

METEOROLOGICAL OFFICE



THE
MONTHLY
WEATHER REPORT
1964

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THE MONTHLY WEATHER REPORT, 1964

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INTRODUCTION

The *Monthly Weather Report* gives a résumé of observations from stations in the United Kingdom. Particulars of the methods adopted in taking the observations are given in the *Observer's Handbook*.

The isopleths on the maps of pressure in this volume have been extended over the Irish Republic from data kindly supplied by the Director of the Meteorological Service, Dublin.

INFORMATION FOR PREVIOUS YEARS

Monthly summaries of observations made at stations in connection with the Meteorological Office were first published in 1869 in the *Quarterly Weather Report*, a publication issued for each of the years 1869 to 1880. The *Monthly Weather Report* commenced in 1884. The gap is bridged for synoptic stations by a supplement to the Daily Weather Report and for other stations by tables in *Observations at Stations of the Second Order*. A brief history of the development of the *Monthly Weather Report* will be found in the 1915 volume. Most of the changes made in later years are indicated in subsequent volumes. A note on the revision of the *Monthly Weather Report* in 1956 is included in the Introduction to the 1955 volume.

GENERAL ARRANGEMENT OF THE REPORT

The arrangement of each issue of the *Monthly Weather Report* is as follows:

1. General remarks on the development of the weather over the British Isles under a brief heading descriptive of the special characteristics of the month.
 2. Table I. Summaries by districts, of air temperature, of earth temperature, of rainfall and of duration of bright sunshine, based on observations at the 'district value' stations.
 3. Table II. Summary of autographic records of wind.
 4. A plate of four maps showing:
 - (a) The monthly distribution of pressure, based on observations at selected stations at 9 h., together with the average distribution of pressure at 9 h. for the month over the period 1921-1950.
 - (b) The distribution of mean temperature at sea level over the land and mean sea temperature in coastal waters.
 - (c) The distribution of bright sunshine in hours per day.
 - (d) Anomalies of 1 foot earth temperature.
 5. A full-page map showing by isohyetal lines the distribution of the month's precipitation. This map is based on data from about 2,500 stations.
 6. Table III, giving for individual stations, summaries of extreme and mean air temperatures, of mean earth temperatures at 1 foot and 4 feet, of rainfall and sunshine, and of weather observations. In the case of air temperature, rainfall and sunshine, differences from average or percentages of average are given when available.
 7. Table IV, giving summaries of the observations of pressure, temperature, humidity, cloud, visibility and wind, made at fixed hours which are indicated in the table for each station.

Tables III and IV together include the items comprised in the international form of monthly climatological summary, the Form B of the Report of the International Meteorological Committee, 1874; and they give, in addition, information regarding the duration of bright sunshine, mean earth temperature at 1 foot and 4 feet (both from 1906), the number of observations of wind of force 4-5 and 6-7 on the Beaufort Scale (from 1937), of winds of force 1-3 (from 1923), the number of days of fog (from 1906), the number of observations of different degrees of visibility (from 1923), the number of days of air frost (from 1956), the number of days of ground frost (from 1908) and the pressure at mean sea level (from 1912). Dates in brackets indicate the first year of publication of the various tables.
 8. Table XIII. Solar radiation and illumination at certain stations.
 9. Table VIII. Monthly frequencies of maximum and minimum temperatures at 20 selected stations.
 10. Additions and corrections to tables.
- The Annual Summary of each volume of the *Monthly Weather Report* includes remarks, maps and tables as above for the year as a whole, and the following additional tables:
11. Table V. Highest and lowest maximum and minimum temperatures during the year at each station.
 12. Table VI. Monthly frequencies of duration of bright sunshine at 20 selected stations.
 13. Table VII. Frequency of rainfall between given limits during the year at 30 selected stations.
 14. Table IX. The annual table corresponding to Table II in the monthly issues.
 15. Table X. The number of hours during the year with gusts exceeding (a) 33 kt and (b) 47 kt at each anemograph station.
 16. Table XI. Occasions of 'strong gales' during the year.
 17. Table XII. Dates on which gusts of 48 kt or more occurred during the year.

NOTES ON TABLES

TABLE I. DISTRICT VALUES

The District Values of this table are computed from the statistics for selected individual stations set out in Table III.

¶§ The stations used for computing District Values of rainfall and temperature are shown in Table III by the sign ¶ and those used for computing District Values of sunshine by the sign §. A list of these stations and of the stations used in computing the District Values of earth temperature is given on page vi.

The differences from and percentages of average for air temperature, earth temperature, rainfall and sunshine are the means of the corresponding values for the selected stations. The highest and lowest air temperatures for the District

may refer to any station in Table III in 1964 but from January 1965 onwards will refer only to District value stations.

From January 1964 the values for England and Wales, for Scotland and for Northern Ireland have been added to the table, and the table moved to page 1 of the Monthly Reports.

TABLE II. SUMMARY OF AUTOGRAPHIC RECORDS OF WIND

About half the records used in the preparation of this table are made by pressure-tube anemographs, and at half the stations electrical cup recorders have been brought into use. The classification adopted for the 'Distribution of mean hourly values of wind speed' is based on the specification of the Beaufort scale of wind force (see *Observer's Handbook*, 1956 ed., page 74). For an anemograph complying with the specification 'head 33 ft. (10 m.) above ground in the open' the several columns correspond to wind speeds (measured over an hour) equivalent to Force 8 and above (gales), Forces 6 and 7 (strong winds), Forces 4 and 5 (moderate breezes), Forces 2 and 3 (light breezes), Forces 1 and 0 (nearly calm). Some information as to the nature of the actual exposures is given in the 'Height' columns. The 'Effective Height' is an estimate of the height at which an anemometer would record an equal mean velocity in a situation free from obstructions.

The duration in each category is the number of 60-minute periods ended at exact hours G.M.T., in each of which the mean wind velocity was between the stated limits. The 'Highest Hourly Wind' similarly refers to the mean for a period of 60 minutes ended at an exact hour G.M.T. Under the heading 'Veer from N.' the direction from which the wind was blowing is stated, the entry for an east wind being 090°, that for a south wind 180°, and so on.

TABLE III. SUMMARY OF OBSERVATIONS AT TERMINAL HOURS

Temperature. The terminal hours of observation are given for each station. When the terminal hours for maximum and minimum temperature are stated independently the temperatures refer to intervals of 24 hours. If the maximum thermometer is read at 9 h. the reading is credited to the previous day. When the terminal hours for maximum and minimum are separated by a dash thus, 21-9, the day-maximum for the period 9 h. to 21 h. and the night-minimum for the period 21 h. to 9 h. are reported and are utilised in determining the means for the month; in such cases the day-minimum and night-maximum temperatures are also read by the observers, so that the absolute maximum and minimum temperatures for the month are obtained.

The measurements of air temperature are made in louvered screens over short grass in the open, the bulbs of the thermometers being approximately 4 feet above ground. At *Kew Observatory*, the thermometers are 10 feet above ground in a louvered screen on the north wall.

Commencing January 1965 the highest and lowest temperatures recorded in each district will be underlined.

Measurements of earth temperature are obtained from thermometers hung vertically in steel tubes sunk in the ground, the bulb of the thermometer being at the appropriate depth.

Rainfall. The daily amounts are for the 24 hours beginning at 9 h. G.M.T. 'Rainfall' includes all forms of precipitation. The number of days of precipitation is counted with reference to the limit .01 inch or 0.2 mm., and also with reference to the limit .04 inch or 1 mm. The lower limit excludes 'Traces' of precipitation, very occasionally it is passed when the precipitation is only in the form of dew.

Weather. The number of days of Precipitation, Snow or Sleet, Hail, Ice or Snow Pellets, etc., Thunder heard and Gale are counted irrespective of the hour at which the phenomena occur. Except for 'Precipitation' the day is the period midnight to midnight G.M.T.

For the purpose of this summary 'Hail', which includes Soft Hail, is defined as small balls or pieces of ice, with diameter from 5 mm. upwards, falling either separately or agglomerated into irregular lumps. 'Ice or Snow Pellets etc.' include ice pellets and snow pellets up to 5 mm. in diameter and also ice grains and ice needles. 'Snow lying' refers to occasions when half or more of the ground representative of the station (see *Observer's Handbook*, 1956 ed., page 78) is covered with snow at 9 h. G.M.T. The entry of 'fog' implies that regular observations of the range of vision are made. Days of fog are those on which the range of vision is less than 1,100 yards at 9 h. G.M.T. Any variability of the observation hour may exercise an important effect upon the statistics of fog frequency. 'Gale' is a wind of Force 8 or upwards on the Beaufort scale. An 'air frost' is entered when the screen minimum temperature, read either at the terminal hour of 9 h. or 21 h., fell below 0.0°C.

Sunshine. The sunshine recorder is generally insensitive to sunshine when the sun is at an altitude of less than 3°.

Where the symbol 'S' occurs it indicates that obstacles obstruct the sun's rays during more than 5 per cent of the period when it is over 3° above the horizon.

TABLE IV. SUMMARY OF OBSERVATIONS AT FIXED HOURS

From January 1945 the hours of observation were changed at certain stations from 0, 6, 12, 18 to 3, 9, 15, 21. From that date departures from the average pressure at 9 h. have been given.

Mean Air Pressure is expressed in millibars (1 millibar = 1,000 dynes per square centimetre = the pressure due to .0295300 inch of mercury at 0°C. and standard gravity 980.665 cm/sec.²). The corrections for gravity, temperature and height have been applied to the barometer readings so as to obtain pressure at mean sea level.

Humidity. The values given depend on the readings of the dry- and wet-bulb thermometers in louvered screens (see above). The observations are reduced by Hygrometric Tables, based on a formula of Regnault, issued by the Office and revised in 1961. At most stations the daily values of relative humidity and vapour pressure are found and the monthly means are computed therefrom. These stations are indicated by the letter 'H'. At the remaining stations the means of relative humidity and vapour pressure are derived from the monthly means of the dry-bulb and wet-bulb readings.

Cloud Amount. The proportion of sky covered with cloud is estimated on the scale 0 to 8, the entry '0' being equivalent to clear sky, '8' to overcast; '9' refers to 'sky obscured or cloud amount cannot be estimated'.

Visibility. The ranges, specified by international arrangement in metres, are given at the head of the table in yards and miles.

Wind Summaries. At stations where there are anemographs the mean speed over the 10 minutes ending at the hour (corrected to a height of 33 feet) is used; at other stations the frequencies are estimates, at the time of observation, of wind force on the Beaufort scale.

TABLE XIII. SOLAR RADIATION AND ILLUMINATION

The instruments used for the radiation records are Moll-Gorczyński solarimeters. Meteorological Office pattern bimetallic actinographs may be used as standby instruments for recording total radiation. Illumination is measured by recording illuminometers (with photocells) of Kew Mk III or Mk V pattern.

If in any month the records for any days are incomplete, owing to instrumental or other faults, the average daily value for complete days is taken, but if there are seven or more incomplete days in the month, the daily mean for that month is not published: when it is possible that either of the extreme values for the month occurred on an incomplete day then no value for that extreme is given.

The daily means for the year are computed from the monthly means. When it is possible that either of the extreme values for the year occurred on an incomplete day then no value for that extreme is given.

From January 1, 1957, the radiation values were measured in accordance with the International Pyrheliometric Scale (1956).

It is sometimes found advisable to apply revised calibration constants retrospectively; the figures published in Table XIII are therefore liable to correction. A review of all data published is being carried out and any necessary amendments will be issued as they become available.

HEIGHTS OF STATIONS ABOVE MEAN SEA LEVEL

The 'height of station above mean sea level' given in Table III refers to the height above Ordnance Datum of the ground on which the rain-gauge stands, while the 'height of barometer above mean sea level' given in Table IV refers to the height above Ordnance Datum of the barometer cistern. A note on the errors arising from differences between the old Liverpool Ordnance Datum and the Newlyn Ordnance Datum adopted in Great Britain in 1933 was included in the Introduction for 1953. From January 1, 1964, altitudes in Northern Ireland refer to the Belfast Datum. On the average the Belfast Datum is about 1 foot lower than the Newlyn Datum.

HIGH LEVEL STATIONS

The following procedure will be adopted with effect from January 1965.

1. Extremes in Table I will refer to District value stations only. An appropriate footnote will be added to the table.
2. 'All-station extremes' will be given in the text, the next 'best' being quoted as necessary.
3. The highest and lowest temperatures recorded in each district will be underlined in Table III.

AVERAGES

Rainfall (Table III). The averages refer to the period 1916-1950 and are 'weighted' if the record is not complete for that period. The averages of rainfall are given in M.O. 635.

Pressure (Table IV). The averages refer to 9 h. G.M.T. for period 1921-1950 and have been 'weighted' where necessary.

Temperature and Sunshine (Table III). The averages refer to the period 1931-1960 and are given in the following publications:

(1.) Averages of Temperature for Great Britain and Northern Ireland, 1931-1960 (M.O. 735).

(2.) Averages of Bright Sunshine for Great Britain and Northern Ireland, 1931-1960 (M.O. 743).

Earth Temperatures 1 foot and 4 feet. The averages refer to the period 1921-1950 (M.O. 665).

STANDARDS OF TIME

All time entries in the *Monthly Weather Report* are in Greenwich Mean Time. British Summer Time was in force from March 22 to October 25; during this period clocks were one hour in advance of Greenwich Mean Time. At all other times clocks referred to Greenwich Mean Time. Observations at all stations were made at the same hours by Greenwich Mean Time throughout the year.

INTERPOLATED VALUES

When the observations for any station for a month are incomplete and relevant data (e.g. records from neighbouring stations) which make it practicable to estimate approximate values for the missing observations are available, such approximate values may be used for completing summaries for stations published in Tables III and IV. Parts of a summary obtained in this way are shown in brackets thus: (11.3).

SEA TEMPERATURE

Mean sea-surface temperatures for the months of the year 1964 are shown by figures within circles on the temperature maps in the monthly issues of the Report. In general the values are derived from readings of ships under way, or from light vessels, certain of which send returns of sea temperature to the Meteorological Office.

ADDITIONAL RECORDS AVAILABLE FOR 1964

Some additional records for 1964 were received which are not summarised in the *Monthly Weather Report*. These include monthly climatological summaries for certain hours additional to those summarised in Table IV and, for certain stations, hourly tabulations of wind force and direction, rainfall duration and amount and duration of sunshine. The records for Scottish stations are available at the Meteorological Office, Edinburgh; those for stations in England and Wales at the Meteorological Office, Met. O. 3, Bracknell, Berks., and those for stations in Northern Ireland at the Meteorological Office, Belfast.

DISTRICT VALUE STATIONS, 1964

The following are the stations, summaries from which are used for the computation of the district values of temperature, rainfall, earth temperature and sunshine given in Table 1; except for rainfall in Northern Ireland which is based on the 11 stations published in *British Rainfall*.*

TR, Temperature and Rainfall: E1, Earth Temperature at 1 foot; E4, Earth Temperature at 4 feet; S, Sunshine

Dist.	Station	Element	Dist.	Station	Element	Dist.	Station	Element
0	Fortrose	TR - - S	3	Cambridge	TR E1 E4 S	7	Bidston	TR - - S
	Lerwick	- E1 E4 -		Gorleston	TR E1 E4 S		Nelson	- E1 E4 -
	Observatory ..	TR - - S		Rothamsted	TR E1 E4 S		Llandudno ..	TR - - S
	Onich	TR - - S		Shoeburyness ..	TR - - S		Manchester ..	- - - -
	Stornoway	TR - - S		Sprowston	TR - - S		Airport	TR - - S
Wick	TR - - S	Woburn	- E1 E4 -	Newton Rigg ..	TR - - S			
1	Craibstone	TR - - S	4	Birmingham	TR - - S	8	Wrexham	- E1 E4 -
	Dundee	TR - - S		Bradford	TR E1 E4 -		Long Ashton ..	TR - - S
	Edinburgh	TR - - S		Buxton	- E1 E4 -		Cardiff	TR E1 E4 S
	Marchmont	TR - - S		Huddersfield	- - - S		Falmouth	TR - - S
	Nairn	TR - - S		Nottingham	TR - - S		Ilfracombe	- E1 E4 -
Arbroath	- - - S	Oxford	TR E1 E4 S	Plymouth	- E1 E4 -			
6	Dumfries	TR E1 E4 S	5	Raunds	- E1 E4 -	Llandrindod Wells	TR - - S	
	Eskdalemuir ..	TR - - S		Ross-on-Wye	TR E1 E4 S	Swansea	- E1 E4 -	
	Kilmarnock	- E1 E4 -		East Malling	TR - - S	Teignmouth	TR - - S	
	Paisley	- E1 E4 -		Hastings	TR E1 E4 S	NORTHERN IRELAND		
	Renfrew	TR - - S		Kew Observatory ..	TR E1 E4 S		Aldergrove	T - - S
Rothsay	TR - - S	Margate	- E1 E4 -	Armagh	T - - S			
Stirling	- E1 E4 -	Porton	TR - - S	Ballykelly	T - - S			
Tiree	TR - - S	Southampton	TR - - S	Moneydig	T - - -			
2	Cockle Park	TR - - S	Wisley	- E1 E4 -	Hillsborough		- - - S	
	Cranwell	TR - - S			Castle Archdale ..		- - - S	
	Durham	TR E1 E4 S			Forest		T - - S	
	Hull	- E1 E4 -						
	Scarborough ..	TR - - S						
York	TR E1 E4 S							

MONTHLY WEATHER REPORT. LIST OF STATIONS

A complete list of climatological stations in Tables III and IV and of anemograph stations in Table II was published in 1963. Amendments to that list are published below. Stations which send in monthly returns of observations, but which are not published in the Report, are printed in italics.

In the tables of the *Monthly Weather Report* the stations are arranged in districts and counties; but in the following list the alphabetical order is adopted. The latitude and longitude of each station to the nearest minute are given (National Grid References can be supplied if required) and a column indicating the type of station has been added, according to the following scheme.

Observatories (O). These stations maintain continuous records of all meteorological elements and are staffed by Meteorological Office personnel.

Synoptic Stations. The observations from these stations are primarily used in preparing synoptic charts for weather forecasting, but climatological returns are also made. They are of two types:

(Sa) Stations manned by Meteorological Office personnel.

(Sb) Auxiliary stations manned by coastguards, lighthouse keepers etc.

Climatological Stations (C). These stations contribute observations made daily at 9 h. (G.M.T.) (and at certain stations at other times also) of temperature (wet and dry bulb), wind, cloud amount and weather, with the daily maximum and minimum temperature, the daily rainfall and remarks on the weather. Observations of visibility and records of sunshine are commonly made at these stations as well.

Agricultural Meteorological Stations (Ag). These are climatological stations participating in a scheme inaugurated by the Ministry of Agriculture, Fisheries and Food, and the Department of Agriculture for Scotland in co-operation with the Meteorological Office.

Health Resort Stations (H). These are climatological stations co-operating with the Meteorological Office under a health resort scheme. They make observations at 6 p.m. clock time (and in some cases at 9 a.m. clock time in addition when this differs from 9 h. G.M.T.) which are reported to the Meteorological Office by telegram for communication to the national press.

Anemograph Stations (A) provide summaries of wind speed and direction which are published in Table II of the *Monthly Weather Report*.

Sunshine Stations (Sun). Some stations report sunshine only, usually for special reasons of situation.

*Meteorological Office; British Rainfall, London

AMENDMENTS TO LIST OF STATIONS MAKING RETURNS

The following changes should be made in the list published in the Introduction to the 1963 volume.

1. Additions or alterations.

Station	Type	County	Lat.	Long.	Authority
Aldenham	C	Hertford	51 40N	00 20W	D. H. Robertson
Balerno	C	Midlothian	55 52N	03 21W	The Rt. Hon. Lord Balerno
Bracknell (Easthampstead)	Sun	Berkshire	51 23N	00 47W	Meteorological Office
Brigg	C	Lincoln	53 34N	00 29W	R. Williamson
Broom's Barn	Ag	Suffolk	52 16N	00 34E	Dr. R. Hull
Caistor	C	Lincoln	53 30N	00 20W	Cherry Valley Farms Ltd.
Coryton	A	Essex	51 30N	00 31E	Mobile Oil Co. Ltd.
Ely Lodge	Sb	Fermanagh	54 24N	07 42W	Lord Robert Grosvenor
Exmouth	H	Devon	50 36N	03 24W	East Devon Water Board
Killough	Sb	Down	54 14N	05 37W	Board of Trade
Kilnsea	A	Yorks., E.R.	53 37N	00 09E	Board of Trade
Little Rissington	Sa	Gloucester	51 52N	01 42W	Meteorological Office
Milford Haven	A	Pembroke	51 42N	05 03W	The Harbour Master
Montrose	C	Angus	56 43N	02 28W	Sunnyside Royal Hospital
Orielton	C	Pembroke	51 39N	04 57W	Field Studies Council
Penketh	C	Lancashire	53 23N	02 40W	Greystone Heath School
Prestwick Airport	A	Ayr	55 30N	04 35W	Meteorological Office
Rodney Stoke	C	Somerset	51 15N	02 43W	The Nature Conservancy
Trawsfynydd	A	Merioneth	52 47N	04 03W	Central Electricity Generating Board
Yeovilton	Sa	Somerset	51 00N	02 38W	Commanding Officer, R.N.A.S.
York (Hesslington)	C	Yorks., N.R.	53 57N	01 02W	Archbishop Holgate's Grammar School

London (Kingsway) becomes London (High Holborn) in January, 1965

2. Deletions. Bangor, Bellingham, Dore, Haydon Bridge, Middleton St. George, Seaford, Spurn Head, Tunbridge Wells, Woolhampton, York.

CHANGES IN THE NUMBER OF STATIONS PUBLISHED IN 1964

The following lists give stations published during 1964 in addition to those published in the 1963 reports and stations deleted in 1964 from the 1963 list of published stations.

1. Stations published in 1964 but not in 1963. Aldeburgh, Avonmouth, Binbrook, Black Mountain, Cairngorm, Camp Reservoir, Carrigans, Castle Archdale Forest, Clatteringshaws, Coire Cas Shieling, Coltishall, Colwyn Bay, Coventry, Craighouse, Credenhill, Dunblane, East Hoathly, Glenanne, Greenmount, Helen's Bay, Killough, Kilroot, Lisnafillan, Monkwood, Nottingham T.C., Pickering, Shin, Walton-on-Naze, West Freugh, Whitchester, Woolhampton.

2. Stations published in 1963 but not in 1964. Barrow, Bath, Bolton, Darwen, Dover R.M.S., Fylingdales Moor, Grantown-on-Spey, Haslemere, Manchester (Smokeless Zone), Milford Haven, Ponteland, Trawsfynydd, Wealdstone, West Kirby Park.

TABLE I. DISTRICT VALUES: ADDITIONS AND CORRECTIONS (1908, revised 1928, 1941, 1956 and 1964)

DISTRICTS	AIR TEMPERATURE					EARTH TEMP.		RAIN DAYS	RAIN-FALL	SUNSHINE
	Highest max.	Lowest min.	Max.	Min.	Mean	Mean 1 ft.	Mean 4 ft.			
1964			Difference from Average						Percentage of average	
January England and Wales										89
February 6. Scotland W.						+0.6	+0.4			
March 2. England N.E.								+5		
7. England N.W.									130	55
8. England S.W.						-0.2	-0.3			
June 3. England E.										76
7. England N.W.				+0.1	-0.9					
8. England S.W.						0.0				
England and Wales				+0.1	-0.6					74
July 8. England S.W.						+0.4			67	
August 6. Scotland W.						-0.1	-0.4			
8. England S.W.						-0.6	+0.5			109

TABLE XIII. SOLAR RADIATION AND ILLUMINATION: ADDITIONS AND CORRECTIONS

STATION	TOTAL RADIATION ON A HORIZONTAL SURFACE milliwatt-hours per square centimetre						DIFFUSE RADIATION ON A HORIZONTAL SURFACE milliwatt-hours per square centimetre						TOTAL ILLUMINATION ON A HORIZONTAL SURFACE Kilolux-hours					
	Max.	Date	Min.	Date	Daily Mean	No. of days	Max.	Date	Min.	Date	Daily Mean	No. of days	Max.	Date	Min.	Date	Daily Mean	No. of days
1956 KEW	January												117				55.6	28
	February												435	23			104.7	25
	March												569		46		244.3	
	April												796		226		311.0	
	May												761		125		530.6	
	June												868	25	146	1	429.1	31
	July																	
	August																	
	October						30						30				167.5	30
	November															11	74.6	
	December																32.7	
	Annual						365						358		July 25			
1957	January												168				76.1	
	February	250				112.1							245		19		126.9	
	March	394		60		206.3									36			
	April	595		91		331.6												
	May	761		118		434.7							356	22	83		211.3	
	June	766		222		548.5							547	29	113	9	320.8	28
	July	585		222		405.9							916	26			480.4	27
	August	611		92		342.1							908		297		668.6	
	September	379				232.9												
	October	306	2			146.0												
	November	188		9		71.8			8	15								
	December	96				48.6												
Annual	766				244.8								363	916	May 26	8	271.0	351
1958	March						346								55	Dec. 13	200.8	29
	May														61			
1959	June																	
	August												685	2	161	18		
1960	Annual														220		571.4	
	June														189	10		
1961	August		4, 7			261.7												
	September																	
1962	Annual																	
	February																	
1963	March						182	31									14	
	September																37	
1964	October																28	26
	Annual																	
1964	September																	
	Annual																150.8	401.3
1959	KINGSWAY																	
	January																	
1960	June	833																
	Annual	833				272.7												
1961	December																	
	Annual																	
1962	May																	
	June																	
1963	Annual																	
	March																	
1964	May																	
	October																	
1964	December																	
	Annual																	
1964	February																	
	Annual																	
1958	ABERPORTH																	
	Annual																	
1959	January	200	31	22		87.8												
	April																	
1960	February			14														
	Annual																	
1963	July	762	27	197	17	497.7	31											
	Annual																	
1964	April																	
	Annual																	
1956	ESKDALEMUIR																	
	May																	
1960	October																	
	November																	
1961	Annual																	
	September																	
1964	Annual																	
	February																	

(ix)

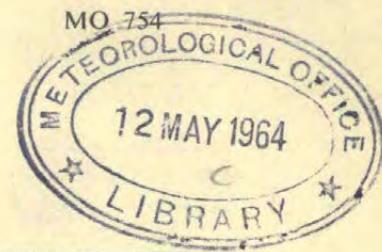
TABLE XIII. SOLAR RADIATION AND ILLUMINATION: ADDITIONS AND CORRECTIONS

STATION	TOTAL RADIATION ON A HORIZONTAL SURFACE milliwatt-hours per square centimetre						DIFFUSE RADIATION ON A HORIZONTAL SURFACE milliwatt-hours per square centimetre						TOTAL ILLUMINATION ON A HORIZONTAL SURFACE Kilolux-hours					
	Max.	Date	Min.	Date	Daily Mean	No. of days	Max.	Date	Min.	Date	Daily Mean	No. of days	Max.	Date	Min.	Date	Daily Mean	No. of days
CAMBRIDGE																		
1956	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1957	754	—	—	—	246.9	357	350	—	—	—	142.2	348	—	—	—	—	—	—
1958	693	July 7	—	—	235.4	342	375	June 26	—	—	148.8	340	—	—	—	—	—	—
1959	—	—	—	—	—	—	—	June 15	—	—	—	—	—	—	—	—	—	—
LERWICK																		
1957	431	—	—	—	—	—	—	—	—	—	—	—	877	—	173	—	—	—
1958	—	—	—	—	—	—	—	—	—	—	—	—	924	—	245	—	504.9	—
	—	—	—	—	—	—	—	—	—	—	—	—	948	—	147	—	335.5	—
	—	—	—	—	—	—	—	—	—	—	—	—	799	—	83	—	254.9	—
	—	—	—	—	—	—	—	—	—	—	—	—	538	—	—	—	121.7	—
	—	—	—	—	—	—	—	—	—	—	—	—	305	—	—	—	—	—
1959	—	—	—	—	—	—	—	—	—	—	—	—	89	—	—	—	75.3	—
	—	—	—	—	—	—	—	—	—	—	—	—	152	—	—	—	224.7	—
	—	—	—	—	—	—	—	—	—	—	—	—	516	27	137	—	372.2	—
	—	—	—	—	—	—	—	—	—	—	—	—	644	—	149	—	—	—
1960	—	—	—	—	—	—	—	—	—	—	—	—	78	—	—	—	94.2	—
	—	—	—	—	—	—	—	—	—	—	—	—	201	—	—	—	135.5	—
	—	—	—	—	—	—	—	—	—	—	—	—	368	—	—	—	278.9	—
	—	—	—	—	—	—	—	—	—	—	—	—	461	78	—	—	475.4	—
	—	—	—	—	—	—	—	—	—	—	—	—	811	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	747	195	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	112	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	811	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	66	—	—	—	80.6	—
1961	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1962	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1963	102	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	62	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	213	—	—	—	105.8	—	—	—	—	—	—	—	73	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	205	—	—	—	110.1	—
	—	—	—	—	—	—	—	—	—	—	—	—	439	—	—	—	154.4	—
1964	—	—	71	20	—	—	—	70	20	—	—	—	—	—	5	Dec. 1	244.4	365
	—	—	—	29	—	—	—	—	—	—	—	—	—	83	20	—	311.0	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	430.4	—

Monthly Weather Report

OF THE METEOROLOGICAL OFFICE

Summary of observations compiled from returns of official stations and voluntary observers



Volume 81 Number 1

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January 1964 — *Very dry; mostly quiet.*

Weather was predominantly anticyclonic in character except during the last few days of the month, a westerly cyclonic type becoming established on the 28th.

During the first four days of the month an anticyclone was centred over western Europe and a trough of low pressure to the west of Ireland on the 1st and 2nd moved slowly over Scotland on the 3rd and over northern England on the 4th. Mild south to south-west winds covered the British Isles, and, except for some sunny periods in the south-east on the 1st, weather was dull but generally dry over England. The trough brought rain to Scotland, falls being heavy on the 3rd in the Hebrides.

On the 4th pressure rose generally over the whole country and winds became light and variable. Fog formed widely becoming dense in parts of central and southern England. This was the beginning of a dull, foggy, but mainly dry spell, which lasted about a week.

The anticyclone over the British Isles and western Europe moved northwards towards Scandinavia on the 10th and easterly winds from the continent spread over southern England. Temperature fell sharply, day temperatures in south-east England being near freezing on the 12th and 13th. A feeble trough moving westwards from Europe gave occasional snow and sleet in south-east England on the 11th, and there were considerable falls of snow over southern England on the 12th as a depression moved northwards from France; the snow spread northwards to all districts the next day. It lay up to 12 inches deep locally along the south coast and the South Downs were covered with 6 inches of snow; further north, however, falls were slight.

The snow thawed rapidly on the 14th as milder air with rain and drizzle spread temporarily northward from France. Cold, dry easterly winds returned to most districts the next day bringing generally fine weather with long sunny periods to eastern and central districts on the 16th and 17th.

A deep depression near Iceland brought milder and moister air from the Atlantic to western districts on the 18th with a renewal of drizzle and fog which spread to nearly all districts during the night. By the 21st, the anticyclone over western Europe had moved westwards to cover the British Isles and winds became light and variable. Extensive fog persisted over much of the Midlands for nearly a week; it thickened on most nights and persisted in many industrial areas throughout the day being almost unbroken from south Yorkshire to the Vale of Evesham from the 19th to the 23rd.

The anticyclone over southern England moved southwards on the 27th and a cold front from the Atlantic brought rain, heavy at times, to many western and northern districts. The remainder of the month was mild and unsettled with showers and bright periods on the 28th and 30th and widespread rain on the 29th and 31st.

Pressure and Wind — Mean pressure was everywhere above the 1921-50 average, the excess ranging from 17.2 mb at Eskdalemuir Observatory to 13.7 mb at Scilly. Surface winds were south to south-

west at first becoming light and variable on the 6th, mainly easterly on the 10th, veering to east to south-east on the 15th and further to south to south-east on the 18th, after which winds were mainly light and variable until the 25th. Generally westerly winds in the north on the 26th spread to the whole country the next day and persisted for the remainder of the month. Wind reached gale force on 19 days in Scotland and on the 3rd, 15th-17th, 27th, 30th and 31st (7 days) in England and Wales. Gusts of 75 kt. were recorded at Benbecula on the 2nd and at Lowther Hill on the 31st.

Temperature — Mean temperature was below the 1931-60 average in eastern, central and southern England, but above in north-west England, Northern Ireland and Scotland. Day temperatures were generally above average except from the 10th to the 18th, and night frost was moderate to severe around the 14th, 18th and 23rd.

Extremes included: (England and Wales) 13.9°C at Aber on the 2nd, -13.3°C at Caldecott on the 14th; (Scotland) 13.9°C at Inverpolly on the 1st, at Kinlochewe on the 1st and 3rd and at Gordon Castle on the 29th; (Northern Ireland) 13.3°C at Stormont Castle on the 31st, -4.4°C at Knockmany Forest on the 21st and at Baronscourt Forest on the 22nd.

Rainfall — Taking England and Wales as a whole it was the driest January since 1880; it was the driest at Wick since 1898 and at Hampstead since 1914. At Ross-on-Wye only in 1896, 1898 and 1950 was there less rain during January. Rainfall was less than 25 per cent of the 1916-50 average over central, southern and south-west England (except Cornwall), South Wales, the Cheshire Plain and the coastal areas of south Lincolnshire and Norfolk.

Thunder was heard on 3 days in Scotland and on the 28th at a few places in England and Wales.

Snow or sleet fell on 13 days in Scotland low ground being snow-covered on the 14th, 15th and 30th. In England and Wales snow fell at one place or another from 10th to 20th and was widespread on the 13th and 14th. On these two days it lay 2-4 in. deep over much of the Midlands and eastern England; the greatest depth reported was 9½ in. at Huddersfield Oakes on the 14th.

Sunshine — Amounts were above the average in parts of east and north Scotland and in parts of northern England. In England and Wales percentages ranged from 171 at Huddersfield to 41 at Sidmouth. It was the dullest January at Worthing since 1912.

Fog — Fog was observed at 09 h at one place or another in Scotland on 26 days and every day in England and Wales except the 28th and 30th. It occurred on more than 10 days at a large number of stations; Thredegar had fog on 18 days. The foggiest periods were from the 4th until the 9th and from the 18th until the 23rd.

Miscellaneous Phenomena — The aurora was visible in Scotland on 4 nights.

Meteorological Office, Air Ministry: SIR GRAHAM SUTTON, C.B.E., D.Sc., F.R.S., Director-General.

DISTRICT VALUES AND WIND SUMMARY, January 1964

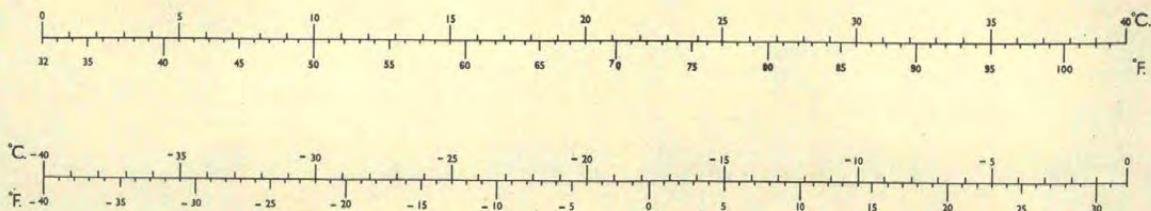
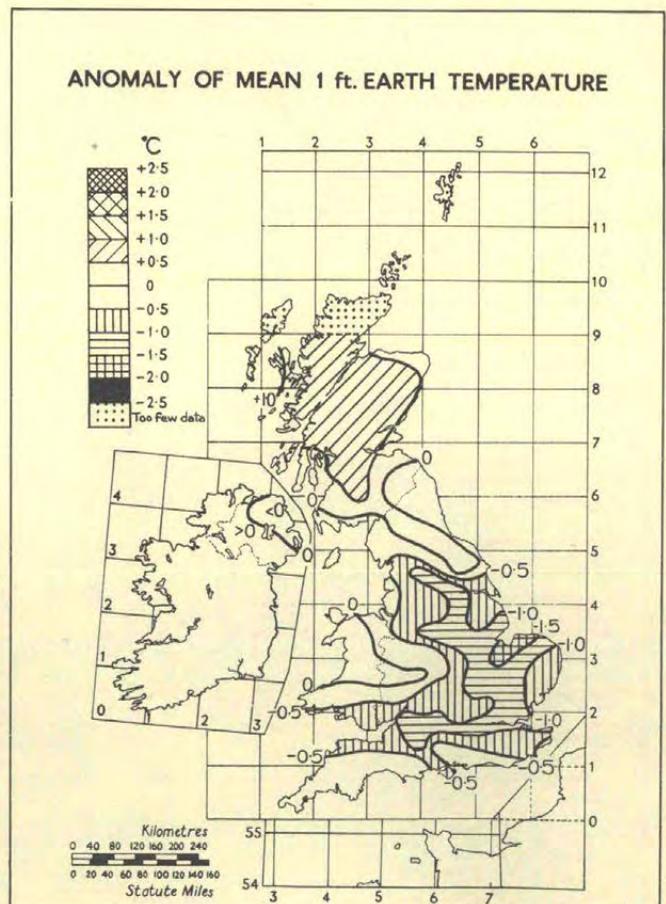
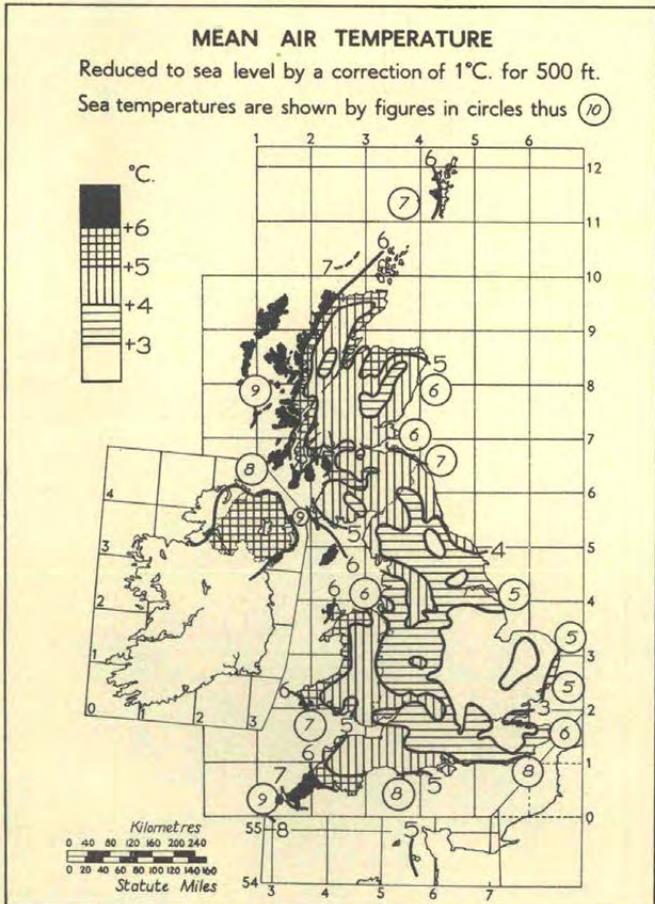
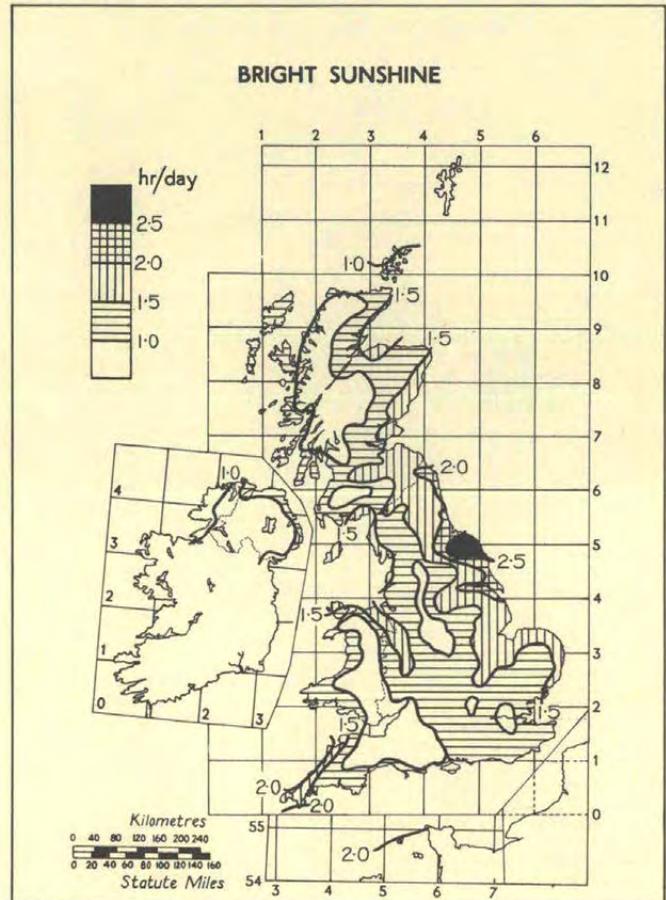
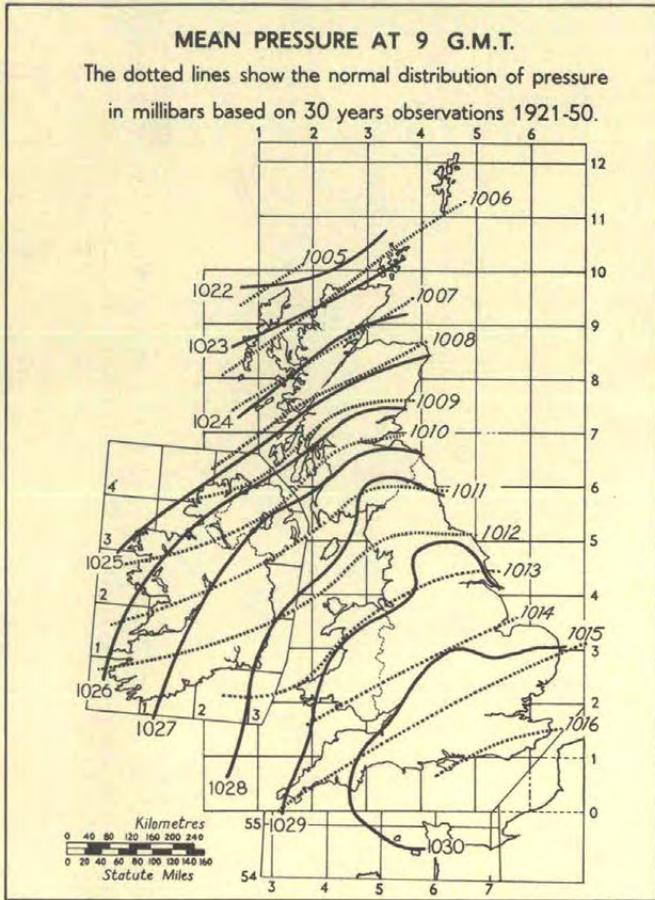
TABLE I—DISTRICT VALUES— January 1964 (1908, revised 1928, 1941, 1956 and 1964)

DISTRICTS	AIR TEMPERATURE					EARTH TEMP.		RAIN DAYS	RAIN-FALL	SUN-SHINE
	Highest Max.	Lowest Min.	Max.	Min.	Mean	Mean 1 ft.	Mean 4 ft.			
	Difference from Average					% of Average				
0 SCOTLAND, N.	12.9	-11.1	+1.9	+2.0	+1.9	-	-	-6	51	96
1 SCOTLAND, E.	13.9	-10.6	+1.6	+1.4	+1.5	-	-	-5	39	108
2 ENGLAND, N.E.	12.3	-10.0	+0.2	+0.1	+0.1	-0.3	-0.3	-8	32	119
3 ENGLAND, E.	11.7	-12.2	-1.2	-0.9	-1.1	-1.1	-1.0	-8	29	85
4 MIDLANDS	12.7	-13.3	-0.4	0.0	-0.3	-0.8	-0.7	-7	27	98
5 ENGLAND, S.E.	11.8	-12.4	-0.9	-0.2	-0.6	-0.9	-0.9	-8	30	63
6 SCOTLAND, W.	12.2	-8.3	+1.0	+1.5	+1.3	+0.7	+0.3	-8	40	91

DISTRICTS	AIR TEMPERATURE					EARTH TEMP.		RAIN DAYS	RAIN-FALL	SUN-SHINE
	Highest Max.	Lowest Min.	Max.	Min.	Mean	Mean 1 ft.	Mean 4 ft.			
	Difference from Average					% of Average				
7 ENGLAND, N.W. and N. Wales	13.9	-8.3	+0.3	+0.5	+0.4	-0.6	-0.4	-10	32	111
8 ENGLAND, S.W. and S. Wales	13.3	-8.9	-0.8	+0.2	-0.3	-0.5	-0.7	-11	18	60
N. IRELAND	13.3	-4.4	+1.3	+1.1	+1.2	-	-	-7	47	62
SCOTLAND	-	-	+1.5	+1.6	+1.6	-	-	-6	43	98
ENG. and WALES	-	-	-0.5	-0.1	-0.3	-	-	-9	29	90

TABLE II—SUMMARY OF AUTOGRAPHIC RECORDS OF WIND— January 1964 (1914)

DISTRICT, COUNTY AND PLACE	Height of Vane			Distribution of Mean Hourly Values of Wind Speed								Highest Velocities								
	Above Mean Sea Level	Above Ground	Effective Height	34 knots or more		22 to 33 knots		11 to 21 knots	4 to 10 knots	Less than 4 knots	No Record	Mean Hourly Wind Speed	Highest Hourly Wind			Highest Gust				
				Dates of Occurrence	Duration	No. of days	Duration	Duration	Duration	Duration	Duration		Duration	Veer from N	Speed	Hour ended at	Speed	Day and Time		
																		hr.	hr.	hr.
ft.	ft.	ft.		hr.	hr.	hr.	hr.	hr.	hr.	hr.	knots	°	knots	day hr	knots	day	h m			
SCOTLAND																				
0 Zetland	Lerwick Observatory	304	33	33	3,20,21,23,29,31	17	19	174	331	181	41	0	15.9	250	45	20	15	65	20	1415
	Orkney Kirkwall	134	50	33	31	1	12	93	394	230	26	0	13.7	250	37	31	24	60	31	2215
	Caithness Dounreay	110	39	30																
	Sutherland Shin	78	33	33	31	1	4	7	168	189	379	0	6.0	260	35	31	24	66	31	2325
	Ross & Stornoway (Coastguard)	12C	40	36	1-3,7,8,20,31	64	23	233	351	48	48	0	19.7	190	52	2	11	72	2	1030
	Cromarty Duirinish	125	65	55	*															
	Inverness Benbecula	69	51	35	1-3,18,20,30,31	66	23	277	301	43	57	0	20.3	170	51	2	24	75	2	2315
	1 Moray Lossiemouth	101	80	60	-	0	4	12	236	338	157	1	8.3	200	26	2	02	50	2	0120
	Aberdeen Dyce	225	40	4C	-	0	3	9	178	277	280	0	6.7	190	27	2	15	39	2	1340
	Angus Auchterhouse	827	62	50	31	1	6	17	251	357	118	0	9.3	250	34	31	24	55	31	2310
	Perth Bell Rock Lighthouse	126	131	124	2,3,31	15	17	150	370	154	55	0	15.3	210	44	2	14	55	31	2325
	Rannoch	1006	56	57	3,31	5	12	87	332	126	175	19	11.7	270	40	31	24	64	31	2215
	Fife Leuchars	78	40	40	2	1	7	56	254	344	89	0	10.4	200	34	2	08	57	31	2055
	Midlothian Turnhouse	137	40	33	31	2	7	39	292	246	165	0	10.3	250	35	31	22	51	31	2000
	Edinburgh, Blackford Hill	496	50	34	1-3,31	16	14	99	272	198	111	48	12.7	180	48	1	24	73	1	2310
6a Argyll	Tiree	89	60	47	1-3,18,31	51	19	230	314	120	29	0	18.4	170	40	2	23	58	31	2325
	Bute Millport	50	34	34	31	3	7	47	290	243	161	0	10.3	260	39	31	23	50	31	1710
	Renfrew Paisley	188	81	31	-	0	5	35	116	334	259	0	7.0	180	31	2	23	61	31	2230
	Renfrew	71	41	39	-	0	5	27	198	303	216	0	7.7	270	29	31	23	49	31	2355
	Lanark Lowther Hill	2412	43	33	1-3,12,13,28-31	63	21	185	400	91	5	0	19.0	280	52	31	24	75	31	2230
	Ayr Prestwick Airport	68	33	33	-	0	3	12	258	389	85	0	9.5	260	24	30	02	45	30	0700
	Dumfries Eskdalemuir Observatory	825	50	35	-	0	3	10	119	316	299	0	6.0	200	26	2	17	48	31	1550
	Wigtown West Freugh	81	33	33	-	0	8	42	263	314	125	0	10.0	200	31	2	01	46	2	0005
ENGLAND and WALES																				
6b Isle of Man	Ronaldsway	119	64	39	1,2,15,16,30	16	15	200	250	230	48	0	15.4	190	39	2	14	53	2	1820
	Point of Ayre	64	33	33	-	0	14	126	379	207	32	0	14.4	260	33	30	09	47	2	0955
2 Durham	Durham	389	53	33	-	0	2	15	174	406	149	0	7.9	260	25	30	05	49	30	0345
	South Shields	73	57	44	-	0	4	10	235	406	93	0	8.7	260	26	31	24	50	31	2355
Lincoln	Cranwell	268	47	47	-	0	2	13	169	488	74	0	8.5	280	26	31	20	44	31	1910
3 Norfolk	Gorleston	45	33	33	*															
Suffolk	Mildenhall	98	83	60	-	0	1	4	121	467	152	0	6.8	280	24	30	13	40	30	1300
Bedford	Bedford	327	42	30	-	0	1	5	121	442	133	43	7.2	260	23	30	15	38	30	1020
	Cardington	226	133	133	-	0	2	16	257	375	96	0	9.1	260	27	30	14	39	30	1335
Hertford	Garston	307	50	33	-	0	0	0	35	457	252	0	4.6	270	18	30	13	32	30	1335
	Rothamsted	461	41	33	-	0	0	0	55	434	221	34	5.2	280	16	30	13	35	30	1255
Essex	Stansted	358	31	31	-	0	0	0	114	452	178	0	6.4	280	20	30	13	30	30	1320
	Coryton	66	57	48	-	0	0	0	65	487	160	32	6.0	290	18	30	12	37	30	1520
	Shoeburyness	116	106	91	-	0	6	23	297	368	56	0	10.4	280	26	30	14	45	28	1405
4 Yorks, W.R.	Sheffield	533	83	35	-	0	0	0	37	264	436	7	3.7	280	17	31	17	38	31	1635
Warwick	Edgbaston	643	118	73	-	0	0	0	34	548	162	0	5.3	280	17	30	07	39	30	0605
	Elmdon	362	30	31	-	0	2	4	152	425	163	0	7.0	280	24	30	13	43	30	1215
Buckingham	Amersham	500	50	50	-	0	0	0	36	497	211	0	5.3	260	14	30	13	40	30	0615
Stafford	Keele	706	50	33	-	0	0	0	158	315	271	0	6.2	050	18	13	04	45	30	1055
Gloucester	Avonmouth	92	61	33	*															
5 London	Kingsway	208	143	41	-	0	0	0	82	473	189	0	6.2	220	20	30	15	39	30	1505
Middlesex	London (Heathrow) Airport	115	33	33	-	0	1	3	93	410	238	0	6.2	280	23	30	14	34	30	1455
	Hampton	139	101	100	-	0	0	0	61	313	370	0	4.3	290	20	30	12	36	30	1140
Surrey	Kew Observatory	92	75	50	-	0	0	0	128	391	225	0	6.0	290	18	30	12	36	30	1140
	Gatwick	232	38	33	-	0	0	0	57	309	378	0	4.5	31C	18	30	11	36	28	0640
Kent	Isle of Grain	48	40	33	-	0	0	0	72	358	287	27	4.7	100	16	11	10	32	30	1145
	Dover	68	38	62	-	0	1	1	184	370	189	0	7.1	200	22	28	08	36	28	0745
Sussex	Thorney Island	75	65	42	-	0	0	0	88	261	395	0	4.6	290	20	31	17	36	28	0550
Hampshire	Hurn	86	53	46	-	0	1	2	141	419	182	0	6.7	300	23	30	13	35	30	1410
	Calshot	50	41	33	-	0	1	1	272	404	67	0	9.3	280	22	31	16	33	31	1725
	S. Farnborough	316	69	35	-	0	0	0	59	322	363	0	4.6	310	16	30	11	(25	16	0530)
Berkshire	Abingdon	295	40	40	‡															
Wiltshire	Larkhill	491	51	36	-	0	2	2	172	275	295	0	6.3	270	23	31	15	42	31	1455
	Boscombe Down	425	55	55	-	0	1	2	148	269	325	0	5.8	290	22	30	15	43	28	0450
	Porton	406	44	44	-	0	0	0	158	253	333	0	5.8	080	20	15	22	43	28	0450
7a Cumberland	Carlisle	137	42	30	-	0	4	11	154	407	172	0	7.2	230	28	31	22	45	31	2220
	Sellafield	83	39	35	-	0	3	18	162	377	124	33	8.5	300	27	30	04	41	30	0320
	Spadeadam	959	51	40	-	0	6	21	342	295	83	3	10.6	240	30	31	23	55	30	0125
Westmorland	Great Dun Fell	2813	33	33	1,2,27-31	49	20	175	376	78	12	54	19.1	260	48	31	24	70	31	2345
	Moor House	1960	50	45	30,31	7	17	147	360	166	40	24	15.7	260	40	31	20	55	31	2105
Lancashire	Squires Gate	88	55	35	-	0	10	47	333	261	103	0	11.2	290	27	30	07	43	30	0430
	Southport	59	41	33	-	0	3	20	171	323	230	0	7.5	290	28	30	09	44	30	0735
	Fleetwood	112	50	31	‡															
	Speke	84	41	33	-	0	2	9												



RAINFALL JANUARY 1964

The equivalent values in mm, are given in round numbers. The exact relation is 10 in. = 254 mm.

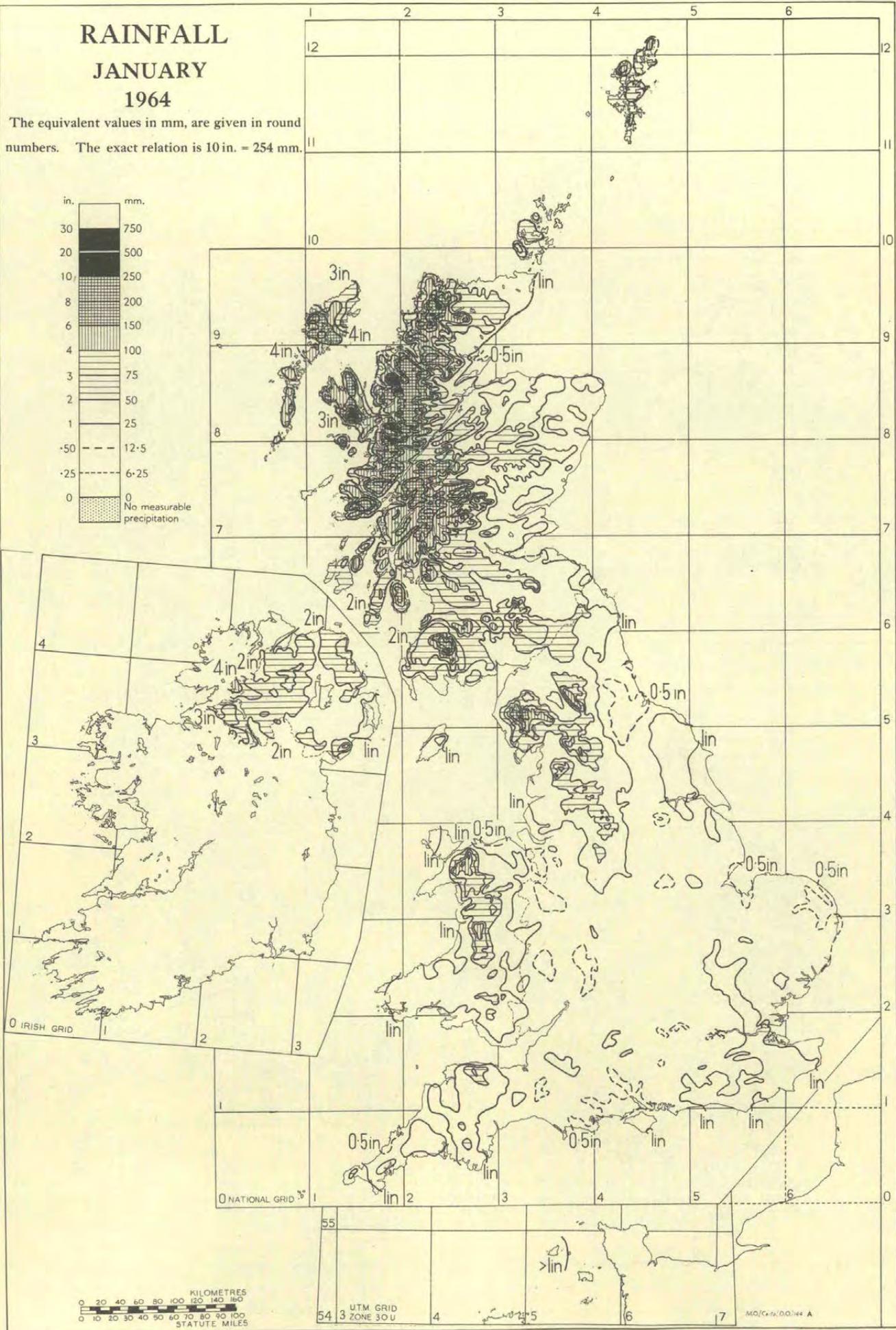
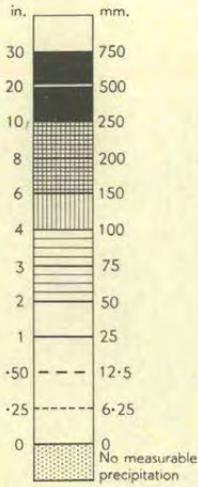


TABLE III — SUMMARY OF OBSERVATIONS OF TEMPERATURE, RAINFALL, SUNSHINE AND WEATHER January 1964

DISTRICT, COUNTY AND PLACE	Terminal Hours of Observation	Height of Station above Mean Sea Level	AIR TEMPERATURE IN DEGREES CELSIUS										MEAN EARTH TEMPERATURE		RAINFALL (Terminal hour 9 G.M.T.)		WEATHER Number of days										BRIGHT SUNSHINE											
			Means of		Mean Temperature Mean of A and B	Difference from Average	Highest Maximum and Lowest Minimum				1 ft.	4 ft.	Total Fall	Per-cent- age of Average	Most in a day		Precip'n			Snow or Sleet	Snow lying at 9h.	Ice or snow pellets etc.	Thunder heard	Fog at 9h.	Air Frost	Grass min below 0° C	Gale	Daily Mean	Per-cent- age of Aver- age									
			A	B			Maximum	Date	Minimum	Date					Amount	Date	0-1in. (0-2mm.) or more	0-1in. (1-2mm.) or more	1-2 in. (2-5mm.) or more																			
			Max. Min.	ft.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	in.	%	in.																							
0 SCOTLAND, N.																																						
Zetland																																						

TABLE III (continued)—SUMMARY OF OBSERVATIONS OF TEMPERATURE, RAINFALL, SUNSHINE AND WEATHER January 1964

DISTRICT, COUNTY AND PLACE	Terminal Hours of Observation	Height of Station above Mean Sea Level	AIR TEMPERATURE IN DEGREES CELSIUS								MEAN EARTH TEMPERATURE		RAINFALL (Terminal hour 9 G.M.T.)				WEATHER (Number of days)										BRIGHT SUNSHINE				
			Means of		Mean Temperature Mean of A and B	Difference from Average	Highest Maximum and Lowest Minimum				1 ft.	4 ft.	Total Fall	Percentage of Average	Most in a day	Precip'n		Snow or Sleet	Snow lying at 9h.	Hail	Ice or snow pellets etc.	Thunder heard	Fog at 9h.	Air Frost 1st below 0° C	Gale	Daily Mean	Percentage of Average				
			A	B			Maximum	Date	Minimum	Date						-0.1in. (0.2mm.) or more	-0.01in. (0.1mm.) or more														
			Max.	Min.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	in.	%	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	
1 SCOTLAND, E.—cont.																															
Midlothian	Balerno ...	9 9	700	6.0	0.2	3.1	-	8.9	1.2	-5.0	20	-	-	1.77	-	.56	4	9	8	-	-	-	-	-	6	11	19	-	1.51	102	
	Turnhouse ...	21-9	114	6.8	1.5	4.1	+1.3	11.2	31	-7.4	17	-	-	1.02	42	.47	4	11	7	3	0	0	0	2	9	20	1	1.21	-		
	Edinburgh—E. Craigs	9 9	200	6.8	1.3	4.1	-	11.1	31	-6.1	17	-	-	1.27	-	.47	4	10	7	1	0	0	1	0	2	9	19	0	1.49	- S	
	Davidson's Mains	9 9	200	6.6	1.5	4.1	+1.3	11.1	31	-5.6	17	3.2	-	1.08	-	.52	4	12	7	2	0	0	0	0	1	8	16	1	1.32	- S	
	Penicuik ...	9 9	620	6.6	0.5	3.5	-	10.0	31	-6.1	17	2.7	-	1.98	-	.46	4	12	8	2	0	0	0	0	0	1	14	1	1.47	-	
	Bush House ...	9 9	605	6.4	0.7	3.5	-	10.6	31	-6.1	17	2.7	4.0	1.89	-	.47	4	11	9	1	0	0	0	0	1	11	19	0	1.75	-	
	Edinburgh—																														
	Blackford Hill ¶§	9 9	441	6.6	2.3	4.5	+1.3	10.6	31	-3.3	17	-	-	1.26	51	.51	4	11	8	1	0	0	0	2	7	15	3	1.65	94		
	Liberton ...	9 9	200	7.1	1.7	4.4	+1.2	11.1	31	-5.0	17, 18	-	-	1.34	-	.55	(4)	10	7	-	-	-	-	-	7	11	-	1.62	-		
	Royal Bot. Gdns.	9 9	74	7.2	1.3	4.3	+1.3	11.7	31	-5.6	17, 18	3.1	-	1.07	-	.47	4	11	7	1	0	0	0	0	5	11	22	0	1.36	96	
E. Lothian	Haddington ...	9 9	162	6.9	1.2	4.1	-	11.1	31	-7.2	19	-	-	.89	-	.41	4	9	4	0	0	0	0	0	0	10	22	0	-	- S	
	North Berwick ...	9 9	152	7.4	2.6	5.0	+1.7	10.6	29	-1.7	17, 18	-	-	.80	38	.25	4	13	4	-	-	-	-	0	4	-	-	1.93	150		
	Dunbar ...	9 9	75	7.4	2.1	4.7	+1.1	11.7	31	-3.3	18	-	-	.68	-	.28	4	10	4	1	0	0	0	0	0	5	11	0	2.02	112	
Berwick	Mertoun ...	9 9	225	6.7	0.7	3.7	-	11.7	31	-7.8	18	-	-	1.21	-	.37	4	12	6	-	-	-	-	-	6	20	-	1.95	-		
	Lauder ...	9 9	800	5.9	0.0	2.9	-	10.6	31	-10.6	18	-	-	1.04	-	.23	4, 29	12	7	2	0	0	0	0	0	0	9	23	0	-	-
	Marchmont ¶§	9 9	498	6.1	1.0	3.5	+1.2	10.0	31	-4.4	18	-	-	1.12	39	.29	29	11	10	0	0	0	0	0	0	8	-	1	1.69	119 S	
	Whitcheater ...	9 9	838	5.8	0.7	3.3	-	10.0	31	-4.4	17	-	-	1.39	-	.37	4	13	9	2	0	0	0	0	0	8	-	0	-	-	
	St. Abb's Head ...	9 9	245	6.9	3.8	5.3	-	11.4	31	-2.0	18	-	-	-	-	-	-	-	-	0	0	0	0	0	0	2	4	2	-	-	
Peebles	Stanhope Farm ...	9 9	741	6.1	0.7	3.4	-	10.0	31	-6.1	6, 24	-	-	1.97	-	.55	27	15	8	4	0	0	0	0	0	10	20	0	-	-	
	Blyth Bridge ...	9 9	830	5.9	0.6	3.3	-	9.4	31	-5.6	6	-	-	1.66	-	.40	29	14	8	3	0	1	0	1	0	13	17	2	1.59	-	
	West Linton ...	9 9	800	6.1	0.2	3.1	-	9.4	31	-6.1	6	1.7	4.1	2.14	-	.46	29	15	10	2	0	0	0	1	0	15	0	-	-	-	
	Glentress ...	9 9	580	6.7	0.6	3.7	-	10.0	3, 31	-6.1	6	-	-	1.47	-	.50	29	11	7	2	0	0	0	0	0	11	-	0	-	-	
Selkirk	Bowhill ...	9 9	600	5.9	0.1	3.0	-	10.0	31	-8.3	17, 18	-	-	1.50	-	.34	29	14	7	2	0	0	0	1	0	11	-	0	-	-	
Roxburgh	Wauchope ...	9 9	560	6.2	0.6	3.4	-	10.0	31	-5.6	18	-	-	1.80	-	.48	27	13	8	-	-	-	-	-	0	11	-	-	-		
	Sourhope ...	9 9	900	5.7	0.8	3.3	-	9.4	31	-4.4	24	-	-	1.88	-	.65	13	11	10	-	0	-	-	-	0	13	24	-	1.66	-	
6a SCOTLAND, W.																															
Argyll	Tiree ¶§	21-9	29	8.2	5.5	6.9	+1.6	10.8	31	-0.4	5	-	-	1.97	41	.37	27	19	11	0	0	0	1	0	0	1	5	5	1.06	82	
	Rhuvaal ...	21-9	65	7.9	5.0	6.5	-	11.3	2	-1.7	16	-	-	2.46	-	.52	29	16	12	0	0	0	1	0	0	0	3	3	-	-	-
	Colonsay ...	9 9	87	8.2	3.6	5.9	+1.3	11.1	1, 2, 3	-1.7	17	-	-	2.63	45	.48	30	18	12	1	-	1	0	1	2	3	-	3	-	-	
	Tobermory ...	9 9	270	7.7	3.9	5.8	-	11.1	1, 2	0.6	5	-	-	3.23	-	.60	28	19	5	-	-	-	-	-	0	4	-	-	-		
	Craighouse ...	9 9	10	8.2	4.6	6.4	-	11.1	31	1.7	17	-	-	3.96	-	.79	30	19	12	-	0	-	-	-	0	0	1	-	-		
	Campbeltown ...	9 9	10	8.6	4.2	6.4	-	12.2	1, 3	1.1	5	-	-	1.80	-	.38	3	9	8	1	0	0	0	0	16	0	-	1.20	-		
	Achaglachgach ...	9 9	40	7.8	2.6	5.2	-	11.7	31	-2.8	17	-	-	3.85	-	.78	30	17	11	1	0	0	0	1	0	5	19	0	-	-	
	Oban ...	9 9	229	7.4	3.7	5.5	+1.7	11.1	1	0.0	5	-	-	3.70	60	.75	27	18	16	0	0	0	0	1	0	0	7	4	1.08	95 S	
	Lepinmore ...	9 9	30	7.6	3.1	5.3	-	11.1	1, 2	-1.1	16, 24	-	-	3.88	-	.77	30	15	10	1	0	0	0	1	0	5	14	0	0.76	- S	
	Glenbranter ...	9 9	120	6.8	1.8	4.3	+1.5	11.1	1, 2	-3.9	17	-	-	4.87	43	1.08	27	20	13	-	0	-	-	-	1	8	16	-	-		
	Benmore																														
	Forestry Sch.	9 9	46	7.2	1.3	4.3	+0.9	11.1	31	-4.4	17	3.8	4.6	4.67	42	.98	27	18	12	0	0	1	0	1	5	10	12	1	-	- S	
	Younger Bot. Gdns.	9 9	40	7.2	2.1	4.7	-	11.7	31	-3.3	17	-	-	4.62	-	.99	27	18	12	1	0	0	1	1	4	8	17	0	-	-	
Bute	Rothsay ¶§	9 9	150	7.3	3.4	5.3	+1.2	10.6	1, 2, 31	-0.6	24	4.6	5.4	2.96	48	.61	27	15	9	0	0	0	1	1	0	1	10	0	1.41	104	
	Millport ...	9 9	16	7.8	4.3	6.1	-	11.7	31	0.6	16, 24	-	-	2.39	48	.41	30	14	10	1	0	0	0	0	0	0	-	1	-	-	
Dunbarton	Helensburgh ...	9 9	293	6.4	2.0	4.2	+1.4	10.6	31	-2.8	17, 18	-	-	2.29	35	.38	27	15	12	0	0	0	0	0	5	7	-	0	-		
	Cumbernauld ...	9 9	310	5.5	0.6	3.1	-	10.0	2, 31	-5.6	16	-	-	2.52	-	.57	27	18	12	0	0	0	0	0	2	12	22	0	-	-	
Stirling	Earls Hill ...	9 9	1100	4.7	0.9	2.8	-	8.9	31	-5.4	24	-	-	2.63	-	.61	3	17	12	-	-	-	-	2	11	17	-	1.56	-		
	Stirling ...	9 9	151	7.2	2.0	4.6	+1.7	11.7	31	-3.9	6	3.6	6.1	1.33	29	.36	3	15	8	0	0	0	0	0	3	10	16	0	1.58	-	
	Falkirk ...	9 9	100	6.8	1.0	3.9	+1.1	11.1	31	-5.0	17	-	-	1.65	-	.44	27	15	9	-	-	-	-	4	11	-	-	-			
Renfrew	Greenock ...	9 9	200	7.1	2.9	5.0	+1.2	11.1	31	-3.3	17	-	-	2.99	38	.66	27	16	11	0	0	0	1	0	0	4	5	18	2	0.81	- S
	Paisley ...	9 9	106	6.8	2.5	4.7	+1.2	11.1	31	-3.9	17, 18	4.3	5.7	2.43	47	.68	3	15	10	0	0	1	0	0	0	7	7	13	4	0.70	69
	Barrhead ...	9 9	97	6																											

TABLE III (continued)—SUMMARY OF OBSERVATIONS OF TEMPERATURE, RAINFALL, SUNSHINE AND WEATHER January 1964

Table with columns for District, County and Place; Terminal Hours of Observation; Air Temperature in Degrees Celsius (Means of A, B; Highest Maximum and Lowest Minimum); Mean Earth Temperature (1 ft, 4 ft); Rainfall (Terminal hour 9 G.M.T.); Weather (Number of days); and Bright Sunshine (Daily Mean, Percentage of Average).

* National Institute of Agricultural Botany

TABLE III (continued)—SUMMARY OF OBSERVATIONS OF TEMPERATURE, RAINFALL, SUNSHINE AND WEATHER January 1964

DISTRICT, COUNTY AND PLACE	Terminal Hours of Observation	Height of Station above Mean Sea Level	AIR TEMPERATURE IN DEGREES CELSIUS								MEAN EARTH TEMPERATURE		RAINFALL (Terminal hour 9 G.M.T.)				WEATHER Number of days										BRIGHT SUNSHINE			
			Means of		Difference from Average	Highest Maximum and Lowest Minimum				1 ft.	4 ft.	Total Fall	Percentage of Average	Most in a day		Precip'n (0.1in (0.25mm) or more)	Snow or Sleet	Snow lying at 9h.	Ice or snow pellets etc.	Thunder heard	Fog at 9h.	Air Frost	Grass min. below 0° C	Gale	Daily Mean	Percentage of Average				
			A Max.	B Min.		Mean of A and B	Maximum	Date	Minimum					Date	Amount												Date			
			Max. Min.	ft.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	in.	%	in.											hr	%			
4 MIDLAND COUNTIES—cont.																														
Yorks., Huddersfield	9-9	325	5.9	0.7	3.3	+0.2	11.1	31	-6.7	18	2.3	4.8	1.22	-	.54	13	12	6	-	1	-	-	-	12	12	20	0	1.40	171	
W. Riding—Oakes	21-9	761	4.9	1.1	3.0	+0.3	9.8	31	-6.8	18	2.9	5.0	1.68	42	.50	13	15	7	2	4	1	1	0	0	3	10	20	0	1.37	106
cont. Bradford	9-9	439	5.4	0.9	3.1	+0.2	10.6	31	-5.0	18, 19	2.2	4.8	1.31	37	.66	13	11	5	1	6	1	3	0	0	2	11	23	1	-	-
Ilkley	9-9	315	5.9	0.6	3.3	+0.5	10.6	31	-5.6	17	-	-	1.33	33	.86	13	7	5	2	8	0	0	0	0	1	12	-	0	1.15	83
Sheffield	9-9	429	5.8	1.0	3.4	-0.2	11.1	31	-5.6	18, 19	2.9	5.4	.91	30	.32	27	8	7	2	2	0	0	0	0	1	12	-	0	1.77	151
Wakefield	9-9	121	6.0	0.4	3.2	0.0	12.2	31	-5.0	6, 7, 18	2.9	5.2	.71	28	.28	13	8	4	1	1	1	0	0	0	2	11	28	1	-	-
Pontefract	9-9	255	5.7	0.4	3.1	0.0	11.1	31	-5.6	18	-	-	.67	31	.30	13	8	5	1	1	0	0	0	0	10	10	13	0	-	-
Bramham	9-9	177	5.5	-0.1	2.7	-	11.1	31	-6.1	17	-	-	.90	45	.52	13	8	5	2	1	0	0	0	0	6	15	22	0	1.98	-
Cawood	9-9	20	5.7	-0.4	2.7	-	11.7	31	-5.6	18	2.1	4.5	.77	33	.35	13	10	4	1	1	0	0	0	0	9	16	23	0	1.49	-
Askham Bryan	9-9	110	5.5	0.4	2.9	-	11.7	31	-4.4	17, 18	-	-	.86	35	.50	13	12	3	1	1	0	0	0	0	8	11	24	0	1.44	104
Derby Buxton	9-9	1007	4.2	-0.1	2.1	+0.2	12.2	31	-5.6	18	2.2	3.9	2.23	41	.83	27	15	11	5	-	0	0	0	0	11	17	22	1	-	-
Chapel en le Frith	9-9	732	4.9	0.1	2.5	-	12.2	8	-4.4	18	-	-	1.66	-	.52	27	14	8	1	2	0	1	0	1	13	20	0	-	-	
Mackworth	9-9	293	-	-	-	-	-	-	-	-	-	-	.87	-	.25	27	8	6	-	-	-	-	-	-	-	-	-	-	-	-
Belper	9-9	203	5.6	-	-	-	12.2	31	-7.8	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Morley	9-9	159	5.6	0.1	2.9	-	12.2	31	-7.2	18	-	-	.84	-	.27	27	8	6	1	1	0	0	0	0	9	14	26	0	.90	-
Chesterfield	9-9	350	4.7	-0.2	2.3	-	11.1	31	-7.2	18	-	-	.96	41	.34	29	8	4	1	1	0	0	0	0	-	13	21	0	0.97	-
Nottingham Sutton Bonington	9-9	157	5.3	-0.3	2.5	-0.6	12.2	31	-8.9	18	3.8	5.6	.62	28	.22	27	9	5	1	1	0	0	0	0	7	15	26	0	1.01	74
Watnall	21-9	385	4.8	0.6	2.7	-	11.6	31	-6.7	18	-	-	.65	24	.28	27	7	5	4	2	0	0	0	0	10	13	22	0	1.06	74
Nottingham Training College	9-9	169	-	-	-	-	12.2	31	-	-	-	-	.55	-	.19	27	7	3	-	-	-	-	-	12	21	-	-	-	-	
Mansfield	9-9	362	5.2	0.3	2.7	-0.3	11.7	31	-6.1	17	2.6	-	.78	29	.40	27	6	5	2	-	0	0	0	0	6	9	20	0	-	-
Nottingham	9-9	192	5.7	0.8	3.1	-0.4	12.2	31	-5.6	18	2.2	4.1	.65	29	.23	27, 29	8	3	1	1	0	0	0	0	8	12	21	0	1.06	85
Warsop	9-9	150	5.6	-1.4	2.1	-	11.7	31	-10.0	17	-	-	.57	27	.24	27	8	4	1	0	0	0	0	0	11	16	23	0	1.05	-
Leicester Finningley	21-9	34	5.6	0.6	3.1	-0.2	12.2	31	-7.6	18	-	-	.57	-	.22	13	7	3	2	1	0	0	0	0	6	12	19	0	1.76	-
Newtown Linford	9-9	392	4.6	-0.6	2.0	-	11.1	31	-10.0	14	-	-	.85	-	.23	12	10	5	2	2	0	1	0	0	6	13	19	0	1.35	-
Caldecott	9-9	175	5.2	-1.3	1.9	-	11.7	31	-13.3	14	-	-	.77	-	.26	28	7	5	-	-	-	-	-	-	5	21	23	-	1.09	-
Northampton Bugbrooke Mills	9-9	228	5.2	-0.7	2.3	-	11.7	31	-11.7	14	3.1	5.4	.77	37	.19	12	12	6	2	2	0	0	0	0	14	14	-	0	1.36	-
Raunds	9-9	193	4.7	-1.2	1.7	-	11.1	31	-11.7	14	2.3	6.1	.77	37	.19	12	12	6	2	2	0	0	0	0	11	19	22	0	1.54	-
Wittering	21-9	212	4.7	-0.4	2.1	-	11.9	31	-7.6	14	-	-	.71	-	.16	12	8	6	3	2	0	1	0	0	7	18	24	0	1.83	-
Warwick Birmingham K.E.S.*	9-9	450	5.4	0.8	3.1	-	11.1	31	-5.6	18	-	-	.83	28	.31	12	14	7	3	2	0	0	0	0	7	9	-	0	-	
Edbaston	21-9	536	5.0	1.7	3.3	-0.2	11.0	31	-5.2	14	5.1	7.1	.83	28	.31	12	14	7	3	2	0	0	0	0	6	9	11	0	1.27	93
Luddington	9-9	138	5.7	0.1	2.9	-	11.7	31	-8.3	14	-	-	.66	31	.15	12	10	7	2	2	0	0	0	0	8	15	19	0	1.09	-
Stratford on Avon	9-9	160	5.6	-0.2	2.7	-	11.7	31	-8.9	14	-	-	.71	39	.16	12	10	7	1	2	0	0	0	0	5	12	19	0	1.26	-
Elmdon	21-9	319	5.2	0.7	2.9	-	11.4	31	-11.6	14	-	-	.75	30	.25	12	12	5	4	2	0	1	0	0	3	14	17	0	1.23	-
Shipston on Stour	9-9	365	5.2	0.3	2.7	-	11.1	31	-10.0	14	3.7	-	.72	-	.26	12	13	6	1	2	1	0	0	0	6	15	21	-	1.15	-
Wellesbourne	9-9	153	5.4	-0.2	2.6	-	12.2	31	-10.6	14	-	-	.66	29	(.17)	12	12	6	1	2	0	0	0	0	-	14	-	0	1.25	-
Moreton Morrell	9-9	280	5.6	0.1	2.9	-	11.7	31	-12.2	14	-	-	.73	-	.34	12	10	5	1	2	0	0	0	0	4	12	19	0	1.25	-
Coventry	9-9	338	5.4	0.0	2.7	-0.3	11.7	31	-7.2	14	4.1	5.9	1.22	49	.31	12, 19	12	9	2	-	0	0	0	0	4	12	22	0	1.15	95
Rugby	9-9	385	5.0	0.0	2.7	-	11.1	31	-9.4	14	2.1	4.6	.16	27	-	-	-	-	-	-	-	-	-	-	5	13	20	0	1.18	-
Oxford Oxford	9-9	208	5.6	1.1	3.3	-0.4	12.2	31	-7.8	14	3.2	5.1	.51	22	.18	12	8	3	2	3	0	0	0	0	8	9	16	0	1.20	69
Grendon Underwood	9-9	220	5.3	-0.6	2.3	-	11.7	31	-9.4	14	2.7	5.3	.53	-	.15	27	7	4	2	2	0	0	0	0	-	13	-	0	1.07	-
Buckingham Medmenham	9-9	98	5.7	-0.9	2.4	-	11.7	31	-8.3	14	-	-	.46	-	.18	27	10	2	-	-	-	-	-	-	14	20	-	-	-	
Aylesbury	9-9	316	5.0	-0.3	2.3	-	11.1	31	-9.4	14	-	-	.64	27	.18	27	8	4	2	2	0	0	0	0	13	15	25	0	1.04	-
Stafford Keele	9-9	587	5.1	0.4	2.7	-	11.1	31	-5.0	14	2.6	5.2	.66	22	.15	27	14	8	2	2	0	0	0	0	6	8	16	0	1.14	-
Oaken	9-9	409	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Stone	9-9	350	5.2	-0.1	2.5	-	11.1	31	-8.9	14	-	-	.89	-	.30	27	12	8	1	2	0	0	0	0	7	13	29	0	1.04	-
Penkridge	9-9	330	5.3	0.2	2.7	-	11.1	31	-9.4	14	-	-	.77	-	.23	27	9	6	1	2	0	0	0	0	4	10	20	0	-	-
Onecote	9-9	1350	-	-0.6	-	-	8.3	31	-5.6	14	1.7	4.3	1.23	-	.28	31	8	8	1	3	0	0	0	0						

TABLE III (continued)—SUMMARY OF OBSERVATIONS OF TEMPERATURE, RAINFALL, SUNSHINE AND WEATHER January 1964

DISTRICT, COUNTY AND PLACE	Terminal Hours of Observation	Height of Station above Mean Sea Level	AIR TEMPERATURE IN DEGREES CELSIUS								MEAN EARTH TEMPERATURE		RAINFALL (Terminal hour 9 G.M.T.)				WEATHER Number of days										BRIGHT SUNSHINE				
			Means of		Mean Temperature Mean of A and B	Difference from Average	Highest Maximum and Lowest Minimum				1 ft.	4 ft.	Total Fall	Percentage of Average	Most in a day		Precip'n		Snow or Sleet	Snow lying at 9h.	Hail	Ice or snow pellets etc.	Thunder heard	Fog at 9h.	Air Frost	Grass min. below 0° C.	Gale	Daily Mean	Percentage of Average		
			A	B			Maximum	Date	Minimum	Date					Amount	Date	0-1in. (0-25mm.) or more	0-0.1in. (1-0.25mm.) or more													
			ft.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	in.	%	in.	%	in.	%	in.	%	in.	%	in.	%	in.	%	in.	%	in.	%	in.
5 ENGLAND, S.E.—cont.			G.M.T.	ft.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	in.	%	in.	%	in.	%	in.	%	in.	%	in.	%	in.	%	in.	%	in.	%	
Surrey	Kew Observatory	21-9	18	5.8	2.3	4.1	-0.2	11.8	31	-3.1	18	3.3	6.0	.53	25	.18	27	10	4	4	2	0	0	0	0	8	6	17	0	1.20	81
—cont.	Gatwick	21-9	192	5.4	0.5	2.9	-	10.4	31	-10.2	13	-	-	.87	-	.26	12	13	5	4	2	0	2	0	8	15	16	0	1.33	-	
	Waddon	9 9	220	5.5	-0.3	2.6	-1.4	10.6	31	-6.7	17, 18	-	-	.60	23	.22	27	7	3	-	-	-	-	-	-	-	-	-	-	-	
	Addington	9 9	474	4.6	0.4	2.5	-0.9	10.0	31	-5.6	14	-	-	.80	30	.27	12	15	4	-	-	-	-	-	4	10	-	-	-	-	
Kent	Bromley	9 9	213	5.6	0.8	3.2	-0.7	11.1	31	-5.0	14	-	-	.77	34	.29	12	11	6	2	-	-	-	-	8	11	-	-	-	-	
	Swanley	9 9	177	5.1	0.0	2.5	-	10.6	31	-9.4	14	3.8	-	.77	-	.35	12	8	4	3	2	0	0	0	7	10	20	0	0.94	-	
	Dartford	9 9	17	5.6	0.3	2.9	-	11.7	31	-9.4	14	-	-	.80	41	.32	12	9	6	3	2	0	0	0	3	8	-	-	-	-	
	Tunbridge Wells	9 9	351	4.7	-0.9	1.9	-1.2	10.6	31	-7.2	18	2.8	4.7	.81	27	.27	12	12	6	4	3	0	0	0	9	17	18	-	1.14	63	
	Goudhurst	9 9	280	4.9	-0.2	2.3	-	10.0	31	-7.8	18	-	-	1.11	32	.29	12	13	7	2	3	0	2	0	6	13	19	-	-	-	
	East Malling	9 9	122	5.3	-0.2	2.5	-1.0	11.1	31	-10.0	14	3.1	5.4	1.44	58	.65	28	12	5	2	2	0	1	1	8	13	17	0	1.09	69	
	Gillingham	9 9	14	5.3	0.3	2.8	-	11.7	31	-7.8	14	-	-	.87	-	.46	28	8	6	1	2	0	0	1	11	6	-	1.10	-		
	Sittingbourne	9 9	224	4.9	0.3	2.6	-	11.1	31	-10.0	14	3.4	5.9	1.02	51	.30	28	10	6	2	3	0	0	0	9	9	17	0	1.23	-	
	Isle of Grain	9 9	9	5.6	1.5	3.5	-	11.7	31	-3.3	14	-	-	.99	-	.42	28	7	4	-	2	-	-	-	6	16	-	1.21	-		
	Faversham	9 9	157	4.9	0.2	2.5	-	11.1	31	-9.4	14	3.7	5.6	1.10	-	.37	28	12	5	2	2	0	1	0	7	12	17	0	1.35	-	
	Dungeness	21-9	10	5.5	1.5	3.5	-0.9	8.8	30	-3.0	7	-	-	1.05	43	.25	28	13	7	5	2	0	0	0	5	8	-	-	-	-	
	Wye	9 9	185	-	-0.1	-	-	10.0	31	-6.7	7, 14	-	-	1.09	36	.36	28	9	6	2	3	0	0	0	11	11	20	0	1.26	72	
	Whitstable	9 9	9	5.1	0.8	2.9	-	11.1	31	-6.1	18	-	-	.81	42	.21	12	12	7	3	3	0	2	0	3	11	-	1.29	-		
	Folkestone	9 9	128	5.4	1.5	3.5	-	10.0	30	-1.7	13	-	7.7	1.15	45	.38	28	11	7	3	3	0	0	1	7	13	0	1.47	-		
	Elmstone	9 9	28	4.7	-0.2	2.3	-	10.6	31	-8.3	14	-	-	.75	-	.24	10	10	5	-	3	-	-	-	4	14	16	-	-	-	
	Herne Bay	9 9	21	4.9	1.3	3.1	-	10.6	31	-4.4	18	-	-	.76	37	.26	12	10	6	2	2	0	0	0	4	10	-	1.20	-		
	Dover	9 9	19	5.4	1.8	3.6	-0.9	10.0	30, 31	-3.3	18	4.7	6.5	1.00	36	.23	28	9	6	3	1	0	0	0	2	8	16	0	1.51	-	
	Deal	21-9	18	5.2	2.2	3.7	-	10.4	31	-3.0	18	-	-	.73	-	.21	12	9	6	1	1	0	0	0	5	6	6	0	-	-	
	Manston	21-9	145	4.7	0.8	2.7	-	11.0	31	-5.5	18	-	-	.71	-	.21	10	10	5	4	2	0	0	0	6	13	19	0	-	-	
	Ramsgate	9 9	80	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Margate	9 9	51	4.8	1.6	3.2	-1.4	11.1	31	-2.2	13, 14	4.1	6.6	.58	31	.14	12	8	5	2	1	0	0	0	5	7	13	0	1.16	66	
Sussex	Thorney Island	21-9	10	6.1	2.1	4.1	-	11.3	31	-3.2	13	-	-	.60	20	.21	27	8	5	4	2	0	0	0	4	9	14	0	1.36	-	
	Bognor Regis	9 9	24	5.8	1.8	3.8	-0.8	11.1	31	-3.9	14	-	7.0	.71	22	.27	12	7	4	2	1	0	0	0	2	8	13	0	1.45	65	
	Fernhurst	9 9	188	5.6	0.6	3.1	-	10.6	31	-5.6	18	-	-	.96	-	.45	12	13	5	2	-	0	0	0	-	13	18	0	1.35	-	
	Littlehampton	9 9	15	6.0	1.2	3.6	-0.8	11.1	31	-3.9	14	-	6.6	.94	31	.44	12	8	5	1	0	0	0	0	2	8	-	1.38	62		
	Rustington	9 9	10	6.1	1.1	3.6	-	11.1	31	-3.9	7, 14	-	6.1	.88	-	.42	12	8	4	-	1	-	-	-	11	16	-	1.26	-		
	Worthing	9 9	25	6.0	1.7	3.9	-0.6	10.0	31	-3.9	14	4.4	6.9	1.49	51	1.01	12	9	4	2	3	0	0	0	2	8	16	0	1.30	57	
	Brighton	9 9	32	6.1	2.2	4.1	-	10.6	31	-3.3	14	-	6.7	1.40	50	.87	12	8	4	3	3	0	0	0	5	8	14	0	1.29	61	
	East Grinstead	9 9	400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Seaford	9 9	45	5.9	1.2	3.5	-	8.9	1, 30, 31	-3.9	7, 14	-	-	1.48	52	.46	14	8	7	-	-	-	-	3	11	-	-	1.02	50		
	East Hoathly	21-9	130	5.2	1.0	3.1	-	10.5	31	-5.8	7	-	-	1.10	-	.43	12	13	6	3	3	0	0	0	4	15	16	0	1.16	-	
	Eastbourne	9 9	23	6.1	2.2	4.1	-0.6	9.4	1, 31	-3.9	14	5.2	8.1	1.32	41	.40	12	11	9	2	-	0	0	0	1	6	14	0	1.19	58	
	Eastbourne C/Guard	21-9	17	6.1	2.1	4.1	-	10.7	31	-3.5	7, 13, 14	-	-	1.05	-	.34	27	10	8	3	3	0	0	0	2	9	13	0	-	-	
	Bexhill	9 9	12	5.9	1.6	3.7	-0.7	10.6	31	-3.3	7, 14	5.0	-	.97	34	.30	12	9	8	3	3	0	0	0	4	8	15	0	1.23	61	
	Bodiam	9 9	73	5.4	-0.3	2.5	-	10.6	31	-7.8	14	3.9	6.4	1.16	-	.28	27	11	9	3	3	0	0	0	8	13	20	0	1.10	-	
	Hastings	9 9	149	5.5	1.9	3.7	-0.8	10.0	31	-3.3	14	4.0	6.4	1.07	38	.35	12	10	7	3	3	0	1	0	3	5	14	0	1.29	61	
Berkshire	Letcombe Regis	9 9	350	6.3	0.6	3.5	-	11.7	31	-10.6	14	-	-	.72	-	.24	12	10	5	2	3	0	0	0	1	11	-	-	-	-	
	Abingdon	21-9	210	5.7	1.1	3.4	-0.3	12.1	31	-9.8	14	-	-	.58	27	.21	27	8	3	4	3	0	1	0	8	10	11	0	1.27	-	
	Compton	9 9	339	5.3	-0.3	2.5	-	11.1	31	-11.1	14	4.6	-	.71	-	.23	27	11	7	2	2	0	1	0	7	16	19	0	1.52	-	
	Woolhampton	9 9	370	5.0	-0.1	2.5	-	10.6	31	-7.8	14	3.3	-	.40	16	.16	27	12	4	2	2	0	0	0	9	10	20	0	-	-	
	Wallingford	9 9	157	5.7	0.2	2.9	-	11.7	31	-9.4	14	4.2	6.6	.48	-	.17	27	11	5	2	2	0	0	0	-	12	19	0	1.37	-	
	Shinfield	9 9	200	5.4	0.3	2.9	-0.7	11.1	31	-7.2	14	-	-	.54	22	.15	27	12	4	3	2	0	0	0	11	9	15	0	1.47	-	
	Reading	9 9	148																												

TABLE III (continued)—SUMMARY OF OBSERVATIONS OF TEMPERATURE, RAINFALL, SUNSHINE AND WEATHER January 1964

Table with columns for District, County and Place; Terminal Hours of Observation; Height of Station; Air Temperature in Degrees Celsius (Means of A, B, Mean of A and B, Difference from Average, Highest Maximum and Lowest Minimum); Mean Earth Temperature (1 ft., 4 ft.); Rainfall (Terminal hour 9 G.M.T.) (Total Fall, Percentage of Average, Most in a day); Weather (Number of days for various conditions); and Bright Sunshine (Daily Mean, Percentage of Average).

† Air Frost - Screen Min. below 0° C.

‡ & § See Notes on Tables in the Introduction.

