

Air Ministry  
METEOROLOGICAL OFFICE



THE  
OBSERVATORIES' YEAR BOOK  
1928

Comprising the meteorological and geophysical results obtained from autographic records and eye observations at the observatories at Lerwick, Aberdeen, Eskdalemuir, Cahirciveen (Valentia Observatory), and Richmond (Kew Observatory), and the results of soundings of the upper atmosphere by means of registering balloons.

Published by the authority of the  
METEOROLOGICAL COMMITTEE



LONDON :

PUBLISHED BY HIS MAJESTY'S STATIONERY OFFICE

To be purchased directly from H.M. STATIONERY OFFICE at the following addresses :  
Adastral House, Kingsway, London, W.C. 2 ; 120, George Street, Edinburgh ;  
York Street, Manchester ; 1, St. Andrew's Crescent, Cardiff ;  
15, Donegall Square West, Belfast ;  
or through any Bookseller.

1930

Price £3 3s. od. Net.







## PREFACE.

UP to the end of 1921, the serial statistical publications of the Meteorological Office were grouped together as though they were parts of one comprehensive book. This book, which was entitled "The British Meteorological and Magnetic Year Book," consisted of :—

Part I	..	..	..	..	The Weekly Weather Report.
Part II	..	..	..	..	The Monthly Weather Report.
Part III, Section I	..	..	..	..	Daily Readings at Meteorological stations of the First and Second Orders.
Section II	..	..	..	..	Geophysical Journal, Daily Values of Meteorological and Geophysical Elements.
Part IV, Section I	..	..	..	..	Hourly Values from Autographic Records. Meteorological Section.
Section II	..	..	..	..	Hourly Values from Autographic Records. Geophysical Section.
Part V	..	..	..	..	Réseau Mondial.

The data for the year 1922 and subsequent years are found in the following publications :—

New Publication from 1922.	Corresponding parts of the British Meteorological and Magnetic Year Book until the end of 1921.
The Weekly Weather Report .. ..	Part I.
The Monthly Weather Report .. ..	Part II.
The Observatories' Year Book .. ..	{ Part III, Section II.
	{ Part IV, Section I.*
	{ Part IV, Section II.
The Réseau Mondial .. ..	Part V.

It will be noticed that Part III, Section I, of the old publication is not included in the new issues. This part contained "Daily Readings at Meteorological Stations of the First and Second Orders," and it has been decided that as the Observatories' Year Book contains daily values of the meteorological elements for the principal first order stations and the Daily Weather Report contains daily values for these and about 40 other stations, it is not necessary to revive the issue of this section, which ceased with the data for 1921.

The present volume is the seventh issue of the Observatories' Year Book. It contains geophysical data for Lerwick, Eskdalemuir, Cahirciveen and Richmond, meteorological data for Aberdeen, Eskdalemuir, Cahirciveen and Richmond, and in addition an aerological section giving the results of soundings of the upper atmosphere by means of registering balloons.

In accordance with the policy of printing site plans and photographs of the observatories every fifth year such plans and photographs, which were last published in the volume for 1923, are again included in this volume.

The table of mean annual values of magnetic data for observatories of the globe has been contributed by the Astronomer-Royal. It will be found in the Eskdalemuir section.

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\* Part IV., Section I., Hourly Values from Autographic Records, Meteorological Section, was discontinued after the data for 1913 had been published. The hourly values for the years 1914 to 1921 are, however, available in manuscript.



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## ERRATA IN PREVIOUS VOLUMES

*Year Book, 1926.*

- P. 49. Table 32.—Magnetic Character 1st August. *For 0 read 1.*  
Mean for Month. *For 0.23 read 0.26.*
- P. 252. Table 336.—Vassouras, Brazil. Magnetic Declination 1924-26. *For E read W.*

*Year Book, 1927.*

- P. 75. Table 56 Heading. *For Disturbed Days read "Quiet Days."*
- P. 149. Line 21 from foot of page. *For maximum read minimum.*  
*For minimum read maximum.*
- P. 264. Table 340.—Apia, Samoa. Magnetic Declination for 1927. *For 10° 9.5 read 10° 29.5.*  
Vassouras, Brazil. Magnetic Declination 1925-26. *For E read W.*
- P. 359. Table 460.—Mean Temperature 15th July. *For 97.7 read 87.7.*



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## LIST OF OBSERVATORIES.

	Latitude.	Longitude	G.M.T. of Local Mean Noon.	Height above M.S.L. in metres.
	° ' "	° ' "	h m	
Lerwick, Shetland Isles .. .. .	60 8 N.	1 11 W.	12 5	81·7
Aberdeen .. .. .	57 10 N.	2 6 W.	12 8	13·4
Eskdalemuir, Dumfries-shire .. ..	55 19 N.	3 12 W.	12 13	242·0
Valentia Observatory, Cahirciveen, Co. Kerry.	51 56 N.	10 15 W.	12 41	9·1
Kew Observatory, Richmond, Surrey ..	51 28 N.	0 19 W.	12 1	5·5

*Note.*—The height given is that of the site of the rain-gauge. The heights of other meteorological instruments are shown in the appropriate Tables.

## NORMAL VALUES AND MONTHLY SUMMARIES.

Monthly and annual normals of pressure, dry bulb temperature, and rainfall for each hour of the day and for the period of 45 years, 1871–1915, are published for the observatories Aberdeen, Cahirciveen, Richmond and Falmouth in *Hourly Values from Autographic Records*, 1917 (Part IV. of the British Meteorological and Magnetic Year Book, 1917), and in previous volumes of that series. Corresponding normals of wind-speed and sunshine are published there for the same observatories and for the period of 35 years, 1881–1915; while corresponding normals of relative humidity are also published there for the period of 30 years, 1886–1915.

For Eskdalemuir the same publication gives hourly averages for the months and for the year, referred to the period 1911–1915.

Summaries giving additional mean values and frequencies of occurrence of various meteorological phenomena will be found for all the observatories in *The Monthly Weather Report* and its Annual Summary. The latter also contains special summaries of the tabulations of the anemographs.

Monthly normal values of maximum, minimum and mean temperature, rainfall and sunshine for the period 1881–1915 are published in the *Book of Normals*, Section I for Aberdeen, Cahirciveen, Richmond and Falmouth. Section IV of the same publication gives information regarding the range of variation of temperature and rainfall at the same observatories, and monthly frequencies of the normal numbers of days of hail, thunder, snow, snow-lying and ground frost. Section VI of the *Book of Normals* gives isopleth diagrams showing the normal diurnal and seasonal variation of relative humidity at all the observatories for which data of relative humidity are included in this volume.



## GENERAL INTRODUCTION TO THE METEOROLOGICAL TABLES.

The elements dealt with in the following meteorological tables for the Observatories at Aberdeen, Eskdalemuir, Cahirciveen and Richmond are :—barometric pressure, air temperature, humidity, rainfall, sunshine, wind speed and direction, minimum night temperature on the grass, cloud, visibility and weather, and in some cases temperature in the ground, solar radiation and level of underground water.

The positions of the Observatories and the heights of the sites are given on p. 10.

### NOTES ON THE INSTRUMENTS AND TABULATION OF THE RECORDS.

A detailed description of the barograph, thermograph, and Beckley raingauge used for obtaining the records of pressure, temperature, humidity, and rainfall is given in the *Reports* of the Meteorological Office for the years 1867 and 1869 ; for a description of other instruments in use reference may be made to the *Meteorological Observer's Handbook* and to the article on Meteorological Instruments in the *Dictionary of Applied Physics*, Vol. III. The following notes are supplementary and are given partly for reference and partly as containing information necessary for the interpretation of the tables.

**Barometer.**—The record of barometric pressure is obtained photographically from a mercurial barometer.

A beam of light is passed through the space between the surface of the column of mercury and the top of the tube, and, after passing through a diaphragm which reduces the width of the beam of light to a very narrow sharp line, is focussed upon a sheet of sensitized paper (ordinary "bromide" paper is employed) carried upon a cylinder which is rotated by clockwork and makes one revolution about its vertical axis in rather more than 48 hours.

The barogram is therefore a continuous photograph of this narrow vertical line, and appears as a horizontal ribbon, the depth of which is constantly varying with the rise or fall of the mercury in the tube of the barometer.

The expansion of a zinc rod is utilised to compensate for the effect of temperature upon the height of the barometric column ; the arrangement produces mechanically a lengthening of the beam of light at its upper end as it becomes shortened at its lower extremity by the expansion of the mercury in the tube. A time-scale is recorded upon the barogram by means of a shutter actuated by the clock. This shutter cuts off the light for the space of four minutes every two hours, thus producing interruptions which appear as narrow white spaces on the record corresponding with known points of time. Until 1918 these time-breaks occurred at the even hours, 2h, 4h, 6h, etc., but it was found that when the edge of the record was not critically sharp owing to various causes, a systematic error was introduced when measuring the records, whereby the values at the even hours were slightly in excess of those at the odd hours where no time-break existed. From 1918 onwards the clock was so arranged that the time-breaks should occur half an hour before the even hours ; by this means both even and odd hour-values are measured at points on the trace which are unaffected by any systematic difference.

Control readings of a standard barometer are taken three times a day by different observers. The control readings are first corrected for index error, temperature and gravity, and then compared with the corresponding readings of the barogram. The differences between the control readings and the corresponding tabulated values



are then found and a correction derived therefrom is applied to all the tabulated values. This correction, known as the "residual correction," is so applied as to run smoothly throughout the whole length of each record—a period of 48 hours—and alterations in the amount of the correction occur, where necessary, in steps not exceeding 0.1 millibar.\*

The scale value of the barograms is found from a comparison of a series of such standard and curve readings. The indications of a curve are converted into numerical values by measuring the ordinates with a tabulating instrument, graduated according to the ascertained scale value.

**Thermometers.**—The air temperature data at each Observatory are derived from records obtained photographically from two mercurial thermometers. One thermometer is used as a dry bulb and the other as a wet bulb thermometer.

Each thermometer has a large cylindrical bulb four inches long and a very long stem. The latter is bent twice at right angles to enable the bulb to be exposed outside the building in a louvred screen attached to the north wall of the Observatory.† The column of mercury in the vertical portion of the stem inside the building is broken at a convenient point by a small air space which moves up or down the stem with rise or fall of temperature. The record is obtained by passing a reflected beam of light through the air space and photographing its image upon a moving sheet of "bromide" paper in the same manner as described in the case of the barometer. A base line is traced on the paper by a pencil of light passing through a small aperture in the brass frame carrying the recording thermometer. The time-scale is automatically recorded upon the curves, a time-break occurring half an hour before each even hour.

Two large standard thermometers with very open scales graduated in degrees absolute and having bulbs similar to those of the thermograph are mounted in the screen side by side and close to the thermograph bulbs. One of the thermometers is arranged as a dry bulb, the other as a wet bulb. Control readings of these thermometers are made three times a day for comparison with the corresponding readings obtained from the thermograms.

The scale-value of the curves is found by a comparison of the readings of the standard thermometers, corrected for any errors they may have, with the corresponding measurements of the curves. The curves are measured by means of a plate of glass ruled with lines corresponding with the ascertained scale-value of the record, both for degrees and for time. The scale is graduated so as to read degrees vertically and hours horizontally.

Two alternative methods of reading the curves have been adopted.

- (a) At Richmond the scale is set by the base-line and after hourly readings have been obtained for the whole record comparisons are made with the control readings. The residual correction so determined (normally the same for the whole record of 48 hours) is applied to the tabulations.
- (b) At Aberdeen, Eskdalemuir and Cahirciveen, the practice is to adjust the glass scale so that the readings at the control hours on the trace are made to show general agreement with the corresponding eye-readings of the standard thermometers. The temperature equivalent of any part of the curve can then be read off. The base-line photographed on the record serves as a useful check.

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\* At Cahirciveen and Richmond the rule is to apply the same correction for the whole chart.

† At Eskdalemuir the screen stands in the open.



**Rainfall.**—This element is recorded by a Beckley self-registering raingauge, in which the rain as it falls is collected in a receiver supported on a float in a vessel of mercury. As the rain passes into the receiver, the float gradually sinks, carrying with it a pen which records its position upon a paper stretched upon a clock-driven cylinder. The displacement of the mercury by the float is arranged so as to give a uniform scale throughout. When five millimetres (two-tenths of an inch) of rain have entered the receiver a siphon comes into action, and, by discharging its contents, causes the float to rise till the pen is brought back to the zero line, from which the record begins again.

The collecting funnel of the Beckley raingauge has an area of approximately 100 square inches. Each gauge stands on level ground and its distance from every other object is greater than twice the height of the object. The height of the rim of the Beckley raingauge above the surface of the surrounding ground varies from 0·4 m. to 0·6 m. at the different observatories. Details are given at the head of the tables of hourly values. A check gauge with funnel 8 inches in diameter is installed near by.

The records obtained from the Beckley self-registering raingauge are, if necessary, subjected to a proportional correction whereby they are brought into agreement with the amount of rainfall as recorded by the check raingauge which is read twice daily at 7h. and 18h.

**Sunshine.**—The record of sunshine is obtained from a Campbell-Stokes recorder, in which instrument the sun's rays are focussed through a 4-inch spherical lens of crown glass upon a strip of blue card, which is scorched, or burned right through, according to the intensity of the sun's rays. Three different patterns of card are used at different seasons of the year. The cards are exposed in a metal bowl, and the focussed image of the sun leaves its mark behind it as it travels along the surface of the card with the apparent motion of the sun through the heavens. The intensity of the burn is not measured, but the record is regarded as that of "bright" sunshine whenever the card has been distinctly scorched. When measuring the duration of sunshine which is represented by intermittent burns, an allowance is made for the extension of the trace by the charring of the card.

**Wind-Speed and Direction.**—The hourly values of wind-speed and direction which appear in this volume are derived from the records of Dines tube anemographs. These instruments record the speed of the wind and its direction directly as functions of the time. For volumes previous to that of 1926 the hourly values of wind-speed and direction were derived from the records of Robinson Cup Anemographs, except at Eskdalemuir, where the records of tube-anemographs have always been used for the purpose of hourly values. Particulars of the exposure of the tube-anemographs at the several observatories will be found in the introductions to the data for each observatory. A description of the tube anemograph will be found in the *Meteorological Observer's Handbook*.

In consequence of these changes the values of wind-speed published for Aberdeen, Cahirciveen and Richmond for 1926 and later years are not directly comparable with those published for earlier years. The matter was briefly discussed in the General Introduction to the *Year Book* for 1926. The following table gives, for the various wind directions, the mean values of windspeed recorded by the tube anemographs, expressed as percentages of the corresponding values recorded by the cup anemographs :—



*Average values of the quantity  $100 \times \frac{\text{Speed by tube anemograph}}{\text{Speed by cup anemograph}}$  at the three observatories, arranged according to the direction of the wind.*

North = 360°, East = 90°, South = 180°, West = 270°.

Wind Direction in degrees from North.	Aber- deen.	Cahir- civeen.	Rich- mond.	Wind Direction in degrees from North.	Aber- deen.	Cahir- civeen.	Rich- mond.
10	131	103	99	190	138	137	96
20	132	103	100	200	132	134	99
30	130	104	103	210	124	128	99
40	117	103	103	220	115	115	100
50	115	104	104	230	108	102	100
60	115	105	99	240	110	90	100
70	119	105	99	250	112	88	101
80	113	104	97	260	114	85	101
90	110	102	101	270	128	82	101
100	126	98	104	280	124	81	103
110	121	97	102	290	110	83	101
120	118	98	100	300	99	88	96
130	118	100	104	310	100	92	93
140	125	103	102	320	108	95	96
150	128	107	98	330	111	97	99
160	137	114	92	340	120	98	98
170	133	123	92	350	138	99	103
180	135	134	95	360	135	102	104

**Minimum Night Temperature on the Grass.**—This is the temperature determined by a minimum thermometer exposed freely over the surface of the grass. The stem of the thermometer is enclosed in an outer glass jacket, but the spirit bulb is freely exposed to the air. The thermometer is supported on two small Y-shaped pieces of wood so that it lies horizontally, with its bulb about one or two inches above the ground which is covered with short grass. When snow has fallen the thermometer is supported so as to lie just above the surface of the fallen snow, but not touching it.

The thermometer is laid out at 18h. each day, having been kept in an upright position, bulb downwards, inside the Stevenson Screen during the daytime, so that any spirit that may have condensed in the upper part of the stem may be able to run down and join the main spirit column.

#### NOTES ON THE TABLES.

**General.**—Interpolated values are printed within brackets, ( ). Maximum and minimum values are printed in heavy type.

**Standard of Time.**—The observations are referred to *Greenwich Mean Time* except as regards sunshine, for which element *local apparent time* is used.

**Units.**—In accordance with the practice introduced in 1911, as a consequence of certain resolutions of the Gassiot Committee of the Royal Society, the values in the tables are expressed throughout in units based upon the C.G.S. System: tables for conversion to other units are given in the *British Meteorological and Magnetic Year Book (Part IV)* for 1913 and are also to be found in the *Computer's Handbook*.



**Daily Mean Values.**—The daily means of pressure, temperature, relative humidity and wind speed are obtained by adding half the sum of the values for the initial and final midnights to the sum of the 23 intermediate hourly values and dividing by 24.

In the preparation of the tables of diurnal inequalities for individual months and for the year, it is assumed that the difference of value between the means for the initial and final midnights, which may be termed, so far as the hourly variations are concerned, the non-cyclic variation, is equally distributed over the whole 24-hour period. Thus, in a table of diurnal inequalities the entry  $d_n$  for the hour  $n$  is given by

$$d_n = x_n - \bar{x} - (n - 12)(x_{24} - x_0)/24,$$

$x_n$  being the value of the element at hour  $n$  and  $\bar{x}$  the mean for 24 hours.

**Annual Values.**—The mean values or totals for the whole year (given either in separate tables or at the end of the corresponding monthly tables), are computed as the means or sums of 365, in leap year 366, daily values.\* The annual values of pressure at sea level are computed from the annual means at station level and the annual means of air temperature; the annual values of vapour pressure are derived from the annual means of air temperature and relative humidity.

**Atmospheric Pressure.**—All pressures recorded in this volume are expressed in *millibars*, one millibar being equal to 1000 dynes per square centimetre. The following are the values of physical constants used in evaluating the data :—

Density of Mercury = 13.5955 grams per cc. at 0°C.

Intensity of Gravity at Sea Level (Lat. 45°) = 980.617 centimetres per second per second.

1 inch = 25.4000 millimetres.

Hence 1000 millibars corresponds with a reading of 750.076 millimetres, on a mercury barometer at temperature 0°C. in Lat. 45°, or 29.5306 inches under standard conditions of temperature (mercury at freezing point, scale at 62° F.) in Lat. 45°.

As a millibar is a pressure, it can only be obtained from the reading of a barometer after the latter has been suitably corrected for

- (a) index error,
- (b) temperature,
- (c) gravity.

All these corrections have therefore been applied to the barometer readings in obtaining the pressure values published in this volume. The corrections for index error (including those for capillarity) are given in the certificates issued by the Kew Observatory or the National Physical Laboratory in respect of the standard barometers at each observatory. The corrections for temperature are equivalent to those published in the *International Meteorological Tables* (Gauthier-Villars, Paris, 1890). The correction for the variation of gravity from its standard value at sea level in latitude 45°, quoted above, is in accordance with the formula adopted in the *International Tables*, viz. :—

$$g_{\lambda} / g_{0, 45^\circ} = (1 - 0.00259 \cos 2\lambda) (1 - 5z/4E)$$

where  $z$  = height of the station above M.S.L.

$E$  = earth's radius, both expressed in the same units,

and  $\lambda$  = latitude of station.

Except at Eskdalemuir, the correction for the variation of gravity with height, contained in the second factor of the above equation, is insignificant.

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\* At Eskdalemuir the annual values for the years 1922 to 1926 were computed as the means or sum of 12 monthly values.



Unless otherwise stated, all pressure values refer to the level of the observatory, as given in the headings of the tables. The reduction to sea-level, wherever made, is effected by tables drawn up for each observatory in accordance with the following scheme:—

If  $p$  is pressure at station level, and  $P$  is pressure at sea-level, the correction required to reduce  $p$  to sea-level is  $P - p$  where

$$\log_e (P/p) = \bar{g}z (1 - 3\bar{w}/8p)/K\bar{T}.$$

$z$  = height of station in centimetres.

$e$  = base of Napierian logarithms.

$K$  = gas constant for dry air =  $10^9/348.4$  C.G.S. units.\*

$\bar{T}$  = mean absolute temperature of the air column between station level and mean sea-level.

$\bar{w}$  = mean value of water vapour pressure in the column.

$\bar{g}$  = mean value of the acceleration of gravity in the air column. Even at Eskdalemuir, the highest station, the effect on the correction of the variation of gravity with height is, in this case, negligible, so that

$$\bar{g} = 980.617 (1 - 0.00259 \cos 2\lambda).$$

The factor  $(1 - 3\bar{w}/8p)$  in the above formula is practically unity except at Eskdalemuir. Its value for that observatory is discussed in the Introduction to the Eskdalemuir section.

In the same way, the value of  $\bar{T}$  at each observatory differs inappreciably from the value of air temperature at the observatory, except in the case of Eskdalemuir (see Introduction to Eskdalemuir section for details).

Hence at all observatories except Eskdalemuir, no corrections are applied for the effects of water vapour, or of change of air temperature in the column of air between the station and sea level.

The scheme for correcting barometer readings outlined above was introduced for Eskdalemuir at the beginning of 1927. For the other observatories, it has come into effect as from 1st January, 1928. The effects of the introduction of the scheme on the tabulated values are briefly referred to in the several introductions to the individual sections. Only at Eskdalemuir are they at all appreciable.

The tables contain values of pressure at exact hours obtained from the photographic barograms in the manner described on p. 11; also daily, monthly and annual means of hourly values, together with the monthly and annual means of diurnal inequalities. Monthly and annual means of the hourly values after reduction to mean sea level are also given.

There is also a table showing the daily extremes of pressure, *i.e.*, the maximum and minimum values recorded during each day.

**Temperature.**—The scale on which temperatures are recorded is such that the freezing point of water under atmospheric pressure is  $273^\circ\text{A}$  precisely. Other temperatures differ by  $273.0$  from readings on the Centigrade scale.

The scale approximates to the absolute scale defined by Lord Kelvin, on which the temperature of the freezing point is  $273.1$  to the nearest tenth of a degree.† Accordingly, to convert temperatures published in this volume to the Kelvin scale, a correction  $+0.1$  is to be added to each reading.

As an alternative to the application of this correction modified values may be used for the constants which enter certain formulæ. For example:—At temperature  $t$  on the scale adopted in the Year Book, the radiation according to Stefan's Law‡ is

$$5.709 \times 10^{-5} (t + 0.1)^4 \text{ erg}/(\text{cm}^2 \text{ sec.}); \text{ or } 5.717 \times 10^{-5} t^4 \text{ erg}/(\text{cm}^2 \text{ sec.})$$

In using the modified formulæ we are virtually adopting a scale of temperature with the degrees greater than those of the Centigrade scale, in the ratio of  $273.1$  to  $273$ . This is the practice of the *Computer's Handbook* of the Meteorological Office.

\* This value depends on a coefficient of expansion of dry air of  $1/273$  and on the density of dry air at pressure  $1013.23$  mb. and temperature  $273^\circ\text{A}$ , viz.,  $1293.052 \text{ g/m}^3$ .

† A. L. Day and R. B. Sosman, *Dictionary of Applied Physics*. Macmillan, London, 1922. Vol. I., p. 840.

‡ The constant  $5.709$  is the value which has been adopted by the International Research Council for publication in the "*International Critical Tables*."



The tables give the values of temperature at exact hours obtained from the photographic thermograms ; also daily, monthly and annual means of hourly values, together with the monthly and annual means of diurnal inequalities. There is also a table showing the daily extremes of temperature.

**Humidity.**—When the temperature of the wet bulb is above 273a, values of relative humidity at exact hours are deduced from the corresponding values of dry and wet bulb temperatures obtained from tabulations of the photographic thermographs, complete saturation being taken as 100. Until the end of the year 1925 the reduction was effected from tables based on Glaisher's hygrometric factors\* but from 1st January, 1926, tables have been employed which proceed from Regnault's formula

$$x = f - Ap(t - t')$$

where  $x$  = vapour pressure under the conditions of observation.

$f$  = saturation vapour pressure at the temperature ( $t'$ ) of the wet bulb.

$p$  = pressure of the air.

$t$  = temperature of the dry bulb in absolute (Centigrade) degrees.

$t'$  = temperature of the wet bulb in the same units.

$A$  = a "constant."

The tables used in this volume for determining the hourly values of relative humidity when the wet bulb is above the freezing point are *Jelineks Psychrometer-Tafeln* (6th edition, Leipzig, 1911). They give values which are in almost exact agreement with those given by *Hygrometric Tables* published by the Meteorological Office in 1924 (M.O. 265) for general use at second and third order stations. The latter tables are not suited to the purposes of this Year Book, because in them temperature is expressed in Fahrenheit degrees, whereas the absolute centigrade scale of temperature is used at the observatories.

No allowance for variation of pressure  $p$  is made and the standard value used in Jelinek's tables, *i.e.*, 755 mm. of mercury (1006.57 mb.) is adhered to. Similarly no allowance is made in the adopted value of the constant "A" for the speed of the air flowing past the wet bulb, though it is well known that "A" is not independent of the ventilation. "A" is regarded as fixed and equal to .0008. In view of the well-marked diurnal variation of wind-speed, the diurnal variation of humidity, derived in this manner, is subject to slight modification.

When the wet bulb reading does not exceed 273a, the above method of reduction is not followed, but values of relative humidity are derived from the record of the hair hygograph. To these values are applied appropriate corrections based on a comparison between the readings of the record of that instrument and the corresponding values of humidity computed from dry and wet bulb readings during neighbouring periods when the wet bulb readings exceeded 273a.

The mean hourly values of vapour pressure are computed by slide rule from a table† of saturation vapour pressure over water, and the corresponding mean hourly values of relative humidity and air temperature.

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\* Glaisher's *Hygrometrical Tables*, 7th edition, London, 1885.

† The saturation vapour pressures used are those employed in the preparation of *Hygrometric Tables*. They are equivalent to those published by Scheel and Heuse in *Annalen der Physik*, 1910.



The normal hourly values of relative humidity for the period 1886–1915, published for certain Observatories in “Hourly Values from Autographic Records, 1917,” were derived from tables based on Glaisher’s factors. The application of the new tables to the normal hourly values of dry and wet-bulb temperature gives results for normal relative humidity which are only slightly different from those which have been published. At Kew Observatory in winter the difference is negligible; in July it does not exceed 1 per cent. at any hour, in October it does not exceed 2 per cent. at any hour. The effect is greatest in April when the published normal values of average relative humidity are reduced by 3 per cent. at noon and at 16h. and by smaller amounts at other hours.

Of greater importance is the effect on the values of absolute minimum humidity. Under the old system, values of relative humidity less than 30 per cent. seldom occurred; under the new system, values less than 20 per cent. may occur not infrequently.

Tables are printed giving the values of relative humidity at exact hours together with daily, monthly and annual means of hourly values. Monthly and annual means of vapour pressure computed from the corresponding mean values of temperature and relative humidity, together with monthly and annual means of diurnal inequalities of relative humidity, are also given.

**Rainfall.**—Tables are given showing for the 60 minute intervals between exact hours\* the amount of precipitation, expressed in millimetres, derived from the record of the Beckley gauge (see p. 11). Totals of amount are given for each day, and for each month; the latter totals referring both to the complete days of the month, and to each of the hours of the day. When zero rainfall is assigned to a particular hour, the entry appears as “...”. Corresponding totals of duration of rainfall are also given, the duration being regarded as the number of hours during which rain falls at a rate of not less than 0.1 millimetre per hour. If slight precipitation, due to rain, snow, fog or dew, extends over some hours, and if the amounts collected in some or all of the hours are less than .1 mm., the fact is indicated by a succession of entries, each of which is enclosed within brackets, covering the period over which precipitation is known or believed to have occurred. In such cases entries of (.1) are allocated evenly among the hours concerned in such a way that their sum is equal to the aggregate fall during the period, and the remaining entries are (...), (\*), (≡) or (⌒) according as the precipitation took the form of rain, snow, fog or dew. Slight precipitation which takes other forms such as hail, sleet, hoar frost, glazed frost and rime is dealt with similarly. When it is impossible to determine the hourly amounts of precipitation, *e.g.*, during snowfall or on occasions when the record has failed, the normal procedure is to consider each case on its merits, and to assign hourly values derived from estimates made by the observers as soon as possible after the event. Such values are also enclosed in brackets.

Annual totals of hourly amounts and duration and notes on special features of the rainfall of the year are also given.

**Sunshine.**—Tables are given showing for each of the 60-minute intervals between exact hours† according to *local apparent time*, from sunrise to sunset, the duration of bright sunshine recorded by the Campbell-Stokes instrument. The sums and means of hourly amounts are also given. For each day is shown the total duration of bright sunshine, and also the percentage this represents of the “possible” duration for the day. The “possible” for each day is computed as the period of time beginning and

\* For the years 1904 to 1920 it was the practice to tabulate rainfall for the period of 60 minutes centred at the exact hours; the reversion to the method in use for 1903 *et ante* occurred on 1st January, 1921.

† Previous to 1st January, 1921, sunshine was tabulated for the period of 60 minutes centred at exact hours.



ending at the instants when the centre of the sun is apparently on the horizon, due allowance being made for atmospheric refraction. Even on a clear day the sun, when at an altitude less than  $2\frac{1}{2}^{\circ}$  to  $3^{\circ}$  above the horizon, fails to make a scorch on the card of the Campbell-Stokes recorder.

A distinction is made in the tables between (a) sunshine not possible, and (b) sunshine possible but none recorded. If, in any hour, sunshine is not possible, the symbol “—” is used; if more than 3 minutes of “possible” sunshine falls in the 60-minute interval between exact hours according to local apparent time, and if no sunshine was recorded the symbol “...” is printed.

The values for the months and for the year of percentage of possible duration of sunshine are obtained by comparing the total recorded sunshine for the period with the total “possible” sunshine for the period.

**Wind.**—Tables are printed giving the hourly values of wind speed and direction, together with the mean speed for each day, each hour, and for the month and year. Values of speed are expressed in metres per second (1 metre per second = 2.2369 miles per hour): those of direction are given in degrees from true north. The values of direction\* and speed are averages for periods of sixty minutes, centred at the exact hours of Greenwich Mean Time. They are obtained by estimation from the records with the aid of a glass scale, the transparent part of which has a width corresponding with one hour on the time scale of the record.

For speeds not exceeding 1.5 m/s the wind directions are regarded as indeterminate and are omitted.

The daily values of the speed and time of occurrence of the maximum gust and the monthly distribution of wind are shown in other tables.

**Minimum Night Temperature on the Grass.**—Values are given for each day of the year together with monthly and annual mean values. The interval to which the reading refers is from 18h the previous day to 7h on the day to which it is entered.

**Diary of Cloud, Visibility and Weather.**—In these tables are given particulars of the cloud forms observed daily at 7h, 13h, and 18h, the total cloud amount observed at 7h, 9h, 13h, 15h, 18h, and 21h, the range of visibility at each of these six hours and the kind of precipitation which may be falling at those hours. There is also a column devoted to remarks on the weather of the day.

**Cloud Form.**—The observations of cloud form are made in accordance with the International classification, and the following abbreviations are used in the tables:—

Cirrus	..	..	..	..	..	Ci.
Cirro-Stratus	..	..	..	..	..	Ci-St.
Cirro-Cumulus	..	..	..	..	..	Ci-Cu.
Alto-Cumulus	..	..	..	..	..	A-Cu.
Alto-Stratus	..	..	..	..	..	A-St.
Strato-Cumulus	..	..	..	..	..	St-Cu.
Nimbus	..	..	..	..	..	Nb.
Cumulus	..	..	..	..	..	Cu.
Cumulo-Nimbus	..	..	..	..	..	Cu-Nb.
Stratus	..	..	..	..	..	St.
Stratus-cumuliformis	..	..	..	..	..	St-Cuf.
Fracto-(prefix, as in fracto-stratus)	..	..	..	..	..	Fr.
-lenticularis (affix, as in stratus-lenticularis)	..	..	..	..	..	-lent.
Mammato-cumulus	..	..	..	..	..	M-Cu.

\* Formerly it was the practice to take the direction at the exact hour. The present rule was adopted as from 1st May, 1915 (see also Introduction to *Hourly Values from Autographic Records*, 1913, p. xv.).



All the cloud forms noted by the observer at the time of observation are printed where space permits. When the number of forms is too great to allow of this, the predominating forms selected at the time of observation to give the best representation of the cloud canopy are printed. If high or medium cloud can be seen, one of the selected types is normally a high or medium cloud.

*Cloud Amount.*—The figure given for the amount of cloud denotes the proportion of the sky covered by cloud, the numerical scale running from 0, cloudless, to 10, completely overcast. The figure denotes the total cloudiness irrespective of form. In the case of fog through which it is impossible to discern the sun or stars the cloud amount is entered as 10, but if cloud can be seen through the fog, the form and amount of that cloud are entered in the usual way. If the sun or stars are visible through fog and if there is no evidence of cloud above the fog the amount is entered as 0.

*Visibility.*—Observations of the range of horizontal visibility made every day at 7h, 9h, 13h, 15h, 18h, and 21h are printed in the diaries of cloud and weather.

As described in detail in the *Meteorological Observer's Handbook* (Ed. 1926), a series of selected objects, A, B, C . . . , as nearly as possible at the standard distances given in the table which follows, are used for this observation. The objects are selected so as to be readily seen and identified from specified observing points in daylight,

SCHEME FOR OBSERVATIONS OF RANGE OF VISIBILITY AND OF FOG,  
MIST AND HAZE.

Indication Letter of Object.	Standard Distance of Object.	Verbal Description.	BEAUFORT LETTERS.	
			Detailed Scale.	Contracted Scale.
(X)	Metres. —	Dense fog	8 f	} F
A	25		7 f	
B	50		Thick fog	
C	100	5 f		
D	200	Fog	4 f	} f
E	500	Moderate fog	3 f	
F	1,000	Mist, haze or very poor visibility	m or z	m or z.
G	2,000	Poor visibility	} m <sub>o</sub> or z <sub>o</sub>	m <sub>o</sub> or z <sub>o</sub>
H	4,000	Moderate visibility		
I	7,000			
J	10,000	Good visibility		
K	20,000	Very good visibility		
L	30,000			
M	50,000	Excellent visibility		

NOTE.—The grouping of the letters by the horizontal lines indicates the limits of the several figures of the International Telegraphic Code for visibility, from 0 to 9, which grouping is also adopted in the tables of frequencies published in the *Monthly Weather Report*.



when the air is clear. A variation up to 10 per cent. from the standard distances is considered admissible. Particulars of the objects in use at each observatory, together with a statement of their actual distances and bearings from the point of observation and notes on local peculiarities which affect the observations will be found in the Introductions to the sections for the individual observatories.

The method of observing consists in determining which is the most distant of the selected objects that can be identified and entering the corresponding letter. In cases of uncertainty when the observer, though recognising the presence of an object, would be unable to identify its nature from the observations he is able to make *at the time*, the letter corresponding with the next nearer object is entered. If object A, the nearest of the selected objects cannot be identified, an entry X is made. At night the letters are used to denote as nearly as possible corresponding degrees of atmospheric obscurity.

Small letters are used to indicate interpolations or extrapolations made in cases where it has not been possible to find suitable objects within 10 per cent. of the standard distances. In such cases the observer may use objects at other than the standard distances to guide his judgment. Particulars of such auxiliary objects will be found in the sectional introductions.

At Cahirciveen, visibility is recorded in both landward and seaward directions. The observations of visibility landwards are printed in the main tables. Particulars of occasions when visibility seawards differed from visibility landwards are set out in the Introduction to the Cahirciveen Section.

*Fog, Mist and Haze.*—The table of standard distances of visibility objects also summarizes the descriptions used in connection with the phenomena of fog, mist and haze, and relates them to the scale of visibility. It also contains the Beaufort letters used for these phenomena in the Remarks column of the diary. In this Year Book as in other publications of the Meteorological Office, statistics of fog, mist and haze are based solely on visibility observations. The term *fog* is restricted to occasions when the visibility is less than 1 kilometre (*i.e.*, object F not visible); the terms *mist* and *haze* to occasions when the visibility is greater than 1 kilometre, but less than 2 kilometres (*i.e.*, object "F" visible, but "G" not visible). The distinction between mist (m) and haze (z) is determined by the depression of the wet bulb. When the visibility is between the limits specified for mist or haze, haze is recorded when the depression of the wet bulb is more than 1° F.; if the depression of the wet bulb does not exceed this limit, the term *mist* is used.

In volumes previous to 1926, occasions of haze, mist and fog were indicated by the International symbols for these phenomena, viz., ∞, ≡° and ≡ respectively, but the relation of these terms to the visibility scale was less rigorous. In order to indicate that a change in procedure has occurred in this matter, the three International symbols for haze, mist and fog have not been used in the tables for 1926 and 1927.

*Precipitation.*—Whenever precipitation is falling at one of the six hours of observation there is printed in the Diary of Cloud and Weather under the heading "Precipitation" the International weather symbol which indicates the kind of precipitation, in accordance with the list below.

*Remarks.*—For the purposes of the column headed "Remarks on the Weather of the Day," it is usual to consider the day as divided into three portions, viz., morning, afternoon and night, denoted by *a*, *p*, *n*, respectively, but it should be noted that no arrangements are made for regular eye observation of weather changes in the period 21h 30m to 6h 30m.



The entries in the remarks column consist very largely of international weather symbols and the letters of the Beaufort scale. These symbols and letters are as follows :—

*Beaufort Notation and International Weather Symbols.*

b	blue sky, whether with clear or hazy atmosphere.	r	● rain.
c	cloudy, <i>i.e.</i> , detached opening clouds.	←	ice crystals in the air.
o	overcast, <i>i.e.</i> , the whole sky covered with one impervious cloud.	s	* snow.
g	gloomy.	rs	* sleet.
u	ugly, threatening.	⊕	drift snow.
v	0 visibility, unusual clearness of atmosphere.	⊗	snow lying. (More than half the surrounding country covered with snow.)
z	haze.*	h	▲ hail.
m	mist, light fog.*	△	soft hail.
f	fog.*	t	T thunder.
fe	wet fog, <i>i.e.</i> , fog which deposits water copiously on exposed surfaces.	l	< lightning.
w	dew.	tlr	⚡ thunderstorm.
x	hoar frost.	☙	gale.
v	rime.	q	squalls.
~	glazed frost.	⊕	solar corona.
e	water deposited copiously on exposed surfaces, without rain falling.	⊕	solar halo.
y	dry air. (Relative humidity less than 60 per cent.)	⊕	lunar corona.
p	passing showers.	⊕	lunar halo.
d	drizzling rain.	—	rainbow.
		☀	aurora.
		☾	zodiacal light.
		☾	mirage.

The letter *i* preceding a letter or symbol which denotes some form of precipitation indicates that the precipitation is of an "intermittent" or "occasional" character.

The letter *j* preceding a letter or symbol which denotes some form of precipitation indicates that the precipitation is within sight, though not actually falling at the station.

The figure 0 written after and above a symbol indicates slight, whilst the figure 2 indicates strong or heavy; thus ●<sup>0</sup> slight rain, ●<sup>2</sup> heavy rain. The figures 0 and 2 written after and below the letters of the Beaufort notation are also used with a similar significance, thus d<sub>0</sub> stands for slight drizzle.

The letters b, c, o, g and u, are used to describe the general appearance of the sky. The use of the letters g and u is sufficiently clear from the definitions given above. o is used whenever the sky is completely overcast with a uniform layer of thick or heavy cloud; c is used to denote that there is some cloud present, but o is not appropriate; b denotes that there is some blue sky.†

In order to meet difficulties which occur when there are only small quantities of cloud or blue sky present, c is not used unless the sky is more than a quarter covered, and b unless there is more than a quarter of the sky free from cloud. If there is more than a quarter of the sky covered with cloud and more than a quarter of the sky free from cloud b and c are both recorded.

The gale symbol ☙ is normally used in this publication to indicate that the wind as recorded by the anemograph averaged at least 17·2 m/s for one or more "centred" hours. At Richmond (Kew Observatory) the symbol has been used with the word gust in brackets to indicate the occurrence of gusts reaching 17·2 m/s.

\* To indicate varying intensities of haze, mist and fog the notation shown in the last two columns of the table on p. 18 is used.

† The present usage with regard to b, c and o dates from 1st Jan., 1926.



M.O. 320  
(Lerwick)

Air Ministry  
METEOROLOGICAL OFFICE

THE  
OBSERVATORIES' YEAR BOOK  
1928

Comprising the meteorological and geophysical results obtained from autographic records and eye observations at the observatories at Lerwick, Aberdeen, Eskdalemuir, Cahirciveen (Valentia Observatory), and Richmond (Kew Observatory), and the results of soundings of the upper atmosphere by means of registering balloons.

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LERWICK

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Published by the authority of the  
METEOROLOGICAL COMMITTEE



LONDON :  
PUBLISHED BY HIS MAJESTY'S STATIONERY OFFICE.

—  
1930



## LERWICK OBSERVATORY.

Latitude	..	..	..	..	..	60° 8' N.
Longitude	..	..	..	..	..	1° 11' W.
G.M.T. of Local Mean Noon	..	..	..	..	..	12h. 5m.
Height of Site above Sea-level	..	..	..	..	..	From 80.5 metres. to 90.0 metres.

## INTRODUCTION.

### GENERAL REMARKS.

In 1919 the establishment of an observatory in the Shetlands was included in the programme of the Meteorological Office. A wireless station, built in 1913 by the Admiralty and transferred after the war to the Post Office, but used by that Department only in case of emergency, offered suitable accommodation in the way of offices and living quarters. It proved possible to make an arrangement under which the Air Ministry has the use of the station as an observatory and of the wireless plant for the reception of meteorological reports and time signals.

The Observatory was opened on the 7th June, 1921, when the first instalment of the instrumental equipment arrived. Later on in the same year the construction of a magnetograph house and of huts for absolute magnetic and auroral observations was commenced. The magnetograph house is a heavy concrete structure with walls 2 feet 6 inches (76 cm.) thick, of internal dimensions 16 feet by 10 feet (4.9 m. × 3 m.), and after construction several months had to elapse before the thick concrete walls and roof could be thoroughly dried and the recording instruments placed in position. These instruments, which are described below, consist of magnetographs recording magnetic declination and horizontal and vertical force. During 1928 subsidiary magnetographs recording declination and horizontal force were installed in one of the adjacent non-magnetic huts; the records obtained therefrom are used to cover lacunæ in the standard traces or for special investigations. In addition, in order to obtain a record of the more minute changes in the vertical component of terrestrial magnetic force, a line of twin cable was laid in an approximately horizontal plane round Loch Trebister, the terminals of the cable being connected to a suitable galvanometer on which could be measured the current induced in the cable by changes in the vertical component of terrestrial magnetic force. The arrangement is similar to one in use at Eskdalemuir Observatory, but no records from either have yet been included in official publications.

Other instruments installed at the Observatory included barometers, barograph, hygrograph, psychrometers, nephoscope, raingauges (ordinary and self-recording), sunshine recorder and Dines tube anemograph and, later, an electrograph; and in 1928 a Krogness auroral camera. But meteorological observations have been restricted, and the time of the somewhat limited staff available has been devoted chiefly to magnetic work and to some work in atmospheric electricity.

The site and the work in Atmospheric Electricity and Terrestrial Magnetism will now be described.



# LERWICK OBSERVATORY.

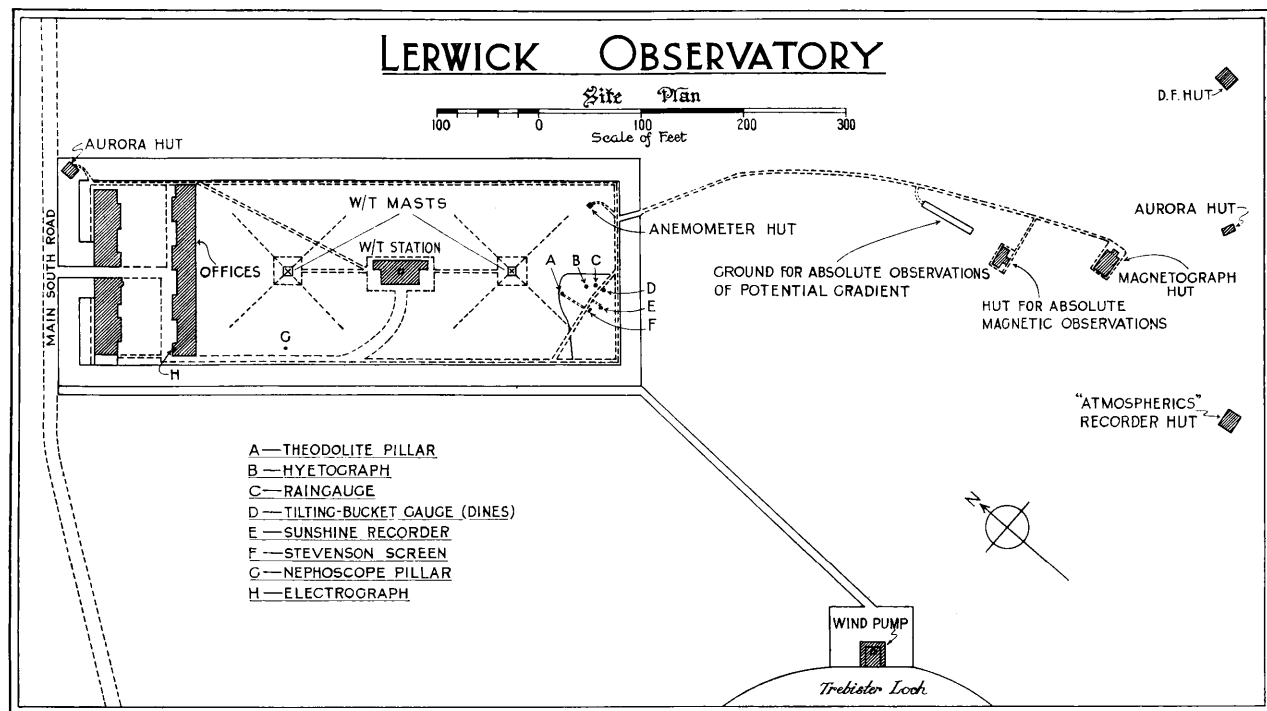


FIG. 1. SITE PLAN.

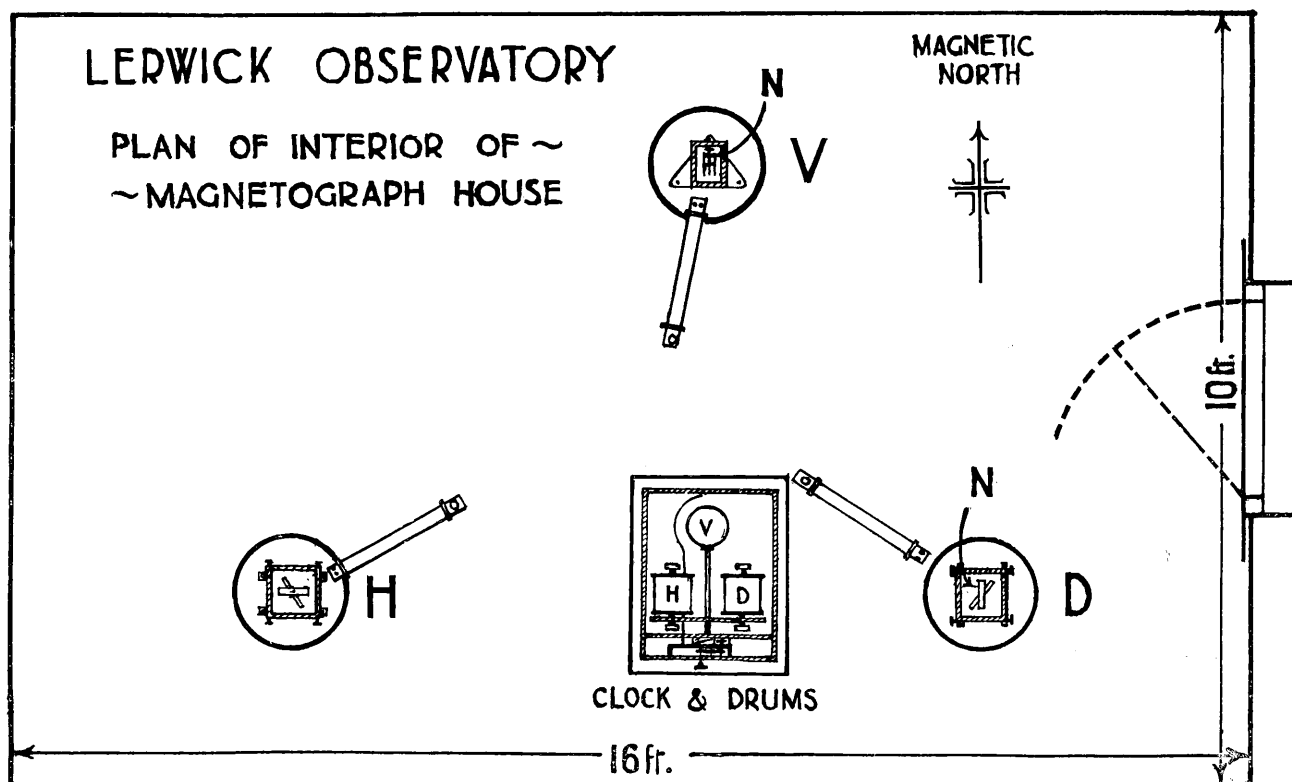


FIG. 2. ARRANGEMENT OF MAGNETOGRAPHS.

[To face p. 24.]



LERWICK OBSERVATORY.



FIG. 3. GENERAL VIEW FROM SOUTH.

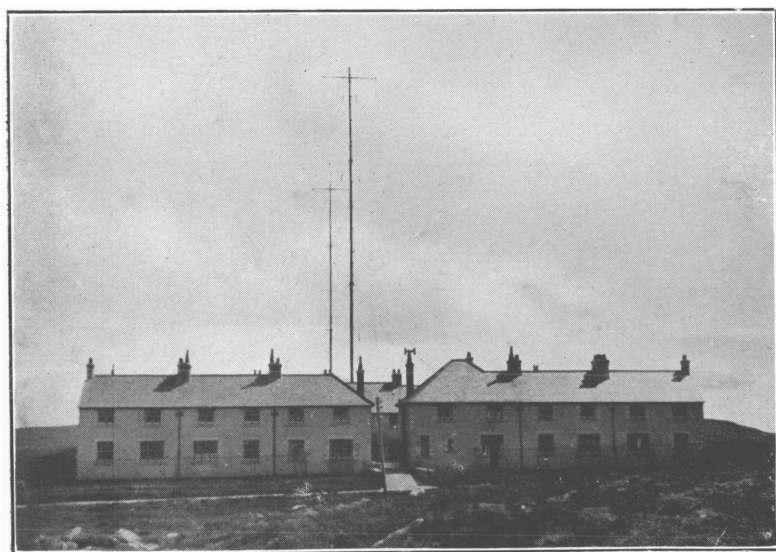


FIG. 4. MAIN ENTRANCE AND FRONT VIEW  
(from N.W.)

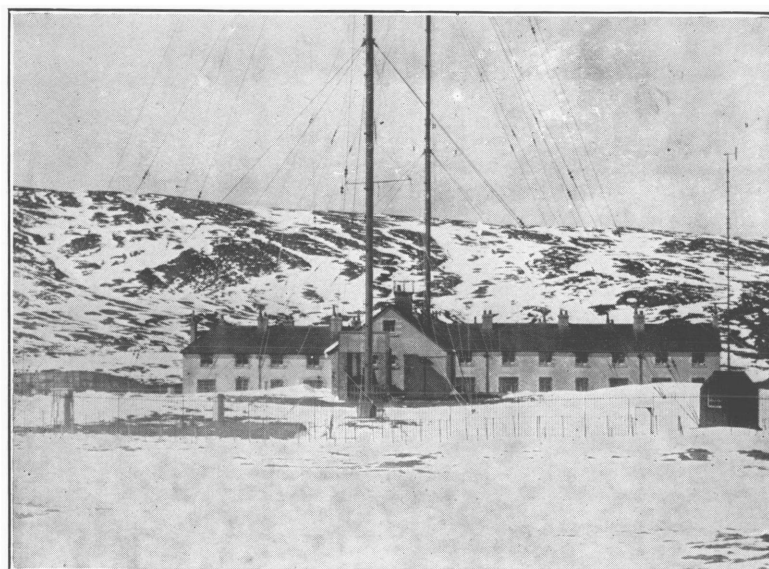


FIG. 5. NEAR VIEW OF BUILDINGS AND METEOROLOGICAL  
INSTRUMENTS (from S.E.)

[To face p. 25.]



## SITE.

The Observatory is situated on a ridge of high ground about a mile and a half (2.4 km.) to the south-west of Lerwick and adjoins the main road between Lerwick and Scalloway. The site slopes upward from west-north-west to east-south-east, the average height above M.S.L. being about 280 feet (85 metres). The ground to the east and south-east rises slightly for about  $\frac{1}{4}$  mile (.4 km.) then slopes sharply down to the sea. In other directions there is a downward slope for about  $\frac{1}{4}$  mile extending to the Loch of Trebister on the south-west, Sandy Loch to north-west, and to the Burn of Sound to north-north-west; beyond these and distant about  $\frac{3}{4}$  mile (1.2 km.) from the Observatory are small hills—Munger Hill to the south is about 320 feet (97 metres) above M.S.L., Shurton Hill to west-north-west rises to 576 feet (176 metres), and Stony Hill to the north to about 400 feet (122 metres). In clear weather it is possible to see the Outer Skerries, 25 $\frac{1}{2}$  miles (41 km.) north-east by north, and Sumburgh Head, 20 miles (32 km.) south by west; the horizon in other directions is limited to a few miles.

The average depth of soil in the vicinity is about a foot, and outcrops of sandstone occur in many places. The surrounding country is barren and desolate, the only vegetation being coarse grass, stunted heather, and moss, with occasional patches of bare black peat. The Observatory ground is of a very uneven nature, and, owing to lack of proper drainage, is frequently water-logged; in winter it may be almost submerged for considerable periods. Views of the station are shown in Figs. 3, 4 and 5, and the arrangement of buildings and situation of instruments are set out on the site plan in Fig. 1.

## ATMOSPHERIC ELECTRICITY.

**Notes on the Instruments.**—The records of potential gradient are obtained from a Benndorf electrograph (No. 108, by L. Castagna, Wien) which since 1926 has been installed in the north-west corner of the Office Block. The site is divergent from the ideal for two reasons:—

(1) There is distortion of the equipotential surfaces by adjacent houses, wireless plant, etc.,

(2) It is a comparatively large distance (236 metres) away from the ground where absolute determinations are made.

Consideration of the variations of mean monthly values of the reduction factor shows that these disadvantages are less serious than might be anticipated.

The collector rod passes through a window in the north wall, and is situated 190 cm. from the corner of the building. The collector, which is 476 cm. above the ground and projects 123 cm. from the window, consists of a copper spiral about 5 cm. long, painted over, by means of a special adhesive varnish, with a salt of radium; according to the maker, Mr. Harrison Glew, this particular salt has no sensible rate of decay, the loss being only 1 per cent. per century. The collector is soldered into the smaller end of a tapered German silver tube, 76 cm. long, and of triangular cross section, which, in turn, is attached to a "Duralumin" tube, 89 cm. long and 1.3 cm. in diameter. The latter tube passes through a hole, 3.8 cm. diameter, in one end of a wooden box (dimensions 38 × 25 × 10 cm.), where it is supported horizontally between the ends of two metal rods embedded in sulphur. A number of small 2-volt electric bulbs are kept burning inside the box in order to improve the insulation of the supports for the collector rod during wet weather, and a similar bulb is placed inside the case of the electrometer. The rod is connected to the base of the acid pot of the Benndorf electrometer by a fine wire. A detailed description of this instrument is to be found in *Phys. Zeit.* 7 (1906), p. 98, whilst the general principle is described in Mathias' *Traité d'Electricité Atmosphérique et Tellurique*, p. 54, and in Chauveau's *Electricité Atmosphérique*, pp. 61–64.



The record consists of a series of dots made once a minute on a long roll of paper as it is unwound from a drum by clockwork, exact hours being indicated by dots near the edge of the sheet. Timing is taken from electric clock No. 1,031, governed by the Observatory standard, Shelton No. 35. The needle of the electrometer is earthed at least twice daily, and a zero line is obtained by connecting up these earth marks; owing to the constancy of the perpendicular distance between the zero line and the line through the hour marks, further intermediate positions of the zero are easily obtained. The scale value has been about 21 volts per millimetre, which permits a range from +1700 to -1100 volts per metre in the open to be recorded.

Combined tests of the insulation of the system and scale value of the record are made daily, the procedure being to remove the collector and to charge the needle, which is connected to a Wulf electrometer. The rate of leak is obtained for a period of 5 minutes with a positive charge and for the same interval with a negative charge. Considering the climatic difficulties the behaviour of the instrument in the matter of insulation has been very satisfactory. The rate of leak has been in general small, the average during 1928 being such that the instrument would lose half its potential in  $38\frac{1}{2}$  minutes. It has been found that the scale value remains reasonably steady and may, for all practical purposes, be taken as constant across the full width of the sheet. The factor by which the recorded potential must be multiplied for conversion into potential gradient in the open is obtained from absolute measurements above a levelled piece of ground near the old site of the electrograph (see site plan in Fig. 1). An insulated wire, stretched horizontally between two stout wooden posts 125 cm. in height and 9.48 m. apart, carries at its centre a burning fuse exactly 1 metre above the ground. Wulf electrometer, No. 5225 (Günther & Tegetmeyer, Braunschweig), is connected to one end of the wire and ten to twenty readings are obtained from the electrometer at minute intervals. The reduction factor is deduced from the mean of these values and the corresponding mean potential at the collector as recorded by the Benndorf. Smoothed monthly means of factors so obtained are employed in reduction of the records.

The position of the collector was not changed during 1928, but two renewals were made to this part of the apparatus:—

- (1) On 26th June, when a new collector rod was substituted for that which was formerly used but had been damaged by gales.
- (2) On 7th December, when a more rapid radio-active collector was brought into use. The mean of 13 tests with the new collector gives 48 seconds as the time required for the electrograph to acquire half the true potential.

Monthly scale values and exposure factors, together with data relating to rate of leak, are shown in the following table:—

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Mean Value of $-\frac{d}{dt} \log_e V. \dots$	·014	·016	·013	·014	·011	·011	·019	·025	·037	·033	·015	·012	·018
No. of days used in mean $\dots$	27	28	31	28	29	28	29	24	27	26	27	31	335
Highest $-\frac{d}{dt} \log_e V. \dots$	·029	·029	·020	·065	·025	·022	·035	·049	·081	·065	·060	·019	—
Lowest $-\frac{d}{dt} \log_e V. \dots$	·008	·007	·006	·005	·006	·005	·007	·010	·019	·006	·007	·005	—
Scale Value (v/mm) $\dots$	22.2* 19.7	20.2	20.1	20.4	20.2	20.3* 20.8 21.5 20.8 20.1	20.4	20.6	21.0	20.9	21.3	21.6	—
Mean Exposure Factor	1.29	1.21	1.36	1.32	1.37	1.45	1.37	1.28	1.37	1.28	1.28	1.13	1.31
Applied Exposure Factor $\dots$	1.27	1.27	1.31	1.34	1.38	1.41	1.37	1.33	1.33	1.30	1.24	1.19	—
No. of Determinations of Exposure Factor...	8	8	7	6	6	7	11	8	4	7	5	9	86

\* Changes of scale value occurred on 21st January, 7th, 15th, 18th, and 26th June.



In its response to changes of potential gradient the Benndorf instrument is very sluggish, compared, for instance, with the Kelvin water dropper in use at Eskdalemuir Observatory. In general, the rise to a steady potential takes an approximately exponential character, and it was found that the mean of 140 tests during 1927 gave 69 seconds as the time to rise to half the final value ; the mean of 34 tests in 1925-26 gave a corresponding period of 63 seconds ; this is about 10 times as slow as the water dropper at Eskdalemuir Observatory. Sometimes when there is no wind the rate of rise of potential is very much slower and apparently nearly linear. If the instrument rises through a potential  $V$  and has a capacity  $C$  a quantity of electricity  $CV$  has to be given to the air in the neighbourhood of the collector, and in the absence of wind and the presence of fog this may hang about in the form of a heavily charged cloud for a considerable time before being dispersed. It is difficult to accept the readings from a radio-active collector during such times. Fortunately these conditions are rare at Lerwick except in early summer, but on the other hand they are then very interesting.

If we assume the leaking and the charging to be exponential, i.e.—

$$\text{If } \frac{dV}{dt} = -K_L V$$

$$\text{and } \frac{d(V_0 - V)}{dt} = K_C (V_0 - V)$$

where  $K_L$  measures the rate of leak,  
and  $K_C$  „ „ charging,

then the potential finally acquired by the instrument is equal to the real potential multiplied by  $K_C/(K_L + K_C)$ .

$K_L/K_C$  varies from  $\frac{1}{50}$  to  $\frac{1}{20}$ , the higher values usually occurring in winter ; that is, the instrument records 2 per cent. to 5 per cent. below the true potential. This variation is included in the exposure factor and would—other things being equal—cause the factor to be about 3 per cent. lower in summer than in winter ; in practice, the factor has been found to be about 12 per cent. higher in summer. As the capacity of the instrument cannot be reduced nothing can be done to remedy this except to keep  $K_L$  as small as possible.

The average rate of leak during the year, .018, is the same as that for 1927, being such that the instrument would lose half its potential in  $38\frac{1}{2}$  minutes. Insulation was worst from August to October, when insects were a frequent source of trouble ; if these months are excluded the average leak corresponds with a fall to half potential in 50 minutes.

The mean exposure factor for 1928 is 1.31, which is 3 per cent. lower than the mean of the 1927 observations. The changes in factor from month to month agree closely with those for 1927, the values being higher in summer, lower in winter. The variation cannot be explained by leakage in the instruments, and there is no obvious relationship between the factor and potential during the absolute determinations. The vegetation around the absolute ground only undergoes a very slight change throughout the year, and the grass in the immediate vicinity is always short.

The following table shows mean values of the exposure factor for 1927 and 1928 summarised according to wind direction :—

	Calm.	N	NE	E	SE	S	SW	W	NW	1927 -28
Mean Factor .. ..	1.35	1.33	1.37	1.27	1.24	1.37	1.36	1.35	1.29	1.33
No. of Observations ..	24	19	16	12	21	44	28	21	26	211



Relatively high values of the factor are associated with winds from north-east, south, south-west, and west, for which directions the electrograph collector has a good exposure. The exposure in other directions is obstructed by adjacent buildings (see Fig. 1), and the depression of the factor depends upon the proximity of these obstructions to the collector. The lower factors, resulting from the higher potential of the collector when shielded from the wind, also follow from R. A. Watson's conclusion that potential gradient is inversely dependent upon wind speed. (Geophysical Memoir No. 38). Wind direction, however, appears to have no appreciable bearing upon the annual variation of factor discussed in the preceding paragraph.

On 28th June, 4th July, and 12th September, measurements were made of potential gradient above fairly smooth ground near sea level. The determinations on the two earlier dates were taken at the Point of Trebister,  $2\frac{1}{4}$  km. south-south-east of the Observatory, those on the third near the Sands of Sound, 1 km. to the east. In all, ten series of observations were obtained. The mean electrograph exposure factor computed therefrom works out at 1.36, a value in close agreement with the standard determinations.

#### IDENTIFICATION NUMBERS OF INSTRUMENTS USED IN 1928.

Benndorf electrograph (L. Castagna, Wien)	..	..	..	..	..	108
Wulf bifilar electrometer (Günther & Tegetmeyer, Braunschweig)	..	..				5225
Electrostatic voltmeter (Cambridge Instrument Company)	..	..	..			11889

**Review of Results.**—Days when there was a complete trace have been classified as follows by means of an electric character figure :—

- o, denotes a day during which, from midnight to midnight, no negative potential was recorded.
- 1, denotes a day with excursions to the negative not amounting in the aggregate to more than three hours.
- 2, denotes a day with negative potential amounting in the aggregate to more than three hours.
- a, denotes that the range of potential gradient in the open did not exceed 1,000 volts in any of 25 hourly periods of the day.
- b, denotes that this range was exceeded in at least one, but in fewer than six, of these periods.
- c, denotes that this range was exceeded in six or more of the hourly periods.

The character figures so assigned are given in Table 4.

The annual mean character figure, 0.92, approximates closely to the corresponding figure for 1927. Compared with 1927 the average character of individual months was lower from March to June and in September, identical in February, and higher in the remaining months.



Curves are read by means of a glass scale graduated in millimetres (by R. Fuess, of Berlin), the tabulated values being 60 minute means centring at exact hours G.M.T. The ordinates are converted into volts per metre in the open by multiplying by the product of the appropriate scale value and reduction factor. Values are assigned for 3h, 9h, 15h, and 21h, on all days, and for each hour on "a" days.

An indication of the characteristics of indeterminate potentials may be obtained from the tabulations in which:—

- (1)  $z$  is marked against hours when there occurred large oscillations of small period which are not accurately reproduced in the record. The signs  $+$ ,  $-$ , following the  $z$  indicate on which side of zero the mean value lay; for values marked  $\pm$  the sign of the mean value was uncertain.
- (2) values prefixed by the symbols  $>$ ,  $<$ , indicate that for one or more periods during the hour potential passed beyond the range recorded by the electrograph.

The hourly values for 3h, 9h, 15h, and 21h are given in Table 1; estimated values, enclosed within brackets, are given in cases where the record was in some manner defective. Two sets of mean values are given:—

(a) The means of all positive values; hours when the trace passed off the top of the sheet are included in obtaining these means, the upper limit of registration being taken as the value for the period not recorded.

(b) The means for all days on which all four hours were completely recorded or could be estimated.

The monthly mean value for *oa* days (see Table 2) is greater than the (a) mean in five months of the twelve, and less than the (b) mean in three months; the (a) mean exceeds the (b) mean in each month. The annual mean values of the means for *oa* days and the (a) and (b) means are 166 v/m, 156 v/m, and 134 v/m respectively; the corresponding values for 1927 were considerably higher, being 213 v/m, 179 v/m, and 160 v/m.

The extreme hourly values recorded were:—  $>1118$  v/m, December 7d 7h, during heavy snow, and  $<-1108$  v/m, December 16d 24h, during continuous heavy rain. As the trace frequently passed off the sheet, particularly for negative potentials, these limits may have been exceeded. The absolute daily range was greater than 2500 v/m on the following dates:—January 3, 4, 5, 8, 9, 10, 11, 24, 25, 26, 29, February 2, 5, 7, 9, April 3, 16, 19, 20, June 11, 15, September 1, October 9, November 9, 13, 20, 21, 27, December 3, 5, 6, 7, 8, 24, 25, 26, 27 and 31.

Notable spells of high potential gradient were:—

- (1) June, 21d 8h—22d 21h. (Mean gradient, 592 v/m).
- (2) September, 8d 19h—9d 6h. (520 v/m) and 9d 15h—23h, (495 v/m).
- (3) September, 13d 17h—14d 2h. (749 v/m).

Winds were light on each occasion and fog occurred at times during the two earlier spells.

Details of occasions when potential gradient was negative for periods approximating to or exceeding six hours, together with the mean potentials during the periods, are:—

- (1) February, 18d 6h 30m—12h 35m.  $<-496$  v/m. (Continuous heavy rain.)
- (2) March, 30d 6h 45m—12h 30m.  $-318$  v/m. (Continuous rain to 9h 30m; intermittent rain later.)
- (3) October, 30d 4h 40m—12h 40m.  $-288$  v/m. (Continuous heavy rain.)
- (4) November, 17d 10h 25m—17h 0m.  $<-557$  v/m. (Continuous moderate rain.)



Considerable periods of negative potential gradient, interrupted only by short intervals of positive gradient, occurred on the following dates :—

- (1) February, 15d 8h 5m—15h 15m.  $<-455$  v/m. (Continuous heavy rain.)
- (2) March, 2d 0h 55m—10h 20m.  $<-663$  v/m. (Continuous moderate rain.)
- (3) October, 18d 16h 40m.—19d 1h 30m.  $<-321$  v/m. (Continuous heavy rain.)
- (4) December, 16d 18h 40m.—17d 1h 20m.  $<-784$  v/m. (Continuous heavy rain.)

The diurnal inequalities for 0a days for the months, seasons, and year, are given in Table 2, together with mean values of the potential gradient and particulars of the non-cyclic change and the number of days used ; the inequalities for the seasons and year are means of the monthly inequalities. Similar data for the 1a and 2a days are given in Table 3.

The winter diurnal variation is of the usual type but there is much less difference between the winter and summer curves than at other existing observatories. In particular, the principal minimum of the day continues, in the majority of equinoctial and summer months, to occur in the early morning hours (2h to 4h) rather than near the middle of the day as in other summer months and as, for example, at Eskdalemuir. There is however, at Lerwick, a secondary minimum near mid-day. The range covered by the inequalities is considerably less than in 1927.

In the three previous years the potential gradient was noticeably higher in summer than in winter. In 1928 the means derived from 0a days in summer and winter are practically identical. The same is true of the "a" means of Table 1. The mean potentials derived from 1a and 2a days are however 25 v/m higher in summer than in winter ; and the "b" means of Table 1 are likewise 22 v/m higher in summer than in winter.

## TERRESTRIAL MAGNETISM.

### Notes on the Instruments.

The standard records of declination and horizontal and vertical force are obtained from the Munro magnetographs which were in use at Falmouth until 1912. The instruments had been stored for several years, but were reconditioned by the makers, and the declination and horizontal force instruments were tested at Kew before being installed at Lerwick in November, 1922.

The declination magnet has a unifilar suspension, and the torsion correction is negligible. The scale value is constant for all positions of the light dot on the sheet ; throughout the year it was 1 mm. of ordinate to 1.93 minutes of arc. In the horizontal force instrument the magnet is maintained in a position approximately perpendicular to the magnetic meridian by torsion of the bifilar suspension. The vertical force balance consists of a single heavy magnet similar to those used for recording declination and horizontal force, and may be compensated for variations of temperature. Copper damping plates are fitted to each instrument and the recording mechanism is similar to that used at Eskdalemuir. The arrangement of the instruments in the magnetograph house is shown in Fig. 2.



The chief instrumental defects encountered during the year were :—

- (a) A slight drift of the trace in the case of the H force instrument ; corrosion of the tungsten wire used for the suspension of the magnet caused a breakage to occur on 16th November.
- (b) Unsteadiness of the vertical force system. This instrument was adjusted on the following dates : 21st February, 8th March, 4th May, 22nd June, 24th July and 13th November.

Although these troubles have not been entirely overcome the records for 1927 and 1928 are better and more continuous than those of former years.

Monthly scale values have been assigned to the records by taking overlapping means except when discontinuities occurred and special measures were required. The determinations are made by Broun's method, the deflecting magnet being placed in the " broadside on " position and at a distance of 55.9 cm. from the recording magnets. A larger deflection distance would render the error due to inequality of the distribution co-efficients for the H, D and V magnets less appreciable, but cannot be used owing to the restricted size of the magnetograph house. The scale value of H was maintained at approximately 6  $\gamma$ /mm. ; that of V showed a progressive change throughout the year from about 10  $\gamma$ /mm. to 12  $\gamma$ /mm.

The records of declination, horizontal force and vertical force have been tabulated hour by hour. The values are read off by means of graduated glass scales, a value being the mean reading for 60 minutes centring at the hour.

Base values for the records are obtained from the results of absolute observations, the determinations of declination and horizontal force being taken at least twice weekly, those of dip five or six times in each week. Horizontal force and declination are determined with Unifilar No. L 3951 (Cambridge Instrument Co.) using magnets 3951A and 3951C. The magnetometer is used on the centre pillar (No. 2) of the absolute hut, the azimuth of the fixed mark being taken as  $8^{\circ} 43' 2''$  east of south. Inclination is measured with Dover Circle No. 238 placed on the East pillar (No. 3), using  $3\frac{1}{2}$  inch needles. In the deflection experiment three distances 25, 30 and 35 cm. are used for obtaining the distribution coefficients, the horizontal force being computed from the deflection at 25 cm. only.

Mean annual values of the P and Q correction have been derived from observations during the period March 1923 to 1927. An accident caused some change to the magnet in March 1923, and values for earlier months have been discarded.

The values during these years are as follows :—

Year.	P.	Q.	$\log_{10}(1 + P/25^2 + Q/25^4)$ .
1923 (March–December) ..	-2.398	-14.36	1.99831
1924 .. ..	-1.236	-464.6	1.99862
1925 .. ..	-1.165	-875.9	1.99821
1926 .. ..	+1.225	-1711.2	1.99895
1927 .. ..	+2.229	-2183.8	1.99912
1928 .. ..	+0.223	-1395.6	1.99860

The mean value of  $\log_{10}(1 + P/25^2 + Q/25^4)$  employed in the reduction of all observations for 1928 was the mean of the values derived up to the end of 1927, namely, 1.99864. If the 1928 values are added, the mean for the total available period is identical with that provisionally taken.



As stated in the general remarks the walls of the magnetograph chamber are of concrete, 2 feet 6 inches in thickness. The diurnal variation of temperature within the chamber is comparatively small, the ranges of the mean diurnal variation in the various months of 1928 having been as follow :—

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<i>a.</i>	<i>a.</i>	<i>a.</i>	<i>a.</i>	<i>a.</i>	<i>a.</i>	<i>a.</i>	<i>a.</i>	<i>a.</i>	<i>a.</i>	<i>a.</i>	<i>a.</i>
0.06	0.07	0.07	0.11	0.11	0.12	0.13	0.12	0.08	0.08	0.06	0.07

No correction for this diurnal variation of temperature has been applied to the diurnal inequalities or other data published in this volume. It will be noted, however, from the Tables, that the day to day change of temperature is sometimes considerable. On the average for 1928 it is 0.31*a*; and there are 10 cases where it reaches or exceeds 1.0*a*. These rapid fluctuations of temperature obviously add considerably to the problem of satisfactorily determining base line values in the cases of the horizontal and vertical force magnetographs. The temperature coefficient of the former is known with fair accuracy, being taken to be 6.17 per 1*a*; consideration of the trend of base values indicates that the error introduced by omitting to apply a correction for temperature of the magnetograph is usually less than the error of observation and that it would be desirable to have absolute observations made more frequently than twice weekly. For another reason, namely that magnetic disturbance at Lerwick is so much more frequent and so much more considerable than at more southerly observatories, it would similarly be desirable to have very frequent absolute observations, with a view to the retention only of those made at times when the autographic records indicate a reasonably constant magnetic field. With the existing staff and instruments it has not, however, been possible to contemplate any increase in the observations of horizontal force.

In the case of the vertical force, the magnetograph appears to be subject to a thermal hysteresis sufficiently large to render ineffectual any method so far tried of making allowance for the fluctuations of temperature in the chamber. It has not therefore been possible to bring into close accord with one another the base line values deduced from individual absolute observations. So long as these conditions exist the hourly values of vertical force must be regarded as of a somewhat lower order of accuracy than might be desirable. The diurnal inequalities are not of course subject to any appreciable uncertainty on this account; the uncertainty only arises where for instance the mean value for a given day or series of days comes to be compared with that for another day or series of days.

Again, owing to the smallness of the chamber, the presence of an observer for a short time, as, for instance, during a scale test, causes an appreciable rise in temperature and this seems to be reflected in the record of vertical force in the form of a fairly rapid rise and afterwards a slow recovery to normal. The effect on the record is so characteristic that an approximation to the undisturbed curve can in general be drawn in with considerable confidence, and this has been done where the duration of the visit of an observer was sufficient to make the magnitude of the effect noticeable. It appears that the presence of an observer even for two or three minutes at the time of changing the charts can at times produce a measurable effect, but it is pretty certain that it is complicated by the existence of a mechanical effect, not definitely determinable. The quiet day inequality of vertical force for March 1927 showed a small irregularity arising from this cause.

### Aurora.

From about September to April a watch for aurora is maintained normally until about 23h G.M.T. each evening, and observations—as a rule at intervals of 15 to 20 minutes—are made of the northern horizon and of general meteorological conditions. The records form what is called the auroral log, a brief summary of which is given in Table 67. When any auroral display is observed, a second observer is



called and detailed observations are maintained until the display subsides. These detailed observations have continued to be mainly non-instrumental and have consisted in noting and making descriptions of the phenomena seen during the display, but from October auroral photography was attempted with the Krogness camera whenever the manifestation was sufficiently bright. The descriptive notes are entered in a second log reserved for records of actual auroral displays. Extracts from this latter log may be obtained by anyone requiring the detailed information.

A general auroral table for Scotland (Table 68) is also included. This table has been compiled from the records of all stations at which climatological observations or weather logs are maintained. The observers at these stations, whilst noting occasions of aurora which they may happen to observe, do not in general maintain a special watch.

### Notes on the Tables.

The hourly values of H, D and V, obtained as described above, appear in three of the four monthly tables. The variations in D, being expressed in minutes, may be readily converted to units of force ( $\gamma$ ) of the component perpendicular to the magnetic meridian by multiplying by a factor which for 1928 is approximately 4.25. A rough comparison of the H, D, and V registrations with component registrations (geographical N and W, and V) as for instance at Eskdalemuir, can then be easily made. The mean value for the day is computed according to the expression:—

$$x = \left\{ \frac{1}{2} (x_0 + x_{24}) + x_1 + x_2 + \dots + x_{23} \right\} / 24.$$

The letters "Q" and "D," prefixed to dates, denote the five quiet and the five disturbed days as selected at De Bilt.

In the fourth table for each month are given:—

- (a) The values and times of the daily maximum and minimum and the values of the absolute daily range for each of the elements H, D and V.
- (b) The value of  $\Sigma R^2$  for each day.  $\Sigma R^2$  is written for  $R_H^2 + R_D^2 + R_V^2$  where  $R_H$ ,  $R_D$  and  $R_V$  denote the absolute ranges in force for a calendar day of the components along and perpendicular to the magnetic meridian and of the vertical component, the ranges in declination having been for this purpose converted into units of force of the component perpendicular to the magnetic meridian.
- (c) The daily magnetic character figures, assigned according to the international scheme wherein "0," "1," "2," respectively, denote quiet, moderately disturbed, and highly disturbed conditions.
- (d) The daily values of temperature in the magnetic chamber.

Mean diurnal inequalities of H, D and V on "all" days and on international quiet and disturbed days are given, for the months, seasons and year, in Tables 53 to 61.

In calculating diurnal inequalities the non-cyclic change has been eliminated on the assumption that its time rate is linear. The values of the range of the mean diurnal inequalities of the several elements on the three different types of day are brought together in Table 62, and the values of the non-cyclic change are given in Table 64. The "Average Departures," or mean values of the inequality taken irrespectively of sign, throughout the 24 hours, are given in Table 63.

The mean values of the squares of the absolute daily ranges are summarized in Table 65.

In Table 66 appear for the months and year the mean values of N, W, V, D, I, H and Total Force T. The means of N, W, I and T are derived from the corresponding mean values of H, D and V, which are the means of hourly values on "all" days in the month or year.

Finally, in Tables 67 and 68 are given summaries of auroral observations obtained as already described.



### Review of Results.

*Mean and Extreme Values of the Magnetic Elements, 1928.*—The mean values of the magnetic elements for the years 1927 and 1928 are given in Table I. The values of H, D and V have been computed from the hourly values derived from the autographic records of "all" days, standardized by means of the absolute observations; those of N, W, I and T have been deduced from the values of H, D and V.

TABLE I.

Year.	H.	D. (West)	I.	N.	W.	V.	T.
	$\gamma$	$^{\circ}$ $'$	$^{\circ}$ $'$	$\gamma$	$\gamma$	$\gamma$	$\gamma$
1927.. ..	14607	14 49.9	72 38.1	14120	3739	46713	48944
1928.. ..	14585	14 37.1	72 39.4	14113	3681	46702	48926

The decrease in westerly declination from 1927 to 1928 ( $12'.8$ ) was less than the rates for the four previous years, these having been  $13'.8$  for 1923–24,  $13'.0$  for 1924–25,  $14'.9$  for 1925–26 and  $12'.9$  for 1926–27.

Mean values derived from (a) international quiet days and (b) international disturbed days, are as follow:—(a) H, 14589 $\gamma$ ; D,  $14^{\circ} 37'.2$ ; V, 46703 $\gamma$ ; (b) H, 14577 $\gamma$ ; D,  $14^{\circ} 37'.0$ ; V, 46698 $\gamma$ .

The extreme values of H, D and V recorded during 1928 are given in Table II., but these values may have been exceeded at times when the light passed beyond the edges of the photographic paper.

TABLE II.

Element.	Maximum.		Minimum.		Absolute Annual Range.
	Value.	Date, 1928.	Value.	Date, 1928.	
		d. h. m.		d. h. m.	
Horizontal Force...	15016 $\gamma$	Oct. 18 ... 17 46	<14046 $\gamma$	Aug. 27 ... 02 10 Between and 02 39	} > 970 $\gamma$
Declination ...	$16^{\circ} 37'.9$	July 8 ... 01 12	< $13^{\circ} 9'.8$	July 8 ... 05 49	
Vertical Force ...	>47428 $\gamma$	Between July 8 ... 04 05 and 08 54	46254 $\gamma$	July 8 ... 01 10	> 1174 $\gamma$

The range of  $3^{\circ} 28'.1$  in declination is equivalent to a range of 884 $\gamma$  in the component of force perpendicular to the magnetic meridian. In the year 1927 smaller ranges were recorded in D and V, but a larger range in H. In the year 1926, much greater ranges were recorded, the extremes in H, D and V, respectively, having been > 1561 $\gamma$ , >  $4^{\circ} 44'.9$  and > 2086 $\gamma$ .

*Magnetic Character of the Year.*—The mean sunspot number has increased in recent years from 5.8 in 1923 to 16.7 in 1924, 44.3 in 1925, 63.9 in 1926, 69.0 in 1927 and 76.8 in 1928. Coincident roughly with this increase there was, up to 1926, an increase of magnetic activity, but the years 1927 and 1928 indicate some falling away. Thus the mean absolute daily range of declination rose from  $14'.9$  in 1923 to  $15'.4$  in 1924,  $18'.1$  in 1925 and  $25'.0$  in 1926, but fell to  $20'.0$  in 1927 and was  $21'.4$  in 1928. For individual months of 1928 the table below indicates no obvious relationship between the provisional sunspot numbers and the magnetic conditions.



At the same time it has to be remarked that if consideration be given to the data of a number of years, it would appear that certain magnetic quantities, in the summer months, are fairly closely correlated with the sunspot numbers. For example, taking the 24 summer months in the period 1923-28, the correlation between the mean daily range of the inequality of H on "all" days of a month and the mean sunspot number for the month is .75 with a standard error of .09. In the case of July, whether H or D be considered, the relationship seems to be still closer. In the equinoctial months the correlation is small; and in the winter months no definite relationship appears.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Provisional sunspot number	79.2	74.6	80.5	76.0	75.4	88.5	101.9	82.4	89.8	59.6	51.2	62.1
Mean absolute daily range of D	12.1	16.4	16.2	19.1	28.3	20.4	26.3	22.3	25.3	26.5	25.2	18.1
Mean $\Sigma R^2$ (100y <sup>2</sup> )	61	92	416	230	1287	400	1197	878	834	821	593	168

The values of mean absolute daily range for the months and seasons of the year 1928 are given in Table IV., the ranges of declination in angle having for convenience of comparison been converted to units of force of the component perpendicular to the magnetic meridian. It will be seen that the ranges of H and V are greater than the corresponding Eskdalemuir values, the ratios of the annual mean ranges of Lerwick H to Eskdalemuir N, Lerwick D to Eskdalemuir W, and Lerwick V to Eskdalemuir V being respectively 1.3, 1.0 and 1.1; the 1927 ratios were the same in the first two cases, but the ratio of the V's was 1.8; the corresponding 1926 ratios were 1.4, 1.1 and 2.1.

The significant change in the three years 1926-28 is thus a diminution in the ratios of the V ranges at the two observatories.

Another important change is in the seasonal behaviour of the ranges; both at Lerwick and at Eskdalemuir during 1928 ~~Summer~~ and not equinox is the season of largest mean absolute daily range.

TABLE III.

Month.	Magnetic Character Figures.			Mean Character Figures.		Mean Value of $\Sigma R^2/100y^2$ .					
	" o "	" 1 "	" 2 "	Ler- wick.	Inter- national.	" All "	Q	" o "	" 1 "	" 2 "	D
	days.	days.	days.			days.	days.	days.	days.	days.	days.
1928.											
January ... ..	11	20	0	0.65	0.44	61	12	15	82	—	195
February ... ..	7	22	0	0.76	0.62	92	27	25	113	—	175
March ... ..	11	16	4	0.77	0.48	416	34	39	109	2,526	2,063
April ... ..	13	17	0	0.57	0.52	230	71	82	342	—	501
May ... ..	10	16	5	0.84	0.75	1,287	99	102	379	6,562	6,259
June ... ..	4	24	2	0.93	0.72	400	108	87	297	2,266	1,164
July ... ..	3	25	3	1.00	0.72	1,197	129	121	284	9,884	1,091
August ... ..	16	13	2	0.55	0.56	878	94	103	662	8,477	4,202
September ... ..	9	14	7	0.93	0.75	834	69	93	249	2,957	3,556
October ... ..	8	20	3	0.84	0.83	821	67	80	272	6,458	2,462
November ... ..	15	13	2	0.57	0.65	593	19	61	590	4,604	2,532
December ... ..	19	11	1	0.42	0.54	168	20	49	279	1,226	621
Year, 1928 ... ..	126	211	29	0.74	0.63	581	62	71	305	4,996	2,068
Year, 1927 ... ..	137	206	22	0.68	0.63	586	58	66	409	5,491	2,427
Year, 1926 ... ..	208	134	23	0.50	0.65	1,436	58	93	1,014	15,614	7,226
Year, 1925 ... ..	207	130	28	0.51	0.56						
Year, 1924 ... ..	229	114	23	0.44	0.55						



TABLE IV.—ABSOLUTE DAILY RANGE. MEAN MONTHLY VALUES.

Month.	Mean absolute daily Range. 1928.			Mean daily Range expressed as percentage of Yearly Mean. 1928.		
	H.	D.	V.	H.	D.	V.
January ...	37	51	19	31	56	35
February ...	50	70	21	42	77	38
March ...	87	69	67	74	76	123
April ...	101	81	41	86	89	75
May ...	112	120	59	180	132	108
June ...	144	87	40	122	96	73
July ...	130	112	84	127	123	154
August ...	158	95	74	134	105	136
September ...	164	108	74	139	119	136
October ...	143	113	65	121	124	119
November ...	111	107	71	94	118	130
December ...	58	77	40	49	85	73
Winter ...	64	76	38	54	84	70
Equinox ...	124	93	62	105	102	114
Summer ...	166	103	64	141	113	117
Year ...	118	91	55	—	—	—

The frequency distribution of absolute daily ranges recorded in 1928 is shown in Table V. A comparison with the corresponding figures for Eskdalemuir (Table V. on page 179) indicates that ranges in excess of 200γ are much more frequent at Lerwick than at Eskdalemuir, except in the case of D or W ranges of which the frequency distributions at the two places show less divergence. Apart from this it is notable that the ranges of maximum frequency at Lerwick fell in the intervals 70-79γ for H, 50-59γ for D, and 10-19γ for V, that is, at lower points in the case of D and V than at Eskdalemuir.

TABLE V.—FREQUENCY DISTRIBUTION OF ABSOLUTE DAILY RANGE.

Range. γ	Number of Cases, 1928.			Percentage Distribution.		
	H.	D.	V.	H.	D.	V.
0—9 ...	0	0	40	0.0	0.0	10.9
10—19 ...	5	1	98	1.4	0.3	26.8
20—29 ...	26	14	51	7.1	3.8	13.9
30—39 ...	30	20	40	8.2	5.5	10.9
40—49 ...	26	29	21	7.1	7.9	5.7
50—59 ...	27	55	27	7.4	15.0	7.4
60—69 ...	26	42	13	7.1	11.5	3.5
70—79 ...	49	40	10	13.4	10.9	2.7
80—89 ...	30	38	8	8.2	10.4	2.2
90—99 ...	28	25	4	7.7	6.8	1.1
100—109 ...	22	19	7	6.0	5.2	1.9
110—119 ...	9	14	4	2.5	3.8	1.1
120—129 ...	7	12	9	1.9	3.3	2.5
130—139 ...	6	10	3	1.6	2.7	0.8
140—149 ...	8	11	4	2.2	3.0	1.1
150—159 ...	4	5	3	1.1	1.4	0.8
160—169 ...	4	3	1	1.1	0.8	0.3
170—179 ...	7	5	0	1.9	1.4	0.0
180—189 ...	2	4	0	0.5	1.1	0.0
190—199 ...	1	0	1	0.3	0.0	0.3
200+ ...	45	16	20	12.3	4.4	5.5
Days omitted	4	3	2	—	—	—



TABLE VI.—PRINCIPAL MAGNETIC DISTURBANCES RECORDED AT LERWICK, 1928.

Where the beginning of a disturbance has been marked by a "sudden commencement," the serial number is followed by an asterisk (\*), and the time entered in the second column is that of the sudden commencement, estimated to the nearest minute. In other cases, the exact hour nearest the time at which disturbance may be regarded as having begun is entered in the second column. To the tabulated values of maximum and minimum, the following have to be added:—H, 14000 γ; D, 14°, V, 46000 γ.

No.	From	To	Horizontal Force.					Declination.					Vertical Force.				
			Max.	Time.	Min.	Time.	Range.	Max.	Time.	Min.	Time.	Range.	Max.	Time.	Min.	Time.	Range.
1	d. h. m.	d. h. m.	γ	d. h. m.	γ	d. h. m.	γ		d. h. m.		d. h. m.		γ	d. h. m.	γ	d. h. m.	γ
2*	Jan. 26 19	Jan. 27 23	665	27 18 8	560	27 11 51	105	55.8	27 13 12	27.6	27 5 16	28.2	812	27 18 17	673	27 5 12	139
3*	Feb. 12 7 15	Feb. 15 3	647	14 20 51	567	14 3 51	80	50.6	14 14 22	28.9	13 21 51	21.7	783	13 21 49	706	14 4 26	77
4	Mar. 10 22 16	Mar. 13 6	939	11 15 31	256	12 2 48	683	65.5	11 15 0	18.4	12 1 57	47.1	1048	11 15 42	483	12 2 47	565
	Mar. 13 10	Mar. 15 6	660	13 16 24	467	14 1 14	193	53.7	13 16 11 and 14 14 56 7 21 31	18.6	14 0 59	35.1	832	13 17 36	540	14 0 3	292
5	Apr. 6 17	Apr. 8 6	656	7 17 9	401	7 21 38	255	54.1		12.2	7 21 43	41.9	709	6 19 42	593	8 1 36	116
6	Apr. 19 2	Apr. 21 20	657	21 16 6	407	20 2 50	250	53.4	21 14 4	15.0	20 1 27	38.4	735	21 17 9	593	20 1 20	142
7†	May 5	May 6 7	676	5 19 52	509	5 12 49	167	50.3	5 20 0	32.2	6 6 32	18.1	727	5 20 7	669	5 8 20	58
8	May 10 12	May 11 9	824	10 17 4	99	10 23 31	725	52.9	10 17 1	10.3	10 23 42	42.6	780	10 17 2	516	10 23 36	264
9	May 11 13	May 15 6	853	11 16 43	394	12 0 58	459	59.5	11 16 47	13.3	12 1 51	46.2	769	11 17 12	611	13 0 32	158
10	May 16 10	May 17 22	703	16 19 42	418	17 1 26	285	58.1	17 1 3	16.6	10 20 22	41.5	707	16 19 20	606	17 1 28	101
11	May 18 3	May 19 22	698	18 19 2	537	19 8 48	161	53.1	18 5 5	21.1	18 18 59	32.0	744	18 15 30	672	18 5 30	72
12	May 27 9	May 30 8	> 954	between 28 12 37 and 16 39	< 64	between 28 23 25 and 23 59	> 890	107.8	27 20 57	-27.8	28 23 41	135.6	776	28 21 28	647	29 2 3	129
13	May 31 10	June 2 4	707	1 19 15	508	2 1 48	199	50.5	1 17 46	26.0	1 23 9	24.5	722	31 10 0	684	2 1 22	38
14	June 3 3	June 6 2	712	3 17 9	463	5 21 51	249	51.9	5 3 7	23.7	5 22 18	28.2	757	3 18 20	691	6 1 10	66
15	June 7 4	June 9 6	799	7 16 49	496	8 1 38	303	50.4	7 16 42	25.3	9 0 52	25.1	713	7 17 7	692	8 2 10	21
16	June 12 0	June 15 4	653	14 15 56	442	14 2 11	211	54.4	14 1 48	25.0	13 5 22	29.4	739	13 12 32	632	14 2 11	107
17	June 22 0	June 25 24	700	22 15 8	251	23 0 18	449	58.0	22 9 21	18.9	22 21 12	39.1	797	22 13 59	531	23 0 16	266
18*	July 2 8 33	July 3 24	695	3 18 59	526	2 10 38	169	50.6	2 14 50	22.5	3 21 21	28.1	686	2 16 20	621	3 22 23	65
19	July 7 18	July 12 24	884	7 23 40	< 116	between 8 0 57 and 9 52	> 768	157.9	8 1 12	< -50.2	8 5 49	> 208.1	> 1428	between 8 4 5 and 8 54	254	8 1 10	> 1174
20	July 21 12	July 23 7	691	22 18 21	419	22 3 27	272	54.1	22 0 22	12.8	22 2 25	41.3	721	22 18 9	645	22 3 47	76
21	July 28 0	July 29 9	670	28 17 30	541	28 6 21	129	45.3	28 13 38	29.6	29 8 30	15.7	759	28 15 14	612	29 4 40	147
22	July 30 15	Aug. 1 8	727	31 17 59	483	1 0 18	244	48.7	31 19 1	21.5	31 19 52	27.2	766	31 18 23	579	1 0 46	187
23*	Aug. 4 17 7	Aug. 6 3	999	5 17 45	< 80	between 5 1 27 and 1 53	> 919	59.3	5 17 59	-1.3	5 1 47	60.6	848	5 17 43	320	5 1 27	528
24	Aug. 6 18	Aug. 7 24	660	7 15 15	271	6 23 24	389	50.6	6 23 40	18.3	7 0 49	32.3	751	7 16 0	481	7 0 50	270
25	Aug. 12 4	Aug. 13 24	743	12 17 19	527	12 11 22	216	47.8	13 2 10	20.0	12 20 25	27.8	750	12 18 52	636	13 4 10	114
26*	Aug. 25 22 35	Aug. 29 6	682	28 18 30	< 46	between 27 2 10 and 2 39	> 636	56.2	26 5 18	-29.1	27 3 15	85.3	731	26 13 50	461	27 5 7	270
27	Sept. 1 23	Sept. 4 1	> 959	3 17 1	511	2 4 9	> 448	56.0	3 13 31	9.1	2 3 22	46.9	886	3 17 1	524	2 3 16	362
28*	Sept. 7 13 44	Sept. 10 4	> 953	7 17 4	187	8 2 10	> 766	54.7	7 17 21	-0.9	8 23 22	55.6	837	7 17 52	592	8 23 26	245
29*	Sept. 18 15 42	Sept. 19 24	693	18 20 12	< 133	18 22 52	> 560	51.1	18 20 18	-13.3	18 23 32	64.4	800	19 16 59	650	18 23 51	150
30*	Sept. 24 16 22	Sept. 26 21	668	25 14 8	404	25 21 49	264	49.9	25 21 45	7.2	25 22 9	42.7	802	25 16 10	647	26 0 40	155
31*	Oct. 1 19 17	Oct. 3 4	701	2 17 4	526	2 9 49	175	50.3	2 15 10	16.3	2 19 23	34.0	832	2 17 47	692	1 22 20	140
32*	Oct. 18 7 23	Oct. 20 12	1016	18 17 46	168	18 20 49	848	75.2	18 17 54	-4.5	18 8 39	79.7	773	18 15 39	616	18 21 14	157
33	Oct. 20 20	Oct. 23 1	699	22 18 29	459	22 1 15	240	45.8	22 18 34	18.2	22 2 29	27.6	711	22 18 27	661	22 2 12	50
34	Oct. 24 2	Oct. 26 6	724	25 20 8	< 97	between 25 1 0 and 2 23	> 627	61.5	25 2 35	-16.9	25 1 12	78.4	890	25 2 4	415	25 0 49	475
35	Nov. 1 20	Nov. 4 24	939	3 17 51	396	3 0 4	543	49.5	3 17 50	-11.9	3 19 28	61.4	776	2 17 58	604	3 0 40	172
36*	Nov. 10 6 55	Nov. 11 3	642	10 15 26	543	10 22 59	99	59.0	10 15 0	23.7	10 23 59	35.3	823	10 15 44	703	10 8 4	120
37*	Nov. 11 16 58	Nov. 14 6	> 979	between 13 18 12 and 18 18	399	11 23 10	> 580	94.6	13 18 19	6.2	13 18 33	88.4	939	13 17 8	579	13 19 17	360
38	Nov. 15 13	Nov. 19 4	637	17 19 55	384	15 21 16	253	52.5	15 21 15	5.1	15 22 15	47.4	781	17 15 55	534	15 21 26	247
39	Dec. 5 16	Dec. 7 7	618	6 14 42	396	6 3 1	222	43.2	6 2 55	-20.2	5 23 37	63.4	760	6 17 38	538	5 23 28	222
40	Dec. 11 17	Dec. 14 6	634	11 18 56	513	13 22 35	121	42.2	12 16 47	12.8	12 2 26	29.4	692	11 21 59	599	12 5 44	93

† Record incomplete; lighting failed between 5d 0h and 5d 8h.



*Diurnal Inequalities.*—The ranges of the mean diurnal inequalities of H and D on "all" days in 1928 are rather higher in summer months than those of 1926 and 1927, and have not changed greatly in winter and equinoctial months from the conditions of 1927. In the case of vertical force there is either little change or general reduction in the "all" day inequality ranges, the month of November providing the only conspicuous exception.

The quiet day inequality ranges have behaved in similar fashion, except that the range of the V inequality in December, as well as in November, has risen appreciably.

Considering now the disturbed days the most conspicuous feature has been the continued drop in the range of the mean diurnal inequality of vertical force, the mean values for the years 1926, 1927 and 1928 being respectively 132, 99, and 67. The range in the inequality of horizontal force is increased in May, August and November above any of the values for these months in recent years; in other months it is lower than one or both of the years 1926 and 1927.

A comparison of the records of Eskdalemuir and Lerwick shows that the declination inequalities at the two places for all, quiet and disturbed days are very similar in general appearance, although minor irregularities on the one set of values are not always reproduced on the other, or if so, only with diminished amplitude. Differences are more obvious on the horizontal force curves even on quiet days; and the disturbed day inequalities in H in some months bear little resemblance to one another. In the case of vertical force the present year is the third year of observations to be published. In some months the quiet day inequalities are very different from those at Eskdalemuir, and it will be seen from the table below that the range of the inequality varies from about one-fifth of the Eskdalemuir range in some summer months to 1.6 times the Eskdalemuir range in December. The seasonal variation of this ratio is thus higher even than in 1926 and much higher than in 1927. There is another point connected with the quiet day inequality of V in which 1928 resembles 1926 more nearly than 1927. At Lerwick the V oscillation on quiet days is more definitely semi-diurnal than at Eskdalemuir, having fairly well marked maxima at about 7h and 18h. In all seasons of 1928, as in 1926, the afternoon hump is definitely the larger, though in 1927 the morning hump was rather the larger in the mean for the year and very definitely the larger in the summer season.

Ratio of the Range of the Inequality at Lerwick to that at Eskdalemuir. (1928).

Type of Day.	Element.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
q	D	...	.78	.86	.88	.94	.95	1.03	1.09	1.04	.95	.92	.99
d	D	...	1.09	1.08	1.00	1.03	1.30	.92	.94	1.26	1.16	1.03	1.12
q	H	...	.73	.84	.95	1.06	1.06	1.04	1.17	1.04	.96	.92	.74
d	H	...	.74	.75	1.56	.95	1.93	1.53	1.60	2.46	2.41	2.41	3.14
q	V	...	.68	.76	.38	.22	.20	.32	.20	.41	.35	.85	1.63
d	V	...	1.18	.59	2.39	1.26	.65	1.20	.91	1.30	1.04	.91	1.33

On Plates I. and II. the diurnal behaviour of magnetic force is illustrated graphically, the representation in the latter plate being in the form of vector diagrams.

*Magnetic Disturbances.*—Particulars of the principal magnetic disturbances recorded at Lerwick during the year are given in Table VI. In the Eskdalemuir Section will be found a similar list which deals with the same disturbances as recorded at that Observatory.

In so far as "sudden commencements" are concerned it has to be remarked that within the limits of accuracy of measurement and registration, these events appear to occur simultaneously at the two Observatories.



# DIURNAL VARIATION OF THE MAGNETIC ELEMENTS LERWICK 1928

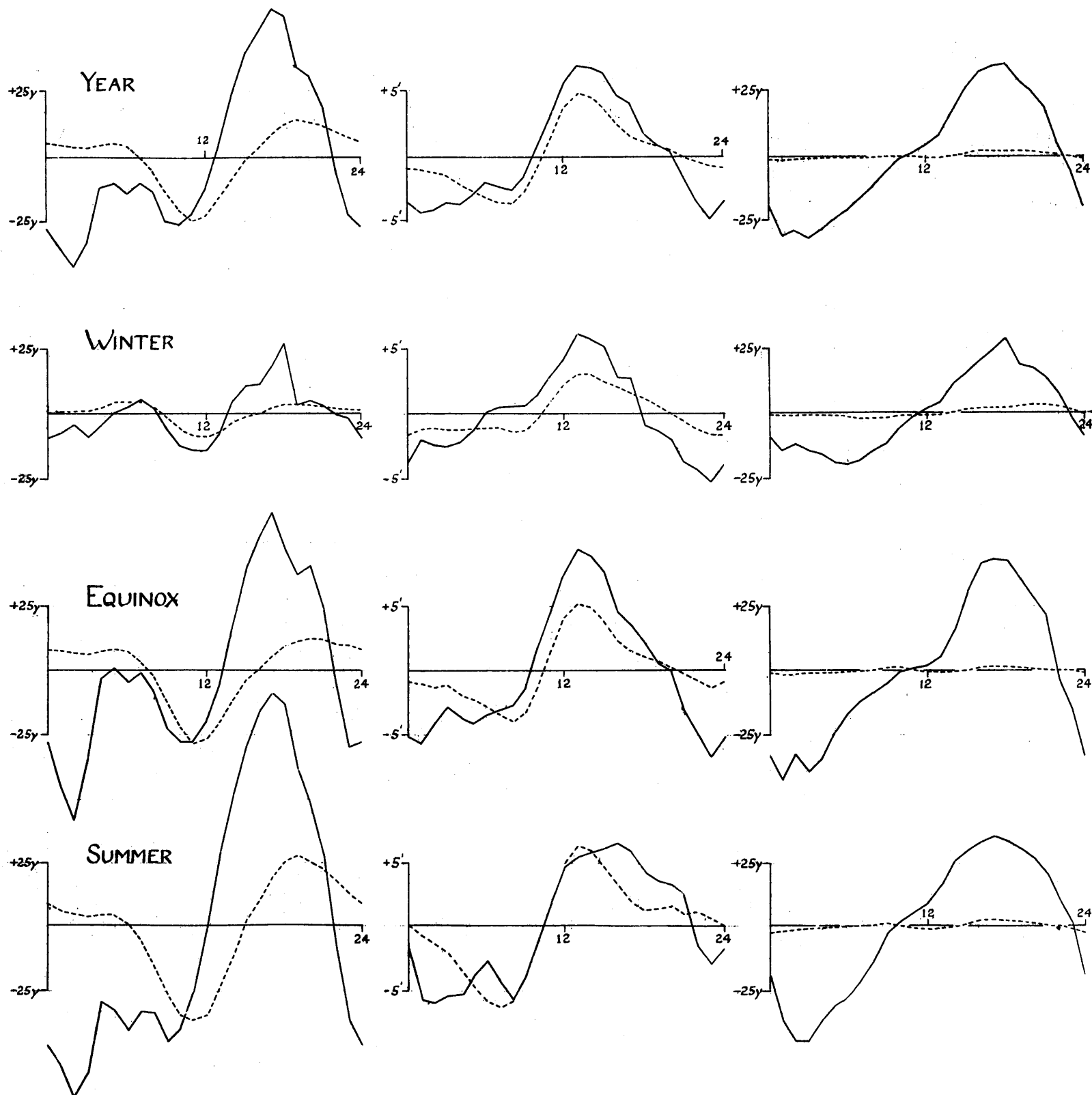
Quiet days .....

Disturbed days —

Horizontal Force

Declination

Vertical Force





# VECTOR DIAGRAMS ILLUSTRATING DIURNAL VARIATION OF MAGNETIC FORCE

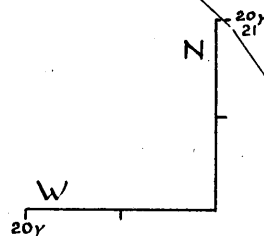
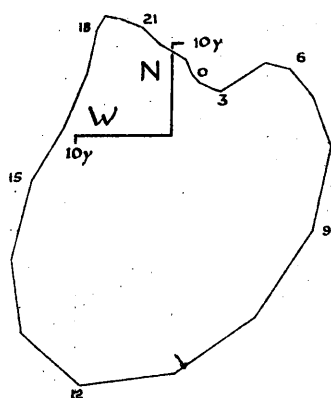
To face page 39.

LERWICK 1928

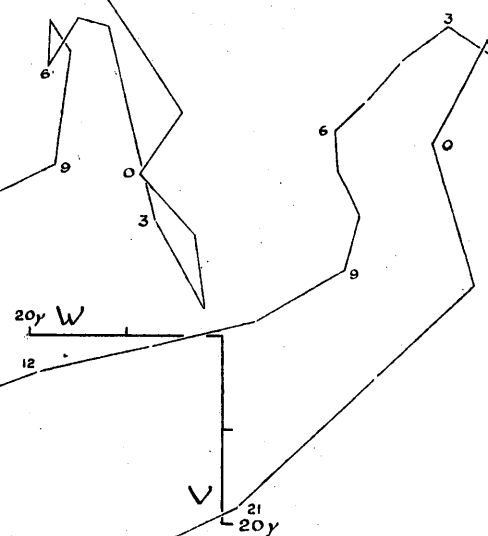
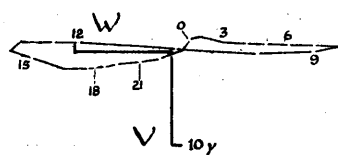
*Quiet days*

*Disturbed days*

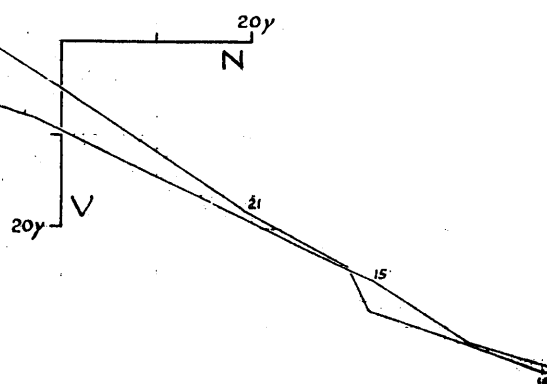
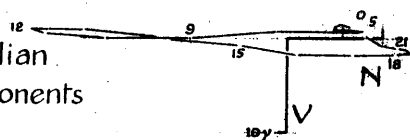
Horizontal  
Components



Prime  
Vertical  
Components



Meridian  
Components





### Remarks on the Autographic Records, 1928.

*January.*—(Average Character Figure 0.65.)—Apart from a slight disturbance from 20h to 24h on the 1st, the month was quiet until the 26th. Some disturbance occurred from 26d 19h to 27d 22h, but the ranges were small, 101 $\gamma$  in H, 27'·6 in D, 135 $\gamma$  in V. Thereafter till the end of the month conditions were rather less quiet. Character figure 2 was not assigned to any day of the month.

Aurora was observed at one or more places in Scotland on January 8, 13, 15, 22, 26 and 27, but only on the two last mentioned dates was the display more than a glow.

*February.*—(Average Character Figure 0.76.)—A slight disturbance from about 20h to 21h on the 1st consisted of a dip of 14' in D and a wave of amplitude 10 $\gamma$  in H; this was repeated in a movement of very similar shape, beginning at 2d 18h 40m, which was followed by slight disturbance for the next 24 hours. Conditions were then quiet until the middle of the month. A "sudden commencement" at 12d 7h 15m consisted of an abrupt drop of 0'·8 in D, followed by a rise of 2'·4 in 4 minutes, and a fall of 3'·6 in the next 9 minutes; the corresponding changes in H being +5.5 $\gamma$ , -18 $\gamma$ , +27 $\gamma$ . This was followed by slight disturbance which reached its greatest intensity in the night of the 13th-14th; the chief auroral activity of the month seems to have occurred on this night.

Mention may be made of a sudden rise of 103 $\gamma$  in H, beginning at 15d 21h 58m, with a recurrence at 16d 19h 57m in the form of a rise of 98 $\gamma$ ; in each case the curve returned to its previous position in about the next 25 minutes. Simultaneously with these there were dips of 7'·7 and 4'·6 in D, and slight but perceptible movements in V. Other rather similar cases occurred, notably at 26d 22h 30m and 27d 21h 31m, there being a drop of 18' in D in about 20 minutes on the latter occasion.

There was slight disturbance on several days in the second half of the month.

Character figure 2 was not assigned to any day in this month.

Aurora was observed at one or more places in Scotland on February 3, 5, 12-16 inclusive, 18-22 inclusive.

*March.*—(Average Character Figure 0.77.)—Until the 10th conditions were very quiet. A "sudden commencement" at 10d 22h 16m was followed by a rise of 29 $\gamma$  in H in 13 minutes, and a fall of 35 $\gamma$  in V in about an hour, superposed on oscillations of very small period and amplitude. This was succeeded by quiet conditions for several hours, during which all three components gradually returned to about their undisturbed values; but shortly before 11d 8h began a considerable disturbance, which lasted until about 15d 2h, with a quiet interval in the early hours of 13th. (The four days 11th-14th were awarded character figure 2). The storm had its greatest intensity from 11d 12h-12d 6h, during which time the H curve assumed the general shape of a complete sine-wave of amplitude about 110 $\gamma$ , with maximum at 11d 18h; the form and phase of the V curve were roughly the same, the amplitude being about 220 $\gamma$ , but in D changes of long period were not much in evidence. Superposed on these were large fluctuations of smaller period, the maximum value of H for the storm (14939 $\gamma$ ) occurring in a very pronounced peak at 11d 15h 31m, the minimum (14256 $\gamma$ ) in a sharp dip at 12d 2h 48m; the maxima and minima of D and V occurred at about the same times, the ranges being 47'·1 and 565 $\gamma$ .



It is noticeable that many of the features of the Lerwick curves, particularly the smallest ones, are faithfully reproduced at Eskdalemuir in the corresponding component; this is especially true of V on this occasion, the curves for the two places being very similar both in general outline and in detail.

A "sudden commencement" at 20d 22h 33m (+27 $\gamma$  in H) was not followed by any disturbance worthy of mention, and conditions were quiet till the end of the month.

Aurora was observed at one or more places in Scotland on March 11, 12 and 13, all within the magnetically disturbed period referred to above.

*April.*—(Average Character Figure 0.57.)—The first few days of the month were not entirely quiet, but the first disturbance to be mentioned was the very moderate one which lasted from 6d 17h to 8d 6h. Between 21h 24m and 21h 50m on the 7th, there was a sharp fall and rise of about 200 $\gamma$  in H, accompanied by a wave of amplitude 20' in D and a fall of about 95 $\gamma$  in V. At about 8d 0h H fell rapidly by about 110 $\gamma$ , remaining near the same value from 0h 40m to 1h 30m, and after a further brief fall rising again rapidly to its undisturbed value; this was accompanied by oscillations in D and a rounded dip of about 65 $\gamma$  in V.

Some disturbance occurred between 16d 14h and 17d 6h, the ranges recorded being 125 $\gamma$  in H, 29' in D and 133 $\gamma$  in V.

In the night of 19th-20th there were well-marked fluctuations in all three components. After short-period oscillations lasting about 7 hours, H fell to a sharp minimum of some 210 $\gamma$  below its undisturbed value, at 20d 2h 51m; there was also a dip of about 10 hours duration in V, with a minimum at 20d 1h 20m of 120 $\gamma$  below the undisturbed value. Thenceforward to the end of the month there is nothing to be mentioned, although no day was free from slight disturbance. The last 8 days were awarded character figure 0. Character figure 2 was not given to any day in the month.

Aurora was observed at one or more places in Scotland on the 15th-21st inclusive.

*May.*—(Average Character Figure 0.84.)—During the first four days of the month conditions were quiet and the normal diurnal variation was well marked. After several days of slight disturbance, a considerable storm occurred between 10d 12h and 11d 10h, which was repeated on the 11th-12th, with curves of very similar characteristics but smaller amplitude. After small and rapid oscillations lasting 3 hours from about 9h on the 10th, H rose fairly steadily for 5 hours, the maximum of 14824 $\gamma$  occurring in a sharp peak at 17h 4m; the curve then falls, most rapidly after 20h, and reaches a minimum, after well marked oscillations, of 14099 $\gamma$  at 23h 31m, instantly rising very rapidly and increasing by 440 $\gamma$  in the next hour. The curve of V is of the same general shape, with a range during the storm of 264 $\gamma$ , the maximum and minimum occurring within 5 minutes of those of H. The long-period oscillation is less noticeable in the D curve, but is approximately in phase with those of H and V, and there is considerable disturbance of a shorter period, the range of D being 42'.6. On the following night disturbance recurred, but the range was considerably smaller in H and V, though slightly larger in D.

The general features of the disturbance are very similar at Eskdalemuir.



Disturbed conditions persisted for several days, the 17th being noticeable for a very sharp V-shaped dip of about 280 $\gamma$  in H, with a minimum at 1h 26m, which was accompanied by a peak of 18' in D and a drop of 70 $\gamma$  in V.

Conditions were fairly quiet from the 20th to 26th, but on the morning of the 27th began a disturbance of great intensity which lasted till the 30th. The main characteristic of this storm was the great activity in H and D, and the relative quietness of V. During the first day and night (27th-28th) the ranges were 629 $\gamma$  in H, 98'·4 in D (the greatest up to this date in 1928) but only 94 $\gamma$  in V; during the succeeding 24 hours the H trace passed off the sheet on both sides for long periods, while ranges of 122'·9 in D and 129 $\gamma$  in V were recorded. In its larger features the H curve follows the usual course of a more or less regular and gradual rise during the afternoon hours, then a sharp peak about 17h, followed by a gradual fall, which becomes very rapid about an hour before the minimum; after the minimum the curve rises rapidly, and irregular oscillations follow during the small hours of the morning. The fluctuations in D were large and irregular during the 27th-28th, larger but less irregular during the 28th-29th, when rather regular oscillations of about 20 minutes period are noticeable.

Comparing the traces with those obtained at Eskdalemuir, we find the usual similarity in the horizontal components, but a much greater activity in V at Eskdalemuir. No aurora was observed from stations in Scotland at this time, but it is reported to have been seen from S.S. "Wangaratta"<sup>1</sup> in Latitude 38° 17' S, Long. 93° 3' E. shortly after 21h G.M.T. on 27th, i.e., near to the time of minimum force on that date in H and V at Lerwick.

The 29th also was considerably disturbed, the 30th and 31st less so, though with continual movement of a small order.

Aurora was observed at one or more places in Scotland on May 10 and 19.

*June.*—(Average Character Figure 0·93.)—June was marked by continual activity, but little disturbance of large amplitude. On the 7th H rose by about 210 $\gamma$  between 13h 30m and 14h 40m, remained at a high value for 2 hours, afterwards falling again gradually, with a dip of about 90 $\gamma$  between 1h and 2h on the 8th. Simultaneously there were irregular fluctuations in D and a small prolonged hump in V.

The 10th and 11th were quiet, though during the daylight hours of the 10th there were very small and rapid oscillations, with periods of the order of 2 minutes and amplitude  $\frac{1}{2}\gamma$  or less in H; then followed another period of moderate activity, ending in a disturbance of somewhat unusual character on the 22nd. The movement appeared first as a rapid fall in H, beginning at 22d 6h; the curve reaches a sharp minimum about 240 $\gamma$  below the undisturbed value at 8h 48m, then rises rapidly for  $\frac{1}{2}$  hour, and from then till midnight it has a gently rounded shape with small and rapid oscillations superposed; between 22d 23h 40m and 23d 1h 0m there is a sharp V-shaped dip of about 270 $\gamma$ , followed by irregular and rapid oscillations during the morning of the 23rd. The D trace presents no very marked features for description, the most noteworthy being a minimum at 22d 8h 37m, followed by a small rounded maximum at 9h 11m. In the case of V the movement is first noticeable about 9h, when a small drop occurs, which is followed by a gradual rise to a maximum at 13h 59m; the curve then falls slowly till about 23h, when irregular fluctuations begin, a minimum is reached at 23d 0h 16m, and there is a gradual rise till the afternoon of the same day; the range in V was 266 $\gamma$ .

<sup>1</sup> Marine Observer, Vol. VI., p. 101.



At Eskdalemuir the dip in H about midnight of the 22nd-23rd is scarcely noticeable; apart from this the records are very similar to those of Lerwick in all three components.

During the rest of the month, though it was not quiet, there was no noteworthy disturbance.

Aurora was not reported from any place in Scotland during June.

*July.*—(Average Character Figure 1.00.)—A "sudden commencement" at 2d 8h 33m was followed by very moderate activity during the rest of the day. The succeeding days were also moderately active, until an abrupt movement at 7d 22h 12m, somewhat similar to a "sudden commencement," marked the beginning of the greatest magnetic storm of the year. Violent oscillations occurred in all three components, H and V exceeding the limits of registration for long periods; H rose to a sharp maximum at 7d 23h 40m, afterwards decreasing very rapidly, passing off the sheet at 8d 1h, and remaining off for most of the time until 10h; there was a temporary rise about 8d 2h. D, after a very sharp maximum at 8d 1h 12m, decreased gradually, with large oscillations, till about 8d 9h, when it rose again. V fell to a sharp minimum at 8d 1h 10m, afterwards rising and passing off the top of the sheet at intervals till 9h, when it fell rapidly, the disturbance of this component appearing to die out about 10h. The ranges during the period 7d 22h-8d 10h cannot be given, but exceeded 770 $\gamma$ , 208' and 1174 $\gamma$  in H, D, and V respectively.

Whereas at Lerwick the main feature of the V curve is a great rise during the morning hours after 8d 1h, at Eskdalemuir there is a no less conspicuous fall.

There was disturbance of considerable intensity until the early hours of the 10th, after which followed a period of comparative calm, the 13th, 14th, and 15th being the quietest days of the month. This continued till near the end of the month, with the exception of about 48 hours beginning at noon on the 21st, when there was disturbance of moderate intensity, the ranges being 272 $\gamma$  in H, 41'·3 in D and 79 $\gamma$  in V during the period.

The last 6 days of the month were notable for the fact that the ranges of diurnal variation in V were unusually large compared with those of H and D.

The 31st saw some disturbance of a usual type, continued on August 1st. The ranges recorded were 244 $\gamma$  in H, 27'·2 in D, and 187 $\gamma$  in V. The maxima of both H and V occurred about 31d 18h, the minima about August 1d 1h; at Eskdalemuir the disturbance was of similar shape, but there was no pronounced minimum in N corresponding to that in H at Lerwick.

Aurora was not reported from any place in Scotland during July, but a bright display was seen from stations in England and in America on the evening of the 7th<sup>1</sup>, also from many ships in both hemispheres<sup>2</sup>.

*August.*—(Average Character Figure 0.55.)—Great disturbance set in after a "sudden commencement" at 4d 17h 7m. Irregular fluctuations occurred till midnight, when H and V began to decrease rapidly; both components remained at a low value between 1h and 3h on the 5th, afterwards rising irregularly. H passed off the bottom of the sheet between 1h 25m and 1h 55m, during which time the absolute minimum occurred; as frequently happens, there was a temporary rise in H at about 2h. During this time D underwent large oscillations, and afterwards rose to a maximum at 5d 5h 47m.

<sup>1</sup> Nature, CXXII., pp. 108 and 167.

<sup>2</sup> Marine Observer, Vol. VI., pp. 146-147.



The D curve during the second day of the storm is gently rounded in general outline, with maximum about 15h, and having no very pronounced fluctuations. H rose to a maximum in a very sharp peak at 5d 17h 45m, afterwards falling irregularly till midnight, when the disturbance seems to have died away temporarily. V rose during the morning and afternoon of the 5th, reached a sharp maximum at 17h 43m, followed by a rapid fall, fluctuated irregularly for the next 6 hours and fell to a rounded minimum at about 6d 0h 35m. The ranges in the period discussed were  $>919\gamma$  in H,  $60\cdot6$  in D,  $528\gamma$  in V. The disturbance at Eskdalemuir was of similar shape, but of markedly small amplitude in N as compared with H at Lerwick.

There was a recurrence of disturbance during the night of the 6th-7th, when a large dip of roughly  $300\gamma$  occurred in H, with a temporary rise about midnight. There was a dip of  $220\gamma$  in V, with minimum about 1h, and large irregular fluctuations in D.

Moderate disturbance occurred on the 12th-13th; conditions were then comparatively quiet until, after a "sudden commencement" at 25d 22h 35m, fluctuations set in in all three elements. Small and rapid oscillations continued throughout the 26th, and at about 22h disturbance of large amplitude began. The H curve shows a large dip between 26d 22h and 27d 8h, with a subsidiary maximum about 1h, the depth, measured from a mean line through the oscillations, being about  $450\gamma$ . There are dips also in the D and V curves, though in the case of D, as is usual, the oscillation of long period is small compared with those of short period. The notable features of this storm are the absence of any pronounced maximum during the afternoon of the 26th, and the presence of continuous small oscillations with a period of the order of 4 or 5 minutes.

Moderate activity continued during the 27th and 28th, the last three days of the month being quiet.

Aurora was observed at one or more places in Scotland on August 24, 26 and 27.

*September.*—(Average Character Figure 0.93.)—Character figure 2 was awarded to seven days in this month, more than in any other month of the year. After moderate agitation throughout the 2nd, there was a somewhat unusual disturbance on the afternoon of the 3rd. H rose irregularly till 17h 55m, when a sudden and very large rise took place, carrying the trace beyond the limit of registration; it returned again about 20 minutes later, falling rapidly to approximately the normal position at 17h 30m, and the disturbance died away in small oscillations during the next 7 hours, with a temporary increase of activity from about 19h 20m to 20h 40m. In D there was not much disturbance, beyond oscillation of roughly  $10'$  amplitude around 17h and 20h. In V there was a gradual rise in the afternoon to a sharp maximum at 17h 1m, followed by an irregular fall till about 21h. The Eskdalemuir V curve is similar to the Lerwick H.

One of the most disturbed days of the month was the 7th, when great agitation began immediately after a "sudden commencement" at 13h 44m. Very large and jagged peaks and dips are superposed on the usual diurnal oscillation of H during the succeeding 18 hours, and these have a well marked period of about  $3\frac{1}{2}$  hours; including the "sudden commencement" itself there are six pronounced minima. The maximum occurred at about 7d 17h 10m, when the trace passes off the sheet,



the minimum at 8d 2h 10m, the range being somewhat greater than 770 $\gamma$ . The usual temporary rise in H during the period of minimum around midnight is here well marked, but increased in duration to some three hours. There was much agitation of short period in D, with a dip at 22h-23h, and an irregular hump about 8d 2h, the range during the storm being 53'·1. The V curve is of normal character with a range of 223 $\gamma$ . The main features of the disturbance as recorded at Eskdalemuir show no very striking differences from those at Lerwick.

The disturbance continued with lessened intensity during the 8th, 9th and 10th, and was followed by a week of quiet conditions. The 12th, 16th and 17th were among the quietest days of the month, but on the 18th a "sudden commencement" at 15h 42m marked the beginning of a rather unusual disturbance. H rose abruptly by 45 $\gamma$ , and after a period of small and rapid oscillations rose to a rounded maximum shortly after 20h, broken by a sharp temporary drop of about 110 $\gamma$  (which was accompanied by a fall of 40' in D); there followed an increasingly rapid fall to a minimum at 23h, after which H rose rapidly but irregularly, nearing its normal value soon after midnight. There were no further large fluctuations, but minor activity continued until near midnight of the 19th. After its drop shortly after 18d 20h, D rose gradually till 22h 40m, when there was a further drop of 40', followed by a rise again at 23h 30m. V underwent a gradual rise from 19h to 21h, followed by a gradual fall, with a sharp temporary rise at 23h. The ranges during the night of the 18th-19th were >560 $\gamma$  in H, 64'·4 in D and 128 $\gamma$  in V.

As recorded at Eskdalemuir the disturbance is of remarkably similar shape in the horizontal components; but in V, although there is the same gradual rise with maximum about 21h, the sharp rise at 23h is inverted and appears as a no less sharp temporary drop. It is perhaps worthy of remark that here, as in many other cases, the preliminary agitation in N at Eskdalemuir is of about the same amplitude as that in H at Lerwick; but the very large movements of H in which the storm seems to culminate are not reproduced at Eskdalemuir on anything like the same scale.

The rest of the month was relatively quiet for the time of year, except for the two days following a "sudden commencement" at 24d 16h 22m. The disturbance, though not of large proportions, was of interesting character. Small and rapid oscillations occurred in H during the rest of the night, with a sharp V-shaped drop of about 120 $\gamma$  between 25d 1h 30m and 2h 5m. This was accompanied by a double peak in D and a small dip in V. From 7h till 11h on the 25th there were continued oscillations of about 5 minutes period and the relatively large amplitude of 12 $\gamma$ , more or less, in H, and 3' in D. Moderate activity occurred during the afternoon, with marked oscillations in all three elements about 22h, after which the disturbance died gradually away.

At Eskdalemuir the disturbance was of similar shape and amplitude, but the initial movements in the horizontal components at the "sudden commencement" were somewhat greater than at Lerwick.

Aurora was observed at one or more places in Scotland on September 7-11 inclusive, 13, 14, 18 (bright and widely seen), 19, 20, 21, 23.



*October.*—(Average Character Figure 0·84.)—The first half of the month was quiet, particularly the period 9d 0h to 13d 10h. A small “sudden commencement” at 1d 19h 17m was followed by moderate activity till about 3d 1h. On the 18th a large disturbance occurred, which was unusual in that it began abruptly after a “sudden commencement” at 7h 26m, and had almost died away by midnight. H fell with irregular oscillations to a sharp minimum at 8h 40m, and then mounted in three jagged waves to a maximum at 17h 46m, the preceding two hours being marked by very large oscillations. These changes were accompanied by small but increasing oscillations in D and V. Beginning shortly after the maximum, H fell by three abrupt stages of about 250γ, separated by intervals of oscillation, to a sharp minimum at 20h 49m, and rose again rapidly, reaching an approximately normal value at 22h, and continuing without much change, but with small and rapid oscillations, for the next 36 hours. The largest oscillations of D and V also took place between 17h and 22h, after which they died away very quickly. The ranges during the storm were 848γ in H, 79'·7 in D and 157γ in V.

At Eskdalemuir the disturbance appeared with much greater intensity in V, of which the curve is very similar to that of H at Lerwick, rising in three large waves, with maxima at about 12, 15 and 18h, and afterwards falling rapidly to a minimum about 21h.

It may be a coincidence that a small peak of about 90γ in H at 18d 21h 35m is repeated three times at intervals of about 48 hours, with small corresponding movements in D and V.

After a very quiet day on the 23rd, disturbance began at 24d 2h. Minor oscillations continued throughout the day, increasing about 20h. At 22h a fall began in H, which was very rapid about 23h; after irregular oscillations the curve passes off the sheet at 25d 1h, returning in a rapid rise at 2h 40m, after which small and rapid oscillations continued for about 48 hours, with a renewal of activity from 25d 17-22h. In the curve of D there is an irregular dip from 24d 20h to 25d 8h, with large oscillations some 20' in amplitude, the range during this period being 78'·4; but perhaps the most unusual feature of the disturbance is the sharp peak in V, about 420γ high, which occurred around 25d 2h, during a pronounced dip of 230γ lasting from 24d 22h to 25d 6h. This dip in V occurred also at Eskdalemuir, but the peak is inverted into a sharp minimum.

The rest of the month was fairly quiet, especially 28d 10h to 29d 10h.

Aurora was observed at one or more places in Scotland on October 2, 6-13 inclusive, 15, 17-21 inclusive, 22 (very bright in Shetland), 24, 25 (widely), 30, 31. The aurora of 18th was seen from ships in the N. Atlantic (Lat. 50° N., Long. 61° 30' W.) and off the New South Wales Coast of Australia.<sup>1</sup>

*November.*—(Average Character Figure 0·57.)—Moderate disturbance occurred on the 2nd, 3rd and 4th. The activity was of a low order, broken during the night of the 2nd-3rd by a peak of 120γ in H at 17h 40m, and a dip of 150γ about midnight; the peak is repeated in a larger one of about 350γ at 3d 17h 51m (of which there

<sup>1</sup> Marine Observer, Vol. VI., p. 219.



is no trace at Eskdalemuir), and again on the 4th by a small one at 18h 55m. The oscillations in D have a marked period of slightly over 2 hours, and amplitude of the order of 10' during the night of the 2nd-3rd, and these are discernible continuously until 4d 8h. V rose gradually to a maximum shortly before 18h on the 2nd, afterwards falling to a rounded minimum soon after midnight, the range being 172γ; during the 3rd-4th the movements of V were rather irregular and of small extent.

It seems worthy of remark that the marked peaks which occurred in H during the period 2d 14h to 3d 20h either gave no counterpart in N at Eskdalemuir, or are inverted; but during the preliminary stages of the disturbance from 1d 20h to 2d 14h the two curves are very much alike, as are the D and W curves throughout. Another notable point of difference is in the V curves of the 3rd-4th, where a pointed peak 110γ high occurring at Eskdalemuir at 3d 17h 56m has its counterpart at Lerwick, not in the V curve, but in H. (Compare October 18th.)

After five days of moderately calm conditions, the 8th and 9th being among the quietest days of the month, a small "sudden commencement" occurred at 10d 6h 55m and was followed by very slight disturbance during the rest of the day; there was further slight disturbance from 11d 22-24h after a "sudden commencement" at 16h 58m. During the afternoon and evening of the 13th there was some disturbance, culminating in large movements in all three elements shortly after 18h. H rose by 300γ to a peak at 18h 12m, falling immediately by more than 400γ, after which the disturbance died away during the night; D had a sharp maximum at 18h 19m, followed by large oscillations for about an hour, the range of variation being 88'·4; in V there was a peak at 14h 20m, another irregular rise about 17h, followed by an oscillating fall to a minimum during the next two hours, with a very abrupt fall and rise of 230γ at 18h 21m; the curve rises to a rounded maximum about 21h, and there is a rounded minimum about 14d 2h.

At Eskdalemuir the V curve is more similar than N to the Lerwick H.

A little disturbance occurred on the night of the 15th-16th; the rest of the month was without noteworthy disturbance, the 21st, 22nd and 29th being among the quietest days of the month.

Aurora was observed at one or more places in Scotland on November 2-20 inclusive; bright and fairly widely seen on 13th.

*December.*—(Average Character Figure 0·42.)—There was no very large disturbance in this month, which, judged by the average character figure, was the quietest of the year, although as judged by the mean value of  $\Sigma R^2$  it was more disturbed than January or February.

The largest disturbance of the month took place between 5d 16h and 7d 7h. After small fluctuations lasting 6 hours, H fell to an irregular minimum about 5d 23h, separated by a rounded hump from a slightly deeper minimum about 6d 3h; the daylight hours of the 6th were marked by small and rapid oscillations, and the disturbance died away in irregular fluctuations during the night. In D the greatest disturbance was from 5d 23-24h, when a dip of 45' occurred, followed by a rise to



a maximum shortly before 6d 3h. In V there were two dips with minima about 5d 23h 20m and 6d 3h 15m ; the curve rises during the 6th to a maximum at 17h 38m. The disturbance was very similar at Eskdalemuir except that the first of the two minima in H is represented by two peaks in N.

From the afternoon of the 11th to the end of the 13th there was some activity, though no well-marked disturbance. The rest of the month was quiet, with occasional periods of slight activity.

Aurora was observed at one or more places in Scotland on December 3, 5, 6, 7, 11-14 inclusive, 17, 20.



1. **Lerwick.**

1928.

Day.	January. Factor 1·27.				February. Factor 1·27.				March. Factor 1·31.			
	3 h.	9 h.	15 h.	21 h.	3 h.	9 h.	15 h.	21 h.	3 h.	9 h.	15 h.	21 h.
	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.
1	51	183	147	65	69	103	(80)	(130)	142	139	160	221
2	73	138	152	226	31	139	<-357	23	<-1002	<-818	237	442
3	276	350	113	178	82	118	164	136	237	323	118	224
4	68	107	±	158	100	159	(160)	15	255	<-447	184	387
5	141	226	(180)	110	90	105	62	z+	153	13	100	<-129
6	71	87	279	118	203	239	113	26	82	92	84	124
7	73	90	178	141	131	< 242	247	72	50	> 339	155	158
8	175	> 420	(280)	<-338	72	257	8	193	89	95	118	124
9	149	166	<-285	> 403	108	±	108	180	60	252	131	126
10	> 355	144	584	<- 23	90	113	26	8	363	89	150	113
11	< 130	152	23	113	8	72	85	111	103	110	131	116
12	73	104	90	141	69	149	224	190	<-736	158	105	145
13	82	99	183	161	118	152	224	> 923	160	158	131	129
14	90	121	147	90	93	131	121	z-	95	168	131	181
15	152	130	643	307	90	347	254	41	97	103	168	210
16	31	(80)	(100)	118	64	75	26	134	139	189	268	137
17	76	223	68	116	23	293	126	18	150	242	289	16
18	87	113	85	79	54	<-902	131	157	<-423	258	184	(200)
19	28	3	790	223	80	118	126	159	(-500)	103	684	168
20	254	116	39	152	152	100	234	306	0	18	34	187
21	166	85	80	150	303	357	455	766	139	139	137	134
22	77	95	153	220	77	103	134	162	110	147	181	213
23	127	133	(-600)	775	95	164	141	177	53	158	221	208
24	100	(110)	7	825	72	62	108	134	16	205	347	426
25	z+	z-	177	230	90	131	116	164	97	42	168	505
26	160	105	157	145	226	157	254	545	71	24	339	216
27	60	113	143	170	244	332	308	465	87	216	368	55
28	125	105	127	127	360	365	411	360	158	171	395	313
29	77	147	220	195	164	152	177	182	155	268	195	187
30	75	195	137	143	—	—	—	—	97	573	50	137
31	85	5	105	90	—	—	—	—	108	168	113	179
(a)	122	148	171	189	119	160	163	239	126	173	203	194
(b)	90	126	82	119	124	99	135	197	83	117	188	127
Mean ...	(a) 157. (b) 104.				(a) 170. (b) 139.				(a) 174. (b) 129.			
Day.	April. Factor 1·34.				May. Factor 1·38.				June. Factor 1·41.			
	3 h.	9 h.	15 h.	21 h.	3 h.	9 h.	15 h.	21 h.	3 h.	9 h.	15 h.	21 h.
	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.
1	-289	115	5	142	103	179	148	173	103	134	206	266
2	66	126	145	117	73	145	167	173	157	120	169	229
3	<-1026	137	306	131	86	112	139	187	103	83	117	94
4	117	128	76	139	89	142	220	59	86	80	31	112
5	101	134	137	311	153	145	220	156	89	43	17	83
6	197	164	55	139	33	22	89	64	60	92	97	120
7	235	420	382	311	103	(130)	(150)	(120)	155	91	237	147
8	270	319	306	131	(90)	112	117	179	111	85	82	185
9	257	491	355	456	106	112	126	204	138	123	144	111
10	265	325	415	404	114	109	114	81	100	50	111	243
11	216	123	33	38	81	70	(100)	67	120	z+	32	149
12	126	46	98	194	45	86	109	120	70	91	208	123
13	191	213	197	153	81	81	86	81	56	111	(130)	(150)
14	115	128	199	177	78	33	92	123	(90)	(120)	(140)	(150)
15	167	134	55	224	53	112	134	22	(90)	(80)	67	118
16	90	117	87	164	73	114	156	148	88	112	73	133
17	85	115	109	131	109	142	170	220	106	94	82	45
18	63	52	27	153	86	89	11	45	15	64	(150)	(200)
19	49	22	106	120	536	396	98	148	(150)	(180)	(200)	234
20	33	134	106	120	28	78	109	126	170	(170)	167	293
21	104	35	79	153	89	92	416	184	188	563	598	439
22	104	106	175	167	95	170	148	201	325	1043	703	501
23	115	8	145	117	112	117	131	195	132	141	155	79
24	57	265	491	407	109	92	(130)	198	29	108	67	88
25	352	317	330	265	64	106	92	198	111	76	117	50
26	358	377	404	339	89	114	139	220	64	202	(100)	85
27	134	150	131	44	139	148	165	142	59	122	110	99
28	46	85	134	246	114	61	89	413	91	195	201	597
29	412	169	183	63	326	53	218	254	365	158	150	283
30	347	224	197	216	109	148	145	167	156	59	(z±)	(z±)
31	—	—	—	—	92	134	165	193	—	—	—	—
(a)	167	174	198	195	97	111	138	157	125	161	168	189
(b)	151	165	156	195	77	90	108	157	112	155	159	167
Mean ...	(a) 183. (b) 167.				(a) 126. (b) 108.				(a) 161. (b) 148.			

NOTE.—The Potential Gradient is reckoned as positive if the potential increases upwards. For indeterminate potential gradient the following notation is used : z +, Indeterminate, positive value; z —, Indeterminate, negative value; z ±, Indeterminate in magnitude and sign.  
(a) Mean of all positive readings. (b) Mean from all complete days using both positive and negative readings.



1. Lerwick.

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Day.	July. Factor 1·37.				August. Factor 1·33.				September. Factor 1·33.			
	3 h.	9 h.	15 h.	21 h.	3 h.	9 h.	15 h.	21 h.	3 h.	9 h.	15 h.	21 h.
	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.
1	(0)	92	81	167	101	126	104	145	<-993	226	206	304
2	212	232	499	363	66	167	132	134	234	416	483	684
3	36	98	112	126	140	137	110	214	-290	296	117	195
4	106	145	128	243	348	255	112	214	114	123	131	195
5	106	312	193	259	414	353	301	553	145	170	170	335
6	340	190	139	165	216	367	348	266	209	-73	114	139
7	109	86	109	165	301	356	274	323	112	145	296	128
8	176	310	156	156	85	96	58	-88	315	167	195	463
9	75	139	92	151	55	82	96	132	644	368	572	480
10	92	106	181	552	60	27	88	142	215	151	(100)	84
11	67	198	120	165	82	170	178	85	81	100	109	128
12	89	126	416	312	77	110	66	79	84	165	340	257
13	84	145	123	117	425	241	575	189	142	446	223	480
14	151	81	170	(110)	326	255	277	367	357	234	(160)	(170)
15	47	84	139	209	112	(400)	458	282	(110)	(140)	(160)	(170)
16	134	148	112	56	96	252	164	307	(110)	(140)	(160)	(100)
17	142	70	61	139	60	110	101	129	(50)	(140)	193	-64
18	70	89	64	84	82	115	77	142	28	100	117	-131
19	84	95	67	17	90	88	142	173	145	78	89	112
20	39	56	56	131	82	162	90	233	114	109	109	187
21	109	114	117	195	88	140	164	153	89	98	114	195
22	148	173	106	195	90	145	164	255	89	137	156	89
23	73	106	53	112	107	167	110	118	-56	131	109	142
24	78	112	(z±)	(z±)	63	(60)	(60)	69	89	81	84	137
25	(z±)	156	45	8	66	77	110	186	81	137	137	198
26	128	179	95	134	79	104	164	249	109	142	114	131
27	134	95	181	259	107	110	142	238	78	-70	128	112
28	81	139	218	> 368	88	156	142	167	61	114	78	114
29	89	103	70	31	126	121	159	230	33	81	6	190
30	89	92	103	120	107	121	112	197	86	114	131	193
31	47	73	81	131	85	137	142	222	-	-	-	-
(a)	105	134	136	168	136	168	168	206	145	170	170	218
(b)	106	133	137	148	136	168	168	197	123	151	169	194
Mean ...	(a) 136. (b) 131.				(a) 169. (b) 167.				(a) 176. (b) 159.			

Day.	October. Factor 1·30.				November. Factor 1·24.				December. Factor 1·19.			
	3 h.	9 h.	15 h.	21 h.	3 h.	9 h.	15 h.	21 h.	3 h.	9 h.	15 h.	21 h.
	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.
1	76	71	139	109	69	135	111	108	59	108	126	129
2	60	95	155	136	77	140	108	164	59	64	123	-319
3	82	112	114	171	71	135	135	164	> 445	98	126	80
4	73	141	245	212	132	87	55	121	59	-23	129	69
5	158	174	171	359	74	135	90	169	69	z+	123	116
6	79	-231	120	133	87	153	164	185	67	121	252	478
7	82	185	112	364	55	82	114	180	514	159	301	301
8	362	38	120	84	61	111	140	132	z+	z+	z+	170
9	33	-24	109	z±	79	z+	61	-77	85	44	-13	136
10	-44	-33	160	152	69	-61	-124	137	301	188	193	152
11	84	114	133	256	58	32	95	50	136	116	195	159
12	87	128	128	103	82	116	185	214	352	136	141	80
13	71	112	117	139	> 412	583	z+	214	111	206	188	105
14	125	141	133	150	164	116	187	282	95	118	(150)	129
15	109	112	218	386	148	-290	341	8	93	103	111	134
16	269	250	316	528	143	100	98	106	51	8	-21	<-830
17	65	98	136	324	-153	79	-554	103	100	231	129	134
18	112	144	150	-348	53	103	69	87	80	103	175	352
19	84	-44	106	174	61	309	261	21	-87	90	172	-95
20	-73	52	101	79	74	95	z+	267	72	111	113	146
21	84	98	139	305	79	71	(50)	48	80	98	13	213
22	82	166	136	133	(80)	(120)	-190	158	85	118	-213	136
23	122	120	160	38	16	z-	(0)	(50)	98	129	164	-280
24	(0)	(140)	(160)	(180)	z-	77	137	195	93	141	283	170
25	(100)	(100)	(160)	(180)	77	79	108	108	z+	z+	113	206
26	(0).	(140)	307	313	79	74	428	137	-105	108	123	z+
27	272	408	-38	141	66	71	114	137	31	z+	111	116
28	82	-76	92	79	61	129	114	58	98	121	177	198
29	-22	128	160	207	106	129	103	74	100	131	111	113
30	52	-242	136	264	79	135	285	185	247	154	146	116
31	8	98	112	112	-	-	-	-	108	103	108	z+
(a)	100	135	151	200	93	131	142	133	137	119	152	166
(b)	88	91	147	182	75	92	99	125	126	120	138	120
Mean ...	(a) 147. (b) 127.				(a) 125. (b) 98.				(a) 143. (b) 126.			

Annual Means ...	(a)	123	149	163	188
	(b)	108	126	141	161
	(a) 156.		(b) 134.		

The Potential Gradient is reckoned as positive if the potential increases upwards. For indeterminate potential gradient the following notation is used :  
z + Indeterminate, positive value ; z - Indeterminate, negative value ; z ± Indeterminate in magnitude and sign.  
(a) Mean of all positive readings. (b) Mean from all complete days using both positive and negative readings.



POTENTIAL GRADIENT (reduced to level surface) : DIURNAL INEQUALITIES (in volts per metre).

The departures from the mean of the day are adjusted for non-cyclic change.

2. Lerwick.

\* 0a DAYS ONLY.

1928.

Month and Season.	Hour	G.M.T.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
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3. Lerwick.

\* 1a AND 2a DAYS ONLY.

1928.

Month and Season.	Hour	G.M.T.																										Non-cyclic change 24-o.	No. of Days used.	Mean Values.
	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.						
	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.			v/m.
Jan. ...	- 19	-153	- 15	+ 26	+ 27	+ 10	+ 22	+ 28	+ 62	+ 52	+ 40	+ 32	+ 26	+ 17	+ 35	+ 15	- 3	- 4	- 7	- 14	- 28	- 40	- 26	- 82	+202		5	104		
Feb. ...	- 25	- 45	- 9	+ 15	- 6	+ 13	+ 53	+ 30	- 42	- 19	+ 40	+ 47	+ 40	+ 41	+ 1	- 24	- 25	- 32	- 96	0	+ 72	0	- 35	+ 5	- 33		5	59		
Mar. ...	- 61	- 56	- 84	- 97	- 77	- 58	-103	- 69	- 81	- 43	- 22	+ 10	+ 51	+ 79	+ 77	+101	+ 87	+107	+116	+125	+ 16	0	+ 38	- 55	- 93		8	158		
April ...	+ 1	- 5	- 11	+ 13	- 12	- 12	- 24	- 25	- 2	- 28	- 11	- 31	- 2	- 21	- 39	+ 37	+ 32	+ 31	+ 53	+ 25	+ 23	- 29	+ 21	+ 16	- 89		6	185		
May ...	+ 21	- 13	- 4	- 2	+ 18	+ 28	- 16	- 26	- 5	- 4	+ 2	- 28	- 44	- 6	- 49	- 35	- 51	- 31	+ 45	+ 35	+ 56	+ 58	+ 30	+ 21	+ 25		9	83		
June ...	- 9	- 12	- 28	- 11	- 7	- 7	- 1	- 12	+ 1	- 8	- 11	+ 1	- 21	+ 14	+ 16	+ 2	- 8	+ 14	+ 24	- 13	+ 31	+ 19	+ 9	+ 14	- 46		9	90		
July ...	- 22	- 18	- 33	- 36	- 97	- 56	- 19	- 15	+ 7	+ 10	+ 26	+ 39	+ 25	+ 13	- 10	- 8	+ 11	+ 32	+ 55	+ 45	+ 34	+ 30	+ 9	- 23	+ 15		8	129		
Aug. ...	+ 4	- 8	- 6	+ 1	- 4	+ 20	- 8	- 7	+ 7	+ 10	- 4	+ 10	+ 30	+ 31	- 20	- 42	- 66	- 15	+ 14	+ 25	+ 25	+ 4	- 5	+ 5	+ 1		8	153		
Sept. ...	- 32	- 7	- 92	-110	- 53	- 22	- 52	- 20	+ 5	- 14	+ 10	+ 12	+ 21	+ 27	+ 26	+ 32	+ 31	+ 45	+ 50	+ 35	+ 35	+ 51	+ 25	- 4	+ 14		7	115		
Oct. ...	+ 10	- 21	- 26	- 31	- 71	- 62	- 71	- 69	- 47	- 33	- 52	- 44	- 4	+ 13	+ 35	+ 56	+ 49	+ 52	+ 64	+ 80	+ 80	+ 38	+ 23	+ 32	- 61		11	106		
Nov. ...	- 3	- 26	- 6	- 38	- 54	- 87	- 24	+ 17	+ 27	+ 13	+ 15	- 1	+ 12	0	+ 8	+ 40	+ 33	+ 21	+ 8	- 16	+ 2	+ 5	+ 47	+ 7	+ 13		9	91		
Dec. ...	- 44	- 16	+ 6	- 17	+ 33	+ 1	- 5	+ 13	+ 11	+ 1	- 1	- 7	- 7	- 5	- 33	+ 15	+ 31	+ 51	+ 51	+ 23	+ 11	- 18	- 39	- 55	+ 81		4	110		
Year	- 15	- 32	- 25	- 24	- 25	- 19	- 21	- 13	- 5	- 5	+ 3	+ 3	+ 11	+ 17	+ 4	+ 16	+ 10	+ 23	+ 31	+ 29	+ 30	+ 10	+ 8	- 10	-	-	-	115		
Winter	- 23	- 60	- 6	- 3	0	- 16	+ 11	+ 22	+ 15	+ 12	+ 23	+ 18	+ 18	+ 13	+ 3	+ 11	+ 9	+ 9	- 11	- 2	+ 14	- 13	- 13	- 31	-	-	-	91		
Equinox	- 21	- 22	- 53	- 56	- 53	- 39	- 63	- 46	- 31	- 29	- 19	- 13	+ 17	+ 25	+ 25	+ 57	+ 50	+ 59	+ 71	+ 66	+ 39	+ 15	+ 27	- 3	-	-	-	141		
Summer	- 1	- 13	- 17	- 12	- 23	- 4	- 11	- 15	+ 3	+ 2	+ 3	+ 5	- 3	+ 13	- 16	- 21	- 29	0	+ 35	+ 23	+ 37	+ 28	+ 11	+ 4	-	-	-	116		

\* NOTE.—For explanation of 0a, 1a and 2a Days, see page 51.



## ELECTRICAL CHARACTER OF EACH DAY, AND APPROXIMATE DURATION OF NEGATIVE POTENTIAL GRADIENT.

## 4. Lerwick.

1928.

Day.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	Char- acter. Duration of neg- ative pot. grad. hrs.	Char- acter. Duration of neg- ative pot. grad. hrs.	Char- acter. Duration of neg- ative pot. grad. hrs.	Char- acter. Duration of neg- ative pot. grad. hrs.	Char- acter. Duration of neg- ative pot. grad. hrs.	Char- acter. Duration of neg- ative pot. grad. hrs.	Char- acter. Duration of neg- ative pot. grad. hrs.	Char- acter. Duration of neg- ative pot. grad. hrs.	Char- acter. Duration of neg- ative pot. grad. hrs.	Char- acter. Duration of neg- ative pot. grad. hrs.	Char- acter. Duration of neg- ative pot. grad. hrs.	Char- acter. Duration of neg- ative pot. grad. hrs.
1	1b 2.0	1b —	1a 1.0	1b 3.2	0a 0.0	0a 0.0	1a —	1a 0.5	1b 1.1	0a 0.0	1a 0.9	0a 0.0
2	1b 0.9	2c 3.3	2c 9.2	0a 0.0	1a 0.2	0a 0.0	2b 3.8	0a 0.0	0a 0.0	0a 0.0	1a 0.1	1b 1.1
3	1c 1.5	1b 0.3	1a 0.2	2b 5.5	0a 0.0	1a 0.4	1a 0.9	0a 0.0	2a 3.2	0a 0.0	1a 0.1	1b 1.2
4	2c (3.4)	2b 4.1	1b 1.4	1b 1.5	0a 0.0	1a 1.2	0a 0.0	1a 0.2	0a 0.0	0a 0.0	0a 0.0	2a 6.2
5	1c 1.9	1c 2.4	1b 2.2	1a 0.2	0a 0.0	2a (3.4)	1a 1.4	1a 0.1	0a 0.0	1a 0.7	0a 0.0	2c 3.2
6	1a 0.3	1b 2.7	1b 0.7	1a 2.1	1a 0.7	1a 1.3	0a 0.0	0a 0.0	2b 5.5	2a 5.4	0a 0.0	2b 3.1
7	2b 3.9	2c 3.1	1b 0.8	0a 0.0	— —	2b 3.8	1a 1.6	1a 1.2	1a 1.1	1a 0.4	1a 1.7	1c 0.9
8	1c 2.2	2a 7.9	1a 1.5	1a 0.1	1a 0.5	2b 4.0	1b 1.7	2b 4.4	0a 0.0	1a 1.1	0a 0.0	1c 2.8
9	1c 2.1	2c 4.1	0b 0.0	0a 0.0	0a 0.0	1a 1.7	1a 0.9	1a 0.3	1a 1.5	1b 1.5	2c 10.8	2a 3.9
10	2c (5.3)	2a 3.6	1b 0.1	0a 0.0	0a 0.0	2a 5.2	1b 0.7	1a 0.7	1b (2.7)	1b 1.9	2a 6.8	0a 0.0
11	1c 2.7	2a 2.7	1b 0.2	2b 5.2	0a 0.0	2c 10.0	1b 1.2	0a 0.0	1a 0.3	1a 0.4	1a 2.5	1b 0.1
12	2b (3.4)	0a 0.0	2b 4.4	1a 1.2	0a 0.0	1a 1.3	0a 0.0	2b 4.9	0a 0.0	2a 3.1	1a 2.0	1b 1.1
13	2a 4.7	1b 0.6	0a 0.0	1a 0.1	2a (3.6)	1 1.8	0a 0.0	1a 0.3	0a 0.0	1a 1.2	1c 1.5	0a 0.0
14	2b 4.1	2b 3.3	0a 0.0	0a 0.0	1a 0.8	— —	0a 0.0	1b 1.1	1 0.1	1a 0.1	1b 1.2	2b —
15	1b 0.7	2b 6.5	0a 0.0	1a 0.8	1a 1.5	2b —	0a 0.0	1b 1.1	0 0.0	0a 0.0	2b 7.3	1a 0.5
16	1a (1.0)	1a 1.7	1a 0.5	2b 5.4	1a 0.3	1a 0.3	0a 0.0	0a 0.0	— —	1b 1.1	2a 3.7	2b 12.8
17	1a 0.2	2b 6.6	1a 1.4	1b 0.5	0a 0.0	2b 4.6	0a 0.0	0a 0.0	1 (1.9)	1b 2.2	2b 10.1	1b 1.9
18	0a —	2 6.2	2b 3.7	1b 0.6	2b 3.8	1a —	0a 0.0	0a 0.0	2b 3.4	2b 7.0	1a 0.8	1b —
19	2a —	0a 0.0	— —	1b 2.0	2b 5.0	0 0.0	1b 2.6	0a 0.0	1b 1.4	2b 3.4	1a 2.6	2b 6.2
20	2b 3.4	1a —	2b 6.2	2b 3.1	1a 1.4	1a 0.3	1a 0.3	0a 0.0	1a 0.3	2b 6.3	1c 1.2	1a 2.0
21	1a —	0a 0.0	0a 0.0	1b 2.7	1a 2.1	0a 0.0	0a 0.0	1a 0.1	0a 0.0	1b 1.2	2b —	1a 1.1
22	1a 0.2	1a 0.7	0a 0.0	1a 1.6	0a 0.0	0a 0.0	0a 0.0	0a 0.0	0a 0.0	1b 1.4	2b —	1b 2.7
23	2b —	0a 0.0	1a 1.8	1b (2.5)	0a 0.0	1a 0.3	0a 0.0	1a 0.3	2a 4.5	1a 2.4	2b —	2b 5.0
24	1c —	0a 0.0	1a 2.7	0a 0.0	0a 0.0	1a 0.4	0a —	2b —	1a —	1a —	2b 3.7	1c (2.9)
25	2c 3.7	1a 0.3	2a 14.7	1a 0.1	0a 0.0	0a 0.0	1a —	0a 0.0	0a 0.0	1a —	1b 0.8	1c 2.1
26	1b 2.0	0a 0.0	1a 1.4	0a 0.0	0a 0.0	0a 0.0	0a 0.0	0a 0.0	0a 0.0	1a —	1b 2.4	2c 3.3
27	1b 1.0	0a 0.0	1b 2.2	0a 0.0	0a 0.0	0a 0.0	1a 0.7	0a 0.0	2a 4.3	1b 2.1	1b 1.8	1c 0.9
28	1b (2.0)	0a 0.0	0a 0.0	0a 0.0	2a 9.2	0a 0.0	1b 1.0	0a 0.0	1b 1.2	1a 1.5	1a 0.3	1b 0.7
29	1b 1.9	0a 0.0	0a 0.0	0a 0.0	0a 0.0	1b 1.1	2b 5.3	0a 0.0	1a (2.0)	1a 0.5	1a 0.5	1a 0.1
30	1a 2.8	— —	2a 8.5	0a 0.0	0a 0.0	2a —	1a 0.3	1a (1.3)	1a 0.1	2a 8.2	0a 0.0	1b 0.3
31	2c 3.1	— —	1b 1.3	— —	0a 0.0	— —	1a 1.0	0a 0.0	— —	1a 1.3	— —	1b 0.7
Total No. of days used.	— 60.4	— 60.1	— 66.1	— 38.4	— 29.1	— 41.1	— 23.4	— 16.5	— 34.5	— 54.4	— 62.8	— 66.8
Mean	— 2.3	— 2.2	— 2.2	— 1.3	— 1.0	— 1.6	— 0.8	— 0.5	— 1.2	— 1.9	— 2.3	— 2.3

Annual Values :—Character Frequency  $\begin{matrix} 0 & 1 & 2 \\ 110 & 174 & 78 \end{matrix}$   
Mean character figure 0.91 (362 days)  
Duration of negative pot. grad. : Total 553.6 hrs.  
No. of days 339  
Mean 1.63 hrs.

*Explanatory Note.*—The electric character of the day is indicated by the figures 0, 1, or 2, according to the character of the trace of the electrograph as regards negative potential gradient. The explanation of these symbols is as follows :—

0, denotes a day during which from midnight to midnight no negative potential was recorded.

1, denotes one or more excursions of limited duration to the negative side of the scale.

2, denotes negative potential extending in the aggregate over 3 hours or more.

a, denotes that within the 25 periods of 60 minutes for which an estimate of the mean potential gradient has to be made in the process of tabulation there was in no case a range of potential gradient in the open exceeding 1000 volts.

b, denotes that a range of potential gradient in the open exceeding 1000 volts was reached in at least one but in fewer than six of the 25 hourly periods referred to above.

c, denotes that a range of 1000 volts or more occurred in at least six of the 25 hourly periods.



Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

## 5. Lerwick. (H.)

14,000  $\gamma$  (14 C.G.S. unit) +

January, 1928.

Hour. G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Day.	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$
1 D	598	598	597	596	597	595	595	595	597	596	593	580	569	597	607	605	604	603	602	609	605	585	566	575	591	594
2	591	593	591	592	596	597	598	592	591	586	577	584	592	596	597	597	593	589	592	593	593	592	597	598	599	598
3	599	597	592	593	597	596	597	598	595	589	585	583	584	587	592	597	599	601	602	604	604	604	604	601	600	596
4	600	600	601	600	603	606	608	609	606	599	596	585	581	591	598	590	597	599	598	596	592	596	600	601	609	598
5	609	595	593	597	597	599	606	602	599	594	588	583	584	591	597	592	598	599	599	599	599	599	597	600	601	596
6	601	598	599	600	599	603	601	604	597	595	592	585	586	592	598	598	597	599	599	598	592	596	603	598	599	597
7	599	599	591	600	603	603	604	603	602	599	593	592	593	596	601	603	603	603	604	603	592	596	604	608	608	601
8	608	598	600	603	604	600	605	609	607	599	591	587	591	599	605	606	606	607	604	605	607	606	605	604	603	602
9	603	603	597	599	604	605	607	609	606	601	597	595	593	597	598	592	598	594	595	600	601	601	600	597	600	600
10	600	601	603	604	607	608	606	605	604	598	593	593	594	597	603	603	599	597	596	587	592	599	597	603	603	599
11 Q	603	604	603	603	604	606	600	603	603	599	596	595	597	603	605	605	607	606	607	608	609	609	608	607	607	604
12 Q	607	604	604	605	605	608	609	608	605	603	600	597	594	594	601	604	606	609	610	611	611	610	608	605	603	605
13 Q	603	604	604	604	605	605	605	604	602	601	599	599	602	608	612	612	611	612	614	615	613	612	605	604	603	606
14 Q	603	603	603	603	605	608	608	608	606	601	597	597	596	597	605	608	604	605	605	608	604	605	604	607	608	604
15	608	607	607	608	608	609	608	607	605	601	596	597	598	604	612	613	614	*	—	—	—	—	—	—	—	—
16	—	—	—	—	—	—	—	—	—	—	*	—	596	601	603	607	609	612	612	611	612	613	612	611	611	—
17	611	611	612	612	613	615	615	613	609	603	599	601	603	608	612	612	613	614	615	616	616	615	613	610	603	611
18	603	605	607	611	613	616	618	620	619	613	604	596	592	597	606	606	607	612	613	613	613	612	608	607	608	609
19	608	605	601	604	608	609	611	608	604	597	596	594	596	600	608	611	612	613	608	608	608	611	608	609	614	606
20	614	608	603	604	605	611	614	608	608	605	602	603	601	597	604	603	609	608	613	613	617	615	614	613	612	608
21	612	609	608	608	613	621	625	623	613	607	601	597	595	598	605	608	609	607	611	607	605	607	619	613	608	609
22	608	609	609	609	610	617	618	611	613	607	599	591	590	597	599	603	605	601	602	603	601	602	604	605	602	605
23 D	602	604	613	611	611	615	619	612	622	613	597	592	585	587	600	601	600	603	608	604	600	606	607	606	606	605
24	606	603	609	610	610	612	614	612	608	602	600	595	589	589	600	609	605	600	608	609	611	614	612	611	610	606
25	610	612	611	610	611	611	613	613	613	610	599	589	586	592	591	599	606	611	616	613	611	609	610	610	611	607
26	611	606	607	612	613	617	620	619	618	612	601	596	598	601	607	611	616	620	628	628	619	607	613	608	605	612
27 D	605	622	607	611	602	611	621	622	625	622	609	582	570	577	588	598	606	605	626	604	598	591	592	599	596	604
28 D	596	596	597	598	600	601	603	604	605	600	588	576	579	577	590	599	601	598	604	603	608	617	607	603	599	598
29 D	599	604	605	600	602	615	615	616	610	606	598	587	588	592	597	597	605	604	603	599	601	604	611	613	611	603
30	611	609	608	603	597	614	620	619	615	608	598	597	592	593	604	609	610	613	613	620	612	609	615	613	611	608
31 Q	611	612	612	612	613	613	615	615	614	611	609	605	602	601	607	612	616	617	617	617	617	616	616	614	614	612
Mean†	605	604	603	604	605	608	610	609	607	603	596	592	590	595	601	603	605	605	607	607	606	605	605	605	605	603

## MAGNETIC DECLINATION (WEST).

Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

## 6. Lerwick. (D.)

14° +

January, 1928.

Hour. G.M.T.	0	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Day.	44.0	43.8	42.1	43.1	42.3	42.3	42.5	42.1	42.3	43.8	45.0	46.5	51.6	48.9	47.1	46.0	45.4	45.0	44.8	44.6	45.0	34.0	34.8	38.8	42.1	43.5
2	42.0	43.0	44.1	43.7	42.4	43.5	42.4	42.8	42.2	43.4	45.9	46.2	47.4	47.8	46.6	45.3	44.7	44.9	43.7	43.5	43.9	40.6	40.8	42.6	42.6	43.9
3	42.6	43.4	45.3	42.2	42.6	43.4	42.8	42.4	42.0	42.0	42.6	43.5	45.1	46.2	45.9	45.1	44.5	44.3	44.7	44.3	43.9	43.7	43.7	43.9	43.9	43.8
4	43.8	43.8	45.0	44.2	44.0	43.6	43.3	43.1	42.5	41.9	43.7	45.6	46.9	47.9	49.8	46.1	45.4	45.6	45.2	44.4	40.7	41.9	42.5	41.9	38.2	44.2
5	38.1	41.8	42.6	43.3	43.5	44.1	42.6	43.2	43.5	42.2	43.0	44.1	45.9	47.2	47.8	47.8	46.0	45.1	45.3	43.9	42.8	43.2	41.6	41.8	43.5	43.9
6	43.4	43.6	43.8	43.8	44.0	43.4	43.4	43.1	42.9	42.7	44.6	47.1	47.7	47.5	46.5	45.8	44.8	44.0	44.6	43.8	43.6	41.9	40.5	41.7	41.3	44.0
7	41.3	43.4	45.8	45.4	43.6	42.1	41.5	41.7	41.7	41.9	43.4	43.8	45.6	45.9	45.4	45.0	44.0	43.8	43.8	43.6	43.4	43.6	43.4	40.0	38.0	43.4
8	38.0	39.8	42.3	42.7	43.1	43.8	43.2	42.3	42.7	42.7	42.3	43.6	45.6	46.1	45.4	44.4	44.0	43.8	43.8	43.6	43.6	43.4	43.4	43.2	43.2	43.3
9	43.1	41.4	41.6	43.3	43.1	43.0	42.6	42.6	42.6	43.1	43.5	44.9	47.0	47.0	47.0	45.7	46.6	45.1	45.3	43.5	42.8	39.7	38.1	41.0	42.0	43.5
10	42.0	42.6	43.0	43.1	42.6	42.4	42.6	42.2	42.0	41.8	42.6	44.1	44.7	45.7	45.5	45.3	45.5	45.7	45.1	43.7	42.2	39.9	41.2	41.6	42.0	43.2
11Q	41.9	42.7	43.4	43.4	43.4	43.2	43.2	42.9	41.3	41.9	43.2	44.0	45.4	46.1	45.6	45.0	44.8	44.6	44.2	43.6	43.4	43.0	42.7	42.5	43.2	43.6
12Q	43.2	43.4	43.4	43.4	43.2	43.0	43.0	43.2	43.2	43.4	43.4	45.2	45.9	46.1	45.4	45.4	45.0	44.4	43.8	43.6	43.4	43.2	43.2	43.2	43.0	43.9
13Q	42.9	42.6	42.4	43.1	42.9	42.8	42.8	42.6	42.6	42.9	43.5	45.1	45.6	46.0	45.3	44.1	43.9	44.1	44.7	44.5	44.3	44.3	43.3	42.6	42.2	43.7
14Q	42.2	41.8	41.8	42.2	42.4	41.6	41.4	41.8	42.6	43.3	43.5	45.6	47.2	47.4	47.2	45.8	45.8	45.6	44.9	44.1	44.1	43.5	41.6	42.4	42.8	43.8
15	42.8	42.9	43.1	43.1	43.1	42.9	42.8	42.8	42.6	42.4	43.9	45.3	45.6	46.2	45.3	45.1	44.5	43.5	43.7	43.3	*	—	—	—	—	—
16	—	—	—	—	—	—	—	—	—	—	—	*	45.6	46.2	47.0	45.3	44.9	44.1	44.1	43.9	43.5	43.3	43.1	43.1	43.3	—
17	43.2	43.2	43.4	43.4	43.6	43.2	42.8	42.1	41.9	42.5	43.6	44.8	45.2	45.2	45.0	44.8	44.8	44.6	43.8	43.4	43.0	43.0	43.0	41.3	40.1	43.5
18	40.1	40.7	42.1	43.0	43.2	43.0	41.7	42.1	42.8	43.0	44.6	45.2	46.5	49.2	50.8	47.3	45.5	45.0	43.8	43.0	42.8	42.7	40.1	41.5	42.8	43.8
19	42.7	42.2	43.7	43.5	43.5	42.0	40.6	42.6	42.0	42.6	43.7	44.9	46.6	47.4	46.8	45.8	44.9	44.5	43.7	44.1	42.2	39.1	42.0	42.6	41.2	43.5
20	41.2	38.5	40.6	42.4	43.1	41.8	41.8	42.0	41.2	41.2	42.9	45.1	47.6	48.7	49.5	48.9	50.9	47.4	44.1	43.3	42.9	42.7	41.6	42.6	43.1	43.9
21	43.1	43.1	45.6	42.9	41.2	41.2	43.1	42.9	42.4	41.8	42.6	44.1	45.6	47.8	47.2	46.6	45.3	44.7	43.7	42.9	38.5	40.8	39.3	39.7	41.4	43.1
22	41.4	42.7	43.3	43.3	43.3	41.4	41.8	42.0	40.6	40.6	42.0	43.9	45.4	46.8	46.8	45.3	45.1	44.5	43.7	41.4	40.2	37.3	37.3	37.5	39.3	42.4
23D	39.2	42.6	41.3	40.5	39.6	39.2	39.6	43.2	41.3	41.5	41.7	44.2	44.8	48.2	48.8	47.5	46.7	42.8	42.3	40.7	39.4	39.4	39.2	39.7	39.7	42.2
24	39.7	39.4	41.1	41.1	41.1	41.1	40.9	40.5	39.6	39.4	41.1	43.0	45.0	46.5	45.9	46.1	45.2	43.4	42.8	42.3	41.3	40.9	40.3	39.6	39.7	42.0
25	39.7	37.6	39.6	40.7	40.9	40.9	40.5	40.1	39.6	39.4	40.9	43.0	45.3	47.5	48.2	45.3	45.2	44.0	43.2	43.4	42.5	41.1	41.1	40.5	40.7	42.1
26	40.7	39.0	39.7	40.9	40.9	40.7	40.5	40.3	39.6	39.4	40.3	41.7	43.0	43.4	43.6	43.2	42.8	42.8	42.6	42.5	44.4	41.7	37.4	37.2	38.8	41.1
27D	38.8	37.4	33.8	33.6	33.2	35.7	31.6	37.6	39.4	39.4	43.0	43.2	45.0	51.1	48.8	48.6	45.0	43.0	41.1	40.7	40.5	35.5	39.0	40.7	40.9	40.8
28D	40.8	41.0	40.8	41.0	41.2	41.6	41.4	40.8	40.4	40.6	41.0	42.9	42.0	44.9	44.5	44.5	42.9	38.9	35.4	39.1	39.1	38.9	39.1	37.5	37.7	40.8
29D	37.7	41.2	41.2	41.2	43.3	40.8	40.8	41.2	40.4	39.5	41.6	42.5	46.6	47.2	48.9	45.1	45.2	42.9	35.4	41.8	37.3	37.5	37.1	37.3	39.1	41.4
30	39.1	40.6	41.0	42.9	43.9	40.0	40.4	41.6	41.8	42.2	42.4	44.1	46.6	45.2	45.4	44.5	43.7	42.7	36.8	35.4	40.8	38.9	41.6	41.4	41.8	41.8
31Q	41.8	42.0	41.4	41.2	41.2	41.4	41.4	41.2	41.0	40.6	41.6	42.9	44.5	45.2	45.4	44.7	43.9	43.3	43.1	43.1	42.7	42.2	41.6	41.6	41.0	42.4
Mean†	41.3	41.7	42.3	42.4	42.3	41.9	41.6	41.9	41.7	41.7	42.9	44.3	45.9	46.9	46.8	45.7	45.1	44.2	43.1	42.8	42.2	40.9	40.7	41.0	41.2	43.0



**7. Lerwick. (V.)**

46,000 γ (-46 C.G.S. unit) +

**January, 1928.**

Hour. G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Day.	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 D	699	698	697	694	692	690	689	688	687	687	688	689	690	687	687	688	688	688	688	688	689	694	697	687	685	690
2	686	686	686	686	685	684	684	685	686	686	687	687	687	687	687	687	687	687	687	687	687	687	686	686	686	686
3	687	687	684	679	680	681	681	682	683	684	687	687	687	687	687	687	687	687	686	685	685	685	686	687	687	685
4	688	688	688	688	688	688	687	687	687	688	689	690	691	691	691	692	692	692	692	693	693	693	693	692	689	690
5	691	691	693	694	694	694	694	695	696	697	696	697	698	699	700	702	701	701	702	702	702	702	703	703	703	698
6	704	703	704	704	705	705	705	704	705	705	708	708	709	709	710	710	711	711	711	711	711	711	708	709	710	708
7	712	711	712	706	707	709	710	711	711	712	713	713	713	713	714	715	716	716	716	716	715	716	716	715	715	713
8	716	715	715	715	715	715	714	714	714	714	715	714	714	714	715	716	716	716	716	716	715	715	715	714	715	715
9	717	715	715	715	716	716	716	716	716	716	716	716	717	717	719	721	722	723	723	723	723	723	723	723	722	719
10	723	719	719	720	720	720	720	720	720	720	721	721	722	722	723	723	724	725	726	726	726	726	725	724	722	722
11 Q	722	720	720	720	719	719	720	720	720	720	722	722	722	723	726	727	727	726	725	725	724	724	723	721	719	722
12 Q	718	717	716	717	717	717	716	717	717	717	716	716	717	717	716	716	716	716	716	716	716	716	716	716	716	716
13 Q	715	714	714	714	714	714	714	714	714	714	713	713	714	713	713	713	713	713	713	714	714	714	715	715	715	714
14 Q	714	714	714	714	713	713	713	713	714	714	715	716	717	718	719	719	720	721	723	724	726	726	726	726	726	718
15	724	724	724	724	724	723	724	724	724	725	727	728	728	726	725	724	724	725	*	—	—	—	—	—	—	—
16	—	—	—	—	—	—	—	—	—	—	*	731	731	730	730	730	730	730	731	731	731	731	731	730	—	—
17	730	730	730	730	731	731	730	730	730	732	731	732	732	732	732	732	732	732	731	731	731	731	732	733	732	731
18	732	732	732	731	730	729	729	727	727	728	731	731	731	731	731	731	731	731	731	731	731	731	731	731	729	730
19	729	729	729	729	731	731	731	729	729	729	731	733	733	733	733	733	731	731	731	731	731	729	727	727	727	730
20	727	725	725	725	725	723	723	723	723	723	725	725	723	725	725	725	725	725	725	723	721	721	721	721	719	724
21	719	718	717	715	713	712	711	711	711	713	716	716	715	717	728	728	728	726	725	725	725	723	723	723	723	719
22	723	724	724	725	725	724	724	724	723	723	723	724	728	728	729	730	731	732	733	733	734	731	726	723	722	727
23 D	722	720	718	719	720	720	720	720	719	718	722	724	724	724	725	727	730	732	733	734	735	734	733	733	732	725
24	732	732	731	731	731	731	731	731	731	731	732	732	733	741	749	753	753	757	756	756	754	750	750	750	750	741
25	750	745	746	747	747	747	747	747	747	748	749	749	750	751	753	753	754	755	755	756	757	757	757	757	755	751
26	755	756	757	757	757	757	756	756	755	754	754	755	755	755	755	755	755	755	755	754	755	763	767	766	765	757
27 D	765	753	750	751	748	697	683	693	701	706	713	720	730	742	759	759	757	759	787	803	788	786	783	774	771	746
28 D	771	769	768	768	768	768	768	768	768	768	770	770	775	775	774	772	771	772	772	773	771	764	764	759	756	769
29 D	756	755	757	756	753	751	755	756	757	759	762	763	765	781	783	792	794	798	804	801	800	794	784	773	771	773
30	771	771	769	768	767	765	765	765	766	767	767	767	768	770	771	772	770	770	772	771	771	772	769	770	770	769
31 Q	770	766	766	766	765	765	765	765	765	765	763	763	764	765	766	764	764	764	764	765	765	765	766	766	766	765
Mean†	726	724	724	724	723	721	721	721	721	722	723	724	725	726	728	729	729	730	731	731	731	730	730	728	728	726

**DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS ;  
MAGNETIC CHARACTER FIGURES ; TEMPERATURE IN MAGNET HOUSE.**

**8. Lerwick.**

**January, 1928.**

Day.	Terrestrial Magnetic Elements.														Character Figure $\frac{2R^2}{100\gamma^2}$ §	Magnetic Character of Day (0-2).	Temperature in Magnet House 200 +	
	Horizontal Force.					Declination.					Vertical Force.							
	Maximum 14,000 $\gamma$ +	Minimum 14,000 $\gamma$ +	Range.	Maximum 14° +	Minimum 14° +	Range.	Maximum 46,000 $\gamma$ +	Minimum 46,000 $\gamma$ +	Range.									
1D	h. m.	$\gamma$	$\gamma$	h. m.	$\gamma$	h. m.			h. m.		h. m.	$\gamma$	h. m.	$\gamma$			<i>a</i>	
2	19 16	619	546	11 25	73	11 51	57·2	23·0	21 21	34·2	21 40	704	684	13 22	20	270	I	74·3
3	21 32	603	575	10 4	28	13 2	48·2	40·1	21 49	8·1	21 15	689	681	5 50	8	21	0	74·8
4	22 19	608	582	10 48	26	1 56	47·2	41·6	9 1	5·6	10 44	689	677	2 40	12	14	0	75·5
5	23 50	621	575	12 8	46	14 8	51·2	35·9	23 46	15·3	20 30	695	683	7 58	12	65	I	75·9
6	0 3	617	580	11 5	37	14 48	48·6	37·9	0 19	10·7	20 8	705	687	0 15	18	38	I	76·0
7	22 11	610	581	11 30	29	12 18	48·6	37·8	21 59	10·8	20 20	713	702	0 0	11	31	I	75·9
8	23 33	616	580	2 15	36	2 19	50·6	37·6	23 40	13·0	18 24	718	703	3 0	15	45	I	75·6
9	7 12	613	586	11 30	27	12 38	46·9	37·6	0 28	9·3	18 30	718	712	9 29	6	24	0	75·7
10	6 51	612	578	14 39	34	13 12	47·8	35·6	21 35	12·2	18 4	725	714	3 20	11	40	I	76·1
11Q	5 15	611	584	18 57	27	16 55	46·2	37·7	21 11	8·5	19 5	728	717	0 30	11	21	I	76·1
12Q	22 34	614	592	10 35	22	13 0	46·5	40·9	7 40	5·6	14 10	729	716	12 2	13	12	0	76·0
13Q	20 6	612	592	12 43	20	13 8	46·9	42·1	22 27	4·8	12 40	719	714	10 3	5	8	0	75·9
14Q	19 9	616	597	10 4	19	12 50	46·8	41·2	22 28	5·6	23 0	717	711	15 52	6	10	0	76·0
15	14 29	612	592	12 31	20	13 12	48·2	41·0	21 55	7·2	22 11	729	711	4 19	18	17	0	76·1
16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0	76·0
17	19 28	618	597	9 58	21	11 51	45·7	39·0	23 50	6·7	24 0	733	728	2 4	5	13	0	76·0
18	7 25	621	586	12 20	35	13 39	51·3	39·4	0 3	11·9	22 4	735	726	5 41	9	39	I	75·8
19	20 26	623	591	10 51	32	12 58	47·8	36·4	20 58	11·4	12 0	733	727	23 0	6	35	I	75·9
20	0 27	628	591	13 17	37	15 38	51·6	37·3	1 9	14·3	15 25	726	718	24 0	8	52	I	76·1
21	22 21	627	590	12 29	37	1 59	48·9	35·4	20 4	13·5	16 0	729	709	6 18	20	51	I	76·9
22	6 11	619	588	11 47	31	13 47	47·4	35·0	21 39	12·4	20 0	736	722	0 38	14	40	I	77·4
23D	7 42	625	578	11 59	47	13 55	49·4	37·8	20 13	11·6	20 10	737	715	2 4	22	51	I	77·8
24	6 10	617	583	12 25	34	13 2	46·9	39·0	8 19	7·9	16 54	760	729	2 27	31	33	I	77·5
25	18 27	619	581	11 52	38	14 21	48·8	35·9	0 56	12·9	21 39	759	743	1 1	16	47	I	77·4
26	18 16	631	594	11 21	37	20 24	46·5	35·1	22 31	11·4	21 30	770	752	0 3	18	41	I	77·1
27D	18 8	665	560	11 51	105	13 12	55·8	27·6	5 16	28·2	18 17	812	678	5 12	139	447	I	76·9
28D	21 11	625	559	11 31	66	12 56	46·8	34·6	18 6	12·2	13 15	777	755	23 35	22	75	I	76·3
29D	22 12	621	581	14 41	40	14 5	50·8	29·8	18 5	21·0	18 7	808	749	4 31	59	130	I	76·2
30	18 41	630	583	3 40	47	12 15	47·6	29·4	18 29	18·2	18 0	774	762	4 30	12	84	I	76·3
31Q	19 18	624	598	13 2	26	14 12	46·0	40·0	8 52	6·0	23 2	768	763	1 30	5	14	0	76·3
†Mean	—	620	583	—	37	—	48·8	36·6	—	12·1	—	736	717	—	19	61	0·65	76·2
No. of days used.	—	29	29	—	29	—	29	29	—	29	—	29	29	—	29	29	31	31



Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

9. Lerwick. (H.)

February, 1928.

14,000 γ (·14 C.G.S. unit) +

Hour. G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Day.	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	609	611	609	609	604	605	615	616	615	610	603	599	594	593	599	603	605	610	614	614	610	606	609	613	611	607
2	611	609	609	612	611	611	611	611	610	606	603	601	601	602	606	610	617	607	607	610	599	597	604	616	588	607
3	588	583	595	598	593	605	619	619	613	604	589	593	591	590	597	609	612	600	604	609	604	609	607	607	613	602
4	613	606	604	605	605	608	613	620	607	603	601	595	588	590	597	608	614	620	608	612	614	615	614	611	611	607
5	611	611	613	613	614	614	620	618	610	602	591	586	590	590	599	605	608	611	613	614	615	612	607	609	610	607
6	610	612	609	611	613	613	614	612	609	604	600	593	594	598	605	608	610	615	620	604	608	612	612	613	611	608
7	611	607	608	613	615	620	620	625	621	613	606	598	600	606	609	612	613	613	615	617	611	606	612	613	613	612
8Q	613	611	611	607	607	613	613	612	615	617	608	601	601	603	608	612	615	617	610	610	614	616	611	612	612	611
9Q	612	612	611	611	612	611	614	616	613	611	605	600	598	600	606	609	612	613	615	615	615	615	615	611	611	611
10Q	616	612	614	616	616	616	616	615	615	615	608	603	601	603	603	610	613	614	615	615	616	616	621	617	619	613
11Q	619	612	611	611	610	612	613	613	610	605	606	604	604	604	607	613	616	615	615	613	616	615	615	615	620	611
12	620	615	613	614	613	613	616	615	629	623	621	615	615	609	610	620	626	630	631	627	622	620	631	621	611	619
13D	611	612	610	611	611	615	614	613	614	613	608	609	609	608	610	620	614	625	614	609	614	619	614	614	607	613
14	607	598	605	611	593	608	609	614	609	603	605	603	611	613	611	613	617	614	614	614	618	623	607	609	608	610
15	608	608	609	610	609	613	611	607	606	611	610	601	599	605	609	614	620	623	618	623	617	609	624	605	607	611
16	607	612	614	607	611	612	611	614	611	603	595	583	590	600	606	611	612	616	621	622	621	607	608	609	601	608
17	601	610	606	605	611	611	611	611	611	607	598	594	593	599	604	610	608	610	611	617	616	611	611	616	615	608
18D	615	615	617	615	612	615	622	625	620	615	593	586	585	576	586	598	609	615	613	608	608	598	593	604	607	606
19D	607	615	609	603	580	607	621	617	613	602	603	597	591	589	594	607	614	612	616	613	612	613	614	614	614	607
20	614	613	613	613	613	614	615	616	615	603	586	581	588	591	595	597	606	611	618	609	598	589	577	579	590	602
21D	590	602	605	601	605	607	612	614	615	611	609	606	592	590	600	610	609	608	616	601	607	615	605	605	600	606
22	600	593	597	610	606	610	611	610	605	594	583	583	585	588	593	596	605	606	609	613	611	624	607	588	598	601
23	598	603	604	604	607	612	615	613	610	609	597	576	579	581	595	597	603	605	608	607	607	607	607	608	607	602
24Q	607	610	607	607	609	611	610	610	607	598	588	584	583	587	591	593	595	597	601	606	607	612	613	615	615	602
25	615	613	612	612	616	613	601	615	617	601	594	583	568	579	591	590	595	595	607	607	599	604	604	601	612	601
26D	612	604	606	602	603	605	607	607	606	593	585	583	559	577	588	594	599	599	606	605	602	606	605	610	605	598
27	605	606	601	594	599	604	604	608	597	577	581	576	575	578	584	588	593	603	602	607	609	609	618	597	600	598
28	600	597	598	598	600	604	608	603	598	592	582	576	577	583	586	597	602	608	609	607	608	606	608	607	607	598
29	607	606	607	602	603	604	605	605	602	596	586	580	580	585	591	596	599	602	603	607	607	607	607	607	606	600
Mean	608	608	608	608	607	611	613	614	611	605	598	593	591	594	599	605	609	611	612	612	611	610	610	608	608	606

## MAGNETIC DECLINATION (WEST).

Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

10. Lerwick. (D.)

February, 1928.

14° +

Hour. G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Day.	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
1	40·9	41·7	40·9	41·9	39·4	39·7	40·9	40·9	40·9	40·9	41·5	43·8	45·3	45·7	46·7	45·7	44·8	43·6	43·4	43·6	38·4	36·7	41·9	41·9	41·3	42·1
2	41·3	42·3	42·4	41·7	41·5	41·3	41·3	41·1	41·1	41·1	42·6	44·0	45·5	46·5	46·5	45·3	43·8	42·8	43·6	35·3	35·7	40·5	40·9	34·9	34·7	41·7
3	34·7	37·2	38·8	39·4	42·4	42·8	40·5	40·9	40·9	42·1	42·6	44·6	47·8	51·1	47·3	48·6	48·2	45·9	44·8	43·0	40·5	40·7	41·7	41·5	40·1	42·9
4	40·0	40·8	42·0	42·9	42·7	42·9	41·8	41·8	43·1	43·3	43·5	45·2	47·0	50·3	48·5	45·0	44·5	43·1	44·1	42·7	42·0	41·4	41·6	41·4	41·4	43·4
5	41·4	42·3	42·9	42·5	43·1	43·7	40·2	40·8	40·6	40·0	41·4	43·3	46·2	47·2	47·2	44·5	43·9	42·9	42·7	42·5	42·3	41·0	40·2	40·8	42·0	48·7
6	42·0	42·7	43·1	42·7	42·5	42·3	41·8	41·2	40·6	40·4	41·6	42·5	44·1	45·4	46·2	45·0	44·5	44·3	43·5	43·3	41·0	42·0	41·4	42·3	42·9	42·8
7	42·9	44·7	44·7	42·7	41·2	40·4	40·2	40·6	40·8	41·2	42·7	42·9	44·3	44·9	44·7	43·9	43·9	44·7	44·7	43·9	38·9	39·8	40·8	41·6	42·0	42·5
8 Q	42·0	42·3	41·0	40·2	39·3	39·4	40·0	40·6	40·6	41·2	42·3	43·9	45·6	46·8	46·4	45·0	44·7	44·1	45·8	45·2	43·3	42·2	39·4	39·1	39·4	42·5
9 Q	39·4	40·8	41·2	41·6	41·0	42·3	41·4	41·0	40·4	40·6	41·4	42·7	44·1	45·2	45·4	44·7	44·3	43·1	43·1	42·5	42·0	41·0	41·0	40·8	40·6	42·1
10 Q	40·5	41·5	41·3	41·1	40·9	40·9	40·7	40·7	40·1	39·3	39·9	42·2	43·8	46·9	48·6	48·4	46·7	44·6	46·3	44·6	42·8	42·1	41·3	40·9	38·6	42·7
11 Q	38·6	38·0	39·0	39·2	39·3	39·2	39·5	39·3	39·0	39·0	41·1	43·0	45·7	46·3	46·1	45·3	46·3	46·7	43·6	42·6	41·3	40·7	40·3	40·3	39·0	41·7
12	39·0	39·9	40·9	40·9	40·7	40·7	40·5	39·9	39·3	39·7	41·1	43·4	45·1	46·9	47·6	46·3	45·9	45·3	44·6	44·8	39·5	37·6	33·0	36·6	40·1	41·7
13 D	40·1	41·5	41·1	40·5	40·3	40·1	40·3	40·3	40·1	40·5	40·9	43·0	44·6	45·7	44·8	44·9	44·6	43·6	44·9	44·8	45·5	41·3	34·9	37·0	37·4	41·8
14	37·3	37·7	37·1	32·7	37·9	35·2	38·7	39·2	40·4	42·5	44·3	44·3	45·4	48·3	47·9	48·5	47·0	40·8	46·0	46·2	44·5	37·5	40·8	40·6	38·7	41·7
15	38·7	39·2	39·6	41·2	41·0	40·8	40·6	40·8	41·6	41·0	42·0	42·9	44·1	44·8	46·4	46·2	45·4	45·2	45·8	43·3	44·7	42·5	41·4	35·2	36·0	42·2
16	36·0	34·8	35·4	36·9	37·5	37·3	39·4	40·6	41·4	42·5	44·5	45·4	46·2	46·2	46·4	46·2	44·8	44·3	43·3	42·7	44·3	43·9	42·3	40·8	36·4	41·8
17	36·4	38·7	36·9	40·0	40·6	40·0	40·2	40·4	40·4	40·2	41·0	43·1	45·4	46·2	46·4	46·2	44·5	44·1	41·8	41·4	42·5	41·0	41·0	41·8	41·6	41·8
18 D	41·6	41·2	40·8	38·5	38·9	40·6	40·4	40·0	40·6	41·8	44·7	47·7	49·5	51·4	50·6	47·2	45·8	44·8	44·3	43·3	39·2	36·2	35·4	37·5	41·0	42·6
19 D	40·9	40·1	37·8	37·2	44·4	42·4	35·1	38·6	40·1	40·1	39·0	42·6	44·7	47·6	47·1	47·6	46·9	44·4	44·6	44·9	42·4	41·3	40·9	40·9	40·9	42·1
20	40·9	41·1	40·9	40·7	40·9	40·7	40·3	39·9	38·8	38·0	39·7	42·0	44·4	46·1	46·5	46·1	44·4	43·4	42·6	35·5	41·3	40·5	27·2	30·7	33·2	40·4
21 D	33·2	32·4	39·9	40·5	39·0	38·8	37·6	38·4	38·2	37·0	38·8	44·4	46·7	48·6	47·8	47·3	46·1	44·6	44·4	42·2	42·6	27·6	31·2	34·9	35·1	40·1
22	35·0	40·8	38·5	38·5	38·3	38·5	38·7	38·3	36·7	36·7	37·1	40·4	42·1	43·3	45·0	44·3	43·9	42·5	42·3	42·5	42·1	36·0	36·5	33·5	34·2	89·6
23	34·2	34·8	36·9	40·4	39·8	38·7	38·9	38·7	37·7	37·9	39·8	41·6	42·5	45·8	46·2	46·0	43·9	42·9	41·9	41·2	40·6	39·8	40·0	40·2	40·0	40·6
24 Q	40·0	41·6	40·2	40·2	40·0	40·2	40·0	39·2	38·5	38·1	38·9	41·6	43·7	45·0	45·8	45·0	44·1	42·5	42·7	42·3	42·1	41·0	40·6	40·4	40·4	41·4
25	40·4	40·6	40·4	40·8	39·0	37·3	41·0	43·3	41·4	38·9	41·8	44·3	46·2	44·6	47·0	46·6	45·8	40·4	37·9	38·9	38·1	40·6	38·7	38·1	36·9	41·3
26 D	36·9	40·0	40·6	40·2	40·0	40·2	40·0	39·6	38·9	38·9	40·4	43·7	44·5	46·0	49·3	50·1	46·4	44·3	34·6	40·0	42·3	41·6	39·6	32·5	39·6	41·3
27	39·5	39·9	40·3	45·9	42·0	40·3	40·1	39·9	40·1	41·1	39·3	41·1	43·2	44·9	46·7	45·7	44·0	42·4	42·2	43·2	42·4	41·5	27·2	31·8	33·5	40·9
28	33·5	34·5	38·0	39·1	39·1	39·3	39·1	39·9	40·5	40·7	39·7	41·3	44·7	46·5	48·0	46·7	39·5	42·4	42·2	42·2	39·9	38·0	39·3	40·7	40·7	40·8
29	40·7	40·3	42·0	41·3	39·7	39·5	39·7	39·7	39·3	38·8	38·9	40·7	43·0	44·4	45·3	44·5	43·2	42·0	42·0	42·0	41·8	40·5	40·9	40·7	40·5	41·3
Mean	38·9	39·8	40·2	40·4	40·4	40·2	40·0	40·2	40·1	40·1	41·1	43·2	45·0	46·5	46·8	46·1	44·9	43·6	43·2	42·4	41·5	39·9	38·7	88·6	38·9	41·8



11. Lerwick. (V.)

46,000  $\gamma$  (.46 C.G.S. unit) +

February, 1928.

Hour. G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Day.	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$
1	766	763	763	762	763	763	762	762	762	762	767	767	767	767	767	766	766	766	766	766	765	766	765	764	762	765
2	762	761	761	760	760	760	759	759	758	758	759	759	758	758	757	757	758	759	760	761	760	759	758	753	750	759
3	750	747	739	740	743	743	745	749	750	751	754	757	759	763	766	765	768	776	777	774	774	770	768	767	763	758
4	763	763	763	763	762	762	762	761	762	761	761	761	763	764	764	768	768	767	768	768	766	765	763	762	762	764
5	762	762	762	762	760	757	754	754	754	754	757	757	757	757	756	757	757	757	756	756	756	755	754	753	753	757
6	753	753	753	752	752	752	752	752	751	751	753	752	752	752	753	754	754	754	754	756	756	754	752	750	749	753
7	749	748	746	747	749	747	746	745	745	745	745	746	747	747	747	747	747	747	747	747	747	748	747	746	744	747
8 Q	744	744	743	743	743	743	741	741	739	738	738	737	738	737	737	738	738	739	740	740	740	738	739	737	736	740
9 Q	736	735	734	734	734	732	729	727	727	727	726	726	726	726	727	727	728	727	727	727	727	726	725	724	724	728
10 Q	724	723	723	722	722	723	723	723	722	722	724	724	724	731	743	746	747	748	746	747	749	750	750	747	746	734
11 Q	746	746	744	744	743	743	743	743	743	742	741	741	741	741	741	742	744	745	749	751	751	749	749	747	744	745
12	744	743	742	742	742	742	743	742	741	740	740	738	739	741	743	742	743	744	745	750	768	768	768	760	759	747
13 D	759	755	754	754	754	753	752	752	752	751	753	753	753	753	753	754	755	756	760	770	776	778	778	776	774	759
14	774	768	759	745	732	715	728	736	741	745	746	748	748	749	751	753	755	760	761	762	762	759	759	759	759	750
15	759	756	756	755	753	753	753	752	752	750	750	751	751	751	751	752	752	752	752	752	753	757	755	744	747	752
16	747	745	744	743	738	739	740	740	741	741	740	742	741	741	741	741	741	741	740	739	738	740	741	739	738	741
17	738	732	731	731	731	731	731	731	732	732	734	733	733	733	734	734	736	736	737	737	735	735	735	735	733	733
18 D	733	734	732	730	730	729	729	728	728	727	731	731	731	731	731	732	732	734	736	740	740	740	739	734	733	733
19 D	733	724	723	723	721	707	708	713	715	717	721	722	723	725	725	726	725	728	728	729	729	728	728	727	728	723
20	728	729	729	728	728	727	727	725	724	724	725	725	726	725	726	726	726	725	725	726	725	722	713	716	714	725
21 D	714	717	721	723	722	721	721	720	721	720	721	721	722	723	724	727	730	731	731	735	736	737	735	732	731	726
22	731	729	726	718	723	726	727	729	729	731	731	731	731	733	733	733	734	735	736	736	736	734	727	729	729	730
23	729	727	727	730	733	733	733	732	732	732	732	732	733	733	734	736	736	736	736	736	736	734	733	733	732	733
24 Q	732	731	731	731	732	732	732	731	731	731	730	729	727	727	728	729	730	731	731	732	732	730	728	727	727	730
25	727	727	727	727	726	727	727	726	723	724	721	722	724	723	724	724	725	728	728	729	731	727	726	724	721	726
26 D	721	720	719	720	721	721	721	722	722	722	723	725	726	726	726	727	729	731	733	731	731	729	729	727	727	725
27	727	725	725	724	723	724	724	726	727	727	727	727	728	727	727	727	728	728	728	728	727	727	727	726	723	726
28	723	720	720	721	721	723	723	723	723	724	725	725	726	738	750	759	767	757	745	742	739	737	734	733	732	733
29	732	729	717	717	719	720	721	721	722	721	723	724	723	723	722	721	721	721	721	721	721	721	721	721	721	722
Mean.	742	740	738	738	737	736	736	737	737	737	738	738	739	739	741	742	743	743	744	744	745	744	743	741	740	740

12. Lerwick.

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS;  
MAGNETIC CHARACTER FIGURES; TEMPERATURE IN MAGNET HOUSE.

February, 1928.

Day.	Terrestrial Magnetic Elements.															Character in Figure $\frac{2R^2}{100\gamma^2}$	Magnetic Character of Day (0-2).	Temperature in Magnet House. 200+
	Horizontal Force.					Declination.					Vertical Force.							
	Maximum 14,000 $\gamma$ +	Minimum 14,000 $\gamma$ +	Range.	Maximum 14° +	Minimum 14° +	Range.	Maximum 46,000 $\gamma$ +	Minimum 46,000 $\gamma$ +	Range.	Maximum 46,000 $\gamma$ +	Minimum 46,000 $\gamma$ +	Range.						
	h. m.	$\gamma$	$\gamma$	h. m.	$\gamma$	h. m.			h. m.		h. m.	$\gamma$	$\gamma$	h. m.	$\gamma$			a.
1	6 31	622	588	12 49	34	13 49	48.4	27.6	20 25	20.8	20 28	768	760	3 10	8	91	I	76.1
2	22 38	637	585	20 14	52	13 18	46.9	27.2	19 9	19.7	19 1	763	748	23 33	15	100	I	76.3
3	7 21	624	577	1 11	47	13 4	53.3	33.8	0 2	19.5	17 17	779	733	2 13	46	112	I	76.3
4	17 15	628	581	12 23	47	13 10	51.6	39.1	0 8	12.5	18 32	771	758	7 1	13	52	I	76.0
5	6 40	623	584	10 52	39	13 46	48.5	38.7	21 46	9.8	1 6	764	752	6 40	12	34	I	76.0
6	17 38	623	591	11 36	32	13 58	46.6	39.1	9 32	7.5	19 10	759	749	24 0	10		O	76.1
7	7 20	631	596	10 50	35	0 29	47.0	34.2	20 18	12.8	20 50	750	744	2 0	6	43	I	76.1
8 Q	20 32	622	597	11 32	25	12 50	47.2	38.5	4 9	8.7	0 0	744	736	24 0	8	21	O	76.6
9 Q	23 33	618	595	11 40	28	13 40	46.0	38.9	0 3	7.1	0 3	737	724	24 0	13	16	O	77.8
10 Q	23 53	626	597	11 25	29	13 56	49.2	36.8	23 48	12.4	20 33	753	721	0 40	32	47	I	77.8
11 Q	23 59	626	601	13 2	25	16 56	47.1	37.0	1 11	10.1	19 10	753	738	12 0	15	27	O	77.1
12	21 48	639	600	7 23	39	13 47	48.4	30.3	22 13	18.1	20 10	773	736	10 50	37	88	I	76.8
13 D	20 57	633	592	13 23	41	19 26	49.0	28.9	21 51	20.1	21 49	783	749	9 22	34	102	I	76.1
14	20 51	647	567	3 51	80	14 22	50.6	29.6	3 23	21.0	0 3	775	706	4 26	69	191	I	75.3
15	22 9	661	588	22 52	73	13 59	47.4	32.7	23 0	14.7	21 40	759	740	22 50	19	96	I	75.3
16	20 8	654	572	11 8	82	11 1	47.0	33.1	23 50	13.9	0 20	746	734	20 15	12	103	I	75.8
17	19 35	620	590	11 40	30	13 19	47.0	35.2	0 3	11.8	18 10	738	729	1 40	9	35	O	76.6
18 D	7 10	626	571	12 46	55	13 2	52.0	34.4	21 48	17.6	21 15	741	726	9 10	15	89	I	76.8
19 D	5 30	639	569	4 19	70	4 35	53.6	32.2	5 22	21.4	19 21	732	701	5 10	31	141	I	77.0
20	18 25	623	557	21 24	66	14 35	47.3	23.5	22 10	23.8	2 0	729	711	21 41	18	149	I	77.5
21 D	17 56	637	573	12 17	64	12 44	54.8	21.8	21 3	33.0	20 55	739	712	0 15	27	247	I	77.8
22	21 1	631	577	10 28	54	13 59	45.6	31.9	22 46	13.7	19 52	738	715	2 53	23	68	I	78.1
23	5 31	619	570	10 55	49	13 16	47.3	33.6	1 17	13.7	15 30	739	725	1 33	14	60	I	78.7
24 Q	23 32	618	581	11 24	37	14 19	46.0	37.7	8 46	8.3	17 0	734	727	1 20	7	26	O	78.8
25	7 31	628	560	12 15	68	11 50	49.9	31.5	19 27	18.4	19 50	734	721	9 40	13	109	I	78.6
26 D	18 19	641	545	12 19	96	14 27	51.6	18.6	18 14	33.0	18 9	736	716	1 35	20	295	I	78.2
27	22 7	633	571	8 54	62	3 1	48.4	22.9	21 52	25.5	21 51	730	721	3 42	9	158	I	78.1
28	20 19	617	573	14 24	44	13 39	49.6	31.6	0 36	18.0	16 4	772	719	1 14	53	108	I	78.2
29	1 32	615	576	11 58	39	1 39	45.9	38.4	8 41	7.5	0 10	732	712	2 4	20	294	O	78.2
Mean.	—	630	580	—	50	—	48.7	32.4	—	16.4	—	751	730	—	21	—	0.76	77.0
No. of Days used.	—	29	29	—	29	—	29	29	—	29	—	29	29	—	29	—	29	29



Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

## 13. Lerwick. (H.)

14,000  $\gamma$  (=14 C.G.S. unit) +

March, 1928.

Hour. G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Day.	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$
1	607	608	607	607	607	608	608	608	607	602	595	589	591	593	593	594	597	600	606	608	609	609	609	610	610	603
2 Q	610	610	610	609	612	611	613	613	607	604	598	597	597	598	599	601	604	604	607	609	611	610	611	612	611	607
3	611	611	610	610	611	611	611	611	606	601	595	591	595	597	601	602	605	608	611	613	616	616	617	615	615	607
4 Q	615	613	614	613	616	614	617	615	609	600	589	585	587	589	592	596	602	607	611	612	614	615	615	615	615	606
5 Q	615	615	613	613	613	613	615	613	609	600	591	588	590	594	600	607	612	614	615	616	617	617	618	618	617	609
6	617	616	615	615	614	612	614	615	605	598	584	578	582	583	589	599	606	613	619	619	615	612	614	614	614	606
7	614	613	611	611	609	609	613	617	609	601	590	582	581	590	598	603	617	613	613	611	605	606	605	608	608	605
8	608	608	609	608	610	609	609	609	604	591	585	584	589	598	606	611	606	611	613	618	611	610	610	611	612	605
9 Q	612	611	607	607	609	609	609	608	604	595	585	579	578	587	595	604	604	609	608	610	611	611	610	610	611	603
10	611	609	609	608	607	609	612	612	607	594	585	583	583	586	594	597	613	614	614	612	615	617	619	629	615	606
11 D	615	610	609	613	615	616	615	615	614	602	578	553	568	601	638	753	714	657	703	657	685	658	595	571	507	625
12 D	507	485	439	405	533	579	586	583	577	564	552	549	555	564	584	591	599	604	608	621	598	589	583	586	594	582
13 D	594	594	594	592	577	596	599	602	597	588	581	566	565	581	594	605	641	633	632	621	590	577	571	533	519	591
14 D	519	499	528	557	587	587	581	566	554	559	548	540	532	558	587	604	613	625	619	603	597	600	602	603	599	575
15	599	582	581	590	595	597	597	594	586	575	559	556	557	564	569	581	596	603	615	610	607	607	602	603	604	589
16	604	601	601	598	598	600	601	603	600	584	576	569	567	574	579	601	595	590	601	609	613	611	606	606	606	595
17	606	605	605	603	606	612	615	608	597	582	568	570	575	574	582	600	606	610	614	616	613	*	—	—	—	—
18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*	—	600	605	609	609	609	606	607	608	—
19	608	605	603	602	600	605	609	604	596	587	585	578	577	578	589	597	595	600	606	615	609	617	609	610	611	599
20	611	609	606	605	606	611	611	611	602	592	578	572	573	579	589	595	602	601	606	612	610	609	610	622	606	601
21	606	607	601	606	611	611	609	611	605	590	578	574	574	580	585	589	600	615	611	611	611	607	605	601	601	600
22	601	602	603	600	602	601	598	596	591	588	580	578	588	595	594	604	615	615	614	616	608	604	594	588	591	599
23 D	591	588	590	599	605	610	599	595	577	561	572	577	580	588	591	608	610	613	617	617	616	610	611	615	598	593
24	615	610	610	610	608	612	615	615	605	593	583	581	575	577	594	591	602	608	609	612	614	610	611	610	610	603
25	610	614	613	604	604	605	609	603	601	591	574	563	572	582	604	606	597	609	609	614	612	616	608	608	608	601
26	608	605	607	602	597	598	606	603	596	581	569	563	565	576	586	603	604	610	612	612	611	610	610	611	609	598
27	609	608	606	602	606	607	607	604	594	579	568	563	564	573	580	590	601	607	610	612	612	611	610	610	610	597
28	610	611	611	611	611	612	608	607	604	585	567	560	561	573	584	601	610	615	626	620	609	612	614	615	620	602
29	620	612	609	609	612	614	615	612	603	587	573	569	565	577	591	603	608	612	613	613	615	613	613	613	611	603
30	611	610	609	609	608	607	607	603	595	585	577	573	576	584	591	601	601	609	612	617	611	617	608	600	605	601
31 Q	605	607	605	605	605	606	605	600	593	586	578	574	578	589	593	599	604	607	609	610	610	615	611	610	610	600
Mean.†	602	599	598	597	603	606	607	605	599	588	578	573	575	583	593	605	609	611	615	615	613	611	607	605	602	600

## MAGNETIC DECLINATION (WEST).

Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

## 14. Lerwick. (D.)

14° +

March, 1928.

Hour. G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Day.																										
1	40.5	40.3	40.3	40.1	39.9	39.9		39.1	38.8	38.4	38.9	40.9	43.4	44.7	45.1	44.5	42.6	41.5	41.7	41.5	41.3	41.1	40.9	40.9	40.9	41.1
2 Q	40.8	40.6	40.4	41.0	39.4	39.4	39.6	39.2	38.7	38.3	39.4	41.9	43.7	44.1	43.3	42.1	41.9	41.7	41.6	41.2	40.8	40.4	40.4	40.6	40.8	40.9
3	40.8	40.4	40.4	40.6	40.0	39.8	39.4	38.8	38.3	37.7	38.5	40.4	42.1	43.3	43.3	42.3	41.4	41.6	41.6	41.2	41.0	41.4	41.6	41.4	41.4	40.7
4 Q	41.4	41.0	41.0	41.7	40.0	38.7	38.7	38.5	38.1	38.1	39.0	41.6	44.6	45.2	45.0	44.1	42.5	41.9	41.4	41.0	41.2	41.2	41.4	41.4	41.4	41.2
5 Q	41.4	40.8	40.6	40.6	40.4	40.0	39.8	38.8	37.9	36.9	37.9	40.4	44.1	45.6	44.4	43.1	42.1	41.7	41.7	41.7	41.0	40.6	40.4	40.4	40.2	40.9
6	40.2	40.2	40.2	40.2	40.0	39.2	38.7	36.9	36.3	36.1	38.5	41.2	45.8	46.0	45.8	44.1	41.9	40.6	40.4	40.4	40.0	39.8	40.2	40.2	40.2	40.5
7	40.2	40.2	40.0	40.0	39.8	38.5	38.1	36.7	36.9	36.7	38.3	41.0	44.3	47.7	47.5	45.6	43.9	42.3	41.7	40.0	39.2	37.9	37.9	38.7	39.4	40.5
8	39.4	39.8	38.8	38.8	38.5	36.7	37.9	37.3	36.5	36.5	38.5	41.9	45.4	47.7	48.3	47.7	44.4	42.3	41.7	41.2	41.4	40.6	40.2	40.2	39.4	40.9
9 Q	39.4	34.8	35.8	36.9	39.0	39.2	38.7	38.1	37.1	36.3	38.3	40.6	43.9	46.2	47.5	47.0	44.4	42.7	41.9	41.4	40.6	40.2	40.2	40.0	39.6	40.4
10	39.6	39.4	38.8	38.8	38.5	38.5	37.9	38.1	37.9	37.9	38.7	40.6	43.9	46.0	47.7	46.4	45.8	44.1	42.1	40.8	41.9	41.6	40.6	36.1	36.0	40.8
11 D	36.0	39.2	39.4	40.0	39.6	40.0	39.8	39.2	38.3	38.5	40.6	47.7	51.4	52.4	51.8	53.7	40.2	55.4	54.5	47.7	47.7	45.6	38.3	33.6	32.1	43.7
12 D	32.1	30.4	26.5	39.4	44.4	36.3	39.4	39.2	38.8	39.4	42.3	44.3	47.9	49.5	49.7	48.5	42.5	44.6	42.1	37.1	41.0	42.1	36.7	37.5	41.2	40.7
13 D	41.2	42.1	41.9	39.2	42.3	38.5	38.1	38.1	37.5	36.9	38.5	41.9	47.1	50.0	52.4	50.0	51.8	45.2	38.8	41.0	40.2	31.9	34.2	30.4	33.4	41.1
14 D	33.4	22.6	38.3	36.5	37.1	38.3	38.3	39.4	40.6	39.2	41.4	43.9	47.9	51.2	52.4	49.9	46.2	38.3	38.8	39.2	42.5	40.6	40.4	41.2	42.7	40.9
15	42.7	49.9	42.5	44.3	41.9	40.6	39.4	38.5	38.1	38.7	40.4	45.0	48.3	51.8	51.8	50.0	47.7	43.9	37.1	41.0	41.9	40.2	37.5	40.0	41.7	43.0
16	41.7	42.1	42.5	41.7	41.4	40.6	39.8	38.5	37.5	37.9	39.2	42.7	46.0	49.7	50.2	50.2	47.9	45.8	44.1	42.9	42.1	37.9	40.0	42.3	42.1	42.7
17	42.2	41.5	41.3	41.3	41.1	40.5	40.3	39.1	38.4	38.9	40.3	44.4	47.8	50.7	51.1	50.1	48.0	45.7	43.0	42.6	43.2	44.0	43.8	38.4	40.1	43.2
18	40.1	40.5	39.5	39.3	38.6	38.2	38.4	38.2	38.0	38.8	41.3	*	—	—	—	*	45.7	43.0	41.8	41.1	40.3	36.8	40.3	41.5	40.3	—
19	40.3	38.2	39.5	39.7	40.1	39.9	38.9	39.3	37.8	38.8	38.8	41.5	44.0	44.9	45.1	45.1	43.0	42.0	41.8	41.8	40.3	38.9	40.3	40.5	40.5	40.9
20	40.6	40.2	39.8	39.2	37.5	37.3	37.9	37.1	36.5	36.3	38.1	40.6	43.1	46.0	46.6	45.6	42.9	40.8	41.0	40.2	40.0	40.4	40.3	39.4	38.3	40.3
21	38.3	39.6	42.9	40.8	36.7	36.5	36.3	36.2	35.8	36.0	38.3	40.8	46.8	49.7	49.5	47.9	45.0	42.5	42.1	40.0	39.8	38.9	37.5	36.0	34.6	40.5
22	34.6	34.6	36.7	38.5	37.9	36.9	36.5	35.4	35.8	36.5	40.0	43.3	47.9	50.1	49.5	48.3	46.6	45.6	43.3	43.1	40.8	36.9	36.5	32.5	30.6	40.2
23 D	30.7	30.1	28.7	28.1	26.4	30.3	32.6	34.7	39.1	43.4	46.3	46.3	48.2	50.9	50.0	47.6	44.7	43.2	42.6	42.2	42.4	40.9	34.7	37.0	38.4	39.4
24	38.4	38.8	39.9	39.1	40.1	38.2	36.6	36.4	35.7	37.0	40.5	43.0	46.7	46.3	47.1	44.6	43.4	42.2	42.0	41.5	41.1	40.3	37.2	38.8	40.3	40.7
25	40.3	39.0	39.1	39.0	36.6	36.8	36.8	36.6	36.4	36.1	40.1	42.4	44.9	46.3	47.3	44.6	41.7	40.7	40.9	40.5	40.1	38.0	40.1	40.3	39.9	40.2
26	40.0	40.6	38.7	38.7	41.2	39.1	37.9	36.9	36.5	37.7	40.6	42.7	46.0	48.1	46.8	46.2	42.3	38.7	39.1	40.2	37.7	38.9	40.2	40.4	40.8	40.7
27	40.8	41.4	39.1	40.2	38.7	38.3	36.9	36.4	35.0	35.0	37.3	40.4	43.9	45.4	45.4	44.1	42.3	41.0	40.0	40.4	40.8	40.6	40.4	40.4	41.8	40.2
28	41.8	41.4	40.4	39.2	38.9	37.9	37.3	35.8	34.8	35.0	36.4	39.2	44.3	46.4	44.5	43.1	41.2	40.4	39.4	38.7	38.9	40.6	40.6	40.4	38.7	39.8
29	38.8	38.8	38.8	38.8	37.8	37.2	37.8	36.3	34.9	34.9	36.8	40.9	44.8	46.9	46.5	44.6	42.2	40.7	40.5	40.5	39.0	39.7	39.7	40.7	40.5	40.0
30	40.5	39.3	39.0	38.6	37.8	37.2	37.0	36.6	36.6	36.6	38.8	40.9	43.6	44.8	43.8	42.1	40.5	39.3	39.5	39.0	39.0	38.0	34.7	39.3	40.5	38.8
31 Q	40.6	39.4	39.1	38.9	38.3	37.9	36.9	36.7	36.2	36.9	41.2	43.7	46.4	46.6	45.2	43.3	41.4	40.8	40.8	40.8	40.8	40.6	40.6	40.2	39.1	40.5
Mean.†	39.2	38.8	38.9	39.3	39.0	38.2	38.0	37.5	37.2	37.4	39.4	42.1	45.5	47.4	47.4	46.1	43.6	42.5	41.5	41.0	40.9	39.8	39.1	39.0	39.2	40.8



**15. Lerwick. (V.)**

46,000 γ (·46 C.G.S. unit) +

**March, 1928.**

Hour. G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Day.	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	721	719	720	719	719	719	719	718	719	720	725	725	723	723	724	725	726	726	725	725	725	725	726	725	725	723
2 Q	725	726	727	727	726	726	726	726	726	727	728	728	729	730	731	732	733	734	734	734	734	733	733	733	733	730
3	733	734	733	733	733	733	733	734	734	733	737	737	738	737	737	737	737	737	736	736	735	734	735	736	735	735
4 Q	735	735	735	734	733	733	733	733	733	733	736	736	736	737	736	736	736	736	734	732	731	731	730	731	731	734
5 Q	731	732	733	733	732	731	731	731	732	732	732	731	731	731	732	731	731	731	731	729	729	729	729	728	728	731
6	728	728	728	728	728	728	729	729	729	728	727	726	726	726	726	726	725	725	725	725	725	724	723	722	721	726
7	721	720	720	720	720	719	718	717	718	718	718	717	716	716	717	717	725	738	746	745	740	739	736	727	726	725
8	726	723	721	719	718	719	719	719	721	721	719	718	722	727	732	736	742	738	735	733	734	728	724	721	718	725
9 Q	718	710	712	716	718	720	720	720	721	721	718	715	711	709	710	716	722	727	726	724	721	718	718	718	718	718
10	718	718	719	718	719	720	719	719	719	720	718	717	712	708	710	715	717	727	733	733	723	715	712	686	684	717
11 D	684	692	699	703	705	707	708	707	706	704	704	709	714	734	788	899	973	899	947	895	848	857	800	732	652	771
12 D	652	593	527	526	577	623	663	697	712	716	729	728	723	722	724	744	773	770	763	733	731	712	669	671	701	688
13 D	701	712	717	715	701	690	704	712	718	720	723	723	720	718	728	743	758	821	797	800	763	737	690	644	563	724
14 D	563	561	608	629	662	697	708	711	716	717	745	761	759	763	769	781	780	783	785	782	743	714	721	718	720	719
15	720	691	672	689	705	720	724	729	734	735	736	735	734	732	734	735	737	742	745	739	733	729	726	721	712	725
16	712	710	710	711	712	712	712	711	711	712	710	710	707	705	705	708	712	713	710	709	718	709	709	706	707	710
17	707	708	707	707	707	705	704	706	708	709	714	708	706	709	712	714	720	725	727	725	724	722	721	713	716	713
18	716	714	714	711	701	693	695	697	699	700	700	*	—	—	—	*	711	728	729	726	723	719	715	713	708	—
19	708	700	700	704	705	702	701	704	703	703	701	703	705	706	707	711	718	720	715	714	715	714	714	712	711	708
20	711	712	712	712	704	700	700	701	702	704	711	711	710	707	706	710	714	721	721	719	719	717	716	704	704	710
21	704	703	698	683	691	694	694	696	697	700	704	702	701	701	702	705	711	715	722	724	723	722	719	715	711	705
22	711	707	706	709	710	710	709	707	689	701	702	700	696	696	698	703	711	720	728	737	743	744	740	728	721	714
23 D	721	711	703	694	685	676	678	685	689	689	688	686	690	696	707	723	733	734	733	729	727	723	719	720	717	706
24	717	720	721	725	726	724	724	721	720	718	718	717	725	732	735	736	736	736	735	735	735	735	733	731	727	727
25	727	713	702	705	709	712	718	721	723	724	727	729	728	727	729	743	757	748	745	743	741	736	731	729	727	728
26	727	724	723	724	724	725	725	726	727	726	727	729	726	724	724	725	732	738	739	737	738	734	731	728	725	728
27	725	718	714	717	717	719	720	723	724	724	722	721	718	717	718	719	718	719	720	720	720	719	718	718	715	719
28	715	709	709	708	709	709	710	711	712	712	714	711	708	706	707	707	707	707	708	715	715	715	715	714	709	710
29	709	710	710	709	709	709	709	711	713	714	713	713	711	708	706	706	708	709	710	710	711	710	710	710	710	710
30	710	710	710	710	709	709	709	709	710	711	715	714	713	712	712	711	711	710	708	708	711	708	705	704	704	710
31 Q	704	703	703	703	703	702	702	702	702	702	699	698	694	693	694	694	694	694	694	696	696	697	698	699	698	698
Mean.†	710	705	703	704	707	710	713	715	716	717	719	719	718	719	722	730	737	739	740	737	732	728	722	715	709	720

**DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS ;  
MAGNETIC CHARACTER FIGURES ; TEMPERATURE IN MAGNET HOUSE.**

**16. Lerwick.**

**March, 1928.**

Day.	Terrestrial Magnetic Elements.														Character Figure $\frac{2R^2}{100\gamma^3}$	Magnetic Character of Day (0-2).	Temperature in Magnet House 200+	
	Horizontal Force.					Declination.					Vertical Force.							
	Maximum 14,000 $\gamma$ +		Minimum 14,000 $\gamma$ +		Range.	Maximum 14° +		Minimum 14° +		Range.	Maximum 46,000 $\gamma$ +		Minimum 46,000 $\gamma$ +					Range.
1	h. m.	$\gamma$	$\gamma$	h. m.	$\gamma$	h. m.			h. m.		h. m.	$\gamma$	$\gamma$	h. m.	$\gamma$			a.
2 Q	22 58	611	585	11 24	26	13 11	45 9	38 0	8 52	7 9	16 50	728	718	7 0	10	19	0	78 0
	21 45	613	594	11 54	19	12 40	44 4	37 9	9 1	6 5	24 0	733	725	0 0	8	12	0	78 0
3	21 55	618	589	11 5	29	13 50	43 7	37 3	8 54	6 4	14 0	738	733	about 6 0	5	16	0	77 9
4 Q	3 40	618	584	10 59	34	13 45	45 6	37 7	8 23	7 9	15 40	738	730	about 22 0	8	24	0	77 8
5 Q	23 1	622	587	10 51	35	12 51	46 0	36 1	9 28	9 9	3 0	733	728	24 0	5	30	0	78 0
6	18 19	621	577	11 2	44	12 26	46 6	35 2	8 39	11 4	8 6	731	719	24 0	12	45	0	78 1
7	17 50	624	576	11 35	48	13 35	48 1	36 1	20 31	12 0	18 29	748	714	13 0	34	61	1	77 6
8	19 19	620	579	10 55	41	13 28	49 3	36 1	8 21	13 2	16 0	743	718	11 0	25	54	0	77 2
9 Q	0 41	621	577	11 50	44	13 40	47 9	34 2	1 9	13 7	17 20	729	707	13 0	22	58	0	77 1
10	22 30	645	581	11 50	64	14 20	48 5	33 8	23 33	14 7	18 53	738	680	23 26	58	114	1	77 1
11 D	15 31	939	474	23 59	465	15 0	65 5	26 7	22 30	38 8	15 42	1048	540	24 0	508	5015	2	77 0
12 D	19 3	641	256	2 48	385	2 39	53 3	18 4	1 57	34 9	15 49	780	483	2 47	297	2586	2	76 7
13 D	16 24	660	485	23 19	175	16 11	53 7	25 1	22 48	28 6	17 36	832	543	23 32	289	1290	2	76 8
14 D	17 20	653	467	1 14	186	14 56	53 7	18 6	0 59	35 1	15 25	793	540	0 3	253	1211	2	76 4
15	17 58	625	550	11 16	75	13 32	53 3	33 8	17 43	19 5	17 45	749	665	1 52	84	196	1	76 8
16	20 31	616	563	12 8	53	13 26	52 7	35 0	21 27	17 7	16 40	716	703	13 30	13	86	1	76 9
17	—	—	—	—	—	13 26	52 5	36 4	23 8	16 1	18 2	729	703	6 20	26	—	1	77 0
18	—	—	—	—	—	—	—	—	—	—	17 18	732	691	4 55	41	—	1	77 7
19	20 41	627	573	11 59	54	12 31	46 3	36 8	0 40	9 5	16 30	723	698	1 50	25	51	1	78 2
20	22 39	639	569	11 33	70	14 27	47 3	36 0	9 0	11 3	17 20	723	698	5 30	25	78	1	78 9
21	17 25	621	571	11 57	50	13 28	50 1	34 2	23 49	15 9	18 52	726	680	3 3	46	92	1	79 2
22	18 42	625	572	10 34	53	13 18	51 4	29 0	23 40	22 4	20 33	746	693	12 3	53	146	1	78 8
23 D	17 18	627	559	8 56	68	12 45	51 9	25 6	4 13	26 3	16 50	736	674	5 20	62	210	1	78 2
24	21 49	626	550	12 18	76	14 8	50 2	34 3	6 26	15 9	14 40	740	714	0 0	26	111	1	78 1
25	0 39	627	557	11 13	70	13 40	48 2	34 7	7 43	13 5	15 39	759	698	2 0	61	120	1	78 3
26	19 14	619	548	10 41	71	13 0	48 9	35 6	7 44	13 3	17 40	740	719	1 18	21	87	1	78 4
27	17 21	617	561	11 6	56	13 28	46 4	34 6	8 33	11 8	8 40	726	711	1 50	15	59	0	78 4
28	18 0	632	551	11 38	81	12 46	47 7	34 4	8 6	13 3	20 0	717	705	12 50	12	100	1	78 7
29	20 20	621	559	12 0	62	13 5	48 0	34 7	8 29	13 3	9 30	715	704	15 0	11	72	0	79 0
30	21 35	631	572	10 59	59	12 57	45 5	30 7	21 31	14 8	10 40	716	704	24 0	12	76	1	79 3
31 Q	21 0	616	572	11 16	44	12 53	47 2	35 8	8 10	11 4	2 0	704	691	13 0	13	45	0	78 9
Mean	—	637	550	—	87	—	49 3	33 1	—	16 2	—	749	682	—	67	416	0 77	77 9
No. of Days used.	—	29	29	—	29	—	30	30	—	30	—	31	31	—	31	29	31	31



Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

## 17. Lerwick. (H.)

14,000  $\gamma$  ( $\cdot 14$  C.G.S. unit) +

April, 1928.

Hour. G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Day.	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$
1 D	616	614	614	614	610	610	611	608	604	595	584	576	576	580	590	596	607	619	625	643	624	618	617	600	609	606
2	609	608	608	608	608	601	600	601	589	571	556	555	565	572	585	590	601	612	617	614	617	619	616	599	582	596
3	582	579	599	605	605	605	605	594	579	563	548	549	560	592	632	630	620	620	614	609	614	619	614	611	580	598
4	580	608	603	591	603	603	603	602	586	569	555	553	567	575	579	601	623	629	627	634	619	607	601	599	592	597
5	592	600	603	593	602	602	601	590	583	572	555	548	553	559	576	589	610	621	617	615	613	616	611	606	604	592
6	604	608	607	601	604	603	609	598	581	565	549	550	558	569	586	594	597	614	632	633	620	609	595	569	569	593
7 D	569	591	596	591	602	608	582	588	577	561	549	539	551	567	589	600	597	628	604	610	616	604	553	583	575	586
8	575	472	524	588	589	588	588	582	570	558	548	536	543	564	591	597	619	614	598	605	608	597	592	591	590	577
9	590	591	590	591	590	589	589	583	571	553	542	540	553	564	581	582	608	603	599	598	598	604	588	592	580	583
10 D	580	549	586	596	597	591	597	574	574	537	527	529	534	560	562	571	587	605	620	611	605	599	588	583	591	576
11	591	589	588	587	587	580	590	585	569	551	539	536	541	547	569	579	599	607	603	602	600	596	595	593	595	581
12 Q	595	595	592	589	585	585	591	588	576	557	541	535	536	551	568	581	591	595	594	597	599	600	599	598	597	581
13 Q	597	596	596	594	594	594	592	587	574	561	547	544	547	560	577	588	594	601	605	609	608	600	596	597	597	586
14	597	595	593	595	598	597	597	591	579	567	555	545	548	555	571	581	589	601	614	617	616	612	604	605	604	589
15	604	603	600	595	593	599	603	594	576	563	556	551	547	551	559	574	591	607	625	636	629	603	595	594	590	589
16	590	579	593	590	591	595	596	595	584	567	560	560	560	567	567	573	583	619	618	617	611	600	594	561	537	585
17	537	548	548	583	583	578	579	578	571	555	554	551	550	558	571	577	588	606	612	610	613	603	593	587	588	577
18	588	583	587	588	591	590	593	590	576	564	560	561	567	573	583	592	592	593	598	602	604	603	604	602	602	587
19	602	601	595	594	598	599	597	592	577	566	557	559	566	575	591	599	605	613	621	628	626	614	608	570	549	593
20 D	549	543	545	495	576	593	593	581	567	549	541	541	546	559	576	598	600	604	609	609	618	610	594	602	605	576
21 D	605	609	609	606	608	608	606	604	587	565	561	564	565	577	604	599	625	618	638	622	610	606	606	603	600	600
22	600	595	583	589	594	594	594	588	577	567	559	557	561	567	574	584	592	605	622	615	618	611	605	604	610	590
23	610	602	595	595	598	601	599	595	585	575	566	561	562	574	585	590	611	622	632	624	610	601	596	580	594	594
24	594	596	597	599	601	604	603	601	591	578	568	561	550	561	583	591	598	606	607	612	613	617	610	604	603	594
25 Q	603	605	606	606	607	605	601	602	596	585	571	562	562	568	579	591	598	608	614	622	618	613	607	603	607	597
26	607	606	603	602	596	599	599	596	589	574	565	561	569	567	589	580	597	605	613	621	623	614	610	607	607	595
27	607	606	605	605	604	604	602	599	589	575	569	558	567	570	584	590	601	618	621	618	612	611	611	607	607	597
28 Q	607	603	605	601	601	601	602	597	590	578	568	561	563	577	593	600	601	606	611	615	611	606	605	607	606	596
29 Q	606	604	603	601	601	599	595	592	588	579	571	564	569	576	582	593	599	606	615	617	616	611	610	610	609	596
30	609	608	608	608	607	604	600	594	586	574	565	561	567	582	591	593	599	605	615	624	617	616	612	611	609	598
Mean.	593	590	592	593	597	598	596	592	581	566	556	552	557	567	582	590	601	610	615	616	614	608	601	596	593	590

## MAGNETIC DECLINATION (WEST).

Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

## 18. Lerwick. (D.)

14° +

April, 1928.

Hour. G M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Day.	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
1 D	39.1	39.3	39.1	38.9	37.1	36.4	35.4	36.9	37.3	35.4	40.8	44.5	48.9	52.4	51.8	50.5	44.9	43.1	42.3	39.4	40.8	38.7	35.2	35.6	35.6	40.9
2	35.6	37.3	38.9	39.1	37.1	38.9	42.5	36.0	35.0	36.2	39.6	42.5	46.4	48.3	46.8	43.3	41.0	39.8	40.4	41.4	41.0	40.6	39.3	35.2	33.7	40.1
3	33.7	34.0	35.2	37.1	36.4	35.8	35.0	33.7	33.1	34.4	39.4	45.0	49.1	48.3	44.9	43.5	40.8	39.1	39.6	38.3	34.8	40.8	39.4	34.4	39.1	38.7
4	39.2	37.2	38.6	39.2	40.7	36.8	35.1	34.9	34.7	35.5	39.4	42.8	47.7	48.6	48.6	47.1	45.1	43.6	40.7	38.8	39.7	39.2	37.6	33.2	33.4	40.0
5	33.4	35.1	40.5	40.9	37.4	36.8	34.9	33.0	35.3	35.3	40.5	44.8	49.4	50.2	49.0	46.7	42.8	40.9	40.9	40.9	40.9	41.1	38.6	37.0	38.8	40.4
6	38.8	37.0	38.2	38.6	38.4	38.0	38.0	37.4	37.0	36.3	39.0	42.6	45.1	48.0	47.1	45.5	43.4	42.8	39.0	42.4	42.4	35.5	37.0	41.1	28.7	40.1
7 D	28.8	29.6	32.9	37.1	35.0	33.1	36.6	35.6	34.6	35.6	38.5	42.0	45.2	48.5	48.9	47.4	44.7	43.3	41.8	41.2	41.2	39.1	27.5	31.3	36.4	38.5
8	36.4	29.6	25.8	35.0	35.6	36.0	35.6	33.7	32.9	35.4	38.9	43.1	47.2	50.3	49.9	48.3	46.8	43.9	42.0	42.0	40.8	38.9	38.7	39.1	39.1	39.5
9	39.1	37.7	37.3	37.3	37.1	36.9	35.6	33.9	32.9	33.5	37.5	42.9	47.9	50.3	50.3	47.0	46.2	42.9	41.2	42.5	41.4	38.7	35.2	39.3	34.4	40.1
10 D	34.5	40.3	37.0	38.6	36.7	37.6	40.9	37.6	33.2	35.7	40.7	43.2	46.3	50.6	49.8	46.7	43.4	41.1	39.4	38.8	40.1	37.2	35.3	39.2	37.4	40.2
11	37.4	37.2	37.4	37.8	38.0	37.0	36.1	34.2	33.6	34.9	37.4	41.5	45.3	48.0	48.2	44.8	41.5	40.7	39.6	39.6	39.9	39.4	38.6	39.7	39.6	39.5
12 Q	39.7	39.1	38.5	37.7	37.1	37.3	36.0	33.7	32.9	33.7	37.0	40.0	43.5	45.6	45.6	44.7	42.7	41.2	41.0	41.0	40.8	39.8	40.2	39.5	39.5	39.5
13 Q	39.5	39.5	38.7	37.9	37.3	36.4	35.0	33.7	33.3	34.8	38.1	41.8	45.1	46.0	45.4	43.7	41.8	41.2	41.0	40.8	39.3	39.3	39.3	39.1	39.1	39.5
14	39.2	39.0	37.4	37.4	37.1	36.1	34.9	33.6	33.0	33.8	37.4	41.1	45.0	46.9	46.9	45.4	43.0	41.3	40.1	39.8	39.9	39.2	37.6	39.4	39.4	39.4
15	39.4	39.2	38.4	37.6	37.8	37.2	34.0	31.1	32.2	35.7	40.9	41.7	43.6	45.5	45.4	43.6	42.5	41.3	40.9	40.9	39.4	38.6	38.0	37.4	29.3	39.1
16	29.4	30.8	30.8	30.8	31.7	31.9	31.9	31.9	31.6	32.1	37.7	42.6	44.5	45.8	44.9	44.9	43.9	42.8	40.2	35.2	36.0	38.9	37.2	23.1	23.8	36.2
17	23.8	29.6	35.8	33.3	34.1	35.4	35.6	33.9	33.7	35.0	37.5	41.0	43.1	44.9	45.3	43.9	43.1	40.0	40.4	40.8	39.7	33.9	37.2	35.4	36.2	37.6
18	36.3	36.1	36.9	37.4	35.7	36.3	36.3	35.7	35.7	35.7	36.9	39.6	43.4	45.9	46.7	45.2	43.2	41.5	40.7	40.0	39.8	39.8	39.6	39.4	39.6	39.4
19	39.6	39.6	39.8	41.3	37.6	37.1	35.7	33.8	33.2	34.2	38.8	42.3	44.6	45.0	45.0	43.6	42.1	41.5	40.9	41.1	41.5	39.6	39.6	35.1	27.8	39.4
20 D	27.9	21.3	27.9	33.7	35.8	33.9	33.5	33.5	34.5	36.2	40.1	43.5	47.4	47.8	46.6	44.7	43.5	42.4	42.2	42.6	41.8	37.9	36.0	37.7	41.2	38.3
21 D	41.2	41.6	40.2	39.9	39.7	37.7	36.2	36.0	37.4	39.5	43.7	47.4	49.3	50.9	51.3	50.3	47.4	41.2	39.5	41.8	41.0	41.4	40.2	40.1	41.0	42.3
22	41.1	41.7	42.7	41.7	39.8	37.8	35.9	34.4	34.4	36.1	39.8	43.4	45.8	47.5	47.7	47.1	45.0	42.7	41.9	41.7	37.3	41.3	41.3	41.7	41.7	41.3
23	41.7	43.2	42.5	41.5	40.0	38.2	37.6	36.3	35.9	36.1	38.0	41.7	43.8	45.4	45.8	45.6	44.2	41.5	38.2	39.8	41.1	41.9	41.7	41.9	38.0	40.9
24	38.1	40.1	40.4	40.1	39.7	38.9	37.6	36.4	35.8	37.0	38.5	41.8	45.3	46.0	46.2	45.7	44.3	43.3	42.2	41.8	41.8	39.9	38.3	40.3	40.3	40.9
25 Q	40.3	40.1	39.9	39.7	39.7	40.3	41.2	38.9	37.4	36.6	37.9	40.4	43.5	44.7	44.7	44.3	43.9	43.5	42.0	41.6	41.0	39.9	38.1	39.7	40.6	40.8
26	40.6	39.9	39.7	39.7	39.7	38.3	37.7	36.6	36.6	37.7	39.7	41.8	44.9	46.0	45.9	44.3	43.7	42.0	41.6	41.4	40.3	38.9	39.7	40.6	40.6	40.7
27	40.7	40.2	39.8	39.8	38.4	37.7	36.1	34.6	34.6	36.3	38.8	41.7	43.1	44.0	43.8	42.1	41.7	41.3	38.4	40.7	41.7	41.5	41.7	41.5	40.7	40.0
28 Q	40.7	40.4	40.5	41.5	40.0	38.0	35.9	35.5	36.1	38.2	40.7	41.9	42.3	43.4	43.3	42.1	41.7	41.3	41.5	41.7	41.5	41.1	40.4	40.2	40.0	40.4
29 Q	40.1	39.9	39.1	38.3	37.4	36.4	36.0	36.0	35.6	37.0	39.3	41.2	43.9	45.5	44.3	43.4	42.6	42.0	41.8	41.6	40.6	41.6	41.4	41.2	40.1	40.3
30	40.1	39.5	38.9	38.3	37.9	37.0	36.0	34.5	33.1	34.7	37.9	42.0	45.3	47.4	47.0	45.1	44.1	43.5	42.2	41.0	41.0	42.0	42.2	38.5	40.5	40.5
Mean	37.2	37.2	37.6	38.2	37.5	36.8	36.3	34.9	34.5	35.6	39.0	42.4	45.5	47.8	46.9	45.3	43.5	41.9	40.8	40.7	40.3	39.5	38.4	38.0	37.1	39.8



**TERRESTRIAL MAGNETIC FORCE : VERTICAL COMPONENT.**  
*Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.*

59

**19. Lerwick. (V.)**

46,000 γ (·46 C.G.S. unit) +

**April, 1928.**

Hour. G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Day.	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1D	699	700	700	700	699	701	702	703	701	702	705	703	703	702	705	707	715	717	718	719	722	719	714	712	710	707
2	710	710	710	711	711	709	705	705	706	708	710	712	710	709	712	714	714	713	712	710	710	710	709	711	704	710
3	704	700	702	704	708	709	709	710	712	712	714	713	713	713	719	728	739	742	743	740	736	730	727	711	707	718
4	707	697	700	705	697	701	707	708	709	711	715	715	713	713	711	711	715	721	725	727	725	724	721	715	711	712
5	711	704	704	701	705	709	709	711	709	709	709	709	707	709	709	709	713	715	714	712	711	711	710	708	703	709
6	703	701	701	701	703	703	701	701	701	701	703	703	701	701	703	703	704	703	705	707	706	702	701	688	659	701
7D	659	658	667	670	665	666	673	678	682	687	690	691	691	691	691	693	695	695	704	704	703	699	629	643	657	680
8	657	613	612	643	661	669	673	678	680	680	685	687	689	689	689	694	699	706	710	709	707	709	707	707	706	682
9	706	708	709	709	710	711	711	712	713	713	718	718	716	718	720	725	730	736	735	730	729	728	728	726	716	719
10D	716	681	687	702	706	710	707	705	707	712	714	714	714	714	721	723	722	723	729	731	731	729	722	719	711	714
11	711	714	718	721	724	726	727	729	729	731	736	734	734	735	737	737	738	739	741	742	741	743	745	743	741	733
12Q	741	741	741	741	741	740	737	739	739	738	737	734	731	729	729	727	727	727	728	728	728	726	726	726	726	733
13Q	726	727	727	727	727	727	728	727	727	727	729	727	726	724	723	723	722	722	721	721	722	724	723	723	722	725
14	722	722	721	721	721	721	721	721	720	719	721	719	716	713	709	711	714	714	714	713	714	715	716	714	713	717
15	713	713	713	713	713	712	710	711	711	710	711	710	709	709	709	708	708	709	709	708	713	729	725	722	689	712
16	689	669	672	671	677	679	681	687	690	695	701	700	698	697	697	697	699	703	723	743	733	731	723	693	653	697
17	653	653	629	633	658	666	672	678	682	685	697	698	699	698	698	699	702	707	707	706	705	706	703	698	691	685
18	691	689	690	695	696	697	696	695	697	697	703	703	702	702	701	700	702	702	701	701	699	701	699	700	700	698
19	700	699	699	697	698	699	699	699	698	698	697	696	696	696	696	697	698	701	703	703	707	714	714	699	643	699
20D	643	605	621	623	621	638	655	666	672	673	690	690	688	689	690	690	690	690	688	687	686	690	691	688	686	670
21D	686	686	686	686	686	686	686	685	685	684	683	683	682	681	681	686	691	723	725	723	719	711	703	697	693	694
22	693	692	693	693	693	693	693	693	691	693	691	689	687	687	687	687	687	687	687	689	687	685	685	683	681	689
23	681	676	674	676	677	679	681	681	681	683	683	681	677	675	675	681	689	695	700	700	698	691	681	657	657	682
24	657	665	666	667	668	671	673	673	673	675	675	675	675	673	673	673	673	673	673	673	673	673	673	672	672	672
25Q	672	671	672	672	673	673	675	674	674	676	676	675	674	673	671	670	670	670	671	672	672	673	673	674	673	673
26	673	674	674	675	676	676	676	676	675	675	675	675	673	673	672	672	672	673	672	672	672	674	674	674	674	674
27	674	673	674	677	679	680	680	681	683	681	681	681	680	679	679	680	681	683	686	686	686	686	685	685	681	681
28Q	685	689	688	690	690	690	693	692	692	693	692	692	692	692	691	691	691	690	690	690	689	689	689	688	688	690
29Q	688	689	690	690	691	692	692	692	691	698	693	692	692	692	691	691	691	689	690	690	689	689	689	688	688	691
30	688	690	690	691	694	696	697	698	698	698	698	698	696	694	695	695	695	694	693	694	695	694	694	693	693	695
Mean	692	687	688	690	692	694	696	697	698	699	701	701	699	699	699	701	703	705	707	708	707	707	703	699	692	699

**DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS;  
MAGNETIC CHARACTER FIGURES; TEMPERATURE IN MAGNET HOUSE.**

**20. Lerwick.**

**April, 1928.**

Day.	Terrestrial Magnetic Elements.														Character Figure 100γ <sup>2</sup>	Magnetic Character of Day (0-2).	Temperature in Magnet House. 200+	
	Horizontal Force.				Declination.				Vertical Force.									
	Maximum 14,000 γ +	Minimum 14,000 γ +	Range.		Maximum 14° +	Minimum 14° +	Range.		Maximum 46,000 γ +	Minimum 46,000 γ +	Range.							
	h. m.	γ	h. m.	γ	h. m.	h. m.	h. m.	h. m.	h. m.	γ	h. m.	γ	h. m.	γ				
1 D	18 49	657	563	11 48	94	12 46	53° 3	31° 0	22 9	22° 3	20 26	724	698	0 0	26	185	I	78° 8
2	0 3	627	549	10 33	78	12 42	49° 5	33° 3	22 55	16° 2	15 58	716	702	6 20	14	110	I	79° 0
3	22 46	641	541	10 14	100	12 31	50° 3	29° 4	0 29	20° 9	17 50	746	696	1 9	50	204	I	79° 3
4	19 11	641	548	10 52	93	13 40	49° 8	31° 2	6 30	18° 6	18 40	730	692	0 42	38	163	I	79° 4
5	16 35	623	544	11 25	79	12 54	50° 7	31° 4	7 0	19° 3	17 0	717	697	3 0	20	134	I	79° 3
6	18 17	644	507	23 26	137	23 16	49° 0	23° 7	23 59	25° 3	19 42	709	654	24 0	55	335	I	79° 3
7 D	17 9	656	401	21 38	255	21 31	54° 1	12° 2	21 43	41° 9	18 4	706	605	21 55	101	1069	I	79° 6
8	16 26	629	420	1 36	209	13 53	51° 2	19° 6	1 51	31° 6	18 0	711	593	1 36	118	758	I	79° 8
9	16 15	621	531	10 42	90	13 31	52° 0	31° 9	8 10	20° 1	17 20	738	705	0 0	33	166	I	80° 1
10 D	18 18	627	516	9 4	111	13 4	52° 3	29° 1	21 15	23° 2	19 40	733	673	1 10	60	257	I	80° 4
11	16 29	614	535	10 54	79	13 59	49° 0	33° 2	7 59	15° 8	22 0	745	709	0 5	36	120	O	80° 8
12 Q	22 38	602	534	11 10	68	13 20	46° 4	32° 5	8 10	13° 9	0 10	744	726	15 3	18	84	O	80° 6
13 Q	20 11	614	542	11 10	72	13 6	46° 8	32° 3	7 48	14° 5	9 50	730	721	15 40	9	91	O	80° 0
14	19 8	620	544	11 19	76	13 20	47° 3	32° 6	8 10	14° 7	9 39	724	708	13 45	16	100	O	79° 7
15	19 6	640	545	12 20	95	13 39	46° 7	25° 5	23 59	21° 2	20 50	731	687	24 0	44	191	I	78° 9
16	17 35	640	514	23 49	126	12 47	47° 6	16° 3	23 15	31° 3	18 52	749	648	24 0	101	435	I	78° 6
17	18 7	617	518	1 45	99	14 24	46° 2	22° 1	0 6	24° 1	21 5	709	611	2 10	98	300	I	78° 2
18	22 25	609	558	10 26	51	13 40	47° 5	34° 9	0 49	12° 6	10 0	703	687	0 36	16	58	O	77° 8
19	19 35	633	491	23 33	142	12 38	46° 3	19° 9	23 55	26° 4	21 20	717	632	24 0	85	399	I	77° 3
20 D	19 58	626	407	2 50	219	12 47	48° 9	15° 0	1 27	33° 9	22 10	693	593	1 20	100	787	I	77° 5
21 D	16 6	657	555	8 55	102	14 4	53° 4	33° 5	7 37	19° 9	17 9	735	680	14 0	55	207	I	77° 9
22	18 22	633	555	11 9	78	13 53	48° 8	31° 9	20 5	16° 9	6 40	694	679	24 0	15	115	I	77° 4
23	18 19	641	557	11 33	84	1 31	46° 1	35° 5	7 57	10° 6	18 30	703	652	23 10	51	117	O	78° 7
24	21 3	622	548	12 5	74	13 50	46° 6	35° 2	9 50	11° 4	10 0	676	656	0 3	20	83	O	79° 2
25 Q	18 53	629	558	11 30	71	12 42	45° 3	36° 2	8 19	9° 1	10 0	676	669	15 0	7	66	O	80° 1
26	19 41	630	558	12 37	72	13 56	47° 4	36° 0	7 37	11° 4	4 0 & 21 12 18 oto	676	671	0 20	5	76	O	80° 7
27	17 52	628	556	11 5	72	13 5	44° 4	33° 6	7 28	10° 8	21 0	686	673	0 0	13	75	O	81° 2
28 Q	18 58	617	555	11 21	62	13 9	43° 8	34° 6	6 52	9° 2	9 40	695	686	0 0	9	54	O	81° 8
29 Q	18 54	621	560	10 45 & 11 25	61	12 56	45° 7	35° 2	7 57	10° 5	9 30	693	688	0 0 & 23 0	5	58	O	82° 1
30	19 0	627	558	11 0	69	13 20	47° 8	32° 7	7 59	15° 1	8 0	698	688	0 0	10	90	O	82° 9
Mean	—	630	529	—	101	—	48° 5	29° 4	—	19° 1	—	714	673	—	41	230	0° 57	79° 5
No. of Days used.	—	30	30	—	30	—	30	30	—	30	—	30	30	—	30	30	30	30



Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

## 21. Lerwick. (H.)

14,000 γ (·14 C.G.S. unit) +

May, 1928.

Hour. G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
1 Q	616	613	611	611	610	609	604	593	580	565	553	554	563	573	580	592	604	615	626	632	637	627	629	621	619	601
2 Q	619	619	614	614	611	612	608	599	589	573	561	556	557	563	573	583	601	614	625	628	624	623	622	619	618	600
3 Q	618	613	608	610	609	608	607	600	590	577	565	559	558	565	577	592	605	622	629	629	619	616	616	613	610	600
4	610	611	611	611	609	606	600	593	581	569	558	552	568	574	595	592	594	598	611	621	616	615	612	*	—	—
5	—	—	—	—	—	—	—	—	*	573	563	566	568	531	569	587	596	637	643	641	652	635	619	609	606	—
6	606	598	606	600	594	583	575	564	557	559	557	551	548	555	575	571	585	600	605	607	606	607	609	606	603	584
7	603	597	597	598	598	598	592	585	573	545	531	526	531	555	578	593	604	621	606	606	611	615	612	588	594	586
8	594	600	593	598	600	594	569	569	558	541	546	551	551	553	547	563	604	604	614	617	606	605	607	602	597	583
9	597	597	597	597	597	597	596	590	581	567	555	543	554	568	582	595	594	612	623	616	615	610	604	601	599	591
10 D	599	598	598	598	596	597	594	587	579	569	560	556	567	589	630	625	695	745	684	654	637	545	406	252	439	583
11	439	545	513	512	591	595	567	552	576	567	554	553	560	577	573	671	757	803	710	663	616	568	470	467	484	584
12 D	484	481	515	580	591	563	563	580	563	519	468	497	556	607	626	579	607	601	631	641	600	590	591	585	568	569
13	568	562	566	544	530	555	563	532	529	530	531	561	569	552	574	610	639	646	658	638	611	596	594	581	576	577
14	576	557	550	572	580	581	570	551	531	520	518	557	562	580	573	587	613	621	599	599	599	597	600	597	586	575
15	586	568	572	587	590	591	584	574	560	550	556	561	560	578	581	610	612	623	641	635	623	606	633	613	618	592
16	618	600	603	605	606	600	594	587	576	566	565	572	571	565	588	612	636	633	636	653	645	600	591	595	595	600
17	595	524	518	594	603	602	591	575	567	560	557	562	574	591	603	609	590	611	628	621	619	614	611	613	614	589
18	614	613	611	608	591	562	580	591	580	572	561	559	561	569	611	649	603	615	637	665	626	608	608	606	598	600
19	598	579	584	599	599	600	595	588	573	550	566	560	569	574	570	581	595	617	636	640	629	612	607	607	605	593
20	605	603	601	599	597	599	594	592	581	564	559	569	581	598	599	593	599	611	621	623	622	617	614	610	611	598
21	611	614	612	609	609	603	600	592	581	573	555	551	569	585	614	603	609	632	638	633	632	626	615	614	608	603
22 Q	608	608	609	609	607	608	604	600	590	579	562	556	567	585	589	617	613	617	630	631	623	622	618	616	615	603
23	615	611	602	605	606	605	601	595	584	577	573	560	563	577	591	615	616	607	627	631	621	614	612	612	601	601
24	612	611	611	611	611	607	605	600	590	567	564	568	566	577	582	594	611	618	629	627	640	630	611	610	611	602
25	611	616	608	610	611	608	599	576	575	570	564	565	567	577	581	603	604	621	630	630	624	617	610	604	601	599
26 Q	601	600	599	596	602	598	597	591	583	573	562	561	564	573	585	603	619	640	644	642	637	625	621	620	620	602
27 D	620	618	617	618	619	616	607	590	573	566	565	567	584	602	612	682	770	812	793	729	731	648	433	428	521	623
28 D	521	572	564	495	444	497	322	313	345	361	423	623	791	932	886	933	908	851	769	562	394	419	353	187	128	553
29 D	128	128	198	230	417	475	472	522	547	520	535	570	588	589	639	663	650	722	703	662	646	611	586	480	518	522
30	518	520	463	545	571	564	557	545	546	545	539	534	551	556	551	561	575	594	614	623	625	615	593	585	580	563
31	580	574	576	568	572	579	578	565	554	547	538	532	543	556	563	569	596	608	634	653	636	635	620	586	596	582
Mean†	571	570	570	577	585	586	575	569	562	551	546	556	570	587	598	616	631	646	646	634	619	604	583	563	570	588

## MAGNETIC DECLINATION (WEST).

Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

## 22. Lerwick. (D.)

14° +

May, 1928.

Hour G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean
Day	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
1 Q	38.5	38.5	38.7	38.1	37.4	36.8	36.4	34.9	34.5	37.0	41.0	45.7	47.2	47.2	46.2	44.1	43.7	42.6	42.0	42.0	41.6	40.6	40.3	38.3	39.1	40.6
2 Q	39.2	39.4	38.4	37.9	37.9	36.9	35.9	34.6	34.6	36.1	38.6	42.1	45.4	47.7	47.1	45.8	43.6	42.1	41.5	41.7	41.5	40.4	40.2	39.8	39.8	40.4
3 Q	39.8	39.0	39.0	38.2	36.7	35.0	33.0	32.8	32.8	34.4	36.3	38.4	41.9	43.3	43.3	42.1	40.4	39.8	39.4	39.8	40.0	40.0	39.8	39.0	38.6	38.5
4	38.6	38.4	38.2	37.3	36.3	34.6	32.6	32.6	34.2	34.8	37.5	40.9	44.8	47.3	47.9	46.0	42.7	40.9	40.9	41.1	40.7	*	—	—	—	—
5	—	—	—	—	—	—	—	—	34.5	38.1	42.0	47.4	48.6	47.6	47.8	46.8	46.3	44.1	43.4	43.9	38.5	38.5	38.7	39.1	—	—
6	39.1	38.7	34.7	34.9	35.4	34.7	32.9	32.7	32.9	36.2	38.5	40.8	42.6	44.5	45.9	43.9	42.4	40.3	39.9	39.9	39.9	40.3	38.3	38.7	40.1	38.7
7	40.1	39.5	38.5	38.0	36.4	35.1	34.1	33.1	32.7	32.5	34.9	40.3	44.7	48.8	49.3	46.6	45.7	41.6	37.2	38.9	40.8	39.9	36.4	38.1	38.9	39.3
8	39.0	38.2	36.9	35.0	30.7	32.5	32.6	41.9	39.0	39.0	40.6	42.3	46.0	46.4	46.0	43.5	42.1	39.0	36.9	37.3	39.0	38.6	38.6	38.4	38.2	39.1
9	38.2	37.7	36.9	36.3	35.0	34.4	34.4	33.4	32.5	33.2	36.5	40.2	43.1	44.8	44.4	42.7	41.7	40.4	38.8	38.6	38.6	40.0	40.0	39.4	38.4	38.4
10 D	38.4	37.3	37.1	37.3	35.0	33.4	32.8	33.2	32.8	34.6	36.7	40.4	43.7	46.5	47.5	47.1	49.6	48.3	42.5	43.8	44.0	42.1	29.2	25.3	21.3	38.8
11	21.3	31.1	38.6	35.0	34.4	32.6	38.1	34.8	34.2	33.2	36.5	39.0	42.9	45.4	45.0	42.3	43.3	44.6	42.1	44.2	42.5	40.2	30.7	29.0	37.5	37.9
12 D	37.6	23.3	25.4	32.6	32.9	31.4	31.2	30.4	30.4	34.9	44.7	48.0	47.6	46.3	42.2	43.8	43.0	40.9	36.6	37.0	40.9	41.6	42.0	42.6	42.8	37.9
13	42.8	38.5	36.4	43.0	44.7	44.1	41.6	36.8	37.2	38.9	39.5	40.1	42.8	49.0	48.4	46.6	43.2	42.0	40.5	40.3	38.9	36.6	39.5	39.1	38.3	41.2
14	38.5	43.0	43.8	37.8	32.4	32.6	31.0	31.0	33.5	38.0	38.9	38.9	42.2	42.8	44.1	45.3	41.8	38.3	38.9	38.9	38.7	39.3	38.9	37.4	27.7	38.4
15	27.7	28.1	32.9	38.3	36.4	33.1	31.0	32.9	33.3	34.7	38.5	40.7	42.4	44.3	44.5	44.9	43.9	42.0	41.0	41.6	38.7	40.7	40.3	38.7	28.9	38.0
16	29.0	30.7	35.0	36.7	35.6	35.0	33.2	33.0	34.4	36.7	38.6	41.5	44.6	46.0	44.4	44.8	44.4	41.5	40.6	36.9	31.9	27.3	36.7	41.1	41.0	37.7
17	41.0	46.7	39.0	33.0	32.3	32.8	33.4	30.5	36.5	40.2	40.8	42.9	47.9	46.4	44.4	43.1	42.5	40.6	40.4	39.6	40.4	40.4	40.4	40.4	39.6	40.0
18	39.6	38.6	38.1	39.0	40.0	48.3	40.8	38.8	35.2	35.6	40.4	42.5	45.8	46.4	46.6	41.0	44.2	42.5	40.6	30.3	36.7	40.4	40.2	37.1	40.4	40.4
19	40.5	42.8	44.5	37.4	35.1	33.3	33.7	35.7	35.7	38.4	38.7	40.5	42.6	44.3	44.5	42.8	39.5	37.6	38.5	37.0	38.2	37.4	39.5	39.3	40.3	39.1
20	40.3	42.0	37.8	36.4	35.5	34.9	33.3	32.9	33.7	37.2	39.3	40.5	42.6	42.8	43.2	42.8	42.8	42.6	41.4	40.5	39.9	39.3	38.9	38.7	38.7	39.1
21	38.7	39.1	38.7	37.6	37.0	37.0	36.6	35.5	36.6	37.4	40.7	43.0	44.3	45.1	45.3	43.0	42.6	42.2	42.4	42.4	41.8	40.9	39.1	40.7	38.5	40.3
22 Q	38.6	38.6	38.3	37.1	36.9	35.4	34.6	34.8	34.8	35.2	38.8	41.7	42.9	43.7	43.1	42.5	40.6	40.0	40.8	41.2	40.8	40.6	40.6	39.4	40.8	39.3
23	40.8	39.6	38.3	37.1	35.2	34.6	33.6	33.0	33.2	35.0	37.1	42.5	44.6	44.2	42.9	43.1	41.7	39.2	38.6	39.0	39.2	39.6	40.2	39.8	39.4	38.8
24	39.4	38.6	39.2	37.5	37.1	36.7	36.3	34.4	33.0	36.7	39.2	41.0	43.9	45.2	45.0	43.9	42.7	40.8	39.8	40.0	40.2	37.1	37.7	39.2	40.6	39.4
25	40.6	39.8	38.5	36.5	35.2	33.8	33.0	36.5	37.1	35.4	36.9	40.8	44.1	45.2	44.2	41.3	40.8	40.4	40.4	40.6	40.8	39.2	39.2	39.8	40.2	39.2
26 Q	40.3	39.1	38.7	38.0	35.1	32.8	31.0	31.4	32.6	35.5	38.7	39.3	41.3	42.6	43.4	42.8	41.4	41.3	41.1	41.1	41.1	41.3	40.7	40.3	39.3	38.8
27 D	39.3	38.4	37.2	36.0	34.7	32.0	30.4	29.7	29.7	33.1	37.6	43.0	45.7	47.4	49.6	52.6	52.5	59.6	50.5	54.2	55.7	56.3	22.0	37.0	34.1	42.1
28 D	34.1	30.4	29.7	32.8	37.8	44.7	59.4	45.1	38.2	38.6	37.0	32.8	28.5	25.4	28.9	40.9	49.0	55.3	52.3	43.8	47.0	48.6	37.0	27.7	24.5	39.2
29 D	24.5	20.4	15.4	41.3	29.5	33.3	32.8	33.3	30.6	29.7	30.3	35.1	37.0	37.2	37.0	37.4	40.7	43.0	44.5	42.6	33.9	37.2	40.7	35.1	38.2	34.6
30	38.2	40.9	44.7	29.5	33.5	33.3	31.8	32.4	31.2	34.7	37.2	41.1	42.6	43.0	43.4	43.2	42.6	41.1	38.7	38.0	40.5	37.4	35.5	35.7	35.9	37.9
31	35.9	35.1	34.5	34.7	34.1	31.6	31.4	30.1	31.0	31.2	35.3	38.9	40.9	42.0	42.8	42.8	42.0	40.9	37.2	39.3	40.1	41.1	40.3	39.1	38.7	37.2
Mean†	37.3	37.0	36.7	36.7	35.5	35.2	34.8	34.3	33.9	35.6	38.2	40.8	43.2	44.3	44.2	43.7	43.6	42.4	40.9	40.4	40.5	40.1	38.0	37.7	37.2	39.0



**23. Lerwick. (V.)**

46,000 γ (·46 C.G.S. unit) +

**May, 1928.**

Hour. G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Day.	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1 Q	693	693	693	695	697	698	698	699	700	697	697	697	696	697	697	697	699	701	699	698	696	695	692	693	697	697
2 Q	693	693	695	694	696	695	694	697	698	698	697	696	695	694	694	695	695	696	698	698	697	696	695	697	698	696
3 Q	698	699	701	699	701	703	704	704	704	706	705	704	703	703	704	706	706	705	704	703	702	701	700	699	698	703
4 Q	698	698	698	697	697	696	696	697	696	696	697	701	700	702	703	716	726	724	715	711	710	706	704	700	697	703
5	697	*	—	—	—	—	—	—	*	675	683	685	689	699	698	697	700	702	711	717	720	715	717	716	712	—
6	712	694	695	704	711	713	714	714	713	710	709	708	708	709	712	720	722	722	722	722	721	720	720	720	720	713
7	720	721	723	725	727	729	730	730	730	722	722	722	722	723	731	739	751	761	767	761	751	747	742	738	736	735
8	736	730	717	690	685	690	695	696	699	706	712	722	726	731	741	743	743	744	745	744	741	739	737	734	734	723
9	734	733	734	734	735	737	737	737	737	735	733	732	731	729	727	729	731	731	734	739	738	737	733	732	732	734
10 D	732	731	731	731	730	730	730	729	727	721	720	720	718	714	718	724	729	761	772	769	750	715	643	573	549	718
11	549	591	615	610	623	641	647	649	650	661	665	669	671	675	683	693	741	761	753	742	737	720	663	643	650	671
12 D	650	636	646	655	671	673	680	682	683	690	694	692	695	703	723	720	717	717	716	714	710	710	707	699	643	691
13	643	621	632	641	637	632	635	646	661	671	674	683	709	704	701	701	707	713	715	711	709	704	695	694	694	678
14	694	682	663	653	655	663	671	675	677	681	682	682	685	691	699	700	701	704	700	698	696	696	693	690	671	684
15	671	657	657	663	667	671	673	673	674	684	695	699	700	700	701	702	707	710	711	711	711	708	689	658	645	687
16	645	657	671	676	680	682	683	685	687	690	689	688	690	691	692	691	691	699	702	703	689	681	685	685	681	685
17	681	653	613	628	653	667	672	678	679	683	685	685	687	689	691	701	703	701	701	701	700	699	700	700	700	682
18	700	698	700	701	700	690	674	677	681	690	692	695	699	700	704	724	741	733	731	733	731	729	727	722	721	708
19	721	719	715	716	719	719	719	720	720	713	717	719	719	719	721	722	726	731	732	733	733	728	726	724	723	722
20	723	715	716	721	722	721	723	724	725	722	722	721	720	720	721	724	724	723	722	722	721	721	721	721	721	721
21	721	719	719	720	721	721	719	720	720	719	719	718	717	717	719	721	721	721	721	721	721	721	721	721	721	720
22 Q	721	721	722	723	723	723	722	721	721	721	721	721	720	720	720	721	725	725	723	721	719	718	716	715	711	721
23	711	709	710	713	716	717	719	719	717	712	711	710	709	707	708	709	715	723	722	721	721	719	718	717	715	715
24	715	715	715	716	717	717	719	721	721	718	715	714	714	713	713	713	716	716	716	717	716	717	720	718	717	716
25	717	715	717	718	719	721	722	725	725	724	723	725	725	725	725	724	724	724	724	724	724	726	725	724	723	723
26 Q	723	723	722	724	723	723	724	723	722	723	722	721	720	720	718	717	716	716	717	718	717	716	715	715	714	720
27 D	714	713	713	712	712	712	712	712	711	712	710	709	708	707	707	706	707	714	716	716	724	711	687	679	688	709
28 D	688	691	698	687	660	662	663	662	673	702	713	736	746	756	769	767	764	745	741	722	713	751	750	743	720	717
29 D	720	677	658	660	665	668	676	686	693	704	715	720	722	728	741	757	758	753	748	746	742	734	731	723	716	713
30	716	718	702	704	712	715	716	718	719	727	728	727	725	725	726	725	724	726	726	725	725	724	724	723	722	721
31	722	719	720	720	719	718	719	719	719	722	721	720	719	719	719	719	719	718	717	717	716	715	715	710	707	718
Mean†	699	695	694	694	696	698	700	701	703	706	707	709	710	711	715	718	721	724	724	722	720	717	710	704	699	708

**DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS;  
 MAGNETIC CHARACTER FIGURES; TEMPERATURE IN MAGNET HOUSE.**

**24. Lerwick.**

**May, 1928.**

Day.	Terrestrial Magnetic Elements.														Character Figure 100γ°.	Magnetic Character of Day (0-2).	Temperature in Magnet House. 200+	
	Horizontal Force.					Declination.					Vertical Force.							
	Maximum 14,000 γ +		Minimum 14,000 γ +		Range.	Maximum 14° +		Minimum 14° +		Range.	Maximum 46,000 γ +		Minimum 46,000 γ +					Range.
	h. m.	γ	γ	h. m.	γ	h. m.			h. m.		h. m.	γ	γ	h. m.	γ			a.
1 Q	22 8	639	551	11 7	88	12 54	47° 6	33° 9	7 22	13° 7	about 8 o	700	690	22 22	10	112	0	83° 6
2 Q	18 40	630	555	11 16	75	12 56	48° 1	34° 4	7 54	13° 7	about 8 & o	698	693	0 3	5	90	0	84° 4
3 Q	18 50	632	554	11 34	78	13 40	43° 8	32° 4	7 21	11° 4	18 & o about	706	698	0 0 &	8	85	0	85° 0
4	18 46	630	556	10 23	74	13 43	> 48° 7	< 32° 3	6 12	> 16° 4	16 10	729	696	8 o	33	115	1	85° 2
5	19 52	676	509	12 49	167	20 o	> 50° 3	< 33° 5	8 17	> 16° 8	20 7	727	669	8 20	58	364	1	85° 6
6	21 58	615	542	11 52	73	14 20	48° 0	32° 2	6 32	15° 8	17 50	724	684	1 19	40	114	0	85° 4
7	16 52	642	522	11 29	120	13 40	50° 1	30° 6	8 35	19° 5	17 30	771	720	0 4	51	239	1	85° 1
8	18 35	622	534	9 13	88	13 22	47° 1	29° 0	3 24	18° 1	15 o	747	680	3 20	67	182	1	84° 0
9	17 59	635	533	11 20	102	13 40	45° 8	31° 3	8 21	14° 5	20 4	741	724	14 3	17	145	1	82° 9
10 D	17 4	824	99	23 31	725	17 1	52° 9	10° 3	23 42	42° 6	17 2	780	516	23 36	264	6281	2	81° 8
11	16 43	853	425	22 42	428	16 47	59° 5	18° 9	0 3	40° 6	17 12	769	543	0 3	226	2642	2	81° 5
12 D	13 27	674	394	0 58	280	11 57	49° 9	13° 3	1 51	36° 6	14 4	729	628	0 57	101	1130	1	81° 7
13	17 31	670	508	4 20	162	13 11	50° 9	33° 3	7 35	17° 6	17 20	719	611	0 32	108	435	1	82° 0
14	16 45	647	510	9 21	137	1 52	46° 6	25° 0	23 52	21° 6	16 40	710	651	3 30	59	307	1	82° 0
15	22 15	653	548	9 33	105	13 59	46° 5	25° 2	0 16	21° 3	17 20	713	639	23 54	74	248	1	81° 5
16	19 42	703	550	12 54	153	13 4	47° 7	16° 6	20 22	31° 1	19 20	707	641	0 4	66	452	1	81° 5
17	18 7	660	418	1 26	242	1 3	58° 1	30° 5	3 3	27° 6	15 35	705	606	1 28	99	823	1	82° 0
18	19 2	698	552	11 53	146	5 5	53° 1	21° 1	18 59	32° 0	15 30	744	672	5 30	72	450	1	82° 3
19	17 59	651	537	8 48	114	1 49	47° 2	32° 8	5 31	14° 4	18 40	735	711	9 9	24	173	1	82° 1
20	19 11	627	553	9 48	74	1 32	46° 7	32° 0	6 49	14° 7	1 10	727	712	1 10	15	97	0	81° 8
21	17 40	643	547	10 48	96	13 56	46° 1	34° 3	6 49	11° 8	12 30	722	716	12 30	6	118	0	82° 1
22 Q	18 33	636	555	10 14	81	13 22	44° 2	33° 8	6 28	10° 4	about 1 30	727	710	24 o about	17	88	0	82° 1
23	18 29	635	551	11 27	84	11 50	44° 8	32° 5	7 1	12° 3	1 30 about	724	707	1 30 about	17	100	0	82° 7
24	19 49	645	557	9 36	88	13 19	46° 0	31° 9	8 22	14° 1	14 o about	722	713	14 o about	9	114	1	83° 1
25	18 43	634	558	11 46	76	12 39	45° 8	31° 1	6 8	14° 7	1 o about	726	714	1 o about	12	99	0	83° 2
26 Q	18 40	648	558	10 49	90	14 3	44° 2	29° 9	6 19	14° 3	24 o about	724	714	24 o about	10	119	0	83° 2
27 D	17 4	909	280	22 10	629	20 57	107° 8	9° 4	21 41	98° 4	20 52	748	667	22 12	81	5778	2	83° 5
28 D	16 39	> 954	< 64	23 59	> 890	17 o	95° 1	-27° 8	23 41	122° 9	21 28	776	654	4 3	122	10816	2	84° 1
29 D	17 19	813	65	3 8	748	2 58	89° 3	-3° 5	2 28	92° 8	15 10 about	764	647	2 3	117	7292	2	83° 5
30	19 11	629	412	1 36	217	14 9	54° 4	26° 0	2 45	28° 4	10 30 about	728	699	2 19	29	625	1	83° 5
31	18 26	671	529	10 35	142	14 41	44° 5	27° 9	7 26	16° 6	10 o about	722	705	23 25	17	255	1	83° 5
Mean†	—	684	472	—	212	—	53° 3	25° 0	—	28° 3	—	731	672	—	59	12870	0·84	83° 1
No. of Days used.	—	31	31	—	31	—	31	31	—	31	—	31	31	—	31	31	31	31



Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

25. Lerwick. (H.)

June, 1928.

14,000  $\gamma$  ( $\cdot 14$  C.G.S. unit) +

Hour. G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Day.	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	602	595	583	584	593	592	589	588	587	573	562	558	571	594	594	592	620	655	672	695	684	671	628	584	587	607
2	587	557	542	599	601	598	595	589	575	570	577	576	573	574	583	599	612	627	634	622	634	633	622	603	602	595
3	602	600	603	594	596	606	605	595	581	561	547	545	557	574	587	620	674	696	680	664	641	621	608	580	579	605
4	579	587	591	597	600	585	576	594	592	578	567	562	555	567	584	633	632	643	656	649	643	608	596	593	591	599
5	591	591	588	548	560	600	602	591	585	588	571	557	565	571	583	589	598	614	659	679	655	629	538	590	579	593
6	579	594	599	604	607	606	599	592	585	570	564	557	558	564	575	584	610	616	627	629	646	629	622	601	605	597
7 D	605	604	606	605	605	604	585	576	575	569	562	566	577	568	625	771	762	753	705	646	648	617	593	591	588	621
8	588	556	537	591	597	592	585	583	574	550	538	531	561	603	602	628	613	627	620	616	613	614	614	617	589	590
9	589	591	559	579	590	593	585	588	584	572	567	559	557	572	588	596	613	636	649	635	633	618	604	597	588	594
10 Q	588	594	594	592	593	593	588	582	576	565	559	553	553	565	587	595	601	608	612	615	612	606	603	599	600	589
11 Q	600	593	593	593	594	594	592	591	586	581	573	564	565	571	580	591	600	614	624	629	621	611	613	607	609	595
12 D	609	605	605	601	593	575	569	589	597	564	528	521	535	576	603	597	590	590	599	610	611	616	607	602	598	587
13 D	598	594	577	591	606	603	597	585	574	561	537	550	573	604	592	599	615	592	622	624	622	621	619	609	603	594
14	603	591	502	547	604	598	550	557	577	570	561	561	584	583	608	622	634	619	607	609	609	611	603	573	574	586
15	574	586	584	596	597	591	590	583	574	561	560	568	571	597	600	604	623	613	603	607	609	612	613	602	602	593
16 Q	602	597	596	591	596	596	591	584	565	555	561	564	571	587	596	601	608	614	615	617	615	613	609	603	596	593
17 Q	596	594	588	590	589	602	599	589	574	560	549	545	554	573	610	609	603	614	609	609	606	609	604	602	602	591
18	602	602	599	593	593	592	590	594	585	566	551	553	564	578	583	602	628	629	633	638	629	620	610	608	605	598
19	605	606	608	611	609	604	594	578	563	561	557	553	555	579	594	621	596	620	635	640	638	625	616	613	609	599
20	609	607	607	610	612	611	597	589	575	573	577	580	567	578	596	607	609	632	627	637	638	638	615	549	555	601
21	555	598	603	601	593	578	585	585	576	557	558	568	573	580	587	597	596	615	621	621	615	609	604	603	603	592
22 D	603	598	591	597	603	603	597	585	491	438	561	575	601	643	659	663	637	646	640	639	620	623	562	561	404	593
23 D	404	481	550	528	540	489	554	558	562	563	561	560	559	580	596	666	639	626	629	646	637	617	597	583	552	575
24	552	573	543	519	561	580	567	568	568	561	551	550	556	592	621	626	643	621	617	617	615	619	614	598	593	586
25	593	555	535	580	586	591	586	572	574	579	569	569	567	586	609	607	592	618	622	633	633	633	603	587	591	591
26	591	589	581	578	587	587	581	575	568	567	557	563	569	581	585	593	611	599	611	621	617	616	606	605	598	589
27 Q	598	598	592	591	592	583	585	586	583	570	561	556	563	575	585	594	608	609	633	640	639	631	621	607	593	596
28	593	587	591	594	603	604	593	587	585	580	580	575	576	567	586	596	587	607	634	642	642	628	611	593	587	597
29	587	587	593	589	592	598	593	592	585	578	584	574	569	572	585	587	605	623	644	650	653	637	619	612	617	601
30	617	612	610	613	615	616	607	595	583	573	576	571	570	580	588	604	626	621	620	624	624	618	613	612	611	604
Mean.	587	587	582	587	594	592	588	584	575	564	561	559	566	581	596	613	619	627	632	633	630	622	606	596	587	595

## MAGNETIC DECLINATION (WEST).

Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

26. Lerwick. (D.)

June, 1928.

14° +

Hour. G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Day.																										
1	38.7	35.3	39.1	37.2	33.7	33.3	33.0	31.4	31.8	33.7	37.4	40.9	42.6	44.3	45.9	45.9	46.3	47.0	49.0	41.3	41.3	41.1	40.5	28.9	34.9	39.1
2	34.9	37.0	36.6	34.5	33.0	32.0	32.0	32.4	32.8	33.1	35.5	40.9	44.2	45.5	45.9	46.5	45.7	44.7	42.6	39.5	37.2	38.7	35.1	37.0	36.8	38.3
3	36.8	36.6	37.2	41.3	40.1	35.3	34.5	33.3	32.6	32.4	35.1	38.6	42.6	46.3	47.2	46.9	44.9	42.4	40.7	38.0	35.9	37.4	33.1	38.7	35.5	38.6
4	35.5	34.1	35.3	33.7	33.7	34.9	37.0	31.8	29.5	30.8	33.1	37.0	41.3	44.7	45.5	44.5	41.1	37.2	36.4	38.4	36.6	36.0	37.8	39.3	39.1	37.0
5	39.1	39.1	39.1	47.0	43.8	34.7	31.4	33.3	34.7	35.5	36.6	39.1	42.8	45.3	45.7	46.3	43.6	42.2	42.0	38.9	38.7	36.8	33.0	28.1	32.4	38.9
6	32.4	37.4	31.6	33.5	32.6	30.8	29.3	28.5	28.9	34.3	35.1	37.2	41.1	43.2	44.5	44.9	44.5	42.0	40.7	39.1	35.1	39.1	34.1	36.0	36.8	36.6
7 D	36.7	36.1	35.4	35.0	33.8	34.4	35.0	33.4	34.4	33.6	36.3	38.8	42.1	44.4	48.1	41.0	44.8	46.2	41.5	42.3	42.1	40.2	38.3	39.8	37.3	38.9
8	37.3	41.2	41.0	35.0	32.7	31.1	30.9	30.9	29.2	32.7	34.8	39.0	45.2	46.2	45.6	45.0	43.5	41.9	40.4	40.6	40.6	39.6	40.6	36.3	33.0	38.3
9	33.0	27.8	33.4	35.8	31.7	30.9	29.2	30.2	30.5	32.9	34.0	38.1	41.5	42.3	41.2	40.8	40.6	40.2	38.5	38.8	39.0	40.2	39.0	39.6	40.4	36.4
10 Q	40.4	36.7	35.9	34.8	34.8	33.6	32.9	32.7	31.5	33.2	33.8	37.1	40.8	42.5	42.3	41.0	40.2	39.2	39.2	39.2	38.8	38.5	39.6	39.2	40.0	37.4
11 Q	40.0	37.9	36.7	35.2	34.2	33.2	31.9	31.9	33.2	34.8	36.5	39.0	41.2	42.3	42.3	42.3	42.1	41.2	40.8	40.4	39.4	39.0	39.2	38.5	37.1	38.0
12 D	37.0	33.3	32.4	31.4	32.6	36.2	34.9	38.4	36.4	34.9	36.8	42.2	48.8	47.0	45.1	44.3	42.6	39.3	38.4	36.8	38.9	40.3	38.4	37.6	36.6	38.5
13 D	36.6	34.9	36.8	35.3	31.0	29.1	30.8	30.1	36.2	37.0	34.3	40.1	46.5	44.7	47.4	44.3	42.4	40.9	40.9	39.7	40.9	38.5	38.9	37.6	38.4	38.2
14	38.4	39.5	44.5	29.7	31.0	33.3	33.7	34.9	33.1	34.1	35.1	36.4	37.8	40.5	42.0	41.1	38.9	37.4	39.1	39.7	40.1	39.1	39.7	35.1	34.3	37.2
15	34.3	35.1	38.9	37.2	34.7	33.5	34.3	32.9	32.4	36.8	38.7	40.3	44.5	43.4	44.5	45.1	43.2	41.4	39.7	39.5	39.1	38.5	39.1	37.0	38.0	38.6
16 Q	37.9	38.8	37.5	37.3	35.7	32.8	31.7	30.7	32.3	35.0	36.9	38.8	41.5	42.5	42.1	41.1	40.4	39.4	38.6	38.3	37.7	37.9	38.4	38.4	38.8	37.6
17 Q	38.8	37.5	36.9	33.6	33.0	33.6	33.4	31.7	30.5	33.0	36.7	40.6	44.4	46.4	44.8	42.1	39.2	39.2	38.4	38.6	38.8	39.0	38.8	38.6		37.8
18	39.0	38.4	39.0	37.5	35.6	34.6	33.6	32.5	31.1	33.2	38.6	41.0	44.2	44.8	44.6	44.0	40.6	39.2	38.8	37.9	36.7	39.6	39.6	39.0	38.6	38.5
19	38.5	38.0	37.0	36.4	35.3	33.5	32.6	32.7	35.5	35.8	36.4	41.2	46.3	46.8	46.1	44.3	42.6	40.3	39.3	39.9	39.5	40.3	40.3	40.3	39.1	39.1
20	39.1	38.2	36.6	35.8	34.1	32.2	32.0	32.2	32.7	33.3	34.7	37.6	43.8	47.2	46.5	46.1	44.9	43.4	40.9	40.7	41.4	40.7	41.0	34.3	28.5	38.5
21	28.5	33.9	35.5	34.9	36.8	37.0	36.4	32.9	32.6	36.0	37.2	40.3	42.4	44.3	45.1	44.1	43.0	42.0	40.3	39.7	39.9	38.9	38.5	38.7	39.5	38.5
22 D	39.5	32.7	32.7	31.4	31.0	28.9	30.4	31.2	32.6	42.0	43.4	38.9	42.8	43.9	43.0	44.1	46.5	44.3	43.9	42.0	42.4	34.5	38.9	35.3	49.9	38.4
23 D	49.8	34.6	28.4	34.0	36.3	39.8	34.4	36.5	30.7	30.7	33.0	38.2	40.8	43.7	40.6	41.7	41.5	42.9	42.9	42.7	40.4	40.6	38.2	40.0	43.5	38.3
24	43.5	35.0	36.9	35.4	32.8	33.4	32.5	34.6	34.6	34.4	36.5	39.2	40.4	40.8	42.3	40.2	38.6	44.2	44.0	42.5	42.1	40.6	38.8	38.2	33.0	38.2
25	33.0	35.0	36.9	29.0	28.2	28.8	26.9	26.7	27.1	32.5	36.7	38.2	40.4	41.7	42.3	42.7	42.5	39.4	40.6	40.8	40.2	39.0	35.0	38.1	36.5	36.0
26	36.4	35.8	34.9	34.5	32.9	32.4	31.4	32.2	31.8	33.1	34.5	36.6	40.5	42.2	43.0	42.4	41.8	40.5	40.3	40.5	39.3	38.3	38.1	38.1	38.3	37.2
27 Q	38.3	37.4	36.8	35.4	34.5	32.7	30.6	29.8	30.4	33.5	35.8	38.3	41.8	43.0	42.0	40.5	40.8	40.8	41.2	40.3	40.5	34.5	36.4	36.8	37.6	37.2
28	37.6	38.3	34.5	31.8	30.0	31.2	30.6	29.8	32.5	34.3	33.1	36.0	38.5	41.2	42.4	42.4	42.0	42.6	42.2	39.9	37.0	38.5	39.1	31.8	32.7	36.5
29	32.7	33.5	35.4	35.8	35.8	34.5	33.5	32.7	32.7	32.9	34.3	38.0	42.4	45.9	45.5	44.1	42.2	41.2	40.7	39.7	39.3	36.4	39.1	39.7	34.7	37.9
30	34.6	36.3	37.7	36.1	35.2	31.5	30.3	28.8	32.6	32.6	36.3	39.8	43.6	45.0	44.0	43.8	42.3	40.0	40.2	38.4	38.2	38.4	38.2	37.9	38.0	37.6
Mean	37.3	36.2	36.3	35.2	34.0	33.1	32.4	32.0	32.2	34.1	35.9	38.9	42.6	44.1	44.3	43.5	42.4	41.4	40.7	39.8	39.2	38.7	38.2	37.1	37.3	37.9



27. **Lerwick. (V.)**

46,000  $\gamma$  (.46 C.G.S. unit) +

June, 1928.

Hour. G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Day.	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	
1	707	704	703	699	700	700	701	701	700	701	700	699	697	697	696	696	697	699	700	705	703	703	702	696	693	700
2	693	688	688	689	695	697	699	700	701	704	703	703	702	702	703	702	702	701	702	703	704	702	704	704	705	700
3	705	709	712	713	713	715	719	719	723	733	734	736	735	736	738	739	743	748	754	753	753	751	751	742	740	733
4	740	743	746	746	746	747	744	745	744	746	744	744	743	741	741	741	741	743	744	743	742	739	738	736	733	743
5	733	731	730	727	719	720	721	721	721	722	721	721	718	717	717	716	716	716	715	715	715	714	697	695	695	717
6	695	693	695	698	699	701	701	701	700	702	701	700	698	697	698	698	699	700	700	700	700	700	697	698	698	699
7D	698	696	697	697	697	697	697	697	698	699	699	699	698	700	700	703	708	708	708	708	706	704	702	701	701	701
8	701	700	695	697	699	701	703	703	704	706	706	706	705	705	705	706	708	707	707	706	705	705	704	701	701	704
9	701	696	696	697	700	701	703	704	704	704	704	704	705	705	705	705	705	705	705	705	705	705	703	701	701	703
10Q	701	700	701	701	702	702	701	702	701	702	703	703	702	702	702	702	702	702	702	701	702	702	702	701	701	702
11Q	701	700	700	700	700	700	700	700	700	701	701	701	701	700	700	699	699	699	699	699	699	700	699	699	697	700
12D	697	690	688	688	688	688	685	681	681	683	683	687	702	704	704	703	702	702	703	704	703	701	699	699	700	694
13D	700	697	692	676	675	681	683	683	683	688	692	694	717	730	721	716	715	715	714	716	715	714	712	712	712	702
14	712	708	666	642	651	658	661	661	664	672	673	681	683	687	688	691	692	694	693	691	691	691	690	686	683	680
15	683	683	684	684	685	687	688	690	692	700	700	699	698	698	699	699	699	700	700	700	699	699	699	699	699	695
16Q	699	698	698	699	699	699	699	699	699	703	702	701	701	700	700	700	700	699	699	699	699	699	700	700	700	700
17Q	700	697	697	695	696	696	697	698	698	704	703	702	702	702	702	703	703	703	703	702	701	700	699	699	698	700
18	698	698	698	698	697	697	696	694	695	698	695	695	694	695	694	694	693	694	694	694	695	693	692	692	691	695
19	691	690	691	692	693	694	694	694	693	698	697	697	696	695	695	694	694	693	693	693	692	691	690	689	689	693
20	689	690	689	690	691	691	692	692	691	693	691	689	687	685	685	683	683	681	682	682	682	681	681	673	665	686
21	665	667	671	674	676	677	679	681	684	693	693	692	691	692	695	694	696	697	697	696	696	697	697	698	698	688
22D	698	696	694	694	697	700	702	704	706	711	701	692	685	735	784	773	762	742	733	731	721	662	625	573	705	
23D	573	562	583	604	633	633	652	665	679	697	702	707	709	710	718	723	730	734	729	727	717	700	703	698	677	681
24	677	675	680	680	680	686	692	697	703	714	716	716	717	720	728	738	750	743	739	738	735	733	732	731	722	714
25	722	704	687	678	678	682	688	695	697	701	702	704	705	704	705	707	708	709	709	708	709	709	706	702	703	700
26	703	703	703	702	702	703	704	705	706	708	709	709	709	710	711	710	713	715	714	714	714	713	713	713	712	709
27Q	712	712	713	713	712	713	713	712	712	715	713	713	712	713	715	724	733	728	722	722	722	721	718	717	711	717
28	711	701	696	697	697	699	701	703	703	701	699	699	698	701	702	705	711	708	706	709	712	709	702	689	684	702
29	684	680	686	691	692	693	695	694	693	696	696	696	696	697	696	697	697	696	696	696	696	700	699	694	690	694
30	690	691	691	690	690	689	688	687	686	685	684	683	682	681	681	680	681	685	684	683	681	680	679	679	678	684
Mean	696	693	692	692	693	695	697	698	699	703	702	702	703	705	708	708	709	709	708	708	707	704	701	699	695	701

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS ;  
MAGNETIC CHARACTER FIGURES ; TEMPERATURE IN MAGNET HOUSE.

28. **Lerwick.**

June, 1928.

Day.	Terrestrial Magnetic Elements.														Character Figure $\frac{2R^2}{100\gamma^2}$ \$.	Magnetic Character of Day (0-2).	Temperature in Magnet House. 200 +	
	Horizontal Force.					Declination.					Vertical Force.							
	Maximum 14,000 $\gamma$ +		Minimum 14,000 $\gamma$ +		Range.	Maximum 14° +		Minimum 14° +		Range.	Maximum 46,000 $\gamma$ +		Minimum 46,000 $\gamma$ +					Range.
	h. m.	$\gamma$	$\gamma$	h. m.	$\gamma$	h. m.	$\gamma$	$\gamma$	h. m.	$\gamma$	h. m.	$\gamma$	$\gamma$	h. m.	$\gamma$			a.
1	19 15	707	550	10 55	157	17 46	50° 5	26° 0	23 9	24° 5	19 7	710	692	23 35	18	358	I	83° 5
2	17 49	647	508	1 48	139	16 40	47° 0	30° 1	5 37	16° 9	23 59	707	684	1 22	23	250	I	83° 6
3	17 9	712	539	11 10	173	13 45	48° 4	29° 1	23 44	19° 3	18 30	757	707	0 3	50	392	I	84° 5
4	18 9	672	553	11 55	119	14 20	46° 9	27° 4	7 34	19° 5	4 0	748	733	24 0	15	213	I	84° 4
5	19 37	693	463	21 51	230	3 7	51° 9	23° 7	22 18	28° 2	0 3	733	693	22 8	40	689	I	83° 5
6	20 7	654	551	10 51	103	15 47	46° 3	23° 5	7 34	22° 8	9 0	702	691	1 10	11	201	I	82° 9
7 D	16 49	799	547	13 3	252	16 42	50° 4	31° 1	7 13	19° 3	17 17	713	696	0 3	17	705	I	82° 7
8	14 44	654	496	1 38	158	1 31	48° 3	26° 5	8 34	21° 8	15 59	711	692	2 10	19	340	I	83° 0
9	18 31	661	548	1 52	113	22 52	43° 7	25° 3	0 52	18° 4	14 59	707	693	0 42	14	190	I	83° 1
10 Q	19 22	619	543	11 34	76	13 40	42° 9	28° 0	7 52	14° 9	10 10	705	699	0 3	6	98	0	83° 0
11 Q	19 14	634	562	11 2	72	14 44	42° 7	31° 1	6 42	11° 6	10 0	701	697	23 59	4	76	0	82° 9
12 D	20 39	623	503	10 38	120	12 28	52° 8	30° 8	3 27	22° 0	13 6	709	679	7 40	30	241	I	81° 7
13 D	16 18	646	523	9 59	123	11 50	53° 4	25° 0	5 22	28° 4	12 32	739	672	3 33	67	343	I	81° 5
14	15 56	653	442	2 11	211	1 48	54° 4	25° 4	2 49	29° 0	0 42	710	632	2 11	78	660	I	81° 5
15	16 13	643	551	11 34	92	12 10	47° 4	30° 1	8 16	17° 3	17 50	702	679	0 3	23	145	I	81° 8
16 Q	18 28	620	550	8 19	70	12 59	43° 1	29° 6	7 19	13° 5	9 0	703	698	0 3	5	83	0	82° 0
17 Q	14 34	632	542	11 21	90	13 2	47° 1	29° 2	7 51	17° 9	15 59	706	693	3 6	13	140	I	81° 9
18	18 35	653	548	10 22	105	13 9	45° 6	30° 9	7 38	14° 7	1 0	698	691	24 0	7	150	I	81° 7
19	19 0	645	544	11 51	101	12 37	47° 4	30° 8	5 38	16° 6	9 0	698	689	24 0	9	153	I	82° 0
20	19 38	673	481	23 34	192	13 0	47° 6	23° 1	23 41	24° 5	7 0	693	665	23 50	28	485	I	82° 9
21	18 19	630	552	9 44	78	13 52	45° 7	27° 3	0 3	18° 4	23 59	700	665	0 4	35	134	I	83° 4
22 D	15 8	700	351	8 48	349	9 21	58° 0	18° 9	21 12	39° 1	13 59	797	553	23 59	244	2085	2	84° 4
23 D	14 40	677	251	0 18	426	0 7	57° 5	23° 0	1 45	34° 5	16 31	736	531	0 16	205	2447	2	85° 0
24	15 42	670	501	3 12	169	0 1	46° 2	28° 8	5 51	17° 4	15 50	751	669	0 20	82	408	I	85° 2
25	17 19	642	496	1 35	146	1 52	44° 6	25° 1	7 10	19° 5	0 4	725	674	2 27	51	308	I	85° 1
26	20 41	627	555	12 22	72	14 4	43° 7	29° 7	6 18	14° 0	17 0	715	701	0 4	14	90	0	84° 8
27 Q	19 19	650	551	11 18	99	13 4	43° 9	28° 7	7 1	15° 2	16 0	733	711	24 0	22	145	I	84° 5
28	19 8	655	557	12 51	98	14 17	43° 9	26° 8	22 49	17° 1	20 20	715	681	22 33	34	161	I	84° 2
29	20 5	667	555	11 28	112	13 14	46° 4	28° 7	0 33	17° 7	21 10	702	673	0 25	29	190	I	84° 4
30	16 19	636	560	11 59	76	12 28	45° 8	27° 2	6 41	18° 6	1 20	692	678	24 0	14	122	I	84° 4
Mean	—	660	516	—	144	—	47° 8	27° 4	—	20° 4	—	717	677	—	40	400	0° 93	83° 3
No. of Days used.	—	30	30	—	30	—	30	30	—	30	—	30	30	—	30	30	30	30



TERRESTRIAL MAGNETIC FORCE : HORIZONTAL COMPONENT.  
Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

29. Lerwick. (H.)

14,000  $\gamma$  (14 C.G.S. unit) +

July, 1928.

Hour. G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Day.	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	612	609	607	603	607	607	601	595	588	577	575	575	583	584	590	603	606	620	643	655	656	631	613	609	607	606
2 D	607	607	606	606	601	597	593	594	590	583	562	547	581	600	630	595	622	624	649	624	630	629	618	617	617	605
3	617	617	611	601	601	605	604	599	590	575	570	574	563	563	575	606	635	651	665	679	647	635	599	590	594	607
4	594	587	591	603	603	598	595	593	578	569	575	581	567	564	573	609	654	645	641	640	629	616	614	598	589	601
5	589	575	590	597	585	561	591	597	580	573	561	556	566	592	591	603	632	666	663	639	626	614	609	605	603	599
6	603	597	587	556	560	591	595	576	572	560	554	559	573	576	601	603	616	643	650	649	631	618	596	588	589	594
7 D	589	589	571	572	598	598	581	541	538	558	547	539	540	542	567	583	605	607	617	624	633	642	613	625	714	587
8	714	265	507	297	267	210	116	117	117	118	198	533	600	539	622	605	651	600	640	606	618	562	560	553	553	489
9 D	553	525	479	465	467	432	477	512	503	497	509	527	570	635	695	694	681	607	604	591	591	585	573	558	544	555
10	544	515	539	573	560	556	553	547	549	539	537	500	518	561	560	569	602	621	625	623	612	603	580	543	561	564
11	561	557	565	547	542	567	547	518	543	548	541	537	535	554	582	579	589	607	613	609	605	606	590	557	555	567
12	555	546	562	574	547	556	565	563	559	553	554	552	563	576	607	601	612	613	610	607	595	595	593	583	575	577
13 Q	575	571	570	570	570	573	571	564	555	545	533	533	544	552	561	571	582	593	597	594	590	591	588	583	581	570
14	581	578	575	581	578	575	562	562	561	551	535	537	553	567	581	572	580	598	597	599	594	596	592	593	581	575
15 Q	581	569	574	581	586	582	574	560	544	537	538	544	539	551	568	585	598	610	616	613	613	609	603	597	581	578
16 Q	581	579	571	561	573	587	581	572	567	555	548	536	526	547	566	577	586	591	595	602	608	611	597	589	588	575
17 Q	588	585	584	586	586	584	581	577	569	566	559	559	560	579	582	600	598	609	625	630	616	607	604	604	602	589
18	602	602	600	600	600	593	582	571	570	566	557	556	563	597	611	594	594	610	618	611	618	607	616	587	556	592
19	556	550	574	588	592	581	574	569	566	559	557	557	561	568	581	613	615	597	610	621	615	604	599	597	591	584
20 Q	591	586	587	586	581	584	591	588	579	565	549	541	543	555	562	584	593	605	615	609	615	609	604	590	585	584
21	585	587	584	589	596	591	593	589	582	575	568	572	574	578	577	590	596	619	613	627	626	625	624	611	596	595
22 D	596	511	520	521	483	529	518	536	534	540	559	564	565	583	599	625	630	654	666	678	618	571	551	573	545	571
23	545	544	539	539	555	579	580	575	570	545	546	546	534	552	557	569	569	575	579	587	592	592	592	585	573	565
24	573	564	562	550	574	575	580	586	574	551	539	538	539	551	567	593	611	634	647	639	618	597	585	577	577	580
25	577	574	570	570	569	574	576	575	571	562	555	543	546	554	537	565	583	593	602	614	619	596	588	584	569	575
26	569	566	544	547	552	571	577	571	564	542	532	528	545	565	570	582	595	596	609	605	600	599	598	593	593	572
27	593	587	593	594	594	592	588	580	565	559	555	557	558	571	586	599	590	588	599	611	616	606	599	599	599	587
28	599	581	592	596	599	591	549	562	577	562	551	551	551	572	596	597	632	640	639	603	609	604	592	586	580	588
29	580	561	573	573	557	574	574	574	572	566	560	560	566	578	597	589	590	584	595	596	600	595	590	587	583	579
30	583	579	578	579	580	579	577	577	567	559	555	542	548	559	570	581	589	587	608	624	619	601	592	585	583	580
31 D	583	569	569	565	580	581	573	569	563	551	540	533	533	541	586	587	614	668	710	662	619	575	562	545	510	581
Mean.	586	562	570	564	563	564	559	555	550	542	539	548	555	568	585	594	608	615	625	622	615	604	595	587	583	578

## MAGNETIC DECLINATION (WEST).

Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

30. Lerwick. (D.)

14° +

July, 1928.

Hour. G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Day.	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
1	38.0	37.5	36.3	34.2	32.1	28.6	29.0	30.1	30.7	32.4	34.8	36.3	40.0	42.1	43.3	42.1	40.2	38.2	37.9	36.1	38.2	37.9	37.3	38.0	36.9	36.3
2 D	36.9	36.9	36.3	36.3	34.2	31.9	30.1	29.0	29.4	30.3	35.9	44.0	45.8	46.0	47.3	48.5	47.7	45.4	42.3	40.2	40.7	40.0	36.5	36.3	36.1	38.7
3	36.0	34.7	32.9	30.4	34.3	34.1	32.5	33.1	34.5	34.3	34.5	35.2	39.1	40.8	41.8	41.6	39.9	38.1	36.2	39.1	38.1	28.7	31.6	34.9	35.6	35.7
4	35.6	34.1	36.6	30.6	30.6	30.6	31.0	31.6	30.4	34.5	35.8	36.6	41.4	42.6	43.9	44.9	42.2	36.6	40.3	38.5	37.9	37.2	34.7	34.9	28.3	36.2
5	28.3	28.3	28.3	29.1	28.7	34.1	34.5	28.5	29.5	32.9	34.5	37.8	39.9	42.6	44.7	44.3	42.0	40.5	40.5	40.1	38.1	38.9	38.5	37.2	36.2	36.1
6	36.2	36.0	34.7	40.3	37.8	31.0	31.6	31.0	30.8	33.3	34.7	35.1	39.9	41.8	42.6	43.9	43.2	39.9	39.9	38.5	39.7	38.1	35.4	37.4	36.2	37.2
7 D	36.1	36.1	38.2	38.4	32.4	30.3	29.2	28.4	28.8	31.9	33.6	36.1	40.5	40.2	41.1	40.5	38.2	36.3	34.6	35.9	38.0	38.0	35.0	24.3	38.4	35.1
8	38.4	59.3	2.9	-2.7	18.7	-2.5	-2.5	-10.2	-6.0	-31.4	-7.9	8.7	26.1	35.5	32.1	32.8	32.4	34.4	41.1	41.7	43.6	38.2	38.6	37.7	36.1	20.7
9 D	36.1	40.0	40.2	36.5	37.7	34.8	35.7	28.4	29.9	26.8	30.3	33.0	35.1	34.2	34.6	33.6	37.3	38.2	36.1	39.8	38.2	38.2	38.0	37.1	39.4	35.5
10	39.4	44.0	40.0	32.4	31.7	31.9	32.4	32.1	30.3	30.7	28.6	32.8	37.8	40.2	41.9	39.4	37.8	38.2	36.3	38.0	40.0	39.8	38.0	39.8	37.7	36.4
11	37.7	37.5	36.3	36.3	34.2	29.2	29.7	32.2	34.0	31.5	33.4	33.8	35.3	37.8	38.0	38.2	37.8	37.7	37.8	38.0	36.1	35.9	38.4	35.0	30.9	35.3
12	30.9	30.3	34.0	32.6	33.0	32.1	30.1	29.4	31.1	33.0	34.2	38.0	40.4	41.3	39.6	37.8	34.8	36.1	37.1	38.0	38.4	39.0	38.4	37.7	36.5	35.4
13 Q	36.4	34.5	33.7	32.7	32.0	30.2	28.3	26.6	27.9	30.0	32.9	35.8	37.9	38.9	38.7	37.6	36.6	36.0	36.8	37.7	37.0	35.6	37.0	36.4	36.2	34.5
14	36.2	37.6	37.9	32.3	32.9	33.7	32.0	33.1	32.1	34.3	35.8	37.9	41.6	42.0	41.6	39.7	38.5	38.1	36.6	36.8	37.9	37.6	36.4	35.4	36.6	36.0
15 Q	35.4	33.5	32.3	32.0	30.4	29.8	28.9	29.6	30.2	32.5	34.7	37.9	39.9	39.9	38.7	37.9	37.7	37.6	36.2	35.8	36.6	37.9	38.1	36.2	34.1	35.0
16 Q	34.1	35.4	34.1	36.0	28.1	28.3	28.3	28.1	30.2	30.4	33.3	37.7	42.6	43.7	42.8	41.8	39.5	36.4	34.5	35.2	35.8	36.0	36.8	37.4	36.6	35.3
17 Q	36.6	35.2	34.5	34.1	32.3	30.4	28.5	29.6	30.2	32.1	37.0	40.1	43.9	46.0	45.7	43.3	40.1	37.7	36.6	36.8	38.1	37.7	37.0	35.8	34.5	36.6
18	34.5	34.1	33.5	32.9	30.4	28.5	28.1	29.3	31.0	34.3	36.4	41.2	47.0	47.6	45.5	43.9	42.2	39.7	38.1	37.4	37.7	37.7	37.7	36.6	32.7	36.9
19	32.7	26.2	29.8	32.1	33.7	32.5	32.0	28.5	28.5	33.1	34.3	36.2	40.3	41.4	43.2	43.2	40.1	37.7	37.2	35.4	35.6	36.2	37.0	37.4	35.4	35.2
20 Q	35.4	34.5	33.9	35.6	35.8	35.2	31.8	29.1	27.7	30.0	32.0	36.0	41.4	43.9	46.0	45.9	43.9	41.8	40.1	37.9	37.6	37.0	37.0	39.7	36.2	37.1
21	36.1	32.2	34.0	31.7	29.9	28.2	27.8	26.1	27.0	29.9	32.0	35.9	39.6	43.1	45.8	45.6	43.8	41.7	37.8	38.0	37.1	36.3	34.2	34.6	40.7	35.4
22 D	40.7	32.4	31.5	32.0	36.1	33.8	44.4	37.3	27.2	26.5	34.2	37.6	39.8	42.1	44.6	45.8	44.0	42.9	37.5	37.8	41.9	41.7	34.4	34.4	34.9	37.4
23	34.9	27.8	24.5	26.3	31.9	30.1	28.0	28.6	30.3	32.2	33.2	35.3	37.5	40.0	42.1	42.1	40.0	38.0	37.3	36.5	36.3	36.7	35.9	32.0	28.0	33.9
24	28.0	26.6	32.2	33.2	29.3	30.8	28.4	26.3	24.3	27.8	30.5	37.3	41.9	45.0	45.2	44.2	43.1	40.2	38.4	38.0	37.6	35.9	34.2	32.0	34.4	34.7
25	34.4	34.2	33.6	31.7	33.2	30.3	28.6	28.6	28.0	28.6	31.7	35.9	41.7	45.2	46.5	45.2	42.5	40.9	38.4	37.8	32.2	35.5	35.9	31.9	29.9	35.4
26	29.9	33.8	31.1	26.3	31.1	28.2	29.5	29.9	29.0	28.2	31.9	38.2	43.6	47.1	46.5	46.3	43.4	39.8	38.8	37.6	37.8	38.0	38.6	37.3	33.6	36.0
27	33.6	35.3	32.0	29.0	28.0	28.0	27.0	27.6	29.0	30.3	33.8	36.5	41.1	42.9	43.1	42.3	39.8	37.3	36.9	36.1	37.8	38.0	37.3	37.3	38.4	35.1
28	38.3	39.3	33.7	32.5	31.8	33.9	39.7	36.0	32.1	34.7	38.1	39.7	42.8	43.5	43.5	43.0	40.1	40.8	38.7	39.3	39.9	36.2	38.1	39.3	36.0	38.1
29	36.0	33.7	33.5	33.5	37.4	34.1	33.7	31.6	30.0	30.6	32.5	34.7	38.3	39.9	39.5	38.3	38.5	38.7	38.5	37.5	36.4	36.8	38.7	37.5	36.4	35.8
30	36.4	35.6	34.7	34.1	32.5	31.9	31.8	31.9	31.9	33.5	35.8	39.5	41.2	40.8	40.4	39.5	38.3	38.7	41.4	41.6	41.0	40.1	39.3	38.1	34.3	37.0
31 D	34.3	31.9	30.4	26.2	30.4	24.8	26.0	24.4	25.4	30.4	33.7	36.0	39.7	43.1	43.5	41.2	39.1	39.7	43.7	41.6	30.0	37.5	33.1	33.5	39.3	34.3
Mean.	35.3	35.1	32.8	31.6	32.0	29.9	29.9	28.6	28.6	29.3	32.5	36.0	40.1	42.0	42.4	41.7	40.1	38.8	38.2	38.0	37.7	37.4	36.7	35.9	35.3	35.5



31. Lerwick. (V.)

July, 1928.

Hour G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Day.	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$
1	678	677	677	677	676	675	673	671	668	667	666	664	662	663	663	666	666	666	667	668	667	666	666	664	664	669
2 D	664	663	662	660	659	659	659	658	657	656	653	648	646	649	654	675	682	680	674	671	664	662	662	660	660	662
3	660	659	658	657	655	651	648	647	645	643	642	641	643	641	641	639	640	641	644	640	639	637	624	625	625	643
4	625	623	612	614	621	621	622	620	620	620	620	619	620	619	620	618	621	629	626	623	622	621	617	612	604	620
5	604	596	600	606	606	604	594	600	603	612	612	609	608	607	611	614	618	619	618	617	617	615	613	608	606	609
6	606	609	607	604	592	598	600	601	601	607	607	605	604	606	605	606	605	605	605	606	607	604	603	599	599	604
7 D	599	601	597	590	591	594	596	597	597	602	600	599	599	599	598	599	598	599	599	599	595	593	586	580	498	594
8	498	405	602	778	1105	1155	1203	1252	1410	1331	909	856	844	849	845	846	843	837	818	808	798	787	787	788	786	896
9 D	786	776	748	741	740	740	739	742	746	750	747	748	748	748	753	758	756	752	749	745	740	736	731	728	723	746
10	723	714	697	702	702	704	704	705	704	706	707	711	709	708	707	707	708	709	710	710	707	705	696	693	685	705
11	685	688	689	691	690	690	692	691	691	692	694	695	697	696	695	697	698	696	695	696	696	696	694	682	675	693
12	675	673	675	679	680	682	682	684	684	690	689	690	689	689	689	691	697	699	698	697	697	694	694	689	689	688
13 Q	689	694	694	694	695	695	695	696	698	702	701	701	700	701	701	699	699	697	698	698	699	699	699	698	699	698
14	699	699	698	697	698	698	698	697	699	699	699	698	698	699	698	699	701	698	698	697	697	697	696	695	692	698
15 Q	692	691	692	692	691	691	691	690	690	695	693	693	695	693	693	693	693	691	690	689	688	688	688	687	688	691
16 Q	688	689	689	686	684	684	686	687	690	692	692	691	690	690	690	691	691	691	691	691	691	689	689	688	688	689
17 Q	688	690	690	690	689	689	689	687	687	690	687	685	683	683	685	685	686	688	688	687	688	688	686	686	685	687
18	685	686	685	686	687	686	686	685	684	685	685	683	683	683	685	689	690	691	690	690	690	690	690	685	676	686
19	676	670	676	679	682	686	687	688	689	689	689	689	689	690	690	688	689	691	693	694	696	696	695	695	695	688
20 Q	695	694	694	695	694	693	693	695	694	696	696	696	695	695	696	697	698	698	698	699	698	698	698	695	688	696
21	688	690	693	693	695	695	696	696	696	701	700	699	699	697	697	697	697	696	698	698	697	698	697	694	692	696
22 D	692	672	661	659	654	660	662	661	669	684	693	695	695	697	700	705	712	715	719	715	711	709	700	708	703	690
23	703	698	697	696	696	700	702	708	710	721	722	723	722	721	720	717	717	718	717	717	718	717	716	716	714	712
24	714	712	711	699	703	703	704	703	704	703	704	704	703	701	701	702	724	748	757	757	754	753	725	704	700	716
25	700	701	699	698	698	699	707	716	718	718	717	716	713	716	727	724	724	719	722	725	734	731	724	716	712	715
26	712	689	665	637	654	667	675	677	678	688	693	691	693	709	732	753	763	760	744	739	725	717	710	706	676	702
27	676	673	684	683	683	685	687	689	689	685	684	682	682	686	693	693	705	702	704	705	705	705	705	703	699	692
28	699	682	677	685	685	680	668	645	640	652	658	659	665	675	700	737	748	746	746	731	702	704	698	695	678	690
29	678	663	668	665	643	620	631	645	657	669	673	674	676	680	701	721	720	713	710	700	698	695	688	686	686	678
30	686	688	688	688	686	683	681	679	679	679	677	675	673	675	679	700	723	732	727	724	723	721	714	711	693	696
31 D	693	689	671	668	656	647	670	682	688	689	686	683	682	685	695	715	725	742	755	745	699	688	670	642	617	689
Mean.	676	669	673	677	687	688	691	693	699	700	687	685	684	685	689	694	698	699	698	696	692	690	686	682	674	688

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS ;  
 MAGNETIC CHARACTER FIGURES ; TEMPERATURE IN MAGNET HOUSE.

July, 1928.

Day.	Terrestrial Magnetic Elements.															Character in Figure $\frac{2R^2}{100\gamma^2}$ §	Magnetic Character of Day (0-2).	Temperature in Magnet House. 200+
	Horizontal Force.					Declination.					Vertical Force.							
	Maximum 14,000 $\gamma$ +		Minimum 14,000 $\gamma$ +		Range.	Maximum 14° +		Minimum 14° +		Range.	Maximum 46,000 $\gamma$ +		Minimum 46,000 $\gamma$ +		Range.			
1	h. m.	$\gamma$	$\gamma$	h. m.	$\gamma$	h. m.			h. m.		h. m.	$\gamma$	$\gamma$	h. m.	$\gamma$			a.
2 D	19 38	677	569	11 28	108	13 42	43·8	27·2	5 15	16·6	0 0	678	660	12 20	18	170	1	84·2
3	14 7	668	526	10 38	142	14 50	50·6	24·9	8 40	25·7	16 20	686	644	12 5	42	338	1	84·1
4	18 59	695	552	13 0	143	14 48	42·6	22·5	21 21	20·1	0 0	660	621	22 33	39	294	1	84·1
5	15 59	666	550	12 46	116	15 13	46·1	27·1	7 42	19·0	17 0	532	606	24 0	26	207	1	84·0
6	17 33	695	549	5 10	146	14 34	46·2	22·5	0 22	23·7	17 25	621	592	5 50	29	324	1	84·1
7 D	18 34	662	527	3 29	135	15 21	45·7	28·9	7 18	16·8	1 0	610	590	4 4	20	238	1	84·1
8	23 40	884	527	11 59	357	23 38	42·7	15·8	22 35	26·9	1 0	602	502	24 0	100	1507	2	84·3
9 D	15 43	811	<116	between 0 57 & 9 52	>695	1 12	157·9	<-50·2	5 49	>208·1	between 4 5 & 8 54	>1428	254	1 10	>1174	26481	2	84·3
10	14 25	767	377	4 46	390	1 15	45·4	21·6	9 1	23·8	0 0	786	721	24 0	65	1664	2	84·1
11	17 33	644	483	1 11	161	0 55	51·0	24·9	9 56	26·1	0 0	723	684	23 42	39	398	1	84·3
12	20 32	627	506	7 14	121	22 16	40·0	27·4	5 10	12·6	15 0	699	673	23 31	26	182	1	84·7
13 Q	14 21	629	533	4 18	96	12 29	41·9	27·6	7 15	14·3	16 20	701	670	1 0	31	139	1	85·3
14	17 59	600	522	10 27	78	13 36	39·7	26·0	7 5	13·7	8 30	703	690	0 0	13	96	0	85·5
15 Q	19 4	607	533	9 50	74	12 38	42·8	30·8	6 17	12·0	15 10	702	692	24 0	10	82	1	85·8
16 Q	17 59	621	533	12 25	88	12 22	40·6	28·1	6 4	12·5	12 0	696	685	23 40	11	107	0	85·7
17 Q	20 9	615	522	11 49	93	12 50	44·3	26·6	6 23	17·7	10 0	692	682	3 50	10	144	1	85·9
18	19 8	641	547	11 20	94	13 40	46·8	27·7	6 5	19·1	about 4 0 & 20 0	690	683	12 0	7	154	1	86·0
19	18 5	631	547	23 54	84	12 53	48·7	26·4	5 41	22·3	21 19	693	673	24 0	20	165	1	85·7
20 Q	15 25	631	525	0 56	106	14 6	45·3	20·6	0 44	24·7	about 20 30 & 19 0 & 22 0	698	666	0 40	32	233	1	85·6
21	17 46	623	540	11 0	83	14 17	47·0	26·7	8 4	20·3	19 0 & 22 0	699	683	24 0	16	145	1	85·6
22 D	18 49	649	563	12 23	86	14 9	46·9	25·1	7 4	21·8	9 0	701	683	0 0	18	164	1	85·8
23	18 21	691	419	3 27	272	0 22	54·1	12·8	2 25	41·3	18 9	721	645	3 47	76	1107	1	85·6
24	22 8	600	525	1 33	75	14 9	43·6	22·4	1 42	21·2	11 40	724	693	2 21	31	147	1	85·9
25	17 50	659	527	10 23	132	13 16	45·6	22·4	7 51	23·2	20 38	760	695	3 0	65	315	1	86·0
26	19 59	636	527	14 22	109	13 49	47·5	25·7	23 22	21·8	19 55	739	695	4 40	44	225	1	86·0
27	17 30	617	524	10 48	93	14 37	48·5	22·2	3 9	26·3	15 57	766	631	2 48	135	394	1	85·7
28	19 42	623	551	10 10	72	13 30	43·4	24·3	6 28	19·1	19 42	706	652	0 30	54	147	1	85·6
29	17 30	670	541	6 21	129	13 38	45·3	30·2	8 6	15·1	15 14	759	636	7 42	123	359	1	85·6
30	19 52	603	549	3 49	54	4 6	41·4	29·6	8 30	11·8	15 12	727	612	4 40	115	186	1	86·0
31 D	18 39	636	539	11 15	97	18 40	42·6	31·2	6 14	11·4	17 11	737	672	12 0	65	160	0	85·8
Mean.	—	661	512	—	150	—	48·9	22·6	—	26·3	—	726	642	—	84	1197	1·00	85·2
No. of Days used.	—	31	31	—	31	—	31	31	—	31	—	31	31	—	31	31	31	31



Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

## 33. Lerwick. (H.)

14,000  $\gamma$  (=14 C.G.S. unit) +

August, 1928.

Hour. G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Day.	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	510	529	579	580	577	575	574	568	558	550	545	545	552	561	568	579	585	603	621	641	611	599	596	591	577	576
2	577	573	574	575	584	588	573	566	565	560	557	561	560	565	571	575	583	598	602	607	603	594	591	594	577	579
3	577	579	584	580	578	589	587	577	567	553	541	540	538	548	570	585	605	613	616	613	612	606	601	589	587	581
4 D	587	588	586	580	582	585	581	572	563	551	551	551	556	579	589	570	592	616	617	619	637	627	604	606	577	587
5 D	577	437	224	362	550	523	460	466	541	565	550	549	562	610	658	704	760	815	765	639	687	635	602	562	568	575
6	568	579	585	584	579	576	573	557	553	549	546	542	541	553	561	583	591	602	597	615	614	574	500	379	491	561
7 D	491	404	457	536	583	569	559	566	541	529	539	536	559	571	582	622	608	596	595	590	589	586	581	577	576	559
8	576	575	576	576	569	570	569	553	554	545	536	542	546	552	558	567	583	593	599	599	597	590	587	581	574	571
9	574	575	573	578	580	580	578	574	568	556	549	543	551	564	573	575	581	590	592	594	591	589	591	587	585	575
10 Q	585	583	580	579	581	578	579	575	566	560	552	548	548	566	556	579	588	584	593	597	597	598	597	589	589	577
11	589	589	584	583	590	601	588	571	570	572	565	571	565	571	571	586	589	595	607	603	606	605	601	598	595	586
12	595	594	594	593	587	571	587	569	553	570	575	545	565	574	574	605	644	687	713	667	615	589	579	577	580	596
13	580	569	556	580	586	581	568	574	574	559	553	550	575	582	597	598	600	610	609	607	603	599	592	591	591	583
14 Q	591	589	585	582	583	581	579	569	561	553	549	551	547	560	561	578	580	595	599	604	603	596	595	596	584	578
15 Q	584	587	587	586	584	581	577	571	559	545	542	553	558	566	583	594	597	606	613	613	607	605	596	590	586	583
16	586	582	566	571	579	579	582	577	566	547	535	533	537	552	587	606	604	604	611	608	607	609	599	594	594	580
17	594	595	595	596	588	589	587	586	575	559	544	531	543	555	570	589	595	604	610	604	598	592	591	591	594	583
18	594	589	586	587	589	589	582	574	561	549	536	537	544	559	580	592	586	615	621	621	601	598	601	598	584	583
19	584	582	584	585	584	588	584	572	560	548	539	534	542	560	576	587	588	591	590	594	601	599	593	591	594	578
20 Q	594	594	594	594	594	591	587	581	575	565	559	554	556	567	578	593	613	605	602	599	595	599	598	591	589	586
21	589	593	593	594	594	593	588	579	565	548	539	535	542	557	569	587	593	600	609	617	601	597	594	593	591	582
22 Q	591	589	591	591	589	587	580	574	566	556	550	549	549	556	568	580	585	590	598	604	611	614	601	597	597	582
23	597	593	597	596	595	591	582	590	586	571	550	544	542	548	566	571	577	597	604	613	614	613	618	600	585	585
24	585	586	586	575	567	591	593	583	565	548	536	546	554	562	573	589	613	596	595	597	603	601	595	596	593	581
25	593	594	588	580	584	588	588	582	570	563	555	553	565	574	588	583	588	593	595	597	601	601	595	603	583	584
26 D	583	580	587	600	593	521	521	527	520	517	532	538	544	556	556	560	597	582	599	622	627	633	599	551	329	563
27 D	329	407	216	184	326	343	411	505	555	505	522	530	531	539	566	575	567	579	591	610	620	595	570	579	577	495
28	577	569	576	554	567	578	572	563	552	551	549	546	559	560	576	579	595	611	638	632	591	586	585	585	580	577
29	580	590	571	575	577	571	573	577	571	564	558	559	571	583	589	596	593	595	598	598	596	596	592	589	588	582
30	588	583	585	585	583	582	575	574	569	557	554	555	564	581	591	599	611	607	601	605	598	594	599	591	590	585
31	590	591	588	588	587	584	580	574	563	556	550	556	567	585	597	603	604	606	605	605	604	601	605	597	587	587
Mean.	571	567	556	562	574	571	568	566	562	552	547	548	553	565	577	590	600	609	613	611	608	601	592	582	574	577

## MAGNETIC DECLINATION (WEST).

Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

## 34. Lerwick. (D.)

14° +

August, 1928.

Hour. G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Day.	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
1	39.3	29.4	31.0	31.0	28.5	30.0	28.9	30.2	31.2	33.9	35.8	39.3	42.6	43.0	41.6	40.1	38.5	38.5	39.9	37.7	39.9	39.7	34.5	30.2	31.9	35.5
2	31.9	31.6	31.4	32.5	32.3	30.0	30.0	30.2	33.1	33.9	34.1	36.0	39.7	42.0	42.0	41.0	38.9	38.7	36.4	36.2	36.6	41.2	33.9	33.9	33.9	35.4
3	33.9	35.4	32.1	32.5	32.9	30.0	28.5	28.1	30.0	31.9	34.5	37.7	42.6	43.7	43.9	42.0	39.7	37.9	36.4	35.8	37.0	37.0	33.3	34.3	34.7	35.5
4 D	34.7	34.3	33.9	35.6	35.4	32.3	30.0	29.4	30.2	35.4	35.8	38.9	43.0	47.0	47.2	45.7	43.1	42.2	42.8	41.8	41.2	29.6	36.6	32.1	26.2	37.3
5 D	26.1	23.0	17.0	32.2	29.9	33.8	49.0	43.4	35.1	30.9	31.8	37.3	41.1	44.6	45.4	50.8	49.2	48.8	46.7	41.5	44.8	41.7	38.0	36.5	35.5	38.5
6	35.5	34.4	31.5	31.5	31.1	30.3	30.3	32.0	31.8	33.4	35.7	38.4	41.9	43.8	43.2	41.1	38.0	35.9	35.9	36.7	31.8	28.0	26.3	31.3	37.1	34.6
7 D	37.1	33.8	41.1	34.0	29.9	37.6	35.3	33.6	36.3	38.2	37.6	38.2	40.0	41.9	40.7	39.6	37.4	37.8	37.6	37.6	36.5	35.7	34.9	35.5	35.1	37.0
8	35.1	35.1	34.9	34.0	34.0	32.0	29.5	29.9	29.7	33.0	34.9	35.9	40.7	43.2	43.0	41.7	40.5	37.6	35.7	35.5	35.7	35.9	36.5	37.6	35.5	35.9
9	35.5	32.2	31.3	32.0	33.2	31.8	31.5	30.1	30.3	33.6	36.1	39.6	42.1	43.6	43.4	41.7	38.2	37.3	36.3	36.1	37.1	37.3	36.5	37.3	36.7	36.0
10 Q	36.7	36.1	35.5	33.8	32.2	31.3	30.3	30.1	31.3	35.1	36.3	38.2	40.7	41.5	40.1	39.4	37.4	36.1	35.5	35.7	36.5	36.5	37.1	35.5	34.4	35.7
11	34.4	35.7	36.7	32.2	33.6	29.1	32.2	36.3	35.7	38.6	38.8	39.6	39.6	40.5	40.1	38.4	37.1	35.7	35.9	36.9	37.6	37.1	36.5	35.5	34.7	36.4
12	34.6	33.9	34.8	35.0	35.6	33.9	29.2	31.2	35.2	37.5	36.0	37.7	41.0	45.1	43.7	43.7	42.4	41.8	40.6	37.3	33.7	33.9	35.8	35.4	32.9	37.0
13	32.9	31.4	38.3	33.7	32.3	30.6	34.6	31.9	32.9	35.0	37.0	38.9	39.7	42.0	42.0	38.9	35.2	34.5	35.6	36.2	37.0	36.2	36.0	35.8	35.6	35.8
14 Q	35.6	36.0	34.8	32.1	31.0	30.0	30.0	30.4	32.1	32.7	34.8	37.5	39.9	41.6	41.2	39.3	37.2	35.0	34.8	35.2	35.6	36.0	36.0	35.6	33.7	35.1
15 Q	33.7	33.5	33.5	33.5	31.6	29.6	29.2	29.0	30.2	33.9	36.6	39.7	43.7	45.1	44.7	42.4	39.5	37.0	34.8	36.0	37.0	36.2	34.6	35.2	33.6	35.9
16	35.6	36.0	39.5	37.5	29.8	28.9	29.0	29.4	29.6	31.7	33.7	38.1	42.2	44.3	44.5	41.6	37.2	35.8	35.6	35.6	35.8	36.8	33.1	35.0	34.8	35.7
17	34.8	35.2	35.6	33.7	31.0	29.8	29.0	29.6	30.2	31.9	35.6	39.5	41.6	43.3	41.6	40.0	37.9	35.8	35.2	35.2	35.2	35.2	35.2	34.1	33.5	35.2
18	33.5	32.7	32.1	31.2	30.6	29.8	27.5	26.2	27.1	29.2	33.5	38.1	41.4	43.9	45.3	43.5	41.0	37.5	35.6	33.7	35.2	35.2	35.0	31.2	32.3	34.6
19	32.3	29.8	31.7	31.6	31.7	29.8	27.7	27.9	27.9	29.8	32.7	37.3	41.2	43.5	43.5	41.6	38.1	36.4	35.2	35.2	34.1	35.2	34.6	33.7	33.7	34.2
20 Q	33.7	33.7	33.7	33.7	33.3	32.1	31.6	31.6	31.2	32.1	35.6	39.5	42.9	44.9	44.7	43.5	41.8	37.5	34.6	35.2	35.6	35.6	35.4	35.4	34.5	36.3
21	34.5	34.3	34.1	33.7	32.3	30.4	29.8	29.0	28.7	30.0	33.3	37.5	41.2	42.4	42.2	40.8	37.7	35.6	33.9	35.0	33.9	34.6	35.4	35.6	34.8	34.8
22 Q	34.7	33.8	33.6	32.8	31.6	30.7	29.1	28.2	28.9	31.6	34.0	37.2	39.8	41.1	39.6	37.8	36.9	35.5	35.7	36.3	36.7	36.3	35.5	33.8	31.8	34.6
23	31.8	32.2	31.8	31.5	31.5	29.5	28.0	26.1	23.9	26.2	30.5	34.7	39.4	41.5	41.3	39.2	35.9	34.7	34.2	34.5	34.9	35.5	34.2	31.5	31.3	33.1
24	31.3	31.8	31.8	28.2	30.1	33.8	29.1	27.8	27.8	31.6	35.1	38.6	41.9	44.4	41.7	39.6	37.6	35.7	35.3	35.3	35.1	35.7	35.7	35.7	35.5	34.7
25	35.5	35.5	34.4	37.2	32.0	29.7	28.9	29.3	29.3	33.6	35.9	37.6	39.6	40.9	39.8	37.6	35.9	33.8	33.8	34.5	34.9	34.2	33.8	33.6	32.0	34.6
26 D	32.0	33.6	31.3	25.7	30.5	42.7	33.2	37.2	33.4	34.5	41.3	39.4	40.9	43.4	42.5	43.2	39.6	35.5	37.4	35.5	33.6	31.6	33.6	24.9	23.5	35.5
27 D	23.5	10.4	16.2	—7.0	8.5	25.9	27.0	25.5	23.0	33.8	39.4	41.3	45.5	45.0	43.2	40.9	37.4	34.9	34.2	35.3	33.2	36.1	29.9	32.8	32.8	30.0
28	32.7	33.9	30.0	30.8	32.5	28.8	27.7	27.7	25.8	30.0	33.1	37.5	41.2	42.7	41.4	38.3	37.3	37.1	31.5	30.8	35.2	35.0	34.1	33.7	34.4	33.7
29	34.4	29.6	32.5	28.8	30.0	30.4	30.0	30.8	31.0	33.7	35.6	37.7	39.3	40.4	39.5	38.9	37.7	36.6	35.4	35.0	35.4	35.2	33.7	33.1	31.5	34.3
30	31.5	33.5	32.5	31.5	30.8	30.0	29.8	30.2	31.4	35.0	37.3	39.1	40.6	40.8	39.5	39.3	38.9	37.3	36.4	35.6	34.6	33.7	32.1	31.5	33.5	34.7
31	33.5	33.5	31.4	32.5	32.1	30.8	29.4	28.3	28.8	30.2	31.7	35.4	39.7	42.7	42.2	40.0	38.9	38.1	37.0	35.4	35.6	34.6	32.1	25.8	28.3	34.0
Mean.	33.6	32.4	32.6	31.3	31.0	31.1	30.5	30.3	30.4	33.0	35.3	38.1	41.2	43.0	42.4	41.0	38.8	37.2	36.3	35.9	36.0	35.6	34.5	33.7	33.3	35.2



35. Lerwick. (V.)

August, 1928.

Hour. G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Day.	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	
1	617	600	645	676	678	680	680	679	679	673	673	670	666	669	676	678	680	682	682	691	696	686	678	656	660	671
2	660	666	668	665	654	657	668	675	674	667	669	675	675	675	676	675	676	677	683	683	684	666	657	665	660	670
3	660	659	663	673	673	673	674	674	674	677	675	673	672	672	672	675	677	682	683	683	682	680	668	669	672	674
4D	672	671	672	672	671	671	673	674	674	671	671	669	662	662	670	679	680	682	688	690	690	692	688	677	641	675
5D	641	490	395	399	504	578	531	543	567	622	644	652	664	697	749	745	756	775	747	728	746	736	725	714	682	640
6	682	649	670	680	683	689	690	691	694	689	688	688	689	689	690	689	694	697	701	700	714	693	650	565	520	678
7D	520	504	496	549	617	646	643	653	669	680	689	698	700	707	708	718	745	739	719	715	713	709	703	700	698	668
8	698	699	698	697	697	696	697	697	696	693	696	694	691	691	692	690	689	689	688	689	690	691	691	687	677	693
9	677	671	677	679	680	680	680	679	678	679	678	677	675	676	681	684	687	687	686	686	685	683	682	682	681	680
10Q	681	682	682	682	682	682	681	681	681	680	680	679	678	678	680	679	679	679	679	679	679	679	679	679	676	680
11	676	671	668	659	654	656	660	661	660	658	659	663	667	671	674	676	680	687	688	688	686	684	680	679	678	671
12	678	676	676	675	666	658	652	654	658	653	654	661	659	667	676	679	690	700	727	741	722	708	699	695	688	681
13	688	677	665	641	638	641	647	646	650	657	660	663	662	665	673	681	684	685	682	678	677	676	675	674	675	666
14Q	675	673	673	674	675	676	675	675	674	669	668	665	666	667	672	674	676	673	666	666	664	664	663	653	647	669
15Q	647	653	663	665	666	667	667	666	664	651	649	647	649	651	654	661	666	667	669	668	665	664	663	662	661	660
16	661	660	653	637	642	651	654	656	656	660	660	654	654	653	655	664	676	678	673	668	667	664	666	665	665	660
17	665	663	663	662	665	667	669	667	666	661	657	659	656	655	657	661	666	672	671	669	669	666	664	662	657	664
18	657	657	662	663	665	667	668	666	666	665	664	662	656	655	659	666	674	677	682	684	682	675	671	666	662	667
19	662	655	662	663	665	664	667	667	667	667	666	664	661	659	661	664	667	671	671	669	671	672	672	672	672	666
20Q	672	671	669	669	669	669	672	672	672	671	668	667	665	663	664	665	667	674	676	675	672	669	667	667	667	669
21	667	667	667	668	668	671	671	671	669	667	666	664	662	660	662	663	665	667	669	671	671	671	671	669	669	667
22Q	669	668	668	668	669	671	672	672	672	672	669	666	664	664	665	666	668	669	669	668	668	668	672	672	671	669
23	671	671	671	671	671	672	672	669	669	671	672	671	668	666	667	671	673	673	672	672	672	667	654	653	670	673
24	653	653	653	653	656	655	659	664	667	672	673	674	674	674	674	677	682	690	693	691	689	687	686	685	683	673
25	683	678	676	675	675	677	681	681	682	684	683	683	683	684	685	685	685	685	684	684	684	685	685	682	673	682
26D	673	624	631	639	637	631	627	640	653	665	678	687	694	703	722	709	705	709	705	706	715	711	694	681	633	676
27D	633	609	583	528	485	479	524	568	608	642	655	668	665	665	666	672	676	675	674	673	678	674	663	667	671	627
28	671	667	664	667	667	669	671	672	671	674	674	674	673	675	676	678	681	682	686	681	678	675	671	666	653	673
29	653	640	650	645	651	653	653	653	654	659	657	656	653	654	657	660	662	664	666	665	662	661	662	662	664	657
30	664	663	655	660	663	664	664	663	662	663	661	653	652	652	655	660	660	662	661	661	662	662	662	663	660	660
31	660	655	655	660	661	662	663	663	661	661	660	656	651	645	647	652	656	657	659	660	661	660	656	655	657	657
Mean	661	650	648	649	653	657	658	661	664	667	668	669	668	670	675	677	681	684	684	683	684	680	675	669	662	668

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS ;  
MAGNETIC CHARACTER FIGURES ; TEMPERATURE IN MAGNET HOUSE.

36. Lerwick.

August, 1928.

Day.	Terrestrial Magnetic Elements.												Character in Figure $\frac{\Sigma R^2}{100\gamma^2}$	Magnetic Character of Day (0-2).	Temperature in Magnet House. 200+				
	Horizontal Force.				Declination.				Vertical Force.										
	Maximum 14,000 $\gamma$ +	Minimum 14,000 $\gamma$ +	Range.		Maximum 14° +	Minimum 14° +	Range.		Maximum 46,000 $\gamma$ +	Minimum 46,000 $\gamma$ +	Range.								
1	h. m.	$\gamma$	$\gamma$	h. m.	$\gamma$	h. m.	$\gamma$	h. m.	$\gamma$	h. m.	$\gamma$	$\gamma$							
2	18 38	659	483	0 18	176	0 20	44.1	22.5	1 0	21.6	19 17	700	579	0 46	121	541	1	84.2	
3	19 19	614	555	12 25	59	20 58	46.2	28.5	6 16	17.7	18 40	686	646	21 35	40	107	0	83.9	
4	18 6	626	534	12 13	92	13 59	44.7	26.9	6 49	17.8	19 20	685	653	1 11	32	153	1	83.9	
4D	20 24	659	542	9 38	117	12 55	47.8	16.5	20 55	31.3	20 46	714	644	24 0	70	363	1	84.1	
5D	17 45	999	< 80	between 1 27 & 1 53	> 919	17 59	59.3	-1.3	1 47	60.6	17 43	848	320	1 27	528	11899	2	84.8	
6	19 39	637	271	23 24	366	23 40	50.6	20.7	20 16	29.9	20 15	731	506	23 57	225	2007	1	85.5	
7D	15 15	660	331	0 55	329	1 45	48.8	18.3	0 49	30.5	16 0	751	481	0 50	270	1980	1	86.0	
8	18 11	604	533	10 29	71	13 27	43.8	28.0	6 21	15.8	1 0	699	679	24 0	20	99	0	86.1	
9	22 12	597	537	11 18	60	13 26	44.6	28.0	7 1	16.6	17 20	688	669	0 57	19	90	0	85.8	
10Q	19 49	607	543	11 41	64	13 9	42.3	29.9	6 58	12.4	16 25	684	676	24 0	8	70	0	85.1	
11	19 29	618	559	9 51	59	13 35	41.5	28.0	4 51	13.5	18 30	690	649	4 27	41	85	1	84.8	
12	17 49	743	527	11 22	216	18 48	47.0	20.0	20 25	27.0	18 52	750	650	5 50	100	699	1	84.7	
13	18 22	619	532	2 3	87	2 10	47.8	29.4	1 22	18.4	0 4	689	636	4 10	53	165	1	84.9	
14Q	23 0	614	544	11 55	70	12 52	42.4	28.9	5 11	13.5	15 53	678	642	23 41	36	96	0	85.1	
15Q	18 35	625	541	9 51	84	13 4	45.6	28.1	6 30	17.5	17 50	671	643	0 0	28	135	0	85.7	
16	15 32	623	532	10 51	91	13 39	45.3	27.9	5 28	17.4	16 25	681	631	3 8	50	163	0	85.6	
17	18 13	614	526	10 50	88	12 51	43.5	27.7	5 44	15.8	17 25	674	653	12 30	21	127	0	85.7	
18	18 30	639	532	10 6	107	13 37	46.2	25.8	6 40	20.4	19 39	686	653	12 40	33	201	1	85.4	
19	20 13	603	531	11 1	72	13 31	44.3	26.0	7 16	18.3	21 0	672	649	0 39	23	118	0	84.9	
20Q	16 4	619	552	11 31	67	13 2	45.3	30.6	8 20	14.7	18 0	677	661	13 5	16	87	0	84.8	
21	19 21	623	534	11 1	89	13 39	42.9	27.9	8 3	15.0	20 40	671	658	12 50	13	122	0	85.0	
22Q	20 52	616	548	12 4	68	12 42	41.5	27.8	7 1	13.7	22 4	674	664	13 0	10	81	0	85.3	
23	22 6	633	530	11 54	103	13 19	42.8	22.2	7 28	20.6	16 5	675	651	23 20	24	189	1	85.4	
24	16 5	630	530	9 51	100	13 0	45.2	25.5	7 47	19.7	17 40	696	651	2 38	45	191	1	85.3	
25	23 9	610	551	10 43	59	12 35	41.7	27.8	8 6	13.9	15 0	686	673	24 0	13	71	0	85.0	
26D	20 40	647	< 280	23 59 2 10 to 2 39	> 367	5 18	56.2	21.6	23 18	34.6	13 50	731	608	24 0	123	1714	1	84.9	
27D	19 54	636	< 46	2 39	> 590	11 44	46.9	-29.1	3 15	76.0	20 30	690	461	5 7	229	5055	2	85.0	
28	18 30	682	541	10 50	141	12 37	43.5	20.7	18 20	22.8	18 16	696	653	24 0	43	320	1	85.0	
29	18 33	607	553	9 51	54	13 8	40.8	27.9	3 0	12.9	17 40	669	632	0 30	37	73	0	85.0	
30	16 39	622	552	9 29	70	11 47	41.4	28.8	6 31	12.6	0 55	665	650	12 4	15	80	0	84.7	
31	18 33	615	544	9 47	71	13 28	43.3	23.8	22 51	19.5	6 0	663	643	13 10	20	123	0	84.4	
Mean.	—	642	484	—	158	—	45.4	23.1	—	22.3	—	696	621	—	74	878	0.55	85.0	
No. of Days used.	—	31	31	—	31	—	31	31	—	31	—	31	31	—	31	—	31	31	31



Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

## 37. Lerwick. (H.)

14,000  $\gamma$  ( $\cdot 14$  C.G.S. unit) +

September, 1928.

Hour. G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Day.	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$
1	586	585	585	578	586	589	581	574	567	553	549	546	560	577	591	596	596	602	603	604	607	608	606	606	593	585
2	593	568	536	540	529	573	584	571	554	543	536	535	559	571	585	585	587	588	586	591	596	601	597	600	589	571
3D	589	589	588	595	605	603	600	593	580	548	528	547	579	605	655	718	741	844	633	614	573	575	575	575	578	610
4	578	578	578	579	580	580	573	565	557	542	530	528	533	549	565	578	578	579	577	598	595	593	590	587	586	571
5	586	585	583	583	583	577	559	569	567	559	555	560	553	560	569	576	608	626	620	592	585	591	592	586	584	580
6	584	584	584	584	589	583	579	573	563	546	530	541	551	551	560	576	587	587	593	604	595	586	585	587	585	575
7D	585	588	584	584	584	584	582	575	567	559	553	548	545	557	629	711	859	880	742	562	633	614	456	497	550	607
8D	550	527	323	468	545	473	438	504	522	518	533	556	558	581	631	680	663	658	621	606	586	559	441	403	346	535
9	346	348	379	443	526	536	555	553	561	562	556	558	566	578	577	590	610	639	632	614	578	572	574	578	555	548
10	555	492	549	571	581	587	579	583	563	554	553	572	566	572	602	587	581	582	589	597	594	594	590	588	581	575
11	581	571	581	579	580	582	583	583	564	558	552	551	545	560	580	558	579	599	599	599	592	589	581	593	585	577
12Q	585	578	577	565	575	587	592	587	580	567	556	553	555	562	572	580	579	587	592	593	596	597	597	597	589	580
13	589	590	591	592	592	593	593	590	584	571	563	556	554	566	579	616	610	582	597	596	601	597	595	597	598	587
14	598	602	605	597	577	573	597	577	571	562	547	545	548	554	566	577	583	583	593	592	594	595	594	593	583	580
15	583	579	542	577	587	582	583	575	564	552	543	541	551	558	572	587	597	596	597	595	591	592	592	592	590	576
16Q	590	587	587	585	585	584	576	570	563	556	549	545	551	558	567	573	574	580	587	591	596	596	595	594	592	577
17Q	592	591	590	589	588	586	580	582	579	565	554	548	548	552	567	581	583	585	591	597	598	597	599	599	596	581
18D	596	595	594	595	594	588	587	584	572	561	551	543	557	571	582	588	624	622	611	635	649	631	571	333	529	579
19	529	597	587	584	581	546	572	575	565	561	536	506	551	582	604	589	616	621	602	597	586	595	584	584	580	578
20	580	576	574	584	579	578	575	573	566	561	549	551	560	564	561	577	581	607	596	596	595	589	584	581	573	576
21Q	573	579	579	579	585	588	591	590	585	577	565	553	551	554	563	574	585	593	595	596	601	610	599	599	596	582
22	596	595	594	597	594	595	599	598	591	581	569	546	551	569	585	570	585	589	599	611	605	603	600	599	602	589
23	602	598	579	588	595	592	589	579	572	565	555	553	555	562	580	595	590	599	598	609	601	611	597	590	604	586
24	604	596	579	586	587	584	573	572	565	554	553	554	565	571	575	586	592	613	607	613	615	614	607	589	578	585
25D	578	554	529	580	595	598	594	586	562	515	484	502	575	570	628	630	615	588	589	599	585	557	501	495	517	566
26	517	518	549	575	581	575	555	557	544	560	560	558	560	562	579	583	597	596	605	595	592	592	592	592	593	572
27	593	585	580	589	588	587	593	585	564	554	551	553	563	572	576	583	596	591	591	592	596	591	589	591	591	581
28Q	591	591	591	591	592	593	591	583	574	565	556	547	553	560	569	573	579	586	585	589	593	595	595	595	593	581
29	593	594	596	595	595	594	594	593	583	570	558	552	556	563	575	585	594	591	597	603	607	607	610	614	611	589
30	611	601	592	593	599	597	599	590	575	569	564	560	558	569	579	579	589	595	597	599	599	600	601	600	598	588
Mean.	574	571	563	575	582	580	578	576	567	557	548	547	556	566	584	596	609	616	604	599	598	595	580	571	575	579

## MAGNETIC DECLINATION (WEST).

Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

## 38. Lerwick. (D.)

14° +

September, 1928.

Hour. G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Day.																										
1	28.3	30.0	32.9	32.3	30.6	29.2	29.0	29.6	30.4	32.3	34.8	38.7	42.7	43.7	42.2	39.5	36.6	35.0	33.5	34.3	35.8	35.8	35.6	28.8	33.7	34.3
2	33.6	24.3	15.6	11.4	16.6	26.8	26.6	26.6	27.8	31.6	36.1	41.3	46.3	46.1	43.2	39.9	36.5	34.2	33.8	34.2	34.2	34.7	34.5	36.7	34.0	32.2
3D	34.0	34.2	28.7	28.9	27.2	25.3	24.6	25.7	28.2	32.8	42.5	44.6	48.6	52.7	50.2	48.4	43.2	37.2	32.6	35.5	30.5	33.4	33.8	34.5	34.9	35.7
4	34.9	34.7	34.7	34.0	33.0	31.8	30.9	31.4	30.1	32.6	35.7	39.2	41.7	42.8	42.6	40.3	36.9	35.3	34.7	36.1	35.3	34.5	34.0	34.0	34.2	35.5
5	34.2	33.2	32.8	32.2	31.3	29.1	29.3	32.2	32.8	34.7	37.4	40.5	41.9	42.5	40.7	38.4	36.3	25.1	27.2	33.6	35.3	35.3	34.2	33.2	34.3	34.3
6	34.3	34.2	32.8	32.0	31.3	30.1	28.9	28.2	29.1	31.8	37.0	40.5	42.5	43.6	40.7	38.6	36.5	34.7	32.8	27.2	26.6	31.8	32.4	34.0	34.5	33.8
7D	34.4	33.3	32.3	31.9	31.3	30.6	30.0	30.8	31.9	34.1	35.6	37.5	40.6	41.2	40.8	39.6	40.2	40.2	36.4	37.5	39.1	34.6	27.5	14.4	26.1	34.2
8D	26.1	25.9	38.9	27.1	27.9	27.3	32.5	31.9	30.0	33.7	37.1	37.7	42.2	43.7	39.6	41.4	37.7	35.0	36.2	34.8	30.8	27.9	21.1	11.1	20.2	32.3
9	20.2	18.2	17.8	13.4	26.1	28.5	28.3	30.6	31.9	33.3	36.0	38.7	41.0	41.6	41.0	40.2	37.9	36.2	38.9	38.9	33.3	28.8	33.5	32.7	32.3	32.2
10	32.3	28.8	21.3	24.0	25.4	27.9	33.3	34.8	34.8	37.1	37.5	36.6	40.4	40.4	40.4	38.5	36.4	34.6	29.2	33.5	33.3	31.9	33.5	33.7	31.9	33.3
11	31.9	34.1	33.1	30.0	28.8	29.4	30.2	32.3	33.3	35.0	35.6	36.6	40.0	40.4	41.0	39.5	37.1	34.8	30.8	32.1	29.4	25.9	29.4	30.4	31.3	33.4
12Q	31.3	31.0	31.0	34.8	31.7	31.5	30.2	29.6	28.8	30.6	31.7	35.0	38.3	38.7	38.1	36.8	35.6	34.4	33.9	33.9	32.3	35.0	31.7	28.3	32.1	33.1
13	32.1	31.9	32.3	31.5	31.7	31.0	28.6	27.5	28.3	29.8	32.1	35.4	39.3	42.9	43.5	44.9	44.1	38.7	37.9	36.2	35.2	34.8	32.7	33.1	33.3	34.8
14	33.2	32.6	32.0	33.6	34.3	31.1	24.7	27.8	28.2	29.3	32.2	35.5	40.5	42.6	42.3	41.5	38.4	35.7	34.0	33.8	33.0	33.0	31.8	31.4	29.1	33.8
15	29.1	30.5	39.0	34.9	29.1	28.9	29.3	28.9	29.9	32.0	34.3	37.0	40.7	40.9	40.1	39.7	37.8	36.1	33.2	34.5	33.8	33.6	33.4	33.4	33.6	34.3
16Q	33.6	32.6	32.4	32.2	31.8	30.9	29.9	29.3	28.9	31.2	34.3	37.4	39.9	40.1	39.2	38.2	36.3	35.7	34.7	34.0	33.8	33.0	33.0	33.2	33.2	34.0
17Q	33.2	32.6	32.0	32.0	30.9	30.5	30.9	30.7	30.5	31.8	33.2	36.5	39.7	41.5	41.5	40.5	38.4	35.9	35.3	34.7	34.7	34.0	34.5	34.0	33.4	34.6
18D	33.4	31.8	32.6	30.1	28.5	28.2	29.3	28.7	29.1	30.7	33.4	38.8	43.6	43.6	41.7	39.2	40.9	42.6	40.7	36.7	40.5	18.3	29.3	11.6	17.2	33.1
19	17.2	32.4	30.7	30.3	28.4	31.4	28.0	27.0	28.0	31.6	37.4	40.1	44.2	44.6	43.4	44.8	42.6	38.4	34.3	29.9	29.1	31.6	30.5	32.6	33.2	34.0
20	33.1	32.9	33.1	30.8	31.1	31.3	30.6	29.8	30.6	31.7	33.1	34.6	37.5	40.0	38.7	38.5	31.3	29.4	31.0	33.5	32.5	31.5	31.1	30.8	33.3	32.9
21Q	33.3	33.5	30.6	30.4	30.6	31.1	31.0	30.0	29.6	29.8	31.0	34.0	36.6	37.7	38.3	38.1	36.2	34.2	33.3	33.1	31.1	27.9	30.8	31.0	30.6	32.6
22	30.6	30.6	31.5	31.3	30.6	31.5	30.2	28.6	27.1	27.3	29.2	32.3	38.3	41.2	42.7	38.5	37.9	35.8	35.4	35.6	34.8	35.4	33.7	31.3	30.6	33.4
23	30.6	27.1	27.9	31.0	27.7	29.2	29.2	28.6	28.8	29.8	33.1	36.9	39.8	42.0	43.5	41.8	36.4	37.1	36.2	35.6	32.9	31.1	30.4	29.2	29.0	33.1
24	29.0	35.6	28.6	28.3	30.4	29.0	31.1	29.0	29.0	30.0	32.5	36.4	38.7	42.2	41.0	40.4	38.5	40.2	38.1	36.7	33.9	33.7	26.9	16.3	15.9	32.9
25D	15.9	21.1	30.6	23.2	25.7	26.9	28.1	29.6	29.4	34.6	41.0	42.3	40.6	42.9	42.3	39.4	36.6	34.0	33.2	30.0	26.3	25.0	25.0	26.3	27.7	31.5
26	27.7	25.0	31.7	31.3	30.2	29.6	29.4	31.3	34.2	33.1	33.1	35.8	38.5	40.6	38.9	36.9	36.2	30.8	26.7	31.0	32.9	33.3	33.3	33.5	32.9	32.8
27	32.9	33.3	33.9	31.9	32.3	31.9	30.6	29.2	28.4	30.6	32.9	36.7	39.1	40.4	40.4	36.6	32.9	34.4	33.9	31.1	31.9	30.6	34.4	30.8	31.7	33.4
28Q	31.7	31.7	31.5	31.3	31.0	30.8	30.0	28.6	28.3	29.8	32.3	35.0	37.9	39.3	38.7	36.6	34.4	33.7	33.7	33.5	32.9	32.5	32.3	31.9	31.7	32.9
29	31.7	31.9	31.1	31.1	31.0	30.6	29.8	28.8	28.1	28.8	31.1	34.8	37.5	38.7	39.6	39.3	37.9	36.0	35.4	35.2	34.0	32.9	31.0	31.9	31.5	33.3
30	31.5	32.5	34.8	32.3	31.9	29.8	29.2	28.6	35.0	34.8	34.8	38.5	40.8	41.6	41.6	38.3	36.4	35.6	35.6	34.4	33.7	33.5	32.9	32.7	33.5	34.7
Mean.	30.5	30.7	30.9	29.7	29.6	29.7	29.5	29.5	30.0	31.9	34.6	37.5	40.7	42.0	41.3	39.8	37.5	35.4	34.1	34.0	33.1	31.8	31.6	29.6	30.7	33.5



39. Lerwick. (V.)

46,000  $\gamma$  ( $\cdot 46$  C.G.S. unit) +

September, 1928.

Hour. G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Day.	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	
1	657	650	634	632	643	652	655	660	660	656	656	657	653	658	663	671	677	677	675	672	669	667	662	652	660	
2	652	603	566	531	537	559	615	647	655	658	658	658	654	648	650	658	663	671	671	668	668	667	667	660	636	641
3D	636	631	627	644	654	657	659	666	666	670	673	672	672	693	743	766	796	814	767	767	711	708	709	710	705	698
4	705	702	703	703	705	708	709	709	709	707	706	702	701	699	701	702	703	703	701	698	698	699	698	696	696	703
5	696	697	697	697	698	700	702	696	693	691	689	692	694	695	696	701	704	726	735	730	724	716	713	709	710	704
6	710	710	709	707	709	710	711	711	713	713	711	709	709	711	711	712	711	712	715	719	715	713	710	708	708	711
7D	708	708	709	709	709	709	709	709	708	708	708	708	707	707	710	761	801	811	820	757	771	762	689	671	684	727
8D	684	671	642	621	629	631	648	662	673	694	697	706	716	728	750	772	771	759	749	746	739	734	663	636	616	695
9	616	637	644	658	665	677	695	701	704	710	711	712	713	715	716	719	730	747	755	753	745	735	734	730	702	707
10	702	680	678	690	696	699	700	700	702	706	710	717	722	722	728	734	734	735	741	738	735	735	733	729	727	716
11	727	720	715	720	723	724	724	724	725	727	728	730	733	734	737	739	738	740	748	747	745	738	734	731	730	731
12Q	730	726	727	726	723	726	727	727	727	732	733	734	733	734	733	734	734	734	734	733	734	733	732	726	727	730
13	727	729	732	732	733	732	732	731	731	727	727	726	726	726	727	727	739	750	747	745	740	740	740	739	739	734
14	739	738	737	737	727	709	702	710	715	725	727	727	728	732	733	738	745	738	733	731	728	725	723	684	691	725
15	691	701	691	681	695	703	709	713	716	717	716	713	713	713	713	713	715	721	724	723	723	717	716	715	714	711
16Q	714	715	716	717	717	717	718	717	716	713	712	711	709	706	705	706	710	710	709	707	707	706	706	705	705	711
17Q	705	704	704	703	703	704	705	704	704	703	701	697	692	691	691	693	697	700	701	701	701	701	701	701	701	700
18D	701	701	700	700	700	702	702	703	703	704	703	702	701	701	702	702	702	703	705	707	726	734	717	718	669	705
19	669	694	705	710	706	704	702	704	706	709	710	717	721	740	758	759	779	790	788	765	749	736	724	727	728	729
20	728	726	726	726	727	731	733	734	734	735	735	735	735	735	737	738	745	747	744	739	738	738	738	734	728	735
21Q	728	716	719	724	725	726	727	728	729	734	734	734	734	733	732	731	732	734	733	733	734	732	728	727	726	729
22	726	725	727	727	728	729	729	732	733	733	732	733	729	728	732	736	736	736	736	735	736	736	737	737	735	732
23	735	733	733	731	731	733	733	735	735	735	736	735	734	734	734	736	741	739	739	737	737	731	727	724	709	734
24	709	689	683	695	706	711	715	717	721	722	722	722	721	719	721	721	722	722	723	724	725	725	721	716	706	715
25D	706	705	690	693	703	707	711	714	716	724	725	725	736	745	767	780	791	785	776	772	769	749	672	668	658	729
26	658	659	681	703	711	715	714	715	715	718	721	722	723	726	728	730	732	734	737	736	735	735	734	734	733	719
27	733	728	726	726	728	732	733	734	735	740	738	737	737	738	750	775	779	764	756	754	750	742	710	715	724	740
28Q	724	729	731	732	732	730	730	732	732	732	732	731	730	729	731	733	736	733	735	733	731	731	730	729	730	731
29	730	728	728	729	728	728	727	727	726	727	726	724	720	720	720	722	723	725	725	723	721	718	721	715	711	724
30	711	711	703	702	703	710	712	714	715	712	713	713	715	719	724	730	729	724	723	721	718	717	716	716	716	716
Mean.	702	699	696	697	700	703	706	709	711	713	713	713	714	716	721	728	734	738	735	731	727	724	714	709	704	715

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS;  
 MAGNETIC CHARACTER FIGURES; TEMPERATURE IN MAGNET HOUSE.

40. Lerwick.

September, 1928.

Day.	Terrestrial Magnetic Elements.														Character Figure $\frac{\Sigma R^2}{100\gamma^2}$	Magnetic Character of Day (0-2).	Temperature in Magnet House 200+.	
	Horizontal Force.				Declination.				Vertical Force.									
	Maximum 14,000 $\gamma$ +	Minimum 14,000 $\gamma$ +	Range.		Maximum 14° +	Minimum 14° +	Range.		Maximum 46,000 $\gamma$ +	Minimum 46,000 $\gamma$ +	Range.							
1	h. m. 23 6	$\gamma$ 627	h. m. 543	10 57	$\gamma$ 84	h. m. 12 57	44' 5"	24' 2"	h. m. 23 4	20' 3"	h. m. 18 0	$\gamma$ 677	628	h. m. 2 51	$\gamma$ 49	169	I	a. 84.4
2	23 18	613	511	4 9	102	12 26	47' 5"	9' 1"	3 22	38' 4"	17 20	673	524	3 16	149	595	I	84.8
3D	17 20	> 959	521	9 32	> 438	13 31	56' 0"	14' 7"	19 31	41' 3"	17 1	886	622	1 31	264	2925	2	84.9
4	19 34	609	523	11 23	86	13 46	44' 0"	29' 7"	7 39	14' 3"	6 30	710	695	19 35	15	113	O	85.1
5	17 7	656	545	11 54	111	12 44	43' 6"	19' 7"	17 13	23' 9"	17 30	739	687	10 0	52	254	I	85.3
6	19 20	617	525	9 53	92	13 0	44' 2"	22' 0"	19 17	22' 2"	19 0	721	707	4 0	14	177	I	85.4
7D	17 4 & 17 13	953	263	22 18	690	17 21	54' 7"	1' 6"	22 43	53' 1"	17 52	837	626	22 16	211	5717	2	85.3
8D	15 19	730	187	2 10	543	2 20	50' 5"	0' 9"	23 22	51' 4"	15 15	790	592	23 26	198	3820	2	85.1
9	17 24	656	239	1 2	417	19 16	43' 5"	0' 3"	2 32	43' 8"	18 18	760	612	0 26	148	2308	2	85.3
10	13 34	623	437	1 5	186	11 56	41' 4"	19' 8"	1 31	21' 6"	18 5	744	664	1 20	80	495	I	85.4
11	16 39	613	541	12 4	72	13 44	41' 8"	24' 0"	21 0	17' 8"	18 5	751	713	2 5	38	124	I	85.2
12Q	22 30	615	551	10 14	64	13 20	39' 5"	26' 7"	22 24	12' 8"	19 32	736	719	3 42	17	74	O	85.1
13	15 22	638	548	11 19	90	15 42	46' 8"	26' 7"	7 8	20' 1"	17 9	758	726	13 0	32	165	I	85.0
14	1 49	609	536	12 20	73	12 58	44' 2"	21' 2"	5 40	23' 0"	15 35	748	678	23 10	70	198	I	85.4
15	17 10	603	529	2 6	74	2 14	43' 4"	28' 0"	4 49	15' 4"	17 50	726	675	2 37	51	124	I	85.6
16Q	21 25	599	543	10 29	56	12 31	41' 3"	28' 0"	7 44	13' 3"	6 0	718	704	24 0	14	66	O	85.8
17Q	22 22	604	545	12 6	59	14 20	41' 7"	28' 9"	7 6	12' 8"	6 0	706	689	13 39	17	68	O	85.4
18D	20 12	693	133	22 55	560	20 18	51' 1"	13' 8"	23 32	64' 4"	23 8	778	650	23 51	128	4051	2	85.0
19	13 38	650	477	10 55	173	15 33	47' 5"	20' 2"	18 39	27' 3"	16 59	800	665	0 0	135	616	2	84.6
20	16 33	614	543	10 9	71	13 9	40' 8"	24' 8"	16 18	16' 0"	16 40	749	724	2 10	25	103	I	84.1
21Q	21 4	620	549	12 30	71	14 29	38' 7"	26' 7"	20 48	12' 0"	19 0	735	713	1 15	22	81	O	83.6
22	19 2	622	540	11 38	82	13 30	46' 0"	25' 2"	8 41	20' 8"	22 33 & 23 15	739	724	0 35	15	149	I	83.1
23	21 5	644	543	11 7	101	13 28	45' 2"	24' 6"	0 47	20' 6"	16 10	744	713	24 0	31	189	I	83.3
24	16 26	648	544	11 4	104	12 59	44' 3"	10' 1"	23 7	34' 2"	21 17	727	677	1 29	50	346	I	83.2
25D	14 8	668	404	21 49	264	21 45	49' 9"	7' 2"	22 9	42' 7"	16 10	802	648	22 12	154	1265	2	83.0
26	17 45	616	459	0 35	157	12 37	41' 6"	22' 3"	1 1	19' 3"	17 50	739	647	0 40	92	398	I	82.8
27	15 35	617	543	9 48	74	13 0	41' 4"	26' 1"	18 42	15' 3"	15 42	785	697	22 5	88	174	O	82.4
28Q	22 10	597	545	10 32	52	13 45	39' 4"	27' 9"	8 5	11' 5"	16 5	738	722	0 0	16	54	O	81.5
29	23 12	626	546	11 19	80	14 23	41' 2"	27' 3"	8 26	13' 9"	0 4	732	709	23 51	23	104	O	81.2
30	0 11	617	551	12 4	66	11 40	43' 3"	27' 3"	6 42	16' 0"	14 50	732	697	2 18	35	102	O	81.0
Mean.	—	631	467	—	164	—	44' 6"	19' 3"	—	25' 3"	—	749	675	—	74	834	0.93	84.2
No. of Days used.	—	30	30	—	30	—	30	30	—	30	—	30	30	—	30	30	30	30



Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

14,000 γ (·14 C.G.S. unit) +

October, 1928.

## 41. Lerwick. (H.)

Hour. G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Day.	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	600	600	600	600	600	600	600	595	583	565	558	556	559	572	585	595	614	594	602	600	605	607	613	600	605	592
2 D	605	581	585	587	588	583	587	580	574	563	551	553	557	579	593	605	600	591	585	591	595	598	595	587	591	582
3	591	581	585	585	581	580	586	584	580	573	561	556	561	568	583	588	591	593	596	594	603	597	600	602	601	585
4	587	591	585	585	581	580	586	584	580	573	561	556	561	568	583	588	591	593	596	594	603	597	600	602	601	585
5	601	603	595	595	598	609	596	599	584	564	557	547	550	555	584	602	619	602	589	581	575	566	572	578	578	584
6	578	571	527	556	578	581	586	569	554	555	546	545	554	554	560	573	598	595	583	577	580	583	585	587	589	570
7	589	579	581	557	530	577	587	572	559	550	541	545	564	554	565	577	583	587	585	589	574	577	577	580	588	570
8	588	582	576	582	583	589	593	586	570	559	551	533	543	549	564	572	587	577	582	583	586	587	579	577	576	574
9 Q	576	573	570	570	580	581	579	574	568	560	552	549	551	553	562	569	573	575	584	587	590	592	589	587	587	573
10 Q	587	585	586	587	587	587	587	584	577	564	553	540	544	552	560	570	581	579	588	590	591	595	593	589	585	577
11 Q	585	586	587	587	587	589	587	584	587	580	562	560	558	561	565	577	582	591	593	592	593	595	594	593	583	582
12	583	577	580	583	589	589	591	589	584	573	563	558	558	569	575	577	581	585	588	590	593	590	586	584	585	581
13	585	583	583	585	587	587	587	583	576	563	555	555	558	569	592	604	594	587	600	581	593	590	592	581	595	581
14	595	581	569	572	575	572	564	575	573	563	555	549	551	551	576	580	581	581	587	590	584	586	587	584	581	574
15	581	582	575	563	569	584	589	585	581	578	570	557	557	574	579	584	582	586	592	594	601	599	591	582	576	581
16	576	566	574	578	583	588	572	575	581	553	548	546	552	557	567	588	570	574	581	581	581	584	581	580	580	572
17	580	581	581	581	580	582	578	577	572	567	561	557	558	561	561	570	578	587	583	583	575	565	581	586	576	576
18	586	583	585	586	586	586	586	586	558	536	505	597	597	643	809	739	743	823	891	677	493	405	516	505	521	612
19 D	521	526	533	538	539	540	542	537	531	520	518	515	524	549	551	545	549	556	556	558	557	505	562	560	556	542
20	556	547	549	537	532	553	558	555	545	538	531	524	533	543	547	550	554	561	567	573	567	558	587	553	547	551
21	547	529	532	545	559	564	568	565	556	550	549	541	537	550	561	562	566	568	572	574	577	579	573	580	568	559
22 D	568	505	493	530	566	570	572	573	554	536	543	548	548	552	561	576	566	579	585	587	594	577	561	551	558	557
23 Q	558	567	569	572	573	575	572	558	561	556	552	542	542	554	562	568	568	573	577	577	578	578	578	578	578	567
24 D	578	576	565	548	571	572	576	579	555	539	551	553	535	541	547	552	561	571	577	583	613	570	553	406	283	551
25 D	283	146	103	324	487	520	503	527	555	553	563	557	552	550	546	552	556	584	593	607	655	577	553	549	559	506
26	559	551	554	557	564	566	569	566	566	563	563	561	561	557	563	563	560	569	573	578	579	569	580	572	572	565
27	572	569	569	569	571	574	583	538	542	548	539	534	536	537	540	551	563	566	576	563	562	566	564	549	559	557
28 Q	559	562	554	569	569	573	573	567	567	557	552	549	550	548	558	562	565	572	573	573	573	570	564	566	565	564
29	565	567	561	572	577	583	572	572	573	561	550	550	547	553	548	570	563	565	568	573	578	575	578	582	565	567
30	565	576	575	572	572	577	582	582	582	559	541	551	558	557	553	563	564	571	563	571	561	552	565	570	565	566
31	565	569	563	557	575	582	583	578	573	568	558	557	556	557	558	563	568	574	577	580	574	561	566	568	561	568
Mean†	565	556	552	561	571	577	577	573	567	557	550	549	552	559	572	578	582	587	593	586	582	573	578	569	565	570

## MAGNETIC DECLINATION (WEST).

Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

## 42. Lerwick. (D.)

14° +

October, 1928.

Hour. G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Day.																										
1	33.5	32.9	32.7	32.7	32.5	32.1	30.8	29.6	29.0	31.7	34.0	36.9	38.9	40.6	40.6	39.6	40.2	38.3	37.3	36.0	33.1	30.0	33.5	31.1	32.7	34.5
2 D	32.7	32.5	32.6	32.5	32.0	31.6	30.3	32.8	36.8	38.3	42.0	43.1	43.9	45.4	46.8	47.2	43.9	41.2	37.1	28.4	32.7	31.3	32.9	32.3	30.0	36.6
3	30.0	32.5	35.0	34.6	33.3	35.0	33.5	35.4	35.0	37.7	38.1	41.8	42.7	46.2	42.3	42.2	34.6	34.8	35.4	36.6	35.2	34.8	33.5	31.9	27.3	36.3
4	27.3	26.9	31.1	30.6	31.5	33.3	33.9	31.5	31.1	33.3	35.0	38.3	40.4	40.4	38.9	36.9	35.2	34.8	34.0	28.8	28.3	32.9	33.7	33.5	32.9	33.5
5	32.9	30.6	30.4	30.4	35.2	36.2	31.3	31.5	33.5	33.3	35.0	39.6	42.9	42.9	41.8	41.6	43.9	40.0	29.8	28.1	26.1	26.7	29.2	31.3	33.1	34.3
6	33.1	31.9	40.4	27.1	30.0	30.4	29.4	30.8	31.0	32.5	34.8	36.6	39.8	40.0	38.7	36.7	27.7	31.0	32.9	32.5	32.9	32.9	31.1	31.5	33.9	33.2
7	33.9	34.4	25.9	25.6	37.7	37.7	37.7	37.5	35.6	35.0	37.1	39.6	40.8	41.8	39.6	37.1	35.0	32.9	33.1	31.0	24.2	27.3	29.6	32.1	29.8	34.2
8	29.8	27.5	29.2	29.6	29.4	29.0	30.2	29.8	29.0	28.4	33.7	35.0	37.5	38.9	38.9	37.1	35.6	29.6	31.7	32.9	32.3	27.7	27.9	29.8	31.1	31.7
9 Q	31.1	31.5	32.7	32.9	31.5	31.0	30.6	29.4	28.6	29.4	32.7	35.4	37.3	37.3	37.1	35.6	34.6	33.1	32.9	32.7	32.5	32.5	32.3	32.1	32.1	32.8
10 Q	32.1	31.9	31.7	31.5	31.5	31.3	30.8	29.8	29.0	29.0	31.7	35.2	37.5	38.7	39.1	38.1	36.6	35.4	34.8	34.0	33.3	32.9	30.2	23.4	27.5	32.8
11 Q	27.5	29.4	30.3	27.5	28.6	27.1	27.2	28.0	28.3	29.1	31.4	34.1	37.0	38.9	38.5	37.9	35.6	35.2	34.6	34.0	33.7	32.7	32.5	31.7	31.0	32.2
12	31.0	27.3	30.8	31.3	29.4	29.8	30.6	30.6	30.4	31.0	33.5	35.6	36.7	37.7	36.9	35.6	34.0	33.3	33.1	33.1	33.1	33.1	31.3	32.1	31.9	32.6
13	31.9	32.1	31.5	31.1	31.3	30.8	30.4	30.4	30.4	31.1	34.6	38.1	40.6	44.3	44.7	46.6	44.1	40.4	39.8	32.9	25.9	30.2	30.8	30.6	20.9	34.5
14	20.9	25.0	23.4	29.8	30.8	30.0	29.4	30.4	29.6	31.1	35.4	37.5	40.2	39.1	40.6	39.4	36.7	36.0	35.6	35.0	34.2	33.8	33.3	33.1	32.7	33.2
15	32.7	31.8	32.4	36.4	35.1	32.2	30.9	31.2	30.7	32.2	35.1	37.2	39.9	40.3	40.1	39.5	37.8	36.6	36.6	37.2	35.7	33.9	33.0	32.6	19.3	34.8
16	19.3	25.3	28.7	31.0	32.0	30.5	32.8	34.7	33.6	33.9	37.2	38.4	39.3	41.9	42.4	43.2	38.4	36.1	34.9	34.5	34.1	32.6	32.8	32.6	33.0	34.5
17	33.0	32.7	32.5	32.5	32.7	32.5	32.5	32.3	31.9	32.3	34.0	35.2	37.3	38.5	37.9	37.3	36.3	36.5	31.7	32.5	32.9	33.8	28.6	33.6	33.8	33.8
18	33.8	33.4	32.8	32.6	32.6	32.6	32.4	31.6	26.4	25.1	30.3	36.2	37.0	40.5	40.3	43.4	38.8	40.5	49.4	36.8	30.5	31.8	30.1	30.8	31.2	34.5
19 D	31.2	32.7	32.5	32.3	31.9	31.5	31.1	30.9	30.7	30.9	32.9	34.8	38.1	42.9	41.6	39.2	38.1	38.7	36.1	35.8	35.2	32.9	32.7	33.3	33.3	34.5
20	33.3	36.2	32.4	33.9	36.4	32.0	30.6	30.6	29.9	30.1	33.0	34.3	35.7	38.2	37.6	36.4	35.7	35.1	35.1	36.0	31.6	30.8	27.9	28.3	28.5	33.3
21	28.5	28.4	26.1	30.7	30.9	30.2	30.5	29.6	29.6	29.0	32.3	35.4	36.5	39.6	40.6	39.4	37.9	37.7	36.3	35.2	33.2	32.5	28.6	27.7	28.0	32.8
22 D	28.0	29.4	22.0	22.4	28.0	29.6	29.0	30.2	31.5	30.7	33.4	35.0	35.7	37.7	37.9	35.4	33.2	35.6	34.0	34.0	30.5	29.8	28.6	31.1	32.3	31.5
23 Q	32.3	33.7	32.2	32.2	32.2	31.8	31.4	32.2	31.6	31.4	33.5	33.9	34.7	35.3	36.0	34.5	34.1	33.1	33.1	33.3	33.3	31.3	32.8	32.9	33.1	33.1
24 D	33.1	32.2	35.1	33.7	29.9	31.0	30.4	30.4	32.2	32.0	33.9	38.9	39.3	38.2	38.3	38.2	36.2	36.0	37.4	37.4	31.8	21.6	28.5	26.2	13.8	33.0
25 D	13.8	6.3	9.4	40.7	21.7	26.8	27.7	31.8	30.0	31.2	31.0	33.3	35.4	36.8	36.2	36.8	36.4	36.6	40.7	35.4	31.8	33.9	34.5	31.6	33.5	30.8
26	33.5	34.3	32.3	32.2	32.0	32.0	31.6	31.4	31.6	32.7	34.7	36.0	36.1	36.0	39.2	39.4	36.9	36.0	35.4	35.8	34.6	32.3	32.1	32.3	32.3	34.2
27	32.3	32.3	33.1	33.8	33.8	32.9	33.6	39.0	43.3	37.9	36.1	37.7	37.7	36.7	35.6	34.0	33.3	33.1	31.7	24.0	28.0	30.4	26.5	24.6	29.8	33.3
28 Q	29.8	33.1	31.9	35.6	30.0	31.1	30.2	30.0	29.0	30.0	33.3	35.8	37.5	37.7	37.5	36.0	35.0	35.2	33.8	32.1	32.9	31.5	26.1	28.4	31.9	32.7
29	31.9	33.3	36.8	32.0	32.0	30.4	33.7	33.5	31.4	29.9	31.6	35.3	36.2	38.4	37.6	35.9	38.7	37.4	34.9	33.7	33.0	32.6	28.3	21.4	26.8	33.2
30	26.8	30.3	29.9	31.2	32.8	33.0	31.8	31.0	31.0	31.6	34.1	35.5	37.8	38.0	37.6	37.2	33.9	31.4	34.1	33.0	18.5	26.0	29.9	29.3	31.2	32.0
31	31.2	32.2	33.3	36.8	31.8	31.4	31.4	31.6	31.6	31.6	32.2	35.1	36.2	37.0	36.2	35.9	35.3	34.5	34.5	33.7	32.2	28.7	29.9	29.9	27.9	33.0
Mean†	30.0	30.4	30.6	31.8	31.6	31.5	31.3	31.6	31.2	31.5	33.9	36.4	38.1	39.8	39.0	38.2	36.3	35.5	35.2	33.6	31.5	31.2	30.7	30.4	29.9	33.4



Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

## 43. Lerwick. (V.)

46,000  $\gamma$  (46 C.G.S. unit) +

October, 1928.

Hour. G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Day.	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$
1	729	727	728	729	729	730	728	728	729	732	732	730	729	728	727	729	735	742	738	738	734	723	703	703	711	728
2 D	711	*	—	—	—	—	—	—	*	716	715	716	728	742	749	759	771	813	821	800	734	727	728	727	720	—
3	720	718	720	724	725	727	724	724	724	725	729	731	734	737	741	747	771	777	768	759	748	744	738	734	723	737
4	723	710	716	719	721	725	722	724	724	726	725	725	725	724	724	723	723	722	722	724	721	718	715	712	709	721
5	709	698	701	704	696	674	673	680	684	691	694	696	701	713	718	721	728	769	780	771	755	740	738	730	723	715
6	723	720	686	651	672	685	686	691	697	700	699	697	694	695	696	700	715	724	724	721	714	709	703	701	694	700
7	694	678	654	650	642	643	644	653	660	669	684	689	699	697	695	695	695	702	705	705	712	707	701	694	680	682
8	680	657	664	670	675	673	672	674	676	677	677	681	680	682	682	684	686	692	692	690	690	690	688	687	685	680
9 Q	685	686	685	685	685	686	687	688	689	691	694	694	694	694	695	696	697	697	697	697	696	696	695	695	695	692
10 Q	695	694	694	694	692	691	689	688	688	688	688	687	686	685	685	683	683	685	683	683	682	682	682	679	687	687
11 Q	679	677	666	664	665	667	666	668	669	670	676	676	677	681	684	688	692	689	688	687	686	685	684	684	681	678
12	681	672	678	681	680	680	679	679	679	679	681	681	681	680	680	680	681	683	680	680	679	679	678	681	681	680
13	681	683	682	683	682	681	679	679	680	679	679	679	679	680	686	694	716	722	730	728	711	707	702	700	689	693
14	689	685	676	678	682	684	684	683	684	684	682	682	683	687	689	695	701	702	700	699	700	699	695	692	689	689
15	689	685	685	682	675	677	676	675	677	677	682	684	687	688	688	687	688	688	687	687	687	680	683	682	662	683
16	662	660	661	664	668	669	669	669	669	669	674	675	676	679	682	688	699	694	689	688	686	685	683	680	681	677
17	681	680	680	680	680	679	679	681	682	681	684	684	683	684	686	686	686	687	689	693	702	704	688	682	686	685
18	686	686	687	687	687	687	687	687	685	685	688	691	720	726	738	751	753	739	691	729	688	644	671	677	681	699
19 D	681	687	688	688	688	688	690	692	693	695	696	697	696	698	702	702	698	698	699	698	697	697	696	696	696	694
20	696	694	692	693	692	692	693	694	695	698	702	702	700	699	699	699	698	698	698	698	699	699	697	693	692	696
21	686	664	669	676	681	687	688	689	690	693	697	697	696	696	697	699	699	699	699	699	699	699	697	695	694	691
22 D	694	684	669	668	676	683	685	686	689	691	693	693	695	695	696	699	703	703	702	698	691	690	693	691	689	690
23 Q	689	689	690	692	690	690	688	689	689	689	691	691	691	692	692	692	691	691	690	689	689	687	687	687	685	690
24 D	685	685	684	675	675	676	678	680	681	683	683	682	680	677	672	671	671	669	669	668	681	668	657	597	475	668
25 D	475	438	644	520	518	597	605	610	619	624	638	639	646	647	653	653	652	652	655	672	669	672	659	660	663	621
26	663	662	664	664	662	661	661	658	658	658	661	663	667	673	673	673	669	668	667	666	664	665	664	664	663	665
27	663	665	665	665	664	663	662	663	662	664	673	671	673	675	675	674	673	672	671	672	671	668	665	663	659	668
28 Q	659	664	663	658	658	659	659	660	661	662	667	666	666	667	668	669	668	668	668	668	668	667	667	666	666	665
29	666	666	665	664	664	665	665	663	662	663	666	666	666	666	666	670	676	677	675	671	670	669	668	656	649	667
30	649	654	657	658	660	661	662	662	661	662	667	668	667	668	668	669	672	678	679	678	674	671	670	669	669	666
31	669	667	668	663	663	663	664	664	663	663	668	666	667	669	669	671	672	671	670	671	660	665	669	669	663	667
Mean.†	679	675	679	674	675	678	678	679	681	682	686	686	688	689	691	693	696	699	697	698	694	690	688	684	677	686

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS;  
MAGNETIC CHARACTER FIGURES; TEMPERATURE IN MAGNET HOUSE.

## 44. Lerwick.

October, 1928.

Day.	Terrestrial Magnetic Elements.															Character Figure $\Sigma R^*$ 100 $\gamma$ §	Magnetic Character of Day (0-2).	Temperature in Magnet House. 200+
	Horizontal Force.					Declination.					Vertical Force.							
	Maximum 14,000 $\gamma$ +	Minimum 14,000 $\gamma$ +	Range.	Maximum 14° +	Minimum 14° +	Range.	Maximum 46,000 $\gamma$ +	Minimum 46,000 $\gamma$ +	Range.									
	h. m.	$\gamma$	$\gamma$	h. m.	$\gamma$	h. m.	$\gamma$	h. m.	$\gamma$	h. m.	$\gamma$	$\gamma$	h. m.	$\gamma$			a.	
1	20 59	637	551	10 34	86	12 49	41° 6'	27° 7'	8 12	13° 9'	17 10	748	692	22 20	56	140	I	80° 8'
2 D	17 4	701	526	9 49	175	15 10	50° 3'	16° 3'	19 23	34° 0'	17 47	832	711	9 26	121	663	I	80° 8'
3	16 37	618	545	11 43	73	13 3	47° 7'	25° 7'	0 23	22° 0'	16 11	787	710	0 16	77	201	I	80° 8'
4	0 23	610	551	11 12	59	12 14	42° 0'	23° 2'	0 15	18° 8'	5 10 7 0 18 55	727	708	1 3	19	102	0	80° 9'
5	16 15	638	540	11 10	98	16 24	51° 2'	19° 6'	19 37	31° 6'	17 50	790	667	5 21	123	430	I	81° 1'
6	16 14	615	501	2 21	114	1 59	45° 6'	23° 8'	3 5	21° 8'	17 51	726	646	2 43	80	280	I	81° 5'
7	16 49	596	511	3 58	85	12 18	42° 7'	17° 4'	20 10	25° 3'	20 8	717	634	4 21	83	258	I	82° 0'
8	0 19	617	528	10 56	89	12 50	40° 2'	23° 6'	0 18	16° 6'	17 21	697	652	0 43	45	150	0	82° 5'
9 Q	22 22	593	546	11 10	47	12 20	37° 7'	28° 3'	8 4	9° 4'	17 0	697	683	2 10	14	40	0	83° 0'
10 Q	21 35	601	515	11 9	86	13 30	39° 4'	21° 3'	22 45	18° 1'	0 50	695	677	22 55	18	136	0	82° 7'
11 Q	23 24	599	556	11 9	43	13 22	40° 0'	26° 9'	23 59	13° 1'	16 0	694	661	2 40	33	61	0	81° 6'
12	5 52	596	554	11 4	42	13 40	38° 3'	25° 0'	0 51	13° 3'	3 30 & 4 30	685	664	0 40 about	21	55	0	81° 1'
13	19 58	617	553	10 58	64	14 41	49° 5'	18° 2'	23 59	31° 3'	18 40	735	679	7 0	56	249	I	80° 7'
14	0 10	612	539	12 56	73	12 29	42° 7'	15° 7'	0 11	27° 0'	16 10	706	674	2 10	32	196	I	80° 4'
15	20 30	647	542	23 41	105	12 39	41° 9'	11° 6'	23 57	30° 3'	19 35	689	662	24 0	27	284	I	80° 4'
16	15 22	605	541	10 41	64	13 39	45° 5'	12° 1'	0 1	33° 4'	16 12	702	654	0 28	48	266	I	80° 8'
17	21 48	657	554	11 6	103	13 32	39° 4'	16° 9'	21 41	22° 5'	20 21	708	677	5 0	31	208	I	81° 3'
18	17 46	1016	168	20 49	848	17 54	75° 2'	4° 5'	8 39	79° 7'	15 39	773	616	21 14	157	8594	2	81° 9'
19 D	13 28	577	495	1 4	82	13 20	46° 0'	29° 2'	8 4	16° 8'	14 30	706	680	0 4	26	126	I	82° 0'
20	20 50	619	512	3 42	107	20 51	42° 4'	21° 4'	21 37	21° 0'	20 49	703	690	4 0	13	195	I	81° 9'
21	22 49	595	494	1 9	101	14 21	43° 3'	18° 4'	1 29	24° 9'	21 45	700	662	0 45	38	229	I	81° 8'
22 D	18 29	699	459	1 15	240	18 34	45° 8'	18° 2'	2 29	27° 6'	18 27	711	661	2 12	50	740	I	81° 9'
23 Q	19 49	581	535	11 50	46	13 56	38° 0'	29° 5'	8 26	8° 5'	13 18	694	685	24 0	9	35	0	81° 7'
24 D	20 15	662	155	23 18	507	19 10	41° 0'	3° 2'	23 49	44° 2'	20 13	693	458	24 0	235	3476	2	81° 6'
25 D	20 8	724	< 97	1 0 & 2 23	> 627	2 35	61° 5'	-16° 9'	1 12	78° 4'	2 4	890	415	0 49	475	7303	2	81° 8'
26	20 13	604	533	0 52	71	15 1	41° 4'	29° 8'	1 42	11° 6'	13 2	676	658	9 0	18	78	I	82° 0'
27	5 55	601	505	7 34	96	7 47	47° 3'	18° 2'	18 40	29° 1'	14 0	676	656	23 43	20	250	I	81° 9'
28 Q	5 29	585	543	2 19	42	2 48	39° 8'	24° 8'	21 36	15° 0	21 30	670	654	3 15	16	61	0	81° 8'
29	22 40	624	529	14 19	95	13 26	40° 1'	13° 7'	22 31	26° 4	16 0	679	645	24 0	34	227	I	81° 4'
30	7 35	590	534	9 50	56	12 39	41° 1'	12° 3'	19 58	28° 8'	18 0	682	645	0 4	37	196	I	80° 9'
31	19 30	633	538	19 48	95	19 41	49° 7'	22° 7'	20 25	27° 0	16 4	674	658	3 26	16	225	I	80° 6'
Mean.	—	634	492	—	143	—	44° 8'	18° 3'	—	26° 5	—	718	653	—	65	821	0·84	81° 5
No. of Days used.	—	31	31	—	31	—	31	31	—	31	—	31	31	—	31	31	31	31



## TERRESTRIAL MAGNETIC FORCE : HORIZONTAL COMPONENT.

Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

## 45. Lerwick. (H.)

November, 1928.

14,000  $\gamma$  ( $\cdot 14$  C.G.S. unit) +

Hour. G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Day.	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	
1	560	556	556	572	578	578	579	578	577	567	561	557	557	557	563	568	575	583	585	590	584	578	578	578	583	572
2 D	583	582	579	571	565	547	529	550	541	541	547	548	542	571	589	605	575	595	628	569	559	552	559	555	458	563
3 D	458	500	540	552	564	548	554	571	568	559	538	556	575	590	597	587	591	635	695	552	538	565	558	545	514	565
4	514	507	519	532	547	543	549	565	568	561	558	556	549	562	558	564	575	566	572	590	558	567	572	572	570	556
5	570	567	567	566	566	570	574	569	567	561	553	548	548	554	558	554	561	565	569	564	565	573	574	577	577	564
6	577	571	569	569	572	581	581	581	578	570	561	558	558	554	557	555	565	571	575	576	576	563	534	571	565	567
7	565	567	570	570	573	573	574	577	577	573	569	559	560	563	565	567	577	575	573	569	573	573	555	567	574	570
8 Q	574	571	572	573	573	576	577	577	573	571	569	569	572	572	573	574	572	576	576	579	580	582	582	581	575	575
9 Q	581	580	580	580	580	581	582	582	581	576	569	565	566	568	571	574	578	580	585	588	587	585	586	584	582	579
10	582	580	581	582	589	589	591	599	601	587	569	558	568	574	589	623	578	555	558	559	562	560	557	547	555	576
11	555	559	560	562	565	570	570	568	566	557	548	542	548	553	557	562	559	568	579	579	578	573	557	490	528	559
12	528	535	568	575	571	584	585	583	580	573	566	565	560	561	557	556	567	577	578	575	560	551	548	557	567	566
13 D	567	565	551	533	542	544	539	544	535	531	508	521	539	550	597	605	611	695	732	520	559	570	555	545	539	564
14	539	537	538	535	542	549	549	547	548	545	534	532	537	536	543	555	542	562	565	568	566	565	563	559	537	548
15 D	537	474	553	553	558	555	558	562	562	560	555	549	548	550	573	577	557	560	564	560	551	478	491	554	562	548
16	562	*	—	—	—	—	—	—	—	—	—	—	—	—	—	*	578	576	576	579	575	567	574	570	586	—
17 D	586	568	575	567	562	575	580	582	569	523	528	550	557	568	579	594	603	587	581	575	596	581	576	575	566	572
18	566	575	571	570	572	577	576	548	548	550	555	564	565	563	561	565	574	574	580	578	591	579	570	572	572	569
19	572	561	560	571	577	575	575	578	577	571	568	567	565	567	570	577	584	583	577	575	572	572	571	576	572	573
20	572	571	572	573	574	576	575	575	575	564	564	560	559	561	564	568	576	576	576	576	575	579	576	574	575	571
21	575	577	574	574	577	581	580	579	574	568	566	563	565	568	572	576	578	579	580	580	580	580	579	577	577	575
22 Q	577	578	578	579	580	581	581	579	577	572	567	567	571	574	578	580	583	582	584	584	586	577	580	578	581	578
23	581	579	578	578	577	576	567	557	562	568	564	563	560	562	567	567	566	571	572	573	572	572	574	571	570	570
24	570	572	573	575	578	583	579	571	564	560	546	542	551	557	547	558	568	570	570	562	561	564	565	560	534	564
25	534	545	555	568	573	576	573	576	562	565	564	557	557	555	553	552	568	571	572	571	572	569	569	568	569	564
26	569	569	571	575	575	575	578	575	569	563	560	554	551	555	553	549	559	568	571	564	563	566	571	571	572	566
27	572	572	572	572	573	578	580	578	568	565	564	561	561	555	557	562	569	571	575	575	572	567	565	569	566	569
28 Q	566	571	571	574	578	581	577	577	576	570	566	563	564	567	567	572	574	578	579	576	571	570	571	576	578	573
29 Q	578	576	575	576	578	580	584	582	581	578	573	570	568	568	571	571	572	577	578	579	578	577	577	576	575	576
30	575	575	576	575	576	579	579	578	575	572	569	570	570	569	573	572	576	582	585	581	571	565	573	567	573	574
Mean.†	561	560	566	567	570	572	572	572	569	563	557	556	558	562	568	572	574	580	587	572	571	567	565	565	561	568

## MAGNETIC DECLINATION (WEST).

Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

## 46. Lerwick. (D.)

November, 1928.

14° +

Hour. G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Day.	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
1	27.9	30.3	32.0	28.1	30.1	30.4	31.4	31.0	30.3	31.0	33.7	35.9	37.4	37.6	37.6	37.2	35.9	35.3	34.5	34.1	34.3	32.0	26.4	30.1	31.6	32.8
2 D	31.6	31.9	30.2	30.0	37.9	30.5	41.3	34.2	34.6	34.4	35.2	36.7	39.2	42.1	44.6	39.4	40.8	36.5	24.9	29.0	26.9	22.4	29.6	29.8	29.4	33.9
3 D	29.4	26.3	24.4	25.5	29.6	29.2	34.8	31.7	30.0	33.6	33.4	35.4	35.6	43.1	37.5	42.1	35.4	36.3	29.2	18.6	20.3	28.0	28.2	27.5	35.2	31.2
4	35.2	32.7	32.5	34.0	28.8	34.6	39.4	32.1	31.5	32.1	34.4	36.3	38.6	42.3	40.0	37.5	36.1	35.6	34.0	26.7	28.0	31.3	32.1	32.3	32.3	34.0
5	32.3	31.9	32.3	32.5	32.7	32.3	30.9	31.3	31.1	31.3	31.9	34.0	35.6	36.1	36.9	35.6	32.5	32.9	33.8	31.5	32.5	32.1	31.5	30.7	29.8	32.7
6	29.8	30.3	31.9	32.7	33.1	31.5	31.5	32.7	33.8	33.8	35.0	36.3	37.3	37.7	37.7	36.3	35.6	35.6	35.2	34.2	31.9	26.7	31.9	25.9	29.4	33.3
7	29.4	31.7	33.6	33.2	31.5	30.7	31.5	31.9	32.3	33.2	35.6	35.4	35.4	35.8	35.6	35.0	34.2	35.8	35.9	36.9	33.4	32.1	35.6	31.7	30.7	33.7
8 Q	30.7	30.9	29.6	28.0	30.2	31.5	31.7	31.7	31.7	31.9	33.2	33.8	34.2	34.4	34.4	34.0	34.2	34.4	34.2	34.0	33.6	32.7	32.7	32.1	31.7	32.5
9 Q	31.7	32.0	31.8	31.6	31.6	31.8	31.8	31.8	31.8	31.6	32.0	32.8	33.9	34.7	35.1	34.9	35.3	35.1	34.5	35.3	34.9	33.7	33.1	33.1	33.3	33.2
10	33.3	33.5	33.5	33.7	33.9	32.8	33.0	33.3	33.7	33.5	33.9	38.7	41.2	45.1	46.7	52.6	43.2	33.9	33.9	33.7	32.8	31.4	29.9	28.5	29.1	35.7
11	29.1	29.5	31.2	32.0	32.8	32.0	32.0	31.4	31.6	31.6	33.1	33.3	34.5	35.8	35.5	34.3	35.1	35.1	35.5	36.0	28.3	28.1	28.5	38.9	18.1	32.5
12	18.1	21.7	30.0	28.6	34.6	34.0	32.5	32.7	31.9	34.0	36.1	37.9	38.1	39.2	38.1	38.6	35.6	35.2	35.4	35.7	31.5	38.8	23.8	22.8	27.4	32.9
13 D	27.4	28.4	31.1	31.9	26.9	35.0	35.7	35.4	38.3	37.7	37.3	40.2	39.4	42.1	41.5	37.3	40.4	45.0	40.6	29.0	29.6	30.5	29.6	30.0	30.0	35.1
14	30.0	29.8	24.7	25.3	27.6	29.6	31.1	31.5	31.7	33.6	34.4	37.1	39.0	36.5	37.1	39.0	35.4	33.2	33.4	33.2	32.9	31.9	31.5	29.2	31.5	32.5
15 D	31.5	26.9	25.9	29.6	31.5	29.8	30.5	32.5	32.5	33.2	33.2	33.8	35.4	35.0	39.6	44.4	41.0	36.9	35.6	31.1	26.5	34.6	23.8	22.4	28.6	32.3
16	28.6	27.2	28.7	25.4	25.2	27.9	29.1	30.8	30.6	31.6	33.7	34.5	35.5	38.7	37.6	36.6	35.6	36.0	34.5	33.9	31.6	27.7	25.2	25.6	22.5	31.2
17 D	22.5	30.4	28.3	30.2	29.3	32.2	31.4	32.4	33.3	34.9	39.3	37.2	37.6	36.8	35.1	37.0	23.3	33.5	35.1	32.8	29.7	29.7	27.3	28.5	31.6	32.2
18	31.6	25.4	25.8	29.9	31.4	31.2	31.8	34.9	35.6	34.1	33.7	32.8	35.3	35.6	34.9	33.5	33.7	31.2	23.9	31.6	30.4	29.3	27.2	33.1	32.9	31.6
19	32.9	33.3	35.3	32.9	30.2	31.2	31.8	31.6	31.4	31.0	31.2	33.3	35.1	35.1	35.1	34.5	35.1	29.9	34.5	33.5	31.4	29.3	37.2	37.7	29.9	33.0
20	29.9	31.5	32.3	31.9	31.5	31.5	31.5	31.3	31.3	30.3	31.1	33.6	35.2	35.7	35.0	31.7	33.2	33.2	32.8	32.7	32.3	31.5	31.3	30.7	32.3	32.3
21	32.3	31.7	30.3	30.5	30.3	29.9	30.5	30.9	31.1	31.3	31.7	33.2	34.2	34.8	34.8	34.2	33.2	33.0	32.8	32.7	32.1	31.7	31.5	31.7	31.9	32.1
22 Q	31.9	31.7	31.7	31.7	31.7	31.7	31.5	31.3	31.3	31.3	33.2	34.0	35.0	35.2	35.0	35.0	35.0	35.2	34.0	33.6	34.0	32.1	31.1	31.1	30.9	32.9
23	30.9	29.9	29.6	30.1	29.9	31.1	32.3	34.2	37.1	36.9	37.1	37.7	38.6	38.6	38.2	38.8	35.9	34.8	33.6	33.0	31.9	31.3	31.3	31.5	31.3	33.9
24	31.3	31.8	32.0	32.2	32.0	31.6	31.8	32.9	34.3	35.1	35.1	38.1	38.7	36.8	41.6	37.8	35.3	33.5	33.3	32.2	32.4	31.0	24.4	17.7	22.7	32.9
25	22.7	22.3	27.5	31.4	31.6	32.4	33.5	35.1	32.9	31.6	33.9	35.1	36.8	36.8	36.6	34.5	33.1	33.3	32.9	32.0	31.8	31.0	30.8	31.2	31.4	32.4
26	31.4	31.9	32.5	34.4	32.6	31.7	31.3	32.1	33.4	34.4	35.0	35.3	35.1	37.9	39.8	38.8	35.0	34.6	33.8	33.0	28.8	28.6	30.9	31.1	31.1	33.5
27	31.1	32.1	32.5	32.6	32.8	32.6	32.5	33.2	32.8	34.0	34.4	35.5	36.1	36.9	38.2	37.5	35.9	34.8	34.0	33.2	31.9	29.9	28.8	27.6	25.7	33.3
28 Q	25.7	28.3	32.4	32.4	31.6	31.6	32.5	31.4	31.2	31.0	31.2	32.5	33.7	35.2	35.2	34.9	34.3	33.5	32.5	31.4	32.2	32.4	31.4	30.2	30.4	32.1
29 Q	30.4	32.4	32.9	33.3	32.9	32.7	31.8	32.7	32.5	32.7	33.5	34.7	35.2	35.8	35.8	34.9	34.5	34.7	34.1	33.3	32.7	32.5	32.5	32.4	32.2	33.4
30	32.2	32.4	32.8	33.2	33.0	32.8	32.6	32.6	32.6	32.8	33.6	34.8	36.7	35.5	37.7	38.0	37.5	35.3	35.0	35.1	34.0	32.8	30.5	25.3	30.5	33.7
Mean.†	29.8	30.1	30.7	31.1	31.5	31.7	32.6	32.5	32.7	33.0	34.0	35.4	36.5	37.4	37.6	37.2	35.4	34.7	33.5	32.4	31.1	31.0	30.1	29.8	30.1	33.0



**TERRESTRIAL MAGNETIC FORCE : VERTICAL COMPONENT.**  
*Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.*

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**47. Lerwick. (V.)**

46,000  $\gamma$  ( $\cdot 46$  C.G.S. unit) +

**November, 1928.**

Hour. G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Day.	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	
1	663	656	655	657	660	661	662	663	663	663	666	667	666	668	669	669	668	667	667	667	671	673	672	671	668	665
2D	668	667	666	666	655	637	638	641	647	654	664	666	668	670	690	709	707	709	755	740	726	720	705	697	653	682
3D	653	616	641	645	648	652	654	657	662	665	675	680	688	696	716	707	714	734	738	729	706	704	703	697	690	683
4	690	685	680	681	680	681	677	680	683	686	692	692	692	696	697	694	696	699	701	700	698	699	697	695	695	691
5	695	691	691	690	689	689	689	688	689	690	696	696	695	694	695	695	695	695	695	695	695	695	693	692	691	693
6	691	689	689	691	691	689	689	688	688	688	691	692	694	696	697	699	698	698	699	702	705	711	688	685	685	694
7	685	691	691	692	692	693	693	693	693	693	695	697	697	697	697	697	698	699	699	706	715	713	706	697	702	697
8Q	702	703	698	701	702	702	702	701	701	701	703	704	708	705	707	707	708	704	703	704	703	704	705	707	708	704
9Q	708	707	708	708	708	708	708	707	707	708	714	714	714	714	714	714	714	714	713	713	713	713	713	713	713	711
10	713	714	713	713	712	712	710	708	706	707	713	713	714	718	737	782	810	786	773	770	761	759	759	758	756	737
11	756	752	752	750	749	748	748	748	746	748	751	751	750	749	748	749	749	748	748	748	751	748	738	682	688	745
12	688	692	705	712	712	708	712	712	712	713	720	721	722	722	723	726	725	723	723	723	727	723	722	721	720	717
13D	720	720	716	699	690	689	690	692	698	700	714	728	747	749	820	834	842	885	882	886	738	802	778	751	730	749
14	730	683	663	682	689	695	700	703	702	700	701	699	702	705	707	718	728	721	716	709	706	704	708	708	703	703
15D	703	625	658	682	687	685	688	690	691	689	701	700	701	701	704	723	757	758	747	764	754	648	580	634	648	693
16	648	672	694	661	671	686	686	686	686	690	701	706	700	702	714	716	710	712	712	716	718	721	719	708	678	698
17D	678	671	684	686	680	683	687	690	692	704	715	710	710	715	719	719	759	746	744	744	718	694	708	711	695	707
18	695	672	681	694	700	703	705	708	707	707	713	713	712	712	711	712	713	718	724	723	707	695	699	703	705	705
19	703	699	690	692	696	701	702	702	701	702	706	704	702	700	699	699	701	711	718	717	717	716	709	704	700	704
20	700	697	697	696	695	694	694	693	693	695	692	690	689	687	687	690	689	688	688	688	689	688	681	682	679	690
21	679	666	673	675	676	675	677	679	680	682	681	681	681	681	681	682	682	684	685	687	688	689	689	689	690	681
22Q	690	690	691	691	691	690	690	690	690	691	691	692	691	691	691	690	690	690	690	691	692	691	700	698	691	692
23	691	684	685	685	683	682	681	682	681	678	678	678	680	682	686	688	690	692	692	692	692	692	690	691	691	686
24	691	690	690	690	689	687	687	689	690	689	692	694	696	699	703	702	695	687	688	693	694	690	675	657	644	689
25	644	616	631	644	653	655	656	652	657	666	670	672	674	678	687	707	700	693	689	687	684	684	685	685	686	670
26	686	685	683	676	675	676	674	674	677	677	678	680	685	688	703	719	721	718	715	719	721	718	706	702	697	694
27	697	701	701	702	703	701	697	697	697	696	697	698	701	705	713	715	719	718	716	714	714	714	714	709	677	705
28Q	677	683	689	696	701	701	701	701	702	701	703	702	703	704	705	719	710	710	709	708	710	710	707	704	701	702
29Q	701	702	705	707	708	708	707	707	707	704	707	707	708	708	710	711	714	712	711	710	709	708	706	704	703	708
30	703	702	701	701	699	699	699	698	697	695	688	688	688	688	687	688	690	691	691	692	697	704	682	672	681	693
Mean.†	693	684	687	690	690	690	690	691	692	693	697	698	699	701	707	712	717	717	718	711	710	708	701	697	693	700

**DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS ;  
MAGNETIC CHARACTER FIGURES ; TEMPERATURE IN MAGNET HOUSE.**

**48. Lerwick.**

**November, 1928.**

Day.	Terrestrial Magnetic Elements.														Character Figure $\frac{\Sigma R^2}{100\gamma^2}$ §	Magnetic Character of Day (0-2).	Temperature in Magnet House. 200+	
	Horizontal Force.				Declination.				Vertical Force.									
	Maximum 14,000 $\gamma$ +	Minimum 14,000 $\gamma$ +	Range.		Maximum 14° +	Minimum 14° +	Range.		Maximum 46,000 $\gamma$ +	Minimum 46,000 $\gamma$ +	Range.							
	h. m.	$\gamma$	$\gamma$	h. m.	$\gamma$	h. m.		h. m.	$\gamma$	$\gamma$	h. m.	$\gamma$						
1	19 38	597	531	1 22	66	13 10	38° 4	23° 5	21 58	14° 9	21 9	675	651	2 16	24	89	0	80° 2
2D	17 48	727	408	23 57	319	4 15	49° 1	13° 6	17 59	35° 5	17 58	776	631	4 37	145	1456	1	79° 4
3D	17 51	939	396	0 4	543	17 50	49° 5	—11° 9	19 28	61° 4	17 38	750	604	0 40	146	3848	2	79° 0
4	18 55	675	497	0 58	178	5 51	44° 1	13° 6	18 58	30° 5	18 54	710	672	6 0	38	500	1	79° 0
5	23 28	585	546	11 44	39	13 49	37° 3	28° 2	22 39	9° 1	19 30	696	687	6 0	9	168	0	78° 6
6	22 32	588	489	21 58	99	21 51	44° 8	19° 7	21 29	25° 1	21 20	713	681	22 30	32	223	1	78° 8
7	20 30	593	543	21 54	50	10 40	38° 5	25° 5	20 28	13° 0	20 27	718	685	0 11	33	66	0	78° 7
8Q	23 18	584	566	1 6	18	11 45	35° 0	26° 1	2 25	8° 9	23 45	709	696	2 13	13	19	0	78° 0
9Q	18 52	592	563	11 51	29	19 40	35° 7	31° 4	9 40	4° 3	15 0	714	707	7 0	7	12	0	77° 4
10	15 26	642	543	22 59	99	15 0	59° 0	23° 7	23 59	35° 3	15 44	823	703	8 4	120	467	1	77° 2
11	22 34	646	399	23 10	247	22 50	69° 8	8° 6	23 27	61° 2	19 51	755	657	22 51	98	1387	1	77° 1
12	20 52	629	495	0 32	134	21 4	54° 9	14° 1	0 35	40° 8	20 51	734	685	0 0	49	506	1	77° 6
Between																		
13D	18 12 & 18 18	> 979	465	18 58	> 514	18 19	94° 6	6° 2	18 33	88° 4	17 8	939	579	19 17	360	5359	2	78° 8
14	19 9	573	523	1 15	50	12 8	41° 0	23° 4	2 38	17° 6	16 20	732	657	1 42	75	137	0	79° 2
15D	14 29	596	384	21 16	212	21 15	52° 5	5° 1	22 15	47° 4	19 22	777	584	1 26	243	1448	1	79° 2
16	23 52	> 608	< 556	23 21	> 52	13 2	40° 9	15° 8	23 49	25° 1	21 57	725	650	0 0	75	198	1	79° 4
17D	19 55	637	508	9 28	129	15 35	44° 5	8° 2	15 58	36° 3	15 55	781	661	0 30	120	551	1	79° 6
18	20 0	625	530	9 2	95	20 12	41° 4	21° 6	17 41	19° 8	17 31	731	660	0 51	71	211	1	79° 4
19	17 28	618	553	1 46	65	18 3	40° 9	12° 1	17 23	28° 8	17 22	731	685	2 14	46	215	1	79° 2
20	21 20	596	556	14 20	40	12 35	36° 9	28° 6	22 10	8° 3	0 4	702	676	22 0	26	35	0	79° 2
21	5 10	583	562	10 58	21	0 16	36° 3	29° 4	4 41	6° 9	24 0	690	664	1 10	26	20	0	79° 5
22Q	19 49	590	565	10 36	25	20 4	35° 7	29° 4	23 46	6° 3	21 0	703	690	16 0	13	15	0	79° 2
23	0 4	588	551	7 19	37	15 4	40° 2	29° 2	0 55	11° 0	20 0	692	678	10 0	14	38	0	79° 5
24	4 40	585	535	23 58	50	14 9	42° 8	11° 9	22 29	30° 9	13 45	705	648	24 0	57	232	1	79° 4
25	7 21	582	518	0 35	64	13 19	40° 7	16° 0	1 21	24° 7	15 0	714	603	1 12	111	274	1	78° 9
26	6 9	582	542	14 50	40	14 41	40° 7	25° 9	20 10	14° 8	16 30	726	670	3 23	56	87	0	78° 3
27	23 4	584	545	13 14	39	13 49	39° 8	22° 8	23 30	17° 0	17 0	721	672	23 40	49	91	0	78° 0
28Q	5 12	583	561	11 50	22	13 35	35° 6	25° 4	0 9	10° 2	16 0	711	677	0 0	34	35	0	77° 3
29Q	6 4	586	564	12 40	22	13 39	36° 4	30° 2	0 3	6° 2	16 10	715	701	0 0	14	14	0	77° 0
30	21 51	603	557	22 23	46	14 28	39° 6	23° 4	22 30	16° 2	21 42	707	666	22 20	41	86	0	78° 0
Mean.	—	630	518	—	111	—	44° 6	19° 4	—	25° 2	—	733	661	—	71	593	0° 57	78° 7
No. of Days used.	—	30	30	—	30	—	30	30	—	30	—	30	30	—	30	30	30	30



Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

## 49. Lerwick. (H.)

14,000  $\gamma$  ( $\cdot 14$  C.G.S. unit) +

December, 1928.

Hour. G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Day.	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$
1D	573	571	557	579	578	578	550	592	561	548	564	564	558	557	561	564	567	569	572	572	568	569	570	569	571	567
2	571	568	565	560	569	576	578	572	571	569	566	565	566	568	569	569	571	572	574	575	572	569	566	562	566	569
3	566	570	567	567	566	567	567	567	564	561	560	561	563	564	566	568	570	575	579	562	568	572	572	571	570	567
4Q	570	568	568	568	570	572	573	570	568	564	564	565	567	570	573	567	569	571	574	576	576	576	574	576	573	570
5D	573	569	568	568	569	572	572	572	572	571	566	563	562	566	573	578	583	592	587	586	580	575	567	564	490	569
6D	523	557	537	447	536	569	559	540	535	531	535	546	569	564	572	583	570	563	566	541	549	558	565	557	522	549
7	522	545	535	547	558	564	564	561	559	548	537	547	550	552	559	565	568	564	570	570	570	576	566	568	570	558
8	570	568	569	570	572	571	575	580	576	568	560	554	557	565	557	565	572	574	576	576	574	565	571	574	577	569
9	577	576	576	576	576	579	581	581	578	563	557	555	564	564	567	570	567	567	568	566	567	572	571	573	573	570
10	573	574	574	573	575	576	577	580	577	568	563	564	564	564	562	558	565	569	575	577	577	571	568	562	569	573
11	573	571	568	566	571	575	581	579	575	569	562	560	565	569	573	575	569	575	580	593	566	574	592	593	563	574
12D	563	559	557	563	564	569	584	583	575	554	546	540	550	552	570	571	577	564	567	572	578	584	578	570	552	566
13D	552	562	562	562	559	576	585	574	574	569	552	553	559	558	555	564	571	574	581	583	574	574	562	561	565	567
14	565	563	563	565	571	574	580	577	573	570	565	541	537	566	569	568	568	572	578	578	591	578	577	574	572	569
15	572	577	573	570	572	572	574	579	575	568	564	564	560	562	570	573	576	579	579	580	580	580	581	585	574	574
16	574	573	572	574	577	580	580	580	579	574	567	568	566	568	572	575	577	577	581	581	581	578	589	574	575	576
17Q	575	576	576	578	579	581	583	584	582	577	574	572	571	572	572	575	577	581	583	577	577	577	576	576	578	577
18	578	578	574	573	575	577	579	579	577	574	568	570	570	560	570	575	574	573	570	558	561	565	568	570	571	571
19Q	571	576	574	574	574	575	577	577	575	573	569	567	566	569	574	577	578	579	581	581	580	579	579	576	571	575
20Q	571	570	575	575	580	586	582	580	576	573	571	566	562	566	574	566	569	576	579	578	576	572	574	581	572	574
21	572	576	578	577	577	582	586	583	574	573	573	569	571	574	572	562	565	564	561	559	572	567	585	576	570	573
22	570	575	575	575	577	580	575	577	577	575	564	546	557	548	560	569	566	563	573	565	566	573	572	572	571	569
23Q	571	572	573	573	575	577	575	584	577	573	569	567	569	568	570	567	570	573	573	574	573	570	574	573	573	573
24	573	573	574	576	583	585	585	587	586	577	580	571	559	560	561	558	560	549	557	561	558	559	544	544	553	567
25	553	560	569	567	574	589	586	590	577	571	570	565	565	566	563	572	574	580	585	585	585	583	577	571	566	574
26	566	535	571	567	572	581	577	574	572	573	569	565	560	565	569	562	565	569	572	569	573	573	573	572	570	569
27	570	571	572	573	579	583	582	577	574	577	576	571	566	561	572	577	570	565	568	577	577	578	576	576	578	574
28	578	574	574	576	578	580	583	586	584	586	581	574	580	581	583	583	582	581	582	582	583	580	582	581	581	581
29	581	581	581	583	584	582	584	583	584	584	584	582	581	582	584	584	576	582	584	589	589	588	580	586	566	583
30	566	573	575	577	576	576	577	582	584	581	578	573	570	571	580	579	579	582	576	579	580	595	575	574	575	578
31	575	572	571	569	573	576	578	577	576	576	574	571	566	566	571	575	577	578	581	580	578	576	574	571	576	574
Mean.	567	569	568	567	572	577	577	578	574	569	565	563	564	565	569	571	572	573	575	574	574	574	573	570	567	571

## MAGNETIC DECLINATION (WEST).

Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

## 50. Lerwick. (D.)

 $14^{\circ}$  +

December, 1928.

Hour. G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean
Day.																										
1D	30.5	30.3	34.2	25.9	25.9	30.3	43.8	39.8	37.1	36.9	34.8	33.6	34.4	35.0	35.0	34.6	33.6	33.2	33.2	33.0	32.8	32.3	31.7	31.5	31.7	33.5
2	31.7	31.6	32.7	32.2	31.0	31.0	31.6	32.0	32.2	32.3	33.3	33.5	34.7	33.9	34.9	34.9	34.1	33.3	32.5	32.2	32.9	31.2	26.4	30.2	30.0	32.3
3	30.0	29.6	31.6	31.8	31.4	30.6	31.4	31.0	31.2	31.4	31.6	32.3	33.3	34.1	33.3	33.3	33.1	32.7	34.1	32.2	32.7	31.6	31.0	30.4	31.4	31.9
4Q	31.4	30.7	31.3	30.7	31.3	31.1	30.9	30.7	31.3	31.9	33.0	34.0	34.8	35.1	35.3	35.3	34.9	34.8	33.8	32.2	31.7	31.3	31.1	30.1	29.7	32.4
5D	29.7	28.5	29.2	29.8	30.4	30.8	31.2	31.2	31.6	32.0	32.9	33.1	33.5	34.7	35.0	34.1	33.3	35.8	36.6	33.1	35.0	32.9	29.4	18.2	4.0	31.2
6D	4.0	26.6	26.3	29.1	14.3	29.9	33.0	31.7	34.4	33.4	33.0	35.3	34.6	38.0	34.6	34.4	23.4	33.4	15.8	26.1	25.1	27.4	27.6	28.0	35.1	28.9
7	35.1	23.0	25.1	30.5	29.5	31.3	32.0	33.0	33.4	32.8	34.7	34.9	35.3	35.1	33.4	34.7	32.6	27.4	31.1	32.0	27.2	23.7	28.4	31.1	32.4	31.1
8	32.4	32.1	31.6	31.2	31.2	32.1	33.1	32.5	31.8	30.8	31.9	32.9	33.3	35.0	34.5	32.3	32.7	32.7	32.5	32.1	31.0	22.9	28.9	30.6	32.9	31.8
9	32.9	32.6	31.8	32.0	32.0	31.8	32.0	32.0	31.7	31.5	32.4	33.6	35.5	36.3	34.9	34.9	30.9	30.5	30.9	31.8	31.7	30.1	30.9	31.7	31.7	32.3
10	31.7	31.7	31.7	31.6	31.7	32.1	32.1	31.7	31.2	31.4	32.7	34.1	35.6	36.0	35.8	33.3	34.1	33.3	33.1	33.3	30.0	24.4	28.7	30.0	30.8	32.1
11	30.8	31.5	30.7	31.5	30.7	31.3	31.8	32.0	31.5	31.3	32.6	33.8	34.2	34.7	35.3	34.5	34.9	35.1	39.4	28.2	35.5	34.3	27.8	25.9	25.1	32.4
12D	25.1	27.3	21.5	23.6	26.5	26.9	32.9	38.3	36.9	33.5	33.9	35.4	35.4	37.1	35.6	36.0	36.2	38.3	34.4	35.0	33.5	29.0	30.8	28.6	24.2	32.1
13D	24.2	28.5	28.5	25.7	30.5	28.4	30.5	31.6	32.0	32.6	33.6	34.1	35.3	37.8	36.8	34.1	34.1	32.6	29.7	29.3	33.2	31.8	32.4	22.6	30.1	31.4
14	30.1	28.3	31.9	30.8	29.6	30.0	30.6	31.2	30.6	30.8	32.5	34.2	34.2	34.0	36.7	35.2	33.7	34.0	29.8	30.6	22.1	29.8	30.0	33.5	34.4	31.5
15	34.4	33.0	32.2	31.2	31.8	33.4	32.2	31.1	30.9	30.9	31.1	34.9	34.5	35.3	35.3	34.7	33.9	34.1	33.9	33.4	32.2	31.8	29.7	31.2	31.8	32.7
16	31.8	31.2	32.0	31.6	30.7	30.7	30.9	31.4	31.4	31.2	32.8	33.7	34.5	35.3	35.1	34.3	34.1	33.2	34.7	34.5	33.0	31.6	24.1	31.4	30.7	32.3
17Q	30.7	32.5	33.1	32.9	33.5	32.7	32.5	31.9	31.9	32.1	33.5	33.8	34.6	35.0	34.8	34.6	34.8	34.6	34.0	33.3	31.3	31.9	31.5	30.9	31.9	33.0
18	31.9	32.0	31.8	32.6	32.4	31.6	31.8	31.6	31.6	31.8	33.0	33.7	34.9	37.0	35.7	36.1	36.6	36.1	36.4	31.4	32.4	30.7	31.4	31.2	31.0	33.1
19Q	31.0	31.1	31.5	31.7	31.7	31.7	31.5	31.3	31.1	31.5	32.1	32.7	33.6	34.8	34.6	33.4	32.9	32.7	32.3	31.7	31.5	31.7	31.5	31.1	31.9	32.1
20Q	31.9	31.0	30.3	28.7	28.3	28.3	29.1	30.5	30.8	30.8	31.6	32.4	34.3	36.4	36.8	36.8	36.2	33.9	32.6	32.4	32.2	30.6	30.8	27.6	28.5	31.8
21	28.5	31.5	32.5	31.5	31.1	31.5	30.7	32.3	31.7	31.3	31.5	32.3	33.8	34.4	35.6	36.7	35.4	36.7	27.3	30.9	31.5	28.6	28.6	27.1	29.4	31.8
22	29.4	31.4	31.4	31.4	31.4	32.0	34.1	33.1	31.6	31.2	32.8	34.5	35.7	36.8	35.8	34.3	34.1	30.8	27.2	29.9	31.4	30.8	31.4	31.2	31.4	32.3
23Q	31.4	31.0	31.2	31.2	31.4	31.6	32.6	34.7	32.0	32.2	32.6	33.1	36.4	36.2	36.4	35.1	32.6	32.2	32.0	31.2	30.6	30.6	29.7	30.1	30.8	32.4
24	30.8	31.1	30.9	31.1	31.3	31.3	31.1	30.7	31.3	32.3	32.8	34.0	35.0	35.5	35.0	33.8	33.6	31.9	31.5	30.9	29.4	24.2	24.7	29.8	28.6	31.4
25	28.6	24.6	25.0	27.1	27.9	28.5	29.9	31.6	30.2	31.0	31.6	32.4	32.9	33.7	32.9	32.7	32.9	32.9	33.3	32.9	31.8	31.2	30.4	24.3	26.4	30.4
26	26.4	30.2	28.3	22.9	26.9	29.1	30.6	33.7	29.7	30.2	32.2	33.3	32.9	33.9	33.7	33.3	31.4	35.8	33.3	30.0	27.7	28.9	29.1	20.7	29.7	30.6
27	29.7	30.5	30.1	30.7	30.1	29.0	30.1	30.5	29.6	30.9	30.9	31.9	34.4	33.6	32.6	32.3	32.3	28.8	32.6	31.3	30.3	29.7	29.9	29.9	27.2	30.9
28	27.2	28.9	27.5	30.0	30.6	30.6	31.0	30.2	30.8	31.4	32.2	31.8	33.9	34.5	33.7	33.3	33.1	32.5	31.8	31.0	30.6	30.2	28.9	30.4	30.2	31.1
29	30.2	30.3	30.7	30.7	30.9	30.5	30.1	30.7	30.5	30.9	31.1	30.9	32.1	33.8	33.4	33.8	33.8	33.4	33.2	31.5	30.9	30.5	29.5	23.4	20.9	30.9
30	20.9	27.3	29.6	28.7	29.1	29.8	31.4	30.8	31.6	31.4	32.1	33.5	33.7	34.3	32.9	32.7	32.3	33.3	32.3	32.1	30.6	28.7	29.4	30.4	28.3	30.9
31	28.3	24.0	25.0	28.3	30.2	30.4	30.2	30.0	30.2	31.2	31.9	32.9	34.5	35.4	35.2	34.8	33.7	33.9	32.1	31.4	31.0	31.2	29.6	30.6	30.2	31.1
Mean.	29.1	29.8	30.0	30.0	29.9	30.7	31.8	32.1	31.7	31.8	32.5	33.4	34.4	35.8	34.9	34.3	33.4	33.3	32.2	31.6	31.1	29.9	29.5	29.1	29.1	31.7



51. Lerwick. (V.)

46,000  $\gamma$  ( $\cdot 46$  C.G.S. unit) +

December, 1928.

Hour. G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Day.	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$
1D	681	683	666	642	658	661	656	636	654	661	662	668	672	673	675	676	677	678	680	684	686	686	685	684	683	670
2	683	682	677	667	669	673	677	679	681	683	681	683	683	683	683	683	684	684	686	688	690	694	694	694	689	683
3	689	687	691	692	691	691	691	690	691	691	690	688	688	688	690	690	690	689	689	696	696	695	694	693	689	691
4Q	689	687	689	689	687	688	686	686	686	686	691	692	691	690	691	694	693	696	696	696	695	694	694	692	688	691
5D	688	687	690	686	686	684	684	682	682	681	683	681	679	678	676	677	676	676	676	682	683	692	694	699	564	677
6D	564	613	622	577	567	593	613	626	640	653	666	696	703	701	708	715	730	723	739	710	707	703	689	654	650	665
7	650	637	640	652	657	663	665	669	674	676	680	681	683	683	688	691	687	693	686	684	684	678	678	678	676	674
8	676	677	676	676	673	670	667	666	666	669	673	673	683	693	700	702	698	695	691	690	690	699	690	682	680	682
9	680	680	683	683	682	678	675	674	675	676	676	674	673	675	677	678	682	683	680	680	678	677	675	670	670	677
10	670	670	668	669	667	665	664	662	663	664	664	664	663	662	664	666	665	661	658	655	657	659	657	652	652	663
11	652	652	650	650	648	646	644	642	641	642	642	642	641	640	642	643	644	643	644	663	677	672	687	654	649	650
12D	649	641	633	633	635	628	604	609	619	629	645	655	664	660	656	655	656	662	661	656	661	661	657	648	639	645
13D	639	641	646	649	645	641	640	643	644	644	645	646	645	650	658	662	661	661	661	658	655	660	658	633	640	649
14	640	645	649	650	650	650	649	649	650	650	649	651	652	650	653	660	664	669	677	674	664	658	656	645	640	654
15	640	640	648	653	654	654	653	653	656	657	662	663	663	662	662	664	665	667	665	665	666	664	662	657	658	659
16	658	660	662	664	664	660	661	662	662	663	664	661	661	661	662	663	664	665	666	667	666	666	664	660	659	663
17Q	659	658	658	658	658	658	657	657	657	656	658	657	654	653	655	655	655	654	656	659	661	659	656	656	654	657
18	654	653	653	655	653	654	654	654	654	654	654	654	655	656	655	657	656	657	662	673	675	673	670	667	663	659
19Q	663	661	658	658	657	657	657	656	657	659	656	656	655	656	656	655	655	655	656	656	657	656	657	657	658	657
20Q	658	659	656	655	652	650	651	653	654	656	658	657	657	657	657	660	664	661	661	661	661	665	665	661	661	658
21	661	660	659	659	658	657	657	658	659	660	658	658	659	662	665	667	668	674	698	698	690	689	666	654	662	666
22	662	665	667	668	669	668	667	667	670	670	676	679	681	683	684	681	682	684	683	683	682	679	675	674	674	675
23Q	674	673	671	670	671	671	670	664	665	668	669	670	671	672	672	675	677	674	675	676	676	677	677	677	676	672
24	676	676	675	673	671	670	670	670	670	671	671	673	674	678	679	682	683	685	685	685	684	683	677	663	660	676
25	660	655	647	650	650	652	654	656	660	664	668	670	673	676	677	676	676	676	674	673	674	675	676	679	679	667
26	679	676	642	655	664	667	667	667	669	670	677	678	681	683	684	687	690	691	690	690	689	688	687	687	685	678
27	685	685	686	686	683	682	681	682	683	682	686	687	688	688	688	689	690	692	692	694	699	697	693	691	690	689
28	690	691	688	689	690	689	689	687	687	686	687	688	688	688	688	689	690	692	692	694	692	691	691	691	690	689
29	690	690	689	688	689	690	689	691	687	687	687	687	687	690	691	692	695	697	695	694	693	694	696	694	693	691
30	693	691	692	693	693	693	692	691	689	690	691	691	690	690	693	693	694	695	696	695	694	689	685	687	686	692
31	686	687	686	686	687	687	686	685	686	687	687	685	684	684	686	686	687	687	687	687	687	687	686	687	684	686
Mean.	666	667	665	664	664	664	664	663	666	667	670	671	672	673	675	676	677	678	679	680	679	679	677	669	666	671

DAILY EXTREMES OF TERRESTRIAL MAGNETIC ELEMENTS;  
MAGNETIC CHARACTER FIGURES; TEMPERATURE IN MAGNET HOUSE.

52. Lerwick.

December, 1928.

Day.	Terrestrial Magnetic Elements.												Character Figure $\frac{\Sigma R^2}{100\gamma^2}$	Magnetic Character of Day (0-2).	Temperature in Magnet House. 200+			
	Horizontal Force.			Declination.			Vertical Force.											
	Maximum 14,000 $\gamma$ +	Minimum 14,000 $\gamma$ +	Range.	Maximum 14° +	Minimum 14° +	Range.	Maximum 46,000 $\gamma$ +	Minimum 46,000 $\gamma$ +	Range.									
1D	h. m. 6 49	$\gamma$ 608	$\gamma$ 523	h. m. 9 13	$\gamma$ 85	h. m. 6 22	48-7	h. m. 24-1	h. m. 2 50	24-6	h. m. 20 40	$\gamma$ 689	$\gamma$ 629	h. m. 6 48	$\gamma$ 60	219	1	a. 78-8
2	5 44	590	550	2 29	40	2 22	37-2	25-0	21 50	12-2	21 50	697	663	3 0	34	55	0	79-4
3	17 40	581	554	19 6	27	18 31	35-2	28-7	0 27	6-5	19 7	701	686	0 29	15	17	0	79-3
4Q	23 3	584	562	15 30	22	16 39	36-3	29-2	23 59	7-1	18 0	697	685	0 30	12	15	0	78-9
5D	17 37	601	425	23 30	176	21 44	38-7	-20-2	23 37	58-9	22 4	698	538	23 28	160	1196	1	79-0
6D	14 42	618	396	3 1	222	2 55	43-2	6-0	18 4	37-2	17 38	760	540	3 12	220	1226	2	78-9
7	20 30	595	509	0 4	86	0 1	38-4	18-1	20 56	20-3	17 2	695	632	1 16	63	188	1	78-0
8	7 5	585	548	14 4	37	13 10	36-4	17-5	20 52	18-9	14 50	704	664	6 40	40	95	0	77-0
9	6 36	584	554	16 54	30	12 21	38-6	26-8	17 4	11-8	17 25	685	673	7 0	12	35	0	76-4
10	21 20	585	550	14 11	35	13 43	37-3	18-6	20 29	18-7	0 0	670	649	23 12	21	81	0	76-4
11	18 56	634	548	19 54	86	18 29	40-5	16-2	22 27	24-3	21 59	692	640	7 25	52	209	1	77-0
12D	21 29	600	533	10 41	67	16 47	42-2	12-8	2 26	29-4	20 43	668	599	5 44	69	249	1	77-4
13D	6 5	602	513	22 35	89	22 39	39-9	14-3	23 0	25-6	15 15	663	624	22 50	39	213	1	77-4
14	20 18	610	508	11 30	102	22 55	38-9	18-6	19 46	20-3	17 51	681	634	23 22	47	200	1	76-7
15	22 35	614	556	12 17	58	0 12	38-8	25-6	22 29	13-2	22 15	668	639	0 48	29	73	0	76-0
16	22 5	600	560	10 14	40	17 51	35-9	20-4	21 52	15-5	19 0	669	658	0 15	11	61	0	75-8
17Q	6 46	588	569	19 41	19	13 41	35-8	29-6	20 7	6-2	19 38	665	653	24 0	12	12	0	76-1
18	17 25	582	549	19 0	33	17 42	38-6	30-7	19 1	7-9	19 22	678	651	1 23	27	30	0	76-8
19Q	17 49	583	565	12 0	18	13 10	35-6	30-4	1 12	5-2	0 0	663	653	15 40	10	9	0	77-1
20Q	5 7 & 23 10	590	560	15 9	30	13 26	38-0	24-9	23 10	13-1	21 0	666	649	5 10	17	43	0	77-8
21	21 59	614	550	18 39	64	14 49	39-0	18-0	18 7	21-0	17 59	706	651	22 20	55	150	1	77-3
22	17 50	593	539	13 13	54	12 58	38-0	17-9	17 39	20-1	17 35	689	661	0 0	28	111	0	77-3
23Q	7 0	588	563	15 22	25	12 38	37-6	28-7	21 32	8-9	22 0	678	663	7 5	15	23	0	77-8
24	7 20	589	533	22 27	56	11 54	36-3	20-9	21 22	15-4	17 19	691	656	24 0	35	87	0	77-7
25	5 36	596	548	0 43	48	13 11	34-7	18-5	22 49	16-2	23 50	683	644	1 44	39	86	0	77-9
26	1 56	590	518	1 21	72	1 26	44-5	18-5	2 32	26-0	17 0	692	638	1 58	54	204	1	77-4
27	4 54	586	554	12 40	32	12 22	35-3	25-9	23 53	9-4	17 0	702	680	4 40	22	31	0	77-0
28	7 33	590	569	0 55	21	12 47	35-2	25-6	1 40	9-6	19 30	695	686	1 38	9	22	0	76-4
29	23 6	610	547	23 47	63	15 32	35-1	13-1	23 54	22-0	16 30	701	687	9 0	14	130	1	75-9
30	21 11	609	564	0 31	45	10 26	35-4	13-8	0 1	21-6	18 30	699	684	21 20	15	107	1	75-9
31	1 22	582	562	12 22	20	12 48	36-0	22-7	0 59	13-3	1 0	687	684	24 0	3	37	0	75-8
Mean	—	596	538	—	58	—	38-1	20-0	—	18-1	—	688	648	—	40	168	0-42	77-3
No. of Days used.	—	31	31	—	31	—	31	31	—	31	—	31	31	—	31	31	31	31



## DIURNAL INEQUALITIES OF THE TERRESTRIAL MAGNETIC ELEMENTS.—“ALL” DAYS.

Departures from mean of the day adjusted for non-cyclic change.

	Hour.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.
Month and Season.	G.M.T.																								
HORIZONTAL FORCE (all days except Jan. 15, 16; March 17, 18; May 4, 5; Oct. 2; Nov. 16).																									
53. Lerwick. 1928.																									
Jan. ...	γ	+0.7	-0.2	γ	+1.9	+4.9	+6.8	+5.8	+4.2	-0.7	-6.9	-11.7	-12.9	-8.5	-2.1	-0.3	+1.5	+1.7	+3.9	+3.2	+2.1	+1.5	+1.6	+1.3	+1.4
Feb. ...	γ	+1.1	+1.4	+1.3	+0.5	+4.1	+6.4	+7.2	+4.7	-1.6	-8.3	-13.7	-15.3	-12.7	-7.1	-1.2	+2.6	+4.5	+5.8	+5.2	+4.1	-3.8	+3.4	+2.1	+1.7
Mar. ...	γ	-0.8	-2.3	-2.6	+3.1	+6.3	+7.0	+5.2	-1.4	-11.5	-21.5	-27.0	-25.2	-16.9	-7.2	+4.8	+9.5	+11.3	+15.6	+14.9	+12.6	+11.2	+7.0	+5.4	+2.3
Apr. ...	γ	-0.8	+1.8	+3.1	+7.1	+7.7	+5.7	+2.1	-8.9	-23.7	-34.0	-37.9	-33.4	-23.0	-7.9	-0.1	+10.6	+20.2	+24.5	+26.2	+23.4	+17.8	+10.9	+5.9	+2.9
May ...	γ	-18.1	-18.8	-11.7	-3.4	-1.9	-12.8	-19.3	-25.8	-37.5	-41.9	-31.7	-17.7	-1.2	+9.6	+27.7	+43.3	+58.0	+57.5	+46.2	+31.1	+16.1	-5.3	-25.2	-17.4
June ...	γ	-7.5	-13.2	-8.1	-1.3	-2.8	-7.4	-11.0	-19.7	-31.2	-34.1	-35.5	-29.4	-13.9	+0.6	+18.0	+24.4	+31.5	+36.9	+38.8	+34.9	+26.6	+11.1	+1.0	-8.2
July ...	γ	-17.2	-9.3	-15.7	-16.5	-15.3	-20.2	-23.6	-28.3	-36.3	-39.0	-30.5	-23.0	-10.0	+7.6	+16.7	+30.6	+37.3	+47.3	+44.6	+38.5	+27.4	+18.0	+10.3	+6.6
Aug. ...	γ	-9.0	-20.1	-14.3	-2.1	-4.7	-7.9	-10.3	-14.7	-24.2	-29.6	-30.7	-24.1	-11.9	+0.5	+12.8	+22.6	+31.6	+35.6	+33.2	+30.1	+22.9	+14.0	+4.4	-4.1
Sept. ...	γ	-8.0	-15.9	-3.9	+3.2	+1.5	-0.6	-2.5	-11.3	-21.9	-30.9	-31.9	+23.0	-12.9	+5.2	+17.1	+29.7	+37.8	+25.2	+20.3	+18.8	+16.0	+0.6	-7.9	-4.2
Oct. ...	γ	-13.4	-17.9	-8.3	+1.4	+7.4	+7.2	+3.5	-2.3	-12.5	-19.6	-20.0	-17.7	-10.5	+2.3	+8.4	+12.8	+18.2	+23.3	+16.5	+13.1	+3.6	+8.9	-0.1	-4.4
Nov. ...	γ	-7.9	-2.3	-0.6	+2.3	+3.9	+3.7	+4.2	+1.1	-5.0	-10.6	-11.4	-9.4	-5.5	-0.2	+4.3	+5.9	+12.7	+19.0	+4.3	+3.3	-0.3	-2.6	-2.3	-6.5
Dec. ...	γ	-2.0	-2.3	-4.1	+1.4	+5.9	+6.3	+6.8	+3.1	-1.9	-5.4	-8.3	-7.3	-5.8	-1.8	+0.2	+0.9	+2.0	+4.4	+3.4	+3.1	+3.5	+2.3	-1.0	-3.5
Year ...	γ	-6.9	-8.3	-5.3	-0.2	+1.4	-0.5	-2.7	-8.3	-17.3	-23.5	-24.2	-19.9	-11.1	0.0	+9.0	+16.2	+22.2	+24.9	+21.3	+17.9	+12.5	+5.8	-0.5	-2.8
Winter ...	γ	-2.0	-0.8	-0.7	+1.5	+4.7	+5.8	+6.0	+3.3	-2.3	-7.8	-11.3	-11.3	-8.1	-2.8	+0.7	+2.7	+5.2	+8.3	+4.0	+3.2	+2.1	+1.2	0.0	-1.7
Equinox ...	γ	-5.7	-8.5	-2.9	+3.7	+5.7	+4.8	+2.1	-5.9	-17.4	-26.5	-29.2	-24.8	-15.8	-1.9	+7.6	+15.7	+21.8	+22.1	+19.5	+17.0	+12.1	+6.9	+0.8	-0.9
Summer ...	γ	-12.9	-15.3	-12.5	-5.8	-6.2	-12.1	-16.1	-22.1	-32.3	-36.1	-32.1	-23.5	-9.2	+4.6	+18.8	+30.2	+39.6	+44.3	+40.6	+33.7	+23.3	+9.5	-2.4	-5.8
DECLINATION (all days except Jan. 15, 16; March 17, 18; May 4, 5; Oct. 2; Nov. 16).																									
54. Lerwick. 1928.																									
Jan. ...	γ	-1.34	-0.74	-0.64	-0.70	-1.04	-1.40	-1.04	-1.31	-1.23	-0.10	+1.33	+2.95	+8.93	+3.81	+2.73	+2.14	+1.22	+0.13	-0.12	-0.70	-1.99	-2.22	-1.97	-1.70
Feb. ...	γ	-1.97	-1.58	-1.35	-1.31	-1.55	-1.78	-1.55	-1.67	-1.62	-0.62	+1.42	+3.26	+4.76	+5.10	+4.36	+3.15	+1.90	+1.49	+0.69	-0.22	-1.86	-3.07	-3.14	-2.84
Mar. ...	γ	-1.98	-1.85	-1.52	-1.77	-2.56	-2.79	-3.24	-3.59	-3.41	-1.41	+1.35	+4.75	+6.58	+6.58	+5.30	+2.82	+1.69	+0.75	+0.19	+0.12	-0.95	-1.68	-1.79	-1.59
Apr. ...	γ	-2.67	-2.21	-1.59	-2.30	-2.99	-3.53	-4.92	-5.27	-4.20	-0.81	+2.58	+5.72	+7.45	+7.10	+5.55	+3.70	+2.09	+0.99	+0.90	+0.49	-0.27	-1.38	-1.77	-2.66
May ...	γ	-1.99	-2.26	-2.32	-3.47	-3.73	-4.13	-4.65	-5.04	-3.34	-0.77	+1.87	+4.20	+5.31	+5.26	+4.73	+4.65	+3.47	+1.92	+1.41	+1.50	+1.21	-0.91	-1.22	-1.70
June ...	γ	-1.72	-1.55	-2.72	-3.88	-4.79	-5.52	-5.86	-5.67	-3.83	-1.99	+1.01	+4.66	+6.17	+6.35	+5.55	+4.54	+3.52	+2.85	+1.90	+1.34	+0.77	+0.26	-0.77	-0.62
July ...	γ	-0.31	-2.58	-3.86	-3.41	-5.49	-5.57	-6.86	-6.88	-6.10	-2.98	+0.58	+4.66	+6.52	+6.92	+6.29	+4.69	+3.37	+2.72	+2.55	+2.28	+1.90	+1.25	+0.46	-0.15
Aug. ...	γ	-2.95	-2.77	-4.08	-4.30	-4.17	-4.81	-4.95	-4.85	-2.29	+0.04	+2.89	+5.97	+7.82	+7.23	+5.85	+3.62	+2.04	+1.20	+0.83	+0.93	+0.48	-0.57	-1.40	-1.76
Sept. ...	γ	-2.73	-2.52	-3.83	-3.87	-3.77	-4.04	-3.98	-3.49	-1.65	+1.08	+3.97	+7.10	+8.46	+7.70	+6.24	+3.90	+1.79	+0.49	+0.44	-0.50	-1.78	-2.01	-4.07	-2.93
Oct. ...	γ	-3.02	-2.77	-1.57	-1.77	-1.88	-2.13	-1.81	-2.15	-1.87	+0.48	+3.03	+4.74	+5.99	+5.66	+4.85	+2.98	+2.17	+1.82	+0.27	-1.84	-2.14	-2.65	-2.96	-3.43
Nov. ...	γ	-2.77	-2.17	-1.74	-1.41	-1.20	-0.31	-0.47	-0.28	+0.06	+1.03	+2.36	+3.49	+4.42	+4.58	+4.17	+2.31	+1.66	+0.46	-0.72	-1.97	-2.12	-2.99	-3.33	-3.06
Dec. ...	γ	-1.94	-1.70	-1.78	-1.89	-1.09	+0.09	+0.35	0.00	+0.03	+0.80	+1.70	+2.63	+3.51	+3.12	+2.59	+1.66	+1.61	+0.43	-0.10	-0.68	-1.88	-2.21	-2.62	-2.63
Year ...	γ	-2.12	-2.06	-2.25	-2.51	-2.85	-2.99	-3.25	-3.35	-2.45	-0.44	+2.01	+4.51	+5.91	+5.78	+4.85	+3.35	+2.21	+1.27	+0.69	+0.06	-0.72	-1.51	-2.05	-2.09
Winter ...	γ	-2.01	-1.55	-1.38	-1.33	-1.22	-0.85	-0.68	-0.81	-0.69	+0.28	+1.70	+3.08	+4.15	+4.15	+3.46	+2.31	+1.60	+0.63	-0.06	-0.89	-1.96	-2.62	-2.77	-2.56
Equinox ...	γ	-2.60	-2.34	-2.13	-2.43	-2.80	-3.12	-3.49	-3.63	-2.78	-0.17	+2.73	+5.58	+7.12	+6.76	+5.49	+3.35	+1.93	+1.01	+0.45	-0.43	-1.29	-1.93	-2.65	-2.65
Summer ...	γ	-1.74	-2.29	-3.25	-3.77	-4.55	-5.01	-5.58	-5.61	-3.89	-1.43	+1.59	+4.87	+6.45	+6.44	+5.61	+4.37	+3.10	+2.17	+1.67	+1.51	+1.09	+0.01	-0.73	-1.06
VERTICAL FORCE (all days except Jan. 15, 16; March 17, 18; May 4, 5; Oct. 2; Nov. 16).																									
55. Lerwick. 1928.																									
Jan. ...	γ	-1.0	-1.3	-1.7	-2.1	-4.3	-4.8	-4.6	-4.3	-3.8	-2.6	-2.0	-1.1	+0.3	+2.1	+2.8	+2.8	+3.3	+4.5	+4.9	+4.2	+3.7	+3.0	+1.5	+0.5
Feb. ...	γ	-0.9	-2.3	-3.0	-3.3	-4.3	-4.0	-3.7	-3.4	-3.3	-2.3	-2.0	-1.5	-0.5	+0.9	+1.9	+3.0	+3.7	+3.9	+4.8	+5.5	+4.8	+3.6	+1.8	+0.8
Mar. ...	γ	-15.2	-16.9	-15.8	-12.8	-10.1	-7.4	-5.1	-3.5	-3.1	-1.0	-0.8	-1.6	-1.0	+2.6	+10.5	+17.5	+19.0	+20.1	+17.1	+12.1	+8.4	+2.3	+4.5	+0.6
Apr. ...	γ	-11.9	-11.2	-8.7	-6.6	-4.5	-3.2	-1.9	-1.2	-0.2	+2.3	+1.8	+0.7	+0.2	+0.7	+2.0	+4.1	+6.7	+8.5	+9.0	+8.2	+8.1	+4.0	-0.1	-6.9
May ...	γ	-13.7	-14.7	-14.0	-11.8	-9.9	-8.6	-6.8	-5.3	-2.6	-1.1	+0.5	+2.1	+3.1	+6.4	+9.3	+13.2	+15.6	+15.8	+14.2	+11.6	+8.9	+1.8	-4.5	-9.5
June ...	γ	-8.3	-9.4	-10.0	-8.2	-6.7	-4.9	-3.9	-2.8	+1.2	+0.8	+1.1	+1.6	+4.1	+6.4	+6.8	+8.3	+7.8	+7.1	+7.1	+6.1	+3.0	+0.4	-1.7	-5.8
July ...	γ	-19.7	-16.4	-12.0	-2.2	-0.7	+2.1	+4.7	+10.8	+11.8	-1.5	-3.8	-4.3	-2.8	+1.0	+6.1	+10.0	+11.1	+10.5	+8.4	+4.7	+2.7	-1.7	-5.5	-13.3
Aug. ...	γ	-17.9	-19.5	-18.9	-14.6	-10.7	-9.6	-6.9	-3.9	-1.1	+0.2	+0.6	+0.3	+1.6	+6.4	+8.9	+12.9	+15.9	+15.3	+14.7	+15.1	+11.4	+6.4	+0.4	-6.7
Sept. ...	γ	-14.9	-17.7	-17.0	-14.2	-11.6	-7.9	-5.0	-3.7	-1.7	-1.5	-1.2	-0.9	+1.3	+6.7	+13.1	+18.9	+21.1	+19.8	+15.4	+12.2	+8.7	-1.7	-6.5	-11.7
Oct. ...	γ	-12.4	-7.4	-12.4	-11.7	-8.4	-8.3	-6.9	-5.5	-3.8	-0.3	+0.2	+2.2	+3.7	+5.5	+7.7	+11.1	+13.3	+11.7	+12.5	+9.2	+5.4	+3.0	-0.6	-7.6
Nov. ...	γ	-15.4	-12.7	-10.0	-9.7	-10.0	-9.5	-8.9	-8.0	-6.8	-2.9	-2.1	-0.4	+1.0	+7.4	+12.6	+17.1	+17.6	+18.4	+11.6	+10.9	+8.1	+1.2	-2.8	-6.7
Dec. ...	γ</																								



## DIURNAL INEQUALITIES OF THE TERRESTRIAL MAGNETIC ELEMENTS.—INTERNATIONAL QUIET DAYS.

Departures from mean of the day adjusted for non-cyclic change.

Month and Season.	Hour. 1.	G.M.T. 2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.
<b>56. Lerwick.</b>																								
<b>HORIZONTAL FORCE (QUIET DAYS).</b>																								
<b>1928.</b>																								
Jan. ...	0.1	0.4	0.3	0.7	2.2	1.5	1.7	0.0	3.1	5.9	7.6	8.1	5.7	0.4	1.7	2.3	3.2	3.9	5.1	4.0	3.5	1.3	0.4	0.1
Feb. ...	3.2	2.5	2.0	2.3	3.9	4.6	4.3	2.9	0.0	6.3	11.0	12.1	10.3	6.8	2.5	0.1	1.0	0.9	1.4	3.1	4.1	4.2	3.1	5.3
Mar. ...	6.8	5.3	4.9	6.4	5.9	7.1	5.0	0.4	7.9	16.7	20.4	19.1	13.7	9.4	3.8	0.1	2.9	4.6	5.9	7.1	8.0	7.3	7.3	7.0
April ...	10.1	9.8	7.6	6.9	6.0	5.4	2.3	6.2	19.0	31.5	38.0	35.8	24.9	11.6	0.8	5.1	11.6	16.2	20.3	18.6	14.2	11.5	11.0	11.2
May ...	11.2	8.7	8.3	7.9	7.0	3.8	3.8	14.1	27.3	40.3	43.8	39.4	29.6	20.7	4.3	6.5	19.6	28.6	30.0	25.5	19.9	18.3	14.8	13.2
June ...	3.8	1.1	0.3	1.0	1.7	1.1	5.8	15.5	26.3	32.0	36.3	31.7	18.8	1.5	4.7	10.6	18.3	24.9	28.2	24.7	19.9	15.8	9.3	5.5
July ...	0.6	0.3	0.9	1.3	3.9	1.4	6.2	15.8	25.2	33.5	36.5	36.9	22.7	11.8	3.6	11.4	21.4	29.3	29.1	27.7	24.5	18.2	11.4	6.0
Aug. ...	7.0	6.0	4.9	4.8	2.2	1.0	7.4	16.0	25.7	31.0	30.4	29.8	18.4	12.2	3.3	11.2	14.6	19.6	22.0	21.2	20.9	16.0	11.2	7.6
Sept. ...	8.3	7.7	4.4	7.3	9.6	7.7	3.8	2.7	13.2	23.5	30.6	28.5	23.1	13.1	4.7	1.2	4.7	8.2	11.1	14.4	16.8	14.0	13.5	9.6
Oct. ...	5.1	3.4	6.9	8.9	10.4	8.7	2.2	0.6	8.3	17.8	24.3	23.5	19.2	11.7	4.2	0.2	4.1	8.8	9.3	10.3	11.0	8.3	7.0	3.8
Nov. ...	1.1	0.9	1.9	3.2	4.8	5.0	4.3	2.3	2.1	6.9	9.1	7.8	6.4	4.4	2.3	0.9	1.7	3.3	3.9	3.0	0.6	1.4	1.3	1.3
Dec. ...	0.6	0.1	0.4	2.3	4.9	4.6	5.5	2.0	1.6	4.3	6.4	6.9	4.9	1.4	3.7	1.6	1.8	3.7	2.8	1.9	0.9	0.0	1.9	1.4
Year ...	4.7	3.7	3.3	4.4	5.2	4.0	0.5	5.3	13.3	20.8	24.5	23.3	16.5	8.7	1.1	3.6	8.7	12.7	14.1	13.5	12.0	9.7	7.7	5.8
Winter ...	0.9	0.8	1.0	2.1	3.9	3.9	3.9	1.8	1.7	5.9	8.5	8.7	6.8	3.3	1.7	0.0	1.9	3.0	3.3	3.0	2.3	1.7	1.7	1.3
Equinox ...	7.6	6.5	5.9	7.4	8.0	7.2	3.3	2.2	12.1	22.4	28.3	26.7	20.3	11.4	3.4	1.0	5.8	9.4	11.7	12.6	12.4	10.3	9.7	7.9
Summer ...	5.7	3.8	3.0	3.7	3.7	0.8	5.8	15.4	26.1	34.2	36.8	34.5	22.4	11.6	1.8	9.9	18.5	25.6	27.3	24.7	21.3	17.1	11.6	8.1

## DECLINATION (QUIET DAYS).

<b>57. Lerwick.</b>																								
<b>1928.</b>																								
Jan. ...	0.96	0.97	0.79	0.85	1.06	1.10	1.13	1.82	1.04	0.44	1.09	2.25	2.68	2.31	1.52	1.19	0.92	0.66	0.29	0.10	0.25	1.02	1.03	1.05
Feb. ...	1.47	1.74	1.81	2.15	1.83	1.88	2.01	2.44	2.50	1.40	0.58	2.51	3.98	4.42	3.66	3.22	2.23	2.34	1.51	0.39	0.49	1.34	1.55	2.23
Mar. ...	1.69	1.61	1.15	1.54	1.89	2.16	2.62	3.26	3.54	1.66	0.84	3.75	4.78	4.34	3.20	1.76	1.08	0.82	0.59	0.26	0.01	0.03	0.03	0.31
April ...	0.39	0.83	1.14	1.87	2.47	3.32	4.58	5.06	4.05	1.52	0.96	3.57	4.95	4.59	3.57	2.47	1.79	1.42	1.30	0.62	0.32	0.14	0.06	0.13
May ...	0.45	0.77	1.54	2.60	4.04	5.25	5.73	5.59	3.82	0.78	1.96	4.25	5.41	5.11	3.94	2.42	1.62	1.41	1.61	1.43	1.00	0.74	0.24	0.09
June ...	0.20	1.08	2.55	3.34	4.58	5.64	6.36	6.11	3.76	1.70	1.15	4.34	5.77	5.16	3.88	3.05	2.48	2.20	1.94	1.64	0.41	1.12	0.98	1.20
July ...	1.10	2.01	1.64	3.99	4.92	6.54	7.10	6.45	4.70	1.71	1.82	5.46	6.80	6.71	5.62	3.89	2.24	1.18	1.02	1.37	1.18	1.53	1.46	0.12
Aug. ...	1.30	1.67	2.67	3.87	5.03	5.70	5.85	4.92	2.54	0.12	2.87	5.88	7.37	6.62	5.08	3.20	0.89	0.20	0.43	1.07	0.95	0.57	0.00	1.06
Sept. ...	1.34	2.09	1.44	2.37	2.58	3.13	3.88	4.27	2.83	0.96	2.14	5.05	6.06	5.76	4.67	2.83	1.44	0.87	0.54	0.33	0.78	0.79	1.56	1.01
Oct. ...	0.53	0.72	0.56	1.78	2.09	2.53	2.72	3.32	2.87	0.15	2.18	4.07	4.84	4.87	3.63	2.36	1.56	0.97	0.33	0.22	0.40	2.18	3.29	1.89
Nov. ...	1.02	0.48	0.81	0.68	0.49	0.55	0.71	0.85	0.92	0.07	0.81	1.57	2.17	2.15	1.72	1.57	1.41	0.63	0.23	0.12	0.75	1.34	1.78	1.98
Dec. ...	1.43	1.17	1.58	1.36	1.48	1.21	0.69	1.05	0.74	0.14	0.82	2.39	3.17	3.29	2.78	2.00	1.48	0.77	0.01	0.65	0.86	1.14	2.06	1.43
Year ...	0.99	1.26	1.47	2.20	2.71	3.25	3.61	3.72	2.78	0.86	1.43	3.76	4.83	4.61	3.61	2.50	1.59	1.09	0.82	0.52	0.03	0.33	0.76	0.84
Winter ...	1.22	1.09	1.25	1.26	1.21	1.19	1.13	1.41	1.30	0.44	0.83	2.18	3.00	3.04	2.42	1.99	1.51	1.10	0.51	0.01	0.59	1.21	1.61	1.66
Equinox ...	0.99	1.31	1.07	1.89	2.26	2.79	3.45	3.88	3.32	1.07	1.53	4.11	5.16	4.89	3.77	2.35	1.47	1.02	0.69	0.19	0.21	0.77	1.23	0.83
Summer ...	0.76	1.38	2.10	3.45	4.64	5.78	6.26	5.77	3.71	1.08	1.95	4.98	6.34	5.90	4.63	3.14	1.81	1.15	1.25	1.38	0.89	0.99	0.55	0.02

## VERTICAL FORCE (QUIET DAYS).

58. Lerwick.															1928.														
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ				
Jan. ...	-0.7	-0.9	-0.7	-1.4	-1.4	-1.2	-1.4	-1.1	-1.1	-1.3	-0.9	-0.4	-0.0	+0.8	+0.6	+0.7	+0.7	+0.9	+1.5	+1.6	+1.6	+1.8	+1.4	+0.9					
Feb. ...	+0.1	-0.7	-0.9	-0.8	-1.0	-1.9	-2.5	-3.1	-3.4	-3.6	-3.9	-4.1	-2.8	-0.0	+1.3	+2.3	+2.9	+3.6	+4.4	+4.9	+3.7	+3.3	+1.6	+0.6					
Mar. ...	-1.4	-0.6	+0.1	-0.1	-0.1	0.0	0.0	+0.5	+0.9	+0.3	-0.6	-2.0	-2.1	-1.5	-0.2	+1.2	-2.5	+1.9	+1.1	+0.4	-0.2	-0.1	+0.1	-0.1					
April ...	-0.6	-0.3	+0.3	+0.8	+1.0	+1.7	+1.7	+1.6	+2.6	+2.7	+1.5	+0.6	-0.2	-1.1	-1.5	-1.6	-2.0	-1.5	-1.1	-1.2	-0.8	-0.9	-0.9	-1.2					
May ...	-2.6	-1.7	-1.2	-0.1	+0.5	+0.6	+1.1	+1.4	+1.5	+1.1	+0.5	-0.3	-0.2	-0.3	+0.4	+1.1	+1.7	+2.2	+1.5	+0.4	-0.7	-1.7	-2.3	-2.9					
June ...	-2.7	-2.3	-2.4	-2.2	-1.9	-1.9	-1.6	-1.8	+1.3	+0.7	+0.4	0.0	-0.1	+0.3	+2.2	+4.0	+2.9	+1.7	+1.4	+1.4	+1.3	+0.5	+0.4	+1.6					
July ...	-1.0	-0.7	-1.1	-1.9	-2.0	-1.6	-1.4	-0.5	+2.7	+1.5	+1.0	+0.4	+0.2	+0.9	+0.9	+1.3	+1.0	+1.0	+0.8	+0.9	+0.5	+0.1	-1.0	-2.2					
Aug. ...	-2.1	-0.3	+0.4	+1.2	+2.2	+2.8	+2.7	+2.3	-1.5	-3.1	-4.9	-5.1	-4.7	-2.1	0.0	+2.4	+3.8	+3.4	+2.9	+1.5	+0.9	+1.1	-0.9	-2.9					
Sept. ...	-3.6	-2.1	-1.0	-1.3	-0.6	+0.3	+0.6	+0.7	+2.0	+1.7	+0.8	-0.9	-1.8	-1.9	-0.8	+1.7	+2.2	+2.5	+1.6	+1.7	+1.0	-0.1	-1.8	-1.5					
Oct. ...	-0.3	-2.7	-3.6	-4.2	-3.6	-4.4	-3.6	-3.0	-2.2	+1.0	+0.6	+0.6	+1.6	+2.7	+3.5	+4.1	+3.9	+3.1	+2.7	+2.1	+1.3	+1.1	+0.3	-0.9					
Nov. ...	-2.9	-2.0	+0.1	+1.2	+0.7	+0.2	-0.6	-0.7	-1.4	+0.9	+0.8	+1.5	+0.7	+1.4	+1.9	+2.6	+1.1	0.0	-0.4	-0.5	+1.0	-0.3	-1.6	-3.9					
Dec. ...	+0.1	-1.0	-1.3	-2.3	-2.5	-3.0	-4.0	-3.3	-2.1	-0.6	-0.6	-1.3	-1.3	-0.6	+1.1	+2.1	+1.3	+2.2	+3.0	+3.5	+3.7	+3.4	+2.2	+1.1					
Year ...	-1.5	-1.3	-0.9	-0.9	-0.7	-0.7	-0.7	-0.6	-0.1	+0.1	-0.4	-0.9	-0.9	-0.1	+0.8	+1.8	+1.8	+1.7	+1.6	+1.4	+1.1	+0.7	-0.2	-1.2					
Winter ...	-0.8	-1.1	-0.7	-0.8	-1.0	-1.5	-2.1	-2.0	-2.0	-1.1	-1.1	-1.1	-0.8	+0.4	+1.2	+1.9	+1.5	+1.7	+2.1	+2.4	+2.5	+2.1	+0.9	-0.3					
Equinox ...	-1.5	-1.4	-1.1	-1.2	-0.8	-0.6	-0.3	0.0	+0.8	+1.5	+0.6	-0.4	-0.6	-0.4	+0.2	+1.4	+1.6	+1.5	+1.1	+0.8	+0.3	0.0	-0.6	-0.9					
Summer ...	-2.1	-1.3	-1.1	-0.7	-0.3	0.0	+0.2	+0.4	+1.0	+0.1	-0.7	-1.3	-1.2	-0.3	+0.9	+2.2	+2.3	+2.1	+1.7	+1.1	+0.5	0.0	-0.9	-2.4					



## DIURNAL INEQUALITIES OF THE TERRESTRIAL MAGNETIC ELEMENTS.—SELECTED DISTURBED DAYS.

Departures from mean of the day adjusted for non-cyclic change.

Month and Season.	Hour. 1.	G.M.T. 2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.
<b>HORIZONTAL FORCE (DISTURBED DAYS).</b>																								
<b>59. Lerwick.</b>																								<b>1928.</b>
Jan. ...	+ 4.2	+ 3.2	+ 2.6	+ 1.8	+ 6.7	+ 9.9	+ 9.1	+ 11.1	+ 6.6	- 3.8	- 17.4	- 22.6	- 14.9	- 4.1	- 0.9	+ 2.3	+ 1.6	+ 7.6	+ 2.8	+ 1.4	- 0.5	- 4.5	+ 1.9	- 0.5
Feb. ...	+ 3.5	+ 3.3	+ 0.3	- 3.9	+ 3.7	+ 9.1	+ 9.2	+ 7.6	+ 0.8	- 6.4	- 9.8	- 18.7	- 17.9	- 10.3	- 0.1	+ 3.1	+ 5.9	+ 7.1	+ 1.4	+ 2.8	+ 4.4	+ 0.4	+ 3.6	+ 0.9
Mar. ...	- 34.3	- 37.6	- 36.5	- 6.3	+ 7.8	+ 6.1	+ 2.3	- 6.2	- 15.3	- 23.9	- 33.2	- 30.3	- 11.9	+ 8.4	+ 41.7	+ 44.9	+ 35.8	+ 45.1	+ 33.1	+ 26.6	+ 17.1	+ 1.3	- 10.2	- 24.3
April ...	- 2.1	+ 6.2	- 3.9	+ 13.8	+ 16.7	+ 4.6	+ 4.7	- 5.0	- 25.9	- 35.5	- 38.6	- 34.5	- 20.8	- 5.7	+ 2.4	+ 12.3	+ 23.4	+ 27.3	+ 26.6	+ 21.7	+ 14.0	- 2.3	- 0.3	+ 1.0
May ...	- 106.4	- 85.9	- 78.6	- 47.9	- 30.2	- 66.8	- 58.5	- 54.0	- 66.9	- 62.2	- 8.3	+ 47.7	+ 95.8	+ 112.1	+ 131.4	+ 162.5	+ 184.2	+ 155.4	+ 90.5	+ 44.0	+ 6.5	- 80.8	- 166.7	- 116.9
June ...	- 24.5	- 14.5	- 15.3	- 9.7	- 23.7	- 17.5	- 18.6	- 36.8	- 57.0	- 45.6	- 40.4	- 25.2	+ 0.7	+ 22.1	+ 66.9	+ 56.9	+ 50.3	+ 48.5	+ 43.2	+ 38.4	+ 30.2	+ 7.6	+ 1.8	- 37.8
July ...	- 19.3	- 30.5	- 33.7	- 33.8	- 32.2	- 31.2	- 29.2	- 34.0	- 33.9	- 36.3	- 37.7	- 21.9	+ 0.5	+ 35.7	+ 37.1	+ 50.6	+ 52.2	+ 69.4	+ 56.0	+ 38.4	+ 20.5	+ 3.5	+ 3.7	+ 6.1
Aug. ...	- 67.0	- 136.7	- 98.8	- 24.9	- 44.0	- 46.3	- 26.0	- 9.7	- 20.8	- 15.9	- 14.4	- 5.3	+ 14.8	+ 33.5	+ 49.0	+ 67.1	+ 79.4	+ 74.7	+ 56.8	+ 72.3	+ 55.0	+ 30.5	+ 13.8	- 36.3
Sept. ...	- 43.5	- 87.3	- 43.3	- 20.0	- 32.3	- 38.1	- 26.7	- 31.4	- 48.7	- 55.9	- 43.3	- 16.6	+ 0.5	+ 51.9	+ 95.5	+ 133.6	+ 154.7	+ 78.7	+ 45.9	+ 51.0	+ 36.1	- 39.1	- 84.1	- 37.6
Oct. ...	- 100.1	- 114.9	- 53.4	+ 2.3	+ 11.9	+ 9.6	+ 15.3	+ 10.0	- 1.8	+ 4.9	+ 4.3	+ 0.8	+ 8.9	+ 12.1	+ 17.1	+ 18.8	+ 33.2	+ 38.4	+ 44.3	+ 65.3	+ 29.2	+ 17.6	- 23.2	- 50.7
Nov. ...	- 33.2	- 10.6	- 14.3	- 10.5	- 14.1	- 15.1	- 4.6	- 10.6	- 22.1	- 28.9	- 18.5	- 10.3	+ 4.0	+ 26.0	+ 33.3	+ 27.9	+ 55.7	+ 82.1	- 2.0	+ 4.2	- 6.5	- 7.1	+ 0.7	- 25.5
Dec. ...	- 4.5	- 11.5	- 23.5	- 5.7	+ 5.8	+ 4.0	+ 6.6	- 1.7	- 10.1	- 11.7	- 10.7	- 3.9	- 3.6	+ 3.6	+ 9.8	+ 11.9	+ 11.1	+ 13.7	+ 10.3	+ 9.7	+ 12.4	+ 9.2	- 9.4	- 11.7
Year ...	- 35.6	- 43.1	- 33.2	- 12.1	- 10.3	- 14.3	- 9.7	- 13.4	- 24.6	- 26.8	- 22.3	- 11.7	+ 4.7	+ 23.8	+ 40.3	+ 49.3	+ 57.3	+ 54.0	+ 34.1	+ 31.3	+ 18.2	- 5.3	- 22.7	- 27.8
Winter	- 7.5	- 3.9	- 8.7	- 4.6	+ 0.5	+ 2.0	+ 5.1	+ 1.6	- 6.2	- 12.7	- 14.1	- 13.9	- 8.1	+ 3.8	+ 10.5	+ 11.3	+ 18.6	+ 27.6	+ 3.1	+ 4.5	+ 2.5	- 0.5	- 1.7	- 9.3
Equinox	- 45.0	- 58.4	- 34.3	- 2.6	+ 1.1	- 4.4	- 1.1	- 8.2	- 22.9	- 27.6	- 27.7	- 20.1	- 5.8	+ 16.7	+ 39.2	+ 52.4	+ 61.8	+ 47.4	+ 37.5	+ 41.1	+ 24.1	- 5.6	- 29.5	- 27.9
Summer	- 54.3	- 66.9	- 56.6	- 29.1	- 32.5	- 40.4	- 33.1	- 33.7	- 44.7	- 40.0	- 25.2	- 1.2	+ 27.9	+ 50.8	+ 71.1	+ 84.3	+ 91.5	+ 87.0	+ 61.6	+ 48.3	+ 28.1	- 9.8	- 36.9	- 46.2

## DECLINATION (DISTURBED DAYS).

## 60. Lerwick.

1928.

Jan. ...	- 0.55	- 1.89	- 1.84	- 1.81	- 1.79	- 2.52	- 0.72	- 0.92	- 0.71	+ 0.78	+ 2.20	+ 4.35	+ 6.41	+ 5.99	+ 4.71	+ 3.41	+ 0.91	- 1.80	- 0.22	- 1.32	- 4.52	- 3.74	- 2.76	- 1.65
Feb. ...	- 2.44	- 1.45	- 2.13	- 0.99	- 1.10	- 2.87	- 2.17	- 1.98	- 1.92	- 0.82	+ 2.69	+ 4.39	+ 6.25	+ 6.30	+ 5.78	+ 4.32	+ 2.69	+ 0.89	+ 1.36	+ 0.71	- 4.11	- 5.31	- 5.16	- 2.93
Mar. ...	- 6.94	- 4.99	- 3.42	- 2.23	- 3.62	- 2.79	- 2.42	- 1.81	- 1.30	+ 0.91	+ 3.80	+ 7.35	+ 9.54	+ 9.87	+ 8.44	+ 3.45	+ 3.60	+ 1.49	- 0.54	+ 0.65	- 2.00	- 5.49	- 6.52	- 5.03
April ...	- 3.78	- 2.94	- 0.89	- 1.84	- 3.13	- 2.51	- 3.27	- 3.97	- 3.06	+ 1.05	+ 4.25	+ 7.39	+ 9.83	+ 9.31	+ 7.38	+ 4.07	+ 1.35	- 0.01	- 0.45	- 0.40	- 2.69	- 6.86	- 5.10	- 3.73
May ...	- 9.74	- 10.63	- 3.48	- 5.40	- 4.31	- 1.83	- 4.71	- 6.60	- 4.65	- 1.47	+ 1.24	+ 1.99	+ 2.16	+ 2.75	+ 6.17	+ 10.88	+ 11.45	+ 7.43	+ 6.53	+ 6.66	+ 7.62	- 3.25	- 3.78	- 5.03
June ...	- 3.57	- 4.80	- 4.58	- 5.10	- 4.41	- 5.06	- 4.28	- 4.19	- 2.67	- 1.59	+ 1.24	+ 5.74	+ 6.24	+ 6.29	+ 4.47	+ 4.91	+ 4.02	+ 2.76	+ 1.89	+ 2.08	- 0.10	- 0.42	- 0.95	+ 2.08
July ...	- 0.37	- 0.53	- 2.01	- 1.77	- 4.83	- 2.91	- 6.53	- 7.91	- 6.90	- 2.58	+ 1.19	+ 3.99	+ 4.91	+ 5.96	+ 5.64	+ 4.95	+ 4.15	+ 2.47	+ 2.65	+ 1.31	+ 2.61	- 1.11	- 3.43	+ 1.05
Aug. ...	- 8.66	- 7.77	- 11.58	- 8.83	- 1.20	- 0.76	- 1.84	- 4.05	- 1.10	+ 1.53	+ 3.38	+ 6.46	+ 8.74	+ 8.17	+ 8.40	+ 5.71	+ 4.22	+ 4.12	+ 2.72	+ 2.25	- 0.68	- 1.01	- 3.24	- 4.98
Sept. ...	- 5.73	- 2.23	- 6.47	- 6.43	- 6.75	- 5.37	- 4.77	- 4.25	- 0.64	+ 4.26	+ 6.65	+ 9.75	+ 11.59	+ 9.84	+ 8.66	+ 6.93	+ 5.17	+ 3.33	+ 2.55	+ 1.25	- 4.21	- 4.57	- 12.17	- 6.39
Oct. ...	- 6.22	- 6.57	- 0.61	- 4.26	- 2.91	- 3.35	- 1.86	- 0.89	- 0.55	+ 1.44	+ 3.77	+ 5.19	+ 6.88	+ 6.97	+ 5.95	+ 4.12	+ 4.13	+ 3.53	+ 0.64	- 1.21	- 3.75	- 2.24	- 2.83	- 5.19
Nov. ...	- 3.00	- 3.91	- 2.55	- 1.05	- 0.86	+ 2.45	+ 0.84	+ 1.23	+ 2.15	+ 2.97	+ 3.84	+ 4.52	+ 6.80	+ 6.53	+ 6.81	+ 2.85	+ 4.20	- 0.45	- 5.54	- 7.15	- 4.81	- 6.25	- 6.42	- 3.20
Dec. ...	- 2.14	- 2.52	- 3.75	- 5.14	- 1.50	+ 3.43	+ 3.56	+ 3.36	+ 2.53	+ 2.40	+ 2.96	+ 3.21	+ 4.98	+ 3.78	+ 2.91	+ 0.30	+ 2.74	- 2.07	- 0.82	- 0.28	- 1.63	- 2.02	- 6.72	- 7.57
Year ...	- 4.43	- 4.19	- 3.61	- 3.74	- 3.03	- 2.01	- 2.35	- 2.67	- 1.57	+ 0.74	+ 3.10	+ 5.36	+ 7.03	+ 6.80	+ 6.28	+ 4.66	+ 4.05	+ 1.81	+ 0.90	+ 0.38	- 1.52	- 3.52	- 4.92	- 3.55
Winter	- 2.03	- 2.44	- 2.57	- 2.25	- 1.31	+ 0.12	+ 0.38	+ 0.42	+ 0.51	+ 1.33	+ 2.92	+ 4.12	+ 6.11	+ 5.65	+ 5.05	+ 2.72	+ 2.63	- 0.86	- 1.31	- 2.01	- 3.77	- 4.33	- 5.27	- 3.84
Equinox	- 5.67	- 4.18	- 2.85	- 3.69	- 4.10	- 3.51	- 3.08	- 2.73	- 1.39	+ 1.91	+ 4.62	+ 7.42	+ 9.46	+ 8.95	+ 7.61	+ 4.64	+ 3.56	+ 2.09	+ 0.55	+ 0.07	- 3.16	- 4.79	- 6.65	- 5.09
Summer	- 5.59	- 5.93	- 5.41	- 5.27	- 3.69	- 2.64	- 4.34	- 5.69	- 3.83	- 1.03	+ 1.76	+ 4.55	+ 5.51	+ 5.79	+ 6.17	+ 6.61	+ 5.96	+ 4.19	+ 3.45	+ 3.07	+ 2.36	- 1.45	- 2.85	- 1.72

## VERTICAL FORCE (DISTURBED DAYS).

## 61. Lerwick.

1928.

Jan. ...	- 1.6	- 2.7	- 3.1	- 4.5	- 15.5	- 17.7	- 15.7	- 14.4	- 13.2	- 9.8	- 7.6	- 4.0	+ 1.0	+ 4.7	+ 6.7	+ 7.1	+ 8.9	+ 15.9	+ 18.9	+ 15.7	+ 13.4	+ 11.2	+ 4.2	+ 2.0
Feb. ...	0.0	- 0.4	- 0.5	- 1.2	- 4.9	- 5.1	- 4.6	- 4.3	- 4.8	- 2.6	- 2.3	- 2.0	- 1.7	- 1.7	- 0.6	+ 0.1	+ 1.6	+ 3.0	+ 6.1	+ 7.2	+ 6.9	+ 6.1	+ 3.2	+ 2.3
Mar. ...	- 64.8	- 68.0	- 65.7	- 53.4	- 41.0	- 27.7	- 17.8	- 12.2	- 11.5	- 3.2	+ 0.2	- 0.3	+ 4.8	+ 21.2	+ 55.7	+ 80.8	+ 78.6	+ 81.9	+ 64.4	+ 38.8	+ 24.7	- 4.4	- 27.4	- 54.1
April...	- 22.1	- 16.3	- 12.8	- 14.1	- 9.7	- 5.7	- 3.4	- 1.9	- 0.1	+ 4.3	+ 3.6	+ 2.5	+ 1.9	+ 3.7	+ 5.4	+ 7.7	+ 14.3	+ 17.1	+ 16.6	+ 15.5	+ 12.5	- 5.7	- 6.2	- 7.1
May ...	- 37.3	- 36.1	- 34.7	- 34.6	- 31.6	- 26.9	- 23.3	- 18.5	- 9.5	- 2.4	+ 4.2	+ 8.1	+ 13.5	+ 25.1	+ 30.9	+ 31.6	+ 36.2	+ 38.3	+ 34.7	+ 30.7	+ 28.7	+ 9.6	- 9.0	- 27.7
June ...	- 28.6	- 26.0	- 24.9	- 18.7	- 16.9	- 12.9	- 10.7	- 7.2	- 1.0	- 1.2	- 0.7	+ 5.7	+ 19.3	+ 28.9	+ 27.1	+ 27.0	+ 23.8	+ 21.0	+ 20.9	+ 16.1	- 0.1	- 8.1	- 9.3	- 23.6
July ...	- 17.2	- 27.7	- 30.0	- 31.6	- 29.7	- 22.5	- 17.8	- 12.5	- 5.7	- 3.2	- 3.4	- 2.1	+ 1.5	+ 6.8	+ 20.1	+ 26.3	+ 31.2	+ 34.8	+ 32.5	+ 21.3	+ 19.0	+ 13.1	+ 9.3	- 12.6
Aug....	- 60.6	- 88.4	- 85.9	- 62.1	- 45.4	- 48.4	- 33.9	- 16.9	+ 3.4	+ 13.2	+ 19.1	+ 19.7	+ 28.0	+ 42.6	+ 42.7	+ 48.9	+ 51.0	+ 40.0	+ 34.3	+ 38.7	+ 33.2	+ 21.8	+ 13.5	- 10.9
Sept....	- 37.2	- 46.0	- 45.3	- 38.9	- 35.8	- 30.3	- 24.5	- 21.2	- 13.5	- 11.5	- 9.2	- 4.6	+ 4.7	+ 25.1	+ 47.8	+ 64.7	+ 67.7	+ 57.6	+ 44.8	+ 39.1	+ 34.1	- 12.4	- 20.9	- 34.3
Oct. ...	- 46.5	+ 1.4	- 32.0	- 30.3	- 8.5	- 4.8	- 2.2	+ 1.4	+ 4.3	+ 8.7	+ 9.0	+ 10.7	+ 10.8	+ 12.4	+ 13.0	+ 12.9	+ 12.5	+ 13.4	+ 16.3	+ 16.9	+ 14.3	+ 8.9	- 6.2	- 36.3
Nov....	- 43.7	- 30.4	- 27.7	- 31.3	- 34.1	- 31.8	- 29.2	- 25.1	- 20.7	- 9.2	- 6.2	- 0.1	+ 3.3	+ 27.0	+ 35.7	+ 53.1	+ 63.7	+ 70.6	+ 30.0	+ 25.9	+ 11.1	- 7.6	- 4.4	- 19.1
Dec....	- 12.3	- 13.6	- 27.2	- 26.0	- 22.5	- 24.1	- 23.9	- 14.9	- 8.8	- 1.8	+ 7.6	+ 11.4	+ 11.5	+ 14.1	+ 16.9	+ 20.3	+ 20.6	+ 24.4	+ 19.4	+ 20.2	+ 22.5	+ 19.1	- 11.5	- 21.5
Year...	- 31.0	- 29.3	- 32.5	- 28.9	- 24.6	- 21.5	- 17.2	- 12.3	- 6.7	- 1.5	+ 1.2	+ 3.8	+ 8.2	+ 17.5	+ 25.1	+ 31.7	+ 34.2	+ 34.8	+ 28.2	+ 23.8	+ 18.4	+ 4.3	- 5.4	- 20.2
Winter	- 14.4	- 11.8	- 14.6	- 15.7	- 19.2	- 19.7	- 18.3	- 14.7	- 11.8	- 5.9	- 2.1	+ 1.3	+ 3.5	+ 11.0	+ 14.7	+ 20.1	+ 23.7	+ 28.5	+ 18.6	+ 17.2	+ 13.5	+ 7.2	- 2.1	- 9.1
Equinox	- 42.6	- 32.2	- 38.9	- 34.1	- 23.7	- 17.1	- 12.0	- 8.5	- 5.2	- 0.4	+ 0.9	+ 2.1	+ 5.5	+ 15.6	+ 30.5	+ 41.5	+ 43.3	+ 42.5	+ 35.5	+ 27.6	+ 21.4	- 3.4	- 15.2	- 32.9
Summer	- 35.9	- 44.0	- 43.9	- 36.7	- 30.9	- 27.7	- 21.4	- 13.8	- 3.2	+ 1.6	+ 4.8	+ 7.9	+ 15.6	+ 25.9	+ 30.2	+ 33.5	+ 35.5	+ 33.5	+ 30.6	+ 26.7	+ 20.2	+ 9.1	+ 1.1	- 18.7



# RANGE OF MEAN DIURNAL INEQUALITIES FOR THE MONTHS, YEAR AND SEASONS OF 1928.

NOTE.—The ranges are those shown in Tables 53 to 61 in the preparation of which the non-cyclic change has been eliminated.

## 62. Lerwick.

1928.

Month and Season.	" All " Days.			Quiet Days.			Disturbed Days.		
	H.	D.	V.	H.	D.	V.	H.	D.	V.
January ...	19.7	6.15	9.7	13.2	4.00	3.2	33.7	10.93	36.6
February ...	22.5	8.24	9.8	17.4	6.92	9.0	27.9	11.61	12.3
March ...	42.6	10.17	37.0	28.4	8.32	4.6	82.7	16.81	149.9
April ...	64.1	12.72	20.9	58.3	10.01	4.7	65.9	16.69	39.2
May ...	99.9	10.35	30.5	73.8	11.14	5.1	350.9	22.08	75.6
June ...	73.8	12.21	18.3	64.5	12.13	6.7	123.9	11.39	57.5
July ...	86.3	13.80	31.5	66.2	13.90	4.9	107.1	13.87	66.4
August ...	66.3	12.77	35.4	53.0	13.22	8.9	216.1	20.32	137.4
September ...	69.2	12.53	38.8	46.9	10.33	6.1	242.0	23.76	113.7
October ...	43.3	9.42	25.7	35.3	8.19	8.5	180.2	13.45	63.4
November ...	30.4	7.91	33.8	14.1	4.10	6.5	115.3	13.96	114.3
December ...	15.1	6.14	16.1	12.4	5.35	7.7	37.2	12.55	51.6
Year ...	49.1	9.26	23.3	38.6	7.55	3.3	100.4	11.95	67.3
Winter ...	19.6	6.92	15.3	12.6	4.70	4.6	41.7	11.38	48.2
Equinox ...	51.3	10.75	28.6	40.9	9.14	3.1	120.2	16.11	85.9
Summer ...	80.4	12.06	27.6	64.1	12.60	4.7	158.4	12.54	79.6

# AVERAGE DEPARTURE OF THE INDIVIDUAL VALUES FROM MEAN OF THE DAY.

## 63. Lerwick.

1928.

Month and Season.	" All " Days.			Quiet Days.			Disturbed Days.		
	H.	D.	V.	H.	D.	V.	H.	D.	V.
January ...	3.6	1.52	2.8	2.6	1.08	1.0	5.9	2.40	9.1
February ...	5.0	2.18	2.9	4.1	2.07	2.4	5.6	2.95	3.1
March ...	9.7	2.51	9.1	7.6	1.79	0.7	22.5	4.09	37.6
April ...	14.1	3.05	4.7	14.0	2.13	1.2	14.5	3.72	8.8
May ...	24.1	2.96	8.5	18.6	2.57	1.2	85.8	5.41	24.3
June ...	18.6	3.24	5.1	14.1	2.94	1.5	30.5	3.48	15.8
July ...	23.7	3.68	7.0	15.8	3.36	1.1	31.1	3.41	18.0
August ...	17.3	3.24	9.2	14.3	2.91	2.3	45.5	4.64	37.5
September ...	14.6	3.43	9.8	11.7	2.45	1.4	54.0	5.83	32.1
October ...	10.5	2.67	7.1	9.1	2.09	2.4	28.7	3.54	13.9
November ...	5.4	2.05	8.7	3.3	1.03	1.2	19.5	3.77	26.7
December ...	3.6	1.54	5.5	2.7	1.40	2.0	9.0	3.01	17.3
Year ...	10.9	2.55	6.3	9.5	2.07	0.9	26.1	3.43	19.3
Winter ...	4.1	1.78	4.9	3.1	1.38	1.4	7.6	2.66	13.3
Equinox ...	11.6	2.87	7.5	10.6	2.10	0.8	26.8	4.24	22.2
Summer ...	20.4	3.24	6.8	15.6	2.91	1.0	45.9	4.12	23.0

## NON-CYCLIC CHANGE (24h.—0h.).

## 64. Lerwick.

1928.

Month.	" All " Days.			Quiet Days.			Disturbed Days.		
	H.	D.	V.	H.	D.	V.	H.	D.	V.
January ...	+ 0.5	-0.08	+ 1.8	+ 1.6	+0.04	+ 0.6	+ 0.6	-0.20	+ 0.4
February ...	-0.1	0.00	-1.6	+ 3.0	-0.50	-1.0	-0.4	+0.26	+ 6.6
March ...	0.0	0.00	-0.8	+ 1.4	-0.50	-1.0	+ 1.6	+2.88	+ 6.4
April ...	-0.2	-0.06	-0.2	+ 1.6	-0.20	-3.6	+12.2	+4.02	+10.8
May ...	-0.5	-0.04	0.0	+ 4.0	+0.24	-2.8	-35.6	-2.60	-37.6
June ...	+ 0.3	0.00	-1.0	+ 3.2	-0.58	-1.2	-14.8	+1.22	-0.6
July ...	-3.3	+0.06	-2.0	+ 4.2	-0.08	-0.8	+ 0.4	+0.78	-46.6
August ...	+ 2.5	-0.34	+ 1.3	0.0	-0.90	-4.4	+12.0	-0.08	+37.2
September ...	+ 0.4	+0.19	-2.0	+ 7.0	-0.42	-2.4	-75.6	-3.54	-20.6
October ...	-0.8	-0.09	-2.5	+ 6.6	+0.58	-0.2	+ 1.5	+0.96	-3.0
November ...	-0.4	+0.31	-0.4	+ 4.2	+1.62	+ 7.6	-18.4	+2.48	-1.2
December ...	+ 0.1	-0.01	+ 0.1	+ 1.8	-0.72	-1.2	-10.2	+2.52	-9.0
Year 1928 ...	—	—	—	—	—	—	—	—	—

# MEAN VALUES OF THE SQUARES OF THE ABSOLUTE DAILY RANGES.\*\* (Unit, 100γ<sup>2</sup>.)

## 65. Lerwick.

1928.

R <sub>h</sub> <sup>2</sup>	R <sub>d</sub> <sup>2</sup>	R <sub>v</sub> <sup>2</sup>	R <sub>h</sub> <sup>2</sup> + R <sub>d</sub> <sup>2</sup>	R <sub>h</sub> <sup>2</sup> + R <sub>v</sub> <sup>2</sup>	Mean Character Figure.
*16.9	*34.2	*9.8	*51.1	*61.0	0.65
28.1	57.0	6.6	85.1	91.7	0.76
†174.7	†61.1	†180.3	†235.8	†416.0	0.77
123.8	77.4	28.3	201.3	229.6	0.57
940.2	274.7	71.8	1214.9	1286.7	0.84
272.9	82.5	44.6	355.4	400.1	0.93
382.6	332.8	481.8	715.4	1197.2	1.00
585.8	123.6	168.1	709.4	877.5	0.55
582.1	151.5	100.5	733.7	834.2	0.93
525.0	173.9	122.2	698.9	821.1	0.84
299.2	186.9	106.8	486.1	592.9	0.57
53.3	79.7	35.3	132.9	168.2	0.42
332.1	136.3	113.0	468.3	581.3	0.74

\* Mean of 29 days; 15th and 16th omitted.

† Mean of 29 days; 17th and 18th omitted.

\*\* R<sub>D</sub> in this Table is used to signify the range in declination converted into units of force of the component perpendicular to the magnetic meridian. See also p. 33.

## MEAN MONTHLY AND ANNUAL VALUES OF TERRESTRIAL MAGNETIC ELEMENTS.

(All days except those noted in monthly tables.)

## 66. Lerwick.

1928.

Month.	North Component.	West Component.	Vertical Component.	Total Force.	Declination (West).	Inclination (North).	Horizontal Force.
January ...	γ 14124	γ 3710	γ 46726	γ 48955	° 14 43.0	° 72 38.7	γ 14603
February ...	14128	3706	46740	48969	14 41.8	72 38.8	14606
March ...	14123	3700	46720	48948	14 40.8	72 38.8	14600
April ...	14115	3693	46699	48925	14 39.8	72 39.0	14590
May ...	14114	3690	46708	48933	14 39.0	72 39.3	14588
June ...	14122	3687	46701	48929	14 37.9	72 38.7	14595
July ...	14108	3673	46688	48911	14 35.5	72 39.6	14578
August ...	14107	3671	46668	48892	14 35.2	72 39.2	14577
September ...	14111	3665	46715	48937	14 33.5	72 40.1	14579
October ...	14102	3662	46686	48907	14 33.5	72 40.1	14570
November ...	14101	3660	46700	48919	14 33.0	72 40.5	14568
December ...	14105	3655	46671	48893	14 31.7	72 39.7	14571
Year 1928 ...	14113	3681	46702	48926	14 37.1	72 39.4	14585



\* Very bright aurora reported from Lerwick around midnight, but not seen at Observatory.

In the interests of brevity there have been omitted from the table above all dates on which the sky throughout the evening remained completely overcast and on which, therefore, no opportunity arose of determining whether or not aurora occurred. The nights on which aurora was actually seen are indicated by the symbol  $\mathfrak{A}$ . The nights on which aurora was not seen, despite at least an occasional interval of more or less clear sky, are indicated by the symbol ...; in the latter case also, remarks on the weather are added to assist the reader in judging how far the fact of no observation of aurora may be taken as indicating that there was not actual aurora. A full description is available of the auroral phenomena observed.



## 68. Other Scottish Stations.

1928.

Date.	Month.	Date.	Month.	Date.	Month.	Date.	Month.
	<b>January.</b>		<b>August.</b>		<b>October (contd.).</b>		<b>November (contd.).</b>
13	H. glow over northern quadrant of sky, 19.45 to 22.00.	24	Glas Island, 01.00 to 02.00.	11	H. faint glow along horizon, W. to N.E., 20.00 to 22.00; Kirkwall, low N.W., about midnight; Cantick Head, 23.00; Hellyar Holm, N., 23.00 to 24.00.	7	H. faint glow, N.W. to N.E., 18.30 to 23.00; B.; G.C.; A.; Helensburgh, 22.00 to 23.00.
15	H. glow, W. to N.E., extending from horizon midway up to Polaris, 21.15 to 23.00; B.	26	B. 21.00; Glas Island, 01.00 to 01.45.			8	H. glow to N., 19.00; glow visible through breaks in clouds, 20.00 to 22.00; A.
22	H. glow low down along horizon, 19.00 to 22.30.	27	Copinsay, 00.40; Killantringan, 01.10; Tiumpman Head, 00.25 to 01.30.	12	H. fairly bright glow, W. to E., 20.00 to 22.30; D., 21.00.	9	H. glow visible through small opening in clouds above horizon, 23.30.
26	H. glow visible through breaks in clouds, N.W. to N., 21.30 to 22.30; A.		<b>September.</b>	13	H. bright aurora visible above bank of cloud, N.W. to N.E., 19.00 to 20.00; Kirkwall, N.W., midnight; Craibstone, Kirkwall, low N.W., midnight.	10	H. faint glow W. to N.E., extending up to Ursa Majoris, 19.00 to 23.00; B.
27	H. glow, N.W. to N.E., extending up to Polaris, 22.30 to 24.00; A.	7	A. rather faint glow seen between clouds at 21.00.	15	A. auroral glow, moderately bright, whitish-green colour, 23.00, elevation about 15°; G.C.; Eskdalemuir, northern sky cloudy in early evening, and cloud interfered with observation later; 18.30 and later, brightness above cloud to north; around 19.30, glow, sometimes bright, and rays, 19.55, rays, N., reaching up to 55°-60°; 20.45 to 21.00, brightness, slight, N. and N.E.; a fairly considerable disturbance was in progress on October 18th, but the largest changes occurred before aurora was seen; Oban, N.	11	D.; A.; Nairn; G.C. Kirkwall, 20.00; Leuchars ill defined arch and porches, 22.20 to 22.30; Tiumpman Head, N., 22.30 to 24.00.
	<b>February.</b>	8	A. faint greenish yellow auroral glow seen at 24.00; D.; Cantick Head, 23.30; Copinsay, 02.00 to 04.00; Fair Isle North, 02.45 to 03.30; Bressay, 22.00 to 24.00.	17		12	D.; A.; G.C.
3	Arbroath, 21.00, N.W.	9	B.; Fair Isle North, 23.30 to 24.00.	18	H. faint glow along northern horizon, 20.45 to 22.00. Boghall, 20.45; Eskdalemuir, 20.50, rays to N.; 20.55, brightness to N.	13	H. aurora visible above bank of cloud along northern horizon, 18.00; bright broad band from E. through S. to W., passing over Jupiter, γ and α Pegasi and Altair to W., 18.15; band fainter, streamers leaping to zenith from all points W. through N. to E., 18.40 to 20.00; glow, 21.00 to 23.00; A.; G.C.; Arbroath, clear vivid aurora, N.N.W., 18.00 to 20.00; Edinburgh, 18.00 to 19.30; B.; Nairn; Banff; bright at 18.30; Eskdalemuir; Tiumpman Head, brilliant display, 18.50 to 19.50; Killantringan, 17.30; Pentland Skerries, 21.00; Cantick Head, 03.45.
12	H. bright glow, W. to N.E., 19.00 to 23.30; B. 18.00; A.; G.C.	10	H. bright glow, W. to E., extending up to a Ursa Majoris, 21.00 to 23.30.	19	H. faint glow along northern horizon, 20.45 to 22.00.	14	H. faint glow, W. to E.N.E., 20.30 to 22.00; rather faint arch, 23.00; B.; Crieff.
13	H. bright arch, W.N.W. to N.E., 18.45 to 19.15; streamers shooting upwards from arch, 19.30 to 20.00; aurora visible through breaks in clouds, 20.15 to 22.00; B. 19.30; Wick.	11	H. glow, W. to E., 20.30 to 23.00; D. low.	20	H. glow visible through breaks in clouds, 20.30 to 21.00, bright glow, W. to N.E., 21.30 to 22.30; G.C.; B. 21.00; Cantick Head, 24.00.	15	Cantick Head, 21.00; Copinsay, 20.00 to 21.00; A.; G.C.
14	H. bright glow, W. to N.E., 19.00 to 23.00.	13	H. fairly bright glow, W. to E.N.E., 21.00 to 22.30.	21	H. very bright arch, W.N. to N.E., with coloured streamers shooting up to Polaris, 18.25; temporarily eclipsed by cloud; glow, 18.45 to 19.00; streamers to N., 19.30; bright glow, 20.00 to 24.00; Wick; Cantick Head.	16	A.; G.C.
15	G.C.	18	H. aurora observed, W. to N.E., streamers shooting up from N.W. to N.E. as high as Polaris, 20.00 to 20.40; very bright glow visible through breaks in clouds, W. to N.E., 20.00 to 22.30; A. moderate bright glow first seen 19.15, occasional streamers; D.; G.C. very bright aurora; Braemar; Arbroath, 21.00, in N.; Stornoway, between 22.00 to 23.00, streamers; Wick, 20.15 to 00.30; Craibstone, 22.00 onwards; Inchkeith; Boghall, 21.00; Marchmont, between 21.00 to 22.00; Glasgow; Eskdalemuir, 21.00 to 22.00, brightness at low elevation, between N.N.E. and N.W.; Start Point, N.W. to N.E., 20.00 to 24.00; Fair Isle North, 22.40 to 00.15; Bressay, 21.00 to 24.00; Pentland Skerries, 20.00 to 23.00; Killantringan, 22.40.	22	H. arch, W. to N.E., with streamers shooting upwards, 21.00 to 22.30, brightest N.N.E.; B.; Boghall, brilliant at 21.00; Leuchars; Edinburgh; Pentland Skerries, N., 03.00; Cantick Head, 02.30; Hellyar Holm, 00.15 to 03.30; Copinsay, 01.00 to 04.00; A.; G.C.	17	H. glow visible through breaks in clouds, 19.00 to 23.00; A.; G.C.
16	H. glow visible through breaks in clouds, 21.00 to 23.00.	19	H. glow visible through breaks in clouds, W. to N.E., 20.00 to 22.30; D. low.	24	Kirkwall, high N.E.	18	H. glow visible through breaks in clouds, 19.00 to 22.30; D.; Bressay, 19.30 to 21.00.
18	H. faint glow, W. to E.N.E., 19.00 to 23.30.	20	H. faint glow along horizon, W. to N.E., 20.30 to 22.00; A. faint low arch seen at 22.00.	25	H. arch, W. to N.E., with streamers shooting upwards, 21.00 to 22.30, brightest N.N.E.; B.; Boghall, brilliant at 21.00; Leuchars; Edinburgh; Pentland Skerries, N., 03.00; Cantick Head, 02.30; Hellyar Holm, 00.15 to 03.30; Copinsay, 01.00 to 04.00; A.; G.C.	19	A.
19	H. glow, W. to N.E., 19.00 to 22.00.	21	H. glow visible through breaks in clouds, 20.00 to 22.30; A. very faint glow seen at 22.00.		<b>November.</b>	20	B.
20	H. glow, W. to N.E., 19.00 to 23.00; G.C.; Kirkwall.	23	H. glow visible along northern horizon, 21.15 to 21.30; aurora visible through breaks in clouds, 21.45 to 22.30; A. moderately bright auroral glow at 21.00.	2	H. bright glow, W. to N.E., 19.00 to 21.00; glow and streamers; Stornoway.	3	H. bright glow along N.W. to N.E., 19.00 to 19.20; glow visible through breaks in clouds, 20.00.
21	H. glow, W. to E.N.E., 19.00 to 21.00.		<b>October.</b>	3	H. bright glow, W. to E.N.E., 18.20 to 19.00; B.	5	D.; G.C.; B.; Kirkwall, 22.00; Stornoway;
22	H. glow, N.W. to N.N.E., 21.45 to 23.00; B.	6	H. faint glow above bank of cloud, W. to E., and up to a Ursa Majoris, 20.45 to 21.30.	4	H. glow, W. to N.E., 18.15; streamers, 18.30; band, E. to W., through N. passing near zenith, 18.40 to 19.00; bright streamers leaping upwards from horizon to band near zenith, 19.00; bright glow, 19.30 to 22.15.	6	A.; B.; Kirkwall.
	<b>March.</b>	9	H. glow, W. to E., and up to Polaris, 19.25 to 22.15.	5	H. glow visible through break in clouds.	7	H. glow visible through openings in clouds, N. quadrant of sky, 19.00 to 22.30.
11	Stornoway, N.; Tiumpman Head, vivid display in N., from 21.30 to 23.00; Sound of Mull, 22.00 to 23.00; A. moderate bright glow seen between clouds, 23.00.	10	H. glow, 20.30 to 21.00; streamers, 21.30 to 23.00; faint glow, 24.00; B.; Stornoway.	6	H. very bright glow, W. to N.E., extending up to a Ursa Majoris, 18.30 to 23.00; B.; D.; Bressay, N.W., 21.00 to 24.00.	11	H. bright glow visible through breaks in clouds, 19.00 to 22.30.
12	Fair Isle North, 21.00 to 22.15.		<b>May.</b>			12	H. glow visible through breaks in clouds in northern part of sky, 19.00 to 20.30; B.
13	H. fairly bright aurora, 20.00 to 21.00; aurora visible through breaks in clouds, 21.30 to 22.45; B.; Fair Isle North, 20.00 to 03.00; Start Point, 19.30 to 24.00.	10	A. moderate faint glow, 22.15 to 23.00, centred about N.; Barnsness, 22.45.			13	H. glow along horizon, W. to N.E., with faint luminous waves moving up to an elevation of about 40°, 20.30 to 23.00; B.
	<b>April.</b>	19	G.C.			14	H. faint glow W. to E. and up to Ursa Majoris, 19.00 to 24.00; B.
15	H. bright glow, W. to N.N.E., 21.00 to 22.30; A.; B. 21.30.		<b>June.</b>			17	H. glow visible through breaks in clouds, 20.30 to 23.00.
16	H. bright glow, W. to N.E., 20.30 to 23.00; A.; Duncansby Head, bright display in N., 23.00 to 03.00; Mull of Kintyre, N., 22.15.		<b>July.</b>			20	H. faint glow N.W. to N.N.E., 20.30 to 23.00.
17	H. glow visible through breaks in clouds, 21.30 to 23.15; A.		<b>August.</b>				
18	H. glow visible through breaks in clouds, 21.30 to 23.00.		<b>September.</b>				
19	H. glow visible through breaks in clouds, 21.00 to 22.30.		<b>October.</b>				
20	H. glow visible through breaks in clouds, 22.00 to 23.00.		<b>November.</b>				
21	H. glow visible through breaks in clouds, 21.00 to 23.00.		<b>December.</b>				

NOTE—For brevity, stations which figure frequently in the above Table are represented by their initials, viz., D—Deerness, B—Baltasound, A—Aberdeen, G.C.—Gordon Castle, H—Haroldswick, Shetland, where a continuous watch was kept.







Air Ministry  
METEOROLOGICAL OFFICE

THE  
OBSERVATORIES' YEAR BOOK  
1928

Comprising the meteorological and geophysical results obtained from autographic records and eye observations at the observatories at Lerwick, Aberdeen, Eskdalemuir, Cahirciveen (Valentia Observatory), and Richmond (Kew Observatory), and the results of soundings of the upper atmosphere by means of registering balloons.

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ABERDEEN

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Published by the authority of the  
METEOROLOGICAL COMMITTEE



LONDON:

PUBLISHED BY HIS MAJESTY'S STATIONERY OFFICE

—  
1930



## ABERDEEN OBSERVATORY.

Latitude .. .. .	57° 10' N.
Longitude .. .. .	2° 6' W.
G.M.T. of Local Mean Noon .. ..	12h. 8m.

### *Heights in metres above Sea-Level.*

Barometer .. .. .	26·0*
Rain-gauge .. .. .	13·4* and 11·4†
Robinson Cup Anemograph .. ..	36*
Dines Tube Anemograph .. .. .	21

### *Heights in metres above ground.*

Thermometer Bulbs, North Wall Screen	12·5
Sunshine Recorder .. .. .	20·7
Robinson Cup Anemograph .. ..	23
Dines Tube Anemograph .. .. .	13
Beckley Rain-gauge Rim .. .. .	0·6

## INTRODUCTION.

### SITE.

The Observatory, which was established in 1868, is housed in the top floor of the Cromwell Tower of King's College in Old Aberdeen. The College lies on a plain gradually rising from the sea from which it is distant about 1 mile (1·6 km.). There are no serious irregularities of surface in the vicinity excepting the two river valleys of the Don and the Dee. To the north, at a distance of about 1 km. the Don flows eastwards to the sea; the Dee flows into the sea at a distance of about 3 km. to the south-east of the College. Between the College and the sea is a golf course covered for the most part with grass. Westwards is the High Street of the Old Town and beyond this there is another street. Further west grass pasture extends for about one kilometre. Southward are some open spaces beyond which the modern town is reached. The enclosure in which the Stevenson screen, the Beckley and check rain-gauges and the grass minimum thermometer are exposed, has had its position changed during the year on account of the extension of the College buildings. From January to May inclusive its position was, as in previous years, about 50 metres to the north-east of the Observatory, but from the 1st June and onwards the site has been a new one, also to the north-east of the Observatory, but at a distance of approximately 180 metres. The height of this "station" above M.S.L. is 11·4 metres. The "North-wall" screen in which the recording thermometers are exposed is erected on the wall outside the north window of the uppermost storey of the Observatory. The nature of the soil and sub-soil is loam and sand.

Plans showing the position of the Observatory relative to the City of Aberdeen, and the general arrangement of the College Buildings, and also photographs, are given in the present volume. The enclosure shown is that on the new site. A view of the old site will be found in the Introduction to the Observatories' Year Book, 1923.

*Change of value adopted for height of Station above Mean Sea Level.*—Consequent upon a careful redetermination of the height of the Station above Mean Sea Level a new value has been adopted for this height for all purposes, as from the 1st January, 1925. The value for the station level is now 13·4 m., and that for the height of the barometer-cistern is 26·0 m., in place of the former values of 14·0 m. and 26·8 m. respectively.

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\* These values differ slightly from those given in former years. See note above.

† See remarks in Introduction.



ABERDEEN OBSERVATORY.

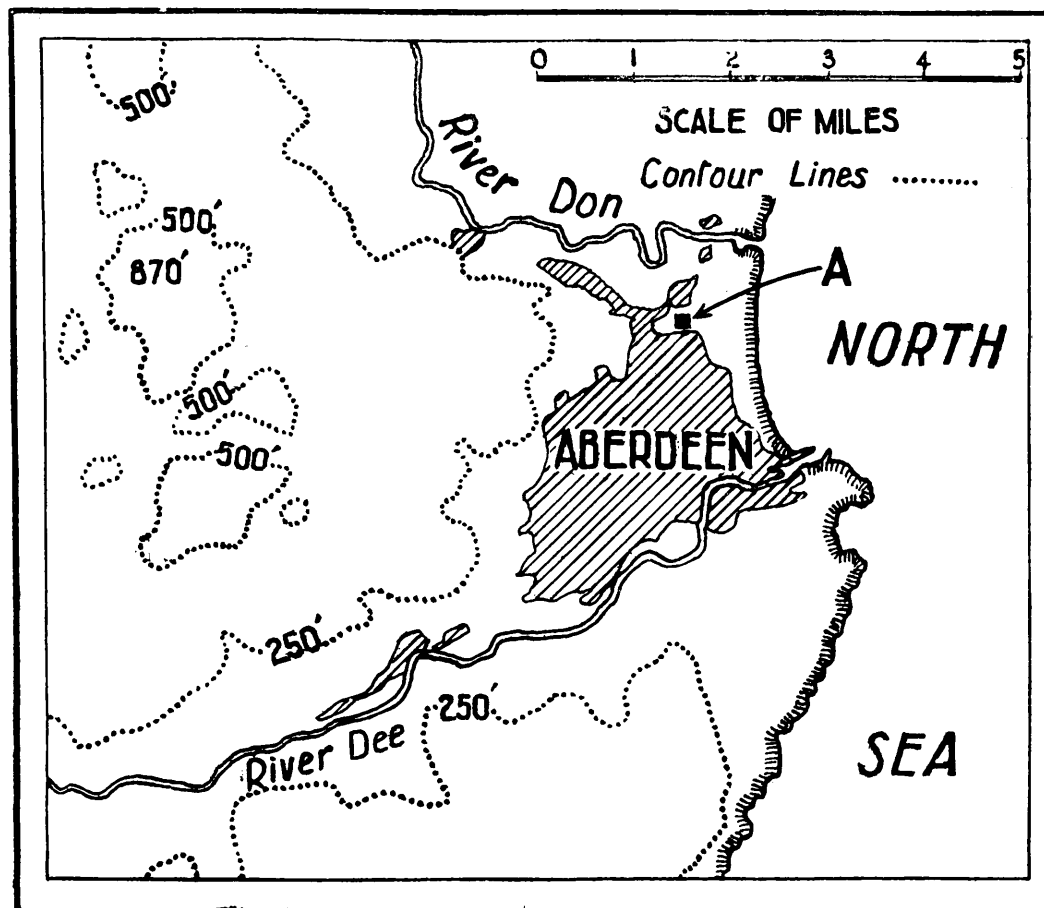


FIG. 6. A SHOWS POSITION OF OBSERVATORY. Shaded areas represent the City of Aberdeen. Figures indicate heights in feet above M.S.L.

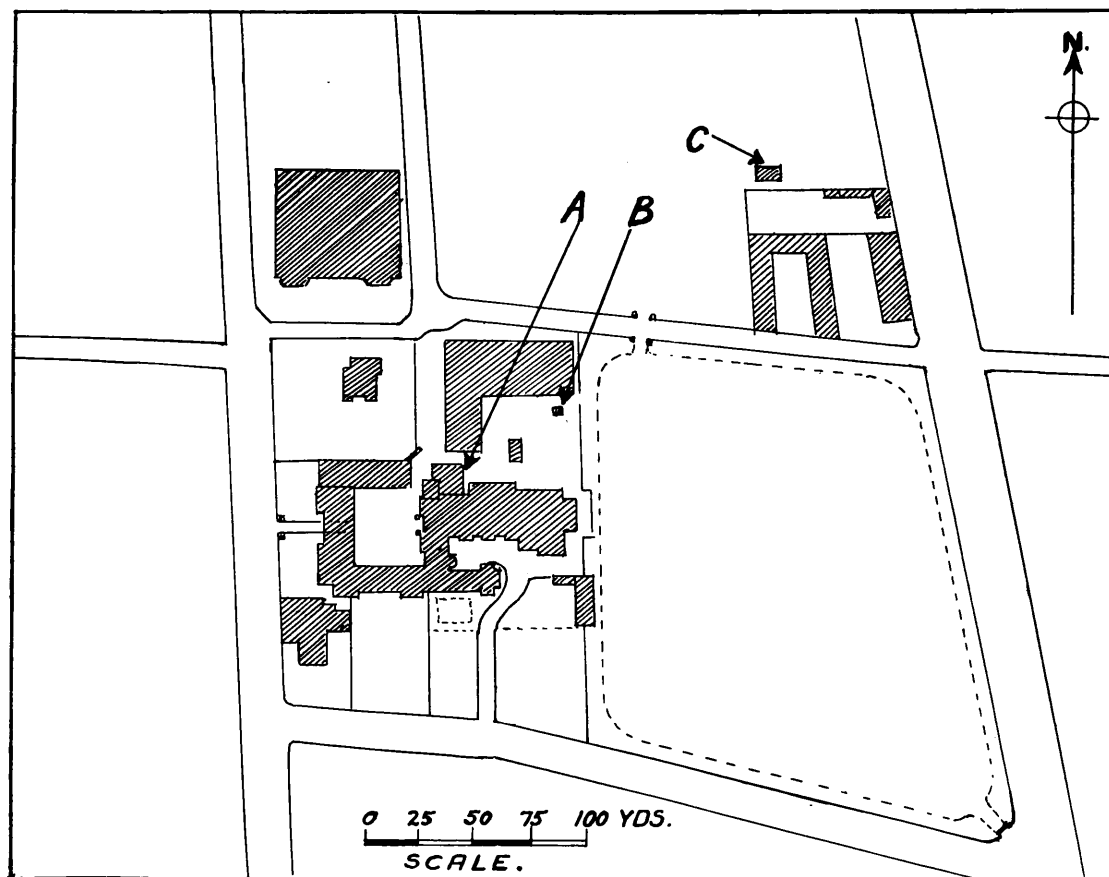


FIG. 7. PLAN OF COLLEGE BUILDINGS. A is Observatory Tower. B is old site of Stevenson Screen Enclosure. C is new site for Stevenson Screen Enclosure.

[To face p. 84.]



ABERDEEN OBSERVATORY.



FIG. 8. OBSERVATORY TOWER (seen from N.E.)



FIG. 9. NEW ENCLOSURE FOR STEVENSON SCREEN AND RAINGAUGE (seen from W.S.W.)

[To face p. 85.]



## METEOROLOGY.

The elements dealt with in the following tables are :—Atmospheric pressure, air temperature, humidity, rainfall, sunshine, wind speed and direction, earth temperature and minimum temperature on the grass, together with a diary of cloud and weather.

The instruments from which values of the above elements have been obtained and the methods of tabulating the records are described in the General Introduction to this volume. The following additional information refers especially to Aberdeen.

*Pressure and Temperature.*—The barograph, standard Kew barometer and thermograph are housed in the uppermost storey of the Observatory. The pressure scale value of the barogram is 1 mm. on the paper = 0.85 mb., when the paper is at normal atmospheric humidity. In similar circumstances the time scale is 9.3 mm. = 1 hour. The records of the photobarograph are standardized by means of control readings taken from Fortin Standard Barometer M.O. 273. The N.P.L. certificate of this barometer shows a correction varying from -0.1 mb. to -0.2 mb. throughout the scale, at a temperature of 273 a.; and this correction has been applied to the control readings.

The recording thermometers are placed in the North-wall screen already referred to. The scale value of the wet bulb thermograph record is 1° absolute = 3.20 millimetres on the paper; for the dry bulb thermograph the scale value varies slightly with the temperature, but is approximately 1° absolute = 3.4 millimetres. The time scale is 1 hour = 9.23 millimetres. Reading of the photothermograms is done by means of glass measuring scales, the records being standardized by control readings from Standard Thermometers M.O. 1698 (dry bulb) and M.O. 1697 (wet bulb). These thermometers have corrections, varying at different parts of the scale, of between -0.1 a. and +0.2 a.; these corrections have been applied to the control readings. The heights of the barometer cisterns and of the bulbs of the thermometers are given at the top of the appropriate tables.

It may here be emphasized that the bulbs of the thermometers in the North-wall screen are at the considerable height of 12.5 metres above the ground, and that readings from these thermometers are exclusively used for this publication (except as noted below under *Humidity*) and for the corresponding summaries printed in the *Monthly Weather Report*.\*

*Rainfall.*—The recording instrument in use is Beckley rain-gauge No. 2 with an area of 101.1 square inches (653 cm<sup>2</sup>). The procedure adopted in tabulating the records is similar to that described in the General Introduction and calls for no comment. Control was by check gauge M.O. 167 up till 31st May, and by M.O. 266 from 1st June onwards.

*Humidity.*—On those occasions when the temperature of the wet bulb has been 273a or under, the relative humidity has been obtained from the records of a hair hygograph. This instrument was accommodated up till the end of May in a small louvered screen which rests on top of the Stevenson screen and is securely fixed to it; since 1st June it has been placed inside the new large screen at the new site. The hygograph is now 13.2 metres below the level of the thermograph bulbs in the North-wall screen, and in using its records an appropriate adjustment is made.

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\* The temperatures for Aberdeen published in the *Daily Weather Report*, and summaries from them given in the *Weekly Weather Report* are from different thermometers, viz., those in the Stevenson Screen with their bulbs only 1.3 metres above the ground.



*Sunshine.*—The sunshine recorder (Campbell-Stokes type) is exposed on the small circular tower on the Observatory roof on which the Robinson Cup Anemograph is erected. It is rigidly held by lead flaps soldered to the lead roof. The exposure is excellent; the only obstruction is a flagpole to the east, of angular diameter about  $1^{\circ}$ , which may obstruct 0.1 hr. record about 7h between April and September. This loss has been allowed for, whenever practicable, in tabulating the records. In computing the percentage duration of sunshine the actual possible values for each day of the year 1928 have been employed, a procedure similar to that adopted from 1926 onwards.

*Wind-Speed and Direction.*—As stated in the General Introduction, the values for 1928 are tabulated from the records obtained by the Dines Pressure-tube Anemograph. This instrument is one of the "standard mounting" type, and is situated in a field about  $\frac{1}{2}$  km. east of the Observatory. The exposure is a more open one than is that of the Cup Anemograph, the records of which were tabulated previous to 1926. The effect of this exposure upon the recorded values is given in the Table in the General Introduction.

In a few instances where the records of the Pressure-tube instrument have been defective, the required values have been obtained from the records of the Cup instrument, a suitable adjustment of such values having been made in accordance with the data given in the above-mentioned table. Values thus obtained are entered in italics.

*Temperature in the Ground.*—This is recorded by a thermometer (unnumbered), which is kept at a depth of 124 cm. (four feet). At Aberdeen the thermometer is carried in a slot near the end of a long bar of wood, about three inches (7.5 cm.) square in section. This bar fits closely into a wooden sleeve, sunk vertically into the earth, so that the bulb of the thermometer is at the required depth. The thermometer itself is enclosed in a glass tube, and its bulb is embedded in paraffin wax so as to render the thermometer insensible to sudden changes of temperature. This allows of its being drawn to the surface and read before the temperature of the bulb has time to change appreciably. As underground temperature changes very slowly, the loss of sensitiveness, resulting from the coating of wax, does not lead to inaccuracies in the determination of the temperature of the earth. The thermometer is read at 9h each morning. The thermometer has a correction of  $-0.2$  a.; this correction is applied to all readings.

*Minimum Temperature on the Grass.*—The grass minimum thermometer is exposed in the enclosure on two wooden pegs about 4 cm. above grass. It is set at 18h and read at 7h, the reading being entered to the day of observation. There is no correction to M.O. 17866, whereas for M.O. 17007, the correction varied between 0.0 a and 0.05 a., and this correction has been applied to the appropriate readings.

*Cloud.*—In connection with the observations of cloud-forms it might be well to indicate the practice adopted at Aberdeen in dealing with the types Nimbus and Strato-cumulus, in view of the fact that there exists among meteorologists some divergence of opinion upon these types, and also because suggestions have been made for a prospective modification in the definitions of the International Classification.

In the case of Nimbus it is the custom at Aberdeen to enter "Nb" on all occasions when the cloud layer from which rain is falling is obviously dense and has developed from A-St, even when no Fr-Nb is visible below it. This is done because it is not always certain to the observer whether the cloud layer is actually uniform low A-St developed as far as rain, or whether a slight mist-film exists below the ragged Fr-Nb, obscuring the latter from view, and thus giving it the appearance of a uniform



featureless sheet. (It is probable that in future a suggestion will be made to extend the definition of A-St in the International Classification to include the dense rain-giving layer which develops from the normal A-St.)

On occasions when the low anticyclonic stratus degrades into drizzle or light rain, it is customary at Aberdeen to enter Nb-St (Nimbo-stratus). The entry "St" is reserved for the type of cloud found generally in dry anticyclonic weather.

The entry St-Cu includes only the cloud-forms as defined under that heading in the International Classification, though some of the entries might equally well have been termed A-Cu. It does not, however, include the bases of closed-up cumulus clouds, nor groups of cumulus arranged in lines.

*Visibility.*—In the subjoined table there is given a list of the objects used for the determination of the degree of visibility, together with their distances and bearings from the observation-point, which may be taken as the roof of the Observatory tower, the N.E. corner thereof being used for the nearer objects.

The range of visibility from the Observatory is somewhat limited by the high ground surrounding the city. From S.E. through S. to N. the distance of the visible horizon is between 2 and 4 miles (4 to 7 km.), but in the N.W. a higher hill, at a distance of 5 miles (8.5 km.), rises above the nearer ridges. To the N.N.E. however there is a clear view of the coast-line as far as Cruden Scaurs, where the coast consists of cliffs over 100 feet high, and is nearly 19 miles (30 km.) distant. From N.N.E. to S.E. there is only the sea-line as horizon, which from the height of the Observatory tower is about 10 miles (16 km.) distant.

Definite objects exist at standard distances from A to H, but from I to M there are no definite objects, though there are adequate identification marks for K and L. Owing, however, to these marks being on the sea-coast, and to the generally clearer visibility to the seaward side of the Observatory, it has been deemed advisable to employ small letter entries for all visibility distances that are not definitely landward estimates. The distances I and J are based upon estimates between other available distances. During darkness the estimates depend upon personal judgment, and upon the degree of obscuration, and alteration in the colour, of the surrounding lights of the town.

VISIBILITY OBJECTS AT ABERDEEN.

OBJECT.	DESCRIPTION.	DISTANCE.	BEARING.
A	Bushes in the garden .. .. .	26 yards.	N.E.
B	Top of finial at East end of University Library roof	55 "	E.S.E.
C	Gate in North wall of Athletics ground .. ..	110 "	E.N.E.
D	East wall of Athletics ground, and trees along it ..	218 "	E.
E	{ (i.) Ventilator tops on Sunnybank School .. ..	550 "	S.W.
	{ (ii.) Pressure-tube Anemograph pole .. ..	ca. 550 "	E.
F	Top of Kiln, Seaton Brickworks .. ..	1,100 "	N.E.
G	{ (i.) Turret of Salvation Army Citadel .. ..	1 $\frac{1}{2}$ miles.	S.S.E.
	{ (ii.) Coastguard watch-tower .. ..	1 $\frac{1}{3}$ "	N.E.
H	{ (i.) Girdleness lighthouse-top .. ..	2 $\frac{3}{5}$ "	S.E.
	{ (ii.) Springhill House .. ..	2 $\frac{1}{2}$ "	W.
I (i)	No object. Estimate between Strathie Hill (3 $\frac{1}{2}$ miles) and Brimmond Hill (5 $\frac{1}{4}$ miles).	{ (3 $\frac{1}{2}$ " ) { (5 $\frac{1}{4}$ " )	N.N.E. N.W.
J (j)	No object. Estimate between Brimmond Hill (5 $\frac{1}{4}$ miles) and Sea horizon (10 miles).	{ (5 $\frac{1}{4}$ " ) { (10 " )	N.W. E.
K (k)	Sand-patch, mouth of Ythan River .. ..	12 $\frac{1}{2}$ "	N.N.E.
L (l)	Cruden Scaurs .. ..	18 $\frac{2}{3}$ "	N.N.E.
M (m)	Cannot see so far. Used when "L" object shows clear detail and colour-differences.		



## IDENTIFICATION NUMBERS OF INSTRUMENTS USED IN 1928.

The following were the instruments actually in use during the year 1928 :—

Standard Fortin Barometer	..	..	M.O. 273
„ Dry Bulb Thermometer	..	..	M.O. 1698
„ Wet „	..	..	M.O. 1697
Recording Beckley Raingauge	..	..	2
Control Raingauge..	..	..	M.O. 167* and M.O. 266
Glass for „	..	..	M.O. 400† and M.O. 1507
Hair Hygrograph	..	..	M.O. 35
Campbell-Stokes Sunshine Recorder	..	..	M.O. 32
Robinson Cup Anemograph	..	..	M.O. 50
Dines Tube „	..	..	M.O. 1011
Earth Thermometer	..	..	—
Grass Minimum Thermometer	..	..	M.O. 17007‡ and M.O. 17866

\* Replaced by M.O. 266 on 1st June, 1928. † Broken on 18th May. ‡ Broken on 17th July.

## Review of Meteorological Results.

*Pressure.*—Pressure over the whole year was about 2 mb below its normal value. The largest deficits occurred in January (11 mb), November (8 mb), June (6 mb), and October (6 mb). Excesses were recorded in December (6 mb), and September (3 mb). The months showing greatest pressure disturbance were January, with a daily range of about 15 mb, and February, November and December with daily ranges of between 11 mb and 12 mb.

As in the past two years the mean diurnal inequalities for the months, seasons, and year have been analysed harmonically, and the results are shown in the accompanying Table. The unit employed in calculating the values for the individual months is .01 mb., that for the seasons and the year is .001 mb. The phase-angles are reduced to Local Mean Time. This year it is also possible to include in the Table the average values of the various coefficients for the period of 56 years from 1871 to 1926,—these having been calculated by Dr. A. Crichton Mitchell,\*—and the Table is therefore arranged similarly to the Table for Eskdalemuir.

The inequality is supposed to be given by the expression—

$$c_1 \sin (15t^\circ + \alpha_1) + c_2 \sin (30t^\circ + \alpha_2) + \dots$$

$t$  being the time in hours since midnight.

HARMONIC COMPONENTS OF THE DIURNAL INEQUALITY OF ATMOSPHERIC PRESSURE—  
ABERDEEN, LONGITUDE 2° 6' W.

Values of  $c_n, \alpha_n$ , in the series  $\sum c_n \sin (15nt^\circ + \alpha_n)$ ,  $t$  being Local Mean Time reckoned in hours from midnight.

Month and Season.	$c_1$		$\alpha_1$		$c_2$		$\alpha_2$		$c_3$		$\alpha_3$		$c_4$		$\alpha_4$	
	1928	1871-1926	1928	1871-1926	1928	1871-1926	1928	1871-1926	1928	1871-1926	1928	1871-1926	1928	1871-1926	1928	1871-1926
January ..	mb. .40	mb. .094	° 67	° 171	mb. .11	mb. .227	° 247	° 151	mb. .16	mb. .130	° 41	° 355	mb. .10	mb. .054	° 239	° 221
February ..	.17	.156	102	176	.15	.270	139	149	.13	.104	342	355	.03	.026	199	96
March ..	.12	.164	275	158	.30	.295	141	151	.04	.052	330	336	.04	.031	30	35
April ..	.18	.153	129	155	.34	.284	136	151	.01	.019	186	188	.04	.044	338	359
May ..	.21	.098	161	135	.26	.237	134	143	.05	.059	200	163	.01	.022	342	329
June ..	.17	.057	124	104	.27	.219	131	141	.06	.065	129	155	.02	.008	330	331
July ..	.09	.089	262	137	.21	.208	137	144	.06	.068	115	159	.01	.013	318	345
August ..	.10	.112	137	162	.24	.232	150	145	.01	.041	209	167	.03	.029	327	336
September ..	.23	.119	235	146	.25	.287	159	148	.01	.027	10	342	.05	.053	1	339
October ..	.09	.155	187	183	.30	.274	151	149	.07	.075	5	349	.04	.027	52	20
November ..	.70	.132	33	197	.39	.229	155	152	.14	.103	350	354	.02	.014	338	172
December ..	.26	.164	300	169	.19	.211	169	146	.10	.122	355	356	.08	.051	203	204
Arithmetic Mean	.23	—	—	—	.25	—	—	—	.07	—	—	—	.04	—	—	—
Year ..	.064	.116	85	163	.236	.247	147	149	.040	.030	13	0	.013	.009	297	340
Winter ..	.271	40	180	164	.271	164	149	149	.120	4	4	4	.048	227	227	227
Equinox ..	.092	208	296	146	.028	353	353	353	.038	144	144	144	.037	15	15	15
Summer ..	.126	151	244	137	.038	144	144	144	.038	144	144	144	.018	327	327	327

*Note.*—*Winter* comprises the four months January, February, November, December; *Equinox* the months March, April, September, October; and *Summer* May to August.

\* Diurnal Variation of Pressure and Temperature at Aberdeen, 1871-1926, by A. Crichton Mitchell, D.Sc., Q.J.R.Met.Soc., 1929, p. 197.



As frequently happens, there is great variation in the individual monthly values of the amplitude of the 24-hour term. In November  $c_1$  is as high as  $\cdot 70$  mb., while in the preceding month of October it is only  $\cdot 09$  mb. In January also  $c_1$  is high. The corresponding phase-angles  $\alpha_1$  vary irregularly from month to month as usual.

The values of  $c_2$  show the usual maxima in spring and autumn; the winter minimum is unusually low. The phase-angles  $\alpha_2$  are lower than the usual values from February to July inclusive, and higher from August to December. In January  $\alpha_2$  shows a remarkable departure of over  $90^\circ$  from its normal value, while the corresponding amplitude  $c_2$  is as low as  $\cdot 11$  mb., less than half its usual value, and almost the least important of the four term-amplitudes for that month, all the other amplitudes,  $c_1$ ,  $c_3$ , and  $c_4$  being much above their average values. January, as already remarked, was a month of very low and very unsteady pressure.

The coefficients of the 8-hour term  $c_3$  and  $\alpha_3$  show the usual seasonal variations, the equinoctial minimum and winter maximum of  $c_3$  are well developed, as is likewise the reversal of phase from winter to summer. The values of  $c_4$  follow the normal values very closely except in January and December, in which months the amplitudes are almost twice the usual values. The phase-angles  $\alpha_4$  are in fair agreement with the average except in February and November.

Speaking generally, the year 1928 shows greater variation in the amplitudes of all four terms than do either of the two preceding years; in the cases of  $c_1$  and  $c_2$  the variation is twice as great as that shown in 1926.

*Temperature.*—In 1928 the temperature showed only a very slight departure from the average over the year as a whole, but the winter half of the year was distinctly warmer throughout, while the summer half, with the exception of July, was definitely cooler than the normal. The monthly departures from the average values were in no cases considerable, the greatest being an excess of  $1\cdot 1$  a. in February, and a deficit of the same amount in June. In this respect the present year bears some resemblance to the previous one, when March was considerably warmer, and June considerably cooler than normal, but the departures this year are not so marked.

*Rainfall.*—The present year again showed an excess of rainfall. During the period of seven years from 1922 to 1928, only one year—1925—was deficient in rainfall. The excess during the present year amounted to 67 mm. The incidence of precipitation showed notable departures from the averages for the individual months. There were large excesses in January (41 mm.) June (40 mm.) March (30 mm.) and November (25 mm.), and deficits in February (36 mm.) May (18 mm.) and July (18 mm.). Over the seven years from 1922 to 1928 the total excess of precipitation amounts to 485 mm.

*Relative Humidity.*—The fluctuations in the values of relative humidity showed, as might reasonably be expected, good agreement on the whole with the recorded monthly percentage of sunshine, whereas the incidence of rainfall had apparently little relation. For example, the very small rainfall of February was accompanied by a normal value of relative humidity, while June, with nearly twice its usual rainfall, had an average relative humidity about three per cent. below the usual.

*Sunshine.*—The year was duller than the average by about 4 per cent. of the possible sunshine. The most of this deficiency arose in the spring months, March, April and May, over which period the loss was fully 13 per cent. March was the dullest month of the year, its value of 13 per cent of the possible being only two-fifths of the average for that month. The month showing the largest excess was September, which had 6 per cent. above the normal, notwithstanding an excess of rainfall; while the four winter months were all brighter than usual.



*Wind.*—The average wind velocity for the year, 4·7 m.p.s., exceeded that of 1927 by about 10 per cent. The variation between the individual monthly means was, however, less than in 1927. The windiest months were March (5·8 m.p.s.), and December (5·7 m.p.s.), while on the other hand, May, August and September all had mean values of 3·9 m.p.s. Only one gale was recorded, that of March 29th, but the highest velocity in a gust was attained on October 28th when a velocity of 27 m.p.s. (61 m.p.h.) was recorded at 9h 25m. The prevailing winds were from the S.E. and S.W. sectors, but in March, April and May, a considerable excess over the normal of winds from the N.E. quadrant had its concomitant in the marked deficiency of sunshine during that period.

*Aurora.*—The aurora was observed on 25 occasions during the year ; twice as frequently in the latter half as in the earlier. The month of greatest frequency was November with 9 observations. The dates of observations will be found in the General Auroral Table.

*General.*—The Seasons of the year 1928 showed, at Aberdeen, the following characteristics. Spring was nearly normal in temperature but was wet and very dull ; Summer was slightly cooler than usual, somewhat wet and rather dull ; Autumn was slightly warmer than usual, decidedly wet, but a little brighter than normal ; and the Winter months were decidedly warmer and brighter than normal, and had average, though erratic, rainfall.



Readings in millibars at exact hours, Greenwich Mean Time.

69. Aberdeen : H<sub>b</sub> (height of barometer cistern above M.S.L.) = 26.0 metres.

January, 1928.

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean
Day.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
1	021.2	021.6	021.5	021.5	021.1	021.0	020.9	020.9	020.7	020.6	019.7	018.9	017.6	016.2	014.7	013.9	011.8	009.7	008.2	006.4	005.1	003.3	000.1	998.7	015.2
2	997.0	996.0	995.0	994.9	993.9	994.6	995.3	995.9	996.2	996.6	996.9	997.5	997.5	998.1	999.2	000.0	000.9	001.5	002.2	002.6	003.0	003.2	003.5	003.8	998.5
3	004.1	004.6	005.3	005.8	006.3	007.3	008.4	009.7	010.9	011.4	012.1	012.7	013.5	013.8	013.8	014.0	014.2	013.5	013.2	012.1	011.4	010.2	008.9	006.4	010.1
4	004.7	003.9	002.9	002.6	001.9	001.2	000.6	000.3	999.3	997.7	995.9	993.6	992.1	991.3	992.6	992.8	993.3	993.5	994.3	994.5	994.8	995.3	995.3	995.7	997.3
5	995.9	996.7	997.3	998.1	999.1	999.7	000.8	001.6	002.4	003.5	004.2	005.0	005.4	005.4	005.4	005.5	005.7	005.4	004.7	004.1	003.4	002.6	001.9	001.2	999.0
6	996.8	994.2	991.3	987.9	985.2	982.0	979.2	977.5	977.0	976.7	977.7	982.5	988.6	993.9	998.3	001.0	003.5	004.9	005.2	006.5	007.8	007.8	008.5	008.2	993.2
7	007.4	007.0	006.1	004.6	003.7	002.5	000.3	998.7	997.9	997.1	995.5	994.8	994.2	993.6	992.8	991.4	990.6	989.7	989.0	987.4	985.8	984.7	983.6	983.0	996.0
8	983.8	985.6	985.9	986.3	985.9	986.7	987.3	988.8	989.1	989.7	990.1	990.6	991.0	991.2	991.7	991.8	992.6	992.8	993.7	994.3	994.7	994.9	995.2	995.4	990.1
9	995.4	996.0	995.9	995.8	995.5	995.2	994.7	993.7	992.8	991.1	990.8	989.9	989.2	989.2	989.2	989.3	989.3	989.3	989.3	989.3	989.3	989.3	989.3	989.3	993.2
10	992.8	991.8	991.6	990.9	989.8	989.7	988.3	987.3	986.3	985.1	984.0	982.9	981.7	979.7	977.2	976.3	979.7	980.3	981.6	982.5	983.8	985.1	986.5	988.4	983.8
11	986.4	988.5	988.8	989.1	990.1	990.4	991.1	992.4	994.0	995.6	996.5	997.3	997.8	998.6	999.2	000.1	001.0	001.4	002.0	002.8	003.1	003.5	003.7	003.7	996.2
12	003.6	003.0	002.3	000.4	999.8	997.8	995.6	993.2	990.7	988.4	987.0	984.7	983.4	983.4	983.6	983.1	983.0	982.5	981.2	980.8	979.9	979.3	978.5	978.4	989.0
13	978.2	978.8	978.1	977.5	976.9	976.4	975.3	975.3	975.4	974.9	975.3	975.7	976.7	977.8	979.4	980.8	982.0	983.8	985.7	986.7	987.4	989.5	990.9	992.1	980.2
14	993.3	994.0	994.5	995.0	995.6	996.1	996.5	995.9	995.3	994.3	992.8	991.4	989.7	988.9	988.9	985.8	985.0	984.3	984.4	983.7	984.4	983.7	984.0	983.0	990.7
15	984.0	983.2	983.2	983.0	982.3	981.7	981.6	980.9	981.3	981.0	980.5	979.5	979.3	979.1	979.2	978.9	979.0	979.3	979.6	980.0	980.9	981.4	982.2	982.8	981.0
16	983.7	984.9	986.2	987.3	988.4	989.2	990.6	991.4	992.8	993.6	994.1	994.5	995.3	995.7	996.2	996.7	997.4	997.6	998.0	998.6	999.0	999.6	000.6	001.3	993.5
17	002.0	003.0	003.8	004.4	004.9	005.6	006.4	007.3	008.3	009.2	009.7	009.9	010.2	010.6	011.5	012.3	012.8	013.4	014.1	013.9	014.1	014.0	014.0	014.2	009.3
18	013.8	014.4	013.6	012.9	013.3	013.3	013.4	013.8	013.6	013.3	012.2	011.0	010.4	009.0	008.2	007.5	006.3	005.1	004.0	002.8	002.4	001.6	001.1	000.9	999.9
19	000.8	000.5	000.6	000.7	001.5	002.1	002.5	003.2	004.2	005.0	006.3	007.0	008.5	009.4	010.3	011.4	012.1	011.9	011.8	012.1	012.5	012.9	013.4	013.7	007.0
20	012.9	013.2	012.2	010.6	010.0	009.0	007.9	008.0	006.8	006.9	006.4	004.2	003.9	004.8	006.1	008.0	008.8	009.5	010.9	011.2	011.4	011.0	010.5	010.1	009.0
21	009.6	008.5	007.1	005.9	004.5	003.1	001.7	000.3	999.0	997.0	995.7	993.9	992.0	991.3	990.9	991.3	991.6	992.0	992.9	993.9	995.0	994.6	995.5	996.3	997.9
22	996.8	997.5	997.6	998.2	998.9	999.6	000.6	001.6	002.5	003.5	004.0	004.1	005.0	005.6	006.6	007.5	008.1	008.4	008.8	009.1	009.5	009.4	009.4	009.2	004.0
23	009.0	008.9	008.8	008.1	007.3	007.0	006.3	005.6	005.6	004.8	004.2	003.4	001.7	999.9	998.8	997.3	995.2	993.1	990.8	989.6	988.3	987.4	986.3	987.6	000.3
24	987.9	989.1	989.5	989.7	989.9	989.7	989.4	988.8	988.4	987.9	986.7	986.1	985.1	985.3	986.4	987.4	988.8	988.8	988.8	989.0	989.3	989.3	989.5	988.9	988.9
25	997.2	997.7	998.6	999.7	000.3	001.1	002.0	003.1	003.5	004.3	003.8	003.4	002.0	000.3	998.7	995.7	993.0	991.8	990.5	989.3	988.7	989.4	990.6	990.5	997.4
26	991.9	991.8	991.6	992.8	993.4	994.1	994.4	994.9	995.7	995.8	995.2	993.6	992.1	991.4	990.9	990.8	990.7	991.2	991.4	992.1	992.5	993.6	994.9	995.5	992.9
27	996.4	997.2	997.7	998.2	998.4	000.4	001.8	003.2	004.7	006.3	007.6	008.1	008.9	009.3	010.1	011.0	011.2	011.5	011.6	011.8	012.2	011.6	011.4	010.6	006.0
28	010.9	009.6	008.9	007.8	006.8	005.4	004.0	003.2	002.4	001.2	000.3	999.3	998.1	997.7	996.9	997.1	997.3	997.2	997.3	996.9	996.9	996.9	997.4	001.4	999.4
29	997.1	996.4	996.0	995.9	995.7	995.7	995.7	995.7	995.7	995.7	995.7	995.7	995.7	995.7	995.7	995.7	995.7	995.7	995.7	995.7	995.7	995.7	995.7	995.7	995.7
30	990.5	990.9	991.1	991.0	991.0	991.0	991.2	991.5	991.6	991.8	991.9	991.8	991.4	991.5	991.5	991.7	992.3	992.7	993.5	993.8	994.3	994.8	995.4	995.9	992.1
31	996.1	996.8	997.0	997.4	997.8	998.0	998.0	998.0	997.9	997.8	996.8	995.5	993.9	990.7	989.4	986.7	984.3	982.0	980.6	979.1	978.1	977.9	977.8	977.4	990.6
Mean (Station level)	998.10	998.24	998.06	997.87	997.72	997.63	997.48	997.43	997.43	997.26	996.93	996.47	996.27	996.37	996.65	996.75	996.79	996.72	996.69	996.70	996.71	996.73	996.70	996.70	997.13
Mean (Sea level)	1001.32	1001.45	1001.28	1001.09	1000.93	1000.85	1000.70	1000.64	1000.64	1000.47	1000.13	999.66	999.46	999.56	999.84	999.94	999.99	999.92	999.89	999.91	999.92	999.94	999.91	999.91	1000.34

70. Aberdeen : H<sub>b</sub> = 26.0 metres.

February, 1928.

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean
Day.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
1	976.7	975.8	974.7	974.2	973.1	972.6	972.5	973.6	975.5	976.6	977.0	977.4	977.8	978.6	979.8	980.4	981.4	982.8	983.5	984.2	984.6	985.4	986.0	986.7	978.6
2	986.7	986.8	987.2	986.9	987.1	987.0	988.1	988.6	989.3	990.2	990.5	990.7	991.0	991.2	990.5	990.6	990.5	990.0	989.6	989.0	988.3	988.2	988.2	988.2	988.9
3	988.3	988.8	989.4	990.1	991.5	992.5	994.1	995.8	997.4	998.9	999.0	999.3	999.7	999.7	999.7	999.7	999.7	999.7	999.7	999.7	999.7	999.7	999.7	999.7	999.7
4	012.0	011.6	011.2	010.5	009.7	008.5	007.4	006.4	005.1	004.2	003.3	002.6	001.4	000.6	999.7	999.7	999.7	999.7	999.7	999.7	999.7	999.7	999.7	999.7	999.7
5	995.9	995.7	995.7	995.6	995.9	996.1	996.4	996.7	997.5	997.9	998.1	998.7	998.7	999.5	999.4	999.7	999.8	000.1	000.6	000.3	000.5	000.6	001.2	001.4	998.3
6	001.9	002.0	002.8	003.5	004.2	004.5	005.5	006.1	007.3	008.9	010.3	011.0	011.7	012.4	012.6	012.8	013.0	012.9	012.7	011.7	010.9	009.4	008.2	005.9	008.3
7	005.8	004.5	003.3	001.7	001.5	002.3	003.4	003.9	004.5	005.5	006.0	006.6	007.3	008.0	008.1	008.2	008.6	009.0	008.9	009.5	009.4	009.2	009.7	009.0	006.3
8	008.4	008.5	008.2	008.0	007.7	007.7	006.9	007.2	007.1	006.5	005.6	005.1	004.4	004.1	003.2	002.7	000.9	999.5	999.7	999.6	999.2	994.3	993.2	991.0	989.4
9	991.0	993.1	995.1	996.3	997.1	997.7	998.0	997.9	998.0	998.1	998.1	998.1	998.1	998.1	998.1	998.1	998.1	998.1	998.1	998.1	998.1	998.1	998.1	998.1	998.1
10	001.1	001.0	000.4	999.5	998.6	996.6	994.9	992.7	990.9	987.3	984.1	980.9	977.6	974.9	973.1	972.4	971.7	970.7	970.1	969.4	968.9	968.4	968.0	967.9	9



Readings in millibars at exact hours, Greenwich Mean Time.

71. Aberdeen :  $H_b$  (height of barometer cistern above M.S.L.) = 26.0 metres.

March, 1928.

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean
Station Level	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
1	015.7	015.5	015.0	014.6	014.3	014.3	014.3	014.1	014.3	014.1	013.9	013.9	013.6	013.1	012.9	012.6	012.3	012.2	011.9	011.9	011.9	012.0	011.9	011.9	013.5
2	011.6	011.4	011.3	011.2	011.6	011.8	012.2	012.8	013.2	013.8	014.3	014.6	014.7	014.8	015.0	015.4	016.0	016.8	017.4	017.8	018.1	018.5	018.6	018.6	014.5
3	018.7	018.8	018.6	018.4	018.2	018.2	018.2	018.3	018.3	018.5	018.6	018.6	018.3	018.0	017.8	017.5	017.5	017.8	017.9	018.0	017.9	017.9	018.0	017.8	018.2
4	017.8	017.9	017.8	017.7	017.4	017.4	017.5	017.5	017.7	017.6	017.7	017.2	016.8	016.4	016.2	015.9	016.0	015.9	016.0	016.1	016.0	016.0	015.8	015.8	016.9
5	015.7	015.7	015.3	015.1	015.2	015.2	015.2	015.3	015.3	015.1	015.0	014.9	014.8	014.6	014.5	014.3	014.1	014.3	014.3	014.3	014.4	014.7	014.8	014.9	014.9
6	014.8	015.0	014.9	014.8	014.8	015.0	015.4	015.6	015.7	015.9	016.0	016.0	015.7	015.5	015.3	015.0	014.8	014.6	014.3	014.1	013.9	013.7	013.1	013.0	014.9
7	012.8	012.6	012.4	012.4	012.4	012.6	012.9	013.6	014.0	014.5	014.8	015.2	015.4	015.6	015.9	016.1	016.7	017.0	017.6	017.9	018.3	018.6	018.5	018.6	015.1
8	018.6	018.7	018.8	018.7	018.6	018.8	018.8	019.2	019.3	019.5	019.7	019.7	019.6	019.6	019.7	019.9	020.0	020.0	020.4	020.6	020.9	020.9	020.9	021.0	019.6
9	020.8	020.6	020.3	020.0	020.0	019.9	019.9	019.8	019.8	019.5	019.4	019.2	018.9	018.6	018.5	018.3	018.4	018.5	018.7	019.0	019.5	020.0	020.5	021.0	019.7
10	021.8	022.3	022.5	022.7	023.0	023.2	023.6	024.0	024.7	025.4	025.9	026.2	026.6	026.6	026.8	027.0	027.2	027.4	027.9	028.5	028.6	028.9	028.8	029.0	025.6
11	028.9	028.8	028.6	028.5	028.3	028.7	028.4	028.3	028.4	028.5	028.6	028.5	028.2	027.9	027.5	027.0	026.9	026.8	026.7	026.4	026.1	025.5	025.2	024.9	027.7
12	024.5	023.9	023.4	023.0	022.9	022.6	022.5	022.2	022.1	022.0	021.8	021.5	021.0	020.5	020.0	019.5	019.4	019.6	019.5	019.4	019.6	019.9	020.1	020.4	021.4
13	020.4	020.7	020.6	020.7	020.6	020.8	021.1	021.5	021.2	021.2	021.2	021.2	021.2	021.2	021.2	021.2	021.2	021.2	021.2	021.2	021.2	021.2	021.2	021.2	021.5
14	022.4	022.0	021.9	021.8	021.6	021.7	022.0	022.1	022.1	022.1	022.2	022.2	022.1	021.8	021.5	021.2	021.5	021.5	021.6	021.6	021.8	022.0	022.0	021.8	021.9
15	021.7	021.6	021.3	021.0	020.7	020.7	020.8	021.1	021.2	021.4	021.6	021.5	021.4	021.3	021.0	021.0	021.0	021.0	021.2	021.1	021.1	021.0	021.1	021.1	021.2
16	020.8	020.6	020.3	020.0	019.7	019.5	019.2	019.0	018.7	018.3	017.6	016.8	016.3	015.1	014.5	013.8	013.0	012.6	012.3	011.7	011.0	010.1	009.7	009.4	016.1
17	008.7	007.7	006.8	006.4	006.2	005.5	005.6	005.4	005.5	005.1	005.2	005.4	005.0	005.0	005.2	005.6	005.5	006.0	006.4	006.4	006.4	006.4	005.8	005.4	006.0
18	005.3	004.7	003.9	003.3	003.1	002.7	002.4	002.3	001.8	001.2	000.5	000.4	000.2	000.5	000.9	000.8	000.1	000.9	001.4	002.0	002.3	002.7	003.0	003.0	001.8
19	003.5	003.4	003.4	003.8	004.0	004.3	004.3	004.3	004.3	004.2	003.8	003.3	002.6	001.8	001.7	001.2	000.3	000.3	000.3	000.3	000.3	000.3	000.3	000.3	000.3
20	997.0	996.5	996.2	996.4	997.1	997.4	997.9	998.5	998.7	999.0	999.2	999.3	999.2	999.1	998.9	998.5	998.4	998.5	998.2	998.5	998.6	998.1	998.0	998.1	998.1
21	998.3	998.8	998.2	998.9	999.1	999.5	000.0	000.0	000.2	001.0	001.3	000.9	001.1	001.0	000.6	000.7	000.9	000.7	001.1	000.8	000.6	000.3	999.7	999.0	000.1
22	998.4	997.8	997.4	997.0	996.8	996.6	996.4	996.4	996.1	996.2	996.0	995.7	995.6	995.4	995.2	994.9	994.7	994.7	994.6	994.1	993.6	993.1	992.7	992.5	995.6
23	992.7	992.8	992.7	992.7	992.8	992.8	993.3	993.8	993.7	994.2	994.1	993.8	993.5	993.0	992.4	992.3	992.3	992.1	992.1	991.9	991.8	991.4	991.0	990.7	992.7
24	990.5	990.1	989.9	989.7	989.9	990.0	990.3	990.1	990.2	990.2	990.4	990.3	989.8	989.8	989.7	989.7	989.0	989.4	989.7	989.8	991.1	991.3	991.3	991.3	990.2
25	991.6	991.6	991.6	991.6	991.9	992.3	993.0	993.5	993.9	994.2	994.8	995.3	995.6	996.1	996.4	996.8	997.2	997.9	998.6	999.2	999.8	000.2	000.7	001.1	995.4
26	001.4	001.9	002.0	002.1	002.4	002.8	003.1	003.4	003.5	003.5	003.6	003.4	003.4	003.3	002.9	002.8	002.5	002.5	002.3	002.2	002.1	001.7	001.3	000.9	002.5
27	000.4	000.1	999.4	998.9	998.2	997.9	997.7	996.8	996.3	995.7	995.1	994.3	994.0	992.8	992.2	992.2	992.4	992.5	992.8	993.1	993.2	993.0	992.7	992.6	995.3
28	992.1	991.6	991.2	991.0	991.1	991.2	991.4	991.6	991.7	991.7	991.5	991.3	991.2	990.9	990.8	990.6	990.7	990.9	991.2	991.4	991.3	991.0	990.9	990.7	991.3
29	990.2	990.0	989.6	989.4	989.0	988.7	988.2	987.5	987.2	986.0	984.7	983.2	981.7	979.5	977.3	974.8	972.5	970.5	968.4	967.0	966.8	966.8	966.6	966.6	980.2
30	966.5	966.6	966.8	967.0	967.6	968.3	969.2	970.6	971.6	972.3	973.3	974.2	975.1	975.9	976.5	977.6	978.5	979.7	980.8	981.8	982.7	983.3	984.2	984.9	974.4
31	985.4	985.7	986.3	986.8	987.5	988.4	989.3	990.3	991.1	992.3	993.1	993.6	993.7	994.0	994.5	995.0	995.7	996.5	997.2	997.5	997.6	997.6	997.7	997.7	992.4
Mean (Station level)	1007.39	1007.27	1007.05	1006.95	1006.97	1007.04	1007.22	1007.37	1007.49	1007.57	1007.58	1007.49	1007.31	1007.04	1006.86	1006.73	1006.70	1006.80	1006.93	1007.03	1006.99	1006.93	1006.90	1007.12	
Mean (Sea level)	1010.63	1010.51	1010.29	1010.20	1010.21	1010.28	1010.46	1010.61	1010.72	1010.80	1010.81	1010.72	1010.53	1010.26	1010.08	1009.95	1009.88	1010.03	1010.16	1010.22	1010.27	1010.23	1010.16	1010.14	1010.35

72. Aberdeen :  $H_b$  = 26.0 metres.

April, 1928.

Station Level ↑   <
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Readings in millibars at exact hours, Greenwich Mean Time.

73. Aberdeen :  $H_b$  (height of barometer cistern above M.S.L.) = 26.0 metres.

May, 1928.

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean
Day.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
1	011.6	011.4	011.4	011.4	011.5	011.5	012.1	012.0	012.4	012.6	012.7	012.9	012.6	012.9	012.9	013.1	012.8	013.0	013.2	013.6	013.9	013.9	014.1	014.4	012.6
2	014.5	014.3	014.4	014.4	014.5	014.6	014.7	014.8	014.8	015.4	015.5	015.5	015.6	015.4	015.2	015.0	014.8	014.8	014.8	015.1	015.3	015.4	015.3	015.0	014.9
3	014.9	014.5	014.3	014.1	014.2	014.3	014.2	014.1	014.2	014.2	014.2	014.2	014.2	014.1	013.9	013.5	013.2	013.2	013.3	013.3	013.4	013.4	013.4	013.4	013.9
4	013.3	013.2	013.1	013.0	013.0	013.0	013.2	013.4	013.9	014.2	014.2	014.2	014.2	014.3	014.2	014.0	014.0	014.1	014.2	014.3	014.3	014.4	014.6	014.5	013.8
5	014.3	014.3	014.0	014.0	013.9	013.9	013.9	014.0	014.1	014.2	014.2	014.1	014.2	014.3	013.8	013.3	012.9	012.9	012.9	012.8	012.9	012.6	012.4	011.7	013.6
6	011.5	011.0	010.4	009.9	009.5	009.4	009.3	009.3	009.0	008.9	008.9	008.7	008.6	008.6	008.5	008.4	008.4	008.6	008.8	009.6	009.9	010.5	010.9	011.1	009.5
7	011.3	011.3	011.4	011.6	011.7	011.7	012.3	012.5	012.7	012.7	012.7	012.9	012.8	012.9	012.5	012.1	011.7	011.4	011.2	011.0	010.7	010.4	009.9	009.2	011.7
8	008.2	007.5	007.0	007.8	008.3	008.9	009.5	009.6	010.3	011.0	011.2	011.8	012.3	012.4	012.6	012.8	013.0	013.2	013.4	014.0	014.1	014.2	014.1	014.0	011.2
9	014.0	014.1	014.0	014.0	014.1	014.2	014.4	014.9	015.2	015.0	015.5	015.6	015.8	016.2	016.5	016.6	016.6	016.7	016.8	017.0	016.9	016.8	016.7	016.6	015.5
10	016.3	016.2	016.1	016.1	016.3	016.4	016.4	016.6	017.0	017.3	017.5	017.3	017.1	016.9	017.1	017.0	017.1	017.5	017.4	017.5	017.7	017.6	017.5	017.3	017.0
11	017.1	017.0	016.4	016.2	016.0	015.8	015.8	015.7	015.5	015.3	015.1	015.0	014.9	014.8	014.7	014.7	014.8	015.1	015.2	015.5	015.6	015.5	015.5	015.3	015.6
12	015.4	015.2	015.3	015.3	015.7	015.8	016.0	016.3	016.8	016.9	016.9	016.9	016.9	017.1	017.5	017.5	017.7	018.1	018.5	018.8	019.0	019.0	019.0	019.0	017.0
13	018.9	018.9	018.9	018.8	018.7	018.6	018.4	018.1	018.0	017.8	017.7	017.6	017.6	017.7	017.6	017.2	017.0	016.8	016.6	016.4	016.0	015.7	015.2	015.0	017.0
14	017.3	017.2	017.2	017.3	017.5	017.5	017.7	017.6	017.8	017.7	017.6	017.6	017.6	017.7	017.6	017.2	017.0	016.8	016.6	016.4	016.0	015.7	015.2	015.0	017.0
15	014.4	013.6	012.6	011.6	010.7	009.7	008.6	007.8	006.0	004.3	003.4	002.9	002.4	001.5	001.3	001.2	001.1	000.6	000.2	999.6	999.7	999.2	999.1	999.1	004.9
16	998.9	998.5	998.2	998.0	998.1	998.1	998.4	999.3	000.8	002.7	003.9	004.8	005.3	005.9	005.9	005.9	006.0	005.9	005.9	005.8	005.5	004.9	004.0	003.2	002.6
17	002.3	001.5	000.1	999.3	998.7	998.1	997.8	997.5	997.4	997.3	997.4	997.5	997.7	997.7	997.5	997.6	997.5	997.4	998.1	998.8	999.6	000.3	000.7	000.8	998.7
18	001.0	001.5	001.7	001.9	002.2	002.9	003.1	003.3	003.6	004.0	004.3	004.5	004.5	004.5	004.3	004.4	004.3	004.5	004.5	004.4	004.5	004.5	004.3	004.2	003.5
19	004.1	003.7	003.0	002.9	002.5	002.4	002.3	002.4	002.4	002.4	002.3	002.3	002.5	002.4	002.4	002.5	002.7	002.9	003.4	004.1	004.5	005.1	005.4	005.2	003.2
20	006.1	006.2	006.3	006.4	006.8	007.1	007.8	008.1	008.5	009.0	009.4	009.7	010.1	010.7	011.0	011.3	011.9	012.8	013.6	014.2	015.0	015.5	016.0	016.2	010.2
21	016.6	016.9	017.1	017.5	017.8	018.1	018.7	019.2	019.9	020.4	020.8	021.1	021.1	021.3	021.4	021.4	021.5	021.5	021.8	021.8	022.1	022.0	021.9	021.6	020.0
22	021.1	020.7	020.4	020.0	019.7	019.4	019.6	019.6	019.3	018.8	018.6	018.4	018.0	017.8	017.2	016.8	016.9	016.9	016.7	016.7	016.5	016.2	015.7	015.8	018.3
23	015.1	014.7	014.2	014.1	013.9	013.8	013.6	013.6	013.5	013.5	013.5	013.4	013.2	013.3	013.3	013.3	013.4	013.5	013.7	014.0	014.5	014.9	014.8	013.9	018.3
24	014.9	015.0	015.0	014.9	015.1	015.5	015.8	015.9	016.0	016.3	016.5	016.7	017.0	016.9	016.8	016.9	017.0	017.1	017.4	017.7	018.3	018.3	018.4	018.4	016.5
25	018.2	018.3	018.5	018.6	018.8	019.1	019.3	019.6	019.9	020.1	020.2	020.2	020.3	020.4	020.5	020.5	020.6	020.8	021.0	021.2	021.4	021.4	021.4	021.4	020.0
26	021.3	021.1	020.9	020.7	020.7	020.6	020.7	020.6	020.5	020.6	020.4	020.1	019.8	019.5	019.4	019.1	018.8	018.8	018.7	018.7	018.9	018.8	018.4	018.1	019.9
27	017.9	017.4	017.3	017.1	017.2	017.1	017.1	017.1	017.0	016.7	016.5	016.4	016.0	015.6	014.9	014.7	014.5	014.4	014.4	014.1	013.9	013.7	013.4	012.7	015.8
28	012.8	012.1	011.6	011.4	011.2	011.1	011.3	011.5	011.5	011.2	011.1	011.5	011.4	011.4	011.4	011.4	011.4	011.4	012.0	012.7	013.5	014.0	014.7	015.2	012.1
29	015.2	015.5	015.6	016.1	016.6	017.0	017.3	017.8	018.3	018.7	018.9	019.1	019.4	019.5	019.6	019.6	019.8	020.0	020.3	020.7	021.2	021.5	021.7	021.8	018.7
30	021.9	022.0	022.1	022.4	022.7	023.1	023.4	023.7	024.0	024.2	024.6	024.7	024.9	024.8	024.7	024.7	024.8	024.9	025.0	025.3	025.4	025.4	025.2	024.0	018.7
31	025.0	024.9	024.8	024.8	024.6	024.7	024.7	024.7	024.6	024.5	024.4	024.5	024.6	024.5	024.2	023.9	023.7	023.9	023.9	024.0	024.2	024.3	024.3	024.4	024.4
Mean (Station level)	1013.72	1013.54	1013.34	1013.28	1013.30	1013.34	1013.47	1013.57	1013.71	1013.80	1013.88	1013.93	1013.92	1013.90	1013.82	1013.74	1013.74	1013.85	1014.00	1014.19	1014.38	1014.43	1014.37	1014.26	1013.80
Mean (Sea level)	1016.95	1016.76	1016.56	1016.51	1016.53	1016.57	1016.69	1016.78	1016.92	1017.00	1017.08	1017.13	1017.12	1017.09	1017.01	1016.94	1016.94	1017.06	1017.21	1017.41	1017.61	1017.85	1017.60	1017.49	1017.02

74. Aberdeen :  $H_b$  = 26.0 metres.

June, 1928.

Station Level	1	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
	2	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
	3	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
	4	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
	5	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
	6	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
	7	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
	8	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
	9	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
	10	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
11	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
12	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
13	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
14	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
15	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
16	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
17	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
18	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
19	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
20	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
21	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
22	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
23	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
24	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
25	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
26	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
27	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
28	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
29	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
30	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
Mean (Station level)	1007.24	1006.96	1006.73	1006.57	1006.51	1006.51	1006.66	1006.70	1006.75	1006.75	1006.72	1006.64	1006.60	1006.53	1006.40	1006.31	1006.28	1006.30	1006.38	1006.52	1006.73	1006.78	1006.65	1006.64		
Mean (Sea level)	1010.43	1010.15	1009.92	1009.76	1009.69	1009.68	1009.82	1009.86	1009.91	1009.90	1009.87	1009.79	1009.75	1009.68	1009.55	1009.46	1009.43	1009.44	1009.53	1009.68	1009.90	1009.96	1009.83	1009.81		
Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean	



Readings in millibars at exact hours, Greenwich Mean Time.

75. Aberdeen :  $H_b$  (height of barometer cistern above M.S.L.) = 26.0 metres.

July, 1928.

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean
Day.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
1	002.9	003.5	003.7	004.0	004.4	004.7	004.9	005.1	005.3	005.4	005.5	005.5	005.5	005.5	005.5	005.5	005.5	005.5	005.5	005.5	005.5	005.5	005.5	005.5	005.5
2	000.4	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0
3	001.9	003.1	004.0	004.4	005.6	006.4	007.4	007.9	008.4	008.7	009.0	009.4	009.4	009.4	009.4	009.4	009.4	009.4	009.4	009.4	009.4	009.4	009.4	009.4	009.4
4	009.9	009.6	009.7	009.7	009.9	010.1	010.1	010.3	010.5	010.3	010.5	010.2	010.2	010.0	009.8	009.3	008.7	008.0	007.3	006.5	005.9	005.1	004.5	003.6	002.5
5	001.2	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0
6	004.3	003.9	003.5	003.2	003.0	003.4	004.0	004.5	005.2	006.1	007.0	007.8	008.7	009.4	000.2	001.3	002.3	003.6	005.0	007.0	008.1	009.4	010.6	011.7	009.4
7	012.2	012.6	013.3	013.8	014.5	014.9	015.6	016.3	016.8	017.5	017.6	017.8	017.8	018.1	018.0	018.1	018.0	017.8	017.5	017.4	017.1	016.8	016.2	015.4	016.2
8	014.4	013.6	012.7	012.0	011.4	010.4	009.5	008.8	008.0	007.6	007.5	007.0	006.2	006.4	006.5	006.3	006.5	007.0	007.1	007.3	007.5	007.6	007.7	007.7	008.8
9	007.1	006.7	006.3	006.2	005.8	005.6	005.4	005.5	005.5	005.5	005.4	005.3	005.2	005.1	005.0	004.9	004.8	004.7	004.6	004.5	004.4	004.3	004.2	004.1	004.0
10	007.7	008.1	008.1	008.6	008.6	008.9	009.1	009.6	009.7	009.9	009.9	008.9	008.3	006.9	006.8	005.6	004.6	004.5	004.4	004.4	004.4	004.3	004.5	004.2	007.2
11	004.5	004.8	004.9	005.1	005.5	005.8	006.3	006.6	006.9	007.3	007.7	007.7	008.3	008.7	008.8	009.0	009.3	009.6	010.3	010.6	011.3	011.8	011.8	012.0	007.9
12	011.8	012.7	012.6	012.4	012.9	013.2	013.2	013.4	013.7	013.6	013.4	013.2	012.7	012.6	012.6	012.7	012.4	012.2	012.4	012.6	012.7	012.7	012.8	012.5	012.8
13	012.3	012.0	011.9	011.7	011.5	011.7	012.0	012.4	012.9	013.1	013.2	012.3	012.4	012.3	012.2	012.1	012.0	011.9	011.8	011.7	011.6	011.5	011.4	011.3	011.2
14	012.7	012.9	013.2	013.2	013.1	013.2	013.4	013.7	013.8	013.7	013.5	013.3	013.1	012.9	012.7	012.5	012.3	012.1	011.9	011.7	011.5	011.3	011.1	010.9	010.7
15	015.0	015.0	015.3	015.7	016.3	016.8	017.3	017.5	017.5	017.4	017.4	017.5	017.5	017.6	017.9	017.9	017.9	018.3	018.7	019.2	019.6	019.9	020.1	020.7	017.5
16	020.9	021.1	021.5	021.8	022.2	022.7	023.1	023.3	023.5	023.6	023.7	023.6	023.5	023.5	023.1	023.0	022.9	023.0	023.1	023.0	023.4	023.7	023.9	024.2	022.9
17	024.3	024.2	024.2	024.0	024.2	024.0	024.0	023.8	023.6	023.0	022.2	021.1	020.8	020.7	020.4	020.3	020.0	019.5	019.4	018.7	018.0	017.3	017.3	016.8	021.5
18	015.7	015.1	014.7	014.2	014.2	014.3	014.4	014.4	014.6	014.6	014.9	015.0	015.1	015.4	015.6	015.6	016.0	016.2	016.4	016.9	017.0	017.0	017.1	017.1	015.4
19	016.8	016.6	016.4	016.4	016.3	016.4	016.5	016.6	016.6	016.3	016.3	016.1	015.5	015.4	015.4	015.4	015.4	015.3	015.3	015.3	015.3	015.3	015.3	015.3	015.2
20	013.4	013.5	013.0	012.6	012.9	013.0	012.9	013.1	013.1	013.0	013.0	012.9	012.9	012.9	012.8	013.2	013.1	013.0	013.6	013.8	013.9	014.3	014.7	014.7	013.3
21	014.9	014.8	014.6	014.8	015.2	015.7	016.0	016.1	016.2	016.6	016.4	016.2	016.3	016.0	015.8	015.5	015.3	015.4	015.6	015.6	015.6	015.6	015.6	015.7	015.6
22	015.5	015.1	015.0	015.1	015.0	015.0	015.2	015.1	015.1	015.1	015.1	015.2	015.3	015.5	015.7	015.6	015.7	015.8	016.0	016.1	016.2	016.3	016.4	016.5	016.6
23	016.5	016.1	016.1	015.7	015.7	015.4	015.4	015.4	015.4	015.0	014.8	014.5	014.0	013.7	013.4	012.8	012.3	011.8	011.3	010.8	010.4	010.5	010.1	010.0	013.5
24	009.8	009.6	009.3	009.2	009.2	009.0	008.9	008.9	008.9	009.0	009.1	009.0	008.9	008.8	008.8	008.8	008.6	008.6	008.6	008.6	008.7	008.6	008.6	008.6	008.0
25	008.4	008.4	008.1	007.9	007.8	007.9	007.9	007.8	007.5	007.2	006.8	006.5	006.3	005.9	005.3	005.1	005.0	005.0	004.8	004.7	004.7	004.7	004.8	004.8	006.5
26	004.5	004.7	004.7	004.7	004.5	004.9	005.5	005.7	005.9	006.2	006.4	006.3	006.7	006.7	006.7	006.7	006.7	006.6	006.8	006.5	006.3	006.0	005.7	005.6	005.9
27	005.1	004.5	003.7	003.2	002.8	002.4	002.2	001.9	002.0	002.0	002.0	001.8	001.9	001.8	001.5	001.3	001.0	000.7	000.9	000.9	000.7	000.3	000.9	000.9	002.0
28	009.1	008.7	008.4	008.0	007.8	007.6	007.4	007.2	007.2	007.2	007.2	007.2	007.2	007.2	007.2	007.2	007.2	007.2	007.2	007.2	007.2	007.2	007.2	007.2	007.5
29	007.1	006.9	006.8	006.7	006.8	006.9	007.0	007.1	007.2	007.3	007.4	007.5	007.6	007.7	007.8	007.9	008.0	008.1	008.2	008.3	008.4	008.5	008.6	008.7	008.8
30	007.9	007.3	006.9	007.1	007.3	007.6	007.8	007.9	008.0	008.1	008.2	008.3	008.4	008.5	008.6	008.7	008.8	008.9	009.0	009.1	009.2	009.3	009.4	009.5	009.6
31	005.7	005.9	005.9	005.7	006.3	006.7	007.2	007.5	007.9	008.4	009.1	009.2	009.6	010.0	010.4	010.9	011.2	011.6	012.2	012.8	013.1	013.8	013.8	013.9	009.4
Mean (Station level)	1008	1008	1008	1008	1008	1008	1008	1009	1009	1009	1009	1009	1009	1009	1009	1009	1008	1008	1008	1009	1009	1009	1009	1009	1009
Mean (Sea level)	1011	1011	1011	1011	1011	1011	1012	1012	1012	1012	1012	1012	1012	1012	1012	1012	1012	1012	1012	1012	1012	1012	1012	1012	1012

76. Aberdeen :  $H_b$  = 26.0 metres.

August, 1928.

Station Level ↑   <
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Readings in millibars at exact hours, Greenwich Mean Time.

77. Aberdeen : H<sub>b</sub> (Height of barometer cistern above M.S.L.) = 26.0 metres.

September, 1928.

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean
Day.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
1	019.2	019.0	019.0	019.1	019.1	019.2	019.3	019.3	019.3	019.2	019.1	019.0	018.8	018.5	018.4	018.3	018.2	018.3	018.5	018.8	018.8	018.8	018.5	018.4	018.9
2	018.1	017.8	017.6	017.5	017.5	017.4	017.5	017.3	016.9	016.7	016.4	016.0	015.7	015.3	015.0	014.7	014.4	014.2	013.9	013.7	013.3	013.0	012.1	011.6	015.7
3	011.1	010.5	009.0	008.7	008.2	008.1	008.2	008.2	008.0	007.9	008.0	007.7	008.0	008.3	008.7	008.3	008.5	008.0	007.7	007.8	007.6	007.8	007.5	007.4	008.4
4	007.1	007.2	006.9	007.2	007.8	008.2	008.6	009.0	009.1	009.2	009.6	009.7	009.6	009.4	009.3	009.1	009.5	008.8	008.6	008.1	007.9	007.2	006.5	006.3	008.3
5	006.1	005.8	006.0	005.8	005.6	005.5	005.8	006.2	006.3	006.4	006.4	006.5	006.4	006.3	006.0	005.6	005.5	005.3	005.0	004.8	004.7	003.1	002.6	002.2	005.5
6	001.5	000.8	000.6	000.9	001.2	001.8	003.1	004.0	005.3	006.1	007.1	007.7	008.3	008.9	009.2	009.8	010.4	010.9	011.0	011.3	011.1	010.9	011.2	011.5	006.7
7	011.8	011.7	011.4	011.0	010.9	010.7	010.5	010.4	009.8	009.7	009.3	009.3	008.8	008.1	007.5	006.8	006.5	006.2	006.0	005.2	004.6	004.7	004.4	004.8	008.7
8	005.3	005.4	005.9	006.4	006.8	007.7	008.3	008.8	009.2	009.4	010.0	010.0	010.0	009.9	010.2	010.3	010.5	010.6	010.7	010.1	010.3	010.1	010.3	010.1	009.7
9	009.2	008.7	008.0	007.4	007.0	006.6	006.0	006.4	006.6	006.1	006.4	006.6	006.9	007.0	007.1	006.9	006.9	007.5	007.4	007.2	006.9	005.5	004.3	007.0	008.0
10	003.6	003.3	002.5	002.5	002.3	002.9	003.3	004.0	005.0	005.7	006.8	007.7	008.0	008.7	008.9	009.5	009.8	010.1	010.4	010.4	010.3	010.7	010.9	011.4	006.9
11	012.2	012.5	013.2	013.8	014.4	015.1	016.0	016.6	017.0	017.5	018.1	018.3	018.8	019.1	019.4	019.5	019.9	020.1	020.4	021.0	021.2	021.2	021.5	021.3	017.6
12	021.4	021.3	021.3	021.3	021.3	021.3	021.3	021.4	021.4	021.4	021.2	021.0	020.8	020.5	020.6	020.6	020.9	021.0	021.1	021.5	021.7	021.9	021.9	022.0	021.2
13	021.9	022.1	022.0	022.1	022.4	022.5	022.8	023.2	023.5	023.4	023.3	023.0	022.9	022.9	022.7	022.6	022.8	022.9	023.1	022.9	022.9	023.1	022.9	022.8	022.8
14	023.0	022.9	022.8	022.8	022.8	023.1	023.2	023.4	023.6	023.6	023.7	023.6	023.5	023.3	022.9	022.8	022.8	022.8	022.7	022.6	022.8	023.2	023.5	024.4	023.1
15	024.7	025.2	025.5	025.9	026.2	026.6	027.1	027.3	027.7	027.9	027.9	027.8	027.6	027.6	027.4	027.1	027.1	027.0	026.7	026.7	026.7	026.3	025.6	025.2	026.7
16	024.6	023.8	023.2	022.8	022.4	022.1	021.9	021.4	020.7	020.3	019.6	019.1	018.7	018.0	017.2	017.2	017.0	017.0	016.8	016.2	016.0	015.8	015.7	019.6	019.6
17	015.3	014.8	014.4	013.8	013.5	013.3	012.8	012.4	011.7	011.0	010.3	009.1	007.8	007.0	006.1	005.1	003.9	002.9	003.3	003.3	003.2	002.7	003.5	003.8	008.8
18	004.2	004.3	004.6	005.3	006.3	007.5	008.2	009.2	009.7	010.4	010.8	011.3	011.8	012.0	012.2	012.4	012.7	013.4	013.7	013.8	014.0	014.1	014.4	014.2	010.2
19	014.2	014.0	014.0	014.0	014.0	013.9	014.0	014.0	013.8	013.7	013.1	013.0	013.1	012.9	012.9	012.9	013.2	013.4	013.8	014.0	013.8	014.0	013.8	013.6	013.6
20	013.5	013.6	013.6	013.5	013.8	013.9	014.5	014.9	015.0	015.6	016.0	016.2	016.6	016.9	017.4	017.6	018.4	019.1	019.8	020.4	020.9	021.1	021.4	021.7	016.7
21	021.7	022.0	022.1	022.4	022.7	023.0	023.6	023.8	024.1	024.3	024.7	025.1	025.4	025.4	025.7	026.1	026.7	026.9	027.4	027.7	027.9	028.1	028.1	028.3	025.0
22	025.5	028.5	028.4	028.5	028.8	028.7	028.8	029.2	029.3	029.7	029.1	029.1	029.1	028.9	028.6	028.6	028.6	028.7	028.7	028.2	028.0	027.6	027.2	028.6	028.6
23	026.9	026.2	025.5	024.8	024.2	023.9	023.7	023.5	022.8	022.1	021.1	020.1	019.2	018.4	017.3	016.3	015.7	015.1	014.7	014.6	014.3	013.7	013.2	012.5	019.9
24	011.8	011.0	010.3	009.4	008.8	008.5	008.4	008.5	008.6	008.4	008.3	008.3	008.3	008.0	007.8	007.8	008.0	008.4	009.0	009.4	009.8	010.2	010.8	011.1	009.1
25	011.5	011.7	012.0	012.3	012.5	013.2	013.7	014.3	014.7	015.0	015.2	015.2	015.1	015.2	015.4	015.7	016.0	016.3	016.6	017.0	017.3	017.6	017.5	014.8	014.8
26	017.4	017.4	017.3	017.2	017.4	017.7	017.9	018.1	018.0	018.2	018.0	017.8	017.6	017.3	016.9	016.6	016.4	016.1	015.8	015.3	015.0	014.5	013.8	013.2	016.8
27	012.7	012.1	011.6	011.0	010.7	010.3	010.2	009.9	009.5	009.0	008.8	008.0	007.8	007.3	006.9	006.6	006.4	006.6	006.8	006.9	007.1	007.5	007.7	008.2	008.9
28	008.6	009.0	009.4	009.7	010.6	011.0	011.6	012.3	012.7	013.1	013.4	013.6	013.6	013.6	013.5	013.7	014.1	014.6	014.9	015.3	015.5	015.4	015.5	015.4	012.8
29	015.3	014.9	014.7	014.7	014.5	014.4	014.2	013.7	013.6	012.9	012.6	012.2	012.0	011.5	011.5	011.4	011.3	011.5	012.0	012.3	012.3	012.6	013.0	013.1	013.1
30	013.3	013.4	013.6	013.5	013.5	013.9	014.3	014.5	014.6	015.1	015.5	015.5	015.4	015.3	015.4	015.3	015.7	016.3	016.6	016.9	017.2	017.2	017.3	017.4	015.2
Mean (Station level)	1014.52	1014.36	1014.21	1014.18	1014.23	1014.40	1014.63	1014.83	1014.93	1014.96	1014.98	1014.92	1014.86	1014.75	1014.65	1014.54	1014.60	1014.65	1014.79	1014.87	1014.82	1014.72	1014.62	1014.53	1014.65
Mean (Sea level)	1017.72	1017.56	1017.41	1017.38	1017.44	1017.60	1017.83	1018.02	1018.11	1018.13	1018.14	1018.08	1018.02	1017.91	1017.81	1017.70	1017.76	1017.82	1017.97	1018.06	1018.01	1017.91	1017.82	1017.73	1017.83

78. Aberdeen : H<sub>b</sub> = 26.0 metres.

October, 1928.

Station Level	1	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.		
	2	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.		
3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Mean (Station level)																												
Mean (Sea level)																												
Hour. G.M.T.																												



Readings in millibars at exact hours, Greenwich Mean Time.

79. Aberdeen :  $H_b$  (height of barometer cistern above M.S.L.) = 26.0 metres.

November, 1928.

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean
Day	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
1	017.1	017.7	018.1	018.6	019.0	019.5	019.9	020.5	021.1	021.6	022.0	022.4	022.8	023.1	023.4	023.7	024.0	024.3	024.6	024.9	025.2	025.5	025.8	026.1	026.4
2	018.6	018.1	017.7	017.4	017.2	017.0	016.8	016.6	016.4	016.2	016.0	015.8	015.6	015.4	015.2	015.0	014.8	014.6	014.4	014.2	014.0	013.8	013.6	013.4	013.2
3	011.9	011.4	011.0	010.5	010.1	010.1	010.1	010.0	009.8	009.3	008.8	008.4	007.9	007.5	007.1	006.7	006.3	005.9	005.5	005.1	004.7	004.3	003.9	003.5	003.1
4	004.3	004.2	004.0	003.9	003.7	003.6	003.4	003.3	003.1	002.9	002.7	002.5	002.3	002.1	001.9	001.7	001.5	001.3	001.1	000.9	000.7	000.5	000.3	000.1	000.0
5	007.3	007.8	007.9	008.0	008.2	008.2	008.5	008.9	009.2	009.3	009.3	009.2	009.3	009.2	009.1	009.1	009.3	009.7	010.2	010.4	010.7	011.1	011.3	011.3	009.2
6	011.3	011.3	011.4	011.4	011.4	011.5	011.6	011.9	012.1	012.2	012.2	012.0	011.9	011.7	011.7	011.7	011.7	011.7	011.7	011.7	011.7	011.8	011.6	011.5	011.7
7	011.5	011.2	011.0	010.9	010.9	011.0	011.3	011.6	011.8	011.9	012.1	012.2	012.1	011.9	011.7	011.7	011.7	011.7	011.7	011.7	011.7	011.8	011.6	011.5	011.7
8	012.7	012.7	012.7	012.9	013.2	013.4	013.7	014.2	014.7	015.2	015.4	015.2	015.3	015.4	015.7	016.1	016.4	016.6	017.1	017.2	017.5	017.6	017.8	017.9	015.2
9	017.9	018.1	018.0	017.8	017.5	017.5	017.3	017.1	017.1	016.7	016.5	015.8	015.3	014.9	014.8	014.6	013.9	013.1	012.5	011.6	011.1	010.3	010.0	010.2	015.2
10	009.7	009.1	008.8	007.1	006.4	005.7	005.6	004.8	003.7	002.5	001.5	000.3	999.3	998.4	998.0	998.2	998.6	999.2	999.9	000.7	001.6	002.2	002.9	003.4	002.9
11	003.8	004.5	004.6	004.9	005.3	005.5	005.0	005.3	004.8	004.3	003.7	002.9	001.3	999.7	998.0	996.4	995.0	994.0	994.3	994.1	993.5	993.3	993.9	994.7	000.3
12	995.3	995.5	995.7	995.7	995.6	995.7	995.7	995.6	995.5	994.8	994.3	992.5	991.1	989.4	988.4	987.2	987.2	986.8	987.2	989.0	991.0	992.7	993.6	995.0	992.5
13	995.5	995.4	996.0	996.1	995.9	996.1	996.2	996.3	996.6	996.9	996.8	996.7	997.0	997.7	998.1	998.8	999.5	999.7	000.2	000.3	000.6	001.1	000.8	000.9	997.8
14	000.7	000.6	000.5	000.5	000.3	000.1	000.4	000.2	000.2	000.1	999.9	999.7	999.4	998.9	998.6	998.1	998.1	997.7	996.8	995.7	994.4	993.2	991.6	989.6	998.4
15	987.4	984.9	982.6	980.9	979.9	979.3	978.9	978.7	978.1	977.6	977.1	976.4	975.6	975.3	974.8	974.4	974.4	974.4	974.1	973.9	974.0	974.2	974.2	975.1	977.8
16	975.6	975.3	976.1	976.1	976.3	976.5	976.2	975.8	975.7	975.0	973.8	972.4	971.3	970.4	969.7	968.6	968.2	968.4	968.4	968.6	968.6	968.8	968.9	969.0	972.4
17	969.1	969.0	968.7	968.4	968.1	968.2	968.8	969.6	970.5	971.1	971.5	971.9	972.7	973.6	974.7	976.5	978.2	979.4	980.4	981.7	983.2	984.5	985.7	987.3	973.7
18	987.1	988.1	989.1	990.5	991.7	992.9	994.5	995.1	996.6	997.2	998.6	999.2	999.4	999.8	999.0	998.8	998.6	998.5	998.0	997.7	997.1	996.4	995.4	995.0	995.4
19	994.3	994.0	993.6	992.7	991.7	990.7	990.3	990.0	989.8	989.6	989.2	988.2	987.3	986.4	985.8	984.9	984.8	984.7	985.4	986.7	987.4	987.8	988.3	988.9	989.0
20	989.3	989.8	990.3	990.7	991.3	992.2	993.6	994.5	996.4	997.8	998.5	999.0	1000.0	1000.6	1001.2	1001.6	1002.5	1003.7	1005.0	1006.5	1008.1	1009.4	1010.8	1012.2	999.9
21	011.4	011.4	011.4	011.3	010.8	010.3	009.7	008.9	007.7	006.7	005.1	003.3	000.9	999.2	998.3	998.0	996.9	996.8	996.0	995.4	994.9	994.3	994.0	993.9	003.1
22	993.6	993.3	993.0	993.0	992.5	992.1	990.6	990.8	989.6	988.4	987.6	985.9	984.2	982.9	982.3	982.4	982.7	983.6	984.4	984.4	984.3	984.3	984.3	984.7	987.5
23	984.4	984.0	984.1	983.3	982.8	982.1	981.0	979.6	977.2	974.9	970.6	965.3	960.8	954.7	949.1	947.8	949.4	952.9	955.4	958.6	960.6	962.0	963.5	964.8	968.8
24	966.0	967.3	968.2	969.2	969.7	971.5	973.0	974.0	975.1	975.5	976.7	977.4	978.9	979.8	980.1	981.2	981.7	982.8	983.4	983.6	982.9	982.4	982.1	981.3	976.6
25	980.3	977.9	975.6	972.0	969.1	966.5	963.1	960.8	958.3	956.3	953.1	950.7	947.9	945.1	942.3	939.1	935.8	932.4	928.9	925.4	921.9	918.4	914.9	911.4	907.1
26	981.0	982.6	983.6	984.4	985.7	986.6	987.7	989.1	990.2	990.8	991.8	992.0	992.0	992.1	992.0	991.9	991.5	991.4	991.7	992.1	991.5	991.2	991.4	991.7	989.2
27	992.1	992.4	992.7	992.8	993.6	994.5	995.1	996.2	997.4	998.4	999.5	1000.6	1001.7	1002.9	1004.0	1005.3	1006.3	1007.7	1008.3	1009.5	1010.7	1011.3	1012.2	1013.0	1000.6
28	013.7	014.7	015.9	015.8	017.0	017.8	018.6	019.1	020.0	020.9	021.7	022.1	023.0	023.3	023.7	024.2	024.3	024.2	024.2	024.2	024.2	024.2	024.2	024.2	020.0
29	019.9	018.9	018.0	017.3	017.1	016.5	015.9	015.4	014.7	014.4	013.7	013.1	012.3	011.5	010.8	010.2	010.1	010.2	010.3	010.3	010.3	010.3	010.3	010.3	010.4
30	013.5	013.5	013.3	013.6	014.0	014.4	014.7	015.4	015.9	016.4	016.8	016.9	017.6	017.7	017.6	016.9	017.1	017.4	017.5	017.7	017.9	018.4	018.5	018.2	016.2
Mean (Station level)	999.21	999.16	999.10	998.92	998.87	998.90	999.00	999.11	999.22	999.10	998.90	998.45	998.09	997.72	997.53	997.49	997.71	997.97	998.27	998.57	998.78	998.93	999.09	999.16	998.63
Mean (Sea level)	1002.40	1002.35	1002.29	1002.11	1002.06	1002.09	1002.19	1002.30	1002.40	1002.28	1002.07	1001.62	1001.25	1000.88	1000.69	1000.66	1000.88	1001.15	1001.45	1001.75	1002.06	1002.17	1002.35	1002.81	

80. Aberdeen :  $H_b$  = 26.0 metres.

December, 1928.

Station Level	1	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
	2	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
	3	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
	4	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
	5	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
	6	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
	7	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
	8	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
	9	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
	10	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
	11	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
	12	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
	13	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
	14	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
	15	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
	16	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
17	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
18	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
19	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
20	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
21	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
22	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
23	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
24	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
25	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
26	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
27	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
28	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
29	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
30	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
31	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
Mean (Station level)	1009.37	1009.44	1009.51	1009.50	1009.63	1009.59	1009.81	1009.84	1010.21	1010.31	1010.26	1009.89	1009.68	1009.53	1009.52	1009.60	1009.58	1009.57	1009.59	1009.61	1009.59	1009.56	1009.55	1009.50	1009.67
Mean (Sea level)	1012.61	1012.69	1012.75	1012.75	1012.88	1012.85	1013.06	1013.09	1013.46	1013.56	1013.51	1013.13	1012.92	1012.77	1012.76	1012.84	1012.82	1012.81	1012.83	1012.85	1012.84	1012.80	1012.79	1012.74	1012.92
Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean



## PRESSURE AT STATION LEVEL AND AT SEA LEVEL.

97

## ANNUAL MEANS FROM HOURLY VALUES.

From readings in millibars at exact hours, Greenwich Mean Time.

81. Aberdeen :  $H_b = 26.0$  metres.

1928.

Hour. M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Station Level.	mb. 006.66	mb. 006.55	mb. 006.43	mb. 006.32	mb. 006.31	mb. 006.35	mb. 006.48	mb. 006.60	mb. 006.72	mb. 006.77	mb. 006.72	mb. 006.58	mb. 006.46	mb. 006.35	mb. 006.29	mb. 006.27	mb. 006.31	mb. 006.41	mb. 006.53	mb. 006.65	mb. 006.75	mb. 006.78	mb. 006.76	mb. 006.72	mb. 006.53
a Level.	009.86	009.76	009.63	009.52	009.52	009.55	009.68	009.79	009.92	009.95	009.90	009.75	009.63	009.53	009.47	009.44	009.49	009.59	009.72	009.84	009.95	009.97	009.96	009.93	009.72

## PRESSURE AT STATION LEVEL ; MONTHLY MEANS AND DIURNAL INEQUALITIES.

The departures from the mean of the day are adjusted for non-cyclic change.

82. Aberdeen :  $H_b = 26.0$  metres.

1928.

Month.	Mean.	Hour. 1.	G.M.T. 2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.
Jan.	mb. 997.13	mb. +0.33	mb. +0.52	mb. +0.41	mb. +0.27	mb. +0.18	mb. +0.15	mb. +0.06	mb. +0.06	mb. +0.12	mb. +0.02	mb. -0.26	mb. -0.66	mb. -0.80	mb. -0.64	mb. -0.31	mb. -0.15	mb. -0.05	mb. -0.05	mb. -0.03	mb. +0.04	mb. +0.11	mb. +0.19	mb. +0.22	mb. +0.28
Feb.	1006.18	+0.22	+0.15	+0.16	-0.04	-0.12	-0.29	-0.25	-0.15	+0.04	+0.11	+0.13	-0.01	-0.21	-0.27	-0.34	-0.20	-0.14	+0.07	+0.15	+0.15	+0.19	+0.24	+0.23	+0.20
Mar.	1007.12	-0.01	-0.10	-0.30	-0.37	-0.32	-0.23	-0.03	+0.15	+0.29	+0.40	+0.43	+0.37	+0.21	-0.03	-0.18	-0.29	-0.29	-0.17	-0.02	+0.06	+0.13	+0.12	+0.08	+0.08
April	1006.33	+0.24	+0.03	-0.20	-0.37	-0.42	-0.38	-0.23	-0.09	+0.05	+0.18	+0.09	+0.07	+0.03	-0.08	-0.22	-0.33	-0.32	-0.17	+0.07	+0.27	+0.43	+0.47	+0.51	+0.37
May	1013.80	+0.11	-0.09	-0.31	-0.39	-0.38	-0.36	-0.25	-0.17	-0.04	+0.03	+0.09	+0.13	+0.10	+0.06	-0.04	-0.13	-0.15	-0.05	+0.08	+0.25	+0.43	+0.45	+0.38	+0.25
June	1006.64	+0.27	+0.02	-0.18	-0.31	-0.34	-0.31	-0.13	-0.06	+0.02	+0.05	+0.05	0.00	-0.01	-0.05	-0.15	-0.21	-0.21	-0.16	-0.05	+0.12	+0.36	+0.44	+0.47	+0.37
July	1009.01	-0.01	-0.12	-0.25	-0.35	-0.27	-0.16	+0.03	+0.14	+0.21	+0.23	+0.26	+0.17	+0.10	+0.07	+0.02	-0.07	-0.16	-0.17	-0.13	-0.04	+0.09	+0.14	+0.15	+0.12
Aug.	1006.91	+0.13	-0.03	-0.17	-0.33	-0.33	-0.25	-0.18	-0.07	0.00	+0.03	+0.02	-0.01	-0.05	-0.14	-0.19	-0.16	-0.17	-0.04	+0.13	+0.35	+0.42	+0.43	+0.36	+0.23
Sept.	1014.65	-0.16	-0.31	-0.46	-0.49	-0.44	-0.27	-0.03	+0.17	+0.27	+0.30	+0.33	+0.27	+0.22	+0.10	+0.01	-0.09	-0.04	+0.01	+0.16	+0.24	+0.19	+0.10	+0.01	-0.09
Oct.	1002.29	+0.09	-0.15	-0.30	-0.38	-0.41	-0.32	-0.12	+0.10	+0.20	+0.32	+0.28	+0.17	+0.05	-0.12	-0.23	-0.34	-0.14	+0.08	+0.15	+0.17	+0.27	+0.23	+0.19	+0.22
Nov.	998.63	+0.60	+0.55	+0.49	+0.31	+0.25	+0.28	+0.38	+0.49	+0.59	+0.47	+0.27	-0.18	-0.54	-0.92	-1.11	-1.15	-0.93	-0.67	-0.37	-0.07	+0.13	+0.28	+0.34	+0.51
Dec.	1009.67	-0.28	-0.21	-0.15	-0.16	-0.03	-0.07	+0.14	+0.17	+0.54	+0.64	+0.59	+0.22	0.00	-0.15	-0.16	-0.09	-0.11	-0.12	-0.10	-0.09	-0.10	-0.14	-0.15	-0.20
Year	1006.53	+0.13	+0.02	-0.11	-0.22	-0.22	-0.18	-0.05	+0.06	+0.19	+0.23	+0.19	+0.04	-0.08	-0.18	-0.24	-0.27	-0.23	-0.12	0.00	+0.12	+0.22	+0.25	+0.23	+0.19

## ABSOLUTE EXTREMES OF PRESSURE AT STATION LEVEL FOR EACH DAY.

Maximum and Minimum for the interval 0h. to 24h., Greenwich Mean Time.

83. Aberdeen :  $H_b = 26.0$  metres.

1928.

Month.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Day.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1	mb. 021.7	mb. 998.2	mb. 986.7	mb. 971.9	mb. 016.2	mb. 011.8	mb. 006.7	mb. 997.6	mb. 014.4	mb. 011.2	mb. 025.8	mb. 024.4
2	003.8	993.9	991.3	986.6	018.7	011.0	008.4	996.0	015.6	014.1	025.6	024.2
3	014.3	003.8	012.2	988.2	018.9	017.4	996.2	989.7	015.0	013.1	024.3	015.6
4	006.4	991.2	012.3	993.8	018.0	015.7	993.7	988.9	014.7	012.9	016.2	014.0
5	005.9	995.6	001.4	995.4	015.8	013.9	000.4	993.7	014.5	011.7	014.7	007.6
6	008.5	976.6	013.0	001.4	016.1	013.0	007.6	000.4	011.7	008.3	007.6	001.3
7	008.3	983.5	009.7	001.0	018.7	012.3	007.6	003.9	013.0	009.2	001.3	994.9
8	995.5	983.1	009.1	989.3	021.1	018.5	004.3	995.5	014.4	006.9	997.4	993.8
9	996.1	989.0	001.2	989.3	021.4	018.1	999.3	996.4	017.0	013.8	996.9	983.1
10	993.1	971.4	001.3	967.9	029.1	021.4	996.9	990.5	017.8	016.0	994.7	981.1
11	003.8	986.1	989.7	986.2	029.0	024.9	999.8	991.6	017.3	014.6	011.4	994.7
12	003.8	978.0	993.9	989.7	024.9	019.3	010.5	999.8	019.1	015.1	016.1	011.4
13	992.1	974.7	994.1	986.3	022.5	020.3	016.5	010.5	019.0	016.0	016.6	012.0
14	996.8	983.6	999.9	986.7	022.5	021.4	017.1	014.8	017.8	014.9	012.2	009.4
15	984.1	978.7	000.5	984.5	021.8	020.6	014.8	012.3	015.0	999.0	015.5	010.4
16	001.4	982.8	996.7	988.9	021.1	009.4	012.3	008.6	006.0	997.9	016.7	012.9
17	014.4	001.3	013.2	988.6	009.4	004.7	013.9	010.9	003.2	997.2	012.9	006.1
18	014.4	000.8	014.9	009.8	005.4	999.3	011.5	002.7	004.6	000.8	006.2	003.1
19	013.5	000.3	027.1	014.9	004.4	997.0	008.4	005.8	005.9	002.2	003.7	001.7
20	013.3	003.7	027.9	024.0	999.3	996.1	008.9	007.5	016.2	005.9	012.0	003.7
21	010.4	990.8	024.2	018.8	001.3	998.1	014.4	008.6	022.1	016.2	012.1	003.3
22	009.5	996.3	036.0	021.9	999.0	992.5	016.5	014.0	021.6	015.5	003.4	009.2
23	009.3	986.2	035.9	026.1	994.2	990.7	014.0	008.7	015.5	013.0	007.9	000.2
24	995.4	984.5	026.1	022.0	991.6	989.5	011.5	010.0	018.4	014.8	010.8	007.9
25	004.4	988.2	025.2	021.2	001.1	991.5	010.6	006.6	021.5	018.1	010.7	001.9
26	996.0	990.4	025.8	023.8	003.7	000.9	009.2	006.6	021.4	018.1	012.7	002.0
27	012.2	995.5	025.5	024.2	000.9	992.1	014.3	008.0	018.1	012.7	002.7	005.6
28	011.5	996.6	024.2	016.6	992.6	990.4	016.3	014.0	015.0	010.9	011.7	000.2
29	997.4	989.4	016.7	014.9	990.7	966.5	016.0	013.5	021.8	015.0	000.3	992.2
30	995.9	989.9	—	—	984.9	986.4	014.5	011.3	025.5	021.7	002.7	993.6
31	998.1	977.3	—	—	997.7	984.9	—	—	025.2	023.5	—	—
Mean	1004.24	989.08	1011.58	1000.48	1010.06	1004.18	1009.07	1003.95	1016.07	1011.62	1010.07	1003.39

NOTE.—When pressure exceeds 1000 mb. the leading figure 1 is not printed, i.e., 1012.3 mb. is written 012.3. This rule does not, however, apply to monthly means.



Readings in degrees absolute at exact hours, Greenwich Mean Time.

84. Aberdeen : North Wall Screen on Tower :  $h_t$  (height of thermometer bulb above the ground) = 12.5 metres.

January, 1928.

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean
Day.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.
1	73.1	73.0	73.0	72.5	72.5	74.0	74.0	73.0	73.1	73.4	73.2	73.0	73.1	74.4	75.2	75.5	75.5	75.7	75.9	76.0	75.9	74.9	76.1	76.0	74.2
2	76.3	76.8	77.5	77.9	78.2	78.2	78.3	78.1	78.1	77.8	77.9	78.1	78.3	78.7	78.6	77.7	77.5	77.4	77.4	77.4	76.9	76.9	77.0	76.5	77.6
3	76.3	76.0	75.1	74.6	74.8	74.7	75.0	74.9	74.7	74.5	75.3	76.5	77.1	77.3	76.6	75.5	75.3	74.9	74.8	74.8	74.8	74.9	76.4	76.2	75.5
4	76.3	77.0	76.5	77.7	78.3	78.0	77.7	77.8	78.7	78.6	78.8	79.6	79.0	78.8	78.7	77.1	77.6	77.4	76.8	77.0	76.9	76.6	76.9	76.7	77.7
5	76.9	76.8	76.4	76.9	76.4	76.6	76.7	76.3	76.6	76.8	77.5	77.7	77.6	77.6	77.4	77.2	77.4	76.2	76.5	76.4	76.9	77.1	77.0	77.0	76.9
6	76.6	76.8	76.8	76.5	76.8	76.6	76.5	77.3	76.5	78.8	80.9	77.5	78.2	78.0	77.7	77.9	76.5	76.4	76.2	75.4	76.0	75.7	75.5	75.4	76.9
7	75.4	75.6	75.5	75.9	75.2	75.4	76.4	76.9	77.3	77.5	77.9	78.0	77.9	77.6	77.8	77.9	78.3	78.7	78.6	78.5	78.6	78.6	79.2	80.2	77.3
8	80.3	78.3	76.6	76.7	76.8	77.3	77.4	77.6	77.1	77.2	78.0	78.4	78.1	78.4	77.9	77.5	77.1	77.0	76.8	76.5	76.2	76.3	75.9	75.6	77.4
9	75.9	74.6	74.8	74.7	75.4	75.3	75.6	76.4	77.3	78.2	78.3	78.3	79.1	79.5	79.5	77.5	76.7	76.5	76.4	75.7	75.5	75.2	75.3	75.4	76.5
10	75.0	75.4	76.1	76.2	76.5	76.6	77.0	77.3	77.8	78.8	78.7	78.8	79.2	78.2	77.2	76.6	76.6	76.2	75.9	75.5	75.6	75.8	75.6	75.6	76.8
11	76.0	76.7	75.7	75.2	75.2	75.0	75.2	75.3	75.3	76.1	76.6	76.9	76.8	76.8	76.3	75.8	75.3	74.8	75.0	75.1	74.9	75.2	74.5	74.4	75.5
12	74.3	74.8	74.8	75.1	75.5	75.9	76.5	76.8	77.2	77.8	78.3	79.4	80.4	80.9	81.3	80.8	80.3	79.8	80.1	80.3	79.3	79.3	78.5	78.4	79.2
13	79.3	78.7	78.1	78.1	78.3	77.6	78.4	78.1	78.8	78.3	80.5	80.2	80.1	80.9	80.2	79.8	80.2	80.3	79.3	79.7	79.3	79.3	78.5	78.4	79.2
14	78.3	77.5	78.4	78.2	78.5	78.2	77.6	77.3	77.1	77.4	77.9	78.0	78.6	78.5	78.4	78.5	78.8	78.9	78.9	78.0	77.4	76.6	77.6	77.4	78.0
15	76.7	77.1	76.8	75.9	75.9	76.1	76.4	76.7	76.9	77.2	77.5	78.1	78.4	78.9	78.5	78.4	78.1	78.5	78.6	78.8	78.4	78.2	78.3	77.8	77.6
16	77.7	78.0	78.2	77.8	78.1	77.7	77.3	77.7	77.9	78.4	78.4	78.6	78.6	78.4	78.4	78.0	77.6	77.4	77.8	77.6	77.3	77.9	76.6	76.6	77.9
17	77.3	77.2	77.0	77.0	76.7	77.2	77.0	77.2	77.1	77.2	77.2	77.4	77.1	77.2	76.9	76.7	76.9	77.0	77.0	77.0	77.5	77.1	77.8	78.0	77.1
18	78.2	78.4	78.3	78.4	78.5	78.7	78.6	78.2	78.5	78.5	78.5	78.6	78.7	78.7	78.7	78.7	78.7	78.7	78.4	78.0	77.6	77.1	76.6	76.9	78.3
19	76.9	77.3	77.5	77.0	76.9	76.6	76.4	75.6	75.8	76.0	76.6	77.6	79.3	80.4	79.6	78.5	77.7	77.4	76.8	76.6	76.8	77.8	77.9	78.0	77.4
20	78.0	78.2	78.5	78.7	79.2	79.5	79.7	79.4	79.3	79.6	79.5	79.5	80.2	81.4	80.3	80.3	79.7	78.9	78.6	78.4	78.1	77.9	77.8	78.5	79.1
21	78.5	78.4	79.2	79.4	79.2	79.5	79.4	79.2	79.1	79.4	80.0	80.6	81.4	81.5	81.4	82.2	82.2	81.6	80.9	80.6	80.7	80.0	79.9	79.9	80.1
22	79.6	79.1	78.2	77.9	77.5	77.2	76.4	76.2	75.9	76.1	78.3	78.4	79.6	80.4	79.9	78.8	77.7	76.3	75.6	74.6	74.3	74.0	73.4	73.9	77.2
23	73.1	73.1	73.1	73.8	74.7	74.9	75.4	76.0	76.6	77.6	77.9	78.1	78.1	78.2	78.3	78.4	78.5	78.7	78.8	79.0	79.3	79.6	81.6	81.5	77.1
24	80.1	79.5	79.0	78.9	78.5	77.8	77.4	77.9	77.8	77.8	77.9	77.5	76.1	76.1	77.9	77.3	76.8	77.0	77.4	76.5	76.2	75.8	75.7	75.6	77.6
25	75.4	74.9	74.7	74.9	74.6	74.9	74.9	75.1	75.6	75.8	75.5	75.6	76.4	77.0	77.6	78.1	78.7	79.4	79.5	78.7	78.4	77.9	77.5	77.4	76.6
26	76.7	76.0	75.9	76.0	75.1	75.0	74.7	74.9	75.4	75.4	76.0	76.2	77.1	76.9	76.9	76.5	76.2	76.4	75.5	75.0	74.9	74.6	74.9	75.2	75.8
27	74.9	74.8	75.0	75.7	74.9	73.8	74.4	74.7	75.1	76.3	77.0	77.8	77.1	78.2	77.9	77.1	76.5	76.4	75.8	76.1	75.7	74.9	74.5	74.9	75.8
28	74.8	74.5	74.4	74.9	75.9	75.6	76.3	76.4	76.5	76.6	77.0	77.3	77.7	78.0	78.1	78.7	78.6	78.4	78.7	77.6	76.5	75.7	75.4	75.2	76.6
29	74.8	74.6	74.5	74.6	74.4	75.2	75.0	75.2	75.5	76.3	76.4	76.7	77.4	77.4	77.7	77.1	76.9	76.5	76.0	75.0	74.4	74.5	74.9	75.1	75.7
30	75.4	75.0	74.8	74.6	74.7	74.8	74.4	74.4	74.0	74.4	75.4	76.4	77.2	77.1	76.7	76.3	75.4	75.3	75.3	75.1	74.5	74.0	73.8	75.2	
31	73.8	73.4	73.3	73.2	73.0	72.9	73.1	73.2	73.4	73.8	74.5	75.4	75.6	76.1	75.8	75.8	76.2	76.4	76.4	77.2	77.2	77.2	76.9	76.4	75.0
Mean	...	76.5	76.4	76.2	76.3	76.3	76.4	76.5	76.6	77.0	77.5	77.7	78.0	78.3	78.2	77.8	77.6	77.5	77.3	77.1	76.9	76.7	76.8	76.8	77.0

85. Aberdeen : North Wall Screen on Tower :  $h_t$  = 12.5 metres.

February, 1928.

	a.	a.	a.	a.	a.	a	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.
1	76.5	76.4	76.6	77.0	77.3	77.5	76.9	77.4	77.1	77.5	78.3	78.4	78.6	78.8	77.9	76.3	76.3	75.6	75.2	75.1	74.7	74.5	74.2	74.1	76.6
2	73.6	74.0	74.0	74.0	74.1	74.6	74.8	74.3	74.6	75.6	76.1	76.6	76.9	76.9	76.7	76.0	75.8	75.7	75.7	75.4	75.4	75.9	75.5	75.3	
3	75.4	75.3	75.2	75.4	75.5	75.7	75.6	75.5	75.9	76.3	77.1	77.7	78.1	78.3	78.4	77.5	76.1	76.4	75.7	75.5	75.1	74.8	74.6	74.4	76.1
4	73.9	74.1	74.0	73.9	74.8	75.6	76.4	76.4	76.8	77.0	77.2	77.3	77.4	77.6	78.3	78.6	78.8	79.0	79.5	79.7	79.9	80.8	80.1	79.4	77.3
5	78.4	78.3	78.4	78.3	78.4	77.8	77.4	76.9	76.6	76.1	77.5	78.2	78.6	78.5	78.0	77.4	76.5	75.8	75.4	74.8	74.8	75.0	74.5	74.5	77.0
6	74.6	74.7	75.0	74.5	74.7	74.5	74.9	74.9	75.4	76.2	77.2	77.4	77.7	77.8	78.3	78.1	77.5	77.5	77.1	77.5	77.7	78.2	78.4	78.6	76.5
7	78.6	79.6	79.6	79.8	80.5	80.5	80.5	81.0	80.9	81.5	82.2	82.5	83.3	83.1	83.1	82.9	83.0	82.5	82.5	82.0	82.0	81.7	81.5	81.6	81.5
8	81.7	81.1	81.0	81.5	81.0	82.0	82.4	82.5	82.8	82.9	84.2	84.8	85.4	84.7	84.4	84.1	84.0	84.1	84.3	84.3	84.6	84.8	84.3	83.9	83.8
9	82.1	80.5	78.2	78.1	78.2	77.7	78.2	77.9	78.5	79.1	79.0	80.1	80.8	79.0	78.3	78.2	77.6	77.8	77.3	76.9	76.6	75.9	76.0	78.6	
10	76.9	76.6	75.8	75.4	75.3	75.5	76.3	77.0	77.5	77.7	77.6	77.5	76.8	77.1	76.7	75.5	75.7	75.1	74.7	74.9	74.6	74.1	74.0	74.2	76.0
11	74.2	74.7	75.3	76.1	76.2	76.1	75.9	75.3	74.3	74.6	75.2	76.4	77.9	76.7	76.5	77.0	76.4	76.1	76.1	75.7	75.8	76.1	75.6	75.1	75.8
12	74.2	74.5	74.3	74.5	74.6	74.0	73.6	73.2	74.0	74.5	75.8	76.9	77.7	78.3	77.9	77.1	76.5	76.2	75.8	75.3	75.1	74.7	74.4	74.3	75.3
13	73.9	73.7	73.5	72.8	72.6	72.4	72.7	73.0	73.5	73.6	75.1	75.8	76.1	76.4	75.8	75.3	75.9	75.9	75.6	74.8	74.6	74.4	74.4	76.0	74.5
14	76.7	76.4	75.6	75.4	75.5	74.8	74.5	74.0	74.9	75.8	77.7	77.5	77.5	77.2	77.6	77.1	76.8	76.0	75.6	75.6	75.5	75.6	75.5	75.3	76.0
15	74.9	74.4	74.9	75.6	76.2	76.5	77.4	78.6	79.4	79.9	80.7	83.4	83.9	83.8	83.6	83.3	82.7	82.7	82.1	81.5	81.0	81.1	80.4	80.0	79.8
16	78.7	79.0	78.9	78.5	79.0	78.7	78.4	78.3	78.6	78.3	79.4	80.7	81.1	81.4	81.7	82.3	81.6	79.7	78.6	78.2	77.8	77.3	76.8	76.9	79.2
17	76.8	76.6	76.3	76.3	76.0	76.5	76.2	75.8	75.9	76.6	77.0	77.4	77.7	78.1	78.0	76.7	76.6	76.2	76.0	76.2	75.8	76.4	75.6	75.9	76.5
18	75.1	74.8	76.3	76.9	76.6	76.8	76.6	77.2	77.2	78.2	79.3	80.1	80.8	81.7	81.8	82.9	82.2	81.4	81.4	81.6	81.7	81.8	82.2	81.8	79.3
19	82.2	82.0	81.3	80.3	82.6	82.1	82.0	82.5	82.9	83.5	83.8	84.2	84.7	84.6	84.4	84.1	83.6	83.0	82.4	81.7	81.3	80.5	80.2	80.3	82.5
20	79.9	79.1	79.2	79.1	78.9	78.6	78.0	77.9	78.3	78.9	79.6	79.6	79.6	79.6	79.6	79.4	79.1	78.9	78.9	78.6	78.8	78.9	78.5	78.5	79.0
21	78.4	78.4	78.3	78.4	78.0	77.8	77.5	77.3	77.8	79.3	80.0	80.9	81.2	81.3	80.9	80.6	80.5	79.4	80.6	79.5	78.7	78.4	77.6	77.5	79.1
22	77.4	79.5	80.3	80.3	79.8	80.4	81.5	80.9	80.7	81.5	82.3	82.3	81.9	82.3	82.1	81.6	80.9	79.2	78.7	76.9	75.9	75.3	74.2	73.8	79.7
23	73.6	73.3	72.8	72.4	71.3	71.1	70.7	71.2	71.3	73.0	75.0	77.7	78.2	78.1	77.8	77.6	77.5	77.3	77.4	77.6	78.2	78.2	78.2	75.2	
24	78.1	78.0	78.0	78.0	77.9	77.9	77.9	77.5	77.1	76.7	77.0	77.0	76.7	76.5	76.6	76.7	76.8	76.7	76.7	76.8	76.8	76.5	76.5	76.6	77.2
25	76.3	76.2	76.4	76.1	75.8	74.8	74.4	74.4	74.7	75.8	77.1	78.7	78.2	78.6	78.7	78.3	77.8	77.2	76.8	76.5	76.3	76.3	76.3	76.0	76.6
26	76.1	76.4	76.2	75.9	75.2	74.0	73.7	73.8	74.9	75.8	76.3	76.8	77.2	77.5	78.2	78.1	77.7	77.9	77.8	76.6	76.3	75.9	75.4	75.4	76.2
27	75.5	75.6	75.8	76.1	76.6	76.8	77.1	77.3	76.8	76.9	77.5	77.6	78.4	79.6	79.7	79.5	78.1	76.6	75.8	75.6	74.5	73.9	75.3	75.7	76.8
28	76.3	76.9	76.9	76.9	77.1	76.6	76.8	77.1	77.9	78.5	78.9	79.3	79.7	79.6	79.5	79.4	78.7	78.4	78.4	78.1	77.7	77.7	77.7	77.7	78.0
29	77.5	77.5	77.4	77.4	77.3	77.2	77.2	77.1	77.1	77.3	77.5	77.4	77.3	77.3	77.4	77.2	77.1	77.0	77.0	77.1	77.0	77.0	76.9	76.9	77.2
Mean ...	76.8	76.8	76.7	76.7	76.8	76.7	76.7	76.8	77.0	77.5	78.3	79.0	79.3	79.3	79.3	78.9	78.5	78.1	77.9	77.6	77.4	77.3	77.1	77.0	77.7
Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean



Readings in degrees absolute at exact hours, Greenwich Mean Time.

86. Aberdeen : North Wall Screen on Tower :  $h_t$  (height of thermometer bulb above ground) = 12.5 metres.

March, 1928.

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean
Day.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.
1	77.0	77.2	77.4	77.4	77.5	77.4	77.5	77.7	77.5	77.5	77.9	78.2	77.9	77.9	77.8	77.7	77.8	77.8	77.9	77.9	78.1	78.2	78.2	78.3	77.7
2	78.4	78.4	78.4	78.3	78.1	78.0	77.2	77.0	77.6	79.0	80.4	81.6	82.4	82.8	82.7	82.2	81.3	80.4	79.2	78.1	77.3	76.3	75.5	74.8	79.0
3	74.7	74.6	74.9	75.1	75.4	75.4	75.8	75.7	76.1	76.9	77.5	78.7	79.2	79.4	79.4	79.2	78.6	78.3	77.9	77.6	77.9	77.8	77.9	77.9	77.1
4	77.8	77.6	77.4	76.6	76.5	76.2	75.8	75.6	76.1	77.8	78.6	79.1	79.0	79.0	79.3	79.0	78.9	78.2	78.0	77.9	77.7	77.3	76.5	76.4	77.6
5	76.4	76.3	76.2	76.0	75.8	75.8	75.8	76.1	76.6	77.1	77.9	78.7	79.0	79.1	79.1	79.0	79.0	79.0	79.1	79.1	78.9	78.6	78.1	78.2	77.7
6	77.8	77.5	77.4	77.2	76.5	76.0	76.0	75.8	77.2	77.6	77.6	77.4	77.9	77.7	77.5	77.3	77.1	76.4	76.2	76.1	76.2	76.4	76.7	76.8	77.0
7	76.4	76.1	76.1	76.2	76.6	76.9	77.5	77.4	77.6	77.5	77.4	77.6	77.8	77.7	77.8	77.6	77.5	76.6	76.5	76.7	76.5	76.0	75.5	75.5	76.9
8	75.6	75.1	75.1	75.6	75.4	75.0	74.9	75.5	75.9	76.7	77.4	77.3	77.8	77.5	77.1	76.8	76.2	75.5	75.0	74.2	73.9	74.1	74.1	74.5	75.8
9	74.0	74.2	74.3	73.5	73.5	73.7	74.4	75.1	75.1	76.2	77.0	77.4	77.4	76.6	77.4	75.1	76.1	75.3	75.5	74.4	75.7	75.9	76.0	75.8	75.4
10	75.5	75.4	75.5	75.5	75.4	75.3	74.6	74.9	74.7	73.0	74.4	75.1	75.0	74.6	73.3	72.9	73.6	74.1	74.0	71.9	73.3	72.4	73.6	73.0	74.3
11	72.8	73.3	73.1	73.4	73.1	71.4	72.2	72.5	74.0	74.0	73.8	74.8	73.5	74.6	74.6	74.4	74.5	74.4	74.3	74.1	74.4	74.5	74.1	73.8	78.7
12	74.0	73.9	74.1	74.0	74.3	74.6	74.5	74.8	74.9	74.7	75.0	75.2	75.6	75.3	75.3	75.3	74.9	73.2	74.1	73.7	73.7	74.5	74.8	74.9	74.5
13	75.0	74.2	74.6	74.4	75.5	76.0	76.1	76.2	76.4	76.5	76.8	76.7	77.4	77.5	76.6	76.7	76.5	76.3	76.4	76.4	76.4	76.3	76.4	76.5	76.1
14	76.5	76.4	76.6	76.6	76.6	76.6	76.5	76.6	76.8	77.1	77.1	77.5	77.3	77.1	76.8	76.6	76.4	76.2	76.1	76.2	76.3	76.2	76.0	76.0	76.6
15	76.1	75.9	75.7	76.3	76.7	76.8	76.9	76.9	76.8	77.0	77.5	77.4	77.3	77.1	76.9	76.9	77.0	77.1	77.1	77.2	77.2	77.2	77.0	77.0	76.9
16	77.1	77.1	77.1	77.0	76.9	77.1	77.2	77.5	77.7	78.4	78.7	79.3	79.3	79.6	79.4	79.0	78.8	78.8	79.4	79.5	79.5	79.4	79.0	79.2	78.4
17	79.0	78.7	78.7	78.5	78.5	78.5	78.9	79.5	79.7	80.6	82.2	81.0	81.3	82.6	82.2	81.1	80.5	80.1	79.9	79.7	79.6	79.5	79.3	78.8	79.9
18	78.7	78.8	78.6	78.2	78.0	77.9	77.7	77.9	78.3	78.3	78.2	78.2	78.4	80.5	81.5	81.4	80.7	79.6	79.0	79.6	79.5	79.4	78.9	78.6	79.0
19	78.2	78.2	77.9	77.5	77.5	77.7	78.1	79.0	79.7	80.0	81.2	81.3	80.5	79.9	79.3	79.2	79.6	79.6	79.7	80.0	80.5	80.2	80.6	80.6	79.4
20	80.4	80.2	80.2	80.3	80.1	80.1	80.0	79.9	80.1	79.9	79.7	79.5	79.3	79.3	79.3	79.4	79.3	79.0	78.7	78.7	78.6	78.6	78.7	78.7	79.5
21	78.7	78.8	78.8	78.6	78.3	78.3	78.4	78.6	78.2	77.5	77.5	77.3	77.7	77.4	76.8	76.1	75.7	75.4	75.3	75.1	75.0	75.1	75.1	75.1	77.2
22	74.8	74.9	74.6	74.8	74.7	75.0	75.3	75.5	75.6	76.3	76.5	76.5	76.5	76.7	76.8	77.0	76.6	76.4	75.9	75.9	75.9	76.8	77.3	77.8	76.0
23	76.8	76.5	77.2	77.2	77.4	77.5	77.7	77.8	77.9	78.1	78.2	78.0	78.1	78.4	78.5	78.4	78.5	78.4	78.4	78.4	78.4	78.3	78.4	78.5	77.9
24	78.5	78.5	78.7	78.7	78.7	78.6	78.8	78.8	79.1	79.5	79.0	78.8	79.4	79.1	79.0	79.2	79.2	79.0	78.9	78.7	78.5	78.2	78.0	78.0	78.8
25	77.9	78.2	78.1	78.0	78.1	78.4	78.5	78.7	78.6	78.8	78.8	78.8	79.1	79.3	79.7	79.3	79.2	79.1	79.0	79.0	79.0	79.0	79.1	79.1	78.8
26	79.3	79.1	78.6	78.5	78.2	78.0	78.0	78.8	79.6	80.3	81.0	81.9	82.0	81.5	81.5	81.2	80.9	80.7	80.0	79.2	78.7	78.5	78.1	78.5	79.7
27	78.6	78.5	78.3	78.3	77.4	77.5	77.7	78.4	79.0	79.0	79.1	79.2	79.2	81.5	82.2	83.5	82.2	81.8	80.3	79.6	79.0	78.8	78.4	77.4	79.4
28	77.2	76.7	76.3	75.8	75.4	75.7	76.5	77.9	79.4	80.3	81.3	82.0	81.5	81.3	81.5	81.4	80.8	80.3	79.0	78.3	77.5	76.9	76.8	76.0	78.6
29	75.5	75.2	75.5	75.9	76.7	77.0	77.2	78.0	78.7	79.1	79.0	78.9	78.7	78.3	77.1	76.4	76.0	75.6	75.4	77.1	78.0	77.4	77.6	77.8	77.1
30	77.6	77.3	77.1	77.5	77.6	77.8	78.0	78.2	78.4	78.6	78.0	78.6	78.5	78.4	78.7	78.6	78.8	78.5	78.3	78.3	78.4	78.4	78.4	78.4	78.2
31	78.4	78.5	78.4	78.5	78.4	78.4	78.3	78.2	78.3	78.4	79.0	79.4	79.0	79.0	78.8	78.8	78.8	78.6	78.4	78.2	77.9	77.8	77.6	78.0	78.5
Mean	...	76.9	76.8	76.8	76.7	76.7	76.8	77.1	77.5	77.8	78.2	78.4	78.5	78.6	78.6	78.3	78.1	77.8	77.5	77.3	77.4	77.2	77.2	77.1	77.5

87. Aberdeen : North Wall Screen on Tower :  $h_t$  = 12.5 metres.

April, 1928.

	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.
1	78.2	78.2	78.0	77.8	78.0	78.2	78.1	78.5	79.9	80.5	80.6	79.4	79.7	80.1	79.5	80.8	81.1	81.3	79.8	79.3	79.2	79.0	78.9	78.7	79.3
2	78.2	78.4	78.5	78.0	78.0	78.0	78.5	79.8	80.7	81.6	82.3	82.3	82.1	81.5	81.4	80.9	80.6	79.9	79.6	80.1	80.0	79.8	78.9	78.8	79.9
3	78.9	78.8	79.2	79.4	80.0	80.0	80.3	80.2	80.5	81.2	81.6	80.5	81.2	82.9	82.8	82.4	82.1	81.1	80.0	78.9	78.0	77.0	76.9	76.8	80.1
4	76.1	76.1	75.9	75.9	75.7	76.3	76.6	78.4	80.6	81.4	82.3	82.4	83.0	82.9	81.0	82.4	82.3	82.0	79.6	79.1	78.6	77.9	77.3	76.3	79.2
5	75.8	75.4	75.1	75.1	75.2	75.6	76.1	77.5	79.0	80.7	81.1	81.7	82.8	82.1	81.3	81.9	81.6	79.8	79.5	78.5	77.6	77.2	76.6	76.3	78.5
6	75.9	75.8	75.1	75.1	75.3	75.5	76.3	77.9	80.3	81.4	82.3	83.0	83.7	84.1	83.8	82.4	81.9	81.7	81.2	80.5	79.5	78.9	78.9	78.6	79.5
7	78.2	77.6	77.7	77.5	77.5	77.6	78.1	79.4	79.4	79.8	81.2	82.1	82.5	81.7	81.4	81.4	81.0	80.9	80.2	79.8	79.5	79.1	78.9	78.8	79.6
8	78.9	78.9	79.0	79.1	78.9	78.9	79.3	79.5	80.0	80.1	79.9	79.6	79.4	79.0	79.4	79.8	79.8	79.8	79.7	79.4	79.4	79.3	78.9	78.9	79.4
9	78.6	78.8	79.7	79.8	80.4	80.4	80.5	80.6	80.9	81.6	82.4	82.4	82.9	83.5	83.5	83.5	82.8	82.8	82.3	82.5	82.3	81.8	81.8	81.5	81.5
10	81.2	81.0	81.0	80.2	80.0	79.8	80.4	80.5	81.2	81.4	82.1	82.4	82.1	81.9	81.8	81.3	81.4	81.0	81.1	80.6	80.5	80.8	79.9	80.0	81.0
11	80.1	80.0	79.5	79.6	79.8	79.9	80.1	80.5	81.1	81.9	82.3	82.9	84.0	85.1	85.8	84.7	84.4	83.6	83.9	83.0	81.6	81.2	80.8	80.6	81.9
12	80.6	80.3	79.9	79.2	77.8	79.3	78.5	78.4	78.1	78.4	78.9	79.3	79.2	78.5	78.4	78.3	78.0	78.0	77.8	77.7	77.7	77.7	77.8	77.6	78.6
13	77.8	77.9	78.1	77.9	77.7	77.3	78.1	78.1	77.9	77.6	77.2	77.2	77.2	77.2	77.1	77.0	76.9	76.9	76.8	76.7	76.8	76.9	77.0	76.9	77.4
14	77.0	77.1	77.2	76.9	76.8	76.7	76.6	76.4	76.6	76.7	76.9	76.8	76.9	76.7	76.5	76.4	76.1	76.0	75.9	75.7	75.8	76.0	76.0	76.1	76.5
15	76.0	75.9	75.7	75.7	75.9	76.0	76.3	76.5	76.1	76.6	75.4	77.2	77.7	77.5	77.4	77.2	77.2	77.4	76.4	76.1	76.2	76.2	75.9	73.4	76.4
16	72.6	72.3	72.0	71.5	71.5	72.5	74.3	75.6	77.4	79.3	79.3	79.6	79.3	79.7	80.0	80.0	79.8	79.4	77.3	76.6	76.5	75.8	74.6	74.2	76.3
17	74.0	73.9	73.6	73.8	73.0	73.7	74.8	75.7	75.8	74.5	75.1	76.5	77.2	76.7	75.6	73.9	76.3	75.5	74.9	74.4	74.1	73.8	73.7	73.3	74.7
18	73.0	73.0	73.7	72.9	72.9	73.0	74.6	74.5	74.7	74.8	76.1	76.4	76.7	77.1	77.3	77.2	78.1	77.7	76.7	74.1	75.1	76.4	76.6	76.0	75.3
19	74.3	74.6	74.2	74.2	74.7	74.3	74.5	74.4	74.6	75.7	76.0	78.4	78.6	79.1	79.2	79.0	79.0	78.4	77.6	76.3	75.5	75.5	75.5	75.6	76.2
20	75.6	76.3	76.2	76.1	75.9	76.6	77.3	77.5	78.3	79.1	79.6	80.2	80.3	79.3	78.6	78.4	78.0	77.4	77.5	77.0	77.2	77.2	76.8	76.0	77.6
21	77.0	76.4	76.5	76.2	76.0	76.6	77.9	79.3	79.7	79.7	80.2	80.1	79.8	80.2	80.1	79.4	79.3	78.9	78.4	77.9	78.4	78.2	77.1	77.5	
22	76.4	76.3	75.8	76.1	76.5	77.5	78.2	78.9	79.4	80.6	80.4	78.5	79.4	79.8	79.7	79.8	79.5	78.9	78.5	78.3	78.1	77.8	77.9	78.4	
23	78.1	78.2	78.4	78.5	78.6	78.6	78.9	79.4	79.4	79.5	80.0	82.6	83.7	83.8	84.2	82.9	84.0	82.9	82.6	83.0	82.6	83.4	83.5	83.4	
24	82.3	82.3	81.9	81.7	81.2	82.2	82.7	83.1	83.4	85.1	84.1	83.4	83.9	83.3	83.5	83.6	83.4	83.7	83.4	81.8	81.4	81.2	80.9	82.8	
25	80.8	80.6	80.4	80.4	80.0	80.1	80.8	81.3	82.0	82.8	83.0	84.5	85.7	85.4	86.0	84.2	84.1	84.5	84.6	84.1	83.2	82.4	81.8	82.9	
26	81.8	81.7	81.8	82.4	81.5	80.3	80.8	82.0	84.5	84.0	82.7	82.4	82.4	82.2	82.7	82.4	82.3	81.4	80.9	80.4	80.6	80.4	80.2	80.1	
27	79.8	79.2	80.6	80.7	80.7	80.8	80.9	81.2	81.2	81.6	81.8	81.8	82.0	81.9	81.6	81.7	81.6	81.3	81.0	80.8	80.6	80.3	80.0	80.0	
28	80.1	79.8	79.9	79.8	80.1	80.8	80.7	80.8	81.1	82.0	82.3	82.5	82.7	83.1	83.8	83.7	83.6	83.0	81.4	80.6	79.9	79.7	79.5	81.3	
29	79.2	79.1	79.0	78.9	79.0	79.3	79.7	80.1	81.0	81.5	81.2	81.1	80.8	81.5	81.9	81.6	81.0	80.9	80.7	79.4	78.9	79.1	79.5	80.1	
30	79.8	79.9	80.4	80.8	80.7	80.9	81.3	81.2	81.5	81.3	81.4	82.2	82.4	82.5	82.8	82.5	82.7	81.8	80.9	80.4	80.5	80.5	80.6	81.2	
Mean	...	77.9	77.8	77.8	77.7	77.6	77.9	78.4	78.9	80.1	80.3	80.7	81.0	81.0	80.9	80.7	80.3	79.7	79.1	78.8	78.7	78.5	78.2	79.3	
Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean



Readings in degrees absolute at exact hours, Greenwich Mean Time.

88. Aberdeen : North Wall Screen on Tower :  $h_t$  (height of thermometer bulb above ground) = 12.5 metres.

May, 1928.

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean
Day.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.
1	80.6	80.6	80.1	79.9	80.2	80.8	81.0	82.0	82.3	82.4	82.1	82.1	82.4	81.8	81.5	80.5	80.8	80.4	80.4	80.2	80.2	80.1	80.0	80.0	80.9
2	80.2	80.1	80.2	80.2	80.2	80.6	81.4	82.7	82.6	81.9	82.2	81.9	82.3	82.4	82.1	81.9	81.3	81.1	80.9	80.5	80.3	80.1	79.9	79.7	81.1
3	79.2	79.3	79.2	79.0	78.8	80.0	81.5	81.4	81.7	82.0	81.9	81.9	81.7	81.5	81.1	80.7	80.6	80.3	80.0	79.7	79.9	80.0	79.9	79.8	80.5
4	80.0	80.0	80.1	80.1	80.0	80.4	80.4	80.5	80.7	81.4	81.6	81.3	81.4	81.5	81.7	81.4	82.2	81.4	80.4	80.0	79.7	79.7	79.8	79.9	80.7
5	79.4	79.6	79.3	78.9	79.4	80.5	82.6	82.4	82.1	82.2	82.3	82.2	82.5	82.3	82.5	82.5	82.4	83.0	82.6	82.0	81.5	81.3	81.1	80.8	81.5
6	80.5	80.3	80.4	80.2	80.3	80.9	81.7	82.6	84.2	84.9	84.0	84.7	84.1	83.7	83.3	83.4	82.8	84.2	84.0	81.4	80.7	80.1	80.2	80.8	82.2
7	80.5	80.5	80.6	80.2	79.8	80.2	80.8	80.9	80.9	80.7	80.8	80.8	81.0	81.0	81.2	81.3	82.2	82.0	80.5	79.6	78.5	78.9	78.6	78.0	80.5
8	78.7	79.2	79.3	78.4	77.8	79.0	78.5	78.4	79.0	78.8	79.2	79.5	79.0	79.6	79.2	79.7	79.8	79.0	78.4	76.6	76.5	76.4	77.2	77.1	78.6
9	77.2	77.5	77.3	77.2	77.3	77.7	77.6	78.7	78.8	79.8	80.0	79.9	79.9	79.9	79.9	79.9	79.9	79.9	78.5	78.1	77.8	78.0	77.7	77.7	78.4
10	77.9	77.4	76.8	76.1	75.8	75.7	76.5	77.6	78.6	79.0	79.6	79.8	79.9	79.9	80.1	80.1	80.0	79.9	79.5	79.2	78.4	77.3	76.3	75.7	78.3
11	74.6	75.2	75.8	77.2	77.8	79.5	80.3	81.5	82.4	82.8	83.8	84.4	84.4	84.5	84.2	84.4	83.6	82.2	81.7	81.6	81.4	81.4	81.5	81.5	81.0
12	81.6	81.7	81.5	81.6	81.5	81.3	82.0	82.6	82.7	83.2	84.5	85.0	85.3	85.1	84.7	85.1	84.7	84.0	83.3	82.6	82.4	82.4	81.2	80.5	83.0
13	81.3	81.4	80.9	80.9	81.2	81.9	83.0	83.6	84.4	84.9	85.0	84.5	85.6	85.0	85.7	85.2	84.9	83.9	82.2	81.6	80.3	80.3	79.7	79.9	82.9
14	78.8	79.2	78.8	78.0	78.4	79.2	79.8	79.9	80.0	80.5	81.3	81.9	82.0	82.3	82.2	82.2	81.5	81.2	80.5	80.3	79.9	79.9	79.5	79.5	80.4
15	79.6	79.5	79.4	79.5	80.0	80.5	81.2	80.9	80.9	81.9	84.0	83.7	83.0	85.1	84.9	84.2	83.7	83.2	82.2	80.9	78.4	77.9	77.6	77.1	81.3
16	77.1	77.1	76.6	77.4	77.7	78.4	79.2	80.2	80.0	80.5	81.3	81.6	82.2	82.5	81.9	82.7	82.7	82.9	81.9	81.3	80.6	79.7	78.8	78.5	80.1
17	78.7	78.1	78.2	77.8	78.4	79.0	79.7	80.5	80.5	79.4	81.1	80.9	79.9	79.9	80.3	79.9	80.0	79.9	80.0	79.5	79.0	79.4	78.7	78.9	79.5
18	79.2	79.4	79.2	79.0	79.5	80.1	80.8	81.6	82.2	82.4	82.6	82.5	83.2	83.5	83.1	82.0	81.6	81.6	80.9	80.1	79.9	79.3	79.0	79.1	80.9
19	78.6	78.7	78.7	78.4	78.5	78.8	79.5	79.1	79.2	79.1	79.5	80.8	79.6	81.4	81.0	81.0	81.5	81.8	80.0	79.5	79.0	78.4	78.2	78.5	79.5
20	78.3	78.4	78.0	78.0	78.3	79.5	80.3	80.4	81.4	82.3	81.6	82.5	81.0	80.6	81.0	81.0	81.7	81.6	81.6	80.6	80.0	79.4	78.3	77.8	80.2
21	78.9	79.6	79.5	79.0	79.3	79.9	81.6	82.2	82.0	82.1	81.9	82.0	81.6	81.5	81.7	81.4	81.1	80.9	80.8	81.2	80.1	79.0	78.9	79.0	80.6
22	79.2	79.2	79.3	78.9	79.0	79.5	80.1	80.6	80.9	81.4	81.2	81.0	81.1	81.2	81.1	81.7	81.2	80.6	80.4	80.0	79.7	79.5	79.4	79.4	80.2
23	79.2	79.2	79.4	79.4	79.4	80.1	81.4	82.4	82.9	82.4	82.5	82.7	82.4	82.8	82.4	81.7	81.8	81.3	81.2	81.1	81.1	81.2	81.1	81.1	81.3
24	80.5	80.5	80.7	80.8	80.9	81.1	81.5	82.1	82.0	82.4	82.9	83.5	84.4	85.5	85.2	85.2	85.6	85.3	84.0	82.5	81.6	81.2	80.9	80.6	82.5
25	80.6	79.9	78.9	77.8	79.3	80.0	82.1	83.0	83.2	84.3	84.2	83.2	83.9	83.3	83.0	83.3	82.5	80.9	80.5	80.4	79.9	79.9	79.6	79.6	81.4
26	79.4	79.5	79.2	78.6	78.5	78.8	79.5	80.9	80.1	80.2	80.7	81.7	82.5	82.4	82.1	81.4	81.2	81.3	81.2	81.1	81.1	81.2	81.1	80.9	80.6
27	80.9	80.9	80.8	80.9	80.9	81.0	81.0	81.1	81.3	81.4	81.6	81.7	82.0	82.0	81.9	81.8	81.8	81.6	81.5	81.4	81.3	81.2	81.1	81.1	81.3
28	81.2	81.3	81.5	81.5	81.5	81.6	81.9	82.2	82.5	82.5	82.9	84.2	84.5	84.9	86.6	87.6	85.0	84.0	84.5	83.7	83.7	83.4	83.0	84.3	83.3
29	83.4	83.4	83.2	83.2	83.4	83.8	84.4	84.7	84.1	83.8	82.0	82.4	82.6	83.3	82.4	82.0	81.5	81.3	81.2	81.0	80.9	80.8	80.7	80.6	82.6
30	80.5	80.5	80.5	80.5	80.6	80.8	81.1	81.7	82.0	82.3	82.2	82.4	83.1	82.8	83.3	83.0	82.6	82.4	82.0	81.4	81.1	80.6	80.2	80.1	81.6
31	80.0	79.8	79.7	79.9	80.1	80.5	80.8	81.3	81.4	81.6	82.0	81.8	81.7	82.2	82.3	82.8	82.9	82.7	83.3	82.5	81.9	81.6	80.7	79.8	81.4
Mean	...	79.5	79.6	79.5	79.9	80.0	80.7	81.2	81.5	81.8	82.0	82.2	82.3	82.4	82.4	82.3	82.1	81.8	81.4	80.7	80.3	80.0	79.7	79.6	80.9

89. Aberdeen : North Wall Screen on Tower :  $h_t$  = 12.5 metres.

June, 1928.

	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	
1	79.5	80.0	80.0	79.9	80.2	80.7	83.1	84.9	84.0	83.9	84.2	84.4	85.2	84.9	85.4	87.2	88.2	88.0	87.2	86.3	84.9	83.6	82.4	81.5	83.7	
2	81.0	81.6	81.2	81.1	82.7	85.0	86.4	88.5	89.2	88.9	89.0	85.5	85.2	84.3	84.5	84.5	85.0	85.3	84.9	84.1	83.2	82.8	81.4	80.9	84.4	
3	80.7	80.0	79.4	80.1	81.6	82.3	81.7	83.5	83.6	83.8	84.3	84.0	83.7	84.7	85.6	86.4	87.6	88.0	87.5	87.3	84.1	82.4	82.4	82.8	83.6	
4	82.9	82.7	82.3	82.4	80.9	80.8	81.4	81.4	81.6	81.9	81.9	82.2	82.0	81.2	82.1	81.6	82.4	81.9	81.5	80.9	79.2	78.9	78.4	79.0	81.4	
5	79.0	78.8	78.5	77.6	78.4	79.3	80.0	80.6	81.6	82.0	82.2	82.1	83.4	83.4	82.9	83.5	83.1	82.7	82.8	81.9	81.6	81.2	81.1	80.9	81.1	
6	80.7	80.6	80.2	80.2	80.9	81.3	82.2	82.6	82.7	83.3	83.6	83.7	84.0	84.0	85.1	84.7	83.9	83.3	83.0	82.6	82.5	82.3	82.2	82.3	82.5	
7	82.3	82.4	82.4	82.6	82.5	82.7	83.1	82.1	81.6	81.9	82.0	82.2	82.1	82.2	82.2	82.4	82.6	82.7	82.6	82.1	81.8	81.3	81.0	80.7	82.2	
8	80.8	80.8	80.7	80.6	80.8	81.2	81.8	82.3	82.6	83.4	84.1	83.9	84.3	84.4	84.5	84.4	84.1	84.1	83.0	82.2	81.5	80.8	80.4	80.0	82.4	
9	80.1	80.4	80.5	80.6	81.2	81.5	80.8	80.9	80.9	80.7	80.4	80.7	80.8	80.9	81.0	81.2	81.5	81.7	81.9	81.8	81.1	81.0	80.9	81.2	81.0	
10	81.4	81.5	81.6	81.7	81.5	81.7	82.0	82.1	82.4	82.7	82.8	82.3	81.7	81.5	81.5	82.0	81.7	81.5	80.7	79.6	79.0	79.0	79.0	79.0	81.3	
11	78.9	78.7	79.0	79.5	80.3	81.6	82.6	83.4	83.6	83.9	83.6	85.0	82.9	84.0	83.4	83.0	83.3	82.8	83.0	82.5	80.9	79.9	80.1	79.4	81.9	
12	79.5	79.6	79.1	78.5	80.3	81.6	81.9	82.1	82.6	83.7	84.0	84.0	84.1	84.7	85.3	84.5	85.1	85.2	87.6	85.7	84.1	83.1	81.7	81.3	82.8	
13	81.1	80.9	80.6	80.5	80.6	81.0	81.5	81.4	81.9	82.2	81.7	82.2	82.0	81.8	81.8	81.5	81.3	81.0	80.8	80.8	80.7	80.6	80.5	80.4	81.2	
14	80.5	80.4	80.2	80.1	80.2	80.5	80.5	80.8	81.6	81.0	82.0	82.0	82.3	81.7	83.1	83.4	83.2	83.5	83.7	82.6	81.6	80.0	78.4	78.9	81.4	
15	79.3	79.0	79.5	79.6	81.4	81.7	81.1	81.4	82.2	82.4	82.4	82.9	82.5	79.9	83.2	83.0	82.9	83.0	82.2	81.1	80.3	79.5	78.9	79.0	81.2	
16	78.8	78.6	78.2	79.1	79.3	80.6	81.4	81.8	83.0	83.7	83.9	84.2	82.4	84.2	83.5	83.5	82.8	84.4	84.0	84.0	83.1	82.4	82.1	81.9	82.1	
17	81.6	81.4	81.2	81.4	82.5	82.6	82.4	82.9	81.9	83.3	83.7	82.3	83.4	84.0	83.9	84.3	84.1	84.6	83.2	82.5	81.7	81.4	81.3	81.2	82.6	
18	80.7	80.6	80.3	80.2	80.8	81.2	81.6	81.5	82.4	82.4	83.4	83.6	84.3	84.4	83.4	83.5	83.0	82.8	82.1	82.0	82.1	82.2	82.0	81.8	82.2	
19	81.6	81.6	81.4	80.8	81.1	82.5	83.0	83.1	84.3	83.8	84.2	84.3	83.7	84.0	83.2	82.6	82.4	82.1	81.8	81.5	81.5	81.6	81.6	81.6	82.5	
20	81.4	81.2	81.1	81.1	81.2	81.7	82.9	84.2	85.5	85.8	85.2	84.1	85.2	85.1	85.6	85.5	85.2	85.0	85.7	84.8	84.0	83.1	82.8	81.5	83.7	
21	81.0	80.6	79.6	79.7	82.2	84.6	86.2	87.0	88.0	87.2	86.5	85.0	85.3	84.1	83.9	83.9	83.6	83.3	83.6	83.7	84.0	84.2	83.4	83.4	83.9	
22	83.5	84.1	83.9	84.1	85.7	86.4	86.6	85.9	85.7	86.3	86.7	86.2	89.5	88.4	89.1	90.8	88.7	89.0	88.4	87.5	86.6	85.5	85.1	84.9	86.6	
23	84.5	83.9	84.0	83.9	85.5	87.4	88.2	88.4	88.5	87.9	88.1	89.5	90.7	90.0	89.6	89.4	88.6	89.6	86.8	86.5	86.0	85.3	84.5	83.0	87.1	
24	82.4	82.0	81.5	81.7	83.2	85.1	86.8	87.3	87.4	88.4	88.7	89.4	89.7	90.2	90.4	90.4	90.4	89.2	89.5	89.0	86.5	84.8	84.3	83.1	86.8	
25	83.2	83.0	82.4	83.1	84.8	85.5	86.5	87.0	87.0	87.4	87.5	87.1	87.9	86.9	86.8	85.8	84.7	84.8	84.3	84.2	83.7	83.4	82.9	83.0	85.1	
26	83.0	83.0	82.9	83.0	82.8	82.9	82.8	83.1	83.2	83.2	83.2	83.1	83.0	82.7	82.6	82.3	82.3	82.6	82.2	81.7	81.5	81.2	81.1	81.1	82.7	
27	80.5	80.5	80.4	80.6	80.7	82.1	82.9	83.4	84.5	85.4	86.0	86.5	87.5	87.8	88.6	87.9	87.8	87.6	86.9	85.7	84.6	84.4	84.8	84.8	84.6	
28	84.3	83.9	83.1	83.2	83.2	84.2	84.1	84.4	84.2	84.3	84.4	84.9	86.4	86.0	85.3	85.2	85.1	85.5	85.2	85.4	86.1	86.3	86.0	85.5	84.7	
29	85.5	84.9	84.4	84.0	83.9	85.1	87.0	88.0	88.2	88.7	89.5	88.8	88.9	88.3	88.3	88.5	89.4	88.1	87.4	86.2	85.1	84.6	84.2	84.0	84.8	
30	83.9	83.8	83.5	83.4	83.8	84.1	84.8	85.1	86.0	87.3	87.4	88.5	89.5	90.1	89.6	89.7	89.2	87.5	86.8	86.1	85.7	84.9	84.1	83.1	86.2	
Mean	...	81.5	81.3	81.1	81.1	81.8	82.6	83.2	83.7	84.1	84.4	84.6	84.5	84.8	84.7	84.9	84.9	84.8	84.8	84.4	83.8	83.0	82.4	82.0	81.7	83.3
Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean	



Readings in degrees absolute at exact hours, Greenwich Mean Time.

90. Aberdeen : North Wall Screen on Tower :  $h_t$  (height of thermometer bulb above ground) = 12.5 metres.

July, 1928.

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean	
Day.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	
1	83.0	82.6	81.4	82.3	83.4	84.9	86.0	87.0	88.1	87.9	88.9	89.9	90.0	88.2	86.1	85.0	85.2	84.4	83.9	83.8	83.7	83.9	84.1	84.7	85.3	
2	84.9	85.1	85.5	85.4	86.1	86.3	87.4	87.9	88.4	88.9	88.6	88.9	89.1	88.4	87.9	87.9	87.5	87.5	88.1	87.3	86.7	86.3	85.5	85.5	87.1	
3	85.4	85.0	84.9	84.4	84.9	85.5	86.5	86.6	86.7	87.0	86.5	85.5	85.1	84.7	84.3	84.3	83.9	83.4	83.0	82.9	82.8	82.9	82.8	84.7		
4	82.7	82.4	82.4	82.4	82.6	82.4	82.7	83.5	84.3	85.4	85.7	85.5	85.3	86.8	87.3	85.9	85.5	84.9	84.8	84.7	84.8	84.6	84.2	84.1	84.3	
5	83.9	83.8	83.8	83.8	84.3	85.0	86.1	87.6	89.2	90.7	91.6	92.0	91.6	91.5	91.4	91.4	90.3	90.4	90.0	88.6	87.1	86.4	85.9	85.7	88.0	
6	85.5	85.0	85.0	84.7	85.0	84.6	85.1	85.4	86.0	86.8	87.2	86.0	87.0	87.6	87.4	86.4	86.3	85.6	84.7	83.4	83.3	83.1	82.9	82.4	85.3	
7	81.8	82.1	81.7	82.1	82.5	83.2	83.3	84.3	84.3	84.8	85.5	86.1	86.6	85.0	85.7	85.9	88.4	89.0	88.9	88.1	88.2	87.3	86.6	85.8	86.1	
8	83.2	82.8	82.8	82.5	83.1	85.2	85.3	86.8	86.4	85.9	85.5	85.7	85.9	88.4	89.0	88.9	90.0	88.9	88.1	88.2	87.3	86.6	85.8	85.4	86.1	
9	84.9	85.0	84.8	84.1	85.1	86.4	87.0	87.6	88.1	89.2	90.5	90.1	90.5	89.6	89.3	89.6	89.7	89.4	88.8	88.0	86.9	86.1	85.6	85.4	87.6	
10	85.8	85.9	85.4	85.1	84.9	85.7	85.9	86.0	86.3	85.7	85.2	85.4	85.1	87.0	87.2	87.8	88.5	88.3	88.3	88.5	88.4	88.6	88.8	89.0	86.7	
11	89.5	89.6	89.7	89.5	89.4	89.7	91.4	93.0	93.0	94.2	95.0	95.0	95.3	95.1	95.6	95.7	95.8	95.3	94.5	93.0	92.0	91.4	91.0	90.5	92.6	
12	89.9	89.2	88.8	88.3	88.3	88.1	87.8	88.2	89.2	90.2	91.1	91.8	93.0	91.9	90.6	88.7	90.5	91.6	91.1	90.5	89.6	89.3	88.6	88.0	89.8	
13	87.9	87.4	87.5	87.4	87.5	87.4	87.4	87.7	88.6	88.7	89.0	90.5	91.0	90.9	92.7	90.3	90.0	89.8	90.1	89.7	89.3	89.0	88.1	88.0	89.0	
14	88.1	88.1	87.4	87.6	88.2	89.0	89.7	90.4	90.8	92.1	93.4	95.0	93.8	93.6	93.8	92.6	94.0	93.2	92.5	91.8	91.1	90.6	90.7	90.5	91.1	
15	88.6	87.8	87.4	87.0	87.0	86.5	86.2	86.4	86.5	86.4	86.3	85.6	85.2	84.8	84.8	84.4	84.1	84.2	83.8	83.6	83.7	84.1	83.9	83.7	85.6	
16	83.2	83.6	83.7	84.1	84.5	86.4	86.8	87.3	88.0	87.7	88.5	88.4	88.6	88.7	88.5	88.6	88.5	90.9	90.3	89.7	87.9	87.4	86.0	85.8	87.2	
17	84.9	85.4	85.5	85.0	86.4	87.5	88.8	89.1	90.6	91.0	92.7	94.4	94.6	93.8	93.3	93.1	92.1	90.5	89.6	89.0	88.2	87.9	87.4	86.5	89.5	
18	85.6	85.7	85.7	85.9	86.1	87.1	88.6	88.9	88.7	88.7	88.7	88.7	90.0	90.3	90.2	89.6	89.3	88.6	88.7	86.9	86.2	85.2	85.0	84.9	87.7	
19	84.8	84.6	84.2	84.5	84.8	85.4	86.2	86.9	87.5	88.1	88.6	88.4	88.8	88.7	89.0	88.8	88.5	88.2	86.5	86.3	85.4	85.1	84.4	84.1	86.6	
20	84.7	85.6	86.1	85.9	86.2	86.8	88.0	88.8	88.9	89.5	90.6	91.5	93.2	91.1	91.6	88.5	88.4	92.2	87.7	87.9	88.0	87.3	86.6	86.6	88.4	
21	87.1	87.3	87.3	87.2	87.4	87.1	87.5	87.9	88.5	88.9	90.9	91.3	91.3	91.5	92.8	92.2	91.9	91.5	91.0	90.1	89.4	88.8	88.4	87.9	89.4	
22	86.9	86.0	85.1	84.9	85.7	86.7	86.9	87.5	88.2	88.3	88.7	88.6	88.2	86.0	86.2	85.6	85.0	85.1	84.9	84.5	84.6	84.7	84.6	84.6	86.2	
23	84.4	84.4	84.9	84.7	85.0	85.2	85.6	85.9	86.0	86.1	87.1	89.4	88.1	87.5	88.3	87.4	87.2	86.9	86.6	86.9	86.4	86.2	86.4	86.9	86.3	
24	87.3	87.4	87.3	86.8	86.6	86.5	86.5	86.7	87.9	89.3	90.1	90.5	91.2	89.4	89.9	90.6	92.3	89.0	88.9	87.0	86.9	87.3	87.1	86.8	88.2	
25	85.8	85.5	86.2	86.1	86.5	87.1	87.8	89.3	90.5	91.3	92.6	93.6	93.6	93.8	93.9	93.6	92.8	91.0	90.2	89.7	88.4	88.4	87.4	88.0	89.6	
26	87.8	87.5	87.5	87.6	87.6	87.7	88.1	88.3	89.1	89.0	89.1	90.0	89.7	89.7	90.0	89.0	89.2	88.1	88.2	87.4	86.6	86.5	85.7	85.4	88.2	
27	84.9	84.8	84.6	84.5	84.2	84.0	83.8	83.5	83.4	83.0	83.2	82.9	82.8	83.1	83.6	84.3	84.5	84.6	83.9	83.5	82.9	82.1	82.1	82.0	83.7	
28	81.9	81.8	81.9	81.7	81.6	82.1	83.3	83.7	84.7	85.4	85.3	85.4	86.5	84.8	85.2	83.6	83.7	83.7	82.5	82.7	82.6	82.0	82.0	81.9	83.3	
29	81.6	81.1	80.7	81.0	81.1	82.3	82.4	83.1	84.5	84.0	85.0	85.3	84.8	84.4	85.8	83.7	84.6	84.0	83.5	83.1	82.6	82.6	82.6	82.9	83.1	
30	82.4	82.4	83.0	83.2	83.3	83.9	84.6	85.1	84.3	84.9	84.7	85.4	85.6	84.7	85.2	83.5	83.3	83.5	83.4	82.8	82.2	81.6	81.5	81.1	83.6	
31	81.0	80.9	80.6	79.9	79.9	81.0	82.0	82.7	83.7	84.2	85.0	86.1	86.0	85.9	86.2	86.1	86.0	85.4	85.0	84.7	83.5	83.1	82.5	82.2	83.5	
Mean	...	85.1	85.0	84.9	84.8	85.1	85.7	86.3	86.9	87.4	87.8	88.4	88.7	89.0	88.6	88.7	88.1	88.1	87.9	87.3	86.8	86.2	85.9	85.5	85.4	86.8

91. Aberdeen : North Wall Screen on Tower :  $h_t$  = 12.5 metres.

August, 1928.

	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.
1	81.2	80.4	79.5	78.6	79.3	80.1	82.0	83.0	84.2	84.5	85.1	85.8	86.0	85.8	84.9	84.3	84.4	84.2	84.1	83.5	82.7	81.2	80.2	79.5	82.7
2	78.5	78.1	78.1	79.6	80.8	82.7	84.1	85.1	86.3	87.1	87.1	86.1	86.0	85.8	85.8	86.5	86.1	86.2	85.3	84.9	84.5	84.5	84.2	84.0	84.0
3	84.2	84.0	83.9	83.9	84.0	84.3	85.0	85.8	87.1	87.9	88.8	89.5	90.0	89.6	89.6	89.0	88.7	88.6	88.9	88.2	87.8	87.2	86.9	86.8	87.0
4	86.0	86.0	85.8	85.9	85.7	86.1	86.8	86.9	88.1	87.6	87.4	87.9	88.4	87.8	88.2	87.2	86.9	86.8	86.7	86.3	86.2	85.6	84.8	84.2	86.7
5	82.8	82.6	81.9	81.6	81.6	82.1	83.8	84.6	84.7	84.6	85.6	86.2	87.4	89.4	89.1	89.2	89.0	88.9	87.4	86.7	86.2	86.3	86.1	86.0	85.5
6	85.9	85.8	85.5	85.2	84.9	85.9	87.3	88.2	88.8	90.5	91.0	92.0	91.2	89.7	89.4	89.6	90.0	89.0	89.1	88.6	88.0	87.1	87.2	87.1	88.2
7	86.6	86.4	86.7	86.5	86.4	86.5	86.8	87.5	86.9	86.5	86.9	86.5	86.5	86.5	87.1	87.7	90.0	92.8	92.0	89.1	87.6	86.1	85.8	85.7	87.4
8	84.6	84.1	83.8	83.2	83.6	85.2	87.1	88.3	89.8	90.1	91.4	91.7	92.5	91.7	91.5	91.3	91.4	90.7	89.2	87.9	87.4	86.5	86.2	85.7	88.1
9	85.6	85.4	85.0	84.5	84.8	87.0	88.7	89.1	89.7	90.3	90.2	90.4	90.8	90.0	89.9	88.5	88.0	87.1	88.1	87.8	87.1	85.9	85.0	85.2	87.7
10	85.0	84.7	85.3	85.0	84.2	86.0	87.1	88.0	89.0	89.7	89.2	89.8	88.5	88.5	88.2	85.7	85.8	85.7	85.4	85.3	85.1	85.0	84.9	84.9	86.5
11	84.9	84.9	84.8	84.9	84.8	84.9	85.0	85.2	85.4	85.9	85.7	85.9	86.7	86.0	85.9	85.5	85.4	85.1	85.0	85.0	85.2	85.3	85.4	85.4	85.3
12	85.4	85.4	85.4	85.5	85.5	85.8	85.9	86.1	86.0	86.2	86.4	86.8	88.5	91.5	92.5	92.5	92.4	91.7	90.6	88.7	88.1	87.4	87.0	86.1	87.8
13	85.9	85.5	85.2	85.1	85.1	86.0	87.5	87.3	87.0	87.4	87.0	87.9	88.7	88.5	89.1	88.9	88.2	87.9	86.6	86.2	86.2	86.3	86.1	86.0	86.9
14	85.9	85.8	85.4	85.4	85.5	85.9	86.5	87.5	88.1	88.2	88.6	87.5	87.0	87.3	88.7	89.0	89.6	88.5	87.4	86.4	86.1	85.9	85.6	84.5	87.0
15	84.2	83.1	82.3	82.8	83.3	84.1	85.2	86.5	87.7	88.1	86.8	88.3	88.3	87.5	88.7	88.7	89.0	89.2	88.1	86.7	86.5	85.9	85.7	85.1	86.1
16	85.2	85.6	85.4	85.0	85.0	85.0	85.1	85.3	85.6	86.2	87.1	87.6	87.4	87.9	88.2	89.0	89.1	89.0	87.2	86.1	85.1	84.9	84.3	84.7	86.3
17	84.7	84.7	84.7	84.5	84.5	84.7	84.9	84.8	85.3	86.0	86.6	87.5	87.6	88.1	88.6	88.9	88.9	87.8	86.6	85.8	84.9	85.0	84.6	84.3	86.0
18	84.0	83.9	83.9	83.9	84.2	84.7	84.7	84.8	85.3	86.0	86.5	87.4	87.6	88.1	88.6	89.1	89.1	88.5	84.8	84.6	84.5	84.4	84.5	84.5	84.8
19	84.5	84.5	84.4	84.5	84.5	84.7	84.8	85.2	85.3	85.7	86.1	85.8	85.8	85.8	85.6	85.6	85.4	85.2	85.1	85.1	85.0	85.0	85.1	85.1	85.1
20	85.1	85.3	85.3	85.2	85.2	85.3	85.2	85.1	85.4	85.6	85.6	85.6	85.8	86.2	86.0	85.7	85.6	85.4	85.3	85.3	85.4	85.5	85.6	85.5	85.5
21	85.6	85.6	85.4	85.5	85.3	85.4	85.7	85.3	85.6	85.8	86.0	86.1	86.2	85.9	85.9	85.6	85.4	85.5	85.6	85.2	85.3	85.3	85.4	85.1	85.6
22	85.1	85.2	85.1	85.2	85.1	85.2	85.4	85.9	86.5	86.2	86.8	86.6	86.6	86.9	86.8	86.7	86.4	85.9	85.7	85.5	85.2	85.1	85.5	85.4	85.8
23	85.4	85.4	85.2	85.2	85.3	85.4	85.7	85.8	86.1	86.5	86.8	86.2	85.8	85.9	86.3	86.2	86.3	86.1	86.1	86.1	86.1	86.3	86.5	86.5	85.9
24	86.6	86.8	87.0	86.8	87.1	87.1	87.5	88.0	89.0	89.9	90.1	90.9	91.5	90.9	90.0	89.1	88.6	88.5	87.9	87.2	86.9	86.7	86.3	86.1	88.2
25	85.5	85.5	85.3	84.9	84.4	84.5	87.2	88.3	89.5	90.1	90.0	91.6	90.5	91.9	91.7	89.2	89.5	88.8	88.3	87.5	86.6	86.1	85.1	84.7	87.8
26	84.7	84.8	84.8	84.9	84.9	85.0	85.1	85.0	85.2	85.7	85.7	86.0	85.6	85.4	85.6	85.3	85.1	85.0	84.8	84.7	84.7	84.6	84.5	84.7	85.1
27	84.9	85.1	84.9	85.1	85.3	85.4	86.0	86.1	86.1	86.8	87.5	86.7	86.5	87.1	86.8	86.3	85.8	85.2	85.1	84.8	84.7	84.6	84.4	84.3	85.7
28	83.9	84.1	83.8	84.0	83.7	83.8	85.1	85.8	86.2	86.6	87.1	86.7	86.4	86.2	86.0	85.6	85.6	84.9	84.9	84.9	84.9	84.7	84.4	84.2	85.1
29	84.1	84.1	83.9	83.7	83.5	82.9	82.9	83.1	83.2	83.6	83.8	84.5	84.4	84.5	84.7	84.5	84.2	83.7	83.7	83.1	82.9	82.5	82.4	82.4	83.6
30	82.3	82.5	82.6	82.0	82.2	82.4	82.7	82.9	84.2	84.4	84.5	84.5	84.3	84.7	84.5	84.5	84.2	83.7	83.1	82.2	80.0	79.4	78.7	78.4	82.8
31	78.7	78.4	78.9	79.4	80.3	81.1	81.4	82.5	84.1	84.8	85.5	85.7	85.5	85.8	86.0	86.8	86.3	85.7	85.1	84.7	84.2	84.1	83.6	82.2	83.3
Mean ...	84.4	84.3	84.2	84.1	84.2	84.6	85.4	85.9	86.5	86.8	87.1	87.4	87.5	87.6	87.7	87.4	87.3	87.0	86.5	85.9	85.5	85.2	84.9	84.6	85.9
Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean



Readings in degrees absolute at exact hours, Greenwich Mean Time.

92. Aberdeen : North Wall Screen on Tower :  $h_t$  (height of thermometer bulb above ground) = 12.5 metres.

September, 1928.

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean	
Day.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	
1	80.6	79.2	78.4	78.1	77.4	77.4	78.4	80.8	83.4	85.0	85.5	86.3	87.1	87.3	87.5	86.8	86.8	86.0	84.8	84.6	84.4	84.0	83.5	82.6	83.2	
2	82.5	82.1	81.5	81.9	82.1	82.5	83.1	84.1	86.5	87.9	88.8	90.2	90.3	89.5	89.3	88.4	87.6	87.5	86.9	86.5	86.2	86.3	87.1	87.4	86.0	
3	86.4	86.2	86.0	85.9	86.2	86.3	87.2	87.8	88.6	88.5	89.0	90.4	90.4	89.6	89.9	86.1	85.4	85.9	85.8	85.5	85.7	85.8	86.1	86.8	86.8	
4	86.0	86.0	86.0	85.5	85.6	85.5	85.5	85.8	87.0	88.0	88.4	87.0	87.5	87.5	86.5	85.8	84.7	84.5	84.4	84.4	84.2	84.3	84.4	84.3	85.8	
5	84.4	84.4	84.4	84.4	84.4	84.5	84.6	84.7	85.1	85.3	85.2	85.0	84.9	85.0	84.9	85.0	84.9	84.7	84.8	84.9	84.9	84.8	84.7	84.8	84.8	
6	84.8	84.7	84.7	84.5	84.4	84.5	84.4	85.0	85.0	86.4	85.5	86.7	87.3	87.6	87.7	88.0	87.2	86.5	85.7	84.8	85.6	85.8	85.5	85.9	85.7	
7	85.4	85.1	84.9	85.0	85.2	85.4	85.9	86.3	86.5	87.0	86.9	87.0	87.1	87.1	87.1	87.1	87.6	87.2	87.2	87.4	86.6	87.1	86.7	86.7	86.5	
8	86.6	87.1	86.9	86.5	86.0	86.0	85.9	87.1	88.5	89.5	89.9	90.2	90.6	90.6	90.6	90.0	89.6	88.4	88.4	87.7	86.9	85.9	85.0	85.4	87.9	
9	84.7	84.5	85.4	85.4	85.9	85.8	85.4	86.0	86.4	87.7	89.1	90.0	90.4	90.4	90.3	89.7	89.1	87.8	86.9	85.5	84.7	84.4	85.7	85.9	86.9	
10	86.1	86.1	84.6	83.8	83.6	83.5	84.0	85.5	86.9	88.0	88.7	89.1	88.8	88.0	88.4	87.5	86.8	86.2	85.9	85.4	84.6	84.3	83.9	83.7	86.0	
11	83.0	82.0	82.4	82.0	81.1	81.3	82.8	84.1	85.2	86.0	86.7	87.1	87.1	87.8	87.2	87.1	86.9	86.4	85.0	84.0	82.7	82.0	81.1	80.8	84.3	
12	80.2	80.4	79.1	79.0	78.4	78.9	80.4	82.4	84.5	86.6	87.5	88.8	90.2	90.5	90.2	90.0	89.0	88.3	87.5	86.9	87.0	87.1	86.8	85.7	85.1	
13	84.9	84.3	83.5	82.6	81.9	81.6	83.0	84.6	87.1	88.9	89.8	90.4	90.5	90.3	89.9	89.2	88.7	88.0	87.2	86.7	86.6	86.6	86.3	86.0	86.6	
14	86.0	85.6	85.4	84.9	85.0	84.9	85.4	86.4	86.8	87.1	87.1	87.3	87.3	87.4	87.3	86.9	86.7	86.1	86.0	85.6	85.2	84.9	85.3	85.7	86.1	
15	85.0	84.1	83.9	83.3	83.1	83.0	83.2	83.7	84.5	85.6	86.0	86.5	86.5	86.2	86.1	85.7	85.7	85.2	84.4	83.8	83.5	83.5	83.3	83.1	84.6	
16	83.0	82.8	82.8	82.4	82.4	82.5	82.8	84.1	85.7	86.0	86.4	87.2	87.4	87.4	87.1	86.9	86.3	85.9	86.0	85.8	85.8	85.6	85.4	85.1	85.1	
17	84.8	84.9	85.0	84.9	84.9	84.5	84.4	84.5	84.7	84.6	84.9	85.1	85.3	85.7	86.4	86.6	86.9	87.6	88.4	88.6	88.0	87.5	87.4	87.4	85.9	
18	87.1	86.8	86.3	85.7	84.5	83.4	84.1	85.0	86.0	86.7	86.7	87.8	88.5	88.6	88.5	87.8	87.2	86.0	84.8	84.4	83.5	82.9	82.0	82.0	85.9	
19	81.3	80.7	80.3	79.9	79.4	79.0	80.0	82.2	83.4	85.0	86.2	86.3	85.7	84.1	84.9	84.8	83.7	83.3	82.1	81.6	81.2	80.7	80.1	79.9	82.4	
20	79.9	81.0	82.0	81.5	81.8	81.3	80.8	82.0	83.3	84.0	84.3	85.1	85.2	85.5	84.7	85.0	84.1	82.8	81.9	80.9	80.4	80.1	79.8	78.9	82.4	
21	78.4	79.4	78.9	78.5	77.5	77.2	77.7	79.6	81.5	82.8	83.8	83.3	83.0	83.8	84.3	83.6	82.9	81.8	79.9	78.6	78.4	77.8	78.1	78.9	80.4	
22	79.0	79.1	79.6	79.6	79.2	79.6	80.1	80.6	81.4	82.2	83.4	83.9	83.8	83.7	83.9	83.3	83.1	82.4	81.4	80.7	80.6	80.5	78.7	78.4	81.2	
23	77.8	78.1	78.0	77.9	79.4	80.2	80.4	80.8	81.0	81.6	82.3	82.5	82.9	83.5	83.7	83.8	83.6	82.9	82.5	82.6	82.5	82.3	81.8	81.8	81.3	
24	82.1	82.1	82.2	82.4	82.1	81.8	82.0	82.2	81.2	83.4	83.0	83.8	82.2	82.7	82.2	82.9	82.1	81.6	81.3	80.6	81.0	80.8	81.2	80.9	82.0	
25	81.4	80.9	79.7	79.7	79.6	80.9	81.0	82.0	82.7	83.4	83.6	84.3	84.0	83.9	84.1	83.7	82.2	82.1	82.0	82.0	82.2	81.9	81.5	80.8	82.1	
26	80.6	80.6	80.3	80.5	80.3	80.3	81.1	81.6	82.1	82.8	83.2	83.6	83.6	83.2	83.1	83.0	82.8	82.5	82.2	82.0	81.6	81.6	81.5	81.5	81.9	
27	81.5	81.3	81.2	80.6	80.4	80.4	81.3	81.9	82.5	83.1	83.9	84.9	85.1	85.4	84.0	83.8	83.6	83.4	83.0	82.6	82.1	81.9	81.2	80.8	82.5	
28	81.2	81.1	80.7	80.5	80.0	80.1	79.4	79.8	80.1	81.1	81.9	81.9	82.2	81.7	81.2	80.9	80.9	79.4	79.3	79.1	78.0	76.8	76.5	75.9	80.1	
29	76.8	76.6	75.9	75.9	75.0	75.8	76.5	77.2	79.1	80.8	82.0	82.9	81.9	82.7	82.4	81.5	81.4	80.7	79.4	79.4	78.5	78.9	78.6	79.0	79.1	
30	77.4	77.8	77.4	77.3	77.4	77.2	77.8	79.3	81.0	80.1	80.9	80.8	81.5	82.5	81.9	82.1	81.0	80.0	79.5	79.3	79.3	78.8	77.8	76.7	79.4	
Mean	...	82.6	82.5	82.2	82.0	81.8	81.8	82.3	83.2	84.3	85.2	85.7	86.2	86.3	86.2	86.0	85.8	85.3	84.7	84.2	83.7	83.4	83.2	82.9	82.7	83.9

93. Aberdeen : North Wall Screen on Tower :  $h_t$  = 12.5 metres.

October, 1928.

	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.
1	75.9	75.0	75.1	75.1	75.0	74.0	74.8	77.1	78.8	81.0	81.9	84.2	85.0	85.4	85.5	85.5	85.3	84.7	84.0	82.9	83.1	83.0	82.4	81.6	80.6
2	81.1	80.6	79.6	80.2	80.4	80.7	81.0	81.4	82.0	82.8	83.1	83.4	83.3	83.1	83.7	83.4	82.5	81.3	79.2	77.4	76.7	75.9	75.9	77.9	80.8
3	78.2	77.8	77.9	77.6	75.9	75.0	74.9	76.1	78.0	80.2	82.5	83.7	84.3	84.3	84.3	83.8	83.4	82.3	81.0	79.5	79.9	79.5	80.3	80.6	80.0
4	80.9	80.8	80.9	80.7	81.0	81.8	81.9	83.0	83.4	84.1	84.5	84.5	84.9	84.8	84.7	84.2	83.9	83.8	83.8	83.7	83.9	83.8	83.6	83.8	83.1
5	83.6	83.5	83.4	83.4	83.7	83.7	83.9	84.1	84.4	84.5	84.7	84.9	84.8	84.8	84.7	84.6	84.5	84.3	83.9	83.9	84.1	84.0	83.9	83.8	84.1
6	83.8	83.5	83.7	83.9	83.9	83.8	83.7	84.0	84.5	85.7	86.4	87.0	86.2	86.9	87.2	86.4	86.0	85.1	84.5	83.9	83.5	82.4	81.9	81.5	84.6
7	81.3	81.5	81.8	82.4	82.3	82.3	82.9	83.4	84.1	84.6	84.7	85.0	84.9	84.9	85.2	85.6	86.5	85.8	87.0	86.6	86.9	87.0	86.8	86.7	84.5
8	85.9	85.5	85.7	86.2	85.8	85.6	85.4	85.5	85.8	87.1	87.2	88.9	89.7	89.1	89.5	88.3	87.6	86.8	86.2	85.9	85.0	84.5	84.8	84.7	86.6
9	83.5	82.8	82.5	81.2	81.0	80.4	81.8	82.1	83.2	83.8	85.6	85.7	86.2	86.5	85.6	85.3	85.0	83.2	82.1	81.2	80.8	80.9	80.7	80.3	83.1
10	79.2	78.4	79.0	77.6	77.2	76.8	77.8	79.9	79.9	81.0	81.0	81.5	81.4	82.3	81.8	81.6	80.4	79.2	78.3	77.5	76.9	76.1	77.8	76.0	79.2
11	75.0	74.9	74.6	80.0	80.8	80.9	81.2	81.9	82.4	82.8	82.8	82.6	82.4	82.3	82.4	82.1	82.0	82.1	82.0	81.6	81.5	81.6	81.5	81.6	80.8
12	81.6	81.6	81.4	81.0	80.8	80.7	77.0	76.8	77.7	80.4	82.0	82.4	82.1	82.5	82.4	82.6	81.9	80.7	79.7	78.0	78.2	78.3	78.9	77.5	80.3
13	77.0	77.9	77.8	78.2	78.5	78.5	78.8	79.1	79.7	80.6	81.4	81.9	81.6	82.4	82.0	82.2	81.2	79.9	78.0	77.2	76.1	76.2	75.1	74.8	79.1
14	74.5	74.4	75.0	75.5	74.4	74.6	76.1	78.4	80.0	80.5	81.6	81.7	81.9	82.1	81.9	81.9	81.9	81.9	82.0	82.1	82.2	82.2	82.2	82.0	79.5
15	82.1	82.2	82.3	82.2	81.7	81.8	82.0	82.5	82.7	82.9	82.8	82.8	83.0	83.2	83.3	83.4	83.1	82.4	82.1	81.8	81.9	82.4	81.9	81.2	82.4
16	81.1	81.1	80.9	81.0	81.7	82.1	82.2	82.4	82.6	82.7	83.1	83.4	84.3	85.0	85.4	85.9	86.2	86.4	86.3	85.9	85.6	85.4	85.7	86.0	83.7
17	85.9	84.2	83.9	82.8	82.4	81.5	80.8	81.2	82.3	83.5	84.0	84.6	85.0	85.1	85.1	84.7	84.3	83.9	83.5	83.1	82.9	82.7	82.6	82.1	83.5
18	81.4	81.0	80.5	80.7	80.8	81.4	81.8	83.2	83.6	84.1	83.8	83.5	83.3	83.1	83.1	83.1	83.1	83.0	81.2	81.0	80.5	80.6	80.6	82.1	
19	80.9	80.9	80.8	81.4	81.2	80.9	80.5	81.4	82.1	82.5	83.4	83.1	83.4	83.9	83.6	83.0	82.0	82.0	81.9	82.7	82.9	83.9	83.1	83.2	82.2
20	83.0	83.8	84.2	84.4	84.1	83.7	83.4	83.3	83.1	83.2	84.0	83.6	83.4	83.1	82.8	82.2	81.7	81.4	81.1	80.9	80.6	80.0	79.9	79.5	82.6
21	79.6	79.7	79.0	79.4	78.9	79.2	79.0	79.3	80.2	81.0	82.1	82.6	82.8	82.6	82.8	82.7	82.3	81.2	80.5	79.9	79.8	79.4	79.1	79.3	80.5
22	78.7	78.0	77.1	76.3	76.4	75.5	74.4	74.7	75.3	76.3	76.3	77.2	78.1	79.1	79.6	79.6	79.6	79.3	79.1	79.0	78.7	78.2	77.4	76.9	77.7
23	76.4	75.7	75.1	74.8	74.0	73.7	73.5	74.2	76.4	78.8	80.1	81.3	81.7	81.4	81.6	82.2	82.4	82.6	82.2	82.3	82.8	83.2	83.2	83.1	79.1
24	83.2	83.1	83.0	82.4	82.6	83.1	83.1	83.4	83.4	83.4	83.8	84.1	84.0	83.9	84.2	83.5	83.5	83.5	83.9	83.4	82.9	82.9	83.3	83.3	83.4
25	83.1	83.2	83.0	83.0	82.6	82.4	82.2	82.1	82.4	83.3	83.7	83.8	84.2	84.7	84.6	83.9	83.1	82.8	82.1	82.0	81.2	80.5	80.0	79.5	82.7
26	79.5	79.7	79.1	78.6	80.6	81.5	81.5	81.8	82.0	81.9	82.0	82.2	82.4	82.5	82.8	83.1	83.2	83.4	83.2	83.3	83.5	83.5	83.5	83.2	81.9
27	83.4	83.4	83.4	83.3	83.4	83.3	83.2	83.1	83.6	84.1	84.2	84.1	84.1	84.1	84.1	83.8	83.5	83.4	83.3	83.4	82.7	82.0	81.6	80.9	83.3
28	80.4	79.9	79.4	79.5	80.2	80.0	79.5	79.4	80.6	81.2	81.4	81.4	81.9	82.4	82.4	81.7	81.7	81.8	80.2	79.9	79.9	79.0	78.4	80.5	
29	79.0	79.5	79.6	78.7	78.5	78.4	77.9	78.8	79.3	80.0	80.4	81.4	82.0	81.5	81.3	81.2	80.7	80.3	80.1	80.4	80.9	81.6	82.1	82.2	80.2
30	82.4	82.7	82.9	83.1	83.2	82.8	82.2	81.8	81.7	82.5	83.1	82.8	83.7	83.7	83.1	83.1	83.2	83.0	82.6	82.5	82.5	82.3	82.3	82.5	82.7
31	82.2	81.8	81.4	81.1	80.9	80.7	80.8	81.1	81.7	81.7	81.4	81.1	81.3	81.1	80.7	80.9	80.4	80.4	80.1	80.7	80.3	80.0	79.6	79.4	80.9
Mean	...	80.8	80.6	80.5	80.5	80.4	80.3	80.3	80.9	81.5	82.3	82.9	83.3	83.5	83.6	83.6	83.4	83.1	82.6	82.1	81.7	81.6	81.4	81.3	81.1
Hour G.M.T.	1.	2	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean



Readings in degrees absolute at exact hours, Greenwich Mean Time.

94. Aberdeen : North Wall Screen on Tower :  $h_t$  (height of thermometer bulb above ground) = 12.5 metres.

November, 1928.

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean
Day.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.
1	79.1	78.9	78.9	79.0	78.7	78.8	78.5	78.7	79.3	80.0	80.2	80.6	80.1	80.4	79.8	78.9	78.5	78.2	77.8	77.8	77.8	77.7	78.0	77.9	78.9
2	77.9	77.7	78.0	78.2	78.1	78.0	78.0	78.0	78.8	79.2	79.5	79.7	79.0	79.8	79.7	79.5	79.0	78.9	78.9	78.7	78.5	77.9	77.2	77.3	78.7
3	78.4	77.6	77.8	77.8	78.4	78.6	79.2	78.9	79.0	78.8	79.0	79.7	79.8	79.9	79.3	78.5	78.6	78.9	79.1	78.8	79.0	80.3	80.9	80.9	78.9
4	80.6	80.6	80.4	80.1	79.9	79.9	80.8	82.0	81.9	82.0	82.4	82.4	82.1	81.9	81.4	81.6	81.4	81.7	81.6	81.6	80.8	81.1	81.3	81.4	81.3
5	81.0	80.9	80.9	80.4	80.0	79.9	77.5	77.0	77.1	78.0	79.6	81.7	81.8	81.8	81.8	81.7	81.5	81.5	81.3	81.4	81.5	81.3	81.3	81.2	80.5
6	81.1	81.1	81.0	80.9	80.1	79.7	79.3	79.1	79.2	79.5	80.3	80.2	80.1	80.6	80.3	79.6	78.2	79.0	79.1	79.2	79.1	79.0	79.0	78.4	79.8
7	78.7	78.8	78.3	77.7	77.3	77.9	77.5	77.3	77.4	78.1	78.4	79.0	79.8	79.3	79.7	78.9	77.7	77.1	77.4	77.1	77.0	76.5	75.7	75.8	77.9
8	75.9	75.2	74.5	74.1	74.0	73.9	73.7	73.7	74.2	75.5	77.2	78.5	79.3	79.4	79.1	77.6	76.0	75.3	75.1	74.6	73.7	73.4	73.7	73.6	75.5
9	72.8	72.3	72.2	71.7	71.6	71.3	70.8	70.9	72.1	73.9	75.2	77.7	78.1	78.5	78.4	77.7	77.5	77.6	78.2	78.3	77.6	77.2	79.3	78.2	75.3
10	77.9	78.1	78.2	78.5	78.9	80.4	79.8	79.1	79.9	80.2	80.4	80.7	80.7	80.8	81.0	81.5	82.1	81.9	82.5	82.4	82.2	81.2	81.6	81.3	80.4
11	80.7	82.1	81.6	81.2	80.3	79.2	78.1	78.8	79.7	80.2	80.7	80.9	81.4	81.6	82.0	82.2	82.4	82.7	83.1	83.5	83.9	83.6	82.9	83.3	81.5
12	82.6	82.3	81.4	82.2	82.3	82.2	81.9	82.2	82.0	82.2	82.3	82.4	82.6	83.5	83.7	84.4	86.0	85.9	85.1	84.9	84.0	83.5	82.9	82.4	83.1
13	81.5	81.8	81.1	80.8	81.1	80.8	81.1	81.3	81.8	81.9	82.1	83.2	83.2	83.0	82.6	81.6	80.9	80.6	79.9	79.4	79.1	79.2	79.2	79.2	81.2
14	79.3	78.9	78.9	78.4	77.9	78.0	77.8	78.1	79.1	79.4	79.9	80.4	80.4	80.0	80.0	79.4	78.6	78.1	77.8	77.7	77.7	78.6	80.0	80.4	78.9
15	80.4	80.7	81.1	81.5	81.8	82.1	82.2	81.9	82.0	82.1	82.8	82.5	82.9	82.8	82.6	82.0	81.4	81.4	81.5	81.0	80.2	80.3	81.1	81.6	81.6
16	80.8	81.0	80.9	79.9	79.4	78.9	77.8	77.5	77.8	78.0	78.7	79.3	79.6	79.4	79.4	78.5	77.5	76.6	77.5	77.9	78.6	78.3	77.8	77.4	78.8
17	77.1	77.2	76.5	77.0	78.2	77.6	79.4	79.5	79.5	79.5	81.8	81.8	82.0	80.6	79.9	80.8	80.6	79.9	80.2	80.4	80.3	79.8	79.8	79.8	79.5
18	80.0	80.6	80.0	79.8	79.7	79.5	79.3	79.1	79.1	79.5	80.1	80.2	80.4	80.3	79.8	79.2	79.1	79.5	79.3	79.1	79.5	80.8	81.2	81.4	79.8
19	81.3	81.7	81.5	82.3	82.5	82.6	82.8	82.7	83.1	83.4	83.9	84.2	84.5	84.3	84.1	84.6	84.5	84.0	82.0	81.7	81.4	81.4	81.0	80.4	82.8
20	80.2	80.6	80.5	80.6	80.8	80.8	80.9	80.5	80.3	80.8	82.0	82.5	82.2	81.7	81.1	80.2	79.5	79.7	79.5	79.5	79.7	79.6	79.9	78.9	80.5
21	78.9	78.5	77.9	78.6	78.3	78.9	79.4	81.5	81.9	81.9	82.2	81.3	81.9	82.3	82.4	82.4	82.1	82.1	82.4	82.6	82.5	82.4	82.1	81.1	81.1
22	82.4	82.3	81.3	81.2	81.9	82.1	82.8	82.8	83.0	82.6	82.5	82.0	82.1	82.7	83.2	82.4	81.5	80.3	79.6	79.2	78.6	78.4	78.5	78.4	81.4
23	78.9	78.0	78.8	77.2	78.6	78.0	78.9	79.0	79.0	79.1	79.0	79.1	78.9	79.2	80.8	80.9	78.6	77.6	77.9	78.0	78.1	77.7	77.8	78.6	78.6
24	77.7	77.7	78.0	78.3	78.2	78.3	78.2	77.8	78.1	79.0	80.1	80.6	80.6	80.5	80.1	79.7	79.6	79.7	79.5	79.1	78.9	79.1	78.4	79.0	79.0
25	78.2	78.1	77.9	77.8	78.3	78.3	79.3	78.4	79.3	78.6	79.2	78.5	77.0	78.8	78.9	78.7	78.7	78.4	78.2	78.1	77.6	77.8	77.9	77.9	78.3
26	77.0	77.4	77.6	78.0	78.0	78.1	78.2	78.4	78.1	78.2	78.5	79.2	79.4	79.0	78.4	77.8	77.4	77.5	77.4	77.0	76.4	77.0	76.8	76.5	77.8
27	75.6	76.2	76.6	76.5	75.9	75.8	75.5	75.6	75.9	76.4	76.9	77.1	77.7	77.6	76.1	76.0	76.1	76.4	76.2	76.1	75.6	75.5	75.6	75.3	76.2
28	75.5	75.4	75.0	74.9	74.9	75.2	75.4	75.1	76.0	76.2	76.6	76.8	77.4	77.0	76.2	76.2	76.2	76.2	76.1	76.1	76.3	76.3	76.1	76.0	75.9
29	76.5	76.8	77.1	76.9	77.1	77.6	78.5	78.7	80.0	80.7	82.1	85.7	86.3	86.1	85.1	84.9	85.2	85.4	85.5	85.5	86.5	86.5	86.0	85.9	82.1
30	85.1	85.2	85.2	85.4	85.3	85.1	85.4	85.2	85.0	84.8	84.5	85.0	85.6	85.7	86.0	85.4	85.3	84.7	84.5	83.8	83.9	83.8	83.2	83.2	84.9
Mean	79.1	79.1	79.0	78.9	78.9	78.9	78.9	78.9	79.3	79.6	80.3	80.7	80.9	81.0	80.8	80.4	80.1	79.9	79.8	79.7	79.5	79.5	79.5	79.4	79.7

95. Aberdeen : North Wall Screen on Tower :  $h_t$  = 12.5 metres.

December, 1928.

	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.
1	85.0	83.0	84.9	84.4	84.1	83.8	82.6	81.8	81.6	81.7	82.1	82.4	82.3	82.0	81.3	80.8	80.3	80.1	79.2	79.1	79.4	79.2	79.0	78.9	81.7
2	77.7	76.3	75.9	75.4	75.1	74.5	73.4	74.6	75.5	75.8	75.9	76.1	75.9	76.1	76.4	76.5	77.0	77.5	77.5	78.3	78.5	79.3	79.9	76.5	
3	78.9	78.7	78.3	77.5	77.4	77.5	77.1	75.8	76.4	76.9	77.8	78.1	78.4	78.0	77.5	77.0	76.8	77.0	76.7	76.6	76.2	75.9	75.4	76.5	
4	76.5	76.4	77.3	76.8	76.6	76.8	77.4	77.7	77.5	77.5	77.7	78.4	78.5	78.7	79.1	79.1	79.7	80.3	80.8	81.0	81.3	82.0	82.2	78.7	
5	82.1	82.1	82.0	82.0	81.4	81.6	80.6	80.4	80.4	81.1	80.9	81.1	81.0	80.9	80.2	78.8	78.3	78.2	77.7	77.6	77.3	77.1	77.4	80.0	
6	76.8	76.4	75.7	75.7	76.2	76.5	76.7	76.6	76.8	77.2	78.6	78.7	78.4	78.1	77.9	76.9	76.3	75.7	75.8	75.9	76.0	76.3	75.9	76.1	
7	76.1	76.9	75.4	74.5	74.6	73.8	73.9	73.2	73.4	73.2	73.3	73.3	73.5	73.6	73.4	73.1	73.4	73.6	73.9	73.8	73.8	73.9	74.1	74.0	
8	73.7	74.0	74.4	74.3	74.4	73.8	74.0	74.1	74.5	74.5	74.6	75.1	75.2	75.5	75.3	74.8	74.6	74.6	74.7	75.0	74.8	74.5	74.7	74.5	
9	74.4	74.0	73.7	72.5	72.8	73.1	73.4	73.5	74.2	74.6	74.8	74.7	74.7	75.0	75.3	75.6	75.9	76.3	76.8	77.1	77.5	77.8	78.0	75.1	
10	78.6	78.6	78.8	78.8	78.9	78.9	78.7	78.6	78.6	78.8	78.6	78.4	78.8	78.9	78.9	78.9	78.9	78.5	78.5	78.5	78.5	78.1	78.0	78.6	
11	78.2	78.2	78.3	78.0	78.1	78.3	78.6	79.0	79.4	79.4	79.3	79.5	79.4	79.2	79.2	78.7	79.0	79.2	79.4	79.1	79.2	78.5	78.7	78.9	
12	79.3	79.1	78.9	79.4	78.2	79.1	78.0	79.1	78.2	79.0	78.2	78.6	78.3	78.3	78.3	77.9	78.2	78.0	78.0	77.0	76.8	77.7	76.5	78.3	
13	77.9	77.1	76.9	77.1	77.3	77.6	77.5	76.9	77.0	76.9	77.1	76.7	77.3	77.4	77.4	77.4	77.0	77.4	77.4	77.2	77.1	76.5	77.6	77.2	
14	77.4	77.2	77.1	76.4	76.6	74.9	74.9	75.2	74.4	74.4	74.5	74.9	76.9	76.3	76.4	76.1	76.4	76.4	76.4	76.2	75.8	75.4	73.9	73.6	
15	73.7	73.2	73.4	73.1	73.1	72.9	73.0	74.9	76.8	77.4	77.7	77.7	77.7	77.7	77.7	76.2	76.6	76.6	76.2	76.0	77.1	77.4	77.7	75.7	
16	77.8	77.9	78.1	78.2	78.3	76.7	77.5	77.4	77.1	76.8	76.5	77.4	77.8	77.9	78.1	78.2	78.4	78.4	78.5	78.1	78.0	77.6	78.1	78.8	
17	78.5	77.9	78.1	78.3	78.2	77.6	77.7	77.4	78.2	79.1	79.6	80.1	80.4	80.3	79.7	78.7	78.1	78.3	77.5	77.2	76.8	76.9	76.5	78.3	
18	75.9	75.4	75.3	74.7	74.4	74.8	74.0	74.9	75.3	75.9	76.1	77.1	77.7	77.7	77.4	77.8	77.4	77.6	78.4	78.6	79.0	78.9	78.5	76.7	
19	78.5	78.5	78.3	78.0	77.7	76.5	76.7	76.1	76.0	75.5	76.8	77.6	77.9	77.6	78.1	78.3	78.4	78.5	78.7	78.4	78.6	78.3	77.0	77.7	
20	76.4	76.1	75.9	75.3	75.2	75.6	75.2	75.3	75.5	75.4	76.2	77.1	77.9	77.6	76.7	75.9	75.6	75.7	75.2	75.3	75.5	75.2	74.1	75.8	
21	74.1	73.7	73.6	73.9	73.9	73.9	74.2	74.0	74.7	74.7	75.6	76.5	77.1	77.1	77.3	77.1	77.8	77.5	78.3	78.3	78.2	76.3	75.7	74.7	
22	74.0	73.6	73.9	73.7	72.8	74.0	74.3	76.5	76.8	77.7	78.0	78.9	79.2	79.4	80.6	79.4	78.6	78.5	78.0	77.5	77.3	77.1	76.4	76.2	
23	77.2	76.0	75.5	75.4	74.6	74.8	74.6	75.4	75.0	74.6	76.0	75.6	76.4	76.4	77.4	77.4	77.7	77.9	78.0	78.6	78.9	79.3	79.7	76.7	
24	80.0	80.1	80.9	81.4	81.1	81.1	82.0	81.5	82.0	82.9	83.1	80.1	79.3	78.9	78.4	80.0	79.7	79.5	78.8	78.1	77.1	77.0	76.3	75.9	
25	76.0	76.5	76.5	75.5	76.2	75.9	75.1	75.1	75.2	76.5	76.4	77.6	78.1	78.1	77.9	77.9	78.2	79.0	78.9	78.9	78.8	78.4	78.5	77.2	
26	78.4	76.1	76.3	77.0	77.2	77.3	76.4	76.4	76.1	76.1	76.9	76.9	77.2	76.9	77.1	77.1	76.5	76.5	76.8	76.7	77.1	76.2	75.7	76.7	
27	75.5	76.0	76.3	76.1	75.5	75.5	75.3	75.1	75.2	75.2	76.0	76.4	76.6	76.6	76.0	75.7	75.0	74.9	74.8	74.4	73.9	73.7	73.4	75.3	
28	73.3	73.0	72.7	72.5	72.8	72.6	73.0	73.7	73.5	73.4	73.3	74.1	74.3	74.3	74.8	76.6	77.2	77.2	77.1	77.3	77.2	77.5	77.5	77.6	
29	77.7	77.8	77.7	78.0	76.8	77.3	77.2	77.5	77.4	77.7	77.8	77.2	77.5	77.8	77.3	77.3	77.5	76.9	75.5	74.7	74.9	76.9	77.0	77.4	
30	76.8	77.0	77.0	77.4	77.8	77.7	76.0	77.4	77.2	77.5	77.8	77.4	77.8	76.1	77.3	76.1	77.4	76.7	76.9	77.2	77.1	77.1	77.1	77.1	
31	77.1	76.8	77.0	77.0	76.2	76.7	76.8	76.8	74.5	74.1	74.3	75.8	76.7	76.0	75.6	75.5	74.4	74.5	74.6	74.4	74.3	74.6	74.7	75.6	
Mean ...	77.2	76.9	76.9	76.7	76.6	76.5	76.3	76.5	76.6	76.8	76.8	77.1	77.4	77.7	77.6	77.3	77.3	77.3	77.2	77.1	77.1	77.1	77.0	77.0	
Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	
																								Mean	



**TEMPERATURE : ANNUAL MEANS OF HOURLY VALUES.**  
*From readings in degrees absolute at exact hours, Greenwich Mean Time.*

**96. Aberdeen :** North Wall Screen on Tower :  $h_t = 12.5$  metres.

**1928.**

Hour. 1.	G.M.T. 2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean
a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.
79.88	79.78	79.66	79.59	79.66	79.87	80.17	80.56	80.99	81.44	81.88	82.19	82.40	82.40	82.39	82.12	81.92	81.65	81.29	80.90	80.60	80.39	80.20	80.06	80.92

**TEMPERATURE : MONTHLY MEANS AND DIURNAL INEQUALITIES.**

*The departures from the mean of the day are adjusted for non-cyclic change.*

**97. Aberdeen :** North Wall Screen on Tower :  $h_t = 12.5$  metres.

**1928.**

Month	Mean	Hour. 1.	G.M.T. 2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.
	<i>a.</i>	<i>a.</i>	<i>a.</i>	<i>a.</i>	<i>a.</i>	<i>a.</i>	<i>a.</i>	<i>a.</i>	<i>a.</i>	<i>a.</i>	<i>a.</i>	<i>a.</i>	<i>a.</i>	<i>a.</i>	<i>a.</i>	<i>a.</i>	<i>a.</i>	<i>a.</i>	<i>a.</i>	<i>a.</i>	<i>a.</i>	<i>a.</i>	<i>a.</i>	<i>a.</i>	
Jan.	277.03	-0.47	-0.61	-0.74	-0.70	-0.68	-0.66	-0.59	-0.50	-0.37	-0.04	+0.49	+0.71	+1.00	+1.23	+1.16	+0.73	+0.55	+0.42	+0.22	-0.01	-0.19	-0.39	-0.32	-0.33
Feb.	277.66	-0.84	-0.83	-0.91	-0.93	-0.86	-0.94	-0.92	-0.89	-0.65	-0.12	+0.64	+1.31	+1.63	+1.66	+1.64	+1.28	+0.88	+0.45	+0.26	-0.04	-0.27	-0.36	-0.59	-0.63
Mar.	277.51	-0.57	-0.68	-0.70	-0.75	-0.77	-0.78	-0.66	-0.40	-0.04	+0.28	+0.67	+0.94	+1.07	+1.08	+1.07	+0.79	+0.61	+0.24	+0.01	-0.17	-0.14	-0.29	-0.36	-0.43
April	279.26	-1.34	-1.44	-1.43	-1.52	-1.60	-1.36	-0.87	-0.34	+0.29	+0.81	+1.05	+1.39	+1.73	+1.71	+1.67	+1.44	+1.40	+1.02	+0.43	-0.15	-0.44	-0.58	-0.85	-1.13
May	280.91	-1.38	-1.34	-1.47	-1.61	-1.44	-0.88	-0.16	+0.34	+0.59	+0.86	+1.10	+1.27	+1.35	+1.48	+1.46	+1.38	+1.18	+0.92	+0.47	-0.18	-0.63	-0.92	-1.20	-1.30
June	283.33	-1.83	-1.93	-2.19	-2.15	-1.49	-0.67	-0.07	+0.39	+0.74	+1.04	+1.22	+1.16	+1.46	+1.33	+1.51	+1.55	+1.42	+1.40	+1.02	+0.43	-0.37	-0.96	-1.40	-1.67
July	286.83	-1.70	-1.81	-1.91	-2.01	-1.70	-1.14	-0.56	+0.03	+0.61	+1.03	+1.58	+1.87	+2.12	+1.78	+1.91	+1.31	+1.27	+1.10	+0.52	-0.03	-0.62	-0.95	-1.32	-1.45
Aug.	285.92	-1.50	-1.61	-1.75	-1.81	-1.74	-1.27	-0.54	-0.05	+0.55	+0.93	+1.20	+1.53	+1.59	+1.63	+1.76	+1.45	+1.41	+1.09	+0.59	+0.02	-0.42	-0.76	-1.03	-1.27
Sept.	283.93	-1.38	-1.50	-1.75	-1.99	-2.17	-2.14	-1.68	-0.72	+0.31	+1.23	+1.78	+2.25	+2.36	+2.30	+2.13	+1.87	+1.39	+0.81	+0.28	-0.13	-0.47	-0.68	-0.94	-1.10
Oct.	281.80	-0.99	-1.18	-1.32	-1.26	-1.32	-1.43	-1.48	-0.94	-0.28	+0.53	+1.11	+1.48	+1.70	+1.81	+1.77	+1.58	+1.26	+0.80	+0.26	-0.11	-0.25	-0.43	-0.53	-0.75
Nov.	279.67	-0.51	-0.50	-0.65	-0.73	-0.73	-0.72	-0.70	-0.70	-0.40	-0.01	+0.59	+1.05	+1.26	+1.29	+1.07	+0.74	+0.36	+0.22	+0.10	-0.01	-0.24	-0.23	-0.21	-0.33
Dec.	277.04	+0.04	-0.27	-0.23	-0.42	-0.52	-0.63	-0.80	-0.58	-0.48	-0.28	+0.10	+0.34	+0.66	+0.54	+0.53	+0.33	+0.30	+0.31	+0.27	+0.18	+0.21	+0.19	+0.05	+0.05
Year	280.92	-1.04	-1.14	-1.25	-1.32	-1.25	-1.05	-0.75	-0.36	+0.07	+0.52	+0.96	+1.27	+1.49	+1.49	+1.47	+1.20	+1.00	+0.73	+0.37	-0.02	-0.32	-0.53	-0.73	-0.86

**ABSOLUTE EXTREMES OF TEMPERATURE FOR EACH DAY.**

*Maximum and Minimum for the interval 0h. to 24h., Greenwich Mean Time.*

**98. Aberdeen :** North Wall Screen on Tower :  $h_t = 12.5$  metres.

**1928.**

Month	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Day.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.
2	76.6	72.4	78.9	74.0	78.3	76.8	81.4	77.7	82.6	79.8	88.7	79.4
3	79.1	75.9	77.1	73.5	83.1	74.8	82.4	77.8	82.8	79.7	89.8	80.5
4	77.4	74.4	78.5	74.4	79.5	74.3	83.3	76.7	82.2	78.6	88.1	79.0
5	79.8	76.0	80.9	73.8	79.4	75.2	83.2	75.6	82.4	79.6	83.0	78.4
6	77.8	75.8	79.4	74.4	79.2	75.6	83.0	74.7	83.4	78.5	84.0	77.4
7	81.1	75.2	78.6	74.2	78.2	75.8	84.5	74.7	84.9	80.0	85.3	80.0
8	80.2	75.0	83.3	78.5	77.9	75.3	82.6	77.4	82.4	78.0	83.1	80.7
9	80.7	75.3	85.4	80.7	78.0	73.8	80.2	78.6	80.3	76.2	84.7	80.0
10	79.7	74.5	81.4	75.9	77.7	73.4	83.9	78.5	80.5	76.9	81.9	79.9
11	80.4	75.0	77.8	73.9	75.8	71.6	82.7	79.7	80.3	75.4	82.9	78.9
12	77.1	73.9	78.1	74.1	75.2	71.4	85.9	79.4	85.0	74.5	85.4	78.6
13	81.4	74.3	78.3	73.1	75.7	73.2	80.7	77.5	86.0	80.3	87.6	78.5
14	81.1	77.6	76.5	72.3	77.6	74.1	78.2	76.7	86.4	79.7	82.3	80.4
15	79.0	75.7	84.2	74.1	77.5	75.7	78.0	73.4	85.2	76.5	84.2	78.9
16	78.7	76.5	82.6	76.7	79.6	76.8	80.6	71.4	84.0	76.4	84.9	77.9
17	78.0	76.2	78.2	75.4	82.6	78.4	77.3	72.7	81.2	77.5	85.5	81.0
18	78.8	76.5	83.0	74.5	82.0	77.6	78.4	72.8	83.7	78.9	84.9	80.1
19	80.5	75.4	84.7	80.1	81.6	76.9	79.4	73.6	82.0	78.0	84.6	80.5
20	81.4	77.6	80.5	77.8	80.6	78.5	80.4	75.3	82.6	77.7	86.4	81.0
21	82.5	78.2	81.5	77.3	79.0	75.0	80.4	75.9	82.7	77.8	88.2	78.9
22	80.5	73.2	82.6	73.8	78.0	74.5	80.6	75.7	81.7	78.9	91.0	83.1
23	82.1	72.9	78.4	70.4	78.6	76.4	84.5	77.7	83.2	79.1	90.9	83.0
24	81.5	75.2	78.2	76.4	79.5	77.9	85.5	81.1	86.0	80.4	91.8	81.0
25	79.5	74.4	78.8	74.3	79.8	77.8	86.4	79.9	84.6	77.4	88.1	82.1
26	77.4	74.4	78.4	73.5	82.3	77.7	84.6	79.9	82.6	78.3	83.3	81.0
27	78.2	73.7	79.8	73.8	83.6	77.4	82.2	79.2	82.0	80.8	88.8	80.3
28	79.1	74.2	79.8	75.5	75.3	84.0	79.2	87.7	81.0	86.5	82.8	85.4
29	77.5	74.2	77.7	76.7	79.3	75.1	82.1	78.8	84.9	80.5	90.0	83.5
30	77.3	73.7	—	—	79.0	77.0	83.1	79.5	83.5	80.0	90.5	83.1
31	77.3	72.8	—	—	79.5	77.6	—	—	83.4	79.6	—	—
Mean	79.4	75.1	80.0	75.1	79.3	75.7	81.9	76.9	83.3	78.5	86.3	80.3

NOTE.—The initial 2 or 3 of the readings is omitted, i.e., 275.0 degrees absolute is written 75.0.



Percentages at exact hours Greenwich Mean Time.

99. Aberdeen : North Wall Screen on Tower :  $h_t$  (height of thermometer bulbs above the ground) = 12.5 metres. January, 1928.

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.	Vapour Pressure.*
Day.	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	mb.
1	79	80	79	80	83	85	80	81	84	86	85	84	82	83	78	79	82	84	82	85	85	91	88	91	82.9	5.5
2	92	92	92	92	90	89	89	90	90	90	87	85	83	77	82	86	84	85	84	89	90	88	92	93	87.9	7.5
3	90	88	87	89	85	84	80	80	80	85	82	77	72	74	80	82	79	84	85	84	82	84	80	85	82.6	6.0
4	85	82	82	79	80	84	82	82	77	75	76	71	78	81	79	80	76	71	73	72	70	72	70	72	77.3	6.6
5	67	67	73	70	75	70	69	73	69	70	62	65	67	67	68	68	65	67	76	75	75	73	77	77	70.1	5.7
6	87	93	93	92	92	93	92	89	93	87	86	84	84	80	78	75	82	80	76	82	74	74	75	75	84.0	6.8
7	74	74	75	74	85	91	90	92	89	94	94	92	92	90	94	92	91	86	89	93	93	97	91	86	88.0	7.3
8	76	72	75	70	69	63	66	62	68	68	61	59	66	63	64	65	69	67	69	72	73	71	74	75	68.4	5.7
9	74	82	84	85	85	85	91	90	92	84	86	86	81	68	64	68	65	63	62	70	77	80	82	84	78.5	6.2
10	87	85	81	83	82	83	82	82	86	91	93	91	67	63	65	67	67	66	69	73	82	82	80	84	78.8	6.3
11	74	65	72	79	79	77	78	80	74	75	64	58	56	58	66	67	68	69	66	66	69	66	72	74	69.9	5.1
12	76	75	78	87	87	88	88	88	87	89	89	90	89	88	87	88	89	93	93	90	82	83	77	75	85.6	7.6
13	75	76	75	74	77	78	72	77	75	80	67	69	71	65	70	71	72	76	78	74	74	72	77	71	73.7	7.0
14	71	74	68	72	71	75	79	79	82	79	75	81	91	91	91	96	94	94	94	95	93	92	82	80	83.1	7.2
15	88	80	78	82	85	85	83	80	82	84	82	80	80	81	83	83	86	86	88	93	91	94	94	96	84.8	7.2
16	92	92	95	96	92	94	90	92	92	91	91	91	88	87	87	89	86	87	90	90	90	89	90	92	90.6	7.8
17	92	90	85	84	88	82	85	77	79	77	77	77	80	80	82	85	82	80	85	85	87	88	87	86	83.5	6.8
18	87	85	85	86	86	86	83	85	87	85	83	83	83	83	85	82	80	82	86	84	84	88	90	90	84.8	7.6
19	92	90	94	93	95	97	95	98	94	90	88	89	83	72	76	83	81	80	78	82	82	82	84	86	86.9	7.3
20	86	87	91	91	90	88	88	88	91	94	93	93	93	91	76	76	73	77	75	77	77	76	78	74	84.5	8.0
21	70	85	84	81	79	81	84	88	90	90	91	90	92	92	92	91	79	83	83	85	83	82	80	79	84.6	8.5
22	78	81	86	84	89	87	90	88	90	85	72	74	76	73	77	78	79	82	85	89	87	90	89	87	83.0	6.8
23	87	87	87	87	90	93	93	91	88	87	89	88	92	92	92	92	94	94	96	96	96	98	93	78	91.0	7.5
24	69	75	72	74	74	79	82	81	81	81	81	82	90	88	70	73	72	69	60	70	70	69	70	65	75.1	6.4
25	70	80	77	73	75	69	67	69	67	69	75	80	78	75	82	85	86	84	86	82	72	73	78	71	75.8	6.0
26	72	81	79	69	78	77	75	78	74	77	76	87	84	85	84	85	85	82	84	78	73	71	73	72	78.3	5.8
27	69	67	71	65	86	94	98	93	85	71	72	71	80	69	69	72	72	71	74	68	69	73	74	77	75.3	5.6
28	77	80	82	82	86	89	87	90	92	92	92	90	90	87	90	86	83	83	74	79	80	84	77	80	84.6	6.7
29	82	85	83	82	83	77	84	93	93	92	90	92	90	90	90	93	93	95	95	94	96	94	95	93	89.5	6.6
30	89	94	96	96	94	91	91	89	90	87	82	75	74	76	80	80	82	85	82	82	82	83	87	84	85.4	6.1
31	82	85	85	84	85	85	84	85	85	85	85	80	80	81	86	89	90	90	92	92	90	82	84	82	85.4	6.0
Mean ...	80.3	81.6	82.1	81.8	83.7	83.8	83.8	84.2	84.1	83.5	81.5	81.1	81.0	79.0	79.6	80.8	80.2	80.3	80.9	82.1	81.5	82.0	81.9	81.1	81.7	6.7†
Vapour Pressure*	mb. 6.8	mb. 6.3	mb. 6.3	mb. 6.3	mb. 6.5	mb. 6.5	mb. 6.5	mb. 6.6	mb. 6.7	mb. 6.8	mb. 6.9	mb. 7.0	mb. 7.1	mb. 7.0	mb. 7.0	mb. 7.0	mb. 6.8	mb. 6.8	mb. 6.7	mb. 6.7	mb. 6.6	mb. 6.5	mb. 6.6	mb. 6.5	mb. 6.7†	

100. Aberdeen : North Wall Screen on Tower :  $h_t$  = 12.5 metres.

February, 1928.

	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	mb.
1	83	85	87	85	84	82	84	71	77	76	63	65	67	61	64	73	61	65	68	64	67	68	74	77	73.1	5.8
2	80	78	80	81	81	76	77	87	82	75	73	67	70	72	72	81	80	80	79	82	79	79	68	74	77.3	5.6
3	77	79	80	80	80	79	80	80	80	76	72	70	68	62	62	68	71	63	65	67	69	73	75	78	73.0	5.6
4	81	81	85	87	85	84	85	90	87	87	89	90	96	97	94	96	94	96	96	91	82	78	76	76	88.5	7.4
5	80	75	71	72	75	78	77	80	77	78	68	60	57	55	57	54	62	72	79	90	82	71	74	73	71.6	5.8
6	73	74	73	72	73	74	69	73	68	68	63	60	62	68	68	69	73	73	77	79	84	81	80	79	72.1	5.7
7	80	71	73	71	72	74	83	82	79	71	68	66	65	66	67	74	73	71	71	68	69	69	69	72	72.0	8.0
8	76	82	86	89	89	88	89	92	89	92	86	81	77	79	78	80	81	80	78	77	74	73	72	76	81.7	10.2
9	55	49	66	61	54	60	54	62	58	63	66	52	47	70	60	72	65	68	67	71	72	73	76	76	63.2	5.8
10	65	65	74	80	85	89	87	87	84	92	90	89	90	90	88	82	77	75	78	77	78	76	75	74	81.2	6.2
11	71	69	68	61	61	64	74	84	91	94	91	85	76	83	83	78	85	87	83	80	80	78	80	78	78.4	5.9
12	80	83	85	83	85	92	92	89	85	80	74	69	62	53	55	61	65	66	69	72	73	78	80	80	75.4	5.4
13	80	80	81	82	86	87	84	83	82	83	84	80	79	80	82	86	91	91	91	95	91	91	81	81	85.0	5.8
14	73	76	82	79	79	85	80	76	69	66	60	56	56	62	59	63	67	73	75	72	70	74	74	74	70.8	5.4
15	77	82	82	85	88	92	96	96	96	96	91	82	70	70	70	71	70	59	61	61	67	59	60	61	77.0	7.6
16	71	66	69	70	69	73	72	77	79	85	87	83	81	81	77	63	60	67	65	68	68	70	72	75	72.5	6.9
17	73	70	66	59	69	57	56	59	58	54	56	53	53	45	51	62	60	59	64	65	69	62	70	66	60.9	4.8
18	71	73	66	64	70	73	75	79	85	81	81	78	81	76	73	64	68	73	74	74	76	77	79	81	74.4	7.1
19	78	77	81	85	74	79	80	76	76	74	73	73	72	71	73	78	81	84	84	87	88	90	91	90	79.6	9.5
20	90	93	82	76	77	73	76	76	74	75	71	77	77	76	78	81	83	86	86	85	84	85	88	80	80.7	7.5
21	89	87	87	86	87	89	89	89	89	81	79	73	70	71	75	73	76	79	76	84	86	86	87	90	82.4	7.8
22	90	87	85	86	88	86	81	85	85	79	75	79	83	78	75	77	73	81	82	85	88	87	91	90	83.2	8.2
23	90	91	92	92	92	92	92	92	92	92	92	92	75	75	76	74	76	73	76	76	87	87	84	89	84.9	6.1
24	90	90	92	90	89	89	81	82	80	78	73	73	77	78	80	82	83	79	90	88	90	92	90	85	84.3	7.0
25	87	87	82	83	82	85	85	87	85	82	79	74	77	79	79	82	89	92	95	97	95	97	98	98	86.2	6.8



Percentages at exact hours, Greenwich Mean Time.

101. Aberdeen : North Wall Screen on Tower :  $h_t$  (height of thermometer bulbs above the ground) = 12.5 metres.

March, 1928.

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.	Vapour Pressure.*
Day.	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	mb.
1	77	79	77	82	84	85	84	84	89	92	90	89	92	94	94	96	94	96	96	97	95	97	97	97	89.5	7.7
2	96	97	97	97	98	95	96	97	97	93	82	74	65	63	60	67	75	72	79	83	85	88	87	88	84.8	7.9
3	90	89	90	89	91	94	94	89	98	97	98	97	94	93	94	94	96	94	96	96	97	97	97	97	94.0	7.7
4	97	97	96	97	97	97	93	94	93	94	94	93	94	96	93	94	94	95	97	98	98	97	98	97	95.5	8.1
5	97	97	98	96	98	98	98	98	98	98	100	96	94	96	96	96	96	94	94	96	96	97	92	89	96.3	8.2
6	84	81	82	82	83	83	85	84	74	74	68	68	61	64	68	71	69	73	76	74	75	70	70	73	75.0	6.1
7	83	90	90	88	90	88	86	84	82	81	86	84	82	82	81	82	84	95	92	87	88	87	87	85	85.7	6.9
8	84	87	89	87	87	89	90	87	88	78	76	71	74	73	73	76	77	81	84	89	91	92	90	91	83.4	6.2
9	90	91	91	90	92	92	91	84	87	78	75	70	68	85	70	87	85	84	80	87	79	68	62	57	81.7	5.9
10	57	59	60	60	60	61	72	70	72	85	71	72	65	61	75	80	70	62	70	85	70	80	59	62	68.1	4.6
11	65	50	60	52	72	82	86	83	76	73	78	68	80	74	70	72	61	57	63	56	57	56	60	57	67.1	4.3
12	58	63	70	65	62	73	80	67	62	60	61	65	62	65	66	61	62	86	76	85	86	82	78	80	69.3	4.7
13	74	85	87	89	74	66	69	63	63	63	64	64	59	57	62	62	67	61	68	63	60	58	62	67	67.2	5.1
14	67	70	62	63	63	63	62	63	60	58	61	54	57	61	60	60	63	65	64	63	65	63	62	64	62.3	4.9
15	64	64	65	71	77	73	75	78	82	80	74	79	80	84	84	84	84	85	84	84	85	80	78	80	77.7	6.3
16	82	82	79	78	80	82	84	82	84	80	79	74	76	80	79	79	85	88	86	86	86	87	91	88	82.2	7.4
17	90	91	90	91	93	93	93	91	91	91	91	92	91	89	87	89	94	94	98	98	94	93	93	93	92.0	9.2
18	91	88	86	87	87	87	87	87	87	91	92	94	92	88	78	79	82	86	88	83	83	81	86	86	86.6	8.1
19	90	90	92	92	92	92	92	91	88	87	92	79	86	88	93	96	96	96	96	96	96	94	94	94	91.0	8.8
20	94	96	96	96	96	98	98	99	98	98	98	99	98	98	91	88	87	85	85	82	79	75	73	73	91.3	8.8
21	73	73	72	73	74	74	74	71	68	69	65	62	60	56	54	55	56	60	57	58	58	56	57	54	64.1	5.3
22	54	55	52	58	56	64	62	56	62	65	58	60	58	55	56	60	67	68	82	86	92	97	98	100	66.6	5.0
23	98	98	98	98	98	98	98	100	100	100	100	98	98	100	99	99	97	97	97	97	97	99	99	99	98.4	8.5
24	99	99	97	97	97	99	99	97	96	93	96	96	93	93	94	93	93	94	94	96	96	95	97	97	95.9	8.9
25	97	97	97	97	97	97	99	97	99	97	97	99	99	98	98	96	97	97	99	97	97	99	97	97	97.6	9.0
26	96	96	96	96	95	95	97	97	94	90	90	86	78	81	87	88	88	86	88	93	96	94	94	94	91.5	9.0
27	93	91	89	90	90	94	94	89	90	88	88	86	88	83	64	61	61	64	70	68	69	67	69	77	80.5	7.7
28	77	80	80	82	82	84	82	76	72	68	62	57	66	66	67	66	68	72	78	72	76	77	79	79	73.5	6.7
29	80	82	84	86	88	85	85	83	80	78	81	74	76	80	85	90	93	94	93	92	94	93	92	94	85.6	7.0
30	94	90	88	86	87	86	86	84	85	83	87	89	89	85	90	89	91	91	91	94	92	96	94	94	89.3	7.9
31	92	96	96	94	91	94	94	94	92	87	84	78	85	87	84	84	82	83	86	87	89	89	90	90	88.7	8.0
Mean ...	83.3	84.0	84.1	84.2	84.9	85.8	86.6	84.5	84.1	82.9	81.5	79.6	79.4	79.8	79.1	80.5	81.1	82.4	84.1	84.8	84.5	84.1	83.4	83.6	83.0	7.1†
Vapour Pressure*	mb. 6.7	mb. 6.7	mb. 6.7	mb. 6.7	mb. 6.8	mb. 6.9	mb. 7.0	mb. 6.9	mb. 7.1	mb. 7.1	mb. 7.2	mb. 7.2	mb. 7.2	mb. 7.3	mb. 7.2	mb. 7.2	mb. 7.1	mb. 7.1	mb. 7.1	mb. 7.1	mb. 7.1	mb. 7.0	mb. 6.9	mb. 6.8	mb. 7.0‡	

102. Aberdeen : North Wall Screen on Tower :  $h_t$  = 12.5 metres.

April, 1928.

	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	mb.	
1	90	90	92	92	92	90	90	89	83	77	79	81	78	77	80	76	74	70	77	84	81	85	86	86	86	83.4	8.0
2	87	87	85	87	89	89	86	80	73	77	74	74	75	79	79	81	80	83	86	78	77	74	86	88	81.4	8.1	
3	90	93	93	93	87	78	76	68	72	69	61	76	63	45	51	50	53	58	61	69	74	73	75	80	71.3	7.2	
4	81	79	79	76	79	82	82	74	61	55	47	49	47	46	64	49	53	45	74	78	82	78	71	75	67.0	6.4	
5	74	79	77	77	72	74	73	71	67	56	52	50	42	48	65	46	51	77	72	77	78	74	80	75	67.0	6.1	
6	76	77	82	80	80	80	80	78	69	62	69	61	58	55	65	71	73	73	73	76	80	79	72	75	72.7	7.0	
7	75	79	84	84	89	90	92	84	86	84	79	76	76	81	81	81	82	81	83	84	83	81	83	84	82.4	8.0	
8	86	87	85	84	86	87	86	82	80	83	87	87	87	93	91	90	91	93	94	93	93	90	90	88.2	8.5		
9	91	91	87	87	83	86	86	89	89	88	84	86	82	80	79	75	82	82	84	84	91	92	92	92	85.9	9.5	
10	92	93	93	93	94	96	94	94	92	89	86	83	86	84	86	89	88	89	89	90	91	92	94	96	90.5	9.7	
11	96	98	96	98	96	96	96	96	98	96	93	94	87	72	69	79	81	83	82	84	87	85	88	89	89.3	10.2	
12	86	89	93	94	94	96	96	96	98	100	100	96	96	97	92	87	89	86	87	92	90	92	94	97	93.0	8.5	
13	96	89	83	81	81	79	74	71	76	74	73	73	71	71	68	66	69	64	67	59	62	64	56	54	72.6	6.1	
14	55	54	58	51	52	54	52	58	57	65	59	62	54	55	57	58	59	59	62	60	59	57	61	57.4	4.5		
15	57	54	53	53	53	54	56	54	66	67	85	62	52	52	50	52	54	50	50	51	53	53	54	63	56.1	4.4	
16	70	74	74	76	77	77	76	74	77	66	63	65	66	63	57	61	60	65	82	87	87	86	89	91	72.9	5.7	
17	85	84	80	77	79	80	67	57	62	80	62	51	43	64	58	75	49	65	67	74	74	74	75	73	69.3	4.8	
18	74	75	71	84	83	83	80	91	88	84	73	68	72	55	54	55	51	53	69	89	91	68	70	81	73.3	5.3	
19	89	93	92	94	96	94	94	93	94	89	90	65	54	52	49	46	42	50	60	70	79	82	85	89	76.5	5.9	
20	89	87	85	85	88	83	74	71	68	55	54	57	56	69	77	80	78	85	86	87	88	90	93	78.0	6.6		
21	90	88	90	92	91	92	87	78	76	78	77	80	78	74	69	70	73	75	78	78	82	85	84	82	81.4	7.4	
22	87	87	89	91	90	82	81	74	71	74	73	83	78	77	76	74	76	83	84	88	87	86	86	82	81.6	7.3	
23	86	86	72	79	77	88	88	86	88	91	91	86	82	83	80	88	77	88	89	88	91	92	92	91	85.6	9.2	
24	93	93	93	91	91	87	84	82	81	68	74	76	74	76	69	67	63	51	47	62	62	59	63	72	74.5	9.0	
25	78	82	83	82	82	81	81	78	74	74	73	70	67	69	65	72	76	77	77	74	79	83	86	83	76.7	9.2	
26	86	87	87	86	91	93	93	89	83	85	84	98	86	86	84	83	86	89	90	93	91	93	93	91	88.5	10.0	
27	94	93	93	91	93	92	92	92	91	88	87	88	87	88	88	86	87	88	90	92	93	94	94	94	90.6	9.7	
28	94	96	96	98	94	90	91	90	88	83	82	82	82	79	76	75	78	84	88	90	91	91	91	91	86.9	9.5	
29	93	93	94	96	94	96	96	90	84	87	88	93	88	88	86	88	89	90	91	100	99	99	99	98	92.6	9.3	
30	96	94	91	88	88	73	88	89	89	89	91	88	87	84	82	83	82	86	90	91	96	93	93	93	88.6	9.6	
Mean ...	84.5	85.0	84.3	84.7	84.7	84.0	83.1	80.9	79.6	77.6	76.2	75.2	72.0	71.4	71.6	71.8	71.4	73.9	77.5	80.9	82.3	81.6	82.3	83.6	79.2	7.7†	
Vapour Pressure*	mb. 7.3	mb. 7.3	mb. 7.3	mb. 7.3	mb. 7.2	mb. 7.3	mb. 7.4	mb. 7.5	mb. 7.7	mb. 7.8	mb. 7.8	mb. 7.9	mb. 7.7	mb. 7.7	mb. 7.7	mb. 7.6	mb. 7.5	mb. 7.6	mb. 7.6	mb. 7.6	mb. 7.6	mb. 7.5	mb. 7.4	mb. 7.4	mb. 7.5†		
Hour G.M.T. ...	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.	—	



Percentages at exact hours, Greenwich Mean Time.

103. Aberdeen : North Wall Screen on Tower :  $h_t$  (height of thermometer bulbs above the ground) = 12.5 metres.

May, 1928.

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.	Vapour Pressure.*	
Day.	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	mb.	
1	93	93	93	96	94	94	94	89	88	87	88	88	87	88	88	96	96	96	98	98	99	99	99	98	93.2	9.9	
2	98	98	96	98	98	96	94	91	87	88	89	91	88	87	88	87	88	89	89	93	94	94	94	93	92.1	9.9	
3	93	93	93	93	94	93	84	82	78	74	80	80	81	86	83	86	88	88	90	93	90	91	93	91	87.4	9.1	
4	93	93	91	90	91	89	89	88	86	82	81	84	82	84	84	83	81	76	78	85	85	87	84	80	85.5	9.0	
5	84	84	87	86	86	85	74	74	75	74	75	78	79	79	80	82	82	79	79	80	84	84	85	86	80.7	9.0	
6	88	88	88	89	88	85	83	82	72	73	74	69	72	79	79	78	78	72	69	81	86	87	87	83	80.5	9.4	
7	86	88	86	87	86	84	82	75	71	72	75	69	72	69	63	60	53	53	59	65	68	67	68	71	72.3	7.5	
8	70	66	75	85	79	62	59	63	62	61	56	48	47	42	42	42	42	45	57	75	77	80	60	59	60.8	5.5	
9	65	59	54	63	54	59	67	52	55	53	51	57	60	75	79	77	69	72	78	81	80	83	87	87	66.2	5.9	
10	82	87	90	91	91	91	92	89	75	63	62	61	62	63	58	55	57	57	60	60	66	71	78	77	72.6	6.5	
11	84	84	84	76	78	72	77	77	76	79	71	71	75	77	84	76	80	89	91	91	89	87	83	81	80.4	8.6	
12	78	77	79	81	88	93	91	88	86	82	74	71	73	69	73	69	73	74	78	89	87	84	77	80	79.8	9.8	
13	79	84	93	94	94	86	79	72	66	60	61	66	59	57	61	59	57	67	75	74	76	80	83	79	73.4	9.0	
14	82	84	70	74	77	75	73	70	70	64	62	63	59	61	56	60	56	60	67	67	72	76	76	77	68.8	7.1	
15	76	81	79	81	78	77	79	89	90	83	74	71	83	65	55	53	58	61	63	67	80	86	89	88	75.0	8.2	
16	84	88	90	84	87	89	93	86	91	83	78	76	74	69	80	70	70	68	71	77	82	86	88	88	81.3	8.2	
17	86	86	83	87	89	91	87	80	79	87	78	70	88	88	89	90	90	91	91	87	90	90	93	91	86.6	8.4	
18	90	90	90	90	86	88	86	77	72	69	64	71	64	63	67	77	79	74	79	84	83	81	88	83	79.1	8.4	
19	85	88	85	85	85	87	80	78	82	84	84	78	83	71	76	76	65	67	79	77	76	82	83	80	79.9	7.7	
20	86	85	87	86	86	83	76	73	69	65	77	72	83	83	81	81	81	81	78	86	87	88	91	94	81.3	8.3	
21	94	91	93	94	91	93	86	88	80	83	81	84	84	81	74	77	79	79	81	73	78	82	84	82	84.1	8.8	
22	78	75	74	81	82	78	71	64	60	60	61	64	62	62	63	64	62	67	69	67	67	68	71	72	68.6	7.0	
23	75	75	72	72	76	71	67	67	62	63	69	74	74	71	72	71	78	83	84	88	85	86	87	91	75.1	8.2	
24	90	89	89	90	90	91	91	87	88	86	82	74	70	61	59	59	58	64	70	80	83	81	81	79	79.1	9.4	
25	76	81	81	82	83	82	77	72	75	71	83	83	83	88	88	88	91	94	96	98	99	96	98	94	85.5	9.4	
26	96	94	97	97	96	96	91	90	94	96	94	95	91	92	93	96	99	98	99	99	100	99	99	100	95.7	10.0	
27	100	100	100	100	100	100	99	99	99	98	99	99	99	97	98	98	98	99	100	100	100	100	100	100	99.3	10.9	
28	100	99	99	99	100	100	99	99	99	99	96	92	91	91	83	83	93	93	93	93	93	94	94	94	94.9	11.9	
29	96	96	95	94	93	92	88	88	87	90	95	96	98	94	96	95	96	98	99	100	100	100	100	100	95.1	11.4	
30	100	100	99	100	99	98	98	96	96	96	98	91	88	92	89	92	89	87	89	89	88	88	86	87	93.4	10.4	
31	84	81	81	83	81	80	81	77	76	78	77	81	83	81	84	88	89	92	90	94	96	95	94	98	84.9	9.4	
Mean	...	86.2	86.4	86.2	87.4	87.1	85.8	83.5	80.7	78.9	77.5	77.1	76.4	77.2	76.3	76.3	76.4	76.6	77.8	80.4	83.5	85.2	86.1	86.3	85.9	81.7	8.8†
Vapour Pressure*	...	mb. 8.4	mb. 8.4	mb. 8.3	mb. 8.3	mb. 8.4	mb. 8.6	mb. 8.8	mb. 8.8	mb. 8.8	mb. 8.8	mb. 8.9	mb. 8.9	mb. 9.0	mb. 9.0	mb. 8.9	mb. 8.8	mb. 8.8	mb. 8.8	mb. 8.8	mb. 8.7	mb. 8.6	mb. 8.5	mb. 8.4	mb. 8.7†		

104. Aberdeen : North Wall Screen on Tower :  $h_t$  = 12.5 metres.

June, 1928.

	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	mb.	
1	99	99	99	99	99	98	92	76	80	83	78	82	74	79	78	53	43	51	52	58	69	77	83	76	78.7	10.1	
2	73	64	67	77	73	69	62	61	59	58	50	78	74	87	80	78	78	77	75	83	91	87	88	88	73.8	9.9	
3	85	82	79	76	78	88	89	84	85	82	79	79	82	79	75	73	68	68	71	70	84	91	89	83	80.1	10.2	
4	82	83	86	86	93	86	71	67	59	50	55	53	54	65	52	52	45	46	49	55	59	65	69	69	64.9	7.2	
5	69	73	71	76	72	68	61	58	59	53	55	53	56	54	56	58	57	60	64	68	69	73	72	75	63.6	6.9	
6	75	76	82	83	79	77	70	70	71	73	77	80	80	84	75	75	82	86	89	95	95	98	99	99	81.6	9.7	
7	99	98	99	96	99	98	94	95	98	93	89	88	88	87	86	87	87	89	88	91	91	89	88	92.1	10.7		
8	85	83	80	82	78	75	69	74	71	65	57	63	61	61	60	61	60	62	72	77	81	83	85	71.1	8.4		
9	88	89	91	93	96	96	94	93	93	94	94	98	99	100	99	99	99	99	98	99	98	98	99	99	95.6	10.3	
10	98	99	99	99	100	100	99	99	98	96	96	96	95	92	88	84	81	79	83	83	78	78	79	78	91.1	10.0	
11	79	77	74	72	73	68	62	59	60	62	62	59	73	58	62	62	67	70	62	71	81	87	81	84	69.3	7.9	
12	80	76	78	79	73	71	66	63	56	55	62	62	66	72	69	74	74	73	47	57	69	73	84	84	69.3	8.4	
13	78	82	83	85	83	81	73	69	68	67	69	63	66	62	63	61	65	67	68	67	68	67	70	70	70.8	7.7	
14	70	69	72	69	66	65	67	62	69	76	67	72	65	72	57	57	53	57	51	61	69	74	80	81	66.5	7.3	
15	79	76	74	77	70	69	64	63	61	56	62	61	62	86	64	58	59	60	61	72	74	80	83	85	68.9	7.5	
16	82	82	80	71	75	72	65	64	58	58	62	66	88	71	74	73	75	67	70	74	63	67	66	70	70.9	8.2	
17	66	70	74	73	71	71	72	75	86	67	63	72	60	50	54	50	51	52	55	64	68	69	70	71	65.6	7.8	
18	76	77	80	80	79	77	76	81	75	80	71	80	72	73	85	81	80	82	88	92	88	83	87	91	80.2	9.3	
19	93	93	92	94	94	94	87	88	83	83	83	84	84	85	86	86	86	83	81	86	86	84	86	86	87.1	10.3	
20	88	89	86	88	83	83	78	63	59	57	65	79	73	69	68	67	66	71	66	68	68	72	75	79	73.5	9.5	
21	81	83	87	87	83	73	65	69	61	69	73	78	85	85	89	92	93	92	93	93	93	94	95	94	83.3	10.9	
22	93	94	94	95	91	80	82	80	81	80	78	77	69	68	62	60	70	62	64	68	71	77	79	79	77.6	12.1	
23	81	81	77	81	75	56	55	52	56	53	53	48	42	46	53	55	65	56	61	68	56	59	58	60	60.9	9.8	
24	69	68	69	72	65	64	60	54	49	49	44	42	39	40	38	40	40	40	43	44	48	52	52	60	51.9	8.2	
25	60	60	63	63	65	61	57	52	54	53	52	57	57	65	68	81	85	88	91	90	93	94	96	96	70.1	9.9	
26	96	96	96	96	98	98	100	98	97	99	97	97	96	95	96	94	91	88	83	83	86	83	81	81	93.0	11.2	
27	91	82	83	79	77	76	76	75	75	71	70	68	59	65	60	62	65	64	68	77	87	87	80	72	73.9	10.1	
28	79	84	84	79	81	79	87	88	89	89	89	87	82	83	87	87	91	90	91	90	88	86	87	91	85.8	11.9	
29	90	89	92	92	93	93	86	61	54	48	48	52	56	58	58	56	56	59	59	65	69	75	76	77	69.4	11.1	
30	76	76	73	75	72	69	72	74	77	59	58	54	54	49	49	47	50	53	49	55	60	62	63	66	62.1	9.4	
Mean	...	82.0	81.7	82.1	82.5	81.1	78.5	75.0	72.2	71.4	69.3	68.6	70.9	70.2	71.3	69.7	68.8	69.4	69.5	69.4	73.9	76.5	78.8	79.8	80.8	74.7	9.4†
Vapour Pressure*	...	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
	...	9.1	9.0	8.9	8.9	9.2	9.4	9.4	9.3	9.4	9.3	9.3	9.6	9.7	9.8	9.7	9.6	9.6	9.6	9.3	9.6	9.4	9.3	9.2	9.1	9.4†	
Hour G.M.T.		1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.	—



Percentages at exact hours, Greenwich Mean Time.

105. Aberdeen : North Wall Screen on Tower :  $h_t$  (height of thermometer bulbs above the ground) = 12.5 metres.

July, 1928.

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.	Vapour Pressure.*
Day.	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	mb.
1	62	65	73	71	69	64	61	61	54	54	47	48	47	59	71	78	83	86	87	90	90	89	90	91	69.9	10.0
2	91	91	90	88	83	75	73	66	59	57	65	54	56	54	56	61	66	66	61	61	61	62	67	65	68.4	11.0
3	70	74	73	75	73	71	70	69	63	70	81	86	90	93	92	90	91	92	91	91	94	94	92	91	81.8	11.3
4	95	92	93	92	94	95	89	81	76	71	74	76	82	69	73	78	81	81	80	83	80	80	80	84	82.6	11.1
5	84	84	87	90	89	88	86	82	76	63	67	54	58	60	45	46	51	60	55	60	67	69	70	70	69.5	11.8
6	76	80	82	87	86	91	82	78	76	73	74	81	82	71	74	75	73	81	87	89	85	83	83	86	80.3	11.5
7	84	81	84	87	74	71	70	66	65	65	64	62	60	74	70	74	74	73	75	76	80	83	87	89	74.0	9.7
8	90	91	86	77	84	75	74	76	76	81	88	88	89	82	81	84	74	59	67	66	71	69	68	71	78.6	11.9
9	75	72	74	79	78	74	73	70	69	53	47	47	50	56	60	53	56	49	54	62	62	73	80	80	64.2	10.7
10	77	73	74	73	73	65	66	66	66	75	84	82	80	75	75	75	76	79	81	83	85	85	84	83	76.4	12.0
11	80	80	80	80	83	73	80	72	71	67	66	67	68	69	65	65	64	65	68	72	75	78	72	70	72.4	16.5
12	64	66	68	71	73	77	83	81	77	71	68	66	61	63	72	82	73	70	64	65	65	62	62	65	69.6	13.3
13	67	73	72	73	73	77	80	76	70	70	67	67	66	67	61	72	75	76	78	78	80	83	87	87	73.6	13.4
14	86	86	86	82	82	80	76	74	70	67	67	60	65	65	67	69	65	69	72	75	78	82	79	76	74.3	15.4
15	85	87	88	91	90	88	85	83	85	85	87	86	87	90	88	91	93	90	92	94	92	90	91	91	88.4	12.9
16	91	91	91	92	91	82	80	73	74	75	74	71	67	73	76	75	77	58	59	59	69	73	80	75	76.4	12.4
17	75	72	71	74	73	70	69	70	61	63	57	51	49	44	46	47	55	59	61	63	56	57	62	66	61.5	11.5
18	70	70	74	75	77	77	65	60	64	61	63	62	58	55	61	62	61	65	59	65	69	71	74	72	66.1	11.1
19	68	68	73	74	73	65	64	60	59	58	60	59	61	64	63	65	70	76	81	78	85	79	82	81	69.2	10.8
20	75	71	69	69	71	69	66	62	61	59	60	54	50	60	60	74	75	53	73	72	68	70	72	70	66.2	11.6
21	70	70	72	73	72	73	72	72	70	63	55	58	55	55	52	51	52	58	59	63	62	64	66	68	64.3	12.0
22	72	73	75	76	77	74	73	72	68	72	74	74	79	90	91	93	96	94	93	89	89	88	87	81	81.4	12.4
23	89	88	89	91	91	91	90	91	94	94	90	80	83	87	84	86	88	91	90	91	93	93	93	94	89.5	13.7
24	92	92	94	94	96	96	96	97	93	76	65	61	60	78	77	72	78	80	78	90	90	81	80	80	83.5	14.4
25	69	72	72	73	70	68	69	62	63	60	51	50	47	46	44	47	52	56	60	60	58	58	59	59	60.1	11.3
26	61	65	64	61	61	64	65	62	59	59	63	57	65	64	64	70	69	74	70	73	82	81	87	89	67.3	11.6
27	91	93	94	95	93	92	97	91	91	95	93	95	62	88	90	78	75	76	75	80	83	88	91	91	88.6	11.4
28	91	91	91	92	92	87	82	77	70	68	65	72	63	75	90	90	85	85	86	89	89	92	88	89	83.3	10.4
29	90	90	89	88	89	88	87	84	75	84	79	85	78	83	74	80	84	87	88	87	88	83	84	80	84.5	10.4
30	87	84	75	76	81	79	77	75	79	75	74	72	75	79	75	88	90	88	84	87	87	88	86	86	80.9	10.3
31	88	83	85	83	80	75	73	65	61	57	59	55	57	59	60	60	61	64	66	69	73	80	83	78	69.9	8.9
Mean	79.5	79.6	80.3	80.7	80.4	77.9	76.5	73.4	70.9	69.3	69.0	67.0	67.2	69.3	69.6	72.0	73.0	72.9	74.0	76.2	77.5	78.3	79.9	79.5	74.7	11.8†
Vapour Pressure*	mb. 11.3	mb. 11.2	mb. 11.2	mb. 11.2	mb. 11.4	mb. 11.4	mb. 11.7	mb. 11.6	mb. 11.7	mb. 11.7	mb. 12.1	mb. 12.0	mb. 12.2	mb. 12.3	mb. 12.4	mb. 12.4	mb. 12.5	mb. 12.4	mb. 12.1	mb. 12.0	mb. 11.8	mb. 11.6	mb. 11.6	mb. 11.4	mb. 11.8†	

106. Aberdeen : North Wall Screen on Tower :  $h_t$  = 12.5 metres.

August, 1928.

	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	mb.	
1	83	85	86	86	84	86	78	73	63	58	58	57	53	58	62	67	65	66	63	69	71	78	82	83	71.3	8.6	
2	85	85	86	84	83	77	72	71	67	73	73	75	77	77	75	77	78	80	85	87	89	92	92	92	80.3	10.5	
3	90	90	93	94	95	94	95	90	85	81	76	72	70	68	73	77	76	74	66	70	70	76	79	80	80.8	12.9	
4	88	86	87	86	87	86	84	86	82	84	87	85	83	86	83	88	90	90	89	90	91	93	93	93	87.1	13.7	
5	92	92	95	95	96	93	90	92	94	94	93	93	86	73	71	71	70	70	80	81	86	86	91	93	86.5	12.5	
6	91	90	91	93	93	88	82	72	72	70	68	66	64	69	72	73	68	66	74	78	82	87	90	91	78.8	13.6	
7	89	91	92	93	93	91	92	88	91	95	96	98	97	96	97	94	90	64	59	63	71	81	77	71	86.6	14.2	
8	80	83	84	86	89	86	72	66	59	60	53	51	51	51	50	58	44	50	57	59	60	62	62	63	64.2	11.0	
9	67	65	68	72	76	69	63	59	56	55	57	56	57	66	60	72	74	77	62	63	65	73	74	73	65.6	11.0	
10	74	79	73	74	78	75	68	64	63	60	67	63	75	74	80	90	90	89	91	94	95	95	96	96	78.6	12.2	
11	96	96	97	97	98	99	98	98	98	97	98	96	95	96	96	98	97	99	99	99	98	98	97	97	97.4	13.9	
12	97	98	98	100	99	99	99	99	99	97	97	96	94	80	65	59	55	56	64	73	75	81	81	85	85.5	14.4	
13	85	87	90	87	89	86	78	81	81	78	84	82	79	79	77	76	79	78	87	90	89	87	88	88	83.5	13.3	
14	89	88	93	94	93	90	88	85	82	79	78	83	90	92	83	76	72	72	78	85	88	88	88	89	85.1	13.6	
15	89	89	88	88	86	86	87	83	80	75	85	81	76	87	73	80	72	78	91	89	88	87	85	84	83.7	12.6	
16	83	82	79	78	75	76	76	74	74	72	66	64	64	64	63	61	63	63	77	81	80	75	79	81	73.0	11.2	
17	79	79	78	80	80	79	79	80	78	75	71	69	68	69	67	67	67	71	81	83	84	83	88	85	76.6	11.5	
18	87	87	89	89	87	88	86	87	87	85	86	86	86	83	82	83	84	86	86	87	86	87	86	87	86.0	11.9	
19	88	87	88	88	89	89	90	87	89	87	88	89	90	90	91	91	93	93	93	91	94	94	91	93	90.0	12.7	
20	94	94	95	96	97	97	98	98	95	93	93	93	93	93	93	94	95	95	96	96	95	94	95	96	94.9	13.8	
21	96	95	95	94	94	94	94	97	93	93	93	91	89	90	90	95	95	94	95	98	97	97	95	98	94.2	13.7	
22	99	98	98	98	97	97	95	91	87	91	88	90	85	87	82	92	91	93	94	94	97	98	94	94	93.0	13.8	
23	91	85	84	84	83	83	82	86	85	81	81	82	96	97	96	96	96	99	98	97	98	97	98	98	90.7	13.5	
24	97	96	97	95	92	93	90	84	74	69	74	72	71	72	75	77	79	80	82	81	82	86	87	82.9	14.3		
25	89	89	87	86	88	87	83	76	69	68	69	69															
26	97	96	96	95	95	95	94	96	95	95	96	95	97	98	98	98	100	99	100	100	100	100	100	100	97.2	13.7	
27	100	100	100	99	99	98	97	97	95	94	90	88	89	90	87	87	88	88	89	90	92	91	94	93	93.1	13.7	
28	92	92	95	93	93	93	91	85	81	73	71	72	77	76	77	86	85	88	89	90	90	91	92	93	86.1	12.2	
29	93	93	95	93	94	96	98	96	97	95	92	89	88	89	77	81	79	85	87	88	86	88	88	87	90.0	11.5	
30	86	84	84	87	84	84	82	83	68	70	66	64	66	67	69	70	72	70	75	83	85	87	90	89	77.7	9.4	
31	91	89	91	91	89	91	91	91	79	76	73	77	81	82	83	81	85	88	93	94	95	97	98	96	87.4	11.0	
Mean	...	88.9	88.7	89.4	89.5	89.5	88.5	86.2	84.4	81.2	79.8	79.6	79.0	79.4	79.6	78.1	80.3	79.8	80.3	82.7	84.8	86.1	87.6	88.4	88.8	84.2	12.6†
Vapour Pressure*	...	mb. 12.0	mb. 11.9	mb. 11.9	mb. 11.8	mb. 11.9	mb. 12.1	mb. 12.4	mb. 12.5	mb. 12.6	mb. 12.8	mb. 13.0	mb. 13.1	mb. 13.2	mb. 13.0	mb. 13.2	mb. 13.0	mb. 12.8	mb. 12.8	mb. 12.7	mb. 12.5	mb. 12.4	mb. 12.3	mb. 12.2	mb. 12.5†		
Hour G.M.T.		1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	12.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean	—



Percentages at exact hours, Greenwich Mean Time.

107. Aberdeen : North Wall Screen on Tower :  $h_t$  (height of thermometer bulbs above the ground) = 12.5 metres. September, 1928.

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.	Vapour Pressure.*	
Day.	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	mb.	
1	98	97	97	98	97	98	97	94	91	85	85	81	78	78	76	82	82	89	96	95	95	95	93	94	90.5	11.3	
2	91	92	89	89	89	89	88	94	83	75	73	65	64	69	68	69	72	72	78	82	85	85	79	77	80.2	12.0	
3	86	86	86	89	87	91	88	87	85	86	86	81	81	91	88	85	89	90	91	91	94	94	95	95	88.0	13.9	
4	97	96	94	94	93	94	91	90	70	72	79	87	83	84	89	96	97	96	96	95	97	97	97	97	90.5	13.4	
5	96	96	97	98	96	96	96	98	97	97	98	99	97	97	98	98	97	99	99	99	99	98	98	98	97.5	13.5	
6	98	98	97	96	95	91	88	85	80	72	82	73	65	61	58	64	74	74	83	86	77	80	83	81	81.2	11.9	
7	87	91	95	94	94	94	91	91	90	88	88	87	86	84	85	84	78	80	76	75	83	81	85	85	86.3	13.4	
8	86	85	88	91	95	94	95	93	83	78	77	76	70	68	69	69	77	78	84	88	91	94	95	82.8	14.0		
9	93	96	98	98	99	97	98	99	97	92	83	76	68	64	61	65	69	80	77	72	76	81	86	86	84.0	13.3	
10	83	85	85	87	84	75	81	75	62	61	57	51	53	61	58	64	67	66	74	74	80	80	84	77	72.0	10.8	
11	76	78	72	73	77	77	73	68	64	59	57	55	59	54	60	64	65	67	74	80	82	81	86	85	70.1	9.4	
12	86	86	87	87	87	88	88	87	80	75	75	75	71	72	72	72	74	79	82	82	81	84	81	83	80.6	11.4	
13	86	89	88	88	91	91	89	88	83	76	72	73	70	69	67	71	73	74	76	79	76	75	77	78	79.2	12.3	
14	77	83	86	89	90	89	85	80	81	78	83	82	81	81	79	79	80	85	85	89	91	91	88	83	83.9	12.7	
15	85	89	89	92	91	91	90	87	82	74	72	69	71	75	77	80	75	82	86	89	90	87	85	86	83.0	11.3	
16	87	88	87	87	86	87	88	85	80	75	74	71	72	69	72	77	86	88	85	87	80	80	79	83	81.4	11.5	
17	84	87	89	89	90	96	96	96	97	95	97	96	96	97	96	96	97	94	89	87	91	88	91	90	92.5	13.8	
18	90	87	88	80	68	74	70	69	64	58	53	52	51	51	51	59	66	62	69	70	72	74	75	73	68.1	10.1	
19	75	76	79	81	81	84	78	71	70	69	63	61	69	75	77	67	74	73	76	76	73	76	78	80	74.1	8.7	
20	80	78	72	76	68	71	78	70	65	63	64	62	62	61	64	65	73	79	83	86	89	90	90	94	74.0	8.7	
21	94	91	94	93	94	93	94	90	84	78	82	75	80	70	65	65	67	72	77	83	83	87	89	87	82.9	8.5	
22	88	88	88	91	91	90	86	86	82	80	69	65	65	65	67	71	71	74	82	82	77	83	83	83	78.8	8.6	
23	84	89	87	87	90	87	90	89	89	89	87	86	83	81	80	79	83	89	95	98	96	95	95	95	88.2	9.7	
24	92	95	93	93	92	95	86	79	92	70	76	67	84	73	80	75	81	81	79	86	83	88	87	89	84.1	9.7	
25	89	88	90	90	91	93	92	95	89	82	75	71	73	71	70	74	88	87	88	84	79	83	83	89	83.9	9.7	
26	90	86	89	86	85	85	82	78	73	70	73	69	70	71	69	70	73	71	76	78	83	79	81	79	78.0	8.9	
27	79	82	83	86	88	86	75	72	72	66	64	63	66	68	75	79	81	82	79	84	91	92	96	89	78.9	9.4	
28	81	79	76	68	74	70	72	74	70	63	57	62	60	58	63	59	61	72	69	72	76	80	82	85	70.2	7.1	
29	83	82	85	85	85	82	80	76	69	64	62	61	73	71	72	81	78	80	83	83	85	87	88	78	78.2	7.4	
30	79	79	80	82	80	82	71	74	67	77	76	73	69	59	60	64	65	67	65	66	69	71	77	71	71.6	6.9	
Mean	...	86.7	87.4	87.6	87.9	87.6	87.7	85.9	84.0	79.7	75.6	74.6	72.1	72.3	71.6	72.3	73.6	76.8	79.2	81.3	83.1	84.0	84.8	86.0	85.7	81.2	10.8†
Vapour Pressure*	...	mb. 10.4	mb. 10.4	mb. 10.2	mb. 10.1	mb. 9.9	mb. 10.0	mb. 10.1	mb. 10.5	mb. 10.6	mb. 10.7	mb. 11.0	mb. 10.9	mb. 10.9	mb. 10.9	mb. 10.9	mb. 11.0	mb. 10.9	mb. 10.8	mb. 10.7	mb. 10.6	mb. 10.5	mb. 10.5	mb. 10.3	mb. 10.6†		

108. Aberdeen : North Wall Screen on Tower :  $h_t$  = 12.5 metres.

October, 1928.

	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	mb.	
1	78	82	80	78	78	81	80	74	66	64	63	61	61	63	64	68	73	79	85	91	87	83	86	88	75.3	7.9	
2	89	86	88	86	86	85	85	84	84	80	65	64	66	67	65	68	74	81	87	87	88	93	93	90	80.8	8.6	
3	90	94	94	94	93	93	93	93	90	83	78	70	67	67	67	71	73	79	86	84	86	90	88	86	83.9	8.4	
4	83	86	86	89	86	77	74	73	76	78	78	78	68	69	74	77	79	79	77	76	79	84	87	85	79.1	9.8	
5	85	84	82	82	79	77	79	81	81	82	81	81	84	85	86	89	89	93	94	97	95	98	95	97	86.3	11.4	
6	95	96	95	95	94	94	94	93	93	86	80	77	76	73	71	71	76	76	76	74	76	83	78	81	83.8	11.5	
7	84	84	86	83	84	87	89	93	89	95	95	97	97	97	97	94	96	92	93	93	92	92	93	93	91.4	12.4	
8	96	97	96	95	95	96	95	96	96	92	90	78	73	72	69	76	78	82	85	85	86	84	86	86	86.9	13.5	
9	91	89	88	92	89	90	88	88	86	84	81	85	81	76	83	87	88	94	93	91	92	83	83	77	86.8	10.7	
10	76	80	78	81	84	83	78	73	77	76	72	70	69	60	62	65	73	75	72	78	80	85	86	87	75.6	7.2	
11	85	84	91	69	64	65	62	65	63	60	62	59	62	65	65	67	67	61	61	63	62	74	70	70	67.7	7.2	
12	64	65	66	64	60	62	75	80	81	76	61	57	61	57	61	61	67	76	77	84	84	85	83	86	70.2	7.2	
13	88	87	87	90	89	88	88	91	91	89	82	80	79	71	74	72	77	80	86	89	91	93	94	93	85.2	8.0	
14	93	93	93	93	93	94	95	89	82	85	68	68	70	67	68	70	68	73	72	75	78	75	70	73	79.8	7.7	
15	77	79	80	84	92	95	93	92	92	92	96	98	98	96	94	93	92	95	93	95	95	95	96	96	91.5	10.8	
16	96	93	93	92	91	92	92	92	94	95	94	96	94	93	91	93	91	90	88	93	93	95	99	99	93.2	12.0	
17	90	84	74	76	79	87	88	87	80	74	79	79	78	80	79	83	83	84	88	80	84	88	89	88	82.8	10.5	
18	88	86	88	90	89	89	91	87	91	90	92	93	93	82	88	91	94	96	91	86	85	78	80	83	88.5	10.2	
19	81	79	78	73	74	73	77	69	68	67	65	67	68	68	68	68	73	76	76	77	79	74	91	90	74.0	8.6	
20	95	93	94	88	75	80	74	71	74	76	68	69	70	72	73	70	76	73	78	79	80	82	83	81	78.3	9.4	
21	83	83	87	87	90	88	87	88	84	85	79	78	80	80	83	83	88	92	91	93	90	91	91	87	86.0	8.9	
22	88	87	88	90	92	89	93	93	91	90	90	92	91	91	88	91	94	91	91	93	90	90	90	90	90.5	7.7	
23	90	93	89	93	92	92	92	91	87	84	86	82	80	79	84	78	84	86	91	91	89	90	88	89	87.5	8.2	
24	88	90	88	94	92	90	86	87	88	89	89	86	87	89	86	90	88	87	83	80	84	86	82	78	87.2	11.0	
25	84	84	83	84	87	87	83	80	79	73	72	73	73	72	74	74	75	74	75	73	81	80	81	83	78.4	9.4	
26	81	81	84	88	85	79	81	80	84	87	88	87	86	84	83	84	88	90	90	91	93	94	95	85.9	9.8		
27	94	95	95	95	96	97	98	95	93	92	92	92	89	89	92	95	95	94	95	94	87	91	91	85	93.3	11.7	
28	80	80	81	81	79	79	81	83	76	78	74	74	71	69	67	72	77	73	76	74	78	79	82	76.7	7.9		
29	81	78	78	82	82	82	82	81	81	81	79	74	72	74	77	74	82	90	94	94	96	98	98	83.3	8.5		
30	98	98	100	99	99	96	95	92	92	88	86	84	79	76	78	75	76	79	82	83	87	86	86	86	87.7	10.6	
31	91	95	93	93	93	96	94	94	91	93	93	92	88	89	89	85	89	90	91	82	83	84	81	86	89.8	9.6	
Mean	...	86.5	86.6	86.5	86.5	85.8	85.9	85.8	85.1	83.9	82.7	79.9	78.7	77.8	76.6	77.4	78.6	81.1	83.4	84.4	84.6	85.4	86.5	86.7	86.7	83.5	9.6†
Vapour Pressure*	...	mb. 9.1	mb. 9.0	mb. 8.9	mb. 9.0	mb. 8.9	mb. 8.8	mb. 8.8	mb. 9.0	mb. 9.3	mb. 9.7	mb. 9.8	mb. 9.9	mb. 9.9	mb. 9.8	mb. 9.9	mb. 9.9	mb. 10.0	mb. 10.0	mb. 9.7	mb. 9.5	mb. 9.5	mb. 9.6	mb. 9.5	mb. 9.4	mb. 9.5†	
Hour G.M.T.		1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.	—



Percentages at exact hours, Greenwich Mean Time.

109. Aberdeen : North Wall Screen on Tower :  $h_t$  (height of thermometer bulbs above the ground) = 12.5 metres. November, 1928.

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.	Vapour Pressure.*
Day.	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	mb.
1	79	79	77	76	74	70	71	67	59	66	62	61	65	67	73	79	85	84	86	84	76	81	76	84	74.3	6.9
2	86	87	81	78	77	84	86	84	76	74	77	77	73	65	70	72	72	72	74	80	86	89	87	87	78.2	7.2
3	86	92	90	90	85	83	76	84	84	90	88	78	78	83	84	93	91	88	88	91	94	97	94	92	87.4	8.1
4	91	93	93	91	88	93	96	88	92	89	82	86	80	81	96	87	92	91	87	91	90	89	87	84	89.2	9.8
5	83	82	83	80	81	83	89	93	92	90	88	83	80	81	87	89	92	91	92	86	84	82	82	83	85.7	8.9
6	83	81	81	82	87	90	96	97	97	94	94	94	96	83	82	83	86	79	76	76	76	76	83	85.3	8.4	
7	82	76	80	81	87	82	87	87	89	88	87	90	80	81	84	81	84	88	87	88	85	85	88	84.6	7.3	
8	88	89	93	92	90	92	92	92	91	87	84	83	79	76	78	81	85	89	89	91	90	92	89	89	87.5	6.4
9	90	90	90	90	90	91	92	93	92	88	81	71	72	68	72	76	78	79	74	74	78	80	69	77	81.7	5.9
10	79	80	84	85	86	79	83	90	88	93	94	94	96	98	98	94	93	98	95	93	89	92	91	92	89.9	9.3
11	91	84	87	83	88	91	92	87	84	86	83	90	96	98	97	98	96	96	96	93	85	87	78	78	90.4	10.0
12	82	83	87	86	86	84	87	83	86	87	91	92	96	96	97	89	82	74	73	68	69	67	67	67	82.8	10.2
13	76	73	75	81	77	86	85	82	83	84	81	66	65	68	67	76	73	76	76	81	79	81	82	82	76.8	8.4
14	83	86	84	86	87	87	87	87	88	84	81	79	74	77	77	79	83	85	87	87	86	91	86	86	84.0	7.8
15	86	91	96	94	95	96	96	95	96	95	92	95	89	92	94	93	94	98	98	98	99	96	83	78	93.5	10.5
16	79	73	71	76	78	79	81	82	81	81	77	76	78	79	79	77	84	87	79	76	71	72	73	74	77.7	7.2
17	80	79	82	78	77	87	76	76	78	80	68	69	66	72	84	81	80	84	84	82	79	77	77	76	78.0	7.6
18	78	76	75	76	76	75	74	75	72	70	68	68	62	66	66	69	72	78	87	91	93	94	94	96	76.7	7.6
19	94	93	94	93	96	95	94	96	95	95	94	94	95	93	94	92	92	89	91	86	78	75	80	91.6	11.1	
20	82	77	82	80	76	76	73	72	76	76	66	64	66	67	68	73	80	78	84	83	86	80	79	83	76.1	7.9
21	87	89	92	89	94	94	94	96	93	92	92	88	98	96	98	95	95	96	93	96	95	98	95	96	93.5	10.1
22	93	95	96	96	93	95	91	94	87	89	88	92	92	91	89	89	76	77	74	79	78	79	80	80	87.3	9.6
23	78	83	79	87	79	83	84	85	85	84	87	88	88	91	98	98	93	97	98	94	90	89	87	86	87.8	8.0
24	82	81	80	72	72	69	71	74	75	70	68	68	69	69	73	73	76	74	70	69	71	68	72	72	72.7	6.8
25	75	77	79	86	89	89	75	69	69	67	65	76	93	91	88	86	80	83	81	80	79	76	76	78	79.3	7.1
26	85	85	84	78	81	85	83	82	82	75	71	71	69	74	77	78	79	76	71	73	76	73	75	77	77.5	6.7
27	84	80	77	78	80	82	85	85	85	82	78	79	74	77	87	85	85	87	85	73	85	87	87	87	81.8	6.3
28	87	89	89	93	91	87	87	88	83	81	78	80	77	77	78	78	81	78	76	78	75	75	74	81	82.3	6.2
29	77	78	82	84	85	86	85	91	91	94	98	85	81	80	82	83	82	85	85	85	83	76	78	76	83.9	9.7
30	76	75	76	74	75	78	78	80	83	85	88	86	81	80	76	78	78	83	80	79	79	76	77	82	79.2	11.0
Mean	83.4	83.2	84.0	83.8	84.0	85.0	84.9	85.5	84.4	83.9	81.7	80.8	80.3	80.5	83.1	83.5	84.0	84.7	83.8	83.7	82.9	82.3	81.5	82.5	83.2	8.3†
Vapour Pressure*	mb. 7.9	mb. 7.8	mb. 7.8	mb. 7.8	mb. 7.8	mb. 7.9	mb. 7.9	mb. 8.0	mb. 8.0	mb. 8.2	mb. 8.3	mb. 8.5	mb. 8.6	mb. 8.6	mb. 8.8	mb. 8.6	mb. 8.4	mb. 8.4	mb. 8.3	mb. 8.2	mb. 8.0	mb. 8.0	mb. 7.9	mb. 7.9	mb. 8.1†	

110. Aberdeen : North Wall Screen on Tower :  $h_t$  = 12.5 metres.

December, 1928.

	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	mb.	
1	74	82	73	76	79	69	82	76	74	69	66	63	65	68	73	75	74	76	79	79	78	78	78	81	74.5	8.4	
2	84	87	90	89	93	91	98	96	91	86	85	83	80	81	82	85	87	86	86	83	85	88	86	80	86.8	6.8	
3	81	66	63	63	60	63	69	72	68	69	67	66	65	68	73	72	72	73	73	72	76	76	79	75	70.1	5.8	
4	77	78	79	85	87	85	82	81	82	84	89	86	86	88	87	91	91	89	88	86	80	81	83	83	84.7	7.8	
5	87	88	91	88	67	64	68	68	69	64	63	62	60	58	62	69	68	68	67	70	72	73	74	70.5	7.1		
6	75	78	80	80	80	77	82	87	87	85	83	88	85	85	81	72	73	77	77	79	81	83	82	78	80.5	6.4	
7	76	67	87	93	85	89	85	83	72	69	67	65	65	65	66	67	70	74	83	86	85	85	83	83	77.1	5.1	
8	87	85	80	82	78	87	85	83	76	82	87	80	82	80	80	90	89	84	80	78	74	73	75	82.1	5.6		
9	74	76	75	81	81	79	76	76	73	82	85	90	91	91	91	89	91	88	88	90	89	87	86	85	83.7	6.0	
10	83	86	84	87	83	81	83	80	82	78	79	78	78	75	72	60	63	62	59	61	64	65	64	60	74.1	6.7	
11	65	59	62	63	57	56	61	65	57	69	68	65	71	69	67	73	62	63	57	62	63	77	74	67	64.5	6.0	
12	60	62	71	59	71	63	75	66	74	63	83	74	70	75	72	71	74	76	75	82	77	79	85	82	72.1	6.4	
13	71	79	75	72	71	70	60	69	66	64	71	69	68	56	57	62	73	62	63	73	68	82	60	57	67.7	5.6	
14	54	58	56	56	58	69	67	75	89	91	91	90	62	80	68	59	60	58	54	58	55	54	61	72	66.1	4.9	
15	73	78	80	84	84	83	84	74	67	64	57	62	67	71	74	83	83	81	81	81	77	76	74	74	75.5	5.6	
16	73	73	78	78	78	90	87	90	90	90	92	92	92	96	95	97	96	94	96	97	90	90	90	85	88.5	7.6	
17	79	79	80	80	81	84	83	84	81	87	77	77	74	73	74	79	83	80	79	82	82	83	83	85	80.0	7.1	
18	86	87	89	90	91	88	92	91	87	86	87	85	86	87	85	84	87	87	88	87	88	88	93	94	87.9	7.0	
19	94	94	96	97	97	100	98	98	96	96	97	97	94	96	85	87	86	86	90	95	94	96	96	92	94.1	8.0	
20	93	93	90	91	89	87	89	89	87	87	71	82	79	82	85	86	87	85	89	87	85	85	89	89	86.6	6.5	
21	90	89	89	85	87	87	87	89	85	88	85	82	84	88	92	93	90	92	89	91	90	95	94	96	88.9	6.6	
22	94	98	100	100	100	98	94	95	95	87	89	88	90	88	74	79	77	76	71	71	71	75	75	75	86.1	6.9	
23	68	73	75	75	80	77	78	70	71	78	76	79	78	78	79	77	79	76	75	79	84	88	93	77	77.3	6.2	
24	96	98	93	94	98	96	98	96	97	89	91	93	90	93	92	79	75	69	71	72	70	69	73	78	86.6	8.5	
25	73	65	65	72	68	71	75	75	75	69	78	74	75	75	78	78	78	75	81	87	88	89	91	93	76.7	6.3	
26	94	88	85	84	80	76	78	71	71	73	65	67	66	69	66	66	67	70	69	67	59	71	77	82	73.6	5.9	
27	74	64	61	64	69	69	72	73	74	72	69	70	70	73	71	70	73	71	69	72	77	75	76	74	71.1	5.1	
28	73	74	77	78	80	82	82	81	83	81	81	80	82	83	84	63	63	62	61	60	60	59	57	59	73.0	5.1	
29	60	64	68	71	85	80	84	82	85	90	84	87	90	86	85	79	78	84	89	93	93	85	69	71	80.7	6.6	
30	80	87	73	70	57	74	78	62	54	48	49	59	53	69	54	69	54	72	57	49	47	54	55	49	61.8	5.1	
31	42	46	47	47	56	49	48	51	70	73	76	62	62	73	72	74	82	83	84	85	85	82	78	82	66.4	4.9	
Mean	...	77.1	77.5	77.8	78.5	78.4	78.5	80.0	79.0	78.3	77.5	77.7	77.3	75.9	78.0	76.6	76.7	76.9	77.1	76.6	77.8	77.1	78.4	78.2	78.2	77.7	6.4†
Vapour Pressure*	...	mb. 6.4	mb. 6.3	mb. 6.3	mb. 6.3	mb. 6.2	mb. 6.2	mb. 6.2	mb. 6.2	mb. 6.2	mb. 6.2	mb. 6.4	mb. 6.5	mb. 6.5	mb. 6.6	mb. 6.5	mb. 6.4	mb. 6.4	mb. 6.4	mb. 6.3	mb. 6.4	mb. 6.3	mb. 6.4	mb. 6.3	mb. 6.3†		
Hour G.M.T.		1.	2.	3.	4.	4.	5.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean	



*For exact hours, Greenwich Mean Time.***111. Aberdeen :** North Wall Screen on Tower :  $h_t$  (height of thermometer bulbs above the ground) = 12.5 metres.**1928.**

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean
Relative Humidity ...	% 83·2	% 83·5	% 83·8	% 84·0	% 84·0	% 83·6	% 82·7	% 81·4	% 79·8	% 78·3	% 77·1	% 76·1	% 75·6	% 75·6	% 75·6	% 76·6	% 77·2	% 78·3	% 79·5	% 81·3	% 82·0	% 82·5	% 82·9	% 83·1	% 80·3
Vapour Pressure, in milli- bars* ... ..	mb. 8·3	mb. 8·2	mb. 8·2	mb. 8·2	mb. 8·2	mb. 8·3	mb. 8·4	mb. 8·5	mb. 8·6	mb. 8·7	mb. 8·8	mb. 8·9	mb. 8·9	mb. 8·9	mb. 8·9	mb. 8·9	mb. 8·8	mb. 8·8	mb. 8·7	mb. 8·7	mb. 8·6	mb. 8·5	mb. 8·4	mb. 8·4	mb. 8·6

\* Computed from the mean temperature and mean relative humidity.

## RELATIVE HUMIDITY : MONTHLY MEANS AND DIURNAL INEQUALITIES.

*The departures from the mean of the day are adjusted for non-cyclic change.***112. Aberdeen :** North Wall Screen on Tower :  $h_t$  = 12.5 metres.**1928.**

Month.	Mean.	Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.
Jan.	81.7	%	-1.4	-0.1	+0.4	+0.1	+2.0	+2.1	+2.1	+2.5	+2.3	+1.8	-0.3	-0.7	-0.7	-2.7	-2.2	-0.9	-1.6	-1.5	-0.9	+0.3	-0.3	+0.2	+0.1	-0.7
Feb.	78.8	%	+1.5	+1.1	+2.1	+1.3	+1.7	+2.7	+2.6	+3.6	+2.7	+1.6	-0.9	-3.9	-5.2	-5.1	-5.3	-3.5	-2.6	-1.1	-0.3	+1.0	+2.1	+0.7	+1.6	+1.4
Mar.	83.0	%	+0.5	+1.1	+1.2	+1.3	+2.0	+2.9	+3.7	+1.6	+1.2	-0.1	-1.5	-3.4	-3.7	-3.2	-3.9	-2.6	-2.0	-0.7	+1.0	+1.7	+1.3	+0.9	+0.2	+0.5
April	79.2	%	+5.4	+5.9	+5.2	+5.5	+5.6	+4.9	+3.9	+1.8	+0.5	-1.6	-3.0	-4.0	-7.2	-7.8	-7.6	-7.4	-7.8	-5.3	-1.7	+1.7	+3.1	+2.4	+3.1	+4.4
May	81.7	%	+4.5	+4.7	+4.6	+5.7	+5.4	+4.1	+1.8	-1.0	-2.8	-4.2	-4.6	-5.4	-4.5	-5.4	-5.3	-5.1	-3.9	-1.3	+1.7	+3.4	+4.3	+4.5	+4.1	
June	74.7	%	+6.8	+6.5	+7.0	+7.4	+6.1	+3.5	+0.1	-2.7	-3.5	-5.6	-6.2	-3.8	-4.5	-3.3	-4.9	-5.8	-5.1	-5.0	-5.0	-0.5	+2.2	+4.5	+5.6	+6.6
July	74.7	%	+5.0	+5.0	+5.7	+6.1	+5.7	+3.2	+1.9	-1.3	-3.8	-5.4	-5.7	-7.7	-7.6	-5.5	-5.2	-2.8	-1.8	-2.0	-0.8	+1.3	+2.6	+3.4	+5.0	+4.6
Aug.	84.2	%	+5.0	+4.8	+5.5	+5.5	+5.5	+4.5	+2.1	+0.3	-2.9	-4.4	-4.6	-5.1	-4.8	-4.7	-6.2	-4.0	-4.5	-4.1	-1.6	+0.5	+1.7	+3.2	+3.9	+4.3
Sept.	81.2	%	+5.2	+6.0	+6.2	+6.5	+6.3	+6.3	+4.6	+2.7	-1.5	-5.6	-6.6	-9.0	-8.8	-9.5	-8.8	-7.5	-4.3	-1.8	+0.3	+2.2	+3.1	+3.9	+5.1	+4.9
Oct.	83.5	%	+3.2	+3.3	+3.2	+3.1	+2.4	+2.5	+2.4	+1.7	+0.5	-0.7	-3.5	-4.7	-5.7	-6.9	-6.1	-4.9	-2.5	-0.1	+0.8	+1.1	+1.8	+3.0	+3.1	+3.1
Nov.	83.2	%	+0.1	-0.1	+0.7	+0.6	+0.7	+1.8	+1.6	+2.2	+1.2	+0.6	-1.5	-2.5	-2.9	-2.7	-0.1	+0.3	+0.8	+1.5	+0.6	+0.5	+1.8	+0.8	-1.7	-0.7
Dec.	77.7	%	-0.6	-0.3	+0.1	+0.8	+0.7	+0.8	+2.3	+1.3	+0.6	-0.2	0.0	-0.5	-1.8	+0.3	-1.1	-1.0	-0.8	-0.7	-1.1	+0.1	-0.7	+0.7	+0.5	+0.4
Year	80.3	%	+2.9	+3.2	+3.5	+3.7	+3.7	+3.3	+2.4	+1.1	-0.5	-2.0	-3.2	-4.2	-4.8	-4.7	-4.7	-3.8	-3.1	-2.0	-0.8	+1.0	+1.7	+2.2	+2.6	+2.7

## RAINFALL : ANNUAL TOTALS OF HOURLY VALUES.

*Amounts, in millimetres ; durations, in hours, for periods of sixty minutes between the exact hours, Greenwich Mean Time.***113. Aberdeen :**  $H_t$  = 13.4 metres + 0.6 metres. (After June 1st  $H_t$  = 11.4 metres + 0.6 metres.)**1928.**

Hour. G.M.T.	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to Noon	Noon to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	0 to 24
Amount ...	mm. 36.0	mm. 35.3	mm. 23.0	mm. 24.2	mm. 30.0	mm. 41.2	mm. 26.4	mm. 28.2	mm. 32.2	mm. 28.9	mm. 32.4	mm. 43.0	mm. 46.9	mm. 37.8	mm. 36.1	mm. 26.2	mm. 29.7	mm. 36.8	mm. 36.7	mm. 34.1	mm. 36.9	mm. 36.2	mm. 40.3	mm. 36.3	mm. 814.8
Duration ...	hr. 27.3	hr. 33.6	hr. 24.3	hr. 26.6	hr. 27.3	hr. 33.2	hr. 30.8	hr. 27.0	hr. 29.9	hr. 23.2	hr. 30.6	hr. 32.9	hr. 37.6	hr. 29.6	hr. 25.0	hr. 25.2	hr. 21.6	hr. 29.3	hr. 25.4	hr. 32.4	hr. 33.7	hr. 34.6	hr. 34.1	hr. 32.2	hr. 707.4

**114. Aberdeen.**

## NOTES ON RAINFALL.

**1928.****Notable Falls of the Year.**—During 1928 there was no fall worthy of special remark. The greatest rate occurred during a fall of 13 mm. on July 28th, when 5 mm. fell in 6 minutes, and 10 mm. in 48 minutes.**Dry Periods.**—(Periods of 7 days or over with no rainfall or with trifling falls.)

Feb. 18—29. In 12 days only 0.1 mm.—due to wet fog—was recorded. February had less than half its normal rainfall.

May 29—June 5. Only 0.1 mm. fell in 8 days.

July 16—26. On 11 days only 0.4 mm. fell. During the 16 days from 11th to 26th the total fall was 2 mm.

**Wet Periods.**—(With notes of the heavier rates of fall.)

April 19th.—In a little over 10 hours, 22 mm. fell. During the three days, 18th to 20th, 35 mm. were recorded.

June 26th.—29 mm. fell in 21 hours from 20h. on 25th to 17h. on 26th.

July 28th.—In a fall of 13 mm. the heaviest rate of fall during the year was recorded, as mentioned above under "Notable Falls."

Nov. 23rd.—27 mm. fell in 13 hours.







**117. Aberdeen :**  $H_r$  (height of receiving surface above M.S.L.) =  $H$  (height of station above M.S.L.) +  $h_r$  (height of receiving surface above ground) = 13.4 metres + 0.6 metres. **March, 1928.**

[illegible]



Amounts in millimetres, for periods of sixty minutes, between the exact hours, Greenwich Mean Time.

119. Aberdeen :  $H_r$  (height of receiving surface above M.S.L.) =  $H$  (height of station above M.S.L.) +  $h_r$  (height of receiving surface above ground) = 13.4 metres + 0.6 metres.

May, 1928.

Hour. G.M.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	0-24	Duration. 0-24.
Day.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	hr.
1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1.6	.7	...	.5	.1	...	.1	.1	.1	3.2	4.2
2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	.1	1.1	...	.1	...	...	1.3	1.1
4	...	.3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.3	0.4
5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
7	...	...	...	.1	.1	.2	...	...	...	...	.2	.5	...	...	...	...	...	...	...	...	...	...	...	...	1.1	1.3
8	...	...	...	.4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.4	0.3
9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	.5	.2	...	...	...	...	...	...	...	0.7	0.6
10	...	...	...	.5	.3	1.0	.1	...	...	...	...	...	...	...	.5	...	...	...	...	...	...	...	...	...	1.9	2.8
11	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	.1	...	.1	...	...	.1	...	...	...	0.3	1.3
12	...	...	...	...	...	1.1	.3	.1	...	...	...	...	...	...	...	...	...	...	...	...	.1	...	...	...	1.6	2.3
13	...	...	.1	.1	...	...	.1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.3	1.6
14	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	.1	...	...	...	...	...	0.1	(0.2)
15	...	...	...	...	...	...	...	.6	.1	...	.1	.7	.2	...	...	...	...	...	...	...	.1	.3	.4	1.0	3.5	3.2
16	.3	.5	.2	.1	...	.1	.4	.1	.6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2.3	2.6
17	...	...	...	...	...	.1	.1	...	...	2.1	.1	...	2.0	1.3	1.3	(.8)	(1.8)	2.4	.2	...	...	...	...	...	12.2	6.9
18	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	.1	.1	.1	.1	.1	.1	.2	0.7	2.4
19	...	...	.1	...	...	...	...	...	.2	.2	.3	.2	.6	.6	.1	.6	...	.2	.1	...	...	...	...	...	3.3	4.8
20	.4	.2	...	...	...	...	...	...	...	...	...	...	.4	.3	...	...	...	...	.2	...	...	...	...	...	1.3	1.5
21	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
22	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
23	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
24	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
25	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
26	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
27	...	...	...	.7	.1	.1	.1	...	.3	1.0	.3	.3	.4	.2	.2	.1	...	...	...	...	...	...	...	.5	4.3	8.1
28	.3	.3	...	.1	.1	.2	.1	.3	.4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1.8	4.4
29	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
30	...	...	...	(...)	(...)	(.1)	(...)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.1	...
31	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Sum.	1.0	1.3	0.4	2.0	0.6	2.9	1.2	1.1	1.6	3.3	1.0	1.7	3.6	2.4	2.1	3.4	2.5	2.5	1.2	1.4	0.2	0.8	0.7	1.8	40.7	50.0
Total Duration.	hr. 1.5	hr. 1.6	hr. 1.0	hr. 3.2	hr. 2.1	hr. 3.8	hr. 3.4	hr. 1.5	hr. 1.7	hr. 2.2	hr. 1.6	hr. 1.6	hr. 3.0	hr. 2.8	hr. 2.4	hr. 2.5	hr. 1.6	hr. 1.6	hr. 1.3	hr. 1.6	hr. 0.9	hr. 2.5	hr. 2.4	hr. 2.2	hr. 50.0	

120. Aberdeen :  $H_r$  = 11.4 metres + 0.6 metres.

June, 1928.

	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	hr.
1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
7	.3	1.2	.5	.1	.1	.3	.1	.4	.9	.6	...	...	...	...	.1	.1	...	.1	.5	.4	1.0	.4	.3	.3	7.7	11.5
8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9	...	...	...	...	.1	.3	.9	2.3	1.9	1.4	1.1	1.8	3.6	3.1	.2	.2	...	...	...	...	...	...	.2	2.0	19.1	10.4
10	.5	...	...	...	...	...	...	.1	.7	.1	.4	.3	.4	...	.2	...	...	...	...	...	...	...	...	...	2.7	4.5
11	...	...	...	...	...	...	...	...	...	...	...	...	.1	...	...	.2	.3	.1	...	...	.8	...	.8	.1	2.4	1.4
12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
13	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
14	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
15	...	...	...	...	...	...	...	...	...	...	...	...	.1	...	1.5	...	...	...	...	...	...	...	...	...	1.6	0.8
16	...	...	...	...	...	...	...	...	...	...	...	...	.8	.2	.1	.6	...	...	...	...	...	...	...	...	1.7	1.2
17	...	...	...	...	...	...	...	...	...	...	...	...	.1	...	...	...	...	...	...	...	...	...	...	...	0.1	0.3
18	...	...	...	.1	...	...	...	...	...	...	...	...	.8	.1	...	.7	...	.5	...	...	.3	...	...	.1	2.6	2.3
19	...	.1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.1	0.2
20	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	.4	.1	...	...	...	...	...	0.5	0.4
21	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
22	...	2.2	...	...	...	...	...	...	...	...	...	...	.4	1.3	.9	.5	.1	...	...	...	...	...	...	...	3.2	4.5
23	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2.2	0.1
24	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.4	0.4
25	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
26	.1	.4	.4	.5	2.1	2.5	2.5	2.1	1.7	3.4	2.0	1.9	1.3	1.6	1.4	.8	.2	...	...	...	...	...	...	...	24.9	15.3
27	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
28	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
29	.3	.4	.2	...	.6	.6	...	...	.3	.6	.4	...	...	...	...	...	...	...	...	...	...	...	...	...	1.8	2.9
30	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2.1	2.4
Sum.	1.2	4.3	1.1	0.7	2.9	3.7	3.9	4.9	5.6	6.1	3.9	5.0	6.7	7.7	3.6	2.4	1.4	0.7	0.6	2.8	5.2	1.9	2.9	4.0	83.2	66.4
Total Duration.	hr. 1.5	hr. 2.4	hr. 2.2	hr. 1.4	hr. 2.7	hr. 2.5	hr. 2.4	hr. 2.8	hr. 4.6	hr. 3.5	hr. 3.2	hr. 3.7	hr. 4.5	hr. 3.8	hr. 3.3	hr. 3.5	hr. 1.9	hr. 1.2	hr. 1.1	hr. 2.7	hr. 3.0	hr. 2.8	hr. 2.2	hr. 3.5	hr. 66.4	
Hour G.M.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	0-24	



# RAINFALL.

115

Amounts in millimetres, for periods of sixty minutes between the exact hours, Greenwich Mean Time.

121. Aberdeen :  $H_r$  (height of receiving surface above M.S.L.) =  $H$  (height of station above M.S.L.) +  $h_r$  (height of receiving surface above ground) = 11.4 metres + 0.6 metres.

July, 1922.

Hour. G.M.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	0-24	Duration. 0-24
Day.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	hr.
1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5	3	3	3	3	3	5	3	...	2.8	5.7
2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
4	2	1	1	1	...	3	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
6	...	...	...	3	1	2.6	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
10	...	...	...	...	...	...	...	...	...	...	1.0	1.2	3	...	...	...	...	...	...	...	...	...	...	...	...	...
11	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
13	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
14	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
15	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
16	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
17	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
18	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
19	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
20	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
21	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
22	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
23	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
24	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
25	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
26	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
27	5	2	1	1.0	1.7	1.6	7	6	2	8	3	1.7	9	9	7	...	...	...	...	...	...	...	...	...	...	...
28	...	...	...	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
29	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
30	1	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
31	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Sum.	0.8	1.0	0.2	2.1	1.9	4.9	1.8	0.6	0.2	1.6	1.7	5.8	2.2	2.6	12.6	3.8	2.3	2.3	0.4	1.2	0.8	0.7	0.9	0.6	53.0	50.7
Total Duration.	hr. 1.5	hr. 2.5	hr. 0.7	hr. 2.7	hr. 1.9	hr. 3.5	hr. 3.2	hr. 0.7	hr. 1.0	hr. 1.6	hr. 2.2	hr. 2.4	hr. 2.4	hr. 2.7	hr. 3.4	hr. 3.0	hr. 2.9	hr. 3.0	hr. 0.9	hr. 2.2	hr. 2.5	hr. 1.4	hr. 1.4	hr. 1.0	hr. 50.7	

122. Aberdeen :  $H_r$  = 11.4 metres + 0.6 metres.

August, 1922.

	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	hr.
1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
11	...	1	3	...	4	5	8	6	9	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
12	...	2	...	1	7	1	1.2	3	6	7	...	1.1	6	...	...	...	...	...	...	...	...	...	...	...	...	...
13	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
14	1	...	...	9	...	...	...	...	...	...	...	...	6	1.8	1	...	1.6	...	...	...	...	...	...	...	...	...
15	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
16	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
17	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
18	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
19	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
20	...	...	...	...	...	5	1.2	3.6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
21	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
22	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
23	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
24	...	9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
25	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
26	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
27	...	...	5	1.8	3.7	8	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
28	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
29	...	...	5	...	1	2	5	4	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
30	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
31	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Sum.	0.1	1.4	1.3	2.8	4.9	2.1	3.9	5.3	2.1	1.4	0.9	2.7	4.3	4.1	0.3	0.6	2.6	0.7	3.1	2.0	3.9	1.4	3.6	3.2	58.7	48.4
Total Duration.	hr. 0.2	hr. 1.2	hr. 1.6	hr. 1.5	hr. 2.8	hr. 2.4	hr. 4.5	hr. 3.5	hr. 2.3	hr. 0.9	hr. 1.2	hr. 1.8	hr. 3.1	hr. 3.1	hr. 0.3	hr. 0.7	hr. 1.4	hr. 1.4	hr. 1.9	hr. 2.9	hr. 2.4	hr. 1.7	hr. 2.7	hr. 2.9	hr. 48.4	
Hour. G.M.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	0-24	



*Amounts in millimetres, for periods of sixty minutes, between the exact hours, Greenwich Mean Time.*

**123. Aberdeen :**  $H_r$  (height of receiving surface above M.S.L.) =  $H$  (height of station above M.S.L.) +  $h_r$  (height of receiving surface above ground) = 11.4 metres + 0.6 metres.

**September, 1928.**

Hour. G.M.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	0-24	Dura- tion 0-24	
Day.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	hr.	
1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
3	4	3	...	9	14	1	...	...	...	...	...	...	...	...	...	...	3	4	...	...	...	1	...	...	39	37	
4	4	4	...	...	...	...	...	...	...	...	...	2	...	...	...	...	38	12	5	2	5	7	...	...	79	68	
5	2	1	1	4	4	1	...	1	3	...	1	1	1	...	...	...	...	...	14	18	15	8	4	15	94	120	
6	18	10	7	6	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	43	50	
7	...	7	6	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	15	22	
8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
9	...	...	...	...	11	64	15	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	91	27	
10	...	...	34	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	40	14	
11	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
13	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
14	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
15	1	3	4	4	5	4	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	22	30	
16	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
17	...	...	...	...	...	17	25	16	13	5	5	3	3	...	...	...	...	...	...	...	...	1	...	...	88	59	
18	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
19	...	...	...	...	...	...	...	...	...	...	...	...	...	1	5	...	...	...	...	...	...	...	...	...	...	06	03
20	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
21	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
22	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	02	03
23	...	...	...	...	...	...	1	4	5	2	2	2	1	...	...	...	...	...	...	5	8	...	...	1	31	61	
24	1	17	7	5	1	1	1	...	13	...	...	...	...	...	...	...	5	...	...	...	...	...	2	2	55	45	
25	...	...	...	...	...	...	...	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	04	04
26	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
27	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	2	18	20	41	33	
28	8	6	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	15	22
29	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	2	1	2	...	...	07	10	
30	...	...	...	...	...	...	...	...	...	(1)	...	...	3	...	...	...	...	...	...	...	...	...	...	...	...	04	(04)
Sum.	40	51	60	33	35	88	45	24	36	08	08	08	08	01	05	02	46	16	19	25	31	20	29	38	67.6	61.2	
Total Duration.	hr. 5.1	hr. 5.9	hr. 4.4	hr. 4.1	hr. 2.5	hr. 3.3	hr. 3.8	hr. 2.3	hr. 3.3	hr. 1.4	hr. 1.7	hr. 2.1	hr. 1.4	hr. 0.1	hr. 0.2	hr. 0.3	hr. 1.4	hr. 2.0	hr. 1.3	hr. 2.7	hr. 2.7	hr. 3.6	hr. 3.0	hr. 2.6	hr. 61.2		

**124. Aberdeen :**  $H_r = 11.4 \text{ metres} \pm 0.6 \text{ metres.}$

**October, 1928.**

[illegible]



**125. Aberdeen :**  $H_r$  (height of receiving surface above M.S.L.) =  $H$  (height of station above M.S.L.) +  $h_r$  (height of receiving surface above ground) = 11.4 metres + 0.6 metres.

[illegible]



*For periods of sixty minutes, between the exact hours of Local Apparent Time.*

**127. Aberdeen :**  $h_s$  (height of recorder above ground) = 20.7 metres.

**January, 1928.**

Hour. L.A.T.	3 to 4.	4 to 5.	5 to 6.	6 to 7.	7 to 8.	8 to 9.	9 to 10.	10 to 11.	11 to Noon	Noon to 12.	12 to 1.	1 to 2.	2 to 3.	3 to 4.	4 to 5.	5 to 6.	6 to 7.	7 to 8.	8 to 9.	Total for Day.	Per cent. of Possible.
Day.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	%
1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...
2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0·1
3	—	—	—	—	—	—	4	1·0	1·0	1·0	1·0	7	—	—	—	—	—	—	—	—	5·1
4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0·6
5	—	—	—	—	—	—	3	1·0	1·0	9	3	—	—	—	—	—	—	—	—	—	3·5
6	—	—	—	—	—	—	1	1	—	—	—	2	—	—	—	—	—	—	—	—	0·4
7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...
8	—	—	—	—	—	—	8	1·0	1·0	1·0	1·0	8	—	—	—	—	—	—	—	—	5·6
9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2·8
10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2·5
11	—	—	—	—	—	—	7	1·0	1·0	1·0	1·0	1·0	2	—	—	—	—	—	—	—	5·9
12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...
13	—	—	—	—	—	—	2	2	7	9	8	5	—	—	—	—	—	—	—	—	3·3
14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...
15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0·1
16	—	—	—	—	—	—	1	—	2	—	—	—	—	—	—	—	—	—	—	—	0·3
17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...
18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...
19	—	—	—	—	—	—	5	4	1	9	8	5	—	—	—	—	—	—	—	—	3·2
20	—	—	—	—	—	—	—	—	—	—	5	9	—	—	—	—	—	—	—	—	1·4
21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...
22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...
23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3·0
24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...
25	—	—	—	—	—	—	9	5	1	—	—	—	—	—	—	—	—	—	—	—	0·8
26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10
27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	19
28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...
29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...
30	—	—	—	—	—	—	9	1·0	1·0	1·0	1·0	8	1	—	—	—	—	—	—	—	5·8
31	—	—	—	—	—	—	2	7	5	—	—	—	—	—	—	—	—	—	—	—	17
Sum.	—	—	—	—	—	0·2	6·6	7·7	7·5	10·3	10·4	10·3	0·6	—	—	—	—	—	—	—	53·6
Mean.	—	—	—	—	—	·01	·21	·25	·24	·33	·34	·33	·02	—	—	—	—	—	—	—	1·73

**128. Aberdeen :**  $h_g = 20.7$  metres.

**February, 1928.**

	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	%	
1	—	—	—	—	...	...	·1	...	...	·8	·9	·9	·3	...	—	—	—	—	3·0	36
2	—	—	—	—	...	...	·3	·5	·5	·9	·2	·1	...	...	—	—	—	—	2·5	30
3	—	—	—	—	...	...	...	·7	1·0	1·0	·9	1·0	·6	...	—	—	—	—	5·2	61
4	—	—	—	—	...	...	...	...	...	...	...	...	...	...	—	—	—	—	...	...
5	—	—	—	—	...	...	·3	1·0	1·0	1·0	1·0	·9	·2	...	—	—	—	—	5·4	63
6	—	—	—	—	...	·1	·8	·3	·2	·3	·1	·7	...	...	—	—	—	—	2·5	29
7	—	—	—	—	...	...	...	·8	·2	1·0	·1	...	...	...	—	—	—	—	2·1	24
8	—	—	—	—	...	...	...	...	·2	·4	...	...	...	...	—	—	—	—	0·6	7
9	—	—	—	—	...	·6	·8	·9	1·0	1·0	·8	·8	·6	...	—	—	—	—	6·5	73
10	—	—	—	—	...	...	...	...	...	...	...	...	·3	...	—	—	—	—	0·3	3
11	—	—	—	—	...	...	...	...	·3	·6	·6	·6	...	...	—	—	—	—	2·1	23
12	—	—	—	—	...	·6	1·0	1·0	1·0	·9	1·0	1·0	·6	...	—	—	—	—	7·1	78
13	—	—	—	—	...	...	...	...	·6	·3	...	...	...	...	—	—	—	—	0·9	10
14	—	—	—	—	·1	1·0	1·0	1·0	·9	·1	...	...	...	...	—	—	—	—	4·1	44
15	—	—	—	—	...	...	...	·3	·6	1·0	1·0	1·0	·9	...	—	—	—	—	4·8	52
16	—	—	—	—	...	...	...	·4	·3	·1	·3	·6	1·0	...	—	—	—	—	2·7	29
17	—	—	—	—	...	·6	1·0	1·0	1·0	1·0	1·0	·8	1·0	...	—	—	—	—	7·4	78
18	—	—	—	—	...	...	...	...	...	...	...	...	·1	·3	...	—	—	—	0·4	4
19	—	—	—	—	...	·1	...	...	...	...	...	...	·1	...	...	—	—	—	0·2	2
20	—	—	—	—	...	...	·3	...	...	...	...	...	...	...	—	—	—	—	0·3	3
21	—	—	—	—	...	·5	1·0	1·0	1·0	1·0	1·0	1·0	·6	...	—	—	—	—	7·1	72
22	—	—	—	—	...	·2	·7	·9	·3	·2	...	...	·8	·3	...	—	—	—	3·4	34
23	—	—	—	—	...	...	...	·1	·2	·1	·3	·1	...	...	...	—	—	—	0·8	8
24	—	—	—	—	...	...	...	...	·1	...	...	...	...	...	...	—	—	—	0·1	1
25	—	—	—	...	...	·4	1·0	·8	·8	·1	·3	·3	·7	...	...	—	—	—	4·4	44
26	—	—	—	...	...	·2	...	...	...	·2	1·0	1·0	·6	...	...	—	—	—	3·0	29
27	—	—	—	...	...	...	...	·3	·3	1·0	1·0	1·0	·7	...	...	—	—	—	4·3	42
28	—	—	—	...	...	...	·1	·1	1·0	·7	1·0	1·0	1·0	...	...	—	—	—	4·9	47
29	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	—	—	—	...	...
Sum.	—	—	—	...	0·1	4·3	8·4	11·1	12·5	13·7	12·5	12·8	10·1	0·6	...	—	—	—	86·1	—
Mean.	—	—	—	...	·00	·15	·29	·38	·43	·47	·43	·44	·35	·02	...	—	—	—	2·97	32
Hour. L.A.T.	3 to 4.	4 to 5.	5 to 6.	6 to 7.	7 to 8.	8 to 9.	9 to 10.	10 to 11.	11 to Noon	Noon to 13.	13 to 14.	14 to 15.	15 to 16.	16 to 17.	17 to 18.	18 to 19.	19 to 20.	20 to 21.	Total for Day.	Per cent. of Possible.



For periods of sixty minutes, between the exact hours of Local Apparent Time.

129. Aberdeen :  $h_s$  (height of recorder above ground) = 20.7 metres.

March, 1928.

Hour. L.A.T.	3 to 4.	4 to 5.	5 to 6.	6 to 7.	7 to 8.	8 to 9.	9 to 10.	10 to 11.	11 to Noon	Noon to 13.	13 to 14.	14 to 15.	15 to 16.	16 to 17.	17 to 18.	18 to 19.	19 to 20.	20 to 21.	Total for Day.	Per cent. of Possible.
Day.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	%
1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...
2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8.2	77
3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.3	3
4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.2	2
5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...
6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.3	3
7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...
8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.8	43
9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.4	21
10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.1	27
11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.6	32
12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.1	1
13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.6	14
14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...
15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...
16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...
17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.2	2
18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.3	28
19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.3	11
20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...
21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.0	8
22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.6	5
23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...
24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...
25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...
26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.9	15
27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.3	26
28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7.7	60
29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.7	21
30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...
31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.6	5
Sum.	—	—	—	—	0.6	2.8	3.4	5.1	4.8	4.2	6.8	8.3	6.3	3.2	1.7	—	—	—	47.2	—
Mean.	—	—	—	—	.02	.09	.11	.16	.15	.14	.22	.27	.20	.10	0.5	—	—	—	1.52	13

130. Aberdeen :  $h_s$  = 20.7 metres.

April, 1928.

Hour. L.A.T.	3 to 4.	4 to 5.	5 to 6.	6 to 7.	7 to 8.	8 to 9.	9 to 10.	10 to 11.	11 to Noon	Noon to 13.	13 to 14.	14 to 15.	15 to 16.	16 to 17.	17 to 18.	18 to 19.	19 to 20.	20 to 21.	Total for Day.	Per cent. of Possible.
1	—	—	—	—	—	.5	—	—	—	—	—	—	.4	.7	.7	—	—	—	2.3	18
2	—	—	—	—	.2	.3	1.0	1.0	1.0	.8	.6	.5	.5	.1	—	—	—	—	6.0	45
3	—	—	—	—	—	—	—	.9	.1	.6	1.0	.9	1.0	.9	.3	—	—	—	5.8	44
4	—	—	—	—	.6	1.0	.9	1.0	1.0	1.0	.6	.6	.5	.7	.6	—	—	—	8.5	64
5	—	—	—	.1	.3	.7	1.0	1.0	1.0	1.0	.4	.5	.3	.4	—	—	—	—	6.7	50
6	—	—	—	.5	.8	.9	1.0	1.0	1.0	1.0	1.0	.6	—	.5	—	—	—	—	9.3	69
7	—	—	—	—	—	—	—	—	.5	.6	.6	—	—	—	—	—	—	—	1.7	13
8	—	—	—	—	—	.4	.2	—	—	—	—	—	—	—	—	—	—	—	0.6	4
9	—	—	—	—	—	.1	.1	.8	.2	.4	.8	—	.1	—	—	—	—	—	2.5	18
10	—	—	—	—	—	.1	—	.1	—	.2	—	—	.2	—	—	—	—	—	0.6	4
11	—	—	—	—	—	—	—	—	—	—	.5	.9	—	.1	—	—	—	—	1.5	11
12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...
13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...
14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...
15	—	—	—	—	.2	—	.2	—	.8	1.0	1.0	1.0	1.0	1.0	.9	.7	—	—	7.8	55
16	—	—	.6	1.0	.7	.7	.7	.4	.1	—	.5	.5	.5	.4	.1	—	—	—	6.2	43
17	—	—	.1	.6	.9	.9	.7	.9	.9	.9	.6	.6	.6	.8	.2	.5	—	—	9.2	64
18	—	—	—	—	—	—	—	—	.3	.8	.3	.2	.6	.9	.8	.1	—	—	4.0	28
19	—	—	—	—	—	—	—	.3	.1	.2	.9	.9	1.0	1.0	1.0	.2	—	—	5.6	39
20	—	—	—	—	—	.3	.9	1.0	.9	.6	.7	.4	.1	.2	.3	—	—	—	5.4	37
21	—	—	.5	.7	1.0	.8	.8	1.0	1.0	1.0	—	.6	.9	.5	.2	.1	—	—	9.1	62
22	—	—	.9	1.0	.9	.7	.1	.1	—	.1	.2	—	.6	1.0	.9	—	—	—	6.5	44
23	—	—	—	—	—	—	—	—	.3	.2	—	—	.2	—	—	—	—	—	0.7	5
24	—	—	—	.2	.8	—	.3	.2	—	—	—	.1	—	.1	.2	—	—	—	1.9	13
25	—	—	—	.3	.5	1.0	1.0	.8	.7	.8	.6	.9	—	—	—	—	—	—	6.6	44
26	—	—	—	—	.7	1.0	1.0	.5	—	.4	—	.2	.5	.9	.4	—	—	—	5.6	37
27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...
28	—	—	—	—	—	—	.1	—	—	—	—	.6	1.0	1.0	1.0	.1	—	—	3.8	25
29	—	—	—	—	—	—	—	—	—	—	—	.1	.2	.3	—	—	—	—	0.6	4
30	—	—	—	—	—	—	—	—	—	—	—	.4	.1	.5	.4	—	—	—	1.4	9
Sum.	—	—	2.1	4.4	7.6	9.4	10.9	10.2	9.8	11.8	10.3	11.0	10.9	11.5	8.5	1.7	—	—	119.9	—
Mean.	—	—	.07	.15	.25	.31	.36	.34	.33	.39	.34	.37	.36	.38	.28	.06	—	—	4.00	28
Hour. L.A.T.	3 to 4.	4 to 5.	5 to 6.	6 to 7.	7 to 8.	8 to 9.	9 to 10.	10 to 11.	11 to Noon	Noon to 13.	13 to 14.	14 to 15.	15 to 16.	16 to 17.	17 to 18.	18 to 19.	19 to 20.	20 to 21.	Total for Day.	Per cent. of Possible.



For periods of sixty minutes, between the exact hours of Local Apparent Time.

131. Aberdeen :  $h_s$  (height of recorder above ground) = 20.7 metres.

May, 1928.

Hour. L.A.T.	3 to 4.	4 to 5.	5 to 6.	6 to 7.	7 to 8.	8 to 9.	9 to 10.	10 to 11.	11 to Noon	Noon to 13.	13 to 14.	14 to 15.	15 to 16.	16 to 17.	17 to 18.	18 to 19.	19 to 20.	20 to 21.	Total for Day.	Per cent. of Possible.
Day.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	%
1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.8	31
2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8.1	52
3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.4	41
4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8.1	52
5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9.4	60
6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.0	32
7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.6	29
8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.1	19
9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.4	15
10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.2	32
11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.3	2
12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.0	6
13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.6	22
14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9.8	60
15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.1	25
16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.2	32
17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.3	2
18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.5	9
19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.5	9
20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.4	38
21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.1	18
22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.0	6
23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.0	36
24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.3	31
25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8.7	51
26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.8	5
27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.3	13
29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.0	17
30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.1	1
31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.9	17
Sum.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	124.0	—
Mean.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.00	24

132. Aberdeen :  $h_s$  = 20.7 metres.

June, 1928.

Hour. L.A.T.	3 to 4.	4 to 5.	5 to 6.	6 to 7.	7 to 8.	8 to 9.	9 to 10.	10 to 11.	11 to Noon	Noon to 13.	13 to 14.	14 to 15.	15 to 16.	16 to 17.	17 to 18.	18 to 19.	19 to 20.	20 to 21.	Total for Day.	Per cent. of Possible.
1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.8	79
2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.8	91
3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14.6	83
4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.7	27
5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.4	37
6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.7	4
7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.4	8
9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10.5	59
12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.1	74
13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.3	2
14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7.4	42
15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7.7	43
16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8.0	45
17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7.7	43
18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.7	10
19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.1	12
20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8.5	48
21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.6	20
22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.7	38
23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7.2	40
24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14.2	80
25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9.6	54
26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8.5	48
28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.2	1
29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9.3	52
30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7.2	41
Sum.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	190.9	—
Mean.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.36	36
Hour. L.A.T.	3 to 4.	4 to 5.	5 to 6.	6 to 7.	7 to 8.	8 to 9.	9 to 10.	10 to 11.	11 to Noon	Noon to 13.	13 to 14.	14 to 15.	15 to 16.	16 to 17.	17 to 18.	18 to 19.	19 to 20.	20 to 21.	Total for Day.	Per cent. of Possible.



For periods of sixty minutes, between the exact hours of Local Apparent Time.

133. Aberdeen :  $h_s$  (height of recorder above ground) = 20.7 metres.

July, 1928.

Hour. L.A.T.	3 to 4.	4 to 5.	5 to 6.	6 to 7.	7 to 8.	8 to 9.	9 to 10.	10 to 11.	11 to Noon	Noon to 13.	13 to 14.	14 to 15.	15 to 16.	16 to 17.	17 to 18.	18 to 19.	19 to 20.	20 to 21.	Total for Day.	Per cent. of Possible.
Day.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	%
1	.3	.7	.5	.3	.8	.7	.8	.7	.9	.9	.1	...	...	...	...	...	...	...	6.7	38
2	...	...	...	...	1.0	.8	1.0	.8	.5	.4	...	...	...	...	.3	.9	.5	.1	7.1	40
3	.2	.6	.6	.7	.3	.2	...	.1	.1	...	...	...	...	...	...	...	...	...	2.8	16
4	...	...	...	...	...	...	.5	.7	...	...	1.0	.9	.6	.3	.1	...	...	...	4.1	23
5	...	...	...	.1	1.0	1.0	.9	.9	.1	.3	.3	.9	1.0	.5	.7	1.0	.4	...	9.1	52
6	...	...	...	...	...	...	...	.1	.3	.6	.7	.4	.1	.1	...	...	...	...	2.3	13
7	.1	.5	1.0	.5	.8	.3	.6	.2	...	.1	.3	.4	...	...	.5	.5	.9	...	6.7	38
8	...	.5	.9	.2	.5	.9	...	...	...	...	...	...	...	...	...	...	.4	...	3.4	19
9	...	.8	1.0	.7	.5	.5	.8	1.0	.7	.8	.7	.7	.9	.3	1.0	.8	.2	...	11.4	65
10	...	...	...	...	...	...	...	...	...	...	...	...	...	.1	...	...	.1	.1	0.3	2
11	...	...	...	.5	.9	.3	.9	.9	1.0	.9	.8	.9	1.0	1.0	1.0	1.0	.8	...	11.9	68
12	...	...	...	...	...	...	...	...	.4	.1	...	...	...	...	.1	...	...	...	0.6	3
13	...	...	...	...	...	...	.1	...	.5	.5	.1	.7	.1	.3	...	.3	...	...	2.6	15
14	...	.5	.4	.6	.8	.5	.6	.7	1.0	1.0	.7	.9	.2	.8	1.0	1.0	1.0	...	11.7	68
15	...	...	...	...	.1	...	...	...	...	...	...	...	...	...	...	...	...	...	0.1	1
16	...	.4	1.0	1.0	.9	.6	.6	.8	.4	.2	.6	.1	.1	...	.1	.6	.9	...	8.3	48
17	...	.9	.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	.6	.2	.2	...	...	...	...	...	9.8	57
18	...	...	.1	.1	.1	...	.2	...	.2	.5	.2	.6	.8	.1	.4	.7	.3	...	4.3	25
19	...	...	...	...	...	...	.1	.3	.2	.5	.4	.1	.6	.9	1.0	.1	...	...	4.2	25
20	...	.1	...	.2	...	...	.2	.7	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	...	...	9.2	54
21	...	...	...	...	...	...	...	.8	.7	.3	.2	1.0	.4	.3	...	...	.1	...	3.8	22
22	...	.3	.8	...	.3	.4	.7	.7	.7	.3	...	...	...	...	...	...	...	...	4.2	25
23	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
24	...	...	...	...	...	...	.2	1.0	.8	.4	.2	.7	.5	.1	...	...	...	...	3.9	23
25	...	...	.1	.2	.8	.9	.8	.7	.1	.6	.4	.9	.9	.9	.1	.1	.2	...	7.7	46
26	...	...	...	...	...	.2	...	.1	.2	...	.2	.1	.1	...	...	...	...	...	0.9	5
27	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
28	...	.1	.1	.8	.8	.8	.6	.1	.6	.7	.2	...	...	...	...	...	...	...	4.8	29
29	...	...	.3	.1	.1	.2	.3	.4	.1	.5	.3	.9	.3	...	.1	.2	.2	...	4.0	24
30	...	...	...	.2	.1	...	...	...	...	.3	...	...	...	...	...	...	...	...	0.6	4
31	...	.5	1.0	1.0	1.0	1.0	.9	.8	.6	.3	.3	.1	.1	...	...	...	...	...	7.6	47
Sum.	0.6	5.9	8.7	9.0	11.8	10.3	11.8	13.5	12.1	12.2	9.3	11.5	8.9	6.7	7.4	8.2	6.0	0.2	154.1	—
Mean.	.02	.19	.28	.29	.38	.33	.38	.44	.39	.39	.30	.37	.29	.22	.24	.26	.19	.01	4.97	29

134. Aberdeen :  $h_s$  = 20.7 metres.

August, 1928.

	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	%
1	...	.2	.3	1.0	1.0	.9	.8	.7	.6	.2	.9	.4	...	...	.1	...	...	...	7.1	44
2	...	.3	1.0	.9	1.0	1.0	1.0	1.0	.1	.1	...	...	.3	.6	.7	...	...	...	8.0	50
3	...	...	...	...	.2	1.0	.1	...	...	.1	...	.7	.4	...	...	...	...	...	2.5	16
4	...	...	...	...	...	...	...	...	.5	.6	.2	.9	.6	...	...	...	...	...	2.8	17
5	...	...	...	.2	.2	.1	...	.5	1.0	1.0	1.0	1.0	1.0	.9	1.0	.1	...	...	8.0	50
6	...	...	...	.1	...	.1	.5	.1	.4	...	...	...	.1	...	...	...	...	...	1.3	8
7	...	...	...	...	...	...	...	...	...	...	...	...	...	.6	1.0	.8	.2	...	2.6	16
8	...	.3	1.0	.6	1.0	1.0	.7	1.0	1.0	.8	.1	.5	.9	1.0	.9	...	...	...	10.8	69
9	...	.4	1.0	1.0	.8	.8	.7	.7	.3	.1	...	...	...	...	...	.1	.2	...	6.1	39
10	...	.3	1.0	.8	.9	.4	.6	.1	.2	.2	.4	.5	.1	.1	...	...	...	...	5.6	36
11	...	...	...	...	...	...	...	...	...	.1	...	...	...	...	...	...	...	...	...	...
12	...	...	...	...	...	...	...	...	...	.1	1.0	1.0	1.0	1.0	1.0	.9	.1	...	6.1	40
13	...	...	.2	.8	.2	.2	.2	.3	.3	.4	.3	.8	.9	...	...	...	...	...	5.0	33
14	...	...	...	.1	.6	1.0	1.0	.7	...	.1	.3	.6	.9	.1	...	...	...	...	5.4	35
15	...	...	.2	...	.2	.3	...	.1	.8	.1	.2	.4	.1	.5	.1	...	...	...	3.0	20
16	...	...	...	...	...	...	...	...	...	.1	.1	.4	.5	.2	.8	.6	...	...	2.7	18
17	...	...	...	...	...	...	...	.1	.2	.3	1.0	1.0	1.0	1.0	.8	.2	.1	...	5.7	38
18	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
19	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
20	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
21	...	...	...	...	.1	.4	...	...	...	...	...	...	...	...	...	...	...	...	0.5	3
22	...	...	...	...	.1	...	.3	1.0	1.0	1.0	1.0	1.0	.8	1.0	.4	.4	...	...	8.0	54
23	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.1	1
24	...	...	...	...	.2	.5	.8	.1	.9	.7	.6	.4	...	...	...	...	...	...	4.2	29
25	...	...	.6	1.0	1.0	.7	.3	.5	.5	.3	.5	.6	...	...	...	...	...	...	6.0	42
26	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
27	...	...	...	...	...	.1	...	.1	...	...	...	...	...	...	...	...	...	...	0.3	2
28	...	...	...	.2	.1	...	...	...	.2	.2	...	...	...	...	...	...	...	...	0.7	5
29	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
30	...	...	...	...	...	...	...	...	.8	.7	.6	.6	.8	1.0	.7	.3	...	...	5.5	39
31	...	...	...	...	...	...	...	.4	.7	.9	.2	...	.5	.8	.4	...	...	...	3.9	28
Sum.	...	1.5	5.3	6.7	7.6	8.5	7.0	7.5	9.6	7.9	8.3	10.0	9.5	10.5	8.0	3.4	0.6	...	111.9	—
Mean.	...	.05	.17	.22	.25	.27	.23	.24	.31	.25	.27	.32	.31	.34	.26	.11	.02	...	3.61	24
Hour. L.A.T.	3 to 4.	4 to 5.	5 to 6.	6 to 7.	7 to 8.	8 to 9.	9 to 10.	10 to 11.	11 to Noon	Noon to 13.	13 to 14.	14 to 15.	15 to 16.	16 to 17.	17 to 18.	18 to 19.	19 to 20.	20 to 21.	Total for Day.	Per cent. of Possible.



For periods of sixty minutes, between the exact hours of Local Apparent Time.

135. Aberdeen :  $h_s$  (height of recorder above ground) = 20.7 metres.

September, 1928.

Hour. L.A.T.	3 to 4.	4 to 5.	5 to 6.	6 to 7.	7 to 8.	8 to 9.	9 to 10.	10 to 11.	11 to Noon	Noon to 13.	13 to 14.	14 to 15.	15 to 16.	16 to 17.	17 to 18.	18 to 19.	19 to 20.	20 to 21.	Total for Day.	Per cent. of Possible.
	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	%
1	—	—	...	.5	1.0	1.0	.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	.7	...	—	—	11.1	80
2	—	—	...	...	.2	1.0	1.0	1.0	1.0	1.0	1.0	1.0	.8	...	...	...	—	—	8.0	58
3	—	—	...	...	...	...	...	...	.1	...	...	...	...	...	...	...	—	—	0.1	1
4	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	—	—	...	...
5	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	—	—	...	...
6	—	—	...	.4	.8	.8	.8	...	.1	.7	.9	1.0	.8	.3	.2	...	—	—	6.8	50
7	—	—	...	...	...	...	...	...	...	...	...	...	...	...	.1	...	—	—	0.1	1
8	—	—	...	.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	.3	...	—	—	10.4	78
9	—	—	...	...	...	.1	...	.4	.6	1.0	1.0	1.0	.8	...	.3	...	—	—	5.2	39
10	—	—	...	.8	1.0	1.0	1.0	.8	.9	.3	...	.1	...	...	...	...	—	—	5.9	45
11	—	—	.1	.9	1.0	1.0	.8	.8	.6	.5	.6	.3	.1	.1	...	...	—	—	6.8	52
12	—	—	...	.3	1.0	.5	.2	...	.8	1.0	1.0	1.0	1.0	.1	...	...	—	—	6.9	53
13	—	—	...	.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	.2	...	—	—	10.7	83
14	—	—	...	.4	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	.9	.5	...	...	—	—	9.8	76
15	—	—	...	...	...	...	.1	.1	.2	.1	...	.1	.9	1.0	.6	...	—	—	3.1	24
16	—	—	...	...	.5	.8	...	...	...	.3	...	...	...	...	...	...	—	—	1.6	13
17	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	—	—	...	...
18	—	—	...	.6	1.0	1.0	.8	.8	.9	.9	.9	.2	.5	.2	.2	...	—	—	8.0	64
19	—	—	...	.4	1.0	.9	1.0	.9	.1	.4	.4	...	.6	.2	.6	...	—	—	6.5	52
20	—	—	...	...	.5	1.0	.6	.8	.8	.8	.6	.7	.9	.2	.1	...	—	—	7.0	56
21	—	—	...	.3	1.0	1.0	.8	.5	.6	...	.5	.7	.8	1.0	.7	...	—	—	7.9	64
22	—	—	...	...	...	...	...	...	.1	...	...	.1	.1	...	...	...	—	—	0.3	2
23	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	—	—	...	...
24	—	—	...	.1	.9	...	...	.9	.2	.4	.2	.1	...	.4	.1	...	—	—	3.4	28
25	—	—	...	...	...	...	...	.5	.4	.2	.1	.1	.1	...	...	...	—	—	1.4	12
26	—	—	...	.2	.3	.8	1.0	1.0	.4	...	...	...	...	...	...	...	—	—	3.7	31
27	—	—	...	...	...	.2	.8	1.0	.5	.3	.1	...	...	...	...	...	—	—	2.9	25
28	—	—	...	...	.5	.2	.5	1.0	.7	.6	.8	.6	.9	.9	.2	...	—	—	6.9	59
29	—	—	...	...	.1	1.0	1.0	1.0	.5	.1	...	.1	.2	.8	...	...	—	—	4.8	41
30	—	—	...	...	.6	.8	.6	.9	.7	.7	.9	.9	.9	.5	...	...	—	—	7.5	65
Sum.	—	—	0.1	5.5	14.4	16.1	15.8	15.7	14.4	13.1	12.9	11.9	13.7	8.9	4.3	...	—	—	146.8	—
Mean.	—	—	.00	.18	.48	.54	.53	.52	.48	.44	.43	.40	.46	.30	.14	...	—	—	4.89	38

136. Aberdeen :  $h_s$  = 20.7 metres.

October, 1928.

	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	%
1	—	—	—	...	.7	1.0	1.0	.3	.1	...	.2	.2	...	...	...	—	—	—	3.5	30
2	—	—	—	...	...	...	...	...	.1	...	...	.1	.7	1.0	...	...	—	—	1.9	17
3	—	—	—	...	...	.4	.8	.9	.2	.1	.1	...	...	...	...	...	—	—	2.5	22
4	—	—	—	...	...	.6	.5	.5	.9	.3	.3	.3	.9	...	...	...	—	—	4.3	38
5	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	—	—	...	...
6	—	—	—	...	...	...	...	...	.7	.3	.4	.3	.1	.1	...	—	—	—	1.9	17
7	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	—	—	...	...
8	—	—	—	...	...	...	.9	.6	.7	.7	.3	.5	.5	...	...	—	—	—	4.2	39
9	—	—	—	...	...	...	...	.2	...	...	...	...	...	...	...	—	—	—	0.2	2
10	—	—	—	...	.1	.9	1.0	.8	.5	.4	.7	.7	1.0	.2	...	—	—	—	6.3	59
11	—	—	—	...	.1	.5	.8	1.0	.9	.1	...	...	.6	...	...	—	—	—	4.0	37
12	—	—	—	...	.6	.4	1.0	1.0	1.0	.8	.4	.2	.7	.5	...	...	—	—	6.6	62
13	—	—	—	...	...	.2	.6	.5	.3	.4	.7	.5	.7	...	...	...	—	—	3.9	37
14	—	—	—	...	...	.6	.1	.3	...	...	.2	...	...	...	...	...	—	—	1.2	12
15	—	—	—	...	...	...	...	...	...	...	...	...	.1	...	...	...	—	—	0.1	1
16	—	—	—	...	...	...	...	...	...	...	.2	...	...	...	...	—	—	—	0.2	2
17	—	—	—	...	.5	.9	.7	.4	.3	...	.2	...	...	...	...	...	—	—	3.0	29
18	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	—	—	...	...
19	—	—	—	...	.4	1.0	1.0	1.0	.9	.2	1.0	1.0	1.0	.1	...	...	—	—	7.6	76
20	—	—	—	...	...	...	.7	.9	.6	...	...	...	...	.4	...	...	—	—	2.6	26
21	—	—	—	...	.1	.9	1.0	1.0	1.0	.6	...	...	...	...	...	—	—	—	4.6	46
22	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	—	—	...	...
23	—	—	—	...	.1	1.0	1.0	1.0	.8	.6	.3	.6	.1	...	...	...	—	—	5.5	57
24	—	—	—	...	...	.2	.2	...	.4	.5	.4	.4	.1	...	...	...	—	—	2.2	23
25	—	—	—	...	.1	1.0	1.0	1.0	.8	.9	.3	.3	.3	.1	...	...	—	—	5.8	60
26	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	—	—	...	...
27	—	—	—	...	...	...	...	.1	1.0	.9	1.0	.4	...	...	...	...	—	—	3.4	36
28	—	—	—	...	.3	1.0	.7	.7	.6	1.0	1.0	1.0	.8	...	...	...	—	—	7.1	76
29	—	—	—	...	.2	...	...	...	...	...	...	...	...	...	...	...	—	—	0.2	2
30	—	—	—	...	...	...	.2	.5	.6	.7	.9	.6	...	...	...	...	—	—	3.5	38
31	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	—	—	...	...
Sum.	—	—	—	...	3.2	10.6	13.2	12.7	12.4	8.5	8.6	7.1	7.6	2.4	...	—	—	—	86.3	—
Mean.	—	—	—	...	.10	.34	.43	.41	.40	.27	.28	.23	.25	.08	...	—	—	—	2.78	27
Hour. L.A.T.	3 to 4.	4 to 5.	5 to 6.	6 to 7.	7 to 8.	8 to 9.	9 to 10.	10 to 11.	11 to Noon	Noon to 13.	13 to 14.	14 to 15.	15 to 16.	16 to 17.	17 to 18.	18 to 19.	19 to 20.	20 to 21.	Total for Day.	Per cent of Possible.



For periods of sixty minutes, between the exact hours of Local Apparent Time.

137. Aberdeen :  $h_s$  (height of recorder above ground) = 20.7 metres.

November, 1928.

Hour. L.A.T.	3 to 4.	4 to 5.	5 to 6.	6 to 7.	7 to 8.	8 to 9.	9 to 10.	10 to 11.	11 to Noon	Noon to 13.	13 to 14.	14 to 15.	15 to 16.	16 to 17.	17 to 18.	18 to 19.	19 to 20.	20 to 21.	Total for Day.	Per cent. of Possible.
Day.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	%
1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.1	46
2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.6	7
3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.9	22
5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.5	6
7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.2	2
8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7.3	86
9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.3	62
10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.5	56
14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.8	72
15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.5	6
16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.4	5
17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.9	49
18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.5	58
19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.5	71
21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.2	84
25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.5	34
26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.5	48
27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.3	73
28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.9	13
29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sum.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	63.4	—
Mean.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.11	26

138. Aberdeen :  $h_s$  = 20.7 metres.

December and Year, 1928.

	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	%
1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.8
2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.3
3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.3
4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.9
6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6
7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.2
8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.8
9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.1
11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.1
14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.5
15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.3
16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.4
18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.6
19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.1
21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.5
26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.2
27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.0
28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.3
31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.8
Sum.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	42.6
Mean.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.37
Annual Totals.	2.5	18.6	32.8	41.9	62.7	83.1	111.9	125.5	125.7	126.8	122.6	118.4	91.3	65.9	49.5	30.7	15.8	1.1	1226.8	—
Annual Mean.	.01	.05	.09	.11	.17	.23	.31	.34	.34	.35	.33	.32	.25	.18	.14	.08	.04	.00	3.35	27
Hour. L.A.T.	3 to 4.	4 to 5.	5 to 6.	6 to 7.	7 to 8.	8 to 9.	9 to 10.	10 to 11.	11 to Noon	Noon to 13.	13 to 14.	14 to 15.	15 to 16.	16 to 17.	17 to 18.	18 to 19.	19 to 20.	20 to 21.	Total for Day.	Per cent. of Possible.



Direction expressed in degrees from North (E=90°, S=180°, W=270°, N=360°) : Speed in metres per second.

139. Aberdeen : Dines anemograph from Jan., 1926.

H<sub>a</sub> (height of anemograph above M.S.L.) = Height of ground above

Hour. G.M.T.	1.		2.		3.		4.		5.		6.		7.		8.		9.		10.		11.		Noon.	
Day.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.
1	240	2.0	250	2.1	240	1.9	—	1.4	—	0.7	180	3.8	210	3.1	200	3.7	200	3.5	210	3.8	190	5.6	190	5.4
2	170	11.5	180	9.7	190	8.7	200	8.5	190	8.4	210	4.2	180	2.0	190	4.7	190	5.2	190	5.0	210	2.5	160	1.8
3	270	1.6	280	4.0	280	4.4	280	4.4	280	4.1	270	3.5	280	4.6	270	3.5	270	4.5	260	3.0	270	3.3	280	3.4
4	190	5.4	200	7.6	200	5.6	230	4.4	200	2.7	160	3.2	190	3.3	220	2.6	210	2.2	210	3.1	220	3.4	230	4.5
5	270	7.9	280	9.3	270	9.2	280	9.0	280	7.8	280	8.5	280	8.4	280	8.0	280	8.6	280	7.4	280	8.9	280	9.5
6	200	3.8	190	3.7	200	5.6	200	5.8	200	5.1	200	4.9	200	5.6	200	5.6	190	4.3	230	3.4	290	7.5	330	12.5
7	220	1.8	220	2.1	—	1.0	200	4.0	200	3.3	190	4.2	180	5.6	190	6.7	180	6.0	180	5.8	190	5.8	190	5.0
8	240	8.2	270	8.8	250	6.4	240	6.8	240	6.5	240	6.1	250	6.7	250	6.7	230	6.8	230	7.8	230	5.9	250	8.2
9	220	3.0	200	2.6	210	2.6	210	3.8	200	4.3	190	3.7	170	4.4	190	4.4	180	6.5	180	6.9	200	6.1	200	5.8
10	200	6.6	200	5.5	220	6.9	230	7.1	220	6.5	210	5.4	200	5.8	200	6.6	180	7.4	170	10.1	170	10.6	190	10.2
11	260	7.3	250	8.2	240	7.0	240	6.6	240	6.1	240	5.7	250	6.0	250	6.1	260	6.2	250	5.0	250	5.0	260	6.4
12	220	4.3	210	4.3	200	3.9	200	4.7	190	5.4	190	6.2	190	7.1	190	8.1	190	9.5	190	8.5	200	7.5	200	8.5
13	240	5.5	240	5.5	230	5.1	220	5.1	210	5.2	210	3.3	220	7.2	210	5.8	220	6.1	210	5.6	250	7.2	250	8.5
14	280	3.0	270	4.1	280	4.7	250	3.3	270	3.4	280	3.5	240	1.7	—	1.4	210	2.0	200	2.2	190	3.4	180	4.3
15	200	2.3	200	6.6	200	4.3	190	4.0	180	4.2	180	4.5	190	4.8	200	7.4	190	4.5	180	4.6	190	6.2	190	6.6
16	360	5.3	360	5.3	360	5.1	330	5.0	340	6.0	330	4.7	320	4.4	320	3.8	310	3.8	320	5.0	320	5.6	310	5.5
17	30	11.1	40	10.4	40	9.8	40	8.4	40	7.3	50	7.6	60	7.2	60	6.6	60	6.2	70	6.0	80	6.3	80	5.5
18	140	7.1	150	5.6	150	6.4	150	6.6	160	6.4	150	8.1	150	9.6	140	11.5	140	12.1	140	12.2	150	10.1	150	10.7
19	160	10.7	170	7.5	190	3.9	—	0.8	—	0.7	—	1.1	—	1.0	200	1.7	200	3.5	190	3.0	200	2.2	230	1.8
20	180	5.6	170	4.8	180	5.5	180	7.2	170	8.6	170	9.2	170	10.4	170	8.5	170	10.3	170	9.0	190	6.0	180	9.4
21	190	6.2	220	5.8	200	8.9	190	8.3	180	6.3	170	9.0	170	10.2	170	10.6	170	10.2	170	9.9	180	9.0	180	7.8
22	180	2.1	170	2.5	210	2.4	190	1.8	—	1.0	—	1.0	—	1.1	—	1.2	—	1.1	280	1.9	280	3.0	290	3.6
23	—	1.4	210	2.1	210	1.7	190	2.5	190	2.5	190	3.0	180	5.2	180	5.6	180	5.2	180	6.3	180	6.7	180	6.5
24	220	6.0	230	5.8	220	6.5	230	8.0	230	6.0	240	4.1	210	5.0	200	6.4	190	6.0	240	2.5	200	2.6	270	4.4
25	250	5.1	240	5.3	240	5.3	240	5.7	240	5.4	240	5.7	250	5.6	240	4.8	230	5.1	180	4.5	180	5.4	180	6.4
26	240	7.0	220	5.5	220	5.9	230	7.0	220	5.8	230	6.2	220	7.4	230	8.7	220	7.8	200	7.1	200	5.4	190	8.2
27	270	5.1	270	6.8	270	5.9	280	8.1	290	8.7	310	7.7	300	8.7	300	8.6	300	8.3	300	9.4	300	8.6	300	9.3
28	230	2.7	—	1.5	—	1.5	220	3.0	200	4.6	200	4.2	200	5.0	200	5.9	200	6.2	200	6.3	200	4.6	200	3.0
29	220	2.1	—	1.5	—	1.4	200	1.7	200	3.0	190	4.1	180	3.4	190	4.0	200	3.2	210	3.1	—	1.3	—	1.2
30	270	2.4	—	1.6	—	1.4	230	1.8	—	1.4	—	1.5	—	0.8	—	0.6	—	1.0	250	1.8	220	2.8	210	2.9
31	210	4.0	220	3.1	220	2.5	220	3.2	200	2.4	200	3.1	210	3.1	200	3.0	210	3.4	200	4.6	190	4.5	200	6.0
Mean ...	—	5.1	—	5.1	—	4.9	—	5.1	—	4.8	—	4.9	—	5.3	—	5.6	—	5.7	—	5.6	—	5.6	—	6.2

140. Aberdeen : H<sub>a</sub> = 8 metres + 13 metres.

		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.
1	210	4.7	210	4.5	210	5.5	210	5.4	210	6.1	210	6.4	220	4.5	260	5.6	200	3.1	180	2.8	250	5.7	250	6.5		
2	220	5.8	220	6.4	220	5.6	220	7.4	220	6.5	220	6.5	230	6.3	220	5.0	220	5.8	230	6.8	240	6.6	240	6.8		
3	310	7.1	310	7.6	310	7.8	310	7.3	310	8.2	310	9.2	310	8.2	300	7.4	310	8.5	300	7.8	310	8.1	310	8.5		
4	200	2.2	200	3.8	210	4.6	200	5.2	190	5.4	200	5.9	200	6.8	180	7.6	180	8.5	180	9.0	180	7.8	180	7.0		
5	250	4.0	240	4.9	250	5.4	240	5.0	240	5.0	210	3.4	220	3.2	260	3.2	240	2.9	240	4.0	240	4.7	250	5.7		
6	250	5.8	250	6.5	250	7.7	250	6.2	240	7.3	250	6.7	260	6.4	250	5.9	250	6.6	250	6.6	260	6.1	250	6.5		
7	210	6.9	220	8.4	230	10.5	240	11.6	240	10.8	240	9.7	250	6.6	250	5.5	240	5.8	250	6.9	260	8.1	260	7.0		
8	210	6.2	190	5.1	200	6.8	200	6.2	190	6.1	220	7.0	210	8.4	200	6.7	200	6.6	200	5.4	220	7.8	220	10.0		
9	260	13.4	260	11.1	260	7.8	250	5.8	250	6.5	250	8.6	250	8.6	240	8.5	230	8.0	230	9.4	240	9.0	250	10.8		
10	250	4.4	240	4.1	190	3.0	180	3.0	200	4.4	190	4.4	180	4.6	180	6.5	160	7.7	150	9.6	150	10.7	160	11.8		
11	240	3.0	250	2.4	260	4.7	270	6.6	270	6.8	270	7.6	270	6.5	280	7.1	310	6.4	350	7.7	340	7.7	350	7.6		
12	310	3.0	260	2.1	260	2.0	250	1.6	—	1.5	—	1.5	—	1.4	230	2.5	250	3.6	240	3.4	240	3.0	230	3.8		
13	260	2.5	300	2.5	270	2.2	—	1.1	—	1.1	220	1.8	240	2.4	240	1.8	—	0.8	—	0.4	200	2.0	200	3.4		
14	270	4.7	260	6.3	250	2.6	250	1.9	250	3.1	240	3.2	250	4.1	250	4.6	240	5.5	260	5.0	260	6.1	260	7.1		
15	220	2.8	—	1.5	200	2.2	190	3.0	190	3.5	180	3.7	180	6.4	170	7.7	190	5.9	190	6.3	200	6.5	220	9.3		
16	230	2.8	230	3.9	220	3.3	200	1.6	260	2.8	160	2.2	—	1.5	180	2.3	190	2.7	180	4.4	190	5.0	190	4.0		
17	210	2.4	230	3.6	240	4.4	280	6.1	280	9.0	280	9.6	270	7.6	270	7.8	280	9.0	280	9.4	280	10.8	280	11.3		
18	260	2.9	240	2.0	240	3.5	220	4.1	220	4.1	200	4.1	210	5.4	190	4.7	200	5.9	210	5.7	210	4.9	190	5.1		
19	270	3.9	280	4.1	240	2.4	230	2.1	270	3.4	260	1.7	280	2.0	290	3.6	290	4.3	290	5.1	290	3.7	290	3.9		
20	140	1.7	180	1.9	220	4.0	220	4.5	220	5.0	210	5.5	210	3.6	180	3.8	190	3.8	190	5.9	190	6.2	180	6.0		
21	180	5.0	180	4.9	170	4.5	190	4.9	190	4.5	200	2.2	190	3.4	190	5.1	190	3.2	180	6.0	180	5.8	180	6.7		
22	—	1.4	240	3.6	260	3.8	—	1.5	—	0.9	—	1.3	—	1.5	—	1.5	290	1.8	300	4.3	310	5.8	320	5.0		
23	280	3.4	280	3.1	280	3.4	290	2.5	290	3.3	280	3.4	280	3.1	280	2.6	290	2.1	280	1.7	—	0.6	130	3.9		
24	140	6.0	140	5.8	150	4.2	160	5.3	160	5.6	140	6.1	150	6.0	140	9.5	140	9.6	140	9.0	140	8.2	140	8.5		
25	200	3.5	190	4.0	190	4.5	190	4.6	190	4.5	190	3.0	200	2.7	190	2.7	190	2.8	200	3.4	190	3.4	180	3.8		
26	190	1.7	200	1.6	190	1.9	190	2.3	190	2.2	190	2.0	170	1.8	200	2.2	180	1.7	170	2.4	170	2.9	180	3.7		
27	190	2.1	200	1.6	—	1.5	170	2.5	180	2.0	170	2.7	160	2.8	150	3.4	170	3.2	170	3.5	170	3.7	170	5.1		
28	—	0.7	170	3.1	170	3.5	160	4.1	160	4.9	150	4.4	160	3.4	150	3.6	140	4.2	130	3.7	120	3.6	120	5.3		
29	140	10.2	140	10.1	140	10.1	140	9.3	130	11.0	130	10.9	130	11.1	130	11.4	130	11.2	140	10.7	130	10.3	130	9.8		
Mean ...	—	4.8	—	4.5	—	4.6	—	4.6	—	5.0	—	5.0	—	4.8	—	5.2	—	5.2	—	5.7	—	6.0	—	6.7		
Hour. G.M.T.	1.		2.		3.		4.		5.		6.		7.		8.		9.		10.		11.		Noon.			



**January, 1928.**

**February, 1928.**

13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean	Day.
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Direction expressed in degrees from North ( $E = 90^\circ$ ,  $S = 180^\circ$ ,  $W = 270^\circ$ ,  $N = 360^\circ$ ) : Speed in metres per second.

141. Aberdeen : Dines anemograph from Jan. 1926.

$H_a$  (height of anemograph above M.S.L.) = Height of ground above

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.
Day.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.
1	120	9.6	130	9.0	130	8.3	130	9.5	130	10.6	130	10.7
2	150	5.2	160	3.1	160	2.6	180	2.6	220	1.7	—	0.7
3	—	1.4	—	1.4	280	2.1	—	1.5	300	2.3	270	1.7
4	—	1.0	—	0.7	—	1.5	—	1.3	—	0.8	—	0.7
5	—	0.3	—	0.8	—	0.8	—	0.7	—	1.1	—	0.8
6	360	6.8	350	5.9	340	5.6	340	5.3	340	4.8	340	5.1
7	330	5.6	20	3.9	10	3.3	340	3.1	360	4.6	20	4.0
8	320	3.3	310	2.8	320	3.1	350	3.6	340	4.3	330	3.4
9	320	3.7	320	3.2	310	3.7	300	3.7	320	3.4	300	3.6
10	70	9.7	70	10.0	70	10.0	60	11.1	70	11.5	60	11.2
11	70	9.8	60	11.0	70	10.3	70	9.7	70	9.5	60	9.0
12	50	8.4	50	8.9	70	8.5	60	9.3	60	9.1	60	9.5
13	110	7.0	100	6.4	90	7.1	90	7.6	90	7.6	90	7.8
14	100	6.8	100	6.3	100	6.6	100	6.5	100	6.2	110	5.4
15	130	8.5	140	8.6	130	8.6	130	8.5	130	9.1	130	10.2
16	170	7.1	160	7.2	170	6.8	170	7.6	170	6.5	170	5.1
17	160	9.5	170	8.7	180	8.6	180	8.4	180	8.1	190	7.0
18	190	4.0	180	4.6	170	5.3	170	5.2	160	5.4	150	4.9
19	200	3.6	200	2.4	200	3.5	—	1.1	210	2.7	190	3.2
20	160	9.0	160	9.1	160	9.4	160	9.1	170	8.3	170	8.3
21	150	9.7	170	8.3	150	10.5	160	9.6	150	11.3	140	12.5
22	140	7.7	140	7.6	130	7.0	130	6.7	130	6.5	130	6.7
23	—	1.3	—	1.5	150	2.8	—	1.2	—	0.7	—	1.3
24	—	1.2	120	4.2	140	3.0	130	2.8	130	2.3	130	3.0
25	110	2.2	100	3.4	90	2.8	80	3.0	60	2.2	110	2.1
26	—	1.5	330	1.7	—	1.5	—	0.3	—	0.8	—	0.5
27	—	1.4	200	1.9	200	2.1	200	1.7	170	2.0	160	3.1
28	220	5.3	220	4.9	220	3.3	190	2.0	190	2.7	210	2.5
29	200	4.2	200	4.1	190	3.8	190	2.5	170	3.4	170	3.5
30	140	5.8	140	4.7	140	5.1	130	5.2	120	5.2	110	6.3
31	40	5.6	30	5.2	20	5.3	30	5.6	30	6.0	20	6.1
Mean ...	—	5.4	—	5.2	—	5.3	—	5.0	—	5.2	—	5.4

142. Aberdeen :  $H_a = 8$  metres + 13 metres.

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.
Day.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.
1	310	4.5	310	4.5	310	3.7	300	3.2	300	3.0	300	3.4
2	290	1.6	—	1.2	290	1.8	—	1.5	—	1.1	—	0.8
3	190	5.3	180	5.5	180	4.8	200	4.2	210	3.6	210	3.5
4	200	4.0	220	3.0	—	1.5	200	2.5	200	3.0	200	3.4
5	—	1.4	—	0.8	—	1.1	—	0.6	—	1.5	—	0.5
6	—	0.8	—	0.7	200	1.8	220	2.0	200	2.9	210	3.3
7	190	2.8	—	1.2	180	2.0	210	1.8	—	0.4	—	1.2
8	140	2.2	130	3.3	130	7.0	130	6.4	150	3.4	130	5.1
9	—	0.8	130	2.1	180	3.7	180	2.4	170	4.7	160	6.4
10	160	1.8	160	3.4	150	2.7	130	2.8	120	2.5	100	2.0
11	—	0.2	—	1.2	—	1.1	—	0.8	—	0.7	290	2.8
12	200	2.8	210	2.0	—	0.5	—	0.2	70	1.7	110	3.4
13	120	9.1	110	10.2	120	9.8	120	10.6	120	11.0	120	11.6
14	130	11.8	130	11.1	130	11.1	130	10.8	130	11.5	130	10.9
15	110	9.8	100	9.0	110	8.7	100	8.5	90	8.2	90	8.0
16	300	4.1	300	4.4	300	4.5	300	4.6	300	4.5	300	4.2
17	320	5.5	320	4.5	320	4.9	330	6.6	320	5.7	320	4.2
18	250	2.4	240	1.8	230	2.8	200	3.4	200	4.4	210	4.1
19	340	8.1	320	8.0	320	7.2	320	8.0	330	6.7	330	7.0
20	320	4.4	330	5.1	340	6.6	330	6.4	340	7.5	330	6.9
21	320	4.4	310	4.5	310	4.6	300	4.4	310	3.8	310	4.0
22	290	3.0	290	3.5	300	4.5	300	4.6	300	3.7	300	4.1
23	230	2.4	190	1.6	200	4.1	190	4.9	180	3.5	180	5.7
24	180	3.8	170	3.6	170	3.0	160	3.4	190	4.5	190	3.8
25	190	3.0	170	4.0	180	4.1	200	3.4	190	4.5	180	5.1
26	210	1.6	200	1.8	—	1.2	200	1.8	—	1.0	—	1.5
27	—	0.5	—	1.5	320	3.5	340	4.8	—	5.4	340	5.8
28	320	3.7	320	4.2	310	4.2	320	4.4	320	4.0	340	4.7
29	330	2.5	340	2.6	340	2.6	330	3.0	310	2.8	340	2.0
30	350	2.5	340	2.3	350	2.2	10	3.0	—	3.2	20	3.4
Mean ...	—	3.7	—	3.8	—	4.0	—	4.2	—	4.1	—	4.4



**March, 1928.**

13.		14.		15.		16.		17.		18.		19.		20.		21.		22.		23.		24.		Mean	Day.
°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.
130	8.6	130	8.3	120	7.1	130	7.3	130	7.1	130	7.5	140	7.5	140	7.8	140	7.5	140	7.1	140	6.1	150	5.2	8.6	1
230	3.4	200	3.2	190	4.1	170	3.3	200	2.6	220	2.1	—	0.6	—	0.6	—	1.0	—	0.8	—	1.5	290	1.8	2.3	2
100	1.9	100	2.1	110	2.4	120	1.9	130	2.0	160	1.7	—	1.4	—	0.7	—	1.2	—	1.4	190	1.7	—	0.8	1.5	3
120	3.0	120	2.9	130	2.0	140	1.8	130	1.7	130	1.8	—	0.9	—	0.1	—	0.3	—	0.5	—	1.2	—	0.5	1.8	4
350	3.0	350	3.4	340	3.0	340	3.5	340	3.5	330	3.2	340	3.5	360	4.5	10	5.1	10	7.6	360	5.8	360	6.7	2.5	5
10	7.2	360	6.2	20	7.0	10	6.7	350	5.0	330	4.7	320	4.5	320	4.2	320	4.2	330	4.8	330	5.1	340	5.3	5.5	6
30	7.0	30	6.6	40	6.6	30	5.9	20	6.1	30	6.9	40	6.7	30	5.4	320	2.1	320	2.4	310	3.0	320	2.8	5.4	7
30	6.8	40	6.3	40	6.0	40	5.5	10	4.5	350	3.8	330	3.2	320	3.5	300	3.4	320	3.5	300	2.8	320	3.4	4.1	8
350	7.9	330	6.0	340	7.6	340	6.8	360	6.4	360	5.2	360	5.4	40	6.4	60	7.8	60	9.3	70	9.6	70	10.0	5.6	9
90	10.5	80	10.0	80	10.6	80	10.2	80	10.6	90	10.0	80	8.5	90	8.0	90	10.5	80	10.3	80	10.6	70	10.8	10.1	10
70	10.7	70	10.4	70	10.1	70	10.1	60	11.0	60	10.5	60	10.5	60	9.7	50	9.2	60	8.5	70	9.0	70	9.3	10.0	11
70	10.5	70	10.6	80	11.0	70	11.4	80	12.0	80	11.8	80	12.5	80	12.4	90	12.6	110	10.3	100	9.1	110	8.2	10.3	12
80	8.1	90	7.2	90	7.0	90	6.8	100	7.0	90	6.3	90	6.5	100	5.6	90	6.9	100	5.6	100	5.8	90	6.4	7.0	13
120	6.8	130	6.4	130	6.2	130	6.3	130	6.2	130	6.6	130	7.1	130	7.6	140	7.6	140	8.0	140	8.4	140	8.3	6.5	14
140	11.0	150	8.6	150	8.5	150	7.8	150	7.3	150	7.4	160	7.3	160	7.5	150	7.7	160	7.9	160	7.6	160	6.5	9.0	15
170	9.2	170	8.8	170	8.0	170	8.1	170	8.1	160	7.9	170	7.1	170	8.0	170	8.0	170	9.0	170	7.8	160	9.3	7.7	16
190	8.3	190	7.6	190	8.5	190	7.5	180	6.7	180	5.8	180	6.4	180	5.6	180	5.9	190	5.1	180	6.1	180	5.2	7.6	17
190	4.8	190	4.6	200	6.3	190	6.1	180	5.9	190	5.7	200	4.3	210	5.5	200	5.4	210	6.2	230	3.7	200	2.6	4.8	18
160	6.7	150	7.9	140	5.3	140	4.1	160	5.7	160	8.5	150	8.3	150	7.6	150	8.3	160	7.2	170	7.6	160	9.1	5.4	19
160	7.5	160	7.2	160	7.4	160	7.1	170	8.1	160	9.3	150	10.7	150	10.0	160	10.0	150	10.4	150	10.4	150	11.0	8.5	20
140	13.6	140	13.5	140	13.5	140	13.6	140	13.3	140	13.5	140	12.0	140	11.8	130	12.1	140	16.2	140	9.1	140	8.4	12.1	21
120	6.8	120	5.9	120	5.3	110	5.1	110	5.2	100	5.2	90	4.6	60	3.2	70	3.9	70	3.0	110	3.1	180	1.6	5.7	22
90	4.0	80	5.0	90	6.1	100	6.2	110	5.9	110	5.5	110	5.8	100	6.3	90	6.0	80	5.1	120	2.4	—	1.1	3.8	23
130	8.3	130	7.3	130	7.1	140	6.9	140	6.7	140	6.6	140	6.5	140	5.8	130	6.2	130	6.1	130	5.2	120	4.5	5.3	24
—	0.8	—	0.7	—	0.5	—	1.0	—	0.2	—	0.4	—	0.1	—	0.1	—	0.0	—	0.0	—	0.0	—	0.2	1.3	25
160	3.4	150	3.1	130	3.8	140	3.4	140	1.8	160	1.6	170	1.8	180	2.1	—	0.8	—	0.6	—	0.3	—	1.0	1.7	26
180	4.4	210	3.9	230	4.6	240	4.4	240	4.5	230	3.5	220	3.0	220	3.4	220	3.1	220	3.6	210	3.5	210	3.6	3.4	27
170	4.7	180	5.8	170	6.1	190	5.2	190	4.9	190	3.3	200	3.3	210	1.9	210	2.2	190	2.7	190	2.7	190	3.3	3.5	28
130	11.6	120	11.7	110	14.5	110	16.3	110	18.0	110	18.1	110	17.3	100	13.2	130	4.4	140	3.8	140	3.2	130	5.5	8.5	29
80	7.9	70	7.7	70	7.0	70	7.1	70	7.2	70	7.2	60	6.4	50	6.6	50	6.9	50	6.8	50	6.3	60	6.1	6.6	30
20	6.7	20	6.8	30	6.0	30	6.1	20	5.2	360	4.3	350	3.9	330	2.8	300	3.6	310	3.9	310	3.4	310	3.8	5.7	31
—	6.9	—	6.6	—	6.7	—	6.6	—	6.5	—	6.3	—	6.1	—	5.7	—	5.6	—	5.5	—	5.2	—	5.2	5.8	

**April, 1928.**

[illegible]



Direction expressed in degrees from North (E = 90°, S = 180°, W = 270°, N = 360°) : Speed in metres per second.

143. Aberdeen : Dines anemograph from Jan. 1926.

H<sub>a</sub> (height of anemograph above M.S.L.) = Height of ground above

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.
Day.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.
1	—	1.2	20	1.8	360	2.0	360	2.1	350	1.8	360	2.0
2	—	1.3	360	1.7	330	1.6	10	2.2	340	2.0	300	2.8
3	300	2.5	320	2.1	330	2.0	320	2.0	310	2.2	320	1.9
4	60	3.5	50	2.0	—	1.0	50	2.0	40	3.4	50	3.6
5	—	0.6	—	0.3	—	0.1	—	1.0	—	0.8	—	0.2
6	190	2.4	180	1.8	160	2.0	160	1.8	—	1.1	—	0.9
7	340	4.5	320	3.3	340	4.4	330	4.5	330	5.5	340	5.8
8	280	4.2	270	5.8	300	7.1	330	6.6	340	6.5	340	7.6
9	320	6.5	320	6.0	320	5.4	320	5.7	320	6.1	320	6.7
10	—	0.8	90	3.0	80	3.3	70	3.3	80	2.5	—	0.8
11	290	2.1	290	1.8	—	1.4	—	1.4	270	2.1	270	2.8
12	300	3.6	300	3.9	300	4.5	300	4.6	300	3.0	310	3.6
13	280	2.2	310	3.5	320	1.7	—	0.5	—	1.2	—	1.0
14	320	4.1	330	5.5	320	4.6	330	4.7	320	4.7	320	6.4
15	280	2.9	260	2.0	240	2.6	250	2.1	250	2.0	230	2.3
16	330	7.1	330	6.8	320	6.5	330	6.6	330	6.2	330	7.4
17	280	2.2	280	1.8	290	2.1	290	2.1	—	1.5	290	1.9
18	350	3.1	340	2.1	340	3.2	340	2.1	330	2.1	350	3.3
19	310	3.1	310	3.4	310	3.9	310	4.3	300	4.4	300	4.4
20	330	3.4	310	3.4	310	3.4	310	3.3	320	3.5	320	4.1
21	340	3.1	340	3.9	340	3.4	330	3.4	320	3.2	320	2.7
22	330	2.1	320	2.2	330	2.4	320	2.0	310	2.3	340	2.5
23	320	3.1	320	3.3	320	3.3	330	2.9	320	2.9	340	3.8
24	—	1.5	—	0.8	—	0.5	—	1.0	—	1.1	—	1.2
25	200	2.5	—	0.4	—	0.8	—	1.5	—	1.2	—	1.4
26	160	2.0	180	1.6	—	1.1	—	0.7	—	0.6	—	0.5
27	90	3.6	90	3.6	90	3.4	90	3.6	100	4.1	90	4.3
28	150	3.5	140	3.0	150	2.8	160	2.9	150	3.5	150	2.8
29	—	0.3	—	0.5	—	1.2	—	1.4	—	1.5	30	2.5
30	80	1.6	90	1.6	90	1.7	70	2.3	90	2.8	90	2.6
31	350	3.4	350	4.0	350	4.4	350	4.0	350	4.5	360	5.1
Mean ...	—	2.8	—	2.8	—	2.8	—	2.9	—	3.2	—	3.7

144. Aberdeen : H<sub>a</sub> = 8 metres + 13 metres.

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.
Day.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.
1	290	2.5	300	2.4	290	2.4	290	2.6	290	2.4	280	2.2
2	—	1.0	—	1.2	—	1.4	—	0.5	—	0.0	—	0.1
3	290	3.1	290	2.7	—	0.7	290	1.6	—	0.5	350	1.9
4	320	3.2	320	2.9	330	2.4	330	3.9	10	6.8	10	7.5
5	—	1.5	280	1.6	270	1.8	260	1.7	260	1.7	240	2.1
6	260	1.8	—	0.8	—	0.6	—	0.7	—	0.3	—	0.4
7	—	1.5	—	0.8	—	0.5	—	0.4	—	0.5	—	0.8
8	340	3.7	340	4.3	340	5.0	340	4.3	340	4.2	340	4.8
9	—	1.4	350	1.8	10	2.1	10	2.6	50	4.6	90	6.2
10	20	5.6	20	5.8	20	6.1	20	5.7	10	5.8	350	4.5
11	280	6.1	280	6.6	280	6.4	270	7.0	270	5.9	280	7.4
12	280	2.1	290	2.1	280	2.1	290	2.7	300	3.0	300	3.3
13	320	1.8	320	2.2	320	1.7	—	1.3	320	1.8	360	2.0
14	40	6.5	40	7.6	30	7.9	30	8.0	30	7.8	30	7.7
15	260	1.7	—	1.5	260	3.0	250	3.4	290	4.8	290	5.5
16	310	4.1	310	3.8	310	4.5	320	5.6	310	5.6	300	6.5
17	250	3.1	230	2.4	250	1.9	260	1.7	290	4.2	280	4.8
18	290	6.5	280	5.5	290	5.2	290	4.0	290	4.2	280	4.8
19	100	1.6	—	1.5	—	1.5	—	0.8	—	0.8	170	2.2
20	—	0.7	—	1.5	300	2.0	—	1.4	300	2.4	320	4.1
21	—	1.4	—	1.1	—	0.8	—	0.5	—	0.5	—	1.5
22	—	0.7	200	2.5	190	2.6	180	3.0	200	2.4	210	3.5
23	230	3.6	230	2.9	240	2.8	220	2.7	220	2.7	260	4.5
24	250	3.0	220	2.8	220	2.9	210	2.5	200	2.4	200	2.4
25	250	3.4	260	2.1	—	1.5	250	2.6	—	0.5	260	2.6
26	70	5.8	70	6.4	60	7.2	60	7.5	50	8.1	50	8.5
27	310	5.4	300	6.0	300	6.8	300	5.4	300	4.6	300	5.0
28	—	1.3	—	1.2	—	1.0	—	0.7	—	0.8	210	2.0
29	210	2.3	180	2.6	150	2.7	150	3.7	160	6.6	180	8.3
30	210	4.6	200	5.7	200	5.8	220	5.8	210	5.0	220	6.1
Mean ...	—	3.0	—	3.1	—	3.1	—	3.1	—	3.4	—	4.0



Averages for periods of sixty minutes centred at the exact hours, Greenwich Mean Time.

M.S.L. +  $h_a$  (height of anemograph above ground) = 8 metres + 13 metres.

May, 1928.

13.		14.		15.		16.		17.		18.		19.		20.		21.		22.		23.		24.		Mean	Day.
°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	m/s.	
40	3.9	40	4.2	50	3.2	50	3.6	50	3.3	40	2.5	30	2.2	40	3.2	50	3.3	30	3.3	30	2.7	30	2.2	2.9	1
60	4.9	40	5.4	40	5.5	50	5.6	50	4.5	60	4.6	60	4.2	40	3.6	20	2.5	10	1.8	330	1.7	—	1.5	3.5	2
80	5.7	70	5.2	60	4.5	60	4.6	60	4.4	60	4.5	50	5.2	60	5.5	70	5.8	70	5.4	60	4.9	60	4.2	4.1	3
90	4.5	80	4.1	90	3.5	100	3.6	110	4.1	120	4.6	120	4.1	120	3.0	130	1.7	—	1.0	—	1.3	—	1.4	3.2	4
100	4.4	110	4.3	120	4.7	120	4.5	120	3.6	130	2.4	150	3.1	—	1.4	180	1.7	160	2.4	160	2.6	150	2.2	2.5	5
110	3.0	90	2.6	60	1.7	—	1.5	30	1.8	340	3.3	340	4.9	320	5.0	330	4.8	320	4.9	330	4.3	350	6.2	2.8	6
360	5.1	340	6.2	340	6.0	340	5.0	330	5.5	340	5.3	350	4.1	340	3.0	320	2.0	290	2.4	270	3.2	280	3.7	5.1	7
360	10.9	340	9.6	330	9.4	340	7.8	340	7.6	330	5.8	330	5.7	350	6.2	350	3.7	340	4.4	310	4.4	320	5.0	7.1	8
340	9.2	330	7.7	340	6.6	340	6.7	330	6.4	340	5.0	330	3.4	310	2.1	300	2.0	—	1.0	—	0.5	—	0.5	5.9	9
80	3.7	80	4.1	80	4.0	80	3.5	70	2.8	70	2.0	—	1.2	—	0.6	—	0.4	—	1.2	—	1.1	—	1.4	2.3	10
320	4.7	310	5.4	310	5.5	310	6.8	310	6.1	310	6.1	300	6.3	300	4.7	300	4.8	300	4.2	300	4.6	300	4.8	4.2	11
330	6.7	330	6.6	330	5.5	340	5.7	350	4.7	340	4.6	340	4.0	340	2.2	320	1.8	320	2.5	310	2.8	300	2.8	4.5	12
310	7.5	310	7.6	300	7.1	320	6.6	320	7.7	310	6.4	320	5.7	320	5.7	320	6.1	310	4.7	320	4.4	320	4.9	5.0	13
330	7.5	340	7.8	340	8.0	340	7.7	340	7.5	330	5.8	340	5.7	330	3.1	320	2.4	310	2.6	290	2.4	280	2.7	5.8	14
310	9.4	320	10.2	320	9.3	330	9.6	340	9.0	340	8.0	330	7.0	320	8.0	320	7.6	310	7.0	320	7.5	330	6.3	5.8	15
20	9.3	30	9.2	30	7.6	10	7.0	350	7.1	350	6.3	340	4.7	320	3.4	320	3.7	300	3.4	300	3.5	290	2.7	6.7	16
310	2.0	—	0.7	—	0.8	—	1.0	—	1.2	—	1.5	30	3.6	40	3.4	360	3.0	360	3.0	340	2.8	340	3.0	2.1	17
340	5.3	340	5.5	330	5.2	330	5.4	330	5.8	340	6.0	340	5.1	320	4.3	320	4.4	320	4.7	330	4.0	320	4.0	4.2	18
20	5.1	360	5.8	350	4.4	10	5.5	350	5.4	360	5.7	350	5.0	330	3.0	330	4.1	320	4.0	320	4.1	340	3.7	4.6	19
80	3.6	40	2.7	60	2.8	70	4.2	70	4.3	60	4.2	60	3.4	30	1.7	—	1.3	340	1.8	330	2.3	320	2.7	3.5	20
40	6.4	40	6.1	50	5.6	50	5.6	50	5.6	50	4.6	30	4.4	10	3.8	40	2.4	320	2.5	320	2.5	320	2.5	4.5	21
50	5.7	40	6.3	40	6.6	20	6.7	10	5.9	10	4.7	10	4.6	20	4.8	350	4.4	340	3.5	330	3.0	330	2.9	4.2	22
50	7.1	40	7.2	40	7.1	40	6.5	40	5.5	30	5.1	50	5.3	50	5.0	30	4.5	10	3.4	10	2.7	—	1.5	5.0	23
150	3.6	150	4.2	150	5.0	160	4.9	160	4.4	160	4.4	180	3.6	190	3.6	190	3.4	190	2.3	190	2.8	200	2.1	2.6	24
120	3.7	120	3.6	110	4.0	110	3.4	110	3.5	110	2.1	130	2.5	130	2.6	140	2.7	140	2.0	150	1.7	150	1.7	2.4	25
50	4.0	60	3.7	70	3.8	60	4.0	50	4.1	50	3.9	60	3.5	70	3.6	80	3.4	90	3.1	80	3.4	90	3.6	2.6	26
130	4.0	140	4.4	130	3.7	140	4.4	150	4.0	140	4.0	140	4.0	140	4.1	140	3.7	140	3.4	140	3.7	140	4.3	4.0	27
120	2.8	120	3.4	140	3.7	130	3.1	120	1.8	—	1.0	—	0.8	—	0.7	—	0.4	—	0.1	—	0.4	—	0.3	2.3	28
60	2.5	70	2.1	90	2.0	100	1.8	—	1.4	—	1.4	50	2.1	50	2.0	60	2.3	60	1.8	70	1.6	80	1.9	1.9	29
80	2.1	60	2.4	—	1.5	50	1.8	40	3.6	50	3.9	40	3.4	40	3.6	30	3.8	360	3.3	360	3.5	350	3.7	2.8	30
40	5.8	30	5.0	40	5.6	50	5.6	50	4.9	40	3.7	40	2.6	—	1.0	—	0.3	—	0.2	—	1.2	330	2.3	4.0	31
—	5.3	—	5.3	—	5.0	—	5.0	—	4.8	—	4.3	—	4.0	—	3.5	—	3.2	—	2.9	—	3.0	—	3.0	3.9	—

June, 1928.

°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°
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Direction expressed in degrees from North ( $E=90^\circ$ ,  $S=180^\circ$ ,  $W=270^\circ$ ,  $N=360^\circ$ ) : Speed in metres per second.

145. Aberdeen : Dines anemograph from Jan. 1926.

$H_a$  (Height of anemograph above M.S.L.) = Height of ground above

Hour. G.M.T.	1.		2.		3.		4.		5.		6.		7.		8.		9.		10.		11.		Noon.	
Day.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.
1	240	4.0	220	2.8	200	2.0	200	2.3	230	2.7	240	4.2	240	4.9	250	4.6	250	5.8	240	5.6	240	5.4	230	6.6
2	210	4.0	210	3.6	220	3.0	210	3.3	250	2.6	220	3.6	220	4.2	220	6.3	210	5.8	210	7.7	190	6.5	200	7.2
3	280	7.3	290	6.0	280	4.5	270	4.7	270	4.3	290	4.6	300	4.9	310	3.4	320	3.1	310	1.8	120	4.1	140	3.9
4	—	0.6	—	0.8	—	1.4	—	1.2	—	0.8	310	1.9	310	2.3	320	2.9	310	2.3	240	1.7	130	4.9	170	4.5
5	190	5.9	180	6.3	180	5.4	180	4.8	200	2.9	190	3.7	210	4.7	210	6.6	200	5.6	220	5.6	170	5.8	200	5.0
6	210	3.2	210	3.8	200	4.3	200	4.1	220	3.3	240	3.5	290	4.2	300	6.8	300	7.4	310	7.1	310	6.8	300	6.9
7	320	3.7	310	2.4	310	2.4	320	4.0	310	3.4	320	4.4	320	3.8	330	4.8	330	3.6	320	3.5	300	3.5	290	2.5
8	200	3.6	190	3.6	200	3.4	190	4.5	170	1.8	180	5.6	180	5.4	190	7.0	170	7.1	180	5.1	190	4.8	160	5.1
9	—	1.2	190	2.2	180	3.0	190	2.9	200	3.7	210	4.5	200	6.4	200	5.8	200	5.4	240	6.5	250	7.1	240	7.8
10	220	5.5	210	6.4	210	5.9	200	4.9	220	3.8	200	5.4	220	3.7	210	4.8	220	5.3	220	6.6	190	4.5	190	5.8
11	230	4.6	190	2.6	210	4.6	170	3.8	170	3.6	220	3.5	220	4.8	220	4.9	220	4.5	220	6.9	220	6.6	210	8.5
12	230	6.7	250	4.0	220	2.7	220	4.7	240	2.5	—	1.5	—	1.5	150	2.1	210	3.1	220	4.8	220	5.3	210	6.0
13	200	4.9	220	3.9	220	5.1	230	3.7	220	4.5	220	5.6	200	3.5	210	4.1	230	7.0	220	8.3	220	8.5	210	7.8
14	180	3.6	190	3.5	200	4.8	200	4.8	200	4.7	190	4.5	200	4.8	190	4.8	210	6.2	210	6.7	220	5.6	220	7.4
15	—	0.5	—	0.7	—	0.5	—	0.5	—	1.0	50	3.4	70	2.2	40	2.6	40	3.5	40	4.0	50	4.4	50	4.4
16	300	2.3	300	2.0	—	1.4	—	0.6	290	1.6	300	2.1	330	2.0	320	2.4	180	3.1	150	4.6	170	5.1	180	5.6
17	260	2.5	250	2.1	230	2.6	240	1.8	—	1.1	—	1.2	—	1.5	120	2.6	120	3.0	130	4.6	190	4.4	220	6.4
18	190	4.3	200	4.8	190	4.8	200	4.6	210	3.4	260	2.1	290	4.1	280	4.0	280	3.6	290	5.7	290	5.3	300	7.1
19	—	1.4	—	1.3	—	1.2	—	1.0	230	1.8	270	3.3	260	2.9	260	3.6	270	3.8	260	3.6	190	3.6	140	4.4
20	—	1.1	290	2.7	270	5.1	270	4.6	270	1.7	280	3.5	280	5.1	290	4.7	290	5.1	300	5.8	300	5.7	300	5.5
21	240	2.3	280	4.3	270	2.7	290	2.4	290	4.1	300	5.1	300	4.5	310	4.1	310	5.3	300	5.7	310	5.8	300	7.8
22	290	2.8	290	3.1	290	2.0	280	2.4	—	0.3	—	1.3	—	1.5	120	2.4	110	3.3	110	3.3	120	3.9	120	4.3
23	90	1.6	100	1.8	160	2.0	180	2.0	—	1.2	150	1.9	140	3.1	170	3.6	170	4.2	160	4.1	160	3.6	150	4.3
24	—	0.8	—	1.3	—	1.2	20	1.7	—	0.8	—	0.6	—	0.7	130	1.8	—	1.4	320	3.4	310	5.7	310	5.7
25	280	2.8	290	3.6	270	2.2	—	1.4	240	2.6	240	2.2	210	1.6	250	3.0	200	2.8	190	4.6	260	4.3	260	4.6
26	230	3.8	200	3.1	220	3.4	260	4.2	270	6.6	260	4.1	270	5.2	270	4.2	280	6.5	280	5.0	290	3.6	280	6.0
27	70	2.0	60	2.1	60	2.4	70	3.2	60	5.4	50	5.8	40	5.6	30	6.7	30	6.6	30	6.7	20	6.7	20	6.8
28	300	4.5	310	4.5	310	4.2	300	3.8	300	3.4	300	3.8	310	4.7	310	5.7	310	5.4	320	4.8	320	4.2	320	4.6
29	300	2.4	300	2.4	290	3.6	290	3.4	290	2.6	300	2.8	300	3.2	300	2.9	310	3.2	—	1.5	150	2.7	140	3.3
30	250	3.6	250	4.0	270	6.6	280	7.0	270	5.5	290	8.2	290	7.3	300	6.3	310	5.5	300	5.9	300	5.8	300	5.8
31	290	2.2	300	2.2	—	1.4	280	2.4	290	3.4	290	4.4	290	5.5	300	6.3	310	6.4	310	6.3	300	5.9	310	5.2
Mean ...	—	3.2	—	3.2	—	3.2	—	3.2	—	2.9	—	3.6	—	3.9	—	4.4	—	4.7	—	5.1	—	5.2	—	5.7

146. Aberdeen :  $H_a=8$  metres + 13 metres.

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.
Day.	m/s.	m/s.	m/s.	m/s.	m/s.	m/s.	m/s.	m/s.	m/s.	m/s.	m/s.	m/s.
1	300	2.0	300	2.3	290	2.6	290	3.3	290	3.8	290	3.3
2	280	1.7	270	1.8	240	1.7	220	1.6	—	1.4	—	0.5
3	190	1.7	—	0.8	170	2.0	—	1.4	—	1.5	—	1.1
4	—	0.1	—	0.3	290	1.6	280	2.0	300	3.0	310	2.9
5	—	0.7	—	0.3	—	1.0	—	0.7	—	0.6	—	0.6
6	150	3.0	160	2.7	160	1.6	—	1.2	—	0.1	—	0.3
7	190	5.6	190	5.6	180	4.2	160	3.4	180	4.1	150	3.8
8	190	2.7	220	3.3	220	3.4	210	3.1	200	2.8	200	2.5
9	230	3.5	250	4.9	240	3.7	220	2.5	—	1.3	220	2.8
10	230	1.7	—	1.0	260	2.6	270	3.4	—	1.3	240	3.4
11	70	2.8	80	3.0	80	3.6	80	3.8	70	3.8	100	3.9
12	100	3.7	80	2.5	100	2.4	90	5.2	90	5.7	110	5.1
13	200	3.3	190	3.0	180	2.6	200	3.1	190	2.3	190	2.6
14	170	4.9	170	5.6	180	5.0	170	4.9	180	4.6	190	5.1
15	—	0.6	—	1.0	—	1.3	260	2.1	—	1.0	—	0.4
16	290	3.4	300	5.8	290	5.3	270	4.1	280	4.3	290	4.8
17	300	5.3	310	5.4	310	5.6	310	4.8	320	3.9	310	3.6
18	—	0.7	—	0.5	—	0.8	—	0.3	—	0.5	—	1.1
19	140	3.3	140	3.4	140	3.1	140	2.8	140	3.0	130	3.0
20	110	4.9	120	4.8	100	6.2	100	6.9	100	7.2	110	7.9
21	20	9.5	20	9.6	10	8.6	10	8.7	10	8.5	10	8.4
22	20	5.9	20	6.0	20	5.7	20	5.4	20	5.4	20	5.7
23	180	2.1	180	2.4	180	1.7	—	1.4	150	1.9	150	3.2
24	190	3.0	190	2.4	170	2.2	180	2.8	190	3.6	200	3.6
25	—	1.2	—	1.1	270	1.8	280	2.5	—	1.5	—	1.5
26	40	2.0	—	1.5	60	1.9	—	1.4	—	0.5	—	0.8
27	60	7.0	70	7.3	70	7.4	50	6.3	40	5.5	50	6.5
28	300	3.7	310	3.4	320	2.5	320	2.0	310	2.0	310	2.2
29	20	2.0	20	1.8	20	2.1	10	2.2	10	2.7	10	3.4
30	330	4.1	340	4.1	330	3.9	330	3.2	340	3.6	340	3.8
31	290	2.0	290	1.8	290	1.7	—	1.0	—	0.9	—	0.8
Mean ...	—	3.2	—	3.2	—	3.2	—	3.1	—	3.0	—	3.2



**July, 1928.**

**August, 1928.**

[illegible]



Direction expressed in degrees from North. ( $E = 90^\circ$ ,  $S = 180^\circ$ ,  $W = 270^\circ$ ,  $N = 360^\circ$ ) : Speed in metres per second.

147. Aberdeen : Dines anemograph from Jan. 1926.

$H_a$  (height of anemograph above M.S.L.) = Height of ground above

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.
Day.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.
1	290	2.2	290	3.1	300	2.8	300	2.2	290	2.6	290	2.8
2	—	0.4	—	0.3	—	0.7	—	0.5	—	1.1	210	2.5
3	200	4.2	190	4.7	180	5.0	200	4.0	190	5.1	180	4.4
4	—	1.5	280	1.7	—	1.1	300	2.3	310	1.8	—	0.7
5	310	2.4	310	2.2	—	1.5	320	1.7	330	2.0	340	2.0
6	300	2.1	300	3.4	310	4.2	320	5.4	320	5.8	320	6.1
7	220	2.4	190	3.0	200	3.4	180	2.7	190	2.6	180	4.2
8	200	6.3	180	4.2	180	4.7	190	3.9	190	3.5	190	2.4
9	—	0.4	—	0.3	—	0.4	—	0.3	—	0.8	—	1.4
10	180	7.1	190	6.8	210	5.3	210	4.5	220	5.1	210	6.7
11	290	3.3	300	3.8	290	5.5	290	3.4	290	3.6	290	3.6
12	—	1.4	—	0.6	—	1.2	—	1.4	—	1.4	—	2.1
13	240	2.1	—	0.2	—	0.6	—	0.6	—	0.9	—	0.9
14	200	3.4	210	3.4	190	3.8	210	2.5	200	3.7	200	3.1
15	310	3.6	310	3.6	310	4.4	320	3.5	320	2.8	300	3.4
16	210	3.5	210	3.6	210	3.4	200	2.8	200	2.9	200	4.1
17	220	4.5	220	4.1	190	3.8	190	4.3	200	3.9	180	3.0
18	210	5.6	210	4.8	210	4.4	220	4.4	240	3.0	200	2.4
19	250	2.0	260	1.7	—	1.5	—	0.5	—	0.8	—	0.9
20	—	1.0	280	3.0	270	3.4	270	4.5	270	5.0	250	3.0
21	300	3.9	300	3.8	290	3.6	280	2.6	280	3.2	290	3.6
22	300	4.1	300	4.3	310	4.5	310	4.5	300	4.4	300	4.4
23	290	4.2	290	4.5	290	4.5	290	4.2	280	3.0	290	4.0
24	310	3.5	320	4.1	300	3.5	310	3.6	320	3.6	320	2.9
25	340	4.7	330	4.4	310	3.6	310	4.4	320	4.5	320	4.5
26	300	3.4	300	3.8	300	3.8	300	4.8	300	4.8	300	4.1
27	250	1.7	—	1.4	—	1.2	—	1.4	—	1.5	290	1.7
28	40	10.0	40	9.9	30	9.5	20	8.2	20	7.4	20	7.0
29	300	4.0	300	4.0	290	4.3	290	3.8	290	3.6	290	3.6
30	310	3.9	310	4.8	310	5.1	310	5.7	310	5.5	320	5.5
Mean ...	—	3.4	—	3.5	—	3.5	—	3.3	—	3.3	—	3.3

148. Aberdeen :  $H_a = 8$  metres + 13 metres.

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.
Day.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.
1	290	3.8	290	4.0	280	3.5	280	3.4	270	2.5	290	2.7
2	300	2.6	310	4.1	310	3.3	300	3.5	290	3.4	290	2.7
3	230	2.1	240	1.6	—	1.4	270	1.7	280	3.0	280	2.6
4	230	1.6	—	0.9	—	0.6	—	0.7	—	1.4	200	1.7
5	160	7.7	160	7.0	160	7.2	160	7.1	160	6.9	160	7.0
6	180	3.9	190	3.7	190	3.1	200	3.1	210	2.0	210	2.5
7	—	0.9	—	1.1	—	1.3	200	3.1	200	2.8	—	1.2
8	180	4.6	180	5.0	190	3.7	200	3.0	190	4.0	130	2.4
9	250	2.6	—	1.5	—	1.2	260	2.3	270	1.8	280	1.9
10	330	4.2	330	4.4	330	4.5	310	4.0	300	2.5	300	3.4
11	290	3.2	280	2.6	300	2.1	90	6.0	90	6.9	100	8.0
12	120	6.4	120	5.7	120	5.6	110	5.4	100	5.3	100	4.5
13	290	3.4	290	4.1	310	4.4	310	4.2	310	4.9	310	5.0
14	280	3.4	280	3.2	280	2.6	280	1.6	—	1.5	—	1.5
15	160	4.2	160	3.8	170	3.7	190	3.0	180	2.7	170	2.6
16	190	4.1	190	3.8	190	4.1	190	4.0	180	5.5	190	5.2
17	290	4.6	300	3.8	280	3.5	270	2.1	—	1.5	230	2.4
18	200	2.0	200	2.0	190	2.4	180	2.7	180	3.3	190	3.8
19	210	8.6	220	8.5	220	8.2	230	7.4	240	4.9	210	3.6
20	140	15.5	150	15.0	170	11.0	170	12.5	180	14.3	190	13.5
21	210	5.0	160	3.0	—	1.5	190	2.4	200	3.3	210	3.0
22	230	2.1	—	1.4	260	1.7	—	1.4	—	0.8	—	1.4
23	280	1.8	260	1.8	280	1.9	—	0.8	—	0.7	—	0.9
24	180	7.0	190	7.5	190	5.6	180	4.3	180	4.4	180	5.9
25	200	6.8	210	6.6	210	6.2	210	4.4	210	5.4	220	5.0
26	210	5.2	210	3.6	230	2.1	220	1.6	180	3.2	170	6.1
27	100	5.4	90	5.5	90	5.4	80	4.5	80	3.4	40	2.0
28	310	4.5	290	4.5	290	3.5	290	4.4	280	4.4	280	4.2
29	290	2.5	300	3.4	300	3.5	270	2.1	270	2.5	260	2.1
30	180	4.1	170	4.8	180	3.5	190	2.6	200	2.0	210	2.5
31	190	1.8	—	1.0	—	1.0	290	1.7	310	3.3	300	3.0
Mean ...	—	4.4	—	4.2	—	3.7	—	3.6	—	3.7	—	3.7



Averages for periods of sixty minutes centred at the exact hours, Greenwich Mean Time.