§ Average period 1931 - 60

TABLE IV—SUMMARY OF OBSERVATIONS AT FIXED HOURS

January

1964

DISTRICT, COUNTY AND PLACE	Hour of Observation	Height of Barometer above Mean Sea Level	MEAN PRESSURE		MEAN TEMPERATURE AND HUMIDITY				CLOUD AMOUNT (OKTAS)					VISIBILITY					WIND, NUMBER OF OBSERVATIONS																					
			At Mean Sea Level	Difference from Average	Dry Bulb	Depression of Wet Bulb	Vapour Pressure	Relative Humidity	Mean Amount	NO. OF OBSERVATIONS					NUMBER OF OBSERVATIONS					FORCE (0-12)					DIRECTION															
										0	1	3 to 5	6	7	8	9	0-44 yd.	45-210 yd.	220-480 yd.	440-1,000 yd.	1,100-2,180 yd.	2,200-4,390 yd.	3-6 mi.	7-12 mi.	13-24 mi.	25 mi. or over	8 or more	6, 7, 8	4, 5, 6	1 to 3	1 to 10	Calm	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
			ft.	mb.	°C	°C	mb.	%	0	1	3 to 5	6	7	8	9	0-44 yd.	45-210 yd.	220-480 yd.	440-1,000 yd.	1,100-2,180 yd.	2,200-4,390 yd.	3-6 mi.	7-12 mi.	13-24 mi.	25 mi. or over	14 or more	12 to 33	11 to 21	10 to 10	0	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.		
0 SCOTLAND, N.	G.M.T.	ft.	mb.	mb.	°C	°C	mb.	%	0	1	3 to 5	6	7	8	9	0-44 yd.	45-210 yd.	220-480 yd.	440-1,000 yd.	1,100-2,180 yd.	2,200-4,390 yd.	3-6 mi.	7-12 mi.	13-24 mi.	25 mi. or over	14 or more	12 to 33	11 to 21	10 to 10	0	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.		
Zetland Lerwick Observatory	H	273	1022.2	-	5.2	1.0	7.5	84	6.5	1	4	2	6	18	0	0	0	0	0	0	0	1	5	8	13	4	0	9	12	10	0	1	2	1	1	6	10	5	5	
Orkney Kirkwall	H	36	1023.4	-	5.2	0.7	7.9	88	6.5	0	3	4	8	15	1	0	1	0	0	0	0	0	3	4	22	1	0	3	15	12	1	0	2	0	2	9	11	5	1	
Caithness Wick	H	121	1023.6	+16.7	4.9	0.9	7.5	86	5.8	2	3	5	10	11	0	0	0	0	0	0	0	0	2	25	3	0	0	3	14	16	1	0	1	1	1	13	7	5	2	
Sutherland Cape Wrath	H	371	1021.9	-	6.4	1.2	8.0	82	5.7	4	3	2	6	13	3	0	3	0	0	0	0	0	2	3	4	19	3	5	12	9	2	0	1	1	2	5	13	7	0	
Ross & Cromarty Stornoway	H	16	1023.1	+17.2	6.0	0.5	8.7	91	5.6	5	2	3	8	13	0	0	0	0	0	0	0	0	3	13	8	7	2	3	11	13	2	0	0	4	0	11	10	4	0	
Inverness Benbecula	H	21	1023.3	-	6.5	0.6	8.9	91	5.9	1	5	5	6	14	0	0	0	0	0	0	0	0	3	14	5	9	1	5	15	9	1	1	1	2	1	11	10	4	0	
1 SCOTLAND, E.																																								
Moray Kinloss	H	19	1024.8	-	4.5	1.1	7.1	83	6.2	3	2	3	8	15	0	0	0	0	0	0	0	2	5	17	7	0	0	11	15	5	0	1	2	0	3	15	5	0		
Aberdeen Dyce	H	193	1025.6	+17.0	3.5	1.0	6.7	84	6.0	2	5	2	6	16	0	0	0	0	0	0	0	1	9	10	5	4	0	0	11	9	11	2	0	1	2	5	2	7	1	
Rattray Head	H	108	1024.8	-	4.9	1.2	7.1	82	5.5	0	4	6	19	2	0	0	0	0	0	0	0	0	2	29	0	0	0	1	20	7	3	1	0	1	1	12	4	8	1	
Fife Leuchars	H	38	1026.0	+16.6	3.4	0.7	7.0	89	5.2	5	4	3	6	13	0	0	0	0	0	0	0	1	2	8	10	1	0	3	6	18	4	1	1	2	1	10	11	0	0	
Midlothian Turnhouse	H	144	1026.8	-	3.5	0.8	6.9	86	4.9	5	4	5	7	13	0	0	0	0	0	0	0	1	3	7	10	7	1	0	10	11	8	0	1	4	0	1	12	4	0	0
6a SCOTLAND, W.																																								
Argyll Tiree	H	34	1024.6	+17.3	6.7	0.9	8.8	86	6.3	0	3	4	14	10	0	0	0	0	0	0	0	0	6	14	4	6	1	11	15	3	1	0	2	1	6	10	4	5	2	
Rhuvaal	H	63	1024.7	-	7.0	0.9	8.8	86	6.2	1	5	1	8	16	0	0	0	0	0	0	0	0	1	6	11	9	1	10	12	7	1	1	3	1	5	10	6	4	0	
Renfrew Renfrew	H	29	1026.7	+16.7	4.4	0.6	7.7	90	6.4	2	2	3	8	12	4	0	2	3	1	1	5	2	11	5	1	0	1	6	12	12	0	2	3	0	3	2	9	0		
Lanark Lowther Hill	H	69	1026.5	-	4.5	0.7	7.6	88	5.5	2	0	3	12	0	0	0	0	0	0	0	0	0	5	19	6	0	0	1	9	23	0	0	4	7	4	5	6	4	0	
Dumfries Eskdalemuir Observatory	H	778	1028.1	+17.2	2.2	0.5	6.7	91	6.0	3	3	4	16	2	0	0	1	1	2	6	7	12	0	0	0	0	0	3	19	2	2	0	0	3	5	6	4	0		
Wigtown Mull of Galloway	H	260	1027.2	-	5.8	0.8	8.2	88	5.8	3	2	1	6	15	0	0	0	0	0	0	0	0	6	9	13	1	2	5	21	2	1	2	0	4	2	6	4	1		
6b ISLE OF MAN																																								
Isle of Man Ronaldsway	H	68	1027.6	-	7.2	1.1	8.6	85	6.5	1	2	2	14	11	0	0	1	0	0	0	0	0	10	11	5	4	0	9	7	13	2	2	3	6	4	5	4	0		
Point of Ayre	H	30	1027.5	-	5.6	0.9	7.9	86	5.7	1	2	8	16	4	0	0	0	0	0	0	0	0	4	11	15	0	1	6	13	11	0	1	3	3	7	8	5	0		
2 ENGLAND, N.E.																																								
Northumberland Acklington	H	151	1027.4	-	3.3	0.6	7.0	89	5.7	4	1	6	7	13	0	0	0	0	0	0	0	1	4	5	8	8	4	0	11	18	1	1	2	2	1	5	7	1		

TABLE IV (continued)—SUMMARY OF OBSERVATIONS AT FIXED HOURS January 1964

Table with columns for District, County and Place; Hour of Observation; Height of Barometer; Mean Pressure; Mean Temperature and Humidity; Cloud Amount (OKTAS); Visibility; Wind, Number of Observations; and Direction. The table is organized into sections for 2 ENGLAND, N.E., 3 ENGLAND, E., and 4 MIDLAND COUNTIES, with sub-sections for various counties like Durham, Yorks., Lincoln, Norfolk, Suffolk, Huntingdon, Bedford, Hertford, and Essex.

TABLE IV (continued)—SUMMARY OF OBSERVATIONS AT FIXED HOURS January 1964

Table with columns: DISTRICT, COUNTY AND PLACE; Hour of Observation; MEAN PRESSURE; MEAN TEMPERATURE AND HUMIDITY; CLOUD AMOUNT (OKTAS); VISIBILITY; WIND, NUMBER OF OBSERVATIONS. Rows include locations like Nottingham, Northampton, Warwick, Shropshire, Worcester, Hereford, Gloucester, Middlesex, Surrey, Kent, Sussex, Berkshire, Hampshire, and Wiltshire.

Monthly Weather Report

OF THE METEOROLOGICAL OFFICE

Summary of observations compiled from returns of official stations and voluntary observers



Volume 81 Number 2

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February 1964 — Dry but dull.

Anticyclones over, or to the south of the British Isles dominated the weather during the first twelve days but depressions to the south and west of the country maintained generally cyclonic weather during the remainder of the month except for a short anticyclonic period on the 18th-21st.

The very mild, windy weather at the end of January continued into February with gales in the north during the first four days; a gust of 77 kt was recorded at Benbecula on the 1st and one of 73 kt at Edinburgh on the 3rd. The 1st was generally showery with good sunny periods during the day, but a wave depression moving round the northern flank of an anticyclone over the Bay of Biscay gave more continuous rain that night. The 2nd was dry and sunny in the south-east but mainly dull elsewhere with cold-front rain from the Atlantic reaching northern districts during the afternoon. The rain spread south-east over the country during the night becoming heavy locally in southern England the next day. A cooler north-westerly airstream following the front brought showers to most northern districts during the next day or two, the showers being of snow at times on the 3rd, 4th and 5th.

Pressure rose rapidly on the 5th and an anticyclone formed over the British Isles. It persisted until the 10th with its centre mostly over southern districts. From 5th to 8th weather was generally sunny but rather cold with widespread frost at night. Overnight fog over much of southern England was slow to clear on the morning of the 8th. On the 9th and 10th the anticyclone was centred near the Scilly Isles, and moist Atlantic air spreading round its northern side brought generally dull weather with about average temperature to most of the British Isles.

The anticyclone declined during the next two days as it moved southward to the Bay of Biscay. Weather remained mainly dry until the 14th when a trough of low pressure, associated with a deep depression to the west of Ireland, brought rain to most districts as it moved north-east across the country; the rain was preceded in some places by snow.

A week of cold weather followed. On the 16th a depression from the Atlantic moved into the Bay of Biscay and winds backed towards the east bringing snow to all districts from 16th to 19th. There were moderate falls on all high ground from the Peak District northwards—it lay 10 inches deep at Forest in Teesdale—and on the lower ground in the Midlands and north-east England it lay several inches deep on the 18th and 19th. An anti-cyclone moved from the north to the east of the British Isles on the 20th, which was a dry sunny day, and this fine weather continued on the 21st, except in the extreme south-west of the country.

Troughs associated with a deep depression in mid-Atlantic brought rain, heavy locally, and milder weather to all districts during the next two days; falls exceeding 1 inch were recorded in south-west England on the 22nd and in eastern Scotland on the 23rd. Rain continued over most of the country on the 24th as a secondary to the main Atlantic depression approached western Ireland, and weather became very mild in a general southerly airstream. Fairly extensive overnight fog persisted in many districts during the next two days with rain at times. On the 27th and 28th winds were south-westerly and weather showery with local thunder,

but the month ended with a rather cold and foggy day following widespread overnight fog.

Pressure and Wind — Mean pressure was above average except in the extreme south-west, the deviation ranging from 5.3 mb at Lerwick to -0.4 at Scilly. Surface winds were mainly westerly at first but became light and variable on the 5th-12th and then south-easterly on the 13th-15th, easterly on the 16th-22nd, and mainly westerly during the last week of the month. Gales were reported on 17 days in Scotland and on the 1st-4th, 13th-19th, 21st-24th and 26th (16 days) in England and Wales.

On the 1st several gusts exceeded 70 kt in the Orkneys and Hebrides, and one of 84 kt recorded at Lowther Hill.

Temperature — It was rather cold for much of the month, but mild spells during the first three or four days and the last week raised the monthly mean temperature above the average. During the second week nights were mild and day temperatures about average.

Extremes included (England and Wales) 15.0°C at Moreton Morrell on the 24th and at Letchworth on the 27th, -13.9°C at Moor House on the 20th; (Scotland) 13.9°C at Nairn on the 25th and 26th, and at several other places on the 26th, -11.7°C at Braemar on the 20th and 21st, and at Bowhill and Cannich on the 21st; (Northern Ireland), 13.7°C at Ballykelly on the 25th, -7.2°C at Pubble Forest on the 8th and 9th.

Rainfall — Rainfall amounts followed the pattern of the two previous months making the winter the driest in England and Wales for more than two hundred years. Only in parts of Essex, Kent, Devon and Cornwall was there more than 80 per cent of the average rainfall during February. Over most of England, and Wales there was less than half the average and in the north Midlands less than 30 per cent of the average was recorded.

Thunder was heard on 4 days in Scotland and on the 15th and 27th-29th in England and Wales.

Snow or sleet was reported in Scotland at one place or another on 18 days, ground being snow-covered on 16 mornings. In England and Wales snow fell on the 5th and 14th-23rd (10 days) ground being covered in places on 16th-19th, to a depth of 3-4 inches in parts of north-east England and to 1-2 inches over much of the Midlands.

Sunshine — It was a dull month generally. In Scotland the largest deficits occurred in the northern areas and Western Isles while there were marked excesses in areas near the Great Glen. In England and Wales some places in the north-west had more than average — Ringway 114 per cent — while parts of the south recorded little more than 60 per cent — Mount Batten only 62.

Fog — Fog was observed in Scotland at one place or another at 09 hr on 23 days and in England and Wales on the 3rd and 6th and daily afterwards. It was widespread on the 23rd-26th and 29th.

Miscellaneous Phenomena — The aurora was observed in Scotland on 10 nights.

TABLE I—DISTRICT VALUES— February

1964

(1908, revised 1928, 1941, 1956 and 1964)

DISTRICTS	AIR TEMPERATURE					EARTH TEMP.		RAIN DAYS	RAIN-FALL	SUNSHINE
	Highest Max.	Lowest Min.	Max.	Min.	Mean	Mean 1 ft.	Mean 4 ft.			
0 SCOTLAND, N.	13.9	-11.7	+0.9	+1.1	+1.0	-	-	68	-5	100
1 SCOTLAND, E.	13.9	-11.7	+0.6	+0.8	+0.7	-	-	51	-4	96
2 ENGLAND, N.E.	14.4	-12.2	+0.3	+0.7	+0.5	+0.3	-0.2	46	-5	86
3 ENGLAND, E.	15.0	-9.4	+0.1	+0.9	+0.5	-0.2	-0.7	61	-2	89
4 MIDLANDS	15.0	-10.0	+0.3	+1.0	+0.6	-0.2	-0.3	43	-3	85
5 ENGLAND, S.E.	14.5	-8.1	+0.3	+1.1	+0.7	-0.3	-0.5	58	-2	79
6 SCOTLAND, W.	14.4	-11.1	+0.4	+0.9	+0.6	+0.6	+0.4	37	-5	89

DISTRICTS	AIR TEMPERATURE					EARTH TEMP.		RAIN DAYS	RAIN-FALL	SUNSHINE
	Highest Max.	Lowest Min.	Max.	Min.	Mean	Mean 1 ft.	Mean 4 ft.			
7 ENGLAND, N.W. and N. Wales	14.5	-13.9	+0.4	+1.0	+0.7	+0.2	+0.1	34	-5	103
8 ENGLAND, S.W. and S. Wales	14.4	-9.4	0.0	+0.5	+0.2	-0.1	-0.4	58	-2	76
N. IRELAND	13.7	-7.2	+0.3	+0.4	+0.3	-	-	44	-6	84
SCOTLAND	-	-	+0.6	+0.9	+0.8	-	-	48	-5	95
ENG. and WALES	-	-	+0.2	+0.9	+0.5	-	-	48	-3	86

F42A

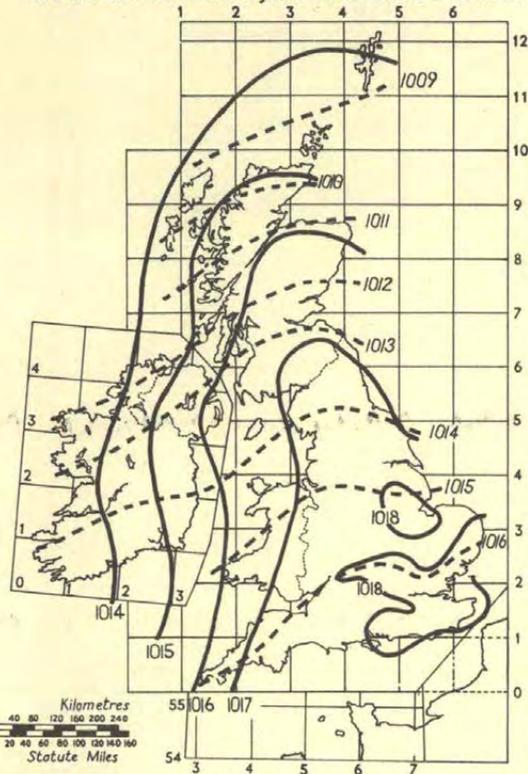
TABLE II—SUMMARY OF AUTOGRAPHIC RECORDS OF WIND— February 1964 (1914)

DISTRICT, COUNTY AND PLACE	Height of Vane			Distribution of Mean Hourly Values of Wind Speed								Mean Hourly Wind Speed knots	Highest Velocities					
	Above Mean Sea Level	Above Ground	Effective Height	34 knots or more		22 to 33 knots		11 to 21 knots	4 to 10 knots	Less than 4 knots	No Record		Highest Hourly Wind			Highest Gust		
				Dates of Occurrence	Duration	No. of days	Duration	Duration	Duration	Duration	Duration		Veer from N	Speed	Hour ended at	Speed	Day and Time	
				ft.	ft.	ft.	hr.	hr.	hr.	hr.	hr.		hr.	kn	kn	day hr	kn	day hr
SCOTLAND																		
0 Zetland	Lerwick Observatory	304	33	33	1-4, 17	23	16	196	231	202	44	0	15.8	220	43	3 06	64	1 042C
	Orkney Kirkwall	134	50	33	1	13	14	125	356	143	59	0	14.9	270	50	1 04	74	1 033C
	Caithness Dounreay	110	39	30														
	Sutherland Shin	78	33	33	1	3	3	19	130	255	239	0	7.5	260	39	1 01	67	1 0020
	Ross & Stornoway (Coastguard)	120	40	36	1-4, 25	24	13	118	387	112	55	0	15.9	270	51	1 03	75	1 0225
	Cromarty Duirinish	125	65	55	1-3	10	9	45	246	304	72	19	10.9	270	45	1 01	66	1 0245
	Inverness Benbecula	69	51	35	1-4, 25, 29	52	22	212	372	34	26	0	20.1	270	49	1 03	77	1 0040
1 Moray	Lossiemouth	101	80	60	-	0	5	28	243	304	120	1	9.4	260	33	1 05	56	1 0435
	Aberdeen Dyce	225	40	40	-	0	2	17	235	284	160	0	8.5	270	31	1 09	49	1 0715
	Angus Auchterhouse	822	62	50	1	1	5	28	299	316	44	6	11.0	270	34	1 13	51	1 1245
	Bell Rock Lighthouse	126	131	124														
	Perth Rannoch	1005	56	57	1-4	19	12	83	367	141	72	14	13.8	260	44	1 03	64	1 0125
	Fife Leuchars	78	40	40	-	0	8	42	272	327	55	0	10.9	220	33	3 05	53	1 0510
	Midlothian Turnhouse	137	40	33	1	1	6	43	232	354	66	0	10.2	260	34	1 01	55	4 1220
	Edinburgh, Blackford Hill	496	50	34	1-3	6	7	63	371	225	31	0	12.4	210	40	3 04	73	3 0350
6a Argyll	Tiree	89	60	47	1-4, 21-25	44	20	278	271	93	10	0	20.4	210	40	3 03	63	4 1305
	Bute Millport	50	34	34														
	Renfrew Paisley	188	81	31	-	0	2	4	140	422	130	0	7.4	260	25	1 01	53	3 0055
	Renfrew	71	41	39	-	0	4	13	210	389	84	0	8.6	220	32	3 03	58	1 0625
	Lanark Lowther Hill	2412	43	33	1-4, 16-18, 24	47	22	253	345	50	1	0	20.6	280	57	1 01	84	1 0025
	Ayr Prestwick Airport	68	33	33	-	0	5	18	288	336	54	0	10.4	280	25	1 02	50	4 1815
	Dumfries Eskdalemuir Observatory	825	50	35	-	0	2	6	101	294	295	0	5.8	220	28	3 03	54	1 0050
	Wigtown West Freugh	81	33	33	-	0	9	68	326	230	72	0	11.8	150	29	21 21	46	4 1620
ENGLAND and WALES																		
6b Isle of Man	Ronaldsway	119	64	39	3, 14, 18	12	17	222	274	158	30	0	17.2	220	36	3 04	50	3 0330
	Point of Ayre	64	33	33	-	0	13	162	377	155	2	0	16.0	050	32	18 11	49	3 0515
2 Durham	Durham	389	53	33	1	4	3	13	246	284	137	12	9.0	260	37	1 09	64	1 1330
	South Shields	73	57	44	1	1	5	55	293	262	85	0	11.1	290	34	1 12	56	1 0205
	Lincoln Cranwell	268	47	47	-	0	4	18	344	308	26	0	10.9	290	26	1 12	46	1 1130
3 Norfolk	Gorleston	45	33	33	*	0	0	0	171	441	84	0	8.0	230	21	3 10	39	4 1350
	Suffolk Mildenhall	98	83	60	-	0	0	0	267	331	97	0	9.0	220	23	3 11	34	3 1650
	Bedford Bedford	327	42	30	-	0	1	1	357	273	46	0	11.0	230	27	1 04	37	1 0310
	Cardington	276	133	133	-	0	4	20	357	273	46	0	5.9	280	17	4 13	30	5 0105
	Hertford Garston	307	50	33	-	0	0	0	43	515	134	0	6.1	060	15	19 08	33	3 1215
	Rothamsted	461	41	33	-	0	0	0	80	468	148	0	8.1	060	18	19 08	28	1 0135
	Essex Stansted	358	31	31	-	0	0	0	137	422	87	0						
	Coryton	66	57	48	‡													
	Shoeburyness	116	106	91	-	0	9	48	356	258	34	0	12.3	060	30	19 05	41	18 0430
4 Yorks, W.R.	Sheffield	533	83	35	-	0	1	4	50	295	337	10	4.5	280	26	1 05	64	1 0455
	Warwick Edgbaston	643	118	73	-	0	0	0	47	551	98	0	6.2	270	16	1 05	36	1 1225
	Elmdon	362	30	31	-	0	1	4	240	379	73	0	8.6	290	26	1 13	45	1 0620
	Buckingham Amersham	500	50	50	-	0	0	0	62	507	80	47	6.6	050	14	19 12	28	16 1145
	Stafford Keele	706	50	33	-	0	1	3	162	374	137	0	7.7	280	22	1 08	46	1 0725
	Gloucester Avonmouth	92	61	33	*													
5 London	Kingsway	208	143	41	-	0	0	0	112	492	92	0	7.3	260	16	1 01	34	19 0720
	Middlesex London (Heathrow) Airport	115	33	33	-	0	0	0	186	442	68	0	8.3	040	19	19 08	31	19 0935
	Hampton	139	101	100	-	0	0	0	113	382	201	0	6.1	240	17	3 12	32	19 0750
	Surrey Kew Observatory	92	75	50	-	0	0	0	160	407	129	0	7.5	050	19	19 06	35	19 0630
	Gatwick	232	38	33	-	0	0	0	119	409	168	0	6.6	180	20	23 15	36	1 0210
	Kent Isle of Grain	48	40	33	-	0	0	0	103	386	184	23	6.5	080	21	19 04	33	19 1220
	Dover	68	38	62	-	0	1	6	192	378	120	0	8.2	050	23	19 11	33	19 0750
	Sussex Thorney Island	75	65	42	-	0	0	0	141	334	221	0	6.6	240	20	1 06	33	1 0520
	Hampshire Hurn	86	53	46	-	0	0	0	214	382	100	0	8.4	240	20	3 13	34	3 1224
	Calshot	50	41	33	-	0	5	14	362	305	15	0	11.5	110	24	15 24	34	1 1230
	Berkshire S. Farnborough	316	69	35	-	0	0	0	140	441	115	0	7.5	300	16	1 12	-	-
	Wiltshire Abingdon	295	40	40	-	0	2	3	279	280	134	0	8.9	230	23	1 02	36	1 0100
	Larkhill	491	51	36	-	0	2	7	220	338	131	0	8.6	270	25	1 08	43	1 0700
	Boscombe Down	425	55	55	-	0	1	1	199	341	155	0	7.8	280	22	1 07	38	1 0115
	Porton	406	44	44	-	0	1	1	212	303	180	0	7.9	290	22	1 12	34	19 0030
7a Cumberland	Carlisle	137	42	30	-	0	4	20	220	362	94	0	9.0	220	29	3 06	46	3 0515
	Sellafield	83	39	35	-	0	4	6	323	296	71	0	10.4	290	23	4 04	38	4 1910
	Spadeadam	959	51	40	-	0	7	36	263	297	88	12	10.6	(050)	27	18 11	(46)	4 1210
	Westmorland Great Dun Fell	2813	33	33	1-4	50	20	192	336	73	4	41	19.7	280	53	1 16	68	1 1545
	Moor House	1960	50	45	1, 3, 4	37	13	85	378	157	15	24	16.0	270	44	4 12	64	4 1530
	Lancashire Squires Gate	88	55	35	-	0	9	58	407	212	19	0	13.7	240	30	3 07	45	4 2030
	Southport	59	41	33	-	0	5	30	230	319	102	15	9.6	080	27	18 15	41	18 1345
	Fleetwood	112	50	31	β													
	Speke	84	41	33	-	0	4	19	321	310	46	0	10.9	240	29	3 05	47	3 0445
	Manchester W/Centre	268	147	55	-	0	2	7	186	382	121	0	8.3	260	24	1 01	48	3 0530
	Cheshire Bidston Observatory	262	64	39	-	0	8	50	334	264	48	0	-	260	30	1 02	50	1 0115
	Ringway	261	33	33	-	0	6	13	253	282	148	0	8.9	270	25	4 13	44	3 0520
7b Anglesey	Valley	86	53	40	3	2	14	107	324	201	62	0	13.3	200	36	3 04	46	3 0340
8a Cardigan	Aberporth	483	41	41	21, 22	5	14	116	387	119	69	0	14.7	130	35	22 21	58	12 1655
	Pembroke Brawdy	432	68	45	13	3												

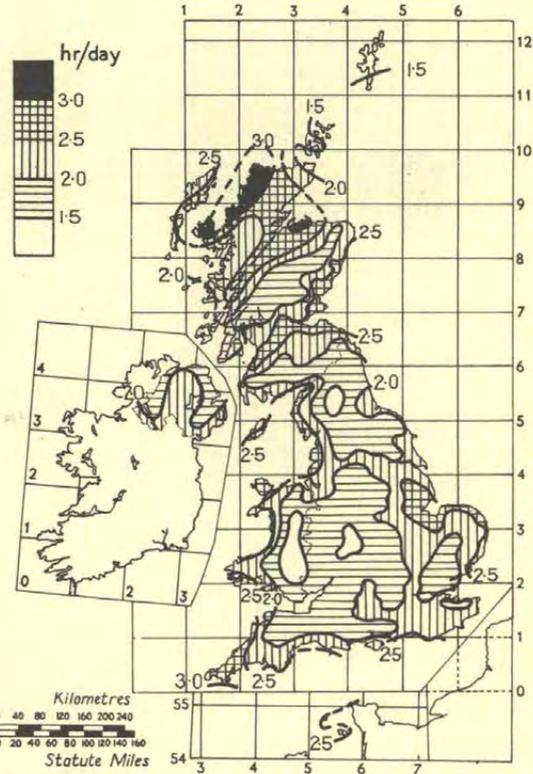
MONTHLY WEATHER CHARTS FEBRUARY 1964

MEAN PRESSURE AT 9 G.M.T.

The dotted lines show the normal distribution of pressure in millibars based on 30 years observations 1921-50.

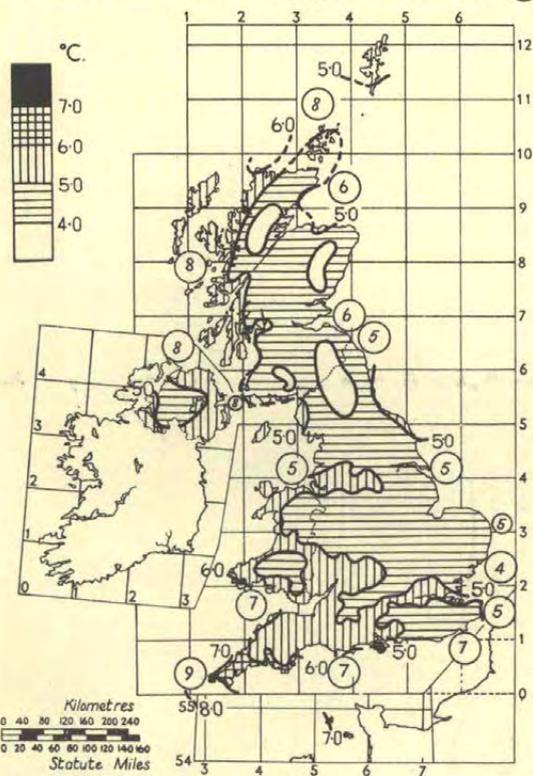


BRIGHT SUNSHINE

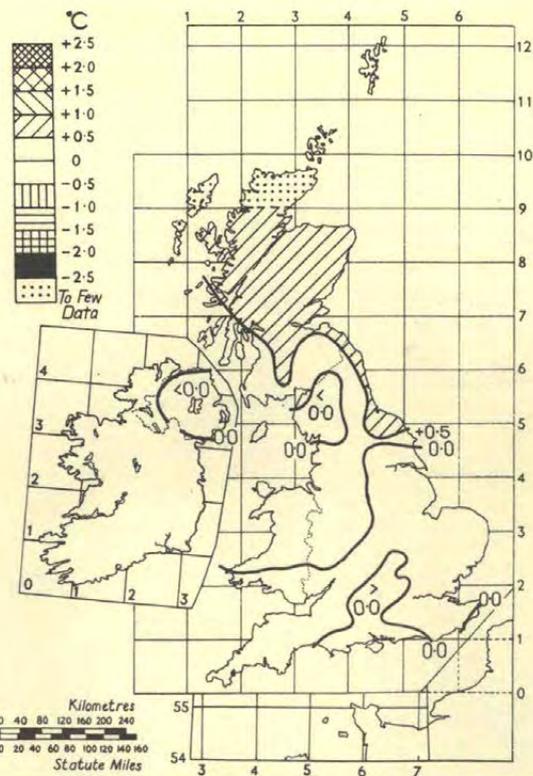


MEAN AIR TEMPERATURE

Reduced to sea level by a correction of 1°C. for 500 ft. Sea temperatures are shown by figures in circles thus (10)



ANOMALY OF MEAN 1 ft. EARTH TEMPERATURE



RAINFALL

FEBRUARY 1964

The equivalent values in mm, are given in round numbers. The exact relation is 10 in. = 254 mm.

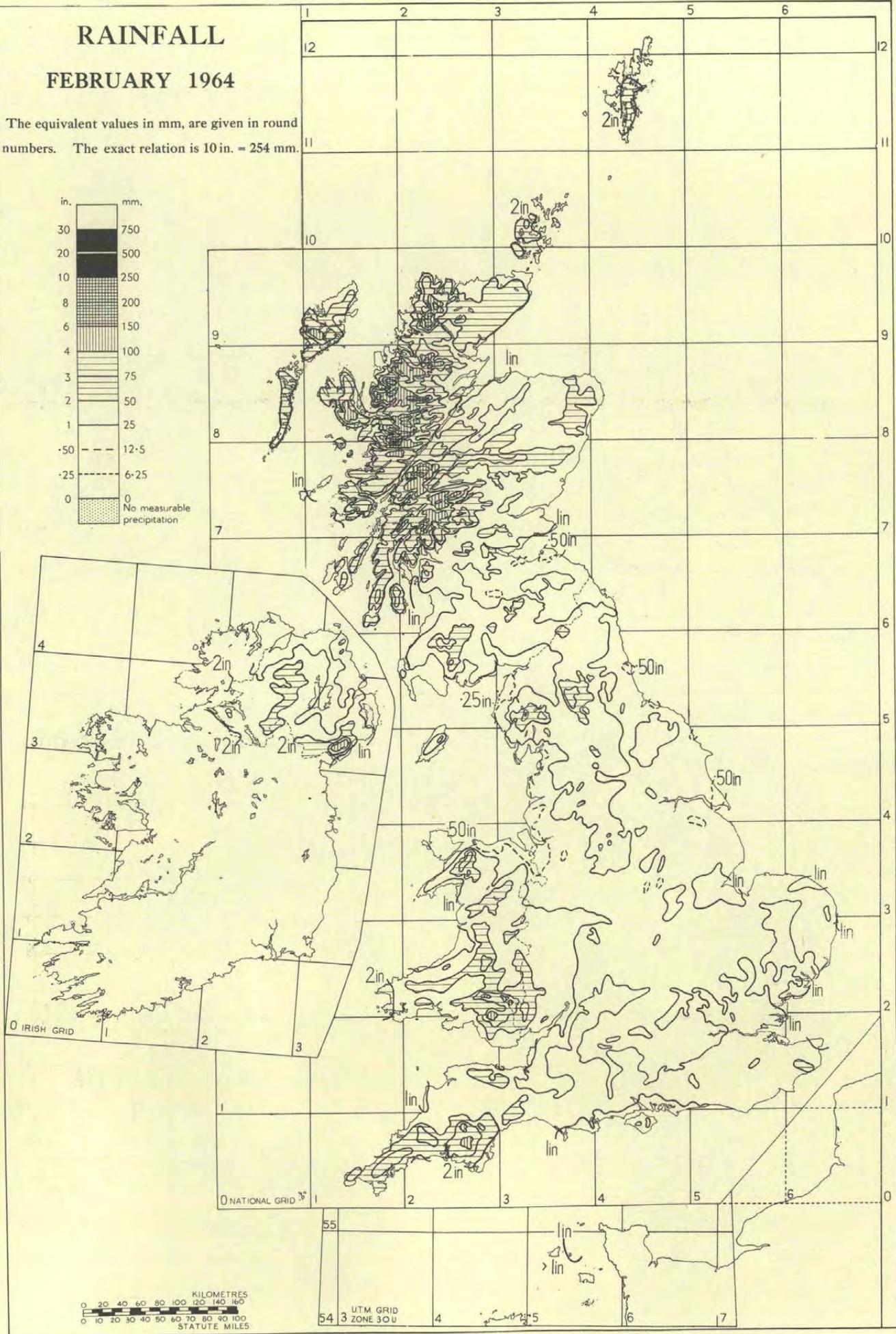
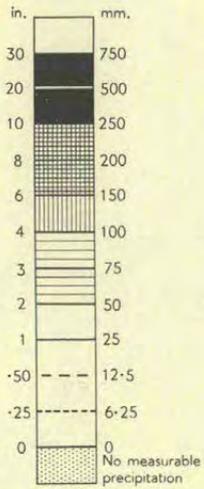


TABLE III — SUMMARY OF OBSERVATIONS OF TEMPERATURE, RAINFALL, SUNSHINE AND WEATHER February 1964

Table with columns for District, County and Place; Terminal Hours of Observation; Air Temperature in Degrees Celsius (Means of A Max, B Min, Difference from Average, Highest Maximum and Lowest Minimum); Mean Earth Temperature (1 ft, 4 ft); Rainfall (Total Fall, Percentage of Average, Most in a day); Weather (Precip'n, Snow or Sheet, etc.); and Bright Sunshine (Daily Mean, Percentage of Average).

TABLE III (continued)—SUMMARY OF OBSERVATIONS OF TEMPERATURE, RAINFALL, SUNSHINE AND WEATHER February 1964

DISTRICT, COUNTY AND PLACE	Terminal Hours of Observation	Height of Station above Mean Sea Level	AIR TEMPERATURE IN DEGREES CELSIUS								MEAN EARTH TEMPERATURE		RAINFALL (Terminal hour 9 G.M.T.)		WEATHER Number of days										BRIGHT SUNSHINE						
			Means of		Difference from Average	Highest Maximum and Lowest Minimum				1 ft.	4 ft.	Total Fall	Percentage of Average	Most in a day		Precip'n	Snow or Sleet	Snow lying at 9h.	Ice or snow pellets etc.	Thunder heard	Fog at 9h.	Air Frost	Grass min below 0° C	Daily Mean	Percentage of Average						
			A Max.	B Min.		Maximum	Date	Minimum	Date					in.	%											Amount	Date	0-1in. (0-2mm) or more	0-4in. (1-6mm) or more	hr	%
1 SCOTLAND, E.—cont.																															
Midlothian			G.M.T.	ft.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	in.	%	in.															
	Balerno ...	9 9	700	5.9	0.2	3.1	-	11.7	26	-8.9	20	-	-	.74	-	.22	23	8	6	-	-	-	-	6	12	15	-	2.73	110		
	Turnhouse ...	21-9	114	7.1	1.7	4.4	+1.0	12.0	25	-8.0	21	-	-	.63	38	.32	23	8	2	6	2	1	3	0	1	9	14	2	2.29	-	
	Edinburgh—E. Craigs	9 9	200	6.9	1.6	4.3	-	11.7	25	-6.7	21	-	-	.49	-	.27	23	7	2	4	1	0	0	0	1	8	17	0	2.52	-	
	Davidson's Mains	9 9	200	6.7	1.7	4.2	+0.8	11.7	25,27	-6.7	21	3.1	-	.66	-	.35	23	11	3	3	2	0	2	0	1	7	18	0	2.49	- S	
	Penicuik ...	9 9	620	6.1	0.5	3.3	-	12.2	26	-9.4	20	2.9	-	.78	-	.25	17	8	6	5	6	0	0	0	0	10	19	1	2.36	-	
	Bush House ...	9 9	605	6.1	0.8	3.5	-	10.6	29	-8.3	20,21	2.7	3.8	.62	-	.19	23	8	5	6	6	1	0	0	0	12	16	1	2.61	-	
	Edinburgh—																														
	Blackford Hill §§	9 9	441	6.6	2.0	4.3	+0.8	12.2	29	-4.4	21	-	-	.33	20	.43	17	6	2	2	2	0	0	0	0	7	17	0	2.58	96	
	Liberton ...	9 9	200	6.9	1.9	4.4	+0.7	11.7	29	-6.1	21	-	-	.45	-	.28	23	4	2	-	-	-	-	-	-	5	13	-	2.65	-	
	Royal Bot. Gdns.	9 9	74	7.1	1.6	4.3	+0.5	12.2	25	-7.2	21	3.3	-	.75	-	.42	23	8	3	3	1	0	1	0	1	7	18	0	2.40	164	
E. Lothian	Haddington ...	9 9	162	7.0	1.4	4.2	-	12.8	26	-5.6	20,21	-	-	.47	-	.24	23	7	2	3	1	0	1	0	3	8	20	0	2.80	- S	
	North Berwick ...	9 9	152	7.3	1.9	4.6	+0.8	13.9	26	-3.3	20,21	-	-	.44	30	.27	23	4	2	-	-	-	-	-	-	5	-	-	-	-	
	Dunbar ...	9 9	75	7.2	2.3	4.7	+0.7	11.7	2,26,27	-2.8	20,21	-	-	.41	-	.20	23	4	3	2	0	0	0	0	0	5	13	0	3.18	113	
Berwick	Mertoun ...	9 9	225	6.6	0.1	3.3	-	12.2	27	-9.4	21	-	-	.79	-	.38	23	11	6	-	-	-	-	-	-	10	20	-	2.11	-	
	Lauder ...	9 9	600	5.6	-0.3	2.7	-	11.1	2	-10.6	21	-	-	1.16	-	.33	23	14	9	6	6	0	0	0	5	12	20	3	2.40	84 S	
	Marchmont §§	9 9	498	5.9	0.7	3.3	+0.5	10.6	2,27	-6.7	21	-	-	.98	45	.41	23	12	5	2	7	0	0	0	1	8	-	4	1.82	-	
	Whitchester ...	9 9	838	5.6	0.1	2.9	-	10.0	2,27	-7.8	20	-	-	1.37	-	.55	17	12	7	4	-	0	0	0	0	10	-	-	-	-	
	St. Abb's Head ...	9 9	245	6.6	3.2	4.9	-	12.1	2	-3.1	21	-	-	-	-	-	-	-	-	3	0	0	0	0	2	6	3	-	-	-	
Peebles	Stanhope Farm ...	9 9	741	5.8	0.5	3.1	-	12.2	26	-10.0	21	-	-	1.19	-	.22	27	14	10	8	2	0	1	0	0	13	17	0	-	-	
	Blyth Bridge ...	9 9	830	5.3	0.4	2.9	-	10.6	26	-9.4	20	-	-	.65	-	.15	3	8	6	5	6	0	2	0	1	12	17	0	2.29	-	
	West Linton ...	9 9	800	5.4	0.1	2.7	-	11.1	26	-10.0	20	1.9	3.9	.87	-	.19	23	16	6	6	6	1	0	0	0	14	15	0	-	-	
	Glentress ...	9 9	580	6.0	0.4	3.2	-	11.1	2	-10.6	20	-	-	.95	-	.27	23	11	7	5	5	0	0	0	3	11	-	0	-	-	
Selkirk	Bowhill ...	9 9	600	5.8	-0.2	2.8	-	10.6	29	-11.7	21	-	-	1.14	-	.32	23	11	7	4	6	0	2	0	2	12	-	1	-	-	
Roxburgh	Wauchope ...	9 9	560	6.0	-0.5	2.7	-	11.1	27	-11.7	20	-	-	.99	-	.27	23	11	7	-	5	-	-	-	0	13	-	-	-	-	
	Sourhope ...	9 9	900	5.1	0.1	2.6	-	10.6	29	-6.1	20	-	-	1.26	-	.58	17	9	6	-	6	-	-	-	0	12	22	-	1.92	-	
6a SCOTLAND, W.																															
Argyll	Tiree ... §§	21-9	29	7.4	4.1	5.7	+0.5	10.7	2	-3.6	19	-	-	.94	30	.22	1	12	8	2	0	0	3	0	0	2	6	3	1.86	71	
	Rhuvaal ...	21-9	65	7.3	4.0	5.7	-	11.1	2	0.6	20,21	-	-	1.53	-	.33	23	13	8	0	0	2	0	0	0	0	6	8	-	-	-
	Colonsay ...	9 9	87	7.6	3.3	5.5	+0.9	10.6	26	-0.6	5,19,21	-	-	1.09	28	.20	23	17	10	2	-	3	0	0	0	4	-	4	-	-	-
	Tobermory ...	9 9	270	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Craighouse ...	9 9	10	7.6	3.8	5.7	-	11.7	26	0.0	5	-	-	2.24	-	.45	3	17	13	-	0	-	-	-	0	0	6	-	-	-	
	Campbeltown ...	9 9	10	7.2	3.2	5.2	-	11.7	1,2	-1.1	5	-	-	1.62	-	.40	22	12	9	2	0	0	0	0	0	13	3	-	0	1.80	-
	Achaglachgach ...	9 9	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Oban ...	9 9	229	7.4	2.6	5.0	+0.9	12.2	26	-3.3	20	-	-	1.29	30	.32	1	15	8	1	0	0	0	0	0	6	11	2	2.81	120	
	Lephinmore ...	9 9	30	7.3	2.3	4.8	-	12.2	26	-3.9	20	-	-	1.51	-	.35	6	16	11	3	1	2	0	0	0	2	6	15	0	1.84	- S
	Glenbranter ...	9 9	120	6.9	1.6	4.3	+1.0	11.1	26	-6.1	20	-	-	2.89	37	.45	3	15	13	-	0	-	-	-	-	0	8	15	-	-	-
	Benmore ...	9 9	46	7.0	1.0	4.0	-0.1	11.7	26	-7.2	5	3.7	4.7	3.14	42	.44	22	15	13	3	1	0	0	0	3	11	13	0	-	-	
	Forestry Sch. ...	9 9	40	7.1	2.1	4.6	-	11.7	26	-5.6	20	-	-	3.09	-	.39	2	15	14	4	2	2	1	0	1	6	17	0	-	-	
Bute	Younger Bot. Gdns.	9 9	150	6.7	2.7	4.7	+0.5	10.6	2	-1.7	5,6,20	4.3	5.2	1.69	41	.36	3	15	13	3	0	1	0	0	0	5	10	0	1.93	82	
	Rothsay §§	9 9	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Millport ...	9 9	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Dunbarton	Helensburgh ...	9 9	293	6.4	1.6	4.0	+0.7	12.2	26	-5.0	20	-	-	1.27	28	.21	3	14	10	2	0	0	0	0	1	9	-	0	-	- S	
	Cumbernauld ...	9 9	310	5.9	0.7	3.3	-	11.1	26	-7.2	21	-	-	1.28	-	.34	23	17	11	3	3	0	1	0	1	11	20	0	-	-	
Stirling	Earls Hill ...	9 9	1100	4.2	-3.2	0.5	-	9.0	26	-8.0	21	-	-	2.42	-	.54	23	16	10	-	-	-	-	-	3	14	17	-	2.50	-	
	Stirling ...	9 9	151	6.9	2.1	4.5	+0.8	11.1	2,28,29	-5.0	20,21	3.6	5.7	1.44	50	.38	23	14	10	3	3	0	0	0	1	6	15	0	2.53	-	
	Falkirk ...	9 9	100	7.2	1.8	4.5	+1.0	12.2	27	-6.1	21	-	-	.99	-	(.30)	23	12	9	-	-	-	-	-	-	6	-	-	-	-	
Renfrew	Greenock ...	9 9	200	7.0	2.2	4.6	+0.5	12.8	26	-3.9	21	-	-	1.31	26	.48	3	16	10	3	1	1	0	0	2	8	13	0	2.08	-	
	Paisley ...	9 9	106	7.2	2.3	4.7	+0.5	13.3	26	-5.0	21	4.4	5.7	1.19	34	.22	23	12	9	5	0	0	0	0	5	11	0	2.06	103		
	Barrhead ...	9 9	97	7.2	1.3	4.3																									

TABLE III (continued)—SUMMARY OF OBSERVATIONS OF TEMPERATURE, RAINFALL, SUNSHINE AND WEATHER February 1964

DISTRICT, COUNTY AND PLACE	Terminal Hours of Observation	Height of Station above Mean Sea Level	AIR TEMPERATURE IN DEGREES CELSIUS								MEAN EARTH TEMPERATURE		RAINFALL (Terminal hour 9 G.M.T.)				WEATHER								BRIGHT SUNSHINE								
			Means of				Highest Maximum and Lowest Minimum				1 ft.	4 ft.	Total Fall	Per-centage of Average	Most in a day		Precip'n		Snow or Sleet	Snow lying at 9h.	Hail	Ice or snow pellets etc.	Thunder heard	Fog at 9h.	Air Frost 1	Grass min. below 0° C	Gale	Daily Mean	Per-centage of Average				
			A	B	Mean Temperature Mean of A and B	Difference from Average	Maximum	Date	Minimum	Date					in.	%	Amount	Date												-0.1in. (0.2mm.) or more	-0.4in. (1.0mm.) or more	Snow or Sleet	Snow lying at 9h.
			Max.	Min.							°C.	°C.	°C.	°C.					°C.	°C.	°C.	°C.	in.	%	in.	Date	in.	mm.	in.				
2 ENGLAND, N.E.—cont.																																	
Northum-berland cont.	9 9	270																															
Haydon Bridge	9 9	160	6.3	-0.6	2.9	-	12.8	27	-11.7	21	-	-	.71	-	.30	17	5	3	4	5	0	0	0	0	2	16	-	0	-	-	-	-	
Corbridge	9 9	76	6.6	2.2	4.4	+0.6	10.6	2,28	-4.4	20	-	-	.60	40	.37	23	6	3	2	0	0	0	0	1	5	13	2	2.07	76	-	-	-	
Berwick-on-Tweed	9 9	326	6.1	1.2	3.7	+0.7	11.1	28	-6.1	20	3.4	-	.95	50	.35	23	10	5	3	4	0	1	0	1	7	15	1	1.66	63	-	-	-	
Cockle Park	21-9	138	6.4	1.5	3.9	-	11.8	28	-6.2	21	-	-	.79	-	.47	23	8	4	4	2	5	0	0	2	10	14	3	1.93	-	-	-	-	
Acklington	9 9	95	6.5	3.0	4.7	+0.3	12.0	2	-4.0	21	-	-	.64	39	.37	23	5	3	3	0	1	1	0	4	4	11	1	1.76	75	-	-	-	
Tynemouth	9 9	446	6.3	1.2	3.7	+0.6	12.8	27	-6.1	20	-	-	1.07	54	.55	17	5	4	4	5	0	0	0	4	10	16	0	-	-	-	-	-	
Chopwellwood	9 9	594	6.1	0.9	3.5	+0.5	12.2	27	-5.6	21	-	-	1.01	49	.44	17	6	3	3	6	0	0	0	19	11	0	-	-	-	-	-	-	
Ushaw College	9 9	123	7.1	0.1	3.6	+0.4	13.3	27	-11.7	21	-	-	.94	50	.42	17	9	3	3	6	0	2	0	5	12	19	0	2.10	91	-	-	-	
Houghall	9 9	336	6.7	0.6	3.7	+0.4	12.8	27	-8.9	21	3.5	4.9	.98	55	.44	17	9	4	-	-	-	-	-	12	19	-	1.99	82	-	-	-	-	
Durham	9 9	509	6.0	1.4	3.7	-	11.7	27	-5.0	21	-	-	.86	-	.37	23	5	3	-	-	-	-	5	10	-	-	1.81	-	-	-	-		
Gateshead	21-9	115	7.3	1.6	4.5	-	12.8	27	-7.0	21	-	-	.91	-	.37	23	9	5	3	0	3	0	3	2	12	17	0	2.21	-	-	-	-	
Middleton St. George	9 9	30	7.4	2.7	5.1	-	12.8	27	-5.6	21	-	-	.93	-	.60	23	8	3	3	1	3	0	0	2	5	11	2	1.99	-	-	-	-	
West Hartlepool	21-9	105	7.0	1.7	4.3	-	13.4	27	-6.1	21	-	-	1.01	58	.60	23	11	5	4	1	0	1	0	6	10	16	1	1.93	-	-	-	-	
Yorks., N. Riding	9 9	111	6.9	1.2	4.1	-	12.2	2,27	-6.7	6,21	-	-	1.05	-	.59	23	13	5	3	2	0	0	0	3	11	19	0	-	-	-	-	-	
Thirk	9 9	57	7.3	2.2	4.7	+0.7	13.3	2,28	-3.9	6	3.9	5.2	.87	52	.47	23	11	4	2	2	0	0	0	5	9	-	0	1.95	92	-	-	-	
York	9 9	313	6.6	1.6	4.1	+1.0	11.7	2,27	-4.4	21	-	-	1.30	61	.69	23	11	7	2	-	0	0	0	5	11	15	0	-	-	-	-	-	
Ampleforth	9 9	25	7.7	2.3	5.0	-	13.3	27	-5.0	21	-	-	.88	57	.42	23	12	4	-	-	-	-	0	6	-	-	2.14	-	-	-	-		
Redcar	9 9	143	7.0	1.0	4.0	-	12.8	27	-7.8	21	-	-	.95	-	.50	23	9	3	2	5	0	1	0	2	11	14	0	-	-	-	-	-	
Pickering	9 9	135	7.6	2.3	4.9	-	12.8	27	-5.6	21	-	-	.69	36	.27	23	7	5	2	1	0	3	0	1	6	-	0	-	-	-	-	-	
Whitby	9 9	118	7.2	2.7	4.9	+0.4	12.2	27,28	-5.6	21	4.1	5.8	.47	26	.19	23	8	4	2	2	0	0	0	5	5	9	0	2.05	89	-	-	-	
Scarborough	9 9	665	5.8	0.9	3.3	-	10.6	28	-6.7	20	2.9	-	.86	-	.39	23	12	5	2	3	0	2	0	6	12	19	0	2.21	-	-	-	-	
Silpho Moor	21-9	200	6.7	2.3	4.5	-	12.5	27	-5.6	20	-	-	.48	-	.29	23	4	4	1	2	0	2	0	1	6	9	4	-	-	-	-	-	
Whitby C/Guard	9 9	574	5.6	0.8	3.2	-	11.1	27	-3.9	6,21	2.9	-	.79	40	.40	23	10	5	2	6	1	1	1	7	12	17	0	2.01	-	-	-	-	
High Mowthorpe	9 9	8	7.1	2.3	4.7	+0.5	13.3	27	-5.6	21	3.7	5.3	.79	43	.21	17	8	6	2	2	0	0	1	2	8	11	0	2.05	94	-	-	-	
Hull	21-9	24	6.9	1.7	4.3	-	13.4	27	-6.5	21	-	-	.53	-	.25	23	10	4	6	2	0	2	1	6	8	20	0	2.05	-	-	-	-	
Leconfield	9 9	122	6.7	2.0	4.3	-	12.2	27	-6.1	21	-	-	.55	-	.24	23	8	4	1	1	3	0	3	6	11	0	2.03	-	-	-	-		
Filey	9 9	157	6.3	1.8	4.1	-	12.2	28	-3.9	6	-	-	.65	-	.30	23	10	5	2	1	2	2	0	5	7	13	2	2.15	-	-	-	-	
Bridlington	21-9	29	6.1	2.8	4.5	+0.5	12.0	28	-0.9	6	-	-	.74	-	.22	17	7	5	4	1	0	0	0	4	2	-	1	2.40	98	-	-	-	
Spurn Head	9 9	60	6.9	0.9	3.9	-	13.9	27	-6.1	6	-	-	.87	-	.17	17,22	12	7	4	3	0	0	0	5	12	16	0	-	-	-	-	-	
Gainsborough	21-9	224	6.9	1.6	4.3	+0.7	13.3	27	-5.7	21	-	-	.62	-	.16	23	10	5	6	2	0	3	0	6	10	14	0	2.47	-	-	-	-	
Navenby	9 9	22	7.6	0.8	4.2	-	14.4	27	-8.3	6	3.3	4.3	.72	-	.20	23	11	5	2	2	0	0	0	6	10	18	0	2.37	-	-	-	-	
Waddington	9 9	205	6.8	0.9	3.9	+0.4	13.2	27	-6.6	21	3.6	4.6	.79	48	.24	29	10	7	5	1	0	1	0	5	13	12	0	2.60	102	-	-	-	
Lincoln	21-9	353	6.3	1.9	4.1	-	11.9	27	-3.6	21	-	-	.69	-	.21	17	8	5	5	1	1	0	1	6	10	13	0	-	-	-	-	-	
Cranwell	9 9	23	7.1	2.3	4.7	+0.7	13.3	2	-3.9	21	-	-	.53	30	.15	17	6	5	5	0	0	1	0	2	5	-	0	2.84	116	-	-	-	
Binbrook	21-9	55	7.0	1.9	4.5	-	13.1	27	-6.3	21	-	-	.68	-	.17	23	7	6	5	2	0	3	0	4	6	11	0	2.44	-	-	-	-	
Clethorpes	9 9	15	6.9	1.8	4.3	+0.6	12.8	2,27	-3.3	6	-	-	.50	33	.16	23	6	6	4	0	0	0	0	4	9	-	0	2.30	92	-	-	-	
Manby	9 9	60	6.9	0.9	3.9	-	13.9	27	-6.1	6	-	-	.87	-	.17	17,22	12	7	4	3	0	0	0	5	12	16	0	-	-	-	-	-	
Skegness	21-9	224	6.9	1.6	4.3	+0.7	13.3	27	-5.7	21	-	-	.62	-	.16	23	10	5	6	2	0	3	0	6	10	14	0	2.47	-	-	-	-	
3 ENGLAND, E.	9 9	22	7.6	0.8	4.2	-	14.4	27	-8.3	6	3.3	4.3	.72	-	.20	23	11	5	2	2	0	0	0	6	10	18	0	2.37	-	-	-	-	
Norfolk	9 9	178	6.6	2.3	4.5	+0.6	12.8	27,28	-2.2	21	-	-	.92	50	.27	24	11	7	-	-	-	-	0	2	10	-	2.64	102	-	-	-		
Terrington	9 9	93	6.7	1.9	4.3	+0.7	13.3	27	-7.2	21	4.2	-	.78	45	.20	25	11	5	3	0	2	0	2	7	19	0	2.42	101	5	-	-		
St. Clement	21-9	55	7.0	2.0	4.5	-	13.5	27	-5.2	21	-	-	.91	-	.20	25	12	5	6	1	3	2	0	4	5	13	0	-	-	-	-		
Marham	9 9	89	6.7	2.1	4.4	-	12.8	27	-4.4	21	-	-	.84	51	.22	24,25	13	5	5	0	0	3	0	5	13	0	0</						

TABLE III (continued)—SUMMARY OF OBSERVATIONS OF TEMPERATURE, RAINFALL, SUNSHINE AND WEATHER February 1964

DISTRICT, COUNTY AND PLACE	Terminal Hours of Observation	Height of Station above Mean Sea Level	AIR TEMPERATURE IN DEGREES CELSIUS								MEAN EARTH TEMPERATURE		RAINFALL (Terminal hour 9 G.M.T.)				WEATHER Number of days								BRIGHT SUNSHINE					
			Means of		Mean Temperature Mean of A and B	Difference from Average	Highest Maximum and Lowest Minimum				1 ft.	4 ft.	Total Fall	Percentage of Average	Most in a day		Precip'n		Snow or Sleet	Snow lying at 9h	Hail	Ice or snow pellets etc.	Thunder heard	Fog at 9h	Air Frost †	Grass min. below 0°C	Gale	Daily Mean	Percentage of Average	
			A	B			Maximum	Date	Minimum	Date					Amount	Date	0 in. (0.2mm) or more	4 in. (1.0mm) or more												
			Max.	Min.	ft.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	in.	%	in.	Date	0 in. (0.2mm) or more	4 in. (1.0mm) or more	Thunder heard	Fog at 9h	Air Frost †	Grass min. below 0°C	Gale	hr	%			
4 MIDLAND COUNTIES—cont.																														
Yorks., Huddersfield §	9 9	325	6.8	1.6	4.2	+0.8	13.3	27	-6.7	21	3.4	4.8	.74	-	.41	23	13	6	-	2	-	-	-	4	9	20	-	1.97	123	
W. Riding—Oakes	21-9	761	5.7	1.4	3.5	+0.6	13.2	27	-5.8	21	3.3	4.8	1.11	33	.55	23	17	9	4	2	1	0	0	0	4	11	21	2	1.97	104
cont. Bradford ¶	9 9	439	6.1	1.5	3.8	+0.7	12.8	27	-5.0	21	-	-	1.16	42	.56	23	14	10	3	3	1	3	0	5	10	21	1	-	-	
Ilkley ...	9 9	315	6.6	1.3	3.9	+0.7	12.8	27	-6.1	21	-	-	.87	26	.90	23	8	5	4	0	0	0	0	7	12	-	0	1.84	87	
Sheffield ...	9 9	429	6.7	1.7	4.2	+0.4	12.8	27	-5.6	21	3.7	4.9	1.13	47	.36	23	12	10	4	4	0	0	0	0	0	11	15	0	1.74	94
Wakefield ...	9 9	121	7.1	1.7	4.4	+0.6	14.4	27	-5.6	21	3.8	5.2	.65	31	.40	23	11	3	2	1	0	2	0	6	10	18	1	-	-	
Pontefract ...	9 9	255	6.6	1.7	4.1	+0.6	12.2	27,27,28	-5.6	21	-	-	.66	36	.39	23	11	4	3	2	0	0	0	6	10	18	1	-	-	
Bramham ...	9 9	177	6.7	1.0	3.9	-	12.2	2,28	-7.2	21	-	-	.92	56	.48	23	12	7	3	1	0	0	0	6	13	16	0	2.13	-	
Cawood ...	9 9	20	7.1	1.3	4.2	-	13.3	27	-6.7	21	3.3	4.4	.76	45	.48	23	7	5	1	1	0	0	0	4	10	17	0	2.24	-	
Askham Bryan ...	9 9	110	6.7	2.2	4.5	-	13.3	21	-3.3	6,21	-	-	.87	49	.51	23	11	4	2	2	0	0	0	4	4	17	0	2.02	88	
Buxton ...	9 9	1007	4.1	-0.3	1.9	-0.1	10.6	27,28	-7.2	6	2.8	3.9	1.27	32	.47	23	13	9	3	8	0	0	0	14	15	17	1	-	-	
Chapel en le Frith	9 9	732	5.8	0.5	3.1	-	12.8	27	-7.2	6	-	-	1.20	-	.45	23	13	8	5	5	0	0	0	6	14	21	1	-	-	
Mackworth ...	9 9	293	6.9	0.9	3.9	-	12.2	29	-7.8	6	-	-	.95	-	.20	22,23	9	8	3	3	0	0	1	4	13	15	0	-	-	
Belper ...	9 9	203	-	-	-	-	-	-	-7.2	21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Derby ...	9 9	159	7.3	1.7	4.5	-	12.8	27	-6.1	21	-	-	.67	-	.19	22	10	6	2	2	0	0	1	4	10	18	0	1.70	-	
Morley ...	9 9	350	6.5	1.3	3.9	-	12.2	27	-5.6	6,21	-	-	.66	33	.16	22	11	8	2	2	0	0	0	9	17	0	1.74	-	S	
Chesterfield ...	9 9	298	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Nottingham Sutton Bonington	9 9	157	7.2	1.3	4.3	+0.7	13.3	27	-6.7	6,21	4.2	5.2	.48	29	.12	23	11	6	3	2	0	0	0	2	10	21	0	2.06	90	
Watnall ...	21-9	385	6.6	1.7	4.1	-	12.7	27	-6.2	21	-	-	.95	48	.19	27	11	10	5	4	1	4	1	7	10	15	0	1.81	82	
Nottingham Training College ...	9 9	169	7.4	1.6	4.5	-	12.8	1	-5.0	21	-	-	.35	-	.11	23	8	5	-	-	-	-	5	9	16	-	-	-	-	
Mansfield ...	9 9	362	6.4	1.4	3.9	+0.6	12.2	27	-7.2	21	3.4	-	1.11	55	.28	23	12	11	2	-	0	0	0	6	9	15	0	-	-	
Nottingham ¶§	9 9	192	7.3	2.1	4.7	+0.8	13.9	27	-3.9	6	3.3	3.9	.53	30	.11	23	11	4	3	2	0	0	0	4	7	16	0	1.64	85	
Warsop ...	9 9	150	7.1	0.7	3.9	-	12.8	2,27	-10.0	21	-	-	.84	49	.24	23	13	8	4	2	0	0	0	5	12	17	1	1.76	-	
Finningley ...	21-9	34	7.7	2.2	4.9	+1.2	14.0	2	-5.7	21	-	-	.73	-	.29	23	9	5	2	0	0	1	5	8	18	1	2.40	-	S	
Leicester Newton Linford	9 9	392	6.6	0.9	3.7	-	12.8	27	-5.6	6,21	-	-	.80	-	.14	23	13	10	4	3	0	2	0	5	10	17	0	1.94	-	
Caldecott ...	9 9	175	7.4	0.9	4.1	-	13.9	27	-6.7	6,7	-	-	.73	-	.17	16	11	6	-	0	-	-	3	14	15	-	1.90	-		
Northampton Bugbrooke Mills	9 9	228	6.8	1.1	3.9	-	12.2	25	-6.1	21	3.9	5.2	.74	-	.20	16	12	6	4	0	0	0	0	14	12	-	0	1.79	-	
Raunds ...	9 9	193	6.9	0.8	3.9	-	13.3	28	-6.7	21	3.3	5.5	.68	46	.16	29	14	7	4	1	0	0	0	6	13	15	0	2.12	-	S
Wittering ...	21-9	212	7.0	1.6	4.3	-	13.4	27	-5.8	21	-	-	.81	-	.21	16	9	7	5	1	0	2	1	6	9	18	0	2.37	-	
Warwick Birmingham K.E.S.*	9 9	450	6.7	1.6	4.1	-	12.8	27	-4.4	6	-	-	.98	-	.27	23	9	5	3	2	0	1	1	3	9	-	0	-	-	
Edgbaston ¶§	21-9	536	6.3	2.5	4.4	+0.6	12.2	27	-3.8	21	5.1	6.8	.95	43	.28	16	11	5	4	5	0	0	0	5	7	13	0	1.39	67	
Luddington ...	9 9	138	7.6	1.2	4.4	-	14.4	27	-6.7	6	-	-	.64	42	.14	16	9	5	4	4	0	0	0	1	8	14	0	1.84	-	
Stratford on Avon	9 9	160	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Elmdon ...	21-9	319	7.0	1.8	4.4	-	12.5	27	-7.0	21	-	-	.70	37	.24	16	9	5	4	2	1	2	0	5	9	14	0	1.72	-	
Shipston on Stour	9 9	365	6.9	1.6	4.3	-	12.8	27,28	-5.0	6	4.1	-	.90	-	.24	15	11	7	4	3	0	0	0	6	12	19	-	1.91	-	S
Wellesbourne ...	9 9	153	7.1	0.8	3.9	-	13.3	27	-7.2	6	-	-	.58	35	.14	16	9	6	5	-	0	0	0	0	11	-	0	1.76	-	
Moreton Morrell	9 9	280	7.4	1.2	4.3	-	15.0	24	-6.7	22	-	-	.84	-	.27	16	11	7	3	3	1	0	1	1	10	14	0	1.78	-	S
Coventry ...	9 9	338	7.2	1.7	4.5	+1.0	12.8	27	-4.4	21	4.4	5.5	.61	34	.20	16	8	5	4	-	0	1	0	1	9	17	0	1.90	88	
Rugby ...	9 9	385	6.7	1.3	4.0	+0.6	12.2	27	-5.6	6	3.2	4.7	.71	-	.22	16	10	5	3	2	0	0	0	0	12	14	0	1.47	-	
Oxford Oxford ¶§	9 9	208	7.3	2.4	4.9	+0.7	13.3	27	-3.9	6,7,21	3.8	5.1	.87	49	.24	15	11	7	3	1	0	0	0	4	7	16	0	1.98	76	
Grendon Underwood	9 9	220	7.3	0.9	4.1	-	13.9	27	-8.3	7	3.5	5.1	.73	-	.27	16	11	7	4	1	0	0	0	0	9	19	0	1.49	-	
Buckingham Medmenham	9 9	98	7.7	0.6	4.1	-	12.8	1,27	-8.3	7	-	-	.79	-	.23	15	13	6	-	-	-	-	-	11	18	-	-	-		
Aylesbury ...	9 9	316	6.9	1.1	4.0	-	12.8	27	-6.1	6	-	-	.72	42	.15	16,19	11	7	2	2	0	0	0	8	14	20	0	1.73	-	
Stafford Keele ...	9 9	587	6.1	1.3	3.7	-	12.2	27	-5.0	6	3.3	4.9	.91	41	.36	23	12	7	7	1	0	1	0	5	10	14	0	1.78	-	
Oaken ...	9 9	409	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Stone ...	9 9	350	6.7	1.3	4.0	-	12.2	27	-7.2	6	-	-	.83	-	.29	23	14	7	2	2	0	1	0	4	10	23	0	1.94	-	S
Penkridge ...	9 9	330	6.8	1.2	4.0	-	12.8	25	-6.7	6,7	-	-	.92	-	.26	23	8	6	4	3	0	0	0	2	10	16	0	-	-	
Onecote ...	9 9	1350	3.6	-0.4	1.6	-	9.4	27	-6.7	21	2.1	3.8	1.46	-	.45															

TABLE III (continued)—SUMMARY OF OBSERVATIONS OF TEMPERATURE, RAINFALL, SUNSHINE AND WEATHER February 1964

DISTRICT, COUNTY AND PLACE	Terminal Hours of Observation	Height of Station above Mean Sea Level	AIR TEMPERATURE IN DEGREES CELSIUS								MEAN EARTH TEMPERATURE		RAINFALL (Terminal hour 9 G.M.T.)				WEATHER Number of days								BRIGHT SUNSHINE							
			Means of		Mean Temperature Mean of A and B	Difference from Average	Highest Maximum and Lowest Minimum				1 ft.	4 ft.	Total Fall	Percentage of Average	Most in a day	Precip'n		Snow or Sleet	Snow lying at 9h.	Fog	Ice or snow pellets etc.	Thunder heard	Fog at 9h.	Air Frost 1	Grass min. below 0° C.	Gale	Daily Mean	Percentage of Average				
			A	B			Maximum	Date	Minimum	Date						0.1 in. (0.2mm.) or more	0.01 in. (0.1mm.) or more															
			Max.	Min.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	in.	%	in.	Date																
7a ENGLAND, N.W.—cont.																																
Westmorland	Great Dun Fell	21-9	2780	0.1	-2.9	-1.4	-	5.6	26	-9.3	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
—cont.	Moor House	9 9	1825	2.3	-2.2	0.1	-	7.8	27	-13.9	20	1.6	-	2.40	-	0.59	2	17	9	-	-	-	-	-	-	-	-	-	-	-	-	-
Lancashire	Squires Gate	21-9	33	7.5	2.0	4.7	+0.6	14.2	27	-8.1	21	-	-	0.49	22	0.24	23	7	4	3	0	0	0	0	0	1	9	13	0	2.63	107	
	Urswick	9 9	130	7.0	1.4	4.2	-	12.2	27,29	-5.0	6,20	-	-	0.80	-	0.29	23	8	4	2	0	0	0	0	0	4	9	-	-	-	-	
	Southport	9 9	16	7.1	1.6	4.3	-	13.3	27	-4.4	20,21	4.4	7.3	0.58	-	0.31	23	9	4	-	-	-	-	-	-	-	1	9	14	-	2.75	-
	Poulton-le-Fylde	9 9	38	7.4	2.2	4.8	-	12.2	29	-5.0	6,20	-	-	0.60	-	0.26	22	10	5	2	0	0	0	0	0	1	6	-	0	-	-	
	Grizedale	9 9	300	7.3	0.1	3.7	-	11.7	27	-7.8	21	3.8	-	1.47	-	0.44	23	14	10	3	1	0	0	0	0	0	1	2	21	0	-	-
	Speke	21-9	80	7.5	3.0	5.3	-	12.9	27	-3.6	21	-	-	0.45	22	0.28	23	8	2	4	0	0	0	0	0	0	1	5	9	1	2.15	-
	Kirkham	9 9	78	7.4	1.6	4.5	-	13.9	27	-5.6	20,21	-	-	0.61	25	0.33	23	8	6	2	0	0	1	0	0	10	15	0	2.69	-	-	
	Garstang	9 9	68	7.3	2.1	4.7	-	13.9	27	-5.0	6	-	-	0.56	-	0.22	23	7	4	-	-	-	-	-	-	0	9	12	-	2.60	-	
	Morecambe	9 9	24	7.1	2.4	4.7	+0.8	13.3	27	-3.3	21	-	-	0.54	21	0.20	23	9	5	2	1	0	0	0	0	0	5	-	0	2.45	100	
	Preston	9 9	108	7.3	1.8	4.5	-	13.9	27	-5.0	6	-	-	0.81	30	0.37	23	10	5	3	0	0	2	0	0	4	11	12	0	-	-	
	Stonyhurst	9 9	377	6.8	1.3	4.1	+0.8	13.3	27	-5.0	6	-	-	1.14	31	0.44	23	10	7	-	-	-	-	-	-	3	13	12	-	2.32	111	
	Manchester W/Centre	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Helmshore	9 9	854	5.3	1.2	3.3	-	10.6	27,29	-6.1	21	3.5	-	1.92	40	0.58	23	14	11	-	-	-	-	-	-	3	11	16	-	1.82	-	
	Burnley	9 9	655	5.8	1.1	3.5	-	12.2	27	5.6	6	3.8	4.8	1.06	-	0.38	23	7	6	3	3	0	0	0	0	3	11	18	0	1.99	-	
	Nelson	9 9	540	5.7	1.4	3.5	-	12.1	27	-5.0	6	3.4	5.0	0.98	27	0.36	23	10	7	-	-	-	-	-	2	10	16	-	1.77	-	5	
	Rochdale	9 9	362	6.8	0.7	3.7	-	12.2	28	-6.1	6	-	-	1.45	-	0.57	23	12	8	0	0	0	0	0	0	2	11	14	0	-	-	
Cheshire	Bidston Obs'y.	9 9	198	6.8	3.0	4.9	+0.7	12.8	27	-2.8	21	-	-	0.39	20	0.26	23	8	2	-	-	-	-	-	3	4	6	-	2.43	105		
	Winnington	9 9	65	7.8	2.6	5.2	-	13.9	27,28	-3.9	6	-	-	0.60	28	0.36	23	7	6	5	0	0	0	0	0	1	6	14	0	-	-	
	Knutsford	9 9	212	7.4	1.7	4.5	-	14.2	27	-5.3	6	3.7	4.9	0.83	-	0.46	23	13	7	-	-	-	-	-	-	-	9	14	-	-	-	
	Ringway	21-9	248	7.0	2.5	4.7	+1.0	13.4	27	-4.8	6	-	-	0.63	27	0.40	23	10	3	4	0	0	1	0	3	7	12	0	2.24	114		
	Macclesfield	9 9	500	6.2	1.7	3.9	+0.8	12.8	27	-4.4	6	-	-	0.77	28	0.35	23	11	6	4	5	0	0	1	2	8	-	0	-	-	-	
7b NORTH WALES																																
Flint	Rhyl	9 9	31	7.8	2.6	5.2	+0.3	13.9	25,27	-3.9	6	-	-	0.28	15	0.06	16,22	7	5	1	0	0	0	0	0	5	7	0	2.11	85		
	Prestatyn	9 9	12	7.7	-	-	-	13.9	24,27	-	-	-	-	0.50	25	0.17	28	7	5	2	0	0	0	0	0	0	-	0	-	1.76	77	
	Hawarden Bridge	9 9	17	7.9	2.2	5.1	+0.6	13.9	27	-6.1	6	-	-	0.35	18	0.19	23	7	3	0	0	0	1	0	2	8	-	0	-	-	-	
Anglesey	Valley	21-9	33	8.2	3.4	5.8	+0.4	14.5	26	-5.5	20	-	-	0.58	25	0.22	21	8	5	3	0	0	1	0	0	6	8	1	2.83	101		
Denbigh	Colwyn Bay	9 9	118	7.9	3.3	5.6	+0.4	13.9	25	-5.0	21	5.1	-	0.17	8	0.07	4	6	1	0	0	0	0	0	0	4	-	0	2.18	90		
	Alwen	9 9	1100	5.4	-0.9	2.3	-	10.6	25,27,29	-10.6	6,21	-	-	1.30	-	0.25	27	15	8	-	-	-	-	-	-	17	22	-	-	-		
	Ruthin	9 9	248	7.2	1.7	4.5	-	13.3	27	-5.6	6	-	-	0.65	-	0.17	28	9	7	-	-	-	-	-	0	11	-	-	2.00	-		
	Loggerheads	9 9	690	6.7	0.7	3.7	-	12.2	24,27	-7.8	7	3.4	5.0	0.46	-	0.14	23	5	4	5	3	0	0	0	0	1	12	16	0	-	-	
	Bwlchgwyn	9 9	1267	4.2	-0.2	2.0	-	9.4	28	-6.7	21	3.2	-	1.97	-	0.66	4	15	11	4	6	0	0	0	0	6	16	17	0	-	-	
	Wrexham	9 9	275	7.2	1.4	4.3	-	13.9	27	-4.4	21	3.9	5.1	0.56	-	0.22	23	7	5	5	0	0	0	0	3	10	21	0	-	-		
Caernarvon	Bardsey Island	21-9	61	7.5	4.6	6.1	-	11.6	1	-0.2	20	-	-	0.76	-	0.23	22	8	6	-	-	-	-	-	0	1	8	-	-	-		
	Botwnnog	9 9	112	7.8	2.9	5.3	-	11.7	1,26	-3.3	6,20,21	5.4	6.7	0.99	-	0.22	22	11	8	4	0	0	0	0	0	4	10	0	2.54	-		
	Bryn Adda	9 9	275	-	2.9	-	-	-	-	-4.4	20	-	-	0.65	-	0.24	21	11	6	3	0	0	3	0	0	3	15	0	2.85	-		
	Cwm Dylli	9 9	324	7.8	2.3	5.1	-	12.2	26	-5.0	6	4.9	-	2.68	-	1.08	2	16	11	-	-	-	-	-	0	6	12	-	-	-		
	Aber	9 9	60	8.4	3.9	6.1	+0.7	13.3	24,25	-3.3	20,21	-	-	0.57	27	0.27	21	10	4	3	0	0	0	0	0	4	13	0	2.07	103		
	Llandudno	9 9	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Merioneth	Llyn Stwlan	9 9	1656	3.3	0.1	1.7	-	7.2	2,27,29	-6.1	20,21	-	-	1.39	-	0.86	2	12	7	-	-	-	-	-	2	15	18	-	-	-		
	Blaenau Ffestiniog	9 9	750	7.1	-	-	-	11.7	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.25	-		
	Corwen	9 9	473	5.9	0.9	3.4	-	10.0	26,27	-8.3	6	-	-	1.14	-	0.19	23	14	11	8	2	0	0	0	0	11	-	0	-	-		
Montgomery	Ceinws	9 9	200	7.7	1.3	4.5	-	12.8	1,25,27	-7.8	6	-	-	2.35	-	0.14	8	-	-	-	-	-	-	-	0	11	15	-	-	-		
	Lake Vyrnwy	9 9	995	5.1	0.5	2.8	-	10.0	29	-6.7	6	3.3	-	1.91	32	0.38	23	18	11	6	8	0	1	0	3	14	17	0	-	-		
8a SOUTH WALES																																
Cardigan	Aberporth	21-9	378	7.2	3.2	5.2	+0.4	12.0	27	-4.9	6	-	-	0.80	26	0.19	23,26	10	8	3	0	0	2	0	0	6	9	4	2.64	-		
	Aberystwyth	9 9	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	" P.B.S.*	9 9	452	6.9	1.6	4.3	0.0	11.7																								

TABLE III (continued)—SUMMARY OF OBSERVATIONS OF TEMPERATURE, RAINFALL, SUNSHINE AND WEATHER February 1964

Table with columns for District, County and Place; Terminal Hours of Observation; Height of Station; Air Temperature in Degrees Celsius (Means of A, B; Highest Maximum and Lowest Minimum); Mean Earth Temperature (1 ft, 4 ft); Rainfall (Terminal hour 9 G.M.T.); Weather (Number of days); and Bright Sunshine (Daily Mean, Percentage of Average).

† Air Frost - Screen Min. below 0°C.

‡ † ‡. † See Notes on Tables in the Introduction.

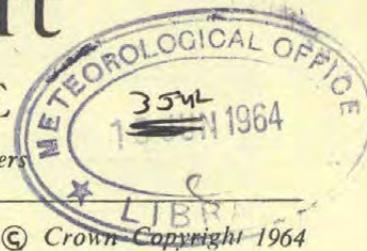
§ Average period 1931 - 60

Monthly Weather Report

MO 754

OF THE METEOROLOGICAL OFFICE

Summary of observations compiled from returns of official stations and voluntary observers



Volume 81 Number 3

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March 1964 — Cold; dull and wet except in north-west Scotland.

The first ten days and last week of the month were mainly anticyclonic in character with pressure high over Scandinavia or to the north of the British Isles, but from the 11th to the 24th troughs of low pressure from the Atlantic gave unsettled weather.

The month began dull and cold with east to south-east winds covering much of England and Wales associated with an anticyclone over Scandinavia which later developed westwards. The 1st and 2nd were mainly dry although there were a few scattered sleet showers in the east, but on the 3rd a shallow depression moving southwards over the North Sea brought a period of more continuous rain which was followed on the 4th by snow and sleet showers in many parts of the country. During the remainder of the first week high pressure extended from the southern Baltic to western Scotland, and cold easterly winds brought wintry showers of increasing frequency to most districts, but there were long sunny periods in the west; by the 7th the higher ground in Kent and Surrey was snow-covered to a depth of 3 inches in places.

During the next three days the anticyclone to the west of Scotland declined and moved slowly northwards. Many parts of the country had almost unbroken sunshine on the 8th but on the 9th and 10th an almost stationary trough of low pressure gave periods of rain in northern and central England while further south there were scattered snow showers with long sunny periods.

On the 11th the main centre of high pressure moved east to Scandinavia and winds in south-west England and Wales increased to gale force as a deepening depression from the Atlantic reached the South-West Approaches. The next day fronts associated with this depression brought widespread rain to western and southern districts which spread to the remainder of the country during the night and the next morning. Temperature rose rapidly, it reached 15°C at a number of places in the south-east on the 13th, about seven degrees higher than the previous day. The fronts over the country became slow-moving on the 14th and rain was heavy and prolonged in many districts.

A wintry spell began on the 15th as a depression formed over northern France and winds over southern England backed towards the east. The rain turned to snow in parts of the south during the night, and snow fell over most of the country except the extreme west and north throughout the 15th. Snow-drifts 6 ft. deep blocked main roads in Scotland while level snow lay 6-12 inches deep in parts of Yorkshire and 3-6 inches deep in the Home Counties. There were long sunny periods in eastern England on the 16th as the snow moved westwards temporarily, but the troughs spread back that night bringing a renewal of heavy rain and snow. Wintry precipitation continued in most western and southern districts on the 17th and 18th as a deep depression approached Ireland from the Atlantic, and on the 19th milder air brought periods of heavy rain to southern England while a belt of moderate to heavy snow moved north-east from the Midlands to southern Scotland.

The next four days were mild, dull and wet with shallow disturbances over the country, and rain was heavy in southern and central England on the 24th, and in eastern Scotland on the 25th, as a vigorous depression moved east across northern England; 2.13 inches fell at Dyce in about 32 hours.

After a sunny day on the 26th easterly winds set in again on Good Friday (27th) as an anticyclone became established over Scandinavia,

and weather during the remainder of the month was generally dull and became progressively colder with rain at times and some snow in eastern coastal districts.

Pressure and Wind — Mean pressure was above the 1921-60 average in the north and below in the south, the deviation at 9h ranging from +9.2 mb at Lerwick to -4.0 mb at Scilly. Surface winds were easterly at first becoming mainly south-easterly (but occasionally south-westerly in the south-west) from the 10th to the 21st after which wind was rather variable until the 27th and mainly easterly during the last four days of the month. Gales were widespread in Scotland on the 14th with wind reaching 60 kt in gusts at a number of places.

Temperature — With winds predominantly between east and south-east, the month was particularly cold in eastern England although there were milder periods around the 13th and 20th. The coldest nights were generally around the 10th in England and Wales and around the 6th in Scotland.

Extremes included: (England and Wales) 15.6°C at Sellafeld on the 20th, -8.9°C at Clawton on the 9th; (Scotland) 13.3°C at Kinlochewe on the 1st and at Benmore Forestry School on the 9th, -8.3°C at Dundee on the 7th and at Coire Cas Scieling and at Cairngorm on the 18th and 19th; (Northern Ireland) 13.0°C at Carrigans on the 24th, -6.1°C at Loughermore Forest and Baronscourt Forest on the 8th.

Rainfall — Large areas of eastern Scotland had more than twice their average amount of rain while places in Skye, west Inverness-shire and west Argyllshire recorded less than 25 per cent of the average. At Stornoway it was the driest March since 1876. Rainfall was also below the average in Cumberland, parts of Westmorland and over most of Wales, but was more than twice the average over much of the north and east Midlands, Lincolnshire, the Thames Valley, Surrey, Hampshire and also in some coastal regions of Norfolk, Essex and the English Channel.

Thunder was heard on the 14th and 19th in Scotland and on the 13th, 21st, 22nd and 24th in England and Wales.

Snow or sleet fell in Scotland at one place or another on the 4th-7th, 9th, 11th-20th, 23rd-25th and 29th-31st (21 days) and ground was snow-covered on the 7th and 14th-21st (12 days). In England and Wales the corresponding figures were the 3rd-8th, 13th-21st, 24th and 28th-31st (20 days) and the 5th-8th, 15th-21st and 24th (13 days). Snow lay 6-12 inches deep in parts of the Midlands and 3-6 inches deep in south-east England on the 16th.

Sunshine — It was a very dull month, especially in eastern districts. Only in the extreme north-west was sunshine above the average, in many eastern coastal districts it was little more than 30 per cent of the average. At Worthing it was the dulllest March since 1900 and at Ross-on-Wye the dulllest since sunshine records began in 1914.

Fog — Fog was observed at 9h at one place or another in Scotland on 26 days and in England and Wales every day except the 7th, 8th and 26th. It was widespread on the 21st and 22nd and was reported at Ushaw College on 19 mornings.

Miscellaneous Phenomena — The aurora was visible in Scotland on 19 nights.

TABLE I—DISTRICT VALUES— March

1964

(1908, revised 1928, 1941, 1956 and 1964)

DISTRICTS	AIR TEMPERATURE					EARTH TEMP.		RAIN DAYS	RAIN-FALL	SUNSHINE
	Highest Max.	Lowest Min.	Max.	Min.	Mean	Mean 1 ft.	Mean 4 ft.			
	Difference from Average					%				
0 SCOTLAND, N.	13.3	-8.3	+0.2	+0.4	0.0	-	-	-10	48	86
1 SCOTLAND, E.	12.8	-7.2	-2.1	-0.2	-1.2	-	-	+1	145	51
2 ENGLAND, N.E.	14.4	-5.1	-3.5	-0.5	-2.0	-0.7	-0.3	+4	210	39
3 ENGLAND, E.	14.4	-6.1	-3.5	-0.6	-2.1	-0.8	-0.6	+2	217	46
4 MIDLANDS	14.6	-7.6	-3.1	-0.7	-1.9	-0.5	-0.3	+2	192	54
5 ENGLAND, S.E.	15.0	-6.1	-2.7	-0.2	-1.5	-0.7	-0.3	+2	212	56
6 SCOTLAND, W.	13.3	-8.3	-1.6	-0.3	-0.9	-0.1	0.0	-4	78	62

DISTRICTS	AIR TEMPERATURE					EARTH TEMP.		RAIN DAYS	RAIN-FALL	SUNSHINE
	Highest Max.	Lowest Min.	Max.	Min.	Mean	Mean 1 ft.	Mean 4 ft.			
	Difference from Average					%				
7 ENGLAND, N.W. and N. Wales	15.6	-8.0	-2.3	-0.6	-1.4	-0.5	0.0	-1	135	57
8 ENGLAND, S.W. and S. Wales	15.1	-8.9	-2.2	-0.6	-1.4	-0.1	-0.2	-2	149	65
N. IRELAND	13.0	-6.1	-1.3	-0.9	-1.1	-	-	-1	131	62
SCOTLAND	13.3	-8.3	-1.3	0.0	-0.7	-	-	-4	83	66
ENG. and WALES	15.6	-8.9	-2.9	-0.5	-1.7	-	-	+1	170	53

TABLE II—SUMMARY OF AUTOGRAPHIC RECORDS OF WIND— March 1964 (1914)

DISTRICT, COUNTY AND PLACE	Height of Vane			Distribution of Mean Hourly Values of Wind Speed								Mean Hourly Wind Speed	Highest Velocities									
	Above Mean Sea Level	Above Ground	Effective Height	34 knots or more		22 to 33 knots		11 to 21 knots	4 to 10 knots	Less than 4 knots	No Record		Highest Hourly Wind			Highest Gust						
				Dates of Occurrence	Duration	No. of days	Duration	Duration	Duration	Duration	Veer from N		Speed	Hour ended at	Speed	Day and Time						
	ft.	ft.	ft.		hr.		hr.	hr.	hr.	hr.	knots		°	knots	day hr	knots	day	hr				
SCOTLAND																						
0 Zetland	Lerwick	Observatory	304	33	33	13-15	31	17	203	289	173	48	0	16.9	150	42	14	12	64	14	1330	
	Orkney	Kirkwall	134	50	33	14, 15	34	11	166	268	214	62	0	15.4	130	41	14	14	60	14	1355	
	Caithness	Dounreay	110	39	30	-	0	7	32	263	265	163	1	9.3	120	27	14	16	54	14	1605	
	Sutherland	Shin	78	33	33	-	0	7	11	115	337	190	95	0	13.0	120	36	15	19	46	19	1910
	Ross & Cromarty	Stornoway (Coastguard)	120	40	36	14, 19	7	11	115	337	190	95	0	9.8	100	30	14	20	46	14	1855	
		Duirinish	125	65	55	-	0	8	54	269	276	144	1	17.1	150	39	15	11	58	17	2320	
	Inverness	Benbecula	69	51	35	14, 15, 17, 18	38	18	208	289	162	47	0	9.5	130	30	14	15	60	14	1430	
1 Moray		Lossiemouth	101	80	60	-	0	9	49	237	303	139	16	9.2	130	31	14	15	46	14	1650	
	Aberdeen	Dyce	225	40	40	-	0	4	31	259	288	166	0	11.5	100	33	14	14	55	14	1730	
	Angus	Auchterhouse	822	62	50	-	0	9	65	303	241	99	36	12.8	110	44	14	15	(56)	19	1605	
		Bell Rock Lighthouse	126	131	124	-	13	10	130	297	174	126	4	12.8	110	40	14	12	56	14	1320	
	Perth	Rannoch	1005	56	57	12, 14, 19	12	10	103	293	255	81	0	9.3	100	28	14	10	49	14	0945	
	Fife	Leuchars	78	40	40	14	12	10	103	293	255	81	0	10.8	110	34	14	09	56	14	0920	
	Midlothian	Turnhouse	137	40	33	-	0	4	22	280	320	122	0	20.4	110	44	14	09	60	14	0915	
		Edinburgh, Blackford Hill	496	50	34	14	1	8	38	303	336	66	0	12.2	060	39	19	11	54	19	1015	
6a Argyll		Tiree	89	60	47	12-19, 25	142	18	183	261	66	92	0	6.8	300	21	25	06	40	14	1420	
	Bute	Millport	50	34	34	12, 14, 19	28	12	79	285	165	167	0	8.5	110	26	19	13	42	19	1255	
	Renfrew	Paisley	188	81	31	-	0	0	0	161	377	206	0	10.6	100	33	14	10	50	14	1005	
		Renfrew	71	41	39	-	0	3	19	223	367	135	0	5.9	310	27	25	08	47	14	1255	
	Lanark	Lowther Hill	2412	43	33	-	0	7	51	288	295	110	0	9.9	300	22	25	13	35	25	1410	
	Ayr	Prestwick Airport	68	33	33	-	0	4	8	116	309	307	4	7.3	310	27	25	13	51	25	1210	
	Dumfries	Eskdalemuir Observatory	825	50	35	-	0	4	8	116	309	307	4	8.1	070	17	9	12	37	9	1140	
	Wigtown	West Freugh	81	33	33	17	17	7	114	229	310	84	0	13.9	110	36	19	14	51	19	1240	
ENGLAND and WALES																						
6b Isle of Man		Ronaldsway	119	64	39	12, 14, 16-19, 25	84	13	112	326	181	41	0	16.7	100	48	19	09	61	19	1050	
		Point of Ayre	64	33	33	14, 16-19, 25	46	12	120	379	174	25	0	15.7	090	40	19	11	54	19	0935	
2 Durham		Durham	389	53	33	-	0	2	3	210	339	183	9	7.6	310	23	25	12	41	14	1310	
		South Shields	73	57	44	14, 19	10	11	126	271	241	96	0	12.8	130	37	14	14	50	14	1135	
	Lincoln	Cranwell	268	47	47	-	0	3	14	252	402	52	24	9.6	270	24	25	08	39	25	0610	
3 Norfolk		Gorleston	45	33	33	-	0	1	1	240	382	121	0	8.4	270	22	25	09	37	25	0820	
	Suffolk	Mildenhall	98	83	60	-	0	1	8	284	333	119	0	8.9	290	24	25	10	38	25	0920	
	Bedford	Bedford	327	42	30	-	0	1	8	284	333	119	0	11.2	100	24	19	11	34	12	1105	
		Cardington	276	133	133	-	0	5	15	399	275	55	0	6.3	310	18	25	13	33	25	1220	
	Hertford	Garston	307	50	33	-	0	0	0	52	586	106	0	7.2	310	16	25	13	35	25	1410	
		Rothamsted	461	41	33	-	0	0	0	184	436	118	6	9.9	300	22	25	13	31	25	1325	
	Essex	Stansted	358	31	31	-	0	1	1	340	336	67	0	14.5	100	33	17	22	42	17	2115	
		Coryton	66	57	48	-	0	14	162	322	231	28	1	3.6	300	16	25	08	41	25	0925	
		Shoeburyness	116	106	91	-	0	0	0	16	293	435	0	6.0	310	23	25	12	41	25	1105	
4 Yorks, W.R.		Sheffield	533	83	35	-	0	1	13	215	416	100	0	8.7	310	32	25	14	47	25	1340	
	Warwick	Edgbaston	643	118	73	-	0	1	2	49	532	161	0	7.1	030	15	8	11	30	25	1115	
		Elmdon	362	30	31	-	0	1	13	215	416	100	0	7.3	310	27	25	13	51	25	1210	
	Buckingham	Amersham	500	50	50	-	0	0	0	108	552	72	12	9.7	070	17	9	12	37	9	1140	
	Stafford	Keele	706	50	33	-	0	2	13	168	344	219	0	9.7	060	22	9	13	34	9	1155	
	Gloucester	Avonmouth	92	61	33	-	0	1	3	274	455	12	0	7.8	060	20	9	12	36	9	1250	
5 London		Kingsway	208	143	41	-	0	0	0	214	470	60	0	8.1	070	17	9	12	37	9	1140	
	Middlesex	London (Heathrow) Airport	115	33	33	-	0	1	3	274	455	12	0	9.7	060	22	9	13	34	9	1155	
		Hampton	139	101	100	-	0	0	0	211	420	113	0	7.8	060	20	9	12	36	9	1250	
	Surrey	Kew Observatory	92	75	50	-	0	0	0	281	401	62	0	9.3	060	21	9	13	37	9	1355	
		Gatwick	232	38	33	-	0	0	0	182	474	88	0	7.8	050	21	8	14	35	8	1135	
	Kent	Isle of Grain	42	40	33	-	0	2	11	219	295	219	0	7.6	060	24	7	20	35	7	2010	
		Dover	68	38	62	-	0	5	51	275	314	104	0	10.4	040	26	7	19	(39)	7	1705	
	Sussex	Thorney Island	75	65	42	-	0	1	3	205	385	151	0	7.8	100	22	11	15	37	11	1500	
	Hampshire	Hurn	86	53	46	-	0	0	0	342	343	59	0	10.0	100	21	11	14	37	11	1335	
		Calshot	50	41	33	-	0	6	52	414	259	19	0	12.7	100	26	11	16	36	11	1445	
		S. Farnborough	316	69	35	-	0	0	0	182	468	94	0	7.9	060	18	9	12	38	9	1140	
	Berkshire	Abingdon	295	40	40	-	0	0	0	355	291	98	0	9.5	040	21	8	11	34	8	0940	
	Wiltshire	Larkhill	491	51	36	-	0	5	12	328	307	97	0	10.2	050	23	9	12	37	25	1150	
		Boscombe Down	425	55	55	-	0	3	9	283	338	114	0	9.0	060	23	9	11	38	9	1030	
		Porton	406	44	44	-	0	4	14	286	321	123	0	9.3	060	25	9	12	40	9	1110	
7a Cumberland		Carlisle	137	42	30	-	0	4	19	246	391	88	0	9.2	080	28	19	10	42	17	1110	
		Sellafield	83	39	35	14, 17	2	10	111	211	322	98	0	11.5	120	34	14	09	50	14	0815	
		Spadeadam	959	51	40	19	2	8	81	289	306	46	20	12.2	090	34	19	14	51	19	1240	
	Westmorland	Great Dun Fell	2815	33	33	14, 16-18	5	10	111	318	217	22	71	13.9	(130)	34	17	21	(50)	14	0905	
		Moor House	1960	50	45	19	3	10	109	338	281	13	0	13.7	110	36	19	12	48	25	0550	
	Lancashire	Squires Gate	88	55	35	19	3	10	109	338	281</											

RAINFALL MARCH 1964

The equivalent values in mm, are given in round numbers. The exact relation is 10 in. = 254 mm.