M.S.L. +  $h_a$  (height of anemograph above ground) = 8 metres + 13 metres.

September, 1928.

13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean	Day.
°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.
120	4.6	130	4.5	130	4.0	120	3.7	130	3.5	140	2.6	150	2.2
170	5.8	170	6.0	180	6.4	190	5.8	190	5.5	200	5.4	200	4.6
220	5.2	20	4.3	40	4.0	70	2.2	—	0.8	—	0.2	—	1.2
200	4.1	180	3.5	170	3.7	150	4.0	—	1.5	100	2.5	70	2.5
40	3.8	40	4.0	40	4.4	40	4.6	40	4.5	40	4.0	30	3.8
300	4.4	310	5.4	300	3.7	120	3.4	170	2.6	—	1.2	170	1.8
180	5.9	190	6.0	180	7.0	180	6.4	180	6.7	180	6.9	180	7.0
170	5.8	180	6.0	190	5.8	190	4.9	200	4.2	200	4.0	200	3.5
210	6.3	220	6.5	210	5.5	200	4.5	190	4.1	190	4.5	210	4.6
240	5.4	240	4.5	250	5.0	250	3.0	240	3.5	240	2.1	200	2.1
300	3.8	300	3.4	290	2.1	150	3.5	180	2.4	200	2.0	—	0.7
210	4.5	180	5.0	190	4.9	200	4.6	210	4.5	210	3.5	220	3.2
180	5.4	180	5.8	180	5.9	190	5.0	210	4.5	190	3.9	200	3.3
170	8.0	160	7.1	170	5.1	180	5.5	180	4.9	190	3.6	200	4.3
50	3.4	70	2.6	90	3.2	100	3.2	130	2.8	160	1.8	190	2.1
220	5.0	210	6.4	210	5.4	190	4.4	190	4.7	190	4.1	200	4.3
180	5.6	180	4.3	200	4.4	190	4.5	190	4.7	190	5.6	180	5.4
260	4.1	280	4.0	270	3.0	300	2.8	—	1.1	280	3.0	260	2.8
290	4.8	280	3.1	270	3.3	290	3.5	280	3.6	280	2.2	290	1.8
320	5.6	310	5.3	310	4.8	310	4.1	320	3.0	290	2.5	270	2.0
10	3.4	40	4.0	20	5.0	350	5.6	360	4.6	340	3.0	310	2.9
350	5.7	350	5.3	350	5.8	340	4.2	340	3.3	340	2.9	320	2.6
280	5.4	280	4.9	290	6.1	290	6.5	300	7.7	300	7.6	310	6.4
330	6.2	330	6.2	330	6.4	340	5.8	340	5.6	340	5.5	330	5.2
340	5.4	330	4.7	340	5.1	340	4.6	340	4.9	320	3.9	320	3.3
310	3.7	300	3.6	300	3.2	310	2.1	—	1.2	—	1.0	—	0.8
250	1.9	170	3.1	190	3.4	210	2.5	—	1.4	—	1.3	330	1.8
30	7.8	30	7.9	20	7.4	10	6.4	360	5.1	340	4.5	330	4.4
300	4.1	300	4.4	310	5.3	300	4.1	300	2.9	320	3.4	300	3.2
320	7.7	330	8.4	320	8.0	320	6.7	320	5.9	320	5.6	320	6.2
—	5.1	—	5.0	—	4.9	—	4.4	—	3.9	—	3.5	—	3.3
—	—	—	—	—	—	—	—	—	—	—	—	—	—

October, 1928.

270	m/s. 6.1	270	m/s. 6.0	280	m/s. 5.5	280	m/s. 4.8	300	m/s. 2.8	310	m/s. 3.4	310	m/s. 6.2	310	m/s. 6.1	310	m/s. 4.2	300	m/s. 4.5	310	m/s. 4.7	310	m/s. 2.6	4.0	1
340	4.1	330	3.0	350	3.0	350	3.6	360	1.8	—	0.6	—	1.1	280	1.7	290	2.0	280	2.1	260	1.6	—	1.5	3.0	2
270	2.1	210	2.5	200	3.5	200	2.9	210	2.1	—	1.5	—	1.1	—	1.2	—	1.3	—	1.2	—	1.0	240	2.1	1.9	3
170	6.7	170	5.9	160	6.0	140	5.8	150	6.1	150	5.4	140	7.4	150	7.6	160	6.7	160	7.0	160	7.2	160	6.6	4.9	4
140	7.5	150	7.2	150	7.1	160	6.7	160	6.4	160	6.1	160	6.1	150	6.8	170	5.1	180	4.1	190	2.7	190	3.9	6.5	5
340	2.1	240	1.7	270	2.0	260	3.4	260	2.3	270	1.6	260	3.4	260	2.6	250	3.8	230	2.7	230	3.1	230	2.1	2.6	6
180	5.3	170	5.5	190	4.7	190	4.6	190	5.0	170	2.8	210	5.6	180	3.1	210	3.0	230	2.8	210	3.1	210	5.0	3.3	7
230	4.7	210	5.3	220	5.0	220	4.3	230	3.6	230	4.2	230	3.6	220	4.0	220	3.3	230	3.0	230	2.7	220	3.1	4.0	8
—	1.4	360	2.0	—	1.4	20	1.7	10	3.4	20	8.0	20	8.7	360	6.6	10	6.5	350	5.7	340	4.2	330	4.4	3.0	9
40	3.3	20	4.4	10	4.4	10	3.3	340	2.0	340	2.5	310	2.6	310	2.8	310	3.3	290	2.3	300	1.6	290	2.6	3.4	10
80	8.5	80	8.4	80	8.0	80	7.1	80	7.0	90	5.8	110	5.4	100	5.6	110	5.0	110	6.7	120	5.1	130	4.5	6.8	11
100	1.7	—	1.4	—	1.0	—	1.5	340	2.3	280	1.7	280	2.5	290	2.6	290	3.0	290	3.5	290	3.4	290	3.0	3.2	12
360	4.6	20	4.9	20	3.9	10	3.6	320	1.8	300	2.1	300	2.9	300	3.3	290	2.8	290	2.6	290	3.4	290	3.0	4.1	13
180	5.0	170	6.6	170	6.6	170	5.5	170	4.8	170	5.1	170	5.2	170	4.6	160	5.3	170	4.2	170	4.2	170	4.1	3.9	14
140	5.0	160	4.3	180	3.9	190	3.6	190	3.5	190	3.0	200	3.4	200	3.5	190	3.4	190	3.3	200	3.0	200	3.9	3.6	15
190	4.8	180	4.1	200	4.0	200	4.4	210	5.3	200	4.7	200	4.7	190	5.6	180	5.0	180	4.1	170	2.1	270	2.2	4.8	16
200	4.2	200	3.8	200	3.5	200	3.4	200	3.4	200	2.7	210	2.6	220	2.5	210	3.0	200	3.3	200	2.6	200	2.7	3.0	17
170	9.4	170	8.2	160	9.1	160	10.5	170	9.2	190	5.6	270	4.2	240	3.7	230	4.6	220	5.6	210	7.1	210	7.8	5.7	18
220	4.5	220	6.2	220	4.4	220	4.8	200	2.7	200	3.0	190	3.6	170	6.1	160	6.3	150	9.4	140	10.5	140	12.8	5.9	19
220	11.4	210	9.7	210	9.3	210	8.0	210	7.6	220	6.7	210	6.5	220	5.2	220	6.1	230	5.0	210	6.5	210	5.9	10.4	20
180	5.3	180	4.8	180	4.6	170	4.5	170	4.5	240	1.7	310	2.0	250	1.6	270	2.0	250	3.1	240	2.8	240	2.5	3.6	21
300	2.2	300	1.7	290	2.1	250	1.9	260	2.0	—	1.0	250	2.0	—	1.4	250	1.6	240	1.6	250	2.6	280	1.8	1.8	22
180	5.9	180	6.2	170	7.1	160	7.0	160	7.5	160	8.5	170	7.9	170	8.8	170	9.4	190	8.0	190	7.8	190	6.5	4.8	23
180	9.0	190	8.6	190	6.8	190	6.0	190	6.9	180	5.5	190	7.1	210	8.0	230	5.6	220	3.5	200	3.5	200	6.1	6.6	24
220	5.8	220	4.8	220	6.1	230	7.0	220	5.6	210	5.2	210	4.7	210	5.4	220	4.3	210	4.6	200	4.1	200	4.0	5.7	25
160	7.6	160	7.6	150	8.1	150	9.0	150	8.3	140	8.4	140	8.5	130	7.6	120	7.4	120	7.4	110	6.2	100	5.6	6.6	26
50	2.5	50	2.2	40	1.6	—	1.1	—	0.5	—	1.1	—	1.3	—	0.8	300	3.1	300	3.9	300	4.8	300	3.9	2.9	27
300	5.8	310	6.1	300	4.3	310	4.1	300	3.4	290	2.5	290	3.6	280	4.4	300	3.8	290	3.6	280	3.0	260	2.1	4.2	28
180	2.0	190	2.9	220	2.1	200	2.4	190	2.1	180	2.5	160	4.3	160	5.6	160	5.8	160	5.2	180	4.6	190	4.1	3.1	29
200	5.1	190	5.1	190	4.6	190	5.3	190	5.5	180	5.0	190	3.7	190	4.6	180	4.6	190	4.1	180	3.4	190	3.1	4.0	30
340	8.9	340	9.5	340	8.6	340	8.2	350	9.1	340	8.7	350	9.4	350	8.8	350	8.4	350	8.8	350	8.5	340	8.7	6.4	31
—	5.2	—	5.2	—	4.9	—	4.8	—	4.5	—	4.1	—	4.6	—	4.6	—	4.5	—	4.4	—	4.2	—	4.3	4.4	
13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean	Day.												



Direction expressed in degrees from North. ( $E=90^\circ$ ,  $S=180^\circ$ ,  $W=270^\circ$ ,  $N=360^\circ$ ) : Speed in metres per second.

149. Aberdeen : Dines anemograph from Jan. 1926.

$H_a$  (height of anemograph above M.S.L.) = Height of ground above

Hour. G.M.T.	1.		2.		3.		4.		5.		6.		7.		8.		9.		10.		11.		Noon.	
Day.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.
1	340	8.4	340	7.4	350	6.6	360	5.8	350	5.8	340	6.0	340	5.2	340	4.7	340	5.3	340	6.3	340	7.4	350	7.8
2	330	5.7	330	5.4	350	5.7	350	7.0	350	6.0	350	6.7	340	5.8	340	5.0	340	5.0	360	5.1	340	5.7	340	5.8
3	10	3.6	310	3.5	320	3.2	320	3.1	340	3.6	10	4.0	40	6.6	70	5.4	60	3.2	300	2.5	300	2.3	40	4.1
4	10	7.2	10	6.7	360	5.4	350	5.4	340	5.5	340	4.6	30	5.6	70	8.2	80	8.2	7.1	90	7.0	90	7.5	
5	160	4.2	150	4.8	140	4.2	140	3.7	150	2.6	150	2.0	300	2.1	300	2.5	310	2.5	—	1.4	90	3.0	80	3.4
6	110	4.1	110	3.5	110	2.6	80	2.1	330	1.7	—	1.5	300	2.8	300	3.3	300	2.8	310	2.6	320	2.8	340	3.0
7	340	3.8	350	3.5	340	4.2	330	3.4	320	3.1	340	4.1	330	2.9	300	3.2	300	2.5	310	2.5	300	2.9	320	2.6
8	300	4.6	300	4.4	300	4.2	300	4.1	300	4.1	300	3.9	300	3.9	300	4.5	300	4.5	300	4.2	300	4.2	300	3.5
9	280	2.5	280	3.0	280	2.6	280	2.8	280	2.3	290	2.4	290	1.9	280	2.0	270	2.0	260	2.0	270	2.0	250	2.1
10	220	6.2	210	6.2	210	5.3	210	6.1	220	5.5	230	6.8	220	6.0	190	4.5	200	5.7	200	5.8	200	5.9	200	5.6
11	—	1.5	290	3.2	290	2.5	—	1.5	—	1.2	—	1.4	230	3.3	230	3.1	190	2.0	190	3.1	190	3.4	190	4.1
12	190	3.2	190	3.6	200	3.5	190	4.1	200	4.0	200	4.4	200	4.6	210	5.2	190	3.0	170	2.6	170	4.5	170	6.1
13	220	4.3	210	5.6	200	5.5	200	5.8	200	5.8	200	3.1	210	3.8	220	3.2	220	3.0	220	5.3	210	4.8	220	5.9
14	210	4.1	200	4.5	180	2.8	160	2.6	170	2.8	200	3.4	160	2.0	220	3.7	210	3.2	200	3.5	220	5.8	210	4.5
15	150	9.5	140	9.7	150	7.6	180	5.2	200	4.6	190	4.7	190	5.5	220	3.5	200	3.6	230	3.2	210	3.4	220	3.1
16	280	6.1	280	7.4	280	5.7	270	6.0	210	3.6	220	2.6	220	3.5	220	3.5	220	2.9	230	2.6	250	2.6	300	1.8
17	—	1.4	200	2.2	190	2.8	190	2.5	220	3.6	230	3.2	270	4.8	270	5.8	270	5.4	240	5.3	280	8.5	280	9.7
18	290	5.9	290	6.6	280	5.6	280	6.6	270	7.1	290	6.8	280	6.5	290	8.3	280	6.6	290	7.3	260	6.4	260	5.1
19	180	3.3	180	3.6	170	3.2	170	4.5	170	6.1	160	7.5	170	8.0	170	7.3	170	6.5	180	5.8	190	5.1	170	6.0
20	210	7.3	210	7.1	210	7.6	210	7.2	200	9.1	200	8.0	230	7.7	230	7.0	220	4.8	200	6.3	220	7.2	230	7.2
21	180	2.1	—	1.4	—	1.5	—	0.5	—	0.8	—	0.5	—	1.5	160	4.5	160	5.5	160	5.8	150	8.0	150	9.0
22	220	3.9	220	2.1	220	1.6	220	3.4	200	3.4	200	4.7	190	4.0	190	5.1	210	6.6	210	6.7	210	5.9	210	3.1
23	200	4.5	180	2.5	190	2.2	170	3.3	190	4.1	200	4.2	210	5.5	200	4.5	190	4.5	190	4.2	150	6.6	130	11.0
24	290	10.2	300	10.1	310	10.4	300	9.5	290	9.0	290	7.6	290	6.1	290	6.6	280	7.1	280	7.3	290	7.5	300	8.7
25	190	3.0	210	4.9	200	4.6	190	4.8	180	3.5	220	5.8	270	7.2	270	7.9	270	8.0	270	9.3	280	8.6	300	11.6
26	300	8.1	310	7.8	300	8.2	300	8.6	300	9.0	310	9.0	300	8.9	300	8.6	310	8.2	300	8.7	290	8.1	290	7.1
27	260	2.4	290	3.8	290	3.1	300	5.1	300	5.6	310	5.8	310	6.0	290	4.9	290	4.9	300	7.0	300	6.4	300	6.2
28	310	7.4	310	7.0	310	7.0	310	7.3	300	5.6	310	5.4	300	5.1	310	5.3	300	5.0	310	5.1	310	5.4	300	6.0
29	230	2.6	210	2.5	220	2.5	230	2.2	230	1.8	220	2.2	—	1.5	210	2.6	220	3.0	—	0.6	—	1.4	300	3.6
30	270	5.4	280	5.7	290	7.8	290	7.5	290	6.9	300	6.0	300	6.4	310	5.3	310	4.3	300	2.1	—	1.3	300	1.6
Mean ...	—	4.9	—	5.0	—	4.7	—	4.7	—	4.6	—	4.6	—	4.8	—	5.0	—	4.7	—	4.7	—	5.1	—	5.6

150. Aberdeen :  $H_a=8$  metres + 13 metres.

	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.
1	260	4.3	250	2.0	280	5.2	260	3.2	270	2.1	300	6.8	310	5.9	300	7.6	310	6.5	310	7.1	300	8.1	300	9.0
2	260	2.0	260	1.9	250	2.3	280	2.9	280	2.0	280	2.1	260	1.9	240	2.1	230	2.7	220	2.5	200	1.8	220	2.0
3	310	3.4	300	4.9	290	4.6	290	3.5	280	4.4	270	4.4	240	1.7	—	1.4	230	3.2	230	2.4	250	3.0	240	2.5
4	210	2.8	210	3.1	210	3.6	200	4.4	200	5.6	200	3.9	220	3.4	210	5.9	200	6.6	200	5.3	210	4.5	210	6.5
5	220	7.4	210	6.5	210	5.0	230	4.2	250	3.4	250	6.2	240	4.7	250	4.6	260	7.1	280	9.0	280	9.7	280	8.4
6	220	2.1	230	3.3	240	2.0	230	2.6	230	3.0	220	3.4	200	3.5	200	4.4	200	4.1	200	5.1	200	6.4	200	6.5
7	250	6.9	280	8.1	300	10.6	310	10.0	310	11.6	310	12.4	310	12.2	310	12.5	290	7.7	280	7.9	290	9.0	280	8.0
8	300	7.5	310	6.8	310	8.0	300	7.6	300	6.4	290	7.3	290	7.1	300	8.0	300	8.9	300	8.8	300	8.6	290	7.4
9	280	4.7	280	3.3	280	1.8	—	1.4	—	1.5	230	1.9	230	1.9	230	1.7	220	3.0	210	4.6	210	5.5	210	5.9
10	200	7.0	190	6.6	190	7.5	180	8.0	180	8.5	180	7.6	170	7.5	170	7.1	170	7.8	170	8.7	180	8.2	170	7.8
11	150	9.6	160	9.1	140	10.7	140	11.2	140	10.4	140	9.3	140	9.0	140	9.1	130	10.6	120	10.4	120	10.6	120	11.5
12	110	11.9	120	10.6	100	10.2	110	11.1	100	9.6	110	10.5	120	8.4	110	9.0	110	9.0	100	9.8	120	7.9	100	8.7
13	100	8.6	100	10.6	110	9.2	120	7.4	110	7.4	130	6.7	110	9.4	110	9.8	110	8.4	130	7.2	100	9.2	100	8.4
14	90	8.0	90	6.3	90	6.0	90	4.1	60	1.9	300	2.1	300	2.5	330	2.0	310	2.3	290	1.8	300	2.1	310	1.6
15	290	2.5	300	3.0	290	2.1	280	1.8	280	1.7	300	2.5	270	2.1	170	3.4	140	7.5	140	6.9	150	7.0	150	6.6
16	180	7.2	180	7.8	180	8.5	180	9.6	180	9.3	180	8.9	170	9.8	160	11.9	170	12.5	170	12.0	170	11.0	170	11.3
17	290	5.0	280	4.6	280	2.6	280	3.0	280	3.1	250	2.1	270	3.4	250	2.3	280	2.9	280	4.1	290	5.4	300	5.3
18	280	3.8	260	2.1	270	1.6	270	1.7	270	1.7	—	0.6	—	0.8	210	1.8	200	2.2	200	2.7	190	4.4	190	4.5
19	210	5.8	210	4.5	200	5.2	200	4.5	210	1.6	—	1.5	—	0.6	—	1.5	—	0.6	—	0.5	—	1.4	210	2.4
20	310	4.6	310	4.6	310	6.3	300	5.2	310	5.6	300	4.9	300	4.6	300	5.5	300	4.7	300	5.5	310	6.5	310	6.0
21	—	1.1	260	1.6	250	1.7	270	2.0	250	1.6	230	2.4	—	1.4	—	0.6	—	0.6	—	1.1	—	1.4	—	1.0
22	—	1.0	290	1.7	280	2.4	280	2.2	250	1.6	220	2.7	200	2.7	190	3.0	190	2.5	200	4.2	190	3.8	200	6.7
23	300	4.6	290	3.4	—	1.0	200	1.7	230	2.6	240	2.7	230	2.7	210	3.6	210	2.5	190	2.2	190	3.5	200	5.6
24	190	7.1	190	6.2	190	7.7	180	6.2	170	4.1	170	2.5	180	3.8	170	2.9	190	2.8	210	4.8	260	3.6	340	2.5
25	240	4.2	260	5.8	260	5.9	260	2.2	270	3.6	150	1.7	—	1.3	240	2.8	—	1.5	230	6.2	220	6.6	230	7.2
26	300	4.0	300	7.6	300	8.5	300	9.5	300	8.9	290	6.9	250	3.5	270	4.6	250	3.6	190	2.4	230	3.5	240	3.7
27	280	7.9	280	8.7	290	9.5	290	8.2	300	7.8	290	7.8	280	6.9	290	6.9	290	6.1	280	4.7	280	3.9	270	



**November, 1928.**

**December and Year, 1928.**

[illegible]



## HIGHEST INSTANTANEOUS WIND SPEED RECORDED EACH DAY BY THE DINES TUBE ANEMOGRAPH.

151. Aberdeen: Ha=8 metres+13 metres.

1928.

Month	Jan.		Feb.		Mar.		April		May		June		July		Aug.		Sept.		Oct.		Nov.		Dec.	
Day.	Max. in a Gust.	Time of Gust.	Max. in a Gust.	Time of Gust.	Max. in a Gust.	Time of Gust.	Max. in a Gust.	Time of Gust.	Max. in a Gust.	Time of Gust.	Max. in a Gust.	Time of Gust.	Max. in a Gust.	Time of Gust.	Max. in a Gust.	Time of Gust.	Max. in a Gust.	Time of Gust.	Max. in a Gust.	Time of Gust.	Max. in a Gust.	Time of Gust.	Max. in a Gust.	Time of Gust.
1	m/s. 26	h. m. 23 20	m/s. 18	h. m. 14 50	m/s. 16	h. m. 7 5	m/s. 8	h. m. 10 55	m/s. 7	h. m. 13 30	m/s. 7	h. m. 16 15	m/s. 12	h. m. 13 15	m/s. 8	h. m. 10 45	m/s. 6	h. m. 13 10	m/s. 12	h. m. 19 0	m/s. 14	h. m. 0 30	m/s. 15	h. m. 11 45
2	22	0 5	14	12 25	8	1 10	14	21 50	6	15 30	6	12 50	18	15 35	10	14 10	10	15 5	9	10 10	12	15 5	11	23 55
3	8	23 40	15	11 20	4	5 20	14	11 25	8	20 50	8	21 40	12	0 40	7	15 5	11	8 40	6	15 20	13	19 10	9	2 0
4	20	15 5	16	9 0	5	11 50	11	14 30	7	17 35	13	15 0	11	18 30	5	15 25	7	12 10	12	11 20	15	17 30	18	22 30
5	17	8 5	15	16 45	12	22 20	10	17 15	6	14 55	8	15 0	12	17 10	7	15 45	6	17 5	12	3 5	10	16 25	17	10 15
6	23	12 40	14	24 0	13	13 20	11	13 10	9	23 45	9	19 50	14	19 5	9	17 10	12	8 10	8	15 15	6	14 5	18	20 45
7	13	8 15	20	4 10	11	18 0	13	18 35	13	8 0	7	23 10	9	21 40	14	17 40	13	22 0	11	13 35	7	3 20	22	6 20
8	21	2 0	23	23 50	11	5 20	13	13 45	16	9 30	10	10 15	13	8 30	15	11 50	12	1 30	11	11 35	6	1 25	16	11 20
9	13	10 5	26	12 20	17	15 40	13	16 10	18	10 30	14	12 5	13	14 35	14	11 20	13	23 15	13	19 10	11	22 50	16	23 35
10	24	13 20	23	13 5	19	10 25	10	17 10	6	14 30	15	20 15	13	9 35	9	9 30	13	0 15	8	0 30	11	6 0	18	18 5
11	16	2 15	13	14 35	18	3 5	6	21 50	12	16 5	16	9 25	17	12 25	6	23 0	9	8 55	14	10 55	13	15 30	18	13 50
12	18	12 40	14	15 5	19	19 0	13	23 40	*	*	12	14 50	12	11 55	11	16 40	8	15 55	9	0 50	16	18 30	19	7 0
13	16	11 5	8	23 25	12	1 20	18	9 35	15	17 15	8	22 5	17	10 0	12	8 15	9	13 40	10	8 10	11	12 45	16	3 15
14	13	16 35	13	13 0	12	23 5	17	7 5	14	13 5	12	12 15	19	16 0	12	10 15	13	12 35	12	14 35	13	23 30	11	1 0
15	13	11 50	24	18 30	17	10 5	14	0 20	18	12 55	13	13 5	9	16 40	9	10 50	8	8 10	8	12 15	16	1 45	11	24 0
16	17	23 40	11	15 40	15	21 35	13	18 30	14	7 15	18	11 25	10	18 40	11	12 55	11	14 5	12	7 40	13	2 20	21	9 30
17	16	0 35	23	14 30	17	10 40	21	9 35	7	9 25	13	13 10	11	14 50	10	10 55	16	22 30	9	2 50	19	13 50	11	14 55
18	24	21 40	11	15 40	13	15 25	19	11 0	10	15 25	11	0 20	13	12 5	7	14 35	10	1 40	18	15 10	15	8 0	13	23 20
19	18	1 30	9	5 5	16	23 25	18	13 25	10	14 10	9	9 55	7	13 25	8	10 30	10	14 0	19	24 0	15	14 10	11	0 20
20	19	6 40	12	12 50	19	19 0	16	10 5	10	7 30	9	9 45	10	10 15	12	10 15	11	10 0	27	9 25	16	7 30	10	3 10
21	18	10 40	13	12 35	21	12 30	9	3 5	9	11 25	10	13 25	13	11 40	14	8 45	10	12 0	11	0 5	15	11 20	4	11 40
22	7	14 5	11	11 20	12	0 15	10	9 10	10	16 30	15	15 0	7	13 15	9	5 55	10	12 10	4	10 35	13	8 35	14	18 25
23	18	19 5	9	18 10	10	16 35	11	10 55	10	14 30	14	13 30	6	8 55	9	15 10	14	17 50	17	19 50	22	13 50	18	14 50
24	15	22 40	14	9 0	12	12 35	16	11 35	7	15 40	14	16 15	10	10 45	9	9 0	13	13 35	17	19 50	18	1 35	12	16 20
25	18	21 10	10	3 30	6	2 10	13	8 55	5	14 35	9	14 30	13	14 50	9	14 55	10	10 55	15	11 45	19	11 40	16	12 55
26	17	12 20	7	20 5	6	12 5	7	16 35	5	16 50	15	16 40	13	5 0	8	23 55	9	9 10	14	9 20	17	0 15	17	4 35
27	18	12 25	7	12 10	9	16 5	10	11 0	7	19 40	14	1 55	10	8 20	10	2 25	15	22 40	8	23 20	16	19 25	18	3 20
28	12	8 10	15	23 30	10	1 25	9	10 45	7	1 30	13	14 5	10	7 50	7	0 15	15	3 0	10	13 45	14	4 25	13	23 50
29	8	5 50	16	8 5	25	17 45	6	16 50	5	10 40	17	10 5	10	16 0	7	17 20	10	15 30	10	20 25	11	23 55	21	11 50
30	8	16 25	—	—	13	12 40	8	14 30	6	21 35	15	15 55	15	6 25	9	10 40	15	9 20	10	17 15	14	3 5	19	6 40
31	19	16 25	—	—	11	9 25	—	—	8	10 30	—	—	13	10 0	8	14 45	—	—	16	12 25	—	—	13	0 10

\* Defective Record.

## DISTRIBUTION OF WIND SPEED: EXTREME VELOCITIES AS RECORDED BY THE DINES TUBE ANEMOGRAPH.

152. Aberdeen: Ha=8 metres+13 metres.

1928.

DISTRIBUTION OF WIND SPEED.									EXTREME VELOCITIES.					
Month.	More than 17·1 m/s.		10·8 to 17·1 m/s.		5·5 to 10·7 m/s.	1·6 to 5·4 m/s.	Less than 1·6 m/s.	No. Record.	Highest Hourly Wind.			Highest Gust.		
	Dates of Occurrence.	Duration.	No. of Days.	Duration.	Duration.	Duration.	Duration.	Duration.	Veer from N.	Speed.	Mid Time.	Speed.	Date.	
Jan. ... ..	—	hr. 0	9	hr. 30	hr. 316	hr. 356	hr. 42	hr. 0	° 170	m/s. 14	day. hr. 1 23	m/s. 26	day. h. m. 1 23 20	
Feb. ... ..	—	0	7	25	262	366	43	0	260	13	9 1	26	9 12 20	
Mar. ... ..	29th	3	7	45	355	256	85	0	110	18	29 18	25	29 17 45	
April ... ..	—	0	3	30	214	417	59	0	110	13	13 11	21	17 9 35	
May ... ..	—	0	1	1	169	491	83	0	360	11	8 13	18	9 10 30	
June ... ..	—	0	0	0	244	400	76	0	300	10	16 12	18	16 11 25	
July ... ..	—	0	0	0	198	464	82	0	230	11	14 16	19	14 16 0	
Aug. ... ..	—	0	0	0	148	497	99	0	20	10	21 2	15	8 11 50	
Sept. ... ..	—	0	0	0	140	493	87	0	40	11	27 24	16	17 22 30	
Oct. ... ..	—	0	2	14	202	472	56	0	140	15	20 1	27	20 9 25	
Nov. ... ..	—	0	2	8	264	420	28	0	90	15	23 14	22	23 13 50	
Dec. ... ..	—	0	7	45	328	324	47	0	110	16	29 12	22	7 6 20	
Year ... ..	1 day	3	38	198	2,840	4,956	787	0	110	18	Mar. 29 18	27	Oct. 20 9 25	



153. Aberdeen.

Readings, in degrees absolute, at gh, Greenwich Mean Time.

1928.

Month.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Day.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.
1	77.5	77.2	77.4	78.3	79.8	81.6	82.9	84.8	85.1	84.0	82.2	80.5
2	77.4	77.1	77.4	78.3	80.0	81.7	83.0	84.8	85.1	83.9	82.2	80.5
3	77.4	77.0	77.5	78.4	80.1	81.7	83.0	84.8	85.0	83.8	82.2	80.4
4	77.3	76.9	77.5	78.4	80.3	81.8	83.1	84.7	85.0	83.7	82.1	80.4
5	77.2	76.9	77.6	78.6	80.4	81.8	83.1	84.6	85.0	83.5	82.0	80.4
6	77.2	76.9	77.6	78.6	80.6	81.9	83.2	84.6	85.0	83.4	81.9	80.3
7	77.2	76.8	77.7	78.7	80.7	82.0	83.2	84.6	85.0	83.3	81.8	80.2
8	77.2	76.8	77.8	78.8	80.8	82.1	83.3	84.7	85.0	83.3	81.8	80.2
9	77.2	76.8	77.8	78.8	81.0	82.2	83.3	84.8	85.0	83.3	81.7	80.1
10	77.2	76.9	77.8	78.8	81.1	82.2	83.4	84.8	85.0	83.4	81.7	80.0
11	77.2	77.1	77.8	78.9	81.1	82.2	83.4	84.8	85.0	83.4	81.6	79.9
12	77.1	77.2	77.7	79.0	81.0	82.2	83.5	84.8	85.0	83.4	81.4	79.8
13	77.1	77.1	77.6	79.1	80.9	82.2	83.6	84.8	85.1	83.4	81.3	79.7
14	77.0	77.1	77.5	79.2	81.0	82.2	83.7	84.8	85.0	83.3	81.3	79.6
15	77.0	77.1	77.4	79.2	81.1	82.2	83.8	84.8	85.0	83.2	81.3	79.6
16	77.0	77.0	77.4	79.2	81.1	82.2	83.9	84.9	84.9	83.1	81.2	79.5
17	77.1	77.0	77.4	79.2	81.2	82.3	84.0	84.9	84.9	83.0	81.2	79.5
18	77.1	77.0	77.4	79.1	81.2	82.3	84.1	84.9	84.9	82.9	81.2	79.5
19	77.2	77.0	77.4	79.1	81.2	82.3	84.2	84.9	84.9	82.9	81.1	79.4
20	77.2	77.0	77.5	79.1	81.2	82.3	84.2	84.9	84.9	82.9	81.1	79.3
21	77.2	77.1	77.6	78.9	81.2	82.3	84.3	85.0	84.9	82.8	81.1	79.2
22	77.3	77.2	77.8	78.9	81.2	82.4	84.4	85.0	84.8	82.8	81.1	79.1
23	77.4	77.2	77.8	78.9	81.2	82.4	84.4	85.0	84.7	82.8	81.1	79.1
24	77.4	77.3	77.8	79.0	81.2	82.5	84.6	85.0	84.6	82.7	81.0	79.0
25	77.4	77.3	77.9	79.1	81.2	82.6	84.7	85.0	84.4	82.6	80.9	78.9
26	77.4	77.4	77.9	79.2	81.3	82.6	84.8	85.0	84.4	82.5	80.9	78.9
27	77.4	77.4	78.0	79.2	81.3	82.7	84.8	85.0	84.3	82.4	80.8	78.9
28	77.3	77.4	78.1	79.3	81.4	82.8	84.8	85.0	84.2	82.4	80.7	78.9
29	77.3	77.4	78.2	79.5	81.5	82.8	84.9	85.0	84.2	82.4	80.6	78.8
30	77.2	—	78.2	79.7	81.6	82.9	84.9	85.1	84.1	82.3	80.6	78.8
31	77.2	—	78.3	—	81.6	—	84.9	85.1	—	82.3	—	78.7
Mean ...	77.2	77.1	77.7	78.9	81.0	82.2	83.9	84.9	84.8	83.1	81.4	79.6

Annual Mean at 124 cm. 281.0

## MINIMUM TEMPERATURE "ON THE GRASS" DURING THE INTERVAL 18h. to 7h. G.M.T.

154. Aberdeen.

Readings, in degrees absolute.

1928.

Month.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Day.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.
1	68.1	74.2	76.1	76.9	77.4	81.6	74.1	75.8	75.9	69.8	75.8	77.1
2	73.4	71.8	73.2	75.6	79.6	78.7	82.7	72.6	75.2	76.5	74.1	68.6
3	71.2	73.5	72.1	77.6	76.8	74.4	82.1	80.8	83.1	70.9	75.1	73.3
4	71.5	70.7	73.1	72.3	78.9	79.6	81.4	83.6	83.5	73.1	77.6	70.7
5	72.9	75.8	74.8	70.6	73.7	73.4	83.1	77.6	83.8	82.0	72.4	77.0
6	72.8	72.3	73.7	70.4	78.1	77.1	83.0	80.8	82.8	82.1	77.4	69.2
7	71.7	73.6	75.0	73.4	78.0	81.8	78.2	85.2	79.9	76.6	75.2	71.8
8	73.6	77.5	73.6	75.7	74.7	79.5	80.0	78.9	83.2	83.7	70.8	71.0
9	70.2	75.2	72.3	75.8	74.2	76.7	80.3	80.2	80.1	75.4	66.3	67.5
10	72.1	71.8	72.3	77.6	74.8	80.6	82.4	77.6	80.2	72.0	74.2	75.8
11	73.0	72.0	70.2	79.1	71.5	76.8	87.4	84.1	77.0	72.1	72.0	76.9
12	70.2	71.7	71.9	74.3	79.9	73.6	84.1	84.7	73.4	72.2	77.4	76.0
13	74.8	68.9	72.8	75.8	78.0	79.2	85.8	82.4	76.5	73.1	76.8	74.2
14	74.3	71.9	74.9	75.2	75.2	78.5	85.9	83.9	80.3	71.5	72.6	71.9
15	72.7	70.9	74.1	74.4	76.0	72.3	81.7	77.6	81.6	80.6	73.8	69.0
16	74.9	74.7	75.4	69.8	75.2	75.4	80.4	81.3	76.9	78.9	72.8	74.6
17	75.8	73.6	77.8	71.3	73.4	79.7	78.8	80.8	83.1	74.9	69.5	72.9
18	74.7	71.6	75.4	69.6	74.9	77.9	82.6	80.7	76.5	75.9	75.9	68.1
19	73.2	77.1	73.4	72.9	76.4	75.3	78.8	83.8	70.9	77.8	77.4	71.4
20	73.9	75.4	79.1	73.6	75.2	79.3	76.8	84.6	72.3	80.2	77.5	72.2
21	74.2	74.8	76.3	75.0	73.7	73.9	80.9	84.2	74.9	73.6	72.6	67.4
22	73.1	72.7	73.3	74.0	75.8	80.7	79.3	84.3	75.4	69.0	73.1	69.3
23	68.9	69.4	74.9	75.0	78.2	79.1	84.1	81.3	74.7	67.1	71.8	68.8
24	74.6	76.5	78.0	79.1	76.3	76.5	84.7	85.7	79.7	80.6	73.7	77.1
25	72.0	71.9	77.5	77.4	72.6	74.8	80.2	80.3	77.3	80.1	75.2	67.0
26	72.9	71.9	75.6	78.1	76.9	82.6	84.7	81.6	78.0	73.2	74.1	73.5
27	72.0	74.7	74.3	75.2	80.9	78.6	83.1	84.6	76.9	81.4	71.2	72.6
28	70.8	70.2	72.1	79.5	81.1	78.3	80.3	81.2	78.0	74.1	72.5	69.0
29	70.4	75.2	72.7	78.9	77.6	83.2	78.8	82.4	72.1	71.6	72.7	75.3
30	72.3	—	73.7	78.1	80.2	81.0	80.6	80.6	74.5	79.1	81.5	70.1
31	69.3	—	76.1	—	78.6	—	75.7	74.3	—	78.7	—	73.9
Mean ...	72.4	73.2	74.4	75.1	76.6	78.0	81.4	81.2	77.9	75.7	74.1	72.0

Annual Mean 276.0

NOTES:—(1) The initial 2 and 3 of the readings is omitted, i.e., 275.0 degrees absolute is written 75.0.

(2) The minimum "on the grass" refers to the interval from 18h on the previous day to 7h on the day to which it is entered.



Day.	Cloud Forms.			Cloud Amount (All Forms).						Visibility.						Precipitation.						Remarks on the Weather of the Day.	
	7 <sup>h</sup>	13 <sup>h</sup>	18 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>		
1	A-St.	A-St.	A-St.	2	5	6	8	10	10	i	H	G	G	H	G	...	...	...	...	...	...	★	b to bc a : c p : o ★ q n.
2	Nb.	A-St.	A-St : Fr-Nb.	10	10	8	7	10	10	H	G	G	G	H	G	...	...	...	...	...	...	● <sup>0</sup>	★ early, c a : bc to c ● <sup>0</sup> p : c ● n.
3	St-Cu.	Ci.	Ci-St.	1	1	1	2	7	10	i	i	j	i	H	H	...	...	...	...	...	...	...	● <sup>0</sup> to b a : b, bc p : c, ● <sup>0</sup> later n
4	A-St : Nb.	St-Cu : Fr-Nb.	A-Cu.	10	9	8	10	2	1	H	H	j	j	k	k	...	...	...	...	...	...	...	● <sup>0</sup> , c a : c ● q to b p : b n. [⊕ 17 <sup>h</sup> 30
5	A-Cu.	Fa-Ci : St-Cu.	A-Cu : St-Cu.	1	2	2	4	8	10	j	k	k	k	k	j	...	...	...	...	...	...	...	b q a : bc, c p : c n : [⊕ 19 <sup>h</sup> et seq.
6	St-Cu.	Cu-Nb.	Cu-Nb.	9	9	8	6	1	4	j	F	j	k	k	j	...	...	...	...	...	...	...	c p ● <sup>0</sup> q to b a and p : bc, c n : [⊕ 23 <sup>h</sup>
7	Nb.	Nb.	A-Cu.	10	10	10	10	7	1	H	H	H	i	H	i	...	...	...	...	...	...	...	o ● <sup>0</sup> , o a : c p : bc, b n.
8	Cu-Nb.	Fa-Ci : Fr-Cu.	St-Cu.	1	1	1	1	1	1	k	k	k	k	k	k	...	...	...	...	...	...	...	p ● early, then fine throughout.
9	Ci-St : A-Cu.	A-St : Cu.	...	4	9	2	3	0	1	i	H	j	j	j	j	...	...	...	...	...	...	...	bc p, c to b a : bc p : b n : [⊕ 7 <sup>h</sup>
10	Ci-St : Fr-Cu.	A-St : Cu.	A-Cu.	5	10	1	1	1	9	j	H	k	k	k	j	...	...	...	...	...	...	...	b, o ● q to bq a : bq p : bc p ● <sup>0</sup> n [⊕ 7 <sup>h</sup>
11	St-Cu.	Cu-Nb.	...	1	2	1	1	0	0	k	k	k	k	k	j	...	...	...	...	...	...	...	Fine throughout.
12	Nb.	A-St : Fr-Cu.	A-St : A-Cu lent.	10	10	8	8	9	2	i	j	j	j	j	H	...	...	...	...	...	...	...	b to c and o ● <sup>0</sup> a : c q p : c to b n
13	A-Cu.	Ci : St-Cu.	St-Cu.	3	5	3	3	7	0	k	k	k	k	k	k	...	...	...	...	...	...	...	bc q a and p : b n. [⊕ 1 <sup>h</sup>
14	A-St : St-Cu.	A-St : Fr-Nb.	Nb.	10	10	10	10	10	0	i	D	G	G	G	H	...	...	...	...	...	...	...	c f, m, ● <sup>0</sup> a : o ● <sup>0</sup> p : o ● <sup>0</sup> to b n
15	St-Cu : Fr-Nb.	A-Cu : St-Cuf.	Fr-St.	9	9	9	8	1	10	k	i	j	H	H	H	...	...	...	...	...	...	...	c q a : c to b p : b to o ● n.
16	St-Cu : Cu.	St-Cu : Cu-Nb.	St-Cu : Nb-Cuf.	4	9	9	9	10	10	k	j	k	j	j	j	...	...	...	...	...	...	...	bc and c p ● a and p : o ● n,
17	Nb.	St-Cu : Nb-Cuf.	St-Cu : Nb-Cuf	10	9	9	10	10	10	j	j	j	j	j	H	...	...	...	...	...	...	...	o ● <sup>0</sup> to c a : c p ● <sup>0</sup> p : p ● Δ n.
18	Nb.	Nb.	Nb.	10	10	10	10	10	10	j	H	H	H	H	H	...	...	...	...	...	...	...	Dull and rainy.
19	A-St.	Ci-St : St-Cu : Fr-Cu.	St-Cu.	1	1	4	4	1	10	G	G	j	i	H	i	...	...	...	...	...	...	...	● early, b and bc a and p : o n.
20	A-St : Fr-Nb.	Nb.	A-Cu.	10	10	10	1	1	0	i	H	G	k	i	i	...	...	...	...	...	...	...	c q to o ● <sup>0</sup> a : ● <sup>0</sup> to b p : b to o n.
21	A-St : Nb.	Nb.	A-St.	9	10	10	10	5	6	H	G	H	H	i	i	...	...	...	...	...	...	...	c and o ● a and p : bc q n.
22	A-St.	Ci : St-Cu.	...	8	8	2	1	0	0	i	i	j	j	i	i	...	...	...	...	...	...	...	c to b a : b p and n : [⊕ 10 <sup>h</sup> 30.
23	A-St : St-Cu.	A-St : Nb.	Nb.	10	9	10	10	10	10	H	i	G	G	G	G	...	...	...	...	...	...	...	c p to ● a : o ● <sup>0</sup> p : ● <sup>0</sup> to b n.
24	A-Cu.	A-St : Nb.	A-Cu : St-Cu.	2	5	10	4	8	1	i	i	G	k	k	j	...	...	...	...	...	...	...	b to c ● and ★ a : bc p : c to b n.
25	A-Cu.	A-St : Fr-Cu.	A-St : Nb.	1	1	9	10	10	2	j	k	j	i	i	i	...	...	...	...	...	...	...	b to c a : c ★ p : c ● <sup>0</sup> q to bq n [⊕ 11 <sup>h</sup>
26	St-Cu.	Nb.	A-St : Fr-Cu.	1	8	10	9	6	1	j	j	H	H	i	i	...	...	...	...	...	...	...	b to o ★ a : c ● <sup>0</sup> p : bc, c ★ <sup>0</sup> n [⊕ 9 <sup>h</sup> et seq. [⊕ 22 <sup>h</sup>
27	Cu-Nb.	St-Cu : Cu-Nb.	St-Cu.	8	1	1	1	1	1	j	k	k	k	j	i	...	...	...	...	...	...	...	b q and c ★ a : b p and n : [⊕ 18 <sup>h</sup> et seq.
28	Nb.	A-St : Nb.	A-Cu : St-Cu.	10	10	10	9	8	1	j	i	F	i	j	i	...	...	...	...	...	...	...	b, o ● <sup>0</sup> , c a : c p : c to b n.
29	Ci : St-Cuf.	Ci-St : St-Cuf.	Nb.	4	7	9	10	10	10	j	H	F	F	F	F	...	...	...	...	...	...	...	bc and c a : c to o ● f p : o ● f to c n
30	A-Cu : St-Cu.	A-Cu : St-Cu.	A-Cu : St-Cu.	7	2	1	4	3	2	H	E	j	H	i	i	...	...	...	...	...	...	...	bc m and f a : bc p : b n.
31	A-Cu.	A-St : Cu.	Nb.	1	1	10	10	10	2	H	G	H	i	H	j	...	...	...	...	...	...	...	b p to c a : o ★ <sup>0</sup> , ● p : ● to b n.
Mean Cloud Am't.				5.9	6.5	6.5	6.3	5.7	4.7														

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February, 1928.

1	A-Cu : St-Cu : Cu.	A-Cu.	A-Cu.	7	6	2	1	1	1	k	j	k	k	k	k	...	...	...	...	...	...	...	b' and bc a : b p and n.
2	A-Cu : St-Cu.	A-Cu : Cu.	A-St : A-Cu.	7	7	6	7	10	10	k	k	k	k	H	H	...	...	...	...	...	...	...	bc a : bc to o p : o n.
3	A-Cu : St-Cu.	Fa-Ci : Cu-Nb.	Ci-St : A-Cu : St-Cu.	9	7	1	1	1	6	k	k	k	k	k	k	...	...	...	...	...	...	...	o to bq a : b p : bc n : [⊕ 8 <sup>h</sup> 30.
4	A-St : Nb.	Nb.	Nb.	10	10	10	10	10	6	j	j	H	H	H	k	...	...	...	...	...	...	...	● a and p : c to bc n.
5	A-Cu : St-Cu.	A-Cu.	Ci-Cu : A-Cu.	8	4	1	2	2	1	l	k	k	k	k	k	...	...	...	...	...	...	...	c to by a : b p : bc p ● n.
6	A-Cu.	Ci-St : A-Cu.	Ci : Ci-Cu : A-Cu.	2	8	6	6	2	10	k	k	k	k	i	j	...	...	...	...	...	...	...	bc and c a, p and n : [⊕ 13 <sup>h</sup> [⊕ 23 <sup>h</sup> 50
7	A-St : Nb.	Ci-St : Cu.	A-St : St-Cu.	10	9	5	9	4	4	j	k	k	k	k	k	...	...	...	...	...	...	...	c ●, bc a : c and bc p and n : [⊕ 10 <sup>h</sup> 30.
8	A-St : Fr-St.	A-Cu : Cu : St-Cuf.	A-St : St-Cuf.	8	10	9	9	8	9	k	j	k	j	j	j	...	...	...	...	...	...	...	c q a, p and n. [10 <sup>h</sup> —14 <sup>h</sup>
9	Ci : Fr-Cu.	Ci : Cu-Nb.	Ci-St.	1	2	1	2	1	0	k	k	k	k	k	j	...	...	...	...	...	...	...	bc and c a : c to o f p : o f to c n
10	A-St : St-Cu.	Nb.	A-Cu : St-Cu.	10	10	10	10	3	1	H	H	H	j	k	k	...	...	...	...	...	...	...	c to o ● a : ● to bc p : b and bc n.
11	Nb.	A-Cu lent : Cu-Nb.	St-Cu : Cu-Nb.	9	10	5	5	8	9	k	j	k	k	k	k	...	...	...	...	...	...	...	c ●, p ★ a : bc p ● Δ p : c to bc
12	St-Cu.	A-Cu lent : Fr-Cu.	Ci : A-Cu : Cu.	3	1	2	1	5	1	k	k	k	k	k	j	...	...	...	...	...	...	...	p ★ Δ early, b a : b, bc p : b n : [⊕ 21 <sup>h</sup> et seq.
13	A-St A-Cu : St-Cu.	A-St : Cu-Nb.	A-St : Nb.	5	10	4	10	10	4	H	F	j	i	G	G	...	...	...	...	...	...	...	Δ, bc and c a : c ●, ★ p : bc, b n.
14	St-Cu.	Ci-Cu : A-Cu : Fr-Cu.	A-Cu.	1	1	7	9	3	8	k	k	k	j	G	G	...	...	...	...	...	...	...	b to bc a : c and bc p n : [⊕ 12 <sup>h</sup> 30.
15	Nb.	A-St : Fr-Cu.	Ci : Fr-Cu.	10	10	1	2	1	0	F	H	k	k	l	k	...	...	...	...	...	...	...	o ● m to bq a : b q p and n.
16	St-Cu.	A-Cu : St-Cu : Cu.	Cu.	9	9	9	2	1	1	H	G	j	j	j	j	...	...	...	...	...	...	...	c f, c a : c to b p : b n.
17	Ci-St : A-Cu.	Fr-Cu.	St-Cu : Cu.	7	1	1	1	1	0	k	k	k	k	k	k	...	...	...	...	...	...	...	p ●, b q y a and p : b n.
18	St-Cu : M-Cu.	A-Cu lent : Fr-Cu.	A-Cu lent : St-Cu.	10	10	9	9	2	10	k	j	j	k	k	k	...	...	...	...	...	...	...	c a : c to b p : bc n.
19	A-Cu : St-Cu.	St-Cu : Cu.	A-Cu : St-Cu.	8	8	9	9	9	10	l	k	k	j	i	H	...	...	...	...	...	...	...	bc and c a : c p and n.
20	A-St : St-Cu.	A-Cu : St-Cu.	St Cu.	2	8	9	10	10	9	j	j	j	j	i	H	...	...	...	...	...	...	...	b to c a : c p and n.
21	Fr-St.	A-Cu lent.	...	1	1	1	0	0	0	G	G	H	H	F	F	...	...	...	...	...	...	...	Δ, b a : b p : b z n.
22	St-Cu.	Cu.	...	10	4	8	7	0	0	E	E	j	j	j	j	...	...	...	...	...	...	...	bc and c a : c to b p : b n.
23	...	St-Cu : Cu.	St-Cu.	0	9	9	8	10	10	E	E	j	j	j	j	...	...	...	...	...	...	...	f a, c a : c p and n.
24	St-Cu : Fr-St.	St-Cu : Fr-St.	A-St : St-Cuf.	10	10	10	10	10	10	H	H	i	H	H	H	...	...	...	...	...	...	...	c a and p : o ●, o n.
25	A-St : A-Cu.	A-Cu.	A-Cu.	3	3	4	3	1	1	H	G	H	H	G	F	...	...	...	...	...	...	...	bc a and p : b m to f e n.
26	A-Cu.	St : Fog.	St.	1	3	9	1	10	10	G	E	F	G	F	E	...	...	...	...	...	...	...	f e, f to c m a : b to o m p : o f n.
27	St.	Fr-St.	...	10	10	1	0	0	0	G	F	G	G	G	F	...	...	...	...	...	...	...	f e, o m to b a : b to b f e p : f e, b n
28	St.	Fr-St.	...	9	9	6	0	0	1	H	G	G	G	H	H	...	...	...	...	...	...	...	c to bc a : b p : b to c n.
29	St-Cu : St-Cuf.	St-Cu : St.	St-Cu : Nb.	10	10	10	10	10	10	H	H	H	H	H	H	...	...	...	...	...	...	...	c a, p and n : ● 18 <sup>h</sup> .
Mean Cloud Am't.				6.6	6.9	5.7	5.3	4.6	4.9														

Day.	7 <sup>h</sup>	13 <sup>h</sup>	18 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	Remarks on the Weather of the Day
	Cloud Forms.			Cloud Amount (All Forms).						Visibility.						Precipitation.						



157. Aberdeen.

March, 1928.

Day.	Cloud Forms.			Cloud Amount (All Forms.)						Visibility.						Precipitation.						Remarks on the Weather of the Day.
	7 <sup>h</sup>	13 <sup>h</sup>	18 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	
1	St-Cu : St-Cuf.	Nb.	Nb.	10	10	10	10	10	10	H	H	H	G	G	G	...	...	...	...	...	...	c to o : a : o : to : p and n.
2	St-Cu.	A-Cu : Cu.	Ci-Cu.	3	0	1	1	1	0	G	F	F	G	G	F	...	...	...	...	...	...	o, bc, b f m b a : b p and n.
3	Nb.	St-Cu : Fr-St.	A-Cu : Fr-St.	10	10	9	8	1	8	F	F	G	H	G	F	...	...	...	...	...	...	o to f, c a : c, b, c p : c m f n.
4	St-Cu.	St-Cu.	St : Fog.	8	10	9	9	10	0	F	F	F	F	E	D	...	...	...	...	...	...	c f and m a and p : f, f, e b n.
5	St : Fog.	Nb.	Nb.	10	10	10	10	10	10	D	E	H	H	H	H	...	...	...	...	...	...	f e o to o : a : o : p and n.
6	A-Cu : Cu-Nb.	St-Cu : Fr-Nb.	St-Cu : Nb-Cuf.	1	9	10	9	10	10	K	j	k	k	k	j	...	...	...	...	...	...	p : o, b to c a : c p : p and n.
7	Nb.	St-Cu : Fr-Nb.	St-Cu : Nb-Cuf.	10	10	10	10	10	9	H	j	k	k	k	j	...	...	...	...	...	...	o : o to c a : c : p and n.
8	St-Cu : Cu-Nb.	A-Cu : Cu-Nb.	St-Cu : Cu-Nb.	8	9	4	2	1	7	j	j	k	k	k	j	...	...	...	...	...	...	c to b c a : b c p : o, b p : b c p : o : n.
9	St-Cu : Cu-Nb.	St-Cu : Cu-Nb.	A-Cu : Cu-Nb.	8	9	9	4	6	7	j	k	k	k	k	k	...	...	...	...	...	...	bc and c p : o, p : p : p : a, p and n.
10	Cu-Nb.	A-Cu : Cu-Nb.	Cu-Nb.	2	6	6	8	5	1	k	k	k	k	k	k	...	...	...	...	...	...	bc and c p : a, * and p : a : q, p and n.
11	A-Cu : Cu-Nb.	A-Cu : Cu-Nb.	Cu-Nb.	8	9	6	4	4	5	1	H	j	k	k	k	...	...	...	...	...	...	bc and c p : a : q to p : a, p and n.
12	St-Cu : Cu.	A-St : Cu.	Nb.	10	9	9	10	10	10	k	k	k	k	i	k	...	...	...	...	...	...	c p : a : p : o to o : p : p : c : a : n.
13	A-St : Nb-Cuf.	A-Cu : Cu.	A-St : A-Cu : Cu.	10	10	4	7	8	10	k	k	k	k	k	k	...	...	...	...	...	...	o, bc and c a and p : c n. [13 <sup>h</sup>
14	St-Cu.	St-Cu.	St-Cu.	10	10	10	10	9	10	j	j	j	j	j	j	...	...	...	...	...	...	Cloudy throughout.
15	St-Cu : St.	Nb.	A-St : Nb.	10	10	10	10	10	10	i	H	H	H	H	H	...	...	...	...	...	...	c : o : a : c and o : p : c n.
16	A-St : St.	A-St : Fr-St.	Nb.	9	10	9	10	10	10	H	G	G	G	G	G	...	...	...	...	...	...	c a : c to o : q p and n.
17	A-St : Fr-Nb.	St-Cu : Fr-St.	A-St : Fr-Nb.	10	8	9	9	10	9	H	G	G	G	G	G	...	...	...	...	...	...	c a : c : o p and n.
18	Ci-Cu : A-Cu : Cu.	A-St : Fr-Nb.	A-Cu : St-Cu : Cu.	7	10	10	7	2	9	i	H	F	G	F	F	...	...	...	...	...	...	bc to c : o a : bc, b p : c n.
19	Ci-Cu : A-Cu.	A-Cu : Fr-St.	Nb.	3	3	9	10	10	10	i	H	H	F	F	F	...	...	...	...	...	...	bc to c a : o m, f, o : m p and n.
20	Nb.	Nb.	A-Cu : Fr-St.	10	10	10	10	8	2	G	F	G	G	G	G	...	...	...	...	...	...	o : m a : o : to c q p : b q n.
21	A-Cu : St-Cuf.	St-Cuf.	St-Cuf.	7	7	9	7	8	10	H	i	i	j	i	i	...	...	...	...	...	...	bc and c q a and p : c q n.
22	St-Cu : St-Cuf.	St-Cu.	A-St : Fr-Nb.	10	10	10	6	10	10	i	i	i	i	i	H	...	...	...	...	...	...	c a : bc, c : p : c : o to o f, e n.
23	Fog.	Nb.	St.	10	10	10	10	10	10	C	E	F	F	G	E	...	...	...	...	...	...	f, e to o : m a : o : m p : o f e to
24	A-Cu : St.	St.	Nb-St.	9	9	10	10	10	10	i	G	H	H	H	E	...	...	...	...	...	...	[o : m n.
25	Fog.	St : Fog.	St : Fog.	10	10	10	10	10	10	D	E	F	E	E	E	...	...	...	...	...	...	c to o a : o : p : o f, e : o n.
26	A-Cu : Fr-St.	A-Cu : Cu : Cu-Nb.	St-Cu : Cu.	9	8	8	3	8	7	F	H	j	i	G	G	...	...	...	...	...	...	o f to c m, c p : o a : bc p : o p : bc
27	A-Cu : Fr-St.	A-St : Nb.	Ci : A-Cu : Cu-Nb.	9	10	10	3	1	2	H	H	j	i	j	j	...	...	...	...	...	...	c : o a : c to b p : b, bc n. [and c n.
28	St-Cu : Cu-Nb.	Ci : Cu.	Ci : Cu.	8	7	5	1	1	0	j	j	j	j	j	j	...	...	...	...	...	...	c p : o, bc a : bc p : o, b p : b n.
29	A-Cu : Cu.	A-St : Fr-Cu.	Nb.	8	2	10	10	10	10	j	j	j	j	j	j	...	...	...	...	...	...	b and c a : c, o : p : o : q, c n.
30	A-St : Nb-Cuf.	A-St : Nb-Cuf.	A-St : A-Cu : Fr-Nb.	9	9	10	10	9	10	j	j	j	j	j	j	...	...	...	...	...	...	c p : o to a, a : c : o p : c p : n.
31	Nb.	St-Cu : Nb-Cuf.	St-Cu : Nb.-Cuf.	10	10	9	10	10	10	j	j	k	k	k	k	...	...	...	...	...	...	c and o : a : c : o p and n.
Mean cloud m't.				8.3	8.5	8.5	7.7	7.5	7.6													

158. Aberdeen.

April 1928.

Day.	Cloud Forms.			Cloud Amount (All Forms.)						Visibility.						Precipitation.						Remarks on the Weather of the Day.
	7 <sup>h</sup>	13 <sup>h</sup>	18 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	
1	St-Cu : Nb.	St-Cu : Cu.	St-Cu : Cu.	10	8	9	9	6	9	k	k	k	k	k	j	...	...	...	...	...	...	c p : o a : bc : o p : c n.
2	St-Cu.	St-Cu.	Ci-St.	9	2	6	9	6	10	j	j	H	i	i	j	...	...	...	...	...	...	c to b and bc a : bc and c p : c n.
3	A-St : A-Cu : St-Cu.	A-Cu : St-Cu.	A-Cu : Cu.	9	8	3	3	3	1	k	k	k	k	k	k	...	...	...	...	...	...	c, c : o, bc a : b y, bc p : bc p : o n.
4	A-Cu : St-Cu.	Ci : Cu.	Ci : St-Cu : Cu.	8	4	4	6	7	2	k	k	k	k	k	k	...	...	...	...	...	...	c to b c a : bc p : a : p : b and bc n.
5	Ci-Cu : St-Cu.	Cu.	A-Cu : Cu-Nb.	5	3	4	8	8	0	k	j	k	k	j	k	...	...	...	...	...	...	bc y a : c p : a : p : c p : o, b n.
6	Ci-St : Ci-Cu : St-Cu.	Cu.	St-Cu.	5	6	2	4	7	1	j	j	j	j	j	H	...	...	...	...	...	...	bc to b a : bc and b p and n. [6 <sup>h</sup> to 8 <sup>h</sup>
7	A-St.	Ci-St.	A-St : A-Cu.	9	10	5	9	9	3	G	F	G	H	H	i	...	...	...	...	...	...	c : o z to bc a : c p : bc and c n. [13 <sup>h</sup>
8	A-St : A-Cu.	A-St : Fr-Nb.	A-St : Nb.	8	5	10	10	10	3	j	G	i	i	i	G	...	...	...	...	...	...	bc and c, c : a : c : o p : bc to b n.
9	A-Cu : St-Cu.	A-Cu : St-Cu.	A-Cu : A-St.	9	7	9	9	9	10	j	H	G	i	i	H	...	...	...	...	...	...	bc and c : o a : c p : o : n. [10 <sup>h</sup> to 30 <sup>h</sup>
10	St-Cu : Fr-Nb.	Ci-St : A-Cu : Fr-St.	A-Cu : Fr-St.	9	8	8	10	9	10	H	i	i	H	H	G	...	...	...	...	...	...	o early, c a : c : g p : o : m n. [12 <sup>h</sup>
11	Nb.	A-St : A-Cu : Nb-Cuf.	St-Cu : Cu-Nb.	10	10	9	6	5	1	F	F	j	j	i	H	...	...	...	...	...	...	o, c : o a : bc p : p : b n.
12	St : Fog.	St.	Nb.	10	10	10	10	10	10	E	D	i	i	j	i	...	...	...	...	...	...	o f, e a : o : o p : o : n.
13	A-St : Nb-Cuf.	A-St : Nb-Cuf.	A-St : Nb-Cuf.	10	10	10	10	10	10	j	j	j	j	j	j	...	...	...	...	...	...	c : o, c a : c, o p : c n.
14	A-St : Nb-Cuf.	St-Cu.	St-Cu.	10	10	10	10	10	10	j	j	j	j	j	j	...	...	...	...	...	...	c : o, c a : c p and n.
15	St-Cu : Cu.	Cu.	Cu.	8	8	2	2	2	4	k	k	k	k	k	k	...	...	...	...	...	...	c p : a, b a : b and bc p and n. [21 <sup>h</sup> to 30 <sup>h</sup>
16	St-Cu.	St-Cu : Cu : Cu-Nb.	A-St : St-Cu : Cu.	1	2	8	7	9	10	j	k	k	k	k	k	...	...	...	...	...	...	b and bc, c p : o a : bc p : a : n. [cp : a : n. [17 <sup>h</sup> to 30 <sup>h</sup>
17	A-Cu : Cu-Nb.	A-Cu : Cu.	A-Cu : Cu-Nb.	4	4	5	3	4	4	k	l	k	k	k	k	...	...	...	...	...	...	bc p : a : bc p : a : q p : bc p : a
18	Fr-Nb.	Ci-St : Cu.	Ci-St : A-Cu : Cu-Nb.	7	10	8	6	4	10	i	k	k	k	k	i	...	...	...	...	...	...	bc, c : a : bc p : a : p : c : n. [17 <sup>h</sup> to 45 <sup>h</sup>
19	A-St : Nb.	A-St : Cu.	Ci-Cu : St-Cu.	10	10	8	7	2	2	i	j	k	k	k	k	...	...	...	...	...	...	c : a : bc y, b p : b n. [14 <sup>h</sup> to 15 <sup>h</sup>
20	Nb.	Ci-St : A-Cu : Cu.	A-Cu : Cu-Nb.	9	5	7	8	7	8	k	l	l	j	k	k	...	...	...	...	...	...	c : a, bc p : o a : c p : p : a p and n. [18 <sup>h</sup>
21	A-Cu : St-Cu : Cu-Nb.	A-Cu : Cu.	Cu.	2	7	3	8	3	8	k	k	k	k	k	j	...	...	...	...	...	...	bc p : a : bc and c p and n.
22	St-Cu : Cu.	St-Cu : Cu.	Ci-St : Fr-Cu.	1	5	8	8	3	8	k	k	j	j	j	H	...	...	...	...	...	...	bc, c p : a : c p : o, bc p : a : n. [18 <sup>h</sup>
23	A-St : Fr-Nb.	A-St : Fr-St.	A-St : Nb.	10	10	9	9	10	9	H	H	i	H	G	G	...	...	...	...	...	...	c : o a and p : c n.
24	A-Cu : St-Cuf.	A-St : A-Cu : Fr-St.	A-St : A-Cu.	9	9	9	9	7	4	i	j	i	j	i	H	...	...	...	...	...	...	c a and p : bc n.
25	A-St : A-Cu.	A-St.	Ci-St : A-St.	4	1	6	7	8	9	H	H	i	i	G	G	...	...	...	...	...	...	b and bc a : bc, c p and n. [15 <sup>h</sup> to 30 <sup>h</sup>
26	A-Cu.	A-Cu.	Ci : Ci-Cu : A-Cu.	7	1	7	7	7	9	G	G	H	G	H	H	...	...	...	...	...	...	b and c a : bc p : c : n. [18 <sup>h</sup>
27	St.	St.	St.	10	10	10	10	10	10	H	H	i	H	H	H	...	...	...	...	...	...	Dull throughout.
28	St.	A-Cu : St.	St-Cuf.	10	10	10	2	3	9	H	H	i	i	i	i	...	...	...	...	...	...	o a : c to b p : c to o n.
29	St.	A-St : Nb-Cuf.	St : Fr-St.	10	10	10	7	8	10	H	i	H	i	H	D	...	...	...	...	...	...	o to c : o a : bc, c p : c to o f e n.
30	St-Cu.	St-Cu : St.	St.	9	9	9	7	10	10	i	i	i	j	i	H	...	...	...	...	...	...	f e early, c a : bc, o p : o : o n. [15 <sup>h</sup>
Mean cloud m't.				7.7	7.1	7.2	7.3	6.9	6.8													
	7 <sup>h</sup>	13 <sup>h</sup>	18 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	Remarks on the Weather of the Day.
	Cloud Forms.			Cloud Amount (All Forms.)						Visibility.						Precipitation.						



Day.	Cloud Forms.			Cloud Amount (All Forms.)						Visibility.						Precipitation.						Remarks on the Weather of the Day
	7 <sup>h</sup>	13 <sup>h</sup>	18 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	
1	St.	Ci-St: A-Cu.	Nb.	10	3	7	10	10	10	H	j	j	j	H	F	...	...	...	...	● <sup>0</sup>	● <sup>0</sup>	o to bc a: c, o ● p: o ● <sup>0</sup> m, f n: 6
2	St.	...	A-Cu: Fr-St.	9	1	0	1	8	6	H	i	i	j	i	H	...	...	...	...	...	...	f, c to b a: b to c p: bc, b n. [12 <sup>h</sup> -14 <sup>h</sup>
3	A-Cu.	A-Cu: Fr-Cu.	A-Cu: Fr-St.	3	5	3	8	10	10	k	j	j	j	j	j	...	...	...	...	...	...	b and bc a: c ● <sup>0</sup> p and n.
4	A-Cu: St-Cu.	Ci: A-Cu: Fr-Cu.	Ci: Ci-Cu.	9	9	2	2	1	1	j	j	j	j	j	j	...	...	...	...	...	...	● <sup>0</sup> , c to b a: b p and n.
5	Ci.	Ci.	Ci.	3	4	4	3	5	8	i	j	i	i	i	i	...	...	...	...	...	...	bc a and p: c n.
6	A-Cu: Cu.	A-Cu: Cu.	Ci: A-Cu.	8	7	5	7	5	1	i	i	j	j	j	j	...	...	...	...	...	...	c to bc a: bc to b p: b n.
7	St-Cu: Cu-Nb.	Cu-Nb.	Ci-Cu: A-Cu: St-Cu.	7	9	9	8	4	2	l	l	k	k	k	k	...	...	...	...	...	...	bc, c p ● a: c p ● <sup>0</sup> , bc p: bc, b n
8	St-Cu: Nb-Cuf.	St-Cu: Cu.	St-Cu: Cu.	9	9	8	6	6	6	k	k	k	k	k	k	...	...	...	...	...	...	c p ● △ q a: c q, bc y p: bc p ●
9	St-Cu: Nb-Cuf.	A-Cu: Cu-Nb.	A-Cu: Nb-Cuf.	9	9	8	9	9	9	k	k	k	k	k	k	...	...	...	...	...	...	c p ● △ a: c p ● p: c ● <sup>0</sup> n. [△ <sup>0</sup>
10	Nb.	Ci: St-Cu.	A-Cu: Fr-Cu.	9	7	6	6	8	1	H	k	k	k	k	j	...	...	...	...	...	...	c ● <sup>0</sup> , bc a: bc, c p: c, b n: [22 <sup>h</sup>
11	St-Cu.	St-Cu: Nb-Cuf.	Nb.	10	10	10	9	10	9	i	k	k	k	H	i	...	...	...	...	...	...	c ● <sup>0</sup> a: c p ● <sup>0</sup> p: c ● <sup>0</sup> n.
12	Nb.	St-Cu: Cu.	St-Cu.	9	10	7	8	9	9	i	j	k	k	k	k	...	...	...	...	...	...	c ● <sup>0</sup> , c a: c p: c ● <sup>0</sup> to b n.
13	St-Cu: Cu.	St-Cu: Cu.	St-Cu: Cu.	9	9	7	5	8	4	l	k	k	k	k	k	...	...	...	...	...	...	c p ● <sup>0</sup> , bc a, p and n.
14	Ci-Cu: Cu.	Cu-Nb.	Cu: Cu-Nb.	3	5	8	6	9	9	k	k	l	k	k	k	...	...	...	...	...	...	bc p ● <sup>0</sup> a: bc and c p: c p ●, c n.
15	A-Cu: Nb.	Ci: Cu-Nb.	A-Cu: Cu.	10	10	8	7	6	10	j	j	k	k	k	k	...	...	...	...	...	...	c p ● q a: bc p: c ● q n.
16	A-St: Nb-Cuf.	St-Cu: Nb-Cuf.	Cu.	10	9	9	5	5	4	j	k	k	k	k	k	...	...	...	...	...	...	c ● q a: bc p and n.
17	A-St: Nb-Cuf.	Nb.	A-Cu: Nb.	9	10	10	9	9	8	k	k	i	i	i	k	...	...	...	...	...	...	c ● <sup>0</sup> to o ● a: c ● and ● <sup>2</sup> p: ●
18	St-Cu: Cu.	A-Cu: Nb-Cuf.	A-Cu: Nb-Cuf.	9	9	8	10	9	10	k	k	l	k	k	k	...	...	...	...	...	...	c, p ● <sup>0</sup> a: c ● <sup>0</sup> p and n. [bc
19	A-St: Nb-Cuf.	A-Cu: Cu-Nb.	Ci-St A-Cu: Cu-Nb.	10	10	9	9	7	7	k	j	j	k	k	j	...	...	...	...	...	...	c ● a: c p ● △ and p ● p and n
20	Ci: A-Cu: Cu-Nb.	Cu-Nb.	Cu.	7	8	8	8	1	1	k	l	k	k	k	k	...	...	...	...	...	...	c p ● a: c p ●, b p: b n. [46 <sup>h</sup> at 18
21	St-Cu: St-Cuf.	St-Cu: Cu.	St-Cu: Cu.	8	4	9	9	9	3	k	k	k	k	k	k	...	...	...	...	...	...	bc and c a: c p: bc and c n.
22	St-Cu: Fr-Cu.	St-Cu.	St-Cu: Cu.	10	9	9	8	9	10	k	k	k	k	l	k	...	...	...	...	...	...	Cloudy throughout.
23	A-Cu: St-Cu: Cu.	A-Cu: St-Cu: Cu.	A-Cu: St-Cu.	8	8	7	6	2	9	k	k	k	k	j	j	...	...	...	...	...	...	c to bc a: bc to b p: b to c n.
24	A-St: St-Cuf.	St-Cu: Cu.	...	10	10	9	1	0	1	j	j	j	j	j	j	...	...	...	...	...	...	c a: c to b p: b n.
25	St-Cu.	A-Cu.	St.	3	1	5	2	10	10	j	j	i	H	C	B	...	...	...	...	...	...	bc and b a: b to f <sub>2</sub> o p: f <sub>2</sub> o n.
26	A-Cu.	A-Cu: St.	St.	5	10	8	10	10	10	E	E	H	G	F	E	...	...	...	...	...	...	f <sub>2</sub> o to c a: o m p: o m, f e n.
27	Nb.	Nb.	St.	10	10	10	10	10	10	G	G	F	F	F	D	...	...	...	...	...	...	o ● m a and p: o m f <sub>2</sub> , ● n.
28	Nb.	M-Cu: St-Cu.	St-Cu: Nb.	10	10	8	3	9	7	E	F	G	H	H	G	...	...	...	...	...	...	o f ● to c a: bc p ● <sup>0</sup> p: bc n.
29	A-Cu.	St.	St: Fog.	4	4	9	10	10	10	H	H	H	E	D	D	...	...	...	...	...	...	bc, c f a: o f p: o f e n.
30	Nb-St	Nb-St.	St.	10	10	10	10	10	10	H	H	i	j	k	j	...	...	...	...	...	...	f e, o ● <sup>0</sup> a: ● <sup>0</sup> , o p: c n.
31	St-Cu.	St-Cu.	St-Cu.	9	9	10	10	8	0	j	j	j	j	j	i	...	...	...	...	...	...	c and bc a: c p: c to b n.
Mean Cloud Am't.				8.0	7.7	7.4	6.9	7.3	6.6													

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1	...	Cu.	...	0	1	1	1	0	0	H	j	k	j	j	j	...	...	...	...	...	...	f b to b a: b y p: b n.
2	...	Ci: Cu.	Ci-St.	0	1	1	1	1	1	H	j	j	j	j	j	...	...	...	...	...	...	b, b y a: b p: b n: ⊕ 13 <sup>h</sup> .
3	St.	Ci-Cu: Fr-St.	A-Cu: Cu.	9	1	1	2	2	3	j	k	k	k	k	k	...	...	...	...	...	...	b, c, b a: b p: b to c n.
4	St-Cu: Cu.	St-Cu: Cu.	St-Cu.	9	8	9	7	2	2	k	k	k	k	k	k	...	...	...	...	...	...	c p ●, c a: c to b p: bc n.
5	A-Cu: St-Cu: Cu.	A-Cu: Cu.	A-Cu: St-Cu.	8	10	2	1	2	9	k	k	k	j	j	j	...	...	...	...	...	...	c to b a: b and bc p: b to c n.
6	A-Cu: St-Cu.	A-Cu: Fr-St.	A-Cu: St.	9	8	9	9	10	10	i	j	j	i	H	H	...	...	...	...	...	...	c, c p ● a: c p: c to o ● n.
7	Nb.	A-St: Nb-Cuf.	A-St: Nb.	10	10	10	10	10	10	i	l	k	k	k	k	●	●	●	●	●	●	● to ● a: c ● and ● p and n.
8	St-Cu: Nb-Cuf.	St-Cu: Cu.	A-Cu: Cu.	9	10	9	8	8	5	k	k	l	k	k	k	...	...	...	...	...	...	c a and p: bc n.
9	Nb.	Nb.	Nb.	10	10	10	10	10	10	H	H	H	H	H	H	...	...	...	...	...	...	o ● and ● a: o ● and ● p and n
10	Nb.	Nb-Cuf.	A-St: Nb-Cuf.	10	10	10	10	9	8	H	H	H	j	k	k	...	...	...	...	...	...	o ● a: c ● p: c n.
11	A-Cu: Cu.	A-Cu: Cu-Nb.	A-St: Cu-Nb.	5	6	8	9	8	8	k	k	k	k	k	j	...	...	●	●	●	●	bc, c p ● a and p: c p ● n.
12	A-Cu: Cu.	Cu.	Cu-Nb.	1	1	1	3	8	8	k	l	k	j	j	j	...	...	...	...	...	...	b a: bc p ● p: bc and c n.
13	A-Cu: St-Cu: Cu.	A-Cu: Cu.	A-St: Fr-Cu.	9	9	9	9	9	9	k	k	k	k	k	k	...	...	...	...	...	...	Cloudy throughout. [⊕ 8 <sup>h</sup> -10 <sup>h</sup>
14	A-Cu: Cu.	Ci-St: Cu-Nb.	Cu.	9	8	7	7	2	2	k	l	l	l	k	k	...	...	...	...	...	...	c, bc p ● a: c p ●, b p: b n: -
15	Ci-St: A-Cu: Cu.	A-Cu: Cu-Nb.	A-Cu: Cu.	7	9	8	8	5	4	k	k	k	k	k	k	...	...	...	...	...	...	bc, c p ● △ a and p: bc n: ⊕ 7 <sup>h</sup> and 9 <sup>h</sup>
16	A-Cu: Fr-Cu.	A-Cu: Cu-Nb.	A-St: Cu-Nb.	5	2	8	8	6	4	k	k	k	k	k	k	...	...	...	...	...	...	bc, c p ● a: c p ● p: bc n.
17	A-Cu: Nb-Cuf.	Cu-Nb.	St-Cu: Cu-Nb.	9	8	7	6	8	8	k	l	l	l	k	k	...	...	...	...	...	...	bc and c p ● a and p: c p ● n.
18	Cu-Nb.	A-Cu: Cu-Nb.	St-Cu: Nb.	9	8	5	9	9	7	k	k	l	j	H	i	...	...	...	...	...	...	bc and c p ● a, p and n. [10 <sup>h</sup>
19	A-Cu: Fr-Cu.	A-St: St-Cuf.	A-St: Nb-Cuf.	7	8	10	10	10	8	H	i	j	j	j	j	...	...	...	...	...	...	bc to c a: c ● p: ●, c n: ⊕ 9 <sup>h</sup>
20	Cu.	St-Cu: Cu.	Ci-Cu: St-Cu: Cu-Nb.	3	3	7	4	8	2	l	l	k	j	i	i	...	...	...	...	...	...	bc, c p ● a and p: c p ● to b n.
21	Ci-St: St-Cu.	A-St: Nb.	Nb.	2	9	10	10	10	8	i	k	i	i	G	H	...	...	...	...	...	...	btoc a: o ● g p: c ● n: ⊕ 7 <sup>h</sup> -9 <sup>h</sup>
22	Ci-Cu: A-Cu: Fr-St.	Ci-Cu: Cu: St-Cuf.	St-Cu: Cu.	6	5	7	8	6	5	j	j	j	k	j	k	...	...	...	...	...	...	p ● early, bc a: bc and c p: bc n.
23	Ci-Cu: Cu.	Ci-St: A-Cu: Cu.	St-Cu: Cu-Nb.	1	9	8	8	4	2	l	l	l	l	l	k	...	...	...	...	...	...	b y to c y a: bc p ● p: c p ● to b n
24	A-Cu: Cu.	Cu.	Cu.	5	6	6	6	2	1	l	l	l	l	l	l	...	...	...	...	...	...	bc and b y a and p: b n. [⊕ 13 <sup>h</sup>
25	Ci-Cu: Cu.	A-Cu: Cu.	A-St: Nb-Cuf.	3	3	6	7	10	10	k	k	k	j	i	H	...	...	...	...	...	...	b, bc y a: bc, c p: o ● n: ⊕ 9 <sup>h</sup> -10 <sup>h</sup>
26	Nb.	Nb.	A-St: Nb-Cuf.	10	10	10	10	10	10	H	G	j	j	j	k	...	...	...	...	...	...	o ●, ● a: o ● to c p: c ● n.
27	St-Cu: Cu.	A-Cu: Cu.	St-Cu: Cu.	9	8	5	7	5	8	l	k	k	l	k	j	...	...	...	...	...	...	bc p ● a, p and n.
28	A-St: Nb.	A-St: St-Cu: Fr-Nb.	A-St: A-Cu: St-Cu.	10	10	10	10	10	9	i	i	H	H	H	j	...	...	...	...	...	...	c ● a: c p: c ● n.
29	Ci-Cu: Fr-Cu.	Ci-Cu: A-Cu: Cu.	A-Cu: Cu: Fr-Cu.	4	1	7	9	7	4	k	l	j	k	k	k	...	...	...	...	...	...	● to bc y a: c y p: bc, b n.
30	Ci-St: Ci-Cu: St-Cu.	Ci: Cu.	A-St: A-Cu: Cu.	8	7	4	6	7	7	k	l	k	k	k	l	...	...	...	...	...	...	bc p ● a: bc y q p: bc n.
Mean Cloud Am't.				6.5	6.6	6.8	7.1	6.6	6.1													
	7 <sup>h</sup>	13 <sup>h</sup>	18 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	Remarks on the Weather of the Day
	Cloud Forms.			Cloud Amount (All Forms.)						Visibility.						Precipitation.						



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Day.	Cloud Forms.			Cloud Amount (All Forms).						Visibility.						Precipitation.						Remarks on the Weather of the Day.
	7 <sup>h</sup>	13 <sup>h</sup>	18 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	
1	Ci-Cu : St-Cu.	Ci-Cu : Cu.	A-St : Fr-Nb.	7	5	6	10	10	10	l	l	l	j	k	k	...	...	...	...	...	...	bc y a : c ● <sup>0</sup> p and n.
2	A-Cu : Cu.	Cu.	A-Cu : Cu.	1	3	8	9	7	2	k	k	j	k	k	k	...	...	...	...	...	...	b to c a : c p : bc n.
3	St-Cu : Cu.	St-Cu : Nb.	A-St : Nb.	7	9	10	10	10	10	k	k	G	j	j	j	...	...	...	...	...	...	bc, c p ● a : c ●, ● <sup>0</sup> p : c ● n.
4	A-St : Nb-Cuf.	A-St : Nb-Cuf.	A-Cu : St-Cu : Fr-St.	9	9	9	4	8	8	k	k	j	j	j	j	...	...	...	...	...	...	c ● <sup>0</sup> , p ● a : ● <sup>0</sup> , bc p : c p ● <sup>0</sup> , c n.
5	St-Cu : Fr-St.	A-Cu : St-Cu : Cu.	A-Cu : St-Cu : Cu-Nb.	7	1	9	6	5	3	j	k	j	k	k	k	...	...	...	...	...	...	bc, b, c y a : bc y, p ● p : bc, c n.
6	A-St : Cu-Nb.	A-Cu : Cu-Nb.	St-Cu : Cu.	8	9	9	9	10	4	k	k	k	k	k	k	...	...	...	...	...	...	c p ● a : c p ● <sup>0</sup> p : c p ● <sup>0</sup> , bc n.
7	Cu.	St-Cu : Cu.	Ci-St : St-Cu : Cu.	6	8	8	8	7	1	k	k	k	j	j	j	...	...	...	...	...	...	bc, c a : c, bc p : bc, b n : ⊕ 18 <sup>h</sup> .
8	Ci : A-Cu : St-Cu.	A-St : Nb.	A-St : Cu.	8	5	10	10	9	8	k	j	j	j	k	k	...	...	...	...	...	...	bc, c ● <sup>0</sup> a : c y p : c n.
9	A-Cu : Cu.	Ci-Cu : Cu.	Ci-Cu : Cu.	7	4	3	6	3	3	k	k	l	k	k	k	...	...	...	...	...	...	bc, p ● <sup>0</sup> a : bc p ● <sup>0</sup> p : bc n.
10	A-Cu lent : A-St.	A-St : Nb.	A-St lent : St-Cu.	10	10	10	10	9	9	k	k	i	i	k	k	...	...	...	...	...	...	c to c ● <sup>0</sup> a : c ● <sup>0</sup> , c p : c n.
11	A-Cu : Fr-Cu.	A-Cu : Cu.	A-Cu : Cu.	6	2	5	3	3	4	k	l	k	k	k	j	...	...	...	...	...	...	b and bc a : bc q p : bc n.
12	A-Cu : St-Cu : Fr-Cu.	A-Cu : Cu.	A-Cu : Cu.	9	9	9	10	8	8	k	k	k	j	k	j	...	...	...	...	...	...	Cloudy throughout.
13	A-Cu lent : St-Cuf.	A-Cu lent : Cu.	A-Cu : St-Cuf.	9	8	6	9	9	8	k	k	j	k	j	j	...	...	...	...	...	...	c to bc a : bc to c p : c n.
14	Ci-Cu : A-Cu : St-Cuf.	Ci-Cu : Cu.	Ci-Cu : Cu.	6	7	4	4	2	1	k	k	k	j	j	j	...	...	...	...	...	...	bc a : bc q, b p : b n.
15	St-Cu.	Nb.	Nb.	9	9	10	10	10	10	k	j	k	j	j	j	...	...	...	...	...	...	b, c to o ● <sup>0</sup> a : o ● <sup>0</sup> , o p : o ● <sup>0</sup> n.
16	A-Cu : St-Cu : Cu.	St-Cu : Cu.	St-Cu : Cu.	2	6	7	8	8	3	l	l	k	j	l	l	...	...	...	...	...	...	bc a : c p : bc n.
17	Ci : Ci-Cu.	Ci : A-Cu : Cu.	St-Cu.	2	2	3	6	9	9	k	k	k	l	k	k	...	...	...	...	...	...	b a : bc y, c y p : c p ● <sup>0</sup> n.
18	A-Cu : Cu.	Ci-St : Cu.	Ci : Cu.	9	9	8	7	6	8	l	l	k	k	l	l	...	...	...	...	...	...	c, c p ● <sup>0</sup> a : c y, bc p : c n : ⊕ 18 <sup>h</sup> .
19	A-St : St-Cu.	Ci-St : A-Cu : Cu.	A-Cu : St-Cu.	9	9	6	8	2	3	l	l	k	k	j	j	...	...	...	...	...	...	c a : bc, c to b p : bc, b n.
20	Ci-St : St-Cu.	A-Cu : Cu.	Cu.	7	9	4	2	1	1	k	k	l	k	k	k	...	...	...	...	...	...	bc and c a : b y p : b n.
21	St-Cu.	Cu.	St-Cu : Cu.	8	7	8	6	8	7	l	l	l	k	l	k	...	...	...	...	...	...	bc and c y a : bc y p : bc n.
22	A-Cu : St-Cu.	A-Cu : St-Cu.	St.	6	7	8	10	10	10	k	k	k	H	F	G	...	...	...	...	...	...	bc a : c, o m p : o m n.
23	St.	M-Cu : A-Cu.	St-Cu.	10	10	10	9	10	10	G	G	H	H	H	H	...	...	...	...	...	...	o ● <sup>0</sup> a : ● <sup>0</sup> , c p : c n.
24	Nb-St.	Cu.	St-Cu : Cu.	10	10	7	8	9	8	G	G	k	j	j	j	...	...	...	...	...	...	o ● <sup>0</sup> to bc y a : bc y, c p ● <sup>0</sup> p : c n.
25	St-Cu : Cu.	A-Cu : Cu.	Cu.	4	2	6	3	8	8	k	l	l	l	l	k	...	...	...	...	...	...	b, bc y a : bc y p : c n.
26	A-Cu : St-Cu : Fr-Cu.	St-Cu : Cu.	St-Cu : Cu.	8	9	8	9	9	9	l	l	l	k	k	j	...	...	...	...	...	...	c, o a : c p ● <sup>0</sup> p and n.
27	Nb.	A-St : Nb.	A-Cu : Cu.	10	10	10	10	8	8	j	j	i	k	k	k	...	...	...	...	...	...	o ● <sup>0</sup> a : c ● <sup>0</sup> , ● <sup>0</sup> p : c n.
28	A-Cu : Cu.	A-Cu : Cu.	A-St : Nb.	5	5	7	10	9	8	k	k	l	j	k	j	...	...	...	...	...	...	bc p ● <sup>0</sup> a : c ● <sup>0</sup> p : c ● <sup>0</sup> , c n.
29	St-Cu : Cu.	Cu-Nb.	A-Cu : Cu-Nb.	9	8	5	2	9	8	l	l	j	k	j	k	...	...	...	...	...	...	c p ● <sup>0</sup> a : bc p ● <sup>0</sup> p and n.
30	A-Cu : Nb-Cuf.	A-Cu : A-St : Cu.	A-Cu : St-Cu : Nb-Cuf.	8	9	8	4	9	4	k	k	k	k	k	k	...	...	...	...	...	...	c p ●, c a and p : ● <sup>0</sup> , bc n.
31	Ci : Cu.	Cu.	St-Cu : Cu.	1	3	8	8	8	4	l	l	l	l	k	k	...	...	...	...	...	...	b to c y a : c y, p ● <sup>0</sup> p : p ● <sup>0</sup> , bc n.
Mean Cloud Am't				7.0	6.9	7.4	7.4	7.5	6.4													

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1	Ci : St-Cu.	Cu.	St-Cu : Cu.	1	3	7	7	7	6	k	l	l	k	k	k	...	...	...	...	...	...	b to bc y a : bc p and n.
2	Ci-St : A-Cu.	St-Cu : Cu.	Ci : A-Cu.	4	3	8	9	3	5	j	k	j	j	k	j	...	...	...	...	...	...	bc, c a : c, bc p : bc n : ⊕ 7 <sup>h</sup> -8 <sup>h</sup> .
3	A-Cu : Fr-St.	A-St : St-Cu.	A-St : St-Cu.	8	5	7	7	9	9	G	i	i	i	i	i	...	...	...	...	...	...	c, bc a : bc p : c n : ⊕ 12 <sup>h</sup> . [and 14 <sup>h</sup> .
4	A-St.	Ci : A-Cu : Cu.	Ci-St:St-Cu:Cu-Nb.	10	8	5	3	7	5	j	j	i	i	i	i	...	...	...	...	...	...	● <sup>0</sup> , c to bc a : bc p : T, bc n : ⊕ 9 <sup>h</sup> .
5	A-Cu.	St : Fog.	Ci : A-Cu : Cu-Nb.	4	8	1	1	2	3	H	F	i	j	j	j	...	...	...	...	...	...	T early, bc f m to b a : b p : bc n.
6	A-Cu : A-St.	A-St.	A-St : A-Cu.	8	7	9	9	10	10	H	i	i	H	H	H	...	...	...	...	...	...	c a and p : o ● <sup>0</sup> n.
7	A-St : Nb.	Nb.	Ci-Cu : Cu.	10	10	10	10	5	1	i	G	G	l	l	k	...	...	...	...	...	...	c to o ● <sup>0</sup> a : o ● <sup>0</sup> to bc q p : b n.
8	A-St : A-Cu lent.	Cu.	Ci : Cu.	5	6	5	6	2	7	k	k	l	l	l	k	...	...	...	...	...	...	bc y a and p : b and bc n.
9	A-Cu lent : Cu.	Cu.	A-Cu : Cu.	1	8	9	9	9	1	k	k	k	k	k	k	...	...	...	...	...	...	b to c y a : c p ● <sup>0</sup> p : c to b n.
10	A-Cu lent.	St-Cu : Cu-Nb.	A-St:St-Cu:Nb-Cuf.	2	7	9	8	9	9	k	k	k	k	k	H	...	...	...	...	...	...	b to c p ● a : c p ● p : o ● <sup>0</sup> n.
11	Nb.	St.	St.	10	10	10	10	10	10	F	F	F	F	E	F	...	...	...	...	...	...	o ● <sup>0</sup> to o m a : o m, f p : f ● <sup>0</sup> n.
12	Nb.	A-Cu : Fr-Nb.	A-Cu : Cu-Nb.	10	10	8	1	1	4	F	E	G	k	k	j	...	...	...	...	...	...	o f m ● <sup>0</sup> , c a : c to b y p : bc p ● <sup>0</sup> n.
13	A-Cu : Cu.	A-Cu : St-Cuf.	A-St:St-Cu:Cu-Nb.	5	9	7	6	9	9	j	i	i	j	j	j	...	...	...	...	...	...	bc and c a and p : c ● <sup>0</sup> , c n : ⊕ 17 <sup>h</sup> .
14	A-Cu : Cu : Fr-St.	A-Cu : A-St : Nb.	A-Cu:St-Cu:Cu-Nb.	7	2	9	8	8	9	j	j	i	j	k	k	...	...	...	...	...	...	c ●, b to c ● a : c p ● <sup>0</sup> p : c p ● <sup>0</sup> n.
15	A-Cu : Cu.	A-Cu:St-Cu:Cu-Nb.	A-Cu : Cu-Nb.	8	9	9	9	9	7	H	j	k	k	k	j	...	...	...	...	...	...	c p ● a, p and n.
16	St-Cu : Fr-Cu.	A-Cu : St-Cu : Cu.	St-Cu : Cu-Nb.	9	9	9	8	7	1	k	k	k	k	k	k	...	...	...	...	...	...	c ● <sup>0</sup> a : c to bc p : c p ● to b n.
17	St-Cu : Cu.	St-Cu : Cu.	Ci : A-Cu : Cu.	9	9	6	2	4	9	k	k	k	k	k	k	...	...	...	...	...	...	c ● <sup>0</sup> a : b and bc p : bc and c n.
18	St.	St-Cu : St.	St-Cu : St.	9	10	10	9	10	10	i	j	j	j	j	j	...	...	...	...	...	...	c and o a : c p : o n.
19	St-Cu : St.	St-Cu : St.	St-Cu : Fr-St.	10	10	10	10	10	10	j	j	j	j	j	i	...	...	...	...	...	...	c a and p : o n.
20	Nb.	A-St : Nb.	St.	10	10	10	9	10	10	H	i	i	i	i	i	...	...	...	...	...	...	o ●, ● <sup>0</sup> to c a : c p : o to o ● <sup>0</sup> n.
21	A-Cu : Nb.	Nb.	St-Cu : Fr-Nb.	10	10	10	10	9	10	i	i	j	i	i	i	...	...	...	...	...	...	o ●, c and o a : o ● p : c and o ● <sup>0</sup> n.
22	St-Cu : Nb.	St-Cu : Cu.	Ci-Cu:St-Cu:Fr-St.	9	9	1	1	3	8	j	j	k	k	j	i	...	...	...	...	...	...	o to b a : b to bc p : c n.
23	St-Cu : Fr-Cu.	Nb.	St.	10	10	10	10	10	10	j	j	F	H	E	F	...	...	...	...	...	...	c to o ● a : o ● to o f p : o ● f n.
24	A-Cu : Cu.	Ci : Ci-Cu : Cu.	A-St : Cu.	9	6	5	9	10	8	j	j	k	j	j	j	...	...	...	...	...	...	c to bc a : c p and n : ⊕ 8 <sup>h</sup> -10 <sup>h</sup> .
25	Ci : A-Cu : Cu.	Ci : A-Cu : Cu-Nb.	A-Cu:St-Cu:Cu-Nb.	1	5	8	5	9	3	j	j	j	j	k	j	...	...	...	...	...	...	b to c a : bc T p ● <sup>0</sup> p : c p ●, bc n.
26	St.	Nb.	Fog.	10	10	10	10	10	10	F	G	G	F	C	D	...	...	...	...	...	...	o m, T ● <sup>0</sup> a : o T ●, f, e p : o f, e n.
27	Nb.	St-Cu : Nb.	A-Cu : Nb-Cuf.	10	10	10	9	9	10	G	H	k	k	k	j	...	...	...	...	...	...	o, c ● <sup>0</sup> , a : ● <sup>0</sup> , c p : c ● <sup>0</sup> n.
28	St-Cu : Cu.	A-Cu : Cu.	St-Cu : Cu.	9	9	9	9	10	10	k	k	k	k	k	k	...	...	...	...	...	...	Cloudy throughout.
29	Nb.	St-Cu : Nb-Cuf.	St-Cu : Nb-Cuf.	10	10	9	10	10	9	G	H	k	k	k	j	...	...	...	...	...	...	o ● to c a : c, c ● p : ●, c n.
30	St-Cu : Nb.-Cuf.	St-Cu : Cu.	St-Cu : Cu.	9	9	5	5	1	1	k	k	k	k	k	j	...	...	...	...	...	...	c ● <sup>0</sup> and bc a : bc p : b n.
31	St-Cu.	Ci : A-Cu : Cu.	A-Cu : St-Cuf.	9	9	6	8	6	2	F	j	j	j	i	i	...	...	...	...	...	...	bc, c, bc a : bc and c p : b n.
Mean Cloud Am't				7.6	8.1	7.8	7.3	7.4	7.0													
	7 <sup>h</sup>	13 <sup>h</sup>	18 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	Remarks on the Weather of the Day.
	Cloud Forms.			Cloud Amount (all Forms).						Visibility.						Precipitation.						



Day.	Cloud Forms.			Cloud Amount (All Forms).							Visibility.						Precipitation.						Remarks on the Weather of the Day.
	7 <sup>h</sup>	13 <sup>h</sup>	18 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>		
1	A-Cu.	Ci : Cu.	Ci : A-Cu : St.	1	2	1	1	2	3	F	i	i	i	i	H	...	...	...	...	...	...	b m, b a : b p : b, o f to bc n. [—19 <sup>h</sup> .	
2	A-Cu : St.	Ci : Cu.	Ci-St:A-St:A-Cu.	4	1	1	3	9	9	G	j	j	j	j	H	...	...	...	...	...	...	bc, c f to b a : bc to c p : c n : ⊕ 16 <sup>h</sup> .	
3	A-St:St-Cu:Fr-Nb.	St-Cu : Fr-Cu.	Ci-Cu : Fr-Nb.	10	10	10	10	7	10	j	j	j	j	H	H	...	...	...	...	...	...	o ●, c a : c and o ● p : c ● n.	
4	A-St : Nb.	A-St : Cu.	Nb.	10	10	10	10	10	10	j	j	k	k	j	i	...	...	...	...	...	...	c ● a : c, o ● p : o ● n.	
5	Nb.	Nb.	Nb.	10	10	10	10	10	10	i	H	H	H	G	i	...	...	...	...	...	...	Drizzle all day, rain at night.	
6	St-Cu : Fr-Nb.	St-Cu : Cu-Nb.	St-Cu : Cu.	7	7	7	1	4	10	l	l	l	l	j	j	...	...	...	...	...	...	o ● early, bc p ● a and p : c n.	
7	A-St : Fr-Nb.	A-Cu lent : Fr-St.	Ci-Cu : A-Cu.	10	10	10	10	8	6	j	j	j	j	j	j	...	...	...	...	...	...	●, c ● a : c p : bc n : ⊕ 21 <sup>h</sup> .	
8	Ci-Cu : Fr-St.	A-Cu : Cu.	Ci-Cu : A-Cu.	1	1	3	3	2	1	i	k	k	j	j	j	...	...	...	...	...	...	b and bc a and p : b n : ⊕ 9 <sup>h</sup> 30 <sup>h</sup> 24 <sup>h</sup> .	
9	Nb : Fog.	Ci-St : Cu.	Ci-St : St-Cu : Cu.	10	9	3	4	4	1	E	H	k	j	j	j	...	...	...	...	...	...	b to o ● f to bc a : bc p : cp ●, b n : ⊕ 16 <sup>h</sup> et seq.	
10	St-Cu : Cu.	A-Cu : A-St : Cu.	A-St : A-Cu : Cu.	1	1	9	8	9	10	l	l	k	k	k	k	...	...	...	...	...	...	p ● early, b to c y a : c y p : cp ● n.	
11	Ci.	St-Cu : Cu.	St-Cu : Cu.	1	1	5	5	3	2	l	l	l	k	j	H	...	...	...	...	...	...	b to bc a : bc p ● p : bc, b n.	
12	St-Cu.	Ci-St : Cu.	Ci : St-Cu.	1	6	2	3	4	6	G	H	i	i	H	H	...	...	...	...	...	...	bc and b a and p : bc c n.	
13	A-Cu.	Ci : Cu.	Ci.	1	1	1	1	1	2	G	G	j	j	j	j	...	...	...	...	...	...	b ● b a : b p and n.	
14	...	St-Cuf.	Ci-St : St-Cu.	0	1	2	1	2	4	H	j	j	j	j	i	...	...	...	...	...	...	b ●, b a : b p : bc n.	
15	St-Cu : Nb.	St-Cu : Cu.	Ci-St : Cu.	9	5	8	5	2	0	k	l	l	l	j	j	...	...	...	...	...	...	c ●, bc a : c to b p : b ● n.	
16	Ci : A-Cu.	Ci-St : A-St.	A-Cu : A-St.	6	9	8	10	9	10	j	j	j	j	j	j	...	...	...	...	...	...	bc, c a : c, c ● p : c ● n.	
17	Nb.	Nb.	Fr-Nb.	10	10	10	10	9	6	H	H	G	H	i	i	...	...	...	...	...	...	o ● a : c ● p : bc ● n.	
18	Ci : Cu.	Cu.	Ci-Cu : Cu.	1	3	4	4	4	1	j	j	l	k	k	j	...	...	...	...	...	...	b to bc y a : bc y p : b n : ⊕ 19 <sup>h</sup> —24 <sup>h</sup> .	
19	St-Cu.	Cu-Nb.	A-Cu : Cu-Nb.	1	4	8	8	2	0	k	k	k	k	k	k	...	...	...	...	...	...	b to c p ● a : c p ● p : b, ● n.	
20	St-Cu : Cu.	St-Cu : Cu.	St-Cu : Cu.	2	5	8	3	2	1	k	l	l	l	k	i	...	...	...	...	...	...	b to c a : bc, b p : b ● n : ⊕ 22 <sup>h</sup> .	
21	St-Cu : Cu.	St-Cu : Cu-Nb.	Ci : Cu.	1	1	8	2	1	0	i	k	k	l	k	k	...	...	...	...	...	...	b to c p ● a : bc, b p : b to c p ● n.	
22	St-Cu.	St-Cu : Cu.	St-Cu.	10	10	9	9	5	9	k	k	k	k	k	k	...	...	...	...	...	...	c, p ● a : c p : bc and c n. [⊕ 22 <sup>h</sup> .	
23	A-St : Nb.	A-St : Nb.	Ci-Cu:St-Cu:Fr-Nb.	10	10	10	9	8	8	j	j	k	k	k	j	...	...	...	...	...	...	c ● to o ● a : c ● p and n : ⊕ 21 <sup>h</sup> .	
24	Ci : A-Cu : St-Cu.	St-Cu : Nb-Cuf.	St-Cu : Cu-Nb.	5	6	8	8	4	3	k	k	k	k	k	k	...	...	...	...	...	...	bc and c ● a : c p ● and p ● p and n	
25	St-Cu : Nb-Cuf.	Ci-Cu : St-Cu : Cu.	Nb-Cuf.	9	9	9	9	8	9	j	k	k	k	k	j	...	...	...	...	...	...	c p ● a and p : c n : ⊕ 9 <sup>h</sup> .	
26	St-Cu.	St-Cu : Cu.	St-Cu.	8	2	9	10	10	10	k	k	k	j	i	i	...	...	...	...	...	...	b and c a : c p and n.	
27	St-Cu.	A-Cu : St-Cu : Cu.	St-Cu : Fr-Cu.	9	2	8	10	9	10	k	k	k	j	i	i	...	...	...	...	...	...	c, b, c a : c p ● p : c ● to o ● n.	
28	A-Cu : Nb-Cuf.	St-Cu : Cu.	St-Cu : Cu.	8	4	6	3	2	2	k	l	l	l	l	j	...	...	...	...	...	...	o ● to bc a : bc p ● to b p : b and c n	
29	A-Cu.	St-Cu : Nb.	St-Cu : Cu-Nb.	7	1	9	7	3	5	k	k	j	j	k	k	...	...	...	...	...	...	b and c ● a : c ● p : bc p ● n.	
30	Cu-Nb.	Cu-Nb.	St-Cu : Cu.	1	1	4	5	3	6	k	k	k	k	k	k	...	...	...	...	...	...	bc p ● q a and p : bc n.	
Mean Cloud Am't				5.5	5.1	6.7	6.1	5.2	5.5														

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1	Ci-St.	St-Cu.	St-Cu : Fr-Cu.	2	4	9	10	9	9	i	k	k	k	l	j	...	...	...	...	...	...	b to c a : c p : cp ●, b n : ⊕ 9 <sup>h</sup> .
2	St-Cu.	St-Cu.	St-Cu.	9	9	10	8	1	1	G	F	j	j	j	H	...	...	...	...	...	...	c a : c to b a : bc p : b ● n.
3	...	St-Cu : Cu.	St-Cu.	0	3	8	9	6	9	G	F	j	j	j	H	...	...	...	...	...	...	b ● m to c a : c, bc p : c n.
4	St-Cu.	A-Cu : St-Cu : Cu.	St-Cu.	9	1	8	1	8	7	F	i	j	j	j	j	...	...	...	...	...	...	c z, b to c a : c, b, c p : bc n.
5	A-St : St-Cu.	A-St : St.	A-St : Nb.	8	10	10	10	10	10	H	i	H	H	G	i	...	...	...	...	...	...	c a : c ● p : o ● n.
6	St-Cu : Fr-Nb.	A-Cu : Cu-Nb.	St-Cu lent.	9	9	6	7	3	0	i	H	j	k	j	j	...	...	...	...	...	...	c ●, bc p ● a : bc p : b and bc n.
7	Ci-St : A-St : Nb.	Nb.	A-St : St-Cu : Nb.	9	10	10	10	10	10	k	j	G	G	j	G	...	...	...	...	...	...	c a : c : o ● p : c : c n.
8	A-St : Nb.	Ci-Cu : Cu.	A-Cu : St-Cu.	9	4	5	7	4	0	i	H	j	k	j	j	...	...	...	...	...	...	c ●, bc a : bc p : b ● n.
9	A-Cu : St-Cu.	A-Cu : Cu.	A-Cu : Nb.	8	9	8	9	10	10	j	H	k	k	j	j	...	...	...	...	...	...	c a : c, c ● p : c ●, c n.
10	Ci : St-Cu : Cu.	Cu : Cu-Nb.	Ci : Cu-Nb.	1	1	4	2	1	3	l	j	k	l	k	j	...	...	...	...	...	...	bc p ● a : b p : bc p ● Δ n.
11	A-Cu : Fr-Cu.	A-Cu : Cu.	Cu.	7	8	6	7	5	1	l	k	k	k	k	j	...	...	...	...	...	...	bc p ● a : bc p : bc p ● n.
12	Cu.	St-Cu : Cu.	St-Cu.	2	1	2	7	7	10	H	H	k	k	j	j	...	...	...	...	...	...	b, b y a : bc p : cp ● n.
13	St-Cu : Fr-Nb.	St-Cu : Cu.	St-Cu : Cu.	4	6	6	2	1	4	k	j	l	l	i	i	...	...	...	...	...	...	bc p ● a : b p : bc n.
14	St-Cu : Fr-Nb.	Cu.	St-Cu : Cu.	9	8	9	6	8	10	j	j	j	i	i	i	...	...	...	...	...	...	c ●, c a : bc p : c n.
15	A-St : Nb-Cuf.	Nb.	Ci : St-Cu.	9	9	10	9	2	8	G	H	G	H	G	G	...	...	...	...	...	...	c ● to o ● a : c ● to b p : b and c n
16	Nb.	Nb.	A-Cu : St-Cu.	10	10	9	8	8	10	i	G	H	H	H	G	...	...	...	...	...	...	o ●, c a : c p : c ● to o ● n.
17	Ci : A-Cu.	A-St.	A-St : Nb.	2	2	9	9	9	9	j	G	i	i	H	H	...	...	...	...	...	...	b to c a : c, c ● p : ●, c n.
18	A-St : St-Cu : Fr-St.	A-St : Fr-Nb.	Nb.	7	9	10	10	10	1	i	i	i	H	H	j	...	...	...	...	...	...	bc to c a : c : o ● p : q to b n : ⊕
19	Ci-Cu : A-Cu : Fr-Cu.	Ci : Cu.	A-St.	3	1	2	1	9	10	k	l	l	k	i	H	...	...	...	...	...	...	b and bc a and p : c to o ● q n. [23 <sup>h</sup>
20	Nb.	A-Cu : Fr-Cu.	A-Cu lent : Fr-Cu.	9	9	8	8	8	1	j	j	l	k	k	k	...	...	...	...	...	...	q to c p ● q a : c q p : b ● n.
21	Ci-Cu : St-Cu : Fr-Cu.	Ci : Cu.	Nb-Cuf.	2	1	8	9	10	1	l	k	j	i	H	H	...	...	...	...	...	...	b to c a : c to o ● p : ● to b and c n
22	Ci : St-Cu : Cu.	A-St : Nb.	St-Cu : Nb.	2	7	10	10	9	4	G	F	H	i	i	H	...	...	...	...	...	...	b to c ● m a : c ● p : cp ●, b n
23	A-Cu : Cu-Nb.	A-Cu : Cu.	A-St : Nb.	1	1	5	7	10	10	i	i	j	j	j	j	...	...	...	...	...	...	⊕ 9 <sup>h</sup>
24	Ci-Cu : St-Cu.	Ci-Cu : St-Cu : Cu-Nb.	St-Cu : Cu.	6	5	5	7	8	9	i	F	j	j	H	H	...	...	...	...	...	...	b ●, z, bc a : bc, c ● p : c ● q, c n
25	Ci-Cu : A-Cu : St-Cu.	St-Cu : Cu.	A-Cu : St-Cu.	3	4	7	6	6	1	j	j	j	j	i	j	...	...	...	...	...	...	bc p ● q a and p : cp ● q, bc n.
26	A-St : Nb-Cuf.	Nb.	Nb.	8	8	10	9	10	10	j	i	H	H	H	H	...	...	...	...	...	...	bc a and p : b n.
27	A-Cu : St-Cu.	St-Cu : Cu.	St-Cu.	9	4	2	3	10	10	j	i	H	H	H	H	...	...	...	...	...	...	c and o ● a and p : ●, o n.
28	Ci : Cu-Nb.	Cu.	St-Cu.	1	2	2	2	8	1	l	k	j	k	j	j	...	...	...	...	...	...	c to b a : bc, c p : c ●, bc n.
29	A-Cu : St-Cu.	A-Cu : A-St.	A-St : Nb.	4	5	9	10	10	10	j	j	i	i	H	H	...	...	...	...	...	...	b a : b to c p ● p : cp ● to b n.
30	A-St : Nb.	A-Cu : Cu.	A-St : St-Cu.	9	8	4	7	9	7	i	i	i	j	j	j	...	...	...	...	...	...	bc to c a : c ● p : o ●, ● n : ⊕ 8-10 <sup>h</sup>
31	Nb.	A-Cu : Fr-Nb.	A-Cu : Fr-Nb.	10	9	9	8	8	2	i	j	k	k	k	k	...	...	...	...	...	...	o ● to bc a : bc p : bc and c n.
Mean Cloud Am't				5.8	5.7	7.1	7.0	7.3	6.1													
	7 <sup>h</sup>	13 <sup>h</sup>	18 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	Remarks on the Weather of the Day.
	Cloud Forms.			Cloud Amount (All Forms).						Visibility.						Precipitation.						



165. Aberdeen.

November, 1928.

Day.	Cloud Forms.			Cloud Amount (All Forms).						Visibility.						Precipitation.						Remarks on the Weather of the Day.
	7 <sup>h</sup>	13 <sup>h</sup>	18 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	
1	St-Cu : Cu.	St-Cu : Cu.	St-Cu : Cu-Nb.	7	8	5	2	7	8	k	k	k	k	k	j	...	...	...	...	...	...	bc and c a : bc p <sup>0</sup> p and n.
2	Cu-Nb.	St-Cu : Cu.	St-Cu : Cu.	8	6	8	9	9	8	j	k	k	k	k	j	...	...	...	...	...	...	bc p <sup>0</sup> a : c p <sup>0</sup> p : c and bc n.
3	Nb.	A-St : Nb-Cuf.	A-St : Nb.	10	10	9	10	10	10	j	k	k	k	j	j	...	...	...	...	...	...	o <sup>0</sup> to c <sup>0</sup> a : o <sup>0</sup> p : c <sup>0</sup> n.
4	A-St : Nb.	A-Cu : Cu-Nb.	Cu-Nb.	10	9	7	9	8	9	k	k	k	k	k	j	...	...	...	...	...	...	c p <sup>0</sup> a and p : c p <sup>0</sup> n.
5	A-Cu : Cu.	A-Cu : Cu.	A-Cu : Cu-Nb.	6	9	8	8	10	9	H	F	j	k	j	j	...	...	...	...	...	...	bc and c a : c, c p : c <sup>0</sup> n.
6	St-Cu : Nb.	A-St : Nb.	St-Cu.	9	9	9	7	8	10	j	H	j	k	k	j	...	...	...	...	...	...	c <sup>0</sup> a : bc and c p : c n.
7	A-Cu : St-Cu : Cu.	A-Cu : Fr-Nb.	A-Cu : St-Cu.	9	10	9	7	8	6	k	k	j	k	j	j	...	...	...	...	...	...	c <sup>0</sup> and <sup>0</sup> a : bc p : bc to b n : $\mathbb{W}$ 23 <sup>h</sup> .
8	St-Cu : Cu.	Cu.	Cu.	1	1	1	1	1	0	j	H	k	k	i	i	...	...	...	...	...	...	b $\mathbb{L}$ , b a : b, p : b $\mathbb{L}$ n : $\mathbb{W}$ 22 <sup>h</sup> 30.
9	...	Ci : St-Cu.	Ci-St.	0	0	2	6	5	2	H	F	j	G	G	H	...	...	...	...	...	...	b $\mathbb{L}$ m, b a : b to bc p : b and c n : $\oplus$
10	A-St : Nb.	Nb.	Nb.	10	10	10	9	3	0	j	H	H	H	H	i	...	...	...	...	...	...	c <sup>0</sup> to o <sup>0</sup> a : c <sup>0</sup> p : b and c n. [13 <sup>h</sup> .
11	Ci-St : St-Cu.	A-St : Nb.	A-St : Nb.	3	10	10	10	10	0	k	E	G	G	G	H	...	...	...	...	...	...	$\mathbb{W}$ 21 <sup>h</sup> 30—23 <sup>h</sup> .
12	St-Cu.	Nb : Fr-Nb.	Fr-Cu.	10	10	10	10	1	1	j	i	G	H	k	k	...	...	...	...	...	...	b to c f, c <sup>0</sup> a : c <sup>0</sup> p : c <sup>0</sup> to b n : $\mathbb{W}$ 17 <sup>h</sup> .
13	A-Cu : Fr-Cu.	Ci-Cu : Fr-Cu.	Fr-Cu.	3	8	1	1	1	2	j	j	l	k	j	j	...	...	...	...	...	...	c <sup>0</sup> a : o <sup>0</sup> to b q p : b q n : $\mathbb{W}$ 17 <sup>h</sup> .
14	Cu : Fr-St.	A-Cu lent : Cu.	A-Cu lent.	2	2	1	1	1	6	j	j	k	j	i	i	...	...	...	...	...	...	[30—24 <sup>h</sup> .
15	A-Cu : Fr-Nb.	A-Cu : St-Cu : St.	St-Cu.	8	5	9	9	9	9	i	i	j	H	H	H	...	...	...	...	...	...	b a and p : b to o <sup>0</sup> n. [30—21 <sup>h</sup> .
16	A-Cu : Cu.	Ci-St : A-Cu.	A-St.	1	1	6	9	10	9	j	j	j	H	G	G	...	...	...	...	...	...	o <sup>0</sup> to bc and c a : c p : c <sup>0</sup> to b n : $\mathbb{W}$ 19 <sup>h</sup> .
17	A-Cu : St-Cu : Cu.	A-Cu : Cu-Nb.	Cu-Nb.	3	3	3	5	5	8	k	k	k	k	k	j	...	...	...	...	...	...	b $\mathbb{L}$ to bc a : c p : c to b n : $\mathbb{W}$ 19 <sup>h</sup> .
18	St-Cu.	Ci-Cu : Cu.	A-St : Fr-Nb.	1	1	4	4	9	9	k	k	l	j	H	H	...	...	...	...	...	...	[et seq.
19	Nb.	A-St : Nb.	Nb.	10	10	10	10	10	10	G	G	k	G	G	G	...	...	...	...	...	...	bc p <sup>0</sup> q a and p : c <sup>0</sup> to b n : $\mathbb{W}$ 22 <sup>h</sup> .
20	St-Cu : Cu.	Ci-Cu : A-Cu : Cu.	Ci-Cu : A-Cu.	8	4	2	2	2	2	j	j	k	j	j	i	...	...	...	...	...	...	bq to bc a : bc, c <sup>0</sup> p : c <sup>0</sup> n. [et seq.
21	Nb.	Nb.	A-Cu : Fr-Nb.	10	10	10	10	8	2	H	G	G	G	G	G	...	...	...	...	...	...	o <sup>0</sup> q to c a : c to o p : <sup>0</sup> to b n : $\mathbb{W}$
22	St-Cu : Fr-St.	A-St : Nb.	A-Cu : St-Cu.	9	10	10	6	3	2	i	H	j	j	j	j	...	...	...	...	...	...	c to b a : b p and n. [22 <sup>h</sup> 45 et seq.
23	A-Cu : Cu.	Nb.	Nb.	9	10	10	10	10	10	j	H	H	H	j	j	...	...	...	...	...	...	b, o <sup>0</sup> a : o <sup>0</sup> to c p : bc and b n.
24	A-St : St-Cu.	A-Cu : Cu-Nb.	Ci-Cu : Nb.	1	1	1	1	1	3	k	l	l	l	l	k	...	...	...	...	...	...	c to o <sup>0</sup> a : bc <sup>0</sup> p : b n.
25	St-Cu : Cu.	A-St : Nb.	Cu-Nb.	8	1	10	9	3	1	k	k	j	k	k	k	...	...	...	...	...	...	b to c, o <sup>0</sup> a : o <sup>0</sup> q p and n.
26	Cu-Nb.	Ci-St : St-Cu.	A-Cu.	4	3	1	1	4	4	k	k	l	j	k	j	...	...	...	...	...	...	c <sup>0</sup> q early, b a : b p <sup>0</sup> p : bc n : $\mathbb{W}$ 21 <sup>h</sup> et seq.
27	A-Cu : Cu-Nb.	Cu-Nb.	Cu-Nb.	1	1	1	1	8	1	k	j	k	k	k	k	...	...	...	...	...	...	c to b to c <sup>0</sup> a : bc p <sup>0</sup> p : bc p <sup>0</sup> q n.
28	A-Cu : Cu-Nb.	Ci-St : Cu-Nb.	A-Cu : A-St.	8	8	3	7	9	9	j	j	k	k	H	H	...	...	...	...	...	...	bc p <sup>0</sup> q to b a : b to bc p : bc n.
29	Nb.	A-Cu : St-Cu.	A-St : St-Cu.	10	10	9	9	9	9	F	H	j	k	k	k	...	...	...	...	...	...	b $\mathbb{L}$ , b a : bc p <sup>0</sup> p : b and c p <sup>0</sup> q n.
30	A-Cu : St-Cu.	A-St : St-Cu : Fr-St.	A-St : St-Cu.	9	9	9	9	8	8	j	j	k	k	k	k	...	...	...	...	...	...	c p <sup>0</sup> a : bc, c p : c n.
Mean Cloud Am't.				6.3	6.3	6.3	6.4	6.3	5.6													c <sup>0</sup> a : c p : bc and c n.

166. Aberdeen.

December, 1928.

Day.	Cloud Forms.			Cloud Amount (All Forms).						Visibility.						Precipitation.						Remarks on the Weather of the Day.
	7 <sup>h</sup>	13 <sup>h</sup>	18 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	
1	A-Cu : St-Cu : Cu.	St-Cu.	...	5	1	1	1	0	4	k	k	k	k	k	j	...	...	...	...	...	...	bc to b q a : b p : b and bc n.
2	A-Cu.	Ci : A-Cu.	A-St : Fr-Nb.	1	1	4	8	9	9	j	i	i	i	G	H	...	...	...	...	...	...	b $\mathbb{L}$ to bc a : bc to c <sup>0</sup> p : c <sup>0</sup> n.
3	Ci-St : A-Cu.	Ci-Cu lent : A-Cu.	Ci-Cu : St-Cu.	4	8	3	6	1	1	i	i	i	j	j	j	...	...	...	...	...	...	bc and c a : bc to b p : b n : $\mathbb{W}$ 7 <sup>h</sup> , $\oplus$
4	A-St : St-Cu.	A-Cu : St-Cu : Nb.	A-St : St.	10	8	9	9	10	10	i	i	i	k	j	j	...	...	...	...	...	...	b to c <sup>0</sup> a : c <sup>0</sup> p : c n. [13 <sup>h</sup> 20.
5	St-Cu.	Fr-Cu.	...	1	1	1	1	0	1	j	k	k	k	k	j	...	...	...	...	...	...	c early, b a and p : b to c n.
6	A-St : Fr-St.	A-Cu : Nb-Cuf.	St-Cu.	10	10	9	3	1	1	i	H	k	j	j	j	...	...	...	...	...	...	$\mathbb{W}$ 17 <sup>h</sup> 30—23 <sup>h</sup> .
7	A-St : Nb-Cuf.	Ci-Cu : Cu.	Cu-Nb.	8	7	1	1	1	1	j	k	k	k	k	j	...	...	...	...	...	...	c to c <sup>0</sup> a : c to b p : bc p <sup>0</sup> q n.
8	Cu-Nb.	Cu-Nb : Fr-Nb.	Fr-Cu.	1	1	1	2	1	0	j	k	k	k	k	k	...	...	...	...	...	...	bc p <sup>0</sup> q to b a : b p <sup>0</sup> p : bc p <sup>0</sup> n.
9	A-St : St-Cu.	Nb.	Nb.	9	10	10	10	9	9	k	j	i	H	H	H	...	...	...	...	...	...	b and c p <sup>0</sup> a : bc p <sup>0</sup> p : b n : $\mathbb{W}$
10	St.	A-St : Fr-Cu.	A-St : St.	10	10	8	9	10	10	j	i	G	H	H	H	...	...	...	...	...	...	c to o <sup>0</sup> a : o <sup>0</sup> to c p : c n $\boxtimes$ thinly.
11	St-Cu.	A-St : Nb-Cuf.	A-St : Nb.	10	10	10	10	10	10	j	i	i	j	j	j	...	...	...	...	...	...	c <sup>0</sup> a : c p and n.
12	Nb.	St-Cu : Nb-Cuf.	St-Cu : Cu.	10	9	9	9	10	10	i	i	i	k	j	j	...	...	...	...	...	...	c <sup>0</sup> q to p <sup>0</sup> a : c p : c p <sup>0</sup> n.
13	St-Cu.	St-Cu : Cu.	St-Cu : Nb-Cuf.	9	9	9	10	10	10	j	j	j	k	j	j	...	...	...	...	...	...	c p <sup>0</sup> a and p : c n.
14	St-Cu.	St-Cu : Cu.	St-Cu : Cu.	9	10	8	8	9	8	j	i	i	j	j	H	...	...	...	...	...	...	c <sup>0</sup> a : c p : bc and c n.
15	Nb.	A-Cu : Cu.	A-St : Nb-Cuf.	10	6	9	9	9	10	H	i	i	H	H	H	...	...	...	...	...	...	c p <sup>0</sup> a, bc and c a : c <sup>0</sup> p : c n.
16	A-St : Nb.	Nb : Nb-Cuf.	Nb.	10	10	10	10	10	10	i	H	H	H	H	H	...	...	...	...	...	...	Dull and rainy.
17	St-Cu.	A-Cu lent : St-Cu.	...	1	1	1	1	0	1	j	j	j	j	j	j	...	...	...	...	...	...	Fine throughout.
18	Ci-St.	A-Cu lent : A-St.	A-St.	2	4	9	10	9	10	H	D	H	G	G	H	...	...	...	...	...	...	b $\mathbb{L}$ , bc f, c a : c p : c to o <sup>0</sup> n.
19	St-Cu.	Ci-St : A-Cu : A-St.	A-St.	1	3	8	9	10	10	i	E	G	i	F	G	...	...	...	...	...	...	<sup>0</sup> early, b $\mathbb{L}$ , bc f a : c f z p : c z,
20	St-Cu.	Ci-Cu : St-Cu : Cu-Nb.	St-Cu.	1	1	1	1	1	1	k	k	j	j	j	i	...	...	...	...	...	...	c to b a : b, b $\mathbb{L}$ p : b $\mathbb{L}$ n. [o <sup>0</sup> n.
21	A-Cu.	A-St.	A-St.	7	8	10	10	10	8	H	E	G	D	G	E	...	...	...	...	...	...	b $\mathbb{L}$ , c f to o <sup>0</sup> a : o f <sup>0</sup> p : c f
22	A-Cu.	A-Cu lent : Fr-St.	A-Cu : A-St.	5	7	10	10	1	0	i	E	i	i	k	k	...	...	...	...	...	...	bc $\mathbb{L}$ to c f z a : c, c p <sup>0</sup> , b q p : b q,
23	A-Cu.	A-Cu : Fr-St.	A-Cu : Fr-St.	1	1	9	10	10	10	k	j	j	j	j	k	...	...	...	...	...	...	b $\mathbb{L}$ , to c a : c p : c q, <sup>0</sup> later n. [b n.
24	Nb.	A-St : Nb.	A-Cu.	10	10	10	7	1	1	H	i	j	j	j	k	...	...	...	...	...	...	o <sup>0</sup> to c a : c to b p : b n.
25	A-Cu lent.	Ci-St : A-Cu : Fr-Cu.	A-St : Fr-St.	1	1	5	3	10	10	j	i	j	j	j	i	...	...	...	...	...	...	b $\mathbb{L}$ to bc a : bc to c p : c to o <sup>0</sup> n.
26	St-Cu.	A-St : A-Cu : Fr-Cu.	A-Cu.	1	1	8	3	2	1	k	k	k	k	k	k	...	...	...	...	...	...	o <sup>0</sup> to b, b to c a : c to b p : b p <sup>0</sup> n.
27	Cu-Nb.	St-Cu : Cu-Nb.	A-Cu : St-Cu.	1	1	1	1	0	0	k	k	k	j	j	j	...	...	...	...	...	...	Fine throughout.
28	St-Cu.	St-Cu.	St-Cu.	8	9	9	9	9	10	j	E	F	F	j	j	...	...	...	...	...	...	b to c $\mathbb{L}$ , f z a : c z p : c n.
29	Nb-Cuf.	A-St : Nb.	St-Cu.	10	10	10	10	2	9	j	i	H	H	H	H	...	...	...	...	...	...	c to o <sup>0</sup> a : c <sup>0</sup> to b p : b to c <sup>0</sup> n.
30	St-Cu : Cu-Nb.	Cu : Cu-Nb.	Cu-Nb.	9	7	5	8	9	4	k	k	k	k	k	k	...	...	...	...	...	...	c <sup>0</sup> q to bc y a : c p <sup>0</sup> a : c p <sup>0</sup> n.
31	St-Cu : Cu.	Ci-Cu : Ci-St : St-Cu.	Ci-St : St-Cu.	2	3	5	9	3	2	k	j	k	j	j	k	...	...	...	...	...	...	[bc n.
Mean Cloud Am't.				5.7	5.7	6.5	6.7	5.7	5.8													b and bc a : bc and c p : b n.
Annual Mean Cloud Am't.	Cloud Forms.			Cloud Amount (All Forms).						Visibility.						Precipitation.						Remarks on the Weather of the Day.







Air Ministry  
METEOROLOGICAL OFFICE

THE  
OBSERVATORIES' YEAR BOOK  
1928

Comprising the meteorological and geophysical results obtained from autographic records and eye observations at the observatories at Lerwick, Aberdeen, Eskdalemuir, Cahirciveen (Valentia Observatory), and Richmond (Kew Observatory), and the results of soundings of the upper atmosphere by means of registering balloons.

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ESKDALEMUIR

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Published by the authority of the  
METEOROLOGICAL COMMITTEE



LONDON  
PUBLISHED BY HIS MAJESTY'S STATIONERY OFFICE.

1930



## ESKDALEMUIR OBSERVATORY.

Latitude	...	...	...	...	55° 19' N.
Longitude	...	...	...	...	3° 12' W.
G.M.T. of Local Mean Noon	...	...	...	...	12h. 13m.

### *Heights in metres above Sea-Level.*

Barometer	...	...	...	...	237·3
Rain-gauge	...	...	...	...	242·0
Dines Tube Anemograph	...	...	...	...	250

### *Heights in metres above ground.*

Thermometer Bulbs	...	...	...	0·9
Sunshine Recorder	...	...	...	1·5
Dines Tube Anemograph	...	...	...	15
Beckley Rain-gauge Rim	...	...	...	0·4

## INTRODUCTION.

### HISTORICAL.

Early in the twentieth century the increasing artificial magnetic disturbance at Kew Observatory, Richmond, due to the westward extension of the electric tramway system from London made desirable the establishment of a magnetic observatory in a locality unlikely to be affected, at least for a large number of years, by electric power or traction system. A committee of the Royal Society of London selected a site in the parish of Eskdalemuir, Dumfries-shire, for the new observatory. The nearest towns or industrial centres are Langholm and Lockerbie, distant approximately 16 and 18 miles (26 and 29 km.) by road, and there is no point of railroad within 9 miles (14 km.) of the Observatory. Installation of the instrumental apparatus commenced in the summer of 1908, the Observatory at that time forming a part of the then recently established National Physical Laboratory.

It seems to have been the initial intention that the new observatory should serve mainly as a magnetic annexe or substation to Kew Observatory, but as soon as it was possible to compare records of simultaneous magnetic changes at Eskdalemuir and Kew it was apparent that natural magnetic disturbance is considerably larger at the former station. Thus, in no sense can the magnetic results obtained at Eskdalemuir be regarded as a direct continuation of the Kew series. As it happened, magnetic observations (and the work of verification of magnetic instruments) were continued at Kew until the end of 1924.

Although the Observatory was established primarily in the interests of the study of terrestrial magnetism the field of geophysical work undertaken has been considerably wider and has included, almost from the beginning, meteorology, atmospheric electricity (mainly atmospheric potential gradient), and seismology. In the earlier years Milne, Wiechert, Omori, and Galitzin seismographs were in operation at Eskdalemuir, but seismological observations ceased in October, 1925, when the three-component installation of Galitzin seismographs was transferred to Kew Observatory. In 1910, when the majority of the various initial difficulties had been overcome, Eskdalemuir passed from the control of the National Physical Laboratory to that of the Meteorological Office. In consequence of this change the meteorological work assumed increased importance, and from the beginning of 1914 the Observatory has served as a telegraphic reporting station of the Meteorological Office.



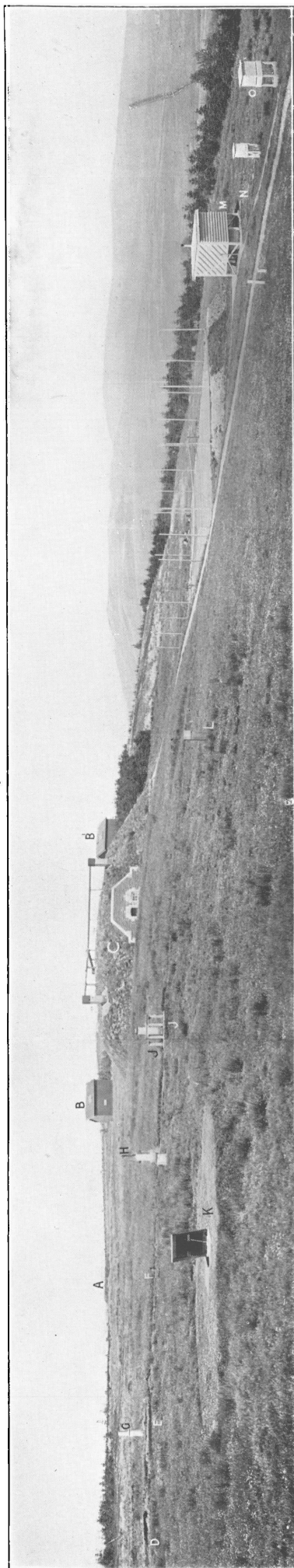


FIG. 10. GENERAL VIEW (NORTH-WEST TO NORTH-EAST) FROM MAIN OBSERVATORY BUILDING.

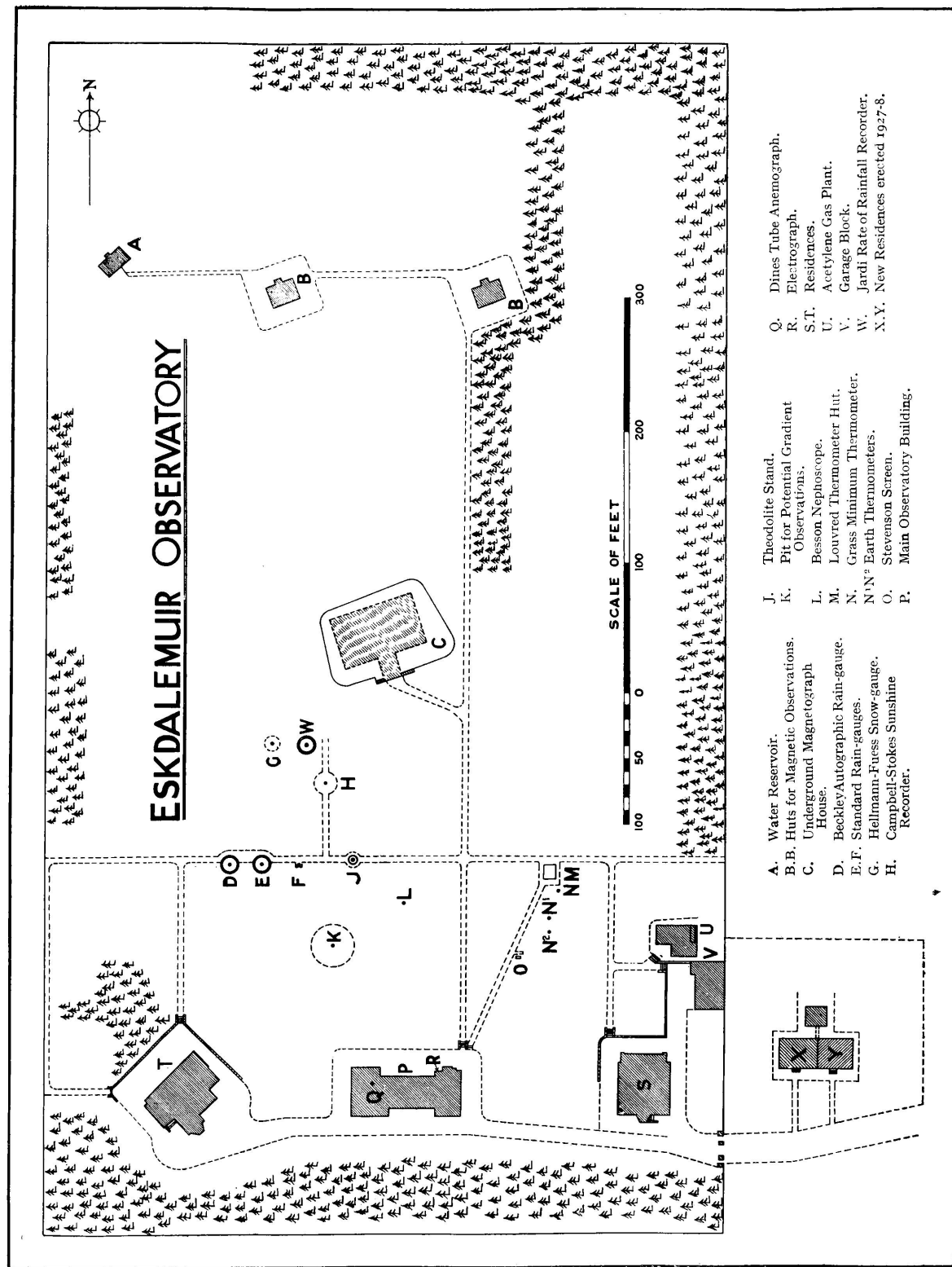


FIG. 11. SITE PLAN (for explanation see page 147).



# ESKDALEMUIR OBSERVATORY.

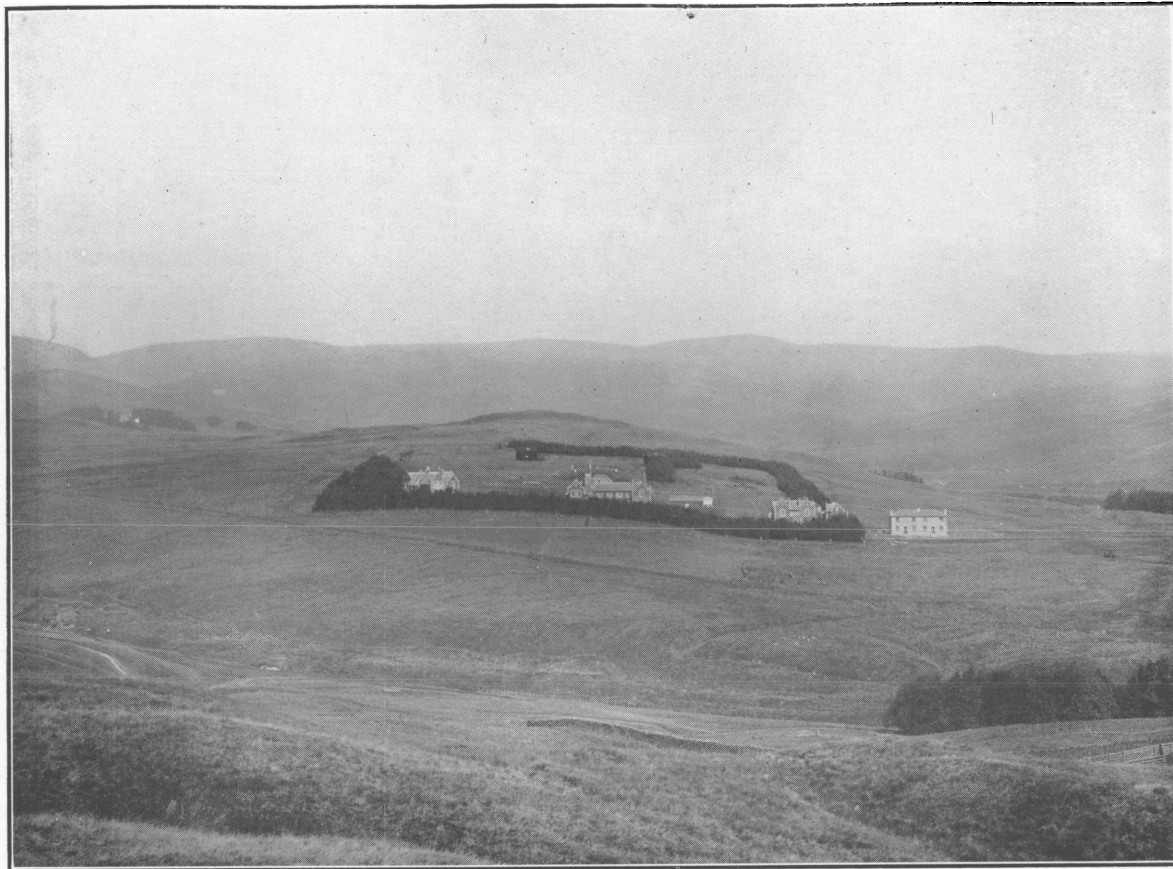


FIG. 12. GENERAL VIEW FROM SOUTH-SOUTH-WEST.

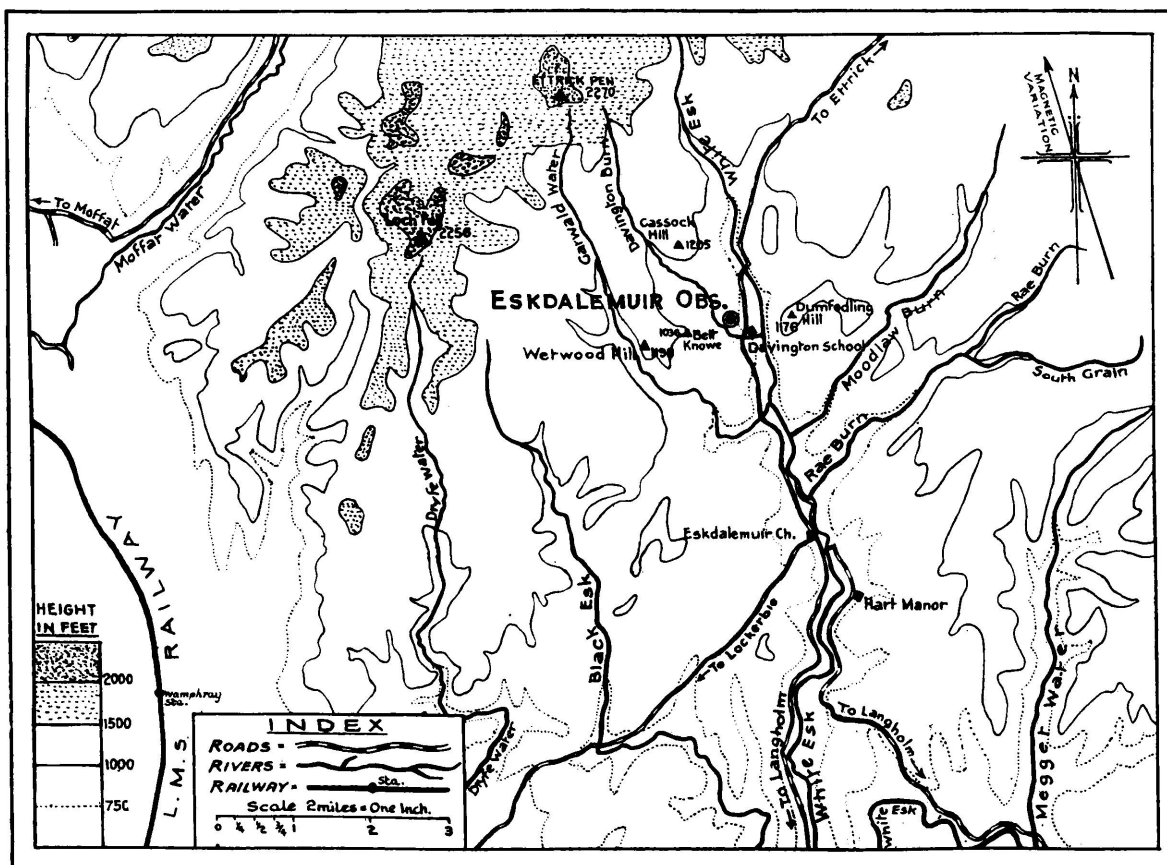


FIG. 13. CONTOURED MAP SHOWING POSITION OF OBSERVATORY.

[To face p. 147.



Summaries of the results of observations made in 1909-10 were published in the Report of the Observatory Department of the National Physical Laboratory, 1909-10. The results for subsequent years are included in the publications mentioned in the Preface to the present volume.

### SITE.

Eskdalemuir Observatory, some  $3\frac{1}{2}$  miles ( $5\frac{1}{2}$  kilometres) north-north-west of Eskdalemuir Parish Church in the county of Dumfries-shire, is situated on a rising shoulder of moorland which is bounded on the east by the road which leads north to Ettrick and Selkirk, on the west by the small Davington Burn, and at the southern extremity by the small hamlet of Davington.

The hillside in the immediate vicinity of the Observatory slopes generally from the north-west to south-east. The mean height above sea level of the Observatory site is about 800 feet (244 metres). Cassock Hill, slightly more than a mile distant to the north-west, is 1,205 feet (367 metres), while the bench mark at Davington School,  $\frac{1}{4}$  mile (0.4 km.) to south-east, is 699 feet (213 metres) above M.S.L. To the east the ground slopes fairly rapidly to the valley bottom, the level of the Ettrick road at a point about  $\frac{1}{4}$  mile (0.4 km.) east of the underground magnet house being 682 feet (208 metres). The River White Esk is rather less than  $\frac{1}{2}$  mile (0.8 km.) to the east. Immediately beyond the river, and almost due east of the Observatory, Dumfedling Hill rises to a height of nearly 1,200 feet (366 metres) above M.S.L. Some 4 or 5 miles (8 km.) to the north is a high ridge, following approximately the boundary between Dumfries-shire and Selkirkshire, the highest point of which is Ettrick Pen (north-north-west) 2,200 feet (670 metres) above M.S.L. Rather more than half a mile (0.8 km.) to the west, and beyond Davington Burn, the ground rises to 1,040 feet (317 m.), and reaches nearly 1,200 feet (366 m.) half a mile (0.8 km.) further on. To the south and south-south-east the Observatory commands a view of the White Esk Valley as far as Hartmanor, 4 miles ( $6\frac{1}{2}$  km.) distant, and beyond that the upper slope of Cauldkine Hill, about 10 miles (16 km.) distant, is visible. The surrounding country is bare and wild and there are but few trees to relieve the monotony of the grass-covered hills and moorland.

Within the Observatory grounds the soil is peaty and in many places is more or less boggy at all seasons. Some two feet, or less, below the surface a clay-like substance containing soft rock is encountered. The local geological formation is described as "rock of the Tarannon Llandovery series traversed by igneous dykes."

The general features of the immediate surroundings and the lay-out of the buildings may be seen from the accompanying photographs, plan and map.

The following brief descriptive notes serve as an index to the accompanying site plan (Fig. II).

There is a narrow belt of trees—chiefly conifers, with a few birch and rowans—around the greater part of the Observatory enclosure. These trees were planted shortly after the building of the Observatory and subsequently. They are largest to the south, but few of them exceed 20 feet (6 metres) in height.

A is a water reservoir, from which water is distributed to the various buildings. The reservoir is fed from a spring on Cassock Hill by means of a pipe line.

B, B are two similar double-walled wooden huts in which absolute observations of the magnetic elements are made. The space between the inner and outer wooden shells is packed with non-conducting material. Lighting is provided by windows in the north sides and by skylights.



C is the underground magnetograph house, constructed throughout of non-magnetic material. Within the outer shell of stone and concrete, and separated therefrom and from each other by corridors and vaultings, are two similar rooms of which the approximate internal dimensions are :—Length, 25 feet (7·6 m.) ; width, 20 feet (6·1 m.) ; height, 10 feet (3·0 m.). The ceilings of the rooms are just below the undisturbed level of the surrounding ground. The roof portion of the outer containing shell is covered with a thick layer of earth, thus forming the mound shown in Fig. 10. The super-structure which is visible in the photograph is part of the ventilation system. The east room contains the standard magnetographs and the photographic barometer. Other magnetographs have been set up from time to time in the west room. Acetylene gas is used as illuminant.

D is the Beckley self-recording rain-gauge, and E the standard 8 inch rain-gauge ; each is surrounded by a low wall or dyke of turf. F is an auxiliary 8 inch rain-gauge but is not artificially screened. G is a snow-gauge of the Hellmann pattern, made by Fuess.

H is the Campbell-Stokes sunshine recorder.

J is a concrete pillar, 4 feet high, on which a pilot-balloon theodolite may be mounted. The pillar is surrounded by a wooden seat of convenient dimensions.

K is the pit from which observations of the electric potential at 1 metre above the surface of the ground are made. The dimensions of the brick-lined pit are 4 feet (1·2 m.) by 3 feet (0·9 m.) by 3 feet. The lid which consists of a fixed and a hinged portion is covered with zinc, is provided with a small glass window, and is flush with the level of the approximately circular lawn indicated on the plan by the dotted circle.

L is a stone pillar formerly used as a support for an Ebert ion-aspiration apparatus but latterly used to support a Besson Comb nephoscope.

M is a large louvred hut which contains the standard dry and wet bulb thermometers, the photographic and pen thermographs, and maximum and minimum thermometers. The hut, of which the general features may be seen on reference to Fig. 10, is painted white inside and out. Until 1925, when electric light was introduced, acetylene gas was the illuminant for the photographic thermograph.

N marks the position in which the grass minimum thermometer is exposed between 18h and 9h G.M.T.

N<sup>1</sup>, N<sup>2</sup> are earth thermometers, 1 foot (0·3 m.) and 4 feet (1·2 m.) below ground level respectively.

O is an auxiliary screen in which a hair hygograph was exposed until June 15, 1928.

P is the main building, two-storied, and containing offices, workshop, laboratory, seismograph and photographic rooms. Q indicates the position of the mast of the Dines tube anemograph and R the position of the jet of the Kelvin water-dropper electrograph.

S, T are residences (Rayleigh House and Schuster House, respectively).

U is the acetylene gas generating house.

V is a block containing the garage, the electric lighting generating set and the accumulator batteries. The electric lighting equipment, which was installed in 1924, provides for continuous illumination for photographic recording instruments in M and P and for occasional general lighting in P, U and V. The voltage on the lighting



circuits is restricted to 8 volts. Connection between the battery room in V and buildings M and P is by underground cable which is insulated, lead covered, and armoured. All precautions have been taken to guard against leakage of current to earth.

W is a Gardi rate of rainfall recorder. It is installed in a pit six feet (1.8 m.) deep and screened by a low dyke of turf.

X, Y are residences (Glazebrook House and Shaw House, respectively) which were erected in 1927-8.

### METEOROLOGY.

The elements dealt with in the following tables are:—Atmospheric pressure, air temperature, humidity, rainfall, sunshine, solar radiation, wind speed and direction, and minimum temperature on the grass. There is also a diary of cloud and weather.

#### Notes on Instruments.

Brief descriptions of the recording instruments and of the methods of tabulating the records, with notes on the information contained in the Tables, are given in the General Introduction to the Tables. The following particulars, which refer specially to Eskdalemuir, are to be regarded as amplifying the information contained therein. References to full accounts of other instruments used at Eskdalemuir appear below.

*Pressure.*—The standard mercury barometer, Kew pattern, is situated in a north window embrasure on the ground floor of the main building.

The photographic mercurial barograph is situated in the east room of the underground magnet house. The daily range of temperature to which the instrument is subject is normally less than  $0.05^{\circ}\text{C}.$ , the annual range being about  $4^{\circ}\text{C}.$  The scale value of the records is 1 millimetre on the paper = 0.85 millibar, and the time scale is 9.1 millimetres on the paper = 1 hour.

As in former years, records of pressure were also obtained from (a) a Dines float barograph<sup>1</sup>, and (b) a Richard barograph, pen recording, the records of which are changed weekly.

*Temperature.*—The photographic thermograph and the standard mercurial thermometers, dry bulb and wet bulb, are situated in a wooden hut, provided with louvred sides and double roof, which is some 200 feet (60 m.) north-north-east of the main building. The installation is similar to that described on p. 10, except that a special enclosure is provided inside the hut to accommodate the optical and photographic arrangements.

The scale values of the thermograph records are 1a. = 3.064 mm. and 2.438 mm. on the paper for the dry and wet bulb records respectively, while the time scale is 1 hour = 9.250 mm.

Auxiliary records of temperature are obtained from one or more instruments of the bimetallic type described in the *Meteorological Observers' Handbook*. These instruments are situated in the hut which contains the photographic thermograph.

*Humidity.*—In addition to the dry and wet bulb thermograph described above there is a Richard hair hygograph which was situated in a Stevenson screen about midway between the louvred hut and the main building until June 15, 1928, and in the louvred hut after that date.

<sup>1</sup> Q.J.R. Meteor. Soc., Vol. LV, pp. 37-53, 1929.



As is stated in the General Introduction, the records from this instrument are utilised when the wet bulb reading does not exceed 273a. On the records obtained in 1928 a change of 10 per cent. in relative humidity is represented by about 0.8 centimetre, the time scale being 1 hour = 3 millimetres.

*Rainfall.*—The recording instrument is a Beckley self-registering rain-gauge, which is described on p. 13. The time scale of the record is 1 hour = 9.24 millimetres on the paper and the rain scale has a magnification of 3.35. The instrument has been in use at Eskdalemuir since 1908 and was originally installed at Fort William in July, 1890.

The conical part of the gauge funnel is surrounded by a cylindrical copper casing lined with asbestos on the inner side and of diameter equal to that of the funnel, viz. 11.27 inches (28.6 cm.). Within the enclosure so formed is a gas jet, and a flame of suitable dimensions is maintained, as circumstances dictate, to melt snow which may be collected.

The gauge is surrounded by a circular turf wall or dyke, the top of which is on a level with the rim of the gauge; the external and internal diameters of the dyke being 11.5 feet (3.5 m.) and 7 feet (2 m.) respectively.

A standard 8 inch (20.3 cm.) rain-gauge is situated some 24.5 feet (7.5 m.) to the east of the Beckley gauge and is surrounded by a turf dyke of similar dimensions. Readings of amounts of rain received in the 8 inch gauge are made at 7h and 18h G.M.T. It is customary to adjust the indications of the recording gauge to agree with the readings of the standard check gauge.

Until May 14 and again after November 8 auxiliary autographic records of precipitation were obtained by means of a Hellmann-Fuess snow-gauge. In the former period the exposure of the instrument was as described on p. 142 of *The Observatories' Year Book*, 1927. In the latter period the gauge was situated in a somewhat deeper pit 8 feet (2.4 m.) almost due north of the 8 inch standard gauge, the pit being surrounded by a low wall of earth and turf—the top of the wall being approximately level with the rim of the gauge. The records so obtained are used only in the event of failure or uncertainty of the Beckley autographic record.

*Sunshine.*—The record of sunshine is obtained from a Campbell-Stokes recorder described on p. 13.

The recorder is fixed on a stone pillar and has a reasonably free exposure, the chief obstacles being hills to east and west. The elevation of hills between 70° and 110° east of south varies from 2.5° to 5°, while between 50° and 135° west of south the high ground varies in elevation from 3° to 4.4°, being generally about 3.5°. As sunshine can be recorded when the sun is 3° above the horizon only in the most favourable circumstances, it appears that the loss of record occasioned by the neighbouring high ground is of relatively small extent and is confined mainly to a possible defect of record at the beginning of the day during a few weeks centred about the equinoxes.

*Solar Radiation.*—Measurements of the intensity of radiation received from the sun by a surface which is normal to the line drawn from the instrument to the sun are effected by means of an Ångström compensating pyrheliometer.<sup>1</sup> The intensity of radiation is expressed in milliwatts per square centimetre (1mw. per sq. cm. = 0.01435 gramme calorie per sq. cm. per minute). In addition, the value is given of

<sup>1</sup> For description see *The Observer's Handbook*, 1921, Ed., Meteorological Office, London; *Astro-physical Journal*, Vol. IX, 1899; *Actes de la société royale des Sciences d'Upsal*, 1893; also *Geophysical Memoirs*, No. 21 (1923), Meteorological Office, London. The pyrheliometer was under repair as from September 20, 1928.



the function  $(p/p_0) \sec Z$ , in which  $p$  is the barometric pressure at the observatory in millibars at the time of the observation,  $p_0$  is 1000 millibars, and  $Z$  is the zenith distance of the sun. This affords a measure of the mass of atmosphere which the solar radiation has had to penetrate before reaching the earth. Entries in the column headed "Sky" are intended to show the presence or absence of haze, mist or cloud in the direct path of the solar radiation recorded.

*Wind.*—A Dines tube anemograph, furnished with direction recorder, is situated in the main building. The vane-head is 15 metres above a tangent plane to the slope of the hillside and approximately 7 metres above the general level of the roof of the building.

The anemograph vane in use throughout 1928 is that which was introduced in August, 1925. It differs from that formerly in use in that the greatest dimension of the fin is vertical instead of horizontal, and that the cross-section of the fin is of aerofoil shape. A twin-lever direction recorder has been in use since June, 1925. In this instrument a pen is carried by each of two pivoted arms, upper and lower. A projection from each arm engages with a flange of a dual helical device cut in a short cylinder (of vertical axis) which rotates with the vane, being connected thereto by a vertical "rod" consisting of steel tubing 1.5 cm. external diameter.

No modifications to the anemograph were made in 1928. On February 2 and March 12 choking of the head with snow rendered the record unreliable.

Apart from the surrounding hills, the exposure of the vane-head is tolerably free in all directions save to the west where at a distance of some 130 feet (40 m.) is a rather large building, of which the height is somewhat greater than that of the main building. With winds from nearly due west the direction records show markedly greater turbulence than with other winds.

*Earth Temperature.*—Commencing on July 28, 1928, readings have been made at 9h. G.M.T. of the earth temperature at nominal depths of one foot and four feet below the surface of the grass lawn a few yards south of the thermometer hut. The thermometers and the method of exposure are of the standard type described in the *Meteorological Observers' Handbook*. The depths of the thermometer bulbs below the grass-covered surface of the ground are 30 and 123 cm.

*Minimum Temperature on the Grass.*—The thermometer used for readings of grass minimum temperature is of the spirit type with index; and when exposed, between 18h and 7h G.M.T., is supported at a height of one or two inches (4 cm.) above close-cropped grass a few metres from the louvred thermometer hut.

*Visibility.*—The descriptions of the selected visibility objects, together with the distances and bearings from the point of observation, are given in the subjoined table. Auxiliary objects and guide criteria are given in brackets. Certain of the nearer objects may be identified by reference to the photographs and site plan. Unless otherwise stated, the distances and bearings are with reference to certain of the windows on the upper floor of the main building.

The situation of the Observatory and the nature of the immediate surroundings allow of only a very limited choice of objects. The objects A to D are situated mainly to the north, while the more distant objects are toward south to south-east, *i.e.*, down valley. Four miles or so to the north of the Observatory the hills rise in places to rather more than 2,000 feet above sea level and at times visibility in this direction is distinctly less than towards south. On other occasions the hills to the north are visible, but nearer objects down the valley are invisible owing to valley mist. With the exception of the cottage at Finglandshiel, and Cauldkine Hill, the objects more distant than D are below the level of the Observatory. There are no objects



at distances which approximate sufficiently closely to the standard distances for objects H, J, and K. When it is estimated that the range of visibility is such that objects at these standard distances would be visible the corresponding small letter entries are made in the Diary of Cloud and Weather. The estimates of visibility in the dark depend largely on the judgment of the observer. There are no lights other than those in the Observatory buildings and in two cottages within a radius of one mile.

## VISIBILITY OBJECTS AT ESKDALEMUIR.

Object.	Description.	Distance.	Bearing.
A	(i) White wooden post ... ..	25 yards	NE.
	(ii) Twigs on trees nearest the boundary wall in front of the main building ... ..	25 "	S.
	(iii) Small thermometer screen—viewed from steps facing the back entrance to the main building ... ..	26 "	NNE.
B	(i) Theodolite pillar ... ..	55 "	N.
	(ii) Chimney (or cowl) on the large thermometer screen	60 "	NE.
C	Posts and shafts on underground magnetograph house ...	107 "	N.
D	Standards on Observatory water reservoir ... ..	217 "	NNW.
E	(i) Church and Manse, Davington ... ..	550 "	SE.
	(ii) (Davington Farm House) ... ..	470 "	SSE.
F	(i) Chimneys at Burncleuch ... ..	1180 "	SSE.
	(ii) (Cottage at Finglandshiel) ... ..	1550 "	NE.
G	Trees at Garwaldwaterfoot ... ..	2160 "	SSE.
H (h)	(Lower slope of Raeburn Hill) ... ..	2½ miles	SSE.
I	Hart Manor ... ..	4 "	SSE.
J (j)	(Cauldkine Hill, 1,478 feet, near Westerkirk; not clearly visible) ... ..	10½ "	SSE.
K (k)	(Cauldkine Hill, 1,478 feet, near Westerkirk; plainly visible) ... ..		
L (l)	No objects available		
M (m)			

Note.—The descriptions of auxiliary objects and guide criteria are given in brackets.

## IDENTIFICATION NUMBERS OF INSTRUMENTS IN USE IN 1928.

Standard Kew pattern Barometer	..	..	..	M.O.	1320
Standard Dry Bulb Thermometer	..	..	..	M.O.	19123
Standard Wet Bulb Thermometer	..	..	..	M.O.	1695
Hair Hygograph	..	..	..	M.O.	59
Recording Beckley Rain-gauge	..	..	..		4
Control Rain-gauge	..	..	..	M.O.	391
" " glass for	..	..	..	M.O.	1354
Campbell-Stokes Sunshine Recorder	..	..	..	M.O.	99
Ångström compensating Pyrheliometer	..	..	..		116
Dines Tube Anemograph	..	..	..	M.O.	1032
Grass Minimum Thermometer	..	..	..	M.O.	23008

## CORRECTIONS TO INSTRUMENTS IN USE IN 1928.

The corrections to the instruments in use during 1928 are given below. In all cases the corrections are those given in the certificate of examination issued by the National Physical Laboratory. The corrections here given have been applied in 1928 and, with the exception of the grass minimum thermometer, in previous years. The date on which each of the instruments mentioned was brought into use is given for purposes of reference.



Kew pattern barometer, M.O. 1,320. December 16, 1913.									
at	920	940	960	980	1,000	1,020	1,040	1,060	mb.*
	-0.4	-0.3	-0.2	-0.1	-0.1	0.0	+0.1	+0.1	
attached thermometer: +0.1 at 290a.									
Dry Bulb Thermometer, M.O. 19,123. January 27, 1919.									
at	263	268	273	278	283	288	293	298	303a.
	+0.2	+0.1	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.1
Wet Bulb Thermometer, M.O. 1,695. November 1, 1915.									
at	260	265	270	275	280	285	290	295	300 305a.
	+0.20	+0.15	+0.15	0.00	-0.10	-0.15	-0.15	-0.10	-0.10 -0.10
Grass Minimum Thermometer, at									
					253	263	273	283	293 303a.
M.O. 23008									
	...	...	...	...	-0.1	-0.2	0.0	0.0	-0.1 -0.2

## NOTE ON THE REDUCTION OF BAROMETER READINGS.

The Kew pattern mercury barometer, M.O. 1320, by J. Hicks, London, has been used as the standard instrument since December 16, 1913. Before this date a Fortin barometer, 657, was the standard instrument.

1. *Reduction to Pressure at Station Level.*—For this purpose it has been the custom to apply to a reading of the Kew pattern barometer a total correction embodying the separate corrections in respect of index error, temperature, and gravity. The corrections for index error (including those for capacity and capillarity) as given in the N.P.L. certificate dated November 26, 1913, are reproduced above. The corrections for temperature are those given in the *International Meteorological Tables* as appropriate to a Fortin barometer. At the time the index corrections of the barometer were determined, the comparisons were made at ordinary room temperatures in the neighbourhood of 60° F. (288a), and as the observing barometer was regularly read at room temperatures, which did not differ materially from 60° F., the practice of using corrections appropriate to a Fortin barometer, although technically incorrect, would not lead to appreciable systematic error in practice.

In the following table are set out the corrections to the barometer readings on this account, for various readings of the attached thermometer.

If the temperature is  $\left\{ \begin{array}{l} \text{above} \\ \text{below} \end{array} \right\} 288a \left\{ \begin{array}{l} \text{subtract} \\ \text{add} \end{array} \right\}$  the correction :

Attached thermometer.	Corrections.	Attached thermometer.
<i>a</i>	<i>mb.</i>	<i>a.</i>
288	.00	288
287	.01	289
286	.01	290
285	.02	291
284	.03	292
283	.04	293
282	.05	294
281	.06	295
280	.07	296

\* These corrections, if applied to readings of the barometer, would bring the readings into agreement with the atmospheric pressure, provided the instrument were at a temperature of 273a. (0°C) and in Latitude 45°.



The corrections for the variation of gravity as obtained from the expression

$$g = 980.617 (1 - 0.00259 \cos 2\lambda) (1 - 5z/4E)$$

where  $\lambda$  = latitude

$z$  = height of the station

$E$  = earth's radius

are as follow :—

at reading of    900    920    940    960    980    1000    1020    1040    mb.

Correction +.78 +.80 +.81 +.83 +.85 +.87 +.88 +.90 mb.

2. *Reduction to Mean Sea Level.*—The correction to reduce pressure at station level ( $p$ ) to pressure at sea level ( $P$ ) is  $P - p$

$$\text{where } \log_e (P/p) = \frac{\bar{g}z}{K\bar{T}} \left(1 - \frac{3\bar{w}}{8p}\right) \dots\dots\dots (A)$$

$z$  = height of station in centimetres.

$e$  = base of Napierian logarithms.

$K$  = gas constant for dry air =  $10^9/348.4$  C.G.S. units.\*

$\bar{T}$  = mean absolute temperature of air column between Station level and Mean Sea level.

$\bar{w}$  = mean value of water vapour pressure in air column.

$\bar{g}$  = mean value of the acceleration due to gravity in the air column. This mean value coincides with the value of gravity at some definite height  $h$  above mean sea level, and is given by

$$980.617 (1 - 0.00259 \cos 2\lambda) (1 - 2h/E).$$

For the relatively small height of Eskdalemuir we can write  $z/2$  for  $h$  (Actually the term  $2h/E$  exercises no appreciable effect on the final result in this case).

It will be noted that the above expression for  $g$  differs from that in a preceding paragraph as regards the correction for altitude; the one referring to determination of gravity at the earth's surface, the other at a point above the earth's surface. This difference is in accordance with the usage of the *International Meteorological Tables*, and it has been decided to make no change, although recent work on isostasy indicates that in many cases the correction  $2h/E$  is more nearly in accordance with observation than the correction  $5z/4E$ .

The term  $\left(1 - \frac{3\bar{w}}{8p}\right)$  in the above formula represents approximately the ratio of the density of moist air to that of dry air at the same temperature. Since the value of  $\bar{w}$  is not known, an approximate correction on account of the effect of water vapour in the air column is made, so that in practice the correction for the reduction of station-level pressure ( $p$ ) to sea-level pressure ( $P$ ) is taken to be

$$P - p = p_o - p - \frac{w^\dagger}{100}$$

$$\text{where } \log_e \frac{p_o}{p} = \frac{\bar{g}z}{K\bar{T}} = \frac{\bar{g}z}{K(T + 1)} \dots\dots\dots (B)$$

$w$  is water vapour pressure at station level.  $T$  is the absolute temperature of the air at station level, and  $e, \bar{g}, z, \bar{T}$  and  $K$  have the same values as before.

In computing the value of  $p_o - p$  the value of  $\bar{T}$  has been taken to be the air temperature at station level increased by 1a, i.e., a uniform lapse rate of 1° C in 119 metres has been assumed to apply at all times of day and all seasons of the year. The values of  $p_o - p$  for different values of  $p$  and of air temperature at station level, in accordance with equation (B), are given in the subjoined table. As indicated in the formula above the allowance for the water vapour in the air column is made by subtracting  $w/100$  ( $w$  being the water vapour pressure at station level) from the value of  $p_o - p$  extracted from the table.

\* This value depends on a co-efficient of expansion of dry air of 1/273.

† The correction  $-\frac{w}{100}$  is the approximate value at Eskdalemuir of the difference  $P - p_o$ , as computed from equations (A) and (B).



CORRECTIONS USED AT ESKDALEMUIR FOR REDUCING PRESSURE AT STATION LEVEL  
TO PRESSURE AT MEAN SEA LEVEL.

Air Temperature at Station Level.	Pressure at Station Level in Millibars.											
	920	930	940	950	960	970	980	990	1000	1010	1020	1030
a.	Millibars.											
260	29.05	29.37	29.68	30.00	30.31	30.63	30.95	31.26	31.58	31.89	32.21	32.53
261	28.94	29.25	29.57	29.88	30.20	30.51	30.83	31.14	31.45	31.77	32.08	32.40
262	28.83	29.14	29.45	29.77	30.08	30.39	30.71	31.02	31.33	31.65	31.96	32.27
263	28.72	29.03	29.34	29.65	29.97	30.28	30.59	30.90	31.21	31.53	31.84	32.15
264	28.61	28.92	29.23	29.54	29.85	30.16	30.47	30.78	31.09	31.41	31.72	32.03
265	28.50	28.81	29.12	29.43	29.74	30.05	30.36	30.67	30.98	31.28	31.59	31.90
266	28.39	28.70	29.01	29.31	29.62	29.93	30.24	30.55	30.86	31.17	31.47	31.78
267	28.28	28.59	28.90	29.20	29.51	29.82	30.13	30.43	30.74	31.05	31.36	31.66
268	28.17	28.48	28.79	29.09	29.40	29.71	30.01	30.32	30.62	30.93	31.24	31.54
269	28.07	28.37	28.68	28.98	29.29	29.59	29.90	30.20	30.51	30.81	31.12	31.42
270	27.96	28.27	28.57	28.88	29.18	29.48	29.79	30.09	30.40	30.70	31.00	31.31
271	27.86	28.16	28.47	28.77	29.07	29.37	29.68	29.98	30.28	30.59	30.89	31.19
272	27.76	28.06	28.36	28.66	28.96	29.26	29.57	29.87	30.17	30.47	30.77	31.07
273	27.65	27.95	28.25	28.55	28.85	29.15	29.46	29.76	30.06	30.36	30.66	30.96
274	27.55	27.85	28.15	28.45	28.75	29.05	29.35	29.65	29.95	30.25	30.54	30.84
275	27.45	27.75	28.05	28.34	28.64	28.94	29.24	29.54	29.84	30.13	30.43	30.73
276	27.35	27.65	27.94	28.24	28.54	28.84	29.13	29.43	29.73	30.02	30.32	30.62
277	27.25	27.55	27.84	28.14	28.43	28.73	29.03	29.32	29.62	29.91	30.21	30.51
278	27.15	27.45	27.74	28.03	28.33	28.63	28.92	29.22	29.51	29.81	30.10	30.40
279	27.05	27.35	27.64	27.93	28.23	28.52	28.82	29.11	29.40	29.70	29.99	30.29
280	26.95	27.25	27.54	27.83	28.13	28.42	28.71	29.01	29.30	29.59	29.88	30.18
281	26.86	27.15	27.44	27.73	28.02	28.32	28.61	28.90	29.19	29.48	29.78	30.07
282	26.76	27.05	27.34	27.63	27.92	28.21	28.51	28.80	29.09	29.38	29.67	29.96
283	26.67	26.95	27.25	27.53	27.83	28.11	28.40	28.69	28.98	29.27	29.56	29.85
284	26.57	26.86	27.15	27.44	27.73	28.01	28.30	28.59	28.88	29.17	29.46	29.75
285	26.48	26.76	27.05	27.34	27.63	27.91	28.20	28.49	28.78	29.07	29.35	29.64
286	26.38	26.67	26.96	27.24	27.53	27.82	28.10	28.39	28.68	28.96	29.25	29.54
287	26.29	26.58	26.86	27.15	27.43	27.72	28.00	28.29	28.58	28.86	29.15	29.43
288	26.20	26.48	26.77	27.05	27.34	27.62	27.91	28.19	28.48	28.76	29.05	29.33
289	26.11	26.39	26.67	26.96	27.24	27.53	27.81	28.09	28.38	28.66	28.94	29.23
290	26.01	26.30	26.58	26.86	27.15	27.43	27.71	27.99	28.28	28.56	28.84	29.13
291	25.93	26.21	26.49	26.77	27.05	27.33	27.61	27.90	28.18	28.46	28.74	29.02
292	25.83	26.11	26.40	26.68	26.96	27.24	27.52	27.80	28.08	28.36	28.64	28.92
293	25.75	26.03	26.31	26.59	26.87	27.15	27.43	27.71	27.98	28.26	28.54	28.82
294	25.66	25.94	26.21	26.49	26.77	27.05	27.33	27.61	27.89	28.17	28.45	28.73
295	25.57	25.85	26.13	26.40	26.68	26.96	27.24	27.51	27.79	28.07	28.35	28.63
296	25.48	25.76	26.04	26.31	26.59	26.87	27.14	27.42	27.70	27.97	28.25	28.53
297	25.40	25.67	25.95	26.22	26.50	26.78	27.05	27.33	27.60	27.88	28.16	28.43
298	25.31	25.58	25.86	26.13	26.41	26.69	26.96	27.23	27.51	27.79	28.06	28.33
299	25.22	25.50	25.77	26.05	26.32	26.59	26.87	27.14	27.42	27.69	27.97	28.24
300	25.14	25.41	25.69	25.96	26.23	26.51	26.78	27.05	27.32	27.60	27.87	28.15
301	25.05	25.33	25.60	25.87	26.14	26.42	26.69	26.96	27.23	27.51	27.78	28.05
302	24.97	25.24	25.51	25.79	26.06	26.33	26.60	26.87	27.14	27.41	27.68	27.96
303	24.89	25.16	25.43	25.70	25.97	26.24	26.51	26.78	27.05	27.32	27.59	27.86
304	24.81	25.07	25.34	25.61	25.88	26.15	26.42	26.69	26.96	27.23	27.50	27.77



## NOTES ON THE METEOROLOGICAL SUMMARIES.

The number of years for which meteorological results are available is insufficient as yet to yield a completely representative set of normal values. Although certain meteorological data are available for 1909 and 1910 it is only since 1911 that the reductions have been made in accordance with an approximately uniform plan. In the following notes the normal or average values referred to are for the period 1911 to 1926, unless otherwise stated.

*Pressure.*—As was the case generally in the British Isles the mean pressure for the year was below normal, the defect at Eskdalemuir being 1.3 mb. Only in February, May, July, September and December were the monthly means above normal, whilst in January, April, June, October and November they were conspicuously below normal. The extreme instantaneous values recorded were 1008.5 mb. on February 22 and 928.0 mb. on November 23. The greatest and least mean daily values are 1004.1 and 948.4 mb. on these two dates respectively. The largest values of the range during a calendar day are 39.7 mb. on February 10 and November 23. The mean value of the absolute daily range of pressure varies between 14.0 mb. in January and 4.7 mb. in May and July. The annual mean value of the daily range is a little above normal.

*Pressure (Diurnal Variation).*—In the mean diurnal inequality for each month there are two maxima, in the late forenoon and usually an hour or two before midnight, and two minima, in the early forenoon and at 16h or 17h. In all months, excepting September, October and December, of 1928, the night maximum is the larger, and except for January, February and November this is true of the representative inequalities for the years 1911–20. The principal minimum in the latter inequalities is in the afternoon except in February, March, August and November, but in 1928 the principal minimum falls in the early forenoon in July, August, September, October and December. Compared with the mean diurnal inequality for 1911–20 the values of the mean inequality for the year 1928 are algebraically less from 9h to 17h and greater from 19h to 7h. In other words, relatively speaking the afternoon trough in 1928 is enhanced, the night crest enhanced and somewhat prolonged in time, the early forenoon trough and the forenoon crest diminished.

The results of the harmonic analysis of the monthly and seasonal mean diurnal inequalities for 1928 are given in the accompanying table. For purposes of comparison the corresponding data <sup>(1)</sup> derived from the mean inequalities for the period 1911–20 are also given. In computing the Fourier co-efficients for the individual months of 1928 the unit employed was .01 mb.; but for the seasons and the year the inequalities were taken to .001 mb., and in these cases the values of  $c_1$  etc. are given to three decimal places. Although for 1928, as for recent years, the phase angles are given to the nearest 1°, this course is scarcely justified, at least for the third and fourth components, by the character of the data from which the harmonic coefficients for the months and seasons of a single year are computed. The phase angles  $\alpha_1$  etc. given in the table below refer to Local Mean Time, whereas in the corresponding tables for 1922 and 1923 the phase angles refer to Greenwich Mean Time.

As is usually the case the amplitude and phase of the 24-hour term fluctuate irregularly from month to month. The ratio of the mean of the twelve monthly values of  $c_1$  to the value of  $c_1$  for the year as a whole considerably exceeds unity and is greater than in any of the years 1922–7.  $c_1$  is noticeably high for January and for November, low for October. The values of  $c_2$  for the year, winter and summer, are less than the corresponding normals. The variation in the 8-hour term from month to month is fairly normal, the amplitude being largest in winter months and least at the time of equinoctial phase transition. The values of  $c_3$  for the year, winter, and equinox are slightly above normal; that for summer is very slightly below normal. For the 6-hour term, also, the amplitude for the year, winter and summer, is above normal.

<sup>(1)</sup> "On the Diurnal Variation of Atmospheric Pressure at Eskdalemuir and Castle O'er, Dumfriesshire," by A. Crichton Mitchell, D.Sc., *Quarterly Journal of the Royal Meteorological Society*, Vol. L., No. 210, April, 1924.



# HARMONIC COEFFICIENTS OF THE DIURNAL INEQUALITY OF ATMOSPHERIC PRESSURE—ESKDALEMUIR, LONGITUDE 3° 12' W.

Values of  $c_n$ ,  $\alpha_n$  in the series  $\Sigma c_n \sin (15nt^\circ + \alpha_n)$ ,  $t$  being Local Mean Time reckoned in hours from midnight.

Month and Season.	$C_1$		$\alpha_1$		$C_2$		$\alpha_2$		$C_3$		$\alpha_3$		$C_4$		$\alpha_4$	
	1928.	1911-20.	1928.	1911-20.	1928.	1911-20.	1928.	1911-20.	1928.	1911-20.	1928.	1911-20.	1928.	1911-20.	1928.	1911-20.
Jan. ...	mb. .67	mb. .094	° 75	° 346.4	mb. .12	mb. .235	° 190	° 151.6	mb. .06	mb. .125	° 30	° 345.3	mb. .06	mb. .046	° 266	° 213.9
Feb. ...	.27	.118	82	215.1	.24	.273	168	138.1	.14	.083	344	341.2	.05	.042	357	67.7
Mar. ...	.11	.128	61	185.3	.36	.304	151	145.3	.14	.053	301	335.0	.04	.051	24	24.5
Apr. ...	.37	.205	116	92.3	.37	.299	156	154.8	.05	.022	201	156.3	.06	.045	344	355.7
May ...	.32	.225	63	52.7	.28	.270	139	147.4	.06	.075	174	160.1	.03	.035	341	330.1
June ...	.27	.152	101	53.9	.22	.234	151	146.1	.08	.084	165	160.6	.02	.018	354	325.7
July ...	.12	.171	224	69.4	.18	.211	148	141.2	.08	.077	164	155.8	.03	.023	5	300.0
Aug. ...	.16	.114	173	114.6	.21	.239	147	147.7	.07	.057	156	157.2	.04	.047	341	330.8
Sept. ...	.18	.121	253	87.7	.28	.313	158	151.6	.02	.012	73	110.7	.04	.050	6	344.7
Oct. ...	.04	.110	157	76.0	.33	.315	173	159.5	.10	.060	21	8.2	.04	.041	45	32.9
Nov. ...	.100	.125	68	183.5	.34	.242	194	168.1	.14	.101	356	9.2	.03	.015	135	146.2
Dec. ...	.17	.137	260	97.1	.22	.213	170	146.9	.14	.124	355	4.2	.08	.067	234	212.8
Arithmetic mean	.31	.142	...	...	.26	.262	...	...	.09	.073	...	...	.04	.040	...	...
Year ...	.213	.085	86	90.8	.253	.260	162	150.1	.026	.020	16	41.7	.024	.016	339	341.9
Winter ...	.438	.038	72	165.4	.226	.236	181	150.9	.118	.106	357	355.5	.029	.023	256	189.1
Equinox ...	.117	.108	116	103.9	.333	.306	159	152.8	.028	.021	18	4.4	.042	.044	11	8.9
Summer ...	.124	.153	107	67.2	.222	.238	146	145.8	.070	.074	164	158.5	.033	.030	350	324.3

NOTE.—*Winter* comprises the four months January, February, November, December.  
*Equinox* the months March, April, September, October.  
*Summer* the months May to August.

*Temperature.*—The mean temperature, 279.87 a. (44° 4 F.) for the year 1928 is equal to the normal value. Monthly mean values depart from the corresponding normals by amounts varying between +1.7a. (3° 0 F.) in November to -2.0a. (3° 5 F.) in June. June is the coldest month of the name since records commenced at Eskdalemuir, having been slightly colder even than June of the previous year. The extreme temperatures recorded during the year were 294.2a. (70° 2 F.) on August 5 and 261.1a. (10° 6 F.) on January 1. The latter day, with mean daily temperature of 267.5a. (22° 1 F.) was the coldest of the year. According to mean daily temperature, May 28 and September 8, with 287.7a. (58° 5 F.), were the hottest days of the year. The values of the absolute range of temperature within a calendar month vary between 24.5a. (44° 1 F.) in May, and 16.1a. (29° 0 F.), in February. Values not in excess of 273.0a. (32° 0 F.) are :—mean daily temperature on 15 days (9 in December), minimum temperature on 95 days (23 in December), and maximum temperature on only one day.

The mean absolute daily range of temperature varied from 9.9a. (18° 0 F.) in May to 5.3a. (9° 5 F.) in November, the mean value for the year being 7.4a. (13° 3 F.). In six months, and for the year as a whole, the mean value is less than the corresponding normal. The greatest daily ranges were 18.1a. (32° 6 F.) on June 3 and 17.6a. (31° 7 F.) on June 2, while the least range was 1.4a. (2° 5 F.) on December 13.

In March, April, June, July, October and November the range of the mean diurnal inequality is more than 5 per cent. below, and in February, May, September, November and December more than 5 per cent. above the range of the mean diurnal inequality for the years 1911-26, the greatest positive departure from the normal being 38 per cent. in December and the greatest negative departure 32 per cent. in March.



*Humidity.*—As is mentioned in the General Introduction, owing to a change in the hygrometric tables used the results for 1926–7 are not strictly comparable with those of earlier years. Compared with the mean values for 1911–25 the chief departures of the values of mean relative humidity in 1928 are +5 in March, –7 in May and –3 in April. The mean relative humidity, 83.5 per cent., for the year is the same as for 1925 and 1927, but is less than that for the other years since 1922; whilst the mean vapour pressure, 8.3 mb., is again smaller than in any of the years 1923–6. The extreme daily mean values of relative humidity and vapour pressure were 99.1 per cent. on July 11, 53.2 per cent. on May 6, 16.0 mb. on September 4, 3.6 mb. on January 1. The lowest hourly readings of relative humidity, one of 19 and others below 30 per cent. occurred on May 6.

*Precipitation.*—1928 was much the wettest year experienced since records commenced at Eskdalemuir, the total amount of rainfall, 2222.6 mm. (87.50 in.), being 47 per cent. over the mean for the period 1911–27. The most outstanding month was January with 390.3 mm. (15.37 in.) or 231 per cent. of normal. The driest month was May with 39.2 mm. (1.54 in.) or 38 per cent. of normal. Precipitation fell, at the rate of not less than 0.1 mm. per hour, for a total period of 1503.4 hours, *i.e.*, in the aggregate for rather more than one-sixth of the whole year. The monthly duration was greatest, 202.0 hr., in January, the duration for October being only 11 hours less, and least, 44.0 hr., in April. For the year as a whole the average rate of fall per hour is 1.48 mm.; the rate of fall during individual months ranges between 1.99 in August and 0.81 in May. The greatest amount recorded during a calendar day was 46.4 mm. (1.83 in.) on January 12. There were 115 days (21 in May) on which either no precipitation was recorded or in amounts too small to be measured. Precipitation amounting to 0.2 mm. or more was recorded on 238 days; to 1.0 mm. or more on 199 days; to 20.0 mm. or more on 34 days.

Snow or sleet fell on 45 days, but on no day from May 17 to November 15 inclusive. Observations of “snow lying” at 7h. number 27, 9 of which were in March. There were no large falls of snow.

*Sunshine.*—The year's total duration of bright sunshine, 1145.2 hr., represents 26 per cent. of the theoretically “possible” duration; whereas the average percentage of “possible” for the years 1911–26 is 27.1. As regards the percentage of “possible” May was the sunniest, and January the least sunny (as also the wettest) month of 1928. In all, there were 90 days without sunshine, 15 of these being in December, 14 in January and 14 in November, and 65 days with 50 per cent. or more of the “possible” sunshine. The days with most sunshine were June 2 with 15.1 hr. (88.9 per cent.) and June 1 and 3 with 14.4 hr. (85.0 and 84.6 per cent.). The first mentioned also represents the highest value of the percentage of “possible” sunshine.

*Wind.*—The mean speed for the year, 5.7 m/s (12.8 mi/hr) has been exceeded only by that of the year 1911. In comparison with the normal values for individual months the mean speeds for January, February, June, July, October and November exhibit the most considerable excess, and that for March the greatest relative deficiency. There were 30 hours of gale force (mean speed greater than 17.1 m/s), a greater number than in any other year since 1922 with the exception of 1927. The highest gust of the year, 39 m/s (87 mi/hr) and the highest hourly speed, 22.7 m/s (50.8 mi/hr) occurred on November 23, and the highest mean daily speed, 13.1 m/s (29.2 mi/hr) occurred on July 2. The quietest days were September 27 and October 3, with mean speeds of 0.4 and 0.6 m/s.

There was a remarkable dearth of westerly winds (between south-south-west and north-north-west) in March and May and marked scarcity of easterly winds (between north-north-east and south-south-east) in January and July. The predominance of winds from between south and west was greatest in January, February and July and the predominance of north-easterly winds was very marked in May.



*Grass Minimum Temperature.*—There were 104 occasions of ground frost (*i.e.*, grass minimum temperature not greater than  $272.1^{\circ}\text{a.}$  or  $30^{\circ}.4\text{ F.}$ ), but none of these occurred between June 22 and September 18. The occurrence as in 1927 of as many as seven ground frosts in June is unusual. The lowest grass minimum temperature was  $259.3^{\circ}\text{a.}$  ( $7^{\circ}.3\text{ F.}$ ) on January 1; readings less than  $263.0^{\circ}\text{a.}$  ( $14^{\circ}.0\text{ F.}$ ) did not occur in any other month. The mean grass minimum temperature for each of the months January, February, March and December is less than  $273.0^{\circ}\text{a.}$  ( $32^{\circ}.0\text{ F.}$ ). The mean value for April is high in comparison with the values in the previous years.

*Cloud and Weather.*—(A) The mean amount of cloud observed at the six hours of observation is 7.6 which is the same as in 1927. March has the largest mean amount, 8.2, and September has the smallest, 6.7. The largest mean amount for an observational hour is 8.7 at 13h in March (as in 1927); the least is 5.6 at 21h in September. For the year as a whole there was most cloud at 13h and least at 21h. In eleven months the mean cloud amount was least at 21h and in most months it was greatest at 13h or 7h. February 28 is the only day of the year on which no cloud was seen at the normal hours of observation. On 40 days the amount 10 was recorded at every hour of observation.

(B) Thunder was heard on only six days, a smaller number than in any of the years since 1922. There were observations of solar halo on 21 days (five of which were in September), of lunar halo on five days, and of aurora or auroral glow on four days.

(C) The numbers of occasions on which the range of visibility was estimated to be (1) not greater than 500 metres (550 yards), corresponding with the entries X to E, and (2) at least 20 kilometres ( $12\frac{1}{2}$  miles), corresponding with the entries k, l, m, are summarized below. The limitations to which the estimates of visibility are subject are mentioned on p. 143. It is to be noted that the group (1) above consists of the occasions which are held to merit the description as "fog, moderate, thick, or dense," while the entries k, l, m, denote "very good or excellent visibility."

There were fewer occasions of fog and more of estimates k, l, and m together than in 1927. Fog was most frequent in January and December, but entirely absent (at the standard hours of observation) in May. Occasions of very good and excellent visibility were most frequent in May, June, July, September and December. There were 24 estimates of m, visibility 50 km. (31 mi.) or more, distributed among 18 days. 19 of the 24 occasions were at 15h or 18h, 18 were associated with increasing barometric pressure, and 15 with winds from west-south-west through north to north-east.

1928.	NUMBER OF OCCASIONS OF—													
	VISIBILITY X TO E.							VISIBILITY k, l, m.						
	7h	9h	13h	15h	18h	21h	Total.	7h	9h	13h	15h	18h	21h	Total.
Jan. ..	3	1	1	—	2	1	8	1	6	9	14	8	4	42
Feb. ..	—	—	1	2	1	1	5	1	2	5	5	3	1	17
Mar. ...	—	—	—	—	—	2	2	5	4	9	8	7	3	36
Apr. ...	1	—	—	—	—	—	1	5	5	15	14	13	10	62
May ..	—	—	—	—	—	—	—	14	14	14	19	19	10	90
June ..	—	—	—	—	1	—	1	12	13	13	16	16	12	82
July ..	1	1	1	1	1	1	6	10	12	13	18	17	14	84
Aug. ...	1	—	—	—	—	—	1	5	10	16	16	16	11	74
Sept. ...	2	—	—	—	1	1	4	14	16	19	23	18	13	103
Oct. ...	1	1	—	—	—	—	2	9	11	9	12	7	7	55
Nov. ...	—	2	1	—	—	—	3	12	13	15	15	9	10	74
Dec. ...	2	2	2	1	1	1	9	11	16	15	14	14	15	85
Year ..	11	7	6	4	7	7	42	99	122	152	174	147	110	804



## ATMOSPHERIC ELECTRICITY.

## Notes on the Instruments.

Continuous autographic records of atmospheric electrical potential gradient are obtained by means of an electrograph of which the essential components are a collector of the Kelvin water-dropper type and a Dolezalek quadrant electrometer. The water-jet pipe (see Fig. 11) projects from the north wall of the main building and the water-jet itself is double, *i.e.*, it consists of two portions issuing from holes one on either side of the nozzle in such a way that the plane containing the jet is parallel to the wall and at a distance of about 30 cm. therefrom. The jet holes are 3.8 m. above the roadway beneath. Although the position of the jet is probably the best available in regard to general convenience it is not ideal owing to the proximity of the wall corners and of a door which is opened frequently. A shallow insulated tank on the upper storey of the building contains the water supply for the jet. The possible range in the head of water at the jet holes is from 1.59 to 1.72 m., but as the water supply in the tank is replenished at 7, 13 and 21h. daily the actual range is normally less than that stated. The insulated tank-and-jet system is connected to the needle of a Dolezalek quadrant electrometer, across the quadrants of which is connected a battery of either two or four Weston cells. The mid-point of the battery and the electrometer case are earthed. A photographic record (time scale, two cm. to one hour) is obtained of the indications of the electrometer needle and therefore of the potential at the spraying-points of the water-jet. Satisfactory zero potential marks are produced on the record as a result of the replenishment (thrice daily) of the water in the insulated tank.

Tests of the insulation of the electrograph system are made on almost all days. For this purpose a Wulf quartz-thread electrometer is connected to a convenient point of the system and, the water-jet having been turned off, a charge is given by means of a Zamboni pile or a Simpson charging rod. The fall in potential in a four-minute interval is noted and the quantity  $-d/dt (\log_e V)$  is computed, where  $V$  is the potential measured in volts and the unit of time is one minute. If the rate of leak so determined is less than 0.025, which value corresponds with a reduction of charge by one-half in about 28 minutes, the insulation is considered to be satisfactory. Apart from failures of insulation due to spider webs the average value of the logarithmic rate of leak, defined as above, is usually from 0.010 to 0.015. It is usual to earth the system immediately after taking the reading of the Wulf electrometer at the end of the four-minute interval, and to utilize the corresponding photographically recorded deflection of the Dolezalek electrometer for the purpose of deriving the scale value of the record. Thus, one set of operations, consisting of giving both positive and negative charges to the system, serves as an insulation and a scale test. The scale value is reasonably steady and, unless some definite change has been made, in reducing the curve readings of a given month, the scale value employed is a mean of the several determinations made during the month. During 1928 the mean scale values ranged from 3.03 to 3.11 volts per millimetre.

In order to convert values of potential at the jet into values of potential gradient in the open the former are multiplied by a factor, the value of which is obtained in the following manner. The Wulf electrometer is supported within a small pit situated at the centre of a levelled and grass-covered expanse some fifty yards from the main building. From the electrometer a thin metal rod, 0.4 cm. in diameter, projects vertically upwards through a small hole in the metal-covered lid of the pit and is of such a length that a fuse (made of blotting paper impregnated with lead nitrate) fixed horizontally to the upper end is 1 metre above the surface of the lid, which is level with the surrounding ground. The fuse having been ignited, the observer shuts himself completely within the pit and takes readings of the electrometer every half-minute, the instrument being earthed momentarily after every two or three



readings. The voltages corresponding with these readings are taken to represent the atmospheric electric potential at 1 metre above the surface of the ground in the open. Within the Observatory grounds, which slope down towards south and south-east, there is no entirely satisfactory site where absolute determinations of potential gradient may be made. The pit appears to be in about the most satisfactory position nearest to the electrograph jet. At the level of the pit the angular elevation of the higher parts of the main building and of Rayleigh House varies from  $7^{\circ}$  to  $12^{\circ}$ , while the elevation of trees to the west approaches  $7^{\circ}$ . The grass on the small lawn surrounding the pit is kept short but there are seasonal changes in the height of the grass beyond this area. Observations of potential in the open are made during suitable weather conditions and usually at least six such observations per month are obtained. From the mean of the readings taken throughout an interval of from ten to twenty minutes and from the corresponding mean value of the potential at the jet, as derived from the photographic record, the electrograph reduction factor is deduced. Unless any change in the jet exposure is known to have been introduced a constant factor is employed for a given month. In some earlier years the monthly values of the factor were obtained by an apparently rough smoothing process. More recently the factor used for a given month was the mean of the values determined during that month, occasional smoothing being adopted. Commencing in 1925 the value of the factor adopted for a given month has been  $(a + 2b + c)/4$ , where  $a$ ,  $b$  and  $c$  are the unsmoothed monthly means for the three successive months centred in the given month. The final values for 1928, given in Table 264, range from 6.30 in April to 6.10 in November; the mean of the twelve adopted monthly factors being 6.20, as compared with 6.19 in 1927.

All determinations of electrograph scale value and reduction factor for 1928 are based on the indications of one Wulf quartz-thread electrometer, and the 1927 calibration of this instrument was employed for the 1928 readings. A calibration of the Wulf electrometer carried out (employing a potentiometer and Weston standard cell) in January, 1929, is in close agreement with the 1927 calibration.

The electrograph curves are read by means of a millimetre scale ruled on glass, the assigned hourly values being the estimated means for the 60-minute periods centring at exact hours G.M.T. The estimate of the mean curve ordinate is made to 0.1 millimetre which, during the years 1926-8, was equivalent to about 0.3 volts at the jet and to about 1.9 volts in potential gradient per metre in the open. The readings of the curve ordinates are converted directly into volts per metre in the open by multiplying by the product of the appropriate scale value and electrograph factor.

#### IDENTIFICATION NUMBER OF INSTRUMENT USED IN 1928.

Wulf bifilar electrometer    ..    ..    ..    ..    ..    ..    3040

#### Notes on the Tables and Results.

As far as possible an electrical character figure is assigned to each day and values of potential gradient are assigned for 3h, 9h, 15h and 21h G.M.T. on all days, while values for all hours are assigned on days classified as  $0a$ ,  $1a$  or  $2a$ . The character figures are given in Table 267, the significance of these symbols being as follows:—

- 0, denotes a day during which from midnight to midnight no negative potential was recorded.
- 1, denotes one or more excursions of limited duration to the negative side of the scale during the same period.
- 2, denotes negative potential extending in the aggregate over three hours or more during the same period.
- $a$ , denotes that within the 25 periods of 60 minutes for which an estimate of the mean potential gradient has to be made in the process of tabulation there was in no case a range of potential gradient in the open exceeding 1,000 volts.
- $b$ , denotes that, during the same period, a range of 1,000 volts or more was reached in one hour at least but in fewer than six hours.
- $c$ , denotes that, during the same period, a range of 1,000 volts or more was reached in at least six hours.



Table 264 contains the values of electrical potential gradient at 3h, 9h, 15h and 21h G.M.T. daily, the value for a given hour representing the mean for the period of 60 minutes centring at that hour. With a view to having no blanks in this table, or even where record was missing or defective, values have been estimated where necessary and are enclosed in brackets. In arriving at these estimates account has been taken of the following considerations,—(i) character of the trace before and after the defective period, (ii) meteorological conditions prevailing at the time, (iii) potential gradient records on days of similar meteorological conditions, (iv) diurnal inequality curves of past years, (v) average values at 3, 9, 15, and 21h, for normal days, and (vi) absolute values observed near the time of missing value. The reduction factors used in converting the potential at the water-jet to potential gradient in volts per metre, in the open are also given.

In Table 265 are given, for *oa* days, (1) the mean diurnal inequalities for the months, seasons and year, (2) particulars of the number of days and of the non-cyclic changes and (3) the corresponding mean values of potential gradient. The inequalities or the mean values for the year and seasons are the means of the inequalities or means, respectively, for the appropriate months. There were no *oa* days with complete record in January or March.

Corresponding data for *1a* and *2a* days combined appear in Table 266.

It should be noted that, in these tables, *Winter* denotes the four months January, February, November, December; *Equinox* the four months March, April, September, October; and *Summer* the four months May to August.

In addition to the electrical character for each day, Table 267 contains the daily, monthly and annual values of duration (in hours and tenths) of negative potential gradient. 18 days of defective record when negative potential may have occurred are left blank; the sign of the gradient has been assumed positive during periods of defective records in which no precipitation was observed. When, during highly oscillatory gradients, there was uncertainty as to the times of changes of sign, half of the total duration of doubtful sign was accounted negative. The total duration of negative potential gradient in each month and the average daily duration are entered in the lower part of the table. For the 348 days of assignable duration of negative potential gradient the total number of hours was 1006.0, an average of 2.89 hours per day.

Following the practice adopted in 1923 the mean values of potential gradient given in Table 264 are of two kinds, viz., (*a*) the mean of all the positive values of potential in the column and (*b*) the algebraic mean derived from all days on which all four hours were represented. The mean values for the month, as derived from the (*a*) and (*b*) values respectively, are shown in the last line, and the means for the year are given at the foot of the December table. It is to be expected that the mean derived from the values at 3h, 9h, 15h and 21h, on a sufficiently large number of days, will approximate closely to the mean value derived from all hourly values of all the days.

The mean (*a*) exceeds the mean (*b*) in all months of the year. In the three months June, July and December, the mean (*a*) also exceeds the mean value for *oa* days.

Annual mean values for recent years, derived by giving equal weight to the twelve monthly means, of the (*a*) and the (*b*) means and of the means for *oa* days are as follow :—

					<i>oa</i> v/m.	( <i>a</i> ) v/m.	( <i>b</i> ) v/m.
1922	..	..	..	..	257	225	182
1923	..	..	..	..	278	235	159
1924	..	..	..	..	236	214	157
1925	..	..	..	..	284	243	209
1926	..	..	..	..	249	201	177
1927	..	..	..	..	259	223	193
1928	..	..	..	..	237	219	150



Judged by any one of the three annual values the potential gradient has decreased from 1927 to 1928. Except that the *oa* day mean for the equinoctial months of 1928 exceeds, though only by 3 v/m, the corresponding mean for 1927, the seasonal mean values for *oa* days and the seasonal means for (*a*) and (*b*) days for 1928 are all exceeded by the corresponding values for 1927.

In 1928, February with a mean of 301 v/m was the month of highest value of potential gradient based on *oa* days, while December was outstandingly high in respect of the means (*a*) and (*b*). Both the mean wind speed and the rainfall for this month were considerably lower than those for any other of the winter months. January and March, the months with the highest average daily duration of negative potential on days of complete record, 5.4h and 4.9h respectively, had the low values derived from the four hours on all complete days of 104 v/m and 123 v/m. October and June, next in order of decreasing average duration of negative potential, had the even lower values of 91 v/m and 68 v/m respectively.

Noteworthy occasions of high potential gradient were as follow :—

January 20d 17h to 21d 7h. Uniformly high gradient about 600 v/m throughout the period associated with mist and light wind.

February 20d 19h to 21d 11h. Continuous run of sixteen hours with a mean of 550 v/m. Prevailing conditions were calm, with mist and hoar frost.

February 27d 18h to 29d 2h. During this time the wind was light between NNE and ENE and visibility was good. The high potential gradient exhibited the regular diurnal variation of a typical quiet day but the mean value was 600 v/m and the daily range 700 v/m.

August 31d 19h to September 1d 8h. On this night the wind dropped to calm and a mist formed in the valley, the air above being clear. The potential gradient was high all night, reaching a maximum of 1200 v/m in the early hours of the morning and falling quickly to 150 v/m at 8h on the dispersal of the mist.

November 28d 13h to 22h. A NNW wind dropped from force 4 to calm and the gradient rose quickly from 300 v/m to 800 v/m, reaching a maximum of 1200 v/m at 19h. It gradually decreased until 22h. Soon afterwards rain fell. Previously the air was dry.

December 18d 7h to 19d 22h. The morning was calm and foggy with a potential gradient of 500 v/m. The fog dispersed at 11h and the gradient fell to 250 v/m. In the next hour a light SSE wind sprang up and the gradient rose to a maximum of 1300 v/m at 18h 30m, then gradually fell to midnight when drizzle set in. Visibility was very good.

December 20d 14h to 21d 0h. During this 10 hours the potential gradient rose to 1600 v/m and then steadily declined. The wind was NW, light to calm, and visibility was very good.

December 21d 14h to 22d 1h. After rain and fog in the morning the gradient increased to 1000 v/m and remained at this average value for eight hours during continuous wet fog and drizzle.



The following were the more noteworthy occasions when for several hours the potential remained continuously negative, save for an isolated excursion to the positive side on one of the occasions :—

- (i) January 12d 5h 5m to 15h 0m. For two hours the potential gradient was less than  $-1700$  v/m.
- (ii) January 21d 7h 20m to 17h 45m. The potential gradient was rarely greater than  $-1700$  v/m.
- (iii) January 23d 8h 50m to 19h 40m. For about an hour the potential gradient was below  $-1700$  v/m.
- (iv) June 14d 0h 30m to 11h 30m. The minimum value of the potential gradient during this period was about  $-1700$  v/m.
- (v) October 26d 3h 0m to 22h 20m. Save for a break of 10 mins. about 13h when a violent oscillation occurred and a large positive value of about  $+1700$  v/m was attained, the potential gradient was frequently less than  $-1500$  v/m.

In all the above cases continuous rain was falling.

On the following occasions long periods of negative potential gradient were broken by short excursions to the positive side :—

- (i) March 5d 2h 53m to 18h 0m. This was a period of continuous rain, light at first, moderate later. During the first period the potential was mainly negative except that there were occasional excursions to the positive side of short duration and of small intensity save in one instance when a value of  $+1200$  v/m was reached. The potential gradient exceeded the limit of registration on the negative side ( $-1700$  v/m.) only once, when the excess persisted for 18 minutes. During the period of moderate rain large indeterminate values were reached on both sides.
- (ii) March 19d 20h 23m to 21d 9h 57m. This period was broken by a long interval of  $6\frac{1}{2}$  hours and two short intervals of less than an hour each when the potential gradient was persistently positive, though small, during breaks in a spell of otherwise continuous rain. Apart from these intervals there were occasional small excursions to the positive side. The trace was persistently off the sheet for several long periods but there is no indication that the potential gradient was ever positive during these periods.
- (iii) June 19d 2h 4m to 15h 12m. During continuous rain the potential gradient was negative except for excursions to the positive side of short duration and not of great intensity. The trace was off the sheet for three short intervals totalling 20 minutes though large oscillations were taking place on the negative side. At the close of the period the rain became very heavy and many violent oscillations occurred for nearly an hour during which the limit of registration was exceeded on both sides several times.
- (iv) October 11d 6h 10m to 23h 36m. During continuous rain the potential gradient was mainly negative but highly oscillatory, and the limit of registration was exceeded intermittently for about four hours. Half way through the period, as the rainfall became lighter, the gradient increased but remained negative except for a short interval of half an hour ; the minimum value reached was about  $-900$  v/m.



- (v) December 16d 6h 50m to 16h 26m. From 2h on the 16th the potential gradient had been positive and abnormally high during a fall of snow though there was an interval of negative potential gradient of about three quarters of an hour's duration when the limit of registration was exceeded at times. At 6h 30m a peak corresponding to about +800 v/m was reached, and from that time onward the potential gradient decreased steadily, the snow having become sleet. The trace was off the sheet persistently from 11h 40m to 15h 10m save that it reappeared for an interval of about 5 minutes just before 14h. During the latter period continuous rain was falling and there is every indication that the gradient was uniformly negative.

Despite the lack of January and March inequalities for *oa* days the annual and seasonal mean daily inequalities show the characteristics of the seasonal change in daily variation with tolerable regularity. From the single principal wave having early morning minimum and late evening maximum with a very imperfect secondary maximum at 9h in winter, the type changed to a double wave in the equinoctial months in which the forenoon maximum increased relatively to the principal maximum, at the same time advancing its culmination to 7h. Since the evening maximum remained stationary two minima, one at 2h and the other at 12h, therefore became prominent. In the summer months a further advance of the time of the morning maximum to 5h and retardation of the evening maximum to 23h made the afternoon minimum the most conspicuous feature of the daily variation. Though the range of the monthly mean diurnal inequality for *oa* days was greatest in November (305 v/m) and least in May (87 v/m), owing to the lack of a contribution from January, the range of the mean inequality for winter (191 v/m) was less than that for the equinoctial months (207 v/m), the latter being largely attributable to the high value (268 v/m) from the 3-day mean inequality for October. For the summer months the mean range was 110 v/m.

## TERRESTRIAL MAGNETISM.

### Notes on the Instruments.

The standard magnetographs,<sup>1</sup> which have been in regular use for several years, are situated in the east chamber of the underground magnet house and are arranged so as to record changes of the three geographical components of terrestrial magnetic force, viz., the north component, N (or + X), west component, W (or - Y), and the vertically downward component, V (or + Z).

The instruments for the north and west components are of the Adie bifilar type, in which torsion of the bifilar suspension, of fine tungsten or steel wire, is utilised to bring the magnets into an azimuth approximately perpendicular to the directions of the components whose changes they respectively record. In each of these instruments the magnet is about 13.8 cm. in length and is suspended within a copper shell, or frame, of suitable dimensions to ensure that the movements of the magnet are sufficiently damped. To the magnet is rigidly attached a semi-circular plane mirror, immediately beneath which is a fixed mirror of similar form and dimensions. Each magnet and mirror system is contained within a brass cylindrical case, cemented on to a pier and surmounted by a tall bell-jar shaped cover of glass. Light from a brightly illuminated slit passes through a collimator, is incident upon the two mirrors and after reflection passes along a wooden channel and thence, through a horizontal hemi-cylindrical lens, to photographic paper wound on a clock-driven cylinder. The hemi-cylindrical lens is set in the side of the case containing the recording drums, and matters are so arranged that the beams of light reflected from the two mirrors are brought to a focus at the lens which condenses the two vertical images to two sharply focussed dots on the paper. Hence the record obtained consists of two traces, the one straight and known as the base line, the other curved and representing the angular movements of the suspended magnet, and, therefore, the changes in the component of terrestrial magnetic force.

<sup>1</sup>For a general description of magnetograph arrangements see "A Dictionary of Applied Physics," Vol. II, Macmillan, London.



The standard instrument for the vertical component is a Watson multiple-magnet balance.<sup>1</sup> In this instrument the magnet system consists of eight magnetised steel rods, each 10 cm. long and 0.2 cm. in diameter, carried by an aluminium frame to the centre of which are attached the moving mirror and also the knife-edge, which bears upon an agate plane and about which the system balances. Copper damping plates and a temperature-compensating device are provided. The recording arrangements are similar to those described above, save that the hemi-cylindrical condensing lens and the recording drum are vertical.

One clock serves to operate the three drums and also makes the time marks at two-hourly intervals.

To the containing case of each instrument is fitted a suitably designed drying tube containing calcium chloride.

Determinations of the azimuth of the magnets of the north and west component magnetographs are carried out, at intervals of a year or two, by comparing the deflections produced by an auxiliary magnet with its axis (*a*) true north-south, or east-west and (*b*) inclined at a known small angle to those azimuths. Drift of the magnet system of the Watson balance has been compensated from time to time by adjusting the position of a small control magnet which is fixed vertically to the lower part of the pier on which the balance stands. No adjustments were made to the standard magnetographs in 1928.

The azimuth lines in use in the east chamber are those which were determined in 1914 and of which particulars are given on p. 70 of *Hourly Values from Autographic Records, Geophysical Section, 1913*.

The diurnal range of temperature in the east chamber of the magnet house is normally negligible. Temperature is ascertained daily at 9h 30m by the thermometers within the instrument cases. The daily values appear in Tables 271, 275, etc.; the monthly means of the readings so obtained during 1928, together with the mean values for the years 1911-27, were as follow:—

EXCESS OF MEAN TEMPERATURE ABOVE 280a.

Month.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Mean 1928 .. ..	3.6	3.0	2.8	2.8	3.3	4.1	4.8	5.7	6.4	6.1	5.4	4.8
Mean 1911-27 .. ..	3.6	3.0	2.7	2.5	2.8	3.7	4.7	5.8	6.4	6.3	5.6	4.6

The annual range of temperature during 1928 was 4°·0 C., the mean range for the previous sixteen years being 4°·2 C.

The constants of the standard magnetographs were as follow:—

	North.	West.	Vertical.
Time scale .. .. 1 hour =	15.5 mm.	15.5 mm.	15.5 mm.
Time marks .. ..	Every two hours, beginning at exact hour.		
Error of time mark .. ..	Not more than $\pm 1$ min.		
Period of vibration, seconds .. ..	13.9	9.9	7.4
Logarithmic decrement <sup>2</sup> .. ..	.365	.569	—
Angular equivalent of 1 mm. on paper, radians .. ..	.00032	.00032	.0003
Twist of bifilar suspension .. ..	60°	30°	—
Ratio $\frac{\text{length of bifilar suspension}}{\text{mean breadth of suspension}}$ .. ..	66	100	—
Temperature coefficient, per 1° C. .. ..	—9 $\gamma$	—2 $\gamma$	+26 $\gamma$
Direction of marked pole .. ..	West.	North.	—
Azimuth of magnet .. ..	270°	0°	346°

<sup>1</sup> Terrestrial Magnetism, Vol. VI.

<sup>2</sup> Log. decr. =  $\text{Log}_e a_n - \text{Log}_e a_{n+1}$ ; where  $a_n, a_{n+1}$  are the amplitudes of two successive swings on the same side of the zero position.



Determinations of scale value of the standard magnetographs are carried out at intervals of two weeks. The method adopted consists essentially in measuring the photographically recorded deflection of the suspended or pivoted magnet produced by an auxiliary or test magnet of known magnetic moment situated at a known distance from the deflected magnet. Two sets of relative positions of the deflecting and deflected magnets are used; for the north and west instruments they may be termed the "end on" and "broadside on" positions, the magnet axes being in one plane: while in the case of the vertical instrument the deflecting magnet is vertical; in one position the line joining its centre to that of the deflected magnet is collinear with the axis of the latter, but in the other position it is perpendicular thereto. On a given occasion deflections are produced with the test magnet first on one side of the deflected magnet and then, at the same distance, on the other side, two deflections being produced at each side by reversal of the test magnet. Thus four deflection dots are obtained on the record. The two sets of relative positions of the magnets are employed on alternate occasions. The distance between the deflected and deflecting magnets is about 90 cm. and approximate values of the double deflections produced are 44 and 87 mm. for the north instrument, 33 and 65 mm. for the west, and 51 mm. for the vertical. In deducing the scale values allowance is made for the distribution of magnetism in the magnets by assuming that the latter consists of point poles separated by four-fifths of the length of the steel<sup>1</sup> and thence computing values of  $P$ , the distribution coefficient, for the different relative positions of the magnets. The moment of the auxiliary or test magnet is determined at intervals of about one month by deflections at two distances on the Kew magnetometer, the value of the horizontal component of the earth's field being obtained from the result of an absolute observation made on the same day.

In the following table are given the scale values, obtained by overlapping means, which were employed in reducing the curve readings for 1928.

SCALE VALUES OF THE MAGNETOGRAPHS ( $\gamma$  per mm. on the paper).

Month.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
North Instrument.. ..	5.03	5.03	5.03	5.04	5.03	5.02	5.01	5.00	5.01	5.00	5.00	5.01
West Instrument .. ..	6.68	6.68	6.68	6.67	6.66	6.67	6.67	6.68	6.66	6.66	6.66	6.65
Vertical Instrument ..	4.32	4.32	4.30	4.31	4.31	4.27	4.23	4.21	4.23	4.23	4.24	4.24

In addition to the standard magnetographs there are in the west chamber of the underground magnet house auxiliary instruments of the Adie pattern (formerly the standard instruments at Kew Observatory) which record changes in declination,  $D$ , horizontal force,  $H$ , and also vertically downward force,  $V$ . Declination records have been obtained since August, 1927, while the vertical force (Adie) and horizontal force records commenced in March and December, 1928. The general arrangements of these instruments are similar to those of the instruments in the east chamber. The declination magnet is suspended by a bundle of silk fibres (the torsion effect of which is negligible) and the scale value of the record is 1'.17 to 1 mm. The vertical force balance consists of a single magnet, of which the dimensions are approximately 13.5 cm.  $\times$  2 cm.  $\times$  0.2 cm. With the object of reducing loss of record during magnetic storms the scale values of the auxiliary  $H$  and  $V$  records are arranged to be considerably greater than those of the standard  $N$  and  $V$  records. Thus, in the earlier part of 1929 the scale values of the Adie  $H$  and  $V$  records were approximately 10 $\gamma$  and 9 $\gamma$  per mm. respectively. Determinations of scale value are made by the method due to Broun. To facilitate the necessary adjustment, from time to time, of the

<sup>1</sup> Chree, Phil. Mag., 1904.



azimuth of the horizontal force magnet, magnetic meridian lines (and lines perpendicular thereto) representing a sufficient range of values of declination were laid down in the west chamber in December, 1928, on the basis of simultaneous observations of declination in the chamber and in the east magnetic hut.

The routine absolute observations of the magnetic elements are made in the east magnetic hut; as a rule two complete sets of observations are made every week, but in 1928 a determination of declination was made on nearly every week-day. Declination and horizontal force were determined by means of the Kew pattern unifilar magnetometer (which was employed by Rücker and Thorpe in their magnetic surveys of the British Isles, 1886-1892) placed on Pier No. 5. Determinations of inclination (dip) are made by means of the Schulze inductor placed on Pier No. 6.

For a detailed description of the method of observation with the Kew pattern magnetometer reference should be made elsewhere.<sup>1</sup>

In determining declination four readings are taken, two with the magnet erect, two with the magnet inverted. A correction is applied to the mean of the observations for the observed torsion in the silk suspending fibre. The fixed mark is about one half-mile (0.8 km.) distant from Pier No. 5, and its bearing is taken as  $8^{\circ} 12' 30''$  west of south.

Determination of the horizontal intensity comprises observations of (a) the time of vibration of the collimator magnet, and (b) the deflection of a mirror magnet by the collimator magnet. Deflection observations are made for three distances of the collimator magnet, the order of the position of the latter being: on east arm at 35 cm., 30 cm., 25 cm.; on west arm at 25 cm., 30 cm., 35 cm. Thus the mean times for the deflections at the three distances are very nearly, if not exactly, identical and the observations are concentrated at the 25 cm. distance. The time interval between the mean times of the vibration and deflection experiments is usually about half an hour. The horizontal intensity,  $H$ , is calculated from  $H = \sqrt{mH_v \times H_R/m}$  where  $mH_v$  is obtained from the vibration experiment and  $H_R/m$  from the deflections made at the 25 cm. distance,  $m$  being the moment of the collimator magnet.  $H_R/m$  is corrected for the distribution of magnetism in the magnets. From the latter part of 1913 until the end of 1923 the value of this correction, viz.,  $\log_{10}(1 + P/25^2 + Q/25^4)$ , applied to the observations of a given month was a mean value derived from the observations obtained during the seven months including the given month as fourth of the seven. The monthly values so derived show considerable fluctuations, and it is improbable that  $P$  and  $Q$  actually varied to the extent implied. Commencing in 1924 the value of the correction used in reducing the horizontal intensity observations has been the mean of the mean values for each of the years 1917-24, 1917-25, etc. The value employed for 1928 is .00541. A variation of .00020 in the value of  $\log_{10}(1 + P/25^2 + Q/25^4)$  corresponds with a variation of about 4% in the derived value of  $H$ .

The values of  $P$ ,  $Q$ , and  $\log_{10}(1 + P/25^2 + Q/25^4)$  for individual years are as follow:—

Year.		P.		Q.		$\log_{10}(1 + P/25^2 + Q/25^4)$ .
1917	....	+6.862	....	+418.9	....	.00520
1918	....	+7.604	....	+ 68.6	....	.00533
1919	....	+9.126	....	-603.5	....	.00563
1920	....	+8.224	....	-216.6	....	.00544
1921	....	+7.978	....	+ 25.3	....	.00554
1922	....	+6.607	....	+513.1	....	.00513
1923	....	+6.371	....	+614.3	....	.00508
1924	....	+7.899	....	-128.6	....	.00531
1925	....	+8.214	....	-261.7	....	.00538
1926	....	+9.675	....	-938.4	....	.00564
1927	....	+10.422	....	-1265.0	....	.00580
1928	....	+ 8.713	....	- 547.2	....	.00541



The Schulze inductor<sup>1</sup> consists essentially of a coil of insulated wire which can be rotated continuously and rapidly about an axis which coincides with a diameter of the coil. This axis is capable of rotation about a horizontal and vertical axis. The inclination and azimuth of the coil axis are read off on a vertical and a horizontal scale respectively. The windings of the coil are led off from a commutator to a Broca galvanometer. To effect a determination of magnetic inclination, the coil is set so that its axis of rotation lies in the plane of the magnetic meridian. The coil is then rotated steadily at the rate of about 360 revolutions per minute and the inclination of the axis of rotation is adjusted until the galvanometer deflection is the same in magnitude and sign whether the sense of rotation is positive or negative. In this position the rotation axis of the coil coincides with the direction of the earth's field and the inclination to the horizontal may be read off from the vertical circle. Two series of settings are made, one with the vertical circle facing east, the other with the circle facing west.

The base line values of the magnetograph records are deduced from the results of the absolute observations, any of the latter obtained during times of considerable disturbance being excluded. For a set of absolute observations on a given day the mean ordinates of the north and west component curves are determined for the periods of time corresponding to the declination, the vibration, and the 25 cm. deflection observations.

From these values, and from the value of  $H$  obtained as described above, the value of  $H$  corresponding to the mean ordinates during the declination observation is derived, and thence the base line values of  $N$  and  $W$  are computed. Similarly, by the combined use of the curve ordinates at the times of the inclination and horizontal force observations the value of  $H$  corresponding to the inclination observation is obtained and thence the base value for  $V$ . The base line values finally adopted are obtained from a curve drawn smoothly through points given by the deduced values, due allowance being made for discontinuities in the records.

The results of the absolute determinations of  $D$ ,  $I$  and  $H$  are summarized in the subjoined table, and the values of  $m$ , the moment of collimator magnet 60a, are also given. For each set of absolute observations are shown the deduced base line values of  $N$ ,  $W$ , and  $V$  and, in brackets, the adopted base line values. Thus, the entry 15823 (18) signifies:—deduced base line value 15823, adopted base line value 15818. The adopted values were obtained as described in the foregoing, and therefore the base line values corresponding to dates between those given in the table may be obtained by interpolation.

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<sup>1</sup> For descriptions of, and discussion of method of observation with, earth inductors see papers by—  
 H. Wild. *Met. Zeit.*, 1895, p. 41.  
 O. Venske. *Ber. über die Tät. des Preuss. Met. Inst.* in 1924, p. 91 (and references given therein).  
 N. E. Dorsey. *Terr. Mag.*, Vol. 18, p. 1, 1913.



## ABSOLUTE DETERMINATIONS OF D, I AND H, AND BASE LINE VALUES OF N, W, AND V.

Eskdalemuir:

1928.

Date.	Declination.				Inclination.		Horizontal Force.			Base Line Values (deduced and adopted).							
	Mean Time.		D.		Mean Time.		I.		Mean Time.		H.		m.		North.	West.	Vertical.
	h.	m.	°	'	h.	m.	°	'	h.	m.	°	'	h.	m.	15,000 γ +	4,000 γ +	44,000 γ +
Jan.	2	14 15	15 19	33	12 48	69	40.5	11 33	16620	906.1	763 (71)	66 (66)	808 (16)				
	6	14 30	15 18	40	12 52	69	40.2	11 37	16632	906.1	772 (70)	65 (66)	833 (20)				
	11	14 21	15 17	37	11 5	69	39.9	11 39	16635	906.3	772 (68)	67 (66)	823 (24)				
	13	14 31	15 17	20	11 10	69	40.0	11 53	16639	906.1	763 (67)	64 (66)	819 (26)				
	16	14 21	15 19	13	11 29	69	40.5	12 7	16636	907.1	773 (67)	68 (66)	845 (29)				
	20	11 7	15 17	7	10 19	69	39.5	—	16625	—	766 (66)	65 (66)	807 (33)				
	23	14 17	15 23	17	11 25	69	41.4	12 11	16623	905.9	766 (66)	66 (66)	845 (36)				
	26	14 21	15 18	49	11 19	69	41.3	11 59	16628	906.3	765 (65)	65 (66)	852 (39)				
	30	14 45	15 18	1	11 31	69	41.1	12 6	16626	906.3	766 (65)	64 (66)	836 (42)				
Feb.	3	14 27	15 21	9	11 23	69	40.7	12 0	16610	905.7	751 (64)	60 (66)	794 (846)				
	6	14 17	15 19	43	11 23	69	41.1	11 59	16621	906.0	758 (64)	63 (66)	832 (48)				
	10	11 21	15 15	2	10 34	69	40.1	—	16609	—	757 (64)	62 (66)	830 (52)				
	14	14 25	15 23	41	11 17	69	40.2	11 57	16623	906.2	756 (63)	66 (66)	812 (55)				
	17	14 21	15 20	3	—	—	—	11 58	16636	906.8	773 (63)	71 (66)	—				
	20	14 27	15 21	16	11 33	69	39.8	12 11	16617	906.7	766 (63)	67 (66)	800 (59)				
	23	—	—	—	16 31	69	39.8	—	—	—	—	—	865 (61)				
	24	11 45	15 17	24	10 31	69	40.4	11 6	16615	906.8	771 (62)	69 (66)	838 (62)				
	25	—	—	—	12 13	69	42.3	—	—	—	—	—	871 (62)				
	27	14 39	15 20	0	11 27	69	40.6	12 9	16626	907.1	777 (62)	68 (66)	861 (64)				
28	—	—	—	15 43	69	40.6	—	—	—	—	—	858 (65)					
Mar.	2	14 17	15 17	7	11 15	69	38.9	11 55	16631	906.1	767 (62)	65 (65)	833 (66)				
	5	14 17	15 18	47	11 17	69	40.0	12 1	16627	906.1	756 (62)	64 (65)	801 (68)				
	9	11 55	15 16	54	10 38	69	40.3	11 15	16607	906.5	768 (62)	66 (65)	817 (70)				
	10	—	—	—	11 47	69	41.3	—	—	—	—	—	867 (70)				
	13	14 37	15 25	13	11 38	69	42.2	12 15	16638	906.6	766 (62)	67 (65)	827 (71)				
	16	14 15	15 21	47	11 15	69	41.2	12 1	16613	906.7	773 (62)	66 (65)	853 (72)				
	19	14 19	15 20	20	11 26	69	40.5	12 11	16617	905.9	759 (62)	63 (65)	821 (72)				
	23	9 15	15 16	53	10 29	69	39.2	11 11	16606	906.0	759 (62)	64 (65)	825 (73)				
	26	14 25	15 20	35	11 21	69	41.2	12 3	16626	906.0	762 (62)	65 (65)	853 (74)				
	30	14 19	15 18	11	11 10	69	40.4	11 45	16643	907.0	775 (62)	68 (65)	863 (75)				
Apr.	2	—	—	—	11 37	69	42.3	12 14	16663	907.1	—	—	891 (76)				
	3	14 39	15 19	50	—	—	—	—	—	—	777 (62)	72 (66)	—				
	5	14 33	15 22	39	12 29	69	43.1	11 49	16614	906.6	763 (62)	67 (66)	893 (76)				
	9	14 41	15 21	17	12 29	69	42.5	11 45	16617	906.5	766 (63)	67 (66)	889 (76)				
	13	12 31	15 20	1	—	—	—	11 53	16596	906.8	767 (63)	67 (66)	—				
	14	—	—	—	12 17	69	42.0	—	—	—	—	—	884 (76)				
	16	14 33	15 18	41	11 25	69	41.9	12 4	16631	906.7	768 (63)	66 (66)	889 (76)				
	20	11 55	15 17	51	11 38	69	44.0	10 55	16576	906.0	763 (63)	64 (66)	874 (75)				
	23	13 27	15 19	1	8 35	69	41.5	11 6	16630	906.4	773 (63)	69 (66)	920 (875)				
	26	—	—	—	11 13	69	41.6	—	—	—	—	—	876 (74)				
	26	—	—	—	14 22	69	40.3	—	—	—	—	—	875 (74)				
	27	13 33	15 17	20	8 51	69	40.6	11 12	16608	905.9	767 (63)	68 (66)	875 (74)				
	28	—	—	—	9 0	69	40.9	—	—	—	—	—	879 (74)				
30	8 19	15 4	50	9 22	69	40.1	14 45	16618	905.6	759 (63)	65 (66)	825 (73)					



## ABSOLUTE DETERMINATIONS—continued.

Date.	Declination.			Inclination.			Horizontal Force.			Base Line Values (deduced and adopted).		
	Mean Time.	D.		Mean Time.	I.		Mean Time.	H.	m.	North.	West.	Vertical.
		h.	m.		°	'						
May	I	—	—	—	14 12	69 40.7	—	—	—	15,000 γ +	4,000 γ +	44,000 γ +
	I	—	—	—	15 51	69 39.5	—	—	—	—	—	875 (72)
	2	8 18	15 6 35	9 7	69 41.1	14 17	16622	905.8	764 (63)	67 (65)	865 (72)	
	2	—	—	15 25	69 40.0	—	—	—	—	—	—	874 (72)
	4	13 51	15 21 1	10 31	69 42.1	11 8	16633	906.8	778 (64)	69 (65)	917 (871)	
	7	15 13	15 21 34	14 47	69 40.6	11 19	16628	906.5	767 (64)	70 (65)	886 (69)	
	8	—	—	9 5	69 43.3	—	—	—	—	—	—	880 (68)
	9	—	—	8 37	69 42.2	—	—	—	—	—	—	855 (68)
	10	—	—	13 45	69 37.5	—	—	—	—	—	—	861 (67)
	11	8 16	15 5 52	9 0	69 42.3	11 0	16596	905.8	760 (64)	67 (65)	849 (67)	
	11	13 53	15 18 38	—	—	—	16572	—	762 (64)	64 (65)	—	
	14	13 59	15 18 55	9 17	69 44.4	11 2	16586	905.8	759 (65)	63 (65)	838 (65)	
	18	13 39	15 18 56	10 27	69 42.5	11 3	16612	906.0	763 (66)	61 (65)	846 (63)	
	21	8 31	15 7 20	9 7	69 42.4	11 19	16606	906.4	770 (66)	67 (65)	866 (62)	
	25	13 41	15 17 0	10 32	69 42.1	11 15	16609	905.7	763 (68)	65 (65)	846 (60)	
29	—	—	9 29	69 49.7	—	—	—	—	—	—	902 (858)	
30	13 43	15 16 44	10 55	69 45.6	11 28	16583	906.2	780 (70)	70 (65)	901 (858)		
June	I	8 22	15 5 3	9 14	69 42.4	10 37	16613	906.3	776 (70)	70 (65)	870 (58)	
	I	—	—	17 10	69 37.9	—	—	—	—	—	—	876 (58)
	I	—	—	18 48	69 38.4	—	—	—	—	—	—	883 (58)
	2	—	—	9 16	69 42.7	—	—	—	—	—	—	868 (57)
	4	13 41	15 18 23	11 37	69 43.0	12 13	16588	905.6	764 (71)	64 (65)	833 (57)	
	6	—	—	9 25	69 42.5	—	—	—	—	—	—	870 (56)
	6	—	—	13 37	69 41.8	—	—	—	—	—	—	860 (56)
	8	13 45	15 19 37	10 39	69 44.6	11 19	16626	905.6	775 (73)	66 (65)	845 (56)	
	11	14 3	15 16 36	10 47	69 42.5	11 21	16623	906.7	780 (73)	67 (65)	860 (55)	
	15	11 13	15 11 13	9 19	69 43.0	10 39	16597	905.8	768 (74)	60 (65)	813 (55)	
	18	13 51	15 18 20	9 21	69 42.7	12 12	16616	906.3	782 (75)	67 (65)	883 (54)	
	18	—	—	—	—	13 25	16603	905.5	769 (75)	64 (65)	848 (54)	
	22	—	—	9 0	69 48.3	—	—	—	—	—	—	839 (54)
	25	13 23	15 13 44	10 43	69 42.2	11 21	16630	906.1	779 (76)	65 (65)	875 (53)	
	28	—	—	9 10	69 40.9	—	—	—	—	—	—	866 (53)
29	11 5	15 10 55	8 56	69 41.1	10 30	16607	905.5	779 (76)	63 (65)	861 (53)		
30	—	—	9 7	69 42.1	—	—	—	—	—	—	851 (52)	
July	2	14 19	15 23 28	9 0	69 41.1	13 40	16664	905.7	781 (77)	66 (66)	872 (52)	
	4	—	—	8 43	69 41.7	—	—	—	—	—	—	861 (52)
	6	13 43	15 18 19	8 51	69 42.3	11 16	16627	905.0	772 (78)	64 (66)	834 (51)	
	11	13 49	15 11 55	10 29	69 45.3	11 5	16589	906.2	779 (79)	64 (66)	859 (51)	
	13	8 43	15 2 47	8 23	69 43.9	10 34	16585	905.7	779 (79)	66 (66)	852 (50)	
	16	14 41	15 16 5	10 45	69 44.1	11 21	16612	906.2	779 (80)	67 (66)	850 (50)	
	20	14 3	15 18 13	10 30	69 43.8	11 7	16602	905.8	779 (81)	62 (66)	840 (49)	
	23	13 39	15 16 0	13 20	69 43.5	11 4	16596	906.1	791 (81)	70 (66)	874 (49)	
	24	—	—	9 16	69 43.6	—	—	—	—	—	—	867 (49)
	27	11 41	15 12 31	10 30	69 43.0	11 5	16597	905.4	781 (82)	67 (66)	849 (49)	
	30	14 5	15 14 2	11 37	69 43.1	11 24	16608	906.1	782 (83)	69 (66)	860 (48)	
	Aug.	3	14 9	15 17 47	10 27	69 44.5	11 2	16613	906.1	788 (84)	68 (67)	865 (48)
		6	13 47	15 16 35	10 33	69 44.3	11 8	16596	905.9	785 (84)	66 (67)	845 (47)
		10	8 55	15 8 0	8 34	69 43.1	10 29	16594	905.3	782 (85)	69 (67)	842 (46)
		13	13 25	15 16 7	10 35	69 43.5	11 12	16612	905.7	788 (86)	67 (67)	860 (46)
17		13 51	15 15 26	10 39	69 44.2	11 16	16626	906.6	803 (787)	68 (67)	893 (45)	
21		13 53	15 17 37	10 25	69 44.6	11 3	16608	905.7	789 (88)	68 (67)	850 (44)	
23		13 27	15 15 55	10 37	69 43.5	11 15	16594	906.0	789 (88)	69 (67)	846 (43)	
24		13 53	15 15 11	14 37	69 41.5	—	—	—	790 (89)	69 (67)	851 (42)	
27		13 25	15 16 9	13 57	69 43.4	11 9	16570	905.2	774 (89)	62 (67)	802 (41)	
29		8 28	15 6 11	8 55	69 43.2	10 57	16590	905.1	785 (89)	68 (67)	824 (40)	
31		—	—	11 29	69 42.3	—	—	—	—	—	—	827 (39)



ABSOLUTE DETERMINATIONS—*continued*.

Date.	Declination.				Inclination.				Horizontal Force.			Base Line Values (deduced and adopted).		
	Mean Time.	D.			Mean Time.	I.			Mean Time.	H.	m.	North.	West.	Vertical.
	h. m.	°	'	"	h. m.	°	'	"	h. m.	$\gamma$		15,000 $\gamma$ +	4,000 $\gamma$ +	44,000 $\gamma$ +
Sept.	3	8 31	15	4	47	9 6	69	44.7	11 3	16585	905.4	779 (90)	66 (67)	801 (37)
	6	13 41	15	15	3	—	—	—	10 52	16585	905.5	780 (91)	65 (67)	—
	7	14 31	15	16	15	10 39	69	43.7	11 17	16654	905.3	775 (91)	64 (67)	788 (834)
	10	14 23	15	13	47	11 37	69	43.1	10 54	16600	905.9	786 (92)	67 (67)	813 (33)
	14	14 31	15	17	30	10 41	69	44.1	11 19	16612	905.6	790 (93)	68 (68)	820 (31)
	17	11 47	15	12	29	13 28	69	42.1	11 11	16597	906.1	795 (93)	68 (68)	846 (30)
	21	8 43	15	3	57	8 25	69	42.1	10 21	16615	906.0	799 (94)	72 (68)	842 (29)
	24	14 1	15	15	1	13.39	69	42.3	11 19	16598	905.9	788 (94)	66 (68)	832 (29)
	28	11 37	15	12	23	10.23	69	44.2	10 59	16580	905.9	793 (95)	69 (68)	820 (30)
Oct.	1	14 17	15	14	7	10 48	69	44.1	11 23	16628	906.6	810 (795)	74 (68)	869 (31)
	5	13 41	15	15	40	10 39	69	44.7	11 16	16599	906.5	798 (94)	69 (68)	849 (34)
	8	14 45	15	13	20	11 19	69	44.3	11 55	16606	905.6	793 (93)	68 (68)	881 (36)
	12	14 45	15	10	44	11 9	69	43.1	11 51	16581	905.9	782 (92)	58 (68)	808 (39)
	15	14 49	15	14	19	11 19	69	44.9	11 56	16637	906.6	803 (791)	73 (68)	887 (41)
	19	11 45	15	10	13	10 28	69	47.7	11 6	16538	905.8	782 (89)	68 (68)	830 (43)
	23	14 35	15	9	7	11 19	69	44.6	11 56	16599	906.5	787 (87)	72 (68)	854 (45)
	26	12 37	15	11	33	11 15	69	43.9	11 57	16570	905.7	769 (85)	63 (68)	809 (45)
	29	14 25	15	8	39	11 29	69	44.1	12 5	16579	906.1	782 (84)	63 (68)	839 (46)
Nov.	2	11 35	15	11	50	10 19	69	44.9	10 56	16576	906.3	782 (82)	67 (67)	860 (46)
	6	14 51	15	9	40	11 23	69	43.0	12 3	16584	906.0	772 (80)	66 (67)	827 (46)
	9	12 17	15	7	30	10 57	69	42.3	11 33	16610	906.3	784 (79)	68 (67)	851 (46)
	12	14 31	15	9	45	11 23	69	42.9	12 3	16598	906.4	781 (78)	67 (67)	857 (46)
	16	12 49	15	12	20	10 33	69	45.0	11 11	16593	906.4	771 (76)	71 (67)	837 (47)
	20	14 7	15	7	33	11 24	69	43.1	12 0	16593	905.7	775 (75)	66 (67)	838 (47)
	23	12 15	15	10	55	10 59	69	41.8	11 36	16589	906.1	773 (75)	62 (66)	826 (47)
	26	14 45	15	12	17	14 25	69	44.3	11 53	16583	906.2	780 (74)	69 (66)	874 (47)
Dec.	3	15 3	15	7	33	11 19	69	42.1	11 57	16607	906.3	771 (73)	68 (66)	837 (48)
	7	12 19	15	9	9	10 58	69	43.4	11 38	16581	905.9	774 (72)	62 (65)	825 (49)
	10	14 9	15	6	27	11 31	69	43.0	12 11	16575	906.1	765 (71)	62 (65)	855 (50)
	11	—	—	—	—	10 59	69	42.7	—	—	—	—	—	823 (50)
	14	11 7	15	7	4	10 25	69	42.7	—	16565	—	773 (70)	67 (65)	862 (50)
	15	—	—	—	—	10 36	69	42.9	—	—	—	—	—	858 (51)
	17	12 31	15	6	55	12 7	69	42.0	14 37	16608	905.9	774 (69)	65 (65)	861 (52)
	21	14 39	15	10	33	11 11	69	41.4	12 2	16608	906.0	769 (68)	63 (65)	858 (54)
	25	14 7	15	7	3	11 19	69	42.2	11 59	16609	906.2	773 (66)	66 (64)	873 (56)
	27	12 39	15	7	57	11 23	69	42.1	11 59	16588	905.9	763 (65)	64 (64)	851 (58)
	28	14 19	15	7	10	12 41	69	41.5	11 25	16623	905.9	768 (65)	64 (64)	887 (59)
	31	11 55	15	6	49	12 36	69	42.3	—	16604	—	768 (64)	65 (64)	868 (62)

The hourly readings are obtained from the magnetograms, standardized as described in the foregoing, by means of a ruled glass scale. The reading for any given hour G.M.T. is that ordinate estimated to be the mean reading for 60-minutes centring at the given hour. The product of this ordinate and the scale value is added to the adopted base line value, and the sum so obtained is the hourly value printed in the tables.

## IDENTIFICATION NUMBERS OF INSTRUMENTS IN USE IN 1928.

Unifilar Magnetometer, Kew pattern .. .. Elliott, No. 60.  
(with collimator magnet, 60a, and mirror magnet,  
60c).  
Dip Inductor .. .. Schulze, No. 103.



## Notes on Tables.

The hourly values of N, W, and V, obtained as described above, appear in three of the four monthly tables. The mean value for the day is computed according to the expression

$$x = \left\{ \frac{1}{2} (x_0 + x_{24}) + x_1 + x_2 + \dots + x_{23} \right\} / 24.$$

The letters "Q" and "D" denote the five quiet and the five most disturbed days as selected at De Bilt.

In the fourth table for each month are given :—

- (a) the values and times of the daily maximum and minimum and the values of the absolute daily range for each of the components N, W and V.
- (b) the value of  $\Sigma R^2$ <sup>Ⓐ</sup> for each day.  $\Sigma R^2$  is written for  $R_N^2 + R_W^2 + R_V^2$  where  $R_N$ ,  $R_W$ ,  $R_V$  denote the absolute ranges for a calendar day of the north, west and vertical components.
- (c) the daily magnetic character figures, assigned according to the international scheme wherein "0," "1," "2," respectively, denote quiet, moderately disturbed and highly disturbed conditions.
- (d) the daily values of temperature in the underground magnetograph chamber

In *The Observatories' Year Book* for the years 1922–6 the fourth table for each month contains the values of the "characteristic ratio,"  $\rho$ , which is the ratio of the value of  $\Sigma R^2$  for a given day to the mean monthly value of  $\Sigma R^2$ . To some extent this ratio serves as an index of the degree of disturbance on a given day relatively to other days of the same month. It enables the most highly disturbed days to be identified with fair certainty, but is of less use in distinguishing between the quieter days of a month, especially in summer months, when even the quiet day range is large, and in months in which very large disturbance occurs. Another defect is the great difference in the significance, in different months, of one and the same value of the ratio. Further, as long as record is liable to be lost during the larger disturbances the exact value of the ratio cannot be computed in some cases. Some of the drawbacks mentioned could be diminished by relating the ratio of the daily value of  $\Sigma R^2$  not to the mean value of  $\Sigma R^2$  for the month but to a quantity which approximates to the mean value of  $\Sigma R^2$  for a long period, e.g., for 11 years. It is considered that, on the whole, the application of  $\Sigma R^2$  as a criterion of disturbance or activity is not materially increased by the publication of the values of " $\rho$ ," and it was decided as from 1927 to discontinue the publication of this ratio.

Hourly values of declination are not given in this volume. They have been published weekly, primarily for the use of mine surveyors, in "The Colliery Guardian" and "The Iron and Coal Trades' Review."

Mean diurnal inequalities of the components N, W, V, H, D, and I on "all" days and on international quiet and disturbed days are given, for the months, seasons and year, in Tables 316 to 333. In calculating diurnal inequalities the non-cyclic change has been eliminated on the assumption that its time-rate is linear. Inequality values are first calculated to 0.01 $\gamma$  and then rounded off to 0.1 $\gamma$ . The inequalities of H, D, and I have been computed from those of N, W, and V by means of the formulae :

$$\begin{aligned} \delta D &= \frac{180 \times 60}{\pi} \left( \frac{\delta W \cos D - \delta N \sin D}{H} \right) \\ \delta H &= \delta N \cos D + \delta W \sin D \\ \delta I &= \frac{180 \times 60}{\pi} \cos I \left( \frac{\delta V \cos I - \delta H \sin I}{H} \right) \end{aligned}$$

<sup>Ⓐ</sup> See also p. 176.



in which  $\delta D$  and  $\delta I$  are expressed in minutes of arc, and where H, D, and I for any given month are the respective mean values for that month as published in Table 337. The values of the range of the mean diurnal inequalities of the several elements on the three different types of day are brought together in Table 334, and the values of the non-cyclic change of N, W, and V are given in Table 335.

The results of harmonic analysis of the mean diurnal inequalities of N, W, and V for the months, seasons<sup>1</sup> and year are to be found in Tables 338 and 339, in which are given the values of  $a_n$ ,  $b_n$ ,  $c_n$ , and  $\alpha_n$ , in the two equivalent series  $\Sigma (a_n \cos 15nt^\circ + b_n \sin 15nt^\circ)$  and  $\Sigma c_n \sin (15nt^\circ + \alpha_n)$ . In the former series  $t$  is reckoned in hours from midnight G.M.T., whilst the published values of  $\alpha_n$  refer to Local Mean Time. The values of the harmonic coefficients have been computed from the unrounded values of the inequalities and have been corrected, where necessary, on account of the fact that the hourly values are not instantaneous values but are mean values. The factors by which the coefficients have to be multiplied (*vide* Report of the British Association, 1883, p. 98) are 1.00286 for  $a_1$ ,  $b_1$ ,  $c_1$ ; 1.01152 for  $a_2$ ,  $b_2$ ,  $c_2$ ; 1.02617 for  $a_3$ ,  $b_3$ ,  $c_3$ ; and 1.04720 for  $a_4$ ,  $b_4$ ,  $c_4$ . Finally, the values were rounded off to 0.1  $\gamma$ .

The mean values of the squares of the absolute daily ranges are summarized in Table 336.

In Table 337 appear for the months and year the mean values of N, W, V, D, I, H and Total Force, T. The means of the four latter elements are derived from the corresponding mean values of N, W and V, which are the means of hourly values on "all" days in the month or year. Tables 340 and 341 contain mean values of the magnetic elements for 1928 and recent years at a number of observatories.

### Review of Results of Magnetic Observations.

*Mean and Extreme Values of the Magnetic Elements, 1928.*—The mean values<sup>2</sup> are given below in Table I along with the corresponding values for the previous year. The values of N, W, and V have been computed from the hourly values derived from the autographic records of "all" days, standardized by means of the absolute observations; those of H, D, I, and T have been deduced from the values of N, W, and V.

TABLE I.

Year.	H.	D. (West).	I.	N.	W.	V.	T.
	$\gamma$	$^\circ$ $'$	$^\circ$ $'$	$\gamma$	$\gamma$	$\gamma$	$\gamma$
1927 .. ..	16631	15   22.7	69   40.2	16036	4410	44887	47869
1928 .. ..	16619	15   10.5	69   41.2	16039	4350	44894	47871

Westerly declination was on the average 12'.2 less in 1928 than in 1927. The rate of decrease is slightly less than the average rate, 12'.4, during the years 1920–1927. Between 1913 and 1920 the average rate of decrease was 9'.3. As compared with the 1927 value horizontal force shows a fall of 12 $\gamma$ , which is less than the average annual rate of decrease between 1912 and 1927. Practically no change in the average value of the north component has occurred since 1925, but as in recent years the west component decreased by some 60 $\gamma$ . Inclination has increased appreciably, the change having apparently set in about the middle of the year. The values of vertical and total force obtained for 1928 differ little from the corresponding values for 1927.

<sup>1</sup> The seasons are defined for this purpose as follows:—*Winter*, January, February, November, December; *Equinox*, March, April, September, October; *Summer*, May, June, July, August.

<sup>2</sup> See remarks on p. 168.



Reference must here be made to the apparently permanent or semi-permanent effects of the magnetic storm of 7th-8th July, 1928. Consideration of smoothed curves of the daily mean values of the magnetic elements suggests that this particular storm was responsible at Eskdalemuir for discontinuities in H of  $-16\gamma$ , in D of  $-2'$ , in V of  $+17\gamma$ , in I of  $+1'4$  and in T of  $+10\gamma$ . It will be noted that the change in H corresponds closely to the average annual rate of decrease since the year 1912. The changes in H and D are supported by similar results for Lerwick Observatory, where H changed by  $-17\gamma$  and D by  $-2'$ . The changes in V at Lerwick for some time before and after this storm are so irregular that it is not possible to estimate the exact nature of the change in that element. The five-day means of the elements at Eskdalemuir for some weeks before and after the storm are set out below in tabular form; the values enclosed within the vertical lines are for the period centring at the time of the storm.

MEAN VALUES OF THE MAGNETIC ELEMENTS FOR 5-DAY PERIODS CENTRED AT THE DATES SHOWN.

	June.						July.						August.				
	2	7	12	17	22	27	2	7	12	17	22	27	1	6	11	16	21
H, 16,000+	626	629	625	630	630	631	636	564	604	617	616	615	617	613	621	619	620
D, 15°	+10.7	10.8	10.8	10.9	11.2	10.2	10.6	8.9	9.4	9.3	9.2	9.4	9.0	10.1	10.1	9.3	8.8
V, 44,000+	898	895	892	893	891	890	890	882	910	904	902	909	909	908	913	911	909
I, 69°	+40.8	40.5	40.7	40.4	40.4	40.3	39.9	44.6	42.6	41.6	41.6	41.8	41.7	41.9	41.6	41.6	41.5
T, 47,000+	878	875	872	874	872	871	874	841	881	880	877	884	885	882	890	887	886

Mean values derived from (a) international quiet days and (b) international disturbed days are as follow: (a) N, 16043 $\gamma$ ; W, 4352 $\gamma$ ; V, 44893 $\gamma$ ; (b) N, 16036 $\gamma$ ; W, 4349 $\gamma$ ; V, 44896 $\gamma$ .

The differences between the mean annual values of N, W, and V, derived from "all," international quiet, and international-disturbed days in 1926, 1927 and 1928, are given below, together with the mean differences for the years 1915-1925. In every year of the series quoted the mean value of N and of W on quiet days exceeded the mean value on "all" and on disturbed days. The only years in the period 1915-25. for which either the "all" or the disturbed day mean value of V exceeded the quiet day value were 1917, 1919, 1921.

Quiet day mean—"All" day mean.			Quiet day mean-Disturbed day mean.				
<u>N                      W                      V</u>			<u>N                      W                      V</u>				
<i>γ</i> <i>γ</i> <i>γ</i>			<i>γ</i> <i>γ</i> <i>γ</i>				
1928	..	+4.5	+1.4	-1.6	+7.7	+2.6	-3.4
1927	..	+2.9	+1.1	-0.3	+ 9.1	+2.4	-2.7
1926	..	+4.8	+2.0	-0.7	+16.1	+5.7	-1.4
1915-1925		+2.7	+1.2	+0.7	+ 8.5	+3.3	+1.5

The resultant vector representing the average excess of the mean values on "all" days over the mean values on quiet days, for the years 1915-1925, has a magnitude of 3 $\gamma$ ; its azimuth is 156°, measured from true north through east, and it is inclined at about 77° to the upwardly directed vertical. The vertical plane which contains this vector approximates very closely in azimuth to the vertical plane passing through Eskdalemuir and the pole (taken as 78°N, 68°W) of the axis of magnetization of the earth. (cf. S. Chapman, *On certain average characteristics of world-wide magnetic disturbance*. Lond. Proc. Roy. Soc. Series A. Vol. 115, p. 242).

The extreme values of N, W, and V recorded during 1928 are given in Table II.



TABLE II.

Component.	Maximum.			Minimum.			Absolute Annual Range.					
	Value.	Date, 1928.			Value.	Date, 1928.						
	$\gamma$		d	h	m		$\gamma$		d	h	m	
North ...	>16354	{	Between			<14948	July	Between			>1406	
			July	7	23			34	8	5		
								and		and		
			7	23	40			8	10			
		{	„	8	00	10						
West ...	4577	July	7	23	38	<3845	July	8	6	50	> 732	
Vertical	45245	Oct.	18	18	3	<44372	July	Between			> 873	
								8	1	7		and
								8	1	30		

*Magnetic Character of the Year.*—General agreement not having been reached yet as to the most suitable method of obtaining a numerical measure of magnetic activity, the Eskdalemuir practice of tabulating for each day the value of  $\Sigma R^{20}$ , i.e., the sum of the squares of the absolute daily ranges of N, W and V, has been continued. The evaluation of the mean daily values of  $\Sigma r^2$ , the sum of the squares of the hourly ranges of N, W, and V, has not been carried out since 1925, but the values of hourly ranges have been tabulated and are available for the purposes of investigation. The magnetic character figures which were assigned in accordance with the international scheme are summarized in Table III. These character figures were assigned quite independently of knowledge of the values of  $\Sigma R^2$ . Table III contains also the monthly mean value of the international character figures, which for 1928 are based on the estimates made at 41 observatories, and the mean monthly values of  $\Sigma R^2$  for "all," "0," "1," "2," international quiet (Q), and international disturbed (D) days.

The Eskdalemuir mean character figure for the year is slightly less than for 1927, though the international mean character figure is the same; and both remain below their respective values for the year 1926. The mean sunspot numbers for the years 1923–28 are, in order, 5.8, 16.7, 44.3, 63.9, 69.0 and 76.8. Both the Eskdalemuir and the international mean character figures increased concurrently with the sunspot numbers up to 1926, but the concurrence since then has not been maintained.

The Eskdalemuir character figures suggest that September was the most disturbed month, but on the basis of mean values of  $\Sigma R^2$  it will be seen that July stands higher, higher even than the very disturbed month of October, 1926. According to either criterion January was the quietest month.

④ See p. 173.



ESKDALEMUIR 1928

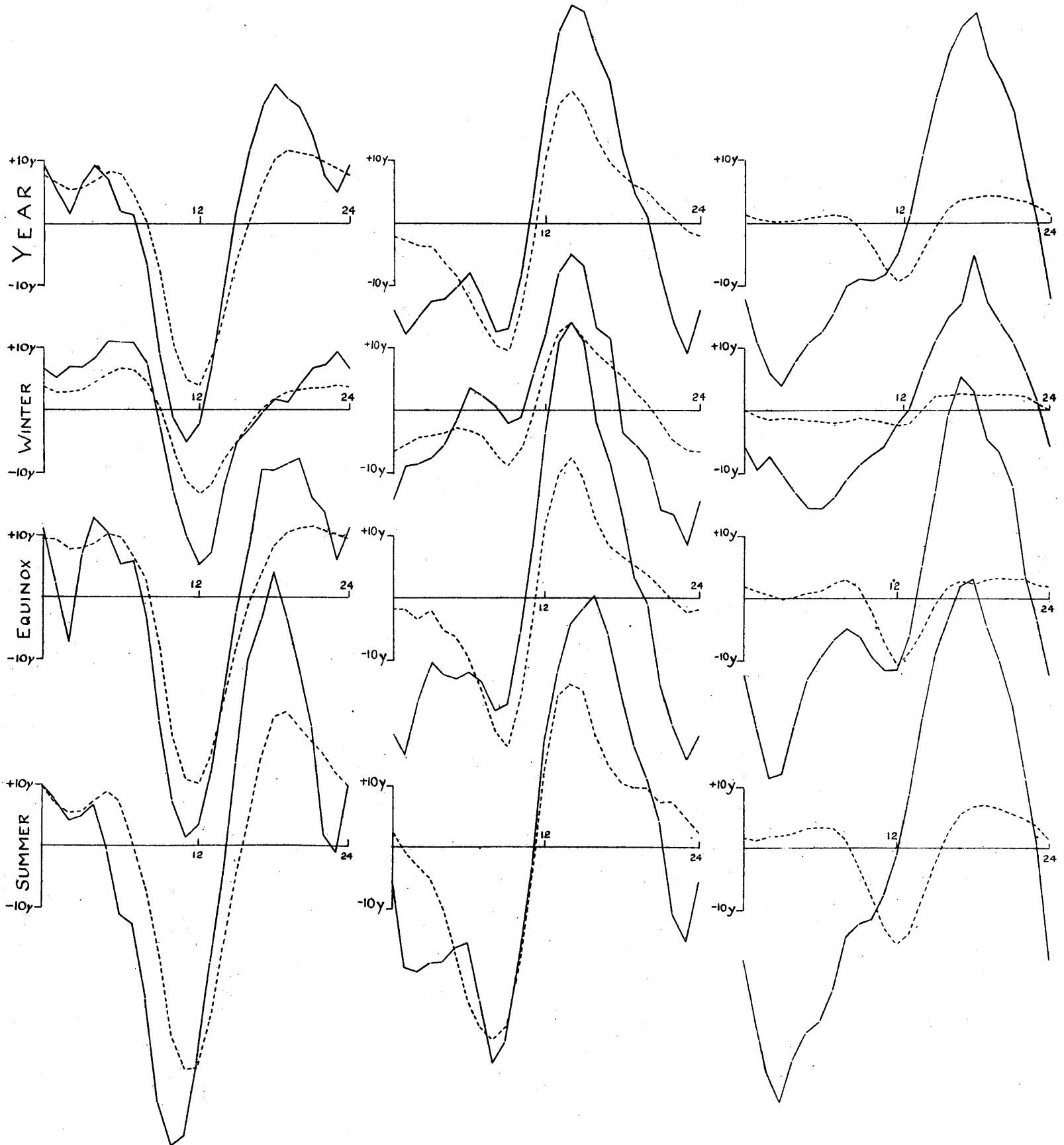
Quiet days.....

Disturbed days —

North Component

West Component

Vertical Component





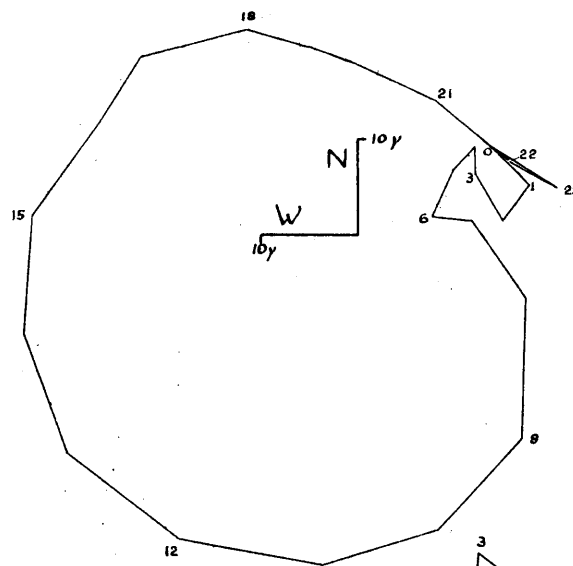
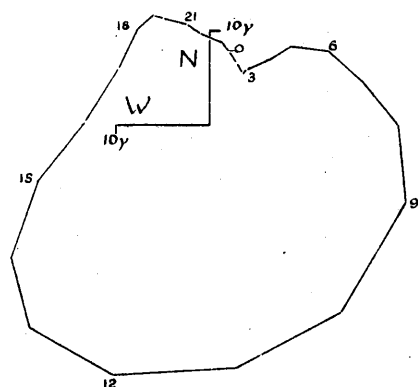
# VECTOR DIAGRAMS ILLUSTRATING DIURNAL VARIATION OF MAGNETIC FORCE

ESKDALEMUIR 1928

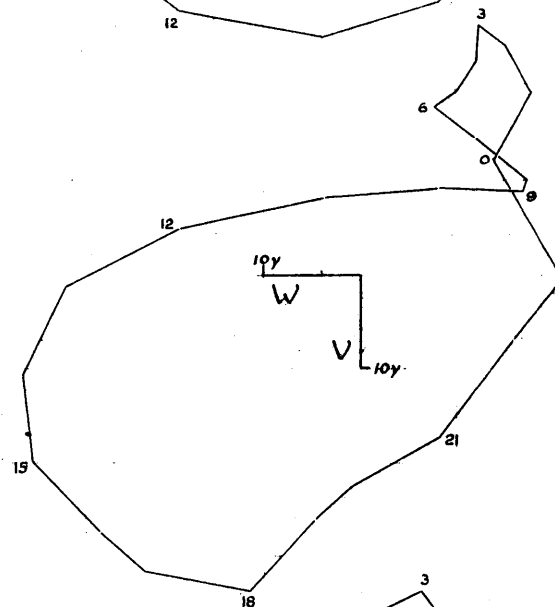
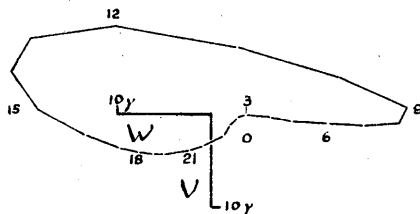
*Quiet days*

*Disturbed days*

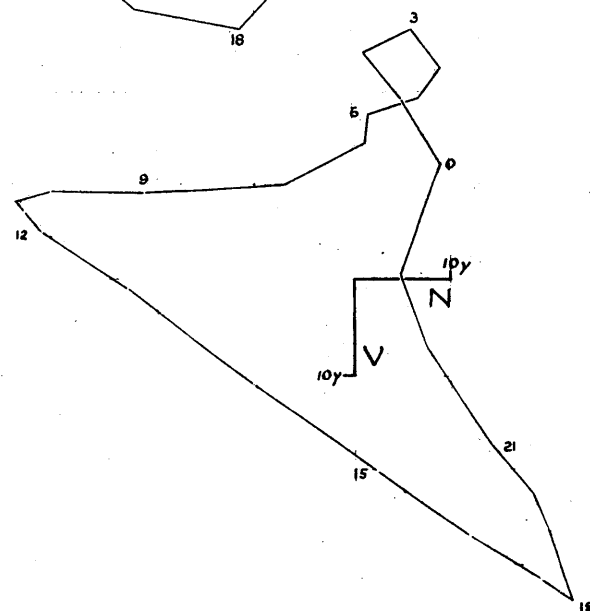
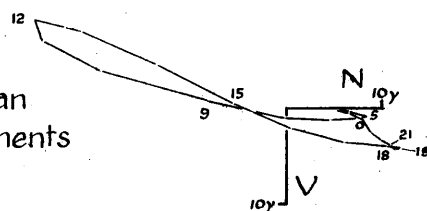
Horizontal  
Components



Prime  
Vertical  
Components



Meridian  
Components





In Table III the annual mean values are the means of the monthly values entered in the corresponding columns. If equal weight be allowed to individual "2" days the mean annual value of  $\Sigma R^2/100$  on these days is 2693. The mean values of  $\Sigma R^2$  for all, "2" and D days for July, August, October, and the year are less than the true values because in either or both of N and V the limits of registration were exceeded on three days. The mean value of  $\Sigma R^2$  for all days is considerably less than in 1926; it exceeds the value for any of the other years since 1919. In the months May to August and in November the value of  $\Sigma R^2$  on all or D days is greater than in 1926. The value of  $\Sigma R^2$  for January is notably small even for a winter month.

TABLE III.

Month.	Magnetic Character Figures.			Mean Character Figure.		Mean Value of $\Sigma R^2/100$ .					
	"0" days.	"1" days.	"2" days.	Eskdale-muir.	Inter-national.	"All" days.	Q days.	"0" days.	"1" days.	"2" days.	D days.
1928.						$\gamma^2$	$\gamma^2$	$\gamma^2$	$\gamma^2$	$\gamma^2$	$\gamma^2$
January ..	13	17	1	0.61	0.44	65	16	22	77	430	202
February ..	6	23	0	0.79	0.62	105	34	37	122	—	202
March ..	12	15	4	0.74	0.48	151	49	56	122	540	468
April ..	10	20	0	0.67	0.52	183	80	98	226	—	336
May ..	8	18	5	0.90	0.75	503	111	125	273	1937	1892
June ..	6	23	1	0.83	0.72	267	113	108	257	1446	623
July ..	6	24	1	0.84	0.72	1288	123	117	350	30838	935
August ..	9	19	3	0.81	0.56	275	97	112	191	1292	922
September ..	5	20	5	1.00	0.75	324	84	92	207	1024	1024
October ..	4	25	2	0.94	0.83	543	82	91	287	4648	1483
November ..	9	20	1	0.73	0.65	238	20	26	281	1307	783
December ..	8	22	1	0.77	0.54	105	27	27	117	465	289
Year, 1928 ..	96	246	24	0.80	0.63	337	70	76	209	4393	763
Year, 1927 ..	95	231	39	0.85	0.63	258	66	68	164	1244	908
Year, 1926 ..	90	227	48	0.89	0.65	465	63	65	180	2167	2048
Year, 1925 ..	145	191	29	0.69	0.56	172	48	56	154	767	541
Year, 1924 ..	191	153	22	0.54	0.55	121	39	43	113	715	424
Year, 1923 ..	235	111	19	0.41	0.48	115	32	42	129	776	408
Year, 1922 ..	174	145	46	0.65	0.65	205	47	64	221	720	601

*Diurnal Inequalities.*—The mean diurnal inequalities for "all" days, international quiet and disturbed days, for the months, seasons and the year, are given in Tables 316–333, and the corresponding inequality ranges in Table 334. The inequalities of N, W, and V for international quiet and disturbed days are shown graphically in Plates III and IV, the representation in the latter plate being in the form of vector diagrams.

The ranges of the mean diurnal inequalities of N, W and V on "all" days in 1928, as compared with 1926 and 1927, are in the main rather higher in summer months and lower in winter months. This is in general agreement with the behaviour of  $\Sigma R^2$  referred to above. The same is true in the main of the ranges of the mean diurnal inequalities on both quiet and disturbed days. In the case of the equinoctial months the most conspicuous feature is the considerable drop in the range of the disturbed day inequality of V, the values in 1926, 1927 and 1928 being respectively 147.7, 95.1 and 64.17.



The average values of the diurnal inequality ranges for the year and seasons for the period 1916-26 (not the values of the range of the representative mean diurnal inequalities for this period) are given below, along with the 1928 values expressed as a percentage of the average values. The units employed are  $\gamma$  for force and  $1'$  for declination. The mean sun-spot number for 1916-26 is 46.7; that for 1927 is 69.0 and for 1928 is 76.8. It was only on international quiet days that the 1927 ranges exceeded the average values for 1916-26 in all seasons and for all components, the excess being greatest for winter and equinox. The 1928 values are nearly all above the average, the excess being greatest in summer. The most conspicuous deficiency is in V in winter in all three classes of days.

		" All " days.					International quiet days.					International disturbed days.				
		N.	W.	V.	H.	D.	N.	W.	V.	H.	D.	N.	W.	V.	H.	D.
Year,	1916-26 ..	36.6	38.7	21.9	35.6	8.26	32.7	37.0	12.1	32.4	8.00	48.3	53.7	65.6	49.7	11.14
	1928 % ..	120	122	102	124	120	116	112	112	118	111	118	104	103	115	107
Winter,	1916-26 ..	22.1	27.7	15.9	18.3	6.31	19.0	19.4	5.2	15.9	4.42	30.1	49.5	53.8	27.5	10.50
	1928 % ..	118	107	82	121	107	104	117	96	104	112	119	94	90	116	99
Equinox,	1916-26 ..	41.5	44.2	27.2	39.0	9.57	37.8	42.0	13.1	37.2	9.04	56.0	65.3	82.0	55.4	13.76
	1928 % ..	118	126	95	121	123	110	110	105	110	108	109	107	105	109	110
Summer,	1916-26 ..	54.0	55.6	26.5	56.1	11.33	45.6	53.4	19.8	46.7	11.12	78.3	67.9	70.2	85.5	12.80
	1928 % ..	123	115	117	125	111	126	107	114	127	110	118	110	113	117	101

*Daily Range.*—The values of mean absolute daily range for the months and seasons of the year, together with the corresponding means for 1916-26 are given in Table IV; the ranges are also expressed as percentages of the mean absolute daily range for the year.

TABLE IV.—ABSOLUTE DAILY RANGE. MEAN MONTHLY VALUES.

Month.	Mean Absolute Daily Range.						Mean Daily Range expressed as Percentage of Yearly Mean.					
	1928.			Mean 1916-26.			1928.			Mean 1916-26.		
	N.	W.	V.	N.	W.	V.	N.	W.	V.	N.	W.	V.
January ..	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	%	%	%	%	%	%
February ..	47	50	17	69	73	39	51	57	35	80	88	81
March ..	60	70	24	69	76	38	65	81	50	80	92	80
April ..	68	77	37	95	94	57	74	88	77	110	113	119
May ..	86	88	40	98	88	54	93	101	81	114	106	113
June ..	133	106	74	102	88	59	145	121	153	119	106	123
July ..	109	94	49	92	85	46	119	108	101	107	102	96
August ..	149	117	77	86	82	43	162	135	158	100	99	90
September ..	95	88	59	98	88	55	103	101	122	114	106	115
October ..	102	103	65	100	92	63	110	118	135	116	111	131
November ..	118	111	69	94	93	57	129	127	143	109	112	119
December ..	82	77	46	62	66	34	89	89	95	72	80	71
	55	67	25	60	64	33	60	76	50	70	77	69
Winter ..	61	66	28	65	70	36	66	76	58	76	84	75
Equinox ..	93	95	53	97	92	58	102	108	109	113	111	121
Summer ..	121	101	65	95	86	51	132	116	134	110	104	106
Year ..	92	87	49	86	83	48	—	—	—	—	—	—



Owing to the limits of photographic registration being exceeded in the storm of 7-8 July, the absolute daily range values given in the above table for N, W and V are less than the true values. The values of the mean daily range for the year are from 3 to 5% greater than for 1927 but less than the corresponding values for 1926. The mean ranges for the months May to August, November and December have risen as compared with the two previous years, but for the months January to April the ranges are lower.

The frequency distribution of absolute daily ranges recorded in 1928 is shown in Table V, which also contains the percentage distribution for the period 1916-1926.

TABLE V.—FREQUENCY DISTRIBUTION OF ABSOLUTE DAILY RANGE.

Range.	Number of Cases 1928.			Percentage Distribution.					
				N.		W.		V.	
$\gamma$	N.	W.	V.	1928.	1916-26.	1928.	1916-26.	1928.	1916-26.
0-9	0	0	21	0.0	0.0	0.0	0.0	5.7	6.3
10-19	2	0	61	0.5	1.7	0.0	0.9	16.7	20.2
20-29	10	11	83	2.7	4.9	3.0	4.5	22.7	24.8
30-39	30	19	74	8.2	7.8	5.2	7.5	20.2	14.3
40-49	23	26	33	6.3	9.9	7.1	10.6	9.0	8.1
50-59	35	34	22	9.6	12.2	9.3	12.0	6.0	4.8
60-69	42	53	17	11.6	12.9	14.5	13.1	4.6	4.2
70-79	41	53	12	11.2	10.3	14.5	12.4	3.3	3.1
80-89	42	43	9	11.6	8.1	11.7	8.6	2.5	2.3
90-99	35	29	3	9.6	6.5	7.9	7.5	0.8	2.1
100-109	21	32	3	5.7	5.3	8.7	4.7	0.8	1.1
110-119	21	9	2	5.7	4.0	2.5	3.5	0.5	1.2
120-129	15	12	5	4.1	3.5	3.3	2.7	1.4	0.8
130-139	11	11	2	3.0	2.6	3.0	2.2	0.5	0.8
140-149	11	6	1	3.0	1.7	1.6	2.2	0.3	0.5
150-159	4	3	1	1.1	1.3	0.8	1.2	0.3	0.7
160-169	2	7	2	0.5	1.2	1.9	0.9	0.5	0.5
170-179	5	4	2	1.4	0.8	1.1	1.0	0.5	0.4
180-189	1	0	2	0.3	0.6	0.0	0.7	0.5	0.5
190-199	2	1	1	0.5	0.5	0.3	0.6	0.3	0.3
200+	13	13	10	3.6	4.4	3.6	3.1	2.7	3.1
Days omitted	0	0	0	..	..	..	..	..	..



TABLE VI.—PRINCIPAL MAGNETIC DISTURBANCES RECORDED AT ESKDALEMUIR, 1928.

Where the beginning of a disturbance has been marked by a "sudden commencement," the serial number is followed by an asterisk (\*), and the time entered in the second column is that of the sudden commencement, estimated to the nearest minute. In other cases, the exact hour nearest the time at which disturbance may be regarded as having begun is entered in the second column. To the tabulated values of maximum and minimum the following have to be added:—N, 15000 γ; W, 4000 γ; V, 44000 γ.

No.	From	To	North Component.					West Component.					Vertical Component.				
			Max.	Time.	Min.	Time.	Range	Max.	Time.	Min.	Time.	Range	Max.	Time.	Min.	Time.	Range
	d. h. m.	d. h.	γ	d. h. m.	γ	d. h. m.	γ	γ	d. h. m.	γ	d. h. m.	γ	γ	d. h. m.	γ	d. h. m.	γ
1	Jan. 26 19	Jan. 27 23	1102	27 5 2	958	27 13 26	144	426	27 13 9	323	27 5 41	103	923	27 18 12	815	27 5 32	108
2*	Feb. 12 7 15	Feb. 15 3	1085	14 20 53	1014	13 18 52 and 14 3 48	71	414	14 14 20	326	14 3 20	88	901	13 21 48	842	14 4 20	59
3*	Mar. 10 22 16	Mar. 13 6	1089	10 22 32 and 12 10 58	923	11 15 42	166	479	11 15 20	278	12 0 41	201	1037	11 15 42	789	12 2 48	248
4	Mar. 13 10	Mar. 15 6	1088	13 19 53	948	14 11 41	140	426	13 14 44	259	14 0 49	167	944	13 16 54	853	14 0 4	91
5	Apr. 6 17	Apr. 8 6	1126	7 21 58	977	7 10 39	149	424	7 14 29	271	7 22 21	153	904	7 17 32	820	8 1 32	84
6	Apr. 19 2	Apr. 21 20	1105	19 23 56	979	20 2 50	126	446	21 13 52	247	20 1 20	199	927	21 17 12	841	20 3 32	86
7*	May 5 2 47	May 6 7	1121	5 19 3	955	5 12 42	166	432	5 4 43	300	5 6 51	132	902	5 20 10	848	5 5 23	54
8	May 10 12	May 11 9	1132	10 17 3	958	10 23 19	174	443	10 16 20	267	10 23 20	176	947	10 17 28	767	10 23 32	180
9	May 11 13	May 15 6	1153	11 16 43	913	12 9 40	240	439	11 16 47	245	12 1 12	194	1003	11 17 28	836	13 0 28	167
10	May 16 10	May 17 22	1167	16 19 41	996	16 12 42	171	424	17 1 1	277	16 20 22	147	910	16 19 14	830	17 1 32	80
11	May 18 3	May 19 22	1137	18 19 5	992	18 11 42	145	412	18 14 19	298	18 18 57	114	927	18 19 5	857	18 5 20	70
12	May 27 9	May 30 8	1308	28 17 0	814	28 8 28	494	525	27 15 47	235	28 23 42	290	1087	28 16 58	708	29 3 20	379
13	May 31 10	June 2 4	1122	31 18 27	981	31 12 39	141	425	1 17 40	307	1 6 41	118	939	1 19 20	864	2 1 51	175
14	June 3 3	June 6 2	1134	5 19 34	986	3 11 10	148	417	3 15 22	300	4 7 34	117	948	3 18 20	864	5 3 42	84
15	June 7 4	June 9 6	1164	7 14 41	961	8 10 54	203	443	7 14 42	285	8 8 26	158	963	7 16 49	864	8 1 55	99
16	June 12 0	June 15 4	1091	12 0 34	957	12 10 52	134	415	14 1 47	297	13 5 21	118	920	14 16 35	841	14 2 11	79
17	June 22 0	June 25 24	1177	22 21 19	850	22 8 39	327	432	22 9 20	272	22 8 32	160	935	22 15 12	793	23 0 20	142
18*	July 2 8 33	July 3 24	1131	3 18 56	978	2 14 48	153	433	2 14 3	263	2 8 36	170	916	3 21 31	849	2 12 0	67
19	July 7 18	July 12 24	>1354	7 23 34 and 8 0 10	<-52	Between 8 5 and 8 10	>1406	577	7 23 38	<-155	8 6 50	>732	1168	8 4 18	<372	Between 8 1 7 and 1 30	>796
20	July 21 12	July 23 7	1107	22 18 48	983	22 8 23	124	410	22 0 17	266	22 8 23 and 28 8 7	144	955	22 18 21	811	22 3 40	144
21	July 28 0	July 29 9	1082	28 17 24	958	28 15 6	124	393	28 15 28	313	29 8 11	80	951	28 17 51	879	28 9 11	72
22	July 30 15	Aug. 1 8	1120	31 17 59	973	31 13 9	147	393	31 18 1	283	31 19 51	110	962	31 19 51	874	1 0 43	88
23*	Aug. 4 17 7	Aug. 6 3	1189	5 17 55	931	5 6 59	258	448	5 15 2	248	5 1 58	200	1020	5 17 58	720	5 1 48	300
24	Aug. 6 18	Aug. 7 24	1100	6 20 21	960	7 10 30	140	387	7 15 8	281	6 21 38	106	952	7 15 42	796	7 1 51	156
25	Aug. 12 4	Aug. 13 24	1121	12 17 49	986	12 11 18	135	407	12 15 58	286	12 20 25	121	979	12 18 57	888	13 3 45	91
26*	Aug. 25 22 35	Aug. 29 6	1124	28 18 30	914	27 6 17	210	402	26 5 11	173	27 2 36	229	943	27 20 22	686	27 2 38	257
27	Sept. 1 23	Sept. 4 1	1141	3 17 11	965	3 10 56	176	452	3 13 33	248	2 3 15	204	1133	3 17 20	854	2 4 48	279
28*	Sept. 7 13 44	Sept. 10 4	1133	7 16 12	948	8 5 2	185	439	7 16 12	234	8 23 11	205	1088	7 17 35	800	8 2 11	288
29*	Sept. 18 15 42	Sept. 19 24	1129	18 16 11	892	18 23 9	237	415	18 16 9	195	18 23 19	220	972	19 16 58	814	18 23 7	158
30*	Sept. 24 16 22	Sept. 26 21	1121	25 21 36	930	25 10 42	191	408	25 13 54	246	25 21 55	162	974	25 16 15	851	26 0 40	123
31*	Oct. 1 19 17	Oct. 3 4	1110	2 19 31	968	2 11 42	142	402	2 13 41	270	2 19 16	132	980	2 17 15	897	1 22 15	83
32*	Oct. 18 7 23	Oct. 20 12	1248	18 17 19	856	18 8 37	392	488	18 17 58	62	18 8 34	426	1245	18 18 3	882	18 20 46	303
33	Oct. 20 20	Oct. 23 1	1118	22 18 29	988	21 10 50	130	378	21 14 5	258	21 1 14	120	940	22 15 55	873	22 2 10	67
34	Oct. 24 2	Oct. 26 6	1117	24 19 6	637	25 1 59	478	394	24 19 7	54	25 1 59	340	985	25 20 11	621	25 1 54	364
35	Nov. 1 20	Nov. 4 24	1101	4 18 58	948	3 13 22	153	380	2 14 12 and 3 13 17	178	3 19 23	202	1092	3 17 53	829	3 0 39	263
36*	Nov. 10 6 55	Nov. 11 3	1078	10 7 0	964	10 15 43	114	419	10 15 0	294	10 24 0	125	966	10 15 32	889	10 7 40	77
37*	Nov. 11 16 58	Nov. 14 6	1175	11 22 36	886	13 18 21 and 17 9 30	289	440	13 18 17	233	13 18 30	207	1033	13 18 26	842	11 22 58	191
38	Nov. 15 13	Nov. 19 4	1116	15 21 12	965	15 42	151	387	15 15 12	220	15 22 18	167	940	17 15 52	859	15 21 19	81
39	Dec. 5 16	Dec. 7 7	1075	5 23 43	972	6 9 21	103	362	6 2 47	140	5 23 31	222	949	6 17 41	822	6 3 20	127
40	Dec. 11 17	Dec. 14 6	1097	11 22 30	986	12 11 9	111	357	12 16 43	252	12 2 25	105	920	11 20 19	871	12 5 48	49



The intervals of maximum frequency in 1926 and 1927 were 70–79 $\gamma$  for N, 60–69 $\gamma$  for W, and 20–29 $\gamma$  for V. In the present year the maximum frequency for W is about one interval higher. In 1923, the year of the last sunspot minimum, the intervals were 40–49 $\gamma$  for N and W, 10–19 $\gamma$  for V.

On 48 days in 1928 the absolute range in either N or W was 160 $\gamma$  or more. The numbers of such days in the years 1915 to 1927 were, in order, 30, 47, 35, 56, 58, 36, 27, 32, 11, 10, 24, 46, 41. The frequency of occurrence in 1928 of ranges in excess of 199 $\gamma$  is about one-half that in 1926 and much the same as in 1927. There were five days on which the range in each of N, W, and V was 200 $\gamma$  or more, as compared with 18 such days in 1926 and seven in 1927.

*Irregular changes in Declination.*—In connexion with the supply of declination data to mine surveyors it has been the practice since May, 1928, to classify the hourly periods between the exact hours G.M.T. into four groups according to the range in declination within each period. The range limits, which were adopted in consultation with representative mine surveyors, are:—less than 5', between 5' and 15', between 15' and 30', and greater than 30'. This method of classification has been applied to the declination records obtained in the year 1928, and the actual frequencies of occurrence of hourly ranges in the last three of the four divisions mentioned are set out below. Owing to defects in the record ranges could not be assigned in the intervals January 6d 23h–7d 10h, March 19d 9h–16h, November 28d 1h–11h and 30d 6h–10h. Inspection of the N and W traces shows that in none of these intervals did the hourly range (as defined) definitely exceed 5'. A range of 30' is equivalent to a change of 145 $\gamma$  in the component of horizontal force perpendicular to the magnetic meridian.

Number of cases per month.

Range Interval.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
5' to 15' ..	25	49	50	58	86	89	77	62	104	89	79	60	828
15' to 30' ..	0	3	5	3	14	3	9	6	9	17	18	8	95
>30' ..	0	0	0	0	3	0	10	0	0	5	1	0	19

Hourly Distribution. 1928.  
Hour ending at (G.M.T.).

Range Interval		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
5' to 15'	..	57	54	43	39	28	27	31	19	19	25	35	39	21	21	18	27	27	22	31	44	53	47	48	53
15' to 30'	..	9	4	6	3	1	2	0	3	1	0	1	1	0	1	1	5	4	11	4	5	8	11	6	8
>30'	..	0	1	1	1	1	1	1	1	2	1	1	0	0	0	0	0	1	1	3	1	0	1	0	1

On the average quiet day the most conspicuous change in declination is that from the most easterly value at about 8h or 9h to the most westerly value at about 13h or 14h; the rate of change being greatest between 10h and 12h. The hourly range due to the regular diurnal variation at this time of day is less than 5', but doubtless it happens at times that the occurrence of slight disturbance will result in the hourly range exceeding 5', whereas the occurrence of the same degree of irregularity at another hour of the day would not cause the hourly range to exceed 5'. Thus the figures given above for the range interval 5'–15' tend to exaggerate somewhat the incidence of irregular changes between 9h and 13h. The hourly distributions of the frequency of occurrence of ranges between 5' and 15' and between 15' and 30' exhibit the well known tendency for irregular changes to occur predominantly during the "night" hours—at least in Europe. Ranges in the first interval were nearly twice as frequent, and in the second interval five times as frequent, between 16h and 4h as between 4h and 16h.

*Principal Magnetic Disturbances during 1928.*—Particulars of the principal magnetic disturbances recorded during the year are given in Table VI. Corresponding information for the same disturbances is given in the Lerwick Section. The magnetograms for the most highly disturbed days are not reproduced in this volume, but photographic copies may be obtained on application to the Director, Meteorological Office, Air Ministry, Kingsway, London, W.C. 2.



**Remarks on Magnetic and Allied Phenomena, 1928.**

*January.*—(Average Character Figure 0.61). Until the 26th magnetic conditions were very quiet. Some disturbance occurred from 26d 19h to 27d 13h but the ranges recorded were small, 144 $\gamma$  in N, 103 $\gamma$  in W and 108 $\gamma$  in V; thereafter until the end of the month conditions were rather less quiet. Character figure 0 was assigned to no less than 13 days and character figure 2 to only one day (27th).

Several sunspots, just visible to the naked eye, are noted as having occurred during this month, the dates of their passing of the sun's central meridian having been 3rd, 22nd, 25th and 30th. The third of these in Latitude 8°N occurred about the time of the only appreciable magnetic disturbance and is described<sup>1</sup> as having been associated with a large metallic prominence of the "rocket" type, which had nearly disappeared round the sun's limb by the end of the month.

*February.*—(Average Character Figure 0.79). In slight disturbance on the first two days of the month the chief feature is a "bay" in W between 20h and 20h 30m on the 1st, which is repeated between 18h 45m and 20h 45m on the 2nd; in both cases the extreme depression below the undisturbed value is about 127 $\gamma$  and is reached some 25 minutes after the commencement of the movement. The simultaneous movements on the N traces are roughly wave-shaped, first down and then up, and of about 15 $\gamma$  amplitude\* on 1st and 24 $\gamma$  on 2nd. A rather sudden rise in N of about 40 $\gamma$  and fall in W of 20 $\gamma$  occur at 2d 22h 27m.

Conditions then remained rather quiet until 12d 7h 15m when a "sudden commencement" (initial changes:—N + 10 $\gamma$ , W – 5 $\gamma$ ) marked the beginning of slight disturbance which lasted until 15d 3h, but gave an extreme range of only 88 $\gamma$  (in W). Few notable features occurred in this period, but mention may be made of a sudden rise of some 60 $\gamma$  in N commencing at 15d 21h 57m, with a recurrence some 22 hours later in the form of a rise of 47 $\gamma$ . On the 14th a somewhat similar but less marked movement had commenced at 20h 30m. Slight, but only slight, disturbance occurred on several days later in the month, though a large sunspot (Central Meridian Passage Feb. 21.6), possibly a return or a revival of the spot of Jan. 25th, was plainly visible about this period.<sup>2</sup>

Character figure 2 was not assigned to any day in this month.

*March.*—(Average Character Figure 0.74). Until 10th conditions were very quiet. A "sudden commencement" at 10d 22h 16m followed by a rapid rise of N through 35 $\gamma$  and rapid oscillatory movement of small amplitude for 1½ hours in both N and W, was succeeded by quiet conditions until 11d 8h and thereafter a rather disturbed period of two days. The ranges in N and W were not great, but the period from noon of 11th to 8h of 12th showed a well-developed disturbed day oscillation of V with a range of 248 $\gamma$ . It is to be noted that this storm is separated from the smaller storm of February 12–15 by an interval of 27 days 15 hours and from that of April 6–8 by an interval of 26 days 20 hours.

A further disturbance of small magnitude is regarded as having lasted from 13d 10h to 15d 6h. Thereafter conditions were quiet until the end of the month.

The Sunspots of March 18, 19<sup>3</sup> do not seem to have been associated with any noticeable magnetic activity.

Character figure 0 was assigned to 12 days in March, including the first nine days, and character 2 to the four days 11th to 14th inclusive.

*April.*—(Average Character Figure 0.67). The first few days of April were not entirely quiet, but the first disturbance to be mentioned is that which lasted from 6d 17h to 8d 6h. During the period 21h to 23h of 7th, N and W each fluctuated in

<sup>1</sup> *Nature*, Vol. CXXI, p. 220.

<sup>2</sup> *Nature*, Vol. CXXI, p. 335.

<sup>3</sup> *Nature*, Vol. CXXI, p. 806.

\* *i.e.* the range of the oscillation was about 30 $\gamma$ . The word amplitude is used in this sense throughout these notes.



value by 133 $\gamma$ , whilst V showed a "pit" of some 47 $\gamma$  below the undisturbed value; again, around 8d 1h V showed another "pit" of about 53 $\gamma$  in depth. By the 11th conditions had again become very quiet; they continued so until the afternoon of 14th when slight disturbance recommenced.

The period 19d 2h to 21d 20h was sufficiently disturbed for mention, at least in the case of W; a fairly large spot (in Lat. 16°S) was nearest the centre of the sun's disc on 19th.<sup>1</sup> The remainder of the month was quiet.

Character figure 2 was not assigned to any day of the month.

*May.*—(Average Character Figure 0.90.) Disturbance was of more frequent occurrence, the character figure 2 being assigned to five days and character 1 to 18 days.

The first four days of the month were quiet. A "sudden commencement" at 5d 2h 47m was followed by slight disturbance lasting till midnight, but the first noteworthy disturbance began about 10d 8h with small oscillations (period about two minutes) in N and W; these continued till 12h 15m, when the larger movements began with a sharp rise in N and W and a drop in V. In their main outlines the curves of all three components are similar to those of Lerwick, and show a maximum about 17h and a minimum shortly before midnight. The ranges during this period were 174 $\gamma$  in N, 176 $\gamma$  in W, 180 $\gamma$  in V.

After a brief quiet interval from 11d 9–13h, disturbance was renewed, and continued with greater or less intensity till the early hours of the 15th. It is worth noting that the largest group of sunspots seen since February was on the sun's disc during the period 2nd to 14th, the time of Central Meridian Passage being May 8.4.<sup>1</sup> Further moderate disturbance occurred between the morning of the 16th and the evening of the 17th, with ranges of 171 $\gamma$  in N, 147 $\gamma$  in W, and 80 $\gamma$  in V.

After a quiet period from the 20th to 26th, one of the largest disturbances of the year began on the morning of the 27th. As is the rule, the initial movements consisted of small and rapid oscillations in N and W, beginning about 6h. During the afternoon all three components rose irregularly; the curve of N has several peaks between 15 and 18h and then falls gradually to a minimum at 28d 9h; the main features of the W curve are a rapid fall of 100 $\gamma$  after 17h, and another of 180 $\gamma$  between 21h and 21h 40m, followed by an irregular rise to a maximum at 28d 6h. V rose rapidly to a maximum shortly after 17h on the 27th, continued near the same value for 4 hours, and fell by 85 $\gamma$  between about 21h 30m and 22h 10m; then followed a rounded hump and a fall to two minima at about 4h and 6h 30m on the 28th. The ranges during this period were:—N 417 $\gamma$ , W 287 $\gamma$ , V 217 $\gamma$ . During the second day (28th–29th) the disturbance was much more intense in N and V. All three components underwent large oscillations, with a period of the order of  $\frac{1}{2}$ –1 hour, superposed on those of shorter and longer periods, especially after the time of maximum in the afternoon. It is noticeable that sometimes during these large oscillations those of very short period (a few minutes), which are scarcely ever absent, are temporarily invisible; this is especially the case where the curve makes a complete oscillation of sine-wave shape. The long-period oscillation is particularly well developed in V, where in its main outline the curve is a wave of amplitude 160 $\gamma$ , with maximum at 28d 15h and minimum at 29d 2h. The absolute ranges during the afternoon and night of the 28th–29th were:—N 466 $\gamma$ , W 264 $\gamma$ , V 379 $\gamma$ . At Lerwick this disturbance, though large in H, was very small in V.

Disturbance continued with moderate intensity during the 29th; perhaps the most notable feature of it is the fairly regular period of about 50 minutes, which can be distinguished in the oscillations of N between 12h and 20h; the corresponding amplitude is of the order of 25 $\gamma$ .

<sup>1</sup> *Nature*, Vol. CXXI, p. 806.



*June.*—(Average Character Figure 0.83). No large disturbance occurred in this month. During the first eight days there was continued activity, one feature of which was the frequent appearance of small oscillations of a few minutes' period in the horizontal components from about 6h onwards, followed by a sharp rise of some 50γ about 15h marking the onset of more vigorous movements. On the 7th the activity was rather greater. N rose by 160γ between 13h 30m and 14h 40m, immediately falling again and continuing to do so irregularly till it reached a minimum at 8d 1h 35m; the maximum in W occurred at practically the same time as that of N; V rose in a rounded hump to a maximum about 7d 17h, falling gradually to a minimum shortly before 8d 2h.

A period of small activity followed, during which the 10th, 11th and 16th were among the quietest days of the month, although seldom free from small and rapid oscillations, especially during the daylight hours.

The largest disturbance of the month occurred on the 22nd. After several quiet hours, small oscillations of about 1½ minutes' period began in N and W at oh 18m. After a few minutes W fell by 25γ and continued to fall slowly till about 8h; N had no conspicuous changes till 6h, when a fall began, which became increasingly rapid at 8h and resulted in a total drop of some 200γ below the undisturbed value, with a minimum at 8h 39m and a rapid recovery soon after. W fell slightly at 8h, beginning to rise rapidly at 9h and reaching a maximum at 9h 20m, 100γ above the undisturbed value. The course of the V curve shows a slight dip between oh and 4h, and a fall around 9h to a minimum about 10h. After this the horizontal components continued with much agitation of small amplitude till 20h 40m, when a fall took place in both; this reached 130γ in W by 23h, but in N was soon turned into a rapid rise to a peak about 100γ high at 21h 19m; both components then underwent considerable fluctuations till 23d 5h, when these died out and the small rapid oscillations began. On the 22nd V rose between 12h and 14h to a rounded maximum, followed by a gradual fall; this was broken by more rapid falls beginning at about 21h and 22h 40m, the latter leading to a minimum at 23d oh 20m and followed by an irregular rise till 10h.

The succeeding two days, until the end of the 25th, were of the type described at the beginning of the month. The remainder of the month was moderately quiet. The sunspot in Lat. 19°S and of Central Meridian Passage June 28.9 was apparently not associated with any noteworthy magnetic disturbance.

*July.*—(Average Character Figure 0.84). Apart from one very large magnetic storm, this was a month of little disturbance. A "sudden commencement" at 2d 8h 33m was followed by very moderate activity during the rest of the day. The succeeding days were also moderately active, until the greatest storm of the year began with irregular oscillations in N at 7d 18h. These continued until shortly after 22h, when the larger movements began with a fall in N and W. At 23h 26m an abrupt movement in all three components marked the beginning of very large and rapid fluctuations which lasted till noon of the next day; N rose rapidly and passed off the sheet at 23h 35m; W rose by some 250γ to a sharp peak at 23h 37m, and V fell by 85γ in 14 minutes. Soon after midnight N fell irregularly, and passed off the bottom of the sheet at about 8d 1h 30m, remaining off (with temporary returns between 2h and 5h) till about 11h; V also fell beyond the limit of registration, but reappeared in several large peaks during the night and morning, the largest being at 2h 15m and 4h 15m, the latter the absolute maximum for the storm; W underwent large and rapid fluctuations, but was below its undisturbed value during practically the whole night after a drop of 470γ from a peak at 1h 10m. Considering its intensity the disturbance died out quickly, the largest oscillations ceasing about 8d 11h, though considerable agitation continued till 22h, to be renewed soon after midnight.

At Lerwick the disturbance was very similar in the horizontal components; in V many of the features were the same, e.g. the disturbance began with a rapid drop



at 7d 23h 26m, which was continued till soon after 8d 1h, and there was a very large and rapid rise at 4h; but whereas at Eskdalemuir V was below its normal value from 8d 0-10h, at Lerwick it was greatly above normal from 2h onwards.

The ranges recorded were :—N 1406 $\gamma$ , W 732 $\gamma$ , V.796 $\gamma$ , but these must have been greatly exceeded in N and V, and somewhat in W as well.

The values of  $\Sigma R^2$  printed in Table 295 might suggest that this month was more disturbed at Eskdalemuir than at Lerwick; but the limits of registration were exceeded at both places, and the figures given, being for the ranges actually recorded, depend in this month mainly upon the range of registration of the instrumental equipment at the two observatories. At the time of the storm there was a moderate-sized group of sunspots just past the sun's central meridian and in Lat. 8°N. The time of Central Meridian Passage was July 12.4.<sup>1</sup> Certain other matters, apparently associated with this storm are referred to above in the Review of Results.

There was slight magnetic agitation on the succeeding days until the end of the 12th, when a quiet period began; conditions were very quiet until 17d 10h, and rather less so until the 21st. Another group of sunspots occurred about this time in Lat. 18°S, its time of Central Meridian Passage being July 17.5.<sup>1</sup>

On the 21st at about noon, small, rapid and irregular fluctuations began; these increased about midnight, but died away during the succeeding day and night, and do not present the usual features of a noteworthy disturbance. There was a dip in V during the early hours of the 22nd, with several irregular waves, the absolute minimum occurring at 3h 40m. At Lerwick this disturbance was of similar type, but of rather greater intensity in the horizontal components, though less in V.

During the rest of the month, though the only really quiet period was from 29d 6h to 30d 15h, there was nothing to remark upon except a slight disturbance on the 31st. This was preceded by small fluctuations beginning at 30d 15h, and continuing at intervals through the night, and by very small and rapid oscillations from about 31d 10-13h (period about 1½ minutes). A naked eye sunspot is noted as having been present in Lat. 14°N from about July 27th to August 6th, its time of Central Meridian Passage having been July 31.8.<sup>2</sup>

*August.*—(Average Character Figure 0.81). Considerable disturbance followed a well-marked "sudden commencement" at 4d 17h 7m. The fluctuations were at first irregular, but a fall in W of 85 $\gamma$  in 35 minutes may be mentioned, beginning at 20h 10m. At 22h V began to fall, and the fall became increasingly rapid after midnight, until a minimum was reached at 5d 1h 48m, after which V rose rapidly for 25 minutes. Two further dips occurred, with minima at about 3h and 6h, separated by a large rounded hump. Between 1h 6m and 3h 6m there was an abrupt dip in N of 110 $\gamma$ , with a temporary rise around 2h; the corresponding movements of W consisted of two dips of about 55 $\gamma$  at 1h 20m and 2h, separated by a peak at 1h 34m and followed by another at 3h 2m. N underwent two further sharp dips at 5h 35m and 6h 59m, after which set in the small and rapid oscillations which are usual in the morning hours. W rose irregularly to a maximum at 5h 46m.

During the 5th the disturbance was of about the same degree of intensity. V rose during the afternoon to a pronounced maximum between 17 and 18h, afterwards falling until 6d 1h. N and W rose irregularly, the general outlines of the curves showing maxima at about 16 and 17h respectively, but the absolute maximum of N occurred in an abrupt peak at 17h 55m; after this both components fell slowly, and the disturbance died away temporarily soon after midnight.

The ranges during the period discussed were :—N 258 $\gamma$ , W 200 $\gamma$ , V 300 $\gamma$ . The disturbance was of similar type as recorded at Lerwick, but the ranges were much greater, especially in H.

<sup>1</sup> *Nature*, Vol. CXXII, pp. 108 and 142.

<sup>2</sup> *Nature*, Vol. CXXII, p. 453.



Disturbance was renewed on the evening of the 6th, and lasted for some 24 hours. The movements were irregular in the horizontal components, and present no marked features for description. Beginning at 19h 36m, N fell by 70γ to a minimum at 20h, rising again rapidly till 20h 20m, thereafter falling irregularly for 3 hours; at 23h 22m, a rapid rise of 80γ began, followed by a dip of about 80γ between 23h 45m, and 1h 55m, and this was accompanied by a dip of about 65γ in W. The oscillation of V was more regular; the curve rises gently to a maximum soon after 6d 20h; it then falls steadily by 150γ to a minimum shortly before 7d 2h, and thereafter rises at about the same rate till 4h 30m.

After the end of the 7th, conditions were mainly quiet for nearly three weeks, broken by a slight disturbance on the 12th. The next disturbance to be noted occurred after a "sudden commencement" at 25d 22h 35m. During the rest of the night and early morning the fluctuations of N and W were irregular, becoming small after 26d 6h. After a rapid rise to a maximum at 0h 44m, N fell gradually until about noon. V fell by 50γ to a rounded minimum at 1h, followed by a slight hump during the next 4 hours, another minimum at 3h 25m, and a gradual rise until the afternoon. During the afternoon of the 26th rather rapid oscillations occurred, N rising to a maximum around 21h, and V showing slight undulations with maxima near 14h, 17h, and 20h. The largest movements took place in the early hours of the 27th; N fluctuated irregularly, with small minima roughly 60γ in depth at 0h 29m, 2h 33m, 6h 17m, and 9h 14m. Dips occurred in W, centred near 1h and 4h, separated by a small peak at 2h 5m. V fell to a small minimum at 0h 25m, separated by a temporary rise from a much deeper fall at 2h, which reached some 200γ below the undisturbed value at 2h 36m; after remaining near this low value for 2 hours, V began to rise soon after 4h 30m, and continued to do so, with a temporary fall at 6h 10m, till 9h.

The disturbance was of similar type at Lerwick, but more intense, especially in the horizontal plane.

Moderate disturbance continued until the morning of the 29th, and the remainder of the month was quiet.

*September*.—(Average Character figure 1.00). Judged by the mean character figure this was the most disturbed month of the year, though three months have larger mean values of  $\Sigma R^2$ . The month was similar to May in that there was a large amount of moderate disturbance.

The 1st was quiet, but shortly before 23h a slight disturbance began. This consisted of two shallow dips in W from 22h 30m to 24h, and from 0h 30m to 4h 30m on the 2nd, accompanied by small humps of about 30γ in N at 23h 5m, 0h 30m and 4h 40m, and a dip of about 55γ in V between 0h and 8h. The first half-hour (22h 30m–23h) was marked by extremely small and rapid oscillations in N and W, such as are frequently seen near midnight. The remainder of the 2nd was fairly quiet until 23h, when a rather rapid rise of 30γ in N and 25γ in W, and a gradual fall of 15γ in V, began. A shallow dip in V persisted till about 3d 4h, and small fluctuations occurred in N and W during the morning hours. N fell to a minimum at about 10h, afterwards rising irregularly till about 17h. V also rose during the afternoon, and the unusual feature of the disturbance was a rapid rise of 120γ in V between 16h 30m and 17h 20m, followed immediately by a rapid fall which continued, with a brief break at 19h 20m, until 20h 20m. The maximum value of N occurred in a small irregular peak at 17h 11m. W fell gradually from its maximum at about 14h, undergoing an abrupt drop of 80γ between 17h 9m and 17h 12m. Moderate fluctuations took place in all components between 19h and 20h 30m, and the disturbance died away soon after midnight.

At Lerwick the remarkable feature was the very large and sudden rise and fall in H corresponding to those in V at Eskdalemuir; but it may be remarked that the drop in H was arrested abruptly at 17h 30m, the time when the Eskdalemuir V curve is steepest and shows the merest trace of discontinuity.



After three quiet days a "sudden commencement" at 7d 13h 44m marked the beginning of a large disturbance. N and W continued their normal diurnal variation, but with greatly increased fluctuations. V rose rapidly in three waves to a maximum at 17h 35m, and then fell irregularly till 8d 2h; three marked dips occurred, with minima at 19h 23m, 22h 21m and 2h 11m, the last being the absolute minimum. In N and W fluctuations of the order of 50γ, but without any very marked features, continued through the night and for the next two days, dying away in the early hours of the 10th. The variations of V during the 8th–10th were of similar type to those of the 7th–8th, but of decreasing amplitude. At Lerwick the disturbance was very great in H, the main features of which were similar to those of V at Eskdalemuir rather than to those of N. Conditions were calm for the next 8 days, during which the 15th–17th were among the quietest days in the month. The large sunspot in Latitude 14°N, time of Central Meridian Passage, September 12·7, was thus not associated with noteworthy magnetic activity.<sup>1</sup>

A "sudden commencement" at 18d 15h 42m was followed immediately by considerable agitation. N and W rose abruptly and continued to oscillate rapidly until about 20h 20m, when a fall began in both, which in less than 20 minutes reached 75γ in N and 120γ in W; this was followed by a rapid recovery in N. V changed little until 19h, when it began to rise, reaching a rounded maximum at 20h 46m. Between 22h 40m and midnight there was a marked outburst of activity, all three components falling to a pronounced minimum preceded by a smaller one; the times of minima were:—N, 22h 55m and 23h 8m; W, 22h 55m and 23h 19m; V 22h 56m and 23h 6m. Slight agitation continued during the morning of the 19th, increasing during the afternoon and dying away before midnight. The ranges during the period discussed were:—N, 237γ; W, 220γ; V 158γ. At Lerwick the disturbance in H was similar to, but greater than, that in N at Eskdalemuir, while in V the dip at 23h was inverted into a sharp rise and fall.

The period 20d 18h to 22d 8h was calm, on the next two days there was considerable activity of a small order, and on the 24th a well-marked "sudden commencement" occurred at 16h 22m. In this connection it is to be remarked that the time of Central Meridian Passage of a large sunspot in Lat. 15°N is given as September 24·4.<sup>2</sup>

Considerable magnetic activity continued through the night and the following day, the hours from 6 to 13 on the 25th being marked by rapid oscillations of relatively large amplitude, particularly between 7 and 8h. At 21h larger oscillation of a different character set in in N and W; after rising rapidly to maxima at 21h 36m and 21h 44m respectively each component made two complete and very smooth oscillations; the maxima of N occurred at 21h 59m and 22h 15m, while those of W were at 22h 2m and 22h 20m, about  $\frac{1}{4}$  period later than N; after this the oscillations became less regular, but the same phase-relation can be detected until midnight. Concurrently with these there was a fall in V to an irregular minimum soon after 22h, separated by a small hump from another at about 0h 30m.

The rest of the month was quiet, especially 28d 0h and 29d 8h. The very large sunspot in Lat. 15°S, time of Central Meridian Passage September 27·4, was not apparently coincident with noteworthy magnetic disturbance.<sup>2</sup>

*October.*—(Average Character Figure 0·94). There was considerable activity of a low order throughout most of the month, but the only large disturbances occurred on the 18th and the 24th–25th. A small "sudden commencement" at 1d 19h 17m was followed by very moderate agitation. A few minor fluctuations took place till

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*Nature*, Vol. CXXII, p. 453. <sup>2</sup> *Nature*, Vol. CXXII, p. 549.



midnight ; the hours from 0 to 6 on the 2nd were quiet ; and soon after 6h small and rapid oscillations began in N and W, superposed on oscillations of about 1 hour period and amplitude in N of about 15γ, which lasted till 21h. V rose during the afternoon to a rounded maximum soon after 17h, afterwards falling gradually ; a small hump occurred at about 19h, shortly before a dip of 60γ in W and a peak of 75γ in N.

The succeeding fortnight, though not entirely quiet, was without any large disturbance. The period 9d 0h to 13d 12h was one of the quietest of the month.

After eight very quiet hours, a well marked " sudden commencement " at 18d 7h 23m was followed immediately by great activity. N and W fluctuated rapidly and irregularly during the morning and afternoon. The most prominent feature of the N curve is a rapid rise of some 180γ shortly before 16h, followed by large oscillations of 40γ amplitude, during which the maximum occurred at 17h 19m, and a large drop beginning at 18h. W made several large and smooth oscillations between 17h 30m and 18h, a rapid fall occurring at the same time as that in N. V rose in three large waves with maxima at about 12, 15, and 18h ; the absolute maximum occurred at 18h 3m, and was followed immediately by an abrupt fall of 140γ. From 18h 20m to 19h 20m the fall in V was still rapid, but marked by six small waves ; during this hour there was also a temporary lessening of activity in N and W. At 19h 20m disturbance began again. After rising by 70γ to a small peak at 19h 40m, V continued to fall, reaching its minimum at about 21h ; after a small and rapid rise at 21h 30m, the disturbance ceased except for very small oscillations. N and W fluctuated rapidly from 19h 20m ; large oscillations occurred in both between 20h 30m and 21h 30m, and after this the oscillations were small and rapid for 48 hours. The ranges during the storm were 488γ in N, 426γ in W and 363γ in V. At Lerwick the disturbance was comparatively small in V, but great in H. The H curve has points in common with both N and V curves at Eskdalemuir, while the V shows a small dip at 18h, in place of the large rise at Eskdalemuir.

Among the features of the succeeding days we may notice a sudden rise of 75γ in N to a sharp peak at 20d 20h 49m, accompanied by an oscillation in W, reaching a small peak at 20h 51m, and a drop of 12γ in V ; this would not be worthy of remark were it not that movements of very similar shape occur again twice, at about 48 hour intervals, viz., at 22d 18h 29m, and 24d 19h 6m.

The last of these was preceded by a small movement of the type of a " sudden commencement " at 24d 17h 50m. During the rest of the night a considerable disturbance took place ; this was characterised by large dips in all components, of which the times and greatest depth below the undisturbed value were roughly as follows :—N, 25d 0—3h, 380γ ; W, 24d 23h to 25d 3h, 270γ ; V, 24d 22h to 25d 5h, 280γ (the minimum of V occurs after a rapid drop in the middle of the rather rounded dip).

Before this, between 19 and 22h on the 24th a small dip occurred in W and a small hump in V. After 25d 6h there were no large movements, but small and rapid oscillations persisted in all components throughout the 25th. At 16h 55m an abrupt rise of 110γ occurred in N, preceded by a small drop, and accompanied by small movements in W and V.

The ranges were 394γ in N, 340γ in W, 364γ in V. At Lerwick the main point of difference was in V ; for although this component shows a considerable dip corresponding to that at Eskdalemuir, it is broken at about 2h by a sharp peak in which the maximum value occurs shortly after the time of minimum at Eskdalemuir.

Further outbreaks of activity on a small scale occurred between 12 and 24h on the 26th, and between 3 and 9h on the 27th, and for the rest of the month few hours were free from minor activity.



*November.*—(Average Character Figure 0.73). A small disturbance began on the 1st with a drop of  $27\gamma$  in N at 19h 39m, accompanied by a small rise in V. Between 3 and 7h on the 2nd several marked oscillations took place in N and W, accompanied by a dip in V. During the afternoon V rose, with a hump at 15h, to a maximum at 18h, falling to a rounded minimum shortly before 3d 1h. No large fluctuation occurred in N and W, but we may mention a dip of about  $75\gamma$  in both shortly before 18h. (At Lerwick the corresponding movement in H was a rise; but the D curve is similar to W at Eskdalemuir). This seems to have been the beginning of a series of oscillations in W, with a period of about 2h, which appear for the next 24 hours, and less obviously until 4d 8h; the amplitude is of the order of  $20\gamma$ . Dips of about  $120\gamma$  occurred in W, with minima at 3d 18h 2m and 19h 25m, the former accompanied by a peak about  $115\gamma$  high in V, the latter by a peak of  $110\gamma$  in N at 19h 32m\*; this is repeated on the next day in another peak in N and a dip in W at 19h.

The next 7 days were fairly quiet, especially 8d 0h to 10d 3h. A very small "sudden commencement" at 10d 6h 55m was preceded by four hours of very small and rapid oscillations, and followed by slight agitation during the rest of the day. The time of Central Meridian Passage of a large group of sunspots in Lat.  $16^{\circ}\text{S}$  and associated with metallic prominences is given as Nov. 9.4.<sup>1</sup> After another "sudden commencement" at 11d 16h 58m there was considerable activity, lasting (with a break from 12d 23h to 13d 2h) till the early hours of the 14th. The most remarkable of the oscillations occurred between 22h and midnight on the 11th. N underwent a complete oscillation like an angular sine-wave of amplitude nearly  $120\gamma$ , with maximum at 22h 35m and minimum at 23h 16m; W fell slightly at 22h, rose to a tall hump at 22h 48m and fell by  $122\gamma$  to a minimum at 23h 35m; V fell by  $68\gamma$  to a rounded minimum shortly before 23h. Very similar movements occurred again at 12d 21h.

The early hours of the 13th were marked by irregular fluctuations, with increasing activity during the afternoon and evening. V rose in four increasingly irregular waves (maxima near 14h 30m, 16h 0m, 17h 30m and 18h 20m), the absolute maximum occurring at 18h 26m, and fell rapidly by  $119\gamma$  to a minimum at 19h 19m, followed by a gentle rise and fall during the rest of the night. N and W oscillated rapidly between 18 and 20h, the maximum and minimum values of each for the day occurring close together in this period; N reached its maximum in a sharp peak at 18h 18m, and fell rapidly to the minimum 3 minutes later; the maximum of W was very close to that of N, the minimum at 18h 30m; the ranges were  $212\gamma$  in N, and  $207\gamma$  in W.

There was little worthy of note during the rest of the month, but we may mention a sharp peak of about  $100\gamma$  in N at 15d 21h 12m; a small peak occurred in W a few minutes later, followed by a dip of some  $90\gamma$  between 21h 50m and 23h 20m; while V fell by  $66\gamma$  between 20h 40m and 21h 19m, afterwards rising gradually till 22h 45m. On the 17th a sharp rise of  $125\gamma$  took place in N between 15h 42m and 16h 2m; there was no corresponding movement in W, but a small peak in V.

Very quiet periods were:—21d 2h to 22d 11h, 23d 10h to 24d 4h, 25d 16h to 26d 2h, and 29d 0h to 30d 9h.

*December.*—(Average Character Figure 0.77). The only considerable disturbance of the month took place between 5d 16h and 7d 7h, being probably associated with a large sunspot in Lat.  $9^{\circ}\text{N}$ , time of Central Meridian Passage Dec. 5.6.<sup>2</sup> The

\* It is frequently found that where smooth humps or dips occur in both N and W, the maximum or minimum in one component coincides with the greatest rate of change in the other, i.e., there is a phase difference of  $\pi/2$ .

<sup>1</sup> *Nature*, Vol. CXXII, p. 783. <sup>2</sup> *Nature*, Vol. CXXII, p. 936.



disturbance began with small irregular fluctuations. Between 22 and 24h there was a large dip in W of some 170γ; this was accompanied by two peaks 60γ high in N, at 23h 2m and 23h 43m, and a rounded dip in V beginning soon after 22h and separated by a hump from another at about 6d 3-4h, during which the minimum value of V occurred at 3h 20m. At 2h 50m a dip in N coincided approximately with a peak in W, which was followed by a dip in W with a minimum at 4h 2m. From 6 to 15h on the 6th there were small and rapid oscillations in N and W; after 15h the fluctuations became larger, and included two small humps in V at about 16 and 18h, accompanied by dips in W. 20-22h was rather quieter, and after an irregular hump in N from 22 to 23h, and a hump in W shortly before midnight, the disturbance gradually died away; a shallow dip occurred in V from 6d 22h till 7d 8h. The ranges during the period under discussion were:—103γ in N, 222γ in W, 127γ in V. It is interesting to note that the peaks in N at 5d 23-24h were represented at Lerwick by dips in the H curve; the V curves are of very similar characteristics.

A small disturbance began at 11d 17h and continued during the whole of the succeeding two days. A noticeable feature of the period is (as is usual at a time of even minor disturbance) the rapid oscillations between about 6 and 15h.

Between 10 and 15h on the 14th a rather regular dip of about 30γ occurred in N, accompanied by a low hump in V.

The rest of the month was quiet, with occasional periods of slight activity. Among the quietest periods may be mentioned 19d 1-22h, 22d 22h to 24d 4h and 28d 14h to 29d 13h.



Readings in millibars at exact hours, Greenwich Mean Time.

167. Eskdalemuir :  $H_b$  (height of barometer cistern above M.S.L.) = 237.3 metres.

January, 1928.

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean
Day.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
1	995.8	995.5	995.7	995.6	995.7	995.6	995.7	995.7	995.6	995.4	994.5	993.1	991.9	990.2	989.0	987.6	985.7	983.7	982.4	981.0	979.5	978.2	976.9	975.7	989.8
2	975.0	973.9	973.3	973.2	972.7	973.0	973.4	974.1	974.7	975.4	975.6	976.0	976.0	976.2	976.4	977.5	977.4	978.1	978.7	979.2	979.5	979.4	979.2	979.6	976.1
3	979.9	980.8	980.9	981.7	982.0	982.6	983.6	984.7	985.5	986.9	987.4	988.1	988.7	989.4	989.6	990.5	990.4	991.3	990.9	991.0	991.1	990.4	989.3	987.9	986.7
4	986.8	985.5	984.5	982.4	982.3	981.9	980.7	979.9	979.9	978.8	977.2	974.9	973.7	973.8	973.7	973.9	974.5	974.4	974.2	974.5	975.3	976.1	976.4	976.1	978.2
5	977.7	978.2	978.6	979.0	980.1	980.6	980.9	981.7	982.8	983.9	985.2	985.2	985.1	985.0	985.1	985.9	986.3	985.5	984.8	983.8	983.0	981.4	979.1	976.6	982.3
6	974.5	971.7	968.9	967.2	964.9	963.2	961.7	960.0	959.6	958.9	958.5	959.9	964.2	970.7	975.4	978.5	980.2	981.3	983.6	984.8	985.8	985.9	985.2	985.5	971.9
7	984.8	984.3	983.0	981.1	979.4	977.9	976.9	975.6	975.0	974.2	973.7	972.8	972.4	971.6	970.7	970.7	969.9	969.0	968.8	968.0	967.2	966.5	966.2	967.1	974.1
8	966.7	966.9	967.5	968.6	969.4	970.2	971.0	972.0	972.6	973.4	973.7	973.4	973.8	974.2	974.5	974.9	975.5	975.8	976.2	976.4	976.9	977.5	977.7	977.2	972.7
9	975.2	974.6	974.0	973.6	972.9	972.0	971.8	971.5	971.4	970.3	969.7	969.1	969.8	969.8	970.6	971.7	972.1	973.3	973.3	973.7	974.2	974.2	974.2	974.2	972.4
10	973.4	972.7	971.9	971.5	970.8	968.6	966.1	963.5	960.6	958.1	956.1	957.7	959.8	961.2	962.2	963.4	964.4	965.2	966.3	966.7	967.4	967.9	968.7	969.7	965.7
11	970.1	971.3	971.6	972.2	972.5	973.1	973.7	974.3	975.3	976.3	977.3	977.9	978.2	978.7	979.1	979.9	980.6	981.3	981.8	982.7	983.1	983.3	983.3	982.7	977.2
12	981.7	981.2	979.9	978.5	976.7	974.7	973.1	971.7	970.5	969.2	968.1	966.5	965.2	964.2	963.5	963.0	962.4	961.7	961.2	960.3	959.8	960.3	960.5	960.6	968.6
13	961.0	961.3	961.1	960.2	960.4	960.5	960.6	960.8	960.9	961.4	961.7	961.7	961.7	961.7	961.7	962.4	963.5	964.5	965.6	966.6	967.9	968.9	969.9	971.7	963.1
14	973.3	974.4	974.6	973.4	974.2	973.7	973.7	973.2	972.9	970.8	969.4	967.1	965.6	964.3	963.3	962.5	962.6	962.8	963.1	962.8	963.1	963.0	962.9	962.5	968.1
15	962.6	962.3	961.7	961.2	960.8	960.2	959.8	959.4	959.0	958.3	957.7	956.9	956.4	955.9	955.2	954.5	953.9	953.9	953.7	953.6	953.9	954.1	954.3	954.6	957.4
16	954.9	956.4	957.8	959.5	961.1	963.1	964.4	965.8	967.2	969.0	969.9	970.4	971.1	971.6	972.2	973.0	973.3	973.8	974.0	974.3	974.6	974.9	975.0	975.3	968.0
17	975.5	975.8	976.1	976.4	976.8	977.5	977.9	979.0	980.4	981.1	981.3	981.6	982.2	982.6	983.5	984.1	985.2	985.5	985.1	985.6	986.4	986.6	986.6	986.5	981.4
18	986.8	986.9	986.6	986.2	986.1	985.8	985.7	985.6	985.9	985.6	985.0	983.7	982.6	981.2	980.1	978.8	978.6	977.3	976.2	975.7	974.8	974.3	974.3	975.2	981.9
19	975.9	976.4	977.3	977.8	978.8	979.6	980.8	981.6	983.1	984.5	985.2	986.2	987.3	987.5	987.6	988.1	989.4	989.9	990.1	990.0	990.2	990.3	990.1	990.1	984.6
20	989.6	988.8	988.3	987.2	987.0	985.9	985.5	984.6	983.8	984.0	983.4	983.5	983.5	984.1	984.5	985.5	986.7	988.2	988.2	988.2	988.7	988.3	988.1	987.6	986.4
21	986.7	985.1	983.9	982.6	981.4	979.5	977.9	976.7	975.6	974.7	973.7	972.9	971.7	970.5	970.3	970.9	971.7	972.2	972.1	972.8	972.5	973.1	973.6	973.8	975.9
22	973.8	974.0	974.1	974.4	975.1	976.0	976.6	977.8	978.7	979.2	980.0	980.8	980.8	981.3	982.4	982.9	983.6	984.1	984.6	985.3	985.7	985.7	985.8	985.8	980.1
23	985.9	985.4	985.3	984.9	983.8	983.4	982.7	982.2	981.8	981.1	980.2	978.6	976.8	975.3	974.0	972.7	971.2	970.2	969.7	969.5	968.9	969.3	969.3	969.7	977.5
24	970.2	970.5	970.8	970.0	969.0	968.4	967.2	966.2	964.1	962.4	962.4	964.4	964.4	964.9	966.5	966.9	967.2	967.5	968.6	970.2	971.5	973.4	975.0	976.5	968.6
25	978.2	979.1	980.0	980.9	981.4	982.5	983.1	983.8	984.5	984.3	983.9	982.7	981.6	979.5	977.7	975.6	973.0	971.0	971.4	971.6	972.3	972.3	971.7	972.1	978.2
26	972.6	973.9	974.3	974.8	975.5	975.4	975.0	974.3	972.9	971.0	969.9	968.6	967.9	967.6	967.9	968.1	968.8	969.6	969.9	970.6	971.2	971.9	972.5	973.0	971.5
27	974.0	974.5	975.7	976.8	977.9	979.5	980.4	981.6	982.9	984.8	986.0	987.3	988.6	989.7	990.8	991.9	992.9	993.9	994.9	995.9	996.9	997.9	998.9	999.9	984.0
28	988.5	987.6	986.5	985.5	984.3	983.0	981.7	980.5	979.5	978.4	977.2	975.9	975.4	974.8	975.1	975.3	975.3	975.3	975.6	975.4	975.0	974.9	974.9	974.2	979.1
29	973.5	973.0	972.7	972.3	972.1	971.8	971.3	970.8	971.1	970.3	969.6	968.8	967.5	966.9	966.3	965.6	965.3	965.3	965.3	965.6	966.0	966.4	966.5	966.5	968.9
30	967.2	967.4	967.9	967.9	967.9	968.0	968.4	968.7	969.0	969.1	969.3	969.2	969.2	969.4	969.5	969.9	970.0	970.8	971.2	971.6	972.2	972.7	973.6	973.9	969.6
31	974.4	974.7	975.3	975.5	975.6	975.8	975.8	976.1	975.9	974.6	973.5	972.6	970.4	968.6	967.1	964.7	961.9	960.3	960.1	959.5	958.8	958.6	958.8	958.2	968.9
Mean ... (Station level)	976	976	976	975	975	975	975	975	975	975	974	974	974	974	974	974	974	974	974	974	975	975	975	975	975
Mean ... (Sea level)	1005	1005	1005	1004	1004	1004	1004	1004	1004	1003	1003	1003	1003	1003	1003	1003	1003	1003	1003	1004	1004	1004	1004	1004	1004
	36	30	15	30	77	60	37	22	19	90	53	14	05	02	03	27	35	51	69	89	07	08	04	06	05

168. Eskdalemuir :  $H_b$  = 237.3 metres.

February, 1928.

Station Level ↑   
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Readings in millibars at exact hours, Greenwich Mean Time.

169. Eskdalemuir :  $H_b$  (height of barometer cistern above M.S.L.) = 237.3 metres.

March, 1928.

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean
Day.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
1	985.0	984.4	984.0	983.7	983.6	983.4	983.4	983.3	983.6	983.4	983.4	983.2	982.6	982.3	982.1	982.4	982.5	983.0	983.3	983.7	984.0	984.5	984.9	985.1	983.5
2	985.5	985.6	985.9	986.1	986.8	987.0	987.8	988.6	988.9	989.0	989.4	989.5	989.5	989.3	989.3	989.4	989.8	990.1	990.4	990.5	990.8	990.6	990.4	990.1	988.7
3	990.1	990.0	989.8	989.7	989.8	989.9	989.9	990.2	990.4	990.5	990.5	990.5	990.2	989.8	989.8	989.6	989.7	990.0	990.4	990.4	990.4	990.4	990.3	990.5	990.1
4	990.5	990.3	990.1	990.2	990.2	990.0	990.1	990.3	990.4	990.3	990.4	990.0	989.7	989.5	989.8	989.8	989.8	990.0	990.3	990.5	990.5	990.5	990.4	990.3	990.2
5	990.1	989.9	989.5	989.1	988.6	988.5	988.5	988.4	988.2	988.0	987.8	987.4	987.0	986.7	986.8	986.9	987.3	987.3	987.6	988.0	988.1	988.1	987.9	987.9	987.9
6	987.6	987.6	987.5	987.5	987.6	987.8	988.1	988.2	988.5	988.7	988.9	988.8	988.5	988.3	988.1	988.1	988.3	988.2	988.1	987.9	987.9	987.9	987.9	987.6	988.1
7	987.2	987.1	986.4	986.0	986.0	986.0	986.0	986.0	986.2	986.4	986.5	986.8	986.6	986.7	987.1	987.5	987.7	988.2	988.7	989.5	989.7	990.0	990.7	990.9	987.5
8	991.2	991.0	991.0	991.3	991.2	991.2	991.5	991.8	992.2	992.1	992.2	992.2	992.1	991.9	992.1	992.1	992.3	992.8	993.2	993.2	993.2	993.5	993.6	993.5	992.1
9	993.2	992.9	992.7	992.7	992.5	992.2	992.2	992.2	992.4	992.5	992.3	992.3	992.2	991.9	991.6	991.4	991.3	991.2	991.1	991.1	991.1	991.0	991.0	991.2	991.9
10	991.4	991.4	991.4	991.2	991.2	991.3	992.0	992.8	993.4	994.0	994.7	995.2	995.1	995.6	995.8	995.9	996.2	996.6	997.0	997.3	997.5	997.7	997.7	997.9	994.4
11	997.5	997.4	997.2	997.1	996.8	996.8	996.8	996.5	996.7	996.7	996.3	996.1	995.7	995.4	995.2	995.0	994.6	994.4	994.3	993.8	993.4	993.3	992.9	992.6	985.6
12	992.1	991.5	991.0	990.7	990.4	989.9	989.5	989.4	989.3	988.8	988.4	988.2	987.8	987.5	987.3	987.0	986.7	987.1	987.8	988.2	988.8	989.3	990.0	990.3	989.1
13	990.9	991.0	991.2	991.2	991.3	991.5	991.5	992.1	992.4	992.5	992.6	992.6	992.5	992.2	992.1	992.4	992.4	992.5	992.6	993.2	993.2	993.4	993.5	993.3	992.2
14	993.1	993.1	992.9	992.9	992.9	992.8	992.8	993.0	993.0	993.1	992.9	992.9	992.5	992.1	991.6	991.6	991.5	991.7	992.1	992.1	992.2	992.2	992.2	992.3	992.5
15	992.3	992.1	992.0	992.0	992.0	992.2	992.6	992.9	993.0	993.2	993.2	993.2	993.0	992.7	992.9	992.6	992.6	992.9	993.3	993.6	993.7	993.7	993.7	993.7	992.8
16	993.8	993.3	993.1	992.7	992.3	992.4	992.2	992.0	991.6	991.4	990.9	990.3	989.5	988.6	988.1	987.5	987.2	986.7	986.4	986.3	986.0	985.8	985.5	984.9	989.7
17	984.6	983.7	983.0	982.6	982.4	982.4	982.5	982.5	982.6	982.4	982.1	982.4	982.4	982.7	982.8	982.1	981.7	981.5	981.1	980.7	980.6	980.0	979.6	978.9	982.1
18	978.2	977.5	976.6	976.0	975.8	975.5	975.4	975.4	975.7	976.4	976.8	977.0	977.1	977.1	977.2	977.2	977.5	978.2	979.0	979.4	979.4	979.4	979.4	979.6	977.4
19	979.5	979.0	978.1	978.4	978.0	977.9	977.9	977.4	977.2	976.7	976.2	975.8	975.2	974.6	974.1	973.9	973.4	973.1	972.7	972.4	972.4	971.9	971.7	971.6	975.5
20	971.7	971.6	971.4	971.5	971.8	972.0	972.4	972.6	972.7	972.6	972.4	971.6	971.2	970.6	970.3	969.8	969.3	969.5	969.8	970.0	970.1	970.3	970.6	970.7	971.1
21	970.8	970.7	970.4	970.4	970.5	970.8	971.0	971.2	971.5	971.2	970.9	970.5	970.3	970.3	969.7	969.9	970.1	970.4	970.8	970.6	970.6	970.3	969.9	969.3	970.5
22	968.9	968.7	968.4	968.0	967.7	967.5	967.3	967.3	967.3	967.1	967.1	966.6	966.8	966.5	966.1	965.7	965.7	965.7	965.8	965.8	965.9	965.7	965.7	965.6	966.9
23	965.6	965.5	965.1	965.0	965.0	965.0	965.0	964.4	964.0	963.9	963.3	962.8	962.5	962.1	961.9	961.5	961.4	961.6	961.8	961.9	962.1	962.1	962.1	962.1	963.3
24	962.1	961.9	961.7	961.6	961.5	961.4	961.2	961.1	960.8	961.2	960.8	960.3	960.1	960.1	960.1	960.2	960.4	960.6	960.8	961.3	961.3	961.3	961.3	961.3	962.1
25	964.5	964.7	964.9	965.3	965.8	966.4	967.4	968.7	969.3	970.1	970.6	971.3	971.6	972.2	972.7	973.3	974.3	975.2	976.2	976.8	977.2	977.7	978.0	978.0	970.6
26	978.6	978.9	978.8	978.6	979.3	979.6	980.1	980.4	980.6	980.2	979.9	979.8	979.5	979.5	979.5	979.2	978.9	978.9	979.0	978.9	978.8	978.4	977.8	977.0	979.2
27	976.2	975.6	974.5	973.5	972.7	972.0	971.5	971.3	970.9	970.8	970.8	970.9	970.5	970.2	970.3	970.2	970.6	970.5	970.9	970.8	970.5	970.3	969.8	971.7	972.2
28	969.7	969.4	968.5	968.4	968.2	968.0	968.3	968.7	968.3	968.2	967.7	967.6	967.4	967.3	967.6	967.4	967.3	967.6	967.8	968.2	968.2	968.1	967.8	967.4	968.2
29	966.9	966.3	965.4	964.6	963.9	962.6	961.4	959.9	958.3	956.0	953.2	950.4	947.3	944.6	942.2	941.8	941.2	940.4	939.3	939.2	939.0	938.9	938.9	938.9	951.8
30	938.6	938.2	938.0	937.9	938.1	938.5	939.2	939.9	940.7	941.6	942.6	943.5	944.4	944.9	945.7	946.5	947.4	948.5	949.9	951.1	952.2	953.2	954.2	954.7	944.2
31	955.2	955.9	956.4	957.3	958.1	959.3	960.5	961.6	962.7	963.5	964.1	964.6	965.1	965.7	966.5	966.9	967.8	968.8	969.7	970.4	970.9	971.3	971.5	972.0	964.1
Mean (Station level)	980.08	979.88	979.58	979.46	979.42	979.42	979.55	979.67	979.78	979.72	979.65	979.53	979.28	979.05	978.95	978.88	978.94	979.20	979.48	979.66	979.73	979.77	979.80	979.73	979.52
Mean (Sea level)	1009.22	1009.02	1008.70	1008.59	1008.54	1008.54	1008.67	1008.74	1008.78	1008.68	1008.57	1008.39	1008.09	1007.84	1007.75	1007.70	1007.81	1008.15	1008.49	1008.71	1008.81	1008.86	1008.92	1008.86	1008.53

170. Eskdalemuir :  $H_b$  = 237.3 metres.

April, 1928.

Station Level	1	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
	2	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
	3	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
	4	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
	5	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
	6	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
	7	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
	8	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
	9	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
	10	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
	11	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
	12	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
	13	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
	14	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
	15	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
	16	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
17	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
18	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
19	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
20	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
21	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
22	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
23	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
24	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
25	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
26	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
27	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
28	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
29	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
30	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
Mean	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
(Station level)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Mean	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
(Sea level)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Hour.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	
G.M.T.																									



Readings in millibars at exact hours, Greenwich Mean Time.

171. Eskdalemuir :  $H_b$  (height of barometer cistern above M.S.L.) = 237.3 metres.

May, 1928.

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean
Station Level	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
Day.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1	983.1	983.3	983.1	983.0	982.7	983.5	983.3	983.3	984.1	984.0	984.4	984.3	984.4	984.4	984.3	984.1	984.1	984.7	985.5	986.0	986.0	986.0	986.6	986.8	984.3
2	986.8	986.9	986.9	986.8	987.0	987.2	986.9	986.8	986.8	986.5	986.6	986.3	985.6	985.0	984.6	984.5	984.5	984.7	984.8	985.2	985.2	985.4	985.1	984.6	985.9
3	984.3	984.3	983.8	983.4	982.9	983.4	982.4	982.8	982.9	982.7	982.6	983.2	983.1	982.9	982.5	982.5	982.3	982.2	981.9	982.1	982.9	983.1	983.1	982.5	982.9
4	982.5	982.3	982.1	982.0	982.5	982.4	983.0	983.5	983.7	983.7	983.5	983.2	983.4	983.4	983.4	983.4	983.3	983.9	984.2	984.2	985.0	985.4	985.5	985.5	983.5
5	985.5	985.3	985.2	984.9	985.0	985.2	985.5	985.6	985.6	985.6	985.4	985.1	985.0	985.0	984.3	984.2	984.1	984.2	984.5	985.1	985.5	985.4	985.3	985.1	985.1
6	985.0	984.6	984.1	983.7	983.6	983.6	983.6	983.4	982.9	982.6	982.1	981.7	981.3	981.0	980.7	980.2	980.2	980.5	981.0	981.6	982.4	982.5	983.2	983.2	982.5
7	983.7	984.1	984.5	984.6	984.8	985.2	985.3	985.8	986.1	985.9	985.9	985.9	986.1	985.8	985.9	985.6	985.7	985.2	985.2	985.2	985.1	984.8	984.7	984.4	985.1
8	983.6	983.5	983.3	983.0	982.8	983.0	983.1	983.7	984.6	985.1	985.5	985.6	985.6	986.2	986.5	986.8	986.9	987.2	987.5	988.5	988.5	989.2	989.2	989.4	985.7
9	989.4	989.4	989.4	989.5	990.0	990.2	990.5	990.7	990.7	990.6	990.8	990.6	990.5	990.5	990.3	990.0	990.6	990.6	991.1	991.6	991.8	991.8	991.9	991.7	990.6
10	991.4	991.3	990.9	990.7	990.9	990.8	990.4	990.2	990.1	989.9	989.9	989.9	989.9	989.4	989.4	989.0	989.2	990.2	990.7	991.3	991.3	991.4	991.4	991.5	990.5
11	991.7	991.9	991.8	991.8	991.8	991.8	991.8	991.6	991.5	991.5	991.4	991.3	991.1	990.8	990.6	990.5	990.4	990.1	990.3	990.6	990.6	990.7	991.1	991.1	991.1
12	991.0	991.1	991.2	991.4	991.8	992.1	992.2	992.3	992.3	992.7	992.6	992.6	992.5	992.6	992.6	992.6	992.6	992.6	992.6	992.6	992.6	992.6	992.6	992.6	992.3
13	993.7	993.9	994.0	994.2	994.1	994.1	994.0	993.9	993.7	993.5	993.5	993.1	992.7	992.2	991.8	991.4	990.5	990.9	990.9	991.2	991.4	991.2	991.4	991.5	992.7
14	991.6	991.5	991.4	991.7	991.8	992.0	992.1	992.1	992.1	992.1	992.1	991.9	991.5	991.3	991.2	990.8	990.5	990.4	990.5	990.8	991.0	991.0	990.9	990.9	991.3
15	989.9	989.6	989.1	988.1	987.8	987.8	987.2	986.5	985.3	984.7	983.3	981.7	979.5	978.9	977.9	977.0	976.2	975.8	975.4	975.2	975.3	974.7	974.0	974.0	978.1
16	974.1	973.9	974.1	973.6	973.4	973.5	973.7	973.6	973.9	973.2	973.9	975.1	976.5	977.3	977.9	978.9	979.5	979.7	980.4	980.6	980.7	980.0	979.5	979.3	976.4
17	978.5	977.4	976.1	975.1	973.7	972.8	971.7	970.9	970.4	970.2	970.1	970.2	970.5	970.5	970.5	970.8	970.8	971.2	971.8	972.5	973.0	973.3	973.7	973.9	972.6
18	974.2	974.4	974.6	975.5	975.5	975.6	976.0	976.7	977.3	977.7	977.5	977.9	978.4	978.9	979.0	979.0	979.0	979.2	979.1	979.1	979.2	979.4	979.4	979.3	977.5
19	979.0	978.7	978.4	978.1	977.9	977.6	977.6	977.6	977.3	976.8	976.7	976.7	976.5	976.5	976.5	976.4	976.2	976.4	976.7	977.1	977.6	978.3	978.8	979.2	977.6
20	979.8	979.7	979.7	979.9	980.1	980.7	981.1	981.6	982.3	982.6	982.9	983.1	983.1	983.1	983.3	983.6	984.1	984.7	985.8	986.6	987.2	987.8	988.5	988.7	983.1
21	988.7	988.9	989.2	989.4	989.7	990.1	990.7	991.1	991.9	992.3	992.5	992.8	992.9	993.3	993.5	993.6	993.8	994.0	994.1	994.6	994.9	995.1	995.0	994.5	992.2
22	994.5	994.0	993.8	993.4	993.2	993.0	993.4	993.2	992.7	992.3	991.7	991.3	990.9	990.5	990.1	989.4	989.3	989.3	989.4	989.2	989.5	989.2	988.9	988.6	991.4
23	988.2	988.0	987.3	987.1	987.1	987.1	986.9	986.8	986.5	986.4	986.5	986.6	986.3	986.3	986.1	986.0	986.1	986.2	986.7	986.8	987.2	987.4	987.6	986.9	
24	987.6	987.8	987.9	988.1	988.3	988.9	989.3	989.6	989.8	989.9	990.1	990.2	990.1	990.2	990.1	990.0	989.9	990.1	991.1	991.7	992.2	992.7	993.0	993.0	986.0
25	993.1	993.2	993.4	993.4	993.4	993.7	993.9	994.1	994.0	993.9	993.8	993.8	993.7	993.7	993.7	993.7	993.8	993.9	994.0	994.4	994.8	995.0	994.8	995.1	993.9
26	995.2	995.0	994.7	994.6	994.6	994.7	994.7	994.3	994.0	993.9	993.6	993.5	993.3	992.9	992.5	992.4	992.3	992.3	992.0	991.9	991.8	991.6	991.2	991.1	993.3
27	990.8	990.4	990.1	990.0	989.8	989.8	989.8	989.8	989.7	989.6	989.2	988.7	988.3	987.8	987.3	986.7	986.5	986.3	986.1	986.4	986.2	985.8	985.5	985.5	
28	985.5	985.2	985.0	985.0	984.5	984.7	985.3	985.6	985.7	985.8	986.0	986.1	986.3	986.3	986.4	986.5	986.6	986.6	986.9	987.3	987.9	988.2	988.5	988.6	
29	988.6	988.6	988.5	988.7	989.0	989.3	989.9	989.9	990.0	990.1	990.2	990.3	990.5	990.8	991.0	991.0	991.2	991.4	991.5	991.7	992.7	993.3	993.6	993.6	
30	993.7	993.8	993.8	994.0	994.6	994.8	995.0	995.1	995.4	995.4	995.3	995.5	995.5	995.5	995.4	995.4	995.4	995.6	996.1	996.5	996.9	997.0	996.9	997.0	
31	996.9	996.8	996.6	996.4	996.2	996.3	996.5	996.2	996.0	995.5	995.6	995.6	995.5	995.0	994.3	994.2	994.2	994.5	994.5	994.8	995.0	995.7	995.8	995.9	985.6
Mean (Station level)	987.15	987.06	986.90	986.79	986.78	986.89	986.96	986.97	987.05	987.05	987.00	986.80	986.73	986.58	986.50	986.50	986.64	986.86	987.17	987.49	987.60	987.68	987.65	987.97	
Mean (Sealevel)	1016.18	1016.12	1015.97	1015.87	1015.84	1015.84	1015.78	1015.64	1015.63	1015.44	1015.33	1015.26	1015.10	1015.02	1014.83	1014.76	1014.81	1015.07	1015.40	1015.87	1016.31	1016.48	1016.62	1016.65	1015.65

172. Eskdalemuir :  $H_b$  = 237.3 metres.

June, 1928.

Station Level ↓	1	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
	2	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
	3	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
	4	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
	5	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
	6	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
	7	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
	8	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
	9	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
	10	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
	11	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
	12	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
13	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
14	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
15	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
16	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
17	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
18	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
19	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
20	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
21	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
22	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
23	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
24	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
25	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
26	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
27	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
28	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
29	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
30	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
Mean ... (Station level)	982	982	982	982	982	982	982	982	982	982	982	981	981	981	981	981	981	982	982	982	982	982	982	982	
Mean ... (Sealevel)	1011	1011	1010	1010	1010	1010	1010	1010	1010	1010	1010	1010	1010	1009	1009	1009	1009	1010	1010	1010	1010	1011	1011	1010	
Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	
Mean	982	982	982	982	982	982	982	982	982	982	982	981	981	981	981	981	981	982	982	982	982	982	982	982	
Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	
Mean	982	982	982	982	982	982	982	982	982	982	982	981	981	981	981	981	981	982	982	982	982	982	982	982	



Readings in millibars at exact hours, Greenwich Mean Time.

173. Eskdalemuir :  $H_b$  (height of barometer cistern above M.S.L.) = 237.3 metres.

July, 1928.

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean
Day.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
1	983.3	983.3	983.6	983.6	984.1	984.4	984.5	984.6	984.5	984.3	984.1	984.0	983.5	982.6	981.7	981.1	980.3	979.8	979.4	979.3	979.2	978.6	978.5	978.3	982.2
2	978.3	976.8	977.2	977.7	978.9	979.3	979.5	978.9	979.6	979.7	979.8	979.6	979.6	979.4	979.7	979.7	979.7	980.0	980.6	981.1	981.7	980.8	981.1	981.8	979.5
3	982.2	983.0	983.7	983.9	985.0	985.5	985.3	985.9	985.9	986.1	986.2	986.2	986.2	986.2	986.1	985.4	985.4	985.4	985.4	985.5	986.0	986.1	985.8	985.6	985.3
4	985.6	985.3	985.3	985.5	985.7	985.9	985.9	986.1	986.1	986.2	986.2	986.2	986.0	986.1	986.0	985.9	985.6	985.4	985.3	983.9	983.1	982.2	981.5	980.7	979.4
5	977.2	976.3	975.3	974.8	974.5	974.3	974.2	974.4	974.1	974.1	973.8	973.9	973.7	973.5	973.3	973.0	972.6	972.8	972.9	973.2	973.9	973.9	973.8	973.3	974.1
6	972.7	972.4	972.2	972.1	971.8	972.3	973.3	973.9	974.8	975.2	975.9	976.5	977.3	977.5	978.2	979.3	980.3	981.2	981.7	982.8	984.3	985.7	986.7	987.6	987.4
7	988.0	988.8	989.3	990.0	990.2	990.6	991.2	991.5	992.0	992.4	992.4	992.4	992.4	992.5	992.5	992.5	992.5	992.4	992.4	992.5	992.8	992.8	992.6	992.1	991.5
8	991.5	990.6	989.9	989.4	988.5	988.2	987.5	987.2	986.3	985.7	985.3	984.9	984.6	984.1	983.5	982.8	982.1	981.5	980.8	980.2	979.5	978.8	978.1	977.4	976.7
9	985.5	985.2	985.3	985.0	985.0	984.8	984.8	984.8	984.9	984.9	984.8	985.1	985.0	985.1	985.3	985.6	986.2	986.2	986.8	987.0	987.3	987.9	988.1	988.1	988.6
10	988.7	988.9	989.1	989.1	989.2	989.3	989.9	989.9	989.9	989.2	988.4	988.0	987.5	987.3	986.5	985.5	984.3	983.6	983.3	983.6	984.1	985.6	986.5	987.7	987.7
11	986.3	986.3	986.7	986.5	986.6	987.1	987.8	988.0	988.6	988.5	988.6	988.8	989.5	990.0	990.1	990.2	990.4	990.7	990.8	990.9	991.1	991.3	991.5	991.3	988.9
12	991.2	991.2	991.1	990.9	990.9	991.3	991.3	991.4	991.4	991.3	991.1	991.1	991.0	991.0	990.9	990.5	990.5	990.5	990.9	990.9	991.0	990.9	990.9	990.9	991.0
13	990.8	990.9	990.7	990.7	990.9	991.2	991.2	991.2	991.2	991.2	991.4	991.6	991.9	992.1	992.1	992.1	992.1	992.1	992.1	992.1	992.1	992.1	992.1	992.1	992.1
14	992.2	991.9	992.1	992.1	992.3	992.6	993.1	993.1	993.4	993.5	993.0	993.4	993.2	992.9	992.8	992.5	992.5	992.8	993.1	993.3	993.4	993.4	993.5	993.5	992.9
15	993.2	992.9	992.7	992.8	992.8	992.8	992.9	993.1	992.8	992.8	992.8	992.8	992.7	992.8	993.0	992.9	993.0	993.4	993.8	994.1	994.3	994.6	995.0	995.5	993.3
16	995.8	996.1	996.2	996.9	997.6	998.0	998.4	998.7	999.1	999.4	999.5	999.7	999.8	1000.0	1000.3	1000.6	1000.5	1000.6	1001.0	1001.1	1001.4	1001.4	1001.4	1001.4	999.3
17	1002.0	1002.0	1002.0	1002.2	1002.2	1002.0	1002.3	1002.0	1001.7	1001.5	1001.3	1001.2	1000.8	1000.3	999.7	999.6	999.3	999.1	998.8	998.5	998.9	997.5	996.8	995.8	1000.4
18	995.5	995.1	994.6	994.2	993.8	993.8	993.6	992.9	993.3	993.6	993.1	993.6	993.2	993.6	993.7	993.9	993.4	993.3	993.7	994.0	994.1	994.4	994.9	995.3	993.9
19	993.4	993.5	993.6	993.6	993.3	993.5	993.8	993.6	993.1	993.2	993.2	993.0	992.8	992.8	992.4	992.0	992.0	991.8	991.6	991.2	991.4	991.7	991.5	992.7	992.7
20	991.6	991.6	991.2	990.9	991.0	991.2	991.6	991.4	991.4	991.7	991.6	992.0	991.9	991.9	991.7	992.1	991.9	992.2	992.1	991.7	991.9	992.5	992.5	992.5	991.7
21	992.7	992.3	992.4	992.2	992.5	992.9	993.2	993.6	993.2	993.2	993.2	993.3	993.6	993.4	993.6	993.4	993.1	993.2	993.3	993.2	993.2	993.0	993.0	993.1	993.1
22	992.7	992.2	991.6	990.9	990.8	990.6	990.5	990.5	990.4	990.2	990.5	990.6	990.6	990.6	990.6	990.5	990.4	990.6	990.7	990.9	991.0	991.2	991.2	991.4	990.9
23	991.3	991.2	991.2	991.0	991.1	991.2	991.4	991.7	991.9	992.1	992.1	992.1	992.1	992.1	992.1	992.1	992.1	992.1	992.1	992.1	992.1	992.1	992.1	992.1	992.1
24	986.9	986.9	986.6	986.8	986.8	986.7	987.2	986.9	987.3	987.0	986.6	986.9	986.7	986.7	986.5	986.3	986.3	986.3	986.5	986.4	986.3	986.5	986.6	986.6	986.7
25	986.6	986.3	986.4	986.2	986.2	986.3	986.4	986.1	986.2	986.2	986.5	986.6	986.4	986.6	986.4	986.0	985.5	985.5	985.5	985.3	985.5	985.6	985.5	985.5	986.1
26	985.1	985.1	984.9	985.2	985.2	985.3	985.6	985.6	985.7	985.5	985.5	985.6	985.5	985.2	984.7	984.2	983.9	983.3	982.9	982.4	981.8	981.3	980.7	980.0	984.3
27	979.0	978.0	977.6	976.6	975.6	974.7	974.1	973.7	973.7	973.6	973.3	973.4	973.6	974.0	974.5	974.8	974.6	974.8	975.2	975.3	975.5	975.5	975.3	975.1	975.2
28	974.6	974.1	973.6	973.4	973.4	973.4	973.5	973.7	973.6	973.4	973.3	973.4	973.3	973.3	973.2	972.9	972.7	972.4	972.4	972.4	972.8	973.2	973.3	973.2	973.2
29	973.2	973.2	973.1	973.0	973.2	973.4	973.6	973.8	974.0	974.0	974.3	974.4	974.6	975.0	975.3	975.4	975.7	976.1	976.5	976.9	977.4	977.6	977.7	977.7	974.9
30	977.8	977.7	977.5	977.7	977.8	978.0	978.4	978.9	979.2	979.3	979.6	979.6	979.5	979.8	979.5	979.9	979.4	979.3	979.3	979.5	979.6	979.9	980.2	980.3	979.0
31	980.5	980.9	981.0	981.5	982.1	982.5	982.9	983.3	983.8	984.3	984.6	985.0	985.2	985.5	985.7	985.8	986.1	986.4	986.6	986.7	986.8	986.9	987.1	987.0	984.4
Mean ... (Station level)	986	986	986	986	986	986	986	986	986	986	986	986	986	986	986	986	986	986	986	986	987	986	986	986	986
Mean ... (Sea level)	1015	1015	1014	1014	1014	1014	1015	1015	1015	1015	1014	1014	1014	1014	1014	1014	1014	1014	1014	1015	1015	1015	1015	1015	1015

174. Eskdalemuir :  $H_b$  = 237.3 metres.

August, 1928.

Station Level	1	987.0	986.9	986.8	986.9	987.3	987.9	988.0	988.3	988.4	988.5	989.0	989.3	989.4	989.7	989.9	990.2	990.3	990.4	991.0	991.6	992.0	992.1	992.2	992.3	989.3
	2	992.7	992.6	992.6	992.9	993.1	993.4	993.7	993.8	993.9	994.4	994.1	994.1	994.0	994.1	994.0	993.7	993.4	993.2	993.0	993.1	993.6	993.6	993.2	993.1	993.5
	3	992.5	992.4	991.8	991.2	991.1	991.3	991.2	991.4	991.3	991.3	991.1	991.1	991.0	990.6	990.1	990.0	989.8	989.5	989.4	989.4	989.9	989.9	989.6	989.6	990.7
	4	989.5	989.1	988.9	989.0	989.0	988.9	988.9	988.9	989.1	989.3	989.3	989.2	988.9	988.9	988.9	988.9	989.5	989.7	990.0	990.1	990.6	991.0	991.1	991.3	989.5
	5	991.4	991.6	991.7	992.0	992.3	992.5	992.7	992.9	993.1	993.2	993.3	993.5	993.4	993.4	993.4	993.4	993.4	993.5	993.8	994.0	994.4	994.5	994.6	994.5	993.1
	6	994.4	994.1	993.7	993.5	993.4	993.2	992.5	992.4	992.3	992.6	992.7	992.5	992.4	991.8	991.6	991.1	991.3	990.7	990.2	990.0	989.6	989.2	988.7	988.7	989.0
	7	987.8	987.2	986.2	985.5	984.8	984.1	983.1	982.2	980.5	978.6	977.9	977.5	977.2	977.1	977.4	977.6	978.2	978.7	979.0	978.8	978.0	978.7	979.1	979.4	981.1
	8	981.2	981.3	981.4	981.6	981.9	982.2	982.5	982.8	982.6	982.2	982.6	982.8	982.8	982.8	982.8	982.8	982.9	983.3	983.9	984.1	984.2	984.6	984.8	984.7	982.8
	9	984.7	985.5	985.0	985.5	985.5	985.7	986.2	986.2	986.3	986.5	986.7	987.0	987.2	987.2	987.4	987.5	987.7	987.8	988.1	988.5	988.6	988.6	989.1	989.2	986.9
	10	989.4	989.2	989.2	989.5	989.0	989.3	989.6	989.8	990.0	990.0	990.0	989.9	989.8	989.5	989.1	988.9	988.5	988.4	987.9	988.0	987.5	987.1	986.7	986.2	988.9
	11	985.2	984.7	983.6	983.0	982.9	982.6	982.4	982.3	982.2	981.7	981.8	981.9	981.6	981.7	981.5	980.8	980.2	979.7	978.7	978.6	977.8	977.2	975.8	975.3	981.2
	12	974.4	973.4	972.7	972.1	971.4	971.2	971.7	971.5	971.4	971.5	971.5	971.3	971.1	970.9	970.5	970.3	970.1	970.2	970.1	970.2	970.2	969.6	969.9	971.2	
	13	968.9	968.3	967.8	967.4	967.1	966.9	967.2	967.3	967.7	967.8	967.9	968.1	967.9	968.1	967.7	967.5	967.3	967.4	967.7	967.7	967.7	967.3	967.0	966.9	967.6
	14	967.2	967.2	967.2	967.4	967.8	967.9	968.3	968.6	969.3	969.8	970.4	970.7	971.2	971.7	972.4	973.0	973.3	973.6	974.1	974.1	974.1	974.1	974.1	974.1	970.6
	15	974.7	974.9	974.8	975.2	975.6	975.9	976.4	976.7	977.1	977.1	977.4	977.8	978.2	978.8	979.2	979.6	980.1	981.1	981.7	982.4	983.0	983.4	983.5	983.7	978.5
	16	984.1	984.2	984.8	985.0	985.3	985.9	986.4	986.7	986.8	986.8	987.0	987.3	987.9	988.0	988.3	988.3	988.3	988.3	988.6	989.0	989.1	989.2	989.7	989.7	989.8
	17	989.8	989.7	989.9	989.8	990.1	990.4	990.8	991.0	991.0	990.8	990.7	990.6	990.7	990.9	991.0	991.1	991.1	991.2	991.2	991.5	991.6	991.3	991.3	991.1	990.7
	18	991.0	991.0	991.0	990.9	990.6	990.5	990.5	990.5	990.3	990.3	990.3	990.3	989.9	989.7	989.1	989.0	988.8	988.5	988.5	988.1	987.9	987.8	987.3	987.0	
	19	986.8	986.4	985.9	985.2	985.0	984.6	984.3	983.8	983.2	982.6	981.9	981.3	980.9	980.5	980.2	979.5	979.0	978.3	977.8	977.3	976.6	976.1	975.7	975.1	981.5
	20	975.3	974.9	974.2	973.8	973.7	973.8	973.5	973.2	973.4	973.1	972.8	972.9	972.9	973.1	973.2	973.3	973.4	973.4	973.4	973.7	973.6	973.6	973.5	973.3	973.6
	21	973.0	972.8	972.4	972.4	972.4	972.5	972.6	972.8	972.7	972.8	972.8	973.1	973.4	973.4	974.0	974.4	974.9	975.4	975.9	976.5	976.9	977.1	977.4	977.6	974.0
	22	978.0	978.5	978.7	978.4	979.3	979.3	979.6	980.1	980.5	980.7	980.8	980.9	980.9	980.8	980.8	980.8	980.6	980.6	980.7	981.0	980.9	981.0	981.0	981.0	980.1
	23	980.7	980.6	980.1	979.8	979.8	980.0	980.1	980.0	980.0	979.9	979.9	980.0	979.8	979.6	979.1	978.6	978.3	978.0	978.0	977.8	977.5	977.3	977.3	976.5	979.2
	24	976.2	976.4	976.4	976.3	976.2	976.6	976.6	977.0	976.8	976.6	976.3	976.1	976.1	975.6	975.6	975.0	974.5	974.1	974.1	974.5	974.0	974.0	973.9	973.7	975.6
	25	973.5	973.5	973.2	972.8	973.0	973.2	973.3	973.6	973.7	974.1	974.4	974.8	975.1	975.3	975.6	975.8	975.8	976.3	976.8	977.2	977.3	977.7	978.1	978.2	975.0
	26	978.1	978.0	977.9	977.8	977.8	978.1	978.3	978.4	978.5	978.4	978.2	978.0	977.3	976.5	975.7	975.0	974.3	973.0	972.6	972.6	972.3	971.4	970.5	970.2	976.0
	27	969.7	969.0	968.5	968.1	968.3	968.7	969.0	969.3	969.6	969.8	969.8	969.7	969.9	970.0	970.0	969.9	969.8	969.6	969.9	970.3	970.6	971.0	971.3	971.6	969.7
	28	971.9	971.8	972.0	972.1	972.3	972.8	973.2	973.4	973.7	974.3	974.6	975.2	975.6	976.2	976.7	977.1	977.6	978.3	979.0	979.3	979.6	979.8	979.8	979.8	975.4
	29	979.8	979.8	979.8	979.7	980.1	980.6	980.7	981.1	981.3	981.4	981.2	980.8	980.8	981.3	981.0	981.4	981.5	981.6	981.6	982.0	982.4	982.8	983.1	983.6	981.1
	30	984.0	984.4	984.6	985.1	985.9	986.6	987.4	988.2	988.9	989.6	990.2	990.9	991.0	991.2	991.5	992.0	992.8	992.9	993.4	993.9	994.5	994.7	994.8	994.8	989.9
31	994.7	994.6	994.5	994.7	994.5	994.4	994.8	994.6	994.6	994.7	994.4	994.3	994.3	994.0	993.8	993.6	993.5	993.5	993.6	993.8	993.8	993.8	993.9	993.8	994.2	
Mean (Station level)	...	982.18	982.07	981.85	981.76	981.83	981.97	982.10	982.22	982.26	982.27	982.28	982.33	982.33	982.31	982.31	982.22	982.23	982.20	982.34	982.61	982.68	982.66	982.62	982.55	
Mean (Sea level)	...	1010.52	1010.41	1010.20	1010.11	1010.20	1010.30	1010.27	1010.35	1010.29	1010.21	1010.15	1010.16	1010.15	1010.12	1010.16	1010.08	1010.11	1010.15	1010.37	1010.75	1010.88	1010.91	1010.88	1010.35	
Hour. G.M.T.		1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	
																									Mean	



Readings in millibars at exact hours, Greenwich Mean Time.

175. Eskdalemuir :  $H_b$  (height of barometer cistern above M.S.L.) = 237.3 metres.

September, 1928.

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean
Day.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
1	993.5	993.4	993.5	993.3	993.3	993.5	993.5	993.5	993.4	993.4	993.1	993.1	993.1	992.6	992.3	992.4	992.4	992.5	992.8	993.1	993.2	993.4	993.3	993.1	993.1
2	993.0	993.0	992.8	992.9	992.9	993.0	993.0	993.0	992.8	992.7	992.7	992.7	992.4	992.0	991.5	991.3	991.1	991.0	990.9	991.1	990.4	990.0	989.9	989.5	992.0
3	988.6	988.1	987.7	987.3	987.1	986.8	987.3	987.2	987.2	987.0	986.6	986.5	986.3	986.2	986.0	985.6	985.4	985.6	985.6	985.6	985.3	985.2	985.3	984.9	986.5
4	984.8	984.5	984.1	984.1	983.9	984.0	984.1	984.4	984.5	984.8	984.7	984.6	984.3	984.3	984.3	984.1	983.7	983.7	984.0	984.1	983.8	983.6	983.3	983.2	984.2
5	983.0	982.8	982.3	982.0	981.8	981.7	981.9	981.9	982.0	982.1	981.9	981.5	981.1	980.7	980.4	980.2	979.7	979.1	978.9	978.8	978.1	977.8	977.7	977.2	980.7
6	977.1	977.3	977.9	978.5	979.4	980.2	981.7	982.8	984.0	984.7	985.0	985.5	985.9	986.4	986.9	987.7	988.2	988.4	988.8	989.0	988.7	988.8	989.1	989.0	984.4
7	988.8	988.0	988.0	988.1	988.1	987.7	987.4	987.3	987.0	986.6	986.3	986.3	985.6	985.5	985.4	984.9	984.4	983.8	983.4	983.4	982.8	982.5	982.4	982.4	985.7
8	982.4	982.4	982.4	982.4	982.7	983.3	984.1	984.7	984.9	985.5	985.6	985.7	985.7	985.8	985.7	985.8	985.7	985.7	985.8	985.3	985.2	984.8	984.1	984.6	988.6
9	983.4	982.5	982.1	982.0	982.4	983.3	983.5	983.5	983.9	983.9	983.9	984.6	984.6	984.6	984.7	984.8	984.6	984.7	984.9	984.1	984.1	983.4	982.9	982.1	983.7
10	981.4	981.0	981.3	982.5	983.8	983.8	984.4	985.5	985.5	985.9	986.5	987.0	987.2	987.5	987.6	987.7	987.2	986.4	985.4	985.0	984.9	985.9	987.2	988.5	985.2
11	989.4	990.1	990.8	991.0	991.3	992.3	993.1	993.8	994.3	994.3	994.5	994.7	994.9	995.2	995.3	995.3	995.5	995.8	996.4	996.8	997.2	997.1	997.3	997.5	994.1
12	997.5	997.3	997.3	997.3	997.0	997.1	997.5	997.5	997.5	997.4	997.3	997.2	997.0	996.9	996.8	996.8	996.9	997.0	997.1	997.5	997.7	997.9	998.0	998.0	997.3
13	998.0	997.8	997.9	997.8	997.9	998.5	998.5	998.6	998.7	998.6	998.5	998.4	998.2	997.8	997.7	997.4	997.3	997.4	997.6	997.9	998.1	998.1	998.1	998.0	998.0
14	998.1	997.9	997.7	997.4	997.3	997.4	997.4	997.5	997.8	997.9	997.9	997.8	997.7	997.5	997.5	997.7	997.8	998.0	998.1	998.4	998.8	999.4	999.6	999.7	998.0
15	999.8	999.6	999.8	999.9	1000.3	1000.6	1001.1	1001.6	1002.1	1002.1	1001.8	1002.0	1001.9	1001.7	1001.4	1001.3	1001.3	1001.2	1001.3	1001.4	1001.4	1001.3	1000.9	1000.4	1001.1
16	1000.1	999.3	998.8	998.2	998.3	998.2	998.1	997.9	997.6	997.0	996.7	996.2	995.8	995.4	994.9	994.5	994.2	994.3	994.1	994.1	993.5	993.2	993.2	992.9	996.3
17	992.5	991.7	991.0	990.7	989.8	988.9	988.1	987.3	986.8	986.3	985.8	985.3	985.0	984.8	984.5	984.4	984.1	984.1	984.0	984.0	984.0	984.0	984.0	984.0	988.6
18	984.1	984.3	984.8	985.1	985.7	986.1	987.2	988.1	988.7	989.1	989.3	989.5	989.9	990.2	990.3	990.6	991.1	991.4	991.9	992.1	992.1	992.1	992.1	992.1	988.9
19	992.1	992.0	991.9	991.8	991.8	992.1	992.2	992.2	992.1	991.5	991.4	991.2	991.1	991.2	991.1	991.3	991.3	991.5	992.0	992.1	992.1	992.2	992.2	992.0	991.8
20	992.1	992.1	992.0	991.8	991.7	992.0	992.2	992.5	992.5	992.6	992.6	992.5	992.6	992.8	992.9	993.2	993.7	994.5	995.1	995.7	996.0	996.1	996.2	996.6	993.3
21	996.6	996.7	996.8	996.8	997.0	997.2	997.4	997.7	997.8	997.8	997.9	998.0	998.0	998.0	998.0	998.3	998.8	999.2	999.8	1000.7	1001.0	1001.6	1001.5	1001.9	1002.6
22	1002.2	1002.0	1002.0	1002.0	1002.1	1002.2	1002.2	1002.2	1002.2	1002.3	1002.3	1002.3	1002.3	1002.3	1002.3	1002.3	1002.3	1002.3	1002.3	1002.3	1002.3	1002.3	1002.3	1002.3	1002.3
23	1001.3	1000.9	1000.6	1000.1	999.9	999.3	999.1	998.9	998.8	998.3	997.7	996.7	996.3	995.7	994.8	993.8	993.1	992.6	992.5	991.6	990.5	989.9	989.3	988.5	996.1
24	988.2	987.3	986.4	985.6	984.8	984.9	984.3	984.0	983.7	982.8	982.6	982.5	982.6	982.2	982.0	981.8	981.9	982.0	982.7	983.0	983.5	983.7	983.8	984.1	983.9
25	984.3	984.5	984.8	984.9	985.4	985.9	986.5	987.3	988.0	988.2	988.8	989.1	989.5	989.5	989.7	990.0	990.3	990.6	991.0	991.5	991.7	992.1	992.2	992.6	988.5
26	992.4	992.5	992.3	992.1	992.2	992.4	992.6	993.0	992.8	993.0	993.0	992.9	992.5	992.0	991.9	991.5	991.0	990.8	990.5	990.3	990.1	989.9	989.3	988.6	991.7
27	988.3	987.9	987.3	986.7	986.3	985.9	985.5	985.2	985.2	985.2	985.2	985.2	985.2	985.2	985.2	985.2	985.2	985.2	985.2	985.2	985.2	985.2	985.2	985.2	988.6
28	980.5	980.3	980.1	980.2	980.5	980.5	981.8	982.5	983.4	983.4	984.1	984.0	984.1	984.6	984.6	984.8	985.6	986.2	986.9	987.1	987.6	987.8	987.9	988.2	983.9
29	988.2	988.4	988.3	988.2	988.0	988.3	988.2	988.3	988.5	988.5	988.2	987.8	987.4	987.0	986.6	986.5	986.6	986.8	987.1	987.3	987.2	987.6	987.6	987.8	987.7
30	988.0	988.0	988.1	988.3	988.5	989.0	989.5	990.0	990.5	990.5	990.9	990.7	991.0	990.9	990.9	991.3	991.7	992.3	992.6	992.8	992.9	993.1	992.9	993.0	990.5
Mean (Station level)	990.32	990.12	990.03	989.97	990.04	990.20	990.45	990.67	990.81	990.80	990.75	990.71	990.60	990.49	990.34	990.27	990.25	990.32	990.51	990.58	990.53	990.54	990.49	990.39	990.42
Mean (Sea level)	1019.17	1018.99	1018.93	1018.89	1019.15	1019.33	1019.40	1019.36	1019.25	1019.13	1019.05	1018.92	1018.80	1018.65	1018.62	1018.67	1018.88	1019.19	1019.31	1019.31	1019.35	1019.32	1019.24	1019.08	1019.08

176. Eskdalemuir :  $H_b$  = 237.3 metres.

October, 1928.

Station Level ↑	1	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.		
	2	993.1	993.4	993.3	993.5	993.2	993.3	993.4	993.5	993.3	993.1	992.9	992.5	991.8	991.5	991.1	990.7	990.2	989.8	989.9	990.0	990.3	990.2	990.2	990.4	991.9	
	3	990.4	990.9	990.8	990.9	991.1	991.6	992.1	992.5	992.9	993.1	993.5	993.7	993.7	994.0	993.9	994.2	994.3	994.8	995.3	995.5	995.9	996.3	996.4	996.6	993.4	
	4	996.9	997.0	996.7	996.6	996.6	996.7	997.0	997.2	997.5	997.6	997.7	997.7	997.7	997.9	997.9	998.0	998.0	998.0	998.0	998.0	998.0	998.0	998.0	998.0	998.6	
	5	995.1	994.3	993.9	993.7	993.5	993.6	993.4	993.3	993.3	993.0	992.9	992.4	991.8	990.8	990.6	990.4	989.8	989.0	989.1	989.9	989.7	989.5	989.2	988.9	991.9	
	6	988.6	988.0	987.3	987.0	986.3	986.3	986.1	986.4	986.2	985.7	985.0	984.7	984.6	984.5	984.1	983.9	984.0	984.4	985.2	984.9	984.8	984.5	984.4	984.6	985.6	
	7	984.8	984.4	984.6	985.0	985.4	985.9	986.5	987.0	987.6	988.1	988.4	988.7	989.0	989.2	989.6	989.1	989.0	989.1	989.1	989.1	989.2	989.2	989.2	989.2	988.4	
	8	991.6	991.7	991.1	990.7	990.4	989.8	989.6	989.1	988.7	988.4	987.9	987.6	987.4	987.0	986.2	985.7	985.2	985.3	985.3	985.1	984.0	983.5	983.0	982.1	987.6	
	9	981.5	980.5	979.6	978.9	978.2	977.8	977.6	977.5	977.5	976.8	976.6	976.5	976.5	976.5	976.5	976.5	976.5	976.5	976.5	976.5	976.5	976.5	976.5	976.5	976.5	
	10	973.2	972.3	971.4	970.7	970.1	969.8	969.5	969.6	969.4	969.1	968.6	968.5	968.2	968.4	968.4	968.8	969.5	970.0	970.6	971.2	972.2	973.0	973.7	974.4	970.4	
	11	975.7	976.5	977.3	978.0	978.8	979.7	980.5	981.2	981.7	982.3	982.6	982.7	982.9	982.7	982.9	983.3	983.6	983.6	983.6	983.6	983.6	983.5	982.8	982.3	981.3	
	12	981.8	980.6	979.6	979.1	978.3	977.5	976.8	976.3	975.7	975.4	975.6	976.0	976.1	976.7	977.2	977.5	978.1	978.9	979.5	980.1	980.6	981.3	981.6	981.9	978.4	
	13	982.2	982.4	982.7	983.0	983.2	983.4	984.2	984.4	985.6	986.1	986.4	986.7	987.1	987.3	987.7	988.0	988.3	989.0	989.7	990.2	990.6	991.0	991.4	991.7	991.7	986.9
	14	991.9	992.0	992.0	992.1	992.2	992.3	992.4	992.5	993.0	993.4	993.5	993.9	994.1	994.5	994.2	994.5	994.8	995.0	995.5	995.9	995.9	996.1	996.6	996.9	996.1	994.1
	15	995.2	994.9	994.4	993.8	993.6	993.3	992.8	992.8	992.0	991.4	990.5	989.7	988.8	988.1	987.5	986.8	986.2	985.8	985.3	984.9	984.3	983.8	983.4	983.2	989.5	989.5
	16	983.3	983.2	983.2	983.6	984.0	984.1	984.7	985.5	986.0	986.5	987.0	987.2	987.2	987.3	987.3	987.5	987.9	988.3	988.4	988.7	988.8	988.5	988.0	987.6	986.3	986.3
17	986.9	986.2	985.4	984.6	984.1	983.5	982.9	982.5	982.2	981.8	981.3	981.6	981.7	981.8	981.2	981.8	981.4	981.7	980.9	980.2	979.8	978.8	978.4	979.0	982.3	982.3	
18	979.3	979.5	980.3	981.0	981.8	982.8	983.6	984.1	984.4	984.4	984.4	984.3	984.2	984.1	983.8	983.8	984.2	983.8	983.3	979.8	979.3	978.6	983.8	983.7	983.0	978.0	
19	983.1	982.5	981.3	980.5	979.9	978.8	977.4	976.4	974.4	972.8	971.4	968.5	965.9	963.2	961.1	959.9	961.0	962.0	962.8	963.4	964.0	963.6	963.6	963.6	963.6	970.6	
20	965.0	965.2	965.2	965.8	966.2	966.4	967.3	968.1	968.5	969.0	968.8	969.0	968.9	968.6	969.1	968.6	967.7	966.7	964.9	962.1	959.2	956.4	953.3	951.0	965.3	965.3	
21	949.2	947.2	946.0	945.9	946.7	948.5	950.4	952.2	954.0	955.3	955.8	957.0	957.3	957.6	958.7	959.9	960.7	961.6	961.9	962.3	963.1	963.6	963.9	964.3	955.7	955.7	
22	964.2	964.2	964.1	964.6	964.7	965.0	965.2	965.2	965.1	966.9	964.3	963.6	963.2	962.5	963.1	963.7	965.0	965.6	966.4	966.9	967.4	967.7	967.6	967.6	967.6	965.0	
23	967.5	967.0	966.9	966.3	966.2	966.3	966.3	966.5	966.7	966.6	966.7	966.8	966.7	966.7	967.0	967.5	967.9	968.3	968.6	969.9	969.2	969.4	969.5	969.8	967.4	967.4	
24	969.6	969.8	969.5	969.7	969.8	969.8	969.8	970.0	969.6	969.3	968.1	967.0	965.9	965.6	965.9	966.2	967.1	968.0	968.6	969.5	969.6	969.7	969.9	969.9	969.9	965.6	
25	959.4	959.3	958.7	958.8	958.3	957.8	957.8	957.8	957.9	957.9	957.9	957.9	957.8	958.6	959.1	959.6	959.6	961.0	961.5	962.0	962.4	962.8	962.5	964.3	959.5	959.5	
26	964.8	965.6	966.6	967.5	968.8	969.8	971.2	971.8	972.4	972.7	973.5	973.6	973.8	974.0	974.4	974.4	974.4	974.4	974.0	973.7	973.4	972.7	971.8	970.9	971.5	971.5	
27	969.8	968.5	967.3	965.8	964.4	963.1	962.1	961.3	960.5	959.9	959.2	958.4	957.8	957.4	957.2	957.0	957.2	957.7	958.2	958.7	959.4	960.2	961.1	962.5	961.2	961.2	
28	963.5	964.7	966.1	967.4	969.0	970.2	971.6	973.1	974.0	974.7	976.1	976.2	976.5	977.0	977.5	978.4	978.7	979.1	979.5	979.8	979.6	980.0	980.0	979.9	974.3	974.3	
29	979.9	980.0	980.0	980.2	980.0	980.0	980.1	980.0	980.1	980.1	980.1	980.1	980.1	979.7	979.4	979.2	979.0	979.9	979.7	979.2	979.5	978.9	978.7	979.3	979.7	979.6	
30	979.8	979.9	979.6	979.2	979.3	979.1	979.0	979.0	979.0	978.3	977.5	976.4	975.6	974.6	973.6	973.0	972.7	972.5	972.3	972.1	971.7	971.2	971.0	970.2	975.9	975.9	
31	969.5	968.3	967.3	967.5	967.6	967.2	967.2	966.7	966.4	966.2	965.8	965.4	964.4	964.0	963.4	962.9	962.3	962.6	962.2	961.8	961.7	962.0	962.3	962.7	965.1	965.1	
Mean (Station level)	...	978.06	977.85	977.60	977.60	977.65	977.73	977.93	978.20	978.27	978.23	978.15	977.97	977.72	977.60	977.52	977.56	977.67	977.98	978.07	978.11	978.10	977.07	977.95	977.98	977.90	
Mean (Sea level)	...	1006.71	1006.51	1006.23	1006.23	1006.29	1006.39	1006.59	1006.80	1006.77	1006.64	1006.50	1006.28	1005.00	1005.88	1005.81	1005.90	1006.08	1006.47	1006.58	1006.63	1006.66	1006.56	1006.59	1006.41	1006.41	
Hour. G.M.T.		1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean	



Readings in millibars at exact hours, Greenwich Mean Time.

177. Eskdalemuir :  $H_b$  (height of barometer cistern above M.S.L.) = 237.3 metres.

November, 1928.

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean
↑ Day.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
1	987.3	988.1	988.8	989.5	989.9	990.5	991.2	991.5	991.9	992.5	993.0	992.7	992.6	992.6	992.3	992.2	992.4	992.5	992.7	992.6	992.3	992.0	991.5	991.0	991.3
2	990.4	990.1	989.7	989.3	988.7	988.1	987.8	987.7	987.3	987.1	986.4	986.1	986.0	985.9	986.0	986.0	986.0	985.8	985.3	985.1	984.6	984.8	984.6	984.5	986.9
3	984.3	983.9	983.6	983.4	983.3	982.9	982.7	982.7	982.3	982.2	981.9	981.6	981.2	981.1	980.9	981.1	980.8	980.7	980.5	980.3	980.1	980.0	979.9	979.7	981.8
4	979.7	979.5	979.2	979.1	979.2	979.0	979.2	979.5	979.5	979.8	979.9	979.7	979.5	979.4	979.3	979.5	979.6	979.9	980.3	980.3	980.4	980.3	980.3	980.3	979.7
5	980.4	980.6	980.3	980.3	980.3	980.3	980.3	980.5	980.6	980.6	981.0	980.9	980.9	980.9	980.9	981.2	981.6	981.9	982.5	982.7	983.0	983.1	983.2	983.3	981.2
6	983.4	983.4	983.3	983.3	983.4	983.4	983.5	983.9	984.4	984.3	984.2	984.0	983.8	983.8	983.7	983.6	983.7	983.7	984.0	984.1	984.1	984.1	984.1	983.9	983.8
7	983.7	983.5	983.5	983.4	983.3	983.6	983.8	984.1	984.2	984.4	984.6	984.5	984.2	984.1	984.0	984.2	984.3	984.4	984.8	985.0	985.5	985.3	985.4	984.2	984.2
8	985.3	985.5	985.5	985.5	985.6	986.0	986.3	986.6	987.2	987.7	988.2	988.7	988.5	988.7	988.9	989.5	990.4	991.0	991.3	991.8	992.2	992.5	992.6	992.6	988.5
9	992.6	992.9	993.1	993.1	993.4	993.2	993.3	993.3	993.7	993.9	993.8	993.2	992.6	992.4	992.3	992.3	992.2	991.5	991.1	990.8	990.5	990.3	989.5	989.1	992.3
10	988.3	987.7	987.0	986.2	985.4	983.9	983.1	981.9	981.1	980.5	979.2	977.9	976.8	976.5	976.5	976.9	977.3	977.7	979.1	980.1	980.5	981.5	981.8	982.5	981.4
11	982.3	982.4	982.6	982.5	982.2	982.6	982.8	981.9	981.5	981.1	980.8	979.6	977.9	976.7	975.7	974.9	974.6	973.1	972.6	973.0	972.3	972.9	973.3	974.8	978.2
12	975.5	974.9	974.8	975.0	975.0	975.1	974.7	972.0	971.5	971.0	970.5	969.9	969.8	970.0	970.1	970.5	970.7	970.8	971.7	972.4	974.2	974.9	975.3	975.0	972.7
13	975.8	975.5	975.4	975.5	975.4	974.9	974.7	974.6	974.8	975.1	975.6	976.3	976.6	977.0	977.3	977.7	978.4	979.1	979.2	978.6	979.0	979.5	979.9	979.3	976.8
14	978.8	978.2	978.1	978.2	978.1	977.9	977.6	977.7	977.6	977.1	976.8	976.5	976.3	975.7	975.3	974.6	973.8	972.8	971.0	969.2	967.1	964.5	962.1	960.6	974.4
15	959.4	958.7	957.2	956.8	956.1	954.9	954.4	954.1	954.0	953.6	953.5	952.9	952.3	951.8	951.3	951.3	952.2	952.8	953.1	953.4	953.9	954.8	955.5	956.3	954.4
16	957.0	956.9	956.7	956.8	956.6	956.0	954.8	954.0	952.7	950.1	948.0	945.9	944.1	942.2	941.7	942.0	942.8	944.4	945.9	947.1	948.1	948.1	948.7	949.7	949.7
17	950.2	951.1	951.3	951.3	951.1	951.2	951.6	952.3	952.6	953.3	954.1	954.4	956.3	957.1	957.5	957.5	959.2	960.2	961.6	962.4	963.2	964.4	965.9	967.3	956.2
18	968.1	969.1	970.5	971.3	972.2	973.0	974.6	975.5	976.4	977.0	977.1	977.5	977.2	976.7	975.9	975.2	974.7	974.0	974.0	973.8	973.7	973.4	972.8	972.0	973.9
19	971.2	970.5	969.4	967.9	967.0	966.1	965.5	966.2	966.3	966.0	965.4	964.0	963.1	962.3	961.2	961.0	962.5	964.4	965.4	965.9	966.8	968.1	968.7	969.1	966.1
20	970.3	971.0	971.8	972.7	973.8	974.6	975.9	977.6	978.8	980.0	980.8	981.5	982.2	982.6	982.8	982.9	984.4	984.8	986.1	986.6	987.3	987.5	987.4	987.4	980.1
21	987.1	986.9	986.0	985.0	984.2	983.3	981.9	980.6	979.3	978.0	976.9	975.8	975.0	974.1	973.5	972.5	972.3	971.7	971.7	971.5	971.5	971.3	971.3	971.6	977.7
22	971.7	971.5	971.4	971.4	971.5	971.1	970.7	969.3	968.5	967.6	966.5	965.4	964.3	963.1	962.4	961.3	960.5	959.5	958.2	956.6	954.7	952.5	950.3	948.0	968.0
23	967.6	966.9	966.4	965.5	964.2	961.9	959.3	954.6	950.3	945.9	940.3	934.6	932.6	929.4	928.6	931.6	935.8	939.3	942.2	943.8	945.4	946.4	946.8	947.6	948.4
24	948.2	949.1	950.6	951.4	951.5	952.5	953.0	954.7	955.7	957.4	957.5	958.5	959.4	961.1	962.1	963.7	964.3	964.7	965.0	965.2	964.5	964.1	963.6	961.4	958.0
25	959.7	958.4	954.9	951.9	949.8	948.6	947.6	947.4	946.3	945.4	944.3	943.8	944.7	946.6	948.8	951.8	953.6	955.0	956.7	957.6	958.2	958.4	959.3	960.0	952.1
26	960.8	961.7	962.7	964.1	964.9	966.1	967.1	968.3	968.7	969.1	969.9	970.2	969.8	970.1	970.2	970.6	970.8	970.4	970.0	969.8	969.4	969.9	968.4	968.3	967.8
27	968.6	968.4	968.6	969.4	970.0	970.7	971.2	972.6	973.6	974.7	975.6	976.2	976.9	977.8	978.7	979.7	980.3	980.4	980.7	980.8	980.5	980.4	980.3	980.3	977.0
28	990.2	990.8	991.4	992.1	993.0	993.7	994.3	995.8	996.2	996.7	996.8	997.1	997.5	997.9	998.8	998.6	999.2	999.0	998.8	998.8	998.8	998.4	997.7	997.4	996.0
29	997.0	996.7	996.0	995.0	995.2	995.0	994.4	994.3	993.9	993.6	993.4	992.7	991.8	991.9	991.6	991.2	991.0	991.2	991.7	991.9	991.6	992.2	992.4	992.3	993.3
30	992.3	992.1	992.2	992.5	992.9	993.2	993.0	993.5	992.8	992.5	992.6	993.8	993.3	992.7	993.5	994.8	995.3	996.1	996.6	996.1	996.6	996.7	996.7	996.7	994.0
Mean (Station level)	976	976	976	976	975	975	975	975	975	975	974	974	974	974	974	974	975	975	976	976	976	976	976	976	975
Mean (Sea level)	1004	1004	1004	1004	1004	1004	1004	1004	1004	1003	1003	1003	1002	1002	1002	1003	1003	1004	1004	1004	1004	1005	1005	1005	1004

178. Eskdalemuir :  $H_b$  = 237.3 metres.

December, 1928.

Station Level ↑   <
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PRESSURE AT STATION LEVEL AND AT SEA LEVEL.  
ANNUAL MEANS FROM HOURLY VALUES.

197

*From readings in millibars at exact hours, Greenwich Mean Time.*

**179. Eskdalemuir :  $H_b = 237.3$  metres.**

**1928.**

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Station Level	mb. 982.39	mb. 982.26	mb. 982.11	mb. 982.01	mb. 982.01	mb. 982.04	mb. 982.14	mb. 982.23	mb. 982.30	mb. 982.25	mb. 982.16	mb. 982.03	mb. 981.91	mb. 981.81	mb. 981.75	mb. 981.77	mb. 981.86	mb. 982.04	mb. 982.22	mb. 982.41	mb. 982.53	mb. 982.53	mb. 982.50	mb. 982.47	mb. 982.16
Sea Level	011.27	011.15	011.01	010.91	010.90	010.91	010.96	010.98	010.98	010.85	010.70	010.52	010.37	010.26	010.21	010.26	010.40	010.65	010.89	011.15	011.32	011.35	011.35	011.34	010.86

PRESSURE AT STATION LEVEL ; MONTHLY MEANS AND DIURNAL INEQUALITIES.

*The departures from the mean of the day are adjusted for non-cyclic change.*

**180. Eskdalemuir :  $H_b = 237.3$  metres.**

**1928.**

Month.	Mean.	Hour. 1.	G.M.T 2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.
	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
Jan.	975.13	+0.65	+0.63	+0.55	+0.35	+0.28	+0.15	+0.01	-0.06	-0.03	-0.22	-0.47	-0.78	-0.82	-0.79	-0.72	-0.49	-0.39	-0.21	+0.01	+0.23	+0.46	+0.52	+0.53	+0.59
Feb.	983.60	+0.35	+0.23	+0.13	-0.06	-0.08	-0.20	-0.06	+0.03	+0.17	+0.12	+0.07	-0.21	-0.31	-0.50	-0.54	-0.51	-0.35	+0.03	+0.19	+0.42	+0.33	+0.26	+0.20	+0.29
Mar.	979.52	+0.37	+0.18	-0.09	-0.20	-0.22	-0.21	-0.05	+0.08	+0.21	+0.16	+0.12	+0.01	-0.22	-0.44	-0.51	-0.57	-0.49	-0.21	+0.08	+0.29	+0.38	+0.43	+0.48	+0.43
Apr.	980.21	+0.32	+0.04	-0.14	-0.41	-0.39	-0.25	-0.16	-0.12	-0.01	-0.05	-0.13	-0.18	-0.19	-0.32	-0.44	-0.42	-0.33	-0.16	+0.18	+0.58	+0.75	+0.74	+0.63	+0.47
May	986.97	+0.37	+0.26	+0.09	-0.04	-0.07	+0.02	+0.08	+0.07	+0.13	+0.01	-0.05	-0.07	-0.19	-0.28	-0.44	-0.53	-0.55	-0.43	-0.23	+0.06	+0.37	+0.46	+0.50	+0.48
June	982.12	+0.24	+0.12	-0.12	-0.19	-0.12	-0.11	-0.02	-0.02	-0.07	-0.10	-0.13	-0.21	-0.16	-0.23	-0.23	-0.33	-0.27	-0.16	0.00	+0.22	+0.48	+0.51	+0.49	+0.43
July	986.74	-0.05	-0.23	-0.33	-0.36	-0.28	-0.15	+0.03	+0.07	+0.11	+0.12	+0.10	+0.18	+0.15	+0.15	+0.07	-0.05	-0.15	-0.05	0.00	+0.04	+0.25	+0.19	+0.12	+0.07
Aug.	982.25	+0.03	-0.10	-0.32	-0.42	-0.36	-0.23	-0.11	0.00	+0.03	+0.03	+0.04	+0.07	+0.07	+0.04	+0.03	-0.07	-0.07	-0.11	+0.02	+0.29	+0.35	+0.31	+0.27	+0.18
Sept.	990.43	-0.12	-0.31	-0.41	-0.47	-0.39	-0.23	+0.02	+0.24	+0.38	+0.37	+0.32	+0.29	+0.18	+0.07	-0.08	-0.15	-0.17	-0.09	+0.09	+0.16	+0.11	+0.13	+0.08	-0.02
Oct.	977.90	+0.07	-0.13	-0.37	-0.37	-0.31	-0.21	-0.01	+0.27	+0.35	+0.32	+0.24	+0.07	-0.17	-0.29	-0.36	-0.31	-0.19	+0.13	+0.22	+0.27	+0.27	+0.24	+0.13	+0.17
Nov.	975.53	+0.85	+0.80	+0.67	+0.58	+0.47	+0.34	+0.23	+0.22	+0.02	-0.17	-0.53	-0.84	-1.28	-1.45	-1.45	-1.13	-0.63	-0.24	+0.16	+0.38	+0.59	+0.76	+0.78	+0.84
Dec.	985.54	-0.29	-0.20	-0.15	-0.21	-0.30	-0.30	-0.12	+0.11	+0.45	+0.55	+0.50	+0.16	-0.03	-0.12	-0.15	-0.07	+0.01	+0.11	+0.03	+0.15	+0.11	-0.01	-0.06	-0.15
Year.	982.16	+0.23	+0.11	-0.04	-0.15	-0.15	-0.11	-0.01	+0.07	+0.15	+0.10	+0.01	-0.13	-0.25	-0.34	-0.40	-0.38	-0.30	-0.12	+0.06	+0.25	+0.37	+0.38	+0.35	+0.31

ABSOLUTE EXTREMES OF PRESSURE AT STATION LEVEL FOR EACH DAY.

*Maximum and Minimum for the interval 0h. to 24h., Greenwich Mean Time.*

**181. Eskdalemuir :  $H_b = 237.3$  metres.**

**1928.**

Month	Jan.		Feb.		Mar.		April		May		June		July		Aug.		Sept.		Oct.		Nov.		Dec.	
Day.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
1	995.8	975.7	969.2	955.0	985.4	981.8	981.7	972.0	986.8	982.6	999.3	955.5	984.7	978.2	992.4	986.8	993.9	992.2	993.6	989.6	993.0	987.1	001.7	995.4
2	979.6	972.5	972.1	962.4	990.9	985.1	984.1	974.5	987.2	984.4	000.1	997.5	981.8	976.7	994.4	992.3	993.1	989.4	996.6	990.2	991.0	984.5	001.2	991.1
3	991.5	979.6	989.6	966.2	990.6	989.6	989.6	974.8	968.0	984.6	981.8	989.3	986.3	981.8	993.1	989.3	989.5	984.9	997.6	995.4	984.5	979.7	001.1	991.2
4	988.3	973.4	989.3	975.4	990.6	989.5	971.3	967.3	985.7	982.0	989.1	986.7	986.4	978.1	991.3	988.8	985.0	983.2	995.7	988.9	980.5	979.0	000.7	989.2
5	986.8	976.6	983.8	974.5	990.3	986.7	977.0	971.3	985.7	984.0	988.2	982.0	978.1	972.4	994.6	991.3	983.2	977.2	988.9	983.8	983.3	980.2	994.4	985.6
6	986.1	958.1	993.6	983.8	988.9	987.4	983.2	977.0	985.1	980.1	982.1	976.1	987.6	971.8	994.5	988.7	989.3	977.0	992.1	984.4	984.4	983.2	992.9	973.9
7	985.5	966.2	991.4	988.1	990.9	985.9	982.7	974.0	986.2	983.2	976.1	968.1	992.9	987.6	988.7	976.8	989.0	982.3	992.1	982.1	985.5	983.2	985.4	972.6
8	976.6	966.2	991.2	975.9	993.6	990.9	974.0	968.4	989.4	982.7	970.9	967.9	992.1	985.1	984.9	981.0	986.0	982.4	982.1	973.6	992.6	985.2	989.0	985.3
9	975.7	969.1	984.3	975.6	993.5	990.9	972.6	969.6	991.9	989.3	969.4	953.9	988.6	984.7	989.3	984.6	984.9	981.9	974.4	968.1	994.0	989.1	988.2	967.5
10	973.7	956.0	982.0	942.3	998.1	990.9	970.1	962.5	991.7	988.9	974.3	953.4	990.3	985.6	990.2	986.2	988.5	981.0	983.7	974.4	989.1	976.3	967.5	960.3
11	983.4	969.7	966.3	942.9	997.7	992.6	973.5	966.3	992.1	990.0	988.4	974.3	991.5	985.7	986.2	975.3	997.6	988.5	982.3	975.4	983.0	972.0	971.7	963.3
12	982.7	959.8	970.9	966.3	992.6	986.7	981.1	973.5	993.5	990.9	992.1	988.4	991.5	990.4	975.3	969.3	998.1	996.7	991.8	981.9	975.6	969.6	985.1	971.7
13	971.7	960.2	971.2	962.9	993.6	990.3	985.4	981.1	994.2	990.5	991.6	980.5	992.3	990.6	969.3	966.8	998.7	997.3	996.1	991.7	979.6	974.6	988.9	985.1
14	974.6	962.5	976.3	967.0	993.3	991.5	985.8	983.5	992.2	990.3	988.8	978.4	993.6	991.7	974.7	966.9	999.7	997.2	995.6	983.2	979.3	960.6	992.6	986.1
15	962.7	953.5	978.2	970.8	993.9	991.9	983.5	821.1	990.3	973.8	991.3	987.7	995.5	992.5	983.7	974.5	002.2	999.5	988.8	983.0	960.6	951.2	995.6	991.8
16	975.3	954.6	978.1	969.4	993.9	984.9	983.9	982.0	980.9	973.3	993.8	991.3	001.9	995.5	989.8	983.7	000.4	992.9	987.6	978.2	957.1	941.6	991.8	975.9
17	986.9	975.3	992.1	969.8	984.9	978.9	989.4	983.8	979.3	970.0	991.4	982.4	002.4	995.7	991.7	989.6	993.0	983.9	984.5	978.8	967.3	949.7	000.4	983.8
18	987.0	974.0	993.9	990.8	979.6	975.1	988.2	981.1	979.6	973.9	983.5	977.4	995.9	992.3	991.1	987.3	992.2	983.9	983.7	959.4	977.5	967.3	001.4	997.6
19	990.4	975.2	002.4	993.8	979.8	971.6	983.8	981.0	979.4	976.1	978.4	973.4	994.1	991.0	987.3	975.6	992.4	991.0	969.2	951.0	972.0	960.8	997.6	988.0
20	990.1	983.3	002.6	000.0	972.9	969.0	983.7	982.5	988.7	979.4	988.7	978.4	993.1	990.8	976.0	972.7	996.6	991.7	964.3	945.6	987.6	969.1	994.6	987.6
21	987.8	970.0	000.1	996.6	971.6	969.3	989.0	982.0	995.2	988.6	988.9	979.8	993.7	991.8	977.7	972.2	001.9	996.5	967.8	962.5	987.4	971.3	994.7	992.2
22	985.9	973.7	008.5	998.9	969.3	965.6	991.1	988.7	994.6	988.6	980.1	977.8	993.1	990.1	981.1	977.6	003.0	001.5	969.8	966.1	972.0	963.0	995.9	985.2
23	985.9	968.8	008.1	997.8	965.6	961.4	990.0	986.3	988.6	985.9	986.8	979.7	991.7	987.2	981.1	976.5	001.5	988.5	970.1	958.8	967.7	928.0	997.4	984.4
24	977.5	962.0	997.8	995.1	964.1	960.7	989.4	985.1	993.0	987.5	988.4	986.7	987.5	986.0	977.1	973.7	988.5	981.8	964.3	957.4	965.4	947.6	984.4	974.6
25	984.7	970.5	998.9	995.6	978.0	964.1	985.1	981.7	995.1	993.0	987.7	971.8	987.0	985.1	978.2	972.8	992.6	984.1	974.5	964.3	961.4	943.5	986.1	960.6
26	975.8	967.4	998.8	996.3	980.8	977.0	983.9	977.8	995.2	991.1	980.3	967.7	985.8	980.0	978.6	970.2	993.1	988.6	970.9	957.0	971.0	960.0	984.6	959.8
27	990.0	973.0	998.4	995.2	977.0	969.8	985.9	979.3	991.1	985.8	990.4	980.3	980.0	973.2	971.6	968.0	988.7	980.4	980.1	962.5	989.3	968.2	990.2	984.5
28	988.8	974.2	995.3	985.5	969.8	967.3	988.6	985.5	988.7	984.4	990.1	976.3	975.1	971.8	979.8	971.6	988.2	980.1	980.3	978.7	999.3	989.3	986.2	973.4
29	974.2	965.2	986.1	983.4	967.4	938.8	988.3	984.7	993.6	988.5	976.3	972.3	977.7	973.0	983.6	979.7	988.7	986.4	980.0	970.2	997.4	990.4	973.4	967.8
30	973.9	966.5	—	—	954.7	937.9	986.0	981.8	987.1	993.6	983.1	975.3	980.6	977.5	984.9	983.6	993.2	987.7	970.2	961.5	996.9	991.8	977.2	966.6
31	976.4	958.2	—	—	972.0	954.7	—	—	997.0	994.0	—	—	987.1	980.5	994.9	993.4	—	—	987.1	962.7	—	—	995.8	977.2
Mean	982.11	968.10	988.64	978.53	982.75	976.70	982.90	977.81	989.47	984.78	986.26	978.34	989.03	984.33	985.07	979.57	993.09	987.66	982.45	972.92	980.84	969.90	990.57	979.65



Readings in degrees absolute at exact hours, Greenwich Mean Time.

182. Eskdalemuir : Louvred Hut :  $h_t$  (height of thermometer bulb above ground) = 0.9 metres.

January, 1928.

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean
Day.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.
1	63.7	62.7	62.1	61.8	61.7	62.2	61.6	61.6	61.2	62.7	65.0	66.9	69.0	71.0	71.7	71.6	72.1	72.8	73.9	73.0	73.2	73.6	74.3	74.6	67.5
2	75.0	75.4	75.1	76.1	76.0	75.9	76.1	75.9	76.1	76.5	76.7	76.4	76.0	76.8	75.6	74.9	74.2	73.9	73.7	73.8	74.2	74.6	74.9	74.4	75.3
3	75.0	74.6	74.7	74.3	73.9	73.8	72.9	74.1	73.1	73.8	75.3	76.3	76.9	76.3	74.9	73.0	71.3	70.3	71.0	72.1	72.9	74.4	73.8	73.8	73.9
4	74.9	75.7	75.6	75.7	76.2	77.1	78.2	78.6	78.2	78.0	79.0	79.6	80.7	79.7	79.8	78.6	78.3	77.8	77.0	76.7	76.0	75.7	76.0	75.8	77.4
5	75.8	75.8	76.0	75.8	75.5	75.4	75.4	75.5	75.5	76.2	77.0	76.6	76.5	76.9	77.2	77.0	76.9	76.7	76.1	76.3	76.6	76.6	76.8	76.2	76.3
6	75.3	76.0	77.2	78.0	79.1	79.5	82.4	82.6	81.1	80.4	80.0	80.7	78.5	77.9	78.1	78.1	77.5	75.1	74.9	74.6	75.0	74.7	74.8	75.2	77.8
7	74.7	75.0	75.1	76.0	75.9	76.5	77.1	77.5	79.0	80.7	81.2	81.3	81.2	81.3	81.0	80.4	81.2	81.3	81.4	81.8	81.5	81.3	81.4	80.8	79.2
8	79.9	79.2	77.9	77.6	76.0	76.7	76.2	76.0	75.4	75.7	76.4	76.8	76.8	76.9	76.3	76.7	76.8	76.5	76.7	76.9	76.9	76.7	76.9	76.9	76.9
9	76.6	76.8	76.9	77.0	77.3	77.6	77.8	77.7	77.8	78.1	78.1	78.3	77.0	77.0	76.7	76.0	75.6	75.2	74.9	75.0	75.3	75.8	76.4	76.9	76.7
10	77.1	77.3	77.2	77.6	77.4	77.4	78.2	78.4	78.5	78.4	78.9	78.1	76.9	76.2	76.5	75.3	74.9	74.6	75.0	74.9	74.7	74.7	74.6	74.9	76.6
11	74.7	74.8	74.7	74.3	74.5	74.5	74.4	74.5	74.6	74.0	74.2	75.5	74.5	74.2	74.5	74.5	74.1	74.1	74.0	73.9	72.4	73.5	74.1	74.2	74.3
12	74.2	74.0	74.7	75.1	75.9	76.1	76.5	77.3	77.9	78.5	78.7	79.0	79.3	79.8	80.9	80.9	81.1	81.0	81.0	80.8	81.2	80.6	79.5	79.1	78.3
13	78.9	78.5	78.0	77.9	78.1	78.0	77.9	77.7	77.9	78.0	78.1	77.9	78.4	78.5	78.5	78.9	79.0	79.7	79.4	79.1	78.8	78.7	78.1	78.6	78.5
14	78.7	77.9	78.0	77.5	77.0	76.9	76.5	76.8	76.9	77.0	76.9	77.1	78.0	78.3	79.3	79.3	79.9	79.1	78.5	78.8	78.3	78.0	78.0	77.8	78.0
15	76.7	76.2	76.0	76.1	76.2	76.3	76.1	76.1	76.1	76.2	76.4	76.0	76.4	77.1	77.2	77.1	77.5	77.9	77.9	77.7	77.7	77.9	77.8	77.9	76.9
16	77.8	77.3	77.8	77.8	77.7	77.2	77.2	77.1	76.8	76.6	77.9	78.1	78.0	77.9	76.9	76.1	75.1	74.1	73.5	74.5	74.9	74.1	73.8	74.2	76.4
17	73.6	74.0	74.9	75.0	75.0	75.4	75.5	75.5	75.7	75.9	76.1	76.1	76.0	76.3	76.0	75.6	75.3	74.9	75.0	75.0	75.1	74.9	74.0	74.0	75.2
18	73.0	73.1	74.4	75.0	75.2	75.4	75.6	75.6	75.1	75.4	75.5	75.6	75.6	75.7	76.1	76.4	76.4	76.5	76.7	76.6	76.6	77.0	77.6	77.6	75.6
19	77.4	77.0	76.7	76.9	76.9	76.1	76.0	76.3	77.1	76.2	76.8	78.0	78.9	79.5	79.5	80.2	78.2	78.0	76.7	75.2	75.9	77.5	76.9	77.1	76.9
20	77.8	78.1	78.9	79.2	79.4	79.4	79.3	79.9	79.8	80.0	79.9	79.5	80.6	81.0	80.2	78.2	78.0	76.7	75.2	75.9	77.5	76.5	76.1	76.9	78.7
21	75.8	76.1	76.5	77.0	77.2	78.1	79.5	79.5	80.2	82.4	82.3	82.2	82.2	82.2	82.0	80.5	79.8	79.0	79.0	78.9	78.5	78.2	78.1	78.0	79.3
22	78.0	77.4	77.7	77.5	78.0	76.9	76.7	76.5	77.0	76.9	77.1	78.3	78.3	79.0	78.9	77.0	77.8	76.8	75.9	75.5	74.7	74.7	74.3	73.6	76.9
23	73.8	74.0	74.4	74.4	75.3	75.7	76.1	76.5	77.4	77.8	78.1	78.1	78.5	77.6	77.8	78.4	79.7	80.0	80.1	80.1	80.4	80.6	81.3	80.1	77.6
24	79.4	78.8	77.8	77.1	76.0	75.0	75.0	76.0	76.9	77.7	78.7	76.9	76.8	76.5	76.1	75.4	73.9	74.1	74.1	74.6	74.5	74.4	73.5	73.8	76.1
25	73.3	73.6	73.5	73.3	73.3	73.1	73.4	73.2	73.3	74.0	74.8	75.6	75.8	76.1	77.0	77.6	78.0	78.1	77.5	76.9	76.6	76.1	75.7	75.1	75.2
26	75.0	74.5	74.0	73.7	73.5	72.9	73.8	74.8	74.6	75.1	75.2	73.8	73.4	73.4	75.0	74.6	74.5	74.0	73.6	73.4	71.4	71.9	71.6	71.7	73.8
27	71.9	72.9	72.0	72.6	72.7	70.5	71.8	72.2	72.9	73.9	74.5	75.1	75.9	75.7	75.8	75.2	74.8	74.0	74.2	74.0	73.3	73.5	73.5	74.5	73.6
28	74.1	74.1	74.2	75.1	75.6	75.6	75.7	76.1	77.0	77.4	77.5	77.7	77.8	78.1	78.8	78.4	78.4	77.4	76.6	75.5	74.9	74.5	74.5	75.0	76.2
29	75.0	75.0	74.9	74.2	73.7	73.5	73.3	73.2	73.1	74.4	75.5	75.5	75.4	74.8	73.8	73.8	73.7	73.4	73.4	73.5	74.0	74.3	75.2	74.3	74.2
30	74.1	73.8	73.5	73.0	72.0	71.6	71.4	72.3	73.3	73.6	74.0	74.1	74.5	74.5	74.6	74.5	74.0	74.0	73.8	74.0	74.0	73.6	73.5	73.5	73.6
31	73.0	73.2	73.0	72.6	72.6	72.4	72.7	72.8	73.3	73.6	74.0	74.2	74.3	73.9	73.6	73.6	75.1	77.5	79.0	77.6	77.9	77.9	77.0	77.0	74.6
Mean	...	75.3	75.3	75.3	75.3	75.2	75.5	75.7	75.9	76.3	76.8	77.0	77.0	77.1	77.1	76.7	76.5	76.2	76.1	76.0	75.9	76.0	76.0	75.9	76.1

183. Eskdalemuir : Louvred Hut :  $h_t$  = 0.9 metres.

February, 1928.

	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	
1	77.1	77.3	77.4	77.1	76.7	76.5	75.7	76.4	76.1	75.3	75.2	75.0	74.3	74.6	74.1	74.3	74.0	73.1	73.1	72.8	72.6	73.2	73.1	73.0	75.0	
2	73.5	73.0	73.0	73.7	73.9	74.0	75.7	73.9	73.8	73.9	74.5	74.9	75.0	74.2	73.0	73.0	73.0	73.5	73.4	73.5	73.9	73.9	73.0	73.3	73.7	
3	73.7	73.9	73.8	73.6	72.9	73.4	73.1	73.0	73.1	73.5	73.7	75.9	75.2	74.6	75.1	74.6	73.5	74.1	73.7	72.0	70.9	70.7	70.0	73.8	78.4	
4	73.3	73.6	74.0	74.4	74.5	74.6	74.6	74.3	74.5	75.0	75.2	76.0	77.1	77.7	77.6	77.7	77.8	78.1	78.8	79.5	80.7	80.5	80.2	80.0	76.5	
5	79.9	79.5	78.6	77.5	77.5	76.7	76.3	76.0	76.2	75.3	76.8	77.6	74.5	74.5	75.9	75.9	75.0	74.3	74.6	74.5	74.1	74.0	74.0	73.9	76.1	
6	73.8	74.1	73.8	73.6	73.2	73.5	73.5	73.7	74.1	74.3	74.8	75.1	75.9	76.1	76.4	76.6	76.2	76.5	76.4	76.7	77.0	77.1	77.3	77.8	75.2	
7	77.7	77.8	78.0	78.1	78.2	78.5	78.6	78.9	79.0	79.0	79.3	79.6	80.0	80.8	80.3	80.9	80.6	80.5	80.1	80.0	80.0	80.5	80.6	80.6	79.4	
8	80.0	79.9	80.1	80.1	80.7	81.0	81.1	81.7	82.0	81.7	80.7	80.2	80.1	80.0	79.5	79.6	80.2	80.6	80.0	79.8	79.9	79.8	79.8	80.3	80.4	
9	79.0	77.8	76.9	76.1	76.0	75.8	75.4	75.0	75.7	76.2	77.0	77.8	77.9	75.6	76.7	76.4	76.9	76.8	75.4	75.0	74.2	75.2	75.4	75.6	76.4	
10	75.8	75.8	75.7	76.0	76.0	76.1	76.6	77.0	76.7	75.8	74.6	76.0	74.0	74.8	65.5	74.5	73.0	73.2	73.2	73.3	73.5	73.2	73.0	73.0	74.9	
11	72.0	73.9	72.9	73.1	73.0	73.5	73.8	74.3	74.5	75.0	74.8	75.6	76.0	76.4	76.3	75.7	75.0	74.9	74.7	74.3	74.0	73.9	72.9	71.9	74.3	
12	72.3	72.8	74.9	74.8	74.5	74.1	73.9	74.3	74.0	73.9	73.9	75.0	75.9	75.1	76.0	76.6	75.0	74.0	74.4	74.1	74.0	73.8	73.7	73.1	74.3	
13	73.5	72.6	71.3	71.5	71.9	72.4	72.5	72.9	73.0	73.5	73.6	74.0	74.6	74.0	73.8	74.0	74.0	75.4	76.3	76.9	76.9	76.3	76.6	76.5	74.0	
14	76.1	76.3	76.5	76.5	76.2	76.0	75.8	75.5	75.4	76.0	77.0	77.3	77.3	77.4	77.2	76.4	76.4	75.8	75.7	75.8	75.8	75.8	75.8	75.8	76.3	
15	75.9	76.0	77.6	78.0	80.0	80.1	80.2	81.0	81.2	81.0	81.1	82.7	82.6	82.6	82.1	82.3	81.8	81.3	81.1	80.7	80.1	80.0	79.7	79.1	80.3	
16	78.9	78.5	78.8	78.7	79.2	79.6	79.9	80.8	81.2	81.3	81.9	81.5	81.2	81.2	80.2	79.5	77.9	77.2	77.3	76.9	76.0	75.1	75.3	75.2	79.0	
17	74.1	73.6	73.9	73.6	74.0	73.8	73.3	73.4	72.2	74.6	74.9	75.9	76.4	76.7	76.1	76.0	75.9	75.6	75.6	75.5	75.5	75.9	74.9	76.0	74.9	
18	75.0	76.2	75.8	76.0	76.1	76.6	76.8	76.9	77.1	77.6	78.0	78.3	78.1	78.3	78.5	78.4	78.4	78.7	78.2	78.3	78.8	79.3	79.6	79.9	77.6	
19	80.0	80.0	79.9	79.9	80.0	80.1	80.2	79.9	79.6	81.0	82.7	81.9	81.5	82.1	82.2	79.6	79.1	79.0	78.5	78.8	78.8	78.1	77.9	78.1	80.1	
20	77.8	77.7	77.2	77.2	77.0	76.7	76.7	76.8	77.0	77.9	78.2	78.5	78.2	78.1	77.8	77.9	77.7	77.2	76.9	76.9	76.9	77.0	76.8	76.2	77.4	
21	75.2	74.2	73.9	73.5	72.7	72.1	72.0	71.8	73.6	76.4	78.9	81.6	81.6	81.0	80.6	79.6	79.3	79.1	78.7	78.6	78.5	78.6	78.4	77.0		
22	78.4	79.1	78.5	78.4	78.7	78.8	78.7	79.0	80.1	80.8	81.1	81.9	83.0	82.9	82.0	81.7	80.2	77.8	78.2	78.1	77.6	77.5	77.4	76.9	79.5	
23	75.9	75.7	75.9	75.5	75.2	75.2	75.3	75.0	75.9	76.4	76.8	77.2	77.6	77.4	77.5	77.2	76.7	76.0	75.7	75.4	75.5	75.6	76.0	76.1		
24	76.8	76.8	76.8	76.7	76.4	76.3	75.8	75.7	75.9	75.6	75.3	75.2	74.9	74.9	74.6	74.2	74.0	73.9	73.6	73.5	73.5	73.5	72.8	71.0	75.0	
25	70.4	70.0	69.3	69.1	68.8	68.8	68.4	69.5	72.0	75.7	79.1	80.8	82.1	83.1	83.5	83.0	79.5	76.9	76.7	75.4	75.3	74.6	73.8	73.4	74.9	
26	73.8	73.1	72.9	72.6	74.3	75.0	75.0	75.7	77.2	80.0	82.0	82.8	83.2	83.5	83.6	83.2	80.6	77.3	77.2	77.0	75.3	75.0	75.7	74.9	77.5	
27	73.7	73.0	71.9	71.9	73.0	73.2	73.8	74.1	76.7	80.0	82.8	83.3	84.1	84.0	84.0	83.0	81.2	78.2	77.3	76.3	75.5	74.8	74.3	73.5	77.3	
28	72.4	72.4	72.3	72.0	72.0	71.6	71.9	72.7	74.1	76.0	76.6	78.1	79.5	81.4	82.4	81.9	81.0	77.1	76.0	74.9	74.7	76.0	74.6	75.5	75.7	
29	75.5	75.5	75.1	75.1	75.1	75.6	75.5	75.6	76.0	76.1	77.1	78.6	78.7	78.1	77.7	77.0	76.7	76.0	75.9	75.7	76.6	76.7	76.5	76.6	76.3	
Mean	...	75.6	75.5	75.4	75.3	75.4	75.5	75.5	75.7	76.1	76.9	77.5	78.2	78.3	78.8	78.8	78.0	77.3	76.6	76.5	76.2	76.1	76.0	75.8	75.8	76.5
Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean	



Readings in degrees absolute at exact hours, Greenwich Mean Time.

184. Eskdalemuir : Louvred Hut :  $h_t$  (height of thermometer bulb above ground) = 0.9 metres.

March, 1928

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean
Day.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.
1	76.0	75.8	75.8	75.7	76.0	76.1	76.2	76.4	76.9	77.0	77.1	77.3	77.4	77.6	77.7	77.8	78.2	78.1	78.3	78.4	78.5	78.7	78.7	78.6	77.2
2	78.2	77.9	77.8	77.5	77.4	76.4	76.0	76.0	76.4	77.1	77.9	78.7	79.0	80.1	80.8	81.2	79.9	77.0	77.7	78.3	77.9	78.0	77.9	77.7	78.1
3	77.6	77.7	77.8	78.0	78.3	78.3	78.3	78.5	79.1	80.2	81.3	81.1	81.8	83.8	83.1	82.9	81.9	80.7	80.0	80.6	80.1	79.7	78.8	78.5	79.9
4	78.5	78.5	77.9	76.0	76.8	76.7	76.8	77.5	78.2	79.7	80.7	83.0	84.4	85.5	84.8	84.8	84.0	81.0	79.9	79.0	77.9	78.0	77.6	77.7	79.8
5	77.6	77.8	78.5	78.6	79.0	80.0	79.9	80.0	80.5	81.1	81.1	81.0	81.0	81.0	80.5	80.1	80.0	79.8	79.7	78.7	77.9	77.8	77.7	77.7	79.5
6	77.8	77.7	77.8	76.9	76.7	76.2	76.1	76.0	76.1	76.2	76.3	76.6	76.5	76.9	76.7	76.9	75.5	74.2	72.4	72.0	71.6	70.9	70.2	70.0	75.3
7	70.3	70.2	72.2	72.3	72.0	73.1	73.9	74.3	74.8	75.6	75.4	75.9	76.9	76.6	76.3	76.2	76.0	75.7	75.4	75.7	75.5	75.1	75.0	75.0	74.5
8	74.9	74.0	74.5	74.1	74.0	74.1	73.9	74.2	75.5	76.6	75.3	75.9	76.4	77.0	75.5	75.8	75.7	74.8	74.0	73.7	73.0	73.2	72.0	71.9	74.6
9	71.9	72.1	72.2	73.0	72.8	72.7	72.2	73.2	74.1	74.0	74.2	75.4	75.8	74.2	75.7	75.3	74.7	74.3	73.6	73.5	73.3	72.9	73.1	72.5	73.6
10	72.5	71.9	71.4	71.2	71.7	71.9	72.1	72.0	73.4	73.8	73.1	74.5	73.6	71.1	72.0	72.0	70.2	70.2	70.0	70.1	69.9	69.9	69.4	69.3	71.8
11	69.5	69.9	70.3	69.9	69.6	69.8	69.5	70.5	70.9	71.8	72.0	71.8	73.1	71.9	72.5	70.9	70.1	70.0	69.8	70.1	69.9	69.9	69.9	70.0	70.6
12	70.2	70.3	70.3	70.2	70.2	70.4	70.7	71.0	71.2	71.4	71.6	71.8	73.1	71.0	71.0	70.5	70.8	70.3	69.6	68.2	68.7	69.8	70.0	68.3	70.8
13	67.6	68.8	67.3	69.9	70.7	70.9	71.1	71.1	72.6	72.5	72.9	73.0	73.3	73.5	73.3	73.3	72.8	72.6	72.4	72.5	72.3	72.1	71.9	71.3	71.5
14	71.1	71.7	71.9	71.9	71.8	71.9	72.0	72.7	73.0	73.0	74.0	74.1	74.2	74.1	74.2	74.1	74.0	74.0	73.9	73.9	73.9	73.9	74.0	73.9	73.2
15	73.9	73.9	73.8	73.8	73.7	73.7	72.2	73.6	75.1	75.7	75.8	75.7	76.2	76.8	76.6	75.6	74.8	74.3	74.1	73.9	74.6	74.4	73.1	72.7	74.5
16	72.7	74.1	74.6	74.7	74.9	75.2	75.3	75.9	76.6	77.3	77.8	79.0	80.1	80.2	80.0	80.4	79.8	79.6	79.9	79.5	79.1	78.9	78.7	78.7	77.5
17	78.7	78.6	78.8	79.2	79.5	79.8	80.2	81.5	81.8	82.0	83.0	83.0	82.4	81.7	81.0	81.2	80.5	80.2	80.0	80.5	80.0	79.6	78.8	78.0	80.4
18	77.9	77.2	78.5	78.1	77.8	77.5	77.5	77.8	78.2	78.5	78.9	79.1	80.0	79.1	79.2	79.0	78.8	78.5	78.4	78.7	78.8	78.9	79.0	78.9	78.5
19	79.0	78.8	78.2	77.5	77.3	77.7	78.0	79.0	80.0	80.7	81.0	81.4	81.8	82.0	82.3	82.2	82.2	82.1	82.3	82.4	82.3	82.1	82.1	81.9	80.5
20	81.8	82.0	82.2	82.0	82.0	81.9	82.1	82.3	82.8	82.8	83.4	83.5	84.0	84.5	84.1	84.0	83.6	82.4	81.5	80.7	79.9	79.0	79.0	79.0	82.8
21	78.6	78.1	77.7	77.2	76.6	76.0	76.0	75.9	75.9	76.0	77.1	77.5	77.5	77.6	76.0	74.9	73.8	73.0	72.6	72.1	71.9	71.2	71.2	71.2	75.7
22	71.7	71.7	71.0	70.9	71.0	70.7	71.0	72.3	73.3	73.9	74.0	73.8	73.8	73.9	74.2	74.0	74.0	74.1	74.2	74.5	74.5	74.4	73.9	74.7	73.1
23	74.9	75.0	75.3	75.3	75.9	76.2	76.8	77.2	77.8	77.3	78.2	79.3	80.6	79.9	79.8	79.8	79.4	78.8	78.5	78.6	78.6	79.3	79.7	79.7	77.9
24	80.0	79.9	79.9	80.0	79.4	79.4	79.3	79.5	79.9	79.8	79.9	79.7	79.9	79.9	79.7	79.5	79.1	78.9	78.8	78.8	78.8	78.8	78.3	77.7	79.5
25	77.8	77.7	77.6	77.6	77.6	78.0	79.0	79.5	79.9	80.0	80.6	80.8	81.0	81.9	82.0	81.3	80.9	80.4	78.9	77.5	77.2	76.9	77.1	77.0	79.1
26	76.7	75.6	75.0	75.2	74.9	75.0	75.6	76.9	78.9	79.6	80.0	80.3	81.3	82.0	80.5	79.9	79.8	78.8	76.9	76.5	76.0	76.2	76.6	76.7	77.7
27	77.0	77.0	77.5	77.4	77.3	77.9	77.3	77.8	78.2	79.0	80.0	80.3	81.3	82.0	81.7	80.4	79.4	78.1	77.4	76.3	76.0	75.8	75.9	78.3	77.7
28	74.8	73.7	74.1	74.1	74.6	74.4	74.6	75.1	75.9	76.5	78.6	78.5	79.9	78.4	80.0	78.4	76.4	76.5	75.4	74.5	73.8	74.0	74.2	74.5	75.9
29	75.0	75.4	75.0	75.0	74.3	74.3	74.4	75.0	75.0	74.0	73.8	73.4	73.5	73.9	75.2	76.2	76.5	76.0	75.9	75.9	75.5	75.0	74.5	74.5	74.9
30	75.0	74.6	74.5	74.2	74.0	73.5	73.2	74.3	75.0	76.7	77.0	77.7	78.5	78.8	78.1	77.1	75.1	74.7	74.7	75.4	76.0	76.4	76.4	76.4	75.7
31	76.8	76.9	77.0	76.9	76.4	76.8	77.0	77.2	77.0	77.5	78.0	79.5	78.1	78.1	78.7	77.6	77.6	77.1	76.9	76.6	76.2	75.7	75.8	76.0	77.1
Mean	...	75.4	75.3	75.4	75.3	75.4	75.4	75.9	76.5	76.9	77.3	77.7	78.2	78.2	78.3	78.0	77.5	76.9	76.3	76.1	75.8	75.7	75.5	75.4	76.4

185. Eskdalemuir : Louvred Hut :  $h_t$  = 0.9 metres.

April, 1928.

	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.
1	76.1	76.2	75.2	74.8	75.2	75.1	76.4	77.0	78.0	79.0	79.0	78.5	80.0	79.8	80.0	81.5	81.1	79.7	78.7	77.5	76.4	76.7	75.6	75.8	77.6
2	75.5	75.2	75.1	75.0	74.8	75.1	75.2	76.0	80.0	81.9	82.9	83.0	82.0	82.7	81.4	79.9	79.0	78.0	77.8	77.9	78.3	78.5	78.3	78.5	79.3
3	78.7	79.2	79.3	79.6	79.3	79.1	79.2	79.4	79.5	79.9	79.4	76.6	78.5	79.5	79.5	76.0	78.4	77.5	76.1	75.5	76.1	75.9	76.0	75.9	78.1
4	76.0	75.9	75.5	75.5	75.5	75.4	75.2	76.6	77.1	78.4	79.0	79.9	76.7	80.1	80.9	80.0	79.5	78.3	76.0	75.0	73.0	73.0	72.5	72.6	76.6
5	72.9	73.9	74.2	73.8	72.8	72.0	73.0	74.8	76.2	77.4	77.8	77.2	78.0	79.5	80.0	79.6	78.5	77.6	75.9	75.3	73.6	73.6	73.5	74.8	75.6
6	75.9	76.0	75.5	74.1	76.0	76.1	76.2	77.0	77.4	78.8	79.8	80.5	81.1	80.5	81.1	81.1	80.8	79.8	75.9	75.1	73.0	72.8	72.9	73.1	77.1
7	73.3	74.1	75.2	75.2	75.4	76.9	77.2	78.3	79.9	81.6	82.5	82.1	81.4	81.3	81.8	82.4	82.9	82.4	80.9	80.3	79.1	78.8	78.8	78.7	79.1
8	78.6	78.2	78.5	77.8	77.7	77.5	77.5	77.9	78.2	78.1	78.3	78.9	79.7	79.9	79.9	79.1	80.4	79.5	78.0	77.0	78.1	79.3	80.5	80.8	78.7
9	80.6	81.2	81.7	81.9	81.9	81.9	81.9	82.5	83.2	83.4	84.3	85.6	86.1	86.6	86.5	86.9	86.4	85.7	85.8	85.1	85.0	84.9	84.6	83.9	84.0
10	83.5	83.3	83.1	83.2	82.0	82.0	83.2	85.6	84.8	85.0	85.3	86.1	86.0	86.9	83.0	81.9	80.6	80.6	80.4	78.9	76.5	76.3	76.0	75.5	82.2
11	74.8	75.1	78.0	78.9	79.1	79.2	79.4	79.8	80.0	80.5	81.1	81.7	83.7	84.3	85.5	85.7	85.0	82.5	81.0	79.6	79.7	79.9	78.8	79.1	80.4
12	79.4	78.8	78.1	78.8	79.2	79.3	80.0	81.8	82.1	82.0	81.4	81.6	81.0	81.2	81.9	80.1	79.0	78.6	78.1	78.0	77.5	77.1	77.0	77.1	79.6
13	77.1	77.1	77.1	77.5	77.8	78.4	78.8	78.6	78.7	78.5	78.1	77.8	77.5	77.1	76.9	76.8	76.6	76.3	76.2	76.1	76.2	76.2	76.1	76.0	77.3
14	75.9	75.9	75.7	75.2	75.1	75.1	75.4	75.1	75.2	75.5	75.2	75.0	75.8	74.9	74.9	74.5	74.3	73.6	73.1	73.1	73.1	73.1	73.1	73.1	74.7
15	73.1	73.0	73.1	73.1	72.9	72.9	73.3	74.3	74.4	75.4	76.6	75.5	76.2	75.5	75.5	75.1	74.7	73.3	73.3	72.9	73.3	72.9	73.0	73.0	74.0
16	73.0	73.0	73.0	73.0	72.4	72.8	74.0	75.7	75.9	76.4	76.9	77.9	79.5	80.0	80.5	79.1	80.0	78.6	77.8	76.5	76.2	76.0	75.2	74.9	76.1
17	75.9	74.5	74.1	73.7	72.5	73.1	73.5	74.7	75.5	75.9	76.0	76.5	77.9	79.0	80.0	77.5	77.1	77.0	76.7	75.0	74.7	73.9	73.8	73.1	74.9
18	71.5	70.5	71.5	69.5	71.0	72.5	71.5	73.2	76.3	77.5	78.4	79.2	80.0	80.0	80.0	77.3	75.2	75.1	75.1	73.6	72.6	72.5	71.9	73.0	74.2
19	72.2	73.1	73.6	73.6	73.7	73.7	74.5	76.2	76.7	78.2	79.5	80.3	79.6	79.6	79.4	79.6	79.0	78.8	77.0	74.9	74.0	74.4	71.8	73.0	76.1
20	73.8	74.1	74.1	71.5	72.8	73.8	75.5	76.9	77.4	78.1	79.3	80.0	80.5	81.0	80.5	80.0	80.1	79.1	76.4	73.9	72.5	72.3	72.9	74.1	76.3
21	74.5	74.4	74.8	74.6	74.7	74.6	75.4	76.7	77.6	77.9	79.0	79.6	79.5	81.0	81.6	81.0	80.9	79.9	77.8	73.0	74.0	73.1	72.9	72.7	76.7
22	72.4	73.1	73.0	73.0	73.4	73.7	74.3	78.2	81.1	80.9	80.4	82.5	82.6	83.9	84.0	83.0	82.6	81.1	79.9	78.1	77.9	75.1	76.2	75.7	78.1
23	77.5	78.0	78.1	78.2	78.2	78.8	78.9	79.5	79.5	80.0	80.0	80.4	80.7	81.0	81.5	81.0	80.8	80.6	81.0	80.6	80.4	80.0	80.0	80.0	79.7
24	80.1	80.1	80.1	80.1	80.0	80.0	79.9	80.0	80.0	81.6	83.6	85.4	86.2	86.0	86.0	85.9	84.6	84.5	82.4	80.8	78.7	78.0	77.5	80.3	81.7
25	81.1	81.1	80.8	79.5	78.6	79.0	82.0	84.0	84.9	84.5	83.9	83.6	83.6	83.6	83.5	83.0	82.5	81.8	81.4	81.6	81.0	80.7	80.8	82.0	
26	80.7	80.9	80.8	80.5	80.2	80.8	82.1	85.0	85.9	88.4	90.8	91.1	91.4	91.8	91.8	91.4	90.8	89.8	88.3	87.0	86.4	85.3	84.6	83.3	86.1
27	82.8	82.1	82.5	82.0	83.4	82.1	82.9	84.1	83.8	83.6	86.0	87.6	88.4	87.7	86.7	85.7	85.2	83.1	81.1	80.5	80.3	80.1	80.0	79.6	83.5
28	79.5	79.0	78.9	78.9	79.2	79.9	80.7	80.1	80.5	80.9	81.0	82.4	83.0	86.5	86.2	85.4	83.9	83.3	82.5	81.5	80.9	80.6	79.4	78.4	81.4
29	78.7	79.0	79.0	78.6	78.5	78.5	78.7	79.9	80.4	81.9	82.0	82.6	84.4	84.6	85.6	85.0	84.1	82.3	81.4	80.9	80.9	80.6	80.0	79.8	81.0
30	79.5	79.4	79.0	79.0	78.1	78.1	78.4	79.5	80.4	83.1	86.1	87.3	86.0	84.5	84.1	81.8	80.6	80.4	79.9	79.4	79.4	79.6	79.9	79.9	81.0
Mean	...	76.8	77.0	76.7	76.7	76.9	77.5	78.6	79.3	80.1	80.8	81.2	81.5	81.8	81.2	80.8	80.0	78.8	77.8	77.3	77.0	76.8	76.8	78.7	
Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean



Readings in degrees absolute at exact hours. Greenwich Mean Time.

186. Eskdalemuir : Louvred Hut :  $h_t$  (height of thermometer bulb above ground) = 0.9 metres.

May, 1928.

Hour G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean	
Day.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	
1	80.1	80.6	79.9	80.2	80.1	80.4	81.6	82.1	82.5	83.9	84.2	85.0	87.5	88.7	88.7	90.0	89.7	84.2	83.9	83.5	83.0	82.1	80.6	80.7	83.5	
2	81.4	82.0	82.0	81.3	81.1	81.8	82.6	83.8	83.7	84.9	85.0	88.0	88.5	89.0	88.5	88.8	87.8	85.4	84.2	82.4	81.9	81.5	81.0	80.1	84.0	
3	80.1	79.9	79.8	79.9	80.0	80.1	80.2	80.2	80.1	80.5	80.8	80.0	79.9	80.8	80.9	80.1	79.9	79.1	78.9	78.7	78.6	78.5	78.6	78.7	79.8	
4	78.8	78.9	79.0	78.8	78.5	78.9	79.7	80.0	80.2	83.1	86.0	87.9	88.5	87.9	87.5	86.8	85.2	83.8	81.4	79.5	78.4	77.4	76.8	76.7	81.7	
5	76.6	76.0	76.5	76.8	77.0	78.1	78.8	81.6	85.2	87.0	88.1	90.0	90.0	90.2	90.7	90.3	89.3	87.0	84.9	81.8	80.9	80.4	79.1	78.5	83.1	
6	78.4	77.0	76.5	77.0	76.6	77.5	80.4	84.1	87.4	88.8	90.0	91.1	92.0	92.5	91.9	92.7	89.8	88.4	86.1	84.9	83.1	82.5	80.3	79.8	84.5	
7	79.8	78.4	78.5	78.7	78.7	79.5	80.9	82.3	81.0	81.4	83.7	83.5	83.8	84.0	83.4	83.5	83.0	82.3	80.5	78.2	76.2	77.0	76.1	76.0	80.5	
8	74.1	73.9	73.8	73.9	76.4	76.5	79.1	80.1	78.6	78.9	79.8	80.1	81.7	81.7	81.7	80.5	80.0	79.9	79.1	77.8	75.1	74.0	73.4	73.3	72.6	
9	72.1	71.5	72.1	72.6	72.1	75.9	77.8	78.5	79.8	79.1	80.0	80.6	81.2	80.9	82.3	82.4	82.1	81.6	79.7	77.8	76.3	75.4	73.7	72.1	77.4	
10	71.0	70.0	69.5	69.0	68.8	71.5	75.8	79.7	83.1	82.7	83.5	83.1	84.0	84.7	85.0	83.8	80.6	79.3	78.3	77.9	77.5	77.0	77.0	76.3	77.8	
11	73.0	71.5	71.0	70.1	71.0	73.6	77.1	81.6	82.5	83.0	82.0	84.0	82.8	84.0	84.5	83.9	83.5	83.2	83.1	82.9	82.7	82.1	81.9	81.3	79.7	
12	81.0	81.0	80.9	80.7	80.6	80.6	81.0	83.0	83.2	83.5	84.5	84.2	85.0	85.0	84.9	85.0	85.9	85.5	84.3	83.0	82.5	83.0	82.0	81.4	83.0	
13	81.9	81.1	80.9	80.6	80.5	81.0	81.7	82.7	83.1	83.5	83.0	84.0	85.1	85.1	85.5	86.4	87.0	84.7	83.8	82.0	81.3	81.5	80.2	80.1	82.8	
14	80.1	79.0	78.0	77.5	76.9	80.0	81.1	81.1	81.8	81.0	81.7	83.9	84.8	83.6	84.3	83.7	83.4	83.3	81.9	80.3	78.8	78.1	76.0	76.0	80.9	
15	73.9	72.5	73.0	73.2	73.8	74.1	75.7	78.0	80.0	80.6	81.5	81.5	83.7	83.4	85.3	85.8	86.1	84.7	84.0	82.5	81.0	80.1	79.5	78.0	79.6	
16	77.0	76.2	76.0	75.9	76.1	76.6	76.8	78.0	78.0	81.0	79.9	80.0	80.0	79.5	81.0	80.0	80.1	80.4	79.8	78.0	77.3	77.1	76.4	75.8	78.3	
17	76.0	76.0	76.2	76.1	76.3	76.9	77.1	77.7	78.3	78.8	79.4	79.5	81.5	79.5	80.5	80.5	81.4	80.3	78.1	78.1	77.8	76.6	77.0	77.3	78.2	
18	76.9	76.9	76.9	76.7	76.6	78.0	79.4	79.4	79.0	80.2	80.5	82.5	82.0	82.9	83.8	83.8	82.8	81.0	80.4	79.4	79.5	79.0	78.4	77.9	79.7	
19	77.2	76.2	76.9	77.0	77.8	78.7	79.1	79.5	80.3	80.3	79.0	78.5	78.6	78.6	79.4	80.6	79.7	78.5	78.7	77.8	77.2	75.9	75.4	76.6	78.3	
20	76.7	76.1	75.6	75.6	76.9	77.1	78.1	80.0	78.6	80.4	80.3	81.0	82.0	82.9	82.0	83.0	82.8	82.0	80.0	78.5	77.0	76.1	76.4	77.0	79.0	
21	77.5	77.5	77.9	77.9	78.0	78.5	79.2	80.1	82.0	82.9	84.3	84.8	84.9	84.4	84.3	83.9	83.7	82.7	81.3	79.3	77.9	76.5	76.9	75.8	80.5	
22	75.3	75.9	74.9	74.0	76.0	78.5	79.0	79.6	80.3	81.2	82.1	83.7	83.0	83.3	83.3	84.2	82.9	81.5	80.7	78.9	77.0	77.1	77.0	76.8	79.4	
23	76.6	76.6	76.5	77.0	77.3	77.9	78.5	79.1	81.4	81.3	81.1	80.7	81.5	81.9	82.5	82.9	83.0	82.5	82.0	80.3	79.2	79.8	79.6	79.5	79.9	
24	79.2	79.5	79.5	78.4	78.6	80.0	81.8	82.7	83.9	84.9	86.1	85.5	85.9	86.1	87.4	86.8	86.5	86.0	85.8	84.1	82.1	80.6	77.9	76.9	82.8	
25	76.0	76.1	75.8	75.5	76.0	77.1	79.7	83.4	85.8	87.3	87.3	88.4	89.6	89.7	90.2	90.2	90.1	88.8	87.0	84.0	80.8	79.5	78.6	78.4	83.1	
26	77.9	78.3	77.8	77.6	77.9	80.0	83.7	85.9	86.4	87.3	88.1	88.8	89.0	88.7	88.9	86.2	85.4	85.1	84.9	84.6	84.2	83.9	83.7	83.4	84.0	
27	82.8	82.8	82.8	82.9	83.0	83.4	83.7	84.0	84.3	84.7	85.3	86.2	86.9	88.5	89.8	89.7	89.5	88.0	87.4	87.2	85.5	85.2	84.8	84.9	85.5	
28	85.5	85.7	85.7	85.6	85.3	85.8	86.3	86.5	87.0	87.4	88.6	89.0	90.2	90.1	90.5	91.3	91.1	91.7	91.6	88.7	86.6	85.5	83.9	84.8	87.7	
29	84.9	85.0	84.6	84.2	84.8	85.7	86.3	87.1	89.1	88.9	89.9	90.7	91.6	91.3	91.0	89.9	89.5	88.1	87.3	86.5	86.4	85.8	84.6	84.2	87.4	
30	84.2	84.0	84.0	83.2	83.0	83.7	85.0	87.8	88.5	89.0	90.9	91.2	91.7	91.5	91.1	90.2	89.7	88.2	85.8	83.2	81.2	80.9	80.5	80.4	86.3	
31	80.1	80.0	79.9	79.9	79.5	79.0	78.5	79.5	80.5	82.6	83.5	84.0	84.0	83.5	83.4	82.5	82.1	82.3	83.0	82.8	82.0	81.5	81.0	81.0	81.5	
Mean	...	78.3	77.9	77.8	77.7	77.9	78.9	80.2	81.6	82.4	83.2	83.9	84.6	85.2	85.3	85.6	85.4	85.0	83.8	82.8	81.4	80.3	79.7	79.0	78.7	81.5

187. Eskdalemuir : Louvred Hut :  $h_t$  = 0.9 metres.

June, 1928.