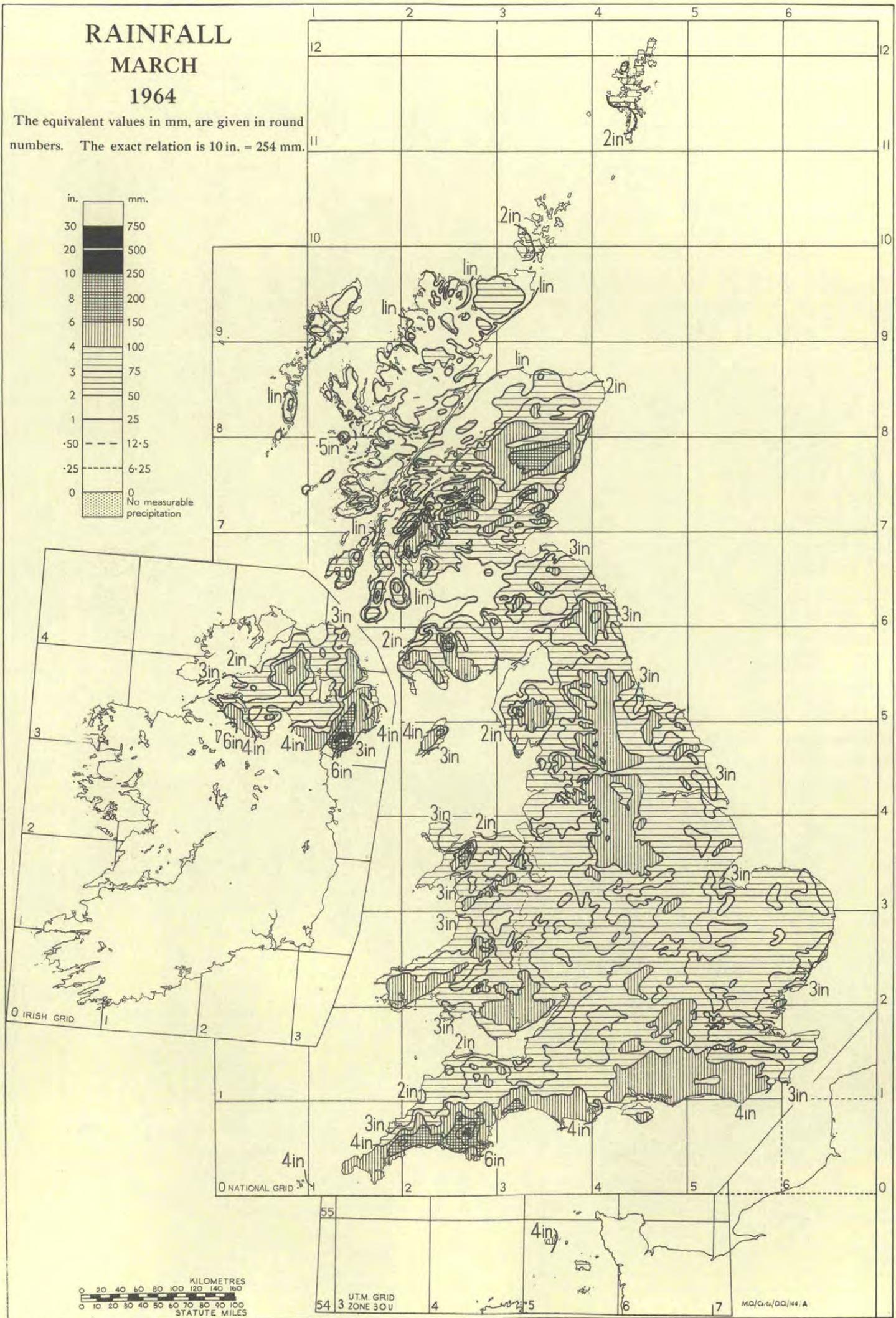
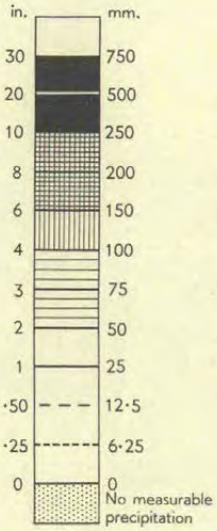


TABLE III (continued)—SUMMARY OF OBSERVATIONS OF TEMPERATURE, RAINFALL, SUNSHINE AND WEATHER March 1964

DISTRICT, COUNTY AND PLACE	Terminal Hours of Observation	Height of Station above Mean Sea Level	AIR TEMPERATURE IN DEGREES CELSIUS								MEAN EARTH TEMPERATURE		RAINFALL (Terminal hour 9 G.M.T.)				WEATHER Number of days										BRIGHT SUNSHINE			
			Means of		Difference from Average	Highest Maximum and Lowest Minimum				1 ft.	4 ft.	Total Fall	Per-centage of Average	Most in a day		Precip'n		Snow or Sleet	Snow lying at 9h.	Hail	Ice or snow pellets etc.	Thunder heard	Fog at 9h.	Air Frost. °	Grass min. below 0° C	Gale	Daily Mean	Per-centage of Average		
			A	B		Maximum	Date	Minimum	Date					Amount	Date	0 in (0.2mm) or more	0.4 in (1.0mm) or more													
			Max.	Min.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	in.	%	in.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	hr	%	
2 ENGLAND, N.E.—cont.																														
Northum-berland cont.	Haydon Bridge	9 9	270																											
	Corbridge	9 9	160	5.7	0.8	3.3	-	9.4	23,26	-3.9	11	-	-	3.32	-	1.15	14	17	14	5	0	0	0	0	7	13	14	0	-	
	Berwick-on-Tweed	9 9	76	5.3	2.6	3.9	-1.3	8.3	8	0.6	3,20	-	-	2.76	183	.97	24	23	11	3	0	1	1	0	2	0	3	2	1.12	
	Cockle Park	9 9	326	5.0	1.4	3.2	-1.5	8.9	11	-2.2	11	3.8	-	3.78	208	1.02	14	24	18	5	0	0	2	0	1	6	14	0	.98	
	Acklington	21-9	138	5.2	2.1	3.7	-	8.0	26	-1.8	6	-	-	2.91	-	.78	14	19	13	8	0	2	0	0	3	6	9	1	1.00	
	Tynemouth	21-9	95	4.8	2.9	3.9	-1.8	7.1	25	0.5	11	-	-	3.15	205	1.02	14	17	12	8	0	0	0	0	2	0	4	5	.96	
Durham	Chopwellwood	9 9	446	4.9	1.1	3.0	-2.0	8.9	23	-2.8	11	-	-	3.71	204	1.14	14	18	14	7	6	0	0	0	6	8	15	0	-	
	Ushaw College	9 9	594	4.5	0.8	2.7	-2.2	8.3	23	-3.3	11	-	-	4.14	212	1.20	14	21	16	8	7	0	0	0	19	10	-	0	-	
	Houghall	9 9	123	5.8	1.2	3.5	-1.6	10.0	23	-3.3	11	-	-	3.99	235	1.30	14	23	15	5	0	0	2	0	5	5	15	0	.95	
	Durham	9 9	336	5.2	0.8	3.0	-2.1	8.3	23	-3.3	11	3.9	5.0	3.65	223	1.09	14	23	15	-	-	-	-	-	10	14	-	1.07		
	Gateshead	9 9	509	4.6	1.6	3.1	-	8.3	23	-1.1	17	-	-	3.65	-	1.21	14	22	14	-	2	-	-	-	6	8	14	-	.96	
	Middleton St. George	21-9	115	5.7	1.9	3.8	-	9.4	23	-4.0	11	-	-	2.17	-	.64	24	20	12	8	0	0	2	0	2	7	15	0	.94	
	West Hartlepool	9 9	30	5.6	2.7	4.1	-	8.3	10,25	-1.1	11	-	-	2.73	-	.82	24	17	12	4	0	0	0	0	3	2	5	1	1.14	
Yorks., N. Riding	Dishforth	21-9	105	5.7	1.8	3.7	-	10.0	23,25	-4.2	11	-	-	3.45	-	1.12	14	20	8	8	2	1	2	0	3	7	11	0	1.26	
	Thirsk	9 9	111	5.5	1.5	3.5	-	9.4	23	-3.9	11	-	-	3.13	-	1.03	14	13	9	7	0	0	0	0	3	7	16	0	-	
	York	9 9	57	6.1	2.1	4.1	-1.9	10.0	23	-1.7	8,11	4.6	5.4	3.50	245	1.24	14	18	13	4	1	0	0	0	2	4	-	0	1.55	
	Ampleforth	9 9	313	4.9	1.3	3.1	-2.0	8.9	25	-4.4	11	-	-	2.16	159	.69	24	18	11	-	-	-	-	-	0	1	-	1.18		
	Redcar	9 9	25	5.6	2.5	4.1	-	8.9	20	-2.2	11	-	-	2.66	-	.96	14	21	11	7	2	0	0	0	2	8	12	0	-	
	Pickering	9 9	143	5.3	1.6	3.5	-	8.9	10,23	-4.4	11	-	-	2.66	-	.96	14	21	11	7	2	0	0	0	2	8	12	0	-	
	Whitby	9 9	135	5.2	2.2	3.7	-	7.8	10,11	-2.2	11	-	-	2.18	134	.55	14	19	13	6	2	0	0	0	0	5	-	0	1.23	
	Scarborough	9 9	118	5.1	2.4	3.7	-2.4	7.2	5,10	0.0	15	4.7	6.1	2.19	144	.88	14	16	14	4	0	1	0	0	3	0	7	1	1.25	
	Silpho Moor	9 9	665	4.1	0.3	3.2	-	7.8	10	-4.4	11	3.1	-	4.05	-	1.17	14	24	17	5	6	0	1	0	7	15	22	0	1.21	
	Whitby C/Guard	21-9	200	4.6	2.0	3.3	-	7.0	10	-2.5	11	-	-	3.03	-	1.66	14	16	10	3	2	1	0	0	1	4	9	9	-	
Yorks., E. Riding	High Mowthorpe	9 9	574	3.9	0.7	2.3	-	7.8	20	-2.2	11	3.0	-	4.07	179	1.87	14	21	15	5	4	0	1	0	8	12	16	0	-	
	Hull	9 9	8	5.7	1.9	3.8	-2.2	10.0	24	-3.9	8	4.1	5.2	3.78	254	1.55	14	18	15	3	0	0	0	0	4	6	12	0	1.37	
	Leconfield	21-9	24	5.3	1.6	3.5	-	9.6	24	-3.3	11	-	-	3.57	-	1.61	14	19	13	9	2	0	5	0	4	9	11	0	1.22	
	Filey	9 9	122	4.8	2.2	3.5	-	7.8	10,24	-2.8	11	-	-	2.67	-	1.15	14	15	10	6	2	0	0	0	2	1	8	0	1.45	
	Bridlington	9 9	157	4.6	1.7	3.1	-	7.8	25	-2.2	11	-	-	3.22	-	1.25	14	18	10	7	2	4	0	0	3	8	14	4	1.46	
	Spurn Head	21-9	29	4.8	2.1	3.5	-2.1	8.0	24,25	-0.3	15	-	-	1.69	-	.50	14	14	8	5	0	0	0	0	4	2	-	3	1.50	
Lincoln	Gainsborough	9 9	110																											
	Navenby	9 9	60	6.1	1.3	3.7	-	12.2	20	-4.4	9	-	-	3.22	-	1.21	14	18	10	6	2	0	0	0	1	12	16	1	-	
	Waddington	21-9	224	5.7	1.1	3.4	-2.2	11.9	20	-3.9	8	-	-	3.12	-	1.24	14	14	10	9	2	0	6	0	4	12	15	0	1.91	
	Lincoln	9 9	22	6.4	1.6	4.0	-	12.2	20	-5.0	8	4.3	4.7	3.12	-	1.25	14	22	11	2	2	0	0	0	0	3	7	14	0	1.90
	Cranwell	9 9	205	5.9	0.8	3.3	-2.2	11.9	20	-3.4	11	4.1	4.8	3.30	228	1.36	14	15	10	8	1	0	3	0	7	12	16	0	1.75	
	Binbrook	21-9	353	4.6	1.2	2.9	-	10.4	24	-1.9	8	-	-	3.39	-	1.23	14	17	12	8	2	0	0	0	7	9	11	0	-	
	Cleethorpes	9 9	23	5.1	1.9	3.5	-2.2	10.0	24,25	-2.2	11	-	-	2.97	201	1.20	14	18	10	4	0	0	0	0	3	1	7	0	1.62	
	Manby	21-9	55	5.4	1.6	3.5	-	10.8	24	-5.1	11	-	-	3.24	-	1.23	14	18	12	7	2	0	7	0	3	6	11	0	1.59	
	Skegness	9 9	15	5.7	1.7	3.7	-1.8	14.4	25	-0.6	16,18	-	-	3.36	256	1.50	14	13	10	2	1	0	0	0	3	5	10	0	1.47	
3 ENGLAND, E.																														
Norfolk	Terrington	9 9	13	6.2	1.7	3.9	-	12.2	20	-2.2	11	4.4	-	2.79	236	1.40	14	15	9	3	0	0	0	0	1	10	10	0	1.75	
	St. Clement	21-9	76	6.3	1.7	4.0	-	12.2	20	-1.6	18	-	-	2.59	-	1.26	14	12	10	6	0	0	1	0	1	10	10	0	-	
	Marham	9 9	80	6.6	0.8	3.7	-	12.8	20	-4.4	11	4.4	5.0	2.57	-	1.10	14	16	11	-	-	-	-	-	0	13	14	-	1.74	
	Santon Downham	9 9	80	6.4	1.2	3.3	-	11.6	20	-3.2	11	-	-	2.81	-	1.11	14	18	10	7	0	0	4	0	1	12	14	0	1.79	
	West Raynham	21-9	250	5.4	1.2	3.3	-	10.0	20	-2.2	8	-	-	3.20	204	1.02	14	19	10	-	2	-	-	-	0	4	12	-	-	
	Cromer	9 9	178	4.8	1.2	3.0	-2.8	10.0	20	-2.2	8	-	-	3.20	204	1.02	14	19	10	-	2	-	-	-	0	4	12	-	-	
	Sproston	9 9	93	5.2	1.2	3.2	-2.5	10.6	20,24	-5.0	11	4.4	-	3.39	220	1.26	14	14	11	4	1	0	2	0	4	10	13	0	1.80	
	Coltishall	21-9	55	5.5	1.5	3.5	-	11.0	20	-4.5	11	-	-	2.79	-	1.06	14	17	9	6	1	0	3	0	3	10	14	0	-	
	Burlingham	9 9	89	5.4	1.5	3.5	-	10.6	20,21	-2.2	11	-	-	3.22	224	1.32	14	16	9	4	2	0	3	0	1	9	14	0	1.92	
	Gorleston	21-9	12	4.7	1.9	3.3	-2.3	9.0	25	-0.6	7	4.7	5.9	2.38	176	.84	14	16	12	7	0	0								

TABLE III (continued)—SUMMARY OF OBSERVATIONS OF TEMPERATURE, RAINFALL, SUNSHINE AND WEATHER March 1964

Table with columns for District, County and Place; Terminal Hours of Observation; Height of Station; Air Temperature in Degrees Celsius (Means of A, B; Difference from Average; Highest Maximum and Lowest Minimum); Mean Earth Temperature (1 ft, 4 ft); Rainfall (Terminal hour 9 G.M.T.); Weather (Number of days); and Bright Sunshine (Daily Mean, Percentage of Average).

* King Edward School

TABLE III (continued)—SUMMARY OF OBSERVATIONS OF TEMPERATURE, RAINFALL, SUNSHINE AND WEATHER March 1964

Table with columns for District, County and Place; Terminal Hours of Observation; Air Temperature in Degrees Celsius (Means of, Highest Maximum and Lowest Minimum); Mean Earth Temperature (1 ft., 4 ft.); Rainfall (Terminal hour 9 G.M.T.); Weather (Number of days); and Bright Sunshine (Daily Mean, Percentage of Average).

TABLE III (continued)—SUMMARY OF OBSERVATIONS OF TEMPERATURE, RAINFALL, SUNSHINE AND WEATHER March 1964

Table with columns for District, County and Place; Terminal Hours of Observation; Air Temperature in Degrees Celsius (Means of A, B, Min, Difference from Average, Highest Maximum and Lowest Minimum); Mean Earth Temperature (1 ft, 4 ft); Rainfall (Terminal hour 9 G.M.T.) (Total Fall, Percentage of Average, Most in a day); Weather (Number of days for various conditions); and Bright Sunshine (Daily Mean, Percentage of Average).

† Air Frost - Screen Min. below 0°C.

‡ & † §§. See Notes on Tables in the Introduction.

§ Average period 1931 - 60

TABLE IV (continued)—SUMMARY OF OBSERVATIONS AT FIXED HOURS March 1964

Table with columns: DISTRICT, COUNTY AND PLACE; Hour of Observation; Height of Barometer above Mean Sea Level; MEAN PRESSURE; MEAN TEMPERATURE AND HUMIDITY; CLOUD AMOUNT (OKTAS); VISIBILITY; WIND, NUMBER OF OBSERVATIONS. Rows include locations like ENGLAND, N.E., Durham, Yorks., N. Riding, Lincoln, Norfolk, Suffolk, Huntingdon, Bedford, Hertford, Essex, and 4 MIDLAND COUNTIES.

TABLE IV (continued)—SUMMARY OF OBSERVATIONS AT FIXED HOURS March 1964

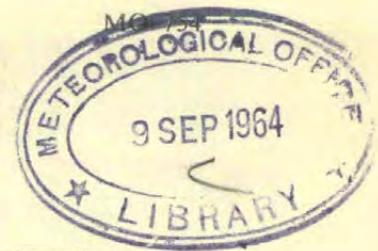
Main data table with columns for District, County and Place; Hour of Observation; Mean Pressure; Mean Temperature and Humidity; Cloud Amount (OKTAS); Visibility; Wind, Number of Observations; and Direction. Includes sub-sections for England, North Wales, South Wales, and Northern Ireland.

H See Notes on Tables in the Introduction.

Monthly Weather Report

OF THE METEOROLOGICAL OFFICE

Summary of observations compiled from returns of official stations and voluntary observers



Volume 81 Number 4

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April 1964 — Cloudy and rather wet.

Weather was cyclonic in character for most of the month.

The month began with a ridge of high pressure near Iceland, and cold east to north-east winds on its southern flank persisted over England and Wales for about four days. Weather was dull in the south, east and Midlands with rain sleet or snow at times; amounts generally were not large although some of the higher ground in the extreme south-east became snow-covered. In Scotland and north-west England, however, weather was less cold with long sunny periods.

On the 5th, as a ridge of high pressure moved slowly south across the British Isles, winds backed and light northerlies brought the brighter milder weather to all districts. The 6th and 7th were dry sunny days with temperature a little above average, but rain, associated with a small depression approaching the west of Scotland, spread over western and northern districts on the 8th and 9th.

After a day of scattered showers on the 10th, frontal rain from the Atlantic reached western areas on the 11th spreading over the whole country during the night and persisting for much of the next day. The rain was followed on the 13th and 14th by good sunny periods in a showery westerly airstream.

The weather pattern changed on the 15th as low pressure near Iceland was transferred southwards and fronts from the Atlantic brought rain to all districts. The next day a depression became established to the south-west of the British Isles and a trough in its circulation moved northwards from France bringing thunderstorms and outbreaks of heavy rain to east and south-east England. Warm southerly winds with occasional rain continued on the 17th and 18th, afternoon temperatures reaching 19°C locally on the 18th.

Rain, associated with a depression from France which had moved northwards to south-east England on the night of the 18th, spread over the remainder of the country, except the extreme south-west, on the 19th. Winds veered towards the west and afternoon temperatures at most places in the cooler airstream were at least 5°C lower than the previous day. As the area of low pressure which now covered the British Isles slowly declined during the next four days (20th-23rd) sunny intervals were broken by showers and periods of rain and there were scattered thunderstorms in the east and Midlands.

A developing ridge of high pressure moving east across the country gave a mainly dry, sunny day on the 24th but troughs from the Atlantic brought rain to all areas the next day. Meanwhile an anticyclone became established over Germany and the next two days were the warmest of the month as it extended its influence westwards—afternoon temperatures exceeded 21°C in many eastern and midland districts on the 27th.

Rain from the Atlantic spread to all areas during the afternoon and evening of the 27th, becoming heavy at times in the early hours of the 28th with widespread thundery rain and renewed thunderstorms in east and south-east England later in the day. The month ended with two sunny days with occasional showers in an unstable westerly airstream.

Pressure and Wind—Mean pressure was below the average except in the extreme south-east of the country, the deviation at 09 hr ranging from -2.1 mb at Tiree to +0.3 mb at Shoeburyness. Surface winds were between east and north-east at first becoming mainly northerly on the 5th-7th and between west and south-west during most of the remainder of the month, apart from rather variable winds on the 20th-22nd and interludes of southerlies on the 15th-18th and 26th-27th. Wind reached gale force in Scotland on eight days and in England and Wales on the 2nd-4th, 7th, 9th, 14th, 15th, 17th, 20th-22nd and 27th-29th (fourteen days). Gusts of 54 kt were recorded at Prestwick, the Lizard and Benbecula on the 14th, 17th and 19th respectively.

Temperature—The first four days of the month were cold especially in south-east England where London had its coldest spell of April weather since 1911. However, there were warm intervals at the beginning of the third week and towards the end of the month.

Extremes included: (England and Wales) 22.2°C at Gillingham, Kent, on the 27th, -6.7°C at Alwen on the 7th; (Scotland) 18.9°C at Sourhope and at Mertoun on the 27th, -6.7°C at Cairngorm on the 1st; (Northern Ireland) 17.6°C at Ballykelly on the 25th, -3.9°C at Baronscourt Forest on the 5th.

Rainfall—The number of days of rain was above average in nearly all districts, but amounts were near average except in parts of west Scotland and south-east England, where values reached 150 per cent of the average, and in parts of eastern Scotland and south-west England where only 75 per cent of the average was recorded. Glasgow had its wettest April since 1947 and Tiree its wettest since 1949.

Thunder was heard in Scotland on eight days mainly during the second half of the month. In England and Wales it was reported on the 15th-17th, 20th-23rd, 26th, 28th and 29th (ten days). Thunderstorms were fairly widespread in east and south-east England on the 16th, 22nd and 23rd.

Snow or sleet was reported from one place or another in Scotland on the 1st-4th, 6th, and 12th-15th (nine days) ground being snow-covered at 09 h in some places on the 13th and 14th. In England and Wales it occurred during the first four days of the month and was widespread on the 3rd and 4th.

Sunshine—It was a cloudy month in all areas, most places having between 70 and 90 per cent of their average amount of sunshine. Watnall reported as little as 57 per cent but Aberystwyth and Gordon Castle recorded 100 per cent.

Fog—Fog was observed at 09 hr at one place or another in Scotland on fourteen days mainly during the second half of the month. In England and Wales it was rarely widespread but was reported on the 1st-4th, 6th, 8th, 11th, 12th, 16th-19th, 22nd-25th and 26th-28th (twenty days).

Miscellaneous Phenomena—The aurora was visible on nine nights in Scotland.

TABLE I—DISTRICT VALUES— April

1964

(1908, revised 1928, 1941, 1956 and 1964)

DISTRICTS	AIR TEMPERATURE					EARTH TEMP.		RAIN DAYS	RAIN-FALL	SUNSHINE
	Highest Max.	Lowest Min.	Max.	Min.	Mean	Mean 1 ft.	Mean 4 ft.			
	Difference from Average					% of Average				
0 SCOTLAND, N.	17.8	-6.7	+0.5	+0.6	+0.5	-	-	+4	124	79
1 SCOTLAND, E.	18.9	-6.1	+0.5	+1.0	+0.8	-	-	+2	99	86
2 ENGLAND, N.E.	20.6	-5.0	+0.2	+1.3	+0.8	+0.1	-0.5	+2	110	82
3 ENGLAND, E.	21.7	-3.3	-0.3	+0.7	+0.2	-0.6	-0.9	0	147	77
4 MIDLANDS	21.1	-3.9	-0.3	+0.6	+0.2	-0.3	-0.5	+3	94	75
5 ENGLAND, S.E.	22.2	-4.0	-0.8	+0.6	-0.1	-0.4	-0.7	+3	134	81
6 SCOTLAND, W.	17.8	-6.2	+0.1	+0.8	+0.5	+0.4	-0.4	+5	114	84

DISTRICTS	AIR TEMPERATURE					EARTH TEMP.		RAIN DAYS	RAIN-FALL	SUNSHINE
	Highest Max.	Lowest Min.	Max.	Min.	Mean	Mean 1 ft.	Mean 4 ft.			
	Difference from Average					% of Average				
7 ENGLAND, N.W. and N. Wales	20.0	-6.7	-0.2	+0.9	+0.3	-0.3	-0.5	+4	108	82
8 ENGLAND, S.W. and S. Wales	20.6	-4.4	-0.8	+0.1	-0.3	-0.3	-0.5	+4	91	78
N. IRELAND	17.6	-3.9	+0.4	+0.4	+0.4	-	-	+3	90	86
SCOTLAND	18.9	-6.7	+0.4	+0.8	+0.6	-	-	+4	113	83
ENG. and WALES	22.2	-6.7	-0.4	+0.7	+0.2	-	-	+3	111	79

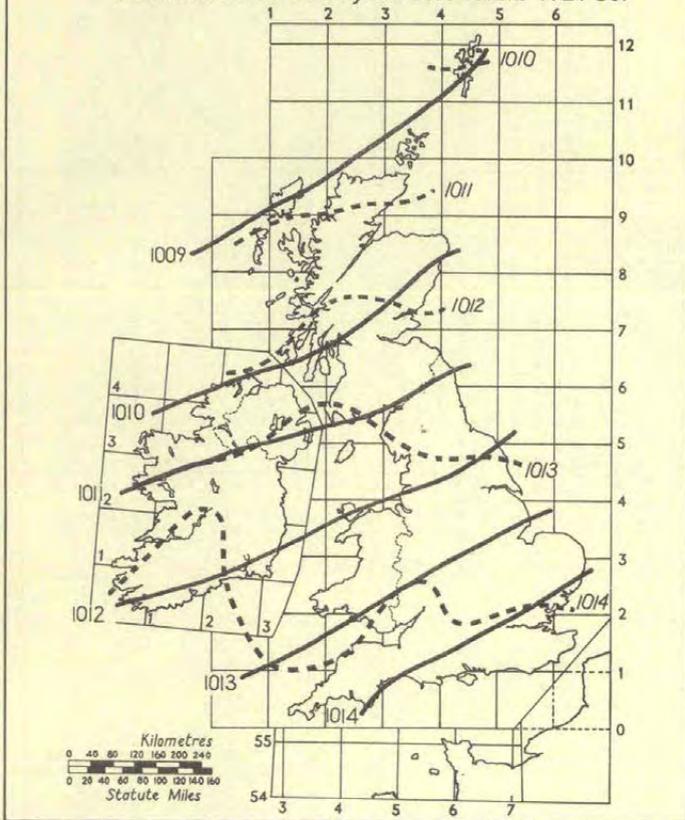
TABLE II—SUMMARY OF AUTOGRAPHIC RECORDS OF WIND— April 1964 (1914)

DISTRICT, COUNTY AND PLACE	Height of Vane			Distribution of Mean Hourly Values of Wind Speed								Mean Hourly Wind Speed	Highest Velocities								
	Above Mean Sea Level	Above Ground	Effective Height	34 knots or more		22 to 33 knots		11 to 21 knots	4 to 10 knots	Less than 4 knots	No Record		Highest Hourly Wind			Highest Gust					
				Dates of Occurrence	Duration	No. of days	Duration	Duration	Duration	Duration	Duration		Veer from N	Speed	Hour ended at	Speed	Day and Time				
																	hr.	hr.	hr.	hr.	hr.
ft.	ft.	ft.		hr.	hr.	hr.	hr.	hr.	hr.	hr.	knots	°	knots	day hr	knots	day	h m				
SCOTLAND																					
0 Zetland	Lerwick Observatory	304	33	33	-	0	16	109	295	286	30	0	13.2	050	32	20	08	49	20	0820	
	Orkney Kirkwall	134	50	33	-	0	9	60	374	227	59	0	12.1	260	33	14	12	45	14	0955	
	Caithness Dounreay	110	39	30	-	0	8	32	442	246	0	0	12.9	180	27	25	13	40	12	1450	
	Sutherland Shin	78	33	33	-	0	4	19	194	303	203	1	7.9	270	29	12	14	46	12	1310	
	Ross & Cromarty Stornoway (Coastguard)	120	40	36	12, 19, 20, 29	8	22	228	358	83	43	0	17.5	030	39	20	02	50	20	0115	
	Inverness Benbecula	69	51	35	19, 20	2	17	159	434	110	15	0	16.7	030	34	19	24	54	19	2340	
1 Moray	Lossiemouth	101	80	60	-	0	5	10	227	349	133	1	8.4	250	26	12	13	43	12	1320	
	Aberdeen Dyce	225	40	40	-	0	1	2	182	337	199	0	7.1	280	22	12	12	32	12	1010	
	Angus Auchterhouse	827	62	50	-	0	6	21	253	313	102	31	9.7	280	25	12	14	46	19	1510	
	Bell Rock Lighthouse	126	131	124	-	0	13	101	395	146	78	0	13.7	220	32	14	07	46	14	0645	
	Perth Rannoch	1006	56	57	-	0	9	49	350	179	92	50	12.0	(050) 30	19	20	(46)	13	2340		
	Fife Leuchars	78	40	40	-	0	9	41	323	294	62	0	11.1	260	31	12	12	47	12	1115	
	Midlothian Turnhouse	137	40	33	-	0	8	51	321	274	74	0	11.1	270	27	12	15	48	30	1230	
	Edinburgh, Blackford Hill	496	50	34	-	0	16	111	393	147	69	0	14.0	130	32	25	07	49	13	2145	
6a Argyll	Tiree	89	60	47	-	0	16	111	393	147	69	0	14.0	130	32	25	07	49	13	2145	
	Bute Millport	50	34	34	-	0	0	0	139	422	159	0	7.1	270	19	29	14	46	30	1140	
	Renfrew Paisley	188	81	31	-	0	3	6	216	373	125	0	8.2	230	23	14	05	38	30	1000	
	Renfrew	71	41	39	-	0	3	6	216	373	125	0	8.2	230	23	14	05	38	30	1000	
	Lanark Lowther Hill	2412	43	33	9, 10, 12, 14, 27, 29	8	20	211	367	112	22	0	17.4	310	36	10	02	53	14	0750	
	Ayr Prestwick Airport	68	33	33	-	0	1	1	350	323	46	0	10.2	190	22	9	12	36	14	0425	
	Dumfries Eskdalemuir Observatory	825	50	35	-	0	1	6	118	372	224	0	6.4	200	23	9	09	41	29	1730	
	Wigtown West Freugh	81	33	33	-	0	3	9	338	315	58	0	10.1	200	26	9	12	41	9	1115	
ENGLAND and WALES																					
6b Isle of Man	Ronaldsway	119	64	39	-	0	13	60	430	213	17	0	13.5	210	33	9	09	45	9	0905	
	Point of Ayre	64	33	33	-	0	7	38	448	224	10	0	12.8	180	27	9	09	41	9	0950	
2 Durham	Durham	389	53	33	-	0	3	11	306	311	92	0	9.7	260	26	12	13	51	14	0655	
	South Shields	73	57	44	-	0	3	6	277	347	90	0	9.4	030	22	4	01	38	14	0820	
	Lincoln Cranwell	268	47	47	-	0	3	9	390	282	39	0	11.3	270	29	14	10	46	28	1335	
3 Norfolk	Gorleston	45	33	33	-	0	3	8	333	307	72	0	10.1	260	23	14	12	42	23	1335	
	Suffolk Mildenhall	98	83	60	-	0	5	33	334	269	84	0	10.9	020	27	4	07	40	4	0630	
	Bedford Bedford	327	42	30	-	0	9	56	431	196	37	0	13.0	230	27	12	11	40	3	2140	
	Hertford Cardington	276	133	133	-	0	0	0	144	463	113	0	7.4	020	18	3	19	36	20	1945	
	Essex Rothamsted	461	41	33	-	0	0	0	189	388	139	4	7.5	040	17	4	12	42	28	1255	
	Essex Stansted	358	31	31	-	0	0	0	306	295	51	68	10.2	220	21	15	13	(33)	20	2030	
	Coryton	66	57	48	-	0	0	0	306	295	51	68	10.2	220	21	15	13	(33)	20	2030	
	Shoeburyness	116	106	91	21	7	12	70	392	197	38	16	13.6	160	37	21	03	51	21	0645	
4 Yorks, W.R.	Sheffield	533	83	35	-	0	0	0	55	355	310	0	4.8	270	14	14	09	36	14	0730	
	Warwick Edgbaston	643	112	73	-	0	0	0	91	548	81	0	6.9	010	16	4	03	33	14	1140	
	Warwick Elmdon	343	31	31	-	0	3	9	359	294	51	0	10.8	260	24	14	10	41	14	0915	
	Buckingham Amersham	500	50	50	-	0	0	0	205	426	89	0	8.3	150	20	20	16	36	20	1530	
	Stafford Keele	706	50	33	-	0	0	0	152	432	136	0	7.3	240	19	14	13	40	14	1330	
	Gloucester Avonmouth	92	61	33	-	0	13	104	314	197	78	27	13.0	020	29	4	04	42	21	2300	
5 London	Kingsway	208	143	41	-	0	0	0	298	357	65	0	9.3	220	20	28	14	28	18	1325	
	Middlesex London (Heathrow) Airport	115	33	33	-	0	4	10	324	346	40	0	10.4	210	23	28	13	39	28	1330	
	Hampton	139	101	100	-	0	1	2	289	289	140	0	8.9	230	22	28	12	39	29	1115	
	Surrey Kew Observatory	92	75	50	-	0	1	2	309	304	105	0	9.5	220	23	28	13	44	28	1305	
	Gatwick	232	38	33	-	0	3	7	275	327	111	0	9.0	230	26	28	15	50	21	0155	
	Kent Isle of Grain	42	40	33	-	0	3	10	157	346	207	0	6.9	180	30	21	07	44	21	0740	
	Dover	68	38	62	-	0	5	9	263	286	162	0	9.4	180	23	21	08	41	20	1720	
	Sussex Thorney Island	75	65	42	-	0	3	8	321	293	98	0	9.6	250	23	28	16	45	29	1230	
	Hampshire Hurn	86	53	46	-	0	3	10	339	308	63	0	10.5	230	27	28	13	42	28	1215	
	Calshot	50	41	33	-	0	2	16	448	239	17	0	12.4	230	26	21	15	36	28	1320	
	S. Farnborough	316	69	35	-	0	3	7	340	314	59	0	10.3	250	23	29	12	38	20	1420	
	Berkshire Abingdon	295	40	40	-	0	2	3	373	226	118	0	10.1	250	23	29	11	36	28	1315	
	Wiltshire Larkhill	491	51	36	-	0	7	54	298	289	79	0	11.2	020	27	2	14	42	28	1150	
	Boscombe Down	425	55	55	-	0	2	5	283	300	132	0	9.3	210	23	21	15	40	21	1605	
	Porton	406	44	44	-	0	4	12	307	278	123	0	10.0	220	27	21	17	42	21	1600	
7a Cumberland	Carlisle	137	42	30	-	0	4	15	279	339	87	0	9.3	210	24	9	16	37	9	1630	
	Sellafield	83	39	35	-	0	1	1	273	383	59	4	9.4	180	23	15	16	35	15	1555	
	Spadadam	959	51	50	-	0	4	9	249	270	92	0	10.5	200	24	9	13	44	14	0625	
	Westmorland Great Dun Fell	2813	33	33	1, 3, 4, 9, 11	6	70	23	284	225	113	9	19	20.9	240	47	9	17	59	9	1050
	Moor House	1960	50	45	9, 11, 15	5	18	135	360	171	25	24	15.5	230	38	9	12	55	15	2020	
	Lancashire Squires Gate	88	55	35	-	0	8	52	419	225	24	0	13.1	250	30	14	09	40	14	0750	
	Southport	59	41	33	-	0	3	10	231	307	172	0	8.5	250	26	14	10	37	9	1445	
	Fleetwood	112	50	31	-	0	5	16	353	307	44	0	10.8	160	26	15	13	41	15	1250	
	Speke	84	41	33	-	0	0	0	230	423	67	0	8.7	260	19	14	11	40	14	1250	
	Cheshire Manchester W/Centre	262	64																		

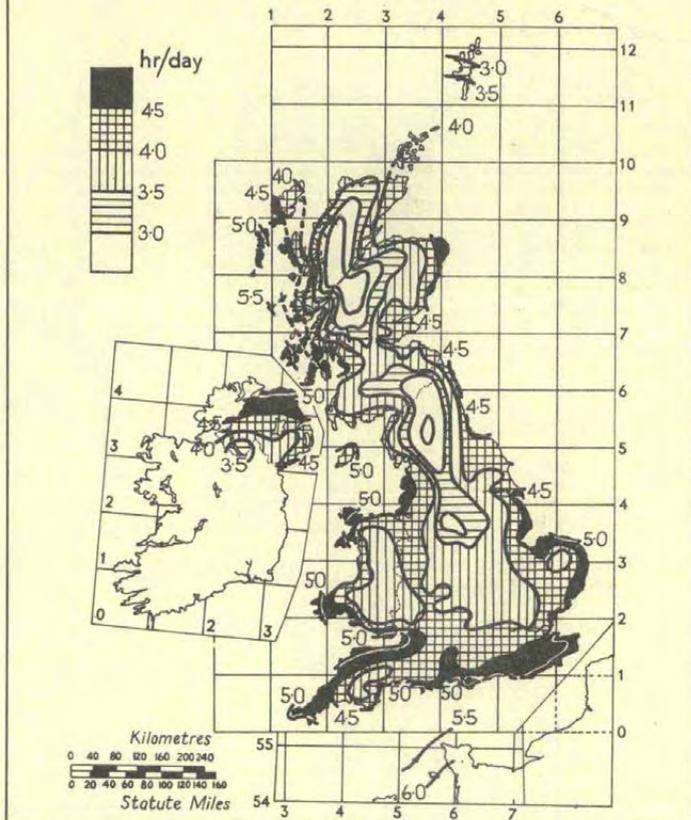
MONTHLY WEATHER CHARTS APRIL 1964

MEAN PRESSURE AT 9 G.M.T.

The dotted lines show the normal distribution of pressure in millibars based on 30 years observations 1921-50.

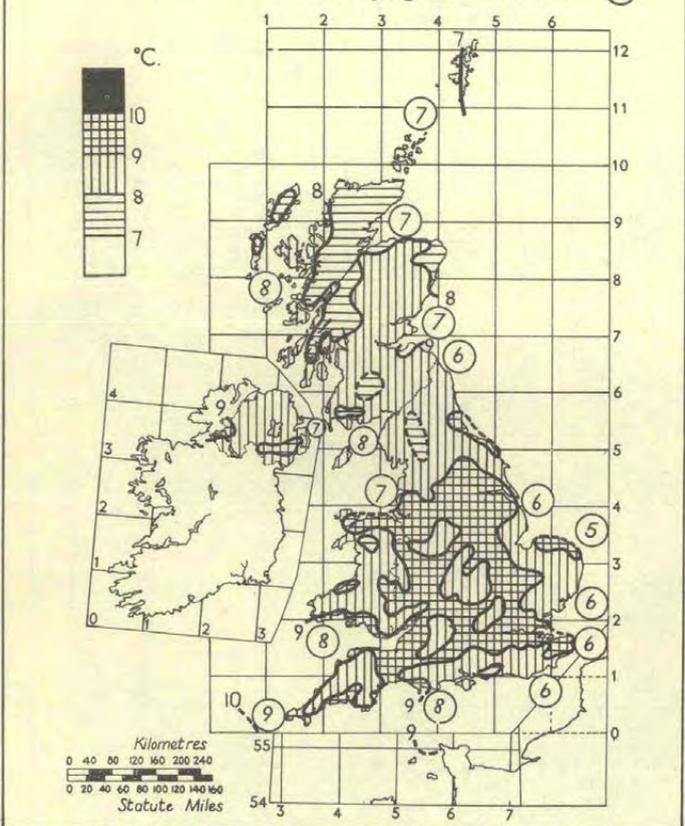


BRIGHT SUNSHINE

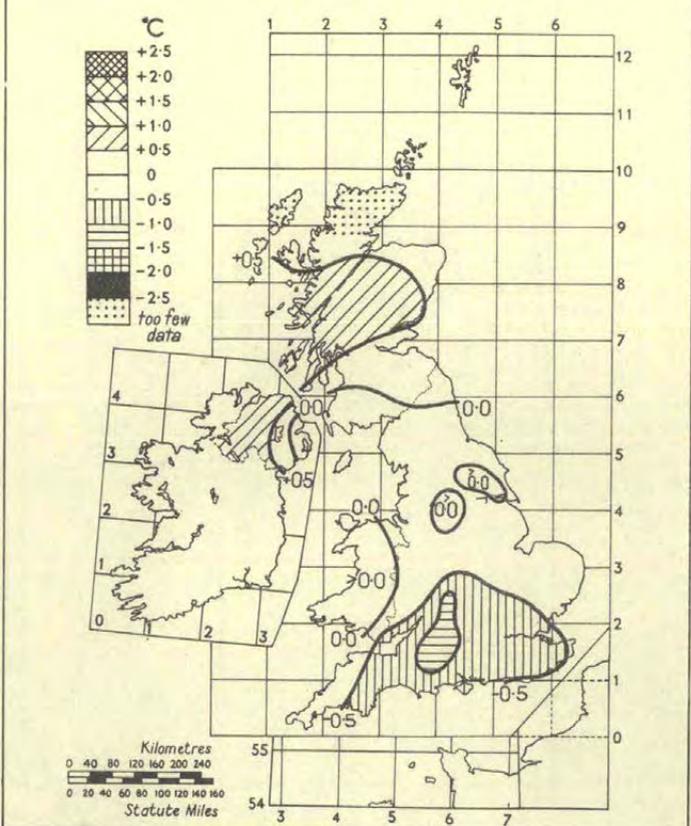


MEAN AIR TEMPERATURE

Reduced to sea level by a correction of 1°C. for 500 ft. Sea temperatures are shown by figures in circles thus (10)



ANOMALY OF MEAN 1 ft. EARTH TEMPERATURE



RAINFALL

APRIL

1964

The equivalent values in mm, are given in round numbers. The exact relation is 10 in. = 254 mm.

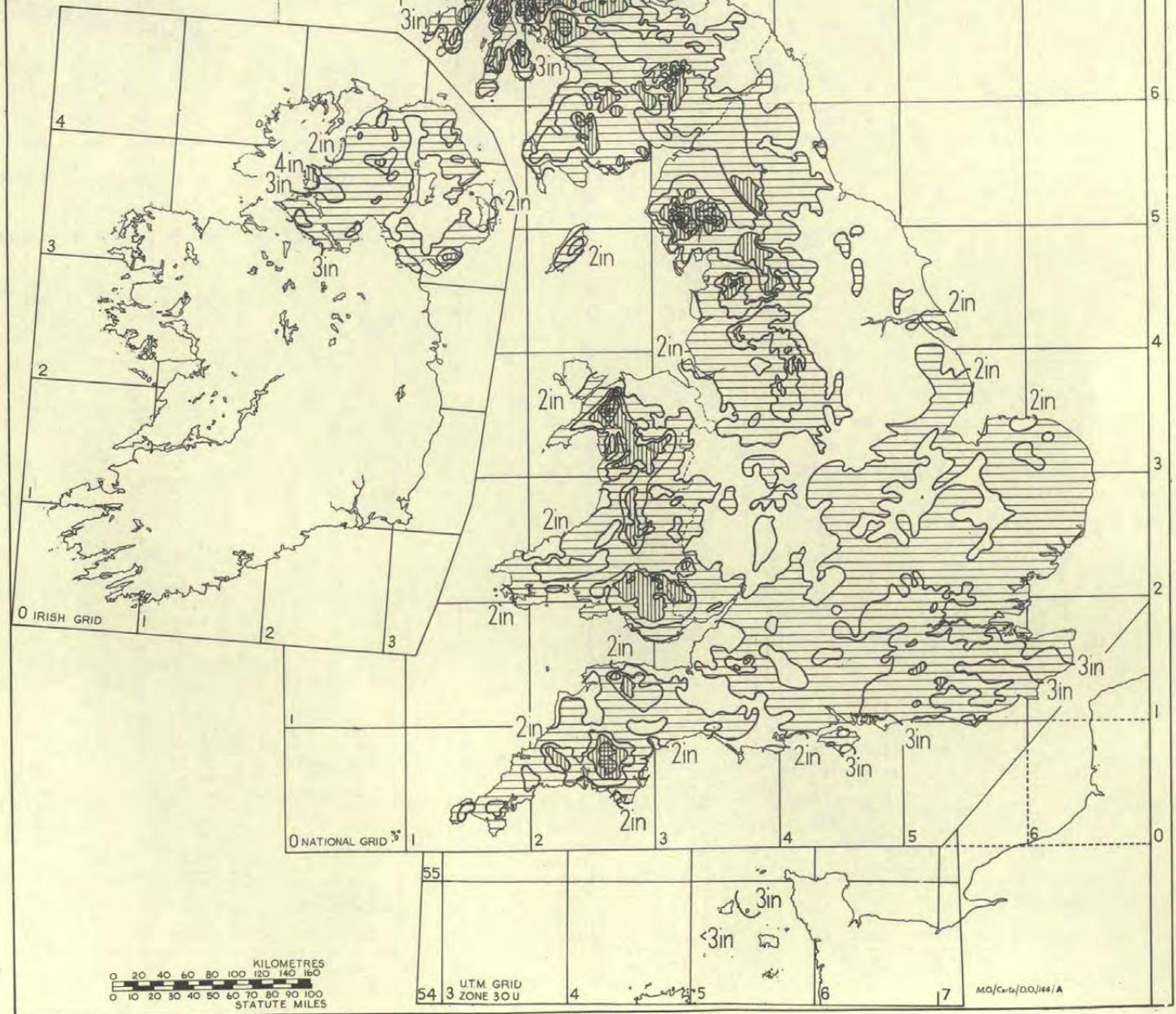
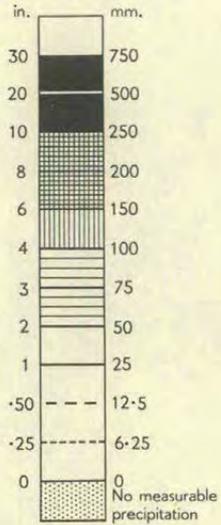


TABLE III (continued)—SUMMARY OF OBSERVATIONS OF TEMPERATURE, RAINFALL, SUNSHINE AND WEATHER April 1964

DISTRICT, COUNTY AND PLACE	Terminal Hours of Observation	Height of Station above Mean Sea Level	AIR TEMPERATURE IN DEGREES CELSIUS								MEAN EARTH TEMPERATURE		RAINFALL (Terminal hour 9 G.M.T.)				WEATHER Number of days										BRIGHT SUNSHINE			
			Means of		Difference from Average	Highest Maximum and Lowest Minimum				1 ft.	4 ft.	Total Fall	Percentage of Average	Most in a day	Precip'n		Snow or Sheet	Snow lying at 9h.	Hail	Ice or snow pellets etc.	Thunder heard	Fog at 9h.	Air Frost 1° C.	Grass min. below 0° C.	Gale	Daily Mean	Percentage of Average			
			A	B		Maximum	Date	Minimum	Date						0.1in. (0.2mm) or more	0.01in. (0.25mm) or more														
			Max.	Min.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	in.	%	in.											hr	%	
1 SCOTLAND, E.—cont.																														
Midlothian	Balerno ...	9 9	700	10.9	3.6	7.3	-	16.1	27	-2.2	6	-	-	2.48	-	.82	19	12	9	-	-	-	-	-	8	3	8	-	3.35	72
	Turnhouse ...	21-9	114	11.9	4.9	8.4	+1.1	16.6	27	-2.9	5	-	-	2.00	-	.78	19	17	8	1	0	0	0	0	0	1	2	6	0	4.05
Edinburgh—E. Craigs	Davidson's Mains	9 9	200	11.4	4.9	8.1	-	16.1	27	-1.7	5	-	-	2.04	-	.81	19	16	7	0	0	0	0	0	0	0	1	6	0	3.65
	Penicuik ...	9 9	200	11.7	5.1	8.4	+0.8	16.7	27	0.0	5	7.1	-	2.11	-	.85	19	16	10	0	0	0	0	0	0	4	1	6	0	3.93
Bush House	Bush House	9 9	620	10.8	3.8	7.3	-	16.7	27	-2.2	5	7.0	-	2.49	-	.57	19	21	9	1	0	0	0	0	0	1	2	9	0	3.85
	Edinburgh—	9 9	605	10.8	3.9	7.3	-	16.7	27	-2.2	5	6.6	5.3	2.39	-	.53	19	19	12	1	0	0	0	0	1	2	2	9	0	4.33
Blackford Hill §§	Blackford Hill §§	9 9	441	11.5	5.0	8.3	+0.8	16.1	27	0.6	3	-	-	1.87	-	.78	19	14	8	0	0	0	0	0	1	0	7	0	4.28	88
	Liberton	9 9	200	11.8	4.8	8.3	+0.7	16.7	28	0.0	3.5	-	-	1.98	-	.74	19	12	9	-	-	-	-	-	0	4	-	-	-	
Royal Bot. Gdns.	Royal Bot. Gdns.	9 9	74	11.7	5.2	8.5	+0.8	17.2	27	-1.7	5	8.0	-	2.05	-	.90	19	16	9	0	0	0	0	0	0	1	8	0	4.24	88
	Haddington	9 9	162	11.8	4.9	8.3	-	17.8	27	-1.7	5	-	-	1.40	-	.53	19	15	7	0	0	1	0	0	0	2	3	0	3.93	
North Berwick	North Berwick	9 9	152	11.4	6.0	8.7	+1.1	16.7	27	2.8	2,3,(22)	-	-	1.94	-	.66	19	14	10	-	-	-	-	5	0	-	-	-	4.14	83
	Dunbar	9 9	75	11.1	5.1	8.1	+0.7	18.3	27	0.6	5	-	-	1.30	-	.53	19	12	9	0	0	0	0	0	0	0	1	0	1	4.60
Mernton	Mernton	9 9	225	11.8	4.4	8.1	-	18.9	27	-1.7	3.5	-	-	1.48	-	.37	19	18	8	-	-	-	-	-	2	7	-	-	3.76	
	Lauder	9 9	600	11.0	3.4	7.2	-	17.2	27	-1.7	3.5	-	-	2.23	-	.39	13	19	11	1	0	3	0	2	0	2	14	0	3.90	
Marchmont §§	Marchmont §§	9 9	498	10.9	4.2	7.5	+0.6	18.3	27	-1.1	3	-	-	1.47	-	.42	19	17	10	0	0	0	0	0	1	1	1	-	-	3.91
	Whitcheater	9 9	838	10.4	3.2	6.8	-	17.8	27	-1.7	3.5	-	-	1.88	-	.55	19	20	12	1	-	0	0	0	-	2	-	-	-	-
St. Abb's Head	St. Abb's Head	9 9	245	10.2	5.1	7.7	-	17.4	27	2.2	14	-	-	-	-	-	-	-	0	0	1	0	0	0	5	0	0	-	-	
	Stanhope Farm	9 9	741	10.5	3.8	7.1	-	16.7	18	-5.0	5	-	-	2.99	-	.52	19	27	18	4	0	0	0	0	1	0	2	9	0	-
Blyth Bridge	Blyth Bridge	9 9	830	10.1	3.5	6.8	-	16.1	27	-6.1	5	-	-	2.82	-	.45	19	23	15	3	0	1	1	1	0	2	9	0	3.46	
	West Linton	9 9	800	10.2	3.2	6.7	-	16.1	27	-2.8	5	6.3	5.4	3.13	-	.46	19	23	18	0	0	0	0	0	0	2	2	0	-	-
Glentworth	Glentworth	9 9	580	11.1	4.3	7.7	-	17.2	27	-2.2	3	-	-	2.33	-	.37	21	24	15	0	0	1	0	1	0	1	0	1	-	-
	Bowhill	9 9	600	11.2	4.0	7.6	-	17.2	18,27	-2.2	5	-	-	2.50	-	.54	21	21	12	4	0	0	0	1	1	2	-	-	-	-
Wauchope	Wauchope	9 9	560	11.1	3.9	7.5	-	17.8	27	-5.0	3	-	-	2.18	-	.36	19	19	13	-	-	-	-	-	0	1	-	-	-	
	Sourhope	9 9	900	10.5	3.7	7.1	-	18.9	27	-2.2	5	-	-	1.78	-	.41	18	19	12	-	0	-	-	-	0	2	9	-	-	2.93
6a SCOTLAND, W.																														
Tiree §§	Tiree §§	21-9	29	10.9	5.1	8.0	+0.2	15.4	18	-1.3	3	-	-	3.81	-	.55	16	22	19	1	0	0	3	0	0	1	12	0	5.60	98
	Rhuvaal ...	21-9	65	10.9	5.8	8.3	-	15.4	18	2.6	14	-	-	3.28	-	.61	13	21	19	0	0	0	0	1	0	0	0	0	-	-
Colonsay	Colonsay	9 9	87	11.6	4.7	8.1	+0.4	16.1	18	0.6	3	-	-	3.28	-	.45	13	23	20	0	-	1	0	0	0	0	0	-	-	-
	Tobermory	9 9	270	11.2	4.2	7.7	-	15.6	18	0.0	1	-	-	4.79	-	.58	7	23	22	-	-	-	-	-	0	7	-	-	-	
Craighouse	Craighouse	9 9	10	11.8	5.5	8.7	-	16.1	18	1.7	1,3	-	-	4.15	-	.60	13	23	21	-	-	-	-	-	0	2	-	-	-	
	Campbeltown	9 9	10	11.6	4.6	8.1	-	14.4	26,27	0.0	7	-	-	2.35	-	.52	19	15	9	0	0	0	0	0	7	0	-	-	5.66	
Achaglachgach	Achaglachgach	9 9	40	11.8	3.7	7.7	-	17.2	18	-2.8	5	-	-	3.88	-	.41	11	23	22	0	-	1	0	0	0	4	13	0	-	-
	Oban	9 9	229	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Lepinmore	Lepinmore	9 9	30	11.6	4.7	8.1	-	16.7	18	-1.1	5	-	-	5.23	-	.63	13	22	21	0	0	2	0	0	0	2	13	0	3.24	
	Glenbranter	9 9	120	11.2	3.5	7.3	0.0	15.6	18	-2.8	2,3,5	-	-	6.93	-	.78	13	23	23	-	-	-	-	-	0	5	12	-	-	
Forestry Sch.	Forestry Sch.	9 9	46	11.7	3.6	7.7	+0.1	16.1	18	(-2.8)	4	7.4	6.5	7.32	-	1.10	13	23	23	0	0	0	0	0	2	6	9	0	-	-
	Younger Bot. Gdns.	9 9	40	11.4	4.3	7.9	-	16.7	18	-1.7	4	-	-	7.62	-	1.06	13	23	22	0	0	1	0	0	0	4	11	0	-	-
Rothsay §§	Rothsay §§	9 9	150	11.2	5.4	8.3	+0.5	16.1	18	1.7	2,3,5	7.7	6.6	3.41	-	.86	19	23	19	1	0	0	0	0	0	0	5	0	4.50	93
	Millport	9 9	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Helensburgh	Helensburgh	9 9	293	11.3	4.4	7.9	+0.5	15.6	18	-0.6	3,5	-	-	5.10	-	.70	21	24	21	0	0	0	0	0	0	2	-	-	-	-
	Cumbernauld	9 9	310	11.3	4.1	7.7	-	16.7	27	-2.2	5	-	-	4.02	-	.83	21	24	21	0	0	0	0	1	1	2	6	0	-	-
Earls Hill	Earls Hill	9 9	1100	9.2	3.1	6.1	-	14.7	27	-0.8	4	-	-	5.27	-	.90	19	23	19	-	-	-	-	-	3	10	-	-	3.39	
	Stirling	9 9	151	12.1	5.2	8.7	+0.6	17.2	18,27	-0.6	5	8.4	6.3	2.61	-	.57	13	22	15	0	0	0	0	1	1	1	5	0	3.90	
Falkirk	Falkirk	9 9	100	12.1	4.5	8.3	+0.4	17.8	27	-1.7	5	-	-	2.50	-	.57	19	21	15	-	-	-	-	-	2	-	-	-	-	
	Greenock	9 9	200	11.5	5.4	8.5	+0.5	16.1	18	1.7	5	-	-	4.26	-	.68	13	23	21	0	0	0	0	0	0	7	0	3.86		
Paisley	Paisley	9 9	106	12.1	5.4	8.7	+0.4	17.8	18,27	0.0	5	8.3	6.7	3.04	-	.47	19	24	19	1	0	0	0	2	0	3	0	3.38	73	
	Barrhead	9 9	97	11.7	4.4	8.1	-	17.2	18,27	-3.9	5	-	-	3.07	-	.44	21	23	19	0	0	0	0	1	0	2	8	0	-	-
Renfrew §§	Renfrew §§	21-9	26	12.1	5.1	8.6	+0.8	17.4	27	-2.5	5	-	-	2.43	-	.52	19	21	17	0	0	1	0	1	0	1	7	0	3.51	76
	Crossmyloof	9 9	75	11.8	5.2	8.5	-	16.7	18,27	-2.2	5	-	-																	

TABLE III (continued)—SUMMARY OF OBSERVATIONS OF TEMPERATURE, RAINFALL, SUNSHINE AND WEATHER April 1964

DISTRICT, COUNTY AND PLACE	Terminal Hours of Observation	Height of Station above Mean Sea Level	AIR TEMPERATURE IN DEGREES CELSIUS								MEAN EARTH TEMPERATURE		RAINFALL (Terminal hour 9 G.M.T.)		WEATHER Number of days											BRIGHT SUNSHINE							
			Means of		Difference from Average	Highest Maximum and Lowest Minimum				1 ft.	4 ft.	Total Fall	Percentage of Average	Most in a day	Precip'n			Snow or Sleet	Snow lying at 9h.	Hail	Ice or snow pellets etc.	Thunder heard	Fog at 9h.	Air Frost	Grass min. below 0° C	Gale	Daily Mean	Percentage of Average					
			A Max.	B Min.		Mean of A and B	Maximum	Date	Minimum						Date	0-1in (0-25mm) or more	0-4in (10-25mm) or more												4-10in (25-254mm) or more				
2 ENGLAND, N.E.—cont.																																	
Northumberland cont.																																	
Haydon Bridge	9 9	270	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Corbridge	9 9	160	12.1	4.2	8.1	-	18.9	27	-3.3	5	-	-	1.85	-	.37	19	17	11	0	0	0	0	0	0	0	0	0	3	6	0			
Berwick-on-Tweed	9 9	76	10.8	5.2	8.0	+1.4	14.4	26	0.0	5	-	-	1.46	108	.44	19	14	6	0	0	0	0	0	0	0	0	2	1	1	0	4.30	82	
Cockle Park	9 9	326	11.1	4.7	7.9	+1.0	17.8	27	0.6	5	6.9	-	1.89	98	.49	18	20	10	0	0	0	0	0	0	0	0	5	0	5	0	3.69	75	
Acklington	21-9	138	11.5	4.8	8.1	-	17.2	27	-0.3	5	-	-	1.87	-	.43	18	22	9	0	0	0	0	0	0	0	0	1	1	0	8	1	4.63	-
Tynemouth	21-9	95	10.9	6.0	8.5	+0.8	16.4	27	2.0	5	-	-	2.13	131	.57	18	14	9	0	0	0	0	0	0	0	0	1	1	0	2	0	4.19	86
Chopwellwood	9 9	446	11.9	4.4	8.1	+0.7	17.2	18,27	-1.1	5	-	-	2.31	124	.60	18	16	11	0	0	0	0	0	0	0	0	1	1	8	0	-	-	
Ushaw College	9 9	594	11.7	4.4	8.1	+0.9	17.8	27	0.0	2,5	-	-	2.27	121	.60	21	15	12	0	0	0	0	0	0	0	0	1	5	0	-	-		
Houghall	9 9	123	12.7	4.6	8.7	+1.2	18.9	27	-2.8	5	-	-	2.03	114	.48	18	19	12	0	0	0	0	0	0	0	0	1	1	9	0	3.84	84	
Durham	9 9	336	12.1	4.7	8.4	+1.0	17.8	27	-0.6	5	7.2	6.2	2.04	120	.48	18	17	13	-	-	-	-	-	-	-	-	1	4	-	-	4.05	88	
Gateshead	9 9	509	11.2	5.2	8.2	-	16.7	27	0.0	5	-	-	2.07	-	.49	18	17	11	-	-	-	-	-	-	-	-	2	1	3	-	3.14	-	
Middleton St. George	21-9	115	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
West Hartlepool	9 9	30	12.5	6.1	9.3	-	20.0	27	1.7	5	-	-	1.61	-	.54	18	14	7	0	0	0	0	0	0	0	0	1	0	1	0	4.61	-	
Dishforth	21-9	105	12.9	5.5	9.2	-	19.3	27	-1.4	2	-	-	1.77	107	.38	18	16	11	0	0	0	0	0	0	0	0	0	1	4	0	4.20	-	
Yorks., N. Riding																																	
Thirsk	9 9	111	12.7	5.0	8.9	-	18.9	27	-0.1	2,11	-	-	1.46	-	.30	18	15	9	0	0	0	0	0	0	0	0	2	12	0	-	-		
York	9 9	57	13.1	5.8	9.5	+0.9	20.0	27	0.0	2	8.1	6.8	2.34	138	.64	19	15	13	0	0	0	0	0	0	0	0	0	0	0	0	4.03	85	
Ampleforth	9 9	313	12.1	4.7	8.4	+0.7	18.3	27	0.0	2	-	-	1.75	88	.34	18	14	9	0	0	0	0	0	0	0	0	3	0	8	0	-	-	
Redcar	9 9	25	12.7	6.2	9.5	-	20.0	27	3.3	1,2,3,5	-	-	1.50	104	.58	18	15	8	-	-	-	-	-	-	-	-	-	-	-	-	-		
Pickering	9 9	143	12.7	4.4	8.5	-	19.4	27	-1.7	11	-	-	1.56	-	.25	23	15	10	0	0	0	0	0	0	0	0	2	8	0	-	-		
Whitby	9 9	135	12.2	5.7	8.9	-	19.4	27	1.7	6	-	-	1.32	82	.40	18	10	10	0	0	0	0	0	0	0	0	0	0	0	0	4.56	91	
Scarborough	9 9	118	12.5	5.6	9.1	+0.6	17.8	26	1.7	6	8.4	7.6	1.47	83	.32	18	14	9	0	0	0	0	0	0	0	0	1	1	0	0	4.43	88	
Silpho Moor	9 9	665	11.1	4.1	7.6	-	17.2	26	0.0	2	6.1	-	1.80	-	.41	18	16	11	0	0	0	0	0	0	0	0	1	1	8	0	4.22	-	
Whitby C/Guard	21-9	200	11.3	5.7	8.5	-	18.9	27	1.4	6	-	-	1.14	-	.38	18	10	7	0	0	0	0	0	0	0	0	1	0	0	0	-	-	
High Mowthorpe	9 9	574	11.2	4.5	7.9	-	17.8	27	0.6	3	6.3	-	1.31	69	.27	18	13	9	0	0	0	0	0	0	0	0	0	1	0	3	0	3.79	-
Yorks., E. Riding																																	
Hull	9 9	8	12.7	5.9	9.3	+0.6	20.0	27	1.7	2,5	7.9	6.1	1.78	97	.25	16	14	11	0	0	0	0	0	0	0	2	0	0	7	0	4.12	87	
Leconfield	21-9	24	12.8	5.3	9.1	-	19.7	27	0.3	5	-	-	1.69	-	.33	26	13	10	0	0	0	0	0	0	0	0	0	0	0	10	0	3.98	-
Filey	9 9	122	11.7	5.2	8.5	-	17.2	26	1.1	11	-	-	1.27	-	.25	18	12	9	0	0	0	0	0	0	0	0	1	0	9	0	4.19	-	
Bridlington	9 9	157	11.4	4.7	8.1	-	17.2	26	0.6	8,11	-	-	1.36	-	.31	21	11	7	0	0	0	0	0	0	0	0	2	0	5	2	4.32	-	
Spurn Head	21-9	29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Lincoln																																	
Gainsborough	9 9	110	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Navenby	9 9	60	12.8	4.5	8.7	-	20.6	27	-1.7	11	-	-	1.84	-	.34	16	19	9	0	0	0	0	0	0	0	0	1	0	2	10	0	-	
Waddington	21-9	224	12.4	5.2	8.8	+0.5	20.2	27	0.4	2	-	-	1.57	-	.33	16	16	9	0	0	0	0	0	0	0	0	0	0	7	0	3.70	-	
Lincoln	9 9	22	13.3	4.7	9.0	-	21.1	27	-1.1	5,11	7.2	5.9	1.75	-	.32	21	16	10	0	0	0	0	0	0	0	0	3	13	0	3.64	-		
Cranwell	9 9	205	12.4	4.8	8.6	+0.4	20.0	27	0.6	2	7.6	6.4	1.85	111	.31	20	17	10	0	0	0	0	0	0	0	0	0	0	11	0	3.86	74	
Binbrook	21-9	353	11.8	5.0	8.4	-	18.9	27	0.9	6	-	-	2.02	-	.31	28	16	11	2	0	0	0	0	0	0	0	0	0	6	0	-	-	
Cleethorpes	9 9	23	12.8	5.7	9.3	+0.9	20.0	27	2.8	5,8	-	-	2.14	126	.43	21	13	10	0	0	0	0	0	0	0	0	0	0	0	0	4.86	92	
Manby	21-9	55	12.8	5.2	9.0	-	19.8	27	0.9	11	-	-	2.04	-	.37	21	15	10	0	0	0	0	0	0	0	0	0	5	0	4.43	-		
Skegness	9 9	15	12.4	4.9	8.7	+0.6	19.4	27	0.6	8	-	-	1.99	124	.43	18	14	10	0	0	0	0	0	0	0	0	0	0	0	0	-	-	
3 ENGLAND, E.																																	
Norfolk																																	
Terrington	9 9	13	12.8	4.9	8.9	-	21.1	27	-1.1	6,25	7.9	-	2.01	135	.40	16	16	10	0	0	0	0	0	0	0	0	1	0	2	4	0	4.40	-
St. Clement	21-9	76	12.6	4.9	8.7	-	19.6	27	-2.1	6	-	-	2.32	-	.74	16	15	10	0	0	0	0	0	0	0	0	5	0	1	7	0	-	
Marham	9 9	80	13.3	4.1	8.7	-	20.6	27	-2.8	6,8	7.6	6.6	2.75	-	.62	16	16	11	-	-	-	-	-	-	-	-	0	5	11	-	3.96	-	
Santon Downham	21-9	250	12.1	4.9	8.5	-	19.2	27	-1.4	6	-	-	2.55	-	.59	16	18	12	3	0	3	0	4	0	1	8	2	4					

TABLE III (continued)—SUMMARY OF OBSERVATIONS OF TEMPERATURE, RAINFALL, SUNSHINE AND WEATHER April 1964

DISTRICT, COUNTY AND PLACE	Terminal Hours of Observation	Height of Station above Mean Sea Level	AIR TEMPERATURE IN DEGREES CELSIUS								MEAN EARTH TEMPERATURE		RAINFALL (Terminal hour 9 G.M.T.)				WEATHER Number of days								BRIGHT SUNSHINE					
			Means of		Mean Temperature Mean of A and B	Difference from Average	Highest Maximum and Lowest Minimum				1 ft.	4 ft.	Total Fall	Percentage of Average	Most in a day		Precip'n		Snow or Sleet	Snow lying at 9h.	Hail	Ice or snow pellets etc.	Thunder heard	Fog at 9h.	Air Frost †	Grass min. below 0°C	Gale	Daily Mean	Percentage of Average	
			A	B			Maximum	Date	Minimum	Date					Amount	Date	-0.1in. (0.2mm) or more	-0.4in. (1.0mm) or more												
			Max.	Min.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	in.	%	in.															
7a ENGLAND, N.W.—cont.																														
Westmorland	Great Dun Fell	21-9	2780	4.2	0.5	2.3	-	11.7	27	-4.5	4	-	-	-	-	-	-	7	-	-	-	-	22	9	-	-	1.64	-		
—cont.	Moor House	9 9	1825	7.3	1.7	4.5	-	15.0	27	-4.4	5	4.0	4.70	108	.63	28	24	20	0	0	0	0	5	8	15	-	2.19	-		
Lancashire	Squires Gate	21-9	33	12.0	5.4	8.7	+0.7	18.5	18	-3.3	7	-	1.99	108	.40	19	20	12	0	0	0	0	2	7	0	0	4.77	84		
	Urswick	9 9	130	11.8	4.4	8.1	-	17.2	18	-3.3	5	-	2.56	-	.52	19	21	14	0	0	0	1	5	-	0	-	-	-		
	Southport	9 9	16		4.9		-			-2.8	7	8.7	2.65	-	.49	19	19	13	0	0	0	1	4	6	-	0	4.35	-		
	Poulton-le-Fylde	9 9	38	11.8	5.5	8.7	-	17.8	18,27	-1.7	7	-	1.98	-	.39	19	18	14	0	0	0	0	1	2	-	0	-	-		
	Grizedale	9 9	300	11.4	2.4	6.9	-	16.7	18,19,27	-4.4	5	6.8	4.43	-	.68	10	25	19	0	0	0	0	0	7	13	0	-	-		
	Speke	21-9	80	12.7	5.9	9.3	-	18.8	27	-0.2	2,3	-	2.30	135	.50	19	18	5	0	0	0	0	0	2	6	0	0	4.37	-	
	Kirkham	9 9	78	12.4	5.1	8.7	-	18.3	18,27	-2.2	7	-	2.33	114	.49	19	17	14	1	0	0	0	0	4	8	0	0	5.01	-	
	Garstang	9 9	68	11.7	5.2	8.5	-	17.8	27	-1.7	5	-	2.23	-	.47	19	20	15	-	0	0	0	0	2	8	-	0	4.16	-	
	Morecambe	9 9	24	11.4	6.2	8.8	+0.5	18.9	27	2.2	2,3	-	2.64	128	.49	19	19	15	0	0	0	0	0	0	0	0	0	4.05	73	
	Preston	9 9	108	12.2	5.4	8.8	-	18.9	27	-1.1	5	-	2.72	123	.41	19	21	13	0	0	0	0	0	3	10	0	-	-		
	Stonyhurst	9 9	377	11.4	4.9	8.1	+0.4	17.8	27	-0.6	2,3,5	-	3.39	126	.79	11	20	16	-	0	0	0	0	3	-	-	3.24	68		
	Manchester W/Centre	9 9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.35	-		
	Helmshore	9 9	854	10.4	4.1	7.3	-	17.8	27	-1.1	2,3	6.4	3.63	98	.58	21	19	17	-	0	0	0	2	8	-	-	3.13	-		
	Burnley	9 9	655	10.9	4.6	7.7	-	18.3	27	-1.7	5	6.5	3.50	-	.62	22	21	17	0	0	0	0	0	3	11	0	0	3.09	-	
	Nelson	9 9	540	10.9	5.0	7.9	-	17.8	27	-1.1	5	7.0	2.79	104	.40	11,19	19	11	-	0	0	0	0	3	8	-	0	3.07	-	
	Rochdale	9 9	362	11.8	4.3	8.1	-	18.9	27	-2.2	11	-	3.08	-	.42	22,28	19	17	0	0	0	0	0	4	7	0	-	-		
Cheshire	Bidston Obs'y.	9 9	198	11.7	5.9	8.8	+0.5	17.8	27	0.6	3	-	1.87	111	.25	22	17	13	-	0	0	0	0	0	3	-	0	4.82	92	
	Winnington	9 9	65	13.2	6.0	9.6	-	20.0	27	-0.6	2	-	2.45	131	.72	19	19	14	0	0	0	1	1	1	2	9	0	-	-	
	Knutsford	9 9	212	12.8	5.2	9.0	-	19.4	27	-0.6	2	7.6	2.36	-	.45	19	18	15	-	0	0	0	1	1	7	0	-	-		
	Ringway	21-9	248	12.1	5.5	8.8	+0.7	19.4	27	-1.2	2	-	2.04	108	.37	19	18	15	0	0	0	0	0	1	5	0	0	3.78	82	
	Macclesfield	9 9	500	11.8	5.0	8.4	+0.5	19.4	27	-0.6	2	-	3.57	147	.41	22	19	17	1	0	0	0	0	0	0	-	-	-	-	
7b NORTH WALES																														
Flint	Rhyl	9 9	31	12.1	6.1	9.1	+0.5	18.1	27	-0.6	7	-	1.53	97	.35	28	17	12	0	0	0	0	0	1	2	0	0	4.34	80	
	Prestatyn	9 9	12	12.2	6.2	9.2	-	19.4	27	0.0	5,7	-	1.60	95	.27	24	19	13	0	0	0	0	0	0	-	0	0	3.44	67	
	Hawarden Bridge	9 9	17	13.2	5.5	9.3	+0.4	18.9	27	-1.7	7	-	1.41	80	.30	21	16	12	0	0	0	0	0	1	0	-	0	-	-	
Anglesey	Valley	21-9	33	11.7	6.1	8.9	+0.4	19.0	18	0.1	5	-	1.77	94	.29	27	15	9	0	0	0	0	0	0	4	2	0	5.20	88	
Denbigh	Colwyn Bay	9 9	118	12.1	6.6	9.3	+0.6	18.9	27	0.6	5	8.4	1.35	78	.58	28	15	6	0	0	0	0	0	0	-	0	0	4.94	89	
	Alwen	9 9	1100	9.9	2.4	6.1	-	17.8	27	-6.7	7	-	2.32	-	.30	20	20	15	-	0	0	0	-	9	13	-	-	-		
	Ruthin	9 9	248	11.3	4.8	8.1	-	18.9	27	-1.7	6	-	1.04	-	.23	21	16	9	-	0	0	0	0	3	-	-	3.99	-		
	Loggerheads	9 9	690	11.3	4.1	7.7	-	18.3	27	-2.8	7	6.3	1.59	-	.34	21	18	11	0	0	0	0	3	5	8	0	-	-		
	Bwlchgwyn	9 9	1267	9.6	2.9	6.3	-	16.7	27	-3.3	2,3	5.5	2.27	-	.44	20	19	13	1	0	0	0	0	7	-	0	-	-		
	Wrexham	9 9	275	12.8	4.9	8.9	-	19.4	27	-1.7	7	7.4	1.63	-	.43	21	17	11	0	0	0	0	0	3	11	0	-	-		
Caernarvon	Bardsey Island	21-9	61	10.4	6.4	8.4	-	13.2	18	1.9	3	-	2.09	-	.31	16	13	12	-	0	0	0	0	5	-	-	-	-		
	Botwnnog	9 9	112	11.8	5.7	8.7	-	16.1	18,27	0.0	7	9.3	8.2	2.27	-	.42	27	19	11	0	0	0	0	0	5	0	0	5.43	-	
	Bryn Adda	9 9	275	12.2	5.7	8.9	-	17.8	27	0.6	5,7	-	2.44	-	.61	28	18	13	0	0	0	1	1	0	8	0	0	4.56	-	
	Cwm Dyli	9 9	324	11.6	5.6	8.6	-	17.8	27	0.0	7	7.7	6.77	-	1.26	27	22	19	-	0	0	0	1	1	4	-	-	-		
	Aber	9 9	60	12.3	6.5	9.4	+0.6	17.8	18	1.1	7	-	2.18	94	.58	28	21	13	0	0	0	0	0	6	0	0	0	4.52	85	
	Llandudno	9 9	13				-																							
Mertoneth	Llyn Stwlan	9 9	1656	6.6	2.3	4.5	-	13.9	27	-1.7	3	-	3.52	-	.76	12	23	16	-	0	0	0	0	7	8	-	-	-		
	Blaenau Ffestiniog	9 9	750	10.7	4.3	7.5	-	17.8	27,28	-0.6	3	-	3.91	-	.54	20	23	15	2	0	0	0	3	4	-	0	-	-		
	Corwen	9 9	473	8.7	4.1	6.4	-	13.3	26,27	-2.2	5	-	2.31	-	.47	21	16	13	0	0	0	0	0	6	8	0	-	-		
Montgomery	Ceins	9 9	200	12.6	4.5	8.5	-	19.4	27	-2.2	5,6	-	4.38	-	.85	21	21	14	-	0	0	0	0	4	7	-	-	-		
	Lake Vyrnwy	9 9	995	10.3	3.6	6.9	-	17.8	27	-2.2	6,7	6.3	3.91	97	.73	21	22	17	2	0	0	0	0	4	9	0	-	-		
8a SOUTH WALES																														
Cardigan	Aberporth	21-9	378	11.0	5.7	8.3	+0.1	16.8	27	1.3	7	-	2.09	88	.54	18	18	9	0	0	0	0	0	4	0	0	0	4.38	-	
	Aberystwyth	9 9	12	12.2	5.5	8.9	+0.3	19.4	28	1.1	4	-	1.45	-	.42	21	10	10	-	0	0	0	0	0	-	0	0	5.35	100	
	" P.B.S.*	9 9	452	11.2	4.8	8.0	0.0	17.8	27	-0.6	2,3	-	1.75	75	.47	21	17	12	0	0	0	0	1	2	9	0	0	4.18	79	
	Gogerddan	9 9	103	11.9	5.0	8.5	-	18.9	27	-1.7	3	-	1.50	65	.42	21	18	10	0	0	0	0	0	4	9	0	0	4.27	-	
	Swyddfynnon	9 9	540	11.3	4.5	7.9	-	18.3	27	-2.2	6	-	1.77	-	.37	21	17	12	-											

TABLE III (continued)—SUMMARY OF OBSERVATIONS OF TEMPERATURE, RAINFALL, SUNSHINE AND WEATHER April 1964

DISTRICT, COUNTY AND PLACE	Terminal Hours of Observation	Height of Station above Mean Sea Level	AIR TEMPERATURE IN DEGREES CELSIUS								MEAN EARTH TEMPERATURE		RAINFALL (Terminal hour 9 G.M.T.)			WEATHER Number of days										BRIGHT SUNSHINE							
			Means of		Mean Temperature Mean of A and B	Difference from Average	Highest Maximum and Lowest Minimum				1 ft.	4 ft.	Total Fall	Percentage of Average	Most in a day		Precip'n			Thunder heard etc.	Fog at 9h.	Air Frost	Grass min. below 0° C	Gale	Daily Mean	Percentage of Average							
			A	B			Maximum	Date	Minimum	Date					Amount	Date	-0.1in. (0.4mm.) or more	-0.01in. (1.0mm.) or more	Snow or Sleet														
			Max.	Min.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	in.	%	in.	Date	0.1in. (2.5mm.) or more	0.01in. (0.25mm.) or more	Snow lying at 9h.	Hail	Ice of snow pellets etc.	Thunder heard	Fog at 9h.	Air Frost	Grass min. below 0° C	Gale	hr	%					
8b ENGLAND, S.W.—cont.																																	
Devon	Clawton ...	9 9	412	11.7	2.1	6.9	-	17.2	26	-4.4	7	-	-	2.85	-	.54	21	20	16	1	0	0	0	0	0	0	4	7	-	2	-	-	
	Hartland Point ...	21-9	298	10.5	6.3	8.4	-	16.5	26	1.5	3	-	-	1.94	-	.46	15	17	12	0	0	0	0	0	0	1	0	1	0	3	5.85	97	
	Mount Batten ...	21-9	87	11.3	6.2	8.7	-0.5	16.2	26	0.9	7	-	-	2.15	98	.40	27	16	9	0	0	0	0	0	0	1	0	1	0	5	0	4.39	72
	Plymouth, The Hoe ...	9 9	119	11.9	6.4	9.1	-0.6	17.2	26	1.1	7	9.3	8.8	2.19	100	.41	27	15	9	0	0	0	0	0	0	1	0	1	0	6	0	4.00	66
	Tavistock ...	9 9	457	11.7	5.1	8.4	-0.4	17.2	26	-0.6	11	-	-	3.97	-	.65	15	18	14	2	0	0	0	0	0	0	1	2	7	0	-	-	
	Chivenor ...	21-9	20	12.8	6.1	9.5	-	19.6	26	-0.4	7	-	-	1.36	-	.24	16	15	8	0	0	0	0	0	0	2	1	6	0	-	-		
	Ilfracombe ...	9 9	25	11.9	7.2	9.5	+0.2	18.9	27	2.8	7	9.8	9.6	2.16	94	.49	27	12	10	0	0	0	0	0	0	0	0	0	0	1	5.69	95	
	Totnes ...	9 9	120	12.6	4.9	8.7	-	18.9	26	-2.8	7	8.8	8.2	2.57	87	.52	27	18	13	2	0	0	1	0	0	0	4	7	0	-	-		
	Slapton ...	9 9	104	11.7	5.6	8.7	-	15.0	24	1.7	4, 11	-	-	2.16	-	.44	20	19	13	1	0	0	0	0	0	2	0	1	0	-	-		
	Newton Abbot ...	9 9	272	12.2	4.8	8.5	-0.5	18.3	26	0.0	11	-	-	2.40	96	.40	21	16	11	2	0	1	0	0	0	0	1	5	0	-	-		
	Paignton ...	9 9	8	12.4	5.7	9.1	-	16.7	24, 26	0.6	7	-	-	1.80	72	.32	20	16	12	2	0	2	0	0	0	0	0	0	0	0	-	-	
	Torquay ...	9 9	26	12.1	6.0	9.1	-0.3	16.1	27	1.1	11	-	8.9	1.73	77	.36	21	15	8	1	0	0	0	0	0	1	0	2	1	4.72	75		
	Teignmouth §§	9 9	20	11.6	5.7	8.7	-0.8	15.6	27, 29, 30	-1.1	7	-	-	1.79	84	.20	18	6	1	0	0	0	0	0	0	0	1	5	0	-	-		
	Starcross ...	9 9	29	12.1	5.2	8.7	-	16.1	24, 27	0.0	7	8.8	-	1.90	84	.40	20	14	9	-	0	-	-	-	-	4	-	-	-	-			
	Exeter, Southam ...	9 9	160	12.4	4.8	8.6	-	17.2	26	0.0	9	-	-	1.96	-	.32	15, 20	11	10	0	-	0	0	0	0	-	-	-	-	-	-		
	Exmouth ...	9 9	195	11.7	5.4	8.5	-0.2	16.7	24	0.6	7	-	-	1.35	61	.36	20	15	8	2	0	0	0	0	0	0	0	0	0	-	-		
	Exeter ...	21-9	106	12.4	5.7	9.1	-	18.0	24	-0.6	7	-	-	1.75	82	.25	19	18	10	2	0	0	0	0	0	2	1	8	0	-	-		
	Sidmouth ...	9 9	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Cornwall	St. Mary's, Scilly	21-9	158	11.8	7.2	9.5	-0.2	14.3	28	3.4	2	-	-	2.46	117	.30	15	16	12	0	0	0	0	0	0	2	0	-	5	5.14	80		
	Penzance ...	9 9	82	11.9	6.3	8.1	-1.8	14.4	19, 29	1.1	7	-	-	3.16	123	.58	15	19	16	0	0	0	0	0	0	1	0	5	1	4.90	79		
	Gulval ...	9 9	50	11.5	6.2	8.9	-0.7	13.3	14, 23, 30	1.7	7	-	-	2.83	119	.57	15	22	13	0	0	0	0	0	0	1	0	5	0	-	-		
	Culdrose ...	9 9	268	11.1	5.8	8.5	-	15.0	26	1.1	7	-	-	2.07	-	.42	15	15	12	0	0	0	0	0	0	2	0	5	0	-	-		
	Rosewarne ...	9 9	250	11.3	6.0	8.7	-	15.6	26	1.1	7	8.9	8.7	3.20	137	.56	15	20	15	1	0	0	0	0	0	0	0	7	1	4.72	-		
	Lizard ...	9 9	240	11.0	6.3	8.7	-0.6	14.1	26	2.1	2	-	-	2.22	110	.35	20	18	13	0	-	0	0	0	0	-	0	-	1	5.19	-		
	Falmouth §§	9 9	167	11.4	5.9	8.7	-0.8	14.4	19, 23, 30	2.2	2, 3, 7	-	-	2.50	96	.49	15	17	12	0	0	0	0	0	0	1	0	-	1	4.27	69		
	Newquay ...	9 9	176	11.6	6.0	8.8	-0.3	16.1	26, 27	0.0	7	-	-	2.26	116	.40	15	19	12	0	-	0	0	0	0	-	1	-	0	-	-		
	St. Mawgan ...	21-9	337	11.1	5.6	8.3	-	15.2	26	0.1	7	-	-	2.46	-	.37	15	19	13	0	0	0	0	0	0	2	0	3	0	-	-		
	St. Austell ...	9 9	310	11.6	5.8	8.7	-	15.0	24	1.1	8	-	-	2.79	95	.47	21	18	15	0	0	0	0	0	0	1	0	-	-	-	-		
	Fowey ...	9 9	51	11.9	6.2	9.1	-0.5	15.6	19, 20	1.1	7, 8	-	-	2.07	-	.39	27	16	11	0	0	0	0	0	0	1	0	-	-	-	-		
	Bude ...	9 9	50	11.7	5.7	8.7	-0.3	17.8	26	-1.7	7	7.8	-	1.79	92	.27	21, 27	19	14	-	-	-	-	-	-	2	-	-	-	-			
	Ellbridge ...	9 9	190	11.8	5.4	8.6	-0.5	16.1	26	-0.6	8	-	-	2.79	117	.45	27	18	15	0	0	0	0	0	0	1	1	5	0	-	-		
9 NORTHERN IRELAND																																	
Londonderry	Loughmore Forest	9 9	570	11.6	3.6	7.6	-	16.1	25	-3.3	2	-	-	2.66	-	.38	16	20	18	0	0	0	0	0	0	0	3	12	0	-	-		
	Ballykelly §§	21-9	6	12.6	5.3	8.9	+0.7	17.6	25	-2.0	2	-	-	2.19	91	.39	22	18	16	0	0	1	0	0	0	0	4	8	0	-	-		
	Derrynoyd Forest	9 9	290	12.1	4.3	8.2	-	16.1	25, 26	-1.7	2	-	-	3.00	-	.77	16	18	15	0	0	1	0	0	0	0	2	8	0	-	-		
	Somerset Forest	9 9	140	12.3	4.6	8.5	-	16.1	18	-2.2	2	-	-	2.24	-	.34	19	18	15	0	0	0	0	0	0	0	1	14	0	-	-		
	Garvagh Forest	9 9	290	12.5	4.2	8.3	-	16.7	26	-1.7	2	-	-	2.68	-	.42	13	18	14	0	0	1	0	0	0	0	2	14	0	-	-		
	Moneydig §	21-9	112	12.6	4.5	8.5	+0.1	16.1	26	-2.9	2	8.3	-	2.15	81	.31	13	20	15	0	0	1	0	0	0	2	12	0	-	-			
Antrim	Portrush ...	-	17	-	-	-	-	-	-	-	-	-	-	2.15	-	.37	19	20	15	-	-	-	-	-	-	-	-	-	-	-			
	Lisnafillan ...	9 9	124	12.0	4.2	8.1	-	15.6	18, 26, 28	-3.3	5	-	-	1.79	-	.20	5	20	13	0	0	0	0	0	0	4	7	0	-	-			
	Aldergrove §§	21-9	275	12.1	4.6	8.3	+0.4	15.8	26	-1.5	5	7.9	7.1	1.44	-	.20	20	17	13	0	0	1	0	0	0	2	9	0	-	-			
	Greenmount ...	9 9	105	12.2	4.8	8.5	-	15.6	25, 26, 28	-2.2	5	8.1	-	1.40	-	.24	20	15	13	0	0	0	0	0	0	3	8	-	-	-			
	Black Mountain ...	21-9	969	9.9	3.3	6.6	-	14.2	18	-0.8	5	-	-	2.23	-	.35	20	19	17	-	-	-	-	-	2	2	0	-	-				
	Ballypatrick Forest	9 9	500	10.9	4.2	7.5	-	16.1	26	-1.7	2	-	-	2.59	-	.49	19	20	15	0	0	1	0	0	0	1	2	5	0	-	-		
	Larne ...	9 9	140	12.1	5.1	8.6	-	15.6	26	0.6	5, 7	-	-	3.13	-	.76	16	20	18	0	0	1	0	0	0	0	0	0	-	-			
	Kilroot ...	9 9	71	11.6	5.3	8.5	-	15.6	28	0.6	7	-	-	1.75	-	.22	20	18	15	0	0	0	0	0	0	2	0	7	0	-	-		
Down	Newry Abbey ...	9 9	32	12.5	4.9</																												

TABLE IV (continued)—SUMMARY OF OBSERVATIONS AT FIXED HOURS April 1964

Table with columns: DISTRICT, COUNTY AND PLACE; Hour of Observation; MEAN PRESSURE; MEAN TEMPERATURE AND HUMIDITY; CLOUD AMOUNT (OKTAS); VISIBILITY; WIND, NUMBER OF OBSERVATIONS. Rows include locations like Nottingham, Northampton, Warwick, Shropshire, Worcester, Hereford, Gloucester, Middlesex, Surrey, Kent, Sussex, Berkshire, Hampshire, and Wiltshire.

TABLE XIII—SOLAR RADIATION AND INTENSITY OF ILLUMINATION April 1964

Table with columns for Station, Total Radiation on a Horizontal Surface (mw. hr./cm²), Diffuse Radiation on a Horizontal Surface (mw. hr./cm²), and Total Illumination of a Horizontal Surface (kilo lux-hours). Rows include Lerwick Observatory, Eskdalemuir Observatory, Cambridge, Kingsway, Kew Observatory, and Aberporth.

TABLE VIII—NUMBER OF DAYS IN April 1964 WITH MAXIMUM AND MINIMUM TEMPERATURES between given limits.

Table with columns for Station, Maximum Temperature °C, and Minimum Temperature °C. Rows list various stations like Lerwick Observatory, Stormoway, Craibstone, etc., with data for temperature ranges.

TABLE III—ADDITIONS AND CORRECTIONS April 1964

Large table with columns for Month, Station, Air Temperature in Degrees Celsius, Earth Temperature, Rainfall (Terminal hour 9 G.M.T.), Weather Number of days, and Bright Sunshine. Rows are organized by month (October, November, December) and station.

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Monthly Weather Report

OF THE METEOROLOGICAL OFFICE

Summary of observations compiled from returns of official stations and voluntary observers



Volume 81 Number 5

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May 1964 — Changeable; warm spells.

Until the 13th weather was of a westerly cyclonic type with a series of troughs and ridges crossing the country. After a mainly anticyclonic spell on the 14th-20th weather again became cyclonic in character over most of the country with south-west to south winds backing to east on the 23rd as depressions to the west of Ireland became slow-moving over the Bay of Biscay and France.

Depressions between Scotland and Iceland during the first five days maintained a westerly airstream over the British Isles; most districts had long sunny periods and scattered showers except on the 2nd when fronts from the Atlantic brought more general rain. Winds backed towards the south early on the 6th as a small depression formed to the west of Ireland; warm-front rain spread from Cornwall over much of the country during the day and the night was very close with rain in most districts. Winds reached gale force in many places on the 7th as the depression deepened and moved north-east near western Scotland. Rain was widespread and heavy at times in the west with scattered thunderstorms in Scotland where falls exceeded 1 inch locally.

An anticyclone covering the Bay of Biscay or western Europe gave mainly dry sunny weather in southern and eastern England by day during the second week although some rain spread over the area at night. Depressions moving north-east near the north of Scotland, however, brought gales with more cloudy showery weather and periods of more continuous rain to the north and north-west. Frontal rain spread from the Atlantic to all districts on the night of the 9th-10th, and after a sunny day the following night was also wet with heavy rain locally in the north-west, as a wave depression moved east across Scotland. The 12th was very warm in southern England with afternoon temperatures exceeding 26°C in places, but further north a deep depression brought renewed rain and gales to western Scotland; gusts of 68 kt were recorded at Benbecula and Duirinish. Cloudy cooler weather spread to southern England also on the 13th.

The weather pattern changed on the 14th as an anticyclone from the south of Ireland slowly drifted across southern England to the continent giving four or five days of fine quiet weather over most of the country with progressively rising day temperatures; 27°C was recorded at some places in southern England on the 17th. Whit Monday (18th) remained generally fine and warm in the south but a thundery trough gave rain and scattered thunderstorms in the north, and rain spread over the whole country during the night persisting in south-east England for much of the following day.

After a generally bright showery day with normal temperature on the 20th, the 21st was dull and wet as a depression moved south-east to the west coast of Ireland and thence to the Bay of Biscay. Widespread overnight rain continued in parts of southern England on the 22nd becoming general again at night.

An easterly airstream became established over the British Isles on the 23rd as pressure rose to the north of Scotland and over Scandinavia. Depressions in the Bay of Biscay and over northern France maintained generally cloudy weather with occasional rain and scattered thunderstorms over southern England until the 25th but it was fine and very warm over most of the remainder of the country away from the east coast. Winds became rather variable on the 26th, and from then until the 28th dry and fine weather with day and night temperatures considerably above the

average extended to most of the country, although overnight fog in many southern and eastern districts was slow to clear during the mornings.

Fronts associated with a deepening depression to the west of the British Isles gave a wet day in Cornwall on the 28th but apart from heavy thunderstorms which broke out in London and the Home Counties during the evening it was fine elsewhere. The next day thunderstorms accompanied by torrential rain caused flooding in central and northern England and thundery rain and thunderstorms occurred in many parts of the country during the last two days of the month.

Pressure and Wind — Mean pressure was below the 1921-50 average in the north and above in the south, the deviation at 9 h ranging from -4.1 mb at Stornoway to +1.6 mb at Shoeburyness. Surface winds were predominantly between west and south-west until the 20th except for an interlude of variable winds on the 14th-15th and of southerlies on the 16th-17th. Winds were mainly southerly on the 21st-22nd as well and then easterly or variable until the end of the month. Winds reached gale force on thirteen days in Scotland and on the 1st, 3rd-5th, 7th-12th and 30th (eleven days) in England and Wales. Gales were fairly widespread, especially in the north, on the 7th-9th: a gust of 70 kt was recorded at Edinburgh, Blackford Hill on the 9th.

Temperature — Day temperatures were mostly about average during the first half of the month in Scotland and the first ten days in England and Wales. They were considerably above average during the second half, maxima being 4°-8°C above normal over wide areas on the 12th, 17th and 22nd-30th. Night temperatures were mostly above average except on the 15th when air frost was reported at a few places. In Scotland temperature fell to -2.2°C at Cairngorm (3,600 ft above MSL) on the 14th; at lower levels 0.0 was recorded at Blackbridge on the 2nd and at Fyvie Castle on the 14th.

Rainfall — In Scotland rainfall was more than 150 per cent of the average in the north and north west and more than 200 per cent near the Great Glen, but below the average in the east. In England and Wales amounts exceeded twice the average in parts of Wiltshire, Hampshire and Sussex, but was less than half the average over much of the country east of the Pennines and in the east Midlands.

Snow or sleet was reported on six days in Scotland.

Thunder was heard on fourteen days in Scotland and on the 3rd, 4th, 7th, 8th, 10th, 13th, 17th, 18th and 23rd-31st (seventeen days) in England and Wales. Thunderstorms were widespread and heavy during the last three days of the month.

Sunshine — Sunshine was mostly above average in east and north-east England but below elsewhere. At Tice it was the dullest May since at least 1927 and at Ross-on-Wye it was the 15th successive month with less than average sunshine.

Fog — Fog was observed in Scotland at one place or another at 9 h on twenty-five days in England and Wales on the 2nd, 6th, 7th, 9th, 11th, 13th, 18th, 20th and 23rd-31st (seventeen days) and was widespread on the 24th and 27th-29th.

Miscellaneous Phenomena — The aurora was reported in Scotland on only one night (1st).