	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.
1	81.0	80.2	79.9	80.0	80.0	81.7	83.9	85.2	87.0	88.1	88.4	88.8	88.7	88.8	88.4	88.0	87.5	86.8	85.5	82.8	79.4	78.2	77.2	78.3	83.9	
2	77.7	75.8	76.7	76.0	78.0	80.7	83.9	85.3	86.8	88.8	89.8	90.3	91.0	91.7	91.8	92.5	92.5	91.8	91.2	87.0	83.7	80.7	80.6	79.0	85.1	
3	77.8	77.0	76.6	75.8	77.1	80.3	85.0	89.0	90.7	91.5	92.0	92.6	93.1	93.4	93.4	93.3	92.9	92.4	90.9	86.8	84.9	82.6	80.8	79.0	86.2	
4	77.9	76.6	76.4	76.1	79.8	81.0	81.8	82.8	83.1	84.3	85.4	83.9	81.9	82.4	82.9	82.3	81.9	81.0	79.5	78.0	75.8	74.7	73.3	73.1	79.9	
5	74.9	74.1	74.6	74.3	74.8	76.9	78.7	80.3	80.5	81.3	81.5	82.0	83.0	84.1	85.0	85.8	86.1	86.2	85.8	81.6	78.6	77.1	76.2	75.0	79.9	
6	73.9	73.4	73.2	73.4	74.6	77.5	81.9	83.8	84.5	83.7	83.9	84.1	84.9	86.3	87.3	88.4	89.2	88.3	85.9	85.2	84.0	84.3	84.2	83.1	82.3	
7	82.5	81.2	80.9	81.0	81.8	82.8	84.0	84.5	85.9	86.6	87.0	88.1	90.3	86.9	85.4	85.4	84.8	82.9	81.6	81.0	80.2	80.1	80.2	80.2	83.6	
8	79.8	79.7	79.7	79.4	79.0	79.2	79.2	79.6	79.9	81.5	81.4	81.9	81.7	81.5	81.4	80.9	80.7	80.5	80.1	80.0	79.8	79.7	79.3	79.1	80.2	
9	79.1	79.3	79.4	79.8	80.2	80.4	80.6	80.9	81.6	82.1	83.6	84.7	85.3	85.8	85.9	86.2	85.8	86.4	84.7	83.0	83.0	82.9	83.1	83.2	82.7	
10	83.0	82.7	83.2	82.7	83.0	81.9	81.4	81.5	81.9	81.3	81.8	82.1	82.3	81.5	81.8	81.4	80.8	80.6	80.3	79.3	78.0	78.5	78.0	77.5	81.2	
11	77.0	76.5	74.9	76.2	76.7	78.0	79.4	80.5	83.7	82.4	83.0	84.6	83.3	84.0	85.1	84.6	84.1	83.9	82.0	81.1	79.1	79.1	78.4	78.1	80.6	
12	78.0	78.2	78.1	77.4	78.5	79.5	81.0	81.3	81.8	84.2	84.1	85.0	86.3	86.0	84.9	84.7	83.4	83.8	82.9	82.0	81.7	81.1	80.8	80.6	81.8	
13	80.2	79.9	79.4	79.5	79.8	80.1	80.3	80.6	80.8	80.9	81.0	81.3	81.4	81.1	81.1	80.8	80.7	80.5	80.5	80.4	80.5	80.7	80.4	80.4	80.5	
14	80.0	79.5	79.6	78.8	78.7	78.3	78.2	78.2	78.1	78.4	78.7	79.8	80.7	81.1	82.2	82.6	81.8	82.4	81.8	80.0	76.8	77.2	78.5	77.0	79.6	
15	77.1	77.2	77.5	77.3	78.9	78.8	78.8	80.1	80.5	80.0	80.4	82.0	82.6	82.0	82.1	82.0	82.0	82.0	81.0	79.7	78.1	78.2	77.1	77.8	79.7	
16	77.4	77.0	75.6	75.4	77.0	78.9	80.1	81.2	81.9	83.6	84.0	85.2	85.4	85.3	85.9	86.6	85.8	84.9	83.8	81.2	80.5	80.0	79.5	78.6	81.4	
17	77.3	77.0	78.8	78.8	78.3	79.1	80.0	81.2	80.8	81.8	81.5	81.1	85.0	83.6	85.0	84.3	82.0	80.6	81.3	80.4	80.0	78.6	79.9	75.7	80.4	
18	76.3	75.9	76.3	76.6	77.4	79.0	80.2	80.9	80.9	82.3	83.0	84.4	84.7	85.3	85.0	84.0	85.0	84.1	83.7	82.0	80.4	79.9	79.4	79.4	81.0	
19	79.6	79.7	79.6	79.4	79.3	79.6	79.8	79.8	80.1	81.3	82.1	82.9	84.4	85.5	84.9	85.2	84.0	83.8	82.8	81.5	80.7	81.0	80.0	81.6	83.0	
20	78.6	78.6	78.8	77.4	80.9	81.4	83.9	83.9	85.2	85.9	85.1	86.7	85.9	86.3	86.3	86.7	87.6	87.2	86.1	84.2	81.3	78.9	77.8	76.4	83.0	
21	75.2	75.5	74.9	75.2	76.0	78.7	81.0	83.0	83.2	83.9	83.9	83.3	83.0	83.7	84.9	85.2	85.2	85.4	84.9	84.9	84.7	84.6	84.7	84.4	81.9	
22	84.1	84.0	84.0	84.0	83.8	83.9	84.3	84.6	84.5	85.0	84.8	85.9	85.5	86.1	86.0	85.6	85.2	84.9	84.6	83.7	83.3	83.7	83.4	83.2	84.5	
23	82.8	82.8	82.7	82.8	82.3	82.5	83.3	83.9	84.5	85.0	85.6	86.0	86.4	86.5	84.2	84.5	84.0	83.1	82.6	82.7	82.1	81.0	81.0	81.0	83.5	
24	79.0	79.0	80.2	79.9	80.8	81.8	82.5	83.0	84.3	85.8	85.3	86.1	87.5	88.2	88.0	87.6	87.8	87.4	85.8	83.7	83.8	83.6	82.7	84.0	83.5	
25	82.4	83.1	83.1	82.9	82.9	83.1	82.8	82.8	83.4	83.3	83.8	84.6	84.4	84.2	83.6	84.1	84.4	84.9	84.0	83.7	82.8	83.0	83.0	82.9	83.5	
26	83.0	83.0	82.8	82.8	82.8	82.9	83.7	83.8	83.5	84.0	84.4	83.7	84.0	84.6	84.8	84.7	84.8	84.0	83.0	82.8	82.2	81.6	80.7	80.3	83.3	
27	79.9	79.9	79.1	78.8	80.0	81.5	82.1	83.6	83.8	84.0	84.6	85.6	86.8	86.2	87.0	86.5	86.6	85.3	85.0	84.0	82.3	80.1	81.4	81.7	83.1	
28	81.6	81.5	81.7	82.0	82.8	82.9	83.1	83.3	83.5	83.7	83.2	83.9	84.1	84.2	84.9	84.9	84.9	84.9	84.6	84.8	84.9	84.6	84.5	84.4	83.6	
29	84.6	84.8	84.9	85.0	85.1	84.7	84.1	84.2	85.0	84.8	84.9	84.4	84.0	83.9	83.2	83.0	82.7	82.6	83.0	82.8	82.5	82.5	82.3	82.6	83.9	
30	82.3	82.1	81.9	81.9	81.9	81.9	82.0	82.2	83.3	83.8	82.9	84.6	85.0	86.7	83.8	83.6	83.9	84.7	84.3	83.2	82.0	81.2	81.4	80.7	83.0	
Mean	...	79.5	79.2	79.1	79.0	79.7	80.6	81.6	82.5	83.2	83.8	84.0	84.7	85.1	85.2	85.2	84.9	84.6	83.8	82.5	81.3	80.6	80.3	79.8	82.3	
Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean	



Readings in degrees absolute at exact hours, Greenwich Mean Time.

188. Eskdalemuir : Louvred Hut :  $h_t$  (height of thermometer bulb above ground) = 0.9 metres.

July, 1928.

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean
Day.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.
1	79.9	80.2	79.5	79.6	80.7	81.4	82.0	82.6	83.6	83.2	84.0	83.3	83.1	82.8	83.0	82.9	83.5	83.8	84.0	84.0	84.1	84.4	84.6	84.7	82.6
2	85.1	84.7	84.0	83.4	83.0	83.6	83.9	85.0	85.5	85.6	85.7	85.9	86.1	86.4	85.2	85.7	85.6	85.0	84.4	84.1	83.1	82.9	82.5	82.4	84.6
3	82.2	82.1	82.0	82.0	82.0	82.5	83.8	83.7	84.8	85.5	85.5	85.3	85.3	85.7	86.0	86.9	86.1	86.0	85.5	83.2	80.8	79.9	81.5	80.0	83.7
4	79.7	79.0	78.5	77.8	80.7	81.4	83.7	84.6	85.2	85.2	85.8	86.6	87.2	86.5	85.9	85.2	83.6	83.5	83.0	82.5	82.8	82.9	83.2	83.8	83.2
5	84.0	84.3	84.5	84.6	84.8	85.2	85.6	85.9	87.9	86.8	88.0	87.4	87.5	87.4	87.9	88.0	88.0	87.5	85.5	85.2	84.5	84.0	83.8	83.6	85.9
6	83.9	83.7	83.1	83.2	83.1	83.3	83.6	85.0	85.4	85.2	85.9	86.7	87.0	87.3	86.6	87.0	87.0	86.0	84.8	84.1	83.8	83.7	82.6	81.9	84.8
7	80.2	79.6	79.8	78.5	79.7	80.4	83.5	85.2	85.6	86.6	87.4	88.3	88.4	89.7	88.7	88.8	88.0	88.1	86.8	85.0	83.0	81.0	79.5	79.0	84.3
8	76.7	78.6	81.3	82.7	83.7	84.0	84.4	84.4	84.5	85.1	85.6	85.9	86.0	86.3	86.9	88.3	88.4	87.2	86.2	85.3	84.6	84.0	83.3	84.1	84.4
9	84.0	83.1	82.7	83.0	82.6	82.9	83.6	84.4	85.0	86.1	87.0	87.1	87.6	88.5	88.7	87.7	87.0	86.0	85.8	85.7	85.2	85.4	84.7	84.1	85.3
10	83.8	82.8	81.0	80.6	81.9	82.8	83.8	84.6	85.2	85.9	86.2	85.5	84.5	84.1	84.7	84.7	85.0	84.9	85.0	85.1	85.2	85.3	85.5	85.7	84.3
11	85.7	85.7	85.8	85.9	85.8	86.0	86.7	86.5	86.5	86.9	86.9	86.6	86.2	86.1	86.0	86.0	85.5	85.3	85.2	85.1	85.2	85.2	85.2	85.2	85.9
12	85.1	85.6	85.4	85.5	85.2	85.0	85.1	85.8	86.0	86.0	85.8	86.1	86.6	86.8	86.7	86.5	86.3	86.0	85.6	85.6	85.6	85.7	85.6	85.4	85.8
13	84.9	84.7	84.2	84.1	84.2	84.4	84.7	85.2	85.8	86.0	87.0	88.8	88.6	86.3	86.2	86.2	86.4	86.0	85.3	85.2	85.2	85.2	85.4	85.5	85.6
14	85.4	85.3	85.5	85.2	85.3	85.3	85.2	85.2	85.3	86.2	87.0	86.9	88.4	89.5	89.5	88.9	89.0	87.6	86.6	86.0	85.7	85.3	85.3	85.6	86.5
15	85.5	85.4	85.4	85.3	85.5	85.5	85.8	86.0	88.0	88.8	89.5	89.7	90.2	89.8	88.9	89.0	88.0	87.5	87.5	87.0	86.8	86.8	84.7	84.9	87.2
16	83.0	82.5	80.0	78.8	79.2	82.3	85.1	85.9	87.1	88.0	89.0	90.3	90.7	90.2	90.7	90.1	88.1	86.9	87.9	86.7	85.0	85.0	83.0	82.6	85.8
17	82.8	82.9	83.2	83.2	83.7	84.7	85.8	85.9	86.9	88.1	88.9	88.8	89.2	90.0	90.3	89.9	89.8	89.1	87.1	85.9	85.1	84.7	84.3	84.4	86.4
18	84.4	84.9	84.8	85.1	84.6	84.5	84.5	85.8	86.5	87.0	87.5	87.6	87.6	87.5	87.7	86.9	87.1	85.9	85.2	84.8	84.6	83.8	83.7	83.3	85.7
19	82.8	82.9	82.8	82.8	82.8	83.0	83.7	84.0	85.8	86.5	86.6	87.0	87.2	87.0	87.4	88.2	87.4	87.7	86.8	86.3	85.9	85.2	85.0	84.0	85.3
20	83.9	83.8	84.0	84.1	84.2	84.6	85.1	85.7	86.3	87.0	87.5	88.2	89.0	90.0	89.1	89.1	86.8	86.2	85.8	85.3	85.0	84.1	84.1	84.0	86.0
21	83.6	83.6	82.9	82.9	83.8	84.9	86.1	87.4	87.8	89.7	90.2	91.0	91.4	91.2	90.5	89.6	89.0	88.7	88.6	86.8	86.1	84.0	85.0	83.7	87.0
22	82.9	83.0	83.4	83.2	83.9	84.0	84.8	85.4	85.9	87.3	87.3	88.3	88.5	88.9	89.7	89.6	89.9	89.1	88.7	87.9	86.6	85.8	85.9	86.7	86.5
23	85.8	86.1	85.9	85.1	85.0	85.4	85.3	85.8	86.9	86.8	87.7	87.2	87.5	88.0	87.9	88.0	87.7	87.4	87.0	86.7	86.7	86.6	86.8	86.9	86.7
24	86.0	85.5	85.4	85.2	84.8	85.0	85.1	84.9	85.2	85.2	86.0	86.5	86.6	86.8	87.4	88.2	88.3	88.0	87.3	86.6	86.0	85.9	85.0	84.8	86.1
25	84.5	83.0	82.3	83.0	84.0	85.4	86.7	87.9	87.7	87.7	87.7	87.4	88.9	87.6	88.0	88.5	88.8	87.9	86.9	85.9	85.6	85.5	85.0	84.4	86.3
26	84.5	84.1	84.2	84.5	84.2	84.1	84.5	85.0	85.6	86.8	87.4	87.0	86.9	86.9	86.9	86.9	86.4	85.1	84.9	84.5	84.4	84.5	84.3	84.3	85.3
27	84.2	84.1	84.1	84.2	84.5	86.5	86.7	87.1	87.0	88.8	88.6	87.5	87.4	86.2	85.5	85.1	84.7	84.0	83.0	82.7	82.0	81.8	81.3	80.8	85.0
28	80.4	80.1	80.1	80.2	80.3	81.0	81.5	82.0	83.3	83.2	84.3	85.0	85.9	83.7	85.5	86.4	85.7	84.3	83.0	81.5	80.1	79.9	79.4	78.6	82.4
29	78.5	78.1	77.8	78.5	79.0	79.7	81.4	81.9	83.7	84.3	84.8	85.7	87.1	84.9	87.2	86.1	85.8	85.0	84.1	82.5	82.5	81.1	81.6	81.0	82.5
30	80.1	79.7	80.8	80.0	80.3	81.7	82.3	82.7	83.6	84.6	85.1	87.0	86.8	85.2	85.6	87.7	85.0	84.8	84.0	83.1	82.6	81.3	80.0	79.0	83.1
31	77.7	78.8	78.0	78.3	77.5	79.6	81.7	82.7	84.4	85.2	85.8	87.2	86.2	88.1	87.6	87.5	86.0	85.1	84.6	82.9	81.0	80.0	79.0	77.9	82.6
Mean	...	82.9	82.8	82.7	82.6	82.9	83.6	84.4	85.0	85.7	86.3	86.8	87.2	87.4	87.3	87.4	86.9	86.3	85.7	84.9	84.3	83.9	83.6	83.3	85.1

189. Eskdalemuir : Louvred Hut :  $h_t$  = 0.9 metres.

August, 1928.

	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.
1	78.0	78.2	77.3	76.8	77.6	80.0	82.7	84.9	85.4	85.6	85.9	85.5	86.8	85.1	84.7	85.0	84.3	84.0	83.0	82.1	82.1	81.2	81.0	80.9	82.4	
2	81.0	79.9	78.0	77.8	77.9	79.9	81.3	82.6	83.5	84.4	86.3	87.6	88.3	88.6	89.4	88.1	87.5	88.5	87.5	86.0	84.3	83.1	82.9	82.7	84.0	
3	82.2	82.2	81.9	81.9	81.7	82.1	83.4	84.8	85.9	81.4	88.2	88.0	88.9	89.8	90.7	90.7	90.0	89.6	89.0	85.8	85.0	84.7	84.1	84.5	85.9	
4	83.1	82.1	81.9	81.9	81.8	82.5	84.3	86.2	88.8	90.1	91.1	91.9	92.4	92.9	93.1	92.0	91.4	86.5	86.8	87.0	86.0	85.2	83.4	81.8	86.9	
5	80.9	80.0	79.0	79.0	78.5	79.6	82.6	85.9	89.7	92.0	93.0	93.0	93.5	93.8	93.9	92.7	93.0	91.5	90.1	86.8	84.0	82.0	81.2	80.2	86.5	
6	79.4	78.8	78.6	78.3	77.9	79.5	83.5	85.4	86.9	89.8	89.2	89.2	89.1	90.0	90.0	89.0	88.6	88.1	88.0	87.1	86.6	86.6	86.6	86.8	85.4	
7	86.7	86.5	86.1	86.7	86.6	86.7	86.9	86.8	87.1	87.3	87.5	89.0	89.0	88.8	88.7	88.8	89.0	87.3	86.9	85.9	85.0	84.3	84.1	81.3	86.9	
8	84.7	83.6	83.8	84.0	82.2	83.0	84.2	85.1	86.4	87.3	88.3	88.6	87.8	88.0	86.0	88.0	87.4	86.0	85.9	85.1	84.6	83.8	83.6	84.0	85.4	
9	83.8	82.9	83.1	83.0	83.1	83.0	83.9	84.8	85.4	86.8	87.3	87.5	86.1	89.0	88.4	87.9	86.4	86.6	86.2	85.5	85.0	84.0	83.2	81.3	85.2	
10	81.5	83.0	82.9	82.8	81.9	83.9	85.1	86.7	87.0	88.7	89.1	88.3	88.8	88.9	88.4	88.2	88.2	87.8	86.8	86.5	86.2	86.0	85.8	85.6	86.1	
11	84.4	84.6	84.6	84.7	84.9	84.8	85.1	85.3	85.9	87.2	87.7	89.0	89.6	88.1	87.9	88.3	88.1	88.4	88.2	88.1	88.3	88.3	88.4	88.4	87.0	
12	88.5	88.2	88.3	88.4	87.7	87.1	86.3	86.3	86.1	87.0	87.7	87.6	88.3	88.2	88.5	87.6	87.8	86.9	86.3	86.0	86.1	85.9	85.8	84.9	87.2	
13	84.9	84.7	84.2	83.9	83.9	83.9	84.0	83.9	86.6	86.0	86.5	87.7	86.8	86.2	85.8	85.9	85.3	85.3	85.6	85.2	85.3	85.4	85.5	85.2	85.3	
14	85.1	85.0	84.9	84.8	84.5	84.3	84.8	84.9	85.6	86.0	86.7	85.5	86.0	86.7	85.0	86.0	85.9	85.2	85.0	84.6	83.9	83.7	83.0	83.0	85.1	
15	83.5	83.1	83.3	83.9	83.9	83.9	84.8	84.8	85.1	86.0	87.0	87.4	88.0	88.7	88.8	87.8	86.5	86.1	85.3	85.0	84.7	84.8	84.2	84.0	85.4	
16	83.2	83.5	83.7	83.9	83.2	83.0	84.0	84.0	85.0	85.7	86.2	86.7	84.1	85.3	85.7	86.0	86.0	85.8	84.2	83.8	83.6	83.1	83.5	83.1	84.4	
17	83.0	83.3	82.8	82.6	82.5	83.9	85.0	87.0	86.6	88.7	88.3	89.8	89.0	89.2	87.7	87.2	87.0	86.5	86.0	84.8	83.0	80.9	80.3	80.2	85.3	
18	80.0	79.1	79.8	80.0	79.9	80.8	82.0	83.0	84.3	86.0	86.8	87.7	88.2	88.6	89.5	89.9	89.5	89.0	85.7	84.3	81.5	80.0	79.4	78.9	83.9	
19	79.6	79.9	80.3	81.8	81.3	82.0	83.6	85.3	88.5	90.0	90.8	91.7	91.7	91.3	90.0	90.8	90.0	89.0	87.8	87.0	86.7	86.0	86.7	86.9	86.5	
20	85.8	85.9	85.1	85.2	85.3	85.0	85.1	85.6	85.9	86.7	86.7	86.8	87.6	86.4	86.3	86.1	86.1	86.3	85.9	85.1	85.0	84.8	84.7	84.3	85.8	
21	84.1	84.0	83.9	84.0	83.9	83.9	84.5	85.5	86.6	86.8	86.9	87.8	87.1	87.9	86.3	86.8	86.7	86.4	85.2	84.5	84.3	84.6	84.7	83.8	85.4	
22	84.5	84.0	84.1	83.6	83.6	83.5	85.4	87.0	87.5	87.7	88.2	89.2	88.9	89.0	88.1	88.1	88.7	87.0	86.0	84.9	84.6	84.5	84.3	84.6	86.1	
23	84.8	84.5	84.0	84.0	84.0	84.1	84.6	85.8	86.9	88.3	89.0	87.6	87.4	87.9	87.7	87.8	88.0	88.0	87.6	87.7	87.7	87.5	87.3	87.0	86.6	
24	87.2	86.6	86.0	85.5	85.0	84.9	85.0	85.9	86.5	87.3	88.4	88.9	90.0	89.5	88.9	88.4	88.3	87.9	86.9	85.9	84.8	84.6	84.3	84.3	86.8	
25	84.6	84.1	84.8	85.4	85.3	85.3	85.7	85.9	86.5	85.8	87.8	87.9	88.5	89.0	88.6	88.2	87.8	87.1	86.8	85.6	85.5	85.9	85.3	85.8	86.4	
26	85.7	85.9	85.5	85.6	85.6	85.6	85.5	87.0	86.9	87.2	88.8	89.1	90.8	90.6	90.9	90.0	89.6	88.7	87.3	86.3	85.6	85.1	84.9	84.6	87.2	
27	84.6	84.5	84.9	85.0	85.1	85.0	84.9	85.0	85.0	85.5	86.5	87.4	88.3	88.5	87.4	86.9	87.4	86.7	85.2	83.1	83.5	84.0	82.0	81.9	85.4	
28	83.0	83.7	83.7	83.7	84.0	84.0	84.6	84.8	85.4	86.3	86.7	86.9	86.2	85.6	86.0	87.7	87.3	86.4	85.9	85.0	84.6	84.1	84.2	82.8	85.1	
29	81.9	83.4	83.3	82.3	82.0	82.3	82.3	83.0	84.8	86.3	86.8	88.1	87.7	85.6	84.5	83.2	83.2	83.1	82.8	79.9	79.2	79.5	79.0	78.8	83.1	
30	78.6	78.7	80.8	81.4	81.8	82.0	82.1	83.0	83.5	83.9	84.0	84.0	85.4	85.4	85.9	84.3	83.6	83.3	82.8	82.5	82.0	81.7	80.9	79.8	82.5	
31	80.0	80.3	80.2	79.9	79.9	79.8	80.7	81.9	83.5	85.2	85.7	86.1	85.9	85.0	84.3	84.7	85.5	84.9	83.2	81.5	81.6	81.8	81.9	81.9	82.7	
Mean	...	83.2	83.0	82.9	83.0	82.8	83.2	84.1	85.1	86.1	87.0	87.7	88.2	88.3	88.0	87.8	87.6	86.9	86.1	85.1	84.5	84.1	83.7	83.3	85.4	
Hour G.M.T.		1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean



Readings in degrees absolute at exact hours, Greenwich Mean Time.

190. Eskdalemuir : Louvred Hut :  $h_t$  (height of thermometer bulb above ground) = 0.9 metres.

September, 1928.

Hour G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean	
Day.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	
1	81.3	80.0	78.3	78.4	77.0	76.6	79.6	82.2	86.6	86.2	87.7	88.1	88.8	89.0	89.7	88.8	89.0	86.9	85.6	82.6	81.2	80.1	79.9	79.2	83.5	
2	78.9	78.1	77.8	78.0	79.2	79.6	80.0	80.9	83.2	84.6	87.0	87.5	88.5	89.1	90.2	89.3	88.1	87.1	85.8	84.9	84.9	84.3	84.8	85.9	83.9	
3	86.0	86.7	86.7	86.3	86.4	86.6	86.7	86.6	86.5	87.0	87.3	87.6	87.3	87.7	87.4	87.9	87.8	87.0	87.0	87.1	87.4	87.3	87.0	87.0	87.0	
4	87.0	87.2	87.1	87.0	87.0	87.0	87.4	87.7	88.3	87.8	87.9	88.1	87.7	87.7	87.9	87.3	87.2	86.9	86.9	86.9	86.9	86.9	86.9	86.8	87.3	
5	86.9	86.8	86.6	86.5	86.4	86.4	86.5	86.7	86.9	86.8	88.0	89.7	89.3	90.0	89.5	88.2	87.8	87.0	85.7	85.4	85.4	85.5	85.1	85.1	87.0	
6	84.4	83.9	83.5	83.5	82.2	82.2	82.7	83.9	85.5	86.8	87.4	88.0	87.3	86.6	86.1	85.8	86.1	85.4	85.0	84.2	85.0	84.8	85.1	85.3	85.0	
7	86.3	86.1	86.0	85.8	85.8	85.9	86.1	86.0	86.1	86.2	86.7	87.0	87.6	87.8	87.3	87.3	87.3	87.0	86.8	86.6	86.6	86.2	86.1	85.9	86.5	
8	86.0	86.0	86.0	86.3	86.7	86.8	86.8	87.3	88.4	88.8	90.0	89.9	89.9	89.8	89.4	89.0	88.7	88.0	87.4	87.0	86.9	86.7	86.8	86.9	87.7	
9	86.9	86.9	86.9	85.9	85.2	84.2	84.3	84.8	85.3	86.6	87.8	87.4	87.1	87.7	87.0	86.8	86.8	85.8	85.7	85.5	85.4	85.8	85.8	85.4	86.2	
10	85.6	85.6	84.7	83.9	82.4	82.2	83.1	83.6	84.9	86.0	85.6	85.9	87.4	86.8	86.4	85.5	85.2	84.0	85.8	85.5	85.8	85.1	84.1	82.8	85.0	
11	82.0	81.9	81.5	81.5	81.0	80.8	82.5	82.8	84.0	85.7	85.8	85.1	85.4	86.2	86.1	87.0	86.7	85.1	81.5	80.1	78.3	76.8	76.2	76.0	82.6	
12	76.8	77.0	76.6	78.0	78.8	78.0	78.7	81.2	85.2	86.0	86.7	87.4	88.5	89.5	89.4	89.6	86.9	86.7	84.2	82.9	81.9	80.6	79.5	78.8	82.8	
13	78.0	77.5	78.6	78.2	78.3	79.0	79.9	82.4	85.3	88.5	90.2	91.0	91.8	92.0	90.9	91.2	90.8	87.8	85.1	84.0	84.6	84.0	83.2	81.9	84.7	
14	81.5	81.1	80.9	80.8	79.9	79.0	79.9	82.9	86.1	87.1	88.0	88.9	88.5	88.9	89.0	86.6	85.8	85.0	82.0	81.8	82.2	82.4	83.7	83.7	83.9	
15	83.5	81.8	80.7	79.0	78.5	80.1	82.1	83.2	83.7	83.9	85.2	85.1	86.3	85.2	85.0	85.9	84.9	83.9	82.0	80.9	79.2	78.1	77.1	77.8	82.3	
16	77.1	76.9	76.8	76.0	76.0	77.3	78.4	81.1	82.3	84.7	85.0	85.9	86.4	86.1	85.5	85.5	85.1	84.2	83.9	82.9	84.2	84.0	84.1	84.3	82.1	
17	84.1	84.1	84.0	84.0	84.0	84.0	84.3	84.5	85.0	85.9	86.5	86.8	86.8	86.9	87.1	86.8	86.9	86.5	86.3	86.1	86.1	85.9	85.8	85.9	85.6	
18	85.3	85.1	83.9	83.4	83.1	82.9	83.0	83.5	83.9	84.9	86.1	87.1	87.4	86.9	85.7	85.0	85.4	82.9	81.0	81.1	79.3	78.6	76.7	75.9	83.5	
19	75.1	74.4	73.9	73.2	72.6	73.0	74.0	78.4	82.7	83.9	82.7	83.4	83.0	83.0	82.1	82.1	82.0	81.4	80.1	79.5	79.8	78.5	78.9	78.2	78.9	
20	76.8	78.8	77.8	77.7	79.2	77.5	79.1	80.9	82.1	82.0	82.9	83.5	84.0	82.1	84.9	85.0	83.1	80.7	80.5	79.8	77.3	75.7	74.8	73.6	80.1	
21	73.9	72.8	72.5	72.2	72.4	73.6	74.1	76.7	79.6	82.5	84.3	84.5	84.9	85.5	84.8	83.1	82.5	80.5	78.0	77.4	76.0	75.6	76.1	76.2	78.3	
22	75.2	75.7	74.4	73.8	72.9	73.0	75.0	78.0	81.2	82.0	82.2	82.9	83.0	82.9	82.7	82.1	81.5	80.5	79.9	79.4	79.4	79.1	78.0	76.8	78.8	
23	75.3	74.7	74.2	73.5	72.5	72.2	73.6	76.1	78.9	81.7	82.1	82.5	82.3	81.6	81.5	81.5	81.0	80.4	81.0	80.1	80.5	81.0	80.9	81.5	78.7	
24	81.1	81.1	81.4	81.1	81.4	81.1	81.6	82.1	83.9	84.2	85.2	83.5	81.6	82.6	83.5	82.9	81.1	79.8	79.1	79.6	78.9	79.2	79.5	79.5	81.5	
25	79.5	79.8	79.5	80.0	80.0	79.9	80.2	81.5	82.1	83.0	83.8	83.0	82.8	83.2	83.7	83.0	82.0	81.2	78.8	79.9	79.7	79.6	80.0	80.0	81.1	
26	79.4	78.7	78.3	78.6	78.7	79.2	79.2	80.0	81.0	81.7	81.9	82.1	82.6	83.0	83.0	83.0	83.0	79.0	77.9	76.9	76.6	77.1	77.1	76.7	79.8	
27	75.1	75.1	75.5	76.0	75.6	75.0	74.6	76.7	79.1	80.2	81.0	81.5	82.5	83.8	83.7	82.9	82.3	81.7	80.7	80.6	80.1	79.9	79.8	80.2	79.2	
28	80.3	80.1	80.8	80.5	81.0	81.0	80.3	79.6	79.1	80.7	80.5	80.7	81.4	81.3	80.3	80.0	78.6	77.2	77.1	76.7	76.2	76.3	75.9	74.8	79.3	
29	75.6	74.5	73.0	72.5	72.8	73.0	73.2	77.1	79.6	80.7	81.8	82.3	82.2	82.5	83.5	82.9	78.9	76.4	75.5	75.0	74.9	77.1	76.3	75.8	77.4	
30	74.9	73.9	75.9	75.2	74.4	74.1	74.7	77.4	79.7	80.2	81.0	81.2	81.6	81.9	81.6	81.5	80.0	75.1	74.1	73.7	71.7	71.5	71.3	71.9	76.7	
Mean	...	80.7	80.4	80.1	79.9	79.7	79.7	80.4	81.9	83.5	84.5	85.3	85.6	85.8	85.9	85.8	85.5	84.7	83.4	82.3	81.8	81.4	81.1	80.9	80.7	82.5

191. Eskdalemuir : Louvred Hut :  $h_t$  = 0.9 metres.

October, 1928.

	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.
1	70.6	69.5	69.1	68.2	68.0	67.5	67.7	70.4	75.8	80.5	81.5	82.0	82.2	83.0	82.7	82.0	81.8	82.1	82.5	82.5	82.9	82.9	83.0	83.0	77.3	
2	82.2	82.1	82.0	80.5	79.9	79.0	79.1	80.8	83.8	83.5	84.2	85.9	85.8	85.8	85.2	83.9	83.9	80.5	78.9	77.2	76.0	75.0	74.0	81.4		
3	74.2	75.0	76.0	76.0	76.6	77.0	77.7	78.5	79.8	80.8	81.5	82.4	83.0	83.9	83.9	83.2	82.9	82.2	81.6	81.1	80.2	77.8	78.5	79.6		
4	78.4	75.9	74.7	74.7	76.1	76.1	76.8	79.9	82.5	83.2	83.0	83.7	84.2	85.5	85.4	84.8	82.7	82.0	81.0	80.5	79.9	80.1	79.8	80.4		
5	79.0	78.8	77.8	78.0	78.0	79.1	80.4	81.1	81.4	82.5	83.0	83.7	83.3	84.0	83.1	83.0	83.0	83.0	83.1	83.3	83.3	83.4	83.7	84.0		
6	84.3	84.2	84.1	83.9	83.0	82.4	82.1	82.1	82.6	83.6	85.2	85.8	85.5	86.0	85.9	85.4	83.7	81.9	82.2	81.2	81.5	81.8	81.8	82.9		
7	83.3	82.5	83.5	84.2	84.3	84.6	84.8	84.9	85.0	85.2	85.4	85.3	85.1	85.0	85.3	85.2	85.3	85.0	85.1	85.1	85.1	85.2	85.2	84.7		
8	85.4	85.3	85.3	85.5	85.1	85.1	85.1	85.3	85.5	85.7	86.0	86.2	86.1	85.8	86.5	86.0	85.5	85.1	85.1	85.1	84.6	83.8	83.2	85.3		
9	83.1	84.1	84.6	84.5	83.9	83.3	82.7	82.6	83.9	84.1	85.1	85.8	84.9	84.9	84.6	84.3	83.7	83.0	82.2	82.8	83.3	82.9	82.5	83.7		
10	81.1	80.7	80.0	79.9	79.6	79.2	79.0	79.5	79.9	81.4	82.1	81.8	82.6	81.4	81.0	80.5	79.8	79.3	78.9	78.0	77.6	77.2	77.1	79.9		
11	77.0	76.9	77.2	78.7	78.8	78.9	78.8	77.6	77.5	77.6	77.6	77.2	77.8	77.7	77.5	77.7	77.7	77.7	77.7	77.8	77.9	78.0	78.1	77.8		
12	78.4	78.7	78.9	79.0	78.8	78.2	77.9	78.9	80.2	81.1	81.3	80.7	81.9	81.4	82.0	81.0	79.1	76.0	76.0	75.7	74.0	74.0	72.6	71.5		
13	71.6	72.1	72.3	72.7	71.8	72.0	72.2	73.8	76.7	80.4	81.2	82.1	81.4	81.8	81.0	80.8	79.8	79.2	78.7	78.0	76.4	74.3	73.6	74.5		
14	75.1	75.2	75.6	75.9	76.0	76.1	75.9	76.9	79.3	80.6	80.9	82.0	81.8	81.4	81.2	80.8	80.1	79.7	79.5	78.9	78.9	78.6	78.3	78.5		
15	78.4	78.5	78.5	78.6	78.9	78.9	78.8	79.0	80.1	82.0	81.9	83.0	83.3	83.4	83.1	82.7	79.9	78.4	77.1	75.4	74.8	74.2	75.1	75.7		
16	77.2	77.7	78.3	79.4	80.1	80.2	80.4	81.0	81.5	84.1	84.8	85.3	86.1	86.1	86.4	86.3	85.9	85.7	86.0	86.2	86.0	86.0	85.6	85.1		
17	83.3	82.8	82.1	81.4	80.8	81.0	79.3	81.0	82.4	83.0	83.7	83.6	84.1	83.4	83.8	83.4	82.9	82.7	82.3	83.0	82.8	82.9	82.0	82.5		
18	81.1	81.3	81.8	82.8	82.9	83.0	83.4	83.2	82.9	82.4	81.9	81.4	81.7	81.7	81.7	82.0	80.7	80.8	80.9	80.5	80.6	80.5	80.2	81.7		
19	80.1	79.7	79.4	79.4	78.9	78.9	78.8	79.0	80.5	81.6	81.3	82.7	82.7	82.3	81.8	81.3	80.9	80.7	80.4	81.3	81.9	82.1	83.0	80.8		
20	83.5	83.1	82.2	81.5	81.5	81.0	81.2	81.2	81.5	81.6	80.7	80.3	81.9	81.7	82.0	79.1	79.6	79.1	79.0	78.4	78.1	78.6	78.5	80.7		
21	78.0	78.8	79.2	78.7	78.5	78.3	78.0	78.5	79.0	79.9	80.1	80.5	80.1	80.7	79.5	79.6	79.7	79.1	78.9	78.2	76.6	75.2	73.9	73.7		
22	73.5	73.8	74.6	75.5	76.4	76.7	76.7	76.8	77.8	79.1	80.0	79.5	80.4	80.1	80.0	79.2	77.9	77.1	75.7	74.6	73.6	72.5	73.5	76.6		
23	73.7	74.1	74.9	75.0	75.1	75.7	76.0	76.2	76.7	78.2	80.6	80.6	81.3	81.1	80.9	80.6	80.1	80.3	81.1	82.2	80.8	81.6	81.9			
24	81.1	82.0	81.5	82.1	81.9	82.0	81.8	82.4	82.3	82.6	82.7	83.3	82.5	83.1	83.3	82.9	82.9	82.3	82.3	82.3	82.3	82.2	81.9	82.0		
25	81.8	81.9	81.6	81.3	80.9	80.4	80.3	80.5	80.9	81.7	82.0	82.5	83.2	83.0	82.6	81.5	80.4	79.1	78.3	78.5	78.1	78.5	77.8	80.7		
26	78.0	78.4	78.4	78.6	78.4	78.4	78.5	78.9	79.3	79.1	79.4	79.9	80.1	80.3	80.6	80.7	80.6	80.8	80.9	81.0	81.3	81.7	81.9	79.8		
27	81.6	81.8	82.0	82.1	82.1	82.1	82.1	82.2	82.1	82.5	83.9	84.0	84.6	84.0	83.9	82.4	79.8	79.5	80.0	80.0	79.2	77.0	76.2	81.5		
28	80.1	79.4	79.0	78.9	77.9	77.4	77.9	79.2	80.7	80.2	81.6	81.9	83.0	82.0	82.6	80.0	80.7	78.7	79.0	78.7	77.9	78.6	79.7	79.7		
29	77.3	77.2	78.4	78.7	77.7	77.5	77.6	77.4	77.8	78.6	79.0	79.5	79.8	79.9	80.2	80.5	80.7	80.9	81.8	82.6	83.4	84.2	84.1	83.8		
30	83.5	83.5	83.7	81.9	81.1	80.9	80.8	81.0	81.2	81.7	82.9	82.3	81.6	81.4	81.3	81.3	81.1	81.0	81.0	80.7	80.9	81.0	81.2	81.6		
31	81.0	80.9	80.5	80.5	80.4	80.5	80.5	80.4	81.1	80.6	80.0	80.2	80.0	79.8	79.0	78.8	79.1	79.2	79.3	78.9	78.9	78.7	78.6	79.9		
Mean	...	79.3	79.2	79.3	79.1	79.1	79.1	79.7	80.7	81.6	82.1	82.4	82.6	82.6	82.5	82.0	81.3	80.7	80.5	80.4	80.1	79.7	79.5	80.5		
Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean	



Readings in degrees absolute at exact hours, Greenwich Mean Time.

192. Eskdalemuir : Louvred Hut :  $h_t$  (height of thermometer bulb above ground) = 0.9 metres.

November, 1928.

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean
Day.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.
1	78.6	78.3	77.9	77.9	77.7	77.7	77.7	77.4	78.2	78.8	77.8	77.9	78.1	78.1	77.7	77.1	76.6	76.4	76.1	76.1	76.6	76.2	76.1	77.4	77.4
2	75.4	75.6	75.8	76.0	75.7	75.8	76.2	76.4	76.9	77.1	77.9	78.3	79.2	78.7	78.4	78.0	77.1	77.0	76.8	77.0	76.2	75.8	75.8	76.8	76.8
3	75.7	74.7	74.5	75.3	75.0	74.9	75.0	74.9	75.3	75.9	76.8	76.7	76.7	76.8	76.6	76.3	75.9	75.9	76.2	75.9	76.2	76.6	77.0	75.2	75.8
4	75.1	74.9	74.7	74.7	74.8	74.2	73.7	73.8	74.7	75.6	76.5	77.1	78.1	78.9	78.9	78.1	77.9	77.6	75.3	73.5	72.9	73.9	74.3	74.7	75.6
5	75.1	75.9	75.7	76.2	76.0	76.7	77.2	77.8	78.0	77.9	77.8	78.8	79.6	80.0	80.0	79.7	78.9	77.7	77.5	75.8	75.3	73.9	76.8	77.6	77.3
6	77.4	77.6	78.0	78.0	77.9	77.8	78.0	77.8	77.9	78.0	78.4	79.1	79.1	79.1	78.8	78.1	77.8	77.7	77.3	77.0	76.5	76.5	76.9	76.6	77.8
7	76.2	76.4	76.6	75.9	75.9	75.0	75.2	75.7	76.4	76.5	78.3	78.5	78.5	78.9	77.7	76.0	74.7	73.6	73.1	74.3	73.9	74.3	75.0	74.9	75.9
8	74.0	73.2	73.0	72.7	72.4	73.0	72.7	73.1	74.2	76.6	78.1	78.4	79.4	78.4	78.0	76.8	75.7	74.7	74.0	74.0	72.8	72.3	71.3	70.7	74.7
9	70.5	69.4	69.3	68.6	67.8	67.7	67.1	66.9	68.3	70.3	72.7	76.7	78.0	78.2	77.1	76.0	75.2	74.8	74.6	75.9	75.6	76.6	76.0	76.7	72.8
10	77.0	77.2	78.2	78.0	78.3	79.1	79.6	80.2	80.3	80.9	80.9	81.0	82.1	82.2	82.6	82.5	82.5	82.4	82.0	82.0	81.8	80.9	80.7	80.6	80.5
11	80.7	80.7	80.1	79.2	79.2	79.4	79.1	79.1	79.7	80.4	80.7	81.0	80.9	81.9	82.2	83.2	83.5	83.7	84.0	84.6	84.9	84.5	83.8	83.2	81.6
12	82.3	82.3	81.7	80.7	80.3	80.0	81.9	82.3	83.4	84.5	84.6	84.7	84.6	84.8	84.7	84.7	84.7	83.7	83.2	82.9	82.6	82.2	82.2	81.9	83.0
13	81.8	81.8	81.9	81.6	81.4	81.5	81.3	81.7	81.8	81.8	81.8	81.9	81.0	81.3	81.0	80.7	80.0	78.6	79.5	79.6	79.4	78.5	78.9	78.9	80.8
14	79.1	79.1	79.1	78.5	77.7	77.9	77.8	77.7	78.0	78.7	79.1	79.7	79.3	79.8	78.8	77.6	78.0	78.1	78.6	78.8	79.0	78.9	79.0	79.3	78.6
15	81.1	82.5	82.2	81.8	81.7	81.5	81.2	80.5	80.5	81.2	81.8	82.0	82.1	81.8	81.7	81.4	80.6	80.4	80.5	80.7	80.5	80.1	80.1	79.5	81.1
16	79.6	78.5	78.4	77.7	76.0	77.2	76.5	76.0	76.2	76.8	77.1	76.4	74.1	73.8	74.3	75.1	75.7	76.1	76.4	77.0	76.7	77.0	76.9	76.9	76.6
17	77.0	77.2	77.0	77.0	77.7	78.0	78.2	78.3	78.9	78.9	79.9	79.8	79.5	79.4	79.3	78.9	78.9	79.1	78.8	78.8	78.8	78.7	78.9	78.8	78.5
18	78.7	78.7	78.6	78.2	78.5	78.0	78.3	78.5	78.4	78.1	79.6	79.3	79.4	79.4	79.4	79.1	79.1	80.8	82.1	82.3	82.5	82.3	82.4	82.6	79.7
19	82.7	82.4	82.3	82.1	83.5	83.8	84.0	84.1	84.2	84.0	84.3	84.7	84.6	84.6	83.1	80.2	79.3	78.9	79.1	79.5	79.3	79.3	79.2	79.4	82.3
20	79.5	79.3	78.9	78.8	78.5	79.4	79.7	79.6	79.8	80.0	80.5	80.7	80.4	80.5	80.7	80.7	80.5	80.1	80.6	80.7	80.5	80.5	80.8	80.8	80.0
21	80.7	80.6	80.0	79.8	80.0	80.1	80.3	80.5	80.4	81.1	82.6	84.0	84.1	84.0	83.9	83.6	83.3	83.2	83.1	82.8	82.9	82.7	82.7	82.9	82.0
22	83.0	82.9	82.8	82.8	82.7	82.3	82.1	81.1	80.6	81.0	81.6	82.1	82.7	82.4	81.9	80.0	80.0	79.1	78.7	78.3	77.9	78.1	78.0	78.1	80.9
23	78.2	77.9	77.8	78.1	78.6	78.7	78.8	78.5	78.3	78.0	79.0	83.5	83.4	82.6	80.6	77.9	79.0	79.0	78.1	77.6	77.1	77.7	77.7	77.1	78.9
24	77.0	77.7	77.6	77.8	77.7	78.1	79.0	79.0	78.7	78.7	79.9	78.9	79.9	80.1	79.8	79.3	79.0	78.8	78.7	78.7	78.6	78.3	78.1	78.6	78.6
25	78.0	78.3	79.1	80.4	81.9	81.5	80.2	77.8	78.3	77.4	76.1	76.1	78.2	78.4	79.2	78.7	78.1	77.8	77.1	77.1	77.5	77.6	77.3	77.1	78.3
26	77.4	77.6	77.7	77.1	77.6	77.3	77.3	77.1	77.8	78.5	79.0	79.4	79.3	78.2	78.4	76.9	77.1	76.7	76.3	76.0	75.9	76.0	76.2	76.0	77.4
27	75.8	75.7	75.3	75.6	75.6	75.6	75.2	74.8	74.9	76.6	75.9	76.1	76.9	77.4	76.3	75.6	75.0	75.5	74.4	75.0	75.1	75.0	74.6	73.4	75.5
28	73.6	72.8	74.3	73.9	73.7	73.8	74.2	73.7	75.1	75.2	76.2	76.5	76.3	75.8	75.8	74.6	73.8	72.5	71.1	70.8	71.2	73.2	75.2	74.2	74.1
29	76.1	75.7	75.7	75.8	75.9	76.1	77.1	76.9	77.5	78.7	79.0	79.4	80.4	81.5	82.3	83.2	82.9	83.3	83.3	83.7	85.0	83.6	83.0	82.9	79.8
30	83.0	82.7	83.1	83.0	82.4	82.3	83.0	83.9	83.9	83.7	85.0	84.4	84.8	84.0	83.7	83.0	82.9	82.4	82.1	82.4	82.5	82.8	82.6	83.2	83.2
Mean	...	78.0	77.9	77.9	77.8	77.7	77.9	77.8	78.2	78.7	79.3	79.8	80.0	80.0	79.8	79.2	78.8	78.5	78.3	78.3	78.2	78.3	78.1	78.5	78.5

193. Eskdalemuir : Louvred Hut :  $h_t$  = 0.9 metres.

December, 1928.

	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.
1	82.3	82.4	82.2	81.9	82.0	82.3	82.2	82.3	81.1	82.1	82.9	82.8	83.2	82.1	80.3	77.9	75.8	73.8	72.7	72.6	71.9	71.0	70.6	70.1	78.9
2	70.1	69.6	69.7	70.0	71.2	71.9	73.1	73.5	75.2	75.7	76.7	77.0	77.0	76.6	76.7	76.6	76.5	76.9	77.2	77.2	77.7	78.1	79.0	79.2	74.9
3	79.6	78.1	77.4	76.0	75.9	75.7	75.4	75.4	76.0	76.4	76.8	77.1	77.0	77.2	76.6	74.8	73.9	73.2	72.3	71.6	71.1	69.8	70.3	69.3	75.1
4	69.7	70.5	71.7	73.4	74.3	74.9	75.1	75.9	75.9	76.7	77.8	77.9	78.0	77.9	78.0	78.3	78.9	79.7	80.2	80.4	80.4	80.3	80.4	80.7	76.7
5	81.1	81.1	81.2	80.5	80.5	80.0	79.9	79.6	79.6	79.2	79.9	80.0	80.0	79.3	78.7	77.8	77.6	77.2	75.4	75.9	76.0	76.1	76.0	76.0	78.8
6	75.6	76.0	75.7	75.3	75.7	76.0	76.7	76.6	76.8	77.1	77.2	77.1	77.0	77.3	76.2	75.3	75.0	75.5	75.0	75.1	74.7	74.4	74.7	75.1	75.9
7	74.9	75.2	73.8	74.8	74.8	74.2	73.8	73.0	72.3	72.4	73.0	73.3	73.4	73.0	72.7	72.5	72.4	72.6	72.8	72.7	73.6	73.2	73.5	72.8	73.4
8	71.2	70.7	69.8	71.4	71.7	70.7	71.1	71.6	71.3	72.8	74.0	74.3	74.1	74.0	73.2	72.8	72.6	72.7	72.2	72.6	71.5	71.4	70.4	70.0	72.1
9	70.0	69.4	69.3	68.7	67.6	68.6	68.9	69.9	71.0	72.0	73.2	73.3	74.0	74.6	75.0	75.1	75.7	75.8	75.9	76.0	76.4	75.4	74.9	75.0	72.6
10	75.2	75.2	74.8	75.0	74.7	74.6	74.8	74.7	75.0	75.4	75.7	75.9	75.9	75.4	75.1	75.1	75.0	75.0	74.0	73.7	73.4	72.7	72.4	71.0	74.7
11	70.6	70.9	71.7	72.1	72.9	73.0	73.1	73.3	73.9	74.6	74.8	74.2	75.1	75.1	75.1	75.4	75.6	75.7	75.8	75.7	75.7	75.7	75.6	75.4	74.1
12	75.7	75.8	76.0	75.7	75.5	75.2	75.5	75.7	75.8	75.6	75.6	75.7	75.5	75.2	75.1	74.8	74.3	75.0	74.9	74.7	75.0	74.6	74.7	74.3	75.3
13	74.4	74.4	74.0	73.7	73.7	73.9	73.8	73.9	73.9	74.0	74.2	74.1	74.2	74.2	74.0	73.7	73.6	73.5	73.5	73.3	73.4	73.3	73.2	73.1	73.8
14	73.0	72.9	72.9	72.8	72.8	72.7	72.9	72.2	70.7	72.0	73.8	75.0	75.1	75.0	73.0	72.0	70.4	70.5	70.4	69.2	69.3	68.7	70.6	70.7	72.1
15	70.1	70.1	69.9	69.3	69.1	69.9	69.0	68.0	68.1	69.9	71.0	71.6	71.6	72.1	71.8	72.0	72.7	72.8	72.9	72.9	73.0	73.1	73.2	73.3	71.1
16	73.6	73.5	72.8	72.8	72.7	72.7	73.1	73.6	73.9	74.1	74.3	74.8	75.0	75.1	75.5	76.7	78.0	78.3	78.0	78.7	77.9	77.0	77.0	77.4	75.2
17	77.5	78.2	78.0	78.0	77.9	77.9	78.1	77.9	78.3	78.7	79.0	79.7	79.9	79.8	79.8	77.5	77.8	77.0	77.0	76.2	75.1	73.0	71.3	70.8	77.4
18	70.5	69.1	69.0	68.6	69.1	69.4	70.4	71.8	72.8	72.8	74.0	74.5	74.8	75.0	75.2	75.1	75.2	75.3	75.1	76.2	76.1	75.9	76.0	75.9	73.1
19	76.2	76.3	76.4	76.1	76.3	76.4	76.9	77.4	77.1	77.5	77.7	77.8	77.8	77.9	77.9	77.6	77.7	77.7	77.8	77.8	78.0	78.4	77.8	77.7	77.3
20	76.6	76.2	76.1	75.7	75.0	74.0	74.0	73.1	72.2	74.3	76.0	76.9	77.2	76.9	75.5	75.0	74.2	75.0	73.0	71.7	70.7	69.8	69.6	70.0	74.3
21	68.8	69.3	69.7	70.0	70.2	69.9	70.2	70.3	71.0	71.8	72.7	72.9	73.1	73.7	75.0	75.2	74.8	74.7	75.3	75.3	76.0	76.2	76.9	76.7	72.8
22	78.0	78.0	77.9	78.0	78.2	78.8	78.9	78.9	78.9	78.6	79.4	79.3	79.5	79.5	79.0	79.3	77.8	77.7	76.9	76.0	74.8	73.4	72.2	72.0	77.6
23	71.4	70.0	69.2	68.0	67.4	67.9	68.4	67.1	67.0	69.0	70.5	71.7	73.4	74.2	74.7	76.0	76.4	76.6	77.0	77.1	77.8	78.0	79.0	79.0	72.6
24	79.0	79.1	79.3	80.0	80.7	81.0	81.0	81.0	81.2	81.2	81.2	81.1	81.9	80.9	80.0	78.9	77.9	77.3	76.8	75.6	76.4	76.3	76.0	74.9	79.6
25	75.3	74.9	74.7	74.2	73.9	74.1	74.3	74.5	74.3	75.2	76.0	76.9	77.7	77.6	77.3	77.8	78.0	77.9	77.8	77.0	77.2	80.2	81.2	81.5	76.5
26	82.4	79.0	78.2	78.7	77.4	76.9	76.6	76.1	75.9	75.9	75.7	75.3	75.5	75.5	75.5	75.2	75.4	75.6	75.3	75.3	75.7	75.2	75.7	76.5	
27	75.6	75.5	75.6	75.6	75.2	74.7	73.5	72.8	72.9	73.6	74.5	74.2	74.7	73.9	73.3	71.1	70.9	70.6	70.4	69.9	68.6	69.3	70.3	70.3	72.9
28	70.3	70.3	69.1	70.0	70.3	70.0	70.0	70.0	70.5	72.6	73.1	75.1	75.6	75.1	74.6	74.6	74.5	74.4	74.0	74.4	74.4	73.9	73.9	72.6	
29	73.9	73.3	73.3	73.4	73.3	73.4	73.8	73.8	73.6	73.8	74.0	74.0	74.0	73.7	73.5	73.4	73.7	73.7	73.4	73.2	72.6	72.7	72.7	73.5	
30	72.7	72.3	72.9	73.6	73.7	73.6	73.7	73.7	73.3	73.7	73.7	73.7	74.1	73.8	74.0	73.7	73.0	73.0	72.9	72.7	72.9	73.0	72.9	73.3	
31	73.0	72.9	72.6	72.1	72.5	72.8	73.0	72.4	71.7	72.4	73.0	72.9	73.7	73.7	73.6	72.5	71.5	71.2	71.0	71.2	70.7	71.4	69.6	66.8	72.1
Mean ...	74.5	74.2	74.0	74.0	74.1	74.1	74.2	74.2	74.2	74.9	75.5	75.8	76.1	76.0	75.6	75.3	75.1	75.0	74.7	74.6	74.4	74.3	74.2	74.0	74.7
Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean



TEMPERATURE : ANNUAL MEANS OF HOURLY VALUES.  
From readings in degrees absolute at exact hours, Greenwich Mean Time.

194. Eskdalemuir : Louvred Hut :  $h_t = 0.9$  metres.

1928.

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean
a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.
78.28	78.15	78.08	78.00	78.08	78.34	78.83	79.48	80.17	80.86	81.43	81.86	82.13	82.19	82.13	81.81	81.38	80.76	80.18	79.60	79.15	78.89	78.65	78.46	79.87

TEMPERATURE : MONTHLY MEANS AND DIURNAL INEQUALITIES.  
The departures from the mean of the day are adjusted for non-cyclic change.

195. Eskdalemuir : Louvred Hut :  $h_t = 0.9$  metres.

1928.

Month.	Mean	Hour. 1.	G.M.T. 2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.
	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.
Jan.	276.05	-0.56	-0.63	-0.62	-0.58	-0.61	-0.71	-0.47	-0.25	-0.11	+0.27	+0.77	+0.91	+0.94	+0.99	+1.00	+0.57	+0.35	+0.09	-0.06	-0.17	-0.29	-0.19	-0.27	-0.34
Feb.	276.49	-0.93	-0.98	-1.10	-1.18	-1.06	-0.99	-1.03	-0.81	-0.36	+0.36	+1.01	+1.72	+1.80	+1.82	+1.82	+1.50	+0.79	+0.14	-0.03	-0.29	-0.43	-0.46	-0.64	-0.66
Mar.	276.40	-1.05	-1.10	-1.04	-1.11	-1.09	-1.05	-1.01	-0.51	+0.12	+0.51	+0.92	+1.32	+1.80	+1.84	+1.87	+1.57	+1.13	+0.46	-0.08	-0.32	-0.57	-0.67	-0.91	-1.04
Apr.	278.75	-1.87	-1.85	-1.75	-2.03	-1.97	-1.82	-1.26	-0.15	+0.58	+1.38	+2.04	+2.46	+2.74	+3.17	+3.06	+2.39	+2.03	+1.22	-0.01	-1.02	-1.53	-1.80	-2.02	-1.99
May	281.52	-3.24	-3.57	-3.69	-3.84	-3.60	-2.59	-1.33	+0.07	+0.92	+1.71	+2.36	+3.04	+3.63	+3.77	+4.06	+3.92	+3.43	+2.30	+1.27	-0.18	-1.28	-1.82	-2.49	-2.86
June	282.31	-2.85	-3.14	-3.17	-3.29	-2.57	-1.68	-0.67	+0.19	+0.85	+1.47	+1.73	+2.34	+2.78	+2.92	+2.90	+2.87	+2.63	+2.27	+1.47	+0.19	-1.05	-1.67	-2.03	-2.46
July	285.05	-2.15	-2.25	-2.43	-2.49	-2.17	-1.52	-0.69	-0.09	+0.68	+1.21	+1.75	+2.10	+2.36	+2.23	+2.31	+2.37	+1.87	+1.28	+0.65	-0.08	-0.67	-1.11	-1.44	-1.71
Aug.	285.42	-2.19	-2.33	-2.44	-2.42	-2.59	-2.19	-1.27	-0.29	+0.66	+1.63	+2.26	+2.76	+2.84	+2.89	+2.54	+2.37	+2.11	+1.47	+0.67	-0.33	-0.92	-1.35	-1.74	-2.15
Sept.	282.55	-2.04	-2.28	-2.56	-2.77	-2.93	-2.92	-2.23	-0.74	+0.95	+1.97	+2.71	+3.04	+3.26	+3.39	+3.31	+2.96	+2.27	+0.91	-0.10	-0.63	-1.01	-1.30	-1.52	-1.72
Oct.	280.51	-1.16	-1.20	-1.17	-1.15	-1.31	-1.38	-1.36	-0.79	+0.21	+1.05	+1.55	+1.90	+2.12	+2.10	+1.97	+1.41	+0.77	+0.15	-0.04	-0.17	-0.54	-0.87	-1.08	-1.02
Nov.	278.53	-0.46	-0.56	-0.57	-0.71	-0.75	-0.68	-0.58	-0.67	-0.28	+0.18	+0.77	+1.23	+1.49	+1.49	+1.27	+0.66	+0.26	-0.02	-0.27	-0.30	-0.34	-0.35	-0.32	-0.51
Dec.	274.72	-0.50	-0.74	-0.89	-0.85	-0.80	-0.75	-0.60	-0.61	-0.55	+0.11	+0.79	+1.10	+1.39	+1.30	+0.98	+0.65	+0.46	+0.42	+0.17	+0.02	-0.09	-0.25	-0.26	-0.49
Year	79.87	-1.59	-1.72	-1.79	-1.87	-1.79	-1.52	-1.04	-0.39	+0.31	+0.99	+1.55	+1.99	+2.26	+2.32	+2.25	+1.94	+1.51	+0.89	+0.31	-0.27	-0.73	-0.99	-1.23	-1.41

ABSOLUTE EXTREMES OF TEMPERATURE FOR EACH DAY.  
Maximum and minimum for the interval 0h. to 24h., Greenwich Mean Time.

196. Eskdalemuir : Louvred Hut :  $h_t = 0.9$  metres.

1928.

Month	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Day.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1	74.7	61.1	77.5	72.4	78.8	75.5	81.9	74.0	90.1	79.8	89.1	76.9
2	76.9	73.5	75.1	72.8	81.4	75.8	83.4	74.6	89.8	80.1	92.6	75.0
3	77.1	69.8	76.2	69.9	84.0	77.5	80.1	75.0	81.0	78.5	93.8	75.7
4	80.8	73.8	80.9	72.0	85.7	76.0	81.1	71.6	88.7	76.6	85.6	73.1
5	77.4	75.1	80.1	73.7	81.1	77.2	80.6	71.9	90.7	76.0	86.6	73.1
6	82.9	73.7	77.8	73.1	77.9	69.9	82.0	72.2	93.1	76.1	89.3	73.0
7	81.9	74.6	81.1	77.6	76.9	70.0	83.0	72.5	84.9	75.4	90.4	80.1
8	80.8	75.0	82.0	79.4	77.3	81.3	80.9	76.5	82.2	71.6	82.6	79.0
9	78.6	74.9	81.0	74.1	76.1	71.8	86.9	80.3	82.6	71.1	86.6	79.0
10	80.0	74.5	77.0	72.8	74.8	69.0	87.0	75.4	85.2	68.6	83.3	77.5
11	75.6	72.3	76.8	71.5	73.3	69.1	86.1	74.8	84.8	70.0	85.8	74.6
12	81.4	73.9	76.6	71.9	72.0	67.4	82.8	77.0	86.0	80.5	86.8	77.3
13	79.8	77.6	77.1	71.0	73.6	67.1	78.9	76.0	87.1	80.4	81.5	79.3
14	80.0	76.5	77.5	75.2	74.3	70.8	76.1	73.0	85.5	75.8	83.0	76.8
15	78.0	75.9	82.9	75.8	76.9	72.0	76.8	72.4	87.2	72.5	82.9	76.3
16	78.7	73.2	82.1	75.0	80.5	72.0	80.6	72.2	81.5	75.8	87.3	75.1
17	77.0	73.5	77.2	75.2	83.3	77.8	78.1	71.5	81.7	75.5	86.3	75.7
18	77.7	72.8	79.9	74.9	80.5	77.2	80.5	69.2	85.0	76.2	86.3	74.8
19	79.5	74.9	82.9	77.8	82.5	77.0	81.6	71.1	80.9	75.9	85.6	79.2
20	81.1	74.6	78.6	76.2	84.6	78.9	82.5	71.3	84.0	75.4	88.3	76.2
21	82.5	75.5	81.6	71.5	79.0	70.8	82.0	72.5	85.9	75.8	85.5	74.6
22	79.8	73.6	83.5	76.7	74.8	70.7	84.0	72.4	84.5	74.0	87.1	82.8
23	81.3	73.5	77.8	74.9	80.6	74.7	81.9	75.6	83.6	76.3	87.9	80.8
24	80.1	73.1	76.9	71.0	80.1	77.5	86.9	77.4	87.5	76.9	89.2	77.9
25	78.3	72.6	83.6	68.1	82.9	76.1	85.6	78.5	90.4	75.1	85.0	82.3
26	75.6	71.3	83.9	72.2	82.1	74.2	92.4	79.6	89.8	77.1	85.2	80.3
27	76.0	70.5	84.2	71.5	82.2	75.6	88.7	79.6	89.8	82.7	87.9	78.5
28	79.0	74.0	82.5	71.2	80.0	73.0	86.8	78.4	91.9	83.9	85.2	81.1
29	75.7	72.9	79.2	75.0	76.9	73.3	86.0	78.3	91.8	83.9	85.5	82.4
30	74.9	70.8	—	—	79.0	73.2	88.2	78.0	91.8	80.4	86.7	80.7
31	79.1	72.4	—	—	79.5	75.4	—	—	84.9	78.3	—	—
Mean.	78.8	73.3	79.8	73.5	79.1	73.5	83.1	74.8	86.6	76.7	86.6	77.6

NOTE.—The initial 2 or 3 of the readings is omitted, i.e., 275.0 degrees absolute is printed 75.0.



Percentages at exact hours, Greenwich Mean Time.

197. Eskdalemuir : Louvred Hut :  $h_t$  (height of thermometer bulbs above ground) = 0.9 metres.

January, 1928.

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.	Vapour Pressure.*	
Day.	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	mb.	
1	93	95	95	95	95	96	95	96	95	96	97	97	97	96	95	95	94	90	76	96	95	95	80	89	93.5	3.6	
2	98	94	98	98	98	98	98	100	98	78	92	95	96	88	91	95	96	94	92	96	96	89	91	94	94.2	6.8	
3	98	89	88	87	85	86	87	94	86	87	84	78	77	78	84	92	94	96	96	95	94	89	90	88.7	5.8		
4	90	87	89	94	97	97	94	88	92	100	99	96	85	86	84	79	77	73	73	82	83	75	76	79	86.7	7.3	
5	72	74	78	72	80	75	74	74	75	76	67	75	78	72	71	73	80	82	93	92	90	90	88	93	78.6	6.1	
6	94	95	97	95	97	96	95	89	81	83	87	88	94	71	69	68	73	80	84	89	85	88	88	94	86.7	7.5	
7	96	100	98	98	100	97	100	100	97	94	93	94	98	94	92	94	98	98	99	92	93	94	93	75	95.7	9.1	
8	69	66	69	64	79	72	73	78	82	84	80	78	80	78	85	83	80	88	85	85	85	83	85	82	78.7	6.4	
9	85	85	84	84	87	86	89	89	89	97	95	92	85	82	82	79	75	82	84	84	84	82	88	87	85.6	6.8	
10	88	87	92	87	90	93	95	92	93	96	100	80	84	81	77	82	84	85	82	82	85	84	85	86	87.1	6.9	
11	88	85	88	89	87	89	89	89	87	96	92	85	85	87	83	87	89	89	85	85	93	96	94	94	88.6	5.9	
12	94	94	93	96	91	96	92	97	97	93	91	93	94	90	93	98	98	98	98	96	96	90	80	86	93.7	8.3	
13	74	77	84	86	83	84	84	84	81	84	83	86	80	83	88	87	90	81	81	84	82	76	82	79	82.7	7.5	
14	82	86	84	86	92	87	92	92	95	92	87	97	94	96	96	96	91	84	85	88	91	87	84	82	89.3	7.8	
15	82	83	83	81	80	80	85	88	95	92	90	91	93	90	90	97	92	94	90	90	89	90	90	92	88.4	7.1	
16	92	96	90	89	89	87	87	82	85	87	78	82	78	78	75	78	78	75	81	82	82	80	82	80	83.3	6.5	
17	81	79	82	82	85	91	91	91	87	85	90	81	91	85	82	88	89	93	93	94	98	98	86	94	88.3	6.3	
18	93	94	89	82	80	79	77	79	85	87	89	89	89	89	91	92	93	92	90	92	93	95	98	90	88.7	6.5	
19	85	84	88	84	84	85	85	87	82	81	78	81	74	64	72	74	81	87	84	93	93	97	92	92	83.6	6.8	
20	89	98	100	99	96	94	93	88	91	98	85	98	100	100	86	82	86	98	95	96	96	100	92	91	93.8	8.6	
21	88	91	87	90	92	83	84	93	96	95	96	98	98	98	96	91	87	87	87	86	88	90	94	95	91.2	8.7	
22	90	92	82	79	72	85	80	77	84	82	92	80	82	79	81	84	86	87	85	91	90	88	92	98	84.9	6.9	
23	94	92	93	93	94	93	96	92	93	94	92	95	93	92	94	94	93	98	84	84	99	100	96	83	93.3	7.9	
24	72	79	86	84	83	91	96	85	85	98	85	78	78	77	83	84	85	89	87	82	83	76	92	87	84.3	6.4	
25	95	94	94	95	94	94	93	94	94	85	85	87	89	96	93	92	98	98	87	84	88	87	91	89	91.5	6.6	
26	82	82	84	81	83	86	91	82	89	85	84	100	96	100	85	89	89	87	91	83	94	94	93	93	88.4	5.7	
27	93	91	79	70	69	80	78	75	74	73	73	73	68	72	70	80	82	80	76	77	87	93	94	91	79.1	5.0	
28	98	98	96	98	93	91	94	96	97	93	94	94	94	92	88	87	86	77	82	94	88	91	93	100	92.0	7.1	
29	100	100	100	98	100	98	98	98	100	98	91	89	93	93	92	92	94	94	94	92	94	92	94	92	94	94.8	6.3
30	96	96	92	94	94	94	94	95	94	94	90	96	89	91	89	91	98	92	96	96	92	92	96	94	93.6	6.0	
31	94	95	94	94	95	96	93	93	92	94	92	96	94	96	98	96	98	97	94	90	87	87	84	85	93.3	6.4	
Mean	88.5	89.0	88.9	87.9	88.5	89.0	89.4	88.9	89.5	89.7	87.9	88.7	87.9	86.3	85.7	87.1	88.2	88.5	87.4	88.8	90.1	89.4	88.8	88.9	88.5	76.8	
Vapour Pressure*	mb. 6.4	mb. 6.4	mb. 6.4	mb. 6.4	mb. 6.4	mb. 6.4	mb. 6.5	mb. 6.6	mb. 6.7	mb. 6.9	mb. 7.1	mb. 7.2	mb. 7.1	mb. 7.0	mb. 7.0	mb. 6.9	mb. 6.9	mb. 6.8	mb. 6.7	mb. 6.7	mb. 6.8	mb. 6.8	mb. 6.7	mb. 6.7	mb. 6.7	16.7	

198. Eskdalemuir : Louvred Hut :  $h_t$  = 0.9 metres.

February, 1928.

	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	mb.
1	85	87	82	85	87	83	85	85	85	91	96	94	91	87	90	83	85	89	91	83	94	92	88	90	87.7	6.2
2	87	94	94	90	85	85	85	85	86	85	89	90	94	94	95	94	93	92	94	91	89	87	89	89	89.8	5.8
3	89	87	92	90	86	84	82	81	82	79	78	67	82	85	80	84	80	85	80	83	90	93	93	94	84.3	5.3
4	93	90	100	94	96	98	98	98	98	91	94	98	97	96	96	94	96	98	97	94	93	93	96	96	95.5	7.5
5	93	91	88	86	86	82	87	90	81	85	78	74	83	85	71	66	77	85	87	91	90	85	83	85	84.0	6.4
6	87	85	89	90	99	92	92	92	90	92	88	93	85	85	83	83	83	80	87	87	87	88	87	84	87.8	6.3
7	87	87	86	90	94	93	93	94	94	99	96	91	90	86	90	85	85	86	88	88	94	93	91	90	90.3	8.7
8	98	98	99	99	93	96	98	92	93	92	98	98	98	98	100	100	98	93	99	100	99	98	99	96	97.0	10.0
9	72	64	65	73	66	70	75	80	79	80	70	67	69	93	70	78	70	72	82	84	94	91	89	77.1	6.0	
10	88	86	87	90	87	91	92	97	92	93	91	100	90	80	70	70	87	80	83	80	85	98	97	96	87.8	6.2
11	92	82	85	94	94	81	81	78	80	80	85	94	66	70	73	70	75	75	77	78	79	80	80	86	80.8	5.4
12	87	95	84	85	91	85	85	83	87	87	98	87	85	82	83	77	82	90	83	90	90	90	96	98	87.3	5.9
13	98	98	99	99	100	99	99	98	97	96	96	96	93	96	94	96	98	93	88	85	84	90	88	88	94.7	6.2
14	95	93	88	77	83	85	80	79	74	71	67	74	68	71	66	76	80	91	94	94	96	94	94	96	82.6	6.4
15	96	96	90	95	98	99	98	98	98	98	99	89	88	83	86	70	68	71	70	64	68	71	74	86	85.7	8.8
16	88	93	94	94	96	93	96	94	96	96	88	92	87	82	84	81	82	80	74	78	87	93	84	80	88.1	8.2
17	92	91	85	90	80	72	78	79	85	82	79	70	76	73	81	76	79	80	75	79	82	87	88	85	80.9	5.7
18	89	87	94	98	96	93	93	93	95	94	92	92	95	96	93	94	96	91	97	97	94	91	88	87	93.1	7.9
19	87	87	87	87	85	86	86	87	90	86	77	86	81	81	93	91	93	97	97	97	94	95	88	92	88.1	8.9
20	87	84	90	82	84	88	88	88	88	84	81	77	81	83	87	86	87	90	90	88	88	88	90	93	86.3	7.2
21	93	94	98	95	95	94	94	93	93	93	84	55	64	71	74	83	86	90	93	96	97	99	99	99	88.7	7.2
22	100	97	97	97	99	99	97	99	87	81	74	71	64	63	72	64	77	81	81	88	87	89	85	87	85.1	8.2
23	86	87	86	87	89	87	85	84	85	88	87	82	84	84	82	84	87	87	87	91	91	89	98	96	87.0	6.6
24	88	92	88	90	93	92	84	79	80	85	82	82	86	82	84	87	83	82	83	84	83	83	86	92	85.5	6.0
25	94	94	94	94	94	94	94	93	91	82	55	57	60	57	57	62	70	84	80	85	87	87	89	94	81.1	5.7
26	95	94	94	94	89	85	87	85	80	57	52	52	34	36	39	49	65	73	77	67	84	82	79	84	72.4	6.1
27	86	90	88	90	88	88	88	88	78	59	45	46	41	50	49	49	52	66	70	78	79	75	76	78	70.9	5.9
28	85	84	79	79	84	79	77	78	76	66	69	69	70	55	43	47	45	72	79	84	85	78	87	87	73.0	5.4
29	85	84	89	89	89	89	91	89	85	87	84	79	74	80	81	84	88	90	88	89	85	87	90	90	86.0	6.7
Mean ...	89.7	89.3	89.3	89.8	89.9	88.3	88.5	88.3	87.1	84.8	81.8	80.1	78.5	78.8	77.7	78.0	80.9	84.2	85.2	86.0	88.1	88.6	88.7	89.9	85.5	†6.8
Vapour Pressure* ...	mb. 6.6	mb. 6.5	mb. 6.5	mb. 6.5	mb. 6.6	mb. 6.5	mb. 6.5	mb. 6.5	mb. 6.7	mb. 6.8	mb. 6.9	mb. 7.1	mb. 7.0	mb. 7.0	mb. 6.9	mb. 6.8	mb. 6.7	mb. 6.7	mb. 6.7	mb. 6.6	mb. 6.7	mb. 6.7	mb. 6.7	mb. 6.7	mb. 6.7	
Hour. G.M.T. ...	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.	—



Percentages at exact hours, Greenwich Mean Time.

199. Eskdalemuir : Louvred Hut :  $h_t$  (height of thermometer bulbs above ground) = 0.9 metres.

March, 1928.

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.	Vapour Pressure.*	
Day.	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	mb.	
1	93	94	93	91	95	96	97	95	92	93	92	92	92	90	89	89	92	95	94	94	94	100	100	99	93.7	7.7	
2	98	100	98	97	97	100	98	96	95	88	86	86	85	83	76	67	76	84	84	85	84	87	90	90	89.0	7.8	
3	92	92	97	97	97	97	96	99	97	90	86	88	88	77	84	83	86	89	87	83	86	86	87	91	89.8	8.9	
4	93	93	87	95	88	92	90	90	90	87	85	83	79	71	74	73	79	85	87	85	90	89	90	90	86.0	8.5	
5	92	90	93	96	99	99	99	99	96	98	98	94	93	93	91	91	90	90	90	90	89	90	90	94	93.4	9.0	
6	90	90	87	95	90	95	88	90	90	88	83	82	85	73	75	72	75	80	87	90	87	89	89	94	86.0	6.2	
7	93	92	84	82	83	75	78	80	85	85	91	88	84	88	93	93	95	91	94	91	91	94	91	87	88.0	6.0	
8	84	85	85	94	89	92	85	87	82	73	93	82	76	69	82	75	70	82	85	86	89	89	95	95	84.2	5.8	
9	94	94	92	93	93	90	90	87	90	92	92	84	77	92	72	75	80	78	82	80	84	93	88	96	87.0	5.6	
10	94	87	84	80	85	93	93	92	88	75	83	85	79	82	87	83	74	87	88	92	91	95	95	95	87.0	4.9	
11	91	92	93	93	93	91	90	90	91	86	82	81	72	79	76	87	89	90	89	86	84	82	93	97	87.3	4.5	
12	95	95	96	97	96	96	98	98	97	98	98	98	100	99	100	99	98	98	97	96	96	91	87	90	96.5	4.8	
13	92	94	93	94	95	95	89	87	82	78	80	86	89	93	93	92	95	96	97	97	96	95	91	91	91.3	5.0	
14	92	90	91	90	89	88	90	90	90	88	83	83	85	89	91	92	94	94	94	92	92	90	90	90	90.2	5.6	
15	89	87	87	92	93	87	88	84	68	72	79	79	80	72	73	77	80	82	81	85	82	82	89	90	82.4	5.6	
16	91	90	89	88	86	84	85	80	77	82	79	74	73	77	82	80	88	91	86	91	96	91	93	94	85.2	7.2	
17	91	93	91	96	93	98	98	93	95	95	83	80	83	91	98	96	91	90	88	79	79	77	73	69	88.9	9.2	
18	67	68	61	68	78	89	92	90	97	91	87	91	84	84	86	88	85	90	93	96	97	96	99	99	85.9	7.8	
19	94	90	89	90	92	89	89	85	82	83	88	92	89	92	91	95	96	96	91	86	84	87	93	95	90.0	9.3	
20	93	92	92	95	95	93	95	96	95	89	89	85	81	76	76	76	75	69	74	78	77	83	85	84	85.3	10.0	
21	86	90	89	87	87	85	87	85	85	85	83	77	74	71	69	74	71	70	71	71	67	70	75	83	78.9	5.9	
22	81	79	82	84	83	80	82	82	78	74	74	89	92	94	96	98	96	98	98	98	100	98	98	94	88.4	5.4	
23	98	96	96	96	98	97	95	98	92	96	100	96	90	90	91	91	94	97	97	96	97	97	96	91	95.3	8.3	
24	91	87	86	84	93	91	93	91	90	94	96	96	93	94	94	94	94	99	100	100	99	99	100	97	93.8	9.1	
25	96	94	97	97	97	95	93	91	87	85	77	76	76	73	73	73	73	73	75	81	80	85	82	82	84.1	7.9	
26	85	87	91	89	86	91	91	85	84	74	71	69	71	73	77	77	80	85	87	90	95	97	90	90	83.8	7.2	
27	88	88	90	90	92	95	98	96	97	97	100	71	78	60	58	60	60	76	75	85	88	95	86	86	83.8	7.5	
28	85	92	87	92	89	91	91	93	82	75	67	61	52	63	53	68	75	75	84	85	87	90	94	93	80.0	6.0	
29	98	94	98	98	98	96	93	91	93	92	90	94	96	94	96	97	87	91	91	91	89	94	93	93	93.6	6.6	
30	98	94	96	98	98	98	98	98	98	98	88	84	76	76	73	83	77	82	89	94	91	96	92	93	90.3	6.7	
31	90	90	92	90	90	87	90	92	90	89	87	78	86	92	80	87	82	82	84	75	80	87	86	85	86.5	7.1	
Mean	90.8	90.3	89.9	91.2	91.5	91.8	91.8	91.6	90.7	88.0	86.8	86.3	84.0	82.5	82.3	82.2	83.4	83.8	86.6	87.7	88.0	88.5	90.1	90.3	90.9	87.9	† 7.0
Vapour Pressure*	mb. 6.6	mb. 6.5	mb. 6.5	mb. 6.6	mb. 6.6	mb. 6.7	mb. 6.7	mb. 6.8	mb. 7.0	mb. 7.0	mb. 7.2	mb. 7.2	mb. 7.3	mb. 7.3	mb. 7.3	mb. 7.3	mb. 7.1	mb. 7.0	mb. 6.8	mb. 6.7	mb. 6.6	mb. 6.7	mb. 6.6	mb. 6.6	mb. 6.6	† 6.9	

200. Eskdalemuir : Louvred Hut :  $h_t$  = 0.9 metres.

April, 1928.

1	83	81	89	88	85	85	80	80	75	70	70	77	70	73	71	60	63	74	82	84	92	87	89	88	78.9	6.7	
2	91	91	96	93	90	91	94	90	71	62	63	62	68	66	63	74	79	81	78	78	84	87	94	99	80.8	7.2	
3	97	96	96	91	94	90	82	87	87	81	81	82	89	78	68	93	75	84	83	84	90	85	85	80	86.1	7.6	
4	83	82	87	87	84	82	87	80	82	77	69	65	87	71	59	65	61	65	78	82	87	91	92	96	78.8	6.2	
5	96	96	97	96	96	96	98	88	87	73	68	79	87	71	61	62	77	78	85	91	92	98	92	93	85.8	6.3	
6	96	96	93	94	93	98	97	90	90	76	73	77	66	65	63	62	61	66	76	80	90	91	92	91	82.4	6.7	
7	92	87	80	82	85	80	93	85	80	74	66	68	73	79	73	69	64	66	63	68	56	67	73	74	75.2	7.1	
8	75	81	77	87	89	92	92	87	94	95	94	90	90	88	94	96	88	86	87	87	89	81	77	76	87.1	8.0	
9	77	79	77	74	74	80	87	82	82	84	84	76	75	71	72	69	73	81	80	84	83	80	82	87	78.6	10.3	
10	88	89	86	83	87	88	84	74	80	86	86	81	86	78	87	88	90	91	90	91	92	90	90	91	86.4	10.1	
11	88	89	87	87	86	91	90	90	93	86	89	92	79	72	70	59	65	80	82	86	88	86	87	87	83.8	8.6	
12	87	84	86	90	96	94	93	84	87	87	89	87	92	94	88	90	91	89	85	84	89	84	82	82	88.2	8.6	
13	84	84	90	89	87	82	84	86	83	85	85	87	87	90	88	87	88	92	88	90	85	83	83	83	86.3	7.2	
14	82	82	79	77	75	73	75	78	74	70	62	61	56	57	57	57	59	61	62	62	62	64	64	64	67.6	4.7	
15	68	68	65	63	68	68	65	55	54	50	55	61	64	57	53	51	61	69	74	71	78	90	91	91	65.7	4.4	
16	92	91	91	91	78	71	68	62	57	49	54	50	43	36	38	47	49	57	64	75	78	79	82	82	66.2	5.1	
17	78	89	84	87	85	81	78	68	62	56	52	47	44	41	38	38	38	49	53	62	64	62	67	61	61.2	4.3	
18	72	78	69	77	76	91	94	78	60	49	38	37	37	35	54	75	78	73	76	79	75	77	72	73	69.2	4.6	
19	73	67	67	67	64	64	59	49	51	51	39	42	45	38	41	35	42	44	48	53	59	56	66	70	53.8	4.1	
20	71	71	71	78	78	84	80	69	62	52	51	44	40	35	40	37	36	40	47	58	62	68	80	82	59.6	4.6	
21	82	85	80	75	75	82	80	80	74	81	57	65	63	50	50	47	48	45	59	74	79	83	87	92	70.3	5.6	
22	92	92	93	94	93	92	89	66	58	56	61	43	46	42	49	52	42	44	62	66	56	78	80	84	68.1	6.0	
23	90	92	92	94	95	96	99	93	94	98	99	96	98	100	93	99	99	98	99	99	96	100	100	100	96.8	9.5	
24	99	99	99	99	99	98	94	87	90	78	57	30	25	34	27	36	36	41	56	61	70	74	76	68	68.7	7.7	
25	58	55	53	61	62	67	58	52	53	53	54	64	74	72	74	80	87	84	88	93	91	93	93	93	70.8	8.1	
26	91	92	89	90	86	88	86	76	78	64	48	44	42	44	45	48	47	51	57	62	63	70	74	76	67.5	10.2	
27	76	81	78	78	70	73	74	74	75	81	72	69	61	66	67	69	74	78	85	85	85	84	85	90	76.0	9.7	
28	90	94	88	90	90	86	82	84	80	79	83	75	73	60	61	66	70	72	75	79	83	83	84	92	79.9	8.8	
29	90	88	91	91	93	93	96	90	91	81	86	82	81	77	70	76	79	84	93	90	92	91	93	94	87.1	9.4	
30	94	94	99	99	97	94	92	90	90	84	76	66	66	76	76	89	94	94	94	96	96	96	96	96	96	89.3	9.6
Mean ...	84.5	85.1	84.3	85.1	84.4	84.5	84.2	79.0	77.1	72.6	69.1	66.7	66.0	63.9	63.0	65.9	67.1	70.2	74.8	78.2	80.1	82.0	83.4	84.7	76.5	77.2	
Vapour Pressure* ...	mb. 6.8	mb. 6.8	mb. 6.8	mb. 6.8	mb. 6.7	mb. 6.8	mb. 7.1	mb. 7.2	mb. 7.4	mb. 7.4	mb. 7.3	mb. 7.3	mb. 7.4	mb. 7.3	mb. 7.1	mb. 7.1	mb. 7.1	mb. 7.0	mb. 6.9	mb. 6.7	mb. 6.6	mb. 6.7	mb. 6.7	mb. 6.8	mb. 7.0		
Hour. G.M.T. ...	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.	—	



Percentages at exact hours, Greenwich Mean Time.

201. Eskdalemuir : Louvred Hut :  $h_t$  (height of thermometer bulbs above ground) = 0.9 metres.

May, 1928.

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.	Vapour Pressure.*	
Day.	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	mb.	
1	99	98	99	98	99	96	92	98	94	90	86	86	78	72	70	68	64	83	83	82	86	86	91	90	87.1	11.1	
2	94	95	89	97	98	91	91	90	91	85	88	76	63	66	63	60	60	72	79	82	87	87	86	91	82.5	10.8	
3	86	88	88	88	88	90	91	91	91	93	89	87	88	88	85	86	87	91	91	93	94	93	93	89.5	8.8		
4	91	91	93	90	93	93	90	91	91	79	73	59	40	36	38	38	42	51	65	77	82	79	78	80	72.8	8.2	
5	80	83	83	82	80	78	81	77	61	57	50	27	26	26	24	26	36	47	59	68	71	68	76	77	60.2	7.4	
6	75	84	75	67	77	76	72	51	44	43	42	36	26	19	24	27	35	49	62	54	60	47	56	74	53.2	7.2	
7	74	71	76	74	74	75	73	62	64	66	55	55	53	47	46	51	56	57	70	78	83	84	81	81	66.8	6.9	
8	90	89	88	89	76	75	63	58	71	69	57	49	36	41	39	43	48	53	55	68	73	77	77	77	65.1	5.4	
9	77	78	78	76	73	62	44	40	36	55	44	38	33	37	34	36	41	42	60	70	75	84	86	89	57.6	4.8	
10	89	91	92	92	92	89	78	61	38	59	38	40	40	36	39	51	73	76	80	79	76	73	72	78	68.2	5.9	
11	81	85	85	86	88	84	68	65	60	56	61	53	63	45	57	63	68	72	73	74	76	81	84	84	71.2	7.0	
12	86	83	75	76	77	77	72	61	59	59	57	60	54	54	55	54	52	58	70	68	72	70	73	79	66.8	8.2	
13	78	85	85	89	89	88	73	72	71	75	67	67	69	58	56	49	48	59	65	81	78	76	83	81	73.3	8.9	
14	80	84	83	76	84	71	63	58	51	58	63	42	42	44	38	38	43	47	61	68	72	75	75	83	62.4	6.7	
15	90	93	93	94	93	85	85	84	84	85	79	79	69	71	59	56	54	56	61	65	69	74	77	81	76.5	7.5	
16	82	76	68	68	76	73	72	81.	81	79	87	77	74	80	73	84	83	72	73	76	79	82	83	86	77.6	6.9	
17	87	85	90	95	93	88	97	89	91	87	79	78	66	80	76	76	67	76	83	86	87	92	85	92	84.3	7.5	
18	85	85	85	87	88	84	76	68	76	77	79	55	61	51	50	50	52	81	79	86	86	85	85	86	75.0	7.4	
19	89	88	85	85	82	79	78	78	73	80	85	93	88	91	79	79	81	83	86	86	92	86	89	88	84.3	7.5	
20	88	90	89	89	85	84	82	71	86	80	96	81	73	57	53	51	52	54	65	67	72	81	78	82	75.4	7.0	
21	78	81	82	82	81	77	75	68	63	69	57	56	48	56	47	53	54	52	62	71	81	90	87	86	68.9	7.1	
22	80	85	82	85	81	74	67	62	68	63	61	48	50	52	47	44	56	59	62	72	82	80	75	77	67.3	6.5	
23	77	78	78	82	79	71	71	68	65	63	62	64	64	62	60	58	61	62	67	74	82	86	90	88	71.1	7.1	
24	93	90	91	92	91	79	76	71	65	60	54	53	55	54	49	49	51	55	61	68	73	79	84	87	70.0	8.5	
25	85	90	86	87	83	82	84	69	67	58	55	45	44	50	50	48	45	42	57	61	71	77	82	78	66.7	8.2	
26	79	80	81	81	82	82	72	67	61	72	57	47	46	53	51	77	86	89	90	92	94	93	93	95	75.5	9.9	
27	96	95	95	95	96	95	95	97	98	97	96	90	90	81	77	75	76	76	91	96	98	93	95	94	93	91.9	13.3
28	94	92	94	93	97	94	94	83	79	76	64	61	59	64	63	58	61	60	61	72	79	83	92	91	77.7	13.0	
29	89	86	88	81	78	73	78	77	66	67	71	67	65	59	53	73	73	80	83	83	83	82	85	85	76.2	12.5	
30	83	80	70	75	70	63	59	42	52	70	63	58	58	62	66	63	63	66	70	78	87	88	93	94	69.5	10.6	
31	98	99	99	93	93	91	91	83	76	75	75	73	70	72	81	86	92	95	87	86	87	87	85	86	86.0	9.5	
Mean	85.6	86.4	85.3	85.3	85.0	81.3	77.9	72.1	70.1	70.9	67.7	61.3	57.8	56.9	54.8	57.2	60.0	65.5	71.5	76.2	80.0	81.3	82.8	84.9	73.2	†8.3	
Vapour Pressure*	mb. 7.6	mb. 7.5	mb. 7.4	mb. 7.3	mb. 7.4	mb. 7.6	mb. 7.9	mb. 8.1	mb. 8.3	mb. 8.8	mb. 8.8	mb. 8.4	mb. 8.2	mb. 8.1	mb. 8.0	mb. 8.3	mb. 8.4	mb. 8.5	mb. 8.7	mb. 8.4	mb. 8.2	mb. 8.0	mb. 7.8	mb. 7.8	mb. †8.1		

202. Eskdalemuir : Louvred Hut :  $h_t$  = 0.9 metres.

June, 1928.

1	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	mb.
2	88	87	86	85	85	77	72	68	60	52	45	42	43	41	40	39	37	38	46	59	66	71	73	69	61.6	8.0	
3	67	79	72	76	71	67	53	51	48	39	33	34	34	34	38	37	38	38	50	62	67	76	76	85	54.9	7.8	
4	84	84	85	86	82	77	66	60	50	50	47	42	37	41	37	38	41	39	51	69	65	73	79	60.5	9.2		
5	79	85	82	83	87	83	77	75	74	72	62	75	73	62	58	57	50	54	58	63	70	73	84	87	71.6	7.1	
6	84	86	83	84	82	69	64	57	60	77	54	53	56	46	43	32	39	41	44	60	71	69	80	80	63.2	6.3	
7	80	80	80	80	80	81	78	65	57	68	74	76	83	86	78	73	67	69	85	86	93	93	94	96	78.9	9.2	
8	92	98	93	93	91	95	90	93	89	82	78	75	66	85	95	95	93	92	93	90	94	96	94	90	89.8	11.5	
9	90	88	88	91	94	88	91	88	83	81	83	86	83	83	86	89	89	91	88	88	88	93	93	93	88.0	8.9	
10	94	93	93	93	94	94	93	92	92	92	98	93	86	78	76	73	80	73	81	89	95	89	91	93	88.5	10.7	
11	95	91	94	89	92	92	92	83	87	92	81	80	72	70	69	69	71	70	70	66	75	71	72	76	80.3	8.7	
12	78	83	86	83	85	87	87	88	60	80	55	59	59	61	51	55	53	44	60	67	75	83	80	85	70.8	7.4	
13	86	87	92	92	93	90	85	75	76	68	58	48	41	45	59	67	78	67	61	65	74	85	88	85	73.5	8.3	
14	86	87	90	90	88	87	91	90	94	98	98	96	94	96	98	98	94	96	94	94	93	91	96	94	92.5	9.6	
15	99	99	96	99	93	97	95	94	94	92	90	78	67	70	65	60	59	61	63	71	83	84	89	84	82.8	8.1	
16	82	80	79	79	83	85	88	86	83	85	76	74	65	71	62	62	77	61	71	76	88	84	88	87	78.0	7.7	
17	90	85	87	84	80	72	69	57	59	43	53	48	49	55	44	43	51	53	52	69	65	63	57	58	62.5	6.9	
18	65	70	69	75	77	79	81	79	88	86	81	96	69	69	64	51	80	81	79	72	75	77	84	75.6	7.8		
19	75	76	78	73	76	74	68	71	67	63	60	60	55	49	65	62	63	63	65	72	82	87	91	70.6	7.6		
20	91	90	91	93	93	91	93	91	96	92	93	91	97	90	90	82	81	75	70	74	78	79	73	78	86.6	9.7	
21	85	83	84	82	78	79	74	53	51	56	60	49	62	61	61	53	53	52	52	61	71	78	81	85	66.7	8.2	
22	87	85	90	93	87	88	86	74	74	71	76	85	95	95	98	99	98	99	99	97	97	98	96	98	89.9	10.2	
23	99	99	97	90	92	89	87	85	86	89	93	82	83	88	85	88	89	90	91	87	93	90	88	87	89.7	12.2	
24	89	86	75	75	76	80	81	74	68	65	60	64	65	76	86	87	92	87	78	79	81	86	86	86	78.5	10.0	
25	87	88	87	91	94	87	86	87	72	66	82	64	62	58	50	52	51	53	61	78	79	83	86	91	74.7	9.8	
26	95	95	95	94	95	95	95	94	93	93	87	82	84	86	91	90	86	87	89	92	94	94	94	92	90.7	11.5	
27	96	96	94	94	94	96	92	89	87	84	83	85	77	79	73	72	69	69	73	71	84	86	83	82	83.9	10.5	
28	83	76	71	70	71	84	71	70	65	67	64	62	62	68	64	72	71	74	64	70	74	87	82	83	72.3	8.9	
29	88	92	88	96	89	88	91	93	93	92	94	94	97	97	95	96	95	97	95	96	93	97	96	96	93.4	11.9	
30	96	96	98	97	95	89	74	75	69	66	67	69	73	76	84	88	92	91	89	91	92	92	92	97	85.1	11.1	
Mean	84	88	86	83	81	87	86	84	75	75	88	80	75	60	68	71	75	67	64	72	80	85	87	86	78.7	9.7	
Mean	86.5	87.1	86.3	86.4	85.9	84.5	82.5	78.0	75.3	74.5	72.6	70.8	68.8	69.2	69.1	68.2	70.1	69.0	71.3	76.3	81.0	83.3	84.5	85.6	77.8	79.1	
Vapour Pressure*	mb. 8.4	mb. 8.2	mb. 8.2	mb. 8.1	mb. 8.5	mb. 8.8	mb. 9.3	mb. 9.3	mb. 9.3	mb. 9.6	mb. 9.5	mb. 9.7	mb. 9.7	mb. 9.9	mb. 9.8	mb. 9.7	mb. 9.8	mb. 9.4	mb. 9.2	mb. 9.1	mb. 8.8	mb. 8.7	mb. 8.6	mb. 8.5	mb. 79.1		
Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.	—	



Percentages at exact hours, Greenwich Mean Time.

203. Eskdalemuir : Louvred Hut :  $h_t$  (height of thermometer bulbs above ground) = 0.9 metres.

July, 1928.

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.	Vapour Pressure.*
Day.	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	mb.
1	87	83	90	91	89	88	86	80	77	84	75	83	91	87	89	94	94	94	97	98	98	97	99	99	89.3	10.7
2	96	93	90	89	88	89	82	76	72	67	69	67	66	73	79	68	71	75	75	78	86	82	80	79	79.2	10.8
3	80	80	80	80	81	80	77	77	72	67	70	66	71	69	65	64	60	63	63	76	86	87	88	90	74.4	9.6
4	88	94	91	89	83	82	76	70	64	63	57	62	69	63	67	72	90	91	91	94	95	98	97	98	80.8	10.1
5	98	98	98	97	99	98	98	96	87	92	82	85	80	81	74	77	69	73	77	78	82	90	90	90	87.2	13.0
6	89	89	94	94	96	93	80	75	78	80	77	71	71	64	67	70	70	75	78	81	84	79	82	81	80.1	11.1
7	84	83	87	89	87	86	79	71	68	60	57	55	52	53	52	64	70	55	68	74	76	86	88	91	72.1	9.7
8	90	89	92	91	92	93	95	97	99	97	96	94	98	97	96	76	64	67	75	75	79	84	90	86	88.2	11.9
9	87	94	91	88	84	84	84	81	83	65	57	70	57	53	59	62	67	75	82	81	80	73	76	76	75.6	10.8
10	72	86	89	89	89	89	89	80	83	72	75	86	91	95	91	93	94	98	98	98	98	98	97	98	89.0	11.9
11	98	98	97	96	97	100	99	100	100	100	100	100	100	100	100	100	99	99	100	100	99	99	99	99	99.1	14.7
12	99	98	98	97	99	100	100	98	99	100	98	99	96	95	95	97	97	98	99	99	98	99	99	95	98.1	14.5
13	96	96	97	98	97	96	93	95	89	87	84	79	73	86	86	88	89	95	97	98	98	98	98	98	92.0	13.4
14	99	98	94	96	94	95	97	97	96	95	90	90	82	72	80	82	81	85	94	95	95	99	99	97	91.7	14.2
15	98	98	97	98	98	97	99	99	85	83	79	77	78	77	80	81	89	94	94	98	97	93	93	90	90.7	14.7
16	91	91	87	90	96	87	75	76	64	63	61	58	56	59	60	61	69	70	69	70	76	74	87	88	74.1	11.0
17	87	86	86	86	82	79	77	77	75	74	68	72	68	66	59	62	66	68	83	85	87	89	92	92	77.7	11.9
18	95	90	78	87	89	92	93	93	85	80	76	72	71	71	69	69	67	73	73	76	76	79	78	79	79.3	11.6
19	78	75	76	76	76	75	76	75	69	72	74	78	76	78	74	70	74	70	78	80	80	86	84	87	76.4	10.9
20	87	85	87	87	88	86	84	82	78	79	78	76	71	71	74	71	80	82	82	78	75	86	84	85	80.7	12.1
21	83	80	86	87	79	75	75	74	71	70	77	62	64	65	66	71	76	73	73	80	81	89	88	93	76.4	12.2
22	99	99	96	97	94	100	99	99	98	96	91	88	84	80	74	74	79	81	83	89	87	90	91	91	90.0	13.9
23	91	88	89	87	85	85	86	82	80	85	84	91	91	85	88	89	94	96	99	100	98	99	99	97	90.2	14.1
24	94	94	90	88	90	84	85	89	89	91	89	90	94	95	95	87	87	88	86	85	85	85	83	80	88.8	13.4
25	82	86	83	87	87	82	77	73	76	72	70	75	67	75	71	68	68	73	80	81	86	82	88	81	77.9	11.9
26	78	85	83	82	84	86	88	85	82	74	74	85	81	81	78	79	87	95	96	97	97	96	97	97	85.8	12.3
27	98	98	99	98	97	97	99	96	96	88	88	85	84	86	85	84	79	85	95	91	95	91	94	88	91.7	12.9
28	91	93	94	94	94	86	83	76	76	75	67	71	59	80	60	60	63	71	70	84	84	87	87	88	78.9	8.8
29	93	92	89	91	91	90	88	83	76	67	66	68	56	72	55	61	62	66	72	80	78	82	79	83	76.7	9.1
30	88	90	86	88	89	83	80	79	74	74	75	76	68	78	81	67	83	78	84	86	82	82	85	81	80.7	10.0
31	84	81	84	80	76	77	72	61	54	54	54	52	52	48	53	53	62	67	76	80	85	84	82	86	69.0	8.3
Mean	89.7	90.0	89.6	89.9	89.3	88.2	86.2	83.6	80.5	78.3	76.1	76.9	74.7	76.0	74.0	74.7	77.4	70.8	83.5	86.0	87.2	88.4	89.5	89.1	83.3	†11.8
Vapour Pressure*	mb. 11.0	mb. 10.9	mb. 10.8	mb. 10.7	mb. 10.9	mb. 11.2	mb. 11.6	mb. 11.7	mb. 11.9	mb. 11.9	mb. 12.0	mb. 12.4	mb. 12.3	mb. 12.4	mb. 12.3	mb. 12.3	mb. 12.2	mb. 12.2	mb. 12.0	mb. 11.7	mb. 11.5	mb. 11.4	mb. 11.2	mb. 11.7		

204. Eskdalemuir : Louvred Hut :  $h_t$  = 0.9 metres.

August, 1928.

1	% 84	% 84	% 89	% 88	% 82	% 85	% 84	% 77	% 73	% 82	% 67	% 71	% 70	% 78	% 78	% 76	% 76	% 77	% 86	% 86	% 86	% 91	% 89	% 90	% 81.1	mb. 9.6
2	% 92	% 90	% 97	% 96	% 92	% 93	% 94	% 91	% 88	% 92	% 83	% 74	% 62	% 61	% 56	% 67	% 72	% 66	% 75	% 81	% 87	% 94	% 88	% 89	% 82.5	10.8
3	% 88	% 91	% 89	% 89	% 89	% 93	% 93	% 86	% 85	% 74	% 62	% 62	% 64	% 65	% 64	% 61	% 65	% 72	% 79	% 86	% 86	% 86	% 87	% 86	% 79.3	11.8
4	% 92	% 91	% 88	% 89	% 91	% 92	% 92	% 89	% 77	% 74	% 63	% 63	% 55	% 56	% 57	% 63	% 69	% 77	% 71	% 68	% 76	% 82	% 82	% 87	% 76.8	12.2
5	% 88	% 93	% 94	% 93	% 91	% 90	% 91	% 82	% 69	% 68	% 62	% 59	% 54	% 65	% 61	% 66	% 47	% 67	% 75	% 80	% 85	% 87	% 91	% 89	% 76.9	11.9
6	% 90	% 88	% 88	% 92	% 90	% 93	% 92	% 89	% 81	% 63	% 67	% 63	% 62	% 63	% 51	% 64	% 63	% 77	% 78	% 84	% 93	% 94	% 94	% 93	% 79.6	11.5
7	% 94	% 95	% 94	% 94	% 94	% 94	% 97	% 97	% 98	% 98	% 100	% 98	% 96	% 92	% 91	% 90	% 79	% 79	% 75	% 75	% 73	% 80	% 83	% 92	% 90.0	14.3
8	% 79	% 84	% 82	% 77	% 88	% 86	% 85	% 74	% 64	% 64	% 60	% 61	% 71	% 68	% 88	% 69	% 74	% 80	% 77	% 82	% 87	% 89	% 89	% 81	% 78.7	11.3
9	% 77	% 84	% 87	% 88	% 86	% 87	% 85	% 78	% 77	% 70	% 74	% 70	% 81	% 74	% 68	% 69	% 90	% 80	% 81	% 88	% 89	% 89	% 93	% 93	% 81.3	11.6
10	% 93	% 89	% 89	% 91	% 91	% 89	% 85	% 77	% 77	% 69	% 66	% 76	% 68	% 80	% 77	% 87	% 84	% 88	% 92	% 95	% 93	% 95	% 97	% 96	% 85.1	12.8
11	% 95	% 94	% 94	% 94	% 96	% 98	% 98	% 99	% 99	% 98	% 99	% 89	% 83	% 94	% 94	% 97	% 99	% 96	% 98	% 98	% 94	% 96	% 94	% 96	% 95.5	15.3
12	% 96	% 98	% 98	% 96	% 97	% 98	% 98	% 94	% 86	% 85	% 78	% 71	% 72	% 86	% 88	% 88	% 90	% 94	% 93	% 94	% 95	% 95	% 90	% 97	% 90.4	12.9
13	% 90	% 93	% 94	% 89	% 92	% 89	% 93	% 92	% 92	% 90	% 83	% 72	% 86	% 88	% 88	% 90	% 94	% 93	% 94	% 95	% 95	% 94	% 97	% 90	% 89.4	12.6
14	% 93	% 91	% 91	% 91	% 92	% 96	% 90	% 88	% 90	% 91	% 91	% 73	% 89	% 82	% 89	% 89	% 85	% 87	% 88	% 89	% 92	% 93	% 90	% 95	% 89.4	12.6
15	% 91	% 95	% 94	% 90	% 90	% 89	% 85	% 90	% 90	% 89	% 77	% 76	% 72	% 70	% 71	% 75	% 77	% 82	% 85	% 85	% 84	% 81	% 85	% 83	% 83.8	12.1
16	% 84	% 82	% 82	% 76	% 82	% 86	% 77	% 77	% 73	% 69	% 75	% 69	% 84	% 83	% 78	% 75	% 75	% 77	% 85	% 85	% 83	% 86	% 84	% 87	% 79.7	10.7
17	% 87	% 86	% 88	% 88	% 89	% 81	% 79	% 78	% 73	% 63	% 69	% 63	% 64	% 65	% 72	% 77	% 81	% 82	% 87	% 91	% 91	% 92	% 94	% 94	% 80.5	11.5
18	% 93	% 97	% 93	% 96	% 96	% 94	% 97	% 96	% 93	% 89	% 80	% 71	% 67	% 75	% 63	% 60	% 56	% 60	% 81	% 83	% 89	% 88	% 93	% 88	% 83.4	10.9
19	% 88	% 90	% 93	% 88	% 87	% 88	% 91	% 88	% 75	% 65	% 61	% 62	% 60	% 60	% 69	% 68	% 71	% 81	% 86	% 88	% 83	% 85	% 82	% 80	% 78.9	12.2
20	% 91	% 90	% 96	% 97	% 95	% 95	% 97	% 95	% 96	% 93	% 92	% 93	% 91	% 96	% 95	% 91	% 90	% 91	% 90	% 94	% 91	% 91	% 91	% 89	% 92.7	13.7
21	% 87	% 85	% 85	% 84	% 87	% 85	% 83	% 82	% 79	% 80	% 71	% 71	% 76	% 73	% 85	% 84	% 81	% 82	% 89	% 88	% 85	% 85	% 83	% 89	% 82.5	11.9
22	% 83	% 87	% 86	% 87	% 87	% 87	% 82	% 78	% 74	% 71	% 67	% 65	% 61	% 69	% 72	% 77	% 78	% 85	% 90	% 93	% 94	% 95	% 96	% 94	% 81.5	12.3
23	% 91	% 93	% 95	% 97	% 97	% 99	% 97	% 83	% 96	% 86	% 82	% 92	% 88	% 90	% 93	% 97	% 99	% 98	% 94	% 92	% 92	% 94	% 97	% 99	% 93.3	14.5
24	% 98	% 94	% 95	% 94	% 97	% 97	% 98	% 91	% 89	% 86	% 75	% 73	% 68	% 69	% 68	% 73	% 77	% 76	% 84	% 89	% 90	% 94	% 97	% 97	% 86.3	13.6
25	% 99	% 99	% 100	% 98	% 98	% 97	% 95	% 97	% 93	% 94	% 86	% 83	% 78	% 76	% 80	% 83	% 85	% 93	% 93	% 93	% 94	% 91	% 94	% 91	% 91.4	14.1
26	% 92	% 91	% 94	% 95	% 93	% 93	% 94	% 87	% 79	% 82	% 66	% 66	% 63	% 65	% 57	% 70	% 72	% 81	% 86	% 88	% 93	% 97	% 93	% 94	% 82.9	13.4
27	% 95	% 96	% 98	% 97	% 97	% 96	% 93	% 96	% 93	% 87	% 82	% 76	% 73	% 74	% 78	% 80	% 75	% 85	% 88	% 95	% 93	% 93	% 97	% 95	% 88.8	12.8
28	% 98	% 97	% 95	% 95	% 99	% 98	% 92	% 93	% 89	% 87	% 86	% 85	% 88	% 95	% 89	% 84	% 84	% 86	% 87	% 93	% 92	% 95	% 97	% 91	% 91.5	12.9
29	% 92	% 95	% 96	% 96	% 97	% 98	% 99	% 98	% 90	% 80	% 79	% 59	% 69	% 86	% 78	% 87	% 89	% 89	% 89	% 87	% 90	% 91	% 93	% 91	% 88.3	10.9
30	% 89	% 90	% 88	% 91	% 92	% 88	% 92	% 87	% 81	% 82	% 81	% 85	% 74	% 60	% 68	% 79	% 87	% 92	% 88	% 84	% 88	% 91	% 88	% 88	% 84.8	10.1
31	% 90	% 91	% 93	% 90	% 91	% 88	% 94	% 92	% 85	% 87	% 81	% 75	% 77	% 88	% 87	% 85	% 82	% 80	% 93	% 93	% 93	% 92	% 95	% 95	% 88.1	10.6
Mean ...	90.3	91.1	91.8	91.2	91.8	91.7	90.9	87.9	84.3	80.7	76.1	73.1	72.9	75.3	75.3	77.7	78.3	82.0	85.5	87.6	88.7	90.3	90.8	91.0	84.8	†12.3
Vapour Pressure* ...	mb. 11.2	mb. 11.2	mb. 11.2	mb. 11.2	mb. 11.1	mb. 11.4	mb. 12.0	mb. 12.4	mb. 12.7	mb. 12.9	mb. 12.7	mb. 12.6	mb. 12.7	mb. 13.1	mb. 12.8	mb. 13.1	mb. 13.0	mb. 13.0	mb. 12.9	mb. 12.4	mb. 12.1	mb. 11.9	mb. 11.7	mb. 11.4	mb. †12.2	
Hour. G.M.T. ...	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.	—



Percentages at exact hours, Greenwich Mean Time.

205. Eskdalemuir : Louvred Hut :  $h_t$  (height of thermometer bulbs above ground) = 0.9 metres.

September, 1928.

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.	Vapour Pressure.*
Day.	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	mb.
1	96	98	96	94	93	90	91	95	75	75	70	72	62	60	53	62	69	78	87	92	92	94	87	95	82.3	10.5
2	94	95	89	90	91	94	99	94	97	88	81	74	71	69	66	69	75	74	81	87	87	87	83	78	84.3	11.0
3	88	85	88	97	96	95	94	95	95	99	97	94	97	96	99	98	96	100	100	100	97	98	99	99	95.5	15.3
4	99	98	99	100	100	100	98	98	96	98	98	100	99	97	94	98	97	98	99	99	99	99	98	98	98.8	16.0
5	97	96	97	96	97	97	97	96	94	93	88	74	74	69	71	76	80	82	91	95	95	94	96	96	89.3	14.3
6	93	90	91	88	84	83	79	76	69	60	57	58	58	62	74	81	77	87	90	94	95	95	96	97	80.5	11.3
7	96	98	95	94	94	93	91	95	94	93	83	80	76	75	75	73	73	76	79	80	81	87	89	91	86.0	13.3
8	95	96	97	97	95	96	97	95	84	77	72	71	70	72	78	82	84	90	96	96	96	99	98	98	88.7	14.8
9	99	99	99	93	98	94	93	91	96	86	74	73	77	71	82	82	81	90	92	94	95	91	91	95	89.1	13.5
10	93	93	89	89	87	83	79	80	76	66	61	58	62	54	58	67	76	90	93	94	90	88	85	80	79.1	11.1
11	84	86	86	87	85	88	84	82	79	68	68	75	71	65	68	66	68	74	81	86	89	88	92	90	79.4	9.5
12	92	93	90	94	94	97	94	96	86	77	83	74	72	68	62	64	85	86	88	88	89	91	91	88	85.1	10.3
13	97	92	88	94	96	93	96	95	96	76	70	69	62	63	71	66	70	84	88	90	92	93	93	88	84.3	11.6
14	87	88	88	88	87	88	90	88	72	73	75	70	70	70	67	71	78	86	92	92	93	95	92	92	82.9	10.8
15	94	89	90	93	93	88	83	84	87	84	75	82	74	80	80	77	79	83	87	88	93	92	95	92	85.9	10.1
16	97	92	95	98	91	96	97	98	96	91	89	78	73	71	79	83	84	85	89	94	94	92	93	96	89.5	10.3
17	97	97	95	97	95	99	97	97	99	99	96	96	97	98	98	96	96	97	98	95	91	91	89	89	96.3	14.0
18	95	90	82	82	86	84	74	73	72	66	65	60	56	60	55	65	61	70	78	85	83	83	87	85	75.0	9.5
19	89	91	87	87	87	87	87	86	76	76	91	71	76	69	79	83	73	74	84	83	81	85	87	89	82.3	7.6
20	87	87	87	89	88	92	87	83	83	88	79	75	69	86	68	65	74	82	76	78	85	87	90	94	82.3	8.3
21	96	96	96	96	98	98	98	88	93	69	60	58	59	49	67	72	74	80	84	84	85	87	87	90	81.9	7.3
22	89	85	91	90	91	92	93	76	75	72	71	63	61	62	57	65	73	73	80	81	83	84	87	84	78.3	7.2
23	94	88	87	87	89	88	90	87	84	65	67	60	57	66	77	73	78	79	71	81	82	82	85	81	79.2	7.3
24	86	86	88	89	88	96	92	91	82	78	67	80	84	73	68	62	72	80	84	84	84	81	82	86	81.7	9.1
25	86	86	88	85	87	88	90	87	84	80	75	86	87	82	72	78	87	87	90	91	90	91	87	87	85.4	9.2
26	91	88	94	91	91	84	90	85	83	67	66	70	65	62	62	62	62	82	75	85	90	90	92	88	79.8	7.9
27	91	96	91	90	89	85	91	88	83	83	85	81	71	71	70	76	84	88	90	88	88	87	88	84	85.0	8.1
28	83	86	82	82	86	86	94	90	96	88	79	72	65	65	66	65	71	79	76	73	80	78	85	85	79.6	7.6
29	84	89	92	93	95	96	96	82	74	65	55	56	51	55	53	47	74	80	77	80	82	80	86	86	75.9	6.4
30	84	84	80	82	83	79	75	65	63	55	54	56	52	49	43	48	65	78	81	81	85	87	88	85	71.0	5.7
Mean	91.8	91.2	90.6	91.1	91.1	91.0	90.5	87.9	84.6	78.5	75.1	72.8	70.5	69.5	70.5	72.4	77.2	83.1	85.9	88.0	89.0	89.2	89.7	89.7	83.8	† 10.3
Vapour Pressure*	mb. 9.6	mb. 9.4	mb. 9.1	mb. 9.1	mb. 9.0	mb. 8.9	mb. 9.3	mb. 10.0	mb. 10.8	mb. 10.7	mb. 10.7	mb. 10.6	mb. 10.4	mb. 10.3	mb. 10.4	mb. 10.5	mb. 10.7	mb. 10.5	mb. 10.1	mb. 10.0	mb. 9.8	mb. 9.6	mb. 9.5	mb. 9.4	mb. † 9.9	

206. Eskdalemuir : Louvred Hut :  $h_t$  = 0.9 metres.

October, 1928.

	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	mb.
1	85	90	90	93	94	93	95	95	94	61	66	61	60	56	65	74	83	86	80	82	83	83	75	74	80.2	6.7
2	78	77	84	80	84	87	86	76	70	72	66	56	58	59	64	76	72	88	88	90	93	90	93	94	78.0	8.6
3	92	98	90	100	93	100	97	100	94	86	87	82	75	70	67	74	83	84	86	83	83	82	99	77	86.7	8.5
4	80	85	84	84	83	88	87	81	66	61	63	57	60	59	60	58	66	71	76	80	84	84	81	81	74.0	7.6
5	78	79	84	84	84	83	73	78	84	80	83	79	94	87	95	96	98	98	98	96	96	95	94	99	87.7	9.9
6	96	97	94	92	94	93	89	87	91	80	72	73	64	61	58	61	77	86	86	87	92	91	91	91	83.6	10.6
7	93	94	96	99	96	97	98	98	98	98	97	97	98	98	97	98	97	97	99	99	98	99	98	98	97.2	13.4
8	95	96	97	94	98	97	98	97	94	94	94	88	87	87	83	89	94	97	96	94	91	94	93	96	93.7	13.4
9	98	99	96	95	97	96	95	94	92	94	89	80	89	90	92	96	92	89	96	91	95	89	94	96	93.1	12.0
10	91	90	88	87	86	82	84	86	84	78	73	63	64	67	72	73	77	81	83	84	86	87	84	91	81.0	8.1
11	84	85	84	74	76	75	81	87	89	87	89	89	87	87	89	89	87	89	89	90	92	92	92	92	86.3	7.4
12	91	91	88	90	88	86	79	70	68	66	76	63	66	62	71	78	85	85	85	92	93	93	91	91	81.0	7.3
13	92	95	96	96	95	95	94	87	67	58	60	57	59	59	68	74	78	82	86	92	89	90	91	91	81.5	6.4
14	93	94	91	94	93	95	91	87	74	65	60	61	60	67	70	73	76	77	78	87	87	89	92	92	81.0	7.3
15	91	91	93	91	87	87	88	87	84	76	78	74	72	76	79	79	87	92	88	93	91	91	93	87	85.7	8.1
16	90	90	96	96	98	98	94	99	99	99	96	100	98	98	95	96	97	98	100	100	100	100	100	100	97.1	12.1
17	93	87	86	89	89	88	93	90	91	87	84	87	84	87	84	87	88	89	88	89	88	84	86	89	88.1	10.5
18	93	93	92	91	91	96	94	95	89	93	91	92	92	96	96	96	82	82	88	80	86	83	84	80	90.0	10.1
19	81	77	81	81	84	83	85	87	79	71	69	66	64	63	74	78	85	88	90	91	89	91	98	99	81.0	8.6
20	79	75	80	88	84	89	82	82	73	76	88	89	73	68	68	83	86	86	87	81	87	86	89	93	82.3	8.6
21	92	91	94	96	94	96	97	96	96	93	99	88	96	93	93	91	90	90	88	94	92	96	94	94	93.5	8.5
22	92	89	93	94	93	98	97	97	98	91	87	83	77	81	84	91	90	92	94	91	92	91	91	90	90.7	7.2
23	94	96	96	98	98	96	100	98	98	97	84	88	78	79	79	88	96	94	96	96	90	93	91	91	92.2	8.4
24	98	96	89	87	91	97	88	95	95	95	92	85	92	88	90	87	86	86	88	89	93	92	93	88	90.9	10.7
25	92	89	89	87	88	89	88	85	77	73	67	65	62	67	78	82	86	87	83	94	93	87	89	82.7	8.7	
26	89	91	92	93	94	94	91	90	94	99	94	94	93	93	90	89	88	88	88	87	88	88	88	89	91.0	9.0
27	93	93	92	93	93	93	88	87	86	82	76	74	68	73	67	79	84	90	84	87	90	88	92	85	85.0	9.4
28	87	90	84	81	71	74	79	78	75	82	77	72	60	67	59	74	82	86	87	85	84	82	84	80	78.5	7.7
29	87	87	80	79	87	89	89	90	90	91	88	93	96	98	98	94	93	98	98	98	99	100	100	99	92.1	9.1
30	96	96	95	88	91	90	93	92	87	86	76	78	84	81	82	82	85	85	86	90	93	94	93	94	88.3	9.9
31	94	98	93	93	94	93	93	93	92	91	94	91	96	90	93	93	86	84	81	87	88	87	88	89	91.0	9.1
Mean ...	89.9	90.3	89.9	89.9	90.0	90.8	90.2	89.8	87.0	83.1	80.9	78.8	77.5	77.8	78.4	82.6	85.2	87.7	88.4	88.9	90.5	90.2	90.7	90.3	86.6	79.1
Vapour Pressure* ...	mb. 8.6	mb. 8.6	mb. 8.6	mb. 8.6	mb. 8.5	mb. 8.5	mb. 8.5	mb. 8.8	mb. 9.2	mb. 9.3	mb. 9.3	mb. 9.3	mb. 9.3	mb. 9.3	mb. 9.3	mb. 9.5	mb. 9.3	mb. 9.2	mb. 9.2	mb. 9.2	mb. 9.1	mb. 8.9	mb. 8.8	mb. 8.8	mb. 79.0	
Hour. G.M.T. ...	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.	—



Percentages at exact hours, Greenwich Mean Time.

207. Eskdalemuir : Louvred Hut :  $h_t$  (height of thermometer bulbs above ground) = 0.9 metres.

November, 1928.

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.	Vapour Pressure.*
Day.	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	mb.
1	89	85	87	86	87	87	84	82	81	79	87	86	80	78	81	82	80	82	83	87	90	87	90	83	84.4	7.1
2	82	82	80	81	85	86	85	85	87	85	92	94	82	85	80	83	84	82	82	82	84	90	88	89	84.7	6.8
3	87	88	89	91	89	90	91	93	93	90	87	88	88	88	90	92	88	86	88	86	87	87	84	93	88.8	6.6
4	94	96	98	93	95	96	98	94	96	98	92	93	90	88	86	92	92	94	94	92	92	92	92	88	93.2	6.9
5	91	86	87	90	88	90	96	89	97	94	97	97	94	94	90	91	90	89	90	89	93	94	90	90	91.5	7.6
6	93	96	95	98	97	97	95	90	89	86	85	84	83	75	75	78	81	81	85	84	87	87	84	85	87.2	7.5
7	88	87	85	86	86	89	93	87	88	83	74	77	80	74	79	87	85	93	94	91	96	94	93	95	86.6	6.5
8	96	94	93	93	92	93	93	93	92	85	83	80	73	85	83	88	89	90	94	94	94	93	93	93	89.9	6.2
9	93	93	93	93	93	93	93	92	96	100	99	94	81	83	85	90	96	96	91	90	91	87	88	88	91.7	5.5
10	88	96	86	87	91	97	98	98	94	92	96	96	96	96	92	92	89	82	77	76	83	85	83	83	89.9	9.3
11	85	85	87	93	93	93	96	97	99	94	94	94	96	96	98	97	95	99	98	96	90	92	84	71	92.8	10.4
12	72	83	83	85	91	88	95	96	96	96	96	99	99	100	99	98	95	77	79	82	82	87	86	86	89.0	10.9
13	86	88	88	91	92	92	93	86	89	86	83	76	72	73	73	76	75	89	80	80	83	83	84	86	83.5	8.8
14	88	88	87	91	90	90	87	89	89	79	87	78	81	77	82	86	92	95	91	90	94	91	93	96	87.7	8.0
15	98	96	99	99	95	96	96	96	96	96	98	91	92	91	92	91	83	86	88	83	80	83	83	84	91.6	9.9
16	78	77	80	81	90	92	92	95	97	98	95	92	96	92	94	94	89	90	85	84	82	82	80	81	88.2	7.0
17	81	80	82	84	74	75	78	80	79	84	77	74	77	76	74	77	74	79	78	75	74	75	75	75	77.5	7.0
18	79	76	77	80	77	78	77	76	77	78	76	79	79	84	93	93	96	96	98	95	96	95	94	94	84.8	8.7
19	92	95	96	96	94	97	97	97	97	99	99	98	97	98	97	99	89	84	88	96	88	86	86	86	94.0	11.0
20	83	81.	81	76	83	79	78	77	84	84	79	79	80	80	87	82	86	87	90	89	91	93	94	96	83.6	8.4
21	91	91	93	91	88	91	86	89	93	96	94	94	93	92	92	94	96	96	98	98	98	98	96	93.6	10.7	
22	95	94	95	92	91	89	93	86	94	94	95	98	89	93	88	84	77	79	73	83	86	83	86	85	88.7	9.5
23	81	82	86	85	77	85	84	93	92	97	99	98	94	89	85	86	77	74	82	87	72	74	73	79	84.7	7.9
24	77	79	78	79	84	89	83	82	78	86	83	86	80	78	77	79	76	81	73	76	77	75	83	88	80.1	7.3
25	89	96	99	98	95	79	73	79	78	80	81	91	77	80	75	80	82	71	77	79	79	74	79	77	82.2	7.3
26	77	74	70	77	74	76	73	76	70	62	66	68	65	66	71	75	76	82	85	87	86	85	83	83	75.2	6.3
27	82	77	79	79	80	79	82	82	82	73	78	78	70	66	75	70	75	70	74	69	66	63	67	66	74.6	5.5
28	66	67	66	68	69	69	69	70	66	75	63	62	61	67	60	60	65	70	76	79	82	82	76	80	69.2	4.6
29	81	85	89	88	94	98	97	100	98	93	97	94	96	96	96	87	86	83	86	89	79	90	92	92	90.9	9.0
30	92	87	80	80	84	87	84	85	83	89	83	87	80	85	84	87	87	91	84	83	80	79	82	83	84.6	10.5
Mean ...	85.8	86.1	86.3	87.0	87.3	88.0	88.0	87.8	88.3	87.7	87.2	86.9	84.0	84.2	84.2	85.7	84.6	85.0	85.3	85.0	85.4	85.5	85.5	85.7	86.1	† 7.0
Vapour Pressure*	mb. 7.5	mb. 7.5	mb. 7.5	mb. 7.5	mb. 7.5	mb. 7.6	mb. 7.6	mb. 7.6	mb. 7.8	mb. 8.0	mb. 8.3	mb. 8.6	mb. 8.4	mb. 8.5	mb. 8.3	mb. 8.1	mb. 7.8	mb. 7.7	mb. 7.6	mb. 7.6	mb. 7.6	mb. 7.6	mb. 7.6	mb. 7.5	mb. 7.8	

208. Eskdalemuir : Louvred Hut :  $h_t$  = 0.9 metres.

December, 1928.

	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	mb.
1	87	84	87	87	88	87	83	74	79	70	63	69	65	68	73	73	86	87	86	85	85	91	92	92	92	80.7	7.5
2	94	95	97	98	100	100	98	98	98	98	88	87	90	90	88	88	92	90	93	97	97	98	100	99	94.6	6.6	
3	96	85	79	79	74	74	75	77	73	76	75	79	82	80	82	85	89	92	94	95	94	94	96	95	84.3	6.0	
4	96	97	96	95	95	96	98	93	91	95	96	96	97	98	97	96	99	98	98	94	96	93	93	93	95.7	7.6	
5	93	93	93	78	74	72	72	77	83	82	77	77	72	76	71	74	73	80	84	85	90	95	95	95	81.7	7.5	
6	93	95	91	94	94	96	90	90	90	97	97	95	84	82	70	77	82	77	82	88	91	88	80	88.0	6.6		
7	82	72	89	85	77	72	71	69	69	71	66	64	64	62	65	68	78	78	79	81	77	78	80	74.0	4.7		
8	80	82	77	81	81	75	80	81	81	79	73	68	69	68	68	68	67	65	66	67	70	71	75	79	73.8	4.2	
9	81	84	85	86	89	92	94	96	97	98	97	97	96	94	98	98	94	98	96	96	95	94	95	98	93.3	5.5	
10	94	93	88	84	85	85	84	85	82	84	82	80	73	72	64	64	66	66	67	68	69	77	73	69	77.9	5.4	
11	75	75	75	79	74	75	78	79	84	85	90	94	91	89	89	87	87	89	88	87	84	82	84	93	83.4	5.5	
12	89	91	93	91	91	89	91	87	86	89	84	87	79	89	89	90	89	89	90	91	84	87	88	91	88.5	6.4	
13	89	89	89	92	92	89	90	87	87	87	87	90	89	89	89	90	89	86	89	85	89	90	91	88.9	5.8		
14	91	91	91	90	85	91	92	92	91	94	90	77	70	69	78	84	90	93	94	94	96	96	98	99	88.8	5.1	
15	99	99	99	98	97	97	97	94	92	94	96	97	97	97	96	93	92	88	85	83	81	79	77	75	92.3	4.9	
16	75	76	95	96	97	96	96	96	96	94	94	95	94	96	96	97	98	92	84	85	82	78	73	77	89.9	6.4	
17	79	81	83	81	84	84	83	84	80	85	81	78	74	74	79	79	79	84	84	81	84	90	94	95	82.1	6.9	
18	96	96	97	96	97	98	100	99	98	97	96	96	100	100	96	98	96	94	98	93	95	96	98	100	97.0	6.0	
19	98	98	98	100	98	97	97	98	98	97	97	98	98	97	97	100	98	97	97	98	98	97	90	84	97.2	8.1	
20	83	81	81	87	85	87	83	83	85	87	83	78	74	75	82	82	87	78	78	83	86	91	92	93	83.3	5.6	
21	93	94	95	96	96	95	95	95	96	97	97	96	96	96	95	98	98	100	98	100	100	100	100	100	96.8	5.8	
22	100	98	98	98	98	96	94	93	94	94	94	96	96	93	87	91	87	84	75	79	82	78	80	80	90.6	7.7	
23	76	82	80	81	81	89	92	93	93	96	97	97	96	87	88	96	92	90	93	95	92	95	96	100	90.3	5.4	
24	100	100	99	99	99	99	98	100	98	98	98	99	92	86	84	72	70	74	72	79	76	85	79	84	89.5	8.5	
25	77	82	85	91	90	89	89	85	91	84	83	87	86	84	92	89	90	89	90	97	96	98	100	100	89.0	7.0	
26	96	85	81	82	79	77	77	81	79	86	85	85	91	89	87	84	89	85	85	85	84	82	85	87	84.7	6.7	
27	84	84	84	79	79	85	88	89	88	87	85	85	82	81	87	93	94	94	94	91	90	90	91	91	87.2	5.3	
28	91	92	88	91	91	90	92	92	96	97	88	80	74	77	73	74	74	76	87	83	85	94	96	94	86.3	5.1	
29	94	98	96	96	96	96	98	100	98	96	94	92	92	90	94	94	94	98	94	95	94	93	94	95	95.0	6.0	
30	95	95	94	94	95	90	94	98	96	98	96	94	87	92	89	86	87	97	96	95	95	92	93	88	93.3	5.8	
31	86	75	75	64	64	63	64	64	65	66	62	62	64	64	61	61	66	70	74	80	76	71	73	77	68.8	3.9	
Mean ...	89.1	88.5	89.0	88.7	87.9	87.8	88.1	88.0	88.2	89.0	86.8	86.3	84.3	84.0	84.0	84.7	86.2	86.5	86.7	87.5	87.3	88.5	88.9	89.5	87.3	76.1	
Vapour Pressure* ...	mb. 6.1	mb. 5.9	mb. 5.9	mb. 5.8	mb. 5.8	mb. 5.8	mb. 5.9	mb. 5.9	mb. 5.9	mb. 6.2	mb. 6.4	mb. 6.5	mb. 6.4	mb. 6.4	mb. 6.2	mb. 6.1	mb. 6.1	mb. 6.1	mb. 6.0	mb. 6.0	mb. 5.9	mb. 5.9	mb. 5.9	mb. 5.9	mb. 16.0		
Hour. G.M.T. ...	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.	—	



For exact hours, Greenwich Mean Time.

209. Eskdalemuir : (Louvred Hut)  $h_s = 0.9$  metres.

1928.

G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean
Relative Humidity ...	% 88.5	% 88.7	% 88.4	% 88.6	% 88.6	% 88.1	% 87.3	% 85.2	% 83.4	% 81.4	% 79.0	% 77.2	% 75.6	% 75.4	% 75.0	% 76.5	% 78.3	% 80.7	% 82.8	% 84.8	% 86.3	% 87.3	% 87.8	% 88.3	% 83.5
Vapour Pressure (in millibars)*	mb. 7.9	mb. 7.8	mb. 7.8	mb. 7.7	mb. 7.8	mb. 7.9	mb. 8.1	mb. 8.2	mb. 8.5	mb. 8.7	mb. 8.7	mb. 8.8	mb. 8.8	mb. 8.8	mb. 8.7	mb. 8.7	mb. 8.6	mb. 8.5	mb. 8.4	mb. 8.3	mb. 8.2	mb. 8.1	mb. 8.0	mb. 8.0	mb. 8.3

\*Computed from the mean temperature and mean relative humidity.

## RELATIVE HUMIDITY: MONTHLY MEANS AND DIURNAL INEQUALITIES.

The departures from the mean of the day are adjusted for non-cyclic change.

210. Eskdalemuir : (Louvred Hut)  $h_s = 0.9$  metres.

1928.

Month	Mean	Hour 1	G.M.T. 2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.
Jan.	% 88.5	% 0.0	% +0.4	% +0.3	% -0.7	% 0.0	% +0.5	% +0.9	% +0.4	% +1.0	% +1.2	% -0.5	% +0.3	% -0.5	% -2.2	% -2.8	% -1.4	% -0.2	% +0.2	% -1.0	% +0.4	% +1.7	% +1.0	% +0.4	% +0.6
Feb.	% 85.5	% +4.3	% +3.9	% +3.9	% +4.3	% +4.4	% +2.9	% +3.1	% +2.8	% +1.6	% -0.7	% -3.7	% -5.4	% -7.0	% -6.7	% -7.8	% -7.5	% -4.6	% -1.3	% -0.3	% +0.4	% +2.5	% +3.0	% +3.2	% +4.3
Mar.	% 87.9	% +2.8	% +2.3	% +1.9	% +3.3	% +3.5	% +3.8	% +3.6	% +2.7	% +0.9	% -1.1	% -1.6	% -3.9	% -5.4	% -5.7	% -5.7	% -4.5	% -4.1	% -1.3	% -0.2	% +0.1	% +0.7	% +2.3	% +2.5	% +3.0
April	% 76.5	% +8.1	% +8.7	% +7.9	% +8.7	% +8.0	% +8.1	% +7.8	% +2.5	% +0.6	% -3.9	% -7.4	% -9.9	% -9.6	% -12.7	% -13.6	% -10.7	% -9.5	% -6.4	% -1.8	% +1.5	% +3.5	% +5.3	% +6.7	% +8.0
May	% 73.2	% +12.2	% +13.0	% +12.0	% +11.9	% +11.7	% +7.9	% +4.6	% -1.2	% -3.1	% -2.4	% -5.6	% -11.9	% -15.5	% -16.3	% -18.4	% -16.0	% -13.2	% -7.7	% -1.7	% +3.0	% +6.9	% +8.2	% +9.7	% +11.8
June	% 77.8	% +8.7	% +9.3	% +8.5	% +8.6	% +8.1	% +6.7	% +4.7	% +0.2	% -2.5	% -3.3	% -5.2	% -7.0	% -9.0	% -8.6	% -8.7	% -9.6	% -7.7	% -8.8	% -6.5	% -1.5	% +3.2	% +5.5	% +6.7	% +7.8
July	% 83.3	% +6.4	% +6.7	% +6.3	% +6.6	% +6.1	% +4.9	% +2.9	% +0.3	% -2.8	% -5.0	% -7.2	% -6.4	% -8.6	% -7.3	% -8.4	% -8.7	% -5.9	% -3.5	% +0.1	% +2.7	% +3.9	% +5.1	% +6.2	% +5.8
Aug.	% 84.8	% +5.6	% +6.3	% +7.0	% +6.4	% +7.0	% +7.0	% +6.2	% +3.1	% -0.5	% -4.1	% -8.8	% -11.7	% -11.9	% -9.5	% -9.5	% -7.1	% -6.6	% -2.9	% +0.5	% +2.6	% +3.7	% +5.3	% +5.8	% +6.0
Sept.	% 83.8	% +7.8	% +7.3	% +6.7	% +7.2	% +7.2	% +7.1	% +6.7	% +4.0	% +0.8	% -5.3	% -8.7	% -11.0	% -13.3	% -14.2	% -13.2	% -11.3	% -6.5	% -0.7	% +2.2	% +4.3	% +5.3	% +5.5	% +6.1	% +6.0
Oct.	% 86.6	% +3.3	% +3.7	% +3.3	% +3.3	% +3.4	% +4.3	% +3.6	% +3.2	% +0.4	% -3.5	% -5.7	% -7.8	% -9.1	% -8.8	% -8.2	% -4.0	% -1.5	% +1.1	% +1.7	% +2.2	% +3.8	% +3.5	% +4.0	% +3.6
Nov.	% 86.1	% -0.4	% -0.1	% 0.0	% +0.8	% +1.1	% +1.8	% +1.8	% +1.6	% +2.1	% +1.5	% +1.0	% +0.7	% -2.1	% -1.9	% -1.9	% -0.5	% -1.5	% -1.1	% -0.8	% -0.2	% -0.7	% -0.5	% -0.6	% -0.3
Dec.	% 87.3	% +1.7	% +1.1	% +1.6	% +1.3	% +0.5	% +0.4	% +0.7	% +0.7	% +0.9	% +1.6	% -0.5	% -1.0	% -3.0	% -3.3	% -3.3	% -2.5	% -1.0	% -0.8	% -0.6	% +0.3	% +0.1	% +1.3	% +1.7	% +2.3
Year	% 83.5	% +5.0	% +5.2	% +4.9	% +5.1	% +5.1	% +4.6	% +3.9	% +1.7	% -0.1	% -2.1	% -4.5	% -6.3	% -7.9	% -8.1	% -8.5	% -7.0	% -5.2	% -2.8	% -0.7	% +1.3	% +2.9	% +3.8	% +4.4	% +4.9

## RAINFALL: ANNUAL TOTALS OF HOURLY VALUES.

† Amounts, in millimetres; durations, in hours, for periods of sixty minutes between the exact hours, Greenwich Mean Time.

211. Eskdalemuir :  $H_r = 242.0$  metres +  $0.4$  metres.

1928.

Hour. G.M.T.	...	...	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to Noon	Noon to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24	0 to 24
Amount	...	...	mm. 72.1	mm. 74.5	mm. 99.1	mm. 94.3	mm. 67.5	mm. 63.6	mm. 70.7	mm. 83.3	mm. 96.9	mm. 124.9	mm. 151.0	mm. 133.9	mm. 119.6	mm. 101.1	mm. 125.2	mm. 102.4	mm. 81.1	mm. 79.1	mm. 74.2	mm. 82.0	mm. 81.9	mm. 71.4	mm. 89.8	mm. 83.0	mm. 222.6
Duration	...	...	hr. 58.3	hr. 51.6	hr. 57.6	hr. 64.8	hr. 61.9	hr. 66.1	hr. 62.8	hr. 63.4	hr. 73.1	hr. 65.6	hr. 76.1	hr. 75.3	hr. 74.5	hr. 69.9	hr. 65.0	hr. 61.7	hr. 60.2	hr. 58.8	hr. 52.9	hr. 54.5	hr. 60.2	hr. 52.5	hr. 59.6	hr. 57.0	hr. 1503.4

† The totals and durations for individual months are printed in the tables on the following pages.

## NOTES ON RAINFALL.

## 212. Eskdalemuir.

1928.

**Rainfall Duration.**—There were 118 days on which no duration of rainfall was registered. There were 42 days on which the duration of rainfall was registered as 0.1 hour to 1.0 hour, 27 days with 1.1 to 2.0 hours, 73 days with 2.1 to 6.0 hours, 69 days with 6.1 to 12 hours, and 37 days with more than 12 hours. The day with the greatest duration was September 4th, when the duration was 19.1 hours, the amount falling being 18.2 mm.

## Notable Falls of the Year.

(a) The greatest amount in a 60-minute period was 11.2 mm., which was recorded between 2h. and 3h., September 10th. On August 27th, 5 mm. fell in 10 minutes, and on September 10th 5 mm. fell in 12 minutes. Falls of 5 mm. in less than one hour occurred on 40 days.

(b) Details of the greatest continuous falls are as follows:—

Date.	Amount. mm.	Duration. hrs.
January 12th	...	43
January 21st	...	10.7
January 23rd	...	11.9
February 4th	...	12.0
June 19th	...	31
July 1st	...	11.7
August 6th—7th	...	12.9
October 7th—8th	...	32
November 23rd	...	11.8
December 16th	...	17.7
December 25th—26th	...	17.4
	...	6.5
	...	13.7
	...	7.5

## Wet Periods.

(a) There were two "rain spells" (i.e., periods of fifteen or more consecutive days on each of which 0.2 mm. or more of rain fell), viz., January 4th to January 21st, and January 31st to February 18th.

(b) There were no "wet spells" (i.e., periods of fifteen or more consecutive days on each of which 1.0 mm. or more of rain fell). The "rain spell" of January 4th to 21st failed to classify as a "wet spell" in having only 0.4 mm. on January 17th.

## Dry Periods.

(a) There were no periods of "absolute drought" (i.e., fifteen or more consecutive days on each of which less than 0.2 mm. of rain fell), or of "partial drought" (i.e., twenty-nine or more consecutive days, the mean rainfall of which did not exceed 0.2 mm. per day).

(b) Two relatively dry periods were February 19th to February 29th, and July 13th to July 22nd, during which 0.2 mm. and 0.5 mm. fell respectively.



*Amounts in millimetres, for periods of sixty minutes, between the exact hours, Greenwich Mean Time.*

**213. Eskdalemuir :**  $H_r$  (height of receiving surface above M.S.L.) =  $H$  (height of station above M.S.L.) +  $h_r$  (height of receiving surface above ground) = 242.0 metres + 0.4 metres.

**January, 1928.**

Hour. G.M.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	0-24	Dura- tion. 0-24	
Day.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	hr.	
1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1·7	2·5	3·8	3·2	1·3	12·5	4·8	
2	3·5	3·6	·5	·7	·3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	8·6	4·5	
3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·1	0·1	
4	...	...	·1	·9	·3	·3	·5	·1	...	1·7	3·8	1·9	1·1	·8	...	...	·1	...	...	...	·3	·3	...	...	12·2	10·0	
5	·2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	·1	·2	·2	·1	...	1·2	1·1	3·1	4·1	
6	1·5	1·2	1·2	2·6	1·0	2·7	2·4	·1	2·1	·5	...	·1	1·0	·1	...	...	...	...	...	...	...	...	...	...	16·5	9·7	
7	...	...	...	1·2	2·1	1·1	3·3	1·7	·4	·2	...	·1	·5	2·2	3·0	4·0	2·7	·3	...	·2	...	·1	·2	·7	24·0	15·0	
8	·1	...	·2	...	·8	·1	...	...	...	...	...	...	...	·6	·6	·8	·1	...	·2	...	1·2	·4	...	...	3·7	4·6	
9	...	...	...	...	...	...	...	·8	...	1·1	4·3	...	·6	·8	·2	·5	·2	...	...	...	...	...	...	...	9·1	5·5	
10	...	...	2·3	·4	...	...	1·6	3·8	1·4	3·4	2·1	1·4	·4	1·2	...	...	...	...	...	...	...	...	...	...	18·0	7·6	
11	...	...	...	...	...	...	...	...	·3	1·2	·1	...	·3	·1	...	...	...	·1	...	...	...	...	...	...	2·1	2·8	
12	...	...	...	...	·2	1·6	5·0	5·4	4·0	4·5	4·4	5·2	4·9	4·0	3·8	·2	·3	...	...	...	1·5	1·0	·2	·2	46·4	12·7	
13	...	...	...	·8	...	·3	·5	·6	·2	·3	·2	·4	·5	·8	3·4	3·0	2·2	·1	...	...	·1	·1	...	...	13·5	8·3	
14	...	...	...	...	...	...	...	...	·2	1·7	2·1	4·4	2·2	2·7	1·4	·5	·1	...	...	...	...	...	...	...	15·2	6·5	
15	...	...	...	...	...	...	·2	·6	1·1	2·1	1·6	2·7	2·3	·5	...	1·3	·6	·5	1·9	1·1	·1	...	·5	·5	17·7	12·3	
16	1·7	2·0	·1	...	...	·2	·1	·1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4·2	3·0	
17	...	...	...	...	...	...	·1	·3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·4	0·9	
18	...	...	...	...	...	...	...	...	·1	...	...	·2	·1	...	·1	1·7	3·2	4·8	1·0	3·1	1·8	1·9	2·4	1·3	21·7	10·9	
19	·9	...	...	...	...	...	...	·1	...	...	...	...	...	...	...	...	...	p	(·1)	p	...	...	...	...	1·1	1·6	
20	...	...	...	·1	·1	·1	1·4	1·2	3·5	6·9	3·3	3·1	·8	...	...	...	...	...	...	...	...	...	...	...	20·6	7·4	
21	...	...	...	...	...	...	...	1·9	2·7	4·6	3·7	1·5	1·3	1·1	3·1	1·6	2·7	·9	1·2	...	...	·3	...	...	26·6	12·2	
22	...	...	...	...	...	...	...	...	·2	1·6	2·3	1·6	3·1	1·8	4·3	5·0	4·0	3·2	3·1	2·3	·5	·6	2·3	2·1	38·0	13·9	
23	...	...	...	...	...	...	...	...	...	1·6	·3	·1	·1	...	·5	·4	2·6	1·4	·9	...	·1	·9	2·2	1·8	12·9	7·7	
24	...	...	...	...	...	...	...	...	...	...	...	...	...	·4	...	·4	1·2	2·8	·7	...	...	...	...	1·1	1·6	13·0	8·0
25	2·5	·2	·2	1·2	·6	·1	...	...	...	...	...	...	...	...	...	...	...	...	·8	...	...	...	...	...	...	10·5	5·8
26	...	...	·2	·1	...	...	...	...	·5	·7	·3	4·0	1·8	1·8	·3	...	...	...	·8	...	...	...	...	...	...	...	...
27	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
28	...	...	...	1·4	·3	·5	·2	·8	1·4	2·5	3·7	3·3	1·5	·4	...	...	...	...	...	...	p	...	p	...	...	16·0	9·5
29	...	...	...	...	...	...	...	...	...	...	...	...	·3	1·6	2·2	2·0	·9	·5	·4	·4	...	...	...	...	...	8·3	6·9
30	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
31	...	...	...	...	...	...	...	...	...	...	...	...	·1	1·7	·9	1·1	1·1	1·5	...	6·3	1·0	·6	...	...	14·3	5·7	
Sum.	10·4	7·0	4·8	9·4	5·7	7·0	15·3	17·5	18·2	34·6	32·2	30·6	22·9	22·0	23·9	21·8	21·8	16·2	10·4	15·4	9·2	10·1	13·3	10·6	390·3	202·0	
Total Duration.	hr. 5·5	hr. 3·4	hr. 4·6	hr. 6·7	hr. 5·3	hr. 6·3	hr. 6·6	hr. 10·2	hr. 10·8	hr. 12·2	hr. 12·3	hr. 12·6	hr. 13·5	hr. 14·0	hr. 10·2	hr. 10·9	hr. 9·3	hr. 8·9	hr. 7·4	hr. 6·4	hr. 5·9	hr. 6·1	hr. 6·6	hr. 6·3	hr. 202·0		

**214. Eskdalemuir :**  $H_r = 242.0$  metres  $\pm 0.4$  metres.

**February, 1928.**

[illegible]



Amounts in millimetres, for periods of sixty minutes, between the exact hours, Greenwich Mean Time.

215. Eskdalemuir :  $H_r$  (height of receiving surface above M.S.L.) =  $H$  (height of station above M.S.L.) +  $h_r$  (height of receiving surface above ground) = 242.0 metres + 0.4 metres.

March, 1928.

Hour. G.M.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	0-24	Duration. 0-24
Day.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	hr.
1	...	...	5	7	4	2	2	1	1	...	3	5	2.1	1.1	9	...	...	...	...	...	3	5	...	...	7.9	11.4
2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	2	0.6	1.7
3	4	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.5	1.4
4	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	0.2	0.3
5	...	...	...	6	1.0	5	5	1.2	3	5	2.1	3.3	2.2	1.4	2.5	1.7	1.0	1	...	...	...	...	...	...	18.9	14.1
6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8	...	...	...	...	...	...	...	...	...	...	(Δ°)	...	(.1)	(Δ°)	(Δ°)	...	...	...	...	...	...	...	...	...	0.1	...
9	(*)	(*)	(.1)	(*)	(*)	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	0.4	0.7
10	1	2	1	...	2	4	1	...	...	...	(*)	(.1)	(*)	(*)	(.1)	(*)	(*)	...	...	...	...	2	1	2	1.8	3.7
11	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	3	1	...	...	...	...	...	1	5	1.1	2.9
12	5	2	3	5	4	3	4	7	7	1.0	1.6	2.2	2.4	2.5	2.6	2.3	9	2	...	...	...	...	...	...	19.7	17.2
13	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	0.2	1.0
14	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
15	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
16	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	7	3	1.1	2.9	1.3	5	6	7.4	6.8
17	1.6	2.1	2.3	1.9	1.5	3.2	3.4	2.0	5	5	...	...	...	9	3.2	1.2	1	...	...	...	...	...	...	...	24.4	13.0
18	...	...	...	...	9	1.5	9	...	7	...	1	9	...	...	1	3	...	...	...	...	8	6	...	...	6.8	5.4
19	...	1	...	...	...	...	...	...	...	...	3	2	8	5	4	1.8	1.3	8	4	2	1.0	1.3	1.4	2.3	12.8	13.8
20	2.6	1.6	9	1.2	1.7	3	9	7	4	7	7	7	3	...	...	...	...	...	...	1	1.1	1.4	1.4	1.4	16.7	15.4
21	2.2	2.3	2.5	2.1	1.1	9	8	1.5	5	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	14.0	8.9
22	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
23	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	2	2	...	0.8	1.8
24	...	...	...	2	5	4	2	4	4	9	3	...	6	1.4	6	2	1	1	6	2	...	...	...	...	7.1	13.0
25	...	...	8	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1.0	1.4
26	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
27	...	...	...	...	...	5	1.5	3.3	3	...	4	1	...	...	...	...	...	...	...	...	...	...	...	...	6.1	2.7
28	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	0.1	0.2
29	...	...	...	...	...	...	...	...	3	1.1	3.0	2.2	2.7	2.7	1.9	5	...	...	...	...	...	5	8	6	16.3	9.2
30	3	5	9	5	2	2	4	7	1	2	...	...	...	...	...	...	...	...	7	2	...	...	...	...	4.9	8.9
31	...	...	...	...	...	...	...	...	...	...	...	1	4	2	...	...	...	...	...	...	...	...	...	...	0.7	1.2
Sum.	8.0	7.1	8.4	7.8	7.6	8.5	9.5	10.4	4.3	4.4	9.5	10.8	11.0	10.0	13.1	8.4	3.8	2.3	1.5	2.2	5.4	5.7	4.9	5.9	170.5	156.1
Total Duration.	hr. 6.3	hr. 5.7	hr. 7.0	hr. 7.8	hr. 7.9	hr. 9.5	hr. 9.9	hr. 8.2	hr. 8.3	hr. 5.8	hr. 6.9	hr. 7.9	hr. 6.7	hr. 7.2	hr. 6.9	hr. 5.8	hr. 5.2	hr. 4.7	hr. 3.1	hr. 3.5	hr. 4.1	hr. 5.3	hr. 6.2	hr. 6.2	hr. 156.1	

216. Eskdalemuir :  $H_r$  = 242.0 metres + 0.4 metres.

April, 1928.

	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	hr.
1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3	2.2	2.4	1.1	4	...	...	1	2	...	...	6	1.2	3.7	...	...	1.6	4	...	3	...	2	3	1.4	3.7	5.6
4	...	...	...	...	...	...	...	...	...	...	...	...	6	2	2	...	...	...	...	...	...	...	...	...	14.2
5	...	...	...	...	...	...	...	...	...	...	...	...	5	...	...	...	...	...	...	...	...	...	...	...	1.0
6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.7
7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.5
8	...	...	...	...	6	5	5	7	6	2	2	2	...	...	7	8	...	...	...	...	...	...	...	...	5.0
9	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	7.4
10	...	1	...	...	...	1	...	...	1.0	4	2	1	1	1	...	...	...	...	...	...	...	...	...	...	0.2
11	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.6
12	...	...	...	...	...	3	1	...	3	...	1.6	3	...	...	...	...	...	1	...	...	...	...	...	...	2.1
13	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1.7
14	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2.9
15	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
16	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
17	1	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.4
18	...	1.3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1.3
19	...	...	...	...	...	...	7	1	2	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1.1
20	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1.4
21	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
22	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
23	...	...	...	...	...	3	1.4	1.5	1.2	5	5	4	4	3	3	4	4	1.2	1	2	2	2	2	1	9.6
24	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.3
25	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1.0
26	...	3	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.5
27	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.8
28	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
29	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
30	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	1	...	...	...	...	...	...	...	0.4
Sum.	2.3	4.1	1.6	0.5	0.6	0.9	1.8	2.4	3.7	1.8	3.1	2.3	5.4	0.8	1.2	2.7	1.2	0.6	1.5	0.1	0.4	0.5	1.7	4.1	45.3
Total Duration.	hr. 1.2	hr. 2.1	hr. 1.7	hr. 0.8	hr. 0.6	hr. 1.6	hr. 3.2	hr. 2.4	hr. 3.2	hr. 1.4	hr. 2.6	hr. 2.8	hr. 3.1	hr. 1.7	hr. 2.0	hr. 1.8	hr. 2.1	hr. 1.6	hr. 1.2	hr. 0.2	hr. 1.2	hr. 1.2	hr. 2.2	hr. 2.1	hr. 44.0
Hour. G.M.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	0-24



*Amounts in millimetres, for periods of sixty minutes, between the exact hours, Greenwich Mean Time.*

**217. Eskdalemuir :**  $H_r$  (height of receiving surface above M.S.L.) =  $H$  (height of station above M.S.L.) +  $h_r$  (height of receiving surface above ground) = 242.0 metres + 0.4 metres.

[illegible]

**218. Eskdalemuir :**  $H_r = 242.0$  metres  $\pm 0.4$  metres.

**June, 1928.**

[illegible]



Amounts in millimetres, for periods of sixty minutes, between the exact hours, Greenwich Mean Time.

219. Eskdalemuir :  $H_r$  (height of receiving surface above M.S.L.) =  $H$  (height of station above M.S.L.) +  $h_r$  (height of receiving surface above ground) = 242.0 metres + 0.4 metres.

July, 1928.

Hour. G.M.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	0-24	Dura- tion. 0-24	
Day.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	hr.	
1	...	...	...	...	...	...	...	...	...	3	4	3	1.8	4	8	2.0	4.9	6.3	8.4	3.7	1.7	1.1	5	...	32.6	12.7	
2	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2.1	...	1	...	2.8	1.8	
3	...	...	...	...	...	...	...	...	...	...	...	1	...	4	...	...	...	...	...	...	...	...	...	...	0.5	0.7	
4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	1	3	4	1.2	1.6	2.3	1.4	7.5	5.6	
5	1.8	2.0	5.3	4.8	1.6	.9	.8	...	2	...	...	...	4	...	...	...	...	...	1.0	...	...	...	...	...	18.8	7.7	
6	...	...	1.1	4	1.2	.3	.1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3.2	3.9	
7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
8	...	...	...	...	...	...	...	...	1	3	6	1.4	6	1.8	5	...	...	...	...	...	...	...	...	...	5.3	6.3	
9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
10	...	...	...	...	...	...	...	...	...	...	...	1	1.7	1.5	.9	...	...	...	...	2.8	1.7	1.2	1.4	2.1	1.0	15.2	9.3
11	.9	1.3	1.3	1.5	.8	1.1	1.1	.6	.2	.1	.5	.4	.2	...	...	...	...	...	...	...	.4	.2	...	...	10.6	13.8	
12	...	.1	.1	...	.1	.2	.1	.2	.4	.3	.1	.4	.9	1.4	.3	.4	.1	.2	...	.1	.1	.1	...	...	5.6	15.9	
13	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
14	...	...	...	...	...	(d <sub>0</sub> )	.1	(d <sub>0</sub> )	.1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.2	...
15	...	...	(fe)	(fe)	.1	(fe)	(fe)	...	...	...	...	...	...	...	...	...	.1	.1	...	...	...	...	...	...	...	0.3	0.8
16	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
17	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
18	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
19	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
20	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
21	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
22	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
23	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
24	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
25	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
26	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
27	.7	5.7	1.0	.5	.3	1.0	...	.2	...	...	...	...	...	...	...	...	...	...	.9	2.8	.3	1.1	.7	.4	6.7	6.2	
28	.4	.3	.3	1.0	...	...	...	.4	...	...	...	.2	...	.4	.1	...	...	...	.7	.4	.6	...	.6	.5	13.9	10.5	
29	...	...	...	...	...	...	...	...	...	...	...	.5	...	...	...	...	...	...	...	.4	.1	...	...	...	...	3.6	6.3
30	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.5	0.5
31	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.7	1.1
Sum.	4.4	9.4	9.1	8.2	4.1	3.5	2.2	1.6	1.4	1.3	3.1	3.5	5.8	7.0	3.4	2.4	5.8	8.5	14.8	10.1	7.9	5.5	6.3	3.8	133.1	112.6	
Total Duration.	hr. 4.8	hr. 4.6	hr. 6.0	hr. 4.8	hr. 4.6	hr. 4.6	hr. 3.2	hr. 2.7	hr. 3.3	hr. 3.7	hr. 3.5	hr. 6.1	hr. 5.8	hr. 5.7	hr. 3.8	hr. 1.8	hr. 3.2	hr. 4.4	hr. 4.6	hr. 8.0	hr. 8.1	hr. 5.8	hr. 4.5	hr. 5.0	hr. 112.6		

220. Eskdalemuir :  $H_r$  = 242.0 metres + 0.4 metres.

August, 1928.

	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	hr.
1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
7	2.0	2.5	.8	.7	1.2	1.5	2.1	1.5	4.7	6.4	8.6	5.1	1.3	.6	...	...	...	...	...	...	...	...	...	...	...	...
8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
11	.6	...	...	...	...	.6	.5	.5	.2	.2	...	.1	...	.4	2.0	1.0	.6	.1	.9	1.0	1.1	5.1	4.9	2.6	22.4	14.8
12	.7	1.5	4.1	1.5	2.0	1.0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
13	.8	1.3	.9	2.8	1.7	2.6	1.1	2.9	2.2	...	.2	...	2.1	.3	.4	2.6	1.2	1.0	.8	.7	...	...	...	...	...	...
14	.6	.4	.4	.2	...	1.3	1.4	...	1.6	2.8	1.6	.3	1.0	1.1	5.0	1.5	...	...	...	...	...	...	...	...	...	...
15	...	...	...	...	.2	.3	...	...	.8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
16	...	...	...	...	...	...	...	...	...	...	...	...	...	.1	...	...	...	...	...	...	...	...	...	...	...	...
17	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
18	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
19	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
20	.5	...	.2	...	...	.6	1.0	.6	2.8	.8	1.4	.4	.1	5.2	1.4	.4	.4	.2	...	.2	1.6	.2	.1	.2	18.3	14.8
21	.1	.2	.2	...	.3	...	...	...	...	...	...	...	...	...	.2	1.1	.1	.1	.5	...	...	...	...	...	...	...
22	...	...	.1	...	.3	.6	.1	...	...	...	...	...	.1	.6	.1	...	.8	6.3	5.5	.1	...	...	...	...	...	...
23	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
24	1.5	.5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
25	...	...	1.5	5.2	.3	.1	...	...	.2	4.0	.4	.9	...	...	...	...	...	...	...	...	...	...	...	...	...	...
26	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
27	.1	1.8	...	5.9	4.5	...	.2	...	1.2	.2	...	...	...	...	...	...	...	.1	...	.3	1.1	2.8	.3	.3	4.8	3.7
28	...	...	...	...	...	.1	.2	.1	.1	...	.1	.1	3.9	.2	...	...	.4	.1	.4	...	...	...	...	...	...	...
29	...	...	...	...	...	...	...	...	...	...	...	...	...	.9	.2	5.4	1.9	2.1	.5	...	...	...	...	...	...	...
30	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	.1	1.1	.6	...	...	...	...	...	...	...	...
31	...	...	...	...	...	...	...	...	...	...	...	...	...	.2	...	...	...	...	...	...	...	...	...	...	...	...
Sum.	6.9	8.2	8.2	16.8	10.5	8.7	6.6	5.6	13.8	14.4	12.3	7.0	5.5	12.6	10.4	12.5	6.6	12.8	9.0	2.7	7.9	14.7	16.2	11.4	240.8	120.9
Total Duration.	hr. 5.1	hr. 5.0	hr. 5.2	hr. 4.8	hr. 6.0	hr. 6.7	hr. 5.1	hr. 3.7	hr. 6.3	hr. 3.9	hr. 3.6	hr. 3.0	hr. 4.3	hr. 4.8	hr. 5.0	hr. 5.5	hr. 6.8	hr. 6.3	hr. 4.7	hr. 2.8	hr. 5.5	hr. 5.2	hr. 5.6	hr. 6.0	hr. 120.9	
Hour. G.M.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	0-24	



Amounts in millimetres, for periods of sixty minutes, between the exact hours, Greenwich Mean Time.

221. Eskdalemuir :  $H_r$  (height of receiving surface above M.S.L.) =  $H$  (height of station above M.S.L.) +  $h_r$  (height of receiving surface above ground) = 242.0 metres + 0.4 metres.

September, 1928.

Hour. G.M.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	0-24	Duration. 0-24
Day.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	hr.
1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
4	1.0	1.1	.7	.1	.3	.4	.5	.5	.4	.2	1.3	1.0	1.0	.3	1.1	1.1	2.3	1.2	.6	.6	.3	1.7	.5	...	18.2	19.1
5	...	...	...	.2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	.7	.9	.5	.6	.5	3.4	5.6
6	.4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.4	0.5
7	...	...	...	...	...	...	...	...	.7	.2	...	...	...	...	...	...	...	...	...	...	...	.4	.8	1.5	3.6	3.7
8	.9	.7	1.1	2.1	.9	.2	.2	...	...	...	...	...	...	...	...	...	...	...	.2	...	...	.2	.1	...	6.6	7.6
9	.3	1.9	10.2	1.9	...	...	...	...	...	...	.1	...	...	...	...	...	...	...	...	...	...	...	...	.7	15.1	4.7
10	.3	.6	11.2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	.4	5.1	2.0	1.1	.2	...	...	20.9	5.4
11	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
13	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
14	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
15	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
16	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
17	...	...	...	...	.2	.3	1.2	2.2	1.6	2.5	1.4	1.2	...	.3	.5	.5	...	...	...	.2	.6	...	...	.1	12.8	10.9
18	.8	...	.7	.2	.1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	.3	.1	...	...	...	2.2	2.7
19	...	...	...	...	...	...	...	...	...	...	...	.3	1.3	.5	.4	1.0	...	...	...	...	...	...	...	...	3.5	2.7
20	...	...	...	...	...	...	...	...	...	.5	.3	.2	...	.6	...	...	...	...	...	...	...	...	...	...	1.6	1.4
21	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
22	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
23	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.2	0.6
24	...	...	...	...	...	...	...	...	...	...	...	.2	.4	...	...	...	...	...	...	.4	.1	...	...	...	1.2	1.8
25	...	...	.1	.2	.2	.1	...	...	...	...	...	...	.1	...	...	...	...	...	...	...	...	...	...	...	0.7	2.8
26	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
27	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
28	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1.2	2.0
29	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
30	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Sum.	3.7	4.3	24.0	5.0	1.7	1.0	2.0	4.6	3.5	4.5	4.3	3.7	3.4	2.3	2.0	3.5	5.0	2.3	8.1	5.6	4.3	4.7	3.9	3.6	111.0	86.8
Total Duration.	4.4	3.3	5.1	4.9	3.7	2.5	2.8	3.4	4.6	3.7	3.7	3.8	3.7	3.0	2.3	3.0	2.0	2.3	2.8	5.0	4.0	4.0	5.0	3.8	86.8	

222. Eskdalemuir :  $H_r$  = 242.0 metres + 0.4 metres.

October, 1928.

	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	hr.	
1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
5	...	...	...	...	...	...	...	...	...	6	5	6	1	1.5	2	2.0	9	7	...	1	...	...	5	2	1.3	9.2	9.7
6	1	5	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.6	
7	...	...	...	...	...	...	1	1	3	1.5	1.6	2.5	7	2.3	1.8	2.3	2.2	2.3	1.2	1.8	1.2	2.4	1.9	2.5	28.7	15.9	
8	2.9	2.5	4	9	2.8	3.0	2.6	5	1	1	3.2	...	...	1	...	...	2.2	2.3	2	...	...	...	...	...	19.3	9.4	
9	...	1.2	4.5	1.0	1	...	...	...	...	...	...	...	...	...	1.7	...	1.1	1.3	2	...	5	1	1	1	11.9	7.6	
10	2	...	...	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.9	1.2	
11	...	...	...	...	...	...	3	1.5	2.2	1.2	2.1	2.6	2.4	1.5	6	1	5	1	...	...	1	4	2	...	15.8	11.2	
12	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.1	0.4	
13	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
14	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	1.6	1.1	1.6	1.9	7	7.1	5.5	
15	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.1	0.4	
16	...	...	...	...	...	3	1.5	1.1	1.1	8	7	3	8	4	...	...	2	7	5	2	...	8	1.4	7.2	18.0	13.1	
17	4.1	1	...	...	...	...	...	...	...	...	...	...	...	...	4	...	...	...	...	...	...	...	...	...	4.6	1.7	
18	...	...	...	...	...	1	8	1.8	9	8	1.7	6	4	2.3	7.7	3.7	4.6	...	...	...	...	...	...	...	25.4	9.7	
19	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	1	8	1.6	1.5	1.8	3.2	3.0	12.4	6.7	
20	4	...	2	1.8	6	2.3	1.1	1	1	...	3	1.5	1	...	...	1.6	2	1.0	2	...	...	...	...	...	11.5	10.4	
21	...	1.7	...	...	1	1	1.0	...	4	2	4	...	1.9	1.4	5	9	...	...	...	...	...	...	...	...	8.6	5.1	
22	...	...	1	1.8	2.6	8	1	1	2	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	5.9	4.5	
23	...	...	(fe)	(fe)	(1)	(fe)	(fe)	...	...	...	...	...	...	...	1	1.3	4	4	2.5	...	...	2.8	2.9	10.5	4.5		
24	2	...	2.2	1	...	2.1	2	2.2	4	1.2	2	3	2.7	4	1.5	...	...	4	4	3	4	1	5.5	2.0	22.8	10.2	
25	8	1.5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2.3	7	...	...	...	1	5.4	3.0	
26	7	...	4	9	5	4	4	1.0	1.4	4.5	4.7	2.3	1.9	1.4	2.2	5	2	2	...	1	2	...	...	...	23.9	17.1	
27	...	5	2	9	7	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2.5	4.3	
28	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
29	...	...	...	...	...	...	...	...	...	...	...	5	2	7	1.5	1.3	7	4	3	4	3	1.0	7	...	8.0	11.9	
30	1.1	3.5	3.2	3.3	1.7	2	...	1.6	3	...	...	...	...	1	1	1	3	6	3	2.7	1.7	1.2	7	1	22.8	12.4	
31	1.1	3.2	3.9	3.1	2.8	1.9	...	...	...	1	1.7	1.7	1.2	3	4	1.1	6	3	...	...	...	...	...	1	23.5	14.5	
Sum.	11.8	14.7	15.3	14.5	12.0	11.4	8.1	10.0	8.0	10.9	17.9	12.1	14.3	12.1	20.2	12.0	12.3	8.1	4.7	13.4	8.4	9.6	17.9	20.0	299.7	191.0	
Total Duration.	hr. 6.4	hr. 6.6	hr. 6.9	hr. 8.7	hr. 7.7	hr. 6.7	hr. 6.5	hr. 7.1	hr. 6.5	hr. 7.0	hr. 10.0	hr. 8.6	hr. 10.0	hr. 9.8	hr. 9.1	hr. 8.0	hr. 10.3	hr. 9.5	hr. 7.6	hr. 7.8	hr. 7.3	hr. 7.3	hr. 7.4	hr. 8.2	hr. 191.0		
Hour. G.M.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	0-24		



Amounts in millimetres, for periods of sixty minutes, between the exact hours, Greenwich Mean Time.

223. Eskdalemuir :  $H_r$  (height of receiving surface above M.S.L.) =  $H$  (height of station above M.S.L.) +  $h_r$  (height receiving surface above ground) = 242.0 metres + 0.4 metres.

November, 1928.

Hour. G.M.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	0-24	Duration. 0-24
Day.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	hr.
1	4	2	...	1	...	...	...	...	...	...	2	1	...	...	...	2	...	...	...	1	2	...	3	1	1.9	6.4
2	...	...	...	...	...	...	1	3	3	...	5	2	...	...	...	...	...	...	...	...	...	...	...	...	1.4	2.2
3	...	...	...	...	5	3	1	2	...	...	...	1	1	1	2	...	...	...	...	...	...	...	...	...	1.6	5.6
4	1	2	4	1	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1.2	3.6
5	...	...	...	...	...	...	...	...	...	8	1.4	...	...	...	...	...	...	...	...	...	...	...	...	...	2.2	1.1
6	...	...	...	2	1	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.5	2.1
7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
10	...	...	...	...	...	...	1.4	1.2	1.4	4.1	5.1	6.1	1.6	5	6	7	4	1	...	...	1	...	...	...	23.3	10.8
11	...	...	...	...	...	...	...	...	...	6	1.8	2.6	1.6	3.2	1.7	2.0	6	6	5	5	...	...	...	...	15.7	10.4
12	1	...	1	...	...	1	3	...	1.2	2.8	1.8	7	9	1.0	...	...	...	...	...	...	...	...	...	...	9.0	7.3
13	...	...	...	2	1	1	2	5	3	1.3	1	...	...	...	...	...	...	...	...	...	...	...	...	...	2.8	4.1
14	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	1.3	2	1.5	1.8	1.1	3.2	9.3	5.1
15	1.8	...	1	2.3	3	...	2	2.0	2	2	1	1.0	4	4	1.3	8	...	...	1	...	...	...	...	1.1	11.3	9.9
16	...	...	...	...	...	...	...	...	...	...	2.1	4.5	4.2	3.1	1.1	6	...	...	...	...	...	...	...	...	15.6	6.0
17	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	0.1	0.2
18	...	...	...	...	...	...	...	...	...	...	...	...	...	...	7	1.2	1.2	1.2	5	1.3	1.0	...	...	...	7.1	6.8
19	1.6	6	5.1	4.3	3.3	3	9	1.0	7	5	1.2	1.3	2.2	6	5	6	1.0	1.8	7	...	...	...	...	...	28.2	17.8
20	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
21	1	...	1	1	...	5	5	2	2.8	1.5	1.2	...	...	...	...	1.5	2.1	7	8	...	3	3	2	1	13.0	11.9
22	1	...	...	1	2	2	...	6	1.7	2.8	3.8	5.9	3.2	1.7	4.3	3	...	...	...	3	4	...	4	...	26.0	11.5
23	...	...	...	...	...	2	...	9	1.6	3.1	8.9	6.6	3.1	1.5	2	4	...	...	...	1.3	1.5	...	...	...	29.8	9.9
24	...	...	...	...	1	2	...	3	...	1.0	2.6	4	...	...	...	...	...	...	...	...	...	...	...	...	4.6	3.4
25	6	1.0	3.0	2.1	2	1.1	4	1.3	...	1.0	3.8	2.5	9	...	...	1	1	...	...	...	...	...	...	...	18.1	9.7
26	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2	...	...	...	1	...	0.5	0.9
27	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
28	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
29	...	...	...	...	...	1.0	7	1	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	2.0	3.7
30	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Sum.	4.8	2.0	8.8	9.5	4.9	4.1	5.1	8.7	10.3	18.9	31.9	31.1	18.6	13.2	12.6	8.9	6.0	4.8	4.1	3.7	5.0	2.1	2.1	3.5	224.7	149.9
Total Duration.	hr. 5.1	hr. 2.8	hr. 4.1	hr. 5.7	hr. 5.3	hr. 6.1	hr. 7.7	hr. 9.7	hr. 7.9	hr. 8.6	hr. 11.1	hr. 11.8	hr. 9.1	hr. 7.6	hr. 7.9	hr. 8.3	hr. 6.1	hr. 4.8	hr. 4.8	hr. 3.8	hr. 4.3	hr. 1.4	hr. 3.4	hr. 2.5	hr. 149.9	

224. Eskdalemuir :  $H_r$  = 242.0 metres + 0.4 metres.

December, 1928.

	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	hr.	
1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
3	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	4	...	2	2	0.9	2.4	
4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.3	1.0
5	8	1.4	8	1.3	...	...	...	...	5	2	...	...	...	2	4	5	6	5	9	4	4	3	1	...	4.3	9.7
																									5.0	4.6
6	...	...	...	...	...	...	...	1.1	2.1	7	2.0	1.6	4	...	...	...	...	...	...	...	5	1.6	8	...	10.8	6.9
7	...	...	4	6	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1.1	1.9
8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9	...	...	...	...	...	...	...	...	...	...	2	3	3	2	5	1.3	3	2	1	...	...	2	...	5	4.1	8.7
10	4	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.5	1.6
11	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
12	...	...	1	3	2	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	0.7	2.5
13	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
14	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
15	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
16	...	...	2	1.1	1.9	1.8	1.4	1.2	1.5	1.9	2.3	4.1	4.4	5.9	4.9	3.9	...	1.1	2	...	...	...	...	...	37.8	14.7
17	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
18	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
19	1.2	4	2	1	1	2	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	1.0	1.3	2.6	2.4
20	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1.0	1.3	7	1	5.4	9.7
21	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
22	1	...	...	...	...	...	...	...	...	1	5	1.1	1.0	1.6	1.2	2	...	1	...	1	1	1	1	1	1.9	7.1
23	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5.8	5.9
24	1.4	3	...	1	5	5	8	1.5	3.0	3.4	3.4	4.9	3.4	1.3	2	...	...	1	...	...	...	...	...	1.1	1.2	0.9
25	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	24.7	13.0
																									24.7	6.4
26	1.6	2	...	...	...	...	...	...	...	...	...	...	2	7	2	1	3	...	...	...	...	...	...	...	3.6	3.7
27	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.1	0.8
28	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
29	8	2.0	2.8	3	1.4	4	...	...	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	8.5	5.7
30	...	...	...	...	2	2	1.1	...	1.0	1.3	3	1	...	1	...	...	...	9	1	3	1	...	2	...	5.9	9.5
31	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Sum.	6.6	4.5	4.5	3.8	4.4	3.1	3.4	3.8	8.9	7.6	8.7	12.1	9.7	10.0	7.5	7.2	1.3	3.1	4.0	4.7	7.5	8.3	6.0	9.2	149.9	119.1
Total Duration.	hr. 7.7	hr. 5.6	hr. 4.5	hr. 5.9	hr. 5.6	hr. 4.4	hr. 3.5	hr. 2.5	hr. 4.8	hr. 4.6	hr. 5.1	hr. 5.1	hr. 4.8	hr. 6.0	hr. 4.9	hr. 4.7	hr. 3.3	hr. 4.7	hr. 3.4	hr. 4.0	hr. 5.8	hr. 5.8	hr. 6.0	hr. 6.4	hr. 119.1	
Hour. G.M.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	0-24	



For periods of sixty minutes, between the exact hours of Local Apparent Time.

225. Eskdalemuir :  $h_s$  (height of recorder above ground) = 1.5 metres.

January, 1928.

Hour. L.A.T.	3 to 4.	4 to 5.	5 to 6.	6 to 7.	7 to 8.	8 to 9.	9 to 10.	10 to 11.	11 to Noon	Noon to 13.	13 to 14.	14 to 15.	15 to 16.	16 to 17.	17 to 18.	18 to 19.	19 to 20.	20 to 21.	Total for Day.	Per cent. of Possible.	Radiation by Ångström Pyrheliometer.			
	Time. G.M.T.	Inten- sity.	$p/p_0$ sec. Z.	Sky.																				
Day.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	%	h. m.	mw/cm <sup>2</sup>		
1	—	—	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2	—	—	—	—	—	...	1.0	1.0	1.0	1.0	1.0	1.0	...	...	...	...	...	...	...	1.7	23.8	...	...	...
3	—	—	—	—	—	...	2	1.0	1.0	1.0	1.0	1.0	...	...	...	...	...	...	...	6.2	86.7	12 25	59	4.61
4	—	—	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Clear.
5	—	—	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
6	—	—	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
7	—	—	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8	—	—	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9	—	—	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
10	—	—	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
11	—	—	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
12	—	—	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
13	—	—	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
14	—	—	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
15	—	—	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
16	—	—	—	—	—	...	1	5	1	7	2	2	1	—	—	—	—	—	—	...	...	...	...	...
17	—	—	—	—	—	...	...	...	...	...	5	8	1	—	—	—	—	—	—	...	...	...	...	...
18	—	—	—	—	—	...	...	...	...	...	...	...	...	—	—	—	—	—	—	...	...	...	...	...
19	—	—	—	—	—	...	...	...	...	...	...	...	...	—	—	—	—	—	—	...	...	...	...	...
20	—	—	—	—	—	...	...	...	...	...	...	...	...	—	—	—	—	—	—	...	...	...	...	...
21	—	—	—	—	—	...	...	...	...	...	...	...	...	—	—	—	—	—	—	...	...	...	...	...
22	—	—	—	—	—	...	...	...	...	...	...	...	...	—	—	—	—	—	—	...	...	...	...	...
23	—	—	—	—	—	...	...	...	...	...	...	...	...	—	—	—	—	—	—	...	...	...	...	...
24	—	—	—	—	—	...	...	...	...	...	...	...	...	—	—	—	—	—	—	...	...	...	...	...
25	—	—	—	—	—	...	...	...	...	...	...	...	...	—	—	—	—	—	—	...	...	...	...	...
26	—	—	—	—	—	...	...	...	...	...	...	...	...	—	—	—	—	—	—	...	...	...	...	...
27	—	—	—	—	—	...	...	...	...	...	...	...	...	—	—	—	—	—	—	...	...	...	...	...
28	—	—	—	—	—	...	4	1.0	1.0	1.0	1.0	1.0	5	—	—	—	—	—	—	6.9	83.7	12 53	66	3.56
29	—	—	—	—	—	...	...	...	...	...	...	...	...	—	—	—	—	—	—	...	...	...	...	Fr-Cu.
30	—	—	—	—	—	...	...	...	...	...	...	...	...	—	—	—	—	—	—	...	...	...	...	...
31	—	—	—	—	—	...	...	...	...	...	...	...	...	—	—	—	—	—	—	...	...	...	...	...
Sum.	—	—	—	—	...	...	6	2.9	4.0	4.1	4.4	5.1	5.8	7	...	—	—	—	—	27.6	—	—	—	—
Mean.	—	—	—	—	...	...	02	09	13	13	14	16	19	02	...	—	—	—	—	0.89	12	—	—	—

226. Eskdalemuir :  $h_s = 1.5$  metres.

February, 1928.

	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	%	h. m.	mw/cm <sup>2</sup>				
1	—	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2	—	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3	—	—	—	—	...	5	1	...	1.0	1.0	1.0	1.0	5	...	...	...	...	...	...	5.1	58.6	...	...	...	...	...
4	—	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5	—	—	—	—	...	...	2	9	8	4	3	8	5	...	...	...	...	...	...	3.9	44.2	...	...	...	...	...
6	—	—	—	—	...	...	1	2	4	1.0	2	...	...	...	...	...	...	...	...	1.9	21.3	...	...	...	...	...
7	—	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8	—	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9	—	—	—	—	...	...	2	...	4	...	...	1	1	...	...	...	...	...	...	0.8	8.8	...	...	...	...	...
10	—	—	—	—	...	...	...	...	...	...	...	5	1	...	...	...	...	...	...	0.6	6.5	...	...	...	...	...
11	—	—	—	—	...	...	...	...	5	4	1.0	9	6	...	...	...	...	...	...	3.4	36.8	...	...	...	...	...
12	—	—	—	—	...	2	...	3	4	...	...	2	4	...	...	...	...	...	...	1.5	16.1	...	...	...	...	...
13	—	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
14	—	—	—	—	...	1	7	5	...	...	...	...	...	...	...	...	...	...	...	1.3	13.7	...	...	...	...	...
15	—	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
16	—	—	—	—	...	...	...	2	...	...	...	...	1	...	...	...	...	...	...	0.3	3.1	...	...	...	...	...
17	—	—	—	—	3	1	1.0	8	9	1.0	8	5	2	...	...	...	...	...	...	5.6	57.8	...	...	...	...	...
18	—	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
19	—	—	—	—	...	1	8	9	6	3	4	2	...	...	...	...	...	...	...	3.3	33.6	...	...	...	...	...
20	—	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
21	—	—	—	—	...	6	1.0	1.0	1.0	9	7	6	...	...	...	...	...	...	...	5.8	58.1	12 3	61	2.53	Haze.	...
22	—	—	—	—	...	2	1	5	1.0	1.0	9	5	9	3	...	...	...	...	...	5.4	53.7	12 43	68	2.46	Fr-Cu.	...
23	—	—	—	...	3	2	4	...	...	...	...	...	...	...	...	...	...	...	...	0.9	8.9	...	...	...	...	...
24	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
25	—	—	—	...	1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	9	...	...	...	...	...	...	8.0	77.8	12 1	63	2.35	Haze.	...
26	—	—	—	...	7	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	3	...	...	...	...	...	9.0	87.0	...	...	...	...	...
27	—	—	—	...	5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	5	...	...	...	...	...	9.0	86.3	12 9	66	2.29	Haze.	...
28	—	—	—	...	7	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	3	...	...	...	...	...	9.0	85.7	12 3	63	2.24	Haze.	...
29	—	—	—	...	...	...	...	...	7	1	2	...	...	...	...	...	...	...	...	1.0	9.5	...	...	...	...	...
Sum.	—	—	—	...	2.6	6.0	8.6	9.3	11.7	10.1	9.5	9.3	7.3	1.4	...	—	—	—	—	75.8	—	—	—	—	—	—
Mean.	—	—	—	...	.09	.21	.30	.32	.40	.35	.33	.32	.25	.05	...	—	—	—	—	2.61	27	—	—	—	—	—
Hour. L.A.T.	3 to 4.	4 to 5.	5 to 6.	6 to 7.	7 to 8.	8 to 9.	9 to 10.	10 to 11.	11 to Noon	Noon to 13.	13 to 14.	14 to 15.	15 to 16.	16 to 17.	17 to 18.	18 to 19.	19 to 20.	20 to 21.	Total for Day.	Per cent. of Possible.	Time. G.M.T.	Inten- sity.	p/p <sub>0</sub> . sec. Z.	Sky.		



*For periods of sixty minutes, between the exact hours of Local Apparent Time.*

**227. Eskdalemuir :**  $h_s$  (height of recorder above ground) = 1.5 metres.

**March, 1928.**

Hour. L.A.T.	3 to 4.	4 to 5.	5 to 6.	6 to 7.	7 to 8.	8 to 9.	9 to 10.	10 to 11.	11 to Noon	Noon to 13.	13 to 14.	14 to 15.	15 to 16.	16 to 17.	17 to 18.	18 to 19.	19 to 20.	20 to 21.	Total for Day.	Per cent. of Possible.	Radiation by Ångström Pyrheliometer.				
																					Time. G.M.T.	Inten- sity.	$p/p_0$ sec. Z.	Sky.	
Day.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	%	h. m.	mw/cm <sup>2</sup>		
1	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	—	—	—	—	—	...	...	...	...	...
2	—	—	—	...	...	...	...	...	·1	·6	·9	·8	·8	·2	...	—	—	—	—	3·4	31·7	...	...	...	...
3	—	—	—	...	...	·1	...	...	...	·3	1·0	1·0	1·0	·1	...	—	—	—	—	3·5	32·4	...	...	...	...
4	—	—	—	...	...	...	...	...	·7	·2	·2	...	...	...	...	—	—	—	—	1·1	10·1	...	...	...	...
5	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	—	—	—	—	...	...	...	...	...	...
6	—	—	—	...	...	...	...	...	...	...	...	...	·1	...	...	—	—	—	—	0·1	0·9	...	...	...	...
7	—	—	—	...	·1	...	...	...	...	...	...	...	...	...	...	—	—	—	—	0·1	0·9	...	...	...	...
8	—	—	—	...	·6	·4	·2	...	...	·1	·3	·1	·4	·2	...	—	—	—	—	2·3	20·6	...	...	...	...
9	—	—	—	...	...	·1	·1	·1	·2	...	...	...	...	...	...	—	—	—	—	0·5	4·4	...	...	...	...
10	—	—	—	...	...	·8	·9	·6	·7	·7	·9	·8	·9	·9	...	—	—	—	—	7·2	63·4	...	...	...	...
11	—	—	—	...	·7	·6	·8	·8	·7	·9	·7	·7	·2	·1	...	—	—	—	—	6·2	54·2	...	...	...	...
12	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	—	—	—	—	...	...	...	...	...	...
13	—	—	—	...	...	·5	·3	...	...	...	...	...	...	...	...	—	—	—	—	0·8	6·9	...	...	...	...
14	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	—	—	—	—	...	...	...	...	...	...
15	—	—	—	...	·6	1·0	1·0	·6	·3	·4	1·0	·8	·2	...	...	—	—	—	—	5·9	50·3	...	...	...	...
16	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	—	—	—	—	...	...	...	...	...	...
17	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	—	—	—	—	...	...	...	...	...	...
18	—	—	—	...	...	...	...	·1	·1	·4	...	·1	...	...	...	—	—	—	—	0·7	5·9	...	...	...	...
19	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	—	—	—	...	...	...	...	...	...
20	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	—	—	—	...	...	...	...	...	...
21	—	—	...	...	...	...	...	...	...	...	·1	·7	...	...	...	...	—	—	—	0·8	6·6	...	...	...	...
22	—	—	...	...	·1	·2	...	...	...	...	...	...	...	...	...	...	—	—	—	0·3	2·4	...	...	...	...
23	—	—	...	...	...	·2	...	...	...	...	...	...	...	...	...	...	—	—	—	0·2	1·6	...	...	...	...
24	—	—	...	...	...	...	...	...	·1	...	...	...	...	...	...	...	—	—	—	...	...	...	...	...	...
25	—	—	...	...	...	...	...	·1	...	...	·1	·5	·5	·3	·1	...	—	—	—	1·6	12·8	...	...	...	...
26	—	—	...	·4	·6	·9	·5	·1	·3	·4	·5	...	·3	·3	...	...	—	—	—	4·3	34·2	...	...	...	...
27	—	—	...	...	...	...	...	·4	·7	·8	·6	1·0	·9	·5	...	...	—	—	—	4·9	38·8	...	...	...	...
28	—	—	...	...	...	...	·4	·8	·3	·8	·3	·9	·5	...	...	...	—	—	—	4·0	31·4	...	...	...	...
29	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	—	—	—	...	...	...	...	...	...
30	—	—	...	...	...	...	...	·1	...	·1	·1	...	·2	·1	...	...	—	—	—	0·6	4·7	...	...	...	...
31	—	—	...	...	...	...	...	·1	·1	...	...	...	...	·2	...	...	—	—	—	0·4	3·1	...	...	...	...
Sum.	—	—	...	·4	2·7	4·8	4·2	3·8	4·2	5·7	6·7	7·4	6·0	2·9	·1	...	—	—	—	48·9	—	—	—	—	—
Mean.	—	—	...	·01	·09	·15	·14	·12	·14	·18	·22	·24	·19	·09	·00	...	—	—	—	1·58	13	—	—	—	—

**228. Eskdalemuir :**  $h_s = 1.5$  metres.

**April, 1928.**

	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	%	h. m.	mw/cm <sup>2</sup>		
1	—	—	...	...	...	...	...	...	...	.5	.7	.5	...	...	...	—	—	1.7	13.1	...	...	...	...	...
2	—	—	...	...	...	1.0	1.0	1.0	.7	.9	.8	.1	...	...	...	—	—	6.5	49.7	...	...	...	...	...
3	—	—	...	...	...	...	...	...	...	.1	.2	.1	.7	...	...	—	—	1.1	8.4	...	...	...	...	...
4	—	—	...	.1	.6	.5	.9	1.0	1.0	.4	.8	.4	1.0	.7	.1	...	—	7.5	56.6	...	...	...	...	...
5	—	—	...	...	...	.8	.6	.5	.1	.3	.5	.9	.8	.4	.1	...	—	5.0	37.5	...	...	...	...	...
6	—	—	...	...	...	.1	...	.5	.8	.9	.7	1.0	1.0	1.0	.6	...	—	6.6	49.3	...	...	...	...	...
7	—	—	...	...	...	...	.2	.1	...	...	...	.1	.1	...	...	—	—	0.5	3.7	...	...	...	...	...
8	—	—	...	...	...	...	...	...	...	...	...	...	...	.8	...	—	—	0.8	5.9	...	...	...	...	...
9	—	—	...	...	...	...	...	...	.1	...	...	...	...	...	...	—	—	0.1	0.7	...	...	...	...	...
10	—	—	...	.1	.6	...	...	...	...	...	...	...	...	...	...	—	—	0.7	5.1	...	...	...	...	...
11	—	—	...	...	...	...	...	...	.5	.2	.7	.5	...	...	...	—	—	1.9	13.8	...	...	...	...	...
12	—	—	...	...	...	.1	.3	...	...	...	.1	...	...	...	...	—	—	0.5	3.6	...	...	...	...	...
13	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	—	—	...	...	...	...	...	...	...
14	—	—	...	...	...	...	.4	...	...	.4	.2	.2	.1	...	...	—	—	1.5	10.7	...	...	...	...	...
15	—	—	...	...	.1	.1	.1	.5	.7	.5	.1	.5	.4	.4	.8	...	—	4.2	29.9	...	...	...	...	...
16	—	...	...	.4	.8	.8	.7	.7	.6	.8	1.0	.9	.7	.7	...	...	—	8.1	57.3	...	...	...	...	...
17	—	...	...	...	.1	.5	1.0	1.0	.9	.2	.6	.5	.2	.5	.4	...	—	5.9	41.5	...	...	...	...	...
18	—	...	...	...	.1	.7	.9	1.0	1.0	1.0	1.0	.1	...	.1	.2	.2	...	6.3	44.1	II 53	IOI	I 38	Fr-Cu.	
19	—	...	...	...	.5	.8	1.0	.8	1.0	.3	.6	.5	.5	.3	.2	...	—	6.5	45.3	...	...	...	...	...
20	—	...	...	.6	.9	1.0	1.0	1.0	.8	.6	.9	.8	1.0	1.0	1.0	.3	...	10.9	75.6	...	...	...	...	...
21	—	...	...	.1	1.0	.2	.5	.9	.9	.8	.9	.9	.9	1.0	1.0	.6	...	9.7	66.9	...	...	...	...	...
22	—	...	...	.5	1.0	1.0	.1	.1	.5	.3	.5	.8	.2	...	...	...	...	5.0	34.3	...	...	...	...	...
23	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
24	—	...	...	...	...	...	...	.4	1.0	1.0	.3	.7	.8	.3	.5	...	...	5.0	33.9	...	...	...	...	...
25	—	...	...	1.0	1.0	.7	...	...	.3	...	.2	...	...	...	...	...	...	3.2	21.6	...	...	...	...	...
26	—	...	...	.6	1.0	.7	1.0	1.0	.4	.2	...	.3	...	...	...	...	...	5.2	35.0	...	...	...	...	...
27	—	...	...	.3	.9	.7	...	.4	1.0	1.0	.9	.9	.4	.2	...	...	...	6.7	44.8	...	...	...	...	...
28	—	...	...	...	...	...	...	...	...	...	.5	.9	.9	.1	...	...	...	2.4	16.0	...	...	...	...	...
29	—	...	...	...	...	...	.5	...	...	.2	.4	1.0	.8	1.0	.1	...	...	4.0	26.5	...	...	...	...	...
30	—	...	...	...	...	...	.2	.6	.9	...	...	...	...	...	...	...	...	1.7	11.2	...	...	...	...	...
Sum.	—	...	...	3.7	8.6	9.7	10.4	11.5	13.0	10.1	11.8	13.9	11.1	9.3	5.0	1.1	...	119.2	—	—	—	—	—	—
Mean.	—	...	...	.12	.29	.32	.35	.38	.43	.34	.39	.46	.37	.31	.17	.04	...	3.97	.28	—	—	—	—	—

Hour. L.A.T.	3 to 4.	4 to 5.	5 to 6.	6 to 7.	7 to 8.	8 to 9.	9 to 10.	10 to 11.	11 to Noon	Noon to 13.	13 to 14.	14 to 15.	15 to 16.	16 to 17.	17 to 18.	18 to 19.	19 to 20.	20 to 21.	Total for Day.	Per cent. of Possible.	Time.	Inten-	$\frac{p}{p_0}$		
																					G.M.T.	sity.	sec.	Z.	Sky.
																						Radiation by Ångström Pyrheliometer.			



For periods of sixty minutes, between the exact hours of Local Apparent Time.

229. Eskdalemuir :  $h_s$  (height of recorder above ground) = 1.5 metres.

May, 1928.

Hour. L.A.T.	3 to 4.	4 to 5.	5 to 6.	6 to 7.	7 to 8.	8 to 9.	9 to 10.	10 to 11.	11 to Noon	Noon to 13.	13 to 14.	14 to 15.	15 to 16.	16 to 17.	17 to 18.	18 to 19.	19 to 20.	20 to 21.	Total for Day.	Per cent. of Possible.	Radiation by Ångström Pyrheliometer.			
																					Time. G.M.T.	Inten- sity.	$p/p_0$ sec. Z.	Sky.
Day.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	%	h. m.	mw/cm <sup>2</sup>		
1	—	...	...	...	...	...	...	...	...	6	1.0	9	1.0	1.0	5	...	...	—	5.0	32.9	...	...	...	...
2	—	...	...	...	...	...	...	...	8	3	2	1	1.0	1.0	6	4	...	—	4.4	28.8	...	...	...	...
3	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	—	...	...	...	...	...	...
4	—	...	...	...	...	3	9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	...	—	10.2	66.1	...	...	...	...
5	—	...	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	7	8	...	—	13.5	87.2	...	...	...	...
6	—	...	5	1.0	1.0	1.0	1.0	1.0	9	1.0	1.0	7	8	...	2	...	...	—	10.1	65.0	...	...	...	...
7	—	...	...	7	1.0	1	1	9	8	9	5	6	1.0	2	9	2	...	—	7.9	50.6	...	...	...	...
8	—	...	...	...	...	...	...	1	...	8	9	3	1	6	1.0	6	...	—	4.4	28.2	...	...	...	...
9	—	...	1.0	1.0	9	1.0	1.0	1.0	1.0	9	4	7	5	1.0	2	...	...	—	10.6	67.3	...	...	...	...
10	—	...	...	9	1.0	1.0	1.0	6	3	1	3	2	...	...	...	...	...	—	5.4	34.2	...	...	...	...
11	—	...	8	1.0	5	4	...	...	...	...	...	...	1	...	...	...	...	—	2.8	17.6	...	...	...	...
12	—	...	...	...	...	...	...	...	...	...	...	2	...	6	1	2	...	—	0.3	1.9	...	...	...	...
13	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	—	0.8	5.0	...	...	...	...
14	—	3	1.0	1.0	1.0	5	...	2	6	8	1.0	1.0	8	2	...	...	...	—	8.4	52.3	...	...	...	...
15	...	...	...	...	...	...	...	...	...	3	...	6	1.0	9	3	2	...	...	3.3	20.5	...	...	...	...
16	...	...	...	...	7	5	9	3	5	1	1	7	5	1	6	5	1	...	5.6	34.6	...	...	...	...
17	...	...	...	...	...	...	...	...	...	...	...	2	1	7	...	...	...	...	1.0	6.2	...	...	...	...
18	...	...	5	1.0	3	2	...	1	2	2	3	9	6	...	...	3	...	...	4.6	28.2	...	...	...	...
19	...	...	...	...	...	...	...	...	...	...	...	...	7	1	2	1	...	...	1.1	6.7	...	...	...	...
20	...	...	...	4	7	3	9	6	1.0	8	1.0	9	1.0	8	1.0	8	4	...	10.6	64.6	...	...	...	...
21	...	...	1	5	...	2	9	1.0	1.0	1.0	1.0	1.0	1.0	9	9	9	4	...	10.8	65.7	11 53	98	1.21	Fr-Cu.
22	...	...	1.0	4	1	4	2	5	9	...	3	4	8	6	6	9	...	...	7.1	43.0	...	...	...	...
23	...	...	...	...	...	2	...	...	...	...	...	...	...	...	5	1	...	...	0.8	4.8	...	...	...	...
24	...	1	1.0	1.0	1.0	1.0	1.0	9	1	3	2	2	3	2	...	5	...	...	7.8	47.0	...	...	...	...
25	...	...	...	2	1.0	1.0	1.0	1.0	1.0	1.0	9	1.0	1.0	1.0	1.0	1.0	1	...	12.2	73.2	...	...	...	...
26	...	...	...	1	9	4	...	1	...	...	...	...	...	...	...	...	...	...	1.5	9.0	...	...	...	...
27	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	0.2	1.2	...	...	...	...
28	...	...	...	...	...	...	...	...	...	2	...	...	4	9	1.0	1.0	5	...	4.0	23.8	...	...	...	...
29	...	...	4	4	4	1	...	2	1	1	...	...	...	...	...	...	...	...	1.7	10.1	...	...	...	...
30	...	...	2	9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	4	...	13.5	80.0	11 55	71	1.19	Haze
31	...	...	...	...	...	2	9	8	1.0	1.0	5	2	...	...	...	...	...	...	4.6	27.2	...	...	...	...
Sum.	...	4	7.5	11.5	12.5	10.8	11.8	12.1	13.3	13.4	12.7	14.0	15.7	13.8	12.3	10.5	1.9	...	174.2	—	—	—	—	—
Mean.	...	.01	.24	.37	.40	.35	.38	.39	.43	.43	.41	.45	.51	.45	.40	.34	.06	...	5.62	35	—	—	—	—

230. Eskdalemuir :  $h_s$  = 1.5 metres.

June, 1928.

	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	%	h. m.	mw/cm <sup>2</sup>	1.20	Fr-Cu
1	...	...	8	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	6	...	14.4	85.0	11 54	95	1.20	Fr-Cu
2	...	7	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	4	...	15.1	88.9	...	...	...	...
3	...	...	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	4	...	14.4	84.6	...	...	...	...
4	...	...	3	3	2	2	7	6	3	...	...	...	4	1.0	1.0	1.0	6	...	6.6	38.7	...	...	...	...
5	...	4	...	...	...	...	...	...	...	...	6	8	1.0	1.0	1.0	1.0	2	...	6.0	35.1	...	...	...	...
6	...	...	1	2	...	...	...	...	...	...	1	...	3	7	1	...	...	...	1.5	8.8	...	...	...	...
7	...	...	...	...	...	...	...	...	...	3	...	...	...	...	...	...	...	...	0.3	1.7	...	...	...	...
8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9	...	...	...	...	...	...	...	...	2	2	4	4	9	9	7	...	...	...	3.7	21.5	...	...	...	...
10	...	...	...	...	...	...	...	1	2	1	...	4	1	1	4	1	...	...	1.5	8.7	...	...	...	...
11	...	...	...	...	4	7	6	8	1.0	8	8	1.0	8	9	9	6	1	...	9.4	54.5	...	...	...	...
12	...	1	...	5	1	4	6	8	1.0	9	2	1	3	...	...	...	...	...	5.0	28.9	...	...	...	...
13	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
14	...	...	...	...	...	...	...	...	...	...	8	9	1.0	1.0	1.0	5	...	...	5.2	30.0	...	...	...	...
15	...	...	...	...	...	...	...	1	7	1	...	...	...	4	9	4	...	...	2.6	15.0	...	...	...	...
16	...	2	8	1.0	1.0	9	1.0	1.0	1.0	1.0	1.0	1.0	8	6	6	7	...	...	12.6	72.7	...	...	...	...
17	...	...	...	1	1	...	3	1	1	7	5	9	8	4	2	2	4	...	4.8	27.7	...	...	...	...
18	...	9	2	...	...	1	1	5	9	6	9	6	8	4	1.0	4	2	...	7.9	45.5	...	...	...	...
19	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2	...	...	0.4	2.3	...	...	...	...
20	...	1.0	7	1.0	1.0	1.0	1.0	4	5	3	1	1	3	9	1.0	1.0	7	...	11.0	63.3	...	...	...	...
21	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.2	1.2	...	...	...	...
22	...	...	...	...	...	...	...	1	2	1	5	2	1	...	2	...	...	...	1.4	8.1	...	...	...	...
23	...	...	...	1	6	2	4	3	5	6	9	2	...	...	...	...	...	...	3.8	21.9	...	...	...	...
24	...	1	...	...	...	3	5	5	5	9	1.0	1.0	1.0	1.0	1.0	5	...	...	8.3	47.8	...	...	...	...
25	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
26	...	...	...	...	...	...	...	...	...	...	...	...	1	8	5	...	...	...	1.4	8.1	...	...	...	...
27	...	4	...	1	1	...	...	...	...	3	7	3	7	7	2	9	2	...	4.6	26.5	...	...	...	...
28	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
29	...	...	...	1	3	3	9	2	...	...	...	...	...	...	...	...	...	...	1.8	10.4	...	...	...	...
30	...	...	...	...	...	1	5	5	3	5	8	4	2	6	1.0	6	1	...	5.6	32.4	...	...	...	...
Sum.	...	3.9	5.0	6.4	6.8	7.2	9.6	9.0	10.4	10.4	11.5	11.2	12.3	14.9	14.9	11.6	4.4	...	149.5	—	—	—	—	—
Mean.	...	.13	.17	.21	.23	.24	.32	.30	.35	.35	.38	.37	.41	.50	.50	.39	.15	...	4.98	29	—	—	—	—
Hour. L.A.T.	3 to 4.	4 to 5.	5 to 6.	6 to 7.	7 to 8.	8 to 9.	9 to 10.	10 to 11.	11 to Noon	Noon to 13.	13 to 14.	14 to 15.	15 to 16.	16 to 17.	17 to 18.	18 to 19.	19 to 20.	20 to 21.	Total for Day.	Per cent. of Possible.	Time. G.M.T.	Inten- sity.	p/p <sub>0</sub> sec. Z.	Sky.
Radiation by Ångström Pyrheliometer.																								



## DURATION OF BRIGHT SUNSHINE.

221

For periods of sixty minutes, between the exact hours of Local Apparent Time.

231. Eskdalemuir :  $h_s$  (height of recorder above ground) = 1.5 metres.

July, 1928.

Hour. L.A.T.	3 to 4.	4 to 5.	5 to 6.	6 to 7.	7 to 8.	8 to 9.	9 to 10.	10 to 11.	11 to Noon	Noon to 13.	13 to 14.	14 to 15.	15 to 16.	16 to 17.	17 to 18.	18 to 19.	19 to 20.	20 to 21.	Total for Day.	Per cent. of Possible.	Radiation by Ångström Pyrheliometer.			
																					Time. G.M.T.	Inten- sity.	p/p <sub>0</sub> sec. Z.	Sky.
Day.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	%	h. m.	mw/cm <sup>2</sup>		
1	...	...	...	...	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	0.3	1.7	...	...	...
2	...	...	1	1	8	9	8	9	8	7	6	...	...	1	...	...	...	...	...	5.8	33.6	...	...	...
3	...	...	3	1.0	1	6	6	2	2	1	2	1	8	9	4	8	5	...	...	6.8	39.5	...	...	...
4	...	4	1	7	9	3	4	5	5	5	6	...	...	...	...	...	...	...	...	4.9	28.5	...	...	...
5	...	...	...	...	...	4	...	2	1	1	4	8	9	8	7	2	1	...	...	4.7	27.4	...	...	...
6	...	...	...	1	4	5	1	4	5	4	5	8	1.0	4	1	...	...	...	...	6.1	35.6	...	...	...
7	...	2	6	9	6	7	1.0	1.0	9	8	9	8	9	7	9	9	4	...	...	12.2	71.3	...	...	...
8	...	...	...	...	...	...	...	...	...	...	...	7	9	9	1	...	...	...	...	1.7	10.0	...	...	...
9	...	1	1	...	...	5	1	4	6	3	9	1.0	3	...	...	...	...	...	...	4.3	25.2	...	...	...
10	...	...	...	1	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	0.3	1.8	...	...	...
11	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
13	...	...	...	...	...	...	...	3	9	5	...	...	...	...	...	...	...	...	...	1.7	10.1	...	...	...
14	...	...	...	...	...	...	...	1	2	2	1.0	1.0	1.0	1.0	7	...	...	...	...	5.2	30.9	...	...	...
15	...	...	...	...	3	1.0	1.0	1.0	1.0	1.0	8	...	...	...	...	...	...	...	...	6.1	36.3	...	...	...
16	...	4	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	6	2	1.0	3	...	...	13.5	80.5	...	...	...
17	...	5	1.0	1.0	9	1.0	1.0	1.0	5	7	1.0	1.0	1.0	1.0	1.0	...	...	...	...	12.6	75.3	...	...	...
18	...	...	...	...	...	...	1	3	4	...	2	...	...	3	...	...	...	...	...	1.3	7.8	...	...	...
19	...	...	...	...	8	1	...	2	8	2	6	1.0	...	4	...	...	...	...	...	4.1	24.7	...	...	...
20	...	...	...	6	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	4	...	...	...	...	...	...	9.0	54.2	...	...	...
21	...	3	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	7	...	...	...	6	...	...	...	...	10.6	64.1	...	...	...
22	...	...	...	...	...	...	...	...	...	...	2	...	...	1	...	...	...	...	...	0.3	1.8	...	...	...
23	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
24	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
25	...	5	1.0	1.0	9	6	7	2	1	8	...	...	5	7	1	...	...	...	...	7.1	43.5	...	...	...
26	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	0.1	0.6	...	...	...
27	...	...	...	...	1	3	...	3	4	2	...	...	...	...	...	...	...	...	...	1.3	8.0	...	...	...
28	...	...	...	...	...	4	4	6	8	9	1.0	7	2	...	...	...	...	...	...	5.4	33.4	...	...	...
29	—	...	...	1	5	8	7	1.0	1.0	9	8	5	4	1	...	...	—	...	...	6.8	42.3	...	...	...
30	—	...	6	1	1	...	...	...	3	1	...	6	...	...	...	...	—	...	...	1.8	11.2	...	...	...
31	—	2	1.0	1.0	1.0	1.0	1.0	1.0	9	7	1.0	1.0	9	...	...	...	...	—	...	10.7	67.0	...	...	...
Sum.	...	2.6	6.8	8.0	8.7	12.4	11.3	11.5	12.9	13.3	12.6	12.0	12.9	9.6	5.2	3.6	1.3	...	...	144.7	—	—	—	—
Mean.	...	.08	.22	.26	.28	.40	.36	.37	.42	.43	.41	.39	.42	.31	.17	.12	.04	...	...	4.67	28	—	—	—

232. Eskdalemuir :  $h_s$  = 1.5 metres.

August, 1928.

hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	%	h. m.	mw/cm <sup>2</sup>		
1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	8.4	52.8	...	...	...	...
2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5.5	34.7	...	...	...	...
3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.8	5.1	...	...	...	...
4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3.7	23.6	...	...	...	...
5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	9.7	62.0	...	...	...	...
6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.7	4.5	...	...	...	...
7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1.3	8.4	...	...	...	...
8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6.8	44.0	...	...	...	...
9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4.4	28.6	...	...	...	...
10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	7.1	46.3	...	...	...	...
11	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6.1	40.2	...	...	...	...
13	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2.8	18.5	...	...	...	...
14	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1.1	7.3	...	...	...	...
15	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5.1	34.0	...	...	...	...
16	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2.5	16.8	...	...	...	...
17	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6.1	41.1	...	...	...	...
18	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5.1	34.5	...	...	...	...
19	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5.3	36.0	...	...	...	...
20	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
21	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3.7	25.4	...	...	...	...
22	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4.9	33.8	...	...	...	...
23	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.2	1.4	...	...	...	...
24	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1.5	10.5	...	...	...	...
25	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3.8	26.6	...	...	...	...
26	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6.7	47.2	...	...	...	...
27	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5.3	37.5	...	...	...	...
28	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1.8	12.8	...	...	...	...
29	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2.8	20.0	...	...	...	...
30	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1.3	9.5	...	...	...	...
31	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.3	2.2	...	...	...	...
Sum.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	114.8	—	—	—	—	—
Mean.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3.70	25	—	—	—	—

Hour. L.A.T.	3 to 4.	4 to 5.	5 to 6.	6 to 7.	7 to 8.	8 to 9.	9 to 10.	10 to 11.	11 to Noon	Noon to 13.	13 to 14.	14 to 15.	15 to 16.	16 to 17.	17 to 18.	18 to 19.	19 to 20.	20 to 21.	Total for Day.	Per cent. of Possible.	Time. G.M.T.	Inten- sity.	$p/p_0$ sec. Z.	Sky.
																					Radiation by • Ångström Pyrheliometer.			



For periods of sixty minutes, between the exact hours of Local Apparent Time.

233. Eskdalemuir :  $h_s$  (height of recorder above ground) = 1.5 metres.

September, 1928.

Hour. L.A.T.	3 to 4.	4 to 5.	5 to 6.	6 to 7.	7 to 8.	8 to 9.	9 to 10.	10 to 11.	11 to Noon	Noon to 13.	13 to 14.	14 to 15.	15 to 16.	16 to 17.	17 to 18.	18 to 19.	19 to 20.	20 to 21.	Total for Day.	Percent. of Possible.	Radiation by Ångström Pyrheliometer.			
																					Time. G.M.T.	Inten- sity.	$p/p_0$ sec. Z.	Sky.
Day.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	%	h. m.	mw/cm <sup>2</sup>		
1	—	—	...	8	6	1.0	6	8	9	1.0	9	1.0	8	1.0	3	...	—	—	9.7	70.5	...	...	...	...
2	—	—	...	...	...	1	7	1.0	1.0	1.0	1.0	7	...	...	...	...	—	—	6.5	47.5	...	...	...	...
3	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	—	—	...	...	...	...	...	...
4	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	—	—	...	...	...	...	...	...
5	—	—	...	...	...	...	...	1	1.0	3	5	...	...	...	...	...	—	—	1.9	14.1	...	...	...	...
6	—	—	...	2	7	1.0	1.0	1.0	8	5	1	...	...	...	...	...	—	—	5.3	39.6	...	...	...	...
7	—	—	...	...	...	...	...	...	1	...	...	...	1	2	3	...	—	—	0.7	5.3	...	...	...	...
8	—	—	...	...	1	9	8	8	5	4	...	...	1	...	...	...	—	—	3.6	27.2	...	...	...	...
9	—	—	...	...	...	...	...	5	1	2	2	...	4	3	...	...	—	—	1.7	12.9	...	...	...	...
10	—	—	...	1	3	1.0	1.0	6	6	6	8	3	1	...	...	...	—	—	5.4	41.3	...	...	...	...
11	—	—	...	9	4	3	7	4	...	...	...	7	4	7	...	...	—	—	4.5	34.6	...	...	...	...
12	—	—	...	...	3	8	9	9	5	1.0	1.0	1.0	1.0	1	...	...	—	—	7.5	58.0	13 12½	68	1.65	Fr-Cu.
13	—	—	...	...	4	1.0	1.0	1.0	8	9	9	5	1.0	9	...	...	—	—	8.4	65.3	...	...	...	...
14	—	—	...	...	1.0	1.0	1.0	1.0	1.0	7	8	7	4	...	...	...	—	—	7.6	59.4	...	...	...	...
15	—	—	...	5	3	...	1	...	...	6	...	2	7	...	3	...	—	—	2.7	21.2	...	...	...	...
16	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	—	—	...	...	...	...	...	...
17	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	—	—	...	...	...	...	...	...
18	—	—	...	4	4	3	9	8	9	1.0	8	7	4	8	4	...	—	—	7.8	62.4	...	...	...	...
19	—	—	...	2	1.0	1.0	1.0	8	6	4	5	2	8	6	6	...	—	—	7.7	62.0	...	...	...	...
20	—	—	...	2	3	7	3	...	8	7	3	2	9	9	...	...	—	—	5.3	42.9	...	...	...	...
21	—	—	...	...	...	...	...	3	...	2	8	8	2	6	1	...	—	—	3.0	24.4	...	...	...	...
22	—	—	...	3	1.0	3	5	5	4	4	...	1	3	...	...	...	—	—	3.8	31.2	...	...	...	...
23	—	—	...	2	9	6	...	...	...	...	...	...	...	...	...	...	—	—	1.7	14.0	...	...	...	...
24	—	—	...	...	...	5	...	4	5	1	7	7	8	4	4	...	—	—	4.5	37.4	...	...	...	...
25	—	—	...	...	5	8	9	6	...	...	...	2	...	...	...	...	—	—	3.0	25.1	...	...	...	...
26	—	—	...	...	...	...	...	...	...	...	...	...	1	9	2	...	—	—	1.2	10.1	...	...	...	...
27	—	—	...	...	2	7	...	...	...	...	2	1	...	...	...	...	—	—	1.2	10.2	...	...	...	...
28	—	—	...	...	...	1	2	7	8	...	4	5	9	1.0	2	...	—	—	4.8	40.9	...	...	...	...
29	—	—	...	2	1.0	1.0	9	1.0	1.0	1.0	1.0	1.0	1.0	5	...	...	—	—	9.6	82.3	...	...	...	...
30	—	—	...	2	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	...	...	—	—	10.2	88.0	...	...	...	...
Sum.	—	—	...	4.2	10.4	14.0	13.4	13.7	13.2	12.8	11.9	10.2	12.4	9.6	3.5	...	—	—	129.3	—	—	—	—	—
Mean.	—	—	...	14	35	47	45	46	44	43	40	34	41	32	12	...	—	—	4.31	34	—	—	—	—

234. Eskdalemuir :  $h_s$  = 1.5 metres.

October, 1928.

Hour. L.A.T.	3 to 4.	4 to 5.	5 to 6.	6 to 7.	7 to 8.	8 to 9.	9 to 10.	10 to 11.	11 to Noon	Noon to 13.	13 to 14.	14 to 15.	15 to 16.	16 to 17.	17 to 18.	18 to 19.	19 to 20.	20 to 21.	Total for Day.	Percent. of Possible.	Radiation by Ångström Pyrheliometer.			
																					Time. G.M.T.	Inten- sity.	$p/p_0$ sec. Z.	Sky.
1	—	—	...	1	1.0	1.0	1.0	1.0	2	2	7	...	...	...	...	...	—	—	5.2	45.1	...	...	...	...
2	—	—	...	...	7	1.0	3	3	6	8	7	6	3	8	...	...	—	—	6.1	53.3	...	...	...	...
3	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	—	—	...	...	...	...	...	...
4	—	—	...	1	5	6	1	1	5	1.0	1.0	1.0	3	...	...	...	—	—	5.2	46.0	...	...	...	...
5	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	—	—	...	...	...	...	...	...
6	—	—	...	...	...	1	5	9	1.0	2	5	9	9	4	...	...	—	—	5.4	48.5	...	...	...	...
7	—	—	...	...	...	...	...	...	...	2	4	...	5	1	...	...	—	—	1.2	10.9	...	...	...	...
8	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	—	—	...	...	...	...	...	...
9	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	—	—	...	...	...	...	...	...
10	—	—	...	...	...	...	2	3	7	1	...	...	...	...	...	...	—	—	1.3	12.0	...	...	...	...
11	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	—	—	...	...	...	...	...	...
12	—	—	...	9	1.0	1.0	1.0	1.0	9	7	8	1.0	3	...	...	...	—	—	8.8	80.4	...	...	...	...
13	—	—	...	4	1.0	1.0	1.0	1.0	1.0	7	...	4	6	...	...	...	—	—	7.1	66.9	...	...	...	...
14	—	—	...	1	1.0	3	8	1.0	1	...	...	...	...	...	...	...	—	—	3.3	31.3	...	...	...	...
15	—	—	...	...	3	1.0	2	1	6	5	...	...	...	...	...	...	—	—	2.7	25.8	...	...	...	...
16	—	—	...	...	...	1	2	4	...	...	...	1	...	...	...	...	—	—	0.8	7.8	...	...	...	...
17	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	—	—	...	...	...	...	...	...
18	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	—	—	...	...	...	...	...	...
19	—	—	...	5	1.0	1.0	8	7	1.0	4	...	...	...	...	...	...	—	—	5.4	53.1	...	...	...	...
20	—	—	...	...	...	...	...	...	...	7	7	2	...	...	...	...	—	—	1.6	15.8	...	...	...	...
21	—	—	...	...	...	2	...	...	...	...	...	...	...	...	...	...	—	—	0.2	2.0	...	...	...	...
22	—	—	...	...	...	...	3	...	3	6	4	3	...	...	...	...	—	—	1.9	19.1	...	...	...	...
23	—	—	...	...	...	...	3	6	...	3	...	...	...	...	...	...	—	—	1.2	12.2	...	...	...	...
24	—	—	...	...	...	...	...	...	1	...	...	...	...	...	...	...	—	—	0.1	1.0	...	...	...	...
25	—	—	...	...	...	4	...	6	6	1.0	4	...	...	...	...	...	—	—	3.0	30.8	...	...	...	...
26	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	—	—	...	...	...	...	...	...
27	—	—	...	...	...	...	5	1.0	1.0	1.0	1.0	1.0	1.0	2	...	...	—	—	5.7	59.4	...	...	...	...
28	—	—	...	3	7	1.0	1.0	1.0	1.0	1.0	1.0	1.0	3	1	...	...	—	—	7.4	77.7	...	...	...	...
29	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	—	—	...	...	...	...	...	...
30	—	—	...	...	...	...	8	9	8	2	1	...	...	...	...	...	—	—	2.8	29.9	...	...	...	...
31	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	—	—	...	...	...	...	...	...
Sum.	—	—	...	0.1	4.0	7.9	9.6	10.1	10.1	9.9	9.6	6.9	5.3	2.7	...	...	—	—	76.2	—	—	—	—	—
Mean.	—	—	...	00	13	25	31	33	33	32	31	22	17	09	...	...	—	—	2.46	24	—	—	—	—



## DURATION OF BRIGHT SUNSHINE.

223

For periods of sixty minutes, between the exact hours of Local Apparent Time.

235. Eskdalemuir :  $h_s$  (height of recorder above ground) = 1.5 metres.

November, 1928.

Hour. L.A.T.	3 to 4.	4 to 5.	5 to 6.	6 to 7.	7 to 8.	8 to 9.	9 to 10.	10 to 11.	11 to Noon	Noon to 13.	13 to 14.	14 to 15.	15 to 16.	16 to 17.	17 to 18.	18 to 19.	19 to 20.	20 to 21.	Total for Day.	Per cent. of Possible.	Radiation by Ångström Pyrheliometer.			
																					Time. G.M.T.	Inten- sity.	$p/p_0$ sec. Z.	Sky.
Day.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	%	h. m.	mw/cm <sup>2</sup>		
1	—	—	—	—	—	5	9	2	—	2	1	1	—	—	—	—	—	—	2.0	21.7	...	...	...	...
2	—	—	—	—	—	—	—	1	—	4	2	1	—	—	—	—	—	—	0.8	8.7	...	...	...	...
3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...	...
4	—	—	—	—	—	—	—	—	—	3	1	7	—	—	—	—	—	—	1.1	12.2	...	...	...	...
5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...	...
6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...	...
7	—	—	—	—	—	—	—	7	3	3	5	1	1	—	—	—	—	—	2.0	22.7	...	...	...	...
8	—	—	—	—	—	7	1.0	1.0	6	6	5	1	3	—	—	—	—	—	4.8	54.9	...	...	...	...
9	—	—	—	—	—	—	—	1.0	1.0	1.0	9	1	—	—	—	—	—	—	4.0	46.1	...	...	...	...
10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...	...
11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...	...
12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...	...
13	—	—	—	—	—	—	—	—	7	8	2	6	—	—	—	—	—	—	2.3	27.3	...	...	...	...
14	—	—	—	—	—	1	9	7	4	5	9	5	—	—	—	—	—	—	4.0	47.8	...	...	...	...
15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...	...
16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...	...
17	—	—	—	—	—	—	—	—	1	—	—	1	—	—	—	—	—	—	0.2	2.4	...	...	...	...
18	—	—	—	—	—	—	2	7	1	—	—	—	—	—	—	—	—	—	1.0	12.3	...	...	...	...
19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...	...
20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...	...
21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...	...
22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...	...
23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...	...
24	—	—	—	—	—	—	2	1	—	6	2	4	—	—	—	—	—	—	1.5	19.3	...	...	...	...
25	—	—	—	—	—	—	—	—	1	6	7	3	—	—	—	—	—	—	1.7	22.0	...	...	...	...
26	—	—	—	—	—	3	1.0	1.0	1.0	1.0	7	6	—	—	—	—	—	—	5.6	72.8	...	...	...	...
27	—	—	—	—	—	—	9	2	4	8	1.0	1.0	1	—	—	—	—	—	4.4	57.5	...	...	...	...
28	—	—	—	—	—	—	1	9	1.0	—	—	—	—	—	—	—	—	—	2.0	26.3	...	...	...	...
29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...	...
30	—	—	—	—	—	—	3	9	1.0	9	6	4	—	—	—	—	—	—	4.1	54.7	...	...	...	...
Sum.	—	—	—	—	—	1.6	5.5	7.5	6.7	8.0	6.6	5.1	5	—	—	—	—	—	41.5	—	—	—	—	—
Mean.	—	—	—	—	—	.05	.18	.25	.22	.27	.22	.17	.02	—	—	—	—	—	1.38	17	—	—	—	—

236. Eskdalemuir :  $h_s$  = 1.5 metres.

December and Year, 1928.

	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	%	h. m.	mw/cm <sup>2</sup>				
1	—	—	—	—	—	...	9	1.0	1.0	1.0	1.0	1.0	1	—	—	—	—	—	6.0	80.5	...	...	...	...	...	
2	—	—	—	—	—	...	...	...	...	...	...	...	...	—	—	—	—	—	...	...	...	...	...	...	...	
3	—	—	—	—	—	...	...	...	...	...	...	...	...	—	—	—	—	—	...	...	...	...	...	...	...	
4	—	—	—	—	—	...	...	...	...	...	...	...	...	—	—	—	—	—	...	...	...	...	...	...	...	
5	—	—	—	—	—	...	2	1.0	1.0	9	1.0	3	...	—	—	—	—	—	4.4	60.3	...	...	...	...	...	
6	—	—	—	—	—	...	...	...	...	...	1	9	...	—	—	—	—	—	1.0	13.8	...	...	...	...	...	
7	—	—	—	—	—	...	5	1.0	1.0	1.0	1.0	9	...	—	—	—	—	—	5.4	74.7	...	...	...	...	...	
8	—	—	—	—	—	...	3	9	1.0	1.0	1.0	1.0	1.0	...	—	—	—	—	6.2	86.1	...	...	...	...	...	
9	—	—	—	—	—	...	...	...	...	...	...	...	...	—	—	—	—	—	...	...	...	...	...	...	...	
10	—	—	—	—	—	...	...	...	...	...	...	...	...	—	—	—	—	—	...	...	...	...	...	...	...	
11	—	—	—	—	—	...	2	...	...	...	...	...	...	—	—	—	—	—	0.2	2.8	...	...	...	...	...	
12	—	—	—	—	—	...	...	...	1	1	...	...	...	—	—	—	—	—	0.2	2.8	...	...	...	...	...	
13	—	—	—	—	—	...	...	...	...	...	...	...	...	—	—	—	—	—	...	...	...	...	...	...	...	
14	—	—	—	—	—	...	...	7	1.0	1.0	6	...	...	—	—	—	—	—	3.3	46.7...	...	...	...	...	...	
15	—	—	—	—	—	...	...	...	...	...	...	...	...	—	—	—	—	—	...	...	...	...	...	...	...	
16	—	—	—	—	—	...	...	...	...	...	...	...	...	—	—	—	—	—	...	...	...	...	...	...	...	
17	—	—	—	—	—	...	...	2	7	7	1.0	6	...	—	—	—	—	—	3.2	45.6	...	...	...	...	...	
18	—	—	—	—	—	...	...	...	...	...	...	...	...	—	—	—	—	—	...	...	...	...	...	...	...	
19	—	—	—	—	—	...	...	...	...	...	...	...	...	—	—	—	—	—	...	...	...	...	...	...	...	
20	—	—	—	—	—	...	8	1.0	1.0	1.0	8	...	...	—	—	—	—	—	4.6	65.7	...	...	...	...	...	
21	—	—	—	—	—	...	...	...	...	...	...	...	...	—	—	—	—	—	...	...	...	...	...	...	...	
22	—	—	—	—	—	...	...	...	...	...	...	...	...	—	—	—	—	—	...	...	...	...	...	...	...	
23	—	—	—	—	—	...	...	...	...	...	...	...	...	—	—	—	—	—	...	...	...	...	...	...	...	
24	—	—	—	—	—	...	...	...	...	...	...	...	...	—	—	—	—	—	...	...	...	...	...	...	...	
25	—	—	—	—	—	...	...	...	...	...	...	...	...	—	—	—	—	—	...	...	...	...	...	...	...	
26	—	—	—	—	—	...	2	1	...	1	1	4	...	—	—	—	—	—	0.9	12.8	...	...	...	...	...	
27	—	—	—	—	—	...	1	5	7	1	...	...	...	—	—	—	—	—	1.4	19.9	...	...	...	...	...	
28	—	—	—	—	—	...	4	1.0	1.0	1.0	2	...	...	—	—	—	—	—	3.6	51.1	...	...	...	...	...	
29	—	—	—	—	—	...	...	3	3	2	...	...	...	—	—	—	—	—	0.8	11.3	...	...	...	...	...	
30	—	—	—	—	—	...	...	...	...	2	2	3	...	—	—	—	—	—	0.7	9.9	...	...	...	...	...	
31	—	—	—	—	—	...	8	8	...	...	...	...	...	—	—	—	—	—	1.6	22.5	...	...	...	...	...	
Sum.	—	—	—	—	—	0.4	5.4	8.8	8.2	8.2	7.0	5.4	0.1	—	—	—	—	—	43.5	—	—	—	—	—	—	
Mean.	—	—	—	—	—	.01	.17	.28	.26	.26	.23	.17	.00	—	—	—	—	—	1.40	20	—	—	—	—	—	
Annual Total.	...	6.9	20.8	39.6	63.5	84.8	103.9	114.0	120.7	118.9	117.1	110.2	90.7	71.7	45.8	29.0	7.6	...	1145.2	—						
Annual Mean.	...	.02	.06	.11	.17	.23	.28	.31	.33	.32	.32	.30	.25	.20	.13	.08	.02	...	3.13	26						
Hour. L.A.T.	3 to 4.	4 to 5.	5 to 6.	6 to 7.	7 to 8.	8 to 9.	9 to 10.	10 to 11.	11 to Noon	Noon to 13.	13 to 14.	14 to 15.	15 to 16.	16 to 17.	17 to 18.	18 to 19.	19 to 20.	20 to 21.	Total for Day.	Per cent. of Possible.	Radiation by Ångström Pyrheliometer.					
																					Time. G.M.T.	Inten- sity.	p/p <sub>0</sub> sec. Z.	Sky.		



## WIND: DIRECTION AND SPEED.

Direction expressed in degrees from North (E = 90°, S = 180°, W = 270°, N = 360°). Speed in metres per second.

## 237. Eskdalemuir :

 $H_a$  (height of anemograph above M.S.L.) = Height of ground above.

Hour. G.M.T.	1.		2.		3.		4.		5.		6.		7.		8.		9.		10.		11.		Noon.	
Day.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.
1	—	0.4	—	0.2	—	0.2	—	0.3	—	0.2	—	0.4	—	0.2	—	0.3	—	0.3	—	0.0	—	0.0	—	0.1
2	190	5.8	180	6.8	180	5.9	190	7.0	210	7.8	220	6.4	220	5.6	220	3.9	230	2.3	240	1.6	230	5.2	210	3.6
3	—	1.5	320	2.9	280	1.8	230	2.9	330	2.0	—	1.5	300	2.9	—	1.0	—	1.3	—	0.5	—	0.6	—	0.5
4	210	8.0	230	10.8	220	12.5	220	13.0	230	11.0	220	8.9	250	12.2	250	11.1	240	8.9	220	7.5	220	8.0	230	10.0
5	280	12.0	280	10.5	280	11.5	290	13.3	290	13.7	300	13.5	300	16.0	300	15.1	290	14.9	290	13.5	290	11.8	290	14.0
6	200	8.2	190	6.4	210	7.5	220	7.4	220	7.5	210	7.6	240	14.0	250	15.8	260	14.9	260	13.5	270	12.4	290	15.0
7	210	3.0	210	4.1	180	4.1	200	8.6	190	8.0	200	10.2	210	10.1	210	8.5	220	8.4	240	11.9	240	11.5	230	11.8
8	250	13.7	250	13.0	250	13.0	250	11.0	250	7.7	230	8.2	250	11.0	230	8.5	220	6.7	220	8.7	220	9.8	230	10.9
9	230	13.4	240	14.0	240	14.0	230	12.3	230	15.0	230	16.0	220	14.5	210	12.4	210	12.5	210	12.3	210	12.5	230	10.1
10	220	12.1	220	12.0	220	12.4	210	10.6	200	7.4	200	10.5	200	15.3	190	18.0	190	19.2	190	20.1	200	19.9	250	14.7
11	240	10.2	240	8.2	230	10.1	220	8.8	220	8.2	220	8.6	220	8.5	220	8.5	230	9.1	240	8.6	230	8.7	240	9.0
12	190	4.3	180	5.0	190	6.5	170	6.3	190	11.2	200	16.4	200	17.0	200	15.9	200	16.0	200	15.3	200	15.0	200	14.0
13	230	10.1	230	10.3	210	8.5	220	10.9	230	10.0	220	10.7	220	10.6	220	11.6	230	13.4	230	14.8	230	13.0	230	13.1
14	250	5.6	210	6.5	230	4.7	230	5.6	220	6.0	220	4.4	220	4.5	180	3.6	190	4.5	170	4.5	170	6.6	170	6.2
15	220	8.5	210	8.0	210	9.2	210	10.1	210	10.0	200	9.9	200	9.4	200	9.5	190	10.1	200	12.5	200	14.0	200	14.5
16	100	3.1	50	4.1	20	6.0	20	6.5	10	7.3	10	7.4	360	7.3	360	6.5	350	7.0	20	2.1	280	2.6	330	5.5
17	*	2.5	*	2.0	*	4.8	*	5.4	*	4.5	*	4.1	20	5.2	30	5.8	30	4.8	30	4.9	40	6.5	40	5.5
18	—	0.1	—	0.1	—	0.7	160	2.8	150	4.3	160	3.7	160	4.1	150	4.8	140	5.6	130	5.5	140	6.7	140	8.2
19	260	6.8	250	5.2	240	5.1	260	6.1	270	5.8	280	5.8	270	6.2	270	5.8	250	5.5	240	5.7	270	6.9	260	5.5
20	190	5.8	200	9.9	180	9.5	200	11.8	190	10.5	180	9.5	190	8.5	190	11.0	190	11.5	190	11.7	200	13.5	210	13.4
21	210	4.5	220	3.6	190	3.5	200	4.0	190	3.5	180	5.4	190	7.7	170	8.0	170	9.4	190	15.3	190	18.3	190	17.2
22	210	3.0	210	2.0	290	3.9	280	3.8	290	1.7	280	2.5	300	3.5	—	1.4	290	3.5	310	2.4	310	5.5	290	5.2
23	—	0.0	—	0.2	180	2.1	180	2.1	180	4.3	190	6.5	190	7.0	190	7.5	200	10.8	200	10.6	190	11.6	280	11.4
24	230	7.0	210	6.6	220	4.6	230	4.5	220	5.3	190	2.6	200	3.2	190	4.9	160	5.4	200	11.0	240	14.9	270	10.1
25	250	9.2	230	9.7	240	10.3	240	9.5	250	11.0	250	9.8	250	11.8	230	9.0	220	9.6	230	12.9	230	11.6	220	13.5
26	240	14.6	240	14.0	230	12.0	220	12.0	220	8.6	200	4.2	190	5.2	190	9.5	170	10.0	170	11.5	170	11.8	180	13.9
27	—	0.0	—	1.5	—	1.5	330	7.4	320	6.8	—	1.0	310	7.0	310	8.6	300	10.0	300	4.4	300	4.4	310	9.6
28	190	3.0	180	2.4	190	3.4	200	5.5	210	8.0	200	8.5	200	10.0	210	10.0	210	10.5	210	8.0	210	8.2	220	7.2
29	200	2.8	—	0.7	170	2.1	200	3.0	180	2.8	—	1.0	—	0.8	—	0.5	—	0.2	—	1.1	10	2.0	10	3.1
30	—	0.1	—	1.5	220	2.4	—	1.5	—	0.8	—	0.3	—	0.1	—	1.0	210	3.8	210	3.6	210	5.5	210	7.2
31	180	2.8	190	4.1	190	3.8	220	4.7	240	6.0	220	3.0	210	4.9	210	5.8	200	5.4	180	6.0	170	7.3	180	7.8
Mean ...	—	5.9	—	6.0	—	6.4	—	7.1	—	7.0	—	6.7	—	7.9	—	7.9	—	8.2	—	8.5	—	9.2	—	9.4

238. Eskdalemuir :  $H_a = 235$  metres + 15 metres.

Day.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.
1	210	9.2	210	10.8	220	11.9	220	12.0	220	12.9	230	13.8	240	12.5	230	10.3	240	11.5	230	10.1	230	10.6	240	10.5
2	230	13.2	220	11.6	220	11.6	220	13.5	230	12.5	230	12.5	230	12.5	220	11.9	220	10.8	200	8.2	170	6.0	200	6.0
3	250	6.3	240	7.2	250	6.1	250	5.9	270	8.0	290	9.7	290	11.6	290	13.0	290	12.1	290	11.3	240	6.7	180	2.3
4	200	5.7	190	5.6	190	7.7	190	9.5	180	9.6	180	10.5	180	9.0	180	5.2	180	5.1	170	7.4	160	6.1	190	7.2
5	210	8.6	210	8.6	250	8.1	260	6.1	250	6.2	240	5.1	220	4.6	230	5.7	240	5.3	260	4.8	260	5.5	260	7.1
6	200	6.6	220	9.9	240	9.2	240	10.1	230	8.5	250	10.0	230	9.0	240	9.9	240	10.4	240	10.6	260	9.3	250	9.8
7	220	16.9	210	14.3	210	13.2	210	12.5	210	12.0	210	11.6	210	11.8	210	13.0	210	13.4	220	14.3	220	14.9	220	16.2
8	200	7.0	190	7.4	200	9.6	200	8.3	210	10.1	200	10.0	210	10.1	220	12.5	220	14.3	210	14.0	200	11.5	210	11.5
9	250	15.3	250	16.1	240	15.2	250	12.3	250	12.7	240	11.1	220	9.4	230	9.5	240	10.7	240	13.2	240	13.6	250	15.0
10	240	13.3	240	13.5	230	13.0	220	11.5	200	8.2	200	10.1	200	11.5	190	15.0	190	15.7	180	14.7	160	9.6	170	12.6
11	270	3.1	250	2.4	—	1.1	210	2.2	260	2.4	290	7.2	280	8.5	270	8.1	260	9.7	250	9.2	250	8.7	300	9.9
12	—	0.8	260	5.1	300	7.6	300	7.3	280	4.9	280	5.0	260	5.2	250	6.1	240	5.6	210	5.0	200	4.9	220	7.4
13	240	2.7	—	0.4	—	0.2	—	0.1	—	0.1	—	0.0	—	0.0	—	0.1	—	0.0	—	0.5	—	0.1	—	0.1
14	230	9.8	230	10.9	250	11.0	250	13.5	250	12.0	260	11.6	260	9.2	260	9.5	260	8.0	240	9.0	250	8.7	240	8.3
15	—	0.0	—	0.5	170	2.1	180	6.1	210	8.6	200	10.4	200	6.5	200	6.0	190	8.5	190	8.0	200	9.5	220	15.7
16	210	6.5	200	5.7	200	6.5	190	5.1	190	5.0	200	5.4	210	5.3	220	6.5	220	7.3	230	10.0	230	10.0	230	9.5
17	250	11.4	250	12.2	260	13.0	270	12.6	270	10.5	270	10.4	270	10.0	270	10.3	280	10.1	270	7.2	260	11.1	270	10.9
18	230	5.0	210	4.0	200	4.2	200	4.1	200	5.1	200	7.0	210	7.2	210	7.6	220	8.8	220	9.9	230	9.9	230	11.2
19	250	6.5	270	5.8	260	5.3	260	2.6	280	3.1	260	2.6	260	3.5	240	3.7	200	2.5	230	3.1	290	2.8	240	5.1
20	230	3.6	230	3.4	210	2.9	210	4.0	190	2.9	180	2.2	170	2.1	180	4.0	180	4.0	170	4.6	180	4.5	180	4.5
21	—	1.1	—	0.1	—	0.0	—	0.1	—	0.2	—	0.5	—	0.6	—	0.5	—	0.4	—	0.6	170	3.0	200	7.1
22	220	4.9	220	5.4	180	3.2	190	3.0	230	4.0	190	3.1	210	1.9	220	2.8	280	3.6	290	3.4	310	3.3	310	3.2
23	40	8.0	40	7.8	40	5.0	40	4.6	50	3.6	60	3.5	40	3.7	10	2.7	10	4.2	60	5.1	40	5.1	30	4.7
24	100	3.5	110	4.7	100	4.5	120	5.6	120	5.7	110	5.0	100	2.8	120	2.7	110	2.7	120	5.5	120	6.5	110	5.6
25	—	1.5	—	0.5	—	0.4	—	0.2	—	0.4	—	0.4	—	0.5	—	1.0	—	0.5	—	0.1	—	0.5	—	0.6
26	—	0.5	—	1.1	—	1.0	350	2.0	360	4.2	360	4.8	350	4.2	350	3.7	360	3.0	10	2.0	40	2.7	110	3.5
27	330	1.6	—	1.2	—	0.9	—	0.7	350	2.1	350	2.6	350	3.1	340	2.0	340	2.0	—	0.5	130	3.5	150	5.7
28	350	2.7	350	3.1	360	5.1	360	5.6	360	5.3	360	5.7	10	2.6	20	3.5	30	3.1	60	5.5	20	3.8	40	6.7
29	100	4.6	100	4.6	80	5.3	60	5.1	80	5.5	90	5.8	100	6.3	80	5.6	50	5.5	50	5.9	50	4.0	60	6.2
Mean ...	—	6.2	—	6.3	—	6.4	—	6.4	—	6.4	—	6.8	—	6.4	—	6.6	—	6.9	—	7.0	—	6.8	—	7.7
Hour. G.M.T.	1.		2.		3.		4.		5.		6.		7.		8.		9.		10.		11.		Noon.	



## WIND: DIRECTION AND SPEED.

225

Averages for periods of sixty minutes, centred at the exact hours, Greenwich Mean Time.

January, 1928.

M.S.L. +  $h_a$  (height of anemograph above ground) = 235 metres + 15 metres.

13.		14.		15.		16.		17.		18.		19.		20.		21.		22.		23.		24.		Mean.	Day.
°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	m/s.	
—	0.3	170	4.6	160	6.8	160	7.0	160	7.6	160	9.1	170	10.5	170	10.0	170	10.4	170	9.1	180	8.4	180	6.7	3.8	1
180	2.2	210	2.9	—	1.5	—	1.3	210	1.6	—	0.5	—	0.5	—	1.1	—	1.1	220	1.6	250	2.2	—	0.4	3.4	2
—	0.4	—	0.6	—	1.0	—	0.5	—	0.4	—	0.3	—	0.3	—	0.5	—	0.6	210	3.6	190	4.4	180	5.1	1.4	3
260	12.0	270	10.6	280	11.5	270	11.0	270	10.0	280	10.6	280	10.0	280	10.7	280	12.6	280	12.4	280	12.3	280	10.9	10.6	4
290	11.7	290	11.3	190	9.9	250	7.0	240	7.5	220	7.0	200	6.8	210	6.9	220	8.0	220	8.1	220	10.6	210	10.2	11.0	5
320	18.6	330	17.2	330	13.8	330	12.8	350	7.0	360	2.7	230	4.5	270	4.5	240	3.1	270	3.6	230	3.5	230	3.6	9.5	6
230	10.6	230	9.6	210	7.0	210	7.0	220	10.4	220	10.3	210	8.0	220	9.0	220	8.9	210	10.1	220	13.2	240	14.5	8.9	7
230	11.5	230	11.5	220	10.5	210	9.6	220	9.5	210	9.6	210	9.0	210	9.5	220	9.5	230	11.5	230	11.7	230	12.3	10.4	8
260	9.8	250	10.5	250	11.6	260	10.0	250	10.1	240	9.4	240	9.9	230	12.0	220	9.5	200	8.8	200	9.0	220	11.0	11.7	9
250	11.4	250	11.6	230	11.6	230	10.4	220	11.5	230	11.0	230	11.5	230	12.1	230	11.9	230	12.2	220	12.1	230	11.2	12.9	10
250	8.8	250	9.7	260	9.0	250	9.0	250	8.7	250	8.6	230	7.6	210	5.5	170	2.5	190	4.5	220	5.5	200	4.4	8.1	11
200	11.8	200	8.2	220	9.9	220	9.8	220	9.0	220	10.7	220	10.9	200	9.9	210	12.4	240	11.5	230	9.6	220	10.0	11.0	12
230	12.9	240	15.2	250	15.0	260	13.2	270	12.0	290	13.2	290	12.2	290	11.5	290	12.0	290	13.5	290	12.7	280	9.1	12.1	13
180	7.5	190	7.9	210	9.4	220	6.2	230	7.5	240	7.8	240	8.2	240	10.0	230	9.3	220	8.7	220	9.7	210	10.2	6.9	14
200	10.1	210	11.2	210	11.5	200	13.5	200	13.2	200	12.7	200	11.8	200	9.2	210	7.6	190	5.0	180	4.9	160	3.4	10.1	15
340	6.0	340	6.6	320	4.5	—	1.3	—	0.6	—	0.3	—	0.6	310	3.5	310	4.7	10	2.1	—	1.5	320	4.3	4.2	16
50	5.2	50	5.1	50	4.5	50	3.7	30	2.2	50	3.0	50	4.5	50	3.7	—	1.0	—	0.5	—	0.3	—	0.1	3.8	17
140	7.7	140	8.0	140	5.7	140	5.7	160	3.6	160	3.9	150	4.3	150	5.4	150	4.6	170	4.5	220	3.9	250	6.1	4.5	18
260	3.3	270	4.5	270	6.1	250	5.6	210	5.1	190	4.4	180	4.0	200	4.3	200	4.9	200	6.0	200	5.7	190	5.8	5.4	19
220	11.9	230	12.0	250	12.5	250	10.6	200	3.7	160	2.5	150	2.5	200	2.6	190	2.6	190	4.6	190	4.7	210	5.3	8.4	20
190	18.6	190	18.5	210	17.2	210	9.8	210	8.9	200	9.1	200	9.1	200	8.5	210	6.5	210	8.1	210	5.1	190	3.5	9.3	21
280	3.9	300	3.6	290	1.6	290	3.9	290	4.7	280	4.0	—	0.5	—	1.0	—	1.0	—	0.9	—	0.5	—	0.2	2.7	22
180	9.6	180	8.5	180	8.0	180	8.0	190	12.0	200	12.1	200	11.6	200	9.8	210	10.2	200	8.8	220	9.3	250	8.7	7.8	23
270	9.5	250	8.6	240	7.4	240	7.0	240	7.4	260	7.6	280	9.4	250	13.6	250	10.9	270	9.3	260	9.0	250	9.1	7.9	24
210	13.1	200	14.1	200	15.7	190	17.0	190	18.4	200	18.6	220	13.0	230	11.7	230	10.0	220	10.9	220	12.0	230	14.6	12.3	25
170	11.5	200	7.5	230	7.7	210	6.5	220	6.2	240	6.5	270	6.0	250	5.7	220	1.6	210	2.9	—	1.0	—	0.4	8.2	26
300	3.6	300	7.7	290	12.8	300	12.5	230	4.9	220	4.5	260	4.6	240	6.0	250	3.5	—	1.0	190	2.9	220	4.6	5.4	27
240	3.2	300	2.6	290	2.0	260	3.5	250	7.0	290	7.5	220	3.5	—	1.0	210	2.9	200	3.6	220	3.2	200	3.1	5.4	28
360	3.8	10	2.6	360	2.5	360	2.1	—	0.8	—	0.0	—	0.0	—	0.2	300	1.8	—	1.5	280	2.5	270	2.0	1.7	29
230	8.0	230	5.8	200	3.5	190	3.5	190	3.5	160	2.2	180	2.7	210	3.7	220	5.1	220	3.9	220	3.4	210	3.0	3.1	30
180	10.7	180	10.2	180	7.7	180	7.3	180	10.6	190	14.9	210	12.8	230	12.5	220	9.7	220	10.6	220	9.0	210	9.0	7.7	31
—	8.7	—	8.7	—	8.4	—	7.6	—	7.3	—	7.3	—	6.8	—	6.9	—	6.5	—	6.6	—	6.6	—	6.5	7.4	

February, 1928.

°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	m/s.	
260	10.1	260	8.6	240	9.9	250	9.7	240	8.9	240	8.6	230	10.4	230	8.5	220	9.9	220	10.5	230	11.5	230	11.4	10.5	1
180	5.0	150	5.6	150	4.2	160	4.3	210	6.2	220	7.8	230	(5.4)	250	(5.5)	250	(7.3)	270	8.5	280	10.0	270	7.5	8.7	2
270	5.6	270	6.9	270	6.5	280	7.8	270	7.4	260	7.9	250	4.5	200	1.6	—	0.1	—	0.1	—	0.5	190	3.7	6.4	3
210	8.5	210	9.9	210	7.1	200	6.1	190	6.8	190	7.7	200	8.8	200	8.7	220	9.6	210	9.5	210	10.3	210	11.0	7.9	4
290	10.1	280	6.8	240	8.0	240	9.5	230	8.2	210	6.3	210	8.6	230	10.0	230	10.5	230	9.7	210	8.4	210	8.3	7.6	5
250	11.4	240	10.5	230	8.5	230	9.5	230	8.6	230	10.2	220	10.5	220	11.0	230	12.7	230	15.2	230	20.0	220	18.0	10.6	6
230	15.7	230	15.0	240	17.0	250	17.7	250	15.0	220	6.4	210	5.8	210	6.5	200	5.9	210	5.7	210	6.0	200	6.4	12.2	7
210	14.3	210	14.0	210	13.9	210	11.0	210	13.5	210	16.6	210	16.4	200	17.1	200	17.2	200	17.9	200	15.5	220	15.0	12.7	8
240	14.5	250	13.7	250	14.5	250	12.5	250	11.8	250	11.9	250	11.4	230	8.6	230	8.5	220	8.6	230	11.0	240	12.5	12.3	9
250	11.0	230	9.9	230	12.5	230	13.0	230	11.0	230	10.1	220	9.0	220	8.6	200	7.5	180	6.4	180	2.5	360	2.6	10.7	10
330	13.2	340	14.1	350	11.5	350	6.5	330	6.5	320	5.1	320	4.0	330	3.8	310	5.5	320	4.5	330	1.8	—	1.1	6.3	11
220	5.9	250	4.3	220	4.0	230	3.7	220	3.7	—	1.4	260	2.4	260	2.6	260	2.8	250	3.2	220	3.5	220	2.6	4.3	12
—	0.1	—	1.5	210	1.9	230	3.5	250	6.2	260	8.0	260	9.3	260	10.6	250	9.0	230	9.2	240	10.5	220	9.8	3.3	13
250	9.5	250	7.8	250	9.1	230	6.5	200	3.5	—	1.0	—	0.6	—	0.4	—	0.2	—	0.4	—	0.5	—	0.1	6.9	14
210	15.0	210	14.2	230	14.8	240	15.1	240	14.9	240	13.5	240	12.7	250	11.9	250	11.2	240	9.5	230	9.0	210	7.5	9.5	15
250	9.1	250	9.5	260	9.1	270	6.9	270	8.5	270	6.1	240	6.5	220	6.9	190	4.5	230	7.4	260	7.9	250	10.1	7.3	16
270	10.3	270	10.3	270	9.9	270	8.2	280	9.3	270	8.5	270	8.5	270	5.3	240	4.6	180	2.1	190	1.6	240	4.0	9.0	17
230	10.2	230	11.2	230	11.6	230	9.2	230	9.7	200	7.2	210	7.1	220	8.5	240	9.2	240	10.0	250	9.2	250	7.2	8.0	18
250	4.4	220	3.5	210	3.9	180	5.1	190	2.8	190	2.5	180	1.9	200	2.6	230	2.6	—	1.5	200	2.6	200	2.2	3.5	19
190	4.1	200	4.2	210	4.4	200	4.0	200	3.3	190	2.6	200	2.2	200	2.0	—	1.1	200	2.6	180	2.4	190	2.0	3.2	20
210	9.3	210	8.0	210	8.9	210	11.0	210	9.7	200	8.7	200	6.6	200	6.5	190	6.6	200	6.3	200	5.9	200	4.4	4.4	21
360	3.6	350	4.1	10	4.1	20	4.2	30	4.0	—	1.5	50	2.9	50	3.5	40	3.8	30	4.0	30	5.4	40	6.4	3.7	22
40	5.3	50	4.6	70	3.5	70	3.4	60	5.0	60	6.1	60	6.6	60	4.3	40	2.8	60	3.0	70	4.0	80	3.5	4.7	23
110	5.9	110	5.5	110	5.5	110	5.2	110	4.7	110	3.9	100	3.2	100	2.0	—	1.1	—	1.4	—	0.5	—	1.3	4.0	24
—	0.7	150	2.2	—	1.4	—	0.2	—	1.1	—	1.3	350	2.1	330	1.6	—	0.9	—	0.9	—	1.0	—	0.7	0.9	25
160	3.9	140	1.7	160	1.7	160	2.1	—	0.8	—	1.5	—	1.5	350	1.6	350	1.7	10	1.8	350	3.8	360	2.7	2.4	26
150	6.0	130	5.5	130	5.5	110	5.1	90	4.5	30	2.6	50	3.1	10	4.0	360	3.1	350	3.5	360	3.5	360	3.1	3.1	27
60	7.5	90	7.5	100	9.5	100	9.7	90	9.0	70	9.4	70	10.0	60	6.5	80	6.0	130	3.5	90	2.0	80	6.0	5.7	28
60	7.1	60	8.1	50	6.3	50	5.4	60	5.6	60	5.2	60	5.1	80	3.1	60	3.5	70	5.2	90	4.3	100	5.2	5.4	29
—	8.2	—	7.9	—	7.9	—	7.5	—	7.3	—	6.5	—	6.5	—	6.0	—	5.8	—	5.9	—	6.0	—	6.1	6.7	
13.		14.		15.		16.		17.		18.		19.		20.		21.		22.		23.		24.		Mean.	Day.



Direction expressed in degrees from North ( $E = 90^\circ$ ,  $S = 180^\circ$ ,  $W = 270^\circ$ ,  $N = 360^\circ$ ), Speed in metres per second.

## 239. Eskdalemuir :

$H_a$  (height of anemograph above M.S.L.) = Height of ground above.

Hour. G.M.T.	1.		2.		3.		4.		5.		6.		7.		8.		9.		10.		11.		Noon.	
Day.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.
1	80	6.5	80	6.9	70	6.0	70	4.9	70	3.6	70	4.2	70	5.2	70	4.5	60	3.3	50	3.0	50	3.5	10	3.6
2	200	2.5	190	2.4	220	3.0	210	1.7	200	2.8	180	3.1	180	1.9	220	1.7	—	0.2	—	1.1	180	2.0	—	1.5
3	50	6.0	50	6.2	40	3.4	360	2.2	40	3.0	30	3.6	20	2.6	30	4.2	20	3.5	10	3.1	40	3.5	40	3.7
4	360	2.0	360	2.5	360	2.1	—	1.5	350	3.0	360	2.6	350	3.2	350	3.8	360	3.6	350	3.2	360	2.4	—	1.0
5	—	0.1	—	0.2	—	0.2	—	0.1	—	0.7	—	0.4	—	0.1	—	0.0	—	0.2	—	0.5	—	1.5	360	1.6
6	10	3.6	10	3.5	20	4.8	20	7.5	20	5.7	20	6.2	20	5.5	20	5.3	20	5.5	20	5.5	20	6.5	20	6.2
7	—	1.5	—	1.5	360	2.5	340	2.2	—	0.8	30	1.9	360	2.8	360	4.2	360	5.2	360	4.9	360	5.0	10	5.0
8	30	5.1	20	4.9	20	4.6	20	5.5	30	5.3	30	6.5	20	5.0	30	4.1	40	3.0	30	4.7	20	5.6	40	6.4
9	20	2.2	10	5.0	10	5.1	10	4.5	10	5.0	10	5.8	10	5.4	20	5.1	20	5.6	20	5.4	20	5.2	20	5.8
10	20	5.3	20	6.5	20	6.5	20	6.7	20	8.3	30	8.5	50	7.6	50	7.4	60	7.5	60	8.6	70	9.5	60	7.1
11	30	6.2	30	6.9	30	8.3	30	7.2	30	6.9	30	7.5	30	6.1	40	6.9	40	8.1	40	7.5	50	7.9	60	10.0
12	40	6.9	30	7.3	40	7.8	40	7.1	40	8.0	40	8.1	40	8.5	40	9.6	40	9.6	50	9.8	50	11.0	50	11.1
13	50	4.5	50	3.6	30	2.4	50	4.8	50	4.5	40	5.1	40	7.0	50	4.6	—	0.6	30	5.2	40	4.0	20	2.8
14	50	3.3	50	3.5	50	3.6	50	4.7	50	3.3	40	2.6	40	5.1	50	4.8	—	0.6	30	5.2	40	4.0	20	2.8
15	120	3.1	120	3.6	130	4.2	130	2.1	—	1.0	120	2.3	—	0.6	—	0.2	130	2.0	130	4.9	130	5.5	130	5.9
16	—	0.8	—	0.3	—	0.4	—	1.0	140	2.6	150	3.3	170	1.9	150	4.0	160	4.5	160	4.6	150	5.0	160	6.4
17	170	5.7	170	7.1	170	6.0	180	6.9	170	6.5	170	6.5	170	7.3	190	11.5	200	13.3	200	12.4	190	13.0	180	10.0
18	180	5.7	180	4.6	170	5.1	180	4.7	—	1.3	170	3.4	160	5.4	170	6.1	200	9.2	220	9.3	210	9.2	200	10.4
19	170	5.2	170	4.7	190	4.0	—	1.5	180	2.2	170	2.5	160	2.5	150	4.0	150	6.4	150	7.9	150	8.4	150	7.9
20	160	7.0	170	9.0	170	8.8	170	7.1	170	6.4	160	6.5	150	5.7	150	5.9	150	6.5	150	6.1	150	6.1	140	7.1
21	140	7.3	130	6.9	130	5.3	120	5.5	130	5.2	130	7.0	120	7.1	120	7.6	110	8.0	100	6.8	110	8.5	120	8.7
22	50	3.9	60	4.2	60	4.0	60	4.5	50	5.2	40	5.1	50	6.6	60	7.0	60	6.5	80	5.9	70	5.6	60	4.6
23	360	3.4	10	2.0	10	2.1	10	2.8	20	3.0	20	2.5	20	3.2	50	7.2	50	8.7	50	7.3	50	8.0	60	8.0
24	140	2.9	120	4.5	120	4.0	100	4.5	110	5.7	110	6.4	120	6.9	120	7.1	140	7.2	160	6.5	170	7.0	180	8.4
25	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	1.0	280	2.2	290	3.5	280	3.7	290	5.6	300	6.2	320	3.7
26	210	2.2	210	2.1	—	1.5	—	1.2	—	1.4	—	1.5	190	2.0	190	2.5	200	4.5	220	5.3	220	5.6	210	5.9
27	190	2.5	190	2.5	170	3.1	170	4.0	160	3.5	150	4.1	160	5.2	170	5.7	190	7.0	210	7.3	240	8.6	240	10.5
28	230	3.1	220	3.5	250	3.0	—	1.3	230	4.7	240	5.0	230	3.7	220	4.5	220	5.4	230	6.7	230	6.4	230	5.4
29	190	4.0	200	5.6	190	5.0	170	4.9	170	3.6	150	5.0	140	6.5	140	8.3	130	8.2	120	9.3	120	11.5	130	12.0
30	200	6.7	200	6.8	190	5.4	160	3.6	150	4.0	150	4.0	140	3.4	150	3.6	140	3.9	130	5.1	130	4.1	120	4.2
31	40	7.2	40	6.7	40	7.3	50	7.5	40	7.3	40	7.2	40	7.5	40	8.8	40	8.4	40	8.2	40	7.1	40	8.4
†Mean ...	—	4.0	—	4.3	—	4.1	—	3.9	—	3.9	—	4.4	—	4.5	—	5.1	—	5.5	—	5.9	—	6.3	—	6.3

240. Eskdalemuir :  $H_a = 235$  metres + 15 metres.

	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.
1	20	4.5	20	3.5	360	3.0	—	0.9	—	1.0	—	0.9	340	2.9	340	2.9	340	3.0	340	3.5	330	5.5	330	3.2
2	—	0.0	—	0.4	—	0.0	—	0.1	—	0.2	—	0.4	—	0.0	—	0.1	—	0.1	—	0.1	200	7.4	200	7.5
3	200	12.8	200	13.0	210	9.8	220	10.0	230	10.1	230	9.4	220	9.8	220	9.6	230	10.1	230	10.6	220	8.8	240	9.5
4	220	8.5	230	9.6	230	10.1	240	11.0	230	8.6	230	8.1	220	7.5	220	8.5	230	8.0	220	7.5	220	9.0	220	9.0
5	210	1.8	200	1.7	230	2.4	240	3.8	—	1.5	—	0.6	190	1.9	210	4.8	230	6.5	230	6.5	220	8.2	230	5.4
6	200	3.0	200	2.0	200	1.8	—	0.5	200	3.2	190	3.3	200	3.7	220	5.7	230	6.2	220	5.5	210	7.0	200	7.5
7	340	2.0	—	0.5	—	1.5	—	1.4	—	0.2	—	1.0	—	0.1	160	2.1	160	6.0	180	6.4	180	6.6	180	7.4
8	90	6.5	80	7.0	80	6.9	40	5.1	40	4.1	30	5.1	30	4.6	30	4.6	50	4.8	50	4.8	80	4.0	140	3.6
9	150	4.5	160	4.7	150	5.7	160	5.7	160	8.0	160	8.0	160	7.5	160	9.1	160	9.3	170	8.1	170	9.4	160	9.6
10	—	0.6	—	0.7	—	0.2	—	0.5	30	2.0	50	3.6	30	1.6	90	4.4	130	6.8	130	6.3	130	6.9	130	6.6
11	—	0.1	—	0.6	360	3.2	360	3.1	360	2.6	30	2.0	360	2.4	20	2.0	10	2.4	360	2.1	50	2.1	—	1.4
12	360	2.1	360	2.5	350	3.5	350	3.2	360	1.6	360	2.3	360	2.8	360	3.0	40	3.6	40	4.8	50	5.4	60	6.1
13	60	4.1	50	3.6	50	3.5	50	3.9	50	4.0	80	4.2	100	6.4	100	6.8	90	6.5	80	6.5	90	6.6	90	7.5
14	110	9.4	100	8.6	90	6.8	90	7.0	90	8.9	100	7.1	110	8.1	110	10.7	100	11.4	110	11.0	110	10.5	100	10.7
15	80	10.0	80	9.6	80	9.0	80	7.2	60	7.0	60	7.4	60	8.5	70	9.9	80	11.0	80	11.3	70	12.0	70	11.7
16	40	6.5	40	6.6	40	6.4	30	6.1	30	7.5	30	7.0	30	7.0	30	7.7	40	8.2	30	8.1	40	7.4	40	7.2
17	10	4.9	30	5.1	30	6.1	30	3.5	40	6.5	20	7.3	20	5.5	10	7.6	10	7.3	10	8.9	20	8.0	360	6.2
18	—	0.7	280	3.7	260	4.3	170	2.5	200	4.0	220	7.7	220	6.1	260	6.4	310	8.2	330	11.3	340	13.4	340	11.8
19	310	6.5	330	8.5	330	9.0	330	10.6	340	10.1	340	9.8	350	12.0	350	13.2	340	13.3	350	11.9	350	10.6	350	11.0
20	310	5.8	310	5.8	310	5.0	350	1.6	—	0.8	360	3.6	360	6.6	360	8.0	360	9.5	10	9.1	10	8.5	360	6.9
21	10	3.0	—	1.0	360	3.4	360	3.9	360	4.6	360	5.0	10	5.7	20	7.0	40	6.4	40	6.1	30	5.3	60	7.2
22	—	0.2	—	0.0	—	0.0	—	0.5	—	0.3	—	0.1	—	0.1	—	0.4	—	1.0	—	0.5	250	5.1	350	3.0
23	190	6.2	200	7.2	200	8.5	190	7.2	190	8.2	190	10.7	200	10.5	200	11.3	200	10.6	200	9.6	200	9.0	200	8.0
24	190	7.0	200	9.8	210	9.8	200	9.3	200	9.1	200	9.8	200	10.7	200	9.5	200	7.2	200	11.4	200	12.6	210	13.4
25	180	5.5	170	6.7	180	6.3	170	3.4	190	3.7	190	4.0	160	5.1	160	6.8	180	8.5	210	9.6	210	10.6	210	10.5
26	—	1.1	350	1.8	360	2.2	360	4.0	360	3.6	360	2.9	360	3.1	10	3.2	30	4.1	50	4.3	90	5.7	100	7.3
27	360	3.8	360	5.2	360	4.6	360	4.5	20	7.3	10	7.5	350	6.4	30	5.9	20	4.6	40	4.9	60	9.2	60	8.7
28	40	8.0	40	9.4	40	9.5	40	7.1	30	7.3	30	8.7	40	9.9	40	9.5	40	10.0	40	9.8	40	9.8	10	4.2
29	330	3.3	10	5.4	20	4.5	20	4.2	350	2.7	20	3.0	40	5.2	50	5.9	50	7.1	50	5.7	60	4.8	70	4.5
30	350	4.1	20	5.2	30	5.4	30	5.0	20	6.8	20	6.6	20	6.0	30	7.0	20	4.9	30	5.8	50	7.6	60	8.5
Mean ...	—	4.5	—	5.0	—	5.1	—	4.6	—	4.9	—	5.2	—	5.6	—	6.5	—	7.0	—	7.3	—	7.9	—	7.5
Hour. G.M.T.	1.		2.		3.		4.		5.		6.		7.		8.		9.		10.		11.		Noon.	



**March, 1928.**

**April, 1928.**

[illegible]

II



Direction expressed in degrees from North (E = 90°, S = 180°, W = 270°, N = 360°). Speed in metres per second.

## 241. Eskdalemuir :

H<sub>a</sub> (height of anemograph above M.S.L.) = Height of ground above

Hour. G.M.T.	1.		2.		3.		4.		5.		6.		7.		8.		9.		10.		11.		Noon.	
Day.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.
1	20	4.0	30	4.1	20	5.2	20	6.3	40	8.1	340	3.3	30	6.1	50	6.5	60	5.5	50	5.8	60	5.6	50	5.0
2	260	4.5	30	3.9	20	4.1	30	3.4	40	4.3	20	4.1	20	4.6	40	6.0	40	5.5	40	6.4	60	6.5	50	8.0
3	40	9.5	40	7.7	40	7.0	30	7.2	30	7.6	30	5.7	40	10.1	40	10.4	30	10.5	40	10.9	40	10.2	20	6.0
4	40	9.1	40	10.8	40	10.0	50	10.2	40	7.2	40	10.3	30	7.0	30	6.4	30	7.0	30	7.0	60	9.8	60	11.0
5	20	6.6	20	7.6	30	6.8	50	3.9	30	3.5	30	7.4	10	6.5	30	4.8	50	6.1	50	6.9	70	7.9	90	8.0
6	360	4.2	350	2.8	350	2.9	—	1.5	—	0.9	—	0.2	—	0.1	—	0.5	—	0.9	—	1.5	—	0.9	90	1.7
7	30	7.9	20	6.5	30	7.7	30	7.2	30	7.0	30	8.9	30	8.2	30	9.5	30	8.5	30	9.0	40	8.8	50	7.5
8	—	0.1	—	1.1	—	1.4	350	2.0	350	1.9	340	1.7	350	7.5	350	8.5	20	7.9	30	7.1	20	7.0	30	6.5
9	—	0.7	—	0.4	—	0.3	—	0.5	—	1.2	10	1.6	10	5.9	10	6.0	10	5.7	10	6.2	10	7.0	10	6.8
10	—	0.1	—	0.0	—	0.1	—	0.0	—	0.0	—	0.0	—	0.3	330	2.2	10	4.0	360	4.3	360	4.2	60	4.3
11	—	1.1	—	1.4	—	0.8	—	0.4	—	0.0	—	0.0	—	1.4	270	2.1	310	2.5	290	4.0	240	5.0	240	5.4
12	—	0.8	—	0.5	360	1.6	—	1.1	30	2.0	—	1.5	—	1.0	340	5.1	340	5.7	340	3.5	340	3.2	330	2.2
13	20	3.5	20	2.8	360	2.1	—	1.0	—	0.8	—	0.4	—	0.2	—	0.2	—	0.5	—	1.1	—	1.5	—	0.6
14	20	5.0	40	4.2	10	3.0	10	2.5	—	1.0	80	2.0	10	5.5	20	6.3	20	5.0	20	5.1	20	4.1	10	4.6
15	—	1.2	—	0.1	—	0.0	—	0.0	—	0.0	—	0.0	—	0.1	170	2.3	270	4.8	290	5.7	290	8.5	260	6.0
16	350	9.5	350	10.0	350	9.5	340	10.5	330	9.8	340	10.8	340	9.7	350	10.4	350	10.8	350	12.0	10	11.5	30	13.3
17	—	0.1	—	1.0	—	0.1	—	0.0	—	0.0	—	0.3	150	2.5	160	3.0	150	3.8	140	5.0	110	4.0	110	4.9
18	10	2.7	20	4.1	20	4.9	20	4.8	20	4.9	10	5.2	20	6.3	30	6.9	30	6.5	30	6.0	30	6.3	30	6.8
19	—	0.7	—	0.2	—	0.4	—	0.5	—	1.4	30	3.0	360	2.2	10	2.9	—	0.7	—	0.5	20	2.0	200	2.4
20	20	5.1	20	4.5	10	3.9	20	3.0	20	6.9	20	7.9	20	8.3	20	8.2	20	7.5	30	7.4	30	8.1	40	8.7
21	20	6.0	30	7.5	30	7.1	30	8.4	30	9.3	30	10.5	30	10.7	30	11.1	30	8.7	40	9.0	40	9.2	40	8.7
22	340	4.1	350	1.6	350	2.6	350	2.5	20	1.8	20	4.4	30	6.0	40	5.9	30	4.9	30	4.5	10	4.3	20	5.7
23	360	2.2	—	1.5	10	2.3	20	3.5	20	4.5	20	4.7	20	5.7	20	6.0	30	5.8	30	6.3	30	6.4	30	6.5
24	30	3.6	20	3.6	50	4.5	40	2.7	40	4.0	30	4.5	40	4.6	50	6.2	60	6.3	80	4.0	120	3.0	150	2.5
25	—	0.2	—	0.1	—	0.0	—	0.4	—	0.0	—	0.0	—	0.0	—	0.6	160	2.9	200	4.5	210	4.8	220	5.2
26	—	0.5	—	1.1	—	0.5	—	0.9	—	0.4	—	0.2	—	0.3	150	3.1	200	4.5	190	4.8	190	5.5	200	5.1
27	160	3.2	170	2.5	—	1.5	180	1.7	—	0.6	—	0.4	150	1.6	150	2.2	150	2.5	150	2.8	170	3.0	160	2.3
28	350	2.6	—	1.5	—	1.5	—	1.3	—	1.5	—	1.0	—	0.1	—	0.7	—	0.2	—	1.5	200	3.4	210	4.1
29	350	3.4	10	4.0	340	3.9	340	4.0	360	3.7	350	4.5	360	4.5	10	3.4	50	4.8	30	3.4	50	3.6	50	5.7
30	360	5.1	350	5.0	10	6.2	10	5.9	10	5.1	10	5.1	20	4.2	50	3.6	60	3.7	50	4.6	50	5.8	50	6.1
31	20	6.8	20	6.0	30	6.5	40	7.2	40	7.4	40	7.6	30	7.0	30	8.0	20	8.5	30	10.4	30	8.2	50	8.6
Mean ...	—	3.7	—	3.5	—	3.5	—	3.4	—	3.5	—	3.8	—	4.5	—	5.1	—	5.2	—	5.5	—	5.8	—	5.8

242. Eskdalemuir : H<sub>a</sub> = 235 metres + 15 metres.

	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.
1	50	4.9	40	4.2	30	6.2	40	5.8	30	5.7	40	6.6	40	7.2	50	6.2	80	7.5	110	9.4	100	10.4	110	10.0
2	10	3.3	360	2.4	360	3.6	350	2.7	360	1.8	—	1.5	—	1.2	—	1.2	130	2.0	130	3.5	130	2.8	170	2.7
3	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.2	140	2.0	190	4.3	220	5.1	220	5.1	230	5.0
4	—	0.0	—	0.0	—	0.0	—	0.0	30	5.9	20	6.4	30	7.4	40	8.3	50	8.0	50	9.0	50	9.7	50	10.5
5	40	1.7	30	2.0	20	2.0	20	1.6	—	0.5	—	1.2	70	2.5	130	2.3	150	2.5	—	1.5	—	1.5	—	1.2
6	—	0.0	—	0.1	—	0.2	—	0.2	—	0.5	—	0.0	—	0.0	—	0.3	160	2.0	—	1.2	170	2.3	—	1.5
7	—	0.0	—	0.1	—	0.0	—	0.0	—	0.0	—	0.0	—	0.1	—	0.8	150	1.8	140	1.6	—	0.8	—	0.7
8	10	5.4	10	6.2	10	4.7	20	4.6	20	4.7	30	5.8	20	4.9	30	5.2	30	5.3	40	6.1	50	6.1	60	6.2
9	50	6.9	40	7.0	20	5.6	60	5.4	70	8.1	60	7.2	50	6.0	50	6.2	70	6.9	20	1.6	180	7.5	200	12.8
10	350	2.0	280	2.0	250	4.8	240	4.1	210	4.6	210	8.4	210	8.2	210	8.9	200	8.6	230	9.0	230	9.5	240	9.2
11	270	3.9	230	3.5	170	4.5	170	5.4	150	4.0	200	3.8	210	6.2	240	5.3	260	6.8	280	6.5	270	7.7	270	7.5
12	190	3.2	190	2.8	170	2.1	180	2.5	190	3.6	210	5.5	230	6.5	240	6.3	250	4.2	250	7.9	280	5.7	260	6.6
13	180	1.9	—	1.0	—	0.0	—	0.4	—	0.5	—	0.9	40	1.7	50	4.0	50	5.4	60	6.1	50	6.1	50	6.7
14	40	9.9	40	11.0	40	10.6	30	10.2	30	10.6	20	11.1	30	11.1	30	11.1	30	11.3	30	10.6	20	11.0	20	10.5
15	280	2.2	290	5.2	230	2.8	250	3.6	250	7.0	220	6.5	200	4.5	240	6.5	260	8.0	280	7.9	270	7.9	270	8.2
16	290	4.1	320	2.6	—	1.4	10	2.6	350	4.0	350	6.2	10	5.7	10	4.2	360	3.1	340	3.5	210	3.6	310	4.3
17	190	3.0	210	3.2	230	4.5	230	4.6	230	5.7	220	6.5	240	6.7	240	7.3	220	6.3	220	6.8	250	5.4	300	6.0
18	290	5.1	200	3.0	—	1.4	230	1.6	250	2.1	250	3.0	290	4.3	300	4.5	290	5.0	280	4.8	290	4.8	270	4.5
19	—	0.5	—	1.0	—	0.8	50	2.7	30	3.5	20	3.0	20	3.3	10	3.1	20	2.2	40	2.4	10	2.2	—	0.2
20	—	0.4	—	0.9	340	2.0	320	3.0	340	2.7	310	3.8	300	4.3	320	5.7	330	6.1	320	5.9	320	4.5	320	5.4
21	—	0.1	—	0.3	—	0.2	—	0.1	—	0.1	—	0.0	—	0.7	150	3.4	160	3.8	150	6.0	150	5.9	150	6.9
22	210	8.0	220	8.5	220	11.0	220	10.4	210	8.9	210	8.8	210	10.1	220	11.3	210	12.2	210	11.7	210	11.9	210	13.0
23	250	12.9	260	12.6	260	11.4	240	7.7	240	7.5	230	7.7	230	8.2	230	9.2	240	8.6	240	10.5	240	9.4	230	9.2
24	220	4.1	190	2.1	230	3.9	190	3.5	190	2.9	220	4.1	220	5.2	240	6.8	240	8.9	240	9.6	260	7.4	260	7.0
25	210	3.3	200	3.5	210	3.0	220	1.9	200	2.0	200	5.4	180	5.8	190	4.6	190	4.9	180	4.0	170	3.2	140	2.5
26	—	1.5	10	2.0	10	2.0	20	2.0	10	2.5	—	0.6	10	2.4	360	2.9	360	5.0	360	6.5	360	7.4	360	7.9
27	290	8.6	280	4.1	20	2.9	160	5.5	320	5.6	290	5.2	280	5.4	280	6.1	280	6.5	290	7.0	290	6.4	280	7.0
28	210	3.2	190	2.5	200	3.2	210	6.1	210	9.1	200	6.0	180	7.2	200	11.2	200	11.0	200	13.7	190	12.3	200	12.5
29	200	9.8	200	11.4	200	14.0	210	12.0	210	12.0	230	12.2	240	11.1	230	10.4	220	11.0	220	12.5	210	11.8	210	11.7
30	240	14.5	240	13.4	230	12.8	230	11.4	230	10.8	220	11.4	220	10.5	220	9.7	230	12.0	230	13.0	240	13.6	240	11.9
Mean ...	—	4.1	—	3.9	—	4.1	—	4.1	—	4.6	—	5.0	—	5.3	—	5.8	—	6.4	—	6.8	—	6.8	—	7.0
Hour. G.M.T.	1.		2.		3.		4.		5.		6.		7.		8.		9.		10.		11.		Noon.	



Averages for periods of sixty minutes, centred at the exact hours, Greenwich Mean Time.

M.S.L. +  $h_a$  (height of anemograph above ground) = 235 metres + 15 metres.

May, 1928.

13.		14.		15.		16.		17.		18.		19.		20.		21.		22.		23.		24.		Mean	Day.
°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	m/s.	
50	5.5	60	6.3	60	7.3	60	6.0	60	7.8	50	8.8	10	6.5	360	6.1	330	4.8	20	4.4	30	5.0	20	4.5	5.8	1
50	8.2	50	9.5	50	10.0	50	9.9	50	9.5	40	9.3	50	7.8	50	8.1	50	9.0	40	8.1	40	9.0	40	8.7	6.9	2
20	6.5	30	7.0	40	8.4	30	7.2	20	8.0	30	7.9	40	10.5	40	9.9	30	7.5	30	6.9	10	7.4	40	8.8	8.3	3
70	10.8	80	9.9	70	9.9	70	10.0	80	9.6	60	8.4	50	9.0	60	8.7	30	4.3	30	5.1	20	5.9	20	7.0	8.6	4
110	7.9	100	6.5	110	6.7	100	5.0	80	6.0	80	5.0	40	3.1	340	4.5	360	5.3	360	5.4	360	5.0	360	4.5	5.9	5
50	2.1	330	3.2	330	2.5	360	4.3	40	5.2	40	5.5	40	5.6	20	5.5	20	5.8	20	8.1	20	4.4	30	6.5	3.2	6
40	5.8	40	6.5	40	6.9	40	6.0	60	4.2	60	3.7	50	2.3	10	2.0	—	1.4	—	0.7	—	1.5	—	0.5	5.9	7
20	7.9	20	7.6	20	6.5	20	5.7	30	6.0	20	7.1	30	4.5	—	0.3	360	3.9	—	1.5	—	1.1	—	0.5	4.4	8
360	5.6	10	5.1	350	4.0	350	5.5	350	4.0	360	2.0	—	0.8	—	0.6	360	2.4	360	3.8	350	2.4	—	1.5	3.3	9
30	4.5	360	2.9	330	2.5	20	2.7	50	7.0	50	6.9	30	3.9	10	2.7	10	2.9	360	2.1	360	1.7	—	0.3	2.5	10
220	5.4	300	3.9	310	5.3	280	4.3	280	4.8	280	5.0	290	4.8	300	5.5	310	5.3	310	2.3	—	1.4	340	2.5	3.1	11
330	3.3	340	3.6	300	2.6	320	2.3	270	2.3	270	3.2	280	2.4	290	3.3	—	0.8	—	1.5	—	1.3	—	1.4	2.4	12
310	1.6	320	4.2	330	3.6	300	4.7	290	7.4	330	5.6	350	5.4	340	2.5	340	3.5	340	4.5	360	3.6	350	3.5	2.7	13
360	6.4	10	5.9	10	4.1	360	3.5	20	3.0	20	2.0	30	3.5	50	4.5	40	2.5	330	2.8	—	1.5	—	0.6	3.7	14
290	8.0	290	9.0	300	8.6	300	9.2	300	8.6	310	10.1	310	9.8	310	9.6	310	9.0	300	9.0	320	10.2	340	8.9	5.6	15
30	12.7	30	12.6	30	12.6	40	10.1	30	9.0	30	8.3	20	6.0	10	3.4	10	3.5	340	1.6	—	1.4	—	0.2	8.9	16
90	7.1	60	6.6	60	8.0	60	5.6	50	6.8	40	6.0	360	5.0	360	3.5	20	2.7	350	2.3	—	0.5	360	2.5	3.3	17
30	6.3	30	6.1	30	4.8	40	4.0	360	4.0	360	3.4	330	1.6	—	1.0	330	2.9	10	4.5	20	4.9	360	2.6	4.6	18
160	3.5	160	2.3	140	3.0	230	1.9	40	5.0	30	3.7	20	4.9	20	4.4	30	4.1	10	3.3	20	2.6	20	4.5	2.5	19
50	8.0	40	8.3	50	8.2	50	7.5	50	7.5	50	7.3	50	5.7	40	5.4	30	4.5	20	6.4	10	4.9	10	5.5	6.6	20
40	8.1	40	8.6	50	7.6	40	8.0	40	8.0	40	6.6	30	6.5	20	5.7	20	5.1	10	4.5	10	4.5	360	1.6	7.6	21
10	4.9	30	5.3	20	5.5	30	5.1	40	5.8	60	6.2	40	4.4	40	2.3	—	0.5	—	1.3	360	3.0	350	2.0	3.9	22
30	5.8	30	6.5	10	6.0	20	6.6	20	6.5	30	6.4	30	5.5	30	4.5	20	3.7	30	4.3	40	3.7	30	4.5	4.9	23
110	1.7	160	1.6	170	3.6	200	4.2	180	3.5	200	3.9	190	3.0	230	2.1	—	0.2	—	0.1	—	1.0	—	0.5	3.2	24
220	4.7	220	4.5	220	4.6	210	5.4	210	5.1	230	5.1	250	3.0	330	2.0	—	0.8	—	0.7	—	0.9	—	0.6	2.3	25
210	5.6	210	3.5	200	5.2	210	6.0	190	3.2	—	1.1	—	0.0	190	2.3	—	1.3	170	3.3	170	2.7	150	2.8	2.6	26
150	2.5	160	2.2	160	2.2	150	1.8	120	2.4	130	2.2	—	1.3	150	2.7	290	4.5	—	0.2	—	0.3	350	1.8	2.0	27
230	4.0	210	2.9	—	1.5	—	0.2	—	0.4	—	0.6	360	2.1	350	2.7	340	2.0	330	3.0	330	3.6	330	3.7	1.9	28
60	5.1	80	4.5	90	5.4	60	5.6	50	6.5	50	5.6	50	6.6	50	7.0	160	2.1	10	3.6	10	4.7	10	4.7	4.6	29
50	6.9	50	7.4	50	8.3	50	8.6	50	8.5	40	6.3	20	4.8	320	4.6	340	6.0	10	8.0	10	7.4	10	6.5	5.9	30
50	9.3	50	9.9	50	10.8	50	10.2	40	8.6	40	6.6	40	5.2	50	5.7	40	6.7	60	4.0	90	2.0	50	2.8	7.3	31
—	6.0	—	5.9	—	6.0	—	5.7	—	5.9	—	5.5	—	4.7	—	4.3	—	3.8	—	3.8	—	3.5	—	3.4	4.7	

June, 1928.

	m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.		m/s.
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Direction expressed in degrees from North (E = 90°, S = 180°, W = 270°, N = 360°). Speed in metres per second.

## 243. Eskdalemuir :

H<sub>a</sub> (height of anemograph above M.S.L.) = Height of ground above

Hour. G.M.T.	1.		2.		3.		4.		5.		6.		7.		8.		9.		10.		11.		Noon.	
Day.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.
1	220	5.6	230	5.0	210	5.0	220	5.5	220	5.6	210	6.6	220	6.3	220	7.4	220	7.6	220	9.0	220	10.0	210	9.5
2	230	12.3	230	15.8	230	15.7	230	12.5	220	9.9	220	10.5	230	11.6	230	14.4	230	15.0	220	13.2	220	14.1	210	14.5
3	250	8.4	250	5.1	250	5.1	260	6.5	250	4.7	270	5.1	260	7.0	240	6.5	240	6.5	240	5.7	260	4.5	250	5.8
4	270	3.7	270	2.4	—	1.3	—	0.3	280	3.4	270	3.3	280	3.7	280	3.7	270	3.0	250	3.7	240	5.4	220	6.5
5	200	8.8	200	7.2	200	5.9	200	4.5	200	3.9	210	5.4	220	6.5	220	7.5	220	7.1	210	8.1	210	9.9	220	11.0
6	220	8.2	230	0.2	230	9.5	230	8.1	230	9.0	230	8.2	270	7.5	270	6.9	270	8.0	270	7.2	270	8.0	270	8.7
7	10	2.6	—	1.0	—	0.1	—	0.5	—	0.2	—	0.0	—	1.0	160	2.2	260	3.3	250	4.0	240	5.4	260	3.9
8	—	0.2	—	0.3	180	2.7	190	5.4	200	9.0	200	9.0	200	10.0	210	11.0	210	12.1	210	11.9	210	11.5	210	10.2
9	230	6.5	230	5.0	230	5.1	230	7.6	230	6.9	230	9.1	230	9.3	230	9.8	250	9.6	240	10.8	250	11.7	250	11.8
10	220	4.4	160	4.0	180	3.9	200	4.5	200	5.7	200	6.6	200	7.2	200	8.4	200	9.4	200	9.3	200	8.6	200	9.3
11	200	9.3	200	7.5	200	6.5	200	7.5	200	7.0	190	7.0	180	6.3	190	7.0	200	8.6	200	10.7	200	12.1	200	13.1
12	200	7.2	210	7.5	210	7.6	210	7.2	200	8.0	200	7.0	200	6.5	200	7.1	210	8.0	200	9.0	200	9.3	210	9.1
13	210	4.5	200	5.3	210	4.7	210	5.1	190	4.7	170	3.7	190	4.1	200	7.8	210	9.0	210	9.1	200	10.1	200	11.0
14	200	6.5	200	6.5	210	8.3	210	8.4	210	9.5	220	10.4	220	10.1	230	8.7	230	4.9	210	6.5	200	10.1	210	10.5
15	190	4.0	200	4.0	220	4.8	210	4.7	210	6.2	210	6.6	210	7.0	220	7.1	220	7.0	210	7.0	210	7.5	210	7.3
16	300	2.0	150	2.0	—	0.3	—	0.2	—	0.3	—	0.1	20	1.6	310	4.0	300	4.1	290	2.1	300	3.1	290	3.6
17	270	3.0	290	1.9	250	2.1	250	2.2	200	1.6	310	3.2	270	4.2	250	5.9	250	5.1	240	7.3	240	7.1	220	7.7
18	240	7.5	240	8.1	240	5.9	230	6.5	230	6.7	220	6.0	230	7.0	260	8.5	260	7.0	260	6.4	270	8.0	270	7.5
19	300	8.3	300	7.5	300	6.6	300	5.2	290	5.6	290	4.0	270	3.5	290	6.0	280	6.5	270	5.5	280	4.8	280	6.1
20	250	8.0	260	7.4	230	6.8	220	8.7	220	7.0	230	5.8	240	6.4	250	8.1	270	8.5	260	7.5	270	8.1	280	5.9
21	250	3.5	300	4.9	290	6.9	310	7.9	310	9.5	310	8.1	340	5.0	310	5.2	310	8.5	310	7.5	300	6.5	290	6.0
22	180	3.0	160	3.0	160	3.6	180	3.7	190	1.7	—	0.5	—	1.5	220	3.5	230	4.0	240	3.7	230	3.5	230	4.2
23	280	2.3	280	3.5	290	3.6	290	3.9	290	2.6	270	3.3	280	3.6	270	3.2	230	3.9	230	5.9	230	6.2	220	6.4
24	280	5.7	280	5.6	270	5.7	250	5.5	230	6.1	200	5.9	250	4.1	260	6.3	250	4.9	230	5.0	230	6.3	240	7.1
25	260	2.7	270	3.2	—	1.5	—	1.5	270	3.3	270	4.0	260	4.5	260	7.5	270	7.3	270	7.0	260	6.6	270	6.5
26	250	5.8	250	6.9	260	7.6	260	4.6	240	4.6	240	3.9	220	3.3	240	4.7	250	7.2	250	6.6	240	8.3	230	7.7
27	—	1.3	—	1.5	—	0.4	—	0.1	—	0.0	210	4.6	210	5.5	220	6.0	230	5.0	260	4.0	300	3.9	350	6.0
28	360	2.6	10	2.4	360	2.4	10	2.5	10	1.7	—	1.5	—	1.0	—	0.5	280	2.5	250	3.3	260	3.2	260	5.5
29	—	0.5	—	0.6	—	0.9	—	1.0	—	1.0	—	1.5	250	2.9	250	3.3	250	4.4	270	5.0	240	4.9	280	5.3
30	230	3.9	240	4.5	230	4.4	230	4.4	240	5.2	250	5.9	240	5.6	230	6.3	230	5.6	240	5.9	260	5.1	270	5.7
31	340	1.7	360	1.6	360	2.5	350	2.4	—	1.5	360	3.0	350	3.4	350	5.4	20	4.5	300	2.5	160	2.3	200	2.5
Mean ...	—	5.0	—	4.9	—	4.7	—	4.8	—	4.9	—	5.1	—	5.4	—	6.5	—	6.7	—	6.8	—	7.3	—	7.6

244. Eskdalemuir : H<sub>a</sub> = 235 metres + 15 metres.

	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.
1	—	1.0	350	1.7	—	1.0	—	1.5	10	2.4	350	3.9	360	3.9	20	4.9	40	6.5	60	7.1	40	6.2	40	5.5
2	10	2.0	10	2.0	350	1.9	350	1.9	340	2.0	—	0.8	—	0.3	—	0.9	170	1.8	180	2.5	170	3.5	200	4.5
3	—	0.5	—	1.1	—	0.9	—	0.9	—	0.5	—	0.2	—	0.3	—	0.6	—	0.5	—	1.4	230	2.0	210	1.6
4	—	1.2	—	1.2	—	0.7	—	0.5	—	0.4	—	0.4	—	0.8	—	0.7	50	1.7	70	2.6	80	2.5	60	2.5
5	—	0.1	—	0.2	—	0.1	—	0.1	—	0.0	—	0.1	—	0.0	—	0.0	—	0.2	150	2.2	190	4.1	210	4.5
6	—	0.1	—	0.1	—	0.2	—	0.0	—	0.1	—	0.0	—	0.0	—	0.0	—	0.7	200	6.9	210	7.5	210	7.5
7	190	6.8	170	5.6	170	6.0	180	5.7	170	5.7	180	5.9	170	6.3	160	5.7	160	6.2	160	7.1	180	10.8	200	16.8
8	240	7.0	230	7.0	250	6.7	240	6.1	210	5.0	220	5.5	220	7.6	220	7.5	240	10.1	240	12.4	250	11.9	250	11.9
9	250	8.8	230	6.8	230	7.6	220	6.0	230	7.2	230	6.5	230	7.2	240	8.5	240	9.8	240	10.0	250	9.8	250	10.4
10	—	1.5	200	2.6	220	2.1	—	1.5	—	1.4	250	2.1	250	4.7	240	4.2	220	4.8	220	6.6	220	7.9	210	8.1
11	—	0.5	—	1.5	—	1.5	40	1.9	—	1.0	—	0.5	—	0.1	—	0.5	—	1.0	190	3.5	200	5.2	210	6.6
12	160	2.9	150	1.6	180	3.7	190	4.0	200	5.5	200	4.7	210	5.7	220	5.5	230	5.7	220	7.4	210	8.1	210	8.5
13	180	8.1	180	6.9	170	5.6	160	5.5	170	5.8	160	5.4	160	6.0	180	5.7	200	9.4	200	10.5	200	11.0	200	11.4
14	210	10.1	210	9.7	210	10.0	210	10.8	210	9.5	210	9.4	220	10.5	220	11.0	230	10.1	220	10.2	240	9.8	230	10.1
15	240	4.5	230	4.1	240	4.0	230	3.7	240	3.4	260	5.0	250	5.7	240	6.9	260	5.5	270	5.7	280	6.0	280	6.4
16	290	6.7	280	5.6	290	4.8	300	4.3	300	5.5	300	5.9	280	4.1	280	5.1	290	5.0	290	7.5	290	7.8	290	6.9
17	310	5.7	310	6.5	310	6.0	310	7.1	280	4.3	—	1.0	290	2.5	310	6.1	320	5.1	350	2.4	260	1.7	290	4.2
18	—	0.2	—	0.1	—	0.2	—	0.0	—	0.0	—	0.1	—	0.0	—	0.0	—	1.1	200	4.0	210	4.7	210	4.1
19	—	0.7	—	1.3	—	1.3	350	2.9	360	3.0	350	2.5	350	2.5	20	2.4	40	2.0	150	4.6	140	6.8	140	6.2
20	—	1.1	30	1.6	40	3.4	50	5.4	40	6.0	50	5.7	30	3.9	40	3.7	50	3.5	40	4.5	50	7.0	70	7.1
21	340	6.4	320	6.1	310	6.5	320	8.7	310	9.0	310	8.1	310	7.9	310	8.3	310	7.5	310	7.5	310	8.0	300	8.5
22	340	4.7	330	4.5	330	3.4	340	4.1	350	2.0	10	2.6	20	3.9	20	4.0	10	3.7	10	2.3	—	0.6	—	0.4
23	—	0.9	50	2.0	40	1.8	—	1.5	—	1.1	—	1.3	—	1.2	—	0.3	150	3.0	170	5.2	200	6.6	200	6.0
24	190	7.9	210	8.1	210	7.1	210	7.6	220	6.4	200	4.6	200	4.1	200	4.1	200	4.3	210	4.0	190	4.9	180	4.7
25	170	1.6	—	1.5	180	4.3	210	7.1	210	6.2	210	5.5	210	4.9	210	5.5	220	6.0	220	7.9	220	8.0	220	8.3
26	220	5.5	220	6.1	220	3.8	210	2.9	210	5.5	210	4.9	210	5.5	210	5.2	220	4.9	210	5.6	210	6.5	200	6.0
27	—	0.3	—	0.2	170	2.8	190	4.0	220	5.0	220	4.2	220	6.0	220	6.9	220	7.5	220	9.1	220	9.5	210	10.1
28	—	0.3	—	1.2	180	1.8	—	1.5	200	3.8	200	4.2	210	4.7	210	5.1	230	6.3	230	6.5	230	9.0	230	9.5
29	—	0.5	—	1.5	250	2.1	—	0.3	—	0.0	—	0.2	—	0.3	—	0.4	170	1.6	190	3.6	210	3.8	210	3.9
30	—	0.2	—	0.2	350	2.4	10	2.0	10	2.0	10	3.1	20	3.3	20	4.1	20	4.0	20	3.5	20	3.6	10	2.0
31	—	0.8	—	0.4	—	0.6	—	0.6	—	0.4	—	0.5	—	0.1	—	0.1	—	0.2	—	0.7	190	2.7	200	4.8
Mean ...	—	3.2	—	3.2	—	3.4	—	3.5	—	3.5	—	3.4	—	3.7	—	4.0	—	4.5	—	5.7	—	6.4	—	6.7
Hour. G.M.T.	1.		2.		3.		4.		5.		6.		7.		8.		9.		10.		11.		Noon.	



**July, 1928.**

**August, 1928.**

[illegible]



Direction expressed in degrees from North ( $E = 90^\circ$ ,  $S = 180^\circ$ ,  $W = 270^\circ$ ,  $N = 360^\circ$ ). Speed in metres per second.

## 245. Eskdalemuir :

$H_a$  (height of anemograph above M.S.L.) = Height of ground above

Hour. G.M.T.	1.		2.		3.		4.		5.		6.		7.		8.		9.		10.		11.		Noon.	
Day.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.
1	—	0.4	—	1.1	—	0.2	—	0.1	—	0.1	—	0.3	—	0.0	—	0.1	—	0.8	180	2.1	200	3.3	220	3.9
2	—	0.1	—	0.1	—	0.1	—	0.2	—	0.2	—	0.9	—	0.2	—	1.4	150	2.5	160	3.6	190	4.5	230	5.7
3	190	6.5	200	9.5	200	9.3	200	9.6	200	9.6	200	10.0	200	9.0	190	8.6	200	8.5	200	8.9	200	8.4	200	8.4
4	190	4.0	210	5.2	200	3.7	200	4.1	200	5.0	200	4.3	200	4.0	210	5.2	210	4.6	210	5.5	220	7.5	210	8.7
5	210	10.5	200	9.4	200	9.8	190	7.9	200	9.0	190	8.9	190	8.6	200	9.2	200	8.6	200	6.9	200	8.6	200	9.7
6	280	3.9	290	7.8	290	8.0	280	7.4	280	7.4	280	9.0	280	7.5	280	6.7	270	5.2	260	5.6	250	6.5	250	7.0
7	200	7.9	200	8.6	200	8.9	200	8.6	200	9.0	200	10.2	190	10.8	190	11.1	190	11.1	190	11.5	190	11.7	190	12.9
8	200	9.5	190	10.1	190	8.6	190	7.8	200	6.1	210	4.6	210	3.6	200	4.0	200	4.0	200	5.3	190	5.6	200	4.9
9	—	0.4	—	0.2	280	2.9	250	2.3	200	4.5	220	3.9	220	3.9	220	4.8	200	4.5	220	6.6	220	8.5	220	9.3
10	200	14.1	210	14.2	230	11.1	230	9.0	230	7.6	230	10.9	240	10.8	230	9.6	240	10.6	240	10.1	240	10.1	240	9.0
11	270	3.3	280	2.1	290	3.5	280	5.2	290	5.4	290	3.8	290	3.0	270	2.5	260	2.6	280	3.1	280	3.0	260	3.5
12	—	0.2	—	0.2	—	0.1	—	0.1	—	0.2	—	0.1	—	0.2	—	0.3	170	2.0	220	4.6	250	4.1	240	4.5
13	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	1.4	160	3.0	170	3.3
14	—	1.0	—	1.0	—	1.5	—	1.3	—	0.9	—	0.7	—	0.2	—	0.5	160	3.0	160	4.0	190	4.5	200	4.0
15	—	0.5	—	0.8	—	0.5	—	0.5	—	1.1	—	1.4	40	2.1	10	3.3	20	4.6	40	6.0	40	5.5	70	4.8
16	—	0.1	—	0.3	—	0.1	—	0.1	—	0.1	—	0.1	—	0.1	—	0.1	160	2.2	200	5.1	220	7.1	210	7.2
17	200	7.1	200	7.0	190	6.3	190	7.0	190	7.0	190	9.0	190	9.8	200	11.3	200	12.2	210	13.5	210	12.2	220	13.5
18	230	11.0	230	9.9	260	8.5	250	7.9	230	8.4	240	9.0	250	7.5	250	6.4	250	6.9	250	6.3	260	6.1	240	7.2
19	—	0.2	—	0.1	—	0.1	—	0.1	—	0.1	—	0.2	—	0.1	—	2.5	220	6.4	240	6.8	230	6.7	250	6.8
20	230	2.5	260	3.7	260	2.8	250	2.1	240	2.4	—	1.1	230	4.3	240	5.4	250	5.5	240	5.6	250	5.5	260	6.5
21	—	0.1	—	0.1	—	0.0	—	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.1	70	2.0	80	1.6
22	10	2.4	—	1.3	—	0.1	—	0.0	—	0.1	—	0.2	—	0.3	—	1.0	20	4.2	40	6.0	30	5.2	30	5.5
23	—	0.5	—	0.6	—	0.3	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.1	10	1.6	350	2.5	310	2.4
24	250	1.6	290	2.1	310	6.0	310	5.5	300	6.7	310	3.6	—	1.3	330	4.0	340	3.3	330	5.0	360	5.5	10	5.1
25	10	5.2	10	6.5	10	6.8	20	8.5	20	8.8	20	7.9	20	8.3	20	7.2	20	7.9	30	8.0	30	6.5	30	5.9
26	—	1.0	—	0.8	—	0.2	—	0.3	—	0.5	—	0.1	—	0.2	—	0.1	60	2.1	60	2.4	—	1.5	—	0.5
27	—	0.1	—	0.1	—	0.0	—	0.1	—	0.3	—	1.1	—	0.1	—	0.1	—	0.1	—	0.0	—	0.1	—	0.0
28	350	2.9	—	1.4	20	3.5	10	5.1	20	4.8	40	8.0	40	9.9	50	11.0	40	11.5	40	12.5	40	12.8	40	12.5
29	20	5.1	30	1.9	—	0.5	—	0.5	—	0.6	—	0.7	350	2.6	10	4.5	20	4.9	50	3.6	60	3.3	70	2.6
30	340	3.4	340	3.3	10	2.5	360	2.6	10	3.9	20	3.9	20	4.5	10	5.4	10	7.4	20	7.5	20	7.3	10	7.1
Mean ...	—	3.5	—	3.7	—	3.5	—	3.5	—	3.7	—	3.8	—	3.8	—	4.2	—	4.9	—	5.6	—	6.0	—	6.1

246. Eskdalemuir :  $H_a = 235$  metres + 15 metres.

	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.
1	—	0.4	—	0.0	—	0.1	—	0.0	—	0.1	—	0.0	—	0.1	180	1.8	210	5.0	240	5.4	260	5.7		
2	300	6.3	300	4.6	290	3.3	310	2.5	—	1.3	—	0.6	—	1.1	—	0.4	—	0.8	—	1.0	—	0.5	—	1.2
3	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.6	—	0.2	—	0.3
4	—	1.0	330	2.0	340	2.6	340	2.5	350	1.6	—	0.5	—	0.3	—	0.1	130	4.0	150	6.5	150	6.5	140	7.9
5	—	1.1	—	1.4	10	2.2	10	2.0	360	2.0	360	2.6	360	2.0	—	1.0	50	2.5	130	1.6	140	3.4	150	4.3
6	220	4.3	230	5.0	240	6.2	230	6.5	230	6.7	230	7.1	240	6.1	240	5.2	230	6.7	230	7.5	220	9.1	240	9.1
7	210	5.3	180	3.2	200	5.4	210	7.8	200	6.6	200	7.2	200	9.1	190	9.1	190	9.7	190	9.1	190	9.7	190	12.0
8	190	12.0	200	11.4	200	10.7	190	10.7	190	11.8	190	12.1	200	13.0	200	12.3	200	11.8	200	12.5	200	11.5	210	11.0
9	—	0.1	210	3.2	200	4.6	190	4.0	160	2.3	—	1.5	—	0.3	—	0.2	—	0.6	40	1.6	60	2.3	—	1.5
10	30	7.0	20	6.5	20	5.5	20	6.1	20	4.8	20	4.5	10	3.5	10	4.1	20	4.5	50	4.6	60	4.6	50	4.7
11	50	4.0	50	4.8	60	5.3	70	6.4	70	7.5	80	7.7	80	9.5	80	9.4	70	9.4	80	11.5	80	10.1	80	9.6
12	40	5.0	50	5.3	50	4.6	50	5.5	50	5.2	50	4.1	50	4.5	40	5.2	50	5.4	50	6.2	50	6.1	50	5.4
13	—	0.1	—	0.1	—	0.1	—	0.2	—	0.1	—	0.3	—	0.4	—	0.3	—	0.4	10	4.2	10	4.0	20	4.8
14	—	0.2	—	0.1	—	0.1	—	0.2	—	0.1	—	0.1	—	0.4	—	0.7	150	4.2	150	5.7	150	7.5	150	7.0
15	350	2.6	360	2.5	10	3.4	10	2.6	—	1.5	—	1.2	350	2.3	350	2.2	—	0.5	—	0.5	—	0.5	—	0.6
16	—	0.1	—	1.0	—	1.5	*	1.6	*	3.7	*	3.7	—	1.5	190	3.5	180	5.0	200	9.5	210	9.7	210	7.6
17	300	7.4	290	5.0	(300)	4.9	(320)	2.5	—	1.5	(170)	2.7	180	3.4	180	3.4	200	4.1	200	4.3	200	5.0	200	5.9
18	170	2.7	170	3.0	170	3.6	200	6.8	200	6.6	190	8.2	190	10.5	180	11.1	180	8.9	170	9.1	180	9.4	160	6.8
19	230	12.5	230	12.6	230	12.1	230	11.2	240	11.0	240	13.5	240	11.5	240	12.2	230	13.5	230	11.2	230	12.7	220	13.1
20	170	14.5	180	20.3	180	21.1	190	21.0	200	19.0	200	18.1	200	17.1	210	17.0	210	16.1	210	14.0	220	14.9	220	12.5
21	200	4.5	210	5.6	210	6.4	190	3.4	190	2.5	180	2.8	180	3.5	170	3.5	160	4.9	150	5.0	150	5.7	160	6.5
22	—	0.1	—	0.5	—	0.1	—	0.3	—	0.2	—	0.0	—	0.1	—	0.1	210	2.0	230	4.6	220	5.5	230	5.8
23	—	0.1	—	0.1	—	0.0	—	0.1	—	0.0	—	0.3	—	0.7	—	0.2	—	1.1	150	4.0	150	5.9	160	8.0
24	190	8.1	190	9.9	190	10.0	190	10.2	190	10.3	190	12.6	190	13.2	180	13.1	180	13.0	180	11.5	190	13.5	190	13.1
25	220	11.6	220	13.2	230	13.0	230	11.1	230	11.2	230	10.5	220	7.7	220	8.9	230	10.1	220	12.0	220	11.1	220	12.0
26	190	5.4	180	6.2	170	6.5	160	6.4	150	6.8	150	7.6	150	7.5	160	7.5	150	7.1	150	6.9	140	8.1	140	7.5
27	60	6.6	60	7.0	60	6.7	50	6.7	40	6.6	40	7.2	40	7.4	40	7.2	40	7.0	30	7.5	30	7.3	30	8.2
28	—	1.4	300	3.5	310	3.0	270	3.5	—	1.0	290	2.5	320	6.0	300	10.1	300	8.0	290	7.5	290	6.5	290	7.2
29	—	1.5	—	1.1	300	2.5	250	2.2	190	2.0	220	2.6	—	1.1	—	0.5	—	0.1	—	0.1	—	0.1	160	2.1
30	200	7.2	200	7.2	220	8.3	270	6.4	220	5.5	210	6.4	210	6.5	220	8.3	230	10.2	220	10.0	210	10.2	210	10.9
31	170	5.6	160	5.1	150	3.3	140	3.1	140	3.5	140	2.9	130	2.0	—	0.6	—	1.5	30	6.4	10	5.0	20	9.4
Mean ...	—	4.5	—	4.9	—	5.1	—	4.9	—	4.6	—	4.9	—	4.9	—	5.1	—	5.6	—	6.5	—	6.8	—	7.1
Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.												



**September, 1928.**

13.		14.		15.		16.		17.		18.		19.		20.		21.		22.		23.		24.		Mean	Day.
°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	m/s.	
230	2.7	240	3.0	220	3.0	220	3.6	210	4.5	220	3.6	—	0.3	—	0.4	—	0.4	—	0.7	—	0.4	—	0.2	1.5	1
230	5.4	220	4.7	210	5.5	200	6.2	200	5.0	200	4.1	190	2.9	180	2.0	190	2.2	—	1.5	180	3.6	210	3.2	2.7	2
220	10.1	220	9.5	220	9.8	220	9.7	210	8.4	200	8.0	190	6.8	200	7.0	210	7.1	200	6.3	190	6.3	190	5.4	8.3	3
200	8.1	200	9.2	200	9.3	200	9.5	190	10.4	200	11.0	200	10.9	200	10.0	200	10.0	200	10.3	200	10.4	200	10.2	7.4	4
200	8.6	200	6.7	190	4.1	200	3.4	230	3.2	—	1.1	—	0.2	—	0.1	—	0.5	—	0.7	210	2.5	260	2.5	6.0	5
240	7.4	220	8.1	220	8.0	220	6.3	210	7.2	210	5.6	200	4.5	210	3.8	200	4.8	210	5.7	210	6.0	200	5.9	6.4	6
190	14.0	200	12.7	200	11.8	190	11.8	190	9.1	190	8.1	200	5.9	190	6.4	190	7.0	200	8.1	200	8.7	190	9.0	9.7	7
190	4.3	200	4.5	210	4.7	200	5.1	210	4.6	190	3.5	190	3.2	170	2.0	—	0.6	—	0.2	—	0.0	—	0.1	4.6	8
210	9.5	210	10.0	200	9.8	200	9.6	200	9.1	200	9.5	190	9.0	190	10.0	190	9.5	190	10.5	200	13.1	200	13.8	7.0	9
240	8.5	230	10.0	230	9.7	210	8.0	200	5.9	200	6.5	210	10.6	210	11.3	230	14.0	250	9.9	280	7.4	270	4.8	9.9	10
250	2.5	280	3.9	290	3.8	290	3.5	290	1.8	280	2.7	300	3.8	300	1.6	—	0.2	—	1.0	—	0.7	—	0.6	2.9	11
210	4.0	220	4.8	220	4.7	210	3.8	230	2.4	—	0.5	—	0.9	—	0.1	—	0.1	—	0.3	—	0.2	—	0.1	1.6	12
190	4.8	200	4.5	200	3.5	210	3.9	—	1.5	—	0.1	—	0.6	—	0.3	—	0.5	—	0.6	—	1.5	—	1.5	1.3	13
190	4.2	200	4.5	220	5.7	230	7.0	240	4.8	—	1.3	—	0.3	—	1.0	—	0.1	—	0.5	—	0.8	—	0.7	2.2	14
50	5.3	60	4.8	50	3.8	30	3.4	40	2.5	30	2.6	—	1.4	340	2.0	340	2.5	—	0.5	—	0.7	—	0.3	2.5	15
210	7.2	220	7.5	210	7.6	200	7.2	210	7.1	200	4.9	190	4.4	190	3.0	200	6.3	190	4.9	200	5.0	200	6.3	3.8	16
220	14.2	220	14.3	220	13.7	210	13.1	210	12.6	200	12.0	200	11.5	210	12.5	210	12.5	210	10.7	200	10.4	220	12.0	10.9	17
250	7.0	260	6.3	270	5.9	260	5.6	260	4.5	250	3.3	260	2.1	270	2.6	250	2.0	—	0.4	—	0.2	—	0.3	5.9	18
270	6.1	290	7.0	300	6.9	270	6.0	260	3.3	250	3.5	250	3.6	270	4.3	230	3.1	250	2.6	270	3.5	260	2.5	3.4	19
280	4.9	300	5.0	300	4.2	320	3.6	300	4.3	320	3.6	360	3.1	—	1.4	—	1.2	—	0.3	—	0.2	—	0.0	3.3	20
—	0.5	50	3.0	60	6.4	50	6.1	50	4.7	60	2.5	360	2.0	340	2.1	330	2.3	350	2.2	360	4.3	360	5.4	1.8	21
30	5.4	20	4.8	20	4.5	20	4.5	20	2.6	10	2.5	—	1.3	340	2.5	350	1.9	350	3.4	360	3.0	—	1.5	2.8	22
310	2.6	310	2.8	280	2.2	280	2.0	280	3.5	270	3.0	260	1.6	300	4.0	300	5.5	310	3.2	220	2.4	250	3.5	1.8	23
20	6.6	30	6.9	20	7.0	20	4.8	20	4.5	10	3.5	360	2.8	10	4.5	20	4.0	10	4.9	20	6.0	10	5.3	4.6	24
30	5.9	30	5.9	30	5.6	30	4.8	50	3.4	—	0.9	—	0.5	—	0.3	—	0.5	—	0.5	—	1.5	—	0.2	5.0	25
—	0.6	—	0.4	—	0.5	—	0.1	—	0.2	—	0.3	—	0.5	—	0.1	—	0.0	—	0.0	—	0.0	—	0.1	0.5	26
—	0.0	—	0.3	230	2.4	—	0.7	—	0.0	—	0.5	—	0.9	—	0.4	—	0.3	—	0.3	—	0.7	360	3.0	0.4	27
40	12.0	50	11.0	50	10.6	40	10.5	30	8.0	30	6.5	30	6.8	20	8.0	20	8.0	20	7.7	10	5.4	40	2.1	8.0	28
—	1.3	—	1.4	—	1.4	320	3.1	320	4.1	—	0.9	—	0.1	—	0.1	10	1.8	350	4.5	350	4.9	360	3.1	2.4	29
20	7.1	10	6.0	360	5.5	340	4.2	340	3.2	330	2.4	—	0.3	—	0.0	—	0.0	—	—	—	—	1.4	3.8	30	
—	6.0	—	6.1	—	6.1	—	5.7	—	4.9	—	3.9	—	3.4	—	3.5	—	3.6	—	3.4	—	3.7	—	3.5	4.4	

[illegible]



Direction expressed in degrees from North ( $E = 90^\circ$ ,  $S = 180^\circ$ ,  $W = 270^\circ$ ,  $N = 360^\circ$ ). Speed in metres per second.

## 247. Eskdalemuir :

$H_a$  (height of anemograph above M.S.L.) = Height of ground above

Hour. G.M.T.	1.		2.		3.		4.		5.		6.		7.		8.		9.		10.		11.		Noon.	
Day.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.
1	20	12.1	20	12.0	20	11.8	20	10.5	20	10.5	20	9.1	20	8.5	20	8.4	20	9.0	30	9.5	20	9.4	20	8.8
2	20	6.9	10	7.2	10	8.0	10	7.2	10	6.5	10	6.3	20	8.6	20	9.7	20	9.0	20	10.0	20	11.3	20	10.1
3	10	3.9	350	2.5	—	0.4	30	3.3	10	4.1	10	3.6	360	2.3	350	2.6	360	3.2	360	4.4	360	3.6	360	4.1
4	—	0.9	—	1.4	—	0.1	—	0.4	—	1.0	—	0.5	—	0.1	—	0.1	—	0.0	—	1.0	150	1.6	—	1.4
5	10	3.1	360	2.9	10	2.2	30	2.3	—	1.0	40	2.1	50	3.2	60	4.0	60	6.2	60	6.9	50	5.7	50	5.1
6	—	0.6	40	1.8	30	1.6	40	1.7	50	3.5	50	2.5	50	5.4	50	6.5	50	5.2	50	6.6	40	6.5	50	6.6
7	20	3.7	20	4.6	20	3.5	20	2.7	20	3.0	20	2.6	350	3.0	360	3.5	20	2.8	20	4.1	60	4.5	50	4.2
8	—	0.5	—	0.4	—	1.0	350	1.6	—	1.4	—	1.0	—	0.6	20	1.8	—	1.5	20	3.6	30	3.8	40	3.5
9	—	0.4	—	0.2	—	0.1	—	0.1	—	0.2	—	0.2	—	0.1	—	0.1	—	0.1	—	0.0	—	0.2	180	2.8
10	190	3.2	190	5.1	210	5.5	210	5.3	190	5.0	190	6.6	200	9.0	200	10.0	210	11.4	200	11.6	200	11.5	200	9.5
11	260	4.5	250	5.2	230	5.5	220	4.4	240	5.7	240	3.9	190	2.4	160	2.3	160	2.0	180	4.1	180	5.2	170	5.5
12	230	8.0	230	9.5	210	7.6	180	4.5	160	4.5	180	4.0	190	8.0	190	7.6	190	7.5	200	12.2	200	11.5	210	11.6
13	230	8.0	210	6.1	220	6.6	210	5.6	190	4.6	200	4.6	190	5.4	210	7.6	220	8.5	230	8.6	240	8.8	230	9.4
14	220	8.2	230	10.1	220	8.1	200	4.1	160	2.0	180	3.4	220	6.3	220	5.0	210	5.2	220	6.8	220	6.4	220	6.6
15	190	8.4	200	9.2	200	9.6	190	10.1	190	8.2	180	6.2	170	6.4	170	3.1	180	2.4	190	3.5	190	6.1	200	7.0
16	260	8.2	260	8.6	260	7.5	250	6.2	220	3.6	210	4.9	230	2.8	—	1.1	—	0.3	—	0.6	70	3.0	70	5.5
17	270	7.8	260	7.6	220	6.2	220	6.5	250	9.9	260	10.1	250	10.0	260	8.4	260	10.0	270	10.9	270	10.5	270	12.1
18	280	10.9	280	10.8	280	9.7	280	8.9	280	9.6	280	7.3	260	5.1	240	4.5	220	4.0	200	4.5	240	7.5	220	5.5
19	190	12.5	190	11.2	180	8.6	180	9.5	190	13.5	200	16.0	200	15.5	200	13.4	200	12.4	200	13.0	190	14.3	150	15.4
20	210	10.2	220	11.5	220	10.3	220	10.3	200	8.8	200	10.7	210	10.3	210	9.4	210	9.7	210	8.5	220	10.1	220	10.5
21	180	5.0	170	6.0	160	3.1	150	3.2	150	4.5	150	5.0	120	4.6	130	5.5	140	4.0	190	4.0	180	8.3	190	12.7
22	230	6.6	230	6.8	220	8.5	220	8.9	220	10.0	210	7.2	210	10.9	210	11.5	200	12.2	200	13.5	200	11.4	210	10.4
23	220	9.0	220	8.1	210	7.3	210	8.0	210	8.4	210	7.3	200	8.7	190	10.4	170	7.2	160	5.8	180	10.2	210	16.1
24	270	7.7	270	10.6	280	8.3	270	6.7	270	7.3	260	7.5	290	13.0	290	15.3	290	15.7	300	11.0	280	12.3	290	15.1
25	230	11.9	220	9.3	210	8.4	210	8.5	260	11.7	270	12.2	280	14.5	270	9.3	270	10.9	270	11.9	260	7.1	290	(8.8)
26	300	14.9	300	14.0	300	14.2	300	13.6	300	13.6	300	13.1	300	13.1	300	12.4	300	13.4	300	13.0	290	12.7	290	10.2
27	290	10.8	290	12.3	290	12.0	300	10.1	310	11.6	310	11.6	310	10.0	310	8.6	320	5.5	320	5.3	340	5.5	320	7.3
28	—	1.4	300	3.9	320	8.0	330	7.3	340	4.5	320	6.1	320	8.1	320	5.6	330	6.8	340	7.3	340	7.4	340	6.0
29	220	5.5	190	3.3	190	2.8	160	2.2	180	2.2	170	2.6	180	3.9	160	3.5	180	2.6	200	5.1	190	5.1	170	4.5
30	230	5.0	220	3.6	270	4.5	300	5.7	320	5.0	270	5.5	280	5.5	310	7.0	300	11.5	310	14.5	300	12.1	320	5.1
Mean ...	—	6.7	—	6.9	—	6.4	—	6.0	—	6.2	—	6.1	—	6.8	—	6.6	—	6.7	—	7.4	—	7.8	—	8.1

248. Eskdalemuir :  $H_a = 235$  metres + 15 metres.

Day.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.
1	260	5.0	230	4.8	260	5.7	260	4.5	250	3.2	270	5.4	350	6.5	210	4.7	230	3.5	320	5.2	170	4.0	300	4.1
2	—	0.2	—	0.4	—	0.1	—	0.2	—	0.1	—	0.3	—	1.1	—	1.5	230	4.5	220	3.7	230	5.2	220	5.1
3	280	6.8	340	6.4	310	9.0	310	8.9	330	5.5	320	7.0	310	7.5	140	3.6	170	2.7	280	3.3	240	3.4	270	2.3
4	—	0.2	—	0.2	—	1.1	160	2.1	180	3.5	190	3.7	170	3.5	200	4.4	200	3.2	190	6.0	200	7.3	190	7.8
5	220	12.4	220	13.0	230	13.3	260	14.6	270	13.8	270	16.0	270	15.2	260	12.5	260	10.6	270	12.0	270	12.4	270	12.5
6	—	1.5	170	2.2	180	2.0	170	2.0	190	3.5	190	2.4	200	3.5	200	7.0	210	7.1	200	7.7	210	9.0	240	9.7
7	250	12.0	260	13.5	260	13.5	280	13.5	290	15.5	290	12.7	300	10.5	290	6.9	300	5.8	290	6.2	290	8.6	290	9.9
8	320	5.5	310	2.0	300	3.2	310	5.9	290	3.4	310	2.5	320	4.3	300	5.6	290	4.0	290	6.0	300	5.4	290	5.6
9	—	1.4	180	2.1	—	1.2	—	0.4	—	0.2	—	0.3	—	0.7	—	1.1	180	2.6	210	5.5	210	5.9	200	4.7
10	180	9.4	170	9.0	170	8.4	170	9.2	160	8.5	160	8.4	170	7.6	160	5.9	160	5.6	170	9.4	160	7.6	170	9.1
11	110	7.7	110	6.3	100	5.2	100	6.9	100	5.5	90	4.7	70	3.9	50	5.0	70	7.0	40	7.0	50	5.5	40	5.4
12	110	6.5	110	7.1	110	7.9	100	9.1	110	10.0	110	11.0	100	9.0	100	7.9	100	6.8	50	6.5	60	6.0	50	5.9
13	40	4.1	40	4.6	50	5.0	60	3.1	40	3.0	40	3.7	60	2.4	50	5.6	60	4.6	60	4.6	60	5.1	60	5.0
14	60	3.5	60	4.0	60	3.7	50	3.6	60	4.6	50	4.5	50	3.7	50	2.3	—	1.5	40	2.5	30	1.6	60	4.4
15	—	1.0	—	0.7	—	1.4	350	2.3	350	1.6	—	1.0	—	0.7	—	1.1	—	1.4	—	0.5	—	0.3	—	0.0
16	160	5.5	150	6.4	150	5.7	150	6.7	150	7.5	160	6.4	150	7.6	160	8.5	160	7.1	170	6.9	170	6.0	170	5.3
17	290	9.0	290	5.9	290	9.5	290	10.3	290	9.4	300	10.1	300	8.4	300	9.1	300	10.5	300	4.8	290	3.5	280	7.4
18	—	0.2	—	0.1	—	0.1	—	0.0	—	0.2	—	0.1	—	0.2	—	0.2	—	0.1	—	0.1	—	0.4	—	0.3
19	190	2.3	180	2.5	190	2.0	—	1.3	160	2.1	—	0.7	220	1.6	190	2.4	180	2.9	200	2.6	200	3.4	210	4.2
20	20	1.8	20	2.7	350	3.0	340	3.2	30	3.7	10	2.8	40	2.1	30	2.5	—	1.0	—	0.7	340	3.7	310	5.7
21	—	0.1	—	0.1	—	0.0	—	0.1	—	0.0	—	0.1	—	0.0	—	0.0	—	0.0	—	0.0	—	0.1	—	0.0
22	220	4.6	220	5.7	220	5.7	200	4.3	200	6.0	220	8.5	220	8.4	210	8.4	210	9.0	210	7.7	210	9.4	210	8.4
23	—	0.6	—	0.6	—	0.5	—	0.2	—	0.4	—	0.4	—	0.3	—	0.2	—	0.1	—	0.1	—	1.1	160	1.6
24	210	18.0	210	16.3	200	13.4	190	11.5	200	14.7	200	17.1	200	16.7	200	17.0	200	17.1	200	15.6	200	15.9	200	13.0
25	240	8.5	240	9.1	200	5.8	200	5.5	200	5.7	220	8.7	230	9.4	230	9.5	220	9.3	220	9.1	210	7.0	200	8.1
26	220	14.8	270	12.0	270	9.2	270	7.9	270	10.2	270	8.6	260	8.7	250	9.1	250	8.6	240	11.5	240	11.5	240	11.2
27	280	8.5	280	7.1	270	7.0	280	9.3	300	6.4	270	3.2	240	1.9	290	1.8	250	2.6	170	3.5	250	3.0	160	1.8
28	50	5.5	50	3.8	30	3.6	50	2.2	—	1.5	50	3.4	40	2.5	30	2.2	40	2.0	60	5.2	50	3.9	100	3.4
29	150	4.1	150	2.8	—	1.3	—	1.0	—	0.7	200	2.9	200	3.1	230	5.4	200	5.0	220	5.0	210	5.5	210	4.7
30	50	5.2	30	6.1	40	5.4	30	5.7	40	7.9	40	8.5	30	11.2	30	11.7	30	12.4	30	15.4	30	15.0	30	13.7
31	30	11.0	30	11.9	30	11.4	30	11.1	30	11.4	30	11.4	30	11.5	30	10.1	20	10.0	20	10.7	20	8.6	20	8.2
Mean ...	—	5.7	—	5.5	—	5.3	—	5.4	—	5.5	—	5.7	—	5.6	—	5.6	—	5.4	—	6.0	—	6.0	—	6.1
Annual Mean.	—	4.7	—	4.8	—	4.8	—	4.8	—	4.9	—	5.1	—	5.4	—	5.7	—	6.1	—	6.6	—	6.9	—	7.1



Averages for periods of sixty minutes, centred at the exact hours, Greenwich Mean Time.

M.S.L. +  $h_a$  (height of anemograph above ground) = 235 metres + 15 metres.

November, 1928.

13.		14.		15.		16.		17.		18.		19.		20.		21.		22.		23.		24.		Mean	Day.
°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	m/s.	
30	9.0	20	9.3	20	8.1	20	7.9	20	7.3	20	6.5	20	6.2	10	5.7	10	5.4	20	6.2	20	6.7	20	7.2	8.6	1
30	10.9	30	10.1	20	8.8	20	6.8	20	6.5	20	7.5	20	7.3	20	6.6	20	7.6	10	5.7	20	5.6	10	4.3	7.9	2
360	4.2	10	3.2	360	3.9	10	2.5	350	1.7	350	2.4	360	5.0	10	3.4	360	3.5	350	3.0	270	2.3	—	0.6	3.1	3
—	1.5	—	0.3	—	1.5	—	0.7	—	0.1	—	0.1	—	0.5	—	1.1	—	1.2	350	2.2	360	2.6	350	3.4	0.9	4
50	4.5	60	4.2	50	3.7	70	4.5	60	3.6	40	3.6	20	3.0	360	3.2	350	4.5	360	3.1	10	2.4	—	1.5	3.6	5
50	6.0	50	6.5	40	5.1	40	6.0	40	6.2	40	6.0	30	6.7	20	6.2	20	5.0	30	5.2	40	4.5	40	3.0	4.8	6
60	3.6	40	3.6	—	1.4	—	0.8	360	1.7	—	1.3	—	1.5	—	0.6	—	0.3	—	0.5	—	0.3	—	0.4	2.5	7
60	4.5	40	3.1	30	2.4	10	2.5	360	2.2	350	2.2	340	2.1	340	1.6	—	0.7	—	0.4	—	0.7	—	0.5	1.8	8
190	4.5	210	4.9	210	5.0	200	3.0	200	3.5	200	2.5	190	2.5	190	4.1	190	2.7	200	3.8	200	3.0	200	3.6	1.9	9
220	8.7	230	6.5	230	7.9	230	6.5	270	5.7	290	6.6	240	4.4	270	4.1	270	6.3	240	5.0	250	4.0	230	3.4	6.8	10
160	3.7	190	4.6	190	6.4	190	7.3	180	5.1	200	7.2	220	13.6	240	15.7	240	17.3	240	16.5	240	16.2	250	12.9	7.2	11
200	12.9	200	12.6	200	11.8	200	13.2	210	15.2	230	15.0	230	14.5	230	11.4	220	8.8	220	9.6	230	9.1	220	7.6	10.0	12
240	8.3	240	9.6	230	8.5	230	9.8	220	7.5	210	6.8	220	8.9	230	11.0	230	10.0	230	6.6	230	7.5	220	6.1	7.7	13
210	6.6	210	6.0	190	2.7	170	2.2	160	1.9	170	2.6	160	5.4	160	6.0	150	6.5	150	8.3	150	9.0	170	7.1	5.7	14
200	7.6	200	8.2	210	7.3	250	8.3	250	9.0	250	7.6	260	7.5	270	9.1	260	9.1	260	8.6	260	9.6	260	9.0	7.5	15
50	6.0	40	7.7	20	8.4	10	7.5	360	5.5	350	4.9	320	4.2	280	6.4	280	7.0	270	10.0	270	8.1	260	8.0	5.7	16
270	10.9	270	11.6	270	13.0	270	14.8	270	12.4	270	12.2	270	11.6	280	11.7	290	11.6	280	12.1	270	10.8	280	10.1	10.5	17
210	4.7	200	4.5	200	6.9	200	7.3	180	4.7	200	8.8	200	8.7	200	8.6	190	8.0	200	8.5	200	10.2	200	10.1	7.5	18
190	15.9	190	15.8	190	14.2	240	11.0	280	6.1	260	5.8	220	6.5	220	8.1	220	9.1	220	8.7	210	8.7	200	9.4	11.5	19
220	10.3	220	10.9	230	12.3	230	13.7	230	9.5	220	8.6	210	7.1	210	5.4	200	4.0	200	3.7	200	5.1	190	6.2	9.1	20
200	12.6	200	12.1	200	12.0	190	11.6	190	12.1	190	12.2	200	10.8	210	9.4	210	8.5	200	7.6	200	5.9	210	6.6	7.8	21
220	11.4	230	10.2	240	7.4	270	5.4	250	6.5	250	7.4	250	7.6	240	7.8	220	8.0	220	7.7	220	7.7	220	8.3	8.9	22
200	17.4	220	16.7	270	21.3	270	22.7	270	19.1	270	16.2	270	14.5	280	15.2	270	13.4	270	10.3	260	11.6	260	9.5	12.2	23
300	17.0	300	16.3	300	15.1	290	15.2	290	15.2	290	15.4	290	14.5	280	10.8	270	11.0	250	9.5	240	9.6	230	11.1	12.1	24
300	12.5	300	13.3	310	13.9	310	12.8	310	12.2	310	12.1	300	12.2	290	12.2	290	14.1	290	14.5	300	15.4	290	15.0	11.8	25
290	10.9	290	10.4	280	6.5	260	4.3	190	3.2	240	2.0	240	2.8	220	2.4	260	2.0	280	6.2	280	8.5	290	9.8	9.6	26
320	8.0	320	6.6	310	8.0	320	7.9	320	8.4	340	8.5	340	5.6	340	6.8	330	7.5	330	7.5	330	4.6	—	1.5	8.1	27
340	3.2	—	0.7	—	1.5	—	1.3	—	1.2	—	0.2	—	0.1	—	0.1	—	0.1	—	0.3	240	5.7	190	3.9	3.7	28
200	5.9	240	6.2	240	7.3	290	8.6	300	10.0	90	4.4	290	6.6	310	5.7	200	3.4	360	3.5	230	5.1	200	4.8	4.8	29
290	8.8	300	12.9	300	9.9	340	6.0	300	5.7	280	5.6	290	8.6	300	8.0	290	5.9	280	6.9	290	5.6	350	4.9	7.2	30
—	8.4	—	8.3	—	8.1	—	7.7	—	7.0	—	6.7	—	7.0	—	6.9	—	6.7	—	6.7	—	6.9	—	6.3	7.0	

December and Year, 1928.

°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.
300	3.8	300	4.3	300	3.5	350	2.5	—	0.6	—	1.0	—	1.1	—	1.2	—	0.2	—	0.6	—	0.1	—	0.1	—	0.1	—	0.1	—	0.1	—	0.1	—	0.1	—	0.1	—	0.1
210	5.5	230	5.2	230	4.5	220	5.5	190	2.9	210	3.5	230	6.6	210	4.0	210	5.0	200	4.4	210	3.8	210	2.8	210	2.8	210	2.8	210	2.8	210	2.8	210	2.8	210	2.8	210	2.8
—	0.9	310	1.7	—	1.0	—	1.2	—	0.2	—	0.2	—	0.2	—	0.1	—	0.1	—	0.2	—	0.1	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
200	10.2	190	9.8	200	8.9	190	8.5	200	8.2	210	10.4	220	13.1	210	10.7	190	7.8	190	8.9	200	9.2	210	10.8	210	10.8	210	10.8	210	10.8	210	10.8	210	10.8	210	10.8	210	10.8
270	11.9	270	10.6	280	10.7	280	9.0	270	6.7	210	3.4	170	2.5	170	4.2	170	4.5	170	3.8	170	3.1	170	2.1	170	2.1	170	2.1	170	2.1	170	2.1	170	2.1	170	2.1	170	2.1
250	8.0	260	8.5	250	9.5	240	7.4	230	8.0	230	10.7	230	11.2	230	11.4	230	12.4	230	10.7	220	8.1	230	9.4	230	9.4	230	9.4	230	9.4	230	9.4	230	9.4	230	9.4	230	9.4
290	8.6	290	7.4	280	6.3	280	7.2	280	6.8	280	8.8	280	7.5	280	7.3	300	10.8	300	10.9	310	7.3	320	7.0	320	7.0	320	7.0	320	7.0	320	7.0	320	7.0	320	7.0	320	7.0
290	7.0	290	5.7	250	3.5	350	1.6	180	2.4	230	3.1	330	2.3	300	3.3	320	3.8	320	4.9	270	1.8	300	2.1	4.1	8												
210	6.3	200	7.0	210	8.1	200	8.4	200	8.3	200	7.6	200	8.5	200	8.4	180	8.1	180	9.5	180	9.8	180	10.1	5.1	9												
160	10.0	160	7.7	140	8.9	150	7.5	150	7.1	140	5.6	130	5.5	120	4.9	100	4.5	80	5.5	100	4.7	110	6.8	7.4	10												
60	7.0	70	6.5	100	5.6	140	6.5	140	6.1	140	5.5	130	5.8	100	6.0	100	6.4	90	5.0	90	6.1	100	6.0	6.0	11												
60	5.6	60	6.0	30	4.0	60	2.7	50	3.2	40	4.5	50	3.5	50	3.5	50	4.2	50	3.5	40	4.0	50	3.3	6.0	12												
70	4.9	70	4.6	60	4.5	60	4.2	60	3.7	60	4.0	60	3.8	70	3.5	50	2.7	60	4.1	60	4.3	60	3.6	4.1	13												
50	4.2	50	4.2	70	2.8	—	1.5	350	1.6	—	1.0	—	1.3	—	0.9	—	0.5	—	1.4	—	0.9	—	0.7	2.6	14												
—	0.0	—	0.0	—	0.4	—	0.3	160	3.0	160	3.2	170	3.8	160	4.3	170	4.2	160	5.6	160	5.7	160	5.5	1.9	15												
170	4.7	190	3.1	220	3.7	190	5.3	200	7.4	270	8.1	280	7.3	290	10.3	290	12.1	300	10.1	300	9.5	300	11.0	7.1	16												
290	7.4	300	8.7	310	7.7	260	3.7	350	5.1	210	2.4	320	4.5	260	2.8	170	1.7	—	0.5	—	0.3	—	0.4	6.2	17												
—	1.0	—	0.6	—	1.5	180	3.0	190	5.3	200	4.1	180	4.3	200	4.9	200	4.0	200	3.6	190	2.8	170	2.5	1.6	18												
200	3.2	200	3.5	190	4.5	190	5.1	180	4.6	180	5.6	190	7.7	190	7.5	190	8.4	200	7.6	270	5.4	290	5.6	4.0	19												
320	5.0	320	5.5	280	3.5	—	1.5	—	0.5	—	0.6	—	0.5	—	0.2	—	0.3	—	0.5	—	0.2	—	0.2	2.3	20												
—	0.0	—	1.0	190	1.6	220	1.6	—	0.9	—	0.3	180	3.3	170	4.1	170	3.4	200	4.3	170	5.0	170	3.5	1.2	21												
230	9.0	250	6.8	260	4.9	280	6.1	310	8.4	320	9.5	320	6.8	—	1.5	60	1.6	320	2.7	—	1.5	—	0.4	6.1	22												
190	5.2	200	6.4	180	6.8	200	10.6	190	11.1	170	6.2	190	11.5	190	10.3	190	11.7	190	12.6	200	17.9	200	17.1	5.2	23												
220	12.3	240	10.0	240	8.6	250	9.5	240	9.9	240	9.0	250	7.5	240	5.6	230	6.6	230	8.8	240	8.9	230	6.1	12.3	24												
200	10.2	200	10.8	180	8.2	190	10.3	190	12.1	180	13.0	180	12.4	160	8.7	160	8.3	190	14.9	190	15.5	200	14.3	9.6	25												
250	9.1	260	9.6	260	8.0	260	8.1	260	8.6	260	8.1	270	8.7	270	8.0	280	8.8	280	9.4	280	8.1	270	6.5	9.5	26												
—	1.2	—	1.1	—	1.4	—	1.4	—	1.0	—	0.5	—	0.3	—	0.5	—	1.1	—	1.5	40	3.0	50	4.7	3.1	27												
140	4.2	130	4.6	110	6.2	130	4.5	130	5.6	120	5.0	120	7.0	120	5.8	130	6.5	140	6.7	140	6.0	140	4.3	4.4	28												
190	3.5	180	3.1	—	1.4	—	0.1	—	1.5	150	3.2	140	2.5	—	1.1	50	2.0	20	3.5	50	2.6	50	4.0	2.9	29												
30	13.8	30	13.0	30	12.1	30	12.1	30	12.2	30	11.5	30	11.5	40	13.6	30	11.5	30	12.3	30	13.1	30	11.3	10.9	30												
20	8.8	20	8.0	20	8.5	20	6.9	10	6.0	360	5.4	360	5.5	360	5.5	360	5.6	360	4.7	10	1.9	—	0.2	8.3	31												
—	6.2	—	6.0	—	5.5	—	5.3	—	5.5	—	5.3	—	5.7	—	5.3	—	5.5	—	5.9	—	5.5	—	5.2	5.6													
—	7.2	—	7.2	—	7.0	—	6.7	—	6.4	—	5.8	—	5.4	—	5.1	—	4.8	—	4.8	—	4.8	—	4.7	5.7													



HIGHEST INSTANTANEOUS WIND SPEED RECORDED EACH DAY BY THE DINES TUBE ANEMOGRAPH.

249. Eskdalemuir : H<sub>a</sub> = 235 metres + 15 metres.

1928.

Day.	Jan.		Feb.		Mar.		April		May		June		July		Aug.		Sept.		Oct.		Nov.		Dec.	
	Max. in a Gust.	Time of Gust.	Max. in a Gust.	Time of Gust.	Max. in a Gust.	Time of Gust.	Max. in a Gust.	Time of Gust.	Max. in a Gust.	Time of Gust.	Max. in a Gust.	Time of Gust.	Max. in a Gust.	Time of Gust.	Max. in a Gust.	Time of Gust.	Max. in a Gust.	Time of Gust.	Max. in a Gust.	Time of Gust.	Max. in a Gust.	Time of Gust.	Max. in a Gust.	Time of Gust.
	m/s.	h. m.	m/s.	h. m.	m/s.	h. m.	m/s.	h. m.	m/s.	h. m.	m/s.	h. m.	m/s.	h. m.	m/s.	h. m.	m/s.	h. m.	m/s.	h. m.	m/s.	h. m.	m/s.	h. m.
1	16	21 15	21	5 40	12	1 55	8	10 55	13	17 45	16	13 10	19	14 45	11	9 5	6	16 20	13	16 30	18	1 15	15	6 40
2	12	4 10	21	1 15	9	22 50	22	23 20	13	14 55	7	13 5	22	22 30	7	11 50	9	15 15	11	1 15	17	11 10	11	19 10
3	9	22 10	17	7 55	9	0 10	27	15 55	17	9 45	9	15 40	17	0 15	4	15 25	15	14 30	5	13 55	8	12 45	15	2 55
4	23	15 20	17	23 50	7	14 25	15	4 15	15	12 20	15	11 50	14	23 20	14	17 55	15	23 40	12	12 5	4	22 20	18	19 20
5	24	7 20	17	12 50	8	16 25	13	14 20	13	11 5	5	8 45	16	13 40	8	16 15	15	0 35	7	11 35	10	9 50	23	5 35
6	30	8 35	26	23 15	11	14 5	13	12 50	13	21 40	8	18 35	17	15 30	13	14 50	16	6 10	14	15 0	11	8 15	17	18 15
7	23	23 55	25	16 5	13	18 5	12	23 55	14	5 55	13	21 20	9	15 25	24	11 30	20	12 50	19	12 10	7	10 50	23	3 10
8	22	1 50	25	22 5	13	14 25	12	15 15	13	8 35	10	1 50	17	11 5	19	11 40	14	1 50	19	10 45	7	13 25	11	12 55
9	22	10 40	31	0 15	12	13 45	16	11 20	11	10 55	19	14 30	19	14 5	17	10 40	20	23 50	9	3 20	8	14 30	14	16 25
10	33	9 5	24	9 30	16	11 10	17	14 45	10	17 35	17	15 10	17	12 55	12	14 50	22	1 45	12	2 25	21	10 50	16	12 15
11	16	0 30	20	14 20	16	12 45	10	16 55	9	11 45	15	14 25	17	12 5	10	12 10	9	4 55	20	9 40	23	21 0	12	18 50
12	24	6 40	14	4 15	17	12 0	11	14 50	8	8 10	13	15 5	13	11 15	15	15 45	7	12 0	10	14 20	22	17 5	15	6 0
13	25	21 55	17	20 30	11	7 5	17	23 20	12	16 35	13	18 30	14	12 50	19	15 40	8	13 35	8	12 45	16	20 0	8	8 10
14	18	23 45	22	3 50	11	14 50	23	19 25	10	14 20	19	7 20	16	11 30	17	7 50	10	15 30	11	11 35	14	22 35	7	13 40
15	22	11 35	24	15 20	9	12 15	19	0 30	17	13 15	15	10 35	11	12 40	15	17 0	8	10 45	6	2 30	16	22 35	9	22 40
16	13	4 55	21	16 35	14	16 20	13	14 35	20	13 10	13	17 15	13	18 15	13	10 40	11	12 25	15	10 40	16	22 0	18	20 40
17	11	7 35	24	4 0	20	8 30	13	5 30	12	15 15	16	13 30	12	23 40	11	4 15	21	14 40	16	0 20	24	16 15	16	0 5
18	12	13 50	17	15 20	15	13 0	18	11 20	11	12 0	12	15 25	17	10 40	7	15 5	20	0 25	23	16 30	19	1 20	8	20 25
19	13	10 25	11	1 25	15	20 30	19	8 55	9	16 30	9	13 40	15	17 25	11	11 20	14	11 25	20	22 20	25	13 15	12	20 30
20	20	11 55	7	4 0	15	16 10	14	9 20	13	11 40	11	16 55	19	20 35	10	11 30	13	13 40	33	3 20	19	16 15	11	0 20
21	27	12 55	17	16 25	14	12 40	11	13 45	16	8 0	12	11 45	16	4 35	13	14 25	10	15 5	16	15 25	18	11 50	7	22 55
22	11	11 35	10	23 15	10	9 25	10	14 55	11	17 50	19	12 45	8	16 45	9	1 20	10	9 40	9	11 10	19	9 40	15	17 30
23	19	17 10	13	1 40	13	13 20	16	7 45	10	15 45	21	1 45	9	12 25	14	18 25	9	21 5	19	23 0	30	15 5	25	23 10
24	21	10 50	10	10 35	12	11 45	19	11 50	9	8 10	15	10 35	12	5 45	13	1 0	11	13 45	22	22 55	25	17 5	25	0 45
25	27	18 20	4	14 10	13	13 45	15	11 20	9	15 55	10	22 5	15	16 45	14	13 35	13	4 45	19	0 25	23	7 15	21	22 30
26	22	0 20	7	5 30	11	14 15	13	14 25	9	12 25	16	15 35	16	2 45	10	10 15	4	10 20	16	20 40	22	0 35	24	1 15
27	19	15 55	10	13 30	15	11 55	14	18 15	10	20 40	13	16 20	10	12 55	14	12 0	5	14 35	12	12 5	18	3 0	16	0 45
28	15	8 45	17	14 40	13	17 0	15	7 15	6	12 35	21	10 5	12	16 5	13	12 0	18	12 45	13	7 35	12	3 30	11	19 30
29	6	13 10	13	13 45	18	13 20	13	17 15	9	19 10	21	3 0	14	13 45	10	14 45	8	0 45	12	23 15	17	16 45	9	8 0
30	11	12 55	—	—	12	0 15	14	16 35	12	22 5	21	0 25	11	15 15	8	15 15	11	10 30	21	20 25	20	10 10	22	11 20
31	25	19 35	—	—	15	13 15	—	—	15	15 25	—	—	10	14 25	7	14 25	—	—	19	22 15	—	—	16	7 5

DISTRIBUTION OF WIND SPEED: EXTREME VELOCITIES AS RECORDED BY THE DINES TUBE ANEMOGRAPH.

250. Eskdalemuir : H<sub>a</sub> = 235 metres + 15 metres.

1928.

Month.	DISTRIBUTION OF WIND SPEED.								EXTREME VELOCITIES.					
	More than 17·1 m/s.		10·8 to 17·1 m/s.		5·5 to 10·7 m/s.	1·6 to 5·4 m/s.	Less than 1·6 m/s.	No. Record.	Highest Hourly Wind.			Highest Gust.		
	Dates of Occurrence.	Duration.	No. of Days.	Duration.	Duration.	Duration.	Duration.	Duration.	Veer from N.	Speed.	Mid Time.	Speed.	Date.	
		hr.		hr.	hr.	hr.	hr.	hr.	°	m/s.	day. hour.	m/s.	day. h. m.	
Jan.	... ..	6th, 10th, 21st	13	18	165	293	190	83	—	190	20·1	10 10	33	10 9 5
Feb.	... ..	6th, 7th, 8th	5	15	117	276	221	77	—	230	20·0	6 23	31	9 0 15
Mar.	... ..	—	—	3	10	333	322	70	9	200	13·3	17 9	20	17 8 30
April	... ..	—	—	12	42	358	225	95	—	200	13·9	2 23	27	3 15 55
May	... ..	—	—	5	14	278	316	136	—	30	13·3	16 12	20	16 13 10
June	... ..	—	—	8	72	295	247	106	—	240	14·5	30 1	21	30 0 25
July	... ..	—	—	10	56	375	259	54	—	230	15·8	2 2	22	2 22 30
Aug.	... ..	—	—	5	22	260	278	184	—	200	16·8	7 12	24	7 11 30
Sept.	... ..	—	—	7	44	214	243	219	—	220	14·3	17 14	22	10 1 45
Oct.	... ..	20th	5	10	96	238	229	176	—	180	21·1	20 3	33	20 3 20
Nov.	... ..	11th, 23rd	5	18	134	311	200	70	—	270	22·7	23 16	39	23 15 5
Dec.	... ..	23rd, 24th	2	12	82	275	244	141	—	210	18·0	24 1	25	23 23 10
Year	... ..	12 days.	30	123	854	3,506	2,974	1,411	9	270	22·7	Nov. 23 16	39	Nov. 23 15 5



## MINIMUM TEMPERATURE "ON THE GRASS" DURING THE INTERVAL 18H. TO 7H. G.M.T.

Readings, in degrees absolute.

251. Eskdalemuir.

1928.

Month.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Day.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.
1	59·8	74·8	74·5	72·0	79·2	79·0	78·0	73·6	74·9	65·0	76·6	80·4
2	72·3	70·9	75·8	73·8	79·5	72·0	82·0	75·1	76·0	74·5	—	67·1
3	71·5	71·8	74·0	77·0	79·2	72·8	80·4	79·7	83·1	70·4	72·2	73·6
4	67·4	67·7	74·0	73·5	77·9	72·0	74·2	79·5	86·6	71·9	71·9	66·4
5	73·5	75·0	75·5	69·5	73·5	69·0	81·9	76·1	86·1	75·3	69·4	77·9
6	73·5	72·8	74·7	71·4	74·0	69·8	82·3	75·6	80·8	80·9	72·1	72·3
7	71·2	75·2	67·9	69·0	76·8	77·6	76·0	85·3	83·0	77·2	73·2	72·0
8	73·9	79·4	72·8	76·0	70·3	78·6	74·4	77·8	84·9	84·8	68·1	65·1
9	75·0	74·6	69·9	75·1	68·8	78·6	80·1	81·2	83·6	80·0	63·7	64·9
10	73·3	73·1	69·9	79·3	65·5	81·1	78·2	78·3	80·7	78·1	71·8	73·9
11	73·5	69·0	67·4	72·8	66·9	72·5	84·8	83·7	77·5	74·5	78·0	68·4
12	70·0	69·8	68·9	75·8	79·6	75·6	85·0	86·2	73·2	76·5	78·3	74·1
13	76·8	70·1	64·6	76·6	79·3	78·7	83·3	82·9	75·0	68·4	80·5	73·2
14	75·2	73·3	69·6	74·6	73·5	78·1	84·8	83·8	76·4	71·0	76·3	72·2
15	75·0	75·1	69·3	72·3	69·4	72·1	85·1	80·7	75·1	77·8	77·8	66·0
16	76·2	77·9	70·7	70·3	73·8	72·0	75·0	82·0	73·1	71·8	74·0	71·9
17	70·2	71·0	77·9	72·0	73·1	74·9	79·5	80·6	81·1	77·7	74·2	75·0
18	70·3	73·6	75·9	68·5	75·0	72·6	83·0	77·9	81·1	79·6	76·3	66·4
19	74·0	77·8	75·9	68·2	74·2	77·9	81·9	75·6	70·0	77·8	80·3	74·1
20	72·9	76·1	81·0	68·1	73·1	74·2	82·5	84·5	73·5	79·5	77·8	72·0
21	72·8	70·0	75·2	68·2	74·7	72·1	81·0	82·6	69·1	75·9	78·9	66·3
22	74·0	78·1	69·2	70·1	71·1	83·1	81·0	79·3	69·6	71·3	81·3	74·4
23	71·9	74·0	72·5	73·2	74·3	80·1	83·0	83·6	68·5	70·5	76·3	64·8
24	72·0	75·0	78·1	79·6	75·3	74·1	84·0	84·1	79·1	79·0	75·0	75·6
25	72·9	68·9	77·1	75·2	72·3	81·2	77·9	82·8	76·0	79·1	77·0	71·7
26	71·2	70·3	71·8	78·1	73·5	82·3	83·0	83·9	76·1	75·7	75·2	74·9
27	64·8	68·9	74·8	80·6	82·2	76·2	83·8	83·4	72·2	79·9	73·7	70·7
28	69·9	69·1	70·0	78·3	83·8	77·3	79·5	79·1	78·7	73·1	68·4	66·8
29	72·0	72·1	71·1	76·9	82·1	83·4	74·4	79·2	69·2	72·6	68·1	72·9
30	70·2	—	73·0	77·8	82·3	80·8	77·3	76·3	70·0	79·8	81·1	69·9
31	70·7	—	73·0	—	78·3	—	73·9	77·8	—	79·8	—	68·8
Mean	71·9	72·9	72·8	73·7	75·2	76·3	80·4	80·4	76·8	75·8	74·7	71·1

- NOTES.—(1) The initial 2 or 3 of the readings is omitted, i.e., 275·0 is written 75·0.  
 (2) The minimum refers to the interval from 18h. the previous day to 7h. on the day to which it is entered.  
 (3) Annual Mean 275·2.  
 (4) Mean for November is for 29 days only.



Day.	Cloud Forms.			Cloud Amount (All Forms).						Visibility.						Precipitation.						Remarks on the Weather of the Day.
	7 <sup>h</sup>	13 <sup>h</sup>	18 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	
1	—	St.	St.	0	7	10	10	10	10	g	h	h	G	g	f	...	...	...	...	...	...	☒ b-o, L m <sub>0</sub> a : o m <sub>0</sub> p : o * m <sub>0</sub> , o * m <sub>0</sub> n
2	St.	St : Fr-St : Ci.	St : Fr-St.	10	10	8	3	3	9	c	F	h	I	I	I	...	...	...	...	...	...	☒ o m <sub>0</sub> , ofe, cm a : bcm <sub>0</sub> p : bcm <sub>0</sub> , ☒ bc, b L, ba : b p : b o m <sub>0</sub> n. [cm <sub>0</sub> n.
3	St-Cu.	—	Ci.	1	0	0	1	2	10	i	j	k	I	k	k	...	...	...	...	...	...	oid <sub>0</sub> m <sub>0</sub> , c, o o m <sub>0</sub> a : cp o, bc p : b, [cp o n.
4	Nb.	St.	Cu : Fr-Cu.	10	10	10	8	6	7	i	I	I	k	k	k	...	...	...	...	...	...	cp o n.
5	Fr-Cu.	Nb : A-St.	Nb : Cu : Fr-Cu.	1	1	9	5	9	10	k	k	k	k	k	i	...	...	p <sup>0</sup>	...	p <sup>0</sup>	p <sup>0</sup>	b, cp o a : bc, cp o p : cp o, o o n.
6	Nb.	Cu : Fr-Cu.	Cu.	10	9	6	7	1	10	i	k	k	k	k	k	...	...	...	...	...	...	o o m <sub>0</sub> , cp o a : bcp o, b p : b-c, [U n.
7	Nb.	St.	St.	10	10	10	10	10	9	i	h	h	h	d	i	...	...	...	...	...	...	o o m <sub>0</sub> , oi o m <sub>0</sub> a : o o m <sub>0</sub> , o o f p : [o o f, cp o m <sub>0</sub> n.
8	Fr-Cu : St-Cu.	Cu : Fr-Cu : St-Cu.	Nb : Cu.	7	6	8	7	9	10	j	k	k	k	j	j	...	...	...	...	...	...	cp o, bc, cp o a : bcp o, b p : oi o n.
9	Nb.	Nb.	Cu.	10	9	9	9	2	8	j	h	j	j	j	j	...	...	p <sup>0</sup>	...	p <sup>0</sup>	...	c, op o, ci o a : cp o, b p : b, c n.
10	Nb.	Nb.	St-Cu.	10	10	9	9	4	8	h	h	j	j	j	j	...	...	p <sup>0</sup>	...	p <sup>0</sup>	...	cp o, o o m <sub>0</sub> , cp o, a : cp o, a : cp o, [bc p : bc, c n.
11	St-Cu.	Nb : St-Cu.	St-Cu.	9	9	7	5	5	1	j	j	I	j	j	j	...	...	p <sup>0</sup>	...	p <sup>0</sup>	...	c, cp o, bcm <sub>0</sub> a : bcp o p : bcp o, [m <sub>0</sub> n.
12	Nb.	Nb.	St.	10	10	10	10	10	10	i	I	G	I	i	i	...	...	...	...	...	...	b L, o o m <sub>0</sub> a : o o m <sub>0</sub> , o m <sub>0</sub> p : op o
13	Nb.	St.	Fr-Nb.	10	10	10	10	5	5	j	j	j	j	j	j	...	...	...	...	...	...	op o a : o o m <sub>0</sub> , bcq p : bcp o, b n.
14	St : St-Cu.	Nb.	Cu.	10	10	10	10	1	1	j	I	h	G	j	j	...	...	...	...	...	...	b, c, o o m <sub>0</sub> a : o o m <sub>0</sub> , b p : bc, b n.
15	Nb.	Nb.	Nb.	10	10	10	10	10	10	I	I	h	I	i	i	...	...	...	...	...	...	b, o o m <sub>0</sub> a : oi o, p o, m <sub>0</sub> p : o o o [m <sub>0</sub> n.
16	St.	Cu : Fr-Cu.	—	9	3	7	5	0	7	j	j	k	k	j	k	...	...	...	...	...	...	ci o, bcp o a : bc, b p : b, bc n.
17	St.	St : St-Cu.	St.	9	9	8	7	10	10	j	j	k	j	k	k	...	...	...	...	...	...	cp o a : bcp o, o p : o, b n.
18	St.	St.	Nb.	10	10	10	10	10	10	I	I	h	j	k	h	...	...	...	...	...	...	b, oi o m <sub>0</sub> , p o a : oid <sub>0</sub> m <sub>0</sub> , o o m <sub>0</sub> p : [o o m <sub>0</sub> n.
19	St-Cu.	Fr-Cu : Ci.	Fr-Cu.	4	9	7	6	1	9	j	j	k	k	j	h	...	...	...	...	...	...	o, bcp o, bc a : bc p : b, cm <sub>0</sub> n.
20	Nb.	St.	St : Ci.	10	10	10	4	2	10	i	I	E	k	j	F	...	...	...	...	...	...	cm <sub>0</sub> , o o m <sub>0</sub> , of a : of, bc p : b p : [b o, om, bc n.
21	Nb.	Nb.	Nb.	9	10	10	10	10	10	j	G	I	h	h	j	...	...	...	...	...	...	bc, o o m <sub>0</sub> , a : o o m <sub>0</sub> , p : oi o [m <sub>0</sub> n.
22	Fr-Cu : Ci.	St-Cu.	Cu.	7	8	8	4	4	6	j	j	k	j	j	j	...	...	...	...	...	...	o, bc, c a : cp o, bc p : b, bc n.
23	St : A-St.	Nb.	Nb.	10	10	10	10	10	10	j	h	h	G	j	e	...	...	...	...	...	...	bc n, c, o o m <sub>0</sub> a : o o m <sub>0</sub> p : o o m <sub>0</sub> , [ofe, oi o m <sub>0</sub> n.
24	St-Cu.	Cu.	Nb.	8	9	7	10	10	10	j	I	j	k	f	f	...	...	...	...	...	...	bc, cp o, p o, bc a : bc, op o, o * m [p : o * m n.
25	St-Cu.	St.	Nb.	2	8	10	10	10	9	j	h	I	I	h	j	...	...	...	...	...	...	☒ 10 cms. o * m <sub>0</sub> , b, oi o m <sub>0</sub> a : o o m <sub>0</sub> , [o, o o m <sub>0</sub> , p : o o m <sub>0</sub> , c, oi o n.
26	St-Cu.	St.	St : Fr-Cu.	9	10	10	9	6	1	j	h	I	l	k	j	...	...	...	...	...	...	cp o, c, oi o, o * m <sub>0</sub> a : o * m, bc p : op * m, b L n.
27	St.	—	Fr-Cu.	2	1	0	1	1	8	j	k	k	k	k	h	...	...	...	...	...	...	☒ b L, b, a : b p : b, cp o m <sub>0</sub> , o m <sub>0</sub> n.
28	Nb.	St.	Cu : Fr-Cu.	10	10	10	9	1	0	g	h	I	m	k	j	...	...	...	...	...	...	oid <sub>0</sub> m <sub>0</sub> , o o m <sub>0</sub> a : o o m <sub>0</sub> , cp o, b p : b, b n.
29	St.	Nb : Fr-Nb.	Nb.	10	10	10	10	10	9	e	E	l	G	c	j	...	...	...	...	...	...	b, ofe, c, o o m <sub>0</sub> a : o * m, o * m <sub>0</sub> p : [cm <sub>0</sub> , ofe, c a : c p : c, bc n.
30	St.	St.	St.	10	10	9	9	9	6	D	G	j	h	h	h	...	...	...	...	...	...	bc L, cp o, oi o m <sub>0</sub> a : o * m, o * m <sub>0</sub> , [o, m <sub>0</sub> p : op o, oi o m <sub>0</sub> n.
31	St-Cu.	St.	Nb.	8	8	10	10	10	10	j	j	I	h	h	h	...	...	...	...	...	...	
Mean Cloud Am't				7.9	8.3	8.5	7.7	6.2	7.8													

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February, 1928.

1	Nb.	St.	St.	10	10	10	10	7	10	j	j	I	G	I	I	°	...	*	*	...	*	bc, oi°, oi°m <sub>0</sub> a : coi°m <sub>0</sub> p : bc, oi° m <sub>0</sub> n. [p : o°m <sub>0</sub> , c n.
2	St.	St.	Nb.	9	8	10	10	10	9	I	j	j	F	g	j	...	...	*	*	...	☒ oi° m <sub>0</sub> , c, op° △, o a : o, o°²m, ☒ 16 cms. oi°, bc a : bc p : bc, c, [U n.	
3	Cu : Ci-St.	Cu.	Cu.	4	3	3	3	3	9	j	j	k	j	g	j	...	...	*	*	...	☒ 6 cms. c, o°°m <sub>0</sub> , o° f a : o° f p : o°m <sub>0</sub> n. [cp°°, bc n.	
4	Nb.	Nb.	Nb.	10	10	10	10	10	10	I	I	D	C	g	g	°	d	•	•	•	☒ 3 cms. c, o°m <sub>0</sub> , cp°, bc a : bc, [cm <sub>0</sub> , bc p : cq, o°m <sub>0</sub> n.	
5	St : A-St.	Nb : St-Cu.	St-Cu.	10	9	8	3	7	5	j	j	j	k	j	j	...	p°	p*	...	...	oi°m <sub>0</sub> , cp° * △ q a : cp° q, bc p : ☒ 3 cms. c, o°m <sub>0</sub> , cp°, bc a : bc, [cm <sub>0</sub> , bc p : cq, o°m <sub>0</sub> n.	
6	St.	Fr-St : St-Cu.	St : Fr-St.	10	10	3	9	7	9	G	I	j	I	j	j	*	...	...	...	...	o°m <sub>0</sub> , o a : c p : c, o n.	
7	Nb.	St.	St : Fr-St.	10	10	10	9	9	10	h	h	j	j	j	j	•	•	...	...	...	oid <sub>0</sub> m <sub>0</sub> a : ofd p : o° f n. [bc n.	
8	St.	St.	St.	10	10	10	10	10	10	g	I	h	j	D	I	d <sub>0</sub>	...	d	d	•	bcq, cp°, c a : cp°, bc p : cp°, cp bc, c, o°m <sub>0</sub> , o°△°m <sub>0</sub> , a : o°m <sub>0</sub> , cp [p : c, o°m <sub>0</sub> , c n.	
9	St-Cu.	St : Fr-St.	St-Cu.	7	7	9	9	7	3	j	k	j	k	j	j	...	•	*	...	...	☒ 3 cms. c, cp°° a : c, b p : bc, b n. bcq, c a : cp°° △, bc p : c, cp°°, b L n. [m <sub>0</sub> , bcm <sub>0</sub> n.	
10	Nb.	Nb.	Cu.	10	10	10	8	9	10	h	I	h	k	j	j	p°	•	*	...	...	b L, o°m <sub>0</sub> a : o°m <sub>0</sub> , cm <sub>0</sub> p : cp° cp°, bc, a : c p : od <sub>0</sub> m <sub>0</sub> n.	
11	Cu : St-Cu.	Cu : St-Cu.	Cu : A-Cu.	8	8	8	5	3	1	j	k	k	k	j	j	...	...	...	...	...	odm <sub>0</sub> a : o, od <sub>0</sub> m <sub>0</sub> , c p : c n.	
12	Cu : Ci.	Cu : Fr-Cu.	Cu : A-Cu.	4	6	9	7	8	4	k	j	k	k	k	k	...	...	...	...	...	c, o°m <sub>0</sub> , cp°² a : cpq p : bc, cp°△ n. ☒ o°, bcp°° a : cp°△, bc p : bc n. cp°°, oi°°m <sub>0</sub> a : odm <sub>0</sub> p : od <sub>0</sub> m <sub>0</sub> n.	
13	St.	St.	Nb : St-Cu.	10	10	10	10	8	4	F	F	F	h	h	h	...	*	*	°	p°	om, bcm L, bm <sub>0</sub> a : bm <sub>0</sub> , cm <sub>0</sub> p : om <sub>0</sub> om, bc a : bc, b p : b n. [od <sub>0</sub> m <sub>0</sub> n.	
14	Cu-A-St.	St-Cu : A-St.	Nb.	8	3	9	10	10	10	j	j	k	j	h	g	...	...	...	...	...	Mainly c all day.	
15	Nb.	St.	St-Cu.	10	10	10	10	9	10	g	G	I	I	j	j	d	d <sub>0</sub>	...	d <sub>0</sub>	...	bc, om <sub>0</sub> a : om <sub>0</sub> p and n. bm <sub>0</sub> , bz <sub>0</sub> y a : bz <sub>0</sub> y p : bm <sub>0</sub> n.	
16	Nb.	Nb : St-Cu.	Cu : St-Cu.	10	10	10	10	5	9	i	G	j	j	j	j	•	•	p°²	•	...	bm <sub>0</sub> L, by ⊕ a : by, bcm <sub>0</sub> p : bm <sub>0</sub> n. bc L m <sub>0</sub> , bz <sub>0</sub> y a : by p : bm <sub>0</sub> n.	
17	Cu : Fr-Cu.	Cu : Fr-Cu.	Cu : St-Cu.	3	9	5	8	5	7	j	I	j	j	j	j	...	d <sub>0</sub>	d <sub>0</sub>	d	d <sub>0</sub>	b L m <sub>0</sub> , bz <sub>0</sub> a : bz <sub>0</sub> y p : bz <sub>0</sub> n.	
18	St.	Nb.	Nb.	10	10	10	10	10	10	I	I	I	G	G	j	...	...	...	...	...	om <sub>0</sub> , cz <sub>0</sub> a : cz <sub>0</sub> p and n.	
19	Cu.	Cu.	St : Fr-St.	9	9	7	6	9	8	j	j	j	j	j	j	...	...	...	...	...		
20	St.	St.	St.	10	10	10	10	10	10	j	j	I	G	h	f	...	...	...	...	...		
21	St : St-Cu.	St-Cu.	St.	3	1	2	2	10	10	F	F	h	I	h	h	...	...	...	...	d <sub>0</sub>		
22	St : Fr-St.	Cu : Ci.	Cu.	10	8	6	5	1	2	F	I	k	j	k	j	...	...	...	...	...		
23	St : St-Cu.	St-Cu.	St-Cu.	9	8	10	10	10	10	j	j	j	j	j	j	...	...	...	...	...		
24	St-Cu.	St.	St.	7	9	10	10	10	10	j	I	I	I	h	h	...	...	...	...	...		
25	St : A-St.	—	Ci.	2	1	0	0	1	0	h	h	h	I	I	h	...	...	...	...	...		
26	A-Cu.	Ci.	St-Cu:A-Cu: Ci-St.	1	3	2	2	6	1	h	h	j	j	h	h	...	...	...	...	...		
27	St-Cu.	—	—	4	2	0	0	0	0	I	I	I	I	I	h	...	...	...	...	...		
28	—	—	—	0	0	0	0	0	0	I	I	I	I	I	h	...	...	...	...	...		
29	St.	St : A-Cu.	St : A-Cu.	10	10	8	9	9	8	G	h	h	h	h	h	...	...	...	...	...		
Mean Cloud Am't				7.5	7.4	7.2	7.1	7.0	6.9													
	7 <sup>h</sup>	13 <sup>h</sup>	18 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	Remarks on the Weather of the Day.
	Cloud Forms.			Cloud Amount (All Forms).					Visibility.					Precipitation.								



Day.	Cloud Forms.			Cloud Amount (All Forms).							Visibility.						Precipitation.						Remarks on the Weather of the Day.
	7 <sup>h</sup>	13 <sup>h</sup>	18 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>		
1	Nb.	Nb.	St.	10	10	10	10	10	10	h	h	h	h	h	g	0 <sup>0</sup>	...	●	...	d <sub>0</sub>	d	c, oi ●, o ● a: o ●, oid <sub>0</sub> p: od n. [m <sub>0</sub> all day.	
2	St.	St-Cu: Ci.	St-Cu: Ci-St.	10	10	8	6	7	9	h	h	j	j	j	i	...	...	...	...	...	...	om <sub>0</sub> , c a: c, bc ⊕ p: bc, cm <sub>0</sub> , o ● <sup>0</sup> m <sub>0</sub> n.	
3	St: St-Cu.	St: Fr-St.	St-Cu: Ci.	10	9	9	4	7	8	h	h	h	h	h	h	...	...	...	...	...	...	o ● <sup>0</sup> , c a: c, b p: bc, c n: m <sub>0</sub> all day.	
4	St: St-Cu.	St-Cu: Ci-St.	St-Cu: Ci.	9	9	7	7	6	7	G	h	I	I	h	G	...	...	...	...	...	...	bcm <sub>0</sub> , cp ● <sup>0</sup> , bcz <sub>0</sub> a: bcz <sub>0</sub> ⊕ p: bcm <sub>0</sub> n.	
5	St.	Nb.	Nb.	10	10	10	10	10	9	F	h	I	h	F	h	0 <sup>0</sup>	d <sub>0</sub>	●	●	...	...	c, o ● <sup>0</sup> m <sub>0</sub> , o ● <sup>0</sup> m <sub>0</sub> a: o ● <sup>0</sup> m <sub>0</sub> p: om <sub>0</sub> n.	
6	St: Fr-St.	Nb: St-Cu.	Cu: St-Cu: A-Cu.	10	10	10	9	4	1	k	j	k	k	j	j	...	...	p <sup>0</sup>	...	...	...	o, cp ● <sup>0</sup> a: c, bc p: b, bc ⊔ n.	
7	St-Cu.	St Cu.	St.	9	9	9	10	10	10	k	k	j	I	h	h	...	...	...	d <sub>0</sub>	d <sub>0</sub>	...	c ⊔, c a: c, od <sub>0</sub> m <sub>0</sub> p: o, od <sub>0</sub> m <sub>0</sub> , c n.	
8	Fr-St: St-Cu.	Cu: St-Cu.	Cu: St-Cu.	7	7	7	8	8	2	k	k	l	l	j	j	...	...	...	...	...	...	bc, cp ● <sup>0</sup> Δ <sup>0</sup> * <sup>0</sup> a: cp Δ <sup>0</sup> , c p: c, b ⊔ n.	
9	St-Cu.	Cu: St-Cu.	Cu: St-Cu.	1	8	7	10	7	5	l	k	k	l	j	j	...	p <sup>0</sup>	...	...	...	...	b ⊔ n. [bcp * <sup>0</sup> n.]	
10	St.	Cu: Cu-Nb.	Cu: Cu-Nb: A-Cu.	10	3	3	4	2	4	I	k	k	j	k	j	...	...	...	...	...	...	⊗ b ⊔, cp * <sup>0</sup> , bc a: bc, cp * <sup>0</sup> Δ <sup>0</sup> p: ⊗ bcp * <sup>0</sup> a, p and n: p Δ <sup>0</sup> 12 <sup>h</sup> .	
11	Fr-Cu: St-Cu.	Cu-Nb: Ci-Cu.	Cu-Nb.	4	9	8	9	9	2	k	j	m	h	h	j	...	...	...	...	...	...	[bcp * <sup>0</sup> , b, o * <sup>0</sup> m <sub>0</sub> n.]	
12	St.	Nb.	St.	10	10	10	10	8	0	G	G	F	F	F	j	...	...	...	...	...	...	⊗ + all day, bcp * <sup>0</sup> a: cp * <sup>0</sup> 0 p: ⊗ o * <sup>0</sup> m <sub>0</sub> + a: o * <sup>0</sup> m <sub>0</sub> + p: c, b n.	
13	St.	Nb.	Nb.	10	8	10	10	10	10	I	I	I	I	I	j	...	...	...	...	...	...	⊗ o, c, oi * <sup>0</sup> m <sub>0</sub> a: oi * <sup>0</sup> m <sub>0</sub> p: oi * <sup>0</sup> m <sub>0</sub> , bc n.	
14	St.	St.	St.	10	10	10	10	10	10	j	I	I	I	h	h	...	...	...	...	...	...	⊗ o, om <sub>0</sub> a: om <sub>0</sub> p and n.	
15	A-St.	Fr-St: Ci.	St-Cu: Ci.	1	1	7	5	4	10	I	I	I	I	I	h	...	...	...	...	...	...	⊗ bm <sub>0</sub> , bcz <sub>0</sub> a: bcz <sub>0</sub> p: bcm <sub>0</sub> , om <sub>0</sub> n. [m <sub>0</sub> all day.]	
16	St.	St.	Nb.	10	10	10	10	10	10	h	h	h	h	G	G	...	...	...	d	●	...	⊗ o, oi ● <sup>0</sup> a: oid <sub>0</sub> p: od, o ● <sup>0</sup> n:	
17	Nb.	Nb: St-Cu.	St: A-St.	10	10	10	10	10	10	h	I	I	h	I	h	...	...	...	...	...	...	o ●, c a: o ●, c p: c, b n: m <sub>0</sub> all day.	
18	Nb.	Nb.	Nb: Fr-Nb.	10	10	9	9	9	10	h	I	I	j	I	h	...	d	p <sup>0</sup>	...	...	p <sup>0</sup>	cm <sub>0</sub> , o ● <sup>0</sup> m <sub>0</sub> , cp ● <sup>0</sup> Δ <sup>0</sup> a: cp ●, cm <sub>0</sub> p: cp ● <sup>0</sup> n.	
19	St: A-St.	St.	Nb.	9	10	10	10	10	10	j	j	I	h	I	h	...	p <sup>0</sup>	d <sub>0</sub>	● <sup>0</sup>	● <sup>0</sup>	●	cp ● <sup>0</sup> , oid <sub>0</sub> m <sub>0</sub> a: o ● <sup>0</sup> m <sub>0</sub> p and n.	
20	Nb.	Nb.	St-Cu: A-St.	10	10	10	10	10	10	h	h	I	I	I	i	...	● <sup>0</sup>	● <sup>0</sup>	...	...	...	o ● <sup>0</sup> m <sub>0</sub> a: om <sub>0</sub> cm <sub>0</sub> p: cm <sub>0</sub> , o ● <sup>0</sup> m <sub>0</sub> n.	
21	Nb: A-St.	Fr-St: A-St.	St: A-St.	10	10	9	6	9	3	I	I	j	I	j	j	...	● <sup>0</sup>	...	...	...	...	c ● <sup>0</sup> m <sub>0</sub> , c a: bcz <sub>0</sub> , c p: c, bc n.	
22	Cu: A-Cu.	St.	St.	3	5	10	10	10	10	I	j	I	I	h	B	...	...	...	...	...	...	b to om <sub>0</sub> a: om <sub>0</sub> , p ● <sup>0</sup> 16 <sup>h</sup> p: om <sub>0</sub> ofe, op ● <sup>0</sup> n.	
23	St.	St: Fr-St.	St.	10	8	10	10	10	10	G	G	I	I	I	i	...	...	...	p <sup>0</sup>	d <sub>0</sub>	d <sub>0</sub>	op ● <sup>0</sup> m <sub>0</sub> , cp ● <sup>0</sup> m <sub>0</sub> a: om <sub>0</sub> , oid <sub>0</sub> m <sub>0</sub> p: oid <sub>0</sub> m <sub>0</sub> n.	
24	Nb.	St.	St.	10	10	10	10	10	10	I	h	I	I	F	d	...	● <sup>0</sup>	● <sup>0</sup>	...	...	...	om <sub>0</sub> , o ● <sup>0</sup> m <sub>0</sub> a: o ● <sup>0</sup> m <sub>0</sub> , ome p: op ●, c a: cp ●, bc 0 p: bc 0, b n.	
25	Nb: St-Cu.	St-Cu: A-Cu.	Cu: St-Cu: A-Cu.	10	9	9	8	7	1	j	j	k	l	m	k	...	...	...	...	...	...		
26	St-Cu: Ci.	St-Cu.	Fr-St: St-Cu.	5	5	9	10	7	10	j	j	k	k	l	F	...	...	...	...	...	...	b, bc, c a: c, bc p: bc, om n.	
27	Nb.	Nb: Cu.	Cu: Ci.	10	10	5	4	7	4	G	h	l	l	k	k	...	...	...	...	...	...	om, o ● <sup>0</sup> m <sub>0</sub> , cp ●, bc a: bcy 0 p: bc n.	
28	St-Cu.	Cu-Nb: Cu.	Cu-Nb: St-Cu.	7	8	6	7	7	2	I	j	k	l	l	l	...	...	...	p <sup>0</sup>	...	...	bcm <sub>0</sub> , cp ● <sup>0</sup> , bcy a: bcp ● <sup>0</sup> Δ <sup>0</sup> , bcyjp p: bcp Δ <sup>0</sup> , b n.	
29	St.	Nb.	Fr-St: St-Cu.	8	10	10	10	9	9	I	I	h	I	k	j	...	● <sup>0</sup>	*	●	...	●	b, cm <sub>0</sub> , o ● <sup>0</sup> m <sub>0</sub> , o * <sup>0</sup> m <sub>0</sub> a: o * <sup>0</sup> m <sub>0</sub> , c ●, cp ● <sup>0</sup> Δ <sup>0</sup> p: cp ● <sup>0</sup> n.	
30	Nb.	St-Cu: A-St.	Nb: Cu: Ci.	10	10	9	8	9	8	I	I	j	k	k	j	...	*	●	...	p <sup>0</sup>	...	⊗ ci ●, o * <sup>0</sup> m <sub>0</sub> , op * <sup>0</sup> m <sub>0</sub> , c a: c p: cp ● q, bc n.	
31	St-Cu.	Nb: St-Cu.	Cu: St-Cu.	9	10	9	9	9	9	j	I	j	j	j	j	...	...	p <sup>0</sup>	p <sup>0</sup>	...	...	c, om <sub>0</sub> , cp ● a: cp ● <sup>0</sup> , c p: c n.	
Mean Cloud Am't				8.5	8.6	8.7	8.5	8.2	6.9														

**255. Eskdalemuir.**

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1	Cu : St-Cu.	St-Cu : A-St.	Cu : St-Cu.	9	8	10	7	8	9	k	k	k	k	...	...	...	...	...	c, cp $\bullet^0 a : c$ , bc $p : c$ n.
2	St-Cu : A-Cu.	Cu : Fr-Cu.	Cu : Fr-Cu : A-St.	10	1	8	6	9	10	j	k	j	k	h	...	...	...	...	c, b, bc $a : bc$ , c $p : c$ , c $m_0$ n.
3	A-St.	Fr-St : A-St.	Fr-Nb : Cu : A-Cu.	10	10	10	8	8	3	j	I	k	k	j	d_0	...	...	...	c $\bullet^0 m_0$ , c, cp $\bullet^0 \Delta a : bc$ , $\mathbb{R} \bullet^0 \Delta^2$ at
4	Fr-St.	Nb : Cu.	Cu : Ci.	3	8	9	6	4	2	j	j	k	k	j	k	...	...	...	$16^h p : cp \bullet^0 \Delta$ , bc n. [b $\square$ n.
5	St : Ci.	Cu-Nb : Ci.	Cu : Ci.	9	9	9	6	3	2	I	k	k	k	k	k	...	...	...	bc, cp $\bullet^0 \Delta a : cp \bullet^0 \Delta q$ , bcy $p : bc$ , bc $\square m_0$ , cp $\bullet^0 \Delta a : bc p : b$ , bc n. [bc n.
6	St.	Cu : Fr-Cu.	Fr-Cu : Ci.	10	9	6	5	2	2	C	j	l	l	m	k	...	...	...	bc, ofe, bc $a : bc$ , b $\emptyset p : b \oplus$ , b $\cup$ .
7	St : A-St.	Nb : St-Cu : A-St.	St-Cu : A-St.	10	10	10	9	10	9	I	j	j	j	I	i	...	...	...	bc, cm_0, cp $\bullet^0 a : cp \bullet^0$ , c $\oplus p : cz_0 y$ n.
8	Fr-St : A-St.	St : A-St.	Fr-St : Ci.	10	10	10	10	6	10	h	h	h	h	j	i	d	$\bullet^0$	$\bullet^0$	c, c $\bullet^0 m_0 a : c \bullet^0 m_0$ , bc $p : bc$ , cm_0 n.
9	Nb : A-St.	Nb : A-St.	St-Cu : A-St.	10	10	9	10	10	9	j	j	j	j	j	j	d	$\bullet^0$	$\bullet^0$	ci $\bullet^0 a : cp \bullet^0 p : ci \bullet^0$ n.
10	Cu : A-Cu : Ci.	Nb : St-Cu.	St : St-Cu.	8	10	10	10	10	3	j	j	j	j	j	j	...	$\bullet^2$	$\bullet^0$	c, o $\mathbb{T} \leq$ , cp $\bullet^0 a : cp \bullet^0$ , kq $14^h$ $47^m p : c$ , bc n. [bc, c n.
11	St.	Cu.	Nb : St-Cu.	10	10	8	7	8	9	j	j	j	j	k	j	d	d	$\bullet^0$	bc, od_0, op $\bullet^0$ , c $a : bc$ , cp $\bullet^0 p : cp \bullet^0$
12	St : A-Cu.	St.	St.	9	8	10	9	10	10	h	h	G	I	j	i	...	...	...	bc, cm_0, cp $\bullet^0 a : cp \bullet^0$ , c $\oplus p : cz_0 y$ n.
13	St : Ci.	St.	St.	10	10	10	10	10	10	I	j	I	I	j	i	...	...	...	cme, cm_0, om_0 $a : c$ , o $p : o$ , oid_0 m_0 n.
14	St : St-Cu.	St-Cu.	St-Cu.	10	9	9	8	8	9	j	j	k	k	k	k	...	...	...	cz_0, om_0 $a : om_0 p : oid_0 m_0$ , om_0 n.
15	St : A-Cu.	Cu.	Cu.	9	9	8	8	6	9	k	k	k	k	k	j	$\ast^0$	$p \ast^0$	$p \ast^0$	c, cy $a : cy$ , bc, c $p : c$ n. cp $\ast^0 a$ , p and n.
16	St-Cu : A-Cu.	Cu : Fr-Cu.	St-Cu.	7	7	5	5	9	9	k	k	k	l	l	k	...	...	...	cp $\ast^0$ , bcy, $a : bcy$ , $p : cy$ , c n.
17	St-Cu.	Nb : Cu.	Cu : St-Cu : Ci.	9	7	7	7	7	10	k	j	l	l	l	k	...	$p \ast^0$	...	$\boxtimes$ thin layer cp $\ast^0$ , bc $\oplus$ , bcyp $\ast^0 a : bcy p : bcy$ , c n.
18	Nb.	Nb : Cu.	Fr-Cu : Nb.	10	9	5	9	6	0	G	j	l	j	l	k	$\ast^0$	...	$p \Delta$	$\boxtimes$ i cm, c, o $\ast^0 m_0$ , bcy $p \ast^0 a : bcy$ , $p \Delta^0$ , $\ast^0 p : bc$ , b n.
19	Cu : Ci-St : Ci.	Cu.	Cu : A-Cu : Ci-St.	4	7	7	7	7	2	k	j	k	k	j	j	...	...	...	b, bcy $a : bcy p : bcy$ , b n.
20	Cu : Ci-St : Ci.	Ci : Fr-Cu.	Fr-Cu : St-Cu.	8	7	9	5	2	2	j	j	l	k	k	k	...	...	...	b-cy $a : cy-by p : by$ , b n.
21	St : A-Cu.	Nb : Cu.	Fr-Cu.	9	9	6	6	1	1	j	j	l	m	m	k	$p \bullet^0$	...	...	bc, cp $\bullet^0 \Delta$ , bc $a : bcy \emptyset p : by \emptyset$ , bn.
22	A-Cu.	Cu-Nb : Cu.	St-Cu : A-St.	2	3	8	7	10	4	j	j	k	k	j	j	...	...	...	b $\cup$ , bcp $\bullet^0$ , cy $a : bcy$ , cy $p : cy$ , bc n.
23	Nb.	Nb.	St.	10	10	10	10	10	10	G	G	G	G	F	j	$\bullet$	$\bullet$	$\bullet$	bc, o, o $\bullet^0 m_0 a : od_0 m_0 p : o \bullet^0$ , odm_0 n.
24	St.	A-St : Ci.	A-St : A-Cu : Ci-St.	10	10	5	7	9	9	I	j	k	k	j	i	...	...	...	oid_0 m_0, o, bcy



Day.	Cloud Forms.			Cloud Amount (All Forms.)							Visibility.						Precipitation.						Remarks on the Weather of the Day.
	7 <sup>h</sup>	13 <sup>h</sup>	18 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>		
1	St.	St: A-Cu.	Cu: A-Cu.	10	10	8	2	3	1	h	h	j	j	j	i	...	...	...	...	...	...	om <sub>0</sub> , c a: c, b p: bc <sub>0</sub> , bz <sub>0</sub> n.	
2	St.	A-Cu.	A-Cu.	10	10	6	6	4	9	I	I	j	j	j	h	...	...	...	...	...	...	bz <sub>0</sub> n, om <sub>0</sub> , bc a: bc p: bc, cm <sub>0</sub> n.	
3	Fr-St:St-Cu:A-St.	St.	St.	10	10	10	10	10	10	I	I	j	j	j	h	...	...	...	...	...	...	cm <sub>0</sub> , o <sup>0</sup> m <sub>0</sub> a: o, om <sub>0</sub> p: op <sup>0</sup> m <sub>0</sub> , op <sup>0</sup> m <sub>0</sub> n.	
4	St.	Fr-Cu.	A-Cu.	10	9	1	1	1	2	I	j	k	k	k	j	...	...	...	...	...	...	om <sub>0</sub> , c, by a: by p: by, b n.	
5	St: A-Cu.	A-Cu: Ci-St: Ci.	Ci: Ci-St.	2	2	4	3	3	2	j	j	j	j	j	h	...	...	...	...	...	...	b n, b, bcy a: bcy p: bcy, bz <sub>0</sub> n.	
6	A-Cu.	Fr-Cu.	Cu: Fr-Cu.	1	1	3	7	7	9	j	j	j	k	j	j	...	...	...	...	...	...	b n, by, bcy a: bcy p: bcy, c n.	
7	Cu: Ci.	St-Cu.	Fr-Cu: Ci-St.	8	10	7	7	4	7	k	l	k	m	l	l	...	...	...	...	...	...	c, bcy a: bcy p: bc n.	
8	St-Cu:A-St:St-Ci.	Cu: Ci-St.	Cu: Fr-Cu.	9	10	7	7	5	4	k	k	k	l	l	k	...	...	...	...	...	...	c, bcy, ⊕ 8 <sup>h</sup> a: bcy p: bc n.	
9	St-Cu: A-Cu: Ci.	Cu: Fr-Cu.	St-Cu.	5	3	7	8	7	6	l	l	k	l	l	j	...	...	...	...	...	...	bcy a: cy, bcy p: bcy, c, bc n.	
10	Ci.	St-Cu.	Cu: St-Cu.	1	2	8	10	10	10	k	l	j	k	k	k	...	...	...	...	...	...	bc, b n, by, cy a: cy p: c n.	
11	A-Cu: Ci.	St-Cu.	St-Cu.	6	8	10	10	10	10	l	k	k	k	k	j	...	...	...	...	...	...	bc n, c a: cy, p: c n.	
12	St-Cu: A-St.	St-Cu.	Fr-Cu: St-Cu.	10	10	10	10	6	9	j	k	j	j	k	k	...	...	...	...	...	...	c, cy, a: cy p: bcy, c n.	
13	Fr-St:St-Cu:A-St.	Fr-Cu:St-Cu:A-Cu.	Cu: St-Cu.	10	10	9	9	9	9	k	k	k	k	k	j	...	...	...	...	...	...	c, c <sup>0</sup> , c a: c, cy p: c, cp <sup>0</sup> , bc n.	
14	Cu: A-Cu.	Cu.	Cu: St-Cu: A-Cu.	2	7	7	6	8	7	k	k	k	k	k	k	...	...	...	...	...	...	bc, b n, bcy a: bcy, cy p: cy, bc n.	
15	St: St-Cu.	St-Cu: Ci.	Cu: St-Cu.	9	10	8	7	7	3	k	k	k	k	k	j	...	...	...	...	...	...	bc, c n, cp <sup>0</sup> , c a: c <sup>0</sup> , bcy p: bcy, p <sup>0</sup> , bc n.	
16	Nb.	Nb: St-Cu.	Cu.	9	8	9	6	8	6	j	j	j	j	l	k	p <sup>0</sup>	p <sup>0</sup>	p <sup>0</sup>	...	...	...	cp <sup>0</sup> , cp <sup>0</sup> a: bcp <sup>0</sup> p: c, bc n.	
17	St.	St-Cu.	Cu: A-St.	10	10	10	9	10	8	I	I	j	j	j	j	...	...	...	...	...	...	oid <sub>0</sub> m <sub>0</sub> , c a: cp <sup>0</sup> p and n.	
18	Cu: A-Cu.	Cu: St-Cu.	Nb: Fr-Cu: St-Cu.	2	9	9	7	9	10	k	j	k	k	k	j	...	...	...	...	...	...	c, b, cp <sup>0</sup> , cy a: bcy, cp <sup>0</sup> p: cp <sup>0</sup> , od <sub>0</sub> n.	
19	Cu: A-St.	Nb: Cu: A-St.	Cu-Nb: St-Cu.	10	10	10	10	8	9	j	j	j	j	k	j	...	...	...	...	...	...	o, c, cid <sub>0</sub> a: cp <sup>0</sup> p and n.	
20	Cu: Ci-St.	Cu: Cu-Nb: Ci-St.	Cu: A-Cu.	8	9	7	6	3	2	j	j	j	l	k	j	...	...	...	...	...	...	cp <sup>0</sup> , bcp <sup>0</sup> a: bcy p: bcy, b n.	
21	Cu: St-Cu.	Cu: Fr-Cu.	Fr-Cu.	7	7	4	5	4	3	k	k	l	m	m	l	...	...	...	...	...	...	b, bc, bcy a: bcy p: bcy p, bc n.	
22	Cu: St-Cu.	St-Cu.	St-Cu.	9	8	9	9	9	4	k	k	k	l	l	k	...	...	...	...	...	...	bc, c, cy a: cy p: cy, bc n.	
23	St-Cu: A-St.	St-Cu: A-St.	Cu: A-St.	9	8	10	10	9	8	k	k	k	k	k	k	...	...	...	...	...	...	bc, c a: c p and n.	
24	St-Cu.	Cu.	St-Cu.	6	2	7	7	7	5	k	k	k	k	j	j	...	...	...	...	...	...	c, cp <sup>0</sup> , b, bcy a: bcy p: bc n.	
25	—	Cu: Fr-Cu.	—	0	1	6	5	0	1	I	I	I	I	j	I	...	...	...	...	...	...	b n, m <sub>0</sub> , bc <sub>0</sub> y a: bc <sub>0</sub> y, by p: by, bz <sub>0</sub> n.	
26	Ci: St.	St-Cu: A-St.	Nb.	2	9	10	10	10	10	I	I	j	I	h	G	...	...	...	...	...	...	b n, z <sub>0</sub> , c a: cz <sub>0</sub> p <sup>0</sup> , o <sup>0</sup> m <sub>0</sub> p: o <sup>0</sup> m <sub>0</sub> , c a: c, oi <sup>0</sup> m <sub>0</sub> , g p: o <sup>0</sup> m <sub>0</sub> , om <sub>0</sub> n.	
27	Nb.	St-Cu.	Nb.	10	10	10	9	10	10	G	h	j	k	I	I	d <sub>0</sub>	...	...	...	...	...	o <sup>0</sup> m <sub>0</sub> , c a: c, oi <sup>0</sup> m <sub>0</sub> , g p: o <sup>0</sup> m <sub>0</sub> , om <sub>0</sub> n.	
28	St: A-St.	Cu: A-St.	Cu: A-Cu.	10	10	8	7	3	2	h	j	j	k	k	k	...	...	...	...	...	...	o <sup>0</sup> m <sub>0</sub> , ci <sup>0</sup> m <sub>0</sub> , c a: c, by p: by, b n.	
29	Fr-Cu: A-Cu.	Cu: St-Cu: A-St.	St-Cu: A-Cu.	7	9	9	9	9	9	I	I	I	I	h	h	...	...	...	...	...	...	b, cz <sub>0</sub> a: cz <sub>0</sub> p: cz <sub>0</sub> , bc n.	
30	Fr-Cu.	—	—	1	0	0	0	0	7	k	k	k	k	k	j	...	...	...	...	...	...	bc, b, by a: by, b p: b, o n.	
31	St.	Fr-St: St.	St: Fr-St.	10	9	8	7	10	9	I	j	j	j	h	j	...	...	...	...	...	...	om <sub>0</sub> e, c a: c, o, d <sub>0</sub> at 18 <sup>h</sup> p: om <sub>0</sub> , c, bc n.	
Mean Cloud Am't				6.9	7.5	7.5	7.1	6.5	6.5														

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1	Fr-St.	Fr-Cu.	—	1	1	1	0	0	0	k	k	k	k	m	k	...	...	...	...	...	bc, b, by a: by, by 0 p: by 0, b n.	
2	—	Ci-St.	Cu: Ci-St.	0	0	1	2	1	1	l	l	l	l	l	k	...	...	...	...	...	b, by a: by p: by, b n.	
3	—	Cu: Fr-Cu.	Cu: Ci.	0	0	1	1	2	0	j	j	j	k	k	j	...	...	...	...	...	b n, by a: by p: by, b n.	
4	St: Fr-St.	St-Cu.	Fr-Cu: Ci.	9	10	10	9	3	1	j	j	k	k	l	k	...	...	...	...	...	bc n, c a: c, bcy p: bcy, b n.	
5	A-Cu.	Fr-Cu: St-Cu.	Fr-Cu: A-Cu.	8	9	9	5	4	3	k	k	j	j	j	j	...	...	...	...	...	bc n, cy a: bcy p: bcy, b n.	
6	St-Cu: A-Cu.	St.	Cu-Nb: Cu: Ci.	9	10	10	9	8	10	I	I	h	h	j	h	...	...	...	...	...	[cp <sup>0</sup> , cm <sub>0</sub> n.	
7	St: A-St.	Cu: A-Cu.	Nb.	10	10	9	10	10	10	h	h	I	h	G	I	...	...	...	...	...	bc n, oz <sub>0</sub> y, o <sup>0</sup> z <sub>0</sub> a: cz <sub>0</sub> , c p:	
8	Nb: A-St.	Nb: A-St.	St: Fr-Nb.	10	10	10	10	10	10	j	I	j	I	j	j	...	...	...	...	...	cz <sub>0</sub> a: cz <sub>0</sub> , o <sup>0</sup> m <sub>0</sub> p: c <sup>0</sup> m <sub>0</sub> n.	
9	Nb: A-St.	St-Cu.	Cu: St-Cu: Ci.	10	10	10	9	9	10	I	I	j	j	j	I	...	...	...	...	...	c <sup>0</sup> m <sub>0</sub> a and p: c, o, oi <sup>0</sup> n.	
10	St.	Nb: St-Cu.	St-Cu: Ci.	10	10	9	9	9	3	I	j	j	k	l	l	...	...	...	...	...	c <sup>0</sup> m <sub>0</sub> a: cp <sup>0</sup> , c p: c, ci <sup>0</sup> m <sub>0</sub> n.	
																...	...	...	...	...	cp <sup>0</sup> q a and p: bc, c n.	
11	St: St-Cu: A-Cu.	Cu: Fr-Cu.	Cu: Ci.	9	8	7	5	2	5	k	k	k	m	m	l	...	...	...	...	...	[bc n.	
12	Cu: A-Cu.	Cu: Fr-Cu.	Fr-Cu: Ci-St.	7	7	7	9	10	9	m	l	k	l	l	k	...	...	...	...	...	c, cp <sup>0</sup> , bcy a: bcy q jp 0 p: by 0	
																...	...	...	...	...	cp <sup>0</sup> , bc 0 p <sup>0</sup> , bcy a: bcy, cp <sup>0</sup>	
																...	...	...	...	...	p: c ⊕, c n.	
13	Nb.	Nb.	Nb: A-St.	10	10	10	10	10	10	j	j	I	h	I	I	...	...	...	...	...	c <sup>0</sup> , o <sup>0</sup> m <sub>0</sub> a: o <sup>0</sup> m <sub>0</sub> p: o <sup>0</sup> m <sub>0</sub> n.	
14	Nb: Fr-Nb.	Cu: St-Cu.	Cu: A-Cu: Ci.	10	10	9	7	6	6	j	j	k	l	m	l	...	...	...	...	...	o <sup>0</sup> , c a: c, bcy 0 p: bc 0, cp <sup>0</sup> n.	
15	St: St-Cu.	Cu: A-St.	Cu: Ci.	10	10	10	9	5	9	j	k	j	k	l	k	...	...	...	...	...	c, cp <sup>0</sup> , c a: c, bcp <sup>0</sup> , ⊕ p: bcy,	
																...	...	...	...	...	cp <sup>0</sup> n.	
16	Cu: Ci-St: Ci.	Cu: Fr-Cu.	Cu: Ci-Cu: Ci.	7	6	7	7	6	7	k	l	k	k	l	k	...	...	...	...	...	cp <sup>0</sup> , bc, bcy a: bcy p: bcy, bc n.	
17	St: Cu: St-Cu.	Cu-Nb: Cu.	Cu-Nb: Nb.	9	10	7	7	6	4	k	j	k	k	k	j	...	p <sup>0</sup>	...	p <sup>0</sup>	...	bc, cp <sup>0</sup> a: bc, c T, p <sup>0</sup> ▲ p: bcp <sup>0</sup> ,	
																...	...	...	...	...	bc n.	
18	St-Cu.	Cu: Ci.	Cu: Ci.	8	10	8	8	7	7	k	k	k	k	k	k	...	...	...	...	...	bc, c, cy, ⊕ a:cy, bc, ⊕ p:bc, o <sup>0</sup> m <sub>0</sub> n.	
19	Nb.	St.	St: Fr-St.	10	10	10	10	5	8	I	h	I	h	I	j	...	...	d	...	...	o <sup>0</sup> m <sub>0</sub> a: o, op <sup>0</sup> , bcz <sub>0</sub> p: bcz <sub>0</sub> , c n.	
20	Cu: Fr-Cu.	Cu: St-Cu.	Cu: Ci.	4	4	8	7	3	2	j	k	j	k	k	l	...	...	...	...	...	bc, bcy, c a: c, bcy p: bcy, b n.	
																...	...	...	...	...	[odm <sub>0</sub> n.	
21	St-Cu: A-St.	St.	St.	9	10	10	10	10	10	j	k	G	G	C	h	...	...	d	...	d	bc n, c, o <sup>0</sup> m <sub>0</sub> a: odm <sub>0</sub> , of p: of,	
22	St: A-St.	Nb.	St: Cu.	10	10	10	9	8	10	j	I	j	j	I	I	...	...	p <sup>0</sup>	...	...	odm <sub>0</sub> , cp <sup>0</sup> a: cp <sup>0</sup> p: cm <sub>0</sub> , o <sup>0</sup>	
																...	...	...	...	...	m <sub>0</sub> n.	
23	Cu: St-Cu.	Cu: St-Cu.	Nb.	8	9	9	10	10	4	j	j	j	h	h	l	...	...	...	...	...	o <sup>0</sup> m <sub>0</sub> q, bc, c a: c, o <sup>0</sup> m <sub>0</sub> p:	
24	St-Cu.	Cu: Fr-Cu.	Cu: Ci.	8	7	5	5	6	7	j	j	k	k	k	j	...	...	...	...	...	bc, cp <sup>0</sup> , bc a: bcy p: bc, c n.	
25	Nb.	Fr-St: St-Cu.	St: A-St.	10	10	10	10	10	10	j	j	j	I	I	i	d <sub>0</sub>	...	d <sub>0</sub>	...	...	c, o <sup>0</sup> , od, c a: c <sup>0</sup> m <sub>0</sub> , c p: c, c <sup>0</sup> m <sub>0</sub> n.	
26	Fr-St: A-St.	Fr-St: St-Cu.	Cu: A-Cu: Ci-St.	10	10	10	10	8	10	I	j	k	k	k	k	...	...	...	...	p <sup>0</sup>	cm <sub>0</sub> , c <sup>0</sup> , c a: c p: c, cp <sup>0</sup> , c n.	
27	St-Cu.	St-Cu.	Cu: St-Cu: A-Cu.	10	9	9	9	8	3	k	k	k	k	k	k	...	...	...	...	...	c, cp <sup>0</sup> , c a: c p: c; bc n. [m <sub>0</sub> n.	
28	Fr-St: A-St.	Nb.	Nb.	10	10	10	10	10	10	k	h	I	h	h	h	...	...	...	...	...	c, cd <sub>0</sub> , o <sup>0</sup> m <sub>0</sub> a: o <sup>0</sup> m <sub>0</sub> , od <sub>0</sub> m <sub>0</sub> p: cd <sub>0</sub> .	
29	Fr-Cu: Ci.	St-Cu.	Nb: A-St.	7	10	10	10	10	8	k	k	k	j	I	I	...	...	...	d <sub>0</sub>	...	o <sup>0</sup> m <sub>0</sub> , bc, c a: c, od <sub>0</sub> , c <sup>0</sup> m <sub>0</sub> p:	
																...	...	...	...	...	ci <sup>0</sup> m <sub>0</sub> n.	
30	St: Fr-St.	Cu: Ci-St.	Cu-Nb: Cu.	10	10	4	8	6	7	k	k	j	j	j	j	...	...	...	p <sup>0</sup>	...	[bc n.	
																...	...	...	...	...	op <sup>0</sup> , cp <sup>0</sup> , bc a: bc, cp <sup>0</sup> , bc p:	
Mean Cloud Am't				8.1	8.3	8.0	7.8	6.7	6.5													
	7 <sup>h</sup>	13 <sup>h</sup>	18 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	Remarks on the Weather of the Day.
	Cloud Forms.			Cloud Amount (All Forms).					Visibility.					Precipitation.								



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Day.	Cloud Forms.			Cloud Amount (All Forms.)						Visibility.						Precipitation.						Remarks on the Weather of the Day.	
	7 <sup>h</sup>	13 <sup>h</sup>	18 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>		
1	St : Fr-St.	Fr-Nb : A-St.	Nb.	10	10	10	10	10	10	k	k	j	I	h	G	...	...	●	●	●	●	d	c, o, cp ● a : oi ● m <sub>0</sub> , o ● <sup>2</sup> m <sub>0</sub> p :
2	Cu : A-Cu.	Cu.	Nb : St-Cu.	9	8	8	10	9	8	j	j	j	k	j	j	...	...	...	...	...	...	...	o ● m <sub>0</sub> , odm <sub>0</sub> n.
3	Cu : Ci.	Cu : Fr-Cu.	Cu : St-Cu.	6	7	9	9	7	3	j	j	j	m	l	k	...	...	...	...	...	...	...	o ● m <sub>0</sub> , c a : c, cp ● <sup>0</sup> p : cp ● <sup>0</sup> , c n.
4	Cu : St-Cu : Ci.	Cu : Fr-Cu.	St-Cu : A-St.	6	9	7	9	10	10	l	l	k	l	j	h	...	...	...	...	...	...	...	c, bc, cp ● <sup>0</sup> a : cp ●, c 0, bcy p : bc, b n.
5	Nb.	Nb : St-Cu.	Cu : Ci.	10	9	9	4	6	5	I	I	j	k	k	k	● <sup>0</sup>	...	...	...	...	...	...	b, bc ●, c, bc a : bc, c ⊕, cp ● p :
6	Cu : Nb.	Cu : St-Cu.	St-Cu.	9	8	7	8	7	7	j	l	k	k	k	k	...	...	...	...	...	...	...	c, o ● <sup>0</sup> m <sub>0</sub> n.
7	Cu : Ci.	Cu : Ci-St.	Cu : Ci-St : Ci.	7	7	6	5	5	1	k	k	k	k	k	k	...	...	...	...	...	...	...	o ● m <sub>0</sub> , cp ● <sup>0</sup> a : cp ● <sup>0</sup> , bc p : bcp ●, bc n.
8	St.	St : Fr-St.	Cu : A-Cu.	10	10	10	10	9	7	h	G	F	h	k	k	...	...	...	...	...	...	...	bc, cp ● <sup>0</sup> a : cp ● <sup>0</sup> , bc p : bc n.
9	St-Cu.	Cu : Fr-Cu.	Nb : St-Cu.	9	6	7	7	9	9	j	j	j	k	k	k	...	...	...	...	...	...	...	b, bcy a : bcy p : bcy, b n.
10	Fr-St : Cu : A-Cu.	Nb : Fr-Nb.	Nb.	9	10	10	10	10	10	j	j	h	h	G	G	...	...	...	...	...	...	...	om <sub>0</sub> , odm <sub>0</sub> a : odm <sub>0</sub> , c p : c, bc n.
11	Nb.	St.	St.	10	10	10	10	10	10	G	D	C	C	D	F	d <sub>0</sub>	...	d <sub>0</sub>	...	...	...	...	c, cp ● <sup>0</sup> , bcy a : bcy, cp ● <sup>0</sup> , p : cp ● <sup>0</sup> c n.
12	St.	Nb.	Nb.	10	10	10	10	10	10	C	F	h	h	h	C	...	● <sup>0</sup>	d <sub>0</sub>	d <sub>0</sub>	d <sub>0</sub>	...	...	c, cp ● <sup>0</sup> , o ● m <sub>0</sub> a : oi ● m <sub>0</sub> p : o ● m <sub>0</sub> n.
13	St : A-St.	Cu : St-Cu : Ci-St.	St : Fr-St.	10	10	10	10	10	10	j	j	j	j	I	G	...	...	...	...	...	...	...	[oid <sub>0</sub> f, om n.
14	Nb.	St-Cu : A-Cu.	Cu : A-Cu.	10	10	9	7	3	10	h	h	j	j	j	h	d <sub>0</sub>	...	...	...	...	...	...	o ● m <sub>0</sub> , od <sub>0</sub> m <sub>0</sub> , od <sub>0</sub> f a : oid <sub>0</sub> f, of p :
15	St.	Cu.	Nb : A-St.	10	6	7	9	10	10	F	j	j	j	I	h	...	...	...	...	...	...	...	oid <sub>0</sub> f, ofe, od <sub>0</sub> m <sub>0</sub> a : od <sub>0</sub> m <sub>0</sub> p : od <sub>0</sub> m <sub>0</sub> , ofe n.
16	Fr-Cu : Ci-St.	Fr-Cu.	St-Cu.	2	2	2	3	5	2	l	l	l	l	l	l	...	...	...	...	...	...	...	ome, c, a : c, om <sub>0</sub> p : om <sub>0</sub> , od <sub>0</sub> m <sub>0</sub> n.
17	Cu : Ci-St.	St-Cu : Ci-St.	St-Cu : Ci-St.	4	4	8	4	4	10	k	k	k	k	k	k	...	...	...	...	...	...	...	oid <sub>0</sub> m <sub>0</sub> , c a : c, b, bc p : bc, om <sub>0</sub> n.
18	St.	St-Cu : A-Cu.	St-Cu : A-Cu.	10	9	9	9	9	10	I	j	j	k	k	k	d <sub>0</sub>	d <sub>0</sub>	...	...	...	...	...	om <sub>0</sub> , ofe, bc a : bc, cid <sub>0</sub> m <sub>0</sub> p : cid <sub>0</sub> m <sub>0</sub> , cm <sub>0</sub> n.
19	St-Cu.	St-Cu : Ci-St.	St-Cu : Ci-St.	9	8	10	9	9	10	k	k	k	j	k	k	...	...	...	...	...	...	...	b, bc, c a : c, bcy p : bc, c n.
20	St-Cu : Ci-St.	Cu : Ci-St.	Fr-St:St-Cu:Ci-St.	10	8	7	6	9	9	I	j	j	j	j	j	...	...	...	...	...	...	...	c, oid <sub>0</sub> m <sub>0</sub> , c a : c p and n.
21	Cu : Ci-St.	Cu : Ci-Cu.	Cu : Ci.	4	4	5	6	6	4	j	k	k	j	l	k	...	...	...	...	...	...	...	c a, p and n.
22	St.	St-Cu.	St-Cu: A-St	10	10	10	7	9	6	F	h	j	k	j	I	d <sub>0</sub>	d <sub>0</sub>	...	...	...	...	...	bc a, p and n.
23	St : St-Cu.	Nb : A-St	St.	10	10	10	10	10	10	j	j	j	j	G	G	...	...	...	...	...	...	...	bc, od <sub>0</sub> m <sub>0</sub> , c a : bc, c p : c, bcm <sub>0</sub> n.
24	St : St-Cu : A-St.	St.	Fr-St : Cu : A-Cu.	10	10	10	10	8	9	j	h	h	h	h	j	...	d <sub>0</sub>	d <sub>0</sub>	...	d <sub>0</sub>	...	...	bcm <sub>0</sub> , cpd <sub>0</sub> a : c, od <sub>0</sub> m <sub>0</sub> p : od <sub>0</sub> m <sub>0</sub> , ofe, om <sub>0</sub> n.
25	Cu : A-Cu.	Cu : Fr-Cu.	St-Cu.	5	8	7	9	9	9	k	k	k	k	k	j	...	...	...	...	...	...	...	om <sub>0</sub> , c, oid <sub>0</sub> m <sub>0</sub> a : cpd <sub>0</sub> m <sub>0</sub> p : c n.
26	St : A-Cu.	St-Cu.	Nb : A-St.	9	9	9	10	10	10	j	j	j	k	j	h	p <sub>0</sub> <sup>0</sup>	...	...	...	...	...	...	c, bc a : bc, c p : cp ● <sup>0</sup> , c n.
27	Nb.	St-Cu.	St-Cu.	10	9	9	10	10	10	h	h	k	k	k	h	...	...	...	...	...	...	...	c, cp ● <sup>0</sup> , c a : c, cp ● <sup>0</sup> p : c. o ● m <sub>0</sub> n.
28	St : St-Cu : A-St.	Cu-Nb : Cu.	Cu-Nb : Cu : Ci.	10	8	7	7	6	10	j	j	k	m	k	j	...	...	...	...	...	...	...	o ● m <sub>0</sub> , c a : c p : c ● <sup>0</sup> m <sub>0</sub> n.
29	Cu : St-Cu.	Cu-Nb : Cu : Ci.	Cu : Ci-St : Ci.	9	9	6	8	8	8	k	k	k	k	k	k	...	...	...	...	...	...	...	ci ● <sup>0</sup> , bcy a : cp ● <sup>0</sup> , bcy 0 p : bcp ●, c n
30	Cu : St-Cu.	Cu : St-Cu.	Nb : St-Cu.	7	10	9	10	7	7	k	k	k	k	k	k	...	...	...	...	...	...	...	c, cp ● <sup>0</sup> , bcy a : cp ● <sup>0</sup> , cy p : c ⊕, bc n.
31	Cu : Fr-Cu.	Cu : Ci.	St-Cu : Ci-St.	1	3	7	6	9	7	l	l	l	l	l	l	...	...	...	...	...	...	...	bc, c a : cp ● <sup>0</sup> p : cp ●, bc n.
Mean Cloud m't				8.2	8.1	8.2	8.1	8.2	8.0														b, bcy a : bcy, c p : c, bc n.

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1	Cu: St-Cu.	Cu: Fr-Cu.	Cu: Fr-Cu.	8	6	7	5	5	9	j	j	j	j	j	j	...	...	...	...	...	...	c $\bar{D}$ , bc a: bc p and n.
2	St.	Cu: Ci-St.	Cu: Ci-Cu: Ci.	8	10	9	7	5	8	j	j	j	j	j	j	...	...	...	...	...	...	bc, om <sub>0</sub> , c a: c, bcy p: bc, c n.
3	St-Cu: Ci-Cu.	A-Cu.	A-Cu.	9	10	9	9	9	9	j	j	j	j	j	h	...	...	...	...	...	...	bc, c $\bar{D}$ , o a: c p: c, cm <sub>0</sub> n.
4	St.	Cu: Ci-St.	Nb: St-Cu.	10	10	6	4	9	9	j	h	j	j	j	j	...	...	...	...	...	...	o $\bar{D}$ , bcy $\oplus$ a: bcy, c $\bar{K}$ $\bullet$ p: c n.
5	—	Cu.	St-Cu: Ci-Cu.	0	0	1	5	3	1	h	h	h	h	h	h	...	...	...	...	...	...	b $\bar{D}$ m <sub>0</sub> , byz <sub>0</sub> a: bcz <sub>0</sub> p: b $\bar{D}$ m <sub>0</sub> n.
6	A-Cu: Ci-St: Ci.	St-Cu: A-St.	St-Cu: A-St.	9	9	10	10	10	10	h	h	j	j	j	h	...	...	...	...	...	...	[m <sub>0</sub> n.
7	Nb.	Nb.	St-Cu: Ci.	10	10	10	10	8	1	I	I	h	j	k	k	...	...	...	...	...	...	c $\bar{D}$ m <sub>0</sub> , c a: cy, ci $\bullet$ p: ci $\bullet$ , o $\bullet$
8	St: Fr-St.	Nb: Cu.	Fr-St: St-Cu.	8	5	6	10	10	10	j	j	j	j	k	j	...	...	...	...	...	...	o $\bullet$ , $\bullet^2$ $\bar{m}$ m <sub>0</sub> a: o $\bullet$ m <sub>0</sub> , cp $\bullet$ p
9	St: Fr-St.	Nb: Cu.	Nb: St-Cu.	9	9	5	8	8	9	k	j	j	j	j	k	...	...	...	...	...	...	c, bcp $\bullet$ a: cp $\bullet$ p and n. [c, b n.
10	Fr-St: St-Cuf: Ci.	Cu: A-Cu: Ci-St.	Cu: A-Cu: Ci-Cu.	3	2	7	9	7	10	j	k	k	k	k	j	...	...	...	...	...	...	cp $\bullet$ a, p and n.
																...	...	...	...	...	...	c, b, bc a: c, bc p: bc, c o $\bullet$ n.
11	St.	Cu: St-Cu.	St.	10	10	10	10	10	10	h	G	k	I	I	h	d	d <sup>0</sup>	...	...	...	...	o, odm <sub>0</sub> , c a: oi $\bullet$ m <sub>0</sub> p: o $\bullet$ m <sub>0</sub> n.
12	St: Fr-St.	Cu.	St-Cuf: Cu.	10	8	8	9	9	10	j	k	k	k	k	j	...	...	...	...	...	...	o $\bullet$ , $\bar{K}$ $\bullet$ 3-4 <sup>h</sup> , c a: bcp $\bullet$ , c p:
																...	...	...	...	...	...	cp $\bullet$ c, n.
13	Nb.	Nb: Cu: Ci.	Nb.	10	8	9	10	10	10	I	j	j	I	h	h	$\bullet^2$	...	...	p $\bullet^2$	...	...	o $\bullet$ m <sub>0</sub> , cp $\bullet^2$ a: op $\bullet^2$ m <sub>0</sub> p: oi $\bullet^2$ m <sub>0</sub> n.
14	St: St-Cu.	Nb: Cu.	Nb: Cu: Ci.	9	10	9	9	8	8	I	j	j	j	k	k	...	...	...	...	...	...	ci $\bullet$ a and p: c n.
15	St: St-Cu.	Cu: Fr-Cu.	Cu: St-Cu.	9	9	7	5	9	7	j	j	k	k	j	j	...	...	...	...	...	...	cp $\bullet$ a: bc and c p and n.
																...	...	...	...	...	...	
16	Cu: St-Cu.	Nb: Cu: St-Cu.	St-Cuf: Ci.	9	8	9	8	6	3	k	k	k	k	k	k	...	...	...	...	...	...	bc, c, cp $\bullet$ a: cp $\bullet$ , bc p: bc n.
17	Cu: St-Cu.	Cu: St-Cu: Ci.	St-Cu.	5	4	8	9	9	4	k	k	k	k	k	k	...	...	...	...	...	...	bc a: c p: c, bc n.
18	St.	Cu: Ci-St: Ci.	St-Cu: Ci.	10	10	9	6	3	1	G	j	k	k	l	l	...	...	...	...	...	...	b, om <sub>0</sub> , c a: c, bc, by p: by, b $\bar{D}$ n.
19	St-Cu.	Cu.	St: A-St.	8	4	7	10	10	10	j	j	j	k	I	h	...	...	...	...	...	...	b $\bar{D}$ , c, bc a: bc, cm <sub>0</sub> p: cp $\bullet$ m <sub>0</sub> n.
20	Nb.	St: Fr-Nb.	St: Nb.	10	10	10	10	10	10	h	h	I	I	I	I	$\bullet^6$	$\bullet^0$	$\bullet^0$	$\bullet^0$	...	...	oi $\bullet$ m <sub>0</sub> a and p: oi $\bullet^6$ m <sub>0</sub> n.
																...	...	...	...	...	...	
21	Fr-St: St-Cu.	Nb: Cu: Fr-Cu.	Nb: St-Cu.	9	4	10	9	9	6	k	k	k	k	k	k	...	...	p $\bullet^0$	p $\bullet^0$	p $\bullet^0$	...	oi $\bullet$ m <sub>0</sub> , bc a: cp $\bullet^0$ p: cp $\bullet^0$ , bc, b n.
22	Cu: Ci.	Cu: St-Cu.	Cu: A-Cu: Ci.	2	7	10	9	8	9	j	j	k	k	k	j	...	...	...	...	...	...	b $\bar{D}$ , bc, c a: c p and n.
23	St.	Nb: A-St.	St.	10	10	10	10	10	9	I	I	I	h	G	j	...	...	$\bullet^0$	d <sub>0</sub>	$\bullet$	...	om <sub>0</sub> , o $\bullet^0$ m <sub>0</sub> a: o, od <sub>0</sub> m <sub>0</sub> , o $\bullet$ m <sub>0</sub> p: c,
																...	...	...	...	...	...	o $\bullet$ m <sub>0</sub> n.
24	St.	Cu: A-Cu.	Cu: St-Cu: A-St.	10	10	9	10	9	8	I	j	k	k	k	k	...	...	...	...	...	...	o $\bullet$ m <sub>0</sub> , c a: c p: c, cp $\bullet$ n.
25	St.	Cu: Ci.	St-Cuf: Ci.	9	9	9	8	8	5	I	j	k	k	j	j	...	...	$\bullet^0$	...	...	...	cp $\bullet^2$ a: cp $\bullet^0$ p: cp $\bullet^0$ , bc n.
																...	...	...	...	...	...	
26	St.	Fr-Cu: Ci.	A-St.	9	8	6	5	10	10	I	j	k	k	k	h	...	...	...	...	...	...	c, bcp $\bullet^0$ a: bc, c, $\oplus$ p: c, o $\bullet$ m <sub>0</sub> n.
27	Nb: St-Cu.	Nb: Cu: Ci.	Nb: St-Cu: Ci.	9	9	8	8	8	9	j	k	k	k	k	j	...	...	...	...	...	...	o $\bullet^2$ , cp $\bullet$ a: c, cp $\bullet^0$ p: c n.
28	Nb: St-Cu.	Nb: Cu.	Cu: St-Cu: Ci.	9	10	9	8	8	8	j	k	k	l	k	j	p $\bullet^0$	...	p $\bullet^0$	...	p $\bullet^0$	...	cp $\bullet^0$ a: cp $\bullet$ p: cp $\bullet^0$ , c n.
29	St.	Cu: St-Cu: A-St.	St: A-St.	10	7	9	9	10	8	D	k	k	l	k	k	...	...	...	$\bullet$	$\bullet$	...	of, bc $\oplus$ , c a: cp $\bullet^0$ T, c T $\bar{\leftarrow}$ $\bullet$ p:
																...	...	...	...	...	...	c $\bullet$ , c n.
30	St: Cu: St-Cu.	Cu: St-Cu.	St: St-Cu: A-St.	9	10	8	8	9	8	k	k	k	k	k	k	...	...	...	...	...	...	cp $\bullet^0$ a: c, c $\bullet$ p: cp $\bullet^0$ , c n.
31	St-Cu.	Cu: St-Cu.	Cu: A-Cu.	10	9	10	10	8	9	j	j	j	I	j	h	...	...	...	...	...	...	c, a: cp $\bullet^0$ , bc p: c, cm <sub>0</sub> n.
Mean				8.4	7.9	8.2	8.3	8.2	7.7													
Cloud																						
m'nt																						
	7 <sup>h</sup>	13 <sup>h</sup>	18 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	
	Cloud Forms.			Cloud Amount (All Forms).						Visibility.						Precipitation.						Remarks on the Weather of the Day.



Day.	Cloud Forms.			Cloud Amount (All Forms).						Visibility.						Precipitation.						Remarks on the Weather of the Day.
	7 <sup>h</sup>	13 <sup>h</sup>	18 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	
1	Cu : Ci.	Cu : Ci.	Cu : A-Cu : Ci.	3	6	8	4	7	2	j	I	k	k	k	j	...	...	...	...	...	...	bc $\Delta$ , bc $\oplus$ a : c, bcy p : bc, b $\Delta$ n.
2	St.	Cu : Ci.	St-Cu : Ci-St.	10	9	5	5	9	9	C	G	k	k	k	j	...	...	...	...	...	...	b $\Delta$ , of <sub>2</sub> e, bc a : bc, c $\oplus$ p : c n.
3	St : Fr-St.	St.	St.	10	10	10	10	10	10	I	I	h	h	D	d	...	...	...	...	...	...	c, odm <sub>0</sub> a : odm <sub>0</sub> , o $\oplus$ m <sub>0</sub> p : od <sub>0</sub> f n.
4	St.	St.	St.	10	10	10	10	10	10	h	h	G	h	h	g	d	d <sub>0</sub>	d	d	d	d	odm <sub>0</sub> a and p : oidm <sub>0</sub> , om <sub>0</sub> n.
5	St.	St-Cu.	St-Cu : A-St.	10	10	7	10	10	10	G	h	j	j	j	h	...	...	...	...	...	...	odm <sub>0</sub> , om <sub>0</sub> , bc a : bc, cp $\bullet$ p : c, o $\oplus$ m <sub>0</sub> n.
6	Cu : St-Cu.	Cu : St-Cu.	St-Cu.	4	5	8	9	10	8	l	l	m	l	l	h	...	...	...	...	...	...	bc, cy $\Delta$ a : cy $\Delta$ , cpd <sub>0</sub> p : c, cm <sub>0</sub> n.
7	Nb : A-Cu.	Cu : Fr-Cu.	St-Cu : Ci.	9	10	10	9	9	10	j	j	k	k	k	j	...	...	...	...	...	...	c $\bullet$ , c a : c p : bc, o $\bullet$ n.
8	St : St-Cu.	Fr-Cu : A-Cu : Ci.	St.	9	8	9	9	10	10	j	k	l	l	k	h	d <sub>0</sub>	...	...	...	...	...	o $\bullet$ m <sub>0</sub> , c a : c p : og, oi $\bullet$ m <sub>0</sub> n.
9	St : St-Cu.	Cu : Fr-Cu.	Cu : Fr-Cu.	9	10	9	9	6	8	j	j	k	k	k	k	...	...	...	...	...	...	o $\bullet$ m <sub>0</sub> , cp $\bullet$ , c a : c $\oplus$ , bc p : bc, c, o $\bullet$ n.
10	Cu : Ci-St : Ci.	Cu : Fr-Cu.	Nb : A-St.	7	7	7	9	10	8	k	k	k	k	G	j	...	...	...	...	...	...	o $\bullet$ bc, bcp $\bullet$ a : bc, cy, c $\bullet$ m <sub>0</sub> p :
11	Cu : Ci.	Fr-Cu : St-Cu.	Cu : St-Cu.	3	7	8	9	4	0	k	k	k	m	m	k	...	...	...	...	...	...	c, bc, c a : c $\Delta$ , bc $\Delta$ p : bc $\Delta$ , b $\Delta$ n.
12	St : St-Cu.	Cu : Ci.	Cu : Ci-St : Ci.	10	5	5	3	8	1	k	j	j	k	j	h	...	...	...	...	...	...	b $\Delta$ , c $\Delta$ , b, bc a : bc, c p : c, bm <sub>0</sub> n.
13	—	Cu : Fr-Cu.	Ci-St.	0	1	5	7	1	0	C	j	j	I	I	I	...	...	...	...	...	...	bm $\Delta$ , bf <sub>2</sub> e, b, bc a : bc p : bz <sub>0</sub> $\Delta$ n.
14	Ci.	Cu.	A-Cu : Ci.	1	1	8	6	7	10	I	j	j	j	j	i	...	...	...	...	...	...	bm <sub>0</sub> $\Delta$ , bc, c a : bc, $\oplus$ p : bc, op $\bullet$ m <sub>0</sub> n.
15	St-Cu : Ci.	Cu : St-Cu : Ci.	Cu : A-Cu : Ci.	3	10	7	5	5	0	k	k	j	k	k	j	...	...	...	...	...	...	o, bc $\Delta$ , c a : bc p : bc, b $\Delta$ n.
16	St : St-Cu.	St-Cu : A-St.	St : St-Cu.	9	10	10	10	8	5	I	I	k	k	k	k	...	...	...	...	...	...	b $\Delta$ , o $\Delta$ m <sub>0</sub> , c a : bc, c p : bc, c n.
17	Nb.	St.	St.	10	10	10	10	10	10	I	I	I	G	h	h	...	...	...	...	...	...	c, o $\bullet$ m <sub>0</sub> a : oi $\bullet$ m <sub>0</sub> p : oi $\bullet$ m <sub>0</sub> n.
18	Fr-Cu.	Cu : Fr-Cu.	Cu : Fr-Cu : Ci.	1	8	4	4	3	2	k	k	l	l	k	k	...	...	...	...	...	...	oi $\bullet$ , b, c, bcy a : bcy $\Delta$ p : cp $\bullet$ , b n.
19	Fr-Cu.	Nb : Cu.	Cu : Fr-Cu.	1	3	9	9	3	1	l	l	l	l	l	k	...	...	...	...	...	...	bc, cp $\bullet$ q a : cp $\bullet$ $\Delta$ p : bc, b $\Delta$ n.
20	St : St-Cu.	Cu.	Cu : Ci.	2	8	7	6	4	0	l	l	l	l	l	k	...	...	...	...	...	...	b $\Delta$ , cp $\bullet$ , bc a : bcp $\bullet$ $\Delta$ q, bc p : bc, b, b $\Delta$ n.
21	St-Cu.	Fr-Cu : St-Cu.	St-Cu : Ci.	9	9	8	7	4	1	l	l	k	l	k	k	...	...	...	...	...	...	b $\Delta$ , c, a : cy, bc p : bc, b n.
22	St-Cu : Ci.	St-Cu.	St-Cu.	2	6	8	9	8	9	l	k	k	l	k	k	...	...	...	...	...	...	b $\Delta$ , bc, cy a : cy p : c n.
23	Ci.	Fr-Cu : A-St.	A-St.	4	9	10	10	10	9	l	l	k	k	j	j	...	...	...	...	...	...	bc $\Delta$ , c $\oplus$ , cy a : ci $\bullet$ p : c n.
24	St-Cu : A-Cu.	Nb : Cu : St-Cu.	St-Cu.	9	9	6	2	3	5	j	l	k	m	l	k	...	...	...	...	...	...	c, cp $\bullet$ a : bc, b $\Delta$ , bc p : bc, cp $\bullet$ n.
25	St : Cu.	St : St-Cu.	St-Cu.	5	9	9	9	5	8	j	k	j	k	k	k	...	...	...	...	...	...	cp $\bullet$ , bc, cp $\bullet$ a : c, bc p : bc, c n.
26	St-Cu.	St-Cu.	St-Cu.	9	9	10	10	4	9	l	l	l	l	l	k	...	...	...	...	...	...	c a : c, bc $\Delta$ p : bc, c n.
27	St-Cu : A-Cu.	St-Cu.	Cu : St-Cu : Ci.	5	7	9	9	10	10	j	j	j	I	h	G	...	...	...	...	...	...	bc $\Delta$ , c a : c, cz <sub>0</sub> p : cz <sub>0</sub> , om <sub>0</sub> n.
28	Nb.	Cu : A-Cu.	Cu : Ci-St : Ci.	10	10	7	5	4	2	l	h	k	k	k	k	...	...	...	...	...	...	om <sub>0</sub> , o $\bullet$ m <sub>0</sub> , bc a : bc p : bc, b $\Delta$ n.
29	Cu : Ci.	Cu : Fr-Cu.	A-Cu.	2	2	5	3	1	2	k	k	l	l	h	h	...	...	...	...	...	...	b $\Delta$ , bcy a : bcy p : bz <sub>0</sub> , bm <sub>0</sub> n.
30	Cu : Ci-Cu.	Cu.	Cu : A-Cu.	2	1	3	2	2	0	k	k	k	k	k	k	...	...	...	...	...	...	b $\Delta$ , bcy a : bcy, by p : b, b $\Delta$ n.
Mean Cloud Am't				5.9	7.3	7.7	7.3	6.5	5.6													

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1	Ci.	St-Cu.	St : Ci.	2	2	8	10	9	10	l	k	l	l	k	i	...	...	...	...	d <sub>0</sub>	d <sub>0</sub>	b $\Delta$ , bc, cy a : cy, cid <sub>0</sub> p : c, oid <sub>0</sub> m <sub>0</sub> n.
2	Fr-St : St-Cu.	Fr-Cu.	St-Cu.	6	5	3	4	3	1	k	k	l	l	l	k	...	...	...	...	...	...	c, bc $\Delta$ , bcy a : bcy, bc p : bc, b n.
3	St-Cu.	Fr-Cu : St-Cu.	St-Cu.	9	10	10	9	10	9	I	I	I	I	h	h	...	...	...	...	...	...	b, cm <sub>0</sub> $\Delta$ , cm <sub>0</sub> a : cm <sub>0</sub> p and n.
4	Fr-St : St-Cu.	St-Cu.	Ci-St.	9	9	6	3	2	2	j	k	j	j	j	i	...	...	...	...	...	...	c $\Delta$ , c, bcy a : bcy p : b, b $\Delta$ m <sub>0</sub> n.
5	St-Cu : A-St.	Nb : A-St.	St.	10	10	10	10	10	10	j	I	I	G	F	f	...	...	...	...	...	...	c $\Delta$ , cdm <sub>0</sub> a : o $\bullet$ m <sub>0</sub> p : oid <sub>0</sub> m <sub>0</sub> , oi $\bullet$ m <sub>0</sub> n.
6	Fr-St : A-Cu : Ci.	Cu : St-Cu.	Cu : St-Cu.	7	7	9	3	3	3	I	I	j	k	j	j	...	...	...	...	...	...	oi $\bullet$ m, bcm <sub>0</sub> , c a : c, bc p : bc $\Delta$ n.
7	St.	St.	St.	10	10	10	10	10	10	h	I	h	G	F	f	d <sub>0</sub>	...	...	...	...	...	oid <sub>0</sub> m <sub>0</sub> , o $\bullet$ , od <sub>0</sub> m <sub>0</sub> a : od <sub>0</sub> m <sub>0</sub> p : o $\bullet$ m <sub>0</sub> n.
8	Nb.	St : St-Cu.	Nb : A-St.	10	10	10	8	10	8	h	I	j	j	i	j	d <sub>0</sub>	...	...	...	...	...	o $\bullet$ m <sub>0</sub> , oi $\bullet$ m <sub>0</sub> , c a : cp $\bullet$ , c p : cp $\bullet$ m <sub>0</sub> , c n.
9	St : St-Cu.	St : St-Cu.	Nb : A-St.	9	9	10	10	10	10	h	j	I	I	j	j	...	...	...	...	...	...	[c $\bullet$ , oid <sub>0</sub> n.
10	St : A-St.	Cu : St-Cu : Ci.	St-Cu.	10	9	9	10	9	2	k	k	l	j	j	k	...	...	...	...	...	...	o $\bullet$ m <sub>0</sub> , c, cd <sub>0</sub> m <sub>0</sub> a : cidm <sub>0</sub> , c $\bullet$ p : op $\bullet$ early, c, bc a : c p : c, b n.
11	Nb.	Nb.	Nb : A-St.	10	10	10	10	10	10	j	j	j	k	j	i	...	...	...	...	...	...	b, o $\bullet$ a : o $\bullet$ , ci $\bullet$ p : c $\bullet$ , od <sub>0</sub> m <sub>0</sub> n.
12	Fr-Cu : St-Cu.	Cu : St-Cu.	Cu.	4	1	6	5	1	0	k	l	m	m	k	k	...	...	...	...	...	...	c, b, bc a : bc, b, $\Delta$ p : b, b $\Delta$ n.
13	Fr-Cu.	Cu : Fr-Cu.	St-Cu.	2	0	6	9	9	1	j	j	l	l	k	k	...	...	...	...	...	...	b $\Delta$ , b, bcy a : bcy, cy p : c, b $\Delta$ n.
14	St-Cu : Ci-St.	St-Cu.	St.	7	6	8	10	10	10	k	k	j	j	h	h	...	...	...	...	...	...	bc $\Delta$ , c a : cz <sub>0</sub> p : oz <sub>0</sub> , o $\bullet$ m <sub>0</sub> n.
15	St.	Cu.	St-Cu.	10	4	7	8	1	0	I	I	I	j	I	h	...	...	...	...	...	...	om <sub>0</sub> , bcz <sub>0</sub> a : c, bcz <sub>0</sub> p : bm <sub>0</sub> $\Delta$ , om n.
16	Nb.	Nb. •	St.	10	10	10	9	10	10	G	h	G	I	G	F	...	...	...	...	...	...	om, o $\bullet$ m <sub>0</sub> , ofe, odm <sub>0</sub> a : cid <sub>0</sub> m <sub>0</sub> p : oid <sub>0</sub> m, o $\bullet$ m <sub>0</sub> n.
17	St : Ci.	St-Cu : Ci.	St : Fr-St.	8	10	8	9	8	8	j	I	j	j	j	j	...	...	...	...	...	...	c, om <sub>0</sub> , c a : cp $\bullet$ , c p : cp $\bullet$ , c n.
18	Nb.	Nb.	Nb : Cu-Nb.	10	10	10	10	8	7	I	I	I	h	j	j	...	...	...	...	...	...	c, oi $\bullet$ m <sub>0</sub> a : o $\bullet$ m <sub>0</sub> , c $\bullet$ k p : c, bc, $\Delta$ n.
19	St : Ci.	Cu : Fr-Cu.	St : A-St.	3	7	5	9	10	10	k	k	k	k	k	I	...	...	...	...	...	...	bc, p $\bullet$ after 10 <sup>h</sup> a : bcp $\bullet$ , c p : o $\bullet$ m <sub>0</sub> , cp $\bullet$ a : cp $\bullet$ , p $\Delta$ at 15 <sup>h</sup> 30 <sup>m</sup> p : cp $\bullet$ , bc $\Delta$ , bc $\Delta$ n.
20	St.	Cu : Fr-Cu.	Nb : Cu.	10	9	8	8	8	6	j	k	k	k	j	j	...	...	...	...	...	...	cp $\bullet$ a : oi $\bullet$ m <sub>0</sub> , bc p : bp $\bullet$ , b n.
21	Fr-St : Cu.	Nb.	Cu-Nb : St-Cu.	9	10	10	10	2	1	k	k	h	h	k	k	...	...	...	...	...	...	c $\bullet$ , cid <sub>0</sub> , c a : c, bcp $\bullet$ p : bc, b $\Delta$ n.
22	St : A-St.	Cu : St-Cu.	Cu : Fr-Cu.	10	10	8	7	5	1	j	j	k	j	k	k	...	...	...	...	...	...	b $\Delta$ , ofe, c a : cp $\bullet$ m <sub>0</sub> , o $\bullet$ m <sub>0</sub> p : oi $\bullet$ m <sub>0</sub> , b, ep $\bullet$ n.
23	St.	St : St-Cu.	Nb.	10	10	9	10	10	2	D	D	I	I	I	k	...	...	...	...	...	...	oi $\bullet$ m <sub>0</sub> a : cp $\bullet$ $\Delta$ , cp $\bullet$ p : cp $\bullet$ o $\bullet$ m <sub>0</sub> n.
24	Nb.	Nb.	St : St-Cu.	10	9	10	9	10	9	F	I	h	j	j	j	...	...	...	...	...	...	c $\bullet$ early, c a : c, bc p : bc, cp $\bullet$ $\Delta$ q
25	St : A-St.	Cu : Fr-Cu.	Cu : Ci-St.	10	10	8	7	5	8	j	j	j	k	j	j	...	...	...	...	...	...	cp $\bullet$ , c $\bullet$ m <sub>0</sub> , o $\bullet$ m <sub>0</sub> a : o $\bullet$ m <sub>0</sub> , o $\bullet$ m <sub>0</sub> p : oid <sub>0</sub> m <sub>0</sub> , cm <sub>0</sub> n.
26	Nb : A-St.	Nb : Fr-Nb.	Nb : Fr-Nb.	10	10	10	10	10	10	I	I	I	I	I	I	...	...	...	...	...	...	c $\bullet$ m <sub>0</sub> , cm <sub>0</sub> , bc a : bc, b p : bc, bm <sub>0</sub> n.
27	St : A-St.	Cu : Fr-Cu.	A-Cu.	10	5	3	2	1	1	I	j	j	k	j	I	...	...	...	...	...	...	b $\Delta$ , bc, by $\Delta$ a : bcy $\Delta$ , p $\bullet$ a : 17 <sup>h</sup> 10 <sup>m</sup> p : bc, b n. [oddm <sub>0</sub> , om <sub>0</sub> n.
28	Cu : Fr-Cu.	Cu : A-Cu.	Cu : Ci-St.	2	5	1	3	5	2	l	l	m	m	j	j	...	...	...	...	...	...	bc $\Delta$ , c $\bullet$ , od <sub>0</sub> m <sub>0</sub> a : oddm <sub>0</sub> p : o $\bullet$ m <sub>0</sub> , c $\bullet$ m <sub>0</sub> , cp $\bullet$ a : cp $\bullet$ p : cp $\bullet$ , o $\bullet$ m <sub>0</sub> n.
29	St : Fr-St.	St.	St.	9	10	10	10	10	10	k	k	G	h	f	g	...	...	...	...	...	...	o $\bullet$ m <sub>0</sub> , c, c $\bullet$ a : c $\bullet$ p : ci $\bullet$ n.
30	St : A-St.	Cu : Fr-Cu.	Cu : Fr-Cu.	10	8	8	9	9	10	I	I	j	j	j	i	...	...	...	...	...	...	...
31	St-Cu : A-St.	Nb : A-St.	Nb : St-Cu.	10	10	10	9	10	8	j	j	j	j	j	j	...	...	...	...	...	...	...
Mean Cloud Am't				8.3	7.9	8.1	8.1	7.4	6.1													
	7 <sup>h</sup>	13 <sup>h</sup>	18 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	Remarks on the Weather of the Day
	Cloud Forms.			Cloud Amount (All Forms).						Visibility.						Precipitation.						