TABLE I—DISTRICT VALUES— May

DISTRICTS	AIR TEMPERATURE					EARTH TEMP.		RAIN DAYS	RAIN-FALL	SUNSHINE
	Highest Max.	Lowest Min.	Max.	Min.	Mean	Mean 1 ft.	Mean 4 ft.			
	Difference from Average					% of Average				
0 SCOTLAND, N.	24.4	-2.2	+0.5	+1.3	+0.9	-	-	+2	138	75
1 SCOTLAND, E.	23.9	0.0	+1.0	+1.3	+1.1	-	-	-1	57	91
2 ENGLAND, N.E.	25.6	0.0	+2.1	+1.8	+2.0	+1.2	+0.5	-3	43	121
3 ENGLAND, E.	27.2	-0.6	+2.6	+1.9	+2.2	+1.2	+0.3	0	69	110
4 MIDLANDS	26.1	-0.6	+1.9	+1.8	+1.9	+1.4	+0.7	0	74	106
5 ENGLAND, S.E.	26.1	0.0	+1.6	+2.1	+1.8	+1.3	+0.9	+2	140	99
6 SCOTLAND, W.	25.0	-0.3	+0.4	+1.8	+1.1	+1.4	+0.1	+3	131	87

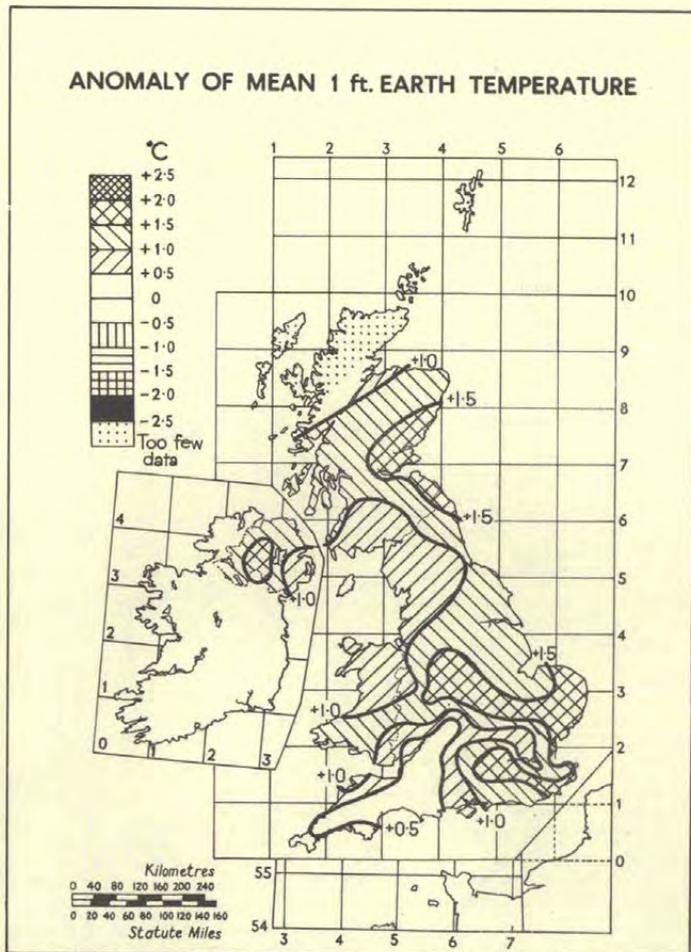
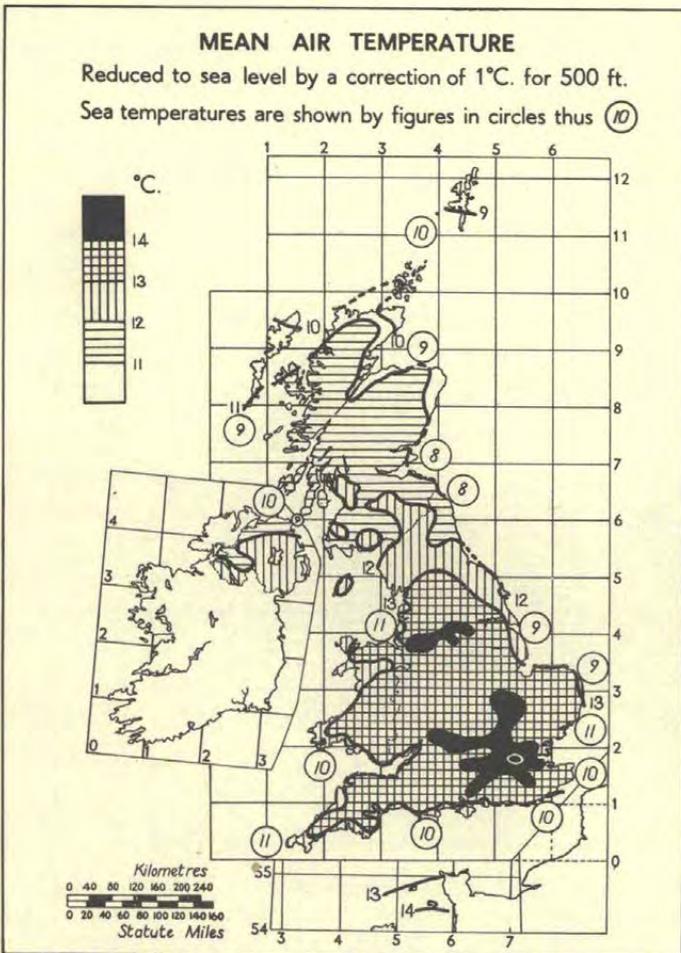
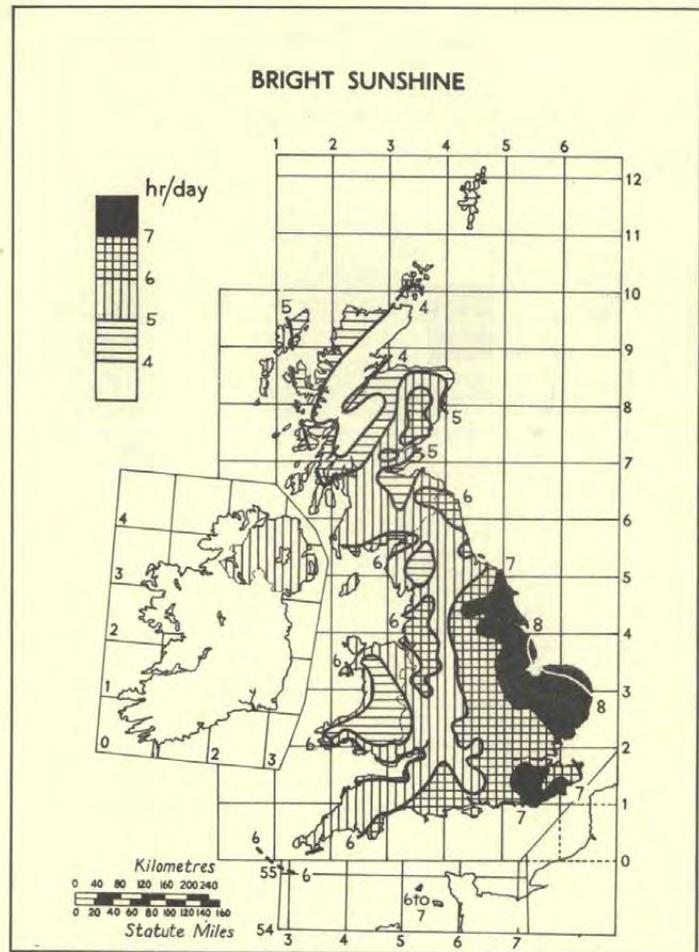
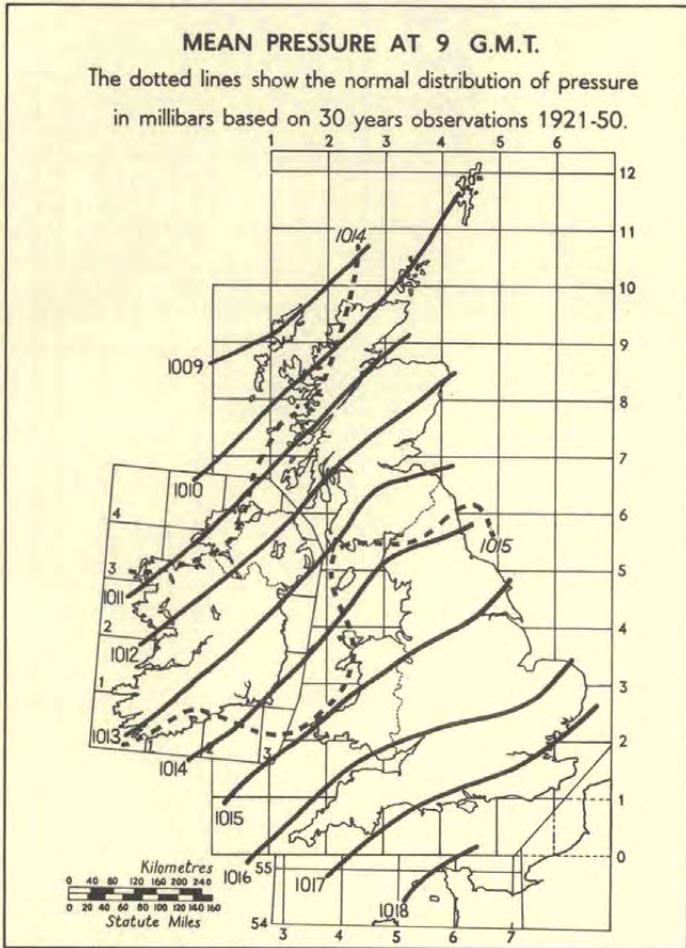
1964 (1908, revised 1928, 1941, 1956 and 1964)

DISTRICTS	AIR TEMPERATURE					EARTH TEMP.		RAIN DAYS	RAIN-FALL	SUNSHINE
	Highest Max.	Lowest Min.	Max.	Min.	Mean	Mean 1 ft.	Mean 4 ft.			
	Difference from Average					% of Average				
7 ENGLAND, N.W. and N. Wales	26.1	0.0	+1.5	+2.2	+1.8	+1.0	+0.8	+1	108	100
8 ENGLAND, S.W. and S. Wales	26.7	-1.7	+0.8	+1.4	+1.2	+0.9	+0.3	+1	98	87
N. IRELAND	22.8	0.0	+1.1	+1.3	+1.2	-	-	+2	92	88
SCOTLAND	25.0	-2.2	+0.6	+1.5	+1.0	-	-	+1	116	84
ENG. and WALES	27.2	-1.7	+1.7	+1.9	+1.8	-	-	0	95	104
SCC										

FH2A

TABLE II—SUMMARY OF AUTOGRAPHIC RECORDS OF WIND— May 1964 (1914)

DISTRICT, COUNTY AND PLACE	Height of Vane			Distribution of Mean Hourly Values of Wind Speed								Mean Hourly Wind Speed knots	Highest Velocities							
	Above Mean Sea Level	Above Ground	Effective Height	34 knots or more		22 to 33 knots		11 to 21 knots	4 to 10 knots	Less than 4 knots	No Record		Highest Hourly Wind			Highest Gust				
				Dates of Occurrence	Duration	No. of days	Duration	Duration	Duration	Duration	Duration		Veer from N	Speed	Hour ended at	Speed	Day and Time			
																	hr.	hr.	hr.	hr.
SCOTLAND																				
0 Zetland	Lerwick Observatory	304	33	33	8, 12, 13	23	10	77	329	268	47	0	13.0	220	40	13	12	61	8	1130
	Orkney Kirkwall	134	50	33	8	1	6	49	425	222	47	0	12.5	270	36	8	10	51	8	1000
	Caithness Downreay	110	39	30	-	0	13	107	442	195	0	0	14.4	150	33	18	12	53	12	1800
	Sutherland Shin	78	33	33	12	1	7	34	231	311	167	0	9.3	230	43	12	17	69	12	1620
	Ross & Stornoway (Coastguard)	120	40	36	3, 9, 10, 12, 13	28	18	208	287	155	66	0	16.6	180	49	12	15	67	12	1420
	Cromarty Duirinish	125	65	55	8, 12	7	11	115	313	228	81	0	12.7	200	42	12	15	68	12	1405
	Inverness Benbecula	69	51	35	3, 8, 9, 12	15	16	180	394	140	15	0	16.5	200	41	12	14	68	12	1250
1 Moray	Lossiemouth	101	80	60	-	0	7	32	304	298	110	0	10.4	230	27	8	09	49	8	0750
	Aberdeen Dyce	225	40	40	-	0	5	18	197	285	244	0	7.5	180	28	9	19	41	9	1510
	Angus Auchterhouse	827	62	50	-	0	7	32	304	298	110	0	10.4	230	27	8	09	49	8	0750
	Bell Rock Lighthouse	126	131	124	8, 9	12	14	118	382	164	68	0	14.6	230	42	8	03	59	8	0630
	Perth Rannoch	1006	56	57	8	1	12	144	274	196	99	30	13.2	260	34	8	06	58	9	1655
	Fife Leuchars	78	40	40	-	0	11	75	297	280	92	0	11.4	250	33	8	08	55	8	0055
	Midlothian Turnhouse	137	40	33	8	2	11	67	372	269	34	0	12.6	220	35	8	02	67	8	0115
	Edinburgh, Blackford Hill	496	50	34	7, 8, 9, 12	13	14	133	281	259	49	9	13.7	190	38	12	13	70	9	1755
6a Argyll	Tiree	89	60	47	3, 8, 9, 12	7	14	177	310	176	74	0	14.6	200	41	12	14	61	12	1250
	Bute Millport	50	34	34	-	0	4	9	224	418	93	0	8.5	170	26	12	12	58	8	0050
	Renfrew Paisley	188	81	31	-	0	8	40	399	229	76	0	11.6	230	30	8	01	54	8	0045
	Renfrew	71	41	39	-	0	8	40	399	229	76	0	11.6	230	30	8	01	54	8	0045
	Lanark Lowther Hill	2412	43	33	1, 7, 9, 12, 14	40	21	258	352	85	9	0	19.4	200	45	9	18	73	8	0030
	Ayr Prestwick Airport	68	33	33	-	0	5	22	425	235	62	0	11.5	230	31	7	24	50	8	0005
	Dumfries Eskdalemuir Observatory	825	50	35	-	0	7	30	183	339	192	0	8.2	200	33	9	16	53	9	1430
	Wigtown West Freugh	84	33	33	-	0	6	35	319	299	91	0	10.6	210	33	9	16	50	7	2205
ENGLAND and WALES																				
6b Isle of Man	Ronaldsway	119	64	39	7, 9	6	12	110	371	191	66	0	13.7	200	37	7	20	55	7	2055
	Point of Ayre	64	33	33	7	1	10	87	420	216	20	0	13.5	230	34	7	22	52	7	2115
2 Durham	Durham	389	53	33	-	0	6	33	254	346	111	0	9.9	230	30	7	24	53	8	0940
	South Shields	73	57	44	-	0	3	10	327	306	101	0	9.8	250	26	8	10	43	8	0740
	Lincoln Cranwell	268	47	47	-	0	9	38	266	365	75	0	10.4	240	31	7	22	52	7	2210
3 Norfolk	Gorleston	45	33	33	-	0	2	10	219	375	140	0	8.2	240	27	7	23	52	7	2140
	Suffolk Mildenhall	98	83	60	-	0	3	10	309	346	79	0	9.9	210	26	7	21	46	7	2045
	Bedford Bedford	327	42	30	-	0	12	61	359	276	48	0	12.1	230	32	7	22	46	7	2050
	Hertford Garston	307	50	33	-	0	0	0	90	512	142	0	6.3	240	17	7	21	38	7	1935
	Ayr Rothamsted	461	41	33	-	0	0	0	88	400	234	22	5.8	220	16	7	21	39	7	2150
	Essex Stansted	358	31	31	-	0	0	0	252	379	87	26	8.8	(240	21	7	22)	(35	7	2115)
	Coryton	66	57	48	-	0	8	31	363	273	77	0	11.3	190	26	3	06	47	7	2155
	Shoeburyness	118	106	91	-	0	0	0	90	368	286	0	5.6	220	19	7	22	46	7	2120
4 Yorks, W.R.	Sheffield	533	83	35	-	0	0	0	106	495	143	0	6.5	230	20	7	21	41	7	2040
	Warwick Edgbaston	643	118	73	-	0	4	18	295	356	75	0	10.1	240	28	7	22	52	7	2105
	Elmdon	343	31	31	-	0	0	0	137	468	139	0	6.9	200	17	7	20	34	7	1815
	Buckingham Amersham	500	50	50	-	0	0	0	188	395	161	0	7.6	230	20	8	15	45	7	2055
	Stafford Keele	706	50	33	-	0	7	60	294	212	146	32	10.7	250	32	7	20	49	7	1950
	Gloucester Avonmouth	92	61	33	-	0	0	0	195	479	70	0	8.2	240	19	7	21	42	7	2110
5 London	Kingsway	208	143	41	-	0	1	2	265	417	60	0	9.1	220	25	7	20	41	7	2025
	Middlesex London(Heathrow) Airport	115	33	33	-	0	1	2	207	325	210	0	7.2	230	25	7	21	43	7	2020
	Hampton	139	101	100	-	0	0	0	224	367	153	0	7.9	220	21	7	20	42	7	2060
	Surrey Kew Observatory	92	75	50	-	0	1	1	208	388	147	0	7.7	250	24	7	21	43	4	1445
	Gatwick	232	38	33	-	0	1	1	251	237	253	2	7.2	220	22	7	21	36	7	2040
	Kent Isle of Grain	48	40	33	-	0	3	7	174	368	195	0	7.3	060	24	31	16	40	7	2250
	Dover	68	38	62	-	0	1	2	247	345	150	0	8.2	250	24	7	21	46	7	2060
	Sussex Thorney Island	75	65	42	-	0	2	3	299	308	134	0	8.9	240	23	7	20	36	7	1905
	Hampshire Hurn	86	53	46	-	0	4	8	420	273	43	0	11.1	200	25	3	04	33	3	0345
	Calshot	50	41	33	-	0	3	6	266	330	142	0	8.9	230	25	7	21	39	7	2045
	S. Farnborough	316	69	35	-	0	3	5	290	257	192	0	8.5	240	25	7	22	39	7	2110
	Berkshire Abingdon	295	40	40	-	0	0	0	251	352	141	0	8.3	270	21	3	15	44	7	1945
	Wiltshire Larkhill	491	51	36	-	0	1	1	200	325	218	0	7.2	220	22	9	23	37	7	1755
	Boscombe Down	425	55	55	-	0	3	3	219	304	218	0	7.6	210	23	7	19	41	7	1845
	Porton	406	44	44	-	0	8	43	348	266	87	0	11.1	220	29	7	23	51	7	2315
7a Cumberland	Carlisle	137	42	30	-	0	4	17	326	344	56	1	10.5	260	32	7	23	47	7	2215
	Sellafield	83	39	35	-	0	9	64	404	225	51	0	12.6	230	32	8	03	55	7	2320
	Spadeadam	959	51	50	-	0	23	272	303	55	17	0	22.2	250	51	7	23	67	7	2155
	Westmorland Great Dun Fell	2812	33	33	1, 3-12	97	14	180	367	119	69	0	15.7	220	37	9	14	55	9	1350
	Moor House	1960	50	45	2, 5, 9	9	13	115	418	162	21	0	14.9	240	41	7	23	55	7	2220
	Lancashire Squires Gate	88	55	35	7, 8	8	5	35	244	307	158	0	9.3	250	32	7	23	47	7	2350
	Southport	59	41	33	-	0	4	13	319	313	95	4	9.9	200	25	7	24	50	7	2305
	Fleetwood	112	50	31	-	0	8	65	390	248	41	0	12.4	230	33	7	23	50	7	2225
	Speke	84	41	33	-	0	1	3	300	376	65	0	9.7	240	23	8	15	56	7	1955
	Manchester W/Centre	268	147</																	



RAINFALL

MAY 1964

The equivalent values in mm, are given in round numbers. The exact relation is 10 in. = 254 mm.

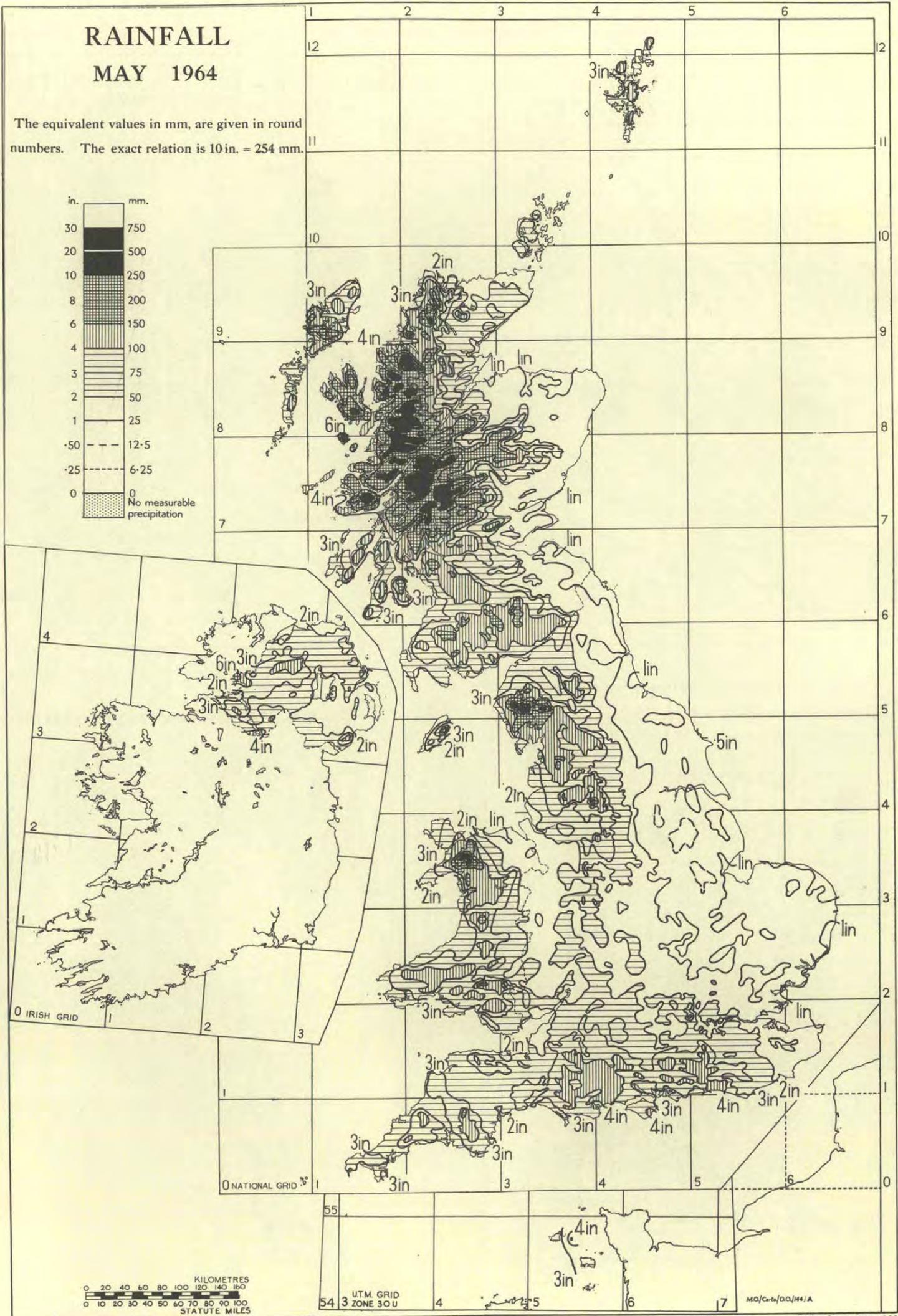
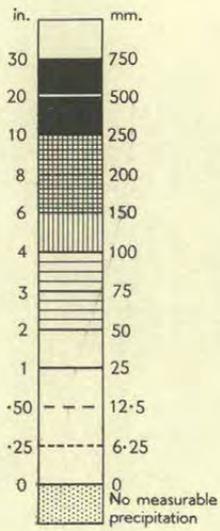


TABLE III (continued)—SUMMARY OF OBSERVATIONS OF TEMPERATURE, RAINFALL, SUNSHINE AND WEATHER May 1964

DISTRICT, COUNTY AND PLACE	Terminal Hours of Observation	Height of Station above Mean Sea Level	AIR TEMPERATURE IN DEGREES CELSIUS								MEAN EARTH TEMPERATURE		RAINFALL (Terminal hour 9 G.M.T.)				WEATHER Number of days								BRIGHT SUNSHINE								
			Means of		Mean Temperature Mean of A and B	Difference from Average	Highest Maximum and Lowest Minimum				1 ft.	4 ft.	Total Fall	Percentage of Average	Most in a day		Precip'n		Snow or Sleet	Snow lying at 9h	Hail	Ice or snow pellets etc.	Thunder heard	Fog at 9h.	Air Frost	Grass min. below 0°C	Gale	Daily Mean	Percentage of Average				
			A	B			Maximum	Date	Minimum	Date					Amount	Date	0-1in. (0-25mm) or more	0-0.1in. (1-6mm) or more															
			G.M.T.	ft.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	in.	%	in.	Date	0-1in. (0-25mm) or more	0-0.1in. (1-6mm) or more										hr	%			
4 MIDLAND COUNTIES—cont.																																	
Yorks., W. Riding—cont.	Huddersfield	9-9	325	18.1	8.4	13.3	+2.5	25.0	17	5.0	16	12.4	9.6	3.48	-	1.87	30	17	12	0	0	0	0	0	0	0	0	0	0	6.38	131		
	Oakes	21-9	761	17.2	7.5	12.3	+1.8	24.2	17	4.2	15	11.0	8.4	3.56	133	1.23	30	17	12	0	0	0	0	0	0	0	0	0	0	5.97	116		
	Bradford	9-9	439	17.0	8.2	12.6	+2.0	23.9	17	4.4	15	11.7	8.6	2.30	94	.72	30	17	12	0	0	0	0	0	0	0	0	0	0	6.15	110		
	Ilkley	9-9	315	17.7	8.2	12.9	+2.1	24.4	17	2.2	15	-	-	2.13	81	.54	30	11	10	0	0	0	0	0	0	0	0	0	0	6.55	125		
	Sheffield	9-9	429	18.2	8.7	13.5	+2.2	23.9	17	5.0	4	12.6	9.1	2.18	95	.74	29	13	10	0	0	0	0	0	0	0	0	0	0	-	-		
	Wakefield	9-9	121	18.8	8.4	13.6	+2.1	24.4	17	4.4	15	11.8	9.4	1.90	86	.61	30	12	11	0	0	0	0	0	0	0	0	0	0	3	-		
	Pontefract	9-9	255	17.5	8.3	12.9	+2.0	22.8	17	3.9	15	-	-	1.10	55	.34	29	12	9	0	0	0	0	0	0	0	0	0	0	0	-		
	Bramham	9-9	177	17.9	7.7	12.8	-	22.8	17	4.4	15,16	-	-	1.25	58	.22	29	17	9	0	0	0	0	0	0	0	0	0	0	7.14	-		
	Cawood	9-9	20	18.5	7.5	13.0	-	23.9	17	1.7	15	11.9	9.8	.94	47	.18	29	12	9	0	0	0	0	0	0	0	0	0	0	6.57	-		
	Askham Bryan	9-9	110	18.1	7.7	12.9	-	23.3	17	3.9	15	-	-	.89	42	.20	21,29	12	9	0	0	0	0	0	0	0	0	0	0	0	7.20	126	
	Buxton	9-9	1007	15.6	7.4	11.5	+2.1	21.1	17	2.8	10	11.6	9.2	3.81	132	.92	30	15	14	0	0	0	0	0	0	0	0	0	0	-	-		
	Chapel en le Frith	9-9	732	16.9	7.9	12.8	-	22.2	17,27	1.7	15	-	-	2.58	-	.62	30	15	13	0	0	0	0	0	0	0	0	0	0	0	-	-	
	Mackworth	9-9	293	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	Belper	9-9	203	18.9	7.5	13.2	+1.9	23.9	17,27,29	1.1	15	-	-	2.09	94	.65	31	14	10	0	0	0	0	0	0	0	0	0	0	0	6.29	-	
	Derby	9-9	159	18.8	8.9	13.9	-	23.9	17,27,30	2.8	15	-	-	1.94	-	.39	31	15	12	0	0	0	0	0	0	0	0	0	0	0	6.27	-	
	Morley	9-9	350	17.8	8.3	13.1	-	22.8	27,30	2.8	15	-	-	2.28	103	.71	30	14	12	0	0	0	0	0	0	0	0	0	0	0	-	-	
	Chesterfield	9-9	298	18.7	7.9	13.3	-	23.3	17,26,30	3.9	15	-	-	1.77	-	.43	29	12	12	0	0	0	0	0	0	0	0	0	0	0	-	-	
	Sutton Bonington	9-9	157	18.3	7.9	13.1	+2.0	23.9	12	2.8	15	11.7	10.0	1.20	64	.28	2	15	10	0	0	0	0	0	0	0	0	0	0	6.23	109		
	Watnall	21-9	385	18.5	8.1	13.3	-	24.5	30	3.7	14	-	-	1.55	75	.26	2	14	10	0	0	0	0	0	0	0	0	0	0	0	6.20	107	
	Nottingham Training College	9-9	189	-	-	-	-	23.9	29,30	3.9	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Mansfield	9-9	362	18.2	8.3	13.3	+2.1	24.4	30	5.0	15,19	12.6	-	.79	37	.17	2	10	8	0	0	0	0	0	0	0	0	0	0	0	-	-	
	Nottingham	9-9	192	18.9	8.9	13.9	+2.2	25.0	30	4.4	14,15	12.7	-	1.03	52	.37	4	9	8	0	0	0	0	0	0	0	0	0	0	0	5.71	107	
	Warsop	9-9	150	18.5	7.4	12.9	-	23.9	12,30	1.1	15	-	-	.65	36	.12	1,9	11	9	0	0	0	0	0	0	0	0	0	0	0	6.60	-	
	Finningley	21-9	34	19.0	8.9	13.9	+2.4	24.8	29	5.9	15	-	-	.52	-	.11	2	10	4	0	0	0	0	0	0	0	0	0	0	0	6.95	-	
	Newtown Linford	9-9	392	18.1	7.6	12.9	-	23.3	12,17,27	2.8	15	-	-	1.21	-	.20	10	14	10	0	0	0	0	0	0	0	0	0	0	0	6.17	-	
	Caldecott	9-9	175	18.7	6.9	12.8	-	24.4	12	1.7	15,16	-	-	.79	-	.15	1	11	7	0	0	0	0	0	0	0	0	0	0	2	6.65	-	
	Bugbrooke Mills	9-9	228	18.6	7.6	13.1	-	24.4	12	1.1	15	12.1	9.4	.95	-	.17	1	10	8	0	0	0	0	0	0	0	0	0	0	0	6.48	-	
	Raunds	9-9	193	19.3	7.9	13.6	-	26.1	12	2.2	15	13.3	9.2	.99	51	.18	1	12	8	0	0	0	0	0	0	0	0	0	0	0	6.27	-	
	Wittering	21-9	212	18.9	8.1	13.5	-	25.6	12	3.4	15	-	-	.75	-	.16	2	13	8	0	0	0	0	0	0	0	0	0	0	5	7.20	-	
	Birmingham K.E.S.*	9-9	450	17.9	8.6	13.3	-	22.8	17	3.3	15	-	-	1.87	-	.42	30	15	12	0	0	0	0	0	0	0	0	0	0	0	0	-	-
	Edgbaston	21-9	536	17.6	8.9	13.3	+1.9	23.3	17	5.6	15	10.0	8.9	1.70	66	.30	30	16	11	0	0	0	0	0	0	0	0	0	0	0	5.55	103	
	Luddington	9-9	138	18.4	7.7	13.1	-	24.4	12	0.0	15	-	-	1.33	65	.32	30	15	8	0	0	0	0	0	0	0	0	0	0	0	3	5.96	-
	Stratford on Avon	9-9	160	18.6	7.6	13.1	-	23.9	12,17	-0.6	15	14.0	-	1.34	67	.30	30	14	9	0	0	0	0	0	0	0	0	0	0	0	4	5.77	-
	Elmdon	21-9	319	18.2	8.0	13.1	-	24.0	12	0.1	15	-	-	1.34	60	.36	30	13	10	0	0	0	0	0	0	0	0	0	0	0	1	6.07	-
	Shipston on Stour	9-9	365	17.8	7.8	12.8	-	23.9	12	2.2	15	11.4	-	1.53	-	.34	30	16	9	0	0	0	0	0	0	0	0	0	0	0	2	6.00	-
	Wellesbourne	9-9	153	18.2	7.4	12.8	-	24.4	12	0.0	15	12.5	10.4	1.92	89	.53	29	16	7	0	0	0	0	0	0	0	0	0	0	0	4	5.26	-
	Moreton Morrell	9-9	280	18.4	7.8	13.1	-	23.9	12,17	1.1	15	-	-	1.80	-	.34	29	15	8	0	0	0	0	0	0	0	0	0	0	0	1	5.49	-
	Coventry	9-9	338	17.9	7.5	12.7	+1.4	22.8	17	2.2	15	12.3	9.2	1.55	71	.24	30	14	12	0	0	0	0	0	0	0	0	0	0	0	3	5.41	99
	Rugby	9-9	385	18.4	7.8	13.1	+2.0	23.9	12	2.2	15	12.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Oxford	9-9	208	18.6	9.3	13.9	+1.9	25.0	12	4.4	15	14.0	11.2	1.75	86	.34	21	15	9	0	0	0	0	0	0	0	0	0	0	0	6.15	100	
	Grendon Underwood	9-9	220	18.8	7.5	13.1	-	24.4	12	-0.6	15	13.2	10.1	1.63	-	.37	22	11	10	0	0	0	0	0	0	0	0	0	0	0	3	6.17	-
	Medmenham	9-9	98	19.0	7.8	13.4	-	25.0	12	0.0	15	-	-	1.90	-	.44	31	12	10	0	0	0	0	0	0	0	0	0	0	0	0	9	-
	Aylesbury	9-9	316	18.5	8.3	13.4	-	25.6	12	2.2	15	-	-	1.70	82	.40	31	12	8	0	0	0	0	0	0	0	0	0	0	0	0	6.22	-
	Stafford	9-9	587	16.8	8.2	12.5	-	22.2	17,27	3.3	15	1																					

TABLE IV—SUMMARY OF OBSERVATIONS AT FIXED HOURS

May

1964

DISTRICT, COUNTY AND PLACE	Hour of Observation	MEAN PRESSURE		MEAN TEMPERATURE AND HUMIDITY				CLOUD AMOUNT (OKTAS)					VISIBILITY										WIND, NUMBER OF OBSERVATIONS														
		At Mean Sea Level	Difference from Average	Dry Bulb	Depression of Wet Bulb	Vapour Pressure	Relative Humidity	Mean Amount	NO. OF OBSERVATIONS					NUMBER OF OBSERVATIONS										FORCE (0-12)				DIRECTION									
									0	1	2	3	4	0-44 yd.	45-310 yd.	320-430 yd.	440-1,000 yd.	1,100-2,100 yd.	2,200-4,300 yd.	3-6 mi.	7-12 mi.	13-24 mi.	25 mi. or over	34 or more	6, 7, 8	9, 10, 11	12	Calm	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	
		ft.	mb.	mb.	°C	°C	mb.	%	0	1	2	3	4	0-44 yd.	45-310 yd.	320-430 yd.	440-1,000 yd.	1,100-2,100 yd.	2,200-4,300 yd.	3-6 mi.	7-12 mi.	13-24 mi.	25 mi. or over	34 or more	6, 7, 8	9, 10, 11	12	Calm	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	
0 SCOTLAND, N.	G.M.T.	ft.	mb.	mb.	°C	°C	mb.	%	0	1	2	3	4	0-44 yd.	45-310 yd.	320-430 yd.	440-1,000 yd.	1,100-2,100 yd.	2,200-4,300 yd.	3-6 mi.	7-12 mi.	13-24 mi.	25 mi. or over	34 or more	6, 7, 8	9, 10, 11	12	Calm	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	
Zetland Lerwick Observatory	3 273	1010.3	-	7.2	0.6	9.3	91	6.3	0	3	6	9	9	4	1	3	0	0	0	2	5	7	8	4	1	3	9	18	0	2	3	3	5	6	8	4	0
Orkney Kirkwall	9 86	1010.5	-3.8	9.0	1.1	9.7	85	6.4	0	3	5	11	12	0	0	0	0	0	0	2	8	6	5	10	1	3	18	8	0	2	1	5	3	6	6	7	0
Caithness Wick	15 86	1011.0	-	10.9	1.8	10.1	77	5.9	0	5	5	9	12	0	0	0	0	0	0	2	5	5	7	12	0	1	18	9	0	2	3	6	4	5	3	7	1
Sutherland Cape Wrath	21 371	1011.2	-	7.7	0.8	9.4	89	5.9	0	5	3	15	7	1	0	1	0	0	0	7	5	10	7	0	0	19	10	2	0	2	4	7	2	10	4	0	
Ross & Cromarty Stornoway	3 16	1009.1	-	8.6	0.4	10.6	94	5.8	0	7	5	4	15	0	0	0	0	0	0	10	9	10	2	0	0	18	12	1	2	5	2	3	8	7	3	0	
Inverness Benbecula	9 21	1009.0	-4.1	10.5	1.1	10.9	86	6.0	0	3	5	16	6	1	0	0	0	0	0	2	6	18	3	0	5	13	11	2	0	7	2	10	4	3	1	0	
1 SCOTLAND, E.	15 16	1009.8	-	11.0	1.3	11.1	84	6.5	0	1	6	14	10	0	0	0	0	0	0	6	10	7	8	0	6	15	9	0	0	9	2	4	7	5	3	1	0
Moray Kinloss	21 16	1010.1	-	9.0	0.7	10.4	90	5.8	0	4	8	11	7	1	0	0	0	0	0	6	7	11	6	0	2	9	20	0	2	9	2	1	8	7	2	0	1
Aberdeen Dyce	3 193	1011.7	-	7.5	0.7	9.4	90	6.5	1	4	12	7	6	0	2	3	3	1	2	2	4	9	5	0	0	6	13	12	1	1	3	5	6	5	6	2	1
Rattray Head	9 108	1011.5	-2.8	11.5	2.3	9.9	73	6.2	1	2	4	16	5	3	0	0	0	0	0	3	6	6	11	0	2	17	12	0	1	3	3	5	6	5	3	1	0
Fife Leuchars	15 108	1011.9	-	9.7	1.4	9.8	83	6.0	0	2	7	14	2	6	0	3	1	1	1	1	7	14	0	0	6	18	11	1	4	1	3	5	8	2	7	0	1
Midlothian Turnhouse	21 108	1012.1	-	9.2	1.2	9.9	85	5.7	0	2	10	13	2	4	0	4	0	0	0	1	6	8	12	0	0	15	15	1	5	1	4	4	9	3	4	0	0
6a SCOTLAND, W.	3 38	1011.6	-	8.0	0.6	9.8	91	5.9	0	4	8	6	10	3	0	1	2	4	2	0	9	9	3	2	2	9	15	5	0	3	4	1	2	9	7	0	2
Argyll Tiree	9 38	1012.1	-2.7	11.0	1.7	10.4	80	6.1	0	3	7	12	8	1	0	0	0	0	0	2	5	1	4	0	6	16	9	0	0	2	9	1	2	8	8	1	1
Renfrew Renfrew	15 38	1012.0	-	13.0	2.6	10.6	72	6.0	1	2	5	15	8	0	0	0	0	0	0	3	3	1	2	15	7	0	6	16	9	0	0	2	0	8	9	8	1
Lanark Lowther Hill	21 38	1012.2	-	9.5	1.2	10.1	85	5.6	0	6	5	11	5	4	0	1	3	2	1	4	7	7	6	0	12	17	2	0	4	5	2	0	9	8	1	1	
Ayr Prestwick Airport	3 69	1011.9	-	9.2	0.7	10.1	90	6.5	0	2	6	9	12	2	0	0	1	3	2	2	4	5	13	1	0	12	15	3	0	2	8	0	3	14	1	0	
Dumfries Eskdalemuir Observatory	9 778	1013.5	-	7.1	0.6	9.3	91	5.9	0	5	7	8	11	0	0	0	0	0	0	1	3	8	7	9	0	0	6	21	4	7	2	1	0	7	7	3	0
Wigtown Mull of Galloway	15 778	1013.6	-1.3	10.8	1.8	10.2	79	6.6	0	2	5	11	13	0	0	0	0	0	0	2	6	12	11	0	2	8	20	1	2	5	2	0	6	12	3	0	
2 ENGLAND, N.E.	21 260	1013.0	-	10.8	1.3	10.9	85	6.0	0	3	7	10	8	3	0	3	0	0	0	1	0	2	11	14	1	2	9	10	1	3	3	2	1	12	8	0	
Northumberland Acklington	3 151	1013.1	-	8.3	0.7	10.0	91	5.6	2	5	4	10	8	2	0	1	0	3	3	1	5	5	7	6	1	0	17	2	6	0	1	1	3	9	7	2	
	9 151	1013.4	-	12.3	2.2	10.6	74	6.2	0	2	7	17	5	0	0	0	0	0	0	2	7	5	10	7	0	3	18	10	0	5	2	3	1	3	11	6	0
	15 151	1013.2	-	14.4	3.1	10.9	67	6.2	0	3	4	17	7	0	0	0	0	0	0	3	4	9	5	10	0	7	13	10	1	2	5	1	5	5	10	2	0
	21 151	1013.6	-	10.2	1.1	10.7	86	5.8	0	4	6	12	8	1	0	0	1	1	1	4	7	7	9	1	0	0	13	15	3	5	2	0	2	4	11	3	1

Monthly Weather Report

OF THE METEOROLOGICAL OFFICE

Summary of observations compiled from returns of official stations and voluntary observers



Volume 81 Number 6

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June 1964 — *Changeable; high rainfall in the south east.*

Weather was mainly cyclonic in character until the 21st with troughs or depressions over or near the British Isles, but during the remainder of the month a ridge of high pressure extended from the Azores across England and Wales to Germany.

Disturbances moving east along the English Channel gave rain over much of England and Wales during the first two days of the month, rain being heavy at times with occasional thunderstorms in the south-east on the 1st. Cool easterly winds kept day temperatures as much as 8°C below normal.

The 3rd was a quiet day with about average temperature but rain spread from the south-west as a deepening depression approached western Ireland, and rain became heavy and thundery in many districts on the 4th as a trough associated with the depression moved slowly east across the country. The frontal rain cleared eastern England on the 5th, but a depression moving north-east towards Northern Ireland brought a renewal of widespread rain on the 6th followed by a day of frequent thundery showers on the 7th as the depression moved away from Scotland further northwards.

An anticyclone moving slowly north-eastwards from the Bay of Biscay maintained dry sunny weather over most of the country on the 8th, and in south-east England during the next three days, although a trough from the Atlantic gave over an inch of rain in parts of south-west Scotland on the 9th. Day temperatures rose progressively in the south-east reaching 25°C locally on the 10th. The 11th was a little cooler, and the fine spell in the south-east was temporarily broken on the 12th by thunderstorms in a trough moving eastwards which gave rain over most of the country during the night. After a fair day the following night was also wet with thunderstorms in the south-east during the evening.

The next few days were unsettled and rather cool. Rain in a westerly airstream reached western districts on the 14th becoming widespread at night. There were long sunny periods in the south during the next two days but frontal rain from the Atlantic reached western Scotland on the 16th. Winds fell light on the 17th and troughs over the British Isles became slow-moving giving periods of heavy rain during the 17th and 18th; Tunbridge Wells recorded over 2 inches on the 18th.

An intensifying ridge of high pressure to the west of the British Isles brought cool northerly winds to all districts during the next three days. Light snow fell in parts of the Scottish Highlands and there were frequent showers and occasional thunderstorms from the 19th to the 21st. Maximum temperature at Kew on the 21st was the lowest for that date since 1886.

Winds became light and variable on the 22nd and day temperatures began to rise. By the 24th a ridge of high pressure extended eastward across the country and the remainder of the month was generally drier and warmer. Many places in southern and central England had more than 12 hours of sunshine on the 26th and 27th, but rather dull weather with occasional drizzle in the extreme north-west on the 26th moved slowly southwards, reaching southern England on the 28th. The month ended with two mainly dry sunny days with temperature near average.

Pressure and Wind — Mean pressure was below the 1921-50 average, the deficit at 9h ranging from 1.6 mb at Lerwick to 0.2 mb at Stornoway. Surface winds were easterly at first veering to between south and south-east on the 4th, and becoming mainly south-westerly from the 7th to the 16th, after which winds were predominantly north-westerly or variable until the end of the month. Winds reached gale force in Scotland on 6 days (15th (4 days) in England and Wales. A gust of 56 kt was recorded at 16th, after which winds predominantly north-westerly or variable until the end of the month. Winds reached gale force in Scotland on 6 days, mainly during the second half of the month, and on the 1st, 7th, 12th and 15th (4 days) in England and Wales. A gust of 56 kt was recorded at Port Talbot on the 1st.

Temperature — In England and Wales day temperatures were considerably below the average on the 1st and 2nd and from about the 15th to the 23rd (5°-6°C below around the 20th), and above the average for some days during the second and fourth weeks. Night temperatures were mainly above the average until the 18th. In Scotland the warmest period occurred from the 23rd to the 26th, and the highest temperature recorded, 23.9°C in the Edinburgh area, was the lowest absolute maximum temperature during June for Scotland as a whole since 1931.

Extremes included (England and Wales) 27.2°C at Gillingham, Kent on the 27th, 0.0°C at Malham Tarn and Stratford on Avon on the 20th; (Scotland) 23.9°C at Davidson's Mains on the 26th, -4.4°C at Cairngorm on the 20th; (Northern Ireland) 22.2°C at Larne on the 26th, -1.1°C at Lough Bradon on the 2nd.

Rainfall — Rainfall was below average in many western districts being 75 per cent below in parts of north-west England, North Wales and south-west England. A feature of the month, however, was the heavy thundery rain, especially in south-east England. Amounts about 175 per cent of the average were recorded near the mouth of the Tay in Scotland, and rainfall exceeded 200 per cent of the average south-east of a line from the Wash to the Isle of Wight, and 300 per cent of the average in some coastal parts of Kent and Sussex. At Worthing it was the wettest June since rainfall records began in 1887.

Thunder was heard in Scotland on 12 days and in England and Wales on the 1st, 2nd, 4th-7th, 10th, 12th-14th, 16th, 18th-23rd (17 days). Thunderstorms were widespread on the 4th and 12th.

Snow or sleet was observed in Scotland on 5 days (1st, 2nd and 18th-20th) and was reported lying on the Cairngorms on the 2nd, 3rd and 19th-22nd (6 days).

Sunshine — In Scotland sunshine amounts varied considerably between east and west. It was above average in many places in the east but deficits of 30 hours or more were reported from the south-west. In England and Wales no station recorded more than the average, percentages varying between 100 at Berwick on Tweed and 58 at Sheffield.

Fog — In Scotland fog was observed at 9h at one place or another on 10 days and in England and Wales on 16 days; it was recorded at a number of places in south-east England on the 24th.

Miscellaneous Phenomena — The aurora was not seen during June.

TABLE I—DISTRICT VALUES— JUNE,

DISTRICTS	AIR TEMPERATURE					EARTH TEMP.		RAIN DAYS	RAIN-FALL	SUNSHINE
	Highest Max.	Lowest Min.	Max.	Min.	Mean	Mean 1 ft.	Mean 4 ft.			
	Difference from Average					% of Average				
0 SCOTLAND, N.	21.7	-4.4	-0.2	-0.5	-0.4	-	-	+2	104	99
1 SCOTLAND, E.	23.9	-3.3	-0.3	-0.3	-0.3	-	-	0	114	104
2 ENGLAND, N.E.	25.6	1.1	-1.2	+0.2	-0.5	-0.5	+0.5	+3	146	75
3 ENGLAND, E.	26.7	1.1	-0.8	+0.2	-0.3	+0.1	+0.5	+5	247	77
4 MIDLANDS	25.0	0.0	-1.7	0.0	-0.9	-0.1	+0.5	+2	137	68
5 ENGLAND, S.E.	27.2	2.2	-1.1	+0.1	-0.5	+0.5	+0.7	+3	203	79
6 SCOTLAND, W.	23.3	-1.5	-1.3	-0.1	-0.7	-0.1	-0.1	-1	117	88

1964

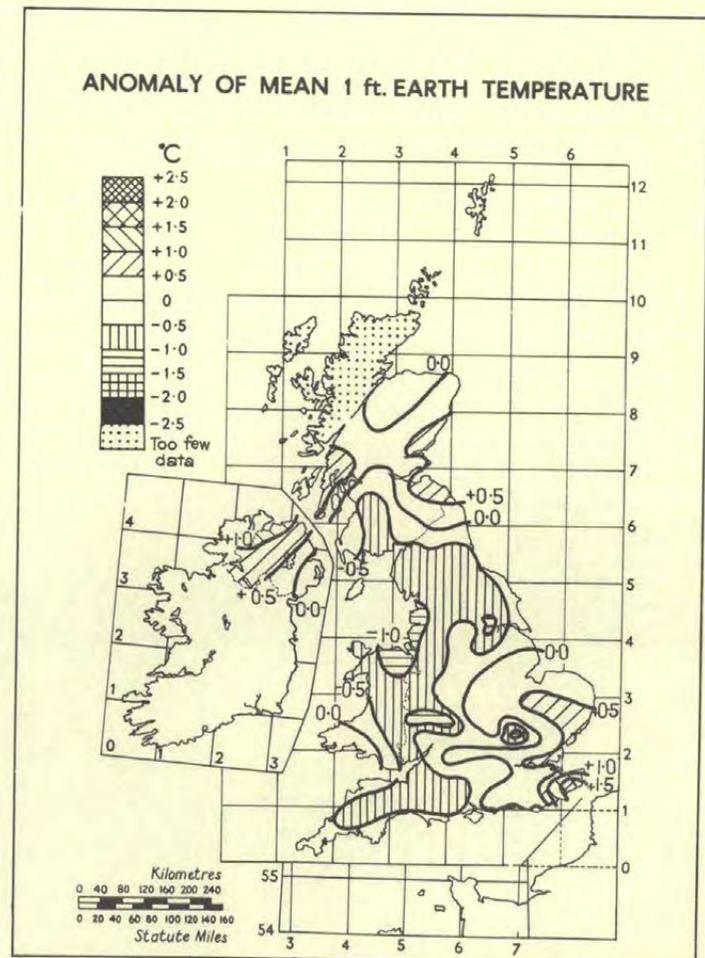
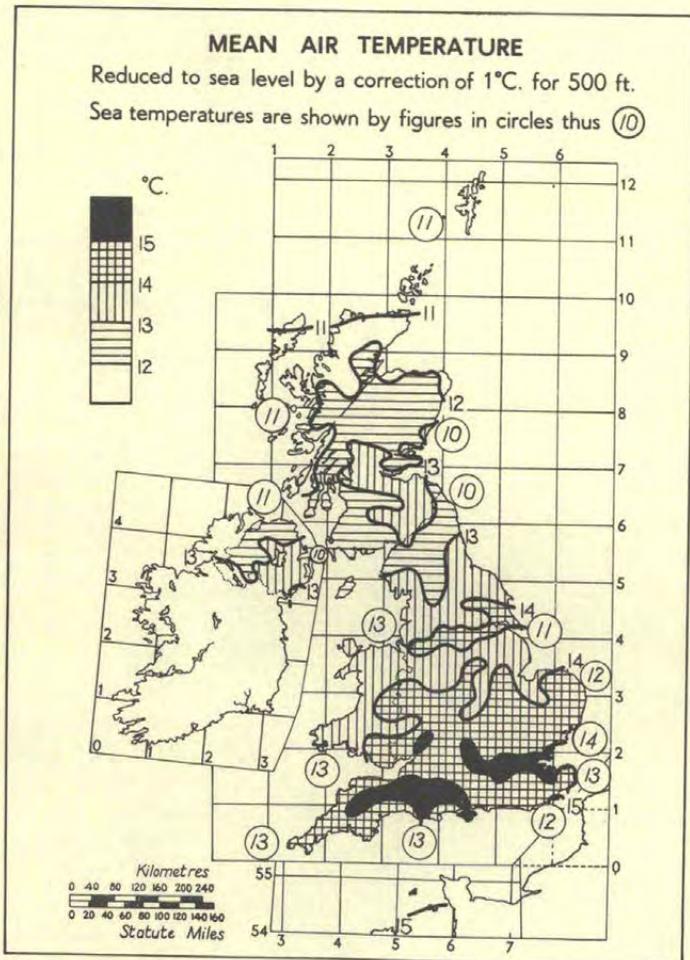
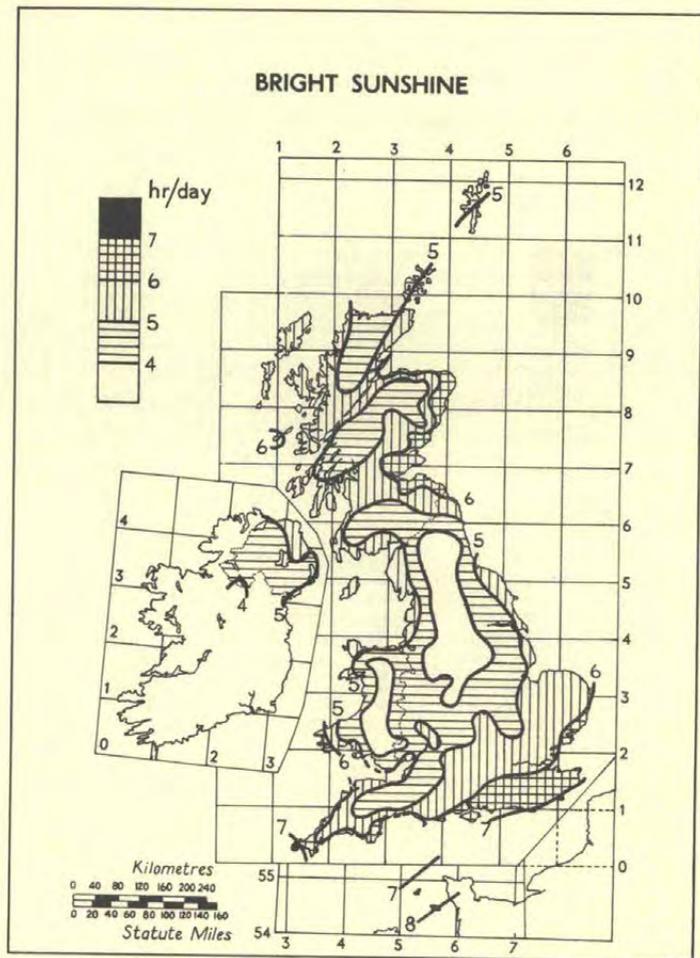
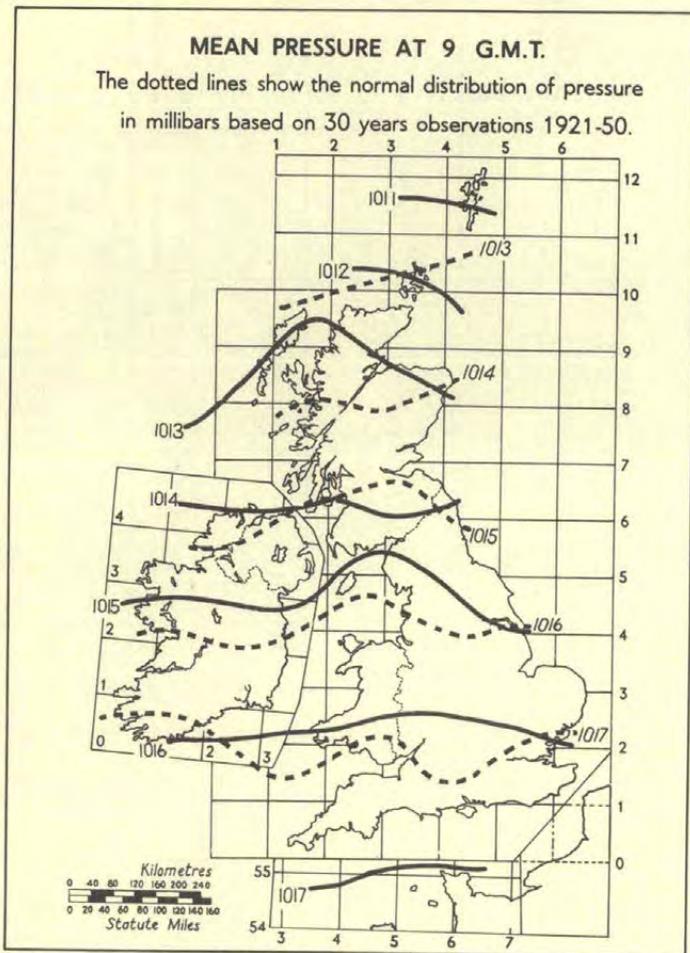
(1908, revised 1928, 1941, 1956 and 1964)

DISTRICTS	AIR TEMPERATURE					EARTH TEMP.		RAIN DAYS	RAIN-FALL	SUNSHINE
	Highest Max.	Lowest Min.	Max.	Min.	Mean	Mean 1 ft.	Mean 4 ft.			
	Difference from Average					% of Average				
7 ENGLAND, N.W. and N. Wales	26.1	1.2	-1.8	+1.0	-0.4	-0.9	-0.1	+1	87	74
8 ENGLAND, S.W. and S. Wales	25.0	0.6	-1.2	+0.3	-0.4	-0.1	+0.3	-1	111	74
N. IRELAND	22.2	-1.1	-1.1	-0.4	-0.8	-	-	+1	107	80
SCOTLAND	23.9	-4.4	-0.6	-0.3	-0.5	-	-	0	102	97
ENG. and WALES	27.2	0.0	-1.3	+0.3	-0.5	-	-	+2	139	75

FH2A

TABLE II—SUMMARY OF AUTOGRAPHIC RECORDS OF WIND— JUNE, 1964 (1914)

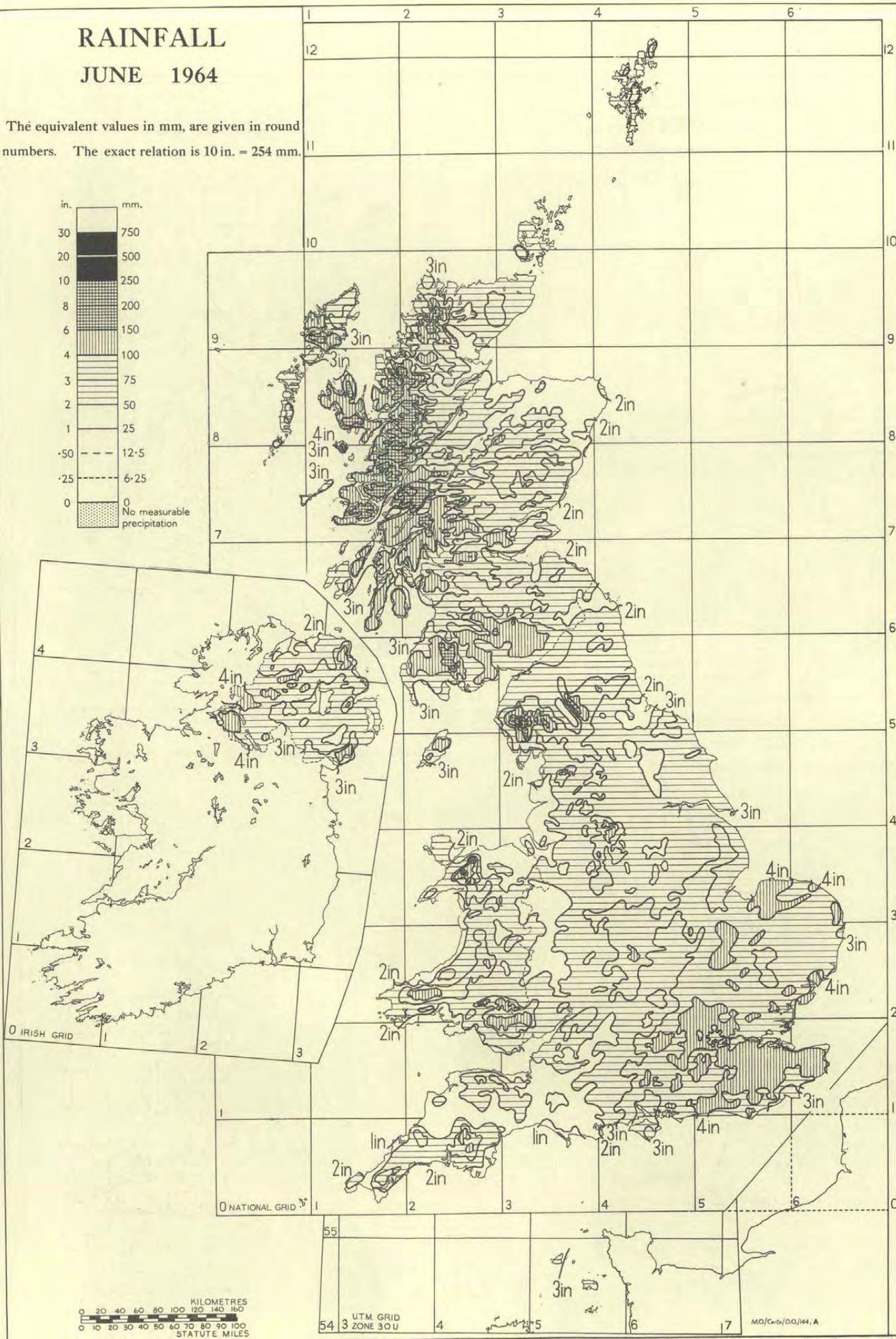
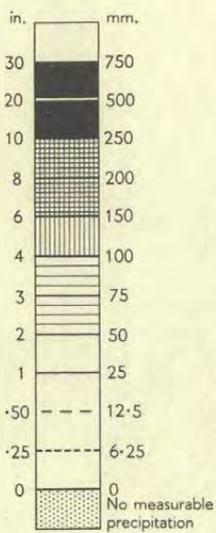
DISTRICT, COUNTY AND PLACE	Height of Vane			Distribution of Mean Hourly Values of Wind Speed									Mean Hourly Wind Speed	Highest Velocities							
	Above Mean Sea Level	Above Ground	Effective Height	34 knots or more		22 to 33 knots		11 to 21 knots		4 to 10 knots		Less than 4 knots		No Record	Highest Hourly Wind			Highest Gust			
				Dates of Occurrence	Duration	No. of days	Duration	Duration	Duration	Duration	Duration				Speed	Hour ended at	Speed	Day and Time			
																		day	hr	knots	day
ft.	ft.	ft.		hr.		hr.	hr.	hr.	hr.	hr.	knots	°	knots	day hr	knots	day	hr				
SCOTLAND																					
0	Zetland	Lerwick Observatory	304	33	33	-	0	11	104	326	244	46	0	13.2	260	33	28	10	48	28	1115
	Orkney	Kirkwall	134	50	33	-	0	10	97	319	251	53	0	12.7	290	27	8	06	42	16	0905
	Caithness	Dounreay	110	39	30	-	0	8	59	381	278	0	2	12.8	140	29	4	14	40	4	1420
	Sutherland	Shin	78	33	33	-	0	3	18	264	268	166	4	8.9	250	28	15	18	44	15	0810
	Ross & Cromarty	Stornoway (Coastguard)	120	40	36	-	0	10	81	348	210	81	0	12.7	190	30	26	16	43	28	1010
	Inverness	Duirinish	125	65	55	26	1	7	30	366	255	59	9	11.3	200	35	26	19	50	26	1820
		Benbecula	69	51	35	-	0	12	102	469	149	0	0	14.8	290	28	15	07	45	15	0655
1	Moray	Lossiemouth	101	80	60	-	0	5	8	260	280	172	0	9.5	340	26	19	16	43	19	1530
	Aberdeen	Dyce	234	30	30	-	0	6	10	331	272	107	0	10.2	300	24	15	13	40	15	1215
	Angus	Auchterhouse	827	62	50	-	0	5	12	301	299	94	14	9.9	260	27	15	13	43	15	1245
		Bell Rock Lighthouse	126	131	124	-	0	19	114	433	120	53	0	15.1	220	30	26	22	43	2	1835
	Perth	Rannoch	1006	56	57	-	0	12	58	338	236	88	0	11.4	350	28	19	19	42	15	1030
	Fife	Leuchars	78	40	40	-	0	5	22	372	291	35	0	11.2	270	25	15	12	43	26	2045
	Midlothian	Turnhouse	137	40	33	-	0	4	18	335	309	58	0	10.8	260	27	15	13	41	15	1155
		Edinburgh, Blackford Hill	496	50	34	-	0	12	78	401	200	41	0	13.5	240	31	15	13	52	15	1530
6a	Argyll	Tiree	89	60	47	-	0	9	72*	484	134	30	0	14.4	350	28	19	20	44	19	1425
	Bute	Millport	50	34	34	-	0	0	0	309	346	65	0	9.6	260	21	15	14	38	15	0130
	Renfrew	Paisley	188	81	31	-	0	0	0	176	423	121	0	7.5	260	19	15	16	38	15	1540
		Renfrew	71	41	39	-	0	0	0	309	346	65	0	9.6	260	21	15	14	38	15	0130
	Lanark	Lowther Hill	2412	43	33	7-9, 15, 29, 30	30	22	202	358	76	8	46	18.8	310	39	30	18	56	15	1200
	Ayr	Prestwick Airport	68	33	33	-	0	0	0	354	323	43	0	10.3	300	21	19	15	33	29	0150
	Dumfries	Eskdalemuir Observatory	825	50	35	-	0	2	2	130	385	203	0	6.5	290	26	30	17	46	30	1625
	Wigtown	West Freugh	81	33	33	-	0	3	9	339	284	88	000	10.0	340	25	19	17	39	19	1720
ENGLAND AND WALES																					
6b	Isle of Man	Ronaldsway	119	64	39	-	0	9	47	408	202	63	0	12.5	220	28	11	07	41	11	0610
		Point of Ayre	64	33	33	-	0	8	15	431	232	42	0	12.0	300	25	19	17	40	9	1615
2	Durham	Durham	389	53	33	-	0	2	7	296	306	111	0	9.4	260	24	8	08	41	15	1100
		South Shields	73	57	44	-	0	3	7	294	332	87	0	9.8	350	23	22	05	35	15	0845
	Lincoln	Cranwell	268	47	47	-	0	0	0	151	384	162	23	7.1	270	20	30	13	37	22	0925
3	Norfolk	Gorleston	45	33	33	-	0	3	33	221	427	37	2	9.8	040	28	1	17	36	1	1620
	Suffolk	Mildenhall	98	83	60	-	0	0	0	114	406	200	0	6.3	230	17	7	14	33	7	1315
	Bedford	Bedford	327	42	30	-	0	0	0	184	386	114	36	7.6	320	20	22	10	32	29	0850
		Cardington	276	133	133	-	0	1	4	299	327	90	0	9.5	040	22	1	06	35	6	1445
	Hertford	Garston	307	50	33	-	0	0	0	34	498	188	0	5.3	210	14	7	14	31	6	1405
		Rothamsted	461	41	33	-	0	0	0	19	375	326	0	4.3	060	13	1	09	31	1	0605
	Essex	Stansted	351	31	31	-	0	0	0	187	394	139	0	7.5	320	19	29	08	30	19	1915
		Coryton	66	57	48	-	0	5	31	270	356	59	4	10.1	050	31	1	09	45	1	0955
		Shoeburyness	116	106	91	-	0	0	0	86	398	236	0	4.7	350	16	30	24	38	30	1900
4	Yorks, W.R.	Sheffield	533	83	35	-	0	0	0	40	568	112	0	5.9	050	17	1	13	29	1	0350
	Warwick	Edgbaston	642	118	73	-	0	0	0	258	399	63	0	9.0	310	20	29	09	36	29	1440
		Elmdon	343	31	31	-	0	0	0	37	486	194	3	5.5	030	15	1	06	31	6	1400
	Buckingham	Amersham	500	50	50	-	0	0	0	49	456	215	0	5.5	050	17	1	01	39	1	0025
	Stafford	Keele	706	50	33	x	0	0	0	49	456	215	0	5.5	050	17	1	01	39	1	0025
	Gloucester	Avonmouth	92	61	33	-	0	0	0	123	493	104	0	7.2	070	17	1	09	36	7	1430
5	London	Kingsway	208	143	41	-	0	0	0	185	478	55	0	8.1	220	23	7	15	36	7	1415
	Middlesex	London (Heathrow) Airport	115	33	33	-	0	1	2	95	386	239	0	5.7	230	20	7	15	35	7	1015
		Hampton	139	101	100	-	0	0	0	110	428	182	0	6.4	230	21	7	15	41	7	1135
	Surrey	Kew Observatory	92	75	50	-	0	0	0	85	383	252	0	5.6	230	19	7	13	39	12	2240
		Gatwick	232	38	33	-	0	0	0	63	285	362	0	4.7	060	25	1	05	40	1	0540
	Kent	Isle of Grain	48	40	33	-	0	1	10	63	285	362	0	4.7	060	25	1	05	40	1	0540
		Dover	68	38	62	-	0	1	1	132	338	194	0	6.5	040	22	1	08	34	7	1625
	Sussex	Thorney Island	75	65	42	-	0	0	0	145	379	196	0	6.6	250	18	7	15	34	7	1410
	Hampshire	Hurn	86	53	46	-	0	1	3	219	359	139	0	8.2	220	23	7	13	35	7	1245
		Calshot	50	41	33	-	0	2	3	327	341	49	0	10.3	210	24	7	05	35	19	1935
		S. Farnborough	316	69	35	-	0	0	0	179	381	160	0	7.3	220	18	7	15	32	7	1305
	Berkshire	Abingdon	295	40	40	-	0	0	0	217	314	189	0	7.4	050	19	1	06	32	1	0520
	Wiltshire	Larkhill	49	51	36	-	0	1	1	149	381	189	0	7.0	040	23	1	05	39	1	0500
		Boscombe Down	425	55	55	-	0	0	0	135	373	212	0	6.6	210	21	7	13	38	1	0510
		Porton	406	44	44	-	0	2	3	105	305	307	0	5.7	220	23	7	14	37	6	1835
7a	Cumberland	Carlisle	137	42	30	-	0	1	1	227	410	82	0	8.5	240	23	15	10	37	15	0925
		Sellafield	83	39	35	-	0	2	4	314	357	45	0	10.0	250	23	14	20	36	14	1335
		Spadeadam	959	51	50	-	0	4	7	368	302	43	0	10.7	260	24	15	17	41	11	1340
	Westmorland	Great Dun Fell	2812	33	33	1, 2, 7, 10, 11 β	45	25	298	269	77	31	0	20.2	280	40	15	10	53	15	1200
		Moor House	1960	50	45	30	1	14	122	441	131	25	0	15.3	280	35	30	13	51	30	1305
	Lancashire	Squires Gate	88	55	35	-	0	5	29	424	227	40	0	12.3	260	28	15	13	39	15	12



RAINFALL

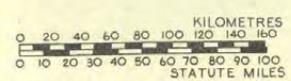
JUNE 1964

The equivalent values in mm, are given in round numbers. The exact relation is 10 in. = 254 mm.



0 IRISH GRID

0 NATIONAL GRID



UTM GRID
ZONE 30 U

MO/Cs-10/DO/144/A

TABLE III (continued)—SUMMARY OF OBSERVATIONS OF TEMPERATURE, RAINFALL, SUNSHINE AND WEATHER JUNE, 1964

DISTRICT, COUNTY AND PLACE	Max. Terminal Hours of Observation	Height of Station above Mean Sea Level	AIR TEMPERATURE IN DEGREES CELSIUS								MEAN EARTH TEMPERATURE		RAINFALL (Terminal hour 9 G.M.T.)				WEATHER Number of days										BRIGHT SUNSHINE					
			Means of		Mean Temperature of A and B	Difference from Average	Highest Maximum and Lowest Minimum				1 ft.	4 ft.	Total Fall	Percentage of Average	Most in a day		Precip'n -0.1in (0.2mm) or more	-0.01in (0.1mm) or more	Snow or Sleet	Snow lying at 9h	Hail	Ice or snow pellets etc.	Thunder heard	Fog at 9h	Air Frost	Grass min below 0° C	Gale	Daily Mean	Percentage of Average			
			A	B			Maximum	Date	Minimum	Date					Amount	Date																
			G.M.T.	ft.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	in.	%	in.													hr	%		
1 SCOTLAND, E.—cont.																																
Midlothian	Balerno ...	9 9	700																													
	Turnhouse ...	21-9	114	17.0	9.1	13.1	+0.2	23.7	26	3.1	20	-	-	2.28	123	.56	9	12	8	0	0	1	0	2	0	0	0	0	0	0	6.21	-
	Edinburgh—E. Craigs	9 9	200	16.6	8.9	12.7	-	22.2	26	3.9	20	-	-	2.23	-	.65	9	13	9	0	0	1	0	1	0	0	0	1	0	0	5.47	-
	Davidson's Mains	9 9	200	17.1	9.3	13.2	0.0	23.9	26	4.4	2	13.6	-	2.36	-	.69	9	13	8	0	0	0	0	1	0	0	0	0	0	5.86	- S	
	Penicuik ...	9 9	620	16.2	7.8	12.0	-	22.2	26	2.2	18,23	13.4	-	2.53	-	.54	9	16	10	0	0	1	0	1	0	0	0	0	4.98	-		
	Bush House ...	9 9	605	15.5	8.2	11.9	-	21.7	26	2.8	23	13.0	10.8	2.36	-	.48	9	14	10	0	0	1	0	1	0	0	0	1	6.29	-		
	Edinburgh—																															
	Blackford Hill §§	9 9	441	16.7	9.3	13.0	+0.1	23.3	26	4.4	2	-	-	2.05	109	.59	9	14	9	0	0	0	3	0	0	0	0	0	6.39	102		
	Liberton ...	9 9	200	16.6	9.1	12.9	-0.4	22.8	26	4.4	2,18	-	-	2.16	-	.70	9	14	8	0	0	-	-	0	0	-	-	6.88	-			
	Royal Bot. Gdns.	9 9	74	16.7	9.4	13.1	-0.3	22.8	26	5.6	2	14.8	-	2.20	-	.62	9	14	10	0	0	0	0	1	0	0	0	0	6.68	107		
E. Lothian	Haddington ...	9 9	162	17.0	9.2	13.1	-	22.8	26	3.3	23	-	-	2.49	-	.42	9	13	10	0	0	2	0	0	0	0	0	0	6.39	-		
	North Berwick ...	9 9	152	16.4	10.2	13.3	+0.5	22.8	26	6.1	20,23	-	-	2.78	143	.52	9	13	9	0	0	-	-	0	0	-	-	6.30	100			
	Dunbar ...	9 9	75	16.0	9.4	12.7	0.0	22.8	26	5.0	23	-	-	2.43	-	.49	4	12	10	0	0	0	0	0	0	0	0	0	7.76	117		
Berwick	Mertoun ...	9 9	225	16.8	8.8	12.8	-	21.1	12,24,26	3.3	2	-	-	2.13	-	.49	4	15	10	0	0	-	-	0	0	0	0	5.48	-			
	Lauder ...	9 9	600	16.2	7.6	11.9	-	22.2	26	2.8	2	-	-	2.43	-	.70	4	14	10	0	0	1	0	3	1	0	2	5.53	-			
	Marchmont §§	9 9	498	15.8	8.3	12.1	-0.6	21.1	26	3.9	2,20	-	-	2.31	114	.41	4	14	13	0	0	0	0	1	0	0	0	5.90	98 S			
	Whitchester ...	9 9	838	15.7	7.4	11.5	-	20.6	24	1.1	23	-	-	2.80	-	.47	2	18	10	0	0	0	0	0	0	0	0	-	-			
	St. Abb's Head ...	9 9	245	15.3	9.4	12.3	-	22.7	26	5.7	1	-	-	-	-	-	-	0	0	0	0	0	1	1	0	0	0	-	-			
Peebles	Stanhope Farm ...	9 9	741	15.3	7.7	11.5	-	20.6	26	1.1	20,23	-	-	2.30	-	.46	9	15	12	0	0	1	0	1	0	0	2	0	-	-		
	Blyth Bridge ...	9 9	830	14.8	7.5	11.1	-	20.0	26	1.7	20	-	-	2.49	-	.66	9	11	10	0	0	1	1	0	0	0	2	0	4.82	-		
	West Linton ...	9 9	800	15.2	7.3	11.3	-	20.6	26	1.1	23	12.4	10.3	2.87	-	.65	9	16	13	0	0	1	0	0	0	0	0	0	-	-		
	Glentress ...	9 9	580	16.2	7.2	11.7	-	22.2	26	1.7	20	-	-	2.39	-	.32	6,19	14	13	0	0	0	0	0	0	0	0	0	-	-		
	Bowhill ...	9 9	600	16.1	8.3	12.2	-	20.6	12,23,26	0.6	20	-	-	1.74	-	.30	4	13	11	0	0	1	0	2	1	0	0	-	-			
Selkirk	Wauchope ...	9 9	560	16.1	8.2	12.1	-	22.2	26	3.3	2	-	-	2.27	-	.58	6	15	12	0	0	-	-	0	0	0	0	-	-			
Roxburgh	Sourhope ...	9 9	900	15.8	7.8	11.8	-	22.2	26	2.8	20,23	-	-	1.72	-	.48	6	16	10	0	0	-	-	0	0	1	0	4.84	-			
6a SCOTLAND, W.																																
Argyll	Tiree ... §§	21-9	29	14.0	8.8	11.4	-0.8	17.4	25	3.6	1	-	-	3.18	113	.85	12	17	11	0	0	0	0	0	0	0	2	0	6.21	92		
	Rhuvaal ...	21-9	65	14.1	9.1	11.6	-	18.0	26	4.9	2	-	-	3.60	-	.83	12	17	14	0	0	0	0	0	0	0	0	0	-	-		
	Colonsay ...	9 9	87																													
	Tobermory ...	9 9	270	14.6	8.0	11.3	-	18.3	22	3.9	1,2	-	-	5.01	-	1.36	6	13	11	-	-	-	-	0	0	0	0	-	-			
	Craigshouse ...	9 9	10	15.7	9.1	12.4	-	20.0	25	3.9	2	-	-	4.32	-	1.01	12	20	15	0	0	-	-	0	0	0	0	-	-			
	Campbeltown ...	9 9	10	16.2	8.8	12.5	-	20.0	29	(1.7)	2	-	-	4.29	-	.62	12	15	13	0	0	0	0	1	11	0	0	5.31	-			
	Achaglachgach ...	9 9	40	15.8	7.8	11.8	-	19.4	25	1.1	2	-	-	3.83	-	.51	6	20	18	0	0	0	0	1	0	0	0	-	-			
	Oban ...	9 9	229																													
	Lepholmore ...	9 9	30	16.4	9.1	12.7	-	20.6	26	2.8	2	-	-	3.37	-	.54	14	18	14	0	0	0	0	2	0	0	2	0	3.99	-		
	Glenbranter ...	9 9	120	15.9	8.2	12.1	-0.6	18.9	23,25,26	-0.6	2	-	-	4.51	87	.80	14	17	14	0	0	-	-	0	1	2	-	-				
	Benmore																															
	Forestry Sch.	9 9	46	16.1	8.2	12.1	-0.8	19.4	(25),26	-0.6	2	13.3	11.9	4.46	84	.79	12	16	12	0	0	0	0	0	0	1	1	0	-	- S		
	Younger Bot. Gdns.	9 9	40	16.7	10.8	13.7	-	21.1	18	4.4	4	-	-	7.79	-	1.73	13	25	21	0	0	0	0	0	0	0	0	0	-	-		
Bute	Rothesay §§	9 9	150	15.9	9.1	12.5	-0.5	20.0	26	4.4	2	12.6	11.1	3.46	100	.99	9	17	10	0	0	0	0	1	0	0	0	5.37	86			
	Millport ...	9 9	16	15.2	9.7	12.5	-	18.3	18	3.3	2	-	-	2.83	103	.77	9	12	9	0	0	0	0	0	0	0	0	0	-	-		
Dunbarton	Helensburgh ...	9 9	293	16.4	8.5	12.5	-0.7	20.0	18,26	0.6	2	-	-	3.07	91	.66	9	16	12	0	0	0	0	0	0	0	0	0	5.77	100 S		
	Cumbernauld ...	9 9	310	17.1	7.9	12.5	-	23.3	26	2.2	2,(20)	-	-	3.60	-	.92	6	15	13	0	0	0	0	0	0	0	1	0	-	-		
Stirling	Earls Hill ...	9 9	1100	14.2	6.7	10.5	-	19.1	26	0.3	20	-	-	4.29	-	1.41	6	17	14	-	-	-	-	3	0	2	-	5.77	-			
	Stirling ...	9 9	151	17.1	9.6	13.3	-0.5	22.2	25,26	4.4	2	15.8	11.2	3.33	149	1.48	6	15	10	0	0	1	0	1	0	0	0	6.37	-			
	Falkirk ...	9 9	100	17.3	8.9	13.1	-0.6	22.8	26	2.8	2	-	-	3.15	94	.60	6	12	10	0	0	0	0	0	0	0	1	0	5.87	-		
Renfrew	Greenock ...	9 9	200	16.2	9.3	12.7	-1.0	20.6	25	3.3	2	-	-	2.82	-	.94	6	12	10	-	-	-	-	0	0	0	0	-	-			
	Paisley ...	9 9	106	16.9	9.6	13.3	-0.8	21.1	26	3.3	2	14.3	11.0	2.67	104	1.04	6	14	9	0	0	0	0	1	0	0	0	5.45	92			
	Barrhead ...	9 9	97	16.2	8.9	12.5	-	21.7	26	1.7	20	-	-	2.94	-	1.42	6	12	10													

TABLE IV—SUMMARY OF OBSERVATIONS AT FIXED HOURS JUNE.

1964

DISTRICT, COUNTY AND PLACE	Hour of Observation	Height of Barometer above Mean Sea Level	MEAN PRESSURE		MEAN TEMPERATURE AND HUMIDITY				CLOUD AMOUNT (OKTAS)					VISIBILITY							WIND, NUMBER OF OBSERVATIONS																							
			At Mean Sea Level	Difference from Average	Dry Bulb	Depression of Wet Bulb	Vapour Pressure	Relative Humidity	NO. OF OBSERVATIONS					NUMBER OF OBSERVATIONS							FORCE (0-12)				DIRECTION																			
									Mean Amount	0	1	3	6	8	9	0-44 yd.	45-210 yd.	220-430 yd.	440-1,000 yd.	1,100-2,100 yd.	2,200-4,300 yd.	3-6 mi.	7-12 mi.	13-24 mi.	25 mi. or over	Beaufort Force				N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.							
																										8 or more	6	4	2									0						
0 SCOTLAND, N.																																												
Zetland Lerwick Observatory	H	3	273	1010.7	-	8.3	0.8	9.9	89	6.3	0	3	5	10	8	4	0	4	0	0	0	0	0	0	0	3	4	13	6	0	5	10	12	3	3	4	3	0	2	7	6	2		
		9	273	1011.0	-1.6	10.4	1.5	10.2	81	6.3	0	2	5	11	10	2	0	1	0	0	0	0	0	0	1	2	3	9	12	0	6	11	13	0	3	5	2	2	4	2	7	4	3	
		15	273	1011.3	-	11.4	1.9	10.3	77	6.1	0	2	8	13	6	1	0	1	0	0	0	0	0	0	1	3	5	11	10	0	6	13	11	0	1	5	1	2	5	2	2	7	4	4
		21	273	1011.2	-	9.1	1.1	9.9	85	6.1	0	4	2	14	8	2	0	2	0	0	0	0	0	1	1	2	7	7	8	8	0	4	14	10	2	3	2	2	2	2	2	6	7	4
Orkney Kirkwall ...	H	3	86	1011.8	-	8.7	0.8	10.1	90	6.1	0	4	4	12	8	2	0	0	1	0	0	0	0	0	7	3	8	10	0	3	13	11	3	3	2	2	2	0	6	3	8	3	3	
		9	86	1012.2	-	11.1	1.5	10.9	82	6.4	0	3	4	13	9	1	0	0	1	0	0	0	0	0	4	5	13	7	0	7	11	12	0	4	3	4	1	4	3	4	7	4	2	
		15	86	1012.2	-	12.1	1.8	11.1	79	6.7	0	1	5	13	11	0	0	0	1	0	0	0	0	0	6	6	14	9	0	6	12	12	0	5	3	2	3	5	5	0	10	2	2	
		21	86	1012.4	-	10.1	1.0	10.8	87	6.3	0	3	4	16	6	1	0	0	0	1	0	0	0	0	1	10	11	7	0	2	16	11	1	4	2	3	2	4	2	2	10	2	2	
Caithness Wick ...	H	3	121	1012.0	-	8.4	0.7	10.1	90	5.9	0	4	5	14	7	0	0	0	0	0	0	0	2	2	5	11	10	0	1	7	20	2	3	2	2	2	2	7	3	8	1	2		
		9	121	1012.4	-0.8	11.2	1.5	10.9	81	6.7	0	2	2	16	9	1	0	0	0	2	0	0	0	1	0	7	10	10	0	3	14	13	0	4	4	1	4	4	2	8	3	3		
		15	121	1012.3	-	12.6	2.1	11.1	76	6.5	0	2	4	14	9	1	0	0	0	2	0	0	0	0	3	5	8	12	0	6	12	12	0	2	3	4	5	3	1	6	6	2		
		21	121	1012.6	-	10.1	1.0	10.8	87	6.3	0	2	6	17	5	0	0	0	0	0	0	0	0	1	0	3	8	11	7	0	10	13	16	1	2	2	1	3	4	5	8	4	4	
Sutherland Cape Wrath ...	H	3	371	1011.4	-	9.0	0.7	10.4	90	6.3	0	3	13	8	3	0	2	0	1	0	0	0	0	2	6	4	15	2	5	8	14	1	3	0	5	3	1	9	6	2	2	2		
		9	371	1011.9	-	10.2	1.2	10.6	85	6.5	0	0	8	11	8	3	0	0	0	0	0	0	0	1	2	8	16	0	7	7	15	1	4	3	2	1	3	2	1	3	8	2	2	
		15	371	1012.1	-	10.7	1.3	10.9	85	6.5	0	1	3	14	10	1	1	0	0	0	0	0	0	1	1	4	9	14	2	4	13	11	0	2	4	2	4	1	8	8	1	1		
		21	371	1012.1	-	9.7	0.8	10.8	89	6.5	0	0	8	12	7	3	0	2	0	1	0	0	0	3	3	9	12	1	6	12	9	2	2	2	5	1	2	8	5	3	3			
Ross & Cromarty Stornoway	H	3	16	1012.8	-	8.9	0.6	10.6	92	5.2	0	6	8	10	6	0	0	0	0	0	0	0	0	2	10	10	8	0	0	12	15	3	1	5	2	1	7	3	4	4	2	4		
		9	16	1013.1	-0.2	11.6	1.5	11.2	82	6.3	0	3	4	14	9	0	0	0	0	0	0	0	0	4	2	14	10	0	1	16	13	0	2	5	2	3	8	1	5	4	1	5		
		15	16	1013.3	-	12.7	2.1	11.2	76	6.4	0	2	3	19	6	0	0	0	0	0	0	0	0	2	3	10	15	0	3	16	10	1	1	4	4	0	7	3	6	4	2	2		
		21	16	1013.3	-	10.6	0.9	11.3	88	6.0	0	4	5	13	8	0	0	0	0	0	0	0	0	2	3	5	11	9	0	14	16	0	4	3	2	4	5	6	2	2	6	2		
Inverness Benbecula	H	3	21	1012.8	-	9.8	0.9	10.8	89	5.8	0	5	3	13	9	0	0	0	0	0	0	0	0	9	9	11	10	0	3	18	9	0	3	6	2	4	5	2	6	2	6	2		
		9	21	1013.0	-	11.9	1.6	11.4	81	6.4	0	3	2	17	8	0	0	0	0	0	0	0	0	4	4	14	8	0	6	22	2	0	5	1	2	3	2	6	4	4	4	4		
		15	21	1013.4	-	12.9	1.9	11.6	78	6.1	0	4	4	14	8	0	0	0	0	0	0	0	0	3	8	8	11	0	6	23	1	0	3	1	2	3	3	5	7	6	2	6		
		21	21	1013.5	-	11.1	1.3	11.2	84	5.6	1	4	4	14	6	0	0	0	0	0	0	0	0	1	2	6	10	11	0	5	18	7	0	5	3	2	3	2	9	3	3	3		
1 SCOTLAND, E.																																												
Moray Kinloss ...	H	3	19	1012.9	-	8.8	0.8	10.2	89	5.7	0	5	3	19	3	0	0	0	0	0	0	0	1	0	4	1	19	5	0	15	11	4	2	2	3	1	1	13	4	0	7	5		
		9	19	1013.1	-	12.9	2.4	10.9	73	6.2	0	2	5	19	4	0	0	0	0	0	0	0	0	1	2	2	5	20	0	5	14	10	1	3	4	1	1	4	4	7	5	11	2	
		15	19	1012.8	-	14.9	3.1	11.5	68	6.4	0	1	4	20	5	0	0	0	0	0	0	0	0	1	2	4	23	0	3	20	7	0	4	7	2	0	1	3	11	2	3			
		21	19	1013.3	-	11.6	1.4	11.3	82	6.1	0	3	3	20	4	0	0	0	0	0	0	0	0	2	7	2	19	0	3	11	16	0	2	3	5	1	1	7	8	3	3	3		
Aberdeen Dyce ...	H	3	193	1012.8	-	8.3	0.9	9.7	88	6.0	2	3	0	21	3	1	0	0	0	0	0	0	1	5	4	6	14	0	3	15	12	0	4	3	2	5	3	8	2	6	3	3		
		9	193	1013.0	-1.1	13.2	2.8	10.5	69	5.7	0	3	9	14	4	0	0	0	0	0	0	0	0	3	4	11	11	0	1	21	8	2	0	2	2	3	8	2	2	6	2	6		
		15	193	1012.7	-	14.5	3.3	10.8	65	6.3	0	1	6	18	5	0	0	0	0	0	0	0	1	3	4	11	11	0	0	9	16	5	4	0	1	1	7	1	7	4	4	4		
		21	193	1013.3	-	11.3	1.8	10.6	79	5.4	0	7	3	16	4	0	0	0	0	0	0	0	0	3	9	8	7	0	0	9	16	5	4	0	1	1	7	1	7	4	4	4		
Rattray Head ...	H	3	108	1012.4	-	8.9	0.9	10.1	88	5.6	0	1	11	3	4	1	0	0	1	0	0	0	1	0	5	18	5	0	3	9	16	2	4	1	2	1	2	1	10	2	7	1	1	
		9	108	1012.6	-	11.7	1.6	11.3	81	5.8	0	2	8	15	2	3	0	2	0	1	0	0	1	12	14	0	0	0	3	11	16	0	5	1	2	5	4	1	10	2	5	4		
		15	108	1012.8	-	12.8	1.8	11.8	79	4.9	0	3	15	10	1	1	0	1	0	0	0	0	0	1	12	15	0	0	3	16	11	0	8	0	2	4	7	0	5	4	10	2	5	
		21	108	1012.9	-	10.9																																						

TABLE IV (continued)—SUMMARY OF OBSERVATIONS AT FIXED HOURS JUNE, 1964

DISTRICT, COUNTY AND PLACE	Hour of Observation	Height of Barometer above Mean Sea Level	MEAN PRESSURE				MEAN TEMPERATURE AND HUMIDITY				CLOUD AMOUNT (OKTAS)					VISIBILITY										WIND, NUMBER OF OBSERVATIONS																			
			At Mean Sea Level	Difference from Average	Dry Bulb	Depression of Wet Bulb	Vapour Pressure	Relative Humidity	No. of Observations					NUMBER OF OBSERVATIONS					FORCE (0-12)					DIRECTION																					
									Mean Amount	0	1	3 to 6	7	8	9	0-44 yd.	45-210 yd.	220-430 yd.	440-1,080 yd.	1,100-2,190 yd.	2,200-4,980 yd.	3-6 mi.	7-12 mi.	13-24 mi.	25 mi. or over	Beaufort Force					N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.							
																										Speed in knots	1 to 3	4 to 6	7 to 10	11 to 16									17 to 21	22 to 27	28 to 33				
4 MIDLAND COUNTIES																																													
—cont.																																													
Nottingham	Watnall	H	3	390	1014.9	-	10.2	0.5	11.7	93	6.2	0	1	8	12	9	0	0	0	0	0	5	6	13	5	1	0	0	0	0	0	0	0	3	22	5	0	2	2	0	1	8	6	6	
			9	390	1015.4	-	13.7	1.9	12.4	78	6.9	0	0	4	12	14	0	0	0	0	0	0	1	4	9	10	6	0	0	0	0	0	0	0	8	21	1	3	2	2	12	4	4	7	5
			15	390	1015.2	-	15.9	2.9	12.9	71	6.8	0	1	5	16	0	0	0	0	0	0	0	0	2	8	11	9	0	0	0	0	0	0	0	6	23	1	4	3	3	0	1	4	11	3
Finningley	H	3	46	1014.7	-	10.9	0.8	11.8	89	5.8	0	4	6	14	6	0	0	0	0	0	1	3	7	10	0	0	0	0	0	0	0	0	4	24	2	4	1	0	1	7	2	8	5		
		9	46	1015.1	-	14.6	2.2	12.9	77	6.8	0	1	3	18	8	0	0	0	0	0	0	0	2	9	10	7	12	0	0	0	0	17	12	1	8	1	0	3	3	4	7	3			
		15	46	1015.1	-	16.6	3.2	12.9	69	6.6	0	3	3	11	13	0	0	0	0	0	0	0	0	9	12	7	2	0	1	20	9	0	9	1	2	0	9	1	2	0	6	8			
Northampton	Wittering	H	3	219	1015.2	-	10.6	0.6	11.9	92	6.1	0	2	7	11	10	0	0	0	0	0	2	8	8	10	2	0	0	0	0	1	6	21	2	3	2	0	2	3	6	10	2			
			9	219	1015.7	-	14.3	2.1	12.2	77	6.9	0	0	5	13	12	0	0	0	0	0	0	1	5	11	10	3	0	0	1	12	16	1	3	3	0	2	4	4	9	4				
			15	219	1015.3	-	16.4	3.0	12.9	89	6.3	0	2	5	13	10	0	0	0	0	0	0	0	1	3	9	15	2	0	0	0	15	15	0	5	1	2	2	4	4	7	2			
Warwick	Edgbaston	H	3	219	1016.1	-	13.3	1.4	12.9	84	6.0	0	4	5	10	11	0	0	0	0	0	0	2	7	7	14	0	0	0	0	4	25	1	5	3	1	1	6	6	5	2				
			9	542	1015.9	-	13.3	2.3	11.3	74	6.1	0	2	6	14	8	0	0	0	0	0	0	3	1	5	15	6	0	0	0	11	17	2	4	2	0	3	4	6	4	5				
			15	542	1015.6	-	15.5	3.2	11.8	68	6.6	0	1	5	13	11	0	0	0	0	0	0	1	6	10	5	7	0	0	0	9	21	0	3	1	1	2	5	4	7	7				
Shropshire	Shawbury	H	3	249	1016.2	-	13.6	2.1	12.0	77	5.7	0	6	4	11	9	0	0	0	0	0	0	5	11	12	2	0	0	0	0	3	28	0	5	2	2	0	2	4	5	7	3			
			9	362	1015.3	-	10.5	0.7	11.6	91	6.1	1	3	3	14	9	0	0	0	0	0	0	3	4	9	12	2	0	0	0	3	4	9	12	2	0	0	3	2	7	4	5			
			15	362	1015.6	-	13.8	2.5	11.6	73	6.9	0	0	3	17	10	0	0	0	0	0	0	0	1	6	18	5	0	0	0	0	14	15	1	5	2	0	4	4	5	5				
Worcester	Persnore	H	3	362	1015.4	-	15.9	3.3	12.1	68	6.8	0	0	5	13	12	0	0	0	0	0	1	1	6	12	10	0	0	0	0	16	14	0	4	2	0	3	2	8	4	7				
			9	362	1016.1	-	13.5	2.0	12.0	77	5.5	0	3	7	14	6	0	0	0	0	0	0	0	5	9	13	3	0	0	0	4	23	3	0	4	2	0	8	6	2	6				
			15	362	1016.1	-	10.6	0.8	11.5	89	6.4	0	3	3	15	9	0	0	0	0	0	0	0	5	7	9	9	0	0	0	3	23	4	3	1	1	2	5	7	5					
Hereford	Ross-on-Wye	H	3	226	1015.8	-1.2	14.2	2.4	12.1	75	6.4	0	2	4	13	11	0	0	0	0	0	0	10	9	9	2	0	0	0	2	28	0	6	3	1	0	3	12	3	2					
			9	226	1015.4	-	16.9	3.5	12.7	66	6.6	0	1	6	12	11	0	0	0	0	0	0	0	10	9	9	2	0	0	0	10	20	0	4	3	0	5	4	8						
			15	226	1016.3	-	13.6	1.7	12.6	81	5.3	0	8	4	10	8	0	0	0	0	0	0	0	3	7	4	13	3	0	0	2	24	4	4	3	1	1	3	8	4					
Gloucester	Filton	H	3	197	1015.4	-	11.7	0.6	12.8	91	6.1	0	5	3	10	12	0	0	0	0	0	0	6	13	10	1	0	0	0	0	1	21	8	4	1	1	2	3	7	3					
			9	197	1016.1	-	14.3	1.9	12.9	79	6.6	0	0	6	14	10	0	0	0	0	0	0	0	6	3	10	7	4	0	0	7	22	1	6	2	1	4	2	8	4					
			15	197	1015.7	-	16.8	3.1	13.3	70	6.1	0	2	8	11	9	0	0	0	0	0	0	0	2	6	5	9	8	0	1	13	16	0	4	1	1	3	9	9						
Gloucester	H	3	79	1016.3	-	12.0	1.1	12.4	88	6.1	0	4	2	15	9	0	0	0	0	0	0	3	6	9	8	1	0	0	0	3	23	4	3	1	0	2	6	9	2						
		9	79	1016.4	-	14.9	2.6	12.4	72	6.7	0	1	4	14	11	0	0	0	0	0	0	0	3	4	12	7	4	0	0	11	16	3	4	2	0	1	7	7							
		15	79	1015.9	-	17.9	4.2	12.5	62	6.7	0	1	3	19	7	0	0	0	0	0	0	0	7	3	12	8	0	0	0	15	15	0	6	2	0	3	2	10	2						
Little Rissington	H	3	751	1015.7	-	10.2	0.4	11.9	94	6.4	1	3	3	9	12	2	0	0	0	0	0	1	10	8	5	4	0	0	0	3	25	2	3	2	1	2	6	6	5						
		9	751	1016.1	-	13.2	1.9	12.1	79	6.6	0	2	2	18	7	1	0	0	0	0	0	1	2	7	12	5	3	0	0	15	14	1	4	2	2	1	2	9	4						
		15	751	1015.6	-	15.7	2.9	12.6	71	6.6	0	2	3	13	12	0	0	0	0	0	0	1	1	5	11	9	3	0	0	13	16	1	3	3	1	2	6	7							
5 ENGLAND, S.E.																																													
Middlesex	London (Heathrow) Airport	H	3	86	1015.5	-	11.8	0.9	12.5	89	6.2	1	3	15	9	0	0	0	0	0	0	1	2	9	13	4	0	0	0	2	25	3	2	1	2	5	5	5							
			9	86	1016.2	-	14.9	2.4	12.6	75	6.2	1	2	4	11	11	0	0	0	0	0	0	1	5	9	13	1	0	0	10	20	0	5	0	3	2	2	8	10						
			15	86	1015.7	-	18.3	4.2	12.9	62	6.0	0	2	8	12	8	0	0	0	0	0	0	0	7	3	17	3	0	0	0	15	13	2	3	1	2	1	5	4	8					
Surrey	Kew Observatory	H	3	34	1016.4	-0.8	15.4	2.2	13.1	77	5.6	1	5	4	13	7	0	0	0	0	0	0	3	6	12	8	1	0	0	5	25	0	4	2	2	6	3	9							
			9	34	1016.4	-	15.4	2.9	12.2	70	6.4	1	1	5	10	13	0	0	0	0	0	0	1	1	7	4	12	5	0	0	9	19	2	3	2	1	4	6	9						
			15	34	1015.8	-	18.5	4.3	12.7	60	6.5	0	1	4	17	8	0	0	0	0	0	0	0	6	4	13	7	0	1	13	14	2	3	2	3	2	3	6	4						
Sussex	Thorney Island	H	3	35	1015.9	-	11.8	0.5	13.2	94	5.6	2	5	5	13	0	0	0	0	0	0	0	1	9	6	12	2	0	0	2	27	1	3	4	1	2	6	4							

Monthly Weather Report

OF THE METEOROLOGICAL OFFICE

MO 754

Summary of observations compiled from returns of official stations and voluntary observers



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July 1964 — *Dry: warm later in England and Wales.*

Weather was predominantly anticyclonic in character, more especially over the southern part of the country on the 1st-6th, 15th, 16th and 19th-31st. The intervening periods were mainly cyclonic as were also some days in Scotland during the last week.