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Day.	Cloud Forms.			Cloud Amount (All Forms).							Visibility.						Precipitation.						Remarks on the Weather of the Day.
	7 <sup>h</sup>	13 <sup>h</sup>	18 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>		
1	St-Cu.	Nb: St-Cu.	St-Cu.	8	8	9	10	7	8	k	k	k	k	j	j	...	...	...	...	...	...	...	ci <sup>0</sup> , bc, cp <sup>0</sup> : a: cp <sup>0</sup> : p: bc, cp <sup>0</sup> : n.
2	Nb: Fr-Nb.	Fr-Nb: Cu.	St-Cu.	8	8	8	9	2	7	k	k	k	k	j	j	...	...	...	...	...	...	...	cp <sup>0</sup> : a: cp <sup>0</sup> , c, b p: b, bcp <sup>0</sup> : n.
3	St-Cu: A-St.	St: A-St.	St-Cu.	10	10	10	9	9	9	k	k	k	k	j	j	...	...	...	...	...	...	...	bc, ci <sup>0</sup> : a: ci <sup>0</sup> : p: cp <sup>0</sup> : bc n.
4	St-Cu.	St: St-Cu.	St-Cu.	7	6	7	4	7	1	I	h	j	k	j	j	...	...	...	...	...	...	...	bcp <sup>0</sup> , cm <sup>0</sup> , bc a: c, bc p: bc, b <sup>0</sup> : n.
5	St: St-Cu.	St: St-Cu.	St-Cu: Ci.	10	10	9	8	3	1	j	j	j	j	j	j	...	...	...	...	...	...	...	b <sup>0</sup> , bc, c, c <sup>0</sup> : c a: c, bc p: bc, b <sup>0</sup> : n.
6	St.	St-Cu: A-St.	St-Cu.	10	9	10	9	9	6	I	k	k	k	k	k	d <sup>0</sup>	...	...	...	...	...	...	b <sup>0</sup> , od <sup>0</sup> m <sup>0</sup> , c a: c p: c, bc n.
7	Fr-St: St-Cu.	Cu: St-Cu: Ci.	St-Cu.	8	7	5	3	1	1	k	k	k	k	k	k	...	...	...	...	...	...	...	c, bca: bc, b p: b p <sup>0</sup> at 20 <sup>h</sup> n.
8	St-Cu.	. Cu.	St-Cu.	5	2	7	6	3	1	k	k	k	k	k	k	...	...	...	...	...	...	...	bc <sup>0</sup> , bc a: bc, p <sup>0</sup> at 16 <sup>h</sup> p: bc.
9	St.	Cu: Fr-Cu.	St.	1	0	3	7	2	7	I	D	j	I	g	g	...	...	...	...	...	...	...	b <sup>0</sup> m <sup>0</sup> , b <sup>0</sup> f, bc a: bcm <sup>0</sup> : p: b, c
10	Nb.	Nb.	St-Cuf.	10	10	10	10	6	9	h	h	h	j	k	j	...	...	d	d	...	...	...	c, o <sup>0</sup> m <sup>0</sup> : a: oi <sup>0</sup> dm <sup>0</sup> , c p: ci <sup>0</sup> d, c n.
11	St: A-St.	Nb.	St.	10	10	10	10	10	5	I	G	h	h	f	j	...	...	...	...	...	...	...	cm <sup>0</sup> , o <sup>0</sup> m <sup>0</sup> : a: o <sup>0</sup> m <sup>0</sup> , odm <sup>0</sup> : p: am <sup>0</sup> , bc
12	Nb: Fr-Nb.	St.	St: Fr-St.	9	10	10	10	7	9	h	h	D	F	j	j	...	...	d	d	...	...	...	c <sup>0</sup> m <sup>0</sup> , od <sup>0</sup> f: a: od <sup>0</sup> f, ome, bc p:
13	St: A-St.	Cu: Fr-Cu: Ci.	Cu: St-Cu.	10	10	5	5	6	2	j	j	k	k	j	k	...	...	...	...	...	...	...	bc, c n.
14	St: Fr-St: Cu.	St: Cu: St-Cu.	Nb.	7	5	6	7	10	10	j	j	j	k	j	j	...	...	...	...	...	...	...	cp <sup>0</sup> , bc a: bc p: bc, b n: <sup>W</sup> glow
15	Nb: A-St.	St: St-Cu.	St.	10	10	9	10	9	7	j	j	j	I	j	j	...	...	...	...	...	...	...	b, bc a: bc, o <sup>0</sup> : p: o <sup>0</sup> , o <sup>0</sup> n.
16	St: St-Cu.	Nb.	St-Cu: A-St.	8	10	10	10	10	3	I	I	h	h	j	j	...	...	...	...	...	...	...	ci <sup>0</sup> , o, cp <sup>0</sup> : a: oid <sup>0</sup> m <sup>0</sup> , cd <sup>0</sup> : p: cid <sup>0</sup> .
17	Fr-St: St-Cu.	St-Cuf.	St-Cu.	9	10	9	8	7	5	j	k	k	k	j	j	...	...	...	...	...	...	...	bc n: <sup>W</sup> glow 21 <sup>h</sup> -22 <sup>h</sup> .
18	Fr-St: Ci.	Fr-St: A-St.	Nb.	9	9	10	10	10	10	k	k	k	I	h	h	...	...	...	...	...	...	...	bc, om <sup>0</sup> , o <sup>0</sup> m <sup>0</sup> , o <sup>0</sup> m <sup>0</sup> : a: o <sup>0</sup> m <sup>0</sup> , o <sup>0</sup> m <sup>0</sup> .
19	St.	St.	St.	10	10	10	10	10	4	f	G	h	h	I	j	d <sup>2</sup>	d	...	...	...	...	...	o <sup>0</sup> m <sup>0</sup> n.
20	St-Cuf: A-St.	St: Cu: St-Cu.	Cu: Fr-Cu.	10	10	8	9	2	7	k	j	k	j	j	j	...	...	...	...	...	...	...	o <sup>0</sup> m <sup>0</sup> , odm <sup>0</sup> : a: oid <sup>0</sup> m <sup>0</sup> , o <sup>0</sup> m <sup>0</sup> : p:
21	Nb: A-St.	St: Fr-St.	Nb.	10	10	9	10	10	10	j	h	j	I	I	G	...	...	...	...	...	...	...	c, p <sup>0</sup> 7 <sup>h</sup> 5 <sup>h</sup> a: c, b p: bc, cp <sup>0</sup> : n.
22	St: Fr-St.	Nb: Fr-Nb.	Cu.	10	10	10	9	7	7	i	h	j	j	j	j	d	...	...	...	...	...	...	c <sup>0</sup> , o <sup>0</sup> m <sup>0</sup> , c a: c, o <sup>0</sup> m <sup>0</sup> : p: oi <sup>0</sup> m <sup>0</sup> n.
23	Fr-Nb: A-St.	Fr-Nb: Nb.	St-Cu.	10	10	10	10	10	7	j	j	h	I	k	j	...	...	...	...	...	...	...	o <sup>0</sup> m <sup>0</sup> : a: cp <sup>0</sup> , bc p: cp <sup>0</sup> , bc, c n.
24	St-Cu.	Cu: Cu-Nb.	Cu: A-Cu.	8	7	9	7	7	7	k	j	k	k	k	k	...	...	...	...	...	...	...	c <sup>0</sup> , o <sup>0</sup> m <sup>0</sup> : a: oi <sup>0</sup> m <sup>0</sup> , c <sup>0</sup> p:
25	Nb.	Cu: A-Cu.	Fr-Cu.	8	7	7	7	1	3	j	k	k	l	l	l	...	...	...	...	...	...	...	cp <sup>0</sup> , bc, n.
26	Cu: Fr-Cu.	Cu: Fr-Cu.	St-Cu.	1	1	2	6	9	9	k	l	k	k	k	k	...	...	...	...	...	...	...	cp <sup>0</sup> q <sup>0</sup> a: cp <sup>0</sup> : a: bcp <sup>0</sup> : p: bc.
27	St-Cu: Ci.	Cu: Fr-Cu.	Cu.	6	5	2	2	1	1	k	k	k	j	j	k	...	...	...	...	...	...	...	cp <sup>0</sup> : a: bc, cp <sup>0</sup> , b p: b, bc n.
28	Cu: A-St: Ci-St.	Ci-St: Ci.	A-Cu: Ci: Ci-St.	4	8	7	7	7	9	k	k	j	j	j	j	...	...	...	...	...	...	...	bc, b a: b, bc, cp <sup>0</sup> : p: cp <sup>0</sup> , bc n.
29	St: Fr-St.	St: St-Cu.	St-Cu.	10	10	10	10	9	8	j	E	F	h	k	l	...	...	...	...	...	...	...	bc, b a: bc, b p: b, b <sup>0</sup> : n.
30	St-Cu: A-Cu.	Cu: A-Cu.	St.	7	6	10	10	6	9	k	k	k	k	j	k	...	...	...	...	...	...	...	b <sup>0</sup> , bc <sup>0</sup> , c, bcy a: bcy, bc <sup>0</sup> p:
Mean Cloud Am't				8.1	7.9	7.9	7.9	6.7	6.0														bc <sup>0</sup> , cp <sup>0</sup> : n.
																							c, o <sup>0</sup> , ofe, cm a: cid <sup>0</sup> m <sup>0</sup> , c p:
																							bc a and p: cid <sup>0</sup> , bc, c n. [cp <sup>0</sup> , c n.

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1	St-Cu : A-Cu : Ci.	—	—	7	2	0	0	0	0	k	k	k	l	k	l	h	...	...	...	...	...	...	...	...	c, bc, b a : b p : b $\sqcup$ n.
2	St.	St : Fr-St.	St : Fr-St.	10	10	10	10	9	10	E	G	j	j	j	j	j	...	...	...	...	...	...	...	...	b $\sqcup$ , of $\sqcup$ , ome, o a : o, c p : c, od $\circ$ m $\circ$ n.
3	St : St-Cu.	A-St.	Ci-St.	10	10	10	9	2	0	E	k	k	l	l	l	f	...	...	...	...	...	...	...	...	od $\circ$ m $\circ$ early, c a : c p : b $\sqcup$ n.
4	St.	St.	St.	10	10	10	10	10	10	E	I	G	F	f	f	f	...	...	...	...	...	...	...	...	b $\sqcup$ , ofe, od $\circ$ m $\circ$ a : oddm p and n.
5	St-Cu.	St : Fr-St.	St-Cu.	2	7	6	2	3	7	k	j	k	k	k	k	k	...	...	...	...	...	...	...	...	odm $\circ$ , b, bcp $\circ$ , bc a : b, bc p : bc n.
6	St : A-St.	St : St-Cu.	Nb : St-Cu.	10	10	9	3	8	10	j	I	k	k	k	j	d $\circ$	...	...	...	...	...	...	...	...	[c $\star$ n.
7	St-Cu.	Fr-St.	St-Cu.	3	3	1	3	3	4	k	k	l	l	k	k	...	...	...	...	...	...	...	...	...	bc, cd $\circ$ , c $\circ$ m $\circ$ , c a : c, bc p : c $\circ$ ,
8	Fr-Cu.	—	—	1	2	0	1	0	0	k	l	k	l	k	k	...	...	...	...	...	...	...	...	...	ci $\star$ , bc, b a : b, bc p : bc n.
9	A-St : Ci	St.	Nb.	3	7	10	10	10	10	j	I	I	h	h	h	...	...	...	...	...	...	...	...	...	b, a, p and n : $\sqcup$ early.
10	St.	St : A-St.	St : A-St.	10	10	9	10	10	10	j	j	h	j	j	j	...	...	...	...	...	...	...	...	...	bc $\sqcup$ , o $\star$ m $\circ$ , o $\star$ m $\circ$ a : o $\circ$ m $\circ$ p :
11	St.	St : Fr-St.	St.	10	10	10	10	10	10	h	I	h	I	h	h	...	...	...	...	...	...	...	...	...	odm $\circ$ , op $\circ$ m $\circ$ n.
12	St.	St-Cu : Ci.	St-Cu.	10	10	7	9	6	9	i	k	k	k	k	k	...	...	...	...	...	...	...	...	...	o, cz $\circ$ a : cz $\circ$ , ci $\star$ $\circ$ p : ci $\star$ $\circ$ n.
13	St.	St : Cu : St-Cu.	St : St-Cu.	10	10	10	10	10	10	j	k	k	j	j	j	...	...	...	...	...	...	...	...	...	[oid $\circ$ m $\circ$ n.
14	St-Cu.	St-Cu.	St-Cu.	10	1	2	6	2	2	j	k	k	l	k	k	...	...	...	...	...	...	...	...	...	oid $\circ$ m $\circ$ , c, bc a : cp $\circ$ , c, bc p : bc, c n.
15	St-Cu.	Fr-St : A-St.	St-Cu : A-St.	1	7	10	9	10	10	k	k	k	k	k	k	...	...	...	...	...	...	...	...	...	o, cp $\star$ $\circ$ , c a : c p and n.
16	Nb.	Nb.	Fr-St.	10	10	10	10	9	1	h	I	h	h	j	k	...	...	...	...	...	...	...	...	...	b $\sqcup$ , c $\sqcup$ a : c $\sqcup$ p and n.
17	St-Cu.	Fr-Cu : St-Cu.	Fr-Cu : Ci-St.	4	4	6	3	2	0	k	k	k	k	k	k	...	...	...	...	...	...	...	...	...	[of p : cp $\circ$ , b n.
18	St.	St : Fr-St.	St : St-Cu.	10	10	10	10	10	10	g	D	j	k	j	i	...	...	...	...	...	...	...	...	...	$\boxtimes$ 5 cms o $\star$ m $\circ$ , o $\circ$ m $\circ$ a : o $\circ$ m $\circ$ .
19	Nb.	St.	St.	10	10	10	10	10	10	i	C	E	h	F	h	...	...	...	...	...	...	...	...	...	bc a and p : b, b $\sqcup$ n.
20	A-Cu : Ci.	—	A-Cu.	1	1	0	6	2	1	k	l	j	k	k	k	...	...	...	...	...	...	...	...	...	bc $\sqcup$ , o $\sqcup$ m, ofe, o a : o, c p : c,
21	St-Cu.	St.	St.	9	10	10	10	10	10	i	i	E	E	D	C	...	...	...	...	...	...	...	...	...	o $\circ$ m $\circ$ n.
22	St : Nb.	Nb.	St : Fr-Cu.	10	10	10	10	4	0	i	k	I	j	j	k	d $\circ$	...	...	...	...	...	...	...	...	oddm $\circ$ , ofe a : om p : oi $\circ$ m $\circ$ , o $\circ$ m $\circ$ n.
23	St-Cu : A-Cu.	St-Cu : A-Cu : Ci.	Nb : St-Cu.	4	7	9	10	10	10	k	k	j	j	j	i	...	...	...	...	...	...	...	...	...	bc, b a : b, bc p : b, b $\sqcup$ , c $\sqcup$ n.
24	Nb.	Nb.	Fr-Cu.	10	10	10	10	4	9	G	h	I	l	k	k	...	...	...	...	...	...	...	...	...	c $\sqcup$ m $\circ$ , oi $\circ$ f a : od $\circ$ f : ofe, c n.
25	Fr-Cu : St-Cu.	Cu : Fr-Cu.	Nb.	3	6	8	10	10	10	j	k	k	j	j	I	...	...	...	...	...	...	...	...	...	cid $\circ$ m $\circ$ , o $\circ$ m $\circ$ a : o $\circ$ m $\circ$ , bcp $\circ$ p :
26	Fr-Cu : St-Cu.	Nb : Ci.	Cu : Fr-Cu.	4	5	8	8	7	2	j	k	k	k	j	k	...	...	...	...	...	...	...	...	...	bcp $\circ$ , b $\circ$ $\sqcup$ , b, bc a : bc $\oplus$ , c p :
27	St-Cu.	Ci-St : Ci.	A-St : A-Cu.	4	2	6	7	10	7	k	k	k	k	j	k	...	...	...	...	...	...	...	...	...	c, bc $\boxplus$ $\sqcup$ n.
28	A-Cu : Ci.	Cu : St-Cu : Ci.	St.	6	6	4	5	9	9	k	k	j	j	j	j	...	...	...	...	...	...	...	...	...	bc $\sqcup$ , a : bc, c $\star$ $\circ$ p : ci $\star$ $\circ$ n.
29	St.	St.	St.	10	9	9	9	10	3	h	h	I	I	h	j	...	...	...	...	...	...	...	...	...	$\boxtimes$ 5 cms, o $\star$ m $\circ$ , c $\circ$ $\circ$ , cm $\circ$ a : cm $\circ$ p :
30	St.	St : St-Cu.	St.	10	10	9	7	10	3	h	G	j	j	G	j	...	...	...	...	...	...	...	...	...	om $\circ$ , bc n.
31	St-Cu.	St.	St-Cu : Ci.	6	2	9	8	2	0	h	j	k	l	k	k	...	...	...	...	...	...	...	...	...	$\boxtimes$ 5 cms, om $\circ$ , o $\star$ m $\circ$ , ci $\star$ $\circ$ a : bcp
																...	...	...	...	...	...	...	...	...	$\star$ $\circ$ , o $\star$ m $\circ$ p : o $\star$ m $\circ$ , bcp $\star$ n.
																...	...	...	...	...	...	...	...	...	$\boxtimes$ 6 cms, bcm $\circ$ , bjp, c a : c, bc p :
																...	...	...	...	...	...	...	...	...	b, b $\sqcup$ n.
Mean Cloud Am't				7.0	7.1	7.5	7.6	6.8	6.0																
Mean Ann'al Cloud Am't				7.8	7.9	8.0	7.7	7.2	6.8																
	Cloud Forms.			Cloud Amount (All Forms).						Visibility.						Precipitation.						Remarks on the Weather of the Day.			



Month.	January. Factor 6.23.				February. Factor 6.23.				March. Factor 6.23.			
Hour. G.M.T.	3 h.	9 h.	15 h.	21 h.	3 h.	9 h.	15 h.	21 h.	3 h.	9 h.	15 h.	21 h.
Day.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.
1	320	460	390	z -	40	5	z +	z +	(-1375)	(-440)	20	180
2	-510	445	785	715	295	100	(450)	(600)	350	95	195	-50
3	230	170	270	840	(400)	(300)	470	660	90	450	365	325
4	55	-245	-65	z ±	345	-40	-575	-510	250	65	290	675
5	105	115	210	155	z -	165	135	170	-355	-370	z -	325
6	-890	-395	100	305	130	z ±	185	130	110	70	150	245
7	190	230	-720	215	-15	-550	155	195	230	60	80	130
8	75	130	115	-25	95	100	15	-10	100	130	(90)	(180)
9	145	95	(30)	180	75	100	75	-395	(380)	(475)	130	(330)
10	z -	-525	145	250	175	-1145	115	125	(95)	110	560	155
11	110	(-10)	205	365	240	140	175	170	95	210	155	(375)
12	170	-1170	-335	-400	115	155	195	275	(475)	(575)	z +	315
13	50	30	-880	65	190	650	50	115	225	(290)	135	215
14	80	260	145	225	-35	125	125	105	150	105	(300)	(475)
15	95	50	0	80	295	135	55	60	(230)	(290)	(200)	(250)
16	235	230	(400)	(515)	-505	-325	-365	225	(210)	(-200)	(250)	510
17	300	155	(170)	335	775	135	220	155	755	-15	-1240	405
18	355	20	150	z -	-215	-245	155	80	195	-10	-25	135
19	110	100	155	365	145	165	185	500	370	190	20	-790
20	265	-1035	145	545	195	315	210	695	-260	-150	235	-200
21	535	-1415	-880	30	565	530	290	230	-425	(-1030)	275	345
22	235	130	185	525	155	190	230	260	215	190	60	185
23	390	-175	z -	5	115	90	65	25	415	425	(95)	(230)
24	140	105	315	365	190	170	155	170	(60)	(100)	(190)	435
25	275	455	65	100	265	325	225	345	(-1205)	150	125	320
26	55	160	155	360	280	435	195	325	305	195	110	490
27	210	325	310	435	135	225	195	575	275	10	170	430
28	-120	65	10	250	325	615	440	615	345	170	170	370
29	355	330	-450	440	270	320	365	520	170	-465	-580	-120
30	480	290	280	250	-	-	-	-	-60	575	110	375
31	320	210	-565	85	-	-	-	-	150	285	105	115
(a)	218	198	206	308	242	239	197	293	250	227	176	316
(b)	125	2	8	282	187	116	149	235	84	80	94	232
Mean ...	(a) 233. (b) 104.				(a) 243. (b) 172.				(a) 242. (b) 123.			
Month.	April. Factor 6.30.				May. Factor 6.27.				June. Factor 6.17.			
Hour. G.M.T.	3 h.	9 h.	15 h.	21 h.	3 h.	9 h.	15 h.	21 h.	3 h.	9 h.	15 h.	21 h.
Day.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.
1	105	160	305	330	405	460	135	250	120	190	170	185
2	170	200	210	75	405	210	(150)	(350)	120	135	135	265
3	80	210	(10)	350	(70)	95	40	225	265	280	150	265
4	135	190	150	370	295	350	215	345	190	70	120	190
5	255	340	245	315	150	225	265	250	65	115	160	135
6	565	235	235	245	220	175	100	135	295	75	160	220
7	95	270	170	320	150	85	135	95	415	205	z +	110
8	35	(-1160)	245	310	120	40	155	135	70	-65	-5	-85
9	230	115	250	195	210	165	150	185	0	-350	205	45
10	285	(445)	50	275	140	135	105	115	245	80	90	170
11	75	(60)	230	190	135	135	115	180	215	50	535	240
12	210	440	210	80	65	115	165	230	95	-70	130	185
13	30	140	255	330	160	90	150	145	95	-340	-415	-10
14	180	130	215	135	95	150	145	200	-565	-410	110	230
15	100	100	135	130	120	70	125	210	290	-940	100	-205
16	10	140	145	195	170	-355	60	125	560	205	110	350
17	70	195	125	135	390	95	-125	265	150	-785	300	245
18	235	145	95	245	25	75	85	-135	120	95	130	315
19	215	220	140	290	110	95	445	-150	-460	-1305	-485	335
20	255	155	115	330	175	-785	105	150	250	245	130	275
21	120	100	100	325	75	95	115	115	265	95	570	205
22	100	170	105	160	115	110	135	(100)	285	115	120	-385
23	95	-210	255	115	(75)	(100)	95	100	135	115	-265	235
24	255	195	210	150	95	95	115	155	185	40	130	190
25	205	245	155	195	85	115	110	(230)	z -	280	0	55
26	160	235	180	340	(100)	(120)	155	190	445	205	-165	115
27	245	195	210	150	185	80	190	-110	100	95	115	210
28	310	115	230	370	-55	230	145	205	265	-1090	300	190
29	290	350	190	340	210	260	205	300	-760	210	60	120
30	350	205	120	220	170	150	150	315	120	115	(190)	155
31	-	-	-	-	340	170	125	150	-	-	-	-
(a)	182	204	176	240	168	146	146	195	206	144	176	201
(b)	182	144	176	240	161	99	137	163	113	-101	103	157
Mean ...	(a) 201. (b) 185.				(a) 164. (b) 140.				(a) 182. (b) 68.			

NOTE.—The Potential Gradient is reckoned as positive if the potential increases upwards. For indeterminate potential gradient the following notation is used: z +, Indeterminate, positive value; z -, Indeterminate, negative value; z ±, Indeterminate in magnitude and sign.  
(a) Mean of all positive readings. (b) Mean from all complete days using both positive and negative readings.



Month.	July. Factor 6·15.				August. Factor 6·17.				September. Factor 6·19.			
Hour. G.M.T.	3 h.	9 h.	15 h.	21 h.	3 h.	9 h.	15 h.	21 h.	3 h.	9 h.	15 h.	21 h.
Day.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.
1	135	105	— 20	100	150	40	65	55	1000	230	155	415
2	155	155	130	+15	120	230	115	195	385	390	210	400
3	130	105	125	270	305	115	135	170	210	220	220	105
4	415	160	190	135	195	130	125	175	140	405	150	135
5	—1135	325	145	250	190	155	95	410	150	360	265	— 180
6	—225	195	125	215	345	190	135	60	150	170	115	315
7	245	175	170	320	55	—380	230	170	150	15	185	250
8	260	255	425	190	150	135	—380	455	25	245	215	125
9	250	115	150	170	120	90	95	145	360	150	170	185
10	280	120	70	35	95	180	130	210	z —	135	205	—95
11	—225	395	385	230	135	220	—220	z —	140	135	190	210
12	320	230	200	285	z ±	220	150	195	100	250	240	320
13	300	225	115	70	(570)	(300)	—245	—150	290	190	185	380
14	240	(200)	120	275	—20	—435	z —	225	210	230	230	460
15	295	250	110	145	225	—60	160	170	115	140	110	180
16	115	130	200	210	95	150	115	325	180	120	170	95
17	190	115	130	285	175	210	90	550	(75)	(—400)	130	35
18	130	95	130	100	260	170	155	250	—75	140	115	170
19	75	95	95	40	185	210	150	325	155	155	—600	290
20	90	85	65	95	200	z —	150	135	230	—160	250	205
21	225	110	150	175	—605	170	(—1050)	270	240	305	130	480
22	345	350	(150)	(175)	170	170	150	190	110	145	130	250
23	(200)	(170)	30	305	425	420	140	205	125	190	—215	290
24	200	110	150	210	180	(230)	210	250	235	185	175	250
25	200	60	70	115	(1350)	z ±	145	230	—200	160	180	260
26	75	80	60	115	10	160	150	(—1330)	135	160	145	245
27	30	150	70	—20	—10	15	150	345	115	115	180	330
28	—95	140	90	55	175	150	15	410	135	—155	170	170
29	260	90	95	130	305	250	z ±	185	95	155	200	700
30	155	65	65	435	150	100	130	170	190	210	235	380
31	245	215	140	190	130	200	10	575				
(a)	206	164	138	184	202	177	128	252	202	196	181	263
(b)	125	164	133	171	154	139	43	184	178	154	139	257
Mean ...	(a) 173. (b) 148.				(a) 190. (b) 130.				(a) 211. (b) 182.			
Month.	October. Factor 6·16.				November. Factor 6·10.				December. Factor 6·16.			
Hour. G.M.T.	3 h.	9 h.	15 h.	21 h.	3 hr.	9 h.	15 h.	21 h.	3 h.	9 h.	15 h.	21 h.
Day.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.
1	150	345	175	230	45	75	215	335	110	220	405	360
2	100	130	245	395	150	40	105	90	140	450	310	135
3	305	285	250	325	130	135	780	190	45	115	245	420
4	190	170	205	500	55	490	265	415	245	400	360	205
5	495	—170	0	910	270	245	255	355	10	15	210	285
6	—10	270	165	415	415	170	115	210	435	z —	185	z ±
7	340	40	—180	—1085	140	165	215	225	300	200	300	180
8	75	195	190	225	215	185	190	280	505	210	405	305
9	—390	305	(—950)	60	155	210	420	520	315	425	z —	220
10	—185	95	175	400	230	(970)	205	150	255	285	305	210
11	90	(—1350)	(—950)	—70	105	240	—225	230	55	310	190	115
12	135	125	155	305	215	110	355	130	—60	85	130	170
13	140	365	150	390	65	5	200	250	95	110	165	225
14	135	145	265	—755	195	255	430	—880	230	150	465	650
15	330	375	260	660	355	260	170	105	320	150	280	265
16	420	220	340	230	105	375	(—1270)	395	540	—990	z —	130
17	(110)	245	230	125	75	30	50	75	95	115	225	220
18	115	—75	z +	225	60	155	—280	—95	130	440	850	680
19	75	115	235	565	—1120	320	—430	125	130	440	740	z ±
20	0	75	—150	250	20	95	95	225	125	525	465	950
21	(65)	250	—5	685	—20	—970	—75	205	225	380	455	945
22	(—435)	135	110	425	160	—860	—215	80	450	155	—130	645
23	325	265	150	(350)	120	—205	—135	40	240	390	525	425
24	z ±	450	—55	70	95	—110	120	100	185	z —	125	100
25	95	120	190	550	—700	335	95	155	170	265	210	z —
26	—50	(—1120)	(—1000)	—255	75	95	170	170	105	130	510	215
27	—75	325	185	675	110	115	205	505	110	270	525	395
28	195	85	155	225	185	240	545	730	480	320	465	340
29	160	235	335	300	295	385	435	165	z +	280	545	260
30	—635	210	165	—460	125	200	320	165	230	z ±	320	565
31	—910	190	(—1200)	115	—	—	—	—	250	105	125	475
(a)	184	213	197	369	154	227	259	236	225	257	359	360
(b)	43	. 92	—4	231	77	125	111	188	194	240	338	383
Mean ...	(a) 241. (b) 91.				(a) 219. (b) 125.				(a) 300. (b) 289.			
					Annual Means ... (a)				203	199	195	268
					(b)				135	105	119	227
									(a) 216.		(b) 147.	

The Potential Gradient is reckoned as positive if the potential increases upward<sup>s</sup>. For indeterminate potential gradient the following notation is used:  
 z + Indeterminate, positive value; z — Indeterminate, negative value; z ± Indeterminate in magnitude and sign.  
 (a) Mean of all positive readings. (b) Mean from all complete days using both positive and negative readings.



*The departures from the mean of the day are adjusted for non-cyclic change.*

## 265. Eskdalemuir.

\* 0a DAYS ONLY.

1928.

Month and Season.	Hour	G.M.T.																								Non-cyclic change 24-0.	No. of Days used.	Mean Values.
	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.				
Jan. ...	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	—	v/m.
Feb. ...	—	0	-20	-39	-51	-22	-18	+19	+36	+31	-2	-9	-50	-77	-63	-55	-48	-15	+22	+78	+87	+112	+63	+9	+13	+23	10	301
Mar. ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
April ...	-1	-35	-12	+19	-34	-18	-18	-43	-49	-56	-59	-64	-47	-38	-22	-12	-5	+9	+27	+81	+72	+87	+113	+96	-148	9	225	
May ...	+9	+28	+23	+6	+14	+45	+37	+32	+28	-14	-18	-32	-42	-40	-38	-37	-35	-19	-15	-1	+7	+12	+39	+18	+44	8	189	
June ...	+14	+11	-11	+6	+14	-1	+4	0	-3	-14	-20	-29	-27	-33	-37	-40	-35	-30	-3	+45	+49	+58	+54	+19	+36	7	173	
July ...	+47	+62	+37	+37	+26	+4	+8	+8	-26	-42	-45	-47	-45	-42	-42	-45	-41	-41	-9	+2	+12	+71	+66	+47	+5	7	154	
Aug. ...	+14	-12	+2	+18	+65	+59	+25	-20	-20	-28	-33	-53	-56	-63	-84	-77	-69	-30	+13	+62	+87	+65	+80	+52	+29	6	200	
Sept. ...	+11	+21	+31	+31	+63	+77	+42	+20	-63	-77	-103	-104	-85	-92	-105	-91	-71	+29	+139	+144	+99	+50	+18	+11	+31	6	299	
Oct. ...	-64	-46	-53	-35	-9	+3	+50	+80	+82	-5	-51	-87	-104	-116	-104	-79	+20	+105	+152	+141	+104	+76	-1	-61	+83	3	290	
Nov. ...	+4	-41	-113	-105	-117	-97	-118	-105	-117	-121	-93	-18	+44	+75	+23	+97	+120	+184	+180	+131	+153	+81	-26	-18	-96	6	286	
Dec. ...	-7	+7	-24	-72	-92	-93	-71	-69	-34	-35	-2	+11	+12	+10	+99	+90	+63	+74	+16	+61	+77	+16	-28	+17	+2	8	254	
Year	+3	-3	-16	-15	-9	-4	-2	-6	-17	-39	-43	-47	-43	-49	-37	-24	-7	+30	+58	+75	+77	+58	+32	+16	—	—	237	
Winter	-1	-18	-59	-76	-77	-69	-57	-46	-40	-53	-35	-19	-7	+7	+22	+46	+56	+93	+91	+93	+114	+53	-15	-7	—	—	280	
Equinox	-18	-20	-11	+5	+7	+21	+25	+19	-10	-46	-71	-85	-79	-82	-77	-61	-19	+48	+106	+122	+92	+71	+43	+15	—	—	271	
Summer	+21	+22	+13	+17	+30	+27	+19	+5	-5	-25	-29	-40	-43	-45	-50	-50	-45	-30	-3	+27	+39	+51	+60	+34	—	—	179	

## 266. Eskdalemuir.

\* 1a AND 2a DAYS ONLY.

1928.

Month and Season.	Hour	G.M.T.																								Non-cyclic change 24-0.	No. of Days used.	Mean Values.
	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.				
Jan. ...	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.	v/m.		v/m.
Feb. ...	+ 81	+100	+ 69	+ 37	- 5	+137	+ 96	+ 14	- 52	+ 43	+ 59	- 71	- 44	- 75	-102	- 12	- 47	- 74	- 2	- 59	- 18	- 66	+ 21	- 38	+245	3	330	
Mar. ...	- 88	+ 1	+ 42	- 8	+ 5	+ 19	-167	-119	-186	-125	- 25	- 28	- 18	+ 27	+ 27	+ 61	+ 66	+ 64	+ 84	+ 94	+ 41	+101	+ 61	+ 64	- 50	3	71	
April ...	+ 59	+ 49	- 54	- 1	- 3	- 42	- 37	- 34	- 40	- 42	- 51	- 69	- 39	- 55	- 77	- 67	+ 5	+ 37	+ 96	+ 75	+ 76	+ 44	+ 20	+ 52	+ 31	4	173	
May ...	- 39	- 39	- 33	- 25	- 38	- 13	+ 32	+ 24	- 2	- 24	- 14	- 23	- 14	- 4	+ 4	- 13	- 31	- 6	+104	+103	+ 78	+ 30	- 42	- 23	+ 60	7	190	
June	- 17	- 6	- 48	- 20	+ 34	+ 51	+ 40	+ 47	- 67	- 41	- 11	0	+ 12	- 11	+ 13	- 2	+ 6	- 19	+ 14	+ 55	+ 33	- 14	- 19	- 31	+ 10	2	145	
July ...	+ 14	+ 83	+ 83	+ 96	+107	+ 54	- 30	- 58	- 72	- 63	- 31	- 47	- 50	- 6	- 15	+ 3	+ 6	- 6	- 18	- 4	+ 22	- 25	- 39	- 7	- 20	4	110	
August	+ 49	+ 27	+ 56	+ 22	+ 10	- 48	- 62	- 4	- 15	- 19	- 11	- 49	- 58	- 45	+ 35	- 4	- 21	- 19	+ 1	+ 15	+ 14	+ 6	+ 65	+ 48	- 1	5	176	
Sept. ...	+ 35	+ 72	+ 1	+ 4	- 4	+ 14	+ 38	+ 29	- 37	- 22	- 55	- 82	- 85	-177	-183	- 29	- 80	+ 58	+ 40	+122	+ 67	+112	+124	+ 36	+220	2	209	
Oct. ...	- 81	-112	-161	- 82	- 42	+ 2	+ 31	+ 20	- 9	+ 23	+ 21	+ 10	+ 13	- 9	- 61	+ 37	+ 95	+151	+ 57	+ 65	+ 16	- 8	+ 44	- 24	-105	4	178	
Nov. ...	+ 40	+ 47	- 60	- 53	- 1	- 2	+ 9	+ 17	+ 2	+ 28	+ 36	+ 39	+ 34	+ 34	+ 50	+ 74	+ 60	+137	+ 42	-147	-195	-251	+ 3	+ 49	+121	3	133	
Dec. ...	- 46	- 13	- 21	- 23	- 69	- 57	- 56	- 13	- 25	+ 1	+ 41	+ 32	+ 19	+ 67	+ 56	+ 23	+ 42	+ 83	+ 49	+ 1	+ 23	- 36	- 44	- 37	+ 35	6	197	
Year	-125	-128	-161	-168	- 83	+ 24	+ 10	+ 60	+ 12	- 55	-103	- 43	+ 33	- 2	+ 46	+119	+126	+ 87	+105	+ 91	+ 92	+ 72	+ 24	- 23	+ 31	6	260	
Winter	- 10	+ 7	- 15	- 18	- 7	+ 12	- 8	- 1	- 41	- 25	- 12	- 28	- 16	- 21	- 17	+ 16	+ 19	+ 41	+ 48	+ 34	+ 21	- 3	+ 18	+ 5	-	-	181	
Equinox	- 45	- 10	- 18	- 41	- 38	+ 31	- 29	- 15	- 63	- 34	- 7	- 27	- 3	+ 4	+ 7	+ 48	+ 47	+ 40	+ 59	+ 32	+ 35	+ 18	+ 15	- 9	-	-	215	
Summer	- 5	- 14	- 50	- 40	- 21	- 14	+ 9	+ 7	- 12	- 4	- 2	- 11	- 1	- 9	- 21	+ 8	+ 32	+ 80	+ 75	+ 24	- 6	- 46	+ 6	+ 13	-	-	169	
	+ 20	+ 44	+ 23	+ 25	+ 37	+ 18	- 3	+ 3	- 48	- 36	- 27	- 45	- 45	- 60	- 37	- 8	- 22	+ 3	+ 9	+ 47	+ 34	+ 20	+ 33	+ 11	-	-	160	

\* NOTE.—For explanation of 0a, 1a and 2a Days, see page 231.



Month.	JANUARY.		FEBRUARY.		MARCH.		APRIL.		MAY.		JUNE.	
Day.	Character	Duration of Negative Pot. Grad. hours.	Character	Duration of Negative Pot. Grad. hours.	Character	Duration of Negative Pot. Grad. hours.	Character	Duration of Negative Pot. Grad. hours.	Character	Duration of Negative Pot. Grad. hours.	Character	Duration of Negative Pot. Grad. hours.
1	2b	4.4	2c	9.2	2c	8.7	1a	0.3	0a	...	0a	...
2	2b	4.4	—	—	1b	2.9	1b	2.5	—	—	0a	...
3	1b	0.3	—	—	1b	0.5	2c	5.1	—	—	0a	...
4	2b	6.4	2c	15.4	1b	1.1	1b	0.7	0a	...	1a	...
5	1b	2.7	2c	6.4	2c	13.6	1b	1.8	0a	...	0a	...
6	2c	8.1	2c	4.6	1a	0.3	0a	...	0a	...	1a	1.2
7	2c	9.8	2a	10.0	1a	0.5	1a	0.7	0a	...	1b	0.7
8	1c	2.8	2b	5.7	—	—	2c	6.7	1a	0.3	2a	9.3
9	2c	4.0	2c	4.1	—	—	1a	0.3	1a	0.1	2c	11.1
10	2c	7.5	2c	6.5	1c	1.4	1b	1.9	1a	0.2	1a	0.6
11	1b	0.7	1b	0.7	—	—	1b	2.0	1a	0.3	1b	1.4
12	2c	14.0	1c	1.1	—	—	1b	0.1	1a	0.4	1b	2.9
13	2c	6.8	1b	2.4	—	—	1a	0.1	—	—	2b	11.8
14	2c	5.5	1b	2.1	—	—	0a	...	0a	...	2b	11.5
15	2c	8.8	1a	0.3	—	—	1b	0.2	1b	0.7	2c	5.0
16	2c	5.8	2c	11.7	—	—	1b	0.3	2c	4.7	1b	1.0
17	1b	2.7	1b	1.8	2c	10.7	1b	1.0	2c	9.4	2c	4.3
18	2c	11.8	2b	5.3	2c	5.1	1c	2.7	2b	5.0	0a	0.0
19	1b	1.9	0a	...	2c	9.1	0a	...	2c	3.9	2c	10.9
20	2b	6.6	0a	...	2b	14.0	0a	...	2c	3.6	0a	...
21	2c	11.2	0a	...	2b	10.5	1a	0.7	0a	...	1b	0.3
22	1a	0.2	0a	...	1a	0.1	0a	...	0a	...	1b	2.5
23	2c	12.8	1a	0.8	—	—	2b	3.6	0a	...	2b	4.0
24	2c	3.1	0a	...	—	—	0a	...	0a	...	1b	1.6
25	2c	4.9	0a	...	1b	2.3	1a	1.3	0a	...	2c	6.7
26	1c	2.9	0a	...	1a	0.1	1a	0.8	—	—	2b	7.6
27	1a	0.2	0a	...	2b	4.5	0a	...	1b	0.9	0a	...
28	2c	8.1	0a	...	1b	1.1	0a	...	1a	1.1	2b	9.9
29	2b	4.1	0a	...	2c	6.7	0a	...	0a	...	2c	9.1
30	1a	0.1	—	—	2c	4.4	1b	1.2	0a	...	2c	3.0
31	2c	5.1	—	—	1b	2.6	—	—	0a	...	—	—
Total ...	—	167.7	—	88.1	—	100.2	—	34.0	—	30.6	—	116.4
No. of days used	—	31	—	27	—	21	—	30	—	27	—	30
Mean ...	—	5.4	—	3.3	—	4.8	—	1.1	—	1.1	—	3.9

Month.	JULY.		AUGUST.		SEPTEMBER.		OCTOBER.		NOVEMBER.		DECEMBER.	
Day.	Character	Duration of Negative Pot. Grad. hours.	Character	Duration of Negative Pot. Grad. hours.	Character	Duration of Negative Pot. Grad. hours.	Character	Duration of Negative Pot. Grad. hours.	Character	Duration of Negative Pot. Grad. hours.	Character	Duration of Negative Pot. Grad. hours.
1	2c	5.6	0a	...	0a	...	0a	...	2b	7.8	0a	...
2	1b	1.1	0a	...	0a	...	0a	...	2b	4.8	1a	0.1
3	1b	0.4	0a	...	2b	4.6	0a	...	2b	4.2	1a	0.1
4	2b	4.1	1b	1.2	1b	1.1	0a	...	1b	2.7	0a	...
5	2c	6.8	0a	...	2a	3.0	1b	2.8	2c	3.3	1b	2.5
6	1b	1.6	2b	3.0	1a	0.4	1b	0.4	0a	...	2c	5.3
7	0a	...	2b	9.5	1a	1.8	2c	6.7	1b	0.9	1b	...
8	1a	0.5	1c	2.1	1a	0.5	2c	5.4	1a	0.1	0a	...
9	1a	0.2	1a	0.6	1b	2.3	2c	5.4	1a	...	2b	5.9
10	2b	4.0	0a	...	2c	4.1	1a	0.9	2b	6.6	1b	0.9
11	1b	2.1	2c	4.7	0a	...	2c	16.1	2b	4.3	1a	0.6
12	1a	0.2	2c	4.4	0a	...	1a	...	1a	0.6	2a	4.2
13	1a	0.1	2c	6.3	0a	...	0a	...	1b	1.4	0a	...
14	1a	0.1	2c	8.6	1a	0.1	2a	4.1	2c	5.3	0a	...
15	0a	...	1b	1.5	0a	...	0a	...	2b	3.9	0a	...
16	0a	...	1b	0.7	0a	...	1b	1.8	2b	5.4	2c	11.0
17	0a	...	0a	...	2b	5.8	1b	2.9	1a	1.7	0a	0.0
18	1a	0.1	0a	...	1b	1.9	2c	6.4	2b	5.8	1b	0.4
19	0a	...	1b	1.1	2c	4.5	2c	8.2	2c	9.9	1c	2.5
20	0a	...	2c	9.5	1b	2.4	2c	6.6	1a	0.2	0b	...
21	0a	...	2c	10.7	0a	...	2c	4.3	2c	7.4	1a	0.4
22	—	—	0a	...	0a	...	2b	5.6	2c	9.4	2b	3.7
23	—	—	1b	2.6	1a	1.1	1b	2.7	2c	9.2	0a	...
24	1a	0.1	1a	0.3	1b	2.4	2c	4.4	2b	4.5	2c	7.2
25	0a	...	1c	1.3	1a	1.7	2c	3.3	2c	8.6	2b	6.1
26	1b	1.9	2b	3.7	0a	...	2c	19.7	1b	0.7	2c	3.0
27	2b	4.2	1c	2.4	0a	...	1b	2.5	0a	...	1a	0.2
28	2c	5.0	2b	3.9	1a	1.7	1b	0.3	0a	...	1b	1.4
29	1b	1.5	1b	2.4	0a	...	1b	1.5	1a	0.8	2c	4.1
30	1b	0.8	1b	2.4	0a	...	2c	8.5	0a	...	2c	3.0
31	0a	...	1a	0.9	—	—	2c	12.7	—	—	0b	0.1
Total ...	—	40.4	—	83.8	—	39.4	—	133.2	—	109.5	—	62.7
No. of days used	—	29	—	31	—	30	—	31	—	30	—	31
Mean ...	—	1.4	—	2.7	—	1.3	—	4.3	—	3.7	—	2.0



## TERRESTRIAL MAGNETIC FORCE: NORTH COMPONENT.

Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

268. Eskdalemuir. (X.)

15,000  $\gamma$  (-15 C.G.S. unit) +

January, 1928.

Hour. G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Day.	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$
1 D	1038	1040	1044	1043	1043	1042	1041	1040	1044	1039	1034	1016	1009	1044	1050	1049	1045	1044	1044	1054	1046	1029	1023	1029	1039	1039
2	1038	1037	1033	1037	1039	1042	1042	1040	1037	1028	1014	1022	1031	1033	1035	1037	1033	1029	1035	1037	1038	1041	1047	1044	1044	1035
3	1044	1043	1043	1041	1043	1043	1043	1043	1042	1035	1029	1028	1027	1028	1033	1038	1042	1045	1047	1048	1048	1052	1052	1047	1048	1041
4	1047	1046	1048	1047	1050	1052	1057	1057	1056	1047	1041	1026	1020	1030	1033	1032	1042	1042	1044	1040	1040	1043	1047	1047	1062	1043
5	1062	1042	1041	1042	1042	1045	1052	1047	1046	1039	1033	1029	1027	1028	1035	1034	1042	1045	1042	1043	1046	1045	1043	1047	1047	1041
6	1047	1046	1046	1047	1046	1050	1048	1052	1044	1042	1036	1032	1030	1036	1041	1041	1042	1043	1043	1043	1038	1044	1055	1047	1047	1043
7	1046	1046	1040	1051	1046	1046	1050	1050	1047	1041	1037	1036	1036	1038	1043	1045	1045	1046	1046	1047	1050	1049	1046	1053	1055	1045
8	1055	1046	1046	1049	1049	1045	1052	1056	1052	1043	1031	1027	1031	1041	1047	1048	1048	1050	1046	1050	1051	1051	1050	1048	1048	1046
9	1048	1051	1042	1047	1050	1051	1051	1055	1051	1044	1038	1036	1031	1036	1031	1030	1036	1035	1036	1045	1045	1045	1047	1041	1046	1043
10	1045	1045	1045	1049	1051	1052	1050	1050	1049	1044	1039	1036	1035	1039	1040	1040	1035	1035	1034	1029	1035	1035	1043	1048	1045	1042
11 Q	1045	1045	1044	1044	1046	1049	1044	1046	1046	1040	1035	1035	1035	1039	1044	1045	1045	1046	1047	1049	1050	1050	1050	1050	1049	1045
12 Q	1049	1045	1046	1046	1049	1050	1050	1050	1049	1044	1040	1034	1025	1026	1039	1041	1045	1047	1050	1054	1054	1051	1050	1046	1045	1045
13 Q	1044	1044	1044	1045	1047	1048	1048	1048	1044	1043	1039	1038	1038	1044	1050	1054	1054	1053	1053	1054	1054	1053	1048	1047	1044	1047
14 Q	1044	1045	1045	1048	1049	1050	1053	1051	1049	1042	1035	1031	1027	1030	1040	1046	1044	1044	1044	1047	1044	1048	1048	1049	1049	1044
15	1049	1049	1049	1049	1050	1052	1053	1050	1050	1044	1032	1029	1030	1039	1048	1056	1055	1056	1061	1058	1050	1049	1050	1058	1054	1049
16	1054	1054	1052	1053	1054	1055	1059	1059	1058	1044	1033	1029	1030	1037	1039	1048	1049	1049	1050	1050	1054	1054	1054	1053	1050	1049
17	1049	1049	1050	1051	1053	1056	1057	1055	1051	1040	1032	1029	1032	1042	1048	1052	1053	1053	1053	1054	1054	1053	1052	1052	1045	1049
18	1045	1023	1023	1024	1026	1029	1032	1034	1032	1025	1038	1028	1023	1028	1033	1041	1043	1048	1049	1053	1052	1050	1048	1048	1048	1037
19	1048	1043	1038	1042	1043	1048	1052	1048	1043	1033	1027	1023	1022	1027	1037	1043	1047	1048	1043	1043	1047	1054	1048	1048	1053	1042
20	1053	1048	1043	1043	1043	1051	1053	1048	1048	1043	1038	1038	1032	1024	1033	1038	1041	1042	1048	1049	1054	1053	1053	1052	1052	1044
21	1052	1048	1052	1047	1053	1062	1063	1062	1052	1043	1034	1027	1022	1029	1039	1047	1042	1043	1048	1048	1048	1049	1063	1055	1048	1047
22	1048	1047	1048	1048	1048	1053	1054	1050	1052	1046	1034	1024	1022	1028	1030	1038	1039	1036	1037	1039	1038	1045	1048	1051	1047	1042
23 D	1047	1048	1054	1052	1052	1054	1060	1054	1063	1054	1032	1023	1015	1019	1027	1028	1028	1036	1040	1038	1035	1044	1046	1046	1046	1041
24	1045	1042	1047	1048	1048	1051	1053	1051	1047	1041	1033	1028	1022	1022	1031	1038	1034	1033	1042	1046	1048	1051	1049	1048	1048	1042
25	1048	1052	1050	1047	1047	1048	1052	1052	1053	1047	1031	1018	1013	1015	1015	1029	1037	1044	1049	1046	1045	1042	1044	1047	1047	1040
26	1047	1043	1044	1047	1048	1052	1057	1057	1057	1048	1033	1027	1027	1031	1036	1042	1049	1055	1062	1061	1047	1029	1043	1041	1041	1045
27 D	1041	1067	1075	1078	1072	1093	1072	1063	1067	1061	1041	1011	984	972	986	1011	1026	1028	1006	1021	1029	1023	1027	1032	1029	1037
28 D	1029	1029	1029	1029	1031	1034	1036	1038	1041	1032	1016	996	1001	991	1016	1022	1028	1031	1038	1037	1047	1057	1043	1042	1042	1029
29 D	1042	1037	1037	1037	1041	1047	1046	1048	1042	1037	1027	1008	1008	1009	1016	1021	1026	1026	1032	1032	1036	1042	1051	1052	1047	1033
30	1047	1044	1042	1037	1033	1047	1053	1052	1047	1037	1027	1022	1016	1018	1027	1037	1038	1043	1047	1057	1045	1047	1050	1047	1044	1040
31 Q	1044	1046	1046	1047	1047	1047	1050	1051	1050	1047	1041	1032	1025	1022	1031	1038	1045	1047	1049	1049	1047	1051	1050	1048	1047	1044
Mean	1046	1045	1045	1046	1046	1050	1051	1050	1049	1042	1033	1026	1023	1027	1034	1039	1041	1043	1044	1046	1046	1046	1047	1047	1047	1042

## TERRESTRIAL MAGNETIC FORCE: WEST COMPONENT.

Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

269. Eskdalemuir. (-Y.)

4,000  $\gamma$  (-04 C.G.S. unit) +

January, 1928.

Hour. G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Day. 1 D	γ 381	γ 381	γ 375	γ 380	γ 377	γ 377	γ 379	γ 375	γ 375	γ 379	γ 385	γ 387	γ 407	γ 406	γ 401	γ 391	γ 389	γ 387	γ 386	γ 387	γ 386	γ 342	γ 346	γ 359	γ 373	γ 381
2	373	375	380	379	375	379	374	373	367	371	383	389	395	399	394	387	384	383	379	381	380	371	373	379	379	380
3	379	379	387	374	377	379	379	375	370	367	367	373	380	389	392	387	385	385	386	385	381	381	381	381	382	380
4	382	382	387	386	384	381	381	380	375	368	375	382	387	400	407	391	387	387	387	383	371	374	376	374	361	382
5	361	373	376	381	381	386	380	380	379	367	368	373	385	394	401	395	392	387	387	381	378	379	374	377	379	381
6	379	381	381	381	381	379	380	379	373	373	381	390	395	397	395	391	386	382	385	382	380	374	373	373	373	382
7	373	379	393	386	380	377	375	374	372	372	377	380	387	393	392	387	386	386	386	382	381	381	381	369	361	381
8	361	371	379	380	381	386	381	379	379	373	371	376	389	395	393	387	386	386	383	381	381	380	380	380	380	381
9	380	373	373	380	379	380	379	379	375	374	379	385	393	396	394	392	393	387	387	385	379	367	364	373	375	381
10	375	379	380	381	380	380	380	379	375	373	374	380	386	393	392	388	387	388	385	379	374	365	371	373	374	380
11 Q	374	377	380	380	380	380	381	379	373	370	375	380	387	393	388	386	387	387	387	385	381	380	379	376	379	381
12 Q	379	379	380	380	379	379	379	379	375	375	375	380	386	393	393	387	387	386	385	381	381	379	377	379	379	381
13 Q	379	375	375	379	379	379	377	375	373	373	380	387	393	399	394	388	387	387	388	387	387	380	379	377	377	383
14 Q	377	374	375	377	377	375	374	375	375	377	381	388	393	399	400	393	392	391	387	385	383	381	375	379	379	383
15	379	379	379	380	380	380	379	379	375	372	374	382	389	393	393	391	387	387	387	385	382	378	379	377	379	382
16	379	380	381	385	382	381	381	382	379	374	380	383	389	395	397	393	387	386	386	385	382	381	381	380	380	384
17	380	381	382	385	386	382	380	379	373	370	379	386	389	393	393	387	387	387	386	382	381	381	380	373	367	382
18	367	371	375	381	381	381	379	379	380	379	386	386	391	407	409	399	388	387	381	380	379	377	369	373	379	383
19	379	374	380	381	381	375	372	377	373	373	375	381	393	399	400	394	387	386	380	381	375	361	374	375	373	380
20	373	360	367	375	377	374	374	373	368	367	373	383	393	400	409	406	412	395	386	380	380	380	379	375	380	382
21	380	381	393	381	379	380	386	380	379	373	373	379	387	401	404	400	393	387	386	381	366	373	367	368	375	382
22	375	380	385	387	387	380	381	381	373	368	373	379	388	400	401	394	393	387	387	375	373	361	361	360	368	380
23 D	368	383	379	375	374	374	377	393	381	379	373	381	386	400	413	407	400	387	384	375	373	373	370	373	373	383
24	373	373	379	380	380	380	380	375	372	367	373	380	387	399	401	401	393	387	386	383	380	375	373	371	374	381
25	374	366	374	379	379	380	379	375	373	368	371	380	393	408	409	400	399	393	392	389	383	377	377	373	373	383
26	373	367	373	379	379	380	380	377	373	367	363	372	381	387	392	388	387	387	387	387	393	380	361	360	366	378
27 D	366	360	347	347	347	371	341	366	373	369	373	380	381	407	401	406	393	381	369	367	367	347	367	369	371	371
28 D	371	373	373	373	375	379	379	374	373	367	367	369	373	385	389	388	383	366	354	372	367	367	367	357	361	372
29 D	361	374	373	376	386	373	374	379	371	365	368	369	392	399	411	392	393	380	353	375	360	361	360	359	366	375
30	366	372	373	380	387	373	373	379	376	374	375	383	391	389	393	387	386	380	359	360	373	367	377	374	377	377
31 Q	377	376	375	375	375	379	379	375	373	372	373	378	386	393	394	393	387	384	381	382	380	379	375	374	373	380
Mean	374	375	378	379	379	379	377	378	374	371	375	381	389	397	398	393	390	386	382	381	378	373	372	372	374	380



**270. Eskdalemuir. (Z.)**

January, 1928.

Hour G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Day.	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$
1 D	878	875	875	871	871	869	869	868	867	867	871	870	864	864	867	871	872	872	871	871	872	881	883	871	867	871
2	868	867	868	868	867	867	867	868	871	871	873	872	869	870	872	872	872	872	872	872	872	872	869	868	868	870
3	869	868	868	861	864	865	866	868	870	872	871	871	868	865	868	870	869	869	868	868	868	868	868	868	866	868
4	867	867	865	865	865	865	864	864	865	866	867	868	867	869	870	871	870	869	869	870	873	871	870	869	864	868
5	865	863	866	866	866	866	866	867	870	872	871	870	866	867	872	874	871	870	870	871	871	870	870	870	867	869
6	868	868	868	868	867	864	864	864	867	867	868	864	863	863	868	871	871	871	868	869	871	871	865	866	865	867
7	866	864	862	853	856	860	864	864	865	865	866	865	865	865	868	870	869	869	869	869	868	866	866	867	865	865
8	866	865	865	865	865	865	864	865	865	866	866	866	863	863	866	869	869	869	869	866	866	865	866	866	866	865
9	866	865	865	863	863	865	865	864	865	865	865	865	862	865	871	877	874	874	873	872	870	870	870	869	866	868
10	867	867	867	866	866	866	865	864	863	862	862	861	861	862	866	868	870	870	870	874	873	874	871	867	867	867
11 Q	868	867	866	865	865	865	866	866	867	866	864	863	863	864	868	871	869	868	868	868	867	867	867	866	864	866
12 Q	865	865	865	866	866	866	866	865	864	864	864	864	865	864	865	868	868	868	868	868	867	866	865	865	865	866
13 Q	866	866	866	865	865	865	865	865	864	864	864	864	864	864	865	866	865	866	866	867	867	866	868	869	868	866
14 Q	869	868	867	867	866	866	866	866	865	864	864	865	866	866	867	870	869	869	870	870	870	870	870	867	866	867
15	867	867	866	866	865	865	865	865	866	866	867	867	867	867	866	866	866	863	863	863	866	867	867	863	863	865
16	864	863	863	861	861	863	864	864	865	867	867	868	868	867	867	866	864	867	867	867	867	867	866	865	865	865
17	866	865	865	865	865	865	864	865	865	865	865	869	870	865	864	862	861	862	863	864	864	864	864	865	865	865
18	866	865	863	862	862	861	862	861	862	863	863	865	865	865	866	866	867	869	868	868	868	868	869	868	866	865
19	867	867	867	867	867	868	867	867	869	871	871	871	872	871	871	871	869	868	870	870	870	870	867	867	867	869
20	868	867	866	864	864	864	865	867	867	868	864	864	864	864	867	867	868	868	870	870	868	868	867	864	864	866
21	865	864	860	860	860	860	859	860	864	868	869	869	869	868	866	866	869	869	868	869	870	868	865	862	863	865
22	864	864	865	865	864	864	864	864	866	867	865	866	867	867	870	873	873	874	874	875	878	875	870	867	865	868
23 D	866	862	860	863	863	863	862	861	860	862	867	867	868	865	867	874	875	879	879	880	880	878	875	875	871	869
24	872	872	869	868	868	867	867	867	868	869	868	867	866	863	871	875	875	878	876	875	873	872	872	872	872	870
25	873	872	870	869	869	868	868	868	868	868	869	864	861	864	872	874	873	873	873	873	873	873	873	873	873	870
26	874	874	874	874	873	871	870	869	869	870	869	868	868	868	869	871	870	869	869	869	873	883	889	887	882	873
27 D	883	871	869	869	867	830	823	831	837	840	846	853	865	874	887	889	894	894	913	910	894	892	887	879	878	871
28 D	878	878	878	878	878	878	878	877	876	876	879	879	883	884	883	882	885	888	884	883	883	874	874	870	867	879
29 D	868	867	871	871	863	866	871	871	875	875	872	876	876	875	876	882	891	893	897	892	890	884	879	875	871	878
30	872	872	872	872	868	872	872	872	872	872	874	875	873	877	880	884	882	881	885	882	880	880	876	876	876	876
31 Q	877	874	874	874	874	874	874	874	874	875	874	875	877	877	877	877	877	876	875	876	877	877	876	874	874	875
Mean	869	868	867	866	866	865	865	865	866	867	867	867	867	867	870	872	872	872	873	873	873	872	871	869	868	869

DAILY EXTREMES OF EACH COMPONENT OF TERRESTRIAL MAGNETIC FORCE :  
 MAGNETIC CHARACTER FIGURES : TEMPERATURE IN MAGNET HOUSE.

**271. Eskdalemuir.**

January, 1928.

Day.	Terrestrial Magnetic Elements.															Character in Figure 100 $\gamma^2$ §.	Magnetic Character of Day (0-2).	Temperature in Magnet House 200 +
	North Component.					West Component.					Vertical Component.							
	Maximum 15000 $\gamma$ +	Minimum 15000 $\gamma$ +	Range.	Maximum 4000 $\gamma$ +	Minimum 4000 $\gamma$ +	Range.	Maximum 44000 $\gamma$ +	Minimum 44000 $\gamma$ +	Range.									
1 D	h. m.	$\gamma$	$\gamma$	h. m.	$\gamma$	h. m.	$\gamma$	$\gamma$	h. m.	$\gamma$	h. m.	$\gamma$	$\gamma$	h. m.	$\gamma$			a.
2	19 3	1064	974	11 22	90	11 50	433	308	21 16	127	21 33	889	863	12 15	26	249	I	84.1
	21 31	1049	1013	10 12	36	12 31	400	367	8 25	33	18 41	873	867	0 21	6	24	O	84.1
3	21 35	1053	1023	12 26	30	1 53 and 13 22	393	366	8 59	27	8 40	873	860	2 28	13	18	O	84.0
4	23 50	1073	1011	12 5	62	13 58	413	354	23 43	59	20 29	874	863	6 40	11	74	I	83.9
5	0 1	1071	1021	12 51	50	14 16	405	360	0 17	45	14 49	875	862	0 43 and 12 22	13	47	I	83.9
6	22 11	1061	1027	12 8	34	12 19	401	362	21 58	39	14 59	872	861	12 32	11	28	I	83.9
7	23 32	1062	1035	12 1	27	2 17	411	360	23 35	51	15 9	872	852	3 1	20	37	I	83.9
8	7 11	1057	1026	11 18	31	13 2	399	360	0 23	39	14 50	869	856	12 10	13	27	O	83.8
9	6 56	1058	1013	14 36	45	13 11	401	354	21 31	47	14 33	878	861	3 18 and 11 50	17	45	I	83.8
10	5 12	1055	1025	18 41	30	13 39	396	357	21 10	39	21 25	875	861	10 49	14	26	O	83.7
11 Q	22 34	1058	1033	10 35	25	13 1	393	367	8 42	26	14 42	871	862	12 0	9	14	O	83.6
12 Q	19 50	1054	1023	12 41	31	13 10	395	374	8 19	21	16 0	868	863	12 40	5	14	O	83.6
13 Q	19 10	1055	1037	11 48	18	13 28	400	373	8 40	27	22 40	869	864	9 55	5	11	O	83.6
14 Q	5 30	1053	1024	12 30	29	13 31	402	372	1 28	30	20 0	871	863	9 38	8	18	O	83.6
15	17 34	1069	1028	11 19	41	12 47	395	372	21 15	23	12 10	868	862	16 0	6	22	O	83.5
16	6 27	1060	1026	11 6	34	13 5	400	373	8 50	27	12 0	869	860	3 3	9	20	O	83.5
17	6 00	1058	1028	11 17	30	13 40	393	362	23 48	31	12 1	870	861	15 50	9	19	O	83.5
18	7 24	1062	1017	12 20	45	13 31	420	367	0 1	53	22 0	870	861	7 0	9	49	O	83.4
19	20 31	1067	1021	12 21	46	14 31	401	352	20 50	49	12 20	874	866	2 39	8	46	I	83.4
20	0 26	1071	1018	13 17	53	13 52	417	354	1 3	63	17 44	871	863	13 4	8	68	I	83.4
21	22 21	1068	1018	12 11	50	13 13	407	353	20 0	54	20 0	872	856	2 20	16	57	I	83.3
22	6 11	1058	1018	11 46	40	13 21	407	353	21 36	54	19 48	878	862	0 33	16	48	I	83.3
23 D	7 46	1068	1009	11 56	59	13 52	419	366	20 10	53	19 49	881	858	7 30	23	68	I	83.2
24	6 25	1056	1016	12 24	40	13 35	406	365	8 51	41	16 50	880	858	13 1	22	38	I	83.3
25	6 20	1056	1006	14 13	50	13 16	447	360	0 58	87	15 38	876	860	12 16	16	103	I	83.3
26	18 16	1066	1025	21 8	41	20 21	399	352	22 32	47	21 57	890	866	11 27	24	45	I	83.3
27 D	5 2	1102	958	13 26	144	13 9	426	323	5 41	103	18 12	923	815	5 32	108	430	2	83.3
28 D	21 19	1067	976	13 0	91	14 12	396	349	11 37	47	18 17	888	867	24 0	20	109	I	83.2
29 D	22 12	1061	996	14 41	65	14 4	425	327	18 5	98	18 7	901	863	4 20	38	153	I	83.3
30	18 40	1067	1006	12 31	61	13 14	400	327	18 28	73	18 29	885	868	4 3	17	93	I	83.2
31 Q	19 18	1057	1020	12 57	37	14 12	399	367	and 9 32	32	15 38	878	873	9 42	5	24	O	83.2
Mean	—	1062	1015	—	47	—	406	357	—	50	—	877	854	—	17	65	0.61	83.5
No. of Days used.	—	31	31	—	31	—	31	31	—	31	—	31	31	—	31	31	31	31



Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

## 272. Eskdalemuir. (X.)

15,000γ (·15 C.G.S. unit) +

February, 1928.

Hour. G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Day.	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	1046	1051	1046	1050	1043	1045	1055	1056	1056	1046	1035	1030	1025	1025	1033	1037	1040	1046	1050	1046	1049	1051	1046	1050	1049	1044
2	1049	1047	1047	1050	1050	1051	1051	1051	1050	1046	1036	1032	1030	1031	1041	1046	1050	1038	1041	1052	1044	1037	1042	1065	1036	1045
3	1036	1031	1041	1040	1035	1041	1052	1056	1051	1041	1021	1022	1011	1005	1025	1032	1031	1021	1033	1041	1046	1046	1045	1051	1036	1035
4	1051	1044	1041	1045	1043	1046	1050	1061	1046	1041	1031	1025	1010	1012	1024	1037	1046	1053	1040	1047	1051	1051	1051	1047	1046	1041
5	1046	1046	1051	1047	1051	1054	1059	1056	1049	1042	1026	1017	1021	1018	1030	1039	1041	1046	1050	1051	1052	1049	1046	1046	1046	1043
6	1046	1047	1046	1047	1051	1051	1052	1051	1050	1043	1036	1027	1026	1026	1035	1036	1042	1050	1052	1038	1045	1051	1049	1048	1046	1044
7	1046	1047	1046	1050	1051	1060	1058	1066	1061	1052	1040	1027	1029	1034	1041	1045	1046	1046	1050	1051	1046	1042	1050	1050	1050	1047
8 Q	1050	1046	1047	1045	1046	1051	1051	1051	1055	1054	1041	1031	1032	1034	1041	1045	1047	1049	1036	1043	1049	1047	1046	1049	1050	1045
9 Q	1050	1050	1050	1050	1051	1050	1056	1055	1052	1050	1042	1033	1028	1030	1035	1040	1045	1049	1051	1051	1051	1051	1052	1047	1053	1047
10 Q	1053	1050	1051	1053	1054	1053	1055	1052	1056	1053	1046	1037	1032	1030	1028	1038	1042	1042	1046	1046	1048	1051	1057	1052	1055	1047
11 Q	1054	1049	1048	1049	1046	1050	1050	1050	1050	1045	1040	1035	1035	1030	1034	1039	1040	1040	1040	1042	1050	1050	1050	1055	1056	1045
12	1056	1050	1045	1047	1046	1049	1050	1051	1070	1061	1055	1045	1041	1030	1036	1050	1054	1060	1062	1052	1045	1051	1060	1056	1042	1051
13 D	1042	1044	1041	1044	1045	1050	1049	1045	1049	1041	1040	1035	1034	1034	1035	1041	1039	1048	1034	1029	1034	1045	1045	1041	1040	1041
14	1040	1039	1049	1060	1051	1050	1040	1045	1035	1033	1029	1027	1031	1030	1031	1031	1034	1040	1035	1039	1045	1060	1039	1042	1045	1040
15	1045	1041	1042	1043	1041	1047	1045	1040	1041	1045	1045	1035	1034	1034	1032	1039	1045	1049	1044	1054	1041	1035	1060	1045	1042	1043
16	1042	1050	1052	1047	1050	1045	1044	1049	1045	1035	1029	1014	1022	1028	1030	1034	1040	1045	1052	1050	1055	1040	1040	1045	1040	1041
17	1040	1050	1045	1040	1046	1045	1047	1049	1049	1044	1034	1028	1025	1027	1032	1035	1038	1040	1045	1052	1051	1046	1049	1052	1051	1042
18 D	1051	1050	1059	1055	1051	1051	1061	1065	1060	1056	1035	1025	1010	1004	1025	1027	1035	1035	1035	1036	1044	1036	1039	1046	1049	1041
19 D	1049	1059	1054	1049	1030	1065	1060	1055	1055	1045	1040	1029	1019	1010	1017	1030	1039	1039	1046	1040	1046	1050	1053	1051	1051	1043
20	1051	1051	1050	1050	1051	1054	1055	1059	1058	1049	1026	1020	1014	1014	1019	1024	1035	1045	1051	1047	1040	1048	1035	1030	1040	1040
21 D	1040	1045	1040	1039	1042	1046	1056	1056	1059	1054	1045	1035	1011	1014	1035	1045	1044	1044	1050	1039	1045	1061	1053	1051	1045	1044
22	1045	1040	1046	1059	1047	1054	1054	1055	1050	1040	1029	1027	1022	1025	1029	1034	1040	1044	1046	1051	1051	1074	1057	1037	1044	1044
23	1044	1049	1045	1042	1046	*	—	—	—	*	1030	1011	1013	1011	1028	1029	1040	1044	1045	1047	1050	1050	1050	1051	1050	—
24 Q	1049	1054	1049	1049	1053	1054	1054	1055	1053	1043	1029	1020	1018	1023	1029	1030	1033	1034	1044	1049	1050	1056	1059	1060	1059	1044
25	1059	1059	1058	1058	1054	1061	1049	1068	1068	1054	1039	1022	1002	1020	1024	1024	1030	1035	1048	1044	1043	1048	1049	1048	1065	1045
26 D	1065	1053	1050	1046	1048	1049	1054	1055	1058	1041	1029	1019	988	1013	1017	1019	1024	1030	1053	1049	1045	1050	1050	1060	1054	1040
27	1054	1050	1045	1045	1045	1048	1049	1054	1044	1025	1028	1023	1014	1014	1018	1023	1029	1038	1043	1049	1049	1053	1064	1051	1050	1040
28	1050	1050	1043	1043	1044	1049	1053	1049	1048	1038	1028	1014	1008	1010	1008	1024	1033	1048	1049	1047	1053	1051	1052	1050	1051	1039
29	1051	1053	1055	1045	1048	1049	1051	1053	1049	1044	1033	1020	1019	1023	1029	1034	1039	1043	1044	1049	1052	1053	1052	1051	1050	1043
Mean†	1048	1048	1048	1048	1047	1051	1052	1054	1052	1045	1035	1027	1021	1022	1029	1035	1039	1043	1045	1046	1047	1049	1050	1049	1048	1043

## TERRESTRIAL MAGNETIC FORCE : WEST COMPONENT.

Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

## 273. Eskdalemuir. (—Y.)

4,000γ (·04 C.G.S. unit) +

February, 1928.

Hour. G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	373	373	373	376	367	367	375	374	373	367	373	381	389	393	400	395	387	386	386	386	361	359	379	378	373	378
2	373	380	380	379	377	375	374	373	373	373	375	381	389	399	400	393	387	377	380	347	351	373	370	347	346	376
3	346	360	360	367	383	381	373	374	369	373	369	385	399	416	402	407	400	390	387	380	367	373	375	373	368	380
4	368	373	377	381	381	381	377	379	379	379	380	387	393	407	401	393	387	383	381	380	379	375	375	374	374	382
5	374	380	381	381	386	387	373	373	367	362	365	374	393	395	401	390	387	381	380	380	377	373	368	373	377	379
6																										
7	377	379	381	380	380	379	375	373	367	361	367	371	381	392	399	392	387	387	381	380	373	377	373	375	380	379
8	380	387	385	380	375	373	373	374	372	369	370	373	381	387	387	382	383	387	387	385	360	367	373	373	373	377
8 Q	373	374	368	367	365	367	367	371	370	368	372	379	388	395	397	392	387	386	388	387	381	375	365	363	366	377
9 Q	366	370	373	373	373	381	374	373	369	369	369	375	380	388	393	393	388	383	384	380	379	373	373	373	372	377
10 Q	372	375	375	378	375	375	373	373	369	361	366	375	386	400	407	407	400	393	399	393	387	381	380	375	366	382
11 Q																										
12	366	362	367	369	371	371	373	369	367	363	369	380	393	394	399	397	399	399	387	381	380	374	373	373	367	378
13	367	373	375	377	375	374	373	372	373	370	374	386	395	399	406	404	400	399	394	394	369	366	341	355	368	380
13 D	368	378	374	373	369	373	373	369	367	367	374	383	391	394	397	399	392	387	387	388	389	379	353	359	359	378
14	359	360	354	340	361	353	366	367	369	379	380	381	393	403	400	403	399	373	388	393	387	360	370	369	362	375
15	362	366	367	373	373	371	367	368	373	370	373	375	381	388	395	394	394	393	393	385	387	379	373	347	353	377
16																										
16	353	347	348	355	356	357	366	367	371	373	374	376	386	392	393	393	387	385	381	377	380	380	374	367	352	372
17	352	360	353	366	367	366	367	367	367	361	365	375	387	393	394	394	387	386	374	375	379	374	374	375	375	374
18 D	375	373	373	362	365	373	373	373	374	373	381	388	400	407	413	397	393	389	383	380	367	347	347	355	372	377
19 D	372	367	360	357	385	380	349	364	367	362	354	368	380	392	394	401	400	387	387	387	379	374	373	373	373	376
20	373	373	373	373	373	373	373	373	366	355	355	363	381	393	397	395	393	387	381	353	373	367	312	327	341	369
21 D																										
21 D	341	341	371	373	369	369	365	367	364	355	361	386	392	400	401	401	393	388	387	374	380	320	345	353	353	371
22	353	373	361	361	366	367	367	366	357	347	349	363	374	386	393	392	393	386	386	386	381	359	360	343	347	369
23	347	353	361	374	373	*	—	—	—	*	361	366	379	393	400	396	393	387	381	377	375	373	373	373	373	—
24 Q	373	379	373	374	374	375	373	372	365	356	360	372	383	394	399	395	393	383	386	384	381	379	379	379	377	378
25	377	375	375	379	372	364	381	388	376	360	367	373	382	388	399	399	393	374	367	364	363	375	367	361	355	375
26 D																										
26 D	355	367	371	369	371	373	373	372	367	361	361	375	373	391	407	412	399	387	353	373	381	379	369	341	369	374
27	369	367	373	394	374	371	372	371	366	365	360	366	379	389	400	397	390	381	380	386	381	377	320	340	341	373
28	341	347	359	365	366	367	367	369	370	367	359	365	385	395	400	401	373	386	381	381	373	363	371	375	373	373
29	373	373	380	375	369	369	369	371	367	360	362	367	378	387	393	393	387	379	379	379	377	377	376	375	375	376
Mean †	365	369	370	371	372	372	371	371	369	365	367	376	386	395	389	397	391	386	383	380	376	370	365	368	365	376



**TERRESTRIAL MAGNETIC FORCE : VERTICAL COMPONENT.**  
*Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.*

251

**274. Eskdalemuir. (Z.)**

44,000γ (.44 C.G.S. unit) +

**February, 1928.**

Hour. G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Day.	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	875	874	874	871	874	874	871	872	874	875	877	874	874	871	871	874	875	875	875	876	880	882	876	874	874	874
2	875	871	870	871	871	871	872	872	872	871	872	872	875	872	871	871	874	880	880	883	880	880	879	872	870	874
3	871	864	859	859	862	862	868	871	874	875	872	874	876	880	884	887	893	897	894	890	889	885	881	881	877	877
4	878	878	877	877	876	875	876	873	875	876	876	877	881	882	883	889	890	889	888	886	882	882	881	881	879	880
5	880	879	878	877	875	870	870	870	874	877	875	876	874	875	879	886	882	882	879	878	878	880	879	878	877	877
6	878	876	877	878	878	876	875	874	875	877	873	870	869	871	875	880	880	878	878	883	883	879	878	878	878	877
7	879	874	870	871	875	875	874	871	871	871	873	874	873	875	878	880	880	879	879	879	884	884	883	880	879	876
8 Q	880	880	879	880	879	878	876	876	875	875	873	872	872	872	875	879	881	882	882	882	882	882	884	884	880	878
9 Q	881	880	878	877	877	876	873	873	873	873	873	873	874	875	880	882	882	882	880	877	877	877	877	877	876	877
10 Q	877	876	877	877	877	877	877	874	874	874	874	869	869	871	875	878	878	882	882	883	884	883	882	878	878	877
11 Q	878	878	877	877	875	874	874	874	874	873	870	869	866	869	873	878	882	882	884	886	883	882	879	878	874	876
12	875	875	875	875	875	876	877	877	874	874	866	866	866	870	870	875	878	877	878	883	897	894	894	884	883	877
13 D	884	880	880	880	880	877	877	879	876	876	870	867	867	867	872	879	883	885	889	897	897	897	898	893	889	881
14	890	886	878	868	855	851	864	872	874	873	876	876	877	877	880	882	889	894	894	893	890	890	889	886	886	879
15	886	885	883	881	881	880	880	878	876	876	873	872	870	872	877	878	881	884	885	885	887	894	890	880	882	881
16	883	882	879	877	873	874	877	877	877	877	873	870	867	872	875	878	878	878	878	881	881	881	882	882	882	877
17	883	878	875	876	875	878	878	879	879	877	871	871	871	874	878	883	886	884	883	882	882	883	883	879	879	879
18 D	880	880	879	875	875	875	875	875	875	875	871	867	869	871	872	878	883	889	892	893	893	893	890	880	875	879
19 D	876	867	867	865	856	840	851	861	867	872	872	872	874	876	877	879	884	888	885	888	888	885	882	881	881	873
20	881	881	881	880	880	878	877	876	877	880	876	873	874	880	880	881	884	884	883	890	889	883	878	881	878	880
21 D	879	881	882	885	885	882	881	878	879	879	877	874	877	881	881	881	882	882	886	890	890	894	887	882	882	882
22	883	878	875	869	874	878	878	879	883	882	879	875	877	878	877	878	883	885	884	883	886	883	875	878	878	879
23	878	878	878	882	883	*	—	—	—	*	878	878	878	879	882	887	887	887	886	886	885	883	883	882	882	—
24 Q	883	880	879	881	883	883	882	883	884	887	884	883	881	879	879	883	888	891	887	884	884	883	881	880	880	883
25	880	880	879	879	879	879	875	872	872	875	871	871	870	875	878	882	888	893	895	897	899	891	888	887	877	881
26 D	878	876	876	880	882	884	884	881	881	884	881	876	879	879	880	889	901	902	906	898	892	888	888	888	884	886
27	885	880	881	877	876	881	883	884	886	886	881	874	872	873	876	881	887	894	890	887	887	889	892	886	879	883
28	880	878	878	882	883	886	884	883	883	883	883	882	877	878	886	895	905	896	894	891	891	890	887	886	886	886
29	886	884	878	878	882	883	883	883	885	886	882	878	878	878	878	880	884	887	886	887	887	886	886	886	886	883
Mean†	880	878	876	876	875	875	875	876	876	877	875	873	873	875	877	881	884	886	886	886	887	886	884	881	880	879

**DAILY EXTREMES OF EACH COMPONENT OF TERRESTRIAL MAGNETIC FORCE :  
MAGNETIC CHARACTER FIGURES : TEMPERATURE IN MAGNET HOUSE.**

**275. Eskdalemuir.**

**February, 1928.**

Day.	Terrestrial Magnetic Elements.															Character Figures	Magnetic Character of Day (0-2).	Temperature in Magnet House 200 +
	North Component.					West Component.					Vertical Component.							
	Maximum 15000 γ +		Minimum 15000 γ +		Range.	Maximum 4000 γ +		Minimum 4000 γ +		Range.	Maximum 44000 γ +		Minimum 44000 γ +		Range.			
	h. m.	γ	γ	h. m.	γ	h. m.	γ	γ	h. m.	γ	h. m.	γ	γ	h. m.	γ			a.
1	20 36	1066	1016	12 48	50	13 49	410	321	20 23	89	20 28	885	870	13 36	15	106	I	83.2
2	22 38	1085	1025	20 14	60	13 58	401	317	19 8	84	19 8	886	870	23 30	16	109	I	83.1
3	7 30	1061	1000	12 33	61	13 1	425	340	0 1	85	16 55	898	859	2 0	39	125	I	83.1
4	6 58	1065	1001	12 19	64	13 9	413	366	0 22	47	15 10	890	873	7 1	17	66	I	83.1
5	6 40	1063	1013	10 53	50	13 45	409	359	9 16	50	15 5	886	869	5 40	17	53	O	83.1
6	21 20	1056	1024	12 41	32	13 50	400	360	9 10	40	18 9	883	867	12 10	16	29	I	83.1
7	7 20	1071	1024	10 49	47	0 20	395	346	20 12	49	20 34	887	867	1 50	20	50	I	83.1
8 Q	8 39	1060	1029	11 13	31	13 55	400	361	3 58	39	21 38	885	871	12 30	14	27	O	83.1
9 Q	6 7	1057	1026	12 31	31	13 38	395	363	0 4	32	15 41	883	873	10 20	10	21	O	83.1
10 Q	23 52	1061	1025	13 7	36	14 55	411	359	9 25	52	20 35	886	869	11 1	17	43	O	83.1
11 Q	28 55	1060	1030	13 1	30	16 10	401	360	1 9	41	19 0	887	865	11 49	22	31	O	82.9
12	7 49	1076	1026	13 18	50	13 44	408	333	22 10	75	19 53	900	865	11 11	35	93	I	82.9
13 D	21 56	1064	1014	18 52	50	12 45	407	334	21 48	73	21 48	901	865	11 23	36	91	I	82.9
14	20 53	1085	1014	3 48	71	14 20	414	326	3 20	88	17 10	895	842	4 20	53	156	I	82.9
15	22 11	1105	1027	11 30	78	13 59	400	334	23 1	66	21 22	895	868	11 51	27	112	I	82.9
16	20 8	1089	999	11 10	90	14 18	394	340	23 49	54	22 40	883	866	12 10	17	113	I	82.9
17	1 3	1058	1023	11 59	35	14 34	399	347	1 22	52	6 0	887	870	11 18	17	42	I	82.9
18 D	7 24	1069	998	12 47	71	13 49	423	340	20 54	83	18 48	896	867	10 43	29	128	I	82.9
19 D	1 2	1083	995	13 34	88	4 35	426	333	5 22	93	19 20	889	834	5 0	55	194	I	82.9
20	21 7	1076	1009	12 19	67	14 33	401	293	22 10	108	19 5	893	872	11 33	21	166	I	82.9
21 D	21 30	1078	995	12 6	83	12 41	433	298	20 59	135	20 57	895	873	11 31	22	256	I	82.9
22	21 3 between 5 and 0	1083	1020	12 12	63	15 32	399	334	22 38	65	19 40	887	865	2 46	22	86	I	82.9
23	9 0	1061	1004	12 56	57	14 30	408	347	0 10	61	15 38	888	877	11 30	11	71	I	82.9
24 Q	23 32	1064	1015	12 1	49	14 17	400	354	9 32	46	16 46	892	879	1 11	13	47	O	82.9
25	7 33	1079	991	12 0	88	13 50	413	333	19 28	80	19 26	905	868	11 52	37	155	I	82.9
26 D	18 18	1098	975	12 0	123	14 27	418	286	18 12	132	18 11	911	873	1 31	38	340	I	82.9
27	22 9	1088	1012	12 9	76	13 44	400	306	22 2	103	17 10	895	872	12 30	23	169	I	82.9
28	20 19	1059	998	14 11	61	13 35	413	333	0 34	80	16 0	908	876	12 21	32	111	I	82.9
29	1 32	1069	1018	11 32	51	14 40	394	358	8 40	36	16 51	887	874	1 58	13	41	I	82.9
Mean	—	1072	1012	—	60	—	408	337	—	70	—	892	868	—	24	105	0.79	83.0
No. of Days used.	—	29	29	—	29	—	29	29	—	29	—	29	29	—	29	29	29	29



Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

## 276. Eskdalemuir. (X.)

15,000  $\gamma$  ( $\cdot 15$  C.G.S. unit) +

March, 1928.

Hour. G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Day.	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	
1	1050	1051	1049	1052	1050	1053	1053	1054	1053	1047	1038	1029	1025	1027	1027	1029	1033	1039	1048	1049	1051	1052	1050	1053	1053	1044
2 Q	1053	1053	1053	1053	1054	1054	1058	1058	1058	1051	1044	1043	1036	1037	1038	1039	1043	1044	1048	1050	1053	1053	1053	1053	1053	1049
3	1053	1052	1051	1053	1053	1054	1054	1056	1054	1048	1039	1036	1036	1037	1040	1043	1045	1049	1052	1055	1058	1059	1059	1055	1055	1050
4 Q	1055	1055	1056	1056	1059	1057	1059	1059	1054	1040	1029	1024	1023	1024	1028	1031	1040	1048	1051	1054	1055	1058	1055	1056	1058	1047
5 Q	1058	1058	1056	1058	1058	1059	1059	1059	1055	1044	1033	1029	1029	1030	1039	1048	1054	1055	1056	1058	1059	1059	1059	1059	1060	1051
6	1060	1059	1058	1058	1058	1055	1060	1060	1053	1048	1028	1020	1014	1015	1027	1035	1045	1053	1058	1057	1053	1055	1057	1055	1054	1047
7	1054	1054	1054	1053	1053	1054	1058	1063	1054	1045	1033	1022	1017	1022	1026	1040	1050	1049	1048	1050	1044	1047	1046	1050	1049	1045
8	1049	1049	1050	1051	1054	1053	1053	1053	1049	1040	1029	1024	1024	1030	1037	1042	1040	1049	1053	1056	1049	1049	1052	1053	1054	1045
9 Q	1054	1059	1054	1052	1053	1054	1054	1054	1053	1044	1030	1020	1014	1020	1028	1037	1043	1044	1048	1050	1053	1054	1054	1053	1054	1045
10	1054	1052	1052	1052	1051	1054	1058	1057	1053	1040	1032	1023	1018	1018	1024	1024	1045	1044	1049	1051	1058	1062	1062	1079	1064	1047
11 D	1064	1054	1054	1055	1059	1060	1063	1064	1066	1054	1022	983	988	1008	1018	1029	988	1023	1008	1024	1027	1018	1029	1013	1019	1031
12 D	1019	1008	1008	1014	1015	1039	1030	1023	1013	1003	986	978	983	988	1008	1007	1022	1028	1040	1064	1036	1047	1048	1036	1034	1019
13 D	1034	1034	1034	1038	1033	1043	1045	1049	1043	1034	1024	1003	998	1008	1013	1024	1053	1030	1064	1040	1039	1033	1040	1043	1044	1033
14 D	1044	1022	1025	1036	1034	1029	1024	1012	1001	999	978	963	963	974	994	1008	1031	1051	1047	1039	1053	1055	1049	1051	1044	1020
15	1044	1044	1038	1038	1038	1039	1042	1039	1033	1019	999	984	980	984	992	1009	1024	1034	1054	1053	1049	1051	1050	1049	1049	1029
16	1049	1044	1044	1043	1043	1045	1049	1053	1049	1035	1024	1014	1007	1008	1008	1029	1029	1029	1044	1053	1057	1056	1054	1050	1050	1038
17	1050	1049	1049	1049	1049	1058	1063	1056	1048	1030	1015	1009	1008	1007	1014	1030	1038	1044	1052	1054	1053	1049	1046	1052	1043	1040
18	1043	1044	1045	1054	1059	1059	1053	1057	1054	1047	1033	1023	1014	1016	1028	1025	1034	1034	1044	1054	1054	1060	1054	1054	1058	1044
19	1058	1054	1050	1049	1048	1054	1058	1055	1053	1044	1040	1029	1023	1018	1025	1030	1029	1042	1050	1058	1049	1063	1054	1054	1056	1045
20	1056	1054	1053	1051	1056	1059	1059	1059	1050	1039	1019	1009	1012	1020	1028	1032	1040	1039	1049	1054	1050	1053	1054	1073	1054	1044
21	1054	1058	1055	1058	1058	1058	1058	1062	1054	1039	1025	1021	1018	1018	1019	1026	1038	1048	1045	1050	1050	1050	1050	1053	1053	1044
22	1053	1054	1051	1049	1050	1053	1049	1049	1049	1042	1028	1024	1028	1034	1033	1038	1045	1045	1049	1051	1047	1043	1042	1041	1049	1044
23 D	1049	1050	1053	1064	1068	1069	1054	1052	1035	1023	1030	1032	1027	1019	1024	1040	1049	1057	1059	1060	1063	1063	1059	1059	1062	1049
24	1062	1059	1058	1059	1058	1063	1064	1069	1060	1049	1035	1023	1003	1013	1029	1034	1048	1054	1055	1057	1059	1054	1059	1055	1059	1049
25	1059	1064	1065	1055	1054	1054	1058	1053	1055	1042	1019	1000	1013	1024	1034	1029	1039	1054	1054	1059	1056	1069	1054	1054	1054	1046
26	1054	1057	1054	1050	1046	1048	1055	1054	1050	1035	1018	1002	1005	1019	1026	1040	1042	1049	1053	1058	1057	1057	1057	1058	1058	1044
27	1058	1059	1053	1051	1054	1054	1058	1055	1048	1033	1019	1008	1003	1008	1016	1031	1043	1053	1053	1056	1055	1054	1054	1056	1059	1043
28	1059	1059	1059	1059	1058	1060	1058	1060	1058	1039	1019	1011	1008	1015	1029	1045	1054	1059	1068	1059	1054	1059	1059	1059	1065	1049
29	1065	1059	1056	1056	1060	1063	1065	1063	1054	1039	1023	1016	1007	1020	1035	1050	1054	1058	1058	1057	1062	1058	1059	1059	1058	1050
30	1058	1058	1056	1058	1058	1055	1058	1054	1045	1034	1024	1020	1023	1028	1035	1045	1050	1059	1063	1061	1058	1069	1062	1055	1058	1049
31 Q	1058	1058	1056	1056	1056	1059	1059	1054	1047	1039	1030	1024	1024	1033	1038	1048	1055	1055	1059	1059	1059	1063	1059	1059	1060	1050
Mean	1053	1051	1050	1051	1052	1054	1054	1054	1048	1038	1024	1014	1012	1017	1025	1033	1041	1046	1051	1053	1052	1054	1053	1053	1053	1043

## TERRESTRIAL MAGNETIC FORCE : WEST COMPONENT.

Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

## 277. Eskdalemuir. (—Y.)

4,000  $\gamma$  ( $\cdot 04$  C.G.S. unit) +

March, 1928.

Hour. G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Day.	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	374	372	372	372	372	371	371	370	366	360	358	365	380	391	391	387	380	374	378	378	377	374	373	373	372	374
2 Q	372	372	372	374	368	368	371	368	364	359	364	372	384	388	386	380	378	378	378	376	375	373	374	374	374	374
3	374	374	374	375	372	370	368	366	360	354	356	366	376	385	386	380	378	378	378	376	376	378	378	377	378	373
4 Q	378	378	378	379	370	367	367	366	358	351	352	364	384	388	389	386	380	378	374	373	374	377	375	377	376	373
5 Q	376	375	374	373	372	372	371	366	356	349	352	364	384	393	392	386	384	379	380	379	378	378	378	378	375	375
6	375	373	373	373	372	372	366	359	352	345	352	364	387	393	398	392	384	378	376	376	372	372	373	374	373	373
7	373	373	372	372	372	366	366	360	358	352	353	368	386	405	406	399	392	384	378	372	366	363	364	367	372	374
8	372	372	371	372	370	362	366	364	354	348	352	368	392	406	410	406	389	380	379	378	378	372	372	372	366	375
9 Q	366	352	352	360	370	370	367	365	358	349	350	359	378	398	406	406	394	386	380	379	375	372	372	372	367	372
10	367	366	366	365	365	366	364	365	358	352	352	362	380	398	406	401	399	387	379	374	379	379	374	353	352	373
11 D	352	365	366	371	370	372	372	367	359	353	359	386	407	426	426	458	379	426	421	394	383	369	347	321	313	380
12 D	313	306	305	352	379	346	352	352	346	345	352	359	384	396	405	399	378	382	372	353	366	368	349	347	366	380
13 D	366	372	371	359	379	392	391	392	385	376	345	354	384	401	412	406	420	380	365	360	352	326	333	314	326	371
14 D	326	285	354	345	351	352	351	349	351	338	344	356	378	396	412	406	392	364	359	358	366	364	363	366	372	360
15	372	394	370	379	366	363	358	352	345	340	345	364	385	406	412	406	399	380	354	366	367	360	352	360	366	371
16	366	372	372	366	366	365	360	356	347	340	346	359	377	398	406	414	399	386	380	378	372	353	364	372	371	372
17	371	366	366	366	366	366	366	360	352	346	346	366	386	406	412	412	401	388	378	374	376	379	378	358	364	374
18	364	366	360	360	358	354	358	356	352	352	358	368	386	399	405	398	392	378	372	372	366	358	368	374	368	370
19	368	359	366	366	367	367	366	366	353	354	352	364	380	386	392	398	380	378	380	378	371	367	372	373	373	371
20	373	371	366	364	358	359	360	358	347	340	344	358	373	392	399	393	385	372	373	372	370	372	372	368	360	368
21	360	366	385	372	353	354	354	352	346	341	351	361	391	406	410	405	393	386	378	372	366	366	359	352	345	370
22	345	346	358	365	361	358	358	352	349	346	354	374	400	414	412	411	405	396	386	381	373	354	351	331	323	370
23 D	323	323	319	318	314	326	336	342	360	373	385	380	399	415	412	406	394	392	388	386	385	379	352	362	365	366
24	365	367	371	371	375	366	360	359	352	352	359	374	387	392	404	392	386	379	379	378	378	372	360.	367	372	373
25	372	369	366	366	358	359	360	358	352	344	354	363	388	398	406	392	378	374	374	372	368	364	372	372	366	370
26	366	372	362	365	374	366	360	356	348	349	358	372	385	400	398	399	379	367	368	372	360	366	370	371	374	370
27	374	374	365	371	365	364	359	352	340	338	340	353	374	390	392	390	382	378	372	374	374	372	372	372	378	368
28	378	378	372	366	366	362	359	352	341	334	338	351	378	394	392	387	380	374	372	366	367	377	376	375	367	368
29	367	366	365	366	368	366	366	358	346	338	340	360	380	398	399	395	384	374	372	373	374	368	372	376	372	368
30	372	372	368	365	364	360	359	354	351	346	353	366	384	395	392	382	372	372	372	368	371	366	352	371	372	368
31 Q	372	372	367	366	365	365	360	354	347	348	364	380	398	406	400	390	381	378	378	379	378	378	375	373	369	374
Mean	364	363	364	366	365	363	363	360	353	349	353	365	385	399	402	399	388	381	377	374	372	368	366	364	364	371



**TERRESTRIAL MAGNETIC FORCE : VERTICAL COMPONENT.**  
*Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.*

253

**278. Eskdalemuir. (Z.)**

44,000 γ (44 C.G.S. unit) +

**March, 1928.**

Hour. G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Day.	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	887	885	886	884	884	884	884	884	887	891	888	887	883	883	883	887	892	892	888	887	887	887	887	887	887	886
2Q	887	886	884	883	883	883	883	883	885	887	883	878	878	882	887	888	891	890	887	887	887	887	887	886	886	885
3	887	886	886	885	885	884	884	886	886	887	883	876	876	879	879	880	884	884	884	884	883	882	883	884	884	883
4Q	884	884	882	881	880	880	880	882	885	888	884	880	876	877	880	881	884	884	884	884	884	884	884	884	884	882
5Q	885	885	885	885	884	883	882	883	885	886	886	880	875	876	880	885	885	882	881	881	881	882	882	883	884	883
6	884	885	885	884	884	883	882	884	886	884	880	876	872	874	876	880	884	885	885	886	887	886	885	885	885	883
7	886	886	886	886	886	884	882	882	886	887	883	878	874	875	881	884	890	890	894	895	897	899	895	891	890	887
8	890	890	890	887	886	886	886	886	886	886	883	878	878	879	883	887	890	890	890	890	890	890	888	887	887	886
9Q	888	887	887	887	887	887	887	887	887	887	884	882	876	875	878	883	888	891	888	888	887	887	887	887	887	885
10	887	888	888	887	887	887	887	887	887	887	885	883	879	879	882	887	891	897	899	896	892	888	888	883	880	887
11D	880	881	883	883	884	884	884	883	883	880	876	872	872	887	912	947	1005	965	982	964	972	969	939	928	900	914
12D	901	880	841	811	841	862	876	888	892	888	884	884	884	886	893	905	920	919	914	907	903	896	884	883	889	885
13D	889	893	896	896	888	884	890	893	896	897	896	892	889	889	896	907	916	941	932	932	923	914	901	888	858	901
14D	858	855	858	866	879	889	892	894	894	894	893	892	889	891	901	914	920	930	928	923	905	892	893	892	892	894
15	893	877	875	881	889	894	898	901	902	899	894	890	890	893	897	901	906	915	919	911	906	905	905	900	896	898
16	896	894	894	897	897	898	898	898	900	898	889	886	882	884	888	893	898	901	898	897	898	901	898	894	894	895
17	894	894	894	894	893	893	893	894	898	896	893	886	880	880	885	893	901	907	909	906	904	902	902	900	899	896
18	899	898	897	895	890	889	889	890	893	890	884	877	877	880	885	893	900	906	906	902	900	899	895	893	892	893
19	892	889	889	889	889	888	889	889	890	889	885	881	879	881	886	893	899	899	893	893	897	893	893	893	893	890
20	893	893	891	890	886	884	884	889	893	893	890	884	880	877	881	885	893	897	893	893	893	893	893	893	893	889
21	886	885	881	873	879	881	882	885	886	887	881	877	869	869	873	881	891	902	904	904	903	901	900	898	895	887
22	895	893	891	890	890	890	890	890	888	886	881	872	869	870	873	885	895	903	907	908	912	913	911	907	900	892
23D	900	894	890	882	877	869	869	872	872	869	865	861	861	868	878	886	890	890	890	890	889	889	891	890	887	880
24	887	887	887	886	886	885	885	886	885	881	877	873	876	881	883	887	890	891	890	890	890	890	890	890	888	886
25	888	882	877	877	881	882	885	890	890	890	882	882	879	882	890	904	907	903	896	894	894	890	887	887	888	888
26	889	887	888	890	887	888	890	891	891	887	883	880	876	878	883	891	899	904	903	896	898	894	892	891	888	890
27	888	883	883	886	887	889	891	894	892	889	879	874	870	874	878	882	887	889	891	891	891	890	891	888	886	886
28	886	883	883	883	883	886	887	890	888	887	878	869	861	865	870	879	886	887	891	895	892	888	887	887	886	883
29	887	887	887	887	887	887	887	891	892	892	884	871	862	862	867	876	881	885	886	886	886	887	885	884	884	883
30	884	884	884	884	884	885	887	888	888	887	883	876	872	875	880	886	887	887	884	889	890	888	888	884	884	884
31Q	884	884	884	885	886	887	887	888	888	884	875	867	867	878	875	880	884	884	884	884	887	886	887	887	887	883
Mean	888	886	884	883	884	885	886	888	889	888	884	879	876	878	883	891	898	900	899	898	897	895	893	891	888	889

**DAILY EXTREMES OF EACH COMPONENT OF TERRESTRIAL MAGNETIC FORCE :  
MAGNETIC CHARACTER FIGURES : TEMPERATURE IN MAGNET HOUSE.**

**279. Eskdalemuir.**

**March, 1928.**

Day.	Terrestrial Magnetic Elements.															Character Figure. $\Sigma R^2$ 100y <sup>2</sup> §	Magnetic Character of Day (0-2).	Temperature in Magnet House 200 +
	North Component.					West Component.					Vertical Component.							
	Maximum 15000 y +		Minimum 15000 y +		Range.	Maximum 4000 y +		Minimum 4000 y +		Range.	Maximum 44000 y +		Minimum 44000 y +		Range.			
	h. m.	y	y	h. m.	y	h. m.	y	y	h. m.	y	h. m.	y	y	h. m.	y			
1	7 8	1054	1021	12 40	33	13 9	395	354	9 52	41	16 50	893	881	11 57	12	29	0	a.
2Q	7 36	1059	1034	11 51	25	13 30	392	358	8 59	34	16 22	892	877	11 35	15	20	0	82.9
3	19 26	1062	1034	11 53	28	13 49	386	353	9 21	33	8 35	888	876	11 50	12	20	0	82.9
4Q	3 31	1064	1020	12 6	44	13 40	392	348	9 9	44	9 0	888	876	11 40	12	40	0	82.9
5Q	23 1	1064	1027	11 20	37	12 50	398	346	9 12	52	9 35	888	874	12 0	14	43	0	82.9
6	6 42	1064	1011	12 32	53	14 0	399	344	8 48	55	20 28	889	872	11 51	17	61	0	82.9
7	7 0	1065	1013	11 32	52	13 34	412	348	9 10	64	20 30	900	873	12 20	27	75	0	82.9
8	19 18	1059	1019	10 58	40	13 28	413	345	9 28	68	16 40	891	877	11 54	14	64	0	82.8
9Q	0 41	1068	1012	11 50	56	14 35	411	346	1 9	65	17 2	892	874	12 48	18	77	0	82.8
10	22 32	1089	1017	11 50	72	14 20	412	346	23 31	66	17 56	900	878	12 21	22	100	1	82.8
11D	8 28	1073	923	15 42	150	15 20	479	305	24 0	174	15 42	1087	867	11 28	170	817	2	82.8
12D	19 1	1089	975	10 58	114	14 18	412	278	0 41	134	15 58	922	789	2 48	133	486	2	82.8
13D	19 53	1088	993	11 17	95	14 44	426	293	22 43	133	16 54	944	856	24 0	88	345	2	82.8
14D	17 20	1085	948	11 41	137	14 57	420	259	0 49	161	17 24	935	853	0 4	82	514	2	82.8
15	0 31	1064	977	11 18	87	13 31	416	338	9 10	78	17 45	920	872	1 39	48	160	1	82.8
16	17 58	1064	977	11 18	87	13 31	416	338	9 10	78	17 45	920	872	1 39	48	160	1	82.8
17	20 32	1059	1002	13 52	57	14 52	425	338	8 51	87	21 27	903	881	11 58	22	113	1	82.8
18	5 33	1064	998	11 40	66	14 38	417	339	8 28	78	17 42	910	879	12 28	31	114	1	82.8
19	4 36	1067	1010	12 45	57	14 16	407	346	20 54	61	16 56	906	877	11 1	29	78	1	82.7
20	20 39	1070	1013	12 50	57	14 21	398	346	9 32	52	16 28	900	878	12 0	22	64	1	82.7
21	22 39	1094	1008	11 10	86	14 23	405	339	9 0	66	17 0	898	876	12 41	22	122	1	82.7
22	7 0	1065	1014	13 7	51	13 47	413	338	8 50	75	18 45	905	868	12 30	37	96	1	82.7
23D	0 19	1062	1019	10 34	43	13 19	425	319	23 37	106	20 45	916	868	11 51	48	154	1	82.7
24	21 42	1076	1008	13 33	68	12 44	419	311	3 17	108	0 1	901	860	12 0	41	180	1	82.7
25	6 40	1080	982	12 10	98	14 6	426	346	8 19	80	17 12	891	871	11 34	20	164	1	82.6
26	1 49	1082	993	11 13	89	13 39	412	335	8 54	77	15 23	908	874	1 52	34	150	1	82.6
27	19 12	1064	990	10 42	74	13 23	407	345	7 43	62	17 20	904	874	11 40	30	102	1	82.6
28	23 58	1068	1003	12 17	65	13 24	393	336	8 32	57	7 7	895	870	11 40	25	81	0	82.7
29	18 0	1074	978	11 31	96	12 43	404	332	9 18	72	19 0	895	860	12 0	35	156	1	82.7
30	0 1	1069	1004	12 21	65	11 14	405	336	9 15	69	8 1	893	862	12 18	31	99	0	82.7
31Q	21 35	1084	1019	11 0	65	13 2	398	338	21 31	60	19 39	893	871	12 0	22	83	1	82.7
Mean	—	1071	1003	—	68	—	411	334	—	77	—	906	869	—	37	151	0.74	82.8
No. of Days used.	—	31	31	—	31	—	31	31	—	31	—	31	31	—	31	31	31	31



Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

280. Eskdalemuir. (X.)

15,000  $\gamma$  (·15 C.G.S. unit) +

April, 1928.

Hour. G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Day.	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	
1D	1060	1059	1061	1064	1056	1058	1060	1059	1057	1046	1029	1014	1009	1015	1028	1030	1040	1055	1059	1079	1059	1060	1065	1049	1055	1049
2	1055	1050	1050	1050	1055	1049	1050	1056	1044	1020	1000	999	1003	1009	1023	1034	1046	1055	1059	1055	1059	1060	1059	1049	1041	1041
3	1041	1034	1045	1049	1052	1054	1054	1045	1029	1009	984	979	989	1019	1054	1054	1044	1049	1049	1049	1064	1065	1059	1064	1045	1039
4	1045	1060	1050	1048	1059	1050	1054	1051	1035	1014	995	994	1003	1012	1022	1046	1054	1060	1059	1074	1064	1051	1054	1055	1050	1042
5	1050	1054	1046	1049	1050	1053	1055	1048	1041	1027	1000	988	988	993	1013	1029	1049	1060	1061	1060	1059	1062	1059	1061	1064	1040
6	1064	1059	1059	1052	1059	1055	1066	1056	1043	1024	1000	998	999	1009	1024	1034	1044	1062	1079	1079	1065	1068	1055	1055	1064	1046
7D	1064	1056	1055	1060	1076	1072	1039	1051	1039	1015	998	984	999	1015	1031	1042	1053	1074	1050	1061	1074	1069	1084	1039	1049	1046
8	1049	1045	1039	1044	1044	1045	1049	1047	1039	1027	1009	980	988	1004	1029	1035	1054	1049	1045	1057	1059	1054	1049	1049	1047	1087
9	1048	1050	1050	1052	1051	1051	1051	1047	1039	1020	1000	992	995	1000	1010	1023	1046	1042	1055	1057	1055	1065	1053	1059	1066	1038
10D	1066	1061	1046	1055	1060	1056	1031	1046	1042	998	989	990	985	995	999	1025	1045	1059	1071	1061	1060	1065	1056	1060	1059	1038
11	1059	1052	1050	1048	1049	1051	1054	1051	1038	1018	999	991	989	995	1016	1031	1055	1061	1060	1060	1056	1056	1056	1055	1057	1040
12Q	1057	1058	1053	1050	1047	1051	1057	1056	1045	1026	1010	999	995	1005	1021	1041	1054	1055	1055	1057	1060	1060	1060	1059	1056	1043
13Q	1056	1056	1056	1056	1056	1056	1056	1055	1050	1030	1009	999	999	1010	1029	1050	1056	1061	1065	1064	1065	1060	1060	1060	1060	1047
14	1060	1057	1055	1058	1060	1062	1065	1061	1051	1036	1018	1006	1006	1010	1024	1036	1049	1061	1075	1075	1075	1072	1068	1070	1069	1051
15	1069	1066	1064	1059	1056	1066	1073	1067	1054	1035	1015	1009	1000	1000	1009	1032	1051	1066	1086	1095	1084	1065	1057	1060	1086	1052
16	1086	1055	1065	1065	1061	1066	1065	1062	1056	1037	1020	1018	1019	1025	1027	1031	1039	1065	1051	1070	1070	1061	1061	1055	1040	1050
17	1040	1035	1061	1050	1049	1041	1041	1045	1035	1011	1010	1001	996	1004	1020	1026	1040	1060	1067	1065	1068	1061	1057	1052	1052	1039
18	1052	1046	1046	1047	1052	1050	1056	1055	1045	1029	1025	1020	1022	1025	1035	1045	1045	1047	1053	1056	1058	1056	1060	1056	1057	1045
19	1057	1056	1053	1056	1055	1058	1060	1055	1045	1030	1016	1015	1020	1030	1045	1052	1056	1065	1070	1076	1069	1060	1064	1051	1081	1051
20D	1081	1055	1040	1023	1067	1051	1047	1036	1026	1005	986	986	994	1006	1025	1051	1051	1056	1062	1064	1070	1059	1050	1061	1061	1039
21D	1061	1065	1066	1065	1065	1066	1066	1065	1050	1025	1018	1013	1017	1030	1050	1045	1064	1046	1081	1060	1062	1060	1062	1061	1058	1053
22	1058	1052	1043	1050	1051	1055	1055	1051	1042	1031	1016	1006	1010	1014	1015	1033	1041	1057	1075	1065	1076	1065	1061	1060	1066	1045
23	1066	1064	1052	1052	1055	1058	1058	1055	1050	1039	1021	1015	1010	1020	1035	1042	1061	1062	1075	1072	1060	1055	1057	1046	1050	1049
24	1050	1051	1053	1055	1056	1060	1060	1061	1055	1042	1025	1011	995	1009	1030	1040	1048	1055	1060	1065	1066	1070	1065	1060	1060	1048
25Q	1050	1060	1061	1061	1065	1061	1057	1061	1057	1050	1031	1020	1017	1024	1034	1046	1055	1061	1066	1071	1068	1065	1062	1058	1063	1053
26	1063	1060	1057	1060	1050	1056	1056	1060	1052	1040	1027	1019	1017	1015	1032	1031	1053	1055	1060	1070	1071	1065	1063	1059	1058	1050
27	1058	1058	1057	1060	1058	1060	1060	1060	1052	1042	1030	1015	1016	1016	1031	1035	1050	1062	1067	1066	1065	1062	1063	1060	1060	1050
28Q	1060	1056	1060	1056	1058	1059	1061	1059	1050	1040	1025	1017	1025	1031	1044	1050	1054	1060	1065	1066	1065	1060	1059	1061	1061	1052
29Q	1061	1060	1060	1059	1059	1059	1056	1053	1051	1045	1029	1021	1025	1029	1035	1046	1053	1064	1067	1068	1066	1065	1063	1064	1065	1053
30	1065	1065	1065	1065	1065	1065	1063	1059	1053	1046	1025	1014	1011	1025	1036	1046	1055	1063	1070	1075	1070	1070	1066	1067	1067	1054
Mean	1059	1055	1054	1054	1057	1056	1056	1054	1045	1029	1012	1004	1005	1013	1028	1039	1050	1058	1064	1066	1065	1062	1060	1057	1059	1046

## TERRESTRIAL MAGNETIC FORCE : WEST COMPONENT.

Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

281. Eskdalemuir. (—Y.)

4,000  $\gamma$  (·04 C.G.S. unit) +

April, 1928.

Hour. G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Day.	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$
1D	369	372	372	367	359	354	353	356	350	341	358	379	406	414	417	412	393	386	380	373	373	363	353	352	351	378
2	351	359	366	366	359	365	378	346	334	333	347	365	391	399	400	385	373	366	372	377	375	373	367	345	333	366
3	333	339	350	359	353	353	347	334	325	327	347	379	406	412	406	393	373	366	366	359	353	374	366	341	359	361
4	359	353	358	365	365	353	345	339	333	333	352	368	398	409	410	412	399	390	373	366	370	362	357	339	340	367
5	340	345	371	371	359	353	345	331	336	331	346	368	398	405	406	399	385	373	372	369	372	373	359	357	360	366
6	360	353	356	359	359	359	359	347	339	326	339	353	374	395	399	393	382	381	371	379	379	353	352	373	319	364
7D	319	320	336	359	345	334	347	341	326	327	339	353	380	406	414	409	393	395	379	375	380	365	315	333	353	359
8	353	319	311	346	352	352	346	333	325	329	339	360	386	408	419	408	406	387	379	378	372	363	361	363	361	362
9	361	358	356	359	355	353	348	336	323	319	335	359	392	406	413	399	397	377	373	375	373	363	346	365	347	364
10D	347	367	352	361	353	360	366	351	320	327	346	360	379	413	412	397	387	375	366	359	366	358	348	367	359	364
11	359	353	358	359	359	355	353	339	327	325	339	360	381	395	406	393	381	378	372	368	372	367	366	369	369	364
12Q	369	365	360	359	357	359	353	339	327	325	334	353	373	392	393	389	385	374	373	373	373	372	372	368	367	364
13Q	367	366	365	361	359	358	349	340	333	332	347	365	381	395	399	391	381	379	378	377	373	369	371	367	367	367
14	367	365	360	360	359	359	351	341	333	332	347	365	385	399	406	399	387	380	379	379	379	373	366	373	372	369
15	372	372	366	361	365	363	347	329	327	340	353	359	372	387	392	388	385	383	385	385	379	367	366	360	332	366
16	332	328	332	331	335	340	339	337	327	327	351	368	378	387	387	386	387	389	372	353	359	366	360	298	391	352
17	301	326	353	339	347	351	352	341	333	332	345	359	372	385	393	387	385	378	374	373	372	346	359	352	353	358
18	353	353	355	356	352	353	353	346	339	333	341	354	375	393	399	392	385	374	371	367	366	366	367	366	366	363
19	366	366	366	373	359	358	350	335	326	327	341	366	379	386	388	385	378	373	371	374	373	362	360	339	313	361
20D	313	273	315	353	352	335	330	321	321	321	339	359	380	392	393	389	379	375	375	374	373	353	349	358	367	382
21D	367	372	369	366	366	359	352	345	339	345	359	379	393	407	419	407	399	368	368	373	372	372	366	362	365	372
22	365	367	373	367	363	353	344	333	328	327	338	358	375	391	395	393	385	379	374	372	355	366	367	367	367	364
23	367	374	367	366	361	359	353	345	335	333	339	353	372	386	391	389	386	374	363	365	365	367	367	367	351	364
24	351	360	365	363	361	359	353	346	339	339	339	353	367	380	387	385	380	378	373	372	371	366	356	363	363	363
25Q	363	365	361	361	361	366	367	355	345	338	339	351	361	374	379	381	381	379	375	373	373	371	366	359	365	364
26	367	365	363	365	363	359	353	348	341	339	345	358	378	385	389	381	383	375	373	373	367	361	365	367	367	365
27	367	366	365	365	361	355	348	341	336	335	346	353	366	377	380	374	376	375	365	373	373	373	373	373	368	363
28Q	368	367	368	372	366	359	349	346	346	346	359	366	371	379	385	380	377	373	374	374	373	373	371	370	367	367
29Q	367	365	361	359	355	351	347	346	341	344	349	359	375	381	379	379	374	373	373	373	373	373	373	372	367	364
30	367	365	364	361	359	353	347	335	327	330	340	358	380	399	398	390	385	383	379	373	372	374	378	375	360	366
Mean	355	354	357	360	357	355	351	341	333	332	345	362	381	395	398	392	385	378	373	372	371	366	361	359	354	364



Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

282. Eskdalemuir. (Z.)

44,000  $\gamma$  (44 C.G.S. unit) +

April, 1928.

Hour. G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Day.	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$
1 D	888	887	886	885	885	886	888	888	885	884	872	867	864	863	866	880	890	895	898	902	902	901	894	893	890	885
2	890	888	888	888	889	885	880	884	882	881	878	876	872	872	879	889	893	893	889	887	888	889	892	893	889	885
3	889	885	885	888	889	890	893	898	897	890	884	876	872	876	892	906	916	917	911	907	902	893	892	885	881	893
4	881	876	880	882	872	880	885	888	888	885	882	876	867	870	873	883	898	907	914	912	905	902	898	893	885	887
5	885	880	876	872	880	885	891	894	889	884	881	873	867	872	879	890	898	901	898	894	893	891	893	890	881	886
6	881	881	881	883	884	885	885	889	888	885	877	872	871	873	884	890	892	893	898	898	898	895	894	876	864	885
7 D	864	865	875	876	863	867	880	877	882	881	876	876	871	872	879	885	888	897	898	897	894	894	854	870	876	879
8	876	832	850	872	884	885	889	891	889	882	877	876	876	875	881	892	903	910	907	903	902	901	898	897	896	886
9	896	896	897	894	894	894	897	901	898	891	884	876	872	876	889	899	906	914	908	899	906	895	897	889	882	894
10 D	882	850	867	881	885	888	880	877	881	877	872	871	867	872	884	889	894	902	910	911	906	898	890	882	873	884
11	873	880	885	889	890	892	893	897	897	891	884	875	873	876	882	889	893	898	898	897	897	894	893	893	889	889
12 Q	889	888	889	889	892	889	890	894	894	889	880	872	867	871	876	884	888	889	889	892	893	892	891	892	891	887
13 Q	891	891	892	893	893	893	896	894	893	889	885	879	876	876	878	880	883	888	889	892	893	893	893	891	891	888
14	891	890	892	892	892	891	892	893	893	888	884	878	868	868	875	880	885	888	889	889	889	891	892	889	888	887
15	888	888	888	889	889	889	891	893	890	884	880	875	867	868	874	879	881	885	886	889	896	902	901	898	882	886
16	882	873	872	872	876	876	876	883	885	885	884	880	876	876	879	880	884	894	913	919	907	901	898	889	872	886
17	872	872	850	860	875	881	884	889	889	889	885	881	879	881	882	887	892	897	898	897	898	901	896	893	887	885
18	887	885	885	889	889	889	889	889	890	889	886	885	878	877	884	889	893	893	893	893	892	893	893	893	893	889
19	892	892	892	884	887	888	890	893	891	883	871	870	866	870	878	886	891	896	899	901	906	909	906	897	870	889
20 D	870	850	863	849	847	869	883	892	890	888	888	884	878	881	889	893	896	896	892	892	893	901	902	896	892	883
21 D	892	891	892	891	890	891	892	892	892	888	884	882	876	876	887	893	902	923	920	917	909	903	900	894	892	895
22	892	892	892	892	896	897	901	901	898	893	888	884	880	879	884	887	892	897	900	900	900	896	894	893	889	893
23	889	883	881	888	892	894	896	897	896	892	888	883	876	875	879	883	890	902	910	909	904	898	894	882	887	891
24	887	892	892	892	893	894	894	894	892	890	886	882	878	879	881	883	887	888	892	892	892	892	892	890	890	889
25 Q	889	890	890	888	888	888	887	886	886	883	880	878	873	870	874	878	879	883	888	891	891	891	891	890	887	885
26	887	887	887	887	888	887	887	887	886	881	874	870	869	869	872	874	882	887	889	894	895	896	891	890	888	884
27	888	888	889	889	890	891	891	891	891	883	874	870	867	870	877	883	886	892	900	899	895	891	891	889	888	886
28 Q	888	888	887	887	887	887	888	888	887	883	880	877	869	868	877	886	887	887	888	891	891	891	891	890	890	885
29 Q	889	888	888	889	889	890	890	887	886	883	878	870	866	869	876	879	882	882	886	890	890	888	887	886	886	884
30	886	887	886	886	886	887	888	887	886	882	873	867	864	864	872	874	877	880	885	889	889	886	886	886	885	881
Mean	885	881	883	884	885	887	889	890	890	886	881	876	871	873	879	886	891	896	898	898	897	896	893	890	885	887

## DAILY EXTREMES OF EACH COMPONENT OF TERRESTRIAL MAGNETIC FORCE :

283. Eskdalemuir.

MAGNETIC CHARACTER FIGURES : TEMPERATURE IN MAGNET HOUSE.

April, 1928.

Day.	Terrestrial Magnetic Force.															Character Figures 2R <sup>2</sup> 100γ <sup>2</sup> §.	Magnetic Character of Day	Temperature in Magnet House 200 +
	North Component.					West Component.					Vertical Component.							
	Maximum 15000 γ +	Minimum 15000 γ +	Range.	Maximum 4000 γ +	Minimum 4000 γ +	Range	Maximum 44000 γ +	Minimum 44000 γ +	Range.									
1D	h. m.	γ	γ	h. m.	γ	h. m.	γ	γ	h. m.	γ	h. m.	γ	h. m.	γ			a.	
2	18 40	1094	994	11 43	100	12 21	426	335	23 35	91	20 22	903	862	12 28	41	200	I	82.7
3	0 10	1069	990	11 42	79	12 40	408	329	8 33	79	22 59	895	870	12 40	25	131	I	82.7
4	22 50	1095	976	10 40	119	13 34	416	317	0 26	99	17 19	919	871	11 51	48	263	I	82.6
5	19 8	1080	988	10 48	92	13 39	419	326	8 19	93	18 22	917	866	12 10	51	197	I	82.7
6	22 38	1077	983	11 24	94	14 16	412	325	6 59	87	17 0	902	867	11 50	35	176	I	82.7
7D	19 11	1092	992	10 21	100	14 21	402	299	24 0	103	18 28	900	864	23 54	36	219	I	82.7
8	21 58	1128	977	10 39	149	14 29	424	271	22 21	153	17 32	904	842	22 3	62	494	I	82.7
9	16 20	1064	978	11 31	91	13 52	428	286	1 40	142	17 3	911	820	1 32	91	367	I	82.6
10D	21 10	1075	984	11 46	91	14 4	417	319	8 9	98	17 0	915	871	11 40	44	198	I	82.6
11	21 19	1091	974	11 50	117	14 0	426	309	8 44	117	18 55	911	842	1 0	69	321	I	82.6
12Q	16 21	1070	984	12 4	86	14 0	411	321	8 43	90	17 38	901	872	11 30	29	163	O	82.7
13Q	23 32	1062	994	11 49	68	12 47	394	324	9 12	70	7 30	895	867	12 0	28	103	O	82.7
14	20 11	1070	995	11 37	75	13 41	399	327	8 46	72	6 14	897	875	12 10	22	113	O	82.7
15	17 49	1080	1004	11 18	76	14 10	406	331	8 40	75	7 20	894	867	12 30	27	121	O	82.7
16	18 54	1099	996	12 20	103	13 32	393	319	7 29	74	20 49	904	867	12 30	37	175	I	82.7
17	0 17	1095	1013	10 26	82	12 41	401	272	23 14	129	18 49	923	867	24 0	56	265	I	82.7
18	2 0	1088	994	11 42	94	14 16	399	299	0 4	100	21 0	902	841	2 5	61	226	I	82.9
19	22 23	1061	1019	11 25	42	13 41	405	332	9 12	73	18 0	894	876	12 50	18	74	O	82.8
20D	23 56	1105	1014	10 26	91	13 32	392	299	23 53	93	21 13	912	866	12 10	46	190	I	82.8
21D	0 1	1099	979	22 50	120	13 43	397	247	1 20	150	21 41	905	841	3 32	64	410	I	82.8
22	16 3	1101	1010	10 59	91	13 52	446	326	7 36	120	17 12	927	874	12 29	53	255	I	82.8
23	20 10	1090	1004	11 26	86	14 23	401	324	7 39	77	18 32	901	878	12 33	23	139	I	82.8
24	0 33	1086	1009	12 2	77	15 47	392	326	0 55	66	18 28	912	875	12 42	37	117	I	82.8
25Q	21 3	1075	994	12 4	81	14 33	391	335	9 18	56	5 50	895	876	12 0	19	101	O	82.8
26	18 52	1080	1015	11 30	65	15 12	385	333	9 40	52	21 35	893	870	13 0	23	75	O	82.8
27	19 44	1077	1005	12 37	72	13 56	399	333	8 41	66	20 53	896	868	12 10	28	103	I	82.9
28Q	17 50	1075	1011	11 6	64	14 3	384	333	7 36	51	18 2	902	866	12 2	36	80	I	82.9
29Q	19 18	1068	1014	11 21	54	13 42	385	339	7 56	46	20 50	891	866	12 37	25	57	O	82.9
30	18 51	1071	1020	11 18	51	13 1	385	339	8 20	46	19 50	890	865	11 56	25	53	O	82.9
Mean	—	1083	997	—	86	—	405	317	—	88	—	903	864	—	38	184	0.67	82.8
No. of Days used.	—	30	30	—	30	—	30	30	—	30	—	30	30	—	30	30	30	30



**TERRESTRIAL MAGNETIC FORCE : NORTH COMPONENT.**  
*Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.*

**284. Eskdalemuir. (X.)**15,000  $\gamma$  (·15 C.G.S. unit) +**May, 1928.**

Hour. G.M.T	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Day.	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$
1Q	1067	1065	1061	1061	1060	1060	1060	1050	1043	1033	1014	1009	1008	1015	1028	1041	1054	1066	1075	1080	1081	1074	1080	1071	1070	1052
2Q	1070	1069	1065	1066	1065	1067	1061	1055	1050	1039	1014	1009	1009	1016	1024	1030	1051	1064	1074	1075	1074	1073	1074	1071	1070	1053
3Q	1071	1067	1066	1067	1062	1065	1066	1061	1053	1041	1030	1016	1010	1013	1027	1040	1052	1072	1076	1076	1070	1067	1069	1066	1065	1054
4	1065	1066	1066	1066	1066	1065	1065	1058	1046	1036	1025	1021	1015	1016	1033	1031	1040	1052	1070	1074	1071	1068	1071	1066	1061	1052
5	1061	1056	1056	1076	1057	1071	1071	1055	1032	1035	1024	1024	1010	984	1031	1047	1051	1082	1083	1086	1090	1082	1069	1066	1070	1054
6	1070	1072	1064	1057	1050	1042	1038	1027	1022	1022	1020	1008	1001	1006	1022	1015	1037	1056	1060	1061	1061	1061	1062	1062	1060	1041
7	1060	1053	1052	1056	1056	1057	1056	1050	1040	1030	1006	995	990	995	1010	1030	1045	1056	1055	1062	1070	1071	1071	1046	1055	1042
8	1055	1062	1070	1081	1066	1061	1038	1051	1025	1002	999	998	985	989	985	1006	1046	1051	1065	1071	1061	1058	1057	1056	1052	1039
9	1052	1052	1051	1051	1052	1054	1053	1046	1036	1026	1006	995	986	1017	1031	1042	1045	1061	1072	1066	1065	1061	1056	1055	1054	1044
10D	1054	1055	1055	1056	1056	1060	1057	1056	1050	1036	1016	1008	1015	1036	1053	1057	1116	1112	1085	1077	1081	1043	1021	1005	1031	1052
11	1031	1021	1021	1026	1052	1048	1036	1017	1030	1021	1008	1004	999	1001	1004	1065	1098	1112	1101	1082	1049	1047	1026	1016	1027	1038
12D	1028	1041	1026	1037	1048	1032	1029	1042	1027	978	931	951	988	1012	1026	1018	1043	1042	1071	1079	1052	1047	1048	1058	1076	1028
13	1076	1042	1037	1028	1031	1051	1037	997	992	992	981	986	987	991	1011	1037	1054	1067	1077	1073	1058	1055	1057	1047	1042	1031
14	1042	1046	1046	1046	1057	1051	1046	1036	1016	997	987	978	1011	1001	1011	1002	1024	1043	1062	1056	1057	1057	1058	1066	1072	1034
15	1072	1047	1038	1046	1052	1050	1047	1041	1023	1013	1012	1007	1008	1016	1023	1047	1056	1062	1082	1076	1067	1054	1101	1086	1090	1047
16	1090	1061	1056	1057	1061	1057	1052	1041	1028	1023	1021	1027	1013	1011	1036	1062	1075	1057	1078	1094	1108	1062	1042	1052	1052	1052
17	1053	1038	1033	1058	1052	1053	1043	1032	1024	1012	1007	1019	1020	1033	1042	1038	1034	1059	1073	1068	1063	1062	1059	1065	1065	1044
18	1065	1064	1060	1063	1048	1042	1048	1049	1043	1033	1011	1009	1002	1012	1033	1048	1038	1059	1079	1103	1068	1058	1059	1059	1052	1048
19	1052	1039	1043	1053	1057	1057	1049	1033	1008	1019	1012	1012	1012	1012	1008	1027	1033	1053	1074	1079	1068	1063	1057	1006	1007	1040
20	1007	1058	1052	1049	1052	1052	1045	1042	1033	1019	1007	1012	1023	1034	1038	1025	1043	1058	1068	1069	1068	1063	1062	1059	1062	1044
21	1062	1062	1060	1058	1059	1054	1053	1049	1033	1023	1003	997	1014	1027	1048	1039	1058	1078	1079	1077	1073	1068	1063	1062	1058	1050
22Q	1059	1059	1059	1060	1063	1064	1064	1061	1050	1038	1013	1009	1015	1029	1033	1059	1054	1064	1078	1079	1069	1068	1064	1064	1064	1053
23	1064	1060	1054	1054	1058	1059	1057	1049	1044	1038	1026	1004	1014	1024	1039	1054	1052	1051	1074	1074	1067	1064	1064	1063	1063	1050
24	1063	1060	1061	1061	1063	1064	1060	1059	1052	1034	1024	1021	1018	1026	1028	1038	1055	1065	1074	1074	1088	1079	1060	1061	1064	1054
25	1065	1069	1060	1060	1065	1065	1055	1035	1035	1035	1020	1014	1009	1021	1030	1051	1055	1071	1077	1075	1072	1067	1063	1057	1055	1051
26Q	1055	1055	1055	1055	1059	1059	1059	1054	1045	1034	1015	1011	1014	1019	1029	1050	1064	1085	1090	1088	1084	1077	1075	1075	1076	1055
27D	1076	1075	1074	1074	1075	1079	1070	1060	1045	1034	1029	1020	1033	1045	1050	1115	1185	1166	1191	1120	1092	1084	1015	1014	1031	1076
28D	1032	1046	1044	1043	1022	1005	930	886	861	855	867	930	1005	1137	1122	1177	1181	1192	1163	1127	1007	951	955	956	932	1019
29D	932	958	970	966	969	1000	969	990	995	958	943	960	976	975	996	1007	1026	1095	1096	1080	1087	1056	1045	1006	1018	1004
30	1019	1027	1026	1028	1031	1028	1016	1005	1005	1001	991	985	997	997	996	1002	1022	1042	1053	1071	1072	1062	1046	1045	1038	1024
31	1038	1036	1035	1032	1038	1042	1042	1030	1016	1007	997	987	990	999	1002	1016	1042	1052	1087	1097	1082	1082	1072	1062	1062	1037
Mean	1052	1051	1049	1052	1051	1052	1044	1036	1026	1014	1002	1002	1006	1017	1027	1043	1060	1073	1082	1080	1070	1061	1056	1050	1051	1044

**TERRESTRIAL MAGNETIC FORCE : WEST COMPONENT.***Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.***285. Eskdalemuir. (—Y.)**4,000  $\gamma$  (·04 C.G.S. unit) +**May, 1928.**

Hour. G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Day.	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1Q	359	359	359	357	352	351	345	332	326	331	351	375	384	391	391	385	384	379	379	379	378	372	372	362	365	365
2Q	365	365	359	357	358	353	345	338	333	330	340	360	379	392	392	391	385	379	377	377	378	373	371	367	369	365
3Q	369	365	365	362	357	349	338	333	329	326	331	342	363	377	378	377	371	371	366	367	369	368	367	365	364	358
4	364	364	363	358	354	345	335	331	330	329	339	361	381	396	403	391	380	374	378	373	371	366	360	345	348	362
5	348	358	357	365	371	391	335	313	325	331	345	365	393	391	397	402	399	405	389	386	385	361	364	363	364	369
6	364	364	344	344	345	338	329	323	320	331	340	351	359	377	390	380	379	371	365	365	365	370	359	364	365	356
7	365	361	359	357	352	349	338	330	321	311	318	339	370	395	405	401	398	384	361	364	371	371	351	357	361	359
8	361	358	352	346	331	332	331	371	352	351	353	359	377	384	382	378	380	365	358	358	364	364	363	359	358	359
9	358	358	353	351	346	344	342	337	325	324	338	353	371	384	387	385	379	377	371	365	365	368	365	365	359	359
10D	359	357	355	358	349	340	335	334	329	331	342	355	378	405	409	411	431	418	378	384	380	357	316	279	291	361
11	291	324	358	343	338	331	346	331	331	324	338	351	371	385	384	391	400	390	369	371	364	351	305	311	339	351
12D	339	285	310	331	337	325	324	315	311	312	358	372	390	393	377	373	374	365	351	353	365	370	371	372	371	350
13	371	351	345	379	379	378	358	331	338	340	344	353	371	392	397	398	385	378	371	364	358	346	360	357	357	364
14	357	372	373	347	326	324	317	311	318	333	340	351	367	378	382	387	379	365	364	364	364	364	363	353	313	353
15	313	317	337	358	351	337	324	327	330	331	345	357	371	384	385	391	385	378	377	373	365	371	359	359	321	356
16	321	331	348	353	350	342	331	325	325	331	340	359	378	379	384	393	391	372	375	363	343	309	351	367	371	354
17	371	385	355	337	333	335	331	341	332	345	351	366	391	391	385	379	372	369	365	361	364	365	365	366	364	360
18	364	358	358	366	365	393	357	345	331	333	347	360	377	385	399	386	380	377	371	333	351	365	365	357	365	363
19	365	375	364	357	345	338	337	340	339	337	347	353	366	380	383	378	371	365	365	358	357	357	364	364	365	359
20	365	371	353	351	351	345	337	331	326	331	338	353	370	379	380	373	378	377	372	370	365	360	361	357	358	358
21	358	359	358	353	353	351	345	338	332	335	345	358	372	385	396	381	378	380	379	377	373	371	361	365	357	363
22Q	357	358	357	353	353	350	338	337	332	335	339	351	363	371	371	378	367	365	371	371	366	365	365	362	365	357
23	365	358	353	351	345	340	333	330	325	329	338	357	369	372	377	382	371	363	364	364	364	364	364	364	363	356
24	363	359	364	358	357	351	347	338	326	331	337	351	365	381	382	383	379	371	365	365	366	353	347	362	365	358
25	365	363	357	351	349	340	331	339	338	329	337	359	373	378	377	377	371	371	371	372	371	365	365	364	365	359
26Q	365	359	358	358	344	333	324	325	327	333	345	345	358	371	379	384	378	379	379	377	373	373	371	367	365	359
27D	365	359	356	351	347	333	319	311	305	317	339	363	383	397	406	444	492	465	424	413	413	391	277	331	338	370
28D	338	318	323	341	349	366	411	352	323	325	333	353	365	385	389	418	434	433	414	377	352	339	311	278	306	359
29D	306	278	279	336	309	325	324	319	299	293	307	332	345	352	365	364	366	392	384	368	339	344	359	345	345	385
30	345	358	363	317	335	325	311	309	299	313	332	345	359	366	371	371	371	370	359	359	365	351	344	344	343	345
31	343	337	337	338	338	325	319	306	305	307	323	331	352	364	371	374	375	371	365	371	365	368	365	358	357	346
Mean	353	351	351	351	347	344	337	330	325	328	339	354	371	383	386	387	387	381	373	369	367	362	355	353	353	358



**TERRESTRIAL MAGNETIC FORCE : VERTICAL COMPONENT.**  
*Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.*  
 44,000 γ (-44 C.G.S. unit) +

257

**286. Eskdalemuir. (Z.)**

**May, 1928.**

Hour. G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Day.	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1Q	884	883	884	884	884	885	885	885	881	872	867	860	859	863	872	876	877	880	881	881	884	886	885	885	884	878
2Q	884	884	884	885	885	883	884	882	878	871	863	860	856	858	864	869	876	881	884	884	884	884	884	884	884	877
3Q	884	884	884	885	884	887	888	888	887	883	874	870	867	871	876	880	883	885	888	888	887	884	884	884	884	882
4	884	884	884	884	885	888	888	884	880	876	874	866	861	864	875	884	890	890	887	888	888	887	886	884	883	882
5	882	882	883	882	880	857	852	856	861	869	867	861	857	864	862	865	869	879	892	892	897	895	893	892	887	875
6	886	873	878	882	886	890	889	886	882	878	868	858	856	861	869	878	882	886	886	886	886	885	886	885	885	879
7	885	886	886	886	887	889	890	888	884	875	865	860	856	861	873	886	894	908	910	898	890	890	890	890	890	884
8	884	881	872	855	859	864	868	860	864	869	872	876	876	881	890	893	894	898	899	898	893	890	890	890	890	880
9	890	890	890	890	893	894	894	895	894	892	877	872	872	872	876	883	889	894	898	898	896	891	890	890	890	888
10D	889	889	889	889	889	892	890	884	879	876	875	871	868	866	877	889	900	935	945	932	916	897	858	811	816	886
11	816	855	858	846	864	883	880	880	884	884	884	882	881	889	901	918	953	989	987	965	941	915	885	876	872	897
12D	871	862	870	876	891	888	892	896	892	883	878	872	878	892	917	910	913	914	919	922	905	897	895	888	854	892
13	854	848	860	862	850	844	854	870	875	875	878	884	900	896	897	904	918	930	935	927	917	908	892	890	889	887
14	888	877	857	853	860	874	885	887	886	878	874	877	877	886	896	902	910	916	903	898	896	895	892	889	875	885
15	875	864	865	874	881	890	891	890	889	883	878	876	877	879	882	890	894	900	906	904	903	895	885	869	862	885
16	861	873	881	882	886	889	890	889	886	881	875	869	870	873	879	882	891	902	902	907	898	895	889	886	881	885
17	881	860	838	857	877	886	888	886	885	884	876	870	872	881	889	898	895	898	895	895	895	894	891	890	890	883
18	889	888	889	889	884	864	862	866	873	875	875	876	875	880	892	916	913	906	906	921	913	901	897	891	888	889
19	888	884	878	885	888	892	890	889	888	885	885	880	879	881	885	889	900	906	910	910	910	898	893	893	891	891
20	890	884	887	891	892	892	896	897	893	884	879	875	875	879	884	888	888	892	892	892	892	892	891	889	890	888
21	890	888	888	889	889	888	889	892	891	888	875	873	871	876	884	892	892	893	895	893	893	892	892	891	892	888
22Q	891	891	891	891	891	891	889	886	885	882	874	866	869	875	883	888	896	899	898	894	892	891	889	888	887	887
23	887	886	887	890	891	892	891	889	882	876	871	869	865	870	877	884	896	901	903	900	895	891	887	887	887	886
24	886	886	886	888	890	890	891	890	885	877	867	869	868	869	877	882	886	892	895	894	892	895	897	890	886	885
25	886	884	885	888	890	894	894	891	885	875	873	876	877	878	882	889	893	895	899	899	899	896	894	890	890	888
26Q	889	889	889	887	889	893	893	892	889	884	883	877	871	872	876	879	887	894	898	901	898	893	889	887	885	887
27D	885	885	886	889	889	893	893	890	888	879	863	863	867	869	877	882	893	937	965	963	962	962	898	869	889	898
28D	889	897	897	866	811	815	796	781	812	833	848	907	984	1046	1042	1058	1049	1016	988	919	891	877	885	825	747	903
29D	746	742	754	742	780	811	836	871	895	902	914	924	931	940	958	978	974	970	970	961	957	934	912	892	879	890
30	879	886	848	867	889	894	901	898	901	904	905	897	887	888	893	900	901	905	914	914	912	914	914	908	902	897
31	902	900	901	901	898	901	901	903	905	902	888	888	885	888	892	896	903	906	909	910	911	910	909	896	892	900
Mean	877	876	875	875	878	880	882	882	882	880	876	875	877	883	890	898	903	910	912	908	903	898	891	883	878	887

**DAILY EXTREMES OF EACH COMPONENT OF TERRESTRIAL MAGNETIC FORCE :  
 MAGNETIC CHARACTER FIGURES : TEMPERATURE IN MAGNET HOUSE.**

**287. Eskdalemuir.**

**May, 1928.**

Day.	Terrestrial Magnetic Force.												Character Figure $\frac{2R^2}{100\gamma^2}$ .	Magnetic Character of Day (0-2).	Temperature in Magnet House 200 +			
	North Component.					West Component.					Vertical Component.							
	Maximum 15000 $\gamma$ +		Minimum 15000 $\gamma$ +		Range.	Maximum 4000 $\gamma$ +		Minimum 4000 $\gamma$ +		Range.	Maximum 44000 $\gamma$ +					Minimum 44000 $\gamma$ +		Range.
1Q	h. m.	$\gamma$	$\gamma$	h. m.	$\gamma$	h. m.	$\gamma$	$\gamma$	h. m.	$\gamma$	h. m.	$\gamma$	$\gamma$	h. m.	$\gamma$		a.	
2Q	22 6	1090	1004	11 8	86	13 0	392	324	8 0	68	21 18	888	858	11 40	30	129	0	82-9
3Q	18 31	1079	1006	11 26	73	14 7	397	326	8 56	71	2 49	885	855	12 10	30	113	0	82-9
4	18 46	1080	1007	12 12	73	13 43	381	325	9 3	56	6 20	889	866	11 52	23	90	0	82-9
5	18 42	1084	1005	12 32	79	13 40	405	327	9 10	78	15 57	892	860	12 8	32	133	0	82-9
6	19 3	1121	955	12 42	166	4 43	432	300	6 51	132	20 10	902	848	5 23	54	479	1	82-9
7	0 32	1081	996	11 51	85	14 21	409	317	8 6	92	4 53	890	856	11 36	34	168	1	82-9
8	22 2	1086	985	11 30	101	14 40	411	310	9 10	101	17 29	913	856	11 49	57	237	1	82-9
9	2 43	1086	970	13 41	116	13 23	397	323	6 7	74	18 15	901	851	3 5	50	214	1	83-0
10D	17 57	1083	986	11 12	97	14 53	396	319	8 20	77	18 33	901	871	12 55	30	162	0	83-0
	17 3	1132	958	23 19	174	16 20	443	267	23 20	176	17 28	947	767	23 32	180	937	2	83-1
11	16 43	1153	975	13 38	178	16 47	439	280	0 1	159	17 28	1003	824	0 1	179	890	2	83-1
12D	18 36	1097	913	9 40	184	13 9	411	245	1 12	166	18 39	926	853	0 53	73	667	1	83-1
13	0 13	1098	962	10 8	136	13 12	405	318	7 20	87	18 14	937	836	0 28	101	363	1	83-2
14	16 42	1082	975	10 12	107	15 20	391	303	6 49	88	16 51	918	852	2 51	66	235	1	83-2
15	22 12	1133	994	11 5	139	14 0	405	304	0 40	101	18 30	908	859	23 49	49	319	1	83-3
16	19 41	1167	996	12 42	171	15 18	405	277	20 22	128	19 14	910	861	0 1	49	480	1	83-3
17	17 56	1081	997	10 0	84	1 1	424	324	8 4	100	17 25	899	830	1 32	69	218	1	83-3
18	19 5	1137	992	11 42	145	14 19	412	298	18 57	114	19 5	927	857	5 20	70	389	1	83-3
19	19 22	1087	995	8 49	92	1 47	392	317	8 50	75	18 50	911	877	2 3	34	152	1	83-3
20	0 30 18 56	1073	998	9 40	75	14 17	391	324	6 46	67	7 2	898	874	13 34	24	107	1	83-3
21	17 39	1085	991	10 49	49	14 0	399	328	8 26	71	18 2	896	870	12 10	26	146	0	83-3
22Q	18 31	1083	1007	10 16	76	14 48	383	331	7 51	52	17 31	900	865	11 22	35	97	0	83-5
23	18 22	1082	1000	11 17	82	14 30	385	323	7 40	62	17 58	904	862	12 11	42	123	1	83-5
24	19 47	1094	1013	11 31	81	13 10	385	320	8 22	65	21 49	898	866	10 9	32	118	1	83-5
25	17 23	1085	995	11 45	90	13 12	381	323	6 5	58	19 20	899	872	9 55	27	122	1	83-5
26Q	17 52	1094	1009	12 35	85	15 3	385	319	6 12	66	18 50	902	869	12 1	33	127	0	83-6
27D	15 49	1231	969	22 21	262	15 47	525	238	21 39	287	17 15	984	860	10 11	124	1664	2	83-6
28D	17 0	1308	814	8 28	494	16 55	499	235	23 42	264	16 58	1087	713	23 57	374	4536	2	83-6
29D	17 19	1155	904	0 23	251	17 16	412	244	0 28	168	17 30	983	708	3 20	275	1668	2	83-6
30	19 33	1081	975	10 51	106	17 16	379	297	7 12	82	21-31	918	845	1 51	73	233	1	83-7
31	18 27	1122	981	12 39	141	14 42	383	291	7 52	92	18 43	913	884	12 2	29	292	1	83-7
Mean	—	1111	978	—	133	—	408	302	—	106	—	920	846	—	74	504	0-09	83-3
No. of Days used.	—	31	31	—	31	—	31	31	—	31	—	31	31	—	31	31	31	31



Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

288. Eskdalemuir. (X.)

15,000  $\gamma$  (·15 C.G.S. unit) +

June, 1928.

Hour. G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Day.	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$
1	1061	1056	1045	1048	1047	1046	1044	1041	1039	1027	1011	1006	1022	1036	1036	1036	1056	1077	1093	1096	1101	1088	1056	1061	1047	1051
2	1048	1052	1037	1052	1052	1048	1046	1038	1031	1022	1029	1025	1017	1018	1032	1053	1062	1067	1073	1063	1077	1074	1065	1053	1052	1047
3	1052	1052	1054	1052	1054	1062	1060	1047	1038	1023	998	991	1002	1013	1028	1060	1087	1098	1083	1087	1077	1060	1060	1057	1045	1050
4	1045	1042	1042	1048	1052	1043	1042	1053	1048	1033	1022	1014	1006	1012	1027	1066	1060	1072	1085	1082	1079	1057	1047	1046	1043	1047
5	1043	1047	1044	1027	1037	1061	1061	1053	1048	1047	1027	1008	1010	1012	1023	1032	1042	1062	1108	1112	1092	1082	1057	1057	1046	1050
6	1047	1059	1049	1054	1063	1064	1059	1049	1043	1028	1023	1009	1013	1013	1018	1024	1048	1054	1064	1068	1088	1073	1078	1048	1052	1047
7D	1052	1053	1055	1058	1060	1063	1044	1039	1033	1024	1014	1009	1005	996	1051	1125	1117	1118	1099	1073	1063	1077	1074	1065	1053	1055
8	1042	1031	1030	1051	1051	1050	1045	1040	1030	1009	989	980	1013	1039	1029	1050	1044	1060	1060	1065	1064	1065	1070	1077	1064	1041
9	1064	1064	1029	1050	1049	1054	1049	1045	1037	1025	1013	1005	1005	1015	1029	1039	1055	1084	1085	1074	1079	1065	1054	1058	1054	1049
10Q	1054	1049	1049	1049	1050	1051	1049	1044	1039	1026	1018	1005	1008	1014	1034	1041	1052	1060	1064	1065	1060	1056	1055	1054	1059	1044
11Q	1059	1049	1046	1049	1054	1056	1054	1049	1039	1019	1013	1014	1014	1020	1030	1044	1054	1065	1075	1079	1070	1064	1069	1065	1071	1050
12D	1071	1079	1065	1062	1054	1050	1044	1069	1059	1031	979	973	989	1024	1038	1035	1037	1039	1050	1059	1064	1065	1059	1054	1053	1043
13D	1054	1055	1050	1065	1070	1065	1056	1050	1040	1020	985	990	982	1030	1033	1040	1050	1035	1060	1060	1066	1063	1066	1060	1056	1044
14	1056	1055	1046	1045	1073	1065	1015	1030	1035	1021	1015	1009	1024	1021	1041	1053	1065	1056	1055	1058	1061	1061	1063	1048	1050	1045
15	1050	1045	1041	1051	1052	1050	1046	1035	1024	1013	1012	1023	1030	1045	1043	1045	1061	1047	1049	1058	1058	1058	1061	1065	1058	1044
16Q	1056	1056	1054	1047	1055	1056	1055	1045	1025	1020	1026	1021	1026	1039	1045	1053	1060	1065	1068	1069	1065	1065	1063	1066	1056	1050
17Q	1056	1056	1051	1055	1051	1065	1060	1051	1041	1030	1010	1000	1009	1025	1055	1046	1050	1070	1065	1061	1061	1065	1060	1057	1057	1048
18	1058	1057	1056	1051	1052	1056	1058	1059	1051	1030	1016	1010	1006	1016	1031	1052	1071	1068	1084	1081	1076	1067	1063	1061	1061	1051
19	1061	1062	1063	1066	1066	1062	1056	1042	1028	1032	1020	1006	1008	1029	1041	1061	1041	1071	1077	1082	1081	1071	1067	1066	1066	1053
20	1066	1062	1065	1067	1071	1071	1061	1055	1046	1050	1046	1041	1019	1031	1042	1057	1061	1084	1067	1087	1086	1086	1074	1057	1056	1060
21	1056	1058	1066	1062	1056	1041	1052	1051	1041	1027	1026	1029	1022	1031	1031	1046	1051	1066	1075	1075	1071	1062	1061	1061	1066	1051
22D	1066	1075	1063	1061	1069	1076	1074	1061	972	930	1031	1035	1041	1025	1016	1036	1042	1062	1066	1069	1067	1108	1046	1051	1021	1047
23D	1021	1032	1051	1021	1036	996	1031	1035	1031	1026	1016	1006	1006	1016	1028	1081	1059	1058	1076	1092	1092	1083	1056	1061	1046	1043
24	1046	1046	1041	1023	1047	1057	1036	1033	1021	1011	997	996	1025	1041	1041	1067	1065	1071	1071	1070	1071	1070	1066	1064	1070	1044
25	1071	1049	1042	1068	1064	1064	1053	1043	1047	1047	1028	1027	1023	1043	1051	1042	1035	1067	1069	1080	1082	1082	1067	1052	1047	1053
26	1047	1049	1047	1047	1052	1048	1042	1037	1028	1027	1016	1017	1017	1026	1030	1037	1047	1040	1066	1072	1068	1067	1058	1062	1057	1044
27Q	1057	1057	1053	1052	1052	1048	1052	1053	1052	1038	1028	1020	1018	1026	1037	1047	1059	1063	1083	1085	1083	1078	1071	1062	1057	1053
28	1057	1057	1057	1058	1062	1063	1057	1058	1053	1051	1045	1037	1029	1011	1026	1032	1027	1058	1078	1087	1079	1073	1076	1061	1062	1054
29	1062	1050	1050	1046	1047	1053	1051	1051	1043	1043	1042	1026	1019	1017	1027	1032	1053	1071	1086	1088	1094	1077	1068	1067	1074	1053
30	1074	1063	1065	1067	1071	1072	1068	1055	1042	1031	1032	1020	1018	1024	1035	1050	1067	1059	1067	1072	1073	1068	1066	1062	1062	1055
Mean	1055	1054	1050	1052	1056	1055	1051	1047	1038	1027	1019	1012	1013	1023	1034	1049	1056	1065	1073	1076	1076	1071	1062	1058	1055	1049

## TERRESTRIAL MAGNETIC FORCE : WEST COMPONENT.

Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

289. Eskdalemuir. (—Y.)

4,000  $\gamma$  (·04 C.G.S. unit) +

June, 1928.

Hour. G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Day.	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$
1	357	340	358	347	334	331	324	318	318	319	338	347	360	382	390	388	396	409	417	379	377	370	364	325	345	358
2	345	352	347	341	333	326	324	319	318	320	339	358	373	384	388	393	392	392	380	365	358	358	344	351	352	354
3	352	352	353	373	365	346	339	331	318	311	318	332	358	380	392	405	405	391	372	358	345	351	336	352	340	355
4	340	339	346	342	344	344	347	326	316	312	325	344	360	378	392	398	382	366	364	365	352	345	354	360	359	352
5	359	361	364	393	374	346	332	338	340	339	338	345	364	384	392	392	386	384	392	373	364	354	335	314	333	360
6	333	346	334	344	338	330	318	312	313	325	322	332	352	370	384	391	392	385	378	371	355	364	345	346	352	350
7D	352	352	351	348	345	347	346	334	332	327	334	346	371	379	412	405	411	399	372	371	372	358	351	358	351	361
8	351	372	362	345	332	327	324	318	305	318	326	346	377	392	392	398	385	378	365	366	365	364	368	350	333	355
9	333	312	343	345	331	326	320	320	320	325	326	340	358	366	371	371	372	372	366	364	364	361	358	360	364	347
10Q	364	346	346	341	344	338	331	325	320	320	320	337	354	366	373	372	366	362	362	364	360	358	362	358	364	350
11Q	364	352	350	345	343	337	331	331	333	338	346	354	366	372	378	378	378	378	378	373	366	365	367	365	362	358
12D	362	344	338	335	336	348	340	352	344	333	332	354	384	386	388	382	372	359	356	353	364	365	358	352	350	355
13D	350	345	352	346	327	318	324	318	338	334	324	358	386	386	398	385	384	366	372	364	371	360	364	355	358	355
14	358	364	378	325	332	334	325	332	325	330	332	335	355	362	377	377	366	359	362	364	365	360	360	344	336	350
15	336	346	364	353	340	334	338	326	319	332	345	352	374	380	388	395	387	371	364	364	364	358	362	350	356	356
16Q	356	359	354	358	348	333	326	318	322	328	339	346	364	376	378	374	371	366	364	358	358	358	358	358	360	353
17Q	360	352	352	339	339	338	332	318	311	312	326	346	371	386	392	379	367	366	358	358	358	358	358	358	358	351
18	358	358	362	353	346	338	332	326	317	317	338	352	374	385	385	388	384	372	370	358	352	362	360	359	358	356
19	358	358	356	352	350	339	332	326	332	324	326	352	378	392	392	392	374	369	365	366	364	365	364	364	359	358
20	359	358	352	352	345	337	330	323	320	316	329	352	372	390	392	393	391	392	378	378	378	373	372	339	319	358
21	319	344	349	346	353	352	345	326	319	325	333	352	364	379	385	385	378	378	372	365	364	359	358	356	360	355
22D	360	338	334	332	332	324	324	319	305	351	353	352	372	384	379	387	392	386	385	372	371	344	352	344	383	354
23D	383	340	318	339	351	358	338	345	314	317	332	345	364	380	378	392	384	385	385	383	372	365	355	362	370	357
24	370	345	352	348	338	344	334	344	332	330	337	346	358	378	386	378	372	386	385	378	371	362	358	339	358	358
25	339	345	352	324	312	313	305	304	306	324	340	345	355	368	378	380	378	374	378	378	372	364	345	351	351	347
26	351	348	346	345	338	332	326	329	326	330	332	344	363	374	378	380	378	373	374	375	366	359	358	358	358	354
27Q	358	352	352	346	344	332	324	319	318	320	332	340	358	372	372	371	372	372	378	373	372	350	357	356	357	352
28	357	358	340	332	326	332	325	319	332	331	326	345	362	367	378	378	374	384	385	372	358	359	359	328	333	351
29	333	338	344	346	346	340	335	332	325	324	332	349	372	386	390	385	378	378	378	372	372	358	366	366	346	356
30	346	355	358	352	352	334	320	315	326	325	345	359	377	385	386	390	385	372	371	364	362	364	360	359	359	357
Mean	352	349	350	346	341	336	330	325	322	325	333	347	367	379	385	386	382	377	374	368	365	360	357	352	352	354



**TERRESTRIAL MAGNETIC FORCE : VERTICAL COMPONENT.**  
*Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.*  
 44,000  $\gamma$  (44 C.G.S. unit) +

259

290. Eskdalemuir. (Z.)

June, 1928.

Hour. G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Day.	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$
1	892	885	884	878	886	892	892	892	892	891	884	880	878	883	883	884	891	902	907	935	935	926	922	902	894	896
2	893	882	868	886	899	904	907	907	900	893	887	879	875	876	878	878	884	892	896	900	905	904	904	900	899	892
3	899	899	896	892	887	891	896	900	898	896	891	887	883	884	888	895	912	934	947	944	934	924	911	892	883	903
4	883	888	895	900	904	904	895	897	899	901	895	890	883	882	883	894	909	921	929	922	921	916	907	901	900	901
5	899	898	896	882	868	882	889	890	889	890	885	878	876	876	881	888	897	900	905	912	911	911	874	881	884	890
6	884	879	889	894	895	899	897	894	891	890	885	877	869	868	877	887	891	899	903	907	911	907	891	889	892	891
7D	892	894	895	895	895	894	894	890	888	886	882	878	881	890	894	932	950	958	958	938	920	912	905	899	895	905
8	895	890	868	882	893	894	894	894	894	892	894	890	888	891	898	907	914	912	912	905	900	898	894	894	884	895
9	884	876	877	877	889	893	895	891	890	887	885	882	881	883	890	897	903	905	912	912	912	908	903	894	885	893
10Q	884	885	889	892	893	894	894	893	891	889	885	884	880	881	887	893	897	899	898	898	901	900	897	896	890	892
11Q	890	889	891	893	894	897	894	894	893	894	890	889	888	886	889	889	893	895	897	902	902	898	896	894	893	893
12D	893	876	875	881	885	876	868	855	864	864	870	873	878	882	890	894	894	898	902	902	898	898	898	898	898	884
13D	898	898	892	881	885	893	893	891	889	886	885	885	902	911	906	905	911	910	911	918	911	911	906	903	902	899
14	902	898	862	863	872	878	877	872	885	888	884	881	893	898	899	912	916	918	910	906	901	902	898	893	887	892
15	887	889	890	890	896	898	899	904	907	902	893	885	881	885	893	893	899	910	908	905	902	902	902	898	898	897
16Q	897	896	895	897	897	897	897	898	897	889	884	883	880	882	887	888	892	897	897	900	898	898	897	897	893	893
17Q	893	889	888	883	885	888	888	893	896	892	880	875	872	874	882	896	904	902	901	898	896	893	893	893	893	890
18	893	894	893	895	893	892	891	892	892	889	880	876	877	883	887	888	896	905	906	910	913	905	900	897	897	894
19	897	896	896	897	898	901	901	897	892	880	874	875	875	876	883	891	897	900	904	905	908	905	900	896	895	893
20	895	895	896	897	898	901	901	901	892	880	876	875	875	875	880	884	889	894	905	904	901	905	904	886	871	892
21	871	880	888	890	892	892	888	892	894	888	884	880	886	885	892	893	898	901	905	903	901	901	898	897	893	892
22D	893	884	879	884	891	892	892	882	884	888	879	866	871	875	897	927	931	927	922	921	922	918	894	879	873	894
23D	829	823	849	852	861	852	868	874	882	883	891	888	890	892	900	908	914	915	912	912	905	894	892	886	865	888
24	865	875	873	865	866	874	882	887	888	891	887	884	883	892	903	917	925	913	908	903	901	903	904	897	891	892
25	891	871	853	857	857	865	877	884	882	881	884	883	882	879	888	896	900	904	905	904	904	907	901	887	891	885
26	891	891	891	887	886	888	891	892	892	888	883	881	883	888	889	891	900	904	902	902	904	903	900	895	892	893
27Q	892	891	891	891	893	892	895	892	891	887	879	873	874	879	884	891	892	892	896	900	904	904	900	896	892	891
28	892	883	882	883	887	891	889	891	891	884	883	882	878	882	888	897	903	897	897	905	913	907	897	888	879	891
29	879	879	882	887	891	892	893	891	887	882	883	879	875	875	878	883	888	895	897	901	904	912	903	896	891	889
30	890	891	890	890	890	893	891	890	887	887	878	873	870	875	882	890	895	903	899	896	899	896	895	894	888	889
Mean	888	885	884	885	888	890	891	891	891	888	884	881	880	884	890	896	903	907	908	909	908	905	899	894	888	893

**DAILY EXTREMES OF EACH COMPONENT OF TERRESTRIAL MAGNETIC FORCE :  
 MAGNETIC CHARACTER FIGURES : TEMPERATURE IN MAGNET HOUSE.**

291. Eskdalemuir.

June, 1928.

Day.	Terrestrial Magnetic Elements.															Character 2R <sup>2</sup> Figures ——. §. 100 γ <sup>2</sup>	Magnetic Character of Day (0-2).	Temperature in Magnet House 200 +
	North Component.					West Component.					Vertical Component.							
	Maximum 15000 γ +		Minimum 15000 γ +		Range.	Maximum 4000 γ +		Minimum 4000 γ +		Range.	Maximum 44000 γ +		Minimum 44000 γ +		Range.			
	h. m.	γ	γ	h. m.	γ	h. m.	γ	γ	h. m.	γ	h. m.	γ	γ	h. m.	γ			a.
1	19 12	1115	991	10 50	124	17 40	425	307	6 41	118	19 20	939	875	2 41	64	334	I	83.8
2	17 48	1096	1013	11 54	83	16 28	405	314	8 23	91	21 54	907	864	1 51	43	171	I	83.8
3	18 44	1117	986	11 10	131	15 22	417	305	9 9	112	18 20	948	878	23 22	70	346	I	83.8
4	19 51	1106	1002	11 49	104	15 10	406	300	7 34	106	18 27	930	882	0 11	48	244	I	83.8
5	19 34	1134	996	11 2	138	3 1	406	303	22 47	103	19 6	915	864	3 42	51	323	I	83.9
6	21 41	1111	1003	10 52	108	15 46	401	289	7 32	112	20 3	912	867	12 52	45	262	I	83.9
7D	14 41	1164	973	13 1	191	14 42	443	312	8 27	131	16 49	968	877	11 41	86	610	I	83.9
8	23 10	1084	961	10 54	123	14 41	415	285	8 26	130	15 56	915	864	1 55	51	346	I	83.9
9	18 27	1098	999	11 49	99	15 18	376	300	0 50	76	18 32	915	871	2 42	44	175	I	83.9
10Q	19 7	1069	998	11 33	71	13 38	378	304	7 52	74	20 30	902	877	11 53	25	111	0	84.0
11Q	19 11	1084	1010	10 53	74	14 43	381	328	6 58	53	19 3	902	885	13 0	17	86	0	84.0
12D	0 34	1091	957	10 52	134	12 12	398	318	8 32	80	18 50	902	854	7 12	48	267	I	84.1
13D	21 50	1081	960	11 50	121	11 43	406	297	5 21	109	19 9	919	878	2 50	41	282	I	84.1
14	15 29	1085	985	11 8	100	1 47	415	306	5 45	109	16 35	920	841	2 11	79	281	I	84.1
15	15 58	1075	1003	9 53	72	2 11	399	307	8 16	92	17 22	911	881	11 55	30	145	I	84.1
16Q	18 26	1072	1015	10 32	57	14 23	378	311	7 42	67	18 41	901	879	12 20	22	82	0	84.1
17Q	17 25	1075	995	10 58	80	14 32	398	306	7 51	92	16 20	905	871	11 56	34	160	I	84.0
18	18 33	1096	998	12 31	98	15 39	397	311	18 32	86	19 38	914	875	11 12	39	185	I	84.1
19	18 49	1089	998	11 35	91	14 35	398	320	9 20	78	20 0	909	873	10 20	36	157	I	84.1
20	19 35	1126	1011	12 18	115	15 16	398	298	23 40	100	18 12	906	870	23 32	36	245	I	84.1
21	18 12	1082	1012	12 19	70	15 2	389	314	8 9	75	18 1	906	865	0 10	41	122	I	84.1
22D	21 19	1177	850	8 39	327	9 20	432	272	8 32	160	15 12	935	825	24 0	110	1446	2	84.2
23D	20 32	1122	966	5 7	156	0 1	407	302	7 52	105	16 22	917	798	0 20	124	507	I	84.2
24	15 36	1089	980	11 49	109	13 56	395	316	6 49	79	15 50	926	858	3 20	68	227	I	84.2
25	20 59	1088	1015	11 50	73	15 5	393	298	7 40	95	17 31	908	848	2 12	60	180	I	84.3
26	18 32	1079	997	12 21	82	15 51	386	318	6 17	68	20 0	905	880	11 34	25	120	0	84.3
27Q	21 18	1093	1012	11 29	81	17 41	384	313	7 30	71	19 51	905	871	11 10	34	128	0	84.3
28	19 6	1095	1004	12 50	91	17 39	392	311	20 50	81	20 2	913	877	11 59	36	161	I	84.3
29	20 3	1113	1011	11 26	102	14 3	392	312	0 30	80	20 48	913	874	0 20	39	183	I	84.3
30	20 22	1077	1011	11 59	66	14 32	392	309	6 36	83	16 55	904	870	11 42	34	124	0	84.3
Mean	—	1099	990	—	109	—	400	306	—	94	—	916	866	—	49	267	0.83	84.1
No. of Days used.	—	30	30	—	30	—	30	30	—	30	—	30	30	—	30	30	30	30



Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

## 292. Eskdalemuir. (X.)

15,000  $\gamma$  (·15 C.G.S. unit) +

July, 1928.

Hour. G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Day.	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	1063	1063	1062	1058	1063	1067	1059	1057	1052	1045	1032	1028	1031	1028	1033	1044	1053	1063	1087	1092	1093	1073	1059	1059	1058	1057
2D	1058	1058	1058	1062	1057	1053	1053	1053	1049	1046	1022	1014	1035	1033	1053	1017	1038	1061	1078	1068	1082	1078	1070	1072	1069	1053
3	1069	1073	1073	1063	1063	1068	1071	1068	1054	1043	1042	1031	1017	1015	1031	1058	1074	1085	1098	1112	1086	1092	1063	1043	1054	1062
4	1054	1053	1065	1062	1060	1057	1056	1057	1043	1034	1033	1030	1007	1008	1016	1053	1077	1068	1078	1083	1073	1063	1071	1063	1069	1053
5	1069	1052	1052	1058	1054	1043	1063	1052	1039	1027	1017	1018	1017	1028	1021	1037	1064	1094	1096	1082	1068	1063	1062	1063	1059	1052
6	1060	1055	1050	1035	1044	1059	1063	1043	1038	1024	1013	1023	1025	1018	1044	1055	1063	1084	1093	1089	1079	1070	1059	1054	1049	1051
7D	1049	1051	1048	1054	1060	1060	1046	1009	1008	1023	1010	1001	993	992	1015	1029	1048	1055	1069	1079	1093	1100	1085	1114	1350	1052
8	1350	829	563	773	359	563	272	-52	87	362	611	922	958	914	993	988	1038	1039	1073	1057	1077	1023	1006	1001	1008	776
9D	1008	1004	993	983	958	943	958	977	968	963	972	973	1004	1040	1078	1070	1089	1037	1038	1040	1039	1039	1034	1019	1011	1010
10	1012	1010	1024	1035	1030	1020	1017	1012	1010	1004	989	950	974	995	1001	1016	1040	1055	1047	1059	1054	1052	1041	1019	1028	1020
11	1028	1019	1026	1012	1014	1032	1005	984	1004	1009	999	994	989	999	1020	1014	1031	1046	1055	1048	1048	1055	1047	1035	1030	1021
12	1030	1024	1029	1032	1009	1021	1024	1024	1020	1016	1015	1005	1013	1024	1048	1036	1045	1050	1055	1055	1045	1047	1050	1042	1031	1032
13Q	1031	1030	1026	1026	1030	1036	1033	1025	1020	1013	999	999	1004	1004	1014	1030	1040	1045	1046	1044	1040	1041	1040	1037	1036	1027
14	1037	1036	1039	1040	1037	1035	1022	1025	1021	1011	1005	1006	1011	1019	1035	1022	1035	1045	1046	1047	1044	1047	1045	1052	1045	1032
15Q	1045	1032	1032	1040	1046	1037	1021	1021	1015	1010	1003	1001	995	1010	1023	1035	1049	1060	1065	1059	1060	1056	1051	1040	1035	1035
16Q	1040	1036	1031	1031	1050	1054	1051	1041	1032	1020	1000	997	990	1005	1019	1030	1041	1047	1046	1055	1060	1060	1050	1044	1043	1035
17Q	1043	1041	1041	1045	1045	1046	1046	1040	1031	1026	1016	1015	1015	1025	1031	1046	1046	1061	1075	1076	1063	1059	1058	1060	1059	1044
18	1059	1057	1056	1056	1056	1056	1050	1041	1031	1023	1022	1021	1016	1031	1036	1035	1045	1061	1065	1056	1066	1055	1066	1053	1036	1046
19	1036	1030	1036	1045	1046	1036	1032	1031	1025	1016	1010	1005	1000	1003	1026	1056	1060	1041	1052	1060	1055	1049	1050	1050	1046	1036
20Q	1047	1044	1045	1042	1041	1047	1052	1051	1045	1032	1015	1001	1002	1001	1014	1038	1042	1056	1062	1061	1067	1062	1060	1057	1055	1041
21	1055	1047	1047	1056	1058	1058	1059	1057	1047	1038	1036	1033	1027	1030	1030	1044	1047	1067	1061	1077	1077	1076	1082	1072	1072	1054
22D	1072	1032	1057	1042	1018	1026	1032	1042	1017	1005	1007	997	997	1006	1014	1032	1042	1063	1077	1102	1066	1052	1025	1026	1023	1034
23	1023	1041	1034	1022	1036	1042	1038	1037	1026	1005	997	994	991	1002	1011	1026	1021	1026	1031	1046	1047	1051	1052	1046	1041	1027
24	1041	1037	1036	1046	1038	1043	1048	1056	1043	1033	996	995	987	996	1005	1032	1042	1056	1068	1067	1052	1042	1046	1042	1037	1034
25	1038	1038	1037	1037	1035	1039	1043	1038	1033	1022	1012	1003	1001	992	980	1017	1028	1043	1050	1069	1063	1049	1047	1045	1038	1032
26	1038	1042	1033	1033	1029	1043	1053	1048	1038	1012	994	992	997	998	997	1007	1026	1032	1053	1052	1053	1053	1053	1054	1068	1031
27	1068	1049	1053	1059	1058	1057	1054	1048	1034	1022	1017	1017	1018	1018	1029	1048	1039	1039	1052	1058	1063	1057	1053	1053	1055	1044
28	1055	1047	1053	1053	1061	1055	1027	1038	1045	1027	1012	1009	1007	1017	1015	1017	1053	1068	1053	1044	1063	1052	1047	1043	1048	1040
29	1049	1030	1038	1044	1039	1053	1048	1040	1037	1029	1024	1019	1025	1024	1028	1024	1034	1034	1044	1048	1053	1049	1049	1048	1044	1038
30	1044	1043	1041	1043	1044	1044	1043	1040	1029	1023	1022	1011	1013	1019	1023	1033	1035	1039	1060	1071	1068	1054	1050	1046	1054	1039
31D	1054	1043	1049	1048	1064	1054	1041	1038	1028	1019	1008	1003	1001	998	1019	1024	1064	1090	1109	1084	1079	1039	1039	1039	1034	1043
Mean	1056	1034	1027	1033	1019	1028	1016	1002	999	999	998	1003	1005	1009	1023	1033	1047	1055	1064	1066	1064	1057	1052	1048	1055	1031

## TERRESTRIAL MAGNETIC FORCE : WEST COMPONENT.

Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

## 293. Eskdalemuir. (-Y.)

4,000  $\gamma$  (·04 C.G.S. unit) +

July, 1928.

Hour. G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Day.	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	360	359	356	346	341	325	325	323	320	319	332	340	362	374	379	381	373	365	367	360	366	357	353	359	353	352
2D	353	357	353	352	341	331	319	319	316	319	346	373	392	399	419	407	406	399	393	373	379	373	359	358	356	364
3	356	353	346	333	354	351	341	339	345	332	327	333	347	360	373	381	378	373	365	372	361	326	332	345	347	351
4	347	345	353	332	333	332	333	333	323	332	338	347	365	375	385	399	393	369	379	369	360	359	349	349	325	354
5	325	313	320	327	325	351	346	319	319	327	327	339	358	385	392	393	389	388	379	372	361	365	360	354	352	352
6	352	349	346	367	358	333	332	326	325	323	327	338	360	371	387	393	390	382	374	369	367	357	347	353	350	355
7D	350	352	360	359	339	331	323	313	313	319	323	335	356	359	369	371	367	359	353	353	366	366	353	326	433	348
8	433	359	48	153	133	125	53	-87	26	51	199	299	333	336	340	339	352	347	379	366	379	345	346	341	340	248
9D	340	354	346	339	333	327	326	299	299	292	313	326	345	353	373	360	367	359	352	359	353	353	347	346	353	340
10	353	370	353	333	326	325	326	321	317	313	299	311	333	359	367	359	359	366	353	359	363	359	347	359	347	343
11	347	346	343	345	334	318	313	323	333	315	313	313	326	346	359	359	358	357	358	353	347	347	350	339	325	339
12	325	321	337	333	333	329	313	313	319	323	335	352	361	365	370	360	347	353	353	357	357	357	358	348	346	343
13Q	346	339	333	333	329	322	313	305	303	306	316	327	341	348	352	348	352	347	347	353	348	346	350	347	346	335
14	346	351	352	333	337	335	326	327	325	325	333	351	368	373	375	362	360	359	353	353	352	353	353	349	341	348
15Q	341	333	333	333	326	321	312	307	307	313	325	341	347	353	353	353	354	353	352	349	353	359	359	347	335	338
16Q	335	345	339	345	315	314	308	308	317	312	325	340	360	373	373	373	361	352	341	346	352	352	352	353	352	342
17Q	352	346	345	341	338	325	314	319	319	325	339	354	379	392	392	386	368	358	355	357	359	354	353	350	345	351
18	345	341	339	339	330	319	307	307	315	327	340	359	386	401	399	385	375	367	359	352	357	353	359	346	327	350
19	327	309	321	335	340	333	326	307	306	321	326	334	359	367	380	386	373	359	353	346	345	347	350	346	341	342
20Q	341	339	335	345	346	341	327	317	301	303	312	325	351	373	385	392	381	379	373	360	359	353	359	346	348	348
21	346	333	340	332	330	319	319	313	313	320	328	339	359	379	394	399	389	386	366	366	359	356	348	346	371	350
22D	371	334	326	333	340	328	379	341	299	293	314	326	343	360	379	393	386	381	360	356	360	353	326	333	334	346
23	334	308	300	305	327	321	312	313	313	313	325	331	340	361	373	375	365	353	352	352	347	347	343	327	315	334
24	315	307	326	327	319	320	315	305	293	293	313	339	359	379	386	387	385	373	365	359	347	345	339	329	335	339
25	335	334	332	326	333	319	313	313	307	306	319	333	360	379	380	387	379	373	361	360	333	340	346	332	323	341
26	323	333	325	311	328	313	319	314	306	299	307	327	360	380	385	386	380	360	359	353	353	354	356	348	339	341
27	339	339	333	323	319	315	308	308	307	312	327	341	360	373	379	379	365	352	353	353	359	359	353	353	359	342
28	359	362	340	339	334	339	353	333	321	329	341	345	358	373	380	379	373	379	360	359	365	345	352	353	346	353
29	346	333	335	338	351	334	332	320	319	316	325	333	358	366	367	359	359	358	355	352	346	347	353	347	346	444
30	346	339	339	339	333	326	325	323	320	325	338	347	354	359	361	360	359	359	373	379	370	363	359	353	339	348
31D	339	333	321	307	333	299	306	299	299	313	319	332	352	366	381	367	370	378	386	365	317	340	326	325	351	337
Mean	346	340	328	329	328	320	315	304	305	307	321	336	356	369	377	376	371	366	362	359	356	353	349	346	346	343



**294. Eskdalemuir. (Z.)**

**July, 1928.**

Hour. G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Day.	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	891	891	894	894	897	899	899	895	893	886	881	877	876	877	881	883	890	899	900	901	902	904	902	896	895	892
2D	895	894	893	890	890	892	890	890	889	882	867	856	850	863	878	901	910	912	915	908	899	898	899	899	899	890
3	899	896	896	897	896	891	889	883	882	876	875	875	872	874	878	885	897	908	915	915	912	907	890	890	890	891
4	890	889	873	879	887	889	890	886	882	880	877	878	878	881	884	886	900	915	911	908	907	903	898	890	879	890
5	879	872	878	885	885	878	866	877	882	882	877	868	869	878	886	891	902	911	912	907	907	900	895	890	889	887
6	888	889	890	883	862	873	880	885	884	881	880	881	880	886	892	889	893	902	908	911	907	903	898	889	889	889
7D	889	889	882	872	877	885	889	889	885	885	880	873	872	877	884	889	897	903	906	902	897	895	889	883	785	885
8	785	512	708	652	687	694	519	561	638	673	851	956	990	983	1003	1000	1008	982	963	953	944	939	936	936	935	881
9D	935	922	889	881	887	876	881	902	909	910	910	915	919	940	962	971	965	949	942	936	931	927	918	915	910	920
10	910	893	885	901	897	902	906	906	906	906	911	914	907	911	911	919	928	935	943	942	933	931	914	902	896	913
11	896	902	906	906	905	910	914	911	909	910	910	903	901	906	911	914	919	923	925	928	928	927	919	898	891	912
12	890	888	892	900	901	901	905	909	906	902	895	893	896	900	909	920	930	927	926	923	920	918	914	906	909	908
13Q	909	910	913	913	913	913	913	914	913	909	905	898	900	901	901	902	905	906	913	913	913	913	913	912	910	909
14	910	909	904	905	905	907	910	908	909	908	896	886	884	893	897	908	913	915	918	919	917	913	913	909	905	906
15Q	905	904	906	909	910	910	913	913	905	892	891	892	892	892	897	905	905	909	913	909	909	909	909	909	909	905
16Q	909	910	909	901	891	899	900	901	901	901	900	887	877	876	886	894	900	905	909	909	909	913	913	911	910	900
17Q	910	910	909	909	910	909	909	905	905	901	897	892	888	889	892	898	905	911	913	917	913	910	907	905	906	905
18	906	908	908	908	909	910	905	901	901	899	888	874	874	886	901	909	913	914	917	914	913	913	910	905	897	903
19	897	896	900	902	909	913	909	905	905	905	901	901	901	909	913	913	917	914	917	922	922	917	913	910	910	909
20Q	909	908	908	908	906	899	899	905	907	901	899	887	882	883	887	891	896	904	908	909	909	911	909	905	888	901
21	888	896	900	898	901	904	900	902	903	900	892	889	887	887	883	889	900	904	911	909	912	909	908	901	893	899
22D	893	863	841	841	832	857	849	845	865	874	892	898	899	906	915	929	937	942	953	950	937	925	908	916	908	895
23	908	898	890	887	887	899	907	908	908	912	917	909	900	896	900	900	904	911	916	916	913	912	909	909	908	905
24	908	900	896	874	890	892	895	897	894	892	899	895	894	895	900	912	926	947	950	950	946	938	925	915	908	909
25	908	908	908	906	907	907	909	913	916	914	912	904	896	900	904	910	913	916	922	924	933	925	919	917	916	912
26	916	905	896	887	889	895	896	896	899	896	895	887	887	896	909	924	933	936	934	930	922	917	916	912	904	907
27	904	899	904	904	904	908	908	908	904	904	899	895	887	895	904	905	908	913	916	918	918	917	917	913	912	907
28	912	904	904	908	909	908	898	887	887	880	883	883	886	896	912	929	937	942	948	936	925	929	921	919	912	910
29	911	907	908	905	892	883	889	898	903	903	900	903	899	903	918	928	928	928	928	926	927	923	917	916	916	910
30	916	915	915	915	915	913	912	911	911	905	900	895	895	897	903	911	916	916	919	920	921	921	919	916	912	911
31D	912	910	900	899	891	889	897	907	908	902	891	890	890	889	903	916	920	939	953	954	950	932	920	908	894	911
Mean	899	887	890	888	888	890	885	888	891	889	893	892	891	896	903	910	917	920	928	922	919	916	911	907	900	901

**DAILY EXTREMES OF EACH COMPONENT OF TERRESTRIAL MAGNETIC FORCE :  
 MAGNETIC CHARACTER FIGURES : TEMPERATURE IN MAGNET HOUSE.**

**295. Eskdalemuir.**

**July, 1928.**

Day.	Terrestrial Magnetic Force.															Character in Figure 100γ±.	Magnetic Character of Day (0-2).	Temperature in Magnet House 200 +
	North Component.					West Component.					Vertical Component.							
	Maximum 15000 γ +		Minimum 15000 γ +		Range.	Maximum 4000 γ +		Minimum 4000 γ +		Range.	Maximum 44000 γ +		Minimum 44000 γ +		Range.			
	h. m.	γ	γ	h. m.		γ	h. m.	γ	h. m.		γ	h. m.	γ	h. m.				
1	19 41	1114	1020	12 55	94	14 47	392	313	7 38	79	20 40	905	874	11 32	31	160	1	84.3
2D	17 56	1102	978	14 48	124	14 3	433	263	8 36	170	18 25	915	849	12 0	66	486	1	84.3
3	18 56	1131	1002	13 0	129	15 36	387	306	21 20	81	21 31	916	871	12 6	45	252	1	84.3
4	19 10	1092	995	12 47	97	15 13	412	311	7 40	101	16 59	916	872	2 10	44	215	1	84.5
5	17 40	1123	1009	12 38	114	14 35	399	300	0 23	99	17 23	915	862	5 40	53	256	1	84.5
6	18 33	1104	1008	13 7	96	15 13	402	319	8 11	83	19 14	914	859	4 3	55	191	1	84.5
7D	Between 23 34 and 23 40	> 1354	978	12 48	> 376	23 38	577	275	22 32	302	18 12	906	788	23 40	118	2465	1	84.5
8	0 10	> 1354	< -52	Between 5 0 and 10 0	> 1406	1 8	533	< -155	6 50	> 688	4 15	1168	< 372	Between 1 7 and 1 30	> 796	30,838	2	84.6
9D	14 20	1129	913	4 39	216	14 22	399	266	9 1	133	14 29	974	868	5 5	106	756	1	84.6
10	17 32	1070	933	10 43	137	0 52	393	286	10 22	107	18 27	945	881	1 25	64	343	1	84.6
11	20 32	1075	967	7 13	108	14 19	367	295	8 58	72	20 30	931	886	23 32	45	189	1	84.6
12	22 35	1064	994	4 15	70	14 10	375	300	7 14	75	16 19	932	888	0 50	44	125	1	84.7
13Q	18 0	1049	989	11 7	60	19 16	353	299	7 48	54	7 5	915	897	10 51	18	68	0	84.7
14	23 5	1056	997	9 52	59	13 50	379	319	7 58	60	19 30	921	883	11 35	38	85	0	84.8
15Q	17 58	1066	991	12 26	75	22 11	360	302	7 40	58	16 20	914	888	9 44	26	97	0	84.9
16Q	20 10	1065	985	11 50	80	14 50	377	303	6 23	74	21 51	914	872	12 38	42	136	0	84.9
17Q	17 55	1086	1005	11 20	81	12 47	399	312	6 4	87	19 1	917	887	12 6	30	150	0	84.9
18	18 3	1077	1006	12 15	71	13 50	408	305	5 41	103	18 28	917	871	11 34	46	178	1	84.9
19	15 25	1076	988	11 46	88	14 6	393	292	0 41	101	19 36	925	891	0 31	34	191	1	84.9
20Q	19 53	1072	997	11 0	75	15 15	398	299	8 5	99	21 0	912	879	12 28	33	165	0	84.9
21	21 54	1103	1012	12 21	91	14 51	406	306	7 7	100	20 3	912	883	14 16	29	191	1	84.9
22D	18 48	1107	983	8 23	124	0 11	410	266	8 23	144	18 21	955	811	3 40	144	568	1	84.9
23	22 11	1061	983	11 20	78	14 30	379	297	2 40	82	9 51	917	885	4 0	32	138	1	84.9
24	18 0	1076	977	12 12	99	14 58	393	287	7 48	106	18 41	951	869	3 0	82	278	1	85.0
25	19 8	1083	972	14 21	111	15 9	393	305	8 50	88	19 55	934	895	11 49	39	216	1	85.0
26	23 57	1077	985	11 44	92	14 35	393	299	2 59	94	16 51	937	883	11 30	54	202	1	85.1
27	0 6	1084	1012	10 12	72	14 28	385	299	6 26	86	19 14	919	887	12 1	32	136	1	85.1
28	17 24	1082	958	15 6	124	15 28	393	313	8 7	80	17 51	951	879	9 11	72	270	1	85.2
29	4 39	1058	1013	15 9	45	13 30	372	313	8 11	59	15 11	929	881	4 34	48	78	1	85.2
30	18 37	1084	1008	11 10	76	18 38	386	319	8 0	67	20 18	924	895	11 23	29	111	1	85.2
31D	17 59	1120	973	13 9	147	18 1	393	283	19 51	110	19 51	962	882	4 32	80	401	1	85.3
Mean	—	1103	953	—	149	—	401	284	—	117	—	934	858	—	77	1288	0.84	84.8
No. of Days used.	—	31	31	—	31	—	31	31	—	31	—	31	31	—	31	31	31	31



Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

296. Eskdalemuir. (X.)

15,000  $\gamma$  (15 C.G.S. unit) +

August, 1928.

Hour. G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Day.	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$
1	1034	1038	1034	1039	1038	1038	1034	1028	1018	1018	1013	1008	1012	1014	1018	1033	1038	1048	1070	1077	1058	1051	1053	1057	1038	1036
2	1039	1038	1041	1048	1055	1052	1036	1031	1029	1025	1019	1020	1019	1019	1021	1029	1039	1053	1049	1059	1055	1059	1049	1053	1044	1039
3	1044	1048	1045	1044	1043	1053	1050	1043	1029	1014	999	998	994	1003	1019	1033	1055	1065	1064	1064	1063	1061	1065	1049	1045	1039
4D	1045	1049	1045	1043	1048	1049	1049	1039	1030	1014	1013	1009	1014	1025	1029	1019	1044	1063	1059	1070	1084	1075	1058	1069	1073	1044
5D	1073	1035	979	1003	1033	1015	1005	979	1015	1014	1004	1003	999	1014	1039	1079	1104	1109	1124	1071	1073	1064	1036	1019	1043	1036
6	1043	1045	1045	1045	1039	1039	1037	1024	1013	1009	1003	999	990	999	1014	1039	1045	1055	1049	1068	1064	1050	1015	994	1045	1030
7D	1046	1000	1040	1038	1040	1040	1035	1040	1006	994	986	992	1006	1010	1025	1046	1030	1040	1054	1052	1050	1046	1045	1040	1040	1029
8	1040	1036	1040	1040	1035	1037	1040	1026	1024	1015	1002	1006	1010	1010	1008	1020	1044	1051	1060	1060	1056	1050	1050	1046	1046	1034
9	1046	1045	1038	1041	1044	1045	1046	1045	1040	1030	1010	1005	1010	1014	1020	1030	1036	1045	1050	1052	1050	1048	1050	1046	1045	1037
10Q	1045	1044	1041	1040	1043	1041	1042	1036	1030	1024	1010	1006	1004	1016	1012	1034	1038	1041	1050	1054	1056	1055	1056	1050	1050	1036
11	1050	1051	1050	1050	1064	1061	1054	1040	1036	1040	1030	1036	1022	1020	1016	1030	1033	1040	1050	1055	1060	1060	1060	1056	1054	1044
12	1055	1056	1059	1056	1056	1046	1061	1041	1019	1033	1041	1003	1023	1020	1015	1041	1073	1096	1092	1071	1051	1046	1033	1039	1041	1047
13	1041	1042	1036	1058	1064	1051	1036	1047	1041	1027	1016	1015	1037	1026	1034	1031	1046	1051	1057	1056	1055	1053	1051	1050	1050	1043
14Q	1050	1047	1045	1041	1041	1041	1041	1033	1023	1016	1011	1009	1004	1011	1011	1026	1035	1051	1057	1061	1057	1052	1054	1061	1048	1037
15Q	1048	1047	1046	1047	1047	1045	1043	1035	1026	1013	1006	1007	1011	1017	1030	1040	1046	1056	1065	1063	1060	1057	1053	1051	1046	1040
16	1047	1047	1037	1046	1043	1042	1043	1038	1030	1012	998	996	992	1007	1029	1046	1048	1058	1068	1066	1066	1067	1062	1057	1057	1040
17	1057	1060	1061	1062	1052	1052	1052	1048	1038	1026	1012	996	1003	1012	1027	1042	1045	1056	1067	1062	1057	1052	1056	1059	1044	1044
18	1059	1053	1049	1051	1052	1054	1053	1048	1032	1020	1000	1000	1006	1016	1026	1036	1032	1058	1068	1067	1053	1056	1062	1062	1052	1042
19	1052	1047	1046	1048	1048	1052	1051	1042	1034	1020	1002	997	1002	1012	1022	1032	1037	1043	1037	1054	1058	1056	1052	1052	1052	1037
20Q	1053	1053	1053	1053	1053	1053	1048	1043	1038	1027	1014	1009	1013	1023	1033	1043	1061	1053	1053	1053	1053	1057	1054	1049	1048	1043
21	1048	1053	1053	1053	1055	1055	1053	1044	1033	1019	1003	995	1003	1012	1022	1038	1045	1053	1063	1072	1059	1057	1055	1053	1049	1042
22Q	1049	1049	1053	1053	1049	1049	1047	1042	1034	1027	1017	1013	1009	1013	1024	1033	1039	1048	1059	1063	1069	1072	1060	1058	1059	1043
23	1059	1055	1061	1059	1058	1055	1051	1060	1058	1038	1018	1011	1007	1008	1021	1022	1033	1053	1064	1072	1073	1069	1083	1073	1055	1048
24	1056	1058	1059	1048	1036	1062	1059	1054	1036	1014	998	1001	1012	1019	1032	1040	1058	1040	1046	1054	1062	1059	1056	1056	1054	1042
25	1054	1055	1050	1044	1047	1048	1050	1045	1036	1026	1014	1013	1016	1022	1034	1034	1044	1052	1054	1059	1059	1059	1056	1068	1064	1043
26D	1064	1078	1064	1074	1069	1055	1005	1004	988	978	979	978	968	974	981	1019	1043	1034	1050	1059	1059	1074	1056	1044	1026	1027
27D	1026	1024	989	1004	1034	999	964	997	1008	954	957	958	984	994	1009	1008	1014	1034	1046	1060	1052	1054	1034	1038	1038	1010
28	1038	1042	1040	1020	1034	1038	1032	1025	1014	1004	1002	996	999	998	1016	1019	1041	1053	1079	1076	1035	1037	1040	1042	1047	1030
29	1047	1048	1034	1034	1036	1031	1034	1034	1026	1019	1014	1010	1021	1032	1036	1042	1040	1040	1047	1048	1049	1048	1044	1043	1044	1036
30	1045	1045	1047	1045	1044	1041	1039	1035	1030	1015	1009	1015	1023	1034	1041	1052	1063	1056	1052	1055	1049	1049	1053	1045	1052	1041
31	1052	1053	1050	1048	1046	1045	1041	1031	1025	1015	1011	1017	1030	1043	1047	1053	1053	1055	1056	1055	1054	1053	1065	1054	1047	1044
Mean	1049	1046	1043	1044	1047	1044	1040	1035	1027	1016	1007	1004	1008	1014	1023	1035	1045	1053	1060	1061	1058	1056	1052	1049	1049	1038

## TERRESTRIAL MAGNETIC FORCE : WEST COMPONENT.

Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

297. Eskdalemuir. (—Y.)

4,000  $\gamma$  (0.4 C.G.S. unit) +

August, 1928.

Hour. G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Day.	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	352	320	326	328	315	321	314	318	321	326	340	354	367	369	367	362	361	362	373	361	366	361	347	328	328	344
2	328	328	328	336	334	323	318	321	329	327	328	342	360	369	373	367	356	360	354	354	349	363	340	341	338	343
3	338	342	328	334	335	322	315	309	313	314	323	342	356	370	381	380	374	362	354	348	354	348	335	340	341	342
4 D	341	341	336	348	344	329	321	313	313	324	334	347	374	394	398	388	381	384	381	380	374	333	348	336	314	352
5 D	314	294	281	334	314	334	380	362	330	314	314	333	360	388	401	428	428	420	401	368	375	368	349	340	337	386
6	337	335	328	328	327	322	322	324	322	321	329	342	360	373	374	370	361	354	348	355	328	302	298	306	328	336
7 D	328	340	348	328	327	355	340	332	335	334	334	348	360	367	366	369	357	356	354	354	348	342	342	342	341	346
8	341	340	341	340	340	328	315	314	311	320	327	336	355	369	374	374	372	361	353	347	347	348	348	354	342	344
9	342	328	328	334	336	332	328	324	320	324	335	348	365	374	374	368	356	349	348	348	352	352	352	354	350	345
10 Q	350	348	343	340	334	328	322	320	321	328	334	348	362	373	362	367	355	352	348	351	354	354	356	348	343	346
11	343	348	352	334	342	324	336	346	345	358	355	360	357	362	362	362	356	354	354	355	360	354	354	348	347	351
12	347	341	347	346	346	336	320	321	334	348	340	341	361	380	375	387	388	388	374	354	333	343	347	345	336	352
13	336	328	358	340	334	323	340	361	363	368	340	349	361	374	380	368	353	348	348	351	354	348	348	348	347	351
14 Q	347	348	342	334	329	322	320	320	320	315	322	340	354	366	367	366	354	347	345	347	348	350	350	348	338	342
15 Q	338	338	340	340	334	322	320	314	314	318	335	354	375	390	391	386	369	358	349	348	353	348	344	346	347	347
16	347	348	360	352	322	322	321	320	314	313	315	338	361	381	394	387	361	354	354	350	354	354	341	346	347	346
17	347	347	348	342	328	327	322	321	321	321	336	348	366	374	374	374	362	354	352	347	346	347	347	342	338	345
18	338	336	335	330	331	328	314	305	301	301	320	344	362	381	394	388	374	367	354	341	347	348	348	333	335	342
19	335	323	334	334	334	327	314	307	302	303	314	328	354	374	382	382	367	354	347	348	347	347	342	340	340	339
20 Q	340	341	341	341	340	335	328	327	322	321	334	348	368	386	388	388	384	362	348	347	348	348	348	347	342	349
21	342	342	341	341	340	332	324	315	313	307	316	336	360	375	380	374	361	348	345	348	341	346	347	347	342	343
22 Q	342	341	341	335	334	328	320	313	313	315	328	344	357	366	366	362	356	351	353	355	357	356	352	344	336	343
23	336	336	335	334	334	327	318	309	300	301	314	334	358	369	374	362	354	349	347	348	348	352	348	335	329	338
24	329	334	334	315	334	342	321	309	307	314	329	350	374	378	374	366	362	348	348	348	348	349	348	348	347	342
25	347	344	340	351	334	326	322	320	317	328	341	350	362	366	366	355	351	343	344	347	348	342	342	348	334	343
26 D	334	334	332	315	328	367	322	338	322	322	354	348	356	374	368	374	368	348	357	348	340	334	328	307	301	342
27 D	301	253	279	194	248	294	293	294	283	308	341	348	369	368	374	362	352	344	342	348	331	347	319	332	331	318
28	331	338	321	324	331	315	311	305	294	307	321	342	363	369	373	356	355	354	335	327	336	341	340	340	338	335
29	338	321	334	318	324	322	320	318	290	327	334	348	362	370	367	362	356	353	349	346	348	345	340	336	333	340
30	333	337	334	328	326	322	319	320	321	328	341	354	368	373	368	367	366	356	350	348	342	340	335	328	338	342
31	338	338	328	334	333	322	315	307	305	308	320	340	362	380	376	370	364	361	354	349	348	342	340	309	321	339
Mean	337	333	334	330	329	328	322	320	318	321	331	345	362	374	376	373	365	358	354	351	349	347	343	339	336	343



August, 1928.

298. Eskdalemuir. (Z.)

Hour. G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
1	894	882	903	912	915	916	915	915	909	903	894	891	890	894	903	907	911	915	915	928	925	920	916	907	910	908
2	910	911	911	907	901	903	904	903	900	899	902	903	900	902	906	907	907	912	915	915	916	907	907	911	907	907
3	907	903	907	911	909	910	914	915	915	911	904	898	892	895	899	908	916	920	923	920	916	915	911	909	911	910
4D	911	911	911	907	905	907	907	907	903	899	899	896	891	886	894	902	911	916	919	916	923	931	923	916	904	908
5D	903	843	763	775	842	868	823	834	855	881	889	893	898	914	943	951	973	999	994	961	958	948	940	931	918	899
6	918	903	911	914	918	918	919	917	918	914	909	906	906	906	908	914	919	926	926	927	940	930	910	879	848	913
7D	848	830	813	848	889	898	890	901	906	908	914	915	918	919	923	935	949	945	935	928	927	923	919	918	918	906
8	918	918	918	918	919	918	918	916	914	906	902	900	896	899	906	909	911	918	919	919	919	918	915	914	908	913
9	908	906	910	913	914	917	914	914	914	910	907	898	894	897	908	915	922	927	926	923	919	918	917	915	914	913
10Q	913	914	914	917	918	918	918	917	912	909	905	901	897	901	905	909	915	917	912	915	916	914	914	915	913	912
11	913	910	906	902	897	902	905	903	905	900	901	902	905	906	909	915	921	927	930	925	920	918	917	915	915	911
12	915	913	910	909	905	897	893	897	901	899	897	897	897	901	913	919	934	951	969	973	960	939	928	924	922	919
13	922	917	905	892	889	895	898	899	902	905	905	903	902	909	921	930	931	937	931	925	922	921	918	917	915	912
14Q	915	913	913	915	918	920	918	918	913	906	901	896	895	897	905	913	918	918	917	916	917	914	913	910	908	911
15Q	908	909	913	913	914	914	914	914	913	906	901	900	900	902	907	918	926	926	927	926	921	918	918	917	915	914
16	915	913	908	897	905	910	913	915	916	913	905	897	894	894	905	921	930	927	925	921	916	914	915	914	913	912
17	912	912	909	908	912	913	914	913	911	904	895	890	888	891	896	905	917	920	917	917	916	912	912	912	908	908
18	908	908	910	912	912	916	916	913	912	908	899	892	887	888	898	910	917	926	930	934	928	920	917	914	912	912
19	912	908	912	912	912	912	916	913	908	905	903	898	890	893	904	912	917	919	917	912	912	913	912	912	912	909
20Q	911	911	911	911	911	913	914	912	913	915	911	907	903	902	903	908	916	924	927	920	916	915	915	915	914	913
21	914	912	912	911	914	916	916	915	915	911	903	898	887	891	899	907	913	919	922	920	920	916	913	912	912	911
22Q	911	911	911	912	914	915	915	915	911	907	901	897	892	890	898	906	910	910	907	907	907	908	911	911	911	907
23	911	910	910	910	910	914	915	913	914	910	904	890	879	882	894	906	912	913	914	911	910	910	906	896	894	906
24	893	893	893	894	897	895	901	904	905	903	901	896	893	892	896	906	918	927	925	921	918	916	914	912	910	905
25	910	907	906	904	907	914	916	915	916	911	904	901	901	902	910	912	913	914	914	913	913	913	914	908	901	910
26D	900	863	874	883	878	865	866	874	888	893	900	909	914	919	928	921	921	924	919	926	938	936	925	917	864	903
27D	864	858	807	707	720	727	786	828	873	888	890	897	895	895	905	922	924	922	921	921	934	923	917	918	918	870
28	917	910	904	907	904	911	915	916	913	912	906	901	899	903	907	916	920	924	933	937	928	924	920	917	912	914
29	912	912	909	909	911	911	912	912	912	909	903	901	900	902	908	914	917	920	921	920	918	917	918	919	920	912
30	919	915	911	911	912	912	912	911	910	907	902	894	895	902	910	914	916	919	917	915	915	915	915	915	912	911
31	912	908	908	910	910	911	913	913	908	906	904	896	888	887	898	906	910	911	911	911	911	911	911	914	914	907
Mean	907	901	897	895	899	902	903	905	907	905	902	899	896	899	907	914	920	925	925	923	923	919	916	913	908	909

DAILY EXTREMES OF EACH COMPONENT OF TERRESTRIAL MAGNETIC FORCE :  
MAGNETIC CHARACTER FIGURES : TEMPERATURE IN MAGNET HOUSE.

299. Eskdalemuir.

August, 1928.

Day.	Terrestrial Magnetic Force.															Character Figure 100γ <sup>2</sup> .	Magnetic Character of Day (0-2).	Temperature in Magnet House 200 +
	North Component.					West Component.					Vertical Component.							
	Maximum 15000 γ +	Minimum 15000 γ +	Range.	Maximum 4000 γ +	Minimum 4000 γ +	Range.	Maximum 44000 γ +	Minimum 44000 γ +	Range.	Maximum 44000 γ +	Minimum 44000 γ +	Range.						
1	h. m. 18 35	γ 1100	994	h. m. 11 2	γ 106	h. m. 18 34	γ 380	γ 300	h. m. 7 45	γ 80	h. m. 19 19	γ 932	γ 874	h. m. 0 43	γ 58	210	1	a. 85.3
2	20 50	1079	1010	12 24	69	20 57	375	313	6 30	62	20 28	917	895	8 33	22	91	1	85.4
3	21 55	1074	989	11 53	85	14 40	387	303	7 41	84	17 40	923	891	11 50	32	153	0	85.4
4D	17 11	1115	1001	10 42	114	17 12	413	295	20 55	118	20 51	936	884	12 42	52	296	1	85.4
5D	17 55	1189	931	6 59	258	15 2	448	248	1 58	200	17 58	1020	720	1 48	300	1966	2	85.5
6	20 21	1100	972	23 12	128	13 1	377	281	21 38	96	20 11	945	847	24 0	98	352	1	85.5
7D	18 8	1070	960	10 30	110	15 8	387	301	0 14	86	15 42	952	796	1 51	156	438	1	85.5
8	18 10	1064	1000	10 32	64	16 7	377	301	7 38	76	19 1	919	894	12 26	25	105	1	85.5
9	0 21	1056	998	10 23	58	13 8	380	313	8 14	67	17 14	927	893	12 41	34	90	0	85.6
10 Q	19 48	1060	1000	12 30	60	13 9	378	317	7 4	61	4 41	919	896	11 59	23	79	1	85.6
11	4 21	1075	1010	13 59	65	14 28	368	316	4 52	52	17 49	930	897	4 25	33	80	1	85.6
12	17 49	1121	986	11 18	135	15 58	407	286	20 25	121	18 57	979	892	5 36	87	404	1	85.6
13	3 30	1069	1001	10 45	68	2 10	388	320	5 13	68	17 2	938	888	3 45	50	117	1	85.6
14 Q	23 2	1077	1001	11 57	76	12 54	374	314	8 56	60	5 9	921	893	12 3	28	102	0	85.6
15 Q	18 33	1076	1003	9 50	73	13 23	394	313	7 20	81	17 42	929	899	11 35	30	128	0	85.7
16	20 24	1072	990	12 13	82	14 1	397	313	8 22	84	16 0	931	892	12 32	39	153	1	85.7
17	2 37	1077	992	10 50	85	12 55	376	314	5 43	62	17 15	921	887	12 20	34	122	0	85.7
18	18 31	1086	996	10 40	90	13 37	400	295	7 49	105	18 53	937	885	12 28	52	218	1	85.8
19	0 18	1067	996	10 55	71	14 39	388	300	7 21	88	17 2	920	887	12 30	33	139	1	85.8
20 Q	16 1	1066	1007	11 30	59	14 36	394	320	8 49	74	18 0	927	900	13 22	27	97	0	85.8
21	19 15	1078	993	11 2	85	13 39	380	307	8 51	73	18 0	924	886	12 12	38	140	0	85.9
22 Q	20 10	1074	1008	12 4	66	13 24	367	311	8 4	56	6 38	915	889	12 52	26	82	0	85.9
23	22 5	1095	993	12 54	102	14 16	386	293	7 28	93	5 50	918	877	12 7	41	207	1	85.9
24	5 7 and 16 3	1070	989	9 50	81	13 0	382	293	7 46	89	17 0	927	891	12 50	36	158	1	85.9
25	22 41	1075	1010	11 12	65	13 42	371	309	8 6	62	17 38	918	899	10 40	19	84	1	85.9
26D	0 44	1123	944	13 32	179	5 11	402	279	23 15	123	21 5	940	849	5 25	91	555	2	85.9
27D	20 38	1079	914	6 17	165	14 20	379	173	2 36	206	20 22	943	886	2 35	257	1357	2	85.9
28	18 30	1124	984	13 4	140	14 36	380	287	7 47	93	18 33	940	898	12 0	42	300	1	86.0
29	1 0	1057	1008	11 22	49	12 57	373	313	7 25	60	17 40	922	899	12 40	23	65	1	86.0
30	16 35	1070	1001	9 31	69	13 10	375	314	6 32	61	17 5	919	892	11 30	27	92	0	86.1
31	22 35	1075	1003	9 46	72	13 25	383	295	7 37	88	23 20	916	885	12 45	31	139	1	86.1
Mean	—	1084	990	—	94	—	386	298	—	88	—	932	873	—	59	275	0.81	85.7
No. of Days used.	—	31	31	—	—	—	31	31	—	31	—	31	31	—	31	31	—	31



Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

## 300. Eskdalemuir. (X.)

15,000  $\gamma$  ( $\cdot 15$  C.G.S. unit) +

September, 1928.

Hour. G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Day.	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$
1	1047	1053	1054	1044	1045	1046	1041	1033	1024	1013	1006	1007	1017	1025	1033	1041	1046	1054	1055	1057	1062	1061	1060	1066	1063	1042
2	1063	1063	1051	1056	1036	1060	1041	1030	1015	1002	983	983	1005	1023	1035	1035	1040	1038	1042	1050	1052	1056	1051	1063	1056	1036
3 D	1056	1058	1056	1056	1066	1069	1065	1041	1005	975	991	1010	1010	1010	1025	1064	1068	1096	1075	1035	1051	1031	1026	1028	1034	1042
4	1035	1032	1036	1036	1037	1039	1034	1027	1016	1001	986	981	983	996	1011	1025	1031	1037	1037	1060	1052	1052	1047	1047	1047	1027
5	1047	1046	1046	1047	1047	1043	1027	1042	1035	1026	1020	1012	1006	1011	1022	1027	1052	1066	1062	1046	1046	1054	1052	1047	1046	1039
6	1046	1046	1047	1051	1053	1051	1047	1042	1026	1008	996	1002	1002	1004	1021	1031	1043	1045	1047	1066	1062	1048	1048	1048	1048	1037
7 D	1048	1051	1047	1048	1050	1051	1051	1042	1036	1023	1014	1006	1001	1006	1052	1077	1101	1102	1071	1052	1042	1041	1032	1021	1032	1044
8 D	1033	1027	998	1031	1048	992	972	997	997	982	983	983	978	992	1012	1029	1039	1078	1068	1054	1043	1032	1012	1012	998	1016
9	998	992	1019	1027	1028	1029	1017	1017	1017	1017	1007	1007	1012	1017	1018	1031	1031	1044	1039	1037	1029	1032	1027	1038	1037	1023
10	1037	1022	1032	1043	1047	1052	1046	1049	1028	1018	1007	1020	1009	1022	1037	1022	1028	1024	1036	1048	1047	1048	1047	1048	1044	1034
11	1044	1043	1052	1036	1041	1043	1049	1048	1027	1018	1008	998	987	1009	1018	1011	1032	1037	1038	1048	1052	1058	1044	1052	1047	1033
12 Q	1047	1043	1038	1033	1042	1048	1053	1044	1037	1023	1007	1004	1007	1011	1022	1030	1031	1037	1047	1048	1053	1052	1057	1063	1048	1037
13	1049	1052	1051	1054	1053	1054	1058	1055	1049	1034	1018	1008	1008	1017	1027	1054	1033	1023	1019	1050	1058	1054	1054	1055	1058	1041
14	1058	1063	1065	1060	1054	1068	1071	1044	1033	1028	1009	1003	1000	999	1013	1024	1029	1039	1049	1049	1050	1053	1058	1067	1044	1041
15	1044	1044	1026	1044	1050	1043	1044	1034	1019	1008	1000	999	999	1009	1024	1038	1048	1045	1051	1049	1048	1052	1053	1052	1049	1034
16 Q	1049	1048	1048	1048	1048	1048	1042	1038	1030	1021	1008	1003	1005	1010	1023	1028	1034	1039	1048	1053	1054	1054	1054	1053	1053	1037
17 Q	1053	1053	1053	1052	1050	1050	1044	1047	1042	1024	1009	1009	1013	1013	1023	1033	1038	1039	1048	1055	1055	1055	1058	1056	1054	1041
18 D	1055	1055	1059	1059	1055	1050	1050	1045	1034	1020	1010	1004	1009	1024	1033	1039	1080	1069	1060	1085	1072	1065	1029	995	1045	1044
19	1045	1042	1042	1040	1050	1024	1040	1039	1030	1025	985	949	982	984	1009	1000	1009	1014	1019	1055	1050	1061	1050	1041	1044	1024
20	1044	1039	1039	1045	1039	1038	1035	1034	1029	1020	1004	1004	1004	1005	1004	1015	1024	1050	1050	1049	1046	1044	1043	1043	1040	1031
21 Q	1040	1046	1040	1040	1043	1046	1049	1049	1045	1035	1019	1007	1000	1009	1015	1029	1038	1045	1046	1050	1059	1070	1059	1057	1055	1039
22	1055	1054	1052	1055	1051	1055	1059	1056	1054	1045	1029	1004	1004	1019	1019	1020	1034	1043	1054	1064	1060	1059	1055	1055	1062	1044
23	1062	1059	1039	1049	1055	1050	1046	1039	1029	1020	1009	1005	1000	1010	1024	1025	1034	1049	1050	1059	1052	1075	1055	1055	1085	1040
24	1085	1076	1046	1040	1045	1040	1034	1035	1029	1019	1009	1005	1015	1020	1024	1034	1045	1060	1059	1066	1067	1069	1075	1069	1060	1044
25 D	1061	1030	1066	1056	1056	1056	1051	1045	1025	980	939	951	985	991	1005	1015	1001	1025	1031	1046	1040	1047	1051	1011	1040	1023
26	1040	1030	1025	1031	1040	1031	1021	1020	1008	1015	1006	1002	1005	1005	1025	1029	1045	1041	1057	1050	1046	1047	1047	1047	1055	1030
27	1055	1047	1045	1046	1042	1044	1051	1041	1021	1009	1006	1005	1006	1007	1010	1016	1040	1040	1040	1051	1051	1052	1057	1050	1049	1035
28 Q	1049	1050	1050	1051	1051	1053	1050	1042	1031	1022	1008	1001	1005	1012	1021	1026	1032	1041	1040	1045	1050	1051	1052	1053	1050	1037
29	1050	1052	1055	1052	1055	1051	1052	1052	1045	1030	1015	1011	1012	1020	1030	1035	1046	1045	1051	1060	1062	1065	1067	1075	1073	1046
30	1073	1065	1061	1056	1060	1056	1060	1049	1031	1025	1015	1008	1005	1015	1020	1026	1040	1046	1050	1051	1052	1055	1056	1056	1055	1042
Mean	1049	1046	1045	1046	1048	1046	1043	1040	1029	1017	1003	999	1002	1010	1022	1030	1040	1047	1048	1053	1052	1053	1049	1047	1049	1036

## TERRESTRIAL MAGNETIC FORCE : WEST COMPONENT.

Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

## 301. Eskdalemuir. (—Y.)

4,000  $\gamma$  ( $\cdot 04$  C.G.S. unit) +

September, 1928.

Hour. G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Day.	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	320	325	332	333	324	319	315	314	315	315	327	349	377	388	380	367	354	347	337	343	349	348	347	321	340	340
2	340	295	273	260	280	307	307	300	293	300	325	353	391	393	384	367	351	339	337	340	341	343	341	347	335	329
3 D	335	334	319	323	315	307	305	303	307	313	353	378	407	428	424	421	387	380	360	336	321	330	333	338	340	348
4	340	337	339	335	333	327	321	319	309	313	323	341	357	368	374	367	351	343	340	353	344	341	340	337	337	340
5	337	334	333	331	327	318	317	327	325	328	344	359	366	373	367	356	359	315	316	335	346	347	340	335	340	339
6	340	339	334	333	330	321	319	308	309	313	337	353	366	373	366	360	353	344	337	317	311	332	332	339	340	336
7 D	340	334	333	332	328	327	321	320	320	325	333	340	355	367	385	393	406	375	332	323	333	333	300	267	307	338
8 D	307	307	353	309	313	307	326	318	301	320	333	347	362	379	373	375	355	345	342	333	313	307	280	255	279	327
9	279	274	274	268	312	307	307	313	314	320	327	347	363	369	367	366	354	348	353	348	329	313	331	331	327	327
10	327	319	289	299	306	315	333	339	333	341	340	346	362	365	367	359	347	339	321	337	335	333	339	339	327	335
11	327	333	333	321	320	321	326	331	328	327	327	339	353	361	367	355	353	341	326	333	320	307	320	325	327	333
12 Q	328	328	327	348	330	334	327	320	313	312	314	328	348	355	358	354	348	342	341	341	336	343	334	321	334	335
13	334	334	334	334	334	330	321	314	311	308	316	334	360	378	382	400	383	360	360	348	347	342	335	336	340	343
14	340	338	335	342	347	329	302	308	305	304	320	334	360	370	374	373	357	348	342	340	336	335	334	328	321	337
15	321	324	361	341	321	320	320	312	308	314	327	341	360	368	369	368	362	354	340	343	341	340	338	337	336	339
16 Q	336	334	334	334	333	327	321	313	306	309	322	336	354	360	362	357	353	348	347	341	341	336	336	338	336	337
17 Q	336	335	334	334	328	327	328	322	320	315	321	336	356	369	375	374	362	353	348	348	347	342	347	342	340	342
18 D	340	334	336	327	320	320	322	314	314	316	329	354	380	384	380	369	387	385	374	362	368	294	308	261	286	340
19	286	334	327	327	320	328	314	306	307	314	334	338	374	380	381	382	380	356	336	328	321	334	328	334	335	337
20	335	335	338	328	328	328	327	318	316	320	320	328	347	362	356	361	328	328	328	336	334	329	328	328	337	333
21 Q	337	335	327	327	328	328	328	323	319	315	321	332	345	350	356	360	354	346	341	340	334	325	331	334	330	335
22	330	328	334	334	328	334	328	315	305	302	308	316	348	368	374	361	361	354	350	354	348	348	340	334	332	338
23	332	316	321	328	321	322	321	313	308	307	316	336	354	374	380	374	354	358	351	348	336	330	328	321	321	335
24	321	343	309	314	323	321	322	311	307	308	321	338	356	374	374	374	368	374	367	360	348	347	321	277	273	336
25 D	273	288	335	302	312	314	315	321	313	315	347	354	370	380	383	368	348	336	334	322	301	301	300	294	304	327
26	304	301	326	327	322	321	315	320	325	321	327	341	355	362	365	354	354	328	320	334	335	340	338	338	336	333
27	336	335	336	328	334	334	328	316	303	309	321	341	360	367	368	354	341	341	337	334	334	328	340	328	334	335
28 Q	334	334	333	330	330	329	326	314	308	310	321	334	354	362	365	355	346	341	340	340	338	336	335	334	333	335
29	333	334	334	334	333	328	327	320	308	307	314	334	352	362	373	370	365	354	349	348	345	341	335	336	334	339
30	334	335	348	336	332	326	321	314	332	325	327	348	360	368	368	355	353	347	347	341	340	335	334	334	334	340
Mean	326	326	328	324	324	323	320	316	318	315	327	342	362	372	378	368	359	349	342	340	336	332	330	323	327	336



302. Eskdalemuir. (Z.)

44,000 γ (·44 C.G.S. unit) +

September, 1928.

Hour G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean
Day.	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	914	907	897	895	903	908	910	910	909	905	901	893	886	897	909	916	919	918	916	913	910	910	910	913	907	907
2	907	888	872	857	857	863	893	906	907	905	901	895	889	891	902	908	915	920	916	913	910	910	911	913	907	897
3D	896	892	892	900	905	906	909	911	909	910	905	893	898	914	941	966	1001	1043	1002	966	936	926	925	923	921	928
4	921	921	921	921	922	923	924	922	921	917	910	905	905	905	911	917	922	920	917	914	917	917	917	916	916	917
5	915	916	916	916	916	916	916	910	907	900	899	902	904	905	912	919	929	948	954	938	926	920	917	916	913	917
6	912	914	913	912	914	915	916	919	915	911	907	899	902	907	909	915	918	919	923	928	926	920	916	912	911	914
7D	910	910	910	911	911	913	914	915	914	911	906	902	897	898	912	956	1007	1042	1054	984	1000	975	928	914	916	937
8D	916	902	842	841	864	862	861	878	891	897	899	914	919	930	953	974	982	974	957	948	942	938	898	885	863	910
9	862	858	835	861	885	900	914	917	918	916	911	907	905	909	913	917	933	952	956	951	941	931	926	919	901	911
10	901	884	887	897	902	902	901	899	900	897	905	909	909	913	926	934	930	931	937	930	926	926	923	918	914	912
11	913	904	900	908	912	912	912	910	912	911	912	911	908	912	920	921	923	932	942	933	930	925	917	913	912	916
12Q	912	908	909	906	900	908	911	914	916	917	916	911	904	908	912	914	917	917	917	916	917	916	917	912	912	912
13	911	911	911	911	911	910	911	911	911	911	907	906	903	902	903	911	932	937	927	920	916	916	916	916	912	913
14	912	911	908	907	894	869	870	883	895	899	902	901	900	902	903	907	915	912	913	912	912	911	911	897	900	902
15	899	902	893	889	898	905	908	910	910	906	901	894	893	895	898	902	910	915	919	916	915	911	910	910	910	905
16Q	910	910	910	910	910	910	910	910	910	905	901	894	890	890	893	902	906	906	906	907	908	908	908	908	908	905
17Q	908	910	909	908	908	908	908	907	906	904	897	886	877	876	881	890	899	906	906	906	906	907	906	907	907	901
18D	907	909	907	906	906	907	907	907	906	904	898	887	884	889	898	904	908	910	909	910	927	941	936	893	896	906
19	895	909	914	917	913	906	905	909	909	906	903	908	909	926	942	939	955	966	960	943	929	917	907	910	910	921
20	910	909	909	910	913	914	914	914	910	909	906	903	899	901	907	914	927	913	905	899	898	919	917	913	909	910
21Q	909	899	904	907	909	910	910	913	910	913	911	906	901	901	900	905	910	917	917	916	914	913	909	906	909	909
22	909	907	909	909	909	909	909	913	913	909	901	900	894	896	905	909	910	914	913	913	914	914	914	914	911	909
23	911	913	910	907	909	909	912	914	913	909	904	896	892	892	895	909	917	917	915	915	918	913	907	905	892	908
24	892	867	871	888	897	903	905	907	906	901	899	898	893	889	892	897	904	905	906	909	910	910	909	903	900	899
25D	900	901	876	888	899	901	905	907	906	901	897	896	909	918	939	956	968	956	943	939	939	922	867	871	859	912
26	859	862	881	900	906	909	905	905	901	903	906	906	909	909	914	923	925	926	930	922	918	914	914	913	910	908
27	911	906	902	902	907	910	911	917	918	915	910	907	911	915	923	932	936	926	922	919	919	918	903	906	910	914
28Q	910	910	911	911	910	910	910	914	915	915	910	901	898	900	905	910	914	911	910	910	910	910	910	910	911	909
29	911	910	910	910	910	910	910	914	914	910	903	897	894	897	898	904	907	910	910	910	910	910	910	907	903	907
30	904	903	895	897	898	903	907	912	911	911	902	897	897	899	907	911	911	912	911	911	911	911	911	911	910	906
Mean	905	902	897	900	903	904	907	909	909	908	904	901	899	903	911	919	928	933	930	924	922	919	912	908	905	911

DAILY EXTREMES OF EACH COMPONENT OF TERRESTRIAL MAGNETIC FORCE :  
MAGNETIC CHARACTER FIGURES: TEMPERATURE IN MAGNET HOUSE.

303. Eskdalemuir.

September, 1928.

Day.	Terrestrial Magnetic Force.															Character 2R <sup>a</sup> Figure 100γ+.	Magnetic Character of Day (0-2).	Temperature in Magnet House 200 +
	North Component.					West Component.					Vertical Component.							
	Maximum 15000 γ +	Minimum 15000 γ +	Range.	Maximum 4000 γ +	Minimum 4000 γ +	Range.	Maximum 44000 γ +	Minimum 44000 γ +	Range.									
1	h. m.	γ	γ	h. m.	γ	h. m.	γ	γ	h. m.	γ	h. m.	γ	γ	h. m.	γ	138	1	86·1
2	23 5	1085	1005	10 18	80	13 10	391	312	6 56	79	16 44	919	885	12 5	34	401	1	86·1
3D	0 28	1090	971	10 42	119	12 16	394	248	3 15	146	17 5	922	854	4 48	68	1216	2	86·1
4	17 11	1141	965	10 56	176	13 33	452	277	19 34	175	17 20	1133	888	1 25	245	147	1	86·1
5	19 29	1066	974	11 24	92	13 45	383	307	8 0	76	6 0	925	904	11 19	21	212	1	86·1
6	17 6	1097	997	11 51	100	13 24	379	293	17 30	86	17 29	959	897	10 0	62	155	1	86·2
7D	19 22	1077	986	9 47	91	12 51	378	300	19 20	78	19 18	932	899	11 1	33	1028	2	86·2
8D	16 12	1133	986	22 25	147	16 12	439	235	22 32	204	17 35	1088	889	22 21	199	869	2	86·3
9	17 10	1103	948	5 2	155	1 49	400	234	23 11	166	15 32	988	800	2 11	188	412	1	86·3
10	23 35	1082	972	1 1	110	13 18	373	256	2 39	117	17 27	957	833	1 52	124	176	1	86·3
11	18 32	1061	1000	12 31	61	13 31	380	283	1 33	97	18 0	938	871	1 11	67	162	1	86·3
12Q	20 33	1072	981	12 2	91	13 41	376	300	21 0	76	18 2	944	898	1 59	46	90	1	86·3
13	22 31	1077	1002	11 47	75	13 19	360	307	8 33	53	9 20	918	895	3 38	23	144	1	86·3
14	15 22	1064	1003	11 17	61	15 6	402	306	8 18	96	16 45	939	901	13 1	38	234	1	86·4
15	5 34	1088	988	12 20	100	14 29	388	284	6 50	104	16 3	916	865	5 18	51	94	1	86·4
16Q	18 3	1055	995	12 8	60	2 5	374	307	7 39	67	17 40	920	884	2 30	36	78	0	86·4
17Q	19 55	1056	998	10 28	58	14 25	365	302	7 42	63	5 50	911	889	12 30	22	87	0	86·5
18D	22 23	1063	1008	10 49	55	14 22	380	314	7 3	66	5 38	910	875	12 29	35	1233	2	86·5
19	16 11	1129	892	23 9	237	16 9	415	195	23 19	220	20 46	951	814	23 7	137	422	1	86·5
20	21 31	1075	924	10 57	151	15 30	407	287	0 3	120	16 58	972	901	10 11	71	99	1	86·5
21Q	17 18	1059	994	13 42	65	15 9	368	302	8 11	66	16 40	935	898	12 10	37	94	0	86·5
22	21 6	1081	999	12 14	82	14 29	361	314	9 2	47	17 33	918	897	0 56	21	194	1	86·6
23	18 59	1074	991	12 27	83	13 29	401	292	8 42	109	22 12	917	892	12 11	25	245	1	86·6
24	21 3	1112	993	12 28	119	13 26	395	298	7 49	97	20 27	922	892	12 42	30	373	1	86·6
25D	0 39	1116	995	11 2	121	16 24	402	260	23 8	142	21 52	911	861	1 28	50	771	1	86·6
26	21 36	1121	930	10 42	191	13 54	408	246	21 55	162	16 15	974	854	22 19	120	183	2	86·6
27	17 40	1066	993	13 18	73	12 36	374	293	1 0	81	17 50	931	851	0 40	80	122	1	86·6
28Q	21 33	1071	999	15 7	72	12 54	374	301	8 34	73	15 40	942	901	and 22 37	41	71	0	86·6
29	22 54	1055	999	10 33	56	13 43	368	308	8 6	60	8 0	916	897	12 2	19	132	0	86·6
30	23 12	1086	1005	11 5	81	14 22	380	301	9 11	79	7 40	915	893	11 39	22	133	0	86·6
Mean	0 12	1081	995	12 3	86	13 34	378	304	7 8	74	7 22	915	894	2 3	21		1	86·6
No. of Days used.	—	30	30	—	30	—	30	30	—	30	—	30	30	—	30	30	30	30



Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

## 304. Eskdalemuir. (X.)

15,000  $\gamma$  ( $\cdot 15$  C.G.S. unit) +

October, 1928.

Hour G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean
Day.	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$
1	1055	1051	1052	1051	1054	1056	1058	1054	1040	1020	1004	1002	1004	1015	1029	1040	1054	1038	1050	1051	1055	1066	1075	1051	1054	1043
2D	1054	1052	1054	1051	1054	1056	1060	1050	1035	1010	995	992	985	1006	1015	1010	1016	1040	1030	1054	1054	1040	1044	1044	1050	1033
3	1049	1039	1039	1042	1044	1039	1044	1037	1029	1015	993	985	990	1004	1003	1025	1029	1039	1035	1039	1045	1050	1053	1050	1054	1030
4	1054	1055	1043	1043	1038	1039	1045	1043	1039	1029	1008	1000	1005	1015	1033	1039	1044	1049	1049	1055	1063	1057	1058	1059	1061	1040
5	1061	1063	1057	1054	1069	1079	1057	1065	1049	1025	1013	989	984	989	1019	1029	1035	1015	1019	1015	1033	1025	1033	1039	1039	1034
6	1039	1039	1034	1043	1039	1043	1051	1031	1015	1019	1004	1004	1004	1005	1013	1019	1039	1039	1029	1039	1041	1045	1049	1049	1059	1031
7	1059	1055	1063	1044	1024	1049	1059	1043	1024	1010	992	989	1004	999	1015	1024	1033	1034	1035	1039	1029	1039	1043	1047	1069	1032
8	1068	1054	1043	1044	1048	1054	1058	1052	1041	1028	1013	993	1003	1008	1018	1026	1038	1033	1043	1046	1048	1049	1048	1044	1044	1037
9Q	1044	1042	1038	1038	1048	1048	1048	1042	1038	1028	1015	1013	1013	1016	1024	1033	1038	1042	1052	1053	1058	1058	1057	1054	1054	1039
10Q	1054	1052	1053	1054	1054	1054	1058	1054	1048	1034	1022	1003	1008	1014	1021	1032	1042	1048	1052	1054	1057	1060	1062	1060	1054	1044
11Q	1053	1056	1062	1057	1053	1057	1052	1052	1058	1047	1023	1022	1018	1017	1022	1036	1041	1051	1052	1053	1053	1057	1057	1060	1065	1046
12	1065	1047	1047	1047	1057	1054	1057	1057	1051	1037	1023	1017	1021	1028	1036	1037	1041	1047	1047	1052	1057	1052	1051	1047	1048	1044
13	1048	1047	1047	1051	1057	1052	1052	1049	1043	1027	1012	1007	1007	1017	1031	1032	1022	1032	1039	1032	1061	1034	1052	1049	1072	1038
14	1071	1056	1046	1040	1040	1041	1036	1041	1036	1027	1020	1011	1006	1002	1021	1021	1026	1036	1042	1042	1037	1044	1048	1046	1046	1034
15	1046	1046	1041	1036	1044	1051	1057	1052	1048	1036	1021	1002	1010	1021	1032	1036	1036	1046	1050	1046	1061	1059	1053	1052	1066	1041
16	1065	1045	1045	1045	1049	1055	1037	1045	1049	1021	1010	1007	1001	1010	1008	1025	1015	1034	1045	1045	1045	1051	1045	1046	1045	1035
17	1045	1045	1045	1045	1045	1049	1045	1045	1040	1033	1020	1015	1010	1011	1015	1035	1035	1045	1055	1041	1015	1031	1075	1044	1050	1037
18	1049	1048	1050	1054	1054	1055	1054	1054	1034	1015	964	979	946	984	1004	989	1054	1134	1079	978	1019	1014	989	994	988	1023
19D	988	997	1002	1004	1004	1004	998	990	978	966	964	973	973	974	980	994	1008	1012	1014	1020	1022	1030	1025	1026	1022	1000
20	1021	1019	1022	1009	1015	1023	1028	1023	1009	998	983	973	988	997	1003	1009	1013	1023	1030	1037	1033	1030	1063	1023	1049	1016
21	1049	1039	1013	1013	1027	1032	1033	1031	1023	1015	1011	999	993	1003	1012	1017	1019	1028	1036	1037	1043	1043	1048	1044	1039	1025
22D	1038	1032	1032	1032	1032	1033	1038	1038	1022	1031	1012	1012	1007	1007	1012	1018	1022	1032	1037	1047	1068	1032	1030	1027	1032	1029
23Q	1032	1032	1032	1035	1037	1042	1037	1024	1032	1026	1016	1002	997	1008	1018	1027	1032	1037	1042	1042	1042	1042	1042	1042	1043	1030
24D	1042	1041	1043	1036	1041	1041	1042	1051	1021	1002	1015	1005	986	1001	1001	1007	1017	1035	1036	1045	1056	1056	1031	1023	1021	1028
25D	1021	942	753	983	1001	991	987	1001	1017	1015	1020	1011	1001	997	997	1010	1016	1037	1036	1023	1033	991	1021	1021	1021	997
26	1020	1020	1019	1020	1030	1030	1034	1030	1030	1025	1020	1014	1010	1005	1016	1021	1024	1034	1040	1045	1046	1040	1050	1040	1038	1028
27	1038	1035	1035	1034	1040	1044	1054	1005	1016	1014	1000	995	990	991	996	1010	1028	1030	1036	1030	1030	1035	1040	1030	1030	1023
28Q	1029	1029	1029	1049	1035	1043	1039	1033	1034	1023	1014	1009	1009	1005	1019	1019	1028	1035	1039	1039	1039	1035	1034	1039	1035	1030
29	1035	1035	1033	1040	1043	1051	1039	1043	1043	1029	1015	1013	1005	1009	999	1024	1019	1029	1034	1039	1044	1041	1045	1069	1044	1033
30	1043	1043	1043	1039	1038	1042	1048	1048	1048	1024	1003	1014	1018	1012	1016	1022	1018	1028	1023	1033	1043	1022	1032	1034	1033	1030
31	1033	1038	1032	1032	1043	1048	1048	1043	1042	1034	1019	1014	1013	1009	1018	1024	1032	1038	1038	1044	1048	1022	1027	1034	1033	1032
Mean	1044	1039	1031	1038	1041	1044	1044	1040	1034	1022	1008	1002	1000	1006	1014	1022	1029	1039	1040	1039	1044	1040	1045	1042	1044	1031

## TERRESTRIAL MAGNETIC FORCE : WEST COMPONENT.

Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

## 305. Eskdalemuir. (—Y.)

4,000  $\gamma$  ( $\cdot 04$  C.G.S. unit) +

October, 1928.

Hour. G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean
Day.	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	334	334	334	334	334	333	327	316	308	308	316	334	348	362	368	367	368	354	354	347	334	322	334	324	331	337
2 D	331	332	333	332	333	332	328	334	329	334	348	360	368	387	394	388	374	367	342	310	321	320	327	322	316	348
3	316	328	335	334	329	338	329	335	328	332	335	355	368	383	368	370	340	336	340	342	341	340	335	328	308	341
4	308	308	327	321	327	334	334	322	320	321	328	342	360	362	362	354	342	338	338	322	321	334	340	338	334	334
5	334	321	322	324	347	350	328	328	327	316	332	348	368	368	368	370	374	354	314	308	301	302	314	325	334	335
6	334	327	360	314	321	322	321	316	314	314	326	335	355	360	354	348	320	326	328	330	334	334	328	328	337	331
7	337	338	308	308	348	354	348	347	335	328	334	348	367	366	361	350	341	329	334	321	293	308	320	327	321	335
8	321	308	316	320	319	319	322	316	306	301	321	327	347	355	360	355	348	322	332	334	333	318	315	322	328	327
9 Q	328	328	334	336	331	328	325	320	311	310	320	334	346	348	353	348	341	335	338	335	334	335	334	334	334	333
10 Q	334	334	334	334	334	332	328	323	314	310	321	334	348	356	361	361	355	348	348	344	341	340	334	308	321	336
11 Q	321	327	328	318	320	315	315	316	314	313	320	334	348	357	357	358	348	347	342	340	340	334	334	328	328	332
12	328	313	326	327	317	321	327	320	315	314	322	336	348	355	355	348	342	336	336	335	335	334	327	331	328	331
13	328	328	328	322	327	321	315	314	307	308	327	347	361	381	389	397	380	366	355	334	308	320	327	321	281	337
14	281	298	283	318	322	316	315	315	307	313	327	334	354	354	370	361	348	347	347	341	336	334	331	329	328	329
15	328	325	327	348	341	328	327	322	320	320	335	348	361	366	368	367	354	348	348	349	342	328	328	321	261	338
16	261	293	308	321	322	315	328	335	357	354	336	341	348	368	368	378	353	347	341	340	335	327	328	324	328	336
17	328	324	323	324	328	325	322	321	314	314	322	334	347	354	332	354	348	350	328	328	322	329	322	334	336	331
18	336	334	331	334	332	329	328	323	280	305	302	368	345	376	409	374	364	314	354	322	280	294	302	308	308	330
19 D	308	314	314	314	309	310	308	302	298	298	310	321	341	362	354	348	347	348	336	334	334	327	322	323	323	325
20	323	335	320	328	335	318	314	309	301	296	308	316	334	347	347	342	336	336	338	342	323	314	308	308	315	324
21	315	301	300	322	320	318	315	308	303	300	314	327	336	354	367	358	348	348	347	336	334	328	308	304	307	325
22 D	307	309	282	283	308	313	310	314	314	310	327	334	340	348	354	342	334	343	336	334	328	307	310	322	328	322
23 Q	328	334	328	328	328	327	321	322	320	314	320	322	332	336	344	340	334	332	334	333	334	333	328	329	330	329
24 D	330	327	342	328	320	321	320	321	320	320	327	348	347	345	347	348	340	341	348	349	328	267	302	292	214	326
25 D	214	181	182	308	260	294	295	313	308	308	308	320	328	334	334	341	336	348	361	334	302	308	327	320	324	305
26	324	330	322	322	322	321	321	318	318	321	331	335	342	341	360	356	346	346	342	347	341	328	329	328	327	333
27	327	328	328	334	334	328	334	354	361	341	334	341	341	341	340	335	334	329	328	294	309	321	303	300	314	330
28 Q	314	328	328	340	320	327	321	315	308	308	322	334	347	348	348	342	341	340	334	328	330	322	302	314	326	328
29	326	328	347	328	328	327	335	330	320	308	314	329	340	350	342	348	354	348	341	335	334	328	321	294	314	331
30	314	322	322	327	334	334	328	327	322	321	322	334	348	354	348	347	334	327	334	328	274	301	317	315	321	327
31	320	323	330	347	327	327	327	326	320	317	317	329	339	343	345	341	341	340	339	334	320	309	317	314	310	329
Mean	317	318	319	325	325	325	323	322	317	315	323	337	348	357	360	356	347	342	340	333	324	321	322	320	317	331



306. Eskdalemuir. (Z.)

October, 1928.

Hour. G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Day.	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	910	911	911	911	908	908	908	911	915	915	911	909	908	905	906	911	920	924	916	919	917	912	900	903	907	911
2 D	908	909	911	911	909	909	909	912	907	904	903	906	912	921	928	933	943	972	971	956	917	914	916	914	910	921
3	910	908	908	912	912	912	911	912	912	912	913	909	912	917	924	933	958	950	937	927	920	917	913	913	909	919
4	910	905	908	909	912	911	909	913	913	913	914	913	909	910	913	915	918	917	917	918	917	912	909	909	909	912
5	910	905	906	910	901	882	886	897	901	906	908	908	910	918	924	932	940	960	965	957	948	936	931	923	918	919
6	919	917	895	884	880	890	894	898	902	898	911	906	905	910	915	923	944	949	945	933	926	920	920	916	909	912
7	910	899	887	883	874	878	882	891	899	903	912	912	916	917	920	925	931	937	935	938	946	934	926	917	904	911
8	904	891	896	904	908	908	906	908	908	912	906	904	903	905	910	915	921	928	924	921	920	921	918	913	912	911
9 Q	913	911	908	906	909	911	912	914	915	917	914	909	906	909	909	911	913	913	910	909	909	908	908	908	908	910
10 Q	909	909	907	907	906	906	906	907	909	907	901	897	893	897	901	904	907	909	907	907	909	909	910	910	909	906
11 Q	910	907	895	894	898	902	903	907	908	907	905	902	902	906	910	913	915	913	911	911	911	912	911	911	910	907
12	910	905	907	908	907	907	906	907	908	907	903	902	899	901	902	903	907	908	907	908	908	910	911	911	911	906
13	912	912	911	911	908	907	907	908	911	909	903	903	903	904	915	925	938	942	946	942	931	925	921	920	916	917
14	916	909	904	903	904	908	906	908	909	905	897	893	894	902	911	920	929	924	920	921	922	922	917	916	911	911
15	912	909	909	904	896	900	901	902	904	907	907	908	909	910	912	917	918	917	914	917	917	910	913	913	902	909
16	903	897	897	897	901	902	902	899	901	905	903	905	909	910	917	927	935	926	920	918	914	914	914	914	914	910
17	914	914	913	913	911	910	910	913	913	913	910	909	909	909	912	914	916	915	922	923	938	935	914	908	911	915
18	912	912	913	911	911	910	910	910	905	907	894	907	974	978	1054	1079	1067	1148	1190	1046	1003	902	927	921	928	867
19 D	928	928	928	930	932	932	934	937	938	936	936	932	929	938	950	941	934	933	936	932	931	928	928	925	927	933
20	928	920	920	920	912	917	924	925	932	932	928	924	920	918	920	921	924	924	921	920	925	924	916	913	905	922
21	905	879	890	899	907	913	916	921	922	921	921	916	913	913	920	924	924	924	923	924	924	924	924	921	920	916
22 D	920	899	878	882	899	909	912	915	916	917	911	908	912	916	924	937	937	937	934	928	918	916	920	915	911	915
23 Q	912	915	917	917	916	915	914	915	916	914	910	912	916	918	921	921	920	921	918	917	916	916	916	914	914	916
24 D	914	914	909	892	895	904	908	908	910	912	904	900	904	908	908	912	915	913	913	916	930	925	913	887	812	907
25 D	812	752	697	734	802	879	887	891	903	904	909	912	917	922	921	920	917	918	921	942	973	963	932	926	925	888
26	925	921	922	921	919	918	916	916	916	916	917	917	921	925	921	917	916	913	913	912	913	914	914	916	914	917
27	915	915	914	914	912	913	909	910	909	914	917	917	921	927	928	926	923	919	921	927	923	918	914	909	905	917
28 Q	905	907	906	897	901	904	905	909	913	914	913	912	913	914	914	919	917	915	914	914	914	915	919	914	910	911
29	910	909	902	903	905	905	905	902	906	910	909	905	905	909	917	926	923	918	917	914	913	913	913	901	892	910
30	892	896	901	904	905	905	905	905	906	910	909	906	905	909	909	913	920	926	926	922	922	912	910	910	909	910
31	909	905	905	897	897	901	901	902	905	906	905	902	905	909	913	913	912	911	910	913	901	909	914	912	905	906
Mean	909	903	899	900	902	906	907	909	911	911	910	909	911	915	921	925	929	933	933	927	925	919	917	913	908	914

DAILY EXTREMES OF EACH COMPONENT OF TERRESTRIAL MAGNETIC FORCE :  
MAGNETIC CHARACTER FIGURES : TEMPERATURE IN MAGNET HOUSE.

307. Eskdalemuir.

October, 1928.

Day.	Terrestrial Magnetic Force.															Character Figure 100γ <sup>1</sup> .	Magnetic Character of Day (0-2).	Temperature in Magnet House 200 +			
	North Component.						West Component						Vertical Component.								
	Maximum 15000 γ +		Minimum 15000 γ +		Range.	Maximum 4000 γ +		Minimum 4000 γ +		Range.	Maximum 44000 γ +		Minimum 44000 γ +		Range.						
	h. m.	γ	h. m.	γ	h. m.	γ	h. m.	γ	h. m.	γ	h. m.	γ	h. m.	γ	h. m.	γ			a.		
1	21 1	1094	1000	11 30	94	13 56	375	301	8 13	74	16 40	926	897	22 15	29	152	I	86.6			
2 D	19 31	1110	968	11 42	142	13 41	402	270	19 16	132	17 15	980	901	10 23	79	438	I	86.6			
3	0 11	1059	973	11 45	86	12 53	394	302	0 23	92	16 13	963	908	11 15	55	189	I	86.5			
4	0 20	1083	994	11 13	89	13 14	368	289	0 16	79	18 56	921	904	1 0	17	145	I	86.5			
5	4 47	1089	975	12 50	114	16 15	388	282	19 41	106	17 48	969	880	5 1	89	322	I	86.5			
6	23 58	1069	995	11 5	74	1 52	378	301	3 5	77	16 42	949	877	2 41	72	166	I	86.5			
7	1 48	1069	979	11 20	90	12 5	375	271	20 11	104	20 10	949	869	4 14	80	253	I	86.5			
8	1 19	1102	987	10 53	115	14 19	367	294	8 43	73	17 15	929	890	0 40	39	201	I	86.5			
9 Q	20 52	1062	1012	11 31	50	13 39	354	308	8 50	46	9 4	917	906	3 12	11	47	O	86.4			
10 Q	22 31	1073	968	11 9	105	14 0	362	301	22 48	61	22 14	912	893	11 55	19	151	O	86.1			
11 Q	1 50	1068	1012	11 37	56	15 16	362	302	8 40	60	16 0	915	894	0 0	21	72	O	86.3			
12	0 13	1083	1012	11 4	71	14 5	360	297	0 50	63	0 1	912	898	12 12	14	92	O	86.3			
13	20 0	1087	1001	11 30	86	14 40	407	267	24 0	140	18 7	946	903	10 48	43	288	I	86.2			
14	0 8	1090	990	12 55	100	13 48	374	258	0 16	116	16 12	930	892	11 13	38	249	I	86.1			
15	20 30	1103	991	11 8	112	12 36	374	242	23 51	132	16 0	918	894	3 42	24	305	I	86.1			
16	0 1	1084	995	12 4	89	13 35	388	249	0 1	139	15 40	935	897	1 50	38	287	I	86.1			
17	21 46	1134	1006	12 4	128	15 5	362	276	21 38	86	20 23	941	903	22 28	38	252	I	86.1			
18	17 19	1248	856	8 37	392	17 58	488	62	8 34	426	18 3	1245	882	20 46	363	4669	2	86.0			
19 D	23 0	1037	954	13 6	83	13 17	381	291	8 20	90	14 5	953	924	0 56	29	158	I	86.0			
20	20 49	1090	968	11 10	122	13 23	356	288	9 0	68	8 20	933	908	3 51 and 24 0	25	201	I	85.9			
21	0 23	1098	988	10 50	110	14 5	378	258	1 14	120	15 28	927	877	0 48	50	290	I	85.9			
22 D	18 29	1118	998	13 1	120	13 38	368	269	2 30	99	15 55	940	873	2 10	67	287	I	85.9			
23 Q	5 21	1047	986	11 41	61	13 52	354	307	8 24	47	15 20	921	909	10 12	12	61	I	85.9			
24 D	19 6	1117	971	19 12	146	19 7	394	201	23 43	193	20 37	942	579	23 49	363	1903	I	85.9			
25 D	16 58	1115	687	1 59	478	16 54	373	54	1 59	319	20 13	985	621	1 54	364	4627	2	85.9			
26	20 9	1080	999	13 10	81	15 0	374	307	8 29	67	12 50	926	908	20 8	18	114	I	85.9			
27	5 53	1063	950	7 23	113	7 44	386	280	18 39	106	14 0	930	902	23 40	28	248	I	85.9			
28 Q	3 0	1059	999	12 36	60	12 24	360	301	22 25	59	21 42	921	893	3 4	28	79	I	85.7			
29	22 40	1109	981	14 16	128	13 24	360	274	22 28	86	15 39	927	889	23 53	38	252	I	85.7			
30	19 59	1061	995	9 46	66	12 36	367	262	19 56	105	17 15	926	889	0 1	37	167	I	85.7			
31	19 29	1108	1004	13 6	104	19 33	373	294	20 9	79	22 4	914	892	3 12	22	175	I	85.7			
Mean	—	1091	972	—	118	—	377	266	—	111	—	945	875	—	70	543	O.94	86.1			
No. of Days used.	—	31	31	—	31	—	31	31	—	31	—	31	31	—	31	31	31	31			



Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

308. Eskdalemuir. (X.)

15,000  $\gamma$  (·15 C.G.S. unit) +

November, 1928.

Hour. G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Day.	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$
1	1032	1033	1033	1037	1041	1042	1043	1043	1042	1032	1021	1015	1011	1009	1018	1027	1037	1047	1048	1057	1039	1037	1041	1043	1045	1035
2D	1045	1043	1043	1042	1052	1023	1019	1023	1015	1001	997	992	992	1003	987	1007	1011	1017	1003	1012	1017	1013	1033	1031	1025	1018
3D	1024	1026	1021	1031	1037	1016	1022	1033	1030	1018	986	989	990	982	1016	1016	1001	1006	1006	996	1011	1016	1022	1020	1015	1013
4	1015	1011	1016	1026	1026	1017	1026	1026	1028	1021	1012	1005	986	994	1012	1022	1025	1012	1020	1046	1016	1026	1032	1032	1030	1019
5	1030	1030	1027	1027	1030	1032	1040	1032	1031	1026	1011	1006	1006	1007	1008	1008	1016	1023	1026	1020	1029	1037	1036	1041	1044	1024
6	1043	1035	1031	1034	1039	1045	1045	1045	1040	1029	1020	1017	1019	1015	1011	1015	1025	1031	1035	1031	1035	1019	1030	1041	1035	1030
7	1035	1031	1035	1036	1035	1038	1040	1042	1045	1040	1030	1015	1020	1025	1027	1029	1035	1031	1030	1024	1025	1035	1025	1038	1039	1032
8Q	1038	1038	1043	1038	1039	1040	1043	1040	1037	1034	1028	1026	1028	1029	1030	1034	1033	1038	1039	1044	1044	1046	1045	1044	1044	1038
9Q	1044	1044	1044	1044	1044	1044	1048	1048	1044	1040	1030	1028	1028	1029	1030	1034	1040	1040	1048	1049	1050	1049	1049	1049	1048	1042
10	1048	1044	1046	1049	1059	1056	1059	1070	1069	1051	1029	1015	1019	1013	1000	990	985	1010	1019	1020	1027	1025	1024	1014	1028	1030
11	1027	1028	1028	1029	1033	1039	1038	1034	1033	1021	1008	999	1007	1014	1019	1023	1023	1038	1047	1043	1043	1048	1048	1043	1033	1030
12	1033	1029	1033	1043	1043	1053	1053	1049	1046	1039	1025	1019	1013	1017	1013	1013	1033	1042	1043	1038	1023	1024	1017	1029	1033	1032
13D	1032	1036	1027	1041	1032	1032	1022	1018	1008	1002	972	978	987	988	1002	1018	1003	1017	1018	1014	992	1002	1012	1012	1016	1011
14	1016	1028	1022	1012	1018	1018	1022	1017	1018	1016	1001	1001	997	1002	1012	1011	1002	1028	1032	1037	1036	1033	1030	1032	1022	1019
15D	1022	1018	1026	1026	1032	1032	1028	1034	1032	1032	1018	1012	1012	1017	1029	1017	998	1022	1027	1020	1027	1037	1022	1032	1032	1024
16	1031	1025	1027	1051	1031	1031	1040	1041	1030	1027	991	1003	1015	1016	1021	1031	1031	1031	1031	1033	1031	1023	1033	1037	1061	1028
17D	1061	1031	1040	1031	1027	1035	1035	1041	1026	977	991	1003	1003	1007	1026	1031	1041	1031	1023	1027	1061	1037	1031	1036	1036	1027
18	1036	1045	1032	1026	1031	1032	1031	1006	1010	1011	1011	1017	1016	1011	1012	1017	1025	1025	1041	1031	1057	1041	1030	1031	1031	1026
19	1031	1026	1025	1031	1033	1031	1031	1036	1036	1027	1023	1021	1020	1021	1027	1031	1033	1033	1028	1031	1031	1034	1035	1037	1033	1030
20	1032	1030	1030	1031	1034	1035	1035	1035	1034	1025	1024	1016	1014	1020	1020	1028	1034	1036	1036	1039	1038	1044	1041	1036	1044	1031
21	1044	1041	1036	1037	1040	1044	1040	1041	1038	1030	1026	1022	1022	1029	1034	1036	1039	1040	1040	1042	1042	1043	1041	1040	1040	1037
22Q	1040	1040	1040	1040	1041	1044	1044	1040	1040	1032	1025	1020	1025	1031	1036	1040	1041	1041	1045	1045	1045	1036	1045	1042	1050	1038
23	1050	1042	1041	1042	1043	1040	1032	1024	1030	1032	1026	1024	1014	1015	1022	1021	1026	1032	1034	1036	1036	1039	1040	1036	1035	1032
24	1035	1037	1040	1040	1044	1049	1044	1038	1032	1030	1014	1006	1010	1014	996	1016	1026	1034	1031	1025	1026	1032	1037	1040	1020	1029
25	1019	1025	1029	1031	1039	1039	1039	1045	1029	1031	1025	1019	1019	1014	1014	1009	1033	1037	1037	1039	1038	1035	1035	1034	1035	1030
26	1035	1034	1036	1045	1040	1043	1044	1040	1035	1029	1023	1013	1011	1012	1003	1001	1015	1030	1029	1022	1026	1036	1039	1038	1039	1028
27	1039	1035	1035	1037	1039	1041	1044	1041	1033	1032	1026	1019	1019	1013	1014	1021	1029	1033	1039	1038	1034	1034	1031	1049	1039	1032
28Q	1039	1039	1039	1039	1043	1043	1040	1043	1042	1035	1030	1026	1026	1029	1029	1035	1039	1043	1044	1041	1035	1035	1035	1044	1043	1037
29Q	1043	1041	1039	1039	1043	1044	1049	1048	1046	1043	1038	1030	1029	1029	1029	1033	1037	1041	1044	1045	1045	1044	1044	1043	1043	1040
30	1042	1040	1042	1041	1042	1048	1048	1044	1042	1039	1034	1033	1032	1028	1038	1034	1038	1048	1050	1044	1034	1032	1053	1038	1042	1040
Mean	1035	1033	1034	1036	1038	1038	1038	1037	1034	1027	1017	1013	1018	1014	1018	1022	1025	1031	1033	1033	1033	1033	1035	1036	1036	1029

## TERRESTRIAL MAGNETIC FORCE : WEST COMPONENT.

Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

309. Eskdalemuir. (—Y.)

4,000  $\gamma$  (·04 C.G.S. unit) +

November, 1928.

Hour. G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Day.	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	310	319	326	314	324	326	327	326	319	316	323	333	342	345	347	347	346	344	340	340	334	323	307	320	326	329
2 D	326	327	321	320	347	320	360	329	324	327	328	339	346	366	368	353	354	340	293	307	293	285	317	315	320	329
3 D	320	293	293	307	314	320	339	321	315	322	315	327	333	361	347	366	333	345	300	268	274	306	301	301	327	318
4	327	314	320	327	313	333	348	321	320	317	328	335	341	360	353	347	341	333	328	301	307	320	323	323	324	328
5	324	321	321	326	327	325	320	320	319	314	315	326	333	337	340	334	327	327	333	320	326	326	324	321	319	325
6	319	319	321	327	327	321	321	327	328	327	329	339	341	340	341	335	339	339	333	333	321	300	327	300	312	327
7	312	321	327	327	321	319	321	324	327	327	339	333	337	340	340	335	335	339	340	342	333	326	337	327	322	331
8 Q	322	320	314	313	319	326	326	326	322	321	326	328	334	339	335	333	334	338	334	334	333	328	327	327	327	328
9 Q	327	327	327	327	327	327	327	327	324	320	320	326	333	334	339	339	339	339	335	340	337	333	330	329	331	331
10	331	333	333	333	335	333	333	335	335	328	327	346	360	375	379	400	360	327	326	326	321	315	313	307	307	387
11	307	313	319	321	326	321	321	319	319	313	314	320	327	339	339	333	333	339	340	340	313	314	313	327	268	323
12	268	286	319	314	341	333	327	327	321	327	333	340	342	349	345	347	340	340	339	339	319	339	287	287	307	326
13 D	307	312	320	320	309	335	333	327	340	333	327	346	346	355	360	347	353	374	340	294	306	310	309	310	307	330
14	307	307	287	293	301	311	317	315	313	319	322	335	346	340	341	347	333	333	329	327	326	326	321	314	313	321
15 D	313	301	300	314	321	313	319	326	323	326	321	326	333	336	364	374	353	341	339	320	301	315	279	287	307	323
16	307	300	313	300	301	311	313	319	313	319	319	328	335	353	347	341	339	340	333	333	327	307	299	302	292	320
17 D	292	314	313	320	315	327	326	327	326	325	346	340	341	340	339	353	300	327	334	327	321	312	306	314	326	325
18	326	296	300	315	321	321	322	333	333	326	326	326	333	339	334	333	333	327	301	326	321	317	307	327	327	323
19	327	327	333	327	320	321	326	325	321	315	320	332	339	337	338	335	339	324	339	333	325	313	306	313	315	326
20	315	321	326	326	326	326	325	324	321	314	316	327	337	337	335	327	333	333	333	328	327	325	321	321	328	326
21	327	321	318	319	319	319	319	319	319	318	318	325	333	339	338	336	333	332	332	328	326	326	325	325	325	326
22 Q	325	325	325	326	326	326	325	323	320	319	320	332	338	339	339	338	339	338	333	332	333	326	321	320	320	329
23	320	316	318	320	319	320	325	332	339	334	336	340	346	346	346	349	339	334	332	326	325	322	320	320	321	330
24	321	325	326	326	326	326	326	326	332	332	332	347	346	344	355	341	338	327	326	320	325	319	294	272	285	326
25	285	286	312	322	325	326	327	334	320	319	326	332	339	346	334	330	328	328	326	325	324	319	319	320	322	324
26	322	325	326	332	326	324	323	326	326	332	332	332	340	342	346	346	333	332	332	325	308	312	319	319	320	328
27	320	324	326	326	326	326	326	326	323	326	326	332	338	340	346	345	339	332	332	326	319	312	307	312	299	327
28 Q	299	306	324	325	325	325	326	320	320	313	314	320	327	336	335	338	332	332	326	321	322	322	318	316	318	323
29 Q	318	326	326	330	328	326	326	326	325	325	325	328	333	339	339	333	333	333	332	326	326	325	324	320	321	328
30	321	321	326	326	327	326	326	325	325	321	325	332	344	338	346	346	346	340	339	338	326	325	314	299	318	329
Mean	315	315	319	321	323	324	327	325	324	322	325	332	339	344	345	344	337	336	330	325	320	318	314	318	315	327



310. Eskdalemuir. (Z.)

44,000 γ (·44 C.G.S. unit) +

November, 1928.

Hour. G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Day.	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	905	897	892	897	901	902	903	904	905	905	905	902	905	910	913	916	913	910	909	905	910	916	917	911	906	906
2D	906	906	906	905	885	871	867	876	885	893	901	905	907	913	935	952	940	948	990	956	948	940	914	906	863	914
3D	863	846	880	884	884	889	890	897	905	905	910	916	931	939	956	939	956	973	1019	965	956	927	922	918	898	920
4	898	889	884	884	889	892	880	895	905	907	910	911	921	924	922	919	924	929	931	931	922	919	914	914	913	909
5	913	912	910	910	909	909	909	910	913	914	910	905	905	910	913	917	919	919	919	922	922	915	913	910	906	913
6	906	904	904	904	902	902	902	902	903	905	901	900	901	902	907	909	909	909	910	913	918	927	908	907	902	906
7	902	903	902	902	902	905	905	903	902	902	902	905	902	901	902	903	907	910	910	916	926	922	914	905	909	907
8Q	909	907	902	905	905	905	905	905	906	909	909	909	911	910	910	905	905	905	905	905	905	905	905	905	905	906
9Q	905	905	905	903	902	901	901	901	903	906	905	902	901	901	903	905	902	901	901	901	902	902	902	902	901	903
10	901	901	901	899	896	897	895	892	891	896	897	896	897	906	924	949	960	943	927	922	917	916	917	918	914	911
11	914	910	909	906	905	905	904	905	905	907	906	907	905	903	905	909	905	902	901	905	913	906	905	858	871	903
12	871	874	888	893	873	885	890	891	893	896	897	900	902	905	909	910	907	905	903	903	910	906	913	913	909	898
13D	909	905	899	876	872	868	872	880	884	888	893	894	904	913	935	953	960	969	994	948	939	944	932	924	918	915
14	918	900	899	901	901	905	905	905	905	902	902	900	901	904	905	912	917	915	913	909	907	907	910	910	910	906
15D	910	884	901	904	902	901	901	901	901	899	901	902	902	902	906	919	924	923	919	927	923	897	871	897	895	905
16	896	902	907	893	896	899	898	897	898	899	902	903	902	906	915	911	907	910	909	910	911	915	914	909	894	905
17D	894	890	895	896	890	890	893	894	893	897	894	894	897	906	910	911	932	919	918	915	902	894	903	906	894	901
18	894	887	893	897	898	899	900	899	898	897	898	900	901	902	905	906	910	914	916	914	904	898	903	902	902	902
19	902	900	894	897	901	903	903	903	903	906	903	899	900	901	902	903	907	914	914	911	911	911	909	906	904	904
20	904	903	903	903	903	903	903	902	902	906	903	902	902	899	902	910	907	906	906	906	906	903	900	902	899	903
21	899	894	897	898	899	899	900	899	898	902	901	900	900	900	900	900	902	902	902	902	902	901	900	900	900	900
22Q	900	900	899	899	898	898	899	900	901	902	900	899	900	902	901	898	898	898	898	898	899	902	906	903	899	900
23	899	896	896	895	895	895	895	895	894	891	890	890	893	898	902	902	903	906	906	906	906	903	902	900	898	898
24	898	897	897	894	894	893	893	894	894	893	890	890	895	905	904	908	908	906	906	908	907	906	902	897	889	899
25	889	879	881	885	889	890	890	887	889	894	895	896	898	898	902	910	907	903	902	899	899	899	898	898	897	895
26	897	897	895	890	890	891	892	893	892	890	890	893	893	895	904	911	914	910	907	910	911	908	903	898	897	899
27	898	897	897	895	895	895	894	894	895	894	894	894	894	898	902	904	904	903	903	903	904	904	904	896	890	898
28Q	890	890	890	894	895	895	895	895	894	895	895	895	895	895	897	899	899	899	899	899	899	899	899	897	896	896
29Q	896	895	895	895	895	895	894	893	892	891	890	890	890	893	896	898	898	898	896	895	895	895	895	895	895	894
30	895	895	895	895	894	894	894	892	891	890	890	890	890	892	893	893	895	895	894	895	899	902	895	895	894	894
Mean	899	895	897	897	895	896	896	897	898	899	899	900	901	904	909	913	915	915	918	913	913	910	906	903	899	904

DAILY EXTREMES OF EACH COMPONENT OF TERRESTRIAL MAGNETIC FORCE :

311. Eskdalemuir.

MAGNETIC CHARACTER FIGURES : TEMPERATURE IN MAGNET HOUSE.

November, 1928.

Day.	Terrestrial Magnetic Force.															Character Figure $\frac{\Sigma R^2}{100\gamma^2}$	Magnetic Character of Day (0-2).	Temperature in Magnet House 200 +
	North Component.					West Component.					Vertical Component.							
	Maximum 15000 $\gamma$ +	Minimum 15000 $\gamma$ +	Range.	Maximum 4000 $\gamma$ +	Minimum 4000 $\gamma$ +	Range.	Maximum 44000 $\gamma$ +	Minimum 44000 $\gamma$ +	Range.	Maximum 44000 $\gamma$ +	Minimum 44000 $\gamma$ +	Range.						
1	h. m.	$\gamma$	$\gamma$	h. m.	$\gamma$	h. m.	$\gamma$	$\gamma$	h. m.	$\gamma$	h. m.	$\gamma$	$\gamma$	h. m.	$\gamma$	74	I	a.
2D	0 59	1062	1001	12 49	61	14 5	352	299	22 0	53	21 5	918	889	2 9	29	605	I	85·7
3D	4 26	1092	956	17 40	136	14 12	380	253	20 8	127	17 58	1020	859	24 0	161	1307	2	85·6
4	19 32	1092	948	13 22	144	13 17	380	178	19 23	202	17 53	1092	829	0 39	263	303	I	85·6
5	18 58	1101	971	11 54	130	12 48	368	269	18 56	99	18 53	939	879	6 0	60	37	0	85·6
6	23 23	1049	1002	14 38	47	13 47	345	313	9 30	32	19 18	923	902	11 28	21	101	I	85·6
7	22 30	1055	1003	22 7	52	21 52	360	280	21 29	80	21 28	931	900	10 40	31	39	I	85·6
8Q	22 32	1048	1009	10 53	39	10 43	348	307	0 9	41	20 26	927	901	2 55	26	22	0	85·5
9Q	21 18	1048	1024	11 20	24	12 30	339	301	2 23	38	12 34	913	901	2 10	12	17	0	85·5
10	18 51	1058	1026	11 11	32	16 12	341	315	9 39	26	9 20	907	901	6 32	6	345	I	85·4
	7 0	1078	964	15 43	114	15 0	419	294	24 0	125	15 32	966	889	7 40	77	767	I	85·4
11	22 36	1175	939	23 18	236	22 48	372	247	23 25	125	0 2	915	842	22 58	73	304	I	85·4
12	20 54	1093	981	21 20	112	21 1	379	254	0 39	125	20 42	918	871	0 30	47	1153	I	85·3
13D	18 18	1098	888	18 21	212	18 17	440	233	18 30	207	18 26	1033	867	5 6	166	80	I	85·3
14	19 8	1042	989	15 40	53	12 6	355	286	2 36	69	16 22	918	898	11 18	20	510	I	85·3
15D	21 12	1116	982	0 38	134	15 12	387	220	22 18	167	19 13	931	859	21 19	72		I	85·3
16	23 53	1083	969	10 12	114	13 1	366	275	23 47	91	13 52	919	889	2 57	30	222	I	85·3
17D	19 55	1105	965	9 30	140	15 34	366	259	15 56	107	15 52	940	889	0 43	51	337	I	85·3
18	20 0	1096	991	9 0	105	20 10	347	286	17 21	61	17 30	919	885	0 46	34	159	I	85·3
19	17 28	1071	1001	17 14	70	18 0	351	267	19 20	84	17 21	920	894	2 0	26	126	I	85·3
20	21 40	1060	1013	11 31	47	12 31	341	309	9 24	32	15 0	910	898	13 15	12	34	0	85·3
21	0 17	1050	1020	11 29	30	0 14	343	314	1 13	29	16 1	903	893	1 0	10	18	0	85·3
22Q	24 0	1058	1020	11 20	38	13 1	344	313	23 45	31	21 9	907	897	17 10	10	25	0	85·3
23	0 6	1059	1010	12 10	49	12 30	352	312	0 50	40	18 0	906	889	9 35	17	43	0	85·3
24	22 31	1055	992	13 39	63	13 19	360	252	22 30	108	11 20	910	889	9 45	21	161	I	85·3
25	7 20	1050	987	14 40	63	13 16	352	268	1 11	84	15 3	911	876	1 2	35	123	I	85·3
26	3 9	1049	995	14 35	54	14 38	352	300	20 18	52	16 22	915	889	3 11	26	63	I	85·3
27	23 2	1065	1003	13 11	62	13 40	352	292	23 30	60	21 14	906	890	24 0	16	77	I	85·3
28Q	23 40	1049	1025	11 51	24	13 32	339	299	0 9	40	22 0	900	890	0 9	10	23	0	85·3
29Q	6 1	1050	1027	12 40	28	13 32	340	318	0 1	22	15 2	899	890	10 0	9	11	0	85·2
30	21 58	1078	1028	13 6	50	14 23	353	292	22 30	61	21 40	903	890	9 30	13	64	I	85·2
														22 15				
Mean	—	1073	991	—	82	—	361	280	—	81	—	931	885	—	46	238	0·73	85·4
No. of Days used.	—	30	30	—	30	—	30	30	—	30	—	30	30	—	30	30	30	30



Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

## 312. Eskdalemuir. (X.)

15,000  $\gamma$  ( $\cdot 15$  C.G.S. unit) +

December, 1928.

Hour. G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.	
Day.	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	
1D	1042	1039	1049	1054	1052	1049	1034	1068	1029	1020	1033	1030	1023	1020	1024	1028	1033	1035	1038	1038	1034	1039	1039	1039	1039	1040	1037
2	1040	1038	1040	1036	1039	1045	1049	1041	1041	1039	1038	1030	1030	1035	1038	1035	1039	1040	1043	1044	1039	1039	1039	1030	1036	1039	
3	1036	1034	1034	1034	1034	1038	1038	1038	1034	1033	1030	1029	1029	1031	1033	1034	1038	1043	1045	1029	1038	1040	1043	1041	1041	1036	
4Q	1040	1034	1035	1037	1038	1040	1042	1038	1033	1031	1028	1028	1028	1037	1034	1028	1032	1037	1040	1043	1044	1043	1047	1044	1044	1037	
5D	1044	1038	1038	1038	1038	1038	1039	1040	1042	1038	1032	1027	1024	1029	1038	1044	1051	1059	1050	1053	1042	1038	1032	1034	1038	1039	
6D	1038	1027	1023	1012	1043	1041	1033	1008	1006	998	997	987	1006	998	1006	1012	1018	1003	1029	1016	1012	1022	1037	1033	1015	1016	
7	1015	1032	1016	1017	1027	1026	1028	1023	1023	1017	1002	1005	1007	1007	1017	1018	1027	1028	1033	1033	1038	1042	1033	1033	1033	1023	
8	1032	1031	1031	1032	1033	1033	1038	1042	1037	1031	1017	1014	1017	1022	1016	1024	1032	1036	1037	1037	1036	1032	1037	1037	1041	1031	
9	1041	1037	1037	1037	1038	1041	1042	1042	1038	1027	1017	1017	1023	1020	1023	1027	1028	1032	1032	1030	1029	1034	1036	1037	1036	1032	
10	1036	1036	1037	1037	1037	1039	1041	1043	1041	1032	1024	1023	1022	1022	1016	1026	1032	1041	1041	1041	1036	1038	1030	1036	1036	1034	
11	1036	1035	1032	1031	1037	1041	1047	1045	1040	1034	1026	1022	1026	1031	1036	1037	1031	1042	1039	1052	1026	1027	1037	1057	1037	1036	
12D	1036	1028	1035	1030	1031	1045	1055	1046	1034	1011	1000	995	1000	1007	1025	1030	1036	1015	1026	1031	1035	1051	1041	1046	1025	1028	
13D	1025	1027	1026	1028	1031	1040	1051	1036	1036	1031	1011	1015	1021	1011	1007	1020	1027	1034	1041	1046	1037	1032	1035	1036	1030	1029	
14	1030	1027	1026	1030	1036	1037	1044	1040	1036	1032	1026	997	1001	1029	1025	1020	1025	1031	1040	1041	1061	1041	1040	1042	1036	1032	
15	1035	1035	1031	1030	1030	1031	1036	1041	1036	1029	1020	1019	1015	1020	1029	1031	1034	1038	1040	1040	1040	1041	1043	1050	1035	1033	
16	1035	1034	1034	1035	1040	1043	1043	1043	1040	1035	1029	1025	1022	1025	1029	1031	1034	1036	1040	1040	1044	1043	1055	1037	1039	1036	
17Q	1039	1038	1037	1040	1040	1043	1045	1046	1045	1039	1032	1030	1030	1031	1031	1034	1039	1042	1045	1036	1040	1044	1041	1040	1045	1039	
18	1045	1040	1039	1037	1040	1040	1044	1044	1040	1036	1030	1030	1030	1019	1031	1032	1034	1034	1028	1020	1024	1030	1035	1036	1037	1034	
19Q	1036	1041	1039	1039	1039	1041	1043	1043	1041	1039	1033	1029	1029	1030	1034	1040	1043	1044	1044	1045	1045	1045	1043	1039	1039	1040	
20Q	1039	1035	1041	1043	1045	1053	1048	1044	1040	1038	1034	1034	1029	1029	1033	1024	1028	1039	1044	1043	1039	1039	1042	1049	1039	1039	
21	1039	1043	1044	1044	1045	1049	1053	1049	1039	1039	1039	1038	1034	1034	1025	1018	1024	1019	1013	1024	1037	1034	1069	1044	1039	1037	
22	1038	1038	1038	1038	1042	1043	1038	1038	1041	1038	1023	1007	1018	1003	1023	1030	1024	1027	1038	1032	1033	1039	1038	1038	1038	1032	
23Q	1038	1038	1039	1040	1042	1043	1042	1053	1043	1039	1036	1032	1030	1028	1032	1027	1033	1038	1038	1038	1038	1040	1038	1043	1042	1038	
24	1041	1038	1041	1042	1048	1052	1052	1053	1053	1043	1042	1036	1022	1021	1022	1018	1021	1011	1023	1026	1026	1028	1023	1027	1027	1033	
25	1027	1039	1043	1037	1048	1057	1052	1056	1037	1032	1032	1026	1023	1023	1027	1037	1037	1046	1052	1051	1050	1047	1042	1040	1037	1040	
26	1036	1021	1052	1034	1036	1043	1041	1041	1035	1036	1030	1023	1016	1021	1026	1020	1026	1021	1031	1032	1041	1038	1039	1036	1035	1032	
27	1035	1036	1036	1040	1046	1047	1046	1041	1037	1040	1035	1030	1026	1022	1035	1036	1030	1026	1031	1041	1040	1042	1040	1041	1041	1037	
28	1041	1041	1038	1040	1041	1045	1046	1047	1050	1046	1041	1035	1040	1041	1045	1041	1041	1041	1042	1044	1045	1042	1045	1043	1045	1043	
29	1044	1041	1044	1045	1045	1046	1046	1045	1045	1044	1044	1041	1040	1040	1041	1040	1030	1042	1041	1050	1050	1050	1040	1050	1034	1048	
30	1034	1034	1035	1039	1039	1039	1040	1045	1046	1040	1034	1030	1026	1027	1039	1039	1036	1035	1035	1040	1040	1065	1039	1035	1038	1038	
31	1038	1034	1034	1033	1035	1039	1041	1040	1039	1038	1035	1030	1021	1020	1026	1034	1039	1037	1040	1040	1040	1039	1038	1035	1039	1035	
Mean	1036	1035	1036	1036	1039	1042	1048	1043	1038	1033	1027	1023	1023	1024	1028	1030	1032	1034	1037	1038	1038	1039	1040	1040	1037	1035	

## TERRESTRIAL MAGNETIC FORCE : WEST COMPONENT.

Mean values for periods of sixty minutes centred at the Hours of Greenwich Mean Time.

## 313. Eskdalemuir. (—Y.)

4,000  $\gamma$  ( $\cdot 04$  C.G.S. unit) +

December, 1928.

Hour. G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Day.	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1D	318	313	332	299	305	319	376	346	334	338	326	325	327	331	333	333	331	327	326	325	325	320	319	319	321	327
2	321	319	325	320	319	324	325	325	325	325	326	327	336	333	337	338	333	332	326	325	325	319	305	313	313	325
3	313	313	324	324	325	319	321	319	319	319	319	325	331	333	332	332	332	331	334	323	327	325	322	319	321	324
4Q	321	319	325	319	325	325	320	319	319	325	326	333	338	339	341	339	336	335	332	327	325	325	321	317	315	327
5D	315	311	314	318	318	319	321	323	325	325	325	327	331	338	345	339	338	345	345	336	339	325	309	252	225	322
6D	224	304	304	318	284	311	324	314	324	318	318	325	331	338	330	326	296	324	258	291	291	304	304	307	331	309
7	331	291	291	314	312	318	322	324	324	318	330	330	331	331	328	332	324	310	324	324	311	298	310	318	324	318
8	324	323	319	322	321	324	325	324	319	312	314	320	324	337	330	324	325	325	324	324	318	290	311	317	324	321
9	324	324	323	323	324	324	324	324	318	312	312	323	339	338	333	334	317	312	318	318	318	312	318	318	318	322
10	318	318	318	318	319	322	324	319	318	312	315	324	331	333	332	326	330	328	326	326	313	298	307	312	317	320
11	317	317	315	318	318	318	324	324	318	312	316	324	328	335	336	331	331	338	351	311	338	327	305	304	292	323
12D	292	296	278	297	298	311	330	344	336	318	322	324	332	337	337	338	338	339	331	331	325	312	317	305	290	320
13D	290	300	304	298	310	310	318	318	318	318	324	331	333	344	338	330	326	324	318	317	324	317	324	284	311	318
14	311	304	318	317	312	316	318	317	312	311	318	319	325	331	340	332	324	325	313	314	290	311	310	324	331	318
15	331	318	324	318	324	325	324	318	316	316	312	325	331	335	336	332	330	330	330	325	322	318	310	318	318	323
16	318	317	318	318	318	318	317	318	318	312	317	324	325	331	332	331	330	324	331	330	324	317	296	314	312	321
17Q	312	319	324	324	325	324	324	322	318	317	322	324	328	331	332	332	332	332	332	325	319	318	296	317	319	324
18	319	321	320	322	322	319	321	319	318	318	321	325	331	338	338	338	338	336	336	314	319	312	317	316	317	324
19Q	317	317	318	318	318	318	318	318	318	318	318	324	325	332	334	331	330	325	325	324	324	324	320	318	320	322
20Q	320	318	317	310	311	311	314	318	317	314	318	318	324	337	343	337	337	331	325	324	324	318	306	311	321	321
21	311	324	324	324	322	324	324	325	324	318	324	324	330	338	338	337	337	338	305	324	323	310	310	304	312	323
22	311	318	319	323	323	323	331	328	323	317	323	323	331	331	336	330	325	316	310	311	318	317	320	317	317	322
23Q	317	317	318	323	323	323	329	331	323	323	323	323	337	337	337	332	324	323	323	319	317	317	316	317	319	324
24	319	318	318	323	323	323	323	323	323	324	330	330	330	336	334	325	325	317	318	317	310	293	295	309	309	320
25	309	297	303	309	312	316	317	323	323	316	319	323	325	331	329	329	330	331	336	330	324	323	317	297	303	319
26	303	319	310	296	310	317	323	331	311	316	322	323	326	331	332	329	323	336	329	313	310	312	313	316	315	319
27	315	318	320	323	322	317	318	317	317	318	317	323	331	330	330	329	323	311	324	323	317	317	317	317	306	320
28	306	311	310	322	323	323	323	321	323	323	323	323	337	342	337	331	331	329	325	322	321	317	313	317	317	323
29	317	318	323	324	324	323	323	323	321	322	323	322	325	336	336	334	331	336	332	324	323	319	316	289	283	323
30	283	304	317	313	316	317	323	321	321	317	323	327	329	336	331	329	325	330	324	325	317	313	311	315	304	320
31	304	293	297	309	317	317	317	317	317	318	322	323	329	336	337	333	330	331	324	323	318	317	311	316	313	319
Mean	311	313	315	316	317	319	324	323	320	318	321	325	330	335	335	332	328	328	324	321	319	314	313	310	311	321



**314. Eskdalemuir. (Z)**

**December, 1928.**

Hour. G.M.T.	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Day.	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	$\gamma$	
1 D	894	894	882	877	883	882	873	865	874	878	881	886	886	887	893	895	895	896	897	898	899	898	895	895	895	888
2	895	895	891	886	887	890	890	891	890	890	890	891	891	891	892	891	894	895	895	895	895	899	899	900	900	898
3	898	897	897	898	898	897	896	895	895	895	893	891	891	891	894	895	895	895	895	902	898	898	897	895	895	896
4 Q	895	894	894	895	894	894	894	894	893	892	893	894	894	891	893	895	898	896	896	895	895	895	895	894	892	894
5 D	892	894	894	894	892	892	891	891	891	891	894	894	894	891	890	890	890	890	890	895	895	904	908	884	858	892
6 D	858	871	877	840	840	861	873	878	884	890	893	902	911	917	925	933	938	929	940	917	915	912	904	884	875	896
7	876	874	877	883	887	891	893	896	896	897	898	899	900	904	912	913	909	912	905	904	905	903	900	899	898	898
8	898	898	897	897	896	895	893	892	896	898	899	897	895	896	900	902	900	897	896	896	899	904	898	896	895	897
9	895	895	895	895	894	892	892	892	895	896	895	892	891	895	897	899	903	904	900	901	901	900	900	897	896	897
10	897	897	896	896	894	893	892	892	894	896	895	896	893	893	897	900	897	896	894	894	897	901	900	897	897	896
11	897	897	896	896	893	892	892	892	892	892	892	892	891	891	892	897	897	895	894	909	910	909	918	905	901	897
12 D	901	897	892	892	892	886	872	875	883	888	896	900	905	901	901	903	901	905	905	902	905	906	902	900	900	896
13 D	900	898	900	901	892	892	889	890	892	889	886	886	888	889	898	904	905	905	903	901	897	901	901	892	892	896
14	892	896	895	895	893	893	892	892	892	892	889	889	889	890	894	898	901	902	905	901	900	893	894	888	886	894
15	887	888	893	893	893	893	890	891	893	895	897	893	893	894	896	898	898	898	897	895	894	893	893	890	890	894
16	890	893	893	893	893	890	889	889	889	890	889	890	892	890	893	893	894	896	893	894	893	893	894	890	891	892
17 Q	892	891	891	890	890	890	890	890	890	890	890	890	890	890	892	894	894	894	894	894	895	893	891	891	890	891
18	890	890	890	890	890	890	890	890	890	888	889	891	890	890	890	894	894	894	896	905	903	902	899	895	894	893
19 Q	895	891	891	891	891	891	891	891	891	891	891	891	888	887	888	891	890	890	890	889	889	888	888	888	888	890
20 Q	888	888	887	887	887	883	883	885	887	890	892	891	883	885	887	891	891	891	891	891	891	891	891	887	886	888
21	887	884	883	883	881	880	882	883	884	883	880	879	880	884	888	892	892	896	913	907	898	896	883	874	879	887
22	879	880	882	883	883	881	879	882	885	885	887	887	887	890	892	892	894	896	896	895	894	891	888	888	887	887
23 Q	888	888	886	885	885	885	885	881	883	884	886	888	886	885	888	889	889	889	889	889	889	889	889	888	885	887
24	885	885	884	883	880	880	880	880	880	880	880	881	881	886	886	889	893	897	894	894	894	893	889	877	872	885
25	873	873	864	865	865	866	869	872	877	880	881	881	884	884	886	882	882	881	879	880	881	881	883	887	885	878
26	886	882	857	870	877	878	878	875	881	881	882	880	886	887	888	891	895	893	891	891	888	887	886	886	883	883
27	884	883	883	883	879	879	879	879	880	880	884	885	883	883	883	885	889	892	889	887	885	884	884	883	883	884
28	884	884	881	880	880	879	879	880	879	877	880	880	878	880	880	881	883	884	884	884	884	884	884	882	881	881
29	882	882	881	881	880	880	880	878	877	877	880	881	877	877	882	885	887	886	885	885	882	881	885	887	887	882
30	888	886	886	886	885	883	881	881	878	878	882	882	882	882	886	886	886	886	887	887	887	883	878	882	885	884
31	886	887	884	884	884	884	883	883	883	882	883	883	881	883	887	887	887	887	887	887	887	887	887	887	884	885
Mean	889	889	887	886	886	886	885	885	887	888	889	889	889	890	893	895	896	896	896	896	895	895	894	890	888	890

**DAILY EXTREMES OF EACH COMPONENT OF TERRESTRIAL MAGNETIC FORCE :  
 MAGNETIC CHARACTER FIGURES : TEMPERATURE IN MAGNET HOUSE.**

**315. Eskdalemuir.**

**December, 1928.**

Day.	Terrestrial Magnetic Force.															Character in Figures 100γ <sup>2</sup>	Magnetic Character of Day (0-2).	Temperature in Magnet House 200 +		
	North Component.					West Component.					Vertical Component.									
	Maximum 15000 γ +		Minimum 15000 γ +		Range.	Maximum 4000 γ +		Minimum 4000 γ +		Range.	Maximum 44000 γ +		Minimum 44000 γ +		Range.					
	h.	m.	γ	γ	h. m.	γ	h. m.	γ	γ	h. m.	γ	h. m.	γ	γ	h. m.	γ				
1 D	6	32	1083	998	9 13	85	6 42	345	293	3 14	52	20 20	899	861	6 33	38	113	I	a.	
2	4	42	1059	1024	23 40	35	2 18	345	301	21 42	44	21 51	903	882	2 51	21	36	I	85.2	
3	17	35	1049	1018	18 48	31	18 15	339	311	1 26	28	19 2	903	890	11 5	13	19	O	85.2	
4 Q	23	31	1054	1023	15 19	31	14 0	345	314	0 39	31	16 13	899	890	13 20	9	20	O	85.1	
5 D	23	43	1075	1002	22 45	73	17 33	352	140	23 31	212	22 26	912	852	23 51	60	539	I	85.1	
6 D	18	24	1070	972	9 21	98	2 47	362	218	18 0	144	17 41	949	822	3 20	127	465	2	85.1	
7	20	28	1062	997	10 0	65	12 29	337	276	20 53	61	14 18	913	871	1 16	42	97	I	85.1	
8	23	41	1047	1004	14 0	43	15 13	344	272	20 46	72	21 6	906	891	6 10	15	73	I	85.1	
9	6	36	1047	1016	15 43	31	12 19	351	302	17 0	49	17 12	904	891	11 29	13	35	I	85.1	
10	21	20	1052	1007	14 10	45	13 42	342	278	20 26	64	20 50	904	892	6 50	12	63	I	84.9	
11	22	30	1097	996	19 53	101	18 20	352	277	23 59	75	20 19	920	890	11 15	30	167	I	84.9	
12 D	5	48	1067	986	11 9	81	16 43	357	252	2 25	105	20 41	909	871	5 48	38	190	I	84.9	
13 D	6	3	1065	996	13 31	69	13 13	351	257	22 59	94	21 42	905	885	10 19	20	140	I	84.9	
14	20	13	1076	986	11 30	110	14 0	351	278	19 45	73	17 41	905	884	23 10	21	179	I	84.9	
15	22	34	1077	1014	11 50	63	0 10	344	271	9 0	73	16 0	898	884	0 30	14	95	I	84.7	
16	22	3	1065	1017	10 13	48	13 53	338	284	21 50	54	17 10	897	889	10 10	8	53	I	84.7	
17 Q	23	50	1051	1029	11 42	22	13 39	337	278	0 17	59	19 39	897	889	12 33	8	40	O	84.7	
18	0	1	1045	1009	19 0	36	17 40	344	304	19 2	40	19 8	907	887	8 48	20	33	I	84.7	
19 Q	2	3	1048	1029	10 50	19	13 28	337	312	0 20	25	0 1	895	886	12 50	9	11	O	84.6	
20 Q	5	2	1058	1019	15 6	39	13 26	350	298	23 11	52	10 45	892	882	12 0	10	43	O	84.6	
21	21	59	1099	1003	17 43	96	14 47	350	276	18 4	74	18 22	918	872	22 59	46	168	I	84.6	
22	17	40	1062	992	12 55	70	13 37	343	281	17 34	62	17 32	901	879	0 1	22	92	I	84.6	
23 Q	6	54	1057	1023	12 49	34	13 19	343	310	21 31	33	15 52	889	880	7 0	9	23	O	84.5	
24	7	18	1057	1003	17 14	54	11 52	339	278	21 14	61	17 19	897	872	23 18	25	73	I	84.3	
25	1	35	1067	1021	13 17	46	18 0	338	278	1 24	60	23 2	889	862	1 51	27	64	I	84.3	
26	1	49	1077	997	1 0	80	1 21	362	277	2 30	85	15 32	896	852	1 51	44	156	I	84.3	
27	4	44	1051	1041	12 33	37	12 20	336	303	24 0	33	17 0	893	878	5 50	15	27	I	84.3	
28	1	26	1054	1030	10 48	24	13 13	343	302	1 37	41	0 8	885	876	9 15	9	23	O	84.3	
29	23	3	1065	1015	23 43	50	14 20	337	257	23 53	80	16 12	889	875	12 30	14	91	I	84.2	
30	21	11	1084	1021	12 29	63	12 47	338	262	0 1	76	20 28	890	877	21 19	13	99	I	84.1	
31	1	21	1046	1016	12 10	30	14 12	338	289	1 0	49	22 31	889	881	12 1	8	34	O	84.1	
Mean	—	—	1063	1008	—	55	—	345	278	—	67	—	902	877	—	25	105	—	84.7	
No. of Days used.	—	—	31	31	—	31	—	31	31	—	31	—	31	31	—	31	—	31	—	31



## DIURNAL INEQUALITIES OF THE GEOGRAPHICAL COMPONENTS OF MAGNETIC FORCE.—"ALL" DAYS.

Not corrected for the effect of the North Force on the West Magnetograph, or *vice versa*, or for the effect of the Horizontal Force on the V.F. Balance.)

Departures from mean of the day adjusted for non-cyclic change.

Month and Season.	Hour.G.M.T.																							
	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.
NORTH COMPONENT (all days except Feb. 23).																								
316. Eskdalemuir. 1928.																								
Jan. ...	+2.9	+2.7	+3.6	+4.4	+7.7	+9.0	+8.0	+6.6	+0.4	+8.9	+15.8	+18.8	+15.0	+8.3	+3.3	+1.1	+0.3	+1.7	+3.5	+3.3	+3.7	+4.9	+4.7	+4.5
Feb. ...	+5.1	+4.8	+5.1	+4.3	+7.7	+9.2	+10.9	+9.4	+2.1	+7.7	+16.1	+21.9	+20.5	+13.9	+8.1	+3.7	+0.2	+2.4	+2.8	+4.0	+6.4	+6.7	+5.9	+5.5
Mar. ...	+8.3	+7.1	+8.1	+8.6	+10.9	+11.5	+10.8	+5.5	+5.4	+18.9	+28.6	+31.0	+26.2	+18.5	+10.2	+2.1	+2.7	+7.9	+10.1	+9.1	+10.8	+9.7	+10.0	+9.7
April ...	+9.3	+8.1	+8.1	+10.7	+10.6	+9.9	+8.5	+0.4	+17.4	+33.9	+42.2	+41.2	+32.8	+18.4	+7.3	+4.2	+12.3	+17.9	+20.4	+19.4	+16.2	+14.2	+11.1	+12.9
May ...	+6.9	+4.8	+7.6	+7.4	+7.9	+0.2	+8.1	+17.9	+29.7	+42.1	+42.0	+37.9	+27.2	+16.8	+0.7	+15.8	+29.2	+38.0	+35.9	+26.4	+17.0	+11.7	+6.0	+7.7
June ...	+5.0	+1.3	+2.9	+6.8	+6.3	+1.9	+1.4	+11.0	+22.1	+30.2	+36.8	+35.6	+25.7	+14.5	+0.3	+7.2	+16.6	+24.6	+27.0	+27.0	+21.8	+13.6	+9.4	+6.2
July ...	+2.6	+4.5	+2.3	+11.6	+3.4	+14.9	+29.2	+31.9	+32.0	+32.4	+27.3	+25.5	+21.2	+7.9	+2.2	+16.3	+24.7	+33.6	+35.5	+33.5	+26.5	+21.9	+18.3	+24.4
Aug. ...	+8.4	+4.8	+6.2	+8.5	+5.6	+1.6	+3.4	+11.1	+22.0	+31.3	+34.3	+30.3	+24.1	+15.3	+3.1	+7.0	+14.8	+21.7	+23.1	+19.8	+18.1	+13.7	+11.1	+10.5
Sept. ...	+10.0	+8.6	+10.2	+11.9	+10.0	+7.3	+3.7	+6.6	+18.9	+33.0	+37.0	+33.6	+26.2	+14.2	+5.8	+3.7	+10.9	+11.9	+16.9	+16.0	+17.0	+13.1	+11.3	+12.9
Oct. ...	+7.3	+0.6	+6.4	+9.4	+12.6	+12.8	+8.7	+2.6	+9.3	+23.1	+29.3	+30.7	+25.3	+16.6	+8.7	+1.5	+7.7	+9.2	+8.3	+13.5	+9.4	+13.6	+10.6	+12.9
Nov. ...	+4.2	+4.4	+6.7	+8.5	+8.3	+8.9	+8.0	+4.7	+2.6	+12.7	+16.2	+16.4	+15.0	+11.6	+7.9	+4.4	+1.7	+3.5	+3.4	+3.5	+3.5	+4.9	+6.4	+6.3
Dec. ...	+0.4	+1.6	+1.1	+4.5	+7.4	+8.4	+7.8	+3.2	+1.7	+7.3	+11.7	+11.9	+11.1	+6.9	+5.3	+2.5	+1.0	+2.5	+3.1	+3.2	+4.6	+4.9	+5.0	+1.8
Year ...	+5.9	+3.6	+5.7	+6.1	+7.6	+5.5	+2.0	+3.9	+13.3	+23.5	+28.1	+27.9	+22.5	+13.6	+4.9	+3.3	+10.0	+14.6	+15.8	+14.9	+12.9	+11.1	+9.2	+9.6
Winter	+3.1	+3.4	+4.1	+5.4	+7.8	+8.9	+8.7	+6.0	+0.7	+9.2	+15.0	+17.8	+15.4	+10.2	+6.1	+2.9	+0.2	+2.5	+3.2	+3.5	+4.5	+5.4	+5.5	+4.5
Equinox	+8.7	+5.8	+8.2	+10.1	+11.0	+10.4	+7.9	+0.3	+12.7	+27.3	+34.3	+34.1	+27.6	+16.9	+8.0	+1.1	+8.4	+11.7	+13.9	+14.5	+13.3	+12.7	+10.8	+12.1
Summer	+5.7	+1.6	+4.8	+2.8	+4.1	+2.8	+10.5	+18.0	+26.5	+34.0	+35.1	+32.3	+24.5	+13.6	+0.5	+11.6	+21.3	+29.5	+30.4	+26.7	+20.8	+15.2	+11.2	+12.2
WEST COMPONENT (all days except Feb. 23).																								
317. Eskdalemuir. 1928.																								
Jan. ...	-5.4	-2.8	-1.7	-1.6	-1.8	-3.3	-2.9	-6.2	-8.9	-5.6	+0.3	+8.4	+16.4	+17.9	+12.4	+9.4	+5.3	+1.7	+0.4	-2.3	-7.5	-7.9	-7.8	-6.5
Feb. ...	-7.6	-6.6	-5.2	-4.4	-4.6	-5.7	-4.9	-7.3	-11.1	-9.0	+0.4	+9.9	+18.7	+22.7	+20.7	+15.3	+9.7	+7.1	+4.0	+0.1	-6.1	-11.3	-12.5	-11.3
Mar. ...	-7.5	-6.5	-5.4	-5.6	-7.6	-8.3	-11.4	-17.6	-22.2	-18.4	+5.8	+14.1	+27.8	+31.3	+27.7	+16.8	+9.9	+5.7	+3.0	+1.2	-2.6	-5.0	-6.6	-6.7
April ...	-10.0	-6.8	-3.6	-6.6	-9.2	-13.1	-23.1	-31.1	-31.7	-19.2	+2.3	+17.0	+30.8	+34.7	+28.4	+21.2	+14.1	+9.6	+8.1	+7.1	+2.3	-2.5	-4.8	-9.3
May ...	-6.7	-6.4	-6.6	-10.3	-13.3	-21.1	-27.3	-32.5	-30.0	-18.4	+3.5	+13.6	+24.9	+28.5	+29.6	+28.8	+23.6	+15.7	+11.4	+9.0	+4.0	-3.1	-5.1	-4.9
June ...	-5.5	-4.3	-8.3	-13.3	-18.6	-24.8	-29.1	-32.4	-29.3	-21.7	+7.7	+12.0	+24.4	+30.9	+31.5	+27.2	+22.9	+19.6	+13.6	+10.1	+5.5	+2.5	-2.7	-2.4
July ...	-2.7	-14.3	-13.4	-14.9	-22.5	-27.6	-38.7	-37.8	-35.5	-21.5	+6.0	+13.4	+26.5	+34.5	+33.6	+29.0	+23.5	+19.8	+16.7	+13.8	+10.2	+7.1	+3.5	+3.4
Aug. ...	-10.5	-9.4	-13.6	-14.2	-15.9	-21.1	-23.3	-25.9	-22.0	-12.8	+1.3	+18.9	+31.0	+33.0	+30.1	+21.8	+15.0	+10.6	+7.5	+6.2	+3.9	-0.2	-3.9	-6.4
Sept. ...	-10.1	-8.0	-12.1	-12.3	-13.5	-15.8	-19.9	-23.4	-21.3	-9.7	+5.7	+25.5	+35.7	+37.0	+32.1	+22.9	+12.7	+5.5	+3.9	+0.6	-4.3	-6.6	-13.4	-9.9
Oct. ...	-12.9	-11.5	-5.9	-5.9	-5.8	-7.7	-8.8	-14.0	-15.4	-7.3	+6.4	+17.8	+26.2	+29.0	+25.4	+16.7	+11.1	+9.4	+2.1	-6.5	-9.5	-8.6	-10.5	-13.7
Nov. ...	-11.5	-7.7	-5.7	-3.7	-7.0	+0.1	-1.4	-2.7	-4.2	-1.6	+5.9	+12.2	+17.8	+18.8	+17.7	+10.9	+9.3	+3.4	+1.8	-6.7	-8.4	-12.8	-13.5	-11.5
Dec. ...	-8.6	-6.3	-5.2	-4.5	-2.1	+2.5	+1.6	-1.0	-3.2	+0.5	+3.2	+8.7	+13.7	+13.6	+10.7	+7.1	+6.7	+3.0	+0.1	-2.0	-7.0	-8.4	-11.3	-10.7
Year ...	-8.3	-7.6	-7.2	-8.1	-9.8	-12.1	-15.8	-19.3	-19.6	-12.1	+0.3	+14.3	+24.5	+27.6	+25.0	+18.9	+13.7	+9.3	+5.7	+2.4	-1.6	-4.7	-7.4	-7.5
Winter	-8.3	-5.8	-4.4	-3.6	-2.8	-1.6	-1.9	-4.3	-6.9	-4.2	+2.2	+9.8	+16.7	+18.2	+15.4	+10.7	+7.8	+3.8	+0.7	-2.8	-7.2	-10.1	-11.3	-10.0
Equinox	-10.1	-8.2	-6.7	-7.6	-9.0	-11.2	-15.8	-21.5	-22.6	-13.7	+1.0	+18.6	+30.1	+33.0	+28.4	+19.4	+12.0	+7.5	+4.3	+0.3	-3.5	-5.7	-8.8	-9.9
Summer	-6.3	-8.6	-10.5	-13.2	-17.6	-23.7	-29.6	-32.1	-29.2	-18.6	-4.0	+14.5	+26.7	+31.7	+31.2	+26.7	+21.2	+16.4	+12.3	+9.8	+5.9	+1.6	-2.1	-2.6
VERTICAL COMPONENT (all days except Feb. 23).																								
318. Eskdalemuir. 1928.																								
Jan. ...	-1.5	-2.1	-2.8	-3.2	-4.1	-4.1	-3.8	-2.8	-2.0	-1.6	-1.5	-1.7	-1.3	+1.4	+3.7	+3.4	+3.8	+4.7	+4.5	+4.1	+3.8	+2.7	+1.1	+0.3
Feb. ...	-1.4	-2.9	-3.5	-3.8	-4.5	-3.8	-3.6	-2.8	-2.0	-4.1	-6.0	-5.9	-4.3	+1.9	+1.9	+5.3	+6.7	+6.6	+7.2	+7.6	+6.8	+5.0	+2.6	+0.8
Mar. ...	-2.6	-4.3	-5.5	-4.4	-3.5	-2.4	+0.6	+0.6	+0.3	-4.9	-9.6	-12.6	-10.1	+5.1	+2.3	+9.5	+11.3	+11.0	+9.5	+8.7	+6.9	+4.5	+2.2	+0.4
April ...	-5.6	-4.2	-2.9	+1.7	+0.1	+2.1	+3.7	+2.9	+1.0	+6.3	+10.8	+15.3	+14.0	+7.4	+1.1	+4.1	+9.0	+11.0	+11.3	+10.1	+8.8	+6.0	+2.8	+1.7
May ...	-10.6	-11.8	-11.7	-9.2	-6.6	-5.4	-5.1	-4.7	-7.3	-11.5	-12.2	-10.2	-4.4	+2.9	+10.4	+15.8	+22.2	+24.3	+20.1	+15.5	+10.4	+3.5	-4.5	-9.6
June ...	-7.2	-8.9	-8.0	-5.2	-2.7	-1.8	-2.0	-2.0	-5.1	-9.2	-12.2	-12.4	-9.1	+3.2	+3.6	+9.9	+13.8	+15.5	+16.2	+15.0	+12.3	+6.2	+0.9	-4.6
July ...	-13.6	-10.1	-12.9	-12.2	-10.1	-15.3	-13.0	-10.1	-11.3	-8.1	-8.6	-9.5	-5.1	+2.6	+9.6	+15.9	+19.6	+22.6	+21.1	+18.5	+15.3	+10.1	+5.7	+1.3
Aug. ...	-6.9	-11.2	-12.9	-8.7	-6.4	-5.3	-3.4	-1.7	-3.3	-6.4	-9.6	-12.1	-9.8	-1.8	+5.5	+11.9	+16.3	+16.4	+14.6	+13.8	+10.4	+7.3	+4.1	+0.8
Sept. ...	-9.0	-13.3	-10.7	-7.5	-6.4	-4.2	-1.5	-1.3	-3.2	-6.5	-10.0	-11.5	-7.9	+0.0	+8.6	+17.5	+21.7	+19.6	+12.9	+11.0	+8.5	+1.5	-2.5	-5.8
Oct. ...	-11.7	-15.3	-14.9	-12.6	-8.8	-7.8	-5.6	-3.7	-2.9	-4.5	-5.7	-2.8	+0.5	+6.7	+11.3	+15.0	+18.9	+18.9	+13.4	+11.0	+5.0	+2.5	-1.0	-6.0
Nov. ...	-8.4	-6.7	-7.2	-8.5	-8.0	-8.1	-7.0	-5.8	-4.4	-4.3	-4.1	-2.2	+0.7	+5.7	+9.2	+11.0	+11.2	+14.0	+9.7	+8.9	+6.3	+2.8	-0.2	-4.6
Dec. ...	-1.9	-3.5	-4.4	-4.8	-4.6	-5.3	-5.1	-3.5	-2.8	-1.7	-1.2	-1.3	+0.5	+2.4	+4.5	+5.4	+5.6	+5.7	+5.5	+5.0	+4.8	+3.7	+0.0	-1.9
Year ...	-6.7	-7.9	-8.1	-6.8	-5.5	-5.1	-3.9	-2.9	-3.8	-5.8	-7.6	-8.1	-5.4	+0.2	+5.8	+10.4	+13.3	+14.2	+12.2	+10.7	+8.3	+4.7	+0.9	-3.0
Winter	-3.3	-3.8	-4.5	-5.1	-5.3	-5.3	-4.9	-3.7	-2.8	-2.9	-3.2	-2.8	-1.3	+1.9	+4.8	+6.3	+6.8	+7.7	+6.7	+6.4	+5.4	+3.6	+0.9	-1.5
Equinox	-7.2	-9.3	-8.5	-6.5	-4.6	-3.1	-1.0	+0.4	+0.9	-5.5	-9.0	-10.6	-7.9	-1.5	+5.3	+11.5	+15.2	+15.1	+11.8	+10.2	+7.3	+3.6	+0.4	-3.5
Summer	-9.6	-10.5	-11.4	-8.8	-6.5	-7.0	-5.9	-4.6	-6.7	-8.8	-10.7	-11.1	+7.1	+0.1	+7.3	+13.4	+18.0	+19.7	+18.0	+15.7	+12.1	+6.8	+1.6	-4.1



## DIURNAL INEQUALITIES OF THE MAGNETIC COMPONENTS, DECLINATION, INCLINATION, AND HORIZONTAL FORCE.

"ALL" DAYS.

Departures from mean of the day adjusted for non-cyclic change.

Month and Season.	Hour.	G.M.T.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.
	1.	2.																						
DECLINATION (measured positive towards the West) (all days except Feb. 23).																								
319. Eskdalemuir. 1928.																								
Jan. ...	-1.24	-0.71	-0.53	-0.56	-0.78	-1.14	-1.01	-1.59	-1.76	-0.63	+0.92	+2.69	+4.09	+4.01	+2.65	+1.94	+1.05	+0.24	-0.10	-0.64	-1.69	-1.85	-1.81	-1.55
Feb. ...	-1.79	-1.57	-1.32	-1.12	-1.34	-1.63	-1.57	-1.97	-2.33	-1.37	+0.79	+3.17	+4.85	+5.28	+4.57	+3.25	+1.96	+1.28	+0.64	-0.23	-1.56	-2.61	-2.82	-2.54
Mar. ...	-1.95	-1.69	-1.51	-1.59	-2.10	-2.28	-2.86	-3.81	-4.18	-2.64	+0.40	+4.49	+6.96	+7.24	+6.07	+3.46	+1.84	+0.70	+0.04	-0.27	-1.11	-1.52	-1.86	-1.88
April ...	-2.50	-1.79	-1.15	-1.89	-2.41	-3.14	-5.07	-6.19	-5.39	-1.99	+1.83	+5.63	+7.92	+7.92	+6.06	+3.99	+2.16	+0.94	+0.51	+0.36	-0.42	-1.27	-1.56	-2.55
May ...	-1.70	-1.54	-1.74	-2.47	-3.07	-4.21	-5.01	-5.51	-4.38	-1.39	+1.57	+4.77	+6.43	+6.61	+5.94	+4.90	+3.12	+1.08	+0.33	+0.37	-0.13	-1.25	-1.35	-1.39
June ...	-1.37	-0.93	-1.81	-3.01	-4.05	-5.06	-5.73	-5.87	-4.65	-2.70	+0.45	+4.32	+6.26	+6.95	+6.30	+5.03	+3.67	+2.58	+1.25	+0.55	-0.09	-0.23	-1.05	-0.82
July ...	-0.68	-2.63	-2.81	-2.35	-4.32	-4.70	-6.14	-5.83	-5.37	-2.54	+0.27	+4.06	+6.44	+7.33	+6.60	+4.91	+3.35	+2.14	+1.42	+0.94	+0.61	+0.22	-0.30	-0.64
Aug. ...	-2.54	-2.14	-3.06	-3.30	-3.48	-4.31	-4.47	-4.57	-3.21	-0.86	+2.11	+5.42	+7.49	+7.42	+6.17	+3.98	+2.20	+0.94	+0.25	+0.16	-0.20	-0.79	-1.39	-1.84
Sept. ...	-2.56	-2.06	-2.96	-3.10	-3.24	-3.54	-4.17	-4.31	-3.23	-0.14	+3.13	+6.91	+8.54	+8.16	+6.72	+4.37	+1.94	+0.45	-0.14	-0.98	-1.79	-2.03	-3.29	-2.67
Oct. ...	-2.98	-2.28	-1.52	-1.68	-1.84	-2.24	-2.23	-2.95	-2.57	-0.21	+2.85	+5.21	+6.59	+6.69	+5.55	+3.42	+1.80	+1.38	-0.02	-2.02	-2.42	-2.46	-2.67	-3.43
Nov. ...	-2.53	-1.78	-1.49	-1.20	-0.98	-0.45	-0.71	-0.81	-0.70	+0.37	+2.05	+3.33	+4.37	+4.35	+3.96	+2.41	+1.77	+0.48	-0.54	-1.52	-1.86	-2.83	-3.05	-2.65
Dec. ...	-1.73	-1.34	-1.09	-1.15	-0.82	+0.05	-0.10	-0.37	-0.54	+0.30	+1.27	+2.37	+3.33	+3.09	+2.42	+1.55	+1.40	+0.46	-0.15	-0.58	-1.65	-1.95	-2.52	-2.25
Year ...	-1.96	-1.71	-1.75	-1.95	-2.37	-2.72	-3.26	-3.65	-3.19	-1.15	+1.47	+4.36	+6.11	+6.25	+5.25	+3.60	+2.19	+1.06	+0.29	-0.32	-1.03	-1.55	-1.97	-2.02
Winter ...	-1.82	-1.35	-1.11	-1.01	-0.98	-0.79	-0.85	-1.19	-1.33	-0.33	+1.26	+2.89	+4.16	+4.18	+3.40	+2.29	+1.55	+0.61	-0.04	-0.74	-1.69	-2.31	-2.55	-2.25
Equinox ...	-2.50	-1.95	-1.79	-2.07	-2.40	-2.80	-3.58	-4.31	-3.83	-1.25	+2.05	+5.56	+7.50	+7.50	+6.10	+3.81	+1.93	+0.87	+0.10	-0.73	-1.43	-1.82	-2.35	-2.63
Summer ...	-1.57	-1.81	-2.35	-2.78	-3.73	-4.57	-5.34	-5.45	-4.40	-1.87	+1.10	+4.64	+6.65	+7.08	+6.25	+4.71	+3.09	+1.69	+0.81	+0.51	+0.05	-0.51	-1.02	-1.17
INCLINATION (all days except Feb. 23).																								
320. Eskdalemuir. 1928.																								
Jan. ...	-0.13	-0.18	-0.28	-0.34	-0.58	-0.63	-0.57	-0.38	+0.14	+0.64	+0.99	+1.03	+0.65	+0.26	+0.08	+0.01	-0.02	-0.02	-0.12	-0.07	-0.01	-0.11	-0.14	+0.18
Feb. ...	-0.23	-0.26	-0.32	-0.29	-0.53	-0.59	-0.71	-0.55	+0.01	+0.56	+0.90	+1.10	+0.90	+0.46	+0.20	+0.10	+0.01	-0.12	-0.07	-0.07	-0.14	-0.11	-0.10	-0.14
Mar. ...	-0.47	-0.45	-0.57	-0.57	-0.66	-0.66	-0.51	-0.33	+0.73	+1.43	+1.72	+1.45	+0.96	+0.52	+0.23	+0.07	-0.07	-0.34	-0.47	-0.40	-0.48	-0.43	-0.48	-0.52
April ...	-0.57	-0.51	-0.53	-0.62	-0.52	-0.36	-0.05	+0.65	+1.66	+2.39	+2.51	+2.00	+1.24	+0.40	-0.06	-0.54	-0.82	-1.06	-1.19	-1.13	+0.87	-0.73	-0.57	-0.71
May ...	-0.60	-0.49	-0.67	-0.53	-0.44	+0.22	+0.88	+1.62	+2.28	+2.77	+2.49	+1.97	+1.22	+0.66	-0.22	-1.14	-1.76	-2.14	-2.03	-1.49	-0.92	-0.62	-0.41	-0.65
June ...	-0.41	-0.23	-0.24	-0.34	-0.15	+0.27	+0.56	+1.24	+1.82	+2.11	+2.22	+1.79	+1.01	+0.32	-0.45	-0.70	-1.14	-1.56	-1.59	-1.56	-1.20	-0.77	-0.54	-0.47
July ...	-0.46	+0.29	+0.23	+0.71	+0.36	+1.08	+2.26	+2.49	+2.43	+2.28	+1.66	+1.19	+0.78	-0.03	-0.49	-1.17	-1.53	-1.97	-2.08	-1.96	-1.52	-1.11	-1.11	-1.18
Aug. ...	-0.53	-0.42	-0.49	-0.52	-0.24	+0.14	+0.55	+1.13	+1.74	+2.10	+1.96	+1.34	+0.78	-0.37	-0.19	-0.54	-0.82	-1.19	-1.27	-1.05	-0.98	-0.71	-0.55	-0.55
Sept. ...	-0.70	-0.75	-0.72	-0.74	-0.57	-0.30	+0.07	+0.81	+1.52	+2.16	+2.06	+1.45	+0.88	+0.27	+0.03	-0.20	-0.39	-0.38	-0.84	-0.76	-0.82	-0.70	-0.56	-0.81
Oct. ...	-0.54	-0.14	-0.69	-0.82	-0.93	-0.89	-0.55	-0.01	+0.80	+1.52	+1.65	+1.62	+1.19	+0.74	+0.40	+0.18	-0.23	-0.29	-0.24	-0.49	-0.32	-0.67	-0.53	-0.75
Nov. ...	-0.28	-0.32	-0.52	-0.70	-0.69	-0.78	-0.67	-0.40	+0.13	+0.75	+0.85	+0.80	+0.68	+0.57	+0.43	+0.37	0.00	+0.06	+0.05	+0.11	+0.08	-0.02	-0.19	-0.32
Dec. ...	+0.07	-0.08	-0.09	-0.33	-0.56	-0.72	-0.66	-0.28	+0.10	+0.44	+0.68	+0.59	+0.47	+0.27	+0.27	+0.17	+0.09	-0.08	-0.07	-0.05	-0.05	-0.08	-0.13	+0.02
Year ...	-0.40	-0.29	-0.45	-0.42	-0.46	-0.27	+0.05	+0.52	+1.11	+1.60	+1.64	+1.36	+0.90	+0.40	+0.02	-0.28	-0.56	-0.76	-0.83	-0.74	-0.60	-0.52	-0.44	-0.57
Winter ...	-0.14	-0.21	-0.30	-0.41	-0.59	-0.68	-0.65	-0.40	+0.09	+0.60	+0.85	+0.88	+0.67	+0.39	+0.25	+0.16	+0.02	-0.04	-0.05	-0.02	-0.03	-0.08	-0.14	-0.15
Equinox ...	-0.57	-0.46	-0.63	-0.69	-0.67	-0.55	-0.26	+0.35	+1.18	+1.87	+1.99	+1.63	+1.07	+0.48	+0.15	-0.12	-0.38	-0.52	-0.69	-0.69	-0.62	-0.63	-0.53	-0.70
Summer ...	-0.50	-0.21	-0.41	-0.17	-0.12	+0.43	+1.06	+1.62	+2.07	+2.31	+2.08	+1.57	+0.95	+0.33	-0.34	-0.89	-1.31	-1.71	-1.74	-1.51	-1.15	-0.85	-0.65	-0.85
HORIZONTAL FORCE (all days except Feb. 23).																								
321. Eskdalemuir. 1928.																								
Jan. ...	+1.3	+1.9	+3.1	+3.8	+7.0	+7.8	+7.0	+4.7	+2.8	-10.1	-15.2	-15.9	-10.1	+3.3	+0.1	+1.4	+1.7	+2.1	+3.5	+2.5	+1.6	+2.7	+2.5	+2.6
Feb. ...	+2.9	+2.9	+3.5	+3.0	+6.2	+7.3	+9.2	+7.2	-0.9	-9.8	-15.6	-18.5	-14.9	-7.5	-2.3	+0.5	+2.3	+4.2	+3.8	+3.8	+4.6	+3.5	+2.4	+2.3
Mar. ...	+6.0	+5.1	+6.4	+6.8	+8.5	+8.9	+7.4	+0.6	-11.0	-23.1	-29.1	-26.2	-18.0	-9.6	-2.6	+2.4	+5.2	+9.1	+10.6	+9.1	+9.8	+8.1	+8.0	+7.6
April ...	+6.4	+6.0	+6.8	+8.6	+7.8	+6.2	+2.2	-8.6	-25.1	-37.8	-41.3	-35.3	-23.6	-8.7	+0.4	+9.6	+15.5	+19.8	+21.8	+20.6	+16.2	+13.1	+9.5	+10.0
May ...	+4.9	+3.0	+5.6	+4.5	+4.1	-5.4	-15.0	-25.8	-36.5	-45.5	-41.5	-33.0	-19.7	-8.7	+7.1	+22.8	+34.3	+40.8	+37.6	+27.8	+17.4	+10.5	+4.5	+6.2
June ...	+3.4	+0.2	+0.6	+3.1	+1.2	-4.7	-9.0	-19.1	-29.0	-34.8	-37.5	-31.2	-18.4	-5.9	+8.0	+14.1	+22.0	+28.9	+29.6	+28.7	+22.5	+13.8	+8.3	+5.3
July ...	+1.8	-8.0	-1.3	-15.1	-9.1	-21.6	-38.3	-40.6	-40.2	-36.9	-27.9	-21.1	-13.5	+1.4	+10.9	+23.2	+30.0	+37.6	+38.6	+35.9	+28.2	+23.0	+18.6	+24.5
Aug. ...	+5.4	+2.2	+2.5	+4.5	+1.2	-4.0	-9.4	-17.5	-27.0	-33.6	-32.7	-24.3	-15.1	-6.1	+4.9	+12.5	+18.2	+23.7	+24.3	+20.7	+18.5	+13.2	+9.7	+8.4
Sept. ...	+7.0	+6.2	+6.7	+8.3	+6.1	+2.9	+1.7	-12.5	-23.7	-34.4	-34.2	-25.8	-16.0	-4.1	+2.8	+9.5	+13.9	+12.9	+17.3	+15.3	+15.3	+10.9	+7.4	+9.9
Oct. ...	+3.7	-3.6	-4.7	+7.6	+10.6	+10.3	+6.1	-1.2	-13.0	-24.2	-28.6	-25.0	-17.6	-8.5	-1.8	+2.9	+10.4	+11.3	+8.5	+11.4	+6.6	+10.9	+7.5	+8.9
Nov. ...	+1.0	+2.2	+5.0	+7.2	+7.3	+8.6	+7.3	+3.9	-3.6	-12.7	-14.1	-12.7	-9.8	-6.4	-3.0	-1.4	+4.1	+4.3	+2.8	+1.6	+1.2	+1.4	+2.7	+3.1
Dec. ...	-1.8	-0.1	-0.3	+3.1	+6.6	+8.7	+8.0	+2.9	-2.5	-7.2	-10.5	-9.3	-7.2	-3.1	-2.3	-0.6	+0.8	+3.2	+3.0	+2.5	+2.6	+2.6	+1.9	-1.1
Year ...	+3.5	+1.5	+3.6	+3.8	+4.8	+2.1	-2.2	-8.8	-17.9	-25.8	-27.2	-23.2	-15.3	-5.9	+1.9	+8.1	+13.2	+16.5	+16.8	+15.0	+12.0	+9.5	+6.9	+7.3
Winter ...	+0.9	+1.7	+2.8	+4.3	+6.8	+8.1	+7.9	+4.7	-2.5	-9.9	-13.9	-14.1	-10.5	-5.1	-1.9	0.0	+2.2	+3.5	+3.3	+2.6	+2.5	+2.5	+2.4	+1.7
Equinox ...	+5.8	+3.4	+6.1	+7.8	+8.3	+7.1	+3.5	-5.4	-18.2	-29.9	-32.8	-28.1	-18.8	-7.7	-0.3	+6.1	+11.3	+13.3	+14.5	+14.1	+12.0	+10.7	+8.1	+9.1
Summer ...	+3.9	-0.7	+1.9	-0.7	-0.7	-8.9	-17.9	-25.7	-33.2	-37.7	-34.9	-27.4	-16.7											



# DIURNAL INEQUALITIES OF THE GEOGRAPHICAL COMPONENTS OF MAGNETIC FORCE.— INTERNATIONAL QUIET DAYS.

*Departures from mean of the day adjusted for non-cyclic change.*

Month and Season.	Hour. G.M.T.																							
	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.
322. Eskdalemuir.																								
NORTH COMPONENT (Quiet Days).																								
1928.																								
Jan. ...	+0.8	+0.7	+1.7	+3.2	+4.3	+4.5	+4.6	+2.9	-1.5	-6.8	-10.9	-14.9	-12.8	-4.3	-0.3	+1.4	+2.1	+3.3	+5.2	+4.3	+5.1	+3.6	+2.3	+1.1
Feb. ...	+5.9	+4.9	+5.0	+5.7	+7.1	+8.6	+7.8	+8.3	+4.0	-5.6	-14.1	-16.5	-16.2	-12.3	-7.5	-4.6	-3.4	-2.9	-0.3	+3.0	+4.3	+5.9	+5.6	+7.4
Mar. ...	+8.7	+7.0	+7.0	+7.9	+8.5	+9.6	+8.5	+5.1	-4.8	-15.2	-20.5	-23.3	-19.8	-14.5	-8.1	-1.8	+0.4	+3.5	+5.2	+6.8	+8.3	+6.9	+6.8	+7.7
April ...	+9.7	+9.6	+7.9	+8.4	+8.5	+8.6	+7.9	+1.6	-10.9	-28.3	-38.1	-37.1	-29.6	-16.9	-3.0	+4.7	+10.4	+13.7	+15.2	+14.7	+11.8	+10.5	+10.1	+10.6
May ...	+11.6	+9.7	+10.1	+9.9	+10.9	+9.7	+3.7	-4.5	-15.9	-35.9	-42.5	-42.3	-35.3	-25.7	-10.1	+0.8	+15.8	+24.0	+24.8	+20.6	+16.6	+17.0	+13.8	+13.2
June ...	+6.2	+3.2	+2.9	+4.7	+7.0	+6.4	+1.3	-7.1	-17.8	-28.4	-36.9	-33.9	-24.2	-9.0	-3.1	+5.5	+15.0	+21.2	+21.9	+17.7	+15.4	+13.2	+9.1	+9.3
July ...	+2.6	+0.8	+2.4	+7.7	+10.9	+8.7	+0.3	-7.0	-15.6	-29.4	-33.6	-35.3	-27.7	-16.7	-1.3	+6.2	+16.2	+21.0	+21.0	+19.7	+17.1	+13.9	+10.9	+7.4
Aug. ...	+8.7	+8.3	+7.4	+7.2	+6.3	+4.7	-1.8	-9.4	-18.3	-28.1	-31.0	-31.6	-23.9	-17.9	-4.8	+3.8	+9.7	+16.7	+18.6	+18.8	+18.3	+15.1	+13.4	+9.8
Sept. ...	+12.0	+9.6	+8.4	+10.2	+12.2	+10.6	+6.8	-0.3	-12.5	-27.5	-33.1	-32.1	-27.2	-17.6	-9.4	-4.2	+1.3	+6.6	+10.9	+14.7	+16.7	+16.1	+16.3	+11.7
Oct. ...	+7.9	+8.2	+11.7	+10.1	+13.2	+10.9	+4.8	+5.5	-5.3	-19.2	-27.7	-28.9	-26.2	-17.7	-9.4	-2.9	+3.1	+7.6	+8.1	+9.3	+9.6	+9.3	+9.6	+8.5
Nov. ...	+3.5	+3.9	+2.7	+4.5	+5.3	+6.9	+5.7	+3.5	-1.7	-8.5	-12.9	-11.9	-9.9	-8.7	-4.5	-1.9	+0.5	+3.7	+4.3	+3.1	+1.3	+2.5	+3.3	+4.1
Dec. ...	+0.4	+1.2	+2.7	+3.5	+6.6	+6.5	+7.1	+2.6	-0.7	-5.5	-7.6	-9.2	-7.5	-5.9	-8.2	-3.9	+0.9	+3.0	+1.6	+1.7	+2.5	+2.0	+4.5	+1.7
Year ...	+6.5	+5.6	+5.8	+6.9	+8.4	+8.0	+4.7	+0.1	-8.4	-19.9	-25.7	-26.4	-21.7	-13.9	-5.8	+0.3	+6.0	+10.1	+11.4	+11.2	+10.6	+9.7	+8.8	+7.7
Winter ...	+2.7	+2.7	+3.0	+4.3	+5.9	+6.6	+6.3	+4.3	0.0	-6.6	-11.4	-13.1	-11.6	-7.8	-5.1	-2.3	+0.1	+1.8	+2.7	+3.1	+3.3	+3.5	+3.9	+3.6
Equinox...	+9.6	+8.6	+8.7	+8.2	+10.6	+9.9	+7.0	+2.9	-8.4	-22.6	-29.8	-30.3	-25.7	-16.7	-7.5	-1.1	+3.8	+7.9	+9.9	+11.4	+11.6	+10.7	+10.7	+9.6
Summer ...	+7.3	+5.5	+5.7	+7.4	+8.8	+7.4	+0.9	-7.0	-16.9	-30.5	-36.0	-35.7	-27.8	-17.3	-4.8	+4.1	+14.2	+20.7	+21.6	+19.2	+16.9	+14.8	+11.8	+9.9
323. Eskdalemuir.																								
WEST COMPONENT (Quiet Days).																								
1928.																								
Jan. ...	-5.2	-4.5	-3.3	-3.5	-3.1	-3.5	-4.9	-7.7	-8.1	-4.7	+1.1	+7.5	+13.9	+12.3	+7.9	+6.4	+5.4	+4.0	+2.4	+0.8	-0.4	-4.4	-4.2	-4.2
Feb. ...	-6.7	-7.5	-6.5	-7.1	-4.9	-6.7	-7.0	-10.6	-15.2	-11.4	-2.4	+7.4	+15.7	+20.5	+18.3	+14.9	+10.3	+10.3	+6.6	+3.2	-2.0	-4.4	-5.8	-8.8
Mar. ...	-4.0	-5.2	-3.4	-4.8	-5.3	-6.5	-9.9	-17.1	-22.4	-17.2	-5.8	+12.0	+21.1	+21.1	+16.1	+9.9	+6.4	+4.6	+3.8	+2.6	+2.3	+1.5	+1.5	-1.1
April ...	+0.5	-2.2	-2.8	-5.6	-6.6	-12.2	-20.0	-26.8	-28.2	-19.6	-6.4	+6.9	+18.9	+21.7	+18.7	+14.3	+10.3	+9.3	+8.7	+7.1	+5.3	+3.9	+3.1	+1.7
May ...	+1.5	-0.2	-2.5	-7.2	-12.9	-22.3	-27.4	-31.1	-29.6	-19.5	-6.2	+8.5	+19.4	+21.1	+21.8	+15.7	+13.2	+12.8	+12.5	+11.0	+8.3	+7.2	+2.5	+3.4
June ...	-0.6	-2.0	-6.9	-9.1	-17.1	-23.9	-30.5	-31.9	-29.1	-20.1	-8.1	+9.9	+21.7	+25.9	+22.1	+18.1	+16.2	+15.4	+12.6	+10.2	+5.4	+7.8	+6.4	+7.6
July ...	-1.6	-5.1	-2.8	-11.4	-17.7	-27.6	-31.3	-33.1	-30.8	-19.3	-5.4	+12.8	+24.9	+28.0	+27.3	+20.1	+14.6	+10.3	+9.6	+10.8	+9.3	+9.8	+7.5	+1.1
Aug. ...	-3.0	-4.7	-8.1	-11.7	-18.9	-23.8	-26.9	-27.6	-26.1	-14.8	+1.5	+18.0	+31.1	+29.8	+28.9	+18.7	+9.2	+3.9	+5.0	+7.5	+6.8	+5.7	+2.4	-2.9
Sept. ...	-3.2	-5.4	-1.9	-6.7	-7.5	-10.5	-18.1	-23.3	-24.3	-16.8	-3.4	+14.8	+22.6	+26.6	+23.3	+15.9	+9.3	+6.7	+5.3	+2.5	-0.3	-0.2	-3.0	-2.2
Oct. ...	-0.2	-0.1	+0.5	-4.2	-5.1	-9.0	-11.9	-17.8	-20.3	-10.9	0.0	+12.5	+17.2	+20.7	+17.7	+11.6	+8.1	+6.8	+3.5	+3.2	+0.1	-6.5	-10.4	-5.3
Nov. ...	-4.4	-2.2	-1.4	-0.8	0.0	-0.3	-2.1	-4.5	-7.3	-6.1	-0.5	+5.4	+9.6	+9.4	+8.0	+7.0	+7.4	+3.1	+1.5	+0.9	-2.7	-5.7	-7.5	-6.8
Dec. ...	-5.9	-3.5	-5.1	-3.4	-3.6	-2.8	-2.1	-4.7	-4.3	-2.3	+0.7	+6.8	+11.6	+13.8	+10.7	+8.3	+5.7	+3.9	+0.3	-1.6	-3.0	-4.8	-8.3	-6.5
Year ...	-2.7	-3.5	-3.7	-6.3	-8.6	-12.4	-16.0	-19.7	-20.5	-13.6	-2.9	+10.2	+19.0	+20.9	+18.4	+13.4	+9.7	+7.6	+6.0	+4.8	+2.4	+0.8	-1.3	-2.0
Winter ...	-5.6	-4.4	-4.1	-3.7	-2.9	-3.3	-4.0	-6.9	-8.7	-6.1	-0.3	+6.8	+12.7	+14.9	+11.2	+9.1	+7.2	+5.3	+2.7	+0.8	-2.0	-4.8	-6.5	-6.6
Equinox...	-1.8	-3.2	-1.9	-5.3	-6.1	-9.6	-15.0	-21.3	-23.8	-16.1	-3.9	+11.6	+19.9	+22.5	+19.0	+12.9	+8.5	+6.8	+5.3	+3.8	+1.8	-0.3	-2.2	-1.7
Summer ...	-0.9	-3.0	-5.1	-9.9	-16.7	-24.4	-29.0	-30.9	-28.9	-18.4	-4.5	+12.3	+24.3	+26.2	+25.0	+18.2	+13.3	+10.6	+9.9	+9.9	+7.5	+7.6	+4.7	+2.3
324. Eskdalemuir.																								
VERTICAL COMPONENT (Quiet Days).																								
1928.																								
Jan. ...	-0.8	-1.1	-1.3	-1.4	-1.3	-1.1	-1.2	-1.3	-1.7	-2.2	-1.9	-1.1	-1.0	+0.5	+2.5	+1.8	+1.7	+1.7	+2.2	+2.1	+1.7	+1.8	+1.3	+0.1
Feb. ...	-0.5	-1.2	-0.7	-0.8	-1.3	-2.5	-2.8	-2.7	-2.2	-3.7	-5.2	-5.9	-5.0	-1.7	+2.0	+4.3	+6.0	+5.2	+4.7	+4.4	+3.9	+3.2	+2.1	+0.4
Mar. ...	+1.6	+0.8	+0.6	+0.4	+0.4	+0.2	+1.0	+2.4	+2.8	-1.2	-6.2	-9.2	-6.0	-3.6	-0.2	+2.8	+2.6	+1.2	+1.2	+1.6	+1.6	+1.8	+1.8	+2.0
April ...	+3.2	+3.4	+3.4	+4.0	+3.7	+4.5	+4.1	+3.5	-0.3	-5.1	-10.5	-15.5	-14.9	-9.5	-4.3	-1.9	+0.1	+2.4	+5.6	+6.0	+5.4	+5.0	+4.2	+3.4
May ...	+3.1	+3.4	+3.0	+3.7	+4.9	+5.0	+3.9	+1.3	-4.2	-10.3	-15.9	-18.0	-14.6	-8.1	-3.9	+1.6	+5.7	+7.7	+7.6	+7.0	+5.7	+4.3	+3.8	+3.3
June ...	-1.3	-0.5	-0.2	+1.0	+2.1	+2.1	+2.4	+2.0	-1.4	-8.1	-10.9	-13.0	-11.4	-6.1	-0.5	+3.7	+5.0	+5.8	+7.5	+8.1	+6.5	+4.4	+3.0	-0.1
July ...	+2.7	+3.5	+2.7	+0.8	+1.0	+1.9	+2.9	+1.7	-3.6	-5.8	-12.9	-16.1	-15.5	-11.0	-5.4	-1.1	-3.9	+8.2	+8.6	+8.0	+8.7	+7.9	+6.2	+2.6
Aug. ...	+0.4	+1.2	+2.4	+3.8	+4.7	+4.5	+3.9	+1.1	-2.8	-7.6	-11.2	-14.0	-13.1	-7.9	-0.7	+5.5	+7.4	+6.4	+5.2	+3.8	+2.1	+2.5	+1.9	+0.5
Sept. ...	-0.1	+1.1	+0.9	0.0	+1.8	+2.4	+4.2	+4.0	+3.5	-0.3	-7.7	-13.3	-12.3	-9.1	-3.1	+2.0	+4.2	+4.0	+3.8	+3.8	+3.7	+2.9	+1.5	+2.3
Oct. ...	-0.1	-3.3	-5.7	-3.9	-2.3	-1.9	+0.4	+2.2	+1.8	-1.4	-3.6	-4.1	-1.3	+0.9	+3.5	+4.3	+4.1	+1.9	+1.4	+1.6	+1.8	+2.6	+1.2	-0.1
Nov. ...	-0.9	-2.0	-1.0	-1.2	-1.3	-1.3	-1.3	-0.8	+0.6	-0.2	-0.9	-0.5	+0.3	+1.6	+2.0	+0.6	+0.5	+0.1	+0.1	+1.0	+1.8	+1.8	+0.9	-0.3
Dec. ...	-1.3	-1.7	-1.8	-1.8	-2.5	-2.4	-2.6	-1.9	-1.1	0.0	+0.5	-1.9	-2.4	-0.2	+2.3	+2.9	+2.6	+2.7	+2.5	+2.8	+2.4	+2.1	+1.1	-0.2
Year ...	+0.5	+0.3	+0.2	+0.4	+0.8	+0.9	+1.3	+0.9	-0.7	-3.8	-7.2	-9.4	-8.1	-4.5	-0.5	+2.2	+3.6	+3.9	+4.2	+4.2	+3.8	+3.4	+2.4	+1.2
Winter ...	-0.9	-1.5	-1.2	-1.3	-1.6	-1.8	-2.0	-1.7	-1.1	-1.5	-1.9	-2.3	-2.0	0.0	+2.2	+2.4	+2.7	+2.5	+2.4	+2.6	+2.5	+2.2	+1.3	0.0
Equinox...	+1.2	+0.5	-0.2	+0.1	+0.9	+1.3	+2.4	+3.0	+1.9	-2.0	-7.0	-10.5	-8.6	-5.3	-1.0	+1.8	+2.7	+2.4	+3.0	+3.3	+3.1	+3.1	+2.1	+1.9
Summer ...	+1.3	+1.9	+2.0	+2.3	+3.2	+3.4	+3.3	+1.5	-3.0	-8.0	-12.7	-15.3	-13.7	-8.3	-2.6	-2.4	+5.5	+7.0	+7.2	+6.7	+5.7	+4.8	+3.7	+1.6



**DIURNAL INEQUALITIES OF THE MAGNETIC COMPONENTS, DECLINATION, INCLINATION AND  
HORIZONTAL FORCE.—INTERNATIONAL QUIET DAYS.**

*Departures from mean of the day adjusted for non-cyclic change.*

Month and Season.	Hour.	G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.
	DECLINATION (measured positive towards the West) (Quiet Days).																									
325. Eskdalemuir.													1928.													
Jan. ...	-1.09	-0.93	-0.74	-0.87	-0.85	-0.94	-1.23	-1.70	-1.53	-0.57	+0.81	+2.30	+3.46	+2.67	+1.58	+1.21	+0.97	+0.63	+0.20	-0.08	-0.36	-1.08	-0.97	-0.90		
Feb. ...	-1.66	-1.77	-1.57	-1.72	-1.36	-1.80	-1.83	-2.57	-3.25	-1.97	+0.29	+2.38	+4.00	+4.75	+4.05	+3.23	+2.24	+2.22	+1.32	+0.47	-0.63	-1.20	-1.46	-2.15		
Mar. ...	-1.28	-1.42	-1.06	-1.38	-1.52	-1.82	-2.44	-3.68	-4.22	-2.61	-0.04	+3.67	+5.28	+4.99	+3.65	+2.08	+1.25	+0.72	+0.47	+0.16	0.00	-0.08	-0.07	-0.63		
April ...	-0.44	-0.95	-0.98	-1.57	-1.78	-2.90	-4.42	-5.44	-5.04	-2.37	+0.78	+3.40	+5.38	+5.25	+3.91	+2.61	+1.49	+1.12	+0.90	+0.61	+0.41	+0.20	+0.07	-0.24		
May ...	-0.34	-0.57	-1.05	-1.98	-3.17	-4.97	-5.66	-5.96	-5.04	-1.94	+1.07	+3.99	+5.78	+5.60	+4.89	+3.09	+1.77	+1.26	+1.16	+1.08	+0.76	+0.52	-0.25	-0.04		
June ...	-0.45	-0.57	-1.54	-2.08	-3.80	-5.12	-6.16	-5.98	-4.84	-2.48	+0.38	+3.81	+5.64	+5.66	+4.58	+3.32	+2.41	+1.92	+1.32	+1.07	+0.74	+0.84	+0.79	+1.01		
July ...	-0.46	-1.06	-0.68	-2.70	-4.13	-5.98	-6.26	-6.24	-5.31	-2.26	+0.75	+4.46	+6.47	+6.50	+5.53	+3.67	+2.04	+0.93	+0.79	+1.08	+0.93	+1.21	+0.92	-0.19		
Aug. ...	-1.08	-1.39	-2.01	-2.73	-4.11	-5.00	-5.27	-5.00	-4.22	-1.43	+1.97	+5.30	+7.50	+6.91	+6.02	+3.54	+1.32	-0.12	0.00	+0.48	+0.37	+0.32	-0.25	-1.11		
Sept. ...	-1.29	-1.60	-0.82	-1.89	-2.16	-2.67	-3.99	-4.84	-4.19	-1.87	+1.11	+4.69	+5.98	+6.28	+5.17	+3.41	+1.79	+0.98	+0.47	-0.30	-0.97	-0.91	-1.48	-1.07		
Oct. ...	-0.47	-0.47	-0.52	-1.38	-1.73	-2.39	-2.64	-3.86	-3.78	-1.14	+1.50	+4.05	+4.85	+5.08	+4.06	+2.48	+1.45	+0.95	+0.26	+0.13	-0.51	-1.80	-2.59	-1.52		
Nov. ...	-1.07	-0.65	-0.43	-0.41	-0.30	-0.43	-0.73	-1.09	-1.37	-0.77	+0.59	+1.73	+2.45	+2.35	+1.84	+1.49	+1.44	+0.43	+0.07	+0.01	-0.61	-1.28	-1.69	-1.58		
Dec. ...	-1.20	-0.76	-1.15	-0.87	-1.07	-0.90	-0.81	-1.08	-0.82	-0.16	+0.56	+1.85	+2.73	+3.08	+2.57	+1.87	+1.09	+0.62	-0.02	-0.41	-0.73	-1.06	-1.91	-1.40		
Year ...	-0.90	-1.01	-1.05	-1.63	-2.17	-2.91	-3.45	-3.94	-3.63	-1.63	+0.81	+3.47	+4.96	+4.93	+3.99	+2.67	+1.61	+0.97	+0.58	+0.36	-0.09	-0.36	-0.74	-0.82		
Winter ...	-1.25	-1.03	-0.97	-0.97	-0.89	-1.02	-1.15	-1.61	-1.74	-0.87	+0.56	+2.07	+3.16	+3.21	+2.51	+1.95	+1.43	+0.97	+0.39	0.00	-0.58	-1.15	-1.51	-1.51		
Equinox ...	-0.87	-1.11	-0.85	-1.55	-1.80	-2.45	-3.37	-4.41	-4.31	-2.00	+0.84	+3.95	+5.37	+5.89	+4.20	+2.65	+1.49	+0.94	+0.53	+0.15	-0.27	-0.65	-1.02	-0.87		
Summer ...	-0.58	-0.90	-1.32	-2.37	-3.80	-5.27	-5.84	-5.79	-4.85	-2.03	+1.04	+4.39	+6.35	+6.17	+5.25	+3.41	+1.89	+1.00	+0.82	+0.93	+0.57	+0.72	+0.30	-0.08		

INCLINATION (Quiet Days).																									
326. Eskdalemuir.													1928.												
Jan. ...	+0.02	0.00	-0.08	-0.18	-0.26	-0.26	-0.24	-0.09	+0.20	+0.47	+0.64	+0.81	+0.56	+0.07	-0.06	-0.16	-0.19	-0.24	-0.33	-0.25	-0.28	-0.11	-0.05	+0.01	
Feb. ...	-0.28	-0.22	-0.23	-0.26	-0.41	-0.50	-0.45	-0.42	-0.04	+0.47	+0.83	+0.79	+0.65	+0.40	+0.21	+0.14	+0.19	+0.14	+0.02	-0.14	-0.14	-0.23	-0.21	-0.32	
Mar. ...	-0.45	-0.34	-0.38	-0.42	-0.45	-0.50	-0.36	+0.03	+0.78	+1.26	+2.83	+1.07	+0.76	+0.48	+0.24	-0.01	-0.07	-0.28	-0.38	-0.45	-0.54	-0.43	-0.42	-0.44	
April ...	-0.56	-0.51	-0.39	-0.35	-0.34	-0.23	+0.07	+0.45	+1.20	+2.07	+2.33	+1.91	+1.22	+0.48	-0.25	-0.60	-0.85	-0.99	-1.00	-0.93	-0.73	-0.63	-0.61	-0.63	
May ...	-0.70	-0.54	-0.53	-0.42	-0.35	-0.11	+0.34	+0.87	+1.45	+2.42	+2.47	+2.15	+1.59	+1.09	+0.17	-0.29	-1.12	-1.59	-1.64	-1.36	-1.08	-1.12	-0.85	-0.84	
June ...	-0.43	-0.19	-0.07	-0.12	-0.10	-0.05	+0.52	+1.07	+1.63	+2.00	+2.27	+1.70	+0.91	-0.03	-0.20	-0.59	-1.13	-1.51	-1.46	-1.13	-0.93	-0.89	-0.63	-0.74	
July ...	-0.07	+0.13	-0.04	-0.28	-0.37	-0.03	+0.61	+1.08	+1.47	+2.11	+1.96	+1.67	+0.98	+0.32	-0.53	-0.79	-1.21	-1.34	-1.32	-1.27	-1.06	-0.88	-0.68	-0.44	
Aug. ...	-0.50	-0.42	-0.28	-0.17	+0.04	+0.23	+0.69	+1.12	+1.58	+1.90	+1.71	+1.39	+0.68	+0.44	-0.21	-0.44	-0.61	-0.99	-1.17	-1.26	-1.26	-1.02	-0.87	-0.57	
Sept. ...	-0.72	-0.50	-0.49	-0.55	-0.62	-0.45	-0.02	+0.53	+1.33	+2.07	+2.02	+1.49	+1.07	+0.45	+0.13	+0.04	-0.14	-0.45	-0.70	-0.90	-0.99	-0.97	-0.97	-0.67	
Oct. ...	-0.51	-0.61	-0.91	-0.68	-0.83	-0.60	-0.09	+0.01	+0.75	+1.40	+1.71	+1.55	+1.37	+0.81	+0.39	+0.09	-0.24	-0.57	-0.55	-0.62	-0.58	-0.43	-0.41	-0.46	
Nov. ...	-0.18	-0.27	-0.18	-0.31	-0.38	-0.48	-0.37	-0.17	+0.25	+0.65	+0.82	+0.66	+0.48	+0.44	+0.20	+0.01	-0.15	-0.30	-0.31	-0.20	0.00	-0.02	-0.06	-0.16	
Dec. ...	+0.05	-0.06	-0.13	-0.22	-0.43	-0.43	-0.40	-0.13	+0.10	+0.40	+0.50	+0.43	+0.23	+0.13	+0.41	+0.18	-0.09	-0.19	-0.05	-0.01	-0.05	+0.01	-0.12	0.00	
Year ...	-0.36	-0.29	-0.29	-0.33	-0.37	-0.28	+0.01	+0.36	+0.89	+1.43	+1.55	+1.30	+0.87	+0.42	+0.04	-0.20	-0.47	-0.69	-0.74	-0.71	-0.64	-0.56	-0.49	-0.44	
Winter ...	-0.10	-0.14	-0.15	-0.24	-0.37	-0.42	-0.39	-0.20	+0.13	+0.50	+0.70	+0.67	+0.48	+0.26	+0.19	+0.04	-0.06	-0.15	-0.17	-0.15	-0.12	-0.09	-0.11	-0.12	
Equinox ...	-0.56	-0.49	-0.54	-0.50	-0.56	-0.45	-0.13	+0.25	+1.01	+1.70	+1.88	+1.51	+1.11	+0.55	+0.13	-0.12	-0.33	-0.57	-0.66	-0.73	-0.71	-0.61	-0.60	-0.55	
Summer ...	-0.43	-0.25	-0.23	-0.25	-0.19	+0.03	+0.54	+1.03	+1.53	+2.11	+2.10	+1.73	+1.04	+0.45	-0.19	-0.53	-1.02	-1.36	-1.40	-1.25	-1.08	-0.98	-0.76	-0.65	

HORIZONTAL FORCE (Quiet Days).																									
327. Eskdalemuir													1928.												
Jan. ...	-0.6	-0.4	+0.8	+2.2	+3.4	+3.4	+3.2	+0.8	-3.6	-7.8	-10.2	-12.4	-8.7	-0.9	+1.8	+3.1	+3.5	+4.2	+5.7	+4.4	+4.8	+2.3	+1.2	+0.1	
Feb. ...	+3.9	+2.8	+3.1	+3.6	+5.6	+6.5	+5.7	+5.2	-0.2	-8.4	-14.3	-13.9	-11.5	-6.5	-2.4	-0.6	-0.5	-0.1	+1.5	+3.7	+3.6	+4.5	+3.9	+4.9	
Mar. ...	+7.3	+5.4	+5.8	+6.4	+6.8	+7.6	+5.6	+0.4	-10.5	-19.2	-21.3	-19.4	-13.6	-8.4	-3.6	+0.9	+2.0	+4.6	+6.1	+7.2	+8.6	+7.0	+7.0	+7.2	
April ...	+9.5	+8.6	+6.9	+6.6	+6.5	+5.1	+2.4	-5.5	-17.9	-32.5	-38.4	-34.0	-23.6	-10.6	+2.0	+8.3	+12.7	+15.7	+17.0	+16.0	+12.8	+11.2	+10.5	+10.6	
May ...	+11.6	+9.3	+9.0	+7.6	+7.1	+3.5	-3.6	-12.5	-23.1	-39.7	-42.6	-38.6	-28.9	-19.2	-4.0	+4.8	+18.7	+26.5	+27.2	+22.8	+18.2	+18.3	+14.0	+13.7	
June ...	+5.8	+2.6	+1.0	+2.2	+2.3	0.0	-6.7	-15.2	-24.8	-32.6	-37.7	-30.1	-17.7	-1.9	+2.8	+10.1	+18.7	+24.5	+24.4	+19.8	+16.3	+14.8	+10.5	+11.0	
July ...	+2.1	-0.6	+1.6	+4.5	+5.9	+1.1	-7.9	-15.4	-23.1	-33.4	-33.9	-30.7	-20.2	-8.8	+5.9	+11.3	+19.4	+22.9	+22.8	+21.9	+18.9	+16.0	+12.5	+7.4	
Aug. ...	+7.6	+6.8	+5.1	+3.9	+1.2	-1.7	-8.7	-16.3	-24.5	-31.0	-29.5	-25.8	-14.9	-9.5	+2.9	+8.5	+11.8	+17.1	+19.3	+20.1	+19.5	+16.0	+13.6	+8.7	
Sept. ...	+10.7	+7.8	+7.6	+8.1	+9.8	+7.5	+1.8	-6.4	-18.4	-30.9	-32.8	-27.1	-20.4	-10.1	-3.0	+0.1	+3.7	+8.1	+11.9	+14.8	+16.0	+15.5	+15.0	+10.7	
Oct. ...	+7.6	+7.9	+11.4	+8.7	+11.4	+8.2	+1.5	+0.6	-10.4	-21.4	-26.8	-24.6	-20.8	-11.7	-4.5	+0.2	+5.1	+9.1	+8.7	+9.9	+9.3	+7.3	+6.5	+6.8	
Nov. ...	+2.3	+3.2	+2.3	+4.2	+5.2	+6.6	+5.0	+2.3	-3.5	-9.8	-12.5	-10.0	-7.0	-5.9	-2.2	0.0	+2.4	+4.4	+4.6	+3.3	+0.6	+1.0	+1.3	+2.2	
Dec. ...	-1.2	+0.3	+1.3	+2.5	+5.4	+5.5	+6.3	+1.3	-1.8	-5.9	-7.2	-7.1	-4.2	-2.1	-5.2	-1.7	+2.4	+3.9	+1.7	+1.2	+1.7	+0.7	+2.1	0.0	



## DIURNAL INEQUALITIES OF THE GEOGRAPHICAL COMPONENTS OF MAGNETIC FORCE.—SELECTED DISTURBED DAYS.

*Departures from mean of the day adjusted for non-cyclic change.*

Month and Season.	Hour. G.M.T.																							
	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.
NORTH COMPONENT ( <i>Disturbed Days</i> ).																								
328. Eskdalemuir. 1928.																								
Jan. ...	+8.9	+12.4	+12.3	+12.3	+18.5	+15.4	+13.0	+15.7	+8.9	-5.8	-25.0	-32.5	-28.9	-17.0	-9.9	-5.5	-3.1	-4.2	+0.2	+2.3	+2.7	+1.6	+3.8	+4.1
Feb. ...	+7.7	+6.3	+4.2	+0.9	+9.9	+13.8	+13.3	+14.1	+5.4	-4.1	-13.3	-29.4	-26.7	-15.9	-9.2	-5.3	-2.3	+2.2	-2.7	+1.5	+7.2	+6.9	+8.7	+6.8
Mar. ...	+2.5	+3.8	+10.5	+10.9	+17.2	+12.4	+9.3	+1.0	-8.0	-22.5	-38.7	-38.6	-30.9	-18.9	-8.6	-1.6	+7.7	+13.5	+15.4	+13.7	+13.3	+15.2	+10.6	+10.9
April ...	+9.8	+4.6	+4.8	+16.6	+12.8	+1.3	+4.5	-3.7	-28.3	-41.7	-47.9	-44.1	-32.2	-17.4	-5.0	+7.4	+15.2	+22.3	+23.1	+23.5	+21.5	+22.7	+13.7	+16.5
May ...	-3.7	-4.6	-2.9	-3.8	-2.3	-26.3	-30.2	-41.1	-64.2	-78.9	-62.0	-32.2	+5.7	+14.4	+40.1	+75.8	+87.3	+87.3	+63.0	+30.5	+3.2	-15.9	-24.6	-14.6
June ...	+8.3	+6.7	+3.7	+8.5	+1.1	+1.3	+2.6	-20.8	-41.2	-42.0	-44.0	-41.6	-27.6	-12.2	+18.4	+16.4	+18.2	+26.4	+27.1	+32.3	+32.9	+11.7	+11.9	+1.9
July ...	+21.9	+23.2	+18.0	+9.5	+3.3	0.0	-4.2	-16.1	-20.9	-30.4	-38.6	-32.3	-26.5	-6.6	-10.0	+9.7	+12.7	+23.6	+22.0	+17.1	+4.9	-8.2	-6.8	-24.5
Aug. ...	+4.7	-8.8	+0.5	+13.2	-5.7	-19.5	-19.0	-21.1	-39.4	-42.1	-41.6	-35.2	-25.7	-12.2	+5.7	+18.8	+28.1	+38.9	+35.0	+36.5	+35.8	+19.3	+15.8	+18.0
Sept. ...	+1.0	+2.9	+8.5	+14.4	+3.9	-1.1	-1.0	-10.5	-34.3	-51.2	-47.5	-37.1	-28.2	-6.5	+13.7	+27.6	+44.7	+32.5	+26.8	+22.9	+17.3	+5.0	-10.7	+6.5
Oct. ...	-4.2	-40.2	+4.2	+9.3	+7.9	+9.1	+10.5	0.1	-10.0	-15.6	-20.4	-26.9	-20.3	-16.3	-9.5	-1.5	+13.8	+13.2	+20.4	+29.1	+12.3	+12.7	+10.7	+11.7
Nov. ...	+5.8	+8.1	+11.4	+13.7	+5.8	+3.9	+9.0	+1.9	-13.8	-25.5	-23.0	-21.5	-18.4	-5.3	+1.0	-5.5	+2.8	+0.1	-1.0	+7.3	+7.2	+10.7	+13.4	+12.5
Dec. ...	-1.7	+1.0	-0.5	+6.4	+10.3	+10.4	+7.9	-1.9	-11.4	-16.1	-19.6	-15.3	-16.8	-9.5	-2.4	+4.1	+0.6	+8.5	+8.8	+4.3	+9.1	+9.8	+10.9	+3.2
Year ...	+5.1	+1.3	+6.2	+9.3	+6.9	+1.7	+1.3	-6.9	-21.4	-31.3	-35.1	-32.2	-23.1	-10.3	+2.0	+11.7	+18.8	+22.0	+19.8	+18.4	+13.9	+7.6	+4.8	+9.3
Winter ...	+5.1	+6.9	+6.9	+8.3	+11.1	+10.9	+10.8	+7.4	-2.7	-12.9	-20.2	-24.7	-22.7	-11.9	-5.1	-3.1	-0.5	+1.7	+1.3	+3.9	+6.5	+7.2	+9.2	+6.6
Equinox ...	+2.3	-7.2	+7.0	+12.8	+10.5	+5.4	+5.8	-3.4	-20.1	-32.7	-38.6	-36.6	-27.9	-14.8	-2.3	+8.0	+20.3	+20.4	+21.4	+22.3	+16.1	+13.9	+6.1	+11.4
Summer ...	+7.8	+4.1	+4.8	+6.8	-0.9	-11.1	-12.7	-24.7	-41.4	-46.3	-46.6	-35.3	-18.5	-4.1	+13.5	+30.2	+36.5	+44.1	+36.8	+29.1	+19.2	+1.7	-0.9	+10.0

WEST COMPONENT ( <i>Disturbed Days</i> ).																								
329. Eskdalemuir. 1928.																								
Jan. ...	-2.4	-7.1	-6.3	-4.7	-1.7	-6.4	+1.0	-1.8	-4.6	-3.1	+0.9	+11.5	+23.1	+26.8	+20.6	+15.4	+4.0	-6.9	-0.9	-5.5	-18.1	-14.0	-12.6	-7.2
Feb. ...	-8.8	-4.3	-7.4	-2.5	-0.9	-8.0	-5.7	-7.0	-11.4	-8.9	+4.8	+11.9	+21.3	+26.8	+26.3	+19.6	+11.6	+3.3	+4.2	+2.9	-16.7	-19.2	-20.5	-11.6
Mar. ...	-31.8	-19.5	-14.0	-4.9	-6.4	-4.1	-4.7	-5.4	-9.1	-9.6	-0.1	-22.8	+38.6	+44.7	+45.8	+22.9	+18.6	+10.3	-1.1	-1.4	-11.1	-24.0	-31.3	-25.4
April ...	-15.7	-8.4	+3.3	-3.5	-10.8	-10.3	-17.7	-30.0	-29.7	-14.3	+2.8	+23.7	+41.9	+45.8	+36.9	+23.7	+12.6	+5.7	+2.3	+3.6	-7.7	-24.3	-16.8	-12.9
May ...	-40.7	-35.0	-15.7	-20.5	-20.4	-15.1	-31.1	-43.4	-40.7	-20.1	-0.4	+17.3	+31.9	+35.2	+48.5	+66.3	+62.0	+38.1	+27.3	+18.6	+9.5	-23.5	-28.8	-19.1
June ...	-12.5	-17.8	-16.4	-18.3	-17.5	-22.1	-23.0	-30.0	-24.3	-21.7	-5.7	+18.6	+26.2	+34.1	+33.3	+31.6	+22.0	+17.0	+11.5	+12.9	+1.2	-1.2	-3.1	+5.1
July ...	+5.8	+0.4	-3.4	-4.8	-19.5	-12.7	-29.7	-39.3	-37.9	-22.7	-7.9	+10.6	+19.8	+36.0	+30.8	+29.8	+25.1	+18.1	+9.9	+3.1	+4.5	-10.9	-16.1	+11.0
Aug. ...	-29.9	-27.2	-38.6	-30.3	-6.7	-11.4	-14.8	-26.1	-22.3	-7.4	+2.0	+20.9	+35.3	+38.4	+41.2	+34.1	+27.3	+23.8	+16.4	+10.3	+1.5	-6.2	-12.0	-18.7
Sept. ...	-23.7	-7.3	-23.2	-23.5	-25.5	-22.0	-23.9	-27.5	-20.0	+1.8	+18.1	+38.9	+52.4	+54.5	+51.3	+43.4	+31.6	+16.5	+3.9	-3.4	-16.9	-25.1	-45.6	-24.8
Oct. ...	-30.1	-32.2	-9.9	-17.1	-9.2	-11.1	-6.6	-9.7	-9.7	+0.2	-12.7	+20.7	+31.0	+32.3	+29.0	+21.7	+24.7	+19.8	+7.3	-2.5	-19.4	-7.7	-9.6	-24.5
Nov. ...	-12.8	-13.1	-6.5	-1.7	-0.2	+12.0	+2.3	+1.7	+2.5	+3.0	+11.0	+14.9	+26.5	+30.3	+33.0	+12.8	+19.3	-5.1	-23.3	-27.8	-21.4	-24.9	-22.1	-10.4
Dec. ...	-11.0	-9.7	-10.4	-13.8	-3.1	+16.4	+11.3	+9.3	+5.0	+4.3	+7.4	+11.4	+17.9	+16.6	+12.9	+5.1	+10.8	-5.7	-1.6	-1.2	-6.7	-8.0	-29.5	-27.7
Year ...	-17.8	-15.1	-12.4	-12.1	-10.1	-7.9	-11.9	-17.4	-16.9	-8.2	+3.8	+18.6	+30.5	+35.1	+34.1	+27.2	+22.5	+11.2	+4.7	+0.8	-8.4	-15.7	-20.7	-13.8
Winter ...	-8.7	-8.5	-7.7	-5.7	-1.5	+3.5	+2.2	+0.6	-2.1	-1.2	+6.0	+12.4	+22.2	+25.1	+23.2	+13.2	+11.5	-3.6	-5.4	-7.9	-15.7	-16.5	-21.2	-14.2
Equinox ...	-25.3	-16.8	-10.9	-12.3	-13.0	-11.9	-13.3	-18.1	-17.1	-5.5	+8.4	+26.5	+41.0	+44.3	+40.7	+27.9	+21.9	+13.1	+3.1	-0.9	-13.8	-20.3	-25.8	-21.9
Summer ...	-19.3	-19.9	-18.5	-18.5	-16.0	-15.3	-24.6	-34.7	-31.3	-18.0	-3.0	+16.9	+28.3	+35.9	+38.4	+40.5	+34.1	+24.3	+16.3	+11.2	+4.2	-10.4	-15.0	-5.4

VERTICAL COMPONENT ( <i>Disturbed Days</i> ).																								
330. Eskdalemuir. 1928.																								
Jan. ...	-4.6	-4.5	-4.5	-6.4	-13.4	-13.8	-12.7	-11.1	-10.0	-6.8	-4.7	-2.3	-0.9	+2.8	+8.6	+9.9	+11.9	+17.1	+15.0	+11.6	+9.7	+7.7	+2.3	-0.8
Feb. ...	-2.3	-2.4	-2.3	-3.8	-7.9	-6.1	-5.0	-4.3	-2.8	-5.9	-9.0	-7.2	-5.7	-4.2	+0.5	+5.8	+8.3	+10.5	+12.0	+10.7	+10.0	+7.5	+3.2	+0.4
Mar. ...	-14.3	-21.3	-27.3	-21.1	-17.3	-12.6	-8.8	-7.4	-9.2	-12.0	-14.5	-15.7	-10.5	+1.3	+17.1	+35.5	+34.3	+34.6	+28.6	+23.8	+17.4	+7.0	+1.7	-9.3
April ...	-14.1	-6.3	-6.7	-9.3	-3.4	+0.8	+1.2	+1.7	-0.9	-6.3	-8.9	-13.9	-12.6	-4.6	+2.2	+7.9	+16.3	+17.1	+17.1	+13.9	+12.2	+0.6	-0.6	-3.3
May ...	-47.5	-42.5	-48.5	-48.1	-39.5	-37.1	-33.3	-23.7	-21.5	-19.7	-7.2	+11.8	+29.6	+42.0	+52.0	+55.2	+64.6	+68.4	+51.2	+38.8	+26.8	+3.7	-28.1	-47.3
June ...	-19.5	-16.4	-15.7	-10.7	-12.6	-10.9	-15.0	-11.4	-13.9	-14.6	-14.3	-7.9	+1.4	+10.5	+21.2	+26.6	+28.1	+28.4	+26.1	+18.3	+11.8	+4.1	0.0	-13.6
July ...	-16.2	-29.8	-33.1	-33.2	-27.8	-25.3	-18.8	-13.2	-12.7	-14.2	-14.8	-14.1	-4.0	+10.4	+24.3	+30.0	+34.2	+40.1	+37.4	+31.2	+24.9	+17.4	+15.8	-8.1
Aug. ...	-27.2	-55.4	-65.8	-43.8	-38.4	-27.8	-24.2	-8.8	-0.8	+3.0	+5.8	+6.2	+8.8	+20.0	+26.8	+35.4	+40.2	+35.8	+27.8	+32.6	+28.0	+19.8	+14.2	-2.2
Sept. ...	-22.8	-39.6	-35.1	-26.7	-25.3	-23.3	-18.3	-16.1	-16.1	-19.0	-21.0	-17.4	-8.4	+11.0	+34.3	+56.9	+69.3	+57.9	+34.9	+34.9	+27.1	-1.8	-14.8	-20.4
Oct. ...	-32.0	-47.8	-42.6	-25.1	-5.9	-2.5	+0.1	+2.2	+2.0	0.0	1.0	+2.1	+8.3	+13.5	+15.9	+16.4	+21.8	+22.2	+22.0	+20.9	+16.3	+8.9	+0.5	-16.0
Nov. ...	-26.1	-16.0	-19.1	-25.4	-28.0	-27.1	-22.0	-17.9	-15.0	-11.5	-8.9	-2.8	+3.7	+17.6	+24.1	+31.8	+36.0	+57.7	+32.0	+23.5	+10.4	-1.5	+0.5	-16.0
Dec. ...	-5.0	-6.6	-14.6	-15.4	-12.4	-15.2	-14.8	-9.5	-6.9	-3.9	0.1	+3.3	+3.7	+8.3	+12.1	+13.1	+12.5	+14.7	+10.5	+10.3	+12.5	+10.6	-0.2	-7.0
Year ...	-19.3	-24.0	-26.3	-22.4	-19.3	-17.6	-14.3	-10.0	-9.0	-9.3	-8.2	-8.4	+1.1	+10.7	+19.9	+27.1	+31.5	+33.7	+26.2	+22.5	+17.3	+7.0	-0.5	-12.0
Winter ...	-9.5	-7.4	-10.1	-12.7	-15.4	-15.5	-13.6	-10.7	-8.7	-7.0	-5.7	-2.3	+0.2	+6.1	+11.3	+15.2	+17.2	+25.0	+17.4	+14.0	+10.7	+6.1	+1.4	-5.9
Equinox ...	-20.8	-28.7	-27.9	-20.6	-13.0	-9.4	-6.5	-4.9	-6.0	-9.3	-11.4	-11.2	-5.8	+5.3	+17.3	+29.2	+35.4	+32.9	+25.6	+23.4	+18.3	+3.7	-3.3	-12.2
Summer ...	-27.6	-36.0	-40.8	-34.0	-29.6	-27.8	-22.8	-14.3	-12.3	-11.4	-7.6	-1.0	+8.9	+20.7	+31.1	+36.8	+41.8	+43.2	+35.6	+30.2	+22.9	+11.3	+0.5	-17.8



DIURNAL INEQUALITIES OF THE MAGNETIC COMPONENTS, DECLINATION, INCLINATION AND HORIZONTAL FORCE.—  
SELECTED DISTURBED DAYS.

*Departures from mean of the day adjusted for non-cyclic change.*

Month and Season.	Hour. 1.	G.M.T. 2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.
DECLINATION (measured positive towards the West) ( <i>Disturbed Days</i> ).																								
<b>331. Eskdalemuir.</b>																								
<b>1928.</b>																								
Jan. ...	-0.95	-2.10	-1.93	-1.61	-1.34	-2.12	-0.51	-1.21	-1.39	-0.31	+1.54	+4.06	+6.19	+6.26	+4.64	+3.37	+0.98	-1.15	-0.19	-1.22	-3.75	-2.89	-2.72	-1.66
Feb. ...	-2.16	-1.20	-1.70	-0.55	-0.71	-2.34	-1.86	-2.17	-2.56	-1.55	+1.68	+3.97	+5.71	+6.21	+5.75	+4.19	+2.44	+0.54	+0.99	+0.49	-3.71	-4.20	-4.56	-2.69
Mar. ...	-6.47	-4.09	-3.36	-1.57	-2.21	-1.50	-1.43	-1.12	-1.38	-0.69	+2.08	+6.64	+9.39	+9.95	+9.61	+4.65	+3.29	+1.31	-1.05	-1.01	-2.93	-5.61	-6.82	-5.66
April ...	-3.67	-1.92	+0.40	-1.61	-2.85	-2.12	-3.78	-5.78	-4.38	-0.60	+3.15	+7.12	+10.09	+10.08	+7.63	+4.32	+1.69	-0.06	-0.80	-0.56	-2.70	-6.09	-4.10	-3.46
May ...	-7.92	-6.74	-2.99	-3.88	-3.95	-1.60	-4.56	-6.44	-4.65	+0.27	+3.28	-5.19	+6.06	+6.24	+7.50	+9.13	+7.64	+2.86	+2.04	+2.06	+1.71	-3.82	-4.41	-3.03
June ...	-2.95	-3.90	-3.47	-4.10	-3.55	-4.48	-4.73	-4.86	-2.61	-2.06	+1.23	+5.96	+6.71	+7.47	+5.64	+5.43	+3.41	+1.96	+0.83	+0.82	-1.54	-0.87	-1.25	+0.92
July ...	-0.02	-1.18	-1.66	-1.48	-4.06	-2.53	-5.70	-6.98	-6.44	-2.90	+0.50	+3.87	+5.39	+7.55	+6.69	+5.42	+4.34	+2.34	+0.79	-0.31	+0.63	-1.74	-2.86	+0.33
Aug. ...	-6.23	-4.95	-7.74	-6.76	-1.03	-1.22	-1.93	-4.06	-2.32	+0.81	+2.65	+6.08	+8.44	+8.34	+7.92	+5.80	+3.93	+2.65	+1.38	+0.09	-1.64	-2.27	-3.25	-4.70
Sept. ...	-4.79	-1.60	-5.09	-5.48	-5.30	-4.34	-4.73	-4.92	-2.15	+3.13	+6.18	+9.78	+11.99	+11.23	+9.51	+7.17	+3.90	+1.53	-0.66	-1.91	-4.32	-5.28	-8.53	-5.30
Oct. ...	-5.79	-4.26	-2.21	-3.91	-2.26	-2.71	-1.89	-1.94	-1.40	+0.88	+3.63	+5.60	+7.29	+7.33	+6.30	+4.41	+4.19	+3.24	+0.35	-2.06	-4.54	-2.22	-2.50	-5.53
Nov. ...	-2.87	-3.04	-1.91	-1.08	-0.35	+2.19	-0.01	+0.24	+1.24	+1.98	+3.44	+4.15	+6.29	+6.33	+6.55	+2.85	+3.72	-1.03	-4.61	-5.95	-4.67	-5.55	-5.14	-2.74
Dec. ...	-2.10	-2.00	-2.04	-3.10	-1.17	+2.71	+1.81	+1.97	+1.62	+1.72	+2.53	+3.11	+4.49	+3.83	+2.70	+0.81	+2.13	-1.60	-0.80	-0.47	-1.82	-2.13	-6.49	-5.70
Year ...	-3.83	-3.08	-2.81	-2.93	-2.40	-1.67	-2.44	-3.11	-2.20	+0.06	+2.66	+5.46	+7.34	+7.57	+6.70	+4.80	+3.47	+1.05	-0.14	-0.84	-2.44	-3.56	-4.39	-3.27
Winter ...	-2.02	-2.09	-1.89	-1.59	-0.89	+0.11	-0.14	-0.29	-0.27	+0.46	+2.30	+3.82	+5.67	+5.66	+4.91	+2.81	+2.32	-0.81	-1.15	-1.79	-3.49	-3.69	-4.73	-3.20
Equinox ...	-5.18	-2.97	-2.57	-3.14	-3.15	-2.67	-2.96	-3.44	-2.33	+0.68	+3.76	+7.29	+9.69	+9.65	+8.26	+5.14	+3.27	+1.51	-0.54	-1.39	-3.62	-4.80	-5.49	-4.99
Summer ...	-4.28	-4.19	-3.97	-4.05	-3.15	-2.46	-4.23	-5.59	-4.01	-0.97	+1.91	+5.27	+6.65	+7.40	+6.94	+6.45	+4.83	+2.45	+1.26	+0.67	-0.21	-2.17	-2.94	-1.62

<b>332. Eskdalemuir.</b>																								
<b>1928.</b>																								
Jan. ...	-0.65	-0.79	-0.80	-0.88	-1.50	-1.23	-1.18	-1.27	-0.74	+0.26	+1.50	+1.85	+1.45	+0.70	+0.49	+0.33	+0.43	+0.82	+0.38	+0.24	+0.39	+0.34	+0.04	-0.16
Feb. ...	-0.40	-0.40	-0.20	-0.11	-0.83	-0.91	-0.89	-0.90	-0.22	+0.28	+0.55	+1.52	+1.22	+0.45	+0.14	+0.14	+0.15	+0.06	+0.40	+0.12	+0.08	+0.08	-0.13	-0.22
Mar. ...	+0.04	-0.43	-1.11	-1.15	-1.43	-1.05	-0.74	-0.15	+0.45	+1.34	+2.15	+1.71	+1.06	+0.47	+0.18	+0.58	+0.03	-0.20	-0.27	-0.27	-0.23	-0.38	-0.10	-0.49
April ...	-0.71	-0.31	-0.54	-1.25	-0.73	+0.12	+0.05	+0.82	+2.34	+2.80	+2.84	+2.10	+1.04	+0.21	-0.27	-0.70	-0.80	-1.12	-1.11	-1.24	-0.96	-1.03	-0.61	-0.93
May ...	-0.23	-0.14	-0.74	-0.59	-0.47	+1.05	+1.68	+2.84	+4.35	+4.99	+3.86	+2.08	-0.20	-0.51	-2.16	-4.72	-5.15	-4.64	-3.30	-1.34	+0.29	+1.54	+1.41	+0.11
June ...	-0.80	-0.53	-0.34	-0.50	-0.07	+0.04	-0.14	+1.59	+2.76	+2.75	+2.60	+2.18	+1.37	+0.46	-1.25	-0.96	-1.30	-1.32	-1.87	-1.87	-0.64	-0.72	-0.55	-0.55
July ...	-1.93	-2.26	-1.93	-1.36	-0.56	-0.41	+0.33	+1.41	+1.71	+2.02	+2.28	+1.56	+1.27	+0.05	-0.71	-0.41	-0.42	-0.86	-0.67	-0.39	+0.22	+1.16	+1.12	-2.64
Aug. ...	-0.46	-0.33	-0.99	-1.41	-0.47	+0.52	+0.89	+1.61	+2.93	+2.94	+2.82	+2.07	+1.27	+0.61	-0.43	-0.94	-1.30	-2.06	-1.87	-1.74	-1.66	-0.65	-0.46	-0.90
Sept. ...	-0.22	-1.05	-1.02	-1.19	-0.44	-0.12	+0.03	+0.77	+2.18	+2.82	+2.25	+1.29	+0.70	+0.26	-0.94	-1.14	-1.74	-0.96	-0.94	-0.56	-0.15	+0.07	+1.13	-0.50
Oct. ...	0.00	+1.99	-1.16	-0.93	-0.50	-0.46	-0.56	+0.24	+0.87	+1.01	+1.08	+1.43	+0.98	+0.83	+0.50	+0.13	-0.79	-0.65	-0.91	-1.33	-0.06	-0.47	-0.51	-0.72
Nov. ...	-0.80	-0.70	-1.10	-1.40	-1.07	-1.14	-1.17	-0.60	+0.48	+1.32	+1.08	+1.07	+0.83	+0.25	-0.04	+0.93	+0.38	+1.52	+1.27	+0.60	+0.17	-0.29	-0.47	-1.03
Dec. ...	+0.18	-0.06	-0.15	-0.56	-0.93	-1.34	-1.08	-0.28	+0.48	+0.88	+1.14	+0.88	+0.87	+0.53	+0.23	-0.03	+0.08	-0.09	-0.28	0.00	-0.16	-0.23	-0.20	+0.10
Year ...	-0.50	-0.42	-0.84	-0.95	-0.75	-0.41	-0.23	+0.51	+1.47	+1.95	+2.01	+1.65	+0.99	+0.32	-0.24	-0.57	-0.83	-0.79	-0.72	-0.65	-0.33	-0.04	+0.04	-0.66
Winter ...	-0.42	-0.49	-0.56	-0.76	-1.08	-1.15	-1.08	-0.76	0.00	+0.69	+1.07	+1.33	+1.09	+0.48	+0.21	+0.34	+0.26	+0.58	+0.44	+0.24	+0.12	-0.03	-0.19	-0.33
Equinox ...	-0.22	+0.05	-0.96	-1.18	-0.77	-0.38	-0.31	+0.42	+1.46	+1.99	+2.08	+1.63	+0.95	+0.31	-0.13	-0.28	-0.83	-0.73	-0.81	-0.85	-0.35	-0.45	-0.02	-0.66
Summer ...	-0.85	-0.81	-1.00	-0.97	-0.39	+0.30	+0.69	+1.86	+2.94	+3.17	+2.89	+1.97	+0.93	+0.15	-0.78	-1.76	-1.93	-2.21	-1.79	-1.33	-0.75	+0.35	+0.34	-0.99

333. Eskdalemuir.										HORIZONTAL FORCE ( <i>Disturbed Days</i> ).										1928.				
Jan. ...	+ 7.9	+10.1	+10.2	+10.6	+17.4	+13.2	+12.8	+14.7	+ 7.3	- 6.4	-23.9	-28.3	-21.8	- 9.3	- 4.1	- 1.2	- 2.0	- 5.9	- 0.1	+ 0.8	- 2.2	- 2.1	+ 0.3	+ 2.1
Feb. ...	+ 5.1	+ 5.0	+ 2.1	+ 0.2	+ 9.4	+11.2	+11.3	+11.8	+ 2.2	- 6.3	-11.5	-25.2	-20.2	- 8.3	- 2.0	0.0	+ 0.9	+ 3.0	- 1.5	+ 2.2	+ 2.6	+ 1.6	+ 3.0	+ 3.5
Mar. ...	- 5.9	- 1.5	+ 6.4	+ 9.2	+14.9	+10.9	+ 7.7	- 0.5	-10.1	-24.3	-37.3	-31.3	-19.7	- 6.5	+ 3.7	+ 4.5	+12.3	+15.8	+14.6	+12.8	+ 9.9	+ 8.3	+ 2.0	+ 3.8
April ...	+ 5.3	+ 2.2	+ 5.5	+15.1	+ 9.5	- 1.5	- 0.3	-11.5	-35.1	-44.0	-45.5	-36.3	-20.1	- 4.8	+ 4.9	+13.4	+18.0	+23.0	+22.9	+23.6	+18.7	+15.5	+ 8.8	+12.6
May ...	-14.2	-13.6	- 6.9	- 9.1	- 7.6	-29.3	-37.3	-51.0	-72.6	-81.4	-60.0	-26.5	+13.9	+23.1	+51.4	+90.5	+100.5	+94.3	+68.0	+34.3	+ 5.6	-21.5	-31.3	-19.1
June ...	+ 4.7	+ 1.8	- 0.7	+ 3.4	- 3.6	- 4.6	- 3.5	-27.9	-46.1	-46.2	-43.9	-35.3	-19.8	- 2.9	+26.5	+24.1	+23.3	+29.9	+29.2	+34.6	+32.1	+11.0	+10.7	+ 3.2
July ...	+22.7	+22.5	+16.5	+ 7.9	- 1.9	- 3.3	-11.8	-25.8	-30.1	-35.2	-39.4	-28.4	-20.4	+ 3.1	- 1.6	+17.2	+18.8	+27.5	+23.8	+17.3	+ 5.9	-10.7	-10.8	+36.2
Aug. ...	- 3.3	-15.6	- 9.6	+ 4.8	- 7.3	-21.8	-22.2	-27.2	-43.9	-42.6	-39.7	-28.5	-15.6	- 1.7	+16.3	+27.0	+34.2	+43.8	+38.1	+37.9	+34.9	+17.0	+12.1	+12.5
Sept. ...	- 5.2	+ 0.9	+ 2.2	+ 7.8	- 2.9	- 6.8	- 7.2	-17.3	-38.3	-48.9	-41.2	-25.6	-13.5	+ 7.9	+26.7	+38.0	+51.4	+35.7	+26.9	+21.2	+12.3	- 1.7	-22.3	- 0.1
Oct. ...	-11.9	-47.2	+ 1.5	+ 4.6	+ 5.3	+ 5.9	+ 8.4	- 2.7	-12.2	-15.0	-16.4	-20.5	-11.5	- 7.3	- 1.6	+ 4.1	+19.8	+17.9	+21.6	+27.5	+ 6.8	+10.3	+ 7.8	+ 4.8
Nov. ...	+ 2.2	+ 4.4	+ 9.3	+12.8	+ 5.5	+ 6.9	+ 9.3	+ 2.3	-12.7	-23.9	-19.4	-16.9	-10.9	+ 2.7	+ 9.5	- 2.0	+ 7.7	- 1.3	- 7.1	- 0.2	+ 1.3	+ 3.8	+ 7.1	+ 9.3
Dec. ...	- 4.5	- 1.6	- 3.2	+ 2.6	+ 9.2	+14.3	+10.6	+ 0.5	- 9.7	-14.5	-17.0	-11.8	-11.6	- 4.9	+ 1.0	+ 5.3	+ 3.4	+ 6.7	+ 8.1	+ 3.9	+ 7.0	+ 7.3	+ 2.8	- 4.1
Year ...	+ 0.2	- 2.7	+ 2.8	+ 5.8	+ 4.0	- 0.4	- 1.9	-11.2	-25.1	-32.4	-32.9	-26.4	-14.3	- 0.7	+10.9	+18.4	+24.0	+24.2	+20.4	+18.0	+11.2	+ 3.2	- 0.8	+ 5.4
Winter...	+ 2.7	+ 4.5	+ 4.6	+ 6.5	+10.4	+11.4	+11.0	+ 7.4	- 3.2	-12.8	-17.9	-20.5	-16.1	- 4.9	+ 1.1	+ 0.5	+ 2.5	+ 0.6	- 0.1	+ 1.7	+ 2.2	+ 2.7	+ 3.3	+ 2.7
Equinox	- 4.4	-11.4	+ 3.9	+ 9.2	+ 6.7	+ 2.1	+ 2.1	- 8.0	-23.9	-33.1	-35.1	-28.4	-16.2	- 2.7	+ 8.4	+15.0	+25.4	+23.1	+21.5	+21.3	+11.9	+ 8.1	- 0.9	+ 5.3
Summer	+ 2.5	- 1.2	- 0.2	+ 1.7	- 5.1	-14.7	-18.7	-33.0	-48.2	-51.3	-45.7	-29.7	-10.5	+ 5.4	+23.1	+39.7	+44.2	+48.9	+39.8	+31.0	+19.6	- 1.1	- 4.8	+ 8.2



## RANGE OF MEAN DIURNAL INEQUALITIES FOR THE MONTHS, YEAR, AND SEASONS OF 1928.

NOTE.—The ranges are those shown in Tables 316 to 333, in the preparation of which the non-cyclic change has been eliminated.

## 334. Eskdalemuir.

1928.

Month and Season.	" All Days."			Quiet Days.			Disturbed Days.			" All Days."			Quiet Days.			Disturbed Days.		
	N.	W.	V.	N.	W.	V.	N.	W.	V.	D.	I.	H.	D.	I.	H.	D.	I.	H.
January ...	27.8	26.8	8.8	20.1	22.0	4.7	51.0	44.9	30.9	5.94	1.66	23.7	5.16	1.14	18.1	10.01	3.35	45.7
February ...	32.8	35.2	13.6	25.1	35.7	11.9	43.5	47.3	21.0	8.10	1.81	27.7	8.00	1.33	20.8	10.77	2.43	37.0
March ...	42.5	53.5	23.9	32.9	43.5	12.0	55.9	77.6	62.8	11.37	2.38	39.7	9.50	1.82	29.9	16.77	3.58	53.1
April ...	62.6	66.4	26.6	53.3	49.9	21.5	71.4	75.8	31.2	14.11	3.70	63.1	10.82	3.32	55.3	16.18	4.09	69.1
May ...	80.1	62.1	36.5	67.3	52.9	25.7	166.2	109.7	116.9	12.12	4.91	86.3	11.74	4.11	69.8	17.05	10.14	181.9
June ...	63.8	63.9	28.6	58.8	57.8	21.1	76.9	64.1	47.9	12.82	3.81	67.1	11.82	3.78	62.2	12.33	4.63	80.8
July ...	67.9	73.2	37.9	56.3	61.1	24.8	73.1	75.3	73.3	13.47	4.57	79.2	12.76	3.45	56.8	14.53	4.92	66.9
August ...	57.4	58.9	29.3	50.4	58.7	21.5	81.0	79.8	106.0	12.06	3.37	57.9	12.77	3.16	51.1	16.18	5.00	87.7
September ...	54.0	60.4	35.0	49.8	50.9	17.5	95.9	100.1	108.9	12.85	3.00	51.7	10.90	3.06	48.8	20.52	4.56	100.3
October ...	44.3	44.4	34.3	42.1	41.0	10.0	69.3	64.5	70.0	10.12	2.58	38.0	8.94	2.62	38.2	13.12	3.32	74.7
November ...	25.3	32.1	22.5	19.8	17.1	4.0	39.2	60.8	85.7	7.42	1.63	22.7	4.14	1.30	19.1	12.50	3.01	36.7
December ...	20.3	25.0	11.0	16.3	22.1	5.5	30.5	47.4	30.1	5.85	1.40	19.2	4.99	0.99	13.5	10.98	2.48	31.3
Year ...	43.9	47.2	22.3	37.8	41.4	13.6	57.2	55.8	60.0	9.90	2.47	44.0	8.90	2.29	38.2	11.96	2.96	57.1
Winter ...	26.1	29.5	13.0	19.7	22.7	5.0	35.8	46.3	40.5	6.73	1.56	22.2	4.95	1.12	16.6	10.40	2.48	31.9
Equinox ...	48.8	55.6	25.8	41.9	46.3	13.8	60.9	70.1	64.1	11.81	2.69	47.3	9.80	2.56	41.8	15.18	3.21	60.5
Summer ...	65.5	63.8	31.1	57.6	57.1	22.5	92.4	75.2	84.0	12.53	4.05	70.4	12.19	3.51	59.3	12.99	5.38	100.2

## NON-CYCLIC CHANGE (24h.—0h.).

## 335. Eskdalemuir.

1928.

Month.	" All " Days.			Quiet Days.			Disturbed Days.		
	N.	W.	V.	N.	W.	V.	N.	W.	V.
January ...	+0.5	-0.3	-1.0	-1.6	+0.2	-1.6	+1.2	-0.6	-3.8
February ...	0.0	-0.9	-0.5	+3.4	-0.4	-2.2	-1.6	+3.0	+2.8
March ...	+0.3	-0.2	-0.3	+1.4	-0.6	0.0	-1.4	+12.4	-0.4
April ...	+0.2	-0.3	0.0	+2.2	+0.2	-0.2	-10.0	+16.0	+5.4
May ...	-0.4	-0.1	+0.7	+4.6	+2.6	-1.4	-6.8	-11.2	-19.0
June ...	-0.2	+0.1	+0.2	+3.6	-0.2	+1.0	-9.4	+1.0	-3.0
July ...	-1.1	-0.3	+0.2	+5.4	+1.8	-3.8	+49.2	+14.8	-25.6
August ...	+0.2	-1.0	+0.9	+1.2	-2.2	+0.6	-6.8	+1.2	+19.2
September ...	+0.1	+0.4	+0.1	+4.4	+0.4	-0.4	-20.8	-15.8	+14.8
October ...	-0.3	-0.7	-0.6	+7.8	+2.8	+0.4	+0.6	+3.0	+0.6
November ...	+0.6	+0.3	-0.4	+4.8	+5.2	-0.8	-12.0	+5.8	-2.8
Dec. ...	+0.2	-0.1	-0.8	+3.4	-0.6	-3.4	-7.4	+7.8	-5.0
Year, 1928...	—	—	—	—	—	—	—	—	—

MEAN VALUE OF THE SQUARES OF THE ABSOLUTE DAILY RANGES.  
(Unit, 100 $\gamma^2$ .)

## 336. Eskdalemuir.

1928.

$R_N^2$	$R_W^2$	$R_V^2$	$R_N^2 + R_W^2$	$R_N^2 + R_W^2 + R_V^2$	Mean Character Figure.
28.2	30.9	6.2	59.2	65.3	0.61
40.7	56.6	7.2	97.3	104.5	0.79
54.6	69.9	26.2	124.6	150.8	0.74
78.8	86.0	18.6	164.7	183.4	0.67
244.7	143.3	115.5	388.0	503.6	0.90
143.7	93.1	30.2	236.8	267.0	0.83
782.9	266.4	239.0	1049.3	1288.3	0.84
108.1	90.1	76.7	198.2	274.8	0.81
122.3	125.1	76.4	247.5	323.9	1.00
216.1	182.3	144.9	398.4	543.3	0.94
96.2	89.6	52.4	185.8	238.3	0.73
36.8	57.2	11.3	93.9	105.2	0.77
162.8	107.5	67.1	270.3	337.4	0.80

## MEAN MONTHLY AND ANNUAL VALUES OF TERRESTRIAL MAGNETIC ELEMENTS.

(All days except those noted in monthly tables.)

## 337. Eskdalemuir.

1928.

Month.	North.	West.	Vertical.	Total.	Declination. (West).	Inclination. (North).	Horizontal. Force.
January ...	16042	4380	44869	47851	15 16.3	69 39.9	16629
February ...	16043	4376	44879	47861	15 15.4	69 40.1	16629
March ...	16043	4371	44889	47870	15 14.4	69 40.4	16628
April ...	16046	4364	44887	47868	15 12.9	69 40.3	16629
May ...	16044	4358	44887	47867	15 11.8	69 40.6	16625
June ...	16049	4354	44893	47874	15 10.7	69 40.5	16629
July ...	16031	4343	44901	47874	15 9.5	69 42.0	16609
August ...	16038	4343	44909	47884	15 9.1	69 41.8	16616
September ...	16036	4336	44911	47885	15 7.8	69 42.1	16612
October ...	16031	4331	44914	47885	15 7.1	69 42.6	16606
November ...	16029	4327	44904	47875	15 6.4	69 42.5	16603
December ...	16035	4321	44890	47863	15 4.9	69 41.9	16607
Year ...	16039	4350	44894	47871	15 10.5	69 41.2	16619



(Longitude of Eskdalemuir Observatory,  $3^{\circ} 12' \text{ W.}$ )

**1928.**

QQ

**1928.**

Month and Season.	North Component.								West Component.								Vertical Component.							
	c <sub>1</sub> .	α <sub>1</sub> .	c <sub>2</sub> .	α <sub>2</sub> .	c <sub>3</sub> .	α <sub>3</sub> .	c <sub>4</sub> .	α <sub>4</sub> .	c <sub>1</sub> .	α <sub>1</sub> .	c <sub>2</sub> .	α <sub>2</sub> .	c <sub>3</sub> .	α <sub>3</sub> .	c <sub>4</sub> .	α <sub>4</sub> .	c <sub>1</sub> .	α <sub>1</sub> .	c <sub>2</sub> .	α <sub>2</sub> .	c <sub>3</sub> .	α <sub>3</sub> .	c <sub>4</sub> .	α <sub>4</sub> .
	" All " Days.																							
Jan. ...	γ 8·0	° 77	γ 6·3	° 267	γ 3·7	° 125	γ 1·1	° 313	γ 7·8	° 239	γ 6·6	° 11	γ 2·7	° 223	γ 2·0	° 33	γ 4·1	° 178	γ 0·7	° 237	γ 0·3	° 68	γ 0·6	° 267
Feb. ...	10·3	73	7·4	253	4·0	106	1·3	301	12·2	231	8·1	359	2·9	220	2·7	19	5·9	160	2·6	245	1·0	90	0·8	263
March	16·1	88	10·5	267	4·3	116	1·2	344	14·7	213	11·5	17	7·1	212	3·3	28	6·7	157	5·9	256	3·1	86	1·2	249
April...	22·4	106	15·2	279	5·1	125	2·1	5	19·5	203	13·5	21	8·8	236	1·8	50	6·2	136	8·2	252	2·0	101	1·1	255
May ...	26·6	131	18·5	293	1·7	51	2·2	82	22·6	198	12·9	18	4·6	245	0·9	92	14·0	185	9·3	272	1·0	99	0·5	329
June ...	22·1	125	14·3	279	1·9	154	1·2	351	24·5	193	12·5	22	3·9	233	1·5	27	9·9	165	8·2	258	1·2	134	0·8	267
July ...	31·4	144	7·0	286	0·8	329	3·3	147	28·8	190	12·6	34	5·4	226	1·4	103	17·2	177	5·6	253	0·5	88	1·9	219
Aug. ...	21·4	121	11·8	286	1·7	132	0·8	60	21·8	208	10·7	37	5·9	227	1·4	31	11·0	173	7·2	248	3·0	105	1·2	209
Sept. ...	20·9	107	11·8	288	3·7	146	1·3	358	21·0	223	13·1	33	6·1	231	2·4	38	11·0	187	8·5	268	3·3	93	1·4	219
October	16·3	95	10·9	270	5·0	137	0·7	116	16·1	234	9·8	15	4·8	227	1·8	84	13·2	200	5·3	261	2·1	113	0·7	162
Nov. ...	9·8	77	6·2	271	2·3	124	0·5	57	12·0	254	6·2	0	2·3	215	1·2	50	10·1	192	2·7	273	0·4	104	0·8	269
Dec. ...	6·3	77	5·2	260	2·3	156	0·2	56	8·9	255	3·8	345	2·0	219	1·8	43	5·5	186	0·9	242	0·1	68	0·7	258
Year ...	16·3	111	10·2	278	2·7	126	0·5	35	16·4	213	9·9	20	4·7	227	1·7	44	9·2	178	5·4	259	1·5	99	0·8	240
Winter	8·6	76	6·2	262	2·9	124	0·6	325	10·1	245	6·1	1	2·5	219	1·9	33	6·2	181	1·7	255	0·5	88	0·7	264
Equinox	18·8	100	12·0	277	4·4	131	1·1	6	17·5	218	11·9	22	6·6	227	2·2	45	8·5	178	6·9	260	2·6	96	0·9	229
Summer	25·1	131	12·8	286	0·8	110	1·1	101	24·3	197	12·1	27	4·9	232	1·1	60	12·9	176	7·5	259	1·4	108	0·9	233
Quiet Days.																								
Year	14·2	101	9·2	274	3·0	123	0·7	353	13·3	197	8·5	28	4·4	231	1·6	46	3·9	115	3·4	261	1·6	95	0·8	267
Winter	6·5	75	4·7	262	2·1	120	0·5	333	7·9	224	4·7	2	2·5	226	1·5	43	2·4	165	0·8	257	0·4	115	0·7	243
Equinox	16·5	93	9·9	275	3·9	124	1·3	334	12·6	196	9·7	24	5·6	229	2·3	55	3·4	100	3·4	251	2·3	92	1·1	274
Summer	21·0	114	13·3	279	3·1	126	0·7	41	20·5	187	11·9	41	5·3	236	0·9	29	6·8	107	6·0	267	2·0	96	0·7	275
Disturbed Days.																								
Year	18·6	123	14·1	292	3·2	125	1·0	10	22·3	230	11·6	3	4·3	219	2·1	50	25·1	195	8·4	255	2·0	115	1·1	217
Winter	12·2	76	7·5	269	4·6	127	1·5	288	14·9	264	8·2	1	3·2	181	2·7	20	16·2	186	3·2	268	2·8	10	0·7	268
Equinox	19·9	118	16·2	280	4·2	146	0·1	175	27·3	237	13·7	8	5·8	236	2·5	25	22·7	195	13·1	257	3·8	117	1·7	194
Summer	29·9	145	20·6	309	2·0	69	3·3	36	29·7	207	12·9	359	5·0	220	3·0	103	36·6	198	9·1	248	3·1	141	1·1	222



340. MEAN VALUES, FOR THE YEARS SPECIFIED, OF THE MAGNETIC ELEMENTS AT OBSERVATORIES  
IN COMMUNICATION WITH THE ROYAL OBSERVATORY, GREENWICH.

Place.	Latitude.	Longitude.	1928.				1927.				1926.			
			Declina- tion.	Inclina- tion.	Hori- zontal Force.	Vertical Force.	Declina- tion.	Inclina- tion.	Hori- zontal Force.	Vertical Force.	Declina- tion.	Inclina- tion.	Hori- zontal Force.	Vertical Force.
	N.	°	°	N.	γ	γ	°	N.	γ	γ	°	N.	γ	γ
Godhavn, Greenland ...	69 15	53 30W.	...	...	...	...	58 28.4W.	81 34.7	08259	55788	...	...	...	...
Sodankylä, Finland ...	67 22	26 39E.	2 20.5E.	75 57.8	12314	49250	2 10.5E.	75 54.7	12357	49239	...	...	...	...
Lerwick, Shetland Islands ...	60 8	1 11W.	14 37.1W.	72 39.4	14585	46702	14 49.9W.	72 38.1	14607	46713	15 2.8W.	72 37.1	14618	46699
Pavlovsk, Leningrad, U.S.S.R.	59 41	30 29E.	3 50.2E.	71 38.6	15630	47106	3 42.6E.	71 34.8	15675	47068	3 34.7E.	71 31.5	15715	47035
Sitka, Alaska ...	57 3	135 20W.	30 21.2E.	74 22.8	15476	55352	30 23.5E.	74 22.6	15491	55394	30 25.2E.	74 22.9	15501	55447
†Swerdlovsk, U.S.S.R. ...	56 50	60 38E.	10 58.5E.	72 16.7	16335	51117	10 59.5E.	72 12.2	16389	51053	11 1.0E.	72 8.5	16443	51033
Copenhagen (in Rude Skov), Denmark.	55 51	12 27E.	6 22.0W.	69 13.9	16948	44691	6 33.4W.	69 11.6	16974	44670	6 45.2W.	69 10.0	16992	44654
Kasan (Sajmistsche), U.S.S.R.	55 50	48 51E.	9 4.5E.	70 27.4	17091	48148	9 1.9E.	70 22.5	17146	48086	9 0.6E.	70 18.3	17191	48028
Eskdalemuir, Scotland ...	55 19	3 12W.	15 10.5W.	69 41.2	16619	44894	15 22.7W.	69 40.2	16631	44887	15 35.3W.	69 40.3	16648	44939
Meanook, Alberta ...	54 37	113 21W.	...	...	...	...	26 56.3E.	77 53.7	12817	59760	27 4.2E.	77 53.8	12832	59844
Stonyhurst, Lancs., England	53 51	2 28W.	14 14.5W.	*68 46.5	17209	*44310	14 26.5W.	*68 43.5	17231	*44251	14 39.7W.	*68 44.6	17242	*44331
†Irkutsk (Zouy), Siberia ...	52 28	104 2E.	...	...	...	...	...	...	...	...	0 42.9E.	71 16.9	19023	56141
Potsdam, Prussia ...	52 23	13 4E.	...	...	...	...	6 9.1W.	66 44.0	18489	43002	6 20.6W.	66 42.6	18503	42982
Seddin, Prussia ...	52 17	13 1E.	5 59.5W.	66 42.8	18504	42995	6 10.9W.	66 41.1	18526	42987	6 21.9W.	66 39.5	18541	42967
De Bilt, Utrecht, Holland ...	52 6	5 11E.	9 48.8W.	66 57.4	18313	43053	10 1.0W.	66 55.9	18330	43041	10 13.1W.	66 55.5	18337	43040
Valentia, Cahirciveen, Ireland	51 56	10 15W.	*17 48.0W.	*67 59.3	*17826	*44096	*17 59.5W.	*67 59.3	*17833	*44112	*18 10.8W.	*68 0.1	*17835	*44147
Bochum, Prussia ...	51 29	7 14E.	*8 57.4W.	...	...	...	*9 8.5W.	...	...	...	*9 19.7W.	...	...	...
Abinger, Surrey, England ...	51 11	0 23W.	12 47.0W.	66 37.3	18564	42941	12 58.4W.	66 36.2	18575	42932	13 10.4W.	66 36.3	18581	42947
Uccle, Belgium ...	50 48	4 21E.	*10 13.4W.	...	...	...	10 26.9W.	...	...	...	*5 21 W.	*64 56	...	...
Prague, Czecho-Slovakia ...	50 5	14 25E.	...	...	...	...	...	...	...	...	11 43.9W.	64 39.2	19649	41482
Val Joyeux, near Paris, France	48 49	2 1E.	11 20.4W.	64 39.9	19648	41500	11 32.3W.	64 39.8	19656	41515	*6 54.7W.	...	...	...
Munich, Bavaria ...	48 9	11 37E.	...	...	...	...	...	...	...	...	...	...	...	...
Maisach, Bavaria ...	48 12	11 15E.	*6 41.6W.	*63 35.2	*20298	*40867	*6 52.5W.	*63 32.5	*20314	*40817	...	...	...	...
Stara Dala, Czecho-Slovakia	47 53	18 11E.	3 36.7W.	...	...	...	3 47.0W.	...	...	...	3 58.3W.	...	...	...
Nantes, France ...	47 15	1 34W.	...	...	...	...	12 35.6W.	63 41.0	20237	40917	12 47.2W.	63 40.3	20227	40876
Agincourt, Ontario ...	43 47	79 16W.	7 20.3W.	74 44.9	15628	57315	7 16.4W.	74 44.3	15664	57412	7 13.4W.	74 44.6	15692	57527
Karsani, U.S.S.R. ...	41 50	44 42E.	4 18.8E.	58 13.5	24646	39788	4 15.5E.	58 8.1	24673	39693	4 12.3E.	58 3.0	24694	39595
Ebro, Tortosa, Spain ...	40 49	0 30E.	10 37.7W.	57 26.8	23386	36633	10 48.8W.	57 26.5	23380	36617	10 59.1W.	57 27.7	23362	36617
Coimbra, Portugal ...	40 12	8 25W.	*14 10.3W.	*58 2.5	*23172	*37142	*14 18.8W.	*58 8.1	*23166	*37273	*14 28.5W.	*58 12.4	*23144	*37340
Cheltenham, Maryland ...	38 44	76 50W.	6 49.0W.	71 4.4	18706	54551	6 45.6W.	71 2.9	18765	54646	6 42.8W.	71 2.2	18809	54740
†San Miguel, Azores ...	37 46	25 39W.	18 40.5W.	*59 52.6	*23324	*40197	18 44.1W.	*59 57.4	*23278	*40245	18 50.9W.	*60 0.4	*23247	*40275
San Fernando, Spain ...	36 28	6 12W.	12 48.8W.	*53 32.2	25039	33882	12 57.1W.	*53 37.7	25051	34013	13 7.7W.	*53 38.6	25020	33991
Tsingtao, China ...	36 4	120 19E.	*4 26.1W.	*52 6.7	*30839	*39713	*4 29.8W.	*52 7.7	*30824	*39627	*4 27.0W.	*52 11.9	*30823	*39750
Tucson, Arizona ...	32 15	110 50W.	13 44.7E.	59 33.5	26536	45153	13 44.1E.	59 32.5	26585	45210	13 44.6E.	59 32.3	26632	45280
Lukiapang, Shanghai, China	31 19	121 2E.	*3 37.4W.	*45 25.4	*33243	*33737	*3 34.8W.	*45 26.9	*33265	*33790	*3 32.6W.	*45 27.9	*33211	*33754
Dehra Dun, United Provinces, India.	30 19	78 3E.	1 18.5E.	45 31.8	32940	33554	1 22.1E.	45 29.2	32931	33494	1 26.3E.	45 26.1	32933	33436
Helwan, Egypt ...	29 52	31 21E.	*0 24.0W.	*41 36.3	*30039	*26775	*0 29.8W.	*41 33.6	*30006	*26603	0 37.7W.	41 30.4	29998	26545
Hongkong, China ...	22 18	114 10E.	*0 43.1W.	*30 38.9	*37478	*22207	*0 31.7W.	*30 39.9	*37376	*22161	0 29.6W.	30 42.4	37323	22167
Honolulu, Hawaii ...	21 19	158 4W.	10 4.7E.	39 30.1	28601	23578	10 4.2E.	39 28.9	28634	23589	10 3.0E.	39 28.3	28658	23600
Teoloyucan, Mexico ...	19 45	99 11W.	9 22.0E.	46 44.1	31325	33294	9 19.7E.	46 41.3	31373	33281	9 17.8E.	46 46.7	31609	33635
Alibag, Bombay, India ...	18 38	72 52E.	*0 4.3W.	*25 27.6	*37158	*17692	*0 2.2W.	*25 25.3	*37123	*17645	*0 0.8E.	*25 22.8	*37100	*17600
San Juan, Porto Rico ...	18 23	66 7W.	4 35.6W.	52 20.6	27644	35824	4 26.0W.	52 14.2	27698	35755	4 21.0W.	*52 10.4	27737	*35724
Antipolo, Philippine Is. ...	14 36	121 10E.	*0 26.9E.	*15 50.4	*38228	*10846	*0 27.7E.	*15 54.5	*38205	*10889	*0 28.5E.	*15 54.3	*38189	*10882
Batavia, Java ...	6 11	106 49E.	*0 53.4E.	*32 15.0	*36832	*23240	*0 52.4E.	*32 12.8	*36858	*23223	*0 51.7E.	*32 11.5	*36832	*23187
Huancayo, Peru ...	12 3	75 20W.	...	...	...	...	*7 50.7E.	*1 17.3	*29737	*00669	*7 55.5E.	*1 9.8	*29725	*00604
Apia, Samoa ...	13 48	171 46W.	10 32.1E.	*30 5.7	35225	*20408	10 29.5E.	*30 7.0	35223	*20432	10 26.1E.	*30 8.3	35216	*20446
Mauritius ...	20 6	57 33E.	11 42.7W.	52 44.6	22768	29934	11 32.0W.	[52 29]	22804	[29701]	11 19.8W.	52 33.7	22852	29849
La Quiaca, Jujuy, Argentina	22 6	65 36W.	4 57.3E.	12 26.6	26338	05812	5 5.5E.	12 25.7	26353	05808	*5 15.0E.	*12 27.0	*26397	*05828
Vassouras, Brazil ...	22 24	43 39W.	12 27.7W.	16 46.9	24221	07304	12 19.6W.	16 37.8	24269	07265	12 10.5W.	16 31.2	24293	07205
Watheroo, Australia ...	30 19	115 52E.	4 15.0W.	64 13.8	24656	51070	4 16.3W.	64 11.9	24671	51028	4 17.2W.	64 10.7	24681	51007
Pilar, Cordova, Argentina ...	31 40	63 53W.	6 42.0E.	25 46.8	24818	11987	6 49.6E.	25 45.5	24877	12004	6 58.2E.	25 44.0	24934	12018
Toolangi, Australia ...	37 32	145 28E.	*8 18.4E.	*67 49.7	*22883	*56153	8 12.1E.	67 47.8	22904	56116	8 10.9E.	67 46.9	22917	56107
Christchurch, New Zealand...	43 32	172 37E.	17 37.4E.	68 17.3	22126	55566	17 31.6E.	68 16.2	22136	55538	17 26.0E.	68 15.6	22141	55525

NOTES.—\* Results derived from absolute observations only.

† A local anomaly is known to exist at the site of the Observatory.

Potsdam.—Magnetic Observation at Potsdam Observatory ceased after the middle of 1928 on account of electrification of Berlin railways.

San Juan, Porto Rico.—The results for 1927 are from the months January to May only.

Apia, Samoa.—The results for 1928 are for five months only.

La Quiaca, Argentina.—Results for 1928 are from hourly values January–April, combined with absolute observations May–December.

ADDITIONAL VALUES FOR EARLIER YEARS.

Stara Dala, Czecho Slovakia Lat. 47° 53' N., Long. 18° 11' E. Declination: 1924, 4° 18.6' W.; 1925, 4° 8.9' W.

**ERRATA.** In 1926 Year Book, Vassouras, Brazil. Declination 1924–26, for E read W.  
In 1927 Year Book, " " " " Declination 1925–26, for E read W.  
" " " " " " " " Declination 1927, for 10° 9.5' read 10° 29.5'.



M.O. 320  
(Cahirciveen)

Air Ministry  
METEOROLOGICAL OFFICE

THE  
OBSERVATORIES' YEAR BOOK  
1928

Comprising the meteorological and geophysical results obtained from autographic records and eye observations at the observatories at Lerwick, Aberdeen, Eskdalemuir, Cahirciveen (Valentia Observatory), and Richmond (Kew Observatory), and the results of soundings of the upper atmosphere by means of registering balloons.

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CAHIRCIVEEN (VALENTIA OBSERVATORY)

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Published by the authority of the  
METEOROLOGICAL COMMITTEE



LONDON:  
PUBLISHED BY HIS MAJESTY'S STATIONERY OFFICE

1929



## CAHIRCIVEEN (VALENTIA OBSERVATORY).

Latitude	..	..	..	..	..	51°	56'	N.
Longitude	..	..	..	..	..	10°	15'	W.
G.M.T. of Local Mean Noon	..	..	..	..	..	12h	41m.	

*Heights in metres above Sea Level.*

Barometer	..	..	..	..	..	..	13·7
Rain-gauge	..	..	..	..	..	..	9·1
Robinson Cup Anemograph	..	..	..	..	..	..	26
Dines Tube Anemograph	..	..	..	..	..	..	30

*Heights in metres above Ground.*

Thermometer Bulbs	..	..	..	..	..	..	1·3
Sunshine Recorder	..	..	..	..	..	..	12·8
Robinson Cup Anemograph	..	..	..	..	..	..	14
Dines Tube Anemograph	..	..	..	..	..	..	13
Beckley Rain-gauge Rim	..	..	..	..	..	..	0·5

## INTRODUCTION.

## SITE.

Valentia Observatory derives its name from the fact that it was originally established on Valentia Island in 1867. It was removed to the mainland in March, 1892, and now lies in a direct line between the old site on Valentia Island and the town of Cahirciveen, about  $2\frac{1}{2}$  miles (4 km.) north-east from the former, and three-quarters of a mile (1 km.) south-west of the latter. It is quite remote from any other buildings. The general character of the country surrounding the Observatory is hilly. The eastern bank of the Cahir river is about 150 metres to the westward, and in that direction there is no very high ground between the Observatory and the open sea, some  $3\frac{1}{2}$  miles (6 km.) away. To the north-west, however, are hills varying in height from 400 (120 m.) to 900 feet (275 m.), the highest being less than 3 miles (5 km.) distant. These are only separated by a narrow gully running in a N N W direction from other hills equally high, which stretch away to the northward: the nearest of these is but little more than a mile ( $1\frac{1}{2}$  km.) from the Observatory. Beyond the town of Cahirciveen to the north-east the river opens out considerably, and the country in this direction becomes an open boggy basin, rising by only a gentle gradient. Southward of this, however, it soon rises again, and at about a mile south-east of the Observatory it culminates in the hill Bantee upwards of 1,245 feet (380 m.) in height. Still further south it opens out once more to a distance of nearly 5 miles (8 km.) from the Observatory, where there is a range of hills running east and west, and varying in height from 400 (120 m.) to 1,300 feet (400 m.). To the south-west there is an opening to the sea, between Valentia Island and the mainland; and the circle of hills is completed by those on the island itself, the highest of which is about 800 feet (240 m.) high, and bears about west-south-west from the Observatory. Photographs of the Observatory building, together with a site plan, showing the disposition of the various instruments are reproduced in Figs. 14, 15 and 16.



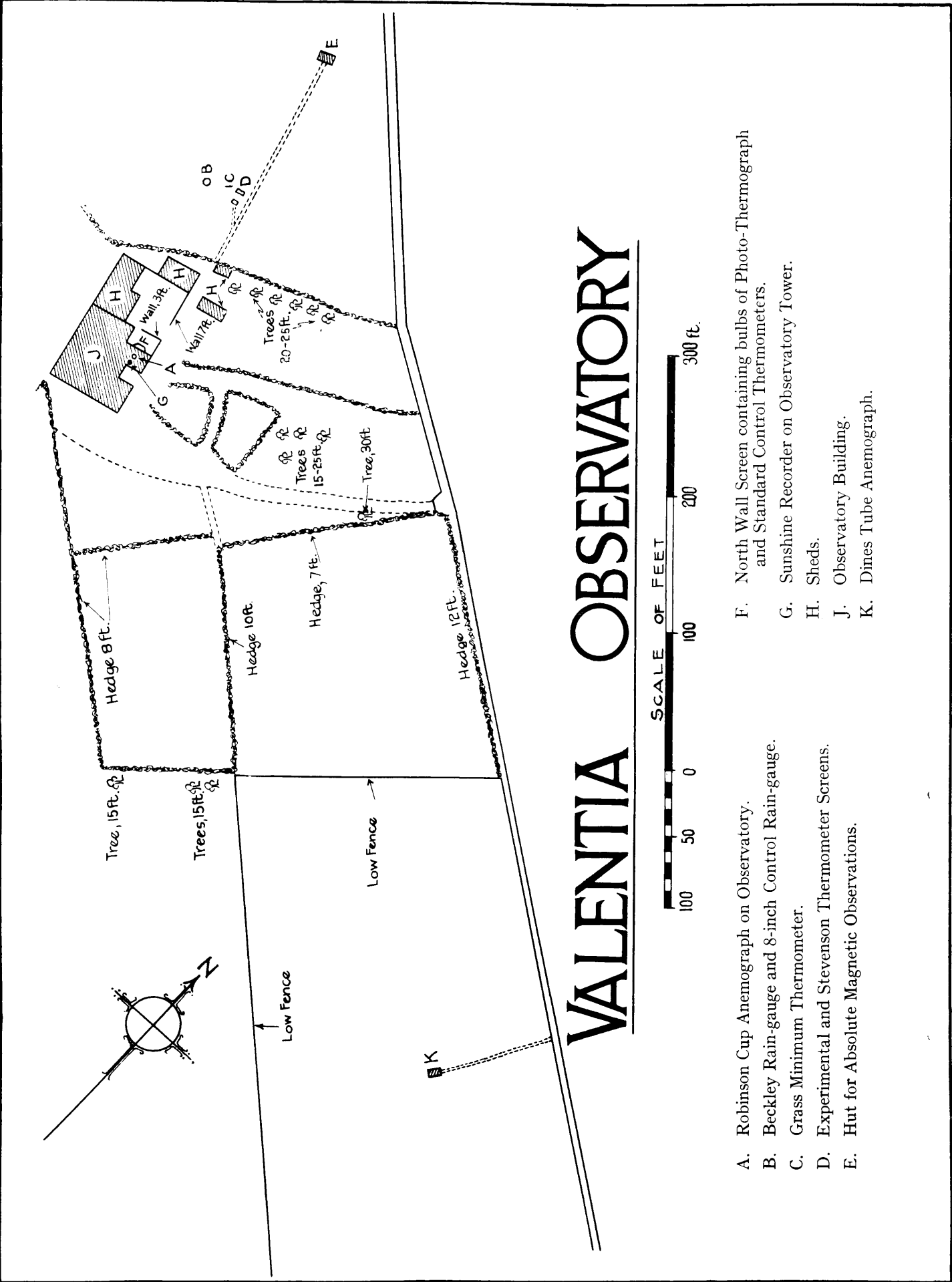


FIG. 14. SITE PLAN.



VALENTIA OBSERVATORY.

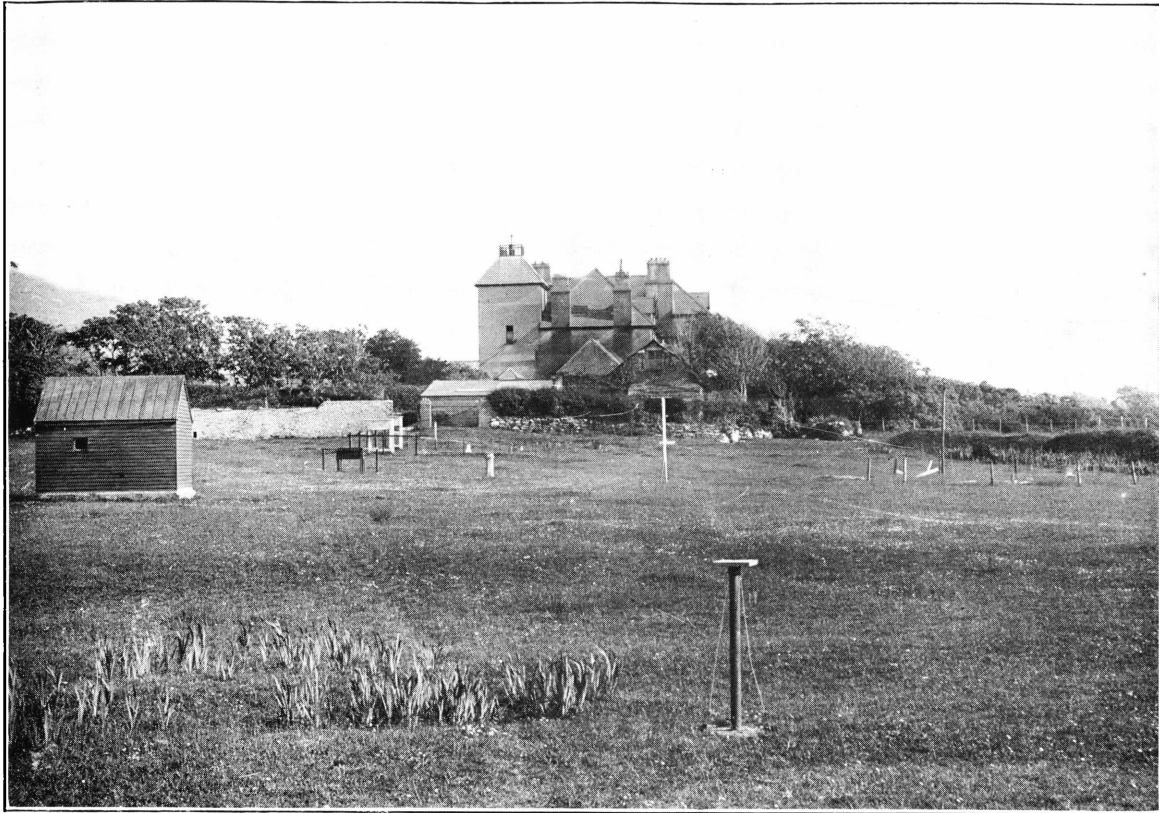


FIG. 15. GENERAL VIEW FROM NORTH.

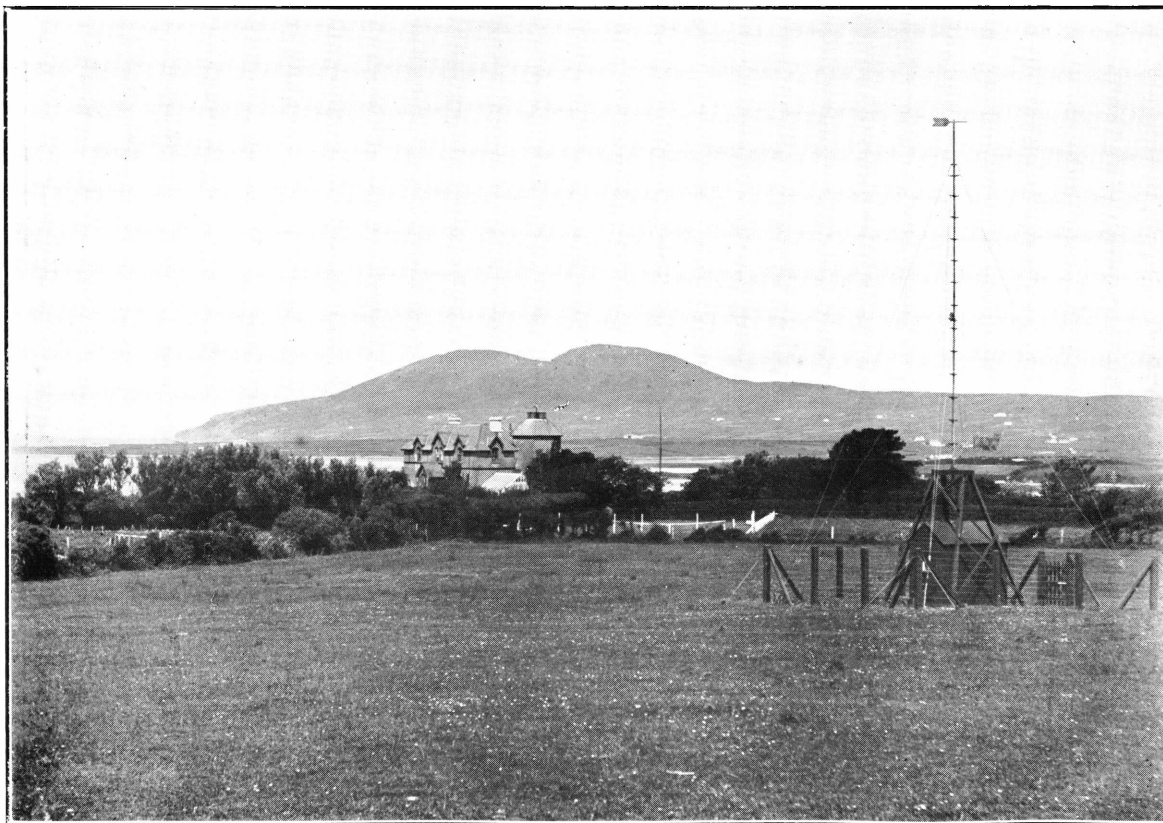


FIG. 16. GENERAL VIEW FROM SOUTH-EAST SHOWING DINES ANEMOGRAPH.

[To face p. 283.]



## METEOROLOGY.

The elements dealt with in the following tables are : atmospheric pressure, air temperature, humidity, rainfall, sunshine, wind speed and direction, minimum temperature on the grass, together with a diary of cloud visibility and weather.

*Pressure and Temperature.*—The photographic barograph and thermograph are installed in a room on the ground floor of the Observatory tower. The standard Fortin barometer, from which the control readings at 9h, 15h and 21h are taken, is mounted in the same room beside a window which faces the north-east. The stems of the dry and wet bulb thermometers pass out into the screen placed against the north wall of the tower. Close to the bulbs of these thermometers are the bulbs of the standard thermometers from which the control readings at 9h, 15h and 21h are taken.

*Rainfall.*—The Beckley raingauge and the 8-inch (20·3 cm.) check gauge are placed in a railed-off enclosure about 40 metres to the north of the tower.

*Sunshine.*—The recorder is cemented to a wooden rail on the roof of the tower. The exposure of the sunshine recorder is such that there is no appreciable loss of record due to obstructions in the months of May, June, July and August. During the remainder of the year the hill Bente lying to the south-east cuts off early morning sunshine. The reduction in possible record, assuming that the recorder becomes sensitive to sunshine only when the sun is at an altitude of more than three degrees, is shown in the following table for the 1st and 15th of each month :—

Reduction in Possible Record in Tenths of an Hour.								
Month.	Jan.	Feb.	Mar.	Apr.	Sept.	Oct.	Nov.	Dec.
1st.	·5	·5	·7	·5	·3	·7	·5	·6
15th.	·6	·5	·7	·3	·5	·7	·5	·5

*Wind, Speed and Direction.*—Up to 1925 the measurements of Wind Speed and Direction, as given in Tables 412-423, were obtained from the Robinson Cup Anemograph on the roof of the Observatory tower. Commencing with the 1926 values, measurements of Wind Speed and Direction published in the Observatories' Year Book are taken from the records of the Dines Pressure-tube Anemograph. This instrument stands in an open field, about 250 metres S E by E of the Observatory tower. The field slopes northwards and downwards to the river Cahir. About 1 mile (1½ km.) to the south-east is the highest point (1,245 feet) of the hill Bente which extends for some little distance in a northerly and south-westerly direction. A description of the surrounding country has already been given.

In a few instances where records of the Pressure-tube Anemograph have been defective, the required values have been obtained from the records of the Cup Anemograph, a suitable adjustment of such values having been made in accordance with the table in the General Introduction showing the effect of exposure on the two instruments. Values thus obtained are entered as interpolated values.

*Minimum Temperature on the Grass.*—The grass minimum thermometer is of the type described in the General Introduction. It is exposed over short grass in the field enclosure. It is set at 18h and read at 7h on the succeeding day, the observation being entered to the day of reading.

*Visibility.*—Lists of the objects used for visibility observations and their distances and bearings from the point of observation are given on p. 288-289.



### Notes on the Meteorological Summaries.

*Pressure.*—No change in the values used for reducing pressure at station level to pressure at mean sea level is made at Valentia Observatory by the introduction of the revised scheme as set out in the General Introduction (pp. 15-16).

The mean pressure for the year was 1·8 millibars below normal. Of the monthly mean pressures five were higher and seven lower than normal. The departures ranged from an excess of about five millibars in December to a deficiency of eight millibars in March.

The highest pressure of the year, 1034·6 millibars, was recorded on the 22nd February and the lowest, 960·5 millibars, on the 16th November, giving a total range for the year of 74 millibars. October, November and December had ranges of more than 50 millibars. The smallest range for any month was 26·1 millibars recorded in July.

The diurnal inequality of pressure for the year as a whole shows the usual well marked double oscillation with maxima at 11h and 22h of which the second is the principal one; and minima at 5h and 16h, the principal of these two being the morning one. In the inequalities for the individual months it is found that the double oscillation is much more prominent in some months than in others. The morning maximum occurs at 11h or 12h, except in July (13h) and August (15h). The morning minimum which is the principal one for eleven months of the twelve occurs each month at 4h, 5h, 6h or 7h. The afternoon minimum appears at 14h or 15h in the winter months; in other months it is seen at 16h, 17h, 18h or 19h. The night maximum occurs between 19h and 23h.

The range of the mean inequality for the year is 1·01 mb. while for the months considered individually it varies from ·79 mb. for May to 2·13 mb. for January. These ranges represent only the regular periodic changes in pressure and are small compared with the ranges obtained from the mean values of the daily maximum and minimum pressures found in Table 356, which vary from 4·01 mb. for July to 10·89 mb. for October.

Comparison of diurnal inequalities may be made by means of analysis into harmonic components. The details of the Fourier analysis of the diurnal inequalities for the year 1928 are given in Table A. The figures in the line immediately following the monthly values are the arithmetic means for the year of the monthly amplitudes. On account of the very large changes in phase throughout the year in some of the terms the amplitudes obtained from the annual inequality are not adequate as measures of the effectiveness of such terms relative to others whose phase angles show less variation from month to month. In these cases comparison of the arithmetic means of the monthly amplitudes is more satisfactory.

The most important terms are the 24-hour and 12-hour terms. For the year considered as a whole the amplitude of the 24-hour term is considerably higher than for the period 1871-1882; the arithmetic mean for the twelve months is also higher than that of the period, which points apparently to a normal amount of variation in the 24-hour term phase angles throughout the year. The seasonal amplitudes show considerable variation, the winter one being the highest and that for the equinoxes the lowest. The 24-hour term always shows wide and somewhat irregular variations from month to month both in phase and amplitude.

The 12-hour term is more nearly constant during the year, both in amplitude and phase. For the year considered as a whole the amplitude is decidedly higher than average. The highest phase angle appears at the equinoxes and the lowest in summer.



In the mean inequality for the year the 8-hour term appears almost negligible when its amplitude is compared with those of the two terms already considered, but that this is due mainly to the very wide variations in phase of this term during the year is seen quite clearly by reference to the individual months. The phase of this term has a fairly regular seasonal variation, changing somewhat rapidly at the equinoxes by approximately two right angles. The effect of the phase variation at this season is seen in the comparatively small amplitude which appears for the equinoctial mean. In the 6-hour term, amplitudes are small throughout and for this reason not very much weight can be attached to the individual phase angles. Nevertheless it is possible to detect an annual variation in the latter in which the movement is generally in the opposite sense to that of the 8-hour term.

*Temperature.*—The mean temperature for the year 1928 was  $0.30a$  ( $0.54^{\circ}$  F.) above normal. The highest temperature of the year,  $294.9a$  ( $71.4^{\circ}$  F.), was registered on the 21st July. Very low temperatures were not common, the freezing point being passed only on four days. The lowest temperature  $269.0a$  ( $24.8^{\circ}$  F.), was registered on the 13th March. The full range of temperature for the year was thus  $25.9a$  ( $46.6^{\circ}$  F.). For the individual months mean temperatures did not differ greatly from normal. February, with an excess of  $1.71a$  ( $3.08^{\circ}$  F.) showed the greatest departure. The monthly ranges of temperature varied from  $16.1a$  ( $29.0^{\circ}$  F.) in March to  $9.8a$  ( $17.6^{\circ}$  F.) in January.

The mean diurnal inequality for the year shows a single oscillation in the 24 hours with its maximum at 14h and 15h and its minimum at 5h and with a range of  $2.52a$  ( $4.54^{\circ}$  F.). Each of the monthly inequalities has a well marked single oscillation with its maximum at 13h, 14h, 15h or 16h. The time of minimum does not show the same constancy. In January it is 19h, in November 24h, in December 2h, in October 8h, and in other months 5h, 6h or 7h.

The harmonic analysis of the monthly and seasonal diurnal inequalities of temperature is given in Table B. The 24-hour term is in all cases predominant. Neither in the 24-hour term nor in the 12-hour term is there any very large variation in phase angle throughout the year, the effect of this being seen in each case in the slight differences between the mean amplitude for the year and the amplitude computed directly from the annual inequality. The highest of the seasonal amplitudes for the 24-hour term is found in summer, as is usual. The amplitudes at equinox and summer are about normal but the winter amplitude is below normal. For the 12-hour term the seasonal values follow the normal sequence in amplitude but the values at all seasons are low. Phase angles both for equinox and summer, normally about the same, are high, the summer one in particular having a value decidedly higher than normal.

The 8-hour term amplitude for the year is so small as to be negligible compared with the two terms already considered but this is due in large measure to the variations of phase angle in this term from month to month. There is approximate opposition of phase as between winter and summer, while for the equinoctial months a rapid change takes place from winter to summer values. The equinoctial amplitude thus appears much smaller than those for the individual months which make up this season. The summer 8-hour term amplitude is greater than the 12-hour term amplitude. The equinoctial amplitude is considerably higher than normal, otherwise the seasonal changes in the 8-hour term accord fairly well with those found in a normal year.

The 6-hour term amplitude is greatest at the equinoctial seasons and smallest in winter but variable phase angle has much to do with the small winter amplitude.



*Relative Humidity.*—The highest mean daily value of the relative humidity was 98.0 per cent., recorded for the 1st December. The lowest value was 45.9 per cent. for the 3rd June. The highest mean daily vapour pressure was 18.1 millibars for the 24th July and the lowest was 4.2 millibars for the 11th March. The diurnal inequality for the year shows a maximum in the early morning and a minimum in the afternoon; the morning maximum is not very sharply defined as to time of occurrence. There is only one well marked oscillation in the 24 hours. The individual months show, on the whole, similar features but there is a slight indication in some cases of a secondary maximum.

*Rainfall.*—The total rainfall for the year was 26 per cent. above normal, the actual excess being 368 millimetres. The month with the highest rainfall was October, with 228 millimetres, this amount being 61 per cent. more than normal. August with 221 millimetres had 81 per cent. more than normal. The lowest monthly total was that for July, the 52 millimetres which fell during that month being only 54 per cent. of the normal amount. The greatest hour's rainfall was 16.7 millimetres which fell between 20h and 21h on the 10th October.

*Bright Sunshine.*—The total amount of bright sunshine for the year 1928 was about 3 per cent. less than the normal. Only four months had more than average sunshine, the greatest excess being about 26 per cent. for August. The most notable deficiency was for December, the total sunshine for this month being 77 per cent. of normal. The greatest recorded sunshine for any one day was 15.5 hours, on the 16th June. The day with the greatest proportion of the total possible sunshine was the 16th July with 95 per cent.

*Wind Speed.*—Gales were experienced on three days in January, one day in February, one day in June, two days in October, two days in November and one day in December.

The highest hourly wind speed recorded was 24 metres per second (54 miles per hour) on the 19th October, on which day occurred also the highest gust of the year 38 metres per second (85 miles per hour).

*Grass Minimum Temperature.*—The mean of the monthly means given in Table 426 is 279.4a (43.5° F.). For no single month is the mean grass minimum temperature lower than the freezing point of water. The lowest value recorded in five months out of the twelve is below the freezing point.

*Cloud and Weather.*—The mean amount of cloud at all observation hours was 7.3. The most cloudy month was December, with a mean cloud amount of 7.9. The month with least cloud was May with a mean of 6.5. The mean values at the individual observation hours for the whole year show a steady decrease in cloud amount from 7h to 13h, followed by a slight increase to 15h and a further decrease to 21h. The number of occasions of cloudless sky during 1928 was only 19 in more than 2,000 observations; on no day in the whole year was the sky without cloud at all observation hours.

*Visibility.*—Two observations, one in a landwards direction, the other in a seawards direction, are made at each hour of observation. The objects used, together with their actual distances and bearings from the point of observation, the Observatory tower, are given in the tables on pages 288, 289. The position of the Observatory is such that a distinction between visibility landwards and seawards cannot be made when the range of visibility is less than 1,000 yards. Objects corresponding with the letters A to E have therefore been included in the table of landwards objects only. Kilkeaveragh Mountain is used as both a landwards and seawards object corresponding with J.



The observations of visibility in tables 427-438 refer to visibility in a landwards direction. The observations, when the range of visibility seawards differs from the range landwards, are shown in the following table :—

Date.	Hour.	Visibility Landwards	Visibility Seawards.	Date.	Hour.	Visibility Landwards	Visibility Seawards.
Jan. 23	18	I	J	July 5	21	k	H
" 31	15	J	k	" 9	7	J	k
" 31	21	J	k	" 9	9	J	k
Feb. 28	18	J	k	" 10	15	J	k
Mar. 21	7	J	k	" 10	18	J	k
April 2	18	J	k	" 11	18	h	I
" 5	7	k	l	Aug. 6	7	G	H
" 7	7	J	k	" 10	7	J	k
" 9	15	k	J	" 13	9	J	k
" 13	7	k	l	" 19	7	J	k
" 14	21	J	k	Sept. 4	9	h	I
" 24	18	J	k	" 11	7	J	k
" 27	7	J	k	Oct. 8	7	J	k
" 27	13	J	k	" 9	13	J	k
" 30	15	J	k	" 9	18	J	k
" 30	18	J	k	Nov. 10	15	h	k
May 4	18	l	m	" 25	7	h	I
" 20	7	l	m	" 30	7	h	I
" 21	7	J	I	Dec. 1	15	I	G
" 27	21	h	I	" 2	9	J	k
June 28	13	J	k	" 4	13	J	k
" 24	18	J	k	" 10	9	J	k
" 25	9	I	J	" 13	13	J	k
" 28	7	h	I	" 21	21	G	F

Entries of "l" and "m" for visibility in a landwards direction are made :—

(a) When Croaghmarhin Mountain (see table of seawards objects) is clearly visible and there is reason to believe that the range of visibility in a landwards direction is as good as, or nearly as good as, visibility seawards.

(b) When Croaghmarhin Mountain is invisible but there is reason to believe from the appearance of Drung Hill (see table of landwards objects) that the range of visibility landwards is greater than the range seawards and is sufficiently good to justify the entry made.

When the mountains used as objects at 3,500 metres and beyond are cloud capped the appropriate entries for the range of visibility are determined by the clearness or otherwise with which the lower parts of the mountains can be seen.

There is a complete absence of industrial activity within a radius of about a hundred miles from the Observatory; the observations are therefore not much affected by smoke pollution of the atmosphere.



## LANDWARDS VISIBILITY OBJECTS AT VALENTIA OBSERVATORY.

Indication letter of object.	Standard distance of object.	Actual distance of object.	Bearing of object in degrees from N.	Description of object.
A	Metres. 25	Metres. 25	350°	Gate near workshop.
B	50	50	345°	North fence of enclosure.
C	100	100	125°	Hedge at S. end of vegetable garden.
D	200	200	330°	Notice board on beach.
E	500	500	360°	Hulk on shore.
F	1,000	1,100	50°	Parsonage.
G	2,000	1,910	55°	Wireless school.
Intermediate object	—	3,500	20°	Top of Castlequin Mountain.
h	4,000	—	—	No object available. (Top of Castlequin well visible).
I	7,000	7,600	40°	Top of Knocknadober Mountain.
J	10,000	10,000	220°	Kilkeaveragh Mountain.
Intermediate object	—	17,000	55°	Drung Hill.
k	20,000	—	—	No object available. (Drung Hill well visible).
l	30,000	—	—	No object available.
m	50,000	—	—	No object available.



## SEAWARDS VISIBILITY OBJECTS AT VALENTIA OBSERVATORY.

Indication letter of object.	Standard distance of object.	Actual distance of object.	Bearing of object in degrees from N.	Description of object.
F	Metres. 1,000	Metres. 1,000	205°	Farmhouse on skyline.
G	2,000	2,200	265°	Laght Point.
H	4,000	3,760	280°	Black Rock.
I	7,000	6,500	250°	Ridge between two hills on Valentia.
J	10,000	10,000	220°	Kilkeaveragh mountain.
k	20,000	—	—	No object available.
Intermediate objects	— —	23,500 25,500	320° 325°	Mount Eagle. Croaghmarhin Mountain.
l	30,000	—	—	No object available. (Croaghmarhin well visible).
m	50,000	—	—	No object available. (Croaghmarhin exceptionally visible).

## IDENTIFICATION NUMBERS OF INSTRUMENTS IN USE IN 1928.

Standard Fortin Barometer .. ..	M.O. 463	
Standard Dry Bulb Thermometer ..	M.O. 1701	Corrections Nil.
Standard Wet Bulb Thermometer ..	M.O. 1702	Corrections $\left\{ \begin{array}{l} 255^{\circ} - 266^{\circ} + \cdot 2^{\circ} \\ 267^{\circ} - 268^{\circ} + \cdot 1^{\circ} \\ 269^{\circ} - 272^{\circ} \text{ Nil.} \\ 273^{\circ} \text{ and above, } - \cdot 1^{\circ} \end{array} \right.$
Recording Beckley Raingauge .. ..	—	
Control Raingauge .. ..	M.O. 402	
Glass for Control Raingauge .. ..	M.O. 1662 and 1627	
Campbell Stokes Sunshine Recorder	M.O. 5	
Robinson Cup Anemograph .. ..	Beck 46	
Dines Tube Anemograph .. ..	—	
Grass Minimum Thermometer .. ..	M.O. 17684	Corrections $\left\{ \begin{array}{l} 2\cdot 0^{\circ} \text{ F. } - \cdot 2^{\circ} \text{ F.} \\ 12\cdot 0^{\circ} \text{ F. } - \cdot 1^{\circ} \text{ F.} \\ 32\cdot 0^{\circ} \text{ F. } \text{ Nil.} \\ 52\cdot 0^{\circ} \text{ F. } - \cdot 1^{\circ} \text{ F.} \\ 72\cdot 0^{\circ} \text{ F. } \text{ Nil.} \end{array} \right.$

All thermometer corrections are applied at the Observatory before tabulation.



TABLE A.

*Diurnal Variation of Barometric Pressure, 1928. Fourier Coefficients.*

Cahirciveen (Valentia Observatory), Longitude 10° 15' W.

Values of  $c_n, \alpha_n$  in the series  $\Sigma c_n \sin (15nt^\circ + \alpha_n)$ ,  $t$  being Local Mean Time reckoned in hours from midnight.

Month or Season.	$c_1$	$\alpha_1$	$c_2$	$\alpha_2$	$c_3$	$\alpha_3$	$c_4$	$\alpha_4$
	mb.	°	mb.	°	mb.	°	mb.	°
January .. ..	.744	175	.364	143	.256	360	.085	250
February .. ..	.341	130	.326	132	.131	320	.058	125
March .. ..	.183	121	.409	156	.043	30	.035	25
April .. ..	.050	123	.374	146	.018	160	.044	20
May .. ..	.137	139	.284	140	.078	155	.013	25
June .. ..	.256	240	.261	147	.082	165	.012	130
July .. ..	.280	168	.270	131	.083	145	.040	55
August .. ..	.446	178	.275	146	.078	140	.036	0
September .. ..	.163	182	.361	147	.004	315	.054	0
October .. ..	.369	291	.288	131	.062	60	.023	180
November .. ..	.782	167	.278	121	.194	340	.065	145
December .. ..	.093	183	.328	153	.157	15	.087	220
Arithmetic Mean ..	.320	..	.318	..	.099	..	.046	..
Year .. ..	.242	174	.313	143	.042	5	.002	220
Winter .. ..	.467	164	.318	139	.176	350	.051	195
Equinox .. ..	.057	225	.353	149	.026	60	.028	15
Summer .. ..	.230	184	.271	140	.078	155	.019	35

TABLE B.

*Diurnal Variation of Temperature, 1928. Fourier Coefficients.*

Cahirciveen (Valentia Observatory), Longitude 10° 15' W.

Values of  $c_n, \alpha_n$  in the series  $\Sigma c_n \sin (15nt^\circ + \alpha_n)$ ,  $t$  being Local Mean Time reckoned in hours from midnight.

Month or Season.	$c_1$	$\alpha_1$	$c_2$	$\alpha_2$	$c_3$	$\alpha_3$	$c_4$	$\alpha_4$
	a.	°	a.	°	a.	°	a.	°
January .. ..	.317	296	.223	50	.092	230	.031	140
February .. ..	.593	238	.290	54	.115	255	.058	210
March .. ..	1.269	236	.406	59	.121	330	.058	200
April .. ..	1.787	239	.276	105	.197	45	.053	260
May .. ..	2.036	240	.223	112	.283	75	.026	285
June .. ..	1.739	242	.176	58	.266	70	.034	355
July .. ..	1.703	243	.106	64	.117	65	.013	35
August .. ..	2.053	238	.236	84	.180	45	.044	250
September .. ..	1.866	237	.434	65	.105	345	.082	240
October .. ..	1.009	236	.452	65	.120	300	.053	195
November .. ..	.587	255	.184	60	.095	265	.023	300
December .. ..	.521	235	.146	22	.096	240	.044	55
Arithmetic Mean ..	1.290	..	.263	..	.149	..	.043	..
Year .. ..	1.267	241	.236	70	.058	30	.021	240
Winter .. ..	.472	251	.208	49	.096	245	.010	150
Equinox .. ..	1.477	237	.376	69	.103	355	.055	230
Summer .. ..	1.842	242	.163	93	.213	65	.020	300

NOTE.—The seasonal means are derived from the following grouping of months:—*Winter*: January, February, November and December; *Equinox*: March, April, September and October; *Summer*: May to August, inclusive.



## TERRESTRIAL MAGNETISM.

**Notes on the Magnetic Observations for the Year 1928.**

Absolute observations of declination, horizontal force and inclination were made weekly at the Valentia Observatory during the year 1928. The instruments in use were the same as in previous years, namely, the Dover unifilar, No. 139, with collimator magnet 139A and mirror magnet 139C, and the Dover dip circle, No. 118. The mean times of observation were 10.22 for the declination, 11.42 for the horizontal force and 14.31 for the inclination, all according to Greenwich Mean Time. In the individual observations the greatest departure from the mean time in any element was 7 minutes. The deflection of the mirror magnet was measured for two distances of the collimator magnet, namely, 30cm. and 40cm. The complete deflection observation consisted of eight readings of the mirror magnet. The distribution constant,  $P$ , used for 1928 was computed from the mean deflections for 30cm. and 40cm. for the seven years 1921-1927 inclusive. The mean  $P$  so obtained was 7.55. The moment of the collimator magnet has decreased at the rate of about 1.5 unit per annum.

The values of the declination, horizontal force and inclination obtained in the absolute observations are given in detail in Table C. All the observations made are included in this table, but in Table D the mean monthly values are computed from only such of the absolute observations as were taken at times subsequently found, by reference to the Eskdalemuir magnetograph curves to be free from serious disturbance. Observations in Table C taken at disturbed times, and not, therefore, utilised for the mean values in Table D, are marked with an asterisk. The north, west and vertical components and the total force for each month and the year are computed from the corresponding mean values of the observed elements.

Westerly declination has diminished by 11'.5 as compared with 1927. From 1926 to 1927 the decrease was 11'.3 and in the previous 12 months 11'.6. The average annual decrease for the five years 1920-1925 was 11'.1, for the five years 1915-1920 it was 9'.2, and for the five years 1910-1915 it was 8'.2. During the five years ending in 1928 the average annual decrement is 11'.7 so that the rate of the eastward movement of the magnetic needle appears to have increased slowly.

Northerly inclination increased by 0'.1 from 1927 to 1928. The corresponding change for the preceding year was -0'.9, and for the year previous to that +0'.1. From 1910 to 1915 the average yearly decrease was 1'.0, from 1915 to 1920 0'.5, and from 1920 to 1925 1'.1. For the five years 1923-1928 the average change per year is -0'.4. Inclination, therefore, continues to diminish at a slow rate.

Up to 1920 the mean annual values of horizontal force had shown a steady decline from year to year. From 1921 to 1924 and from 1926 to 1927 the change was in the opposite direction, each year having a mean value higher than that of the preceding year. It would appear that the increase was temporary since a decline was in evidence from 1924 to 1926 and again from 1927 to 1928. The amount of annual change is shown in the following table :—

Period.	Annual Change.
1910-15	5γ decrease (mean value).
1915-20	6γ „ (mean value).
1920-21	8γ increase
1921-22	1γ „
1922-23	3γ „
1923-24	2γ „
1924-25	5γ decrease.
1925-26	14γ „
1926-27	2γ increase.
1927-28	11γ decrease.



Reference to the last column of Table D shows that the reversal of the annual change in the horizontal force from 1920 to 1924 and from 1926 to 1927 was not accompanied by any such reversal in the total force. From 1910 to 1915 the average yearly change in the total force was  $-49\gamma$ , from 1915 to 1920 it was  $-33\gamma$  and from 1920 to 1925 it was  $-32\gamma$ . From 1923 to 1928 the mean annual change is  $-29\gamma$ , so that the total force has continued to decrease, but at a rate which is apparently diminishing gradually. The individual changes from year to year as shown in the table are somewhat irregular, but this may be due in considerable measure to instrumental uncertainties. The total force is computed from the horizontal force and the inclination, using the formula  $T = H \sec I$ , so that an error of  $0'.1$  in  $I$  would give an error approximately  $4\gamma$  in  $T$  at Valentia. In addition, it is to be remembered that the secular change data for Valentia are obtained from absolute observations made at fixed hours at any of which the value obtained for an element may differ, by an amount which is not necessarily constant, from its true mean value for the day of observation. It is by no means improbable that owing to this and errors of observation, uncertainties to the extent of several tenths of a minute of arc may be introduced into the mean value of  $I$  for the year. For the average change over a series of years these possible errors are naturally much diminished and the average fall of  $36\gamma$  per annum in the total force obtained from the values in Table D is probably a close approximation to the true change. This continued decrease in the total force indicates that the rise in the value of the horizontal force observed from 1920 to 1924 was not a true increase in the magnetic field but merely a component increase arising from the continued fall in the inclination, which becomes proportionally more effective in the horizontal component as the actual inclination angle itself becomes smaller. The magnetic field in the Valentia district continues to become less year by year, therefore, although without observations of inclination the opposite would have appeared to be the case in some recent years.



TABLE C.

*Cahirciveen (Valentia Observatory). Absolute Magnetic Observations, 1928.*Latitude  $51^{\circ} 56'N$ . Longitude  $10^{\circ} 15'W$ .

Date.	Westerly Declination	Horizon- tal Force	Northerly Inclination	Date.	Westerly Declination	Horizon- tal Force	Northerly Inclination
	°   '   ''	γ	°   '   ''		°   '   ''	γ	°   '   ''
January 7 ..	17 55.2	17846	67 59.1	July 6 ..	17 45.9	17826	67 58.3
" 14 ..	17 54.1	17852	67 59.2	" 13 ..	17 47.4	17802	68 0.6
" 20 ..	17 53.6	17851	67 59.9	" 20 ..	17 41.6	17812	67 59.4
" 27 ..	..	..	68 0.8*	" 27 ..	17 45.4	17832	67 59.4
" 28 ..	17 55.0	17806*	..				
February 9 ..	17 53.1	17839	67 59.8	August 2 ..	17 45.9	17830	67 59.7
" 17 ..	17 52.1	17840	67 59.1	" 10 ..	17 46.7	17818	68 0.2
" 23 ..	17 53.2	17829	67 58.9	" 17 ..	17 46.4	17811	67 59.7
" 28 ..	17 51.6	17824	68 1.4	" 24 ..	17 46.8	17818	67 58.6
				" 31 ..	17 45.2	17831	67 57.6
March 8 ..	17 49.2	..	..	September 7 ..	17 46.7	17809	67 59.7*
" 9 ..	..	17826	67 57.8	" 14 ..	17 45.4	17811	68 0.0
" 17 ..	17 49.2	17822	67 59.6	" 21 ..	17 44.9	17815	67 59.7
" 23 ..	17 52.5	17860	67 58.2	" 28 ..	17 45.6	17808	68 0.3
" 30 ..	17 50.7	17833	67 58.5				
April 6 ..	17 47.4	17816	67 59.7	October 5 ..	17 45.2	17790	68 0.3
" 13 ..	17 50.4	17802	..	" 11 ..	17 43.1	17823	..
" 14 ..	..	..	67 58.4	" 12 ..	..	..	68 0.6
" 19 ..	17 48.2	17841	67 58.5	" 19 ..	17 45.5	..	68 3.3*
" 27 ..	17 48.4	17827	67 59.3	" 20 ..	..	17774	..
				" 26 ..	17 46.8	17801	67 59.7
May 4 ..	17 46.8	17827	67 58.8	" 30 ..	17 46.7	17827	67 59.7
" 11 ..	17 49.4	17806	68 0.7*				
" 18 ..	17 50.9	17818	67 59.8	November 2 ..	17 47.3	17806	68 1.7*
" 25 ..	17 47.0	17830	67 58.7	" 9 ..	17 45.2	17832	67 59.7
June 1 ..	17 47.4	17827	67 58.7	" 16 ..	..	..	68 0.1
" 8 ..	17 47.0	..	68 0.4*	" 17 ..	17 49.2*	17823*	..
" 15 ..	17 47.5	17838*	67 58.0	" 23 ..	17 46.9	17837	68 0.0
" 22 ..	17 48.8	17844*	68 1.6*	" 30 ..	17 44.7	17848	67 58.5
" 29 ..	17 46.7	17835	67 59.1	December 7 ..	17 47.3	17817	68 0.0
				" 14 ..	17 45.2	17809*	68 0.2
				" 21 ..	17 43.7	17849	67 59.9
				" 28 ..	17 45.0	17847	67 58.3

\* Disturbance at these times. Values not utilised in computing means given in Table D.



TABLE D.

*Valentia Observatory, Cahirciveen.*

Magnetic Data for the Year 1928.

1928.	Declination (West).	Inclination (North).	Horizon- tal Force.	North.	West.	Vertical.	Total.
	° ' "	° ' "	γ	γ	γ	γ	γ
January .. ..	17 54.5	67 59.4	17850	16985	5489	44158	47630
February .. ..	17 52.5	67 59.8	17833	16972	5474	44132	47598
March .. ..	17 50.4	67 58.5	17835	16977	5464	44088	47559
April .. ..	17 48.6	67 59.0	17821	16967	5451	44070	47537
May .. ..	17 48.5	67 59.1	17820	16966	5450	44074	47540
June .. ..	17 47.5	67 58.6	17831	16979	5448	44082	47552
July .. ..	17 45.1	67 59.4	17818	16970	5433	44081	47545
August .. ..	17 46.2	67 59.2	17822	16972	5439	44081	47548
September .. ..	17 45.7	68 0.0	17811	16962	5433	44084	47547
October .. ..	17 45.5	68 0.1	17803	16955	5430	44066	47526
November .. ..	17 46.0	67 59.6	17831	16981	5441	44117	47585
December .. ..	17 45.3	67 59.6	17838	16989	5440	44136	47605
Year, 1928 .. ..	17 48.0	67 59.3	17826	16973	5449	44096	47563
Year, 1927 .. ..	17 59.5	67 59.2	17837	16965	5509	44119	47588
Year, 1926 .. ..	18 10.8	68 0.1	17835	16945	5565	44147	47612
Year, 1925 .. ..	18 22.4	68 0.0	17849	16939	5626	44177	47646
Year, 1924 .. ..	18 34.9	68 0.6	17854	16923	5689	44213	47682
Year, 1920 .. ..	19 17.9	68 5.3	17840	16837	5896	44353	47806
Year, 1915 .. ..	20 3.8	68 7.9*	17869	16785	6130	44519*	47972*
Year, 1910 .. ..	20 44.6	68 13.0	17892	16732	6337	44771	48215

\* Mean of 11 months only.



Readings in millibars at exact hours, Greenwich Mean Time.

342. Cahirciveen (Valentia Observatory) :  $H_b$  (height of barometer cistern above M.S.L.) = 13.7 metres.

January, 1928.

Hour G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean
Day.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
1	020.9	020.4	020.0	018.9	017.6	016.0	014.6	013.1	011.2	009.6	007.6	005.1	002.9	001.2	000.2	000.1	999.8	000.7	001.8	002.5	003.1	003.9	004.0	004.0	008.7
2	004.2	004.4	005.1	005.5	006.0	006.4	007.3	008.4	009.6	010.3	011.4	011.6	011.8	012.6	012.9	013.7	014.8	015.6	016.4	017.1	017.5	017.8	017.8	017.7	011.2
3	017.7	017.6	018.1	018.3	018.1	018.7	018.8	019.7	020.0	020.8	021.2	021.5	021.8	021.9	022.7	023.5	023.7	024.1	024.6	025.0	025.2	025.0	024.3	024.1	021.4
4	023.5	023.7	023.5	023.1	022.7	022.2	021.9	022.0	022.0	021.7	021.1	020.4	019.6	019.4	019.4	019.7	020.1	020.5	021.0	021.1	022.1	022.5	022.6	023.4	021.6
5	023.8	024.1	025.4	025.3	024.8	025.5	025.8	025.8	026.2	026.5	026.8	026.4	025.5	025.1	024.6	023.4	022.2	020.9	019.1	017.6	016.5	015.2	014.8	014.2	022.9
6	013.7	013.5	012.7	012.2	011.5	011.5	012.0	012.9	014.2	015.2	016.3	016.6	016.6	017.1	017.2	017.2	017.5	018.0	017.8	017.3	016.4	015.7	014.9	014.4	015.1
7	013.5	013.3	013.0	012.2	011.4	010.8	010.0	009.6	009.0	008.8	008.7	007.3	006.9	005.6	004.7	004.4	003.8	004.3	004.0	004.3	005.1	005.4	005.9	006.8	008.0
8	007.3	007.5	008.5	009.0	008.9	009.5	009.7	010.4	011.0	011.5	011.8	011.8	011.6	011.4	011.2	011.0	010.8	010.5	010.3	010.2	009.9	009.4	008.5	007.8	010.0
9	007.0	006.4	005.9	005.0	004.0	002.8	003.4	004.1	005.6	006.8	007.4	007.3	007.9	008.1	008.3	008.9	008.9	008.8	008.5	008.3	007.8	007.2	006.2	005.4	006.7
10	003.9	002.3	000.7	998.2	995.3	993.2	992.7	995.8	997.9	999.7	000.6	001.5	001.8	002.2	003.1	003.3	004.6	005.5	005.8	006.5	006.4	007.1	007.3	007.6	001.7
11	008.2	008.3	008.8	009.8	010.3	010.6	011.5	012.5	013.5	014.2	014.7	014.7	014.5	014.8	014.9	015.1	014.9	015.1	014.3	014.0	013.3	012.6	011.1	010.0	012.5
12	008.7	007.1	005.9	004.4	002.7	001.1	999.9	999.3	998.7	998.4	998.1	996.9	995.9	995.5	995.8	996.1	996.6	996.9	997.6	997.9	998.0	998.5	999.2	000.0	999.8
13	000.4	001.1	001.8	002.3	002.8	003.2	003.9	004.8	005.4	006.1	007.1	007.7	007.9	008.5	008.6	009.0	009.0	009.0	009.1	008.9	008.6	007.7	006.4	004.9	005.9
14	003.5	001.7	000.3	998.3	996.8	995.5	994.7	994.6	995.4	996.3	996.8	996.7	996.5	996.5	996.5	996.2	995.8	996.2	996.2	996.2	996.2	996.1	995.7	995.3	997.0
15	995.2	994.5	994.3	994.0	993.5	992.9	992.8	992.9	992.9	993.3	993.4	993.2	993.1	993.6	993.9	994.4	995.0	995.2	996.2	997.0	997.9	999.1	000.1	000.9	994.9
16	001.7	002.5	003.4	004.3	004.7	005.1	005.3	005.9	006.9	007.1	007.7	007.4	007.4	007.1	006.3	005.8	005.3	005.0	004.6	004.1	003.7	003.8	003.7	003.7	005.0
17	003.5	003.5	004.5	004.7	004.6	005.2	005.8	006.0	006.2	006.2	006.7	006.7	006.6	005.5	005.3	005.8	005.5	005.5	005.1	005.0	004.6	004.2	004.3	004.2	005.2
18	004.9	005.3	005.2	005.1	004.4	004.5	004.0	003.6	002.8	002.0	002.0	002.0	001.8	002.1	003.4	004.1	005.3	006.4	007.4	008.5	009.6	010.4	011.3	012.7	005.2
19	013.7	015.5	015.4	016.0	016.5	016.5	017.1	017.4	017.7	018.2	018.0	017.6	017.1	016.5	016.1	016.0	016.0	015.9	015.4	015.0	014.2	013.1	012.3	011.2	015.8
20	009.9	009.0	008.4	008.0	007.9	008.5	009.3	010.9	012.2	013.5	014.2	014.7	014.7	014.4	014.2	014.1	013.6	013.1	012.0	011.1	010.2	008.9	006.8	005.7	011.2
21	003.9	002.2	001.2	999.6	997.7	996.8	995.9	995.3	996.8	997.1	998.6	999.3	999.3	999.7	000.0	000.6	001.3	001.9	002.8	003.5	004.0	004.2	004.9	005.7	000.5
22	006.4	007.6	008.3	009.5	010.4	011.3	012.0	013.5	014.5	015.6	015.9	016.2	016.2	016.4	016.3	016.8	016.8	016.6	016.6	015.7	015.5	014.4	013.4	012.7	013.5
23	011.3	009.9	008.7	007.0	005.1	004.8	004.8	004.9	004.5	004.1	003.0	002.0	002.0	001.8	002.1	003.4	004.1	005.3	006.4	007.4	008.5	009.6	010.7	011.3	004.4
24	000.4	999.2	998.3	998.5	997.8	998.0	998.1	000.7	001.8	003.1	005.2	006.8	007.7	009.1	009.8	011.1	012.3	014.0	014.4	015.5	015.8	016.7	017.9	018.5	006.8
25	019.5	020.0	019.8	019.7	019.3	018.5	017.4	015.8	014.8	013.8	012.3	009.9	007.4	008.1	007.0	007.3	008.0	008.9	010.3	010.6	011.7	012.5	012.2	011.9	013.3
26	011.1	009.1	006.7	005.1	002.2	000.5	001.4	001.3	001.5	003.3	003.9	004.4	004.7	004.7	003.9	004.4	005.5	006.8	007.9	008.9	010.2	011.5	012.4	012.9	006.0
27	014.2	014.7	015.8	016.6	017.9	018.9	020.3	021.0	022.0	022.8	023.4	024.0	023.9	023.9	023.8	023.9	023.6	023.5	022.7	022.5	021.0	020.0	018.9	017.7	020.6
28	016.7	015.4	014.4	013.2	011.5	011.4	012.0	012.9	012.1	012.7	012.2	011.7	010.6	010.1	009.2	008.9	008.1	006.5	005.1	003.0	001.9	999.7	998.4	997.0	009.4
29	996.1	996.5	997.2	997.0	997.2	997.4	997.9	998.5	999.3	999.9	000.2	000.6	000.6	000.7	000.5	000.7	001.1	001.4	001.4	001.6	001.3	001.1	000.7	000.5	999.5
30	000.7	000.9	000.2	000.2	000.6	000.6	000.9	001.3	001.7	001.6	002.1	002.1	002.2	002.3	002.7	003.0	003.8	005.0	005.8	006.7	006.7	007.0	007.5	007.3	002.9
31	007.5	007.4	007.3	006.3	005.4	003.9	003.2	001.9	000.6	999.3	998.7	998.6	998.0	997.8	997.8	997.4	997.1	996.6	996.0	995.6	995.2	995.1	995.0	995.0	000.1
Mean ... (Station level)	1008.8	1008.5	1008.3	1007.9	1007.4	1007.1	1007.2	1007.6	1008.0	1008.3	1008.8	1008.8	1008.8	1008.8	1008.8	1008.8	1008.8	1008.8	1008.8	1008.8	1008.8	1008.8	1008.8	1008.8	1008.8
Mean ... (Sea level)	1010.4	1010.2	1010.0	1009.6	1009.1	1008.8	1008.9	1009.0	1009.3	1009.6	1010.0	1010.0	1010.0	1010.0	1010.0	1010.0	1010.0	1010.0	1010.0	1010.0	1010.0	1010.0	1010.0	1010.0	1009.9

343. Cahirciveen (Valentia Observatory) :  $H_b$  = 13.7 metres.

February, 1928.

Station Level ↑	1	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.		
	2	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.		
	3	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.		
	4	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.		
	5	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.		
	6	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
	7	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
	8	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
	9	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
	10	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
	11	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.		
	12	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.		
	13	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.		
	14	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.		
	15	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.		
	16	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
	17	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
	18	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
	19	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
	20	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
	21	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.		
	22	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.		
	23	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.		
	24	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.		
	25	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.		
	26	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.		
	27	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.		
	28	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.		
	29	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.		
		Mean ... (Station level)	1014 .36	1014 .09	1013 .06	1013 .72	1013 .56	1013 .57	1013 .37	1013 .40	1013 .63	1013 .88	1014 .03	1013 .24	1013 .00	1013 .76	1013 .44	1013 .32	1013 .64	1013 .77	1013 .05	1014 .26	1014 .38	1014 .45	1014 .28	1013 .08	
	Mean ... (Sea level)	1016 .05	1015 .78	1015 .65	1015 .41	1015 .25	1015 .26	1015 .06	1015 .18	1015 .35	1015 .56	1015 .71	1015 .92	1015 .67	1015 .44	1015 .23	1015 .32	1015 .63	1015 .45	1015 .63	1015 .94	1016 .06	1016 .26	1016 .37	1016 .37	1016 .35	1015 .67
	Hour G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean	



Readings in millibars at exact hours, Greenwich Mean Time.

344. Cahirciveen (Valentia Observatory) :  $H_b$  (height of barometer cistern above M.S.L.) = 13.7 metres.

March, 1928.

Hour G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean
Day.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
1	005.5	005.5	005.3	005.4	005.6	005.8	006.1	006.4	006.7	006.9	007.5	007.6	007.8	007.7	008.0	008.4	008.8	009.3	010.0	010.6	011.3	011.9	012.2	012.0	007.9
2	012.1	012.3	012.5	012.6	012.7	012.9	013.4	013.9	014.3	014.2	014.3	014.4	014.2	013.9	013.6	013.6	013.6	014.0	014.5	014.6	014.7	014.8	014.6	014.5	013.7
3	014.3	014.1	013.5	013.2	013.1	013.0	013.1	013.3	013.5	013.5	013.6	013.5	013.3	013.1	013.0	013.1	013.1	013.5	013.8	013.9	014.0	014.0	013.9	013.9	013.5
4	014.1	013.9	013.5	013.6	013.7	013.9	014.1	014.3	014.6	015.0	015.2	015.5	015.7	015.5	015.8	015.6	015.8	016.0	016.1	016.8	017.3	017.9	018.0	018.3	015.5
5	018.2	018.0	018.3	018.1	018.1	018.1	018.6	018.7	018.7	018.7	018.7	019.0	019.0	018.3	018.1	017.6	017.1	017.2	017.3	017.1	017.1	016.9	016.5	015.9	017.8
6	014.7	014.2	013.6	013.1	012.6	012.2	011.9	011.6	011.5	011.5	010.8	010.1	009.9	009.4	008.9	008.1	007.6	007.1	006.9	006.7	006.9	006.6	006.3	005.9	010.1
7	005.4	004.9	004.5	004.1	003.9	003.8	004.4	005.2	005.8	006.2	006.9	007.0	007.2	007.1	007.2	007.3	007.6	008.1	008.9	009.5	009.9	010.5	011.0	011.2	006.9
8	011.4	011.3	011.3	011.5	011.9	012.2	012.8	013.4	013.8	013.9	014.2	014.2	014.3	014.3	014.3	014.2	014.2	014.2	014.5	014.6	014.4	014.5	014.6	014.7	013.5
9	014.5	014.2	014.0	013.8	013.8	013.9	014.1	014.3	014.6	014.8	015.3	015.5	015.7	016.2	016.2	016.4	016.6	017.1	017.4	017.5	017.6	018.1	018.2	018.3	015.7
10	018.3	018.0	017.8	017.6	017.8	017.7	017.7	017.7	017.7	017.7	017.7	017.6	017.4	017.4	017.4	017.3	017.4	017.5	017.8	017.9	018.0	018.0	018.1	018.1	017.7
11	018.0	017.9	017.3	017.5	017.2	017.2	017.2	017.3	017.2	017.3	017.1	017.0	016.9	016.6	016.4	016.4	016.5	016.8	017.1	017.4	017.8	018.0	018.1	018.3	017.3
12	018.2	018.0	017.9	017.7	017.6	017.5	017.8	017.9	017.8	017.8	017.4	017.0	016.6	015.9	015.4	014.9	014.8	014.6	014.6	014.6	014.4	014.4	014.4	014.2	016.4
13	013.7	013.5	013.3	013.4	013.4	013.6	013.8	014.1	014.0	014.3	014.2	014.0	014.1	013.7	013.7	013.1	012.9	012.7	012.5	011.9	011.4	011.2	010.3	009.7	013.1
14	009.1	008.2	007.5	007.0	006.7	006.6	006.1	005.7	005.2	005.0	005.0	004.5	004.4	004.2	004.0	004.5	004.6	004.9	005.2	005.7	005.9	006.0	006.2	006.1	005.8
15	006.4	006.7	006.5	006.6	007.2	007.5	008.2	008.9	009.4	009.7	010.2	010.7	010.7	010.7	010.7	010.7	010.6	010.8	011.0	011.2	011.0	010.7	010.5	010.2	009.4
16	009.7	008.1	007.4	006.4	005.8	005.6	005.4	005.2	004.7	004.2	003.7	003.6	003.4	003.0	003.1	003.0	002.9	002.7	002.6	002.5	002.6	002.4	002.4	001.9	004.4
17	001.9	001.5	000.8	000.1	999.6	000.0	001.3	002.1	002.7	002.5	002.5	002.2	002.2	001.9	002.4	002.0	002.1	002.5	002.6	002.9	002.8	003.0	002.8	002.6	001.9
18	002.5	002.3	002.2	002.6	002.7	003.1	003.6	004.0	004.0	004.0	003.8	003.5	002.8	001.9	001.0	000.2	999.3	998.5	997.7	996.7	995.6	994.8	993.5	993.0	000.8
19	992.3	991.7	990.5	989.1	987.4	986.3	986.2	986.7	986.5	986.1	984.7	984.1	983.2	981.4	980.1	981.6	983.4	984.8	985.6	986.9	988.0	988.6	989.1	989.2	986.5
20	989.4	989.4	988.8	987.9	987.3	987.0	986.8	986.6	986.2	985.9	985.5	984.9	984.6	984.2	984.5	984.5	984.7	985.0	985.6	986.2	987.0	987.4	987.7	988.0	986.5
21	988.3	988.6	988.6	988.9	989.2	989.6	990.1	990.3	990.7	991.1	991.8	992.0	992.1	992.0	992.1	992.0	992.0	992.1	992.2	992.3	992.2	991.7	991.1	990.9	990.9
22	990.2	989.7	988.8	988.1	987.8	987.4	987.1	987.1	986.8	986.1	985.9	985.3	984.9	983.8	983.3	982.9	982.4	982.2	982.3	982.4	982.2	981.8	981.5	981.0	985.2
23	980.8	980.7	980.6	980.6	980.8	980.8	981.2	981.6	982.1	982.5	983.1	983.8	984.5	985.0	985.8	986.7	987.9	988.9	990.0	990.9	991.5	991.8	992.4	992.8	985.0
24	993.0	992.9	992.9	992.8	992.5	992.2	992.5	992.9	993.2	993.2	993.7	994.2	994.8	995.1	995.8	996.2	996.8	997.8	998.8	999.5	999.6	999.7	999.7	999.7	993.7
25	998.9	999.8	000.4	001.3	002.0	003.0	004.1	004.8	005.8	006.6	007.1	007.6	008.1	008.2	008.4	008.5	008.7	009.0	009.3	009.6	009.7	009.9	009.9	010.6	006.0
26	011.1	011.3	011.3	011.2	011.2	011.0	010.8	010.8	010.1	009.7	009.1	008.3	007.3	006.6	004.5	003.6	002.4	001.8	001.3	001.8	002.5	003.0	003.4	003.9	007.1
27	004.1	004.2	004.3	004.1	004.5	004.5	004.8	005.1	005.2	005.0	004.9	004.6	004.4	004.2	004.2	004.1	004.2	004.4	004.7	004.9	005.1	004.9	004.4	004.0	004.5
28	003.6	003.7	002.7	002.6	002.1	002.4	002.7	002.8	003.0	002.8	002.5	002.2	002.1	002.0	001.7	001.3	001.0	000.7	000.1	999.6	998.8	997.1	995.0	992.8	001.3
29	991.3	989.4	987.9	986.6	985.3	984.2	982.9	982.0	981.7	981.4	980.8	980.1	980.1	980.3	980.4	980.1	980.0	979.2	978.5	978.0	978.3	979.3	979.8	980.9	982.3
30	981.3	981.7	981.9	982.0	982.1	982.8	983.3	983.5	984.2	984.2	984.2	984.5	983.8	982.8	982.8	982.3	982.4	982.7	983.3	983.8	984.6	985.0	985.4	985.4	983.2
31	985.6	985.9	986.0	986.2	986.8	987.9	988.9	989.8	990.4	991.7	992.4	993.1	993.4	993.9	994.7	995.5	996.5	997.5	997.9	999.3	000.7	001.6	002.1	002.6	993.0
Mean (Station level)	1003.80	1003.60	1003.29	1003.09	1002.99	1003.04	1003.26	1003.48	1003.61	1003.65	1003.66	1003.56	1003.42	1003.16	1003.03	1002.98	1003.07	1003.23	1003.44	1003.67	1003.86	1003.95	1003.87	1003.82	1003.44
Mean (Sea level)	1005.48	1005.28	1004.97	1004.77	1004.67	1004.72	1004.94	1005.16	1005.29	1005.33	1005.33	1005.22	1005.08	1004.82	1004.69	1004.64	1004.74	1004.90	1005.11	1005.35	1005.54	1005.63	1005.55	1005.50	1005.12

345. Cahirciveen (Valentia Observatory) :  $H_b$  = 13.7 metres.

April, 1928.

Station Level ↑ ↓	1	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.		
	2	003.2	003.5	004.0	004.6	005.0	005.5	006.2	006.7	007.1	007.6	008.4	008.7	009.0	009.4	009.6	010.0	010.8	011.3	011.8	012.0	012.5	013.0	013.0	013.1	008.4	
	3	012.8	013.0	012.8	012.6	012.7	012.7	012.8	012.9	013.0	013.0	011.9	010.8	009.9	009.3	008.7	007.7	007.6	006.4	005.2	005.4	005.1	005.2	005.3	005.4	009.8	
	4	005.2	004.3	003.9	003.2	003.1	002.5	002.7	002.9	003.0	003.1	003.4	003.7	003.7	003.0	003.8	003.6	003.5	003.2	003.1	003.3	003.1	003.2	002.9	002.7	003.4	
	5	002.0	001.7	001.5	001.3	000.9	000.7	001.1	001.1	001.0	001.4	001.9	002.1	002.0	002.0	001.8	001.9	002.1	002.1	002.3	002.7	002.8	002.7	002.7	001.9		
	6	002.7	002.3	001.8	001.7	001.5	001.6	001.6	001.5	001.2	001.2	001.2	001.3	001.2	001.1	001.2	001.4	001.5	002.1	002.7	003.4	004.3	005.0	005.5	005.8	002.2	
	7	006.2	006.1	006.0	005.9	005.9	006.1	006.3	006.3	006.2	006.1	006.1	005.9	005.6	005.2	004.7	004.1	003.6	003.2	003.1	003.1	003.0	002.5	001.9	001.6	004.9	
	8	001.4	001.2	000.9	000.3	999.8	999.7	999.7	999.4	999.1	999.0	998.6	998.0	997.4	997.0	996.4	995.6	994.8	994.7	994.3	994.0	993.7	993.2	992.6	992.4	997.4	
	9	2.990	6.989	9.989	3.989	0.988	0.988	3.987	8.987	3.987	2.986	8.986	2.985	0.985	0.983	8.982	9.981	5.980	7.980	5.980	6.981	6.982	0.982	7.983	3.984	1.985	3.985
	10	984.5	984.9	984.9	985.0	984.8	985.0	984.8	985.0	985.1	985.1	985.0	985.6	985.3	985.4	985.1	985.0	984.8	984.9	985.4	985.6	985.7	985.9	986.0	985.8	985.2	
	11	934.5	983.6	982.7	982.0	981.4	981.3	981.3	981.5	981.3	981.6	982.1	982.8	983.0	983.4	983.8	984.0	984.2	985.0	986.0	986.6	986.8	986.9	986.9	987.1	988.7	
	12	987.1	986.9	986.9	987.0	987.3	988.0	988.5	989.2	989.8	990.5	991.0	991.9	992.5	993.2	993.8	994.2	995.1	996.1	997.0	998.1	998.2	998.6	998.6	999.1	999.2	
	13	999.3	999.3	999.3	999.0	998.9	999.0	999.2	999.6	999.8	000.0	000.3	000.3	000.4	000.7	000.8	001.3	001.1	001.7	002.2	002.6	003.0	002.6	002.7	002.3	000.6	
	14	001.9	001.2	000.8	000.3	999.9	999.6	999.2	998.9	998.4	997.8	997.0	996.3	996.0	995.8	994.6	993.5	992.6	993.0	993.4	994.2	994.8	995.3	995.4	995.2	997.0	
	15	995.6	995.6	995.7	995.8	995.6	995.7	996.0	996.2	996.4	996.8	995.8	995.3	995.0	994.5	993.8	993.4	993.1	992.8	992.3	991.7	991.7	991.8	991.7	992.1	994.4	
	16	992.1	991.3	990.8	992.1	992.5	993.0	993.2	994.4	995.3	995.8	996.4	997.0	997.3	997.7	998.0	998.7	999.9	000.6	001.2	001.7	002.8	003.4	003.8	004.2	997.0	
17	004.8	005.2	005.9	006.5	007.1	008.0	008.9	009.7	010.3	010.5	011.3	011.5	012.1	012.2	012.6	012.9	013.4	013.8	014.5	015.0	015.8	016.3	016.7	016.9	011.1		
18	017.1	017.1	017.3	017.3	017.9	018.3	019.0	019.1	019.2	019.4	020.1	020.4	020.5	020.4	020.9	021.3	021.8	022.9	023.9	024.9	025.9	026.9	027.9	028.9	019.9		
19	021.7	021.4	021.3	021.2	021.0	020.9	021.0	021.1	021.2	021.2	021.8	021.8	021.8	021.8	021.8	021.7	021.6	021.7	021.8	021.9	022.0	022.1	022.2	022.3	022.4		
20	018.0	017.9	017.7	017.9	018.0	018.3	018.5	018.8	018.8	018.8	018.8	018.7	018.6	018.3	017.8	017.5	017.3	017.3	017.3	017.1	017.2	017.0	016.7	016.5	017.9		
21	016.3	015.9	015.6	015.2	015.0	015.0	015.3	015.6	015.5	015.5	015.2	015.3	015.2	015.4	014.9	014.4	014.0	014.0	014.1	014.2	014.4	014.2	013.6	013.3	014.9		
22	013.2	013.1	012.8	012.4	012.1	012.2	012.5	012.7	013.0	013.4	013.7	014.1	014.3	014.4	014.9	015.2	015.5	016.2	017.4	018.0	018.7	018.9	019.0	019.5	014.8		
23	019.4	019.5	019.6	019.7	019.6	019.7	020.4	020.7	020.7	020.6	020.2	019.8	019.7	019.4	019.0	018.4	017.6	017.1	016.5	016.3	016.1	015.9	015.1	014.6	018.7		
24	014.5	014.0	013.6	013.4	013.1	013.3	013.4	014.0	014.2	014.3	014.2	014.2	014.2	013.6	013.1	012.8	012.4	012.2	011.8	011.6	011.0	010.5	009.7	013.0	0		
25	009.3	008.2	007.6	006.9	006.4	005.9	006.2	006.1	006.1	006.2	006.3	006.3	006.5	006.5	006.0	005.6	005.3	005.0	004.5	004.5	003.8	004.0	004.1	004.2	006.0		
26	003.6	003.6	003.6	003.2	003.2	003.3	003.6	004.1	004.0	004.4	004.8	005.0	005.2	005.5	005.5	005.7	006.2	006.4	006.4	006.6	006.7	006.5	006.4	006.3	004.9		
27	006.1	005.4	005.1	004.5	004.3	004.2	004.2	004.2	004.0	004.2	004.3	004.3	003.8	003.8	003.8	003.7	003.8	003.9	004.6	005.4	005.9	006.4	007.1	007.3	004.7		
28	007.7	007.9	007.9	008.1	008.1	008.7	009.3	010.1	010.7	011.1	011.2	011.3	011.4	010.7	010.8	010.4	010.8	011.0	011.5	012.0	012.0	011.9	012.7	012.4	010.3		
29	011.9	011.8	011.3	011.7	011.5	012.5	013.1	013.1	013.1	013.0	013.5	013.6	013.5	013.3	013.3	013.2	013.1	013.2	013.3	013.5	013.5	013.8	013.2	013.1	012.9		
30	013.0	012.6	012.2	012.0	011.6	011.3	011.5	011.4	011.1	010.9	010.4	010.2	009.9	009.6	009.6	009.1	009.0	008.7	008.6	008.8	008.9	008.8	008.7	010.4	0		
	008.5	008.0	007.6	007.2	006.8	006.4	006.7	006.7	006.6	006.4	006.4	006.0	005.5	004.9	004.4	004.0	003.9	003.8	003.9	004.0	004.5	004.8	005.3	005.5	005.8		
Mean (Station level)	1005.16	1004.90	1004.70	1004.58	1004.47	1004.56	1004.81	1005.01	1005.07	1005.20	1005.22	1005.17	1005.06	1004.95	1004.75	1004.56	1004.57	1004.68	1004.81	1005.06	1005.30	1005.36	1005.35	1005.34	1004.94		
Mean (Sea level)	1006.84	1006.58	1006.38	1006.26	1006.15	1006.24	1006.49	1006.68	1006.73	1006.86	1006.88	1006.83	1006.72	1006.61	1006.41	1006.22	1006.23	1006.34	1006.47	1006.72	1007.03	1007.02	1007.02	1006.61			
Hour G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean		



Readings in millibars at exact hours, Greenwich Mean Time.

346. Cahirciveen (Valentia Observatory) :  $H_b$  (height of barometer cistern above M.S.L.) = 13.7 metres.

May, 1928.

Hour G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean
Day.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
1	006.0	006.3	006.6	006.9	007.2	007.5	008.2	008.9	009.5	009.8	010.2	010.3	010.7	010.8	010.9	010.8	010.6	010.3	010.5	010.9	011.1	011.1	011.0	009.3	
2	010.7	010.3	009.9	009.6	009.5	009.4	009.1	008.9	009.0	009.1	008.5	008.1	008.1	007.7	007.3	007.0	006.4	005.9	005.6	005.4	005.5	005.2	005.0	004.7	007.9
3	004.4	003.8	003.0	002.8	002.7	002.6	002.5	002.4	002.1	001.7	001.1	000.9	000.7	000.5	000.1	999.8	999.6	999.3	999.3	999.5	999.4	999.2	999.0	998.9	011.2
4	998.6	998.4	998.4	999.1	999.6	000.5	000.8	001.6	001.9	002.7	003.2	003.2	003.7	004.0	004.2	004.4	004.9	005.2	005.5	005.7	005.8	005.8	005.8	005.3	002.7
5	005.1	004.4	004.4	004.2	004.3	004.5	005.0	005.1	005.2	005.2	005.5	005.6	005.4	005.6	006.0	006.4	007.1	007.8	008.6	009.4	010.1	010.6	011.0	011.2	006.4
6	011.3	011.4	011.3	011.5	011.7	012.2	012.2	012.1	012.1	012.1	012.1	012.1	012.0	011.7	011.4	011.0	010.9	011.0	010.9	011.2	011.3	011.2	011.1	011.7	011.6
7	011.6	011.5	011.3	011.5	011.7	012.3	012.3	012.3	012.3	012.3	012.3	012.3	012.3	012.3	012.3	012.3	012.3	012.3	012.3	012.3	012.3	012.3	012.3	012.3	012.3
8	014.3	014.5	014.7	014.6	014.5	014.7	015.0	015.5	015.8	016.2	016.3	016.2	016.3	016.3	016.4	016.3	016.4	016.6	016.8	017.2	017.8	018.1	018.1	018.1	016.0
9	018.3	018.3	018.3	018.3	018.3	018.7	018.9	019.2	019.4	019.4	019.4	019.6	019.5	019.2	019.2	019.3	019.1	019.2	019.2	019.4	019.8	019.9	020.1	019.7	019.1
10	019.6	019.4	019.2	019.0	019.2	019.3	019.3	019.4	019.5	019.5	019.7	019.8	019.7	019.7	019.5	019.3	019.2	019.2	019.4	019.9	020.3	020.3	020.3	020.4	019.6
11	020.6	020.7	020.8	020.8	021.1	021.5	021.9	021.8	022.0	022.3	022.5	022.4	022.6	022.4	022.1	022.0	022.0	022.1	022.5	022.7	022.8	022.9	022.8	022.1	021.9
12	022.7	022.6	022.6	022.6	022.6	022.9	023.2	023.5	023.5	023.5	023.4	023.3	023.2	023.3	023.0	023.1	023.3	023.3	023.3	023.6	023.9	024.4	024.4	024.5	023.3
13	024.4	024.3	024.3	024.2	024.2	024.4	024.7	024.8	024.9	024.7	024.8	024.7	024.5	024.5	024.4	024.4	024.2	024.4	024.1	024.0	024.4	024.3	024.2	024.2	024.4
14	024.0	023.8	023.5	023.4	023.3	023.3	023.2	023.0	023.0	022.8	023.0	022.8	022.5	022.3	022.2	022.3	022.2	022.3	022.1	022.5	022.6	022.8	023.1	022.9	022.9
15	022.6	022.7	022.3	022.2	022.1	021.9	021.9	021.7	021.7	021.5	021.3	021.0	020.8	020.3	021.9	021.9	021.3	021.8	021.2	021.7	021.6	021.5	021.6	021.5	020.1
16	014.7	014.4	013.6	013.1	013.2	013.1	013.2	013.2	013.2	013.3	013.5	013.5	013.8	013.7	013.9	014.1	014.2	014.6	014.4	015.4	015.5	015.3	015.4	015.4	014.0
17	014.8	014.2	013.5	012.6	011.4	011.1	009.7	008.6	008.6	007.6	006.6	006.0	005.2	004.8	004.6	004.0	003.8	003.8	003.7	003.5	003.9	004.2	004.2	007.5	
18	004.5	004.7	005.0	005.7	006.2	006.8	007.6	008.1	008.5	009.1	009.8	010.4	010.6	010.9	011.1	011.2	011.4	011.7	011.8	012.3	012.7	013.2	013.4	013.4	009.4
19	013.4	013.4	013.1	012.9	012.8	012.7	012.8	012.7	012.9	012.4	012.3	012.2	012.0	011.5	011.1	010.6	009.9	009.7	009.7	010.4	010.6	010.7	011.0	011.7	
20	011.3	011.2	011.1	011.0	011.1	011.3	012.1	012.8	013.4	013.9	014.5	014.8	015.0	015.1	015.1	015.2	015.5	015.8	016.2	016.7	017.4	017.6	018.0	018.3	014.2
21	018.3	018.4	018.4	018.4	018.5	018.6	018.9	019.2	019.5	019.9	019.8	020.2	020.3	020.5	020.7	020.8	021.0	021.3	021.7	022.1	022.6	022.9	023.2	023.2	020.2
22	023.2	023.1	023.0	022.9	022.8	023.0	023.2	023.0	022.9	022.8	022.6	022.7	022.5	022.3	022.0	021.6	021.4	021.1	020.8	020.6	020.4	020.1	019.7	019.2	022.0
23	018.5	017.9	017.3	017.0	016.7	016.6	016.5	016.2	015.9	015.8	015.8	015.4	015.2	015.1	014.9	014.8	014.7	014.7	014.8	014.9	014.8	014.8	014.6	014.5	014.9
24	014.5	014.3	014.0	013.8	013.8	013.8	014.1	014.0	014.2	014.3	014.4	014.5	014.5	014.7	014.8	014.6	014.5	014.4	014.5	014.6	014.7	014.6	014.5	014.4	014.4
25	013.9	013.4	013.0	012.6	012.4	012.4	012.4	012.4	012.3	012.4	012.2	012.2	012.2	012.2	012.1	011.9	012.0	011.9	011.9	011.8	011.7	011.6	011.5	011.4	012.4
26	012.0	011.2	010.2	009.7	009.2	008.9	008.7	008.5	008.7	008.8	008.9	009.5	009.8	009.9	009.9	010.0	010.1	010.5	010.7	010.9	011.2	011.4	011.4	011.4	010.1
27	011.2	010.8	010.4	010.0	009.3	009.3	008.7	008.3	008.2	008.2	008.2	008.1	007.9	007.6	007.5	007.4	007.3	007.4	007.7	008.1	008.7	009.0	009.0	009.1	008.7
28	009.1	009.3	009.3	009.3	009.6	010.1	010.7	011.1	011.4	011.7	012.1	012.2	012.5	012.6	012.6	012.6	012.8	013.2	013.6	014.1	014.4	014.4	014.0	013.9	011.7
29	013.9	013.5	013.3	013.3	013.3	013.6	014.0	014.1	014.0	013.9	014.4	014.8	014.8	014.6	014.5	014.5	015.0	015.1	015.2	015.5	016.0	016.5	016.7	017.0	014.6
30	017.0	017.0	017.1	017.1	017.3	017.3	017.3	017.7	017.7	017.9	017.9	018.1	018.1	017.9	017.6	017.5	017.3	017.3	017.4	017.2	017.2	017.1	016.7	016.3	017.4
31	015.9	015.3	014.9	014.6	014.4	014.2	014.1	013.9	013.4	013.4	013.8	013.8	013.7	013.3	013.0	012.6	012.4	012.7	012.7	012.7	012.9	012.9	012.8	012.5	013.7
Mean (Station level)	1014.21	1014.02	1013.80	1013.70	1013.67	1013.80	1013.90	1014.00	1014.08	1014.13	1014.18	1014.21	1014.21	1014.12	1014.06	1013.93	1013.88	1013.95	1013.99	1014.20	1014.48	1014.60	1014.62	1014.55	1014.09
Mean (Sea level)	1015.89	1015.70	1015.48	1015.38	1015.35	1015.48	1015.57	1015.67	1015.75	1015.79	1015.84	1015.87	1015.86	1015.77	1015.71	1015.58	1015.53	1015.61	1015.65	1015.87	1016.15	1016.27	1016.29	1016.22	1015.76

347. Cahirciveen (Valentia Observatory) :  $H_b$  = 13.7 metres.

June, 1928.

Station Level	1	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
	2	012.1	012.0	011.7	011.5	011.8	012.1	012.5	012.7	012.9	013.1	013.2	013.8	014.1	013.9	014.0	013.9	013.9	014.2	014.5	014.3	016.0	016.4	016.6	016.9	013.6
	3	017.2	016.8	017.3	017.3	017.4	017.8	018.3	018.3	018.5	018.6	018.5	018.8	018.9	018.6	019.0	018.7	018.6	018.9	019.5	019.4	020.0	020.4	020.1	019.8	018.5
	4	020.0	019.8	019.5	018.9	018.6	018.6	018.6	018.3	018.2	018.0	017.4	017.1	016.9	016.4	015.7	015.2	015.0	015.1	014.7	014.4	014.5	014.2	014.1	013.8	016.9
	5	012.7	012.4	012.2	011.4	010.9	010.7	010.0	009.5	009.2	008.5	008.2	007.5	007.0	006.7	006.2	005.6	005.2	005.4	005.5	005.6	005.7	006.0	005.6	005.5	008.2
	6	005.3	005.3	004.7	004.8	005.0	005.3	005.4	005.4	005.3	005.2	005.3	005.0	004.6	004.2	003.9	003.8	003.7	003.4	003.5	003.4	003.5	003.7	003.5	003.1	004.5
	7	003.0	002.4	002.1	001.9	001.6	001.5	001.4	001.4	001.2	000.9	000.8	000.6	000.2	000.0	999.4	999.3	999.0	998.9	998.8	999.0	998.8	998.4	998.3	998.2	000.4
	8	997.6	997.2	996.7	996.3	996.2	995.7	995.5	995.5	994.7	994.6	994.5	994.3	994.1	993.4	992.9	992.7	992.1	992.0	992.2	992.2	992.4	992.3	992.3	992.4	
	9	992.1	992.1	992.2	992.2	992.4	992.7	992.9	993.3	993.4	993.4	993.4	993.6	993.3	993.0	992.5	991.7	991.1	990.1	989.6	988.3	987.2	985.9	983.5	981.7	991.1
	10	980.0	979.4	978.7	978.6	978.5	978.6	978.3	978.1	977.5	977.5	976.9	976.7	976.7	977.7	979.0	980.3	981.4	982.9	984.4	985.5	987.1	988.5	989.3	980.2	
	11	990.5	991.5	992.4	993.4	994.7	995.9	997.5	998.4	999.9	1000.8	1001.8	1003.0	1004.2	1004.9	1005.7	1006.2	1006.9	1007.6	1008.3	1009.0	1009.5	1010.3	1010.8	1011.1	1001.8
	12	011.5	011.9	012.2	012.6	013.1	013.7	014.0	014.8	015.6	015.8	016.4	017.0	017.5	018.0	018.3	018.6	018.9	019.1	019.4	019.8	020.1	020.2	020.2	016.3	
	13	020.0	019.8	019.5	018.9	018.7	018.4	018.1	017.8	017.2	016.7	016.2	015.0	013.4	011.7	010.3	009.6	009.1	010.0	010.4	010.5	010.5	010.6	010.5	014.5	
	14	010.3	009.7	009.0	008.5	007.9	007.6	007.5	007.5	007.4	007.2	006.9	006.7	006.3	006.2	006.2	005.8	005.1	004.6	004.2	003.8	003.2	003.1	002.7	002.1	006.4
	15	002.4	003.2	004.1	005.4	006.7	008.3	009.9	011.2	012.8	014.2	015.4	016.6	017.6	018.5	019.6	020.2	020.7	021.3	022.0	022.6	023.4	024.2	024.7	025.0	014.9
	16	025.2	025.2	025.0	024.8	024.8	024.9	024.9	025.2	025.6	025.8	026.3	026.3	026.4	026.4	026.3	026.1	026.0	025.7	025.7	025.7	025.6	026.0	026.0	025.7	025.6
	17	025.5	025.3	025.1	024.8	024.9	025.3	025.3	025.7	025.7	025.7	025.8	025.8	026.0	026.0	025.7	025.5	025.5	025.4	025.4	025.2	025.2	025.2	025.2	025.4	025.4
	18	024.0	023.4	022.9	022.2	022.0	021.6	021.2	021.0	020.8	020.5	020.3	019.8	019.5	019.2	018.9	018.5	018.2	017.9	017.7	017.3	017.1	016.8	016.5	015.8	015.4
	19	014.6	014.1	013.2	012.4	012.0	011.6	010.9	010.6	009.9	009.3	008.8	008.3	007.5	006.9	006.2	005.3	004.4	003.4	002.6	002.2	002.2	002.2	002.2	002.4	007.9
	20	002.2	002.3	002.3	002.4	002.6	002.9	003.2	003.5	003.7	004.2	004.4	005.1	005.3	005.6	005.9	006.3	006.8	007.4	007.8	008.5	009.3	009.8	010.5	011.0	005.4
21	011.2	011.7	011.9	012.3	012.7	013.2	013.5	013.5	014.2	014.4	014.1	014.2	014.1	014.1	013.7	014.1	014.3	014.1	013.6	013.3	012.9	012.3	011.5	010.5	009.0	013.0
	22	009.2	008.3	007.4	006.8	006.8	007.3	008.0	008.4	008.4	008.4	008.5	008.6	008.6	008.5	008.4	008.4	008.4	008.5	008.6	008.8	008.9	008.9	009.0	008.3	
	23	008.8	008.6	008.4	008.4	008.7	008.9	009.1	009.4	009.8	010.0	010.5	011.0	011.4	011.8	012.3	012.7	013.4	014.1	014.5	015.2	015.7	016.1	016.2	016.3	011.6
	24	016.5	016.3	016.4	016.3	016.3	016.4	016.5	016.6	016.9	017.2	017.4	017.7	018.0	018.0	018.0	018.2	018.3	018.3	018.5	018.7	018.8	019.3	019.7	019.7	017.6
	25	019.6	019.4	019.2	019.3	019.2	019.0	019.1	018.9	018.9	018.8	018.8	018.6	018.2	017.3	016.9	016.4	015.1	014.2	014.5	014.7	013.3	012.7	011.3	010.3	017.1
	26	008.9	007.2	006.0	004.5	003.2	002.2	001.1	000.3	999.9	999.8	998.1	998.0	996.8	995.5	993.9	992.3	991.4	990.4	988.9	988.6	988.9	989.3	990.6	992.7	997.1
	27	993.9	995.4	997.2	999.2	1001.6	1003.6	1005.7	1007.5	1009.1	1010.7	1011.8	1013.1	1014.3	1015.2	1016.0	1016.8	1017.4	1018.0	1018.5	1019.1	1019.7	1020.4	1020.5	1020.8	1010.5
	28	020.8	021.1	021.1	021.2	021.4	021.9	022.2	022.4	022.9	023.0	023.4	023.5	023.4	023.2	023.1	023.0	022.7	022.2	021.7	020.9	020.3	019.7	019.2	018.1	021.8
	29	016.5	014.9	013.8	012.2	011.5	011.4	011.3	010.4	010.3	010.4	010.3	010.3	010.2	010.0	009.5	008.9	008.1	007.3	006.0	004.9	004.8	004.7	005.0	005.4	009.8
	30	005.9	006.2	006.1	006.4	006.2	006.4	006.7	006.9	006.8	007.0	007.3	008.0	008.7	009.4	010.1	010.4	010.6	010.1	010.1	011.1	012.0	012.4	012.4	012.5	008.7
	Mean (Station level)	1009.67	1009.51	1009.35	1009.24	1009.33	1009.55	1009.74	1009.86	1010.03	1010.11	1010.16	1010.25	1010.24	1010.13	1010.02	1009.94	1009.80	1009.81	1009.82	1009.87	1010.03	1010.10	1010.11	1009.07	1009.87
Mean (Sea level)	1011.33	1011.17	1011.01	1010.90	1010.99	1011.21	1011.39	1011.50	1011.67	1011.75	1011.80	1011.88	1011.77	1011.66	1011.58	1011.53	1011.45	1011.46	1011.51	1011.68	1011.84	1011.77	1011.63	1011.51		
G.M.T.	...	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean



Readings in millibars at exact hours, Greenwich Mean Time.

348. Cahirciveen (Valentia Observatory) :  $H_b$  (height of barometer cistern above M.S.L.) = 13.7 metres.

July, 1928.

Hour G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean	
Day.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
1	015.3	014.7	014.0	013.4	012.7	011.6	010.7	010.2	009.7	008.9	008.1	007.8	007.5	007.2	007.0	007.0	007.2	007.7	008.3	008.6	009.3	010.1	010.3	010.7	010.0	
2	010.8	010.9	011.0	010.9	011.2	011.5	012.0	012.6	013.0	013.6	013.9	014.3	014.8	015.1	015.1	015.1	015.2	015.4	015.6	015.9	016.3	016.3	016.3	016.3	013.7	
3	016.2	016.2	016.0	015.9	016.1	016.3	016.4	016.5	016.7	016.8	016.7	016.7	016.7	016.6	016.7	016.6	016.7	016.6	016.7	016.8	017.2	017.3	017.1	017.1	016.6	
4	016.8	016.4	016.2	015.8	015.4	015.2	014.8	014.6	014.3	013.5	012.6	012.4	011.6	011.1	010.4	009.9	009.5	009.0	008.8	008.5	008.3	008.0	007.5	012.3		
5	007.0	006.5	006.1	005.7	005.6	005.6	005.9	006.2	006.6	006.7	007.1	007.1	007.4	007.5	007.6	007.7	007.8	008.1	008.4	008.7	009.0	009.3	009.3	009.2	007.3	
6	009.3	009.5	009.5	009.9	010.1	010.7	011.5	012.4	013.0	013.6	014.4	015.0	015.5	015.9	016.4	016.9	017.2	017.6	018.1	018.5	019.1	019.6	020.1	020.3	014.5	
7	020.4	020.3	020.2	020.3	020.4	020.6	020.9	021.2	021.2	021.3	021.0	020.5	020.2	020.2	019.6	019.3	018.9	018.2	018.0	018.2	018.0	017.8	017.7	017.2	019.7	
8	016.9	016.2	016.0	015.5	015.5	015.4	015.4	015.5	015.9	016.6	016.9	017.5	017.8	018.1	018.1	018.3	018.5	018.7	018.8	019.0	019.2	019.6	019.7	019.8	017.4	
9	019.6	019.3	019.2	019.2	019.4	019.6	019.9	020.2	020.6	020.9	021.3	021.5	021.7	021.9	022.1	022.2	022.3	022.3	022.3	022.3	022.2	022.0	021.8	021.4	021.0	
10	021.2	020.5	019.7	018.9	018.3	018.0	018.1	018.1	018.0	017.5	017.6	017.7	017.6	017.4	017.1	017.0	016.9	016.9	016.8	017.1	017.4	017.6	017.6	017.7	018.0	
11	017.5	017.1	017.2	017.1	017.2	017.3	017.8	018.1	018.5	018.6	018.8	019.0	019.1	019.2	019.3	019.4	019.3	019.3	019.5	019.5	019.8	019.8	020.1	019.8	018.6	
12	019.5	019.0	018.9	018.6	018.7	018.8	019.1	019.3	019.5	019.7	020.1	020.3	020.7	020.8	020.9	020.9	021.0	021.1	021.4	021.5	021.7	021.7	021.6	021.4	020.2	
13	021.1	020.8	020.3	020.3	020.5	020.8	020.7	020.9	021.1	021.2	021.5	021.9	022.1	022.2	022.1	021.8	021.8	021.9	022.1	022.2	022.3	022.3	022.4	022.5	021.5	
14	022.2	022.1	021.9	021.5	021.7	021.8	022.1	022.2	022.2	022.2	022.4	022.6	022.5	022.4	022.1	021.9	021.5	021.3	021.1	021.2	021.3	021.5	021.4	021.3	021.9	
15	021.1	020.8	020.7	020.3	020.0	020.3	020.3	020.4	020.6	020.7	021.0	021.6	021.9	022.2	022.5	022.8	023.1	023.6	024.1	024.7	025.6	026.1	026.5	027.0	022.3	
16	027.2	027.3	027.7	028.1	028.2	028.7	029.1	029.4	029.8	030.0	030.2	030.6	030.8	030.9	030.8	030.6	030.8	030.6	030.8	031.1	031.2	031.3	031.1	031.1	031.3	029.8
17	031.4	031.4	031.4	031.2	031.1	031.2	031.5	031.5	031.1	031.0	031.0	031.0	030.9	030.8	030.4	030.6	030.3	030.4	030.4	030.3	030.0	030.0	030.1	030.1	030.8	
18	030.0	029.6	029.2	028.9	029.3	029.4	029.4	029.4	029.3	029.1	029.1	029.1	029.2	029.2	029.1	029.0	028.7	028.4	028.3	028.1	028.1	028.1	028.0	027.7	028.9	
19	027.6	027.4	027.2	027.1	027.2	027.4	027.7	027.3	027.1	026.9	026.9	026.8	026.7	026.5	026.5	026.2	026.0	025.8	025.8	025.8	025.9	025.9	025.9	025.9	026.7	
20	025.8	025.5	025.1	025.1	025.1	025.1	025.2	025.3	025.4	025.2	025.4	025.4	025.4	025.5	025.3	025.1	024.9	024.8	024.6	024.6	024.6	024.7	024.6	024.7	025.1	
21	024.6	024.2	023.7	023.7	023.6	023.6	023.4	023.4	023.1	023.0	022.6	022.0	022.9	022.5	022.2	021.9	021.7	021.4	021.4	021.6	021.1	021.2	021.5	021.4	022.6	
22	021.4	021.1	020.8	020.8	021.0	020.8	021.0	021.0	021.2	021.3	021.7	022.0	022.0	021.9	021.8	021.9	021.8	021.9	021.8	021.7	021.8	021.9	021.9	021.9	021.5	
23	021.9	021.6	021.2	020.9	021.0	021.3	021.7	021.9	022.3	022.1	022.1	022.1	022.2	022.3	022.2	022.1	022.0	021.8	021.5	021.5	021.5	021.5	021.5	021.5	021.5	
24	023.0	022.6	022.2	022.2	021.9	021.9	022.3	022.3	022.4	022.4	022.4	022.3	022.2	022.1	022.0	021.8	021.4	021.3	021.2	021.1	020.7	020.5	020.2	020.1	021.8	
25	020.0	019.7	019.2	018.8	018.6	018.8	018.9	019.0	019.0	019.0	019.4	019.4	019.2	019.2	019.1	019.0	018.8	018.7	018.6	018.7	018.5	018.6	018.5	018.1	019.0	
26	017.6	016.7	016.0	015.7	014.9	015.0	014.9	014.8	014.4	013.8	013.7	013.4	013.2	012.6	012.2	011.8	011.3	010.8	010.5	009.9	009.2	009.2	009.1	008.9	013.1	
27	008.3	007.8	007.0	006.4	005.9	005.9	005.6	005.8	006.1	006.1	006.3	006.4	006.2	006.3	006.5	006.6	006.3	006.9	007.2	007.0	007.7	007.9	008.1	008.2	006.8	
28	008.1	008.0	007.9	007.6	007.8	007.9	008.2	008.4	008.7	008.5	008.5	008.6	008.6	008.4	008.3	008.1	008.4	008.6	008.7	009.1	009.4	009.6	009.5	009.4	008.5	
29	009.3	009.2	009.1	008.9	009.0	009.1	009.4	009.5	009.9	010.0	010.2	010.3	010.1	010.0	009.9	009.8	009.7	009.6	009.4	009.3	009.3	009.3	009.3	009.3	009.5	
30	008.3	007.9	007.5	006.6	006.4	006.4	006.3	005.9	006.2	006.2	006.0	006.2	006.2	006.7	006.6	006.9	007.2	007.5	007.8	008.1	008.7	009.0	009.3	009.8	007.2	
31	009.7	009.6	009.3	008.9	008.8	008.9	009.3	009.2	009.5	010.2	010.5	010.6	011.0	010.7	010.7	010.8	010.9	011.0	011.7	011.9	012.0	012.6	013.0	013.3	010.5	
Mean (Station level)	1018.36	1018.06	1017.79	1017.55	1017.50	1017.58	1017.72	1017.82	1017.93	1017.95	1018.03	1018.14	1018.20	1018.17	1018.11	1018.05	1017.98	1018.00	1018.10	1018.18	1018.31	1018.45	1018.47	1018.45	1018.04	
Mean (Sea level)	1020.01	1019.72	1019.45	1019.21	1019.16	1019.24	1019.37	1019.47	1019.58	1019.59	1019.67	1019.78	1019.84	1019.81	1019.75	1019.69	1019.62	1019.64	1019.75	1019.83	1019.96	1020.10	1020.12	1020.10	1019.69	

349. Cahirciveen (Valentia Observatory) :  $H_b$  = 13.7 metres.

August, 1928.

Station Level	1	mb. 013.3	mb. 013.6	mb. 013.7	mb. 013.9	mb. 014.4	mb. 015.0	mb. 015.9	mb. 016.3	mb. 016.5	mb. 016.9	mb. 017.3	mb. 017.6	mb. 017.8	mb. 018.3	mb. 018.4	mb. 018.6	mb. 018.8	mb. 019.1	mb. 019.5	mb. 019.9	mb. 020.6	mb. 021.0	mb. 021.1	mb. 021.3	mb. 017.3
	2	021.2	021.4	021.4	021.3	021.2	021.2	021.6	022.0	022.1	022.2	022.2	021.9	021.4	021.0	020.6	020.3	020.1	019.8	019.7	019.8	019.5	019.4	018.9	018.9	020.0
	3	018.4	017.8	017.5	017.2	017.2	017.0	016.7	016.5	016.4	016.0	016.0	015.7	015.6	015.4	015.0	014.7	014.7	014.9	015.1	015.1	015.0	014.9	016.1	016.1	016.1
	4	014.8	014.7	014.6	014.6	014.6	015.0	015.4	015.6	015.9	016.3	016.8	016.8	017.0	017.3	017.4	017.5	017.7	018.1	018.3	018.5	018.9	018.9	018.8	019.0	016.7
	5	018.9	019.0	018.9	018.4	018.4	018.4	018.5	018.5	018.6	018.4	018.6	018.5	018.3	018.0	017.5	017.1	016.8	016.8	016.2	016.0	015.7	015.4	015.3	014.3	017.6
	6	012.9	012.9	012.5	011.7	011.4	011.1	011.2	011.6	011.9	012.3	012.6	012.7	012.8	013.0	013.1	012.6	012.4	012.4	012.1	011.7	011.5	010.9	009.5	008.2	012.0
	7	006.1	004.6	002.8	002.2	002.4	004.8	005.9	007.1	007.9	008.7	009.5	009.8	010.3	010.8	011.5	011.7	012.0	012.5	012.8	013.7	013.8	014.2	014.5	014.6	009.2
	8	014.8	014.6	014.7	014.8	014.8	015.2	015.6	016.0	016.4	016.5	016.9	017.1	017.4	017.6	017.8	018.0	018.1	017.9	018.3	018.8	019.2	019.4	019.8	019.8	017.0
	9	019.8	019.5	019.2	019.2	018.9	019.1	018.9	019.2	019.2	018.9	019.1	018.9	019.1	018.8	018.8	018.5	018.4	018.3	018.1	018.0	017.8	017.7	017.6	017.5	018.7
	10	016.8	016.3	015.5	014.7	014.2	013.5	013.2	012.8	012.0	011.8	011.5	011.5	010.9	010.5	010.1	010.6	010.6	010.7	010.8	010.6	010.8	010.2	009.5	008.5	012.2
11	007.5	006.8	005.9	005.2	004.5	004.2	004.6	004.0	003.4	002.8	002.2	001.7	001.8	001.7	001.4	000.8	000.7	000.5	000.3	000.3	000.3	000.2	999.8	999.4	002.7	
12	998.8	998.2	997.4	996.8	996.4	996.4	996.1	995.7	995.1	994.9	994.6	994.2	994.0	993.6	993.3	992.7	992.5	992.0	991.6	991.1	991.0	991.0	991.4	991.7	994.3	
13	992.1	992.1	992.2	992.2	992.1	992.1	992.3	992.8	993.0	993.1	993.6	993.9	994.4	994.9	995.7	996.5	997.3	998.5	999.6	1000.0	1000.3	1000.4	1000.5	1000.9	995.4	
14	001.0	001.1	001.1	001.1	001.2	001.7	002.0	002.1	002.5	002.8	003.2	003.6	003.9	004.4	004.8	005.0	005.4	005.7	006.4	007.3	007.8	008.7	009.2	009.6	004.1	
15	009.9	010.3	010.5	010.9	011.3	011.9	012.7	013.4	013.9	014.2	014.7	015.0	015.2	016.0	016.5	016.9	017.4	017.7	017.9	018.3	018.6	018.9	019.2	019.5	014.8	
16	019.8	020.0	020.2	020.4	020.7	021.1	021.5	021.6	021.8	022.0	022.2	022.3	022.4	022.4	022.5	022.4	022.3	022.3	022.2	022.2	022.3	022.3	022.1	021.8	021.7	
17	021.2	020.8	020.5	020.2	019.7	019.3	019.1	018.9	018.6	018.7	018.2	018.1	017.8	017.5	017.2	016.9	016.5	016.2	015.8	015.8	015.9	015.5	015.2	014.7	018.0	
18	014.3	013.8	013.4	013.0	012.4	012.3	012.3	012.2	012.3	012.2	012.2	012.0	011.5	011.4	010.8	010.4	010.3	009.8	009.4	009.3	008.8	008.5	007.7	007.4	011.3	
19	006.9	006.2	005.7	005.2	004.9	004.5	004.3	004.4	004.6	004.4	004.5	004.3	004.2	004.4	004.4	004.4	004.6	004.8	004.9	005.3	005.4	005.8	006.0	006.1	005.0	
20	006.1	006.1	005.8	005.7	005.4	005.4	005.5	005.7	005.9	006.0	006.1	006.2	006.3	006.6	006.7	006.7	006.8	007.0	007.2	007.1	007.4	007.7	008.1	008.6	006.5	
21	008.8	009.0	009.3	009.7	009.8	010.2	010.8	011.1	011.2	011.4	011.7	011.7	011.8	012.0	012.0	012.0	012.0	011.9	011.9	011.8	012.0	011.4	010.7	010.4	011.0	
22	009.2	008.5	007.4	006.5	005.9	005.5	004.8	004.0	003.7	003.6	003.6	003.6	003.7	003.8	003.8	003.9	004.0	003.9	003.8	004.1	004.2	004.0	003.9	004.9	000.8	
23	003.7	003.4	002.8	002.4	002.4	002.3	002.1	001.9	001.6	001.4	001.3	001.0	000.8	000.8	000.2	999.8	999.4	999.1	999.0	998.9	998.8	998.2	998.1	997.7	000.8	
24	997.0	996.8	996.4	995.9	995.7	995.8	995.7	995.5	995.2	995.3	995.0	995.1	994.9	994.8	994.5	994.3	994.2	994.2	994.1	994.6	994.8	994.9	995.2	995.6	995.3	
25	995.9	996.0	996.3	996.2	996.5	997.0	997.5	998.2	998.8	999.5	1000.0	1000.5	1001.0	1001.3	1001.6	1001.8	1002.0	1002.1	1002.3	1002.5	1002.7	1002.7	1002.6	1002.5	999.8	
26	002.3	001.9	001.3	000.7	000.4	999.8	999.8	999.7	999.3	998.8	998.2	998.2	998.0	997.8	997.9	997.9	997.8	997.8	997.9	998.2	998.3	998.4	998.3	997.9	999.1	
27	997.8	997.0	996.7	996.1	995.4	995.6	995.7	996.1	996.4	996.8	997.1	997.3	997.8	998.2	998.7	999.2	999.6	1000.0	1000.4	1001.5	1002.1	1002.3	1002.5	1002.8	998.4	
28	003.2	003.1	003.3	003.2	003.2	003.5	003.9	004.4	004.7	005.1	005.2	005.5	005.6	005.6	005.5	005.3	005.1	005.1	004.9	004.9	005.0	005.0	005.1	004.6	004.6	
29	005.2	005.0	005.0	005.0	005.2	006.0	006.7	007.3	007.9	008.6	009.3	009.7	010.3	011.0	011.4	011.6	011.8	012.3	013.0	013.5	014.5	015.2	015.7	016.1	009.7	
30	016.4	016.6	016.6	016.7	017.0	017.7	018.2	018.6	018.9	019.4	019.7	019.8	020.2	020.1	020.0	020.0	020.2	020.2	020.3	020.8	020.8	020.7	020.5	019.1	019.1	
31	020.5	020.3	020.2	019.9	019.6	019.8	020.1	020.2	020.4	020.5	020.2	020.2	020.1	020.0	019.9	019.6	019.7	019.6	019.7	020.0	020.1	020.0	019.9	019.6	020.0	
Mean (Station level)		1009.50	1009.27	1008.99	1008.74	1008.62	1008.80	1009.01	1009.15	1009.24	1009.37	1009.47	1009.52	1009.57	1009.67	1009.70	1009.64	1009.67	1009.72	1009.78	1009.97	1010.14	1010.13	1010.08	1009.96	
Mean (Sea level)		1011.15	1010.92	1010.64	1010.39	1010.27	1010.45	1010.65	1010.79	1010.88	1011.00	1011.10	1011.15	1011.20	1011.30	1011.33	1011.27	1011.30	1011.35	1011.42	1011.61	1011.78	1011.77	1011.72	1011.61	
Hour G.M.T.		1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	
Mean																										



Readings in millibars at exact hours, Greenwich Mean Time.

350. Cahirciveen (Valentia Observatory) :  $H_b$  (height of barometer cistern above M.S.L.) = 13.7 metres.

September, 1928.

Hour G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean
Day.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
1	019.1	019.2	019.2	019.0	019.0	019.1	019.0	019.1	018.9	018.8	018.5	018.1	018.1	016.1	016.1	015.8	015.6	015.9	016.4	016.8	016.8	016.8	016.8	016.5	016.4
2	019.9	016.9	016.8	016.4	015.9	016.2	016.1	016.1	016.0	016.3	016.4	016.2	016.2	016.1	015.8	015.6	015.9	016.4	016.8	016.8	016.8	016.8	016.5	016.4	016.4
3	016.7	016.6	016.2	016.2	015.9	015.9	016.2	016.5	016.4	016.4	016.3	016.2	016.0	015.7	015.3	015.2	014.9	014.8	014.7	014.8	014.8	014.7	014.6	014.3	015.7
4	013.8	013.2	012.7	012.2	011.7	011.6	011.6	011.5	011.5	011.3	011.3	011.1	010.9	010.4	010.0	009.8	009.3	008.9	008.5	008.5	008.7	008.8	008.6	008.0	010.7
5	007.8	007.4	006.7	006.8	006.8	006.9	007.5	007.9	008.2	008.3	008.5	009.0	009.6	009.0	010.5	011.1	011.5	012.2	012.9	013.5	013.7	013.9	013.7	013.7	009.8
6	013.7	013.2	012.8	013.1	013.8	014.6	015.3	015.7	016.1	016.7	016.4	016.5	016.9	017.0	016.9	016.3	016.2	015.6	014.9	014.8	014.5	013.5	012.7	012.0	015.0
7	011.5	010.5	010.1	009.1	008.4	007.6	007.3	006.8	006.3	005.8	005.3	004.3	003.8	003.1	002.6	003.9	003.7	004.7	005.9	007.2	007.8	008.4	008.8	009.3	006.8
8	009.6	009.9	010.1	010.2	010.5	010.9	011.4	011.4	011.4	011.6	011.8	011.6	011.8	011.6	011.5	011.1	011.3	011.2	011.3	011.1	011.1	010.9	010.7	011.0	011.0
9	010.8	010.8	010.6	010.7	010.8	011.1	011.4	011.7	012.1	012.1	012.1	012.4	012.6	012.6	012.6	012.6	012.6	012.6	012.9	013.1	013.6	013.9	014.4	014.4	012.2
10	015.1	015.5	015.9	016.3	016.8	017.2	017.8	018.0	018.5	018.9	018.9	019.2	019.4	019.6	019.6	019.8	020.1	020.3	020.8	021.4	021.7	022.0	022.0	021.9	018.9
11	022.1	022.5	022.7	023.0	023.1	023.3	023.4	023.5	023.8	024.0	024.0	023.6	023.2	023.2	023.1	022.9	022.7	022.4	022.2	022.6	022.3	022.3	022.2	021.8	022.9
12	021.5	021.4	021.2	020.8	020.4	020.3	020.4	020.7	020.9	020.8	021.1	021.0	021.1	021.2	020.8	020.9	020.8	021.2	021.0	022.0	021.8	021.1	021.2	021.0	021.0
13	020.7	021.0	020.2	019.7	019.5	019.6	019.5	019.7	019.7	019.8	019.8	019.7	019.6	019.5	019.5	019.3	019.2	019.0	019.5	019.5	019.5	019.2	018.9	019.7	019.7
14	018.7	018.2	017.6	017.3	017.2	017.3	018.0	019.7	021.4	022.7	023.5	024.3	025.3	026.2	026.8	027.2	027.6	028.2	028.7	029.5	030.3	030.7	030.8	030.7	023.8
15	030.8	030.9	031.0	030.7	030.5	030.3	030.9	031.1	031.2	031.0	030.7	030.3	030.4	029.8	029.5	029.2	029.1	029.1	029.1	029.2	029.3	028.8	028.2	027.7	030.0
16	026.8	026.5	025.9	025.5	025.5	025.4	025.3	024.8	024.1	023.8	023.8	023.8	023.4	022.9	022.5	022.0	021.9	021.5	021.3	020.9	020.6	019.9	019.5	019.1	023.4
17	018.3	017.6	017.0	016.6	016.3	016.4	016.5	016.1	016.5	016.5	016.4	016.0	015.6	015.5	015.2	014.9	014.3	014.4	014.6	014.9	014.7	015.5	016.1	016.4	016.0
18	016.8	016.9	017.3	017.5	017.9	018.7	019.1	019.8	020.3	020.6	020.7	020.9	021.1	021.2	021.2	021.2	021.4	021.7	021.9	022.4	022.5	022.8	022.8	022.9	020.3
19	022.9	023.1	023.2	023.4	023.4	023.9	024.5	024.7	025.0	025.2	025.2	025.2	025.2	025.2	025.2	025.2	025.2	025.2	025.2	025.2	025.2	025.2	025.2	025.2	025.2
20	025.0	024.8	024.6	024.6	024.3	024.8	024.9	025.1	025.4	025.5	025.7	025.5	025.3	025.2	025.0	025.2	025.4	025.5	025.6	026.0	026.3	026.5	026.4	026.3	025.3
21	026.3	026.1	025.8	025.7	025.8	026.1	026.5	026.5	026.6	026.5	026.4	026.3	026.1	026.2	026.1	025.8	025.6	025.5	025.6	025.9	026.3	026.4	026.4	026.4	026.1
22	026.3	026.1	025.8	025.7	025.5	025.5	025.8	026.1	026.3	026.3	026.4	026.5	026.3	025.9	025.3	025.3	025.4	025.5	025.7	026.1	026.3	026.2	026.3	026.3	026.0
23	026.0	025.6	025.2	024.8	024.5	024.4	024.5	024.6	024.6	024.6	024.3	023.8	023.4	022.7	022.2	021.6	021.3	021.3	021.5	021.4	021.2	020.8	020.2	020.1	023.2
24	019.7	019.2	018.7	018.3	017.9	017.7	017.7	017.7	017.6	017.4	016.9	016.7	016.2	015.6	015.2	014.7	014.5	014.3	014.2	014.1	013.8	013.4	013.7	013.7	016.4
25	013.8	013.7	013.7	013.7	013.8	013.7	014.1	014.6	015.2	015.2	015.5	015.6	015.5	015.3	015.4	015.3	015.4	016.0	016.6	016.9	017.3	017.6	017.6	017.5	015.3
26	017.1	016.5	016.2	016.0	015.9	015.9	016.3	016.2	016.3	016.2	016.1	016.0	015.7	015.2	014.9	014.3	014.1	014.2	014.1	014.2	013.7	013.2	012.4	012.2	015.2
27	011.6	010.9	010.2	009.1	008.8	008.3	008.0	007.5	007.4	007.1	006.5	005.7	005.0	004.3	004.0	003.2	002.8	002.6	002.2	001.9	001.7	001.2	000.8	000.0	005.7
28	999.6	999.2	998.8	998.4	998.2	998.3	998.4	998.4	998.6	998.3	998.5	998.3	998.6	998.8	999.2	999.8	999.8	999.8	999.8	999.8	999.8	999.8	999.8	999.8	999.8
29	005.2	005.8	005.6	005.5	006.0	006.7	007.1	007.3	008.5	009.2	009.9	010.5	010.9	011.2	011.9	012.1	012.5	012.6	013.1	013.8	014.2	014.4	014.4	014.3	009.7
30	014.6	014.7	014.8	014.9	015.4	015.8	016.4	016.8	017.1	017.4	017.9	018.2	018.3	018.3	018.4	018.5	019.1	019.6	020.2	020.7	020.8	020.8	021.1	021.4	017.8
Mean (Station level)	1017.29	1017.13	1016.89	1016.71	1016.65	1016.78	1017.03	1017.19	1017.40	1017.46	1017.49	1017.42	1017.38	1017.24	1017.11	1017.01	1017.01	1017.15	1017.29	1017.60	1017.70	1017.70	1017.62	1017.48	1017.24
Mean (Sea level)	1018.95	1018.80	1018.56	1018.38	1018.32	1018.45	1018.70	1018.86	1019.06	1019.11	1019.14	1019.07	1019.03	1018.80	1018.76	1018.66	1018.66	1018.80	1018.94	1019.26	1019.36	1019.36	1019.29	1019.15	1018.90

351. Cahirciveen (Valentia Observatory) :  $H_b$  = 13.7 metres.

October, 1928.

Station Level	mb.																								
	1	2	3	4	5	6	7	8	9	10	11	Noon	13	14	15	16	17	18	19	20	21	22	23	24	Mean
1	021.6	021.7	021.8	022.0	022.4	022.8	023.3	023.3	023.5	023.7	024.0	024.1	024.0	023.8	023.7	023.5	023.6	023.7	024.0	024.4	024.5	024.5	024.4	024.4	023.4
2	024.2	024.2	024.0	023.8	023.8	023.7	023.9	023.9	024.0	024.0	024.1	023.8	023.5	022.9	022.7	022.6	022.5	022.3	022.4	022.5	022.2	022.3	022.0	022.3	
3	021.4	021.0	020.3	019.7	019.4	019.3	019.3	019.1	019.0	018.7	017.9	017.2	016.9	015.9	015.2	013.8	013.1	013.2	013.3	012.9	012.1	011.6	010.6	009.9	016.5
4	009.3	008.3	007.0	006.0	005.5	005.0	004.2	004.2	004.3	003.9	003.8	003.6	003.1	002.6	003.4	003.4	003.9	003.9	004.1	004.1	004.0	003.9	004.0	003.9	004.7
5	004.1	004.1	004.0	004.0	004.1	004.4	004.9	005.7	005.2	007.1	007.3	008.0	008.4	008.9	009.3	009.7	010.5	011.4	012.2	013.0	013.7	014.2	014.9	015.5	008.3
6	015.7	015.7	016.0	016.5	016.8	017.4	018.1	018.4	018.9	019.3	019.8	019.8	019.8	019.6	019.3	018.7	018.3	018.0	017.5	017.2	016.6	015.9	015.4	014.5	017.7
7	013.7	013.0	012.0	011.3	010.8	010.8	010.9	010.9	010.5	010.1	010.1	009.9	009.3	008.7	008.4	008.1	007.7	007.5	007.2	006.9	006.5	005.7	005.2	004.7	009.2
8	003.4	003.1	002.0	002.2	002.3	002.2	002.3	002.9	003.0	003.1	003.2	003.3	002.5	002.1	001.7	001.0	000.9	000.9	000.9	000.9	000.9	000.9	000.9	000.9	009.8
9	991.7	991.7	991.5	991.8	991.8	992.2	992.4	993.2	994.2	994.4	995.5	996.6	997.2	998.4	999.3	000.3	001.6	002.3	003.7	004.8	005.5	006.2	006.5	006.8	997.6
10	007.1	007.6	007.5	007.6	007.4	007.4	007.7	007.4	007.2	006.9	006.7	005.7	004.9	003.9	002.4	000.8	000.9	000.9	000.9	000.9	000.9	000.9	000.9	000.9	003.0
11	994.6	995.1	995.8	996.5	997.1	997.4	997.3	998.1	998.3	998.6	998.7	998.8	998.2	997.4	997.1	996.5	996.4	996.2	995.9	996.0	996.2	996.5	996.9	997.3	996.9
12	997.6	998.2	998.7	999.4	000.4	001.5	002.2	003.8	004.7	005.6	006.2	007.7	008.7	009.7	010.4	011.2	012.8	014.2	015.4	016.0	017.1	018.3	019.2	019.6	007.8
13	019.8	020.0	020.3	020.4	020.6	021.2	021.7	022.1	022.4	022.4	022.6	022.8	021.3	020.9	020.2	019.9	019.6	019.4	019.0	018.3	017.8	016.6	015.7	014.4	020.0
14	013.5	012.6	011.2	010.8	010.2	009.4	009.5	009.3	009.4	010.2	010.0	009.9	009.8	010.0	010.1	010.4	010.9	011.5	012.1	012.8	013.3	013.6	013.7	014.0	011.2
15	014.3	014.7	014.7	015.0	014.9	014.8	014.6	014.6	014.5	014.6	014.8	014.8	014.5	014.6	014.2	013.7	013.5	012.7	012.2	011.5	011.1	010.6	010.1	010.3	013.6
16	010.4	010.5	010.7	010.8	011.2	011.3	011.6	012.4	012.7	012.8	012.8	012.6	012.5	012.6	012.6	012.3	011.7	011.2	010.9	010.9	012.4	012.7	013.0	013.4	011.9
17	013.5	013.7	013.7	013.9	014.2	014.4	014.5	015.1	015.1	015.5	015.5	015.2	015.0	014.7	014.5	014.0	014.1	013.7	013.4	013.4	012.5	011.5	010.3	014.1	
18	008.9	007.3	005.7	004.0	002.9	001.6	000.7	000.5	000.7	000.5	000.7	000.5	000.3	000.6	000.7	000.9	000.9	000.9	000.9	000.9	000.9	000.9	000.9	000.9	009.9
19	000.7	000.5	000.1	000.3	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0
20	983.5	984.6	985.1	985.9	986.4	986.9	986.9	988.9	989.1	988.9	989.1	989.4	989.4	990.1	990.3	990.9	991.3	991.6	992.1	992.0	992.1	992.1	991.8	991.6	989.0
21	991.5	991.9	992.4	993.0	993.4	994.3	994.9	995.8	996.1	996.4	996.8	997.0	997.6	997.6	996.5	996.7	996.6	996.5	996.5	996.5	996.2	996.3	996.1	995.9	995.4
22	996.0	995.8	995.2	994.9	994.9	995.0	995.2	995.4	995.8	995.8	995.8	995.9	996.0	996.1	996.3	996.7	997.1	997.5	998.0	998.6	998.8	998.6	998.3	998.0	996.5
23	997.2	996.4	995.1	993.9	992.6	991.2	989.6	989.5	989.0	988.8	988.5	988.3	988.2	987.5	987.1	986.1	985.7	985.0	984.9	984.3	983.9	983.5	982.7	982.0	988.4
24	980.9	981.0	981.0	981.0	981.2	981.4	982.4	984.2	985.1	986.1	986.3	987.3	988.2	989.3	990.4	991.3	992.7	994.0	995.8	996.8	997.8	998.9	999.7	000.5	988.5
25	001.3	002.1	002.6	003.4	004.1	004.7	005.4	005.5	005.8	006.2	005.9	005.9	005.5	004.9	004.2	003.4	002.3	001.7	000.2	998.2	996.7	995.2	993.8	992.2	002.3
26	990.9	989.2	987.6	986.5	986.1	985.5	984.5	984.2	983.7	983.3	984.1	984.1	984.5	984.9	985.6	985.9	986.3	986.6	987.1	987.4	988.0	988.8	989.3	990.6	986.5
27	992.5	994.2	995.7	997.2	998.3	999.7	001.3	003.2	005.1	005.8	006.8	007.4	007.0	008.1	009.3	009.7	011.2	012.5	012.7	013.8	014.8	014.7	015.1	015.2	005.8
28	015.4	015.2	015.3	015.3	015.5	015.7	001.6	015.9	015.8	015.6	014.8	014.3	014.1	014.3	014.2	013.6	013.2	013.7	013.1	013.1	012.5	012.2	011.4	010.9	014.3
29	010.3	009.4	008.7	008.1	008.0	008.1	008.2	008.4	008.4	008.4	008.3	007.7	007.0	006.9	006.7	005.9	005.2	004.4	003.7	003.1	003.4	003.1	003.0	002.1	006.7
30	001.9	002.2	001.9	002.1	001.7	001.5	001.6	001.7	001.8	001.2	001.1	000.6	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0	000.0
31	003.8	004.6	005.2	006.1	007.0	007.8	008.7	010.3	011.1	011.7	012.6	013.2	013.6	014.1	014.6	015.2	015.9	016.4	016.9	017.7	018.3	018.7	018.6	018.8	012.2
Mean (Station level)	1004.86	1004.83	1004.62	1004.63	1004.65	1004.70	1004.82	1005.28	1005.42	1005.53	1005.60	1005.60	1005.36	1005.20	1005.03	1004.79	1004.72	1004.73	1004.64	1004.46	1004.59	1004.83	1004.85	1004.80	1004.94
Mean (Sea level)	1006.51	1006.48	1006.27	1006.28	1006.30	1006.35	1006.47	1006.93	1007.07	1007.18	1007.25	1007.24	1007.00	1006.84	1006.67	1006.43	1006.36	1006.38	1006.29	1006.11	1006.24	1006.48	1006.50	1006.45	1006.59
Hour G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean



Readings in millibars at exact hours, Greenwich Mean Time.

352. Cahirciveen (Valentia Observatory) :  $H_b$  (height of barometer cistern above M.S.L.) = 13.7 metres.

November, 1928.

Hour G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean
Day.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
1	019.0	018.6	018.6	018.2	018.2	018.7	019.1	019.4	019.3	019.5	019.3	019.3	019.1	019.0	018.6	018.8	019.3	019.6	019.8	019.8	019.7	019.7	019.5	019.1	019.1
2	019.3	019.3	019.2	018.7	018.6	018.6	018.9	019.0	018.7	018.1	017.7	017.1	016.5	016.0	015.5	015.3	015.3	015.0	014.8	014.5	014.3	014.1	013.8	013.4	016.9
3	012.7	012.2	012.1	011.6	011.3	010.6	010.3	010.1	010.7	010.7	010.5	010.1	009.7	009.2	008.9	009.0	008.9	008.8	008.7	008.6	008.3	008.0	007.6	007.2	010.0
4	006.7	006.2	005.9	005.6	005.5	005.3	005.3	005.3	005.2	004.8	004.5	004.1	003.9	003.9	003.7	003.9	004.1	004.1	004.0	003.7	003.4	003.3	003.0	002.8	004.8
5	003.2	002.8	002.6	002.4	002.4	002.2	002.1	002.2	002.3	002.1	001.9	001.4	000.9	000.6	000.1	000.7	000.7	000.7	000.0	000.1	000.0	000.0	000.0	000.0	001.2
6	999.7	999.4	998.8	998.4	998.0	997.8	997.7	997.6	998.0	997.9	997.8	997.9	998.0	998.0	998.0	998.6	999.1	999.4	999.5	000.1	000.5	000.7	000.9	998.7	998.7
7	001.4	001.4	001.3	001.5	002.1	002.8	003.2	004.2	004.3	004.4	005.1	005.3	005.3	005.4	005.9	006.3	006.7	007.1	007.6	008.3	008.7	009.1	009.5	009.6	005.1
8	010.1	010.4	010.7	010.8	011.2	011.5	011.9	012.5	013.4	013.9	014.4	014.3	014.4	014.7	014.9	015.6	015.9	016.5	016.9	017.5	017.9	018.1	018.5	019.0	014.2
9	019.2	019.4	019.3	019.4	019.6	019.8	020.0	020.4	020.5	020.5	019.9	019.7	019.3	019.0	018.7	018.6	018.5	018.0	017.5	017.1	017.0	016.3	015.5	018.9	018.9
10	015.0	014.1	013.4	012.7	012.0	011.6	011.4	011.6	011.7	012.1	012.5	012.7	012.7	012.7	013.0	013.1	013.3	013.6	013.7	013.8	013.8	013.8	013.7	013.0	013.0
11	012.9	012.3	011.3	010.6	010.1	009.6	009.3	009.0	008.4	007.7	007.3	006.9	006.2	006.0	005.5	005.9	006.1	006.6	007.1	007.0	006.8	006.4	006.0	005.1	008.1
12	003.8	002.5	000.9	999.8	999.4	999.2	998.4	998.6	999.0	999.1	000.3	001.3	002.0	002.4	002.5	003.1	003.4	003.6	004.1	003.9	003.8	003.7	003.6	003.4	001.8
13	003.6	003.7	004.0	004.6	005.3	005.9	006.8	007.6	008.6	009.1	009.7	009.7	009.7	009.5	009.4	009.6	009.8	009.7	009.7	009.6	009.4	009.2	009.0	008.6	007.9
14	008.1	008.0	007.9	007.7	007.4	007.2	006.5	006.1	005.3	004.1	002.6	001.9	001.6	002.4	003.3	004.1	004.9	005.6	006.3	006.9	007.4	007.8	008.2	008.6	007.7
15	985.2	984.2	983.7	983.3	982.9	983.1	983.4	984.9	986.9	988.5	989.7	990.0	990.1	990.7	990.8	990.9	990.8	990.9	990.2	989.5	989.7	988.8	988.1	987.6	987.6
16	985.9	983.9	981.8	978.3	975.4	969.4	964.9	960.5	962.7	967.6	975.1	977.5	979.4	981.0	982.3	982.8	983.5	983.3	983.6	983.9	983.8	984.0	984.1	985.3	978.4
17	987.0	988.7	990.1	991.9	993.2	994.5	995.6	996.8	998.1	999.0	999.7	000.1	000.5	001.1	001.7	002.2	002.9	003.5	004.2	004.8	005.4	006.1	006.5	007.0	998.7
18	007.2	007.3	007.3	007.0	006.6	005.8	004.8	004.3	004.2	003.7	003.3	002.4	002.0	001.0	000.1	999.5	998.8	997.4	996.0	993.5	991.4	990.0	989.2	989.0	990.9
19	989.2	989.9	989.1	987.8	987.3	988.4	989.0	990.2	990.9	991.6	992.4	993.0	993.8	994.0	994.5	995.0	995.6	996.2	996.8	997.1	998.2	999.2	000.1	000.5	000.3
20	003.8	004.6	005.4	006.0	006.7	007.6	008.2	008.8	009.7	010.2	010.7	010.4	010.1	009.7	009.2	008.7	008.4	008.1	007.2	006.7	005.6	005.0	003.2	001.7	007.3
21	000.6	000.0	999.6	999.1	998.8	998.2	997.9	997.6	997.0	996.6	995.8	995.2	994.8	995.5	997.1	998.3	999.8	002.0	003.5	005.1	006.3	006.9	007.3	999.5	999.5
22	007.4	006.8	006.2	004.6	004.0	003.0	001.2	000.9	000.2	001.1	001.9	002.6	002.2	002.4	002.6	003.1	003.9	004.5	005.3	005.6	005.2	004.9	004.2	003.2	003.7
23	001.5	998.7	995.0	991.0	988.2	985.9	984.2	982.5	981.7	981.4	984.7	988.3	990.1	992.1	993.5	994.0	994.8	995.5	995.9	996.9	997.6	998.6	999.6	999.7	001.7
24	000.9	002.3	003.7	004.6	005.5	006.6	007.5	008.7	010.1	010.8	011.8	012.1	012.0	011.6	011.4	010.8	010.2	009.3	008.5	007.0	004.7	002.0	000.9	000.1	007.2
25	999.4	998.9	998.2	997.8	997.8	997.3	997.4	997.9	997.8	998.5	999.0	000.0	000.7	001.2	001.0	001.9	002.5	003.4	004.0	005.1	005.4	006.6	007.4	007.7	001.0
26	008.4	008.7	009.4	009.5	009.7	009.6	009.8	010.0	009.9	010.1	009.9	009.7	009.6	009.2	009.2	009.4	009.5	009.6	010.5	010.7	011.7	012.5	012.8	014.1	010.0
27	014.6	015.3	015.9	016.2	016.5	017.2	017.8	018.4	019.7	020.0	020.4	021.3	021.7	021.9	022.7	023.2	024.1	024.7	025.0	025.6	026.3	027.1	027.3	028.0	021.0
28	028.5	028.5	029.0	029.3	029.4	030.0	030.4	030.9	031.3	031.3	031.3	031.3	031.3	031.3	031.3	031.3	031.3	031.3	031.3	031.3	031.3	031.3	031.3	031.3	031.3
29	029.6	029.1	029.0	028.8	028.9	028.9	029.1	029.4	029.6	029.8	029.9	029.6	029.5	029.6	029.2	029.4	029.5	029.6	029.9	030.2	030.0	030.1	030.1	030.1	029.5
30	030.1	030.0	030.0	029.8	029.9	030.2	030.3	030.5	031.0	031.2	031.7	031.7	031.5	031.3	031.4	031.4	031.7	032.1	032.4	032.5	032.7	032.8	033.0	033.2	031.3
Mean (Station level)	1007.13	1006.91	1006.65	1006.23	1006.06	1005.88	1005.74	1005.84	1006.19	1006.54	1007.11	1007.15	1007.11	1007.04	1007.04	1007.23	1007.49	1007.70	1007.93	1007.94	1007.92	1007.92	1007.77	1007.72	1007.00
Mean (Sea level)	1008.79	1008.57	1008.31	1007.89	1007.72	1007.54	1007.40	1007.50	1007.85	1008.20	1008.77	1008.81	1008.77	1008.70	1008.70	1008.89	1009.15	1009.36	1009.60	1009.61	1009.59	1009.59	1009.44	1009.39	1008.66

353. Cahirciveen (Valentia Observatory) :  $H_b$  = 13.7 metres.

December, 1928.

Station Level	mb.																								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	033.2	033.1	032.8	032.8	032.8	032.4	032.3	032.5	032.7	032.9	033.2	033.1	032.7	032.1	031.8	031.8	031.5	031.8	031.6	031.3	031.1	030.9	030.5	030.0	032.2
2	029.6	029.2	028.9	028.8	028.2	028.0	027.7	027.5	027.5	027.1	026.9	026.3	025.7	025.3	024.9	024.7	024.8	024.7	024.7	024.9	024.9	025.0	025.1	025.8	026.6
3	026.3	026.8	027.4	027.7	027.7	028.0	028.6	029.2	029.6	029.7	030.5	030.3	029.7	029.6	029.8	029.5	029.5	030.0	029.7	029.7	029.4	029.0	028.8	028.9	028.9
4	028.4	028.1	027.8	027.5	027.2	027.0	026.7	026.6	026.7	026.5	026.6	026.3	025.7	025.1	024.7	024.6	024.5	024.6	024.5	024.4	024.4	024.2	024.1	024.0	025.9
5	024.0	024.8	025.1	025.5	025.8	026.2	026.8	027.3	027.8	028.4	028.5	028.3	027.9	027.5	027.3	027.3	027.0	026.5	025.9	025.3	024.3	023.8	022.4	021.2	026.1
6	019.9	018.1	015.7	014.3	015.3	015.6	015.9	016.6	017.7	018.0	018.8	018.3	018.4	018.1	017.8	017.7	017.3	017.6	017.7	017.9	018.2	018.0	018.0	017.5	017.5
7	017.8	017.3	016.9	016.9	016.4	016.5	016.6	016.7	017.3	017.5	017.5	016.9	018.0	018.2	019.1	019.4	020.2	020.3	021.1	022.2	022.5	023.0	023.3	023.7	018.9
8	023.8	024.2	024.5	024.6	024.7	024.9	025.2	025.5	026.2	026.4	026.6	026.5	026.2	025.1	024.6	024.5	024.7	024.5	024.4	024.1	024.1	023.3	022.1	024.8	024.8
9	021.3	020.7	019.8	019.0	018.0	016.8	015.6	014.3	013.9	012.8	011.4	009.2	007.5	005.5	003.5	001.9	000.1	998.3	996.0	993.8	991.4	988.8	986.1	985.1	007.1
10	984.2	983.9	983.2	982.5	981.9	981.4	981.0	980.8	980.7	979.9	979.3	978.6	978.3	978.7	979.0	979.3	979.7	980.1	980.4	980.9	981.0	981.2	981.5	980.7	980.7
11	981.5	981.7	981.8	981.9	982.1	982.6	983.0	983.5	984.0	984.6	985.2	985.2	985.2	985.4	986.0	986.7	987.3	988.3	988.8	989.5	990.2	991.0	991.6	992.4	985.6
12	993.1	993.8	994.8	995.5	996.0	997.2	998.1	999.0	999.8	000.5	001.4	001.5	002.1	002.5	003.0	003.7	004.4	004.9	005.3	005.9	006.7	006.8	007.3	007.5	000.9
13	007.6	007.8	007.9	007.8	007.7	007.8	007.8	007.7	007.2	007.2	007.3	006.6	006.6	005.7	005.0	004.3	004.3	004.3	002.7	002.1	001.4	000.7	999.6	998.9	997.8
14	997.8	996.8	997.0	996.8	997.2	998.0	998.9	999.8	001.0	002.6	003.5	004.4	005.3	006.3	007.1	008.4	008.9	009.7	010.2	010.8	011.6	011.5	011.4	011.4	004.1
15	011.4	011.4	011.1	010.5	010.3	010.5	010.2	009.9	010.5	011.0	011.4	010.9	010.6	010.3	010.0	009.7	008.4	007.5	006.5	005.6	005.2	005.1	005.1	005.1	009.2
16	004.5	004.6	004.4	003.6	002.8	002.3	002.4	002.9	003.3	003.2	004.8	007.6	009.5	011.0	012.5	013.7	015.3	016.6	018.0	019.3	020.2	021.2	022.0	022.7	010.0
17	023.3	023.7	024.4	024.8	025.1	025.6	026.2	027.2	027.7	028.6	028.8	028.7	028.2	028.3	028.5	028.3	028.5	028.3	027.8	027.8	027.6	026.7	026.6	026.6	026.8
18	025.1	024.4	024.4	023.7	023.1	022.6	022.6	022.4	022.4	022.2	022.2	022.0	021.6	021.3	021.4	021.9	022.6	023.6	023.6	023.9	024.4	025.2	025.6	026.0	023.4
19	026.6	026.5	026.6	026.4	026.4	026.9	027.1	027.1	027.4	027.3	027.1	026.6	026.0	025.4	024.8	024.2	023.6	022.8	021.9	022.4	022.6	023.0	023.3	023.4	025.3
20	023.3	023.7	024.0	024.2	024.6	024.7	025.0	025.5	026.3	026.5	026.8	026.6	026.6	026.1	026.1	026.4	026.4	026.5	026.4	026.3	026.3	026.2	026.1	026.2	025.6
21	025.6	025.2	024.7	024.3	024.0	023.9	023.9	024.4	024.8	024.8	025.2	025.0	024.8	024.3	024.3	024.4	024.4	024.3	024.3	024.5	024.5	024.4	023.9	023.2	024.5
22	022.5	022.0	021.6	021.0	020.4	020.0	019.7	019.4	019.2	020.4	021.3	021.5	022.0	022.8	023.6	024.5	025.1	025.7	026.1	026.5	026.6	027.6	027.3	027.3	023.0
23	027.0	026.9	026.2	025.6	024.9	024.5	024.2	023.8	023.6	023.5	023.1	021.7	022.0	022.0	019.3	018.8	018.9	018.6	018.0	017.6	016.9	016.6	015.4	015.4	021.5
24	014.6	013.3	012.6	011.8	011.0	010.1	009.6	010.3	011.0	011.1	011.6	011.5	011.5	011.3	011.3	012.2	012.6	013.2	014.0	015.0	015.3	016.1	016.7	016.8	012.7
25	017.1	017.4	017.3	017.2	016.5	016.0	015.7	015.2	014.6	014.1	013.0	010.8	008.3	005.1	003.1	000.9	000.2	000.0	999.6	000.0	001.6	004.3	005.7	006.3	009.4
26	006.7	007.1	007.7	008.0	008.2	008.9	009.9	010.9	012.4	013.7	014.7	015.3	015.6	016.2	016.9	017.7	018.7	019.4	019.6	020.0	020.6	020.8	020.7	020.7	014.3
27	020.3	020.1	020.0	019.3	018.2	017.2	016.3	015.2	014.6	014.1	012.9	011.2	008.5	007.3	007.1	006.1	005.8	005.3	004.5	004.2	003.4	003.4	003.2	001.2	011.2
28	002.2	002.0	002.3	002.5	002.4	002.4	002.7	003.1	003.4	003.7	003.1	002.0	001.1	001.2	001.5	002.3	002.9	003.3	003.7	003.4	003.4	003.3	003.1	002.7	002.7
29	003.0	002.5	003.0	002.7	002.5	002.2	001.9	001.9	002.0	001.6	000.9	999.7	998.0	997.6	997.2	996.7	995.9	995.6	995.4	995.3	995.1	994.8	994.5	994.4	999.1
30	994.4	994.7	994.7	994.6	994.2	994.1	994.2	994.2	994.8	995.2	995.6	995.7	996.0	996.4	997.1	998.3	999.1	000.0	000.5	001.3	002.1	002.8	003.7	004.3	997.2
31	005.2	006.3	007.0	007.7	008.4	009.3	010.5	011.7	013.2	014.2	015.6	015.9	016.2	016.7	018.2	019.1	019.0	021.5	021.5	023.0	023.3	024.5	025.1	025.4	015.3
Mean (Station level)	1014.24	1014.14	1014.05	1013.85	1013.68	1013.66	1013.75	1013.95	1014.30	1014.49	1014.67	1014.33	1014.00	1013.74	1013.75	1013.84	1013.90	1014.03	1013.98	1014.14	1014.17	1014.28	1014.19	1014.14	1014.06
Mean (Sea level)	1015.94	1015.84	1015.75	1015.55	1015.38	1015.36	1015.45	1015.65	1016.20	1016.19	1016.36	1016.02	1015.69	1015.43	1015.44	1015.53	1015.59	1015.72	1015.67	1015.83	1015.87	1015.98	1015.89	1015.84	1015.76
Hour G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	Mean	



## ANNUAL MEANS FROM HOURLY VALUES.

From readings in millibars at exact hours, Greenwich Mean Time.

354. Cahirciveen (Valentia Observatory) :  $H_b = 13.7$  metres.

1928.

Hour G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.
Station Level	010.60	010.41	010.19	009.99	009.87	009.91	010.00	010.21	010.40	010.55	010.68	010.66	010.55	010.43	010.35	010.32	010.35	010.46	010.55	010.68	010.81	010.88	010.82	010.74	010.43
Sea Level	012.27	012.08	011.86	011.66	011.54	011.58	011.67	011.88	012.06	012.21	012.34	012.32	012.21	012.09	012.01	011.98	012.01	012.12	012.21	012.34	012.48	012.55	012.49	012.41	012.10

## PRESSURE AT STATION LEVEL: MONTHLY MEANS AND DIURNAL INEQUALITIES.

The departures from the mean of the day are adjusted for non-cyclic change.

355. Cahirciveen (Valentia Observatory) :  $H_b = 13.7$  metres.

1928.

Month.	Mean.	Hour. 1.	G.M.T. 2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.
	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
Jan.	1008.28	+0.14	-0.09	-0.25	-0.57	-1.06	-1.32	-1.24	-0.82	-0.36	+0.02	+0.33	+0.23	-0.03	-0.05	-0.06	+0.16	+0.36	+0.64	+0.73	+0.81	+0.80	+0.74	+0.53	+0.36
Feb.	1013.98	+0.55	+0.27	+0.12	-0.13	-0.31	-0.32	-0.54	-0.43	-0.31	-0.07	+0.06	+0.26	-0.01	-0.26	-0.49	-0.42	-0.30	-0.14	+0.16	+0.27	+0.46	+0.55	+0.53	+0.50
Mar.	1003.44	+0.31	+0.12	-0.19	-0.39	-0.48	-0.43	-0.20	+0.02	+0.16	+0.20	+0.22	+0.12	-0.02	-0.27	-0.40	-0.44	-0.35	-0.19	+0.03	+0.26	+0.46	+0.55	+0.48	+0.43
April	1004.94	+0.27	-0.01	-0.21	-0.33	-0.45	-0.36	-0.11	+0.08	+0.14	+0.26	+0.28	+0.23	+0.12	+0.01	-0.20	-0.39	-0.39	-0.28	-0.16	+0.09	+0.32	+0.38	+0.36	+0.35
May	1014.09	+0.21	+0.02	-0.21	-0.32	-0.36	-0.23	-0.14	-0.05	+0.02	+0.06	+0.10	+0.12	+0.11	+0.01	-0.06	-0.20	-0.26	-0.20	-0.17	+0.04	+0.31	+0.42	+0.43	+0.35
June	1009.87	-0.14	-0.31	-0.47	-0.59	-0.50	-0.29	-0.10	+0.01	+0.18	+0.25	+0.30	+0.38	+0.37	+0.25	+0.14	+0.05	0.00	-0.08	-0.08	-0.03	+0.13	+0.28	+0.18	+0.05
July	1018.04	+0.28	0.00	-0.27	-0.50	-0.55	-0.47	-0.33	-0.23	-0.12	-0.10	-0.02	+0.09	+0.15	+0.13	+0.07	+0.02	-0.05	-0.03	+0.09	+0.17	+0.30	+0.45	+0.47	+0.45
Aug.	1009.48	+0.11	-0.13	-0.42	-0.67	-0.80	-0.63	-0.43	-0.30	-0.21	-0.09	0.00	+0.04	+0.08	+0.17	+0.19	+0.12	+0.14	+0.18	-0.23	+0.41	+0.57	+0.56	+0.50	+0.38
Sept.	1017.24	+0.08	-0.08	-0.32	-0.50	-0.57	-0.44	-0.19	-0.04	+0.17	+0.23	+0.25	+0.18	+0.14	0.00	-0.14	-0.24	-0.24	-0.10	+0.03	+0.34	+0.44	+0.44	+0.35	+0.21
Oct.	1004.94	-0.13	-0.15	-0.36	-0.34	-0.32	-0.27	-0.14	+0.32	+0.47	+0.58	+0.66	+0.66	+0.43	+0.27	+0.10	-0.13	-0.20	-0.19	-0.27	-0.45	-0.32	-0.07	-0.05	-0.10
Nov.	1007.00	+0.35	+0.11	-0.17	-0.61	-0.80	-1.00	-1.16	-1.08	-0.75	-0.42	+0.13	+0.15	+0.09	0.00	-0.02	+0.15	+0.39	+0.58	+0.79	+0.78	+0.74	+0.72	+0.55	+0.48
Dec.	1014.06	+0.07	-0.02	-0.10	-0.29	-0.45	-0.46	-0.36	-0.15	+0.21	+0.41	+0.60	+0.27	-0.05	-0.30	-0.28	-0.18	-0.11	+0.03	-0.01	+0.17	+0.21	+0.33	+0.25	+0.21
Year	1010.43	+0.17	-0.02	-0.24	-0.44	-0.56	-0.52	-0.41	-0.22	-0.03	+0.12	+0.25	+0.23	+0.11	-0.01	-0.08	-0.11	-0.08	+0.03	+0.12	+0.25	+0.38	+0.45	+0.39	+0.30

## ABSOLUTE EXTREMES OF PRESSURE AT STATION LEVEL FOR EACH DAY.

Maximum and minimum for the interval 0 h. to 24 h., Greenwich Mean Time.

356. Cahirciveen (Valentia Observatory) :  $H_b = 13.7$  metres.

1928.

Month	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Day.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1	021.6	999.8	009.5	995.0	012.2	005.3	013.1	002.6	011.2	005.5	016.9	011.4
2	018.2	004.0	009.2	999.0	014.8	012.0	013.1	005.0	011.0	004.7	020.4	016.8
3	025.5	017.5	021.5	008.8	014.5	012.8	005.4	002.5	004.7	998.9	020.0	013.8
4	024.1	019.2	015.4	006.9	018.3	013.5	002.9	000.7	005.9	998.4	013.8	005.1
5	026.9	014.2	023.0	006.9	019.1	015.3	005.8	001.1	011.2	004.2	005.5	003.1
6	018.2	011.5	028.8	023.0	015.3	005.9	006.3	001.6	012.2	010.8	003.1	998.0
7	014.4	003.8	027.0	023.7	011.2	003.8	001.6	992.1	014.3	011.1	998.0	022.3
8	011.9	006.8	025.2	014.6	014.7	011.2	992.1	980.0	018.1	014.1	993.7	022.3
9	009.0	002.7	024.2	013.4	018.4	013.8	986.1	984.1	020.1	018.1	989.3	022.3
10	007.6	992.2	013.4	991.3	018.4	017.2	987.1	981.2	020.4	019.0	011.1	989.3
11	015.1	007.6	006.3	999.2	018.3	016.0	999.1	986.8	022.9	020.4	020.3	011.1
12	010.0	995.4	006.3	996.4	018.3	013.9	003.3	998.7	024.5	020.2	020.2	009.4
13	009.3	000.00	005.9	992.0	014.3	009.7	002.3	992.5	024.9	024.0	010.5	002.1
14	004.9	994.6	008.3	002.4	009.7	004.0	996.3	991.6	024.2	021.9	025.0	002.1
15	001.0	992.6	011.2	007.6	011.2	006.1	004.2	990.6	022.9	015.4	026.4	024.8
16	007.7	000.9	016.4	005.0	010.2	001.9	016.9	004.2	015.6	013.1	026.2	024.7
17	007.0	003.3	027.9	016.4	003.1	999.4	021.8	016.9	015.4	003.2	024.7	015.4
18	012.7	001.5	027.6	024.8	004.2	993.0	021.7	017.9	013.5	004.2	015.4	002.2
19	018.2	011.2	026.2	024.0	093.0	018.8	016.5	013.4	009.6	011.0	002.0	027.7
20	014.9	005.7	026.2	021.6	989.5	984.2	016.5	013.3	018.3	011.0	014.4	009.9
21	005.7	995.2	028.3	020.6	992.4	988.0	019.5	012.0	023.3	018.3	009.9	006.6
22	017.0	005.7	034.6	028.3	990.9	981.0	020.9	014.6	023.2	019.2	016.3	008.2
23	012.7	001.3	029.9	015.1	992.8	980.5	014.6	009.7	019.2	014.6	019.7	006.2
24	018.5	997.1	015.9	011.4	998.1	992.4	009.7	003.7	014.8	013.8	019.7	010.3
25	020.1	006.1	019.3	015.9	010.6	998.1	006.7	003.2	014.4	011.5	010.3	988.6
26	012.9	000.4	017.3	013.9	011.3	001.2	007.3	003.4	012.1	008.5	020.8	992.7
27	024.2	012.9	015.7	008.1	005.3	003.9	012.7	007.3	011.4	007.3	023.7	018.1
28	017.7	996.8	008.1	992.0	004.2	992.8	013.7	010.7	014.1	009.1	018.1	008.9
29	001.7	995.9	006.0	998.2	992.8	977.8	013.1	008.6	017.0	013.2	012.6	005.4
30	007.7	000.1	—	—	985.4	980.9	008.7	003.6	018.1	016.3	016.8	012.2
31	007.7	994.4	—	—	002.6	985.4	—	—	016.3	012.4	—	—
Mean	1013.68	1002.92	1018.43	1009.50	1006.94	1000.03	1008.04	1001.89	1016.41	1012.07	1014.46	1004.81

NOTE.—When pressure exceeds 1000 mb. the leading figure 1 is not printed, i.e., 1005.6 mb. is written 005.6. This rule does not, however, apply to monthly means.



Readings in degrees absolute at exact hours, Greenwich Mean Time.

357. Cahirciveen (Valentia Observatory) : North Wall Screen :  $h_t$  (height of thermometer bulbs above ground) = 1.3 metres.

January, 1928.

Hour G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean
Day.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.
1	78.5	78.9	79.2	79.8	80.0	80.2	80.0	79.6	79.9	80.3	80.8	81.4	82.4	83.4	84.1	84.2	84.6	83.3	83.0	82.3	82.0	82.0	81.7	81.7	81.3
2	81.6	81.4	81.4	81.7	81.5	81.7	81.3	80.9	81.0	81.3	81.5	81.6	81.2	79.8	80.8	80.3	79.2	80.0	79.1	80.2	80.6	80.8	79.5	80.0	80.8
3	80.0	80.9	81.1	80.9	80.1	80.0	80.9	80.4	80.3	80.5	81.0	81.0	81.1	81.1	81.0	80.5	79.2	78.3	78.8	78.4	79.4	79.7	79.8	80.3	80.2
4	80.3	81.9	82.1	82.2	82.2	82.3	82.4	82.2	82.1	82.0	82.5	83.0	83.1	83.0	82.9	83.0	82.9	82.8	82.5	82.7	82.5	82.4	82.0	82.0	82.3
5	82.0	81.3	81.0	81.4	81.2	81.4	81.2	80.2	81.0	81.0	81.4	81.5	81.4	81.3	81.8	81.4	81.4	81.8	81.8	82.4	83.7	84.0	84.2	84.6	81.8
6	84.6	84.5	84.2	84.0	84.0	84.0	84.0	83.8	83.4	83.8	83.5	83.3	83.1	82.9	82.8	82.6	81.9	81.3	81.4	81.7	81.7	82.2	82.3	83.8	83.1
7	83.8	83.6	83.4	83.4	83.5	83.5	83.5	83.8	83.7	83.8	84.0	84.0	84.0	84.2	84.3	84.4	84.5	84.0	83.9	83.1	82.9	82.9	82.4	81.4	83.6
8	81.7	81.6	80.4	81.0	81.0	81.0	81.2	81.0	80.6	80.8	81.2	80.9	81.5	81.4	80.4	80.5	80.5	80.5	80.9	80.4	80.6	80.6	80.8	80.5	80.9
9	81.0	81.1	81.2	81.5	81.9	82.2	81.1	81.0	81.1	80.4	80.9	81.2	80.4	80.9	80.9	80.9	80.6	80.1	80.5	80.7	81.0	81.2	81.7	81.5	81.0
10	81.7	82.0	82.2	82.3	82.2	82.4	83.0	82.0	81.4	81.0	81.0	80.7	80.3	80.0	80.3	80.6	80.0	79.7	80.0	79.0	79.5	79.1	79.0	78.9	80.8
11	78.4	78.9	79.7	79.5	79.5	79.5	79.4	79.0	79.5	79.6	80.0	80.1	80.0	79.8	80.1	79.4	79.0	78.4	78.2	79.2	80.0	80.8	81.0	81.4	79.5
12	81.9	82.6	83.0	83.0	83.0	83.0	83.1	83.9	84.0	84.1	84.6	84.6	84.6	84.6	84.3	84.0	83.4	83.5	82.7	82.9	82.6	81.7	82.0	81.0	83.3
13	81.6	81.7	81.5	81.0	81.1	81.0	81.0	81.3	81.1	81.2	81.3	81.5	81.9	81.0	81.6	81.2	80.9	81.1	81.2	80.1	79.7	79.9	81.5	81.1	81.1
14	82.3	82.8	83.0	83.5	83.6	83.8	84.3	84.3	83.0	83.2	82.6	83.1	83.3	82.0	81.1	80.0	80.0	80.0	80.0	79.5	79.2	79.0	79.1	81.9	81.9
15	78.5	79.1	79.1	79.4	80.0	79.9	79.9	79.9	80.4	80.4	81.2	81.4	81.3	81.0	81.1	81.4	81.2	81.8	81.3	81.9	81.9	82.0	81.7	81.9	80.7
16	81.9	81.9	82.0	81.8	81.7	81.4	81.6	81.4	80.9	81.2	81.5	82.0	81.5	81.8	81.8	81.5	81.0	81.0	81.1	80.9	80.6	80.9	80.8	80.4	81.4
17	81.0	81.4	81.0	80.5	80.4	80.1	80.0	79.9	80.0	80.0	81.2	81.8	81.9	81.9	81.8	81.4	81.3	81.5	81.2	82.0	82.6	83.1	83.1	83.9	81.3
18	83.3	83.1	82.6	82.5	82.5	82.5	82.9	82.8	82.9	83.5	84.0	83.9	83.4	83.0	82.0	81.6	81.4	81.0	80.9	80.1	80.2	80.3	79.8	80.0	82.2
19	80.1	80.4	80.1	80.0	80.2	80.1	79.9	79.9	81.1	82.3	82.9	83.8	83.9	83.9	83.7	83.1	83.2	83.5	83.6	84.0	84.0	84.0	84.0	84.0	82.0
20	83.7	83.7	83.9	84.1	84.9	84.1	83.9	83.1	82.7	83.0	83.2	83.6	83.5	83.9	83.8	83.1	82.5	82.4	82.1	82.7	83.1	83.0	83.8	84.0	83.4
21	84.5	85.0	85.0	85.0	85.0	85.0	84.9	84.9	83.1	83.4	83.0	82.7	82.6	82.3	82.2	82.1	81.7	81.3	80.7	80.0	79.3	79.6	80.6	80.2	82.7
22	80.4	79.9	80.0	80.0	80.0	80.0	80.0	80.0	80.3	80.0	80.5	81.1	81.2	81.0	80.8	80.6	79.9	79.3	79.5	79.7	80.5	81.0	81.6	81.5	80.3
23	81.4	81.4	81.9	82.1	82.8	83.2	83.4	83.7	83.9	84.0	84.2	84.4	84.4	84.5	84.6	84.9	84.9	84.4	84.2	83.0	82.3	82.1	81.8	81.8	83.4
24	82.0	82.3	82.9	81.3	81.8	80.8	81.3	79.0	79.8	79.5	78.3	78.0	79.0	78.0	79.2	79.5	80.0	78.0	79.4	78.3	79.0	78.3	79.5	79.8	79.8
25	79.2	79.7	79.8	80.0	80.2	80.0	80.2	81.4	82.0	82.3	82.7	82.9	82.6	79.0	80.3	80.1	79.2	79.5	78.2	79.1	78.7	78.5	79.3	78.8	80.2
26	78.7	78.2	79.3	78.7	78.3	79.0	77.6	77.9	77.7	75.4	76.2	77.0	78.8	78.3	77.9	78.3	78.9	79.2	79.7	80.1	79.9	80.3	80.0	80.6	78.5
27	80.3	81.0	80.6	79.5	80.2	80.3	80.1	80.2	80.0	80.7	81.2	81.2	81.6	81.7	81.3	81.0	80.8	80.6	80.5	80.8	81.1	81.4	81.8	82.0	80.8
28	82.7	83.1	83.2	83.2	83.2	83.1	82.9	82.8	82.3	82.1	82.2	82.0	82.4	82.5	82.3	82.3	81.6	81.1	80.9	81.0	81.0	81.0	81.3	81.3	82.2
29	81.2	77.9	77.6	78.2	78.5	78.7	79.6	80.2	79.0	80.1	79.7	79.2	79.0	80.1	79.9	79.7	79.6	78.6	79.0	79.0	78.9	78.1	78.1	77.7	79.1
30	78.1	78.3	78.5	78.2	77.3	77.1	77.6	76.4	77.1	79.0	78.9	79.9	79.0	79.0	79.3	79.9	79.9	79.0	79.5	79.5	78.0	77.9	77.7	77.7	78.5
31	76.9	75.7	77.4	78.1	78.6	79.6	80.5	80.8	81.2	82.6	83.2	83.8	83.8	84.0	83.8	83.7	83.1	83.0	82.7	82.5	82.4	81.8	81.7	81.4	81.3
Mean	...	81.1	81.1	81.2	81.3	81.3	81.4	81.2	81.1	81.3	81.6	81.8	81.9	81.7	81.7	81.6	81.3	81.0	80.9	80.9	80.9	81.0	81.1	81.1	81.3

358. Cahirciveen (Valentia Observatory) : North Wall Screen :  $h_t$  = 1.3 metres.

February, 1928.

	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.
1	81.2	80.8	81.0	80.0	79.9	78.2	79.3	79.1	79.0	79.4	79.8	79.3	78.9	77.9	78.8	78.3	78.4	78.3	78.9	78.2	78.5	78.6	79.0	79.2	
2	78.0	78.9	79.1	79.1	79.5	79.9	79.3	78.9	79.7	78.7	79.2	79.0	79.1	79.7	79.0	78.7	77.4	78.2	77.3	77.9	77.1	76.4	78.0	78.7	
3	77.5	77.4	78.0	77.4	78.0	78.5	77.1	78.1	77.6	78.3	77.9	78.2	78.9	79.7	80.0	79.2	79.3	79.0	79.3	79.5	79.8	80.5	81.1	81.9	
4	82.7	83.0	83.1	83.2	83.4	83.5	83.5	83.7	83.9	84.0	84.1	84.1	84.1	84.1	84.1	84.0	83.6	83.2	83.0	82.7	82.6	82.5	82.4	83.4	
5	80.8	80.6	80.2	80.6	80.2	79.6	79.0	78.2	78.0	79.2	78.9	80.1	80.3	80.9	80.5	79.9	78.2	79.9	79.3	79.2	78.9	79.5	79.6	79.7	
6	79.6	79.1	79.3	78.8	78.8	79.6	79.6	79.7	79.3	80.1	81.0	81.1	81.7	82.0	82.0	81.9	81.5	81.2	81.6	81.6	81.9	81.8	81.7	81.9	
7	81.7	81.9	82.1	81.9	82.3	82.3	82.6	82.7	82.9	83.2	83.7	83.9	84.1	83.8	83.6	83.2	83.1	83.4	83.7	83.9	83.9	83.9	84.0	83.1	
8	83.9	83.8	83.9	84.0	83.8	83.8	84.0	84.0	84.1	84.3	84.5	84.8	84.9	84.9	84.5	84.5	84.2	83.7	83.8	84.0	82.2	82.0	81.8	83.8	
9	81.1	80.9	80.8	80.6	80.6	80.4	80.9	80.5	80.3	80.9	81.1	81.4	81.5	81.6	81.6	81.0	80.9	80.0	80.2	79.9	80.3	80.8	80.7	80.8	
10	80.9	81.0	81.0	81.4	81.4	81.8	81.9	82.3	79.1	79.4	78.9	79.1	77.6	77.4	78.7	79.8	79.0	80.9	81.4	81.0	81.3	80.9	80.0	80.3	
11	80.0	80.0	79.0	79.5	80.0	80.0	78.6	79.9	80.0	80.2	80.0	80.3	80.3	78.9	79.9	80.4	80.2	79.9	79.4	79.0	79.4	79.9	79.2	79.1	
12	79.5	79.5	79.7	79.9	79.4	79.1	79.0	79.3	79.8	80.0	82.0	82.0	82.9	83.3	83.1	83.3	83.0	82.6	82.5	82.2	82.3	82.5	83.0	83.1	
13	83.4	83.6	84.0	84.0	84.4	84.1	83.5	83.4	83.0	83.7	84.6	84.7	84.7	84.7	84.5	84.8	84.7	84.5	84.4	84.1	84.4	84.5	84.8	84.9	
14	81.7	81.9	81.9	81.7	81.4	81.4	81.6	81.7	82.6	83.9	84.6	84.7	84.7	84.7	84.5	84.8	84.7	84.5	84.4	84.1	84.4	84.5	84.8	84.9	
15	84.8	84.8	84.6	84.9	84.9	84.9	84.5	84.8	85.0	84.9	85.3	85.2	85.0	85.1	84.9	84.9	84.4	84.7	84.4	84.3	84.3	84.3	84.4	84.5	
16	84.4	84.4	84.3	84.3	84.0	84.0	84.0	83.9	83.9	82.8	83.0	83.3	82.9	82.9	82.0	81.9	81.6	81.0	80.9	79.3	80.0	79.6	79.5	78.9	
17	79.7	79.1	79.2	80.2	79.9	80.2	79.3	80.3	80.6	81.0	81.3	81.4	82.0	81.9	81.1	81.1	81.2	81.1	80.1	81.2	80.9	80.4	80.7	80.5	
18	79.8	80.0	80.1	80.1	80.2	80.0	80.1	80.2	80.5	81.0	82.1	81.8	82.0	82.0	82.7	82.1	82.0	82.0	80.7	79.9	80.0	80.1	80.0	80.7	
19	80.1	80.0	80.1	80.1	80.1	80.3	80.5	81.0	81.3	81.3	81.3	81.4	81.9	82.1	82.0	82.0	82.0	82.0	82.0	82.1	81.9	82.0	82.2	81.2	
20	82.3	82.3	82.5	82.6	82.7	82.8	82.9	82.6	83.0	83.4	83.7	83.9	83.9	83.9	83.9	83.6	83.2	82.9	82.9	83.0	83.0	82.9	82.8	82.7	
21	82.4	82.3	82.1	82.2	82.4	82.3	82.2	82.2	82.7	83.0	83.2	83.3	83.9	83.4	83.4	83.4	82.7	82.4	82.3	82.2	82.2	81.6	81.2	80.8	
22	79.9	80.2	80.7	80.5	80.0	80.0	80.1	80.1	78.9	80.9	81.6	83.0	83.4	83.9	84.2	83.9	83.0	81.9	80.5	80.4	81.3	81.2	81.1	81.9	
23	81.4	81.2	81.1	81.4	81.9	81.5	81.1	81.0	81.0	82.1	82.6	83.2	83.3	83.8	83.9	83.4	83.0	82.0	81.9	81.7	81.4	81.6	81.7	81.2	
24	80.9	81.1	81.5	81.2	81.5	81.8	81.6	81.3	81.8	82.1	82.4	82.8	82.8	83.2	83.4	83.4	83.4	83.3	83.2	83.2	83.2	83.1	83.0	82.9	
25	82.9	83.1	83.1	83.1	83.1	83.1	83.0	82.9	83.1	83.5	84.0	84.1	84.1	84.4	84.5	84.1	84.0	83.2	83.1	83.1	83.0	83.2	83.1	83.4	
26	83.1	83.0	83.3	83.3	83.5	83.4	83.4	83.7	83.9	84.2	84.8	84.5	84.4	84.4	84.0	83.9	84.0	83.7	83.9	83.6	83.7	83.4	83.4	83.7	
27	83.5	83.8	83.4	83.7	83.3	83.2	83.2	83.7	84.0	84.0	85.4	85.0	85.0	86.0	85.1	84.8	84.0	83.0	82.4	82.5	82.8	83.0	83.3	83.8	
28	83.2	83.1	83.0	83.0	83.4	82.8	82.9	83.2	83.8	84.0	84.9	84.3	83.4	83.4	83.9	83.5	83.5	83.4	83.5	83.1	82.7	81.4	81.0	80.3	
29	80.2	79.5	79.7	79.0	77.7	76.3	75.8	75.7	75.9	77.9	80.2	81.9	82.1	82.4	82.4	82.2	81.9	80.1	79.8	79.0	79.1	77.7	76.2	79.4	
Mean ...	81.4	81.4	81.4	81.4	81.4	81.3	81.2	81.3	81.3	81.7	82.2	82.5	82.5	82.6	82.6	82.4	82.1	81.8	81.7	81.5	81.5	81.5	81.3	81.7	
Hour G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	
																								Mean	



Readings in degrees absolute at exact hours, Greenwich Mean Time.

359. Cahirciveen (Valentia Observatory) : North Wall Screen :  $h_t$  (height of thermometer bulbs above ground) = 1.3 metres.

March, 1928.

Hour G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean
Day.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.
1	75.4	75.0	74.9	74.4	74.0	75.8	75.0	76.2	77.0	79.1	79.9	80.9	81.2	81.3	81.2	81.0	80.7	79.3	77.8	76.1	75.1	75.2	75.6	75.9	77.4
2	76.6	77.4	75.6	74.4	75.7	77.1	77.1	77.0	78.1	79.7	80.4	81.3	81.7	82.1	82.2	82.2	82.0	81.4	79.9	78.3	77.4	77.0	76.9	76.3	78.7
3	76.1	76.6	77.0	77.8	78.5	78.0	78.1	78.2	78.7	80.1	81.8	82.9	83.1	83.5	83.4	83.5	83.5	82.8	81.6	81.2	81.6	81.7	81.1	81.0	80.4
4	80.9	81.1	81.3	81.2	80.7	79.8	78.0	77.7	78.4	80.1	81.5	83.4	83.9	83.6	83.4	83.4	83.2	82.9	82.1	81.0	80.2	79.3	79.3	78.3	81.1
5	78.4	77.1	77.0	76.0	75.9	75.1	75.5	76.1	77.3	79.4	81.8	81.9	82.4	83.1	82.8	82.8	82.9	81.2	80.0	79.9	79.6	79.6	79.1	80.2	79.3
6	81.1	81.6	81.6	81.7	81.3	81.1	81.2	81.4	82.0	81.8	82.2	82.6	83.0	83.1	82.9	82.9	83.0	82.8	82.9	83.0	82.9	82.9	82.9	83.1	82.2
7	83.4	83.5	83.1	83.0	83.0	82.9	82.9	82.8	83.0	83.5	83.8	83.9	84.8	84.0	84.0	83.6	83.3	83.1	82.9	83.0	83.0	82.8	82.6	83.1	83.3
8	82.4	82.1	81.9	82.0	81.9	81.9	81.9	81.9	81.9	82.1	82.4	82.4	82.2	81.9	81.6	81.0	80.8	80.8	80.0	79.4	79.5	79.0	79.0	78.8	81.3
9	78.6	78.8	78.9	78.9	78.9	78.5	78.3	78.1	77.9	78.0	77.9	77.7	77.6	78.1	78.6	78.2	78.4	77.9	77.0	76.7	75.2	74.4	74.1	73.9	77.6
10	74.0	73.9	75.0	74.5	73.2	74.9	75.1	75.9	76.9	77.8	79.0	79.3	79.1	79.1	79.0	79.0	78.0	77.5	77.1	76.8	76.4	76.0	76.2	76.1	76.6
11	76.0	75.9	76.0	75.7	76.0	76.1	75.5	75.4	75.4	75.9	76.0	76.8	77.2	77.4	77.7	77.4	76.9	76.1	75.1	74.7	73.2	72.9	72.4	72.0	75.7
12	72.0	72.4	71.9	71.4	71.2	71.0	71.2	72.5	73.2	74.0	74.7	74.8	75.4	75.9	75.0	74.6	74.9	74.9	74.7	74.5	74.0	73.8	73.0	72.8	73.8
13	71.5	71.0	70.1	70.0	69.3	69.1	70.3	70.6	71.2	73.0	75.4	76.2	76.9	77.4	77.7	77.4	77.7	77.7	77.0	77.4	77.9	77.9	77.9	77.9	74.3
14	77.9	77.5	77.9	78.0	78.3	78.2	78.6	79.0	79.9	79.9	80.3	81.0	82.0	82.7	82.5	80.2	80.6	81.7	81.3	81.4	81.4	81.6	81.7	82.0	80.1
15	80.7	80.7	81.0	81.2	81.0	80.9	81.1	81.2	81.9	82.2	84.3	84.7	84.7	84.8	84.4	83.8	83.7	83.3	83.1	83.1	83.1	83.2	83.0	83.1	82.7
16	83.0	83.1	83.2	83.2	83.4	83.6	83.9	83.9	84.2	84.1	84.2	84.4	84.8	85.0	85.0	84.9	84.9	85.1	84.6	84.7	84.6	84.5	84.6	84.7	84.2
17	84.6	84.4	84.5	84.4	84.3	84.2	82.8	82.4	82.3	82.4	82.0	81.9	81.9	82.4	82.0	82.0	81.9	81.8	81.4	81.1	80.1	80.1	80.1	80.1	82.4
18	80.1	80.1	80.3	79.9	79.7	79.9	80.0	80.8	81.9	82.9	82.3	84.0	84.0	83.6	83.7	83.9	83.7	83.3	82.7	82.5	82.6	82.1	82.6	82.9	82.0
19	83.1	83.3	83.4	83.1	83.8	84.0	84.0	84.0	84.1	84.1	84.4	84.6	84.4	84.4	84.5	83.6	82.9	82.9	82.4	82.6	82.0	81.6	81.4	82.0	83.4
20	82.2	82.1	82.3	82.7	83.0	83.2	83.1	83.3	83.8	83.6	83.2	83.3	83.8	83.2	82.8	82.4	83.0	83.1	82.9	82.6	82.2	82.1	82.0	81.6	82.8
21	81.8	81.5	81.4	81.7	81.3	80.7	80.9	81.0	81.9	82.3	80.9	82.0	82.0	82.0	82.0	82.0	81.9	81.4	80.5	79.8	79.1	78.4	77.8	76.0	81.0
22	75.7	75.5	75.0	75.0	74.6	74.7	78.0	80.3	81.1	82.1	83.0	83.3	83.7	83.3	83.2	82.8	82.4	82.3	82.2	82.1	82.2	82.1	81.9	81.1	79.9
23	81.3	82.1	82.2	82.1	81.6	81.9	81.3	81.4	82.4	83.3	84.0	83.4	83.0	83.0	83.0	82.7	82.4	82.3	82.0	81.9	82.1	82.0	82.0	81.8	82.3
24	81.4	81.2	81.0	81.0	80.5	80.6	80.1	80.4	81.0	81.9	81.8	82.8	82.9	83.0	83.0	82.7	81.6	81.3	81.0	80.9	81.1	80.9	80.5	80.6	81.4
25	80.6	81.0	81.0	81.0	80.8	81.0	81.1	81.1	82.0	81.9	82.7	83.0	83.6	83.3	83.0	83.0	82.7	82.5	82.0	81.9	82.1	82.0	82.0	82.0	81.9
26	81.8	81.5	81.5	81.1	80.2	80.1	79.1	79.9	81.9	82.9	83.1	82.9	83.0	81.9	82.4	82.1	82.0	82.0	82.1	82.4	81.9	81.7	82.0	81.5	81.7
27	81.0	80.9	80.9	80.9	80.3	80.4	80.3	80.9	80.8	81.9	82.7	81.8	82.2	82.2	81.9	82.0	81.4	80.8	80.1	80.1	80.4	79.9	78.1	79.4	80.9
28	79.4	77.8	78.7	78.0	79.2	78.2	78.0	78.4	78.5	79.0	78.7	80.0	80.0	79.0	80.1	79.9	80.3	80.2	79.8	79.3	79.2	79.6	79.9	80.5	79.2
29	82.2	82.6	82.9	83.0	83.0	83.0	82.9	82.9	81.4	81.0	81.6	80.9	80.5	80.7	79.3	80.5	80.6	80.8	81.0	81.1	80.2	79.9	79.6	79.9	81.3
30	80.7	80.7	80.0	80.5	80.7	81.0	80.0	80.9	80.0	81.1	81.6	80.0	80.0	80.7	79.9	80.1	80.8	80.8	80.2	80.5	80.6	80.7	80.9	80.7	80.5
31	80.2	80.6	80.7	80.7	80.6	78.7	80.2	80.6	80.9	81.1	81.9	82.1	82.4	82.9	83.2	83.0	82.9	82.2	81.9	81.4	81.1	81.4	80.4	80.9	81.3
Mean	...	79.5	79.5	79.4	79.3	79.2	79.2	79.1	79.4	80.0	80.7	81.2	81.6	81.8	81.9	81.8	81.4	81.1	80.6	80.3	80.1	80.0	79.7	79.7	80.3

360. Cahirciveen (Valentia Observatory) : North Wall Screen :  $h_t$  = 1.3 metres.

April, 1928.

	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.
1	80.1	80.2	80.5	80.4	79.7	79.0	79.9	80.3	81.4	82.4	82.2	82.9	83.2	83.0	83.0	82.7	82.4	82.2	81.9	80.9	80.0	80.1	79.8	79.5	81.2
2	79.0	79.1	79.1	79.1	79.5	80.4	80.9	81.4	82.6	82.2	82.3	82.9	83.0	83.1	83.2	83.2	83.5	83.4	83.7	83.5	83.6	83.6	83.0	82.3	81.9
3	82.3	82.2	82.3	82.3	82.2	82.4	81.7	81.1	82.2	82.4	83.3	82.9	83.3	81.7	82.0	82.7	82.4	81.4	81.0	80.2	79.4	79.0	79.3	79.9	81.7
4	79.9	79.4	78.3	79.0	77.6	79.2	78.6	80.2	80.9	80.0	79.9	80.9	80.9	81.1	81.6	80.4	80.7	80.9	79.9	79.2	79.8	78.1	77.9	77.9	79.7
5	77.6	78.2	77.2	77.9	77.0	76.4	77.9	78.1	80.0	80.9	80.9	80.3	79.9	80.9	81.0	81.0	80.8	81.0	80.0	78.9	78.2	77.0	76.9	76.9	79.0
6	76.9	76.8	76.6	77.1	77.0	77.5	78.1	79.6	81.9	83.0	83.0	83.1	83.8	83.9	84.0	83.7	83.2	82.4	82.0	82.1	82.2	82.4	82.1	82.1	80.9
7	81.6	81.5	81.3	81.2	81.8	81.8	81.9	82.2	82.5	82.9	83.3	84.0	83.9	83.6	83.8	83.6	83.9	83.1	82.8	82.1	81.9	82.0	82.0	81.9	82.5
8	81.7	81.5	81.4	81.3	81.8	82.0	82.2	82.9	83.2	84.0	84.9	85.0	84.9	84.7	83.1	83.9	83.9	83.7	83.4	82.4	82.1	82.0	82.2	82.2	82.9
9	82.3	82.2	82.1	82.1	82.3	82.6	82.8	83.0	83.9	84.9	85.3	85.1	85.3	85.2	85.2	84.3	82.8	83.8	83.5	83.6	83.6	83.6	83.7	83.7	83.6
10	83.5	83.1	83.0	83.2	83.1	83.0	83.0	83.4	84.2	84.0	84.0	85.2	85.0	85.3	85.2	84.9	84.4	83.9	83.0	82.2	82.0	81.8	81.0	80.8	83.5
11	81.3	80.7	80.0	79.9	80.5	81.0	81.1	81.1	81.6	81.8	82.0	82.7	83.0	83.4	83.5	84.5	84.3	83.2	82.1	81.3	81.0	80.1	79.4	79.2	81.6
12	78.3	78.9	78.0	78.2	78.1	78.4	80.0	81.8	83.7	84.5	84.9	85.4	85.0	85.2	84.5	84.1	83.4	82.9	82.0	81.4	82.0	81.9	82.4	81.7	81.6
13	82.5	82.5	82.0	82.0	81.8	82.2	82.7	82.5	82.4	83.1	83.2	83.0	83.3	82.2	81.8	82.9	82.7	82.7	82.7	81.5	81.9	81.7	81.9	81.9	82.4
14	82.0	81.3	81.7	81.8	81.6	81.9	82.0	82.3	83.2	83.5	84.0	83.1	83.0	83.0	83.1	82.4	81.9	81.6	82.0	81.9	82.0	81.4	81.0	80.9	82.2
15	80.4	80.5	80.5	79.8	79.8	79.0	79.9	79.4	80.0	79.9	80.6	81.1	81.1	81.0	80.6	80.4	79.9	78.9	78.0	77.5	77.1	77.4	77.6	77.1	79.6
16	77.0	76.8	76.1	76.0	75.4	75.4	75.7	75.9	77.0	77.3	77.5	78.0	79.0	79.0	79.4	79.5	79.3	79.4	79.1	78.8	78.3	77.1	77.0	75.5	77.5
17	75.9	74.9	74.5	73.7	73.8	73.1	75.0	77.4	79.0	80.5	81.6	81.0	81.5	82.1	82.4	82.2	81.4	81.1	80.8	79.6	79.2	79.1	77.0	78.7	78.6
18	78.3	78.0	78.0	77.7	77.6	77.4	77.9	79.0	79.4	80.1	80.3	82.1	81.6	81.4	81.1	81.1	81.3	81.3	80.9	80.6	80.0	79.9	80.0	80.0	79.8
19	79.2	77.9	77.9	77.0	76.4	75.8	76.7	79.3	80.4	80.3	80.9	80.9	81.1	81.3	81.4	81.4	81.1	80.9	80.0	79.2	78.4	78.0	77.7	77.0	79.2
20	76.7	76.7	76.1	75.9	76.6	76.9	78.3	80.4	81.1	81.4	81.1	81.9	82.0	82.0	82.9	83.0	83.1	82.4	81.5	80.7	80.0	79.1	78.7	77.7	79.8
21	76.5	75.7	74.6	74.3	74.1	74.4	75.8	79.0	81.4	81.2	81.9	81.2	81.9	81.9	81.5	81.6	81.9	81.1	80.8	79.9	79.2	78.7	77.1	76.1	78.9
22	74.9	74.7	74.0	73.9	73.9	74.1	74.8	77.9	80.4	81.5	82.4	83.0	83.4	83.9	83.4	82.9	83.1	83.0	83.0	83.0	83.0	83.1	83.0	83.2	83.8
23	83.6	83.7	83.8	83.8	83.8	83.8	83.9	83.7	83.8	83.9	84.1	84.4	85.0	85.4	85.6	85.1	84.8	84.4	84.2	84.1	84.0	84.0	83.9	83.9	84.2
24	83.8	83.5	83.4	83.4	83.3	83.3	83.4	83.8	83.8	83.7	83.4	83.3	83.0	83.1	82.8	82.4	82.1	81.8	81.5	81.1	81.1	81.0	80.5	80.8	82.8
25	80.9	81.0	81.9	82.0	81.9	82.1	82.6	81.3	83.4	83.9	84.9	85.3	85.2	85.6	86.1	85.8	85.1	84.4	83.8	83.2	82.4	81.6	82.4	82.2	83.3
26	82.4	82.2	82.4	82.4	82.6	83.0	83.0	83.4	83.9	83.5	83.7	83.5	83.0	82.7	82.5	82.8	83.0	82.7	82.5	82.2	82.2	82.1	82.0	81.9	82.8
27	81.6	81.6	81.9	81.8	81.5	81.4	81.4	81.4	81.3	81.3	81.4	81.1	81.5	82.3	82.8	83.1	83.3	83.1	82.5	82.0	81.8	81.1	81.0	81.2	81.8
28	81.1	81.4	81.2	81.0	81.0	81.1	81.9	82.0	85.1	84.4	85.7	87.0	87.1	87.5	86.7	86.2	85.9	85.7	84.9	83.5	82.2	81.8	80.9	80.4	83.6
29	80.0	79.1	79.3	79.0	78.8	78.9	79.9	80.1	81.1	82.1	82.7	83.4	84.7	85.0	84.8	85.3	85.5	84.5	84.2	83.5	83.1	83.1	83.1	83.2	82.6
30	83.4	83.0	82.9	83.1	83.3	83.7	84.0	84.1	84.4	85.1	85.4	85.3	85.3	85.6	85.3	85.0	84.9	84.7	84.7	84.4	84.1	83.7	83.1	83.0	84.2
Mean	...	80.2	79.9	79.7	79.7	79.6	79.7	80.2	80.9	81.9	82.3	82.7	83.0	83.1	83.2	83.1	82.9	82.6	82.1	81.5	81.2	80.9	80.6	80.5	81.4
Hour G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean



Readings in degrees absolute at exact hours, Greenwich Mean Time.

361. Cahirciveen (Valentia Observatory) : North Wall Screen :  $h_t$  (height of thermometer bulbs above ground) = 1.3 metres.

May, 1928.

Hour G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean
Day.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.
1	82.7	82.0	82.0	81.9	81.0	81.2	83.0	84.9	86.0	85.8	86.2	87.0	87.5	84.3	84.9	85.0	85.0	84.5	84.9	84.1	84.0	83.9	84.4	83.4	84.1
2	83.0	82.3	82.1	82.1	81.9	82.1	84.4	86.4	87.4	87.4	88.5	89.0	90.2	88.3	88.3	88.4	88.0	88.8	87.9	86.6	85.8	85.7	85.9	85.8	86.1
3	85.5	85.2	85.3	85.4	85.0	84.9	85.0	85.4	85.9	86.7	87.9	87.2	87.7	88.0	88.6	87.4	88.0	88.0	88.3	88.1	87.9	88.0	88.7	88.5	86.9
4	88.0	87.7	88.1	87.4	86.5	86.1	85.1	85.5	86.0	86.2	87.1	88.2	89.0	89.1	88.4	87.1	86.9	85.0	84.5	84.6	84.7	84.7	84.3	84.1	86.5
5	84.0	84.1	83.8	83.3	83.0	83.2	84.6	86.9	88.1	89.3	90.4	91.1	92.0	92.7	91.5	90.5	90.0	89.0	87.8	86.1	85.2	84.6	84.0	83.4	87.0
6	82.1	81.4	81.0	80.5	79.9	80.0	81.3	85.3	87.3	88.0	88.0	88.1	87.9	87.9	87.6	87.9	87.7	86.9	85.7	85.3	85.0	85.5	85.4	84.4	85.0
7	83.9	83.4	82.7	82.2	82.7	82.6	83.4	83.5	84.2	85.3	86.0	87.1	87.4	88.6	88.5	88.6	89.0	88.1	87.4	86.9	84.8	84.1	83.0	82.4	85.3
8	82.0	81.0	81.2	81.1	80.2	80.3	83.3	84.1	84.4	84.2	85.0	85.5	86.0	86.2	86.5	86.9	86.6	85.4	84.8	84.0	83.0	82.7	82.3	82.1	83.7
9	81.9	81.5	81.4	81.0	80.9	82.0	82.4	83.3	84.1	84.4	84.9	85.0	85.4	86.0	85.8	86.0	85.6	85.7	85.0	84.3	83.8	82.4	81.5	79.6	83.5
10	78.7	78.5	78.1	77.9	78.0	78.4	82.0	83.3	85.0	86.7	86.5	86.4	86.5	86.6	86.9	87.2	87.4	86.4	85.5	84.5	83.7	83.1	82.7	82.7	83.4
11	82.7	82.1	81.6	82.0	82.3	82.1	84.0	85.0	85.9	86.2	86.1	86.0	86.3	86.4	86.3	87.0	87.1	86.4	85.5	84.7	84.4	84.1	84.1	84.0	84.7
12	84.1	84.1	83.8	83.6	83.4	83.4	83.5	84.0	84.6	84.8	85.5	86.0	86.3	86.1	86.9	87.1	85.8	85.2	84.9	84.5	84.3	84.0	83.9	83.9	84.7
13	83.7	83.3	83.2	83.2	83.2	83.3	83.7	83.9	84.5	85.1	85.8	85.6	85.6	86.0	86.0	86.0	86.0	85.5	84.8	84.4	84.0	84.0	84.1	84.2	84.5
14	84.1	84.0	83.1	82.8	82.0	83.0	83.4	84.7	84.5	85.0	84.4	84.9	85.9	85.9	86.3	86.0	86.3	85.1	84.5	84.0	83.6	83.5	83.2	83.5	84.3
15	83.1	83.1	83.0	83.1	83.0	83.1	83.0	83.0	83.0	83.3	83.4	84.2	84.1	84.0	84.4	84.1	84.0	83.7	83.3	83.4	83.4	83.5	83.4	83.3	83.5
16	83.3	83.3	83.3	83.3	83.2	83.4	83.9	84.0	84.1	84.6	85.0	85.0	84.6	84.9	85.0	84.7	85.0	84.0	83.7	83.2	83.0	82.9	82.9	82.8	83.9
17	82.7	82.4	82.4	81.7	82.2	82.8	82.3	83.1	83.0	83.3	83.6	83.8	83.3	83.6	83.4	83.4	83.0	82.5	82.4	81.5	81.6	81.9	82.1	82.0	82.7
18	82.0	82.0	82.0	81.7	81.4	81.9	82.1	82.5	83.1	84.0	83.9	84.2	83.9	83.8	83.9	84.1	84.0	83.9	83.9	83.3	83.1	83.0	83.0	82.9	83.0
19	82.5	82.1	82.0	81.8	81.9	82.0	82.4	82.8	81.5	83.1	83.5	84.4	83.3	84.0	84.1	83.4	83.4	83.0	82.8	82.7	82.0	81.8	81.3	81.2	82.7
20	80.9	80.7	80.3	80.9	80.7	81.0	82.0	81.8	81.9	82.6	83.0	83.4	83.2	83.5	83.5	83.9	83.7	83.5	83.0	82.6	82.2	82.2	81.9	81.5	82.2
21	81.0	80.9	81.1	81.4	81.4	81.9	82.1	82.0	82.4	82.7	84.0	84.2	84.8	85.2	85.2	86.2	86.3	85.9	84.9	84.4	83.8	83.2	83.6	82.2	83.4
22	81.9	80.5	80.1	79.0	78.4	80.6	82.6	83.1	83.5	84.0	84.2	84.6	84.6	85.0	84.6	85.2	85.0	84.0	83.9	82.8	82.1	82.6	82.1	82.4	82.8
23	82.3	82.4	82.2	82.6	82.7	82.6	83.7	84.0	84.6	85.0	83.9	85.4	86.0	87.3	87.5	87.4	87.0	86.1	85.5	84.3	84.1	83.5	83.1	83.4	84.4
24	83.4	82.9	83.1	83.3	83.3	83.9	84.0	84.2	84.5	85.1	86.1	87.1	87.4	87.1	87.4	87.6	87.1	87.2	86.1	85.2	84.9	84.9	85.0	85.0	85.2
25	85.0	85.0	85.0	85.0	84.9	84.9	85.0	85.5	86.0	85.8	86.3	86.1	85.5	85.9	85.7	85.9	85.7	85.6	85.6	85.7	85.8	85.8	85.7	85.7	85.5
26	85.6	86.0	86.4	86.1	86.4	86.9	86.3	86.6	86.9	87.1	87.1	87.2	87.4	87.8	87.6	87.1	87.0	86.9	86.4	86.0	86.0	85.9	85.7	85.7	86.6
27	85.7	85.7	85.7	85.7	85.9	85.7	86.1	87.0	86.9	85.9	86.0	85.9	85.8	85.9	86.0	85.7	85.6	85.5	85.5	85.3	85.0	84.9	85.0	85.0	85.7
28	84.5	84.1	83.8	82.7	82.2	81.9	82.1	82.9	84.0	85.0	86.4	86.4	86.8	87.0	87.5	87.4	87.7	87.1	87.0	85.9	84.1	83.0	81.9	81.8	84.8
29	80.3	80.0	80.3	79.1	78.9	80.9	84.0	86.6	88.3	88.4	88.9	88.4	88.1	89.0	89.0	90.5	90.2	88.9	87.9	86.9	85.5	84.6	84.3	84.2	85.5
30	83.2	82.8	82.0	81.6	81.2	83.3	86.4	87.5	89.9	90.9	89.7	90.3	91.2	91.0	91.3	92.1	91.3	89.6	88.1	87.4	87.0	87.0	86.6	86.6	87.4
31	86.8	86.5	86.9	88.8	88.2	88.8	89.4	89.1	90.1	91.2	91.6	91.1	91.0	91.3	91.3	91.4	91.4	91.3	89.6	89.3	89.0	88.3	88.1	88.2	89.5
Mean	...	83.3	82.9	82.8	82.7	82.5	82.9	83.8	84.6	85.2	85.7	86.1	86.4	86.7	86.8	86.8	86.7	86.1	85.5	84.9	84.4	84.2	84.0	83.7	84.8

362. Cahirciveen (Valentia Observatory) : North Wall Screen :  $h_t$  = 1.3 metres.

June, 1928.

	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.
1	87.7	88.0	87.6	87.2	87.0	86.8	86.4	86.1	86.2	86.6	86.4	85.8	85.5	87.0	87.2	87.8	88.1	87.8	87.4	87.4	87.4	87.6	87.7	87.9	87.1	
2	87.7	87.4	87.0	86.1	86.2	86.2	87.6	88.7	89.8	90.3	90.7	90.7	90.9	92.1	92.5	92.9	92.6	91.6	91.0	90.0	89.3	88.0	88.9	88.9	89.4	
3	88.9	87.9	87.1	87.3	87.2	88.2	89.6	90.2	91.0	91.5	91.9	92.1	92.3	92.8	92.9	92.6	92.6	91.7	91.2	90.0	89.4	88.5	88.4	88.5	90.2	
4	88.2	87.9	88.0	87.7	86.9	86.6	88.0	88.9	91.0	91.0	92.0	93.1	93.5	92.3	92.7	93.0	92.0	91.3	90.9	90.3	89.6	87.7	87.5	87.9	89.9	
5	87.8	87.0	87.1	87.3	87.0	86.4	87.0	88.1	89.9	89.5	89.1	90.2	91.1	91.5	91.9	91.5	90.9	90.0	89.0	88.4	88.0	87.8	87.4	87.8	88.8	
6	87.3	87.1	86.5	87.0	87.0	86.4	87.6	88.2	88.5	89.3	89.8	90.1	90.7	90.2	90.7	90.1	89.8	89.7	89.0	88.1	88.0	87.4	86.9	86.6	88.4	
7	87.0	86.8	86.4	86.2	86.1	86.4	87.2	87.9	88.2	88.1	88.8	89.0	89.0	88.9	90.0	89.0	89.3	88.0	88.0	87.2	86.9	86.7	86.1	86.2	87.7	
8	86.1	86.0	85.7	85.5	85.1	85.7	86.4	86.6	86.9	87.3	88.9	89.5	89.1	89.6	88.8	88.2	88.2	87.9	87.1	86.7	84.5	83.4	84.0	83.8	86.8	
9	83.9	84.1	85.4	85.2	84.9	85.0	85.9	86.5	88.3	86.9	88.5	88.3	88.3	87.6	87.5	87.6	87.3	87.5	85.9	85.3	84.9	84.1	84.0	84.0	86.1	
10	83.3	82.7	82.5	82.2	82.4	82.4	81.4	83.7	82.6	84.0	84.5	84.9	85.1	85.2	85.5	86.0	85.9	85.1	84.9	84.0	83.9	83.0	83.2	83.0	83.8	
11	82.0	82.4	82.2	81.4	80.1	83.0	84.1	86.0	84.0	85.7	86.0	86.2	85.1	86.3	86.9	87.1	86.9	86.4	86.0	85.4	83.3	82.0	80.4	79.6	84.2	
12	79.1	79.2	79.7	81.5	82.4	82.8	83.4	84.3	84.9	84.8	83.6	83.6	84.2	84.3	85.0	86.2	86.4	86.9	86.9	86.5	86.3	86.3	86.2	86.1	84.1	
13	86.0	86.0	85.9	85.7	85.4	85.4	85.8	86.2	87.3	87.1	87.3	87.3	87.3	87.3	87.4	87.3	86.9	86.4	85.9	85.1	84.9	85.2	85.3	85.2	86.3	
14	85.0	84.5	83.8	83.5	83.0	83.1	83.4	83.6	83.9	83.9	84.5	85.2	85.4	85.1	85.0	84.8	84.8	84.3	84.1	83.7	83.2	82.8	82.6	83.0	84.1	
15	82.6	82.7	83.1	83.4	82.3	83.0	84.3	85.2	86.0	86.1	86.0	87.0	86.9	87.0	87.3	86.3	87.3	87.1	86.1	85.8	85.4	84.8	84.7	84.6	85.2	
16	84.5	84.2	83.5	82.5	82.9	83.9	85.1	85.6	86.0	86.1	86.4	86.8	86.7	86.9	86.4	87.2	87.9	86.6	86.0	85.0	84.2	82.9	82.7	82.2	85.1	
17	82.9	82.0	81.4	81.1	81.4	82.2	83.5	85.1	85.8	86.4	87.4	87.5	86.9	86.9	88.0	88.4	88.9	88.0	87.9	86.9	86.4	86.0	85.8	85.9	85.5	
18	85.9	85.8	85.5	85.2	85.2	85.1	85.7	86.0	86.1	86.3	86.1	86.4	86.5	86.1	86.6	86.0	86.0	86.3	86.3	86.3	86.2	86.3	86.0	86.0	86.0	
19	85.9	85.9	85.9	85.9	86.0	86.0	86.3	86.4	87.1	88.9	89.1	89.4	89.0	88.4	88.2	87.8	87.0	86.4	86.0	85.4	85.1	85.0	84.8	86.8	86.8	
20	83.8	83.2	82.0	81.4	80.9	82.0	83.9	85.9	88.0	87.6	89.0	89.5	89.7	88.4	87.9	88.0	88.1	87.9	86.9	85.4	85.1	85.2	85.9	86.4	85.5	
21	87.0	87.2	87.2	87.3	87.3	87.4	87.8	87.9	87.6	87.6	88.0	88.4	88.4	88.9	89.4	90.0	89.7	88.9	87.6	87.2	86.9	86.8	86.8	86.6	87.8	
22	86.4	86.3	86.3	86.0	86.0	86.1	86.5	86.9	87.4	88.9	88.8	88.4	90.0	89.9	87.8	89.4	88.3	88.5	88.0	87.0	86.4	86.0	86.0	85.4	87.4	
23	85.3	85.2	85.1	85.5	85.4	85.9	86.4	86.9	88.0	87.9	88.0	88.0	87.3	88.9	89.0	89.3	89.3	88.3	87.9	87.1	86.5	86.1	85.7	85.3	87.0	
24	84.1	84.3	84.0	83.9	83.6	84.9	86.4	89.0	88.0	88.6	88.0	88.1	88.2	88.2	87.8	86.9	85.4	84.5	85.0	85.0	85.1	85.1	84.3	84.3	86.0	
25	84.4	85.0	85.4	85.5	85.9	86.2	86.6	87.0	87.0	86.9	88.3	87.8	87.6	86.7	86.9	87.9	87.0	86.1	86.2	86.2	86.0	86.0	86.0	86.1	86.4	
26	85.7	85.3	85.1	85.0	84.6	84.4	84.8	85.0	85.3	85.5	85.7	86.1	86.0	85.8	86.2	87.1	87.0	86.6	85.8	85.5	85.1	85.3	85.4	85.4	85.6	
27	85.4	85.4	85.5	85.4	85.2	85.3	85.6	86.0	87.3	87.7	87.9	88.0	88.1	88.5	88.1	88.6	87.8	87.6	87.4	86.5	86.1	86.0	86.0	85.9	86.7	
28	85.4	85.2	85.0	85.0	85.3	86.0	85.4	86.4	86.4	86.1	86.4	86.6	86.7	86.8	87.0	86.6	86.3	86.3	86.9	87.1	87.0	87.0	86.6	85.8	86.2	
29	84.9	84.9	83.9	83.7	84.0	83.8	84.4	85.5	85.5	85.1	84.8	85.0	85.2	87.4	87.9	87.0	87.0	86.5	85.9	85.1	84.4	84.0	84.0	85.2	85.2	
30	84.5	84.3	84.7	84.5	84.3	84.6	85.2	86.6	86.4	87.2	87.9	87.7	87.9	88.0	88.5	87.9	87.1	86.5	86.0	86.3	86.0	85.5	85.1	86.1	86.1	
Mean	85.3	85.1	85.0	84.9	84.7	85.0	85.7	86.5	87.0	87.3	87.7	87.9	87.9	88.1	88.2	88.3	88.1	87.6	87.1	86.6	86.1	85.6	85.5	85.4	86.5	
Hour G.M.T.	1.	2	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	12.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean	



Readings in degrees absolute at exact hours, Greenwich Mean Time.

363. Cahirciveen (Valentia Observatory) : North Wall Screen :  $h_t$  (height of thermometer bulbs above ground) = 1.3 metres.

July, 1928.

Hour G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean
Day.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.
1	85.3	85.3	85.3	85.1	85.0	85.5	85.4	85.7	86.0	86.1	86.9	87.0	87.2	87.3	87.4	87.7	88.0	87.4	87.1	86.3	85.3	85.4	85.1	85.1	86.2
2	85.1	84.9	84.9	84.9	84.9	85.0	86.6	86.9	87.8	88.1	88.5	88.9	88.8	88.9	88.5	88.3	88.3	88.1	87.4	86.8	85.8	85.0	85.1	84.4	86.8
3	84.4	83.0	82.6	82.0	81.8	82.4	84.7	87.0	88.3	88.5	88.3	88.3	89.0	88.6	88.3	88.4	88.4	88.0	87.5	86.3	85.5	85.2	84.0	84.0	86.0
4	83.1	83.0	83.9	84.1	84.9	85.0	85.3	85.4	85.4	85.5	86.0	86.4	86.7	87.0	87.3	87.3	87.3	87.3	87.3	87.2	87.1	87.1	87.1	87.0	85.9
5	87.0	86.9	86.9	86.7	86.7	86.7	86.1	86.1	86.9	87.1	87.6	88.3	88.6	88.4	88.8	89.0	88.1	88.1	87.5	87.0	86.4	86.0	86.1	86.0	87.2
6	86.0	85.8	85.8	85.2	85.7	85.5	86.0	86.5	86.8	86.5	87.4	87.3	88.2	88.5	88.2	88.0	88.0	87.4	87.0	86.6	86.4	86.3	86.1	86.0	86.7
7	86.0	85.8	85.7	85.8	85.4	85.4	86.0	87.4	88.4	88.0	88.0	88.5	87.9	87.2	88.4	87.5	87.5	87.6	87.4	87.4	87.2	87.3	87.1	86.9	87.1
8	86.8	87.0	87.3	87.4	87.4	87.4	87.4	87.9	87.6	88.0	89.2	89.0	88.6	88.5	88.8	88.9	88.8	88.0	87.1	86.0	85.3	85.1	85.3	85.3	87.6
9	86.0	86.2	86.4	86.0	86.0	86.3	87.0	87.9	87.2	88.0	88.4	89.0	89.1	89.3	90.0	90.4	90.5	90.1	89.1	87.9	86.7	85.9	85.4	85.6	87.7
10	85.5	85.6	86.0	86.1	86.5	86.9	87.0	87.1	87.3	87.3	87.7	88.1	88.5	88.9	89.1	89.0	89.4	89.1	88.9	88.3	88.1	88.0	87.9	87.7	87.6
11	87.7	87.9	87.8	87.6	87.5	87.4	87.9	88.0	88.0	87.9	87.9	88.0	88.0	88.3	88.7	88.5	88.7	88.3	88.1	88.0	87.9	87.9	87.6	87.3	88.0
12	87.3	87.3	87.3	87.3	87.3	87.1	87.0	87.3	87.9	88.9	89.1	89.9	90.2	90.9	90.5	89.9	90.1	90.2	89.0	88.0	87.4	87.3	87.3	87.2	88.4
13	87.1	87.0	87.0	87.1	87.3	87.4	87.9	88.4	88.4	88.4	89.3	89.4	90.2	90.9	90.3	90.3	89.4	89.3	88.7	88.2	88.0	87.9	87.8	87.7	88.4
14	87.6	87.5	87.3	87.4	87.4	87.6	87.9	88.0	89.0	90.1	90.0	90.1	91.1	91.6	91.4	91.2	91.7	91.0	90.0	89.0	88.8	88.4	88.4	88.4	89.2
15	88.1	88.1	88.3	88.1	88.0	88.4	89.1	89.0	89.0	89.1	89.1	89.6	89.9	89.2	90.8	89.0	88.4	87.8	87.3	87.0	86.5	86.5	86.1	85.9	88.3
16	85.9	85.6	85.5	85.5	84.7	85.5	87.2	87.6	89.0	88.4	88.7	89.0	88.6	88.5	88.8	89.1	89.9	89.0	88.4	87.9	87.2	85.4	85.0	84.4	87.3
17	84.0	83.0	83.5	82.5	82.2	83.1	86.3	87.9	89.1	91.1	91.0	91.1	91.9	92.1	92.6	89.9	90.2	89.0	88.3	88.1	87.0	85.8	85.4	84.3	87.5
18	84.0	84.1	84.1	84.9	85.9	86.6	87.2	88.1	88.8	89.4	89.9	89.9	89.3	89.0	89.3	89.9	89.6	88.6	88.0	87.9	87.7	87.4	87.4	87.2	87.7
19	87.0	87.0	87.0	86.9	86.9	87.0	87.2	87.8	88.0	88.3	88.8	88.8	89.1	89.4	89.6	89.6	88.9	88.8	88.2	88.0	87.8	87.5	87.4	87.3	88.0
20	87.3	87.1	87.0	87.0	86.7	87.0	87.1	87.7	88.1	89.3	90.0	90.0	91.1	90.9	90.8	90.3	90.9	90.2	90.0	89.1	87.7	86.5	85.9	85.1	88.5
21	85.2	83.4	82.7	83.0	82.1	83.9	87.0	90.2	92.6	93.6	94.0	94.9	94.8	94.3	94.3	94.2	94.7	92.9	91.7	90.5	89.9	89.9	90.0	89.9	89.9
22	89.8	89.5	89.0	88.8	88.6	88.9	89.1	89.2	90.3	90.8	91.0	90.8	90.6	90.3	90.5	90.3	90.0	89.8	89.8	89.3	89.0	88.6	88.6	88.6	89.7
23	88.6	88.4	88.5	88.6	88.9	89.0	89.1	89.0	90.0	90.0	90.0	90.0	90.1	90.0	90.0	90.0	89.8	89.4	89.1	89.3	88.9	89.1	88.9	88.8	89.3
24	88.8	88.9	88.9	89.0	89.0	89.1	89.1	89.1	89.3	89.5	90.0	89.9	90.1	90.3	90.4	90.2	90.3	90.1	89.6	89.4	89.2	89.2	89.2	89.1	89.5
25	89.1	89.0	89.0	89.1	89.1	89.1	89.1	89.2	89.5	89.9	89.9	90.2	91.0	91.7	91.6	91.2	90.5	90.3	89.9	89.5	89.3	89.2	89.1	89.0	89.8
26	89.0	89.0	89.3	89.4	89.1	89.1	89.4	89.4	89.6	90.5	90.0	90.8	91.2	91.3	91.0	90.3	90.3	90.2	90.1	89.6	89.3	89.3	89.1	89.0	89.8
27	88.8	88.2	88.0	88.0	88.0	87.6	87.9	87.5	88.1	88.2	88.6	88.8	88.9	89.0	89.3	89.3	89.4	88.3	87.9	87.0	87.1	86.6	86.5	86.6	88.1
28	86.4	86.0	86.0	85.3	85.0	85.7	86.1	86.9	86.2	87.2	88.0	88.8	87.9	87.0	88.0	87.5	88.0	87.3	86.9	86.4	86.1	85.7	85.9	86.0	86.7
29	86.1	85.4	85.8	85.8	85.9	85.6	86.0	87.0	87.1	87.3	88.4	89.0	88.9	88.4	89.0	88.1	88.5	88.3	87.9	86.7	86.0	85.0	84.8	84.1	86.9
30	83.9	84.0	84.0	84.9	84.5	84.6	84.8	85.2	86.4	87.2	87.9	88.5	89.7	89.2	89.5	89.4	89.1	89.0	88.4	87.9	87.0	86.9	86.0	85.2	86.8
31	85.3	85.0	84.9	85.2	85.1	85.0	85.7	86.0	85.6	86.1	86.7	86.9	87.0	87.3	87.3	87.3	86.8	86.9	86.3	85.4	85.0	84.9	85.0	84.3	85.8
Mean	...	86.5	86.3	86.3	86.2	86.5	87.1	87.6	88.1	88.5	88.9	89.2	89.4	89.4	89.6	89.3	89.3	88.9	88.4	87.8	87.3	87.0	86.8	86.6	87.8

364. Cahirciveen (Valentia Observatory) : North Wall Screen :  $h_t$  = 1.3 metres.

August, 1928.

	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.
1	83.2	82.8	83.0	83.1	81.6	82.8	84.1	87.8	88.7	88.8	88.4	89.0	88.6	89.0	88.9	89.0	88.5	87.8	87.0	86.0	85.4	84.7	83.4	86.3	86.0	
2	81.8	81.9	81.3	81.0	80.8	81.2	85.1	86.3	87.9	88.0	88.1	89.6	89.7	88.9	88.6	89.4	89.3	88.4	88.0	87.9	86.1	85.9	85.5	84.8	86.0	
3	84.1	82.9	82.6	82.5	82.4	82.9	84.1	85.8	87.1	88.4	89.3	89.4	89.4	89.7	89.3	89.5	90.0	88.9	88.4	87.8	86.9	85.4	84.6	83.3	86.5	
4	82.1	82.9	82.0	81.9	81.4	81.6	83.7	86.4	87.9	88.3	88.9	90.0	90.0	90.0	90.3	90.4	90.5	90.0	89.3	88.3	86.2	84.9	84.3	84.0	86.4	
5	83.1	83.2	83.1	84.2	86.0	87.0	88.0	89.4	89.7	89.9	91.1	91.4	92.1	91.4	91.4	90.8	90.3	90.0	89.9	89.8	89.9	89.9	90.0	90.0	88.7	
6	90.1	90.0	89.9	89.8	89.2	89.1	88.9	88.9	89.5	90.2	90.1	90.8	91.0	90.5	90.2	90.4	90.0	89.7	88.4	88.8	89.0	88.6	88.9	88.5	89.6	
7	88.9	90.0	90.4	90.3	90.9	88.9	88.2	88.1	88.4	89.1	89.1	89.1	89.9	90.4	90.2	90.6	90.4	90.1	89.3	88.0	87.1	86.8	86.4	86.2	89.1	
8	86.0	86.1	86.5	86.4	86.4	86.8	88.4	88.9	89.6	90.2	90.0	91.3	90.2	90.4	90.5	90.3	90.7	90.2	89.4	88.3	86.9	87.1	87.1	86.6	88.5	
9	86.5	86.4	86.0	85.9	86.3	86.5	86.5	87.7	88.9	89.1	89.3	90.0	89.9	90.5	91.0	91.0	91.6	90.3	90.0	89.5	88.2	88.8	88.8	88.6	88.6	
10	88.3	88.0	88.3	88.0	87.9	87.2	87.2	87.8	88.8	89.5	92.2	91.9	92.6	94.0	91.0	89.9	89.6	89.0	88.6	88.4	88.4	88.2	88.1	88.1	89.2	
11	88.2	89.0	89.9	90.0	90.0	90.0	89.0	89.9	90.4	90.4	90.5	90.5	88.7	87.8	87.8	88.0	89.2	89.1	88.1	87.5	86.9	86.1	86.1	85.9	88.8	
12	86.0	86.1	85.4	85.9	85.8	85.8	86.0	87.1	88.4	88.6	88.5	90.0	88.4	88.4	87.8	87.1	87.2	86.5	86.0	86.0	86.0	86.0	86.1	86.1	86.9	
13	86.0	85.8	85.9	86.0	86.1	85.9	85.7	85.9	86.2	87.0	87.9	88.0	88.8	88.2	88.5	88.4	88.7	87.3	87.9	87.1	86.9	86.3	86.6	86.8	86.9	
14	86.8	85.7	85.5	85.1	85.5	86.2	86.5	88.3	87.3	88.3	87.7	88.1	88.0	88.0	88.2	88.5	89.0	88.0	88.7	87.2	87.2	87.2	86.3	86.1	87.2	
15	86.1	86.0	85.8	86.0	86.0	85.4	86.0	86.9	87.0	87.3	87.0	87.1	88.0	87.1	88.0	87.8	87.6	86.9	86.6	86.9	86.8	86.0	86.3	86.0	86.7	
16	85.5	85.9	85.9	86.1	86.2	86.3	86.8	87.1	86.9	88.2	88.5	89.0	89.3	88.9	89.0	89.1	88.6	88.5	87.8	86.6	86.0	86.1	85.7	85.2	87.2	
17	85.9	86.0	85.9	86.0	85.9	86.2	86.9	87.9	88.8	89.1	89.7	90.1	89.6	90.0	90.2	90.0	89.6	89.1	88.4	88.0	88.0	87.6	87.4	87.8	88.0	
18	87.9	87.9	87.9	88.0	88.0	88.0	88.4	89.1	90.2	90.4	90.7	91.0	91.1	90.3	90.8	90.2	89.4	88.2	88.0	88.0	87.5	87.9	88.0	88.0	88.9	
19	88.1	88.2	88.3	88.3	88.3	88.4	88.1	87.5	87.4	87.4	88.6	89.6	90.0	90.2	89.2	89.2	88.4	88.1	87.9	87.0	86.9	87.0	86.8	86.8	87.7	
20	86.3	86.4	86.0	85.5	84.6	85.0	85.2	86.8	86.9	87.7	88.2	88.2	88.8	88.9	89.0	89.0	88.8	88.0	86.3	86.3	86.1	86.2	86.4	86.4	87.0	
21	86.3	86.1	86.4	86.4	86.4	86.5	87.0	87.8	87.7	88.1	88.5	89.4	89.5	87.9	89.2	88.9	88.8	88.2	87.9	87.2	87.0	86.6	86.1	86.1	87.5	
22	85.9	86.1	86.6	87.2	87.6	88.1	88.3	88.9	88.9	89.0	89.3	89.4	89.9	90.0	90.0	90.0	89.0	89.0	88.0	87.1	87.1	87.5	87.0	88.3	88.3	
23	87.0	87.0	87.0	86.7	86.6	87.0	87.4	88.0	89.0	89.4	89.9	89.6	90.1	90.0	90.7	90.4	90.1	89.2	88.8	88.3	88.3	88.4	88.3	88.0	88.5	
24	87.8	87.7	87.6	87.4	87.4	86.9	87.4	88.9	89.1	89.5	89.8	90.0	90.1	89.8	89.7	89.0	88.4	88.4	87.7	87.9	87.8	87.3	87.1	87.1	88.4	
25	87.0	87.3	87.1	87.1	87.0	87.1	87.1	87.9	88.2	88.3	89.0	89.8	90.3	90.4	90.0	90.0	90.0	89.0	88.7	88.0	87.1	87.1	87.6	87.5	88.3	
26	87.0	86.1	87.0	86.2	86.3	86.6	86.4	86.7	86.4	86.9	86.6	87.4	87.0	88.3	87.4	88.2	88.9	88.8	88.2	87.1	86.2	86.4	86.1	86.4	87.0	
27	86.4	86.7	85.7	85.4	85.3	85.5	86.4	86.3	87.7	88.0	88.4	88.6	89.9	89.9	90.0	89.3	89.2	89.0	88.1	87.5	87.3	87.2	87.1	87.0	87.6	
28	87.0	86.8	86.5	86.4	85.9	85.1	85.0	87.7	88.3	89.0	87.6	88.2	89.4	89.7	89.4	89.2	89.1	87.0	86.7	86.9	86.0	85.9	85.9	87.3	87.3	
29	85.8	85.2	85.5	85.1	86.0	86.0	86.2	87.0	87.4	87.7	88.0	88.2	88.0	88.3	88.0	88.8	88.6	88.4	87.9	87.4	86.4	86.1	86.3	86.4	87.0	
30	86.3	86.0	85.6	85.0	84.8	83.9	83.9	85.8	86.9	88.1	88.4	89.0	89.3	90.0	89.3	88.6	88.4	88.1	87.7	86.6	86.1	85.9	85.0	85.0	86.9	
31	84.6	84.4	84.3	84.4	84.0	84.1	83.9	84.7	85.7	87.2	88.5	88.9	89.0	89.0	89.0	89.0	88.9	88.2	86.9	86.0	85.0	84.1	83.9	86.4	87.7	
Mean ...	86.2	86.1	86.1	86.0	86.0	86.1	86.5	87.5	88.1	88.6	88.9	89.4	89.6	89.5	89.4	89.3	88.7	88.2	87.6	87.1	86.8	86.6	86.4	87.7	87.7	
Hour G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean	



Readings in degrees absolute at exact hours, Greenwich Mean Time.

365. Cahirciveen (Valentia Observatory) : North Wall Screen :  $h_t$  (height of thermometer bulbs above ground) = 1.3 metres.

September, 1928.

Hour G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean
Day.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.
1	86.3	84.5	83.0	82.2	82.3	82.0	82.7	85.3	87.5	88.6	89.5	91.0	91.2	91.6	91.1	90.4	90.0	90.0	89.1	88.7	88.9	87.9	86.7	88.0	87.4
2	88.4	88.2	87.9	89.0	89.0	89.0	89.0	90.0	90.4	90.9	90.2	91.1	91.3	90.9	90.8	90.1	89.9	89.9	89.0	88.1	88.2	88.7	88.9	88.6	89.5
3	88.6	88.9	88.9	88.9	89.0	88.9	89.0	89.1	89.4	89.8	89.7	89.8	89.8	89.5	89.9	89.4	89.4	89.1	89.0	89.0	89.0	89.0	89.0	89.0	89.2
4	89.1	89.0	88.9	89.0	88.8	88.8	88.9	89.0	89.0	89.1	89.1	89.2	89.1	89.3	89.8	89.6	89.4	89.2	89.0	88.9	89.0	88.9	88.9	88.9	89.1
5	88.9	88.9	87.5	87.1	86.6	86.6	86.6	86.1	86.4	86.5	86.4	86.9	86.4	88.0	88.1	87.9	87.9	87.6	87.0	86.0	86.3	86.0	85.4	84.9	87.0
6	85.7	86.4	86.4	86.4	86.6	86.2	86.3	87.3	87.8	88.4	89.2	90.1	90.2	90.1	90.1	90.0	89.4	88.9	88.4	88.4	88.4	88.4	88.5	88.3	88.1
7	88.4	88.4	88.4	88.4	88.5	88.4	88.4	88.2	88.9	88.9	88.2	88.0	88.0	88.0	88.0	86.5	88.8	88.1	87.4	86.5	85.8	85.7	85.4	85.4	87.8
8	85.2	84.8	84.3	83.3	83.2	83.9	85.0	86.0	86.9	88.1	88.0	88.4	88.9	88.8	88.9	89.0	87.4	87.3	87.0	86.9	86.5	86.4	85.9	85.9	86.5
9	86.0	85.8	84.4	85.1	85.9	85.1	85.1	85.9	87.0	87.0	88.2	88.9	89.5	89.6	89.4	89.3	87.8	87.6	87.6	87.4	87.5	87.6	87.8	87.8	87.2
10	87.7	87.7	87.8	87.4	87.0	87.1	87.2	87.9	88.1	88.0	88.3	88.8	89.0	89.3	89.6	89.4	89.0	88.6	88.0	87.9	87.5	87.2	87.4	87.1	88.1
11	87.0	87.0	86.9	87.0	86.8	87.0	87.3	88.1	89.0	89.4	89.7	90.0	90.9	90.4	90.4	89.9	89.6	88.8	87.9	87.2	87.5	87.2	87.1	87.0	88.3
12	87.3	87.1	87.1	87.0	87.0	87.0	87.1	87.8	88.6	89.1	89.8	90.0	90.3	90.2	90.5	90.1	89.4	89.4	88.5	87.9	87.5	87.6	87.4	87.9	88.4
13	87.9	88.0	88.2	88.1	88.1	88.4	88.4	89.0	89.5	90.0	90.3	90.5	90.6	91.0	91.6	90.7	90.2	89.9	89.8	89.4	89.2	89.2	89.2	89.1	89.4
14	89.0	89.2	89.2	89.1	89.0	88.9	88.9	86.9	86.0	86.0	86.7	87.2	87.8	87.6	87.7	87.4	87.1	86.7	85.9	85.7	84.1	83.9	83.7	83.1	87.1
15	82.0	81.0	81.3	80.6	80.4	80.5	80.0	80.8	83.1	85.2	86.6	87.4	87.7	88.0	88.1	87.9	87.0	86.0	84.6	83.5	82.6	81.0	82.0	82.3	83.7
16	84.0	83.8	83.4	84.8	84.9	84.9	85.3	86.0	86.8	87.0	87.4	87.8	87.9	87.9	88.0	88.0	87.1	87.0	87.0	87.1	87.3	87.7	87.9	87.7	86.4
17	87.9	88.0	87.9	88.0	88.0	87.9	88.0	88.1	88.2	88.1	88.1	88.6	88.7	89.0	89.2	88.9	88.8	88.3	88.2	88.2	88.2	86.0	85.8	85.9	88.0
18	85.5	85.6	85.5	85.2	85.0	83.6	83.1	83.3	85.4	86.3	87.5	87.5	88.0	87.9	87.7	87.5	87.1	86.5	86.0	84.7	83.8	82.7	82.0	82.0	85.5
19	82.0	82.2	83.4	83.0	83.0	82.0	81.8	83.0	84.7	86.0	86.0	87.0	87.8	87.9	86.9	86.9	87.0	86.1	85.5	85.6	85.3	84.0	82.4	82.9	84.7
20	83.2	83.7	84.0	83.9	83.7	83.3	84.0	84.1	84.9	85.0	86.0	86.9	87.0	87.2	87.0	86.9	86.6	86.3	85.8	85.5	85.1	84.9	84.9	84.7	85.2
21	84.5	84.4	84.1	84.2	84.1	84.0	84.0	84.1	85.0	86.9	87.2	87.9	88.0	88.1	88.6	88.4	88.2	87.2	86.5	85.2	84.3	84.0	82.0	81.4	85.6
22	81.0	80.0	79.9	80.8	80.3	80.0	80.0	81.0	84.0	87.5	88.8	89.0	88.7	89.5	89.6	89.0	88.4	87.7	86.6	86.1	85.7	84.8	84.3	83.7	84.8
23	82.7	82.5	82.9	83.0	83.1	82.8	83.3	84.0	84.3	86.1	87.1	87.5	87.9	88.2	88.0	87.7	87.1	86.1	85.1	84.1	83.6	83.0	81.8	80.9	84.8
24	79.0	78.3	77.9	77.1	77.0	77.1	78.2	78.0	80.2	82.3	84.9	85.1	85.9	85.9	86.0	85.8	86.0	85.4	85.2	85.4	85.6	85.3	85.1	84.1	82.5
25	83.9	83.0	83.4	83.1	83.3	83.2	82.6	82.4	83.6	84.9	85.2	85.9	86.2	86.4	86.8	86.8	86.1	85.4	83.9	83.9	83.6	83.3	82.4	82.0	84.3
26	81.4	82.0	81.0	83.3	83.4	83.1	84.0	84.9	86.0	86.9	87.7	88.0	88.4	88.9	88.4	88.2	87.9	87.0	86.1	85.0	84.0	84.0	83.8	84.0	85.3
27	83.8	84.0	83.9	84.4	84.4	84.0	84.9	84.8	85.9	86.2	86.6	87.1	87.4	87.7	87.4	86.1	85.9	85.3	85.0	84.9	84.8	84.0	83.9	83.6	85.3
28	83.4	83.4	83.1	83.0	83.1	83.4	83.1	83.1	83.4	84.0	84.3	84.8	85.0	85.1	84.5	84.4	85.0	85.0	85.0	85.1	84.9	84.4	84.7	84.0	84.1
29	83.5	83.4	83.0	82.9	82.1	82.2	82.4	82.8	83.0	83.2	84.9	84.7	84.9	85.1	85.4	85.2	84.9	84.0	83.5	82.8	82.1	81.4	81.1	80.6	83.4
30	80.3	80.3	79.8	79.9	79.8	79.5	80.1	80.5	81.1	82.9	83.5	84.0	84.6	85.0	85.3	85.3	85.0	84.4	83.0	82.7	82.1	82.0	82.1	80.4	82.2
Mean	85.1	85.0	84.8	84.8	84.8	84.6	84.8	85.3	86.1	86.9	87.5	88.0	88.2	88.4	88.4	88.1	87.8	87.3	86.7	86.3	86.0	85.5	85.3	85.0	86.3

366. Cahirciveen (Valentia Observatory) : North Wall Screen :  $h_t$  = 1.3 metres.

October, 1928.

	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	
1	80.0	80.2	79.4	78.3	78.2	77.9	78.2	77.2	80.0	82.9	83.8	85.0	85.1	85.8	85.8	85.5	85.3	84.4	83.0	81.8	81.0	79.6	79.1	78.1	81.5
2	78.3	76.8	77.0	77.2	78.2	79.6	79.1	79.5	81.0	82.7	84.0	85.1	85.6	85.6	86.4	86.4	86.0	85.0	84.1	84.0	83.8	83.2	83.3	83.1	82.2
3	84.0	83.8	83.0	83.3	83.0	83.9	83.8	83.5	84.8	85.8	86.3	86.6	87.3	87.9	87.2	87.1	86.4	86.0	86.0	86.1	86.0	86.0	86.0	86.0	85.4
4	86.0	86.4	87.0	87.1	87.4	87.8	87.9	87.7	87.9	88.4	89.0	89.0	88.9	88.4	87.1	86.0	86.0	86.4	86.5	86.4	86.4	86.9	86.7	86.1	87.2
5	86.1	86.3	86.3	86.8	86.6	86.4	86.2	86.8	87.4	87.6	88.0	87.9	88.3	87.9	87.8	87.0	86.3	85.8	85.0	85.1	85.0	85.1	84.4	84.9	86.5
6	85.1	85.9	85.6	85.9	85.3	85.0	85.0	86.0	86.8	87.3	88.4	88.4	89.0	89.1	88.5	88.2	88.0	87.8	87.7	88.0	88.1	88.2	88.1	87.4	87.1
7	87.4	87.8	88.1	88.1	88.1	88.2	88.1	88.3	88.7	88.6	88.8	88.7	88.9	88.7	88.8	88.5	88.6	88.1	88.1	88.2	88.5	88.5	88.6	88.0	88.3
8	87.4	87.4	87.2	87.4	87.0	86.4	86.9	86.5	87.4	88.1	88.4	88.8	89.2	88.8	88.4	88.0	87.9	87.1	87.3	87.0	87.0	86.5	86.4	85.5	87.5
9	85.4	85.1	85.0	85.1	85.0	85.4	85.9	85.8	86.1	86.4	86.9	86.4	87.0	86.9	86.4	86.4	86.9	86.9	86.9	86.9	86.7	86.4	86.4	86.4	86.2
10	86.1	86.0	86.0	85.0	84.0	83.3	83.0	83.0	85.5	86.0	86.4	86.9	86.3	86.1	86.5	86.5	86.9	87.0	87.0	87.3	87.4	85.8	85.5	84.9	85.8
11	85.0	85.0	85.0	84.0	84.1	83.4	84.0	84.3	85.4	86.3	86.0	86.0	86.6	87.2	87.0	86.5	85.5	85.1	85.0	85.0	84.9	84.6	83.4	83.1	85.1
12	82.7	82.1	82.0	81.0	80.4	80.0	80.0	80.0	82.0	82.2	85.0	86.1	87.0	87.3	87.1	87.0	86.9	86.0	85.4	84.2	84.3	83.1	82.1	81.2	83.5
13	80.1	79.9	79.0	79.0	79.0	78.5	78.0	78.1	80.1	83.6	85.6	86.9	87.3	87.0	87.3	87.1	86.4	86.2	85.9	85.9	86.2	86.3	86.6	86.7	83.5
14	86.4	86.0	86.1	86.4	86.8	86.8	86.4	86.3	86.3	86.4	86.9	87.2	88.0	87.8	87.0	86.9	86.7	86.2	85.6	86.0	85.7	85.8	85.4	84.9	86.5
15	85.4	85.8	85.9	85.6	85.6	85.4	85.1	85.9	86.1	87.1	87.2	87.2	87.9	87.4	87.6	87.6	87.1	87.1	87.3	87.4	87.6	88.0	88.0	88.0	86.7
16	88.4	88.3	88.4	88.1	88.2	88.2	88.1	88.1	88.3	88.4	88.8	88.7	88.9	89.0	88.5	88.2	88.1	88.1	88.2	88.1	86.1	85.7	85.5	85.2	88.0
17	85.2	85.4	85.3	85.3	85.0	84.8	84.2	83.9	85.0	85.9	86.1	86.1	87.2	87.6	87.6	87.1	86.7	85.3	85.0	85.0	85.0	85.0	85.0	85.0	85.7
18	86.1	86.1	86.2	86.2	86.0	86.1	85.4	84.5	84.3	84.3	83.4	85.6	85.9	84.7	85.1	85.0	83.3	83.0	83.2	83.0	83.4	82.8	83.0	84.7	
19	83.0	82.4	82.3	83.0	82.2	82.7	82.6	82.5	83.4	84.1	83.8	84.0	84.0	84.4	85.1	85.7	86.4	84.3	84.3	84.3	82.9	82.4	84.2	84.1	83.7
20	84.1	83.0	83.1	82.0	81.9	82.1	81.9	81.3	81.1	80.7	82.3	83.4	83.9	84.9	85.4	83.0	82.7	82.0	81.1	81.7	81.6	82.2	82.3	83.0	82.4
21	83.0	83.2	83.8	83.4	83.8	83.2	83.7	83.4	84.0	83.8	84.1	84.4	82.8	82.4	82.8	81.0	82.1	82.0	82.1	80.9	81.2	81.6	82.1	82.4	82.8
22	82.0	81.9	81.3	81.0	81.5	80.2	79.6	78.8	79.1	80.9	82.1	82.9	84.0	84.2	84.0	84.2	83.6	83.0	81.5	80.0	78.8	78.2	78.7	79.0	81.8
23	81.1	81.3	82.6	82.5	82.3	82.7	83.9	85.5	86.0	84.5	85.8	86.0	86.5	85.6	85.3	85.4	84.4	84.3	84.7	84.9	84.1	84.1	84.2	84.4	84.1
24	84.6	84.5	84.6	84.8	84.4	83.9	83.8	83.8	84.0	84.8	85.0	85.0	85.6	84.9	85.0	84.9	84.1	84.0	83.8	83.1	84.4	84.1	84.1	84.0	84.4
25	84.2	84.1	84.0	83.8	83.8	83.0	83.0	81.7	82.1	82.3	83.3	83.6	83.9	83.8	83.6	83.4	83.1	82.1	82.4	82.6	83.1	83.9	84.0	84.1	83.3
26	84.3	84.6	85.0	84.9	84.2	84.0	84.4	84.1	83.8	84.0	83.0	83.7	83.3	84.0	84.0	83.8	83.9	84.4	84.0	84.0	83.6	83.7	84.2	84.3	84.0
27	84.9	84.7	84.3	84.2	84.3	84.9	84.4	84.7	85.0	85.1	85.4	85.3	86.0	85.9	85.9	85.7	85.3	85.1	84.8	84.3	84.4	84.5	84.1	84.5	84.9
28	84.0	84.0	84.0	84.0	83.9	83.9	84.0	83.7	84.3	84.4	83.9	84.3	85.0	85.0	84.0	84.1	83.8	83.1	82.4	82.2	83.3	83.5	83.6	83.8	83.9
29	84.1	84.4	84.9	85.6	85.7	85.8	85.9	86.0	86.2	86.4	86.9	87.2	87.0	86.7	86.5	86.4	86.0	86.1	86.1	86.0	84.0	84.2	83.4	83.9	85.6
30	83.9	83.7	83.7	82.3	83.1	82.4	83.5	83.9	82.8	84.0	83.3	84.1	83.6	84.1	82.8	83.1	83.9	83.9	84.1	83.9	83.8	83.9	84.0	83.5	83.6
31	82.9	82.4	82.5	82.5	82.0	82.2	82.4	82.1	82.2	82.4	82.7	82.9	82.2	83.3	83.1	83.0	83.0	82.4	82.1	82.4	82.3	82.2	82.1	82.0	82.5
Mean ...	84.2	84.1	84.2	84.0	83.9	83.8	83.8	83.8	84.4	85.0	85.5	85.9	86.2	86.1	86.0	85.8	85.6	85.2	84.9	84.7	84.5	84.5	84.3	84.2	84.8
Hour G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean



Readings in degrees absolute at exact hours, Greenwich Mean Time.

367. Cahirciveen (Valentia Observatory) : North Wall Screen :  $h_z$  (height of thermometer bulbs above ground) = 1.3 metres.

November, 1928.

Hour G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean
Day.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.
1	82.0	82.0	81.9	81.8	81.9	81.5	81.6	81.2	81.4	82.0	82.1	82.1	82.3	82.3	82.5	81.8	81.0	80.4	80.0	80.1	79.5	79.1	78.6	78.7	81.2
2	78.8	78.3	78.0	77.3	77.7	77.4	76.7	76.6	78.0	79.2	79.9	80.8	80.1	80.1	79.7	79.0	78.7	78.5	78.2	76.7	78.0	78.0	76.7	78.0	78.5
3	78.4	78.9	78.2	78.8	79.2	79.0	79.5	79.6	79.4	79.3	80.2	80.9	81.0	81.0	80.8	80.4	79.9	79.7	78.7	78.5	78.4	78.0	77.2	76.0	79.3
4	75.5	75.4	75.9	75.6	75.6	76.0	75.9	75.9	76.4	77.3	78.5	78.9	79.9	79.8	80.4	79.6	78.7	77.9	76.9	77.0	76.9	76.9	77.2	76.3	77.8
5	76.0	76.7	76.7	76.7	76.5	75.5	76.5	77.1	77.6	79.0	81.0	81.6	82.3	82.2	82.0	82.4	82.0	82.1	82.2	82.5	82.8	82.8	83.0	83.0	79.9
6	83.2	83.1	83.1	83.5	83.8	83.7	83.9	84.1	84.3	84.6	84.8	85.0	85.1	85.0	84.9	84.4	84.2	83.6	83.6	83.9	84.0	83.6	82.4	83.0	83.9
7	83.2	82.6	83.0	83.6	82.9	82.0	82.0	82.0	82.7	83.6	84.0	84.0	84.1	84.9	83.9	83.5	83.0	83.0	82.1	82.2	81.6	80.8	79.0	78.0	82.7
8	77.9	76.5	76.6	75.4	75.6	74.7	75.1	76.2	75.2	77.2	79.6	81.2	82.2	82.2	82.1	81.9	80.5	80.0	79.3	78.4	77.0	77.5	77.0	76.0	78.2
9	75.9	76.9	75.5	76.6	77.1	77.0	77.8	78.0	78.1	79.5	81.6	82.5	82.5	83.0	82.9	82.9	83.0	83.2	83.6	83.5	84.0	84.0	84.4	84.0	80.5
10	84.1	84.2	84.3	84.3	84.4	84.6	85.0	85.1	85.2	85.4	85.5	85.4	85.2	85.2	85.1	85.2	85.1	85.1	85.1	85.0	85.0	84.9	85.0	85.1	84.9
11	85.0	85.7	85.8	85.7	85.8	85.8	85.9	86.0	86.1	86.3	86.1	86.1	86.1	86.4	86.3	86.4	86.2	86.0	86.0	86.0	85.9	85.7	85.4	85.5	85.9
12	85.6	85.7	86.0	86.4	87.0	87.0	87.1	87.1	87.0	87.0	86.1	85.8	85.2	85.0	84.9	84.4	84.0	84.0	83.9	84.0	83.9	84.0	83.9	84.0	85.4
13	83.3	82.9	82.9	82.4	82.6	82.4	82.1	82.2	82.7	83.1	83.0	83.1	83.4	83.5	83.4	83.0	81.9	81.6	81.0	80.6	81.0	80.6	81.0	81.0	82.3
14	81.0	81.1	80.9	80.1	80.4	81.1	81.6	81.9	82.8	82.4	83.3	83.2	83.2	83.4	85.0	85.1	85.2	85.3	85.4	85.5	85.4	84.9	84.9	84.2	83.2
15	84.6	84.7	84.1	83.1	83.9	83.9	84.0	84.0	84.0	84.0	84.0	84.1	83.7	83.9	83.0	83.2	82.4	82.4	82.0	81.3	81.7	81.3	81.3	81.8	83.2
16	82.0	82.9	83.4	83.3	82.4	82.0	84.1	83.4	83.4	83.3	81.4	81.9	81.3	81.4	81.4	81.4	81.0	80.7	81.0	82.0	81.3	80.5	79.6	79.4	81.9
17	79.8	80.1	81.1	80.5	81.3	82.0	82.0	82.1	82.6	82.7	82.4	83.0	82.7	82.7	82.5	82.4	82.9	83.0	82.9	83.0	83.0	82.8	82.4	82.6	82.1
18	82.0	82.0	82.0	82.0	82.5	82.8	83.4	83.8	84.3	85.0	85.4	85.9	85.7	85.7	85.5	85.3	85.2	85.3	85.2	85.0	85.3	85.9	86.1	86.1	84.4
19	86.5	86.3	86.4	86.1	86.0	84.6	83.6	82.9	81.9	81.9	82.7	83.0	82.6	82.4	82.5	81.0	82.1	80.6	81.7	82.6	82.6	82.4	82.4	82.4	83.3
20	82.9	82.4	82.8	82.9	82.6	82.9	83.0	83.1	83.0	83.9	83.9	84.4	84.8	84.4	84.4	84.4	84.1	84.4	84.5	84.6	85.0	85.0	84.5	85.0	83.8
21	85.4	85.4	85.2	85.4	85.5	85.2	85.1	85.0	85.0	85.0	85.6	85.6	85.0	85.3	85.5	84.3	84.5	84.7	84.8	84.8	84.5	83.9	83.6	83.1	84.9
22	83.5	83.4	83.6	84.0	84.1	84.4	84.9	85.1	85.7	85.2	85.0	84.0	84.5	84.9	84.1	83.9	83.8	82.4	83.1	83.0	83.0	82.9	83.1	83.0	83.9
23	82.9	83.0	83.1	85.0	85.9	86.0	86.1	86.4	86.1	85.9	84.1	83.1	83.2	82.8	82.0	81.0	81.1	82.1	81.8	82.2	80.8	82.0	82.4	82.7	83.4
24	82.2	82.2	82.7	83.0	82.7	83.0	82.6	82.9	83.1	83.0	83.1	83.0	83.0	83.0	83.0	83.0	83.0	83.0	82.7	83.0	82.9	83.9	84.7	85.1	83.0
25	85.0	85.1	85.1	85.0	85.0	84.9	84.7	84.0	84.1	84.1	84.1	84.0	84.0	83.9	83.7	83.5	83.4	83.4	83.0	82.9	83.0	82.8	82.4	82.4	84.0
26	82.5	82.8	82.9	82.4	82.8	82.5	82.5	82.4	82.4	82.9	82.9	81.4	82.0	82.5	81.4	82.1	81.4	82.2	81.3	81.7	81.0	81.1	81.4	80.2	82.1
27	81.6	81.0	81.1	81.6	81.4	81.1	81.6	81.0	81.0	80.0	81.9	81.3	81.9	82.1	81.9	82.0	81.9	81.0	81.9	81.6	81.5	81.5	81.3	81.2	81.4
28	81.1	81.0	81.4	81.4	81.1	81.1	81.0	79.4	79.9	81.0	81.4	81.9	82.4	83.0	82.6	82.3	82.0	82.0	82.0	82.0	82.3	82.9	83.2	83.2	81.7
29	83.4	83.8	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.1	84.0	83.8	83.8	83.9	84.4	84.4	84.1	83.6	83.4	83.3	83.3	83.4	83.9
30	83.8	83.6	83.6	83.4	83.4	83.3	83.2	83.4	83.3	83.2	83.4	83.6	83.9	83.9	83.5	83.3	83.2	83.3	83.1	83.1	83.3	83.3	83.1	83.1	83.4
Mean	...	82.0	82.0	82.0	82.2	82.1	82.2	82.2	82.3	82.7	83.0	83.2	83.3	83.3	83.2	83.0	82.6	82.6	82.3	82.4	82.3	82.1	82.0	81.9	82.5

368. Cahirciveen (Valentia Observatory) : North Wall Screen :  $h_z$  = 1.3 metres.

December, 1928.

	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.
1	83.1	83.1	83.1	83.4	83.7	83.6	83.9	83.9	83.9	84.0	84.1	84.6	84.9	84.9	84.8	84.3	84.2	84.0	83.9	83.8	83.5	83.6	83.6	83.5	83.9
2	83.4	83.5	83.4	83.4	83.2	83.1	83.2	83.5	83.7	83.9	84.1	84.1	84.1	83.9	84.0	84.0	83.7	83.7	83.7	83.8	83.9	84.0	83.1	82.4	83.6
3	82.4	82.0	81.7	81.1	80.8	81.0	80.7	80.2	80.3	80.6	81.0	81.2	81.3	81.1	81.0	81.0	80.7	80.5	80.4	80.4	80.0	80.1	80.6	81.0	80.9
4	81.1	81.4	81.6	81.2	81.8	82.2	83.0	83.0	83.0	83.2	83.5	83.9	84.1	84.2	84.1	84.1	84.0	84.0	84.0	84.0	84.0	83.9	84.0	84.0	83.2
5	84.3	83.4	83.8	83.4	83.3	83.1	83.2	82.4	82.4	82.2	82.1	83.3	83.9	83.6	83.2	83.0	82.4	82.0	81.9	81.8	81.5	81.8	81.5	81.8	82.8
6	81.4	81.6	81.9	83.5	81.0	81.4	81.9	81.1	81.0	81.0	79.8	81.1	80.2	79.7	80.3	80.5	80.9	79.1	79.2	78.9	78.9	79.1	80.0	79.2	80.6
7	79.1	79.2	79.8	78.8	78.8	77.9	76.8	77.3	76.0	76.4	78.9	76.5	77.2	77.4	77.4	77.3	77.0	76.0	76.9	75.3	76.0	75.5	75.3	74.5	77.2
8	76.4	76.5	76.0	75.0	76.1	76.9	77.6	77.6	77.8	76.4	77.9	77.4	77.8	78.0	78.7	78.0	77.4	77.2	77.3	76.3	75.9	76.0	75.9	75.4	76.8
9	75.2	75.8	75.9	76.1	76.1	76.1	77.9	78.1	78.6	79.9	80.4	81.0	81.2	81.4	81.7	81.4	81.4	81.4	81.2	81.7	81.3	81.3	82.0	81.5	79.4
10	81.5	80.4	80.3	80.0	78.8	79.0	78.2	77.0	76.9	77.0	77.9	78.1	78.9	79.1	78.8	78.8	78.3	77.0	76.7	76.4	76.1	76.0	75.0	74.5	78.1
11	74.5	75.0	74.0	75.4	74.1	75.0	75.0	74.9	74.9	76.0	76.9	77.4	77.6	78.1	77.9	77.5	77.4	77.1	78.0	78.0	78.1	78.1	78.1	78.1	76.5
12	78.3	78.2	78.2	78.2	77.8	77.8	77.9	78.0	78.0	78.0	78.2	78.9	78.7	78.9	79.0	78.7	78.4	78.4	78.3	78.8	78.6	78.9	78.9	78.7	78.4
13	79.1	79.6	79.7	79.6	79.6	79.4	79.8	79.8	79.8	79.6	79.8	80.2	80.5	81.0	80.7	80.9	80.4	80.4	80.9	81.1	80.9	80.8	81.0	80.9	80.2
14	80.4	80.3	80.7	81.0	81.3	81.3	81.1	80.9	81.0	81.1	81.9	81.8	81.4	81.3	81.0	81.0	80.5	80.4	80.1	80.4	80.9	81.0	81.4	81.4	81.0
15	81.4	81.4	81.5	81.4	81.6	81.5	81.8	81.9	82.1	82.2	82.5	83.0	83.1	83.2	83.1	83.2	83.4	83.7	84.0	84.4	84.9	85.2	85.5	85.3	82.9
16	85.3	85.0	85.0	84.9	85.0	85.1	85.0	84.3	83.8	84.0	83.1	82.6	82.9	82.1	82.0	82.3	81.8	81.9	82.1	82.2	82.0	81.1	81.9	81.9	83.3
17	81.6	81.3	81.4	81.0	80.0	79.2	78.7	77.3	76.6	76.5	78.2	79.3	80.4	81.0	80.9	80.4	80.1	80.8	80.8	81.0	81.2	81.2	81.1	81.4	80.1
18	81.9	82.0	82.3	82.2	82.0	82.1	82.3	82.6	82.9	83.1	83.3	83.4	83.6	83.9	84.0	84.0	84.0	83.6	83.1	82.6	82.3	82.1	82.0	81.8	82.8
19	81.2	80.0	79.7	79.0	78.4	77.5	77.0	77.9	78.5	78.1	80.4	81.6	82.1	82.9	83.2	82.5	82.7	82.8	82.9	81.9	81.4	81.1	81.5	81.9	80.6
20	81.3	81.4	81.5	81.0	80.9	80.6	80.9	80.4	80.7	81.0	81.4	82.0	81.4	82.0	82.3	82.2	82.2	82.2	82.4	82.5	82.3	82.0	82.0	82.1	81.6
21	82.8	82.4	82.0	82.1	82.3	82.2	82.6	82.8	82.8	82.8	82.9	82.9	82.8	82.7	82.7	82.4	82.1	82.0	81.9	81.8	81.4	81.1	81.0	81.3	82.3
22	81.0	81.0	81.8	81.5	82.0	81.9	82.4	82.5	83.0	83.2	83.0	82.9	82.5	82.3	82.3	81.9	81.4	80.8	79.6	78.3	77.4	76.8	76.0	75.9	81.0
23	76.9	77.1	77.4	78.4	79.4	79.5	80.4	80.9	81.0	81.8	82.4	82.2	82.7	83.0	83.6	83.7	83.9	84.2	84.1	84.2	84.2	84.2	84.2	84.3	81.6
24	84.2	84.4	84.5	84.4	84.4	84.5	84.4	83.9	83.6	82.9	82.5	82.7	81.9	82.0	82.2	81.9	81.9	80.4	80.8	80.6	80.4	80.0	79.1	79.8	82.5
25	80.0	80.0	79.1	79.6	79.9	80.1	81.0	81.0	81.8	82.0	82.0	82.1	82.1	82.9	83.9	84.8	85.0	85.0	85.5	85.5	84.1	83.4	83.0	82.6	82.3
26	82.4	82.0	82.0	81.9	81.7	81.5	81.1	81.0	80.9	81.0	81.1	81.3	81.4	81.4	81.4	81.3	80.9	81.0	80.4	79.6	78.7	77.9	77.4	77.0	80.8
27	77.0	76.9	77.2	78.8	79.1	79.6	79.9	80.3	80.4	80.0	79.9	80.1	81.3	81.9	82.1	82.0	81.4	81.2	81.9	82.0	81.9	82.0	81.9	81.7	80.3
28	82.0	81.4	81.5	81.6	82.2	82.3	82.0	81.7	81.2	81.2	81.9	82.5	81.9	81.5	81.3	80.9	80.4	80.6	80.5	79.8	78.7	77.1	77.5	80.9	
29	77.3	77.1	77.9	78.1	79.0	78.4	78.9	79.1	79.0	79.0	78.8	78.0	78.6	78.4	78.0	78.0	78.1	77.6	76.6	77.8	78.0	78.3	77.8	78.2	
30	78.0	76.2	77.1	78.2	78.8	79.5	79.0	79.0	78.1	78.9	78.0	78.0	77.9	76.9	76.7	75.9	75.0	75.9	76.6	77.0	76.8	76.9	76.1	76.0	77.4
31	75.9	75.6	75.4	75.4	75.3	75.3	75.3	75.5	75.4	75.2	75.7	76.1	76.5	76.8	76.8	76.4	76.0	75.4	75.9	75.4	74.3	74.6	74.0	74.0	75.5
Mean	...	80.3	80.2	80.2	80.3	80.3	80.4	80.3	80.3	80.4	80.7	81.0	81.1	81.2	81.2	81.1	80.9	80.7	80.7	80.5	80.3	80.2	80.1	80.0	80.5
Hour G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	8.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean



From readings in degrees absolute at exact hours, Greenwich Mean Time.

369. Cahirciveen (Valentia Observatory) : North Wall Screen :  $h_t = 1.3$  metres.

1928.

Hour	G.M.T																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
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## TEMPERATURE: MONTHLY MEANS AND DIURNAL INEQUALITIES.

The departures from the mean of the day are adjusted for non-cyclic change.

370. Cahirciveen (Valentia Observatory) : North Wall Screen :  $h_t = 1.3$  metres.

1928.

Month	Mean	Hour. 1.	G.M.T. 2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.
	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.
Jan.	281.27	-0.14	-0.08	+0.02	-0.01	+0.07	+0.07	+0.15	-0.06	-0.12	+0.07	+0.34	+0.53	+0.59	+0.36	+0.37	+0.27	-0.04	-0.34	-0.41	-0.40	-0.38	-0.34	-0.29	-0.23
Feb.	281.73	-0.42	-0.42	-0.36	-0.35	-0.35	-0.44	-0.57	-0.48	-0.44	-0.02	+0.47	+0.73	+0.78	+0.85	+0.87	+0.74	+0.39	+0.11	-0.03	-0.12	-0.13	-0.19	-0.31	-0.31
Mar.	280.34	-0.78	-0.82	-0.85	-0.98	-1.05	-1.09	-1.21	-0.88	-0.34	+0.33	+0.87	+1.29	+1.46	+1.54	+1.48	+1.23	+1.07	+0.77	+0.25	-0.04	-0.31	-0.51	-0.70	-0.74
Apr.	281.44	-1.24	-1.47	-1.66	-1.74	-1.83	-1.72	-1.25	-0.56	+0.48	+0.87	+1.24	+1.53	+1.67	+1.75	+1.72	+1.63	+1.45	+1.10	+0.67	+0.07	-0.29	-0.58	-0.83	-1.00
May	284.79	-1.46	-1.78	-1.92	-2.08	-2.29	-1.89	-0.99	-0.18	+0.45	+0.94	+1.31	+1.59	+1.79	+1.92	+1.94	+2.02	+1.87	+1.25	+0.67	+0.04	-0.46	-0.71	-0.89	-1.14
June	286.53	-1.29	-1.45	-1.62	-1.71	-1.86	-1.51	-0.83	+0.01	+0.47	+0.77	+1.13	+1.35	+1.41	+1.58	+1.72	+1.80	+1.56	+1.08	+0.65	+0.08	-0.42	-0.86	-0.99	-1.07
July	287.81	-1.31	-1.53	-1.51	-1.54	-1.58	-1.34	-0.75	-0.19	+0.29	+0.71	+1.07	+1.37	+1.60	+1.61	+1.80	+1.52	+1.54	+1.12	+0.61	+0.04	-0.47	-0.82	-1.01	-1.24
Aug.	287.68	-1.50	-1.54	-1.60	-1.64	-1.67	-1.62	-1.17	-0.20	+0.42	+0.92	+1.27	+1.75	+1.89	+1.85	+1.80	+1.70	+1.65	+1.00	+0.51	-0.06	-0.59	-0.87	-1.05	-1.25
Sept.	286.28	-1.22	-1.36	-1.55	-1.49	-1.54	-1.69	-1.49	-1.06	-0.17	+0.63	+1.22	+1.69	+1.96	+2.13	+2.17	+1.83	+1.53	+1.05	+0.45	+0.03	-0.28	-0.69	-0.97	-1.18
Oct.	284.78	-0.52	-0.60	-0.58	-0.77	-0.86	-0.95	-0.95	-1.01	-0.38	+0.24	+0.72	+1.17	+1.41	+1.36	+1.21	+0.97	+0.81	+0.38	+0.05	-0.10	-0.25	-0.35	-0.45	-0.56
Nov.	282.45	-0.46	-0.44	-0.39	-0.39	-0.26	-0.39	-0.22	-0.24	-0.10	+0.26	+0.57	+0.71	+0.71	+0.88	+0.72	+0.52	+0.18	+0.10	-0.12	-0.09	-0.22	-0.32	-0.47	-0.54
Dec.	280.54	-0.34	-0.50	-0.41	-0.32	-0.35	-0.34	-0.19	-0.27	-0.33	-0.12	+0.20	+0.45	+0.62	+0.69	+0.73	+0.59	+0.38	+0.20	+0.25	+0.16	-0.12	-0.21	-0.35	-0.42
Year	283.81	-0.90	-1.01	-1.05	-1.09	-1.14	-1.08	-0.79	-0.42	+0.02	+0.47	+0.87	+1.18	+1.34	+1.38	+1.38	+1.23	+1.03	+0.66	+0.30	-0.03	-0.32	-0.53	-0.69	-0.81

## ABSOLUTE EXTREMES OF TEMPERATURE FOR EACH DAY.

Maximum and minimum for the interval 0 h. to 24 h., Greenwich Mean Time.

371. Cahirciveen (Valentia Observatory) : North Wall Screen :  $h_t = 1.3$  metres.

1928.

Month	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Day	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1	84.9	78.2	81.8	77.2	81.3	74.0	83.4	78.5	87.7	81.0	88.2	85.3
2	81.8	78.9	79.9	76.2	82.4	74.4	83.9	78.9	90.4	81.5	92.9	86.0
3	81.1	78.1	81.9	75.9	83.7	76.0	83.4	78.9	89.1	84.9	93.0	87.0
4	83.1	80.1	84.2	81.9	84.1	77.7	81.7	77.4	89.1	84.1	93.6	86.6
5	84.6	80.2	82.4	77.9	83.3	75.0	81.7	76.3	93.1	82.9	92.0	86.4
6	84.6	81.3	82.3	78.8	83.4	80.2	84.3	76.5	88.8	79.9	91.1	86.4
7	84.5	81.4	84.1	81.5	84.9	82.4	84.0	81.2	89.1	82.2	91.1	85.9
8	82.0	80.3	84.9	81.0	82.6	78.8	85.1	81.2	87.2	79.9	90.0	83.4
9	82.3	79.8	81.6	79.9	79.0	73.9	85.6	82.0	86.2	79.6	88.9	83.4
10	83.3	78.5	82.4	76.8	79.6	73.2	85.5	80.6	87.6	77.7	86.4	81.4
11	81.4	78.0	81.0	78.2	77.7	72.0	84.9	78.3	87.6	81.3	87.3	79.6
12	84.8	80.8	83.4	79.0	76.1	70.9	85.5	78.0	87.4	83.3	87.0	79.0
13	82.0	79.4	84.4	81.6	78.0	69.0	83.5	81.5	86.6	83.1	87.6	84.9
14	84.4	78.5	85.0	81.4	82.7	77.3	84.1	80.9	86.3	82.0	85.5	82.4
15	82.0	78.4	85.3	84.3	84.9	80.6	81.5	77.1	84.6	82.3	87.6	82.3
16	82.2	80.4	84.5	78.1	85.1	83.0	80.1	75.3	85.4	82.7	88.0	82.1
17	83.9	79.8	82.1	78.3	84.7	80.0	82.5	72.9	84.0	81.5	88.9	80.9
18	84.2	78.2	82.8	79.3	84.4	79.7	82.2	77.4	84.4	81.3	86.9	85.1
19	84.0	78.9	82.2	79.8	84.6	81.3	82.3	75.1	84.5	81.2	89.5	84.8
20	85.0	82.0	84.0	82.2	83.8	81.6	83.4	75.7	84.2	79.8	90.0	80.5
21	85.1	78.9	84.0	80.8	82.3	76.0	82.3	73.9	86.8	80.8	90.0	86.4
22	87.7	79.2	84.2	78.9	83.9	74.4	84.0	73.6	85.8	78.1	90.1	85.4
23	84.9	81.3	84.0	80.9	84.4	81.0	86.1	83.6	88.1	82.0	89.5	85.0
24	83.1	77.2	83.5	80.5	83.0	79.7	83.9	80.5	87.9	82.7	89.0	83.1
25	83.0	78.0	84.6	82.6	83.7	80.5	86.3	80.4	86.9	84.9	88.7	84.2
26	81.0	75.3	85.0	83.0	83.2	79.0	84.2	81.9	88.0	85.6	87.2	84.4
27	82.0	79.0	86.1	82.3	81.0	78.1	83.5	81.0	87.0	85.6	88.7	85.2
28	83.2	80.9	84.9	80.3	81.1	77.0	88.0	80.4	87.9	81.8	87.1	84.9
29	81.3	77.5	82.4	75.2	83.0	79.2	86.1	78.5	88.9	78.8	88.0	83.5
30	79.9	76.4	—	—	82.0	78.2	86.0	82.9	92.7	81.1	88.5	83.7
31	84.0	75.6	—	—	83.3	78.6	—	—	91.8	86.3	—	—
Mean	83.1	79.0	83.4	79.8	82.6	77.5	84.0	78.7	87.6	81.9	89.1	84.0

NOTE.—The initial 2 or 3 of the readings is omitted, i.e., 275.0 degrees absolute is written 75.0.



Percentages at exact hours, Greenwich Mean Time.

372. Cahirciveen (Valentia Observatory) : North Wall Screen :  $h_t$  (height of thermometer bulbs above ground) = 1.3 metres.

January, 1928.

Hour G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.	Vapour Pressure*
Day.	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	mb.
1	83	83	81	76	78	79	71	77	83	89	92	94	96	95	98	98	96	95	94	96	88	88	91	91	87.8	9.6
2	91	91	81	68	67	68	69	72	69	62	64	68	66	74	71	73	72	70	79	76	68	71	84	77	73.3	7.8
3	82	72	70	71	84	85	78	82	80	77	71	69	70	71	72	77	84	87	85	85	87	90	94	79.4	8.1	
4	96	96	98	98	98	96	96	98	96	98	91	89	88	88	91	92	79	74	75	74	66	67	61	61	86.4	10.1
5	63	67	69	65	70	69	69	82	67	76	79	78	78	79	77	81	81	84	91	95	97	99	98	98	78.9	8.9
6	99	98	98	99	98	99	95	95	94	83	80	76	74	75	76	91	89	91	89	89	86	87	96	97	89.7	11.1
7	97	94	95	96	96	96	98	97	97	97	97	95	98	97	97	96	96	98	95	92	88	87	83	87	94.7	12.1
8	83	78	88	79	73	72	71	75	77	75	77	79	78	79	80	83	86	86	83	86	88	91	89	90	81.0	8.6
9	86	91	88	88	86	84	89	86	75	73	73	71	78	76	76	73	76	84	86	83	82	78	81	92	81.7	8.8
10	91	86	84	83	83	88	94	86	79	81	73	75	79	66	66	62	71	76	66	79	71	79	72	78	78.1	8.3
11	83	75	63	64	64	72	65	69	64	68	65	70	78	74	70	72	76	78	81	76	74	76	82	82	72.5	7.0
12	87	84	83	86	87	91	94	92	94	97	95	94	94	94	96	92	92	90	76	79	79	77	74	81	87.9	11.0
13	77	76	77	79	81	75	79	73	78	75	69	77	76	76	77	83	82	83	82	86	87	87	88	92	79.6	8.6
14	91	89	92	94	94	94	97	97	94	87	86	86	82	87	88	79	82	79	77	66	71	75	70	71	85.3	9.7
15	68	71	69	72	65	70	73	81	80	88	83	84	87	85	85	81	85	83	81	74	72	77	80	77	77.8	8.2
16	76	78	77	77	78	81	79	81	89	85	81	87	88	84	84	87	86	85	89	89	91	89	89	94	84.0	9.3
17	86	81	88	93	93	96	93	91	91	93	88	81	81	83	84	88	84	81	85	87	91	94	95	95	88.4	9.7
18	97	98	94	95	95	96	95	96	92	95	99	97	96	96	88	78	79	75	68	70	66	68	71	66.8	10.1	
19	76	68	73	82	83	83	76	85	86	85	83	82	81	82	83	85	91	90	93	92	91	87	87	87	83.5	9.6
20	93	94	94	98	94	95	89	89	89	88	86	81	82	77	71	89	94	93	86	77	88	96	94	95	88.7	11.2
21	95	95	95	95	95	94	94	94	86	82	80	76	79	80	72	79	78	82	86	87	81	84	72	77	85.3	10.3
22	79	73	71	74	70	67	72	72	69	74	77	79	78	75	76	76	84	87	86	87	90	88	89	92	78.2	8.0
23	94	94	93	98	95	97	98	98	97	98	98	96	96	96	94	93	93	96	98	93	96	89	83	88	94.9	12.0
24	88	91	88	87	83	86	81	85	74	72	85	72	69	64	69	63	57	74	65	80	75	79	80	77	77.0	7.6
25	81	76	68	74	70	84	83	81	80	78	76	75	80	90	89	86	87	78	83	72	74	68	66	67	78.0	7.9
26	74	80	75	88	89	81	87	86	73	87	80	77	63	66	82	85	72	69	66	68	72	68	70	68	76.1	6.9
27	73	69	72	84	82	80	83	77	82	76	77	71	74	67	78	85	85	86	91	90	96	94	96	99	81.3	8.6
28	98	99	97	97	99	99	98	91	89	98	96	93	93	94	92	92	92	92	92	92	92	90	93	91	94.3	11.0
29	92	87	90	83	85	85	77	77	70	70	72	81	72	70	73	73	73	75	79	79	75	82	83	86	78.8	7.4
30	85	82	77	83	87	85	87	92	88	84	87	80	85	82	79	72	69	67	64	70	81	84	77	84	80.5	7.3
31	85	87	87	85	89	88	88	93	98	95	84	83	84	85	79	77	76	76	70	69	69	63	60	57	80.9	8.9
Mean ...	85.5	84.0	83.1	84.2	84.2	85.0	84.5	85.5	83.2	83.3	82.1	81.2	81.7	80.9	81.1	82.0	82.2	82.6	81.9	82.0	81.5	82.5	82.1	83.7	82.9	†9.2
Vapour Pressure*	mb. 9.2	mb. 9.1	mb. 9.1	mb. 9.2	mb. 9.2	mb. 9.3	mb. 9.3	mb. 9.3	mb. 9.0	mb. 9.1	mb. 9.2	mb. 9.2	mb. 9.3	mb. 9.1	mb. 9.1	mb. 9.2	mb. 9.0	mb. 8.9	mb. 8.7	mb. 8.7	mb. 8.7	mb. 8.9	mb. 8.0	mb. 9.0	mb. 19.1	

373. Cahirciveen (Valentia Observatory) : North Wall Screen :  $h_t$  = 1.3 metres.

February, 1928.

1	73	73	71	74	74	77	78	71	75	66	60	66	67	70	63	77	71	69	57	69	78	72	73	72	70.6	6.7
2	72	71	76	74	78	73	87	88	80	73	67	79	68	63	66	70	68	76	66	74	70	74	69	69	73.8	6.8
3	66	73	71	82	68	58	72	68	74	66	79	80	77	76	72	82	81	84	84	87	90	93	98	93	77.6	7.2
4	92	94	98	96	95	95	95	95	95	95	98	98	97	97	95	95	93	94	91	91	92	94	95	95	94.7	11.9
5	89	89	89	89	77	80	85	84	86	76	86	78	77	68	73	76	84	69	66	74	69	72	84	77	79.4	7.8
6	76	81	83	88	81	71	78	73	78	83	72	74	72	72	71	71	74	71	68	76	74	76	78	77	75.7	8.0
7	84	81	83	88	86	89	91	92	91	91	96	94	95	97	94	93	95	94	95	95	97	97	97	97	91.6	11.3
8	94	93	93	93	90	90	92	92	92	91	89	86	84	83	83	81	84	92	93	94	91	86	73	75	88.5	11.5
9	70	61	68	72	64	73	61	64	68	71	70	67	66	66	70	71	73	85	87	87	86	90	83	89	73.1	7.7
10	90	90	89	88	89	86	88	87	91	79	65	63	74	79	70	64	84	75	61	65	61	59	59	59	76.3	7.8
11	62	56	67	72	65	69	74	73	71	69	71	68	70	79	73	65	69	70	66	74	66	60	67	79	68.5	6.7
12	72	78	78	80	87	91	91	93	88	88	97	95	96	96	95	86	80	82	83	86	86	87	86	89	91.0	10.0
13	96	95	95	95	96	97	95	95	96	98	99	95	95	87	86	80	82	83	86	86	87	86	78	89	90.9	11.1
14	84	88	89	92	96	96	95	96	94	99	98	98	98	98	97	97	96	97	98	99	99	99	97	96	95.5	12.0
15	94	94	95	91	91	93	96	95	97	97	95	95	95	97	95	97	97	97	97	98	98	98	97	97	95.6	13.1
16	97	97	97	97	98	94	93	90	89	91	88	83	80	75	81	76	81	75	75	81	69	71	63	74	84.4	10.0
17	61	79	79	68	73	66	68	74	71	70	71	73	73	73	78	71	82	83	84	71	86	86	93	88	76.1	7.9
18	88	90	91	91	93	88	88	84	80	85	81	87	87	83	76	77	80	85	87	88	87	88	84	84	85.6	9.0
19	83	79	81	83	83	77	76	76	68	69	69	71	72	71	72	73	73	74	77	81	84	86	86	86	76.5	8.3
20	86	87	91	91	91	89	89	92	89	89	90	85	87	89	87	89	87	87	84	86	86	86	82	83	87.8	10.8
21	83	86	89	91	89	92	96	96	91	88	87	88	87	92	95	95	94	95	95	95	96	93	93	92	91.4	10.8
22	94	96	91	93	91	91	91	91	94	88	86	74	70	64	62	65	72	73	79	70	71	72	62	62	80.6	8.8
23	67	66	71	79	74	78	78	75	76	71	69	68	61	61	57	60	67	65	63	67	66	63	69	68.6	7.9	
24	68	68	67	73	69	68	74	77	74	76	74	75	76	75	76	75	74	74	78	78	80	82	86	87	74.5	8.8
25	87	84	86	86	86	86	86	80	83	80	76	78	75	72	74	75	75	75	80	80	83	82	81	76	80.5	10.2
26	74	75	73	73	70	71	71	73	76	75	74	78	82	82	81	82	81	82	77	80	79	81	80	78	77.0	9.9
27	75	73	75	71	71	72	70	67	64	68	60	63	57	55	54	52	59	69	71	72	74	73	78	81	67.6	8.7
28	86	86	78	70	64	68	64	66	64	62	58	65	71	73	67	70	81	82	82	86	91	92	86	88	74.9	9.3
29	89	88	83	85	86	90	86	87	85	87	82	59	62	63	61	60	62	68	77	74	84	83	84	88	78.0	7.5
Mean ...	81.1	81.8	82.7	83.6	81.0	81.7	83.7	82.2	82.2	80.8	70.5	78.7	78.3	77.8	76.7	77.0	80.3	80.8	79.9	81.8	82.2	82.4	82.5	82.7	80.9	79.2
Vapour Pressure*	mb. 8.9	mb. 9.0	mb. 9.1	mb. 9.2	mb. 9.0	mb. 8.9	mb. 9.1	mb. 9.0	mb. 9.0	mb. 9.1	mb. 9.3	mb. 9.4	mb. 9.3	mb. 9.3	mb. 9.2	mb. 9.1	mb. 9.3	mb. 9.2	mb. 9.0	mb. 9.1	mb. 9.1	mb. 9.1	mb. 9.1	mb. 9.1	mb. 9.2	
Hour G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.	—



Percentages at exact hours, Greenwich Mean Time.

374. Cahirciveen (Valentia Observatory) : North Wall Screen :  $h_t$  (height of thermometer bulbs above ground) = 1.3 metres.

March, 1928.

Hour G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.	Vapour Pressure*
Day.	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	mb.
1	91	89	86	93	89	91	91	95	95	91	86	73	70	67	66	63	65	75	73	81	85	85	85	85	82.1	6.9
2	80	71	82	87	72	74	71	69	68	61	64	60	63	58	58	58	61	63	67	77	77	78	78	80	70.0	6.4
3	85	88	85	82	74	74	80	81	83	86	80	71	71	69	69	68	68	78	84	85	81	81	88	89	79.0	8.2
4	89	88	84	81	79	83	86	86	87	86	83	71	67	72	76	78	81	82	84	85	86	90	87	89	82.5	8.9
5	87	88	88	88	86	89	89	91	92	91	98	88	88	86	87	86	86	88	91	90	91	91	94	94	89.4	8.5
6	85	81	83	86	93	86	83	82	76	81	84	80	83	83	82	79	79	83	82	84	88	86	87	84	83.5	9.7
7	82	82	87	87	86	87	88	89	91	94	92	89	91	92	90	93	93	89	86	84	79	76	79	78	87.0	10.9
8	80	80	78	77	78	78	78	80	81	84	80	80	81	80	79	86	83	79	79	86	80	84	84	84	80.7	8.9
9	85	85	86	84	81	83	82	83	76	72	71	74	74	74	73	68	63	55	59	60	75	78	79	81	75.1	6.4
10	75	73	65	67	75	67	68	68	67	65	52	51	50	53	55	57	57	62	66	67	63	69	68	66	63.9	5.1
11	64	68	66	69	64	59	58	59	59	53	51	46	49	45	41	45	39	48	54	57	70	65	70	75	57.1	4.2
12	71	68	69	72	77	77	77	77	70	68	66	54	54	58	53	64	71	67	66	73	81	85	90	92	70.5	4.4
13	88	90	93	84	90	92	89	85	77	79	59	61	54	59	56	60	57	59	54	58	62	56	58	61	70.7	4.7
14	64	74	73	75	75	81	85	85	80	80	79	85	88	87	86	94	93	93	93	93	93	92	89	84.0	8.5	
15	91	90	88	91	93	89	92	92	89	92	87	86	86	88	87	92	93	95	95	94	95	93	95	94	91.0	11.0
16	92	88	89	94	94	94	92	94	95	97	97	96	94	95	95	93	91	90	94	93	92	93	91	91	93.1	12.4
17	91	92	89	89	92	93	92	95	95	93	92	89	88	87	88	92	89	89	93	92	93	90	91	88	91.0	10.8
18	88	90	93	88	90	88	93	92	89	82	87	85	83	92	84	84	83	83	87	82	82	88	88	92	87.1	10.0
19	98	96	96	95	90	94	95	98	98	99	96	94	95	95	92	93	89	91	93	92	93	92	94	93	94.2	11.9
20	95	93	89	83	83	84	86	85	87	91	90	83	79	84	89	89	92	94	91	92	95	93	93	93	88.9	10.8
21	91	93	94	93	96	91	92	93	91	87	88	74	72	73	68	65	62	67	68	74	78	80	81	89	81.7	8.8
22	85	87	85	85	84	87	88	80	72	70	70	63	64	60	63	61	66	72	75	75	76	76	81	89	75.6	7.5
23	91	86	80	76	79	77	84	87	83	83	77	81	80	87	80	84	84	86	88	87	81	78	78	83	82.6	9.7
24	84	88	86	89	91	90	90	93	86	78	68	69	63	67	66	69	71	70	76	78	75	72	69	77	77.8	8.6
25	77	72	71	71	73	72	70	71	67	68	65	64	67	71	71	74	73	79	80	87	86	87	84	84	74.3	8.5
26	83	86	86	85	83	87	90	67	87	80	78	78	75	89	93	87	91	92	95	89	86	81	78	85.2	9.6	
27	73	75	72	78	77	79	82	81	76	74	69	78	81	71	74	72	66	68	70	71	70	73	85	79	74.7	8.0
28	78	96	79	84	71	71	84	83	86	76	83	78	71	85	84	77	80	76	78	90	94	91	93	93	82.3	7.8
29	96	95	95	95	94	94	92	94	72	71	73	73	86	85	88	82	77	73	82	83	83	77	84	74	85.4	9.3
30	69	72	81	76	73	71	77	71	74	71	64	72	81	76	79	83	77	72	79	76	74	72	69	69	74.3	7.7
31	70	69	67	65	67	79	72	67	69	68	63	65	62	63	60	66	67	70	67	69	72	65	79	73	68.0	7.4
Mean ...	83.2	83.7	82.7	82.9	82.3	82.6	83.8	82.9	81.9	79.7	77.1	74.5	74.5	75.8	75.2	76.2	75.7	77.0	79.0	81.0	81.9	81.3	83.3	83.4	80.1	†8.4
Vapour Pressure*	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	
Pressure*	8.0	8.1	8.0	7.9	7.8	7.8	7.9	8.0	8.2	8.4	8.4	8.3	8.4	8.6	8.5	8.5	8.4	8.3	8.3	8.3	8.3	8.1	8.2	8.2	†8.2	

375. Cahirciveen (Valentia Observatory) : North Wall Screen :  $h_t$  = 1.3 metres.

April, 1928.

Day.	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	mb.	
1	81	82	79	77	84	85	74	76	69	67	71	63	60	66	63	66	69	71	74	78	84	84	87	88	74.6	8.1	
2	85	88	87	88	88	90	86	87	84	88	93	91	94	94	95	95	94	93	92	94	94	94	91	89	90.6	10.3	
3	91	89	89	88	88	88	84	89	85	81	74	75	74	71	78	73	76	71	78	78	82	86	84	83	79	81.3	9.1
4	79	78	80	75	89	81	80	82	73	75	86	73	73	72	69	76	76	72	72	82	74	82	82	82	77.6	7.6	
5	87	83	85	84	85	92	87	90	84	75	73	83	87	82	85	85	88	83	87	87	89	88	85	85	84.9	7.9	
6	85	87	90	87	87	90	94	91	81	74	78	75	72	76	75	77	76	83	86	86	87	91	95	93	83.8	8.9	
7	93	93	93	89	88	83	88	86	80	75	82	77	76	79	76	75	74	78	76	72	73	73	74	74	80.6	9.6	
8	74	76	76	74	73	72	71	69	71	70	66	65	66	68	74	81	85	89	92	93	95	93	92	77.9	9.5		
9	91	89	86	86	84	83	80	84	75	75	73	76	74	75	76	84	87	82	85	87	84	84	80	79	81.9	10.5	
10	82	86	87	83	79	78	80	80	75	80	83	80	76	80	74	75	75	76	83	86	86	81	86	88	80.6	10.2	
11	84	88	87	87	91	88	85	86	83	89	89	89	89	91	87	82	78	76	83	86	86	86	88	91	86.1	9.6	
12	89	86	87	84	85	83	89	84	74	67	69	67	71	72	68	72	79	84	86	88	88	87	86	83	80.5	9.1	
13	82	84	88	89	87	83	79	80	82	73	72	75	82	84	80	75	79	84	89	81	80	81	76	74	81.0	9.6	
14	80	82	77	76	78	74	72	75	70	69	67	72	68	73	72	80	86	89	83	81	78	79	76	73	76.3	8.9	
15	76	73	72	74	74	79	73	79	72	73	74	71	71	72	72	72	73	74	80	78	80	74	71	76	74.2	7.2	
16	73	72	73	66	72	72	67	68	64	63	60	55	55	56	54	53	53	52	56	60	65	66	72	79	63.5	5.4	
17	74	82	78	84	80	83	82	84	72	60	55	62	64	61	54	58	57	58	53	62	67	68	70	74	68.5	6.2	
18	57	60	60	57	59	62	55	56	51	56	59	60	58	55	58	66	56	56	60	62	71	73	71	59	60.2	5.9	
19	67	71	73	78	76	74	72	66	57	44	44	40	46	51	55	49	55	52	57	65	69	69	71	78	61.2	5.8	
20	77	75	81	82	73	70	71	58	50	44	46	41	37	39	41	49	49	57	56	60	69	71	66	73	59.9	5.9	
21	80	84	87	85	81	83	72	70	59	57	45	43	41	45	51	51	48	52	53	60	67	73	82	83	64.5	6.0	
22	84	88	87	84	84	81	80	73	68	66	65	61	59	57	63	71	76	82	87	92	94	91	96	93	78.2	7.8	
23	94	94	94	95	94	95	95	94	92	92	86	86	84	86	82	87	85	87	88	87	89	89	89	89	89.8	11.9	
24	87	85	82	82	83	83	82	81	83	85	93	94	94	96	92	94	95	96	91	92	91	92	93	90	89.0	10.8	
25	90	93	91	93	93	92	88	93	93	84	81	78	80	82	76	75	76	78	84	86	91	82	82	84	85.0	10.7	
26	84	88	82	83	89	83	87	82	76	84	79	80	86	88	88	88	87	88	88	86	86	86	87	86	85.0	10.3	
27	83	84	86	84	86	87	79	79	82	81	78	83	79	72	69	69	70	66	67	72	72	72	71	70	77.0	8.7	
28	71	73	75	81	79	83	76	76	75	73	69	66	69	75	81	82	80	75	77	85	87	89	88	93	77.8	9.9	
29	90	94	94	91	94	96	94	99	94	89	91	93	86	84	81	78	76	82	85	87	87	86	84	84	88.6	10.3	
30	81	80	79	79	76	77	76	84	84	87	85	86	87	88	90	91	91	93	93	91	90	92	89	87	85.6	11.4	
Mean	81.7	82.9	82.8	82.2	82.6	82.2	80.1	79.9	75.1	73.0	72.9	72.0	71.8	73.2	72.5	74.4	74.8	76.2	78.0	80.3	81.7	82.0	82.2	82.6	78.2	78.8	
Vapour Pressure*	mb. 8.3	mb. 8.2	mb. 8.1	mb. 8.1	mb. 8.1	mb. 8.1	mb. 8.1	mb. 8.5	mb. 8.6	mb. 8.6	mb. 8.8	mb. 8.8	mb. 8.9	mb. 9.1	mb. 9.0	mb. 9.2	mb. 9.1	mb. 9.1	mb. 9.0	mb. 8.9	mb. 8.9	mb. 8.7	mb. 8.6	mb. 8.6	mb. 78.6		
Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.	—	



Percentages at exact hours, Greenwich Mean Time.

376. Cahirciveen (Valentia Observatory) : North Wall Screen :  $h_t$  (height of thermometer bulbs above ground) = 1.3 metres.

May, 1928.

Hour G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.	Vapour Pressure.*
Day.	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	mb.
1	89	87	87	83	88	83	84	77	73	72	71	67	66	76	77	71	71	75	76	74	76	75	70	82	77.2	10.2
2	84	86	87	87	88	87	86	70	75	75	76	72	71	82	79	79	67	72	78	82	85	82	83	87	79.9	12.0
3	90	89	89	89	90	90	90	93	90	83	80	86	82	80	73	80	76	80	65	67	64	65	61	62	80.3	12.7
4	63	71	76	84	85	87	88	85	81	77	78	75	69	74	73	77	75	80	83	84	84	88	89	92	79.3	12.3
5	93	93	92	95	92	95	94	91	83	82	68	70	67	65	71	76	75	77	80	86	88	92	90	94	83.7	13.4
6	93	94	94	94	94	98	94	89	87	81	82	82	81	82	84	81	82	79	85	86	88	83	79	86	86.7	12.2
7	89	81	77	83	77	79	71	74	74	75	72	67	67	65	63	61	56	57	57	54	73	75	80	82	71.3	10.2
8	86	86	88	88	87	94	86	79	63	63	63	61	56	57	59	57	54	61	65	64	68	74	74	73	71.3	9.2
9	76	78	79	78	82	67	74	66	58	57	56	56	60	54	56	55	60	59	62	65	70	78	79	86	66.9	8.5
10	86	86	88	86	84	86	76	78	75	61	69	69	69	64	68	57	53	56	67	74	68	74	77	73	72.9	9.2
11	73	76	79	81	82	84	76	75	68	65	65	64	62	62	63	66	63	66	73	79	78	75	75	81	72.0	9.9
12	78	80	77	73	72	71	74	71	61	63	53	55	63	66	61	65	68	75	76	78	77	81	79	79	70.7	9.7
13	79	82	82	79	76	75	77	77	78	80	80	80	81	78	77	66	66	70	71	75	76	79	83	84	76.9	10.4
14	84	81	84	84	87	79	80	68	70	66	69	66	63	62	63	62	63	66	68	71	74	76	78	70	72.5	9.7
15	74	74	74	73	74	74	74	76	76	72	73	72	73	75	71	76	79	85	95	94	91	87	80	81	77.8	9.9
16	78	75	71	71	72	63	64	64	61	59	64	55	58	59	63	60	57	65	65	66	67	68	67	64	65.2	8.5
17	61	67	71	91	83	78	84	78	74	64	62	61	72	64	63	63	66	69	69	78	74	72	67	63	70.6	8.5
18	61	62	68	76	79	73	71	67	65	63	64	62	67	68	72	73	74	69	72	73	74	72	74	75	69.5	8.5
19	78	83	81	80	77	74	75	69	81	71	68	64	71	63	64	72	82	82	78	76	68	67	67	67	73.5	8.9
20	72	65	68	68	71	67	68	63	62	64	62	58	61	58	58	57	61	62	63	65	70	73	72	69	64.8	7.5
21	72	73	72	69	70	72	72	81	76	70	62	61	63	63	57	53	48	53	58	63	67	73	70	80	66.4	8.4
22	77	83	84	88	92	89	80	82	76	75	71	62	62	64	61	62	57	63	60	62	71	71	83	87	73.3	8.9
23	88	92	87	91	87	88	84	85	80	76	89	83	77	74	68	67	67	76	81	83	86	85	88	92	82.1	11.1
24	93	89	88	86	86	85	89	94	95	95	89	81	77	75	77	73	67	71	76	73	66	66	65	65	80.6	11.5
25	65	68	68	69	67	66	66	63	65	68	68	69	79	80	83	82	86	89	93	92	91	91	93	95	76.7	11.1
26	95	91	86	88	86	85	90	93	93	95	96	96	95	90	90	92	93	92	96	97	95	95	95	95	92.5	14.4
27	96	95	94	94	93	95	96	90	88	90	90	91	93	93	94	94	95	94	94	97	98	95	95	95	93.7	13.8
28	96	98	94	92	96	93	98	94	94	90	91	88	82	81	83	78	77	78	79	85	87	88	88	89	88.4	12.2
29	91	88	91	93	90	90	85	83	80	75	67	75	77	72	77	56	61	59	68	68	77	80	83	86	78.1	11.3
30	86	83	87	91	89	83	83	78	76	63	76	72	72	72	72	69	68	72	78	81	79	82	88	89	78.6	12.9
31	88	87	87	81	87	84	81	90	89	77	70	79	66	67	67	62	60	54	63	81	65	72	68	69	75.2	14.1
Mean	81.7	82.0	82.3	83.4	83.3	81.7	81.0	78.8	76.3	73.1	72.4	70.9	71.0	70.5	70.5	69.1	68.6	71.3	73.9	76.5	77.2	78.5	78.7	80.4	76.4	†10.7
Vapour Pressure*	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	†10.6

377. Cahirciveen (Valentia Observatory) : North Wall Screen :  $h_t$  = 1.3 metres.

June, 1928.

	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	mb.	
1	74	74	75	77	77	71	74	76	75	73	70	73	77	69	69	66	67	71	74	74	74	72	71	69	72.6	11.7	
2	70	67	68	76	75	76	72	64	61	60	64	63	58	50	47	44	42	51	57	58	57	62	51	50	60.5	11.3	
3	47	51	56	54	54	51	46	41	45	49	47	46	44	41	43	41	35	40	40	44	46	46	46	45	45.9	9.0	
4	48	55	51	52	65	71	58	61	45	48	54	47	48	55	44	46	46	48	46	48	54	71	71	68	53.7	10.3	
5	71	80	81	79	82	86	76	73	71	74	73	71	66	63	63	62	63	70	76	75	76	78	82	75	73.4	13.2	
6	79	80	83	77	78	86	74	74	75	70	67	67	63	67	61	69	69	65	69	77	76	80	79	82	73.5	12.8	
7	78	79	85	89	89	85	79	75	75	75	71	69	72	77	69	73	75	78	78	85	86	87	88	88	79.3	13.3	
8	90	94	92	94	93	92	91	89	85	82	78	74	72	66	69	74	71	65	65	63	80	81	71	79	79.8	12.6	
9	81	93	95	93	87	89	81	82	74	86	67	71	69	73	77	72	75	75	78	77	68	75	74	69	78.6	11.8	
10	79	84	80	83	79	70	78	68	67	62	55	57	63	63	64	55	55	60	59	64	65	70	73	72	67.6	8.8	
11	77	75	75	71	74	76	66	59	69	69	66	67	66	64	64	62	62	61	61	63	74	77	86	91	69.4	9.2	
12	93	93	91	89	80	74	71	68	68	71	90	92	89	92	90	93	97	99	99	98	99	98	99	99	88.7	11.7	
13	100	99	99	99	99	98	97	97	99	97	95	92	95	96	97	96	96	93	95	90	94	95	98	96	98	96.4	14.7
14	96	96	93	94	91	88	87	84	81	77	69	57	59	64	64	57	55	60	55	65	71	76	73	68	74.8	9.9	
15	66	70	74	82	87	87	85	86	76	75	74	77	69	73	75	76	78	80	85	85	86	90	87	92	79.3	11.3	
16	89	86	87	88	84	89	79	74	75	74	64	68	66	67	64	66	60	60	67	66	72	75	76	76	74.2	10.5	
17	75	76	86	85	86	88	85	81	83	84	83	91	91	90	88	82	79	80	80	84	86	88	87	89	84.0	12.2	
18	90	89	90	89	89	90	91	89	89	90	89	91	91	96	93	94	97	97	97	97	97	98	97	98	92.6	13.9	
19	97	97	96	96	97	98	96	96	92	87	86	86	85	85	80	77	78	78	75	77	82	80	82	80	87.2	13.8	
20	84	83	87	91	88	87	85	78	71	71	73	69	72	76	80	83	88	88	91	88	91	95	91	95	83.2	12.4	
21	96	97	98	97	97	97	96	98	97	94	98	99	96	92	94	89	82	84	86	87	87	87	84	82	92.6	15.6	
22	86	86	87	89	87	87	83	82	84	74	79	78	73	75	83	75	77	78	78	86	87	89	89	89	82.4	13.5	
23	90	91	91	94	95	91	88	84	81	78	80	80	85	76	77	76	76	77	78	81	85	87	85	88	83.4	13.4	
24	87	89	87	89	92	90	89	79	81	77	78	80	80	77	81	91	91	88	90	94	93	94	89	88	86.4	12.9	
25	91	88	86	86	89	88	89	90	94	93	86	84	84	93	94	91	91	98	98	98	98	95	94	95	91.2	14.0	
26	92	89	90	86	85	88	78	73	66	73	71	72	72	80	75	75	70	72	75	76	76	79	85	88	78.7	11.5	
27	95	95	94	90	89	88	87	89	86	82	80	78	77	76	77	78	80	81	81	85	87	89	88	89	85.0	13.3	
28	94	94	95	95	97	97	95	97	96	97	97	96	95	95	96	96	97	97	97	98	98	98	96	96	96.1	14.6	
29	95	93	90	92	87	82	76	78	83	94	91	95	97	84	78	78	79	79	79	78	80	83	87	87	84.9	12.2	
30	83	87	84	87	88	80	84	80	78	79	77	80	78	78	75	78	78	82	83	78	85	86	89	88	81.9	12.3	
Mean	...	83.1	84.3	84.9	85.4	85.3	84.6	81.5	79.0	77.1	76.8	75.8	75.4	75.1	75.1	74.3	73.8	73.5	75.2	76.2	78.1	80.4	82.8	82.2	82.4	79.3	†12.3
Vapour Pressure*	...	mb. 11.9	mb. 11.9	mb. 11.9	mb. 11.9	mb. 11.7	mb. 11.9	mb. 12.0	mb. 12.2	mb. 12.3	mb. 12.5	mb. 12.7	mb. 12.8	mb. 12.7	mb. 12.9	mb. 12.8	mb. 12.8	mb. 12.6	mb. 12.5	mb. 12.3	mb. 12.2	mb. 12.1	mb. 12.1	mb. 11.9	mb. 11.9	†12.3	
Hour G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.	—	



Percentages at exact hours, Greenwich Mean Time.

378. Cahirciveen (Valentia Observatory) : North Wall Screen :  $h_t$  (height of thermometer bulbs above ground) = 1.3 metres.

July, 1928.

Hour G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean	Vapour Pressure.*
Day.	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	mb.
1	87	87	87	89	89	88	91	91	93	98	96	99	98	97	97	97	96	96	93	91	91	94	91	93	92.8	14.1
2	93	90	90	90	90	89	80	78	75	77	77	75	75	74	66	77	76	76	77	80	85	88	88	89	82.0	12.9
3	88	88	92	89	92	95	87	88	76	74	76	76	74	61	66	71	71	71	73	74	76	80	87	87	79.9	12.0
4	87	88	89	86	90	89	91	89	95	93	96	97	96	96	97	97	97	98	97	98	98	98	98	99	93.9	14.0
5	98	98	97	97	97	97	99	98	92	90	77	78	76	73	72	78	80	77	83	80	85	88	87	88	87.1	14.1
6	88	91	91	88	88	88	82	87	85	89	83	85	86	80	84	80	81	78	78	82	78	75	80	83	83.9	13.2
7	88	87	87	81	86	86	77	74	71	71	73	74	74	76	73	83	88	87	88	92	95	96	98	94	83.1	13.4
8	95	96	97	97	96	96	94	94	90	87	86	86	85	84	84	80	81	83	85	82	87	87	89	88	88.9	14.8
9	88	86	85	86	88	86	79	77	86	83	80	79	78	80	79	81	78	79	82	87	87	90	94	93	83.7	14.0
10	94	93	91	89	82	88	90	90	88	90	91	89	91	90	89	89	88	89	90	96	98	98	94	96	90.9	15.1
11	96	96	96	97	97	98	96	96	97	97	96	96	96	97	96	94	96	97	98	97	96	96	97	97	96.4	16.4
12	97	97	97	97	97	98	97	96	93	93	89	86	80	80	84	80	82	85	89	91	93	88	90	91	90.1	15.8
13	92	91	91	93	94	95	91	90	91	93	88	87	85	85	83	81	84	85	83	87	84	85	87	88	88.1	15.4
14	86	87	86	85	85	84	85	88	85	83	80	82	79	78	78	80	76	80	84	89	89	91	92	91	84.2	15.5
15	93	93	92	93	91	92	88	90	93	97	98	95	92	98	89	89	89	89	90	88	88	88	88	83	91.3	15.9
16	83	83	82	79	79	83	78	72	64	69	65	64	73	72	69	69	64	69	73	77	82	88	88	89	75.5	12.3
17	89	92	93	94	93	92	90	81	80	76	79	76	77	71	71	82	85	87	88	90	91	94	91	94	85.0	13.9
18	94	95	95	91	94	88	87	81	80	77	74	74	76	78	72	76	72	75	78	78	81	81	83	80	82.7	13.8
19	78	80	78	79	78	78	76	72	76	73	71	71	70	73	73	73	70	71	75	77	77	81	78	81	75.3	12.8
20	82	81	81	79	83	80	80	81	78	80	80	76	78	80	77	80	79	83	84	87	89	90	91	97	82.0	14.4
21	97	95	94	94	98	93	97	95	79	67	56	49	47	41	51	57	60	70	79	85	88	90	90	91	77.7	15.0
22	91	94	92	92	92	90	91	90	88	86	89	85	91	88	90	87	89	89	87	88	90	92	92	92	89.8	17.1
23	93	96	96	96	96	96	98	99	99	95	96	97	97	94	94	94	95	96	96	96	96	97	96	96	95.9	17.8
24	96	97	98	97	98	98	98	98	97	96	98	94	96	95	95	96	96	95	95	96	97	97	97	98	96.5	18.1
25	98	98	98	98	98	98	98	97	96	94	91	97	96	90	89	88	91	90	91	93	93	93	92	93	94.3	18.0
26	97	98	97	96	98	97	96	96	94	91	91	91	91	90	90	93	93	92	93	93	95	96	97	96	94.1	18.0
27	92	97	96	96	96	94	96	86	87	83	78	74	71	67	67	69	64	73	74	77	77	79	66	70	80.6	13.8
28	72	73	68	67	73	74	68	61	74	67	67	65	76	91	72	74	68	65	70	73	67	81	78	73	71.5	11.2
29	73	83	80	70	76	72	76	69	68	65	70	64	71	66	67	78	75	76	72	83	87	89	88	87	74.9	11.9
30	89	89	89	79	85	87	88	86	78	75	77	71	62	66	71	73	80	81	84	87	87	85	86	82	80.8	12.8
31	80	79	77	79	82	82	84	81	80	80	76	74	75	75	74	73	73	69	74	72	68	65	66	72	75.6	11.2
Mean	89.5	90.3	89.7	88.5	89.6	89.6	87.8	86.3	84.9	83.7	82.2	80.8	81.2	80.2	79.7	81.3	81.0	82.1	83.7	86.0	86.7	88.4	88.3	88.7	85.4	†14.5
Vapour Pressure*	mb. 13.9	mb. 13.8	mb. 13.7	mb. 13.5	mb. 13.6	mb. 13.9	mb. 14.1	mb. 14.3	mb. 14.6	mb. 14.7	mb. 14.8	mb. 14.9	mb. 15.1	mb. 15.0	mb. 15.0	mb. 15.1	mb. 15.0	mb. 14.8	mb. 14.6	mb. 14.5	mb. 14.1	mb. 14.1	mb. 13.9	mb. 13.8	†14.4	—

379. Cahirciveen (Valentia Observatory) : North Wall Screen :  $h_t$  = 1.3 metres.

August, 1928.

1	74	75	69	69	77	69	78	59	56	54	58	59	62	71	64	70	64	67	69	77	78	83	84	84	69.3	10.6	
2	89	88	89	89	89	89	87	86	80	76	77	76	72	68	71	76	77	75	78	84	81	80	88	80	81.1	12.1	
3	86	86	89	84	84	87	81	80	80	71	66	73	75	76	75	70	61	68	68	80	79	85	84	86	78.0	12.1	
4	89	88	87	86	92	92	91	86	84	74	77	80	76	73	68	77	75	79	79	85	86	89	88	87	82.9	12.7	
5	89	90	88	89	94	92	89	85	82	82	74	77	73	69	76	73	77	80	81	82	86	87	88	89	83.0	14.8	
6	89	90	91	92	97	97	94	94	95	94	93	91	90	91	93	95	95	94	96	93	96	94	94	94	93.3	17.6	
7	91	97	96	97	95	91	97	93	94	89	88	88	84	82	81	79	79	79	80	81	86	88	88	88	88.5	16.2	
8	89	90	91	89	91	92	85	81	82	82	80	78	78	75	77	78	76	79	82	87	86	90	87	90	83.9	14.8	
9	91	91	90	90	91	95	95	92	90	88	87	90	89	90	90	84	84	87	90	93	94	91	91	91	90.1	16.0	
10	92	86	87	82	84	91	92	89	87	91	84	86	86	82	89	92	92	93	93	94	93	93	93	88	89.2	16.4	
11	91	93	94	95	95	96	92	92	93	94	95	95	93	92	93	97	90	88	89	90	91	87	88	89	92.1	16.5	
12	88	88	93	90	91	91	95	90	80	81	81	74	85	79	90	88	87	88	90	89	91	94	94	90	87.8	13.9	
13	89	99	91	89	91	91	94	90	89	90	91	89	85	86	85	86	85	88	85	86	88	90	92	92	89.2	14.1	
14	92	92	94	95	94	94	89	85	50	87	83	88	89	83	84	82	83	81	81	86	87	85	90	91	87.7	14.2	
15	91	89	89	86	85	83	80	71	74	68	68	65	63	67	69	65	79	80	69	77	83	76	76	76	76.2	11.9	
16	82	81	80	82	76	76	72	73	70	74	71	74	76	74	75	76	73	75	81	88	89	89	91	94	78.5	12.7	
17	89	88	89	88	88	85	82	81	79	77	77	76	77	80	78	79	80	82	85	86	86	92	94	90	84.3	14.4	
18	90	90	91	93	92	92	92	89	87	85	83	81	80	85	82	83	86	91	90	93	94	91	93	97	88.6	16.0	
19	98	98	98	97	97	96	96	96	97	92	94	93	90	87	82	78	76	77	81	79	84	80	79	81	88.9	14.9	
20	85	85	85	86	87	91	98	81	86	77	79	76	73	71	79	77	80	81	91	91	91	90	88	86	83.8	13.4	
21	85	85	85	85	83	82	80	81	82	81	83	79	79	87	85	80	81	85	87	88	91	93	94	95	84.6	13.8	
22	93	93	94	94	93	94	96	94	94	97	97	97	99	98	94	89	84	84	88	88	90	93	94	91	92.7	16.1	
23	91	93	90	93	94	93	93	89	86	85	82	83	83	80	78	77	79	82	84	86	86	85	86	89	86.2	15.2	
24	91	91	92	95	96	92	95	96	90	89	86	82	81	84	80	81	85	90	87	91	90	91	91	93	89.0	15.6	
25	93	91	93	91	94	93	92	90	88	85	81	81	80	83	90	90	82	87	86	89	90	92	88	94	88.4	15.4	
26	95	95	93	96	96	95	96	94	96	93	94	92	92	87	90	88	85	85	88	90	91	94	91	95	92.1	14.7	
27	95	93	91	95	88	89	89	89	87	80	78	83	81	84	80	88	81	79	82	86	86	91	90	91	85.9	14.3	
28	84	80	81	78	89	89	88	82	76	73	76	76	74	69	68	68	69	85	85	86	89	86	88	85	80.3	13.1	
29	89	87	86	89	89	88	87	81	78	75	73	75	77	73	74	71	74	75	78	81	85	88	87	85	81.0	12.9	
30	85	89	89	89	90	90	90	90	86	84	77	76	75	71	74	76	75	77	82	86	89	89	89	89	83.5	13.3	
31	91	95	92	92	93	89	90	93	90	76	71	65	64	67	69	69	69	68	74	81	86	89	89	89	81.3	12.5	
Mean	...	89.2	89.5	89.3	89.3	90.2	89.9	89.6	86.2	84.6	82.1	80.8	80.6	80.0	79.5	80.1	79.9	79.0	81.6	83.5	86.1	87.7	88.8	88.9	89.0	85.2	†14.3
Vapour Pressure*	...	mb. 13.5	mb. 13.5	mb. 13.5	mb. 13.4	mb. 13.5	mb. 13.6	mb. 13.9	mb. 14.1	mb. 14.5	mb. 14.6	mb. 14.6	mb. 15.0	mb. 15.1	mb. 14.9	mb. 15.0	mb. 14.9	mb. 14.6	mb. 14.6	mb. 14.4	mb. 14.3	mb. 14.1	mb. 14.0	mb. 13.9	mb. 13.7	†14.2	—
Hour G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.	—	



Percentages at exact hours, Greenwich Mean Time.

380. Cahirciveen (Valentia Observatory) : North Wall Screen :  $h_t$  (height of thermometer bulbs above ground) = 1.3 metres.

September, 1928.

Hour G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.	Vapour Pressure.*
Day.	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	mb.
1	75	86	88	91	91	87	91	95	84	83	76	71	64	67	72	70	70	70	85	68	64	69	79	71	78.2	12.8
2	72	75	77	70	71	69	70	72	76	81	87	86	85	87	86	89	90	89	89	89	90	90	89	93	81.7	15.4
3	93	90	91	91	90	93	93	94	94	92	90	89	92	95	92	95	96	98	98	98	99	99	99	99	94.1	17.3
4	98	93	94	93	96	96	97	98	98	98	98	96	97	97	92	93	95	97	97	97	97	97	97	97	96.2	17.6
5	98	98	96	96	95	94	94	96	95	94	89	81	83	75	67	69	69	71	71	82	74	82	85	87	85.3	13.6
6	87	86	95	87	85	87	85	83	90	87	86	86	82	84	84	82	83	86	88	88	87	88	85	86	86.1	14.8
7	85	84	84	84	82	85	86	89	83	84	90	92	94	94	96	95	96	93	95	95	93	92	95	95	89.9	15.1
8	96	93	96	96	97	93	96	97	90	88	88	91	83	83	86	85	87	88	91	94	89	89	90	90	90.5	14.0
9	93	91	95	93	90	94	93	89	81	85	85	81	83	74	76	79	90	86	86	87	85	87	90	91	86.8	14.1
10	92	91	91	94	96	97	97	92	92	90	97	90	89	86	84	84	87	87	89	90	94	96	96	97	91.5	15.7
11	94	97	94	98	93	95	97	93	90	91	89	86	80	81	84	82	84	86	90	93	93	92	92	93	90.4	15.7
12	94	94	94	93	91	91	92	91	88	87	76	79	72	81	75	74	79	80	83	85	84	74	78	77	84.2	14.8
13	77	77	80	81	81	86	85	85	85	83	85	86	85	84	82	84	88	86	85	89	88	87	87	88	83.9	15.6
14	88	88	88	90	91	92	93	92	89	89	86	83	70	72	71	74	66	66	73	74	83	79	83	86	82.0	13.2
15	87	89	89	91	93	93	90	90	91	88	76	74	72	71	76	73	75	78	86	90	88	89	87	88	84.3	10.8
16	87	90	93	90	90	90	91	90	90	88	88	88	84	84	84	89	94	95	96	98	97	97	96	96	91.0	14.0
17	97	94	94	94	93	96	96	96	94	96	97	93	92	89	87	86	87	89	90	91	91	94	95	95	92.6	15.8
18	94	93	94	89	90	93	96	95	95	95	75	80	75	71	71	72	68	73	73	79	81	83	87	87	83.5	12.1
19	87	89	87	87	84	88	89	91	85	77	81	71	68	66	68	61	67	75	81	81	85	81	88	88	80.2	11.0
20	87	85	81	84	87	89	87	87	89	89	88	78	66	68	68	75	78	82	69	73	76	80	76	81	80.3	11.4
21	82	82	83	78	81	83	84	83	78	60	57	59	59	58	61	59	66	66	71	75	80	80	87	87	73.2	10.7
22	86	88	87	83	83	85	84	88	77	73	69	70	70	69	65	67	64	67	69	71	70	72	71	67	75.2	10.4
23	73	78	75	74	74	75	75	76	82	75	66	61	55	56	58	62	66	66	75	73	70	74	77	82	70.4	9.7
24	87	87	89	84	84	84	81	86	86	65	62	64	65	63	65	62	66	71	75	83	80	78	80	89	76.4	9.1
25	81	80	70	73	70	61	66	78	72	66	63	57	57	58	59	59	65	70	70	68	69	71	72	74	68.2	9.1
26	79	74	82	71	76	75	74	73	67	68	66	66	59	53	53	56	55	62	65	68	74	75	76	75	68.4	9.8
27	77	75	76	72	75	75	69	72	67	71	69	71	69	71	60	60	76	78	85	79	80	83	79	83	74.3	10.6
28	82	81	86	86	87	88	89	89	91	87	89	88	88	83	87	87	82	80	78	76	77	83	79	87	84.5	11.2
29	87	84	86	84	91	86	83	78	79	81	74	78	76	75	73	73	71	74	69	68	71	71	71	73	77.6	9.8
30	68	68	73	73	74	78	78	79	81	63	63	65	64	65	63	64	68	71	78	77	73	71	71	80	71.1	8.8
Mean ...	86.1	86.0	86.9	85.7	86.0	86.4	86.7	87.2	85.3	82.1	80.2	78.6	76.0	75.3	74.7	75.9	77.6	79.5	81.3	82.5	82.9	83.6	84.5	86.1	82.4	†12.8
Vapour Pressure*	mb. 12.2	mb. 12.1	mb. 12.0	mb. 11.9	mb. 11.9	mb. 11.8	mb. 12.0	mb. 12.5	mb. 12.9	mb. 13.0	mb. 13.2	mb. 13.4	mb. 13.1	mb. 13.2	mb. 13.1	mb. 13.0	mb. 13.1	mb. 13.0	mb. 12.8	mb. 12.6	mb. 12.4	mb. 12.1	mb. 12.1	mb. 12.1	†12.6	

381. Cahirciveen (Valentia Observatory) : North Wall Screen :  $h_t$  = 1.3 metres.

October, 1928.

	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	mb.
1	78	76	79	82	81	84	78	85	84	62	58	66	64	59	58	60	62	70	74	81	83	87	88	88	74.3	8.2
2	85	87	87	92	90	88	86	91	88	83	76	71	64	70	72	74	76	80	80	76	76	75	71	74	80.0	9.3
3	65	68	73	70	73	64	64	69	65	66	65	61	61	59	62	63	62	63	66	66	66	65	65	65	65.5	9.4
4	66	71	67	68	70	72	80	86	90	89	87	89	84	91	98	94	89	93	90	93	90	93	95	84.1	13.6	
5	95	95	95	92	93	94	95	91	88	86	84	86	85	80	76	80	82	76	84	82	82	85	84	89	86.7	13.4
6	88	89	90	90	88	89	90	89	91	87	85	85	80	80	84	87	86	89	90	90	90	90	93	96	88.0	14.2
7	96	94	97	97	98	98	99	97	94	96	96	97	97	96	93	94	93	91	91	92	92	88	92	90	94.6	16.4
8	92	86	87	85	85	88	90	87	86	83	83	81	80	83	85	84	84	83	86	90	88	89	90	88	86.0	14.2
9	85	85	82	89	88	85	80	89	88	86	84	92	85	86	91	93	90	90	87	86	91	85	85	86	87.0	13.2
10	88	89	87	89	89	93	89	92	94	88	85	80	86	88	89	90	91	90	91	92	96	94	94	93	89.7	13.3
11	91	88	78	89	90	92	89	94	93	86	78	88	85	80	79	83	93	90	91	91	91	94	94	88	88.2	12.4
12	91	92	88	89	93	90	93	91	90	81	85	85	78	79	80	78	78	81	80	85	82	86	87	91	85.5	10.9
13	91	87	91	91	88	93	90	89	96	90	83	79	79	80	81	80	85	87	86	86	87	82	81	86.4	11.0	
14	85	90	94	95	91	91	96	97	96	95	90	96	88	84	84	85	75	82	87	77	82	78	85	85	87.7	13.6
15	88	88	90	93	93	95	95	94	97	97	98	97	93	96	94	93	96	98	97	97	97	96	97	97	94.5	14.8
16	96	96	96	98	97	97	97	96	96	96	92	93	92	93	94	97	97	98	98	98	97	89	94	96	95.6	16.3
17	94	93	87	86	89	90	88	89	89	85	89	88	87	83	82	83	81	93	94	92	91	90	89	89	88.5	13.0
18	89	89	87	91	94	97	95	95	96	94	94	80	72	79	76	80	76	82	80	87	86	85	76	74	85.9	11.8
19	76	82	78	83	89	87	80	91	88	87	92	97	93	95	95	94	91	81	80	84	89	89	75	73	86.2	11.1
20	72	74	74	74	80	79	76	88	85	89	91	72	77	83	75	74	84	84	88	91	92	87	87	87	81.5	9.6
21	86	86	77	82	75	79	68	82	74	70	67	71	88	88	79	89	77	83	80	88	88	87	75	79	80.1	9.7
22	83	74	82	85	77	84	88	88	91	89	87	76	69	65	70	63	69	69	79	91	88	94	90	96	80.8	8.9
23	89	91	79	88	95	94	94	97	97	93	89	82	81	87	86	85	84	84	79	73	80	85	85	83	86.9	11.5
24	86	82	80	80	82	90	90	90	87	78	75	84	82	89	84	77	76	79	82	86	79	75	75	79	82.0	11.1
25	74	74	77	76	76	82	83	89	83	83	71	74	75	71	75	74	78	89	91	92	94	92	94	95	81.4	10.2
26	97	95	97	84	93	87	86	86	85	80	79	72	76	68	68	75	76	71	75	76	61	82	80	87	82.1	10.8
27	77	79	84	84	83	76	82	79	78	75	74	77	76	77	77	70	73	72	67	68	65	64	62	63	74.7	10.4
28	74	75	75	79	76	76	80	74	82	89	84	83	88	89	86	90	89	93	91	89	92	94	93	93	83.4	10.9
29	97	96	96	98	98	97	98	98	98	96	93	93	91	93	93	94	98	97	98	99	93	88	84	85	94.8	13.8
30	89	85	72	75	75	86	74	70	83	76	85	78	84	81	88	87	83	89	76	84	90	83	73	70	81.0	10.4
31	75	82	80	79	76	75	72	71	65	69	65	63	62	60	51	55	58	66	62	55	53	58	55	56	65.4	7.8
Mean ...	85.1	85.1	84.1	85.9	86.0	86.8	85.8	88.1	87.4	84.4	82.9	81.8	80.5	81.0	80.9	81.3	81.7	83.5	83.9	85.0	85.5	84.8	83.5	84.2	84.1	†11.8
Vapour Pressure*	mb. 11.3	mb. 11.2	mb. 11.2	mb. 11.3	mb. 11.2	mb. 11.2	mb. 11.1	mb. 11.4	mb. 11.8	mb. 11.8	mb. 12.0	mb. 12.2	mb. 12.2	mb. 12.2	mb. 12.1	mb. 12.0	mb. 11.9	mb. 11.9	mb. 11.7	mb. 11.7	mb. 11.6	mb. 11.5	mb. 11.2	mb. 11.2	†11.6	
Hour G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.	—



Percentages at exact hours, Greenwich Mean Time.

382. Cahirciveen (Valentia Observatory) : North Wall Screen :  $h_t$  (height of thermometer bulbs above ground) = 1.3 metres.

November, 1928.

Hour G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.	Vapour Pressure.*
Day.	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	mb.
1	60	60	62	63	63	67	65	69	67	61	62	70	65	66	66	63	71	76	72	70	72	76	79	74	67.1	7.3
2	73	77	75	79	76	74	77	75	68	56	51	50	54	53	55	60	70	67	71	67	66	72	70	68	67.0	6.1
3	71	72	81	82	79	81	77	77	72	69	66	63	59	64	59	61	62	66	74	77	78	81	80	83	71.9	6.9
4	84	82	79	85	87	87	85	86	88	85	85	84	74	74	73	76	76	78	85	85	85	85	85	87	82.4	6.8
5	88	88	88	88	90	91	90	88	90	85	72	69	67	70	74	72	80	79	78	80	78	79	78	76	81.0	8.1
6	73	75	74	70	67	69	65	62	62	63	61	63	63	66	66	71	72	79	75	75	71	74	83	80	69.9	9.1
7	81	83	82	79	82	86	83	84	77	72	69	70	73	66	72	74	79	75	80	80	84	85	90	90	78.8	9.5
8	92	92	92	93	94	93	83	88	93	92	88	83	81	86	87	88	91	90	92	92	92	90	93	90	90.2	8.0
9	93	88	91	92	90	90	89	89	90	90	86	80	80	76	78	78	83	87	87	91	92	87	87	88	86.8	9.0
10	94	95	96	96	96	96	96	99	98	97	97	97	97	97	97	98	99	99	99	97	98	95	95	96	96.7	13.5
11	98	96	96	96	97	96	96	97	98	97	98	98	98	96	97	96	98	98	96	97	95	94	95	96	96.6	14.4
12	96	96	97	96	94	96	97	97	96	91	86	83	87	88	85	87	87	89	87	89	87	89	89	93	91.0	13.1
13	96	89	91	95	89	82	86	83	77	79	80	84	82	74	75	79	80	78	85	82	81	85	82	82	83.4	9.8
14	86	86	88	87	89	93	92	89	89	93	86	91	94	95	97	97	91	90	88	88	87	80	86	88	89.5	11.2
15	87	87	87	89	89	89	87	89	87	76	71	74	77	75	84	83	88	92	88	88	91	88	89	89	85.1	10.6
16	88	89	92	90	88	88	87	93	94	94	87	88	84	88	87	87	89	90	89	88	93	90	91	93	89.4	10.2
17	88	86	85	85	75	66	66	72	70	74	80	74	79	79	82	86	75	84	80	86	82	80	87	83	79.5	9.2
18	87	87	87	88	89	89	91	90	92	89	90	86	86	86	89	90	90	89	90	94	96	95	97	97	89.9	12.1
19	95	95	91	95	94	94	93	91	88	89	83	79	74	71	70	75	81	79	83	77	75	74	82	79	84.0	10.5
20	73	82	76	75	80	78	80	78	82	87	79	84	84	88	88	87	85	84	82	80	78	88	92	90	82.3	10.7
21	95	95	98	95	94	93	93	90	95	95	89	87	94	95	94	91	91	91	91	91	93	89	81	79	91.9	12.8
22	81	84	91	87	93	95	90	93	92	95	89	83	80	76	76	77	67	83	74	80	82	78	82	86	83.8	10.9
23	88	89	92	93	91	93	94	93	90	90	75	73	71	69	71	73	77	72	76	74	81	74	75	77	81.5	10.3
24	78	76	76	74	77	74	80	78	86	65	63	72	75	76	75	75	79	80	89	89	91	93	94	96	79.2	9.7
25	96	95	94	95	94	93	94	77	74	75	73	67	64	62	58	63	59	62	66	67	58	62	69	63	74.9	9.8
26	69	64	62	56	57	67	67	69	70	64	65	81	76	72	79	65	77	68	69	64	71	71	59	73	67.9	7.8
27	54	67	59	56	63	59	55	71	71	77	61	69	62	60	65	62	65	73	62	64	66	66	69	73	64.5	7.1
28	72	71	74	73	79	82	83	87	86	78	82	83	83	80	83	89	88	88	88	89	97	96	96	97	83.8	9.4
29	98	98	97	99	99	98	99	99	99	99	100	100	100	99	98	98	96	95	87	93	95	96	96	96	97.3	12.7
30	90	93	93	95	95	96	97	95	96	99	96	95	93	95	94	96	97	96	99	99	97	97	99	99	95.7	12.1
Mean ...	84.1	84.6	84.9	84.9	85.0	85.2	84.9	84.9	84.6	82.5	79.0	79.3	78.5	78.1	79.1	79.9	81.4	82.6	82.7	83.0	83.8	83.6	85.0	85.4	82.8	79.9
Vapour Pressure*	mb. 9.7	mb. 9.7	mb. 9.8	mb. 9.8	mb. 9.9	mb. 9.8	mb. 9.9	mb. 9.9	mb. 9.9	mb. 9.9	mb. 9.7	mb. 9.9	mb. 9.9	mb. 9.8	mb. 9.9	mb. 9.8	mb. 9.7	mb. 9.9	mb. 9.7	mb. 9.8	mb. 9.8	mb. 9.7	mb. 9.8	mb. 9.7	mb. 9.8	

383. Cahirciveen (Valentia Observatory) : North Wall Screen :  $h_t$  = 1.3 metres.

December, 1928.

	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	mb.	
1	99	99	99	95	95	97	97	98	98	99	99	98	97	97	98	99	98	100	99	99	98	98	98	99	98.0	12.8
2	99	96	98	98	99	99	99	99	98	97	99	98	97	97	95	95	97	95	97	99	99	99	98	95	97.7	12.5
3	92	88	88	88	81	73	76	84	82	79	71	71	67	70	64	64	73	82	83	83	85	83	79	78	78.9	8.4
4	83	81	84	93	91	96	94	94	95	97	95	92	95	97	97	94	93	95	97	95	94	95	97	99	93.0	11.6
5	97	94	90	82	71	68	65	69	72	81	86	82	75	80	75	82	83	84	80	81	81	77	79	76	80.1	9.7
6	92	92	92	95	86	86	77	83	72	55	74	58	70	76	69	60	61	81	74	74	72	78	59	67	75.3	7.9
7	69	69	74	73	76	76	87	80	85	88	60	85	82	80	68	82	78	85	84	89	83	79	79	87	78.7	6.5
8	83	85	83	84	83	78	74	71	82	86	85	79	78	73	75	80	74	79	88	85	90	86	93	87	82.3	6.6
9	93	86	86	88	91	91	86	88	89	87	90	89	93	93	89	93	93	94	94	91	93	92	93	93	90.6	8.7
10	93	91	89	84	87	85	83	85	87	85	87	89	81	78	75	75	80	85	88	92	95	90	93	91	86.2	7.6
11	91	87	94	93	96	98	93	88	84	88	85	80	82	82	82	82	84	87	86	87	89	89	88	88	87.7	6.9
12	89	87	87	87	81	87	86	86	84	84	83	81	85	84	84	86	85	83	83	73	79	77	81	83	83.7	7.5
13	78	74	73	71	71	73	70	67	64	71	74	73	76	73	77	73	79	74	73	72	76	75	72	78	73.3	7.4
14	82	82	88	85	86	91	93	92	89	93	88	87	87	84	83	81	79	80	83	80	79	83	81	81	84.8	9.1
15	81	79	79	82	83	92	88	87	87	89	94	88	91	91	94	95	95	92	92	98	97	98	96	97	89.9	10.9
16	97	99	99	97	96	99	97	97	92	93	91	86	76	86	78	61	63	62	60	66	68	83	74	76	83.6	10.5
17	78	81	81	76	85	86	88	89	90	92	97	96	93	89	89	94	86	76	81	83	82	82	83	81	85.6	8.6
18	80	84	83	89	95	99	98	96	95	98	96	98	97	95	97	100	99	94	98	94	95	95	92	91	93.9	11.4
19	96	99	94	94	90	94	98	96	94	98	94	92	92	91	88	92	91	91	94	92	92	92	84	84	93.0	9.7
20	86	81	78	75	73	77	72	82	79	82	79	73	81	76	82	76	83	84	82	83	86	91	92	93	80.9	9.0
21	86	92	89	93	96	98	96	95	95	95	94	94	89	91	91	95	98	99	95	95	96	99	99	96	94.4	11.1
22	98	99	93	93	92	91	95	95	95	95	86	70	67	79	82	75	74	81	79	86	92	87	90	88	86.7	9.3
23	87	93	93	92	87	90	86	85	86	81	83	96	92	98	94	94	94	97	98	94	93	95	97	96	91.5	10.2
24	97	95	93	92	96	95	96	93	93	88	94	91	88	88	83	78	74	82	67	64	65	69	83	70	85.3	10.1
25	72	74	83	70	73	80	73	79	76	78	86	89	89	89	93	91	91	95	94	94	86	85	87	92	83.7	9.8
26	91	91	88	88	87	84	89	86	81	73	68	67	66	62	60	65	63	72	67	76	76	79	82	84	77.0	8.2
27	84	85	82	73	69	64	60	66	70	78	84	86	82	76	79	77	81	83	76	78	81	87	88	86	78.1	8.0
28	88	94	94	93	98	95	92	91	93	88	86	86	89	88	82	73	77	70	69	68	73	76	87	84	84.8	9.0
29	80	82	79	83	74	78	79	75	75	70	73	84	76	70	66	78	75	68	73	75	68	69	60	60	74.3	6.6
30	68	80	74	69	63	64	76	70	85	72	81	74	76	84	72	80	82	79	78	75	73	70	79	76	74.7	6.2
31	73	74	75	74	75	75	75	74	74	77	70	66	67	60	57	60	64	72	64	65	70	71	75	73	70.1	5.1
Mean ...	86.5	86.9	86.5	85.5	84.9	85.8	85.1	85.2	84.8	84.4	82.7	83.5	83.2	81.0	81.6	82.7	83.8	83.3	83.6	84.1	84.8	85.1	85.0	84.5	79.1	
Vapour Pressure*	mb. 8.9	mb. 8.8	mb. 8.8	mb. 8.8	mb. 8.7	mb. 8.8	mb. 8.8	mb. 8.7	mb. 8.7	mb. 8.9	mb. 9.0	mb. 9.0	mb. 9.1	mb. 8.8	mb. 8.8	mb. 8.8	mb. 8.8	mb. 8.8	mb. 8.7	mb. 8.6	mb. 8.6	mb. 8.6	mb. 8.5	mb. 8.5		
Hour G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.	—



*For exact hours, Greenwich Mean Time.***384. Cahirciveen (Valentia Observatory): North Wall Screen:  $h_t = 1.3$  metres.****1928.**

Hour G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean
Relative Humidity ...	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Vapour Pressure in millibars*	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.

\* Computed from the mean temperature and mean relative humidity.

## RELATIVE HUMIDITY: MONTHLY MEANS AND DIURNAL INEQUALITIES.

*The departures from the mean of the day are adjusted for non-cyclic change.***385. Cahirciveen (Valentia Observatory): North Wall Screen:  $h_t = 1.3$  metres.****1928.**

Month.	Mean.	Hour. 1.	G.M.T. 2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.
Jan.	82.9	+2.1	+0.7	-0.2	+1.0	+1.1	+1.9	+1.3	+2.4	+0.2	+0.3	-0.9	-1.8	-1.2	-2.0	-1.7	-0.8	-0.6	-0.1	-0.8	-0.6	-1.2	-0.1	-0.4	+1.2
Feb.	80.9	+0.5	+1.1	+2.0	+2.9	+1.2	+0.9	+2.9	+1.5	+1.3	-0.1	-1.4	-2.3	-2.6	-3.2	-4.3	-4.0	-0.7	-0.3	-1.2	+0.7	+1.0	+1.2	+1.3	+1.5
Mar.	80.1	+2.9	+3.4	+2.5	+2.6	+2.0	+2.4	+3.6	+2.8	+1.8	-0.4	-3.0	-5.5	-5.5	-4.1	-4.8	-3.8	-4.3	-2.9	-0.9	+1.0	+2.0	+1.5	+3.4	+3.6
April	78.2	+3.7	+4.9	+4.8	+4.1	+4.6	+4.1	+2.0	+1.8	-3.0	-5.2	-5.3	-6.2	-6.4	-5.0	-5.8	-3.9	-3.5	-2.1	-0.3	+1.9	+3.3	+3.6	+3.7	+4.2
May	76.4	+5.1	+5.4	+5.6	+6.8	+6.8	+5.2	+4.5	+2.3	-0.1	-3.4	-4.0	-5.5	-5.3	-5.9	-5.8	-7.2	-7.7	-4.9	-2.3	+0.3	+1.0	+2.4	+2.6	+4.3
June	79.3	+4.1	+5.3	+5.9	+6.4	+6.3	+5.5	+2.4	+2.4	-0.2	-2.1	-2.4	-3.5	-3.9	-4.2	-5.0	-5.5	-5.9	-4.2	-3.2	-1.4	+0.9	+3.3	+2.7	+2.9
July	85.4	+3.8	+4.6	+4.1	+2.9	+4.0	+4.0	+2.3	+0.8	-0.6	-1.8	-3.3	-4.6	-4.3	-5.2	-5.7	-4.1	-4.3	-3.2	-1.5	+0.7	+1.4	+3.2	+3.1	+3.5
Aug.	85.2	+4.3	+4.6	+4.3	+4.3	+5.1	+4.8	+4.5	+1.1	-0.5	-3.1	-4.3	-4.6	-5.2	-5.8	-5.2	-5.4	-6.8	-3.8	-1.9	+0.7	+2.2	+3.3	+3.5	+3.5
Sept.	82.4	+3.6	+3.5	+4.4	+3.2	+3.5	+4.0	+4.2	+4.8	+2.9	-0.3	-2.2	-3.8	-6.4	-7.1	-7.6	-6.4	-4.8	-2.8	-1.0	+0.2	+0.6	+1.3	+2.3	+3.8
Oct.	84.1	+0.6	+0.6	-0.4	+1.5	+1.6	+2.5	+1.5	+3.8	+3.1	+0.2	-0.3	-2.3	-3.6	-3.1	-3.2	-2.7	-2.3	-1.4	0.0	+1.1	+1.6	+1.0	-0.3	+0.5
Nov.	82.8	+2.0	+2.4	+2.7	+2.6	+2.7	+2.8	+2.4	+2.4	+2.0	-0.2	-3.7	-3.4	-4.3	-4.8	-3.8	-3.1	-1.6	-0.5	-0.5	-0.2	+0.5	+0.3	+1.6	+1.9
Dec.	84.5	+1.7	+2.1	+1.8	+0.7	+0.2	+1.1	+0.5	+0.6	+0.7	+0.3	-0.1	-0.7	-0.9	-1.1	-3.8	-2.7	-1.6	-0.4	-0.9	-0.6	+0.1	+0.7	+1.0	+1.0
Year	81.9	+2.9	+3.2	+2.9	+3.3	+3.3	+3.3	+2.7	+2.0	+0.5	-1.3	-2.7	-3.7	-4.1	-4.3	-4.7	-4.1	-3.6	-2.1	-1.2	+0.3	+1.1	+1.8	+2.1	+2.7

## RAINFALL: ANNUAL TOTALS OF HOURLY VALUES.

*Amounts, in millimetres; durations in hours for periods of sixty minutes between the exact hours, Greenwich Mean Time.***386. Cahirciveen (Valentia Observatory):  $H_r$  (height of receiving surface above M.S.L.) =  $H$  (height of station above M.S.L.) +  $h_r$  (height of receiving surface above ground) = 9.1 metres + 0.5 metre.****1928.**

Hour G.M.T.	0 to 1.	1 to 2.	2 to 3.	3 to 4.	4 to 5.	5 to 6.	6 to 7.	7 to 8.	8 to 9.	9 to 10.	10 to 11.	11 to Noon	Noon to 13.	13 to 14.	14 to 15.	15 to 16.	16 to 17.	17 to 18.	18 to 19.	19 to 20.	20 to 21.	21 to 22.	22 to 23.	23 to 24.	0 to 24.
Amount ...	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.
Duration ...	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.

**387. Cahirciveen (Valentia Observatory).**

## NOTES ON RAINFALL.

**1928**

**Notable Falls of the Year.**—The heaviest rain of the year was experienced on August 6th when 21.2 mm. fell between 3 h. 55 m. and 7 h. The day's total rainfall was 44.3 mm. this being also the highest total rainfall for any day of the year. The highest hour's fall of the year occurred on October 10th when 16.7 mm. fell between 20 h. and 21 h.

**Dry Periods.**—The only dry period of any note was the 12 days May 5th to 16th, when no measurable rain fell

**Wet Periods.**—The thirty-one days of January and the first eighteen days of February were part of a period of 51 days beginning on December 30th, 1927, on all of which rain was measured; on none of these days was the measured amount less than 0.4 mm. There was a period of 31 days from March 12th to April 11th on only one of which no rain was recorded. During the 41 days, November 10th to December 31st, there were only three days without rain. During the 35 days, September 27th to October 31st, there were only two days without rain.



Amounts in millimetres for periods of sixty minutes between the exact hours, Greenwich Mean Time.

388. Cahirciveen (Valentia Observatory) :  $H_r$  (height of receiving surface above M.S.L.) =  $H$  (height of station above M.S.L.) +  $h_r$  (height of receiving surface above ground) = 9.1 metres + 0.5 metre.

January, 1928.

Hour G.M.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	0-24	Dura- tion. 0-24	
Day.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	hr.	
1	...	4	...	...	...	...	1	4	2	2	2.9	1.2	5.5	3.7	2.8	9	3	2	...	...	...	...	...	...	18.8	9.7	
2	...	...	...	...	...	...	...	...	...	...	...	...	(...)	1.2	...	...	7	5	...	...	...	...	1.0	4	3.8	1.4	
3	...	3	...	2	6	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	(...)	4	...	1	2.4	1.9	
4	4	2	1	1	...	(...)	(...)	...	(...)	1	...	...	...	...	1	1	...	...	...	(...)	...	...	...	...	1.1	4.6	
5	...	...	...	...	...	(...)	...	...	...	...	...	...	...	...	...	...	...	...	...	1.0	2	6	5	...	2.3	3.0	
6	...	1	1	...	9	...	...	...	2	...	...	...	...	...	1	1	...	...	(...)	...	...	...	4	2	2.1	3.2	
7	4	...	...	...	...	...	1	...	...	...	1	...	4	2	4	4	6	2	2	8	...	...	...	2	4.0	7.0	
8	...	...	7	...	...	...	...	...	(...)	...	...	2	...	...	1	...	2	...	...	...	4	...	2	...	1.8	1.6	
9	...	5	2	...	...	...	1.2	1.3	1	...	...	...	7	...	...	...	...	4	...	...	...	...	...	1.0	5.4	1.8	
10	1	2	...	4	2	6	8	5	...	...	...	7	...	(...)	...	...	...	...	...	...	4	...	1	...	4.0	3.7	
11	6	...	...	...	...	...	...	...	...	...	...	...	2	(...)	...	...	...	...	(...)	(...)	...	...	...	1	0.9	1.0	
12	4	...	...	...	2.5	2.0	1.1	3	6	7	1.0	9	1.5	1.2	5	...	...	...	(...)	(...)	(...)	2	...	...	12.9	10.5	
13	...	...	...	2	2	4	4	...	...	...	...	...	2	8	...	1	...	...	...	...	...	...	...	...	2.3	1.5	
14	1	...	3	1.6	7	1.3	1.6	1.5	6	...	...	...	...	5	8	...	...	1	4	...	...	2	...	...	9.7	6.7	
15	...	...	...	...	...	...	...	1	1	1.6	...	1	9	6	3	...	...	1	1.0	...	...	...	4	1	5.3	2.4	
16	...	...	...	5	...	...	...	...	...	...	(...)	(...)	(...)	...	...	1	...	...	6	1.7	1.5	1	2	...	4.8	3.1	
17	...	...	...	(...)	(...)	(...)	...	...	...	...	...	...	...	...	1	...	...	...	...	(...)	(...)	3	7.0	3.1	10.5	2.4	
18	7	...	...	(...)	(...)	(...)	(1)	4	5	4	3	...	...	6	...	...	...	...	...	...	...	...	...	...	3.6	3.5	
19	...	...	2	2	...	...	...	...	...	...	...	...	...	...	...	...	1	...	(...)	(...)	...	...	...	...	...	0.5	0.4
20	1.1	3.3	1.7	1.7	1	1.1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	9.3	4.7	
21	7	2.6	4.1	9	1.9	1.8	1.4	2.0	1.3	...	...	(...)	...	...	...	...	...	...	...	...	...	...	...	...	16.7	7.1	
22	...	...	...	1	...	1	...	...	...	...	5	...	...	...	...	...	1	...	...	...	1	...	...	6	1.5	1.3	
23	9	1.8	2.0	2.1	1.2	2.8	4	...	1.9	2.0	7	...	5	1	6	...	...	1	...	8	1	...	...	...	18.0	11.6	
24	...	...	...	5	...	4	1.1	1.5	2	...	1	3	...	...	...	...	...	...	...	2	1.0	1	...	...	5.4	2.8	
25	2	...	...	...	2	1	...	...	1	...	...	...	2	3.8	1.2	1.2	6	1	4	3	2	...	...	...	8.6	4.4	
26	...	1	3	1.0	2.1	...	6	5	...	...	2	...	...	1	1.2	1.3	...	...	1	3	5	...	...	1	8.4	3.3	
27	1	...	1	6	8	1.8	3	5	6	...	...	...	...	...	1	...	...	...	1	2	1	...	6	1.6	7.6	5.9	
28	1.4	1.5	1.0	1.0	1.6	1.6	2.2	8	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	11.9	9.0	
29	...	2.6	2.3	1.4	3	1.1	...	...	7	...	...	1.6	2	...	4	...	...	7	...	...	...	...	2	...	11.5	5.6	
30	...	...	...	...	...	...	6	...	...	...	4	...	2	7	7	...	...	...	...	5	...	...	...	...	3.1	2.6	
31	...	...	(...)	(...)	(...)	(...)	(...)	1	2.5	1.0	2.2	1.8	1	...	...	...	...	...	...	...	...	...	...	...	7.7	3.5	
Sum.	7.1	13.6	12.9	12.5	13.3	16.0	12.1	9.9	10.4	6.0	8.4	6.8	10.6	13.5	8.9	4.7	2.6	2.4	2.8	5.1	4.2	2.9	10.7	8.5	205.9	131.2	
Total Duration.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.		
	7.9	6.8	7.2	8.6	8.4	8.3	9.8	7.6	7.3	3.3	5.3	4.1	5.9	5.1	4.2	3.4	2.9	2.4	2.7	3.5	3.4	2.5	5.0	5.6	131.2		

389. Cahirciveen (Valentia Observatory) :  $H_r$  = 9.1 metres + 0.5 metre.

February, 1928.

	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	hr.
1	...	...	1	2	...	1.0	...	...	1	1	2	1	...	...	2	1	...	(...)	...	...	...	...	...	...	2.2	1.3
2	...	...	...	...	...	...	7	1.4	(...)	6	...	2	...	...	2	(...)	6	1	1	...	6	...	...	6	5.1	3.0
3	8	1	...	2	...	...	6	(...)	(...)	...	3	...	2	...	...	(...)	...	2	...	1	4	1.7	2.9	2.5	10.0	5.9
4	2.6	8	1.4	3	...	4	9	1.0	9	2	1	...	1	...	1	2	3	...	1	3	4	8	6	11.5	12.0	
5	3.7	6	...	...	...	...	2	6	8	...	...	...	...	...	(...)	1	4	5	(...)	(...)	...	...	6	...	7.5	3.6
6	...	...	...	4	...	...	...	...	...	(...)	(...)	...	...	...	...	...	...	...	4	(...)	(...)	...	...	...	0.4	0.2
7	...	...	...	...	...	...	2	4	1	(...)	(...)	1	2	(...)	...	...	...	...	4	(...)	(...)	...	...	...	1.4	2.6
8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	8	1	7	2	...	...	...	2.0	2.2
9	...	...	...	...	...	...	...	...	(...)	...	...	...	...	...	...	...	1	...	2	...	...	...	...	...	0.4	0.6
10	2	1	2	...	1	...	7	1	2.5	4	...	...	7	...	2	1	5	4	8	...	...	...	...	1	7.1	6.0
11	...	...	1	...	...	...	4	...	...	...	3	...	1	7	(...)	...	1	...	2	...	...	...	...	...	1.9	1.1
12	...	...	...	...	6	1.7	1.7	1.1	2.2	2.2	1.6	1.4	5	(...)	(...)	(...)	4	2	...	1	2	7	2.6	17.2	11.3	
13	2.7	3.0	3.2	1.4	1.0	(...)	(...)	(...)	(...)	(...)	(...)	(1)	(...)	(...)	(...)	...	...	...	...	...	...	...	...	...	11.4	4.9
14	...	...	...	2	1.8	1.6	3	4	(...)	(...)	(...)	(1)	(...)	(...)	2.6	2.0	1.9	4	...	8	(...)	...	1	5	13.1	8.9
15	...	...	...	...	...	...	(...)	(...)	(...)	(...)	(...)	(...)	(...)	(...)	...	5	6	9	8	2.4	7	9	8	7.6	7.6	
16	5	1.7	1	...	5	...	...	(...)	3.3	...	...	...	...	3	...	...	(...)	(1)	(...)	7	1	...	...	7.3	3.2	
17	1	1	...	...	5	2	2	...	...	1	...	...	...	1	(...)	(...)	(...)	(1)	(...)	(...)	(...)	(...)	(...)	5	1.9	1.2
18	...	...	...	...	(...)	(...)	...	...	...	...	...	(...)	...	1	...	...	...	...	...	1	1	...	...	...	0.4	0.7
19	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
20	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
21	...	...	...	...	(...)	(...)	(...)	2	1	...	...	(...)	(...)	1.4	4	4	2	2	1	...	...	...	...	...	3.0	4.6
22	p	p	p	p	(1)	p	p	p	...	...	...	...	...	...	...	...	...	...	...	...	...	...	p	p	0.1	...
23	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
24	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
25	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
26	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
27	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
28	5	...	6	...	...	...	...	...	...	...	...	...	...	...	...	...	9	1.6	3.0	1.2	3	...	...	...	8.1	5.2
29	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Sum.	11.1	6.4	5.7	2.7	4.5	5.0	5.9	5.2	6.8	6.8	2.7	1.9	1.8	3.3	4.6	2.8	3.6	3.4	5.3	5.4	6.5	3.7	6.2	8.3	119.6	86.1
Total Duration.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	
	4.9	4.5	3.4	2.7	2.7	2.6	4.5	5.3	3.5	2.8	2.4	1.9	2.0	1.1	2.9	2.6	4.2	3.9	4.6	4.5	5.1	4.3	4.5	5.2	86.1	
Hour G.M.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	0-24	



**390. Cahirciveen (Valentia Observatory) :**  $H_r$  (height of receiving surface above M.S.L.) =  $H$  (height of station above M.S.L.) +  $h_r$  (height of receiving surface above ground) = 9.1 metres + 0.5 metre. **March, 1928.**

**April, 1928.**

	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	hr.
1	...	...	...	...	...	...	...	...	...	(...)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	8·5
3	...	...	...	...	...	...	I·0	'3	...	...'3	'3	'4	'3	'9	I·0	'2	(...)	'2	'4	'4	'4	'2	'3	...	4·6 I·2
4	...	'I	...	...	I·0	(...)	(...)	'2	...	'3	'I	'2	'4	(...)	(...)	...	...	...	'2	...	...	...	...	...	2·5 I·5
5	'4	'I	...	'3	I·5	...	'9	'6	...	...	...	I·2	2·7	(...)	'I	'2	I·8	(...)	...	...	...	...	...	...	9·8 2·8
6	...	...	...	...	...	...	'4	'3	...	...	...	...	...	...	...	...	(...)	'2	...	...	...	...	-6	I·0	2·5 3·0
7	'4	'7	'4	'I	...	...	'2	'I	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	I·9 3·9
8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	'9	3·8	4·3	2·4	3·8	2·9	I·9	'I	...	20·1 7·0
9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	'I	I·9	'4	...	'I	'I	...	...	...	2·6 0·7
10	...	'4	'7	...	...	...	...	...	...	(...)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	I·I I·I
11	...	...	...	...	...	'3	'9	'7	'2	'2	I·2	'4	I·0	...	...	...	...	...	...	...	...	(P::)	(P::)	...	4·9 4·3
12	...	...	...	'2	...	...	...	'5	I·0	...	...	'7	3·4	2·8	3·3	I·0	I·0	I·I	'2	...	...	...	...	...	15·2 7·0
13	...	I·2	...	...	...	...	...	...	...	...	...	...	...	...	...	(...)	I·5	'7	I·6	I·3	'5	'4	'2	'I	7·5 7·5
14	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
15	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
16	...	...	...	(L)	(L)	(L)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
17	...	...	...	(L)	(L)	(L)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
18	...	...	...	(L)	(L)	(L)	...	...	...	...	...	...	...	...	...	(...)	...	...	...	...	...	...	...	...	...
19	...	...	...	(L)	(L)	(L)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
20	...	...	...	(L)	(L)	(L)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
21	...	(L)	(L)	(L)	(L)	(L)	(L)	...	...	...	...	...	...	...	...	...	...	(...)	(...)	(...)	I·2	I·I	I·6	I·5	5·4 4·0
22	'7	'6	'3	'5	'7	...	'3	...	...	(...)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3·I 5·5
23	...	...	...	...	...	...	(...)	...	...	(...)	'I	'5	I·0	'9	I·3	I·8	3·I	2·5	2·9	2·0	2·I	'6	...	...	18·8 10·4
24	...	...	...	...	...	...	(...)	4·2	I·4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5·6 0·9
25	...	...	...	...	...	...	(...)	4·2	I·4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
26	...	...	...	...	...	...	'2	...	...	(...)	...	...	...	...	...	'8	2·6	I·8	I·7	I·I	I·I	I·2	'8	'6	I·0 13·6 







*Amounts in millimetres for periods of sixty minutes between the exact hours, Greenwich Mean Time.*

**394. Cahirciveen (Valentia Observatory) :**  $H_r$  (height of receiving surface above M.S.L.) =  $H$  (height of station above M.S.L.) +  $h_r$  (height of receiving surface above ground) = 9.1 metres + 0.5 metre. **July, 1928.**

[illegible]

**395. Cahirciveen (Valentia Observatory) :**  $H_r = 9.1 \text{ metres} \pm 0.5 \text{ metre.}$

**August, 1928.**

[illegible]



*Amounts in millimetres for periods of sixty minutes between the exact hours, Greenwich Mean Time.*

396. **Cahirciveen (Valentia Observatory) :**  $H_r$  (height of receiving surface above M.S.L.) =  $H$  (height of station above M.S.L.) +  $h_r$  (height of receiving surface above ground) = 9.1 metres + 0.5 metre. **September, 1928.**

**September, 1928.**

[illegible]

**397. Cahirciveen (Valentia Observatory) :**  $H_r = 9.1 \text{ metres} \pm 0.5 \text{ metre.}$

**October, 1928.**

[illegible]







For periods of sixty minutes, between the exact hours of Local Apparent Time.

400. Cahirciveen (Valentia Observatory) :  $h_s$  (height of recorder above ground) = 12·8 metres.

January, 1928.

Hour. L.A.T.	3 to 4.	4 to 5.	5 to 6.	6 to 7.	7 to 8.	8 to 9.	9 to 10.	10 to 11.	11 to Noon	Noon to 13.	13 to 14.	14 to 15.	15 to 16.	16 to 17.	17 to 18.	18 to 19.	19 to 20.	20 to 21.	Total for Day.	Per cent. of Possible.
Day.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	%
1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2	—	—	—	—	—	—	·5	·8	·6	·5	·5	·1	—	—	—	—	—	—	3·0	39
3	—	—	—	—	—	—	·3	1·0	1·0	1·0	1·0	·6	—	—	—	—	—	—	4·9	63
4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
6	—	—	—	—	—	—	—	—	·2	—	—	—	—	—	—	—	—	—	0·2	3
7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
8	—	—	—	—	—	—	—	·2	—	·2	—	—	—	—	—	—	—	—	0·4	5
9	—	—	—	—	—	—	·8	·5	·3	·9	1·0	·4	—	—	—	—	—	—	3·9	49
10	—	—	—	—	—	—	·3	·3	·3	·5	·7	·5	—	—	—	—	—	—	2·6	32
11	—	—	—	—	—	—	·9	1·0	·9	·9	·8	—	—	—	—	—	—	—	4·5	56
12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
13	—	—	—	—	—	—	·2	·5	·4	·8	·8	·9	·3	—	—	—	—	—	3·9	48
14	—	—	—	—	—	—	·4	1·0	·9	·7	·6	·7	·2	—	—	—	—	—	4·5	55
15	—	—	—	—	—	—	—	—	—	—	·1	—	—	—	—	—	—	—	0·1	1
16	—	—	—	—	—	—	—	·7	·2	—	—	—	—	—	—	—	—	—	0·9	11
17	—	—	—	—	—	—	·6	—	—	—	—	—	—	—	—	—	—	—	0·6	7
18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
19	—	—	—	—	—	—	·1	·3	·9	·9	·4	—	—	—	—	—	—	—	2·6	31
20	—	—	—	—	—	—	·2	1·0	·9	·7	·2	·8	—	—	—	—	—	—	3·8	45
21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
22	—	—	—	—	—	·1	·4	1·0	1·0	·8	·1	·1	—	—	—	—	—	—	3·5	41
23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
24	—	—	—	—	—	—	·1	·3	·3	·6	·5	·3	—	—	—	—	—	—	2·1	24
25	—	—	—	—	—	—	—	—	—	—	—	·2	·2	—	—	—	—	—	0·4	5
26	—	—	—	—	—	—	—	·1	·9	·1	—	—	—	—	—	—	—	—	1·1	13
27	—	—	—	—	—	—	·1	·3	·3	·5	·7	—	—	—	—	—	—	—	1·9	22
28	—	—	—	—	—	—	·4	·3	·7	1·0	1·0	·7	·2	—	—	—	—	—	4·3	49
29	—	—	—	—	—	—	·1	·3	·8	·9	·7	·6	·1	—	—	—	—	—	3·5	40
30	—	—	—	—	—	·2	—	—	·1	·5	·3	·4	—	—	—	—	—	—	1·5	17
31	—	—	—	—	—	—	—	—	—	—	·1	·1	—	—	—	—	—	—	0·2	2
Sum.	—	—	—	—	—	0·3	5·4	9·6	10·7	11·5	9·5	6·4	1·0	—	—	—	—	—	54·4	—
Mean	—	—	—	—	—	·01	·17	·31	·35	·37	·31	·21	·03	—	—	—	—	—	1·75	21

401. Cahirciveen (Valentia Observatory) :  $h_s$  = 12·8 metres.

February, 1928.

hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	%
1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
4	—	—	—	—	—	—	—	(·3)*	(·3)*	(·1)*	(·5)*	(·2)*	—	—	—	—	—	—	(1·4)*	(15)*
5	—	—	—	—	—	·5	·7	1·0	1·0	1·0	·7	·4	·2	—	—	—	—	—	5·5	59
6	—	—	—	—	—	·5	1·0	1·0	·6	1·0	1·0	1·0	·1	—	—	—	—	—	6·2	67
7	—	—	—	—	—	—	—	—	—	—	—	·2	·1	—	—	—	—	—	0·3	3
8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10	—	—	—	—	—	—	—	·1	·3	·4	·3	·1	—	—	—	—	—	—	1·2	13
11	—	—	—	—	—	—	—	·5	·4	·4	·4	·7	·1	—	—	—	—	—	2·5	26
12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
13	—	—	—	—	—	—	—	·1	·3	·2	1·0	·1	·1	—	—	—	—	—	1·8	19
14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
16	—	—	—	—	—	·1	·4	·7	·8	1·0	·8	·8	·3	—	—	—	—	—	4·9	49
17	—	—	—	—	—	·2	·8	·8	·6	·7	·5	·3	·4	—	—	—	—	—	4·3	43
18	—	—	—	—	—	—	·1	·2	·7	·8	1·0	·8	·3	—	—	—	—	—	3·9	39
19	—	—	—	—	—	—	·1	·1	—	—	—	—	—	—	—	—	—	—	0·2	2
20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
22	—	—	—	—	·1	1·0	1·0	1·0	1·0	1·0	1·0	1·0	·8	·5	—	—	—	—	8·4	82
23	—	—	—	—	—	·7	·9	·7	·7	—	—	—	—	—	—	—	—	—	3·0	29
24	—	—	—	—	—	·1	·4	—	—	—	—	—	—	—	—	—	—	—	0·5	5
25	—	—	—	—	—	—	·1	—	—	—	—	—	—	—	—	—	—	—	0·1	1
26	—	—	—	—	·2	1·0	·8	·9	1·0	1·0	·9	·2	—	—	—	—	—	—	6·0	57
27	—	—	—	—	·2	1·0	·2	·4	·2	·5	·8	—	·2	—	—	—	—	—	3·5	33
28	—	—	—	—	—	·4	1·0	·5	—	—	—	—	—	—	—	—	—	—	1·9	18
29	—	—	—	—	·2	1·0	1·0	1·0	1·0	1·0	1·0	1·0	1·0	1·0	—	—	—	—	9·2	86
Sum.	—	—	—	—	0·7	6·5	8·5	9·3	8·9	9·1	9·9	6·8	3·6	1·5	—	—	—	—	64·8	—
Mean	—	—	—	—	·02	·22	·29	·32	·31	·31	·34	·23	·12	·05	—	—	—	—	2·23	23
Hour. L.A.T.	3 to 4.	4 to 5.	5 to 6.	6 to 7.	7 to 8.	8 to 9.	9 to 10.	10 to 11.	11 to Noon	Noon to 13.	13 to 14.	14 to 15.	15 to 16.	16 to 17.	17 to 18.	18 to 19.	19 to 20.	20 to 21.	Total for Day.	Per cent. of Possible.

\* Record lost owing to sphere having been displaced.



For periods of sixty minutes, between the exact hours of Local Apparent Time.

402. Cahirciveen (Valentia Observatory) :  $h_s$  (height of recorder above ground) = 12·8 metres.

March, 1928.

Hour. L.A.T.	3 to 4.	4 to 5.	5 to 6.	6 to 7.	7 to 8.	8 to 9.	9 to 10.	10 to 11.	11 to Noon	Noon to 13.	13 to 14.	14 to 15.	15 to 16.	16 to 17.	17 to 18.	18 to 19.	19 to 20.	20 to 21.	Total for Day.	Per cent. of Possible.
Day.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	%
1	—	—	—	...	...	5	...	7	1·0	1·0	1·0	1·0	1·0	9	...	—	—	—	7·1	66
2	—	—	—	...	4	1·0	1·0	1·0	1·0	1·0	1·0	1·0	1·0	1·0	1	—	—	—	9·5	88
3	—	—	—	...	...	2	1·0	7	1·0	1·0	1·0	1	1	...	—	—	—	—	5·1	47
4	—	—	—	...	4	1·0	1·0	1·0	1·0	5	4	1·0	1·0	1·0	1	—	—	—	8·4	76
5	—	—	—	...	...	...	...	...	3	1·0	9	3	4	5	...	—	—	—	3·4	31
6	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	—	—	—	...	...
7	—	—	—	...	...	...	...	...	1	1	...	...	...	...	...	—	—	—	0·2	2
8	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	—	—	—	...	...
9	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	—	—	—	...	...
10	—	—	—	...	5	1·0	1·0	9	5	1	...	5	6	...	...	—	—	—	5·1	45
11	—	—	—	...	...	1	...	1	1·0	1·0	1·0	1·0	1·0	1·0	1	—	—	—	6·3	55
12	—	—	—	...	5	1·0	1·0	1·0	1·0	1·0	1·0	7	3	1	...	—	—	—	7·6	66
13	—	—	—	...	3	8	1·0	1·0	1·0	1·0	1·0	3	...	...	...	—	—	—	7·4	64
14	—	—	—	...	...	...	...	...	...	1	...	...	...	1	...	—	—	—	0·2	2
15	—	—	—	...	...	5	8	9	7	...	...	...	...	...	...	—	—	—	2·9	25
16	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	—	—	—	...	...
17	—	—	—	...	...	...	...	...	...	...	...	...	...	2	...	—	—	—	0·2	2
18	—	—	—	...	...	1	2	8	1·0	7	3	...	...	...	...	—	—	—	3·1	26
19	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	—	—	—	...	...
20	—	—	—	...	...	...	...	...	...	...	...	...	1	...	...	—	—	—	0·1	1
21	—	—	...	...	...	...	...	...	3	1·0	1·0	9	6	1·0	6	...	—	—	5·4	45
22	—	—	...	1	1·0	4	7	8	2	...	...	...	...	...	...	—	—	—	3·2	26
23	—	—	...	...	1	...	1	1	...	...	...	...	...	...	...	—	—	—	0·3	3
24	—	—	...	...	...	...	...	2	7	1	3	6	...	...	2	...	—	—	2·1	17
25	—	—	...	...	5	7	8	1·0	9	1·0	1·0	1·0	5	4	3	...	—	—	8·1	65
26	—	—	...	...	...	1	...	...	...	...	...	...	...	...	...	—	—	—	0·1	1
27	—	—	...	...	...	5	8	2	2	7	5	5	6	9	2	...	—	—	5·1	41
28	—	—	...	...	3	3	3	4	9	7	4	5	...	...	...	—	—	—	3·8	30
29	—	—	...	...	...	...	...	...	...	...	...	1	9	4	1	...	—	—	1·5	12
30	—	—	...	1	6	5	4	4	...	...	...	...	...	...	...	—	—	—	2·0	16
31	—	—	...	...	...	1	3	9	1·0	9	1·0	6	1·0	5	3	...	—	—	6·6	52
Sum.	—	—	...	0·2	4·6	8·8	10·4	12·1	13·8	12·9	11·8	10·8	9·4	8·0	2·0	...	—	—	104·8	—
Mean	—	—	...	01	15	28	34	39	45	42	38	35	30	26	06	...	—	—	3·38	28

403. Cahirciveen (Valentia Observatory) :  $h_s$  = 12·8 metres.

April, 1928.

	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	%
1	—	—	...	1	1·0	1·0	3	7	9	3	8	1·0	...	...	...	...	—	—	6·1	47
2	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	—	—	...	...
3	—	—	...	...	...	2	4	3	8	8	1·0	6	7	4	2	4	—	—	5·8	45
4	—	—	...	3	6	5	1	8	5	7	1·0	8	6	1·0	4	1	—	—	7·4	57
5	—	—	...	...	6	6	3	1	...	5	...	1	3	5	3	1	—	—	3·4	26
6	—	—	...	...	9	8	8	8	4	4	...	...	...	...	...	...	—	—	4·1	31
7	—	—	...	...	...	...	...	...	...	...	...	...	2	8	...	...	—	—	1·0	8
8	—	—	...	1	...	...	...	2	1	...	...	...	...	...	...	...	—	—	0·4	3
9	—	—	...	1	6	1·0	9	9	2	2	3	2	1	5	5	...	—	—	5·5	41
10	—	—	...	...	...	1	1	1	6	6	9	1·0	1·0	1	2	...	—	—	4·7	35
11	—	—	...	...	...	...	...	...	...	...	2	...	6	6	...	...	—	—	1·4	10
12	—	—	...	...	...	5	8	1	6	4	4	8	6	7	4	3	—	—	5·6	41
13	—	—	...	...	...	...	...	...	...	...	...	1	...	...	2	1	—	—	0·4	3
14	—	—	...	3	9	2	...	...	...	...	...	...	...	...	...	...	—	—	1·4	10
15	—	—	...	...	...	...	...	9	9	3	5	4	1·0	4	...	...	—	—	4·4	32
16	—	—	...	...	3	8	3	7	5	7	7	3	6	1	3	...	—	—	5·3	38
17	—	—	...	3	1·0	1·0	1·0	3	8	6	1·0	1·0	1·0	6	1·0	6	—	—	11·2	80
18	—	—	...	...	1	1	...	2	4	2	2	...	2	9	8	4	—	—	3·5	25
19	—	—	...	4	1·0	1·0	1·0	1·0	1·0	1·0	7	1·0	8	5	4	...	—	—	10·8	77
20	—	—	...	5	1·0	1·0	1·0	9	9	1·0	4	...	8	1·0	8	3	2	...	9·8	70
21	—	—	...	5	1·0	1·0	1·0	1·0	6	7	9	7	7	1·0	1·0	8	...	—	11·9	84
22	—	—	...	...	3	8	3	...	5	...	1	1	...	...	...	...	—	—	2·1	15
23	—	—	...	...	...	...	...	...	...	1	2	1	...	...	...	...	—	—	0·4	3
24	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	—	—	...	...
25	—	—	...	...	4	1·0	1·0	1·0	9	5	7	1·0	4	...	...	...	—	—	6·9	48
26	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	—	—	...	...
27	—	—	...	...	...	...	...	...	...	...	5	2	5	8	1·0	7	...	—	3·7	25
28	—	—	...	7	7	1·0	9	1·0	1·0	1·0	1·0	1·0	1·0	1·0	4	...	—	—	11·7	80
29	—	—	...	...	...	...	...	...	...	2	1	...	1·0	9	9	1	...	—	3·2	22
30	—	—	...	...	...	...	1	...	...	...	...	...	...	...	...	...	—	—	0·1	1
Sum.	—	—	...	1·7	5·9	10·9	12·1	9·9	11·5	11·2	9·7	11·2	11·1	12·3	11·6	8·9	4·2	...	132·2	—
Mean	—	—	...	06	20	36	40	33	38	37	32	37	37	41	39	30	14	...	4·41	32
Hour. L.A.T.	3 to 4.	4 to 5.	5 to 6.	6 to 7.	7 to 8.	8 to 9.	9 to 10.	10 to 11.	11 to Noon	Noon to 13.	13 to 14.	14 to 15.	15 to 16.	16 to 17.	17 to 18.	18 to 19.	19 to 20.	20 to 21.	Total for Day.	Per cent. of Possible.



For periods of sixty minutes, between the exact hours of Local Apparent Time.

404. Cahirciveen (Valentia Observatory) :  $h_s$  (height of recorder above ground) = 12·8 metres.

May, 1928.

Hour. L.A.T.	3 to 4.	4 to 5.	5 to 6.	6 to 7.	7 to 8.	8 to 9.	9 to 10.	10 to 11.	11 to Noon	Noon to 13.	13 to 14.	14 to 15.	15 to 16.	16 to 17.	17 to 18.	18 to 19.	19 to 20.	20 to 21.	Total for Day.	Per cent. of Possible.
Day.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	%
1	—	...	·5	1·0	1·0	·7	·7	·9	1·0	·9	·2	·4	·6	·5	...	...	...	—	8·4	57
2	—	...	·1	·7	...	1·0	1·0	1·0	1·0	1·0	1·0	1·0	·9	1·0	·8	·4	...	—	11·7	79
3	—	...	...	...	...	...	...	·1	·1	...	...	...	·2	·6	...	...	...	—	1·0	7
4	—	...	...	...	...	...	...	·4	·8	1·0	1·0	1·0	·2	·2	...	...	...	—	4·6	31
5	—	...	...	...	·9	1·0	1·0	1·0	1·0	1·0	1·0	·7	·4	·9	·8	...	...	—	10·7	71
6	—	...	·3	1·0	1·0	1·0	1·0	1·0	1·0	1·0	1·0	1·0	1·0	1·0	1·0	·5	...	—	12·8	85
7	—	...	·3	·6	·7	1·0	1·0	1·0	1·0	1·0	1·0	1·0	1·0	1·0	·8	1·0	·2	—	12·6	83
8	—	...	·7	1·0	1·0	1·0	1·0	1·0	1·0	1·0	1·0	1·0	1·0	1·0	1·0	1·0	·2	—	13·9	91
9	—	...	...	...	...	...	...	...	...	...	...	...	...	...	·7	1·0	·2	—	1·9	12
10	—	...	·8	1·0	1·0	1·0	1·0	1·0	1·0	1·0	1·0	·8	·7	·6	·1	...	...	—	11·0	72
11	—	·1	·6	1·0	1·0	1·0	·9	·8	·7	·2	·1	...	·8	·9	1·0	1·0	...	—	10·1	66
12	—	...	...	...	...	...	...	...	·1	...	...	...	·4	...	...	...	...	—	0·5	3
13	—	...	...	...	...	...	...	...	...	...	...	...	...	...	·1	...	...	—	0·1	1
14	—	...	·4	·5	·6	·4	·7	·4	·8	1·0	1·0	1·0	1·0	1·0	·3	·2	...	—	9·3	60
15	—	...	...	...	·2	...	...	...	·1	...	...	...	...	...	...	...	...	—	0·3	2
16	—	...	·1	·9	·9	·3	·9	1·0	·8	·5	·9	·9	1·0	·8	·8	·1	...	—	9·9	63
17	—	...	...	·3	·7	·2	·2	...	·7	·9	1·0	·8	·7	·7	·4	·3	...	—	6·9	44
18	—	...	...	·2	·2	·8	·9	·8	·8	·3	·3	·1	·1	·1	·1	...	...	—	4·7	30
19	—	...	·2	...	...	...	·2	·5	·4	·7	·2	·2	...	...	1·0	·3	...	—	3·7	23
20	—	...	·6	·6	·1	·2	·8	1·0	·7	·7	·9	1·0	1·0	1·0	1·0	1·0	·4	—	11·0	69
21	—	...	...	...	...	...	·4	·7	·7	·9	·9	·8	·9	·9	1·0	·2	·1	—	7·5	47
22	—	·3	1·0	·6	1·0	·7	·9	1·0	1·0	1·0	1·0	1·0	·9	1·0	·4	·9	·3	—	13·0	82
23	—	...	...	...	...	...	...	...	...	...	·9	1·0	1·0	·6	...	·5	·2	—	4·2	26
24	—	...	...	...	...	...	·1	·2	·1	·8	·9	·1	·2	·4	1·0	·9	...	—	4·7	29
25	—	...	...	...	...	...	·3	...	...	...	...	...	...	...	...	...	...	—	0·3	2
26	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	—	...	...
27	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	—	...	...
28	...	...	...	...	...	...	·6	1·0	1·0	1·0	1·0	1·0	1·0	1·0	1·0	1·0	·7	...	10·3	64
29	...	·5	1·0	1·0	1·0	1·0	1·0	1·0	1·0	1·0	1·0	1·0	1·0	1·0	1·0	1·0	·6	...	15·1	93
30	...	·7	1·0	1·0	1·0	1·0	1·0	1·0	1·0	1·0	1·0	1·0	1·0	1·0	·4	...	...	...	13·1	81
31	...	...	...	...	...	...	...	·3	·1	...	...	...	·2	·4	...	...	...	...	1·0	6
Sum.	...	1·6	7·6	12·3	13·2	12·3	15·6	17·1	17·9	17·9	18·8	16·8	17·2	17·6	14·7	11·3	2·9	...	214·3	—
Mean.	...	·05	·25	·40	·43	·40	·50	·55	·58	·58	·59	·54	·55	·57	·47	·36	·09	...	6·91	44

405. Cahirciveen (Valentia Observatory) :  $h_s$  = 12·8 metres.

June, 1928.

hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	%
1	...	...	...	...	...	...	...	...	·1	...	...	...	...	·1	...	...	...	...	0·2	1
2	...	...	·5	1·0	1·0	1·0	1·0	·9	...	·5	1·0	·9	1·0	1·0	1·0	·9	...	...	11·7	72
3	...	·5	1·0	1·0	1·0	1·0	1·0	1·0	1·0	1·0	1·0	1·0	·7	·9	·7	·5	·1	...	13·4	82
4	...	·1	...	·1	·5	1·0	·6	1·0	·9	·3	...	·1	·1	...	...	·5	·4	...	5·6	34
5	...	...	·1	·8	·9	·4	...	·1	·9	·7	·9	·9	·3	·2	·4	...	...	...	7·2	44
6	...	...	·5	·1	...	·2	·5	·3	·9	·3	·4	·3	·2	·7	·4	...	...	...	4·8	29
7	...	...	...	·1	...	...	...	·1	...	...	·8	·5	·1	·4	...	...	...	...	2·0	12
8	...	...	·1	...	·1	·4	·8	1·0	1·0	1·0	·3	...	...	...	...	...	...	...	4·7	29
9	...	...	...	...	·5	·7	·8	·6	·2	·1	·1	·5	·6	·3	·6	·2	...	...	5·2	32
10	...	·1	·2	·7	·8	·9	·8	·9	1·0	1·0	1·0	1·0	1·0	·8	·9	·8	·1	...	11·7	71
11	...	·6	·3	1·0	·9	·4	·7	1·0	1·0	·6	1·0	1·0	·8	·9	1·0	1·0	·9	...	13·1	79
12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
13	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
14	...	...	...	...	...	...	...	...	·4	·9	1·0	·4	·5	·5	·8	·6	·4	...	5·5	33
15	...	...	·4	·3	·7	1·0	1·0	1·0	1·0	·7	1·0	1·0	·8	1·0	1·0	·1	...	...	11·0	66
16	...	·8	1·0	1·0	1·0	1·0	1·0	1·0	1·0	1·0	1·0	1·0	1·0	1·0	1·0	1·0	·7	...	15·5	93
17	...	...	...	...	...	...	...	...	...	...	...	·6	1·0	·7	·5	·2	...	...	3·0	18
18	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
19	...	...	...	...	...	·2	·6	·8	·4	·2	·2	·2	·1	...	·4	...	...	...	3·1	19
20	...	·6	·7	1·0	1·0	1·0	1·0	·5	·5	·4	...	...	...	...	...	...	...	...	6·7	40
21	...	...	...	...	...	...	...	...	...	·1	...	·8	1·0	1·0	·6	·2	...	...	3·7	22
22	...	...	...	...	·1	·5	·9	·8	·7	1·0	·5	·5	1·0	·8	1·0	·9	·3	...	9·0	54
23	...	...	·2	·2	·2	·2	...	...	...	·4	1·0	1·0	1·0	1·0	1·0	1·0	·5	...	7·7	46
24	...	...	·1	·1	·8	·2	...	...	...	...	...	...	...	...	...	...	...	...	1·4	8
25	...	...	...	...	...	...	·2	·6	...	...	...	...	·2	...	...	...	...	...	1·0	6
26	...	...	...	...	·3	...	...	·4	·1	·2	·2	·7	·7	1·0	·4	...	...	...	4·0	24
27	...	...	·1	·4	·7	·9	·9	1·0	·3	...	·3	...	·2	·3	·8	...	...	...	5·9	35
28	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
29	...	...	...	·1	·3	...	...	...	...	·2	1·0	1·0	·8	·7	·9	·8	...	...	5·8	35
30	...	·2	·6	·6	·6	·4	·9	·6	·8	·7	·9	·4	...	...	...	·1	...	...	6·8	41
Sum.	...	2·9	5·8	8·5	11·4	11·2	13·0	13·9	12·5	11·5	13·0	13·9	13·4	13·6	13·1	9·0	3·0	...	169·7	—
Mean.	...	·10	·19	·28	·38	·37	·43	·46	·42	·38	·43	·46	·45	·45	·44	·30	·10	...	5·66	34
Hour. L.A.T.	3 to 4.	4 to 5.	5 to 6.	6 to 7.	7 to 8.	8 to 9.	9 to 10.	10 to 11.	11 to Noon	Noon to 13.	13 to 14.	14 to 15.	15 to 16.	16 to 17.	17 to 18.	18 to 19.	19 to 20.	20 to 21.	Total for Day.	Per cent. of Possible.



For periods of sixty minutes, between the exact hours of Local Apparent Time.

406. Cahirciveen (Valentia Observatory) :  $h_s$  (height of recorder above ground) = 12.8 metres. July, 1928.

Hour. L.A.T.	3 to 4.	4 to 5.	5 to 6.	6 to 7.	7 to 8.	8 to 9.	9 to 10.	10 to 11.	11 to Noon	Noon to 13.	13 to 14.	14 to 15.	15 to 16.	16 to 17.	17 to 18.	18 to 19.	19 to 20.	20 to 21.	Total for Day.	Percent. of Possible.
Day.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	%
1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.3	2
2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	13.2	80
3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	12.0	72
4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4.0	24
6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3.2	19
7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2.1	13
8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4.1	25
9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6.6	40
10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
11	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4.0	25
13	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.5	3
14	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	9.2	57
15	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.9	6
16	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	15.4	95
17	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	14.6	90
18	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6.8	42
19	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	8.2	51
20	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	11.0	69
21	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	13.5	84
22	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
23	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
24	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
25	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.1	1
26	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
27	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1.7	7
28	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	8.5	54
29	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	7.2	46
30	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1.1	7
31	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.2	1
Sum.	...	0.9	4.6	6.7	7.0	8.8	11.1	11.0	10.9	11.0	11.5	12.5	11.8	14.0	12.9	10.4	3.3	...	148.4	—
Mean.	...	.03	.15	.22	.23	.28	.36	.35	.35	.35	.37	.40	.38	.45	.42	.34	.11	...	4.79	30

407. Cahirciveen (Valentia Observatory) :  $h_s$  = 12.8 metres.

August, 1928.

hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	%
1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	14.8
2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	31
3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	74
4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	89
5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	38
6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	46
8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	68
9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	23
10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	11
11	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	15
12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	32
13	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	14
14	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	44
15	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	35
16	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	44
17	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	29
18	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	19
19	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	37
20	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	66
21	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	24
22	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	12
23	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	38
24	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	45
25	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	30
26	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	30
27	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	75
28	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	70
29	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	89
30	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	48
31	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	71
Sum.	...	0.6	4.5	9.6	10.8	13.5	15.6	16.0	16.3	18.2	18.1	18.7	17.8	14.8	13.7	6.5	0.3	...	195.0	—
Mean.	...	.02	.14	.31	.35	.44	.50	.52	.53	.59	.58	.60	.57	.48	.44	.21	.01	...	6.29	43
Hour. L.A.T.	3 to 4.	4 to 5.	5 to 6.	6 to 7.	7 to 8.	8 to 9.	9 to 10.	10 to 11.	11 to Noon	Noon to 13.	13 to 14.	14 to 15.	15 to 16.	16 to 17.	17 to 18.	18 to 19.	19 to 20.	20 to 21.	Total for Day.	Percent. of Possible.



For periods of sixty minutes, between the exact hours of Local Apparent Time.

408. Cahirciveen (Valentia Observatory) :  $h_s$  (height of recorder above ground) = 12.8 metres. September, 1928.

Hour. L.A.T.	3 to 4.	4 to 5.	5 to 6.	6 to 7.	7 to 8.	8 to 9.	9 to 10.	10 to 11.	11 to Noon	Noon to 13.	13 to 14.	14 to 15.	15 to 16.	16 to 17.	17 to 18.	18 to 19.	19 to 20.	20 to 21.	Total for Day.	Per cent. of Possible.
Day.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	%
1	—	—	...	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	.6	.9	.8	.2	—	—	11.5	85
2	—	—	...	.8	1.0	.9	...	.1	.6	.1	...	...	...	...	...	...	—	—	3.5	26
3	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	—	—	...	...
4	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	—	—	...	...
5	—	—	...	...	...	...	...	...	...	.3	.8	1.0	1.0	1.0	.9	.1	—	—	5.1	38
6	—	—	...	.7	.1	...	.2	.6	1.0	.3	.2	...	...	...	...	...	—	—	3.1	23
7	—	—	...	...	...	...	...	...	...	...	...	...	...	.8	.8	...	—	—	1.6	12
8	—	—	...	...	.1	.9	.3	...	...	.2	...	...	...	...	...	...	—	—	1.5	11
9	—	—	...	.4	.8	...	.4	.9	1.0	1.0	1.0	1.0	.1	...	...	...	—	—	6.6	50
10	—	—	...	...	...	...	...	...	...	.2	.3	.8	.5	.5	...	...	—	—	2.3	18
11	—	—	...	.1	.6	...	...	.2	.8	1.0	1.0	.4	.6	.9	.5	...	—	—	6.1	47
12	—	—	...	...	...	...	.1	.8	.1	.1	.1	.8	.9	.5	...	...	—	—	3.4	26
13	—	—	...	.2	.1	.2	...	...	...	.2	.1	.4	...	...	...	...	—	—	1.2	9
14	—	—	...	...	...	...	...	.3	.7	.3	.3	1.0	1.0	1.0	.8	...	—	—	5.4	42
15	—	—	...	...	.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	.8	...	—	—	10.3	81
16	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	—	—	...	...
17	—	—	...	...	...	...	...	...	...	...	.1	.2	...	...	...	...	—	—	0.3	2
18	—	—	...	.1	.5	.8	.9	.5	.8	1.0	1.0	1.0	1.0	1.0	.3	...	—	—	8.9	71
19	—	—	...	.3	.1	.9	.4	.2	.4	.6	.3	...	...	.6	.1	...	—	—	3.9	31
20	—	—	...	...	...	...	...	.5	.4	.1	...	...	...	...	...	...	—	—	1.0	8
21	—	—	...	...	...	...	.3	.3	.6	.6	...	.1	.1	.5	.1	...	—	—	2.6	21
22	—	—	...	.2	1.0	1.0	1.0	1.0	1.0	.8	.8	.9	.2	...	...	...	—	—	7.9	65
23	—	—	...	.1	1.0	1.0	1.0	1.0	1.0	.0	.9	.6	.2	...	...	...	—	—	7.8	64
24	—	—	...	...	.7	1.0	1.0	1.0	1.0	1.0	1.0	.6	.9	.9	.2	...	—	—	9.3	77
25	—	—	...	...	.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	.9	.8	.5	...	—	—	10.1	84
26	—	—	...	...	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	.4	...	—	—	10.4	87
27	—	—	...	...	.1	.9	.7	.6	.5	...	...	...	...	...	...	...	—	—	2.8	24
28	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	—	—	...	...
29	—	—	...	...	...	.2	.2	...	...	...	...	...	...	...	...	...	—	—	4.7	40
30	—	—	...	...	.8	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	.3	...	—	—	10.1	87
Sum.	—	—	...	3.9	10.3	12.8	11.5	13.8	14.9	13.8	13.4	14.8	12.0	13.1	6.8	0.3	—	—	141.4	—
Mean.	—	—	...	.13	.34	.43	.38	.46	.50	.46	.45	.49	.40	.44	.23	.01	—	—	4.71	37

409. Cahirciveen (Valentia Observatory) :  $h_s$  = 12.8 metres.

October, 1928.

	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	%
1	—	—	...	...	.7	1.0	1.0	1.0	1.0	.4	.8	.9	1.0	1.0	.1	...	...	...	8.9	77
2	—	—	...	...	.1	.8	1.0	1.0	1.0	1.0	.9	1.0	.5	.2	...	...	...	...	7.5	65
3	—	—	...	...	.6	1.0	1.0	1.0	1.0	1.0	1.0	1.0	.9	.9	...	...	...	...	9.5	83
4	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5	—	—	...	...	...	.1	...	.5	.7	.5	...	.5	.3	.2	...	...	...	...	2.8	25
6	—	—	...	...	...	...	.4	.8	.8	.9	.7	...	...	...	...	...	...	...	3.6	32
7	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8	—	—	...	...	...	.4	.9	.7	.2	.2	...	...	...	...	...	...	...	...	2.4	21
9	—	—	...	...	...	...	...	...	...	.1	...	...	.1	...	...	...	...	...	0.2	2
10	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
11	—	—	...	...	.2	.5	.7	.2	...	.3	.9	.2	.1	...	...	...	...	...	3.1	28
12	—	—	...	...	...	...	.1	.4	.7	1.0	1.0	.6	.7	.7	...	...	...	...	5.2	48
13	—	—	...	...	.3	.4	1.0	.9	1.0	1.0	.9	.7	.4	...	...	...	...	...	6.6	61
14	—	—	...	...	...	...	...	...	.3	.8	.1	.4	.4	.4	...	...	...	...	2.4	22
15	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
16	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
17	—	—	...	...	...	...	.1	...	.3	.8	1.0	1.0	.2	...	...	...	...	...	3.4	32
18	—	—	...	...	...	...	...	.4	.8	.4	.6	.7	.5	.1	...	...	...	...	3.5	33
19	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
20	—	—	...	...	(.1)*	(.2)*	(.3)*	(.2)*	(.3)*	(.3)*	(.3)*	(.3)*	(.3)*	(.2)*	...	...	...	...	(2.5)*	(24)
21	—	—	...	...	...	.5	.3	.2	.7	...	...	...	...	...	...	...	...	...	1.7	17
22	—	—	...	...	...	1.0	.7	1.0	.9	1.0	1.0	.8	1.0	.5	...	...	...	...	7.9	77
23	—	—	...	...	...	...	...	.9	1.0	.5	.1	.5	.1	...	...	...	...	...	3.1	31
24	—	—	...	...	...	.3	...	...	.8	.6	.4	...	.4	...	...	...	...	...	2.5	25
25	—	—	...	...	...	.5	.6	.8	.9	1.0	.9	.5	...	...	...	...	...	...	5.2	52
26	—	—	...	...	...	.1	.3	.3	.1	.1	.5	.3	...	...	...	...	...	...	1.7	17
27	—	—	...	...	...	...	...	...	.3	1.0	.6	.7	.8	...	...	...	...	...	3.4	34
28	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
29	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
30	—	—	...	...	...	...	.3	.3	.2	.4	.7	...	...	...	...	...	...	...	1.9	19
31	—	—	...	...	...	...	.3	.5	.5	.2	.7	.4	.2	...	...	...	...	...	2.8	29
Sum.	—	—	...	...	2.0	6.8	9.0	11.1	13.5	13.5	13.1	10.5	8.0	4.2	0.1	—	—	—	91.8	28
Mean.	—	—	...	...	.06	.22	.29	.36	.44	.44	.42	.34	.26	.14	.00	—	—	—	2.96	28
Hour. L.A.T.	3 to 4.	4 to 5.	5 to 6.	6 to 7.	7 to 8.	8 to 9.	9 to 10.	10 to 11.	11 to Noon	Noon to 13.	13 to 14.	14 to 15.	15 to 16.	16 to 17.	17 to 18.	18 to 19.	19 to 20.	20 to 21.	Total for Day.	Per cent. of Possible.

\* Record lost owing to sphere having been blown out of position.



For periods of sixty minutes, between the exact hours of Local Apparent Time.

410. Cahirciveen (Valentia Observatory):  $h_s$  (height of recorder above ground) = 12.8 metres. November, 1928.

Hour. L.A.T.	3 to 4.	4 to 5.	5 to 6.	6 to 7.	7 to 8.	8 to 9.	9 to 10.	10 to 11.	11 to Noon	Noon to 13.	13 to 14.	14 to 15.	15 to 16.	16 to 17.	17 to 18.	18 to 19.	19 to 20.	20 to 21.	Total for Day.	Per cent. of Possible.
Day.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	%
1	—	—	—	—	...	.8	1.0	1.0	1.0	1.0	1.0	1.0	1.0	.4	—	—	—	—	8.2	85
2	—	—	—	—	...	.8	1.0	1.0	.8	...	...	...	...	...	—	—	—	—	3.6	38
3	—	—	—	—	...	...	.7	1.0	1.0	.3	.9	1.0	1.0	.3	—	—	—	—	6.2	65
4	—	—	—	—	...	...	...	...	.5	1.0	.9	.7	.9	.3	—	—	—	—	4.3	46
5	—	—	—	—	...	.5	1.0	.9	.5	...	...	...	...	...	—	—	—	—	2.9	31
6	—	—	—	—	...	...	...	...	...	...	...	...	...	...	—	—	—	—	...	...
7	—	—	—	—	...	.2	1.0	.6	.4	.2	.7	.2	.2	...	—	—	—	—	3.5	38
8	—	—	—	—	...	.5	1.0	1.0	1.0	1.0	1.0	1.0	.9	...	—	—	—	—	7.4	80
9	—	—	—	—	...	.5	.8	.2	.3	...	.1	...	...	...	—	—	—	—	1.9	21
10	—	—	—	—	...	...	...	...	...	...	...	...	...	...	—	—	—	—	...	...
11	—	—	—	—	...	...	...	...	...	...	...	...	...	...	—	—	—	—	...	...
12	—	—	—	—	...	...	...	...	...	...	.1	...	...	...	—	—	—	—	0.1	1
13	—	—	—	—	...	.2	1.0	.8	1.0	.8	.9	1.0	.5	...	—	—	—	—	6.2	70
14	—	—	—	—	...	...	...	...	...	...	...	...	...	...	—	—	—	—	...	...
15	—	—	—	—	...	...	.1	.6	.7	.5	...	...	...	...	—	—	—	—	1.9	22
16	—	—	—	—	...	...	...	...	...	...	...	...	...	...	—	—	—	—	...	...
17	—	—	—	—	...	...	.8	.7	.8	1.0	.8	.4	.4	...	—	—	—	—	4.9	56
18	—	—	—	—	...	...	...	...	...	...	...	...	...	...	—	—	—	—	...	...
19	—	—	—	—	...	...	...	...	...	.6	1.0	.4	...	...	—	—	—	—	2.0	23
20	—	—	—	—	...	...	...	.1	...	...	...	...	...	...	—	—	—	—	0.1	1
21	—	—	—	—	...	...	...	...	...	...	...	...	...	...	—	—	—	—	...	...
22	—	—	—	—	...	...	...	...	...	...	.1	...	...	...	—	—	—	—	0.1	1
23	—	—	—	—	...	...	...	.2	.6	.6	.2	...	...	...	—	—	—	—	1.6	19
24	—	—	—	—	...	...	...	...	...	...	...	...	...	...	—	—	—	—	...	...
25	—	—	—	—	...	...	...	...	...	...	...	.1	...	...	—	—	—	—	0.1	1
26	—	—	—	—	...	...	...	...	...	...	...	...	...	...	—	—	—	—	...	...
27	—	—	—	—	...	...	.2	.2	.3	.6	.7	.4	...	...	—	—	—	—	2.4	29
28	—	—	—	—	...	...	...	...	...	...	.1	...	...	...	—	—	—	—	0.1	1
29	—	—	—	—	...	...	...	...	...	...	...	...	...	...	—	—	—	—	...	...
30	—	—	—	—	...	...	...	.1	...	.1	...	...	...	...	—	—	—	—	0.2	2
Sum.	—	—	—	—	...	3.5	8.6	8.4	8.9	7.7	8.5	6.2	4.9	1.0	—	—	—	—	57.7	—
Mean	—	—	—	—	...	.12	.29	.28	.30	.26	.28	.21	.16	.03	—	—	—	—	1.92	22

411. Cahirciveen (Valentia Observatory):  $h_s$  = 12.8 metres.

December and Year, 1928.

	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	%
1	—	—	—	—	—	...	...	...	...	...	...	...	...	...	—	—	—	—	...	...
2	—	—	—	—	—	...	...	.2	...	...	...	...	...	...	—	—	—	—	0.2	2
3	—	—	—	—	—	...	...	...	...	...	...	...	...	...	—	—	—	—	...	...
4	—	—	—	—	—	...	...	...	...	...	...	...	...	...	—	—	—	—	...	...
5	—	—	—	—	—	...	...	.3	1.0	.8	...	...	...	...	—	—	—	—	2.1	26
6	—	—	—	—	—	...	.1	.5	.6	1.0	.8	.3	...	...	—	—	—	—	3.3	42
7	—	—	—	—	—	...	...	...	.1	.2	.9	...	...	...	—	—	—	—	1.2	15
8	—	—	—	—	—	...	.1	.2	...	.1	...	.2	...	...	—	—	—	—	0.6	8
9	—	—	—	—	—	...	...	...	...	.2	.1	...	...	...	—	—	—	—	0.3	4
10	—	—	—	—	—	...	...	.3	.2	.8	.4	.4	...	...	—	—	—	—	2.1	27
11	—	—	—	—	—	...	...	.1	...	...	.1	...	...	...	—	—	—	—	0.2	3
12	—	—	—	—	—	...	.6	1.0	.5	...	.3	...	...	...	—	—	—	—	2.4	31
13	—	—	—	—	—	...	...	...	...	...	...	...	...	...	—	—	—	—	...	...
14	—	—	—	—	—	...	...	...	...	...	...	...	...	...	—	—	—	—	...	...
15	—	—	—	—	—	...	...	...	...	...	...	...	...	...	—	—	—	—	...	...
16	—	—	—	—	—	...	...	...	...	.3	.2	...	...	...	—	—	—	—	0.5	7
17	—	—	—	—	—	...	.8	1.0	1.0	1.0	.3	.5	...	...	—	—	—	—	4.6	60
18	—	—	—	—	—	...	...	...	...	...	...	...	...	...	—	—	—	—	...	...
19	—	—	—	—	—	...	...	...	...	.1	...	.1	...	...	—	—	—	—	0.2	3
20	—	—	—	—	—	...	.1	.2	...	...	...	...	...	...	—	—	—	—	0.3	4
21	—	—	—	—	—	...	...	...	...	...	...	...	...	...	—	—	—	—	...	...
22	—	—	—	—	—	...	.2	.2	.2	1.0	.9	.5	...	...	—	—	—	—	3.0	39
23	—	—	—	—	—	...	...	...	...	...	...	...	...	...	—	—	—	—	...	...
24	—	—	—	—	—	...	...	...	...	.3	.3	.2	...	...	—	—	—	—	0.8	10
25	—	—	—	—	—	...	...	...	...	...	...	...	...	...	—	—	—	—	...	...
26	—	—	—	—	—	...	.3	.6	...	...	...	...	...	...	—	—	—	—	0.9	12
27	—	—	—	—	—	...	...	...	...	...	...	...	...	...	—	—	—	—	...	...
28	—	—	—	—	—	...	...	...	...	...	.2	.1	...	...	—	—	—	—	0.3	4
29	—	—	—	—	—	...	.1	...	.2	.7	.6	.2	...	...	—	—	—	—	1.8	23
30	—	—	—	—	—	...	.2	.1	.3	.2	.2	.2	...	...	—	—	—	—	1.2	16
31	—	—	—	—	—	...	.4	1.0	1.0	1.0	1.0	1.0	.4	...	—	—	—	—	5.8	75
Sum.	—	—	—	—	—	...	2.9	5.7	5.2	7.6	6.4	3.6	0.4	—	—	—	—	—	31.8	—
Mean	—	—	—	—	—	...	.09	.18	.17	.25	.21	.12	.01	—	—	—	—	—	1.03	13
Annual Total	...	6.0	24.2	47.1	70.9	96.6	121.5	139.5	144.7	144.4	144.7	132.1	111.8	99.4	72.2	41.7	9.5	...	1406.3	—
Annual Mean	...	.02	.07	.13	.19	.26	.33	.38	.40	.39	.40	.36	.31	.27	.20	.11	.03	...	3.84	31
Hour. L.A.T.	3 to 4.	4 to 5.	5 to 6.	6 to 7.	7 to 8.	8 to 9.	9 to 10.	10 to 11.	11 to Noon	Noon to 13.	13 to 14.	14 to 15.	15 to 16.	16 to 17.	17 to 18.	18 to 19.	19 to 20.	20 to 21.	Total for Day.	Per cent. of Possible.



Direction expressed in degrees from North ( $E = 90^\circ$ ,  $S = 180^\circ$ ,  $W = 270^\circ$ ,  $N = 360^\circ$ ): Speed in Metres per second.

**412. Cahirciveen (Valentia Observatory) :**

$H_a$  (height of anemograph above M.S.L.) = Height of ground above

Dines Anemograph from Jan., 1926.

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.
Day.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.
1	145	6.2	140	6.3	145	7.6	145	8.9	145	9.0	150	9.5
2	245	5.8	270	4.5	280	5.2	290	5.7	290	6.1	290	5.5
3	290	7.8	295	8.4	310	7.9	320	8.2	305	6.2	340	6.1
4	—	1.4	245	2.0	230	1.6	240	2.9	240	4.2	245	5.5
5	305	7.2	290	7.6	305	7.2	305	6.4	295	5.5	305	5.7
6	230	12.3	235	12.1	235	12.3	235	13.0	240	12.8	240	12.9
7	210	10.8	220	10.4	215	10.0	220	11.0	220	10.9	215	10.7
8	255	9.6	255	10.1	255	10.5	260	9.4	260	10.2	255	9.5
9	195	7.7	200	8.9	210	8.9	205	10.0	210	10.5	210	12.2
10	200	10.8	200	13.0	200	13.7	195	15.3	195	15.9	200	17.7
11	275	8.4	270	7.5	280	9.0	290	7.5	290	6.9	290	6.6
12	195	10.4	200	12.3	200	14.8	200	13.9	200	13.6	200	16.9
13	255	11.2	260	11.5	260	11.3	260	10.5	270	10.3	265	9.9
14	175	9.4	180	10.7	180	11.4	185	12.0	185	12.1	190	11.3
15	240	12.7	240	11.8	240	11.8	240	11.9	245	14.0	245	12.1
16	295	9.8	295	9.0	300	8.6	320	7.5	330	7.2	320	5.6
17	80	5.5	90	5.3	—	1.1	—	0.5	—	0.5	—	0.5
18	205	5.2	195	3.9	190	4.1	185	3.7	170	4.6	170	6.2
19	265	10.7	265	9.3	260	7.7	265	6.8	250	6.1	230	5.8
20	180	13.8	180	13.4	185	13.2	190	12.6	200	12.6	210	8.5
21	185	13.5	190	14.3	190	14.9	190	15.0	190	16.6	190	16.8
22	280	5.7	290	5.5	285	4.8	285	5.7	290	6.2	285	5.3
23	185	10.4	185	11.0	180	11.9	185	12.1	190	11.0	195	10.4
24	200	7.6	190	8.5	210	11.8	230	11.8	235	11.9	235	11.4
25	275	9.8	260	9.0	240	8.0	235	8.6	230	7.5	220	8.9
26	235	8.7	215	10.3	220	14.9	220	13.2	240	12.7	280	10.6
27	305	11.5	310	11.2	320	11.9	330	10.4	335	10.8	330	10.3
28	200	7.6	220	9.7	225	9.6	225	9.2	225	9.3	235	8.7
29	180	5.2	340	8.6	350	7.0	5	7.2	360	5.0	355	9.2
30	295	4.0	270	4.9	300	4.1	265	3.6	215	3.5	225	5.4
31	135	2.0	105	2.3	180	4.9	175	5.6	180	6.0	190	7.6
Mean ...	—	8.5	—	8.8	—	9.1	—	9.0	—	9.1	—	9.2

**413. Cahirciveen (Valentia Observatory) :  $H_a = 17$  metres + 13 metres.**

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.
Day.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.
1	260	15.5	265	12.1	270	11.4	255	12.7	270	11.9	275	10.0
2	240	8.7	240	9.4	235	10.4	235	10.5	225	10.2	220	12.1
3	305	9.9	305	8.8	305	9.5	300	10.6	320	9.3	305	9.6
4	225	11.9	225	13.0	230	12.2	230	11.4	230	11.3	230	11.7
5	280	5.6	280	6.0	240	5.4	255	7.2	290	7.0	275	6.6
6	275	7.3	275	7.1	270	5.7	280	6.0	280	6.5	270	7.3
7	215	10.4	215	9.9	220	10.0	210	9.7	210	10.0	210	10.2
8	210	9.3	210	9.3	205	10.0	200	11.2	200	10.9	205	11.4
9	275	10.4	280	9.4	280	8.3	270	9.0	270	8.7	265	8.6
10	205	9.3	205	10.0	205	11.6	210	13.7	215	13.9	215	15.5
11	285	14.9	280	13.7	285	13.5	285	13.4	290	13.0	285	12.8
12	295	5.5	285	4.8	270	5.9	255	6.4	255	6.6	230	4.5
13	220	(7.2)	220	(9.2)	225	(11.3)	235	12.4	250	15.3	260	13.2
14	230	4.5	225	5.4	225	6.0	215	5.0	175	4.3	170	5.2
15	220	13.4	220	13.2	215	13.3	225	14.0	225	13.8	215	12.8
16	220	10.3	225	10.4	225	10.8	225	11.0	225	11.0	225	11.7
17	280	11.9	285	12.2	290	11.8	285	10.8	285	10.9	290	10.8
18	200	3.7	205	4.2	210	4.3	210	5.1	230	5.0	215	4.7
19	150	4.7	135	5.3	145	5.9	150	6.0	155	6.1	145	6.9
20	155	8.0	165	6.8	170	6.5	170	6.7	165	6.5	170	5.7
21	170	9.5	175	9.9	185	8.0	175	7.4	175	7.4	180	7.5
22	—	(0.5)	—	(0.5)	—	(0.5)	—	(0.5)	—	(0.5)	—	(0.5)
23	90	6.4	90	5.8	80	6.5	95	5.2	100	5.1	105	5.3
24	80	5.7	75	6.9	85	5.9	75	5.4	95	8.0	100	8.8
25	140	3.9	145	5.0	145	5.2	150	5.3	150	4.9	145	5.3
26	100	4.6	75	3.6	55	4.0	70	6.0	90	6.1	90	7.5
27	135	6.1	105	6.3	90	5.0	100	5.7	90	4.8	50	4.6
28	150	10.1	150	10.8	145	11.0	140	11.2	110	9.5	110	10.3
29	250	2.7	—	0.5	—	0.5	—	0.5	—	0.5	—	1.3
Mean ...	—	8.0	—	7.9	—	7.9	—	8.3	—	8.2	—	8.4



Averages for periods of sixty minutes, centred at the exact hours, Greenwich Mean Time.

M.S.L. +  $h_a$  (height of anemograph above ground) = 17 metres + 13 metres.

January, 1928.

13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean	Day.
°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.
155	17.0	170	15.1	180	14.1	185	13.2	200	13.1	220	10.5	215	7.7
285	6.7	285	6.9	280	7.3	290	6.7	285	7.0	300	6.8	315	5.2
350	2.7	330	2.2	—	1.4	—	0.5	—	0.5	—	0.5	—	1.5
250	10.4	250	8.9	265	6.8	275	7.3	290	8.6	285	9.2	280	7.4
250	5.1	220	4.7	220	5.5	205	6.1	200	6.0	190	7.7	195	10.2
315	5.5	330	2.6	300	2.5	—	0.5	—	0.5	—	1.5	170	3.1
210	11.7	215	11.8	215	12.5	220	11.6	225	11.5	225	8.1	220	8.7
240	7.5	230	6.1	225	6.4	215	5.0	220	4.9	220	4.8	215	5.5
250	8.3	260	8.5	250	8.7	240	7.2	225	6.7	220	7.3	215	8.0
255	11.8	250	12.8	250	13.1	250	12.6	260	12.7	260	9.2	250	11.2
250	6.3	265	4.8	250	5.0	240	4.9	215	4.3	200	4.4	195	5.4
225	12.7	225	12.6	225	10.6	230	9.0	230	8.5	235	10.7	250	10.2
275	7.1	285	6.9	275	7.0	285	4.9	265	3.6	240	4.9	230	5.2
240	9.5	245	8.7	245	8.8	240	8.8	240	9.7	250	10.7	240	11.4
265	12.4	270	12.0	275	11.7	275	11.5	275	10.1	280	10.5	290	11.7
265	4.9	245	3.1	230	1.6	—	1.4	190	3.3	170	3.6	140	3.4
145	5.9	140	6.0	150	7.5	150	6.7	145	8.3	145	7.3	150	8.6
210	8.0	230	8.9	250	9.8	250	10.0	250	9.0	250	10.8	250	10.1
195	10.1	195	10.4	195	10.3	190	9.1	185	9.0	185	10.0	185	10.0
205	5.2	195	6.6	190	7.1	175	5.4	175	6.4	175	7.0	175	9.0
225	8.0	225	8.4	245	7.6	235	6.0	250	5.5	250	3.7	250	1.9
270	6.7	270	5.6	245	4.7	240	5.0	240	5.1	210	4.5	200	5.1
210	11.4	210	12.4	210	12.3	220	11.9	225	11.1	225	10.0	220	9.5
275	14.3	280	13.7	270	13.4	270	13.9	270	13.8	270	11.7	270	11.6
210	17.9	230	13.3	230	12.3	235	12.7	245	14.3	250	14.8	250	14.5
290	10.0	285	10.1	270	11.2	280	12.2	295	11.9	305	11.1	300	11.0
300	5.3	295	5.5	275	3.3	265	2.8	240	3.5	195	3.2	195	3.8
270	(3.8)	270	3.3	260	3.4	240	4.5	225	3.8	185	4.8	175	5.7
320	8.2	320	6.0	305	5.8	320	5.2	315	5.0	285	5.5	275	6.0
280	6.5	290	5.7	300	5.9	295	7.1	300	7.0	310	5.9	300	6.0
230	10.2	240	10.9	230	10.0	230	11.7	225	10.0	225	10.3	230	12.4
—	8.7	—	8.2	—	8.0	—	7.6	—	7.6	—	7.5	—	7.8
—	—	—	—	—	—	—	—	—	—	—	—	—	—

February, 1928.

13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean	Day.
°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.
265	9.9	300	9.1	290	9.4	290	9.0	275	11.1	275	9.9	280	10.8
300	10.4	290	8.6	280	8.1	275	8.0	285	8.9	315	7.8	300	10.0
305	4.4	280	4.7	270	4.9	275	3.6	260	4.1	205	4.4	210	6.7
220	12.7	220	12.9	225	13.4	220	12.2	225	9.8	225	9.4	225	7.8
250	6.4	250	9.4	255	9.9	265	10.7	275	9.2	280	9.3	295	8.3
225	7.8	225	8.8	225	9.0	220	8.2	220	9.1	225	8.7	225	9.3
205	10.6	210	9.8	225	9.3	210	9.1	205	8.7	205	8.5	200	8.5
200	14.3	200	14.9	200	14.6	200	14.4	200	14.7	200	15.0	205	14.5
240	7.3	240	6.5	235	6.2	235	6.0	225	5.2	205	3.9	195	5.1
265	15.7	265	15.1	265	17.9	255	19.0	260	21.6	275	15.9	290	16.2
290	7.6	300	7.4	305	6.7	305	6.6	300	7.7	300	6.4	305	6.5
260	8.4	270	7.2	285	6.5	275	4.6	270	(3.4)	275	(4.7)	270	(4.8)
275	6.2	275	5.3	275	4.2	275	6.3	270	6.3	260	7.3	260	6.0
225	9.1	225	9.6	230	9.3	235	9.5	230	8.1	235	8.9	230	6.7
230	9.4	230	9.0	225	9.4	235	8.4	200	7.8	215	9.3	205	9.7
265	10.5	255	10.8	250	10.6	245	12.0	245	11.4	250	13.4	275	14.0
275	7.8	275	8.0	295	7.7	285	7.2	280	5.5	305	3.4	—	1.5
225	5.8	225	5.4	220	5.7	220	5.0	210	3.8	180	3.2	185	1.7
150	7.4	150	8.0	145	7.2	145	7.0	140	6.9	140	7.3	150	7.0
180	8.3	180	8.6	175	8.6	175	9.7	180	8.7	180	7.7	180	8.3
180	10.0	180	9.6	185	8.9	225	7.0	220	2.6	—	(1.3)	—	(0.5)
45	4.7	50	4.7	50	4.4	50	3.7	55	4.4	75	4.2	75	3.5
85	4.2	90	3.6	90	6.0	100	5.6	100	5.5	90	5.0	100	6.6
125	7.8	130	9.9	125	8.5	75	6.2	80	6.3	75	5.1	80	5.6
125	3.5	130	4.3	120	4.4	100	4.8	95	5.0	90	5.3	95	5.8
115	9.9	110	9.3	115	10.4	90	7.7	65	6.5	75	5.8	90	5.5
125	8.6	125	9.9	120	6.0	85	5.2	90	5.6	80	5.0	75	5.6
135	13.1	130	13.3	125	13.0	125	13.5	130	13.4	140	13.6	145	14.3
335	2.8	305	3.4	325	4.7	330	5.7	330	5.0	340	3.9	350	2.6
—	8.4	—	8.5	—	8.4	—	8.1	—	7.8	—	7.4	—	7.4
—	—	—	—	—	—	—	—	—	—	—	—	—	—



Direction expressed in degrees from North ( $E = 90^\circ$ ,  $S = 180^\circ$ ,  $W = 270^\circ$ ,  $N = 360^\circ$ ) : Speed in metres per second.

414. Cahirciveen (Valentia Observatory) :

$H_a$  (height of anemograph above M.S.L.) = Height of ground above

Dines Anemograph from Jan., 1926.

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.
Day.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.
1	10	1.8	—	1.0	—	1.3	25	2.5	—	1.5	25	1.6
2	110	4.1	105	4.5	75	1.9	80	3.5	95	4.4	100	3.8
3	—	0.5	—	0.5	—	0.5	—	0.5	—	0.5	55	2.5
4	—	1.4	50	3.5	80	3.2	75	3.6	60	2.0	55	2.1
5	—	0.5	—	0.5	—	0.5	45	1.8	—	1.4	55	1.7
6	140	3.5	140	4.3	145	4.4	150	4.6	155	5.0	145	5.7
7	95	5.9	100	6.4	100	7.0	100	6.1	110	6.2	95	7.2
8	75	5.1	80	7.7	75	7.8	80	8.0	80	7.3	70	7.0
9	105	7.4	105	7.5	110	6.9	110	7.2	105	7.3	110	7.0
10	60	1.7	70	5.5	90	5.8	90	4.9	70	4.7	80	6.5
11	90	6.4	90	7.0	100	8.3	95	6.8	110	10.2	105	8.6
12	70	7.7	85	6.8	90	6.3	80	6.4	65	8.1	65	6.6
13	65	2.5	—	1.4	—	0.5	—	1.2	60	2.7	50	2.4
14	135	11.9	125	11.1	130	11.3	125	12.0	120	11.7	125	10.2
15	155	5.0	155	6.0	150	6.7	150	5.9	150	6.5	150	6.0
16	155	9.8	145	11.4	150	12.7	150	12.8	155	12.9	165	12.3
17	175	12.1	175	11.8	175	12.3	170	12.6	175	13.3	190	10.6
18	175	4.8	180	5.2	200	5.2	195	4.2	195	3.9	185	3.7
19	165	10.3	165	9.7	165	9.2	150	8.1	150	10.7	165	12.4
20	170	6.0	165	6.0	155	6.2	140	5.6	140	6.9	150	6.5
21	160	5.3	160	4.8	175	3.9	175	4.0	190	3.0	155	1.8
22	55	2.1	—	1.1	50	2.5	—	1.0	355	1.8	35	3.1
23	80	5.1	100	6.0	100	6.6	90	5.2	85	4.5	85	4.6
24	280	5.4	275	5.5	270	6.3	270	5.1	270	4.6	280	3.3
25	350	6.4	245	6.0	345	6.1	350	7.0	350	5.6	325	6.4
26	330	5.0	345	3.1	320	3.6	360	2.4	35	1.9	—	1.5
27	275	8.2	275	7.9	275	7.6	270	6.6	275	6.0	260	5.9
28	280	6.4	300	4.8	305	5.2	275	5.3	300	7.8	300	5.8
29	210	9.0	225	9.5	235	11.0	235	11.5	235	11.2	235	11.6
30	330	9.1	330	10.0	330	8.6	340	8.8	320	8.3	330	8.2
31	10	10.5	10	10.3	10	11.6	10	11.4	15	10.5	15	11.4
Mean ...	—	5.8	—	6.0	—	6.2	—	6.0	—	6.2	—	6.0

415. Cahirciveen (Valentia Observatory) :  $H_a = 17$  metres + 13 metres.

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.
Day.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.
1	35	3.2	15	3.9	10	4.4	5	4.3	360	5.1	20	3.3
2	50	1.7	60	1.7	45	2.5	45	1.9	80	2.3	155	5.0
3	225	5.8	220	6.9	220	8.0	220	8.4	220	8.1	225	10.0
4	255	7.2	275	5.7	240	6.0	255	4.4	205	5.2	255	7.7
5	190	4.8	175	3.4	175	2.9	230	5.7	190	5.4	175	5.3
6	50	2.2	50	1.8	50	2.2	50	1.7	—	1.5	—	1.5
7	165	8.2	165	8.2	105	7.9	165	8.2	160	9.0	160	9.5
8	150	8.9	145	8.0	130	7.6	120	6.3	135	8.1	130	8.8
9	170	8.7	165	9.2	160	9.1	155	9.2	150	9.5	150	9.6
10	150	9.6	150	10.0	150	9.9	150	10.6	150	9.9	150	10.5
11	185	1.9	—	1.0	—	1.1	—	1.2	—	1.3	45	2.0
12	90	2.0	70	1.6	80	2.0	70	2.1	60	2.6	140	1.7
13	150	5.1	150	5.6	160	5.3	175	4.0	160	5.2	150	5.9
14	155	7.6	150	7.9	150	7.4	150	7.4	150	7.8	145	7.2
15	95	11.7	105	15.8	100	17.0	65	10.3	45	9.7	60	10.1
16	60	7.3	60	7.2	55	7.7	55	8.2	65	7.4	60	5.8
17	—	(0.5)	50	(2.0)	55	(2.2)	—	(1.1)	—	(1.2)	—	(1.0)
18	70	3.8	65	4.0	65	4.8	55	4.2	55	3.9	130	4.3
19	25	4.6	45	2.8	50	3.6	50	2.2	55	2.2	50	2.7
20	45	2.3	55	1.8	40	2.6	40	3.8	40	3.3	60	3.7
21	55	2.6	—	1.5	50	2.5	50	3.5	50	3.2	55	2.0
22	60	1.9	70	1.8	—	1.3	—	1.5	50	2.8	55	2.7
23	200	9.5	195	9.4	200	9.5	200	8.4	200	8.2	200	8.1
24	175	12.9	175	12.9	170	14.0	170	12.7	170	13.3	165	13.4
25	170	5.4	170	5.2	170	5.9	175	5.8	170	5.5	160	7.0
26	—	0.5	50	2.2	—	1.5	—	0.5	60	3.9	55	5.1
27	10	10.7	10	9.1	15	8.7	5	10.0	15	10.1	20	10.2
28	30	8.5	25	10.7	40	9.1	40	4.8	40	8.0	40	4.6
29	—	0.5	—	1.2	—	0.5	—	0.5	—	0.5	—	0.5
30	150	5.8	145	5.1	145	6.2	135	5.7	140	6.8	125	6.1
Mean ...	—	5.5	—	5.6	—	5.8	—	5.7	—	5.8	—	5.8



Averages for periods of sixty minutes centred at the exact hours, Greenwich Mean Time.

M.S.L. +  $h_a$  (height of anemograph above ground) = 17 metres + 13 metres.

March, 1928.

13.		14.		15.		16.		17.		18.		19.		20.		21.		22.		23.		24.		Mean	Day.
°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	m/s.	
230	4.1	230	3.4	230	3.5	225	3.9	190	2.9	170	1.8	160	2.2	—	1.3	—	1.5	70	1.8	—	1.2	85	1.7	2.0	1
—	1.1	315	1.6	320	3.4	345	3.7	35	2.4	75	3.0	85	3.2	70	1.8	—	1.5	—	1.4	—	0.5	—	0.5	3.0	2
90	3.5	100	5.0	105	3.8	85	2.4	95	2.3	—	0.5	—	0.5	—	1.1	85	2.4	—	0.5	—	0.5	—	0.5	1.7	3
320	4.3	330	4.4	315	3.7	320	3.9	330	3.2	—	1.4	—	1.0	—	0.5	—	0.5	—	0.5	—	0.5	—	0.5	1.9	4
220	1.8	—	1.5	—	1.3	—	1.2	220	1.9	180	3.9	160	2.9	165	3.6	125	1.6	90	2.0	50	2.2	135	2.7	1.6	5
130	6.7	130	7.1	110	6.9	105	7.5	100	7.2	95	8.1	85	7.2	105	6.9	115	5.3	100	4.6	95	4.3	100	4.6	6.0	6
265	2.3	260	3.0	255	2.1	270	1.9	205	2.7	115	7.0	100	5.5	95	4.6	85	5.1	75	6.5	70	4.7	95	4.8	4.4	7
115	7.1	110	6.2	105	6.0	100	5.7	105	6.7	110	7.1	105	7.5	95	6.6	105	7.9	105	7.7	105	8.0	100	6.7	6.5	8
95	6.7	110	5.3	105	4.6	95	5.2	110	5.2	105	4.1	110	2.9	100	3.5	55	1.6	70	1.7	—	1.4	—	1.1	5.7	9
60	6.1	70	5.6	65	5.5	65	5.3	65	4.9	80	4.8	90	4.6	85	5.7	90	5.5	85	4.3	90	4.1	90	4.8	5.2	10
110	9.9	100	8.5	105	7.5	105	7.5	100	7.3	85	4.6	85	5.0	85	4.9	80	3.7	75	5.7	80	5.9	75	5.3	7.6	11
20	5.7	20	6.1	15	7.0	10	6.6	5	5.3	5	6.4	20	4.8	25	4.0	55	1.7	—	0.5	—	0.5	—	1.4	5.3	12
160	3.4	155	4.4	160	5.2	145	5.0	135	6.2	120	5.8	100	7.1	100	8.7	110	9.4	115	8.7	130	9.6	135	10.7	4.3	13
150	8.6	145	8.0	155	7.7	155	6.1	155	4.6	160	4.8	160	5.0	160	5.2	160	5.4	160	4.5	150	6.0	160	5.6	8.9	14
175	7.0	175	7.6	170	7.7	170	7.3	165	6.8	160	6.7	160	6.1	155	7.1	155	7.5	155	7.8	160	9.7	155	9.8	6.6	15
175	12.5	175	12.2	175	12.0	175	11.5	175	12.0	170	11.8	170	11.0	170	11.6	175	11.9	175	12.0	175	12.2	175	12.0	12.0	16
150	5.0	175	4.5	185	5.6	175	4.7	165	5.4	160	4.5	155	4.5	150	4.2	155	4.9	160	5.1	195	3.6	190	4.7	6.7	17
175	9.0	170	9.4	170	10.2	165	9.9	160	10.2	160	11.5	155	12.1	150	13.1	150	14.8	150	14.7	145	14.4	155	11.6	8.2	18
160	14.1	155	14.2	160	15.9	190	10.4	205	6.2	185	6.0	180	7.1	180	7.0	185	6.0	180	5.1	170	4.7	165	5.8	9.9	19
150	6.0	160	6.0	170	5.5	160	6.3	175	5.7	175	5.5	170	5.9	170	5.6	170	5.7	170	5.6	170	5.9	165	5.4	5.9	20
340	8.6	335	7.7	330	6.9	340	6.4	340	5.6	345	4.8	350	3.0	350	2.1	—	1.2	25	1.6	—	1.4	—	1.2	4.0	21
100	6.2	110	6.7	110	6.4	110	6.6	85	5.9	80	5.8	80	4.9	80	5.4	85	5.5	85	6.0	80	4.9	75	4.8	4.5	22
305	4.4	285	5.1	305	5.5	310	5.7	305	5.7	300	7.2	295	8.2	300	8.5	295	8.0	295	7.7	290	7.3	285	6.2	5.0	23
315	3.6	315	4.1	325	4.3	320	4.5	345	5.0	350	1.9	350	2.3	345	2.9	345	4.7	345	5.4	350	6.5	345	5.3	3.9	24
295	7.2	285	7.4	280	7.8	280	6.9	285	6.5	280	5.5	280	5.5	280	4.9	275	6.9	275	8.6	285	7.9	325	6.6	6.7	25
175	8.4	165	8.3	170	9.1	165	10.4	160	11.3	160	11.1	165	9.4	245	7.7	270	7.5	255	5.3	255	7.6	265	8.1	6.1	26
265	7.3	275	7.2	275	6.9	270	7.2	280	7.4	275	7.1	290	7.0	280	6.2	270	6.8	275	5.8	250	7.6	275	7.5	7.0	27
310	7.9	300	5.7	275	6.0	275	7.1	270	6.9	265	6.5	245	4.7	210	3.8	185	4.2	175	5.0	170	6.7	170	9.1	6.2	28
275	9.8	265	8.7	275	7.7	265	7.3	265	9.6	255	10.9	250	9.9	270	9.4	295	7.0	325	6.2	330	6.5	350	7.7	10.1	29
330	10.9	335	11.0	345	14.0	350	14.2	350	14.0	355	13.6	360	13.1	360	12.5	360	12.0	360	11.8	5	11.6	5	10.9	10.8	30
10	12.6	10	13.5	10	11.8	5	10.3	360	10.6	5	11.1	5	11.9	5	8.7	355	6.6	20	10.5	65	3.9	40	3.5	10.6	31
—	6.8	—	6.8	—	6.8	—	6.5	—	6.4	—	6.3	—	6.0	—	5.8	—	5.6	—	5.6	—	5.5	—	5.5	6.1	

April, 1928.

°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	
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Direction expressed in degrees from North ( $E = 90^\circ$ ,  $S = 180^\circ$ ,  $W = 270^\circ$ ,  $N = 360^\circ$ ): Speed in metres per second.

**416. Cahirciveen (Valentia Observatory) :**

$H_a$  (height of anemograph above M.S.L.) = Height of ground above

Dines Anemograph from Jan., 1926.

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.
Day.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.
1	190	4.4	205	4.7	190	3.5	170	4.0	165	3.7	160	3.5
2	—	1.2	—	0.5	—	0.5	—	1.3	—	1.2	—	1.4
3	—	0.5	—	0.5	40	2.5	—	0.5	—	1.0	—	1.3
4	90	6.6	85	6.1	90	4.5	95	3.3	105	4.7	125	3.1
5	—	0.5	—	0.5	—	0.5	195	1.6	—	1.5	—	0.5
6	50	1.7	—	1.2	—	1.3	60	1.6	60	1.7	—	1.4
7	360	6.0	40	4.1	35	6.8	40	5.0	25	4.8	35	7.4
8	—	0.5	—	0.5	—	0.5	—	0.5	—	0.5	—	1.2
9	125	3.3	15	3.8	150	3.6	160	2.3	360	2.2	320	2.3
10	55	1.7	—	1.3	—	1.0	—	0.5	—	1.0	—	1.4
11	70	5.5	70	3.7	55	2.9	65	3.9	65	3.3	70	2.5
12	—	0.5	55	2.1	45	3.7	50	2.3	60	4.0	45	4.0
13	—	0.5	—	1.3	—	1.2	75	3.0	60	3.8	50	4.5
14	35	4.2	45	5.4	55	6.0	45	3.9	55	1.9	25	4.1
15	20	5.5	10	5.1	5	5.8	5	8.5	5	5.5	360	6.1
16	345	11.3	355	11.2	355	12.8	360	12.4	360	11.8	360	11.9
17	360	6.3	360	5.4	350	5.2	345	5.6	340	7.5	330	7.4
18	11.0	10	11.5	5	9.5	5	10.1	5	9.8	5	9.9	5
19	5	6.0	360	7.3	15	5.8	10	5.9	355	7.2	355	7.0
20	15	4.8	20	5.3	5	5.0	360	6.2	360	7.4	10	7.6
21	30	4.6	30	4.1	25	4.4	10	6.1	5	6.9	10	5.4
22	60	2.3	—	0.5	—	1.1	—	0.5	—	1.2	—	1.2
23	300	1.7	270	1.8	185	1.8	245	2.8	250	3.0	240	2.2
24	170	3.6	155	4.1	150	4.4	155	5.3	155	5.7	160	5.8
25	145	7.9	145	8.0	145	8.0	145	9.3	140	9.3	140	9.7
26	155	8.5	145	8.1	140	9.6	145	10.8	145	10.6	145	10.7
27	170	6.0	165	5.6	155	6.4	155	6.1	150	6.2	150	5.5
28	—	0.5	—	0.5	—	0.5	—	0.5	—	0.5	—	0.5
29	50	2.1	50	2.0	—	1.3	—	1.0	55	2.8	—	1.0
30	—	1.3	—	1.5	—	0.5	—	1.3	70	2.3	50	2.4
31	—	0.5	—	1.2	60	3.0	80	6.0	90	5.2	80	5.0
Mean ...	—	3.9	—	3.8	—	4.0	—	4.3	—	4.5	—	4.4

**417. Cahirciveen (Valentia Observatory) :  $H_a = 17$  metres + 13 metres.**

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.
Day.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.
1	85	5.9	95	6.0	100	7.0	100	7.4	105	8.0	80	6.0
2	95	5.0	95	6.3	95	7.4	80	7.2	90	7.2	75	5.7
3	70	3.0	85	4.6	80	4.7	85	5.7	85	5.6	75	5.0
4	75	4.3	70	2.3	100	2.7	75	1.6	—	1.0	—	1.5
5	95	5.9	100	4.9	100	5.2	100	4.9	115	5.0	150	4.9
6	110	4.6	90	4.2	75	3.8	85	4.1	80	4.0	90	4.3
7	115	4.1	95	2.6	100	2.5	—	1.5	—	1.2	100	2.4
8	—	1.3	180	2.1	175	2.6	175	2.7	175	2.9	175	2.2
9	75	9.1	105	6.0	180	6.5	180	6.8	165	5.9	165	7.2
10	5	9.6	5	10.1	360	9.9	355	10.0	355	9.5	360	9.1
11	5	2.5	325	2.4	325	4.0	—	1.4	—	1.2	255	5.0
12	60	2.3	50	3.0	55	1.6	95	3.9	100	4.8	95	5.1
13	180	6.1	175	6.3	170	6.6	165	7.0	165	7.3	155	6.9
14	330	9.5	340	11.2	345	12.4	350	13.7	350	15.4	355	14.2
15	325	4.6	305	3.9	290	3.6	285	4.6	310	2.7	265	5.2
16	325	1.9	355	3.0	10	3.1	40	2.1	65	1.7	60	1.6
17	—	1.0	—	1.4	—	0.5	—	1.1	—	0.5	—	1.2
18	200	3.7	200	4.9	185	4.1	185	4.5	190	5.0	190	4.9
19	270	3.7	250	4.3	250	7.0	255	6.7	265	4.8	270	4.0
20	45	2.6	40	1.8	—	1.5	—	1.5	45	2.4	—	1.5
21	165	8.8	180	7.8	190	8.5	195	11.1	200	11.3	210	10.4
22	205	10.4	205	9.9	205	10.7	210	9.8	220	9.7	220	9.9
23	225	4.4	220	4.3	220	4.8	220	5.0	225	5.4	230	6.2
24	210	3.2	205	3.3	195	2.8	85	2.0	—	1.4	170	1.9
25	150	12.0	145	12.6	140	12.0	140	11.9	145	12.4	145	11.0
26	335	12.1	340	14.3	345	15.4	345	17.2	345	16.1	340	15.8
27	285	6.5	280	6.3	290	6.8	295	6.2	295	6.0	295	(5.2)
28	190	9.9	190	11.5	195	11.4	195	12.1	200	11.8	215	9.8
29	235	6.0	240	6.7	235	6.0	235	6.5	245	7.6	240	6.8
30	255	8.6	255	8.7	260	8.7	260	7.9	260	8.3	260	8.3
Mean ...	—	5.8	—	6.0	—	6.1	—	6.3	—	6.2	—	6.1



**May, 1928.**

**June, 1928.**

[illegible]



Direction expressed in degrees from North (E = 90°, S = 180°, W = 270°, N = 360°) : Speed in metres per second.

**418. Cahirciveen (Valentia Observatory) :**

$H_a$  (height of anemograph above M.S.L.) = Height of ground above

Dines Anemograph from Jan., 1926.

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon
Day.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.
1	205	6.9	205	7.1	200	8.1	200	8.3	190	8.0	185	9.2
2	225	4.6	225	5.1	220	5.0	230	5.3	230	5.0	240	5.9
3	—	0.5	—	0.5	—	0.5	—	0.5	—	0.5	—	0.5
4	—	1.4	250	1.7	185	2.9	180	3.9	205	4.6	200	4.7
5	225	9.5	225	8.6	225	7.6	230	6.6	225	6.5	225	6.2
6	260	9.0	270	7.9	270	8.2	275	7.5	280	6.6	290	6.4
7	270	3.0	255	2.3	—	1.0	—	1.1	—	1.1	230	2.2
8	175	7.1	180	6.5	190	6.0	195	5.9	190	6.2	195	5.4
9	245	6.8	250	6.9	250	7.5	240	6.5	240	6.3	240	7.1
10	180	6.5	180	7.1	180	6.9	180	8.2	180	9.8	185	10.0
11	175	7.1	175	8.1	175	8.3	175	8.5	180	8.0	180	8.5
12	175	4.0	175	5.0	190	3.3	195	3.8	200	2.5	205	2.9
13	180	6.1	180	5.7	185	6.6	185	6.2	190	6.1	200	6.1
14	200	5.7	200	6.4	205	6.7	200	6.3	195	6.0	200	6.3
15	185	4.6	180	5.3	185	4.5	175	5.5	180	6.4	210	6.0
16	355	3.1	355	3.5	355	4.2	360	3.7	25	3.0	65	1.7
17	(—)	1.0	(40)	2.0	—	1.0	(40)	1.6	(—)	1.4	(—)	1.4
18	70	1.6	—	0.5	—	1.1	—	1.0	—	1.0	—	1.4
19	355	3.5	350	3.2	350	2.9	335	2.8	330	2.4	310	2.9
20	360	3.2	350	2.8	360	2.1	5	2.2	15	1.7	15	1.7
21	—	1.2	45	2.1	—	1.2	—	1.0	50	1.6	45	1.6
22	190	3.5	205	3.7	215	3.6	215	2.8	190	2.0	190	2.2
23	200	2.5	175	3.5	170	4.4	175	4.1	180	3.0	200	2.3
24	—	1.1	—	0.5	245	2.3	245	1.7	—	1.2	—	1.0
25	255	6.8	255	6.1	250	6.4	245	6.3	250	6.7	255	6.6
26	175	3.4	180	4.0	210	4.5	225	4.1	185	4.4	195	4.4
27	240	3.1	245	1.7	225	3.0	215	3.0	235	2.5	340	3.6
28	5	5.9	15	4.5	5	5.0	10	5.3	355	3.1	325	4.0
29	325	5.2	315	4.4	310	5.2	315	4.7	320	6.0	325	5.5
30	45	3.2	—	1.5	80	2.8	90	4.2	90	3.8	—	1.5
31	75	5.2	75	6.7	75	7.2	80	6.9	75	4.8	70	6.8
Mean ...	—	4.4	—	4.4	—	4.5	—	4.5	—	4.3	—	4.4

**419. Cahirciveen (Valentia Observatory) :  $H_a$  = 17 metres + 13 metres.**

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon
Day.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.
1	110	1.8	—	1.3	85	4.2	80	3.0	—	0.5	340	1.9
2	40	1.8	—	1.2	—	1.1	—	1.4	—	1.2	50	2.1
3	—	0.5	—	1.3	60	1.7	—	1.2	—	1.1	90	1.7
4	55	2.1	—	0.5	—	1.0	—	0.5	55	2.0	—	1.2
5	75	1.7	—	0.5	60	1.9	50	2.3	155	2.2	155	3.0
6	160	10.3	175	11.1	175	10.8	175	10.7	175	11.8	175	11.5
7	165	10.1	175	11.9	190	12.4	195	13.1	215	13.0	240	7.3
8	200	2.4	225	3.6	230	4.0	225	4.0	220	3.7	225	4.0
9	215	3.9	195	3.5	205	3.7	190	3.7	185	3.7	215	2.9
10	155	3.9	145	4.3	160	5.2	155	5.2	125	4.5	85	5.2
11	160	6.9	165	7.4	180	7.0	180	7.2	180	7.5	190	8.1
12	185	4.6	200	5.0	200	4.5	200	6.0	200	6.1	200	5.7
13	235	9.4	235	8.6	240	7.8	235	7.9	230	9.0	235	10.0
14	250	5.8	245	4.7	235	3.0	215	2.8	245	3.0	270	3.5
15	330	2.1	315	4.0	330	3.9	350	4.7	350	6.0	355	5.4
16	355	2.2	345	2.3	345	1.7	340	2.0	310	2.8	300	2.7
17	165	2.8	165	3.1	170	3.4	170	3.6	170	4.3	160	4.7
18	170	7.7	170	7.6	175	7.1	175	8.1	170	7.6	165	7.8
19	165	6.6	170	5.5	180	2.9	170	3.9	170	4.0	170	5.0
20	265	5.3	265	5.2	255	5.2	245	3.9	220	3.4	250	4.8
21	325	4.0	315	3.3	300	4.1	305	3.6	320	4.0	310	3.7
22	155	5.8	155	6.1	160	6.0	160	6.0	160	6.2	185	6.1
23	185	5.7	185	5.5	180	6.0	180	5.7	175	5.5	185	5.9
24	180	9.7	180	10.2	180	10.3	185	9.1	180	9.3	180	7.3
25	200	7.2	200	7.9	195	7.5	195	7.4	195	7.6	195	7.8
26	195	4.4	200	3.9	180	5.1	175	3.1	170	4.6	165	4.2
27	170	4.1	165	4.5	180	4.2	120	2.5	95	3.3	—	1.3
28	285	3.4	290	2.7	280	3.0	265	3.0	225	1.6	205	2.5
29	220	5.7	225	5.7	230	5.0	245	5.5	265	5.6	280	4.9
30	—	1.3	—	1.1	—	0.5	—	0.5	—	1.0	—	1.3
31	—	1.4	65	1.9	65	1.9	65	1.8	65	1.7	—	1.0
Mean ...	—	4.7	—	4.7	—	4.7	—	4.6	—	4.7	—	4.7



Averages for periods of sixty minutes centred at exact hours, Greenwich Mean Time.

M.S.L. +  $h_a$  (height of anemograph above ground) = 17 metres + 13 metres.

July, 1928.

13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean	Day.
°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.
200	12.4	200	11.6	205	12.2	210	11.4	220	11.2	230	10.2	225	8.3
260	7.1	260	6.5	260	6.6	260	6.2	265	5.8	265	5.4	270	4.5
270	4.2	280	3.9	285	4.7	270	4.6	270	4.3	270	3.8	275	3.5
195	11.1	200	9.7	210	9.7	220	9.9	225	9.7	220	9.8	220	9.5
250	8.5	250	8.1	250	8.7	250	8.8	250	8.9	255	8.7	255	8.6
270	6.3	275	6.3	280	6.0	290	6.4	285	5.6	310	5.1	325	4.2
175	8.2	170	8.2	170	8.1	165	7.4	165	9.0	160	9.3	160	8.4
270	4.8	270	3.7	270	4.6	270	5.1	260	5.2	255	5.8	255	5.8
230	6.8	225	7.2	225	6.9	225	6.5	225	6.1	230	4.9	220	5.0
190	9.5	190	11.4	195	10.9	195	11.0	190	10.4	190	10.2	185	8.8
175	6.6	185	7.4	195	8.7	195	8.4	200	6.9	195	6.9	200	6.1
230	6.1	225	6.6	230	6.2	245	5.6	235	5.1	225	4.9	225	4.5
215	7.6	220	7.8	225	7.8	215	7.1	210	7.2	210	7.0	205	7.3
195	7.8	200	8.0	190	8.9	190	8.8	190	8.0	185	8.1	185	7.3
270	3.5	265	3.6	285	3.5	320	4.2	335	6.0	335	6.5	355	5.7
330	7.2	330	7.7	330	7.8	330	7.0	335	7.4	335	6.6	335	5.8
200	4.1	195	4.2	230	3.6	285	4.5	285	2.3	275	4.1	—	1.1
295	4.0	285	4.4	325	4.0	330	4.0	325	4.8	335	4.3	335	4.8
305	3.2	310	4.0	305	3.9	315	4.6	325	4.7	335	4.3	335	4.2
270	2.8	275	3.1	275	3.6	275	3.4	275	2.6	275	1.6	—	0.5
175	6.6	175	8.1	175	8.7	180	7.7	190	7.4	185	7.0	180	8.2
255	2.7	255	2.8	240	3.8	260	3.9	255	3.3	250	2.2	255	3.1
255	4.9	260	4.5	260	4.0	255	4.5	255	4.1	265	3.1	270	2.6
255	4.7	255	4.8	250	5.9	250	5.2	245	5.5	250	5.6	245	5.4
250	4.8	255	4.8	250	4.8	255	4.7	260	3.4	260	2.3	—	1.5
205	7.0	215	7.1	215	7.4	210	6.5	210	6.0	195	5.2	205	4.5
15	7.1	5	6.2	10	5.3	10	6.3	360	6.8	360	6.3	350	6.5
280	6.8	295	6.5	300	6.5	320	7.5	325	7.9	330	7.1	335	7.4
270	3.7	275	3.8	265	5.1	240	4.8	220	4.5	235	3.3	245	2.7
55	6.2	50	5.9	35	5.8	50	6.0	15	6.0	15	5.3	20	4.0
55	3.7	65	5.1	75	4.2	90	4.3	75	5.1	70	5.9	60	4.6
—	6.1	—	6.2	—	6.4	—	6.3	—	6.2	—	5.8	—	5.3
—	6.1	—	6.2	—	6.4	—	6.3	—	6.2	—	5.8	—	5.3
—	6.1	—	6.2	—	6.4	—	6.3	—	6.2	—	5.8	—	5.3

August, 1928.

13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean	Day.
°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.
330	3.3	325	4.9	325	5.7	320	5.2	315	5.3	325	5.4	340	6.0
290	2.0	330	2.7	310	1.7	265	1.7	—	1.5	—	1.0	—	0.5
270	3.2	265	3.6	270	3.7	285	3.2	310	4.1	330	4.7	345	4.2
265	3.7	270	4.1	270	4.1	265	3.4	265	2.4	—	1.5	—	0.5
180	10.0	175	9.9	170	9.4	160	9.8	160	8.6	165	8.2	165	8.9
185	7.8	190	8.1	190	7.0	190	7.4	190	6.7	200	5.2	200	3.8
255	5.5	255	5.8	255	6.2	250	5.0	255	7.0	250	5.7	250	5.7
255	8.3	250	7.9	245	8.4	235	8.6	240	8.3	230	6.9	230	6.6
215	5.7	220	7.2	215	7.3	220	6.9	215	6.0	205	5.0	175	4.5
175	2.8	235	3.5	270	3.4	295	1.8	280	1.9	270	3.0	270	4.2
245	3.9	260	4.7	260	3.0	255	2.5	255	5.0	235	5.1	220	5.2
220	10.8	215	10.9	210	10.7	225	11.9	215	12.0	220	11.7	225	12.0
250	10.0	255	9.6	260	9.0	255	8.0	260	8.3	265	6.3	260	6.5
275	6.4	280	5.9	275	6.1	275	6.2	280	5.1	320	5.9	330	5.1
335	7.0	325	6.2	325	6.7	325	7.3	325	6.8	330	5.6	320	5.6
270	4.7	270	3.9	270	3.7	270	3.3	275	2.1	—	1.2	—	0.5
175	8.7	175	9.3	180	9.6	180	9.0	180	8.5	180	6.9	175	6.6
170	10.3	170	9.7	165	9.6	165	9.6	160	9.2	155	10.1	160	8.6
270	5.0	270	4.9	280	5.5	290	6.0	295	5.5	290	4.9	285	4.3
275	5.6	275	6.1	270	5.5	275	5.9	280	5.7	275	5.6	270	4.6
280	4.1	290	4.1	270	4.5	250	4.5	270	4.5	255	4.1	235	3.3
205	8.4	205	7.7	220	7.4	220	6.6	215	6.7	205	6.7	200	6.8
180	8.7	185	9.2	185	9.5	185	9.2	185	8.9	185	8.8	185	8.3
185	10.0	185	10.3	185	10.2	185	9.0	185	8.8	180	7.7	185	8.8
210	9.6	210	9.0	205	8.7	205	9.5	195	7.9	185	6.9	180	6.2
205	3.1	265	3.7	280	4.4	245	4.3	240	4.2	245	4.3	230	3.7
270	4.5	270	4.9	275	4.4	275	3.9	275	4.1	275	3.9	285	3.3
220	6.1	210	6.5	205	7.4	195	6.9	205	7.0	195	5.9	185	6.0
315	5.8	315	4.9	305	4.2	305	4.3	295	3.5	300	3.5	305	3.0
250	4.5	250	4.8	265	3.8	280	2.7	285	1.8	275	2.0	—	1.1
325	4.2	325	4.5	300	4.0	310	3.1	315	3.0	330	3.3	345	1.7
—	6.3	—	6.4	—	6.3	—	6.1	—	5.8	—	5.4	—	5.0
—	6.3	—	6.4	—	6.3	—	6.1	—	5.8	—	5.4	—	5.0



Direction expressed in degrees from North ( $E = 90^\circ$ ,  $S = 180^\circ$ ,  $W = 270^\circ$ ,  $N = 360^\circ$ ) : Speed in metres per second.

**420. Cahirciveen (Valentia Observatory) :**

$H_a$  (height of anemograph above M.S.L.) = Height of ground above

Dines Anemograph from Jan., 1926.

Hour. G.M.T.	1		2.		3.		4.		5.		6.		7.		8.		9.		10.		11.		Noon.	
Day.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.
1	100	4.8	—	1.0	—	1.0	65	1.6	—	0.5	105	2.1	55	1.8	—	1.0	—	1.2	—	1.0	—	1.0	160	3.7
2	115	6.5	125	5.7	110	4.9	135	6.0	140	6.3	150	6.4	145	5.4	160	7.0	165	7.5	175	7.6	175	7.5	180	8.5
3	185	7.1	180	7.7	185	6.7	186	6.6	185	7.2	185	7.6	190	7.7	190	7.8	185	6.9	190	7.4	190	7.5	195	8.7
4	200	9.0	180	8.7	185	9.5	185	8.9	180	8.6	180	8.8	185	8.1	185	8.6	180	9.1	185	9.2	185	9.1	185	9.0
5	180	6.9	195	6.2	360	2.4	330	6.0	350	7.5	360	7.8	355	8.1	360	8.4	360	8.0	355	7.6	350	8.8	350	8.6
6	210	5.6	215	7.2	225	7.4	250	9.0	255	8.0	250	6.8	250	6.8	245	5.3	230	5.9	225	5.8	225	7.3	225	7.6
7	195	11.5	195	11.5	195	11.0	195	11.7	195	11.7	190	11.8	185	12.4	185	13.1	185	12.8	180	13.2	185	13.3	180	12.8
8	205	3.5	115	1.8	—	0.5	75	2.0	75	1.9	75	1.8	150	2.7	170	3.6	165	2.9	200	4.0	240	3.4	155	3.3
9	190	5.2	210	5.4	195	4.9	185	5.1	200	5.2	200	4.5	220	4.5	220	6.2	220	8.6	210	8.8	205	9.6	205	9.4
10	245	9.7	245	8.5	240	7.0	240	6.6	235	6.0	225	5.6	225	5.9	230	6.2	230	6.9	235	7.0	225	7.5	230	7.7
11	215	4.1	220	3.9	200	2.9	195	2.0	200	3.1	195	2.2	190	3.1	180	3.5	195	4.0	215	3.7	215	2.9	205	4.7
12	175	4.5	180	4.3	180	4.7	175	5.0	170	5.3	165	5.3	165	4.9	175	4.7	175	5.9	165	7.2	175	7.6	175	6.7
13	130	5.4	135	5.0	140	5.8	145	5.9	150	6.2	150	7.0	150	7.6	155	7.8	165	8.0	155	8.4	155	8.6	160	8.5
14	160	7.0	165	7.3	160	8.5	165	8.4	165	8.0	170	7.8	220	7.8	335	8.0	340	7.8	345	6.0	345	6.6	345	7.8
15	—	0.5	—	1.3	—	1.2	50	1.9	—	1.2	55	1.6	—	1.2	105	1.6	—	1.4	195	2.1	220	2.0	270	2.7
16	160	4.6	210	2.7	180	4.3	175	5.5	180	4.9	180	5.0	180	5.5	180	5.0	180	6.1	(185)	(6.5)	(185)	(6.5)	(205)	(6.5)
17	(210)	(9.1)	(205)	(9.6)	(205)	(10.0)	(205)	(10.0)	(210)	(9.2)	(210)	(8.8)	(210)	(7.8)	(205)	(8.8)	(210)	(9.2)	220	9.7	215	10.2	205	10.1
18	320	2.4	—	1.4	—	0.5	—	0.5	—	0.5	—	1.2	10	1.6	—	1.5	—	1.2	—	1.5	290	2.0	285	3.1
19	—	0.5	—	1.0	—	1.0	—	0.5	—	1.0	—	0.5	—	1.3	—	1.0	—	1.2	310	2.8	320	3.1	330	3.9
20	—	0.5	—	0.5	—	0.5	325	2.1	120	2.2	70	2.3	—	1.4	—	1.0	—	1.5	185	2.0	225	1.8	310	1.6
21	—	1.5	—	0.5	—	1.4	—	1.3	65	1.7	65	1.7	65	2.3	60	2.6	60	3.0	55	3.4	45	3.3	60	1.7
22	—	1.4	60	2.0	60	2.2	60	2.4	50	2.0	45	2.2	45	2.3	40	2.1	—	1.4	80	3.9	100	4.5	95	4.9
23	75	5.0	75	4.3	80	4.5	80	5.0	75	4.3	85	4.7	85	4.7	80	5.0	75	4.0	75	4.7	75	4.1	80	4.0
24	—	1.2	25	2.0	—	1.4	30	2.0	30	2.2	—	1.0	—	1.5	—	1.1	—	0.5	30	1.6	10	5.1	15	4.5
25	55	5.4	45	5.0	50	3.5	55	3.8	60	4.8	55	5.3	50	5.2	35	6.2	50	4.9	30	6.7	50	5.4	35	4.7
26	55	4.0	70	5.5	65	4.6	80	5.6	80	6.3	80	6.2	85	4.8	85	5.3	80	5.8	80	4.5	85	4.7	100	6.4
27	80	5.9	80	5.4	75	4.9	80	6.4	80	6.2	80	4.6	85	5.3	80	5.1	75	4.3	65	4.4	60	5.5	55	5.6
28	65	10.2	60	9.4	65	7.9	60	9.7	55	9.6	55	7.7	55	8.7	55	8.2	55	10.3	60	10.8	60	10.1	50	11.1
29	55	11.1	50	11.3	60	13.1	65	14.7	60	14.9	60	13.5	60	13.1	65	14.3	65	13.7	60	10.9	55	10.1	50	9.8
30	55	7.3	55	6.6	65	3.4	80	4.4	150	2.8	180	2.8	75	4.3	80	6.8	65	7.2	50	8.6	45	7.4	55	6.0
Mean ...	—	5.4	—	5.1	—	4.7	—	5.4	—	5.3	—	5.2	—	5.3	—	5.6	—	5.7	—	6.0	—	6.2	—	6.5

**421. Cahirciveen (Valentia Observatory) :  $H_a = 17$  metres + 13 metres.**

Hour. G.M.T.	1	2	3	4	5	6	7	8	9	10	11	Noon.
Day.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.
1	45	2.0	60	2.2	—	1.0	—	1.0	—	1.0	55	1.8
2	—	1.5	—	1.5	60	2.4	60	2.4	55	2.3	—	1.3
3	90	5.7	85	5.8	85	5.6	85	6.5	80	6.0	105	5.8
4	130	8.2	125	9.6	125	10.2	125	10.1	130	10.1	125	10.7
5	180	4.9	180	6.4	180	6.6	185	5.9	190	6.3	195	6.2
6	225	5.1	225	6.0	225	5.6	225	5.2	230	4.9	220	4.5
7	175	11.2	175	11.4	185	11.9	185	11.9	180	11.9	190	11.2
8	195	9.2	195	9.6	195	9.1	200	10.5	200	9.6	200	8.3
9	225	11.0	235	10.5	240	10.2	245	9.4	240	9.5	260	10.6
10	290	2.9	280	2.4	295	2.3	220	1.6	—	1.5	—	1.2
11	235	5.5	260	7.8	275	8.5	250	7.6	240	7.0	230	5.5
12	—	1.3	—	1.0	65	1.9	65	2.2	65	1.8	65	2.2
13	70	2.0	—	1.5	50	2.0	50	1.6	—	1.5	—	0.5
14	150	10.5	155	10.2	155	11.1	155	10.2	150	10.0	145	8.2
15	260	4.3	255	4.4	250	3.5	230	2.8	200	3.0	185	3.3
16	220	7.3	225	6.9	225	6.8	225	5.8	220	5.9	220	6.2
17	245	4.9	255	6.3	270	5.1	265	5.5	245	4.4	235	4.1
18	190	9.0	190	9.5	190	10.5	195	10.9	190	9.2	190	10.6
19	240	7.8	235	7.3	235	7.8	240	7.5	225	6.5	225	5.1
20	260	13.2	260	12.1	255	11.3	255	10.2	275	7.6	250	8.8
21	235	9.1	255	10.1	270	9.7	275	9.1	275	8.7	270	8.9
22	285	6.6	270	4.1	215	3.0	200	(3.0)	260	(5.2)	160	(3.6)
23	160	4.5	170	5.1	185	7.4	175	8.2	170	10.5	170	10.6
24	215	14.5	220	13.4	220	12.9	210	13.3	220	13.5	225	12.7
25	260	7.9	260	7.5	255	7.9	270	6.4	275	6.5	260	6.5
26	200	7.4	205	6.8	225	7.5	250	9.0	265	8.8	255	8.6
27	355	16.9	355	15.3	355	14.2	355	15.0	355	14.6	355	14.7
28	5	4.9	360	4.8	355	4.8	350	4.8	345	3.5	345	3.6
29	190	5.5	180	6.2	190	4.8	250	5.4	265	5.1	260	5.1
30	260	9.8	270	10.4	265	11.4	260	10.8	250	10.5	245	9.7
31	345	12.7	345	15.2	350	16.0	350	15.5	350	15.1	355	14.8
Mean	—	7.3	—	7.5	—	7.5	—	7.4	—	7.2	—	6.9



**September, 1928.**

13.		14.		15.		16.		17.		18.		19.		20.		21.		22.		23.		24.		Mean	Day.
°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	m/s.	
175	4.7	180	4.1	290	1.9	330	3.3	330	2.3	—	1.0	—	0.5	115	3.2	95	3.6	105	4.0	90	2.8	95	4.3	2.3	1
180	8.4	185	7.8	190	7.2	190	7.4	200	6.6	205	6.1	210	5.8	190	4.3	180	5.5	190	6.6	190	6.7	190	6.1	6.5	2
200	9.1	200	8.8	200	9.2	200	8.2	195	8.5	200	7.9	200	7.6	200	6.8	200	6.9	200	7.6	195	7.9	200	8.2	7.7	3
185	9.7	180	9.0	180	9.2	180	8.6	180	9.4	180	9.0	180	8.3	180	8.4	185	9.0	185	8.0	185	8.3	180	7.8	8.8	4
350	9.9	345	9.7	330	8.7	325	8.4	320	7.0	300	6.0	295	5.5	290	4.9	290	4.8	255	5.1	240	5.4	210	4.2	7.0	5
220	8.0	210	9.0	205	8.0	200	8.9	200	8.5	195	7.8	195	9.3	195	9.7	195	9.9	190	10.6	190	10.8	195	10.9	7.9	6
185	13.1	190	12.9	195	13.2	220	7.0	230	5.9	255	5.1	270	4.0	245	4.1	230	4.1	210	3.4	205	3.4	200	3.5	9.6	7
190	5.3	180	6.0	195	4.8	180	5.0	170	4.5	165	3.7	160	3.7	160	4.1	170	4.3	185	5.2	190	4.2	190	4.4	3.6	8
220	10.1	220	10.0	220	10.1	210	10.0	215	10.8	220	10.3	215	10.1	225	10.2	225	9.9	225	9.9	225	9.1	225	9.4	8.1	9
235	7.5	245	8.3	250	8.5	250	8.3	245	7.7	240	6.8	240	6.2	245	6.7	245	6.2	230	4.9	225	4.1	230	4.6	6.9	10
195	5.5	190	5.6	185	5.9	185	6.6	185	6.0	180	5.4	170	4.9	170	4.5	165	5.5	165	4.1	170	3.7	165	4.3	4.3	11
175	7.0	180	7.0	170	7.3	175	6.9	175	5.8	170	4.6	150	4.2	155	4.0	140	4.1	130	5.0	135	5.4	140	6.0	5.5	12
165	8.7	160	8.8	165	8.5	170	9.2	160	7.5	155	7.6	150	8.5	160	7.9	160	7.2	165	7.0	165	6.9	165	6.8	7.4	13
350	8.0	355	7.4	350	7.9	350	7.7	355	6.9	360	6.3	360	5.6	10	4.6	45	2.5	45	1.9	40	2.2	—	1.2	6.5	14
280	2.5	240	2.9	240	4.0	230	4.1	225	4.3	195	3.1	190	2.9	165	3.0	125	2.3	70	2.7	70	2.2	55	1.6	2.2	15
(210)	(5.2)	(205)	(6.5)	(185)	(6.3)	(205)	(6.9)	(205)	(6.1)	(185)	(6.4)	(185)	(6.9)	(185)	(6.5)	(185)	(6.1)	(205)	(6.1)	(210)	(6.5)	(210)	(7.0)	5.7	16
205	10.8	205	10.0	205	10.2	205	9.4	210	10.1	210	9.4	215	9.1	215	9.0	260	6.7	305	3.2	325	2.2	—	1.1	8.6	17
270	3.5	275	3.4	285	3.9	285	3.8	285	2.9	285	2.5	305	1.7	—	0.5	—	0.5	—	0.5	—	0.5	—	1.0	1.8	18
315	3.9	305	4.3	330	5.3	350	4.1	325	2.5	330	2.8	330	4.9	—	1.5	—	1.4	—	1.1	—	1.2	—	0.5	2.1	19
325	2.8	335	2.0	320	2.5	320	2.2	320	2.1	—	1.0	—	0.5	—	0.5	55	1.6	60	1.8	65	1.6	70	1.9	1.5	20
—	1.4	10	2.5	5	1.8	35	2.5	70	3.8	85	3.9	100	4.5	105	2.2	—	1.0	100	3.2	—	1.2	—	0.5	2.2	21
105	4.0	100	4.0	105	5.3	110	5.2	120	4.4	105	4.7	75	3.8	90	4.7	90	4.5	90	5.9	90	7.2	85	5.6	3.7	22
85	3.1	65	2.7	90	1.8	75	2.7	70	2.9	80	3.1	60	2.0	50	2.5	—	0.5	—	0.5	—	0.5	—	0.5	3.3	23
15	4.9	15	4.4	20	5.1	15	5.4	10	4.7	5	3.9	5	3.6	355	2.4	355	4.7	360	5.1	15	4.1	40	2.9	3.1	24
30	5.6	35	7.0	35	6.8	35	6.3	40	5.3	50	4.3	70	3.2	80	4.5	85	4.8	75	5.0	65	4.3	60	3.9	5.1	25
105	6.1	100	5.6	100	5.7	90	4.7	95	3.7	100	6.0	95	5.3	80	5.0	75	6.0	85	6.7	85	6.8	80	5.9	5.4	26
60	6.0	70	5.2	80	5.4	80	5.2	60	6.1	65	6.5	60	7.1	65	6.1	60	7.0	60	9.3	70	10.5	65	9.8	6.1	27
50	10.0	55	10.5	55	11.1	60	11.8	65	12.6	65	12.8	65	13.6	60	12.2	60	12.5	60	12.5	60	12.6	60	11.8	10.7	28
55	9.5	50	9.8	45	10.2	45	9.4	40	6.5	45	5.9	50	6.5	50	7.1	50	7.9	60	5.2	50	5.9	50	6.3	10.1	29
50	5.2	40	4.6	30	4.9	25	6.1	10	5.1	10	4.9	50	2.5	65	2.0	75	5.0	80	5.8	75	5.6	40	3.5	5.2	30
—	6.7	—	6.7	—	6.7	—	6.5	—	6.0	—	5.6	—	5.4	—	5.1	—	5.2	—	5.3	—	5.1	—	4.9	5.6	

335	m/s. 2.1	355	m/s. 3.1	355	m/s. 3.1	350	m/s. 3.4	350	m/s. 3.5	345	m/s. 1.9	—	m/s. 1.3	—	m/s. 0.5	—	m/s. 0.5	55	m/s. 2.0	60	m/s. 1.6	—	m/s. 1.5	1.9	1
—	0.5	—	1.0	210	2.9	205	2.0	190	1.7	—	1.0	145	2.3	135	3.7	140	4.2	125	3.4	105	5.0	90	5.3	2.0	2
110	5.9	100	5.5	135	6.5	150	10.6	140	10.2	130	9.7	130	8.0	135	9.5	130	9.3	125	9.8	120	10.0	125	9.3	7.2	3
155	11.5	160	12.3	175	7.8	165	6.0	160	6.3	155	5.5	150	5.5	155	6.0	155	6.6	160	6.6	175	5.6	180	5.3	8.9	4
225	7.9	225	7.0	230	7.7	235	6.7	230	6.6	225	5.8	220	4.9	230	5.4	230	6.0	225	5.5	220	5.0	225	5.2	6.5	5
205	8.0	200	7.9	180	7.2	180	7.8	170	8.1	175	7.6	175	7.7	175	9.0	180	9.7	175	10.9	180	10.7	180	11.4	7.0	6
185	10.2	185	10.2	185	10.8	190	9.1	180	8.3	185	8.3	185	8.1	180	8.5	185	9.1	185	10.1	195	9.3	190	9.2	10.3	7
200	9.0	195	8.6	190	9.0	180	9.2	175	8.3	170	8.2	165	11.0	170	11.5	170	12.0	180	10.9	205	10.5	230	12.0	9.6	8
290	10.5	290	10.5	295	10.0	295	8.9	305	7.7	315	8.2	315	8.0	315	6.5	320	5.1	315	5.0	300	4.6	295	4.1	9.0	9
150	5.7	150	7.5	150	7.2	145	8.6	150	10.3	150	10.0	150	10.0	150	10.2	210	7.1	235	5.9	245	6.3	230	4.8	5.4	10
190	7.4	200	8.5	195	8.0	180	6.4	190	5.0	165	4.6	150	5.0	170	5.4	170	3.6	170	2.6	160	2.7	125	2.2	6.1	11
40	5.2	50	4.9	50	4.9	65	4.1	70	2.5	70	2.3	70	2.7	70	3.7	70	3.0	—	0.5	—	1.4	—	0.5	2.7	12
160	5.3	170	6.1	170	6.2	175	6.2	170	5.9	170	6.0	165	6.1	160	7.0	160	7.2	160	8.1	160	8.6	160	10.0	4.3	13
240	8.5	245	7.9	250	7.3	260	8.0	270	7.1	270	6.5	280	5.7	280	5.7	280	5.0	285	4.4	280	3.6	295	2.5	7.0	14
225	4.8	220	5.1	215	5.3	185	4.8	175	5.8	175	5.6	180	6.3	175	7.4	180	8.0	195	7.8	200	8.5	210	8.4	5.2	15
220	8.1	200	7.6	220	8.0	200	7.5	200	7.5	200	8.9	200	9.9	210	9.2	290	6.1	300	3.5	240	2.6	235	4.0	7.2	16
225	7.5	225	8.0	225	8.5	225	7.8	215	7.6	230	7.5	200	6.3	200	7.0	200	7.5	200	7.7	195	7.7	190	8.0	6.3	17
255	11.0	240	10.3	245	11.5	250	11.0	250	11.5	245	8.2	260	7.5	250	9.1	250	9.4	245	8.7	250	10.2	255	8.2	9.6	18
160	7.7	155	10.0	170	13.0	175	14.7	195	15.4	195	17.1	200	21.5	210	24.1	240	24.2	250	23.2	255	18.2	265	15.8	11.4	19



Direction expressed in degrees from North ( $E = 90^\circ, S = 180^\circ, W = 270^\circ, N = 360^\circ$ ): Speed in metres per second.

## 422. Cahirciveen (Valentia Observatory):

$H_a$  (height of anemograph above M.S.L.) = Height of ground above

Dines Anemograph from Jan., 1926.

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.
Day.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.
1	20	8.8	20	8.9	25	9.8	25	11.1	25	11.0	30	7.9
2	60	5.5	25	5.3	10	4.1	25	3.5	60	4.0	50	3.2
3	60	3.7	40	4.4	55	5.0	25	3.8	50	4.0	25	5.1
4	50	1.6	—	0.5	—	1.3	—	1.1	—	0.5	—	0.5
5	—	0.5	—	1.5	—	1.5	—	0.5	—	1.2	50	2.8
6	95	5.0	75	4.8	80	5.0	95	6.0	100	7.0	95	6.0
7	80	4.5	80	5.1	90	6.1	90	4.5	75	4.6	70	5.4
8	50	1.9	55	2.1	—	1.4	50	2.6	55	1.8	55	1.9
9	55	2.5	55	2.1	55	1.8	—	1.2	—	1.0	—	1.2
10	190	9.8	190	10.0	195	10.1	195	9.9	200	11.2	200	10.8
11	170	6.5	190	7.2	190	7.7	185	7.4	195	9.6	200	9.6
12	165	6.4	175	8.2	185	10.7	195	12.3	195	15.6	200	14.9
13	220	5.2	205	4.0	215	4.5	230	6.0	245	6.8	250	8.0
14	220	7.0	245	7.6	215	5.2	190	5.1	185	4.9	195	4.7
15	220	10.0	225	10.2	230	9.8	235	8.1	235	7.8	240	7.3
16	95	2.4	160	4.2	145	6.0	145	5.6	115	6.2	105	8.7
17	15	3.5	360	2.8	360	4.0	355	2.2	335	3.5	325	5.3
18	235	5.4	220	4.6	195	4.0	200	5.4	195	5.7	190	6.5
19	200	13.1	190	13.2	185	13.9	195	12.9	200	10.7	225	7.3
20	235	10.4	235	9.2	225	9.9	225	10.1	225	9.7	225	8.5
21	170	10.3	175	9.2	190	8.1	190	9.7	180	10.0	180	11.0
22	235	9.1	225	9.3	215	11.5	215	12.9	215	14.1	215	15.0
23	225	7.7	205	8.7	195	10.7	205	15.4	225	18.8	230	19.0
24	300	15.5	300	15.8	300	15.0	300	14.7	295	15.2	295	15.2
25	255	13.0	260	13.0	265	12.4	270	11.5	265	10.9	270	10.2
26	325	9.1	320	7.9	325	7.3	320	6.3	310	5.8	300	5.2
27	325	12.4	325	10.3	320	10.7	325	11.7	320	10.8	325	10.4
28	355	6.1	360	5.5	360	5.5	360	4.5	5	3.1	355	3.6
29	200	3.5	210	3.0	225	2.9	225	2.7	270	1.9	275	1.7
30	320	4.6	320	4.5	320	2.4	310	4.2	300	4.3	305	4.0
Mean ...	—	6.8	—	6.8	—	6.9	—	7.1	—	7.4	—	7.5

423. Cahirciveen (Valentia Observatory):  $H_a = 17$  metres + 13 metres.

	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	
1	280	2.3	—	0.5	—	0.5	—	1.1	—	0.5	—	1.1	270	3.2	270	2.4	270	2.5	270	2.5	270	2.2	
2	—	0.5	(245)	1.8	(—)	1.5	(230)	1.9	(230)	1.7	(—)	1.2	(230)	2.1	(230)	2.2	(225)	2.3	225	3.8	225	4.4	
3	5	5.6	10	5.9	10	6.1	25	4.6	25	3.3	25	3.2	—	1.2	—	0.5	—	1.1	—	1.5	—	1.0	
4	150	7.1	160	6.9	165	7.0	160	7.5	165	6.3	180	6.6	190	6.7	195	5.8	195	6.5	200	7.2	205	7.7	
5	245	5.6	270	4.1	285	6.2	300	5.9	305	5.2	305	4.5	315	4.6	310	3.5	295	3.1	—	0.5	—	3.3	
6	200	4.9	195	5.5	175	7.7	245	10.1	340	7.1	300	7.0	290	7.6	310	8.3	300	8.4	295	8.7	295	9.6	
7	305	6.1	300	6.9	285	8.5	310	6.1	300	5.1	320	4.1	350	2.8	5	6.1	25	2.9	—	0.5	320	5.1	
8	335	2.7	45	1.8	—	0.5	—	1.2	35	2.6	—	1.5	10	1.9	10	3.1	355	2.6	340	4.0	10	4.0	
9	—	1.0	—	1.5	45	1.7	45	1.8	—	1.3	120	2.6	170	4.9	170	5.0	185	5.0	200	6.5	195	7.6	
10	240	6.0	265	6.1	255	7.1	250	6.1	240	6.2	245	6.2	235	5.7	220	4.5	200	4.8	170	5.7	185	4.9	
11	—	1.1	—	1.2	—	0.5	—	0.5	—	0.5	—	1.0	—	0.5	—	0.5	55	2.1	45	3.4	45	2.4	
12	45	4.5	55	6.2	50	5.2	65	4.8	55	4.0	65	4.0	45	2.5	45	2.1	55	4.2	55	3.6	40	3.8	
13	80	3.7	80	4.3	80	5.1	90	4.1	95	4.1	100	3.6	95	5.3	105	7.7	100	10.2	105	9.4	105	8.5	
14	140	11.0	135	12.6	135	11.8	120	10.9	125	9.4	130	5.7	90	1.8	50	3.6	50	3.1	60	3.2	90	7.2	
15	145	9.0	140	9.2	145	10.4	145	9.9	150	9.8	155	10.3	155	10.5	155	12.5	150	12.9	150	12.0	150	11.5	
16	195	12.0	200	11.8	195	10.2	190	10.8	195	12.1	200	13.4	205	11.1	210	9.7	205	9.1	200	10.2	290	11.1	
17	310	3.7	335	2.6	320	1.9	—	0.5	—	0.5	—	0.5	—	0.5	55	1.7	60	1.7	15	1.6	—	0.5	
18	160	10.1	160	10.5	160	9.8	160	10.5	160	9.4	165	9.8	170	9.1	175	9.6	175	9.7	170	10.6	170	9.8	
19	—	1.0	—	0.5	—	0.5	—	0.5	—	0.5	—	0.5	—	1.7	—	1.3	—	0.5	—	1.0	170	4.4	
20	325	4.9	345	5.5	350	5.1	355	5.5	360	5.6	360	5.2	360	5.3	360	3.6	360	3.4	360	3.8	355	5.0	
21	290	3.7	275	1.7	—	0.5	295	1.6	—	0.5	—	0.5	—	1.4	—	1.5	345	1.7	340	2.9	340	4.0	
22	195	5.0	190	4.4	205	5.5	220	5.5	210	5.9	205	5.5	220	7.2	230	8.9	230	9.0	315	7.8	330	7.1	
23	55	1.7	—	0.5	160	2.6	155	4.9	155	5.1	160	5.9	155	6.4	180	6.5	180	6.3	180	7.2	180	9.2	
24	200	11.6	200	12.1	200	12.3	205	12.3	205	12.5	205	12.7	210	12.6	225	8.5	235	8.1	215	6.0	245	5.2	
25	250	6.2	235	4.2	200	4.1	225	5.2	205	5.1	200	6.1	195	6.4	195	7.4	200	8.2	200	9.4	190	10.7	
26	260	5.5	265	3.2	265	1.7	—	0.5	—	1.4	300	2.9	310	3.3	305	4.1	300	5.5	300	6.1	300	5.2	
27	—	1.4	20	3.0	30	2.7	75	3.5	80	4.1	90	5.4	85	5.2	95	5.4	110	7.7	100	6.8	90	7.3	
28	155	2.6	170	2.1	160	4.0	170	4.9	230	6.5	250	6.3	255	7.7	245	8.0	240	5.8	220	5.1	195	6.8	
29	255	7.0	250	8.4	270	9.2	260	9.0	275	8.6	260	9.8	260	11.0	275	8.7	255	9.6	240	7.9	240	8.8	
30	330	6.8	320	6.4	315	6.9	325	7.1	305	6.5	300	7.3	325	9.0	320	6.6	320	6.0	360	6.6	25	4.0	
31	40	6.5	50	4.7	40	7.2	30	7.3	30	7.3	30	8.0	25	7.4	40	7.5	40	7.3	35	7.0	30	8.3	
Mean ...	—	5.2	—	5.0	—	5.3	—	5.4	—	5.1	—	5.2	—	5.4	—	5.4	—	5.5	—	5.6	—	5.8	—
Annual Mean ...	—	5.9	—	6.0	—	6.1	—	6.1	—	6.2	—	6.1	—	6.2	—	6.2	—	6.4	—	6.6	—	6.9	—



**November, 1928.**

13.		14.		15.		16.		17.		18.		19.		20.		21.		22.		23.		24.		Mean	Day.
°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	m/s.	
25	6.5	30	7.5	35	6.5	30	8.3	40	6.4	55	4.7	60	6.0	60	6.3	65	6.6	60	5.0	55	3.0	70	5.8	7.4	1
45	4.5	20	4.4	30	4.5	40	3.5	65	1.7	—	1.2	—	0.5	—	1.0	.40	1.9	—	1.2	—	1.0	35	3.8	3.6	2
30	4.1	35	4.4	15	5.5	20	4.8	25	3.5	20	3.6	—	1.5	55	2.0	—	1.2	—	0.5	—	1.0	—	1.5	3.9	3
—	1.4	—	0.5	45	1.7	60	2.4	70	2.5	60	1.8	—	0.5	—	0.5	—	1.2	—	0.5	—	0.5	—	1.4	1.1	4
130	4.6	110	4.4	100	5.2	105	6.0	115	5.5	115	5.4	100	4.9	95	4.7	100	5.0	100	5.4	100	6.0	95	5.1	3.5	5
85	8.4	90	8.3	85	7.6	95	7.5	85	7.0	70	5.7	95	5.3	90	5.7	90	5.1	90	5.1	75	4.6	70	4.8	6.6	6
75	5.4	80	7.0	65	5.3	65	4.1	—	0.5	—	1.5	—	1.1	—	0.5	—	0.5	—	0.5	—	0.5	—	1.4	4.3	7
—	0.5	250	1.6	—	1.0	—	0.5	—	0.5	—	0.5	75	1.6	—	1.0	60	2.5	—	0.5	—	1.0	55	1.8	1.3	8
155	6.6	155	7.5	155	7.2	155	7.4	160	7.3	170	6.7	175	6.9	175	7.2	175	7.7	185	8.5	185	9.0	190	10.1	4.7	9
245	4.7	230	3.2	210	3.3	210	4.0	210	4.7	225	5.3	220	5.0	210	5.1	215	5.2	200	4.8	190	4.6	180	5.0	7.1	10
205	11.1	215	10.3	210	8.6	215	8.7	215	7.4	210	7.5	220	6.7	210	6.2	205	5.2	190	4.9	190	4.8	175	6.4	8.4	11
225	9.1	225	9.4	225	7.2	220	5.6	195	4.5	190	4.8	180	5.0	185	5.3	185	4.5	190	5.0	190	5.0	195	6.0	9.3	12
235	6.1	225	6.9	230	6.3	225	6.0	220	5.2	215	4.9	220	6.1	220	5.4	220	6.2	225	6.2	225	7.1	215	7.2	6.2	13
170	12.8	175	13.9	195	13.2	215	13.7	220	12.7	220	13.0	220	12.7	225	12.8	220	13.1	215	11.2	210	10.8	220	9.9	9.6	14
290	5.8	275	5.5	265	4.5	260	4.5	220	2.4	200	2.6	185	2.2	105	1.7	—	1.2	—	1.0	45	2.2	75	1.6	5.6	15
325	6.4	305	4.4	280	5.1	245	3.7	205	4.4	210	5.1	230	5.7	280	2.7	—	0.5	70	2.4	50	2.5	—	1.1	5.3	16
280	5.8	275	5.7	270	5.6	275	5.2	280	6.1	280	5.2	270	6.5	270	7.2	265	7.0	275	6.2	265	6.2	265	5.8	5.1	17
200	11.8	200	10.8	195	10.8	190	9.9	185	10.7	180	11.4	175	12.1	175	13.5	180	14.5	185	14.9	190	15.3	195	14.2	10.0	18

[illegible]



424. Cahirciveen (Valentia Observatory) :  $H_a = 17$  metres + 13 metres.

1928.