An anticyclone centred to the west of the British Isles maintained the generally dry sunny weather of the end of June until 6th July. Torquay recorded more than 12 hours of sunshine on each of the first five days of the month. Afternoon temperatures reached 25°C locally in the south-east on the 2nd, but following a little frontal rain on the 3rd freshening north-westerly winds kept temperatures well below average, especially in eastern districts where the 4th-6th were among the coolest days of the month.

On the 7th and 8th a deepening depression moving east near Scotland gave record low pressure readings for July and widespread gales. Troughs associated with the depression brought an end to the dry period with about 24 hours of rain in most places (over 1 inch was recorded in parts of north-west England and western Scotland.) After two or three showery days with broken sunshine, rain from another Atlantic depression reached western districts late on the 10th and spread to the remainder of the country during the night. A secondary depression gave over an inch of rain in parts of South Wales on the 11th; it was not until the afternoon of the 12th that the rain finally cleared south-east England. On the 13th, a dry sunny day over most of the British Isles, an anticyclone formed over Scandinavia; and the next depression approached Ireland from mid-Atlantic turned northwards towards Iceland in the southerly air stream on the western flank of the anticyclone. Rain from associated slow-moving cold fronts was heavy locally in some western districts on the 14th, but with rising pressure in southern England the fronts gave little or no rain as they cleared south-east districts about noon on the 15th.

For most of the third week pressure was rather uniform over the British Isles and weather warm and thundery. During the first two or three days afternoon temperatures over much of England and Wales progressively increased, the 17th being the warmest day of the month in many places. On the 18th, however, a small depression deepened slowly as it moved north-east across England and Wales. Thunderstorms with heavy rain or hail broke out at a number of places. Lancashire and the West Riding of Yorkshire reported widespread flooding; at Bolton about 3 inches of rain fell in half an hour while further east a large area of moorland around Pateley Bridge became white with hailstones, the ground being covered to a depth of 6 inches in places. The second half of the week was rather more cloudy and a little cooler than the beginning with scattered thunderstorms on the 19th and 21st.

On the 22nd a ridge of high pressure extended from the Azores over the British Isles, but it subsequently drifted slowly south giving place over Scotland to a generally westerly airstream. In the north weather was changeable and cool for most of the remainder of the month, but in south-east England it became sunny and very warm again with afternoon temperatures exceeding 28°C at a number of places on the 25th and 26th. A moist airstream from the Atlantic brought occasional drizzle to most districts on the 29th, but weather was sunny and warm in the south-east during the last two days of the month.

Pressure and Wind — Surface pressure was generally above the 1921-50 average except in the extreme north, the deviation at 9h G.M.T. ranging from -2.4 mb at Lerwick to +4.0 mb at Scilly. Pressure at mean sea level at Sule Skerry fell to 967.9 mb at about 0600 G.M.T. on the 8th, a new record low for the British Isles for July. Surface winds were mainly north-westerly at first becoming westerly on the 10th-12th and southerly on the 13th and 14th after which winds were light and variable over much of the country until the end of the month but mainly westerly in the north from the 23rd. Winds reached gale force in Scotland on 14 days and in England and Wales on the 7th, 9th, 11th, 12th and 18th (6 days). Gales were widespread on the 7th and 8th, many places in the north and north-west registering their highest gust and highest hourly wind ever recorded in July; a gust of 57 kt at Paisley on the 7th was the highest for the month in 51 years of records.

Temperature — Day temperatures were below average during the first ten days, but above average during the third week, the difference from average decreasing northwards. From the 23rd temperatures were above average in south-east England but below average in Scotland.

Extremes included: (England and Wales) 28.9°C at a number of places in the south-east on the 17th, 0.0°C at Lincoln on the 6th, (Scotland) 26.3°C at Dyce on the 30th, -0.6°C at Balmoral and at Strachan on the 6th; (Northern Ireland) 23.4°C at Moneydig on the 30th, 2.2°C at Pubble Forest on the 26th.

Precipitation — In Scotland most eastern districts had less than half their average rainfall, Kelso having its driest July since records began in 1888; while in the west rainfall was above average, totals in parts of the Highlands approaching double the usual amount. In England and Wales rainfall was generally 80-100 per cent of the average in the west but less than half the average in many eastern, central and southern districts; heavy localised thundery rain, however, brought amounts up to twice the average in parts of Buckingham and Lancashire.

Thunder was heard in Scotland on 6 days, an unusually low frequency for July. In England and Wales it was reported on the 3rd, 8th, 9th, 11th, 12th, 14th, 16th, 17th-19th, 21st and 22nd (12 days). Thunderstorms were widespread on the 17th, 18th and 21st.

Sunshine — Sunshine was generally above the average in the east and south but below in the north-west and north, amounts varying from 126 per cent (at North Berwick) of the local average to 69 per cent (at Ballykelly). The week ending the 18th was the sunniest, amounts being above average nearly everywhere.

Visibility — Fog was observed at 9h at one place or another on 11 days in Scotland and 18 days in England and Wales. Few places reported fog on more than one morning except in north-west England where a number of stations had two days of morning fog.

Miscellaneous Phenomena — The aurora was not seen in July.

TABLE I—DISTRICT VALUES— JULY

DISTRICTS	AIR TEMPERATURE					EARTH TEMP.		RAIN DAYS	RAIN-FALL	SUNSHINE
	Highest Max.	Lowest Min.	Max.	Min.	Mean	Mean 1 ft.	Mean 4 ft.			
	Difference from Average					% of Average				
0 SCOTLAND, N.	23.9	-0.6	-0.7	-0.8	-0.7	-	-	0	98	101
1 SCOTLAND, E.	26.3	-0.6	-0.1	-0.3	-0.2	-	-	-5	34	116
2 ENGLAND, N.E.	26.2	0.0	-0.3	-0.3	-0.3	-0.7	0.0	-5	44	106
3 ENGLAND, E.	28.9	0.6	+0.2	-0.1	0.0	0.0	+0.3	-4	51	105
4 MIDLANDS	27.8	2.8	-0.3	-0.1	-0.2	0.0	+0.2	-4	53	107
5 ENGLAND, S.E.	28.9	3.3	+0.6	+0.2	+0.4	+0.4	+0.4	-4	41	105
6 SCOTLAND, W.	24.4	2.2	-1.1	-0.3	-0.7	-0.3	-0.5	-2	70	91

1964

(1908, revised 1928, 1941, 1956 and 1964)

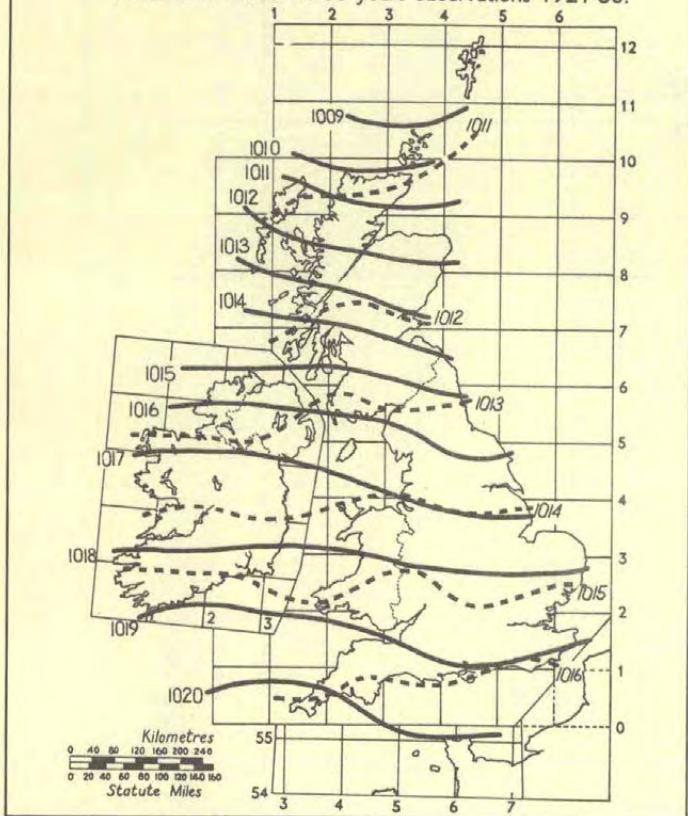
DISTRICTS	AIR TEMPERATURE					EARTH TEMP.		RAIN DAYS	RAIN-FALL	SUNSHINE
	Highest Max.	Lowest Min.	Max.	Min.	Mean	Mean 1 ft.	Mean 4 ft.			
	Difference from Average					% of Average				
7 ENGLAND, N.W. and N. Wales	28.3	0.6	-1.0	+0.2	-0.4	-1.3	-0.8	-2	90	93
8 ENGLAND, S.W. and S. Wales	27.2	1.1	0.0	0.0	0.0	+0.3	+0.4	-4	6	102
N. IRELAND	23.4	2.2	-0.2	-0.2	-0.2	-	-	-2	56	77
SCOTLAND	26.3	-0.6	-0.6	-0.5	-0.5	-	-	-2	79	103
ENG. and WALES	28.9	0.0	-0.1	0.0	-0.1	-	-	-4	63	103

TABLE II—SUMMARY OF AUTOGRAPHIC RECORDS OF WIND— JULY 1964 (1914)

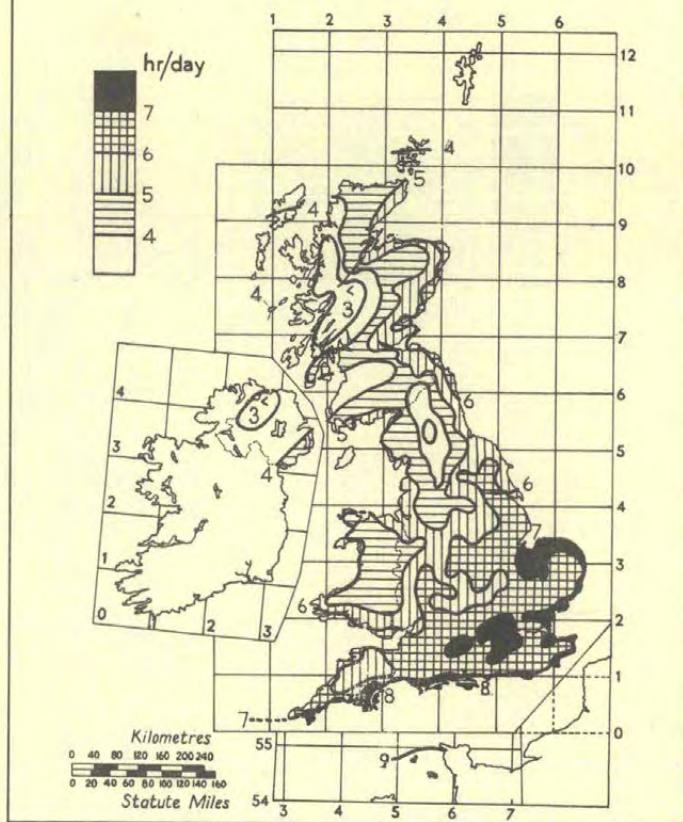
DISTRICT, COUNTY AND PLACE	Height of Vane			Distribution of Mean Hourly Values of Wind Speed								Mean Hourly Wind Speed	Highest Velocities								
	Above Mean Sea Level	Above Ground	Effective Height	34 knots or more		22 to 33 knots		11 to 21 knots	4 to 10 knots	Less than 4 knots	No Record		Highest Hourly Wind			Highest Gust					
				Dates of Occurrence	Duration	No. of days	Duration	Duration	Duration	Duration	Duration		Veer from N	Speed	Hour ended at	Speed	Day and Time				
																		hr.	hr.	hr.	hr.
ft.	ft.	ft.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	knots	°	knots	day hr	knots	day hr					
SCOTLAND																					
0 Zetland	Lerwick Observatory	304	33	33	2, 28	12	14	122	345	217	48	0	13.9	290	39	28	15	61	28	1415	
	Orkney Kirkwall	134	50	33	28	12	9	74	402	196	60	0	13.3	280	38	28	14	59	28	0820	
	Caitness Downreay	110	39	30	-	0	15	131	430	153	0	30	15.4	31C	33	28	13	55	28	0645	
	Sutherland Shin	78	39	33	28	1	8	49	357	21C	127	0	11.0	250	34	28	04	57	28	0330	
	Ross & Cromarty Stornoway (Coastguard)	12C	40	36	15	2	12	102	304	150	186	0	11.6	20C	34	15	12	47	8	1230	
	Inverness Benbecula	125	65	55	7, 8	8	12	96	323	267	50	0	12.9	260	39	8	19	59	8	1730	
	1 Moray Lossiemouth	69	51	35	8	11	11	126	402	179	26	0	15.2	280	41	8	17	59	8	1535	
	Aberdeen Dyce	101	80	60	-	0	9	65	300	228	147	4	10.6	230	33	8	19	55	28	0830	
	Angus Auchterhouse	234	30	30	-	0	8	46	333	267	98	0	10.9	200	28	7	15	44	28	1120	
	Bell Rock Lighthouse	827	62	50	-	0	6	28	286	292	107	31	9.9	240	28	8	16	45	8	2015	
	Perth Rannoch	126	131	124	7-9, 28	17	20	166	354	139	68	0	15.8	24C	44	8	22	58	8	2055	
	Fife Leuchars	10C6	56	57	-	0	8	64	333	313	34	0	11.7	250	33	8	21	55	8	2105	
	Midlothian Turnhouse	78	40	40	-	0	9	87	288	303	66	0	11.7	250	33	8	18	55	8	1815	
	6a Argyll Edinburgh, Blackford Hill	137	40	33	-	0	8	12	119	312	180	66	59	14.1	200	44	7	14	75	7	1310
	Bute Millport	496	50	34	7, 8, 14	8	12	119	312	180	66	59	14.1	200	44	7	14	75	7	1310	
	Renfrew Paisley	89	60	47	7, 8, 14	14	11	123	404	96	107	0	14.3	280	38	8	19	54	8	1825	
	Renfrew Renfrew	50	34	34	-	0	2	5	171	390	178	0	7.5	180	25	7	13	57	7	1310	
	Lanark Lowther Hill	188	81	31	-	0	3	21	303	322	98	0	9.8	200	29	7	14	52	28	0010	
	Ayr Prestwick Airport	71	41	39	-	0	3	21	303	322	98	0	9.8	200	29	7	14	52	28	0010	
	Dumfries Eskdalemuir Observatory	2412	43	33	1, 2, 7-10, 14, 28	61	21	208	300	170	5	0	13.7	300	48	28	05	65	8	2315	
	Wigtown West Freugh	68	33	33	-	0	5	22	370	256	96	0	10.5	260	29	28	04	45	8	0510	
		825	50	35	-	0	1	4	154	325	261	0	6.3	210	26	7	13	51	8	1925	
		81	33	33	-	0	4	22	302	290	130	0	9.6	220	28	7	15	44	14	1010	
ENGLAND AND WALES																					
6b Isle of Man	Ronaldsday	119	64	39	7	5	7	56	285	279	119	0	10.8	220	35	7	16	48	7	1350	
	Point of Ayre	64	33	33	-	0	7	38	352	270	84	0	11.1	210	30	7	16	42	7	1530	
2 Durham	Durham	389	53	33	-	0	1	8	268	284	176	8	8.4	190	31	7	15	56	7	1430	
	South Shields	73	57	44	-	0	4	5	256	354	129	0	8.8	290	25	2	08	44	7	1420	
Lincoln	Cranwell	288	47	47	-	0	3	9	190	343	202	0	7.6	230	25	7	19	44	7	1720	
3 Norfolk	Gorleston	45	33	33	-	0	1	1	287	419	35	2	9.7	210	23	8	10	36	8	1415	
Suffolk	Mildenhall	98	83	60	-	0	1	4	103	390	247	0	6.0	260	26	8	17	46	8	1640	
Bedford	Bedford	327	42	30	-	0	1	1	184	422	129	8	7.9	230	22	8	16	38	8	0005	
	Cardington	226	133	133	-	0	2	27	284	376	57	0	10.0	230	29	8	16	39	7	2235	
Hertford	Garston	307	50	33	-	0	0	0	53	480	211	0	5.4	230	17	7	23	33	7	1645	
	Rothamsted	461	41	33	-	0	0	0	30	359	348	7	4.0	240	14	8	14	33	8	1325	
Essex	Stansted	351	31	31	-	0	0	0	183	464	97	0	8.0	240	20	8	15	32	8	1435	
	Coryton	66	57	48	-	0	0	0	183	464	97	0	8.0	240	20	8	15	32	8	1435	
	Shoeburyness	116	106	91	-	0	4	34	271	404	35	0	10.4	210	31	8	03	48	8	0105	
4 Yorks, W.R.	Sheffield	533	83	35	-	0	0	0	44	290	410	0	4.0	240	18	7	15	41	7	1415	
Warwick	Edgbaston	643	118	73	-	0	0	0	45	534	165	0	5.6	210	16	7	17	35	7	1625	
	Elmdon	343	31	31	-	0	3	8	242	405	89	0	8.7	220	25	7	19	43	7	1550	
Buckingham	Amersham	500	50	50	-	0	0	0	34	462	228	20	5.2	210	16	7	22	33	7	2145	
Stafford	Keele	706	50	33	-	0	0	0	78	382	284	0	5.4	320	16	1	06	40	7	1550	
Gloucester	Avonmouth	92	61	33	-	0	0	0	143	516	85	0	7.5	230	19	8	15	38	7	2140	
5 London	Kingsway	208	143	41	-	0	0	0	143	516	85	0	7.5	230	19	8	15	38	7	2140	
Middlesex	London (Heathrow) Airport	115	33	33	-	0	2	3	170	511	60	0	8.2	220	24	7	22	34	7	2150	
	Hampton	139	101	100	-	0	0	0	107	391	246	0	5.9	220	21	7	22	38	7	2145	
Surrey	Kew Observatory	92	75	50	-	0	0	0	132	457	155	0	6.9	220	20	7	22	42	7	2135	
	Gatwick	232	38	33	-	0	2	4	112	414	214	0	6.6	240	23	8	16	37	8	1500	
Kent	Isle of Grain	48	40	33	-	0	1	1	55	247	441	0	3.9	230	23	7	24	36	7	2340	
	Dover	68	38	62	-	0	2	10	154	345	235	0	6.8	220	28	8	10	49	8	0910	
Sussex	Thorney Island	75	65	42	-	0	1	1	133	316	294	0	6.1	240	22	8	09	42	8	0550	
Hampshire	Hurn	86	53	46	-	0	2	4	224	367	149	0	8.3	220	24	7	22	40	7	2200	
	Calshot	50	41	33	-	0	2	17	316	371	40	0	10.5	220	26	7	24	38	7	2310	
	S. Farnborough	316	69	35	-	0	1	3	182	394	165	0	7.7	230	22	8	16	34	8	1310	
Berkshire	Abingdon	295	40	40	-	0	1	4	173	297	270	0	6.6	240	23	8	16	36	8	1020	
Wiltshire	Larkhill	491	51	36	-	0	0	0	140	379	225	0	6.5	280	20	9	16	46	7	2225	
	Boscombe Down	425	55	55	-	0	2	9	217	401	117	0	8.5	230	24	7	23	40	7	2225	
	Porton	406	44	44	-	0	1	5	99	240	400	0	4.9	220	23	7	24	40	7	2225	
7a Cumberland	Carlisle	137	42	30	-	0	3	29	274	303	138	0	9.2	210	29	7	16	44	7	1715	
	Sellafield	83	39	35	-	0	3	22	301	359	62	0	10.1	250	31	7	16	46	7	1615	
	Spadeadam	959	51	50	-	0	5	27	267	361	86	3	10.1	270	30	28	09	49	28	0840	
Westmorland	Great Dun Fell	2812	33	33	2, 7-9, 11, 14 β	73	21	222	274	125	50	0	19.1	240	55	7	14	72	7	1425	
	Moor House	1960	50	45	-	0	0	0	143	516	85	0	7.5	230	19	8	15	38	7	2140	
Lancashire	Squires Gate	88	55	35	7	5	10	86	403	231	19	0	13.8	240	41	7	16	58	7	1550	
	Southport	59	41	33	-	0	8	60	267	233	184	0	10.0	260	28	8	14	45	7	1435	
	Fleetwood	112	50	31	-	0	7	39	323	289	92	1	10.6	230	26						

MEAN PRESSURE AT 9 G.M.T.

The dotted lines show the normal distribution of pressure in millibars based on 30 years observations 1921-50.

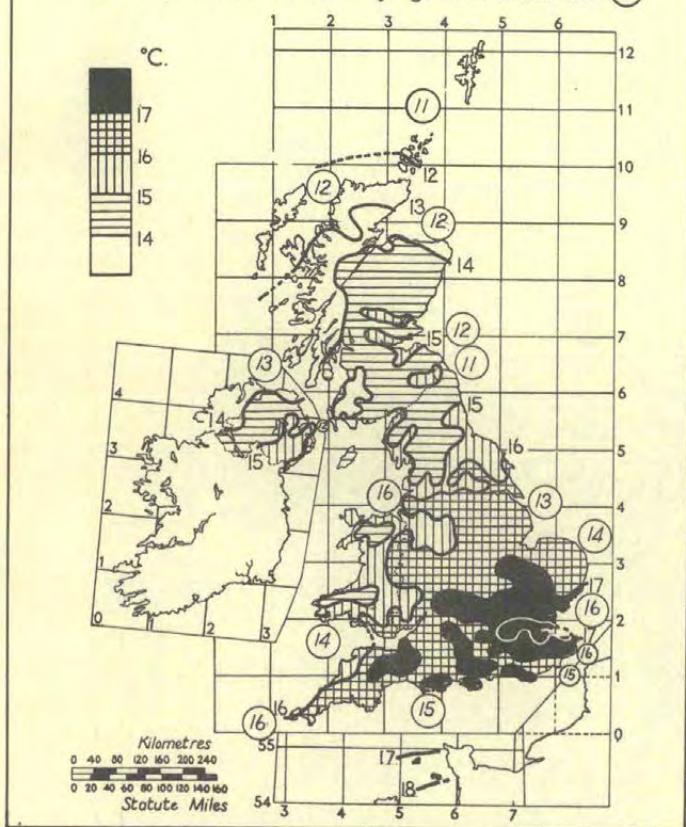


BRIGHT SUNSHINE

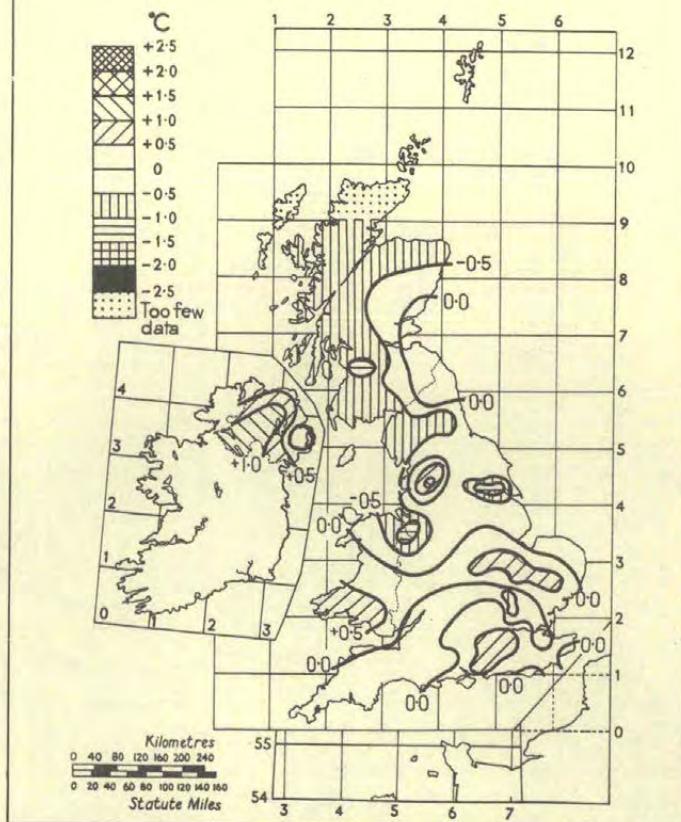


MEAN AIR TEMPERATURE

Reduced to sea level by a correction of 1°C. for 500 ft. Sea temperatures are shown by figures in circles thus (10)



ANOMALY OF MEAN 1 ft. EARTH TEMPERATURE



RAINFALL

JULY 1964

The equivalent values in mm, are given in round numbers. The exact relation is 10 in. = 254 mm.

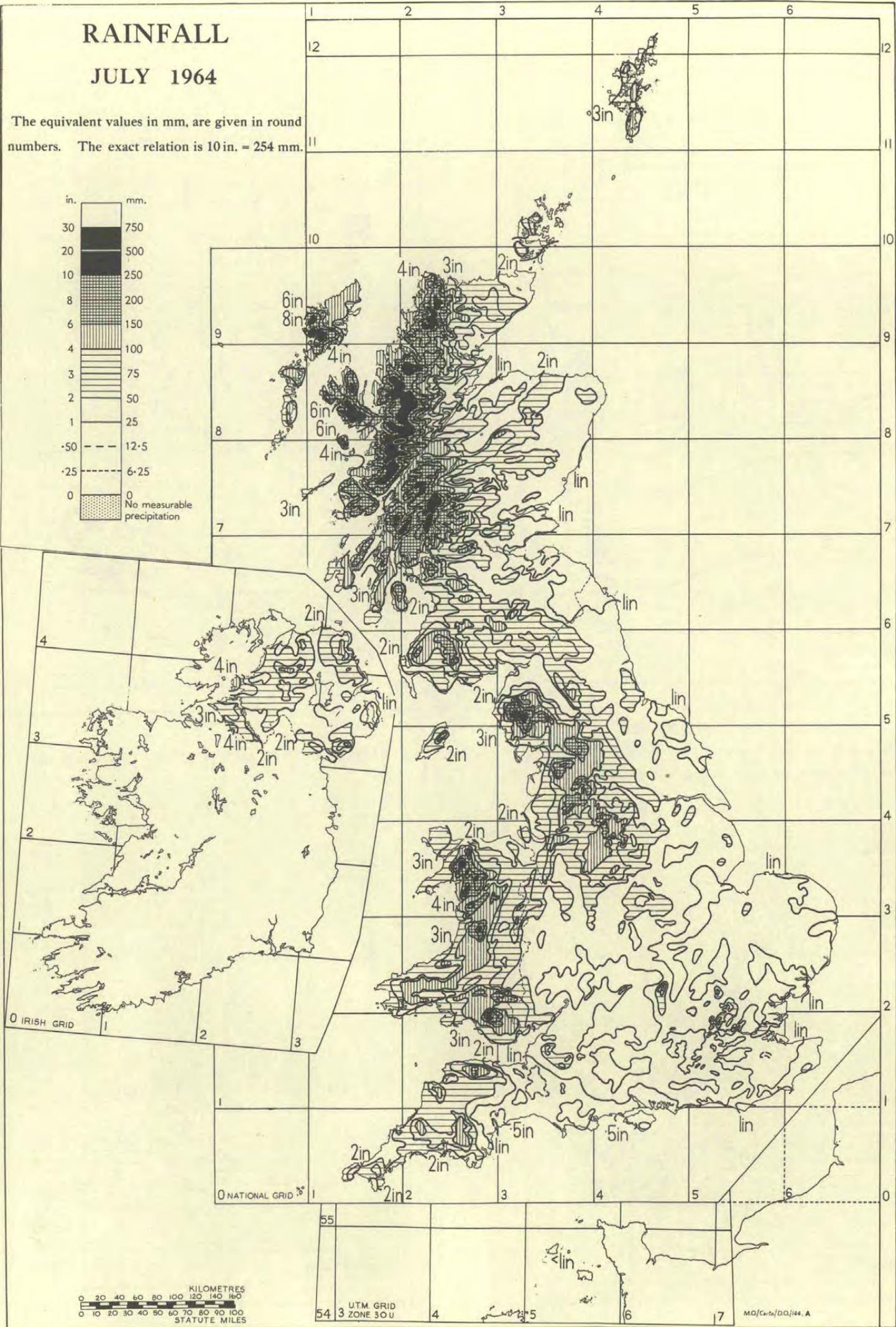
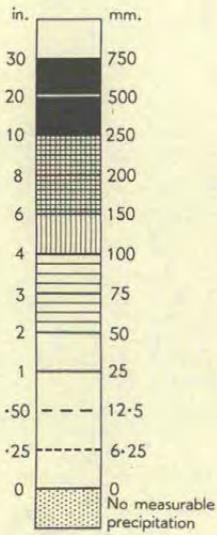


TABLE III (continued)—SUMMARY OF OBSERVATIONS OF TEMPERATURE, RAINFALL, SUNSHINE AND WEATHER JULY 1964

DISTRICT, COUNTY AND PLACE	Terminal Hours of Observation	Height of Station above Mean Sea Level	AIR TEMPERATURE IN DEGREES CELSIUS								MEAN EARLY TEMPERATURE		RAINFALL (Terminal hour 9 G.M.T.)		WEATHER										BRIGHT SUNSHINE					
			Means of		Mean Temperature Mean of A and B	Difference from Average	Highest Maximum and Lowest Minimum				1 ft.	4 ft.	Total Fall	Percentage of Average	Most in a day		Precip'n	Snow or Sleet	Snow lying at 9h.	Fog at 9h.	Thunder heard	Air Frost †	Gale min. below 0° C	Gale	Daily Mean	Percentage of Average				
			A Max.	B Min.			Maximum	Date	Minimum	Date					Amount	Date											0-1in. (0-2mm.) or more	0.01in. (1-0mm.) or more	Ice or snow pellets etc.	Daily Mean
			G.M.T.	ft.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	in.	%	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
1 SCOTLAND, E.—cont.																														
Midlothian	Balerno ...	9 9	700	17.3	9.8	13.5	-	21.7	22, 23	6.1	13	-	-	.71	.16	19	11	8	-	-	-	-	-	-	-	-	-	5.09	100	
	Turnhouse ...	21-9	114	18.6	10.6	14.6	-0.2	23.2	23	5.0	6	-	-	.65	.23	7	9	6	0	0	0	0	0	0	0	0	0	5.12	-	
	Edinburgh—E. Craigs	9 9	200	18.2	10.6	14.4	-	22.8	23	5.6	29	-	-	.58	.19	7	9	6	0	0	0	0	0	0	0	0	0	4.55	-	
	Davidson's Mains	9 9	200	18.6	10.8	14.7	-0.8	23.3	23	6.1	29	15.9	-	.71	.25	7	8	6	0	0	0	0	0	0	0	0	0	4.94	-	
	Penicuik ...	9 9	620	17.9	9.8	13.9	-	22.2	23	5.0	6	14.9	-	1.33	.52	7	8	6	0	0	0	0	0	0	0	0	0	4.49	-	
	Bush House ...	9 9	605	17.0	9.8	13.4	-	21.1	23	3.9	6	14.4	12.4	1.24	.54	7	9	5	0	0	0	0	0	0	0	0	0	2	5.40	-
	Edinburgh—																													
	Blackford Hill §§	9 9	441	18.7	10.7	14.7	-0.2	22.8	23	6.7	4, 6	-	-	.48	.13	10	6	5	0	0	0	0	0	0	0	0	0	6	5.43	104
	Liberton ...	9 9	200	19.1	10.9	15.0	-0.1	22.8	23	6.1	6, 29	-	-	.38	.17	10	5	3	-	-	-	-	0	0	0	0	0	0	5.92	-
	Royal Bot. Gdns.	9 9	74	18.6	10.9	14.7	-0.5	22.2	22, 23	6.1	29	15.8	-	.50	.15	7	7	4	0	0	0	0	0	0	0	0	0	0	1	5.50
E. Lothian	Haddington ...	9 9	162	19.0	10.5	14.7	-	23.3	23	3.3	6	-	-	.56	.17	13	9	5	0	0	0	0	0	0	0	0	0	1	5.58	-
North Berwick ...	9 9	152	18.4	11.4	14.9	+0.1	22.2	23	(6.1)	6	-	-	.83	.31	.26	13	9	8	-	-	-	-	1	0	0	0	0	6.33	117	
Dunbar ...	9 9	75	18.3	10.8	14.5	-0.1	21.7	15, 30	6.1	6	-	-	.64	.20	13	10	5	0	0	0	0	0	0	0	0	0	0	7.31	126	
Berwick	Mertoun ...	9 9	225	18.9	9.9	14.4	-	24.4	23	2.2	6	-	-	.45	.17	10	10	4	-	-	-	-	-	-	-	6	5.06	-		
Lauder ...	9 9	600	17.8	9.2	13.5	-	22.2	23	1.7	6	-	-	.93	.36	13	11	7	0	0	0	0	0	0	0	0	0	0	5.15	-	
Marchmont §§	9 9	498	18.2	9.8	14.0	-0.5	22.8	23	4.4	6	-	-	.72	.24	.18	10	8	6	0	0	0	0	0	0	0	0	4	5.86	117 S	
Whitceter ...	9 9	838	17.5	9.1	13.3	-	22.8	23	3.3	4	-	-	.87	.22	10	14	7	0	0	0	0	0	0	0	0	0	0	-	-	
St. Abb's Head ...	9 9	245	17.5	10.9	14.2	-	23.0	30	7.6	6	-	-	-	-	-	8	4	0	0	0	0	0	0	0	0	2	4	-		
Peebles	Stanhope Farm ...	9 9	741	17.1	9.3	13.2	-	21.7	23	2.8	4	-	-	1.98	.76	7	14	11	0	0	0	0	0	0	0	0	0	0	-	
Blyth Bridge ...	9 9	830	16.4	9.4	12.9	-	20.0	22, 23	3.9	4	-	-	1.30	.41	7	13	8	0	0	0	0	0	0	0	0	0	0	1	3.71	
West Linton ...	9 9	800	16.6	9.1	12.9	-	20.6	22	2.8	6	14.1	11.9	1.51	.42	7	17	8	0	0	0	0	0	0	0	0	0	0	-		
Glentress ...	9 9	580	17.7	8.3	13.0	-	(22.2)	23	1.7	8, 13	-	-	.81	.23	18	8	6	0	0	0	0	0	0	0	0	0	0	-		
Selkirk	Bowhill ...	9 9	600	18.0	10.0	14.0	-	22.8	23	3.3	6	-	-	1.17	.43	18	10	8	0	0	0	0	0	0	0	0	0	0	-	
Roxburgh	Wauchope ...	9 9	560	18.4	9.5	13.9	-	22.8	23	2.2	6	-	-	1.59	.60	21	9	8	-	-	-	-	0	0	0	0	0	-		
Sourhope ...	9 9	900	17.7	9.0	13.3	-	22.8	23	1.7	29	-	-	.56	.07	24	15	9	-	-	-	-	0	0	0	0	3	4.11	-		
6a SCOTLAND, W.																														
Argyll	Tiree ... §§	21-9	29	15.2	10.8	13.0	-0.7	17.2	15	8.0	20	-	-	2.91	.86	.78	6	19	12	0	0	0	0	0	0	0	0	2	4.04	78
	Rhuval ...	21-9	65	15.4	10.8	13.1	-	(20.0)	18	(7.0)	20	-	-	3.56	.72	10	22	14	0	0	0	0	0	0	0	0	0	0	3	-
	Colonsay ...	9 9	87	15.9	10.6	13.3	-0.5	20.0	18	6.1	29	-	-	.52	10	26	19	0	0	0	0	0	0	0	0	0	0	4	-	
	Tobermory ...	9 9	270	15.3	10.3	12.8	-	19.4	17	7.2	6	-	-	5.53	.85	6	21	20	-	-	-	-	-	-	-	-	0	-		
	Craighouse ...	9 9	10	16.7	11.0	13.9	-	22.2	18	7.2	4	-	-	4.96	.65	10	27	21	-	-	-	-	0	0	0	0	0	-		
	Campbeltown ...	9 9	10	16.8	11.1	13.9	-	20.6	18	8.3	11	-	-	2.40	.51	10	13	9	0	0	0	0	0	0	0	0	0	0	4.08	-
	Achaglachgach ...	9 9	40	17.0	9.7	13.3	-	22.8	18	3.9	4	-	-	5.11	.68	6	26	24	0	0	0	0	0	0	0	0	0	-		
	Oban ...	9 9	229																											
	Lepinmore ...	9 9	30	16.7	10.7	13.7	-	22.2	20	5.6	4	-	-	6.22	1.11	13	22	21	0	0	0	0	0	0	0	0	0	0	2.85	-
	Glenbranter ...	9 9	120	16.3	10.4	13.3	-0.9	22.2	18	3.3	4	-	-	7.64	1.81	7	25	20	-	-	-	-	0	0	0	0	0	-		
Benmore	Forestry Sch. ...	9 9	46	17.1	9.9	13.5	-0.9	21.7	18	3.3	4	14.9	-	7.87	1.75	13	24	20	0	0	0	0	0	0	0	0	0	-		
Younger Bot. Gdns.	9 9	40	16.7	10.8	13.7	-	21.1	18	4.4	4	-	-	7.79	1.73	13	25	21	0	0	0	0	0	0	0	0	0	0	-		
Bute	Rothsay §§	9 9	150	16.6	11.0	13.8	-0.6	20.0	18	8.3	3, 6	14.2	12.6	3.41	.80	10	23	15	0	0	0	0	0	0	0	0	0	4.35	87	
Millport ...	9 9	16																												
Dunbarton	Helensburgh ...	9 9	293	17.3	10.8	14.1	-0.6	21.7	22	6.7	4	-	-	3.76	.90	.84	7	21	15	0	0	0	0	0	0	0	0	4.01	86 S	
Cumbernauld ...	9 9	310	18.5	10.2	14.3	-	22.8	22	5.0	6, 29	-	-	2.08	.61	7	11	9	0	0	0	0	0	0	0	0	0	0	-		
Stirling	Earls Hill ...	9 9	1100	15.6	8.4	12.0	-	20.5	22	2.6	8	-	-	3.33	1.32	7	17	11	-	-	-	-	1	0	0	0	0	5.23	-	
Stirling ...	9 9	151	18.8	11.2	15.0	-0.4	24.4	22	(5.0)	29	17.6	13.1	1.35	.43	.50	7	10	6	0	0	0	0	0	0	0	0	0	5.22	-	
Falkirk ...	9 9	100												1.18	.61	7	6	4	-	-	-	-	-	-	-	-	-			
Renfrew	Greenock ...	9 9	200	16.9	11.3	14.1	-1.0	20.0	5, 20	8.3	4	-	-	4.76	1.12	7	18	15	0	0	0	0	0	0	0	0	0	4.23	-	
Paisley ...	9 9	106	17.9	11.6	14.7	-0.9	21.1	22, 5, 20	7.8	4	15.4	12.3	2.28	.70	.84	7	14	10	0	0	0	0	0	0	0	0	2	4.09	81	
Barrhead ...	9 9	97	17.3	11.1	14.2	-	21.1	22	5.0	4	-	-	2.31	.68	7	14	12	0	0	0	0	0	0	0	0	0	0	-		
Renfrew §§	9 9	26	17.8	11.1	14.5	-0.6	21.5	22	5.7	4	-	-	1.77	.57	.46	7	15	12	0	0	0	0	0	0	0	0	0	4.56	89 S	
Lanark	Crossmyloof ...	9 9	75	18.0	11.3	14.7	-	21.7	5, 22	7.2	6	-	-	1.60																

TABLE III (continued)—SUMMARY OF OBSERVATIONS OF TEMPERATURE, RAINFALL, SUNSHINE AND WEATHER JULY 1964

DISTRICT, COUNTY AND PLACE	Terrestrial Hours of Observation	Height of Station above Mean Sea Level	AIR TEMPERATURE IN DEGREES CELSIUS								MEAN EARTH TEMPERATURE		RAINFALL (Terminal hour 9 G.M.T.)				WEATHER (Number of days)										BRIGHT SUNSHINE						
			Means of		Mean Temperature Mean of A and B	Difference from Average	Highest Maximum and Lowest Minimum				1 ft.	4 ft.	Total Fall	Percentage of Average	Most in a day		Precip'n		Snow or Sleet	Snow lying at 8h	Hail	Ice or snow pellets etc.	Thunder heard	Fog at 9h	Air Frost	Grass min below 0° C	Gale	Daily Mean	Percentage of Average				
			A	B			Maximum	Date	Minimum	Date					Amount	Date	0.01 in. (0.2mm) or more	0.01 in. (0.2mm) or more															
			Max.	Min.	ft.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	in.	%	in.															
4 MIDLAND COUNTIES—cont.																																	
Yorks.	Huddersfield	8	9 9	32.5	19.3	12.1	15.7	-0.2	25.0	17	6.7	13	16.0	13.7	2.76	-	.77	21	14	8	-	-	-	-	-	-	-	-	-	-	5.55	111	
W. Riding—	Oakes		21-9	76.1	18.8	10.9	14.9	-0.5	24.3	17	6.4	5	14.2	11.7	3.23	107	.73	18	17	8	0	0	0	0	0	0	0	0	0	0	5.02	97	
cont.	Bradford	¶	9 9	439	18.4	11.6	15.0	-0.6	23.9	17	6.7	27	15.1	13.0	2.03	70	.64	16	13	10	0	0	0	0	0	0	0	0	0	0	4.99	98	
	Ilkley	...	9 9	315	15.4	11.7	15.5	-0.2	25.0	17	6.1	27	-	-	2.26	73	.66	18	12	11	0	0	0	0	0	0	0	0	0	0	5.96	112	
	Sheffield	...	9 9	429	16.8	11.9	15.9	-0.4	24.4	17	7.8	13, 14	16.6	13.4	2.00	72	.47	7	12	9	0	0	0	0	0	0	0	0	0	0	-	-	
	Wakefield	...	9 9	121	20.6	11.8	16.2	-0.4	25.0	17	6.1	13	15.8	13.2	3.23	127	1.59	18	15	11	0	0	0	0	0	0	0	0	0	0	-	-	
	Pontefract	...	9 9	255	19.3	11.6	15.5	-0.4	23.9	17	7.2	6	-	-	1.86	78	.70	16	12	10	0	0	0	0	0	0	0	0	0	0	0	-	-
	Bramham	...	9 9	177	20.0	10.8	15.4	-	25.0	17	5.0	6	-	-	1.59	58	.35	14, 17	14	9	0	0	0	0	0	0	0	0	0	0	6.03	-	
	Cawood	...	9 9	20	20.4	10.3	15.3	-	25.0	17	3.9	6	16.0	14.2	1.94	75	.58	16	10	9	0	0	0	0	0	0	0	0	0	0	5.68	-	
	Askham Bryan	...	9 9	110	20.4	10.7	15.5	-	25.0	18	5.6	6	-	-	1.15	45	.30	14	12	8	0	0	0	0	0	0	0	0	0	0	5.87	111	
Derby	Buxton	...	9 9	1007	17.1	10.9	14.0	-0.3	21.6	16, 17, 24	5.5	13	15.1	13.3	5.29	136	1.33	7	16	13	0	0	0	0	0	0	0	0	0	0	-	-	
	Chapel en le Frith	...	9 9	732	16.1	10.9	14.5	-	22.8	16, 24	5.0	27	-	-	4.51	-	1.23	18	19	13	0	0	0	0	0	0	0	0	0	0	-	-	
	Mackworth	...	9 9	293	20.0	11.0	15.5	-	23.3	16, 24, 30	5.5	5	-	-	1.79	-	.34	14, 26	12	7	-	-	-	-	-	-	-	-	-	-	-	-	
	Belper	...	9 9	203	20.7	10.9	15.8	-0.4	26.1	24	6.1	5	-	-	2.06	75	.50	14	12	9	0	0	0	0	0	0	0	0	0	0	0	-	-
	Derby	...	9 9	159	20.6	12.3	16.5	-	25.0	24	7.7	5	-	-	1.89	-	.39	21	12	8	0	0	0	0	0	0	0	0	0	0	6.91	-	
	Morley	...	9 9	350	19.9	11.1	15.5	-	23.9	17	6.1	5	-	-	1.89	71	.34	14	11	9	0	0	0	0	0	0	0	0	0	0	6.24	-	
	Chesterfield	...	9 9	298	20.1	11.2	15.7	-	23.9	16, 30	6.1	5	-	-	2.30	-	.82	17	11	10	0	0	0	0	0	0	0	0	0	0	-	-	
Nottingham	Sutton Bonington	...	9 9	157	20.1	11.3	15.7	-0.7	27.2	16	6.1	5	16.2	14.6	2.24	95	1.35	21	10	6	0	0	0	0	0	0	0	0	0	6.33	115		
	Watnall	...	21-9	385	20.2	11.3	15.7	-	25.1	16	6.2	5	-	-	1.61	59	.38	14	12	8	0	0	0	0	0	0	0	0	0	0	5.77	105	
	Nottingham Training College	...	9 9	169	20.3	11.7	16.0	-	25.0	17	7.2	5, 6	-	-	1.41	-	.34	26	12	11	-	-	-	-	-	-	-	-	-	-	-	-	
	Mansfield	...	9 9	362	19.6	11.9	15.7	-0.5	23.9	30	7.2	5, 6	16.7	-	1.72	64	.30	22	9	9	0	0	0	0	0	0	0	0	0	0	-	-	
	Nottingham	¶	9 9	192	20.6	12.4	16.5	-0.2	24.5	17	7.2	5	16.6	15.5	1.76	70	.38	22	9	8	0	0	0	0	0	0	0	0	0	5.20	102		
	Warsop	...	9 9	150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Finningley	...	21-9	34	21.0	12.1	16.5	-0.1	27.1	17	7.6	6	-	-	1.77	-	.44	22	13	10	0	0	0	0	0	0	0	0	0	0	5.63	-	
Leicester	Newtown Linford	...	9 9	392	20.4	10.7	15.5	-	23.9	17	6.1	5	-	-	2.45	-	.93	21	12	9	0	0	0	0	0	0	0	0	0	6.19	-		
	Caldecott	...	9 9	175	21.7	10.5	16.1	-	25.5	15, 17	5.0	5, 7	-	-	1.06	-	.35	21	8	6	-	-	-	-	-	-	-	-	-	6.27	-		
Northampton	Bugbrooke Mills	...	9 9	228	21.5	10.3	15.9	-	26.1	17	4.5	7	16.9	13.7	.78	-	.17	10	7	6	0	0	0	0	0	0	0	0	0	6.80	-		
	Raunds	...	9 9	193	22.0	11.3	16.6	-	25.5	16, 25, 30	5.5	6	17.5	13.3	1.09	50	.24	7	10	7	0	0	0	0	0	0	0	0	0	0	5.81	-	
	Wittering	...	21-9	212	21.4	11.6	16.5	-	25.3	30	6.3	6	-	-	.80	-	.19	14	8	6	0	0	0	0	0	0	0	0	0	6.80	-		
Warwick	Birmingham K.E.S.*	...	9 9	450	20.1	12.3	16.2	-	23.3	16, 16, 24	8.3	6, 10	-	-	1.60	-	.31	21	13	8	0	0	0	0	0	0	0	0	0	0	-	-	
	Edgbaston	¶	21-9	536	19.7	12.3	16.0	-0.2	23.5	16, 18	8.8	10	13.0	11.7	1.75	61	.38	11	12	9	0	0	0	0	0	0	0	0	0	5.84	109		
	Luddington	...	9 9	138	21.7	11.1	16.4	-	25.5	17	5.5	7	-	-	.90	39	.33	11	6	5	0	0	0	0	0	0	0	0	0	6.37	-		
	Stratford on Avon	...	9 9	160	21.6	11.1	16.3	-	25.5	16, 17, 24	4.5	7	18.7	-	.94	42	.28	11	9	5	0	0	0	0	0	0	0	0	0	6.01	-		
	Elmdon	...	21-9	319	20.6	11.7	16.1	-	24.0	17	8.2	4	-	-	1.58	61	.29	7	15	8	0	0	0	0	0	0	0	0	0	6.52	-		
	Shipston on Stour	...	9 9	365	20.9	11.6	16.3	-	25.0	17, 18	7.8	7	16.5	-	.57	-	.18	11	6	5	0	0	0	0	0	0	0	0	0	6.10	-		
	Wellesbourne	...	9 9	153	21.0	10.9	15.9	-	25.0	17	5.0	4, 7	17.0	15.3	.89	37	.26	11	8	6	0	0	0	0	0	0	0	0	0	5.62	-		
	Moreton Morrell	...	9 9	280	21.1	11.1	16.1	-	25.5	18	6.7	4, 13	-	-	2.41	-	.31	11	6	6	0	0	0	0	0	0	0	0	0	2	5.51		
	Coventry	...	9 9	338	20.2	11.5	15.9	-0.6	22.8	16, 17	6.7	7	16.9	13.3	.99	38	.22	11	12	8	0	0	0	0	0	0	0	0	0	5.46	105		
	Rugby	...	9 9	385	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Oxford	Oxford	¶	9 9	208	22.1	12.7	17.4	+0.3	26.7	17, 25	7.8	4	18.3	15.7	.83	35	.20	10, 14	7	6	0	0	0	0	0	0	0	0	0	6.93	118		
	Grendon Underwood	...	9 9	220	21.8	10.6	16.2	-	26.7	17	5.5	5	17.7	14.7	2.44	-	1.36	21	12	10	0	0	0	0	0	0	0	0	0	6.71	-		
Buckingham	Medmenham	...	9 9	98	22.1	9.9	16.0	-	27.8	17	4.5	10	-	-	1.37	-	.44	12	11	8	-	-	-	-	-	-	-	-	-	-	-		
	Aylesbury	...	9 9	316	21.5	11.5	16.5	-	26.7	17	7.2	4, 6, 10	-	-	.98	37	.19	10	10	7	0	0	0	0	0	0	0	0	0	6.58	-		
Stafford	Keele	...	9 9	587	18.4	11.1	14.7	-	22.2	16, 17, 24	5.5	6	15.0	12.5	2.29	76	.49	21	17	11	0	0	0										

TABLE III (continued)—SUMMARY OF OBSERVATIONS OF TEMPERATURE, RAINFALL, SUNSHINE AND WEATHER JULY 1964

DISTRICT, COUNTY AND PLACE	Terminal Hours of Observation	Height of Station above Mean Sea Level	AIR TEMPERATURE IN DEGREES CELSIUS								MEAN EARTH TEMPERATURE		RAINFALL (Terminal hour 9 G.M.T.)		WEATHER										BRIGHT SUNSHINE					
			Means of		Difference from Average	Highest Maximum and Lowest Minimum				1 ft.	4 ft.	Total Fall	Percentage of Average	Most in a day		Precip'n		Snow or Sleet	Snow lying at 9h.	Hail	Ice or snow pellets etc.	Thunder heard	Fog at 9h.	Air Frost 1	Grass min. below 0° C	Gale	Daily Mean	Percentage of Average		
			A	B		Maximum	Date	Minimum	Date					Amount	Date	0.1 in. (0.2 mm.) or more	0.01 in. (0.1 mm.) or more													
			Max. Min.	ft.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	in.	%	in.		°	°	°	°	°	°	°	°	°	°	°	hr	%	
7a ENGLAND, N.W.—cont.																														
Westmorland	Great Dun Fell	21-9	2780	11.5	6.5	9.0	-	17.8	17	2.0	4	-	-	-	-	-	0	-	-	-	-	-	-	-	-	-	-	2.52	-	
-cont.	Moor House	9 9	1825	14.3	7.6	10.9	-	20.0	17	0.6	6	11.3	-	4.74	.99	7	22	15	-	-	-	-	-	-	-	-	2	4.23	-	
Lancashire	Squires Gate	21-9	33	18.3	12.7	15.5	-0.2	25.9	17	6.9	4, 13	-	1.58	55	.47	18	16	7	0	0	0	0	0	0	0	0	0	5.30	89	
	Urswick	9 9	130	18.6	11.3	14.9	-	24.4	17	7.2	5, 27	-	2.30	.42	9	15	12	0	0	0	0	0	0	0	0	0	0	-	-	
	Southport	9 9	16	18.1	12.0	15.1	-	24.4	17	6.1	4	16.3	12.2	.62	18	14	12	0	0	0	0	0	0	0	0	0	0	5.20	-	
	Poulton-le-Fylde	9 9	38	18.0	-	-	-	28.3	17	8.3	4	-	-	1.39	.78	13	6	0	0	0	0	0	0	0	0	0	0	-	-	
	Grizedale	9 9	300	17.7	9.6	13.7	-	23.3	18	2.8	5	15.2	-	5.68	2.05	7	19	14	0	0	0	0	0	0	0	0	0	-	-	
	Speke	21-9	80	19.2	13.0	16.1	-	24.5	17	8.0	4	-	-	2.04	.61	18	16	11	0	0	0	0	0	0	0	0	0	5.40	-	
	Kirkham	9 9	78	18.3	11.7	15.0	-	24.4	17	5.6	27	-	-	2.63	.97	7	16	10	0	0	0	0	0	0	0	0	0	(5.46)	-	
	Garstang	9 9	68	17.8	11.7	14.7	-	21.7	17, 18	6.7	27	-	-	2.49	1.12	7	13	9	0	0	0	0	0	0	0	0	0	4.58	-	
	Morecambe	9 9	24	18.1	13.0	15.5	-0.5	25.6	17	10.0	11	-	-	1.85	.57	7	15	10	0	0	0	0	0	0	0	0	0	5.13	90	
	Preston	9 9	108	18.3	12.0	15.1	-	21.7	17	5.6	27	-	-	2.95	.76	7	17	12	0	0	0	0	0	0	0	0	0	-	-	
	Stonyhurst	9 9	377	17.7	11.3	14.5	-0.7	23.3	17	5.0	13	-	-	5.10	1.55	7	17	13	0	0	0	0	0	0	0	0	0	4.33	85	
	Manchester W/Centre																										4.30	-		
	Helmshore	9 9	854	16.9	10.9	13.9	-	22.8	17	5.6	5	13.8	-	7.35	153	2.36	18	15	0	0	0	0	0	0	0	0	0	4.28	- S	
	Burnley	9 9	655	17.3	11.0	14.1	-	23.3	17	6.1	5, 13, 27	14.1	-	4.96	1.88	18	13	12	0	0	0	0	0	0	0	0	0	4.02	-	
	Nelson	9 9	540	17.4	11.3	14.3	-	23.9	17	6.1	13	14.9	12.1	6.20	169	1.90	18	16	11	0	0	0	0	0	0	0	0	4.08	- S	
	Rochdale	9 9	362	18.3	10.8	14.5	-	24.4	17	3.9	13	-	-	3.96	1.04	7	17	12	0	0	0	0	0	0	0	0	1	-	-	
Cheshire	Bidston Obs'y.	9 9	198	18.1	13.1	15.6	-0.1	23.9	17	10.0	4, 11	-	-	2.29	.83	.75	18	15	10	0	0	0	0	0	0	0	0	5.49	96	
	Winnington	9 9	65	19.8	12.5	16.1	-	24.4	24	7.2	5, 13, 27	-	-	2.65	.59	18	17	12	0	0	0	0	0	0	0	0	0	-	-	
	Knutsford	9 9	212	19.5	11.4	15.5	-	23.9	24	6.1	4, 13	16.8	14.8	2.74	.62	18	16	10	0	0	0	0	0	0	0	0	0	-	-	
	Ringway	21-9	248	18.9	12.0	15.5	-0.4	23.8	17	6.7	13	-	-	3.22	108	.76	18	15	11	0	0	0	0	0	0	0	0	4.68	94	
	Macclesfield	9 9	500	18.7	11.3	15.0	-0.7	23.3	17	7.2	9	-	-	3.29	90	.72	17	19	13	0	0	0	0	0	0	0	0	-	-	
7b NORTH WALES																														
Flint	Rhyl	9 9	31	18.6	12.7	15.7	-0.1	23.3	17	6.7	27	-	-	1.33	64	.41	18	12	8	0	0	0	0	0	0	0	0	5.17	90	
	Prestatyn	9 9	12	18.8	12.8	15.8	-	25.0	17	8.9	13	-	-	1.36	58	.25	18	15	9	0	0	0	0	0	0	0	0	4.33	80	
	Hawarden Bridge	9 9	17	19.9	12.3	16.1	-0.2	23.9	24, 30	5.0	27	-	-	1.22	49	.23	11	15	10	0	0	0	0	0	0	0	0	1	-	
Anglesey	Valley	21-9	33	17.8	12.3	15.1	0.0	22.6	18	8.2	5	-	-	2.18	87	.46	7	15	10	0	0	0	0	0	0	0	0	5.13	85	
Denbigh	Colwyn Bay	9 9	118	18.4	12.9	15.7	-0.2	22.8	24	9.4	27	16.3	-	1.27	59	.42	7	11	5	0	0	0	0	0	0	0	0	4.98	86	
	Alwen	9 9	1100	16.6	8.6	12.6	-	22.8	17	1.1	5	-	-	3.33	1.00	7	17	11	-	-	-	-	-	-	-	0	3	-		
	Ruthin	9 9	248	18.8	10.1	14.5	-	23.9	17	3.9	27	-	-	2.95	.59	18	14	11	0	0	0	0	0	0	0	0	0	4.92	-	
	Loggerheads	9 9	690	17.7	10.3	14.0	-	22.8	18	3.9	27	14.6	13.2	1.72	.40	11	14	9	0	0	0	0	0	0	0	0	0	0	-	
	Bwlchgwyn	9 9	1267	16.2	9.8	13.0	-	20.0	16	5.0	5	12.6	-	2.24	.43	18	17	14	0	0	0	0	0	0	0	0	0	0	-	
	Wrexham	9 9	275	19.7	11.2	15.5	-	23.9	24	5.0	5	14.8	13.2	3.36	1.27	17	18	11	0	0	0	0	0	0	0	0	0	0	-	
Caernarvon	Bardsey Island	21-9	61	16.6	12.4	14.5	-	20.0	17, 21	8.5	5	-	-	2.15	.51	13	9	9	0	0	0	0	0	0	0	0	0	5.59	-	
	Botwnnog	9 9	112	18.0	11.8	14.9	-	22.8	17, 18	6.7	27	17.0	14.6	2.84	.76	7	10	8	0	0	0	0	0	0	0	0	0	4.53	-	
	Bryn Adda	9 9	275	18.6	11.6	15.1	-	24.4	17	6.7	4	-	-	3.92	1.12	7	16	10	0	0	0	0	0	0	0	0	0	4.53	-	
	Cwm Dylli	9 9	324	17.7	11.5	14.6	-	24.4	17	5.0	27	15.3	-	11.12	3.16	7	23	15	-	-	-	-	-	-	-	0	1	-		
	Aber	9 9	60	18.2	12.0	15.1	-0.5	21.7	16	7.2	5	-	-	5.02	163	2.23	18	12	0	0	0	0	0	0	0	0	0	4.61	84	
	Llandudno	9 9	13	17.9	13.1	15.5	-0.4	21.7	14, 17	7.2	27	-	-	1.58	78	.46	7	12	9	0	0	0	0	0	0	0	0	2	4.97	85
Merioneth	Llyn Stwlan	9 9	1656	14.2	9.0	11.6	-	18.3	19	5.0	4, 5	-	-	13.10	4.60	5	21	17	-	-	-	-	-	-	-	0	-	-		
	Blaenau Ffestiniog	9 9	750	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-		
	Corwen	9 9	473	18.3	9.3	13.8	-	23.3	17	2.2	5	-	-	2.19	.70	7	12	11	0	0	0	0	0	0	0	0	0	-	-	
Montgomery	Ceinws	9 9	200	19.2	10.7	14.9	-	22.8	16, 22	1.1	4	-	-	8.52	3.43	7	18	13	-	-	-	-	-	-	-	0	2	-		
	Lake Vyrnwy	9 9	995	17.4	10.2	13.8	-	21.1	16, 17	3.9	5	14.4	-	3.83	86	1.34	7	17	9	0	0	0	0	0	0	0	0	4	-	
8a SOUTH WALES																														
Cardigan	Aberporth	21-9	378	17.1	12.2	14.7	-0.1	20.0	16	9.0	13	-	-	2.10	66	.82	11	10	7	0	0	0	0	0	0	0	0	5.10	-	
	Aberystwyth	9 9	12	18.5	10.3	14.4	-1.2	21.1	13, 16, 18	8.9	23	-	-	3.04	1.00	11	9	9	-	-	-	-	-	-	-	0	0	5.80	113	
	" P.B.S.*	9 9	452	17.4	11.4	14.4	-0.5	23.9	17	5.0	4	-	-	3.96	114	.75	7, 11	16	10	0	0	0	0	0	0	0	0	1	4.60	91
	Gogerddan	9 9	103	18.3	12.0	15.1	-	24.4	17	2.8																				

TABLE III (continued)—SUMMARY OF OBSERVATIONS OF TEMPERATURE, RAINFALL, SUNSHINE AND WEATHER JULY 1964

DISTRICT, COUNTY AND PLACE	Terminal Hours of Observation	Height of Station above Mean Sea Level	AIR TEMPERATURE IN DEGREES CELSIUS								MEAN EARTH TEMPERATURE		RAINFALL (Terminal hour 9 G.M.T.)		WEATHER										BRIGHT SUNSHINE												
			Means of		Mean Temperature of A and B	Difference from Average	Highest Maximum and Lowest Minimum				1 ft.	4 ft.	Total Fall	Percentage of Average	Most in a day		Precip'n	Snow or Sleet	Snow lying at 9h.	Hail	Ice or snow pellets etc.	Thunder heard	Fog at 9h.	Air Frost	Grass min. below 0° C	Gale	Daily Mean	Percentage of Average									
			A	B			Maximum	Date	Minimum	Date					Amount	Date																					
			Max.	Min.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	in.	%	in.	Date	-0.1in. (0.2mm.) or more	-0.4in. (1.0mm.) or more										hr	%						
8b ENGLAND, S.W.—cont.																																					
Devon																																					
Clawton ...	9 9	412	19.7	8.4	14.1	-	25.0	17	2.8	6,7,13	-	-	2.89	-	1.11	14	14	10	0	0	0	0	0	0	0	0	0	0	0	-	-						
Hartland Point ...	21-9	298	17.5	13.4	15.5	-	21.9	27	9.8	13	-	-	2.61	-	1.30	14	13	9	0	0	0	0	0	0	0	0	0	0	4	6.77	109						
Mount Batten ...	21-9	87	19.4	12.5	15.9	-0.1	22.7	17	6.5	13	-	-	1.99	77	.87	14	6	6	0	0	0	0	0	0	0	0	0	0	0	0	7.15	112					
Plymouth, The Hoe	9 9	119	20.0	12.6	16.3	0.0	23.3	17	7.2	13	17.6	15.5	1.67	65	.92	14	8	6	0	0	0	0	0	0	0	0	0	0	0	0	7.01	110					
Tavistock ...	9 9	457	20.4	11.2	15.8	+0.1	27.2	17	4.4	7,13	-	-	2.97	-	1.89	14	12	7	0	0	0	0	0	0	0	0	0	0	0	-	-						
Chivenor ...	21-9	20	19.6	12.3	15.9	-	24.3	17	6.4	13	-	-	1.57	-	.61	14	7	5	0	0	0	0	0	0	0	0	0	0	0	0	6.31	-					
Ilfracombe ...	9 9	25																																			
Totnes ...	9 9	120	21.4	10.8	16.1	-	26.7	17	4.4	7	17.8	14.5	1.62	54	.80	7	8	4	0	0	0	0	0	0	0	0	0	2	0	0	7.23	-					
Slapton ...	9 9	104	20.6	12.4	16.5	-	25.0	21,22	7.8	7,13	-	-	1.92	-	.95	7	8	7	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-				
Newton Abbot ...	9 9	272	21.0	11.3	16.1	-0.1	24.4	2,17	6.1	4	-	-	.99	38	.43	7	5	4	0	0	0	0	0	0	0	0	0	0	0	0	0	7.61	127				
Paignton ...	9 9	8	21.4	13.1	17.3	-	25.0	2	7.8	13	-	-	1.02	43	.51	7	8	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8.12	125			
Torquay ...	9 9	26	21.0	13.1	16.1	-0.5	25.0	2	7.8	7,13	-	16.6	.91	42	.47	7	6	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8.18	121			
Teignmouth †	9 9	20	21.1	13.4	17.3	+0.4	23.9	1,2,27	8.3	13	-	-	.59	27	.19	7,14	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7.82	117			
Starcross ...	9 9	29	20.9	11.9	16.4	-	23.9	17	5.6	13	18.2	-	.44	18	.21	14	5	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7.40	-			
Exeter, Southam	9 9	160	21.2	11.7	16.5	-	25.6	17	6.1	13	-	-	.38	16	.18	14	5	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6.79	106			
Exmouth ...	9 9	195	20.2	12.4	16.3	+0.3	23.9	2	7.8	4	-	-	.49	20	.17	9	8	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5.90	-			
Exeter ...	21-9	106	21.4	11.9	16.7	-	25.6	17	5.9	13	-	-																									
Sidmouth ...	9 9	25																																			
Cornwall																																					
St. Mary's, Scilly	21-9	158	19.2	13.9	16.5	+0.5	21.7	26	11.3	7	-	-	1.78	80	.64	14	13	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7.38	110		
Penzance ...	9 9	62	19.3	12.9	16.1	-0.3	22.8	17,23	7.2	13	-	-	2.96	108	1.41	14	11	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6.90	104		
Gulval ...	9 9	50																																			
Culdrose ...	9 9	268	18.3	12.3	15.3	-	22.2	17	7.2	13	-	-	1.87	-	1.08	14	8	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7.03	-		
Rosewarne ...	9 9	250	18.3	12.7	15.5	-	22.2	16	7.2	13	16.7	15.1	2.30	90	1.24	14	11	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.67	-		
Lizard ...	9 9	240	18.6	12.6	15.6	0.0	23.5	2	9.7	4,7	-	-	1.71	80	.87	14	11	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7.40	-	
Falmouth †	9 9	167	19.2	12.7	15.9	-0.4	23.9	17	7.8	13	-	-	2.64	94	1.10	14	10	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6.50	100	
Newquay ...	9 9	176	18.4	13.1	15.7	-0.1	21.7	16	7.2	13	-	-	1.89	71	1.02	14	11	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6.46	102	
St. Mawgan ...	21-9	337	18.2	12.6	15.4	-	21.7	16,17	8.5	13	-	-	1.99	-	1.02	14	10	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6.32	-	
St. Austell ...	9 9	310	19.8	12.4	16.1	-	24.4	17	7.8	13	-	-	2.43	72	1.29	14	11	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	
Fowey ...	9 9	51	20.1	12.5	16.3	0.0	25.0	17	6.7	13	-	-	1.99	-	1.13	14	11	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	
Bude ...	9 9	50	18.3	11.9	15.1	-0.6	22.2	16	6.7	6,7	16.1	-	2.47	92	.99	14	11	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	6.00	101		
Ellbridge ...	9 9	190	20.3	11.4	15.9	-0.1	26.1	17	5.0	7,13	-	-	2.90	98	1.75	14	12	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6.85	111	
9 NORTHERN IRELAND																																					
Londonderry																																					
Loughmore Forest	9 9	570	16.7	9.6	13.1	-	21.7	30	5.0	4	-	-	2.43	-	.40	9	21	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	
Ballykelly †	21-9	6	17.8	11.6	14.7	+0.1	22.5	30	8.8	12	-	-	1.54	46	.30	24	17	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3.01	69
Derrynoyd Forest	9 9	290	18.0	10.7	14.3	-	22.8	30	5.6	4	-	-	2.40	-	.48	10	18	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
Somerset Forest	9 9	140	17.6	10.8	14.2	-	22.8	30	7.8	4,12,16	-	-	2.14	-	.31	7,17	16	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
Garvagh Forest	9 9	290	17.6	10.4	14.0	-	23.3	30	5.6	4	-	-	2.36	-	.54	13	18	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
Moneydig †	21-9	112	18.1	10.8	14.5	-0.6	23.4	30	6.1	4	16.6	-	2.01	52	.32	13	19	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
Portrush ...	9 9	17											1.23	37	.28	24	17	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.06	-		
Lisnafillan ...	9 9	124	18.1	10.7	14.4	-	22.2	30	4.4	4	-	-	1.89	-	.56	13	13	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3.73	-
Aldergrove †	21-9	225	18.5	11.1	14.8	+0.1	21.9	17	6.0	4,26	15.4	12.3	1.55	-	.29	13	19	11	0	0	0																

Monthly Weather Report

MO 754

OF THE METEOROLOGICAL OFFICE

Summary of observations compiled from returns of official stations and voluntary observers



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August 1964 — Dry in the South, rather wet in Scotland.

Apart from cyclonic spells during the 6th-9th, 16th-19th and 23rd-28th weather was mainly anti-cyclonic in character with pressure high either to the south-west, west or north of the British Isles.

During the first four days of the month a ridge of high pressure extended from the south-west over the British Isles. Fresh north-westerly winds on the 1st moderated on the 2nd as a belt of drizzle spread over the country from the west. The next two or three days were fine and warm especially in the south where many places had 10-12 hours of sunshine and where temperature reached 27°C locally on the 3rd and 5th.

A depression near Iceland moved south-eastwards on the 5th and the next day an associated cold front brought to many districts the first measureable rain for about two weeks. From the 7th to the 9th weather remained generally rather cool with scattered thundery showers in an unstable airstream from high latitudes as the declining depression from the north-west formed a broad low pressure area covering northern and north-eastern districts.

Winds were light and variable on the 10th following a general rise of pressure but were generally north-east to east during the next three or four days. Until the 15th eastern coastal districts were rather cool with drizzle at times, but over most of the country weather was cloudy with about average temperature although there were good sunny periods in sheltered western districts.

Rain reached western coasts on the 16th as a deepening depression approached southern Ireland from the west. The depression turned north-eastwards, bringing stormy weather to the whole country during the next two days as it moved across the Irish Sea to the North Sea. Winds reached gale force in many places especially in the south-west and rainfall exceeded 1 in. over wide areas on both the 17th and 18th, more than 2½ in. being recorded in parts of Northern Ireland and Scotland on the 17th.

Winds of northerly origin behind the depression brought a sharp fall of temperature in all areas on the 19th, afternoon temperatures in parts of eastern England being as much as 7°C below normal. Subsequently winds became light and variable as a ridge of high pressure moved slowly southwards over the country on the 20th-22nd. Weather was dry and sunny; it remained generally cold and was very cold at night. A covering of ground frost was reported from places as far south as Bristol on each of the three mornings, and air frost was recorded locally.

A deep depression between Iceland and Scotland brought rain to Scotland on the 22nd but southern England remained dry and sunny. The depression later became complex and associated troughs brought rain to western districts on the afternoon of the 23rd. The rain became widespread and heavy locally during the night and persisted for much of the next day.

A warm southerly airstream on the western flank of an anti-cyclone centred over Germany cleared most of the rain, except over Scotland, on the night of the 24th/25th. The next two or three days were hot over the Midlands and south-east England with almost uninterrupted sunshine. Temperatures rose to 32°C at a number of places.

A shallow depression over Scotland brought thundery rain or showers to most districts on the 28th. The dry weather with almost continuous sunshine returned during the last three days of the month as an anti-cyclone from the Atlantic approached the British Isles, but associated north-westerly winds kept temperatures a little below normal.

Pressure and Wind — Surface pressure was generally above average, the excess at 9h G.M.T. ranging from 3.0 mb at Stornoway to 0.3 mb at Shoeburyness. Surface winds were north-westerly at first but after the 4th were rather variable; they were mainly easterly on the 12th-14th, south-westerly on the 23rd-25th and north-westerly on the 28th-30th. Winds reached gale force in Scotland on 11 days and in England and Wales on the 1st, 16th-19th, 23rd and 24th (7 days). A gust of 65 kt was recorded at Brawdy on the 17th.

Temperature — Mean temperatures during the month were generally below average especially in Scotland. Nights were particularly cold around the 20th and 21st; on these dates temperature at Eskdalemuir fell below (minus) -2°C the lowest August temperature recorded there for at least 50 years. There were some very warm days in the Midlands and south-east England during the first and last weeks.

Extremes included: (England and Wales) 32.8°C at Cromer on 28th, -1.7°C at Lincoln and Santon Downham on the 31st; (Scotland) 27.8°C at Strachan on the 3rd, -2.7°C at Cannich on the 20th and 21st; (Northern Ireland) 24.4°C at Armagh on the 4th, -1.1°C at Loughermore Forest on the 21st.

Precipitation — In Scotland rainfall was generally above average except for some areas in the extreme south. In the north-east amounts were twice the average in some places; Wick had its wettest August since 1920. In England and Wales it was below average almost everywhere except in Northumberland and locally in Lincolnshire and Suffolk. Over much of central southern England amounts were less than 25 per cent of the average.

Thunder was heard in Scotland on 17 days and in England and Wales on the 6th-11th, 15th-18th, 20th, 28th and 29th (13 days). Thunderstorms were widespread on the 7th-9th, 17th and 18th. During a heavy thunderstorm near Yarmouth on the 9th about 2 in. of rain fell in four hours.

Snow was reported from Cairngorm (3575 ft.) on the 19th.

Sunshine — In Scotland there were large local deficits of sunshine in the north and north-east, but in the west sunshine was more generally above average. In England and Wales, although excesses only locally exceeded 20 per cent sunshine was considerably above normal in the Midlands, south-east and eastern England after the 20th.

Fog — Fog was observed at 9h at one place or another in Scotland on all but four days (19th-21st and 31st). England and Wales had 17 days of early morning fog; Mansfield and Aberystwyth reported it on 7 days but mostly at a particular place it occurred on only one or two.

Miscellaneous Phenomena — The aurora was observed in Scotland on one night only (the 31st).

TABLE I—DISTRICT VALUES— AUGUST, 1964

DISTRICTS	AIR TEMPERATURE					EARTH TEMP.		RAIN DAYS	RAIN-FALL	SUNSHINE
	Highest Max.	Lowest Min.	Max.	Min.	Mean	Mean 1 ft.	Mean 4 ft.			
0 SCOTLAND, N.	24.4	-2.7	-1.4	-1.6	-1.5	-	-	+1	141	92
1 SCOTLAND, E.	27.8	-1.7	-0.9	-0.3	-0.6	-	-	+1	128	93
2 ENGLAND, N.E.	30.7	-1.7	-0.3	-0.5	-0.4	-0.3	+0.1	-3	76	109
3 ENGLAND, E.	32.8	-1.7	+0.1	-0.5	-0.2	-0.1	+0.4	-1	57	115
4 MIDLANDS	30.5	-0.5	-0.2	-0.7	-0.4	+0.1	+0.1	-4	68	116
5 ENGLAND, S.E.	31.1	0.0	+0.1	-0.1	0.0	+0.2	+0.3	-3	54	108
6 SCOTLAND, W.	23.3	-2.2	-1.1	-0.6	-0.8	-0.5	-0.7	-1	115	102

(1908, revised 1928, 1941, 1956 and 1964)

DISTRICTS	AIR TEMPERATURE					EARTH TEMP.		RAIN DAYS	RAIN-FALL	SUNSHINE
	Highest Max.	Lowest Min.	Max.	Min.	Mean	Mean 1 ft.	Mean 4 ft.			
7 ENGLAND, N.W. and N. Wales	26.7	-0.6	-0.5	-0.5	-0.6	-0.3	-	-5	73	115
8 ENGLAND, S.W. and S. Wales	27.2	-0.6	-0.4	-0.7	-0.5	+0.4	+0.7	-5	59	108
N. IRELAND	24.4	-1.1	-0.4	-0.9	-0.6	-	-	0	105	104
SCOTLAND	27.8	-2.7	-1.1	-0.8	-1.0	-	-	0	126	96
ENG. and WALES	32.8	-1.7	-0.2	-0.5	-0.3	-	-	-3	64	112

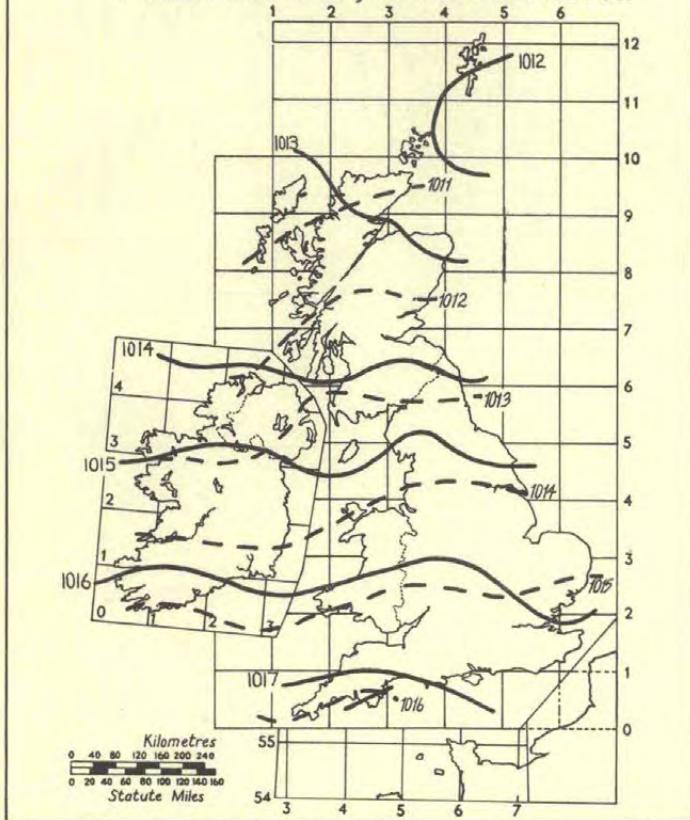
TABLE II—SUMMARY OF AUTOGRAPHIC RECORDS OF WIND— AUGUST, 1964 (1914)

DISTRICT, COUNTY AND PLACE	Height of vane			Distribution of Mean Hourly Values of Wind Speed										Highest Velocities						
	Above Mean Sea Level	Above Ground	Effective Height	34 knots or more		22 to 33 knots		11 to 21 knots	4 to 10 knots	Less than 4 knots	No Record	Mean Hourly Wind Speed	Highest Hourly Wind			Highest Gust				
				Dates of Occurrence	Duration	No. of days	Duration	Duration	Duration	Duration	Duration		Veer from N	Speed	Hour ended at	Speed	Day and Time			
	ft.	ft.	ft.		hr.		hr.	hr.	hr.	hr.	hr.	knots	knots	day hr	knots	day	hr.			
SCOTLAND																				
0 Zetland	Lerwick Observatory	304	33	33	18, 26	19	13	85	237	297	106	0	11.6	230	42	26	12	61	26	1135
Orkney	Kirkwall	134	50	33	17, 18, 26	13	7	64	253	312	102	0	11.2	240	39	26	10	53	18	0635
Caithness	Dounreay	110	39	30	-	0	11	102	303	337	2	0	12.8	090	32	17	20	52	17	1955
Sutherland	Shin	78	33	33	-	0	4	13	216	283	224	8	7.6	050	25	17	23	44	18	0335
Ross & Cromarty	Stornoway (Coastguard)	120	40	36	17, 18, 21, 25, 26	32	11	73	380	202	57	0	13.9	190	40	26	01	60	26	0035
Inverness	Benbecula	69	51	35	-	0	9	66	261	293	124	0	10.2	170	33	22	04	51	22	0310
1 Moray	Lossiemouth	101	80	60	17, 18, 25	12	8	59	323	306	44	0	12.4	040	40	17	22	58	17	2120
Aberdeen	Dyce	234	30	30	-	0	8	29	286	299	130	0	9.6	340	26	18	22	42	18	2140
Angus	Auchterhouse	827	62	50	-	0	2	8	171	333	209	23	7.1	230	24	24	12	44	24	0905
Perth	Bell Rock Lighthouse	126	131	124	18, 19	9	14	99	325	205	106	0	12.9	010	41	18	24	51	18	2325
Fife	Rannoch	1005	56	57	-	0	3	20	184	263	265	12	7.3	270	27	1	11	41	24	0950
Midlothian	Leuchars	78	40	40	-	0	3	13	210	405	116	0	8.7	250	27	24	11	47	24	1105
	Turnhouse	137	40	33	-	0	5	26	192	422	104	0	8.6	240	29	24	12	51	24	1045
6a Argyll	Edinburgh, Blackford Hill	456	50	34	23, 25	2	8	68	238	330	106	0	10.5	160	35	25	20	62	25	1920
Bute	Tiree	89	60	47	18	14	12	80	264	202	184	0	11.1	010	38	18	15	53	18	1630
Renfrew	Millport	50	34	34	-	0	1	3	185	413	143	0	7.5	240	24	24	17	39	24	1700
Lanark	Paisley	188	81	31	-	0	0	0	84	368	292	0	5.3	150	20	24	18	39	24	0650
Ayr	Renfrew	71	41	39	-	0	1	3	185	413	143	0	7.5	240	24	24	17	39	24	1700
Dumfries	Lowther Hill	2412	43	33	1, 19, 25	15	16	176	257	223	73	0	15.0	320	44	1	16	57	1	1525
Wigtown	Prestwick Airport	68	33	33	-	0	1	3	214	387	140	0	8.1	290	24	1	17	34	23	1445
	Eskdalemuir Observatory	825	50	35	-	0	3	5	93	268	378	0	4.8	240	27	24	16	47	24	1455
	West Freugh	81	33	33	-	0	3	10	222	342	170	0	8.2	190	25	25	15	39	25	1445
ENGLAND and WALES																				
6b Isle of Man	Ronaldsway	119	64	39	-	0	6	52	280	298	114	0	10.7	200	31	23	13	43	18	2105
2 Durham	Point of Ayre	64	33	33	-	0	7	44	319	324	57	0	11.0	190	27	25	16	42	24	1155
	Durham	389	53	33	-	0	2	4	147	345	206	42	7.0	180	25	24	13	51	24	1250
	South Shields	73	57	44	-	0	3	11	179	386	168	0	7.7	350	29	19	04	42	19	0340
Lincoln	Cranwell	268	47	47	-	0	3	8	187	422	127	0	8.0	230	24	24	14	39	24	1320
3 Norfolk	Gorleston	45	33	33	-	0	3	10	340	363	31	0	11.0	160	26	18	12	37	17	1510
Suffolk	Mildenhall	99	83	60	-	0	0	0	76	432	236	0	5.7	200	19	17	17	36	17	1600
Bedford	Bedford	377	42	30	-	0	2	2	234	415	93	0	8.5	280	23	1	22	42	17	1700
	Cardington	276	133	133	-	0	5	12	332	340	60	0	10.1	230	25	24	16	36	17	1640
Hertford	Garston	307	50	33	-	0	0	0	43	503	198	0	5.6	280	16	1	14	40	17	1610
	Rothamsted	461	41	33	-	0	0	0	21	448	275	0	4.7	200	14	17	17	35	17	1645
Essex	Stansted	851	31	31	-	0	0	0	187	453	104	0	7.7	210	18	17	17	31	17	1835
	Coryton	66	57	48	-	0	1	1	174	443	78	48	8.0	250	23	17	16	40	17	1540
	Shoeburyness	116	106	91	-	0	7	42	331	337	34	0	11.5	190	32	17	20	48	17	1730
4 Yorks, W.R.	Sheffield	533	83	35	-	0	0	0	43	314	387	0	3.9	240	16	24	12	42	24	1210
Warwick	Edbaston	643	112	73	-	0	0	0	43	525	176	0	5.5	230	17	24	15	35	19	0405
	Elmdon	343	31	31	-	0	3	5	214	387	138	0	8.0	300	24	19	05	37	17	1525
Buckingham	Amersham	500	50	50	-	0	0	0	36	497	181	30	5.7	190	18	17	17	42	17	1545
Stafford	Keele	706	50	33	-	0	0	0	82	298	364	0	4.7	190	15	24	01	35	1	1820
Gloucester	Avonmouth	92	61	33	x	0	0	0	127	508	109	0	7.4	200	21	17	17	43	17	1655
5 London	Kingsway	208	143	41	-	0	1	4	210	457	73	0	8.2	200	25	17	16	40	17	1535
Middlesex	London (Heathrow) Airport	115	33	33	-	0	0	0	126	401	217	0	6.2	210	20	17	15	37	17	1545
	Hampton	139	101	100	-	0	0	0	166	405	173	0	7.0	210	21	17	15	45	17	1450
Surrey	Kew Observatory	92	75	50	-	0	0	0	166	405	173	0	7.0	210	21	17	15	45	17	1340
	Gatwick	232	38	33	-	0	1	2	129	394	219	0	6.2	210	23	17	15	41	17	1340
Kent	Isle of Grain	48	40	33	-	0	0	0	72	242	405	25	4.1	220	19	17	14	32	19	0930
	Dover	68	38	62	F	0	0	0	140	320	284	0	6.1	200	19	18	10	36	17	1700
Sussex	Thorney Island	75	65	42	-	0	1	3	219	371	151	0	8.2	210	23	17	18	36	17	2240
Hampshire	Hurn	86	53	46	-	0	1	3	338	363	32	0	10.6	200	26	17	16	36	17	1505
	Calshot	50	41	33	-	0	0	0	185	402	157	0	7.6	200	20	17	16	40	17	1345
	S. Farnborough	316	69	35	-	0	0	0	198	322	224	0	7.1	180	21	17	15	36	17	1345
Berkshire	Abingdon	295	40	40	-	0	0	0	198	322	224	0	7.1	180	21	17	15	36	17	1405
Wiltshire	Larkhill	491	51	36	-	0	1	7	125	402	210	0	6.6	290	28	1	16	47	17	1405
	Boscombe Down	425	55	55	-	0	3	22	285	349	88	0	9.5	200	27	17	17	41	17	1650
	Porton	406	44	44	-	0	1	4	111	275	354	0	5.3	200	23	17	13	42	17	1800
7a Cumberland	Carlisle	137	42	30	-	0	1	2	125	354	263	0	6.2	240	23	24	13	37	24	0845
	Sellafield	83	39	35	-	0	3	8	247	353	94	52	9.4	240	24	23	15	36	23	1430
	Spadeadam	959	51	50	-	0	4	21	153	404	147	19	8.1	020	30	19	02	48	19	0220
Westmorland	Great Dun Fell	2813	33	33	1, 19, 23-25	43	16	165	286	154	96	0	15.9	250	49	23	19	63	23	1830
Lancashire	Moor House	1960	50	45	23, 24	6	11	113	246	268	84	27	12.6	250	38	24	18	55	24	0110
	Squires Gate	88	55	35	-	0	7	41	325	302	76	0	11.1	250	27	24	19	43	24	1720
	Southport	59	41	33	-	0	1	17	193	222	312	0	6.7	280	26	1	03	36	1	1610
	Fleetwood	112	50	31	-	0	3	24	213	342	136	29	8.6	270	26	1	03	38	23	1610
	Fleetwood	84	41	33	-	0	3	20	242	376	106	0	9.1	230						

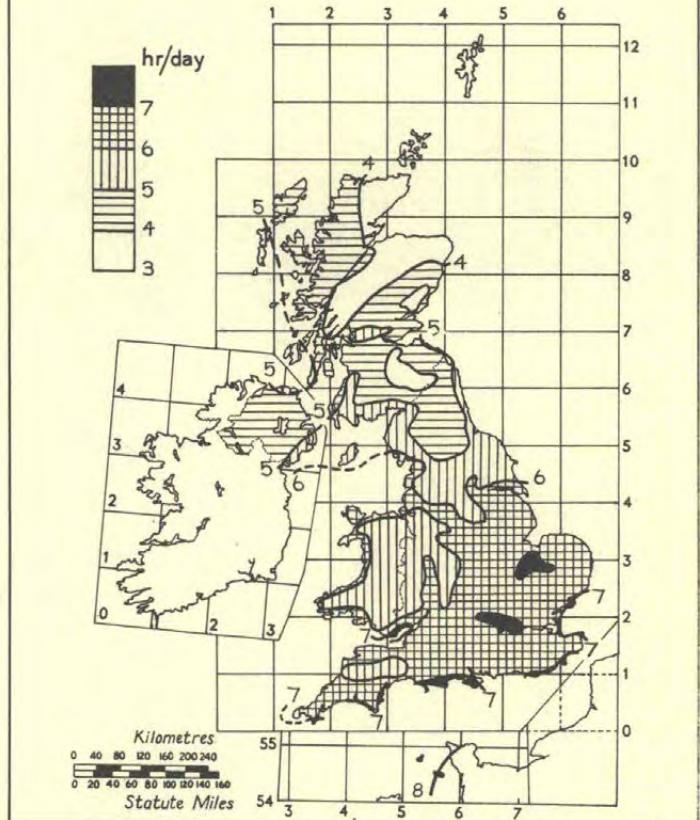
MONTHLY WEATHER CHARTS AUGUST 1964

MEAN PRESSURE AT 9 G.M.T.

The dotted lines show the normal distribution of pressure in millibars based on 30 years observations 1921-50.