Month	Jan.		Feb.		Mar.		April		May		June		July		Aug.		Sept.		Oct.		Nov.		Dec.	
Day.	Max. in a Gust.	Time of Gust.	Max. in a Gust.	Time of Gust.	Max. in a Gust.	Time of Gust.	Max. in a Gust.	Time of Gust.	Max. in a Gust.	Time of Gust.	Max. in a Gust.	Time of Gust.	Max. in a Gust.	Time of Gust.	Max. in a Gust.	Time of Gust.	Max. in a Gust.	Time of Gust.	Max. in a Gust.	Time of Gust.	Max. in a Gust.	Time of Gust.	Max. in a Gust.	Time of Gust.
1	m/s. 26	h. m. 11 30	m/s. 25	h. m. 0 55	m/s. 6	h. m. 15 15	m/s. 10	h. m. 11 10	m/s. 8	h. m. 10 20	m/s. 15	h. m. 19 35	m/s. 19	h. m. 10 30	m/s. 9	h. m. 18 30	m/s. 8	h. m. 13 25	m/s. 6	h. m. 12 20	m/s. 18	h. m. 3 35	m/s. 7	h. m. 0 45
2	20	13 35	25	11 15	7	10 30	17	19 05	6	21 50	16	14 20	11	13 05	5	13 40	12	12 25	7	23 35	11	0 30	10	23 25
3	16	3 45	27	0 20	7	13 30	20	13 40	13	22 35	13	10 35	8	14 25	7	17 10	15	12 00	17	16 10	13	7 20	9	23 30
4	17	20 25	21	11 00	8	3 25	15	1 05	13	2 20	16	22 15	18	12 40	6	15 25	15	13 25	22	10 50	6	12 20	13	21 05
5	19	23 55	21	16 50	7	18 15	16	0 20	10	14 50	13	15 30	14	0 30	15	22 10	15	12 45	13	12 10	10	16 45	13	0 55
6	20	0 05	17	21 25	13	12 05	13	23 30	9	22 20	11	7 10	16	3 50	20	6 10	18	22 55	18	23 35	23	5 00	23	13 35
7	18	15 10	20	1 15	12	22 15	20	9 30	14	6 45	10	17 20	17	17 00	21	4 20	22	11 00	20	4 05	13	9 10	15	5 05
8	23	2 45	23	18 55	12	2 35	24	17 15	12	9 25	16	23 15	11	0 15	13	20 40	10	22 10	21	23 30	4	21 05	11	12 40
9	20	6 35	16	0 40	16	10 40	20	15 15	7	0 00	15	23 25	12	9 55	12	13 20	17	17 40	19	12 20	16	23 25	23	22 30
10	27	6 25	87	16 50	10	10 10	18	5 30	8	21 10	16	1 30	19	11 15	9	8 40	16	0 30	20	16 45	16	4 55	15	4 35
11	16	23 35	22	0 25	21	8 50	7	17 40	8	12 30	10	12 40	14	3 05	17	12 15	9	16 30	14	11 45	18	10 10	11	15 50
12	25	5 50	15	11 25	13	4 35	7	14 50	11	16 25	19	15 15	9	13 45	21	20 25	12	23 50	9	11 45	23	10 15	10	1 55
13	20	3 10	23	5 00	19	22 40	19	12 00	10	19 00	13	10 55	12	15 15	19	9 00	15	13 30	18	24 00	14	11 25	20	22 05
14	19	14 45	20	24 00	23	9 50	25	22 30	12	16 45	21	4 45	13	12 05	12	12 05	15	7 00	20	4 25	23	16 25	23	3 00
15	22	12 35	22	3 05	14	22 40	25	0 40	15	23 35	13	5 45	9	5 45	13	11 30	7	16 50	12	20 25	16	2 30	20	23 15
16	16	2 10	29	18 30	21	4 10	13	16 20	22	11 30	10	15 25	11	14 20	8	8 20	*	*	13	18 35	23	5 55	18	0 45
17	16	21 00	27	1 40	20	5 15	9	14 05	21	17 25	9	15 40	9	15 50	15	14 25	17	12 40	16	17 35	14	10 00	16	23 00
18	21	23 10	11	12 45	28	21 25	13	15 05	16	1 35	13	12 30	8	11 15	15	13 05	7	15 55	20	17 15	26	23 00	16	10 15
19	22	23 50	14	8 40	25	15 10	9	17 05	13	11 55	11	3 20	7	16 10	10	17 25	9	14 45	40	20 10	21	19 40	14	20 55
20	21	23 15	16	24 00	12	4 55	8	11 05	15	17 25	17	22 35	6	1 10	10	18 30	7	4 05	24	0 05	18	1 55	12	12 50
21	27	5 00	15	2 20	12	10 40	10	15 05	12	14 05	18	4 50	12	14 00	9	15 15	7	19 00	17	15 25	19	9 40	7	0 35
22	15	23 25	13	23 40	15	17 25	16	19 15	10	12 25	17	15 35	7	9 20	15	7 45	10	23 30	10	1 15	24	8 50	13	8 00
23	19	3 20	11	23 35	14	20 15	18	22 50	10	14 45	11	13 25	7	16 20	16	21 30	8	10 25	23	20 50	31	21 25	17	23 40
24	31	11 40	17	13 50	11	22 55	23	2 55	14	23 15	15	23 45	10	23 50	17	3 20	8	14 45	26	10 55	29	0 05	20	2 40
25	29	18 50	13	23 15	13	10 50	10	10 35	22	14 25	23	4 55	10	5 10	14	14 20	11	13 50	17	20 30	21	9 25	27	19 40
26	27	3 20	15	15 40	16	16 35	16	17 25	19	6 30	26	3 45	11	13 25	11	2 55	11	12 35	27	23 20	23	21 10	12	9 35
27	23	1 15	18	23 55	17	23 10	18	20 50	14	9 00	13	22 50	11	12 55	9	2 45	17	23 40	28	0 35	22	14 20	15	13 45
28	17	7 55	27	16 10	22	3 00	18	2 30	5	13 40	23	20 45	13	14 05	12	16 30	21	19 10	11	0 20	11	1 35	23	15 00
29	18	8 45	8	15 40	23	12 15	9	22 40	7	16 20	17	21 50	11	1 05	10	3 45	22	4 55	18	20 00	11	18 45	19	0 40
30	15	10 40	—	—	24	16 15	14	13 10	7	14 45	15	4 00	11	11 45	7	12 35	13	10 15	25	10 40	8	1 30	17	6 45
31	25	23 40	—	—	20	5 45	—	—	13	19 05	—	—	11	9 15	7	13 55	—	—	27	6 15	—	—	18	18 10

## DISTRIBUTION OF WIND SPEED : EXTREME VELOCITIES AS RECORDED BY THE DINES TUBE ANEMOGRAPH.

425. Cahirciveen (Valentia Observatory) :  $H_a = 17$  metres + 13 metres.

1928.

Month.	DISTRIBUTION OF WIND.								EXTREME VELOCITIES.					
	More than 17.2 m/s.		10.8 to 17.1 m/s.		5.5 to 10.7 m/s.	1.6 to 5.4 m/s.	0 to 1.5 m/s.	No Record.	Highest Hourly Wind.			Highest Gust.		
	Dates of Occurrence.	Duration.	No. of Days.	Duration.	Duration.	Duration.	Duration.	Duration.	Veer from N.	Speed.	Mid. Time.	Speed.	Time.	
Jan. ... ..	10th, 24th, 25th	hr. 3	20	hr. 198	hr. 387	hr. 137	hr. 19	hr. 0	210	m/s. 18	day. 25 hour. 13	m/s. 31	day. 24 h. 11 m. 40	
Feb. ... ..	10th	4	15	146	378	134	34	0	260	22	10 17	37	10 16 50	
Mar. ... ..	—	—	10	95	323	246	80	0	160	16	19 15	28	18 21 25	
Apr. ... ..	—	—	10	46	353	262	59	0	100	17	15 3	25	15 0 40	
May ... ..	—	—	5	44	274	302	124	0	350	15	17 14	22	17 17 25	
June ... ..	26th	1	8	63	375	252	29	0	345	17	26 4	26	26 3 45	
July ... ..	—	—	3	11	319	351	63	0	200	14	1 11	19	10 11 15	
Aug. ... ..	—	—	3	20	308	334	82	0	195	13	7 4	21	12 20 25	
Sept. ... ..	—	—	6	41	313	292	74	0	60	15	29 5	22	7 11 0	
Oct. ... ..	19th, 26th	6	16	133	391	173	41	0	240	24	19 21	38	19 20 10	
Nov. ... ..	22nd, 23rd	8	15	122	298	217	75	0	230	20	23 7	31	23 21 25	
Dec. ... ..	25th	1	9	47	327	264	105	0	220	17	25 19	27	25 19 40	
Year ... ..	10 days	23	120	966	4,046	2,964	785	0	240	24	Oct. 19 21	38	Oct. 19 20 10	



MINIMUM TEMPERATURE "ON THE GRASS" DURING THE INTERVAL 18H. TO 7H. G.M.T.

*Readings in degrees absolute.*

426. Cahirciveen (Valentia Observatory).

1928.

Month.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Day.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.
1	72.9	75.2	72.4	73.9	77.8	85.6	83.2	74.6	76.8	73.1	78.7	82.4
2	78.8	75.6	71.6	76.0	78.8	85.0	82.8	76.3	81.2	74.6	73.5	82.4
3	75.9	73.6	72.4	80.3	81.9	81.8	78.8	78.6	84.1	78.6	71.8	78.6
4	75.8	77.8	74.9	75.3	84.4	82.7	79.8	77.2	86.9	82.9	72.1	76.9
5	77.4	77.1	73.2	73.6	79.7	84.4	85.8	78.8	84.7	83.3	72.3	79.7
6	80.4	76.1	77.7	74.0	78.1	84.2	83.9	88.0	81.0	81.7	79.9	79.8
7	79.8	80.1	81.6	79.7	79.2	83.7	84.3	87.6	85.8	86.4	80.3	74.6
8	78.4	82.6	81.3	78.5	77.1	82.8	86.3	83.6	79.7	84.2	72.3	70.6
9	77.4	78.1	77.0	80.3	77.4	81.8	82.3	83.6	80.1	82.8	73.1	73.0
10	77.9	78.1	70.3	81.4	73.6	79.7	81.9	86.1	84.9	80.2	82.5	76.0
11	75.9	75.7	74.6	77.1	76.7	75.0	87.1	85.7	82.6	80.8	84.2	71.8
12	75.5	76.0	69.9	75.4	82.6	76.4	86.6	81.7	83.4	76.9	84.1	74.1
13	78.4	81.6	66.8	78.7	81.3	85.0	84.1	83.1	82.5	74.9	80.2	77.1
14	77.4	80.2	75.4	78.7	78.3	82.0	86.2	81.3	86.4	83.3	76.8	78.8
15	76.3	83.7	79.7	78.5	80.8	77.4	86.7	81.9	74.7	80.8	81.6	79.0
16	78.6	83.3	82.1	74.2	80.9	76.9	80.9	81.4	75.9	83.9	79.0	83.1
17	78.8	76.3	81.9	69.8	80.2	74.6	78.7	82.0	86.4	81.9	74.7	74.6
18	80.2	78.0	77.9	76.5	79.7	82.8	80.9	85.2	79.9	83.5	79.2	78.6
19	75.7	76.8	81.1	71.4	79.7	84.2	85.4	85.8	79.0	79.9	82.6	74.4
20	82.4	81.3	79.3	74.1	75.8	76.9	85.1	80.2	78.4	78.6	78.6	77.7
21	80.2	81.8	78.7	71.7	77.8	84.1	80.3	81.2	82.6	78.6	83.6	79.2
22	76.2	75.4	72.3	70.4	73.8	83.6	87.1	83.8	75.8	75.7	81.9	79.6
23	77.0	78.1	78.2	82.1	78.6	83.7	86.9	83.2	78.7	76.0	80.4	73.5
24	78.2	79.1	77.3	82.7	78.6	79.2	88.8	84.8	74.3	81.3	78.0	83.6
25	75.0	81.4	77.8	78.5	80.8	83.1	88.7	84.1	83.2	80.2	81.5	76.3
26	74.9	81.0	75.8	79.9	84.8	83.4	88.2	82.6	84.2	81.1	78.8	77.9
27	75.9	81.1	77.4	80.1	85.0	83.0	86.9	81.6	79.5	81.8	77.6	74.7
28	79.6	80.8	75.2	78.2	78.5	84.2	80.3	79.5	81.7	81.4	76.8	80.1
29	76.9	78.8	78.3	75.9	75.8	81.6	82.2	80.3	81.3	79.8	80.9	74.8
30	75.1	—	77.6	80.2	76.9	81.4	80.8	79.3	74.1	79.8	81.9	73.1
31	73.7	—	77.1	—	84.2	—	81.7	80.3	—	79.7	—	73.7
Mean	...	77.3	78.6	76.3	76.9	79.3	81.7	84.0	82.0	81.0	80.2	78.6
												77.1

NOTES:—(1) The initial 2 of the readings is omitted, i.e., 275.0 degrees absolute is written 75.0.  
 (2) The minimum refers to the interval from 18h. the previous day to 7h. on the day to which it is entered.  
 (3) Annual Mean 77.4.



Day.	Cloud Forms.			Cloud Amount (All Forms.)						Visibility.						Precipitation.						Remarks on the Weather of the Day.
	7 <sup>h</sup>	13 <sup>h</sup>	18 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	
1	Nb.	St : Nb.	St : A-St.	10	10	10	10	10	9	k	I	G	h	J	k	●	●	●	●	●	●	o i ● d a : o ● p : c to b n. [▲ n.
2	St-Cu.	St : St-Cu.	St : St-Cu : A-Cu.	2	2	5	8	4	2	l	l	l	l	l	l	...	...	...	...	...	...	Fair with p ● a : bc p ▲ p : b to bc p
3	St-Cu : Cu-Nb.	Fr-Cu : A-Cu.	Fr-Cu:St-Cu:A-Cu.	8	8	5	4	6	10	k	l	l	l	l	I	...	...	...	...	...	...	Fair to fine a and p : c o d o d n.
4	St.	St : St-Cu.	St : St-Cu.	10	10	10	10	4	9	G	J	k	J	k	J	●	...	...	...	...	...	o d a : c to o i d p : bc c p ● n.
5	St : Cu-Nb.	St : St-Cu.	St : St-Cu : A-St.	7	2	10	9	10	10	k	l	l	l	k	I	...	...	...	...	...	...	Fair a : c to o p : o d ● n.
6	St.	St : St-Cu.	St : St-Cu : A-Cu.	10	8	8	9	8	10	I	J	k	k	k	k	●	...	...	...	...	...	c to o d o a : c to o i ● p : o d n.
7	St.	St.	St : St-Cu.	10	10	10	10	10	9	I	I	I	h	J	k	●	...	...	...	...	...	od d o a : o ● d p : b to c p ● n.
8	Cu : St-Cu : A-Cu.	St-Cu : A-St.	St : St-Cu : A-St.	6	7	8	10	9	6	k	k	k	k	k	k	...	...	...	...	...	...	bc p ● a : bc to c p ● p : bc to c
9	St : St-Cu.	St : St-Cu.	St : St-Cu : A-Cu.	9	5	5	5	6	5	k	l	k	l	k	k	...	...	...	...	...	...	p ● n. [p ● n.
10	St : St-Cu.	St : St-Cu : A-Cu.	St : St-Cu.	10	6	7	5	5	7	J	k	k	l	k	k	●	...	...	...	...	...	bc to c p ● a : bc p ● p : bc c
11	Fr-Cu.	Fr-Cu : St-Cu.	St : St-Cu : Ci-St.	2	3	4	9	5	10	l	l	k	l	l	k	...	...	...	...	...	...	bc to c ● p ▲ a : bc y to p ● p :
12	St : Nb.	St.	St : St-Cu.	10	10	10	10	8	6	I	I	I	J	k	k	●	...	...	...	...	...	c p ▲ to b n. Fair with p ▲ all day : bc p ● n.
13	Cu : St : Cu-Nb.	St : Cu-Nb : St-Cu.	St : St-Cu.	8	7	8	6	7	2	k	k	k	k	k	k	●	...	...	...	...	...	o ● ● a and p : bc to c p ● n.
14	St : Nb.	St : St-Cu.	St : Nb : St-Cu.	10	9	4	8	6	2	I	J	k	k	k	k	●	...	...	...	...	...	bc to c p ● a : bc to c p ● p : i ● n.
15	St : St-Cu : A-St.	St : Cu-Nb.	St : Cu-Nb.	10	10	9	8	8	3	k	I	J	J	J	k	...	...	...	...	...	...	c to o i ● a : bc to c p ▲ q p : bc c
16	St : St-Cu : Cu.	St : St-Cu.	St : St-Cu.	6	7	10	9	10	10	k	k	k	l	k	I	...	...	...	...	...	...	[▲ q n. c p ● p ● a : c p ● ▲ p : c p ▲ n.
17	St : St-Cu.	St : St-Cu.	St : St-Cu.	10	7	10	8	10	10	J	k	k	l	k	J	...	...	...	...	...	...	bc to c p ● a : c p ● p : o d ● n.
18	St.	St : St-Cu.	St : St-Cu.	10	10	10	10	7	4	h	I	k	k	k	k	●	...	...	...	...	...	c a : c p ● p : i d o ● n.
19	St-Cu.	St : St-Cu.	St : St-Cu.	2	7	7	9	10	10	k	l	k	k	k	J	...	...	...	...	...	...	oi ● d a : c p ● p : bc p ▲ n.
20	St : A-St.	St-Cu.	Fr-Cu : St-Cu.	10	6	2	3	2	5	J	J	k	k	k	k	...	...	...	...	...	...	bc to c p ▲ a : fair to c p ● p : o d ● n.
21	St : A-St.	St : St-Cu.	St : St-Cu.	10	10	10	9	2	1	J	k	k	k	k	k	●	...	...	...	...	...	Fair to fine day : c to oid o ● n.
22	St-Cu.	St-Cu:Cu-Cu:St.	St : St-Cu : Ci-St.	5	2	5	8	5	5	k	l	k	k	k	k	...	...	...	...	...	...	c to o ● a : c p ● p : fine n.
23	St : Nb.	St.	St : St-Cu.	10	10	10	10	10	10	J	J	h	I	I	I	...	...	...	...	...	...	b to c p ● a : bc to c p ● p : b c to
24	St : Nb.	Nb : St : St-Cu.	Nb : St-Cu.	10	6	6	8	8	9	J	k	k	k	k	k	▲	...	...	...	...	...	p ● n. c to o a : oi ● d p : oid o to c p ● n.
25	St : St-Cu : A-St.	St : St-Cu : A-St.	St : St-Cu.	8	9	10	10	10	9	k	k	J	J	k	J	...	...	...	...	...	...	q c p ● a : bc p ● p : c p ▲ n.
26	St : Nb.	St : St-Cu : A-Cu.	St : Nb : St-Cu.	10	10	6	10	6	8	k	k	l	J	k	k	●	...	...	...	...	...	c p ● a : K Q 13 <sup>h</sup> 35 <sup>m</sup> K ▲ p : p
27	St-Cu:A-Cu:A-St.	St : St-Cu : A-Cu.	St : St-Cu : A-St.	8	7	5	9	10	10	J	k	k	k	k	I	...	...	...	...	...	...	q < n. o ● p ▲ * a : p ▲ p : c p ▲ q n.
28	St : Nb.	St : St-Cu : A-Cu.	St : St-Cu : A-St.	10	10	6	3	9	8	J	k	k	k	k	J	...	...	...	...	...	...	bc to c p ● a : bc p ● p : i d o ● n.
29	St-Cu : A-St.	St-Cu : Cu-Nb.	Nb : St : A-St.	10	8	8	8	6	6	k	k	l	k	k	k	...	...	...	...	...	...	o ● a : bc to c p : ● n.
30	St-Cu : A-St.	St : Nb : St-Cu.	St : St-Cu.	4	6	9	5	5	2	l	l	k	l	l	l	...	...	...	...	...	...	c p ▲ all day.
31	St : Nb.	St : St-Cu.	St : St-Cu.	10	10	10	8	8	8	J	I	J	J	k	J	●	●	●	...	...	...	Fair p ▲ all day.
Mean Cloud Am't.				8.2	7.5	7.6	8.0	7.3	6.9													o d ● a : ci ● p : c p ● n.

## 428. Cahirciveen (Valentia Observatory).

February, 1928.

1	Cu-Nb: Fr-St: A-St.	St: St-Cu: Nb: A-St.	Fr-St: St-Cu.	9	8	9	9	3	8	k	l	l	l	l	l	0	0	0	0	0	0	0	c p ▲ K a : c p ▲ p : b to bc to p
2	Nb.	St: Nb: St-Cu.	St: Nb: St-Cu.	10	8	6	8	10	8	I	k	k	k	k	k	0	0	0	0	0	0	0	K p ▲ a : bc p ▲ p : bc p ▲ q n.
3	St-Cu.	St: St-Cu: A-St.	St: St-Cu: A-St.	4	6	10	7	10	10	k	k	l	l	l	I	0	0	0	0	0	0	0	bc p ▲ a : bc to c p ° p : ° ° n.
4	St: Nb.	St: St-Cu.	St: St-Cu: A-St.	10	10	10	10	10	10	I	I	I	J	k	J	0	0	0	0	0	0	0	i ° a : c to o i d p : i ° n.
5	St: St-Cu: A-St.	Fr-Cu.	St-Cu: A-St.	8	3	1	9	8	7	k	l	l	k	l	l	0	0	0	0	0	0	0	bc c p ° a : c p ° p : p ▲ n.
6	Cu.	St-Cu: A-Cu.	St: St-Cu: A-Cu.	2	7	7	4	6	10	l	l	l	l	l	l	0	0	0	0	0	0	0	Fair day.
7	St: Nb.	St.	St: St-Cu.	10	10	10	10	10	10	J	I	I	k	J	I	0	0	0	0	0	0	0	c to o i d.
8	St: St-Cu.	St: St-Cu.	St: A-St.	10	10	10	10	10	10	J	k	k	k	k	h	I	0	0	0	0	0	0	c to o a : i d p : i d ° n.
9	St-Cu: Ci-St.	St: St-Cu: A-St.	St: St-Cu: A-St.	10	10	10	8	10	4	k	k	k	l	k	k	0	0	0	0	0	0	0	c p ° a and p : bc c p ° n.
10	St: Nb.	St: Nb: St-Cu.	St: Nb: St-Cu.	10	10	10	8	9	4	J	J	k	J	I	J	0	0	0	0	0	0	0	° ° to c p ▲ a : c to bc p ▲ p and n:
11	St: St-Cu: A-St.	St: St-Cu.	St: St-Cu: A-Cu.	10	7	7	7	8	5	k	l	l	l	l	l	0	0	0	0	0	0	0	[ < 21 <sup>h</sup> .
12	Fr-St: Nb.	St: A-St.	St.	10	10	10	10	10	10	J	J	I	J	J	I	0	0	0	0	0	0	0	° a : i ° d p : i d ° n.
13	St.	St: St-Cu.	St: St-Cu.	10	10	9	7	9	8	G	I	k	l	l	J	0	0	0	0	0	0	0	i d o a and p : c n.
14	St: Nb.	St.	St: St-Cu.	10	10	10	10	10	10	h	k	h	I	J	J	0	0	0	0	0	0	0	i d o a : p : ° i d o n.
15	St: Nb.	St: St-Cu.	St: A-St.	10	10	10	10	10	10	I	J	J	J	J	h	0	0	0	0	0	0	0	i d o d ° °.
16	St: St-Cu.	St-Cu: A-Cu.	St: St-Cu.	9	9	4	3	6	4	J	h	l	l	k	k	0	0	0	0	0	0	0	p ° a : bc p ▲ p and n : q n.
17	St-Cu: Cu: A-St.	St: St-Cu: A-Cu.	St: St-Cu.	8	7	7	9	8	9	k	k	l	k	k	k	0	0	0	0	0	0	0	bc to c p ° a : p and n.
18	Fr-St: St-Cu.	St: St-Cu.	St: St-Cu: A-Cu.	10	10	8	6	3	9	l	l	k	l	l	l	0	0	0	0	0	0	0	c to o p ° a : c p ° to bc p : p ° n.
19	St: St-Cu.	St-Cu: A-Cu.	St: St-Cu.	10	8	9	10	10	10	k	l	l	l	l	l	0	0	0	0	0	0	0	c to o all day.
20	St: St-Cu.	St: St-Cu.	St: St-Cu.	9	9	10	9	6	10	J	k	k	k	k	k	0	0	0	0	0	0	0	c to o a and p : bc to c n.
21	St: St-Cu.	St: St-Cu.	St: St-Cu.	10	9	10	10	10	8	h	k	k	I	k	h	0	0	0	0	0	0	0	i d o a : ° d p : i d o to b n.
22	St-Cu.	Fr-St: A-Cu.	Cu: St-Cu: Ci-Cu.	2	2	2	4	6	5	k	l	l	l	l	l	0	0	0	0	0	0	0	b n a : fine p and n.
23	St-Cu: A-St: A-Cu.	St-Cu: A-Cu: Ci-Cu.	St-Cu: A-Cu: Ci-Cu.	8	7	8	8	7	3	J	J	k	k	k	k	0	0	0	0	0	0	0	Fair a : c y to bc p : bc to c n.
24	St-Cu: A-St.	St: St-Cu.	St: St-Cu: A-Cu.	10	8	10	8	8	8	J	J	J	J	J	J	0	0	0	0	0	0	0	Fair.
25	St-Cu.	St: St-Cu: A-Cu.	St: St-Cu: A-Cu.	6	8	8	9	5	9	J	k	k	k	J	J	0	0	0	0	0	0	0	Fair.
26	St-Cu: Cu: lent: A-Cu.	St-Cu: Cu.	St: St-Cu.	8	8	4	5	9	7	k	k	k	k	k	l	0	0	0	0	0	0	0	Fair.
27	Cu: Ci-St.	Cu: St-Cu: A-Cu.	St: St-Cu: A-Cu.	5	2	4	5	6	7	l	l	l	l	l	l	0	0	0	0	0	0	0	Fair to fine a : bc y p : c ° n.
28	St-Cu: A-Cu.	St: St-Cu.	St: St-Cu.	8	8	10	9	10	10	l	l	l	l	l	J	0	0	0	0	0	0	0	c to bc a : c to o ° p : ° p ° n.
29	Fr-Cu: A-Cu.	St-Cu: A-Cu.	Fr-Cu.	2	2	2	2	1	1	l	l	l	l	l	l	0	0	0	0	0	0	0	Fine all day : y p : b n.
Mean Cloud Am't.				8.2	7.8	7.8	7.7	7.9	7.7														

NOTE.—Visibility in these tables refers to a landwards direction ; visibility seawards, when it differs from visibility landwards, is given on p. 287.



## 429. Cahirciveen (Valentia Observatory).

March, 1928.

Day.	Cloud Forms.			Cloud Amount (All Forms.)							Visibility.						Precipitation.						Remarks on the Weather of the Day.
	7 <sup>h</sup>	13 <sup>h</sup>	18 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>		
1	St-Cu.	Fr-Cu : St-Cu.	Fr-Cu : St-Cu.	8	8	4	2	2	5	l	k	l	m	l	l	● <sup>6</sup>	...	...	...	...	...	...	h to c p ● a : fair v y p : fine n.
2	Cu.	Fr-Cu.	Fr-Cu : St-Cu.	2	1	1	1	2	0	l	l	m	m	l	l	...	...	...	...	...	...	...	h fine a : v y p : fine n.
3	St-Cu : A-St.	Cu.	St : St-Cu : A-Cu.	10	10	2	8	8	10	k	J	J	k	k	k	...	● <sup>0</sup>	...	...	...	...	...	h to i d <sub>0</sub> a : fair p : p ● <sup>0</sup> n.
4	Cu.	Cu : A-Cu : Ci-Cu : Ci.	St-Cu.	2	4	7	4	1	1	l	l	l	l	l	l	...	...	...	...	...	...	...	● <sup>0</sup> then fair to fine h n.
5	St-Cu : Ci-St.	St-Cu.	St : St-Cu : A-Cu.	8	8	3	5	7	8	l	k	l	k	k	k	...	...	...	...	...	...	...	h fair to fine.
6	St : St-Cu.	St : St-Cu.	St : St-Cu.	8	9	9	10	10	10	k	k	k	k	l	k	...	...	...	...	...	...	...	c p ● i d <sub>0</sub> a : c to o p : i d <sup>0</sup> n.
7	St : Nb.	St : St-Cu.	St : St-Cu.	10	9	9	9	10	10	J	k	k	k	k	k	...	● <sup>0</sup>	...	...	...	...	...	i ● <sup>0</sup> a : c to o p ● <sup>0</sup> p : c p ● <sup>0</sup> n.
8	St : St-Cu.	St : St-Cu.	St : St-Cu.	10	10	10	10	10	10	k	k	J	J	J	I	...	...	● <sup>c</sup>	...	...	...	...	i ● <sup>0</sup> a : i ● <sup>0</sup> p ● <sup>0</sup> p : ● <sup>0</sup> n.
9	St : St-Cu : A-St.	St : St-Cu.	St : St-Cu : A-Cu.	10	10	10	10	3	1	J	J	k	k	l	l	...	...	● <sup>6</sup>	● <sup>6</sup>	● <sup>6</sup>	...	...	● <sup>0</sup> d a : p ● <sup>0</sup> to bc y p : b to bc h n.
10	St-Cu.	St-Cu.	St-Cu.	3	3	7	8	9	9	l	l	l	l	l	l	...	...	...	...	...	...	...	Fine a : fair y p : c to bc n.
11	St-Cu : A-Cu.	Cu : Ci-Cu : Ci.	Fr-Cu : St-Cu : A-Cu.	7	8	4	4	4	0	l	l	l	l	l	l	...	...	...	...	...	...	...	Fair to fine all day : y a and p.
12	St-Cu : Ci-Cu.	St : St-Cu : A-Cu.	Nb : St-Cu : A-Cu.	2	2	5	3	7	4	l	l	l	l	k	k	...	...	...	...	...	...	...	h a : bc p ★ p : p ★ <sup>0</sup> n.
13	St-Cu.	Cu : St-Cu : A-Cu.	St : St-Cu : A-Cu : Ci-St.	5	2	7	3	8	10	k	k	l	l	l	k	...	...	...	...	...	...	...	i ★ <sup>0</sup> to fair a : bc y p : c n.
14	St : Nb.	St : Nb : St-Cu.	St : Nb : St-Cu.	10	10	9	8	8	4	J	k	k	k	k	k	...	...	...	...	...	...	...	● d <sub>0</sub> a : i ● p : bc to c p ● n.
15	St : St-Cu.	St : St-Cu : A-St : A-Cu.	St : St-Cu.	9	6	8	10	10	10	k	k	k	k	k	I	...	...	...	...	...	...	...	c p ● <sup>0</sup> a : c p ● <sup>0</sup> to i d <sub>0</sub> p : i d <sub>0</sub> ● n.
16	St : Nb.	St : St-Cu.	St : St-Cu.	10	10	10	10	9	10	I	I	k	J	J	J	...	...	...	...	...	...	...	i ● a : i ● <sup>0</sup> d p : i d <sub>0</sub> ● n.
17	St : Nb.	St : St-Cu : A-St.	St : St-Cu : A-Cu.	10	10	10	10	7	4	J	J	k	I	k	J	...	...	...	...	...	...	...	● a : ● <sup>0</sup> p : p ● n.
18	St-Cu : Cu-Nb.	St-Cu : Ci-Cu : Ci.	St : St-Cu : A-St.	5	8	8	10	9	10	l	J	J	k	k	J	...	...	...	...	...	...	...	Fair a : p ● to i ● <sup>0</sup> p : i ● n.
19	St : Nb.	St : St-Cu : Nb.	St : St-Cu : Nb.	10	10	10	10	10	1	J	J	J	k	k	l	...	...	...	...	...	...	...	i ● <sup>0</sup> a : a : ● <sup>0</sup> d p : p ● n.
20	St : St-Cu : Ci : Ci-Cu.	St : St-Cu.	St : Cu-Nb : St-Cu.	8	10	10	10	7	3	k	k	k	k	k	k	...	...	...	...	...	...	...	c p ● <sup>0</sup> a : i ● <sup>0</sup> p : c to bc p ● <sup>0</sup> n.
21	St : St-Cu.	St : St-Cu : A-Cu.	St-Cu.	9	8	6	4	1	1	J	k	l	l	l	l	...	...	...	...	...	...	...	bc to c p ● <sup>0</sup> a : fine p : h n.
22	St-Cu : A-Cu : Ci-Cu : Ci.	St-Cu : A-Cu.	St : St-Cu.	7	8	9	9	10	10	l	l	m	l	l	k	...	...	...	...	...	...	...	h c to bc v a : c v to i ● <sup>0</sup> p : i ● <sup>0</sup> n.
23	St-Cu : A-Cu : A-St.	St : St-Cu.	St : Nb : St-Cu.	8	8	10	9	10	4	l	k	k	k	k	k	...	...	...	...	...	...	...	c a : c p ● p : p ● n.
24	St-Cu : A-Cu : Ci-St.	St : St-Cu : A-Cu.	St-Cu : A-Cu : Ci-Cu.	8	8	8	8	8	5	l	l	l	l	l	l	...	...	...	...	...	...	...	c p ● <sup>0</sup> a : c p ● <sup>0</sup> to bc p : b to bc n.
25	St-Cu : Ci : Ci-Cu.	Cu : St-Cu : Cu-Nb.	St : St-Cu.	6	6	5	4	5	8	l	l	l	l	k	k	...	...	...	...	...	...	...	bc p ● <sup>0</sup> a : bc p ● <sup>0</sup> p : p ● <sup>0</sup> n.
26	Fr-Cu : Ci-St : Ci.	St : St-Cu.	St : St-Cu.	8	8	10	10	10	10	l	k	k	k	I	k	...	...	...	...	...	...	...	c a : c to o ● <sup>0</sup> p : ● <sup>0</sup> n.
27	St : St-Cu : Cu-Nb.	St : St-Cu : A-Cu : Ci-Cu.	St : St-Cu : A-Cu.	9	6	6	7	6	9	l	l	l	l	l	l	...	...	...	...	...	...	...	c p ● <sup>0</sup> a : bc to c p ● <sup>0</sup> p : bc to c n.
28	St-Cu : Fr-St : A-St.	St : Nb : St-Cu : A-Cu.	St : St-Cu.	9	8	4	6	10	10	l	k	k	l	l	k	...	...	...	...	...	...	...	c p ● <sup>0</sup> a : bc to c p ● <sup>0</sup> p : i ● <sup>0</sup> n.
29	St : St-Cu.	St : St-Cu.	St : St-Cu.	10	10	9	9	9	8	k	I	k	k	k	l	...	...	...	...	...	...	...	c p ● a and p : p ▲ n.
30	St-Cu : Cu-Nb.	Nb : St-Cu.	St : St-Cu.	8	8	10	10	9	10	k	k	k	k	k	k	...	...	...	...	...	...	...	p ● ▲ a and p : bc to c p ● n.
31	Cu : St-Cu.	St : St-Cu.	St : Nb : St-Cu.	8	7	7	7	6	3	l	l	k	k	k	l	...	...	...	...	...	...	...	bc to c p ● <sup>0</sup> a : fair to fine p and n.
Mean Cloud Am't.				7.6	7.5	7.3	7.4	7.3	6.4														

## 430. Cahirciveen (Valentia Observatory).

April, 1928.

1	Cu.	Cu.	St: St-Cu.	5	3	6	5	9	8	l	l	J	l	l	l	...	...	...	...	...	...	Fair to cloudy.
2	St: St-Cu: Ci-St.	St: St-Cu.	St: St-Cu.	10	10	10	10	10	10	k	k	J	l	J	h	...	...	...	...	...	...	c to o i d <sub>0</sub> a: ● <sup>0</sup> p: i ● <sup>0</sup> p ● <sup>0</sup> n.
3	St: St-Cu.	St-Cu: A-Cu.	St-Cu: A-Cu.	9	7	4	6	3	9	J	k	l	l	l	l	...	...	...	...	...	...	bc to c p ● <sup>0</sup> a: bc p ● <sup>0</sup> p: bc c p ● <sup>0</sup> n.
4	Cu-Nb: Cu.	St: Nb: A-St.	Cu: St-Cu.	8	6	3	6	2	6	l	l	l	l	l	l	...	...	...	...	...	...	bc to c p ● <sup>0</sup> a: bc c p ● <sup>0</sup> p and n.
5	Cu-Nb.	St:Nb:St-Cu: A-Cu.	Cu-Nb: Nb: St-Cu.	9	4	6	8	8	2	k	l	k	l	l	l	...	...	...	...	...	...	p ▲ <sup>0</sup> a and p: b to c p ● <sup>0</sup> n.
6	St: St-Cu.	St-Cu: Cu: Ci-St: Ci-Cu.	St-Cu: A-St.	8	8	8	9	10	10	k	l	l	l	k	k	...	...	...	...	...	...	c p ● <sup>0</sup> a: c to o i ● <sup>0</sup> p: i ● <sup>0</sup> ● <sup>0</sup> n.
7	St: St-Cu.	St: St-Cu.	St: St-Cu: A-Cu.	10	10	9	8	7	3	J	l	k	k	l	l	...	...	...	...	...	...	c p ● <sup>0</sup> a: c to bc p and n.
8	St-Cu: Cu: Ci-St.	St-Cu: St: A-St.	St: Nb.	8	9	10	10	10	10	l	l	l	J	I	I	...	...	...	...	...	...	Cloudy a: o ● <sup>0</sup> p: c ● <sup>0</sup> n.
9	St-Cu.	St: St-Cu.	Cu: St-Cu: A-Cu: Ci-Cu.	5	6	8	9	6	7	k	k	k	k	k	k	...	...	...	...	...	...	Fair a: bc to c p ● <sup>0</sup> p and n.
10	Cu-Nb: Nb: A-Cu.	St: St-Cu.	St: St-Cu.	7	9	9	6	6	5	k	k	l	l	l	l	...	...	...	...	...	...	bc to c p ● <sup>0</sup> a: c to bc p: bc n.
11	Fr-St: Nb.	St: St-Cu.	St: St-Cu.	10	10	10	7	8	1	J	k	k	k	l	l	...	...	...	...	...	...	i ● <sup>0</sup> a and p: n.
12	Cu: St-Cu: A-Cu.	St: St-Cu: A-Cu.	St-Cu: A-Cu.	8	7	6	6	4	2	m	m	l	l	l	l	...	...	...	...	...	...	Fair to fine a and p: b n to bc n.
13	St: A-St.	St: St-Cu: A-St.	St: St-Cu.	10	10	10	10	9	3	k	k	J	J	k	l	...	...	...	...	...	...	i ● <sup>0</sup> a: ● <sup>0</sup> p: bc to c p ● <sup>0</sup> n.
14	Fr-Cu: A-Cu: A-St.	St: Nb: St-Cu.	St: Nb: A-St.	5	6	10	10	10	10	l	k	l	l	k	J	...	...	...	...	...	...	bc to c a: c to o i ● <sup>0</sup> to o ● <sup>0</sup> p: ● <sup>0</sup> n.
15	St-Cu: A-St.	St: St-Cu: A-Cu.	St:Nb:St-Cu:A-Cu.	10	9	8	8	8	10	k	k	k	k	k	k	...	...	...	...	...	...	c to o all day. [● <sup>0</sup> n.
16	Fr-St: St-Cu.	St: St-Cu.	St: St-Cu.	9	4	7	7	8	5	l	l	l	l	l	l	...	...	...	...	...	...	Fair all day: y p: bc to c n.
17	Fr-Cu.	St: St-Cu.	Cu.	1	1	7	7	2	9	l	l	l	l	l	l	...	...	...	...	...	...	l early, fine generally: y p: cloudy n
18	St-Cu.	St-Cu.	St: Cu: St-Cu.	9	9	7	9	4	3	l	l	m	l	l	l	...	...	...	...	...	...	Variable cloud with p ● <sup>0</sup> p: bc p ● <sup>0</sup> n
19	Fr-Cu.	Cu:St-Cu:Ci:St.	Cu:St-Cu: A-Cu: Ci-Cu.	1	1	4	7	7	3	l	l	m	l	l	l	...	...	...	...	...	...	l generally fine a: fair v y p: bc n.
20	Cu.	Cu: St-Cu: A-Cu.	St: St-Cu.	5	3	4	5	7	8	l	l	m	m	l	l	...	...	...	...	...	...	l early, fair all day: v y p.
21	St-Cu.	Cu: St-Cu.	Fr-Cu.	1	1	3	4	2	2	l	l	m	m	l	l	...	...	...	...	...	...	l early, fair to fine all day: v y p.
22	A-Cu.	St-Cu:Fr-Cu:A-St.	St: St-Cu: A-St.	8	9	9	10	10	10	l	l	l	l	k	J	...	...	...	...	...	...	l early cloudy a: i d <sub>0</sub> ● <sup>0</sup> p and n.
23	St: St-Cu.	St: St-Cu.	St: St-Cu.	10	10	9	9	10	10	h	J	k	k	k	J	...	...	...	...	...	...	i d <sub>0</sub> a: c to o p and n.
24	St: St-Cu.	St: St-Cu.	St: A-St.	10	10	10	10	10	9	J	k	J	J	J	k	...	...	...	...	...	...	c to o i d <sub>0</sub> a: ● <sup>0</sup> ● <sup>0</sup> p: p ● <sup>0</sup> n.
25	St: St-Cu: Nb.	St: St-Cu: A-Cu.	St: St-Cu.	10	6	7	9	8	8	l	k	J	J	J	l	...	...	...	...	...	...	bc to c p ● <sup>0</sup> a: bc to c p and n.
26	St: A-St.	St: Nb: A-St.	St: Nb: A-St.	10	10	10	10	10	10	k	k	k	J	J	J	...	...	...	...	...	...	c to o with i ● <sup>0</sup> and ● <sup>0</sup> all day: p ● <sup>0</sup> n.
27	Fr-St: St-Cu: Cu.	St: Nb: A-St.	St-Cu: A-Cu.	8	9	9	6	4	3	J	k	J	k	l	l	...	...	...	...	...	...	i d <sub>0</sub> a: bc to c i ● <sup>0</sup> p: fine n.
28	Cu.	...	Cu.	3	4	0	1	1	0	k	k	k	k	k	k	...	...	...	...	...	...	Fine day: n.
29	St.	St-Cu.	Cu: Ci: Ci-Cu.	10	10	9	9	7	7	D	F	J	J	J	J	...	...	...	...	...	...	o f m m <sub>0</sub> a: bc to c p and n.
30	St-Cu.	St: St-Cu.	St: St-Cu.	10	10	10	10	10	10	k	J	J	J	J	J	...	...	...	...	...	...	c to o a: c to o i d p: bc to c p ● <sup>0</sup> n.
Mean Cloud Am't.				7.6	7.0	7.4	7.6	7.0	6.4													
	7 <sup>h</sup>	13 <sup>h</sup>	18 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	Remarks on the Weather of the Day.
	Cloud Forms.			Cloud Amount (All Forms).						Visibility.						Precipitation.						

NOTE.—Visibility in these tables refers to a landwards direction; visibility seawards, when it differs from visibility landwards, is given on p. 287.



## 431. Cahireveen (Valentia Observatory).

May, 1928.

Day.	Cloud Forms.			Cloud Amount (All Forms).						Visibility.						Precipitation.						Remarks on the Weather of the Day.
	7 <sup>h</sup>	13 <sup>h</sup>	18 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	
1	Cu : A-Cu.	Cu:St-Cu:St-Cu:St-Cu.	St-Cu:St-Cu:St-Cu:St-Cu.	3	3	7	9	8	9	1	1	1	1	1	1	...	...	...	...	...	...	b c y a : bc y to c p : c n.
2	A-Cu : Ci-Cu.	Cu:Fr-Cu:A-St:St-Cu:St-Cu.	Cu:A-Cu:St-Cu:St-Cu:St-Cu.	7	5	7	7	6	8	1	1	1	1	1	1	...	...	...	...	...	...	early bc y all day : c n.
3	St : St-Cu.	St : St-Cu.	St : St-Cu.	10	10	10	10	6	8	J	J	J	J	J	J	...	...	...	...	...	...	early c to bc n.
4	St : Nb : St-Cu.	St-Cu.	St : St-Cu.	8	9	3	3	9	10	k	k	1	1	1	1	...	...	...	...	...	...	bc to c a : bc to c d <sub>0</sub> p : c n.
5	—	Fr-Cu.	St-Cu.	0	0	1	4	5	3	J	J	J	J	J	J	...	...	...	...	...	...	Fine a : fine to fair p and n.
6	—	Cu.	Cu : St-Cu.	0	0	1	1	2	7	I	k	J	J	J	J	...	...	...	...	...	...	early fine to fair all day.
7	St-Cu.	Fr-Cu : St-Cu.	Cu : St-Cu.	3	5	2	1	4	5	k	k	k	k	1	1	...	...	...	...	...	...	early fine to fair all day.
8	Cu.	Cu : A-Cu.	Fr-Cu.	1	1	2	1	1	3	1	1	m	1	1	1	...	...	...	...	...	...	b p to b y a : b y v p : b to c n.
9	St-Cu.	Fr-St : St-Cu.	Cu : St-Cu.	10	9	8	8	6	8	1	1	1	1	1	1	...	...	...	...	...	...	c y a : c y to bc p and n.
10	—	Cu : St-Cu.	Cu:St-Cu:St-Cu:St-Cu.	0	1	5	5	8	4	1	1	1	1	1	1	...	...	...	...	...	...	b p to bc a : bc y p : b to bc n.
11	Cu : St-Cu.	St-Cu.	Cu : St-Cu : Ci-Cu.	5	4	6	7	6	9	1	1	m	m	m	1	...	...	...	...	...	...	Fine to fair all day : y p : c n.
12	St : St-Cu.	St-Cu.	St : St-Cu.	10	8	9	9	9	9	1	1	1	1	1	1	...	...	...	...	...	...	c all day : y p.
13	St : St-Cu.	St : St-Cu : St-Cu.	St : St-Cu.	10	10	10	9	8	9	1	1	1	1	1	1	...	...	...	...	...	...	c all day.
14	St : Cu : St-Cu.	Cu : St-Cu : A-Cu.	St:St-Cu:A-Cu:St-Cu.	7	8	3	7	6	9	1	1	m	1	1	1	...	...	...	...	...	...	c p <sup>0</sup> to bc a : bc to c p and n.
15	St : Cu : Ci-Cu.	St : St-Cu.	St : St-Cu.	9	8	10	10	10	9	1	1	k	k	J	J	...	...	...	...	...	...	c p <sup>0</sup> all day.
16	Cu : St-Cu.	St : St-Cu.	Cu : St-Cu : A-Cu.	9	9	8	7	5	8	J	k	k	1	1	1	...	...	...	...	...	...	c p <sup>0</sup> a : bc to c p : bc to c n.
17	St:Cu:St-Cu:A-Cu.	St : Cu : St-Cu.	St:Nb:Cu:St-Cu.	8	9	7	6	7	9	1	1	k	k	k	1	...	...	...	...	...	...	c p <sup>0</sup> a : bc p <sup>0</sup> p and n.
18	Cu : St-Cu.	St : Nb : Cu : St-Cu.	St : St-Cu.	8	5	5	8	5	9	1	1	1	1	1	1	...	...	...	...	...	...	bc to c p <sup>0</sup> a : bc to c p and n.
19	St : Cu : St-Cu.	St:Cu:St-Cu:A-Cu.	Cu : St-Cu.	9	9	8	8	4	6	k	k	1	1	1	1	...	...	...	...	...	...	c p <sup>0</sup> a : bc to c p <sup>0</sup> p : bc n.
20	Cu.	Cu.	Cu.	6	7	7	4	3	6	1	m	m	m	m	1	...	...	...	...	...	...	bc to c p <sup>0</sup> v a : c to bc v p : bc to c n.
21	St : Cu.	Cu : St-Cu.	Cu : Fr-Cu : St-Cu.	9	8	4	5	4	5	J	J	1	1	1	1	...	...	...	...	...	...	c p <sup>0</sup> a : bc y p : bc n.
22	Cu : Fr-Cu : A-Cu.	Cu : A-Cu.	Cu:St-Cu:St-Cu:St-Cu.	2	6	2	2	6	9	1	1	m	m	1	1	...	...	...	...	...	...	b p to bc a : fine p : bc c p <sup>0</sup> n.
23	St : St-Cu.	St : St-Cu.	St : St-Cu : A-Cu.	9	9	9	4	8	7	1	1	k	1	1	1	...	...	...	...	...	...	ci <sup>0</sup> to c a : fair p and n.
24	St : St-Cu.	Cu : St-Cu : A-Cu.	Cu:St-Cu:A-Cu:St-Cu.	10	10	6	8	6	9	J	J	k	1	1	1	...	...	...	...	...	...	ci d <sub>0</sub> i <sup>0</sup> a : fair to cloudy p and n.
25	Fr-St:St-Cu:St-Cu:St-Cu.	St : St-Cu.	St.	7	9	10	10	10	10	J	J	J	J	J	G	...	...	...	...	...	...	bc to ci d <sub>0</sub> a : ci d <sub>0</sub> p : o <sup>0</sup> d n.
26	St : St-Cu.	St : St-Cu.	St : St-Cu.	10	10	10	10	10	10	k	J	I	J	J	I	...	...	...	...	...	...	ci <sup>0</sup> d <sub>0</sub> a : ci d <sub>0</sub> p : ci d <sub>0</sub> v n.
27	St : A-St.	St.	St.	10	10	10	10	10	10	k	k	h	G	h	h	...	...	...	...	...	...	ci d <sub>0</sub> a : o <sup>0</sup> p : d n.
28	St.	Fr-St:Cu:St-Cu:St-Cu.	Cu : Ci-Cu : Ci-St.	10	10	3	3	2	1	C	D	1	1	1	m	...	...	...	...	...	...	F f m to bc a : fine p : n.
29	A-Cu : Ci-Cu.	Cu : A-Cu : Ci-Cu.	Fr-Cu:St-Cu:St-Cu.	3	2	4	2	1	1	1	m	m	m	1	1	...	...	...	...	...	...	early a : fine day : v a and p : n.
30	Ci.	Cu : St-Cu : Ci.	St-Cu : A-Cu.	1	2	2	2	7	9	1	m	m	m	1	1	...	...	...	...	...	...	early a : fine v y a and p : c p <sup>0</sup> n.
31	Nb : A-St.	St-Cu:A-St:A-Cu.	St : St-Cu : A-Cu.	10	10	9	8	9	8	k	k	k	k	k	k	...	...	...	...	...	...	c i <sup>0</sup> a : bc to c p and n.
Mean Cloud Am't.				6.6	6.6	6.1	6.1	6.2	7.3													

## 432. Cahirciveen (Valentia Observatory).

June, 1928.

Day.	Cloud Forms.			Cloud Amount (All Forms).						Visibility.						Precipitation.						Remarks on the Weather of the Day.
	7 <sup>h</sup>	13 <sup>h</sup>	18 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	
1	Fr-St : St-Cu.	St : A-St.	St:Nb:St-Cu:A-Cu.	9	8	10	8	8	9	k	k	k	k	k	k	...	...	...	...	...	...	c to ci <sup>0</sup> a : ci <sup>0</sup> p : c to bc n.
2	Cu.	Cu : St-Cu : A-Cu.	Fr-Cu.	4	2	3	3	2	1	k	k	k	1	1	1	...	...	...	...	...	...	Fair to fine all day : y p.
3	Ci.	Ci-Cu : Ci.	Ci-Cu.	1	0	6	7	7	9	1	1	1	1	1	1	...	...	...	...	...	...	b y a : b to bc y p : bc to c y n.
4	St : St-Cu : A-Cu.	St-Cu : A-Cu.	St : St-Cu : Ci-Cu.	8	6	7	8	8	9	1	1	1	1	1	1	...	...	...	...	...	...	bc to cy all day : u y to c p <sup>0</sup> n.
5	St : St-Cu.	St : St-Cu.	St : St-Cu.	7	7	8	5	9	9	1	1	1	1	1	1	...	...	...	...	...	...	c p <sup>0</sup> to bc a : bc to c p <sup>0</sup> p : c p <sup>0</sup> n.
6	St : St-Cu.	Cu : St : St-Cu.	Cu : St : St-Cu.	7	9	7	8	7	10	k	1	1	1	1	k	...	...	...	...	...	...	bc to c p <sup>0</sup> a : bc to c p : p <sup>0</sup> n.
7	St : St-Cu.	St : Fr-St : St-Cu.	St : Cu : St-Cu.	9	9	9	8	8	10	k	1	1	1	k	k	...	...	...	...	...	...	c p <sup>0</sup> to c a : c p <sup>0</sup> p and n.
8	St : St-Cu.	Cu : St-Cu : A-Cu.	St : Cu : Ci-St.	10	8	5	9	10	10	k	k	1	1	1	k	...	...	...	...	...	...	c p <sup>0</sup> p <sup>0</sup> a : bc to c p : o <sup>0</sup> n.
9	St : St-Cu.	St : St-Cu : A-Cu.	St : Cu : St-Cu.	10	7	7	6	3	10	k	1	1	1	k	k	...	...	...	...	...	...	oi <sup>0</sup> p <sup>0</sup> a : fair p : p <sup>0</sup> n.
10	St : St-Cu : A-Cu.	Cu : A-Cu.	Cu:St-Cu:A-Cu:St-Cu.	7	6	5	4	6	7	k	1	1	1	1	1	...	...	...	...	...	...	p <sup>0</sup> a : fair p : p <sup>0</sup> n.
11	Cu : St-Cu.	St : Cu : St-Cu.	Cu.	2	8	7	4	4	3	1	1	1	m	m	1	...	...	...	...	...	...	b to c p <sup>0</sup> a : p <sup>0</sup> v p : fair n.
12	Cu : Fr-St : A-St.	St : St-Cu : A-St.	St.	10	10	10	10	10	10	1	1	k	k	F	F	...	...	...	...	...	...	p <sup>0</sup> to a : a : p : d n.
13	St.	St : St-Cu.	St : St-Cu.	10	9	10	10	9	10	h	k	J	k	J	G	...	...	...	...	...	...	o <sup>0</sup> a : d <sub>0</sub> p : d <sub>0</sub> n.
14	St : Nb : St-Cu.	Cu : St-Cu.	Cu : St-Cu.	10	10	3	7	8	8	k	k	1	1	1	1	...	...	...	...	...	...	i <sup>0</sup> a : bc y p : c n.
15	St : Cu-Nb : St-Cu.	Cu-Nb : Cu : St-Cu.	St : Cu : St-Cu.	4	3	4	5	5	10	k	1	1	1	1	1	...	...	...	...	...	...	p <sup>0</sup> early a : fair p : n.
16	Cu : St-Cu.	Cu : St-Cu : A-Cu.	Cu : St-Cu : A-Cu.	4	3	3	3	4	5	1	1	1	1	1	1	...	...	...	...	...	...	Fair all day.
17	St : St-Cu.	St.	St:St-Cu:A-Cu:St-Cu.	10	10	10	7	8	9	1	1	G	k	k	1	...	...	...	...	...	...	bc to c d a and p : cloudy n.
18	St : St-Cu.	St : St-Cu.	St.	10	10	10	10	10	10	k	k	J	k	I	J	...	...	...	...	...	...	c p <sup>0</sup> p <sup>0</sup> a : i <sup>0</sup> d p and n.
19	St : St-Cu.	St : St-Cu.	St : St-Cu.	8	10	9	9	9	8	k	k	k	k	1	1	...	...	...	...	...	...	p <sup>0</sup> a : bc to c p <sup>0</sup> p : c n.
20	St-Cu:A-Cu:St-Cu.	Cu:St-Cu:A-St:St-Cu.	St : St-Cu : A-St.	7	7	6	10	10	10	1	1	1	k	k	I	...	...	...	...	...	...	early a : bc v p <sup>0</sup> p : d n.
21	St.	St.	St : St-Cu.	10	10	10	6	6	8	I	F	I	k	k	k	...	...	...	...	...	...	d d <sub>0</sub> a : c to bc p and n.
22	St : St-Cu.	Cu : St-Cu : A-Cu.	Fr-St : Cu.	7	8	7	8	4	2	k	k	J	k	k	k	...	...	...	...	...	...	Fair a : p <sup>0</sup> p : b to bc n.
23	Cu : Nb : St-Cu.	St : St-Cu : A-Cu.	Cu.	7	9	9	6	2	5	J	k	1	1	k	1	...	...	...	...	...	...	p <sup>0</sup> a : p <sup>0</sup> p : b to bc n.
24	Cu : St : St-Cu.	St : Fr-St : A-St.	St : A-St.	6	9	10	10	10	10	J	k	k	k	J	J	...	...	...	...	...	...	early b to bc a : ci <sup>0</sup> n.
25	Fr-St : St-Cu.	St.	St.	10	9	10	10	10	10	I	I	h	h	G	G	...	...	...	...	...	...	ci d <sub>0</sub> a : o <sup>0</sup> d p and n.
26	Fr-St : Nb.	St : St-Cu.	St : Cu : St-Cu.	10	9	8	7	7	9	k	k	1	k	k	k	...	...	...	...	...	...	i <sup>0</sup> p <sup>0</sup> a : p <sup>0</sup> p and n.
27	Fr-St:Cu:St-Cu.	St : St-Cu.	Cu : St : St-Cu.	6	6	10	9	7	10	J	k	k	k	k	k	...	...	...	...	...	...	p <sup>0</sup> a : bc to c p and n.
28	Nb.	St : St-Cu.	St.	10	10	10	10	10	10	h	J	I	I	G	G	...	...	...	...	...	...	Continuous rain a : o <sup>0</sup> p : con-
29	St-Cu : A-St.	St : St-Cu : A-St.	Cu : St-Cu : Ci-Cu.	8	10	9	6	5	3	I	1	k	k	k	k	...	...	...	...	...	...	[tinuous rain n.
30	Cu : St-Cu.	Cu:St-Cu:A-Cu:St-Cu.	St : Fr-St : St-Cu.	6	6	4	9	10	10	J	k	k	k	k	k	...	...	...	...	...	...	o <sup>0</sup> a : p <sup>0</sup> p : bc p <sup>0</sup> n.
																...	...	...	...	...	...	bc p <sup>0</sup> a : bc to c p : c n.
Mean Cloud Am't.				7.6	7.6	7.5	7.4	7.2	8.1													

NOTE.—Visibility in these tables refers to a landwards direction; visibility seawards, when it differs from visibility landwards, is given on p. 287.



## 433. Cahireiveen (Valentia Observatory).

July, 1928.

Day.	Cloud Forms.			Cloud Amount (All Forms).						Visibility.						Precipitation.						Remarks on the Weather of the Day.
	7 <sup>h</sup>	13 <sup>h</sup>	18 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	
1	St.	St.	St: St-Cu.	10	10	10	10	10	7	h	h	G	h	h	k	0	0	0	0	0	0	o i 0° d a: d <sub>0</sub> i 0° p: cloudy n.
2	Cu: St-Cu.	Cu: St-Cu: A-Cu: Ci.	Cu: St-Cu: A-Cu.	5	2	5	8	5	4	k	l	l	l	l	l	...	...	...	...	...	...	p 0° early: fair to fine day.
3	Cu: St: St-Cu.	Cu: St-Cu.	Cu: Fr-Cu.	5	2	8	4	2	3	l	l	l	l	l	l	...	...	...	...	...	...	p 0° early: fair to fine day: ⊕ 20 <sup>h</sup> .
4	St: Cu: St-Cu.	St: A-St.	St: A-St.	10	10	10	10	10	10	k	I	h	h	I	G	...	0	0	0	0	0	i 0° d a: 0° p: 0° d n.
5	St.	Cu: St-Cu.	Cu.	10	9	7	7	2	9	G	k	l	l	l	k	...	0	0	...	...	...	0° i d a: b to bc p: c p 0° n.
6	St: St-Cu.	St: St-Cu.	St: St-Cu.	10	10	7	8	8	10	k	J	k	k	k	l	...	0	0	0	0	0	p 0° p 0° a: c p 0° p: c n.
7	St-Cu.	St: St-Cu.	St: St-Cu.	8	8	10	10	10	10	l	l	l	l	k	G	...	0	0	0	0	0	c to bc p 0° a: c p 0° i d p: d <sub>0</sub> n.
8	St.	St: Fr-St: A-Cu.	Cu: St-Cu: A-Cu: Ci-Cu.	10	10	10	8	3	2	G	h	k	k	k	l	...	0	0	...	...	...	0° d a: c to bc p: b to bc n.
9	St: Nb: St-Cu.	St: St-Cu.	Cu: A-Cu: Ci-Cu: Ci.	6	10	8	7	2	3	J	J	k	k	k	k	...	0	...	...	...	...	bc to c p 0° a: bc to c p: b to bc n.
10	St: St-Cu.	St.	St: St-Cu.	10	10	10	10	10	10	k	k	I	J	J	F	...	...	...	...	...	...	bc to c p 0° a: c to o p: o d n.
11	St.	St.	St.	10	10	10	10	10	10	F	F	G	J	h	G	...	0	0	0	0	0	o all day with i d <sub>0</sub> 0° d.
12	St: A-St.	Cu: A-Cu: Ci: St: Ci.	Cu: St-Cu: A-Cu.	10	10	7	6	7	8	J	k	l	l	k	k	...	...	...	...	...	...	0° at times a: fair p and n.
13	St: St-Cu.	St: St-Cu.	St: St-Cu.	10	10	9	1	9	9	k	k	k	k	k	k	...	...	...	...	...	...	c all day.
14	St: St-Cu.	St-Cu.	St: St-Cu.	9	8	5	4	6	10	k	k	k	k	k	J	...	...	...	...	...	...	c to bc a and p: bc to o n.
15	St: St-Cu.	St.	St: St-Cu.	9	10	10	8	8	10	k	I	I	J	k	k	...	0	...	...	...	...	c to o d a: o i d <sub>0</sub> to c p: c to bc n.
16	Cu.	Fr-Cu: A-Cu.	A-Cu.	7	1	2	1	1	1	m	m	m	m	m	m	...	...	...	...	...	...	Fine all day: v a and p: ⊕ n.
17	Ci-Cu: Ci: St: Ci.	Fr-Cu: Ci-Cu: Ci.	Cu: St-Cu: Ci-Cu: Ci.	1	3	2	3	3	2	m	m	m	l	l	l	...	...	...	...	...	...	⊕ b to c v a: b to bc v p: ⊕ n.
18	St-Cu.	St-Cu.	St-Cu.	10	8	7	8	7	8	k	k	k	k	k	k	...	...	...	...	...	...	⊕ early a: bc to o rest of day.
19	St-Cu.	St-Cu: A-Cu: Ci-Cu.	St-Cu: A-Cu: Ci-Cu.	10	9	3	2	7	9	k	k	l	l	k	k	...	...	...	...	...	...	o to bc a: b to c p and n.
20	St-Cu.	Fr-Cu.	—	9	9	0	0	0	0	J	k	m	k	k	k	...	...	...	...	...	...	c to bc a: fine p and n: ⊕ n.
21	Ci-Cu.	Ci: Ci-Cu.	A-Cu: Ci-Cu: Ci.	1	1	3	5	2	3	l	l	m	m	l	k	...	...	...	...	...	...	[and p.
22	St: St-Cu: A-Cu.	St: Fr-St.	Fr-St: A-Cu.	10	10	10	10	10	9	J	J	J	k	k	k	...	...	...	...	...	...	⊕ early a: b to bc p and n: v y a
23	St.	St.	St.	10	10	10	10	10	10	E	k	G	G	G	G	...	...	0	0	0	0	c to o i a: c to o i 0° p: cloudy n.
24	St.	St.	St.	10	10	10	10	10	10	E	E	I	I	E	G	...	...	...	...	...	...	f early a: i d <sub>0</sub> p: continuous d n.
25	St.	St.	St: St-Cu.	10	10	10	10	10	10	F	H	G	J	J	k	...	...	0	...	...	...	o f m a and p: o d n.
26	St: A-St.	St: St-Cu.	St: St-Cu.	10	10	10	10	10	10	J	k	k	k	k	k	...	...	...	...	...	...	0° a: c p: c p 0° n.
27	St: St-Cu: A-Cu.	St: St-Cu.	St: St-Cu: A-Cu.	9	9	8	9	7	6	k	k	l	l	l	l	...	...	...	...	...	...	i 0° early a: c to bc rest of day: v p.
28	St: Cu: St-Cu.	Cu: Nb: St-Cu.	Cu: St-Cu: Ci-St.	8	7	4	5	6	6	m	l	l	l	l	l	...	...	...	...	...	...	c v to bc p 0° a: p 0° p: bc p 0° n.
29	St: Cu: St-Cu.	Cu: St-Cu: A-Cu.	Cu: St-Cu: A-Cu: Ci-Cu.	5	4	8	7	8	9	l	l	m	l	l	l	...	...	0	...	...	...	bc p 0° p 0° a: bc to c p 0° p: p 0° n.
30	St-Cu: A-St.	Cu: St-Cu.	Fr-St: St-Cu: A-Cu.	9	9	7	8	9	9	k	l	l	l	l	l	...	...	...	...	...	...	bc to c p 0° a: bc to c p and n.
31	Cu: St-Cu: A-St.	St: St-Cu: A-St.	St: St-Cu.	9	10	10	10	8	3	l	l	l	l	l	l	...	...	...	...	...	...	bc to c a: c p 0° p: bc to b n.
Mean Cloud Am't.				8.4	8.0	7.4	7.1	6.7	7.1													

## 434. Cahireiveen (Valentia Observatory).

August, 1928.

1	—	Fr-Cu.	Fr-Cu: A-Cu: Ci-Cu: Ci.	0	1	1	2	6	2	l	l	m	m	m	l	...	...	...	...	...	...	bc to b a: b to bc v p: ⊕ n.
2	Cu: Ci-Cu: Ci.	St: St-Cu: Fr-Cu: A-Cu.	St: St-Cu: A-St.	2	4	9	10	10	10	l	l	l	l	l	l	...	...	...	...	...	...	⊕ early a: bc to c p and n.
3	St-Cu: A-St: Ci-Cu: Ci.	Cu: Fr-Cu: A-Cu: Ci-Cu.	Fr-Cu: A-Cu.	7	7	3	6	2	1	l	l	l	l	l	l	...	...	...	...	...	...	⊕ early a: fair to fine day: ⊕ n.
4	Ci-Cu: Ci.	Fr-Cu.	Ci-Cu: Ci.	3	1	1	1	1	1	l	l	l	l	l	l	...	...	...	...	...	...	⊕ early a: fine day: ⊕ n.
5	St: St-Cu: A-Cu.	Cu: A-Cu.	St: St-Cu.	8	8	8	9	10	10	k	k	k	k	k	k	...	...	...	...	...	...	⊕ early a: c to o during day.
6	St: A-St.	St: St-Cu.	Nb: Fr-St.	10	10	10	10	10	10	G	J	J	J	h	I	...	...	0	0	0	0	c 0° a: c p 0° p: continuous rain n.
7	St: St-Cu.	St: St-Cu: A-Cu.	St: St-Cu: A-Cu.	10	10	7	7	7	7	J	k	k	k	k	k	...	...	...	...	...	...	o 0° a: c to bc p: fair n.
8	Cu: A-Cu: Ci-Cu: Ci-St.	Cu: Fr-Cu: St-Cu.	Cu: St-Cu: A-Cu.	7	8	3	6	5	5	k	k	k	k	k	k	...	...	...	...	...	...	⊕ a: fair p: K Q 20 <sup>h</sup> 40 <sup>m</sup> : p 0° n.
9	St: St-Cu.	St: St-Cu.	St: St-Cu: A-Cu.	10	9	10	7	8	10	k	k	k	k	k	J	...	...	0	...	...	...	bc p 0° to i 0° a: bc to c i 0° p: c n.
10	St: St-Cu: A-St.	St: St-Cu.	St: St-Cu.	10	10	9	10	10	10	J	k	l	J	h	J	...	...	...	...	...	...	c i 0° a: i d <sub>0</sub> p: c i 0° n.
11	St: St-Cu: A-St.	St: A-St.	Cu.	10	10	10	10	5	8	k	k	I	h	l	k	...	...	0	0	0	0	c i 0° a: c 0° p: bc to c p 0° n.
12	Cu: Nb: St-Cu: Ci-Cu: A-Cu.	Cu: A-Cu.	St: St-Cu: A-St.	8	9	8	9	10	10	k	k	k	k	k	I	...	...	0	0	0	0	bc to c p 0° a: c p 0° p: 0° n.
13	St: St-Cu: A-Cu: Ci-Cu.	St: St-Cu.	St: St-Cu.	9	9	8	9	8	7	k	J	k	k	k	k	...	...	...	...	...	...	c p 0° all day.
14	Cu: St-Cu: Ci-Cu: Ci-St.	St: St-Cu: A-Cu.	Fr-St: Cu: St-Cu.	7	9	7	7	6	9	k	k	k	k	l	l	...	...	0	...	...	...	bc to c p 0° all day.
15	St-Cu: A-Cu.	Cu: St-Cu: A-Cu: Ci-Cu.	St: St-Cu.	4	6	7	9	8	7	k	k	l	l	l	k	...	...	...	...	...	...	bc to c occasional p 0° all day.
16	Fr-St: St-Cu.	Cu: St-Cu.	St-Cu: Fr-Cu: A-Cu.	8	9	5	6	5	9	l	l	l	l	m	l	...	...	...	...	...	...	c to bc all day: v p: ⊕ n.
17	Fr-St: Cu: Ci-Cu: Ci-St.	Fr-Cu: St: St-Cu.	Fr-Cu: St: St-Cu.	9	9	8	9	10	10	l	l	l	l	l	l	...	...	...	...	...	...	⊕ early: bc to c p: c to o 0° n.
18	Fr-St: St-Cu.	Fr-St: St-Cu.	Fr-St: Nb.	8	7	7	9	10	10	l	k	k	k	h	h	...	...	...	...	...	...	0° early a: 0° d late p and n other-
19	St: A-St.	Cu: A-Cu.	Fr-St: Cu: A-Cu.	10	10	9	7	5	2	J	J	k	k	l	l	...	...	0	0	...	...	i 0° a: c to bc p: bc to b n. [wise fair.
20	Nb: St-Cu.	Cu: St-Cu: A-Cu.	Fr-St: St-Cu: A-Cu.	3	7	4	6	8	9	l	l	l	l	l	k	...	...	...	...	...	...	p 0° a: bc p: p 0° n.
21	St: St-Cu: A-Cu.	St: St-Cu: A-Cu: Ci-Cu.	Fr-St: St: A-St.	8	7	8	9	10	10	l	l	l	l	l	k	...	...	...	...	...	...	bc to c p 0° a and p: i 0° n.
22	St: A-St.	St: St-Cu.	St: Fr-Cu: Ci-Cu: Ci.	10	10	10	10	7	3	J	I	J	k	k	k	...	...	...	...	...	...	c 0° a: bc to c p: p: fair n.
23	St: St-Cu.	St: Cu: St-Cu: A-Cu.	Fr-St: St: St-Cu.	9	7	9	7	7	10	k	k	k	k	k	k	...	...	...	...	...	...	p 0° early a: i 0° n: otherwise fair.
24	St: St-Cu.	Cu: St-Cu: A-Cu.	St: St-Cu: A-Cu.	10	7	6	6	9	6	k	k	k	k	k	k	...	...	...	...	...	...	Continuous 0° early a: bc to c p 0° [remainder of day.
25	St: St-Cu.	Cu: St-Cu: Ci.	St: Nb: St-Cu.	8	6	5	9	7	4	k	k	k	k	k	k	...	...	...	...	...	...	bc to c p 0° a: bc to c p 0° p: c 0° n.
26	St: A-St.	Nb: Fr-Nb: St-Cu.	Cu: St-Cu.	10	10	9	3	4	3	k	k	k	k	l	l	...	...	0	0	...	...	Continuous 0° early a: i 0° p: bc to
27	Cu: St-Cu: A-Cu: Ci-Cu.	Cu: St-Cu.	Cu: St-Cu.	6	2	3	5	4	3	l	l	l	l	l	l	...	...	...	...	...	...	i 0° early a: fair otherwise. [c 0° n.
28	Cu: Fr-Cu: A-Cu: Ci-Cu.	Cu: St-Cu.	St: Nb: St-Cu.	2	3	6	5	9	6	l	l	l	l	k	k	...	...	...	...	...	...	p 0° early a and n otherwise fair.
29	Cu: St: St-Cu.	Cu: St-Cu.	Cu: St-Cu.	4	3	3	5	4	3	l	l	l	l	l	l	...	...	...	...	...	...	p 0° early a otherwise fair: ⊕ n.
30	Cu: St-Cu: Ci-Cu: Ci.	Cu: St-Cu: A-Cu: Ci-Cu.	St: St-Cu.	3	7	7	4	7	9	l	l	l	m	m	l	...	...	...	...	...	...	⊕ early a: fair day: v p: c to bc
31	St-Cu: A-St.	Cu: Ci-Cu: Ci.	Fr-Cu: A-Cu.	9	8	2	3	2	1	l	l	m	m	m	m	...	...	...	...	...	...	⊕ early a: fair to fine day: v p and n.
Mean Cloud Am't.				7.2	7.2	6.5	6.9	6.9	6.6													

NOTE.—Visibility in these tables refers to a landwards direction; visibility seawards, when it differs from visibility landwards, is given on p. 287.



Day.	Cloud Forms.			Cloud Amount (All Forms)						Visibility.						Precipitation.						Remarks on the Weather of the Day.
	7 <sup>h</sup>	13 <sup>h</sup>	18 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	
1	—	Fr-Cu : St-Cu.	Cu : A-Cu : Ci-Cu.	0	1	3	4	4	4	l	m	m	m	l	l	...	...	...	...	...	...	☉ early : fine day : v y a and p.
2	Cu:St-Cu:St-Cu:St-Cu.	St : St-Cu.	Fr-St : St-Cu.	5	6	10	10	10	10	l	l	k	k	l	k	...	...	...	...	...	...	bc to c all day.
3	St : St-Cu.	St : St-Cu.	St.	10	10	10	10	10	10	J	J	h	I	G	G	...	...	...	...	...	...	c i ☉ d all day.
4	St.	St : St-Cu.	St.	10	10	10	10	10	10	h	h	h	J	G	G	...	...	...	...	...	...	o i d <sub>0</sub> a : c i ☉ d p : ☉ n.
5	St.	St : Cu : St-Cu.	Cu : St-Cu.	10	10	9	4	3	2	I	I	l	l	l	l	...	...	...	...	...	...	Continuous ☉ a : bc to c p : bc p ☉ [☉ n.
6	Cu.	St : St-Cu : A-St.	St : A-St.	2	9	8	10	10	10	l	k	k	k	k	J	...	...	...	...	...	...	c p ☉ p ☉ a : c p and n.
7	St : St-Cu : A-St.	St : A-St.	Cu : Ci-Cu.	10	10	10	10	2	1	k	k	h	G	h	k	...	...	...	...	...	...	c p ☉ a : continuous ☉ p : fine n.
8	St : A-St.	St : St-Cu : Ci-Cu.	St : St-Cu.	10	4	6	9	9	10	k	k	l	k	l	l	...	...	...	...	...	...	☉ to bc a : bc to c p ☉ p : c n.
9	St : St-Cu.	St : St-Cu.	St : St-Cu : A-St.	6	7	7	7	10	10	l	l	l	l	k	k	...	...	...	...	...	...	bc to c p ☉ a : bc to c i ☉ p : c p [☉ n.
10	St : St-Cu.	St : St-Cu.	Cu : St-Cu.	10	10	10	6	7	2	k	k	k	k	k	k	...	...	...	...	...	...	c p ☉ ☉ a : fair to fine p and n.
11	St : St-Cu.	Cu : St-Cu.	Cu : Ci-Cu.	8	9	3	7	6	7	J	k	k	k	k	k	...	...	...	...	...	...	☉ early a : fair day.
12	St : St-Cu : A-St : A-Cu.	Fr-St : St-Cu : A-Cu : A-St.	Cu : St-Cu : A-Cu.	9	10	8	6	6	2	k	k	k	k	l	l	...	...	...	...	...	...	☉ early a : bc to c p : b to bc n.
13	Fr-St : St-Cu.	St : St-Cu.	St-Cu.	4	7	9	8	10	8	k	k	k	k	k	k	...	...	...	...	...	...	Fair early : c p : c to o n.
14	St : St-Cu.	St : St-Cu : A-St.	Fr-Cu.	10	9	6	3	2	1	I	k	l	l	l	l	...	...	...	...	...	...	Continuous ☉ a : fair p : fine with ☉ n
15	A-Cu : Ci-Cu.	Fr-Cu : Ci-Cu.	A-Cu : Ci-Cu.	7	7	4	3	2	1	l	l	l	l	l	l	...	...	...	...	...	...	☉ early a and n : fine : y p.
16	St : St-Cu : A-St.	St : St-Cu : A-St.	St : Nb : A-St.	10	10	10	10	10	10	l	k	k	k	I	I	...	...	...	...	...	...	bc to c a : c i ☉ p : continuous ☉ n.
17	St : St-Cu.	St : St-Cu.	St : St-Cu.	10	10	10	10	10	10	J	J	J	J	J	I	...	...	...	...	...	...	i ☉ d <sub>0</sub> a : c i d <sub>0</sub> p : ☉ n.
18	St-Cu : Ci-Cu.	Cu : St-Cu : Ci-Cu : Ci.	Cu : St-Cu : A-St : Ci.	5	2	6	2	5	1	l	m	m	m	m	l	...	...	...	...	...	...	i ☉ early to bc a : bc v p : fine n.
19	St : Fr-Cu : Ci-Cu.	St-Cu : Ci-Cu.	St : Fr-Cu : St-Cu.	5	5	7	9	4	7	l	m	m	m	m	l	...	...	...	...	...	...	bc p ☉ a : bc c v p : fair n.
20	St-Cu.	St : St-Cu : Ci : St : Ci.	St-Cu.	8	9	7	9	9	10	l	l	l	m	m	l	...	...	...	...	...	...	☉ to c p ☉ a : bc to c v p : c to o n.
21	St-Cu.	St-Cu : Ci-Cu : Ci.	St : St-Cu : Ci-Cu.	10	9	7	9	6	1	l	l	m	l	l	l	...	...	...	...	...	...	c a : c bc y v p : ☉ n.
22	Ci : Ci-Cu.	Cu : St-Cu.	Cu : St-Cu.	2	1	3	6	8	3	m	m	l	k	k	k	...	...	...	...	...	...	☉ early : fine day.
23	Fr-Cu.	Cu.	Cu : A-Cu.	1	1	4	6	5	4	l	l	J	k	k	l	...	...	...	...	...	...	☉ early : fine to fair.
24	Ci-Cu : Ci : St : Ci.	Cu : St-Cu : Ci-Cu : Ci.	Cu : St-Cu : Ci-Cu : Ci.	5	4	6	7	6	9	l	l	l	l	l	l	...	...	...	...	...	...	☉ early : fair p : p ☉ n.
25	St-Cu : A-St : Ci : St.	Cu : St-Cu.	Cu : St-Cu.	3	2	2	2	2	1	l	l	m	l	l	l	...	...	...	...	...	...	p ☉ early a : otherwise fair to fine.
26	Cu : Ci-St.	Cu : Fr-Cu.	Cu.	3	0	3	3	1	0	k	k	k	k	k	k	...	...	...	...	...	...	☉ early : fine generally : y p.
27	Cu : St-Cu : Ci-Cu : Ci-St.	Cu : St : A-St.	St : A-St.	5	6	7	10	10	10	k	k	k	k	k	J	...	...	...	...	...	...	Fair a : c ☉ p : ☉ n.
28	St : A-St.	St : Nb : A-St.	St : Nb : A-St.	10	10	10	10	10	10	I	h	J	J	I	J	...	...	...	...	...	...	Continuous ☉ a : i ☉ d p : ☉ n.
29	Fr-St : Nb : Cu.	St : St-Cu.	Fr-St : St-Cu : Ci-Cu.	9	8	7	3	4	4	k	k	k	k	l	l	...	...	...	...	...	...	i ☉ early then b to bc.
30	Fr-Cu : St-Cu.	Cu : Fr-Cu.	Cu : St-Cu : A-Cu.	2	1	1	1	2	6	l	l	l	l	l	l	...	...	...	...	...	...	☉ early and late : fine.
Mean Cloud Am't.				6.6	6.6	6.8	6.8	6.4	5.8													

## 436. Cahirciveen (Valentia Observatory).

October, 1928.

1	St-Cu : Ci-Cu.	St-Cu.	Cu.	2	2	6	7	2	1	l	l	l	l	l	l	...	...	...	...	...	...	Fine generally : ☉ a and n.
2	St-Cu.	Cu : St-Cu.	Fr-Cu : St-Cu.	6	1	2	6	7	5	k	J	l	k	k	l	...	...	...	...	...	...	Fine : ☉ early.
3	St-Cu.	Fr-Cu : St-Cu.	Fr-Cu : A-Cu.	4	2	2	2	2	3	J	I	l	l	l	l	...	...	...	...	...	...	Fine.
4	St : A-St.	St : St-Cu : A-St.	St : St-Cu : A-Cu : A-St.	10	10	10	10	9	3	J	I	k	J	k	l	...	...	...	...	...	...	p ☉ continuous ☉ a : i ☉ p : fair n.
5	St : Cu : St-Cu.	St : Cu : St-Cu : Ci-St.	St-Cu.	2	8	6	8	4	6	k	k	k	l	k	l	...	...	...	...	...	...	bc p ☉ a and p : fair n.
6	St : St-Cu.	Cu : St-Cu : A-Cu.	St : St-Cu.	6	10	6	9	10	10	k	J	k	k	k	k	...	...	...	...	...	...	[p ☉ n.
7	St.	St.	St : St-Cu.	10	10	10	9	9	10	G	F	h	k	k	k	...	...	...	...	...	...	☉ early to bc p ☉ a : bc to c p : Continuous ☉ and i ☉ a : T 10 <sup>h</sup> 15 <sup>m</sup> .
8	St : St-Cu : A-Cu.	St : St-Cu.	St : St-Cu : A-St.	6	3	8	8	10	10	J	J	k	k	k	k	...	...	...	...	...	...	p ☉ early then fair a : p ☉ p : i ☉ n.
9	St : St-Cu.	St : St-Cu : A-Cu.	St : Fr-St : St-Cu.	10	10	9	10	9	10	k	J	J	J	J	J	...	...	...	...	...	...	i ☉ a and p : p ☉ n.
10	Fr-St : St-Cu : A-Cu.	St : St-Cu : A-St.	St : A-St.	6	9	10	10	10	10	l	k	k	k	J	J	...	...	...	...	...	...	Fair a : ☉ p : ☉ n.
11	St : St-Cu.	Cu : Fr-St : A-Cu.	St : St-Cu.	6	7	6	9	10	7	k	k	k	k	k	k	...	...	...	...	...	...	bc p ☉ a : fair then p ☉ p : i ☉ and Fair a : fair to fine p : fine n. [p ☉ n.
12	St : St-Cu : A-Cu : A-St	St : Fr-St : Cu : St-Cu.	St : Cu : St-Cu.	9	7	4	5	4	1	l	l	l	l	l	l	...	...	...	...	...	...	☉ early to bc a : fair p : cloudy n.
13	—	Cu : St-Cu.	St : St-Cu : A-Cu.	0	7	7	7	4	10	l	k	k	k	k	k	...	...	...	...	...	...	Continuous ☉ early to c i ☉ a : p
14	St : St-Cu.	St : Cu : A-Cu.	St : St-Cu : A-Cu.	10	9	8	5	5	2	k	k	k	k	k	k	...	...	...	...	...	...	[c ☉ p ☉ n.
15	St : St-Cu.	St : St-Cu.	St : St-Cu.	10	10	10	10	10	10	I	I	J	J	J	G	...	...	...	...	...	...	i ☉ ☉ a : i d <sub>0</sub> ☉ p : continuous ☉ n.
16	St : St-Cu.	St : St-Cu.	St.	10	10	10	10	10	10	h	G	J	I	J	G	...	...	...	...	...	...	i d <sub>0</sub> a and p : i ☉ n.
17	St : Cu : A-Cu : Ci-Cu.	Cu : St-Cu.	St : St-Cu.	4	9	5	5	10	10	k	k	k	k	J	k	...	...	...	...	...	...	i ☉ early to bc p ☉ a : bc to c p : p.
18	St : Nb : St-Cu.	Cu : Nb : St-Cu : A-St.	St : St-Cu : A-Cu.	10	10	8	4	4	4	I	k	k	l	l	l	...	...	...	...	...	...	i ☉ to continuous ☉ a : bc to c p : p [variable cloud p ☉ n.
19	St : St-Cu.	St : Nb : A-St.	St : Nb : A-Cu.	10	10	10	10	8	10	J	k	J	I	J	G	...	...	...	...	...	...	p ☉ a : continuous rain q p : i ☉ n.
20	St : Cu : St-Cu.	Nb : St-Cu : A-Cu.	Cu : Nb : St-Cu.	9	8	4	7	4	5	l	l	k	l	l	l	...	...	...	...	...	...	p ▲ a and p : p ☉ n.
21	St : St-Cu.	St : Nb : St-Cu.	St : Nb : St-Cu.	6	7	9	9	7	3	k	l	k	l	k	k	...	...	...	...	...	...	p ▲ ☉ a : p ☉ p and n.
22	St : Cu : St-Cu.	Cu : Nb : St-Cu.	Fr-Cu : St-Cu.	3	6	5	5	4	1	l	l	l	m	l	l	...	...	...	...	...	...	bc to c p ☉ a : bc v p : fair to fine n.
23	St.	St : Cu : St-Cu.	St : Cu : St-Cu.	10	9	7	7	8	6	G	J	k	k	k	k	...	...	...	...	...	...	Continuous ☉ early to c ☉ a : p ☉ p.
24	St : Nb : A-St.	Nb : St : St-Cu.	Cu : St : St-Cu.	9	7	8	9	7	4	k	k	k	k	k	k	...	...	...	...	...	...	i ☉ and p ☉ a : p ☉ p : p ☉ n. [p ☉ n.
25	Cu : Nb.	Cu : Nb : A-Cu.	St : St-Cu : A-St.	7	4	3	7	10	10	k	l	l	l	k	k	...	...	...	...	...	...	bc to c p ☉ a : bc c p : ☉ n.
26	St : Nb : St-Cu : A-Cu.	St : Nb : St-Cu.	St : Nb : St-Cu.	8	7	8	6	9	10	k	k	k	k	k	k	...	...	...	...	...	...	p ☉ a : p ☉ p : ☉ n.
27	St : Nb : St-Cu.	Cu : Nb : St-Cu.	St : Nb : St-Cu.	10	10	7	8	7	6	J	J	k	k	k	k	...	...	...	...	...	...	i ☉ a : fair p and n.
28	St : Nb : St-Cu.	St : Fr-St : A-Cu.	St : Cu : A-Cu.	10	8	9	9	3	9	l	l	l	k	l	l	...	...	...	...	...	...	bc to c a : i d <sub>0</sub> p : c o ☉ n. [and i ☉ n.
29	St.	St : St-Cu.	St : St-Cu.	10	10	9	10	10	10	h	I	k	k	J	J	...	...	...	...	...	...	i ☉ a : c i ☉ d p : continuous ☉
30	Fr-Cu : Cu-Nb.	St : Nb : St-Cu.	Nb : St-Cu.	5	5	8	9	7	9	k	k	k	k	J	J	...	...	...	...	...	...	bc c p ☉ ▲ a and p : p ☉ n.
31	St : Nb : A-St.	Cu : Nb : St-Cu.	Nb : St-Cu.	9	8	7	6	7	5	J	k	k	k	k	k	...	...	...	...	...	...	p ☉ ▲ a : bc y to p ☉ p : p ☉ n.
Mean Cloud Am't.				7.3	7.5	7.1	7.6	7.1	6.8													

NOTE.—Visibility in these tables refers to a landwards direction ; visibility seawards, when it differs from visibility landwards, is given on p. 287.



## 437. Cahirciveen (Valentia Observatory).

November, 1928.

Day.	Cloud Forms.			Cloud Amount (All Forms).						Visibility.						Precipitation.						Remarks on the Weather of the Day.
	7 <sup>h</sup>	13 <sup>h</sup>	18 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	
1	St: Cu.	Cu: Fr-Cu.	Fr-St: Fr-Cu.	6	2	2	4	2	3	1	m	m	m	1	1	...	...	...	...	...	...	p early to bc v a: b to bc v p: fine n.
2	St: Cu.	St: St-Cu.	St: St-Cu.	2	4	9	8	7	2	1	1	1	1	1	1	...	...	...	...	...	...	Fine to fair a: c y to bc p: fair n.
3	St: St-Cu: A-St.	St: Cu: A-Cu.	St: Cu: Fr-Cu: A-Cu.	10	6	6	4	7	5	1	1	1	m	m	k	...	...	...	...	...	...	pp early a: bc v p: fair n.
4	St: St-Cu.	Cu: A-Cu.	Cu: St-Cu.	9	9	2	6	5	10	k	k	k	k	k	k	...	...	...	...	...	...	pp early to c a: b to bc p: c n.
5	St: St-Cu.	Cu: St-Cu.	Cu: Fr-St: St-Cu.	9	4	8	9	5	5	k	k	1	1	k	k	...	...	...	...	...	...	pp bc a: i d p: p 0° n.
6	St: Fr-St: A-St.	Fr-St: Cu: St-Cu: A-St.	St: Nb: A-St.	9	9	9	10	10	7	1	1	k	k	J	k	...	...	...	...	...	...	p 0° early to c a: c p 0° p: bc to c
7	St: Fr-St: Ci-Cu.	Cu: St-Cu.	Fr-St: St-Cu.	8	7	6	5	8	3	k	k	k	k	k	1	...	...	...	...	...	...	bc to c a and p: fair n. [p 0° n
8	St.	Cu: Ci-Cu: Ci.	Fr-Cu: St-Cu: A-Cu.	1	2	3	3	5	0	k	k	k	k	k	J	...	...	...	...	...	...	pp b bc a: bc p: fine n.
9	St.	St: St-Cu: A-Cu: Ci-Cu.	St: St-Cu.	7	4	8	8	9	9	k	k	k	k	k	k	...	...	...	...	...	...	pp bc a: c p and n.
10	St.	St: St-Cu.	St.	10	10	10	10	10	10	J	I	k	k	G	J	...	...	...	...	...	...	0° d a: c to o i d a: p i d a n.
11	St.	St.	St.	10	10	10	10	10	10	I	J	h	J	J	J	...	...	...	...	...	...	0° d a: d a: continuous 0° to o p:
12	St.	St: St-Cu.	St: St-Cu.	10	10	8	9	7	10	J	J	k	k	k	J	...	...	...	...	...	...	o d a: d a: c to bc p: o n. [o n.
13	St: Cu.	Fr-St: Cu: St-Cu.	St: Nb: St-Cu.	3	3	2	3	7	2	1	1	1	1	k	1	...	...	...	...	...	...	0° early to bc a: p 0° p and n.
14	St: Nb.	St: Nb: A-St.	St: A-St.	10	10	10	10	10	8	k	J	J	I	k	I	...	...	...	...	...	...	0° a and p: c i d a n.
15	St: St-Cu.	Cu: St-Cu: A-Cu: A-St.	St: St-Cu.	9	9	5	10	10	7	k	k	1	1	J	1	...	...	...	...	...	...	p 0° to p 0° a: 0° p: 0° n.
16	St.	St: St-Cu.	St: St-Cu: Ci-Cu.	10	10	10	10	6	8	J	J	k	J	k	k	...	...	...	...	...	...	[i 0° n.
17	Cu: St-Cu.	Cu: A-Cu.	Cu: St: St-Cu.	2	3	2	4	6	7	k	1	1	1	1	1	...	...	...	...	...	...	0° early then b to bc with p 0° a: p
18	Fr-Nb: St.	St: St-Cu.	St: Nb: St-Cu.	10	10	10	10	10	10	J	J	J	J	J	h	...	...	...	...	...	...	[0° p and n.
19	Fr-Nb: A-St.	Cu: Ci-Cu: Ci-St: Ci.	St: St-Cu.	10	10	6	3	8	4	I	k	1	1	k	1	...	...	...	...	...	...	0° a: c p: continuous 0° early n.
20	Fr-St: St-Cu.	St: Cu: Fr-St: A-St: A-Cu.	St: St-Cu: A-St.	9	9	9	10	10	10	k	k	k	k	k	J	...	...	...	...	...	...	0° a: p 0° p: 0° p: 0° n.
21	Nb: St.	St: St-Cu.	St: St-Cu.	10	10	10	9	10	10	I	I	I	J	J	J	...	...	...	...	...	...	i 0° a: 0° p: p 0° n.
22	Fr-Nb: St.	St: St-Cu.	Nb: St: St-Cu.	10	10	10	10	10	6	I	I	k	k	J	k	...	...	...	...	...	...	Continuous 0° early to 0° a: p
23	Nb.	Cu: Nb: St-Cu.	Nb: Cu: St-Cu.	10	9	7	7	5	9	I	I	k	J	k	k	...	...	...	...	...	...	[0° p: p 0° n.
24	Nb.	St: Nb: St-Cu.	St: Nb: A-St.	8	9	9	10	10	10	J	k	1	1	k	1	...	...	...	...	...	...	0° a and p: c to o 0° p: 0° n.
25	St: Nb.	St: St-Cu: A-St.	Fr-St: St-Cu.	10	9	9	7	9	9	h	I	J	k	J	k	...	...	...	...	...	...	0° to c p 0° a: fair p: p 0° n.
26	Fr-Cu: A-St.	St: Cu: A-St: Ci-Cu.	St: Nb: St-Cu.	10	10	8	10	8	8	k	1	1	1	1	k	...	...	...	...	...	...	c p 0° a: p 0° to i 0° p: q p 0° n.
27	St-Cu: Cu-Nb.	St: St-Cu: A-Cu.	Nb: St-Cu: A-Cu.	8	8	7	4	7	3	k	k	k	1	k	1	...	...	...	...	...	...	bc to c p 0° a: bc p 0° p and n.
28	Cu.	St-Cu.	St: St-Cu.	3	6	10	10	10	10	1	k	1	1	h	G	...	...	...	...	...	...	bc to o a: c p 0° p: d n.
29	St.	St.	St: St-Cu.	10	10	10	9	9	9	G	F	E	J	k	J	...	...	...	...	...	...	o d 0° f a: o f to c p: i d a n.
30	St: St-Cu.	St: St-Cu.	St.	10	10	8	9	10	10	I	I	k	1	h	h	...	...	...	...	...	...	c i d a and p: i d a n.
Mean Cloud am't.				8.1	7.7	7.4	7.7	8.0	7.1													

## 438. Cahirciveen (Valentia Observatory).

December, 1928.

1	St.	St.	St.	10	10	10	10	10	10	F	E	G	I	E	E	0°	...	...	...	...	...	...	o d f m a: m i d a p: f m i d a n.
2	St.	St: St-Cu.	St: St-Cu.	10	8	9	10	10	10	G	J	I	1	J	J	0°	...	...	...	...	...	...	i d a m a: c p 0° p: p 0° d n.
3	St-Cu.	St: St-Cu.	St-Cu.	8	8	9	9	5	5	k	1	1	1	1	1	...	...	...	...	...	...	c to o a and p: c to bc n.	
4	St.	St: St-Cu.	St.	10	10	10	9	10	10	I	h	J	1	I	h	...	...	...	...	...	...	o i d a i d a: c i d a p: d 0° n.	
5	St-Cu.	St: St-Cu.	St: St-Cu.	8	6	9	7	9	9	1	1	1	1	1	k	...	...	...	...	...	...	0° early to bc a: c to bc p: p 0° n	
6	Fr-St: St-Cu.	Cu: Fr-Cu: St-Cu.	Cu-Nb.	10	8	4	6	6	3	J	k	1	1	1	1	...	...	...	...	...	...	Continuous 0° early to p 0° a: [p 0° p: bc p 0° n.	
7	Fr-St: Ci-St.	St: Nb: St-Cu.	Cu.	6	8	7	7	2	1	1	1	1	1	1	1	...	...	...	...	...	...	bc to c p 0° all day.	
8	Cu-Nb.	St: Nb: St-Cu.	St: Nb: St-Cu.	2	8	8	6	8	8	1	k	1	1	1	k	...	...	...	...	...	...	p 0° to bc to a: p 0° p: p 0° n.	
9	St: A-St.	St: Nb.	Nb: St: A-St.	10	10	10	10	10	10	k	1	J	h	I	I	...	...	...	...	...	...	c i 0° a and p: 0° p: 0° n.	
10	Fr-St.	Cu: Fr-Nb: St-Cu: A-St.	St: Nb.	8	8	3	3	6	8	k	J	1	1	k	k	...	...	...	...	...	...	p 0° a: bc p 0° p and n.	
11	St-Cu: Cu-Nb.	Fr-St: St-Cu: A-Cu.	St: Nb: St-Cu.	5	6	7	9	10	10	k	k	1	1	J	I	...	...	...	...	...	...	bc p 0° a: bc to c i 0° p: i 0° n.	
12	St.	St: Nb: St-Cu.	St: St-Cu.	7	8	7	6	10	10	I	J	J	J	J	J	...	...	...	...	...	...	c to bc all day.	
13	Fr-St: St-Cu.	St: St-Cu.	Fr-St: A-St.	10	9	10	10	8	10	k	1	J	J	k	J	...	...	...	...	...	...	c a: c p 0° p: i 0° p: 0° n.	
14	St: Nb.	St: Nb: St-Cu.	St: St-Cu: A-St.	10	8	9	8	10	10	J	k	J	1	1	k	...	...	...	...	...	...	0° a: p 0° p: c n.	
15	Fr-St: Nb.	St: St-Cu.	St: St-Cu.	10	10	10	10	10	10	J	k	J	J	J	I	...	...	...	...	...	...	0° i 0° a: d 0° p: 0° p: 0° n.	
16	Fr-St: St-Cu.	Cu: St-Cu.	St-Cu.	8	6	7	9	6	6	k	k	1	k	1	1	...	...	...	...	...	...	0° early to bc a: bc p 0° p: bc y to	
17	St-Cu.	Cu: A-Cu: Ci-Cu: Ci.	Fr-Cu: St-Cu: A-Cu.	1	4	5	6	5	6	1	1	1	1	1	1	...	...	...	...	...	...	bc to bc a: bc p: bc to c n. [bc n.	
18	St.	St.	St: St-Cu.	10	10	10	10	10	2	h	I	h	h	k	1	...	...	...	...	...	...	Continuous 0° a: continuous 0° and [d p: c 0° bc n.	
19	St: St-Cu.	Fr-St: A-St: Ci-Cu: Ci-St.	St: A-St.	4	8	8	8	10	10	1	k	1	1	k	J	...	...	...	...	...	...	bc to c a: c to i 0° p: continuous 0°	
20	St-Cu: A-Cu.	St: Nb: St-Cu.	St: St-Cu.	9	8	10	9	10	10	1	1	k	1	1	J	...	...	...	...	...	...	bc to c p 0° a: p 0° p and n. [to c n.	
21	St.	St: St-Cu: A-Cu.	St: A-St.	10	9	8	9	10	10	G	J	k	k	F	G	...	...	...	...	...	...	o d a to c a: c i d a p: d a n.	
22	St.	Cu.	Cu: St-Cu.	10	10	2	6	2	1	G	I	1	1	1	1	...	...	...	...	...	...	d a d 0° a: fair p: 0° n.	
23	St-Cu: A-St.	St.	Fr-St: St-Cu.	7	9	10	10	10	10	1	1	F	F	I	1	...	...	...	...	...	...	0° early to o d a: d 0° p: c to o n.	
24	St.	Nb: St-Cu.	Cu: St-Cu.	10	9	6	7	7	3	k	J	k	k	1	1	...	...	...	...	...	...	Continuous 0° and 0° a: bc c p 0° p: [bc to c n.	
25	St: Ci-St.	Nb: A-St.	St.	9	10	10	10	10	10	1	1	J	J	G	I	...	...	...	...	...	...	p 0° early to p 0° a: continuous 0° to [d a p: d a n.	
26	Cu.	Cu: Ci-St.	St-Cu.	8	8	9	6	4	10	1	1	1	1	1	1	...	...	...	...	...	...	o 0° to c p 0° a: bc to c p: 0° n.	
27	St.	St: Nb: St-Cu: A-St.	St: St-Cu: A-St.	10	10	10	9	9	9	1	1	1	m	1	1	...	...	...	...	...	...	0° early to o i 0° a: c v p: c p 0° n.	
28	St-Cu.	Fr-St: A-St.	Fr-St: Cu: St-Cu.	10	9	10	9	4	8	1	k	k	1	1	1	...	...	...	...	...	...	c p 0° a: q p 0° p: p 0° n.	
29	Cu: Cu-Nb: Ci-Cu.	St: Cu: Nb: St-Cu.	St: Nb: St-Cu.	8	6	8	10	8	6	1	1	1	1	k	k	...	...	...	...	...	...	p 0° to p 0° a: bc to c p 0° p: p 0° n.	
30	Cu-Nb: Cu: St-Cu.	Cu: Ci-Cu.	St: Nb: St-Cu.	10	8	9	7	8	9	k	k	1	1	k	k	...	...	...	...	...	...	p 0° a: fair p: cloudy n.	
31	Cu.	Cu.	Fr-Cu.	8	2	1	2	1	1	1	1	1	1	1	1	...	...	...	...	...	...	p 0° to b a: fine y p: b y to b 0° n.	
Mean Cloud am't.				8.3	8.1	7.9	8.0	7.8	7.6	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>		
Mean Annual Cloud am't.				7.6	7.4	7.2	7.4	7.2	7.0														

NOTE.—Visibility in these tables refers to a landwards direction; visibility seawards, when it differs from visibility landwards, is given on p. 287.







M.O. 320  
(Richmond)

Air Ministry  
METEOROLOGICAL OFFICE

THE  
OBSERVATORIES' YEAR BOOK  
1928

Comprising the meteorological and geophysical results obtained from autographic records and eye observations at the observatories at Lerwick, Aberdeen, Eskdalemuir, Cahirciveen (Valentia Observatory), and Richmond (Kew Observatory), and the results of soundings of the upper atmosphere by means of registering balloons.

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RICHMOND (KEW OBSERVATORY)

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Published by the authority of the  
METEOROLOGICAL COMMITTEE



LONDON :

PUBLISHED BY HIS MAJESTY'S STATIONERY OFFICE

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1930



## RICHMOND (KEW OBSERVATORY).

Latitude .. .. .	51° 28' N.
Longitude .. .. .	0° 19' W.
G.M.T. of Local Mean Noon .. .. .	12h 1m.

### *Heights in Metres above Sea Level.*

Barometer .. .. .	10·4
Raingauge Site .. .. .	5·5
Robinson Cup Anemograph .. .. .	25
Dines Tube Anemograph .. .. .	25

### *Heights in Metres above Ground.*

Thermometer Bulbs .. .. .	3·0
Sunshine Recorder .. .. .	13·3
Robinson Cup Anemograph .. .. .	20
Dines Tube Anemograph .. .. .	20
Beckley Rain-gauge Rim .. .. .	0·53

## INTRODUCTION.

The Observatory was built in 1769 as the private observatory of King George III. Since 1842 it has been devoted to physics and meteorology. The meteorological records are continuous from 1854. The Observatory is in the Old Deer Park, Richmond (Surrey), about 10 miles (16 km.) to the west of the City of London. The Observatory stands on a low artificial mound whose level is about  $1\frac{1}{2}$  metres higher than that of the surrounding park. The river Thames is distant about 300 metres on the north and west. Kew Gardens, which are extensively wooded, lie to the east-north-east, the nearest point of the Gardens being about 600 metres away. The town of Richmond, to the south-east, is about 1,100 metres distant. On the east side of the Park is the main road from Richmond to Kew; on the south side the railway from Richmond to Twickenham. The Old Deer Park is mainly open pasture. Round the Observatory a golf course has been laid out. Another open area partly wooded, Syon Park, lies to the north-north-east across the river. Richmond Park is about  $1\frac{1}{2}$  miles ( $2\frac{1}{2}$  km.) to the south-east. General views of the Observatory building and the exposure lawn are to be found in this volume. The photographs were taken in 1925 but the only change (before the end of 1928) which need be noted is the substitution of other experimental screens for the small marine screens which were being tested in 1925. For the early history of the Observatory reference may be made to papers by S. P. Rigaud (The Observatory 1882, p. 279), R. H. Scott (Royal Society's Proceedings, Vol. 39 (1885), pp. 37-86), C. Chree (The Record of the Royal Society, 1897), and R. S. Whipple (Proceedings of the Optical Convention, 1926).

## METEOROLOGY.

The elements dealt with in the following tables are: atmospheric pressure, temperature, humidity, rainfall, sunshine, solar radiation, wind speed and direction, earth temperature, minimum temperature on the grass, level of underground water; there is also a diary of cloud and weather.

For brief descriptions of most of the instruments from which values of the above elements have been obtained and of the methods of tabulating the records, reference should be made to the General Introduction. The following notes supplement, where necessary, the information contained therein.



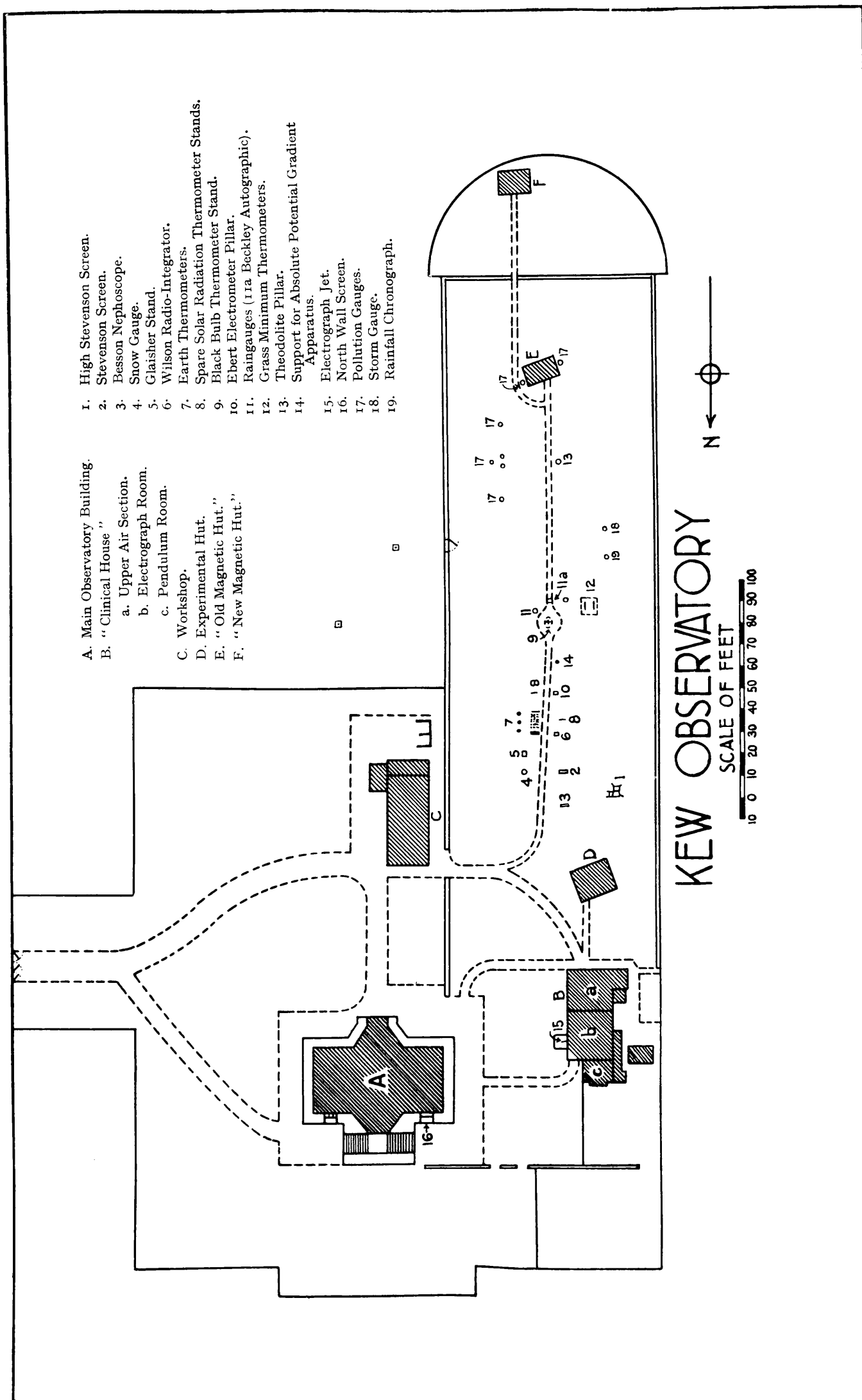


FIG. 17. SITE PLAN, 1928.



KEW OBSERVATORY.



FIG. 18. GENERAL VIEW FROM SOUTH-WEST, 1925.



FIG. 19. VIEW FROM NORTH SHOWING NORTH WALL SCREEN, 1925.

[To face p. 351.]



### Notes on Instruments.

**Pressure.**—The barograph\* is mounted in the basement of the Observatory, where the diurnal variation of temperature is very small. The normal position of the instrument has been in the north room occupied by the magnetographs. When the magnetographs were removed and the preparations for the installation of the seismographs were commenced, the barograph was placed in the photographic dark-room (June 16th, 1925). The instrument remained in that position until May 21st, 1928, when it was restored to its original site and electric lighting installed. The barograph magnifies barometric changes in the ratio 1.553:1, i.e., the change of ordinate equivalent to a change of 1 mm. in the height of the barometer is 1.553 mm. "Residual corrections," obtained from the control observations taken daily with the Newman barometer at 9h, 15h and 21h, are applied to the hourly measurements. The same correction is applied to all the readings on the same photographic sheet, i.e., generally for forty-eight hours. The individual entries published for the hours of the control observations may differ by .3 mb. from those observations. The Newman barometer is compared from time to time with the two large mercury barometers, which were set up in 1855 and 1860 respectively and are still recognised as standards. A zero correction is based on these comparisons. The correction + 0.2 mb. (+ .006 mercury inch) which has been applied for many years, remained in use during 1928. Comparisons are made on the assumption that the value of the acceleration due to gravity is  $g = 981.199 \text{ cm./sec}^2$ . This is the value given by pendulum observations.† The departure from the value given for the latitude by Helmert's formula is insignificant. On occasions when a loss of trace occurred, the missing hourly values were derived from the Dines Float Barograph.\* There were 54 hours in the year for which this was necessary.

**Temperature and Humidity.**—The thermograph is mounted in the West Room on the first floor of the Observatory, the thermometer bulbs being exposed in the screen attached to the north wall of the building. This screen has single louvres and the bottom is open. There is an additional flat louvred screen which shields the main screen from direct sunshine when the sun is in the West and not too low. The height of the bottom of the bulbs of the recording thermometers above the bottom of the sides of the screen containing them is 30 cm. in summer, 33 cm. in winter. The height of the bulbs above the top of the artificial mound on which the Observatory stands is approximately 3 metres; the height above the lawn where the raingauge is situated is approximately 5 metres. The scale values of the photographic records are not identical for the dry- and wet-bulb curves. For the dry-bulb, tube No. 4 II. was in use and the scale value was 1 mm. = 0.3336a; for the wet-bulb, the old Falmouth wet-bulb tube (no number) was in use and the scale value was 1 mm. = 0.290a.

The control thermometers, which were graduated and mounted by Messrs. Negretti & Zambra in 1915, had been made and filled many years before and were therefore well seasoned. The National Physical Laboratory certificates dated 1916 give corrections to the nearest 0.05° C., the largest being 0.10°. The thermometers are tested each January in ice. According to tests made in January, 1928, there was no indication of any change of zero. The water for the wet-bulb thermometers used to be supplied from a small open tank inside the screen and it was customary to fill the tank to overflowing several times each day. In November, 1925, a tank was fitted outside the screen. A tube leads from this tank to two cups from which

\* For descriptions of this instrument see *Observatories' Year Book*, 1923, p. 94, and *R. Met. Soc. Q. J.*, 1929, Vol. 55 (229), p. 37.

† A comparison between the values of "g" at Cambridge and Kew Observatory was made during the year 1925 by Sir G. Lenox Conyngham with the assistance of Mr. G. Manley. A similar comparison between Potsdam and Cambridge was made by Prof. Meinesz earlier in the year. These observations are in accord with those made at Kew and Potsdam by Putnam in 1900, from which the value stated above was derived. The value for Potsdam,  $g = 981.274$ , based on the observations of Kühnen and Furtwängler, is adopted as the standard of reference.



wicks are taken to the wet-bulbs. A further improvement was made in July, 1926, when a large inverted bottle was set up over the tank. Water flowing from this bottle keeps the level constant in the tank and the cups. The height of the apparatus is adjusted so that water drips slowly from the wet-bulbs. A bottleful of water lasts about a week. It is found that the bottle survives severe frost.

Control eye-readings of the standard thermometers are taken daily at 9h, 15h and 21h. Residual corrections obtained from the control observations are applied to the hourly measurements of the curves. The same correction is applied to all the readings on the same photographic sheet, i.e., generally for forty-eight hours. The individual entries published for the hours of the control observations may differ by 0.3a from these observations. The larger departures refer to occasions when temperature is oscillating or changing rapidly.

In cases of loss of the dry-bulb record owing to the failure of the electric light or any other cause the readings of a thermograph in a second North-wall screen are adopted. There were 45 hours in the year for which this was necessary.

When the wet-bulb trace is missing or defective, the missing values are derived from the dry-bulb trace and the records of a hair hygograph. The same procedure is always adopted when the wet-bulb reading is below 273a. 289 hours had thus to be dealt with during the year. Humidity was determined from the dry- and wet-bulb readings by the procedure described in the General Introduction to this Volume.\*

It may be noted that during 1928, as in previous years, the temperatures published for Kew Observatory in the Daily Weather Report and elsewhere also refer to the North-wall screen. For the daily and weekly reports the readings of maximum and minimum thermometers exposed in that screen are utilised.

*Rainfall.*—As from January, 1921, the standard raingauge for the Observatory has been an 8-inch gauge with the deep "Snowdon" funnel. The site is level and protected from wind, principally by hedges about 1½m. high and distant 11 metres to East and 17 metres to West. The readings of this standard gauge are at 7h and 18h. The hourly readings of the Beckley gauge are adjusted to give totals in agreement with the standard gauge.

*Sunshine.*—The sunshine recorder is mounted on the south parapet of the roof. The same frame has been in use since 1880 and it is believed that the ball has not been changed. The ball is now somewhat yellow. The exposure is satisfactory. The greatest elevations of the sky line in the azimuths in which the sun can rise and set are 1° and 3° respectively.

*Solar Radiation.*—Observations are made with an Ångström pyrheliometer, which measures the intensity of the direct radiation received from the sun by a surface which is normal to the sun's rays. The observations are made within half an hour of noon on all days except Sundays, provided that the sun is visible and not too much obscured by cloud, fog or thick haze. The conditions of the intervening atmosphere are indicated in Tables 497-508 in the column "sky." The amount of radiation is given in milliwatts per square centimetre in the column headed "total." For conversion to the unit more ordinarily employed abroad, the following relation may be used, 1mw. per sq. cm. = 0.01435 gramme-calorie per sq. cm. per minute. The vertical component, i.e., the direct radiation received per square centimetre of a horizontal surface, is also given.

---

\* Prior to 1926 the tables, based on Glaisher's factors, published in *The Computers' Handbook*, were used.



The Ångström instruments in use are by Rose, Stockholm. No. 24 was in use throughout the year. The ammeter is No. 68956, which was certified at the National Physical Laboratory in 1919.\* The readings are evaluated according to Ångström's original instructions.† To bring the readings into accordance with the scale adopted by the Smithsonian Institution, a correction of + 3·5 per cent. would be required.‡

*Wind Speed and Direction.*—To the end of 1925 the record of wind velocity was based on the readings from the Robinson-Beckley cup-anemograph. From the beginning of 1926, readings of the Dines tube-anemograph have been used for all the wind data. The vane of the Dines instrument is at the same level as the cups of the other anemograph, 20 metres above the lawn. There are trees in the neighbourhood reaching greater heights. Those along the river to the west of the Observatory and about 280 metres away average 25 metres. The head of the present Dines instrument, set up at the beginning of the year 1923, is of the Mark II pattern. In the vertical tube there are 80 holes in 4 rows of 20. The diameter of each hole is 3 mm. The connecting tubes, 17 metres long, have the internal diameter 12 mm.

Wind direction is given by a twin-lever recorder attached to the vane of the Dines instrument. In accordance with an old convention, wind direction is not printed when the speed of the wind averages less than 1·6 metres per second, though the present vane is sensitive to lighter currents.

*Earth Temperature.*—The two thermometers in use were at 30 cm. and 122 cm. The ground in which the tubes for the thermometers are sunk is under grass. The soil is gravel. The site is well exposed. There are, however, three fruit trees about 9 metres to the east and 6 metres high. The bulb of the lower thermometer is 430 cm. above sea level. As will be seen from Table 525 the surface of the underground water surpassed this level at the beginning of the year when the park was flooded.

*Minimum Temperature on the Grass.*—The grass minimum thermometer is set at 18h and read at 7h on the succeeding day, the reading being assigned to the day of reading.§ The thermometer is placed with the bulb about 25 mm. above the turf. The exposure is good, there being no obstruction within 76° from the zenith. The thermometer in use throughout the year was M.O. 23006. This thermometer has a spherical bulb, diameter 17 mm.

#### Identification Numbers of Instruments in use in 1928.

Control Barometer	..	..	..	..	Newman 34
Control Dry Bulb Thermometer	..	..	..	..	Negretti & Zambra 173971
Control Wet Bulb Thermometer	..	..	..	..	Negretti & Zambra 173969
Control Raingauge (8-inch)	..	..	..	..	M.O. 1271
Measuring Glass for the Control Raingauge	..	..	..	..	M.O. 1425, 1617
Campbell-Stokes Sunshine Recorder	..	..	..	..	M.O. 12
Dines Tube Anemograph Head	..	..	..	..	M.O. 1017
Dines Tube Anemograph Recorder	..	..	..	..	M.O. 1017
Earth Thermometer 1 ft.	..	..	..	..	M.O. 5
Earth Thermometer 4 ft.	..	..	..	..	M.O. 10
Grass Minimum Thermometer	..	..	..	..	M.O. 23006
Photo-thermograph { Dry Bulb	..	..	..	..	4 II.
{ Wet Bulb (Old Falmouth Wet Bulb)	..	..	..	..	No number
Photo-barograph	..	..	..	..	..

\* In view of the discovery by Marten (*Preuss. Met. Inst. Ann. Rep.*, 1928, p. 64) that errors are likely to be caused by temperature changes produced in a microammeter when sunshine falls on it, it may be noted that the instrument used at Kew is always in shadow.

† Report of the International Meteorological Committee, St. Petersburg, 1899, p. 57.

‡ R. E. Watson. *Geophysical Memoir*, No. 21, 1923.

§ The hour of the readings to be published in the Year Book was changed from 9h to 7h as from January 1st, 1924.



## Thermometer Corrections, 1928.

	173971. N.P.L. 1915.				173969. N.P.L. 1915.				MO 5. N.P.L. 1913.		MO 10. N.P.L. 1913.		MO 23006. N.P.L. 1918.	
	°		°		°		°		°		°		°	
Certified.	255 <sup>a</sup>	+0.20	285 <sup>a</sup>	-0.10	255 <sup>a</sup>	+0.15	285 <sup>a</sup>	-0.10	260 <sup>a</sup>	+0.1	260 <sup>a</sup>	+0.3	253 <sup>a</sup>	-0.1
	260	+ .15	290	- .10	260	+ .15	290	- .10	273	.0	273	+ .1	263	- .1
	265	+ .10	295	- .05	265	+ .10	295	- .05	280	.0	280	+ .2	273	- .1
	270	+ .05	300	- .10	270	+ .10	300	- .05	290	.0	290	+ .1	283	- .0
	273	- .05	305	- .05	273	.00	305	- .05	300	.0	300	.0	293	- .0
	275	.00	310	- .05	275	.00	310	- .05	310	.0	316	+ .1	303	- .0
	280	- .05	—	—	280	- .05	—	—	—	—	—	—	—	—
Applied.	260 } 270 }	+ 0.1	—	—	260 } 270 }	+ 0.1	—	—	—	—	275 } 285 }	+ 0.2	253 } 278 }	- 0.0
	270.1 } 283.0 }	0.0	—	—	270.1 } 283.0 }	0.0	—	—	260 } 310 }	0.0	285.1 } 295 }	+ 0.1	278.1 } 303 }	+ 0.1
	283.1 } 310.0 }	-0.1	—	—	283.1 } 310.0 }	-0.1	—	—	—	—	—	—	—	—

## Notes on the Meteorological Tables.

*The Weather of 1928.*—The year was notable for the very wet January and October and the dry, sunny periods of July, August and September.

Flood water invaded the Observatory grounds on the night of January 7, flooding the rain gauges. The flood was general throughout the Thames valley and the highest of which we have any knowledge. Loss of life and great damage to property occurred in some districts.

Rainfall for the whole year was 5 per cent. above normal.

Sunshine was 170 hours in excess of normal. On July 13, 15h. 12m. of sunshine was recorded, this being 94 per cent. of the total amount possible.

The highest temperature recorded in the north wall screen was 303.5a (87° F.) on July 15.

The lowest temperature recorded was 269.0a (25° F.) on December 9 and 15.

December 15 was the only "ice day," i.e., a day with the maximum temperature in the screen below 273a.

During the gale of November 16 the wind reached a velocity of 65 miles per hour, the second highest gust ever recorded at Kew Observatory.

*Diurnal Variation of Pressure and Temperature.*—Harmonic Analysis. In accordance with the precedent of the last six years, the first four harmonic components have been computed for each month. The results are tabulated in Tables A and B.

The inequality is supposed to be given by the expression

$$c_1 \sin (15 t^\circ + \alpha_1) + c_2 \sin (30 t^\circ + \alpha_2) + \dots$$

$t$  being the time in hours since midnight. The angles  $\alpha$  are the phases of the several sine-waves at midnight. The curves are tabulated according to Greenwich mean time but the phases in Table A have been reduced to local mean time. The difference in Longitude between Kew and Greenwich being only 19' the correction is hardly appreciable in the figures, which are rounded to the nearest degree.



TABLE A.

Diurnal Variation of Barometric Pressure. Fourier Coefficients.  $\Sigma c \sin (nt + \alpha)$ .  
 Richmond (Kew Observatory), Longitude  $0^\circ 19' W$ . 1928. Local Mean Time.

Month or Season.	$c_1$	$\alpha_1$	$c_2$	$\alpha_2$	$c_3$	$\alpha_3$	$c_4$	$\alpha_4$
	mb.	°	mb.	°	mb.	°	mb.	°
January ...	.243	38	.289	157	.206	348	.109	227
February ...	.431	12	.379	153	.097	337	.020	60
March ...	.251	61	.375	149	.089	3	.050	357
April ...	.295	20	.427	154	.029	181	.058	354
May ...	.265	24	.330	151	.074	152	.009	330
June ...	.355	42	.371	139	.058	148	.012	275
July ...	.382	349	.339	138	.104	144	.015	335
August ...	.127	324	.253	154	.048	150	.031	323
September ...	.269	16	.433	157	.028	26	.053	12
October ...	.048	64	.323	171	.107	345	.009	330
November ...	.634	49	.351	157	.114	350	.024	305
December ...	.149	190	.306	156	.129	350	.101	212
Arithmetic Mean ...	.287	—	.348	—	.090	—	.041	—
Year ...	.237	28	.346	153	.041	2	.018	297
Winter ...	.280	38	.331	156	.136	347	.048	225
Equinox ...	.201	33	.386	157	.047	356	.042	359
Summer ...	.250	11	.321	145	.070	148	.016	317

Note.—*Winter* comprises the four months, January, February, November, December,  
*Equinox* the months March, April, September, October, and *Summer* May to August.

TABLE B.

Diurnal Variation of Temperature. Fourier Coefficients.  $\Sigma c \sin (nt + \alpha)$ .  
 Richmond (Kew Observatory), Longitude  $0^\circ 19' W$ . 1928. Local Mean Time.

Month or Season.	$c_1$	$\alpha_1$	$c_2$	$\alpha_2$	$c_3$	$\alpha_3$	$c_4$	$\alpha_4$
	a.	°	a.	°	a.	°	a.	°
January ...	1.388	218	.474	45	.171	218	.027	119
February ...	2.231	213	.805	26	.175	197	.057	176
March ...	2.291	225	.524	57	.092	307	.094	174
April ...	2.950	226	.528	79	.263	35	.067	216
May ...	3.426	225	.306	80	.223	18	.024	11
June ...	3.514	229	.010	229	.243	45	.144	25
July ...	4.434	219	.096	330	.336	22	.130	34
August ...	3.493	228	.363	69	.316	32	.047	233
September ...	4.345	226	.812	53	.231	4	.160	199
October ...	2.492	230	.801	56	.077	262	.091	182
November ...	1.542	223	.510	45	.240	227	.051	60
December ...	1.103	217	.438	40	.177	215	.041	92
Arithmetic Mean ...	2.767	—	.472	—	.212	—	.078	—
Year ...	2.757	224	.448	51	.071	9	.021	151
Winter ...	1.562	218	.550	37	.187	215	.030	112
Equinox ...	3.018	226	.657	60	.123	2	.101	196
Summer ...	3.707	225	.160	65	.276	29	.064	23

NOTE.—*Winter* comprises the four months January, February, November, December,  
*Equinox* the months March, April, September, October, and *Summer* May to August.



*Level of Underground Water.*—In Table 525 there is given for each day the mean height above sea level of the surface of the underground water. The level actually measured is the surface of water in a pipe which passes through the floor of the basement into the ground. The water level depends mainly on the state of the river Thames. The Observatory is close to Richmond lock, which is half-tidal, and the underground water is in summer a little below the level of low water above the lock (220 cm. above M.S.L.). The effects of the spring and neap tides are conspicuous in the fluctuations of level in summer.

*Cloud Amount.*—The mean cloud amounts for the six hours of observations are given month by month in the diary of cloud and weather. The following means are derived from these data :—

*Mean Amount of Cloud from Six Observation Hours.*

Month	Jan.	Feb.	Mar.	Apl.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
Cloud ...	7.0	6.4	7.6	7.4	6.9	6.7	5.4	6.8	4.9	6.2	7.1	7.4	6.6

*Mean Amount of Cloud for the Year at the Six Observation Hours.*

Hour ...	7h	9h	13h	15h	18h	21h
Cloud ...	6.8	6.8	7.1	7.2	6.4	5.5

*Visibility.*—The objects used for the classification of visibility are enumerated below. The Observatory is on very low ground. The view is bounded on the south-east by Richmond Hill and on the west by the trees near the river. For object H a church tower seen through trees and with high ground behind it has to be used. There is no conspicuous object at the appropriate distance to serve as I, and interpolation is necessary. The object J is in London and is therefore more affected by atmospheric pollution than the other objects.

VISIBILITY AND FOG.

LIST OF OBJECTS.

Identification Letter.	Actual Object.	View Point.	Bearing.	Actual Distance.	Standard Distance.
X	Verification House (Not Visible).	S.W. Corner of Observatory Bldg.	S.W.	<25 metres	25 metres
A	Verification House ...	S.W.	S.W.	25 "	25 "
B	17ft. Stevenson Screen	S.E. " Corner " Observatory Bldg.	S.W.'S.	50 "	50 "
C	New Magnetic Hut ...	SW. Corner of Observatory Bldg.	S.'W.	110 "	100 "
D	S.W. Tree ...	"	S.W.	200 "	200 "
E	Golf Club House ...	Observatory "	S.E.'E.	500 "	500 "
F	Orange Tree Hotel ...	"	S.E.'E.	970 "	1,000 "
G	St. Matthias Church ...	"	S.E.	1,900 "	2,000 "
H	South Ealing Church	"	N.'W.	4,000 "	4,000 "
	(Mortlake Chimney well visible.	"	E.	3,500 "	} 7,000 "
i	Chelsea Chimneys not visible.	"	E.	9,300 "	
J	Chelsea Chimneys ...	"	E.	9,300 "	10,000 "
K	Surrey Hills ...	"	S.'E.	20,000 "	20,000 "
l	Surrey Hills well visible	"	S.'E.	> 20,000 "	30,000 "
m	Surrey Hills, exceptionally visible.	"	S.'E.	> 20,000 "	50,000 "



## ATMOSPHERIC ELECTRICITY.

The systematic observations in atmospheric electricity are devoted to potential gradient, air-earth current and ionization. In the case of potential gradient there is continuous autographic registration ; the other elements are observed each afternoon when conditions are favourable.

*Potential Gradient.*—The Kelvin water-dropper electrograph has been housed since 1915 in a low building known as the Clinical House. The pipe carrying the jet projects through a hole in a window and is adjusted so that the point where the jet breaks into spray is 1.50 m.\* from the window and 1.73 m. above the pool into which the water falls.† The electrogram is a record of the difference of potential between the ground and the point where the jet breaks. The aim is, however, to obtain the potential gradient in the open. For this purpose observations are made at a site in the Observatory garden. The apparatus for these “absolute” observations consists essentially of a long insulated rod carrying at the end a lighted fuse, which is connected to an electrostatic voltmeter. Readings are taken with the fuse at one metre and at two metres above the ground, the grass on which is kept short. The observations are taken about noon on all convenient dry days. From the observations the ratio of the potential gradient in the garden to the potential recorded by the electrograph is computed. Such a ratio is given for each month in Table 540.

The water dropper was out of action for eight days in March. It was again dismantled later on in the year when the Clinical House was being redecorated. During this second period of inaction however a subsidiary electrograph consisting of a radio-active collector attached to a Dolezalek quadrant electrometer was run in the Observatory building. The values of potential gradient from 16h. on August 27 until 10h. on October 2 are derived from this instrument, and in addition those during the night and early morning of October 7-8 when the insulation of the water dropper was not very good.

The exposure factor for the subsidiary electrograph is naturally different from that for the water dropper. The factor applicable to the Dolezalek electrograph, is that given for the month of September.

Two exposure factors are given for November, the reason being that the water dropper was taken down on November 15 to be cleaned and dried. The factor prior to this date is 2.06, that for the last half of the month is 2.07.

During the year‡ two electrostatic voltmeters, No. 1684 and No. 1685, were used for the absolute observations. The voltmeters and also the electrograph are calibrated at frequent intervals by means of a Cambridge and Paul potentiometer, a high tension dry battery being used as a source of potential difference.

The data appearing in Table 539 include the electrical character figure assigned to each day from the consideration of the electrograms. Of the character figures, 0 denotes the absence of negative potential, 1 implies the existence of negative potential at one or more times during the day but with a total duration of less than 3 hours, while 2 implies the existence of negative potential with a total duration of 3 hours or more. As a negative potential gradient hardly ever occurs except when rain is in the neighbourhood, character 0 occurs on dry days and character 2 on days with

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\* This measurement was made in July, 1926. It is believed that there has been no appreciable change since 1915.

† This height is regulated and has been kept the same.

‡ As from January 1st, 1923, the electrostatic voltmeters took the place of the Kelvin portable electrometer, No. 81, previously used for this purpose.



continuous rainfall. For the eight days in March during which the electrograph was out of action, the characters 0 or 1 have been assigned from information as to rainfall; the figures are in brackets to indicate that they are not derived from electrical records.

The present criteria for character figures were adopted as from the beginning of 1914. Correcting for missing days, the average frequency of character figures 0, 1, and 2 during the years 1914-1927 inclusive were 186 : 139 : 40. The corresponding figures for 1928 are 176 : 150 : 40. In accordance with a resolution of the International Union for Geodesy and Geophysics (Section for Terrestrial Magnetism and Atmospheric Electricity: Prague Meeting 1927) tabulations of the duration of negative potential gradient are included in the present issue of the Year Book. The total duration of negative gradient is given for each day for which the electrographic record is satisfactory.

Table 540 gives daily data derived from measurements of the electrograms. They represent means for 60-minute intervals centred at the exact hours 3h, 9h, 15h, and 21h G.M.T. On occasions when the trace was defective, either through failure of insulation or some other cause, values of potential gradient have been interpolated, reference being made to the weather conditions as well as to the curve on either side of the defect. Such values are printed in brackets. On some occasions the curve, though existent, is so oscillatory that no satisfactory estimate is possible of the mean value of the ordinate. Such occasions are indicated by the letter  $z$ . If there is no doubt as to the sign of the hourly mean value, though a numerical measure is unobtainable, the sign is indicated by a + or a - attached to the  $z$ . The symbol  $z \pm$  indicates that there were oscillations on both sides of the zero line, and that the sign of the mean value was uncertain.

The extreme hourly mean values in Table 540 are 1405 v/m at 9h. on November 10 and - 1030 v/m at 9h. on April 1. The former value is representative of foggy conditions; on this particular occasion the fog developed about 21h. on November 9 after a fine day. The potential gradient fell rapidly as the fog increased, even to the extent of assuming negative values at times between midnight and 2h. After 2h. the potential gradient rose rapidly, reaching a maximum at 9h. The fog cleared at 11h. 40m. The extreme negative potential of April 1 was associated with light intermittent rain which continued at intervals throughout the day. The potential gradient was persistently negative and free from large oscillations from 8h. to 13h.

Of the two sets of mean monthly values at 3h, 9h, 15h and 21h given in Table 540 at the foot of each month's data, the first set ( $a$ ) represents the arithmetic means of all the positive potentials in the column, the second set ( $b$ ) represents the algebraic mean derived from all days on which all four hours were represented. The last line gives the mean value for each month as derived from the ( $a$ ) and the ( $b$ ) values respectively.

For reasons explained in the 1922 Year Book, it is believed that the values ( $a$ ) may be expected to give approximately the true monthly mean from all days when negative potentials are excluded, while the values ( $b$ ) may be expected to give approximately the true monthly mean when negative potentials are included. But a reservation is necessary in both cases, for the highly oscillatory occasions such as are met with during thunderstorms have been omitted, and this omission may have a sensible effect.

If the monthly means in Tables 540 and 541 be compared, it will be found that the quiet day mean is in excess of the mean ( $b$ ) in nine months out of the twelve. It is greater than the mean ( $a$ ) in six months and is equal to the mean ( $c$ ) in one month.



In only two months, January and November, is the excess of the quiet day mean over the mean (*a*) notable. For the year as a whole, allowing equal weight to the twelve months, the quiet day mean, the mean (*a*) and the mean (*b*) are respectively 298 v/m, 301 v/m and 282 v/m. The corresponding values for 1927 were 315 v/m, 303 v/m and 278 v/m.

As to comparison with earlier years it is to be noted that the present method of making the "absolute" observations was initiated at the beginning of 1910. Since then there has been no considerable change in the exposure at the control station.\* The annual mean potential gradient for selected quiet days is available from that date onwards.†

1910	310 v/m	1917	354 v/m	1923	318 v/m
11	301 v/m	18	346 v/m	24	329 v/m
12	300 v/m	19	331 v/m	25	326 v/m
13	335 v/m	20	315 v/m	26	279 v/m
14	345 v/m	21	281 v/m	27	315 v/m
15	354 v/m	22	318 v/m	28	298 v/m
16	367 v/m				

The average for the 19 years is 322 volts per metre.

The mean for 1926 is a minimum. Along with the low value for 1921 it was probably to be attributed in part to the exceptional atmospheric conditions prevailing during the coal strikes of those years. Apart from these abnormalities a smooth change of potential gradient is to be noticed. In fact, the figures have been quoted‡ by Dr. Bauer as evidence for a connection between atmospheric electricity and solar activity.

The diurnal inequalities and the mean monthly and annual values in Table 54I are based on the curves of quiet days selected from those entirely free from negative potential. Other objects aimed at in the selection of the days are freedom from large irregular movements, absence of indications of inferior insulation in the electrograph, and the avoidance, so far as possible, of large non-cyclic changes. The quiet days numbered 10 in each month; but to complete that number in January and October it was necessary to include several 24-hour periods which did not commence at midnight.

Except in these cases the non-cyclic change is given explicitly in Table 54I, so that anyone who may desire to reproduce the figures as they were before the non-cyclic correction was applied can easily do so.

All the inequalities show a well marked double oscillation with minima in the early morning and early afternoon, maxima in the late morning as well as in the evening. The diurnal inequality for the whole year shows the higher maximum at 9h, the lower minimum at 13h. This is not the case in every year. The hours of the extremes and the range of the inequality is given for each year from 1910 in the following list.

Year.	Max. hr.	Min. hr.	Range v/m	Year.	Max. hr.	Min. hr.	Range v/m	Year.	Max. hr.	Min. hr.	Range v/m
1910	20	4	138	1917	20	4	154	1923	9	4	160
1911	9	4	154	1918	20	2	139	1924	20	4	133
1912	9	4	149	1919	8	4	124	1925	19	3	129
1913	19	3, 4	160	1920	9	3	122	1926	20	4	118
1914	20	3	169	1921	20	3, 4	132	1927	19	3	129
1915	19	5	173	1922	20	4	144	1928	9	3	124
1916	20	4	151								

It will be seen that the range has been considerably lower in most recent years than it was in the years 1911 to 1917.

\* cf. Year Book, 1926, p. 327.

† Estimates for the years 1898–1909 are given by Chree, *Phil. Trans. A* (1915) p. 141. The change of site of the electrograph in 1915 is discussed in *Hourly Values*, 1916.

‡ Washington, Carnegie Institution. Researches of the Dept. of Terr. Mag., Vol. V. (1926) pp. 361–384.



If the inequalities for the year and the seasons are compared with the corresponding inequalities for atmospheric pollution given in Table 543, the remarkably close similarity in the hours of occurrence of the principal maxima and minima noted in previous years is not borne out. There is, however, the same marked double oscillation throughout the day in both elements, a principal maximum or minimum of one falling at the same time as the secondary maximum or minimum of the other.

*Conductivity and Air-earth Current.*—To determine the current flowing from air to earth, the conductivity of the atmosphere at one metre above the ground is measured by means of the Wilson universal electrometer.\* For calculating the conductivity at 15h. four observations, each giving the leakage from a charged plate in 5 minutes, are averaged. The product of the conductivity so determined and the potential gradient at 15h (as given in Table 540) is taken as the measure of the air-earth current. The conductivity is not observed during rain nor when the potential gradient is negative. Data are available for about one-third of the days of the year 1928.

In Table 538, in addition to the air-earth current, the "Wilsonian" conductivity is published this year for the first time.

In the Table we have ventured to use  $\lambda_+$  as the symbol for the Wilsonian conductivity, so implying that the conductivity measured is that due to positive ions. This interpretation of the observations is not accepted by all physicists.

The conditions under which the air-earth current is measured are maintained as uniform as possible, but they differ from the conditions under which the vertical current passes from the air to the earth in the absence of the apparatus. The presumption is that the results obtained would require to be multiplied by a factor to represent the true air-earth current.† The monthly mean of the observed values of the current varied from 49 in November to 102 in June in terms of the unit  $1 \times 10^{-18}$  ampere per square centimetre. Allowing equal weight to each month we find that the mean for the year in terms of the above unit is 74. The mean derived directly from the 126 observations is also 74. There is very little difference from the corresponding values for other years.

There is some doubt as to the comparability of observations made with the Wilson apparatus and other estimates of the air-earth current. Determinations based on separate measurements of the conductivity for positive and negative electricity have yielded on the continent averages of about  $2 \times 10^{-16}$  amperes per square centimetre. On the hypothesis that it is only  $\lambda_+$  that governs the transport of electricity from air to ground this estimate must be reduced to  $1 \times 10^{-16}$  amperes per square centimetre.

*Ionic Charges.*—Table 538 also gives the volume-charges carried by such positive and negative ions (including all of the more mobile type) as are caught by the Ebert apparatus.‡ The instruments are exposed in the open on a stone pedestal 1 metre high, and the observations extend over some 20 minutes near 15h, being simultaneous with the experiments with the Wilson electrometer.

Normally, two Ebert instruments are in use, one charged positively, the other negatively, the signs alternating from day to day. The initial voltage is about 180.

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\* *Proceedings of the Cambridge Philosophical Society*, Vol. 13, p. 184 (1906).

† When the current passing into a metal plate at ground level is taken as the standard the factor is found to be about 1.2. A discussion of this question has been published in a memoir by Dr. R. E. Watson.—*Geophysical Memoirs*, No. 45. 1928.

‡ *Physikalische Zeitschrift*, Vol. 8, No. 8, p. 246 (1907).



In interpreting the observations it is to be borne in mind that even in pure mountain air the greater part of the electric charge is carried by the sluggish "Langevin" ions. In less pure air a still higher proportion of the ions is immobilised and there is a decrease in the number of the small ions, i.e., of ions such as are effective in producing the conductivity of the atmosphere.

As is usual at Kew the highest values of the measured ionization occurred during the summer half of the year. Positive ionization exceeding  $100 \times 10^{-18}$  coulomb per cc. occurred on days in all months save January, November and December. The negative ionization exceeded the same limit in the months April to September inclusive. In foggy weather the number of small ions is very small and uncertain. The lowest ionizations tabulated were  $+21 \times 10^{-18}$  coulomb per c.c. on January 31, and  $-11 \times 10^{-18}$  coulomb per c.c. on January 17. The averages for the year were  $+64$  and  $-48 \times 10^{-18}$  coulomb per c.c. According to Millikan's experiments\* the ionic charge is  $15.9 \times 10^{-20}$  coulomb, so that these averages correspond respectively with 400 positive and 300 negative ions per c.c. These averages are much lower than those obtained in clean country air. According to Bauer and Swann† the means for the principal observations reported at land stations before 1917 were 737 positive and 668 negative ions per c.c.

### ATMOSPHERIC POLLUTION.

The Owens atmospheric pollution recorder or air filter No. 1‡ is situated in the Clinical House, and the level of the intake is about 1½ m. above that of the adjacent ground. The weight of the pollution is not obtained directly but is deduced from shade numbers 0, 1, 2, etc., assigned to the deposit left on the filter paper through which the air is drawn. The equivalents of the shade numbers are allotted in accordance with the results of an investigation carried out for the Atmospheric Pollution Committee by Mr. J. G. Clark.§ When the normal volume of air, 2 litres, is aspirated (it is drawn through a hole 3.2 mm. in diameter) shade number 1 answers to 0.32 milligrams per cubic metre. The Owens apparatus was designed in the first place for dealing with the air of cities and the amount of pollution at the Observatory is usually so small that the shade recorded when the 2 litres are aspirated is either 0 or 1.

Preliminary experiments with a spare recorder having justified the assumption that increasing the volume of air would increase the shade number in proportion an auxiliary tank was brought into use at the beginning of July, 1928. With this tank in operation each spot on the filter paper corresponds with 6.4 litres of air. The unit shade is therefore equivalent to 0.1 mg./m³. When fog prevails the auxiliary tank is put out of action and the unit shade reverts to the value 0.32 mg./m³.

This improvement in the recording system must of itself introduce a discontinuity in the published data. It is anticipated however that the results will be much more reliable.

In this connection it is to be noted that new scales of shades were taken into use on the following dates:—

June 7, 1925; July 1, 1926; and (retrospectively) January 1, 1928.

Table 542 gives mean hourly values derived from all the days of the month for which complete records were obtained. There were 356 such days in the year. The highest and lowest of these hourly values are in heavy type.

\* Phil. Mag. (6) 34 (1917) 3.

† Washington, Carnegie Institution. *Researches Dept. of Terr. Mag.*, Vol. III (1917) p. 411.

‡ A description of the instrument is given in the *Report of the Advisory Committee for Atmospheric Pollution*. 4th Report, 1917-1918 (p. 20).

§ London, M.O. *Report of the Advisory Committee for Atmospheric Pollution*. 3rd Report, 1916-1917, (p. 20).



Table 543 gives diurnal inequalities derived from the data in Table 542 after the application of non-cyclic corrections. The principal reason for computing the diurnal inequalities was to facilitate comparison with the corresponding diurnal variations in barometric pressure and the potential gradient of atmospheric electricity.

The mean values computed for the several years since the recorder has been in operation are given in the following table, together with the means for the summer months (May to August) for the equinoctial months (March, April, September, October) and for the winter months. The unit is  $1 \text{ mg/m}^3$ .

	1921.	1922.	1923.	1924.	1925.	1926.	1927.	1928.
Summer ... ..	·13	·27	·27	·25	·15	·08	·06	·07
Equinox ... ..	·27	·45	·30	·50	·24	·25	·13	·15
Winter ... ..	·53	·46	·35	·39	·39	·27	·24	·23
Year ... ..	·31	·39	·31	·32	·26	·20	·14	·15

In any discussion of these mean values it should be borne in mind that before the introduction of the auxiliary tank the great majority of estimates were shade 0 or shade 1. To discriminate between these two shades is difficult, and the decision depends on the "personal equation" of the observer as well as on the colour of the scale of shades. Some change in standard from year to year has been inevitable.

The nature of the diurnal variation is most easily recognised in Table 543. There is always a well defined minimum during the night and another in the early afternoon. The first maximum of the day usually occurs about 9h and the second one follows about 12 hours later. This double oscillation is apparently due to two causes, the variation in human activity in producing pollution and the variation in the wind which disperses it. In 1928 the principal maximum was in the forenoon in every month except April and December. The principal minimum occurred in the early morning in January, November and December and in the afternoon in the remaining months. Curves illustrating the diurnal variation of atmospheric pollution will be found in the Annual Reports of the Advisory Committee on Atmospheric Pollution and in a paper by Dr. F. J. W. Whipple in the Quarterly Journal of the Royal Meteorological Society, Volume 55, No. 231.

## SEISMOLOGY.

**Notes on Instruments.**—The instruments which were transferred from Eskdalemuir Observatory during the latter part of 1925 have been in regular operation since the beginning of 1926. They consist of three Galitzin pendulums, with galvanometric registration arranged to record earth displacements in the north, east and vertical directions. The installation is situated in the basement rooms of the Observatory building, the pendulums being placed on a massive concrete pillar, separated from the floor, in the old magnetograph room. The galvanometers and recording apparatus are accommodated on slate slabs in the old seismograph room, which housed the Milne instrument until it was put out of action on June 17th, 1925. In order to eliminate temperature variation as far as possible, the windows of the pendulum room are provided with triple glass and also shielded by louvered screens from direct sunshine which might fall on them morning and evening. The annual range of temperature variation is about  $10^{\circ} \text{C.}$  and the mean daily range about  $0.2^{\circ} \text{C.}$



The concrete pillar rests on gravel. The underlying geological strata are shown in the diagram on this page. The diagram is based on the results obtained \* in sinking a well near Richmond Bridge. The Richmond boring terminated at a depth of 440 metres in Old Red Sandstone. At Stonebridge Park, 8 km. to the north, a boring was carried down † to a depth of 600 metres, the last 280 metres being in Old Red Sandstone. There is no information as to deeper strata near Richmond. It may be noted, however, that the sandstone beds dip at about 30° and that a boring at Little Missenden, Bucks, entered Silurian rocks at a depth of 370 metres with no evidence of the presence of Old Red Sandstone.

For detailed description of the Galitzin seismograph and for particulars of interpretation of the records, reference may be made to Fürst B. Galitzin's "Vorlesungen über Seismometrie" (Leipzig, 1914), or to G. W. Walker's "Modern Seismology" (London, 1913).

Timing is controlled by a half-seconds clock (Morrison 8587) which is rated daily by comparison with the Greenwich wireless time-signal relayed from Daventry. Time breaks are made electro-magnetically every minute and seismometric readings can be determined to the nearest second.

The free periods of the galvanometers ( $T_1$ ), were determined in November, 1925, and were found to have suffered very little change since the original determinations at Eskdalemuir were made. The lengths of the simple equivalent pendulums ( $l$ ), are assumed to have remained unaltered. These constants are as follows:—

	N	E	Z
$T_1$	24.68 sec.	24.80 sec.	13.04 sec.
$l$	118 mm.	118 mm.	360 mm.

N, E, and Z indicate the north, east and vertical components respectively.

In June and August standardisation tests were carried out in order to determine the values of the other constants which are used for deriving the scale values. In the case of the horizontal instruments it was found that the values agreed to within 3 per cent. of those obtained in the previous tests in August, 1927. Some adjustments to the north component pendulum were deemed necessary and a second standardisation of this instrument was carried out. In order to diminish the sensitivity of the vertical pendulum to temperature changes the steel controlling spring was replaced in May by one made of elinvar alloy which has a temperature coefficient of elasticity about one tenth of that of steel. ‡ The full advantage of this modification was not gained immediately owing to the large rate of natural "creep" shown by the elinvar spring, but after about four months this effect became smaller than the temperature effect. A detailed report on the behaviour of the spring has been published in a paper § by F. J. Scrase. The difficulties usually associated with the operation of the vertical pendulum have been greatly diminished. The values of the constants of the instrument which were obtained in a test made in August, 1927, have been used up to May 23, 1928, when the new spring was fitted. Approximate interpolated values were used from the latter date until August 21, 1928, when a new standardisation test provided values which were adopted for the remainder of the year.

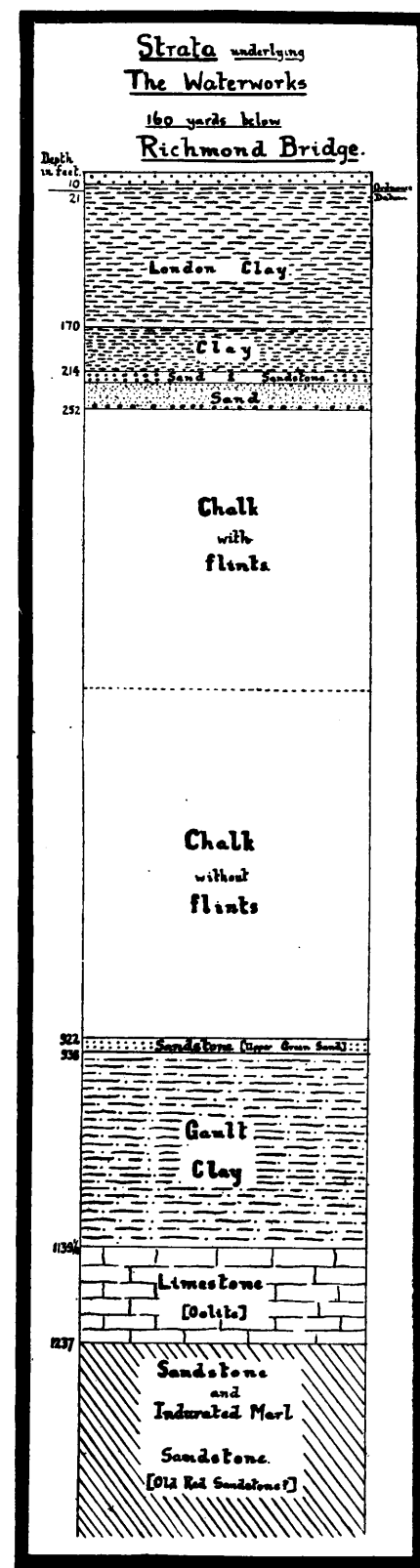
The table given below summarises the values of the constants obtained from the standardisation tests. The figures in brackets are interpolated values.  $T$  is the free period of the pendulum,  $\mu$  is a damping co-efficient which vanishes when the free movement of the pendulum is just aperiodic,  $A$  is the length of the beam of light from the galvanometer mirror to the recording drum (usually about 1100 mm), and  $k$  is the "transmission" factor. The quantity  $\frac{kA}{\pi l}$  may be regarded as a relative measure of the nominal magnification. A more detailed explanation of the meaning of these constants is given in the works referred to above.

\* London. J. Geological Soc., Vol. 40 (1884), Vol. 41 (1885), p. 523.

† Records of London Wells, Mem. Geol. Survey 1913.

‡ Y. Dammann, "Contribution à l'étude des propriétés élastiques de l'élinvar. Son utilisation dans les séismographes." Publications du Bureau Central Séismologique International, Série A, Fascicule No. 5, pp. 122-129, 1927.

§ J. Sci. Instruments, Vol. VI., No. 12 (1929), p. 385.



A. Strahan  
Prof. Papers No. 14, Survey of India.



Component.	Readjusted.	Tested.	Used in 1928.	T (sec.)	$\mu^2$	$\frac{k A}{\pi l}$ (sec. <sup>-1</sup> )
N.	Aug. 3, 1927 June 13, 1928	Aug. 3, 1927 June 13, 1928	Jan. 1 to June 13 June 13 to Dec. 31	24.8 24.8	0.01 0.01	46.5 46.9
E.	Nov. 2, 1926 —	Aug. 4, 1927 June 18, 1928	Jan. 1 to June 18 June 18 to Dec. 31	23.9 24.7	0.12 0.02	41.2 43.3
Z.	*Nov. 11, 1926 New spring May 23, 1928 Aug. 21, 1928	Aug. 17, 1927 May 23, 1928 Aug. 21, 1928 Aug. 21, 1928	Jan. 1 to May 21 May 23 to Aug. 21 Aug. 21 to Dec. 31	12.7 (12) 14.2	0.35  0.08	115 (112) 113

\* The frequent adjustments of zero are ignored.

The expression used for the determination of the scale value was :—

$$\text{Magnification of record} = \frac{kAT_p}{\pi l} \cdot \frac{1}{(1+u^2)(1+u_1^2)\sqrt{1-\mu^2 f(u)}}$$

where  $T_p$  is the period of the earthwave considered,  $u = \frac{T_p}{T}$ ,  $u_1 = \frac{T_p}{T_1}$  and  $f(u) = \left[ \frac{2u}{1+u^2} \right]^2$

During December, 1927, and January, 1928, when abnormally high tides occurred in the River Thames, water rose in the pit in which the seismograph pillar stands. The pillar was caused to tilt about 8 seconds of arc (0.04 milliradian). The effect on the constants of the pendulums was calculated and found to be negligible. As soon as the water subsided adjustments were made to bring the pendulums back to their original tilts.

In windy weather the seismographs, especially the horizontal components, are affected by slow oscillations, which are attributed to the tilting of the ground, the movement being conveyed through the foundations of the Observatory. On occasions the reading of an earthquake record is rendered very difficult, if not impossible, by these irregular disturbances.

**Notes on Tables.**—The *Seismological Diary*, Table 544, contains the particulars of the earthquakes recorded at the Observatory. The notation employed is as follows :—

P is the normal first phase (longitudinal waves).  $P^1$  is a special case of P in which the waves penetrate the earth's central core.

$PR_1, PR_2 \dots$  are longitudinal waves reflected once, twice . . . at the earth's surface.

S is the normal second phase (transverse waves).  $ScPcS$  is a special case of S in which the waves penetrate the central core and pass through it as longitudinal vibrations.

PS and PPS are waves which suffer a change or changes from longitudinal to transverse oscillation, or vice versa, on reflexion at the surface.

$SR_1, SR_2 \dots$  are transverse waves reflected once, twice . . . at the surface.

L indicates long waves (surface waves).

$\dot{}$  is the sudden commencement of a phase.  $e$  means a gradual or indistinct commencement. These letters are used as prefixes to the phase symbols, but where the character of the phase is not assignable the letters are used as independent symbols. When the commencement of a phase is moderately clear the prefixes are not used.

The suffixes N, E, Z indicate that the estimates refer to the records from the north-south, east-west and vertical seismographs respectively. The absence of all these suffixes indicates that the estimates refer to all three records.

All times entered against the above phases are the times of arrival of the phases at the station.

$m_1, m_2 \dots$  are successive prominent maxima of sinusoidal waves occurring in the preliminary phases.  $M_1, M_2 \dots$  are successive prominent maxima occurring during the principal or surface phase. Galitzin's formula for the lag of the displacement shewn by the galvanometer after the maximum displacement of the ground, viz. :—

$$\tau + \tau_1 = \frac{T_p}{2\pi} \left[ \tan^{-1} \frac{2u \sqrt{1-\mu^2}}{u^2-1} + \tan^{-1} \frac{2u_1}{u_1^2-1} + \frac{\pi}{2} \right]$$

is used for computing the times of m and M each inverse tangent being taken as between 0 and  $\pi$ .

The period is the duration of a double oscillation (to and fro movement).



$A_n, A_e, A_z$  are the amplitudes, in microns ( $\mu=0.001$  mm.), of the components of the true displacement of the ground from the position of rest. Displacements to the north, east and upwards are regarded as being positive. When successive positive and negative displacements have the same magnitude the time of occurrence is given for the positive one. When no sign is given the measurement refers to a long group of waves the amplitudes of which are the same.

$\Delta$  is the distance in kilometres of the epicentre measured along the arc of the great circle passing through the station. This distance is derived from the interval between P and S, by the tables, due to Zeissig, given in Klotz's "Seismological Tables" (Publication of the Dominion Observatory, Ottawa, Vol. III, No. 2). The azimuth of the epicentre ( $0^\circ$  to  $360^\circ$ ) is measured from north through east. When an estimation of the azimuth is possible, it is used, together with  $\Delta$ , to determine the co-ordinates of the epicentre. In other cases where co-ordinates are given, the information has been obtained from other sources; the origin of the determination is inserted in brackets.

Brackets enclosing figures or phase symbols indicate that the information is uncertain.

The Diary contains some amendments to the information which has already been issued in the Observatory Seismological Bulletin. Attention is drawn to revised readings for the disturbances on March 13th 18h and on March 26th 5h. In these two cases misinterpretation of the phases led to estimates of the epicentral distances which were quite incompatible with information received subsequently.

The total number of shocks recorded during the year was 339. The phases being sufficiently well defined, estimates of the epicentral distance were obtained for 96 shocks, whilst in 19 cases the records of the initial impulses were sufficiently sharp to allow of computations of azimuth and so of estimates of the co-ordinates of the epicentres. There were 18 earthquakes which produced a disturbance at the observatory with an amplitude exceeding 0.1 mm. in a horizontal component. These earthquakes originated in the Indian Ocean (March 9th), in the South Pacific Ocean (March 16th), near the Pacific Coast of Mexico (March 22nd, July 17th, August 4th and October 9th), in the Carinthian Alps (March 27th), near Smyrna (March 31st), in Bulgaria (April 14th and April 18th), at Corinth (April 22nd), in Anatolia (May 2nd), in Peru (May 14th and July 18th), near Japan (May 27th), in Baluchistan (October 15th), in Chile (December 1st) and near the South of Mindanao (December 19th). The large number of destructive earthquakes in South East Europe will be noticed.

For comparison the statistics for the three years in which the Galitzin seismographs have been in operation at Kew Observatory are given:—

	Shocks recorded.	Epicentral distances.	Azimuths estimated.	Shocks exceeding 0.1 mm.
1926	306	55	—	10
1927	314	78	6	9
1928	339	97	19	18

*Microseisms.*—In Table 544 are given the amplitude ( $A$ ) and period ( $T_p$ ) of the microseisms shown by the north component seismograph on each day at 0h, 6h, 12h, and 18h\*. On a few occasions (about 2 per cent. of the total number) when the north component record was not available measurements of the east component record have been included. The group of waves of greatest amplitude occurring in the 30 minutes centering at the hour in question is selected, and the amplitude tabulated is the mean obtained from the three largest complete waves in that group. The period is derived from a measurement made on the same group, but the procedure adopted in previous years has been slightly modified as from January 1st in order to diminish



the tendency on the part of the tabulator to give preference to certain periods.\* The total time, to the nearest second, for a number of complete consecutive waves is measured, the number of waves being chosen so that the time is between 23 and 30 seconds. The period is then derived from the following division table :—

Time interval in seconds.								
Number of Waves.	30	29	28	27	26	25	24	23
3	10	9.7	9.3	9.0	8.7	8.3	8.0	7.7
4	7.5	7.3	7.0	6.7	6.5	6.3		
5	6	5.8	5.6	5.4	5.2			
6	5	4.8	4.7	4.5				
7	4.3	4.1	4.0	3.9				
8	3.7	3.6	3.5					
9	3.3	3.2	3.1					
10	3.0	2.9	2.8					
11	2.7	2.6						
12	2.5							

In computing the mean period occasions of zero amplitude are omitted. The mean values of amplitude and period for each month of 1928 and for the year, together with the corresponding values for 1926 and 1927 are given below :—

#### MICROSEISMS—MONTHLY AND ANNUAL MEANS.

1926.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
Amplitude ( $\mu$ ) ...	2.3	1.7	1.8	1.1	0.5	0.4	0.5	0.6	0.5	0.8	1.7	1.6	1.1
Period (secs.) ...	6.3	6.5	6.5	5.6	4.7	4.6	4.6	4.7	5.2	4.9	6.1	6.2	5.5
1927.													
Amplitude ( $\mu$ ) ...	2.8	1.6	1.7	1.1	0.5	0.6	0.5	0.8	0.9	1.1	1.9	2.5	1.3
Period (secs.) ...	6.6	6.1	5.8	5.5	4.5	4.6	4.0	4.7	4.8	5.1	6.1	6.3	5.3
1928.													
Amplitude ( $\mu$ ) ...	2.9	2.6	1.3	1.1	0.4	0.8	0.4	0.7	0.7	1.4	2.1	1.6	1.3
Period (secs.) ...	7.1	6.7	5.6	5.5	4.6	4.6	4.7	4.3	5.0	5.9	6.0	6.0	5.5

\* F. J. W. Whipple and F. J. Scrase, "On the Frequency of Microseisms of Different Periods at Eskdalemuir and at Kew." Mon. Not. R.A.S., Geophys. Suppl. II. No. 2 (1928).



Readings in millibars at exact hours, Greenwich Mean Time.

439. Richmond (Kew Observatory) :  $H_b$  (height of barometer cistern above M.S.L.) = 10.4 metres.

January, 1928.

Hour G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean
Day.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
1	024.2	024.7	024.9	025.2	025.6	026.0	026.4	026.9	027.5	028.3	027.6	027.1	026.7	026.6	026.2	025.8	025.5	025.0	024.5	024.0	023.1	022.1	020.9	019.8	025.3
2	018.5	018.0	016.7	015.2	014.0	012.9	012.1	011.4	010.7	010.1	009.1	008.1	007.3	006.9	006.8	006.7	006.7	006.7	006.6	006.6	006.2	005.9	010.0	010.3	010.8
3	010.6	010.9	011.8	011.8	011.9	011.9	012.3	013.1	013.6	014.5	014.7	014.6	015.2	015.8	017.0	018.1	018.8	019.6	020.5	021.4	021.8	022.1	022.3	023.2	015.9
4	023.1	023.8	023.7	023.4	022.8	022.6	021.9	021.7	021.0	020.8	019.5	018.0	017.3	016.2	015.3	014.3	013.4	013.5	012.6	012.5	012.2	012.5	012.8	013.0	018.0
5	013.7	014.6	015.0	014.9	016.0	016.6	017.2	018.4	019.4	020.1	020.1	020.5	020.8	021.4	022.6	022.8	022.6	022.5	022.7	022.5	022.3	021.3	019.6	018.3	019.3
6	016.8	014.5	012.4	009.7	007.7	006.1	005.4	004.6	004.1	004.1	003.2	002.3	001.1	002.4	004.8	007.0	008.8	011.6	014.0	015.8	017.2	018.8	019.5	019.9	009.6
7	019.8	020.1	020.2	019.8	018.7	017.9	017.0	016.5	015.8	015.0	014.1	013.0	012.2	012.0	011.0	010.7	009.8	009.4	008.9	008.5	008.4	007.4	007.2	013.7	
8	006.8	006.4	006.3	006.3	006.7	007.5	007.9	009.0	010.4	011.0	011.8	012.1	012.3	012.5	012.8	012.9	012.8	013.1	013.1	013.5	013.6	013.5	013.4	013.4	010.7
9	012.9	012.9	012.8	012.3	011.9	011.7	011.8	010.5	010.2	011.2	011.5	011.0	009.8	009.1	008.9	008.9	009.2	009.9	010.4	011.1	012.1	012.9	013.1	013.2	011.4
10	013.4	013.4	013.6	013.3	012.7	011.8	010.8	010.5	009.6	008.7	007.8	007.8	007.8	008.3	003.1	003.3	003.4	003.1	005.3	006.1	007.0	007.6	009.1	010.0	008.6
11	010.3	010.7	011.4	011.7	011.5	011.5	012.0	012.7	013.2	013.2	013.3	012.7	013.1	013.6	014.1	015.0	015.9	016.7	017.3	017.6	018.2	018.6	018.8	019.0	014.1
12	019.1	019.4	019.2	018.6	018.1	017.7	017.1	016.6	016.2	015.3	014.1	012.8	011.5	010.3	009.2	008.1	007.0	005.9	005.1	004.1	003.2	002.4	001.8	001.6	011.8
13	001.3	001.3	001.6	002.0	001.8	002.4	003.3	003.8	004.3	004.9	005.1	004.6	004.3	004.2	005.0	005.2	005.2	005.8	006.4	007.0	007.7	008.1	008.4	008.7	004.5
14	009.3	009.8	010.0	010.0	009.6	009.8	009.8	009.9	009.4	008.8	007.7	006.4	005.1	003.7	003.0	002.1	000.8	000.3	999.7	999.3	999.2	999.6	999.9	999.9	005.3
15	000.0	000.1	000.1	000.2	000.0	000.2	000.4	000.6	000.1	000.1	000.2	000.6	000.9	999.4	999.4	999.4	998.8	998.6	998.3	997.9	997.1	996.5	996.9	999.3	
16	994.8	994.6	994.3	993.8	993.4	993.3	993.6	993.8	994.2	994.4	995.1	995.6	996.7	997.9	999.0	000.5	001.3	002.0	003.1	003.8	004.3	004.5	004.7	004.8	997.9
17	004.9	005.1	005.4	005.6	005.7	006.1	006.7	007.4	008.2	009.1	009.3	009.6	009.7	010.3	011.1	011.8	012.4	013.8	014.5	014.7	015.7	016.3	017.0	017.4	010.1
18	017.6	018.0	018.1	018.4	018.2	018.3	018.4	018.5	018.6	018.5	017.8	017.1	016.3	015.4	014.7	014.1	013.3	012.0	011.1	010.1	008.7	007.6	006.4	005.0	015.0
19	006.6	008.6	009.7	010.2	010.9	012.3	013.4	014.5	015.1	016.5	017.6	018.2	019.1	019.9	020.4	021.4	022.5	023.4	024.1	024.4	024.6	024.7	025.1	025.2	017.5
20	025.3	025.2	025.5	025.5	025.4	025.1	025.4	025.1	025.3	025.1	024.8	024.4	023.9	023.4	022.8	020.9	022.1	022.5	022.4	022.5	022.7	022.6	022.4	022.0	023.8
21	021.9	021.4	021.3	020.4	019.9	019.3	019.0	018.4	018.0	018.0	017.3	016.5	015.6	014.7	014.2	013.6	013.1	012.0	011.4	010.0	009.4	008.3	007.5	006.4	015.6
22	005.2	004.0	002.9	001.9	001.1	001.2	002.8	004.1	005.6	007.1	008.1	008.5	009.1	010.4	011.2	012.3	013.4	014.0	014.6	015.3	016.1	016.7	017.2	017.5	008.9
23	017.7	018.3	018.8	019.0	019.3	019.1	019.3	020.0	020.0	020.0	019.5	018.9	018.1	017.5	016.7	016.4	015.6	014.8	013.9	013.6	012.7	011.7	010.7	009.9	016.9
24	009.5	009.2	008.8	008.2	007.3	006.7	005.7	005.4	005.5	005.6	005.5	005.3	005.4	006.0	007.2	008.7	009.7	011.4	012.5	013.6	015.0	016.0	017.2	018.0	009.2
25	018.8	019.5	020.3	020.9	021.0	021.5	022.4	023.6	024.1	025.2	025.7	025.4	025.1	024.6	023.7	022.5	022.1	021.6	020.4	018.8	018.3	017.4	016.8	017.1	021.6
26	017.2	017.4	017.7	017.3	016.8	016.5	015.6	014.8	014.2	013.5	012.2	010.3	008.7	006.7	005.6	004.7	004.2	003.8	003.9	004.2	005.2	006.2	006.9	007.5	010.7
27	007.7	008.0	008.2	008.0	007.8	007.8	008.3	008.8	009.8	011.0	012.7	013.9	015.0	016.2	017.5	018.8	019.7	020.7	021.6	022.1	022.3	022.8	023.4	023.5	014.5
28	023.4	023.3	023.3	023.0	022.6	022.4	022.0	020.5	020.2	019.6	018.2	016.7	014.8	013.5	012.0	011.0	010.2	009.7	009.0	008.9	008.1	007.5	006.9	006.2	015.9
29	005.2	004.2	003.4	002.7	001.8	001.4	001.0	000.8	000.8	000.6	000.6	000.6	000.6	000.6	000.6	000.6	000.6	000.6	000.6	000.6	000.6	000.6	000.6	000.6	000.2
30	997.2	997.3	997.9	998.6	999.2	999.5	000.0	001.1	002.1	002.7	003.0	002.8	003.0	003.3	003.5	003.8	004.3	004.4	004.8	005.4	005.8	005.9	006.1	006.3	002.2
31	006.5	007.0	007.1	007.7	008.2	008.5	009.4	010.1	010.6	011.5	011.4	010.3	009.7	009.4	009.0	008.5	007.5	006.3	005.2	004.3	003.1	002.3	001.5	001.3	007.5
Mean (Station level)	1012.23	1012.31	1012.33	1012.12	1011.85	1011.80	1011.88	1012.10	1012.27	1012.47	1012.22	1011.68	1011.28	1011.13	1011.10	1011.23	1011.27	1011.44	1011.55	1011.65	1011.71	1011.72	1011.63	1011.60	1011.79
Mean (Sea Level)	1013.53	1013.61	1013.63	1013.41	1013.15	1013.10	1013.18	1013.40	1013.56	1013.76	1013.51	1012.97	1012.57	1012.41	1012.38	1012.51	1012.55	1012.73	1012.84	1012.94	1013.00	1013.01	1012.92	1012.89	1013.08

440. Richmond (Kew Observatory) :  $H_b$  = 10.4 metres.

February, 1928.

Station Level ↑ ↓	1	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
	000.8	000.4	999.3	999.6	999.7	999.7	999.9	000.3	000.9	001.3	001.9	001.5	001.6	001.8	001.9	002.5	002.9	003.9	004.6	005.6	006.3	006.9	008.1	009.0	002.4
	2	009.6	010.4	011.1	011.6	012.3	012.4	012.5	012.7	013.2	013.1	012.7	011.7	010.8	009.4	008.4	006.3	004.6	003.0	003.0	002.6	002.8	003.1	003.5	007.8
	3	003.9	004.5	004.9	005.0	005.5	005.5	006.4	007.3	008.7	009.4	010.6	011.5	012.5	013.6	015.2	016.8	017.8	019.3	020.7	021.5	022.2	023.4	024.0	024.4
	4	024.9	025.3	025.6	025.4	025.6	024.9	025.7	025.5	025.2	025.1	024.3	023.5	022.6	021.8	021.3	020.9	020.0	020.2	019.9	019.5	019.2	018.8	018.6	018.5
	5	017.8	017.3	016.6	015.8	015.1	014.4	013.3	012.5	011.7	010.6	011.4	011.8	012.0	012.9	013.4	014.1	015.0	016.5	017.5	018.4	019.4	020.4	021.0	021.6
	6	022.0	022.3	023.0	023.9	024.3	025.0	025.8	026.6	027.3	028.1	028.9	029.2	029.3	029.2	029.6	030.4	030.7	031.4	032.0	032.2	032.5	032.8	032.6	033.1
	7	032.7	032.7	032.7	032.7	032.7	032.2	032.1	032.2	031.8	032.0	032.2	032.1	031.7	031.2	031.4	031.5	031.5	031.9	031.7	031.6	031.4	031.2	030.9	030.8
	8	030.5	030.3	030.1	030.0	030.1	030.0	030.2	030.2	030.7	030.9	031.0	030.5	030.0	029.7	029.1	028.7	028.1	028.0	027.2	026.4	025.2	024.4	023.6	022.8
	9	021.7	021.0	020.3	019.6	019.9	020.6	021.8	023.2	023.9	024.8	025.0	024.9	024.3	024.0	023.9	023.6	023.0	023.1	022.8	022.4	021.6	020.9	020.2	019.5
	10	018.8	017.8	016.4	015.6	014.9	014.1	012.7	011.3	010.2	008.5	005.7	003.1	001.0	997.9	995.0	992.6	994.3	993.7	993.7	993.4	993.5	992.2	990.9	990.4
	11	989.8	990.0	990.0	990.2	990.7	990.2	990.5	990.7	990.3	990.1	989.7	989.5	989.6	989.2	988.8	988.3	998.8	989.4	989.8	990.7	991.7	992.8	993.9	995.2
	12	996.4	997.9	998.6	999.2	000.6	001.2	002.4	003.2	004.2	004.6	005.1	004.8	003.8	003.2	002.6	001.9	001.8	001.0	001.2	000.0	000.9	001.3	001.8	002.6
	13	001.6	002.3	002.6	001.7	001.3	001.0	000.0	998.8	997.5	995.7	993.7	992.5	992.5	993.3	994.6	996.1	998.1	999.3	000.5	001.7	002.5	003.7	003.5	004.9
	14	005.4	005.3	005.5	005.7	006.3	006.7	006.8	007.5	008.3	008.5	009.1	009.0	008.9	008.4	008.3	008.0	007.7	007.6	007.7	008.5	008.4	008.9	009.7	010.2
	15	010.9	011.7	012.1	012.4	013.2	013.1	014.0	014.1	014.1	014.7	015.1	015.1	015.2	015.0	015.3	015.8	015.6	016.0	016.7	016.8	016.5	016.4	016.2	017.4
	16	016.0	015.5	015.2	014.6	014.4	014.5	014.0	013.5	012.8	012.6	012.8	012.2	011.5	011.6	011.3	010.7	010.2	010.1	010.4	010.8	011.0	011.6	011.6	010.8
	17	010.8	011.2	011.3	012.0	012.9	014.2	015.2	016.1	017.0	018.1	019.1	020.0	020.7	020.9	021.6	022.5	022.8	023.9	024.1	024.9	025.2	025.5	026.0	026.5
	18	026.8	027.2	027.4	027.6	027.8	027.9	028.2	028.4	029.0	029.1	028.8	028.5	028.1	027.6	027.2	026.7	027.5	027.7	027.9	028.0	028.2	028.2	028.2	027.9
	19	028.3	028.5	028.3	028.4	028.6	028.8	029.1	029.5	030.0	030.1	030.0	029.7	029.6	029.4	029.4	029.6	029.7	030.4	030.9	031.0	031.5	032.1	032.4	032.6
	20	032.5	032.4	032.7	032.5	033.0	033.2	033.4	034.0	034.0	034.3	034.3	033.9	033.5	033.3	033.2	033.3	033.1	033.3	033.4	033.2	033.4	033.5	033.6	033.6
	21	033.3	033.1	032.8	032.5	032.6	032.6	032.4	032.6	032.6	032.4	032.2	031.7	031.1	030.6	030.0	029.9	029.7	030.0	030.3	030.3	030.7	031.0	030.9	031.1
	22	031.2	031.1	031.1	031.2	031.9	032.0	032.6	033.4	033.8	033.9	033.6	033.4	033.1	032.9	032.7	032.5	032.7	033.0	033.4	033.4	033.4	033.4	033.2	033.1
	23	033.1	033.0	032.7	032.1	032.0	032.1	032.2	033.1	031.5	031.2	030.9	029.9	029.4	028.7	028.1	027.6	027.2	027.1	026.8	026.6	026.2	025.9	025.5	025.0
	24	024.9	024.5	024.1	024.0	023.6	023.6	023.6	024.0	024.0	024.0	023.9	023.8	023.5	023.2	022.9	023.1	023.3	023.9	024.2	024.3	024.7	024.9	025.3	023.9
	25	025.3	025.4	025.3	025.3	025.4	025.6	026.0	026.6	027.1	027.2	027.1	026.9	026.3	026.1	025.8	026.0	026.2	026.5	027.0	027.3	027.3	027.3	027.1	027.1
26	027.0	026.9	026.6	026.4	026.3	026.3	026.3	026.5	026.4	026.5	026.4	025.8	025.4	025.3	025.1	025.1	025.3	025.9	026.0	026.1	026.2	026.3	026.2	026.1	
27	026.2	026.1	025.6	025.7	025.6	025.6	025.8	025.7	025.8	025.8	025.2	024.7	024.3	023.6	023.1	022.8	022.7	022.9	023.2	023.1	022.7	022.2	021.8	024.4	
28	021.1	020.5	019.7	019.2	018.8	018.4	017.8	017.9	017.2	016.8	016.2	015.1	014.4	014.1	013.9	012.8	012.9	013.2	013.0	012.7	012.5	012.1	012.0	011.6	
29	010.9	010.9	010.1	009.9	009.8	009.6	009.7	009.9	009.9	009.7	009.8	009.6	009.4	009.3	009.2	008.9	009.1	009.4	009.6	010.0	010.1	010.0	009.8	009.8	
Mean (Station level)	1018.42	1018.47	1018.35	1018.29	1018.45	1018.46	1018.62	1018.83	1018.93	1018.93	1018.85	1018.48	1017.14	1017.85	1017.65	1017.57	1017.66	1017.99	1018.23	1018.40	1018.48	1018.67	1018.69	1018.79	
Mean (Sea level) .	1019.72	1019.77	1019.65	1019.59	1019.75	1019.77	1019.93	1020.13	1020.24	1020.23	1020.15	1019.77	1019.42	1019.13	1018.94	1018.85	1018.94	1019.28	1019.52	1019.69	1019.77	1019.96	1019.99	1020.09	
Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	
																								Mean	



Readings in millibars at exact hours, Greenwich Mean Time.

441. Richmond (Kew Observatory) :  $H_b$  (height of barometer cistern above M.S.L.) = 10.4 metres.

March, 1928.

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean
Day.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
1	009.7	009.5	009.4	009.4	009.2	009.2	009.3	009.7	009.9	010.0	010.1	010.4	010.4	010.7	011.0	011.3	012.1	012.6	013.3	013.5	014.2	014.4	014.6	014.8	011.1
2	014.8	014.6	014.4	014.2	014.2	014.1	014.2	014.3	014.4	014.4	014.4	014.4	014.1	013.9	013.9	013.9	014.2	014.5	015.0	015.5	015.8	015.9	015.9	016.1	014.6
3	016.0	015.9	015.8	015.8	015.9	016.1	016.3	016.6	016.7	016.8	016.7	016.8	016.5	016.4	016.5	016.5	016.9	017.6	017.7	017.7	017.7	017.9	017.9	018.1	016.7
4	018.2	018.2	018.0	018.0	018.1	018.3	018.3	018.8	019.1	019.2	019.0	018.6	018.5	018.2	018.0	017.9	018.3	018.6	018.9	019.2	019.5	019.6	019.7	019.5	018.6
5	019.4	019.3	019.1	018.9	018.8	018.7	018.7	018.9	018.8	018.5	018.2	017.7	016.9	016.3	015.9	015.6	015.5	015.6	015.7	015.7	015.6	015.5	015.2	014.7	017.3
6	014.3	014.0	013.7	013.7	013.4	013.4	013.7	014.1	014.3	014.5	014.5	014.6	014.4	014.0	014.3	014.4	014.3	014.5	014.6	014.8	014.8	015.0	014.9	014.6	014.3
7	014.7	014.6	014.4	014.1	014.1	014.2	014.4	014.6	014.9	014.6	014.5	014.4	014.1	013.8	013.6	013.5	013.5	013.5	013.6	013.8	013.9	014.0	014.1	014.4	014.1
8	014.5	014.4	014.4	014.5	014.5	014.8	015.1	015.4	015.7	015.8	015.9	015.8	015.7	015.6	015.7	015.6	015.7	016.0	016.4	016.5	016.6	016.6	016.5	016.7	015.6
9	016.6	016.4	016.0	015.8	015.5	015.3	015.3	015.4	015.5	015.3	015.2	015.4	014.9	014.8	014.6	015.1	015.1	015.2	015.4	015.6	015.7	015.6	015.3	015.2	015.5
10	015.1	014.9	014.8	014.8	015.0	015.2	015.5	015.7	015.9	015.9	016.4	016.4	016.2	016.0	015.9	016.6	016.5	017.1	017.4	017.5	017.6	017.5	017.4	017.4	016.1
11	017.5	017.3	017.2	017.0	016.9	016.9	016.8	016.7	016.7	016.7	016.5	016.3	016.0	015.5	015.3	014.8	014.9	014.8	014.7	014.5	014.3	014.1	013.9	013.5	015.9
12	013.3	013.0	012.5	012.3	012.0	012.0	012.1	012.6	012.8	012.8	012.7	012.7	012.6	013.1	012.9	013.1	013.5	014.1	014.6	015.2	015.3	015.6	015.7	015.3	013.3
13	015.7	015.7	015.7	015.6	015.8	016.1	016.4	016.8	017.1	017.6	017.3	017.3	017.5	017.4	017.5	017.5	017.8	018.2	018.7	018.8	019.2	019.3	019.5	019.6	017.3
14	019.9	020.1	019.9	020.0	020.0	020.0	020.5	020.8	021.1	021.3	021.1	021.0	020.7	020.4	020.0	019.8	020.0	020.3	020.5	020.7	020.8	020.8	021.1	021.0	020.5
15	021.1	021.0	020.7	020.6	020.6	021.0	021.4	021.7	022.2	022.5	022.3	022.4	022.2	022.0	022.2	022.3	022.7	023.0	023.6	024.0	024.4	024.4	024.5	024.7	022.3
16	025.0	025.0	025.0	025.0	025.0	025.3	025.6	026.1	026.2	026.1	025.7	025.4	025.2	024.7	024.4	024.2	024.4	024.2	024.1	023.7	023.7	023.6	023.4	023.2	024.8
17	023.1	022.3	022.0	021.7	021.6	021.7	021.9	021.8	021.6	021.1	020.2	019.8	019.3	018.5	017.8	017.2	016.7	016.4	016.1	015.8	015.3	014.5	013.6	012.7	019.1
18	012.1	011.3	010.5	010.5	010.5	010.7	011.4	012.4	012.8	013.1	013.4	013.6	013.4	013.3	013.2	013.2	013.5	014.4	014.5	014.5	014.1	013.4	013.2	012.8	012.8
19	012.8	012.1	011.6	011.5	011.1	011.1	011.3	011.2	011.0	011.0	010.8	010.5	010.1	009.6	009.0	008.6	008.1	008.1	007.7	006.9	006.8	007.3	006.6	006.9	009.8
20	006.3	006.0	005.4	004.6	004.3	004.2	004.4	004.2	004.0	003.5	002.6	001.6	001.2	000.7	000.0	999.8	999.9	999.8	999.9	999.8	999.5	999.5	999.5	999.6	002.2
21	999.3	998.9	998.3	997.8	997.3	997.0	997.0	996.9	996.6	996.3	995.8	995.2	994.7	994.1	993.7	993.5	993.3	993.0	992.6	992.1	991.7	991.8	991.9	992.4	995.2
22	992.9	992.9	992.9	993.0	993.0	993.4	993.7	994.0	994.1	994.2	994.5	994.7	994.5	994.4	994.2	993.9	993.4	993.3	993.0	992.8	992.3	991.9	991.5	991.4	993.4
23	991.2	990.5	990.0	989.6	989.2	989.0	989.0	989.3	989.5	989.5	989.8	990.0	990.1	990.2	990.1	990.1	990.4	990.7	991.1	991.7	992.2	992.8	993.3	993.7	991.2
24	995.6	995.6	995.6	995.5	995.4	995.3	995.3	995.2	995.0	994.7	994.4	994.1	993.8	993.7	993.6	993.3	992.8	992.9	993.0	993.2	993.1	993.0	993.1	993.1	994.2
25	993.3	993.2	993.2	993.5	993.9	994.2	994.9	995.7	996.6	997.2	997.7	998.3	998.7	999.3	999.7	1000.3	1001.0	1002.0	1003.1	1003.9	1004.5	1004.8	1005.6	1006.2	998.5
26	006.8	007.2	007.4	007.9	008.3	009.0	010.0	010.5	010.8	010.9	010.4	010.4	010.4	010.2	009.9	009.8	009.9	010.0	010.2	010.6	010.7	010.5	010.3	010.2	009.6
27	010.1	009.1	008.5	008.1	007.8	007.4	007.2	006.6	006.2	005.9	005.3	004.9	004.2	003.2	002.8	002.7	002.5	002.6	002.7	002.9	002.7	002.4	002.4	002.4	005.2
28	002.0	001.7	001.3	001.0	000.6	000.5	000.5	000.5	000.6	000.5	999.8	999.4	998.7	998.5	998.5	998.5	999.2	999.7	1000.0	1000.2	1000.9	1001.4	1001.8	1002.4	000.4
29	002.0	001.9	001.2	000.7	000.1	999.4	998.3	997.3	995.9	994.5	992.4	990.5	988.6	987.2	985.4	984.3	983.3	982.6	981.8	981.1	981.0	981.5	981.5	982.3	991.6
30	981.7	981.5	981.3	981.1	980.6	980.2	979.6	979.6	979.8	979.8	979.4	979.5	979.5	980.1	980.1	980.1	980.3	981.0	981.3	981.8	982.1	982.0	982.4	982.1	980.7
31	982.2	981.8	981.3	981.3	981.3	981.9	982.1	982.8	983.3	983.5	983.8	984.2	984.3	984.4	985.5	986.3	986.7	987.6	988.3	989.3	990.0	990.5	990.9	991.2	985.0
Mean (Station level)	1008.94	1008.72	1008.43	1008.31	1008.19	1008.25	1008.40	1008.59	1008.68	1008.63	1008.42	1008.27	1007.98	1007.73	1007.59	1007.57	1007.64	1007.88	1008.13	1008.29	1008.39	1008.39	1008.37	1008.40	1008.27
Mean (Sea level)	1010.23	1010.01	1009.72	1009.59	1009.48	1009.53	1009.69	1009.87	1009.96	1009.91	1009.69	1009.54	1009.25	1009.00	1008.86	1008.84	1008.91	1009.15	1009.41	1009.57	1009.68	1009.67	1009.65	1009.69	1009.55

442. Richmond (Kew Observatory) :  $H_b$  = 10.4 metres.

April, 1928.

Station Level ↑  <
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Readings in millibars at exact hours, Greenwich Mean Time.

443. Richmond (Kew Observatory) :  $H_b$  (height of barometer cistern above M.S.L.) = 10.4 metres.

May, 1928.

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean
Day.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
1	007.3	007.4	007.5	007.9	008.3	008.9	009.1	009.3	009.7	010.2	010.3	010.4	010.4	010.2	010.0	010.0	009.8	009.9	010.1	010.6	011.1	011.3	011.2	011.2	009.6
2	011.0	010.7	010.7	010.6	010.7	010.7	010.5	010.3	010.2	010.0	009.9	009.7	009.3	009.1	008.8	008.3	008.1	007.6	007.3	007.1	007.0	007.0	007.0	006.1	009.1
3	005.6	005.2	004.9	004.3	004.1	004.3	004.4	004.3	004.4	004.3	004.1	003.9	003.7	003.5	003.2	002.1	001.6	001.3	001.3	001.4	001.6	001.6	002.2	002.3	003.1
4	002.0	001.9	001.8	001.9	002.2	002.3	002.4	002.6	002.7	003.0	003.0	002.9	003.0	002.9	002.8	003.0	003.1	003.2	003.3	003.6	004.0	004.3	004.6	004.6	002.9
5	004.5	004.5	004.9	005.2	005.6	006.1	006.4	006.7	006.9	006.9	006.8	006.9	006.9	006.9	006.9	006.8	007.0	007.4	007.8	008.3	008.6	008.7	008.9	008.7	006.8
6	008.6	008.5	008.4	008.4	008.5	008.9	008.9	008.9	008.6	008.5	008.3	007.9	007.5	007.3	006.7	006.4	006.2	006.1	006.2	006.9	007.4	007.5	007.2	006.9	007.7
7	006.7	006.5	006.3	006.5	006.5	006.7	006.9	007.1	007.2	007.6	007.8	007.8	007.5	007.6	007.4	007.8	008.1	008.7	009.5	010.5	011.1	011.5	011.7	011.7	007.9
8	011.4	011.3	011.4	011.2	011.3	011.4	011.6	011.4	011.2	010.9	010.5	010.3	009.8	009.5	009.6	010.8	011.6	012.1	012.8	013.6	014.3	014.8	015.0	015.6	011.7
9	015.7	015.9	016.1	016.2	016.5	016.9	017.4	017.6	017.5	017.6	017.5	017.4	017.4	017.2	017.0	017.1	017.1	017.4	017.8	018.7	019.4	019.5	019.9	019.7	017.4
10	019.9	019.8	019.8	019.7	020.0	020.2	020.3	020.3	020.2	019.8	019.4	019.0	018.6	018.7	017.9	017.2	017.1	016.8	016.6	016.9	017.1	016.8	016.8	016.7	018.6
11	017.4	017.9	018.0	018.3	018.8	019.0	019.5	019.8	019.9	020.0	020.2	020.2	020.2	020.2	020.0	019.8	019.8	019.9	019.9	019.9	020.1	020.2	020.2	020.2	019.5
12	020.1	020.1	019.9	019.9	020.1	020.2	020.4	020.5	020.6	020.4	020.1	020.0	019.9	020.0	020.1	020.0	019.9	020.0	020.2	020.7	021.0	021.3	021.5	021.4	020.4
13	021.5	021.4	021.5	021.7	021.8	021.9	022.1	022.0	021.9	021.7	021.3	021.0	021.0	020.5	020.3	020.1	020.0	019.5	019.4	019.5	019.4	019.2	019.0	018.7	020.7
14	018.2	017.9	017.3	017.1	017.2	017.0	016.7	016.6	016.3	015.8	015.5	015.3	015.5	015.7	016.3	016.6	016.8	016.8	016.8	017.1	017.2	017.1	017.3	017.3	016.8
15	017.1	016.9	016.6	016.5	016.5	016.4	016.2	015.9	015.5	015.2	014.5	013.8	012.5	011.4	009.9	008.6	007.7	007.0	006.3	005.6	005.0	004.0	002.9	001.8	011.7
16	000.6	000.9	000.8	000.8	000.8	000.8	000.8	000.8	000.8	000.8	000.8	000.8	000.8	000.8	000.8	000.8	000.8	000.8	000.8	000.8	000.8	000.8	000.8	000.8	000.8
17	003.3	003.1	002.9	002.7	002.7	002.7	002.7	002.7	002.7	002.7	002.7	002.7	002.7	002.7	002.7	002.7	002.7	002.7	002.7	002.7	002.7	002.7	002.7	002.7	002.7
18	004.8	004.5	004.4	004.4	004.5	004.8	005.4	005.7	005.7	005.7	005.7	005.7	005.7	005.7	005.7	005.7	005.7	005.7	005.7	005.7	005.7	005.7	005.7	005.7	005.7
19	007.2	007.1	007.1	007.2	007.4	007.4	007.6	007.6	007.7	007.7	007.7	007.7	007.7	007.7	007.7	007.7	007.7	007.7	007.7	007.7	007.7	007.7	007.7	007.7	007.7
20	005.5	005.3	005.1	005.0	005.2	005.4	005.7	006.1	006.4	006.6	006.7	006.6	006.6	006.4	007.0	007.3	007.4	007.3	007.8	008.4	009.4	009.7	009.9	009.9	007.0
21	009.9	010.0	010.1	010.2	010.4	010.6	011.0	011.1	011.6	011.8	011.5	012.0	012.3	012.2	011.8	012.3	012.7	013.1	013.3	013.7	014.2	014.4	014.7	014.6	012.0
22	014.7	014.6	014.4	014.5	014.7	015.1	015.4	015.5	015.3	015.4	015.4	015.4	015.4	015.4	015.4	015.4	015.4	015.4	015.4	015.4	015.4	015.4	015.4	015.4	015.4
23	013.1	012.6	012.5	012.4	012.2	012.3	012.3	012.2	012.0	011.9	012.0	012.0	012.0	011.9	011.9	011.7	011.8	011.9	012.0	012.2	012.4	012.4	012.5	012.5	012.2
24	012.6	012.6	012.5	012.5	013.0	013.3	013.6	014.0	014.4	014.6	015.0	015.5	016.0	016.4	016.6	017.1	017.6	018.1	019.1	019.9	020.3	020.6	021.0	021.5	015.8
25	021.3	021.2	021.3	021.6	022.1	022.5	023.1	023.4	023.4	023.3	023.3	023.3	023.3	023.3	023.3	023.3	023.3	023.3	023.3	023.3	023.3	023.3	023.3	023.3	023.2
26	025.5	025.6	025.7	025.8	025.6	025.5	025.4	025.3	025.2	024.9	024.7	024.3	023.8	023.6	023.3	023.1	022.9	022.9	022.6	022.3	022.0	021.5	021.2	021.2	024.2
27	020.7	020.3	020.0	019.7	019.7	019.6	019.5	019.3	018.9	018.5	017.9	017.3	016.9	016.2	015.6	015.2	014.8	014.6	014.7	014.8	014.8	014.7	014.5	014.5	017.3
28	014.3	014.3	013.7	013.4	013.5	013.5	013.4	013.4	013.5	013.5	013.5	013.5	013.5	013.5	013.5	013.5	013.5	013.5	013.5	013.5	013.5	013.5	013.5	013.5	013.6
29	014.3	014.1	014.1	014.1	014.5	014.6	015.0	015.1	015.0	015.0	015.0	015.0	015.0	015.0	015.0	015.0	015.0	015.0	015.0	015.0	015.0	015.0	015.0	015.0	015.4
30	017.6	017.5	017.3	017.6	018.1	018.4	018.7	018.7	018.7	018.6	018.6	018.6	018.5	018.5	018.3	018.1	018.4	018.4	018.5	018.6	019.0	019.1	019.2	019.4	018.4
31	019.0	018.9	018.9	018.9	018.7	018.8	019.1	019.0	018.9	019.0	018.9	018.8	018.5	018.2	017.8	017.3	016.9	017.0	017.5	017.6	017.6	017.4	017.0	018.2	
Mean (Station level)	1012	1012	1012	1012	1012	1012	1012	1012	1012	1012	1012	1012	1012	1012	1012	1011	1011	1011	1012	1012	1012	1012	1012	1012	1012
Mean (Sea level)	1013	1013	1013	1013	1013	1013	1013	1013	1013	1013	1013	1013	1013	1013	1013	1013	1013	1013	1013	1013	1014	1014	1014	1014	1013

444. Richmond (Kew Observatory) :  $H_b$  = 10.4 metres.

June, 1928.

↑ Station Level ↓	1	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
	2	016.7	016.6	016.5	016.5	016.4	016.6	016.7	016.9	017.1	017.2	017.3	017.5	017.7	017.8	017.9	017.5	017.5	017.8	018.2	018.9	019.4	019.9	020.2	020.4	017.6
	3	020.5	021.0	021.2	021.5	021.8	022.2	022.8	023.2	023.7	023.9	024.1	024.1	024.1	024.0	023.8	023.7	023.9	024.0	024.2	024.7	024.8	024.7	024.6	023.3	
	4	024.6	024.3	024.2	024.1	024.0	024.1	024.3	024.4	023.9	023.5	023.1	022.7	022.2	021.6	020.9	019.9	019.2	018.9	018.5	018.4	018.6	018.1	017.7	017.0	021.7
	5	016.4	015.7	014.9	014.3	013.9	013.4	012.9	012.6	011.9	011.7	011.0	010.7	009.9	009.6	009.8	009.5	009.2	009.2	009.6	009.9	010.8	011.2	011.9	012.2	011.9
	6	012.3	012.3	012.2	012.1	012.2	012.3	012.6	012.7	012.8	012.6	012.4	012.3	012.1	011.8	011.3	011.0	010.7	010.4	010.2	010.4	010.6	010.6	010.7	010.4	011.7
	7	010.2	009.7	009.6	009.6	009.6	009.5	009.2	009.4	009.2	008.9	008.2	007.8	007.3	006.9	006.5	006.0	005.4	005.3	005.2	005.2	005.3	005.0	004.5	003.9	007.5
	8	002.9	002.2	002.0	002.0	002.0	002.0	002.0	002.0	002.0	002.0	002.0	002.0	002.0	002.0	002.0	002.0	002.0	002.0	002.0	002.0	002.0	002.0	002.0	002.0	002.0
	9	007.4	006.9	006.3	005.7	005.4	005.3	005.4	005.6	005.6	005.6	005.6	005.6	005.6	005.6	005.6	005.6	005.6	005.6	005.6	005.6	005.6	005.6	005.6	005.6	005.6
	10	007.3	006.6	005.6	005.1	004.2	003.9	003.2	002.9	002.7	002.8	002.8	002.8	002.8	002.8	002.8	002.8	002.8	002.8	002.8	002.8	002.8	002.8	002.8	002.8	002.8
	11	004.5	004.3	004.3	004.4	004.9	005.2	005.3	005.5	005.8	005.8	005.8	005.8	005.8	005.8	005.8	005.8	005.8	005.8	005.8	005.8	005.8	005.8	005.8	005.8	005.8
	12	009.5	010.0	010.5	011.0	011.7	012.3	012.7	013.2	013.2	013.5	014.0	014.8	014.8	015.0	015.1	015.7	016.4	017.0	017.7	018.6	019.8	020.3	021.0	021.5	014.7
	13	021.9	022.3	022.7	022.8	023.2	023.7	024.3	024.5	024.6	024.5	024.3	024.1	024.0	023.9	023.8	023.5	023.3	023.3	023.1	022.7	022.5	022.2	022.1	021.7	023.3
	14	021.2	020.4	019.7	019.1	018.6	018.4	018.1	017.7	017.3	016.9	016.1	015.4	014.4	013.6	012.6	011.9	011.7	010.8	009.5	009.0	008.1	007.0	005.6	004.2	014.4
	15	003.5	003.0	001.6	001.0	002.2	002.9	004.0	004.7	005.4	006.1	006.4	006.4	006.4	006.9	007.4	008.7	008.8	010.3	011.7	012.7	014.1	015.2	016.3	017.3	007.3
	16	018.3	019.0	019.5	020.2	020.8	021.3	021.7	022.1	022.3	022.5	022.4	022.3	022.0	021.6	021.3	020.8	020.5	020.4	020.5	020.6	020.7	020.7	020.8	021.0	020.9
17	021.0	021.0	020.8	020.6	020.9	021.1	021.2	021.3	021.4	021.4	021.7	021.6	021.5	021.6	021.5	021.5	021.7	021.6	021.6	021.7	022.1	022.1	022.1	022.0	021.4	
18	021.8	021.5	021.1	020.9	020.7	020.5	020.1	019.6	019.0	018.4	017.9	017.6	017.2	016.4	015.8	015.3	014.8	014.9	014.9	015.0	015.3	015.3	015.1	014.9	017.8	
19	014.7	014.3	013.9	013.7	013.4	013.5	013.4	013.4	013.4	013.2	012.3	012.2	011.8	011.3	010.8	010.4	010.5	010.3	009.9	009.5	009.4	009.1	008.3	008.1	011.8	
20	007.5	007.1	006.6	006.3	006.2	006.0	006.0	005.8	005.7	005.7	005.6	005.4	005.2	004.9	004.9	004.8	004.9	004.9	005.0	005.1	005.5	005.9	005.9	005.7		
21	006.1	006.3	006.6	007.1	007.6	008.4	009.3	010.1	010.8	011.3	012.1	012.7	013.1	013.5	013.8	014.0	014.3	014.7	015.4	016.0	016.7	017.1	017.5	017.7	011.9	
22	017.8	018.1	018.2	017.9	018.2	018.4	018.5	018.8	019.1	019.3	019.5	019.7	019.3	019.0	018.7	018.6	018.2	018.1	018.2	018.1	017.9	017.8	017.8	017.5	018.5	
23	017.3	016.9	016.4	016.8	016.7	016.7	016.9	017.1	017.1	017.0	016.8	016.7	016.5	015.9	015.7	015.4	014.9	015.1	015.0	015.5	016.5	017.0	017.1	017.3	016.4	
24	017.2	017.5	017.8	018.1	018.6	018.6	018.7	018.7	018.4	018.3	017.9	017.9	017.2	017.1	017.1	016.9	016.5	016.2	016.5	016.6	017.1	017.5	017.8	017.9	017.6	
25	018.0	018.3	018.5	018.6	018.9	019.0	019.1	019.2	019.3	019.3	019.1	019.1	019.0	018.9	018.8	018.4	018.0	017.8	017.7	018.0	018.2	018.1	018.0	017.9	018.5	
26	017.7	017.3	016.6	016.3	016.2	016.1	015.5	014.8	014.0	013.5	012.2	011.5	010.7	010.1	009.0	008.2	007.2	006.6	005.9	005.5	005.3	004.7	004.2	003.5	011.2	
27	003.0	002.5	001.5	000.6	000.0	009.9	009.6	009.2	008.5	008.2	007.9	007.3	006.6	006.7	007.0	007.9	009.8	001.7	003.2	005.4	007.1	008.7	010.0	011.1	001.2	
28	012.2	013.1	013.9	014.7	015.7	016.6	017.2	018.0	018.7	019.3	019.7	020.0	020.4	020.4	020.6	020.6	020.9	021.1	021.6	022.0	022.5	022.7	023.0	023.1	018.8	
29	023.0	022.9	022.8	022.9	023.1	022.9	022.8	022.9	022.5	022.1	021.9	021.9	021.0	020.7	020.6	020.2	020.1	019.7	019.1	018.9	018.7	018.9	018.8	018.1	021.1	
30	017.8	017.1	016.5	016.1	015.8	015.6	015.3	015.3	015.3	014.5	013.9	013.0	012.6	012.1	011.6	011.1	010.9	011.3	012.2	013.2	013.9	014.2	014.4	014.6	014.2	
	014.6	014.6	014.6	014.9	015.1	015.3	015.3	015.7	015.9	015.8	015.3	015.6	015.3	015.6	015.3	015.6	015.3	015.4	015.8	016.3	017.0	017.9	018.3	018.9	015.9	
Mean (Station level)		1013 .23	1013 .07	1012 .87	1012 .81	1012 .87	1012 .94	1013 .03	1013 .17	1013 .17	1013 .15	1013 .00	1012 .90	1012 .65	1012 .49	1012 .35	1012 .22	1012 .22	1012 .38	1012 .56	1012 .84	1013 .27	1013 .41	1013 .47	1013 .40	1012 .89
Mean (Sea level)		1014 .50	1014 .34	1014 .14	1014 .08	1014 .14	1014 .20	1014 .29	1014 .43	1014 .42	1014 .40	1014 .25	1014 .14	1013 .89	1013 .73	1013 .59	1013 .46	1013 .46	1013 .62	1013 .81	1013 .09	1014 .53	1014 .67	1014 .73	1014 .67	1014 .15
Hour. G.M.T.		1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean



Readings in millibars at exact hours, Greenwich Mean Time.

445. Richmond (Kew Observatory) :  $H_b$  (height of barometer cistern above M.S.L.) = 10.4 metres.

July, 1928.

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean
Day.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
1	018.8	018.8	018.9	018.9	019.2	019.4	019.4	019.8	019.9	019.9	019.7	019.4	019.2	018.9	018.7	018.5	018.6	018.6	018.7	018.4	018.6	018.5	018.3	018.2	019.0
2	017.9	017.7	017.3	017.0	017.0	017.1	017.3	017.2	017.1	017.1	016.9	016.8	016.4	016.2	016.1	015.9	015.8	015.5	015.6	015.6	016.0	016.2	016.3	016.2	016.6
3	016.0	016.0	015.6	015.4	016.1	016.1	016.2	016.4	015.9	015.6	015.1	014.6	014.1	013.7	013.5	013.4	013.7	013.8	013.8	014.0	014.2	014.2	014.2	014.0	014.9
4	013.9	013.8	014.1	014.1	015.6	016.0	016.4	017.3	017.7	018.1	018.1	018.3	018.3	018.2	018.1	017.8	017.4	017.4	017.5	017.4	017.7	017.5	017.2	016.6	016.8
5	016.0	015.2	014.8	014.4	014.1	013.5	013.1	013.1	012.9	012.2	011.7	011.8	011.3	010.6	010.3	010.2	010.1	009.9	009.4	009.4	009.6	009.4	008.5	008.5	011.9
6	007.9	008.1	008.2	008.3	008.5	008.8	009.1	009.7	010.0	010.4	011.1	011.5	011.9	012.2	012.6	013.0	013.4	013.9	014.5	015.0	015.8	016.6	017.0	017.3	011.7
7	017.6	017.9	018.3	018.6	019.0	019.7	020.5	021.0	021.5	022.0	022.0	022.2	022.1	022.1	022.0	021.9	021.8	021.8	022.0	022.2	022.6	022.7	022.7	022.8	021.0
8	022.7	022.4	022.2	022.1	022.2	022.2	022.1	022.1	022.0	021.8	021.2	020.8	020.4	020.0	019.6	019.4	019.2	019.0	019.2	019.0	018.9	018.9	018.6	018.4	020.7
9	017.9	017.7	017.6	017.5	017.7	018.0	018.6	018.9	019.0	019.3	019.5	019.6	019.4	019.3	019.4	019.4	019.7	020.1	020.7	021.3	022.1	022.5	022.9	023.2	019.5
10	023.3	023.3	023.3	023.5	023.8	024.4	024.6	024.6	024.6	024.7	024.3	024.1	023.9	023.7	023.3	023.2	023.2	023.3	023.4	023.3	023.5	023.7	023.6	023.5	023.7
11	023.4	023.3	023.4	023.5	023.7	024.1	024.5	024.5	024.5	024.5	024.1	024.0	023.8	023.6	023.2	022.9	022.6	022.7	022.9	023.0	023.4	023.8	023.8	023.6	023.6
12	023.4	023.1	023.1	023.0	023.1	023.3	023.6	023.5	023.1	022.8	022.4	022.1	021.6	021.3	021.0	020.7	020.5	020.5	020.7	020.9	021.7	021.8	021.7	021.7	022.1
13	021.6	021.5	021.5	021.9	022.1	022.7	023.4	023.5	023.5	023.5	023.6	023.6	023.4	023.1	022.8	022.3	022.3	022.5	022.7	022.9	023.6	023.9	024.3	024.5	022.9
14	024.6	024.5	024.5	024.7	025.2	025.4	025.6	025.6	025.4	025.3	025.2	024.9	024.8	024.7	024.3	023.7	023.3	023.2	023.3	023.3	023.6	023.7	023.8	023.7	024.4
15	023.5	023.4	023.2	022.8	022.6	022.3	022.3	022.3	021.8	021.6	021.5	021.2	020.6	020.3	019.8	019.7	019.8	019.8	020.3	020.8	021.5	021.8	022.4	022.9	021.6
16	023.2	023.3	023.4	023.6	024.1	024.6	024.9	025.0	025.1	025.1	025.2	025.5	025.6	025.6	025.5	025.4	025.3	025.3	025.6	026.2	027.3	028.1	028.5	028.8	025.3
17	029.1	029.3	029.5	029.7	029.9	030.3	030.7	030.8	030.7	030.4	030.2	030.1	029.7	029.3	028.8	028.4	027.9	027.8	027.9	028.0	028.1	028.2	028.2	028.1	029.2
18	028.0	027.7	027.3	026.6	026.8	026.8	026.7	026.5	025.6	025.4	024.5	023.8	022.9	022.2	021.8	021.4	021.1	020.9	021.6	021.7	022.4	022.8	023.2	023.4	024.3
19	023.3	023.1	023.0	023.0	023.1	023.3	023.3	023.2	023.2	023.1	023.1	023.0	022.8	022.6	022.4	022.3	021.8	021.5	021.4	021.6	021.8	021.9	022.1	022.1	022.6
20	022.0	021.9	021.6	021.6	021.7	021.7	021.9	021.8	021.6	021.6	021.5	021.4	021.1	020.8	020.4	020.0	019.7	019.7	019.6	019.8	020.4	021.0	021.4	021.6	021.1
21	021.5	021.4	021.4	021.5	021.5	021.8	022.0	022.2	022.1	022.1	021.9	021.8	021.7	021.3	021.0	020.7	020.5	020.6	020.8	021.2	021.5	021.5	021.7	021.9	021.5
22	022.0	021.8	021.7	021.7	021.8	021.8	022.0	021.7	021.4	021.2	020.8	020.3	019.7	019.5	019.3	019.0	018.8	019.0	019.3	019.9	020.0	019.8	019.9	019.9	020.6
23	019.8	019.5	019.1	019.6	020.0	020.3	020.4	020.5	020.3	020.2	020.5	020.9	021.9	021.9	021.9	021.8	021.7	021.8	021.8	021.8	021.8	021.8	021.8	021.8	021.9
24	018.2	018.0	017.6	017.4	017.2	017.2	017.3	017.3	017.1	017.1	016.9	016.8	016.6	016.3	015.8	015.6	015.7	015.8	015.8	016.0	016.1	016.2	016.3	016.5	016.7
25	016.4	016.3	016.3	016.3	016.4	016.6	016.7	016.9	016.9	016.9	016.4	016.3	016.4	016.3	016.3	016.2	016.0	016.1	016.3	016.8	017.2	017.4	017.5	017.8	016.6
26	017.8	017.5	017.2	017.2	017.2	017.2	017.3	017.1	017.1	016.9	016.6	016.4	016.0	015.4	014.7	013.9	013.0	012.7	012.5	012.7	012.6	012.1	011.3	010.9	015.3
27	010.6	009.7	009.0	008.7	008.0	007.3	006.0	005.9	005.2	004.5	004.6	003.8	003.3	003.7	003.7	003.7	003.4	003.2	003.0	003.3	003.2	003.1	003.0	002.3	005.3
28	002.0	002.1	001.5	001.1	001.1	001.2	001.6	002.2	002.6	002.9	003.3	003.3	003.4	003.4	003.4	003.3	003.2	003.2	003.4	003.7	004.0	005.2	005.5	002.2	002.9
29	005.1	005.2	005.2	005.5	005.8	006.1	006.6	006.9	007.0	007.2	007.5	007.6	007.7	008.1	008.1	008.2	008.4	008.7	009.3	010.0	010.5	010.8	011.0	011.1	007.7
30	011.2	011.2	011.0	011.4	011.4	011.6	012.0	012.0	012.1	012.1	011.9	011.8	011.8	011.7	011.2	010.9	010.5	010.3	010.3	010.1	009.8	009.5	009.2	009.1	011.0
31	009.1	008.7	008.6	008.6	008.8	009.1	010.2	011.1	011.7	012.1	012.6	012.7	012.9	013.1	013.6	013.3	013.3	013.2	013.3	013.3	013.2	013.2	013.0	012.8	011.7
Mean (Station level)	1018.32	1018.17	1018.05	1018.06	1018.22	1018.38	1018.59	1018.73	1018.67	1018.64	1018.52	1018.38	1018.18	1017.97	1017.75	1017.55	1017.38	1017.38	1017.52	1017.71	1018.05	1018.21	1018.24	1018.22	1018.12
Mean (Sea level)	1019.57	1019.43	1019.31	1019.32	1019.48	1019.64	1019.84	1019.98	1019.91	1019.88	1019.75	1019.61	1019.41	1019.20	1018.98	1018.77	1018.60	1018.61	1018.75	1018.95	1019.29	1019.45	1019.49	1019.48	1019.37

446. Richmond (Kew Observatory) :  $H_b$  = 10.4 metres.

August, 1928.

Station Level	1	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
	2	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
	1	012.4	011.9	011.8	011.7	011.8	011.6	011.9	012.0	011.9	012.0	012.0	012.2	012.8	013.4	013.7	014.3	014.7	015.2	015.9	016.6	017.3	017.4	017.6	013.4
	2	017.9	018.5	019.1	019.7	020.0	020.3	020.7	021.1	021.5	021.5	021.6	021.4	021.3	021.1	021.0	020.4	020.1	020.6	020.7	020.9	021.1	020.8	020.3	020.5
	3	020.0	019.7	019.0	019.0	018.9	018.6	018.2	018.1	017.4	017.6	017.5	017.3	016.7	016.2	015.8	015.3	015.2	015.0	015.1	014.9	014.4	013.5	012.8	016.9
	4	012.4	011.9	011.4	011.0	011.0	010.5	011.5	011.1	011.3	011.2	011.4	012.2	012.3	012.7	013.1	013.6	014.4	015.2	015.9	017.0	017.7	017.9	018.3	018.5
	5	018.6	018.9	019.3	019.6	019.8	020.0	020.4	020.7	020.9	021.1	021.1	021.2	021.1	021.2	021.1	021.2	021.3	021.6	021.9	022.3	022.8	023.0	023.4	023.5
	6	023.5	023.4	023.3	023.3	023.4	023.6	023.7	023.6	023.5	023.7	023.8	023.6	023.3	023.2	023.2	023.2	023.3	023.4	023.1	023.1	023.1	023.0	022.8	022.2
	7	021.6	021.2	020.2	019.7	019.5	019.1	019.0	019.0	018.7	018.3	017.7	017.3	016.8	016.4	016.0	015.7	015.1	014.9	014.8	014.8	013.7	013.0	012.0	017.3
	8	013.2	013.5	013.8	014.1	014.7	015.4	016.0	016.5	016.8	017.3	017.6	017.4	017.7	018.1	018.0	018.1	018.3	018.6	018.9	019.3	019.7	020.1	020.5	017.0
	9	020.5	020.7	020.9	020.7	021.1	021.3	021.3	021.5	021.4	021.2	021.2	021.1	020.9	020.8	020.7	020.6	020.5	020.2	020.2	020.4	020.8	020.9	021.1	020.9
	10	021.0	021.0	020.9	020.8	020.8	020.9	020.9	021.0	021.1	021.2	021.2	021.1	020.7	020.2	019.9	019.7	019.2	018.8	018.7	018.5	018.0	017.6	017.5	017.1
	11	016.5	016.2	015.5	015.0	014.7	014.5	014.4	014.1	013.7	013.3	012.8	012.4	011.7	011.2	010.4	009.8	009.3	009.0	008.7	008.3	007.8	007.2	006.2	005.6
	12	004.4	004.0	002.8	002.2	002.1	002.2	002.2	002.2	002.5	003.0	003.4	003.7	003.7	003.8	003.9	004.2	004.6	004.9	005.1	005.2	005.2	005.2	005.3	003.6
	13	005.2	005.0	004.8	004.7	004.7	004.9	005.1	005.2	005.3	005.5	005.8	005.3	005.7	005.7	006.0	005.8	006.2	006.5	006.7	007.0	007.1	007.0	006.9	005.7
	14	006.7	006.7	006.7	006.6	006.7	006.8	007.0	006.9	006.8	006.7	006.6	006.6	006.7	006.9	006.9	007.0	007.1	007.5	007.9	008.0	008.0	008.1	008.2	007.1
	15	008.3	008.4	008.5	008.8	008.9	009.3	009.7	010.0	010.1	010.3	010.4	010.2	010.1	010.1	010.2	010.2	010.4	010.8	011.6	012.2	012.7	013.3	013.6	014.1
	16	014.2	014.6	015.2	015.5	016.0	016.4	017.0	017.3	017.4	017.5	017.4	017.3	017.7	018.0	018.2	018.1	018.1	018.2	018.6	019.1	019.4	019.5	019.7	019.9
	17	019.8	019.7	019.7	019.8	020.0	020.1	020.4	020.6	020.6	020.5	020.3	020.3	020.3	020.2	020.2	020.0	020.1	020.2	020.6	020.6	020.5	020.4	020.2	020.2
	18	020.2	020.0	019.9	020.0	020.0	020.0	020.1	019.9	019.6	019.3	018.9	018.4	018.0	017.4	017.0	016.8	016.3	016.3	016.3	016.2	016.1	015.8	015.4	018.3
	19	015.1	014.8	014.2	013.8	013.6	013.2	012.9	012.4	011.9	011.4	011.0	010.2	009.6	009.1	008.6	007.8	007.4	006.5	006.0	005.2	004.4	003.4	002.7	002.1
	20	002.7	001.9	002.1	002.2	002.4	002.7	003.5	004.0	004.7	005.1	005.7	005.7	005.5	005.6	005.9	006.1	006.5	006.6	006.6	007.0	007.1	007.2	007.1	006.9
	21	006.7	006.6	006.7	006.7	007.0	007.2	007.4	007.4	007.5	007.6	007.4	007.6	008.0	008.1	008.3	008.7	009.2	009.6	010.1	010.4	010.5	010.4	010.3	008.1
	22	010.1	009.9	010.0	010.1	010.3	010.2	010.4	010.6	010.9	011.1	010.7	010.8	011.0	010.9	011.0	010.9	011.0	010.5	010.7	011.0	011.1	011.4	011.4	010.7
	23	011.3	011.1	011.1	011.2	011.2	011.6	011.9	012.1	012.3	012.0	011.9	011.0	011.1	010.9	011.7	011.5	011.1	010.8	010.9	011.1	010.9	011.1	011.0	010.4
	24	009.5	009.0	008.4	008.2	007.7	007.4	006.7	006.2	005.9	004.8	004.5	004.8	004.4	003.6	003.2	003.0	003.2	003.8	004.1	004.2	004.3	004.6	005.2	005.6
	25	005.9	006.2	006.4	006.6	007.0	007.5	008.0	008.3	008.7	008.8	008.9	009.2	009.5	009.6	009.7	009.9	010.1	010.7	011.4	011.5	011.8	012.1	012.1	009.0
	26	011.9	011.9	011.5	010.9	010.8	010.8	010.6	010.5	010.3	009.9	009.3	008.1	007.7	007.1	006.2	005.3	004.4	003.4	002.5	002.0	001.0	000.4	001.5	001.9
	27	002.3	002.7	002.9	003.2	003.9	004.6	004.8	005.0	005.0	005.1	004.6	004.5	004.3	004.0	003.9	003.8	003.8	003.4	004.2	004.3	004.3	004.3	004.6	004.0
	28	005.0	005.3	005.7	006.0	006.7	007.5	007.9	008.2	008.5	008.7	008.8	009.3	009.3	009.6	009.6	009.9	010.1	010.4	011.0	011.3	011.4	011.7	011.7	008.9
	29	011.6	011.8	011.7	011.9	011.9	012.3	012.7	012.9	012.9	012.9	012.8	012.4	012.4	012.1	011.8	011.5	011.3	011.2	011.2	011.5	011.8	011.9	012.3	012.4
	30	012.4	012.4	012.4	012.8	013.5	014.1	015.0	015.7	016.4	017.2	017.8	018.3	018.4	018.8	019.0	019.2	019.5	020.1	020.7	021.4	021.8	022.0	022.4	022.5
	31	022.9	022.9	022.9	022.9	022.9	023.1	023.3	023.4	023.5	023.6	023.0	022.8	022.4	021.9	021.7	021.6	021.7	021.6	021.7	021.7	021.9	021.9	021.8	021.7
Mean (Station level)		1013.03	1012.96	1012.87	1012.86	1013.00	1013.15	1013.37	1013.47	1013.51	1013.52	1013.45	1013.38	1013.25	1013.19	1013.08	1013.00	1012.95	1012.97	1013.15	1013.38	1013.46	1013.47	1013.47	1013.41
Mean (Sea level)		1014.28	1014.22	1014.12	1014.12	1014.26	1014.41	1014.63	1014.72	1014.75	1014.76	1014.69	1014.62	1014.48	1014.42	1014.31	1014.23	1014.19	1014.21	1014.39	1014.63	1014.71	1014.73	1014.72	1014.67
Hour. G.M.T.		1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	



Readings in millibars at exact hours, Greenwich Mean Time.

447. Richmond (Kew Observatory) :  $H_b$  (height of barometer cistern above M.S.L.) = 10.4 metres.

September, 1928.

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean
Day.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
1	021.4	021.3	021.3	021.2	021.3	021.5	021.5	021.5	021.5	021.3	021.3	021.2	021.1	020.8	020.4	020.5	020.6	020.7	020.9	021.2	021.6	021.9	022.0	022.0	021.2
2	021.9	021.7	021.7	021.8	022.1	022.2	022.2	022.1	022.1	022.1	021.9	021.5	021.2	021.1	020.9	020.9	021.1	021.5	022.1	022.3	022.6	022.4	022.5	022.4	021.8
3	022.2	022.6	022.3	022.4	022.2	022.4	022.6	022.5	022.7	022.6	022.4	022.2	021.7	021.5	021.3	020.8	021.0	021.0	021.0	021.3	021.0	020.9	020.8	020.7	021.8
4	020.5	020.1	019.8	019.6	019.6	019.8	020.0	020.0	019.8	019.5	019.3	019.0	018.8	018.5	018.2	018.0	018.0	017.9	017.9	018.0	017.9	017.6	017.2	017.1	018.9
5	017.0	016.9	016.5	015.9	015.1	014.8	014.4	014.1	013.8	013.5	012.8	012.1	011.8	011.4	010.9	010.7	010.4	010.6	010.6	010.7	010.3	010.2	009.9	009.8	012.8
6	009.3	009.0	009.2	009.8	011.2	013.2	015.2	016.7	017.8	018.6	019.0	019.4	019.8	020.1	020.4	020.5	021.4	022.0	022.6	022.9	022.9	023.1	023.1	023.4	017.7
7	023.4	023.4	023.7	023.2	023.3	023.4	023.5	023.3	022.9	022.6	021.5	020.9	020.5	019.8	019.0	018.5	017.8	017.7	017.4	017.4	017.3	017.4	017.3	017.4	020.6
8	016.5	016.2	015.7	015.5	015.6	015.8	015.8	015.9	015.9	015.6	015.5	014.9	014.7	014.4	014.4	014.6	014.9	015.0	015.6	015.6	015.6	015.7	015.8	015.7	015.5
9	015.6	015.4	015.4	015.4	015.6	015.9	016.1	015.9	016.6	016.5	016.7	016.7	016.6	016.4	017.2	018.7	018.4	018.8	019.1	019.6	020.2	020.4	021.0	021.2	017.4
10	021.4	021.6	021.7	021.6	021.7	022.1	022.0	022.3	022.4	022.3	022.3	022.3	022.3	022.2	022.2	022.1	022.1	022.2	022.3	022.7	022.8	022.9	023.0	023.0	022.2
11	023.0	023.0	023.0	023.1	023.2	023.5	024.2	024.3	024.6	024.5	024.4	024.1	023.9	023.9	023.8	023.7	023.7	023.8	024.1	024.4	024.9	025.0	025.1	025.2	024.0
12	025.1	025.0	025.0	025.1	025.1	025.6	025.9	026.1	026.1	026.0	025.8	025.7	025.4	025.0	024.7	024.6	024.7	025.0	025.3	026.0	026.2	026.1	026.1	026.4	025.5
13	026.5	026.2	026.2	026.0	026.1	026.3	026.7	026.8	027.0	026.8	026.6	026.5	026.2	025.7	025.2	025.2	025.2	025.4	025.6	025.9	025.9	025.8	025.7	025.6	026.1
14	025.5	025.3	025.0	024.9	024.6	024.4	024.4	024.4	024.5	024.6	024.7	024.4	024.4	024.2	024.0	023.9	023.6	023.8	024.4	024.6	024.7	025.2	025.5	026.0	026.7
15	026.2	025.8	025.7	025.4	025.6	026.3	026.7	027.2	027.3	027.3	027.3	027.0	027.0	026.7	026.4	026.4	026.4	026.4	026.4	026.4	027.5	027.5	027.4	027.5	026.6
16	027.3	027.1	026.7	026.3	026.4	026.6	026.7	026.9	027.0	026.9	026.7	026.4	025.9	025.3	024.8	024.7	024.6	025.0	025.3	025.8	025.8	025.6	025.5	025.3	026.1
17	025.2	025.1	024.8	024.7	024.6	024.6	024.7	024.6	024.7	024.5	024.1	023.4	022.9	022.4	021.6	021.5	021.4	021.5	021.8	022.0	021.9	021.9	021.9	021.9	023.3
18	021.6	021.4	021.3	021.3	021.4	021.6	021.9	022.2	022.1	021.9	021.8	021.4	021.1	020.7	020.3	020.2	020.2	020.2	020.5	020.6	020.7	020.8	020.7	020.6	021.1
19	020.7	020.6	020.7	020.9	021.1	021.5	022.0	022.3	022.5	022.5	022.3	022.2	022.0	021.7	021.6	021.5	021.6	021.9	022.1	022.3	022.5	022.7	022.8	022.8	021.8
20	022.8	022.8	022.8	022.7	022.9	023.2	023.6	023.8	023.9	023.6	023.3	023.2	023.0	022.6	022.4	022.4	022.6	022.9	023.1	023.7	024.1	024.5	024.7	024.8	023.3
21	024.8	024.7	024.7	024.8	024.9	025.3	025.5	025.9	025.7	025.6	025.2	024.9	024.6	024.5	024.4	024.1	024.2	024.4	024.6	024.9	025.4	025.6	025.7	025.9	025.0
22	026.0	025.9	025.8	025.9	026.0	026.1	026.3	026.6	026.7	026.6	026.3	026.0	025.6	025.5	025.0	024.9	024.9	025.0	025.3	025.6	025.7	025.7	025.5	025.3	025.8
23	025.0	024.7	024.4	024.2	024.2	024.0	023.8	023.7	023.5	023.2	022.9	022.7	022.5	022.1	021.5	020.8	021.7	021.9	021.9	021.8	021.6	021.7	021.7	021.6	021.7
24	016.1	015.5	014.9	014.2	013.4	013.0	012.7	012.3	011.9	011.7	011.3	011.0	010.7	010.1	009.5	008.8	008.2	008.1	008.0	007.9	007.9	007.8	007.8	007.8	010.9
25	008.0	007.9	008.2	008.3	008.4	008.9	009.4	010.0	010.7	011.1	011.3	011.5	011.7	011.5	011.1	010.6	011.8	012.3	012.8	013.9	014.7	015.5	016.1	016.4	011.4
26	016.8	017.0	017.0	017.0	017.3	017.9	018.2	018.5	018.5	018.6	018.3	018.0	017.8	017.6	016.8	016.3	016.4	016.9	017.1	016.8	016.6	016.5	016.1	015.9	017.3
27	015.4	014.9	014.2	013.6	013.3	013.2	012.7	012.4	012.1	011.7	011.0	010.4	009.5	008.5	007.7	007.2	007.1	007.1	007.4	007.0	006.1	005.8	005.0	004.3	010.1
28	003.8	003.1	002.4	001.7	001.2	001.0	000.1	000.1	000.2	000.1	000.3	000.1	000.5	001.5	002.6	003.6	004.2	005.1	005.4	006.1	006.6	007.1	007.4	007.6	003.3
29	007.9	008.1	008.0	008.5	009.0	009.3	009.7	009.9	010.0	010.1	010.1	010.1	010.1	010.1	010.1	010.1	009.9	010.0	010.5	010.6	010.5	010.7	010.7	010.7	009.9
30	010.6	010.5	010.4	010.9	011.4	012.2	012.8	013.0	013.3	013.7	014.1	014.5	014.9	015.1	015.4	015.6	016.4	017.0	017.8	018.1	018.5	018.9	019.3	019.6	014.6
Mean (Station level)	1019.58	1019.43	1019.27	1019.20	1019.26	1019.52	1019.74	1019.88	1019.97	1019.90	1019.70	1019.48	1019.25	1018.97	1018.73	1018.66	1018.77	1018.97	1019.27	1019.48	1019.60	1019.67	1019.65	1019.66	1019.40
Mean (Sea level)	1020.86	1020.71	1020.55	1020.48	1020.54	1020.80	1021.02	1021.15	1021.24	1021.16	1020.96	1020.73	1020.49	1020.21	1019.98	1019.91	1020.02	1020.23	1020.53	1020.75	1020.87	1020.95	1020.93	1020.93	1020.67

448. Richmond (Kew Observatory) :  $H_b$  = 10.4 metres.

October, 1928.

Station Level	1	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
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*Readings in millibars at exact hours, Greenwich Mean Time.*

**449. Richmond (Kew Observatory) :**  $H_b$  (height of barometer cistern above M.S.L.) = 10.4 metres.

**November, 1928.**

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean
↑ Day.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
1	010.8	008.9	008.8	008.7	009.3	009.9	010.1	010.7	010.9	010.8	010.8	010.6	010.5	010.4	010.0	010.1	010.3	010.5	010.7	010.7	010.7	010.5	010.5	010.4	010.1
2	010.3	010.3	010.1	009.8	009.6	009.3	009.2	009.1	008.8	008.6	008.4	007.8	007.4	007.1	006.7	006.8	006.8	006.9	006.9	006.9	006.9	007.0	007.0	007.1	008.2
3	007.0	007.2	007.3	007.2	007.2	007.3	007.4	008.0	008.0	008.2	008.0	007.9	007.8	007.8	008.1	008.3	008.3	008.4	008.4	008.4	008.4	008.4	008.2	008.1	007.9
4	007.7	007.6	007.4	006.9	006.8	006.8	006.7	007.0	007.1	007.0	007.1	007.0	006.8	006.7	006.8	006.9	007.1	007.1	007.3	007.4	007.5	007.6	007.5	007.2	007.2
5	007.0	007.1	006.9	006.9	007.0	007.0	007.3	007.4	007.5	007.5	007.4	007.2	007.1	007.1	007.2	007.3	007.6	008.0	008.4	008.6	008.8	008.9	009.0	009.1	007.6
6	009.0	009.1	009.1	009.0	009.1	009.0	009.0	009.4	009.3	009.2	009.2	008.8	008.6	008.1	007.9	007.5	007.3	007.6	007.6	007.8	007.7	007.5	007.3	007.2	008.4
7	006.9	006.6	006.4	006.3	006.0	005.8	006.0	006.6	006.6	006.6	006.6	006.1	005.6	005.4	005.4	005.5	005.9	006.0	005.9	006.1	006.4	006.7	006.6	006.5	006.2
8	006.5	006.5	006.6	006.6	006.8	006.9	007.3	008.1	008.7	008.9	008.9	008.9	008.9	009.3	009.7	010.3	011.0	011.8	012.4	013.2	014.0	014.5	014.5	014.9	009.6
9	015.3	015.8	016.3	016.7	017.4	017.9	018.6	019.4	020.0	020.4	020.6	020.8	020.9	020.8	020.5	020.8	021.4	022.1	022.6	022.7	022.9	023.0	022.9	022.9	020.0
10	022.6	022.7	022.6	022.4	022.4	022.4	022.5	022.4	022.2	021.8	021.0	020.2	019.7	018.7	017.9	017.0	016.5	015.7	015.4	014.6	014.1	014.0	014.1	014.3	019.2
11	014.3	014.6	014.6	014.6	014.6	014.5	014.9	015.3	015.5	015.4	015.5	015.1	014.8	014.2	013.8	013.6	013.3	013.2	012.9	012.7	012.5	012.4	012.3	012.4	014.1
12	012.3	012.2	011.9	011.7	011.6	011.6	011.7	012.1	011.8	011.9	011.9	011.6	011.4	011.1	011.1	011.3	011.4	011.6	011.8	012.0	012.2	012.4	012.5	012.4	011.8
13	012.3	012.1	011.8	011.5	011.7	011.8	012.1	012.1	012.6	012.3	012.2	012.1	011.9	012.0	012.4	013.2	013.5	013.6	013.8	013.9	013.9	013.9	014.0	012.6	012.6
14	013.7	013.7	013.8	014.0	014.3	014.4	015.0	015.0	014.9	014.7	014.3	013.9	013.2	012.6	011.9	011.5	011.4	011.6	010.9	010.9	007.6	006.3	005.1	003.8	012.6
15	002.7	001.0	009.3	008.1	006.0	005.8	006.0	006.6	006.6	006.6	006.6	006.1	005.6	005.4	005.5	005.9	006.0	005.9	006.1	006.4	006.7	006.6	006.5	006.2	005.9
16	002.7	001.0	009.3	008.1	006.0	005.8	006.0	006.6	006.6	006.6	006.6	006.1	005.6	005.4	005.5	005.9	006.0	005.9	006.1	006.4	006.7	006.6	006.5	006.2	005.9
17	092.8	093.1	092.7	092.1	091.8	090.9	089.6	088.6	086.2	083.0	080.0	078.8	078.4	076.9	075.5	074.8	075.3	077.8	079.7	081.9	083.4	085.1	086.0	086.8	084.3
18	087.2	087.6	087.5	087.4	087.3	087.1	087.1	087.9	088.9	090.5	092.2	093.3	094.2	095.3	096.3	097.4	098.1	099.2	099.8	000.4	001.3	002.1	002.9	003.7	093.6
19	004.3	004.8	005.8	006.7	007.5	008.5	009.5	010.5	011.5	012.0	012.2	012.3	012.7	012.7	012.6	012.6	012.6	012.6	012.6	012.6	012.4	012.4	011.7	011.2	010.5
20	010.8	010.2	009.6	009.3	008.6	008.2	007.8	007.7	007.7	006.8	006.3	005.5	004.6	003.7	002.6	002.2	001.6	002.8	005.5	007.0	008.6	009.6	010.4	006.9	006.9
21	011.4	012.6	013.6	014.3	015.3	016.4	017.2	017.9	019.0	019.3	019.9	020.0	020.4	020.5	020.7	021.2	021.5	022.1	022.3	022.5	022.5	022.4	022.4	021.6	018.8
22	021.2	020.7	019.6	018.4	018.2	017.7	017.4	017.4	017.4	016.9	016.0	015.2	014.3	013.5	012.9	012.5	012.1	011.7	011.2	010.3	009.6	009.3	009.0	008.9	014.9
23	008.9	006.1	006.1	009.4	010.2	010.7	011.4	012.0	012.8	012.4	011.9	011.5	010.9	008.1	007.9	006.7	005.2	005.2	004.8	005.2	005.2	005.0	005.6	008.5	008.5
24	006.1	006.3	006.4	004.7	004.1	003.5	002.9	009.9	097.0	093.7	091.0	088.4	086.1	083.9	082.3	082.5	084.7	085.8	087.0	088.2	089.3	089.3	089.0	090.1	093.7
25	009.1	090.6	090.4	090.7	090.9	090.8	091.7	093.0	094.2	095.4	096.6	097.0	097.8	098.6	099.0	000.2	001.2	001.9	002.6	002.9	002.9	002.7	002.5	002.2	096.7
26	001.3	009.6	007.4	005.4	002.8	000.1	008.6	008.7	008.5	008.4	008.3	008.1	008.1	008.2	008.4	008.2	008.7	008.3	008.5	008.7	008.7	009.1	009.3	009.5	008.9
27	094.0	094.6	095.4	095.9	097.0	097.8	098.6	099.5	000.7	002.0	002.4	002.9	003.1	003.3	003.2	003.3	003.3	003.3	003.1	002.5	002.0	001.9	001.1	000.5	000.3
28	000.5	000.7	001.0	001.3	001.7	002.2	002.6	003.6	004.0	005.0	005.5	006.0	006.4	006.6	006.7	007.5	008.5	009.8	010.5	011.3	012.7	013.1	014.2	014.9	006.1
29	015.8	016.8	017.6	018.7	018.7	019.2	020.2	021.1	021.7	022.5	023.0	023.1	023.2	023.8	024.0	024.8	025.4	025.8	026.3	026.7	027.2	027.2	028.0	028.0	022.5
30	027.8	027.8	027.8	027.9	027.9	028.0	027.6	027.8	027.2	027.4	026.9	025.9	025.7	024.7	024.1	023.7	023.7	023.2	022.6	022.4	022.3	022.0	022.0	021.7	025.5
Mean (Station Level)	1008.32	1008.38	1008.26	1008.09	1008.08	1008.03	1008.08	1008.33	1008.27	1008.00	1007.65	1007.46	1007.20	1007.05	1007.14	1007.40	1007.77	1008.05	1008.34	1008.57	1008.75	1008.83	1008.92	1008.04	
Mean (Sea Level)	1009.60	1009.65	1009.54	1009.37	1009.36	1009.31	1009.36	1009.61	1009.60	1009.54	1009.27	1008.92	1008.73	1008.46	1008.81	1008.41	1008.67	1009.04	1009.32	1009.61	1009.84	1010.03	1010.11	1010.20	1009.38

**450. Richmond (Kew Observatory) :**  $H_b = 10.4$  metres.

**December, 1928.**

[illegible]

NOTE.—When pressure exceeds 1000 mb. the leading figure 1 is not printed, i.e., 1005.6 mb. is written 005.6. This rule does not, however, apply to monthly means.



**PRESSURE AT STATION LEVEL AND AT SEA LEVEL.  
ANNUAL MEANS FROM HOURLY VALUES.**

373

*From readings in millibars at exact hours, Greenwich Mean Time.*

**451. Richmond (Kew Observatory) :  $H_b = 10.4$  metres.**

1928.

Hour G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean
Station Level	mb. 013.20	mb. 013.12	mb. 012.99	mb. 012.91	mb. 012.94	mb. 013.04	mb. 013.19	mb. 013.35	mb. 013.43	mb. 013.46	mb. 013.29	mb. 013.05	mb. 012.82	mb. 012.63	mb. 012.49	mb. 012.46	mb. 012.51	mb. 012.69	mb. 012.88	mb. 013.09	mb. 013.25	mb. 013.31	mb. 013.31	mb. 013.28	mb. 013.03
Sea Level	014.48	014.40	014.27	014.19	014.22	014.32	014.47	014.63	014.70	014.78	014.55	014.31	014.08	013.89	013.75	013.72	013.77	013.95	014.15	014.36	014.52	014.58	014.59	014.56	014.30

**PRESSURE AT STATION LEVEL : MONTHLY MEANS AND DIURNAL INEQUALITIES.**

*The departures from the mean of the day are adjusted for non-cyclic change.*

**452. Richmond (Kew Observatory) :  $H_b = 10.4$  metres.**

1928.

Month	Mean.	Hour. 1.	G.M.T. 2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.
	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.	mb.
Jan.	1011.79	+0.12	+0.23	+0.28	+0.09	-0.15	-0.16	-0.05	+0.19	+0.39	+0.62	+0.40	-0.11	-0.47	-0.60	-0.60	-0.44	-0.37	-0.17	-0.03	+0.10	+0.19	+0.23	+0.17	+0.17
Feb.	1018.38	+0.18	+0.21	+0.08	+0.01	+0.15	+0.16	+0.31	+0.50	+0.59	+0.58	+0.49	+0.10	-0.25	-0.56	-0.76	-0.85	-0.78	-0.46	-0.23	-0.07	-0.01	+0.17	+0.18	+0.27
Mar.	1008.27	+0.40	+0.19	-0.06	-0.17	-0.25	-0.18	+0.01	+0.22	+0.33	+0.31	+0.12	0.00	-0.26	-0.49	-0.61	-0.61	-0.50	-0.24	+0.04	+0.22	+0.35	+0.37	+0.37	+0.48
April	1007.87	+0.19	-0.02	-0.09	-0.19	-0.12	+0.13	+0.37	+0.44	+0.46	+0.47	+0.26	+0.03	-0.10	-0.36	-0.63	-0.77	-0.70	-0.52	-0.21	+0.13	+0.28	+0.34	+0.35	+0.29
May	1012.29	+0.15	+0.02	-0.11	-0.14	0.00	+0.15	+0.30	+0.34	+0.36	+0.33	+0.14	+0.02	-0.14	-0.29	-0.48	-0.56	-0.56	-0.46	-0.31	-0.02	+0.26	+0.35	+0.38	+0.29
June	1012.89	+0.37	+0.21	0.00	-0.06	0.00	+0.06	+0.15	+0.29	+0.28	+0.26	+0.11	0.00	-0.24	-0.41	-0.55	-0.69	-0.69	-0.53	-0.35	-0.07	+0.35	+0.50	+0.53	+0.48
July	1018.12	+0.10	-0.03	-0.15	-0.13	+0.03	+0.21	+0.43	+0.57	+0.52	+0.50	+0.38	+0.26	+0.06	-0.14	-0.35	-0.54	-0.70	-0.69	-0.55	-0.35	0.00	+0.16	+0.21	+0.20
Aug.	1013.22	-0.06	-0.14	-0.25	-0.26	-0.13	0.00	+0.22	+0.30	+0.33	+0.33	+0.25	+0.17	+0.01	-0.05	-0.17	-0.26	-0.32	-0.32	-0.15	+0.07	+0.13	+0.14	+0.12	+0.05
Sept.	1019.40	+0.15	0.00	-0.16	-0.23	-0.16	+0.10	+0.32	+0.47	+0.56	+0.49	+0.30	+0.08	-0.15	-0.43	-0.66	-0.73	-0.62	-0.41	-0.11	+0.10	+0.22	+0.30	+0.28	+0.29
Oct.	1010.05	+0.04	-0.09	-0.23	-0.21	-0.20	-0.15	-0.01	+0.25	+0.34	+0.41	+0.27	-0.01	-0.23	-0.31	-0.46	-0.42	-0.22	+0.09	+0.17	+0.27	+0.31	+0.23	+0.11	+0.07
Nov.	1008.04	+0.55	+0.58	+0.43	+0.24	+0.21	+0.13	+0.16	+0.39	+0.36	+0.27	-0.02	-0.39	-0.60	-0.89	-1.07	-1.00	-0.76	-0.41	-0.16	+0.10	+0.31	+0.47	+0.53	+0.58
Dec.	1016.37	-0.19	-0.17	-0.19	-0.38	-0.43	-0.40	-0.30	-0.06	+0.30	+0.54	+0.40	+0.11	-0.17	-0.24	-0.17	-0.11	+0.01	+0.09	+0.18	+0.30	+0.33	+0.27	+0.26	+0.05
Year	1013.06	+0.17	+0.08	-0.04	-0.12	-0.09	+0.00	+0.16	+0.33	+0.40	+0.48	+0.26	+0.02	-0.21	-0.40	-0.54	-0.58	-0.52	-0.34	-0.14	+0.07	+0.23	+0.29	+0.29	+0.27

**ABSOLUTE EXTREMES OF PRESSURE AT STATION LEVEL FOR EACH DAY.**

*Maximum and Minimum for the interval 0h. to 24h., Greenwich Mean Time.*

**453. Richmond (Kew Observatory) :  $H_b = 10.4$  metres.**

1928.

Month	Jan.		Feb.		Mar.		April		May		June		July		Aug.		Sept.		Oct.		Nov.		Dec.	
Day.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1	mb. 028.3	mb. 019.8	mb. 009.0	mb. 999.4	mb. 014.8	mb. 009.1	mb. 008.8	mb. 991.2	mb. 011.4	mb. 007.2	mb. 020.4	mb. 016.4	mb. 020.0	mb. 018.1	mb. 017.6	mb. 011.5	mb. 022.1	mb. 020.4	mb. 023.4	mb. 019.6	mb. 011.0	mb. 008.3	mb. 029.5	mb. 025.2
2	019.8	006.6	013.2	002.4	016.1	013.7	014.2	008.8	011.2	006.0	024.9	020.4	018.2	015.5	021.6	017.6	022.6	020.8	024.9	021.7	010.4	006.7	029.5	024.7
3	023.2	010.3	024.4	003.6	018.1	015.7	013.5	004.1	006.2	001.3	024.7	017.0	016.5	013.3	020.3	012.7	022.8	020.7	026.5	022.4	008.5	006.9	029.8	024.1
4	024.0	012.2	025.9	018.5	019.8	017.8	005.4	998.8	004.7	001.8	017.0	009.2	018.4	013.7	018.5	010.4	020.7	017.0	022.4	017.2	008.1	006.6	031.1	028.3
5	022.8	013.0	021.6	010.4	019.5	014.7	008.8	004.8	008.9	004.4	012.8	010.2	016.6	008.5	023.6	018.5	017.1	009.8	018.2	013.4	009.1	006.8	028.3	025.6
6	019.9	000.7	033.2	021.6	015.1	013.3	013.6	008.8	009.0	006.1	010.4	003.9	017.3	007.8	023.9	022.2	023.4	008.9	025.7	018.2	009.4	007.1	026.2	012.8
7	020.6	007.1	033.1	030.7	015.0	013.4	013.3	997.9	011.7	006.3	003.9	997.7	022.8	017.3	022.2	012.9	023.5	017.1	025.9	019.3	007.2	005.3	017.8	014.6
8	013.7	006.1	031.0	022.7	016.8	014.3	004.6	996.6	015.6	009.3	000.1	995.2	022.8	018.4	020.6	012.9	017.1	014.3	019.3	006.3	014.9	006.4	018.9	017.1
9	013.4	008.8	025.1	019.5	016.7	014.6	004.8	999.2	019.9	015.6	998.0	992.7	023.2	017.4	021.7	020.1	021.2	015.3	006.3	997.6	023.0	014.9	018.5	006.7
10	013.7	002.9	019.5	990.4	017.7	014.7	999.2	994.6	020.4	016.6	008.7	994.2	024.7	023.1	021.3	017.1	023.0	021.2	010.7	998.6	022.9	013.9	006.7	990.1
11	019.1	009.9	995.2	988.3	017.5	013.5	998.2	996.1	020.3	016.7	021.5	008.7	024.6	022.6	017.1	005.6	025.2	022.9	009.2	998.7	015.8	012.2	992.9	988.6
12	019.6	001.6	005.1	995.2	015.8	011.9	006.2	997.9	021.5	019.8	024.6	021.5	023.7	020.4	005.6	002.0	026.4	024.5	016.8	006.9	012.7	011.0	005.7	992.8
13	008.7	001.2	004.9	992.4	019.7	015.6	009.6	006.2	022.2	018.7	021.7	004.2	024.5	021.4	007.1	004.6	027.0	025.1	024.1	016.8	014.0	011.4	014.3	005.7
14	010.2	999.0	010.2	004.9	021.3	019.6	009.2	001.4	018.7	015.3	017.3	001.5	025.6	023.2	008.2	006.5	026.3	023.6	024.2	013.6	015.1	003.8	018.5	011.9
15	001.2	995.5	016.6	010.2	024.7	020.6	004.8	999.7	017.3	001.8	022.5	017.3	023.7	019.6	014.1	008.2	027.6	025.3	018.8	010.6	003.8	987.3	027.2	018.5
16	004.9	993.8	016.3	010.0	026.2	023.2	009.5	999.3	003.2	997.7	022.2	020.6	028.8	022.9	019.9	014.0	027.5	024.5	019.5	017.5	993.1	974.7	026.8	013.5
17	017.4	004.7	026.5	010.2	023.3	012.7	018.1	009.5	003.3	995.0	022.0	014.8	030.9	027.8	020.7	019.6	025.3	021.3	018.5	014.2	003.7	986.8	029.0	013.7
18	018.7	006.0	029.1	026.5	014.6	010.4	017.9	010.5	007.1	994.1	014.9	008.1	028.2	021.2	020.4	015.4	022.3	020.1	018.7	001.0	013.0	003.7	032.6	028.9
19	025.3	005.9	032.6	028.1	013.2	006.5	012.7	009.6	007.6	005.2	008.1	004.7	023.4	021.3	015.4	002.0	022.8	020.5	007.8	994.8	011.2	001.5	032.4	022.7
20	025.6	020.6	034.4	032.4	006.6	999.4	012.7	010.0	009.9	004.9	017.8	005.9	022.2	019.6	007.2	001.8	024.8	022.3	001.0	993.7	022.6	010.4	022.7	017.9
21	022.0	006.4	033.6	029.7	999.7	991.6	014.4	010.1	014.7	009.8	019.7	017.4	022.2	020.5	010.5	006.6	026.0	024.1	002.9	000.9	021.6	008.8	027.0	021.7
22	017.5	000.9	034.0	031.0	994.7	991.5	023.2	014.4	015.5	013.5	017.5	014.8	022.1	018.7	011.5	009.8	026.7	024.8	002.2	993.0	004.7	026.5	020.8	
23	020.1	009.9	033.2	025.0	995.5	939.0	024.9	023.2	013.6	011.7	018.8	016.2	020.6	018.1	012.4	010.2	025.3	016.8	003.4	993.4	006.5	981.7	028.2	022.2
24	018.0	005.1	025.3	022.9	995.6	992.7	024.7	016.6	021.0	012.4	019.4	017.7	018.3	015.6	010.2	002.9	016.9	007.7	006.7	998.3	003.1	989.8	026.8	014.3
25	025.8	016.7	027.4	025.2	006.2	993.1	016.6	009.2	025.7	021.0	017.9	003.5	017.8	015.9	012.3	005.6	016.6	007.8	010.8	006.6	002.2	981.5	023.6	011.0
26	017.8	003.7	027.1	025.0	011.0	006.2	009.2	002.9	025.9	021.2	011.1	996.5	017.8	010.9	012.1	000.3	018.6	015.8	007.5	981.9	003.4	993.5	019.9	008.6
27	023.5	070.5	026.3	021.8	010.2	002.4	008.0	000.6	021.2	014.5	023.1	011.1	010.9	002.3	005.3	001.9	015.9	004.3	999.8	981.8	014.9	000.4	022.2	012.6
28	023.5	006.2	021.8	011.6	002.4	998.4	012.0	008.0	014.5	013.0	023.2	018.1	005.2	000.9	012.0	004.6	007.6	001.0	011.5	999.8	028.1	014.9	012.6	006.3
29	006.2	997.4	011.6	008.9	002.3	980.8	011.1	005.9	017.6	014.0	018.2	010.9	011.1	005.1	013.1	011.1	010.8	007.6	012.5	007.9	028.1	021.7	006.8	995.8
30	006.3	997.1	—	—	982.6	979.5	007.2	003.8	019.4	017.3	018.9	014.5	012.2	009.0	022.5	012.3	019.6	010.4	007.9	003.9	025.7	020.9	995.8	985.3
31	011.5	001.2	—	—	991.2	981.2	—	—	019.4	016.9	—	—	013.6	008.5	023.6	021.5	—	—	008.3	002.4	—	—	017.2	987.6
Mean	1017.49	1005.72	1022.32	1014.43	1011.09	1005.84	1011.21	1004.66	1014.79	1009.97	1016.71	1009.50	1020.25	1016.08	1015.89	1010.40	1021.76	1017.20	1014.05	1005.55	1012.53	1003.45	1020.81	1011.92



Readings in degrees absolute at exact hours, Greenwich Mean Time.

454. Richmond (Kew Observatory) : North Wall Screen :  $h_t$  (height of thermometer bulb above the ground) = 3.0 metres.

January, 1928.

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean
Day.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.
1	73.7	73.6	73.5	73.7	73.6	73.5	73.7	73.6	73.4	73.5	73.9	74.4	75.2	74.9	74.6	74.9	74.9	75.2	75.3	75.4	75.8	75.8	76.0	76.6	74.5
2	76.8	76.8	77.0	76.9	77.1	77.4	77.8	78.0	78.1	78.5	78.6	78.9	78.9	79.0	79.0	78.9	78.9	78.9	78.8	78.5	78.4	77.7	77.5	76.7	78.0
3	76.0	75.1	74.3	74.2	73.8	74.1	74.8	75.0	75.5	76.8	77.5	77.9	78.5	78.4	78.6	78.2	77.6	77.0	76.4	76.1	75.9	75.0	73.8	73.3	76.1
4	73.8	73.8	74.1	74.0	74.1	74.5	75.1	75.8	76.6	77.1	78.5	79.0	79.6	79.9	80.0	80.5	81.4	82.4	82.1	82.0	82.0	82.1	82.0	81.3	78.2
5	81.0	80.3	79.8	79.0	78.6	78.0	77.7	77.6	77.7	78.0	78.8	79.7	80.0	79.9	79.5	78.9	78.4	78.1	78.3	78.0	78.1	78.0	78.1	78.2	78.8
6	78.5	78.8	79.1	79.8	80.7	81.8	82.3	84.4	84.7	84.4	85.0	85.4	85.6	85.5	84.2	83.1	82.8	82.6	82.0	81.0	80.1	79.8	78.3	77.7	82.0
7	76.8	77.0	76.9	76.7	77.4	77.8	77.6	78.4	80.1	80.7	81.7	82.3	82.7	83.1	83.3	83.2	83.0	83.0	82.9	83.0	82.9	83.0	83.0	83.2	80.7
8	83.1	83.3	83.8	83.8	83.9	82.9	82.1	82.5	81.6	81.7	82.1	82.2	82.4	82.0	81.5	80.8	80.0	79.3	79.0	78.7	78.6	78.9	78.8	78.9	81.4
9	78.9	78.8	78.9	78.6	78.0	77.6	77.6	77.7	78.5	79.4	80.1	81.5	82.0	82.4	82.5	82.1	81.8	81.5	80.5	79.8	79.2	78.5	77.5	77.4	79.6
10	77.5	77.2	77.3	77.1	77.1	76.6	76.5	77.4	78.7	80.2	81.0	81.8	82.1	82.8	82.9	82.7	82.5	81.1	80.1	79.9	79.5	79.5	78.8	78.0	79.5
11	77.7	77.5	77.5	77.0	76.8	77.0	77.4	77.5	77.6	77.9	78.6	79.5	80.0	80.0	80.2	79.1	78.0	77.5	76.1	75.5	75.1	74.5	74.1	74.0	77.4
12	74.0	73.5	73.4	72.3	73.0	73.4	74.2	75.4	76.6	77.6	78.7	79.7	80.0	80.2	80.5	80.9	80.7	80.8	81.0	81.5	81.7	82.2	82.4	82.5	78.0
13	82.6	82.7	82.5	82.6	81.4	81.3	81.2	80.6	80.3	81.0	81.3	81.8	82.0	81.9	82.0	81.3	80.6	80.1	79.8	79.4	79.3	78.7	78.4	78.2	81.0
14	78.0	77.9	77.9	77.8	77.8	77.6	77.3	77.0	77.9	79.2	80.5	81.4	81.7	81.7	81.4	80.6	80.6	81.0	81.3	81.6	82.1	81.9	80.5	79.9	79.7
15	79.4	78.9	79.0	78.5	78.3	78.0	77.5	77.6	77.8	78.6	79.5	80.1	80.5	80.8	80.6	79.9	79.2	79.1	79.0	79.2	79.4	79.9	80.0	79.6	79.2
16	79.6	78.9	78.6	78.9	79.4	79.5	79.2	79.2	79.8	79.7	80.0	79.7	80.4	80.5	80.7	80.4	80.3	80.1	79.2	78.6	77.6	77.5	78.5	78.1	79.4
17	77.4	77.3	76.9	76.1	76.3	75.6	74.6	74.1	74.5	75.5	76.7	77.7	78.4	78.7	79.0	78.4	76.2	75.5	74.0	72.5	72.4	71.8	70.7	70.0	75.6
18	69.8	70.9	70.1	70.8	71.5	71.9	73.2	73.8	74.5	75.4	77.5	78.2	78.7	78.7	78.5	78.7	78.9	79.2	79.5	79.8	80.1	80.5	81.2	81.4	76.1
19	82.2	80.6	80.0	79.9	79.4	78.5	78.1	77.5	77.5	78.8	79.7	80.0	80.5	80.5	80.6	80.0	79.0	78.4	77.3	76.6	76.0	75.0	75.0	75.0	78.7
20	73.8	73.2	73.0	73.1	73.3	74.0	75.6	77.1	78.2	79.5	80.5	81.3	81.2	80.9	80.8	80.9	81.0	81.0	81.1	81.1	81.2	81.2	81.5	81.5	78.5
21	81.6	81.8	82.0	82.1	82.1	82.2	82.4	82.5	83.0	83.2	83.8	83.7	83.5	83.6	83.7	83.9	83.5	83.3	83.1	83.1	83.1	82.9	82.2	81.8	82.8
22	81.8	81.4	80.9	81.1	81.3	81.3	79.2	78.8	79.0	79.2	80.0	80.5	81.1	80.8	81.5	80.9	80.1	79.1	78.3	77.9	77.2	77.0	76.7	76.3	79.8
23	76.1	75.1	74.6	75.0	74.3	73.1	73.1	73.8	74.6	75.1	76.1	79.1	80.0	80.4	80.7	80.5	80.1	80.0	80.1	80.1	80.5	80.5	80.8	81.3	77.6
24	81.7	82.1	82.6	82.8	83.0	83.1	83.1	83.2	83.2	83.5	84.1	84.0	84.2	83.7	81.6	79.2	79.6	79.6	78.5	77.7	77.5	77.4	77.2	76.9	81.3
25	77.0	76.6	76.6	76.6	76.9	76.8	76.7	76.6	76.7	77.8	79.2	80.1	80.6	81.1	81.4	81.1	80.8	80.4	80.5	81.3	81.4	81.6	81.6	80.6	79.1
26	80.9	80.3	80.1	79.7	79.2	79.1	78.5	78.6	78.7	79.1	80.1	80.9	80.8	80.4	80.7	80.6	79.5	79.0	78.8	78.2	77.6	76.9	76.2	75.5	79.2
27	74.7	74.5	75.1	75.7	76.1	75.6	75.7	76.1	76.0	75.7	76.2	75.9	76.4	77.0	77.5	77.2	76.5	75.4	74.7	74.0	73.8	73.6	73.4	73.4	75.5
28	72.6	72.0	72.1	72.0	72.5	72.7	73.7	75.5	76.5	77.4	78.3	78.8	79.0	79.0	79.1	79.4	79.6	79.5	79.9	79.9	80.0	80.2	80.2	80.2	76.7
29	80.2	80.2	80.0	80.0	80.0	80.0	79.9	79.7	79.3	79.0	78.7	79.0	79.5	79.5	79.3	79.0	78.5	78.4	78.2	78.2	78.2	78.0	77.8	77.8	79.1
30	77.8	77.9	78.0	78.0	77.7	77.5	77.1	77.0	77.0	77.5	77.9	79.0	79.7	80.3	79.7	79.1	78.1	77.2	76.7	76.9	77.4	77.1	77.0	76.7	77.9
31	76.8	77.2	76.7	76.6	76.2	75.5	75.1	74.7	74.6	75.6	76.6	77.6	78.5	79.1	79.6	79.4	79.3	79.6	79.7	80.0	80.1	80.7	81.6	82.0	77.9
Mean	77.8	77.6	77.5	77.4	77.5	77.3	77.8	77.6	78.0	78.6	79.4	80.0	80.4	80.5	80.5	80.1	79.7	79.5	79.1	78.9	78.8	78.6	78.4	78.2	78.7

455. Richmond (Kew Observatory) : North Wall Screen :  $h_t$  = 3.0 metres.

February, 1928.

1	82.2	82.6	82.6	82.3	82.4	82.2	82.1	80.6	80.8	81.1	81.3	81.7	81.6	82.1	81.6	80.7	79.7	78.5	77.9	77.6	77.1	76.4	75.9	75.8	80.4
2	75.5	75.1	74.9	74.8	74.8	74.6	74.9	75.3	76.1	77.1	78.9	80.0	80.8	80.3	78.3	79.7	79.6	79.2	79.2	76.1	76.3	76.6	76.7	76.3	77.1
3	75.7	75.4	75.1	74.4	74.1	74.1	73.9	74.5	75.2	76.5	77.5	78.4	79.4	79.6	80.0	79.1	79.1	78.1	77.6	77.6	76.7	76.2	75.5	74.9	78.6
4	74.4	73.8	73.6	73.3	73.1	72.8	73.1	74.1	75.5	77.3	78.8	79.7	80.1	80.1	80.1	80.0	80.7	81.1	81.6	82.0	82.4	82.4	82.5	82.5	78.0
5	82.5	82.5	82.5	82.5	82.5	82.5	82.5	82.4	82.0	82.4	82.5	81.3	81.4	81.8	81.7	81.6	80.9	79.9	79.1	78.1	77.5	76.5	76.1	75.6	80.9
6	74.8	75.0	75.5	75.2	75.1	74.7	74.8	74.7	75.2	76.9	78.2	79.6	80.3	80.7	81.0	80.9	80.0	79.0	78.4	77.7	77.3	76.7	76.0	75.3	77.3
7	76.2	76.0	76.1	76.5	76.5	77.1	77.2	78.0	79.1	80.8	81.4	81.5	82.2	82.7	82.6	82.5	82.1	81.6	81.5	81.5	81.6	81.4	81.8	82.1	79.9
8	82.4	82.5	82.6	82.7	82.6	82.6	82.7	82.7	82.7	82.9	83.0	83.6	83.6	83.0	82.7	82.7	82.6	82.6	82.5	82.5	82.6	82.6	82.6	82.4	82.7
9	82.6	82.9	83.0	82.9	83.0	83.4	82.9	81.5	81.2	81.2	81.4	81.5	82.0	81.8	81.5	81.2	80.7	80.3	80.0	79.8	79.5	79.2	78.4	78.1	81.3
10	78.0	77.5	77.3	76.8	76.1	76.2	75.4	75.9	77.5	78.2	79.1	79.7	80.5	81.2	81.6	81.9	80.7	80.3	79.6	77.7	77.1	76.9	77.0	77.6	77.9
11	80.0	80.4	80.3	79.9	79.1	79.0	78.8	78.9	79.1	79.6	80.2	80.3	79.9	80.5	80.5	80.5	80.5	80.2	80.0	79.4	79.5	79.0	78.1	78.0	79.7
12	78.3	78.2	78.4	78.4	78.4	78.0	77.6	77.1	77.5	78.0	78.6	79.5	80.2	80.1	80.0	79.9	79.0	78.2	77.7	77.5	77.3	77.3	77.3	77.5	78.3
13	77.5	77.4	77.4	77.3	77.4	77.4	77.4	77.5	77.8	79.0	79.7	81.0	82.5	84.6	85.5	85.6	85.0	83.5	82.5	81.7	81.6	80.9	80.3	80.0	80.4
14	79.9	79.9	79.4	79.1	79.0	78.6	78.9	79.3	79.8	80.6	81.1	81.7	82.9	82.9	82.9	82.9	82.9	82.6	83.0	83.6	83.6	84.0	84.4	84.5	81.5
15	84.5	84.3	84.1	84.2	84.1	84.0	84.4	84.8	84.9	85.0	85.6	85.7	85.3	85.2	85.2	84.9	84.8	84.6	84.5	84.5	84.5	84.6	84.6	84.6	84.7
16	84.6	84.5	84.4	84.5	84.8	84.5	84.5	84.3	84.3	84.0	83.6	83.6	84.0	84.1	84.2	84.4	84.1	84.0	83.9	83.5	82.7	82.3	81.5	81.0	83.9
17	80.9	80.0	79.8	79.0	78.3	77.7	77.4	77.4	78.3	79.0	79.9	80.5	80.9	81.0	81.5	81.0	80.4	80.2	80.0	79.9	79.9	79.4	78.6	78.8	79.6
18	78.2	77.4	76.8	76.3	75.7	75.5	75.4	75.4	76.0	77.7	79.8	81.0	81.7	82.1	82.5	81.5	81.0	80.4	79.9	79.9	79.0	78.4	79.0	79.0	78.7
19	79.1	79.3	79.3	78.8	78.0	77.2	76.5	76.6	78.1	79.7	80.7	81.6	82.6	82.8	83.4	83.3	82.5	80.8	79.9	78.9	78.0	77.2	76.6	76.1	79.5
20	76.0	74.1	73.7	72.6	73.7	73.0	72.1	72.9	73.5	73.8	76.0	79.0	81.4	82.5	82.9	82.7	82.0	81.0	79.9	78.6	78.7	78.6	78.0	77.6	77.2
21	76.0	77.5	77.2	76.8	76.4	75.4	74.9	73.5	75.2	78.5	80.4	82.0	83.4	83.3	83.7	83.2	82.3	80.6	79.7	78.0	76.9	75.7	74.4	74.0	78.4
22	73.0	72.0	72.1	73.5	73.5	73.4	73.0	72.7	73.7	73.3	75.0	78.0	81.4	82.5	83.4	83.6	82.5	81.1	80.6	78.0	78.1	79.8	78.9	78.6	77.4
23	75.3	73.5	72.9	72.4	73.5	75.5	75.5	75.1	76.1	77.0	77.5	78.1	78.5	79.2	80.1	79.6	78.8	78.4	78.4	77.6	76.7	76.7	76.7	76.7	77.0
24	78.0	78.0	77.8	77.6	77.4	77.4	77.2	77.3	77.4	77.5	77.6	77.9	78.4	78.8	79.1	78.5	77.6	76.6	76.6	76.9	76.7	76.7	76.7	76.7	77.6
25	76.4	76.7	76.8	76.7	76.9	76.7	76.7	76.7	76.9	77.8	79.4	81.4	83.4	84.9	85.5	84.7	82.9	80.8	79.5	78.5	77.4	77.3	76.5	79.1	
26	76.1	75.5	75.4	74.5	75.4	75.4	75.9	76.4	77.9	79.2	80.5	83.1	83.9	84.9	85.5	85.3	83.4	81.5	80.5	79.8	79.1	78.9	78.6	78.0	79.3
27	77.7	77.4	77.2	76.8	76.4	75.9	75.6	75.9	77.6	79.9	81.7	84.4	85.2	85.7	85.9	85.5	84.2	82.3	81.0	80.1	79.4	79.0	78.3	77.9	80.0
28	77.7	77.1	77.0	76.2	75.5	75.1	75.4	75.6	76.9	78.5	80.1	82.4	83.3	84.2	84.0	83.9	82.9	81.8	80.9	80.1	79.6	79.3	78.8	78.9	79.4
29	78.5	78.2	78.1	78.2	78.3	78.7	78.7	78.9	80.0	81.1	82.6	84.1	84.8	84.8	84.9	84.7	84.0	83.1	82.8	82.2	81.8	81.6	81.5	81.5	81.3
Mean	...	78.3	78.1	78.0	77.7	77.5	77.4	77.5	78.1	79.1	80.1	81.1	81.9	82.3	82.5	82.3	81.5	80.8	80.2	79.7	79.4	79.1	78.8	78.6	79.5
Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean



Readings in degrees absolute at exact hours, Greenwich Mean Time.

456. Richmond (Kew Observatory) : North Wall Screen :  $h_t$  (height of thermometer bulb above the ground) = 3.0 metres.

March, 1928.

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean
Day.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.
1	81.5	81.5	81.3	81.0	80.9	80.9	81.0	81.6	82.8	83.6	84.0	83.6	84.4	83.8	83.9	83.5	83.1	83.1	82.6	82.0	81.6	81.0	80.6	80.5	82.3
2	80.0	80.2	80.2	80.3	80.4	80.5	81.2	81.9	82.8	83.1	83.6	83.7	83.5	83.2	83.4	83.6	83.8	83.7	83.2	82.0	81.8	81.0	80.7	80.7	82.1
3	79.8	79.0	79.7	79.4	79.5	80.3	80.4	80.9	81.7	83.4	84.6	86.5	88.0	88.0	88.2	87.8	87.0	85.5	84.0	83.6	83.1	82.8	82.2	81.5	83.2
4	81.4	80.6	80.0	79.1	78.7	78.6	78.4	78.8	80.8	83.6	85.6	88.9	89.8	90.2	90.4	90.1	89.2	87.5	84.5	83.1	83.2	82.7	80.4	80.1	83.6
5	80.5	79.0	78.1	77.6	76.7	75.7	74.5	75.5	77.7	82.3	84.8	86.3	87.8	88.0	87.8	87.6	87.0	85.7	84.9	84.1	83.1	81.7	81.7	81.4	82.0
6	81.0	80.6	81.3	81.4	81.3	81.3	80.9	80.7	80.7	81.4	81.6	81.1	81.8	81.9	81.8	81.6	81.6	81.1	80.7	80.3	80.0	79.8	79.5	79.2	81.0
7	78.8	78.5	78.2	78.2	77.9	78.1	78.2	78.4	78.5	78.9	79.0	79.5	79.9	80.0	80.3	80.4	80.2	80.2	80.0	79.9	79.9	79.9	79.8	79.1	79.3
8	78.0	77.4	76.3	76.5	76.8	76.4	76.4	76.5	77.6	78.0	78.0	78.1	78.5	78.6	78.3	78.6	78.2	77.7	77.6	77.5	77.1	77.0	76.6	76.5	77.5
9	76.1	75.5	74.9	74.3	74.5	74.3	74.5	74.6	74.9	76.0	77.0	76.6	78.1	77.0	77.0	73.8	75.1	75.3	75.3	74.9	74.3	74.2	74.0	73.6	75.3
10	73.4	73.4	73.3	73.0	72.7	73.0	73.0	73.1	74.0	74.6	75.1	75.5	76.4	76.3	76.6	73.1	74.8	74.1	73.1	72.5	72.1	71.7	71.0	70.9	73.7
11	70.8	71.1	70.6	70.7	71.0	70.7	70.8	71.2	71.2	71.4	71.8	72.3	72.7	73.1	72.7	72.9	72.4	72.0	71.7	71.6	71.5	71.1	71.1	71.2	71.6
12	70.9	71.0	71.1	71.3	71.5	71.3	71.4	71.7	72.5	73.4	74.0	74.6	75.4	75.5	75.7	73.8	74.8	74.0	73.7	73.0	72.5	72.0	71.4	71.0	73.1
13	73.1	73.8	73.9	73.2	73.1	73.0	73.2	74.0	74.1	74.5	75.0	75.5	75.7	76.3	76.2	76.2	75.9	75.6	75.3	75.4	75.0	74.7	74.6	74.5	74.6
14	74.0	74.0	74.0	74.1	73.9	73.9	74.0	74.3	75.0	75.2	75.9	76.5	77.2	77.8	78.0	77.6	77.7	77.5	76.8	76.2	76.0	75.6	75.5	75.4	75.7
15	74.9	73.7	73.4	74.0	74.2	74.2	74.4	75.5	77.4	78.6	79.1	79.4	80.1	80.8	80.7	80.4	80.0	78.5	77.5	76.4	75.9	75.3	74.7	74.5	76.8
16	74.0	73.6	74.1	75.2	75.7	75.3	74.5	75.8	79.5	81.1	82.5	83.4	84.0	84.0	83.7	83.2	82.0	81.3	80.8	80.6	80.3	80.4	80.6	80.6	79.3
17	80.5	80.0	79.5	79.5	79.5	79.4	79.5	79.5	80.1	82.5	84.1	84.5	84.8	85.9	85.4	84.0	82.9	82.1	81.2	81.4	81.4	81.6	81.7	81.8	81.8
18	81.8	81.5	81.3	82.2	82.1	81.9	82.5	82.7	82.0	84.0	84.9	85.4	85.6	86.6	86.2	85.9	85.5	83.9	82.6	81.6	81.2	80.9	80.5	81.0	83.1
19	81.5	81.9	81.9	82.0	82.2	82.4	82.6	83.4	84.0	85.2	86.0	86.5	86.0	86.1	85.9	85.5	85.4	85.0	85.2	85.5	85.4	85.5	85.6	85.7	84.3
20	85.0	84.6	84.7	83.9	83.4	82.8	82.4	83.0	83.9	85.4	86.7	87.9	88.8	89.1	88.2	87.4	86.8	86.3	85.6	85.2	85.0	84.4	83.5	82.7	85.8
21	82.1	81.6	81.1	80.5	80.0	79.5	79.5	79.4	79.7	80.2	80.2	80.2	79.8	79.8	79.4	79.4	79.0	78.8	78.8	79.0	79.2	79.7	80.9	81.3	80.0
22	81.3	80.7	80.5	80.2	80.8	81.2	81.3	82.3	83.0	83.9	84.7	84.7	84.6	84.7	84.9	85.0	83.7	82.4	82.4	81.8	82.0	81.6	81.9	82.6	82.6
23	81.4	81.8	81.9	82.0	81.8	81.4	82.2	82.7	82.8	83.4	84.6	84.6	84.7	84.9	85.3	84.4	84.5	83.9	82.6	81.9	80.9	80.7	80.8	79.9	82.7
24	79.7	80.2	80.3	80.3	80.6	80.4	81.1	81.9	82.3	82.6	83.9	84.5	85.4	82.6	83.4	83.8	84.6	84.0	81.4	80.4	79.5	78.6	78.2	77.7	81.6
25	77.6	77.8	77.9	77.5	77.6	77.6	78.4	80.5	81.8	82.7	84.2	85.1	85.1	84.6	84.9	84.9	84.4	83.2	82.5	82.0	81.9	81.8	82.0	81.4	81.5
26	81.2	81.1	80.7	80.4	80.0	79.5	79.2	79.5	81.8	83.3	84.0	84.4	85.2	85.7	86.4	86.5	86.2	85.2	83.7	82.6	81.6	80.8	80.0	79.4	82.5
27	79.6	79.0	79.0	79.0	79.1	79.5	80.8	81.8	83.2	83.6	83.8	82.9	82.7	83.0	83.0	82.5	82.5	82.2	81.9	81.5	80.7	79.9	79.5	79.0	81.2
28	78.1	77.0	77.0	76.8	77.1	77.0	77.5	78.8	79.5	80.4	81.6	82.0	83.0	82.7	83.4	83.0	80.5	80.0	79.2	78.6	77.8	77.1	76.4	75.6	79.3
29	75.5	75.0	74.6	74.5	74.9	75.7	77.1	78.6	80.0	80.2	80.0	80.2	80.5	81.4	82.8	83.0	83.4	83.4	83.2	83.0	81.3	80.8	79.3	79.6	79.6
30	79.3	78.8	78.6	78.6	78.7	79.0	80.5	81.6	83.1	82.4	83.1	83.9	81.9	82.6	83.5	83.9	82.3	81.3	80.7	80.4	80.0	79.8	79.3	79.3	81.0
31	78.7	78.5	78.3	78.4	77.6	77.9	78.7	79.5	80.3	82.4	82.8	82.8	83.4	83.1	80.5	78.6	80.2	80.3	80.4	80.4	80.0	79.9	80.0	79.9	80.1
Mean	...	78.4	78.2	78.0	77.9	77.8	78.1	78.7	79.6	80.7	81.4	81.9	82.5	82.5	82.4	82.0	81.9	81.2	80.5	80.1	79.7	79.3	79.0	78.7	79.9

457. Richmond (Kew Observatory) : North Wall Screen :  $h_t$  = 3.0 metres.

April, 1928.

	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.
1	80.0	79.9	80.2	79.9	80.3	80.3	79.8	80.2	80.1	80.3	80.7	80.7	80.9	81.3	81.1	81.2	80.9	80.4	80.5	80.4	79.8	79.3	79.1	78.8	80.3	
2	78.4	77.6	76.7	76.9	77.0	76.9	77.4	78.9	79.9	80.8	81.4	82.3	83.0	83.5	83.7	84.1	84.1	83.3	81.5	79.6	79.5	79.0	79.1	78.6	80.1	
3	78.4	78.6	78.5	78.5	79.1	79.8	80.5	81.1	81.7	82.9	82.8	82.6	83.0	83.1	83.1	83.3	83.4	83.4	82.9	82.4	81.6	81.0	80.6	80.8	81.3	
4	80.5	80.0	79.3	78.8	79.2	79.4	80.3	82.0	81.2	82.8	83.0	83.2	83.6	83.5	83.7	83.7	81.3	80.9	79.6	78.8	78.3	78.0	77.6	77.1	80.6	
5	77.1	76.6	76.3	76.0	75.7	75.2	76.5	79.0	80.5	82.0	81.6	83.3	84.1	84.4	84.7	83.9	83.7	83.9	82.6	81.0	80.7	79.2	78.2	77.4	80.0	
6	76.1	76.1	74.9	74.7	73.9	74.4	76.1	78.4	80.4	82.4	83.2	84.0	85.7	85.9	86.8	86.5	84.9	82.5	80.9	80.1	78.7	78.4	78.5	78.0	80.4	
7	78.3	77.9	77.7	76.9	77.4	78.6	79.5	81.1	83.2	85.3	85.5	86.0	86.2	86.2	86.6	86.5	84.5	83.6	83.5	83.7	84.0	84.1	83.1	82.3	82.3	
8	82.5	82.2	81.6	81.4	81.9	82.2	82.4	82.7	84.5	84.4	85.5	86.2	86.6	86.5	87.0	86.5	86.6	86.2	84.5	83.6	83.3	83.2	84.0	83.7	84.1	
9	83.6	82.9	82.9	83.6	83.4	84.1	84.5	85.3	86.7	87.6	88.8	89.5	90.6	91.6	91.3	91.1	90.9	89.9	89.5	89.0	88.6	87.9	87.1	86.8	87.3	
10	86.6	86.5	86.3	86.3	85.7	85.7	86.1	86.5	87.1	87.5	88.2	88.4	88.0	87.9	86.1	85.5	85.0	84.4	83.6	83.2	83.0	82.6	82.7	82.5	85.7	
11	82.8	82.4	81.3	81.2	81.1	80.5	82.1	84.0	85.7	86.4	87.2	87.4	87.1	88.0	88.1	87.9	87.2	87.0	85.8	84.5	84.2	84.1	83.6	83.2	84.7	
12	83.6	83.0	82.6	82.4	82.0	81.9	82.4	83.2	83.5	84.4	85.5	85.9	85.0	85.2	85.0	84.8	84.5	84.3	83.5	83.0	82.9	82.9	82.7	83.7	83.7	
13	82.5	82.3	82.3	82.1	82.1	81.8	81.4	81.5	82.5	82.9	83.8	84.9	84.6	85.4	85.6	84.5	83.6	83.3	82.4	82.1	81.9	82.4	82.3	81.9	82.9	
14	82.0	81.9	81.6	81.2	80.7	80.5	80.1	79.9	79.8	79.6	79.4	79.0	78.9	78.9	79.0	78.8	78.6	78.9	79.1	79.1	79.0	78.9	78.6	78.1	79.7	
15	78.0	77.9	77.5	77.0	76.5	76.4	76.6	77.4	77.2	77.4	77.8	77.7	77.9	77.9	77.8	77.8	78.5	78.3	78.0	78.0	77.9	77.7	77.7	78.0	77.6	
16	77.8	76.5	74.9	74.6	74.6	74.2	75.0	75.1	75.8	75.1	75.5	76.5	77.0	77.0	76.9	76.9	77.0	76.8	76.5	76.1	76.3	76.1	76.1	76.0	76.1	
17	76.0	75.9	75.7	75.2	73.8	73.5	74.5	76.9	78.4	79.5	80.5	80.5	81.0	81.7	80.6	79.9	79.5	79.0	78.6	78.4	77.3	76.8	76.1	76.0	77.8	
18	75.5	74.9	74.0	73.5	73.0	73.3	74.1	76.1	77.4	78.5	79.6	79.8	80.1	80.2	80.5	81.1	81.0	77.1	77.0	76.0	75.5	75.0	75.4	75.0	76.9	
19	74.2	73.6	74.4	74.5	74.4	74.5	75.0	76.4	77.6	78.8	79.9	80.7	81.6	82.2	82.9	83.4	81.0	81.3	79.5	78.7	78.1	78.0	77.1	76.3	78.1	
20	75.5	75.0	74.8	74.0	73.6	74.2	75.5	76.6	79.0	80.2	80.7	80.2	81.0	81.0	81.4	81.5	81.7	81.0	78.4	77.8	77.2	76.5	75.6	75.2	77.8	
21	74.7	74.6	74.0	73.7	73.6	74.7	76.1	77.5	79.6	80.1	80.7	79.3	80.6	78.6	77.1	78.1	78.5	78.5	78.1	77.8	77.0	76.6	76.0	75.4	77.1	
22	74.9	74.5	74.5	74.4	74.4	74.9	76.0	78.1	78.8	79.9	80.4	81.0	81.8	82.4	83.5	83.0	82.0	81.8	81.3	80.6	80.0	79.2	79.2	78.3	78.9	
23	78.0	77.2	76.6	76.1	75.6	77.0	78.6	81.0	82.2	82.6	83.7	84.1	84.2	84.4	84.4	84.0	84.2	83.8	83.1	82.7	82.5	82.1	82.0	81.6	81.3	
24	81.2	79.9	79.1	78.7	78.9	79.6	82.0	83.8	85.5	86.1	87.4	88.0	88.5	88.7	88.9	88.0	88.4	87.8	85.8	84.5	83.7	83.1	82.8	82.1	84.3	
25	81.5	82.1	81.6	81.9	82.2	82.1	82.9	85.0	87.0	88.1	89.5	91.0	91.2	91.0	91.5	91.6	91.9	90.4	89.0	87.5	88.0	87.3	86.5	85.7	86.9	
26	85.6	84.9	84.2	84.6	84.4	85.0	86.5	87.5	89.4	91.1	92.5	93.6	94.0	93.6	95.5	95.9	95.0	93.7	91.6	90.1	88.9	88.2	87.4	86.6	89.6	
27	86.6	86.4	86.0	85.5	85.1	85.2	85.4	86.3	86.6	87.5	88.4	88.8	88.7	88.6	88.9	88.7	88.1	87.7	86.9	86.0	84.4	83.9	83.6	82.0	86.6	
28	81.0	79.8	78.4	78.1	77.0	78.9	79.0	80.9	84.8	87.9	88.1	88.5	89.1	89.8	90.3	90.8	91.1	90.3	88.9	86.9	85.7	84.9	84.0	83.1	84.9	
29	81.1	80.9	80.9	80.9	81.3	81.6	82.5	83.9	84.8	85.9	87.6	88.5	89.8	89.4	89.6	89.2	88.7	87.4	86.2	85.7	84.9	84.5	84.3	83.5	85.1	
30	83.3	83.0	82.4	82.0	82.1	82.4	82.7	83.3	84.0	84.5	84.7	86.2	87.7	87.6	85.7	83.9	83.5	83.3	83.0	83.0	83.0	82.8	82.9	82.8	83.8	
Mean	...	79.9	79.5	79.0	78.8	78.7	79.0	79.7	80.9	82.2	83.0	83.7	84.3	84.7	84.9	84.8	84.7	84.4	83.7	82.8	82.1	81.6	81.1	80.9	80.4	81.9
Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean	



Readings in degrees absolute at exact hours, Greenwich Mean Time.

458. Richmond (Kew Observatory): North Wall Screen:  $h_t$  (height of thermometer bulb above the ground) = 3.0 metres.

May, 1928.

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean
Day.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.
1	82.8	82.9	83.0	83.0	83.0	83.2	83.6	84.1	85.4	85.9	86.2	87.6	88.2	88.2	89.5	89.6	89.8	89.1	88.1	86.0	85.7	85.6	85.4	84.9	85.8
2	84.8	84.5	84.2	84.0	83.6	83.5	83.9	83.7	84.4	85.1	85.2	85.1	86.0	87.5	87.4	87.4	87.5	87.4	86.6	86.1	86.2	85.4	85.1	85.1	85.4
3	85.0	84.6	83.9	83.8	83.6	83.6	83.8	84.1	84.9	86.1	87.6	89.7	92.8	94.5	94.6	93.5	93.5	93.0	91.6	91.0	90.4	89.9	88.0	87.8	88.3
4	87.3	87.0	86.5	85.8	85.2	85.4	86.0	86.6	88.0	89.2	90.2	91.3	91.5	91.9	91.7	91.7	91.8	91.5	90.7	89.4	87.9	87.2	86.8	86.8	88.7
5	86.0	85.4	84.9	84.5	84.4	84.4	85.5	86.6	88.3	89.8	91.6	91.5	92.0	92.4	92.0	91.9	92.2	91.2	90.0	88.6	87.6	86.5	85.6	84.7	88.3
6	84.2	83.0	81.7	81.6	81.1	81.5	83.0	85.0	87.9	89.6	90.6	91.5	92.3	92.7	93.1	93.3	93.3	92.9	91.8	89.0	86.3	85.2	84.1	82.8	87.4
7	81.6	81.0	81.2	81.3	80.4	82.0	84.3	85.6	87.0	88.6	89.6	90.1	90.5	91.0	91.1	90.4	90.2	89.0	87.3	85.4	83.4	81.9	80.7	80.5	85.6
8	80.0	79.6	78.6	78.1	77.7	78.6	80.1	81.2	82.6	83.6	84.4	85.7	86.3	86.7	85.2	83.1	82.1	81.9	81.4	80.4	79.4	78.6	77.7	77.2	81.3
9	76.6	75.8	75.6	75.3	75.1	76.2	77.6	79.0	80.1	80.8	81.7	82.0	82.6	82.8	83.7	83.4	83.2	82.7	82.2	81.2	80.3	79.3	78.3	77.4	79.7
10	76.2	76.5	76.8	76.2	76.6	76.9	78.4	79.5	80.9	82.0	83.3	84.6	84.8	83.1	84.9	85.7	85.3	85.3	84.7	84.0	83.7	83.1	82.2	81.1	81.4
11	80.2	79.6	79.0	78.4	78.4	78.7	79.7	80.2	80.9	81.4	82.6	83.5	83.1	84.1	85.5	85.5	85.9	85.9	85.1	82.1	81.2	81.1	81.0	80.6	81.8
12	80.6	80.5	80.6	80.4	80.5	81.0	82.2	83.6	85.1	86.2	86.6	87.5	86.4	87.1	87.0	86.4	86.0	85.8	85.4	84.6	84.5	84.0	83.6	83.3	84.1
13	83.0	83.0	82.6	82.4	82.3	82.5	83.5	84.5	86.3	87.3	87.8	88.0	87.4	87.4	87.4	86.5	86.3	86.0	86.0	85.0	84.4	83.8	83.5	83.4	85.0
14	83.0	82.5	82.2	82.2	82.0	82.9	83.2	84.4	85.9	86.7	86.1	87.1	86.5	85.0	83.1	83.2	82.7	82.7	82.3	81.2	80.2	79.1	77.8	77.8	83.2
15	77.5	76.7	76.1	75.5	75.6	77.1	79.1	80.3	81.4	81.8	82.6	83.6	85.1	86.1	86.9	86.7	86.2	85.7	83.9	83.7	83.3	82.6	82.1	81.9	81.6
16	81.5	81.9	81.7	81.6	79.0	78.7	79.2	78.5	78.6	79.4	78.3	80.0	80.6	82.5	82.9	81.7	82.1	81.6	80.7	79.9	79.9	79.6	79.5	78.6	80.4
17	77.8	78.5	78.7	79.2	79.5	80.1	80.3	81.2	82.3	82.3	83.8	84.5	84.9	85.8	82.7	81.9	82.3	80.4	80.1	80.1	79.9	80.0	80.1	80.5	81.1
18	80.2	80.1	80.3	80.2	80.0	80.2	80.4	81.2	81.4	80.0	82.2	83.6	81.8	83.2	83.0	82.6	82.4	81.4	81.3	81.2	80.7	79.7	78.8	78.1	81.1
19	77.6	76.7	76.5	75.8	75.7	76.2	78.8	81.0	82.6	84.0	84.4	85.8	82.6	81.8	83.5	82.8	83.0	81.7	81.6	81.1	80.7	80.5	79.8	79.5	80.5
20	79.7	78.5	79.1	78.0	79.0	79.4	80.0	80.8	81.8	83.2	84.2	84.8	85.9	82.8	82.0	82.3	82.5	82.5	81.9	81.4	81.0	80.1	79.8	79.3	81.3
21	79.0	78.6	78.8	79.4	79.9	80.5	81.2	82.5	83.1	85.0	85.3	83.1	83.1	85.5	85.7	83.0	84.1	83.7	84.0	83.6	83.2	83.1	82.6	82.4	82.5
22	81.8	81.5	81.2	81.0	80.9	81.1	81.1	81.5	81.7	82.5	82.2	82.4	82.0	82.3	81.8	81.9	81.4	81.3	81.1	80.7	80.3	80.0	79.9	79.7	81.4
23	79.2	78.4	78.4	78.3	78.6	78.7	78.8	79.4	79.8	80.6	80.7	80.6	80.6	81.0	81.1	81.1	81.1	81.0	80.9	80.7	80.3	80.0	80.3	80.3	79.9
24	80.4	80.4	80.4	80.5	80.5	80.7	81.1	81.9	83.2	84.1	84.2	85.1	86.1	86.1	86.5	87.8	87.3	88.0	86.6	84.6	83.2	82.6	82.0	80.4	83.5
25	79.0	78.6	79.3	79.7	80.4	80.4	80.7	82.0	84.4	86.6	87.7	89.3	90.9	91.7	91.3	91.1	91.4	90.3	90.4	86.7	84.1	82.6	81.1	80.1	85.0
26	79.4	79.1	78.2	78.2	79.3	81.7	85.6	87.1	88.6	89.7	90.5	91.5	92.2	92.0	92.1	91.5	90.1	89.8	88.7	87.9	87.2	87.0	86.5	86.1	86.5
27	86.1	85.9	85.7	85.6	85.4	87.0	88.9	90.1	90.8	92.1	93.0	94.1	94.9	95.1	95.5	95.5	95.0	93.7	93.2	90.5	88.5	88.0	87.6	86.7	90.4
28	86.0	86.0	85.7	85.2	85.0	86.2	87.7	90.1	92.5	94.9	95.1	96.2	96.4	96.1	97.1	96.5	96.1	95.7	94.3	92.9	90.7	90.0	89.7	89.1	91.5
29	89.0	88.8	87.9	87.5	87.6	87.9	88.8	90.1	91.2	93.6	95.3	95.1	96.0	96.1	95.1	95.6	94.8	93.2	92.4	91.1	90.3	90.0	89.7	89.6	91.5
30	89.1	88.0	87.7	87.4	87.3	87.5	88.1	89.0	91.0	92.3	93.6	94.6	95.4	95.5	95.7	95.5	94.1	93.7	92.8	91.1	90.0	89.0	88.1	87.1	91.0
31	86.1	85.1	84.0	83.0	83.6	83.9	83.3	84.0	84.5	84.1	84.0	84.1	85.1	85.7	86.8	87.3	86.8	86.5	86.1	85.1	84.7	84.3	84.6	84.8	84.9
Mean	82.0	81.6	81.3	81.1	81.0	81.5	82.5	83.5	84.7	85.7	86.5	87.2	87.6	87.9	88.0	87.6	87.5	86.9	86.3	85.1	84.2	83.6	83.0	82.5	84.5

459. Richmond (Kew Observatory): North Wall Screen:  $h_t$  = 3.0 metres.

June, 1928.

	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.
1	85.0	85.1	85.1	85.2	85.3	85.5	85.8	85.9	86.2	88.0	87.8	87.4	87.1	86.3	86.2	88.1	88.8	89.0	88.1	86.6	85.8	85.1	84.5	84.0	86.3
2	83.8	83.6	83.4	83.6	84.2	85.0	85.7	86.5	86.9	87.6	87.7	88.1	88.6	88.9	89.1	89.1	88.7	88.6	87.9	86.5	85.3	84.4	83.7	83.0	86.3
3	82.4	81.8	80.5	79.8	80.6	83.3	85.2	86.8	88.4	89.1	90.1	90.7	91.5	93.1	92.5	92.9	93.1	92.9	92.1	89.7	87.6	86.3	85.3	83.9	87.5
4	83.1	82.1	81.1	80.9	81.7	83.7	85.7	86.5	87.3	88.6	89.8	90.7	90.7	91.1	90.5	90.2	89.7	89.5	88.2	87.6	86.7	86.6	85.1	84.6	86.7
5	84.1	84.1	83.9	83.9	83.8	83.7	83.9	84.3	84.7	85.7	86.2	87.6	88.6	89.2	89.7	89.2	89.4	88.6	88.2	88.0	87.6	86.7	86.5	85.8	86.4
6	85.1	83.6	82.7	81.8	83.1	83.9	85.2	86.4	89.0	91.1	91.8	93.8	94.3	94.1	94.9	95.7	96.3	95.8	94.6	91.6	88.6	86.7	85.7	85.0	89.2
7	85.9	85.6	86.5	86.6	86.4	86.7	87.1	87.2	87.3	87.2	88.4	88.7	91.2	91.2	91.5	90.7	92.1	90.8	88.8	87.9	87.1	86.6	86.5	86.0	88.0
8	85.6	85.5	85.6	85.4	85.6	85.8	86.1	87.1	88.2	89.1	90.1	91.6	92.3	92.5	92.4	92.6	92.2	90.4	90.1	88.7	87.6	86.7	86.1	86.1	88.5
9	86.2	86.6	86.9	86.8	87.1	87.6	88.3	87.6	88.5	90.0	90.6	91.5	92.0	92.1	91.1	92.1	92.0	90.7	90.2	89.4	88.1	87.3	87.4	87.5	89.0
10	87.5	87.4	87.1	87.0	86.8	87.6	87.5	88.1	88.4	89.1	88.2	90.0	89.7	90.1	89.8	87.1	86.9	85.6	85.6	84.6	83.4	82.5	81.5	81.5	87.1
11	81.0	80.5	79.9	79.9	81.1	82.5	83.3	85.4	86.1	87.0	87.7	84.2	87.7	88.7	89.7	89.1	88.6	89.1	87.9	86.0	85.1	83.7	82.6	81.8	84.9
12	81.1	80.5	80.1	79.9	81.5	82.4	83.9	85.7	87.1	87.2	88.4	87.8	89.3	90.4	90.2	89.3	89.0	88.0	87.5	86.6	85.6	85.3	83.7	82.7	85.7
13	84.6	84.6	84.6	84.9	85.9	87.5	88.5	90.1	91.1	92.0	94.2	94.8	95.2	96.4	96.6	95.1	93.8	92.8	90.2	89.6	89.0	89.2	88.4	88.1	90.2
14	88.1	88.0	87.7	87.7	87.2	87.0	87.1	87.9	88.0	88.2	90.0	90.1	91.5	88.9	87.6	88.1	84.5	83.9	83.3	82.8	82.4	81.7	81.5	81.3	86.6
15	81.1	80.7	80.1	79.5	79.6	80.4	81.9	83.2	84.7	85.7	86.6	86.7	87.6	88.5	88.7	88.9	88.7	88.6	87.7	85.7	84.6	83.6	83.2	83.0	84.5
16	82.7	81.9	81.5	80.9	81.9	82.5	83.1	84.0	84.7	85.3	85.2	85.6	86.4	86.5	86.3	86.2	86.0	85.7	86.1	85.0	82.2	81.9	81.7	81.1	84.0
17	80.3	80.0	79.5	79.0	79.5	80.6	82.6	84.3	85.7	86.1	87.0	87.9	87.9	87.9	88.1	88.3	87.9	87.4	86.6	86.0	84.2	83.2	82.7	82.1	84.3
18	82.4	82.6	82.7	83.0	83.5	84.1	85.2	85.6	86.6	86.9	87.8	88.5	89.1	89.0	89.7	89.6	88.3	87.3	86.6	86.1	85.9	85.6	85.3	84.8	85.8
19	84.8	84.7	84.7	84.6	84.5	85.1	86.6	86.9	87.8	88.5	89.1	89.9	90.0	90.9	90.3	91.5	90.1	89.3	88.6	88.1	87.5	86.7	86.1	85.9	87.6
20	85.8	85.7	85.7	85.6	85.9	86.5	86.6	86.9	88.2	88.4	89.2	89.7	90.1	90.9	91.6	91.6	92.1	92.4	91.8	90.1	87.2	85.6	84.2	84.2	88.2
21	83.6	83.0	82.4	81.3	81.7	84.7	87.1	88.1	87.6	88.6	88.6	88.6	89.1	89.0	88.6	88.4	88.4	88.5	88.4	88.3	88.3	88.1	87.8	87.6	86.8
22	87.6	87.1	87.0	87.0	87.1	87.8	88.6	89.5	89.6	90.6	91.7	90.7	90.5	91.2	92.1	91.8	91.5	91.2	92.2	89.7	88.1	86.6	85.6	84.9	89.2
23	84.2	83.8	83.1	82.7	84.0	85.1	86.0	87.5	88.4	90.2	90.4	91.3	91.2	91.9	93.2	93.3	93.5	93.3	93.3	91.7	88.6	87.5	86.9	86.1	88.5
24	85.2	84.6	84.1	83.5	84.5	85.2	85.7	87.2	88.0	89.9	90.4	91.9	92.6	93.1	93.4	94.1	94.0	94.2	94.1	91.1	89.5	88.1	87.2	86.6	89.1
25	85.8	85.9	85.1	83.7	84.1	86.8	88.4	90.1	90.6	91.6	92.7	93.6	94.4	95.3	95.6	96.3	96.2	94.3	93.5	92.9	91.8	90.7	89.6	88.7	90.7
26	88.4	87.4	87.1	86.9	87.1	87.3	88.1	88.3	89.2	89.6	89.2	89.1	89.8	89.8	89.8	89.3	90.0	88.6	88.0	86.6	86.8	86.5	85.7	85.1	88.1
27	84.9	84.5	84.3	83.2	83.5	83.8	84.3	85.5	86.1	87.1	88.3	88.6	89.2	90.0	90.1	90.4	90.7	91.3	88.3	87.6	86.8	86.8	86.6	86.0	87.0
28	85.1	84.4	83.6	83.5	84.6	85.0	86.0	86.6	87.8	89.2	90.3	90.9	91.8	91.0	90.2	89.6	89.3	89.1	88.7	88.1	87.5	87.0	86.6	86.1	87.6
29	85.8	85.7	85.6	85.8	86.1	86.7	88.3	89.2	89.6	91.0	91.1	92.1	92.6	92.3	93.1	92.1	90.7	89.0	88.4	86.4	85.3	84.6	84.5	84.5	88.4
30	84.2	83.7	83.1	83.0	84.1	85.3	86.1	87.2	88.0	88.3	89.7	87.2	89.7	89.4	89.7	90.1	91.0	90.2	89.5	87.6	86.4	85.5	84.6	84.5	87.0
Mean	...	84.5	84.2	83.8	83.5	84.1	85.0	85.9	87.7	88.6	89.3	89.7	90.4	90.7	90.7	90.4	89.8	89.1	87.9	86.7	85.9	85.3	84.8	87.3	
Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean



Readings in degrees absolute at exact hours, Greenwich Mean Time.

460. Richmond (Kew Observatory) : North Wall Screen :  $h_t$  (height of thermometer bulb above the ground) = 3.0 metres.

July, 1928.

Hour G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean	
Day.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	
1	84.5	84.6	84.6	84.5	84.7	85.5	86.6	88.0	88.2	89.1	90.1	90.5	90.9	91.9	91.9	91.7	90.8	90.1	89.6	88.1	86.8	86.1	85.7	85.3	87.9	
2	85.0	85.2	85.7	86.1	86.7	87.6	87.6	89.2	90.2	91.3	91.7	92.2	92.5	92.9	93.7	92.4	91.9	93.0	91.7	90.9	90.3	89.6	88.9	88.4	89.7	
3	87.2	86.1	85.3	84.9	85.3	86.1	87.7	88.8	90.0	90.6	91.6	92.4	92.6	92.5	91.7	89.9	88.6	87.2	86.6	86.5	86.3	86.3	86.1	85.7	88.2	
4	85.6	85.8	85.7	85.2	85.1	85.0	85.7	87.2	88.1	89.0	89.6	90.5	91.8	91.8	91.8	93.0	93.0	91.1	90.1	89.0	88.2	87.5	87.0	86.6	88.5	
5	86.5	86.6	86.9	86.9	86.9	87.5	88.4	89.4	90.0	91.9	92.1	92.7	92.5	93.8	93.5	92.2	90.7	90.1	89.6	89.0	88.7	88.3	87.8	87.8	89.5	
6	87.8	86.5	86.4	85.1	85.0	85.1	86.6	87.6	88.1	89.0	89.1	90.1	89.7	90.2	90.5	90.7	91.1	90.3	89.6	89.0	88.1	87.2	86.6	86.2	88.2	
7	86.2	86.1	86.1	85.9	86.0	86.5	87.4	87.9	88.7	89.0	90.0	90.6	91.5	91.3	92.8	93.0	93.1	94.1	92.4	90.8	89.8	88.6	87.4	86.6	89.2	
8	86.0	85.4	85.0	84.5	85.4	86.6	88.2	89.5	90.4	91.6	92.6	93.0	93.7	94.0	94.6	94.0	93.7	93.5	92.0	90.7	89.6	88.9	88.9	88.9	90.0	
9	88.9	88.8	88.6	88.7	88.6	88.8	89.2	90.4	90.9	91.0	91.9	92.8	94.0	94.5	95.0	95.0	94.5	94.1	93.0	90.9	89.5	88.5	87.5	86.6	90.9	
10	85.9	85.5	84.8	84.5	85.1	85.5	87.2	88.5	90.7	92.1	93.2	94.6	95.6	96.6	97.1	97.0	96.0	94.6	93.2	91.7	90.5	89.6	88.9	88.0	90.7	
11	87.7	87.1	86.4	86.1	87.4	88.3	89.0	90.6	91.9	93.2	94.7	95.6	97.1	98.0	99.0	99.0	99.8	99.7	99.1	95.0	93.0	90.8	89.8	88.7	92.8	
12	88.0	87.0	86.9	85.1	86.2	87.9	89.5	91.3	93.1	94.7	95.9	97.0	98.1	98.8	99.9	100.5	101.1	101.6	100.5	97.0	94.3	92.4	90.9	89.6	93.6	
13	88.9	87.8	86.7	86.7	87.0	87.8	88.8	90.4	91.7	93.0	94.2	95.0	96.6	97.3	98.0	98.6	99.0	98.6	97.0	94.7	92.9	91.2	90.6	93.0		
14	89.5	88.6	86.8	87.1	87.2	88.3	89.7	91.1	92.8	94.6	96.2	97.8	98.8	99.7	100.5	101.2	101.7	102.3	101.9	98.3	93.8	91.8	91.4	89.4	94.2	
15	89.4	89.2	87.5	87.4	87.5	88.7	91.0	93.5	95.4	97.4	98.7	99.8	100.5	101.5	102.2	102.6	102.9	103.2	101.8	98.7	96.4	94.5	92.8	91.1	95.5	
16	90.1	88.3	88.6	88.5	87.8	90.0	90.7	91.9	93.1	94.3	95.5	96.6	97.0	97.1	96.8	96.7	97.0	97.4	97.0	95.6	93.2	91.2	90.1	89.9	93.1	
17	89.3	87.8	87.0	85.9	85.5	85.3	85.4	86.7	88.8	90.8	92.6	93.6	94.8	95.7	96.7	97.4	97.4	96.6	95.0	92.9	90.6	89.0	88.0	86.6	90.9	
18	86.3	86.4	85.7	84.1	85.3	87.1	88.9	90.4	92.6	94.6	96.1	98.0	99.3	100.1	100.9	100.6	100.2	99.8	98.6	96.1	93.3	91.7	90.6	90.4	93.1	
19	90.0	89.6	89.5	89.4	89.5	89.6	89.9	91.1	90.5	91.6	92.4	92.9	94.1	94.0	94.8	94.8	95.0	95.4	94.6	93.2	91.8	90.7	89.8	89.2	91.8	
20	89.7	89.0	88.7	88.6	88.6	89.2	90.0	90.5	91.1	92.1	93.1	93.9	94.9	96.2	97.0	97.5	97.6	98.0	96.8	94.7	93.3	92.4	91.4	90.2	92.7	
21	89.6	89.2	88.6	87.8	87.5	88.3	88.9	89.3	90.5	91.7	92.8	93.7	94.5	95.5	96.5	96.8	97.2	96.9	96.5	94.3	92.6	89.9	88.8	88.1	91.9	
22	86.9	87.1	86.8	85.4	86.4	87.1	88.6	91.6	93.4	95.5	97.4	99.0	100.4	101.1	101.9	101.0	100.0	99.0	97.5	96.0	94.4	93.7	93.0	92.2	93.8	
23	91.2	90.9	89.5	89.2	89.7	90.3	91.0	92.5	93.6	93.9	94.2	95.4	96.0	95.9	96.7	97.0	97.1	96.9	96.0	94.9	93.9	93.2	92.6	92.0	93.5	
24	91.5	91.1	90.6	90.5	90.6	91.0	91.8	92.5	93.4	94.4	95.4	96.6	98.2	98.9	100.0	99.4	98.8	98.8	97.5	96.4	95.8	95.5	94.6	93.9	94.8	
25	92.9	92.5	91.9	91.8	92.0	92.5	93.5	93.6	94.5	95.1	96.4	96.5	97.8	98.0	97.6	98.0	98.1	97.7	96.4	94.4	93.0	91.8	90.9	90.4	94.5	
26	90.0	90.2	90.4	89.5	89.8	90.7	91.1	92.6	93.8	93.1	93.5	94.6	96.0	97.4	98.5	99.6	99.2	98.7	96.2	94.4	93.0	92.2	91.1	90.5	93.6	
27	90.0	89.5	89.5	89.4	89.4	89.5	89.6	90.6	92.0	94.6	94.3	94.9	94.1	93.6	93.1	91.4	90.0	91.0	90.6	90.4	90.2	90.0	89.8	89.5	91.2	
28	87.4	85.4	84.7	84.8	85.0	85.5	86.1	86.8	87.9	88.6	89.4	89.7	89.8	90.6	91.3	91.9	92.1	92.6	91.2	89.9	88.4	87.0	86.1	85.5	88.3	
29	85.0	84.3	83.7	83.4	83.2	84.0	85.1	86.8	88.0	89.0	89.1	90.1	90.7	91.5	91.7	91.1	92.3	92.1	91.4	89.0	87.5	86.6	85.8	84.9	87.8	
30	84.4	84.0	83.9	83.6	83.5	84.9	86.5	88.6	88.9	90.6	90.8	92.5	91.9	90.6	91.7	92.3	91.3	90.7	89.1	88.9	88.3	88.4	88.5	88.3	88.4	
31	87.5	87.5	87.6	87.5	87.4	87.5	88.0	87.6	88.2	89.6	89.9	91.5	92.5	92.1	91.6	91.6	90.9	91.2	90.8	90.2	89.7	89.4	89.1	89.0	89.5	
Mean	...	88.0	87.5	87.1	86.7	86.9	87.7	88.6	89.9	91.0	92.2	93.1	94.0	94.8	95.3	95.7	95.7	95.6	95.4	94.3	92.7	91.3	90.2	89.4	88.7	91.3

461. Richmond (Kew Observatory) : North Wall Screen :  $h_t$  = 3.0 metres.

August, 1928.

	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	
1	89.1	89.0	89.1	89.1	89.0	89.5	89.9	89.9	90.5	91.4	92.9	94.0	93.5	93.1	93.3	93.3	91.5	90.6	89.3	88.8	88.1	87.6	86.9	86.5	90.3	
2	86.5	86.4	86.6	86.6	86.5	86.6	87.0	87.9	88.5	89.2	89.9	91.1	91.4	92.0	92.6	93.1	92.5	91.1	90.6	89.1	88.4	87.8	87.3	87.3	89.0	
3	87.6	87.8	87.3	87.0	87.1	87.5	87.5	87.6	88.4	88.6	88.7	88.8	88.9	88.9	88.7	88.0	87.6	87.6	86.7	86.2	86.2	86.2	86.4	87.6		
4	86.3	86.3	86.0	85.9	86.1	85.9	84.9	84.7	84.9	84.9	85.9	86.3	87.4	87.5	88.5	88.5	88.9	88.5	87.7	86.3	85.3	83.5	83.6	83.1	86.2	
5	82.5	81.5	82.0	81.9	81.9	82.4	83.9	85.7	87.8	89.6	91.5	92.7	93.8	94.7	95.1	95.1	95.2	94.8	93.6	90.9	88.9	87.3	85.9	85.0	88.5	
6	84.5	84.1	83.7	83.5	83.1	83.6	86.1	88.9	91.6	93.0	93.9	94.5	95.6	96.3	95.7	94.8	93.7	92.9	91.9	90.8	89.9	89.2	88.1	88.5	89.8	
7	87.9	87.5	87.3	87.6	87.6	88.8	90.4	91.1	93.0	93.9	94.5	95.1	96.3	96.0	96.8	96.5	95.8	94.1	93.3	92.8	92.7	92.7	92.2	92.2	92.3	
8	90.3	89.4	88.3	88.3	87.9	87.8	88.1	89.2	90.4	91.2	92.1	92.6	93.3	92.8	92.1	92.0	92.2	92.3	91.5	89.5	88.4	87.7	87.3	86.9	90.2	
9	86.3	85.8	85.3	84.8	84.7	85.9	87.1	88.8	89.9	90.6	91.8	92.0	92.9	93.4	93.2	92.9	92.5	93.0	92.1	90.0	88.7	87.7	86.9	86.2	89.3	
10	85.4	85.3	84.7	83.3	83.2	83.7	86.2	88.2	89.5	90.2	90.3	90.9	91.6	92.9	93.5	92.3	90.7	90.8	89.6	89.1	88.7	88.8	88.8	88.8	88.5	
11	88.8	88.8	88.6	88.3	87.7	88.4	89.4	91.3	92.5	93.4	94.5	95.5	96.9	97.8	97.6	98.6	98.5	96.4	95.4	93.6	92.5	91.5	90.5	90.1	92.7	
12	90.2	90.5	90.2	89.6	88.9	89.2	90.2	90.6	91.1	90.3	91.5	92.4	93.0	94.8	94.8	94.6	93.9	93.9	92.2	90.2	88.6	88.4	87.5	87.5	91.1	
13	87.2	87.3	87.2	87.6	88.0	89.0	89.8	90.6	91.3	92.3	93.2	91.7	91.4	92.1	92.1	91.0	90.6	92.4	91.1	90.5	88.4	87.6	86.6	86.9	89.9	
14	87.6	87.5	87.0	86.8	86.7	87.7	88.5	89.6	90.9	91.1	92.5	92.5	91.0	91.8	93.3	93.0	93.0	92.0	90.4	89.2	88.3	87.6	87.4	87.5	89.7	
15	87.1	86.6	86.4	86.0	85.5	86.0	87.1	87.7	88.8	89.7	90.9	92.0	92.1	92.9	92.7	93.2	92.9	93.2	90.7	89.7	89.4	88.3	86.8	85.9	89.2	
16	85.0	84.6	84.2	84.4	84.5	85.0	85.9	87.4	88.4	89.2	89.8	90.5	89.4	89.7	90.0	90.9	90.2	90.0	89.5	88.5	88.0	87.4	86.5	86.2	87.7	
17	85.7	84.8	84.5	84.3	84.5	85.1	85.8	86.8	88.0	89.0	90.3	90.1	90.8	91.1	91.1	91.8	92.2	90.9	89.7	87.9	86.9	87.2	86.5	85.6	88.0	
18	85.0	84.0	83.7	84.0	83.9	83.4	84.8	86.8	88.0	88.5	90.6	91.4	93.5	94.4	94.6	94.8	95.1	94.8	92.6	90.4	88.7	86.7	85.0	84.0	88.7	
19	83.0	82.7	82.1	81.6	81.8	82.2	84.7	86.3	87.0	93.5	94.1	94.9	95.0	94.9	95.0	94.1	95.0	93.0	92.3	91.9	91.0	90.6	90.2	89.5	89.6	
20	87.1	87.6	87.7	87.5	86.6	86.8	87.5	88.3	88.8	89.8	90.5	90.9	92.1	92.5	91.5	90.5	88.8	88.2	87.1	86.5	86.1	85.9	85.3	84.8	88.4	
21	84.1	83.9	83.6	83.5	83.3	84.0	85.1	86.7	88.2	89.2	89.6	90.6	90.7	89.9	91.0	90.9	90.1	89.6	88.8	88.1	87.7	87.3	87.3	87.1	87.5	
22	86.7	86.7	86.5	86.2	86.3	86.6	86.8	88.1	89.1	90.2	91.0	91.9	91.9	91.2	90.0	89.6	89.5	89.6	89.4	89.3	89.4	89.5	89.1	89.0	88.9	
23	89.0	88.7	88.9	89.1	89.4	89.6	90.2	91.1	91.1	92.1	93.0	93.3	93.1	92.8	92.3	92.7	92.6	92.2	91.2	89.8	89.4	89.6	89.0	88.8	90.8	
24	88.0	87.9	87.4	86.6	86.6	86.8	89.6	92.0	93.0	93.5	94.3	93.6	93.8	95.0	96.2	96.0	94.4	93.5	92.3	91.9	90.7	90.4	89.7	89.0	91.3	
25	88.5	87.8	87.5	87.1	86.9	87.5	88.9	90.0	90.4	91.9	93.0	93.8	94.1	94.2	94.1	94.4	94.1	92.5	91.1	90.3	89.5	88.8	88.2	87.9	90.5	
26	87.6	87.5	86.8	86.7	86.6	87.2	88.3	89.9	91.2	92.0	92.1	92.2	92.0	90.5	90.6	90.2	89.6	89.1	88.8	88.6	88.3	88.2	88.1	88.1	89.2	
27	87.6	87.0	86.5	86.4	86.0	86.4	87.4	88.8	90.3	90.9	90.5	91.5	92.9	93.0	93.0	93.0	92.9	91.9	90.4	89.6	89.5	89.5	89.6	88.7	89.7	
28	88.0	87.5	87.1	86.5	86.3	86.7	87.9	88.9	90.4	91.0	92.2	92.4	93.7	93.1	93.8	93.4	93.6	93.0	90.6	88.2	88.1	87.8	87.1	87.1	89.8	
29	87.4	87.4	87.2	86.5	86.0	85.6	86.6	87.8	89.1	89.9	90.7	92.3	91.8	91.3	91.3	92.8	92.7	92.4	89.8	88.5	87.5	86.4	86.0	85.2	88.9	
30	84.6	84.5	84.4	84.1	83.9	84.0	85.4	86.2	87.4	88.7	89.7	90.4	91.4	92.0	92.3	92.8	92.0	90.1	89.5	88.4	87.1	85.9	84.7	84.3	87.7	
31	83.6	83.1	82.6	83.0	82.8	83.1	84.0	86.5	87.9	89.1	90.3	90.9	91.4	91.6	89.3	88.7	87.1	87.1	87.1	86.9	86.8	86.5	86.0	86.0	86.7	
Mean	...	86.7	86.4	86.1	85.9	35.8	86.2	87.3	88.6	89.7	90.6	91.5	92.0	92.5	92.7	92.8	92.7	92.3	91.6	90.5	89.4	88.7	88.1	87.5	87.1	89.3
Hour G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean	



Readings in degrees absolute at exact hours, Greenwich Mean Time.

462. Richmond (Kew Observatory) : North Wall Screen :  $h_t$  (height of thermometer bulb above the ground) = 3.0 metres.

September, 1928.

Hour G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean
Day.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.
1	85.5	84.5	83.2	82.8	82.7	82.2	83.0	86.5	88.5	89.8	91.4	91.9	92.9	91.9	92.0	92.0	91.6	90.4	88.7	87.6	86.7	85.8	84.3	83.6	87.5
2	82.9	82.2	81.2	81.3	81.3	81.1	83.0	86.1	88.1	89.4	90.8	92.2	92.6	93.7	93.0	93.2	92.7	91.6	89.1	87.9	86.9	85.9	84.4	83.3	87.3
3	81.1	81.5	79.9	80.2	80.5	81.4	83.1	85.2	87.9	90.0	91.6	92.4	93.5	94.0	94.2	94.5	94.0	92.2	90.8	89.9	88.8	88.1	87.5	86.8	87.9
4	85.4	85.7	84.8	84.2	83.8	83.4	85.3	88.5	90.3	91.9	93.5	95.0	95.5	96.4	96.7	96.6	96.7	95.4	92.2	90.3	89.3	87.8	85.9	85.0	90.1
5	84.0	83.5	83.1	82.9	82.6	82.6	83.9	87.1	90.2	92.8	94.2	97.4	97.1	97.4	97.2	97.0	96.0	93.8	92.4	91.2	90.4	89.9	90.0	90.0	90.2
6	90.1	90.1	90.4	89.6	89.0	88.2	87.7	88.3	88.4	89.4	90.0	90.9	91.9	91.8	92.0	92.1	91.7	91.0	89.4	88.5	87.6	87.0	86.2	85.6	89.5
7	35.0	85.0	83.6	84.5	83.2	83.7	84.7	86.8	89.8	91.2	92.0	92.2	93.1	93.5	94.0	93.7	93.2	91.6	89.4	87.7	86.7	85.5	84.3	83.6	88.3
8	33.2	83.4	83.0	82.3	82.5	82.5	86.2	89.0	91.2	94.5	96.9	98.2	98.8	99.6	98.6	96.8	95.1	93.5	92.0	90.5	88.9	88.6	88.7	88.6	90.4
9	88.2	87.9	87.5	87.5	87.4	87.5	88.6	89.7	90.0	91.5	92.5	93.8	94.0	94.0	94.0	93.8	92.7	91.1	89.6	87.7	86.7	86.2	85.6	85.2	88.7
10	85.5	85.3	84.7	84.4	84.2	84.4	85.6	87.3	89.2	90.0	90.8	91.9	91.7	92.3	92.4	92.2	91.6	91.0	90.1	89.1	88.7	88.3	87.4	86.6	88.6
11	36.6	86.0	85.5	85.4	84.9	84.9	85.7	88.0	88.6	89.4	90.2	91.2	92.2	92.6	92.3	93.0	93.0	91.9	90.5	88.6	87.9	87.4	86.2	86.1	88.7
12	84.5	83.7	82.9	82.3	81.5	81.2	83.0	83.7	84.5	85.9	86.8	89.5	91.4	91.9	92.4	91.5	91.0	89.5	88.4	87.2	85.7	84.0	83.4	82.6	86.3
13	82.6	81.5	81.2	80.8	81.0	81.3	82.6	83.1	85.5	88.8	89.9	90.3	90.8	91.5	90.8	91.0	89.7	88.7	87.2	85.8	85.6	86.2	85.3	83.8	86.0
14	83.0	83.0	82.7	83.1	83.5	83.1	84.0	86.6	88.5	90.1	90.4	92.0	92.5	92.6	92.1	91.9	91.2	89.7	88.4	87.9	87.4	86.0	84.5	83.3	87.4
15	33.4	83.2	83.5	84.0	83.4	83.2	84.0	84.9	86.3	87.0	88.9	90.3	90.4	91.0	90.5	90.5	90.5	89.5	88.0	87.0	86.0	85.4	84.8	84.0	86.6
16	84.4	85.1	85.6	85.1	85.4	85.6	85.4	85.9	86.5	87.6	88.6	89.9	90.5	91.8	91.9	91.8	91.4	89.7	88.1	86.5	84.9	84.5	84.5	84.5	87.3
17	84.0	83.4	83.1	82.1	82.6	82.1	82.6	85.2	86.9	89.4	91.0	91.8	92.3	92.9	93.1	92.4	91.5	90.1	88.9	87.5	86.3	85.5	83.8	82.9	87.2
18	81.9	82.3	81.6	83.1	83.6	84.0	84.0	84.5	85.6	86.8	88.3	90.5	92.0	92.2	92.8	92.5	92.3	90.7	87.9	86.0	84.9	85.2	84.6	85.2	86.7
19	34.9	84.8	85.2	85.5	85.6	85.1	84.4	84.9	86.0	86.8	88.5	90.2	90.0	90.1	90.1	90.0	89.6	88.3	85.0	83.1	82.4	81.0	80.6	80.5	86.0
20	30.5	80.0	78.8	78.6	79.0	78.8	79.2	80.8	83.1	85.2	86.6	87.3	37.6	89.0	89.0	89.2	88.3	87.0	84.1	82.5	81.5	80.8	80.4	80.1	83.2
21	79.9	79.8	78.9	78.5	78.1	77.9	77.7	79.6	81.8	84.5	86.3	87.1	87.8	88.7	88.4	88.8	88.1	87.1	85.9	85.7	85.6	84.9	84.2	84.1	83.6
22	83.5	82.1	81.1	80.2	79.7	79.3	80.1	81.9	83.9	85.0	85.7	86.5	87.5	87.0	87.2	86.5	86.9	85.5	84.1	83.0	82.2	81.8	81.4	80.9	83.5
23	30.4	80.2	79.7	79.2	79.7	80.2	80.7	81.5	82.5	83.1	84.6	86.0	87.0	86.8	86.8	86.2	85.8	84.5	83.7	83.1	82.7	82.4	82.0	81.4	82.9
24	30.6	79.8	79.6	79.5	79.0	78.9	79.5	80.7	83.4	85.1	85.8	87.5	88.5	88.5	88.5	86.5	85.7	84.8	84.0	82.7	82.9	82.8	82.8	82.6	82.9
25	82.1	82.0	81.6	81.5	81.4	80.6	80.0	80.2	82.2	82.1	83.4	84.6	85.5	86.4	87.1	87.5	87.0	85.7	85.8	85.1	84.0	82.6	81.5	80.2	83.4
26	80.2	79.4	78.0	78.6	78.1	78.5	79.5	80.4	82.9	85.0	86.2	86.9	87.9	87.6	88.4	88.1	87.1	85.9	84.4	83.8	82.0	80.5	79.2	78.9	82.2
27	77.5	77.0	76.5	76.5	76.6	75.6	74.9	76.8	80.5	85.5	87.5	89.2	90.0	90.1	90.0	89.5	88.0	86.6	85.9	85.6	85.5	85.4	84.8	84.7	83.8
28	34.2	84.6	85.0	85.0	85.2	85.5	85.4	86.0	86.4	86.8	87.2	86.6	86.1	86.1	85.6	85.4	85.5	85.2	84.9	84.9	84.9	85.0	84.9	84.7	85.5
29	84.3	83.7	84.0	84.1	84.1	84.1	84.1	84.5	85.2	86.2	86.4	86.4	87.1	87.1	87.0	86.7	86.2	85.7	85.2	84.5	84.1	83.9	83.7	83.3	85.1
30	83.2	83.0	82.8	82.5	82.0	81.3	79.9	80.7	82.0	82.5	83.7	83.6	84.0	84.8	84.0	84.0	83.4	83.0	81.6	80.2	79.5	78.6	78.2	77.5	92.0
Mean	...	83.5	83.1	82.6	82.5	82.3	82.9	84.5	86.2	87.7	88.9	89.9	90.6	91.0	90.8	90.6	90.1	88.9	87.5	86.4	85.6	84.9	84.2	83.7	86.3

463. Richmond (Kew Observatory) : North Wall Screen :  $h_t$  = 3.0 metres.

October, 1928.

	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.
1	77.4	77.3	76.5	76.0	75.6	75.0	75.5	77.0	79.3	82.1	83.4	84.1	84.6	85.0	85.3	85.3	84.4	81.9	79.3	79.3	78.9	78.2	77.6	77.2	79.8
2	76.7	76.6	76.1	76.5	77.5	78.1	79.1	80.3	83.2	84.5	85.8	86.7	86.7	86.1	86.0	85.6	85.4	84.8	83.7	81.6	80.2	79.4	78.5	78.5	81.3
3	76.7	76.9	75.7	75.4	75.0	75.3	74.8	74.7	76.2	79.5	84.1	86.7	86.9	88.5	88.1	86.6	86.3	84.8	83.9	83.1	82.3	81.1	80.5	81.1	81.1
4	80.5	80.1	79.9	79.7	79.2	79.2	79.1	81.1	83.7	85.8	86.9	88.0	88.2	88.5	87.9	87.1	86.1	84.7	83.6	82.8	82.1	81.7	81.3	81.6	83.3
5	81.6	81.2	81.2	81.6	81.8	82.6	83.1	83.7	84.7	86.2	87.0	89.2	90.5	90.8	91.0	90.2	89.1	88.6	87.3	86.3	85.5	84.7	85.1	85.5	85.7
6	86.3	86.2	85.7	85.1	84.8	84.5	84.0	84.6	85.9	87.8	88.2	88.2	88.9	89.6	89.7	89.3	88.5	86.6	85.4	84.3	84.1	84.0	83.7	83.2	86.2
7	83.0	82.2	81.3	79.8	82.1	82.5	83.1	84.3	86.5	88.1	89.5	90.2	90.6	90.3	90.5	89.6	88.8	88.1	87.4	86.7	86.1	85.6	85.6	85.3	86.1
8	34.7	86.1	86.2	86.4	86.5	86.7	86.8	87.4	88.0	88.6	89.7	90.6	91.0	90.6	89.6	89.0	88.1	87.3	86.7	86.3	86.4	85.7	85.2	84.7	87.7
9	85.2	86.6	86.7	86.7	86.7	86.0	87.0	87.2	87.2	87.7	88.6	88.8	88.8	88.4	89.4	87.9	86.3	85.3	84.1	84.2	85.1	84.1	83.4	83.9	86.5
10	83.5	83.1	81.7	81.3	81.7	81.9	82.2	82.8	83.5	84.6	85.9	86.9	87.1	87.3	87.7	87.2	86.1	84.9	84.1	84.5	84.1	84.1	84.2	84.3	84.4
11	84.2	84.6	84.9	85.2	85.5	85.6	85.6	85.8	86.7	87.9	88.4	88.8	88.4	88.8	88.7	88.3	87.5	86.5	85.6	85.0	84.3	83.8	83.1	82.5	86.1
12	81.5	81.4	82.2	82.7	82.4	82.3	83.1	83.7	84.2	84.8	85.1	85.0	84.7	84.6	84.3	84.0	83.5	82.8	82.2	81.7	80.6	80.1	79.1	79.1	82.9
13	78.6	78.1	77.1	76.7	76.3	75.8	76.1	77.1	79.1	80.7	83.0	83.7	83.8	83.7	83.3	82.2	80.8	78.4	78.8	78.7	78.1	77.1	75.5	79.5	79.4
14	75.6	74.5	73.9	73.5	73.7	73.4	73.5	74.1	75.5	79.0	82.1	83.7	83.8	84.9	84.6	84.0	83.6	83.1	83.0	82.1	81.9	81.7	81.9	82.3	83.7
15	82.6	82.9	83.0	83.0	82.6	82.5	82.3	82.6	83.1	84.7	85.1	85.3	85.2	85.6	85.6	84.6	84.3	83.7	83.7	83.5	83.2	83.3	83.3	83.3	83.7
16	83.2	83.1	82.4	81.6	80.6	81.7	81.8	82.4	83.6	85.3	86.1	86.6	86.7	87.1	87.2	87.2	86.9	87.3	87.3	87.4	87.4	87.6	87.6	87.7	85.1
17	87.4	87.5	87.4	87.4	87.3	87.2	86.9	87.5	87.8	88.1	88.4	88.8	89.0	90.1	90.9	88.7	87.6	86.8	86.0	84.6	83.6	82.7	82.3	82.0	87.0
18	81.7	81.6	81.2	81.2	80.8	80.3	80.6	82.6	84.9	86.6	87.4	88.3	88.2	88.1	88.6	88.0	86.1	85.9	85.7	85.5	84.9	84.5	84.3	84.1	84.6
19	83.8	83.5	83.6	83.5	83.5	83.6	83.6	84.1	85.1	84.7	85.4	86.9	87.0	87.3	87.0	86.7	86.0	85.2	85.0	84.6	84.9	85.4	85.4	85.4	84.6
20	87.8	85.9	85.1	84.6	84.4	84.8	84.7	84.9	85.2	85.4	86.3	86.5	86.5	85.8	85.8	85.8	84.8	84.1	83.3	82.9	81.8	82.0	81.2	81.0	84.7
21	80.9	80.2	79.4	78.8	79.6	80.0	80.4	80.9	83.1	84.2	85.0	83.9	84.7	85.0	85.0	85.0	83.7	82.7	82.1	82.0	81.8	81.1	81.3	80.9	82.2
22	80.7	80.9	81.0	80.6	81.1	81.8	81.7	81.9	81.8	83.2	84.0	85.0	85.7	85.2	84.8	84.6	83.9	83.5	83.0	83.0	82.5	81.7	81.0	81.0	82.6
23	81.1	81.1	81.5	81.0	80.5	80.8	80.1	80.0	80.5	81.5	82.7	83.6	84.8	85.1	85.2	84.9	84.9	85.1	84.6	84.3	84.9	85.4	85.6	86.2	83.0
24	86.5	86.3	85.5	85.4	85.5	85.1	85.1	85.4	86.3	86.4	88.1	88.4	86.7	87.1	86.7	86.5	85.0	85.0	84.8	84.8	84.5	84.2	84.0	83.5	85.8
25	84.0	83.6	83.2	82.5	82.6	82.4	82.5	83.2	84.4	85.4	86.5	86.7	87.5	87.4	86.8	86.4	84.8	84.0	82.8	82.0	81.6	81.5	81.1	80.7	84.0
26	80.6	80.6	80.2	79.7	80.2	80.8	81.4	82.1	83.6	84.8	85.3	85.6	85.6	84.6	84.2	83.9	83.8	83.9	83.8	83.8	83.8	83.5	83.8	83.6	83.0
27	83.5	83.4	83.4	83.5	83.8	84.4	84.0	84.1	84.7	85.0	85.8	85.6	86.3	86.0	86.8	85.8	85.4	85.6	85.9	85.7	85.7	85.6	85.4	85.0	85.0
28	85.1	84.6	84.6	84.5	84.4	84.3	83.9	83.2	82.8	83.0	83.7	84.0	84.6	84.7	84.7	84.0	83.0	82.3	81.5	81.0	80.6	80.2	79.7	79.5	83.2
29	78.6	78.0	77.2	77.6	77.6	77.6	78.0	77.6	79.5	80.8	82.4	84.0	84.5	84.1	84.1	84.2	84.1	84.0	84.3	84.9	85.3	85.6	85.7	85.7	81.8
30	85.8	85.7	85.7	85.4	85.1	85.5	85.1	85.5	86.6	86.1	84.6	85.9	86.4	86.2	86.1	85.2	84.1	83.1	82.6	82.2	81.6	81.6	81.3	81.3	84.6
31	81.1	80.5	81.1	80.9	80.5	80.6	80.7	81.9	83.3	84.6	84.9	85.1	85.8	85.4	85.6	84.8	83.6	82.8	82.1	81.0	80.2	80.1	80.0	79.0	82.4
Mean ...	82.3	82.1	81.8	81.5	81.6	81.7	81.8	82.4	83.5	84.7	85.7	86.5	86.8	86.9	86.8	86.3	85.5	84.7	84.0	83.6	83.3	83.0	82.7	82.5	83.8
Hour G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean



Readings in degrees absolute at exact hours, Greenwich Mean Time.

464. Richmond (Kew Observatory): North Wall Screen:  $h_t$  (height of thermometer bulb above the ground) = 3.0 metres.

November, 1928.

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean
Day.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.
1	78.5	79.9	80.2	80.2	80.5	81.0	80.8	81.6	82.1	83.5	84.9	84.9	84.9	85.1	85.0	84.7	84.4	84.0	83.5	83.5	83.4	83.0	82.6	82.2	82.6
2	81.5	81.0	80.4	80.5	80.0	79.8	79.4	79.2	79.2	79.5	80.0	80.6	81.3	81.4	81.5	81.4	81.5	81.8	81.6	82.0	82.5	82.5	82.1	81.9	80.9
3	81.5	81.0	80.4	79.9	79.5	78.9	78.0	78.2	78.7	80.0	81.2	81.4	81.3	81.2	81.1	81.0	80.8	80.7	80.4	79.5	79.2	79.6	79.5	79.5	80.2
4	79.4	79.3	78.9	78.9	79.0	79.1	79.3	79.5	80.4	81.2	82.8	83.2	84.2	84.5	83.7	83.0	81.5	80.0	79.0	78.8	78.0	77.4	77.1	75.9	80.2
5	75.0	73.4	73.0	73.6	75.2	75.7	75.0	73.7	74.8	74.9	75.6	81.9	82.7	83.0	82.4	81.2	79.8	79.3	78.8	79.2	77.4	76.0	75.3	74.9	77.2
6	74.0	74.3	74.6	74.5	74.4	74.7	75.0	75.6	76.2	76.6	77.3	78.5	79.5	79.6	80.4	80.7	80.8	80.6	80.4	80.5	80.5	80.0	79.8	79.8	77.6
7	79.1	78.6	78.4	77.9	77.6	77.4	77.0	77.1	78.0	79.9	81.6	82.8	83.9	83.6	83.7	83.1	82.8	82.1	81.3	80.8	80.8	80.3	80.2	79.9	80.3
8	80.0	80.1	80.4	79.5	80.1	80.7	81.1	80.5	80.8	81.6	82.2	82.2	82.7	82.7	82.6	82.1	81.8	80.5	80.3	80.1	79.2	78.9	78.1	78.1	80.7
9	78.3	78.1	78.3	79.5	79.2	78.1	77.4	77.4	78.9	80.5	81.2	81.7	82.0	82.0	81.7	80.6	79.6	79.5	78.9	78.0	77.1	76.0	74.5	73.4	78.9
10	73.8	72.6	72.2	72.4	71.8	71.8	71.4	71.3	71.8	72.9	75.1	79.1	80.8	80.8	80.4	80.5	81.0	81.2	81.5	82.1	82.6	83.4	83.9	84.0	77.2
11	84.0	83.6	83.3	83.1	82.9	82.6	82.9	83.0	83.7	84.3	85.0	85.6	85.5	85.5	85.7	85.8	85.5	85.2	85.2	85.4	85.3	85.2	85.4	85.4	84.5
12	85.5	85.5	85.6	85.7	85.8	85.9	85.9	85.9	86.2	86.5	86.7	86.9	87.0	87.1	87.1	87.0	86.9	86.8	86.7	86.6	86.5	86.5	86.4	86.4	86.4
13	86.4	86.1	86.0	85.9	85.7	85.5	85.4	85.5	85.7	85.8	86.7	87.0	87.5	87.7	87.5	86.7	85.8	85.2	85.0	84.6	84.4	84.3	83.7	83.4	85.8
14	83.0	82.8	82.2	81.9	81.0	80.4	79.9	79.7	80.5	81.5	83.3	84.0	84.6	84.8	84.5	83.9	83.1	82.2	82.5	82.5	82.4	83.0	83.5	83.4	82.5
15	83.5	83.5	83.6	83.5	83.9	84.3	84.5	84.5	84.5	85.2	85.5	85.5	85.6	86.0	85.5	85.0	84.2	83.6	83.8	83.9	83.5	83.5	82.6	82.0	84.2
16	82.0	82.2	81.7	80.9	80.7	80.4	81.2	82.4	83.5	84.2	85.0	86.7	86.8	86.5	85.6	85.5	84.5	84.5	84.0	83.7	83.4	82.4	81.9	81.5	83.4
17	81.8	81.4	81.4	81.0	81.0	80.7	80.7	80.7	81.7	82.4	82.4	82.3	83.0	83.7	83.5	82.5	82.1	81.4	81.0	81.2	80.9	80.3	79.5	79.2	81.5
18	79.1	78.9	79.3	79.5	78.6	78.6	79.0	79.3	80.2	81.1	83.6	83.7	83.8	83.7	83.0	83.0	82.9	82.9	83.0	82.9	82.4	82.6	82.7	82.7	81.3
19	83.1	83.6	84.0	84.2	84.4	84.5	84.5	84.5	84.9	85.2	85.6	86.5	86.6	86.0	85.7	85.3	85.1	85.9	85.9	82.9	82.4	81.5	81.1	81.1	84.4
20	81.2	81.5	81.4	81.0	80.6	80.1	79.9	80.0	80.6	82.8	83.6	84.5	85.4	85.6	85.1	84.4	84.0	83.3	82.9	82.7	83.1	83.0	82.7	82.7	82.6
21	82.6	83.0	83.3	83.0	83.8	84.6	85.2	85.4	85.8	86.2	86.2	86.3	86.7	86.9	86.9	86.5	86.4	86.3	86.2	86.2	85.6	85.9	85.6	85.5	85.4
22	85.0	84.6	84.5	84.6	84.6	84.5	84.1	83.8	83.9	84.0	84.2	84.3	84.0	84.4	84.5	84.3	84.7	85.0	85.1	85.1	84.6	84.2	84.1	83.7	84.4
23	82.0	82.8	82.6	82.4	82.7	83.0	83.2	82.8	83.0	84.4	86.1	86.5	86.4	86.6	86.2	84.3	83.9	83.2	83.2	83.1	81.5	81.4	81.3	81.2	83.7
24	80.9	81.1	81.1	82.0	82.5	82.6	82.4	82.5	82.6	82.8	83.1	83.3	83.5	83.5	83.1	82.6	82.4	82.0	81.9	81.8	81.5	81.6	81.6	81.4	82.2
25	81.1	81.0	81.1	81.6	81.6	82.6	83.9	84.5	85.2	85.7	86.1	86.4	84.3	83.2	83.5	83.7	83.6	83.1	83.1	82.3	82.0	81.6	81.5	81.1	83.1
26	80.8	80.4	80.6	80.1	80.2	80.1	80.2	79.8	80.4	81.4	81.9	82.6	82.9	82.8	82.4	81.0	80.4	79.3	78.5	77.9	77.6	77.2	76.8	76.4	80.2
27	78.5	78.5	78.0	77.7	77.4	77.4	77.7	78.4	78.2	78.6	78.5	79.2	79.1	79.4	79.6	78.9	77.3	77.7	77.3	77.4	77.4	76.8	76.4	76.1	78.0
28	76.1	75.6	75.5	75.6	75.5	75.6	75.5	75.5	76.0	76.7	77.7	78.0	78.3	78.4	78.4	77.5	76.9	76.1	75.8	75.5	75.5	75.4	75.1	74.9	76.8
29	74.6	74.9	74.6	74.2	74.5	75.0	74.9	75.1	75.6	76.5	77.2	77.9	78.6	79.4	79.4	79.2	78.8	78.8	78.9	79.1	79.5	79.9	80.3	80.7	77.3
30	80.9	81.1	81.4	81.6	81.9	82.9	83.1	83.2	83.4	83.8	84.0	84.7	85.0	84.6	84.5	83.5	83.0	83.2	83.5	83.6	83.7	83.9	83.9	83.8	83.2
Mean	80.5	80.3	80.3	80.2	80.2	80.3	80.3	80.3	80.8	81.6	82.4	83.2	83.6	83.7	83.5	83.0	82.5	82.2	82.0	81.7	81.5	81.2	81.0	80.8	81.5

465. Richmond (Kew Observatory): North Wall Screen:  $h_t$  = 3.0 metres.

December, 1928.

	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.
1	83.6	83.4	83.3	83.1	83.2	83.3	83.3	83.5	83.9	84.0	84.5	84.5	84.6	83.9	83.9	83.7	83.7	83.5	83.5	82.1	81.1	81.1	81.5	81.3	83.8
2	80.8	80.9	80.6	80.1	80.0	79.5	79.1	77.8	76.1	77.1	77.4	77.6	77.6	78.3	78.5	78.4	78.3	78.5	79.0	79.0	79.1	79.3	79.3	78.8	
3	79.5	79.5	79.3	79.4	79.4	79.5	79.5	79.5	79.9	80.4	81.1	81.6	82.4	82.4	81.9	81.6	81.5	81.1	80.9	80.6	80.4	80.1	79.9	80.6	
4	79.3	78.5	77.9	77.5	76.5	77.0	76.7	76.5	77.0	77.5	77.8	78.7	79.5	79.5	79.2	78.7	77.6	77.1	77.6	77.0	76.9	76.0	75.6	75.0	
5	74.1	73.5	74.3	75.5	76.4	77.3	77.9	78.4	79.0	80.2	81.0	81.7	82.4	82.9	82.4	81.4	80.3	77.3	76.1	75.3	75.4	74.5	74.3	73.4	
6	73.2	72.6	72.3	73.2	73.6	73.9	73.7	74.7	75.0	76.2	76.6	76.1	77.5	78.5	78.9	78.6	77.4	76.6	75.3	74.3	74.0	73.5	73.2	72.8	
7	76.6	76.6	76.4	76.0	75.5	75.3	75.0	74.9	75.0	76.1	77.5	78.5	78.9	78.9	78.6	77.4	76.6	75.3	74.3	74.0	73.5	73.2	72.8	72.3	
8	72.1	71.0	71.0	71.0	70.3	70.3	70.2	70.6	70.9	72.1	73.4	75.1	75.7	75.8	75.5	75.1	74.2	72.9	72.7	72.6	72.6	71.9	71.9	71.5	
9	71.1	70.3	70.3	70.0	69.9	69.4	69.1	69.5	69.5	71.0	72.5	73.4	74.4	75.0	74.8	74.0	73.2	72.5	72.2	71.9	72.9	73.5	73.7	73.9	
10	74.8	75.0	75.5	76.0	76.4	75.6	75.2	74.9	74.9	75.1	75.6	76.3	75.8	75.4	74.6	74.8	75.0	74.7	74.9	75.0	74.9	75.0	75.0	75.0	
11	75.0	75.1	75.0	75.1	75.0	75.0	75.4	75.5	76.0	76.3	76.5	76.7	76.9	76.9	76.5	76.1	75.9	75.6	75.5	75.8	76.0	76.1	75.9	75.6	
12	75.6	75.8	75.4	74.4	74.1	73.8	74.5	75.6	76.1	76.1	75.9	75.7	75.9	75.8	76.0	76.1	75.6	75.9	75.7	75.8	76.0	76.0	76.1	75.6	
13	76.0	76.4	76.5	76.6	76.6	76.7	76.7	76.7	76.9	76.8	77.0	77.3	77.6	77.3	77.2	77.0	76.8	76.6	76.4	75.9	75.9	75.5	74.5	74.0	
14	73.7	73.0	72.8	73.2	72.4	72.2	71.9	71.5	71.3	71.4	72.5	73.4	74.8	73.6	73.2	72.7	72.8	72.7	72.3	71.3	71.4	71.0	70.8	70.9	
15	70.7	70.7	70.4	69.6	69.5	69.5	69.1	69.9	70.6	71.2	71.8	72.4	72.5	72.7	72.6	72.5	72.4	72.4	72.1	72.0	72.1	72.0	72.2	72.0	
16	71.7	71.7	72.5	73.6	74.7	75.6	76.1	76.9	77.5	78.2	78.6	77.9	78.0	77.9	77.8	78.3	78.5	79.2	79.9	80.0	80.3	80.5	80.9	81.0	
17	81.0	81.0	80.4	80.0	78.9	78.1	78.1	78.0	78.0	79.1	80.2	80.7	81.1	81.1	80.8	80.5	79.1	78.6	78.1	78.0	77.7	76.7	77.1	76.9	
18	76.5	75.8	74.6	74.5	75.4	75.5	75.1	75.0	74.2	74.0	74.1	74.6	74.7	75.2	75.5	75.6	75.7	75.7	75.7	75.7	75.5	75.0	74.7	75.2	
19	74.2	74.2	74.1	73.9	74.0	74.0	74.1	74.5	74.8	75.6	76.8	78.3	79.3	79.4	79.9	79.8	79.7	79.7	79.7	80.1	80.3	80.7	81.0	81.1	
20	81.1	81.0	80.7	80.3	80.0	79.5	79.2	79.5	79.6	79.1	79.1	79.4	79.3	79.3	78.9	78.9	78.6	78.6	78.0	77.4	76.7	76.6	76.5	76.5	
21	76.8	76.6	76.5	76.0	75.6	74.8	74.3	73.7	73.5	74.4	74.9	75.8	77.1	77.3	77.6	77.0	76.1	75.4	75.4	75.0	74.7	74.6	74.5	73.8	
22	71.6	71.6	73.0	73.5	73.5	74.1	74.3	74.5	75.0	76.0	77.7	79.0	79.5	79.6	79.6	79.6	79.7	80.1	80.4	80.3	80.6	80.5	80.0	79.6	
23	78.6	78.6	78.0	77.5	76.5	76.6	76.3	77.4	78.0	78.2	78.7	79.2	79.1	78.4	77.5	77.0	76.4	76.0	74.7	74.1	73.5	75.5	75.6	75.3	
24	74.8	74.0	75.4	76.5	77.1	78.0	79.1	79.9	80.3	80.9	81.5	82.2	82.2	82.4	82.8	83.1	83.2	83.2	83.2	83.0	83.1	83.0	82.6	80.4	
25	81.7	81.6	81.1	79.7	78.7	78.1	77.4	76.6	76.1	76.6	77.8	78.7	80.0	80.0	79.1	78.6	79.1	79.6	80.2	80.8	81.6	82.1	82.1	82.5	
26	83.4	83.9	84.2	84.6	84.7	84.7	84.6	84.7	85.0	83.6	83.3	83.2	82.9	82.9	82.4	81.8	81.1	80.5	79.5	78.9	78.0	77.5	77.0	76.6	
27	76.4	76.5	76.7	76.2	76.0	75.6	75.6	74.8	75.0	75.9	77.1	77.6	78.1	78.5	78.7	78.1	78.2	78.0	78.0	78.1	77.6	77.2	76.7	76.5	
28	76.1	76.1	76.4	76.6	76.9	76.5	76.1	76.0	76.0	76.9	77.4	77.7	77.7	77.6	77.7	77.7	77.7	77.7	77.7	77.6	77.7	77.7	77.5	77.1	
29	78.1	78.6	79.5	78.2	77.6	76.7	76.2	76.6	77.6	78.0	78.7	79.0	79.1	79.0	78.7	77.7	77.1	76.4	75.3	75.3	75.1	75.1	76.1	76.4	
30	76.0	75.4	75.3	75.3	75.4	75.4	75.4	75.5	75.6	75.8	76.0	76.0	76.2	76.0	75.8	75.7	75.7	75.5	75.2	74.9	74.9	74.0	73.5	75.0	
31	75.9	76.0	75.9	75.0	75.1	76.0	76.5	76.6	76.4	76.4	76.5	76.5	77.1	76.9	77.0	77.1	76.6	76.6	76.4	75.9	76.3	76.2	75.7	75.4	
Mean	...	76.5	76.3	76.2	76.1	76.0	76.0	76.1	76.3	76.8	77.5	78.0	78.5	78.5	78.4	78.1	77.7	77.4	77.2	76.9	76.8	76.7	76.6	76.4	
Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	Mean	



463. Richmond (Kew Observatory) : North Wall Screen :  $h_s = 3.0$  metres.

1928.

Hour	G.M.T.										Noon														Mean
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.		13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.		
a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	
81.55	81.25	81.00	80.81	80.82	81.04	81.50	82.23	83.16	84.11	84.97	85.67	86.19	86.41	86.42	86.16	85.76	85.19	84.47	83.72	83.14	82.66	82.24	81.88	83.43	

## TEMPERATURE: MONTHLY MEANS AND DIURNAL INEQUALITIES.

The departures from the mean of the day are adjusted for non-periodic change.

467. Richmond (Kew Observatory) : North Wall Screen :  $h_s = 3.0$  metres.

1928.

Month	Mean.	Hour 1.	G.M.T. 2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.
	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.
Jan.	278.69	-0.77	-0.99	-1.10	-1.17	-1.16	-1.27	-1.31	-1.07	-0.69	-0.10	+0.68	+1.33	+1.74	+1.82	+1.77	+1.38	+0.98	+0.70	+0.34	+0.13	-0.01	-0.16	-0.39	-0.6
Feb.	279.49	-1.16	-1.41	-1.52	-1.79	-1.84	-1.96	-2.09	-2.04	-1.34	-0.40	+0.58	+1.61	+2.43	+2.83	+3.00	+2.80	+2.01	+1.29	+0.74	-0.19	-0.05	-0.40	-0.68	-0.9
Mar.	279.93	-1.51	-1.79	-1.96	-2.04	-2.06	-2.11	-1.87	-1.26	-0.32	+0.77	+1.51	+2.02	+2.55	+2.55	+2.50	+2.11	+1.94	+1.28	+0.55	+0.15	-0.26	-0.62	-0.95	-1.2
April	281.86	-1.86	-2.31	-2.78	-3.01	-3.16	-2.87	-2.15	-0.93	+0.32	+1.18	+1.88	+2.42	+2.86	+3.00	+2.95	+2.85	+2.49	+1.84	+0.87	+0.17	-0.33	-0.76	-1.06	-1.5
May	284.52	-2.53	-2.92	-3.19	-3.43	-3.49	-3.00	-2.01	-1.06	+0.16	+1.20	+1.97	+2.66	+3.05	+3.37	+3.46	+3.09	+2.92	+2.40	+1.71	+0.54	-0.33	-0.93	-1.52	-2.0
June	287.31	-2.80	-3.15	-3.49	-3.76	-3.24	-2.33	-1.38	-0.46	+0.38	+1.25	+1.96	+2.39	+3.08	+3.40	+3.43	+3.34	+3.08	+2.50	+1.80	+0.55	-0.59	-1.40	-2.01	-2.4
July	291.32	-3.23	-3.74	-4.17	-4.56	-4.33	-3.62	-2.65	-1.41	-0.29	+0.85	+1.74	+2.68	+3.44	+3.93	+4.40	+4.40	+4.22	+4.03	+2.99	+1.34	-0.10	-1.17	-1.99	-2.6
Aug.	289.28	-2.61	-2.88	-3.18	-3.37	-3.53	-3.12	-2.04	-0.74	+0.43	+1.29	+2.20	+2.75	+3.19	+3.45	+3.51	+3.42	+3.04	+2.37	+1.26	+0.14	-0.59	-1.17	-1.71	-2.1
Sept.	286.29	-2.93	-3.29	-3.78	-3.87	-3.98	-4.09	-3.42	-1.86	-0.12	+1.37	+2.63	+3.66	+4.34	+4.75	+4.56	+4.40	+3.83	+2.70	+1.28	+0.19	-0.61	-1.25	-1.96	-2.4
Oct.	283.81	-1.54	-1.72	-2.03	-2.25	-2.22	-2.11	-2.01	-1.44	-0.33	+0.87	+1.94	+2.64	+2.96	+3.04	+3.01	+2.49	+1.66	+0.93	+0.20	-0.20	-0.54	-0.85	-1.09	-1.3
Nov.	281.54	-1.00	-1.12	-1.21	-1.27	-1.26	-1.21	-1.23	-1.19	-0.71	+0.04	+0.84	+1.69	+2.01	+2.11	+1.94	+1.45	+0.96	+0.63	+0.39	+0.16	-0.11	-0.37	-0.63	-0.8
Dec.	276.97	-0.64	-0.79	-0.77	-0.86	-0.93	-1.00	-1.03	-0.94	-0.74	-0.22	+0.50	+1.07	+1.50	+1.53	+1.42	+1.14	+0.80	+0.47	+0.29	+0.04	-0.03	-0.18	-0.28	-0.4
Year	283.42	-1.88	-2.18	-2.43	-2.61	-2.60	-2.39	-1.93	-1.20	-0.27	+0.67	+1.54	+2.24	+2.76	+2.98	+3.00	+2.74	+2.33	+1.76	+1.03	+0.28	-0.30	-0.77	-1.19	-1.5

## ABSOLUTE EXTREMES OF TEMPERATURE FOR EACH DAY.

Maximum and Minimum for the interval 0h. to 24h., Greenwich Mean Time.

468. Richmond (Kew Observatory) : North Wall Screen :  $h_s = 3.0$  metres.

1928.

Month	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Day.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1	76.6	73.3	82.8	75.8	84.5	80.4	81.3	78.8	90.2	82.8	89.2	84.0
2	79.1	76.6	80.9	74.5	84.1	79.9	84.5	76.5	87.6	83.5	89.2	83.0
3	78.6	73.1	80.0	73.6	88.6	78.1	83.5	78.1	95.2	83.5	93.4	79.7
4	82.5	73.3	82.5	72.6	90.6	78.1	84.8	77.1	92.1	85.1	91.2	80.7
5	81.6	77.5	82.6	75.5	88.4	74.5	84.9	75.1	92.6	84.2	90.6	83.6
6	85.9	77.6	81.1	74.6	82.0	79.2	86.9	73.7	93.4	81.1	96.7	81.7
7	83.5	76.5	82.8	75.8	80.4	77.7	86.6	76.7	91.4	80.3	92.2	85.0
8	84.0	78.6	84.0	82.1	79.1	76.1	87.9	81.4	87.3	77.2	93.0	85.3
9	82.6	77.3	83.4	78.0	78.3	73.6	91.8	82.6	84.1	74.9	92.4	86.1
10	83.0	76.2	82.0	75.4	77.2	70.9	89.3	82.4	86.3	75.7	90.6	81.5
11	80.5	73.7	80.6	77.8	73.4	70.5	88.8	80.5	86.1	78.3	90.1	79.7
12	82.5	72.0	80.3	77.0	76.0	70.8	86.0	81.9	87.8	80.3	90.7	79.8
13	83.0	78.2	85.9	77.3	76.5	72.9	85.9	81.3	88.2	82.2	96.7	84.2
14	82.5	77.0	84.6	78.6	78.4	73.8	82.0	78.1	87.6	77.8	91.9	81.3
15	80.9	77.4	85.8	83.9	81.1	73.0	78.7	76.3	87.3	75.2	89.6	79.3
16	80.7	77.2	84.8	81.0	84.4	73.6	78.1	74.1	83.6	78.0	87.5	80.9
17	79.0	70.0	81.6	77.3	86.1	79.3	81.9	73.3	85.9	77.7	88.6	78.7
18	81.4	69.7	82.5	74.5	86.9	80.4	81.8	72.8	84.8	78.1	90.2	82.0
19	82.3	74.5	83.6	76.2	86.5	80.9	83.6	73.5	86.4	75.6	91.5	84.3
20	81.6	72.8	83.0	71.8	89.5	82.4	81.9	73.5	86.0	77.6	92.6	84.0
21	84.1	81.5	84.0	73.4	82.7	78.7	82.0	73.5	85.9	78.5	89.4	81.2
22	81.9	76.3	83.7	71.0	85.5	80.2	83.8	74.2	82.6	79.7	92.2	84.8
23	81.3	73.0	80.2	72.2	85.9	79.8	85.0	75.6	81.3	78.2	93.7	82.5
24	84.5	76.8	79.3	76.5	85.9	77.7	89.0	88.0	80.3	94.9	83.3	80.4
25	81.9	76.5	85.8	76.4	85.8	77.4	92.5	81.4	92.1	77.8	96.7	83.2
26	80.9	75.5	85.5	74.5	86.6	79.1	96.1	84.2	92.6	78.0	90.6	85.1
27	77.6	72.9	86.2	75.3	84.0	78.7	89.4	82.0	95.6	85.1	91.4	83.0
28	80.3	71.6	84.8	74.9	83.7	75.6	91.3	76.9	97.2	84.9	92.0	83.5
29	80.3	77.7	85.1	78.0	83.5	74.3	80.8	80.8	87.2	93.2	84.3	92.6
30	80.4	76.6	—	—	84.7	78.5	87.8	81.9	95.7	87.1	91.2	82.9
31	82.1	74.2	—	—	83.7	77.5	—	—	87.5	82.9	—	—
Mean	81.5	75.3	83.1	76.1	83.4	76.9	85.9	77.9	89.0	80.3	91.8	82.6

NOTE.—The initial 2 or 3 of the readings is omitted, i.e., 275.0 degrees absolute is written 75.0.

Year ... 87.3 79.5



Percentages at exact hours Greenwich Mean Time.

469. Richmond (Kew Observatory) : North Wall Screen :  $h_t$  (height of thermometer bulbs above the ground) = 3.0 metres.

January, 1928.

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.	Vapour Pressure*
Day.	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	mb.
1	96	98	98	96	98	100	96	96	98	98	92	93	87	88	89	91	93	89	85	85	84	88	90	88	92.5	6.3
2	87	88	90	93	93	92	94	96	97	93	93	91	94	94	94	94	96	97	96	92	92	92	90	88	92.6	8.1
3	91	98	96	96	96	98	95	94	93	90	87	86	85	86	83	86	87	88	87	91	91	93	94	100	91.0	6.9
4	98	98	100	100	98	98	98	94	90	90	85	82	80	84	93	91	89	86	81	84	87	86	81	88	90.3	8.0
5	79	74	73	74	71	75	76	74	70	76	73	67	65	66	70	74	78	80	81	84	85	89	85	87	76.3	7.0
6	91	90	91	91	93	91	93	86	86	88	83	73	70	51	50	55	57	55	58	65	73	71	82	82	76.2	8.7
7	87	88	88	90	89	87	87	87	84	89	92	92	94	91	88	87	88	88	89	88	89	89	88	89	88.5	9.3
8	92	92	90	92	84	76	81	78	81	74	62	58	60	61	61	68	72	81	82	83	83	84	87	88	78.0	8.6
9	88	88	91	93	95	97	97	97	96	94	94	87	81	80	79	84	91	86	89	87	86	86	92	96	89.6	8.7
10	94	93	92	93	92	93	97	97	93	91	86	84	86	83	87	92	88	85	86	83	86	81	82	84	88.7	8.6
11	87	87	82	85	87	87	87	92	97	94	91	87	77	72	69	69	75	78	85	91	91	91	92	94	85.1	7.1
12	94	98	98	98	98	98	96	93	90	87	88	84	85	86	88	88	91	94	94	93	95	92	93	94	92.3	8.0
13	94	95	95	76	87	89	82	82	83	81	78	73	68	72	68	69	70	76	76	79	79	83	86	87	80.5	8.6
14	87	87	87	89	92	92	93	97	96	91	89	87	81	83	86	91	93	93	94	98	98	81	88	88	90.0	8.8
15	90	93	91	93	94	94	92	92	92	86	91	86	67	65	64	69	75	79	81	81	79	79	82	86	83.4	7.9
16	83	84	88	87	86	87	86	87	81	87	85	90	80	80	76	74	74	74	76	77	84	82	80	83	82.2	7.8
17	85	80	84	90	90	89	91	96	94	91	85	79	78	74	70	74	88	94	98	98	98	98	98	98	88.0	6.5
18	98	98	98	98	98	98	98	98	96	94	90	84	80	86	93	94	96	96	96	98	99	99	98	100	95.1	7.3
19	92	85	81	80	81	76	74	76	76	72	63	66	62	62	60	65	70	71	79	87	90	98	98	91	77.5	7.1
20	96	98	100	98	96	96	98	98	100	100	98	93	92	94	96	96	96	98	98	98	99	100	100	100	97.2	8.8
21	99	98	97	99	100	99	98	99	95	96	92	92	94	93	92	89	88	86	87	86	86	87	89	87	93.1	11.3
22	83	88	94	93	94	94	84	81	84	87	84	80	71	71	62	65	69	75	80	79	80	80	82	83	81.0	8.0
23	85	91	93	91	94	98	96	98	98	98	96	84	81	82	83	86	91	93	93	96	94	94	96	96	91.7	7.8
24	98	96	95	95	94	95	94	95	97	95	93	81	80	63	77	81	74	62	67	74	74	74	73	75	83.9	9.2
25	73	78	80	82	80	82	85	87	88	84	75	70	70	70	69	70	76	76	82	78	81	81	84	86	78.4	7.4
26	81	86	86	88	88	83	85	91	88	87	86	79	81	88	86	85	86	87	88	90	82	82	80	84	85.3	8.1
27	88	87	85	80	85	89	89	88	90	89	85	85	82	75	82	84	87	91	87	85	87	90	89	92	86.1	6.3
28	92	97	97	97	98	98	96	95	89	90	89	89	91	90	93	94	93	93	94	96	99	98	99	98	94.3	7.5
29	98	99	99	96	94	94	93	90	91	88	77	75	67	68	66	66	71	74	81	89	89	92	96	97	85.4	8.0
30	97	97	97	90	92	89	92	92	93	90	86	78	67	64	67	69	77	80	87	84	85	88	90	92	85.3	7.4
31	95	92	97	97	97	94	96	96	96	91	90	84	76	72	74	76	81	84	90	91	93	94	95	95	89.4	7.7
Mean	90.3	91.0	91.4	91.0	91.4	91.2	90.9	90.8	90.5	89.1	85.7	81.9	78.5	77.2	77.9	79.9	82.5	83.5	85.5	86.9	87.7	87.8	88.9	90.2	86.7	†8.0
Vapour Pressure*	mb. 7.8	mb. 7.7	mb. 7.7	mb. 7.6	mb. 7.7	mb. 7.6	mb. 7.6	mb. 7.7	mb. 7.9	mb. 8.1	mb. 8.2	mb. 8.2	mb. 8.1	mb. 8.0	mb. 8.1	mb. 8.1	mb. 8.1	mb. 8.1	mb. 8.1	mb. 8.0	mb. 8.1	mb. 8.0	mb. 8.0	mb. 8.0	mb. 7.9	

470. Richmond (Kew Observatory) : North Wall Screen :  $h_t$  = 3.0 metres.

February, 1928.

	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	mb.	
1	91	87	86	86	84	76	70	76	72	68	66	67	55	53	51	57	66	71	76	73	77	78	85	80	73.3	7.5	
2	80	82	82	84	85	85	82	82	79	72	65	61	69	86	81	78	77	86	90	90	88	87	88	80	80.6	6.6	
3	85	82	80	83	85	87	87	87	84	77	71	68	62	58	57	66	63	69	74	74	77	78	82	84	75.9	6.0	
4	85	87	91	92	93	94	85	89	87	80	87	90	91	93	94	98	99	99	96	92	93	95	94	94	92.0	8.0	
5	94	94	94	94	91	89	88	89	96	95	83	93	92	86	77	70	73	77	84	90	87	93	93	93	88.2	9.4	
6	96	100	94	94	93	98	95	91	94	85	75	67	64	64	60	60	65	72	77	82	82	88	90	91	82.4	6.8	
7	90	93	91	91	92	90	89	90	83	76	74	76	74	75	71	71	77	81	84	87	87	91	89	88	83.8	8.3	
8	88	88	88	88	91	92	91	92	92	91	95	89	84	88	89	88	89	89	91	91	89	89	89	91	89.6	10.8	
9	87	86	86	89	91	91	76	62	61	61	62	55	52	58	55	58	64	68	73	74	78	80	83	71.7	7.9		
10	81	87	87	88	93	98	96	96	94	92	91	91	88	85	86	88	88	90	87	81	79	73	73	76	86.8	7.5	
11	65	52	51	51	55	55	58	51	53	53	50	51	59	56	56	57	57	60	62	71	71	78	83	84	59.9	5.9	
12	78	80	80	80	78	75	74	76	76	74	70	64	61	62	67	70	85	90	96	94	97	93	96	98	79.5	7.1	
13	97	93	96	96	96	96	98	98	97	96	98	98	95	87	79	76	66	75	82	92	88	92	91	93	90.7	9.3	
14	93	90	91	91	88	91	90	88	88	82	84	78	75	88	86	91	96	95	97	99	95	93	93	93	90.2	10.0	
15	91	92	93	90	93	94	95	91	91	89	85	87	86	88	87	87	88	89	89	89	89	91	89	89	89.7	12.3	
16	88	91	92	89	88	88	83	83	84	92	94	94	92	92	86	84	84	85	77	74	66	70	74	78	84.7	11.0	
17	72	70	56	57	56	56	62	63	59	59	52	51	46	44	47	52	55	60	71	74	76	76	83	81	61.5	6.0	
18	83	87	90	93	94	93	93	93	95	89	76	71	64	67	61	66	65	68	73	79	79	85	78	82	80.1	7.3	
19	81	79	79	82	84	89	92	92	88	76	69	68	65	65	62	65	67	76	86	92	90	90	95	96	80.0	7.7	
20	95	96	98	96	92	98	97	100	100	96	93	87	78	71	73	71	73	76	80	88	88	85	90	92	88.1	7.3	
21	91	89	90	95	95	98	96	98	100	97	86	73	63	71	67	67	70	72	76	84	93	96	96	98	85.7	7.7	
22	98	97	99	100	100	98	100	100	100	100	100	90	71	74	70	72	74	75	85	86	83	86	93	93	89.5	7.5	
23	96	98	99	99	99	100	100	100	100	98	98	95	89	88	83	81	84	85	84	86	84	85	83	83	91.8	7.5	
24	86	83	81	84	77	79	79	76	77	79	79	79	75	73	72	76	79	80	85	87	90	90	93	95	81.2	6.9	
25	95	97	97	98	97	98	97	97	97	94	86	78	68	59	60	64	61	61	72	83	86	90	89	93	84.1	7.9	
26	96	94	93	100	93	89	90	90	86	79	77	67	67	64	56	55	64	62	65	67	72	77	82	84	78.1	7.5	
27	87	84	87	85	87	93	94	93	84	70	61	40	37	32	32	33	37	44	64	70	76	81	85	87	68.4	6.9	
28	92	90	90	95	96	96	93	94	85	79	70	60	54	49	59	53	63	62	65	70	76	78	79	81	76.3	7.3	
29	80	83	83	81	83	82	82	84	79	78	71	60	60	61	59	55	55	63	64	75	80	83	83	81	73.5	8.0	
Mean	...	87.6	87.3	87.0	88.0	87.9	88.5	87.6	86.9	85.6	82.2	78.3	74.4	70.0	69.7	68.5	69.4	72.0	74.8	79.0	82.5	83.2	85.1	87.0	88.1	81.3	77.9
Vapour Pressure*	mb. 7.8	mb. 7.7	mb. 7.6	mb. 7.5	mb. 7.5	mb. 7.5	mb. 7.3	mb. 7.3	mb. 7.5	mb. 7.7	mb. 7.9	mb. 8.0	mb. 8.0	mb. 8.2	mb. 8.1	mb. 8.1	mb. 8.0	mb. 7.9	mb. 8.0	mb. 8.1	mb. 8.0	mb. 8.0	mb. 8.0	mb. 8.0	mb. 8.0	mb. 7.8	—
Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.	—	



Percentages at exact hours Greenwich Mean Time.

471. Richmond (Kew Observatory) : North Wall Screen :  $h_t$  (height of thermometer bulbs above the ground) = 3.0 metres.

March, 1928.

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.	Vapour Pressure*
Day.	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	mb.
1	81	81	86	90	90	92	93	93	91	89	83	91	86	90	89	91	96	88	89	91	92	93	98	96	89.7	10.5
2	98	98	99	98	98	99	99	96	92	92	90	89	81	87	82	84	83	84	84	84	87	91	94	98	91.1	10.5
3	99	93	96	94	94	93	93	92	88	76	71	66	63	64	60	62	64	70	77	81	80	82	86	87	80.7	10.0
4	86	90	90	97	96	96	94	96	89	75	69	52	50	48	44	46	47	53	63	72	71	73	86	87	73.7	9.4
5	86	91	94	92	97	96	98	98	94	70	56	54	51	49	54	56	59	63	64	69	79	96	98	98	77.4	8.9
6	94	99	91	98	98	93	93	91	89	81	81	81	74	72	72	74	74	77	77	80	79	81	83	82	84.3	9.0
7	87	89	89	89	89	89	89	87	89	87	89	91	88	91	90	91	93	94	94	94	94	94	96	83	90.3	8.6
8	84	84	88	92	87	87	85	92	84	76	75	72	71	75	78	73	71	70	79	66	72	75	72	72	78.7	6.6
9	73	75	77	83	85	87	91	94	95	90	82	83	71	73	67	98	89	80	82	69	69	72	73	74	80.5	5.8
10	76	77	80	82	85	85	83	76	63	48	46	47	48	47	43	89	63	61	70	74	77	80	86	87	69.4	4.5
11	89	88	89	90	89	89	90	87	84	82	79	77	71	70	79	77	75	80	85	87	86	91	94	93	84.1	4.6
12	97	98	97	97	97	97	97	97	88	80	69	60	54	55	89	83	81	77	76	78	78	78	76	80	82.7	5.1
13	81	81	80	82	82	90	91	83	79	77	71	69	58	58	59	61	68	69	74	74	77	82	85	85	75.5	5.2
14	87	85	85	85	87	87	87	85	85	84	82	78	73	71	68	73	67	62	70	75	74	74	79	77	78.5	5.8
15	82	90	87	87	89	91	87	91	76	68	68	62	58	57	55	53	57	64	68	75	79	85	88	89	75.0	6.0
16	90	96	92	89	89	91	94	91	77	67	57	56	51	50	50	49	54	60	62	59	61	61	64	64	70.3	6.7
17	67	69	71	72	70	68	67	66	63	56	54	49	45	35	32	36	40	42	50	49	51	52	51	51	54.7	6.2
18	53	56	61	66	77	86	92	86	90	83	64	59	57	51	50	56	57	63	78	87	91	89	90	93	70.2	8.7
19	92	89	92	93	92	93	92	89	87	82	77	72	70	71	70	70	72	74	74	71	72	72	70	71	79.9	10.7
20	71	70	70	71	73	74	76	74	69	65	59	53	45	44	47	49	56	55	55	57	57	52	50	48	60.5	8.7
21	51	52	57	65	71	71	63	61	58	57	58	61	67	66	73	71	81	90	94	96	97	99	100	93	72.0	7.2
22	92	96	93	96	96	92	92	89	86	81	77	75	69	74	68	66	63	65	75	76	77	78	84	83	81.2	9.7
23	92	89	88	88	91	96	96	92	92	91	80	85	83	84	73	78	70	72	79	83	88	90	88	85	10.3	10.3
24	90	90	90	90	90	94	93	91	91	88	83	78	73	89	85	84	64	65	78	80	87	96	97	100	85.8	9.6
25	98	96	89	97	97	98	94	86	78	73	67	65	63	65	60	62	65	71	75	77	77	78	76	79	79.0	8.8
26	78	72	72	74	75	77	78	77	66	60	55	54	44	44	46	37	43	55	63	67	70	78	81	87	64.5	7.7
27	88	93	93	94	94	90	90	86	72	68	71	84	94	91	94	83	82	84	84	87	82	81	83	85	85.7	9.3
28	90	92	93	95	92	93	94	88	84	72	59	52	46	46	48	47	64	71	75	82	86	88	87	91	76.3	7.3
29	91	93	89	91	91	89	88	85	79	83	87	89	93	92	92	92	91	89	89	91	94	82	79	90	88.7	8.6
30	81	82	86	85	83	85	80	85	77	68	63	69	57	67	71	74	67	71	77	79	82	81	83	90	76.8	8.2
31	88	89	89	91	94	96	93	90	88	89	68	70	64	61	85	93	83	83	85	86	87	87	88	87	84.8	8.6
Mean	84.3	85.3	85.6	87.5	88.3	89.2	88.8	86.9	81.7	75.5	70.7	69.1	65.1	65.7	66.9	69.6	79.0	71.0	75.7	77.3	79.1	80.9	82.9	83.5	78.3	†8.0
Vapour Pressure*	mb. 7.6	mb. 7.5	mb. 7.5	mb. 7.6	mb. 7.6	mb. 7.7	mb. 7.8	mb. 8.0	mb. 8.0	mb. 7.9	mb. 7.8	mb. 7.9	mb. 7.7	mb. 7.8	mb. 7.9	mb. 8.0	mb. 7.9	mb. 7.7	mb. 7.9	mb. 7.8	mb. 7.8	mb. 7.7	mb. 7.8	mb. 7.6	mb. 7.8	—

472. Richmond (Kew Observatory) : North Wall Screen :  $h_t$  = 3.0 metres.

April, 1928.

1	88	88	90	96	90	88	88	86	90	90	88	89	86	82	79	78	79	86	79	79	81	84	84	81	85.5	8.7	mb.
2	86	90	95	95	95	95	92	79	73	68	65	58	58	61	56	59	58	64	76	87	81	87	91	93	77.3	7.8	
3	92	93	94	94	94	88	90	93	93	89	89	94	94	94	94	95	94	87	84	87	88	92	93	89	91.5	10.0	
4	86	87	90	91	91	90	89	87	87	78	82	64	62	57	53	44	69	67	77	82	80	83	84	88	77.9	8.1	
5	88	90	90	91	93	94	88	84	77	70	68	59	58	54	53	55	60	64	73	73	78	82	87	89	75.7	7.6	
6	98	96	98	98	100	100	98	94	80	70	66	60	58	56	56	54	52	60	67	75	77	88	86	85	78.1	8.0	
7	86	89	89	92	90	89	86	75	64	45	44	41	40	49	56	61	63	67	69	72	70	67	64	75	68.7	8.1	
8	82	83	92	94	95	96	87	79	71	70	67	64	62	61	59	61	61	60	65	71	72	73	73	76	73.9	9.8	
9	77	82	82	81	84	76	76	74	70	68	61	61	52	49	48	50	53	57	60	61	65	69	70	70	66.6	10.9	
10	71	72	74	74	76	75	71	71	67	66	63	64	63	67	80	83	83	84	89	91	89	92	89	91	76.4	11.2	
11	89	91	94	94	93	94	91	81	74	63	63	56	63	58	55	51	60	59	73	82	85	87	89	91	76.5	10.5	
12	87	94	94	92	92	92	92	89	87	87	81	77	80	76	82	80	91	91	89	80	88	88	89	84	87.3	11.2	
13	87	88	87	91	87	89	91	88	80	80	76	69	73	70	66	80	83	83	88	91	93	88	88	89	83.4	10.2	
14	87	86	86	88	90	86	86	84	81	83	81	84	81	79	76	79	75	72	69	69	69	67	68	68	79.4	7.8	
15	68	64	63	67	70	65	63	58	59	58	62	61	60	64	63	62	62	63	66	69	72	71	74	72	64.7	5.5	
16	71	78	91	93	94	92	89	89	86	89	87	75	67	66	69	69	67	70	73	76	71	74	73	76	78.5	6.0	
17	74	76	72	77	82	82	80	69	57	55	57	58	57	51	59	70	70	75	75	78	80	70	72	72	69.6	6.0	
18	82	88	92	94	96	96	92	81	65	67	36	44	38	42	40	44	47	87	84	91	91	82	82	82	72.8	5.9	
19	87	92	89	91	87	85	84	70	62	55	52	50	47	40	39	31	58	48	64	64	71	75	79	83	66.7	5.9	
20	87	89	88	92	94	92	84	73	65	42	42	45	41	41	41	41	43	48	77	79	80	83	89	89	68.4	5.9	
21	91	91	92	94	94	90	85	79	65	56	58	59	70	71	87	83	79	85	89	81	84	83	87	89	80.9	6.6	
22	93	91	94	93	93	91	85	78	66	57	53	54	51	51	44	46	53	60	70	74	77	84	81	91	72.0	6.7	
23	81	84	83	83	87	82	83	72	68	66	67	62	66	63	67	69	72	71	73	76	76	79	74	73	74.4	8.1	
24	74	80	86	85	86	83	76	69	60	54	46	44	44	42	38	35	36	35	44	47	54	59	60	65	58.6	7.8	
25	67	67	73	73	75	77	75	69	64	62	56	47	42	40	39	41	38	44	52	56	51	54	60	70	57.9	9.2	
26	69	74	77	74	75	73	65	61	54	48	42	36	35	38	36	38	39	44	56	63	64	66	69	72	57.0	10.8	
27	71	69	69	70	69	67	65	61	60	57	58	56	57	59	60	62	69	67	69	76	83	87	87	93	67.9	10.6	
28	96	98	96	98	98	97	99	94	81	70	63	62	59	52	49	45	44	49	61	73	80	83	87	88	76.0	10.6	
29	88	93	96	96	94	95	91	83	76	73	68	64	64	65	64	68	67	73	80	83	73	77	82	82	78.7	11.1	
30	82	83	86	87	86	84	83	82	80	80	79	75	70	71	81	89	90	89	89	88	88	91	89	92	83.7	10.8	
Mean	...	82.8	84.9	86.7	87.9	88.3	86.8	84.1	78.4	72.1	67.2	64.0	61.1	59.9	59.0	59.6	61.1	63.8	67.0	72.7	75.7	77.0	79.1	79.8	81.9	74.2	†8.6
Vapour Pressure*	...	mb. 8.2	mb. 8.2	mb. 8.1	mb. 8.1	mb. 8.1	mb. 8.3	mb. 8.4	mb. 8.4	mb. 8.3	mb. 8.2	mb. 8.1	mb. 8.2	mb. 8.2	mb. 8.2	mb. 8.4	mb. 8.6	mb. 8.6	mb. 8.8	mb. 8.8	mb. 8.6	mb. 8.5	mb. 8.5	mb. 8.4	mb. 8.3	—	
Hour. G.M.T.		1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.	—



Percentages at exact hours, Greenwich Mean Time.

473. Richmond (Kew Observatory) : North Wall Screen :  $h_t$  (height of thermometer bulbs above the ground) = 3.0 metres.

May, 1928.

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.	Vapour Pressure.*	
Day.	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	mb.	
1	92	94	92	92	94	91	91	87	83	78	80	72	69	72	65	68	67	68	73	86	87	85	86	84	81.7	12.1	
2	85	86	86	87	87	88	84	90	86	80	83	87	80	74	71	73	69	76	76	88	87	90	93	94	83.1	12.0	
3	95	94	94	94	94	93	93	94	91	88	83	76	70	58	59	64	63	65	71	75	73	73	91	94	81.0	14.1	
4	87	82	82	81	84	80	76	74	67	66	61	56	54	54	56	55	51	51	53	55	59	61	66	67	66.3	11.8	
5	67	68	67	70	71	75	72	71	64	66	59	53	49	49	48	45	45	49	50	49	52	54	58	61	59.0	10.3	
6	62	70	69	69	72	69	66	57	42	32	31	28	25	29	28	30	26	30	33	44	51	56	72	75	48.3	7.9	
7	83	86	87	87	90	84	57	51	50	44	34	34	31	29	29	32	33	38	45	55	63	72	77	73	56.9	8.3	
8	74	78	83	85	87	82	71	65	61	57	55	50	49	51	56	57	56	53	50	49	58	62	62	66	63.3	6.9	
9	62	70	70	72	73	66	64	57	48	46	47	44	41	39	36	37	39	42	41	52	57	65	68	66	54.3	5.8	
10	70	70	65	70	70	77	65	61	56	52	46	38	41	54	52	49	40	41	44	54	53	60	61	75	56.6	6.2	
11	83	76	74	68	74	73	58	57	51	49	43	43	42	39	37	39	36	38	43	65	66	72	75	79	57.4	6.5	
12	80	82	80	83	82	81	71	69	61	52	52	49	58	57	58	64	67	69	71	74	76	81	83	85	70.1	9.3	
13	87	84	88	89	91	91	84	78	68	58	54	52	57	57	56	63	64	65	67	79	81	82	82	85	73.4	10.3	
14	88	89	92	91	91	91	88	87	79	69	57	64	57	60	66	75	72	73	73	60	63	66	74	81	75.3	9.4	
15	82	85	85	87	93	84	74	64	60	56	54	51	52	49	49	51	54	59	71	68	72	80	88	84	68.8	7.7	
16	83	71	72	71	88	93	86	86	85	76	83	74	67	57	53	67	68	74	82	84	83	80	78	82	76.8	7.9	
17	86	86	88	86	83	81	80	74	66	66	51	57	57	51	74	80	79	89	88	88	84	82	84	83	76.7	8.3	
18	86	87	90	84	87	80	82	81	73	85	83	71	73	64	75	76	74	84	88	82	80	87	87	89	81.0	8.7	
19	90	93	95	94	94	97	93	89	73	69	63	62	78	88	80	80	75	89	93	94	94	98	99	98	86.4	9.0	
20	98	99	99	97	100	99	94	92	78	74	60	55	58	75	83	82	82	79	80	82	85	88	88	93	84.3	9.2	
21	94	96	96	93	91	91	89	83	82	79	75	86	83	78	68	88	87	89	85	85	90	84	86	84	86.1	10.2	
22	87	84	85	83	81	77	75	70	67	60	62	63	65	65	69	68	66	69	72	75	79	79	80	81	73.5	8.1	
23	86	86	85	85	82	85	90	91	87	88	82	80	82	88	86	89	88	87	89	90	90	90	91	93	86.8	8.6	
24	93	93	93	91	91	93	91	87	82	74	75	69	56	60	59	53	51	57	64	68	75	84	89	99	76.8	9.8	
25	97	99	100	100	99	100	100	93	82	64	58	51	50	50	54	54	51	50	45	61	78	87	92	96	75.5	10.6	
26	98	96	95	98	94	87	81	69	67	65	58	51	47	44	44	46	46	45	54	53	56	63	63	74	66.9	10.4	
27	72	78	77	77	82	73	64	61	56	55	48	50	44	41	35	36	37	35	44	57	66	71	75	75	58.7	11.7	
28	80	77	80	83	86	82	72	65	56	46	42	41	46	43	41	47	45	48	54	57	66	68	70	74	61.3	13.1	
29	76	73	85	86	85	83	79	73	69	61	57	54	49	49	53	53	52	44	38	46	55	54	56	56	62.3	13.3	
30	61	66	72	75	78	81	78	76	68	61	54	51	42	41	43	41	42	44	46	53	61	64	66	59	59.3	12.2	
31	57	62	70	82	83	83	85	79	80	81	83	80	74	69	65	63	60	63	65	67	75	78	79	81	73.0	10.2	
Mean	...	82.0	82.6	83.7	84.2	85.7	84.2	79.1	75.2	69.0	64.4	60.4	57.8	56.3	55.9	56.4	58.9	57.6	60.1	62.8	67.6	71.5	74.7	78.0	80.2	70.3	†9.7
Vapour Pressure*	...	mb. 9.4	mb. 9.2	mb. 9.2	mb. 9.1	mb. 9.2	mb. 9.3	mb. 9.4	mb. 9.6	mb. 9.5	mb. 9.5	mb. 9.3	mb. 9.4	mb. 9.4	mb. 9.5	mb. 9.6	mb. 9.5	mb. 9.5	mb. 9.6	mb. 9.5	mb. 9.5	mb. 9.6	mb. 9.6	mb. 9.5	mb. 9.5	—	

474. Richmond (Kew Observatory) : North Wall Screen :  $h_t$  = 3.0 metres.

June, 1928.

	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	mb.	
1	84	83	84	87	86	85	82	80	76	62	61	62	64	68	68	58	52	46	48	55	56	60	62	65	68.4	10.5	
2	68	69	72	69	63	59	57	49	43	33	39	40	39	40	41	42	40	45	46	49	52	49	50	50.3	7.7		
3	52	56	73	77	80	66	63	50	43	39	37	29	29	32	28	31	38	46	53	60	63	70	74	72	48.6	8.0	
4	69	81	86	86	84	82	70	66	64	51	42	42	42	42	59	54	56	49	53	63	74	74	72	74	63.9	10.0	
5	79	79	83	81	81	82	77	76	76	73	72	65	67	63	65	67	68	75	73	81	82	79	79	83	75.0	11.5	
6	85	90	94	96	95	93	88	83	76	71	66	58	51	50	47	48	43	46	46	60	75	85	88	93	71.7	13.2	
7	89	91	89	93	97	97	97	96	94	92	79	75	64	59	60	62	61	64	69	75	79	81	85	87	80.7	13.8	
8	90	90	91	93	93	95	95	88	79	70	68	66	63	60	59	56	54	55	54	63	69	77	82	88	74.9	13.2	
9	91	93	95	95	95	94	91	89	79	69	61	55	56	55	58	56	57	63	63	62	70	75	75	75	74.1	13.5	
10	74	76	79	81	84	74	71	68	66	60	75	62	57	58	63	84	75	78	76	75	65	72	76	83	72.0	11.6	
11	85	89	90	90	92	83	82	74	61	60	49	65	51	58	41	42	51	46	51	57	66	67	74	81	66.9	9.3	
12	85	86	88	90	88	80	79	74	61	50	52	46	44	46	51	55	56	57	53	62	69	71	73	72	66.4	9.8	
13	71	68	73	73	62	73	68	65	63	61	52	49	45	43	36	45	51	57	79	83	80	91	94	64.5	12.7		
14	94	94	96	92	90	86	84	74	71	70	65	64	63	67	87	83	92	89	82	82	82	77	81	84	81.4	12.7	
15	82	85	86	88	88	85	78	75	62	59	48	54	46	43	55	56	47	45	51	63	70	79	84	83	67.2	9.1	
16	87	89	83	81	71	66	61	52	54	51	53	50	50	51	51	49	53	55	57	62	81	84	87	88	65.1	8.5	
17	90	88	91	90	91	85	78	61	52	54	49	43	45	51	51	52	55	49	57	47	62	68	70	81	65.1	8.7	
18	86	88	88	88	88	84	78	74	72	68	62	64	60	59	56	55	76	78	86	89	91	93	93	95	78.1	11.5	
19	96	96	96	95	95	91	83	75	68	70	59	63	64	63	69	66	71	75	79	82	86	82	85	86	79.2	13.1	
20	87	88	91	95	93	85	73	68	57	56	52	51	51	49	42	42	40	38	45	55	78	85	90	89	69.6	11.6	
21	92	92	91	93	93	85	78	65	62	66	70	76	73	76	80	83	86	86	86	87	88	89	89	90	82.3	12.9	
22	89	91	90	86	85	83	77	67	77	74	70	73	75	72	70	70	68	59	69	69	67	69	77	75.1	13.8		
23	83	85	87	88	85	82	77	68	63	59	56	53	53	51	48	42	47	47	48	70	60	69	70	77	65.3	11.5	
24	82	84	86	90	88	84	81	73	64	54	50	45	43	42	43	39	44	34	45	61	66	71	72	76	63.3	11.6	
25	82	82	87	94	87	78	69	50	51	48	56	53	50	48	47	48	49	56	58	57	64	66	75	88	64.0	13.0	
26	81	76	78	79	83	83	77	79	75	66	71	72	73	78	69	78	71	77	86	82	77	71	73	75	76.5	13.1	
27	73	70	74	71	69	69	70	60	54	52	49	51	51	52	49	53	52	50	78	81	84	82	82	85	64.8	10.4	
28	88	89	92	91	86	83	80	73	69	63	60	61	56	58	62	65	66	66	64	61	73	75	78	80	72.6	12.1	
29	85	85	86	85	85	82	76	69	66	65	63	56	56	55	50	55	63	80	73	71	77	80	81	80	71.8	12.6	
30	80	83	86	86	84	79	73	67	61	58	50	67	56	69	56	65	60	48	43	53	59	65	74	77	66.5	10.6	
Mean	...	82.6	83.9	86.2	86.8	85.4	81.8	77.1	70.6	65.3	60.8	57.9	57.0	54.6	55.3	55.4	57.0	57.9	58.4	61.4	66.6	71.7	74.4	77.3	80.9	69.4	†11.4
Vapour Pressure*	...	mb. 11.2	mb. 11.2	mb. 11.2	mb. 11.0	mb. 11.3	mb. 11.5	mb. 11.5	mb. 11.2	mb. 10.9	mb. 10.8	mb. 10.7	mb. 10.8	mb. 10.9	mb. 11.2	mb. 11.2	mb. 11.5	mb. 11.5	mb. 11.2	mb. 11.2	mb. 11.3	mb. 11.2	mb. 11.1	mb. 11.1	mb. 11.2	mb. 11.2	—
Hour. G.M.T.	...	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.	—



Percentages at exact hours, Greenwich Mean Time.

475. Richmond (Kew Observatory) : North Wall Screen :  $h_t$  (height of thermometer bulbs above the ground) = 3.0 metres.

July, 1928.

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.	Vapour Pressure.*
Day.	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	mb.
1	78	79	80	80	81	79	73	67	60	60	55	54	57	52	49	50	55	56	57	65	73	78	82	86	66.7	11.3
2	86	88	87	85	83	80	83	78	75	64	65	63	65	62	64	66	71	67	72	76	81	83	87	86	75.7	14.4
3	85	82	82	84	86	83	71	64	63	58	52	49	48	52	55	66	80	91	94	95	96	95	96	96	75.7	13.1
4	97	97	96	96	96	82	76	62	59	57	50	59	49	49	47	50	54	58	62	68	73	75	78	69.2	12.2	
5	79	75	69	73	78	77	72	70	71	64	69	67	69	62	63	67	73	78	80	83	86	90	96	93	74.9	14.1
6	93	93	87	84	86	88	76	70	70	61	63	62	62	57	58	56	54	59	64	65	73	78	81	86	72.0	12.4
7	88	89	89	90	90	86	65	66	56	58	54	54	50	48	45	42	45	45	58	68	73	75	81	83	66.6	12.3
8	88	89	90	91	89	83	75	66	61	60	57	53	53	54	52	55	60	61	65	73	79	84	90	91	71.5	13.9
9	91	92	94	93	94	92	89	75	67	57	49	49	48	43	40	41	44	47	53	62	68	70	75	80	67.4	13.8
10	85	87	87	88	89	89	83	77	67	51	50	41	35	36	37	44	49	47	49	58	62	65	67	69	63.2	12.8
11	69	77	80	85	82	77	65	61	53	47	41	37	39	38	43	42	41	40	42	44	53	63	64	74	56.4	13.0
12	76	84	82	91	88	80	75	66	57	45	34	39	39	35	32	33	32	31	34	44	51	61	69	76	56.4	13.7
13	72	76	82	81	77	72	69	67	65	61	62	58	49	47	48	47	49	45	46	57	55	58	64	69	61.6	14.4
14	71	75	84	77	79	76	73	66	59	43	40	33	29	25	27	26	26	28	28	44	63	67	68	83	53.5	13.5
15	72	74	87	86	87	79	71	52	50	47	45	40	37	35	34	35	29	27	30	37	43	51	54	58	58.0	14.5
16	64	68	78	80	84	74	70	63	64	59	56	52	50	53	52	52	51	49	49	59	71	77	85	84	63.8	15.0
17	86	76	81	87	89	88	85	75	71	59	54	51	47	47	43	43	46	47	51	57	65	69	75	79	65.6	13.5
18	83	83	91	90	88	77	72	74	61	51	45	32	34	31	28	33	39	33	37	46	60	64	71	70	58.3	13.7
19	74	74	75	76	74	74	74	64	63	57	49	49	48	44	45	45	44	44	49	55	60	66	69	79	60.3	13.1
20	74	78	78	80	80	78	73	70	65	57	55	51	50	47	47	44	44	45	49	54	58	63	63	64	61.4	14.1
21	69	69	74	75	78	74	71	69	65	58	55	53	50	48	42	41	45	44	48	52	57	70	77	88	60.8	13.3
22	86	85	80	88	85	83	78	64	54	48	40	33	30	24	22	20	20	24	26	41	54	44	52	55	52.2	12.8
23	60	66	75	75	77	76	73	65	62	58	58	53	52	51	47	48	43	47	52	58	65	67	69	70	60.8	14.7
24	72	75	78	80	82	83	81	71	66	54	49	42	39	42	41	47	50	51	57	64	66	67	70	72	62.4	16.3
25	81	83	86	85	84	81	74	72	70	62	59	60	56	56	54	56	55	56	59	68	74	78	82	84	69.5	17.8
26	86	85	84	87	84	84	77	72	71	74	69	62	58	52	51	48	49	51	64	71	73	75	78	81	70.3	17.1
27	83	86	85	89	92	94	93	89	82	66	71	67	70	75	69	86	92	89	89	92	93	94	93	93	84.4	17.6
28	96	95	94	95	96	93	85	71	66	61	59	51	49	39	40	37	36	35	43	52	58	69	75	79	65.9	11.5
29	79	84	84	85	86	83	80	68	56	47	48	44	39	34	42	41	39	35	40	54	59	67	69	74	60.0	10.1
30	78	83	84	85	87	80	75	69	66	63	51	51	54	63	63	54	60	65	82	82	88	87	88	92	72.5	12.7
31	94	96	96	93	94	94	91	86	74	68	65	55	56	54	66	66	76	76	78	83	89	86	89	88	79.8	15.0
Mean	80.5	82.0	83.8	85.0	85.3	81.9	76.4	69.3	64.2	57.3	53.8	50.5	48.7	46.9	46.7	47.8	50.0	50.7	55.1	62.0	68.2	72.1	75.9	79.3	65.5	†13.8
Vapour Pressure*	mb. 13.7	mb. 13.5	mb. 13.5	mb. 13.3	mb. 13.5	mb. 13.7	mb. 13.5	mb. 13.3	mb. 13.3	mb. 12.7	mb. 12.7	mb. 12.6	mb. 12.7	mb. 12.6	mb. 12.9	mb. 13.2	mb. 13.7	mb. 13.7	mb. 14.0	mb. 14.2	mb. 14.3	mb. 14.2	mb. 14.2	mb. 14.1	mb. 13.5	—

476. Richmond (Kew Observatory) : North Wall Screen :  $h_t$  = 3.0 metres.

August, 1928.

	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	mb.	
1	89	90	91	94	96	95	94	96	97	92	84	80	77	76	71	71	76	78	80	80	85	89	90	90	85.8	16.9	
2	89	90	88	87	87	85	81	77	75	71	68	62	63	62	57	55	56	61	63	70	72	76	81	81	73.4	13.3	
3	78	81	83	85	85	81	82	81	73	68	65	61	60	61	62	67	70	79	85	86	87	88	87	87	75.9	12.6	
4	88	89	93	95	94	94	94	87	89	87	86	83	77	74	65	59	56	56	61	70	80	88	87	87	80.8	12.3	
5	89	93	92	93	93	91	85	82	72	66	59	54	48	47	48	46	47	45	47	63	75	79	88	93	70.5	12.4	
6	95	95	95	95	96	94	91	80	72	62	62	62	59	53	51	51	54	58	63	68	75	79	85	80	74.3	14.2	
7	82	86	88	87	87	82	74	75	70	66	55	57	53	51	54	56	60	70	76	80	82	83	84	88	72.6	16.3	
8	93	93	91	92	87	90	87	77	68	58	55	50	47	46	51	54	54	55	55	62	67	71	76	80	69.3	13.6	
9	86	87	89	90	91	87	85	77	67	63	61	60	51	50	47	48	52	50	50	62	70	76	80	83	69.2	12.8	
10	89	90	95	96	95	95	89	71	76	73	68	67	60	51	54	61	68	74	79	86	82	77	82	83	77.5	13.7	
11	81	78	81	83	88	85	81	74	70	66	62	60	59	58	57	55	59	62	67	74	80	85	88	92	72.5	16.6	
12	93	90	91	94	92	93	89	86	87	84	63	61	53	46	53	49	54	54	62	71	76	80	82	86	74.7	15.5	
13	87	86	86	85	82	77	73	66	63	56	55	66	63	55	57	55	62	66	72	74	78	81	84	84	71.0	13.7	
14	87	90	91	90	89	85	83	75	66	62	57	61	73	60	55	53	52	59	67	75	78	82	85	85	73.3	13.9	
15	87	89	89	90	90	90	84	77	72	65	61	50	50	49	51	45	49	48	59	64	62	66	74	80	68.5	12.6	
16	83	87	86	86	89	88	81	71	65	59	62	50	52	56	56	48	53	56	60	59	64	67	74	77	67.9	11.4	
17	82	83	83	85	83	83	77	73	67	60	55	59	52	55	52	45	46	51	65	74	82	80	85	89	69.2	11.8	
18	91	93	93	90	92	94	88	81	76	75	57	51	50	46	46	48	48	55	64	67	77	89	87	71.1	12.7		
19	91	91	98	95	95	96	93	78	71	55	51	50	49	48	50	49	47	55	59	60	65	70	74	75	69.6	13.2	
20	88	91	91	88	89	87	82	77	69	60	53	50	43	45	51	63	72	74	80	80	85	86	86	86	73.8	12.9	
21	87	90	91	92	92	90	89	81	69	61	56	55	53	57	56	53	64	67	73	78	82	83	84	85	74.5	12.2	
22	86	86	85	88	87	85	84	75	64	63	61	60	57	66	79	83	87	86	89	90	91	92	95	95	80.4	14.5	
23	95	98	97	97	95	94	90	84	85	74	72	69	74	75	77	77	75	77	83	87	88	86	89	90	84.6	17.2	
24	92	92	96	96	96	96	85	76	73	74	72	80	82	72	68	61	64	70	75	80	81	82	83	85	80.6	17.0	
25	86	90	92	93	93	91	85	79	73	64	59	56	53	55	55	54	54	60	68	74	79	84	88	89	73.8	14.8	
26	90	92	94	95	95	96	97	91	80	75	72	73	74	89	90	87	84	88	87	89	93	96	96	93	88.1	16.2	
27	92	93	94	93	93	91	88	84	76	73	86	72	62	63	66	59	60	64	72	78	79	80	78	83	78.5	14.9	
28	85	88	90	93	93	93	87	81	71	68	61	56	51	55	55	54	56	57	66	73	81	84	90	93	74.0	14.2	
29	90	87	87	90	90	93	88	82	72	63	60	54	57	65	69	61	55	56	68	75	81	86	89	89	75.4	13.6	
30	94	91	92	93	92	89	86	81	69	63	55	55	51	45	45	42	48	58	61	71	84	90	94	91	72.5	12.1	
31	94	99	95	96	98	98	95	85	76	75	70	68	61	59	74	83	96	91	93	93	94	96	98	98	86.7	13.6	
Mean	...	88.3	89.6	90.5	91.2	91.1	89.9	86.0	79.3	73.3	67.8	63.3	61.0	58.5	57.7	58.8	58.5	60.3	63.2	68.7	74.4	78.7	81.8	85.3	86.6	75.2	†14.0
Vapour Pressure*	...	mb. 13.8	mb. 13.8	mb. 13.6	mb. 13.6	mb. 13.5	mb. 13.6	mb. 14.0	mb. 14.1	mb. 13.9	mb. 13.6	mb. 13.5	mb. 13.4	mb. 13.3	mb. 13.2	mb. 13.6	mb. 13.4	mb. 13.5	mb. 13.6	mb. 13.7	mb. 13.9	mb. 14.0	mb. 14.0	mb. 14.1	mb. 13.9	mb. 13.7	—
Hour. G.M.T.		1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.	—



Percentages at exact hours, Greenwich Mean Time.

477. Richmond (Kew Observatory): North Wall Screen:  $h_t$  (height of thermometer bulbs above the ground) = 3.0 metres.

September, 1928.

Hour G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.	Vapour Pressure.*
Day.	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	mb.
1	99	97	100	99	99	100	98	93	84	70	63	56	55	56	58	56	57	58	63	69	77	82	92	95	78.2	12.9
2	98	99	99	100	99	100	95	83	62	53	51	46	45	44	47	46	50	52	63	70	78	86	96	97	73.3	11.9
3	100	98	99	99	99	99	98	94	89	81	74	58	55	54	51	49	53	59	64	69	74	78	82	85	75.8	12.8
4	85	86	87	88	92	95	87	74	66	63	50	42	43	36	35	38	45	47	61	69	71	77	91	93	67.4	13.1
5	95	95	98	96	99	99	94	85	73	61	50	43	40	32	37	39	45	52	72	78	82	83	84	87	71.7	14.1
6	86	87	86	79	83	73	70	65	62	52	46	42	45	49	52	55	60	66	76	82	87	91	94	95	70.0	13.1
7	96	96	97	96	99	98	98	94	77	66	58	58	53	46	45	43	49	60	71	80	83	89	91	94	74.6	13.0
8	93	94	94	95	98	98	87	79	74	58	51	51	47	38	51	56	57	65	74	81	88	89	89	89	74.9	14.9
9	92	92	94	94	96	96	92	86	85	91	85	81	76	71	93	92	94	92	94	95	95	96	95	97	90.4	16.1
10	97	97	96	95	94	96	95	88	81	75	71	65	67	66	66	70	74	73	77	83	84	89	91	92	82.7	14.7
11	92	91	94	94	95	96	95	86	83	74	62	58	55	52	56	53	53	60	68	80	83	83	89	83	76.7	13.7
12	93	94	96	98	99	98	96	98	99	94	92	79	59	55	55	58	58	64	63	67	81	87	95	94	82.0	12.5
13	94	96	94	96	94	98	94	94	88	55	46	46	45	47	52	58	60	64	72	80	82	76	79	85	75.0	11.2
14	87	83	87	87	88	88	87	79	72	66	63	49	47	44	51	51	53	59	65	69	72	78	83	88	70.6	11.6
15	84	93	92	90	94	97	98	95	88	84	75	68	65	61	61	61	63	69	80	82	86	88	93	95	81.6	12.7
16	98	97	93	97	95	93	95	91	89	84	76	70	63	59	57	59	61	70	78	86	91	97	96	96	82.9	13.5
17	95	96	99	98	99	98	96	95	91	67	61	57	58	57	57	61	68	75	77	82	87	89	95	98	81.5	13.2
18	93	96	98	98	99	98	100	98	95	88	82	68	58	54	52	54	57	68	81	93	96	94	95	93	83.8	13.1
19	93	95	94	91	89	95	93	91	76	63	46	45	44	41	41	43	46	53	75	87	91	93	89	89	73.5	11.0
20	88	90	97	94	93	90	91	90	82	72	61	59	52	42	44	42	46	54	75	84	87	90	93	90	75.2	9.4
21	88	87	93	93	94	97	97	93	89	77	67	60	52	48	45	42	42	49	58	60	55	58	65	67	70.3	9.0
22	70	76	82	86	86	88	86	73	67	62	58	54	52	56	53	57	53	59	68	72	80	81	86	89	70.1	8.9
23	90	91	93	94	94	93	93	89	87	82	73	67	58	61	56	54	56	60	70	72	74	78	81	79	77.1	9.4
24	83	86	86	87	91	90	90	74	76	69	72	71	67	65	62	73	78	81	85	92	94	96	94	91	81.0	9.9
25	95	95	98	94	91	93	91	91	86	83	76	71	67	61	57	57	63	73	70	71	73	80	87	91	79.8	10.1
26	91	91	94	97	95	97	99	96	86	73	66	59	56	59	54	51	51	62	71	76	86	93	96	94	78.9	9.6
27	96	97	97	95	97	96	96	95	98	73	62	55	54	51	52	56	61	67	68	71	71	72	78	81	76.9	9.6
28	85	85	83	85	86	83	86	82	83	81	77	83	88	88	89	90	86	88	85	81	80	79	80	79	83.9	12.2
29	78	84	83	85	86	86	87	85	83	76	80	76	75	74	76	79	83	83	82	85	84	83	81	81	81.5	11.5
30	86	84	87	84	83	71	77	73	68	70	63	63	61	56	54	54	58	60	69	73	78	80	81	84	71.5	8.2
Mean ...	90.7	91.6	93.0	92.8	93.5	93.3	91.9	87.3	81.0	72.1	64.6	59.9	56.8	54.1	55.4	56.3	59.0	64.3	72.0	77.4	81.5	84.3	88.1	89.0	77.1	†11.9
Vapour Pressure*	mb. 11.5	mb. 11.3	mb. 11.1	mb. 11.0	mb. 11.0	mb. 10.9	mb. 11.2	mb. 11.8	mb. 12.3	mb. 12.1	mb. 11.7	mb. 11.5	mb. 11.4	mb. 11.2	mb. 11.3	mb. 11.3	mb. 11.5	mb. 11.6	mb. 11.9	mb. 11.9	mb. 11.9	mb. 11.7	mb. 11.7	mb. 11.5	mb. 11.5	—

478. Richmond (Kew Observatory): North Wall Screen:  $h_t$  = 3.0 metres.

October, 1928.

	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	mb.
1	84	84	88	88	94	93	94	88	74	60	53	51	46	44	48	42	44	61	76	81	84	83	82	84	71.9	7.1
2	85	90	90	88	87	89	88	80	76	73	71	70	66	68	72	74	76	80	87	91	96	96	96	94	82.4	9.0
3	98	97	96	94	91	94	96	96	98	94	75	57	59	51	54	61	63	64	67	68	70	68	70	79	77.8	8.4
4	80	80	81	84	87	88	93	83	71	58	49	48	43	46	50	53	58	67	70	71	73	77	82	86	69.8	8.7
5	87	88	89	89	91	88	86	87	84	80	79	73	71	69	73	74	82	85	87	87	90	94	96	94	84.1	12.4
6	93	91	94	95	96	96	95	94	86	71	64	62	61	59	56	60	65	79	86	87	93	92	93	93	81.7	12.4
7	94	96	98	100	98	96	98	98	90	81	75	69	66	64	63	70	77	83	86	89	91	94	95	94	86.0	13.0
8	95	89	88	86	85	81	82	80	77	77	78	72	71	69	85	79	78	84	88	92	94	94	97	98	84.0	14.1
9	100	97	96	96	95	94	92	94	90	87	75	69	77	77	69	67	81	87	90	93	93	94	98	97	87.9	13.6
10	96	96	95	98	99	96	96	94	92	88	81	70	70	67	67	71	78	85	89	86	89	89	88	91	86.4	11.6
11	94	95	93	89	91	93	96	96	96	78	69	64	69	64	63	63	64	69	77	80	84	89	91	92	81.6	12.3
12	96	94	96	94	95	95	94	94	92	89	87	78	73	70	62	62	61	63	66	68	69	74	76	83	80.7	9.8
13	85	86	90	92	92	93	91	90	88	83	70	47	53	56	53	49	60	71	89	85	86	90	92	96	78.3	7.6
14	93	94	96	94	98	96	96	92	96	88	67	58	54	56	56	62	64	69	76	89	93	95	95	96	82.2	7.9
15	96	95	96	96	99	98	98	96	95	86	83	80	78	77	77	82	85	87	93	92	94	94	95	94	90.3	11.6
16	96	94	95	95	98	98	98	96	94	89	87	85	88	90	90	93	96	93	95	96	97	96	97	94	93.7	13.2
17	93	93	91	90	87	90	94	93	94	94	97	97	96	90	71	79	89	93	75	82	89	92	95	95	89.9	14.4
18	95	95	98	96	96	98	99	95	89	83	86	82	93	91	93	89	78	78	77	80	85	84	85	84	88.9	12.1
19	84	84	82	84	85	84	83	79	76	78	66	61	57	60	71	72	81	91	95	91	84	95	86	94	79.9	11.5
20	91	78	85	88	93	91	88	90	91	87	85	65	68	69	73	69	74	75	78	82	88	86	91	89	82.4	11.3
21	90	94	96	93	93	91	90	88	78	77	73	84	75	83	72	76	83	84	86	84	88	92	91	92	85.5	10.0
22	91	92	90	93	96	96	96	96	89	86	85	76	71	76	80	79	85	88	95	98	95	98	99	99	89.4	10.7
23	98	99	98	92	91	94	94	93	90	81	79	77	61	57	64	68	74	71	79	89	90	95	97	97	84.5	10.4
24	97	93	89	89	88	88	84	85	78	80	67	64	78	74	75	72	83	83	76	78	80	80	79	82	81.2	12.0
25	81	87	84	89	86	88	88	87	82	77	73	68	64	64	69	69	78	87	88	89	92	89	92	94	81.6	10.7
26	94	94	96	96	98	94	93	87	83	78	73	70	70	79	86	90	90	90	92	92	90	93	90	92	88.0	10.8
27	91	89	89	90	85	83	90	93	91	93	90	89	85	87	80	77	80	89	90	91	92	93	94	94	88.5	12.4
28	88	89	85	83	82	80	82	81	80	75	74	70	65	63	63	63	70	74	78	81	85	86	90	88	78.3	9.7
29	93	95	97	97	96	97	94	97	93	92	88	85	82	92	93	90	92	94	94	95	95	95	95	95	93.1	10.5
30	94	92	92	89	87	79	83	85	78	81	87	76	63	60	54	63	68	74	79	81	83	83	86	86	79.5	10.9
31	85	88	85	85	88	83	86	83	81	80	75	76	77	86	76	80	87	89	92	98	99	98	100	86.2	10.2	
Mean ...	91.5	91.2	91.5	91.3	91.8	91.1	91.5	90.0	86.2	81.4	76.2	70.7	69.3	69.6	69.6	70.9	75.6	80.2	83.7	86.0	88.1	89.7	90.7	91.8	83.7	†11.0
Vapour Pressure*	mb. 10.7	mb. 10.5	mb. 10.4	mb. 10.1	mb. 10.3	mb. 10.2	mb. 10.4	mb. 10.6	mb. 10.9	mb. 11.2	mb. 11.2	mb. 10.9	mb. 10.9	mb. 11.1	mb. 11.0	mb. 10.8	mb. 11.0	mb. 11.0	mb. 11.0	mb. 11.0	mb. 11.0	mb. 10.9	mb. 10.9	mb. 10.8	—	
Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.	—



Percentages at exact hours, Greenwich Mean Time.

477. Richmond (Kew Observatory) : North Wall Screen :  $h_t$  (height of thermometer bulbs above the ground) = 3.0 metres.

November, 1928.

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.	Vapour Pressure.*	
Day	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	mb.	
1	97	99	99	98	98	96	94	92	89	81	73	73	74	68	69	70	76	80	81	81	80	79	76	84.0	10.0		
2	76	72	74	74	77	76	75	75	76	78	75	74	75	77	79	82	84	87	92	92	88	86	87	86	79.7	8.5	
3	83	82	85	87	88	91	94	94	90	82	77	76	75	75	78	79	76	76	76	81	83	84	83	81	82.5	8.4	
4	81	83	87	87	87	90	93	93	93	92	83	82	77	69	73	78	84	91	97	94	98	97	98	100	87.4	8.8	
5	100	100	100	98	98	100	100	98	100	100	98	77	69	75	76	83	91	93	94	94	98	98	96	100	93.2	7.7	
6	100	98	100	100	100	100	100	100	100	100	98	96	91	88	94	93	93	93	94	94	96	94	94	94	96.4	8.2	
7	99	99	99	100	100	100	100	98	98	87	83	76	71	72	67	73	75	76	81	83	82	88	87	86	86.8	8.9	
8	82	84	80	87	88	88	78	80	81	71	68	70	66	65	65	70	64	73	74	76	79	77	80	80	76.2	8.0	
9	80	83	82	78	79	82	80	77	72	60	57	52	53	56	61	70	77	77	85	84	88	91	91	94	75.1	7.0	
10	92	96	97	96	97	95	97	99	97	96	94	84	75	76	86	88	89	93	94	96	96	95	95	95	92.4	7.6	
11	94	97	96	96	94	98	99	99	98	97	95	93	93	94	95	94	96	97	97	95	96	97	97	97	96.0	13.0	
12	96	97	97	97	96	96	96	96	95	95	95	95	95	94	93	92	93	93	92	92	93	91	93	91	94.4	14.5	
13	91	94	94	91	92	94	95	93	91	91	87	87	83	74	74	80	82	90	89	88	88	85	91	91	88.1	13.0	
14	87	91	91	92	94	96	96	98	94	91	83	79	67	65	70	76	80	84	87	89	92	89	88	91	86.3	10.3	
15	93	94	95	98	94	92	93	89	91	93	89	86	85	80	83	76	83	87	85	85	87	82	84	88	88.0	11.7	
16	89	86	91	93	94	94	96	99	99	98	96	86	69	66	70	70	76	64	65	67	68	69	70	78	81.6	10.3	
17	83	86	82	83	86	86	93	94	93	83	65	67	62	56	61	67	67	70	75	75	79	82	84	84	77.5	8.6	
18	86	87	81	81	86	85	87	87	88	89	86	69	74	77	80	82	80	82	82	83	88	87	91	92	92	84.0	9.2
19	92	91	90	90	89	91	92	95	90	87	81	81	78	82	81	79	83	76	77	74	76	84	85	86	85.1	11.5	
20	85	81	82	85	86	87	87	87	86	79	79	76	68	66	68	72	76	81	83	92	91	88	91	92	81.9	9.8	
21	88	88	89	95	97	98	98	95	93	93	94	93	92	91	94	96	88	89	87	87	87	88	91	93	91.8	13.2	
22	91	91	91	88	86	86	87	95	84	80	79	80	85	83	87	92	93	94	95	82	84	85	84	76	87.0	11.7	
23	80	76	78	87	86	84	84	94	98	95	90	88	90	88	77	75	67	64	65	58	61	52	60	66	77.8	10.0	
24	72	71	72	66	66	66	67	69	69	69	65	63	59	58	60	60	60	61	62	64	67	71	73	76	65.9	7.7	
25	85	89	91	91	99	95	90	92	91	87	78	66	60	60	56	54	55	56	55	63	62	65	61	66	73.8	9.1	
26	67	68	65	69	68	68	68	68	67	62	63	60	57	57	60	65	67	75	82	79	81	84	88	85	69.3	7.0	
27	83	83	81	81	84	82	76	76	71	77	72	67	69	66	68	74	82	81	82	82	80	83	83	81	77.7	6.8	
28	78	80	77	72	74	70	69	67	66	65	64	61	62	62	63	68	69	73	72	74	74	75	77	75	70.4	5.5	
29	78	75	84	87	87	82	84	82	79	78	79	78	75	79	81	87	96	97	97	99	99	98	98	98	86.1	7.2	
30	99	99	96	96	95	92	92	91	89	85	85	79	78	80	82	87	88	90	88	89	89	84	83	83	88.6	11.0	
Mean	...	86.9	87.3	87.5	88.1	88.8	88.7	88.7	89.1	87.6	84.8	81.2	77.1	74.2	73.3	75.0	77.7	79.7	81.4	82.9	83.2	84.3	84.4	85.4	86.0	83.5	†9.5
Vapour Pressure*	...	mb. 9.0	mb. 8.9	mb. 9.0	mb. 9.0	mb. 9.1	mb. 9.1	mb. 9.1	mb. 9.3	mb. 9.5	mb. 9.6	mb. 9.6	mb. 9.5	mb. 9.4	mb. 9.5	mb. 9.5	mb. 9.5	mb. 9.5	mb. 9.4	mb. 9.4	mb. 9.2	mb. 9.2	mb. 9.1	mb. 9.1	mb. †9.3	—	

478. Richmond (Kew Observatory) : North Wall Screen :  $h_t$  = 3.0 metres.

December, 1928.

	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	mb.
1	80	82	83	88	87	86	85	84	83	81	81	80	80	90	90	87	83	82	80	77	79	79	67	70	82.1	10.3	
2	72	71	74	80	78	80	84	87	95	95	96	94	94	92	93	92	94	93	85	87	88	87	88	88	86.8	8.0	
3	87	88	94	93	94	94	94	94	96	96	93	93	89	88	83	80	83	86	88	88	86	86	87	88	89.5	9.3	
4	88	91	94	94	98	95	97	98	93	96	96	91	87	88	91	93	97	98	98	100	98	100	100	100	94.7	8.0	
5	98	100	96	98	97	97	96	96	100	98	94	95	92	91	95	94	98	98	100	100	100	100	96	100	97.0	8.3	
6	99	98	98	98	98	98	100	96	98	97	93	91	89	91	89	92	92	90	79	75	75	82	79	80	91.1	7.7	
7	83	85	85	87	91	89	91	91	91	88	78	70	67	65	68	79	83	93	89	96	98	98	98	98	85.5	6.4	
8	98	98	98	98	98	98	98	98	98	95	87	80	74	74	74	78	82	87	88	89	89	92	94	95	90.0	5.3	
9	96	97	98	98	99	100	100	100	100	100	97	95	92	88	84	89	89	90	92	93	92	88	87	88	94.0	5.3	
10	89	91	87	81	75	79	79	73	69	71	70	68	66	66	73	75	77	78	80	84	82	80	82	84	77.5	5.5	
11	84	84	85	85	87	89	85	89	85	85	83	80	84	85	88	90	91	91	88	85	83	88	88	93	86.4	6.5	
12	93	88	93	93	98	96	96	96	91	91	90	91	91	89	91	90	91	90	91	89	88	88	87	88	91.3	6.7	
13	93	90	90	88	87	85	87	87	84	87	84	79	73	73	76	77	78	78	80	79	82	83	87	87	82.7	6.5	
14	89	91	92	93	94	95	96	97	97	97	95	92	87	88	92	92	93	94	95	96	96	97	96	96	93.5	5.5	
15	95	95	94	95	95	94	94	94	96	96	97	94	98	96	96	98	98	98	97	99	97	99	97	99	96.3	5.2	
16	99	99	98	97	91	89	85	82	76	72	67	76	76	82	89	94	96	96	98	98	98	100	99	100	89.7	7.4	
17	100	94	89	81	81	85	86	89	89	87	83	79	77	79	79	80	86	88	89	89	92	93	93	95	86.9	8.2	
18	93	94	94	93	94	98	100	98	98	96	98	98	98	98	96	100	100	100	100	100	100	100	100	100	97.5	7.0	
19	98	100	98	98	98	98	98	96	98	96	97	96	94	94	91	93	96	98	96	99	99	99	99	99	97.0	8.1	
20	99	99	98	96	94	93	94	93	93	96	91	90	86	79	78	78	80	83	81	79	82	82	85	83	88.3	8.3	
21	82	83	83	85	84	85	87	92	90	87	91	86	84	87	82	84	88	93	93	94	96	96	93	92	88.0	6.4	
22	97	99	100	94	94	96	94	96	93	91	94	94	96	98	99	99	99	99	98	98	98	98	99	98	96.6	7.9	
23	97	93	92	94	97	98	98	97	93	92	89	86	84	84	91	94	100	97	100	98	100	100	100	98	94.7	7.8	
24	98	100	100	97	97	97	96	96	96	96	94	93	96	95	95	91	94	88	89	91	95	96	98	94	95.2	9.8	
25	93	92	85	88	91	90	89	93	96	95	90	83	75	75	79	82	79	83	77	82	87	86	91	94	86.5	8.4	
26	94	94	93	89	88	89	91	89	89	97	97	97	98	95	86	89	86	86	81	79	84	84	87	88	89.7	10.4	
27	88	88	85	90	90	91	91	95	96	91	90	87	86	86	83	86	84	86	84	83	84	89	90	92	88.0	7.2	
28	93	93	93	95	93	93	93	91	91	88	87	89	90	94	96	96	94	94	96	97	96	97	98	98	93.3	7.6	
29	97	99	96	97	96	97	97	93	89	84	80	70	71	70	74	81	84	87	93	91	89	89	88	92	87.8	7.3	
30	91	93	94	96	98	98	98	98	93	91	90	88	87	87	86	87	87	89	91	93	91	96	98	93	92.2	6.7	
31	93	93	91	98	93	91	88	88	88	87	87	85	77	80	80	76	80	83	80	86	68	66	69	70	83.7	6.4	
Mean	...	92.1	92.3	91.9	92.2	92.1	92.3	92.5	92.5	91.7	90.9	89.0	86.8	85.1	85.4	86.0	87.6	89.1	90.2	89.7	90.2	90.0	90.7	91.6	90.1	77.4	
Vapour Pressure*	...	mb. 7.2	mb. 7.2	mb. 7.1	mb. 7.1	mb. 7.0	mb. 7.0	mb. 7.0	mb. 7.1	mb. 7.1	mb. 7.3	mb. 7.5	mb. 7.6	mb. 7.7	mb. 7.7	mb. 7.7	mb. 7.7	mb. 7.6	mb. 7.5	mb. 7.4	mb. 7.3	mb. 7.2	mb. 7.2	mb. 7.2	mb. 7.1	mb. 7.3	—
Hour. G.M.T.	...	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.	—



*For exact hours, Greenwich Mean Time.*

**481. Richmond (Kew Observatory) :** North Wall Screen :  $h_t = 3.0$  metres.

**1928.**

Hour G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean
Relative Humidity ...	% 86·6	% 87·4	% 88·3	% 88·8	% 89·2	% 88·3	% 86·2	% 83·0	% 79·0	% 74·4	% 70·4	% 67·3	% 64·8	% 64·2	% 64·7	% 66·2	% 68·1	% 70·4	% 74·1	% 77·5	% 80·1	% 82·1	% 84·2	% 85·8	% 78·0
Vapour Pressure in Millibars* ...	mb. 9·6	mb. 9·5	mb. 9·5	mb. 9·4	mb. 9·5	mb. 9·5	mb. 9·6	mb. 9·7	mb. 9·8	mb. 9·8	mb. 9·9	mb. 9·9	mb. 9·8	mb. 9·9	mb. 10·0	mb. 10·0	mb. 10·0	mb. 10·0	mb. 10·0	mb. 10·0	mb. 9·9	mb. 9·9	mb. 9·8	mb. 9·8	mb. 9·9

\* Computed from the mean temperature and mean relative humidity.

### RELATIVE HUMIDITY: MONTHLY MEANS AND DIURNAL INEQUALITIES.

*The departures from the mean of the day are adjusted for non-cyclic change.*

**482. Richmond (Kew Observatory) :** North Wall Screen :  $h_t = 3.0$  metres.

**1928.**

Month.	Mean.	Hour.	G.M.T.																							
		1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Jan.	86·7	+ 3·5	+ 4·2	+ 4·6	+ 4·2	+ 4·7	+ 4·5	+ 4·2	+ 4·1	+ 3·8	+ 2·3	- 1·0	- 4·8	- 8·3	- 9·5	- 8·8	- 6·9	- 4·2	- 3·2	- 1·3	+ 0·2	+ 1·0	+ 1·1	+ 2·2	+ 3·5	
Feb.	81·3	+ 6·1	+ 5·8	+ 5·6	+ 6·5	+ 6·5	+ 7·1	+ 6·2	+ 5·6	+ 4·2	+ 0·9	- 3·0	- 6·9	- 11·2	- 11·6	- 12·7	- 11·8	- 9·2	- 6·4	- 2·2	+ 1·3	+ 2·1	+ 4·1	+ 5·9	+ 7·1	
Mar.	78·3	+ 6·0	+ 7·0	+ 7·3	+ 9·3	+ 10·1	+ 11·0	+ 10·5	+ 8·6	+ 3·4	- 2·8	- 7·6	- 9·2	- 13·2	- 12·6	- 11·5	- 8·7	- 9·3	- 7·3	- 2·7	- 1·1	+ 0·7	+ 2·5	+ 4·5	+ 5·1	
April	74·2	+ 8·7	+ 10·7	+ 12·6	+ 13·8	+ 14·2	+ 12·6	+ 9·9	+ 4·2	- 2·1	- 7·0	- 10·2	- 13·1	- 14·3	- 15·3	- 14·6	- 13·2	- 10·4	- 7·3	- 1·6	+ 1·4	+ 2·8	+ 4·9	+ 5·5	+ 7·6	
May	70·3	+ 11·5	+ 12·1	+ 13·3	+ 13·7	+ 15·3	+ 13·7	+ 8·7	+ 4·8	- 1·4	- 6·0	- 9·9	- 12·5	- 14·0	- 14·4	- 13·9	- 11·4	- 12·7	- 10·2	- 7·4	- 2·7	+ 1·2	+ 4·5	+ 7·9	+ 10·0	
June	69·4	+ 13·1	+ 14·4	+ 16·7	+ 17·3	+ 15·9	+ 12·3	+ 7·7	+ 1·1	- 4·1	- 8·6	- 11·6	- 12·4	- 14·8	- 14·1	- 14·0	- 12·4	- 11·5	- 11·0	- 7·9	- 2·7	+ 2·3	+ 5·1	+ 8·0	+ 11·5	
July	65·5	+ 15·1	+ 16·6	+ 18·4	+ 19·5	+ 19·9	+ 16·4	+ 10·9	+ 3·8	- 1·3	- 8·3	- 11·7	- 15·1	- 16·8	- 18·6	- 18·9	- 17·8	- 15·6	- 15·0	- 10·6	- 3·7	+ 2·5	+ 6·4	+ 10·2	+ 13·6	
Aug.	75·2	+ 13·3	+ 14·6	+ 15·5	+ 16·1	+ 16·0	+ 14·9	+ 10·9	+ 4·2	- 1·8	- 7·4	- 11·8	- 14·1	- 16·7	- 17·5	- 16·4	- 16·8	- 14·9	- 12·0	- 6·6	- 0·9	+ 3·4	+ 6·5	+ 9·9	+ 11·3	
Sept.	77·1	+ 13·4	+ 14·3	+ 15·7	+ 15·5	+ 16·3	+ 16·1	+ 14·7	+ 10·2	+ 3·8	- 5·0	- 12·5	- 17·2	- 20·2	- 23·0	- 21·6	- 20·7	- 18·0	- 12·7	- 4·9	+ 0·5	+ 4·6	+ 7·4	+ 11·3	+ 12·2	
Oct.	83·7	+ 8·0	+ 7·7	+ 8·0	+ 7·8	+ 8·3	+ 7·5	+ 7·9	+ 6·4	+ 2·5	- 2·3	- 7·5	- 13·0	- 14·4	- 14·2	- 14·2	- 12·9	- 8·2	- 3·6	- 0·1	+ 2·1	+ 4·1	+ 5·7	+ 6·7	+ 7·8	
Nov.	83·5	+ 3·1	+ 3·6	+ 3·8	+ 4·4	+ 5·2	+ 5·0	+ 5·1	+ 5·5	+ 4·0	+ 1·3	- 2·3	- 6·4	- 9·2	- 10·1	- 8·4	- 5·7	- 3·7	- 1·9	- 0·5	- 0·1	+ 1·1	+ 1·2	+ 2·2	+ 2·8	
Dec.	90·1	+ 1·8	+ 2·0	+ 1·7	+ 1·9	+ 1·9	+ 2·1	+ 2·3	+ 2·3	+ 1·6	+ 0·8	- 1·1	- 3·3	- 5·0	- 4·7	- 4·0	- 2·4	- 0·9	+ 0·2	- 0·3	+ 0·2	0·0	+ 0·8	+ 0·8	+ 1·7	
Year	77·9	+ 8·6	+ 9·4	+ 10·3	+ 10·8	+ 11·2	+ 10·3	+ 8·3	+ 5·1	+ 1·1	- 3·5	- 7·5	- 10·7	- 13·2	- 13·8	- 13·3	- 11·7	- 9·9	- 7·5	- 3·8	- 0·5	+ 2·1	+ 4·2	+ 6·3	+ 7·9	

RAINFALL: ANNUAL TOTALS OF HOURLY VALUES.

*Amounts, in millimetres ; durations, in hours for periods of sixty minutes between the exact hours, Greenwich Mean Time.*

**483. Richmond (Kew Observatory) :**  $H_r$  (height of receiving surface above M.S.L.) =  $H$  (height of station above M.S.L.) +  $h_r$  (height of receiving surface above ground) = 5.5 metres + 0.53 metres.

**1928.**

Hour. G.M.T.	0 to 1.	1 to 2.	2 to 3.	3 to 4.	4 to 5.	5 to 6.	6 to 7.	7 to 8.	8 to 9.	9 to 10.	10 to 11.	11 to Noon	Noon to 13.	13 to 14.	14 to 15.	15 to 16.	16 to 17.	17 to 18.	18 to 19.	19 to 20.	20 to 21.	21 to 22.	22 to 23.	23 to 24.	0 to 24.
Amount ... ..	mm. 34·6	mm. 33·5	mm. 26·5	mm. 27·5	mm. 25·3	mm. 19·4	mm. 27·1	mm. 29·6	mm. 19·2	mm. 16·5	mm. 20·3	mm. 14·5	mm. 15·7	mm. 19·4	mm. 30·0	mm. 38·3	mm. 40·7	mm. 25·4	mm. 32·3	mm. 36·2	mm. 31·4	mm. 22·2	mm. 30·3	mm. 21·9	mm. 637·8
Duration ... ..	hr. 17·3	hr. 18·4	hr. 18·9	hr. 21·0	hr. 20·8	hr. 17·1	hr. 17·4	hr. 20·8	hr. 17·1	hr. 15·3	hr. 16·4	hr. 14·8	hr. 13·4	hr. 15·4	hr. 18·2	hr. 19·9	hr. 24·1	hr. 24·2	hr. 23·0	hr. 19·2	hr. 20·8	hr. 16·7	hr. 16·7	hr. 16·5	hr. 443·4

**484. Richmond (Kew Observatory).**

## NOTES ON RAINFALL.

**1928.**

### Dry Periods.

There were two outstanding dry periods during the year—a period of 17 days without precipitation from 10th to 26th July, and one of 15 days from 10th to 24th September during which the only falls were 0.3 mm. on 19th and 0.2 mm. on 24th. A further dry period of interest occurred between 17th and 29th of February, 13 days without rain except for falls of 0.2 mm. on 17th and 28th February, respectively.