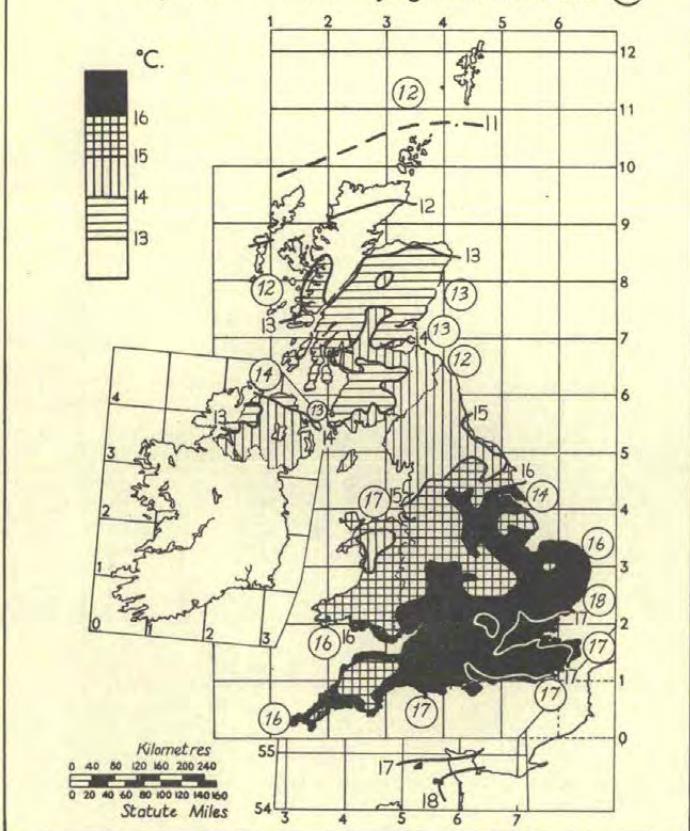


BRIGHT SUNSHINE

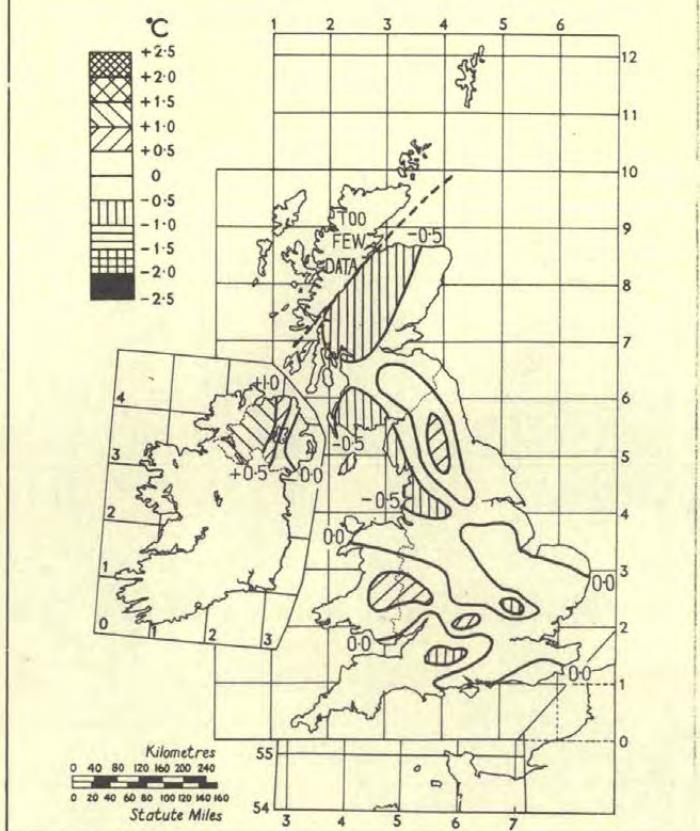


MEAN AIR TEMPERATURE

Reduced to sea level by a correction of 1°C. for 500 ft. Sea temperatures are shown by figures in circles thus (10)



ANOMALY OF MEAN 1 ft. EARTH TEMPERATURE



RAINFALL

AUGUST 1964

The equivalent values in mm, are given in round numbers. The exact relation is 10 in. = 254 mm.

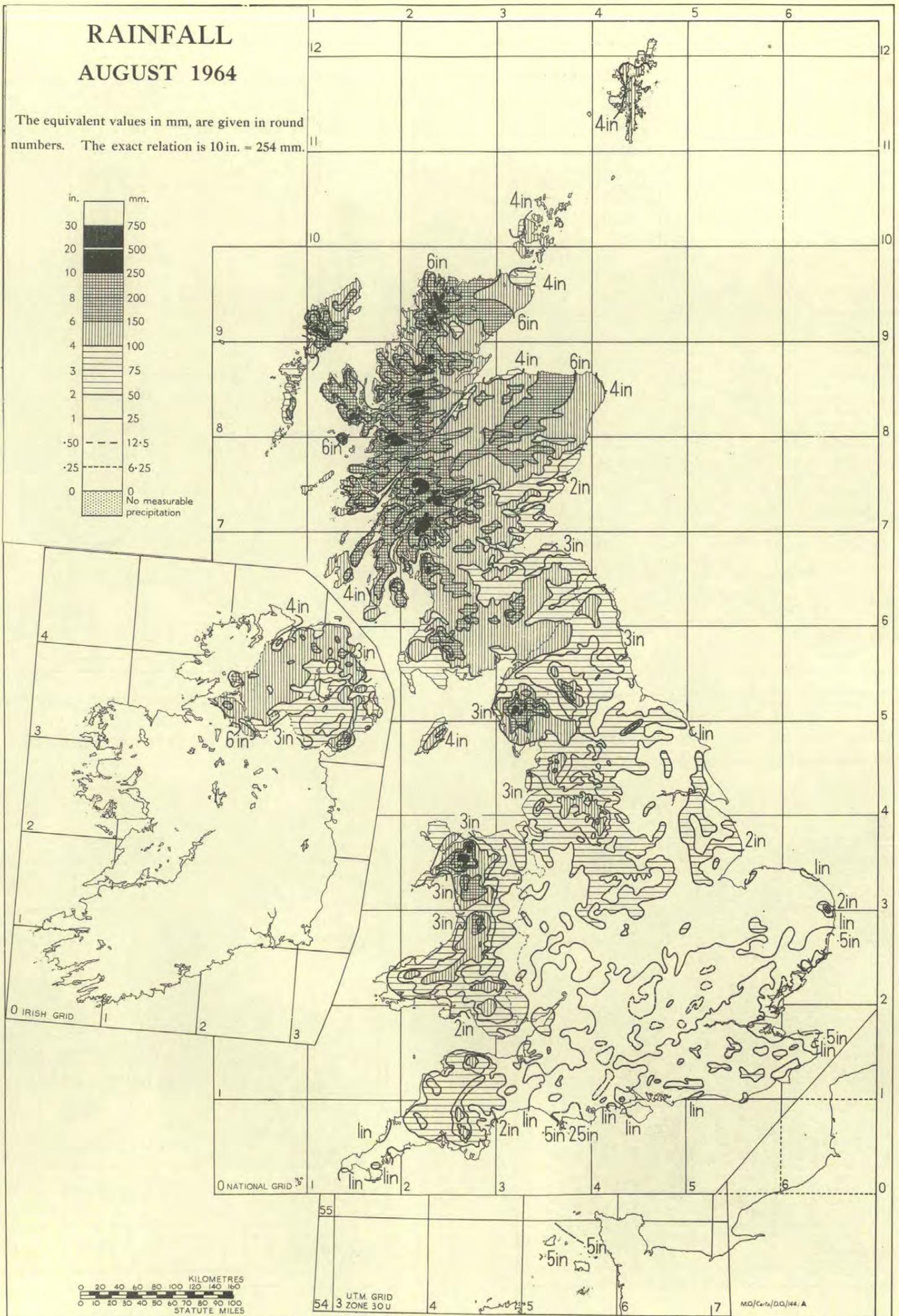
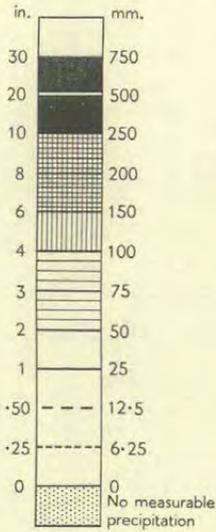


TABLE III (continued)—SUMMARY OF OBSERVATIONS OF TEMPERATURE, RAINFALL, SUNSHINE AND WEATHER AUGUST, 1964

DISTRICT, COUNTY AND PLACE	Terminal Hours of Observation	Height of Station above Mean Sea Level	AIR TEMPERATURE IN DEGREES CELSIUS								MEAN EARTH TEMPERATURE		RAINFALL (Terminal hour 9 G.M.T.)				WEATHER Number of days								BRIGHT SUNSHINE					
			Means of		Mean Temperature Mean of A and B	Difference from Average	Highest Maximum and Lowest Minimum				1 ft.	4 ft.	Total Fall	Percentage of Average	Most in a day		Precip'n -0.1in.(0.2mm) or more -0.01in.(1.0mm) or more	Snow or Sleet	Snow lying at 9h.	Fog at 9h.	Thunder heard	Fog at 9h.	Air Frost 1°	Grass min. below 0° C	Gale	Daily Mean	Percentage of Average			
			A	B			Maximum	Date	Minimum	Date					Amount	Date														
			G.M.T.	ft.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	in.	%	in.		in.									hr	%		
I SCOTLAND, E.—cont.																														
Midlothian	Balerno ...	9 9	700	16.3	9.4	12.9	-	(21.1)	4	2.8	20,21	-	-	3.20	-	.51	17	18	14	-	-	-	-	-	-	-	-	4.37	98	
	Turnhouse ...	21-9	114	17.5	10.1	13.8	-0.5	23.4	4	1.7	20	-	-	3.14	101	.68	17	16	14	0	0	1	0	0	0	4	0	4.38	-	
	Edinburgh—E. Craigs	9 9	200	17.1	10.1	13.6	-	21.7	4	2.2	21	-	-	3.09	-	.66	17	16	15	0	0	0	0	0	0	3	0	3.90	-	
	Davidson's Mains	9 9	200	17.4	10.4	13.9	-0.6	21.7	4	3.3	26	15.2	-	3.21	-	.79	17	18	12	0	0	0	0	0	0	0	0	4.27	-S	
	Penicuik ...	9 9	620	16.9	9.4	13.1	-	22.2	4	1.7	20	14.6	-	3.43	-	.46	15,18	16	15	0	0	0	0	1	0	0	1	0	4.06	-
	Bush House ...	9 9	605	16.6	9.3	12.9	-	21.7	4	2.2	21,22,31	14.4	13.2	3.01	-	.45	18	18	15	0	0	0	0	0	3	0	2	0	4.58	-
	Edinburgh—																													
	Blackford Hill ¶§	9 9	441	17.4	10.8	14.1	-0.4	23.9	4	5.0	20,21	-	-	3.05	97	.52	17	16	14	0	0	0	0	0	1	0	0	3	4.73	102
	Liberton ...	9 9	200	17.8	10.5	14.1	-0.5	22.8	4	3.3	21	-	-	3.15	-	.50	17	17	14	-	0	-	-	-	0	0	0	4	4.51	-
	Royal Bot. Gdns.	9 9	74	17.3	10.6	13.9	-0.8	22.8	4	3.9	20	15.4	-	3.52	-	.77	17	17	14	0	0	0	0	0	0	0	0	0	4.69	100
E. Lothian	Haddington ...	9 9	162	17.6	10.3	13.9	-	23.9	4	2.2	20	-	-	2.90	-	1.18	8	14	10	0	0	0	0	0	0	0	0	0	4.51	-
	North Berwick ...	9 9	152	17.2	10.8	14.0	-0.5	23.9	4	3.9	(21)	-	-	3.45	113	1.40	8	16	11	-	0	-	-	-	0	0	-	-	4.45	95
	Dunbar ...	9 9	75	16.9	10.7	13.8	-0.5	24.4	4	5.0	21	-	-	2.30	-	.90	8	18	14	0	0	0	0	0	0	0	0	0	5.11	101
Berwick	Mertoun ...	9 9	225	18.2	9.4	13.8	-	25.0	4	0.6	21	-	-	3.11	-	.53	17	19	11	-	-	-	-	-	0	4	-	4.73	-	
	Lauder ...	9 9	600	17.7	8.9	13.3	-	22.8	4	0.0	20,21	-	-	3.42	-	.73	17	19	13	0	0	1	0	1	1	0	5	0	4.46	-
	Marchmont ¶§	9 9	498	17.1	9.7	13.4	-0.7	23.3	4	3.3	20,21	-	-	4.62	141	.82	17	20	14	0	0	0	0	1	0	0	1	0	4.24	93 S
	Whitchester ...	9 9	838	16.4	8.5	12.5	-	23.9	4	1.7	20	-	-	4.10	-	.83	18	21	14	0	-	0	2	-	0	-	0	-	-	-
	St. Abb's Head ...	9 9	245	16.4	11.3	13.9	-	24.3	3	6.9	22	-	-	-	-	-	0	0	1	0	2	1	0	0	0	2	-	-	-	
Peebles	Stanhope Farm	9 9	741	17.1	8.4	12.7	-	21.1	14	(0.0)	21	-	-	3.48	-	.70	17	18	13	0	0	0	0	0	1	0	3	0	-	-
	Blyth Bridge ...	9 9	830	16.4	8.8	12.6	-	20.0	4	1.1	31	-	-	3.46	-	.90	14	17	13	0	0	0	0	0	0	3	0	3.80	-	
	West Linton ...	9 9	800	16.2	8.4	12.3	-	20.0	4	0.0	21	13.7	12.8	3.48	-	(.75)	14	19	12	0	0	0	0	0	0	1	0	-	-	-
	Glentworth ...	9 9	580	17.8	7.6	12.7	-	22.8	4	-1.7	21	-	-	4.32	-	1.03	14	19	14	0	0	0	0	0	2	-	0	-	-	-
Selkirk	Bowhill ...	9 9	600	17.4	9.3	13.3	-	21.7	3,4	1.1	21,31	-	-	4.43	-	1.11	17	14	13	0	0	1	0	3	0	-	0	-	-	-
Roxburgh	Wauchope ...	9 9	560	17.4	9.1	13.3	-	23.3	3,4	0.6	20,21	-	-	3.35	-	.61	18	19	14	-	0	-	-	-	2	0	-	-	-	
	Sourhope ...	9 9	900	17.3	9.3	13.3	-	24.4	4	2.2	20	-	-	4.08	-	1.58	18	19	15	-	0	-	-	-	1	0	4	-	3.94	-
6a SCOTLAND, W.																														
Argyll	Tiree ... ¶§	21-9	29	15.1	10.4	12.7	-1.1	18.5	13	5.6	21	-	-	4.52	125	.85	17	23	16	0	0	0	0	0	0	0	1	1	5.43	103
	Rhuvaal ...	21-9	65	15.6	10.6	13.1	-	18.3	12	6.1	20	-	-	5.72	-	.83	27	19	17	0	0	0	0	0	0	0	0	0	-	-
	Colonsay ...	9 9	87	16.2	9.9	13.1	-1.0	20.0	12	3.9	31	-	-	5.30	122	.88	22	26	16	0	-	0	0	0	2	0	-	-	-	-
	Tobermory ...	9 9	270	15.3	9.7	12.5	-	20.6	13	4.4	21,31	-	-	6.91	-	1.25	22	22	20	-	-	-	-	-	0	0	-	-	-	-
	Craighouse ...	9 9	10	17.2	10.8	14.0	-	23.3	12	5.0	21	-	-	5.99	-	1.10	26	23	19	-	0	-	-	-	0	0	-	-	-	-
	Campbeltown ...	9 9	10	16.8	10.6	13.7	-	20.6	4	4.4	21	-	-	3.33	-	.72	17	16	15	0	0	0	0	0	10	0	-	5.24	-	
	Achaglachgach ...	9 9	40	17.1	9.6	13.3	-	23.3	13	1.7	20	-	-	6.82	-	.97	17	24	21	0	-	0	0	1	0	0	2	0	-	-
	Oban ...	9 9	229																											
	Lephinmore ...	9 9	30	16.9	10.1	13.5	-	21.7	11,12	2.8	21	-	-	5.76	-	.94	22	24	19	0	0	0	0	0	1	0	0	0	3.86	-
	Glenbranter ...	9 9	120	16.8	9.2	13.0	-0.9	23.3	13	0.6	21	-	-	8.47	118	1.19	22	19	16	-	0	-	-	-	0	0	2	-	-	-
	Benmore																													
	Forestry Sch.	9 9	46	16.9	9.1	13.0	-1.1	22.2	11	0.6	21	14.6	-	8.06	113	1.66	17	21	18	0	0	0	0	0	4	0	3	0	-	-
	Younger Bot. Gdns.	9 9	40	-	9.8	-	-	-	-	2.8	20,21	-	-	8.09	-	1.67	17	20	17	0	0	0	0	1	0	0	2	0	-	-
Bute	Rothsay ¶§	9 9	150	16.6	10.7	13.7	-0.6	22.8	12	4.4	21	14.3	13.3	5.93	194	1.23	17	18	14	0	0	0	0	1	0	0	2	0	4.82	105
	Millport ...	9 9	16	16.7	11.3	14.0	-	22.2	12	6.1	21	-	-	5.59	150	1.42	14	17	14	0	0	0	0	1	0	0	-	-	-	-
Dunbarton	Helensburgh ...	9 9	293	16.8	9.9	13.3	-1.0	21.1	11,12	2.8	21	-	-	5.66	115	1.30	17	19	15	0	0	0	0	0	0	0	0	4.51	107 S	
	Cumbernauld ...	9 9	310	17.5	9.1	13.3	-	22.2	4	0.6	21	-	-	4.89	-	.96	17	17	16	0	0	0	0	0	1	0	2	0	-	-
Stirling	Earls Hill ...	9 9	1100	15.0	7.9	11.5	-	20.0	4	2.7	21	-	-	6.08	-	1.44	17	18	16	-	-	-	-	-	8	0	-	4.08	-	
	Stirling ...	9 9	151	18.0	10.4	14.2	-0.8	23.3	4	3.3	20,21	16.4	13.9	4.18	121	.66	17	17	15	0	0	0	0	0	0	0	0	0	4.60	-
	Falkirk ...	9 9	100	17.7	9.9	13.8	-1.2	21.7	4	2.2	21	-	-	3.94	-	.84	17	17	15	-	-	-	-	-	0	-	-	-	-	
Renfrew	Greenock ...	9 9	200	16.8	10.8	13.8	-1.0	21.7	12	5.0	21	-	-	6.77	146	1.15	17	19	16	0	0	0	0	1	0	0	0	0	4.86	-
	Paisley ...	9 9	106	17.6	10.8	14.2	-1.1	22.2	11,12	3.9	21	15.1	13.1	5.75	161	1.45	17	18	15	0	0	0	0	3	0	0	0	0	3.93	89
	Barrhead ...	9 9	97	17.2	10.2	13.7	-	21.7	12	1.7	31</																			

TABLE III (continued)—SUMMARY OF OBSERVATIONS OF TEMPERATURE, RAINFALL, SUNSHINE AND WEATHER AUGUST, 1964

DISTRICT, COUNTY AND PLACE	Terminal Hour of Observation	Height of Station above Mean Sea Level	AIR TEMPERATURE IN DEGREES CELSIUS								MEAN EARTH TEMPERATURE		RAINFALL (Terminal hour 9 G.M.T.)				WEATHER Number of days								BRIGHT SUNSHINE					
			Means of		Difference from Average	Highest Maximum and Lowest Minimum				1 ft.	4 ft.	Total Fall	Percentage of Average	Most in a day		Precip'n		Snowing at 9h.	Hail	Ice or snow pellets etc.	Thunder heard	Fog at 9h.	Air Frost †	Grass min. below 0° C.	Gale	Daily Mean	Percentage of Average			
			A Max.	B Min.		Mean of A and B	Maximum	Date	Minimum					Date	Amount	Date	0 (in 0.2mm.) or more											0 (in 1.0mm.) or more		
			°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	in.	%	in.											hr	%			
2 ENGLAND, N.E.—cont.																														
Northumb.		9 9	270																											
berland cont.		9 9	160	18.6	9.2	13.9	-	25.0	4	1.1	31	-	-	3.49	-	1.19	18	12	10	0	0	0	0	0	0	0	0	0	-	-
		9 9	76	16.7	10.7	13.7	-0.5	22.8	3	4.4	21,31	-	-	3.00	111	.50	7.8	17	14	0	0	0	0	2	0	0	0	0	4.76	96
		9 9	326	17.9	9.8	13.9	-0.2	25.0	5	2.8	20	-	-	3.83	127	1.24	18	13	12	-	-	-	-	-	-	-	-	-	-	-
		21-9	138	17.8	10.1	13.9	-	24.7	3	3.2	22	-	-	2.49	-	.39	17	15	13	0	0	0	0	2	0	0	1	1	5.77	-
		21-9	95	17.4	11.7	14.5	-0.4	26.0	25	5.8	20	-	-	3.01	99	1.00	18	16	11	0	0	0	0	3	0	0	0	1	5.32	112
Durham		9 9	446	18.0	9.9	13.9	-0.8	23.3	26	3.3	21	-	-	3.56	116	.75	6	17	12	0	0	0	0	0	0	0	1	0	-	-
		9 9	594	-	9.9	-	-	-	-	4.4	20	-	-	2.33	81	.47	17	11	10	0	0	0	0	0	5	0	0	0	-	-
		9 9	123	19.2	9.5	14.3	-0.5	25.0	5	1.1	21,22,31	-	-	1.96	68	.39	17	15	9	0	0	0	0	0	0	0	5	0	5.18	112
		9 9	336	19.0	9.7	14.3	-0.6	25.0	4	2.2	21,31	15.4	13.7	1.72	63	.40	17	14	8	-	-	-	-	-	-	-	-	4.95	104	
		9 9	509	17.7	10.8	14.3	-	24.4	5	6.1	20,21	-	-	2.35	-	.58	8	15	11	-	-	-	-	2	0	0	0	-	4.53	-
		21-9	115	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		9 9	30	18.8	11.5	15.1	-	26.1	3,26	5.0	21	-	-	1.57	-	.33	7	15	8	0	0	0	0	3	0	0	0	0	5.38	-
Yorks., N. Riding		21-9	105	20.0	10.4	15.2	-	27.0	5	4.0	21,22	-	-	2.17	87	.76	18	13	9	0	0	1	0	3	0	0	0	0	5.61	-
		9 9	111	19.7	10.2	14.9	-	25.6	3,5,26	2.8	21	-	-	2.86	-	1.13	8	12	10	0	0	1	0	4	1	0	4	0	-	-
		9 9	57	20.2	11.0	15.6	-0.6	27.8	26	5.0	20,21,31	16.6	15.4	1.94	75	.52	18	11	8	0	0	0	2	0	0	0	0	0	5.77	114
		9 9	313	18.1	10.4	14.7	-0.4	25.6	26	4.4	21,30	-	-	2.45	80	.55	8	17	11	-	-	-	-	1	0	0	0	-	-	-
		9 9	25	19.3	11.6	15.5	-	27.8	26	5.0	21	-	-	1.49	58	.29	8	17	11	-	-	-	-	0	0	0	0	-	5.50	-
		9 9	143	19.7	9.6	14.7	-	27.2	3,26	1.1	31	-	-	2.40	-	1.14	9	12	10	0	0	1	0	4	0	0	1	0	-	-
		9 9	135	18.6	11.1	14.9	-	27.2	26	3.9	21,31	-	-	-	.04	18	-	-	-	-	-	-	-	4	0	0	-	1	6.02	119
		9 9	118	19.4	11.8	15.6	-0.3	28.3	26	7.2	20,30	16.1	14.9	.89	34	.18	18	10	7	0	0	0	0	0	0	0	0	0	5.61	109
		9 9	665	17.9	9.6	13.7	-	26.1	26	2.8	21	13.7	-	2.61	-	.81	18	17	10	0	0	0	0	0	2	0	2	0	5.32	-
		21-9	200	-	-	-	-	30.7	26	3.3	21,31	-	-	1.79	-	.47	18	12	8	0	0	0	0	0	0	0	0	1	-	-
Yorks., E. Riding		9 9	574	19.3	9.9	14.6	-	27.8	26	3.9	20,30	15.2	-	1.94	61	.45	9	14	9	0	0	0	0	0	0	0	1	0	5.94	-
		9 9	8	20.6	12.1	16.3	-0.2	29.4	26	5.6	20,31	16.2	13.4	1.85	73	.50	8	12	8	0	0	0	0	2	0	0	0	0	6.11	116
		21-9	24	19.9	10.8	15.3	-	28.3	26	3.8	31	-	-	1.87	-	.33	8	13	8	0	0	0	0	3	0	0	1	0	5.59	-
		9 9	122	18.3	10.7	14.5	-	27.8	26	3.9	21,31	-	-	1.14	-	.24	7,17	12	8	0	0	0	0	1	0	0	0	0	5.78	-
		9 9	157	18.9	10.8	14.9	-	27.8	26	5.0	20	-	-	2.05	-	.53	6	15	8	0	0	0	0	2	0	0	0	1	5.49	-
		21-9	29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lincoln		9 9	110	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		9 9	60	21.3	10.3	15.8	-	29.4	26	1.1	31	-	-	1.79	-	.80	18	10	6	0	0	0	0	1	0	0	2	0	-	-
		21-9	224	20.4	11.2	15.8	-0.3	29.2	26	5.3	20	-	-	1.40	-	.65	18	8	6	0	0	0	0	1	0	0	0	0	6.42	-
		9 9	22	20.6	9.2	14.9	-	28.9	26	-1.7	31	16.4	14.9	2.02	-	.70	6	8	7	0	0	0	0	3	0	1	2	0	6.31	-
		9 9	205	20.4	11.1	15.7	-0.3	29.1	26	5.0	20	16.6	15.1	1.80	83	.56	18	9	8	0	0	0	0	0	0	0	0	0	6.19	110
		21-9	353	19.5	11.4	15.5	-	29.9	26	4.8	20	-	-	1.71	-	.69	18	11	9	0	0	0	0	3	0	0	1	0	-	-
		9 9	23	-	12.1	-	-	-	-	6.1	20	-	-	1.15	54	.43	18	11	8	0	0	0	0	1	0	0	0	0	6.44	115
		21-9	55	20.3	11.2	15.7	-	30.2	26	4.7	20	-	-	2.31	-	.83	18	13	10	0	0	0	0	3	0	0	0	0	6.37	-
		9 9	15	20.1	11.7	15.9	-0.1	30.6	26	5.0	20,30	-	-	2.32	108	.80	9	10	8	0	0	0	0	1	1	0	0	0	6.72	119
3 ENGLAND, E.																														
Norfolk		9 9	13	21.2	10.9	16.1	-	31.7	26	3.9	20,30,31	16.5	-	1.23	65	.22	17	13	9	0	0	0	0	1	0	0	0	0	6.97	-
		21-9	76	20.9	11.3	16.1	-	31.2	26	3.0	30	-	-	1.21	-	.24	15	15	9	0	0	0	0	3	0	0	1	0	-	-
		9 9	80	22.0	9.1	15.5	-	32.2	26	-1.7	31	16.1	14.7	1.71	-	.70	15	13	6	-	-	-	-	0	2	6	-	5.99	-	
		21-9	250	20.5	11.2	15.9	-	31.1	26	4.2	30	-	-	1.16	-	.20	23	15	7	0	0	0	0	4	0	0	2	0	6.88	-
		9 9	178	20.4	12.2	16.3	-0.1	32.8	26	7.2	20,30	-	-	.88	40	.19	8,28	8	7	-	-	-	-	0	0	0	0	-	6.56	113
		9 9	93	20.7	11.1	15.9	-0.5	31.7	26	3.3	31	16.2	-	1.55	73	.34	8	12	7	0	0	0	0	1	0	0	1	0	6.25	109
		21-9	55	20.8	11.3	16.1	-	32.4	26	4.6	30	-	-	1.36	-	.47	19	12	7	0	0	0	0	3	0	0	3	0	-	-
		9 9	89	20.8	11.7	16.3	-	31.7	26	5.0	21	-	-	1.75	84	.42	8	13	10	0	0	0	0	5	0	0	0	0	6.57	-
		21-9	12	19.9	12.7	16.3	-0.2	27.0	26	6.5	20	17.1	15.6	2.15	107	1.22	9	13	7	0	0	0	0	4	0	0	0	0	6.79	111
Suffolk		21-9	15	21.9	11.6	16.7	-	32.2	26	2.8	31	-	-	1.69	83	.79	1													

TABLE III (continued)—SUMMARY OF OBSERVATIONS OF TEMPERATURE, RAINFALL, SUNSHINE AND WEATHER AUGUST, 1964

DISTRICT, COUNTY AND PLACE	Terminal Hours of Observation	Height of Station above Mean Sea Level	AIR TEMPERATURE IN DEGREES CELSIUS								MEAN EARTH TEMPERATURE		RAINFALL (Terminal hour 9 G.M.T.)				WEATHER Number of days										BRIGHT SUNSHINE			
			Means of		Highest Maximum and Lowest Minimum				1 ft.	4 ft.	Total Fall	Percentage of Average	Most in a day		Snow or Sleet	Snow lying at 9h	Hail	Ice or snow pellets etc.	Thunder heard	Fog at 9h	Air Frost	Grass min below 0° C	Gale	Frost-Mean	Percentage of Average					
			A Max.	B Min.	Maximum	Date	Minimum	Date					Amount	Date																
			°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	in.	%	in.		0/10 (0-3mm or more)	0/10 (1.0mm or more)										hr	%			
4 MIDLAND COUNTIES—cont.																														
Yorks.	Huddersfield	9 9	325	19.6	11.0	15.3	-0.2	26.7	26	3.9	21,31	15.7	14.5	3.54	-	1.30	17	14	10	-	0	-	-	-	0	0	2	-	5.77	127
W. Riding—	Oakes	21-9	761	18.9	10.4	14.7	-0.5	26.5	26	5.1	20	14.5	12.5	2.77	85	1.09	18	15	10	0	0	1	1	4	2	0	0	1	5.90	124
cont.	Bradford	9 9	439	18.6	10.7	14.7	-0.5	25.0	26	3.9	20	15.1	14.2	2.36	78	.64	15	11	10	0	0	0	0	0	0	0	0	0	-	S
	Ilkley	9 9	315	19.4	10.7	15.1	-0.2	25.0	5,26	3.3	21	-	-	1.90	56	.35	17	10	10	0	0	0	1	1	0	0	-	5.64	116	
	Sheffield	9 9	429	19.5	11.5	15.5	-0.5	27.2	26	5.0	31	16.1	14.4	1.94	70	.45	18	10	7	0	0	0	0	2	-	0	0	0	5.78	120
	Wakefield	9 9	121	20.6	11.0	15.8	-0.3	27.2	26	3.9	21	15.7	14.1	1.42	54	.43	15	11	7	0	0	0	0	0	1	0	4	1	-	S
	Pontefract	9 9	255	19.7	11.1	15.4	-0.1	26.7	26	5.6	20,30	-	-	1.05	42	.28	15	10	7	0	0	0	0	1	1	0	0	0	-	-
	Bramham	9 9	177	20.1	10.1	15.1	-	27.2	26	4.4	20,21,31	-	-	1.81	66	.39	18	12	9	0	0	0	0	3	0	0	0	0	6.08	-
	Cawood	9 9	20	20.2	9.7	14.9	-	27.2	26	2.2	21,31	16.2	15.4	1.46	58	.43	7	11	10	0	0	0	0	1	0	0	1	0	5.42	-
	Askham Bryan	9 9	110	20.1	9.9	15.0	-	27.2	26	3.9	20,21,31	-	-	1.74	65	.39	18	8	8	0	0	0	0	0	0	0	0	0	5.87	121
Derby	Buxton	9 9	1007	17.0	9.7	13.3	-0.7	24.5	26	2.8	31	14.7	14.1	2.73	66	.59	18	12	12	0	0	0	0	0	4	0	0	0	-	-
	Chapel en le Frith	9 9	732	-	-	-	-	25.5	26	-0.5	30	-	-	3.91	-	1.08	18	12	11	0	0	0	0	-	-	-	-	-	-	-
	Mackworth	9 9	293	19.9	10.2	15.5	-	27.2	26	3.3	20	-	-	2.49	-	.89	6	7	7	0	0	0	0	1	0	0	0	0	-	-
	Belper	9 9	203	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Derby	9 9	159	20.5	11.3	15.9	-	28.3	26	4.5	31	-	-	2.33	-	.83	18	10	7	0	0	0	0	1	0	0	0	0	6.43	-
	Morley	9 9	350	19.9	10.5	15.2	-	27.2	26	3.3	20	-	-	2.42	80	.89	18	10	7	0	0	0	0	1	-	0	3	0	6.44	-
	Chesterfield	9 9	298	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Nottingham	Sutton Bonington	9 9	157	20.1	10.3	15.2	-0.7	27.8	26	1.7	31	16.3	15.6	1.59	72	.59	18	8	7	0	0	0	0	0	0	0	1	0	6.72	133
	Watnall	21-9	385	20.3	10.7	15.5	-	28.1	26	4.5	20	-	-	1.99	77	.79	18	13	8	0	0	0	0	2	0	0	0	0	6.11	121
	Nottingham Training College	9 9	169	20.3	10.8	15.5	-	28.3	26	5.0	20,31	-	-	1.64	-	.56	6,18	8	6	-	-	-	-	2	0	0	0	-	-	
	Mansfield	9 9	362	20.1	11.2	15.7	-0.1	27.2	26	5.5	31	16.5	-	2.35	94	.91	18	9	8	0	0	0	0	0	7	0	0	0	-	-
	Nottingham	9 9	192	20.6	11.2	15.9	-0.5	27.8	26	5.0	20	16.3	16.5	2.12	89	.67	18	9	5	0	0	0	0	0	0	0	0	0	5.56	115
	Warsop	9 9	150	20.5	9.5	15.0	-	27.8	26	0.0	31	-	-	2.14	95	.66	18	10	8	-	-	-	-	0	1	2	-	5.66	-	
	Finningley	21-9	34	21.0	11.3	16.1	-0.4	28.6	26	5.1	31	-	-	1.20	-	.25	6	10	8	0	0	0	0	1	0	0	0	0	6.15	-
Leicester	Newtown Linford	9 9	392	20.1	10.0	15.1	-	27.2	26	2.8	31	-	-	1.91	-	.81	18	10	9	0	0	0	0	1	0	0	2	0	6.25	-
	Caldecott	9 9	175	21.3	9.5	15.4	-	30.0	26	-0.5	31	-	-	1.29	-	.33	18	10	8	-	-	-	-	0	1	1	-	6.31	-	
Northampton	Bugbrooke Mills	9 9	228	21.2	9.7	15.5	-	30.0	26	1.1	31	16.2	-	1.34	-	.32	15	11	8	0	0	0	0	0	0	0	0	0	6.90	-
	Raunds	9 9	193	21.3	10.3	15.8	-	30.5	26	2.3	31	17.3	13.6	1.05	50	.60	15	9	6	0	0	0	0	1	0	0	1	0	6.09	-
	Wittering	21-9	212	21.2	11.0	16.1	-	30.4	26	4.8	20	-	-	1.24	-	.42	15	10	7	0	0	0	0	1	0	0	2	0	6.48	-
Warwick	Birmingham K.E.S.*	9 9	450	20.0	11.3	15.7	-	27.8	26	4.5	31	-	-	2.70	-	1.45	6	13	6	0	0	0	0	1	1	0	0	0	-	-
	Edgbaston	21-9	536	19.5	11.7	15.6	-0.4	27.7	26	6.6	31	13.4	12.7	2.44	88	1.07	6	11	7	0	0	0	0	2	0	0	1	0	5.83	114
	Luddington	9 9	138	21.1	10.3	15.7	-	28.3	26	1.7	30	-	-	1.22	55	.37	15	10	6	0	0	0	0	0	0	0	2	0	6.47	-
	Stratford on Avon	9 9	160	21.3	9.9	15.6	-	28.3	5,26	0.5	30	18.1	-	1.13	45	.36	15	9	7	0	0	0	0	0	0	0	2	1	5.97	-
	Elmdon	21-9	319	20.1	10.2	15.1	-	27.2	26	3.0	31	-	-	1.91	79	.59	18	10	7	0	0	0	0	1	0	0	3	0	5.88	-
	Shipston on Stour	9 9	365	20.7	11.1	15.9	-	28.3	26	5.0	31	1	-	.96	-	.20	15	9	9	0	0	0	0	2	-	0	-	6.17	-	
	Wellesbourne	9 9	153	21.0	9.9	15.5	-	28.3	26	1.7	31	16.5	16.0	1.80	79	.65	6	10	8	0	0	0	0	0	0	4	0	5.89	-	
	Moreton Morrell	9 9	280	20.9	-	-	-	28.9	26	2.8	31	-	-	1.16	-	.38	8	10	7	0	0	0	0	1	0	0	4	3	6.35	-
	Coventry	9 9	338	20.1	10.9	15.5	-0.6	27.2	26	3.3	30	-	14.4	2.14	84	.69	18	11	7	0	-	0	0	0	0	0	1	0	6.13	121
	Rugby	9 9	385	20.5	10.8	15.7	-0.3	28.3	26	3.9	31	16.3	15.9	1.42	-	.33	15	9	8	0	0	0	0	1	-	0	0	0	-	-
Oxford	Oxford	9 9	208	21.7	11.8	16.7	-0.2	30.5	26	5.0	21	18.3	16.7	.57	25	.19	18	9	6	0	0	0	0	1	0	0	2	0	7.02	123
	Grendon Underwood	9 9	220	21.5	8.9	15.2	-	29.5	26	0.0	30	17.3	15.7	.62	-	.12	8	8	6	0	0	0	0	0	0	4	0	6.93	-	
Buckingham	Medmenham	9 9	98	21.5	8.9	15.2	-	28.9	26	0.5	31	-	-	.69	-	.20	18	11	6	-	-	-	-	-	0	9	-	-	S	
	Aylesbury	9 9	316	20.9	10.5	15.7	-	29.5	26	2.8	22	-	-	.98	44	.40	8	8	7	0	0	0	0	0	1	0	4	0	6.54	-
Stafford	Keele	9 9	587	18.6	10.5	14.5	-	25.5	26	5.0	20	15.2	13.5	2.33	76	.97	18	14	9	0	0	0	0	1	0	0	0	0	5.47	-
	Oaken	9 9	409	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Stone	9 9	350	19.3	9.4	14.3	-	26.1	26	2.8	20,21,30	-	-	1.81	-	.61	18	10	9	0	0	0	0	0	0	0	2	0	6.27	-
	Penkridge	9 9	330	19.5	9.9	14.7	-	27.2	26	2.2	21	-	-	2.02	-	.43	8	11	8	0	0	0								

TABLE IV (continued)—SUMMARY OF OBSERVATIONS AT FIXED HOURS AUGUST, 1964

DISTRICT, COUNTY AND PLACE	Hour of Observation	Height of Barometer above Mean Sea Level	MEAN PRESSURE		MEAN TEMPERATURE AND HUMIDITY				CLOUD AMOUNT (OKTAS)					VISIBILITY							WIND, NUMBER OF OBSERVATIONS																				
			At Mean Sea Level	Difference from Average	Dry Bulb	Depression of Wet Bulb	Vapour Pressure	Relative Humidity	Mean Amount	NO. OF OBSERVATIONS					NUMBER OF OBSERVATIONS							FORCE (0-12)				DIRECTION															
										0	1	2	3	4	0-44 yd.	45-210 yd.	220-430 yd.	440-1,080 yd.	1,100-2,180 yd.	2,200-4,300 yd.	3-6 mi.	7-12 mi.	13-24 mi.	25 mi. or over	0	1	2	3	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.					
			ft.	mb.	°C.	°C.	mb.	%	0	1	2	3	4	0-44 yd.	45-210 yd.	220-430 yd.	440-1,080 yd.	1,100-2,180 yd.	2,200-4,300 yd.	3-6 mi.	7-12 mi.	13-24 mi.	25 mi. or over	0	1	2	3	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.						
5 ENGLAND, S.E.	3	419	1016.4	-	11.8	0.7	12.8	91	4.1	5	8	4	7	6	1	0	0	0	0	0	1	14	13	2	0	0	0	0	0	0	4	19	8	3	1	3	2	1	4	3	6
—cont.	9	419	1016.6	-	16.4	2.6	13.8	73	4.5	2	9	6	8	6	0	0	0	0	0	0	0	5	13	10	3	0	0	0	0	0	14	16	1	3	4	3	2	3	4	4	7
Boscombe	15	415	1016.0	-	19.8	4.8	13.3	58	5.4	2	3	6	15	5	0	0	0	0	0	0	0	3	12	9	7	0	0	0	0	2	14	15	0	6	2	2	1	4	5	7	4
Down	21	419	1016.9	-	14.5	1.8	13.4	80	4.0	7	5	4	13	2	0	0	0	0	0	0	0	8	15	8	0	0	0	0	0	9	21	1	4	3	2	2	4	3	9	3	
Upevon	9	582	1016.1	-	15.6	1.9	14.2	79	4.5	2	7	8	7	7	0	0	0	0	0	0	0	11	6	7	7	0	0	0	0	12	18	1	6	3	3	0	5	5	1	7	
—cont.	15	582	1015.5	-	19.4	4.2	14.2	63	5.5	2	2	7	16	4	0	0	0	0	0	0	0	1	3	9	9	7	0	0	0	1	14	15	1	4	4	1	3	2	5	6	
—cont.	21	587	1016.5	-	14.3	1.5	13.7	83	4.1	6	7	2	14	2	0	0	0	0	0	0	0	1	8	10	11	1	0	0	1	8	16	6	6	2	1	4	2	3	3	4	
7a ENGLAND, N.W.	3	92	1014.5	-	11.5	0.7	12.6	91	5.5	3	5	2	8	13	0	0	0	0	0	0	0	1	10	10	8	2	0	0	0	4	18	9	0	4	2	4	0	6	5	1	
—cont.	9	92	1014.9	-	14.4	1.7	13.4	81	5.7	1	2	8	13	7	0	0	0	0	0	0	0	8	8	8	6	0	0	0	1	2	25	3	4	2	5	3	3	5	6	0	
Cumberland	15	92	1014.8	-	17.1	3.1	13.5	69	6.0	0	2	8	16	5	0	0	0	0	0	0	0	4	7	10	10	0	0	0	0	11	18	2	1	1	4	2	0	9	11	1	
—cont.	21	92	1015.3	-	13.5	1.2	13.5	86	5.3	1	5	7	13	5	0	0	0	0	0	0	0	1	5	17	4	4	0	0	0	4	20	7	1	2	5	0	1	7	8	0	
Lancashire	3	35	1014.5	-	12.5	0.7	13.6	93	5.8	3	2	5	11	10	0	0	0	0	0	0	0	7	6	8	7	1	0	0	2	10	18	1	2	2	7	2	4	2	5	6	
Squires Gate	9	35	1015.1	-	15.7	1.9	14.5	81	5.7	0	6	2	19	4	0	0	0	0	0	0	0	2	8	12	9	0	0	0	0	1	13	15	2	2	0	4	4	5	4	6	
—cont.	15	35	1015.1	-	17.4	2.7	14.7	73	5.2	0	5	10	14	2	0	0	0	0	0	0	0	0	2	9	11	9	0	0	0	3	13	15	0	1	0	0	2	1	6	11	
—cont.	21	35	1015.2	-	14.3	1.3	14.0	85	5.5	1	3	8	13	6	0	0	0	0	0	0	0	4	12	8	7	0	0	0	0	13	16	2	2	0	7	2	2	1	9	6	
—cont.	3	85	1014.9	-	13.4	1.1	13.7	88	5.3	2	3	9	8	9	0	0	0	0	0	0	0	4	9	9	8	1	0	0	1	7	17	6	2	0	0	6	7	2	4	4	
Speke	9	85	1015.5	-	15.7	2.2	13.8	77	5.8	2	3	4	14	8	0	0	0	0	0	0	0	3	12	8	7	0	0	0	0	11	16	4	1	2	2	4	7	3	3		
—cont.	15	85	1015.3	-	18.6	3.9	13.6	63	6.0	0	2	7	17	5	0	0	0	0	0	0	0	6	10	6	9	0	0	0	3	14	13	1	1	2	1	4	3	10	8		
—cont.	21	85	1015.6	-	15.2	2.0	13.7	78	5.1	0	8	7	17	5	0	0	0	0	0	0	0	3	11	11	6	0	0	0	1	6	22	2	4	3	1	2	6	2	5	6	
Cheshire	3	251	1014.7	-	12.2	1.1	12.5	87	5.2	4	5	6	5	11	0	0	0	0	0	0	0	7	13	7	3	0	0	0	0	4	19	8	2	2	0	4	10	1	3	1	
Ringway	9	251	1015.3	-	15.0	2.3	12.9	75	5.3	3	3	6	13	6	0	0	0	0	0	0	0	4	13	12	2	0	0	0	0	6	22	3	2	3	0	1	10	5	3		
—cont.	15	251	1014.9	-	18.3	4.7	12.0	58	5.5	0	2	11	14	4	0	0	0	0	0	0	0	7	12	10	2	0	0	0	1	9	20	1	2	2	1	9	20	1	6		
—cont.	21	251	1015.4	-	14.5	2.1	12.8	77	4.9	2	7	5	10	7	0	0	0	0	0	0	0	1	3	15	10	2	0	0	0	3	25	3	1	3	2	2	6	4	6		
7b NORTH WALES	3	36	1014.7	-	12.9	0.4	14.3	94	5.2	3	4	6	8	10	0	0	0	0	0	0	0	1	9	9	7	5	0	0	5	8	14	4	2	2	1	3	7	2	6	4	
Anglesey	9	36	1015.7	+1.7	15.3	1.3	15.1	86	6.0	0	4	4	14	9	0	0	0	0	0	0	0	8	11	5	7	0	0	6	12	9	4	2	2	2	1	7	3	4	6		
—cont.	15	36	1015.3	-	17.1	2.2	15.3	78	4.6	0	8	10	8	5	0	0	0	0	0	0	0	1	4	6	6	14	0	0	4	13	14	0	2	3	0	1	7	8	4		
—cont.	21	36	1015.3	-	13.7	0.6	14.7	93	5.1	1	6	7	8	9	0	0	0	0	0	0	0	2	6	7	7	9	0	0	2	6	7	7	9	15	3	4	3	4			
8a SOUTH WALES	3	382	1015.6	-	12.9	0.9	13.5	89	5.1	5	3	4	9	10	0	0	0	0	0	0	0	1	8	8	11	3	0	0	1	11	15	4	0	1	0	3	11	3	5		
Cardigan	9	382	1016.0	-	15.1	1.7	14.1	81	5.6	0	4	6	14	6	1	0	0	0	0	0	0	6	10	8	6	0	0	0	1	16	12	2	2	2	1	2	9	3	6		
—cont.	15	382	1015.9	-	16.7	2.4	14.0	73	5.0	0	9	5	13	4	0	0	0	0	0	0	0	6	9	3	13	0	0	2	16	13	0	6	0	2	1	4	1	8	1		
—cont.	21	382	1016.3	-	13.6	1.1	13.8	87	4.9	3	8	2	9	9	0	0	0	0	0	0	0	8	7	7	8	0	0	1	10	15	5	3	1	0	1	4	5	5			
Glamorgan	3	123	1015.9	-	14.3	1.1	14.4	88	4.8	7	3	4	8	9	0	0	0	0	0	0	0	6	15	9	1	4	0	0	4	12	14	0	5	6	0	2	1	4	6		
Mumbles Head	9	123	1016.5	-	16.0	1.9	14.6	80	5.3	1	6	6	11	7	0	0	0	0	0	0	0	2	12	10	7	0	0	0	3	15	12	1	1	3	4	4	3	7			
—cont.	15	123	1016.3	-	17.8	2.9	14.7	72	5.2	1	6	8	7	9	0	0	0	0	0	0	0	10	5	12	4	0	0	0	4	16	11	0	2	1	3	2	2	9			
—cont.	21	123	1016.6	-	15.7	1.8	14.6	81	4.5	6	4	6	7	8	0	0	0	0	0	0	0	7	11	9	4	1	3	8	17	2	3	1	3	0	2	4	11				
Rhoose	3	225	1016.0	-	12.4	0.4	13.8	92	4.4	8	4	5	3	11	0	0	0	0	0	0	0	8	3	15	4	0	0	0	8	18	5	3	3	5	1	0	4	4			
—cont.	9	225	1016.4	-	15.9	1.8	14.7	81	5.3	0	8	4	14	5	0	0	0	0																							

Table with columns for Station, Total Radiation on a Horizontal Surface (mw. hr./cm²), Diffuse Radiation on a Horizontal Surface (mw. hr./cm²), and Total Illumination on a Horizontal Surface (kilo lux-hours). Rows include Lerwick Observatory, Eskdalemuir Observatory, Cambridge, Kingsway, Kew Observatory, and Aberporth.

TABLE VIII—NUMBER OF DAYS IN AUGUST, 1964 WITH MAXIMUM AND MINIMUM TEMPERATURES BETWEEN GIVEN LIMITS.

Table with columns for Station, Maximum Temperature °C, Minimum Temperature °C, and Station. Rows include Lerwick Observatory, Stornoway, Craibstone, Rothesay, Renfrew, Eskdalemuir Observatory, Douglas, Cockle Park, Gorleston, Cambridge, Edgbaston, Kew Observatory, Hastings, Southampton, Stonyhurst, Bidston, Valley, Falmouth, Aldergrove, and Armagh.

TABLE II—ADDITIONS AND CORRECTIONS

Table with columns for Month, Station, Height of Vane, Distribution of Mean Hourly Values of Wind Speed, Mean Hourly Wind Speed, Highest Velocities, and Highest Hourly Wind. Rows include 1964 data for January, February, March, April, and May at various stations like Dounreay, Isle of Grain, Bell Rock, etc.

TABLE III—ADDITIONS AND CORRECTIONS AUGUST, 1964

Table with columns for Month, Station, Air Temperature in Degrees Celsius, Earth Temperature, Rainfall, Weather, and Bright Sunshine. Rows include 1964 FEB data for various stations like Avonmouth, Sittingbourne, Winchester, etc., and a 1964 ANNUAL summary row.

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Monthly Weather Report

MO 754

OF THE METEOROLOGICAL OFFICE

Summary of observations compiled from returns of official stations and voluntary observers

Volume 81 Number 9

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September 1964 — Sunny and dry except in north and west Scotland.

Apart from the third week, when the country was under the influence of a rather complex low pressure area, weather during September was predominantly anticyclonic in character, although small disturbances from the Atlantic brought changeable cyclonic weather to northern districts on the 5th-11th and to northern and western districts on the 24th-26th.

The first two days were warm and sunny as a large anticyclone over the North Sea drifted slowly eastwards. Winds were mainly south-easterly reaching gale force at times along the English Channel coasts on the 1st. On the 3rd winds became light and variable but there was little change in the general weather apart from the formation of fairly extensive fog patches in some coastal areas; afternoon temperatures exceeded 25°C at places as far apart as Ellbridge, Cornwall and Stirling on the 4th.

Rain from an Atlantic trough reached Western Scotland early on the 5th; it spread to all areas by the evening becoming heavy at times in the west and north, but amounts were small in the south-east where in some areas it was the first measurable rain for 17 days. After a day of scattered showers in a north-westerly airstream rain was again widespread on the 7th as a depression skirted the north of Scotland; amounts were generally small especially in south-east England. During the next three to four days a series of troughs and ridges from the west brought variable cloud and rain at times to Scotland; some places had over an inch on the 9th. High pressure over France, however, maintained generally warm sunny weather over south-east England where afternoon temperatures exceeded 26°C locally on both the 10th and 11th.

The fine warm weather spread to the whole country on the 12th as an anticyclone moved east-south-east across the British Isles, and most of southern England had 8-10 hours of sunshine on the 13th.

Widespread and locally heavy rain on the 14th and for much of the 15th heralded a week of cooler more changeable weather. Winds increased to gale force in many districts on the 16th as a depression previously south of Iceland became complex while moving steadily eastwards across the British Isles. An unstable airstream from high latitudes on the western flank of the disturbance brought frequent showers and scattered thunderstorms to most districts. The showers gradually became less frequent during the next two days as the depression moved away north-eastwards. Another trough from the Atlantic brought rain to the whole country on the night of the 18th/19th, but the rain gave place to fair periods and showers in a north-westerly airstream on the 19th and 20th, the showers being largely confined to Wales, England north of the Wash and to Scotland.

Another spell of fine sunny weather began over the southern half of the British Isles on the 21st as an anticyclone from the Bay of Biscay moved slowly north-east. Nights were clear and cold—the 20th/21st was the coldest night of the month with fairly widespread air frost over northern and central England—but day temperatures increased progressively reaching 25°C in parts of Lincolnshire and East Anglia on the 25th. In the north, however, the cool changeable weather continued. A deep depression moving northward off the coast of Ireland brought gales to south-west England and to Wales on the 24th and to western Scotland on the 25th.

An anticyclone spread over southern England on the 27th and westerly winds round its northern flank brought rather cooler weather to most southern districts after the clearance of early morning fog patches.

Another ridge from the west brought brighter weather to Scotland on the 29th, and the month ended fine and sunny nearly everywhere with afternoon temperatures well above average.

Pressure and Wind — Mean pressure at 9hr was below the 1921-50 average in the north-west but above in the south-east, the deviation ranging from -1.0 mb at Tiree to +2.1 mb at Gorleston. Surface winds were mainly south-easterly at first, light and variable on the 3rd-5th becoming predominantly westerly from then until the 20th, after which they were mainly southerly on the 21st-25th, south-westerly on the 26th-28th becoming light and variable during the last two days of the month. Winds reached gale force in Scotland on 11 days and in England and Wales on the 1st, 14th-17th, 24th and 25th (7 days). Gales were widespread on the 16th. A gust of 74 kt was recorded at the high level station of Lowther Hill (2412 ft) on the 24th and one of 63 kt at Stornoway on the 25th.

Temperature — In Scotland the first three or four days of the month were the warmest though night temperatures were below the average. Night temperatures were 3-5°C above the average over most of the country around the 9th/10th. In south-east England day temperatures were mainly above the average except during the third week; night temperatures were mostly below the average after the 19th. The 25th was the warmest September day in the London area for 15 years.

Extremes included: (England and Wales) 27.8°C at Gillingham on the 11th, -2.8°C at Kielder Castle on the 21st. (Scotland) 25.0°C at Stirling and at Mertoun on the 4th, -4.4°C at Glentress on the 21st. (Northern Ireland) 22.2°C at Armagh on the 3rd, 0.0°C at Lisnafillan and at Lough Bradan on the 21st.

Rainfall — In Scotland rainfall was 50 per cent above the average in parts of the west and in the extreme north-east and below average in some eastern coastal areas south of Aberdeen. In England and Wales rainfall was generally below the average being less than 25 per cent of the average over much of East Anglia, Kent, Montgomery, Warwickshire, Leicestershire and Lincolnshire.

Thunder was heard on 11 days in Scotland and on the 1st, 3rd, 6th, 14th-17th, 20th, 25th and 26th (12 days) in England and Wales. Thunderstorms were fairly widespread on the 14th and 16th.

Sleet was reported over high ground in Scotland on the 20th.

Sunshine — In Scotland sunshine was below the average in the north and over the Western Isles, but most other parts reported an excess. Stornoway had its dullest September since 1895. In England and Wales sunshine was everywhere above the average being more than 60 per cent above over parts of the midlands and London area where amounts were more than during the unusually sunny September of 1959. At Worthing it was the sunniest September for 36 years.

Fog — In Scotland fog was observed at 9hr at one place or another on 21 days, and in England and Wales on 13 days; it was fairly extensive in the Midlands and north-east England on the 3rd-5th and in south-east England on the 27th, 29th and 30th.

Miscellaneous Phenomena — The aurora was visible in Scotland on 10 nights.

TABLE I—DISTRICT VALUES— SEPTEMBER,

DISTRICTS	AIR TEMPERATURE					EARTH TEMP.		RAIN DAYS	RAIN-FALL	SUN-SHINE
	Highest Max.	Lowest Min.	Max.	Min.	Mean	Mean 1 ft.	Mean 4 ft.			
	Difference from Average					% of Average				
0 SCOTLAND, N.	23.3	-2.8	-0.6	-1.1	-0.8	-	-	+1	134	92
1 SCOTLAND, E.	25.0	-4.4	0.0	-0.5	-0.2	-	-	+1	90	109
2 ENGLAND, N.E.	25.0	-2.8	+0.8	-0.4	+0.2	0.0	+0.1	-4	41	123
3 ENGLAND, E.	27.2	-1.7	+1.2	-0.7	+0.3	-0.4	0.0	-7	23	136
4 MIDLANDS	25.6	-1.7	+1.3	-0.6	+0.4	0.0	+0.2	-6	29	146
5 ENGLAND, S.E.	27.8	0.6	+1.6	-0.2	+0.7	+0.2	+0.1	-5	32	145
6 SCOTLAND, W.	25.0	-4.4	+0.1	+0.2	+0.2	+0.2	-0.3	+1	128	116

1964

(1908, revised 1928, 1941, 1956 and 1964)

DISTRICTS	AIR TEMPERATURE					EARTH TEMP.		RAIN DAYS	RAIN-FALL	SUN-SHINE
	Highest Max.	Lowest Min.	Max.	Min.	Mean	Mean 1 ft.	Mean 4 ft.			
	Difference from Average					% of Average				
7 ENGLAND, N.W. and N. Wales	24.4	-2.2	+0.7	-0.1	+0.3	-0.3	0.0	-2	59	127
8 ENGLAND, S.W. and S. Wales	26.1	-1.7	+1.1	-0.2	+0.4	+0.4	+0.4	-6	45	135
N. IRELAND	22.2	0.0	+0.4	-0.2	+0.1	-	-	+1	89	119
SCOTLAND	25.0	-4.4	-0.2	-0.5	-0.3	-	-	+1	116	106
ENG. and WALES	27.8	-2.8	+1.1	-0.4	+0.4	-	-	-5	43	135

TABLE II—SUMMARY OF AUTOGRAPHIC RECORDS OF WIND— SEPTEMBER, 1964

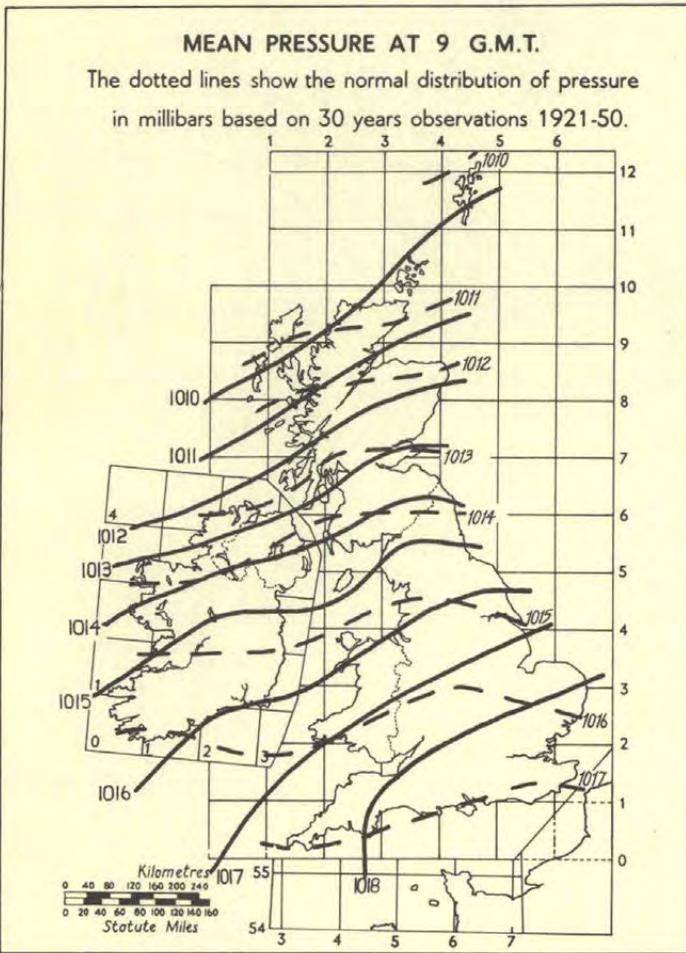
(1914)

DISTRICT, COUNTY AND PLACE	Height of Vane			Distribution of Mean Hourly Values of Wind Speed										Highest Velocities							
	Above Mean Sea Level	Above Ground	Effective Height	34 knots or more		22 to 33 knots		11 to 21 knots	4 to 10 knots	Less than 4 knots	No Record	Mean Hourly Wind Speed	Highest Hourly Wind			Highest Gust					
				Dates of Occurrence	Duration	No. of days	Duration	Duration	Duration	Duration	Duration		Duration	Veer from N	Speed	Hour ended at	Speed	Day and Time			
	ft.	ft.	ft.		hr.		hr.	hr.	hr.	hr.	hr.	knots	°	knots	day hr	knots	day	hr			
SCOTLAND																					
0 Zetland	Lerwick Observatory	304	33	33	28	4	9	48	324	269	75	0	11.5	230	38	28	20	56	28	1925	
	Orkney Kirkwall	134	50	33	-	0	10	54	343	266	57	0	12.0	260	30	17	09	45	17	0845	
	Caithness Dounreay	110	39	30	-	0	12	65	347	250	0	58	13.0	300	33	17	10	54	17	0925	
	Sutherland Shin	78	33	33	-	0	1	5	174	251	274	16	6.7	270	26	17	11	50	17	1525	
	Ross & Cromarty Stornoway (Coastguard)	120	40	36	11, 17, 25	21	14	110	304	115	170	0	12.9	200	42	25	11	63	25	0530	
	Inverness Benbecula	125	65	55	25	9	9	46	280	280	105	0	10.8	170	38	25	06	60	25	0440	
	1 Moray Lossiemouth	69	51	35	25	12	11	71	382	226	29	0	13.3	190	37	25	07	59	25	0535	
	Aberdeen Dyce	101	80	60	-	0	8	31	225	241	223	0	8.1	360	31	11	16	49	11	1550	
	Angus Auchterhouse	234	30	30	25	1	8	29	325	244	121	0	10.0	210	34	25	06	54	25	0420	
	Bell Rock Lighthouse	827	62	50	-	0	2	2	178	296	226	18	7.1	290	23	11	16	38	11	1535	
	Perth Rannoch	126	131	124	11, 18, 25	7	21	191	332	105	85	0	16.2	360	35	11	20	47	25	0025	
	Fife Leuchars	1006	56	57	-	0	7	20	244	223	233	0	8.1	210	27	25	05	46	24	2200	
	Midlothian Turnhouse	78	40	40	-	0	6	21	277	268	154	0	9.4	260	26	11	16	41	11	1455	
	Edinburgh, Blackford Hill	137	40	33	-	0	8	25	282	273	140	0	9.9	250	31	11	15	47	11	1420	
6a Argyll	Tiree	496	50	34	22, 23	2	14	102	314	236	66	0	12.7	180	36	23	04	59	25	0005	
	Bute Millport	89	60	47	11, 24, 25	15	18	148	393	100	64	0	15.7	190	39	25	05	60	25	0340	
	Renfrew Paisley	50	34	34	§	-	0	3	9	137	325	249	0	6.5	260	32	11	14	62	11	1305
	Renfrew	188	81	31	-	0	4	13	256	308	143	0	8.9	250	31	11	13	53	11	1220	
	Lanark Lowther Hill	71	41	39	-	0	2	7	284	345	84	0	9.2	180	26	24	24	38	11	1220	
	Ayr Prestwick Airport	2412	43	33	11, 16-19, 21, 24, 25	35	23	283	279	117	6	0	19.8	200	51	24	23	74	24	2245	
	Dumfries Eskdalemuir Observatory	68	32	33	-	0	2	7	284	345	84	0	9.2	180	26	24	24	38	11	1220	
	Wigtown West Freugh	825	50	35	-	0	4	19	110	299	292	0	6.1	200	29	24	23	54	11	1040	
	Wigtown West Freugh	81	38	33	-	0	7	25	349	262	84	0	10.7	200	33	24	22	52	24	2040	
ENGLAND and WALES																					
6b Isle of Man	Ronaldsway	119	64	39	22, 24	5	15	124	381	166	44	0	14.7	190	43	24	21	62	24	2030	
	Point of Ayre	64	33	33	-	0	11	49	436	212	23	0	13.2	190	26	24	23	56	16	0835	
2 Durham	Durham	389	53	33	-	0	5	23	228	332	137	0	8.5	300	27	18	09	46	11	1405	
	South Shields	73	57	44	-	0	2	4	203	384	129	0	8.0	270	25	11	14	42	11	1305	
	Lincoln Cranwell	268	47	47	-	0	5	15	279	320	106	0	9.7	240	26	16	18	45	16	1735	
3 Norfolk	Horleston	45	33	33	-	0	2	9	302	398	11	0	10.5	170	33	16	13	45	16	1210	
	Suffolk Mildenhall	99	83	60	-	0	1	2	124	403	191	0	6.5	250	24	16	18	44	16	1650	
	Bedford Bedford	377	42	30	-	0	2	3	246	402	69	0	8.9	240	25	16	17	47	16	1635	
	Cardington	276	133	133	-	0	4	16	357	264	83	0	10.6	240	31	16	17	49	16	1505	
	Hertford Garston	307	50	33	-	0	0	0	57	445	218	0	5.4	270	18	16	17	40	17	1200	
	Rothamsted	461	41	33	-	0	0	0	33	426	249	12	5.0	240	16	16	17	36	16	1610	
	Essex Stansted	381	31	31	-	0	1	2	228	416	74	0	8.6	250	25	16	17	42	16	1635	
	Croyton	66	57	48	-	0	1	3	228	378	63	48	8.8	280	23	16	16	47	16	1545	
	Shoeburyness	116	106	91	16	3	8	35	366	294	22	0	11.9	180	35	10	12	56	16	1320	
4 Yorks, W.R.	Sheffield	533	83	35	-	0	0	0	18	333	369	0	4.0	270	15	16	18	40	16	1700	
	Warwick Edgbaston	643	118	73	-	0	0	0	76	569	75	0	7.0	210	20	24	17	37	16	1535	
	Elmdon	343	81	31	-	0	1	6	262	337	115	0	8.8	250	26	16	16	47	16	1455	
	Buckingham Amersham	500	50	50	-	0	0	0	35	517	168	0	5.9	-	16	16	16	38	16	1545	
	Stafford Keele	706	50	33	-	0	0	0	72	423	225	0	5.6	210	20	24	18	43	16	1210	
	Gloucester Avonmouth	92	61	33	-	0	3	19	255	226	169	51	8.8	250	33	16	14	48	16	1300	
5 London	Kingsway	208	143	41	-	0	1	2	140	472	106	0	7.5	210	22	16	16	48	16	1540	
	Middlesex London (Heathrow) Airport	115	33	33	-	0	2	5	194	417	114	0	8.2	230	24	16	16	42	16	1515	
	Hampton	139	101	100	-	0	1	1	121	360	238	0	6.1	250	23	16	16	45	16	1530	
	Surrey Kew Observatory	92	75	50	-	0	0	0	142	433	145	0	7.2	250	21	16	16	45	16	1535	
	Gatwick	232	38	33	-	0	1	1	140	405	174	0	6.8	230	24	16	15	40	16	1210	
	Kent Isle of Grain	42	40	33	-	0	0	0	136	339	245	0	6.3	240	21	16	17	40	16	1315	
	Dover	68	38	62	-	0	2	8	181	370	161	0	7.8	190	26	16	12	49	16	1325	
	Sussex Thorney Island	75	65	42	-	0	1	5	145	353	217	0	6.6	200	23	16	09	41	16	1420	
	Hampshire Hurn	86	53	46	-	0	1	7	215	348	150	0	8.1	210	26	16	10	43	16	0820	
	Calshot	50	41	33	-	0	2	7	360	323	30	0	11.1	210	28	16	11	40	16	1050	
	S. Farnborough	316	69	35	-	0	1	3	238	322	157	0	8.3	250	29	16	16	46	16	1500	
	Berkshire Abingdon	295	40	40	-	0	1	3	227	313	177	0	7.9	250	28	16	15	43	16	1340	
	Wiltshire Larkhill	49	51	36	-	0	1	3	160	366	191	0	6.7	250	25	16	15	46	16	1420	
	Boscombe Down	425	55	55	-	0	3	8	297	333	82	0	9.6	240	24	16	13	43	16	1510	
	Porton	406	44	44	-	0	1	2	113	283	322	0	5.5	240	23	16	14	45	15	1145	
7a Cumberland	Carlisle	137	42	30	-	0	2	4	249	321	146	0	8.3	240	24	25	03	40	25	0230	
	Sellafield	83	39	35	-	0	8	17	470	191	42	0	12.3	310	25	19	07	37	19	0805	
	Spadeadam	959	51	50	-	0	3	10	303	321	86	0	8.8	240	25	11	12	45	11	0955	
	Westmorland Great Dun Fell	2815	33	33	7, 10, 11, 14-17 §	83	21	314	203	63	57	0	21.3	210	50	24	23	64	24	2310	
	Lancashire Moor House	1960	50	45	-	0	12	96	458	133	33	0	14.9	290	30	16	17	44	16	1655	
	Squires Gate	88	55	35	-	0	6	33	232	238	180	37	9.1	290	28	16	18	46	16	1635	
	Southport	59	41	33	-	0	6	46	311	288	74	1	10.9	280	31	16	18	43	16	1705	
	Fleetwood	112	50	31	-	0	3														

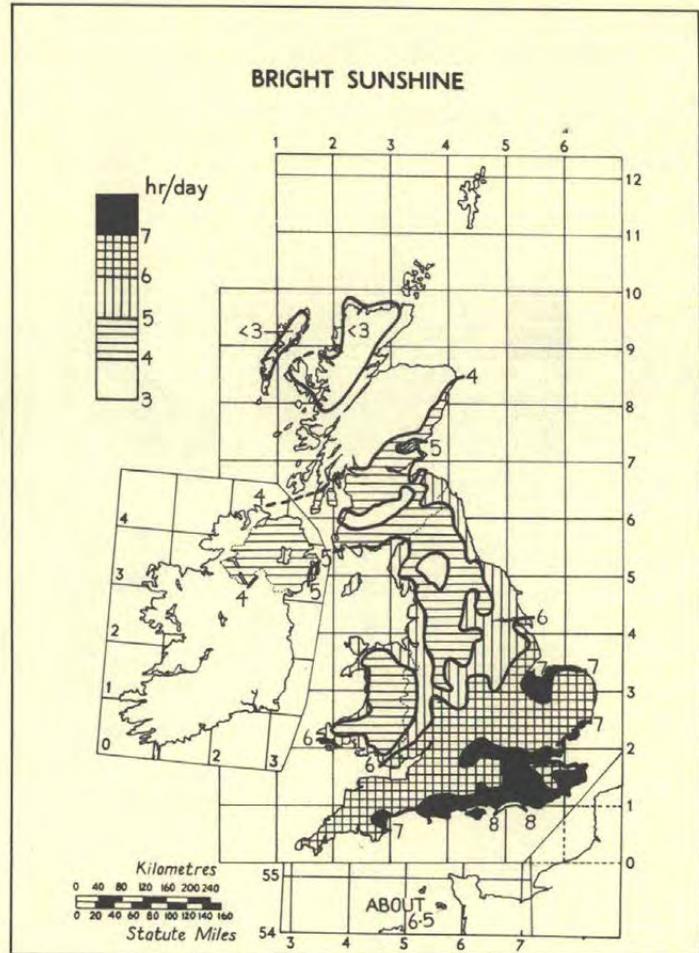
MONTHLY WEATHER CHARTS SEPTEMBER 1964

MEAN PRESSURE AT 9 G.M.T.

The dotted lines show the normal distribution of pressure in millibars based on 30 years observations 1921-50.

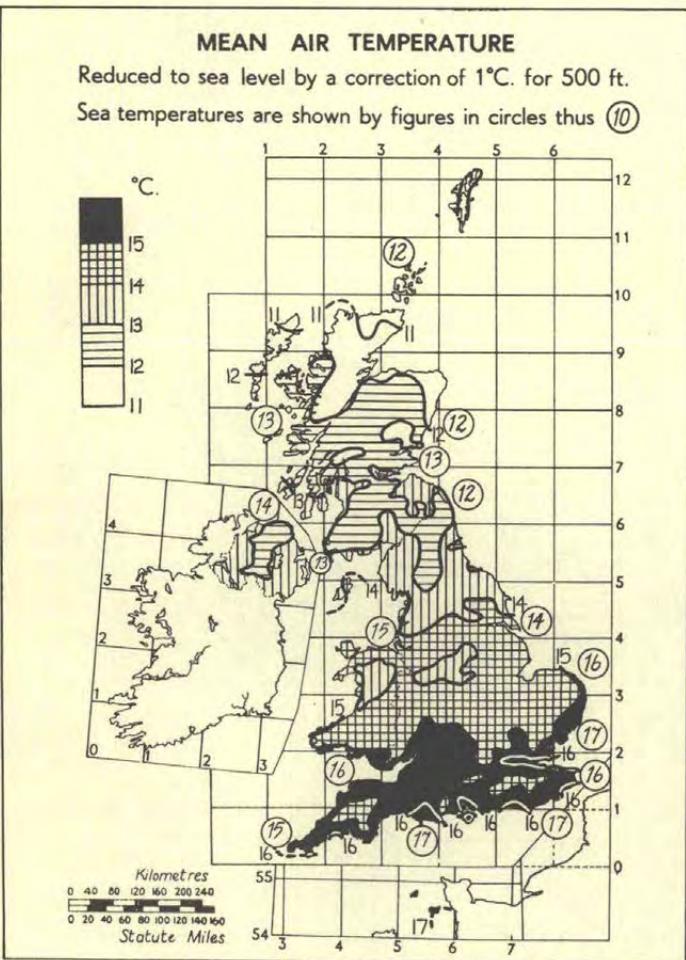


BRIGHT SUNSHINE

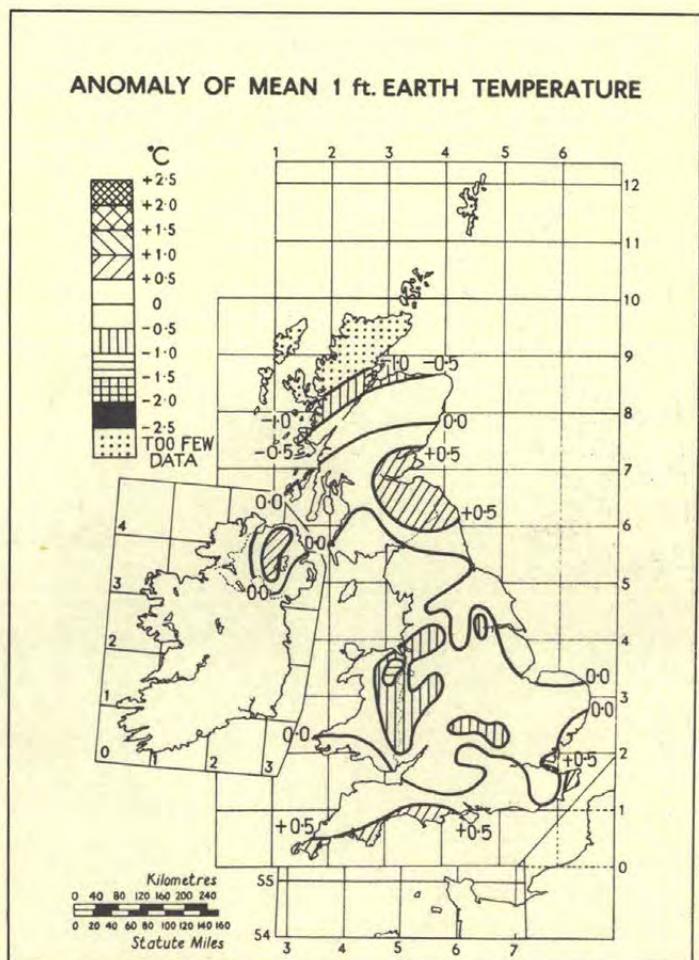


MEAN AIR TEMPERATURE

Reduced to sea level by a correction of 1°C. for 500 ft. Sea temperatures are shown by figures in circles thus (10)



ANOMALY OF MEAN 1 ft. EARTH TEMPERATURE



RAINFALL

SEPTEMBER 1964

The equivalent values in mm. are given in round numbers. The exact relation is 10 in. = 254 mm.

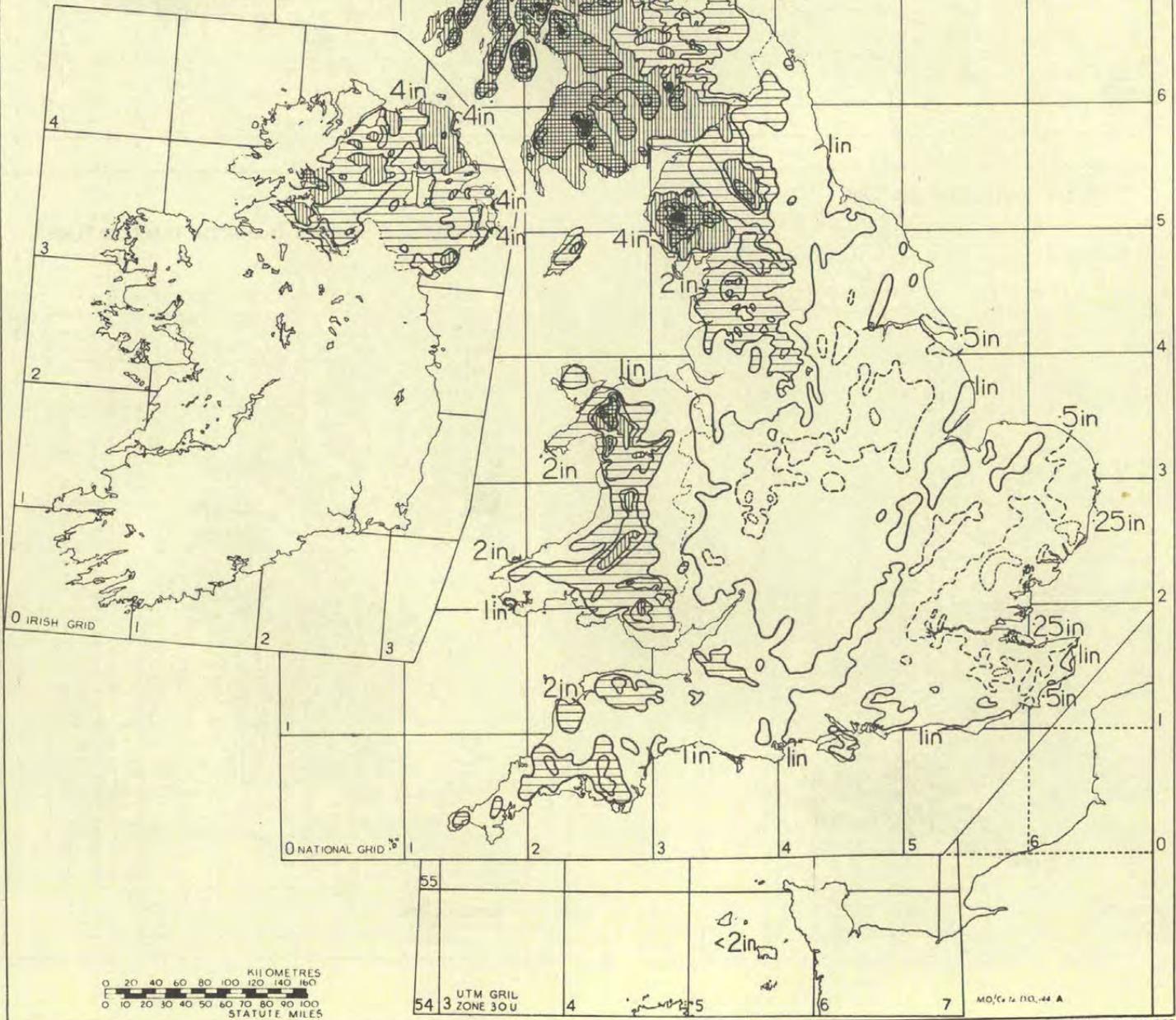
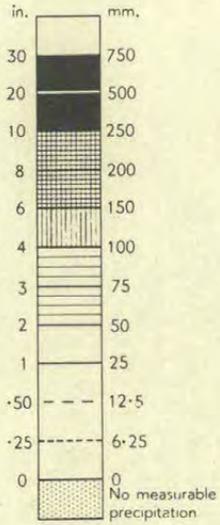


TABLE III (continued)—SUMMARY OF OBSERVATIONS OF TEMPERATURE, RAINFALL, SUNSHINE AND WEATHER SEPTEMBER, 1964

DISTRICT, COUNTY AND PLACE	Terminal Hours of Observation	Height of Station above Mean Sea Level	AIR TEMPERATURE IN DEGREES CELSIUS										MEAN EARTH TEMPERATURE		RAINFALL (Terminal hour 9 G.M.T.)				WEATHER										BRIGHT SUNSHINE	
			Means of		Mean Temperature Mean of A and B	Difference from Average	Highest Maximum and Lowest Minimum				TEMPERATURE		Total Fall	Percentage of Average	Most in a day		Precip'n			Number of days							Daily Mean	Percentage of Average		
			A	B			Maximum	Date	Minimum	Date	1 ft.	4 ft.			Amount	Date	0 in. (0.2mm) or more	0.1 in. (1.6mm) or more	Snow or Sleet	Snow lying at 9h	Hail	Ice or snow pellets, etc.	Thunder heard	Fog at 9h	Air Frost †	Grass min. below 0° C			Gale	
			ft.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	in.	%	in.												hr	%		
4 MIDLAND COUNTIES—cont.																														
Yorks.	Huddersfield	9 9	32.5	18.6	9.3	13.9	+0.6	23.3	4.23	1.1	21	13.9	14.1	.72	49	.28	16	12	5	-	0	-	-	-	3	0	1	-	5.14	139
W. Riding—	Oakes	21-9	78.1	17.8	8.8	13.3	+0.4	24.2	4	3.0	21	12.7	12.1	1.43	49	.53	16	15	8	0	0	0	2	3	0	1	1	4.82	127	
cont.	Bradford	9 9	439	17.3	9.4	13.3	+0.2	22.8	4	1.7	21	13.3	13.9	1.32	51	.57	16	16	10	0	0	0	1	0	0	1	0	-	-	S
	Ilkley	9 9	315	18.0	9.0	13.5	+0.4	23.3	4	0.6	21	-	-	1.36	46	.64	16	13	11	0	0	0	1	0	0	-	4.84	126		
	Sheffield	9 9	429	18.7	9.3	14.0	+0.2	22.8	2.4	2.8	21	14.2	14.2	.82	35	.34	16	8	5	0	0	0	1	-	0	1	0	5.50	142	
	Wakefield	9 9	121	19.3	9.1	14.2	+0.3	25.0	2	1.7	21	13.7	13.5	.65	31	.21	16	7	6	0	0	0	1	1	0	3	0	-	-	S
	Pontefract	9 9	255	18.4	9.3	13.9	+0.4	22.8	4	3.3	21	-	-	.42	21	.15	5	8	5	0	0	0	2	3	0	0	0	-	-	
	Bramham	9 9	177	18.5	8.1	13.3	-	23.3	4	1.7	13	-	-	.98	55	.37	16	9	6	0	0	0	1	1	0	2	0	5.07	-	
	Cawood	9 9	20	18.6	7.4	13.0	-	23.3	4.5	1.1	13,21	13.6	14.3	.87	43	.27	5	8	7	0	0	0	1	2	0	2	0	4.62	-	
	Askham Bryan	9 9	110	18.8	8.2	13.5	-	23.9	4	1.1	21	-	-	.63	29	.16	21	6	5	0	0	0	1	2	0	1	0	4.84	123	
Derby	Buxton	9 9	1007	15.9	7.9	11.9	+0.1	21.1	4	-0.5	21	12.5	13.4	1.98	50	.39	14	13	10	0	0	0	1	2	1	1	0	-	-	S
	Chapel en le Frith	9 9	732	17.2	7.7	12.5	-	22.2	4	-1.1	21	-	-	2.10	-	.61	16	11	10	0	0	1	0	0	1	8	0	-	-	
	Mackworth	9 9	293	18.7	7.6	13.1	-	22.8	2.5, 24	0.6	21	-	-	.59	-	.22	16	9	4	0	0	0	0	2	0	3	0	-	-	
	Belper	9 9	203	18.1	7.6	12.9	-0.7	22.2	2	0.0	21	-	-	.51	21	.17	16	7	5	0	0	0	0	1	-	0	-	-		
	Derby	9 9	159	19.3	8.7	14.0	-	23.3	2.4, 24	1.1	21	-	-	.47	-	.19	5	7	4	0	0	0	0	3	0	1	0	5.99	-	
	Morley	9 9	350	18.8	8.5	13.7	-	23.8	2.4, 24	0.6	21	-	-	.60	30	.23	16	9	5	0	0	1	0	1	-	0	5	0	5.86	-
	Chesterfield	9 9	298	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Nottingham	Sutton Bonington	9 9	157	19.2	7.4	13.3	-0.3	23.9	24	-1.1	21	14.2	14.7	.33	18	.10	5, 15	5	3	0	0	0	1	3	2	6	0	5.93	148	
	Watnall	21-9	385	19.1	8.8	13.9	-	24.6	24	2.8	21	-	-	.52	23	.14	5	7	5	0	0	0	1	2	0	1	0	5.24	131	
	Nottingham Training College	9 9	169	19.4	9.2	14.3	-	24.1	24	2.2	21	-	-	.29	-	.13	5	4	4	-	-	-	-	5	0	1	-	-	-	
	Mansfield	9 9	362	18.4	9.2	13.8	+0.2	23.3	24	3.3	21	14.1	-	.60	28	.35	16	5	3	0	0	0	1	0	1	0	-	-	-	
	Nottingham	9 9	192	19.5	9.1	14.3	+0.1	24.5	24	2.2	21, 30	14.6	15.4	.33	17	.09	5	6	5	0	0	0	0	2	0	2	0	5.07	130	
	Warsop	9 9	150	19.5	6.2	12.9	-	23.9	4, 24	-1.7	21	-	-	.32	18	.23	16	5	1	-	0	-	-	1	4	8	-	5.62	-	
	Finningley	21-9	34	19.6	9.0	14.3	+0.4	24.3	4, 24	3.4	13, 21	-	-	1.06	-	.72	16	6	4	0	0	0	1	2	0	2	0	5.55	-	
Leicester	Newtown Linford	9 9	392	19.2	7.8	13.5	-	23.9	24	1.1	21	-	-	.58	-	.26	15	6	4	0	0	0	0	0	0	9	0	5.94	-	
	Caldecott	9 9	175	20.8	6.4	13.6	-	25.6	3	-0.5	21	-	-	.50	-	.18	14	4	3	-	0	-	-	0	1	3	-	6.13	-	
Northampton	Bugbrooke Mills	9 9	278	20.4	6.9	13.7	-	25.0	4	1.7	21, 28	13.9	13.9	.61	-	.37	15	5	4	0	0	0	0	3	0	-	6.53	-		
	Raunds	9 9	193	20.3	7.8	14.1	-	25.0	3, 24	2.2	21	14.8	14.2	1.20	58	.35	25	6	5	0	0	0	0	1	0	1	0	6.27	-	
	Wittering	21-9	212	20.2	8.8	14.5	-	24.9	3	4.0	21, 23	-	-	.80	-	.22	16	6	6	0	0	0	1	0	4	0	6.91	-		
Warwick	Birmingham K.E.S.*	9 9	450	19.1	9.4	14.3	-	22.8	2.4, 24	3.3	21	-	-	.70	-	.25	15	7	5	0	0	0	0	2	0	-	-	-		
	Egbaston	21-9	536	18.8	10.2	14.5	+0.7	23.0	2	4.5	21	12.7	12.7	.60	24	.22	15	5	4	0	0	0	0	2	0	2	0	5.83	149	
	Ludington	9 9	138	20.4	7.8	14.1	-	23.9	2.10	0.6	21	-	-	.75	35	.39	14	4	3	0	0	0	0	3	0	2	0	6.53	-	
	Straford on Avon	9 9	160	20.6	7.1	13.9	-	24.4	4, 24	-1.1	21	15.5	-	.76	46	.38	14	4	3	0	0	0	0	2	1	2	1	6.11	-	
	Elmdon	21-9	319	19.5	7.7	13.6	-	23.6	2	-1.0	21	-	-	.52	24	.20	15	5	4	0	0	0	0	4	1	6	0	6.16	-	
	Shipston on Stour	9 9	365	20.0	8.6	14.3	-	23.9	2.4, 5	4.4	21	14.0	-	.54	-	.24	14	5	3	0	0	0	0	1	0	9	-	6.64	-	
	Wellesbourne	9 9	153	20.3	7.4	13.9	-	23.9	2.4, 24	0.6	21	13.0	14.8	.72	32	.43	14	5	3	0	0	0	0	2	0	10	0	6.04	-	
	Moreton Morrell	9 9	280	20.3	8.1	14.2	-	24.4	4	1.7	28	-	-	.65	-	.35	14	5	3	0	0	0	0	2	0	7	1	6.37	-	
	Coventry	9 9	338	19.6	8.4	14.0	+0.3	23.3	4.5, 24	1.7	28	-	13.8	.57	26	.36	15	4	4	0	0	0	0	0	3	0	0	6.32	153	
	Rugby	9 9	385	19.7	8.4	14.1	+0.5	23.9	5	0.8	21	13.8	14.9	.76	-	.24	15	7	3	-	0	-	-	0	0	1	-	-		
Oxford	Oxford	9 9	208	20.6	9.6	15.1	+0.7	25.6	5	4.4	21, 29	16.0	15.8	.61	28	.16	16	6	5	0	0	0	0	0	0	3	0	7.01	159	
	Grendon Underwood	9 9	220	20.6	6.9	13.7	-	25.0	3.4, 5	-1.7	21	14.6	15.0	.78	-	.37	25	6	5	0	0	0	1	-	1	2	0	6.90	-	
Buckingham	Medmenham	9 9	98	20.7	6.3	13.5	-	25.6	3.4, 5	0.6	21	-	-	.84	-	.37	14	6	4	-	-	-	-	-	0	17	-	-	S	
	Aylesbury	9 9	316	19.8	8.7	14.3	-	24.4	4.5	2.2	21	-	-	1.35	61	.64	25	6	5	0	0	0	2	3	0	4	0	6.96	-	
Stafford	Keele	9 9	587	17.7	8.7	13.2	-	21.7	2.4, 24	1.1	21	13.2	13.2	.83	31	.18	5	11	7	0	0	0	1	3	0	1	0	5.24	-	
	Oaken	9 9	409	19.1	7.9	13.5	-	23.3	2	2.2	21	13.1	-	.55	-	.17	5	7	5	-	-	-	-	-	0	16	-	-		
	Stone	9 9	350	18.4	7.7	13.1	-	22.8	24	0.0	21	-	-	.93	-	.28	15	10	6	0	0	0	0	2	1	3	0	5.45	-	
	Penkridge	9 9	330	18.8	8.1	13.5	-	22.8	24	0.0	21	-	-	.42	-	.15	16	6	4	0	0	0	0	0	2	0	4	0	-	
	Onecote	9 9	1350	15.1	7.6	11.3	-	19.4	4	2.2	21	11.8	11.4	.99	-	.														

TABLE III (continued)—SUMMARY OF OBSERVATIONS OF TEMPERATURE, RAINFALL, SUNSHINE AND WEATHER SEPTEMBER, 1964

DISTRICT, COUNTY AND PLACE	Terminal Hours of Observation	Height of Station above Mean Sea Level	AIR TEMPERATURE IN DEGREES CELSIUS								MEAN EARTH TEMPERATURE		RAINFALL (Terminal hour 9 G.M.T.)				WEATHER Number of days								BRIGHT SUNSHINE								
			Means of		Difference from Average	Highest Maximum and Lowest Minimum				1 ft.	4 ft.	Total Fall	Percentage of Average	Most in a day		Precip'n	Snow or Sleet	Snow lying at 9h	Hail	Ice or snow pellets etc.	Thunder heard	Fog at 9h	Air Frost	Grass min below 0° C	Gale	Daily Mean	Percentage of Average						
			A	B		Maximum	Date	Minimum	Date					Amount	Date													0.1 in. (0.2 mm) or more	0.1 in. (1.0 mm) or more				
			Max.	Min.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	in.	%	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.				
7a ENGLAND, N.W.—cont.																																	
Westmorland	Great Dun Fell	21-9	2780	13.1	5.6	9.3	-	18.9	4.24	-2.2	21	10.2	-	7.05	-	1.31	8	21	17	-	0	-	-	-	-	4	3	6	-	3.42	-		
-cont.	Moor House	9 9	1825	17.9	9.8	13.9	0.0	23.1	2	-0.1	21	-	-	1.89	57	.33	14	15	12	0	0	0	0	0	2	2	0	1	1	0	5.52	125	
Lancashire	Squires Gate	21-9	33	17.3	10.4	13.9	-	23.3	4	0.0	21	-	-	3.93	-	1.04	21	15	12	0	0	0	0	2	2	0	0	1	1	0	-	-	
	Urswick	9 9	130	17.3	10.4	13.9	-	23.3	4	0.0	21	-	-	3.93	-	1.04	21	15	12	0	0	0	0	2	2	0	0	1	1	0	-	-	
	Southport	9 9	16	17.5	8.9	13.2	-	22.2	2.24	1.1	21	19.2	13.1	1.63	-	.33	14,16	15	11	-	0	0	0	0	0	0	0	3	0	1	-	5.47	-
	Poulton-le-Fylde	9 9	38	-	7.4	-	-	-	-	-1.7	21	13.5	-	5.73	-	1.42	21	18	15	0	0	0	0	0	0	0	0	1	2	0	-	-	
	Grizedale	9 9	300	-	7.4	-	-	-	-	-1.7	21	13.5	-	5.73	-	1.42	21	18	15	0	0	0	0	0	0	0	0	1	2	0	-	-	
	Speke	21-9	80	18.5	10.5	14.5	-	23.0	2	3.1	21	-	-	1.44	51	.37	16	13	9	0	0	0	0	0	0	2	0	1	0	0	5.09	-	
	Kirkham	9 9	78	17.8	9.3	13.5	-	22.2	2	0.0	21	-	-	2.02	55	.41	14	14	13	0	0	0	0	1	2	0	1	2	0	0	5.39	-	
	Garstang	9 9	68	17.1	9.7	13.4	-	21.7	2	0.6	21	-	-	2.40	-	.46	14	16	12	0	0	0	0	0	0	0	1	1	0	-	4.80	-	
	Morecambe	9 9	24	17.2	-	-	-	22.8	2	3.3	21	-	-	2.53	66	.45	5	18	12	0	0	0	0	0	0	0	1	0	0	0	5.03	117	
	Preston	9 9	108	17.6	9.9	13.7	-	22.2	4	0.6	21	-	-	2.33	60	.90	16	15	11	0	0	0	0	2	1	0	0	1	0	-	-		
	Stonyhurst	9 9	377	17.1	9.2	13.1	+0.1	22.2	4	1.1	21	-	-	2.61	57	.64	16	15	13	0	0	0	0	0	2	1	0	0	1	0	4.76	124	
	Manchester W/Centre	9 9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.58	-		
	Helmshore	9 9	854	15.9	8.6	12.3	-	21.1	4	1.7	21	12.4	-	2.78	52	.64	16	16	14	0	0	0	0	0	0	0	1	0	0	1	0	4.85	-
	Burnley	9 9	655	16.7	8.8	12.7	-	21.7	4	0.0	21	12.8	12.4	2.52	-	.85	16	15	15	0	0	0	0	0	1	0	1	0	0	0	4.56	-	
	Nelson	9 9	540	16.4	8.8	12.6	-	22.2	4	0.0	21	13.6	13.0	2.42	60	.71	16	15	12	0	0	0	0	0	0	0	0	2	0	0	4.16	- S	
	Rochdale	9 9	362	17.3	7.9	12.6	-	23.3	4	-0.6	21	-	-	2.03	-	.66	16	15	12	0	0	0	0	0	1	0	1	0	1	0	-	- S	
Cheshire	Bidston Obs'y.	9 9	198	17.4	10.8	14.1	+0.4	21.7	3.24	7.2	21	-	-	1.52	58	.59	16	15	10	-	-	-	-	-	-	-	-	0	0	(5.54)	132		
	Winnington	9 9	65	18.9	10.3	14.6	-	23.3	24	0.6	21	-	-	1.33	49	.48	16	12	10	0	0	0	0	0	1	2	0	0	0	0	-	-	
	Knutsford	9 9	212	18.7	9.0	13.9	-	22.8	4	1.1	21	14.8	15.2	1.54	-	.50	16	12	11	0	0	0	0	0	0	1	0	1	0	0	-	-	
	Ringway	9 9	248	17.9	9.8	13.9	+0.4	22.6	2.4	0.8	21	-	-	1.71	64	.60	16	13	10	0	0	0	0	0	2	1	0	0	0	4.82	125		
	Macclesfield	9 9	500	17.8	9.5	13.7	+0.5	22.2	2.24	2.2	21	-	-	1.19	38	.35	16	14	9	0	0	0	0	1	0	2	0	0	0	-	-		
7b NORTH WALES																																	
Flint	Rhyl	9 9	31	18.6	10.7	14.7	+0.6	23.3	2	5.6	21	-	-	1.18	45	.36	16	12	9	0	0	0	0	0	0	0	1	0	0	0	5.65	130	
	Prestatyn	9 9	12	18.5	11.1	14.8	-	23.3	2	6.1	1	-	-	1.33	49	.41	5,16	13	8	0	0	0	0	0	0	0	0	0	0	0	4.57	112	
	Hawarden Bridge	9 9	17	19.7	9.4	14.3	+0.3	22.8	2.24	3.3	21	-	-	1.13	48	.33	16	11	10	0	0	0	0	1	1	-	0	0	0	-	-		
Anglesey	Valley	21-9	33	17.7	11.2	14.5	+0.3	22.3	2	4.5	21	-	-	2.02	64	.72	16	11	6	0	0	0	0	0	1	1	0	1	0	0	5.58	121	
Denbigh	Colwyn Bay	9 9	118	18.3	11.2	14.7	+0.4	23.3	23	6.1	1	14.5	-	.99	35	.39	5	11	6	0	0	0	0	0	0	0	0	0	0	0	5.41	124	
	Alwen	9 9	1100	15.8	6.9	11.3	-	20.6	3	0.0	21	-	-	2.09	-	.42	16	15	10	-	-	-	-	-	-	0	3	-	-	-	-		
	Ruthin	9 9	248	18.3	9.4	13.9	-	22.2	2.3	5.0	21	-	-	1.16	-	.28	14	12	9	0	0	0	0	0	0	0	0	0	0	0	5.73	-	
	Loggerheads	9 9	690	17.1	8.6	12.9	-	21.7	3	5.0	3,4,21	13.1	13.1	1.79	-	.39	15	15	11	0	0	0	0	2	1	0	0	0	0	-	-		
	Bwchgwyn	9 9	1267	15.2	7.9	11.5	-	21.7	4	4.4	21	10.6	-	1.80	-	.42	5,16	11	9	0	0	0	0	0	0	1	0	2	0	-	-		
	Wrexham	9 9	275	18.9	8.7	13.8	-	22.2	24	3.9	21	13.7	13.7	.97	-	.19	5	11	8	0	0	0	0	0	0	1	0	4	0	-	-		
Caernarvon	Bardsey Island	21-9	61	16.7	12.7	14.7	-	19.1	2	9.0	16	-	-	1.72	-	.54	5	11	8	0	0	0	0	0	0	2	0	0	0	-	-		
	Botwnnog	9 9	112	17.5	10.5	14.0	-	21.1	2,23	3.9	21	14.9	14.8	2.32	-	.86	5	12	8	0	0	0	0	0	1	0	0	0	0	0	5.44	-	
	Bryn Adda	9 9	275	18.3	10.6	14.5	-	24.4	2,23	5.0	21	-	-	2.33	-	.71	14	13	9	0	0	0	0	0	0	0	1	1	0	5.37	-		
	Cwm Dylli	9 9	324	17.4	10.1	13.7	-	23.9	23	3.3	21	14.2	-	7.39	-	1.39	14	21	18	0	0	0	0	0	0	0	3	-	-	-	-		
	Aber	9 9	60	17.9	11.1	14.5	+0.3	23.9	2	5.6	21	-	-	1.95	50	.57	14	13	9	0	0	0	0	0	0	1	0	0	0	4.99	120		
	Llandudno	9 9	13	17.9	11.7	14.8	+0.4	23.3	24,24	6.7	21	-	-	1.03	38	.33	5	9	7	0	0	0	0	0	0	0	0	0	0	5.45	122		
Merioneth	Llyn Stwlan	9 9	1656	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Blaenau Ffestiniog	9 9	750	-	-	-	-	22.2	2,3,5	-	-	-	-	9.55	-	2.20	21	19	17	-	0	-	-	-	3	-	-	-	3.40	- S			
	Corwen	9 9	473	17.7	7.4	12.5	-	22.8	3	0.0	21	-	-	1.67	-	.48	15	13	11	0	0	0	0	0	0	0	1	1	0	0	- S		
Montgomery	Ceinws	9 9	200	18.1	8.4	13.3	-	23.3	3	1.1	21	-	-	4.63	-	.86	14	19	16	-	-	-	-	-	0	0	1	0	-	-			
	Lake Vyrnwy	9 9	995	16.0	7.9	11.9	-	21.1	4	0.6	21	12.7	-	2.76	55	.59	16	17	11	0	0	0	0	0	0	0	0	0	17	0	-	-	
8a SOUTH WALES																																	
Cardigan	Aberporth	21-9	378	17.3	11.1	14.2	+0.1	22.4	2	7.4</																							

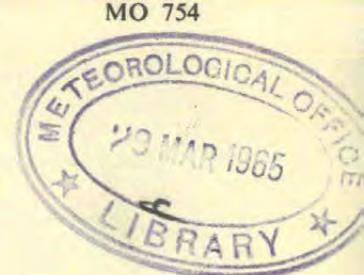
TABLE IV (continued)—SUMMARY OF OBSERVATIONS AT FIXED HOURS SEPTEMBER, 1964

DISTRICT, COUNTY AND PLACE	Hour of Observation	Height of Barometer above Mean Sea Level	MEAN PRESSURE		MEAN TEMPERATURE AND HUMIDITY				CLOUD AMOUNT (OKTAS)					VISIBILITY							WIND, NUMBER OF OBSERVATIONS																				
			At Mean Sea Level	Difference from Average	Dry Bulb	Depression of Wet Bulb	Vapour Pressure	Relative Humidity	No. of Observations					NUMBER OF OBSERVATIONS							FORCE (0-12)				DIRECTION																
									Mean Amount	0	1	2	3	4	5	6	7	8	0-44 yd.	45-810 yd.	220-480 yd.	440-1,060 yd.	1,100-2,190 yd.	2,200-4,390 yd.	3-6 mi.	7-12 mi.	13-24 mi.	25 mi. or over	8 or more	Beaufort Force	Speed in knots										
			0	1	2	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	32	33	N.	N.E.	E.	S.E.	S.
5 ENGLAND, S.E.—cont.																																									
Boscombe Down	3	419	1018.3	-	10.7	0.7	11.7	92	3.7	11	4	1	9	5	0	0	0	0	2	1	1	8	13	4	1	0	0	7	20	3	1	1	5	2	5	3	6	4			
	9	419	1018.4	-	14.0	1.6	13.2	82	5.3	1	5	6	12	4	2	0	0	0	0	3	1	2	4	7	5	8	0	1	17	6	6	1	0	2	4	4	3	6	4		
Upavon	21	419	1017.2	-	19.4	5.0	11.9	53	4.2	2	8	10	8	2	0	0	0	0	0	0	0	4	6	8	12	0	0	21	9	0	1	4	3	2	5	13	1	0			
	9	582	1017.9	-	12.6	1.5	12.2	83	3.3	10	5	5	7	3	0	0	0	0	0	1	0	7	13	7	2	0	0	6	20	4	0	0	5	2	3	5	5	6	2		
7a ENGLAND, N.W.	3	92	1015.0	-	10.7	1.0	11.5	87	4.1	5	8	4	8	5	0	0	0	0	2	1	9	8	9	1	0	0	7	18	5	0	2	2	3	4	10	4	0	0			
	9	92	1015.1	-	13.1	1.7	12.3	81	5.4	1	4	9	9	7	0	0	0	1	1	0	7	12	8	1	0	0	12	12	6	0	0	4	6	0	9	5	0	0			
Lancashire Squires Gate	21	92	1014.2	-	16.3	3.0	12.4	67	5.7	0	4	7	12	7	0	0	0	0	1	0	2	11	11	5	0	0	13	14	3	0	0	1	2	5	9	8	2	0			
	3	35	1015.6	-	11.5	0.9	12.3	90	4.7	3	8	3	9	6	1	0	1	0	1	4	6	8	5	4	0	0	2	16	9	3	1	0	5	2	4	5	8	2	0		
Speke	9	35	1015.7	-	14.0	1.5	13.4	84	6.0	0	3	5	17	4	1	0	1	0	0	4	9	10	5	1	0	0	3	19	7	1	0	0	5	2	4	4	14	2	0		
	21	35	1015.4	-	16.5	2.5	14.1	75	5.5	0	6	5	14	5	0	0	0	0	1	4	2	9	7	7	0	0	3	18	8	1	1	0	2	2	4	4	14	2	0		
Cheshire Ringway	3	85	1016.2	-	13.6	1.4	13.2	84	5.0	2	4	9	12	3	0	0	0	0	0	6	7	10	0	0	0	0	4	14	11	1	0	0	3	1	4	7	6	6	1		
	9	85	1016.3	-	11.8	1.1	12.2	87	3.6	6	5	11	6	1	1	0	1	1	1	0	0	2	6	7	9	3	0	0	10	15	5	1	0	3	7	4	8	1	0		
7b NORTH WALES	15	85	1016.3	-	13.6	1.7	12.6	80	5.8	0	4	4	18	3	1	0	1	0	1	3	9	10	3	2	0	0	15	13	1	0	0	3	9	6	1	7	3	0			
	21	85	1015.4	-	17.7	3.8	12.9	64	5.3	1	2	12	13	2	0	0	0	0	0	2	4	10	8	6	0	0	1	19	9	1	0	0	1	5	5	2	12	4	1		
Anglesey Valley	3	251	1015.8	-	11.0	1.2	11.3	85	3.4	8	9	8	3	0	0	0	0	1	2	0	1	10	10	5	1	0	0	4	23	3	0	1	3	1	13	4	1	0			
	9	251	1016.3	-	13.4	2.2	11.6	75	5.2	1	4	8	14	3	0	0	1	0	0	3	11	9	3	0	0	0	0	14	12	4	0	0	2	3	11	4	6	0			
8a SOUTH WALES	15	251	1015.2	-	17.1	4.4	11.3	59	5.5	0	4	9	12	5	0	0	0	0	0	2	5	12	10	1	0	0	1	13	16	0	0	0	2	4	5	9	9	1			
	21	251	1015.9	-	13.1	2.3	11.3	75	3.3	2	6	10	8	4	0	0	0	0	1	2	1	9	15	2	0	0	1	5	21	3	0	0	5	4	8	5	5	0			
Cardigan Aberporth	3	36	1015.5	-	12.4	0.7	13.3	91	4.0	5	3	10	6	5	1	0	1	0	0	1	0	1	13	11	3	0	0	8	16	6	2	3	1	2	1	10	4	6	1		
	9	36	1015.5	+0.4	14.5	1.3	14.3	86	6.0	0	3	6	13	7	1	0	0	0	0	3	3	6	6	11	0	0	0	8	16	3	0	0	2	0	2	11	5	5	2		
Glamorgan Mumbles Head	15	36	1015.1	-	16.5	2.0	14.9	79	5.2	0	5	8	13	4	0	0	0	0	0	2	1	2	6	8	11	0	0	3	19	8	0	1	0	1	12	6	4	0			
	21	36	1015.5	-	13.6	1.0	13.9	89	4.5	5	4	8	8	4	1	0	1	0	0	1	1	1	13	9	4	1	0	7	12	7	3	1	1	3	0	9	5	5	3		
Cardigan Aberporth	3	382	1016.5	-	12.4	1.3	12.2	84	4.5	8	2	3	9	6	2	0	0	2	0	0	0	3	11	10	4	0	0	2	14	11	3	1	0	1	4	9	5	5	2		
	9	382	1016.5	-	14.1	1.7	13.0	80	5.3	0	6	6	13	4	1	0	0	0	1	0	2	3	10	9	5	0	0	1	20	5	4	0	0	1	5	9	4	4	3		
Glamorgan Mumbles Head	15	382	1016.1	-	16.2	2.8	13.2	72	5.3	0	8	3	14	5	0	0	0	0	0	2	2	6	7	13	0	0	3	19	8	0	4	0	1	1	6	7	7	4			
	21	382	1016.7	-	13.4	1.5	12.8	83	4.5	3	8	4	10	3	2	0	0	0	0	4	6	13	5	0	0	0	3	11	13	3	1	0	0	3	12	1	7	3			
Rhoose	3	123	1017.2	-	13.6	1.1	13.6	85	3.3	7	9	5	4	0	0	0	0	0	0	0	0	7	15	8	0	0	0	7	13	10	0	3	4	5	1	0	7	5	5		
	9	123	1017.3	-	14.9	1.7	13.9	82	4.6	2	9	5	10	4	0	0	0	0	0	0	0	3	14	6	6	1	1	4	15	10	0	1	5	5	2	2	5	5	5		
Rhoose	15	123	1017.0	-	16.9	2.7	14.1	73	4.7	2	5	9	8	6	0	0	0	0	0	0	1	7	13	6	3	1	5	20	4	0	0	4	2	2	14	6	2	0			
	21	123	1017.4	-	15.1	1.7	14.0	82	3.5	5	9	6	5	0	0	0	0	0	0	0	7	9	11	3	0	0	8	12	10	0	5	1	4	0	2	10	7	1			
8b ENGLAND, S.W.	3	225	1017.5	-	11.7	0.8	12.5	90	3.2	12	4	4	5	0	0	0	1	0	0	3	7	5	9	5	0	0	0	10	16	4	0	3	5	0	1	3	4	7			
	9	225	1017.7	-	14.4	1.6	13.7	83	4.7	2	8	5	11	4	0	0	0	0	0	1	6	4	8	6	5	0	0	15	13	2	1	0	7	4	2	3	4	7			
Dorset Portland Bill	15	225	1016.9	-	17.9	3.5	13.7	67	4.4	0	9	8	12	1	0	0	0	0	0	2	3	5	9	11	0	0	2	19	9	0	0	0	5	1	1	17	2	0			
	21	225	1017.7	-	14.1	1.4	13.6	84	3.8	8	5	5	7	0	0	0	0	0	0	3	3	7	11	6	0	0	1	10	18	1	2	1	3	1	1	5	8	8			
Devon Hartland Pt.	3	35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	9	35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Mount Batten	15	35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	21	35	1017.8	-	15.9	1.3	15.6	86	2.8	12	6	4	3	5	0	0	0	0	0	2	3	23	2	1	8	15	5	1	1	7	1	1	3	13	2	0	0				
Chivenor	3	306																																							

Monthly Weather Report

OF THE METEOROLOGICAL OFFICE

Summary of observations compiled from returns of official stations and voluntary observers.



Volume 81 Number 10

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October 1964 — *Dry and rather cold.*

Weather was predominantly anticyclonic in character with pressure high mostly to the south or east of the country except from the 5th to the 15th and the 22nd-23rd when troughs or small depressions moved over or near the British Isles.

The dry sunny weather at the end of September continued during the first four days of October. Afternoon temperatures were above average nearly everywhere and nights were clear with ground frost. On the 4th an anticyclone, which had been centred over the North Sea, moved away south-eastwards and fog became widespread that night in a moister southerly airstream.

A rather unsettled period began on the 5th as a slow moving trough brought rain from the Atlantic, the first in many places for over two weeks. The rain was prolonged and locally heavy in the west, but did not reach eastern districts until the late evening. Most of England and Wales was dry and sunny again on the 6th, but a rapidly deepening depression brought renewed rain to Scotland which spread southwards to most districts during the night. By the 7th a slow-moving depression was centred to the north of Scotland and the rain gave place to thundery showers as winds veered towards the north west. The showers continued throughout the 8th but there were long sunny periods in the south.

On the 9th a small depression from the Atlantic deepened very rapidly off south-west England, pressure falling up to 18 mb in 3 hours on its forward side, as it moved eastwards along the north coast of France. Winds increased to storm force in the English Channel; mean wind speed at Jersey Airport between 1300 and 1400 GMT that day was 68 kt, a gust of 94 kt at about 1325 GMT being the highest gust ever recorded in the British Isles during October. Rain associated with the depression was mainly confined to southern England.

A complex area of low pressure covered the British Isles for most of the next week, a feature of the situation being the persistence of a north-westerly airstream off our western seaboard. Weather remained generally cold with outbreaks of rain and occasional thunderstorms but with good sunny periods especially in the south. On the 13th many parts of southern and central England had 8-10 hours of sunshine, but the next day rain was heavy at times along the south coast as a depression from the Atlantic moved across northern France. Some coastal areas of east Kent had more than 2 inches of rain on the 14th. There were scattered showers in a north-westerly airstream on the 15th as the depression moved away north-eastwards over the Low Countries.

Weather became more settled and milder on the 16th as pressure rose generally over the country. Most of England was sunny and dry during the next four days, but slow moving fronts from the Atlantic gave rather cloudy weather with occasional slight rain in north-west England, Northern Ireland and Scotland.

Cold fronts, associated with depressions in high latitudes, brought rain southwards over the country early on the 21st and on the 22nd; northern districts were mainly fine on the 21st between the rain-belt. On the 23rd a northerly airstream from Arctic regions brought wintry showers of rain, hail or light snow and occasional thunderstorms to all areas. The showers continued on the 24th but there were long sunny periods in south-

east England; light frontal rain from the Atlantic spread south-east across the country that evening.

Winds backed to south-west on the 25th and 26th and temperature returned to normal as an anticyclone over the Bay of Biscay spread over southern England. Most of England was dry with broken sunshine on the 25th-27th but Scotland and Northern Ireland were dull with occasional drizzle. During the last four days of the month a ridge of high pressure extended over the British Isles from an anticyclone near the southern Baltic, and weather was generally dull and cooler with occasional drizzle chiefly in Coastal districts.

Pressure and Wind — Mean pressure at 9h was everywhere above the average, the excess ranging from 3.1 mb at Lerwick to +0.3 mb at Shoeburyness. Surface winds were east to south-east at first becoming mainly south-westerly on the 6th, north-westerly on the 7th-8th and then rather variable until the 14th. During the latter half of the month, apart from spells of north-westerlies on the 15th-17th and 22nd-24th, winds were mainly between south-west and south. It was a quiet month generally but winds reached gale force on 9 days in Scotland and on the 6th, 7th, 9th and 23rd in England and Wales. A gust of 94 kt was recorded at Jersey on the 9th.

Temperature — Day temperatures were above the average during the first week and around the 19th and 26th. The second week was cold both day and night and there was another cold spell around the 23rd.

Extremes included: (England and Wales) 23.3°C at Eastwick Lodge on the 5th, -7.2°C at Lincoln on the 13th; (Scotland) 20.6°C at Kinlochewe on the 4th, -7.0°C at Lowther Hill on the 24th; (Northern Ireland) 17.2°C at Larne on the 1st and at Roscor on the 3rd, -2.5°C at Carrigans on the 13th.

Rainfall — In Scotland rainfall totals were less than half the average over most of Inverness-shire and over most central and eastern districts north of the Firth of Forth. Further south rainfall was less than half the average over counties east of the Pennines, the east Midlands and the Thames Valley. Rainfall totals exceeded 125 per cent of the average around Gorseston and in coastal areas of east Kent and east Sussex, mainly owing to heavy rain on the 14th.

Thunder was heard on 8 days in Scotland and on the 7th-16th, 22nd and 23rd in England and Wales.

Snow or sleet was reported on 9 days in Scotland and ground was snow-covered on 4 days (22nd-25th). In England and Wales it was reported on the 8th-11th and 22nd-24th.

Sunshine — Sunshine was below average over most of Scotland and Northern Ireland but above average over most of England and Wales; it exceeded 140 per cent of the average in parts of the Midlands.

Fog — Fog was observed at 9h at one place or another on 20 days in Scotland and daily except the 7th-9th, 23rd and 24th in England and Wales.

Miscellaneous Phenomena — The aurora was observed in Scotland on 8 nights.

TABLE I—DISTRICT VALUES— OCTOBER.

DISTRICTS	AIR TEMPERATURE					EARTH TEMP.		RAIN DAYS	RAIN-FALL	SUNSHINE
	Highest Max.	Lowest Min.	Max.	Min.	Mean	Mean 1 ft.	Mean 4 ft.			
	Difference from Average					% of Average				
0 SCOTLAND, N.	20.6	-6.1	-0.3	-0.8	-0.6	-	-	-2	72	102
1 SCOTLAND, E.	19.4	-6.1	-0.6	-0.7	-0.7	-	-	-4	67	82
2 ENGLAND, N. E.	19.4	-7.2	-1.0	-1.2	-1.1	-0.4	0.0	-5	48	106
3 ENGLAND, E.	23.3	-5.0	-1.4	-2.0	-1.7	-1.0	-0.5	-2	76	112
4 MIDLANDS	21.1	-6.1	-1.0	-1.6	-1.3	-0.8	-0.2	-2	52	125
5 ENGLAND, S. E.	22.2	-3.9	-1.0	-1.9	-1.5	-1.2	-0.6	-3	78	125
6 SCOTLAND, W.	17.8	-7.0	-0.6	-0.9	-0.8	-0.1	-0.1	-4	81	96

1964 (1908, revised 1928, 1941, 1956 and 1964)

DISTRICTS	AIR TEMPERATURE					EARTH TEMP.		RAIN DAYS	RAIN-FALL	SUNSHINE
	Highest Max.	Lowest Min.	Max.	Min.	Mean	Mean 1 ft.	Mean 4 ft.			
	Difference from Average					% of Average				
7 ENGLAND, N. W. and N. Wales	20.6	-5.6	-0.7	-1.0	-1.1	-0.5	+0.1	-4	92	117
8 ENGLAND, S. W. and S. Wales	21.1	-3.9	-1.3	-1.7	-1.5	-0.5	-0.2	-2	82	103
N. IRELAND	17.2	-2.5	-0.6	-1.4	-1.0	-	-	-2	126	78
SCOTLAND	20.6	-7.0	-0.5	-0.8	-0.7	-	-	-3	69	93
ENG. and WALES	23.3	-7.2	-1.1	-1.6	-1.6	-	-	-3	66	115

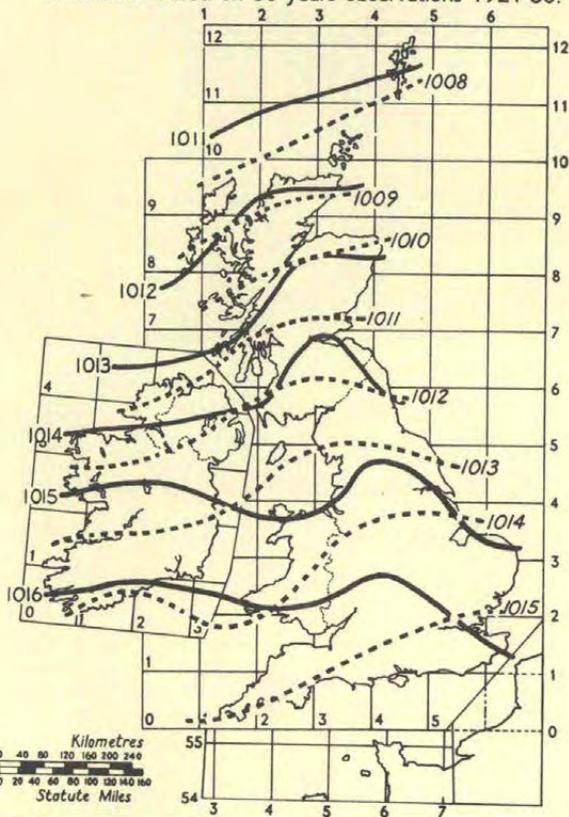
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TABLE II—SUMMARY OF AUTOGRAPHIC RECORDS OF WIND— OCTOBER, 1964 (1914)

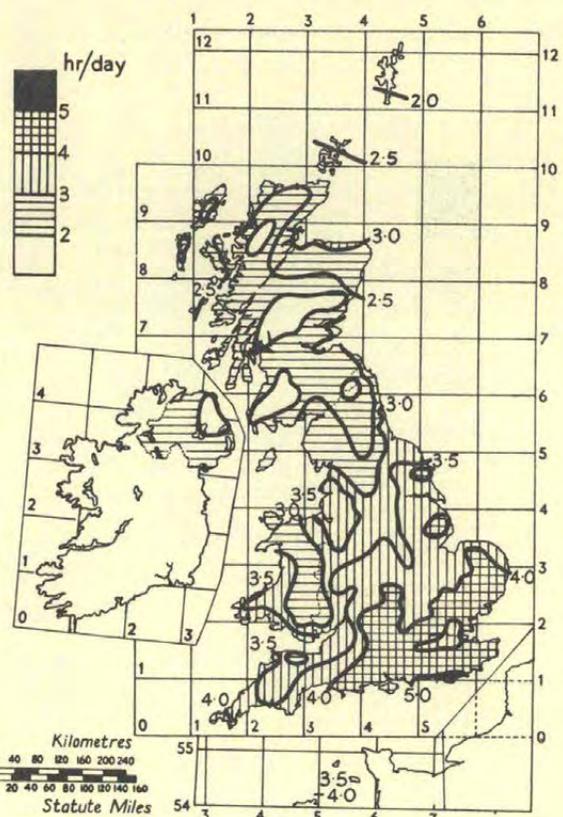
DISTRICT, COUNTY AND PLACE	Height of Vane			Distribution of Mean Hourly Values of Wind Speed								Mean Hourly Wind Speed	Highest Velocities							
	Above Mean Sea Level	Above Ground	Effective Height	34 knots or more		22 to 33 knots		11 to 21 knots	4 to 10 knots	Less than 4 knots	No Record		Highest Hourly Wind			Highest Gust				
				Dates of Occurrence	Duration	No. of days	Duration	Duration	Duration	Duration	Duration		Veer from N	Speed	Hour ended at	Speed	Day and Time			
	ft.	ft.	ft.		hr.		hr.	hr.	hr.	hr.	hr.		knots	knots	day hr	knots	day hr			
SCOTLAND																				
0 Zetland	Lerwick Observatory	304	33	33	-	0	11	50	367	228	99	0	11.4	230	33	22 09	50	22	0755	
	Orkney Kirkwall	134	50	33	-	0	4	31	268	316	129	0	9.4	350	28	23 03	45	23	1520	
	Caithness Dounreay	110	39	30	-	0	6	50	237	435	3	19	10.5	010	30	23 16	56	23	1520	
	Sutherland Shin	78	33	33	-	0	0	0	66	208	470	0	3.7	190	18	19 18	44	22	1305	
	Ross & Cromarty Stornoway (Coastguard)	120	40	36	22	1	12	105	273	221	144	0	11.7	230	35	22 03	51	22	0215	
	Inverness Benbecula	125	65	55	-	0	5	34	207	356	147	0	8.5	200	27	22 10	55	22	1350	
	1 Moray Lossiemouth	69	51	35	22	4	9	74	348	275	43	0	12.5	320	37	22 22	59	22	2135	
	Aberdeen Dyce	101	80	60	-	0	2	25	111	307	301	0	6.1	310	32	23 03	50	23	0430	
	Angus Auchterhouse	294	30	30	-	0	1	3	159	279	303	0	5.9	180	31	7 02	46	23	0630	
	Bell Rock Lighthouse	827	62	50	-	0	0	0	96	358	290	0	5.7	290	21	23 15	37	22	(1400)	
	Perth Rannoch	126	131	124	7, 22, 23	5	9	88	337	172	142	0	12.0	220	35	22 12	46	7	0215	
	Fife Leuchars	1005	56	57	*	-	0	4	9	100	365	270	0	6.0	250	26	22 13	44	22	1230
	Midlothian Turnhouse	78	40	40	-	0	3	8	173	311	252	0	6.7	200	28	7 01	45	7	0655	
	Edinburgh, Blackford Hill	137	40	33	-	0	3	8	173	311	252	0	6.7	200	28	7 01	45	7	0655	
	6a Argyll Tiree	456	50	34	6, 7	4	6	17	247	318	158	0	8.6	170	38	7 02	74	7	0105	
	Bute Millport	89	60	47	22, 23	5	18	146	369	142	82	0	14.9	320	37	22 23	60	22	2050	
	Renfrew Paisley	50	34	34	∅	-	0	2	4	23	275	442	0	3.6	180	29	7 01	52	7	0030
	Renfrew Paisley	188	81	31	-	0	2	5	96	357	286	0	5.7	210	31	7 01	47	7	0040	
	Lanark Lowther Hill	71	41	39	-	0	2	5	96	357	286	0	5.7	210	31	7 01	47	7	0040	
	Ayr Prestwick Airport	2412	43	33	6, 7, 22, 23	18	17	126	361	210	29	0	15.0	220	42	6 23	61	6	2215	
	Dumfries Eskdalemuir Observatory	68	33	33	-	0	0	0	132	421	191	0	6.9	310	21	23 02	46	22	2035	
	Wigtown West Freugh	825	50	35	-	0	2	8	58	188	490	0	3.7	200	32	7 02	55	7	0115	
	ENGLAND and WALES	81	33	33	6, 7	2	4	12	187	402	141	0	8.0	210	35	6 24	55	6	2325	
6b Isle of Man	Ronaldsway	119	64	39	6, 7, 9	11	12	85	319	283	46	0	12.6	200	49	6 23	70	6	2205	
	Point of Ayre	64	33	33	-	0	10	89	275	341	39	0	12.1	200	33	7 01	55	7	0025	
2 Durham	Durham	389	53	33	-	0	1	2	112	238	337	0	5.5	320	23	23 09	39	7	0120	
	South Shields	73	57	44	-	0	2	16	140	326	262	0	6.7	190	26	7 07	46	7	0655	
Lincoln	Cranwell	268	47	47	-	0	5	18	295	344	87	0	10.5	190	30	7 09	48	23	1605	
3 Norfolk	Gorleston	45	33	33	-	0	0	0	68	260	416	0	4.2	220	20	7 09	39	7	0845	
Suffolk	Mildenhall	99	83	60	-	0	2	6	154	440	144	0	7.2	200	26	7 08	41	7	0745	
Bedford	Bedford	377	42	30	-	0	1	7	234	356	147	0	8.3	190	31	7 08	45	7	0720	
	Cardington	276	123	132	-	0	1	7	234	356	147	0	8.3	190	31	7 08	45	7	0720	
Hertford	Garston	307	50	33	-	0	0	0	35	434	275	0	4.5	310	18	23 11	37	7	0710	
	Rothamsted	461	41	33	-	0	0	0	19	375	350	0	4.1	300	15	23 12	33	23	1320	
Essex	Stansted	351	31	31	-	0	0	0	140	433	171	0	6.6	210	19	7 09	32	7	0820	
	Coryton	66	57	48	-	0	1	1	137	381	199	26	6.5	270	22	7 11	44	7	1000	
	Shoeburyness	118	106	91	7	3	4	14	282	335	104	6	9.5	220	38	7 11	62	7	1010	
4 Yorks, W.R.	Sheffield	533	53	35	-	0	0	0	31	250	455	8	3.5	200	18	7 05	39	7	0240	
Warwick	Edgbaston	643	118	73	-	0	1	5	106	531	102	0	7.2	200	26	7 06	44	7	0400	
	Elmdon	343	31	31	-	0	2	7	126	369	242	0	6.4	210	26	7 07	43	7	0640	
Buckingham	Amersham	500	50	50	-	0	0	0	24	453	267	0	4.8	200	16	7 08	33	7	0730	
Stafford	Keele	706	50	33	-	0	1	2	31	275	436	0	3.8	220	24	7 05	48	7	0430	
Gloucester	Avonmouth	92	61	33	-	0	4	27	159	239	255	64	7.2	320	27	23 10	46	23	0920	
5 London	Kingsway	208	143	41	-	0	1	1	86	471	186	0	6.3	200	22	7 09	41	7	0900	
Middlesex	London (Heathrow) Airport	115	33	33	-	0	2	4	122	467	151	0	6.9	200	27	7 09	41	7	0850	
	Hampton	139	101	100	-	0	1	1	65	349	329	0	4.8	220	23	7 09	40	7	0835	
Surrey	Kew Observatory	92	75	50	-	0	1	1	90	425	228	0	5.8	220	22	7 09	43	7	0810	
	Gatwick	232	38	33	-	0	1	4	76	329	335	0	4.9	230	25	7 11	43	7	0830	
Kent	Isle of Grain	48	40	33	-	0	1	1	135	235	373	0	5.0	220	22	7 11	42	7	0940	
	Dover	68	38	62	-	0	3	15	207	327	195	0	7.9	200	30	7 09	50	7	0950	
Sussex	Thorney Island	75	65	42	-	0	0	0	88	285	371	0	4.8	230	20	7 10	42	7	0930	
Hampshire	Hurn	86	53	46	-	0	2	6	143	367	228	0	6.7	220	25	7 08	44	7	0735	
	Calshot	50	41	33	-	0	3	12	243	444	45	0	9.5	220	28	7 09	42	23	1040	
	S. Farnborough	316	69	35	-	0	1	1	107	350	286	0	5.9	210	22	7 09	44	7	0835	
Berkshire	Abingdon	295	40	40	-	0	1	2	105	329	308	0	5.5	210	23	7 08	36	23	1210	
Wiltshire	Larkhill	491	51	36	-	0	1	1	144	325	274	0	6.2	310	23	23 12	49	23	0950	
	Boscombe Down	425	55	55	-	0	2	6	219	370	149	0	7.9	220	27	7 08	47	23	1000	
	Porton	406	44	44	-	0	1	4	59	243	438	0	4.0	210	24	7 08	45	23	1000	
7a Cumberland	Carlisle	137	42	30	-	0	1	1	116	341	286	0	6.0	210	22	6 23	38	7	1410	
	Sellafield	83	39	35	-	0	4	18	199	461	66	0	9.2	210	33	6 24	50	7	0055	
	Spadeadam	959	51	50	-	0	3	8	134	374	228	0	6.9	190	29	7 01	46	7	0015	
Westmorland	Great Dun Fell	2615	33	33	6, 7, 22	25	16	144	313	117	140	5	14.5	240	59	6 23	71	6	2320	
	Moor House	1960	50	45	6, 7	3	10	75	231	306	73	56	11.2	220	37	6 24	60	6	2255	
Lancashire	Squires Gate	88	55	35	-	0	5	78	223	384	64	0	10.7	260	30	7 11	48	23	0245	
	Southport	59	41	33	-	0	5	52	99	218	366	9	6.3	-	29	7 23	48	23	0525	
	Fleetwood	112	50	31	-	0	4	40	111	382	189	22	7.4	320	29	23 06	48	23	0125	
	Speke	109	41	33	-	0	2	15	160	424	145	0	7.8	180	31	7 02	56	23	0540	
	Manchester W/Centre	268	147	55	-	0	1	1	77	380	286	0	5.4	190	22	7 06	46	7	0550	
Cheshire	Bidston Observatory	262	64	39	-	0	4	29	149	461</										

MEAN PRESSURE AT 9 G.M.T.

The dotted lines show the normal distribution of pressure in millibars based on 30 years observations 1921-50.

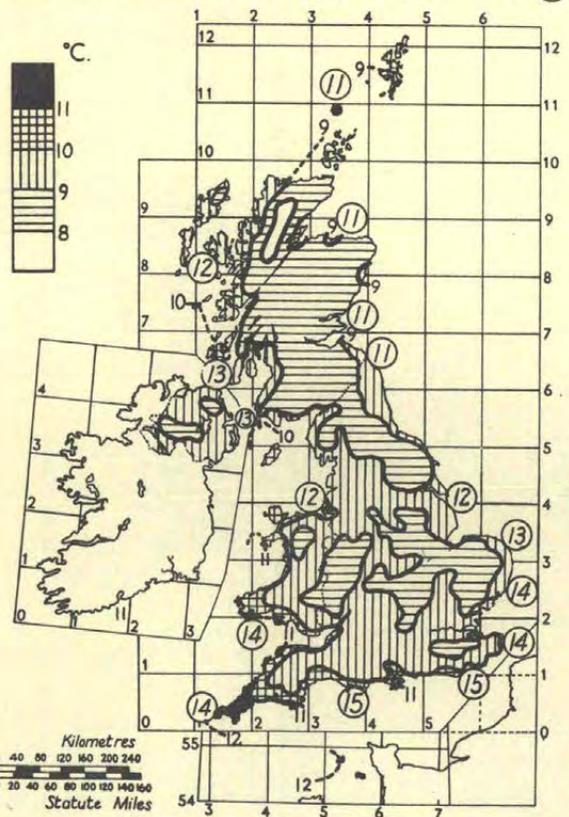


BRIGHT SUNSHINE

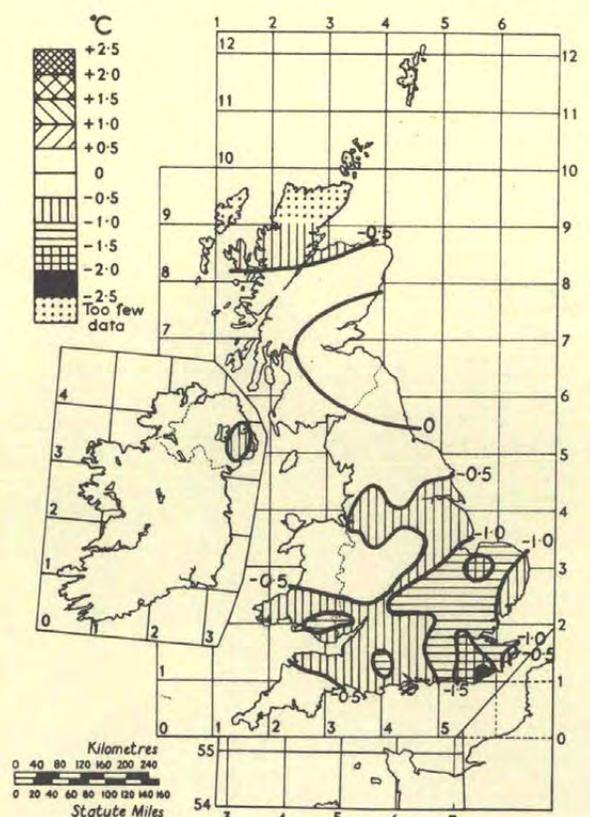


MEAN AIR TEMPERATURE

Reduced to sea level by a correction of 1°C. for 500 ft. Sea temperatures are shown by figures in circles thus (10)



ANOMALY OF MEAN 1 ft. EARTH TEMPERATURE

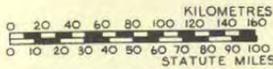
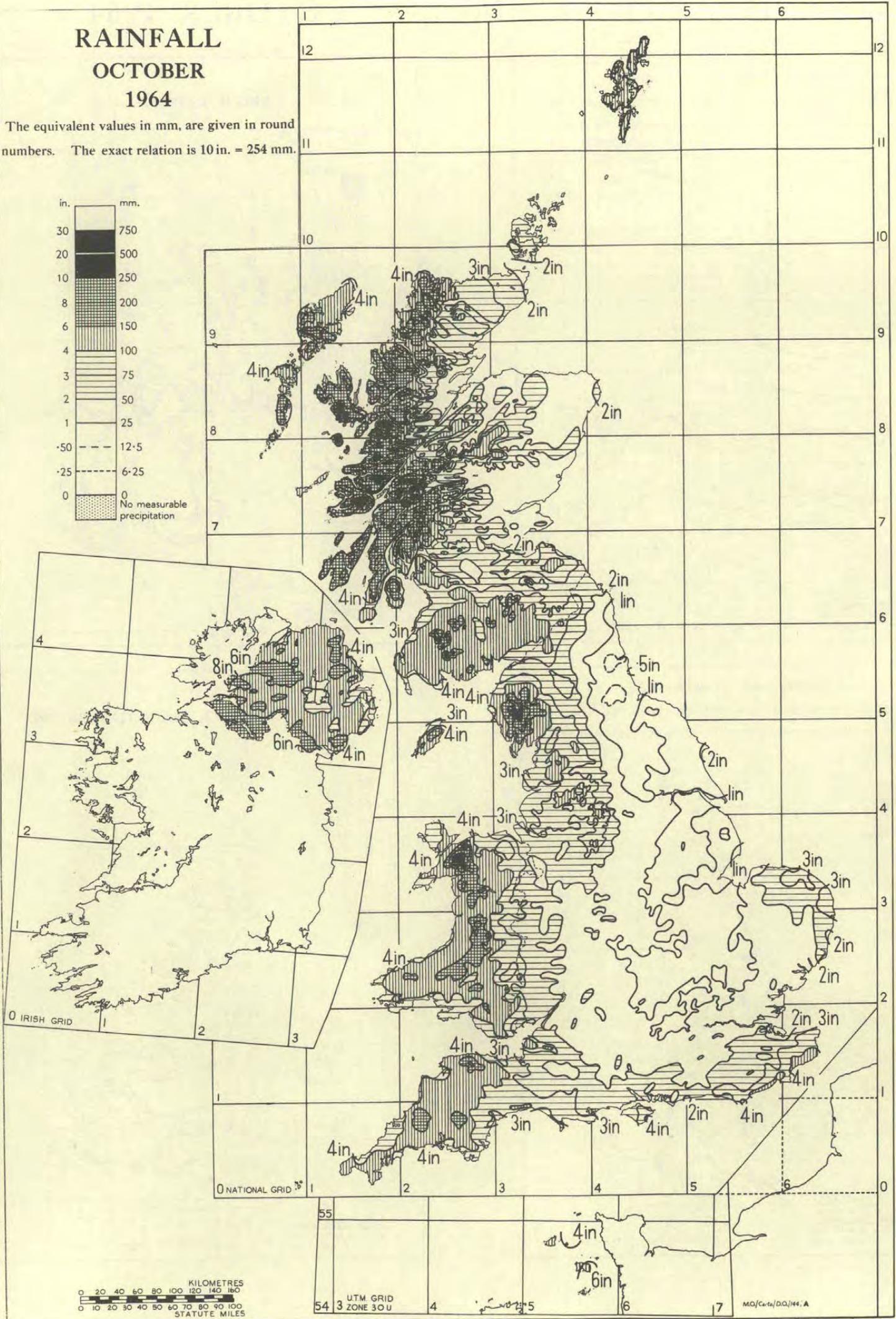
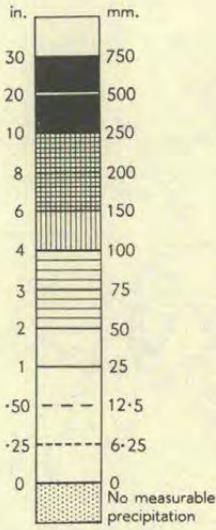


RAINFALL

OCTOBER

1964

The equivalent values in mm, are given in round numbers. The exact relation is 10 in. = 254 mm.



54 3 UTM GRID ZONE 30 U 4

MO/Ce-16(D.O.)/44, A

TABLE III (continued)—SUMMARY OF OBSERVATIONS OF TEMPERATURE, RAINFALL, SUNSHINE AND WEATHER OCTOBER, 1964

DISTRICT, COUNTY AND PLACE	Terminal Hours of Observation	Height of Station above Mean Sea Level	AIR TEMPERATURE IN DEGREES CELSIUS								MEAN EARTH TEMPERATURE		RAINFALL (Terminal hour 9 G.M.T.)				WEATHER Number of days										BRIGHT SUNSHINE																	
			Means of		Mean Temperature Mean of A and B	Difference from Average	Highest Maximum and Lowest Minimum				1 ft.	4 ft.	Total Fall	Percentage of Average	Most in a day		Precip'n		Snow or Sleet	Snow lying at 9h.	Hail	Ice or snow pellets etc.	Thunder heard	Fog at 9h.	Air Frost	Grass min below 0° C	Gale	Daily Mean	Percentage of Average															
			A	B			Maximum	Date	Minimum	Date					Amount	Date	0.1 in (0.2 mm) or more	0.1 in (1.0 mm) or more																										
			Max.	Min.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	in.	%	in.	Date	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.	hr	%								
1 SCOTLAND, E.—cont.																																												
Midlothian																																												
Balerno ...	9 9	700	10.8	4.0	7.4	-	16.1	5	-2.8	24	-	-	-	2.72	-	.79	6	13	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Turnhouse ...	21-9	114	12.0	4.3	8.1	-1.2	16.5	19	-1.8	10	-	-	-	1.77	64	.39	11	13	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.23	-			
Edinburgh—E. Craigs	9 9	200	11.6	4.6	8.1	-	16.1	19	-0.6	10	-	-	-	2.08	-	.48	11	12	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.28	-			
Davidson's Mains	9 9	200	11.6	4.9	8.3	-1.0	16.7	19	-0.6	15	8.7	-	-	2.24	-	.63	10	13	10	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.49	-			
Penicuik ...	9 9	820	10.9	3.7	7.3	-	16.1	4.5	-1.7	10	8.7	-	-	3.54	-	1.21	6	13	11	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.09	-		
Bush House ...	9 9	605																																										
Edinburgh—																																												
Blackford Hill ¶§	9 9	441	11.9	6.1	9.0	-0.5	16.7	4	-1.1	10	-	-	-	2.37	84	.62	11	10	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.59	84		
Liberton ...	9 9	200																																										
Royal Bot. Gdns.	9 9	74	12.1	4.6	8.3	-1.3	17.2	4,19	-0.6	10	9.3	-	-	1.80	-	.46	10	12	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.29	81		
E. Lothian																																												
Haddington ...	9 9	162	12.0	4.7	8.3	-	16.7	4,19	-1.7	10	-	-	-	3.11	-	1.20	10	13	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.35	85	
North Berwick ...	9 9	152	12.3	6.4	9.3	-0.3	17.2	5,6	2.8	23	-	-	-	2.98	112	(1.16)	10	10	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.90	91		
Dunbar ...	9 9	75	12.0	6.4	9.2	-0.6	17.2	5,19	1.7	10,24	-	-	-	2.56	-	1.15	10	12	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.90	91	
Berwick																																												
Mertoun ...	9 9	225	11.9	3.7	7.8	-	16.1	4	-2.8	10	-	-	-	2.73	-	.92	10	16	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.57	-		
Lauder ...	9 9	600	11.2	3.2	7.2	-	15.0	19	-2.2	10	-	-	-	2.76	-	1.04	10	13	9	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.36	-	
Marchmont ¶§	9 9	498	10.9	4.7	7.8	-0.9	15.6	5	0.0	10,24,25	-	-	-	3.03	93	1.20	10	13	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.05	83 S		
Whitcheater ...	9 9	838	10.8	4.0	7.4	-	14.4	5	-2.2	10	-	-	-	3.42	-	1.57	10	16	7	3	-	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
St. Abb's Head ...	9 9	245	11.3	7.4	9.3	-	16.2	19	2.5	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Stanhope Farm	9 9	741	10.9	3.6	7.3	-	16.1	3,4	-2.2	13,24,29	-	-	-	3.59	-	1.71	6	15	11	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.29	-
Blyth Bridge ...	9 9	830	10.3	3.9	7.1	-	15.6	4	-1.7	24	-	-	-	2.37	-	.95	6	14	9	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
West Linton ...	9 9	800	10.6	3.2	6.9	-	15.6	4	-2.2	24	7.8	10.2	-	3.32	-	1.51	6	14	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Glentress ...	9 9	580	11.4	2.7	7.1	-	16.1	4	-3.9	24	-	-	-	2.08	-	.60	10	10	9	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bowhill ...	9 9	600	10.8	4.0	7.4	-	15.6	4	-2.2	10	-	-	-	2.90	-	.96	10	12	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Selkirk																																												
Bowhill ...	9 9	600	10.8	4.0	7.4	-	15.6	4	-2.2	10	-	-	-	2.90	-	.96	10	12	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Roxburgh																																												
Wauchope ...	9 9	560	11.3	3.8	7.5	-	15.6	4,5	-2.8	10,24	-	-	-	2.83	-	1.26	6	9	8	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Sourhope ...	9 9	900	10.7	4.5	7.6	-	17.8	5	-1.7	24	-	-	-	3.38	-	1.83	11	15	7	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
6a SCOTLAND, W.																																												
Argyll																																												
Tirree ... ¶§	21-9	29	12.0	7.7	9.9	-0.5	15.4	1	2.0	23	-	-	-	5.37	105	.97	6	22	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.61	88
Rhuvaal ...	21-9	65	12.0	8.2	10.1	-	15.2	2	2.6	23	-	-	-	5.55	-	1.09	5	20	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Colonsay ...	9 9	87	12.3	6.6	9.5	-0.7	15.6	1,2	2.2	9,11,12	-	-	-	6.15	97	1.29	6	22	18	0	-	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Tobermory ...	9 9	270																																										
Craighouse ...	9 9	10	12.6	7.4	10.0	-	16.7	1	2.2	22	-	-	-	7.24	-	1.20	5	20	15	-	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Campbeltown ...	9 9	10	12.9	6.7	9.8	-	16.1	2	1.1	26	-	-	-	3.36	-	.80	6	14	10	0	0	1	0	0																				

TABLE III (continued)—SUMMARY OF OBSERVATIONS OF TEMPERATURE, RAINFALL, SUNSHINE AND WEATHER OCTOBER, 1964

DISTRICT, COUNTY AND PLACE	Terminal Hours of Observation	Height of Station above Mean Sea Level	AIR TEMPERATURE IN DEGREES CELSIUS								MEAN EARTH TEMPERATURE		RAINFALL (Terminal hour 9 G.M.T.)				WEATHER Number of days								BRIGHT SUNSHINE						
			Means of		Difference from Average	Highest Maximum and Lowest Minimum				1 ft.	4 ft.	Total Fall	Percentage of Average	Most in a day		Precipitation		Snow or Sleet	Snow lying at 9h	Hail	Ice or snow pellets etc.	Thunder heard	Fog at 9h.	Air Frost †	Grass m.m. below 0° C	Gale	Daily Mean	Percentage of Average			
			A	B		Maximum	Date	Minimum	Date					Amount	Date	-0.1in. (0.2mm.) or more	0.1in. (1.0mm.) or more														
			Max.	Min.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	in.	%	in.													hr	%		
4 MIDLAND COUNTIES—cont.																															
Yorks.	Huddersfield	9 9	32.5	12.6	5.2	8.9	-0.7	16.7	3,19	-0.6	13	9.8	11.8	2.28	.54	7	11	9	-	0	-	-	-	-	7	1	10	-	3.17	128	
W. Riding—	Oakes	21-9	76.1	11.6	5.3	8.5	-1.0	16.0	3	-1.0	24	9.2	10.3	2.44	.63	.49	7	15	9	0	0	1	0	0	4	1	6	1	3.13	114	
cont.	Bradford	9 9	439	11.6	5.2	8.4	-1.1	15.6	3,6	0.0	13	9.6	11.9	1.86	.57	.44	7	12	7	0	0	0	0	0	5	0	10	0	-	-	
	Ilkley	9 9	315	12.3	5.0	8.7	-0.8	16.1	1,3	-1.7	11	-	-	1.84	.49	.52	7	7	7	0	0	0	0	0	3	3	-	0	2.93	106	
	Sheffield	9 9	429	12.5	5.7	9.1	-1.1	17.2	3	0.0	22	10.5	12.3	1.64	.55	.31	7	13	10	0	0	0	0	0	-	0	11	0	3.44	130	
	Wakefield	9 9	121	12.9	4.8	8.9	-1.2	16.7	3	-0.6	24	10.1	11.4	1.28	.52	.41	7	12	9	0	0	0	0	0	10	1	14	0	-	-	
	Pontefract	9 9	255	12.3	5.1	8.7	-1.2	16.1	1,3	0.0	24	-	-	.82	.39	.28	5	12	4	0	0	0	0	0	10	0	1	0	-	-	
	Bramham	9 9	177	12.4	3.9	8.1	-	17.2	3	-1.7	11	-	-	.94	.29	.21	5	12	7	0	0	0	0	0	1	7	5	13	0	3.67	-
	Cawood	9 9	20	12.7	3.1	7.9	-	17.2	1,3,4	-3.9	13	9.4	11.7	.82	.37	.33	5	10	5	0	0	0	0	0	0	7	7	11	0	3.25	-
	Askham Bryan	9 9	110	12.7	3.4	8.1	-	17.2	1,4	-2.8	11,13	-	-	.98	.42	.25	6	7	7	0	0	0	0	0	12	6	11	0	3.84	141	
Derby	Buxton	9 9	1007	10.2	3.6	6.9	-1.5	14.5	4,6	-1.7	13	8.4	10.5	3.98	.80	1.11	7	13	12	0	0	0	0	0	0	9	4	9	0	-	-
	Chapel en le Frith	9 9	732	11.7	3.4	7.6	-	16.1	4	-2.2	12,13	-	-	2.94	-.91	.7	13	9	0	0	1	0	1	4	8	17	0	-	-	-	
	Mackworth	9 9	293	12.3	2.8	7.5	-	18.3	4	-	-	-	-	1.78	-.46	.5	12	8	0	0	0	0	0	0	4	10	12	0	-	-	
	Belper	9 9	203	12.2	3.0	7.6	-2.2	17.8	2,3	-2.2	13	-	-	1.48	.54	.47	5	10	8	0	0	0	0	0	4	-	0	-	-	-	
	Derby	9 9	159	12.8	4.9	8.9	-	18.3	4	-1.1	13	-	-	1.67	-.54	.5	11	8	0	0	0	0	0	0	9	2	8	0	3.71	-	
	Morley	9 9	350	12.2	3.9	8.1	-	18.3	4	-1.7	13	-	-	1.81	.58	.55	5	13	8	0	0	0	0	0	4	16	0	3.72	-	-	
	Chesterfield	9 9	298	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Nottingham	Sutton Bonington	9 9	157	12.6	-	-	-	18.9	5	-3.9	13	10.5	12.5	1.03	.48	.32	5	13	5	0	0	0	0	0	0	5	0	3.48	120		
	Watnall	21-9	385	12.6	4.9	8.7	-	19.0	4	-0.3	24	-	-	1.53	.60	.40	5	13	9	0	0	1	0	0	11	1	10	0	3.12	109	
	Nottingham Training College	9 9	169	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Mansfield	9 9	362	12.1	5.1	8.6	-1.2	17.2	4,5	0.0	24	9.5	-	1.20	.45	.40	5	10	7	0	0	0	0	0	4	0	9	0	-	-	
	Nottingham	9 9	192	12.9	4.9	8.9	-1.4	18.9	4	-0.5	13	10.1	12.9	1.17	.52	.36	5	9	6	0	0	0	0	0	6	1	4	0	3.10	115	
	Warsop	9 9	150	13.2	3.3	8.3	-	18.3	4	-2.8	13	-	-	1.03	.47	.43	5	11	7	-	0	0	0	0	8	17	0	3.47	-	-	
	Finningley	21-9	34	13.3	5.1	9.2	-1.0	18.2	3	0.5	13,22	-	-	1.33	-.44	.11	10	6	0	0	0	0	0	1	10	0	7	0	3.83	- S	
Leicester	Newtown Linford	9 9	392	12.3	3.9	8.1	-	18.9	4	-1.1	13	-	-	1.07	-.36	.5	15	7	0	0	0	0	0	0	4	3	14	0	3.67	-	
	Caldecote	9 9	175	13.1	2.5	7.8	-	20.0	5	-5.0	13	-	-	.51	-.22	.5	11	3	-	0	-	0	0	0	9	7	11	-	3.64	-	
Northampton	Bugbrooke Mills	9 9	228	12.8	3.3	8.1	-	20.0	5	-3.3	13	9.4	11.8	.91	-.25	.5	11	6	1	0	0	0	0	0	10	5	-	0	4.00	-	
	Raunds	9 9	193	12.8	3.9	8.3	-	20.0	5	-2.2	13	10.1	12.3	1.08	.53	.34	5	12	6	0	0	0	0	0	8	4	11	0	3.81	- S	
	Wittering	21-9	212	12.6	4.4	8.5	-	19.1	4	-0.7	11	-	-	.81	-.29	.5	12	4	0	0	0	0	0	0	5	2	11	0	3.77	-	
Warwick	Birmingham K.E.S.*	9 9	450	12.1	5.2	8.7	-	18.9	4	-1.1	13	-	-	1.46	-.49	.5	15	8	0	0	0	0	0	0	9	1	-	0	-	-	
	Edgbaston	21-9	536	12.1	6.0	9.1	-1.0	19.2	4	1.0	24	9.9	11.5	1.50	.52	.47	5	18	8	1	0	1	0	2	6	0	6	0	3.76	136	
	Luddington	9 9	138	12.9	3.1	8.0	-	20.0	4	-3.3	13	-	-	1.14	.50	.57	5	15	8	0	0	0	0	0	1	6	10	0	3.74	-	
	Stratford on Avon	9 9	160	13.3	2.9	8.1	-	21.1	4	-3.9	13	10.3	-	1.29	.50	.58	5	15	8	0	0	0	0	0	5	7	13	0	3.56	-	
	Elmdon	21-9	319	12.7	4.0	8.3	-	19.4	4	-4.8	13	-	-	1.63	.65	.46	5	16	11	0	0	1	0	0	6	4	11	0	3.84	-	
	Shipston on Stour	9 9	365	12.5	4.6	8.5	-	20.5	4	-1.1	13	9.7	-	1.62	-.78	.5	16	10	0	0	2	0	0	0	3	3	16	-	3.90	-	
	Wellesbourne	9 9	153	12.9	2.9	7.9	-	20.0	4	-3.3	13	10.1	12.1	1.08	.46	.66	5	12	7	0	0	0	0	0	8	5	20	0	4.02	-	
	Moreton Morrell	9 9	280	12.9	3.7	8.3	-	20.5	5	-4.5	13	-	-	.99	-.62	.5	11	6	0	0	0	0	0	0	4	4	12	0	3.46	-	
	Coventry	9 9	338	12.7	3.9	8.3	-1.5	18.9	4	-6.1	24	-	11.9	1.19	.49	.44	5	14	8	0	-	0	0	0	1	0	12	0	3.80	132 S	
	Rugby	9 9	385	12.4	4.3	8.3	-1.4	18.3	4,5	-6.1	13	8.3	11.9	1.43	-.37	.5	15	10	-	0	-	0	-	-	-	-	1	6	-	-	
Oxford	Oxford	9 9	208	13.3	4.9	9.1	-1.4	20.0	4	-1.7	13	10.6	13.0	.68	.27	.17	5	14	6	0	0	0	0	0	4	2	12	0	4.34	134	
	Grendon Underwood	9 9	220	13.3	2.3	7.8	-	20.0	4	-5.5	13	9.9	12.6	.72	-.28	.5	12	5	0	0	0	0	0	0	-	7	12	0	3.87	-	
Buckingham	Medmenham	9 9	98	13.5	2.9	8.2	-	20.0	4	-4.5	13	-	-	.83	-.23	.6	10	7	-	-	-	-	-	-	-	-	10	25	-	- S	
	Aylesbury	9 9	316	12.7	3.9	8.3	-	20.0	5	-3.3	13	-	-	.74	.29	.20	7	8	7	1	0	1	0	0	12	4	16	0	3.91	-	
Stafford	Keele	9 9	587	11.7	4.8	8.3	-	16.7	4	-0.5	24	9.3	11.3	2.70	.84	.72	22	17	11	1	0	2	1	1	5	1	8	0	3.44	-	
	Oaken	9 9	409	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Stone	9 9	350	12.4	3.5	7.9	-	17.2	1	-4.5	13	-	-	2.24	-.54	.22	21	11	1	0	1	0	0	0	6	5	13	0	3.17	- S	
	Penkridge	9 9	330	12.5	3.6	8.1	-	17.8	4	-3.9	13	-	-	1.51	-.46</																

TABLE III (continued)—SUMMARY OF OBSERVATIONS OF TEMPERATURE, RAINFALL, SUNSHINE AND WEATHER OCTOBER, 1964

DISTRICT, COUNTY AND PLACE	Terminal Hours of Observation	Height of Station above Mean Sea Level	AIR TEMPERATURE IN DEGREES CELSIUS							MEAN EARTH TEMPERATURE		RAINFALL (Terminal hour 9 G.M.T.)		WEATHER										BRIGHT SUNSHINE						
			Means of		Difference from Average	Highest Maximum and Lowest Minimum				1 ft.	4 ft.	Total Fall	Percentage of Average	Most in a day		Precip'n		Snow or Sleet	Snow lying at 9h.	Hail	Ice or snow pellets etc.	Thunder heard	Fog at 9h.	Air Frost t	Grass min. below 0° C	Gale	Daily Mean	Percentage of Average		
			A Max.	B Min.		Mean of A and B	Maximum	Date	Minimum					Date	Amount	Date	-0 in. (0.2mm.) or more												-0 in. (1.0mm.) or more	
			G.M.T.	ft.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	in.	%	in.													hr	%	
7a ENGLAND, N.W.—cont.																														
Westmorland	Great Dun Fell	21-9	2780																											
—cont.	Moor House	9 9	1825																											
Lancashire	Squires Gate	21-9	33	13.1	5.6	9.3	-1.2	18.3	5	0.6	13			2.44	66	.68	5	16	11	0	0	1	0	1	2	0	10	0	3.58	116
	Urswick	9 9	130	12.8	5.7	9.3		16.7	1,3,4	1.7	24			5.42		1.34	13	14	11	0	0	0	0	0	6	1		1		
	Southport	9 9	16	12.8	4.9	8.9		17.8	4,5	0.6	22	9.8	12.2	2.62		.73	5	14	11	0	0	0	0	3	0	12		3.69		
	Poulton-le-Fylde	9 9	38	12.6	5.2	8.9		17.2	4	0.6	13			3.07		.61	5	16	12	0	0	0	0	1	0		0			
	Grizedale	9 9	300		3.7									6.90		2.34	6	17	10	0	0	0	0	0	3	4	8	0		
	Speke	21-9	80	13.1	6.6	9.9		18.0	1	1.6	24			3.13	100	.76	8	16	12	0	0	2	1	1	2	0	2	0	3.63	
	Kirkham	9 9	78	12.8	5.4	9.1		17.8	4,5	0.6	15			3.08	74	.78	5	13	10	0	0	1	0	1	2	0	11	0	3.45	
	Garstang	9 9	68	12.6	5.8	9.2		17.8	5	-2.2	24			3.57		.77	5	12	12	0	0	0	0	0	1	4			3.48	
	Morecambe	9 9	24	12.5	6.8	9.7	-0.8	18.3	4	3.3	13,15,24			3.79	90	.86	6	13	10	0	0	0	0	0	0	0			3.33	111
	Preston	9 9	108	12.7	5.4	9.1		17.2	4,5	-2.8	24			2.91	68	.65	5	15	10	0	0	0	2	0	8	1	9	1		
	Stonyhurst	9 9	377	12.2	5.4	8.8	-0.9	17.2	4	0.6	24			4.00	75	.91	5	10	9	0	0	0	0	0	1	1	3		3.94	121
	Manchester W/Centre																													
	Heimshore	9 9	854	10.8	5.2	8.0		16.1	1,4	-0.6	24	9.1		4.74	73	1.13	6	12	9	0	0	0	0	0	5	1	9		3.60	
	Burnley	9 9	655	11.5	4.7	8.1		16.1	3	-2.8	24	9.5	10.8	3.62		.94	7	14	9	0	0	0	0	1	1	2			3.36	
	Nelson	9 9	540	11.1	5.1	8.1		15.6	4	-1.1	24	9.5	11.3	3.29	67	.90	7	13	8	0	0	0	0	1	1	2			2.99	- S
	Rochdale	9 9	362	12.2	4.1	8.1		17.8	4	-5.6	24			3.26		.78	5	12	9	0	0	0	0	0	7	3	8	0		- S
Cheshire	Bidston Obs'y.	9 9	198	12.2	7.0	8.6	-1.7	17.2	5	3.3	23,24			2.72	90	.84	8	15	13	0	0	0	0	0	2	0	3		3.80	130
	Winnington	9 9	65	13.2	5.7	9.5		18.3	4	0.0	13			2.57	82	.70	5	14	12	0	0	0	2	2	2	0	3	0		
	Knutsford	9 9	212	13.2	4.6	8.9		18.9	4	-1.7	24	10.6	12.7	3.18		.78	8	13	12	0	0	0	0	0	6	2	15			
	Ringway	21-9	248	12.5	5.7	9.1	-0.8	18.7	4	-1.6	12			2.96	92	.89	8	14	11	0	0	0	2	3	4	2	4	0	3.92	142
	Macclesfield	9 9	500	12.1	5.1	8.6	-0.9	17.8	4	-2.2	24			3.13	86	.89	8	16	10	0	0	0	0	0	2	1	2			
7b NORTH WALES																														
Flint	Rhyl	9 9	31	13.3	6.4	9.9	-1.0	20.6	4	0.6	13			2.84	95	.58	14	16	12	0	0	1	2	0	0	0	2	3.07	98	
	Prestatyn	9 9	12	13.4	6.9	10.1		20.0	4	2.8	2			3.00	97	.88	15	15	9	0	0	1	0	0	0	0	0		2.87	99
	Hawarden Bridge	9 9	17	13.2	4.9	9.1	-1.4	17.8	3	-1.1	13			2.18	76	.53	5	15	11	0	0	1	0	0	6	2				
Anglesey	Valley	21-9	33	13.3	7.6	10.5	-0.9	18.2	4	-0.3	23			3.45	90	.70	6	15	14	0	0	1	0	2	0	1	4	2	2.69	82
Denbigh	Colwyn Bay	9 9	118	13.1	6.9	10.0	-1.2	18.9	4	3.3	11, 10, 9			3.66	111	.56	15	16	15	0	0	3	0	2	0	0	0		2.67	87
	Alwen	9 9	1100	10.6	2.3	6.5		17.2	4	-5.0	13			4.00		.56	6	17	16	0	0	0	0	0	0	7	16			
	Ruthin	9 9	248	12.8	4.7	8.7		20.6	5	-2.6	24			2.79		.52	7	14	11	0	0	0	0	1	2			3.27		
	Loggerheads	9 9	690	11.6	3.7	7.7		17.8	4,5	-0.2	13	8.2	10.9	2.98		.51	22	16	16	1	0	2	0	1	1	4	10	0		
	Bwlchgwyn	9 9	1267	10.2	4.2	7.2		15.0	4	-0.6	24	8.7		3.69		.72	5	18	16	0	0	1	0	0	2	1	11	0		
	Wrexham	9 9	275	13.9	4.7	9.3		17.8	5	-0.6	13, 24	10.1	11.7	2.01		.44	5	15	13	0	0	0	0	0	4	2	13	0		
Caernarvon	Bardsey Island	21-9	61	13.1	10.0	11.5		16.1	4	4.7	24			2.57		.65	6	14	9	0	0	0	0	0	0	0	0			
	Botwnnog	9 9	112	12.9	7.1	10.0		17.2	4	1.7	13	11.2	12.8	3.58		.58	6	14	12	0	0	0	2	2	0	0	3	2	2.94	
	Bryn Adda	9 9	275	13.5	6.6	10.1		20.6	4	2.8	13			5.29		.89	6	17	17	0	0	3	0	1	0	0	3	0	2.75	
	Cwm Dyli	9 9	324	12.4	5.8	9.1		20.0	4	-0.6	13	10.9		10.12		2.35	6	17	17	0	0	0	0	0	1	11				
	Aber	9 9	60	13.4	7.0	10.2	-1.1	18.3	4,5	2.2	24			4.95	105	1.03	9	17	15	0	0	2	0	2	0	0	7	0	2.52	90
	Llandudno	9 9	13																											
Merioneth	Llyn Stwlan	9 9	1656	9.3				16.7	4					9.87		2.06	5	22	21	0	0	0	0	0	0	0	0			
	Blaenau Ffestiniog	9 9	750											7.85		1.66	5	22	21	0	0	0	0	0	0	0	0			
	Corwen	9 9	473	12.2	2.5	7.3		18.3	4	-4.4	13			3.46		.48	6	17	15	0	0	1	1	0	0	7	12	0		- S
Montgomery	Ceinws	9 9	200	12.6	3.7	8.1		17.8	5	-3.3	13			7.00		1.52	5	17	15	0	0	0	0	0	0	2				
	Lake Vyrnwy	9 9	995	10.6	3.9	7.3		15.0	4,5	-1.1	13	9.2		4.65	65	1.05	6	19	13	1	0	1	0	0	6	2	26	0		
8a SOUTH WALES																														
Cardigan	Aberporth	21-9	378	12.7	7.6	10.1	-0.7	17.8	3	3.1	24			3.56	76	.73	15	17	11	0	0	8	0	4	0	0	4	2	3.79	
	Aberystwyth	9 9	12	13.2	5.8	9.5	-1.7	17.8	2	0.6	13			2.27		.68	6	12	11	0	0	0	0	0	0	0			2.92	90
	" P.B.S.*	9 9	452	12.7	5.8	9.3	-1.3	19.4	4	0.6	24			4.08	88	.86	5	16	15	0	0	2	0	2	0	6	1		2.94	92
	Gogerddan	9 9	103	13.4	4.7	9.1		20.6	4	-2.2	13			4.12	91	.70	5	16	14	0	0	5	0	2	0	2	10	0	3.41	- S
	Swyddffynnon	9 9	540	12.6	4.4	8.5		18.9	4	-2.8	24			5.80		.78	6</													

TABLE III (continued)—SUMMARY OF OBSERVATIONS OF TEMPERATURE, RAINFALL, SUNSHINE AND WEATHER OCTOBER, 1964

DISTRICT, COUNTY AND PLACE	Terminal Hours of Observation	Height of Station above Mean Sea Level	AIR TEMPERATURE IN DEGREES CELSIUS								MEAN EARTH TEMPERATURE		RAINFALL (Terminal hour 9 G.M.T.)				WEATHER Number of days								BRIGHT SUNSHINE						
			Means of		Difference from Average	Highest Maximum and Lowest Minimum				1 ft.	4 ft.	Total Fall	Percentage of Average	Most in a day		Precip'n		Snow or Sleet	Snow lying at 9h.	Fog at 9h.	Thunder heard	Fog at 9h.	Air Frost	Crust min. below 0° C	Gale	Daily Mean	Percentage of Average				
			A Max.	B Min.		Maximum	Date	Minimum	Date					Amount	Date	-0.1 in (0.2mm) or more	-0.4 in (1.0mm) or more														
			G.M.T.	ft.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	in.	%	in.												hr	%			
8b ENGLAND, S.W.—cont.																															
Devon	Clawton ...	9 9	412	13.8	2.9	8.3	-	18.3	3.4	-3.3	28	-	-	4.96	-	1.05	9	19	13	0	0	7	0	0	5	2	3	-	-		
	Hartland Point ...	21-9	298	12.7	8.5	10.6	-	18.2	4	3.9	11	-	-	2.98	-	.56	9	16	14	0	0	2	0	1	0	0	0	3	3.83	112	
	Mount Batten ...	21-9	87	13.7	8.0	10.9	-1.0	18.8	1	1.6	24	-	-	3.62	95	.71	5	17	13	0	0	1	3	4	0	0	5	1	3.60	98	
	Plymouth, The Hoe	9 9	119	13.8	7.9	10.9	-1.0	18.9	1	1.7	24	12.0	13.8	3.25	85	.71	5	17	12	0	0	1	0	0	0	1	0	5	0	3.51	94
	Tavistock ...	9 9	457	13.6	6.0	9.8	-1.1	19.4	2	-0.6	24	-	-	5.16	-	.89	9	21	14	-	-	-	-	-	-	0	1	12	-	-	
	Chivener ...	21-9	20	14.1	7.1	10.6	-	19.2	4	0.9	13	-	-	3.60	-	.84	9	17	14	0	0	3	4	2	0	0	2	0	3.67	-	
	Ilfracombe ...	9 9	25	13.8	9.3	11.5	-0.8	18.9	5	5.0	13	12.2	13.9	4.09	94	.95	9	14	13	0	0	0	0	2	0	0	1	2	3.26	100	
	Totnes ...	9 9	120	13.9	5.7	9.8	-	18.9	5	-1.7	13	11.9	13.5	3.37	74	1.09	9	17	11	0	0	0	3	4	1	1	5	1	3.22	-	
	Stapton ...	9 9	104	14.0	7.8	10.9	-	18.9	5	1.7	24	-	-	3.48	-	.97	9	19	12	-	-	-	-	-	-	-	-	-	-		
	Newton Abbot ...	9 9	272	13.4	6.2	9.8	-1.4	17.8	1,2,5	0.0	24	-	-	3.44	90	1.03	9	14	13	0	0	1	0	0	0	1	4	0	4.00	113	
	Paignton ...	9 9	8	14.1	7.0	10.5	-	18.3	1,3,5	1.7	24	-	-	3.11	85	1.44	9	17	11	0	0	0	0	0	0	0	0	0	3.71	102	
	Torquay ...	9 9	26	13.9	7.6	10.7	-1.2	18.9	1	1.7	24	-	-	3.15	95	1.51	9	13	10	0	0	0	0	0	0	0	1	0	3.75	98	
	Teignmouth ¶	9 9	20	13.7	7.7	10.7	-1.3	17.8	1,2,3	2.8	13,24	-	-	3.00	92	1.18	9	13	10	0	0	0	0	0	0	0	0	0	3.92	106	
	Starcross ...	9 9	29	13.8	6.3	10.1	-	19.4	3	0.6	13	10.9	-	2.61	78	.96	9	15	10	0	0	1	0	0	3	0	3	0	3.83	-	
	Exeter, Southam	9 9	160																												
	Exmouth ...	9 9	195	13.4	6.1	9.7	-1.4	18.3	1,2,3	1.1	13,24	-	-	2.57	80	1.03	9	16	13	0	0	0	0	0	0	0	0	0	3.87	106	
	Exeter ...	21-9	106	13.9	5.8	9.9	-	19.9	3	-0.7	13	-	-	3.16	98	1.08	9	15	10	0	0	0	3	1	1	2	9	1	3.30	-	
	Sidmouth ...	9 9	25																												
	Cornwall	St. Mary's, Scilly	21-9	158	14.2	10.3	12.3	-0.4	18.8	4	7.6	13	-	-	4.13	116	.78	9	18	15	0	0	0	0	0	2	0	4	4.14	106	
		Penzance ...	9 9	62	14.3	8.6	11.5	-0.9	18.3	1,2	3.9	13,28	-	-	4.82	111	.90	8	22	17	0	0	3	1	1	0	0	3	1	4.12	109
Gulval ...		9 9	50	14.1	8.6	11.3	-0.8	17.8	2,3	4.4	13	-	-	4.41	106	.75	9	20	17	0	0	-	-	-	-	-	0	0	4.06	112	
Culdrose ...		9 9	268	13.3	7.1	10.2	-	16.7	4	2.8	13	-	-	4.19	-	.96	9	16	13	0	0	2	4	1	1	0	-	0	3.63	-	
Rosewarne ...		9 9	250	13.5	8.2	10.9	-	18.3	1,4	3.3	13	11.8	13.1	4.32	108	.59	8	18	16	-	-	-	-	-	-	0	2	-	4.16	-	
Lizard ...		9 9	240	13.3	8.9	11.1	-1.2	17.1	4	4.5	24	-	-	3.97	115	.78	12	18	15	0	0	1	0	0	0	0	0	3	4.26	-	
Falmouth ¶		9 9	167	13.4	8.4	10.9	-1.2	16.7	1,6	4.4	13,15,24	-	-	4.83	105	.66	9,15	19	14	0	0	2	0	3	0	0	2	0	3.63	103	
Newquay ...		9 9	176	13.9	7.8	10.9	-0.9	18.9	1	3.9	13,28	-	-	3.17	84	.90	9	14	11	0	0	6	0	0	0	0	0	1	3.68	105	
St. Mawgan ...		21-9	337	13.4	7.9	10.7	-	19.0	2	2.9	13	-	-	3.41	-	.82	9	17	13	0	0	5	3	1	0	0	0	0	3.84	-	
St. Austell ...		9 9	310	13.7	7.9	10.8	-	18.3	2	4.4	14,24	-	-	5.21	104	1.05	9	16	15	0	0	2	3	1	1	0	0	-	-		
Fowey ...		9 9	51	14.7	7.8	11.3	-0.9	19.4	2	3.3	13	-	-	4.33	-	.91	9	14	11	0	0	0	0	0	0	0	0	-	-		
Bude ...		9 9	50	13.8	7.0	10.4	-1.3	18.9	4	0.6	13,24	9.7	-	3.62	96	.71	9	19	14	-	-	-	-	-	-	-	0	3.55	99		
Ellbridge ...		9 9	190	13.6	5.7	9.7	-1.4	20.0	1,2	0.0	24	-	-	4.62	108	.80	9	18	13	0	0	5	0	0	0	0	7	0	3.36	92	
9 NORTHERN IRELAND																															
Londonderry	Loughmore Forest	9 9	570	11.6	4.7	8.1	-	16.1	1,4	-1.7	13	-	-	6.31	-	1.47	6	23	19	0	0	0	0	0	2	8	0	-	-		
	Ballykelly ¶	21-9	6	12.9	6.6	9.7	-0.5	16.8	4	-1.4	13	-	-	3.64	93	1.02	6	19	17	0	0	3	0	3	0	1	9	0	2.05	73	
	Derrynoyd Forest	9 9	290	12.1	5.4	8.7	-	16.1	4	0.0	13	-	-	5.65	-	.96	9	21	15	0	0	0	1	0	0	0	11	0	-	-	
	Somerset Forest	9 9	140	12.3	5.5	8.9	-	16.1	4	0.0	13	-	-	4.98	-	.68	6	20	15	0	0	0	0	0	0	0	6	0	-	-	
	Garvagh Forest	9 9	290	11.9	5.4	8.7	-	16.1	4	1.1	9,13	-	-	5.08	-	.85	6	19	14	1	0	3	0	1	0	0	6	0	-	-	
Antrim	Moneydig ¶	21-9	112	12.3	5.1	8.7	-0.9	15.8	19	-0.9	13	11.1	-	4.94	111	1.17	5	19	14	1	0	2	0	2	2	1	10	0	-	-	
	Portrush ...	-	17	-	-	-	-	-	-	-	-	-	-	4.87	-	.68	6	18	18	-	-	-	-	-	-	-	-	2.23	-		
	Lisnafillan ...	9 9	174	12.1	4.2	8.1	-	16.1	1,4	-2.2	13	-	-	5.65	-	1.05	5	20	14	1	0	0	0	1	6	2	9	0	1.95	-	
	Aldergrove ¶	21-9	225	11.9	5.5	8.7	-1.0	15.8	4	-0.8	13	10.3	12.0	4.31	-	.86	6	17	15	1	0	1	0	2	1	2	9	1	1.94	74	
	Greenmount ...	9 9	105	12.2	5.4	8.8	-	16.1	1,4,19	-0.6	13	10.4	-	5.06	-	1.20	9	18	13	0	0	0	1	-	1	11	-	-			
	Black Mountain	21-9	989	10.0	5.3	7.7	-	14.4	4	-1.4	24	-	-	5.91	-	1.09	5	19	17	1	0	0	3	2	11	1	-	-			
	Ballypatrick Forest	9 9	530	11.4	6.0	8.7	-	14.4	4	1.7	9,11,13	-	-	5.17	-	1.51	5	15	13	2	0	3	0	0	0	0	3	2	-	-	
	Larne ...	9 9	140	12.6	6.4	9.5	-	17.2	1	0.6	13	-	-	4.33	-	.99	5	18	13	0	0	1	0	2	0	0	-	-			
	Kilroot ...	9 9	71	12.4	7.2	9.8	-	15.6	1,19	1.7	13	-	-	5.12	-	1.76	9	15	12	0	0	0	0	2	0	0	1	0	-	-	
	Newry Abbey ...	9 9	32	12.7	5.3	9.0	-	16.7	1	0.0	13,17	-	-	5.14	-	1.28	6	16	14	0	0	0	0	0	3	2	-	-			
Down	Hillsborough §	9 9	379	11.6	5.8	8.7	-0.8	15.6	1	0.6	13	10.2	-	4.46	122	.81	6	16	14	1	0	0	0	1	1	0	8	0	2.23	81	
	Kilkeel ...	21-9	58	12.1	7.2	9.7	-	16.4	1	2.2	13,24	-	-	3.83	-	.83	6	18	15												

TABLE IV (continued)—SUMMARY OF OBSERVATIONS AT FIXED HOURS OCTOBER, 1964

Table with columns: DISTRICT, COUNTY AND PLACE; Hour of Observation; Height of Barometer above Mean Sea Level; MEAN PRESSURE; MEAN TEMPERATURE AND HUMIDITY; CLOUD AMOUNT (OKTAS); VISIBILITY; WIND, NUMBER OF OBSERVATIONS. Rows include locations like 2 ENGLAND, N.E. (Tynemouth, Durham, Yorks., N. Riding, Whitby Coastguard, Yorks., E. Riding, Spurn Head, Lincoln, Waddington, Binbrook, Manby), 3 ENGLAND, E. (Norfolk, Marham, West Raynham, Coltishall, Gorleston, Suffolk, Mildenhall, Wattisham, Aldeburgh, Huntingdon, Wyton, Bedford, Cardington, Hertford, Bovingdon, Essex, Stansted, Shoeburyness, Walton-on-Naze), and 4 MIDLAND COUNTIES (Yorks, W.R., Huddersfield Oakes).

TABLE IV (continued)—SUMMARY OF OBSERVATIONS AT FIXED HOURS OCTOBER, 1964

DISTRICT, COUNTY AND PLACE	Hour of Observation	Height of Barometer above Mean Sea Level	MEAN PRESSURE		MEAN TEMPERATURE AND HUMIDITY				CLOUD AMOUNT (OKTAS)									VISIBILITY							WIND, NUMBER OF OBSERVATIONS																					
			At Mean Sea Level	Difference from Average	Dry Bulb	Depression of Wet Bulb	Vapour Pressure	Relative Humidity	No. of Observations									NUMBER OF OBSERVATIONS							FORCE (0-15)				DIRECTION																	
									Mean Amount	0	1	2	3	4	5	6	7	8	9	0-44 yd.	45-110 yd.	110-430 yd.	440-1,000 yd.	1,100-2,100 yd.	2,200-4,300 yd.	3-6 mi.	7-12 mi.	13-24 mi.	25 mi. or over	14 or more	8 to 13	4 to 7	1 to 3	0	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.				
			Beaufort Force	Speed in knots	0	1	2	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											
4 MIDLAND COUNTIES—cont.		G.M.T.	ft.	mb.	mb.	°C.	°C.	mb.	%	Mean Amount	0	1	2	3	4	5	6	7	8	9	0-44 yd.	45-110 yd.	110-430 yd.	440-1,000 yd.	1,100-2,100 yd.	2,200-4,300 yd.	3-6 mi.	7-12 mi.	13-24 mi.	25 mi. or over	14 or more	8 to 13	4 to 7	1 to 3	0	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.			
Nottingham	Watnall ... H	3	390	1014.8	-	6.2	0.5	9.0	95	4.0	10	4	2	5	10	0	0	0	0	0	2	1	6	6	3	9	4	0	0	0	0	0	0	2	20	9	2	1	3	1	0	4	6	5		
		9	390	1015.4	-	7.8	0.7	9.6	90	5.2	0	8	6	8	5	4	0	0	0	0	0	4	3	4	5	4	7	4	0	0	0	0	0	0	2	23	6	1	2	4	0	1	6	7	4	
	Finningley H	15	390	1014.3	-	11.7	2.3	10.1	73	5.8	2	2	5	15	7	0	0	0	0	0	0	1	2	3	3	11	5	6	0	0	0	0	0	0	6	21	4	0	1	7	2	2	3	9	3	
		21	390	1015.5	-	7.3	0.6	9.4	91	5.1	6	3	3	8	11	0	0	0	0	0	0	1	4	11	5	8	1	0	0	0	0	0	0	0	3	21	7	12	3	4	0	2	3	7	3	
		3	46	1014.5	-	6.4	0.6	9.0	91	4.9	9	0	4	5	11	2	2	3	0	0	0	1	4	3	2	6	4	4	3	0	0	0	0	0	1	5	14	11	2	3	2	0	4	1	4	4
		9	46	1015.1	-	8.0	0.9	9.5	88	4.8	3	6	5	9	6	2	0	0	0	0	0	2	1	7	5	3	9	4	0	0	0	0	0	0	7	17	7	3	4	0	2	5	2	2	6	
		15	46	1014.5	-	12.4	2.9	9.8	67	5.6	3	2	6	13	7	0	0	0	0	0	0	0	1	3	2	3	2	8	9	7	1	0	0	1	8	16	6	3	2	4	1	3	5	3	4	
		21	46	1015.2	-	8.1	0.9	9.5	87	5.0	6	2	5	10	7	1	0	0	0	0	0	0	1	3	6	8	11	1	1	0	0	0	0	1	5	15	10	5	2	1	0	5	3	3	2	
		3	219	1014.9	-	6.4	0.6	8.9	91	4.4	7	5	4	3	11	1	0	0	0	0	0	0	2	1	4	7	8	6	2	1	0	0	0	1	5	24	1	2	4	1	1	7	1	9	5	
		9	219	1015.5	-	7.8	0.9	9.4	87	5.1	3	6	3	11	7	1	0	0	0	0	0	0	1	3	4	7	2	6	6	1	0	0	0	2	8	19	2	2	4	0	3	3	3	9	5	
Northampton	Wittering H	15	219	1014.4	-	11.9	2.7	9.7	69	5.4	3	4	4	12	8	0	0	0	0	0	0	0	4	1	9	10	7	0	0	0	0	0	13	16	2	3	4	4	1	3	4	6	4			
		21	219	1015.4	-	7.9	0.9	9.5	87	5.0	6	2	5	7	11	0	0	0	0	0	0	0	2	1	11	11	4	2	0	0	0	0	4	22	5	4	3	1	0	5	4	5	4			
Warwick	Edgbaston H	3	542	1015.9	-	7.7	0.8	9.5	89	4.3	6	7	2	7	2	0	0	0	0	0	0	2	4	5	8	9	3	0	0	0	0	0	4	27	0	2	2	2	2	2	2	7	6	7		
		9	542	1015.1	-	11.4	2.6	9.3	69	2	3	9	7	10	0	0	0	0	0	0	0	0	1	3	5	10	10	1	1	0	0	0	0	7	23	1	3	2	5	0	3	9	3	5		
		15	542	1015.7	-	8.4	0.9	9.7	87	5.1	6	4	2	6	12	1	0	0	0	0	0	0	2	7	5	12	4	1	0	0	0	0	0	4	26	1	2	1	5	1	6	5	4	6		
		3	362	1015.2	-	5.5	0.4	8.7	94	4.4	8	3	5	6	8	1	0	0	0	0	0	0	6	0	3	5	2	8	1	1	0	0	0	5	12	1	4	0	0	0	5	2	5	4		
Shropshire	Shawbury H	9	362	1015.6	-	7.5	0.8	9.4	89	4.6	3	7	8	3	7	3	0	0	0	0	0	4	2	6	9	6	2	0	0	0	0	0	7	17	7	3	1	1	4	5	3	6	5			
		15	362	1014.8	-	11.8	2.8	9.4	68	5.5	2	3	8	12	6	0	0	0	0	0	0	0	0	0	9	12	8	2	0	0	0	0	8	21	2	1	3	3	3	2	8	4	5			
		21	362	1015.2	-	7.2	0.8	9.1	89	4.6	8	3	4	6	9	1	0	0	0	0	0	0	1	4	8	7	9	1	1	0	0	0	3	20	8	0	2	2	0	6	4	6	3			
		3	249	1015.0	-	5.6	0.3	8.8	96	5.0	6	2	6	10	1	0	3	2	3	2	3	0	0	3	2	3	5	6	4	2	0	0	0	4	15	12	0	2	1	0	5	2	8	1		
Worcester	Pershore ... H	9	249	1015.6	-	7.5	0.6	9.7	92	5.1	1	6	8	7	5	4	0	0	0	0	0	2	2	3	3	8	2	6	3	0	0	1	4	16	10	1	1	3	4	3	8	7	1			
		15	249	1014.6	-	11.9	2.4	10.2	73	6.0	2	2	2	18	7	0	0	0	0	0	0	0	0	0	3	6	13	4	5	0	0	0	12	19	0	1	0	9	2	3	5	9	2			
		21	249	1015.5	-	7.8	0.7	9.7	91	5.6	5	0	4	11	11	0	0	0	0	0	0	0	2	2	4	9	10	4	0	0	0	0	2	25	4	2	5	2	7	4	3	2				
		3	117	1015.6	-	6.1	0.5	9.0	93	3.8	13	2	1	6	8	1	1	0	0	0	0	0	1	4	0	10	7	3	4	1	0	0	1	4	13	13	0	4	0	0	3	6	4	1		
Hereford	Ross-on-Wye H	9	117	1016.2	-	7.7	0.7	9.6	90	5.4	4	3	5	8	3	0	0	0	0	0	0	1	9	3	3	9	1	2	0	0	0	4	16	11	0	1	3	2	2	6	5	1				
		15	117	1015.2	-	12.4	2.7	9.9	69	5.4	2	5	6	12	6	0	0	0	0	0	0	0	1	2	1	9	8	8	2	0	0	0	2	7	19	3	2	4	2	1	1	5	8	5		
		21	117	1016.0	-	8.1	0.9	9.6	88	4.5	8	4	1	10	8	0	0	0	0	0	0	0	2	1	5	14	6	2	1	0	0	0	3	21	7	2	3	4	1	3	5	4	2			
		9	226	1015.9	+1.1	7.6	0.7	9.5	90	5.7	3	2	5	12	8	1	0	0	0	0	0	0	3	1	4	4	7	0	10	2	0	0	2	23	6	0	4	0	7	8	4	2				
Gloucester	Filton ... H	15	226	1014.8	-	12.0	2.6	9.8	70	5.6	3	3	5	9	11	0	0	0	0	0	0	0	0	4	10	4	12	1	0	0	0	5	25	1	6	1	3	2	5	6	4	3				
		21	226	1015.6	-	8.4	0.9	9.8	88	5.3	4	7	0	6	14	0	0	0	0	0	0	0	0	3	4	14	2	8	0	0	0	0	1	27	3	2	3	6	0	6	6	2	3			
		3	197	1015.7	-	7.3	0.5	9.6	92	3.9	10	3	4	4	10	0	0	0	0	0	0	1	0	4	7	10	9	0	0	0	0	0	2	20	9	5	3	0	1	3	1	8	1			
		9	157	1016.2	-	8.6	0.8	10.1	89	5.4	3	3	6	11	8	0	0	0	0	0	0	0	6	3	5	8	8	1	0	0	0	0	2	23	6	1	6	1	3	2	5	7	0			
Gloucester	H	15	157	1015.2	-	12.3	2.3	10.5	73	5.3	2	4	6	10	9	0	0	0	0	0	0	0	2	5	6	10	7	1	0	0	0	7	23	1	2	5	3	3	1	7	7	2				
		21	197	1015.8	-	9.0	0.8	10.2	88	5																																				

Monthly Weather Report

MO 754

OF THE METEOROLOGICAL OFFICE

Summary of observations compiled from returns of official stations and voluntary observers

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November 1964 — Dry and rather mild.

Weather was mainly anticyclonic in character except on the 11th-17th, when a series of troughs and ridges moved east across the country, and during the last five days of the month when deep depressions were centred to the north of Scotland or disturbances moved south over the British Isles.

For most of the first week an anticyclone was centred to the west of Scotland and an associated ridge of high pressure covered much of the British Isles. Widespread overnight fog, which persisted in many places throughout the 1st, cleared on the 2nd as a weak cold front moved south over the country. Two or three mainly dry days with broken sunshine followed though easterly winds over England and Wales brought light scattered showers, chiefly to coastal areas. As the anticyclone moved eastwards towards Scotland, northern districts became generally dull on the 4th and this dull weather spread to most of the country on the 5th. The next day was also dull but the anticyclone reached the North Sea by the 7th and clouds broke nearly everywhere in England and Wales, though in the lowlands of Scotland overnight fog persisted throughout the day.

Although the main high pressure area continued to move away south-eastwards, an associated ridge remained over the British Isles until the 10th. Fog became widespread, persisting in many central and eastern districts throughout the 9th and 10th, and temperature, which had been near normal, fell to little above freezing point in foggy areas.

The weather pattern changed on the 11th as mild westerly winds, associated with a deep depression near Iceland, brought frontal rain from the Atlantic to all areas. The rain became locally heavy during the night in slow moving frontal troughs. The mild unsettled weather continued for nearly a week as depressions from the Atlantic moved eastwards over or to the north of Scotland and associated fronts crossed the British Isles. The wettest day was the 13th with heavy rain in many northern and western districts; many places in northern Scotland had over 1 inch while in North Wales more than 2½ inches was recorded at Ceinws.

On the 16th, winds increased to gale force in many areas as a deep depression moved eastwards across the British Isles. Behind the disturbance winds veered to north-west and weather became temporarily cooler in Scotland with scattered snow showers.

From the 18th to the 25th an anticyclone covered the Bay of Biscay or northern France and westerly winds on its northern flank, having had a long sea track in lower latitudes, brought mild weather back to all districts of the British Isles. It was generally dull throughout the period with slight rain or drizzle at times; there was little measurable rainfall in the south or Midlands, though more than 1 inch was recorded in parts of western Scotland on the 18th.

On the 26th, a cold front, associated with a rapidly deepening depression north of Scotland, brought a sharp fall in temperature as it moved south-east across the country. The next day a north-westerly airstream brought wintry showers to all districts. On the 28th the main depression moved southwards over the British Isles and an airstream of arctic origin brought sleet and snow to all areas; ground became snow-covered in many parts of northern England and in Scotland. The depression, which was centred over the English Channel about mid-day on the 29th, filled rapidly, and after a dull day with thundery showers of rain and sleet, fog

became widespread at night as the sky cleared. The last day of the month was cold and rather wet with high ground snow-covered in the north and with widespread freezing fog in the south.

Pressure and Wind — Mean pressure at 9h was everywhere above the 1921-50 average, the excess ranging from 2.5 mb at Lerwick to 7.2 mb at Valley. Surface winds were light and variable over much of the country until the 10th, but easterly on the 3rd-8th over most of England and Wales, they were predominantly westerly on the 11th-26th becoming north-west to north during the last four days of the month. Winds reached gale force on 18 days in Scotland and on the 2nd-5th, 7th and 13-17th (10 days) in England and Wales. Gales were widespread on the 16th and wind reached 68 kt in gusts at Lerwick on the 26th and at Kirkwall on the 16th.

Temperature — Mean temperatures were about normal during the first week after which there were three or four days of cold weather with severe night frost; at Turnhouse temperature fell to -8°C on the morning of the 10th. From the 11th to the 25th weather was generally very mild, especially at night, apart from a temporary cooler spell in northern districts around the 17th. The month ended cold everywhere with day temperatures about 4°C below the average over most of England and Wales.

Extremes included: (England and Wales) 16.7°C at Harwarden Bridge on the 19th, -8.9°C at Corwen on the 10th, (Scotland) 15.6°C at several places on the 24th, -9.4°C at Glentress on 10th; (Northern Ireland) 15.0°C at Crossgar on the 24th, -6.1°C at Lough Bradan on the 10th.

Rainfall — In Scotland rainfall ranged from 150 per cent of the average in parts of western Ross to 25 per cent locally in Aberdeenshire and Angus. In England and Wales rainfall was everywhere below the average except for a few places in the extreme north of Devon. It was less than 50 per cent of the average over most of the Midlands and over most of England east of the Pennines.

Thunder was heard in Scotland on 10 days and in England and Wales on the 12th, 25th and 28th-30th (5 days). Thunderstorms were fairly widespread in south-east England on the 29th.

Snow or sleet fell in Scotland on 15 days, ground being snow covered on 7 days. In England and Wales snow was reported on the 26th-30th (5 days) and ground was snow-covered at a few places, mainly in the Midlands and north-west England, on the 28th, 29th and 30th.