### Wet Periods.

Rain fell on every day from 14th to 31st October (18 days).

### Rainfall Duration.

There were 73 calendar days on which the duration was registered as 0.1-1.0 hours, 30 days with 1.1 to 2.0 hours, 68 days with 2.1 to 6.0 hours, 16 days with 6.1 to 12.0 hours and 1 day with 12.8 hours.

### Continuous Falls.

On August 4th it rained continuously for 10.4 hours from 1h. 12m. to 11h. 18m. (23.3 mm. fell on this day between 0h. and 13 hours G.M.T.).

### Heavy Falls in Short Periods.

There was no very heavy fall in a short period. On 22nd October 21 mm. fell in exactly 3 hours.

The following list includes all dates on which 5 mm. fell within an hour.

[illegible]



*Amounts, in millimetres, for periods of sixty minutes between the exact hours, Greenwich Mean Time.*

**485. Richmond (Kew Observatory):**  $H_r$  (height of receiving surface above M.S.L.) =  $H$  (height of station above M.S.L.) +  $h_r$  (height of receiving surface above ground) = 5.5 metres + 0.53 metres. **January, 1928.**

**January, 1928.**

Hour. G.M.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	0-24	Dura- tion. 0-24	
Day.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	hr.	
1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
2	...	...	...	...	.2	.7	.2	.2	...	.4	.9	1.7	2.2	1.5	2.0	1.7	1.7	2.1	.9	...	...	...	...	...	...	18.4	11.8
3	...	...	...	...	...	...	.1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.1	0.3
4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	.6	0.6	0.5
5	.4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.4	0.3
6	.9	1.4	.6	.3	.4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3.6	3.7
7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
10	...	...	...	(P)	(P)	(.1)	(P)	(P)	...	...	...	...	...	...	...	...	.3	.1	...	...	...	...	...	...	...	0.4	0.8
11	...	...	...	...	...	...	.1	.2	2.0	.1	...	...	...	...	...	...	1.9	...	...	...	...	...	...	...	...	2.4	1.2
12	(L)	(L)	(L)	(L)	(.1)	(L)	(L)	...	...	...	...	...	...	.2	...	...	.2	.3	.4	.2	.9	1.1	1.3	.8	2.5	1.8	
13	.9	.2	.2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5.5	7.9
14	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1.3	1.5
15	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	.3	.2	.1	...	...	...	...	0.7	1.4
16	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
17	...	...	...	...	...	...	...	...	...	.3	.3	.3	...	...	...	...	...	...	...	...	...	...	...	...	...	0.9	2.0
18	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
19	.5	.8	.1	...	...	...	...	...	...	...	...	...	...	.1	.3	...	.1	1.4	1.1	1.2	.9	1.3	...	1.7	8.1	5.2	
20	...	...	...	...	...	...	...	...	...	...	...	...	.3	1.1	.8	...	...	...	...	...	...	(...)	(...)	(...)	...	1.4	1.1
21	(.1)	...	...	...	...	...	(.1)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	(.2)	...	...
22	...	...	...	.7	.5	.1	...	...	.1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1.4	1.8
23	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
24	...	.1	...	...	...	...	...	...	...	.4	.1	2.5	...	...	.3	.4	...	.7	1.1	1.5	1.4	.8	.4	...	6.3	6.5	
25	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3.8	1.3
26	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2.9	0.9
27	...	...	...	...	...	...	...	...	...	...	...	...	...	.2	.2	...	1.4	1.1	.4	...	...	...	...	...	...	3.3	2.5
28	...	...	...	...	...	...	...	.3	.2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.5	0.8
29	...	...	...	...	...	...	...	...	...	...	...	...	.1	.3	.4	.8	.9	1.1	1.0	.7	.6	.2	.5	.2	...	6.8	9.5
30	.1	.2	.3	.6	.1	.1	...	...	...	.1	.4	...	...	...	...	...	...	...	...	...	...	...	...	...	.2	3.2	7.3
31	...	...	.2	...	...	(L)	(.1)	(L)	...	...	...	...	...	...	...	...	.1	.1	.7	.8	.5	...	...	...	...	2.5	3.7
Sum	2.9	2.7	1.4	1.6	1.5	1.3	0.8	0.9	2.5	1.3	1.8	4.8	2.9	3.9	4.5	3.6	7.2	6.5	5.5	4.1	4.5	4.2	2.3	6.1	78.8	79.5	
Total Duration.	hr. 2.4	hr. 2.5	hr. 2.0	hr. 2.7	hr. 3.0	hr. 1.5	hr. 1.5	hr. 1.6	hr. 2.1	hr. 2.7	hr. 2.9	hr. 2.9	hr. 2.2	hr. 3.8	hr. 3.8	hr. 2.5	hr. 6.2	hr. 6.4	hr. 6.4	hr. 4.4	hr. 5.4	hr. 4.2	hr. 2.7	hr. 3.7	hr. 79.5	—	

**486. Richmond (Kew Observatory) :**  $H_r = 5.5 \text{ metres} + 0.53 \text{ metres.}$

**February, 1928.**

[illegible]







*Amounts, in millimetres, for periods of sixty minutes, between the exact hours, Greenwich Mean Time.*

**489. Richmond (Kew Observatory)**  $H_r$  (height of receiving surface above M.S.L.) =  $H$  (height of station above M.S.L.) +  $h_r$  (height of receiving surface above ground) = 5.5 metres + 0.53 metres.

**May, 1928.**

[illegible]

**490. Richmond (Kew Observatory) :**  $H_r = 5.5$  metres  $\pm 0.53$  metres.

**June, 1928.**

[illegible]



Amounts, in millimetres, for periods of sixty minutes between the exact hours, Greenwich Mean Time.

491. Richmond (Kew Observatory) :  $H_r$  (height of receiving surface above M.S.L.) =  $H$  (height of station above M.S.L.) +  $h_r$  (height of receiving surface above ground) = 5.5 metres + 0.53 metres. July, 1928.

Hour. G.M.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	0-24	Duration. 0-24
Day.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	hr.
1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
4	1.3	.2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1.0	4.1	4.2	4.2	1.3	.5	.9	16.2	6.9
5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1.5	1.6
6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3.9	1.3
7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.1
8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
11	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
13	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
14	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
15	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
16	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
17	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
18	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
19	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
20	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
21	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
22	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
23	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
24	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
25	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
26	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
27	...	...	...	...	1.2	...	3.1	.1	...	...	...	...	...	...	...	1.4	.7	...	...	.2	...	...	(.1)	(...)	6.8	2.0
28	3.2	6.3	1.9	2.1	.3	.1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	13.9	4.2
29	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
30	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
31	0.8	1.1	1.3	2.0	0.2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Sum.	5.3	7.6	3.6	4.1	1.7	0.1	3.1	0.1	...	...	...	...	...	...	...	1.4	0.7	1.0	4.5	5.0	5.2	1.5	5.5	1.9	52.3	23.6
Total Duration.	hr. 2.6	hr. 2.5	hr. 2.2	hr. 2.0	hr. 1.0	hr. 0.2	hr. 0.4	hr. 0.1	...	...	...	...	...	...	...	hr. 0.4	hr. 0.5	hr. 1.0	hr. 1.2	hr. 1.7	hr. 1.7	hr. 1.4	hr. 2.8	hr. 1.9	hr. 23.6	—

492. Richmond (Kew Observatory) :  $H_r = 5.5$  metres + 0.53 metres.

August, 1928.

	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	hr.
1	...	...	...	.4	.5	...	1.3	3.4	.4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6.0	3.0
2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3	...	...	...	...	...	...	.9	.5	.1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
4	.1	.4	1.7	1.1	.6	4.7	5.0	4.7	3.0	1.1	.6	.2	.1	...	...	...	...	...	...	...	...	...	...	...	2.5	2.6
5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8	.4	.7	1.3	.3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
11	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
12	...	...	1.2	.2	...	...	...	...	...	.1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
13	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
14	...	.1	...	...	...	...	...	...	...	...	...	...	.2	...	.1	.2	...	...	...	...	...	...	...	...	...	...
15	...	...	...	...	...	...	...	...	...	...	...	...	2.1	...	...	...	...	...	...	...	...	...	...	...	...	...
16	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
17	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
18	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
19	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
20	3.5	.7	...	...	...	...	...	...	...	...	...	...	...	...	...	.1	.1	.2	.2	.2	.1	...	...	...	...	...
21	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
22	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
23	.4	1.8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
24	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
25	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
26	...	...	...	...	...	.6	2.4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
27	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
28	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
29	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
30	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
31	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Sum.	4.4	3.7	4.2	2.0	1.1	5.3	9.6	8.6	3.5	1.2	3.0	0.7	2.4	0.7	1.1	0.9	7.3	0.4	0.9	0.2	2.0	1.0	1.5	0.1	65.8	33.9
Total Duration.	hr. 1.0	hr. 3.1	hr. 2.3	hr. 2.2	hr. 1.7	hr. 1.5	hr. 3.1	hr. 2.4	hr. 1.6	hr. 1.1	hr. 1.6	hr. 1.0	hr. 0.5	hr. 0.8	hr. 1.2	hr. 1.4	hr. 2.2	hr. 0.4	hr. 1.4	hr. 0.2	hr. 1.1	hr. 1.0	hr. 1.0	hr. 0.1	hr. 33.9	—
Hour. G.M.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	—	—



Amounts, in millimetres, for periods of sixty minutes, between the exact hours, Greenwich Mean Time.

493. Richmond (Kew Observatory):  $H_r$  (height of receiving surface above M.S.L.) =  $H$  (height of station above M.S.L.) +  $h_r$  (height of receiving surface above ground) = 5.5 metres + 0.53 metres. September, 1928.

Hour. G.M.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	0-24	Duration.
Day.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	hr.
1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2.6	5.9	4.9	9	4	...	...	...	...	...	14.7	3.6
10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
11	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
13	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
14	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
15	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
16	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
17	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
18	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
19	...	...	...	...	...	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.3	0.4
20	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
21	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
22	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
23	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
24	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
25	3.8	6	5	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	0.2
26	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.1
27	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.3
28	...	...	...	1	...	...	...	...	2	...	2	1.3	9	8	1.6	5	...	...	...	...	...	...	...	...	5.6	5.2
29	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.2	0.3
30	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Sum.	3.8	0.8	0.5	0.3	...	...	0.3	...	0.2	...	0.2	1.3	0.9	0.8	4.2	6.4	4.9	0.9	0.4	...	...	...	...	0.2	26.1	12.2
Total Duration	hr. 1.0	hr. 0.8	hr. 0.5	hr. 0.6	hr. ...	hr. ...	hr. 0.4	hr. ...	hr. 0.3	hr. ...	hr. 0.3	hr. 0.9	hr. 0.9	hr. 1.0	hr. 1.1	hr. 1.8	hr. 1.0	hr. 1.0	hr. 0.5	hr. ...	hr. ...	hr. ...	hr. ...	hr. 0.1	hr. 12.2	—

494. Richmond (Kew Observatory):  $H_r$  = 5.5 metres + 0.53 metres.

October, 1928.

	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	hr.
1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
11	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
13	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
14	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
15	2.9	3	3.0	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
16	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
17	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
18	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
19	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
20	5	2.3	2	5	2.7	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
21	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
22	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
23	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
24	1.0	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
25	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
26	(...)	(...)	(...)	(...)	(...)	(...)	(...)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
27	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
28	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
29	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
30	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
31	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Sum.	4.4	3.3	3.8	0.8	5.6	2.5	2.4	6.5	2.1	3.5	4.3	0.5	1.0	3.7	2.0	2.3	2.8	2.1	6.6	12.1	12.0	3.3	1.5	3.0	92.1	51.6
Total Duration	hr. 2.5	hr. 2.3	hr. 1.8	hr. 0.6	hr. 2.8	hr. 2.8	hr. 2.8	hr. 3.2	hr. 1.7	hr. 1.4	hr. 1.9	hr. 1.4	hr. 1.0	hr. 1.8	hr. 1.2	hr. 1.1	hr. 1.4	hr. 2.8	hr. 2.9	hr. 3.7	hr. 3.5	hr. 2.6	hr. 1.9	hr. 2.5	hr. 51.6	—
Hour. G.M.T.	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	—	—







For periods of sixty minutes, between the exact hours of Local Apparent Time.

497. Richmond (Kew Observatory) :  $h_s$  (Height of recorder above ground) = 13.3 metres.

January, 1928.

Hour. L.A.T.	3 to 4.	4 to 5.	5 to 6.	6 to 7.	7 to 8.	8 to 9.	9 to 10.	10 to 11.	11 to Noon	Noon to 13.	13 to 14.	14 to 15.	15 to 16.	16 to 17.	17 to 18.	18 to 19.	19 to 20.	20 to 21.	Total for Day.	Per cent. of Possible.	Radiation at Noon. Angström Pyrheliometer.			
																					Sky.	Total.	Vertical.	
Day.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	%		mw/cm <sup>2</sup>	mw/cm <sup>2</sup>	
1	—	—	—	—	—	...	...	5	7	5	...	...	...	—	—	—	—	—	—	1.7	22	...	...	...
2	—	—	—	—	—	...	...	...	...	...	...	...	...	—	—	—	—	—	—	...	...	...	...	...
3	—	—	—	—	—	...	...	...	...	3	...	...	...	—	—	—	—	—	—	0.3	4	...	...	...
4	—	—	—	—	—	...	...	...	...	...	...	...	...	—	—	—	—	—	—	...	...	...	...	...
5	—	—	—	—	—	2	1.0	1.0	1.0	1.0	2	...	...	—	—	—	—	—	—	4.4	55	Clear	55	15
6	—	—	—	—	—	...	...	...	3	9	1.0	1.0	1	—	—	—	—	—	—	3.3	42	...	...	...
7	—	—	—	—	—	...	...	...	...	...	...	...	...	—	—	—	—	—	—	...	...	...	...	...
8	—	—	—	—	—	...	8	1.0	1.0	1.0	...	...	...	—	—	—	—	—	—	3.8	47	...	...	...
9	—	—	—	—	—	...	...	...	5	3	6	2	...	—	—	—	—	—	—	1.6	20	...	...	...
10	—	—	—	—	—	...	1	...	...	...	...	...	...	—	—	—	—	—	—	0.1	1	...	...	...
11	—	—	—	—	...	...	...	5	1.0	6	8	1.0	...	...	—	—	—	—	—	3.9	48	Clear	54	15
12	—	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
13	—	—	—	—	...	1	1.0	1.0	7	2	4	4	...	...	...	...	...	...	...	3.8	47	...	...	...
14	—	—	—	—	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	0.1	1	...	...	...
15	—	—	—	—	...	1	1.0	1.0	1.0	1.0	1.0	6	2	...	—	—	—	—	—	5.9	72	...	...	...
16	—	—	—	—	...	...	...	...	...	...	...	...	...	—	—	—	—	—	—	...	...	...	...	...
17	—	—	—	—	...	...	6	1.0	1.0	8	1	9	2	...	...	...	...	...	...	4.6	55	Mist	25	8
18	—	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
19	—	—	—	—	...	8	1.0	1.0	1.0	1.0	1.0	1.0	5	...	—	—	—	—	—	7.8	87	Clear	64	20
20	—	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
21	—	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
22	—	—	—	—	...	...	...	...	...	...	3	9	1	...	...	...	...	...	...	1.3	...	...	...	...
23	—	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
24	—	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
25	—	—	—	—	...	7	1.0	1.0	6	8	2	2	...	...	...	...	...	...	...	4.5	...	...	...	...
26	—	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
27	—	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
28	—	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
29	—	—	—	—	...	...	...	...	9	1.0	1.0	2	...	...	...	...	...	...	...	3.1	35	...	...	...
30	—	—	—	—	...	...	...	8	1.0	1.0	1.0	6	...	...	...	...	...	...	...	4.4	49	Clear	45	16
31	—	—	—	—	...	3	9	7	8	9	3	...	...	...	...	...	...	...	...	3.9	43	Clear	53	19
Sum.	—	—	—	—	0.0	2.2	7.4	9.6	11.5	11.3	7.9	7.0	1.1	0.0	—	—	—	—	—	58.0	—	—	—	—
Mean	—	—	—	—	0.00	0.07	0.24	0.31	0.37	0.36	0.25	0.23	0.04	0.00	—	—	—	—	—	1.87	22	—	—	—

498. Richmond (Kew Observatory) :  $h_s$  = 13.3 metres.

February, 1928.

	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	%		mw/cm <sup>2</sup>	mw/cm <sup>2</sup>	
1	—	—	—	—	...	1	2	...	3	9	1.0	9	...	...	...	...	...	...	...	3.4	37	Ci-cu.	53	19	
2	—	—	—	—	...	1	1.0	1.0	8	3	...	...	...	...	...	...	...	...	...	3.2	35	...	...	...	
3	—	—	—	—	...	1	4	8	...	4	...	5	2	...	...	...	...	...	...	2.4	26	...	...	...	
4	—	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
5	—	—	—	—	...	...	...	...	...	...	2	3	1	...	...	...	...	...	...	0.6	6	...	...	...	
6	—	—	—	—	...	1	1.0	1.0	1.0	1.0	1.0	5	5	...	...	...	...	...	...	7.1	76	Clear	59	23	
7	—	—	—	—	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	0.1	1	...	...	...	
8	—	—	—	—	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	0.2	2	...	...	...	
9	—	—	—	—	...	...	...	...	...	6	4	2	...	...	...	...	...	...	...	1.2	13	...	...	...	
10	—	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
11	—	—	—	—	...	6	1.0	3	...	...	...	...	1	...	...	...	...	...	...	2.0	21	...	...	...	
12	—	—	—	—	...	...	1	...	...	2	...	...	...	...	...	...	...	...	...	0.3	3	...	...	...	
13	—	—	—	—	...	...	...	...	...	...	5	8	4	1	...	...	...	...	...	1.8	18	...	...	...	
14	—	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
15	—	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
16	—	—	—	—	...	...	...	...	...	...	...	3	...	...	...	...	...	...	...	0.3	3	...	...	...	
17	—	—	—	—	...	5	1.0	1.0	1.0	1.0	1.0	9	3	...	...	...	...	...	...	7.7	77	Clear	78	35	
18	—	—	—	—	...	6	1.0	1.0	1.0	1.0	6	4	2	...	...	...	...	...	...	5.8	58	...	...	...	
19	—	—	—	—	...	1	2	9	1.0	1.0	1.0	8	1.0	1.0	5	...	...	...	...	7.5	74	...	...	...	
20	—	—	—	—	...	...	...	5	1.0	2	...	...	...	...	...	...	...	...	...	1.7	17	...	...	...	
21	—	—	—	...	...	4	1.0	1.0	1.0	1.0	1.0	1.0	1.0	4	...	...	...	...	...	7.8	76	Clear	63	29	
22	—	—	—	...	...	...	...	5	1.0	1.0	1.0	7	1	...	...	...	...	...	...	4.3	42	Mist	40	19	
23	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
24	—	—	—	...	...	...	...	...	1	3	9	7	...	...	...	...	...	...	...	2.0	19	...	...	...	
25	—	—	—	...	...	...	...	...	...	3	1.0	1.0	4	...	...	...	...	...	...	2.7	26	...	...	...	
26	—	—	—	...	...	8	1.0	9	1.0	1.0	1.0	1.0	1.0	4	...	...	...	...	...	8.1	77	...	...	...	
27	—	—	—	...	...	6	1.0	1.0	1.0	1.0	1.0	1.0	1.0	8	...	...	...	...	...	8.4	79	Clear	74	37	
28	—	—	—	...	...	5	1.0	1.0	1.0	1.0	1.0	1.0	9	...	...	...	...	...	...	7.4	69	Mist	32	16	
29	—	—	—	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	0.1	1	...	...	...	
Sum.	—	—	—	0.0	0.8	6.4	11.0	10.2	11.9	12.1	12.2	11.7	7.6	2.2	0.0	—	—	—	—	86.1	—	—	—	—	
Mean	—	—	—	0.00	0.03	0.22	0.38	0.35	0.41	0.42	0.42	0.40	0.26	0.08	0.00	—	—	—	—	2.97	30	—	—	—	
Hour. L.A.T.	3 to 4.	4 to 5.	5 to 6.	6 to 7.	7 to 8.	8 to 9.	9 to 10.	10 to 11.	11 to Noon	Noon to 13.	13 to 14.	14 to 15.	15 to 16.	16 to 17.	17 to 18.	18 to 19.	19 to 20.	20 to 21.	Total for Day.	Per cent. of Possible.	Sky.	Total.	Vertical.		
																							Radiation at Noon. Angström Pyrheliometer.		



## DURATION OF BRIGHT SUNSHINE.

395

For periods of sixty minutes, between the exact hours of Local Apparent Time.

499. Richmond (Kew Observatory) :  $h_s$  (Height of recorder above ground) = 13.3 metres.

March, 1928.

Hour. L.A.T.	3 to 4.	4 to 5.	5 to 6.	6 to 7.	7 to 8.	8 to 9.	9 to 10.	10 to 11.	11 to Noon	Noon to 13.	13 to 14.	14 to 15.	15 to 16.	16 to 17.	17 to 18.	18 to 19.	19 to 20.	20 to 21.	Total for Day.	Per cent. of Possible.	Radiation at Noon. Ångström Pyrheliometer.		
																					Sky.	Total.	Vertical.
Day.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	%		mw/cm <sup>2</sup>	mw/cm <sup>2</sup>
1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...
2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...
3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Mist	29	15
4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...
5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Haze	59	32
6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...
7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...
8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...
9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...
10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...
11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...
12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Clear	58	33
13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...
14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...
15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...
16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Cirrus	35	21
17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...
18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...
19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...
20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Clear	77	48
21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...
22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Clear	82	51
23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...
24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...
25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...
26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Clear	83	54
27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...
28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Clear	74	49
29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...
30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Clear	83	55
31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...
Sum	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mean	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

500. Richmond (Kew Observatory) :  $h_s$  = 13.3 metres.

April, 1928.

Hour. L.A.T.	3 to 4.	4 to 5.	5 to 6.	6 to 7.	7 to 8.	8 to 9.	9 to 10.	10 to 11.	11 to Noon	Noon to 13.	13 to 14.	14 to 15.	15 to 16.	16 to 17.	17 to 18.	18 to 19.	19 to 20.	20 to 21.	Total for Day.	Per cent. of Possible.	Radiation at Noon. Ångström Pyrheliometer.		
																					Sky.	Total.	Vertical.
1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...
2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...
3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Clear	73	50
4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...
5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...
6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...
7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...
8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...
9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...
10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...
11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...
12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...
13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...
14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...
15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...
16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...
17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...
18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...
19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...
20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Clear	67	51
21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...
22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...
23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...
24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Haze	76	60
25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...
26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...
27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...
28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Haze	77	61
29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...
30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...
Sum	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mean	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—



For periods of sixty minutes, between the exact hours of Local Apparent Time.

501. Richmond (Kew Observatory) :  $h_s$  (Height of recorder above ground) = 13.3 metres.

May, 1928.

Hour. L.A.T.	3 to 4.	4 to 5.	5 to 6.	6 to 7.	7 to 8.	8 to 9.	9 to 10.	10 to 11.	11 to Noon	Noon to 13.	13 to 14.	14 to 15.	15 to 16.	16 to 17.	17 to 18.	18 to 19.	19 to 20.	20 to 21.	Total for Day.	Per cent. of Possible.	Radiation at Noon. Angström Pyrheliometer.		
																					Sky.	Total.	Vertical.
Day.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	%		mw/cm <sup>2</sup>	mw/cm <sup>2</sup>
1	—	...	...	...	...	...	...	...	1	...	...	2	...	4	...	...	...	...	0.7	5	...	...	...
2	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3	—	...	...	...	...	...	...	...	...	9	9	7	6	7	3	...	...	...	4.1	28	...	...	...
4	—	...	...	9	9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	3	...	...	12.1	81	Haze	63	51
5	—	...	...	4	8	8	7	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	5	...	...	11.2	75	Haze	59	48
6	—	...	8	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	...	...	...	13.8	92	...	...	...
7	—	...	4	1.0	1.0	1.0	1.0	6	9	1.0	1.0	1.0	8	1.0	1.0	...	...	...	12.7	84	Haze	57	47
8	—	...	6	1.0	3	8	...	1	6	7	4	6	...	...	...	...	...	...	5.1	34	...	...	...
9	—	...	1.0	1.0	1.0	1.0	8	5	7	9	6	6	7	5	1	...	...	...	9.4	62	...	...	...
10	—	...	4	3	5	6	8	1.0	1.0	6	...	...	5	...	...	...	...	...	5.7	37	...	...	...
11	—	...	3	1.0	1.0	9	9	9	8	7	9	1.0	1.0	8	1.0	7	...	...	11.9	78	Clear	62	51
12	—	...	...	6	1.0	1.0	1.0	4	3	...	...	...	...	...	...	...	...	...	4.3	28	...	...	...
13	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
14	—	...	...	...	...	...	...	5	3	5	8	6	...	1	...	...	...	...	2.8	18	...	...	...
15	—	...	3	1.0	9	8	5	...	3	9	1.0	6	2	...	...	...	...	...	6.5	42	...	...	...
16	—	...	...	...	...	...	...	...	...	...	3	6	2	2	...	...	...	...	1.3	8	...	...	...
17	—	...	...	...	...	4	6	1	5	2	4	1	...	...	...	...	...	...	2.3	15	...	...	...
18	—	...	...	...	...	...	...	...	...	...	4	...	...	...	...	...	...	...	0.4	3	...	...	...
19	—	...	...	8	1.0	1.0	1.0	9	7	...	...	1	...	...	...	...	...	...	5.5	35	...	...	...
20	—	...	...	...	...	5	1.0	1.0	6	4	...	...	...	3	6	1	...	...	4.5	29	...	...	...
21	—	...	...	...	4	2	5	5	1	...	1	3	1	...	...	...	...	...	2.2	14	...	...	...
22	—	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	0.2	1	...	...	...
23	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
24	—	...	...	...	...	1	1	...	...	1	1	2	5	2	1	6	...	...	2.0	13	...	...	...
25	—	...	...	...	...	1.0	1.0	1.0	1.0	1.0	1.0	9	7	1.0	1.0	1.0	5	...	11.1	69	Haze	80	69
26	—	...	...	5	1	7	...	6	1.0	9	9	3	...	...	...	...	...	...	5.0	31	...	...	...
27	—	...	...	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	9	7	5	...	...	12.1	75	...	...	...
28	—	...	...	...	9	6	7	3	1	2	1	4	6	...	...	...	2	...	4.1	25	...	...	...
29	...	...	...	...	...	...	6	1.0	...	7	...	6	8	3	...	...	...	...	4.0	25	...	...	...
30	...	...	...	...	...	...	...	...	3	6	1.0	1.0	1.0	1.0	1.0	1.0	4	...	7.3	45	...	...	...
31	...	...	...	...	...	...	...	...	...	...	...	5	9	6	2	...	...	...	2.2	14	...	...	...
Sum.	0.0	0.0	3.8	10.5	11.8	14.4	14.9	13.2	13.5	13.9	14.4	13.1	12.5	11.4	9.3	6.7	1.1	0.0	164.5	—	—	—	—
Mean	0.00	0.00	0.12	0.34	0.38	0.46	0.48	0.43	0.44	0.45	0.46	0.42	0.40	0.37	0.30	0.22	0.04	0.00	5.31	34	—	—	—

502. Richmond (Kew Observatory) :  $h_s$  = 13.3 metres.

June, 1928.

Hour. L.A.T.	3 to 4.	4 to 5.	5 to 6.	6 to 7.	7 to 8.	8 to 9.	9 to 10.	10 to 11.	11 to Noon	Noon to 13.	13 to 14.	14 to 15.	15 to 16.	16 to 17.	17 to 18.	18 to 19.	19 to 20.	20 to 21.	Total for Day.	Per cent. of Possible.	Radiation at Noon. Angström Pyrheliometer.		
																					Sky.	Total.	Vertical.
1	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	%		mw/cm <sup>2</sup>	m/cm <sup>2</sup>
2	...	3	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	5	...	14.8	91	...	...	...
3	...	4	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2	...	14.6	90	...	...	...
4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5	...	...	...	...	...	...	...	...	...	2	1	2	...	...	...	...	...	...	0.5	3	...	...	...
6	...	...	...	...	...	1	7	7	8	1.0	9	3	5	1.0	9	9	7	...	8.5	52	Clear	87	76
7	...	...	...	...	...	...	...	...	1	6	4	7	4	3	8	...	...	...	3.3	20	...	...	...
8	...	...	...	...	...	8	3	2	2	6	1.0	1.0	1.0	1.0	6	...	1	...	6.8	41	Clear	83	72
9	...	...	...	...	...	2	8	1.0	1.0	1.0	7	4	7	1.0	7	4	2	...	8.1	49	...	...	...
10	...	1	9	...	2	1	6	1	6	2	4	3	1	1	...	...	4	...	4.1	25	...	...	...
11	...	1	1.0	1.0	1.0	4	4	9	6	3	4	9	8	5	1.0	5	1	...	9.9	60	...	...	...
12	...	3	1.0	1.0	1.0	1.0	1.0	1.0	1	...	...	...	...	...	...	...	...	...	7.4	45	Clear	75	66
13	...	4	7	1.0	9	7	4	9	1.0	1.0	1.0	9	4	...	...	...	...	...	9.3	56	...	...	...
14	...	...	...	...	1	1	1	3	...	4	4	...	...	...	...	...	...	...	1.4	8	...	...	...
15	...	3	1.0	1.0	1.0	1.0	1.0	9	5	6	1.0	7	9	9	5	1.0	7	...	13.0	79	Clear	79	70
16	...	9	1.0	1.0	1.0	1.0	1.0	2	3	9	3	4	4	1	...	...	...	...	8.5	51	...	...	...
17	...	...	1.0	1.0	1.0	1.0	9	6	4	...	...	...	...	...	3	...	2	...	6.4	39	...	...	...
18	...	...	...	...	...	...	...	...	2	...	...	...	3	...	...	...	...	...	0.5	3	...	...	...
19	...	...	5	1.0	3	...	2	...	...	1	4	1	3	1	...	...	...	...	3.0	18	...	...	...
20	...	...	6	1.0	1.0	1.0	1.0	1.0	1.0	8	9	9	9	8	8	8	2	...	12.7	77	Clear	75	66
21	...	...	6	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1.3	8	...	...	...
22	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	4	3	...	0.8	5	...	...	...
23	...	2	1.0	1.0	1.0	1.0	1.0	9	9	6	5	4	1.0	9	6	1	...	...	11.1	67	...	...	...
24	...	2	1.0	1.0	1.0	1.0	9	1.0	1.0	1.0	9	9	9	9	7	1.0	3	...	13.7	83	...	...	...
25	...	1	1.0	1.0	1.0	1.0	1.0	1.0	9	1.0	1.0	1.0	1.0	1.0	1	...	...	...	12.1	73	Clear	85	75
26	...	...	...	...	2	4	1	...	1	1	1	1	...	2	...	...	1	...	1.4	8	...	...	...
27	...	7	4	2	2	7	9	1.0	4	6	4	9	7	8	4	...	...	...	9.5	57	...	...	...
28	...	1	5	5	8	7	1.0	3	8	1	...	...	...	...	5	...	...	...	5.3	32	Cirrus	53	47
29	...	...	...	6	3	5	8	9	8	8	1.0	1.0	2	...	...	2	4	...	7.5	45	Clear	72	63
30	...	2	1.0	1.0	...	5	7	7	6	6	6	9	8	8	1.0	1.0	7	...	11.6	70	...	...	...
Sum.	0.0	4.3	15.2	16.0	14.5	15.2	17.2	15.8	15.0	14.6	14.4	14.3	13.3	13.3	11.9	10.2	5.8	0.0	211.0	—	—	—	—
Mean	0.00	0.14	0.51	0.53	0.48	0.51	0.57	0.53	0.50	0.49	0.48	0.48	0.44	0.44	0.40	0.34	0.19	0.00	7.03	43	—	—	—
Hour. L.A.T.	3 to 4.	4 to 5.	5 to 6.	6 to 7.	7 to 8.	8 to 9.	9 to 10.	10 to 11.	11 to Noon	Noon to 13.	13 to 14.	14 to 15.	15 to 16.	16 to 17.	17 to 18.	18 to 19.	19 to 20.	20 to 21.	Total for Day.	Per cent. of Possible.	Radiation at Noon. Angström Pyrheliometer.		
																					Sky.	Total.	Vertical.



For periods of sixty minutes, between the exact hours of Local Apparent Time.

503. Richmond (Kew Observatory) :  $h_s$  (Height of recorder above ground) = 13.3 metres.

July, 1928.

Hour. L.A.T.	3 to 4.	4 to 5.	5 to 6.	6 to 7.	7 to 8.	8 to 9.	9 to 10.	10 to 11.	11 to Noon	Noon to 13.	13 to 14.	14 to 15.	15 to 16.	16 to 17.	17 to 18.	18 to 19.	19 to 20.	20 to 21.	Total for Day.	Per cent. of Possible.	Radiation at Noon. Angström Pyrheliometer.		
																					Sky.	Total.	Vertical.
Day.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	%		mw/cm <sup>2</sup>	mw/cm <sup>2</sup>
1	...	...	4	1.0	.9	.3	.5	.6	.7	.5	.8	.7	.8	.4	.2	...	...	...	8.8	53	...	...	...
2	...	3	4	1.0	.9	.1	1.0	1.0	.4	.1	.1	.3	...	...	.3	...	...	...	5.2	32	...	...	...
3	...	4	1.0	1.0	.7	.6	.8	1.0	.9	.2	...	...	...	...	...	...	...	...	6.6	40	Haze	60	53
4	...	...	.6	1.0	1.0	1.0	1.0	1.0	1.0	.9	.8	...	.2	.5	...	...	...	...	9.0	55	Clear	78	69
5	...	...	.1	.9	.9	.7	.9	.5	.8	.9	.9	.3	...	...	...	...	...	...	6.9	42	...	...	...
6	...	...	.6	1.0	1.0	.8	.3	...	.1	...	...	...	.2	...	...	...	...	...	4.0	24	...	...	...
7	...	...	...	.5	1.0	1.0	.6	.7	.3	.6	.7	.9	.9	.9	.8	...	...	...	8.9	54	...	...	...
8	...	.5	1.0	1.0	1.0	1.0	.1	.2	.2	1.0	.8	.4	...	.1	.9	.4	...	...	8.6	53	...	...	...
9	...	...	...	...	.7	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	.9	1.0	.5	.1	...	11.2	69	Clear	84	73
10	...	...	.4	1.0	1.0	1.0	.6	1.0	1.0	1.0	1.0	1.0	.9	.4	...	...	...	...	10.3	63	Clear	84	73
11	...	.4	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	.7	...	15.1	93	Clear	87	76
12	...	.3	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	.6	...	14.9	92	Clear	83	72
13	...	.6	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	.9	1.0	1.0	1.0	1.0	1.0	.7	...	15.2	94	Cirrus	72	63
14	...	.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	.7	...	15.2	94	Clear	73	64
15	...	...	.3	.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	.7	...	13.5	84	...	...	...
16	...	.2	1.0	1.0	1.0	1.0	1.0	1.0	.9	.6	...	...	...	.1	.9	.9	...	...	9.6	60	Clear	83	72
17	...	...	.5	1.0	1.0	1.0	.6	.8	.4	1.0	1.0	1.0	1.0	1.0	1.0	.8	...	...	12.1	75	...	...	...
18	...	...	.9	1.0	1.0	1.0	1.0	1.0	.9	1.0	.9	1.0	1.0	.8	.9	.9	.1	...	13.4	84	...	...	...
19	...	...	...	.1	.1	...	.7	.9	.8	.9	.9	1.0	1.0	1.0	1.0	.7	...	...	9.1	57	...	...	...
20	...	...	.1	.5	.1	.2	.3	.5	.9	1.0	1.0	1.0	1.0	1.0	1.0	.7	...	...	9.3	58	...	...	...
21	...	...	.8	.9	.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	.9	...	...	13.5	85	...	...	...
22	...	.1	.9	1.0	1.0	1.0	1.0	1.0	1.0	.9	.8	.7	.4	...	...	...	...	...	9.8	62	...	...	...
23	...	...	...	.9	.9	.7	.3	.1	.4	.2	.1	.2	.4	...	.4	...	...	...	4.6	29	...	...	...
24	...	...	...	.4	.2	.9	.9	1.0	1.0	1.0	.5	1.0	.5	...	.1	.2	...	...	7.7	49	...	...	...
25	...	...	...	.3	...	.5	.3	.8	.3	.7	.9	.8	.4	.9	.9	.7	.3	...	7.8	50	...	...	...
26	...	...	1.0	1.0	.9	.3	...	...	...	.2	.9	1.0	.8	.7	.5	...	...	...	7.3	47	...	...	...
27	...	...	...	...	...	.8	.9	...	...	...	...	...	...	...	...	...	...	...	1.7	11	...	...	...
28	...	...	.3	.9	1.0	1.0	.9	.7	.8	.7	.8	1.0	1.0	1.0	1.0	.7	...	...	11.8	76	...	...	...
29	...	...	1.0	1.0	1.0	1.0	.9	.8	.9	.9	1.0	.9	.5	.6	.7	1.0	.4	...	12.6	81	...	...	...
30	...	.2	.8	...	.7	.3	.4	.7	.7	.1	...	...	.1	...	...	...	...	...	4.0	26	...	...	...
31	...	...	...	...	...	.1	.7	.7	.9	.2	...	...	...	...	...	...	...	...	2.6	17	...	...	...
Sum.	0.0	3.5	16.1	21.9	23.1	24.1	22.7	23.0	22.3	21.6	20.8	20.3	17.8	17.3	17.4	13.9	4.5	0.0	290.3	—	—	—	—
Mean	0.00	0.11	0.52	0.71	0.75	0.78	0.73	0.74	0.72	0.70	0.67	0.65	0.57	0.56	0.56	0.45	0.15	0.00	9.36	58	—	—	—

504. Richmond (Kew Observatory) :  $h_s$  = 13.3 metres.

August, 1928.

Hour. L.A.T.	3 to 4.	4 to 5.	5 to 6.	6 to 7.	7 to 8.	8 to 9.	9 to 10.	10 to 11.	11 to Noon	Noon to 13.	13 to 14.	14 to 15.	15 to 16.	16 to 17.	17 to 18.	18 to 19.	19 to 20.	20 to 21.	Total for Day.	Per cent. of Possible.	Radiation at Noon. Angström Pyrheliometer.		
																					Sky.	Total.	Vertical.
Day.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	%		mw/cm <sup>2</sup>	mw/cm <sup>2</sup>
1	...	...	...	...	...	...	.1	...	.3	.6	.1	...	.3	.2	...	...	...	...	1.6	10	...	...	...
2	...	...	...	...	...	...	...	.1	.8	.6	.5	.9	.8	.8	.4	.7	...	...	5.6	37	...	...	...
3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
4	...	...	...	...	...	...	...	...	...	...	...	.5	1.0	1.0	1.0	.9	...	...	4.4	29	...	...	...
5	...	...	.3	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	.5	...	...	...	12.8	84	...	...	...
6	...	...	...	.4	.7	.9	1.0	.9	...	.9	.8	.3	...	...	...	...	...	...	5.9	39	...	...	...
7	...	...	...	.3	...	.1	.1	.2	.6	.7	1.0	.8	...	.2	...	...	...	...	4.1	27	...	...	...
8	...	...	...	.5	.8	1.0	.6	.9	.9	.8	.2	...	...	.6	.9	1.0	...	...	8.2	55	Clear	75	61
9	...	...	.6	1.0	1.0	1.0	.9	.9	.3	.8	.3	...	.3	...	.9	.9	...	...	8.9	60	...	...	...
10	...	...	.4	1.0	.8	...	...	...	...	...	...	...	...	...	...	...	...	...	2.4	16	...	...	...
11	...	...	.2	.3	1.0	1.0	.9	.9	.8	1.0	1.0	1.0	.9	.6	...	...	...	...	10.5	71	...	...	...
12	...	...	...	...	...	...	...	.1	.7	.8	1.0	.5	1.0	.9	.9	.7	...	...	6.6	45	...	...	...
13	...	...	.8	.9	.9	.8	1.0	.7	.2	...	.1	.8	...	.7	.1	...	...	...	7.0	48	...	...	...
14	...	...	.7	.6	.8	1.0	.9	.9	.9	.7	.6	.8	.9	1.0	.9	.3	...	...	11.0	75	Clear	92	74
15	...	...	.8	1.0	1.0	.9	1.0	.9	.9	.8	.7	.2	.2	.6	.3	...	...	...	9.9	68	Clear	92	73
16	...	...	.1	.6	1.0	.8	.5	.6	.7	.1	...	.3	.9	.1	.2	...	...	...	5.9	41	Clear	89	70
17	...	...	.5	1.0	.3	.6	1.0	.9	.3	...	...	...	.1	.9	...	...	...	...	5.6	39	...	...	...
18	...	...	...	...	...	...	...	.2	1.0	.9	1.0	.9	1.0	1.0	.9	.5	...	...	7.4	51	...	...	...
19	...	...	.1	1.0	1.0	1.0	1.0	.9	.1	.1	.2	...	.3	.3	.2	...	...	...	7.2	50	...	...	...
20	...	...	.6	.4	.6	.3	.9	1.0	.9	1.0	1.0	.3	...	...	...	...	...	...	7.4	52	Clear	90	70
21	...	...	.5	1.0	1.0	1.0	1.0	1.0	.5	...	...	...	.2	...	...	...	...	...	6.2	44	...	...	...
22	...	...	.2	.8	.8	1.0	1.0	.8	.6	.2	...	...	...	...	...	...	...	...	5.4	38	...	...	...
23	...	...	...	...	.3	...	...	...	.1	...	...	...	...	...	...	...	...	...	0.4	3	...	...	...
24	...	...	...	.2	.6	.1	...	...	...	...	.5	.9	.9	...	...	...	...	...	3.2	23	...	...	...
25	...	...	.2	.6	.6	.6	.9	1.0	1.0	.9	.4	.4	.3	.9	.5	...	...	...	8.3	59	...	...	...
26	...	...	...	...	.9	.6	.3	.1	...	...	...	...	...	...	...	...	...	...	1.9	14	...	...	...
27	...	...	.4	1.0	1.0	.9	.7	.4	.4	.9	.7	1.0	1.0	.8	.8	.1	...	...	10.1	73	...	...	...
28	...	...	.4	1.0	.8	1.0	1.0	1.0	1.0	.9	.9	1.0	1.0	1.0	.4	...	...	...	12.4	90	Clear	85	64
29	...	...	.4	1.0	1.0	1.0	1.0	1.0	.8	...	.1	...	.4	1.0	1.0	.3	...	...	9.0	66	...	...	...
30	...	...	...	.6	.5	1.0	1.0	1.0	.9	1.0	1.0	1.0	1.0	.9	.3	...	...	...	10.2	75	Clear	75	55
31	...	...	...	...	.2	...	...	.6	...	.1	.1	...	...	...	...	...	...	...	1.0	7	...	...	...
Sum.	...	0.0	7.2	16.2	18.6	17.6	17.8	18.0	16.1	14.8	12.8	13.1	14.4	14.8	12.3	6.8	0.0	...	200.5	—	—	—	—
Mean	...	0.00	0.23	0.52	0.60	0.57	0.57	0.58	0.52	0.48	0.41	0.42	0.46	0.48	0.40	0.22	0.00	...	6.47	45	—	—	—



## DURATION OF BRIGHT SUNSHINE.

For periods of sixty minutes, between the exact hours of Local Apparent Time.

505. Richmond (Kew Observatory) :  $h_s$  (Height of recorder above ground)=13.3 metres.

September, 1928.

Hour. L.A.T.	3 to 4.	4 to 5.	5 to 6.	6 to 7.	7 to 8.	8 to 9.	9 to 10.	10 to 11.	11 to Noon	Noon to 13.	13 to 14.	14 to 15.	15 to 16.	16 to 17.	17 to 18.	18 to 19.	19 to 20.	20 to 21.	Total for Day.	Per cent. of Possible.	Radiation at Noon. Ångström Pyrheliometer.		
																					Sky.	Total.	Vertical.
Day.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	%		mw/cm <sup>2</sup>	mw/cm <sup>2</sup>
1	—	—	...	1	7	7	1.0	1.0	9	8	5	7	1.0	9	6	...	—	—	8.9	66	...	...	...
2	—	—	...	7	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	...	—	—	11.7	87	...	...	...
3	—	—	...	...	...	8	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	...	—	—	8.8	66	Clear	67	49
4	—	—	2	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2	...	—	12.4	93	Clear	87	62
5	—	—	...	2	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2	...	...	—	—	9.4	71	Clear	81	57
6	—	—	...	...	3	1.0	1.0	1.0	1.0	1.0	8	2	6	1	4	1	...	—	7.5	57	...	...	...
7	—	—	...	...	1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	8	...	—	—	9.9	75	Clear	77	55
8	—	—	...	4	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	8	...	...	...	—	—	9.2	70	Sl. haze	75	52
9	—	—	...	...	...	...	...	...	...	1	...	...	...	...	...	...	—	—	0.1	1	...	...	...
10	—	—	...	7	1.0	8	5	9	1.0	2	1	7	3	2	...	...	—	—	6.4	49	...	...	...
11	—	—	...	2	9	2	9	1.0	9	1.0	1.0	3	9	1.0	5	...	—	—	8.8	68	Clear	67	46
12	—	—	...	...	...	...	...	1	9	8	8	8	1	6	...	...	—	—	4.1	32	...	...	...
13	—	—	...	...	...	1.0	1.0	1.0	1.0	1.0	1.0	7	6	2	...	...	—	—	7.5	59	...	...	...
14	—	—	...	...	1.0	1.0	1.0	7	1.0	1.0	1.0	9	8	6	3	...	—	—	9.3	73	...	...	...
15	—	—	...	...	...	2	9	8	8	4	1.0	1	6	1.0	5	...	—	—	6.3	50	...	...	...
16	—	—	...	...	...	...	1	2	9	7	9	1.0	1.0	1.0	...	...	—	—	5.8	46	...	...	...
17	—	—	...	...	3	7	1.0	8	4	5	...	2	...	1	...	...	—	—	4.0	32	...	...	...
18	—	—	...	...	...	...	4	1.0	1.0	1.0	9	1.0	9	9	4	...	—	—	7.5	60	Clear	76	50
19	—	—	...	...	...	...	2	1.0	1.0	1.0	1.0	1.0	7	9	...	...	—	—	6.8	55	Cirrus	69	45
20	—	—	...	...	9	1.0	1.0	1.0	6	4	7	8	1.0	1.0	4	...	—	—	8.8	72	...	...	...
21	—	—	...	...	3	1.0	1.0	6	7	8	9	9	1.0	7	...	...	—	—	7.9	64	...	...	...
22	—	—	...	1	1.0	1.0	1.0	1.0	1.0	1.0	9	7	2	3	8	5	...	—	8.6	71	...	...	...
23	—	—	...	...	...	...	2	7	8	9	8	4	1	...	...	...	—	—	3.9	32	...	...	...
24	—	—	...	...	...	...	...	...	...	1	...	4	1	...	...	...	—	—	0.6	5	...	...	...
25	—	—	...	...	...	4	4	1.0	9	5	8	1.0	1.0	6	2	...	—	—	6.8	57	...	...	...
26	—	—	...	...	...	9	1.0	1.0	7	7	3	...	1.0	5	...	...	—	—	6.1	51	...	...	...
27	—	—	...	...	...	3	1.0	1.0	1.0	1.0	8	9	1.0	2	...	...	—	—	7.2	61	...	...	...
28	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	—	—	...	...	...	...	...
29	—	—	...	...	...	...	...	...	...	...	...	...	1	...	...	...	—	—	0.1	1	...	...	...
30	—	—	...	2	1.0	1.0	1.0	9	8	1	2	2	1	3	...	...	—	—	5.8	50	...	...	...
Sum.	—	—	0.2	3.6	11.5	17.0	20.6	22.7	23.8	21.0	20.2	18.4	19.0	15.6	6.8	0.3	—	—	200.2	—	—	—	—
Mean	—	—	0.01	0.12	0.38	0.57	0.69	0.76	0.78	0.70	0.67	0.61	0.63	0.52	0.23	0.01	—	—	6.67	53	—	—	—

506. Richmond (Kew Observatory) :  $h_s$  =13.3 metres.

October, 1928.

Hour. L.A.T.	3 to 4.	4 to 5.	5 to 6.	6 to 7.	7 to 8.	8 to 9.	9 to 10.	10 to 11.	11 to Noon	Noon to 13.	13 to 14.	14 to 15.	15 to 16.	16 to 17.	17 to 18.	18 to 19.	19 to 20.	20 to 21.	Total for Day.	Per cent. of Possible.	Radiation at Noon. Ångström Pyrheliometer.		
																					Sky.	Total.	Vertical.
1	—	—	—	...	8	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	...	...	...	...	9.8	85	...	...	...
2	—	—	—	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	0.1	1	...	...	...
3	—	—	—	...	...	...	5	7	1.0	1.0	6	5	1	4	...	...	...	...	4.8	42	Misty	44	25
4	—	—	—	...	2	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	5	...	...	...	...	8.7	76	Haze	71	40
5	—	—	—	...	...	...	...	...	...	...	1	2	4	...	...	...	...	...	0.7	6	...	...	...
6	—	—	—	...	1	8	1.0	1.0	...	9	9	4	6	5	...	...	...	...	6.2	55	...	...	...
7	—	—	—	...	...	4	1.0	7	4	2	4	1	...	...	...	...	...	...	3.2	29	...	...	...
8	—	—	—	...	...	...	...	...	7	2	...	...	4	7	...	...	...	...	2.0	18	...	...	...
9	—	—	—	...	...	...	...	4	9	3	7	8	6	...	...	...	...	...	3.7	33	Clear	80	43
10	—	—	—	...	...	...	...	1	5	...	...	2	8	...	...	...	...	...	1.6	15	...	...	...
11	—	—	—	...	...	...	7	1.0	8	3	8	5	8	4	...	...	...	...	5.3	48	Clear	79	42
12	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
13	—	—	—	...	3	5	1	3	8	9	4	4	6	...	...	...	...	...	4.3	40	...	...	...
14	—	—	—	...	...	2	1.0	1.0	9	9	9	4	...	...	...	...	...	...	5.3	49	...	...	...
15	—	—	—	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	0.1	1	...	...	...
16	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
17	—	—	—	...	...	...	...	...	...	2	9	7	5	...	...	...	...	...	2.3	22	...	...	...
18	—	—	—	...	4	1.0	4	2	1	...	...	...	...	...	...	...	...	...	2.1	20	...	...	...
19	—	—	—	...	...	4	2	6	8	2	1	...	...	...	...	...	...	...	2.3	22	...	...	...
20	—	—	—	...	...	...	...	4	6	3	1	9	4	3	...	...	...	...	3.0	29	...	...	...
21	—	—	—	...	3	9	1.0	7	3	1.0	4	8	5	2	...	...	...	...	6.1	59	...	...	...
22	—	—	—	...	...	...	5	4	1.0	1.0	7	...	...	...	...	...	...	...	3.6	35	Clear	83	38
23	—	—	—	...	1	1.0	1.0	1.0	9	1.0	7	4	...	...	...	...	...	...	6.1	60	Misty	62	28
24	—	—	—	...	2	6	7	8	1.0	7	6	5	8	...	...	...	...	...	5.9	58	...	...	...
25	—	—	—	...	5	1.0	1.0	1.0	9	7	7	9	9	2	...	...	...	...	7.8	78	Clear	77	34
26	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
27	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
28	—	—	—	...	...	...	8	7	1.0	7	1.0	7	1.0	1	...	...	...	...	6.0	61	...	...	...
29	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
30	—	—	—	...	...	...	1	...	6	9	1.0	1.0	1.0	3	...	...	...	...	4.9	50	Clear	79	33
31	—	—	—	...	3	1.0	1.0	5	5	5	3	6	1.0	2	...	...	...	...	5.9	61	...	...	...
Sum.	—	—	—	0.0	3.2	9.8	13.0	13.5	15.7	13.8	12.6	12.3	12.6	5.3	0.0	—	—	—	111.8	—	—	—	—
Mean	—	—	—	0.00	0.10	0.32	0.42	0.44	0.51	0.45	0.41	0.40	0.41	0.17	0.00	—	—	—	3.61	34	—	—	—



## DURATION OF BRIGHT SUNSHINE.

399

For periods of sixty minutes, between the exact hours of Local Apparent Time.

507. Richmond (Kew Observatory) :  $h_s$  (Height of recorder above ground) = 13.3 metres.

November, 1928.

Hour. L.A.T.	3 to 4.	4 to 5.	5 to 6.	6 to 7.	7 to 8.	8 to 9.	9 to 10.	10 to 11.	11 to Noon.	Noon to 13.	13 to 14.	14 to 15.	15 to 16.	16 to 17.	17 to 18.	18 to 19.	19 to 20.	20 to 21.	Total for Day.	Per cent. of Possible.	Radiation at Noon, Angström Pyrheliometer.		
																					Sky.	Total.	Vertical.
Day.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	%		mw/cm <sup>2</sup>	mw/cm <sup>2</sup>
1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.8	8	...	...
2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...	...
3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...	...
4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.8	29	...	...
5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.6	28	...	...
6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.0	32	...	...
7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...	...
8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.8	9	...	...
9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.8	9	...	...
10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7.6	83	Slight Mist	53
11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.2	2	...	...
12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...	...
13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.5	39	...	...
14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.7	64	Slight Haze	65
15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.2	2	...	...
16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.6	18	...	...
17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.8	67	...	...
18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.4	39	...	...
19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.2	2	...	...
20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.6	42	...	...
21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...	...
22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...	...
23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...	...
24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.3	15	...	...
25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.8	10	...	...
26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.3	76	Clear	63
27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.9	11	...	...
28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.2	39	...	...
29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	...	...	...	...
30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.3	4	...	...
Sum.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	55.4	—	—	—
Mean	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.85	21	—	—

508. Richmond (Kew Observatory) :  $h_s$  = 13.3 metres.

December and Year, 1928.

	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	%		mw/cm <sup>2</sup>	mw/cm <sup>2</sup>
1	—	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.1	1	...	...	...
2	—	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3	—	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
4	—	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5	—	—	—	—	...	...	...	...	...	4	5	...	...	...	...	...	...	...	...	0.9	11	...	...	...
6	—	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
7	—	—	—	—	...	4	1.0	1.0	1.0	1.0	1.0	1.0	...	3	...	...	...	...	...	6.7	84	Slight Haze	53	14
8	—	—	—	—	...	3	1.0	1.0	1.0	1.0	1.0	1.0	...	...	...	...	...	...	...	6.3	79	Mist	51	14
9	—	—	—	—	...	3	1.0	.9	1.0	1.0	.6	...	...	...	...	...	...	...	...	4.8	61	...	...	...
10	—	—	—	—	...	2	.9	1.0	.9	.7	1.0	...	...	...	...	...	...	...	...	4.7	60	Mist	42	11
11	—	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
12	—	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
13	—	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
14	—	—	—	—	...	...	...	1.0	.9	.9	...	...	...	...	...	...	...	...	...	2.8	36	...	...	...
15	—	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
16	—	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
17	—	—	—	—	...	2	1.0	1.0	1.0	1.0	1.0	.8	...	...	...	...	...	...	...	6.0	77	Clear	45	12
18	—	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
19	—	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
20	—	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
21	—	—	—	—	...	...	...	3	.9	1.0	.7	.2	...	...	...	...	...	...	...	3.1	40	...	...	...
22	—	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
23	—	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
24	—	—	—	—	...	2	.7	.7	.7	...	...	...	...	...	...	...	...	...	...	2.3	30	...	...	...
25	—	—	—	—	...	...	1	1.0	.6	.9	.3	...	...	...	...	...	...	...	...	2.9	37	...	...	...
26	—	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
27	—	—	—	—	...	...	...	3	.5	.3	...	...	...	...	...	...	...	...	...	1.1	14	Ci Cu	15	4
28	—	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
29	—	—	—	—	...	1.0	1.0	1.0	1.0	.6	.9	.3	...	...	...	...	...	...	...	5.8	74	Clear	58	15
30	—	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
31	—	—	—	—	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Sum.	—	—	—	—	...	1.4	6.2	8.3	9.6	9.9	7.6	3.9	0.6	—	—	—	—	—	—	47.5	—	—	—	—
Mean	—	—	—	—	—	0.05	0.20	0.27	0.31	0.32	0.25	0.13	0.02	—	—	—	—	—	—	1.53	19	—	—	—
Annual Total	0.0	7.8	44.2	73.7	96.9	131.2	161.7	168.4	171.5	165.5	153.5	142.4	120.7	96.0	64.4	39.6	11.4	0.0	1648.9	—	—	—	—	
Annual Mean...	0.0	0.02	0.12	0.20	0.26	0.36	0.44	0.46	0.47	0.45	0.42	0.39	0.33	0.26	0.18	0.11	0.03	0.00	4.51	37	—	—	—	
Hour. L.A.T.	3 to 4.	4 to 5.	5 to 6.	6 to 7.	7 to 8.	8 to 9.	9 to 10.	10 to 11.	11 to Noon	Noon to 13.	13 to 14.	14 to 15.	15 to 16.	16 to 17.	17 to 18.	18 to 19.	19 to 20.	20 to 21.	Total for Day.	Per cent. of Possible.	Sky.	Total.	Vertical.	
																					Radiation at Noon. Angström Pyrheliometer.			



Direction expressed in degrees from North ( $E = 90^\circ$ ,  $S = 180^\circ$ ,  $W = 270^\circ$ ,  $N = 360^\circ$ ). Speed in metres per second.

## 509. Richmond (Kew Observatory) :

$H_a$  (height of vane of anemograph above M.S.L.) = Height of ground above

Dines Anemograph from Jan., 1926.

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.
Day.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.
1	—	0.2	—	0.3	—	0.5	—	0.2	—	0.1	—	0.2
2	175	7.0	175	6.3	175	6.8	175	7.1	180	8.0	180	7.1
3	—	0.6	—	0.1	—	0.1	—	1.4	—	0.2	—	2.5
4	255	2.9	245	2.7	235	2.4	230	2.8	220	2.6	225	3.7
5	290	5.4	260	3.6	260	4.1	260	4.0	275	4.2	270	4.2
6	220	6.4	215	7.3	215	7.8	220	8.1	225	8.0	230	7.9
7	205	2.6	205	2.4	—	1.2	195	1.8	190	2.2	200	3.0
8	230	6.9	225	6.3	230	6.6	240	6.4	245	5.7	250	5.5
9	230	1.9	235	2.0	210	3.0	210	3.5	220	3.5	210	3.1
10	220	4.1	215	4.0	220	4.9	210	4.6	200	4.0	190	3.5
11	220	5.2	230	4.6	235	3.7	225	3.6	230	3.8	230	3.2
12	220	2.3	230	1.9	—	0.7	—	1.1	205	1.9	200	2.9
13	220	8.7	225	6.6	230	5.9	250	6.2	240	4.1	235	5.0
14	220	4.8	225	5.0	230	3.7	225	3.1	210	3.7	200	2.9
15	220	3.6	215	3.4	220	3.8	210	4.0	210	4.0	210	4.1
16	200	7.3	200	6.9	200	5.9	200	6.5	205	6.5	210	6.5
17	240	3.1	250	3.6	245	2.9	235	1.6	—	1.3	—	0.8
18	—	0.1	—	0.0	—	0.0	—	0.1	—	0.2	—	1.3
19	285	6.2	295	6.4	300	3.6	275	2.8	270	4.3	270	4.9
20	—	0.5	—	0.5	—	0.7	—	0.5	—	0.7	—	1.5
21	—	1.4	210	3.1	215	3.1	210	3.3	190	3.5	195	4.4
22	170	6.1	175	6.5	180	5.7	180	4.6	190	4.5	255	5.0
23	225	3.1	215	2.5	225	2.1	240	2.1	225	2.1	—	0.9
24	205	7.4	200	6.6	210	7.6	210	8.5	205	7.1	210	9.1
25	235	7.0	235	5.5	240	6.3	230	6.2	235	6.5	240	6.0
26	235	6.8	220	7.3	230	5.0	220	4.0	215	3.6	210	4.9
27	230	2.8	220	3.6	210	3.4	210	4.7	215	5.0	210	4.9
28	—	1.0	200	2.0	215	2.0	205	2.0	—	1.5	—	1.0
29	180	2.9	180	3.5	180	4.4	180	4.3	180	4.6	175	5.5
30	190	2.1	210	1.9	260	2.5	305	2.4	295	1.9	310	1.9
31	—	1.3	235	1.9	—	0.8	—	1.3	—	0.6	—	0.8
Mean ...	—	3.9	—	3.8	—	3.6	—	3.6	—	3.5	—	3.8

510. Richmond (Kew Observatory) :  $H_a = 5$  metres + 20 metres.

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.
Day.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.
1	220	7.5	230	6.6	220	8.3	230	7.6	240	6.4	245	7.2
2	240	3.4	235	3.6	225	3.8	230	3.8	225	4.1	225	4.5
3	235	3.1	245	3.4	245	3.1	220	3.3	225	2.6	225	4.0
4	230	2.4	215	2.5	215	2.2	—	1.5	200	1.6	—	1.1
5	220	8.4	220	9.0	220	8.6	220	8.8	220	9.4	215	9.8
6	215	2.4	230	2.5	240	3.3	245	3.3	250	2.6	240	2.0
7	225	2.7	230	3.7	225	3.9	220	3.3	215	4.0	215	5.3
8	240	6.6	240	5.5	240	5.2	240	5.8	240	5.0	235	4.5
9	225	10.5	225	10.2	230	9.1	230	8.7	230	7.9	245	6.4
10	225	2.4	220	2.0	215	2.0	215	2.5	210	2.1	200	2.6
11	250	11.1	255	12.0	255	11.3	255	10.2	260	10.5	255	10.0
12	290	4.3	300	5.2	290	5.1	290	4.3	285	4.5	295	5.5
13	230	1.9	—	1.5	—	1.5	—	1.1	—	1.0	—	1.4
14	240	2.9	240	3.0	230	3.1	230	3.0	235	3.1	220	3.4
15	250	5.0	245	5.0	250	3.9	255	5.4	240	4.4	235	4.5
16	230	7.7	230	7.4	235	6.9	230	6.4	235	6.6	230	7.1
17	245	8.1	260	7.6	265	8.1	270	8.2	270	7.7	265	6.9
18	255	3.5	240	2.4	235	2.7	230	2.1	230	2.1	230	1.9
19	250	1.9	250	2.0	250	2.3	250	2.0	250	1.8	230	2.1
20	—	0.8	—	0.5	—	0.2	—	0.3	—	0.3	—	0.4
21	130	1.6	—	1.4	—	1.0	—	1.0	—	1.0	—	0.7
22	—	0.0	—	0.3	—	0.4	—	0.5	—	0.5	—	0.0
23	—	0.2	—	0.0	—	0.1	—	0.1	95	1.9	105	1.8
24	105	5.0	100	4.9	80	6.5	90	6.0	85	7.3	80	6.5
25	100	4.0	90	3.8	95	3.0	95	3.8	85	2.9	85	2.9
26	85	1.6	85	2.8	70	2.0	65	1.6	75	2.8	70	1.9
27	—	0.9	75	2.2	—	1.4	75	2.0	70	1.9	70	1.6
28	90	4.5	90	4.9	90	4.5	95	4.4	95	3.4	85	2.1
29	95	3.6	90	5.1	90	5.7	90	5.9	90	4.6	95	5.4
Mean ...	—	4.1	—	4.2	—	4.1	—	4.0	—	3.9	—	4.0



Averages for periods of sixty minutes, centred at the exact hours, Greenwich Mean Time.

M.S.L. +  $h_a$  (height of anemograph above ground) = 5 metres + 20 metres.

January, 1928.

13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean	Day.
°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.
160	1.8	170	3.2	150	1.6	150	2.4	150	3.1	160	4.1	160	3.6
185	6.6	185	6.0	190	5.0	190	4.1	190	3.2	—	0.6	325	1.7
230	2.5	330	2.0	335	1.6	—	1.0	—	0.7	—	1.5	320	1.9
230	7.0	230	7.2	230	7.2	235	6.8	235	6.9	250	8.2	250	6.9
270	6.1	275	6.0	260	4.0	245	3.0	235	3.6	235	4.4	240	4.4
270	12.1	275	12.5	280	12.0	285	11.0	290	9.1	310	7.2	305	7.2
230	5.3	225	5.0	225	6.0	235	4.9	225	6.5	225	6.8	230	6.6
255	4.6	255	5.3	255	4.9	240	3.5	235	3.5	230	3.9	230	4.0
210	7.0	210	7.0	220	7.7	220	7.9	220	6.4	240	4.4	245	4.1
215	10.3	220	11.0	215	11.1	230	8.7	245	6.0	245	5.2	240	5.0
270	3.5	265	3.1	270	2.2	280	2.6	270	2.1	260	1.6	215	1.6
205	7.4	210	8.5	210	8.5	205	8.3	210	9.0	205	10.0	205	9.3
235	7.3	225	6.6	240	6.6	235	6.4	240	7.1	235	6.5	235	5.4
190	6.8	185	8.1	190	7.9	185	7.1	180	7.3	185	7.0	190	5.7
210	7.0	210	7.2	210	7.4	200	6.5	195	6.5	195	6.8	200	7.5
270	5.4	280	6.4	285	7.0	285	5.5	285	5.0	290	4.9	270	3.5
250	2.3	260	2.0	265	2.0	—	0.3	—	0.1	—	0.1	—	0.0
140	4.4	130	4.3	125	4.0	120	3.6	120	3.3	125	3.7	150	4.7
280	7.0	285	6.1	280	6.0	275	4.1	270	3.5	265	2.9	220	2.0
210	5.1	210	4.5	200	5.3	210	5.1	215	4.2	210	3.9	210	3.6
200	6.9	205	6.7	200	6.1	205	7.0	205	7.5	195	7.0	190	6.9
295	6.1	300	5.5	305	5.9	295	5.5	290	4.1	275	3.0	265	2.8
190	4.6	200	5.5	200	7.0	200	7.1	195	6.2	195	7.4	195	7.5
240	8.4	250	9.0	240	6.9	255	7.6	245	6.6	250	8.6	250	8.7
230	6.5	225	6.3	210	6.7	210	8.8	215	9.1	215	9.4	210	9.0
210	7.0	200	5.9	200	6.5	200	7.0	210	7.6	210	5.2	225	5.3
340	3.5	345	4.5	340	2.5	—	1.0	—	0.5	—	0.5	—	1.1
200	7.0	200	7.6	200	8.1	200	8.0	205	8.2	205	7.9	205	6.1
170	8.8	175	7.7	175	7.0	175	5.5	175	5.9	180	4.6	185	5.0
280	3.4	255	3.5	255	2.6	250	1.9	—	1.5	190	1.9	200	2.0
205	4.1	215	5.5	200	4.5	200	5.2	200	5.7	200	6.4	200	7.7
—	6.0	—	6.1	—	5.9	—	5.4	—	5.2	—	5.0	—	4.9
—	—	—	—	—	—	—	—	—	—	—	—	—	—

February, 1928.

13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean	Day.
°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.
255	8.3	260	8.1	265	7.5	260	5.1	245	3.6	240	2.9	240	4.1
215	8.4	210	7.7	210	7.6	200	8.5	200	9.7	205	12.6	230	11.0
295	6.5	300	5.7	295	5.0	280	3.0	295	2.0	270	2.3	—	1.2
205	7.5	200	6.7	200	7.2	200	6.1	205	7.0	210	5.9	205	6.5
230	4.2	250	4.8	275	3.9	275	3.0	275	3.5	260	3.5	270	3.1
265	5.4	265	5.0	270	4.9	270	3.9	250	3.1	245	3.2	235	2.9
235	7.5	235	7.1	240	6.9	240	7.3	240	6.7	235	6.3	230	6.4
235	7.2	230	7.1	230	7.5	220	7.5	225	7.5	230	7.5	225	8.5
260	6.6	260	5.9	260	5.8	255	5.0	250	4.9	250	4.4	245	3.4
220	8.0	215	9.5	220	11.1	230	10.5	275	5.9	235	5.7	245	5.7
265	11.2	265	11.1	265	11.0	260	9.9	265	8.6	270	8.2	275	7.8
255	4.9	255	5.2	245	4.5	235	4.3	215	3.5	190	2.4	175	1.6
255	5.6	270	7.0	275	6.2	290	5.7	300	4.9	265	2.0	220	3.4
240	4.9	220	4.7	215	4.3	200	2.2	200	2.6	210	4.0	230	4.5
240	6.8	240	6.9	240	6.9	235	6.5	235	6.5	230	7.0	230	5.6
225	8.6	230	7.9	235	7.6	230	7.6	230	7.8	225	7.6	250	8.4
285	7.8	285	8.1	285	7.9	280	6.3	270	5.3	245	3.8	250	5.1
280	3.7	265	4.0	265	4.3	275	4.6	265	3.9	265	2.5	230	2.1
265	2.0	—	1.5	255	1.6	—	1.0	—	1.0	—	0.8	—	0.6
—	1.3	185	2.5	—	1.5	170	1.7	160	2.4	160	2.0	—	1.5
170	4.0	190	3.0	195	2.9	205	3.0	210	2.6	195	2.4	—	1.4
—	0.4	—	0.1	—	0.3	—	1.1	—	1.5	—	1.1	—	1.1
90	3.9	85	3.0	90	4.2	85	5.0	90	5.2	90	5.8	90	6.0
80	5.8	75	5.6	85	5.8	90	5.5	95	6.0	90	5.5	100	5.2
70	2.7	85	4.4	95	4.0	90	4.5	95	5.8	85	5.0	80	4.5
140	4.1	150	3.6	140	3.9	135	4.0	125	5.0	115	3.3	95	2.9
140	6.4	140	6.8	130	5.3	135	5.5	130	4.0	115	3.0	90	3.7
105	5.9	120	7.1	135	7.4	125	7.3	125	7.2	120	6.0	125	5.8
120	5.0	120	5.0	115	5.3	115	5.5	110	5.2	110	3.9	110	3.8
—	5.7	—	5.7	—	5.6	—	5.2	—	4.9	—	4.5	—	4.4
—	—	—	—	—	—	—	—	—	—	—	—	—	—



Direction expressed in degrees from North ( $E = 90^\circ$ ,  $S = 180^\circ$ ,  $W = 270^\circ$ ,  $N = 360^\circ$ ): Speed in metres per second.

## 511. Richmond (Kew Observatory):

$H_a$  (height of vane of anemograph above M.S.L.) = Height of ground above

Dines Anemograph from Jan., 1926.

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.
Day.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.
1	95	3.3	95	3.3	100	3.0	95	3.2	100	3.6	105	3.1
2	—	0.0	—	0.0	—	0.0	—	0.9	25	1.8	35	2.0
3	—	1.4	—	1.1	—	1.5	—	1.1	—	0.8	—	0.7
4	90	2.6	85	2.5	80	1.8	—	1.0	—	1.0	—	0.7
5	90	1.6	85	1.9	—	0.9	—	0.0	—	0.0	—	0.1
6	—	0.6	—	1.0	295	2.0	—	1.1	—	1.4	10	2.0
7	150	1.6	—	1.1	—	0.4	—	0.5	—	0.4	—	0.8
8	20	3.7	20	3.5	20	1.9	—	1.4	20	3.0	20	1.8
9	40	3.9	20	3.6	15	3.1	10	3.1	15	3.4	20	3.0
10	15	2.6	15	2.9	10	3.3	10	3.8	15	3.8	20	4.0
11	360	2.5	360	2.5	360	3.4	360	3.1	360	3.9	360	3.7
12	—	1.1	—	0.7	—	0.8	—	0.2	—	0.6	—	0.9
13	—	0.9	—	1.5	—	0.6	335	1.7	5	1.9	—	1.5
14	—	0.9	—	1.0	—	1.1	275	1.8	260	1.9	—	1.3
15	110	1.9	—	1.5	110	1.9	90	2.3	95	2.0	—	1.5
16	—	0.7	—	0.7	—	1.2	90	1.9	90	2.4	90	1.9
17	170	5.0	170	4.3	165	4.1	170	4.4	170	5.0	170	4.5
18	160	6.4	160	5.5	175	6.2	180	5.8	175	5.0	175	3.6
19	160	3.0	165	3.6	170	3.6	170	3.5	150	3.5	165	3.6
20	160	4.5	145	4.3	145	4.1	150	4.2	140	5.0	145	5.0
21	110	4.8	110	5.0	110	4.5	95	4.4	100	5.4	105	5.4
22	200	4.5	200	3.1	190	2.9	185	2.5	185	3.3	175	3.3
23	130	4.4	140	4.5	140	5.0	130	4.9	140	4.9	130	5.0
24	190	2.5	185	3.0	180	3.0	175	3.9	180	3.4	180	3.6
25	—	0.4	—	0.9	—	0.5	—	0.3	—	0.1	—	0.1
26	320	1.6	320	2.0	330	2.5	320	2.0	310	2.0	315	2.4
27	195	2.5	190	2.0	190	2.3	185	2.4	175	2.6	170	2.5
28	—	0.9	—	1.5	215	2.0	215	1.8	220	2.4	225	2.0
29	205	2.1	210	1.9	—	1.3	—	1.4	180	2.0	170	3.0
30	220	6.5	215	6.6	210	5.7	210	5.8	200	5.1	205	6.3
31	170	4.4	170	5.1	170	3.7	170	3.7	120	2.5	—	1.5
Mean ...	—	2.7	—	2.6	—	2.5	—	2.5	—	2.7	—	2.6

512. Richmond (Kew Observatory):  $H_a = 5$  metres + 20 metres.

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.
Day.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.
1	45	3.5	25	3.4	25	4.1	20	4.2	40	5.5	35	5.8
2	360	2.3	330	1.9	—	1.5	—	1.1	—	0.4	—	0.3
3	210	1.8	210	2.1	200	2.5	195	3.0	190	3.0	200	3.5
4	240	3.4	230	2.5	225	2.1	215	2.5	210	2.8	205	2.0
5	235	2.8	230	3.0	230	2.7	220	2.1	225	2.3	—	1.0
6	—	0.6	—	1.0	—	1.0	—	0.4	—	0.8	—	0.2
7	—	0.1	—	0.1	—	0.0	—	1.0	110	1.6	105	3.1
8	110	4.2	125	3.7	145	2.7	170	1.7	175	2.2	180	2.8
9	150	4.6	160	2.9	155	2.4	165	3.5	165	3.4	160	4.9
10	150	3.8	145	4.0	150	4.0	150	4.4	145	4.5	150	5.0
11	185	2.9	195	2.0	180	2.1	175	2.6	185	1.9	—	1.2
12	50	2.0	—	1.1	10	1.9	15	2.2	20	2.6	10	1.6
13	90	2.7	80	2.9	80	2.5	90	2.4	65	2.4	60	3.7
14	90	5.8	90	5.8	85	6.6	90	7.5	85	8.3	80	8.8
15	70	10.5	65	10.2	60	9.3	60	9.7	60	8.6	50	7.0
16	50	6.7	60	9.0	45	7.4	35	5.7	30	5.4	30	5.5
17	345	3.1	330	2.4	325	2.5	325	2.4	330	1.7	335	2.1
18	—	0.3	—	0.0	—	0.2	—	0.1	—	0.0	—	0.0
19	265	2.0	—	0.9	—	1.2	—	1.5	305	2.4	280	3.4
20	—	1.5	275	2.1	270	1.9	—	1.4	—	1.2	25	1.7
21	260	1.6	260	2.3	—	1.4	225	2.0	—	1.4	—	1.5
22	350	2.0	345	1.8	350	1.6	345	1.7	340	2.5	345	2.4
23	220	2.0	220	1.8	210	1.9	210	2.3	210	2.0	210	2.4
24	180	2.4	200	2.0	165	2.0	170	3.2	180	2.9	185	1.9
25	90	2.2	100	2.6	125	2.4	130	2.7	150	2.8	155	2.5
26	—	1.5	75	2.0	80	2.2	—	1.5	—	1.5	70	1.9
27	—	0.5	60	2.2	60	3.2	70	5.2	65	4.2	65	5.5
28	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.7
29	10	2.2	20	3.5	20	3.6	10	3.5	10	3.6	15	3.4
30	340	4.5	345	4.5	350	5.7	340	4.9	340	4.0	345	4.1
Mean ...	—	2.8	—	2.8	—	2.8	—	2.9	—	2.9	—	3.0



## WIND: DIRECTION AND SPEED.

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Averages for periods of sixty minutes, centred at the exact hours, Greenwich Mean Time.

M.S.L. +  $h_a$  (height of anemograph above ground) = 5 metres + 20 metres.

March, 1928.

13.		14.		15.		16.		17.		18.		19.		20.		21.		22.		23.		24.		Mean	Day.	
°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	m/s.		
170	4.9	180	4.0	185	2.9	180	2.5	—	1.1	180	2.0	185	1.9	175	2.4	180	2.2	—	1.5	190	1.7	—	0.5	3.0	1	
130	6.3	120	4.8	115	4.5	120	4.1	125	3.6	110	2.9	90	3.1	90	3.1	90	2.4	—	0.4	—	0.4	—	0.5	2.6	2	
140	3.9	155	3.8	150	3.6	130	3.1	130	2.5	—	1.5	—	1.3	—	1.1	75	1.9	80	2.9	80	3.1	90	2.0	1.9	3	
145	3.6	170	3.5	175	3.6	170	3.4	175	2.9	—	1.1	—	1.4	—	0.5	—	1.2	105	1.6	—	1.3	90	1.7	1.9	4	
—	1.5	245	2.1	225	2.1	230	2.0	220	2.9	215	3.0	205	2.5	210	1.8	—	1.3	190	1.9	—	1.0	—	0.5	1.3	5	
15	2.8	30	3.8	35	2.4	30	1.6	—	1.5	40	2.0	—	1.5	45	2.6	40	2.0	—	1.3	100	1.9	115	2.1	2.1	6	
—	0.8	—	0.8	—	1.4	—	0.2	—	0.1	—	0.2	—	0.8	—	0.9	—	0.7	—	0.5	—	1.1	20	3.4	0.9	7	
35	5.0	53	4.7	30	4.4	35	5.9	35	5.9	45	5.3	40	4.3	50	5.0	35	4.0	35	4.3	25	3.4	50	3.1	4.0	8	
100	5.2	50	3.4	35	3.1	40	4.5	45	3.4	50	3.5	40	4.0	50	5.9	45	4.9	40	4.1	20	3.1	20	3.2	4.0	9	
35	6.4	20	6.0	40	6.9	50	6.2	20	6.0	15	4.0	15	3.5	5	3.3	5	3.0	5	3.5	5	3.4	5	2.9	4.7	10	
360	3.2	350	3.4	340	2.9	340	2.4	25	3.5	—	1.2	—	0.9	—	1.4	—	1.0	—	1.5	—	1.5	—	1.5	2.4	2.8	11
155	2.9	135	4.0	115	3.5	150	2.0	160	2.0	135	2.5	120	2.4	110	3.0	115	2.1	110	1.6	—	0.7	—	1.5	1.7	12	
5	3.3	360	3.4	345	2.9	345	3.0	350	2.8	335	2.2	—	1.3	320	1.6	335	1.9	345	1.6	—	0.5	—	0.5	2.1	13	
—	0.2	—	0.1	—	1.5	75	2.9	90	3.1	120	2.8	115	3.0	120	2.1	120	3.0	115	2.1	120	2.3	115	2.1	1.5	14	
155	3.1	140	3.5	120	3.0	125	3.4	135	3.3	140	2.9	130	2.4	115	2.0	105	1.9	105	1.8	—	1.5	—	0.8	2.2	15	
175	6.5	175	6.3	165	6.4	175	5.4	160	4.5	145	4.5	150	4.7	150	5.0	150	4.5	160	3.7	165	4.2	170	5.2	3.9	16	
165	6.5	165	5.5	155	6.4	155	6.2	145	6.1	130	4.9	140	5.1	130	4.4	130	3.0	125	3.0	130	6.1	160	7.1	5.1	17	
210	5.8	210	7.3	210	7.5	210	5.9	210	5.1	185	4.5	185	4.3	180	3.6	175	2.9	150	1.9	—	1.5	160	2.0	4.8	18	
175	5.5	170	4.5	160	4.9	160	4.6	140	4.4	150	3.6	145	4.6	150	4.6	150	4.5	160	4.3	160	5.0	150	5.0	4.2	19	
140	9.5	135	9.6	130	9.5	140	9.0	135	8.5	125	7.9	120	6.9	115	6.5	120	6.9	125	7.5	125	7.1	110	5.8	6.8	20	
105	7.1	100	7.0	100	6.4	100	6.9	100	6.1	100	6.1	90	5.9	95	5.6	100	5.7	110	3.2	165	2.4	190	3.6	5.6	21	
175	5.6	180	4.9	180	4.7	180	4.4	170	3.9	150	3.3	125	3.9	120	4.9	120	4.5	140	6.0	130	5.0	140	5.0	4.3	22	
190	7.4	105	6.9	200	7.8	205	7.4	210	7.4	195	4.8	195	4.6	190	3.7	180	3.4	185	3.7	180	2.5	175	2.6	5.4	23	
200	3.4	220	2.6	180	2.7	200	1.6	210	5.0	200	2.8	—	1.5	175	1.9	—	0.5	—	0.1	—	0.0	—	0.1	2.6	24	
330	4.1	330	4.3	330	4.5	325	4.3	320	3.9	315	3.3	320	3.0	305	2.1	310	2.4	325	2.5	320	3.0	310	2.0	2.3	25	
310	2.2	330	2.0	285	2.4	270	3.0	255	2.3	235	2.0	230	3.5	225	3.1	230	2.6	215	2.7	210	2.1	205	2.5	2.3	26	
185	4.3	200	3.7	225	3.1	275	2.5	280	1.7	—	1.5	235	1.7	235	2.6	260	2.3	250	2.5	245	2.0	250	1.6	3.1	27	
270	4.0	260	3.7	280	4.1	300	2.9	280	5.1	260	2.6	270	2.5	245	2.1	240	2.4	255	2.0	—	1.5	215	2.1	2.5	28	
185	9.2	190	7.2	195	6.1	205	7.1	215	8.2	215	8.9	215	10.2	215	10.5	230	8.7	240	5.8	235	5.6	250	4.0	6.0	29	
210	8.0	235	6.7	205	5.3	210	4.5	210	7.0	210	6.7	205	6.2	200	5.3	200	4.4	190	4.3	190	3.7	180	3.3	6.1	30	
120	6.3	115	5.8	145	5.0	135	2.0	100	3.5	90	2.5	85	4.4	85	4.0	70	2.9	55	3.5	50	3.9	45	4.5	4.1	31	
—	4.8	—	4.5	—	4.4	—	4.0	—	4.1	—	3.5	—	3.5	—	3.4	—	3.1	—	2.8	—	2.7	—	2.7	3.4	—	

April, 1928.

	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.
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Direction expressed in degrees from North (E=90°, S=180°, W=270°, N=360°) : Speed in metres per second.

## 513. Richmond (Kew Observatory) :

H<sub>a</sub> (height of vane of anemograph above M.S.L.)=Height of ground above

Dines Anemograph from Jan., 1926.

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.
Day.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.
1	270	1.8	—	1.1	—	1.0	—	1.4	—	1.1	—	1.1
2	—	1.0	—	0.9	—	1.3	—	2.5	25	2.0	20	2.4
3	10	2.0	15	2.4	15	2.4	—	1.4	15	2.1	15	2.0
4	55	3.9	60	4.5	60	4.0	60	4.0	55	3.9	65	5.0
5	65	3.9	75	5.0	70	3.5	70	2.5	80	1.8	—	1.5
6	—	—	—	—	—	—	—	—	—	—	—	—
7	50	3.9	35	2.5	15	2.6	15	2.7	20	1.7	10	2.5
8	—	0.6	—	0.6	—	0.5	—	0.5	—	0.6	—	0.9
9	20	3.1	10	2.7	345	2.1	—	1.5	—	1.1	—	1.5
10	320	2.1	320	2.0	—	1.5	—	1.3	—	1.4	310	2.0
11	330	1.7	—	0.8	—	0.6	—	0.7	—	0.5	—	0.1
12	15	3.5	40	5.5	40	5.0	45	4.2	25	3.0	25	2.2
13	225	2.5	220	2.5	230	2.9	220	2.3	235	1.8	235	1.6
14	—	0.3	—	0.0	—	0.1	—	0.2	—	0.1	—	0.2
15	—	0.1	—	0.3	—	0.1	—	0.0	—	0.0	—	0.0
16	350	1.7	—	1.1	—	1.4	325	1.8	—	1.5	—	0.2
17	290	3.5	295	4.1	290	4.2	300	4.5	5	2.5	—	1.5
18	330	2.3	310	2.1	320	2.3	320	2.5	320	1.9	320	2.4
19	70	4.5	45	3.7	60	3.9	50	5.6	40	5.3	35	6.1
20	—	0.8	—	0.4	—	0.3	—	1.0	—	0.7	—	0.8
21	—	1.3	—	0.3	—	0.4	—	0.1	—	0.5	—	0.5
22	15	2.2	25	1.9	20	2.6	20	3.1	25	2.8	20	3.5
23	15	6.1	15	6.4	20	6.1	20	5.8	15	6.5	15	6.9
24	290	1.7	275	2.0	—	1.5	265	1.6	280	2.5	280	2.5
25	260	1.9	255	1.8	260	2.5	260	2.3	260	2.4	270	1.9
26	—	0.5	—	1.0	—	0.9	70	1.6	—	1.2	—	1.5
27	—	0.0	—	0.2	—	0.3	—	0.1	—	0.7	—	0.8
28	—	1.0	—	0.8	—	1.1	—	0.5	—	0.9	110	1.9
29	—	0.6	—	1.0	—	0.3	—	0.1	—	0.5	—	0.4
30	60	2.0	25	2.1	45	3.0	30	2.3	40	2.9	40	2.7
31	45	5.1	45	4.3	45	5.6	45	6.1	50	5.9	45	6.5
Mean	—	2.2	—	2.1	—	2.1	—	2.2	—	2.0	—	2.1

514. Richmond (Kew Observatory) : H<sub>a</sub>=5 metres+20 metres.

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.
Day.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.
1	45	4.5	50	4.5	45	5.2	45	4.7	45	4.8	50	4.9
2	50	5.2	50	4.9	40	4.9	55	5.6	60	6.1	65	7.9
3	45	2.5	45	2.5	—	0.6	—	0.6	—	0.8	—	1.3
4	—	1.2	—	0.5	—	0.1	—	0.2	—	0.3	—	1.0
5	75	5.6	65	4.5	85	4.1	80	3.9	55	3.4	55	3.6
6	—	1.1	—	1.3	—	0.0	—	0.0	—	0.1	—	0.4
7	—	0.1	—	0.5	—	0.4	—	0.8	—	0.2	—	0.9
8	—	1.3	175	1.9	—	1.0	—	0.5	—	1.4	—	0.6
9	165	4.6	175	3.5	175	3.7	175	3.5	165	3.6	160	5.4
10	200	8.4	200	7.1	195	6.8	200	6.9	210	6.8	210	7.1
11	225	2.6	230	2.1	220	1.6	215	1.9	—	1.4	—	1.5
12	210	2.2	225	1.9	210	2.3	—	1.5	220	2.6	—	1.5
13	—	0.5	—	1.0	—	1.0	—	1.3	—	0.5	—	0.2
14	190	3.5	190	4.2	195	3.6	225	5.2	240	6.0	240	5.4
15	320	2.2	—	1.4	295	1.6	—	1.5	—	1.5	280	1.8
16	265	1.6	—	1.1	—	1.5	—	1.4	290	2.4	300	2.5
17	—	0.7	—	0.8	—	1.0	—	1.1	—	0.6	—	0.2
18	240	2.2	235	2.5	230	1.9	230	1.9	230	1.8	250	1.9
19	200	1.6	—	0.9	210	2.0	—	0.9	210	1.9	205	2.0
20	240	2.5	240	2.2	—	1.2	250	1.9	265	1.8	290	2.1
21	—	0.2	—	0.2	—	0.6	—	0.2	—	0.9	—	1.0
22	210	4.6	210	4.7	210	4.6	225	4.0	220	4.6	215	5.1
23	230	2.1	225	2.7	220	2.4	—	1.1	—	1.3	230	2.0
24	—	1.2	245	1.6	225	2.0	220	1.6	—	1.5	—	1.5
25	—	0.4	—	1.0	—	0.5	—	0.1	—	0.0	—	0.2
26	220	7.3	220	5.9	210	5.9	205	6.1	210	6.3	215	7.8
27	295	5.1	295	4.0	285	3.9	275	3.0	260	2.9	250	2.8
28	230	2.0	220	2.6	210	2.4	220	3.1	215	3.2	230	3.2
29	210	5.5	210	6.9	215	6.0	210	6.6	205	5.7	205	6.0
30	220	5.6	220	4.6	220	3.5	215	3.9	220	4.1	220	4.0
Mean ...	—	2.9	—	2.8	—	2.5	—	2.5	—	2.6	—	2.8



**May, 1928.**

**June, 1928.**

[illegible]



Direction expressed in degrees from North (E=90°, S=180°, W=270°, N=360°): Speed in metres per second.

## 515. Richmond (Kew Observatory):

H<sub>a</sub> (height of vane of anemograph above M.S.L.)=Height of ground above

Dines Anemograph from Jan., 1926.

Hour. G.M.T.	1.		2.		3.		4.		5.		6.		7.		8.		9.		10.		11.		Noon.	
Day.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.
1	220	2.5	225	2.6	225	3.0	225	2.9	220	3.5	225	3.7	235	4.1	245	3.5	245	4.5	245	4.7	235	5.7	225	6.2
2	205	3.5	210	3.5	210	4.7	210	5.5	210	6.0	210	6.3	220	4.5	215	5.7	225	6.8	215	7.0	220	7.5	215	6.3
3	—	1.0	—	1.2	—	1.0	—	0.1	—	0.3	—	0.2	—	0.0	—	0.5	—	1.1	20	2.4	5	2.7	15	2.3
4	—	0.5	—	0.4	—	1.4	—	1.4	—	0.9	—	1.3	—	1.1	295	1.8	275	2.2	260	3.6	250	3.6	230	4.1
5	215	5.3	215	5.8	215	5.5	220	6.5	220	7.0	210	7.3	220	7.5	220	8.3	220	8.2	220	7.9	220	8.7	220	9.1
6	220	4.3	270	3.9	250	3.3	250	3.1	240	2.6	250	2.8	255	4.6	255	5.0	235	5.1	250	4.9	250	5.1	245	6.5
7	235	2.0	245	1.7	240	1.7	—	1.4	—	1.4	—	1.5	330	3.1	320	2.7	305	2.5	310	2.1	330	1.7	—	1.4
8	205	1.6	—	1.3	—	1.5	210	1.7	—	0.9	—	1.3	215	2.9	215	4.9	215	5.6	215	5.9	210	5.5	200	6.1
9	220	3.7	225	3.1	225	2.5	220	2.4	225	2.5	255	2.6	265	2.4	280	2.7	285	3.5	275	3.5	280	3.6	270	3.5
10	220	1.6	215	1.9	220	2.0	210	1.6	210	2.0	225	2.1	225	2.0	230	2.1	220	2.2	255	2.2	235	3.0	225	5.0
11	220	2.9	220	2.5	—	1.5	220	2.0	220	3.0	220	3.1	230	3.8	225	4.4	225	4.1	225	4.2	225	5.1	230	5.0
12	—	0.8	—	1.1	—	0.9	—	0.3	—	0.1	—	0.5	—	0.1	—	0.3	—	1.1	200	2.0	220	2.7	220	4.1
13	—	0.6	—	0.9	—	0.2	—	0.9	—	0.5	—	0.5	—	0.3	—	0.5	—	0.6	—	1.4	270	2.0	250	2.1
14	—	1.5	—	0.9	—	0.4	—	1.1	—	0.5	—	0.5	—	1.0	—	1.2	—	1.5	220	2.4	235	2.5	270	2.5
15	—	0.3	—	0.3	—	0.1	—	0.0	—	0.0	—	0.0	—	0.0	—	0.2	—	0.2	—	1.4	320	1.9	—	1.3
16	—	0.6	—	0.2	—	0.7	—	0.4	—	0.1	—	1.5	15	3.0	15	3.1	15	3.5	10	4.0	15	3.6	350	3.6
17	25	2.6	25	2.0	—	1.4	10	1.6	15	2.6	15	2.6	25	2.9	35	3.2	35	2.8	35	2.5	35	3.1	50	3.1
18	—	0.5	—	0.6	—	0.1	—	0.9	—	0.4	—	0.6	240	1.6	250	2.1	260	3.3	275	3.7	245	4.4	260	4.0
19	—	1.2	—	1.0	—	0.5	—	1.0	305	1.8	—	1.3	—	1.4	315	2.6	315	3.1	330	3.0	320	4.0	310	3.0
20	—	1.2	—	0.9	—	1.2	—	1.2	270	1.6	285	2.0	290	2.2	260	2.2	285	2.8	305	3.5	285	3.7	290	3.6
21	—	1.1	—	1.5	—	1.5	—	1.5	—	1.0	315	1.7	330	3.5	340	3.2	325	2.4	325	2.5	315	2.5	305	2.3
22	—	0.1	—	0.5	—	0.7	—	0.6	—	0.6	—	0.6	—	0.8	225	2.0	235	2.7	230	2.3	230	4.0	240	4.1
23	—	0.8	—	0.4	—	0.5	—	1.0	—	1.0	325	1.7	330	2.0	330	2.2	—	1.4	300	2.1	285	2.5	280	2.3
24	280	2.4	270	2.0	155	1.9	250	1.7	255	1.6	265	2.4	280	3.3	295	3.9	280	4.2	280	4.2	270	4.2	280	4.1
25	—	1.1	230	1.6	235	2.1	250	2.6	250	2.0	250	2.7	250	3.1	260	3.4	270	3.5	270	4.7	270	5.2	265	5.0
26	240	1.9	260	2.5	240	2.1	235	1.7	250	2.5	240	2.1	255	3.7	245	3.5	235	2.9	250	2.7	260	2.5	250	3.0
27	—	1.4	—	1.4	—	1.1	—	0.9	—	0.8	—	0.5	—	0.3	—	0.5	—	1.1	—	1.5	335	2.2	—	0.5
28	320	1.6	330	3.3	350	2.1	—	0.5	—	0.2	—	0.7	325	2.6	330	2.9	335	2.8	320	2.9	310	2.6	295	3.9
29	220	2.5	220	2.4	230	2.0	220	2.5	235	1.8	—	1.5	—	1.5	265	2.6	260	4.1	270	4.6	260	4.7	260	4.8
30	225	3.0	230	2.4	230	1.7	225	1.9	230	1.7	—	1.5	230	2.4	225	3.8	235	4.2	235	4.7	255	3.5	230	4.0
31	265	2.9	240	2.0	—	1.3	225	2.2	—	1.5	235	1.7	—	1.5	350	3.0	360	1.8	—	1.2	—	1.4	—	0.6
Mean ...	—	1.8	—	1.8	—	1.6	—	1.7	—	1.7	—	1.9	—	2.4	—	2.8	—	3.1	—	3.4	—	3.7	—	3.8

516. Richmond (Kew Observatory): H<sub>a</sub>=5 metres+20 metres.

	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.
1	—	1.4	—	1.5	—	1.2	—	0.6	—	1.0	190	2.3	230	1.9	—	0.2	—	0.9	—	1.0	240	1.9	265	2.2
2	15	3.5	30	2.7	25	2.7	15	3.2	10	3.0	20	3.9	45	3.7	45	3.2	40	2.9	60	3.6	60	3.2	60	4.0
3	70	3.5	60	2.7	50	2.6	40	2.6	50	2.9	70	3.7	90	4.8	85	4.4	80	5.0	90	6.4	80	6.3	80	6.6
4	45	4.1	35	3.5	25	3.9	30	4.8	35	5.3	35	5.8	25	4.5	30	5.7	35	5.5	45	5.8	35	6.5	25	4.4
5	—	0.7	—	0.4	—	0.4	—	0.3	—	0.5	—	0.5	—	0.7	—	0.6	—	0.8	—	1.3	—	1.5	335	2.1
6	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.1	165	2.1	185	3.4	180	3.3	190	3.3
7	—	0.2	—	0.1	—	0.1	—	0.4	—	1.1	170	1.9	190	3.4	190	3.2	205	4.6	205	5.3	205	7.3	210	8.2
8	260	4.9	260	3.1	275	3.0	265	1.6	285	2.0	—	1.1	265	2.5	270	3.0	280	3.5	280	3.6	270	4.0	260	4.1
9	240	2.6	225	2.6	220	2.9	215	2.5	220	2.5	225	2.1	240	2.0	250	3.3	265	3.6	260	4.6	250	4.0	245	4.5
10	—	1.4	—	1.4	—	0.5	—	0.5	—	0.5	—	0.2	—	0.5	—	0.3	—	0.3	—	1.0	235	1.6	220	2.7
11	200	1.9	200	2.1	—	1.1	—	0.7	—	0.2	—	0.4	—	0.5	200	1.9	210	3.5	220	3.6	205	2.5	200	2.5
12	—	0.0	—	0.5	—	0.8	—	0.9	—	0.8	—	0.7	220	1.9	230	2.5	205	2.5	250	3.9	255	4.0	255	4.5
13	195	3.3	195	3.5	190	3.3	195	4.4	200	4.4	205	5.8	210	7.0	210	7.1	210	7.6	215	8.8	215	9.1	220	7.0
14	200	3.9	210	4.4	210	4.0	205	4.0	200	3.3	215	4.2	210	4.8	220	6.4	220	6.5	220	7.2	210	8.6	210	7.7
15	220	4.0	215	3.1	220	3.9	220	3.7	225	2.5	225	2.2	235	3.4	245	3.2	250	2.5	265	2.5	240	2.5	245	3.7
16	—	1.0	—	0.9	—	1.0	—	1.2	—	1.1	—	1.4	—	1.3	310	1.8	300	1.8	280	2.9	285	2.6	285	3.4
17	—	1.5	—	1.1	255	1.9	—	1.4	—	1.2	—	1.4	250	2.1	275	2.2	300	2.5	305	3.2	305	2.6	300	2.0
18	—	0.3	—	0.1	—	0.4	—	0.3	—	0.2	—	0.1	—	0.2	—	0.3	—	0.5	—	0.5	—	1.0	—	1.2
19	—	0.2	—	0.1	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	1.5	150	1.9	170	3.8	175	4.0	175	3.8
20	245	3.8	235	1.9	230	3.0	235	4.0	230	4.2	230	4.5	240	5.1	240	6.2	250	6.3	250	6.7	255	7.0	255	6.0
21	230	1.8	215	2.3	225	2.0	220	2.5	215	2.8	220	2.9	225	2.8	235	3.9	235	4.4	255	4.4	255	4.6	255	5.2
22	230	3.5	235	3.7	230	3.9	230	3.2	235	3.4	225	4.5	235	3.7	240	4.0	260	4.5	255	4.9	250	4.6	240	5.6
23	205	2.2	200	2.5	200	2.4	210	2.5	220	2.3	210	3.4	215	3.6	205	3.9	210	3.0	215	4.6	215	5.0	225	4.3
24	—	0.2	—	0.5	—	0.3	—	0.0	—	0.0	—	0.5	—	0.9	—	1.4	—	1.4	—	1.4	140	2.3	—	1.4
25	230	2.4	220	2.0	210	3.5	205	2.6	205	3.0	200	3.5	210	3.6	225	4.4	230	5.5	225	7.0	220	7.5	220	8.2
26	190	2.1	190	2.1	—	1.3	—	1.5	—	0.9	—	0.6	—	1.2	175	2.4	185	3.7	180	3.9	185	4.1	175	4.0
27	230	3.0	220	2.6	220	3.2	230	3.5	225	3.0	215	3.6	215	3.9	220	5.1	220	6.0	215	6.0	220	5.0	220	7.3
28	225	4.1	215	4.2	225	3.1	235	2.2	220	3.4	210	3.3	220	3.2	230	4.2	230	5.5	230	5.2	230	5.5	235	4.9
29	195	4.2	205	3.7	215	4.1	225	2.7	215	2.1	—	1.2	235	1.9	235	2.3	225	3.2	225	2.8	220	2.8	230	3.7
30	—	1.4	215	1.7	220	2.6	235	1.6	250	2.5	255	2.1	270	3.0	270	3.1	295	4.2	310	4.2	305	3.9	285	3.9
31	—	0.2	—	0.2	—	0.1	—	0.1	—	0.2	—	0.1	—	0.6	95	2.8	105	3.0	—	1.5	115	1.7	—	1.4
Mean ...	—	2.2	—	2.0	—	2.0	—	1.9	—	1.9	—	2.2	—	2.5	—	3.1	—	3.5	—	4.0	—	4.2	—	4.3
Hour. G.M.T.	1.	2.		3.		4.		5.		6.		7.		8.		9.		10.		11.		Noon.		



**July, 1928.**

**August, 1928.**

[illegible]



Directions expressed in degrees from North (E=90°, S=180°, W=270°, N=360°): Speed in metres per second.

## 517. Richmond (Kew Observatory) :

H<sub>a</sub> (height of vane of anemograph above M.S.L.)=Height of ground above

Dines Anemograph from Jan., 1926.

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.
Day.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.
1	—	0.2	—	0.1	—	0.0	—	0.0	—	0.1	80	1.7
2	—	0.3	—	0.0	—	0.2	—	0.2	—	0.2	70	1.6
3	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	—
4	—	1.5	220	1.6	—	1.5	—	1.1	—	0.5	—	—
5	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	—
6	200	4.4	205	4.2	225	4.6	245	5.4	245	5.1	270	5.8
7	—	0.8	—	0.3	—	1.3	—	1.3	—	0.1	—	—
8	—	0.6	—	0.5	—	0.5	—	0.7	—	0.5	—	—
9	—	0.6	—	0.5	—	0.7	—	0.7	—	0.3	—	—
10	225	2.5	220	2.4	220	2.4	215	3.6	220	3.4	210	3.1
11	225	2.1	230	1.7	225	1.6	215	2.0	225	2.0	—	1.5
12	—	0.1	—	0.0	—	0.0	—	0.0	—	0.1	—	—
13	—	0.1	—	0.0	—	0.0	—	0.1	—	0.0	—	—
14	—	1.5	—	1.5	—	1.3	—	1.2	20	2.0	30	1.6
15	—	0.5	—	0.5	345	1.9	25	2.3	10	1.9	10	2.6
16	20	2.5	10	1.6	10	2.4	25	2.2	10	2.0	360	2.1
17	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	—
18	—	0.7	—	0.5	—	0.9	—	0.8	—	1.3	250	1.6
19	—	0.0	—	0.0	—	0.1	—	0.2	—	1.1	—	—
20	—	0.8	—	0.4	—	0.4	—	0.5	—	0.5	—	—
21	—	1.5	—	1.5	—	1.0	—	1.2	—	1.5	—	—
22	20	2.9	360	2.5	10	2.5	5	2.7	20	1.6	—	—
23	5	3.1	5	2.7	—	1.1	340	1.6	340	2.3	360	3.2
24	—	1.2	—	1.4	—	1.5	—	1.4	225	2.3	230	2.2
25	20	2.4	40	2.1	—	1.4	360	1.6	360	2.1	15	3.6
26	—	0.6	—	0.1	—	0.2	—	1.0	—	0.7	—	—
27	—	0.0	—	0.2	—	0.3	—	0.0	—	0.1	—	—
28	60	2.0	55	2.7	60	3.3	55	3.3	60	4.0	55	4.6
29	50	5.0	50	4.6	55	4.0	45	4.1	50	3.9	45	3.3
30	35	4.1	25	4.1	25	4.6	25	4.4	20	4.1	20	4.8
Mean ...	—	1.4	—	1.8	—	1.3	—	1.5	—	1.4	—	1.5

518. Richmond (Kew Observatory) : H<sub>a</sub>=5 metres + 20 metres.

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.
Day.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.
1	—	1.1	—	1.1	—	0.9	—	0.5	—	1.1	240	1.6
2	—	0.8	—	1.1	225	2.0	—	1.2	240	1.8	—	—
3	—	0.1	—	0.1	—	0.0	—	0.0	—	0.2	—	—
4	95	2.4	90	2.9	90	3.0	90	3.1	80	2.7	85	2.0
5	80	1.9	75	2.6	75	2.5	85	3.2	75	2.9	85	3.0
6	230	3.1	225	3.4	225	2.8	220	2.3	220	2.2	230	2.0
7	240	1.7	—	0.9	—	0.9	—	1.0	235	1.6	—	—
8	185	1.6	190	2.6	190	3.2	185	3.2	180	3.7	210	4.2
9	—	1.5	180	2.6	180	3.2	185	2.1	210	3.0	180	2.6
10	—	0.0	—	0.3	—	0.3	—	—	—	1.2	—	—
11	—	1.4	155	2.5	145	2.6	130	3.5	125	3.6	135	4.5
12	—	0.2	—	1.0	75	2.1	90	4.0	110	4.2	75	4.0
13	25	1.7	—	0.6	—	0.6	—	0.4	—	0.4	—	—
14	—	0.8	—	0.5	—	0.4	—	0.4	—	0.5	—	—
15	160	5.5	175	5.0	200	4.0	190	1.9	—	1.0	250	1.6
16	—	0.6	—	1.2	—	1.0	—	0.5	—	0.3	—	—
17	215	5.1	215	5.2	220	6.3	230	4.8	220	5.8	215	6.4
18	220	2.4	225	2.1	—	1.5	210	1.6	—	1.0	—	—
19	235	5.0	235	4.8	230	4.5	230	4.0	230	5.0	230	4.6
20	205	10.6	225	8.4	210	6.1	195	5.6	200	4.1	190	4.9
21	195	3.0	195	2.1	195	1.9	—	1.3	195	2.5	195	3.2
22	195	2.9	190	3.0	190	2.9	185	2.6	180	3.1	190	3.5
23	—	1.3	315	1.8	320	3.1	315	2.8	295	2.1	275	2.2
24	205	6.1	215	6.8	210	6.0	200	5.9	205	5.9	205	5.8
25	210	5.9	205	4.6	215	4.4	210	3.5	205	4.7	210	3.9
26	195	2.1	195	2.3	185	2.4	180	1.7	175	3.2	170	3.8
27	120	6.0	95	5.9	85	5.9	80	5.8	75	6.1	70	7.0
28	10	7.1	15	7.9	15	6.7	10	5.6	10	5.1	10	5.6
29	220	2.6	—	1.5	—	1.4	205	2.1	210	2.2	210	2.9
30	210	5.1	215	5.7	215	6.0	220	5.9	210	5.4	205	5.9
31	185	2.9	185	3.1	190	4.3	190	3.9	190	2.5	180	3.0
Mean ...	—	3.0	—	3.0	—	3.0	—	2.7	—	2.9	—	3.1



Averages for periods of sixty minutes, centred at the exact hours, Greenwich Mean Time.

M.S.L. +  $h_a$  (height of anemograph above ground) = 5 metres + 20 metres.

September, 1928.

13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean	Day.
°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.
110	2.7	75	5.0	95	5.7	95	5.9	100	5.3	105	4.6	90	4.5
95	4.5	100	3.6	90	4.1	100	4.0	85	4.0	105	4.1	105	3.4
210	4.9	210	4.8	200	5.0	195	5.4	200	4.7	195	4.0	195	3.4
220	5.8	220	5.9	230	5.8	225	5.4	210	4.7	195	3.1	195	2.3
200	5.5	205	6.5	205	6.0	195	5.7	180	4.5	205	5.8	215	5.5
265	5.3	245	4.6	240	4.5	240	4.5	245	4.0	230	4.2	215	4.0
180	6.0	175	6.1	180	5.6	170	5.8	175	4.7	165	3.0	—	1.3
160	6.0	175	6.5	190	5.6	190	5.0	200	4.9	200	3.1	205	2.5
—	1.2	—	0.6	270	3.2	—	1.1	—	0.2	—	0.0	—	0.6
235	4.6	230	4.6	225	5.0	230	4.8	230	4.2	245	3.2	240	2.9
275	1.8	—	1.5	—	1.0	—	0.6	—	1.0	—	0.1	20	1.6
—	1.2	70	1.9	100	2.5	90	2.5	110	3.1	100	3.0	105	3.5
60	5.3	70	4.4	70	4.5	100	4.7	105	4.3	110	4.0	105	2.7
90	6.7	100	5.7	80	5.3	80	5.0	65	4.3	70	3.5	75	2.7
350	4.4	10	4.3	10	4.2	10	4.3	20	3.6	25	2.5	—	1.3
—	1.0	—	0.5	—	0.2	—	0.6	—	1.0	—	0.7	—	1.0
220	4.7	210	4.5	205	4.6	205	4.0	205	4.5	205	3.6	200	2.5
230	3.5	250	3.4	260	2.9	255	2.3	—	1.1	—	0.5	—	0.2
330	2.9	330	3.0	330	2.9	325	2.1	—	1.5	—	0.7	—	0.2
340	2.0	330	2.6	320	2.5	330	3.0	330	1.9	—	1.5	—	0.9
25	3.4	10	3.5	15	3.7	15	3.5	20	3.4	15	1.9	—	1.5
15	5.5	5	5.6	15	4.8	5	5.0	10	5.0	15	3.8	10	2.0
5	4.4	350	3.6	360	4.1	15	4.5	5	3.9	355	3.2	—	1.4
295	3.4	300	2.5	315	2.1	290	2.2	255	2.1	255	1.9	270	2.1
15	3.5	15	3.5	15	3.2	10	2.5	—	1.5	—	0.9	45	3.1
55	3.7	85	3.5	80	3.6	80	4.6	100	4.2	110	3.4	110	2.6
100	4.5	115	3.8	100	5.8	100	6.0	100	4.5	95	4.5	100	3.7
55	6.2	55	5.7	55	5.1	50	5.6	50	6.0	50	6.0	50	6.5
30	4.0	20	3.8	25	4.1	25	3.9	25	3.7	30	3.2	45	4.0
20	4.1	10	3.6	10	3.7	10	4.4	10	3.6	10	2.7	—	1.2
—	4.1	—	4.0	—	4.0	—	4.0	—	3.5	—	2.9	—	2.5

October, 1928.

13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean	Day.
°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.
320	2.0	305	2.3	280	2.2	270	2.5	—	1.4	—	0.7	—	1.0
330	2.9	325	2.4	330	2.5	335	1.6	—	0.9	—	0.1	—	0.4
90	3.9	110	2.9	105	4.7	105	3.4	110	3.8	110	3.1	110	2.9
110	6.0	105	5.3	90	5.8	90	5.8	100	4.9	105	4.0	100	4.0
175	4.5	185	5.2	180	4.9	180	4.8	195	3.8	225	5.1	235	4.3
255	4.4	265	3.6	265	4.3	250	3.3	245	2.6	210	1.6	215	2.1
225	6.4	230	6.0	225	5.6	210	4.4	200	3.4	190	3.5	190	4.0
205	5.7	210	5.5	210	4.6	205	4.7	205	4.9	210	4.0	220	3.4
225	4.4	220	4.1	220	5.3	240	4.9	220	2.9	—	1.5	—	1.5
—	1.5	—	0.6	—	0.1	—	0.2	60	1.6	115	2.4	115	2.0
260	6.8	255	7.5	265	7.1	260	6.0	260	5.1	250	4.5	250	3.8
80	9.0	80	8.7	80	10.0	80	8.3	75	7.9	70	6.5	60	5.8
315	3.1	315	3.1	335	2.5	340	2.3	—	0.9	—	0.6	—	0.5
180	3.0	175	3.5	175	3.9	165	3.7	150	4.3	150	4.2	150	3.0
340	3.3	335	3.2	325	3.1	345	2.6	340	1.6	—	1.5	—	0.8
195	5.4	200	5.5	195	4.9	200	4.5	200	5.8	215	5.6	210	4.8
230	4.5	235	4.0	270	5.2	290	3.6	—	1.4	245	2.9	255	3.3
195	6.4	200	7.2	220	9.0	230	8.4	240	5.5	235	5.9	230	7.1
230	6.0	220	6.5	210	5.9	200	5.0	195	4.4	190	3.9	175	4.5
230	5.9	220	6.0	210	5.0	230	4.9	210	4.4	205	4.1	205	5.2
210	6.9	215	6.6	220	7.6	215	6.2	210	4.9	205	4.6	205	4.2
200	4.8	190	3.3	175	2.9	175	3.0	150	3.3	125	3.8	110	3.5
220	5.4	205	6.6	195	6.1	190	4.7	190	5.6	195	7.4	190	7.8
230	9.4	225	7.1	220	8.6	215	10.0	215	7.5	205	6.1	210	6.5
220	6.7	215	6.6	215	5.1	210	5.2	195	3.5	205	3.0	195	2.5
180	9.3	175	8.7	160	7.5	160	7.8	155	7.8	145	9.2	145	9.0
90	4.0	80	4.1	80	5.3	105	2.3	—	1.0	—	1.4	20	2.1
340	4.6	335	4.5	315	3.7	315	3.0	—	1.5	285	1.6	270	1.6
230	4.2	215	5.3	200	4.8	210	5.5	205	6.5	210	6.6	210	6.3
240	6.9	255	6.6	245	6.0	240	5.0	215	4.4	205	4.5	210	4.8
185	5.9	200	5.1	200	5.8	190	3.8	180	2.7	180	2.7	175	2.1
—	5.3	—	5.1	—	5.2	—	4.6	—	3.9	—	3.8	—	3.7



Direction expressed in degrees from North ( $E = 90^\circ$ ,  $S = 180^\circ$ ,  $W = 270^\circ$ ,  $N = 360^\circ$ ): Speed in metres per second.

**519. Richmond (Kew Observatory) :**

Dines Anemograph from Jan., 1926.

$H_a$  (height of vane of anemograph above M.S.L.) = Height of ground above

Hour. G.M.T.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.
Day.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.
1	—	0.7	—	0.5	—	1.0	—	1.4	—	1.2	—	1.5
2	10	5.1	360	4.5	360	4.6	5	4.5	10	4.8	360	5.7
3	45	4.0	45	3.4	35	3.0	30	2.5	30	2.5	15	1.6
4	45	3.4	60	3.2	50	2.5	45	3.0	50	3.0	50	2.3
5	95	1.7	—	1.1	—	0.5	—	0.8	—	1.0	—	0.6
6	—	0.0	—	0.5	50	1.9	55	1.8	—	0.9	—	0.7
7	55	3.7	50	3.4	50	2.1	40	2.9	40	3.0	40	1.7
8	25	4.9	30	4.6	30	4.2	25	4.3	25	4.7	30	4.8
9	15	4.5	15	4.1	10	4.2	15	4.5	10	3.6	15	3.8
10	—	0.5	—	1.5	—	1.1	—	1.4	—	0.4	—	0.1
11	260	2.5	250	2.3	245	2.4	250	2.0	245	2.1	225	2.0
12	225	4.5	225	5.0	225	5.1	225	4.9	230	5.8	220	5.6
13	220	6.7	215	6.3	220	7.5	210	6.4	215	6.7	205	6.0
14	215	2.5	225	2.5	220	2.9	225	3.1	235	2.3	230	2.5
15	200	7.6	200	7.9	200	8.5	200	8.0	195	8.0	205	9.0
16	225	3.9	235	4.0	225	3.8	210	3.2	185	1.6	180	1.6
17	250	4.5	235	5.1	240	5.7	240	4.6	235	3.0	230	3.0
18	250	4.4	250	4.3	255	4.4	255	5.1	250	3.6	240	4.8
19	205	5.6	205	6.0	200	6.9	205	7.4	200	6.6	200	7.1
20	225	5.4	230	5.5	230	6.0	225	4.9	215	4.1	210	3.7
21	165	3.4	150	3.6	160	5.3	165	5.4	175	5.4	180	5.0
22	230	5.6	230	5.8	225	5.0	230	5.7	240	5.9	235	6.4
23	240	4.5	240	5.2	245	4.6	230	5.9	230	6.5	225	6.6
24	245	7.8	250	8.1	245	8.1	250	8.7	255	9.6	260	10.3
25	235	4.9	220	5.5	225	7.2	225	6.4	225	6.1	230	7.1
26	280	6.5	280	6.2	280	6.9	275	6.0	275	6.0	285	6.6
27	275	4.0	280	4.0	280	3.6	285	4.1	270	3.5	275	3.8
28	315	4.0	320	3.5	310	3.6	310	4.1	315	3.5	310	3.1
29	320	2.6	320	2.6	—	0.9	—	1.2	225	1.9	225	2.1
30	270	1.8	265	1.6	270	2.0	285	1.6	—	1.2	320	1.9
Mean ...	—	4.0	—	4.1	—	4.2	—	4.2	—	3.9	—	4.0

**520. Richmond (Kew Observatory) :**  $H_a = 5$  metres + 20 metres.

	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.	°	m/s.
1	315	4.0	305	2.9	310	1.9	320	2.0	325	1.7	—	1.5	—	1.4	305	2.0	310	3.3	315	2.5	325	3.1
2	360	1.9	350	1.9	—	1.1	—	0.9	—	0.9	—	1.0	—	1.0	310	1.9	315	2.0	—	1.4	255	2.1
3	220	3.1	235	1.6	220	2.0	—	1.4	—	1.3	—	1.3	—	1.5	—	1.5	—	1.0	—	1.0	—	1.0
4	20	2.2	10	1.6	—	1.0	—	0.4	—	0.5	—	0.0	—	0.0	—	0.5	—	0.7	—	0.7	—	1.1
5	—	0.1	—	0.2	—	0.6	—	1.0	—	1.5	200	1.6	230	3.0	225	3.4	230	3.3	225	3.6	240	3.0
6	—	0.1	—	0.1	—	0.1	—	0.5	—	0.1	—	0.0	—	0.1	—	0.3	—	0.3	—	1.4	205	3.5
7	230	4.5	230	5.0	225	5.9	235	3.7	225	3.4	225	3.6	230	3.5	230	3.4	225	3.5	235	3.6	245	4.0
8	—	1.2	—	0.9	220	1.8	—	1.4	—	1.5	—	1.5	—	1.1	—	1.2	225	1.6	—	1.2	—	1.4
9	—	1.4	—	1.5	215	1.9	220	1.8	—	1.5	—	1.1	—	1.3	—	1.0	—	1.1	—	1.1	—	1.5
10	190	2.7	180	2.4	185	3.4	175	3.9	175	5.5	170	4.5	160	4.3	145	5.4	145	6.5	140	6.0	145	6.6
11	100	5.1	100	5.9	100	4.9	100	4.5	90	5.1	85	5.5	90	5.4	85	6.0	85	6.1	95	5.0	90	6.5
12	—	0.9	40	3.0	30	3.0	30	2.4	30	1.6	30	1.6	15	1.8	40	2.9	50	3.8	55	4.4	50	4.3
13	35	4.5	30	4.4	40	4.4	40	4.3	30	4.6	30	5.5	35	5.4	30	3.9	40	4.5	35	4.5	40	4.2
14	—	1.2	—	0.2	—	0.7	—	1.0	—	0.8	—	1.0	—	0.5	—	0.2	—	0.3	—	0.5	—	1.0
15	—	1.1	—	0.9	—	1.5	—	0.9	—	1.5	—	1.1	—	1.2	—	0.3	260	2.0	—	1.5	—	1.5
16	—	0.2	—	0.7	—	1.0	125	2.0	145	2.0	160	3.1	160	3.2	160	4.1	170	4.5	175	6.2	185	7.0
17	230	2.5	230	3.8	335	3.9	325	3.6	315	3.0	315	2.6	315	3.4	315	3.4	310	1.9	315	3.2	310	4.0
18	—	0.7	—	1.1	—	1.1	—	1.4	—	0.9	—	0.9	—	0.5	—	1.1	—	1.5	—	0.4	—	0.5
19	—	0.3	—	0.4	—	0.2	—	0.2	—	0.3	—	0.4	—	0.3	—	0.5	—	0.0	—	0.0	—	0.3
20	220	2.5	240	1.8	240	2.1	220	2.5	220	2.6	210	2.4	200	2.3	200	2.1	220	2.6	270	2.1	325	1.7
21	—	1.0	—	0.5	—	0.6	—	0.7	—	1.4	330	2.0	—	1.5	—	1.0	—	1.0	—	0.6	—	0.7
22	—	0.9	—	0.6	—	1.0	—	1.0	—	0.4	—	1.4	—	0.2	—	0.0	—	0.4	190	1.6	200	2.9
23	305	1.7	325	1.9	—	1.5	—	0.7	—	0.5	—	0.6	—	0.4	—	0.5	—	1.1	—	1.2	—	0.7
24	—	0.6	200	1.6	190	3.5	190	4.1	195	4.7	190	4.9	190	6.1	195	6.7	200	6.1	195	6.5	200	7.3
25	235	4.0	250	4.8	265	4.6	255	3.4	260	3.2	260	2.9	260	2.5	240	2.5	215	2.3	220	2.9	225	2.9
26	210	11.2	220	10.5	225	10.0	225	9.3	225	8.3	225	8.4	220	8.0	230	8.0	230	7.8	275	4.3	270	3.8
27	235	3.5	240	3.6	260	2.5	—	1.5	240	2.0	220	1.8	215	1.8	190	2.5	195	2.0	220	2.9	—	1.5
28	90	8.1	85	8.8	90	8.7	85	8.3	75	8.0	60	6.0	50	4.7	55	5.3	65	5.0	85	6.1	100	6.5
29	175	1.9	180	2.5	230	4.0	235	2.7	240	3.0	230	3.0	225	2.1	205	4.1	215	5.0	235	5.7	235	6.9
30	150	4.2	130	2.3	—	1.2	—	0.7	—	0.1	—	0.1	—	0.7	—	1.3	315	2.3	300	3.3	295	4.5
31	45	6.7	50	7.2	50	6.1	65	5.2	60	5.6	40	5.2	40	7.0	45	7.8	50	8.0	35	8.4	40	9.0
Mean ...	—	2.7	—	2.7	—	2.8	—	2.5	—	2.5	—	2.5	—	2.5	—	2.7	—	2.9	—	3.0	—	3.4
Annual Mean ...	—	2.8	—	2.8	—	2.7	—	2.7	—	2.7	—	2.8	—	3.0	—	3.3	—	3.7	—	4.2	—	4.5



Averages for periods of sixty minutes, centred at the exact hours, Greenwich Mean Time.

M.S.L. +  $h_a$  (height of anemograph above ground) = 5 metres + 20 metres.

November, 1928.

13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean	Day.
° m/s.	° m/s.	° m/s.	° m/s.	° m/s.	° m/s.	° m/s.	° m/s.	° m/s.	° m/s.	° m/s.	° m/s.	m/s.	
35 5.1	35 4.9	25 6.4	25 5.8	20 5.5	15 6.4	20 6.7	15 6.7	15 6.5	15 6.8	15 6.6	15 6.5	4.2	1
360 4.7	360 4.0	355 3.1	335 2.1	335 2.0	350 2.1	345 1.6	10 2.0	40 3.4	45 4.0	40 4.4	45 4.3	4.0	2
20 2.9	15 3.3	20 2.0	15 1.8	25 2.6	40 1.9	45 2.3	40 2.7	35 2.4	45 3.0	55 2.5	40 2.6	2.7	3
— 1.1	190 2.3	220 2.0	— 1.0	— 1.3	— 1.0	— 0.5	— 1.0	— 1.0	— 1.1	— 0.7	95 2.0	1.9	4
105 1.6	— 0.3	— 0.3	— 0.1	— 0.1	— 0.5	— 0.9	— 1.0	— 0.6	— 0.5	— 0.2	— 0.0	0.8	5
75 2.5	80 4.5	90 4.6	85 4.8	85 4.4	90 4.7	85 5.2	80 4.6	75 5.0	70 4.8	60 3.6	65 3.7	2.9	6
65 7.1	65 7.0	60 6.8	60 6.0	60 5.8	50 4.5	40 4.3	40 4.7	40 4.6	35 3.8	35 4.5	30 5.0	4.0	7
30 7.5	40 7.9	30 5.6	15 3.9	20 5.7	20 5.6	25 6.2	20 5.4	20 5.0	15 4.3	10 5.0	15 4.5	5.6	8
30 5.4	30 5.0	15 3.7	5 2.1	360 2.0	360 1.9	355 2.1	350 1.6	— 0.6	— 0.3	— 0.5	— 0.5	3.3	9
215 6.5	210 5.0	205 5.2	200 5.0	210 6.0	215 6.7	220 6.3	225 7.5	225 6.4	240 3.8	250 2.9	255 2.5	3.0	10
220 4.0	215 4.5	210 4.0	215 4.7	215 5.6	220 4.4	220 5.0	225 5.5	225 6.1	225 5.9	230 5.5	230 4.2	3.6	11
220 7.3	220 7.7	220 7.9	220 8.0	220 7.4	230 6.9	230 7.8	225 7.5	225 6.6	220 6.6	220 6.1	215 6.1	6.4	12
220 7.4	225 6.6	225 5.2	230 3.9	250 3.6	230 2.6	215 2.9	235 1.9	235 1.9	240 2.0	240 2.0	235 2.0	5.1	13
230 5.7	230 6.0	220 5.5	215 5.7	200 4.2	190 2.9	195 4.8	205 5.7	185 5.0	195 6.7	205 8.9	200 8.8	4.4	14
230 5.3	230 5.1	240 5.7	245 5.0	240 4.0	235 4.4	230 5.1	240 5.6	245 4.3	245 5.4	245 4.3	240 3.2	6.7	15
235 11.6	220 14.0	225 15.2	230 15.5	240 14.0	250 13.9	255 12.5	260 11.6	260 9.4	265 8.6	260 6.8	250 5.7	8.1	16
270 6.4	270 6.5	265 6.4	255 5.4	255 5.5	250 4.6	250 5.3	255 5.8	250 5.5	250 4.6	245 3.8	240 4.3	4.6	17
250 5.3	245 4.0	230 3.3	230 4.0	220 4.5	215 4.9	210 4.4	210 5.0	215 5.6	220 4.7	205 5.1	200 5.1	4.5	18
195 8.2	195 7.0	185 6.4	180 7.5	190 8.0	190 8.7	235 10.0	245 6.7	240 6.2	230 4.8	225 5.0	220 5.3	7.0	19
230 6.4	220 6.3	220 5.3	215 5.0	215 5.4	205 3.2	195 3.3	200 4.0	200 4.1	185 3.1	170 3.0	170 4.1	4.6	20
195 6.9	200 6.4	205 7.5	205 7.3	220 7.9	210 6.4	205 7.0	205 7.9	220 8.9	220 8.0	220 8.4	220 7.6	6.5	21
220 10.0	225 10.4	225 10.0	220 9.5	225 10.3	225 9.5	235 8.3	245 5.2	245 5.2	240 5.6	240 6.6	245 5.0	7.1	22
225 13.4	225 13.1	235 12.4	250 11.1	255 10.8	260 11.0	260 10.0	260 10.1	260 8.8	255 10.0	250 9.1	245 9.7	9.0	23
285 8.9	280 9.1	280 10.0	280 8.6	270 8.7	270 7.5	275 6.5	270 6.0	260 5.5	260 5.0	250 5.8	240 5.2	8.2	24
285 10.5	285 10.7	280 10.8	280 12.0	270 10.1	290 8.9	285 9.0	280 7.9	280 8.3	285 7.4	280 7.5	280 6.0	8.2	25
300 6.8	295 5.5	280 4.6	260 4.0	255 3.7	255 3.7	240 3.0	245 3.5	255 2.9	255 2.5	235 2.5	260 4.5	5.3	26
300 6.0	305 5.5	305 5.8	305 5.6	300 3.5	305 3.4	300 2.9	300 3.6	305 3.5	310 3.3	315 3.0	310 3.6	4.4	27
325 4.5	330 4.3	325 3.6	310 2.5	310 3.1	315 3.4	320 3.0	315 2.6	320 2.6	320 3.0	330 2.5	330 2.5	3.4	28
240 1.9	240 2.5	240 3.3	245 2.8	235 2.6	240 2.5	240 2.1	245 1.7	— 1.2	255 1.7	265 1.6	280 1.8	2.0	29
320 3.1	320 2.9	310 2.7	310 3.0	315 2.7	320 3.2	320 3.4	315 3.1	310 2.9	315 3.6	315 3.6	310 3.9	2.6	30
— 6.1	— 6.1	— 5.8	— 5.5	— 5.4	— 5.0	— 5.1	— 4.9	— 4.7	— 4.5	— 4.4	— 4.3	4.8	—

December and Year, 1928.

13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean	Day.
° m/s.	° m/s.	° m/s.	° m/s.	° m/s.	° m/s.	° m/s.	° m/s.	° m/s.	° m/s.	° m/s.	° m/s.	m/s.	
320 4.0	325 3.7	320 3.3	330 2.6	335 3.0	335 3.0	360 4.1	20 4.4	25 3.1	10 1.9	20 4.3	20 2.6	3.0	1
295 1.7	— 1.5	210 2.1	210 2.1	230 2.6	240 2.0	250 1.6	250 1.6	230 1.6	230 2.3	230 2.5	225 2.5	1.8	2
320 1.8	— 1.4	355 2.5	10 2.0	10 2.0	25 3.3	30 2.9	40 3.0	25 2.5	40 2.5	50 2.0	30 1.7	1.9	3
— 0.1	— 1.1	— 0.2	— 0.5	— 1.1	— 1.3	— 1.5	— 1.5	— 1.1	— 0.9	— 0.7	— 0.6	0.8	4
245 2.7	240 2.0	240 1.8	— 0.9	— 0.6	— 0.5	— 0.3	— 1.5	215 1.6	— 0.4	— 0.4	— 0.2	1.6	5
220 6.5	220 7.5	220 7.4	230 7.7	270 5.5	270 2.7	270 4.0	275 3.5	260 3.6	245 2.6	240 3.5	235 4.2	2.8	6
275 3.4	270 3.7	265 2.9	250 2.0	— 1.5	— 0.9	— 0.9	— 0.9	— 1.2	— 1.2	— 1.5	— 1.5	2.9	7
320 3.0	320 2.4	295 1.6	290 1.6	— 1.5	— 1.2	— 1.2	— 1.5	— 1.5	235 1.6	245 1.6	— 1.1	1.5	8
215 2.1	210 2.6	210 2.6	205 1.7	— 1.5	180 1.8	— 1.0	— 1.5	180 1.9	175 3.1	175 3.2	170 3.0	1.7	9
155 7.5	150 6.6	160 5.0	145 3.5	130 3.8	110 5.3	110 4.9	110 5.6	105 5.9	100 5.8	105 5.3	100 5.0	5.1	10
90 5.8	95 5.2	100 4.5	105 4.0	110 2.6	100 3.1	90 2.8	100 3.0	100 3.0	85 4.0	95 2.9	120 1.6	4.6	11
40 4.3	40 4.2	40 4.4	40 4.9	45 4.6	40 4.5	45 4.2	35 4.7	40 4.9	40 5.0	40 4.5	40 4.4	3.6	12
45 4.9	45 4.5	45 4.2	45 3.9	50 4.0	55 4.0	55 3.4	50 3.0	45 2.5	40 2.5	30 2.0	40 1.8	4.1	13
350 2.5	5 2.5	5 2.6	10 2.6	15 3.5	360 1.9	— 1.1	— 0.9	— 1.1	— 0.9	— 1.0	— 1.0	1.3	14
270 1.9	— 1.5	265 1.9	— 1.0	— 1.0	— 0.5	— 0.4	— 0.2	— 0.2	— 0.3	— 0.2	— 0.5	1.1	15
185 7.7	175 7.5	180 6.1	180 6.2	180 6.5	180 6.2	175 6.3	190 6.0	195 4.8	200 3.5	210 3.0	— 1.5	4.5	16
305 3.8	310 3.5	310 3.4	300 2.9	280 2.0	270 2.4	275 2.6	285 1.9	— 1.4	— 1.2	305 1.6	— 0.8	2.8	17
— 0.7	— 0.6	— 0.5	— 0.3	— 6.5	— 0.4	— 0.5	— 1.0	— 1.3	— 1.0	— 1.0	— 0.9	0.8	18
195 3.3	190 2.9	190 2.4	190 2.0	— 1.3	190 2.0	195 2.9	200 2.8	190 2.7	205 2.9	215 3.1	200 3.0	1.5	19
330 2.8	335 4.0	325 2.4	315 1.6	315 2.4	335 2.5	335 2.1	325 1.9	320 1.7	320 1.7	— 0.5	— 1.2	2.2	20
— 1.2	— 0.9	— 1.4	— 1.1	— 0.2	— 0.7	— 1.4	— 0.8	— 0.6	— 0.9	— 0.4	— 0.5	0.9	21
200 5.6	205 5.1	205 4.5	200 3.6	200 3.3	210 4.0	220 4.0	225 3.0	240 2.9	260 2.6	255 2.2	280 1.8	2.4	22
— 0.5	— 0.6	— 1.1	— 1.2	— 1.5	— 1.2	— 0.9	— 1.4	— 1.5	— 1.5	215 1.6	205 1.8	1.1	23
200 6.5	205 6.9	210 8.0	210 9.2	210 9.2	205 9.3	210 9.1	210 9.0	210 8.5	215 7.6	225 5.5	235 4.0	6.3	24
220 4.2	215 4.5	215 3.9	190 3.8	190 4.9	190 6.2	180 6.5	180 7.1	190 8.0	200 9.7	200 11.1	200 10.6	4.9	25
260 4.5	265 4.0	290 4.0	260 2.9	260 3.2	260 3.8	260 3.5	265 3.5	255 2.6	245 3.0	245 3.3	245 3.4	5.8	26
— 0.6	— 0.3	— 0.5	— 0.4	135 1.6	— 1.5	— 1.5	135 2.1	95 3.5	105 4.1	110 5.1	100 5.9	2.2	27
115 3.7	110 2.6	105 3.0	125 2.4	115 2.6	120 3.0	120 2.4	140 2.6	140 2.5	135 2.7	— 1.4	— 1.1	4.7	28
250 6.3	245 4.9	235 4.4	220 3.4	230 4.2	225 3.1	210 3.1	210 3.2	200 2.1	170 2.0	180 3.0	170 4.2	3.7	29
270 4.3	265 4.4	260 4.1	250 4.2	240 4.0	250 3.1	280 1.8	— 1.2	10 3.0	15 2.6	— 1.5	30 4.3	2.6	30
45 9.8	40 8.7	30 8.9	35 8.4	30 8.0	35 8.6	35 8.5	35 6.9	40 8.0	40 7.3	35 7.6	30 6.1	7.6	31
— 3.8	— 3.6	— 3.4	— 3.1	— 3.0	— 3.0	— 2.9	— 2.9	— 2.9	— 2.9	— 2.8	— 2.7	3.0	—
— 4.9	— 4.9	— 4.9	— 4.6	— 4.4	— 4.0	— 3.7	— 3.5	— 3.3	— 3.1	— 3.0	— 2.9	—	—



521. Richmond (Kew Observatory) :  $H_a = 5$  metres + 20 metres. 1928.

Month	Jan.		Feb.		Mar.		April		May		June		July		Aug.		Sept.		Oct.		Nov.		Dec.	
Day.	Max. in a Gust.	Time of Gust.	Max. in a Gust.	Time of Gust.	Max. in a Gust.	Time of Gust.	Max. in a Gust.	Time of Gust.	Max. in a Gust.	Time of Gust.	Max. in a Gust.	Time of Gust.	Max. in a Gust.	Time of Gust.	Max. in a Gust.	Time of Gust.	Max. in a Gust.	Time of Gust.	Max. in a Gust.	Time of Gust.	Max. in a Gust.	Time of Gust.	Max. in a Gust.	Time of Gust.
	m/s.	h. m.	m/s.	h. m.	m/s.	h. m.	m/s.	h. m.	m/s.	h. m.	m/s.	h. m.	m/s.	h. m.	m/s.	h. m.	m/s.	h. m.	m/s.	h. m.	m/s.	h. m.	m/s.	h. m.
1	10	23 55	16	12 20	9	11 10	9	8 5	5	23 35	14	17 5	15	13 55	6	12 30	9	15 5	6	10 30	12	19 0 20 45	8	19 25
2	15	8 40 9 50 11 5	23	17 55	10	13 10	6	14 40	6	14 10	17	11 5	13	11 10	11	17 10	8	12 45	5	12 20	11	0 5	5	12 5
3	6	10 55	11	13 10	7	14 50	13	15 25	11	21 55	11	12 15	8	15 30	13	10 5	9	13 10	8	14 50	6	0 35	5	20 10
4	15	18 5	13	23 20	7	12 15	9	16 30	12	12 40	9	23 45	10	18 40	12	11 20	10	12 50	13	12 5	5	1 25	5	0 45
5	13	0 50	15	8 0	5	17 0 18 5	11	13 25	11	14 20	10	0 15	15	13 50	6	13 20	11	15 30	9	14 45	5	12 10	6	8 30
6	24	12 35	9	13 25	6	14 5	7	18 0	8	9 40	8	12 35	12	13 35	7	13 25	13	3 50	9	9 55	9	20 20	13	15 55
7	12	19 55	15	11 10	7	23 45	15	14 30	11	16 55	13	18 30	9	16 45	13	12 5	10	13 20	11	12 45	12	12 55	9	2 45
8	12	0 40	17	21 55	10	12 5	10	6 30	15	15 0	14	14 25	11	12 20	9	18 20	11	13 55	10	13 15	13	14 0	5	13 15
9	13	17 20	17	1 55	12	11 30	15	14 30	9	14 50	20	16 15	12	15 20	10	12 55	12	14 55	13	15 30	10	11 20	5	22 40
10	18	13 45	27	16 20	16	15 35	14	12 5	9	13 45	19	12 55	10	17 20	6	16 20	9	11 30	5	18 15	13	19 50	13	12 55
11	8	1 0	24	2 10	7	13 55	12	11 45	8	1 45	11	11 40	10	13 30	7	8 55	6	8 30	15	9 30	9	21 55	10	10 55
12	17	21 20	10	13 30	8	14 35	7	13 40	7	9 40	8	14 50	9	14 20	13	16 10	6	18 35	16	14 50	14	19 0	9	16 25
13	15	12 55	12	13 30	6	14 20	9	23 45	5	16 10	10	13 20	6	13 45	17	13 55	9	12 30	7	12 35	13	4 35	9	6 15
14	14	14 10	9	10 30	6	17 20	20	23 15	12	15 25	15	10 30	7	16 5	15	11 5	12	11 40	9	22 40	19	19 55	5	16 50
15	14	21 50	15	11 40	6	14 20	18	0 10	10	21 40	11	16 40	6	16 30	7	13 45	7	15 50	11	2 15	22	7 30	3	14 40
16	13	15 5	19	8 50	10	11 50	14	2 10	13	17 10	8	8 5	9	21 15	8	11 50	6	0 35	10	11 55	29	16 10	14	11 35
17	6	1 35	18	4 40	12	12 40	9	14 0	11	14 40	11	17 55	7	12 35	6	9 20	8	16 40	11	4 15	12	14 10 15 0	8	11 35
18	8	19 0	8	15 30	12	13 35	11	17 35	14	9 0	7	15 40	9	14 10	5	12 50	8	14 5	17	16 25	10	12 40	3	9 20
19	15	1 15	5	10 0	9	12 35 13 25	15	16 30	9	15 25	11	14 50	7	11 5	8	13 25	6	13 40	23	23 20	18	18 25	5	13 0
20	9	15 0	4	13 40	15	14 55	11	10 40	7	13 5	8	9 20 11 5	8	11 35	14	12 55	6	14 10	18	1 50	11	12 35	8	14 0
21	15	20 35	7	12 50	11	11 35	9	12 35	13	15 20	11	14 20	6	7 25	12	18 20	7	14 10	13	11 20	17	20 35	3	5 35
22	12	1 40	4	20 0	10	11 35	9	10 15	13	10 5	11	14 50	10	14 30	11	12 15	11	11 10	9	19 50	21	14 25	9	13 10
23	15	23 20	10	21 45	13	13 5	12	13 50	7	11 40	9	15 0	6	20 25	9	13 40	8	10 55	17	19 25	24	15 5	4	1 15
24	17	14 5	11	4 55	8	16 50	12	15 5	6	19 10	7	13 5	10	15 40	10	18 0	6	9 10	20	10 55	19	7 55	15	17 20
25	22	21 55	9	16 30	9	14 45	8	12 25	9	14 50	12	12 25	11	14 35	13	12 25	7	12 20	13	13 30	23	16 10	19	22 0
26	14	17 15	8	17 25	6	15 50	13	16 20	9	12 35	17	13 35	9	18 45	8	16 30	7	16 30	17	13 5	13	12 45	18	1 15
27	9	13 50	11	13 45	11	10 0	13	12 15	8	13 15 15 10	12	12 35	6	15 00	17	15 10	9	9 45	14	10 10	13	12 0	9	23 0
28	14	16 55	12	15 30	12	16 40	7	19 45	9	11 35	17	16 20	8	13 10	12	15 50	11	11 20	13	2 35	9	11 55	13	4 0
29	16	10 50	9	15 15	17	20 30	9	16 15	9	17 5	20	15 40	12	17 00	9	16 20	9	20 55 21 5	10	18 20	6	14 50	12	12 5
30	6	13 55	—	—	16	7 50	10	11 30	15	17 40	13	10 55	12	15 50	8	13 30	9	11 15	14	9 40	7	23 35	7	13 0
31	15	20 30	—	—	13	10 5	—	—	10	21 0 21 25	—	—	7	0 5	8	14 30	—	—	11	11 40	—	—	16	13 30

DISTRIBUTION OF WIND SPEED: EXTREME VELOCITIES AS RECORDED BY THE DINES TUBE ANEMOGRAPH.

522. Richmond (Kew Observatory) :  $H_a = 5$  metres + 20 metres. 1928.

Month.	DISTRIBUTION OF WIND.								EXTREME VELOCITIES.					
	More than 17·1 m/s.		10·8 to 17·1 m/s.		5·5 to 10·7 m/s.	1·6 to 5·4 m/s.	Less than 1·6 m/s.	No Record.	Highest Hourly Wind.				Highest Gust.	
	Dates of Occurrence.	Duration.	No. of Days.	Duration.	Duration.	Duration.	Duration.	Duration.	Veer from N.	Speed.	Mid. Time.		Speed.	Date.
		hr.		hr.	hr.	hr.	hr.	hr.	°	m/s.	day.	hour.	m/s.	d. h. m.
Jan. ...	—	0	4	12	275	369	88	0	220	13	25	22	24	6 12 35
Feb. ...	—	0	4	16	221	370	89	0	205	13	2	18	27	10 16 20
Mar. ...	—	0	0	0	124	471	149	0	215	11	29	20	17	29 20 30
April ...	—	0	1	9	159	449	103	0	75	12	14	19	20	14 23 15
May ...	—	0	0	0	104	458	182	0	80	9	30	17	15	30 17 40
June ...	—	0	3	5	187	406	122	0	85	12	2	11	20	29 15 40
July ...	—	0	0	0	76	475	193	0	220	9	5	12	15	5 13 50
Aug. ...	—	0	0	0	118	440	186	0	210	10	27	15	17	27 15 10
Sept. ...	—	0	0	0	58	385	277	0	60	7	28	11	13	6 3 50
Oct. ...	—	0	1	1	172	435	136	0	210	11	24	12	23	19 23 20
Nov. ...	—	0	3	20	256	376	68	0	230	15	16	16	29	16 16 10
Dec. ...	—	0	2	2	102	385	255	0	210	11	26	1	19	25 22 00
Year ...	—	0	18	65	1852	5019	1848	0	230	15	Nov. 16	16	29	Nov. 16 16 10



## 523. Richmond (Kew Observatory).

Readings, in degrees absolute, at 9h., Greenwich Mean Time.

1928.

Month	Jan.		Feb.		Mar.		April		May		June		July		Aug.		Sept.		Oct.		Nov.		Dec.	
Day.	30 cm	122 cm	30 cm	122 cm	30 cm	122 cm	30 cm	122 cm	30 cm	122 cm	30 cm	122 cm	30 cm	122 cm	30 cm	122 cm	30 cm	122 cm	30 cm	122 cm	30 cm	122 cm	30 cm	122 cm
1	74.8	79.2	78.0	79.3	78.8	79.6	80.7	81.0	84.2	82.2	87.0	84.3	88.0	86.3	90.8	88.8	88.5	88.3	83.5	86.5	82.4	84.7	80.4	82.7
2	74.8	79.2	77.4	79.3	79.4	79.6	80.5	80.9	84.7	82.4	86.5	84.8	88.2	86.3	90.8	88.7	88.2	88.1	83.0	86.3	82.5	84.7	80.5	82.7
3	75.1	79.1	76.9	79.2	79.5	79.7	80.6	80.9	84.8	82.3	86.4	84.9	88.6	86.5	90.4	88.7	88.2	88.1	82.9	86.1	82.2	84.6	80.2	82.7
4	75.2	79.0	76.1	79.2	79.7	79.8	80.7	81.0	85.8	82.7	86.8	84.8	88.7	86.5	90.2	88.7	88.6	88.1	82.8	86.1	81.7	84.4	80.1	82.6
5	76.4	78.9	77.8	79.2	79.6	79.9	80.1	81.1	86.0	83.0	86.6	84.8	89.1	86.5	88.5	88.8	88.5	88.1	83.1	85.9	81.0	84.3	79.3	82.3
6	76.7	78.9	77.4	79.2	80.3	79.9	80.4	81.0	86.0	83.0	86.8	84.9	89.3	86.6	89.3	88.7	89.5	88.1	84.2	85.8	80.2	84.2	79.1	82.3
7	77.2	78.8	77.0	79.2	80.1	80.1	80.7	81.0	86.0	83.2	87.6	84.9	88.9	86.4	90.2	88.4	89.0	88.0	84.1	85.8	80.4	84.1	79.0	82.3
8	78.7	78.7	78.1	79.2	79.6	80.1	80.9	81.6	85.7	83.4	87.4	85.1	89.5	86.8	91.0	88.5	88.6	88.0	85.0	85.7	80.5	83.8	87.6	82.2
9	78.0	78.8	79.4	79.2	79.0	80.2	82.0	81.1	84.6	83.6	88.0	85.2	90.1	86.7	90.6	88.5	89.3	88.0	85.3	85.6	80.0	83.8	76.6	82.2
10	77.7	78.8	78.6	79.2	78.0	80.2	83.1	81.8	83.9	83.4	87.9	85.2	90.4	86.8	90.1	88.4	88.5	88.1	84.9	85.6	79.1	83.7	76.0	81.9
11	77.6	78.9	78.0	79.4	77.0	80.2	83.0	81.4	84.1	83.7	86.8	85.2	90.7	86.9	90.4	88.5	88.6	88.1	85.0	85.7	80.1	83.5	76.2	81.7
12	76.7	79.1	78.0	79.4	76.3	80.1	83.4	81.3	84.7	83.7	86.7	85.4	91.0	87.1	91.5	88.6	88.4	88.0	84.8	85.6	82.0	83.4	76.2	81.5
13	77.8	79.2	78.0	79.3	76.4	79.9	83.2	81.7	84.9	83.4	87.6	85.4	91.5	87.1	90.8	88.6	87.5	88.1	83.4	85.7	83.1	83.3	76.6	81.2
14	77.5	79.1	78.5	79.5	76.6	79.8	84.5	81.8	85.0	83.7	88.7	85.3	92.0	87.3	90.1	88.7	87.1	88.0	82.3	85.7	83.0	83.3	76.5	81.1
15	77.8	79.2	79.6	79.5	76.5	79.6	81.4	81.9	84.5	83.7	87.5	85.6	92.4	87.6	89.8	88.6	87.1	88.0	83.0	85.5	82.6	83.4	75.7	80.9
16	77.8	79.2	80.8	79.6	76.9	79.7	80.5	81.9	84.6	83.7	87.4	85.6	92.6	87.7	89.8	88.6	87.4	87.8	83.4	85.2	82.5	83.6	75.4	80.8
17	77.5	79.2	80.4	79.7	77.9	79.6	79.6	81.9	83.9	83.7	86.9	85.7	92.0	87.9	89.5	88.5	87.4	87.7	84.8	85.2	82.2	83.6	76.3	80.6
18	76.2	79.2	79.1	79.8	78.8	79.6	80.0	81.8	83.7	83.7	86.8	85.6	91.6	88.1	89.1	88.5	87.1	87.7	84.2	85.2	81.2	83.5	76.0	80.4
19	77.1	79.1	79.0	80.0	79.7	79.6	80.0	81.7	82.9	83.7	87.4	85.7	92.0	88.1	89.3	88.6	87.5	87.7	84.3	85.2	81.6	83.6	76.3	80.3
20	76.5	79.2	78.5	79.9	80.7	79.6	80.0	81.6	83.4	83.7	87.7	85.6	92.0	88.2	89.7	88.6	86.7	87.6	84.7	85.2	81.7	83.5	77.1	80.2
21	77.9	79.2	78.1	79.9	81.1	79.8	80.0	81.5	83.7	83.5	88.0	85.7	92.0	88.4	89.1	88.5	85.8	87.6	83.8	85.2	81.9	83.3	77.1	80.2
22	79.0	79.1	77.8	79.9	80.6	80.1	80.0	81.5	83.7	83.6	88.0	85.7	92.0	88.3	89.1	88.5	85.7	87.5	83.2	85.2	82.8	83.4	76.1	80.2
23	77.9	79.1	77.9	80.0	81.0	80.4	81.4	83.2	83.6	87.7	85.7	85.7	92.7	88.5	89.6	88.4	85.3	87.2	83.3	85.2	82.6	83.4	76.8	80.2
24	78.5	79.2	77.9	79.9	81.0	80.2	80.9	81.4	83.0	83.6	88.5	85.9	92.9	88.6	89.6	88.4	85.1	87.3	84.0	85.2	82.1	83.3	76.5	80.1
25	78.1	79.2	77.8	79.8	80.6	80.3	81.7	81.4	83.2	83.4	89.4	85.9	93.4	88.6	89.8	88.3	85.2	87.1	83.7	85.1	81.8	83.3	77.9	80.0
26	78.4	79.3	77.5	79.8	81.1	80.5	83.0	81.4	84.7	83.4	89.7	86.1	93.0	88.7	89.7	88.3	84.6	87.0	83.1	85.0	81.5	83.4	78.6	79.9
27	77.8	79.3	77.5	79.7	81.4	80.6	84.0	81.7	85.9	83.6	88.6	86.1	92.7	88.7	89.4	88.3	84.0	86.9	83.4	85.0	80.5	83.3	78.2	80.1
28	76.6	79.3	77.5	79.7	80.9	80.7	83.4	81.8	87.1	83.6	88.8	86.2	91.8	88.9	89.5	88.3	84.8	86.7	83.8	85.0	79.4	83.2	77.7	80.0
29	77.3	79.2	77.8	79.7	80.5	80.7	84.5	81.9	88.0	84.0	88.5	86.4	90.9	88.9	89.4	88.4	85.0	86.6	82.6	84.8	78.4	83.1	77.8	80.0
30	77.7	79.2	—	—	80.5	80.8	84.5	82.1	88.5	84.2	88.2	86.5	90.4	88.9	88.9	88.4	85.0	86.5	83.3	84.8	79.0	82.9	77.1	80.0
31	77.4	79.2	—	—	80.6	80.9	—	—	88.0	84.3	—	—	90.2	88.8	88.8	88.2	—	—	82.7	84.8	—	—	77.0	80.0
Mean	77.2	79.1	78.2	79.5	79.4	80.0	81.6	81.5	84.9	83.4	87.7	85.5	91.0	87.6	89.8	88.5	87.1	87.7	83.7	85.4	81.3	83.7	77.5	81.1

The initial 2 or 3 of the readings is omitted; i.e., 275.0 degrees absolute is written 75.0.

Year 83.3 | 83.6

## MINIMUM TEMPERATURE "ON THE GRASS" DURING THE INTERVAL 18h. TO 7h. G.M.T.

Readings in degrees absolute.

## 524. Richmond (Kew Observatory).

1928.

Month	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Day.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.
1	72.7	78.4	79.5	77.1	82.2	83.8	80.9	87.8	79.3	69.2	74.0	80.8
2	74.2	71.3	76.0	69.7	78.8	80.5	82.5	85.9	74.6	69.8	78.6	75.5
3	69.9	70.4	72.6	71.4	80.9	70.8	78.3	84.6	75.3	71.4	75.7	77.5
4	69.9	68.5	71.2	74.7	83.2	74.2	82.7	84.5	77.2	73.2	77.8	71.0
5	74.6	80.3	70.5	69.9	81.5	82.4	85.6	76.0	76.8	75.0	70.7	71.0
6	76.5	70.1	75.5	69.0	73.5	77.3	82.4	78.4	86.8	80.9	71.7	70.4
7	72.1	73.0	75.0	70.6	73.6	79.8	83.9	83.7	77.9	74.3	74.0	72.0
8	83.2	79.9	72.2	80.4	72.5	83.5	79.9	86.2	76.0	80.6	77.5	64.0
9	73.3	80.4	71.7	79.4	67.1	84.6	87.9	81.3	83.3	79.8	74.1	68.4
10	72.7	71.4	70.1	83.6	69.6	84.8	79.7	78.3	81.9	75.6	67.3	65.7
11	74.1	74.1	67.0	74.4	76.8	74.8	81.9	84.4	80.4	80.9	79.5	73.9
12	67.0	75.0	67.0	79.3	73.7	74.3	78.5	86.3	76.6	76.6	84.8	73.0
13	78.6	74.9	69.4	81.1	80.7	82.3	79.0	84.4	75.7	69.1	84.8	75.1
14	73.4	76.1	71.0	79.8	80.0	86.0	81.0	84.5	75.7	69.4	75.3	66.0
15	74.8	82.3	66.6	74.8	70.7	76.4	82.6	82.8	77.2	79.4	79.0	64.1
16	76.4	84.0	67.2	73.3	78.5	76.0	81.5	79.3	77.0	78.8	76.7	71.2
17	69.5	75.0	76.4	70.2	75.1	72.9	83.0	81.5	77.0	86.1	78.0	74.5
18	67.7	71.2	78.2	66.0	77.5	79.0	79.1	78.0	75.0	73.8	75.3	68.9
19	75.1	70.7	77.3	67.9	69.5	82.8	86.1	75.6	78.3	81.3	80.3	73.5
20	69.2	68.0	80.1	66.7	71.7	84.5	83.3	84.7	72.5	83.3	75.9	77.2
21	80.5	69.2	77.1	68.0	75.9	75.8	83.5	80.0	72.0	75.0	79.8	70.5
22	78.2	68.4	77.3	70.6	79.9	86.0	79.8	84.6	72.1	77.3	82.8	67.1
23	67.7	70.2	79.2	70.6	76.0	77.8	84.3	88.1	74.7	77.0	80.8	70.5
24	79.2	76.4	74.8	71.8	79.1	78.7	88.9	82.3	74.7	83.2	78.8	69.6
25	73.8	74.4	71.4	73.7	74.1	77.9	89.1	84.3	76.8	79.8	79.4	72.7
26	76.0	67.7	76.5	78.5	73.8	84.5	86.6	82.2	71.8	75.5	77.2	78.7
27	71.0	67.8	74.3	80.9	83.1	79.6	86.1	83.5	72.0	82.1	72.7	70.3
28	66.7	68.8	69.9	72.8	79.6	80.3	84.1	83.9	80.8	83.2	71.7	75.2
29	78.9	74.9	67.2	79.8	85.6	83.6	79.6	82.9	82.8	71.2	71.1	72.3
30	75.4	—	75.2	81.7	85.8	79.9	79.9	79.4	79.2	83.1	78.4	71.3
31	69.2	—	74.1	—	81.5	—	86.4	77.0	—	75.2	—	72.9
Mean	73.6	73.5	73.3	74.3	77.1	79.8	82.8	82.5	77.0	77.1	76.8	71.6

Year 76.6

The initial 2 or 3 of the readings is omitted; i.e., 275.0 degrees absolute is written 75.0.



## 526. Richmond (Kew Observatory).

January, 1928.

Day.	Cloud Forms.			Cloud Amount (All Forms).						Visibility.						Precipitation.						Remarks on the Weather of the Day.	
	7 <sup>h</sup>	13 <sup>h</sup>	18 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>		
1	St.	A-Cu.	St : St-Cu.	10	8	5	—	9	9	F	E	E	—	G	H	...	...	...	—	...	...	...	~ a : ☒.
2	Nb.	A-St : Nb.	Nb.	9	10	10	10	10	10	J	G	G	G	G	G	●	● <sup>0</sup>	●	●	●	...	...	☐ 22 <sup>h</sup> 20 <sup>m</sup> .
3	A-Cu : Nb.	A-Cu:St-Cu:Fr-St.	St-Cu.	9	9	9	9	8	8	G	G	G	G	G	G	● <sup>0</sup>	...	...	...	...	...	...	☐ <sup>0</sup> 6 <sup>h</sup> 45 <sup>m</sup> to 7 <sup>h</sup> .
4	St-Cu.	A-St:A-Cu:Fr-St.	Nb : St-Cu.	10	10	10	10	10	9	G	G	G	H	i	i	...	...	...	...	● <sup>0</sup>	...	...	☐ 23 <sup>h</sup> : ● 23 <sup>h</sup> 30 <sup>m</sup> to 24 <sup>h</sup> .
5	St-Cu.	Ci : Ci-Cu.	A-Cu.	<1	0	7	10	9	9	J	H	J	J	i	i	...	...	...	...	...	...	...	p ● 0 h 40 <sup>m</sup> to 1 <sup>h</sup> .
6	A-St : St.	Ci : Fr-Cu.	Fr-Cu.	9	10	7	4	5	7	J	K	J	K	J	i	...	...	...	...	...	...	...	● 0 <sup>h</sup> 25 <sup>m</sup> to 4 <sup>h</sup> 25 <sup>m</sup> : q y p.
7	A-St : St-Cu.	A-St : Fr-St.	St.	10	10	10	10	10	9	G	H	H	G	G	J	...	...	...	...	...	...	...	☐ n.
8	A-Cu : St-Cu.	Ci-St : Cu.	Ci-St : St-Cu.	3	3	7	—	3	8	J	i	i	—	i	J	...	...	...	—	...	...	...	p n.
9	—	St-Cu.	A-St : St.	0	9	8	8	5	0	J	G	i	i	i	J	...	...	...	...	...	...	...	☐ early a : p ● <sup>0</sup> p.
10	A-Cu.	Fr-St : St-Cu.	A-Cu.	1	7	10	10	<1	7	J	i	J	i	J	J	...	...	...	● <sup>0</sup>	...	...	...	● ☐ (gusts) SW p.
11	Nb.	Ci : St-Cu.	—	10	9	6	4	0	0	i	G	i	i	i	G	● <sup>0</sup>	●	...	...	...	...	...	● 7 <sup>h</sup> to 9 <sup>h</sup> 15 <sup>m</sup> : ☐ n.
12	A-St.	A-St : Nb.	A-St : Nb.	7	10	10	10	10	10	J	i	i	i	G	G	...	...	● <sup>0</sup>	...	...	...	...	☐ early a : q n.
13	Cu.	A-Cu:A-St:Cu:Fr-Cu.	—	2	1	8	5	0	0	J	i	K	K	K	i	...	...	...	...	...	...	...	☐ a : q p : c b to b w n.
14	A-St : St-Cu.	A-St : Fr-St.	A-St : Fr-Nb.	7	9	10	10	10	10	i	G	i	i	i	G	...	...	...	● <sup>0</sup>	● <sup>0</sup>	● <sup>0</sup>	● <sup>0</sup>	☐ a : ● <sup>0</sup> 22 <sup>h</sup> 30 <sup>m</sup> .
15	St-Cu.	Ci-St : Fr-Cu.	Ci-St : St-Cu.	<1	1	3	—	4	2	J	G	i	—	H	J	...	...	...	—	...	...	...	☐ a : q p : c b to b w n.
16	St-Cu.	St-Cu : Nb.	A-Cu : St : St-Cu.	8	10	10	9	9	2	G	G	i	i	H	H	...	...	...	...	...	...	...	q early a.
17	A-Cu : St-Cu.	A-Cu.	Ci.	2	0	4	2	2	10	G	E	G	G	G	A	...	...	...	...	...	...	...	☐ a and n.
18	St.	Nb.	Nb.	10	10	10	10	10	10	B	C	G	G	G	G	...	...	...	...	...	...	...	f cleared about 10 <sup>h</sup> 30 <sup>m</sup> : ☐ early a.
19	St.	Fr-Cu.	—	1	0	1	0	0	0	J	i	J	i	i	F	...	...	...	...	...	...	...	y p : ☐ n.
20	St.	St : Nb.	St.	10	10	10	10	10	10	F	F	G	H	G	G	...	...	...	...	...	...	...	☐ p a.
21	Nb.	Nb.	St-Cu.	10	10	10	10	9	9	i	i	J	J	J	K	...	...	...	...	...	...	...	● 3 <sup>h</sup> to 5 <sup>h</sup> .
22	A-St : Fr-St.	Fr-Cu : St-Cu.	—	10	10	9	—	0	0	i	i	i	—	G	G	...	...	...	—	...	...	...	☐ early a : ☐ 12 <sup>h</sup> .
23	St-Cu.	A-St : St-Cu.	St : Nb.	<1	10	10	10	10	10	G	B	G	i	H	J	...	...	...	...	...	...	...	p ● <sup>2</sup> 11 <sup>h</sup> 45 <sup>m</sup> : q a. p and n.
24	Fr-Nb.	Nb:Fr-Nb:St-Cu.	Fr-St.	10	10	9	9	1	0	G	G	J	i	J	J	...	...	...	...	...	...	...	☐ a : q p : c q ● n.
25	St-Cu.	Ci : Ci-Cu.	Ci : St.	1	0	5	7	2	9	J	G	i	H	H	i	...	...	...	...	...	...	...	
26	A-St : St-Cu.	A-St : Fr-Nb.	A-St : Nb.	10	10	10	10	10	3	G	H	J	G	i	J	...	...	...	...	...	...	...	c p ● to bc n.
27	St-Cu.	St : St-Cu.	—	7	9	9	4	0	0	J	G	G	G	E	F	...	...	...	...	...	...	...	☐ 7 <sup>h</sup> 50 <sup>m</sup> : ☐ n.
28	A-Cu:A-St:St-Cu.	A-St : Nb : Fr-Nb.	A-St:Nb:Fr-Nb.	8	10	10	10	10	10	J	G	G	H	H	i	...	...	...	...	...	...	...	☐ a : ● from 10 <sup>h</sup> .
29	A-St:Fr-Nb:Cu-Nb.	Ci:St:A-Cu:A-St.	A-St : St.	10	10	4	—	10	10	K	J	H	—	G	G	...	...	...	...	...	...	...	q a : ☐ p : ● n.
30	A-St : St-Cu.	Cu.	Ci : Ci-St : A-St.	9	9	1	7	6	10	G	G	i	H	E	G	...	...	...	...	...	...	...	● early a : ☐ n.
31	St-Cu.	Ci : A-Cu.	A-St : Nb.	2	1	2	10	10	10	G	D	G	H	H	G	...	...	...	...	...	...	...	☐ a : ● <sup>0</sup> 16 <sup>h</sup> 25 <sup>m</sup> till 21 <sup>h</sup> : ☐ p.
Mean Cloud Am't.				6.4	7.3	7.5	8.0	6.2	6.5														

## 527. Richmond (Kew Observatory).

February, 1928.

1	St-Cu.	Ci: Cu.	Ci.	8	8	4	4	1	2	i	i	J	i	K	i	G	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
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Note.—Observations are not taken at 15h. on Sundays, Good Friday and Christmas Day.

\* Mean of 26 days.

† Mean of 24 days.



## 528. Richmond (Kew Observatory).

March, 1928.

Day.	Cloud Forms.			Cloud Amount (All Forms).						Visibility.						Precipitation.						Remarks on the Weather of the Day.
	7 <sup>h</sup>	13 <sup>h</sup>	18 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	
1	Nb.	St-Cu.	A-Cu: St-Cu-Nb: Fr-St.	10	10	10	10	9	9	G	G	i	H	G	G	●	●	...	...	...	...	c c ● p: ⊕ 21 <sup>h</sup> .
2	Nb.	A-St: Nb.	St-Cu: St.	10	10	10	10	10	4	D	E	E	G	G	F	●	●	...	...	...	...	c. c ● p: ⊕ n.
3	St-Cu.	Ci: Ci-St.	Ci-Cu.	9	9	3	3	1	1	E	E	i	i	G	E	...	...	...	...	...	...	a and n: ⊕ 21 <sup>h</sup> . [11 <sup>h</sup> 30 <sup>m</sup> .
4	St.	A-Cu.	Ci: A-St: A-Cu.	6	6	2	2	0	0	D	D	G	-	G	E	...	...	...	...	...	...	a: y p: ⊕ n: f cleared about
5	St-Cu.	Ci.	Ci: St-Cu: Fr-Cu.	1	0	3	8	9	9	A	D	J	J	G	G	...	...	...	...	...	●	a: f cleared about 11 <sup>h</sup> 30 <sup>m</sup> : ● <sup>2</sup> [21 <sup>h</sup> 50 <sup>m</sup> to 22 <sup>h</sup> 9 <sup>m</sup> .
6	A-St: St: Fr-St.	St-Cu.	St-Cu.	10	10	9	10	9	10	F	G	i	H	G	G	...	...	...	...	...	...	● early a.
7	Nb.	Nb.	St.	10	10	10	10	10	10	G	E	F	H	F	G	●	●	●	●	...	...	i ● a and p.
8	St-Cu.	St-Cu.	A-Cu: St-Cu.	10	10	9	7	9	10	G	G	F	H	G	G	...	...	...	...	...	...	● 7 <sup>h</sup> 35 <sup>m</sup> .
9	A-Cu: Nb: Fr-Nb.	A-Cu: Cu-Nb: Cu.	A-Cu: St: Fr-St.	9	10	7	10	9	5	G	F	G	H	G	F	★	★	...	...	...	...	g 15 <sup>h</sup> 25 <sup>m</sup> to 15 <sup>h</sup> 50 <sup>m</sup> : * 15 <sup>h</sup> 32 <sup>m</sup> to
10	St-Cu.	Cu: Fr-Cu.	Cu-Nb: St-Cu.	8	2	3	7	9	0	i	H	H	i	G	J	...	...	...	...	*	...	L a and n: q * 15 <sup>h</sup> 35 <sup>m</sup> . [16 <sup>h</sup> 15 <sup>m</sup> .
11	St-Cu.	St-Cu.	Ci-St: St-Cu.	9	9	10	-	8	0	J	i	i	-	G	G	...	...	...	-	...	...	L a: * p p: * between 21 <sup>h</sup> and 23 <sup>h</sup> .
12	A-St: Nb.	Cu.	Ci: Ci-Cu: St-Cu.	10	8	6	9	7	10	G	G	i	G	G	F	* <sup>0</sup>	...	...	*	...	...	7 <sup>h</sup> .
13	A-St: St.	A-St: St-Cu.	A-Cu: St-Cu.	10	10	10	9	10	10	G	G	i	H	G	G	...	...	...	...	...	...	7 <sup>h</sup> : * <sup>0</sup> between 5 <sup>h</sup> and 6 <sup>h</sup> .
14	St-Cu.	St-Cu.	A-Cu: St-Cu.	10	10	7	8	8	8	G	G	G	H	G	G	...	...	...	...	...	...	c f p.
15	St-Cu.	Ci-St: St-Cu.	A-St.	10	9	9	6	1	0	G	G	H	H	F	E	...	...	...	...	...	...	L a and n: ⊕ 13 <sup>h</sup> : f n.
16	St-Cu.	Ci: A-Cu.	A-St: St-Cu: Fr-Cu.	1	2	7	8	10	2	D	G	i	H	G	J	...	...	...	...	...	...	L early a: ⊕ 16 <sup>h</sup> : ● <sup>0</sup> n.
17	A-St: A-Cu: St.	Ci: Ci-St: St: Fr-St.	Ci-St: Ci: St.	9	9	8	5	8	7	G	G	J	J	J	J	...	...	...	...	...	...	y p and n: ⊕ 13 <sup>h</sup> .
18	St-Cu: Fr-Cu	Cu: Fr-Cu.	Ci-Cu: Ci-St: A-St: Fr-Cu.	9	4	6	-	7	4	J	i	K	-	J	J	...	...	...	-	...	...	p ● early a: y p.
19	A-Cu: A-St: Fr-St.	A-Cu: A-St: St-Cu.	A-St: St: St-Cu.	9	9	9	10	10	8	G	G	J	i	H	J	...	...	...	...	...	...	p ● 5 <sup>h</sup> 10 <sup>m</sup> .
20	A-Cu: St-Cu.	Ci: A-Cu.	Ci-St: St-Cu.	8	9	4	6	9	10	i	H	K	K	i	i	...	...	...	...	...	...	b q y to c y p.
21	A-St: Fr-St.	Nb.	Nb.	10	10	10	10	10	10	i	H	H	G	G	F	...	...	● <sup>0</sup>	● <sup>0</sup>	●	● <sup>0</sup>	● <sup>0</sup> early a.
22	Fr-St: St-Cu.	A-Cu: St-Cu: Cu.	Ci: Cu.	8	9	9	8	5	3	J	J	K	K	H	G	...	...	...	...	...	...	p ● 11 <sup>h</sup> and 14 <sup>h</sup> 30 <sup>m</sup> .
23	Fr-Nb.	St-Cu: Nb: Fr-Nb.	Ci: Cu: Fr-Cu.	10	10	10	10	3	0	G	G	J	K	i	i	● <sup>0</sup>	● <sup>0</sup>	● <sup>0</sup>	...	...	...	p ● early a and p: f n.
24	A-St: Fr-St.	A-Cu: St-Cu: Cu.	Ci: Cu.	10	10	9	10	2	2	i	G	i	H	G	H	...	...	...	...	...	...	p f a.
25	Ci: A-St.	Ci-St: Ci: Cu.	Ci-St: Ci: Cu: St-Cu.	8	8	9	-	8	10	E	G	i	-	-	G	...	...	...	-	...	...	y p: ⊕ n.
26	A-Cu: St-Cu.	Cu.	Ci: Cu: Fr-Cu.	8	1	5	4	7	7	i	H	K	K	K	H	...	...	...	...	...	...	early a: ⊕ n.
27	A-St: A-Cu: Fr-Cu: St-Cu.	A-St: Nb: Fr-Nb.	A-St: St-Cu: Fr-Cu.	9	9	10	10	10	5	J	K	G	K	H	G	...	...	● <sup>0</sup>	● <sup>0</sup>	...	...	L p early a: p ● a and p.
28	A-St: St-Cu.	Cu: Cu-Nb.	Ci-Cu: A-Cu: Nb: Cu-Nb.	9	8	6	6	8	0	G	G	K	K	H	G	...	...	...	...	...	...	early a.
29	A-St: St: Fr-Cu.	A-St: Fr-Nb.	Fr-Nb.	9	10	10	10	10	10	i	J	i	i	i	G	...	...	...	...	...	...	L p early a.
30	St-Cu: Nb.	Cu: Fr-Cu.	Ci-St: Cu: Cu-Nb.	8	6	7	8	5	3	K	K	K	K	K	i	...	...	...	...	...	...	▲ p: - 15 <sup>h</sup> 15 <sup>m</sup> : ● <sup>0</sup> 23 <sup>h</sup> 10 <sup>m</sup> to [24 <sup>h</sup> .
31	Ci-St: Ci: St-Cu: Cu.	A-Cu: Cu: Fr-Cu.	St-Cu: Cu-Nb: Nb.	8	8	9	10	8	9	G	G	J	G	F	F	...	...	...	...	...	...	p ● 8 <sup>h</sup> and 11 <sup>h</sup> : ● p.
Mean Cloud Am't.				8.5	7.9	7.6	8.2	7.5	5.7													

## 529. Richmond (Kew Observatory).

April, 1928.

1	Fr-Nb.	A-St: Fr-Nb.	A-St: Nb: Fr-Nb.	10	10	10	-	10	9	J	G	G	-	G	G	●	●	●	●	●	●	⊕ 20 h 50 <sup>m</sup> .
2	St-Cu.	A-Cu: Cu.	A-St.	9	5	8	6	1	0	G	J	H	H	G	F	●	●	●	●	●	●	a and n: ⊕ 21 <sup>h</sup> .
3	A-St: Nb: Fr-Cu.	A-St: Nb: Fr-Nb.	Ci-St: A-St: St-Cu.	10	10	10	10	9	7	J	J	H	K	K	G	●	●	●	●	●	●	n.
4	St-Cu.	Ci-St: A-St: St-Cu.	Ci-Cu: A-Cu: Cu-Nb.	9	9	9	7	5	1	J	i	K	K	K	G	●	●	●	●	●	●	a and n: j p p.
5	A-Cu.	Ci: Ci-St: Cu: Fr-Cu.	Ci: Cu-Nb: Fr-Cu.	2	4	6	5	8	3	G	i	K	K	K	H	●	●	●	●	●	●	a: ▲ 10 <sup>h</sup> 30 <sup>m</sup> and 17 <sup>h</sup> 25 <sup>m</sup> .
6	St-Cu.	St-Cu.	Ci-St: A-Cu: Cu: St-Cu.	7	3	9	6	3	1	G	i	K	K	K	G	●	●	●	●	●	●	a and n: ⊕ 20 <sup>h</sup> 55 <sup>m</sup> .
7	Ci-St.	Ci-St.	A-St: St-Cu.	4	2	8	10	10	1	G	i	K	K	G	G	●	●	●	●	●	●	early a: ⊕ a: y q p: p ● n.
8	Fr-Cu: St-Cu.	St-Cu: Cu.	Ci.	8	7	6	-	3	1	K	K	K	K	K	J	●	●	●	●	●	●	early a: y p.
9	A-St: St-Cu.	Ci-St: Ci: St-Cu.	Ci-St: St-Cu.	10	10	8	4	10	9	K	K	K	K	K	J	●	●	●	●	●	●	y p.
10	A-St: Nb: St-Cu.	A-St: St-Cu.	A-St.	10	10	10	10	10	7	K	K	K	K	K	i	●	●	●	●	●	●	
11	Ci-St: A-St: St-Cu: Cu.	Ci-St: A-St: Fr-Cu.	Ci: Ci-Cu: A-Cu: Cu.	9	7	9	8	7	10	i	K	K	K	J	G	●	●	●	●	●	●	p early a: y a: y p: p ● 19 <sup>h</sup> 20 <sup>m</sup> .
12	Nb.	St: Fr-St.	A-St: St.	10	10	9	10	10	10	G	G	G	G	F	G	●	●	●	●	●	●	c g t to ● 2 <sup>h</sup> m p: T 14 <sup>h</sup> 25 <sup>m</sup> .
13	St.	St: St-Cu.	A-St: St: Fr-St.	10	10	10	10	10	10	G	G	H	G	G	H	●	●	●	●	●	●	p a.
14	A-St: St.	A-St: St.	A-St: St.	10	10	10	10	10	10	G	G	G	H	H	J	●	●	●	●	●	●	(gusts) E 18 <sup>h</sup> 30 <sup>m</sup> to 20 <sup>h</sup> 40 <sup>m</sup> .
15	A-St: Fr-Cu: Nb.	A-St: St: Fr-Cu.	A-St: Fr-Cu.	10	10	10	-	10	10	J	H	G	-	G	G	★	●	●	●	●	●	(gusts) ENE early a.
16	Nb.	Cu: Fr-Cu.	Nb.	10	10	10	10	10	8	G	G	J	H	H	H	★	●	●	●	●	●	q p.
17	St-Cu: Cu.	Cu.	A-Cu: St-Cu.	4	5	5	10	9	10	G	G	J	J	K	i	●	●	●	●	●	●	p ● p.
18	A-Cu.	A-Cu: St-Cu.	Nb: Fr-Nb: St-Cu.	3	0	9	9	10	0	G	G	J	K	K	i	●	●	●	●	●	●	L early a and n: y p.
19	-	Cu: Fr-Cu.	A-Cu: A-St: St-Cu: Cu.	0	8	5	7	7	4	G	J	K	K	K	i	●	●	●	●	●	●	a: y q p.
20	St-Cu: Fr-Cu.	A-Cu: A-St: Cu.	A-St: Fr-Cu: St-Cu.	9	5	8	7	10	1	G	i	K	K	K	i	●	●	●	●	●	●	p a: y p.
21	St-Cu.	Ci: Cu-Nb: Fr-Cu.	A-Cu: Cu-Nb: St-Cu.	5	8	7	9	8	1	G	i	J	H	G	G	●	●	●	●	●	●	early a: ★ a: ● p.
22	Fr-St.	St: St-Cu.	St-Cu: St.	2	9	8	-	8	8	G	i	i	-	G	G	●	●	●	●	●	●	a: y p.
23	Ci-St: Ci-Cu.	Ci-St: A-Cu: Cu: St-Cu.	A-St: St-Cu.	8	8	10	10	10	9	G	J	K	K	K	J	●	●	●	●	●	●	early a: ⊕ 7 <sup>h</sup> .
24	Ci.	Ci.	Ci-St.	1	0	4	2	1	0	G	J	J	K	K	H	●	●	●	●	●	●	early a: y p and n.
25	Ci.	Ci.	Ci-St: Ci: A-Cu.	6	7	4	8	7	10	G	i	J	K	K	K	●	●	●	●	●	●	early a: y ⊕ p.
26	Ci-St: Ci: St-Cu.	Ci-St.	Ci: Ci-Cu: A-Cu: A-St	10	8	9	8	9	5	F	i	K	K	K	F	●	●	●	●	●	●	p early a: ⊕ 11 <sup>h</sup> 15 <sup>m</sup> .
27	Ci-St: St-Cu.	A-Cu.	A-St: Nb: Fr-Nb.	8	9	9	10	10	8	G	G	K	K	K	i	●	●	●	●	●	●	
28	St.	Ci: Ci-St: Cu.	A-St: Cu.	10	0	1	1	2	0	C	G	J	J	K	K	●	●	●	●	●	●	a: y p.
29	A-St: St.	A-St: St: Fr-St.	A-St.	10	10	10	-	10	9	G	i	J	-	K	K	●	●	●	●	●	●	● 18 <sup>h</sup> 50 <sup>m</sup> to 19 <sup>h</sup> 10 <sup>m</sup> .
30	Fr-St.	St-Cu.	Nb: Fr-Nb.	10	10	10	10	10	10	i	H	J	H	G	G	●	●	●	●	●	●	● p 19 <sup>h</sup> 57 <sup>m</sup> .
Mean Cloud Am't.				7.5	7.1	8.0	7.9	7.9	6.0													

\* Mean of 27 days.

† Mean of 25 days.



## 530. Richmond (Kew Observatory).

May, 1928.

Day.	Cloud Forms.			Cloud Amount (All Forms).							Visibility.						Precipitation.						Remarks on the Weather of the Day.
	7 <sup>h</sup>	13 <sup>h</sup>	18 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>		
1	A-St: St.	St-Cu.	—	10	10	9	9	0	0	G	G	i	i	i	G	...	...	...	...	...	...	pp <sup>n</sup> .	
2	St.	A-St: St.	St-Cu.	10	10	10	9	10	10	G	G	G	G	G	G	...	...	...	...	...	...	pp <sup>n</sup> .	
3	St.	Cu.	A-Cu: St.	10	10	4	6	7	4	G	G	G	G	G	G	...	...	...	...	...	...	p 0° 3 <sup>h</sup> 55 <sup>m</sup> : R 21 <sup>h</sup> 20 <sup>m</sup> to 22 <sup>h</sup> 30 <sup>m</sup>	
4	Ci-St: Cu.	Ci: A-Cu: Cu.	Ci.	2	4	4	0	<1	1	J	H	H	H	H	i	...	...	...	...	...	...	y p.	
5	Ci: St-Cu: Cu.	—	Ci.	6	2	0	0	<1	0	G	F	J	J	J	i	...	...	...	...	...	...	y p.	
6	—	—	—	0	0	0	—	0	1	i	i	J	—	K	J	...	...	...	—	...	...	y a and p.	
7	Ci: St-Cu.	Cu.	Cu.	2	1	<1	6	1	1	i	G	K	K	K	K	...	...	...	...	...	...	⊕ a: y p.	
8	Ci-St: Cu.	Ci-St: St-Cu.	A-St: St-Cu: Nb.	4	9	9	10	9	<1	i	J	K	K	K	K	...	...	...	...	...	...	⊕ a: K Q 15 <sup>h</sup> p 0° 15 <sup>h</sup> 7 <sup>m</sup> : ⊕ 15	
9	—	St-Cu: Cu.	St-Cu.	0	5	9	7	9	8	i	J	K	K	K	J	...	...	...	...	...	...	early a: y a and p. [40 <sup>m</sup>	
10	St-Cu.	A-Cu: St-Cu: Cu.	A-Cu: St: St-Cu.	6	7	9	8	8	10	G	i	J	J	J	G	...	...	...	...	...	...	y a: p 0° 13 <sup>h</sup> 45 <sup>m</sup> : and n.	
11	Cu.	Ci: St-Cu.	Cu.	5	5	6	7	2	4	i	i	K	K	J	G	...	...	...	...	...	...	y a and p: n.	
12	Ci-St: St-Cu.	A-St: St-Cu: Cu.	A-St: St-Cu.	2	2	10	10	10	10	i	J	K	i	G	G	...	...	...	...	...	...	...	
13	St: St-Cu.	A-St: St-Cu: Cu.	A-St: St.	10	10	10	—	10	10	G	i	i	—	G	F	...	...	...	—	...	...	y p.	
14	Ci-St: Nb.	A-Cu: Cu: Cu-Nb.	A-St: Nb: Fr-Cu.	10	9	6	9	10	2	F	G	i	i	i	i	...	...	...	...	...	...	p 0° to 8 <sup>h</sup> y p: p 0° 17 <sup>h</sup> 40 <sup>m</sup> .	
15	Cu.	A-Cu: Cu: St-Cu.	A-St: St-Cu: Fr-Cu.	1	8	6	7	10	10	G	J	K	J	i	i	...	...	...	...	...	...	p 0° from 16 <sup>h</sup> 50 <sup>m</sup> .	
16	A-St: Nb.	A-St: Nb: St-Cu.	Ci: A-Cu: Nb: Cu.	10	10	10	10	9	8	i	J	J	K	J	i	...	...	...	...	...	...	0° and p 0° till 19 <sup>h</sup> 55 <sup>m</sup> .	
17	A-St: Fr-St.	A-St: A-Cu: Nb: Cu.	A-St: Nb.	10	9	9	10	10	8	i	i	K	J	H	G	...	...	...	...	...	...	⊕ a. [12 <sup>h</sup> 34 <sup>m</sup>	
18	A-St: Fr-St: St-Cu.	Ci: A-Cu: Cu-Nb: Nb.	A-St: Fr-Nb.	10	10	8	10	10	1	i	H	J	H	G	G	...	...	...	...	...	...	u 9 <sup>h</sup> : T 11 <sup>h</sup> 2 <sup>m</sup> and 12 <sup>h</sup> 42 <sup>m</sup> : 0° 3 <sup>h</sup> 34 <sup>m</sup>	
19	St-Cu.	Cu-Nb: St-Cu.	A-St: Nb.	1	4	10	10	10	10	G	J	J	H	H	G	...	...	...	...	...	...	R 12 <sup>h</sup> 45 <sup>m</sup> : T 13 <sup>h</sup> 20 <sup>m</sup> to 35 <sup>m</sup> .	
20	A-St: St.	A-Cu: Cu-Nb: Cu.	A-Cu: St-Cu: Cu.	10	5	9	—	4	8	i	i	H	—	G	G	...	...	...	—	...	...	u c T p.	
21	A-St: St-Cu: Fr-St.	A-St: Nb.	A-Cu: St-Cu: St-Nb.	10	9	10	9	10	9	G	i	H	H	G	G	...	...	...	...	...	...	R 11 <sup>h</sup> 24 <sup>m</sup> : R 14 <sup>h</sup> 26 <sup>m</sup> to 16 <sup>h</sup> : 0°	
22	Fr-St: St-Cu.	A-St: St-Cu.	St-Cu: Fr-St: A-St.	10	9	10	10	10	10	i	J	J	i	G	G	...	...	...	...	...	...	[and n: 0° p	
23	Nb.	A-St: Nb.	A-St: Nb.	10	10	10	10	10	10	G	G	J	J	H	G	...	...	...	...	...	...	0° from 6 <sup>h</sup> 10 <sup>m</sup> .	
24	A-St: St.	A-Cu: St-Cu.	Cu-Nb: St-Cu.	10	9	9	8	7	<1	G	i	J	J	H	F	...	...	...	...	...	...	Thick bank of haze E to S p.	
25	St.	Cu.	Cu.	10	5	7	7	<1	<1	D	G	J	J	J	G	...	...	...	...	...	...	y p: n.	
26	Ci-St: St-Cu.	Ci-St: Ci-Cu: Cu: Fr-Cu.	Ci-St: A-St.	8	8	7	9	10	9	G	i	J	K	K	i	...	...	...	...	...	...	⊕ a ⊕ till 13 hrs.: y p.	
27	Ci: A-Cu: St-Cu.	Ci: Ci-St: A-Cu.	Ci: Ci-St: A-Cu.	6	7	4	—	5	6	J	J	K	—	J	J	...	...	...	...	...	...	⊕ a: y p.	
28	Ci-St: Ci: A-Cu.	A-Cu: St-Cu.	A-Cu: St-Cu.	7	8	7	4	8	8	G	H	K	K	K	J	...	...	...	...	...	...	early a: y p.	
29	A-Cu: St-Cu.	A-Cu.	A-Cu: A-St.	8	9	9	9	9	9	G	G	H	H	i	H	...	...	...	...	...	...	i p 0° a and p.	
30	Ci-St: St-Cu.	A-Cu.	A-Cu.	10	9	4	1	1	1	G	H	K	K	K	K	...	...	...	...	...	...	y p.	
31	A-St: Fr-St.	A-St: St: St-Cu.	St-Cu.	2	10	10	8	8	10	i	i	i	J	J	i	...	...	...	...	...	...	...	
Mean Cloud Am't.				6.8	7.2	7.3	7.5	6.8	5.8														

## 531. Richmond (Kew Observatory).

June, 1928.

1	St : Fr-St.	A-St : St-Cu.	Fr-Cu.	10	10	10	10	<1	1	G	G	i	i	J	i	...	...	...	...	...	c to b y p.
2	Ci-St.	—	—	1	0	0	0	0	0	i	K	K	K	K	K	...	...	...	...	...	q y a and p.
3	—	—	Ci-St.	0	0	0	—	1	3	i	K	K	K	K	K	...	...	...	...	...	early a.
4	A-St : St-Cu.	A-St : Nb.	St : Nb.	10	9	10	10	10	9	G	F	G	i	G	i	...	...	...	...	...	p 0° y p.
5	A-St : St.	St-Cu.	A-St : St-Cu : St.	10	10	10	10	10	10	G	G	G	J	i	i	...	...	...	...	...	...
6	A-St:St-Cu:St-Cu.	Cu.	Ci : A-Cu : Cu.	9	8	6	7	2	2	G	H	K	l	l	K	...	...	...	...	...	p 0° early a : y p.
7	A-St : Nb.	A-Cu:A-St:St-Cu : Nb.	Ci: A-Cu: Fr-Cu: Cu.	10	10	8	9	8	8	G	G	K	l	l	K	...	...	...	...	...	early a : 0° 9 <sup>h</sup> 12 <sup>m</sup> and 9 <sup>h</sup> 50 <sup>m</sup> .
8	A-St : Fr-Nb.	Ci : Cu : St-Cu.	Ci-St:Ci:Cu:Fr-Cu.	10	8	7	7	8	10	G	J	K	l	m	K	...	...	...	...	...	p 0° a : ⊕ y p : 0° n.
9	Fr-Nb.	Cu : Fr-Cu.	Cu : Fr-Cu.	10	7	8	9	5	3	i	K	K	K	K	K	...	...	...	...	...	c to b c q a : c y p.
10	A-St:A-Cu:Cu:Fr-Cu.	St-Cu : Cu.	A-St : St-Cu : St.	8	9	8	—	10	1	l	l	l	—	K	K	...	...	...	...	...	p 0° a and p : q y p.
11	Ci : St-Cu.	Ci-St:Ci:Cu:Nb:Cu.	Cu-Nb : Fr-Cu.	7	7	9	8	2	3	i	l	l	l	l	i	...	...	...	...	...	pp a : ⊕ early p : T 15 <sup>h</sup> 20 <sup>m</sup> —17 <sup>h</sup> 15 <sup>m</sup>
12	Ci : Ci-St.	A-St : A-Cu : Cu.	A-Cu:A-St:St-Cu.	2	5	9	10	10	10	K	l	l	l	l	K	...	...	...	...	...	early a : y p.
13	Ci:Ci-St:A-Cu:St-Cu	Ci : Ci-St.	A-St.	6	7	4	7	10	10	K	K	l	K	K	K	...	...	...	...	...	y p : 0° after 18 <sup>h</sup> .
14	Fr-St : St-Cu.	A-Cu : Fr-Cu : St.	A-St : Nb : Fr-Nb.	9	9	8	10	10	10	l	l	l	J	G	G	...	...	...	...	...	early a : q p.
15	Ci : Fr-Cu.	Ci : Cu.	Cu.	1	5	5	4	4	1	i	K	K	K	K	K	...	...	...	...	...	p 0° 12 <sup>h</sup> 4 <sup>m</sup> : y p.
16	Cu.	Ci:Cu:Cu-Nb:St-Cu.	A-Cu : St-Cu.	2	5	6	7	7	4	K	l	K	J	J	J	...	...	...	...	...	pp early a and n : p 0° p.
17	Ci.	A-St:Fr-Cu:St-Cu.	Ci-Cu : A-Cu : St-Cu : Cu.	6	7	10	—	7	6	G	K	l	—	J	K	...	...	...	...	...	pp early a : y a and p.
18	A-St:A-Cu:St-Cu:Cu	A-Cu : Cu.	A-St : Nb : St-Cu.	10	9	9	10	10	10	K	K	K	K	K	J	...	...	...	...	...	0° 18 <sup>h</sup> 55 <sup>m</sup> to 19 <sup>h</sup> 15 <sup>m</sup> : i 0° 23 <sup>h</sup>
19	Cu : A-Cu : Ci.	St-Cu : A-Cu.	Nb : St-Cu : A-St.	8	9	9	8	9	7	K	K	K	K	K	K	...	...	...	...	...	i 0° o h to 2 <sup>h</sup> : 2 <sup>h</sup> 25 <sup>m</sup> —35 <sup>m</sup> : [2 <sup>h</sup> 35 <sup>m</sup> to 4 <sup>h</sup> 10 <sup>m</sup>
20	Cu.	Cu.	Cu : Ci.	2	4	5	6	4	5	i	K	K	K	K	i	...	...	...	...	...	p 0° 3 <sup>h</sup> 30 <sup>m</sup> —4 <sup>h</sup> : y p.
21	St-Cu : A-Cu.	St-Cu : A-St.	St-Cu : St : A-St.	6	9	10	10	10	10	i	K	K	K	K	J	...	...	...	...	...	p early : 0° 11 <sup>h</sup> 30 <sup>m</sup> : p 0° 12 <sup>h</sup> an [18 <sup>h</sup> 5 <sup>m</sup>
22	St-Cu.	St-Cu.	Cu : Ci : Ci-St.	9	10	10	9	7	5	K	K	K	K	K	K	...	...	...	...	...	...
23	St-Cu : Ci.	Cu : Ci.	Cu : Ci.	1	4	8	7	6	7	i	K	l	l	l	K	...	...	...	...	...	pp early : y p.
24	Cu.	Cu.	Cu : Ci-St.	1	3	5	—	4	2	J	K	l	—	l	l	...	...	...	...	...	early : y p.
25	St-Cu.	Cu.	Cu:A-Cu:Cu:Cu.	1	1	4	2	7	10	i	l	l	l	K	K	...	...	...	...	...	pp 0° early : y a and p : 0° 23 <sup>h</sup> 25 <sup>m</sup> [and 18 <sup>h</sup> 30 <sup>m</sup> q 1
26	Nb : St-Cu : A-Cu.	Nb : St-Cu.	Nb:St-Cu:A-Cu:Cu.	9	9	10	9	9	10	K	K	J	l	J	K	...	...	...	...	...	gust 13 <sup>h</sup> 30 <sup>m</sup> SW : p 0° 13 <sup>h</sup> 30
27	St-Cu.	St-Cu : A-Cu.	Cu : A-Cu.	9	8	7	5	6	5	l	l	l	l	K	J	...	...	...	...	...	y a and p : p 0° 18 <sup>h</sup> 45 <sup>m</sup> —18 <sup>h</sup> 50 <sup>m</sup> .
28	Cu : A-St : A-Cu.	St-Cu:Cu:A-St:A-Cu	Fr-Cu:A-St:A-Cu:Cu:St.	8	4	8	10	9	9	K	K	l	K	K	K	...	...	...	...	...	q p.
29	St-Cu : A-Cu : Ci.	Cu:Cu:Cu:Cu:A-Cu.	St-Cu : Cu : A-St.	7	9	4	2	10	2	K	K	l	l	J	l	...	...	...	...	...	p 0° 18 <sup>h</sup> 20 <sup>m</sup> : q 13 <sup>h</sup> —17 <sup>h</sup> 45 <sup>m</sup> .
30	Cu : St-Cu.	Cu-Nb:Cu:St-Cu:Cu.	Cu-Nb:Cu:St-Cu:Cu.	4	5	9	7	5	7	K	K	K	K	K	l	...	...	...	...	...	p 0° 13 <sup>h</sup> 5 <sup>m</sup> : p 0° 14 <sup>h</sup> 5 <sup>m</sup> and 16 [20 <sup>m</sup> and 18 <sup>h</sup> 30 <sup>m</sup> —
Mean Cloud Am't.				6.2	6.7	7.2	7.4	6.7	6.0												

\* Mean of 27 days.

† Mean of 26 days.



## 532. Richmond (Kew Observatory).

July, 1928.

Day.	Cloud Forms.			Cloud Amount (All Forms).						Visibility.					Precipitation.					Remarks on the Weather of the Day.		
	7 <sup>h</sup>	13 <sup>h</sup>	18 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>		18 <sup>h</sup>	21 <sup>h</sup>
1	Fr-Cu: St-Cu: Ci-St: Ci.	St-Cu: Cu: Ci.	Cu: St-Cu: A-Cu: Ci: Ci-Cu.	6	9	9	-	7	2	1	1	1	-	1	K	...	...	...	...	...	...	y p.
2	St: Fr-St: A-St.	St-Cu.	St-Cu.	10	7	9	7	4	8	1	1	1	1	1	K	...	...	...	...	...	...	
3	Ci: Ci-St: Ci-Cu.	Cu: A-St.	Nb: A-St.	6	9	10	10	10	10	1	J	K	K	1	G	...	...	...	...	●	●	p ●° p.
4	St-Cu.	Cu.	St-Cu: A-Cu: Ci-St.	<1	<1	5	10	9	10	1	J	1	1	1	1	...	...	...	...	...	...	● till 1 <sup>h</sup> 50 <sup>m</sup> .
5	Cu: A-Cu: Ci.	Cu: Fr-Cu: A-Cu: Ci: Ci-Cu.	Fr-St: St-Cu.	6	9	6	8	10	10	1	K	K	K	K	K	...	...	...	...	...	...	● n.
6	Fr-Cu: Ci-St.	St-Cu: Fr-St: A-Cu.	St-Cu: Fr-Cu: A-Cu.	2	9	10	10	8	5	K	K	K	1	1	K	...	...	...	...	...	...	p ●° 1 <sup>h</sup> 40 <sup>m</sup> : y p.
7	St-Cu: Cu: Ci.	Cu: A-Cu: A-St.	Cu: Ci.	7	5	6	4	4	4	J	K	K	K	K	K	...	...	...	...	...	...	y p.
8	St-Cu: Ci.	Cu: St-Cu: A-Cu.	St-Cu: A-Cu: Ci: Ci-Cu.	2	3	5	-	6	10	K	1	m	-	m	1	...	...	...	-	...	...	y p.
9	St: St-Cu.	Cu.	Cu: Ci-St: Ci.	10	4	3	3	5	6	1	K	1	1	1	K	...	...	...	...	...	...	● early a: y p.
10	Fr-Cu: Ci-St: Ci.	A-Cu: Ci.	A-Cu: Ci: Ci-Cu: Ci-St.	6	7	7	7	8	7	H	J	1	1	1	K	...	...	...	...	...	...	● early a: y p.
11	Ci.	Ci.	Ci.	7	5	2	1	<1	<1	1	1	1	1	1	1	...	...	...	...	...	...	y a and p.
12	Ci-St.	—	—	<1	0	0	0	0	1	1	J	K	1	1	K	...	...	...	...	...	...	● early a: y a and p.
13	Ci.	Ci: Ci-Cu.	Ci.	2	2	4	3	<1	1	1	1	1	1	1	K	...	...	...	...	...	...	y p.
14	A-Cu.	—	—	1	0	0	0	0	1	1	J	1	1	1	J	...	...	...	...	...	...	y p: ● n.
15	St-Cu: Cu.	Ci haze.	Ci haze.	6	0	1	-	0	1	1	H	J	-	1	K	...	...	...	-	...	...	y a and p.
16	—	St-Cu: Cu.	Cu.	0	0	9	9	0	4	i	J	K	K	J	H	...	...	...	...	...	...	● early a: y a and p.
17	—	Ci.	Ci.	0	2	2	0	<1	<1	G	G	J	K	K	K	...	...	...	...	...	...	● early a: y a and p.
18	—	Ci: Ci-Cu.	Ci: Ci-Cu: Cu.	0	0	4	2	5	4	i	K	K	K	K	K	...	...	...	...	...	...	y a and p.
19	A-Cu: St-Cu: Cu.	Cu: St-Cu.	A-Cu.	9	9	5	6	1	5	J	K	K	K	K	J	...	...	...	...	...	...	y a and p.
20	A-Cu: A-St: St-Cu: Fr-Cu.	Cu.	Cu.	9	9	3	0	<1	10	K	K	J	K	K	G	...	...	...	...	...	...	y a and p.
21	Fr-Cu: St-Cu.	Cu.	—	5	1	<1	0	0	1	J	J	K	K	J	J	...	...	...	...	...	...	y a and p.
22	Ci-Cu: Ci.	Ci-St: Ci-Cu: Ci: A-Cu.	Ci-St: Ci: A-St: Cu.	1	2	6	-	8	10	G	K	K	K	K	K	...	...	...	-	...	...	● early a: y a and p: ⊕ p.
23	A-Cu.	A-Cu: Cu.	Ci-St: Ci-Cu: A-Cu: Fr-Cu.	2	8	9	8	9	10	i	K	K	K	K	J	...	...	...	...	...	...	y a and p: ⊕ p.
24	Ci-St: A-Cu: Fr-St.	Ci: Ci-St: A-St.	A-Cu: Cu: St-Cu.	9	7	7	6	8	9	i	K	K	m	K	K	...	...	...	...	...	...	y p.
25	A-St: St: St-Cu.	Cu.	Cu.	10	9	9	8	4	1	K	K	1	1	1	1	...	...	...	...	...	...	y a and p.
26	Ci-St: St-Cu: Cu.	Cu.	Ci-St: Ci: A-Cu: Fr-Cu.	7	9	8	6	7	8	K	K	1	1	1	K	...	...	...	...	...	...	y p.
27	A-St: Nb: St-Cu.	A-St: A-Cu: Cu: Nb: Fr-Nb.	A-St: St: Fr-St.	10	5	10	10	10	10	G	G	K	K	J	i	...	...	...	...	●	...	● early a: ● p.
28	Ci-Cu: Cu: Fr-Cu.	Cu: St-Cu.	Ci: Cu.	7	2	5	4	3	3	i	K	1	1	1	1	...	...	...	...	...	...	● early a.
29	Ci-Cu: Ci-St: A-Cu.	Cu: Fr-Cu.	A-Cu: Cu.	1	6	5	-	5	2	m	m	m	-	m	1	...	...	...	-	...	...	● early a: y p.
30	Ci-St: Ci: A-St: A-Cu.	A-St: A-Cu: Cu: St-Cu.	St: Fr-St.	9	9	10	10	10	10	K	1	1	1	1	K	...	...	...	...	...	...	●° 9 <sup>h</sup> 30 <sup>m</sup> : ● from 18 <sup>h</sup> 12 <sup>m</sup> .
31	A-St: St: Nb.	A-Cu: A-St.	A-St: A-Cu.	10	9	9	10	10	10	i	i	i	H	i	i	...	...	...	...	...	...	● till 5 <sup>h</sup> 55 <sup>m</sup> : ●° 15 <sup>h</sup> 5 <sup>m</sup> : ● n.
Mean Cloud Am't.	—	—	—	5.2	5.1	5.8	5.5	5.0	5.6													

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1	A-St: Nb.	A-Cu: A-St: Cu: Nb.	Ci-Cu: A-Cu: St.	10	10	8	9	9	10	G	G	J	J	J	J	●°	●°	...	...	...	...	● 3 <sup>h</sup> 30 <sup>m</sup> : c p and n.
2	A-St: St-Cu: Cu.	A-Cu: Cu.	Ci.	9	10	7	7	8	4	J	J	J	J	J	K	...	...	...	...	...	...	y p.
3	A-St: Nb: Cu.	A-St.	St.	10	10	10	10	10	10	G	G	J	J	J	K	...	...	...	...	...	...	p ●° p.
4	Nb.	St-Cu: Nb.	Ci: St-Cu.	10	10	10	9	4	2	G	G	K	K	K	J	...	...	...	...	...	...	● till Noon.
5	Ci.	Cu.	A-Cu.	2	1	2	-	1	1	i	i	J	-	J	J	...	...	...	...	...	...	● a and n: y p.
6	Ci: Ci-St.	Ci-St: Ci: A-Cu: Cu.	Ci-St: A-Cu: A-St.	7	2	8	10	10	10	G	i	J	K	K	i	...	...	...	...	...	...	● early a.
7	Ci-St: A-Cu: A-St.	Ci: Ci-St: A-Cu: A-St.	A-St: St-Cu: Fr-Cu.	10	10	8	4	10	10	K	K	K	K	K	J	...	...	...	...	...	...	y p.
8	Ci: Ci-St: Ci-Cu: A-Cu.	Ci: A-Cu: A-St: Cu.	A-Cu: Cu.	8	8	9	10	2	0	J	K	K	K	K	m	...	...	...	...	...	...	●° early a: y p.
9	Ci-Cu: Ci.	Ci: A-Cu: Cu.	Ci: Ci-St: A-Cu: Cu.	2	7	8	9	6	2	i	K	1	K	K	K	...	...	...	...	...	...	● early a: y p.
10	Ci-Cu: A-Cu.	A-St.	A-St: Nb: St.	1	10	10	9	10	9	G	H	K	K	K	J	...	...	...	...	...	...	● early a: p ●° a: ●° p.
11	Ci: St-Cu.	Ci: Ci-St: Cu.	Ci: Ci-St: Cu.	8	7	7	5	5	6	J	J	K	-	1	K	...	...	...	...	...	...	⊕ p.
12	A-St: St: St-Cu.	Ci-St: Cu.	Ci: Ci-St: Cu.	9	10	7	-	5	1	G	G	1	1	1	1	...	...	...	...	...	...	● between 2 <sup>h</sup> and 4 <sup>h</sup> : ●° 8 <sup>h</sup> 40 <sup>m</sup> .
13	St: Cu.	A-Cu: Cu: Nb: Nb.	Ci-St: A-Cu: Cu: Fr-Cu.	4	7	9	7	8	2	K	K	1	1	1	1	...	...	...	...	...	...	p ●° a: q p: p ●° 15 <sup>h</sup> 25 <sup>m</sup> to 50 <sup>m</sup> .
14	Ci: A-Cu: Cu: St-Cu.	Cu.	Cu.	3	8	5	8	6	1	J	K	1	1	1	1	...	...	...	...	...	...	●° 0 <sup>h</sup> 50 <sup>m</sup> to 1 <sup>h</sup> 40 <sup>m</sup> : p ●° 12 <sup>h</sup> 20 <sup>m</sup> .
15	Ci: Ci-Cu: A-Cu: Cu.	Ci: Cu.	A-Cu: A-St: Cu.	4	5	6	9	7	7	K	1	1	1	1	K	...	...	...	...	...	...	● early a: y a and p. [38 <sup>m</sup> .
16	A-Cu: St-Cu.	A-Cu: Cu.	A-Cu: St-Cu.	4	7	9	8	9	9	H	K	1	1	1	K	...	...	...	...	...	...	y a and p.
17	Ci: A-Cu.	Cu: St-Cu.	Ci: Ci-St: A-Cu: Cu.	8	5	9	9	7	7	K	K	K	K	1	J	...	...	...	...	...	...	● early a and n: y p.
18	Ci-St: Ci: A-Cu.	Cu.	Ci-St: A-Cu.	9	10	5	3	4	1	G	G	K	K	1	K	...	...	...	...	...	...	● a and n: y p.
19	A-Cu.	Ci-St: Ci: A-Cu: St-Cu.	Ci-St: A-Cu: A-St.	3	2	9	-	9	8	G	G	K	-	J	J	...	...	...	...	...	...	● early a: p ●° 12 <sup>h</sup> 55 <sup>m</sup> : y p.
20	Fr-St: St-Cu.	Cu.	Nb: Fr-St.	9	9	4	6	9	4	m	1	m	1	K	J	...	...	...	...	...	...	●° 0 <sup>h</sup> —2 <sup>h</sup> : ●° 15 <sup>h</sup> 32 <sup>m</sup> .
21	Ci: St-Cu.	A-Cu: St-Cu: Cu.	A-Cu: St-Cu.	2	3	10	10	10	4	K	K	K	1	1	K	...	...	...	...	...	...	● early a: p ●° 16 <sup>h</sup> 46 <sup>m</sup> .
22	A-Cu.	A-Cu: A-St: Cu.	A-St: Nb.	5	4	10	10	10	9	1	1	1	1	1	J	...	...	...	...	...	...	c, cd p: c, c, n.
23	A-St: Fr-St.	St-Cu.	A-St: St-Cu: Fr-Cu.	10	10	10	10	9	8	J	K	1	1	1	J	...	...	...	...	...	...	● early a: ● n.
24	Ci: A-Cu.	A-St: Cu: Nb: St-Cu.	A-St: St-Cu.	7	10	9	7	9	8	F	G	1	K	K	K	...	...	...	...	...	...	● early a: ● 11 <sup>h</sup> : p ●° 19 <sup>h</sup> 5 <sup>m</sup> .
25	A-Cu: Fr-Cu.	Ci: A-Cu: Cu: Fr-Cu.	Ci: Ci-St: Fr-Cu.	2	7	9	9	7	7	K	K	1	1	1	K	...	...	...	...	...	...	● a: y ⊕ p.
26	A-Cu: Cu: St-Cu.	A-St: Fr-Nb.	A-St: St-Cu: Fr-St.	4	9	10	10	10	10	i	K	K	K	1	K	...	...	...	...	...	...	p ●° 10 <sup>h</sup> 20 <sup>m</sup> : q p.
27	A-Cu: St-Cu.	Ci: Cu.	Fr-Cu.	1	7	7	6	2	2	1	K	1	1	1	K	...	...	...	...	...	...	a and n: y p.
28	Ci: A-Cu: Fr-Cu.	Ci: Cu.	Ci: Cu.	1	6	5	5	2	<1	J	K	1	1	1	K	...	...	...	...	...	...	● early a: p ●° p.
29	A-Cu: Fr-Cu.	Ci-St: A-Cu: Cu: St-Cu.	Ci: A-St: Cu.	<1	1	9	9	3	1	K	K	K	1	1	K	...	...	...	...	...	...	● early a: y p: p ●° 17 <sup>h</sup> 5 <sup>m</sup> and 20 <sup>h</sup> .
30	St-Cu.	Cu.	A-Cu: St-Cu: Cu.	9	2	4	3	6	3	K	K	1	1	1	J	...	...	...	...	...	...	
31	Ci: A-Cu.	A-Cu: Cu.	A-St: A-Cu: Nb: St-Cu.	8	9	9	10	9	10	F	G	J	J	G	G	...	...	...	...	...	...	● a: ●° 16 <sup>h</sup> 40 <sup>m</sup> .
Mean Cloud Am't.	—	—	—	5.8	7.0	7.8	7.9	7.0	5.4													
	7 <sup>h</sup>	13 <sup>h</sup>	18 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	Remarks on the Weather of the Day.
	Cloud Forms.			Cloud Amount (All Forms).						Visibility.					Precipitation.							

\* Mean of 26 days.

† Mean of 28 days.

† H



Day.	Cloud Forms.			Cloud Amount (All Forms.)							Visibility.							Precipitation.							Remarks on the Weather of the Day.
	7 <sup>h</sup>	13 <sup>h</sup>	18 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>				
1	St.	Cu : Fr-Cu.	St-Cu.	9	1	7	2	1	0	B	G	K	K	K	i	...	...	...	...	...	...	...	ppp	a and n : y p.	
2	—	—	Ci-St.	0	0	0	—	1	0	F	H	J	J	K	J	...	...	...	—	...	...	...	pppp	a : y p.	
3	A-Cu : St-Cu.	Ci.	Ci : Ci-Cu : A-St : A-Cu.	8	5	1	3	8	4	E	G	J	K	K	J	...	...	...	...	...	...	...	pppp	a : y p.	
4	—	—	—	0	0	0	0	0	0	E	G	J	K	K	J	...	...	...	...	...	...	...	pppp	a and n : y p.	
5	—	—	Ci-St : Ci A-Cu.	0	0	0	1	9	1	E	G	J	K	K	J	...	...	...	...	...	...	...	pppp	a : y p : mock sun 17 <sup>h</sup> .	
6	St-Cu : Fr-Cu.	Cu.	Ci : Nb : Cu.	8	1	4	8	7	0	K	K	K	l	K	K	...	...	...	...	j	...	p	● 5 <sup>h</sup> 20 <sup>m</sup> : and 17 <sup>h</sup> 35 <sup>m</sup> —45 <sup>m</sup> : y p.		
7	—	Ci.	Ci.	0	6	3	4	2	0	D	K	K	m	K	H	...	...	...	...	...	...	pp	a and n : y p.		
8	Ci : Ci-Cu : A-Cu.	Ci:A-Cu:A-St:Cu.	Ci:Ci-St:A-St:A-Cu.	7	5	6	7	8	2	G	G	K	K	K	K	...	...	...	...	...	...	pp	a : y p.		
9	A-St : St-Cu : St.	St-Cu.	A-St : Nb : St-Cu.	9	10	8	—	9	4	i	i	K	—	i	H	...	...	...	—	...	...	p	c, c, c, cd a : K 15—16 <sup>h</sup> .		
10	Ci : Ci-St.	A-Cu: A-St: St-Cu: Cu-Nb.	A-St : St-Cu : Nb.	1	9	9	9	9	8	i	K	K	K	J	J	...	...	...	...	...	...	p	early a : c p ● c p : c n.		
11	Ci : A-Cu : St-Cu.	Cu.	A-Cu : St-Cu.	3	9	3	7	5	0	G	J	K	K	K	H	...	...	...	...	...	...	ppp	a and n : y p.		
12	St.	Cu.	Cu.	10	10	4	4	2	0	B	B	G	K	K	H	...	...	...	...	...	...	pppp	a and n : y p.		
13	Ci-St : A-St : A-Cu:	Cu.	Cu : St-Cu.	8	0	3	7	3	2	F	F	K	K	K	H	...	...	...	...	...	...	pppp	a and n : y p.		
14	A-Cu.	Cu.	Ci : A-Cu.	<1	5	4	5	1	0	G	G	K	K	K	J	...	...	...	...	...	...	pppp	early a : y a and p.		
15	St.	Ci-St : Ci-Cu : A-Cu : Cu.	Ci : Cu.	9	9	9	9	2	0	E	i	J	J	J	J	...	...	...	...	...	...	pppp	early a.		
16	St.	Cu.	Ci-Cu : Ci : A-Cu : St-Cu.	10	10	7	—	4	0	i	i	i	—	J	J	...	...	...	—	...	...	ppp	early a and n.		
17	Ci.	Ci : Ci-St : Ci-Cu : A-Cu.	Ci-St : Ci.	7	1	9	9	7	0	E	G	K	K	K	J	...	...	...	...	...	...	pppp	a and n : y p.		
18	St.	Cu : Fr-Cu.	Ci-Cu : Ci : Cu.	10	10	4	3	2	0	D	G	K	K	K	J	...	...	...	...	...	...	pppp	a and n : y p.		
19	A-St.	Ci : Cu.	Ci : Ci-St.	10	9	3	6	6	0	G	G	K	K	K	J	...	...	...	...	...	...	p	● 6 <sup>h</sup> 55 <sup>m</sup> to 7 <sup>h</sup> : p n.		
20	Ci : Ci-St.	Cu.	A-St.	7	2	4	4	1	0	G	G	K	K	K	J	...	...	...	...	...	...	p	a and n : y p.		
21	Ci : Ci-Cu : Ci-St.	Ci : Cu.	Ci : A-Cu : St-Cu.	4	1	6	2	8	7	E	G	J	J	J	i	...	...	...	...	...	...	ppp	early a : y p.		
22	—	Cu.	A-Cu : Cu.	0	<1	5	7	1	0	i	i	K	J	J	i	...	...	...	...	...	...	ppp	early a : y p.		
23	St.	Ci:A-Cu:Cu:Fr-Cu.	Ci: Ci-Cu : A-St : A-Cu.	10	9	5	—	7	9	i	i	J	J	—	J	...	...	...	—	...	...	pppp	early a : p ● 14 <sup>h</sup> 20 <sup>m</sup> .		
24	A-St : St-Cu.	Ci:A-Cu:St-Cu:St.	A-Cu : St-Cu.	10	9	9	9	7	5	G	i	J	J	J	G	...	...	...	...	...	...	pppp	early a : ● 23 <sup>h</sup> 55 <sup>m</sup> .		
25	A-St : St.	A-Cu : Cu.	A-Cu : St-Cu : Cu.	9	9	5	5	3	0	G	H	J	J	J	i	...	...	...	...	...	...	pppp	● till 3 <sup>h</sup> 35 <sup>m</sup> .		
26	St.	St-Cu : Cu.	A-Cu.	10	0	8	4	4	0	E	G	i	i	G	F	...	...	...	...	...	...	p	a and n : y p.		
27	St.	A-Cu Cu : Fr-Cu.	Ci-Cu : Ci-St.	10	9	5	<1	2	8	A	D	i	i	F	G	...	...	...	...	...	...	p	f cleared by 10 <sup>h</sup> : □ 20 <sup>h</sup> 35 <sup>m</sup> : y p.		
28	A-St : St-Cu : Nb.	A-St : Nb.	A-St : Nb.	10	10	10	10	10	10	G	G	G	H	F	G	...	...	...	...	...	...	p	● 3 <sup>h</sup> 20 <sup>m</sup> .		
29	A-St : St.	A-St : St : St-Cu.	A-St : St : Fr-St.	10	9	10	10	10	10	G	G	H	H	H	G	...	...	...	...	...	...	p	● 5 <sup>h</sup> 40 <sup>m</sup> : ● 7 <sup>h</sup> 5 <sup>m</sup> .		
30	Ci-St : A-Cu.	Fr-Cu : St-Cu.	A-St : St-Cu.	1	0	9	—	7	0	i	i	i	—	H	G	...	...	...	...	...	...	p	y p : p n.		
Mean Cloud Am't.				6.4	5.3	5.3	5.4	4.9	2.3	—	—	—	—	—	—	—	—	—	—	—	—	—			

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1	—	Cu.	—	0	0	<	0	0	0	G	G	J	J	E	E	...	...	...	...	...	...	...	...	...	early a : y p.
2	St-Cu.	A-Cu:A-St:St-Cu:Cu.	St-Cu.	10	9	9	10	9	0	G	B	G	G	G	C	...	...	...	...	...	...	...	...	...	early a : p n.
3	St.	Cu.	—	10	10	6	8	1	4	D	G	J	H	F	G	...	...	...	...	...	...	...	...	...	early a : f e a : f cleared 10 <sup>h</sup> 45 <sup>m</sup> .
4	—	—	—	0	0	0	0	0	0	D	G	J	H	F	G	...	...	...	...	...	...	...	...	...	a : y p.
5	A-St : Fr-Cu : St.	A-Cu : A-St.	A-St : Fr-Nb.	10	9	10	9	10	3	E	D	H	J	H	i	...	...	...	...	...	...	...	...	...	a : f till about 10 <sup>h</sup> : d ● 17 <sup>h</sup> 23 <sup>m</sup> .
6	Ci.	Cu : Cu.	Ci : Ci-Cu.	2	1	6	7	7	0	i	i	K	K	G	G	...	...	...	...	...	...	...	...	...	p a and n.
7	St.	Ci:Ci-St:A-Cu:Cu.	A-St : St-Cu : St.	10	4	8	—	10	2	D	K	K	K	G	H	...	...	...	...	...	...	...	...	...	f cleared about 8 <sup>h</sup> .
8	A-Cu : A-St.	A-Cu:A-St:St-Cu:Fr-Cu.	Ci : St-Cu.	10	9	9	10	<1	2	K	K	K	K	J	J	...	...	...	...	...	...	...	...	...	● 8 <sup>h</sup> 45 <sup>m</sup> to 9 <sup>h</sup> 5 <sup>m</sup> : p ● a.
9	A-St : Fr-St : Nb.	Ci : A-Cu : Nb : Cu.	Ci:St:St-Cu:Nb:St-Cu.	9	9	8	5	6	8	K	K	K	K	K	G	...	...	...	...	...	...	...	...	...	u 7 <sup>h</sup> : p : c ● to b m n.
10	St.	St-Cu.	St.	10	10	9	2	9	0	F	G	H	i	E	F	...	...	...	...	...	...	...	...	...	p n.
11	A-St : Nb.	Nb : St-Cu.	Ci.	10	10	7	7	2	1	G	K	K	K	K	J	...	...	...	...	...	...	...	...	...	p ● between 4 <sup>h</sup> 55 <sup>m</sup> and 8 <sup>h</sup> 35 <sup>m</sup> : f
12	A-St : Nb.	St-Cu.	St : Cu.	10	10	9	10	3	<1	G	E	G	J	F	G	...	...	...	...	...	...	...	...	...	● till 7 <sup>h</sup> 30 <sup>m</sup> [● 12 <sup>h</sup> 55 <sup>m</sup>
13	A-Cu.	Cu.	St-Cu.	<1	9	7	1	0	10	G	F	J	J	F	E	...	...	...	...	...	...	...	...	...	early a : p a and n.
14	St.	Ci : A-Cu : A-St.	St-Cu.	10	0	6	—	10	10	B	E	G	J	F	G	...	...	...	...	...	...	...	...	...	● early a : ● from 19 <sup>h</sup> .
15	St-Cu : Cu.	A-St : St-Cu : St.	St.	4	10	10	9	10	10	G	G	G	H	F	F	...	...	...	...	...	...	...	...	...	● till 2 <sup>h</sup> 50 <sup>m</sup> .
16	St.	St-Cu.	A-St : Nb : St-Cu.	10	10	10	10	10	10	F	F	J	J	H	G	...	...	...	...	...	...	...	...	...	● 10 <sup>h</sup> 25 <sup>m</sup> —40 <sup>m</sup> : p early a.
17	A-St : Fr-St.	A-St : Nb.	Ci:St:St-Cu:St-Cu.	10	10	10	6	4	0	J	J	H	J	F	i	...	...	...	...	...	...	...	...	...	● 9 <sup>h</sup> 10 <sup>m</sup> to 12 <sup>h</sup> 30 <sup>m</sup> .
18	Ci : Ci-Cu : A-Cu.	A-St : Nb.	A-St : Nb.	7	3	10	10	10	2	J	H	J	J	J	i	...	...	...	...	...	...	...	...	...	early a : q p : p ● 16 <sup>h</sup> 15 <sup>m</sup> .
19	A-St : St-Cu.	Ci:St:St-Cu:Fr-Cu.	A-St : Nb.	9	5	9	9	0	7	K	J	K	K	K	G	...	...	...	...	...	...	...	...	...	● 13 <sup>h</sup> 30 <sup>m</sup> : c ● q n.
20	A-St : St : Cu-Nb.	Ci:St:A-St:St-Cu:Nb.	Ci:St:A-Cu:Cu:St-Cu.	10	10	9	6	8	1	K	J	K	K	K	G	...	...	...	...	...	...	...	...	...	● early a : p ● a, p and n.
21	Ci:St:St-Cu:Cu-Nb.	Ci:A-Cu:Cu:St-Cu.	Ci : St-Cu : Cu-Nb.	4	4	3	—	3	<1	K	J	J	H	J	J	...	...	...	...	...	...	...	...	...	p ● a and p : — 13 <sup>h</sup> 57 <sup>m</sup> .
22	A-St : Nb.	Ci:St:St-Cu:St-Cu.	Nb.	10	9	5	9	10	8	G	G	K	K	K	J	...	...	...	...	...	...	...	...	...	p a : c q p ● n.
23	Ci : St-Cu.	Ci : Ci-Cu.	A-St.	2	<1	8	9	10	10	G	G	J	K	K	J	...	...	...	...	...	...	...	...	...	p a : p ● q p : p n.
24	Fr-St : St-Cu.	Ci : Nb : Cu.	Ci : Fr-Cu.	3	<1	6	3	3	2	K	K	K	K	K	J	...	...	...	...	...	...	...	...	...	p a : K 17 <sup>h</sup> 40 <sup>m</sup> .
25	Ci:St:A-St:Fr-Cu.	Ci:A-Cu:Cu:St-Cu.	Ci : Cu-Nb.	2	<1	7	6	4	1	K	J	K	K	K	J	...	...	...	...	...	...	...	...	...	p a : p ● 7 <sup>h</sup> 20 <sup>m</sup> : q p.
26	Ci-St : St : Cu : Nb.	A-St : Nb.	A-St : Nb : Fr-Nb.	8	10	9	10	10	10	J	J	K	F	G	G	...	...	...	...	...	...	...	...	...	p ● 7 <sup>h</sup> 20 <sup>m</sup> : q p.
27	Nb : Fr-Nb.	Nb.	St.	10	10	10	9	10	10	J	G	F	G	F	F	...	...	...	...	...	...	...	...	...	p ● a : p ● 13 <sup>h</sup> 20 <sup>m</sup> .
28	St.	Fr-Cu.	—	10	8	7	—	0	0	J	G	F	G	F	F	...	...	...	...	...	...	...	...	...	p ● 9 <sup>h</sup> 10 <sup>m</sup> to 30 <sup>m</sup> .
29	A-Cu : A-St.	A-St : Nb.	Nb.	9	9	10	10	10	10	J	G	F	G	F	G	...	...	...	...	...	...	...	...	...	p early a.
30	Ci : A-Cu : St-Cu.	Cu : Fr-Cu.	—	6	9	6	2	0	0	K	K	K	K	K	G	...	...	...	...	...	...	...	...	...	p ● 10 <sup>h</sup> 10 <sup>m</sup> to 30 <sup>m</sup> .
31	A-Cu : Cu-Nb.	A-Cu:Nb:St-Cu:Cu.	A St.	1	6	7	3	1	2	K	i	K	J	G	E	...	...	...	...	...	...	...	...	...	p a : p ● a and p.
Mean Cloud Am't.				7.0	6.6	7.5	6.9	5.5	3.7																

G.M.T.	7 <sup>h</sup>	13 <sup>h</sup>	18 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	Remarks on the Weather of the Day.
Day.	Cloud Forms.			Cloud Amount (All Forms).						Visibility.						Precipitation.						



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Day.	Cloud Forms.			Cloud Amount (All Forms).						Visibility.						Precipitation.						Remarks on the Weather of the Day.
	7 <sup>h</sup>	13 <sup>h</sup>	18 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	
1	St-Cu : Fr-Cu.	A-Cu : St-Cu.	A-St:St-Cu:Fr-St	9	9	10	9	10	10	F	F	H	i	G	i	...	...	...	...	...	...	b f w to c m a.
2	A-St : St-Cu : St.	A-Cu : St.	St.	10	9	10	10	10	10	F	J	F	H	G	G	...	...	...	...	...	...	p 0° 8 <sup>h</sup> 50 <sup>m</sup> .
3	Ci:Cu:Cu:A-Cu:St.	Ci : A-Cu.	St.	7	4	9	9	10	9	G	G	H	G	G	F	...	...	...	...	...	...	p a.
4	A-St : Nb.	A-Cu : Cu.	A-Cu.	10	10	7	-	2	0	G	A	X	G	D	E	...	...	...	...	...	...	i 0° till 7 <sup>h</sup> 20 <sup>m</sup> : p n.
5	St.	A-Cu : Fr-Cu.	St.	10	10	3	4	10	10	A	X	G	G	D	E	...	...	...	...	...	...	a : f cleared 11 <sup>h</sup> 45 <sup>m</sup> : p n.
6	St.	St.	St.	10	10	10	10	10	10	B	A	D	D	F	F	...	...	...	...	...	...	p a : f cleared 17 <sup>h</sup> 40 <sup>m</sup> .
7	A-Cu : Cu.	Ci : Fr-Cu.	...	7	6	5	7	0	0	D	E	G	H	G	G	...	...	...	...	...	...	p a.
8	Ci-St : St-Cu.	A-St : St-Cu.	St-Cu.	9	10	9	9	<1	0	i	H	i	i	i	G	...	...	...	...	...	...	p early a and n : y p.
9	A-Cu.	Cu.	St-Cu.	<1	<1	3	4	8	0	i	A	J	G	G	F	...	...	...	...	...	...	a : f cleared 11 <sup>h</sup> 40 <sup>m</sup> : i 0° 11 <sup>h</sup> to [20 <sup>h</sup> 30 <sup>m</sup> .
10	St.	A-St.	Nb.	10	10	10	10	10	9	B	A	G	J	G	G	...	...	...	...	...	...	i 0° 3 <sup>h</sup> to 5 <sup>h</sup> 30 <sup>m</sup> .
11	A-St : St-Cu.	St : Fr-St.	Nb.	10	10	10	-	10	9	G	F	G	-	G	i	...	...	...	...	...	...	0° p : 0° n.
12	A-St : Fr-Nb.	A-St : St.	St-Cu : St.	10	10	10	10	10	10	G	G	G	i	J	J	...	...	...	...	...	...	bc, b a : (gust) 19 <sup>h</sup> 55 <sup>m</sup> : 0° q n.
13	Nb.	Cu.	Ci-St: Nb.	10	10	3	4	10	10	i	G	K	K	J	J	...	...	...	...	...	...	0° q a : j p 0° p.
14	St-Cu.	Ci-Cu : Ci : Cu.	A-Cu.	<1	<1	6	9	1	10	G	i	K	J	J	J	...	...	...	...	...	...	0° 7 <sup>h</sup> 5 <sup>m</sup> to 11 <sup>h</sup> 30 <sup>m</sup> : q p 0° p : c q—
15	A-St : Fr-Nb.	A-Cu:A-St:Fr-Cu.	St-Cu.	10	10	9	9	2	7	i	i	K	J	J	J	...	...	...	...	...	...	early a.
16	A-St : Nb.	A-Cu : St-Cu : Cu.	St-Cu.	10	10	5	7	9	8	G	G	J	J	J	K	...	...	...	...	...	...	p a.
17	A-St : St-Cu.	A-Cu : Fr-Cu.	...	10	1	4	3	0	0	i	G	J	J	J	J	...	...	...	...	...	...	i p 0° early a : p 0° p.
18	A-Cu.	A-Cu : Cu.	A-St : St.	5	8	8	-	9	3	l	H	J	-	J	J	...	...	...	...	...	...	0° 14 <sup>h</sup> : p n.
19	A-St : A-Cu : Fr-Cu : St.	Ci-St:A-Cu:Fr-Cu.	A-St : St.	10	10	9	9	9	1	J	J	J	J	J	J	...	...	...	...	...	...	0° early a.
20	Ci : Ci-St : St-Cu.	Ci:Cu:A-Cu:Cu.	Ci-Cu : Ci.	3	6	7	8	7	9	J	J	J	J	J	J	...	...	...	...	...	...	early a : 0° 15 <sup>h</sup> 15 <sup>m</sup> .
21	Nb.	Nb : St-Cu.	A-St:Fr-St:St-Cu.	10	10	10	10	10	7	i	i	J	H	i	J	...	...	...	...	...	...	(gust) 20 <sup>h</sup> 30 <sup>m</sup> : p 0° n.
22	A-Cu:Fr-St:St-Cu:Nb.	Nb.	A-St : St.	8	10	10	10	10	10	i	i	G	H	J	J	...	...	...	...	...	...	(gusts) 14 <sup>h</sup> 25 <sup>m</sup> and 40 <sup>m</sup> .
23	A-St : Fr-Nb.	A-St : Nb.	Cu : Fr-Cu.	10	10	10	5	1	2	J	H	K	K	K	J	...	...	...	...	...	...	(gusts) 9 <sup>h</sup> 45 <sup>m</sup> : p 0° p.
24	St-Cu : Fr-St.	St-Cu.	A-St.	9	9	9	4	2	8	K	K	K	K	J	J	...	...	...	...	...	...	q a and p : p 0° 14 <sup>h</sup> 45 <sup>m</sup> : 0° 20 <sup>h</sup> .
25	A-St : Fr-St.	Nb.	Cu-Nb : St-Cu.	10	10	10	-	6	3	K	K	i	-	J	J	...	...	...	...	...	...	0° early a : q y p.
26	Fr-Cu.	Ci : Cu.	...	3	2	2	4	0	1	l	K	l	J	H	G	...	...	...	...	...	...	y p.
27	Ci : A-Cu : St-Cu.	St-Cu.	A-Cu.	1	8	9	9	2	0	K	J	K	K	H	G	...	...	...	...	...	...	i p 0° a and p : p n.
28	A-Cu.	Ci-Cu : A-Cu.	...	1	1	6	1	0	8	i	H	J	J	H	G	...	...	...	...	...	...	early a.
29	St-Cu.	St.	Nb.	9	9	10	10	10	10	G	G	H	G	H	G	...	...	...	...	...	...	early a : 0° 15 <sup>h</sup> 15 <sup>m</sup> .
30	Fr-St.	Ci-Cu:A-Cu:St-Cu:Fr-Cu.	Ci.	10	10	7	8	1	10	G	G	H	G	G	G	...	...	...	...	...	...	
Mean Cloud Am't.				7.8	7.8	7.7	7.4	6.0	6.1													

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1	St-Cu.	Ci-St:A-Cu:Fr-Cu.	St.	10	9	9	10	10	1	G	i	G	G	i	i	...	...	...	...	...	...	0° 14 <sup>h</sup> : p n.
2	St-Cu.	St.	St.	9	10	10	-	10	10	G	D	F	G	G	G	...	...	...	...	...	...	0° early a : 0° about 12 <sup>h</sup> 30 <sup>m</sup> .
3	A-St : St-Cu.	St.	St.	10	9	10	10	10	10	G	D	F	G	G	H	...	...	...	...	...	...	all day.
4	St : St-Cu.	A-Cu.	—	9	10	9	10	0	10	E	D	G	D	C	C	...	...	...	...	...	...	early a : f e n.
5	A-St : St-Cu.	St-Cu.	—	10	9	7	3	0	7	G	D	G	G	C	X	...	...	...	...	...	...	early a : f cleared soon after 10 <sup>h</sup> .
6	St.	A-St : Nb.	A-St : St.	10	10	10	10	10	3	C	D	G	G	G	i	...	...	...	...	...	...	a and n.
7	St-Cu.	Cu.	A-Cu.	1	0	1	<1	1	0	H	G	i	H	G	E	...	...	...	...	...	...	all day.
8	St.	Cu.	—	1	2	<1	0	0	0	G	E	i	G	E	F	...	...	...	...	...	...	a and n.
9	A-St : Cu : St.	Ci.	St-Cu.	1	0	3	-	0	6	G	E	F	G	E	F	...	...	...	...	...	...	p 0° 1 <sup>h</sup> 10 <sup>m</sup> ~ a.
10	A-St : St-Cu : Cu.	Ci:Cu:A-Cu:Cu.	St.	5	3	8	10	10	10	G	G	H	H	G	G	...	...	...	...	...	...	Gloomy p.
11	A-St : St.	St.	Nb.	10	10	10	10	10	10	G	E	F	F	E	F	...	...	...	...	...	...	f cleared about 12 <sup>h</sup> 45 <sup>m</sup> : all day.
12	Nb.	Nb.	Nb.	10	10	10	10	10	10	F	F	F	F	F	G	...	...	...	...	...	...	f 8 <sup>h</sup> till after 24 <sup>h</sup> and 1.
13	A-St : Fr-St.	St : St-Cu.	St-Cu.	10	10	9	9	10	10	H	D	G	G	G	G	...	...	...	...	...	...	early a.
14	—	A-Cu.	—	0	1	4	6	0	0	G	E	G	G	E	B	...	...	...	...	...	...	0° 1 <sup>h</sup> 15 <sup>m</sup> —20 <sup>m</sup> .
15	St.	St.	St.	10	10	10	10	10	10	G	E	G	G	E	B	...	...	...	...	...	...	all day.
16	A-St : St.	A-St : Fr-St.	A-St : Nb.	10	10	10	-	10	10	J	G	G	-	G	H	...	...	...	...	...	...	f 8 <sup>h</sup> to 12 <sup>h</sup> : p early a.
17	St-Cu.	—	—	5	1	0	0	0	0	G	G	i	G	F	B	...	...	...	...	...	...	p n.
18	St.	St.	St.	10	10	10	10	10	10	B	B	C	D	B	B	...	...	...	...	...	...	early a and n : f a, p and n.
19	St.	St-Cu.	St.	10	10	10	10	10	10	F	D	G	G	G	G	...	...	...	...	...	...	f 8 <sup>h</sup> till 10 <sup>h</sup> : early a.
20	A-St : St.	St-Cu.	St-Cu.	10	10	9	9	10	8	G	G	G	G	G	G	...	...	...	...	...	...	early a : f in p.
21	St.	—	A-Cu.	1	0	0	0	9	10	G	F	F	E	E	E	...	...	...	...	...	...	9 <sup>h</sup> : (gusts) 21 <sup>h</sup> 55 <sup>m</sup> : 22 <sup>h</sup> 30 <sup>m</sup> [and 23 <sup>h</sup> 15 <sup>m</sup>
22	Nb.	A-St : Nb.	St.	10	10	10	10	10	10	G	D	G	F	E	G	...	...	...	...	...	...	(gusts) 1 <sup>h</sup> to 2 <sup>h</sup> 30 <sup>m</sup> .
23	St.	Ci : Cu.	A-Cu : St.	10	6	7	-	7	10	G	G	F	G	-	B	...	...	...	...	...	...	early a : 0° 7 <sup>h</sup> .
24	A-Cu:A-St:Fr-St.	Nb.	A-Cu : Fr-Cu.	8	10	10	10	9	10	i	i	G	G	H	G	...	...	...	...	...	...	f about 9 <sup>h</sup> : gloomy at times.
25	Ci : St-Cu.	Ci : Ci-St : A-Cu.	A-St : St.	1	9	9	-	10	10	J	G	H	-	H	J	...	...	...	...	...	...	early a and n.
26	A-St : Nb.	Nb.	Ci : Ci-Cu.	10	10	10	9	2	2	J	J	G	i	H	G	...	...	...	...	...	...	early a : 0° 22 <sup>h</sup> 50 <sup>m</sup> to 24 <sup>h</sup> .
27	A-St:A-Cu:St-Cu.	Ci : Ci-Cu.	A-St.	4	7	7	10	10	10	G	G	G	F	F	G	...	...	...	...	...	...	0° 14 <sup>h</sup> 15 <sup>m</sup> and 19 <sup>h</sup> 10 <sup>m</sup> .
28	St.	St.	St.	10	10	10	10	10	10	H	E	G	i	F	F	...	...	...	...	...	...	
29	St-Cu.	Cu.	Cu.	2	2	1	1	<1	7	i	G	i	-	H	G	...	...	...	...	...	...	
30	St.	A-St : Nb.	Nb.	10	10	10	-	10	10	G	i	G	-	H	G	...	...	...	...	...	...	
31	A-St : Cu-Nb : Nb.	A-Cu : St : Fr : St.	A-Cu : St-Cu.	10	10	9	9	9	7	J	G	i	i	i	J	...	...	...	...	...	...	
Mean Cloud Am't.				7.3	7.4	7.5	7.5	7.0	7.5													
Mean Annual Cloud Amount				6.8	6.8	7.1	7.2	6.4	5.5													

G.M.T.	7 <sup>h</sup>	13 <sup>h</sup>	18 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	7 <sup>h</sup>	9 <sup>h</sup>	13 <sup>h</sup>	15 <sup>h</sup>	18 <sup>h</sup>	21 <sup>h</sup>	Remarks on the Weather of the Day.
* Day.	Cloud Forms.			Cloud Amount (All Forms).						Visibility.						Precipitation.						

\* Mean of 26 days.

† Mean of 25 days.

† H\*



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Month.	JANUARY.				FEBRUARY.				MARCH.				APRIL.				MAY.				JUNE.			
Day.	$\lambda +$ $\times 10^{16}$	$i$ $\times 10^{16}$	$E +$ $\times 10^{18}$	$E -$ $\times 10^{18}$	$\lambda +$ $\times 10^{16}$	$i$ $\times 10^{16}$	$E +$ $\times 10^{18}$	$E -$ $\times 10^{18}$	$\lambda +$ $\times 10^{16}$	$i$ $\times 10^{16}$	$E +$ $\times 10^{18}$	$E -$ $\times 10^{18}$	$\lambda +$ $\times 10^{16}$	$i$ $\times 10^{16}$	$E +$ $\times 10^{18}$	$E -$ $\times 10^{18}$	$\lambda +$ $\times 10^{16}$	$i$ $\times 10^{16}$	$E +$ $\times 10^{18}$	$E -$ $\times 10^{18}$	$\lambda +$ $\times 10^{16}$	$i$ $\times 10^{16}$	$E +$ $\times 10^{18}$	$E -$ $\times 10^{18}$
	Ohm-1 cm-1	Amp cm-2	Coulomb cm-3		Ohm-1 cm-1	Amp cm-2	Coulomb cm-3		Ohm-1 cm-1	Amp cm-2	Coulomb cm-3		Ohm-1 cm-1	Amp cm-2	Coulomb cm-3		Ohm-1 cm-1	Amp cm-2	Coulomb cm-3		Ohm-1 cm-1	Amp cm-2	Coulomb cm-3	
1	...	...	...	...	26	51	99	73	...	...	...	...	...	...	...	...	42	77	33	17	31	115	59	41
2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	42	...	...	...	...	...	...	...	...	...
3	14	71	...	31	...	...	...	...	...	...	...	...	...	...	...	...	27	114	56	26	...	...	...	...
4	...	...	26	...	...	...	...	...	...	...	...	...	...	...	54	42	15	98	51	39	...	...	...	...
5	9	47	...	28	...	...	...	...	20	32	62	39	...	...	...	...	...	...	...	...	54	76	56	...
6	...	...	...	...	16	52	35	29	...	...	...	...	...	...	80	70	...	...	...	...	100	115	153	124
7	...	...	...	...	13	43	54	31	...	...	...	...	...	...	51	47	46	101	...	...	50	115	...	...
8	19	49	45	...	...	...	39	23	9	...	61	37	...	...	...	...	...	...	...	...	...	...	...	...
9	8	29	...	19	25	67	52	41	4	...	59	43	...	...	...	...	25	40	...	...	...	...	...	...
10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
11	9	66	35	...	...	...	...	...	...	...	...	...	49	120	127	115	53	64	...	...	...	...	...	...
12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	49	76	74	...
13	35	114	...	24	...	...	...	...	...	...	40	31	...	...	48	31	...	...	...	...	...	...	...	...
14	...	...	...	...	...	...	...	...	...	...	48	35	...	...	...	...	...	...	...	...	...	...	...	...
15	...	...	...	...	...	...	...	...	20	...	18	20	...	...	...	...	40	40	...	...	35	36	50	45
16	...	...	...	...	...	...	...	...	...	...	31	...	...	...	...	...	...	...	...	...	...	...	...	...
17	13	66	26	11	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
18	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	37	...	...	...	...	...	...	...	...
19	12	47	34	45	...	...	...	...	15	45	31	25	...	...	...	...	...	...	...	...	81	134	101	103
20	...	...	...	...	11	41	47	27	43	131	107	64	23	38	104	57	...	...	...	...	39	74	52	26
21	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
22	...	...	...	...	3	19	31	26	58	126	93	81	...	...	...	...	...	...	...	...	...	...	...	...
23	...	...	...	...	...	...	...	...	...	...	...	...	28	37	35	39	...	...	...	...	...	...	...	...
24	...	...	...	...	6	38	36	18	...	...	...	...	39	71	62	...	34	96	34	43	...	...	...	...
25	12	46	47	21	...	...	...	...	29	70	56	...	59	106	83	70	43	58	38	42	99	179	105	...
26	...	...	...	...	...	...	...	...	...	...	45	52	128	90	57	...	...	...	...	...	...	...	...	...
27	6	26	36	18	28	93	92	66	...	...	...	...	13	78	71	45	...	...	...	...	...	...	...	...
28	...	...	...	...	24	80	47	23	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
29	...	...	...	...	...	...	...	...	...	...	...	...	43	66	56	...	...	...	...	...	...	...	...	...
30	18	55	41	26	...	...	...	...	...	...	...	...	...	...	...	...	25	127	98	68	...	...	...	...
31	10	31	21	29	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Mean ...	14	54	35	25	17	54	53	36	25	81	55	42	38	81	69	55	35	81	52	39	60	102	81	68
No. of days used ...	12	12	9	10	9	9	10	10	8	5	11	10	8	8	13	11	10	10	6	6	9	9	8	5

Month.	JULY.				AUGUST.				SEPTEMBER.				OCTOBER.				NOVEMBER.				DECEMBER.			
Day.	$\lambda +$ $\times 10^{16}$	$i$ $\times 10^{16}$	$E +$ $\times 10^{18}$	$E -$ $\times 10^{18}$	$\lambda +$ $\times 10^{16}$	$i$ $\times 10^{16}$	$E +$ $\times 10^{18}$	$E -$ $\times 10^{18}$	$\lambda +$ $\times 10^{16}$	$i$ $\times 10^{16}$	$E +$ $\times 10^{18}$	$E -$ $\times 10^{18}$	$\lambda +$ $\times 10^{16}$	$i$ $\times 10^{16}$	$E +$ $\times 10^{18}$	$E -$ $\times 10^{18}$	$\lambda +$ $\times 10^{16}$	$i$ $\times 10^{16}$	$E +$ $\times 10^{18}$	$E -$ $\times 10^{18}$	$\lambda +$ $\times 10^{16}$	$i$ $\times 10^{16}$	$E +$ $\times 10^{18}$	$E -$ $\times 10^{18}$
	Ohm-1 cm-1	Amp cm-2	Coulomb cm-3		Ohm-1 cm-1	Amp cm-2	Coulomb cm-3		Ohm-1 cm-1	Amp cm-2	Coulomb cm-3		Ohm-1 cm-1	Amp cm-2	Coulomb cm-3		Ohm-1 cm-1	Amp cm-2	Coulomb cm-3		Ohm-1 cm-1	Amp cm-2	Coulomb cm-3	
1	...	...	...	...	69	145	64	38	...	...	...	...	32	80	67	50	20	76	47	31	...	...	...	...
2	...	...	...	...	...	...	...	...	...	...	...	...	37	92	...	...	10	45	31	31	...	...	...	...
3	...	...	...	...	...	...	...	...	...	...	...	...	18	77	54	33	...	...	...	...	...	...	...	...
4	...	...	...	...	...	...	...	...	...	...	...	...	20	84	67	43	...	...	...	...	...	...	64	50
5	54	131	110	111	...	...	...	...	...	...	...	...	57	143	65	26	5	18	85	47	...	...	29	26
6	41	67	97	70	55	55	47	38	56	83	95	69	...	...	...	...	6	23	...	...	...	...	...	...
7	...	...	...	...	88	118	85	65	57	111	111	59	...	...	...	...	15	68	23	16	...	...	...	...
8	...	...	...	...	29	47	50	31	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9	45	75	45	38	...	...	...	...	...	...	...	...	...	...	77	67	...	...	...	...	...	...	...	...
10	55	82	127	97	...	...	...	...	...	...	...	...	37	105	41	...	...	...	...	...	25	98	50	38
11	43	75	65	45	...	...	...	...	57	107	79	47	26	53	46	25	...	...	...	...	...	...	...	...
12	60	75	109	61	...	...	...	...	23	82	80	59	...	...	...	...	...	...	...	...	...	...	...	...
13	...	...	...	...	...	...	...	...	27	105	70	66	...	...	...	...	19	65	31	13	6	46	72	52
14	...	...	...	...	29	37	141	126	27	106	64	52	...	...	...	...	13	49	39	36	8	45	54	36
15	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
16	54	76	63	45	43	79	...	88	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
17	19	52	61	31	66	82	97	54	41	87	83	41	23	64	25	36	...	...	...	...	9	35	36	...
18	36	27	81	61	80	88	67	32	83	124	93	43	...	...	...	...	...	...	...	...	...	...	...	...
19	62	62	59	47	84	84	79	47	52	79	81	64	...	...	...	...	...	...	...	...	...	...	...	...
20	67	67	108	87	46	34	144	135	54	103	125	106	...	...	...	...	13	39	45	36	...	...	...	...
21	...	...	...	...	51	64	106	83	38	80	86	33	...	...	...	...	...	...	...	...	4	32	54	63
22	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
23	72	90	139	115	...	...	...	...	...	...	...	...	29	88	72	29	...	...	...	...	...	...	...	...
24	76	68	72	...	49	66	75	45	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
25	75	68	85	67	...	...	...	...	39	139	80	56	23	82	61	49	...	...	...	...	...	...	...	...
26	66	76	110	...	...	...	...	...	21	88	56	31	...	...	...	...	15	56	64	45	...	...	...	...
27	38	62	...	59	...	...	...	...	20	84	57	32	...	...	...	...	...	...	...	...	...	...	...	...
28	...	...	...	...	33	47	133	118	...	...	...	...	...	...	...	...	13	51	45	26	...	...	...	...
29	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	12	44	40	25	...	...	...	...
30	53	74	99	71	62	136	109	81	...	...	...	...	40	70	118	74	15	50	27	31	...	...	...	...
31	...	...	...	...	...	...	...	...	...	...	...	...	...	...	63	44	...	...	...	...	...	...	...	...
Mean ...	54	72	89	67	56	77	92	70	43	98	83	54	31	85	63	43	13	49	43	31	10	51	51	44
No. of days used ...	17	17	16	15	14	14	13	14	14	14	14	14	11	11	12	11	12	12	11	11	5	5	7	6

THE YEAR	Mean No. of days used	35	74	67	49
		129	126	130	123



## 539. Richmond (Kew Observatory).

1928.

Month.	JANUARY.		FEBRUARY.		MARCH.		APRIL.		MAY.		JUNE.	
Day.	Character	Duration Negative Pot. Grad.	Character	Duration Negative Pot. Grad.	Character	Duration Negative Pot. Grad.	Character	Duration Negative Pot. Grad.	Character	Duration Negative Pot. Grad.	Character	Duration Negative Pot. Grad.
		hours.		hours.		hours.		hours.		hours.		hours.
1	0	...	1	0.3	0	0.9	2	6.2	0	...	0	...
2	2	10.5	1	1.4	2	4.3	0	...	0	...	0	...
3	1	0.2	0	...	0	...	1	2.7	1	0.8	0	...
4	1	0.8	0	...	0	...	1	0.7	0	...	1	0.1
5	1	1.3	1	2.1	1	1.7	1	0.8	0	...	1	0.5
6	1	1.6	0	...	1	2.3	0	...	0	...	1	1.1
7	0	...	0	...	0	...	1	0.7	0	...	2	3.5
8	0	...	0	...	(0)	—	1	2.8	0	...	1	0.1
9	1	0.8	1	0.5	(1)	—	0	...	0	...	1	1.5
10	1	1.2	1	1.0	(1)	—	1	0.2	1	1.3	1	0.1
11	1	1.6	1	1.3	(1)	—	1	1.0	0	...	1	2.0
12	2	4.1	2	3.3	(1)	—	2	3.2	0	...	0	...
13	1	0.7	1	1.9	(1)	—	0	...	1	1.5	1	1.6
14	1	0.1	1	0.3	(0)	—	0	...	1	1.5	2	5.3
15	0	...	0	...	(0)	—	0	...	2	3.0	1	0.1
16	1	2.1	1	1.1	0	...	2	3.4	2	6.3	0	...
17	1	0.4	1	0.3	0	...	0	...	1	2.4	0	...
18	1	2.3	0	...	0	...	1	0.5	2	7.6	1	1.3
19	1	1.6	0	...	1	0.5	0	...	2	5.9	1	2.1
20	1	0.3	0	...	0	...	0	...	1	2.9	1	0.5
21	0	...	0	...	2	3.5	2	5.2	2	3.9	0	...
22	1	1.8	1	1.2	1	0.7	0	...	0	...	0	...
23	2	—	0	...	1	0.9	0	...	2	3.3	0	...
24	1	—	0	...	1	1.3	0	...	1	0.1	0	...
25	1	1.5	0	...	0	...	0	...	0	...	1	0.1
26	1	2.1	0	...	0	...	0	...	0	...	1	2.3
27	1	1.5	0	...	1	0.3	1	0.1	0	...	1	0.7
28	2	5.5	0	...	1	1.4	0	...	0	...	0	...
29	2	5.0	0	...	2	5.3	1	0.6	1	0.6	1	0.5
30	2	4.0	...	...	2	3.0	1	0.3	0	...	1	1.6
31	1	0.8	...	...	2	4.3	...	...	0	...	...	...
Total ...	—	51.8	—	14.7	—	30.4	—	28.4	—	41.1	—	25.0
No. of days used	—	29	—	29	—	23	—	30	—	31	—	30
Mean ...	—	1.8	—	0.5	—	1.3	—	0.9	—	1.3	—	0.8

Month.	JULY.		AUGUST.		SEPTEMBER.		OCTOBER.		NOVEMBER.		DECEMBER.	
Day.	Character	Duration Negative Pot. Grad.	Character	Duration Negative Pot. Grad.	Character	Duration Negative Pot. Grad.	Character	Duration Negative Pot. Grad.	Character	Duration Negative Pot. Grad.	Character	Duration Negative Pot. Grad.
		hours.		hours.		hours.		hours.		hours.		hours.
1	0	...	1	1.2	0	...	0	—	1	0.1	0	...
2	0	...	0	...	0	...	1	0.1	0	...	0	...
3	2	3.5	1	0.1	0	...	0	...	0	...	0	...
4	1	1.2	2	5.3	0	...	0	...	1	0.5	0	...
5	1	0.2	0	...	0	...	0	...	0	...	1	0.1
6	1	0.1	0	...	0	...	0	...	0	...	1	1.6
7	0	...	0	...	0	...	0	...	0	...	0	...
8	0	...	1	0.1	0	...	1	0.2	0	...	0	...
9	1	1.0	0	...	1	1.4	1	1.6	0	...	0	...
10	0	...	0	...	0	...	0	...	1	1.6	1	0.4
11	0	...	0	...	0	...	1	0.8	1	2.5	1	0.1
12	0	...	1	0.8	0	...	1	2.7	0	...	2	5.7
13	0	...	1	0.8	0	...	0	...	1	0.2	0	...
14	0	...	1	0.5	0	...	1	1.7	1	2.1	0	...
15	0	...	0	...	0	...	2	3.8	2	3.1	0	...
16	0	...	0	...	1	0.1	1	0.4	2	4.0	1	0.9
17	0	...	0	...	0	...	1	1.6	0	...	1	0.6
18	0	...	0	...	0	...	1	1.5	0	...	0	...
19	0	...	1	0.5	1	0.1	1	1.4	1	0.3	1	0.6
20	0	...	2	3.4	0	...	2	3.4	0	...	1	1.4
21	0	...	0	...	0	...	1	1.7	1	2.1	1	0.1
22	0	...	1	0.1	0	...	2	6.7	1	1.7	0	...
23	0	...	1	0.2	0	...	1	0.3	1	2.7	0	...
24	0	...	1	1.0	1	0.2	1	1.4	1	0.2	1	2.0
25	0	...	0	...	1	2.6	1	0.4	1	1.8	1	0.1
26	0	...	2	4.1	0	...	2	9.3	0	...	1	0.5
27	1	2.7	1	—	0	...	1	2.4	1	0.8	2	3.2
28	2	3.7	0	...	1	2.4	0	...	0	...	2	6.9
29	0	...	1	0.6	0	...	0	...	0	...	1	1.7
30	1	0.7	1	1.0	0	...	1	0.2	0	...	2	6.7
31	1	1.5	1	1.5	...	...	1	0.3	...	...	2	4.1
Total ...	—	14.6	—	21.2	—	6.8	—	41.9	—	23.7	—	36.7
No. of days used	—	31	—	30	—	30	—	31	—	30	—	31
Mean ...	—	0.5	—	0.7	—	0.2	—	1.4	—	0.8	—	1.2

Annual Values :— Character frequency ... 0. 1 2  
176 150 40

Duration ... Total No. of days. Mean.  
336.3 hrs. 355 0.95 hrs.



## 540. Richmond (Kew Observatory).

1928.

Month.	January. Factor 2.04.				February. Factor 2.05.				March. Factor 2.19			
Hour G.M.T.	3h.	9h.	15h.	21h.	3h.	9h.	15h.	21h.	3h.	9h.	15h.	21h.
Day.												
1	410	710	475	375	115	315	200	435	145	215	305	640
2	125	100	-625	550	315	475	±	400	-720	320	145	720
3	695	585	510	585	(450)	535	375	625	305	695	375	720
4	400	(360)	175	225	485	600	175	275	480	385	225	990
5	(200)	425	500	500	75	115	285	625	(340)	465	160	-145
6	100	160	260	385	(400)	725	325	535	-95	415	465	680
7	550	425	350	175	335	375	325	200	280	320	400	400
8	60	285	250	535	115	175	225	175	255	440	—	—
9	325	435	335	525	85	365	265	550	—	—	—	—
10	350	400	85	450	500	325	15	300	—	—	—	—
11	200	-135	720	645	100	175	165	±	—	—	—	—
12	475	460	210	-150	85	385	315	675	—	—	—	—
13	100	275	300	425	350	-300	335	485	—	—	—	—
14	200	550	275	300	215	365	350	50	—	—	—	—
15	225	450	300	375	125	115	125	250	—	—	—	615
16	185	185	350	585	100	150	125	215	585	345	360	535
17	275	535	500	200	125	250	200	265	215	375	375	455
18	1295	575	375	-125	235	600	200	375	160	265	200	415
19	50	710	385	660	235	450	200	200	200	345	295	345
20	550	535	235	310	225	615	365	685	160	295	305	305
21	160	110	135	200	(390)	435	335	700	40	465	505	240
22	100	85	335	695	500	825	585	550	175	240	215	505
23	510	695	400	(400)	675	225	375	425	105	215	215	425
24	(200)	(300)	300	250	325	525	665	525	175	80	135	655
25	125	375	375	60	425	585	615	585	185	495	240	215
26	100	300	410	375	450	475	185	425	255	585	225	425
27	350	-175	460	695	215	335	335	625	225	265	225	440
28	625	560	-25	210	450	650	335	500	335	-40	±	545
29	125	50	300	-200	535	625	425	535	360	-25	160	-255
30	-135	625	300	150	—	—	—	—	215	320	±	375
31	250	560	300	100	—	—	—	—	120	385	-440	640
Means { (a)	311	408	342	391	298	421	301	435	242	360	277	513
(b)	296	371	299	338	304	402	306	437	176	340	242	445
Mean for day	(a) 363 (b) 326				(a) 364 (b) 362				(a) 348 (b) 301			
Month.	April. Factor 2.11.				May. Factor 2.00.				June. Factor 2.10.			
Hour G.M.T.	3h.	9h.	15h.	21h.	3h.	9h.	15h.	21h.	3h.	9h.	15h.	21h.
Day.												
1	285	-1030	50	540	145	330	185	340	75	435	370	500
2	410	385	270	670	185	390	390	415	305	435	370	475
3	385	115	25	615	120	390	425	355	305	385	255	410
4	245	410	320	540	(290)	535	635	450	255	435	450	295
5	270	515	310	630	(440)	550	450	440	255	335	140	100
6	540	630	255	670	255	270	100	280	165	155	115	205
7	375	475	525	590	120	525	220	270	-50	(60)	230	255
8	-195	230	230	270	220	270	220	355	130	305	155	295
9	90	115	205	295	245	295	160	295	75	205	140	205
10	155	205	140	465	245	305	-60	100	75	115	100	270
11	165	345	245	25	135	280	120	220	220	255	370	245
12	-65	490	465	565	60	230	145	220	230	205	155	345
13	310	490	590	360	195	205	60	295	245	295	180	295
14	285	435	425	425	85	305	355	500	±	155	±	130
15	130	230	375	375	315	205	100	-35	410	245	100	255
16	±	195	230	320	100	120	±	270	270	205	130	165
17	195	310	515	435	135	295	-230	340	230	140	65	245
18	345	255	165	335	-160	±	±	490	115	180	140	115
19	375	345	195	205	535	220	±	-135	-385	230	163	305
20	155	360	165	425	280	245	±	405	165	255	190	165
21	(250)	320	±	465	245	465	±	±	155	295	130	230
22	295	230	165	220	195	295	255	340	140	230	205	220
23	155	255	130	320	330	170	120	205	220	270	155	230
24	180	245	180	425	120	280	280	440	205	165	90	140
25	255	285	180	695	450	475	135	270	100	280	180	180
26	400	515	245	580	340	230	145	390	100	230	75	65
27	360	615	605	400	220	205	315	315	90	255	130	230
28	360	450	205	255	255	415	145	380	155	205	130	165
29	(130)	130	155	140	-75	475	535	560	(100)	115	40	280
30	65	140	155	220	295	450	500	365	155	180	100	230
31	—	—	—	—	220	415	405	340	—	—	—	—
Means { (a)	265	335	266	416	234	328	260	344	183	242	174	241
(b)	238	292	267	417	213	338	228	325	156	245	174	245
Mean for day	(a) 321 (b) 304				(a) 291 (b) 276				(a) 210 (b) 205			

NOTE.—The Potential Gradient is reckoned as positive if the potential increases upwards. For indeterminate potential gradient the following notation is used: ± Indeterminate, positive value; - Indeterminate, negative value; ± Indeterminate in magnitude and sign.

(a) Mean from all positive readings.

(b) Mean from all complete days using both positive and negative readings.



Mean Values for periods of sixty minutes, centered at the exact hours, Greenwich Mean Time.

## 540. Richmond (Kew Observatory).

1928.

Month.	July. Factor 8.53.				August. Factor 2.01.				September. Factor 8.53.			
Hour G.M.T.	3h.	9h.	15h.	21h.	3h.	9h.	15h.	21h.	3h.	9h.	15h.	21h.
Day.												
1	100	150	100	215	170	0	210	210	140	230	265	315
2	125	275	200	215	125	500	355	365	150	330	180	320
3	175	340	215	-705	220	415	490	135	210	345	175	250
4	75	350	125	250	110	-110	(185)	515	205	235	155	345
5	90	290	240	215	280	195	85	280	320	375	205	250
6	125	250	165	250	100	235	100	320	95	210	150	340
7	150	275	140	165	100	170	135	110	155	250	195	(300)
8	100	265	150	200	75	280	160	255	(150)	(230)	150	100
9	40	265	165	215	110	220	145	170	30	120	110	375
10	175	300	150	315	170	280	195	170	210	250	175	250
11	190	275	175	250	135	195	125	365	140	290	190	(390)
12	190	340	125	165	-35	50	125	270	(300)	(390)	355	180
13	175	315	175	140	135	195	145	220	80	410	385	210
14	115	325	125	100	50	210	125	245	245	330	395	345
15	65	150	90	100	60	220	135	210	265	300	265	345
16	75	265	140	365	185	255	185	235	125	125	155	95
17	190	465	275	140	135	245	125	255	125	345	210	220
18	125	200	75	140	185	380	110	175	245	245	150	(280)
19	90	150	100	150	245	255	110	235	95	375	150	155
20	125	125	100	125	50	210	75	255	(120)	535	190	150
21	115	215	150	190	170	245	125	135	250	370	210	745
22	90	240	100	200	75	270	110	270	245	385	290	370
23	50	200	125	125	100	195	135	320	210	230	220	180
24	150	175	90	150	185	440	135	270	95	(390)	260	285
25	125	165	90	125	165	135	135	270	-135	440	360	605
26	90	115	115	215	125	195	75	$z \pm$	125	190	410	(550)
27	50	350	165	15	145	245	(160)	235	(390)	(550)	415	510
28	-225	300	125	200	175	190	(140)	355	(150)	(300)	(200)	(390)
29	165	165	75	265	(230)	(300)	275	285	(120)	190	285	80
30	200	225	140	25	190	245	220	235	40	300	260	(390)
31	0	350	150	225	265	400	-10	260				
Means { (a)	118	254	140	182	149	246	161	254	173	309	238	311
(b)	107	254	140	153	143	235	158	254	163	309	238	311
Mean for day	(a) 173				(b) 163				(a) 258			
									(b) 255			
Month.	October. Factor 2.04.				November. Factor { 2.06. 2.07.				December. Factor 2.06.			
Hour G.M.T.	3h.	9h.	15h.	21h.	3h.	9h.	15h.	21h.	3h.	9h.	15h.	21h.
Day.												
1	(150)	(300)	250	390	(240)	(400)	375	265	100	300	255	580
2	300	455	250	260	115	340	440	390	290	380	310	380
3	235	685	425	600	300	425	415	525	180	455	310	515
4	300	435	425	575	115	340	350	340	355	280	335	325
5	(150)	425	250	350	755	790	375	450	(330)	415	355	255
6	110	300	200	(300)	125	340	400	390	1035	515	445	455
7	(230)	300	175	285	325	490	465	680	225	645	445	425
8	100	140	175	310	390	575	600	550	370	590	570	625
9	110	(180)	-10	325	250	640	(400)	550	445	600	660	780
10	335	175	285	375	600	1405	-300	250	125	400	390	425
11	135	75	200	485	-115	250	315	200	235	490	525	580
12	$z \pm$	510	(380)	695	65	165	165	(240)	-336	355	445	380
13	475	500	225	385	(110)	(400)	340	325	255	645	805	635
14	525	550	210	-285	400	615	(380)	(500)	435	525	590	690
15	-85	(350)	250	375	(250)	(300)	380	360	625	545	515	725
16	210	300	210	200	215	-215	180	170	715	310	180	155
17	75	275	285	385	110	595	200	260	110	570	400	535
18	385	360	-185	335	170	345	300	335	470	735	500	670
19	125	310	285	210	45	135	290	245	715	780	535	455
20	85	-10	450	575	110	515	315	270	270	$z \pm$	415	760
21	375	350	225	500	100	100	-145	125	535	690	790	515
22	175	350	400	$z \pm$	110	180	90	235	635	790	370	435
23	75	375	300	200	125	-20	65	190	335	745	445	355
24	100	250	185	350	135	215	190	280	415	290	300	300
25	150	325	350	460	80	110	90	180	145	800	645	190
26	275	325	-60	-500	100	290	370	495	45	125	245	670
27	250	75	485	350	155	110	$z \pm$	380	390	725	760	-280
28	85	185	200	375	270	415	380	480	-210	470	555	-155
29	385	525	275	150	470	615	370	190	-10	535	415	770
30	50	150	175	335	225	245	335	270	-180	310	225	290
31	175	210	(300)	(500)					$z \pm$	-570	660	580
Means { (a)	211	325	279	380	223	405	318	337	376	518	464	498
(b)	202	306	234	316	213	379	280	336	303	518	459	437
Mean for day	(a) 299				(b) 265				(a) 464			
									(b) 429			
					Annual Means { (a)				232	346	268	359
					(b)				209	332	252	335
									(a) 301			
									(b) 282			

(a) Mean from all positive readings.

(b) Mean from all complete days, using both positive and negative readings.

NOTE.—The Potential Gradient is reckoned as positive if the potential increases upwards. For indeterminate potential gradient the following notation is used:  $z$  + Indeterminate positive value;  $z$  - Indeterminate negative value;  $z \pm$  Indeterminate in magnitude and sign.



*The departures from the mean of the day are adjusted for non-cyclic change.*

## SELECTED QUIET DAYS.

## 541. Richmond (Kew Observatory).

1928.

Month and Season.	Hour. 1	G.M.T. 2	3	4	5	6	7	8	9	10	11	Noon.	13	14	15	16	17	18	19	20	21	22	23	Midt.	Non-cyclic change.	Mean values.
	v/m	v/m	v/m	v/m	v/m	v/m	v/m	v/m	v/m	v/m	v/m	v/m	v/m	v/m	v/m	v/m	v/m	v/m	v/m	v/m	v/m	v/m	v/m	v/m	v/m	v/m
Jan.	- 23	- 54	- 90	- 55	- 53	- 40	+ 1	+ 23	+ 32	- 16	- 27	- 14	- 26	- 29	- 17	+ 18	+ 24	+ 40	+ 95	+ 100	+ 83	+ 42	+ 4	- 17	...	405
Feb.	- 31	- 54	- 71	- 78	- 92	- 54	- 11	+ 20	+ 93	+ 103	+ 77	+ 56	+ 28	- 52	- 62	- 51	- 14	+ 37	+ 76	+ 49	+ 45	+ 33	- 14	- 33	- 46	367
Mar.	- 45	- 52	- 64	- 54	- 44	- 57	- 39	+ 1	+ 26	+ 21	- 6	- 47	- 55	- 47	- 32	- 15	+ 8	+ 40	+ 96	+ 118	+ 128	+ 106	+ 38	- 18	- 61	273
Apr.	- 17	- 13	- 31	- 49	- 53	- 21	+ 32	+ 43	+ 45	- 5	- 39	- 41	- 65	- 35	- 38	- 33	- 4	+ 12	+ 72	+ 68	+ 84	+ 62	+ 25	- 2	- 35	321
May	- 19	- 41	- 23	- 43	- 34	+ 1	+ 49	+ 81	+ 90	+ 28	- 36	- 57	- 60	- 59	- 59	- 56	- 46	+ 12	+ 31	+ 49	+ 61	+ 68	+ 50	+ 13	+ 9	252
June	- 18	- 20	- 33	- 16	- 12	+ 24	+ 70	+ 70	+ 40	+ 19	- 30	- 30	- 42	- 58	- 41	- 27	- 13	- 2	- 8	+ 11	+ 47	+ 63	+ 11	- 11	- 1	226
July	- 24	- 33	- 29	- 23	- 1	+ 14	+ 46	+ 80	+ 70	+ 43	+ 2	- 24	- 41	- 45	- 47	- 46	- 38	- 23	- 3	+ 29	+ 44	+ 44	+ 13	- 11	- 14	167
Aug.	- 17	- 27	- 38	- 31	- 20	+ 11	+ 62	+ 85	+ 59	+ 24	- 11	- 37	- 42	- 29	- 36	- 47	- 49	- 18	+ 14	+ 29	+ 52	+ 45	+ 18	+ 3	- 18	175
Sept.	- 59	- 47	- 57	- 61	- 60	- 36	+ 24	+ 62	+ 56	+ 36	- 10	- 25	- 52	- 44	- 22	- 19	+ 1	+ 50	+ 116	+ 97	+ 74	+ 11	+ 4	- 39	+ 25	262
Oct.	- 25	- 42	- 43	- 70	- 43	- 38	+ 8	+ 82	+ 70	+ 55	+ 3	- 37	- 78	- 69	- 33	+ 16	+ 31	+ 55	+ 44	+ 57	+ 69	+ 18	- 9	- 20	...	290
Nov.	- 88	- 99	- 121	- 106	- 86	- 78	- 24	+ 42	+ 84	+ 74	+ 39	+ 24	- 6	- 17	+ 8	+ 43	+ 58	+ 84	+ 94	+ 67	+ 38	+ 34	+ 3	- 65	- 14	368
Dec.	- 57	- 115	- 109	- 70	- 62	- 76	- 17	+ 73	+ 111	+ 99	+ 97	+ 37	+ 21	- 1	- 4	+ 39	+ 46	+ 34	+ 10	+ 11	+ 40	+ 27	- 71	- 64	+ 88	469
Year	- 35	- 50	- 59	- 55	- 47	- 29	+ 17	+ 55	+ 65	+ 40	+ 5	- 16	- 35	- 40	- 32	- 15	0	+ 27	+ 53	+ 57	+ 63	+ 47	+ 6	- 22	...	298
Winter	- 50	- 81	- 98	- 77	- 73	- 62	- 13	+ 39	+ 80	+ 65	+ 47	+ 26	+ 4	- 25	- 19	+ 12	+ 29	+ 49	+ 69	+ 57	+ 51	+ 34	- 19	- 45	...	402
Eqnx.	- 36	- 39	- 49	- 58	- 50	- 38	+ 6	+ 47	+ 49	+ 27	- 13	- 37	- 62	- 49	- 31	- 13	+ 9	+ 39	+ 82	+ 85	+ 87	+ 49	+ 15	- 20	...	287
Sumr.	- 19	- 30	- 31	- 28	- 17	+ 13	+ 57	+ 79	+ 65	+ 28	- 19	- 37	- 46	- 47	- 46	- 44	- 37	- 7	+ 9	+ 29	+ 51	+ 55	+ 23	- 1	...	205

## AIR POLLUTION: HOURLY MEANS FOR EACH MONTH (milligrams per cubic metre).

COMPLETE DAYS ONLY.

## 542. Richmond (Kew Observatory).

1928.

Month and Season.	Hour. 1	G.M.T. 2	3	4	5	6	7	8	9	10	11	Noon.	13	14	15	16	17	18	19	20	21	22	23	Midt.	Mean.	No. of days used.
Jan.	mg/m <sup>3</sup>	mg/m <sup>3</sup>	mg/m <sup>3</sup>	mg/m <sup>3</sup>	mg/m <sup>3</sup>	mg/m <sup>3</sup>	mg/m <sup>3</sup>	mg/m <sup>3</sup>	mg/m <sup>3</sup>	mg/m <sup>3</sup>	mg/m <sup>3</sup>	mg/m <sup>3</sup>	mg/m <sup>3</sup>	mg/m <sup>3</sup>	mg/m <sup>3</sup>	mg/m <sup>3</sup>	mg/m <sup>3</sup>	mg/m <sup>3</sup>	mg/m <sup>3</sup>	mg/m <sup>3</sup>	mg/m <sup>3</sup>	mg/m <sup>3</sup>	mg/m <sup>3</sup>	mg/m <sup>3</sup>	mg/m <sup>3</sup>	31
Feb.	.11	.09	.10	.08	.11	.13	.17	.25	.34	.35	.26	.23	.17	.13	.13	.15	.18	.22	.22	.24	.22	.21	.17	.09	.18	29
Mar.	.18	.18	.17	.17	.19	.17	.18	.35	.46	.46	.45	.29	.22	.11	.13	.19	.23	.27	.31	.32	.32	.34	.33	.25	.26	31
Apr.	.22	.23	.19	.19	.19	.19	.26	.38	.33	.31	.22	.14	.08	.09	.13	.19	.19	.26	.31	.37	.37	.36	.32	.27	.24	31
May	.06	.09	.07	.05	.06	.12	.16	.20	.16	.10	.07	.09	.06	.05	.05	.06	.06	.10	.17	.23	.26	.23	.11	.11	.11	30
June	.15	.13	.08	.15	.19	.19	.22	.23	.15	.13	.10	.10	.08	.07	.06	.10	.11	.13	.17	.15	.17	.17	.13	.13	.14	31
July	.04	.05	.06	.06	.06	.09	.08	.06	.04	.02	.02	.01	.01	.01	.01	.01	.02	.04	.06	.03	.04	.03	.04	.04	.04	30
Aug.	.05	.05	.06	.07	.07	.08	.08	.07	.06	.05	.03	.02	.01	.01	.02	.02	.03	.03	.05	.05	.06	.05	.04	.05	.05	31
Sept.	.02	.03	.03	.03	.05	.07	.08	.08	.05	.04	.03	.03	.02	.01	.01	.02	.02	.02	.04	.05	.04	.04	.03	.03	.04	31
Oct.	.13	.11	.11	.13	.14	.17	.23	.23	.18	.13	.10	.07	.06	.07	.07	.09	.09	.14	.15	.16	.15	.13	.13	.13	.13	27
Nov.	.11	.10	.10	.10	.10	.13	.22	.28	.31	.25	.15	.11	.09	.08	.10	.14	.20	.25	.24	.25	.22	.20	.15	.12	.17	24
Dec.	.17	.15	.11	.10	.11	.11	.16	.23	.31	.28	.29	.20	.17	.16	.19	.20	.22	.22	.22	.21	.19	.19	.19	.17	.19	30
Year	.21	.21	.17	.15	.18	.15	.19	.30	.38	.42	.38	.32	.27	.28	.28	.33	.37	.47	.48	.44	.43	.42	.33	.24	.31	31
Winter	.12	.12	.11	.11	.12	.13	.17	.22	.23	.21	.17	.13	.10	.09	.10	.13	.14	.18	.20	.21	.21	.20	.16	.14	.15	356
Eqnx.	.17	.16	.14	.12	.14	.14	.17	.28	.37	.38	.35	.26	.21	.17	.19	.22	.25	.29	.31	.30	.29	.29	.25	.19	.23	121
Spring	.14	.16	.13	.12	.13	.16	.21	.29	.25	.20	.15	.11	.07	.07	.09	.13	.13	.18	.24	.30	.31	.30	.21	.19	.18	61
Autm.	.12	.11	.11	.11	.12	.15	.22	.26	.24	.19	.13	.09	.07	.08	.09	.11	.15	.19	.19	.20	.18	.16	.14	.13	.15	51
Sumr.	.07	.06	.06	.08	.09	.11	.11	.11	.08	.06	.05	.04	.03	.03	.03	.04	.04	.05	.08	.08	.08	.07	.06	.06	.07	123

## AIR POLLUTION: DIURNAL INEQUALITIES (milligrams per cubic metre).

*The departures from the mean of the day are adjusted for non-cyclic change.*

## 543. Richmond (Kew Observatory).

1928.

Month and Season.	Hour. 1	G.M.T. 2	3	4	5	6	7	8	9	10	11	Noon.	13	14	15	16	17	18	19	20	21	22	23	Midt.	Non-cyclic change.	Range.
Jan.	mg/m <sup>3</sup>	mg/m <sup>3</sup>	mg/m <sup>3</sup>	mg/m <sup>3</sup>	mg/m <sup>3</sup>	mg/m <sup>3</sup>	mg/m <sup>3</sup>	mg/m <sup>3</sup>	mg/m <sup>3</sup>	mg/m <sup>3</sup>	mg/m <sup>3</sup>	mg/m <sup>3</sup>	mg/m <sup>3</sup>	mg/m <sup>3</sup>	mg/m <sup>3</sup>	mg/m <sup>3</sup>	mg/m <sup>3</sup>	mg/m <sup>3</sup>	mg/m <sup>3</sup>	mg/m <sup>3</sup>	mg/m <sup>3</sup>	mg/m <sup>3</sup>	mg/m <sup>3</sup>	mg/m <sup>3</sup>	mg/m <sup>3</sup>	mg/m <sup>3</sup>
Feb.	-.08	-.10	-.09	-.10	-.07	-.05	-.02	+.06	+.16	+.17	+.08	+.05	+.01	-.05	-.05	-.02	00	+.04	+.04	+.06	+.04	+.03	-.01	-.08	-.02	27
Mar.	-.07	-.07	-.09	-.09	-.07	-.09	-.08	+.09	+.21	+.21	+.19	+.03	-.04	-.15	-.13	-.08	-.04	+.01	+.04	+.05	+.05	+.07	+.06	-.02	+.02	36
Apr.	-.03	-.02	-.06	-.05	-.06	-.05	+.01	+.14	+.09	+.07	-.02	-.10	-.16	-.15	-.12	-.05	-.05	+.02	+.07	+.13	+.13	+.12	+.08	+.03	-.01	30
May	-.05	-.03	-.04	-.08	-.05	00	+.05	+.09	+.05	-.02	-.04	-.03	-.05	-.06	-.06	-.05	-.02	+.06	+.12	+.14	+.12	-.01	-.01	00	00	17
June	+.02	-.01	-.05	+.02	+.06	+.05	+.08	+.09	+.02	00	-.04	-.04	-.05	-.06	-.08	-.04	-.03	00	+.03	+.02	+.03	+.03	00	00	00	08
July	00	+.02	+.03	+.02	+.02	+.05	+.04	+.02	+.01	-.02	-.02	-.03	-.03	-.03	-.02	-.02	-.02	00	+.02	00	00	00	00	00	00	00
Aug.	+.01	00	+.01	+.02	+.03	+.04	+.03	+.02	+.01	00	00	00	-.04	-.03	-.02	-.03	-.02	-.02	+.01	+.01	+.01	00	00	00	00	00
Sept.	-.01	-.01	-.01	-.01	+.01	+.03	+.05	+.05	+.02	00	-.01	-.01	-.02	-.02	-.03	-.02	-.02	-.01	+.01	+.01	+.01	+.01	00	00	00	00
Oct.	00	-.01	-.01	00	+.01	+.04	+.10	+.10	+.05	00	-.03	-.06	-.07	-.06	-.05	-.04	+.01	+.02	+.03	+.02	00	00	00	00	00	17
Nov.	-.06	-.07	-.07	-.07	-.07	-.04	+.05	+.11	+.14	+.09	-.02	-.06	-.08	-.08	-.06	-.02	+.04	+.08	+.08	+.06	+.03	-.01	-.04	-.01	-.04	22
Dec.	-.03	-.04	-.08	-.10	-.09	-.08	-.03	+.04	+.12	+.09	+.10	+.10	-.02	-.03	00	+.02	+.03	+.03	+.03	+.03	+.01	+.01	+.01	-.01	-.02	22
Year	-.10	-.10	-.13	-.16	-.17	-.16	-.11	-.01	+.08	+.11	+.07	+.01	-.03	-.03	-.02	+.03	+.07	+.16	+.18	+.13	+.13	+.11	+.02	-.07	00	35
Winter	-.03	-.04	-.05	-.05	-.04	-.02	+.01	+.07	+.08	+.06	+.02	-.02	-.05	-.06	-.05	-.03	-.01	+.02	+.05	+.06	+.05	+.05	+.01	-.02	00	14
Eqnx.	-.07	-.08	-.10	-.11	-.10	-.10	-.06	+.05	+.14	+.15	+.11	+.02	-.03	-.06	-.05	-.01	+.02	+.06	+.07	+.07	+.06	+.06	+.02	-.04	00	26
Spring	-.04	-.03	-.05	-.05	-.04	-.01	+.05	+.11	+.08	+.03	-.03	-.06	-.09	-.09	-.07	-.04	-.02	+.02	+.06	+.09	+.09	+.07	+.02	00	00	20
Sumr.	00	00	-.01	+.01	+.03	+.04	+.05	00	+.04	+.01	-.01	-.02	-.03	-.04	-.04	-.03	-.02	-.01	+.01	+.01	+.01	+.01	-.01	00	00	09



SEISMOLOGICAL DIARY : *Instruments*.—Two horizontal and one vertical Galitzin Seismographs with galvanometric registration.

Lat. 51° 28' N. Long. 0° 19' W. Height above M.S.L. 5 metres.

## 544. Richmond (Kew Observatory).

1928.

Date.	Phase.	Time. G.M.T.	Period	Amplitudes.			$\Delta$	Remarks.	Date.	Phase.	Time. G.M.T.	Period	Amplitudes.			$\Delta$	Remarks.
				A <sub>N</sub> .	A <sub>E</sub> .	A <sub>Z</sub> .							A <sub>N</sub> .	A <sub>E</sub> .	A <sub>Z</sub> .		
Jan. 1	eL F	h. m. s. 0 38 1 10	...	μ	μ	μ	km.		Jan. 26	eL F	22 40 23 10	...	μ	μ	μ	km.	
1	ePz iPR <sub>1,2</sub> eSe LNE Lz MNE F	9 38 15 41 27 48 37 10 7 10 16 40	...	...	...	...	9230	Epicentre (from St. Louis, Tucson and Kew data) = 15° N, 98° 5' W; off Southern Coast of Mexico. Records interrupted between 9 <sup>h</sup> 54 <sup>m</sup> and 10 <sup>h</sup> 1 <sup>m</sup> , owing to changing of charts.	27	eL F	23 10 25	...	...	...	...		
									29	eL F	0 49 1 0	...	...	...	...		Disturbed by microseisms.
									30	eLNE eLz M F	4 5 12 16-18 55	...	...	...	...		
1	iPz ee L F	18 54 37 19 63 12 25	...	...	...	...	...	Kurile Isles, according to Osaka.	Feb. 3	iPz eSe LNE Lz M <sub>1</sub> M <sub>2</sub> M <sub>3</sub> F	13 56 52 14 4 17 15 19 18 45 23 21 25 23 45	...	...	...	...	5800	Dilatation. Disturbed by microseisms and wind. Epicentre :—Siberia; 73° N., 139° E., according to Zürich.
3	ez F	16 27 37	...	...	...	...	...		4	eLNE Lz M F	7 5 12 21-22 50	...	...	...	...		
4	eL F	0 16 35	...	...	...	...	...		6	eLNE M F	4 42 50 28 5 20	...	...	...	...		Disturbed by microseisms. Traces on Z component
4	eLNE M <sub>1</sub> M <sub>2</sub> F	22 (27) 39 48 40 39 23 35	...	...	...	...	...		7	ePz ScPcSe eSn iPS iSR <sub>1</sub> ene Lz M <sub>1</sub> M <sub>2</sub> M <sub>3</sub> F	0 15 25 22 25 43 26 57 32 4 40 8 48 52 59 0 1 1 29 5 1 2 5	...	...	...	...	9780	Disturbed by microseisms. Strasbourg, Phu-lien and Helwan data indicate epicentre near 0° 5' S., 87° 5' E. (Indian Ocean).
5	e F	14 34 50	...	...	...	...	...	Disturbed by wind and microseisms.	10	iPz iSe LNE M F	4 50 42 5 0 46 17 23 45	...	...	...	...	8880	Dilatation. Jesuit Seis. Assoc. gives tentative epicentre :—Mexico, 19° 8' N., 98° 5' W.
6	ePz ez ePR <sub>1,2</sub> en iSez SRNE LNE Lz	19 42 1 42 44 44 9 50 13 50 24 55 59 20 5	...	...	...	...	6890	Compression. Amplitude of P as read in mm. N E +3.3 -3.0 Azimuth : 134° ± 2°, giving epicentre near 0°, 39° E; near Mount Kenya.	13	ez ene LNE F	6 3 8 30 45	...	...	...	...		
	M <sub>1</sub> M <sub>2</sub> M <sub>3</sub> M <sub>4</sub> M <sub>5</sub> M <sub>6</sub> Lz F	20 5 5 5 7 8 16 10 7 11 34 11 52 22 3 50	22 22 20 14 16 14 ...	+55 ...	+64 ...	...	...	Long waves via the antipodes.	17	e F	23 39 50	...	...	...	...		
10	eLNE eLz M <sub>1</sub> M <sub>2</sub> M <sub>3</sub> F	2 53 58 3 4 16 5 16 5 28 30	...	...	...	...	...	Earlier phases masked by microseisms.	19	e F	22 31 37	...	...	...	...		
12	eL M <sub>1</sub> M <sub>2</sub> F	13 59 7 53 8 7 35	...	...	...	...	...	N record disturbed by wind.	21	ePz iSNE LNE M <sub>1</sub> M <sub>2</sub> M <sub>3</sub> M <sub>4</sub> M <sub>5</sub> M <sub>6</sub> F	19 59 24 20 7 40 18 26 11 30 38 32 45 33 49 36 51 38 0 21 40	...	...	...	...	6750	68° N., 173° 5' W., according to Jesuit Seis. Assoc. Felt in Seward, Alaska
14	en ee F	0 19 13 19 42 ?	...	...	...	...	...	Extremely small movements. Felt in Belgium (according to press).	23	e F	10 19 22	...	...	...	...		
14	ie F	4 10 32 ?	...	...	...	...	...		24	eL M F	14 39 58 15 40	...	...	...	...		
17	eL F	8 20 30	...	...	...	...	...		25	eLNE eLz F	11 50 12 6 30	...	...	...	...		
18	—	—	...	...	...	...	...	No records from 10 <sup>h</sup> 15 <sup>m</sup> to 10 <sup>h</sup> 35 <sup>m</sup> .									
18	eL F	13 9 30	...	...	...	...	...										
20	eL F	0 0 50	...	...	...	...	...										
21	—	...	...	...	...	...	...	No records from 9 <sup>h</sup> 54 <sup>m</sup> to 10 <sup>h</sup> 45 <sup>m</sup> .									
24	e F	7 45 55	...	...	...	...	...	Disturbed by wind.									







SEISMOLOGICAL DIARY :—continued. Instruments.—Two horizontal and one vertical Galitzin Seismographs with galvanometric registration.

Lat. 51° 28' N. Long. 0° 19' W. Height above M.S.L. 5 metres.

## 544. Richmond (Kew Observatory).

1928.

Date.	Phase.	Time. G.M.T.	Period	Amplitudes.			△	Remarks.	Date.	Phase.	Time. G.M.T.	Period	Amplitudes.			△	Remarks.
				A <sub>N</sub> .	A <sub>E</sub> .	A <sub>Z</sub> .							A <sub>N</sub> .	A <sub>E</sub> .	A <sub>Z</sub> .		
Mar. 18	en ez F	h. m. s. 23 56.8 57 11 59	...	μ	μ	μ	km.	Very small. Jugo Slavia; 45° 25' N, 17° 10' E, according to Zagreb.	Mar. 31	iP S iN iE LNE Lz M <sub>1</sub> M <sub>2</sub> M <sub>3</sub> M <sub>4</sub> M <sub>5</sub> F	h. m. s. 0 35 2 39 15 40 21 40 34 40.8 43 19 43 32 43 39 44 11 45 6 45 8 2 0	...	μ	μ	μ	km.	Compression. Amplitudes of iP as read in mm.— N E +0.85 -1.1 Azimuth: 124° ± 3° giving epicentre near 36° N, 24° E. Destructive near Smyrna.
22	iP <sub>ez</sub> PR <sub>1,ez</sub> PR <sub>2,ez</sub> iS <sub>N</sub> iS <sub>E</sub> iS <sub>Z</sub> PS <sub>Z</sub> SR <sub>1</sub> SR <sub>2</sub> LN LE <sub>z</sub> M <sub>1</sub> M <sub>2</sub> M <sub>3</sub> M <sub>4</sub> M <sub>5</sub> M <sub>6</sub> M <sub>7</sub> M <sub>8</sub> M <sub>9</sub> M <sub>10</sub> M <sub>11</sub> M <sub>12</sub> F	4 29 17 32 9 33 36 39 37 39 40 39 43 40 27 44.3 49.0 52 55 17 55 21 56 56 57 53 5 0 5 0 9 0 14 3 6 5.7 6 17 7 39 15 10 15 15 8 40	...	...	...	...	9190	Compression. Amplitudes of iP as read in mm.— N E Z -1.9 +6.0 +9.5 Azimuth = 285° ± 1° giving epicentre near 15° N, 97° 5 W. Felt in Mexico.	31	eE LN MN F	5 21 57 24.6 25.8 33	...	...	...	...	...	Very small. Probably a repetition of pre- ceding shock.
								*Negative maximum off chart.	Apr. 1	eL F	18 59 19 8	...	...	...	...	...	
								†Negative and positive maxima off chart.	2/3	eL F	23 50 0 10	...	...	...	...	...	
									3	ePz eL <sub>z</sub> M F	16 53 38 17 12 15 58 40	...	...	...	...	...	
23	eL F	21 25 22 5	...	...	...	...	...		7	ez L MN F	20 53 21 4 9 30	...	...	...	...	...	
24	eL F	11 15 30	...	...	...	...	...		9	eScPcSe eSe iPS <sub>ez</sub> (SR <sub>1</sub> ) (SR <sub>2</sub> ) Le Lz M <sub>1</sub> M <sub>2</sub> M <sub>3</sub> M <sub>4</sub> M <sub>5</sub> F	17 57 34 57 53 58 58 18 4.2 7.6 13 16 20 10 21 59 22 4 24 6 24 10 19 45	...	...	...	...	(9700) Z record defective before 17 <sup>h</sup> 53 <sup>m</sup> . No N record.	
26	eLNE M F	7 35 46 8 15	...	...	...	...	12000	Epicentre: Menado, Celebes, according to Batavia.	10	e F	1 16 22	...	...	...	...	Felt in Peru. 12° 4 S., 69° 6 W., according to Jesuit Seis. Assoc.	
26	eL F	9 0 45	...	...	...	...	...	Traces on Z compt.	12	eL F	18 57 19 35	...	...	...	...		
26	ePz eSNE L M <sub>1</sub> M <sub>2</sub> M <sub>3</sub> F	14 43 1 44 51 45 52 46 16 46 18 46 27 55	...	...	...	...	1020	? Compression. A fore-shock of the following disturbance	13/14	ePz eSe LNE F	23 28 33 38 45 57 0 40	...	...	...	...	9030	Small disturbance. South of Mexico. 13° N., 95° W., ac- cording to Jesuit Seis. Assoc.
27	iP iSNE iz(S) LNE M <sub>1</sub> M <sub>2</sub> M <sub>3</sub> M <sub>4</sub> F	8 34 56 36 49 36 54 37 36 38 16 38 50 39 13 39 17 9 25	...	...	...	...	1050	Dilatation. Amplitudes of iP as read in mm.— N E -0.7 +1.2 Azimuth: 117° ± 3° giving epicentre near 47° N, 12° E (Carin- thian Alps). Destructive in Udine and Friuli, N.E. Italy.	14	iP iS LN LEz M <sub>1</sub> M <sub>2</sub> M <sub>3</sub> M <sub>4</sub> M <sub>5</sub> M <sub>6</sub> M <sub>7</sub> M <sub>8</sub> M <sub>9</sub> F	9 4 32 8 20 9 25 10.4 10.9 12 0 12.13 13.1 14.6 15 11 15 40 16 22 16 44 11 0	...	...	...	...	2290	Dilatation. Amplitudes of iP as read in mm.— N E Z -3.0 +8.5 -5.3 Azimuth = 107° ± 2° giving epicentre near 42° N, 27° E. Destructive in Bulgaria (Chirpan, etc.). *Both positive and negative maxima off the charts. †Negative maxima off the charts.
27	e(S)NE L M F	19 31 9 59 20 3 40	...	...	...	...	...		16	ePz eSe F	10 32 14 36 12 ?	...	...	...	...	2410	Probably a repetition of preceding shock. Overlapped.
28	e F	13 22 27	...	...	...	...	...										
29	iPz iSNE iSR <sub>1</sub> iSR <sub>2</sub> L M <sub>1</sub> M <sub>2</sub> F	5 18 19 28 24 31 22 34 36 51 56 44 6 0 38 40	...	...	...	...	8980	Compression. S very sharp and large. Epicentre near Japan.									



Date.	Phase.	Time. G.M.T.	Period	Amplitudes.			$\Delta$	Remarks.	Date.	Phase.	Time. G.M.T.	Period	Amplitudes.			$\Delta$	Remarks.
				A <sub>N</sub> .	A <sub>E</sub> .	A <sub>Z</sub> .							A <sub>N</sub> .	A <sub>E</sub> .	A <sub>Z</sub> .		
April 17	iPz iz iS <sub>E</sub> iE eSR <sub>1</sub> <sup>E</sup> eN LeZ M <sub>1</sub> M <sub>2</sub> M <sub>3</sub> M <sub>4</sub> M <sub>5</sub> F	h. m. s. 3 37 27 37 57 47 25 47 46 52.5 59.3 4 3.6 4 17 5 10 11 15 11 29 11 33 5 5	s. ... ... ... ... ... 38 33 32 21 20 20 ...	$\mu$ ... ... ... ... ... ... ... +38 ... +18 +7 ... +22 ... +29 ...	$\mu$ ...												



SEISMOLOGICAL DIARY:—continued. Instruments.—Two horizontal and one vertical Galitzin Seismographs with galvanometric registration.

Lat. 51° 28' N. Long. 0° 19' W. Height above M.S.L. 5 metres.

## 544. Richmond (Kew Observatory).

1928.

Date.	Phase.	Time.		Period	Amplitudes.			△	Remarks.	Date.	Phase.	Time.		Period	Amplitudes.			△	Remarks.
		G.M.T.			A <sub>N</sub> .	A <sub>E</sub> .	A <sub>Z</sub> .					G.M.T.			A <sub>N</sub> .	A <sub>E</sub> .	A <sub>Z</sub> .		
May 12	iP eS <sub>NE</sub> ez(PS) L <sub>NE</sub> M <sub>E</sub> F	h. m. s. 20 37 22 44 56 45 6 55 57 36 21 35	s. ... ... ... 15 ...	μ ... ... ... ... ...	μ ... ... ... +5 ...	μ ... ... ... ... ...	km. 5970 ... ... ... ...	Compression. Azimuth slightly west of south. Epicentre: 0° N., 19° W. (Atlantic Ocean), according to Zürich.	May 26	e(S) <sub>N</sub> L <sub>N</sub> M F	h. m. s. 6 2 5 0 6 7 20	s. ... ... ... ...	μ ... ... ... ...	μ ... ... ... ...	μ ... ... ... ...	km. ... ... ... ...	Felt in Italy.		
14/15	eP <sub>EZ</sub> iP <sub>Z</sub> iz eScPcS iS <sub>N</sub> e(PS) <sub>E</sub> e <sub>N</sub> SR <sub>1E</sub> L <sub>NE</sub> M <sub>1</sub> L <sub>Z</sub> M <sub>2</sub> M <sub>3</sub> M <sub>4</sub> M <sub>5</sub> M <sub>6</sub> F	22 27 30 27 35 27 43 38 4 38 21 39 8 39 40 44 2 52 9 54 8 57 4 23 1 18 23 1 38 23 2 30 22 3 40 21 4 7 2 40	... ... ... ... ... ... ... ... ... 36 ... 23 23 21 22 21 ...	... ... ... ... ... ... ... ... ... +140 ... ... ... -130 ... +120 -100 ... +110 ... +120 ...	... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ...	9840 ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ...	Compression. Amplitudes of iP as read in mm.— N E +0.2 +1.2 Azimuth = 259° ± 3°, giving epicentre near 6° S., 80° W. Destructive in Peru (Chacapoyas).	26	e(S) <sub>NE</sub> L F	8 52 37 9 (12) 35	... ... ... ...	... ... ... ...	... ... ... ...	... ... ... ...	... ... ... ...	Part lost during changing of charts.			
	eP <sub>EZ</sub> iP <sub>Z</sub> iz eScPcS iS <sub>N</sub> e(PS) <sub>E</sub> e <sub>N</sub> SR <sub>1E</sub> L <sub>NE</sub> M <sub>1</sub> L <sub>Z</sub> M <sub>2</sub> M <sub>3</sub> M <sub>4</sub> M <sub>5</sub> M <sub>6</sub> F	22 27 30 27 35 27 43 38 4 38 21 39 8 39 40 44 2 52 9 54 8 57 4 23 1 18 23 1 38 23 2 30 22 3 40 21 4 7 2 40	... ... ... ... ... ... ... ... ... 36 ... 23 23 21 22 21 ...	... ... ... ... ... ... ... ... ... +140 ... ... ... -130 ... +120 -100 ... +110 ... +120 ...	... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ...	9840 ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ...	Compression. Amplitudes of iP as read in mm.— N E +0.2 +1.2 Azimuth = 259° ± 3°, giving epicentre near 6° S., 80° W. Destructive in Peru (Chacapoyas).	26	e(S) <sub>E</sub> L F	14 26 6 46 15 0	... ... ... ...	... ... ... ...	... ... ... ...	... ... ... ...	... ... ... ...	No Z record.			
	eP <sub>EZ</sub> iP <sub>Z</sub> iz eScPcS iS <sub>N</sub> e(PS) <sub>E</sub> e <sub>N</sub> SR <sub>1E</sub> L <sub>NE</sub> M <sub>1</sub> L <sub>Z</sub> M <sub>2</sub> M <sub>3</sub> M <sub>4</sub> M <sub>5</sub> M <sub>6</sub> F	22 27 30 27 35 27 43 38 4 38 21 39 8 39 40 44 2 52 9 54 8 57 4 23 1 18 23 1 38 23 2 30 22 3 40 21 4 7 2 40	... ... ... ... ... ... ... ... ... 36 ... 23 23 21 22 21 ...	... ... ... ... ... ... ... ... ... +140 ... ... ... -130 ... +120 -100 ... +110 ... +120 ...	... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ...	9840 ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ...	Compression. Amplitudes of iP as read in mm.— N E +0.2 +1.2 Azimuth = 259° ± 3°, giving epicentre near 6° S., 80° W. Destructive in Peru (Chacapoyas).	27	iP <sub>Z</sub> iPR <sub>1</sub> ePR <sub>2</sub> iS <sub>NE</sub> iz ie(PS) ie(PPS) iSR <sub>1E</sub> iSR <sub>2E</sub> L <sub>NE</sub> L <sub>Z</sub> M <sub>1</sub> M <sub>2</sub>	10 2 52 6 7 8 8 13 12 13 28 14 0 14 22 18 50 22 7 27 33 33 21 34 26	... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ...	... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ...	9190 ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ...	Compression. Amplitudes of iP as read in mm.— N E -1.75 -0.95 Azimuth = 32° ± 3°, giving epicentre near 39° N., 136° E. N.E. of Miyako, Iwate Province, Japan, ac- cording to Kobe.					
15	eP <sub>Z</sub> iP <sub>Z</sub> eS <sub>E</sub> eS <sub>N</sub> L <sub>NE</sub> L <sub>Z</sub> M <sub>1</sub> M <sub>2</sub> F	2 48 59 49 5 59 20 59 33 3 18 7 18 9 21 38 23 18 4 35	... ... ... ... ... ... 24 22 ...	... ... ... ... ... ... +15 +9 ...	... ... ... ... ... ... ... ... ...	9220 ... ... ... ... ... ... ... ... ...	Probably a repetition of preceding shock.		M <sub>3</sub> M <sub>4</sub> M <sub>5</sub> M <sub>6</sub> M <sub>7</sub> M <sub>8</sub> M <sub>9</sub> M <sub>10</sub> L <sub>2</sub> M <sub>11</sub> F	10 35 55 39 30 39 59 40 (43) 42 2 42 (8) 43 10 44 (46) 12 2 10 14 10	... ... ... ... ... ... ... ... ... ... ... ...	... ... ... ... ... ... ... ... ... ... ... ...	... ... ... ... ... ... ... ... ... ... ... ...	... ... ... ... ... ... ... ... ... ... ... ...	... ... ... ... ... ... ... ... ... ... ... ...	*Positive maxima are off the charts.			
15	e(P) <sub>Z</sub> e(S) <sub>N</sub> L F	6 3 0 12 9 39 7 35	... ... ... ...	... ... ... ...	... ... ... ...	... ... ... ...	...		28	e(P) <sub>Z</sub> L M F	7 1 55 8 2 9 0	... ... ... ...	... ... ... ...	... ... ... ...	... ... ... ...	...			
16	e(P) <sub>Z</sub> e(S) <sub>NE</sub> L M F	8 9 36 20 12 39 42 9 5	... ... ... ... ...	... ... ... ... ...	... ... ... ... ...	... ... ... ... ...	(9520) ... ... ... ...	N and E records dis- turbed by wind. Probably a repetition of May 14d. 22 <sup>h</sup> .	28	eP <sub>NZ</sub> ePR <sub>1Z</sub> eS SR <sub>1E</sub> SR <sub>2E</sub> L <sub>NE</sub> M <sub>1</sub> M <sub>2</sub> F	15 48 10 51 20 58 29 16 3 8 7 1 16 24 5 26 46 17 0	... ... ... ... ... ... ... ... ... ...	... ... ... ... ... ... ... ... ... ...	... ... ... ... ... ... ... ... ... ...	... ... ... ... ... ... ... ... ... ...	9170 ... ... ... ... ... ... ... ... ... ...	Repetition of May 27d. 10 <sup>h</sup> .		
17	eL F	11 38 50	... ...	... ...	... ...	... ...	...			16 3 8 7 1 16 24 5 26 46 17 0	... ... ... ... ... ... ... ...	... ... ... ... ... ... ... ...	... ... ... ... ... ... ... ...	... ... ... ... ... ... ... ...	... ... ... ... ... ... ... ...	No Z record from 16 <sup>h</sup> 25 <sup>m</sup> to 17 <sup>h</sup> 40 <sup>m</sup> .			
17	eL F	12 4 12	... ...	... ...	... ...	... ...	...			24 5 26 46 17 0	... ... ... ...	... ... ... ...	... ... ... ...	... ... ... ...	... ... ... ...	...			
19	e F	0 13 16	... ...	... ...	... ...	... ...	...			17 0	... ...	... ...	... ...	... ...	... ...	... ...	...		
19	ez ez L <sub>NE</sub> F	3 41 7 4 5 5 14 45	... ... ... ...	... ... ... ...	... ... ... ...	... ... ... ...	...		30	e F	20 7 5 14	... ...	... ...	... ...	... ...	... ...	...		
19	eL F	5 1 50	... ...	... ...	... ...	... ...	...		31	eP <sub>Z</sub> L <sub>NE</sub> M F	7 38 8 9 15 40	... ... ... ...	... ... ... ...	... ... ... ...	... ... ... ...	... ... ... ...	Repetition of May 27d 10 <sup>h</sup> (according to Kobe).		
19	...	...	...	...	...	...	...	No records from 9 <sup>h</sup> 21 <sup>m</sup> to 10 <sup>h</sup> 13 <sup>m</sup> (oiling clocks).	31	ez L F	14 2 (35) 15 5	... ... ...	... ... ...	... ... ...	... ... ...	... ... ...	...		
19	eL M F	10 13 27 45	... ... ...	... ... ...	... ... ...	... ... ...	...		31	eL F	22 1 10	... ...	... ...	... ...	... ...	... ...	...		
20	iP <sub>Z</sub> eS <sub>NE</sub> L <sub>NE</sub> F	16 41 49 52 21 17 10 50	... ... ... ...	... ... ... ...	... ... ... ...	... ... ... ...	9440 ... ... ...	Compression. Felt near Tokyo (ac- cording to Press).	31	e L F	23 (50) 0 26 1 45	... ... ...	... ... ...	... ... ...	... ... ...	... ... ...	...		
21	eL F	3 2 10	... ...	... ...	... ...	... ...	...		I	eL F	9 8 16	... ...	... ...	... ...	... ...	... ...	...		
21	...	...	...	...	...	...	...	21d 9 <sup>h</sup> 30 <sup>m</sup> to 17 <sup>h</sup> 30 <sup>m</sup> 22d 11 <sup>h</sup> 20 <sup>m</sup> to 15 <sup>h</sup> 40 <sup>m</sup> No records. Elinvar spring being fitted to vertical pendulum. No Z record.	I	ez L F	12 36 0 13 12 ?	... ... ...	... ... ...	... ... ...	... ... ...	... ... ...	...	F overlapped by next shock.	
22	...	...	...	...	...	...	...		I	iP PR <sub>1Z</sub> iS SR <sub>1E</sub>	13 24 51 28 (5) 35 13 40 39	... ... ... ...	... ... ... ...	... ... ... ...	... ... ... ...	9230 ... ... ...	Compression. Repetition of May 27d. 10 <sup>h</sup> .		



Date.	Phase.	Time. G.M.T.	Period	Amplitudes.			$\Delta$	Remarks.	Date.	Phase.	Time. G.M.T.	Period	Amplitudes.			$\Delta$	Remarks.
				A <sub>N</sub> .	A <sub>E</sub> .	A <sub>Z</sub> .							A <sub>N</sub> .	A <sub>E</sub> .	A <sub>Z</sub> .		
		h. m. s.	s.	$\mu$	$\mu$	$\mu$	km.				h. m. s.	s.	$\mu$	$\mu$	$\mu$	km.	
June I cont.	L <sub>E</sub>	53.3	...	...	...	...	...		June 16	e(P) <sub>Z</sub>	19 0	...	...	...	...	...	
	L <sub>Z</sub>	58	...	...	...	...	...			e(S) <sub>N</sub>	9 59	...	...	...	...	...	
	M <sub>1</sub>	14 0 48	21	...	+30	...	...			L	30	...	...	...	...	...	
	M <sub>2</sub>	2 42	20	...	+28	...	...			F	20 5	...	...	...	...	...	
	M <sub>3</sub>	3 31	22	+32	...	...	...		17	iP	3 31 49	...	...	...	...	9280	Compression.
	M <sub>4</sub>	3 50	22	...	...	+30	...			iPR <sub>1</sub> <sup>E</sup>	34 55	...	...	...	...	...	Amplitudes of iP as
	F	15 45	...	...	...	...	...			ePR <sub>2</sub>	37.3	...	...	...	...	...	read in mm.—
1	eL	15 55	...	...	...	...	...			iS <sub>E</sub>	42 13	...	...	...	...	...	N E Z
	F	16 20	...	...	...	...	...			SR <sub>1</sub> <sup>E</sup>	47.3	...	...	...	...	...	-2.75 +7.85 +12.0
1	eL	19 12	...	...	...	...	...			SR <sub>2</sub> <sup>E</sup>	51.5	...	...	...	...	...	Azimuth = 288° ± 1°,
	F	22	...	...	...	...	...			L <sub>N</sub>	58 16	...	...	...	...	...	giving epicentre near
1.	eL	22 53	...	...	...	...	...			L <sub>Z</sub>	58 27	...	...	...	...	...	16° N., 100° W., off
	F	23 10	...	...	...	...	...			M <sub>1</sub>	58 34	29	+215	...	...	...	Pacific Coast of
3	eL	4 0	...	...	...	...	...			L <sub>Z</sub>	59.5	...	...	...	...	...	Mexico.
	F	25	...	...	...	...	...			M <sub>2</sub>	4 0 9	30	...	+530†	...	...	†Negative maximum off
3	eP <sub>Z</sub>	8 43 42	...	...	...	...	(9250)	Epicentre: 32° N., 129° 5' E. (Japan), according to Zurich.		M <sub>3</sub>	3 19	24	...	...	+520†	...	chart.
	eS <sub>E</sub>	54 (5)	...	...	...	...	...			M <sub>4</sub>	3 33	25	+250	...	...	...	*Positive and negative
	L <sub>N</sub>	9 16	...	...	...	...	...			M <sub>5</sub>	3.4	24	...	> 440*	...	...	maxima off chart.
	M <sub>1</sub>	21 34	18	...	+25	...	...			M <sub>6</sub>	7 24	21	+240	...	...	...	
	M <sub>2</sub>	27 2	14	...	...	-30	...			M <sub>7</sub>	7 44	20	...	...	+470†	...	
	M <sub>3</sub>	27 3	15	-40	-31	...	...			M <sub>8</sub>	10-12	17	...	> 340*	...	...	
	F	10 40	...	...	...	...	...			M <sub>9</sub>	11 22	17	...	...	+500†	...	
3	eL	22 57	...	...	...	...	...			M <sub>10</sub>	12 59	17	-220	...	...	...	
	F	23 15	...	...	...	...	...		17	F	8 40	...	...	...	...	...	Overlapped by pre- ceding disturbance.
5	e(P) <sub>Z</sub>	6 8 16	...	...	...	...	...			iz	7 0 37	...	...	...	...	...	Traces of short period (2 sec.) oscillations on N. and E. compo- nents.
	L <sub>N</sub>	40	...	...	...	...	...			F	?	...	...	...	...	...	
	F	7 5	...	...	...	...	...		17	iP <sub>EZ</sub>	22 33 27	...	...	...	...	9170	Probably a repetition of the shock at 3 <sup>h</sup> .
6	eL	20 26	...	...	...	...	...			eS <sub>N</sub>	43 46	...	...	...	...	...	
	F	50	...	...	...	...	...			L <sub>N</sub>	23 0	...	...	...	...	...	
7	eL	3 58	...	...	...	...	...			M <sub>E</sub>	10	18	...	...	...	...	
	F	4 10	...	...	...	...	...		17/18	F	35	...	...	...	...	...	
7	e	13 6	...	...	...	...	...	Damage at Corinth (according to press).		iP <sub>EZ</sub>	23 37 8	...	...	...	...	9050	Probably a repetition of the shock at 3 <sup>h</sup> .
8	ez	14 58(58)	...	...	...	...	...	N and E components disturbed by wind.		eS <sub>E</sub>	47 25	...	...	...	...	...	
	ez	15 0 31	...	...	...	...	...			L <sub>N</sub>	0 4	...	...	...	...	...	
	L	(46)	...	...	...	...	...			M <sub>E</sub>	14	18	...	...	...	...	
	F	17 0	...	...	...	...	...			F	45	...	...	...	...	...	
13	e	8 1	...	...	...	...	...	Not very distant.	18	eL	16 27	...	...	...	...	...	
	F	4	...	...	...	...	...			F	35	...	...	...	...	...	
14	e	16 40	...	...	...	...	...		18	eL	22 55	...	...	...	...	...	
	F	17 5	...	...	...	...	...			F	23 10	...	...	...	...	...	
15	eL	4 56	...	...	...	...	...		21	ez	4 5 45	...	...	...	...	...	
	F	5 10	...	...	...	...	...			ez	27.8	...	...	...	...	...	
15	eP	6 26 18	...	...	...	...	(11050)	Epicentre S.W. of Manila; 13° 5' N., 118° E., according to Strasbourg.		L	5 0	...	...	...	...	...	
	PR <sub>1</sub>	30 20	...	...	...	...	...			F	6 0	...	...	...	...	...	
	PR <sub>2</sub>	33 (2)	...	...	...	...	...		21	eP <sup>1</sup>	10 59 54	...	...	...	...	(16000)	Fiji Islands; 18° S., 178° W., according to U.S.C. & G.S.
	iScPcS	36 57	...	...	...	...	...			e(PR <sub>1</sub> )	11 1 36	...	...	...	...	...	Very irregular long waves.
	en(S)	38 1	...	...	...	...	...			ez	22 13	...	...	...	...	...	
	ezPS	39 9	...	...	...	...	...			L	(41)	...	...	...	...	...	
	en(PPS)	40.3	...	...	...	...	...			M <sub>1</sub>	12 36 14	21	+16	...	...	...	
	enSR <sub>1</sub>	44.7	...	...	...	...	...			M <sub>2</sub>	37 2	19	...	...	+12	...	
	enSR <sub>2</sub>	49.0	...	...	...	...	...			M <sub>3</sub>	39 4	18	...	-15	...	...	
	enSR <sub>3</sub>	53.7	...	...	...	...	...			F	13 50	...	...	...	...	...	
	L <sub>N</sub>	7 1	...	...	...	...	...		21	iP	16 37 58	...	...	...	...	7340	Compression.
	L <sub>Z</sub>	6	...	...	...	...	...			i	38 10	...	...	...	...	...	Amplitudes of i as
	M <sub>1</sub>	5 42	26	...	-71	...	...			PR <sub>1</sub> <sup>Z</sup>	40 24	...	...	...	...	...	read in mm.—
	M <sub>2</sub>	7 27	23	+100	-82	...	...			PR <sub>2</sub>	41 47	...	...	...	...	...	N E
	M <sub>3</sub>	13 26	19	...	-64	...	...			iS <sub>N</sub>	46 44	...	...	...	...	...	+4.5 -1.3
	M <sub>4</sub>	7 16 41	19	+62	...	...	...			iz	46 58	...	...	...	...	...	Azimuth = 342° ± 5°
	M <sub>5</sub>	16 55	18	...	...	+60	...			iE(PS)	47 53	...	...	...	...	...	giving epicentre near
	F	9 25	...	...	...	...	...			SR <sub>1</sub> <sup>N</sup>	51.0	...	...	...	...	...	59° N., 147° W.
15	e(P) <sub>Z</sub>	17 30.7	...	...	...	...	(11000)	Repetition of preceding shock.		SR <sub>2</sub> <sup>E</sup>	54 31	...	...	...	...	...	Felt on south coast of Alaska.
	ePR <sub>1</sub> <sup>Z</sup>	34 38	...	...	...	...	...			L <sub>N</sub>	58	...	...	...	...	...	
	L <sub>N</sub>	18 5	...	...	...	...	...			L <sub>Z</sub>	17 1	...	...	...	...	...	
	M <sub>1</sub>	9 18	27	+55	-67	...	...			M <sub>1</sub>	1 41	25	-75	...	...	...	
	L <sub>Z</sub>	10	...	...	...	...	...			M <sub>2</sub>	3 49	20	...	+72	...	...	
	M <sub>2</sub>	12 57	21	...	+42	...	...			M <sub>3</sub>	7 30	19	+85	...	...	...	
	M <sub>3</sub>	21 32	18	...	...	-30	...			M <sub>4</sub>	7 45	18	...	...	+90	...	
	F	20 0	...	...	...	...	...			M <sub>5</sub>	8 38	15	...	+60	...	...	
			...	...	...	...	...			M <sub>6</sub>	9 20	18	+80	...	...	...	
			...	...	...	...	...			L <sub>2</sub>	18 57	...	...	...	...	...	
			...	...	...	...	...			F	19 55	...	...	...	...	...	







## 544. Richmond (Kew Observatory).

1928.

Date.	Phase.	Time. G.M.T.	Period	Amplitudes.			$\Delta$	Remarks.	Date.	Phase.	Time. G.M.T.	Period	Amplitudes.			$\Delta$	Remarks.
				A <sub>N</sub> .	A <sub>E</sub> .	A <sub>Z</sub> .							A <sub>N</sub> .	A <sub>E</sub> .	A <sub>Z</sub> .		
		h. m. s.	s.	$\mu$	$\mu$	$\mu$	km.				h. m. s.	s.	$\mu$	$\mu$	$\mu$	km.	
July 23	e F	16 15 20	...	...	...	...	...	No E record.	Aug. 10	eSR <sub>1</sub> NZ L F	50 (53) 16 (4) 45	...	...	...	...	...	Surface waves very small and irregular.
26	eL F	13 23 42	...	...	...	...	...		12	ePz ePR <sub>1</sub> z eNE ePSz eSR <sub>1</sub> N L F	8 23.8 27.9 33 39 37 6 43.4 9 (0) 10 0	...	...	...	...	(12000)	Near Menado, East Indies, according to Batavia.
28	ez L F	20 8 39 21 15	...	...	...	...	...		15	e(S) L M F	12 15 40 19 20 1 30	...	...	...	...	...	Surface waves very small and irregular.
29	e F	18 27 33	...	...	...	...	...		15	Pz e(S) L F	15 45 54 51.7 56.5 16 30	...	...	...	...	...	Atlantic Ocean.
30	ez L M F	2 56.0 3 20 27 4 10	...	...	...	...	...		15	Pz ez iS ePSN eSR <sub>1</sub> N eSR <sub>2</sub> N LNE F	17 28 8 30 21 37 47 38 44 42.7 45 28 52.5 18 40	...	...	...	...	8380	
31	eL F	20 16 40	...	...	...	...	...	Felt in Iceland, according to Scoresby Sund.	16	eL F	8 3 20	...	...	...	...	...	
Aug. 1	ez L F	19 12 39 55 20 5	...	...	...	...	...		19	eP e(S) <sub>N</sub> L M F	2 54 28 58 1 59 3 0 25	...	...	...	...	(2110)	
1	e F	20 32 21 5	...	...	...	...	...		19	eL F	4 30 40	...	...	...	...	...	
2	eL F	7 20 35	...	...	...	...	...		20	eL F	2 45 3 0	...	...	...	...	...	
3	ez L F	7 20 16 30 50	...	...	...	...	...		20	...	...	...	...	...	...	...	9 <sup>h</sup> 50 <sup>m</sup> to 11 <sup>h</sup> 5 <sup>m</sup> 13 <sup>h</sup> 15 <sup>m</sup> to 16 <sup>h</sup> 0 <sup>m</sup> No records.
3	ePNZ iSN L M F	11 54 16 12 1 57 11.2 14 26 13 10	...	...	...	...	6100	Atlantic Ocean, near 3° S., 13° W.	21	eL F	19 30 50	...	...	...	...	...	
4	ez eez F	4 24 54 27 12 29	...	...	...	...	...	N and E records disturbed by wind.	22	eL F	7 17 30	...	...	...	...	...	
4	ez Lz F	7 23 29 40	...	...	...	...	...		23	ez ez ine F	1 28 40 30 44 37 30 45	...	...	...	...	...	
4	iPz iPe, en iPR <sub>1</sub> iS ie PSz SR <sub>1</sub> NE SR <sub>2</sub> iN en LNE Lz M <sub>1</sub> M <sub>2</sub> M <sub>3</sub> M <sub>4</sub> M <sub>5</sub> M <sub>6</sub> M <sub>7</sub> M <sub>8</sub> F	18 38 37 38 38 41 48 49 5 49 22 50 3 53 41 18 59 2 19 0 16 1.8 4.2 7 11 40 11 46 12 53 15 11 16 15 20 27 20 30 22 28 23 5	...	...	...	...	9360	Compression. Amplitudes of iP as read in mm.— N E Z -1.4 +4.05 +6.2 Azimuth = 288° ± 1°, giving epicentre near 15° N., 100° W. Destructive in province of Oaxaca, Mexico.	23	e(P) e(S) <sub>N</sub> L M F	4 13.3 19.0 21 21 25 40	...	...	...	...	(3800)	Felt in Persia.
5	ePz e(ScPcS) <sub>NE</sub> eNE L M F	14 55 18 5 54 6 14 30 41 16 10	...	...	...	...	(12000)	East Indies. Shocks felt at Manila. Tidal wave near Island of Flores.	23	e F	5 35.1 40	...	...	...	...	...	
8	eL F	3 10 35	...	...	...	...	...	(4200)	24	ePNZ eSNZ LNE M <sub>1</sub> Lz M <sub>2</sub> M <sub>3</sub> F	9 48 (5) 51 (20) 52.2 53 (8) 53.8 54 (33) 54 (41) 10 15	...	...	...	...	1910	Absolute times uncertain. Epicentre: 36° N., 1° E., according to Almeria. Felt at Inkerman, Algeria.
10	iPz, eNE iPR <sub>1</sub> , eNE eSN	15 42 30 43 46 48.4	...	...	...	...	...		24	ez enz ene LNE F	22 2 38 6 24 25 (36) 23 55	...	...	...	...	...	



SEISMOLOGICAL DIARY :—continued. Instruments.—Two horizontal and one vertical Galitzin Seismographs with galvanometric registration,  
Lat. 51° 28' N. Long. 0° 19' W. Height above M.S.L. 5 metres.

## 544. Richmond (Kew Observatory).

1928.

Date.	Phase.	Time. G.M.T.	Period	Amplitudes.			△	Remarks.	Date.	Phase.	Time. G.M.T.	Period	Amplitudes.			△	Remarks.
				A <sub>N</sub> .	A <sub>E</sub> .	A <sub>Z</sub> .							A <sub>N</sub> .	A <sub>E</sub> .	A <sub>Z</sub> .		
Aug.		h. m. s.	s.	μ	μ	μ	km.		Sept.		h. m. s.	s.	μ	μ	μ	km.	
25	eL <sub>NE</sub> F	0 22 50	...	...	...	...	...	No Z record.	5	eL F	3 18 40	...	...	...	...	...	No Z record. N and E records disturbed by wind.
25	eL <sub>NE</sub> F	2 30 50	...	...	...	...	...		6	eL <sub>NE</sub> F	7 16 40	...	...	...	...	...	
25	eL F	17 4 20	...	...	...	...	...		6	eL <sub>Z</sub> F	10 16 40	...	...	...	...	...	
25	(ez) (eL) M <sub>N</sub> F	21 10 15.5 16.0 25	...	...	...	...	...	Felt at Zagreb, Jugo Slavia.	7	e(P) <sub>Z</sub> L <sub>E</sub> M <sub>E</sub> F	3 10 (17) 49 4 3 5 10	...	...	...	...	N record defective.	
26	eL F	5 10 6 30	...	...	...	...	...	Overlapping preceding disturbance.	11	ez ez e <sub>N</sub> L M <sub>N</sub> F	0 56 15 59 (58) 1 5 33 40 47 2 45	...	...	...	...	...	
26	ez F	5 16 26 ?	...	...	...	...	...		11	eP <sub>Z</sub> eS <sub>E</sub> iS <sub>E</sub> ePS <sub>N</sub> eSR <sub>1</sub> <sub>NE</sub> L <sub>NE</sub> L <sub>Z</sub> M <sub>1</sub> M <sub>2</sub> M <sub>3</sub> F	12 48 10 57 49 57 56 58 29 2 39 10 16 18 53 20 29 22 12 14 50	...	...	...	...	8380 Epicentre : North Pacific Ocean, 43° N., 132° W., according to Jesuit Seis. Assoc.	
26	eL F	19 4 15	...	...	...	...	...		12	e(P) <sub>Z</sub> i(PR <sub>1</sub> ) <sub>Z</sub> i(PR <sub>2</sub> ) <sub>Z</sub> e(ScPcS) <sub>NZ</sub> e(PS) <sub>EZ</sub> L <sub>NE</sub> F	1 39 7 39 48 43 28 45 48 49 36 2 11-14 3 25	...	...	...	...	(12000) Probably near the East Indies.	
28	eL F	1 50 55	...	...	...	...	...	N and E records disturbed by wind.	13	eP <sub>Z</sub> ePR <sub>1</sub> eS <sub>NE</sub> i ez L M <sub>N</sub> F	3 41 45 41 51 37 54 51 56 1 4 19 33 14 6 5	...	...	...	...	(12000) Menado, East Indies, according to Batavia.	
28	eL <sub>Z</sub> F	9 34 50	...	...	...	...	...		13	eL F	19 16.6 20	...	...	...	...	...	
29	eL F	3 55 4 30	...	...	...	...	...		14	eP eS <sub>N</sub> L <sub>NE</sub> L <sub>Z</sub> M <sub>N</sub> F	8 10 23 17 (6) 22 23.1 24 50	...	...	...	...	(5000)	
29	eL F	18 5 25	...	...	...	...	...	N and E records disturbed by wind.	16	e F	3 8 12	...	...	...	...	...	
30	eP <sub>Z</sub> ePR <sub>1</sub> <sub>Z</sub> ePR <sub>2</sub> <sub>Z</sub> eS <sub>E</sub> ePS <sub>EZ</sub> L <sub>NE</sub> L <sub>Z</sub> F	6 44 5 47 38 50 31 55 0 56 0 7 15 23 55	...	...	...	...	9940		18	eP <sub>Z</sub> iS <sub>N</sub> eS <sub>EZ</sub> e(SR <sub>1</sub> ) <sub>N</sub> e(SR <sub>2</sub> ) <sub>NZ</sub> L M <sub>1</sub> M <sub>2</sub> M <sub>3</sub> F	17 28 51 36 40 36 44 42 40 45.6 17 (46) 56 32 56 41 56 44 19 50	...	...	...	...	6240 Atlantic Ocean, near 2° N., 30° W.	
30	ez F	11 51 55	...	...	...	...	...		18	(eP <sub>Z</sub> ) iP <sub>Z</sub> iPR <sub>2</sub> iS <sub>NE</sub> e(SR <sub>1</sub> ) <sub>E</sub> e(SR <sub>2</sub> ) <sub>N</sub> L <sub>NE</sub> L <sub>Z</sub> M <sub>1</sub> M <sub>2</sub> M <sub>3</sub> F	20 2 16 2 22 5 46 10 6 15 6 16 33 20 22 25 39 29 4 29 10 22 0	...	...	...	...	6260 This may be a micro-seism. Epicentre near 12° N., 52° E. (Gulf of Aden).	
30	eL F	12 56 13 10	...	...	...	...	...	N and E records disturbed by wind.	18	eP <sub>Z</sub> iS <sub>N</sub> eS <sub>EZ</sub> e(SR <sub>1</sub> ) <sub>N</sub> e(SR <sub>2</sub> ) <sub>NZ</sub> L M <sub>1</sub> M <sub>2</sub> M <sub>3</sub> F	17 28 51 36 40 36 44 42 40 45.6 17 (46) 56 32 56 41 56 44 19 50	...	...	...	...	Commencement of L very indistinct.	
30	ez L F	22 11.5 43 23 0	...	...	...	...	...		18	(eP <sub>Z</sub> ) iP <sub>Z</sub> iPR <sub>2</sub> iS <sub>NE</sub> e(SR <sub>1</sub> ) <sub>E</sub> e(SR <sub>2</sub> ) <sub>N</sub> L <sub>NE</sub> L <sub>Z</sub> M <sub>1</sub> M <sub>2</sub> M <sub>3</sub> F	20 2 16 2 22 5 46 10 6 15 6 16 33 20 22 25 39 29 4 29 10 22 0	...	...	...	...		
31	e L F	5 31 23 37 6 0	...	...	...	...	...		18	(eP <sub>Z</sub> ) iP <sub>Z</sub> iPR <sub>2</sub> iS <sub>NE</sub> e(SR <sub>1</sub> ) <sub>E</sub> e(SR <sub>2</sub> ) <sub>N</sub> L <sub>NE</sub> L <sub>Z</sub> M <sub>1</sub> M <sub>2</sub> M <sub>3</sub> F	20 2 16 2 22 5 46 10 6 15 6 16 33 20 22 25 39 29 4 29 10 22 0	...	...	...	...		
Sept. 1	eP <sub>Z</sub> S <sub>NE</sub> L <sub>NE</sub> L <sub>Z</sub> M <sub>1</sub> M <sub>2</sub> M <sub>3</sub> F	6 18 39 26 27 38 40.5 48 35 48 37 48 40 8 35	...	...	...	...	6230	Probably in Siberia.	16	e F	3 8 12	...	...	...	...	...	
1	eL <sub>Z</sub> F	8 49 9 50	...	...	...	...	...	N and E records disturbed by wind.	18	eP <sub>Z</sub> iS <sub>N</sub> eS <sub>EZ</sub> e(SR <sub>1</sub> ) <sub>N</sub> e(SR <sub>2</sub> ) <sub>NZ</sub> L M <sub>1</sub> M <sub>2</sub> M <sub>3</sub> F	17 28 51 36 40 36 44 42 40 45.6 17 (46) 56 32 56 41 56 44 19 50	...	...	...	...	6240 Atlantic Ocean, near 2° N., 30° W.	
2	eP <sub>EZ</sub> eS <sub>E</sub> L M F	0 6 15 16 19 32.5 43 1 35	...	...	...	...	8840	Southern Mexico.	18	(eP <sub>Z</sub> ) iP <sub>Z</sub> iPR <sub>2</sub> iS <sub>NE</sub> e(SR <sub>1</sub> ) <sub>E</sub> e(SR <sub>2</sub> ) <sub>N</sub> L <sub>NE</sub> L <sub>Z</sub> M <sub>1</sub> M <sub>2</sub> M <sub>3</sub> F	20 2 16 2 22 5 46 10 6 15 6 16 33 20 22 25 39 29 4 29 10 22 0	...	...	...	...	6260 This may be a micro-seism. Epicentre near 12° N., 52° E. (Gulf of Aden).	
2	...	...	...	...	...	...	...	No records from 4 <sup>h</sup> 30 <sup>m</sup> to 7 <sup>h</sup> 25 <sup>m</sup> . No N record.	18	(eP <sub>Z</sub> ) iP <sub>Z</sub> iPR <sub>2</sub> iS <sub>NE</sub> e(SR <sub>1</sub> ) <sub>E</sub> e(SR <sub>2</sub> ) <sub>N</sub> L <sub>NE</sub> L <sub>Z</sub> M <sub>1</sub> M <sub>2</sub> M <sub>3</sub> F	20 2 16 2 22 5 46 10 6 15 6 16 33 20 22 25 39 29 4 29 10 22 0	...	...	...	...		
2	ez L <sub>EZ</sub> F	17 16 35 18 16 19 10	...	...	...	...	...		18	(eP <sub>Z</sub> ) iP <sub>Z</sub> iPR <sub>2</sub> iS <sub>NE</sub> e(SR <sub>1</sub> ) <sub>E</sub> e(SR <sub>2</sub> ) <sub>N</sub> L <sub>NE</sub> L <sub>Z</sub> M <sub>1</sub> M <sub>2</sub> M <sub>3</sub> F	20 2 16 2 22 5 46 10 6 15 6 16 33 20 22 25 39 29 4 29 10 22 0	...	...	...	...		
3	eL F	22 5 20	...	...	...	...	...		18	(eP <sub>Z</sub> ) iP <sub>Z</sub> iPR <sub>2</sub> iS <sub>NE</sub> e(SR <sub>1</sub> ) <sub>E</sub> e(SR <sub>2</sub> ) <sub>N</sub> L <sub>NE</sub> L <sub>Z</sub> M <sub>1</sub> M <sub>2</sub> M <sub>3</sub> F	20 2 16 2 22 5 46 10 6 15 6 16 33 20 22 25 39 29 4 29 10 22 0	...	...	...	...		







**1928.**

 $\dagger K^*$



## 544. Richmond (Kew Observatory).

1928.

Date.	Phase.	Time. G.M.T.	Period	Amplitudes.			$\Delta$	Remarks.
				A <sub>N</sub> .	A <sub>E</sub> .	A <sub>Z</sub> .		
		h. m. s.	s.	$\mu$	$\mu$	$\mu$	km.	
Dec. I cont.	M <sub>1</sub>	5 1 14	25	...	+450*	...	...	
	M <sub>2</sub>	3 41	23	...	...	+410	...	
	M <sub>3</sub>	3 59	23	+310	...	...	...	*Negative maxima off the charts.
	M <sub>4</sub>	5-9	(20)	>320†	>370†	>470†	...	†Positive and negative maxima off the charts.
	M <sub>5</sub>	10 40	18	...	...	+250	...	
	M <sub>6</sub>	11 5	19	...	>370*	...	...	
	M <sub>7</sub>	12 48	20	+270	...	...	...	
	M <sub>8</sub>	16 25	17	+200	...	...	...	
	F	9 0	...	...	...	...	...	
I	eL	10 13	...	...	...	...	...	
	M	20	20	...	...	...	...	
	F	50	...	...	...	...	...	
I	eL	19 27	...	...	...	...	...	
	M	33	20	...	...	...	...	
	F	55	...	...	...	...	...	
2	ePz	4 34 42	...	...	...	...	(12000)	Repetition of the shock on Dec. 1d. 4h.
	PR <sub>1</sub>	39 0	...	...	...	...	...	
	ScPcS <sub>NE</sub>	45 19	...	...	...	...	...	
	iPS <sub>E</sub>	48 32	...	...	...	...	...	
	SR <sub>1N</sub>	54 2	...	...	...	...	...	
	L <sub>NE</sub>	5 6	...	...	...	...	...	
	Lz	10	...	...	...	...	...	
	M <sub>1</sub>	21 24	21	...	-80	...	...	
	M <sub>2</sub>	22 48	19	...	...	-85	...	
	M <sub>3</sub>	22 52	19	+83	...	...	...	
	M <sub>4</sub> *	6 34 42	20	+12	...	...	...	* Via Antipodes.
	F	7 55	...	...	...	...	...	
3	eL <sub>E</sub>	5 36 0	...	...	...	...	...	Not very distant. Azimuth approximately north or south.
	eL <sub>NZ</sub>	37 9	...	...	...	...	...	
	M	39	...	...	...	...	...	
	F	50	...	...	...	...	...	
3	eL	13 6	...	...	...	...	...	
	F	30	...	...	...	...	...	
7	(ez)	9 34	...	...	...	...	...	Probably a repetition of the shock on Dec. 1d. 4h.
	eNE	55	...	...	...	...	...	
	L <sub>NE</sub>	10 5	(60)	...	...	...	...	
	M	20 10	21	+25	...	...	...	
	F	11 45	...	...	...	...	...	
9	eL	1 7	...	...	...	...	...	
	F	2 0	...	...	...	...	...	
9	ez	5 26	...	...	...	...	...	
	L	6 5	...	...	...	...	...	
	F	7 50	...	...	...	...	...	
9	ez	10 6	...	...	...	...	...	Traces on N. and E. records.
	F	20	...	...	...	...	...	
9	eL	19 15	...	...	...	...	...	
	F	45	...	...	...	...	...	
Dec. 10	iP <sub>EZ</sub>	7 8 7	...	...	...	...	2560	Compression. Epicentre near Crete: 36° N., 24° E., according to Oxford.
	iS	12 17	...	...	...	...	...	
	L	12 8	...	...	...	...	...	
	F	20	...	...	...	...	...	
12	iP <sub>z</sub>	20 39 42	...	...	...	...	(17500)	Dilatation. Near Fiji Islands; 23° S., 175° E., according to Denver.
	PR <sub>1z</sub>	43 46	...	...	...	...	...	
	iSR <sub>1z</sub>	21 3 38	...	...	...	...	...	
	L <sub>NE</sub>	40	...	...	...	...	...	
	Lz	42	...	...	...	...	...	
	M <sub>N</sub>	50 22	20	+20	...	...	...	
	F	23 0	...	...	...	...	...	
13	eL	3 28	...	...	...	...	...	
	F	50	...	...	...	...	...	
14	eL <sub>N</sub>	1 1 2	...	...	...	...	...	
	F	20	...	...	...	...	...	
14	eL	2 50	...	...	...	...	...	
	F	3 30	...	...	...	...	...	
16	eLz	19 44	...	...	...	...	...	N. and E. records disturbed by wind.
	F	50	...	...	...	...	...	
19	ePz	11 51 22	...	...	...	...	...	Epicentre: South of Mindanao; 6° N., 124° 5 E., according to Strasbourg.
	iPR <sub>1z</sub>	55 39	...	...	...	...	...	
	eNE	12 2 3	...	...	...	...	...	
	iz	6 37	...	...	...	...	...	
	iSR <sub>1NE</sub>	10 43	...	...	...	...	...	
	L <sub>NE</sub>	29 1	(38)	...	...	...	...	
	Lz	35	(27)	...	...	...	...	
	M <sub>1</sub>	35 2	26	...	-270*	...	...	
	M <sub>2</sub>	36 27	23	...	-310*	...	...	
	M <sub>3</sub>	39 20	23	...	-260*	...	...	*Positive maxima off the charts.
	M <sub>4</sub>	40 16	21	...	-280*	...	...	
	M <sub>5</sub>	43 6	18	...	...	+120	...	
	M <sub>6</sub>	48 32	16	...	...	+80	...	
	F	16 20	...	...	...	...	...	
20	eL	7 30	...	...	...	...	...	
	F	50	...	...	...	...	...	
26	e	21 55	...	...	...	...	...	
	F	22 20	...	...	...	...	...	
27	eL	5 46	...	...	...	...	...	
	F	6 15	...	...	...	...	...	
28	ePR <sub>1z</sub>	14 38 7	...	...	...	...	...	Repetition of the shock on Dec. 19d. 11h.
	ez	36 4	...	...	...	...	...	
	iNE	44 27	...	...	...	...	...	
	ee(SR)	15 2 1	...	...	...	...	...	
	L <sub>NE</sub>	10	...	...	...	...	...	
	Lz	17	...	...	...	...	...	
	M <sub>1</sub>	17 8	23	+45	...	...	...	
	M <sub>2</sub>	18 7	20	...	-30	...	...	
	M <sub>3</sub>	25 29	19	...	...	+30	...	
	F	17 0	...	...	...	...	...	



Derived from readings for the period of thirty minutes centering at the exact hour, Greenwich Mean Time.

## 544. Richmond (Kew Observatory).

1928.

Month	January.								February.								March.							
Hour G.M.T.	o h.		6 h.		12 h.		18 h.		o h.		6 h.		12 h.		18 h.		o h.		6 h.		12 h.		18 h.	
	A.	Tp.	A.	Tp.	A.	Tp.	A.	Tp.	A.	Tp.	A.	Tp.	A.	Tp.	A.	Tp.	A.	Tp.	A.	Tp.	A.	Tp.	A.	Tp.
Day.	$\mu$	S.	$\mu$	S.	$\mu$	S.	$\mu$	S.	$\mu$	S.	$\mu$	S.	$\mu$	S.	$\mu$	S.	$\mu$	S.	$\mu$	S.	$\mu$	S.	$\mu$	S.
1	1.4	6.3	1.0	6.0	1.2	6.0	2.1	6.0	1.9	6.5	2.7	6.0	3.5	7.0	4.8	7.3	1.7	5.8	2.0	5.2	1.5	5.8	1.4	6.0
2	2.2	5.4	2.7	5.2	2.3	6.0	2.3	5.8	5.3	8.0	3.6	8.3	3.9	7.3	3.1	7.0	2.1	5.6	1.8	6.0	1.2	6.0	1.5	6.7
3	2.4	5.6	2.3	5.2	1.7	5.8	1.8	6.0	2.0	7.0	1.8	7.0	2.2	6.3	2.7	6.5	1.4	6.3	1.2	6.5	1.3	5.8	0.9	6.7
4	1.6	6.5	1.2	6.0	1.5	5.8	1.6	6.0	1.9	6.5	1.9	6.7	1.9	6.7	2.6	6.7	0.4	5.4	0.4	6.7	0.4	6.5	0.2	6.3
5	2.1	6.0	3.4	6.7	2.6	6.7	2.3	7.5	3.2	7.3	3.2	7.3	5.0	8.3	5.0	8.3	0.5	5.2	0.5	5.0	0.3	4.5	0.2	5.8
6	2.0	7.0	2.1	6.0	2.7	5.4	2.4	4.8	4.5	8.0	5.5	8.3	5.0	8.0	3.6	8.3	0.2	5.4	0.4	5.8	0.4	5.8	0.8	4.5
7	1.9	5.6	1.7	5.6	1.4	6.0	1.2	6.0	4.5	7.5	4.1	7.7	4.6	7.0	4.0	9.0	0.5	4.7	0.6	4.0	0.8	4.3	1.7	4.1
8	2.4	7.7	3.5	7.3	5.1	9.7	5.9	9.7	4.6	7.7	3.4	7.3	3.2	8.0	2.0	7.0	0.8	4.3	0.7	4.7	0.3	3.3	0.3	3.6
9	5.7	9.0	4.0	7.5	3.6	8.3	4.2	8.0	3.5	7.0	3.6	6.7	4.6	7.0	5.0	8.0	0.6	3.7	1.0	4.7	0.5	5.0	1.5	5.4
10	5.3	7.7	5.5	8.0	4.4	8.3	3.9	8.3	3.7	7.0	2.3	7.5	3.7	6.5	4.9	6.7	1.3	5.4	1.1	5.2	0.9	5.2	1.1	4.0
11	3.7	8.3	2.4	7.5	2.9	7.0	2.1	6.5	4.6	7.0	6.0	8.3	3.5	6.5	3.4	6.7	1.2	4.7	1.2	4.7	1.0	4.5	1.0	5.8
12	1.9	6.7	2.2	6.3	2.0	6.3	2.3	6.5	2.2	6.3	1.9	6.5	2.0	5.4	2.1	5.6	2.1	6.0	1.8	6.3	1.3	7.0	1.3	4.5
13	4.1	6.7	4.1	6.7	5.2	7.5	3.6	6.7	2.1	5.0	1.8	5.4	1.5	5.6	1.6	5.0	0.9	7.3	0.7	7.0	1.0	6.3	0.6	6.7
14	2.9	6.0	2.1	6.0	2.1	6.0	2.1	6.5	2.3	5.8	2.3	5.8	2.3	6.0	2.4	6.3	0.9	5.4	0.9	5.4	1.6	5.0	1.8	5.2
15	2.2	7.0	4.1	7.3	4.8	9.0	3.3	7.5	2.4	6.3	2.5	5.8	2.1	6.0	3.2	6.7	1.5	8.0	1.4	6.0	0.7	5.2	0.5	7.3
16	2.1	7.5	1.9	7.5	2.1	6.0	2.1	6.0	3.5	7.3	2.9	6.5	2.2	5.4	2.3	5.2	0.4	6.0	...	...	0.7	4.8	0.8	5.8
17	1.8	7.0	1.8	7.0	2.1	5.8	2.7	5.4	2.1	6.7	2.3	6.7	3.3	7.0	2.7	7.0	0.8	5.8	1.1	5.2	1.9	4.8	1.8	6.0
18	2.0	7.0	1.8	7.0	1.7	6.5	1.7	6.7	3.4	7.3	3.4	7.3	1.9	7.5	1.6	7.3	1.5	5.8	1.4	6.0	1.8	5.2	1.6	6.0
19	2.1	6.7	2.4	6.7	3.4	6.7	1.9	6.7	2.1	6.0	1.6	7.0	1.7	6.7	1.5	6.7	2.0	5.4	2.1	5.6	1.5	5.8	2.1	5.6
20	2.4	7.0	3.0	6.7	3.2	6.7	3.5	9.3	1.4	6.3	1.3	7.0	1.3	7.0	1.7	7.5	2.7	6.0	2.8	6.3	2.3	5.2	2.2	4.8
21	4.8	9.0	3.5	8.7	5.0	8.3	4.0	8.0	1.9	6.7	2.1	6.7	2.2	7.0	2.3	7.3	1.9	5.6	2.1	6.0	2.3	5.8	2.2	5.4
22	3.7	7.0	3.3	7.5	2.7	7.0	2.3	6.7	2.6	7.0	2.7	7.0	2.3	7.3	3.0	7.3	1.9	5.6	...	...	1.7	5.6	1.9	5.0
23	2.2	7.0	1.7	7.5	1.9	6.7	1.8	7.0	3.0	7.5	2.3	7.3	2.4	7.5	2.6	7.0	1.7	5.6	2.0	4.7	1.1	6.7	1.3	6.7
24	2.4	7.0	3.7	7.3	3.2	7.3	4.2	7.0	1.8	7.3	1.6	7.3	1.9	6.7	1.6	7.0	1.6	6.5	1.4	6.5	1.2	6.3	0.8	6.3
25	3.3	7.0	3.7	8.3	4.9	7.5	4.4	8.7	1.6	7.0	1.8	7.0	0.8	6.5	1.0	6.3	0.7	4.8	1.1	4.1	0.8	4.5	0.8	6.0
26	5.1	8.7	5.3	8.3	5.5	8.0	5.4	8.7	1.2	6.0	1.0	6.5	0.9	7.0	1.1	5.4	0.9	5.4	0.8	6.0	0.9	5.4	0.7	5.0
27	6.8	8.7	5.8	8.7	4.5	8.0	3.4	7.7	1.0	4.7	1.2	4.8	0.5	4.8	0.5	4.7	1.0	6.0	0.8	5.8	0.9	5.0	1.8	7.3
28	3.0	8.0	2.8	8.0	2.1	7.5	1.6	7.3	0.2	4.8	0.4	5.6	0.6	6.0	1.4	6.0	2.6	6.7	2.1	7.3	2.2	7.0	1.9	6.5
29	1.9	6.7	1.7	7.5	2.2	8.0	3.4	8.3	1.8	6.3	1.7	6.5	1.4	6.5	2.1	5.6	1.6	6.5	...	...	1.4	6.0	1.8	5.2
30	3.8	7.5	2.4	7.5	2.3	7.5	1.9	7.5	...	...	...	...	...	...	...	...	1.9	5.0	3.3	5.8	2.9	5.8	2.1	5.6
31	1.8	7.0	1.6	6.0	1.3	7.0	1.2	6.0	...	...	...	...	...	...	...	...	1.9	5.6	1.5	5.6	1.4	5.0	1.4	6.0
Mean ...	2.9	7.1	2.9	7.0	2.9	7.0	2.8	7.1	2.6	6.7	2.5	6.8	2.5	6.7	2.6	6.7	1.3	5.7	1.4	5.7	1.2	5.5	1.3	5.7
Mean for day ...	A = 2.9 $\mu$ ; T <sub>p</sub> = 7.1s.								A = 2.6 $\mu$ ; T <sub>p</sub> = 6.7s.								A = 1.3 $\mu$ ; T <sub>p</sub> = 5.6s.							

Month	April.								May.								June.								
Hour G.M.T.	o h.		6 h.		12 h.		18 h.		o h.		6 h.		12 h.		18 h.		o h.		6 h.		12 h.		18 h.		
	A.	T <sub>p</sub> .	A.	T <sub>p</sub> .	A.	T <sub>p</sub> .	A.	T <sub>p</sub> .	A.	T <sub>p</sub> .	A.	T <sub>p</sub> .	A.	T <sub>p</sub> .	A.	T <sub>p</sub> .	A.	T <sub>p</sub> .	A.	T <sub>p</sub> .	A.	T <sub>p</sub> .	A.	T <sub>p</sub> .	
Day.	μ	s.	μ	s.	μ	s.	μ	s.	μ	s.	μ	s.	μ	s.	μ	s.	μ	s.	μ	s.	μ	s.	μ	s.	
1	0.8	6.5	0.8	4.3	0.6	3.7	0.6	3.9	0.2	5.6	0.2	6.0	0.5	5.0	0.5	5.0	1.0	4.5	1.1	4.1	1.1	3.9	1.1	4.0	
2	0.3	3.7	0.3	3.1	0.6	3.5	0.7	5.2	0.4	5.6	0.2	5.0	0.2	4.8	0.3	3.6	0.9	3.9	0.3	3.2	0.3	3.6	0.6	4.0	
3	0.6	6.0	1.0	5.8	2.3	7.3	3.3	7.5	0.3	4.0	0.3	3.3	0.3	3.3	0.3	3.5	0.6	3.9	0.3	4.3	0.2	4.7	0.7	4.8	
4	1.9	7.3	2.1	5.8	1.6	7.0	1.6	7.3	0.3	3.9	0.3	3.2	0.3	3.7	0.3	3.3	0.6	4.0	0.6	4.0	0.3	4.0	0.3	4.0	
5	1.6	6.3	1.7	6.5	1.4	6.5	1.1	7.0	0.3	3.2	0.4	3.0	0.4	2.6	0.3	3.2	0.3	4.0	0.5	4.3	0.5	4.3	0.5	4.8	
6	1.6	6.5	1.2	6.5	1.0	6.5	1.3	5.8	0.4	3.0	0.3	3.1	0.0	—	0.0	—	0.8	4.5	0.7	5.0	0.7	4.7	0.5	4.8	
7	1.0	6.7	1.2	6.5	1.2	6.5	1.2	6.5	0.0	—	0.0	—	0.0	—	0.3	3.2	0.5	4.5	0.7	4.7	0.3	4.3	0.3	4.3	
8	1.1	7.0	0.9	7.0	1.0	6.5	1.0	7.3	0.2	4.7	0.3	3.6	0.2	4.7	0.3	4.3	0.6	3.9	0.6	4.0	0.6	3.5	0.6	4.0	
9	1.8	5.0	1.9	5.6	1.6	7.5	...	...	0.5	7.5	0.5	5.0	0.9	5.6	0.6	5.6	1.3	4.3	1.9	5.0	3.4	4.8	3.6	5.8	
10	1.3	6.7	1.9	7.7	1.7	6.7	1.2	7.3	0.4	5.8	0.5	5.0	0.5	4.7	0.2	5.0	3.7	5.0	2.1	5.8	2.1	5.0	2.0	5.2	
11	1.1	6.0	0.7	6.3	1.3	5.4	0.7	5.4	0.2	4.7	0.3	3.2	0.0	—	0.0	—	1.1	5.4	0.9	5.0	0.9	5.0	0.7	4.7	
12	1.2	5.0	0.7	5.0	0.5	4.7	0.7	5.0	0.0	—	0.0	—	0.2	5.0	0.0	—	0.7	5.4	0.5	5.0	0.5	4.7	0.7	4.8	
13	0.7	5.4	0.5	5.0	0.7	4.7	0.5	4.5	0.3	4.1	0.2	7.0	0.0	—	0.3	3.6	1.1	4.3	0.8	4.3	0.8	4.3	1.1	4.3	
14	0.5	4.7	1.2	5.0	1.6	5.0	2.5	4.7	0.3	3.5	0.3	3.9	0.3	3.2	0.3	3.6	0.8	4.3	0.5	4.1	0.6	3.6	1.9	4.3	
15	2.7	4.7	2.5	5.2	2.7	4.7	2.5	4.7	...	...	0.2	6.0	0.3	3.9	0.2	5.6	1.1	3.9	1.2	3.6	0.3	3.2	0.3	3.2	
16	2.8	4.5	2.5	4.5	2.0	4.5	2.2	4.1	0.7	5.0	1.1	5.6	1.0	4.8	0.7	4.8	0.4	2.9	0.3	3.3	0.3	3.2	0.4	6.7	
17	1.2	4.7	0.8	4.0	0.3	4.3	0.2	5.4	0.5	4.3	0.5	4.5	0.9	5.0	0.8	5.8	0.2	5.2	...	...	0.2	5.0	0.5	5.0	
18	0.4	5.8	0.4	5.8	0.2	5.0	0.3	3.1	0.7	5.4	1.0	5.8	0.5	5.0	0.7	5.4	0.4	3.0	0.8	6.0	0.8	5.8	1.1	5.4	
19	0.3	3.7	...	...	...	0.3	3.3	0.3	3.7	0.7	5.0	0.2	5.0	0.2	4.7	0.2	4.8	1.1	5.2	0.7	5.2	0.7	5.0	0.7	5.2
20	0.4	5.4	0.6	4.1	0.5	5.0	0.5	4.7	0.3	4.3	0.3	4.3	0.2	4.8	0.2	5.4	0.5	4.8	0.5	4.3	0.0	—	0.3	3.9	
21	0.4	5.6	0.2	5.0	0.2	5.0	0.5	5.0	0.2	5.0	0.4	5.4	0.3	4.0	0.3	3.7	0.3	3.3	0.3	4.5	...	...	...	...	
22	0.4	5.8	0.4	5.6	0.7	5.0	0.6	5.6	0.5	5.0	0.3	3.7	0.3	3.5	0.3	3.7	0.2	4.7	0.9	5.0	0.9	5.0	1.8	6.3	
23	0.6	6.0	0.8	6.0	1.1	6.7	0.8	6.3	0.5	4.5	0.3	3.1	0.3	3.5	0.3	3.5	1.1	5.6	0.8	6.7	0.6	5.8	0.7	5.0	
24	1.4	6.5	1.6	6.0	2.1	5.0	1.6	6.0	0.3	3.6	0.2	5.0	0.2	4.7	0.2	4.8	0.4	5.8	0.3	4.3	0.2	4.7	0.3	4.1	
25	1.3	5.8	1.2	6.5	0.7	5.2	1.1	5.4	0.3	4.3	0.7	4.7	0.7	5.2	0.7	5.2	0.7	4.7	0.8	4.3	1.2	4.8	1.3	4.3	
26	0.6	5.8	1.0	5.8	1.0	4.7	0.8	5.8	0.9	5.4	0.8	5.8	0.5	5.2	0.5	4.7	1.2	5.0	1.8	5.4	1.0	4.7	1.0	4.8	
27	1.9	5.0	1.6	5.0	1.3	4.5	0.7	5.4	0.5	5.0	0.7	5.0	...	...	0.5	5.0	1.3	3.5	2.0	3.9	0.5	4.3	0.3	3.3	
28	0.7	5.0	0.7	5.0	0.8	4.3	0.9	3.9	0.5	4.8	0.2	4.8	0.2	5.0	0.3	4.5	0.3	4.1	0.5	4.7	0.5	4.5	0.8	4.5	
29	0.4	5.6	0.2	5.2	0.2	4.7	0.2	5.6	0.3	4.1	0.2	4.7	0.2	4.8	0.2	5.2	0.7	5.0	1.4	6.0	1.4	5.0	0.9	5.0	
30	0.2	5.8	0.2	6.3	0.2	6.0	0.4	6.0	0.5	4.3	0.5	5.0	0.5	5.0	0.7	5.0	...	...	1.4	5.2	0.7	5.4	0.7	4.8	
31									0.7	4.7	0.7	5.0	0.5	4.7	1.1	4.3									
Mean ...	1.0	5.6	1.1	5.5	1.1	5.3	1.0	5.5	0.4	4.7	0.4	4.6	0.3	4.5	0.4	4.5	0.8	4.4	0.9	4.7	0.7	4.5	0.9	4.7	
Mean for day ...	A = 1.1μ; T <sub>p</sub> = 5.5s.								A = 0.4μ; T <sub>p</sub> = 4.6s.								A = 0.8μ; T <sub>p</sub> = 4.6s.								



Derived from readings for the period of thirty minutes centering at the exact hour, Greenwich Mean Time.

## 544. Richmond (Kew Observatory).

1928.

Month	July.								August.								September.							
	o h.		6 h.		12 h.		18 h.		o h.		6 h.		12 h.		18 h.		o h.		6 h.		12 h.		18 h.	
	A.	Tp.	A.	Tp.	A.	Tp.	A.	Tp.	A.	Tp.	A.	Tp.	A.	Tp.	A.	Tp.	A.	Tp.	A.	Tp.	A.	Tp.	A.	Tp.
Day.	$\mu$	s.	$\mu$	s.	$\mu$	s.	$\mu$	s.	$\mu$	s.	$\mu$	s.	$\mu$	s.	$\mu$	s.	$\mu$	s.	$\mu$	s.	$\mu$	s.	$\mu$	s.
1	0.7	5.0	0.5	4.8	0.7	4.7	1.0	4.5	0.9	3.6	0.9	3.7	0.8	4.0	0.6	3.9	0.3	4.3	0.3	4.3	...	...	...	...
2	1.5	4.7	1.0	4.8	1.2	6.3	1.2	5.0	0.3	3.1	0.4	2.8	0.0	...	0.0	...	...	...	...	0.3	5.0	0.3	4.3	4.3
3	0.5	4.3	...	...	0.3	4.1	0.2	4.7	0.3	4.3	0.3	4.5	...	...	0.3	3.1	0.3	5.0	0.3	4.8	0.2	5.2	0.6	4.3
4	0.3	4.3	0.3	4.0	0.3	3.6	0.3	4.3	0.3	3.1	0.4	2.7	0.4	2.7	0.4	3.0	0.4	6.7	0.6	6.5	0.6	5.8	0.6	6.3
5	0.3	4.3	0.5	4.3	0.3	4.3	0.3	4.5	0.4	6.0	0.4	2.8	0.3	3.2	0.4	3.0	0.4	5.6	0.4	5.6	0.2	5.0	0.2	5.4
6	0.8	4.3	0.5	5.0	0.5	4.7	0.8	4.3	0.2	4.7	0.3	4.3	0.3	4.1	0.5	4.5	0.3	3.6	0.3	3.9	0.5	2.6	0.5	5.6
7	0.7	5.0	0.3	3.3	0.3	4.0	0.3	3.5	0.5	4.7	0.9	5.2	0.5	5.0	0.8	4.5	0.5	5.2	0.7	5.0	0.8	5.8	1.3	6.7
8	0.3	4.3	0.3	3.7	0.0	...	0.0	...	0.7	5.2	0.8	5.8	0.9	5.0	0.9	5.2	1.7	6.7	1.6	7.5	1.8	6.3	1.0	6.3
9	0.2	4.7	0.6	6.7	1.2	6.5	1.5	6.7	1.1	5.4	1.4	5.0	1.1	5.4	1.7	4.7	0.6	6.0	1.0	5.8	0.4	5.4	0.5	4.8
10	1.5	6.7	1.0	6.3	0.7	5.4	0.7	5.4	0.5	5.2	0.9	5.0	0.5	5.0	0.5	4.7	0.4	5.6	0.7	5.4	0.7	4.8	0.7	5.2
11	0.9	5.6	0.9	5.4	0.7	5.2	0.4	5.4	0.7	4.7	0.5	4.1	0.3	3.9	0.5	4.1	0.4	5.4	0.5	5.0	0.4	5.4	0.2	5.0
12	0.5	4.7	0.5	4.8	0.2	4.7	0.5	5.0	0.5	4.8	0.8	4.1	0.7	4.7	0.8	4.0	0.2	5.0	0.2	5.0	0.2	5.4	0.2	6.0
13	0.5	4.8	0.4	5.4	0.5	5.2	0.4	5.4	1.2	4.8	1.3	4.5	1.7	4.0	0.9	5.2	0.2	6.0	0.4	6.0	0.4	6.5	0.4	5.8
14	0.5	5.4	0.4	6.0	0.5	4.8	0.7	5.0	1.0	4.7	0.8	4.3	0.8	4.3	0.9	3.7	0.4	5.6	0.2	5.2	0.2	4.8	0.5	5.0
15	0.7	5.2	0.5	4.8	0.5	5.0	0.5	5.0	0.5	4.5	0.3	4.0	0.3	4.0	...	...	0.5	5.0	0.7	5.0	0.6	5.8	0.6	5.8
16	0.3	4.8	0.0	...	0.0	...	0.0	...	0.3	4.0	0.4	3.0	0.0	...	0.0	...	0.8	6.5	1.2	6.5	1.5	7.0	1.6	6.5
17	0.0	...	0.0	...	0.0	...	0.3	4.5	0.0	...	0.3	3.7	0.0	...	0.3	4.0	1.4	6.5	1.2	6.3	0.9	5.6	0.5	5.0
18	0.2	5.0	0.2	4.7	0.2	4.8	0.2	5.0	0.2	5.0	0.5	4.3	0.7	5.0	0.8	4.5	0.4	5.6	0.5	5.0	0.3	4.5	...	...
19	0.2	5.2	0.2	4.8	0.0	...	0.0	...	0.5	4.5	0.5	4.5	0.7	4.8	0.7	5.0	0.3	4.5	0.3	4.0	0.3	4.3	0.2	4.7
20	0.2	5.6	0.0	...	0.0	...	0.0	...	0.6	4.0	0.3	3.5	0.8	4.3	0.6	3.9	0.2	4.7	0.3	4.5	0.2	4.8	0.3	4.5
21	0.0	...	0.0	...	0.0	...	0.0	...	1.3	3.3	0.6	4.0	0.4	3.0	0.5	4.3	0.3	4.1	0.3	4.0	0.3	4.1	0.3	3.3
22	0.0	...	0.0	...	0.0	...	0.0	...	0.8	4.0	0.4	2.8	0.4	2.8	0.7	4.8	0.3	3.9	0.3	4.3	0.3	4.1	0.3	4.0
23	0.0	...	0.0	...	0.0	...	0.0	...	0.7	4.7	0.8	5.8	1.3	7.0	1.4	5.2	0.3	4.5	0.3	4.3	0.3	4.5	0.3	4.3
24	0.2	5.8	0.2	6.0	0.2	5.2	0.4	5.6	0.9	5.2	1.1	5.4	1.3	5.6	1.4	5.0	0.3	4.3	0.3	4.3	0.3	3.7	0.3	3.7
25	0.2	5.0	0.5	5.0	0.2	4.7	0.5	4.5	1.0	4.8	1.2	4.7	1.2	4.7	1.6	4.3	0.3	3.5	0.3	3.5	0.3	3.5	0.3	3.9
26	0.7	5.4	0.7	5.2	0.4	5.4	0.2	4.7	1.0	4.8	1.2	4.7	0.8	4.3	0.8	4.3	0.3	3.7	0.6	4.0	0.5	4.3	0.5	4.8
27	0.2	4.7	0.3	4.3	0.3	4.0	0.3	4.3	0.8	4.1	1.0	4.5	1.1	4.0	1.2	4.7	0.8	4.3	0.6	4.0	0.6	4.0	0.7	5.4
28	0.3	3.5	0.4	3.0	0.3	3.2	0.3	3.2	1.0	4.5	0.8	4.0	0.9	3.7	0.5	4.3	0.7	5.2	1.2	4.7	2.1	6.0	2.5	4.7
29	0.3	3.3	0.3	3.6	0.0	...	0.0	...	0.6	4.0	0.3	4.3	0.3	3.3	0.2	4.7	3.0	5.0	2.5	4.7	2.5	4.5	2.3	4.5
30	0.4	2.8	0.3	3.7	0.3	3.7	0.3	4.0	0.3	3.3	0.3	3.3	0.0	...	0.4	2.8	2.5	4.7	2.2	4.7	1.1	4.3	1.4	4.0
31	0.3	3.1	0.2	5.0	0.3	3.6	0.6	3.6	0.3	3.5	0.0	...	0.0	...	0.0	...	...	...	...	...	...	...	...	...
Mean ...	0.4	4.7	0.4	4.8	0.3	4.7	0.4	4.7	0.6	4.4	0.7	4.2	0.6	4.3	0.7	4.3	0.6	5.1	0.7	5.0	0.7	4.9	0.7	5.0
Mean for day ...	A = 0.4 $\mu$ ; Tp. = 4.7s.								A = 0.7 $\mu$ ; Tp. = 4.3s.								A = 0.7 $\mu$ ; Tp. = 5.0s.							

Month	October.								November.								December.							
Hour G.M.T.	o h.		6 h.		12 h.		18 h.		o h.		6 h.		12 h.		18 h.		o h.		6 h.		12 h.		18 h.	
	A.	Tp.	A.	Tp.	A.	Tp.	A.	Tp.	A.	Tp.	A.	Tp.	A.	Tp.	A.	Tp.	A.	Tp.	A.	Tp.	A.	Tp.	A.	Tp.
Day.	$\mu$	s.	$\mu$	s.	$\mu$	s.	$\mu$	s.	$\mu$	s.	$\mu$	s.	$\mu$	s.	$\mu$	s.	$\mu$	s.	$\mu$	s.	$\mu$	s.	$\mu$	s.
1	1.5	5.8	1.0	4.5	0.8	4.3	0.5	4.1	1.9	7.3	1.7	5.6	1.5	6.7	1.1	5.2	0.2	5.4	...	...	1.1	6.7	1.2	6.3
2	0.5	4.3	0.3	3.5	0.5	4.3	0.5	4.5	1.3	4.5	0.7	4.7	0.7	5.2	0.5	4.3	1.6	6.3	...	...	1.3	6.7	1.3	5.8
3	0.8	4.1	0.3	4.0	0.3	4.3	0.5	4.7	1.2	4.7	0.9	5.6	1.6	5.0	1.0	6.0	1.0	6.0	1.4	6.3	1.8	6.3	1.8	7.3
4	0.7	4.7	0.5	4.7	0.5	5.0	0.7	5.0	1.0	6.3	0.6	5.8	0.4	5.6	0.5	4.7	1.8	7.0	1.8	7.3	1.8	7.0	1.9	6.5
5	1.3	8.3	1.1	8.3	1.5	8.0	1.5	7.7	0.2	4.7	0.6	5.6	0.5	4.8	0.7	5.0	1.9	6.7	1.9	6.7	2.6	6.3	1.9	6.7
6	1.6	7.0	1.5	6.7	1.4	6.5	1.6	6.3	0.5	5.2	...	...	2.3	5.0	2.4	4.8	2.3	6.5	1.9	6.7	1.9	6.5	2.1	6.5
7	1.0	6.0	0.7	4.7	0.9	5.4	0.9	7.3	2.3	4.5	1.6	5.2	0.7	4.8	1.1	3.9	3.7	6.5	2.1	6.5	2.6	6.3	2.2	6.3
8	1.1	5.4	0.7	5.4	1.2	7.3	1.9	6.7	1.5	4.8	1.1	4.3	1.0	4.8	1.2	6.3	2.3	6.5	1.9	7.5	1.8	7.3	1.9	7.3
9	1.9	6.7	...	...	1.9	6.5	1.5	7.0	1.7	5.6	1.7	6.7	1.4	6.3	1.2	5.0	1.6	6.0	1.2	6.3	0.6	6.0	0.7	5.2
10	1.9	5.8	1.6	6.5	1.4	6.5	1.4	6.5	1.2	6.3	1.4	6.0	1.3	5.4	1.6	6.5	0.7	5.2	1.5	5.4	1.6	5.0	1.4	6.5
11	1.1	7.0	1.4	6.0	2.7	5.4	2.5	6.0	1.9	4.3	0.9	5.2	1.0	6.0	1.7	5.8	2.0	4.7	2.1	5.8	2.2	6.3	2.3	6.0
12	2.1	6.0	1.8	6.3	2.2	4.8	1.7	4.8	1.9	5.0	3.3	7.0	3.5	7.3	3.0	8.0	1.4	6.5	1.4	7.3	1.6	6.5	1.3	7.0
13	1.6	5.0	1.5	3.7	1.4	4.0	1.1	4.1	1.9	6.5	1.7	6.5	1.8	7.3	1.7	6.7	0.7	5.2	0.5	4.7	0.6	4.0	0.5	4.3
14	0.7	4.7	0.7	5.4	0.6	6.0	0.2	5.4	1.6	6.3	1.7	6.5	1.9	5.6	1.6	7.3	1.0	4.7	1.3	4.5	1.9	4.1	2.0	4.7
15	0.3	3.5	0.3	3.5	0.6	4.0	0.7	5.2	1.6	6.0	1.5	5.8	1.6	5.8	2.1	5.0	1.9	5.0	1.2	4.7	1.4	5.2	1.6	6.0
16	0.6	5.8	0.9	5.0	1.6	6.0	1.6	7.0	1.6	6.0	1.6	7.0	2.1	5.0	2.2	7.0	1.7	5.8	1.6	5.0	1.5	4.8	2.2	4.7
17	1.7	6.7	1.9	6.7	1.8	6.3	1.8	7.3	2.4	5.4	3.8	6.7	4.8	5.8	4.7	6.0	2.1	5.6	1.9	5.0	1.4	6.0	1.7	5.8
18	1.8	7.3	1.6	6.5	1.7	6.5	2.3	5.2	2.5	6.0	2.6	5.0	2.3	6.0	2.5	6.0	1.1	5.4	0.8	5.8	0.6	5.6	0.6	5.6
19	2.0	6.3	2.0	6.3	...	...	2.1	5.0	2.2	6.3	3.9	6.0	2.9	6.5	3.7	6.0	0.5	5.2	0.5	5.2	...	...	0.5	4.8
20	1.8	6.0	1.9	6.7	2.5	6.5	1.8	6.3	3.2	6.3	3.5	7.0	3.2	7.3	2.4	7.7	0.6	5.8	0.4	5.6	0.7	5.4	0.7	3.2
21	1.8	6.3	1.9	6.5	2.1	5.0	1.8	6.0	3.0	7.3	2.5	6.0	3.3	5.0	3.1	6.5	0.8	4.0	0.4	5.8	0.4	5.4	0.4	5.6
22	1.5	6.7	1.4	6.0	1.4	6.3	1.2	6.0	2.2	6.3	2.1	5.8	1.3	6.7	2.2	6.3	0.5	5.0	0.9	5.2	0.7	5.0	0.7	5.0
23	1.4	6.0	0.9	7.5	0.7	5.0	1.1	5.4	2.1	6.7	4.4	8.3	6.2	9.0	6.4	9.0	0.8	6.5	0.7	5.0	1.4	6.0	2.0	6.3
24	1.0	6.0	1.9	6.7	1.7	6.7	2.4	8.3	6.5	8.0	6.2	8.7	8.1	8.7	7.1	8.7	1.7	6.5	2.3	7.3	3.1	8.3	4.7	8.3
25	2.8	8.0	2.4	6.7	2.0	7.0	1.7	6.7	3.6	8.3	2.3	8.0	5.3	7.3	3.7	7.3	3.2	7.7	3.2	7.3	2.9	8.3	2.3	7.5
26	1.7	5.8	1.1	6.7	0.8	4.1	1.7	4.7	3.1	6.5	1.8	6.3	2.0	6.3	1.5	6.7	3.2	7.3	3.2	6.7	2.1	6.5	1.8	7.3
27	2.1	5.8	2.1	5.8	2.0	6.3	1.9	6.5	1.9	5.6	1.9	5.8	1.8	5.4	2.1	6.0	1.9	6.5	1.8	6.0	1.8	6.3	1.9	5.6
28	2.1	5.8	1.9	5.6	1.4	6.3	1.4	5.0	2.1	6.0	2.2	4.8	...	...	1.1	5.6	1.9	4.8	1.5	5.8	1.7	4.7	1.7	5.6
29	0.4	5.6	0.4	6.0	0.4	6.5	0.5	4.8	0.8	4.5	0.7	5.4	0.5	4.8	0.2	5.4	1.9	5.6	2.1	5.8	2.3	6.0	2.6	7.0
30	0.9	5.6	2.1	6.0	2.5	6.5	3.3	7.5	0.2	5.6	0.2	5.0	0.2	5.0	0.3	4.5	2.8	6.3	3.5	6.0	1.9	6.5	1.8	7.3
31	3.4	6.7	2.6	6.7	3.0	6.3	1.9	6.7									1.9	5.8	1.9	6.7	1.8	7.0	1.9	5.0
Mean ...	1.5	6.0	1.3	5.8	1.5	5.8	1.5	5.9	2.0	5.9	2.0	6.1	2.3	6.0	2.2	6.1	1.6	5.9	1.6	6.0	1.6	6.1	1.7	6.0
Mean for day ...	A = 1.4 $\mu$ ; Tp. = 5.9s.								A = 2.1 $\mu$ ; Tp. = 6.0s.								A = 1.6 $\mu$ ; Tp. = 6.0s.							



M.O. 320  
(Aerological Section)

Air Ministry  
METEOROLOGICAL OFFICE

THE  
OBSERVATORIES' YEAR BOOK  
1928

Comprising the meteorological and geophysical results obtained from autographic records and eye observations at the observatories at Lerwick, Aberdeen, Eskdalemuir, Cahirciveen (Valentia Observatory), and Richmond (Kew Observatory), and the results of soundings of the upper atmosphere by means of registering balloons.

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AEROLOGICAL SECTION

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Published by the authority of the  
METEOROLOGICAL COMMITTEE



LONDON:  
PUBLISHED BY HIS MAJESTY'S STATIONERY OFFICE

1930



## AEROLOGICAL SECTION.

Station.		Latitude.		Longitude.		Height above Sea Level.
Kew Observatory	..	51° 28' N.	..	0° 19' W.	..	7 metres.
Sealand .. ..	..	53° 14' N.	..	3° 0' W.	..	5 metres.
Calshot .. ..	..	50° 49' N.	..	1° 18' W.	..	4 metres.

## INTRODUCTION.

**Notes on the tables of Upper Air Temperatures obtained from soundings with registering balloons at Richmond, Sealand and Calshot. 1928.**

The tables are presented in the same form as those appearing in the Observatories Year Book for 1927. The Dines pattern meteorograph was employed solely as before. About 40 % of the instruments used had been constructed in the Observatory workshop, the rest being purchased from outside contractors.

The method of operation remained substantially the same as that described in the Computer's Handbook.\* In the computation of pressure-heights the graphical method was employed, checked as to its main features by an arithmetical process. A value of gravity constant with height was assumed, and equal to 981·2; the effect of humidity on the density of the air was neglected.

A total of 47 soundings were made during the year, 28 from the Aviation Service Station of the Meteorological Office at Sealand Aerodrome, 16 from Kew Observatory, and three from the Aviation Service Station at Calshot. In the cases of 36 of these soundings the instruments were found and returned, the rest being lost. The choice of station from which a sounding was made was generally determined in view of the probable direction and length of the run of the balloon. The average height reached was not so good as in the previous year.

The ventilation of the Dines meteorograph is effected solely by the natural draught produced by its vertical velocity. The coned case referred to in the Year Book for 1925 was employed solely in 1928. The vertical velocity of the rising balloon was of the order of 220 metres per minute in about one-half of the soundings, and 330 metres per minute in the remainder. After the balloon burst the meteorograph fell in all cases at the rate of about 700 metres per minute.

As regards temperature, unless stated to the contrary the mean of the records on the ascent and descent was employed entirely in computing the published figures. Except in one or two cases of daylight soundings in which a small vertical velocity of the balloon was employed, and in a limited region near the top of another daylight sounding, the difference between the two records did not in general exceed 4a., with a mean of about half that value. Whenever direct evidence is available it is almost always found that in the troposphere the descending record is the colder of the two. An analysis of a large number of British soundings has led to the conclusion that as far as the troposphere is concerned this effect is mainly due to a temperature lag of the thermograph member, and that the mean of the two records gives in general a close approximation to the true air temperature.† Occasionally in exceptional circumstances it is deemed best to give greater weight to one record than to the other, or to publish the data from one record only. All such occasions are mentioned in the notes, they generally refer either to occasions of strong solar radiation when the less vigorous ventilation of the meteorograph on the ascent makes that record less reliable than that of the descent, or to the lowest layers of the troposphere only.

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\* M.O. 223, Section II, Sub-section II.

† See also :—Memoirs of the Indian Meteorological Department. Vol. XXIV. Part V. By J. H. Field.



In the case of high soundings made during the day-time a pronounced rise of temperature is sometimes observed over about a kilometre at the extreme top. There is good evidence that this is a fictitious effect due to solar radiation and that the ascent is a great deal more affected by it than the descent. The rise of temperature in such cases is therefore usually ignored, and in addition greater weight is given to the descent than to the ascent in the upper parts of such records as show an unusually large difference between them. All occasions on which such selection has been made are specifically mentioned in the notes. An account of this phenomenon is to be found in "Memoirs of the Royal Meteorological Society," Vol. 2, No. 18. By L. H. G. Dines.

In almost every case during 1928 the meteorograph was fitted with a hair hygograph. Only one record of relative humidity in each case has been published, which unless specifically mentioned to the contrary in the notes is that of the ascent. The record of the descent appears to be the less reliable for two reasons, first that the previous exposure of the hair to extreme cold and dryness makes it more sluggish in response to changes in the relative humidity, second that the higher velocity at which the meteorograph falls increases the lag in its response reckoned in terms of height. The hygrometer readily shows changes in the relative humidity in the lower part of the troposphere, but the absolute value of its readings may be subject to an uncertain error of five or more on the percentage scale. Below a temperature of 250 a. it seems very doubtful if in the ordinary way the record has any meaning, and the figures have therefore not been published. In some cases of a saturated atmosphere the hair appears to freeze up in some peculiar manner at a point near 273 a. and thereafter to become quite inert.

Data of well marked inversions and regions of zero lapse rate in the troposphere are included in the notes on the soundings. They are set out in a uniform manner on the principle that corresponding values of height, temperature and relative humidity are given for the salient points in each special case, the sequence being always from lesser heights to greater.

The figures given in the table of lapse rates do not in every case agree with the temperatures appearing in the table of temperature-heights. The reason for this is that both were determined independently from the original data, which can sometimes profitably be read to the nearest half degree, but are rounded off to whole degrees for publication.

The lapse rates given between ground level and 0.5 km. are determined from the reading in the thermometer screen at the station and that of the meteorograph at 0.5 km. A source of error arises here in that the two standards are independent and are not exposed in the same manner. A small difference is capable of making an appreciable error in the lapse rate, and it is possible that lapse rates apparently greater than 10a. per km. in this layer are sometimes due to this cause.

Whenever possible the meteorograph was calibrated again after return before the record plate had been disturbed, in order to discover whether any shift of zero had taken place since the previous calibration. Some disturbance is almost inevitable considering the rough treatment experienced, more especially in the shock of the fall. It is satisfactory to note that for the year 1928, omitting two cases in which the instrument was returned badly damaged, the mean values of the shift without regard to sign were small, being for the Pressure 4.6 mb, and for the Temperature 1.3 a.

All new meteorographs, and all old ones used again after repair, were seasoned in a vacuum chamber before use by being subjected to several slow reductions of pressure. This process has been found greatly to reduce the chance of a systematic difference occurring between the results of a fast and slow calibration. More detail is given in the Introduction to the tables for 1923, and within the limits of accuracy at present attainable in the measurement of upper air pressures, the results of the fast reduction of pressure in the calibration test may be taken as applying to the slow reduction in the actual sounding.



The lag, or difference in pressure reading as between a falling and a rising pressure, is of the order 3 or 4 millibars on the average in the middle region of a high sounding, falling off to lesser values on either side. If a correction be applied to the recorded temperature-pressures to allow for this error, it results, for an average sounding in the troposphere, in an increase in the difference between the temperatures recorded at any pressure on the ascent and descent. The effect is to make the recorded temperatures on the descent too high by about half a degree at a height of 6 or 7 kilometres, with a tendency for the error to fall off above and below. When the mean of the two records is employed the resultant error is halved and becomes negligible.

In Table 546 occur the entries "Type of Tropopause" and " $H_0$  = Height of Tropopause." These are defined as follows:—Type I. The stratosphere commences with an inversion, and  $H_0$  is the height of the first point of zero temperature gradient. Type II. The stratosphere begins with an abrupt transition to a temperature gradient below 2a. per kilometre without inversion, and  $H_0$  is the height of the abrupt transition. Type III. There is no abrupt change of temperature gradient, and the base of the stratosphere is taken at the point where the mean fall of temperature for the kilometre next above is 2 a. or less, provided that it does not exceed 2 a. for any subsequent kilometre. In the Remarks on the Soundings the pressure distribution is classified according to the types defined in "Aids to Forecasting." †

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† E. Gold, F.R.S., Geophysical Memoir No. 16, M.O. 220f, London, 1920.



$T$  = Temperature in Degrees absolute.  
 $H$  = Height in kilometres above M.S.L.

$P$  = Pressure in millibars.  
 $RH$  = Relative Humidity as percentage.

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1928.

No. of Ascent.	674.	675.	676.	677.	678.	679.	680.	681.	682.
Date.	Jan. 10.	Jan. 23.	Feb. 23.	Feb. 27.	Mar. 8.	Mar. 9.	Mar. 10.	Mar. 11.	Mar. 12.
Station.	Calshot.	Sealand.	Kew.	Kew.	Sealand.	Sealand.	Sealand.	Kew.	Kew.
Start G.M.T. ... ..	12h. 37m.	13h. 10m.	16h. 51m.	16h. 0m.	7h. 15m.	7h. 30m.	7h. 10m.	7h. 2m.	12h. 34m.
$H_t$ = Greatest Height ... (km.)	14.79	7.76	2.31	13.61	17.21	19.78	19.40	8.24	12.89
$T_t$ = Corresponding Temperature (a.)	216	241	273	223	220	225	227	229	227
$P_t$ = Corresponding Pressure (mb.)	118	369	774	149	83	56	59	321	160
Place of Fall ... ..	Ashford, Kent.	Barrow, Oakham, Rutland.	Isleworth, Middlesex.	Woodford Halse, nr. Rugby, Warwickshire.	Lilleshall, Wellington, Salop.	Bagley, nr. Ellesmere, Salop.	Wellington, Salop.	Chipstead, Surrey.	Whaddon, Royston, Herts.
Distance ... .. (km.)	154	165	1	99	67	43	67	22	73
Bearing. Degrees from N....	78	110	273	321	145	170	151	154	14
Geostrophic Wind— Speed ... .. (m/s.)	26	28	9	13	12	9	6	12	6
Degrees from N. ... ..	250	220	130	130	90	75	90	20	150
Wind (Anemograph)— Speed ... .. (m/s.)	16	7	4	2	4	3	2	4	4
Degrees from N. ... ..	215	135	90	135	45	25	340	360	160
Humidity at surface ... .. (%)	86	92	86	56	85	85	85	86	63
Type of Tropopause ... ..	I.			I.	I.	II.	I.		I.
$H_c$ = Height of „ ... (km.)	10.49	—	—	10.64	10.33	9.38	9.51	—	9.44
$T_c$ = Temp. at „ ... (a.)	207	—	—	217	216	223	221	—	222
$P_c$ = Pressure at „ ... (mb.)	235	—	—	237	240	275	266	—	270
Mean Temp. in Stratosphere									
( $H_c + 2$ ) to ( $H_c + 5$ ) (a.)	—	—	—	—	223	224	225	—	—
( $H_c + 5$ ) to ( $H_c + 8$ ) (a.)	—	—	—	—	—	223	224	—	—
( $H_c + 8$ ) to ( $H_c + 11$ ) (a.)	—	—	—	—	—	—	—	—	—
$T_m$ (Mean Temp. 1 to 9 km.) (a.)	251	—	—	252	247	243	241	—	242
$P_s$ (Pressure at M.S.L.) ... (mb.)	1007	1010	1029	1024	1019	1020	1018	—	1014

547.

1928.

## REMARKS ON THE SOUNDINGS AND THE PREVAILING WEATHER CONDITIONS, 1928.

No. of  
Ascent.

674. Weather cloudy. Cirrus from WSW, Stratus 6/10 from SW at 250 m. Surface wind from SW'S, gusty. Small inversion on descent from 1.36 km. to 1.46 km.; Temp. 272 a. to 273 a. Another small inversion on ascent from 1.65 km. to 1.73 km.; Temp. 273.5 a. to 274 a. Pressure distribution:—Barometer falling briskly. Deep depression to the north having two centres, one just east of Iceland and the other over the Shetland Isles, merging into one and moving slowly eastwards. Another low over the Mediterranean, high over Spain and the Azores, connecting up with another over the northern Balkans. Type V a.
675. Weather dull and overcast with continuous moderate rain. Clouds, Alto-Stratus, Nimbus from SSW at 500 m. Very small lapse rate from 0.9 km. to 1.9 km. The relative humidity was about 92 per cent. up to a height of 2.5 km., above that it is unknown as the hairs froze up. Ice formed on the record plate and interrupted the record in many places and entirely so from 8 km. upwards. The temperature record was taken from the record of the ascent only. Pressure distribution:—Barometer falling briskly. Extensive belt of low pressure over North western Europe, having its main centre over Iceland. A secondary depression off the west of Ireland moving rapidly eastwards. Shallow low over the Netherlands also moving eastwards. Highs over Spain and Russia. Type V a.
676. Weather hazy. Clouds, Stratus 9/10 from East. Balloon burst prematurely. Pronounced inversion on both records from 0.74 km. to 0.94 km.; Temp. 275 a. to 278.5 a. Relative humidity 100 per cent. to 65 per cent. Pressure distribution:—Anticyclone over most of Europe with centres over Southern Scandinavia, Germany and Austria moving slowly eastwards. A depression well to the west of Ireland moving south eastwards. Type VII b.
677. Weather slightly misty, no clouds. The hygrograph pointer did not mark at all well but sufficient record was made to indicate that the relative humidity was below 50 per cent. at all heights. Pressure distribution:—A high system existed over most of Europe with anticyclonic centres over the Baltic and the Mediterranean. Depression approaching Ireland from the West. Type VII b.
678. Weather dull. Clouds, St-Cu. 10/10 at about 0.7 km. Inversion on ascent from 1.61 km. to 1.81 km.; Temp. 265 a. to 266.5 a. Relative humidity 97 per cent. to 90 per cent. Inversion on descent from 1.25 km. to 1.54 km.; Temp. 266 a. to 267.5 a. Inversion on both ascent and descent from 3.16 km. to 3.40 km.; Temp. 258.5 a. to 259.5 a. Relative humidity 57 per cent. to 49 per cent. Pressure distribution:—Anticyclone over Iceland influencing the weather of the British Isles. Low over Spain extending eastwards to the Black Sea. Type VIII a.
679. Weather cloudy. St-Cu. 6/10 from NE'E at about 1.3 km. Small inversion on both ascent and descent from 2.80 km. to 2.99 km.; Temp. 255.5 a. to 256 a. Relative humidity 56 per cent. to 52 per cent. Pressure distribution:—Anticyclone centred between Iceland and the Faroes. Shallow low north west of Denmark. Stationary depression to the west of Ireland and another depression over the Western Mediterranean moving eastwards. Type VIII a.
680. Weather fair. Clouds, St-Cu. 7/10 from north east at about 1 km. Inversion on ascent from 3.35 km. to 3.43 km.; Temp. 249.5 a. to 251 a. Relative humidity 72 per cent. to 68 per cent. Also a small inversion on descent from 3.86 km. to 3.96 km.; Temp. 245.5 a. to 246 a. The mean of both temperature records was employed throughout except at and just below the top where a bias towards the colder one was made. Pressure distribution:—Anticyclone centred near the Faroes and over Scandinavia. Depressions over the Mediterranean and out on the Atlantic. Type VIII a.
681. Weather dull. Clouds, Stratus 10/10 at 0.5 km. Snow lying. The ascent was curtailed by means of an automatic releaser. The large lapse rate near the ground is apparently genuine. Small inversion from 4.76 km. to 4.95 km.; Temp. 235.5 a. to 236 a. Relative humidity, 74 per cent. to 71 per cent. Isothermal layer from 4.95 km. to 5.57 km.; Temp. 236 a. Relative humidity, 71 per cent. to 60 per cent. Pressure distribution:—Belt of high pressure persisting from Iceland to South Russia. Depressions over the Mediterranean and to the north of Scandinavia deepening. Type VIII a.
682. Weather fair. Clouds, Fr-Cu. 5/10 moving slowly from S'E. Isothermal layers occurred from 3.62 km. to 4.03 km.; Temp. 246.5 a. Relative humidity 52 per cent. to 45 per cent., and from 5.21 km. to 5.65 km.; Temp. 241.5 a. Relative humidity 36 per cent. to 34 per cent. The large lapse rate near the ground is apparently quite genuine. Pressure distribution:—Belt of low pressure extending from the Atlantic across Southern France to the Adriatic. Ridge of high pressure from Iceland across Southern Scandinavia to Russia becoming less pronounced. Depression over North-west Russia. Type VIII.



546.

T = Temperature in Degrees absolute.  
H = Height in kilometres above M.S.L.

P = Pressure in millibars.  
RH = Relative Humidity as percentage.

1928.

No. of Ascent.	683.	684.	686.	687.	689.	690.	691.	692.	693.
Date.	Mar. 13.	Mar. 14.	Mar. 16.	Mar. 17.	Mar. 20.	Mar. 22.	Mar. 26.	Mar. 29.	Mar. 31.
Station.	Calshot.	Kew.	Sealand.	Sealand.	Kew.	Kew.	Sealand.	Sealand.	Kew.
Start G.M.T. ... ..	8h. 5m.	7h. 23m.	7h. 15m.	7h. 30m.	17h. 30m.	17h. 33m.	17h. 50m.	10h. 40m.	9h. 55m.
H <sub>1</sub> = Greatest Height ... (km.)	17.75	13.94	13.19	14.35	21.51	11.73	12.82	13.98	13.02
T <sub>1</sub> = Corresponding Temperature (a.)	221	219	210	215	209	221	221	219	221
P <sub>1</sub> = Corresponding Pressure (mb.)	75	135	156	128	40	192	165	134	153
Place of Fall ... ..	Oxenwood, Hungerford, Berks.	Kemsing, Sevenoaks, Kent.	Croxden, Cheadle, Stoke-on-Trent, Staffs.	Pately Bridge, Harrogate, Yorks.	Farm Wicken, Soham, Cambs.	Beauchamp Roding, Ongar, Essex.	Ipstones, Stoke-on-Trent, Staffs.	Old Rossington, Doncaster, Yorks.	Astwick, Hatfield, Herts.
Distance ... .. (km.)	69	42	78	125	103	53	72	132	34
Bearing. Degrees from N....	350	116	112	40	25	.50	106	77	14
Geostrophic Wind—Speed ... .. (m/s.)	7	Indeterminate	21	27	15	13	5	26	13
Degrees from N. ... ..	45	Indeterminate	190	195	160	165	235	215	160
Wind (Anemograph)—Speed ... .. (m/s.)	5	1	8	4	9	4	Calm.	9	4
Degrees from N. ... ..	350	270	135	135	225	160	—	160	135
Humidity at surface ... .. (%)	85	91	90	85	67	71	89	90	74
Type of Tropopause ... ..	II.	I.	I.	I.	I.	I.	I.	I.	I.
H <sub>c</sub> = Height of „ ... .. (km.)	8.53	10.75	12.47	11.94	11.64	10.18	10.33	10.43	7.24
T <sub>c</sub> = Temp. at „ ... .. (a.)	219	213	207	202	205	215	214	213	224
P <sub>c</sub> = Pressure at „ ... .. (mb.)	311	224	175	190	198	244	244	234	370
Mean Temp. in Stratosphere { (H <sub>c</sub> + 2) to (H <sub>c</sub> + 5) (a.)	222	—	—	—	213	—	—	—	223
(H <sub>c</sub> + 5) to (H <sub>c</sub> + 8) (a.)	222	—	—	—	211	—	—	—	—
(H <sub>c</sub> + 8) to (H <sub>c</sub> + 11) (a.)	—	—	—	—	—	—	—	—	—
T <sub>m</sub> (Mean Temp. 1 to 9 km.) (a.)	243	246	253	258	254	251	251	252	245
P <sub>s</sub> (Pressure at M.S.L.) ... (mb.)	1018	1022	1022	1016	1002	995	1010	983	985

547.

REMARKS ON THE SOUNDINGS AND THE PREVAILING WEATHER CONDITIONS, 1928.

1928.

No. of Ascent.

683. Weather misty. Clouds, A-Cu. 5/10 at about 4 km. from ESE. Cirrus clouds observed an hour later moving slowly from SE'E. An unusual type of record as the two traces agreed over most of the troposphere. The balloon was in the air about three hours. Pressure distribution:—Complex system of high pressure with centres over Iceland, North-west Scandinavia and South Russia: Shallow depression over France: Low over the Atlantic and Mediterranean Sea. Depression over Northern Russia moving south. Type VIII.
684. Weather dull. Clouds, Stratus 10/10 very low. Inversion from 1.36 km. to 1.52 km.; Temp. 265 a. to 267.5 a. Relative humidity 90 per cent. to 80 per cent. Isothermal layer from 6.92 km. to 7.21 km.; Temp. 233 a. Relative humidity 35 per cent. Pressure distribution:—Depression approaching Ireland from the west. Indefinite areas of high pressure over France, Spain and Scandinavia. Shallow depression over Italy. Type VII b.
686. Weather fair. Clouds, St-Cu., A-Cu. & Ci. 6/10. Low clouds at 1.2 km., middle clouds moving from SW and upper clouds from W'S. Inversion from 0.47 km. to 0.68 km.; Temp. 274.5 a. to 276 a. Relative humidity uncertain at bottom to 74 per cent. at top. Also inversion from 3.87 km. to 3.94 km.; Temp. 260 a. to 261 a. Relative humidity, 84 per cent. to 81 per cent. A large number of temperature oscillations of about one degree are shown in both troposphere and stratosphere. Some small inversions or isothermals occur near the top of the troposphere in both traces and appear to be genuine. The mean of both temperature records was employed throughout except at the extreme top where a rise of temperature was ignored. Pressure distribution:—A deep depression to the west of the British Isles. High over Central Europe. Complex area of low pressure over the Mediterranean. Type VI a.
687. Weather dull. Clouds, St. and St-Cu. 9/10 from S at 0.5 km. Inversion from 0.81 km. to 0.99 km. Temp. 277.5 a. to 278.5 a. Relative humidity 93 per cent. to 88 per cent. Inversion on up trace only from 1.19 km. to 1.31 km.; Temp. 279 a. to 280 a. Relative humidity 89 per cent. to 76 per cent. The record seemed to indicate the existence of a cloud of super-cooled water drops at the level of about 4 km. and a temperature of about 260 a. Pressure distribution:—Deep depression over Iceland. Anticyclone over Germany. Complex low area over Eastern Mediterranean. Type VI a.
689. Weather fair. Clouds, St-Cu. and Cu. 6/10, Ci-St. 1/10. Low clouds at 0.7 km. moving from SE. Inversion on ascent from 0.99 km. to 1.23 km.; Temp. 279 a. to 279.5 a. Relative humidity 66 per cent. to 61 per cent. Pressure distribution:—Deep depression south of Iceland remaining stationary. Anticyclone over Russia. Secondary depression forming off South-west England. Type V.
690. Weather fine. Clouds, Cu. 1/10, Ci. and Ci-St. 3/10. The lower clouds at about 0.7 km. moving from SSE, and the upper from W. Isothermal layer from 6.17 km. to 6.48 km.; Temp. 242 a. Relative humidity 23 per cent. Pressure distribution:—Secondary depression South-west Ireland, Anticyclone over Russia. Type VII.
691. Weather fair. Clouds, St-Cu. 7/10, Ci-St. 2/10. Lower clouds at 1.5 km. moving from SSW, upper clouds from NW. Inversion from 1.78 km. to 1.92 km., Temp. 268.5 a. to 269.5 a. Relative humidity, 96 per cent. to 70 per cent. Pressure distribution:—Depression to the North-west of the British Isles. Wedge of high pressure over England. High to the south-west of Spain and over Russia. Complex low area over the Mediterranean. Type IV.
692. Weather dull with slight rain. Clouds, Stratus and St-Cu. 10/10 at 0.2 km. from S'E. Barometer low and falling rapidly. Inversion on ascent only from 1.48 km. to 1.52 km.; Temp. 274.5 a. to 275 a. Relative humidity 100 per cent. to 96 per cent. The mean of both temperature records was used throughout except over the top 2.5 km. where a bias was made towards the colder. Pressure distribution:—High over Spain and the Azores and over Russia. Depression over Ireland and a complex system of low pressure stretching from the Baltic to the Mediterranean. Type IV a.
693. Weather fair. Clouds, Cu. 5/10, A-Cu. 2/10. Lower cloud from SE'S, upper clouds from S. The mean of both temperature records was used except near the top where a bias was given towards the descent. The very large lapse rate near the ground appears to be genuine. Pressure distribution:—Depression centred over the south-west of England and a complex system of low pressure from Finland to the Western Mediterranean. High over Iceland. Type XV.



$T$  = Temperature in Degrees absolute.  
 $H$  = Height in kilometres above M.S.L.

$P$  = Pressure in millibars.  
 $RH$  = Relative Humidity as percentage.

546.

1928.

No. of Ascent.	696.	697.	698.	699.	700.	701.	702.	703.	704.
Date.	May 21.	May 23.	July 3.	July 17.	July 17.	July 18.	July 18.	July 19.	July 19.
Station.	Kew.	Sealand.	Sealand.	Sealand.	Sealand.	Sealand.	Sealand.	Sealand.	Sealand.
Start G.M.T. ... ..	11h. 28m.	17h. 55m.	17h. 38m.	7h. 15m.	18h. 30m.	7h. 10m.	18h. 20m.	7h. 15m.	17h. 50m.
$H$ = Greatest Height ... (km.)	2·03	10·38	12·95	—	10·96	13·49	15·53	17·02	12·56
$T_c$ = Corresponding Temperature (a.)	272	217	227	—	221	221	219	221	215
$P_c$ = Corresponding Pressure (mb.)	787	241	168	—	239	160	116	94	185
Place of Fall ... ..	Chertsey, Surrey.	Clyro, Hereford.	Milnrow, Rochdale, Lancs.	Hartington, Buxton, Derbyshire.	Stretton, Burton-on- Trent, Staffs.	Gumley, Market Harboro', Leicestershire.	Woodford Halse, Rugby, Warwickshire.	Pailton, nr. Rugby, Warwickshire.	Sulgrave, Banbury, Oxon.
Distance ... .. (km.)	15	127	74	80	102	156	168	144	175
Bearing. Degrees from N....	238	185	54	97	116	121	134	128	135
Geostrophic Wind— Speed ... .. (m/s.)	15	5	Indeterminate	< 6	< 9	13	11	7	9
Degrees from N. ... ..	75	330	Indeterminate	295	285	290	320	305	305
Wind (Anemograph)— Speed ... .. (m/s.)	4	4	4	4	7	8	7	7	7
Degrees from N. ... ..	90	295	295	305	315	295	295	305	295
Humidity at surface ... (%)	81	91	59	82	69	79	84	75	71
Type of Tropopause ... ..		?	I.	I.		I.	I.	I.	I.
$H_c$ = Height of „ ... (km.)	—	9·57	9·62	(11·53)	—	11·61	12·44	12·36	12·07
$T_c$ = Temp. at „ ... (a.)	—	217	224	217	—	216	211	217	214
$P_c$ = Pressure at „ ... (mb.)	—	273	278	(220)	—	215	190	194	200
Mean Temp. in Stratosphere									
( $H_c + 2$ ) to ( $H_c + 5$ ) (a.)	—	—	—	—	—	—	—	223	—
( $H_c + 5$ ) to ( $H_c + 8$ ) (a.)	—	—	—	—	—	—	—	—	—
( $H_c + 8$ ) to ( $H_c + 11$ ) (a.)	—	—	—	—	—	—	—	—	—
$T_m$ (Mean Temp. 1 to 9 km.) (a.)	—	250	254	263	262	262	263	264	263
$P_s$ (Pressure at M.S.L.) ... (mb.)	1013	1015	1015	1032	1030	1027	1025	1024	1023

547.

1928.

## REMARKS ON THE SOUNDINGS AND THE PREVAILING WEATHER CONDITIONS, 1928.

No. of  
Ascent.

696. Weather, Thunderstorm. Rain falling from thunder cloud overhead. The thunderstorm approached from the east, the centre passing to the south of the Observatory. Thunder and lightning occurred about every minute and the rain became heavy a few minutes after the release of the balloon. The sky to the north-east had cleared somewhat by 11·40. The ascent only was used for this sounding as the two traces differed at the bottom by 3 or 4 degrees. Pressure distribution:—Complex system of low pressure over Northern and Western Europe, one of the centres being over North-west France. A wedge of high pressure extended from North-east Atlantic through the Faroes to Scandinavia. Type IX a.
697. Weather continuous moderate rain. Clouds, Stratus and A-St. Stratus at 0·8 km. moving from NNW. Small isothermal at 3·82 km.; Temp. 259 a. Pressure distribution:—High to the north of Iceland and over Spain. Area of low pressure from the Atlantic over the British Isles to Central Europe. Type IV a.
698. Weather fair. Clouds, St-Cu. 1/10, Ci. and Ci-St. 7/10. St-Cu. at 1·2 km. moving from W, Ci. from SW. Pressure distribution:—Low over Scandinavia and depression over the Atlantic. Ridge of high pressure extending to South-west England from an Anticyclone over the Azores. Complex system of low pressure elsewhere except near Southern Europe where the pressure was relatively high. Type indefinite.
699. Weather fair. Clouds, St. and St-Cu. from N. Cirrus observed two hours before the sounding, moving from W'S, and A-Cu. one hour before moving from WSW. Inversion from 0·66 km. to 1·07 km.; Temp. 285 a. to 287 a. Relative humidity 93 per cent. to 47 per cent. Owing to the aneroid box leaking, only the lower portion of the sounding could be used with any degree of accuracy. Pressure distribution:—Belt of high pressure extending from the Atlantic over the British Isles to Western Germany. Low over Iceland and Northern Europe. Type I a.
700. Weather fine. Clouds, Ci. 2/10 moving from W. Inversion on ascent from 0·44 km. to 0·49 km.; Temp. 285·5 a. to 286 a. Relative humidity 82 per cent. to 83 per cent., Inversion from 0·57 km. to 0·76 km.; Temp. 285·5 a. to 287·5 a. Relative humidity 85 per cent. to 73 per cent. Isothermal layer on descent from 0·05 km. to 0·59 km.; Temp. 290 a., and several small isothermal layers on both ascent and descent between 1·09 km. and 1·75 km. Pressure distribution:—Anticyclone over the British Isles and Western Germany persisting. Low over Northern Europe and over the Mediterranean. Type I a.
701. Weather fair. Clouds, St-Cu. 6/10 at about 2 km. moving from W'N, and Ci. moving from WNW. Inversion from 0·75 km. to 0·92 km.; Temp. 285·5 a. to 287·5 a. Relative humidity 35 per cent. to 27 per cent. Isothermal layer from 1·48 km. to 1·78 km.; Temp. 284·5 a. Relative humidity 27 per cent. to 35 per cent. Isothermal layer on ascent from 3·30 km. to 3·35 km.; Temp. 274·5 a. Relative humidity 66 per cent. to 64 per cent. Mean of both records was used except near the top where a bias was made towards the descent. Pressure distribution:—A belt of high pressure extending from the Atlantic over England to Western Germany. Depression centred to the south of Spitzbergen beginning to influence the weather in Northern Scotland. Type I a.
702. Weather dull, slight drizzle. Clouds, St. 10/10 at 0·8 km. from WNW. Inversion from 1·66 km. to 1·95 km.; Temp. 279·5 a. to 283·5 a. Relative humidity 100 per cent. to 55 per cent. Pressure distribution:—Anticyclone persisting to the south-west of the British Isles extending a ridge of high pressure to Western Germany. Low over North-west Europe and Eastern Mediterranean. Type I a.
703. Weather fair. Clouds, St-Cu. and St. from NW. Inversion from 1·31 km. to 1·54 km.; Temp. 278 a. to 282 a. Relative humidity 100 per cent. to 56 per cent. Isothermal layer 3·30 km. to 3·48 km.; Temp. 275 a. Relative humidity 25 per cent. to 20 per cent. The mean of both records was used except near the top where a bias was given to the descent. The hygrogram shows great liveliness with many small oscillations on the ascent up to about the 700 mb. pressure surface. Pressure distribution:—Ridge of high pressure over Germany extending from a stationary Anticyclone to the south-west of the British Isles. Low to the north of Scandinavia and over South-eastern Europe. Type I a.
704. Weather fair. Clouds, St-Cu. and Cu. at 1·8 km. from WNW. Cirrus observed three hours earlier moving from WNW. Inversion shown on ascent from 1·69 km. to 1·97 km.; Temp. 278·5 a. to 282 a. Relative humidity 95 per cent. to 58 per cent. Inversion also shown on descent from 1·54 km. to 1·94 km.; Temp. 277 a. to 281 a., high lapse rate near the ground. Mean of both records used except at the top where a bias was made towards the descent. Pressure distribution:—Same as for Ascent No. 703. Type I a.



$T$  = Temperature in Degrees absolute.  
 $H$  = Height in kilometres above M.S.L.

$P$  = Pressure in millibars.  
 $RH$  = Relative Humidity as percentage.

546.

1928.

No. of Ascent.	705.	706.	708.	709.	710.	713.	717.	719.	720.
Date.	July 23.	Aug. 2.	Sept. 5.	Sept. 11.	Sept. 12.	Nov. 8.	Nov. 15.	Nov. 17.	Dec. 11.
Station.	Kew.	Sealand.	Kew.	Sealand.	Sealand.	Kew.	Sealand.	Sealand.	Kew.
Start G.M.T. ... ..	13h. 59m.	13h. 54m.	15h. 0m.	15h. 55m.	9h. 3m.	12h. 25m.	7h. 10m.	7h. 30m.	16h. 45m.
$H_c$ = Greatest Height ... (km.)	10.17	16.45	14.41	18.93	10.32	12.79	17.34	17.90	18.91
$T_c$ = Corresponding Temperature (a.)	233	223	219	222	237?	223	212	218	217
$P_c$ = Corresponding Pressure (mb.)	273	102	139	68	260	165	81	72	60
Place of Fall ... ..	Hartfield, Sussex.	Arley, Northwich, Cheshire.	Walsham - le-Willows, Bury St. Edmunds, Suffolk.	Burton-on-Trent, Staffs.	Chorlton-cum-Hardy, nr. Manchester, Lancs.	Goose Green, Hadlow, Kent.	Bolton Percy, Yorks.	Rufford, Ollerton, Notts.	Woodford Halse, Rugby, Warwick.
Distance ... .. (km.)	51	36	126	104	53	53	139	132	100
Bearing. Degrees from N. ...	144	73	40	116	62	122	58	92	324
Geostrophic Wind—Speed ... .. (m/s.)	5	Indeterminate	9	3	4	18	22	20	11
Degrees from N. ... ..	310	Indeterminate	220	305	180	60	230	300	110
Wind (Anemograph)—Speed ... .. (m/s.)	4	4	7	6	4	7	5	7	2
Degrees from N. ... ..	295	295	205	315	160	45	215	270	110
Humidity at surface ... (%)	58	58	36	69	83	67	80	77	93
Type of Tropopause ... ..		I.	I.	I.	I.	II.	I.	I.	II.
$H_c$ = Height of ,, ... (km.)	—	12.48	11.94	11.73	10.15	9.95	8.17	8.43	10.03
$T_c$ = Temp. at ,, ... (a.)	—	214	217	215	227	217	227	222	215
$P_c$ = Pressure at ,, ... (mb.)	—	191	205	209	267	258	330	311	244
Mean Temp. in Stratosphere									
$(H_c + 2)$ to $(H_c + 5)$ (a.)	—	—	—	220	—	—	227	224	217
$(H_c + 5)$ to $(H_c + 8)$ (a.)	—	—	—	—	—	—	218	218	217
$(H_c + 8)$ to $(H_c + 11)$ (a.)	—	—	—	—	—	—	—	—	—
$T_m$ (Mean Temp. 1 to 9 km.) (a.)	265	264	264	260	259	251	251	245	247
$P_c$ (Pressure at M.S.L.) ... (mb.)	1023	1023	1012	1025	1026	1010	984	987	992

547.

1928.

## REMARKS ON THE SOUNDINGS AND THE PREVAILING WEATHER CONDITIONS, 1928.

No. of Ascent.

705. Weather dull. Clouds, Fr-Cu. 3/10, St-Cu. 6/10. Fr-Cu. at about 0.6 km., the St-Cu. at a much higher level. Inversion from 2.43 km. to 2.58 km.; Temp. 277.5 a. to 278.5 a. Relative humidity 99 per cent. to 84 per cent. The ascent showed temperature oscillations from about 3 km. upwards increasing in magnitude with height. Pressure distribution:—Anticyclone to the south-west of the British Isles extending a ridge of high pressure over Southern North Sea and Germany; high over Central, Southern and Eastern Europe. Depression centred over Northern Scandinavia and a shallow depression over Iceland. Type I.
706. Weather fine. Clouds, Cu. 3/10, direction indefinite. Small inversions at 2.84 km. and 3.87 km. Mean of both records used except at the top where a bias was given to the descent. The large lapse rate near the ground appears to be genuine. Pressure distribution:—Ridge of high pressure extending over the British Isles and France from an Anticyclone centred near the Azores. Depression south of Iceland, low pressure over Northern Russia. Type indefinite
708. Weather fine. Ci. 2/10, A-Cu. 1/10. Double ascent, two instruments were placed in tandem, each in its own spider, respectively 20 m. and 40 m. from the balloon. Mean values of inversion recorded on both instruments on ascent from 3.39 km. to 3.53 km.; Temp. 273 a. to 274 a. Relative humidity 73 per cent. to 57 per cent. Mean of the two instruments used throughout. Pressure distribution:—Complex system of low pressure over Northern and North-western Europe, having two of the centres over Scotland and over Ireland. High over the Azores, Eastern and Southern Europe. Type XIII.
709. Weather fine. Clouds, Cu. and St-Cu. at 0.9 km. moving from NW. Inversion from 2.56 km. to 2.83 km.; Temp. 270.5 a. to 273 a. Relative humidity 90 per cent. to 58 per cent. Isothermal layer shown on ascent only from 0.77 km. to 0.86 km.; Temp. 282 a. Relative humidity 91 per cent. to 92 per cent. Mean of both records used except at the top where a bias was given towards the descent. The large lapse rate near the ground appears to be genuine. Pressure distribution:—A ridge of high pressure over the British Isles and the Azores; high over Northern Russia. Shallow depression over Southern Scandinavia; depression to the south-west of Iceland. Type indefinite.
710. Weather fine. Clouds, A-Cu. 1/10 from W.N. Double ascent. Instruments placed 20 m. and 40 m. respectively from the balloon, each in its own spider. The mean of the results obtained from both instruments was used throughout. A very rapid rise in temperature was shown by both instruments just above  $H_c$ . It is possible that this may be partly due to insolation. Pressure distribution:—Anticyclone over England with a ridge of high pressure extending to the Azores and another up the coast of Norway. Shallow lows centred over Southern Scandinavia, to the north-west of Iceland and over the Atlantic, south-west of Ireland; low pressure over the Mediterranean. Type XI.
713. Weather fair. Clouds, St-Cu. 7/10, A-Cu. 1/10. Inversion from 1.79 km. to 1.93 km.; Temp. 269 a. to 271 a. Relative humidity 67 per cent. to 59 per cent. The mean of both up and down temperature records was used except near the top where a bias towards the colder one was made. At the greatest height the balloon had apparently floated about for some time and a large increase in temperature shown by the record at this level was ignored. Temperature oscillations of as much as 2 a. were shown on the up trace near the top. Pressure distribution: A wedge of high pressure stretching from an Anticyclone to the north-west of Iceland, developing over the British Isles. Complex area of low pressure over the Western Mediterranean and low again to the north of Scandinavia. Type IX.
717. Weather fair. Cirrus observed through Stratus clouds to be travelling from WSW. Pronounced fall of temperature in the stratosphere above 11½ km. Pressure distribution:—A depression just off the west coast of Scotland with a secondary centred close to Sealand moving northwards along the coast. High over Eastern Europe. Type V a.
719. Weather fine. Clouds, Cu. 1/10, at 1 km. moving from WNW, and A-Cu. 1/10 moving from W.N. The bursting of the balloon made the top of the trace unusually blurred, making the actual top a little uncertain. Pressure distribution:—A complex depression with centres over the Shetlands and Denmark and a secondary over the English Channel. Type XIV.
720. Weather overcast with rain and low clouds. Inversion on ascent from 1 km. to 1.14 km.; Temp. 270 a. to 271 a. Relative humidity 100 per cent. throughout. Inversion on descent from 1.23 km. to 1.42 km.; Temp. 268 a. to 269.5 a. The hygrogram was peculiarly sluggish, possibly the hairs were frozen whilst wet. Pressure distribution: A large low area centred off the mouth of the English Channel and a high over Scandinavia, a relatively stable distribution. Type VII b.



$T$  = Temperature in Degrees Absolute.  
 $H$  = Height in kilometres above M.S.L.

$P$  = Pressure in millibars.  
 $RH$  = Relative Humidity per cent.

No.	674.	675.	676.	677.	678.	679.	680.	681.	682.
Date.	Jan. 10.	Jan. 23.	Feb. 23.	Feb. 27.	March 8.	Mar. 9.	Mar. 10.	Mar. 11.	Mar. 12.
Station.	Calshot.	Sealand.	Kew.	Kew.	Sealand.	Sealand.	Sealand.	Kew.	Kew.
Start. (G.M.T.)	12h. 37m.	13h. 10m.	16h. 51m.	16h. 0m.	7h. 15m.	7h. 30m.	7h. 10m.	7h. 2m.	12h. 34m.

### 548. HEIGHTS, TEMPERATURES AND RELATIVE HUMIDITIES CORRESPONDING WITH ISOBARIC SURFACES.

1928.

Pressure.	H.	T.	H.	T.	RH.	H.	T.	RH.	H.	T.	H.	T.	RH.	H.	T.	RH.	H.	T.	RH.	H.	T.	RH.
Millibars.	km.	a.	km.	a.	%	km.	a.	%	km.	a.	km.	a.	%	km.	a.	%	km.	a.	%	km.	a.	%
100	...	...	...	...	...	...	...	...	...	...	16.01	22	...	16.00	23	...	15.95	23	...	...	...	...
200	11.48	11	...	...	...	...	...	...	...	...	11.70	21	...	11.49	21	...	11.39	26	...	...	...	...
300	8.97	20	...	...	...	...	...	...	...	...	9.11	23	...	8.91	19	...	8.82	24	...	...	...	...
400	7.04	37	7.18	45	...	...	...	...	...	...	7.18	35	...	7.01	33	...	6.89	32	30	6.83	30	...
500	5.45	49	5.54	57	...	...	...	...	...	...	5.60	48	...	5.45	45	25	5.35	40	32	5.30	39	...
600	4.10	59	4.15	65	...	...	...	...	...	...	4.25	57	...	4.11	55	31	4.05	49	38	4.00	47	...
700	2.91	67	2.94	70	...	...	...	...	...	...	3.07	67	...	2.94	60	59	2.91	56	54	2.88	52	...
800	1.86	73	1.88	75	...	...	...	...	...	...	2.01	73	...	1.91	66	88	1.90	61	83	1.87	60	...
900	0.92	75	0.93	75	Nearly saturated	...	...	...	...	...	1.06	79	...	0.99	69	85	0.99	67	76	0.97	65	...
1000	0.06	...	0.08	...	...	...	...	...	...	...	0.23	...	...	0.15	...	...	0.16	...	...	0.14	...	...

### 549. PRESSURES, TEMPERATURES AND HUMIDITIES AT GIVEN HEIGHTS.

1928.

Heights.	P.	T.	P.	T.	RH.	P.	T.	RH.	P.	T.	P.	T.	RH.	P.	T.	RH.	P.	T.	RH.	P.	T.	RH.
Kilometres	mb.	a.	mb.	a.	%	mb.	a.	%	mb.	a.	mb.	a.	%	mb.	a.	%	mb.	a.	%	mb.	a.	%
21	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
20	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
19	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
18	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
17	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
16	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
15	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
14	133	16	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
13	157	16	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
12	184	13	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
11	217	9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
10	254	11	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9	298	19	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8	347	28	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
7	403	37	410	47	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
6	464	45	470	53	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5	532	53	537	60	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
4	608	59	612	67	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3	692	65	695	70	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2.5	737	69	740	72	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2	785	73	788	75	Nearly saturated	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1.5	836	73	838	75	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1	890	75	892	75	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
0.5	948	78	949	77	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ground.	1007	82	1009	79	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

Note.—The temperatures are derived from the original tabulations which are generally made to the nearest half-degree, and are shown to the nearest whole degree.

### LAPSE RATE OF TEMPERATURE BETWEEN GIVEN HEIGHTS.

Degrees absolute per kilometre.

1928.

Kilometres	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
20 to 21	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
19 to 20	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
18 to 19	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
17 to 18	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
16 to 17	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
15 to 16	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
14 to 15	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
13 to 14	0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
12 to 13	-2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
11 to 12	-5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
10 to 11	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9 to 10	9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8 to 9	9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
7 to 8	9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
6 to 7	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5 to 6	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
4 to 5	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3 to 4	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2.5 to 3	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2 to 2.5	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1.5 to 2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1 to 1.5	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
0.5 to 1	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Gd. to 0.5	9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

Note.—The lapse rates are derived from the original tabulations, which are generally made to the nearest half-degree.

\* See Remarks.



T = Temperature in Degrees Absolute.

P = Pressure in millibars.

H = Height in kilometres above M.S.L.

RH = Relative Humidity per cent.

No.	683.	684.	686.	687.	689.	690.	691.	692.	693.
Date.	Mar. 13.	Mar. 14.	Mar. 16.	Mar. 17.	Mar. 20.	Mar. 22.	Mar. 26.	Mar. 29.	Mar. 31.
Station.	Calshot.	Kew.	Sealand.	Sealand.	Kew.	Kew.	Sealand.	Sealand.	Kew.
Start (G.M.T.)	8h. 5m.	7h. 23m.	7h. 15m.	7h. 30m.	17h. 30m.	17h. 33m.	17h. 50m.	10h. 40m.	9h. 55m.

### HEIGHTS, TEMPERATURES AND RELATIVE HUMIDITIES CORRESPONDING WITH ISOBARIC SURFACES—continued.

548.

1928.

Pressure.	H.	T.	H.	T.	RH.	H.	T.	RH.	H.	T.	RH.	H.	T.	RH.	H.	T.	RH.	H.	T.	RH.	H.	T.	RH.
Millibars.	km.	a.	km.	a.	%	km.	a.	%	km.	a.	%	km.	a.	%	km.	a.	%	km.	a.	%	km.	a.	%
100	15.89	22	...	...	...	...	...	...	...	...	...	15.87	13	...	...	...	...	...	...	...	...	...	...
200	11.38	21	11.46	15	...	11.67	9	...	11.63	3	...	11.58	5	...	11.46	21	...	11.58	19	...	11.42	19	...
300	8.77	19	8.91	21	...	9.11	25	...	9.10	23	...	9.03	25	...	8.86	23	...	9.00	24	25	8.84	26	70
400	6.89	30	7.00	33	36	7.15	40	87	7.15	39	83	7.07	40	65	6.92	39	22	7.04	39	22	6.87	40	74
500	5.35	42	5.45	43	37	5.55	51	94	5.56	51	89	5.46	52	82	5.34	47	24	5.44	49	21	5.27	51	85
600	4.03	49	4.12	54	40	4.18	59	85	4.19	61	100	4.08	61	65	3.99	57	22	4.10	56	24	3.91	60	91
700	2.89	55	2.96	63	63	3.00	64	87	3.00	67	76	2.90	67	83	2.81	65	26	2.92	65	30	2.71	67	90
800	1.89	61	1.92	66	63	1.96	68	100	1.94	75	69	1.84	75	57	1.77	71	71	1.87	69	80	1.66	73	96
900	0.97	67	1.01	67	84	1.03	75	90	0.99	79	88	0.88	79	66	0.82	78	71	0.94	75	81	0.71	75	100
1000	0.14	...	0.17	72	90	0.18	...	...	0.13	...	...	0.01	...	...	...	...	...	0.09	...	87	...	...	...

549.

## PRESSURES, TEMPERATURES AND HUMIDITIES AT GIVEN HEIGHTS—continued.

1928.

Heights.	P.	T.	P.	T.	RH.	P.	T.	RH.	P.	T.	RH.	P.	T.	RH.	P.	T.	RH.	P.	T.	RH.	P.	T.	RH.
Kilometres	mb.	a.	mb.	a.	%	mb.	a.	%	mb.	a.	%	mb.	a.	%	mb.	a.	%	mb.	a.	%	mb.	a.	%
21	...	...	...	...	...	...	...	...	...	...	...	44	9	...	...	...	...	...	...	...	...	...	...
20	...	...	...	...	...	...	...	...	...	...	...	51	9	...	...	...	...	...	...	...	...	...	...
19	...	...	...	...	...	...	...	...	...	...	...	60	11	...	...	...	...	...	...	...	...	...	...
18	...	...	...	...	...	...	...	...	...	...	...	71	10	...	...	...	...	...	...	...	...	...	...
17	84	21	...	...	...	...	...	...	...	...	...	83	12	...	...	...	...	...	...	...	...	...	...
16	98	21	...	...	...	...	...	...	...	...	...	98	13	...	...	...	...	...	...	...	...	...	...
15	115	21	...	...	...	...	...	...	...	...	...	115	13	...	...	...	...	...	...	...	...	...	...
14	133	23	...	...	...	...	...	...	...	...	...	135	13	...	...	...	...	...	...	...	...	...	...
13	156	23	157	17	...	161	9	...	159	11	...	159	13	...	...	...	...	156	19	...	153	21	...
12	182	21	184	16	...	189	8	...	188	2	...	187	7	...	...	...	...	187	22	...	183	19	...
11	212	21	215	13	...	223	12	...	222	6	...	219	9	...	215	20	...	219	16	...	214	15	...
10	248	21	253	13	...	261	17	...	261	15	...	258	17	...	251	15	...	257	15	...	250	16	...
9	289	19	296	19	...	305	25	...	305	24	...	301	25	...	294	22	...	300	24	...	293	25	69
8	338	22	345	27	34	354	33	84	354	33	81	349	33	58	341	29	20	349	32	25	340	32	72
7	393	29	400	33	35	408	41	89	409	40	84	403	41	65	395	38	22	403	39	22	393	39	74
6	456	37	463	39	37	470	49	94	471	47	87	465	48	75	456	43	23	464	47	20	453	47	80
5	525	44	533	47	38	538	55	92	539	55	91	532	55	79	523	50	24	532	51	22	519	53	87
4	603	50	610	55	41	615	61	83	615	61	97	607	61	64	599	57	22	608	57	25	593	59	91
3	690	55	697	62	61	701	64	87	701	67	75	691	65	85	684	63	26	693	64	30	675	65	89
2.5	737	57	743	65	72	747	66	74	746	71	70	736	70	69	729	67	33	738	67	38	720	69	90
2	787	61	793	66	65	796	68	100	794	75	68	784	73	59	777	69	56	787	69	65	766	71	94
1.5	841	64	845	67	83	848	71	100	845	78	70	834	77	56	828	73	73	838	71	93	816	73	98
1	897	67	901	67	84	903	75	90	899	79	88	887	78	66	881	77	82	893	75	82	868	75	96
0.5	956	71	960	71	94	961	...	...	956	79	91	943	81	62	937	81	66	950	...	81	924	...	97
Ground.	1018	73	1021	74	91	1022	77	90	1015	82	85	1001	87	67	994	84	71	1009	81	89	983	79	90

Note.—The temperatures are derived from the original tabulations which are generally made to the nearest half-degree, and are shown to the nearest whole degree.

## LAPSE RATE OF TEMPERATURE BETWEEN GIVEN HEIGHTS—continued.

Degrees absolute per kilometre.

550.

1928.

Kilometres	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
20 to 21	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
19 to 20	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
18 to 19	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
17 to 18	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
16 to 17	0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
15 to 16	0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
14 to 15	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
13 to 14	0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
12 to 13	-1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
11 to 12	-1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
10 to 11	0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9 to 10	-1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8 to 9	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
7 to 8	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
6 to 7	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5 to 6	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
4 to 5	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3 to 4	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2.5 to 3	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2 to 2.5	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1.5 to 2	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1 to 1.5	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
0.5 to 1	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Gd. to 0.5	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

Note.—The lapse rates are derived from the original tabulations, which are generally made to the nearest half-degree.

\* See Remarks.



$P$  = Pressure in millibars.

$RH$  = Relative Humidity per cent.

HEIGHTS, TEMPERATURES AND RELATIVE HUMIDITIES CORRESPONDING WITH ISOBARIC SURFACES—*continued.*

**548.**

**1928.**

549.

PRESSURES, TEMPERATURES AND HUMIDITIES AT GIVEN HEIGHTS—*continued.*

**1928.**

*Note.*—The temperatures are derived from the original tabulations which are generally made to the nearest half-degree, and are shown to the nearest whole degree.

LAPSE RATE OF TEMPERATURE BETWEEN GIVEN HEIGHTS—*continued.*

Degrees absolute per kilometre.

**550.**

**1928.**

**Note.**—The lapse rates are derived from the original tabulations, which are generally made to the nearest half-degree.

\* See Remarks.



$T$  = Temperature in Degrees Absolute.  
 $H$  = Height in kilometres above M.S.L.

$P$  = Pressure in millibars.  
 $RH$  = Relative Humidity per cent.

No.	705.	706.	708.	709.	710.	713.	717.	719.	720.
Date. Station.	July 23. Kew.	Aug. 2. Sealand.	Sept. 5. Kew.	Sept. 11. Sealand.	Sept. 12. Sealand.	Nov. 8. Kew.	Nov. 15. Sealand.	Nov. 17. Sealand.	Dec. 11. Kew.
Start. (G.M.T.)	13h. 59m.	13h. 45m.	15h. 0m.	15h. 55m.	9h. 3m.	12h. 25m.	7h. 10m.	7h. 30m.	16h. 45m.

### HEIGHTS, TEMPERATURES AND RELATIVE HUMIDITIES CORRESPONDING WITH ISOBARIC SURFACES—continued.

548.

1928.

Pressure.	H.	T.	RH.	H.	T.	RH.	H.	T.	RH.	H.	T.	RH.	H.	T.	RH.	H.	T.	RH.	H.	T.	RH.	H.	T.	RH.	H.	T.	RH.
Millibars.	km.	a. 200 +	%	km.	a. 200 +	%	km.	a. 200 +	%	km.	a. 200 +	%	km.	a. 200 +	%	km.	a. 200 +	%	km.	a. 200 +	%	km.	a. 200 +	%	km.	a. 200 +	%
100	...	...	...	...	...	...	...	...	...	16.44	19	...	...	...	...	...	...	...	16.00	14	...	15.80	19	...	15.68	17	...
200	...	...	...	12.17	15	...	12.08	17	...	12.00	16	...	...	...	...	11.57	15	...	11.53	28	...	11.32	25	...	11.28	15	...
300	9.53	37	...	9.50	35	...	9.43	32	...	9.37	31	...	9.36	31	...	8.99	23	...	8.81	29	...	8.66	22	...	8.72	19	...
400	7.47	51	28	7.45	53	34	7.41	49	29	7.38	45	20	7.35	46	60	7.05	38	23	6.87	37	76	6.76	32	25	6.83	34	73
500	5.80	62	25	5.75	63	47	5.75	61	25	5.73	59	23	5.71	57	71	5.46	48	18	5.28	49	84	5.22	43	27	5.25	47	80
600	4.38	71	32	4.33	69	43	4.33	70	32	4.32	67	27	4.31	64	67	4.11	59	21	3.93	59	86	3.89	53	31	3.92	55	85
700	3.15	77	60	3.11	75	29	3.09	75	65	3.10	73	32	3.11	71	58	2.92	67	31	2.75	67	82	2.73	63	43	2.75	63	93
800	2.06	79	97	2.03	77	56	2.00	84	39	2.04	74	73	2.05	75	80	1.87	70	60	1.69	73	75	1.69	70	59	1.71	69	100
900	1.09	86	79	1.07	81	88	1.01	89	36	1.08	79	87	1.09	81	73	0.94	73	90	0.74	79	80	0.75	75	78	0.78	71	100
1000	0.19	94	52	0.19	...	...	0.11	...	...	0.21	87	70	0.22	86	88	0.08	...	...	...	...	...	...	...	...	...	...	...

549.

### PRESSURES, TEMPERATURES AND HUMIDITIES AT GIVEN HEIGHTS—continued.

1928.

Heights.	P.	T.	RH.	P.	T.	RH.	P.	T.	RH.	P.	T.	RH.	P.	T.	RH.	P.	T.	RH.	P.	T.	RH.	P.	T.	RH.
Kilometres	mb.	a.	%	mb.	a.	%	mb.	a.	%	mb.	a.	%	mb.	a.	%	mb.	a.	%	mb.	a.	%	mb.	a.	%
21	...	200	...	...	200	...	...	200	...	...	200	...	...	200	...	...	200	...	...	200	...	...	200	...
20	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
19	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
18	...	...	...	...	...	...	...	...	...	79	20	...	...	...	...	...	...	...	...	...	...	...	...	...
17	...	...	...	...	...	...	...	...	...	92	19	...	...	...	...	...	...	...	85	12	...	83	19	...
16	...	...	...	109	21	...	...	...	...	107	19	...	...	...	...	...	...	...	100	14	...	97	18	...
15	...	...	...	128	15	...	...	...	...	125	21	...	...	...	...	...	...	...	117	15	...	113	18	...
14	...	...	...	149	17	...	...	...	...	147	20	...	...	...	...	...	...	...	137	19	...	133	19	...
13	...	...	...	175	15	...	...	...	...	171	20	...	...	...	...	...	...	...	160	23	...	154	23	...
12	...	...	...	205	17	...	...	...	...	202	18	...	...	...	...	...	...	...	186	27	...	180	25	...
11	...	...	...	239	23	...	...	...	...	234	19	...	...	...	...	...	...	...	216	29	...	210	25	...
10	280	35	...	279	31	...	...	...	...	274	27	...	...	...	...	...	...	...	251	29	...	245	25	...
9	323	41	...	322	39	...	...	...	...	319	36	...	...	...	...	...	...	...	292	29	...	285	23	...
8	372	48	31	371	47	33	...	...	...	368	44	30	...	...	...	...	...	...	338	28	71	332	23	24
7	426	53	25	424	57	36	...	...	...	422	42	26	...	...	...	...	...	...	392	35	75	386	30	25
6	487	61	24	484	63	44	...	...	...	483	59	23	...	...	...	...	...	...	452	43	79	447	37	26
5	554	67	29	551	66	49	...	...	...	550	66	27	...	...	...	...	...	...	519	51	87	515	44	28
4	629	73	35	625	71	40	...	...	...	625	71	37	...	...	...	...	...	...	594	59	90	591	53	31
3	713	77	74	709	75	27	...	...	...	708	76	63	...	...	...	...	...	...	677	65	80	676	61	41
2.5	758	78	99	754	75	37	...	...	...	753	80	47	...	...	...	...	...	...	722	68	85	721	65	44
2	806	79	96	802	77	60	...	...	...	800	84	39	...	...	...	...	...	...	769	71	74	769	67	54
1.5	856	83	80	853	79	85	...	...	...	850	87	25	...	...	...	...	...	...	819	75	73	819	71	60
1	909	87	77	907	82	87	...	...	...	902	89	36	...	...	...	...	...	...	871	77	73	872	73	74
0.5	965	91	62	963	85	68	...	...	...	956	94	32	...	...	...	...	...	...	927	81	...	928	77	76
Ground.	1022	96	58	1022	91	58	...	...	...	1011	99	36	...	...	...	...	...	...	984	85	80	986	81	77

Note.—The temperatures are derived from the original tabulations which are generally made to the nearest half-degree, and are shown to the nearest whole degree.

### LAPSE RATE OF TEMPERATURE BETWEEN GIVEN HEIGHTS—continued.

Degrees absolute per kilometre.

1928.

Kilometres	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
20 to 21	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
19 to 20	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
18 to 19	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
17 to 18	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
16 to 17	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
15 to 16	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
14 to 15	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
13 to 14	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
12 to 13	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
11 to 12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
10 to 11	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9 to 10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8 to 9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
7 to 8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
6 to 7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5 to 6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
4 to 5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3 to 4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2.5 to 3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2 to 2.5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1.5 to 2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1 to 1.5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
0.5 to 1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Gd. to 0.5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

Note.—The lapse rates are derived from the original tabulations, which are generally made to the nearest half-degree.