Sunshine — In Scotland sunshine amounts were above the average in parts of the east and south but below elsewhere. In England and Wales percentages were generally greater in the north than in the south, ranging from 165 at Morecambe to 65 at Torquay.

Fog — Fog was observed at 9h at one place or another on 27 days in Scotland and on the 1st, 2nd, 6th-11th, 13th, 17th-24th, 26th and 28th-30th (21 days) in England and Wales; it was widespread and dense locally on the 9th, 10th and 11th.

Miscellaneous Phenomena — The aurora was observed in Scotland on 8 nights.

TABLE I—DISTRICT VALUES— NOVEMBER,

1964

(1908, revised 1928, 1941, 1956 and 1964)

DISTRICTS	AIR TEMPERATURE					EARTH TEMP.		RAIN DAYS	RAIN-FALL	SUNSHINE
	Highest Max.	Lowest Min.	Max.	Min.	Mean	Mean	Mean			
						1 ft.	4 ft.			
	Difference from Average					% of Average				
0 SCOTLAND, N.	14.4	-7.8	+0.4	0.0	+0.2	-	-	-2	102	85
1 SCOTLAND, E.	15.6	-8.9	+0.5	+0.2	+0.4	-	-	-4	46	114
2 ENGLAND, N.E.	15.6	-11.0	+0.7	+0.2	+0.5	+1.1	+0.3	-4	41	115
3 ENGLAND, E.	15.6	-7.2	+0.8	+0.5	+0.6	+0.8	-0.1	-4	53	114
4 MIDLANDS	15.6	-7.8	+0.8	+0.9	+0.9	+1.1	+0.3	-5	41	97
5 ENGLAND, S.E.	16.1	-5.7	+0.9	+1.1	+1.0	+0.7	-0.3	-4	66	93
6 SCOTLAND, W.	14.4	-8.3	+0.4	+0.2	+0.3	+1.0	+0.4	0	82	108

DISTRICTS	AIR TEMPERATURE					EARTH TEMP.		RAIN DAYS	RAIN-FALL	SUNSHINE
	Highest Max.	Lowest Min.	Max.	Min.	Mean	Mean	Mean			
						1 ft.	4 ft.			
	Difference from Average					% of Average				
7 ENGLAND, N.W. and N. Wales	16.7	-8.9	+1.2	+0.4	+0.6	+0.9	+0.5	-2	75	123
8 ENGLAND, S.W. and S. Wales	16.1	-5.6	+0.4	+0.9	+0.7	+1.0	0.0	-3	68	85
N. IRELAND	14.6	-6.1	+0.8	-0.5	+0.2	-	-	-2	78	125
SCOTLAND	15.6	-8.9	+0.4	+0.1	+0.3	-	-	-2	85	102
ENG. and WALES	16.7	-11.0	+0.8	+0.7	+0.7	-	-	-4	56	105

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TABLE II--SUMMARY OF AUTOGRAPHIC RECORDS OF WIND -- NOVEMBER, 1964

(1914)

DISTRICT, COUNTY AND PLACE			Height of Vane			Distribution of Mean Hourly Values of Wind Speed										Highest Velocities					
			Above Mean Sea Level	Above Ground	Effective Height	34 knots or more		22 to 33 knots		11 to 21 knots	4 to 10 knots	Less than 4 knots	No Record	Mean Hourly Wind Speed	Highest Hourly Wind			Highest Gust			
						Dates of Occurrence	Duration	No. of days	Duration	Duration	Duration	Duration	Duration		Veer from N	Speed	Hour ended at	Speed	Day and Time		
																				hr.	hr.
ft.	ft.	ft.		hr.	hr.	hr.	hr.	hr.	hr.	hr.	knots	knots	day hr	knots	day	hr					
SCOTLAND																					
0	Zetland	Lerwick Observatory	304	33	33	24, 26, 27	18	16	132	297	231	42	0	14.3	240	45	26	22	68	26	2205
	Orkney	Kirkwall	134	50	33	16	2	13	93	323	259	43	0	12.8	210	38	16	21	58	16	2025
	Caithness	Dounreay	110	39	30	15, 16, 25	13	14	100	348	257	2	0	14.4	300	44	16	17	68	16	1855
	Sutherland	Shin	78	33	33	-	0	5	11	139	198	372	0	5.8	-	30	24	13	58	16	1855
	Ross & Cromarty	Stornoway (Coastguard)	120	40	36	9, 11, 16, 18, 23	31	22	215	276	162	36	0	17.3	180	41	26	12	63	16	1650
	Inverness	Duirinish	125	85	55	14, 16, 26, 28	14	16	112	215	231	147	1	11.8	200	44	14	07	65	14	0820
		Benbecula	69	51	35	14, 16, 28	17	14	131	317	207	48	0	14.7	350	43	28	18	64	28	1520
1	Moray	Lossiemouth	101	80	60	14, 16	2	10	40	255	277	146	0	9.9	270	35	16	21	62	16	1710
	Aberdeen	Dyce	734	30	80	-	0	4	8	171	344	197	0	7.3	220	30	14	12	48	16	1505
	Angus	Auchterhouse	827	62	50	-	0	6	18	194	270	216	22	7.7	260	29	25	07	49	25	0545
		Bell Rock Lighthouse	126	131	124	14-16, 26, 28, 29	37	20	209	317	124	33	0	18.2	220	47	14	18	60	14	1140
	Perth	Rannoch	1005	56	57	-	0	8	48	157	223	288	4	7.3	220	32	14	10	(54)	16	1655
	Fife	Leuchars	78	40	40	-	0	8	39	248	335	98	0	9.7	220	32	14	12	55	14	1115
	Midlothian	Turnhouse	137	40	33	-	0	9	58	276	217	169	0	10.2	250	30	25	02	59	26	1610
		Edinburgh, Blackford Hill	456	50	34	13, 14, 19, 26	12	18	178	271	179	71	9	15.1	200	38	14	14	68	14	1140
6a	Argyll	Tiree	89	60	47	14, 15, 16, 26, 28, 29	39	20	230	276	98	77	0	17.6	340	44	28	19	66	14	0630
	Bute	Millport	50	34	34	β	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Renfrew	Paisley	188	81	31	-	0	0	0	158	287	275	0	6.3	240	21	14	21	54	14	2135
		Renfrew	71	41	39	-	0	7	24	255	254	187	0	8.6	220	28	14	11	45	14	1410
	Lanark	Lowther Hill	2412	43	33	13-16, 24-26	58	17	160	366	121	15	0	18.1	290	47	16	15	75	16	1450
	Ayr	Prestwick Airport	68	33	33	-	0	5	40	264	275	141	0	9.9	210	27	14	11	45	14	2335
	Dumfries	Eskdalemuir Observatory	825	50	35	-	0	9	23	201	232	264	0	7.6	220	29	26	15	49	25	0655
	Wigtown	West Freugh	81	31	33	-	0	11	55	277	276	112	0	10.5	350	29	28	23	51	16	1450
ENGLAND AND WALES																					
6b	Isle of Man	Ronaldsway	119	64	39	13, 14, 16, 26	21	16	179	291	190	39	0	15.8	250	37	16	04	59	16	0805
		Point of Ayre	64	33	33	-	0	13	158	375	164	23	0	15.3	290	33	16	17	49	16	1610
2	Durham	Durham	389	53	33	-	0	5	23	229	369	99	0	9.0	250	27	14	05	53	16	1605
		South Shields	73	57	44	-	0	1	8	215	385	112	0	8.5	270	25	15	05	45	15	0415
	Lincoln	Cranwell	268	47	47	-	0	4	19	241	315	145	0	8.8	260	26	16	09	46	16	0905
3	Norfolk	Gorleston	84	40	43	-	0	6	34	332	329	25	0	11.7	030	30	3	01	48	3	0125
	Suffolk	Mildenhall	99	83	60	-	0	2	7	138	324	251	0	6.4	270	27	16	10	42	16	0935
	Bedford	Bedford	327	42	30	-	0	2	11	218	414	77	0	8.8	240	27	16	09	44	16	0845
		Cardington	276	133	133	-	0	7	54	363	240	61	2	12.0	240	31	16	09	43	16	0835
	Hertford	Garston	307	50	33	-	0	1	2	66	497	155	0	5.8	270	23	16	07	45	16	0645
		Rothamsted	461	41	33	-	0	0	0	70	448	202	0	6.0	260	20	16	06	47	16	0535
	Essex	Stansted	351	31	31	-	0	1	4	220	364	132	0	8.0	260	24	16	09	37	16	0840
		Coryton	66	57	48	-	0	1	1	205	422	92	0	8.2	300	22	16	08	41	16	0225
		Shoeburyness	118	106	91	16	2	11	77	334	253	48	6	12.6	210	40	16	03	55	16	0230
4	Yorks, W.R.	Sheffield	533	53	35	-	0	2	3	109	254	354	0	5.0	250	22	15	01	50	15	0050
	Warwick	Edgbaston	643	118	73	-	0	1	3	165	507	45	0	8.2	270	26	16	07	45	16	0645
		Elmdon	843	31	31	-	0	5	13	211	387	109	0	8.8	270	28	16	08	47	16	0750
	Buckingham	Amersham	500	50	50	-	0	0	0	88	532	100	0	6.8	240	20	16	07	44	16	0615
	Stafford	Keele	706	50	33	-	0	0	0	91	368	261	0	5.7	270	21	16	07	50	16	0520
	Gloucester	Avonmouth	92	61	33	16	3	9	43	351	228	90	5	11.4	250	37	16	05	53	16	0300
5	London	Kingsway	208	143	41	-	0	0	0	137	475	108	0	7.6	230	19	16	08	42	15	1205
	Middlesex	London (Heathrow) Airport	115	33	33	-	0	2	7	236	399	78	0	8.7	250	26	16	07	43	16	0630
		Hampton	139	101	100	-	0	0	0	162	374	184	0	7.0	250	21	16	08	37	16	0855
	Surrey	Kew Observatory	92	75	50	-	0	0	0	177	409	134	0	7.6	260	20	16	07	45	16	1005
		Gatwick	232	38	33	-	0	2	6	164	386	164	0	7.4	220	24	16	02	39	13	1515
	Kent	Isle of Grain	48	40	33	-	0	3	6	231	289	194	0	7.9	200	24	16	03	44	16	0830
		Dover	68	38	62	-	0	7	21	293	276	106	24	10.0	260	29	16	08	53	16	0220
	Sussex	Thorney Island	75	65	42	-	0	1	11	129	327	253	0	6.3	250	27	16	11	45	16	0955
	Hampshire	Hurn	86	53	46	-	0	2	10	169	395	146	0	7.7	250	26	16	02	44	16	0105
		Calshot	50	41	33	-	0	3	13	301	382	24	0	10.6	220	26	16	01	37	16	0115
		S. Farnborough	316	69	35	-	0	2	9	242	327	142	0	8.6	240	25	16	07	41	14	1805
	Berkshire	Abingdon	295	40	40	-	0	1	5	247	284	184	0	8.1	240	26	16	04	42	16	0605
	Wiltshire	Larkhill	491	51	36	-	0	2	8	270	302	140	0	8.7	250	27	16	07	45	16	0620
		Boscombe Down	425	55	55	-	0	5	21	310	330	59	0	10.2	220	28	16	01	44	16	0605
		Porton	406	44	44	-	0	2	10	139	272	299	0	6.2	210	24	16	01	40	16	0015
7a	Cumberland	Carlisle	137	42	30	-	0	7	20	276	162	262	0	8.7	220	28	26	16	44	26	1530
		Sellafield	83	39	35	-	0	5	53	237	361	68	1	10.5	270	28	14	14	43	14	1630
		Spadeadam	959	51	60	-	0	7	34	275	282	129	0	9.9	350	30	29	09	48	14	1800
	Westmorland	Great Dun Fell	2813	33	33	2, 3, 11-19, 23-27	146	21	207	215	87	56	9	21.5	290	49	25	09	64	25	0800
		Moor House	1960	50	45	13, 16, 24-26	17	17	164	2											

RAINFALL NOVEMBER 1964

The equivalent values in mm, are given in round numbers. The exact relation is 10 in. = 254 mm.

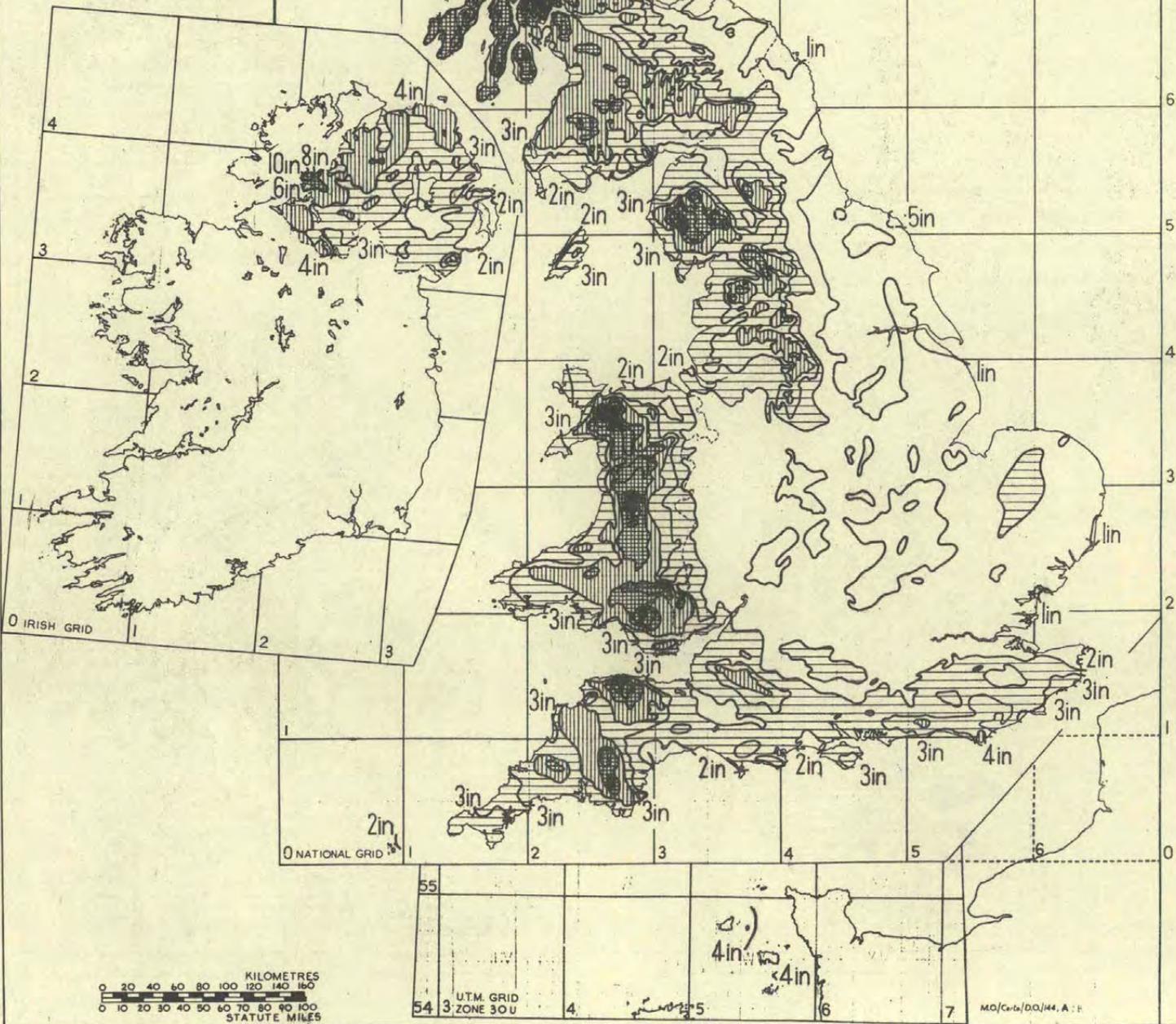
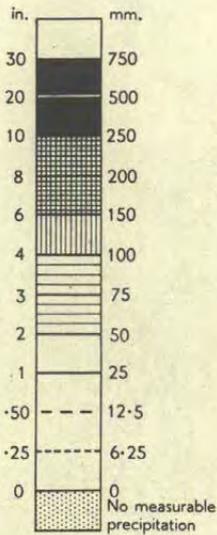


TABLE III — SUMMARY OF OBSERVATIONS OF TEMPERATURE, RAINFALL, SUNSHINE AND WEATHER NOVEMBER, 1964

DISTRICT, COUNTY AND PLACE	Terminal Hours of Observation	Height of Station above Mean Sea Level	AIR TEMPERATURE IN DEGREES CELSIUS								MEAN EARTH TEMPERATURE		RAINFALL (Terminal hour 9 G.M.T.)				WEATHER Number of days								BRIGHT SUNSHINE					
			Means of		Difference from Average	Highest Maximum and Lowest Minimum				1 ft.	4 ft.	Total Fall	Percentage of Average	Most in a day		Precip'n		Snow or Sleet	Snow lying at th.	Hail	Ice or snow pellets etc.	Thunder heard	Fog at th.	Air Frost	Grass min. below 0° C	Gale	Daily Mean	Percentage of Average		
			A	B		Maximum	Date	Minimum	Date					Amount	Date	0 in (0.2mm) or more	0.1 in (1.0mm) or more													
			Max.	Min.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	in	%	in.												hr	%		
0 SCOTLAND, N.																														
Zetland																														
	9 9	70	8.9	5.4	7.1	-	10.6	9,19,21	-0.6	30	-	-	4.47		.81	18	23	20	4	0	3	0	0	1	1	-	9	1.23	-	
	21-9	269	7.7	4.1	5.9	0.0	10.6	21	-2.1	30	-	-	5.14	104	.92	18	23	19	7	1	2	8	0	0	5	8	7	1.17	107	
	9 9	78	8.2	3.9	6.1	-	11.1	21	-1.7	30	7.1	-	3.94	77	.53	18	24	20	5	1	5	0	0	0	3	-	6	0.82	-	
Orkney																														
	9 9	43	9.5	6.8	8.1	-	11.8	19	2.0	29	-	-	3.96	-	.75	18	20	17	0	0	3	0	0	0	0	0	2	7	-	
	9 9	75	8.9	4.6	6.7	-	12.2	21	-1.7	30	7.2	-	4.40	-	.68	18	22	16	7	0	1	0	1	0	2	9	5	1.18	-	
	9 9	115																												
	21-9	84	8.7	4.5	6.6	-	12.4	10	-1.4	30	-	-	4.21	95	.69	18	22	18	7	0	6	1	1	0	1	7	2	1.13	81	
Caitness																														
	9 9	70	9.8	3.8	6.8	-	13.9	10	-2.8	30	-	-	3.84	-	.58	27	21	15	1	1	0	0	0	0	2	7	4	-	-	
	21-9	119	8.9	3.8	6.3	-0.1	13.2	10	-2.8	30	-	-	2.50	79	.46	28	21	14	4	0	5	0	0	0	4	13	0	1.68	97	
Sutherland																														
	21-9	367	9.4	5.0	7.2	0.0	13.0	18	0.0	16,17,18	-	-	3.83	72	.57	13	22	18	2	0	3	1	0	1	0	1	8	0.61	- S	
	9 9	280	8.4	1.4	4.9	-	12.8	20,21	-7.2	30	5.7	7.6	6.04	150	.69	14,23	22	14	7	1	6	0	2	2	8	23	0	-	-	
	9 9	120	8.9	3.2	6.1	+0.3	13.3	10,21	-3.3	30	-	-	3.88	84	.46	23	23	18	8	0	3	0	0	0	6	-	0	0.99	79 S	
Ross & Cromarty																														
	21-9	11	9.5	4.8	7.1	+0.1	12.4	18	-2.3	30	-	-	4.71	105	.57	28	20	17	5	0	3	5	2	0	5	9	4	0.93	62	
	9 9	2	10.8	4.7	7.7	-	13.3	3,18	-0.6	30	-	-	7.19	-	1.41	13	21	20	-	-	-	-	-	-	-	-	-	-	-	
	9 9	20	10.1	5.2	7.7	-	13.3	10	0.0	18	-	-	6.45	-	.72	18	19	18	-	-	-	-	-	0	0	6	-	0.91	- S	
	9 9	45	9.9	4.5	7.2	-	13.9	18	-1.1	11	8.3	-	6.22	-	.69	22	21	18	2	0	9	0	5	-	3	9	2	-	-	
	9 9	270	9.4	2.2	5.8	+0.2	13.3	19,23	-2.2	9,18	-	-	13.36	167	1.83	23	23	21	2	0	0	0	0	0	5	-	1	-	-	
	9 9	76	9.8	3.6	6.7	-	13.9	18,20	-2.2	30	7.5	-	11.41	-	1.66	13	21	20	4	0	1	0	0	0	4	12	0	0.62	- S	
	9 9	690	9.6	1.8	5.7	-	14.4	20	-5.6	9,11	-	-	6.43	-	1.22	14	21	18	-	-	-	-	-	0	8	9	-	1.00	-	
	9 9	15	9.5	5.2	7.3	+0.5	12.8	20	0.0	30	-	-	2.27	102	.50	14	15	11	-	-	-	-	-	0	0	8	-	1.34	79	
	21-9	60	8.8	5.0	6.9	-	13.0	21,22	-3.0	9	-	-	2.20	-	.34	11	18	13	1	0	1	0	0	0	1	-	0	-	-	
Inverness																														
	21-9	19	9.9	6.0	7.9	+0.6	11.7	13,21,23	-2.0	29	-	-	4.62	92	.95	18	23	19	2	0	1	7	1	0	2	6	1	0.7	1.07	
	9 9	15	10.1	5.2	7.7	-	13.9	18	-1.7	30	8.3	10.0	11.18	-	1.96	18	22	21	2	0	4	1	2	0	1	8	11	-	-	
	9 9	220	9.1	4.4	6.7	-	12.8	18	-1.1	30	-	-	10.13	-	1.38	18	24	20	1	0	4	5	0	0	1	10	8	0.99	-	
	9 9	294	9.4	5.7	7.5	+0.4	12.2	18,19	+0.6	30	-	-	5.37	95	.79	18	22	19	4	0	0	0	0	0	0	2	7	0.67	49 S	
	9 9	48	9.7	3.8	6.7	+0.3	12.8	13,23	-3.3	30	-	-	9.57	121	1.68	18	22	19	2	0	1	0	0	0	1	3	10	0	0.97	80 S
	9 9	27	9.7	3.2	6.5	-	13.3	20	-5.0	11	7.1	8.7	7.59	-	1.14	13	21	18	4	1	1	2	1	9	10	0	0.85	-		
	9 9	70	8.8	2.9	5.9	+0.3	12.8	20	-3.9	11,30	-	-	6.31	-	1.06	14	22	17	3	0	0	1	0	2	8	-	0	0.75	- S	
	9 9	350	9.2	0.4	4.8	-	13.9	19,21,24	-7.8	11	-	-	5.28	111	.98	14	16	16	2	1	0	0	0	0	14	21	0	-	-	
	9 9	13	9.7	3.6	6.7	-	14.4	20	-3.9	30	-	-	2.66	-	.63	14	14	12	2	0	0	0	0	0	3	9	0	1.60	-	
	9 9	2500	5.7	0.6	3.1	-	11.1	10,19	-7.2	30	-	-	4.98	-	1.26	14	19	16	5	6	0	0	0	0	1	9	-	1	- W	
	9 9	3575	3.6	-1.1	1.3	-	9.4	10	-7.8	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	- S	
	9 9	1000	7.8	1.0	4.4	-	12.8	13	-6.1	30	5.5	-	3.51	-	1.02	14	16	12	6	-	0	0	0	-	10	20	2	-	-	
	9 9	1120	7.9	0.5	4.2	-	13.1	18	-6.4	30	-	-	3.90	-	1.30	14	16	11	6	5	0	0	0	0	13	19	0	1.13	- S	
I SCOTLAND, E.																														
Nairn																														
	9 9	20	9.4	3.2	6.3	+0.3	13.9	20	-5.6	30	-	-	2.33	106	.39	28	17	12	1	0	0	0	0	0	5	11	0	1.67	94	
Moray																														
	9 9	155	9.4	2.7	6.1	-	13.9	21,22	-3.9	30	6.1	7.9	1.62	76	.32	14,28	15	12	3	0	1	0	0	0	0	5	8	0	1.84	96
	21-9	15	9.5	3.4	6.5	-	14.0	13	-4.8	30	6.7	-	1.76	-	.40	14	15	11	3	0	1	0	0	0	0	6	14	1	1.71	-
	9 9	92	10.1	3.2	6.7	-	14.4	20,21,22	2.2	11,30	-	-	1.49	-	.30	28	14	10	1	0	0	0	0	0	6	9	0	2.09	-	
	9 9	21	9.8	2.2	6.0	+0.2	15.0	21	-4.4	30	-	-	2.06	-	.37	14	17	12	3	0	0	0	0	0	7	15	0	-	-	
	9 9	104	9.8	3.8	6.8	+0.8	14.4	21,22	-2.8	30	-	-	1.61	56	.62	28	14	10	1	0	1	0	0	-	4	-	0	1.94	115	
Banff																														
	9 9	80	9.3	3.6	6.5	-	13.9	20	-2.8	30	-	-	1.00	-	.16	28	17	8	3	0	0	0	0	0	2	-	0	1.86	-	
Aberdeen																														
	9 9	1113	7.4	0.4	3.9	+0.1	12.2	21	-8.9	11	-	-	2.18</																	

TABLE III (continued)—SUMMARY OF OBSERVATIONS OF TEMPERATURE, RAINFALL, SUNSHINE AND WEATHER NOVEMBER, 1964

DISTRICT, COUNTY AND PLACE	Terminal Hours of Observation	Height of Station above Mean Sea Level	AIR TEMPERATURE IN DEGREES CELSIUS								MEAN EARTH TEMPERATURE		RAINFALL (Terminal hour 9 G.M.T.)		WEATHER										BRIGHT SUNSHINE							
			Means of		Mean Temperature Mean of A and B	Difference from Average	Highest Maximum and Lowest Minimum				1 ft.	4 ft.	Total Fall	Percentage of Average	Most in a day		Precip'n	Number of days										Daily Mean	Percentage of Average			
			A	B			Maximum	Date	Minimum	Date					Amount	Date		0.01 in. (0.2mm.) or more	0.04 in. (1.0mm.) or more	Snow or Sleet	Snow lying at 9h	Hail	Ice or snow pellets etc.	Thunder heard	Fog at 9h.	Air Frost †	Grass min. below 0° C			Gale		
			°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	in.	%	in.											hr	%					
2 ENGLAND, N.E.—cont.																																
Northumberland cont.	Haydon Bridge	9 9	270	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	Corbridge	9 9	160	9.9	1.9	5.9	-	15.0	24	-10.0	10	-	-	.90	.27	13	11	10	1	0	0	0	0	0	0	3	10	15	0	-	-	
	Berwick-on-Tweed	9 9	76	9.6	3.4	6.5	0.0	14.4	24	-3.9	10,11	-	-	.90	.40	.22	29	16	9	0	0	1	0	0	0	1	6	9	0	2.74	134	
	Cockle Park	9 9	326	9.2	3.5	6.3	+0.5	13.3	24	-2.8	11	6.7	-	1.31	.47	.36	29	13	9	2	0	0	0	0	0	1	7	11	1	2.54	124	
	Acklington	21-9	138	9.2	3.9	6.5	-	14.3	24	-4.9	10	-	-	1.25	.41	.29	11	9	3	0	0	0	0	0	0	0	5	8	2	2.70	-	
	Tynemouth	21-9	95	9.5	5.8	7.7	+0.4	14.9	24	-1.1	30	-	-	.99	.40	.15	30	12	10	1	0	0	0	0	0	1	6	0	2.13	131		
	Chopwellwood	9 9	446	9.6	3.3	6.5	+0.5	13.9	24	-3.3	10,11,30	-	-	.83	.30	.13	29	17	8	1	1	0	0	0	0	0	7	16	0	-	-	
	Ushaw College	9 9	594	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Houghall	9 9	123	10.3	2.2	6.3	+0.4	15.6	24	-7.8	10	-	-	1.11	.42	.21	20	15	11	1	0	0	0	0	0	3	11	19	0	2.30	135	
	Durham	9 9	336	9.9	2.8	6.3	+0.2	15.0	24	-5.6	10	7.4	9.7	1.12	.45	.24	29	15	9	-	0	-	-	-	-	8	14	-	2.22	116		
Gateshead	9 9	509	9.2	4.4	6.8	-	14.4	24	-2.2	30	-	-	1.01	-	.15	29	16	12	-	0	-	-	-	-	0	3	6	-	2.32	-		
Middleton St. George	21-9	115	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
West Hartlepool	9 9	30	10.4	4.4	7.4	-	15.6	24	-3.9	10	-	-	.67	-	.16	20	11	7	1	0	0	0	0	0	2	4	8	0	1.88	-		
Dishforth	21-9	105	10.0	4.2	7.1	+0.6	15.2	21	-5.6	30	-	-	.77	.33	.21	13	11	6	1	0	0	0	0	0	2	4	12	0	2.20	111		
Yorks., N. Riding	Thirsk	9 9	111	10.1	3.2	6.7	-	15.0	21,24	-5.6	30	-	-	.60	-	.19	30	10	6	1	0	0	0	0	2	7	17	0	-	-		
	York	9 9	57	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Ampleforth	9 9	313	9.9	3.2	6.5	+0.4	13.9	24	-5.0	30	-	-	.19	.30	-	-	-	-	-	-	-	-	-	-	3	7	12	0	-	-	
	Redcar	9 9	25	10.8	4.9	7.9	-	15.6	24	-2.2	9,10	-	-	.77	.31	.16	29	13	8	-	0	-	-	-	-	3	5	-	1.95	-		
	Pickering	9 9	143	9.5	-	-	-	14.4	19,24	-5.0	30	-	-	.81	-	.18	13	17	6	1	0	0	0	0	0	5	16	0	-	-		
	Whitby	9 9	135	10.5	4.3	7.4	-	15.6	24	-3.3	10,30	-	-	.38	.14	.09	13	11	4	0	0	0	0	0	0	2	5	-	0	2.19	132	
	Scarborough	9 9	118	10.4	5.4	7.9	+0.5	14.4	24	-3.3	30	8.2	10.4	.86	.34	.25	13	12	8	0	0	0	0	0	0	2	1	3	0	2.07	123 S	
	Silpho Moor	9 9	665	9.6	3.2	6.4	-	13.3	24,25	-3.3	30	-	-	1.02	-	.32	13	18	8	0	0	0	0	0	0	3	5	14	0	2.44	-	
	Whitby C/Guard	21-9	200	10.0	5.1	7.5	-	15.4	24	-2.7	30	-	-	.37	-	.10	13	9	4	0	0	0	0	0	0	1	5	7	1	-	-	
	High Mowthorpe	9 9	574	8.9	3.8	6.3	-	12.8	24	-4.4	30	6.6	-	.97	.34	.24	13	13	8	0	0	0	0	0	0	3	4	11	0	2.13	-	
Yorks., E. Riding	Hull	9 9	8	10.4	4.6	7.5	+0.4	14.4	24,25	-2.2	30	7.5	9.4	.92	.36	.37	13	13	6	2	0	0	0	0	0	4	4	5	8	0	1.72	110
	Leconfield	21-9	24	10.1	4.4	7.3	-	14.6	24	-3.8	30	-	-	.89	-	.32	13	12	7	2	0	0	0	0	0	3	5	12	0	2.14	-	
	Filey	9 9	122	10.1	3.3	6.7	-	14.4	24	-3.9	30	-	-	.67	-	.20	13	12	6	1	0	1	0	0	0	4	6	9	0	1.91	-	
	Bridlington	9 9	157	10.3	4.2	7.3	-	13.9	21,24	-3.9	30	-	-	.73	-	.26	13	11	5	0	0	0	0	0	0	2	3	9	0	2.21	-	
	Spurn Head	21-9	29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Gainsborough	9 9	110	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Navenby	9 9	60	10.0	3.3	6.7	-	14.4	24,25	-3.9	9	-	-	1.24	-	.24	13	11	9	1	0	0	0	0	0	7	7	14	0	-	-	
	Waddington	21-9	224	9.4	4.2	6.8	+0.4	14.2	24	-3.3	30	-	-	1.31	-	.25	3	11	10	1	0	0	0	0	0	7	6	7	0	1.72	-	
	Lincoln	9 9	22	9.9	2.6	6.3	-	14.4	24	-6.1	9	8.1	9.6	.96	-	.20	13	12	8	0	0	0	0	0	0	6	9	17	1	1.64	-	
	Cranwell	9 9	205	9.9	3.8	6.9	+0.5	14.1	24	-3.1	30	7.2	9.2	1.05	.45	.20	2	14	8	1	0	0	1	0	0	5	4	7	0	2.05	102	
Binbrook	21-9	353	9.2	4.1	6.7	-	14.1	24	-3.8	30	-	-	1.20	-	.35	13	12	8	2	0	0	0	0	0	4	4	12	0	-	-		
Cleethorpes	9 9	23	10.2	4.2	7.2	+0.2	15.0	24	-2.2	29,30	-	-	.79	.33	.28	13	7	6	0	0	0	0	0	0	5	4	-	0	1.96	104		
Manby	21-9	55	10.1	4.1	7.1	-	15.5	24	-3.3	30	-	-	1.22	-	.39	13	9	8	2	0	1	0	0	0	3	6	8	0	2.11	-		
Skegness	9 9	15	10.7	4.4	7.5	+0.6	14.4	25	-5.0	30	-	-	1.00	.43	.30	13	7	7	0	0	0	0	0	0	6	3	5	0	2.18	107		
3 ENGLAND, E.																																
Norfolk	Terrington	9 9	13	10.3	3.8	7.1	-	14.4	25	-5.0	30	7.6	-	1.31	.65	.31	30	9	7	1	0	0	0	0	0	6	4	6	0	2.43	-	
	St. Clement	9 9	76	10.2	4.3	7.3	-	14.6	25	-5.4	30	-	-	1.74	-	.70	30	11	9	1	0	0	0	0	0	4	5	10	0	-	-	
	Marham	21-9	76	10.2	4.3	7.3	-	14.6	25	-5.4	30	-	-	1.74	-	.70	30	11	9	1	0	0	0	0	0	4	5	10	0	-	-	
	Santon Downham	9 9	80	10.9	2.8	6.9	-	15.0	25	-7.2	30	7.4	9.2	1.77	-	.60	30	13	8	-	0	-	-	-	-	6	8	14	-	2.18	-	
	West Raynham	21-9	250	9.7	4.0	6.9	-	13.7	25	-5.4	30	-	-	1.95	-	.81	30	10	8	1	0	0	0	0	0	7	4	10	0	2.55	-	
	Cromer	9 9	178	10.5	5.1	7.8	+0.5	13.3	24,25	-2.8	29,30	-	-	1.63	.55	.56	30	11	7	-	0	-	-	-	-	0	2	5	-	2.72	135	
	Sproston	9 9	93	10.6	3.9	7.3	+0.4	13.9	24	-5.6	30	8.3	-	1.66	.62	.46	30	11	8	0	0	0	0	0	0	2	5	11	2	2.16	118 S	
	Coltishall	21-9	55	10.3	4.7	7.5	-	14.8	25	-5.6	29	-	-	1.47	-	.47	30	10	8	0	0	0	0	0	0	4	4	7	0	-	-	
	Burlingham	9 9	89	10.6	4.7	7.7	-	14.4	25	-3.9	29	-	-	1.33	.48	.42	30	10	7	0	0	0	0	0	0	2	2	6	1	2.59	-	
	Gorleston	21-9	12	10.3	6.3	8.3	+0.6																									

TABLE III (continued)—SUMMARY OF OBSERVATIONS OF TEMPERATURE, RAINFALL, SUNSHINE AND WEATHER NOVEMBER, 1964

DISTRICT, COUNTY AND PLACE	Terminal Hours of Observation	Height of Station above Mean Sea Level	AIR TEMPERATURE IN DEGREES CELSIUS								MEAN EARTH TEMPERATURE		RAINFALL (Terminal hour 9 G.M.T.)				WEATHER Number of days										BRIGHT SUNSHINE				
			Means of		Mean Temperature Mean of A and B	Difference from Average	Highest Maximum and Lowest Minimum				1 ft.	4 ft.	Total Fall	Percentage of Average	Most in a day		Precip'n -0 in. (0.2mm.) or more	Snow or Sleet	Snow lying at 9h.	Hail	Ice or snow pellets etc.	Thunder heard	Fog at 9h.	Air Frost 1/4	Grass min below 0° C	Cale	Daily Mean	Percentage of Average			
			A	B			Maximum	Date	Minimum	Date					Amount	Date															
			Max. Min.	ft.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	in.	%	in.													hr	%		
4 MIDLAND COUNTIES—cont.																															
Yorks.	Huddersfield	9 9	325	9.8	4.2	7.0	+0.7	14.4	24	-4.4	30	7.6	9.6	1.81	75	.23	15	15	12	0	0	0	0	0	0	0	0	0	0	1.24	99
W. Riding—	Oakes	21-9	761	8.6	4.4	6.5	+0.5	14.0	-	-1.7	30	7.2	8.5	2.94	75	.37	13	20	14	3	2	0	3	1	5	4	12	2	1.20	72	
cont.	Bradford	9 9	439	9.3	4.7	7.0	+0.8	13.9	24	-2.8	30	7.6	9.7	1.60	45	.28	15	17	13	1	0	0	1	0	4	1	11	0	-	-	
	Ilkley	9 9	315	9.8	3.8	6.8	+0.7	13.9	24	-3.9	10	-	-	1.92	50	.28	15	15	15	2	0	0	0	0	1	2	-	0	1.20	74	
	Sheffield	9 9	429	9.8	4.7	7.3	+0.4	14.4	24,25	-2.8	30	8.1	10.1	1.60	50	.31	13	15	11	2	0	0	0	0	0	2	13	0	1.36	96	
	Wakefield	9 9	121	10.1	4.4	7.3	+0.7	14.4	13,24	-5.0	30	8.1	9.6	.81	32	.22	17	15	6	0	0	0	0	0	0	6	3	13	0	-	S
	Pontefract	9 9	255	9.9	4.4	7.1	+0.6	14.4	24	-3.3	30	-	-	.55	24	.15	17	12	5	0	0	0	0	0	0	9	1	4	0	-	-
	Bramham	9 9	177	9.8	3.4	6.6	-	14.4	24	-5.0	30	-	-	1.16	51	.24	16	15	9	0	0	0	0	0	0	7	6	12	0	1.70	-
	Cawood	9 9	20	9.9	3.2	6.5	-	15.0	24	-6.7	30	7.2	9.2	.61	26	.12	13	11	7	0	0	0	0	0	2	6	12	0	1.50	-	
	Askham Bryan	9 9	110	10.1	3.4	6.7	-	15.0	24	-6.1	30	-	-	.62	25	.14	30	7	7	0	0	0	0	0	0	6	7	17	0	2.09	132
Derby	Buxton	9 9	1007	8.2	3.5	5.9	+0.6	12.2	13,18,24	-7.8	30	6.5	8.2	3.68	74	.84	13	18	16	4	3	0	0	0	0	11	7	10	1	-	-
	Chapel en le Frith	9 9	732	9.3	3.4	6.3	-	12.8	14,18,24	-6.7	30	-	-	2.95	-	.51	13	16	14	3	3	2	0	0	1	7	12	0	-	-	
	Mackworth	9 9	293	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Belper	9 9	203	10.3	3.5	6.9	+0.4	14.5	24,25	-5.5	30	-	-	1.73	59	.41	13	13	8	1	0	0	0	0	0	9	-	0	-	-	
	Derby	9 9	159	-	-	-	-	15.0	24	-5.5	30	-	-	1.21	-	.27	13	12	9	1	0	0	0	0	5	3	8	0	1.72	-	
	Morley	9 9	350	10.0	3.9	6.9	-	13.0	24	-5.5	30	-	-	1.20	47	.30	13	10	8	0	0	0	0	0	0	1	12	0	1.79	-	S
	Chesterfield	9 9	298	10.3	4.0	7.1	-	14.5	21,24	-5.0	30	-	-	1.37	-	.29	13	15	9	1	0	0	0	0	7	3	-	0	-	-	
Nottingham	Sutton Bonington	9 9	157	10.3	4.1	7.2	+0.8	15.0	24	-3.3	30	8.4	10.1	.95	43	.24	13	11	9	0	0	0	0	0	3	4	11	0	-	-	
	Watnall	21-9	385	9.7	4.4	7.1	-	14.2	25	-5.1	30	-	-	1.41	53	.37	13	12	7	2	0	0	1	0	8	4	13	0	1.48	88	
	Nottingham Training College	9 9	169	10.5	4.5	7.5	-	15.5	25	-3.3	30	-	-	-	-	-	-	-	-	-	-	-	-	4	4	7	-	1.47	-		
	Mansfield	9 9	362	9.5	4.3	6.9	+0.6	13.9	24	-3.3	30	7.2	-	1.10	39	.31	13	11	7	1	0	0	0	0	8	3	10	0	-	-	
	Nottingham	9 9	192	10.3	5.1	7.7	+0.8	15.0	25	-3.3	30	7.5	9.9	1.06	46	.29	3	10	7	0	0	0	0	0	5	1	4	0	1.67	113	
	Warsop	9 9	150	10.3	2.9	6.6	-	15.0	24	-7.1	30	-	-	.96	40	.17	17	15	9	-	0	-	-	-	8	7	15	-	1.81	-	
	Finningley	21-9	34	10.1	4.4	7.3	+0.6	15.6	24	-6.3	30	-	-	.85	-	.16	17	12	9	2	0	0	0	0	7	4	11	0	1.78	-	S
Leicester	Newtown Linford	9 9	392	9.9	3.7	6.8	-	14.5	17	-2.8	2,30	-	-	1.16	-	.25	13	15	9	1	0	0	1	0	7	5	12	0	1.64	-	
	Caldecott	9 9	175	10.7	3.1	6.9	-	15.0	17	-5.0	30	-	-	.90	-	.25	30	11	6	-	0	-	-	-	3	9	9	-	1.62	-	
Northampton	Bugbrooke Mills	9 9	228	10.5	3.5	7.0	-	15.0	24,25	-4.5	30	7.9	9.8	.89	-	.26	30	13	5	0	0	0	0	0	8	5	-	0	1.99	-	
	Raunds	9 9	193	10.3	3.7	7.0	-	14.5	24,25	-5.0	30	7.9	10.1	.88	38	.22	13	14	7	0	0	0	0	0	8	5	7	0	1.90	-	S
	Wittering	21-9	212	10.1	4.4	7.3	-	14.5	25	-4.7	30	-	-	.98	-	.31	13	12	6	2	1	0	0	0	5	15	1	2.06	-		
Warwick	Birmingham K.E.S.*	9 9	450	10.1	4.8	7.5	-	14.5	17,25	-2.2	30	-	-	.26	8,13	9	7	1	0	0	0	0	0	4	1	-	0	-	-		
	Edgbaston	21-9	536	9.7	5.7	7.7	+1.0	14.6	18	-2.4	30	8.6	10.1	1.20	38	.28	3	13	7	3	0	0	0	0	4	1	4	0	1.42	89	
	Luddington	9 9	138	10.6	4.4	7.5	-	14.5	17	-2.8	30	-	-	.32	30	.12	2	0	0	0	0	0	0	3	3	7	0	1.83	-		
	Stratford on Avon	9 9	160	10.7	3.9	7.3	-	14.5	17,18,25	-3.9	30	8.0	-	1.05	49	.29	30	13	6	0	0	0	0	0	3	4	10	0	1.72	-	
	Elmdon	21-9	319	10.2	4.4	7.3	-	15.1	25	-4.3	30	-	-	.97	36	.23	13	11	5	3	0	0	0	0	4	4	9	0	1.71	-	
	Shipston on Stour	9 9	365	10.3	4.5	7.4	-	13.9	17,18,24	-3.3	30	8.1	-	1.24	-	.24	30	14	6	2	1	1	0	0	4	3	14	-	1.83	-	S
	Wellesbourne	9 9	153	10.5	3.9	7.2	-	14.5	17,25	-3.9	9	7.3	8.5	.97	40	.30	30	13	7	1	0	0	0	0	-	-	-	0	-	-	
	Moreton Morrell	9 9	280	10.8	4.1	7.5	-	14.5	25	-2.2	9,30	-	-	.88	-	.26	30	12	5	3	1	0	0	0	2	4	9	0	1.74	-	S
	Coventry	9 9	338	10.2	4.3	7.3	+1.0	14.5	25	-2.2	30	-	-	.96	37	.25	13	10	6	0	0	0	0	1	2	11	0	1.77	112		
	Rugby	9 9	385	10.1	4.3	7.2	+1.0	13.9	17	-2.8	30	-	-	-	-	-	-	-	-	-	-	-	-	1	3	8	0	-	-		
Oxford	Oxford	9 9	208	10.5	5.0	7.7	+0.7	14.5	18	-3.9	30	8.3	10.3	.98	38	.22	13	11	6	1	0	0	0	0	6	1	6	0	1.83	89	
	Grendon Underwood	9 9	220	10.5	3.2	6.9	-	14.5	18	-7.2	30	8.1	10.1	.80	-	.25	13	10	7	0	0	0	0	0	8	0	8	0	2.03	-	
Buckingham	Medmenham	9 9	98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Aylesbury	9 9	316	-	4.0	-	-	-	-	-5.5	30	-	-	.81	30	.33	13	10	5	0	0	0	0	0	8	4	10	0	1.76	-	
Stafford	Keele	9 9	587	9.7	4.0	6.9	-	15.5	17	-4.5	30	7.1	9.2	1.59	51	.38	30	13	9	2	0	0	0	0	5	4	11	0	1.74	-	
	Oaken	9 9	409	9.9	3.1	6.5	-	14.5	24,25	-3.3	30	7.3	-	1.38	-	.46	30	10	7	-	-	-	-	-	6	-	-	-	-		
	Stone	9 9	350	10.1	3.3	6.7	-	15.0	17	-4.5	30	-	-	1.64	-	.30	30	17	9	0	0	0	0	0	2	7	13	0	1.53	-	S
	Penkridge	9 9	330	10.0	3.8	6.9	-	15.0	17,24	-4.5	30	-	-	1.04	-	.26</															

TABLE III (continued)—SUMMARY OF OBSERVATIONS OF TEMPERATURE, RAINFALL, SUNSHINE AND WEATHER NOVEMBER, 1964

DISTRICT, COUNTY AND PLACE	Max. Terminal Hours of Observation	Height of Station above Mean Sea Level	AIR TEMPERATURE IN DEGREES CELSIUS								MEAN EARTH TEMPERATURE		RAINFALL (Terminal hour 9 G.M.T.)		WEATHER Number of days										BRIGHT SUNSHINE							
			Means of		Mean of A and B	Difference from Average	Highest Maximum and Lowest Minimum				1 ft.	4 ft.	Total Fall	Per-cent- age of Average	Most in a day		Precip'n	Snow or Sleet	Snow lying at 9h.	Hail	Ice or snow pellets etc.	Thunder heard	Fog at 9h.	Air Frost	Grass min below 0° C	Gale	Daily Mean	Per-cent- age of Average				
			A	B			Maximum	Date	Minimum	Date					Amount	Date													-0.1in (0.2mm.) or more	-0.01in (1.0mm.) or more		
			°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	in.	%	in.																	
7a ENGLAND, N.W.—cont.																																
Westmorland	Great Dun Fell	21-9	2780	3.9	0.5	2.2	-	8.8	9	-4.0	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.53	-		
—cont.	Moor House	9 9	1825	6.3	0.1	3.2	-	11.1	9	-8.9	30	5.1	-	5.79	-	.93	14	18	16	-	3	-	-	-	-	-	2	14	19	-	1.84	-
Lancashire	Squires Gate	21-9	33	9.9	4.2	7.1	-0.3	13.0	1	-6.8	10	-	-	2.19	65	.47	13	15	12	0	0	1	1	0	0	6	9	11	0	2.38	136	
	Urswick	9 9	130	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Southport *	9 9	16	10.3	3.8	7.3	-	10.0	4	-4.4	9,10	7.5	-	2.75	-	.59	30	15	12	-	0	0	0	0	0	0	5	7	10	-	2.13	-
	Poulton-le-Fylde	9 9	38	-	-	-	-	-	-	-	-	-	-	2.00	-	.48	-	-	-	-	0	0	0	0	0	0	5	7	-	0	-	-
	Grizedale	9 9	300	-	2.9	-	-	15.0	13,24	-5.0	10	7.6	-	5.64	-	1.07	13	19	18	2	2	0	0	0	0	0	1	6	13	0	-	-
	Speke	21-9	80	10.3	5.5	7.9	-	15.1	19	-1.6	10	-	-	2.47	84	.53	28	11	11	0	0	2	0	0	0	4	2	5	1	1.68	-	
	Kirkham	9 9	78	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Garstang	9 9	68	10.3	-	-	-	12.8	13,19,24	-2.2	10	-	-	2.55	-	.51	13	16	14	-	0	-	-	-	-	0	6	11	-	2.52	-	
	Morecambe	9 9	24	9.8	5.2	7.5	+0.4	12.2	13,14,24	-2.2	10	-	-	2.47	64	.62	13	16	14	0	0	0	0	0	0	0	0	3	-	0	2.94	165
	Preston	9 9	108	10.2	4.5	7.3	-	13.3	19,24	-3.3	30	-	-	2.74	70	.47	13	15	14	0	0	0	4	0	0	6	4	12	0	-	-	
	Stonyhurst	9 9	377	9.8	-	-	-	12.8	24	-2.8	10	-	-	3.98	84	.68	22	17	15	-	0	-	-	-	-	2	3	8	-	-	-	
	Manchester W/Centre	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Heimshore	9 9	854	8.7	3.9	6.3	-	12.8	24	-3.9	30	7.0	-	5.11	80	.90	13	19	17	-	3	-	-	-	-	4	4	13	-	2.02	-	
	Burnley	9 9	655	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Nelson	9 9	540	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Rochdale	9 9	362	9.9	3.3	6.6	-	13.9	14,24,25	-5.0	10,30	-	-	4.15	-	.48	15	19	16	2	1	0	0	0	0	5	7	13	0	1.46	- S	
Cheshire	Bidston Obs'y.	9 9	198	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Winnington	9 9	65	10.6	4.8	7.7	-	15.6	24	-3.9	30	-	-	2.13	73	.51	30	16	10	1	0	1	0	0	0	5	4	9	1	-	-	
	Knutsford	9 9	212	10.0	3.8	6.9	-	14.4	19,24	-5.0	9	7.7	10.0	2.29	-	.43	28	17	10	-	0	-	-	-	-	5	4	15	-	-	-	
	Ringway	21-9	248	9.6	4.5	7.1	+0.4	14.2	24	-6.2	10	-	-	2.21	73	.40	28	16	10	3	0	2	0	0	0	3	4	7	0	1.67	116	
	Macclesfield	9 9	500	9.3	-	-	-	13.3	24	-5.0	10	-	-	2.22	65	.41	28	18	13	1	0	1	0	0	0	0	3	5	-	0	-	-
7b NORTH WALES																																
Flint	Rhyl	9 9	31	11.4	5.0	8.2	+0.3	16.1	24	-3.3	9	-	-	1.78	70	.55	30	15	9	0	0	2	2	0	0	1	3	5	1	2.51	138	
	Prestatyn	9 9	12	11.2	5.2	8.2	-	16.1	24	-3.3	11	-	-	1.48	53	.37	28	14	10	0	0	1	0	0	0	0	3	-	0	1.95	115	
	Hawarden Bridge	9 9	17	10.9	4.3	7.6	+0.3	16.7	19	-3.3	30	-	-	1.50	55	.59	30	12	7	0	0	0	2	0	0	5	7	-	0	-	-	
Anglesey	Valley	21-9	33	11.6	6.1	8.9	+0.2	14.0	17,19	-2.7	9	-	-	2.90	81	.85	28	15	13	0	0	4	0	0	1	0	3	7	4	2.75	141	
Denbigh	Colwyn Bay	9 9	118	11.7	5.7	8.7	+0.4	16.1	24	-0.6	10	8.3	-	1.78	61	.69	28	10	9	0	0	3	0	0	0	0	3	-	0	2.24	131	
	Alwen	9 9	1100	8.9	1.8	5.3	-	12.2	9,13,20	-7.2	10,11	-	-	3.44	-	.61	13	18	15	-	-	-	-	-	-	11	13	-	-	-	-	
	Ruthin	9 9	248	11.1	3.8	7.5	-	16.1	17	-4.4	9	-	-	1.65	-	.58	30	13	9	-	0	-	-	-	-	2	7	-	-	2.54	-	
	Loggerheads	9 9	690	9.6	2.9	6.3	-	14.4	17	-4.4	10,11	-	-	2.16	-	.84	30	17	10	2	0	1	0	0	0	0	0	8	9	1	-	-
	Wlchwyn	9 9	1267	8.4	3.3	5.9	-	12.2	17,19	-1.7	28,30	6.8	-	1.87	-	.28	17	17	10	1	1	0	0	0	0	4	7	13	0	-	-	
	Wrexham	9 9	275	10.6	3.9	7.3	-	16.1	17	-6.1	30	7.7	9.4	1.57	-	.76	30	10	7	0	0	0	0	0	0	5	5	12	0	-	-	
Caernarvon	Bardsey Island	21-9	61	11.8	8.6	10.2	-	14.3	19	4.0	30	-	-	1.89	-	.31	13,30	14	10	-	0	-	-	-	-	0	0	2	-	-	-	
	Botwnnog	9 9	112	11.7	5.9	8.8	-	15.0	17	-0.6	9	8.6	10.4	2.91	-	.44	13	14	13	0	0	1	0	0	0	0	1	10	2	2.96	-	
	Bryn Adda	9 9	275	11.3	5.9	8.6	-	15.6	9	1.1	11,30	-	-	4.43	-	.62	13	17	16	0	0	3	0	1	0	0	0	10	2	2.09	-	
	Cwm Dylli	9 9	324	11.1	5.1	8.1	-	15.6	9	-3.3	11	8.7	-	12.11	-	2.29	13	19	18	-	-	-	-	-	0	3	10	-	-	-		
	Aber	9 9	60	11.9	6.2	9.1	+0.6	15.6	24	-0.6	9	-	-	3.53	81	.40	12,30	17	14	1	0	2	0	1	0	1	0	1	7	0	1.50	119 S
	Llandudno	9 9	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Merioneth	Llyn Stwlan	9 9	1656	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Blaenau Ffestiniog	9 9	750	11.1	4.7	7.9	-	15.6	9	-1.1	29	-	-	7.58	-	1.41	22	19	17	-	0	-	-	-	-	4	2	-	-	1.51	- S	
	Corwen	9 9	473	10.2	2.4	6.3	-	13.9	13,17,19	-8.9	10	-	-	2.52	-	.41	13	17	12	0	0	0	0	0	0	0	13	13	0	-	- S	
Montgomery	Ceinws	9 9	200	10.6	4.2	7.4	-	14.4	17	-6.1	10	-	-	9.63	-	2.73	13	18	18	-	-	-	-	-	-	0	6	10	-	-	-	
	Lake Vyrnwy	9 9	995	8.6	3.4	6.0	-	12.8	17	-6.7	10	7.1	-	5.34	77	1.25	13	18	17	3	1	0	0	0	0	0	3	6	21	1	-	-
8a SOUTH WALES																																
Cardigan	Aberporth	21-9	378	10.8	6.4	8.6	+0.5	13.5	13	-1.1	9	-	-	2.37	51	.46	13	16	13	0	0	4	0	0	0	0	1	9	2	2.41	-	
	Aberystwyth	9 9	12	12.6	5.7	9.1	+0.8	14.4	7,8,9	0.0	7,9,11	-	-	1.30	-	.34	28	15	14	-	0	-	-	-	-	0	5	-	-	-	-	
	" P.B.S.*	9 9	452	11.1	5.4	8.3	+0.7	14.4	9	-0.6	11,30																					

TABLE III (continued)—SUMMARY OF OBSERVATIONS OF TEMPERATURE, RAINFALL, SUNSHINE AND WEATHER NOVEMBER, 1964

DISTRICT, COUNTY AND PLACE	Max. Terminal Hours of Observation	Height of Station above Mean Sea Level	AIR TEMPERATURE IN DEGREES CELSIUS								MEAN EARTH TEMPERATURE		RAINFALL (Terminal hour 9 G.M.T.)				WEATHER Number of days								BRIGHT SUNSHINE						
			Means of		Difference from Average	Highest Maximum and Lowest Minimum				1 ft.	4 ft.	Total Fall	Percentage of Average	Most in a day		Precip'n	Snow or Sleet	Snow lying at 9h.	Ice or snow pellets etc.	Thunder heard	Fog at 9h.	Air Frost	Glass min. below 0°C	Gale	Daily Mean	Percentage of Average					
			A	B		Maximum	Date	Minimum	Date					Amount	Date												0 in. (0.2mm. or more)	0.1 in. (1.0mm. or more)			
			ft.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	in.	%	in.											hr	%				
8b ENGLAND, S.W.—cont.																															
Devon																															
	9 9	412	11.6	2.7	7.1	-	15.0	1	-4.4	30	-	-	4.30	-	.75	13	17	12	-	-	-	-	-	-	-	-	-	-	-	-	
	21-9	298	10.9	7.7	9.3	-	13.2	16	1.2	10	-	-	3.05	-	.38	13	17	14	0	0	3	0	0	0	0	1	0	1	8	2.57	129
	21-9	87	11.4	7.5	9.5	+0.5	14.8	16	0.5	9	-	-	3.45	77	1.19	13	14	9	0	0	0	0	0	0	0	1	0	6	3	2.04	92
	9 9	119	11.7	7.3	9.5	+0.7	14.4	14,16,21	0.6	9	9.9	11.6	2.96	66	.97	13	15	9	0	0	0	0	0	0	0	2	0	7	3	2.04	91
	9 9	457																													
	21-9	20	12.0	6.5	9.3	-	14.4	13	-4.3	9	-	-	2.47	-	.57	17	14	11	0	0	1	2	1	0	0	4	4	1	2.43	-	
	9 9	25	11.8	8.0	9.9	+0.5	14.4	13	0.6	9	9.8	11.7	3.88	90	.72	15	16	13	0	0	0	0	0	0	0	0	0	4	0	2.19	116
	9 9	120	11.8	5.7	8.7	-	15.6	21	-1.1	9,30	10.2	11.7	4.04	70	1.37	13	13	11	0	0	0	0	0	0	0	3	8	2	1.33	-	
	9 9	104	11.9	7.2	9.5	-	15.6	21	0.6	29,30	-	-	3.92	-	1.11	13	15	11	-	-	-	-	-	-	-	-	-	-	-	-	
	9 9	272	11.3	5.9	8.6	+0.6	15.6	21	0.0	29,30	-	-	2.50	52	.79	13	11	10	0	0	0	0	0	0	0	2	6	0	1.97	87	
	9 9	8	11.9	-	-	-	15.0	16,21,25	-	-	-	-	2.34	50	.87	13	12	9	0	0	0	0	0	0	0	-	-	0	1.55	69	
	9 9	26	12.2	7.3	9.7	+0.9	16.1	21,25	0.6	29,30	-	11.8	2.35	55	.80	13	10	9	0	0	0	0	0	0	0	0	3	-	1.55	65	
	9 9	20	11.9	7.4	9.7	+0.8	15.0	16,17,21	1.1	29	-	-	1.55	40	.95	13	12	9	0	0	0	0	0	0	0	1	1	1.90	81		
	9 9	29	11.9	6.1	9.0	-	15.6	17,25	-1.1	29	9.2	-	1.88	48	.40	11	12	9	0	0	0	0	0	0	-	1	4	0	2.00	-	
	9 9	160																													
	9 9	195	11.6	6.2	8.9	+0.9	15.6	17	0.0	9	-	-	1.60	43	.36	11	9	8	0	-	1	0	0	0	0	-	0	2.10	89		
	21-9	106	11.7	5.9	8.8	-	15.5	19	-0.8	30	-	-	1.49	38	.32	28	12	8	0	0	0	0	0	0	1	3	11	1	2.05	-	
	9 9	25																													
Cornwall																															
	21-9	158	12.1	9.4	10.7	+0.4	15.0	2,11	5.4	28	-	-	1.85	51	.39	12	14	10	0	0	0	0	0	0	2	0	-	4	1.78	70	
	9 9	62	12.3	7.8	10.1	+0.4	14.4	15,16,19	1.1	10	-	-	3.25	66	.62	13	18	13	0	2	0	0	0	0	1	0	6	2	1.67	67	
	9 9	50	12.2	7.6	9.9	+0.4	14.4	16,19	2.2	30	-	-	3.15	67	.63	13	19	11	-	-	-	-	-	1	0	2	-	1.53	65		
	9 9	268	11.5	6.8	9.1	-	13.9	13,16	0.6	30	-	-	2.37	-	.59	13	17	10	0	0	2	0	0	3	0	-	2	1.90	-		
	9 9	250	11.6	7.3	9.5	-	14.4	16	1.1	9	9.5	10.9	2.66	59	.69	13	18	12	-	-	-	-	-	0	0	6	-	2.02	-		
	9 9	240	11.7	7.8	9.7	0.0	13.8	2,16	2.0	29	-	-	2.26	58	.49	13	19	10	0	-	0	0	0	0	-	0	-	5	1.72	-	
	9 9	167	11.9	6.9	9.4	+0.1	15.0	19,27	0.0	30	-	-	3.84	74	1.08	13	14	9	0	0	0	0	0	0	0	4	0	1.28	54		
	9 9	176	11.8	7.1	9.5	+0.5	13.9	13,16,18	-1.1	9	-	-	2.70	69	.85	13	15	10	0	-	1	0	0	-	1	-	0	2.34	100		
	21-9	337	11.3	6.8	9.1	-	13.9	16	0.0	9	-	-	2.78	-	.93	13	18	10	0	2	1	0	0	1	0	4	2	2.25	-		
	9 9	310	11.7	7.1	9.4	-	15.0	22	1.1	30	-	-	3.38	60	.95	13	17	11	0	0	0	0	0	0	0	-	-	-	-	-	
	9 9	51	12.2	7.2	9.7	+0.5	15.0	15,16,22	-1.1	9	-	-	3.00	-	.97	13	16	9	0	0	1	0	0	0	1	-	0	-	-	-	
	9 9	50	11.9	6.3	9.1	+0.3	15.0	1	-1.7	30	7.8	-	2.95	75	.53	13	16	12	-	-	-	-	-	-	1	-	-	2.45	110		
	9 9	190	11.5	5.6	8.5	+0.4	14.4	13,15	-2.8	9	-	-	3.56	74	.96	13	20	12	0	0	4	0	0	1	2	12	1	2.02	88		
9 NORTHERN IRELAND																															
Londonderry																															
	9 9	570	9.8	2.9	6.3	-	12.8	18	-3.9	10	-	-	4.28	-	.64	28	20	17	2	1	0	0	0	0	5	12	0	-	-	-	
	21-9	6	10.9	4.5	7.7	+0.6	14.5	18	-3.6	10	-	-	4.06	110	.57	28	17	17	2	0	3	0	0	2	2	3	12	0	2.51	124	
	9 9	290	9.9	3.1	6.5	-	13.3	1,19	-1.7	10	-	-	4.18	-	.55	28	20	17	3	0	0	0	0	6	5	16	0	-	-	-	
	9 9	140	10.2	3.7	6.9	-	13.3	13,18,24	-2.2	7,10	-	-	4.19	-	.47	15	19	18	1	0	2	0	0	2	2	13	0	-	-	-	
	9 9	290	10.1	3.3	6.7	-	13.3	13,18,24	-2.2	10	-	-	4.35	-	.50	27,28	20	17	2	1	0	0	0	5	4	14	0	-	-	-	
	21-9	112	10.0	3.7	6.9	+0.5	14.0	24	-2.8	10	8.4	-	3.53	84	.59	28	18	17	3	0	2	1	0	4	5	13	0	-	-	-	
	9 9	17											3.93	-	.49	28	19	14	-	-	-	-	-	-	-	-	-	2.35	-		
Antrim																															
	9 9	124	10.3	2.7	6.5	-	13.9	23,24	-2.8	7	-	-	3.20	-	.44	28	19	16	2	0	0	0	0	8	7	12	0	2.34	-		
	21-9	225	9.9	3.8	6.9	+0.3	13.4	18,24	-2.4	10	7.8	10.2	2.37	-	.35	28	18	14	3	2	1	0	0	2	6	9	0	2.55	144		
	9 9	105	10.3	3.5	6.9	-	13.9	8	-2.2	7,9,10	8.0	-	2.30	-	.32	28	21	14	2	0	0	0	0	8	13	-	-	-	-		
	21-9	959	8.3	3.9	6.1	-	13.1	18	-1.2	30	-	-	3.01	-	.42	28	19	16	3	2	0	0	0	9	3	-	1	-	-	-	
	9 9	530	9.8	3.9	6.9	-	12.8	13,18,24	-0.6	28,30	-	-	4.76	-	.71	30	18	17	2	1	3	0	1	0	3	11	0	-	-	-	
	9 9	140	10.9	4.3	7.6	-	13.9	24	-0.6	10,28	-	-	3.01	-	.52	28	17	16	2	1	0	0	0	0	1	2	-	1	-	-	
	9 9	71	11.1	4.8	7.9	-	13.9	13,24	-0.6	10	-	-	2.29	-	.43	28	14	14	0	0	1	0	0	3	1	7	0	-	-	-	

TABLE IV (continued)—SUMMARY OF OBSERVATIONS AT FIXED HOURS NOVEMBER, 1964

DISTRICT, COUNTY AND PLACE	Hour of Observation	Height of Barometer above Mean Sea Level	MEAN PRESSURE		MEAN TEMPERATURE AND HUMIDITY				CLOUD AMOUNT (OKTAS)					VISIBILITY					WIND, NUMBER OF OBSERVATIONS																									
			At Mean Sea Level	Difference from Average	Dry Bulb	Depression of Wet Bulb	Vapour Pressure	Relative Humidity	Mean Amount	NO. OF OBSERVATIONS					NUMBER OF OBSERVATIONS					FORCE (0-12)				DIRECTION																				
										0	1	2	3	4	5	6	7	8	9	0-44 yd.	45-310 yd.	320-480 yd.	490-1,000 yd.	1,000-2,100 yd.	2,200-4,300 yd.	3-8 mi.	7-12 mi.	13-24 mi.	25 mi. or over	8 or more	6 to 7	4 to 5	3 to 4	2 to 3	1 to 2	0	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
										0	1	2	3	4	5	6	7	8	9	0-44 yd.	45-310 yd.	320-480 yd.	490-1,000 yd.	1,000-2,100 yd.	2,200-4,300 yd.	3-8 mi.	7-12 mi.	13-24 mi.	25 mi. or over	8 or more	6 to 7	4 to 5	3 to 4	2 to 3	1 to 2	0	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
5 ENGLAND, S.E.	3	419	1020.0	-	6.6	0.6	9.1	91	5.6	6	2	2	4	16	0	0	1	0	0	3	3	11	10	2	0	0	1	9	19	1	4	3	4	0	1	5	10	2						
—cont.	9	419	1020.0	-	7.3	0.8	9.4	90	5.9	3	4	0	12	11	0	0	0	0	6	5	5	5	8	1	0	0	11	16	3	1	3	5	0	2	5	9	2							
Boscombe	15	419	1019.3	-	9.7	1.7	9.5	78	6.0	2	2	4	14	8	0	0	0	0	0	2	9	11	6	2	0	0	1	16	13	0	2	2	7	0	1	5	11	2						
Down	21	419	1020.1	-	7.1	0.9	9.3	90	4.1	10	3	1	8	7	1	0	2	1	1	2	9	11	3	0	0	0	0	12	15	3	3	3	3	0	3	6	9	0						
Upavon	9	582	1019.5	-	6.8	0.4	9.6	95	5.8	1	5	3	12	7	2	0	1	0	5	1	0	9	7	5	2	0	2	11	14	3	1	5	5	0	1	5	9	1						
—cont.	15	582	1018.8	-	9.1	1.1	10.1	86	5.9	2	1	6	12	9	0	0	0	0	0	5	8	12	3	2	0	0	1	12	15	2	2	4	3	0	1	4	11	3						
—cont.	21	587	1019.6	-	6.8	0.4	9.6	95	5.9	12	0	4	4	9	1	0	1	1	0	3	1	11	10	3	0	0	1	9	16	4	3	5	2	0	5	9	2							
7a ENGLAND, N.W.	3	92	1016.9	-	5.8	0.7	8.6	90	6.2	3	3	1	5	13	5	1	3	0	1	0	3	11	9	2	0	0	0	3	6	13	8	0	1	3	3	0	10	5	0					
—cont.	9	92	1017.4	-	5.7	0.9	8.2	86	5.5	2	4	4	13	7	0	0	1	1	0	2	3	4	13	5	1	0	0	8	16	6	1	2	2	3	1	5	10	0						
Cumberland Carlisle	15	92	1016.4	-	8.7	1.7	8.8	77	6.0	1	2	5	12	10	0	0	0	0	0	1	4	4	16	5	0	0	2	11	13	4	2	2	4	1	2	6	9	0						
—cont.	21	92	1016.8	-	6.3	0.8	8.6	87	5.6	4	1	7	12	2	0	1	1	1	3	2	9	9	4	0	0	0	0	9	13	8	1	0	3	1	2	7	8	0						
Lancashire Squires Gate	3	35	1017.4	-	6.4	0.6	9.1	91	5.5	4	3	3	7	11	2	1	0	2	3	1	3	6	6	7	1	0	4	9	17	0	1	4	6	2	2	9	6	0						
—cont.	9	35	1017.9	-	6.8	0.7	9.1	91	5.9	1	2	7	11	8	1	1	0	3	2	1	3	11	6	3	0	0	3	12	14	1	0	3	6	4	2	10	2							
—cont.	15	35	1017.2	-	9.0	1.3	9.7	84	5.2	3	5	5	9	8	0	0	0	0	5	2	15	6	2	0	0	0	2	15	11	2	1	4	1	4	2	4	10	2						
—cont.	21	35	1017.5	-	6.8	0.7	9.1	90	5.4	5	2	4	7	12	0	1	0	1	2	7	3	7	7	2	0	0	3	11	14	2	1	3	4	3	2	5	9	1						
Speke	9	85	1018.0	-	7.0	0.9	8.9	88	5.8	2	1	8	7	8	4	2	2	0	1	7	1	2	6	7	2	0	2	6	21	1	3	3	6	6	3	5	0							
—cont.	15	85	1018.4	-	7.2	0.8	9.1	88	6.9	0	1	2	18	6	3	1	1	2	0	4	3	9	4	6	0	0	0	13	14	3	3	1	3	7	1	2	9	1						
—cont.	21	85	1018.1	-	7.7	1.2	9.0	84	6.0	2	3	3	13	7	2	2	0	0	1	4	7	6	4	5	1	0	1	9	17	3	4	2	1	4	5	6	1							
Cheshire Ringway	3	251	1018.0	-	5.9	1.0	8.2	86	5.2	4	4	5	9	4	0	3	1	2	4	2	6	7	4	1	0	0	0	8	15	7	3	1	1	3	9	6	0	0						
—cont.	9	251	1018.2	-	6.3	0.9	8.5	87	6.2	1	3	5	7	12	2	0	3	0	3	9	10	5	0	0	0	0	0	8	17	5	3	1	2	4	3	7	5	0						
—cont.	15	251	1017.5	-	8.7	1.8	8.7	76	5.7	2	4	4	9	10	1	1	0	0	1	3	7	10	7	1	0	0	0	12	15	3	2	3	2	0	6	4	7	3						
—cont.	21	251	1018.1	-	6.6	1.1	8.4	84	6.2	3	1	2	10	11	3	2	1	0	0	5	8	10	4	0	0	0	0	8	15	7	1	2	3	0	10	2	4	1						
7b NORTH WALES	3	36	1017.9	-	7.9	0.8	9.8	89	5.2	6	3	1	8	12	0	0	0	0	1	0	2	4	18	5	0	1	9	9	9	2	1	6	2	1	5	8	4	1						
—cont.	9	36	1018.3	+7.2	8.4	0.9	9.9	87	5.9	2	2	6	14	7	0	0	0	0	2	2	5	6	12	3	1	6	12	9	2	3	4	2	0	6	6	7	0							
Anglesey Valley	15	36	1017.9	-	10.5	1.4	10.4	81	5.6	2	1	7	14	5	0	0	0	0	0	0	4	13	7	6	0	0	8	14	6	2	2	6	1	0	5	9	0							
—cont.	21	36	1018.2	-	8.3	1.0	9.7	87	5.0	7	2	3	10	8	0	0	0	0	0	0	1	8	8	11	2	2	7	6	14	1	2	7	0	1	6	6	6	1						
8a SOUTH WALES	3	382	1018.7	-	8.2	1.1	9.5	85	5.1	7	2	3	3	15	0	0	0	0	1	4	6	12	5	2	1	2	14	10	3	0	1	3	3	8	6	4	2							
—cont.	9	382	1019.1	-	8.4	1.1	9.6	84	5.4	4	3	4	8	11	0	0	0	0	0	0	7	14	6	3	0	0	3	18	8	1	1	4	4	1	5	8	4	2						
Cardigan Aberporth	15	382	1018.4	-	10.1	1.5	10.1	80	5.9	3	0	6	13	8	0	0	1	0	0	1	11	8	6	3	0	0	5	13	11	1	2	2	6	0	1	7	10	1						
—cont.	21	382	1019.1	-	8.1	1.1	9.3	84	4.9	7	4	1	5	13	0	0	0	0	0	1	2	8	10	7	2	0	3	13	12	0	0	2	3	2	7	8	4	2						
Glamorgan Mumbles Head	3	123	1019.5	-	9.1	1.0	10.1	86	5.2	7	3	1	3	16	0	0	0	0	0	0	14	13	3	0	0	0	5	13	12	0	1	7	5	0	6	10	1							
—cont.	9	123	1019.5	-	9.1	1.1	10.1	86	5.7	1	5	5	5	14	0	0	0	0	2	2	18	5	3	0	0	0	8	15	6	1	3	4	5	1	0	6	10	1						
—cont.	15	123	1018.4	-	10.6	1.5	10.6	82	5.9	3	0	7	7	12	1	0	0	2	0	1	16	8	2	0	1	9	16	3	1	0	2	7	0	3	4	12	1							
—cont.	21	123	1019.4	-	9.4	1.2	10.1	83	4.8	6	5	3	3	13	0	0	0	0	1	0	12	10	6	1	1	2	16	10	1	4	6	2	0	0	6	10	1							
Rhoose	3	225	1019.6	-	8.0	0.6	10.0	91	6.0	5	0	3	5	16	1	0	0	1	2	4	6	10	6	1	0	1	16	11	2	1	4	6	0	0	7	9	1							
—cont.	9	225	1019.6	-	8.2	0.6	10.1	91	6.1	0	5	2	13	10	0	0	0	1	3	7	5	8	5	1	0	1	17	11	1	1	5	5	1	0	3	11	3							
—cont.	15	225	1018.9	-	9.8	1.0	10.6	86	5.8	3	1	6	10	10	0	0	0	1	3	3	9	10	3	1	0	4	13	13	0	1	3	6	1	2	2	14	1							
—cont.	21	225	1019.7	-	8.0	0.6	10.0	90	4.7	6	4	5	6	9	0	0	0	0	2	5	8	7	6	2	0	2	15	12	1	0														

Monthly Weather Report

OF THE METEOROLOGICAL OFFICE

Summary of observations compiled from returns of official stations and voluntary observers



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December 1964 — *Rather cold, but some mild stormy periods.*

Weather during December was predominantly cyclonic in character except from the 17th to the 23rd when pressure was high over the north of the British Isles.

The month began dull and rather cold with sleet in some eastern districts as a depression over eastern England moved southwards into France. Widespread frost and some fog patches early on the 2nd, in a ridge of high pressure behind the depression, were followed by rain in a frontal trough which reached the English Channel coast before dawn the next day. Northerly winds behind the trough brought brighter weather with scattered wintry showers to all areas on the 3rd and 4th.

A mild period began on the 5th. An anticyclone moved from our South-West Approaches towards the Bay of Biscay and a mild westerly airstream on its northern side brought rain, preceded by snow in a few places, to all parts of the British Isles. The anticyclone moved away south-eastwards on the 6th and the next two days were stormy as deepening depressions moved rapidly north-eastwards, one crossing Ireland and Scotland on the 7th and another skirting north-west Scotland on the night of the 8th/9th. Associated fronts brought heavy and prolonged rain to many western and northern areas which caused widespread flooding in Wales and the Lake District. After a sunny day in most parts except the south-east on the 10th, and some overnight fog, fronts associated with a vigorous depression to the north of Scotland brought rain to western districts on the night of the 11th/12th; the rain became heavy and prolonged in many parts of the west and north as a deepening secondary depression moved rapidly across Ireland and the extreme north of England. In North Wales the rain, which followed a period of earlier flooding, was more or less continuous for 36 hours and resulted in the worst floods known in the district.

The relatively mild weather came to an abrupt end on the 14th as a small depression moving eastwards across northern France brought easterly winds and wintry showers to southern England. Fog formed widely that night, and freezing fog persisted in many areas for about three days. An anticyclone from the Atlantic became centred over the country on the 18th and during the next four or five days a belt of high pressure built up from the west of Scotland to Southern Scandinavia. Winds remained mainly between east and north-east and weather generally dry and cold with sunny periods.

On the 24th an airstream of arctic origin spread southwards over the British Isles bringing scattered snow showers to northern districts. Wintry showers continued in the north and east on Christmas Day, and on the 26th a belt of snow moved eastwards across the country reaching the London area during the evening. A depression and associated troughs moving southwards over the country brought snow to most places on the 27th, but the 28th was mainly dry with light winds and good sunny periods.

Rain from the Atlantic, preceded locally by snow, brought a rapid rise of temperature on the 29th. The rain continued throughout the night and for much of the next day with strong to gale force winds, but the last day of the month was generally sunny with scattered showers.

Pressure and Wind — Pressure was mainly below the 1921-50 average, the departure at 9 hr. ranging from -3.1 mb at Lerwick to 0.0 mb at Stornoway. Surface winds, rather variable at first, were northerly on the 3rd-4th, south-westerly on the 5th-15th becoming mainly variable again until the 28th apart from easterlies on the 19th-23rd. Winds were south-westerly during the last three days of the month. They reached gale force on 20 days in Scotland and on the 2nd-3rd, 6th-13th, 21st, 27th, 29th-31st (15 days) in England and Wales. Gales were widespread and severe at times on the 7th/8th and 12th/13th. On the 7th gusts of 94 kt and 77 kt were recorded at Great Dun Fell (2813 ft.) and Ronaldsway respectively.

Temperature — Temperature was generally below the average except on the 5th-13th and during the last three days of the month. Day temperatures were 5°-7°C above the average during the former period, and night frosts were severe around mid-month and during the fourth week.

Extremes included: (England and Wales) 15.0°C at Santon Downham and Tavistock on the 8th and at Harwarden Bridge on the 11th, -15.5°C at Caldecott on the 29th; (Scotland) 13.3°C at Blackford Hill, Edinburgh and at Dunbar on the 11th, -15.6°C at Strachan on the 26th; (Northern Ireland) 13.3°C at Newry Abbey on the 11th, -5.6°C at Aldergrove on the 25th and Newry Abbey on 28th.

Precipitation — In Scotland the eastern side of the country had less than average rainfall for the fourth successive month, the western side of the mainland and the Islands to the west and north reported more than average amounts. Most of southern, central and eastern England had less than average except around Gorleston and north-east England east of the Pennines. It was more than 175 per cent of the average west of the Pennines and over north-west Wales—twice the average was recorded in parts of Merionethshire and adjacent counties.

Thunder was heard in Scotland on 11 days and in England and Wales on the 7th-9th and 30th.

Snow or sleet fell every day except the 20th at one place or another in Scotland and on the 1st-6th, 13th, 21st and 24th-31st (16 days) in England and Wales. Ground was snow-covered at 9 hr. on 20 days in Scotland and on the 1st, 4th and 25th-29th (and also on the 30th and 31st at stations above 1,000 ft.) in England and Wales. It lay 2-4 in deep in parts of the Midlands, northern and eastern England on the 27th and 28th.

Sunshine was mostly above average except in the extreme east. Amounts ranged from 62 per cent of the average at Margate to 202 and 206 per cent at Sheffield and Ringway respectively.

Fog — Fog was observed at 9 hr. at one place or another on 29 days in Scotland and on the 1st, 2nd, 5th-7th, 10th-20th and 24th-30th (23 days) in England and Wales. It was widespread on the 15th-18th.

Miscellaneous Phenomena — The aurora was seen in Scotland on 2 nights, the 9th and 10th.

TABLE I—DISTRICT VALUES— DECEMBER,

1964

(1908, revised 1928, 1941, 1956 and 1964)

DISTRICTS	AIR TEMPERATURE					EARTH TEMP.		RAIN DAYS	RAIN-FALL	SUNSHINE
	Highest Max.	Lowest Min.	Max.	Min.	Mean	Mean 1 ft.	Mean 4 ft.			
	Difference from Average					% of Average				
0 SCOTLAND, N.	12.8	-13.9	-1.3	-1.7	-1.5	-	-	+3	135	104
1 SCOTLAND, E.	13.3	-15.6	-1.1	-1.5	-1.3	-	-	+2	89	105
2 ENGLAND, N.E.	14.4	-14.4	-1.0	-2.0	-1.5	-0.3	+0.5	+1	84	105
3 ENGLAND, E.	15.0	-13.6	-0.7	-1.4	-1.0	-0.1	0.0	0	109	88
4 MIDLANDS	14.5	-15.5	-1.0	-1.8	-1.4	-0.3	+0.4	+1	109	128
5 ENGLAND, S.E.	14.5	-11.7	-0.6	-1.1	-0.9	-0.3	+0.1	+1	88	106
6 SCOTLAND, W.	12.8	-14.6	-0.6	-1.6	-1.1	-0.3	+0.3	+1	121	125

DISTRICTS	AIR TEMPERATURE					EARTH TEMP.		RAIN DAYS	RAIN-FALL	SUNSHINE
	Highest Max.	Lowest Min.	Max.	Min.	Mean	Mean 1 ft.	Mean 4 ft.			
	Difference from Average					% of Average				
7 ENGLAND, N.W. and N. Wales	15.0	-14.4	-0.8	-1.5	-1.2	-0.1	+0.6	-1	158	149
8 ENGLAND, S.W. and S. Wales	15.0	-13.9	-1.0	-1.8	-1.4	0.0	+0.1	0	112	110
N. IRELAND	13.3	-5.6	-0.7	-1.5	-1.1	-	-	+1	107	102
SCOTLAND	13.3	-15.6	-1.0	-1.6	-1.3	-	-	+2	114	111
ENG. and WALES	15.0	-15.5	-0.9	-1.6	-1.2	-	-	0	111	114

FH2A

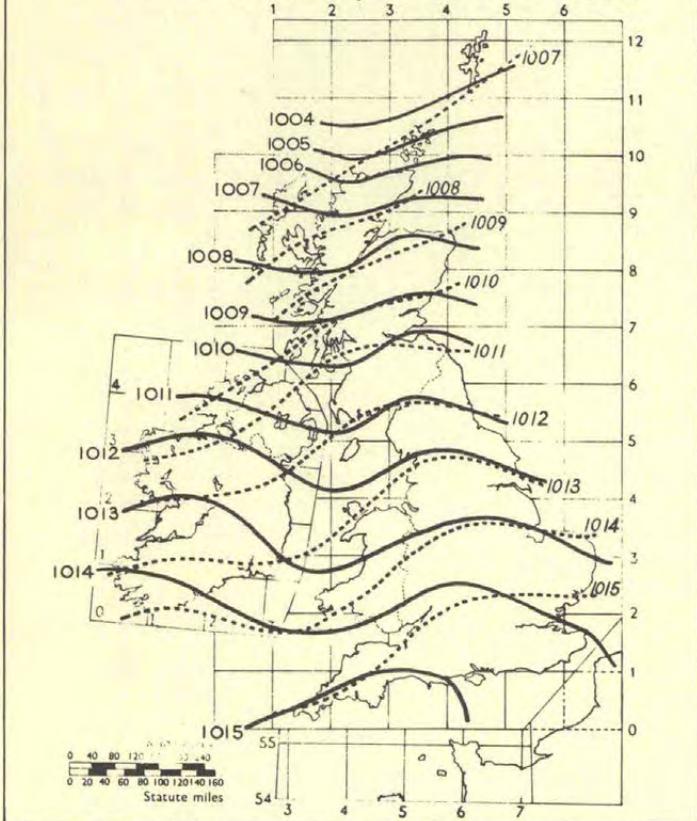
TABLE II—SUMMARY OF AUTOGRAPHIC RECORDS OF WIND— DECEMBER, 1964

(1914)

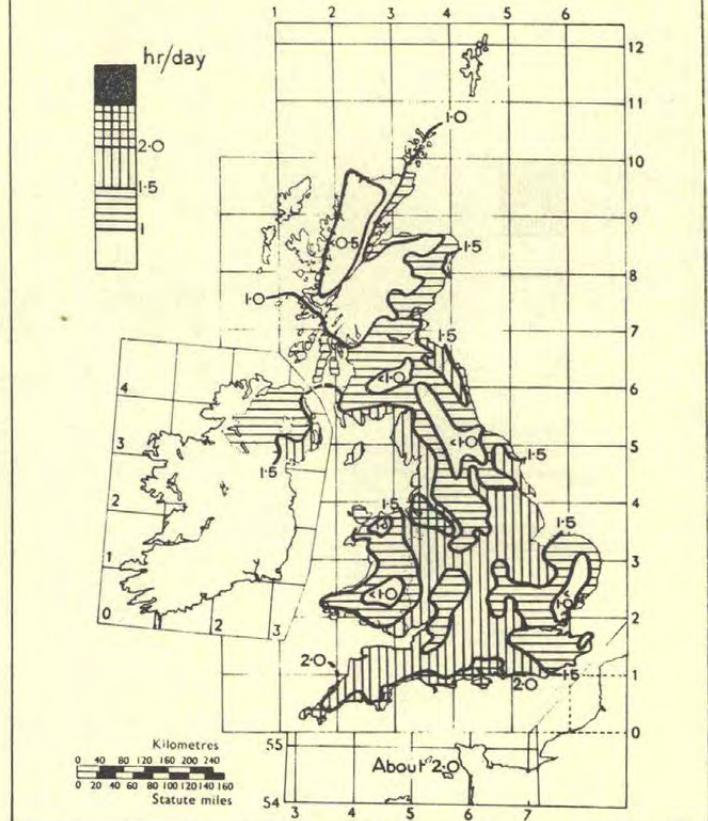
DISTRICT, COUNTY AND PLACE	Height of Vane			Distribution of Mean Hourly Values of Wind Speed										Highest Velocities							
	Above Mean Sea Level	Above Ground	Effective Height	34 knots or more		22 to 33 knots		11 to 21 knots	4 to 10 knots	Less than 4 knots	No. Record	Mean Hourly Wind Speed	Highest Hourly Wind			Highest Gust					
				Dates of Occurrence	Duration	No. of days	Duration	Duration	Duration	Duration	Duration		Veer from N	Speed	Hour ended at	Speed	Day and Time				
	ft.	ft.	ft.		hr.		hr.	hr.	hr.	hr.	hr.	knots	°	knots	day hr	knots	day	h:m			
SCOTLAND																					
6	Zetland	Lerwick Observatory	304	33	33	9,11,12	28	20	109	366	172	69	0	14.7	240	47	12	11	67	12	0950
	Orkney	Kirkwall	134	50	33	3,9,11,12	17	18	139	357	196	35	0	15.3	260	41	9	05	65	12	1040
	Cathness	Dounreay	110	39	30	2,11,12,31	10	18	125	395	173	4	37	15.4	310	39	2	14	74	2	1305
	Sutherland	Shin	78	33	33																
	Ross & Cromarty	Stornoway (Coastguard)	120	40	36	8,9,11,15,31	29	17	105	321	214	75	0	14.4	190	49	11	19	68	31	0220
		Duirinish	125	65	55	8,9,11	9	14	100	254	293	88	0	11.9	210	42	8	23	70	8	2225
	Inverness	Benbecula	69	51	35	2,8,11	8	16	124	304	248	60	0	13.5	310	36	2	20	63	2	1925
1	Moray	Lossiemouth	101	30	30		0	9	35	322	200	187	0	9.6	180	31	12	01	50	12	0040
	Aberdeen	Dyce	827	62	50		0	5	16	212	386	90	40	9.0	200	31	8	23	57	8	2225
	Angus	Auchterhouse	125	131	124	2,3,6-9,11 / /	72	25	275	271	105	21	0	20.5	230	45	31	03	59	31	0200
		Bell Rock Lighthouse	1005	56	57	x															
	Perth	Rannoch	78	40	40		0	10	47	237	426	34	0	10.0	210	32	12	01	54	31	0125
	Fife	Leuchars	137	40	33	11,12	2	9	51	246	291	154	0	9.8	190	41	12	01	73	11	2350
	Midlothian	Turnhouse	496	50	34	6-9,11,12,16 / /	43	19	145	279	198	79	0	15.2	180	60	12	01	88	12	0120
6a	Argyll	Tiree	89	60	47	2,3,8,11 x x	46	24	223	305	143	27	0	18.2	210	45	8	22	72	8	2145
	Bute	Millport	50	34	34	/															
	Renfrew	Paisley	188	81	31		0	8	32	238	279	195	0	8.6	230	31	8	22	48	11	2320
		Renfrew	71	41	39																
	Lanark	Lowther Hill	2412	43	33	2,3,5-9,11 / /	60	24	196	358	112	15	3	19.4	310	58	8	02	78	8	0120
	Ayr	Prestwick Airport	68	33	33		0	8	46	252	323	123	0	9.8	290	29	8	01	56	8	0020
	Dumfries	Eskdalemuir Observatory	825	50	35	7	3	10	46	159	310	226	0	8.3	200	38	7	24	69	8	0155
	Wigtown	West Freugh	81	38	33	7,8,11,12	11	10	77	225	332	99	0	11.0	300	40	8	01	64	7	2345
ENGLAND and WALES																					
6b	Isle of Man	Ronaldsway	119	64	39	3,7,8,11,12 /	55	19	174	316	145	54	0	17.3	250	56	7	24	77	7	2215
		Point of Ayre	64	33	33	2,7,8,11,12	16	15	136	384	189	19	0	15.5	260	42	8	01	67	7	2350
2	Durham	Durham	389	53	33	8	1	9	41	310	292	100	0	10.8	250	37	8	03	75	8	0155
		South Shields	73	57	44		0	7	23	299	358	64	0	10.1	240	30	8	03	59	8	0045
	Lincoln	Cranwell	268	47	47		0	12	62	255	266	161	0	10.3	220	30	13	04	49	13	0655
3	Norfolk	Gorleston	54	49	49	7,8	3	16	181	361	167	32	0	16.0	190	35	8	03	48	8	0230
	Suffolk	Mildenhall	98	83	60		0	5	25	231	256	232	0	8.1	220	28	13	08	51	8	0140
	Bedford	Bedford	377	42	30		0	9	55	328	269	92	0	11.2	200	30	9	02	50	9	0200
		Cardington	276	133	133	7,9,13,30	15	12	139	300	182	106	2	13.8	180	37	7	24	60	7	2325
	Hertford	Garston	307	50	33		0	1	1	184	409	150	0	7.7	240	22	9	06	49	8	0135
		Rothamsted	461	41	33		0	1	5	180	356	179	24	7.4	210	22	9	05	45	9	0325
	Essex	Stansted	351	31	31		0	9	48	352	272	72	0	11.2	210	27	9	01	46	9	0215
		Coryton	66	57	48																
		Shoeburyness	116	106	91	1,7-9,13,27 /	50	17	168	331	166	29	0	16.9	210	41	8	02	60	8	0205
4	Yorks, W.R.	Sheffield	533	53	35		0	1	1	198	242	303	0	6.2	210	22	8	22	50	8	2300
	Warwick	Egbaston	643	118	73		0	3	8	238	429	69	0	8.8	190	23	7	20	47	3	0405
		Elmdon	343	31	31		0	8	46	303	246	149	0	10.0	310	30	3	04	59	3	0315
	Buckingham	Amersham	500	50	50	/															
	Stafford	Keele	706	50	33		0	4	10	221	281	232	0	7.5	210	28	7	21	53	3	0315
	Gloucester	Avonmouth	92	61	33	7,9	3	9	72	316	204	130	19	11.7	200	35	7	17	51	7	1710
5	London	Kingsway	208	143	41		0	1	1	240	399	104	0	8.6	220	22	30	14	57	8	0220
	Middlesex	London(Heathrow)Airport	115	33	33		0	9	52	294	313	85	0	10.8	200	32	7	22	49	7	2150
		Hampton	139	101	100		0	6	44	282	243	175	0	9.5	220	30	9	01	54	7	2315
	Surrey	Kew Observatory	92	75	50		0	5	31	293	326	94	0	10.1	230	27	9	01	52	9	0020
		Gatwick	232	38	33		0	7	57	256	297	134	0	10.1	220	32	13	08	55	13	0750
	Kent	Isle of Grain	48	40	33		0	9	37	297	258	152	0	10.0	210	26	13	11	50	13	0720
		Dover	68	38	62		0	15	117	348	213	66	0	13.7	210	29	7	21	56	9	0035
	Sussex	Thorney Island	75	65	42		0	7	29	261	264	190	0	9.0	210	29	8	01	46	8	0020
	Hampshire	Hurn	86	53	46		0	8	47	298	289	110	0	10.5	220	28	13	07	50	13	0715
		Calshot	50	41	33		0	10	89	405	236	14	0	13.5	190	32	7	24	43	13	0440
		S. Farnborough	316	69	35		0	7	42	289	257	156	0	10.0	220	27	8	02	48	30	1240
	Berkshire	Abingdon	295	40	40		0	7	39	295	221	189	0	9.4	210	27	30	12	43	9	0330
	Wiltshire	Larkhill	451	51	36		0	8	49	302	239	154	0	10.3	240	26	8	01	53	8	0025
		Boscombe Down	425	55	55	13	1	9	99	329	249	66	0	12.4	230	34	13	05	51	8	0035
		Porton	406	44	44		0	8	62	188	248	246	0	8.7	210	32	8	24	53	30	1140
7a	Cumberland	Carlisle	137	42	30	7	2	10	66	172	225	279	0	8.5	220	37	7	24	60	8	0135
		Sellafield	83	39	35	7,8	4	11	80	233	290	84	53	11.2	260	41	8	01	63	8	0020
		Spadadam	959	51	50	7,8	2	10	48	259	339	96	0	10.5	170	35	8	01	65	8	0140
	Westmorland	Great Dun Fell	2815	33	33	2-4,6-9,11,12 /	88	23	184	313	126	31	2	19.7	230	68	7	24	94	7	2330
		Moor House	1960	50	45	2,6-8,11,12,29	28	19	185	308	144	79	0	15.9	210	41	7	24	65	7	2325
	Lancashire	Squires Gate	88	55	35	2,7,8,13,30	9	14	141	291	238	65	0	14.0	250	44	8	01	65	8	0010
		Southport	59	41	33	8	1	8	55	208	192	262	26	8.8	260	35	8	01	55	3	0230
		Fleetwood	112	50	31		0	10	32	285	265										

MEAN PRESSURE AT 9 G.M.T.

The dotted lines show the normal distribution of pressure in millibars based on 30 years observations 1921-50.

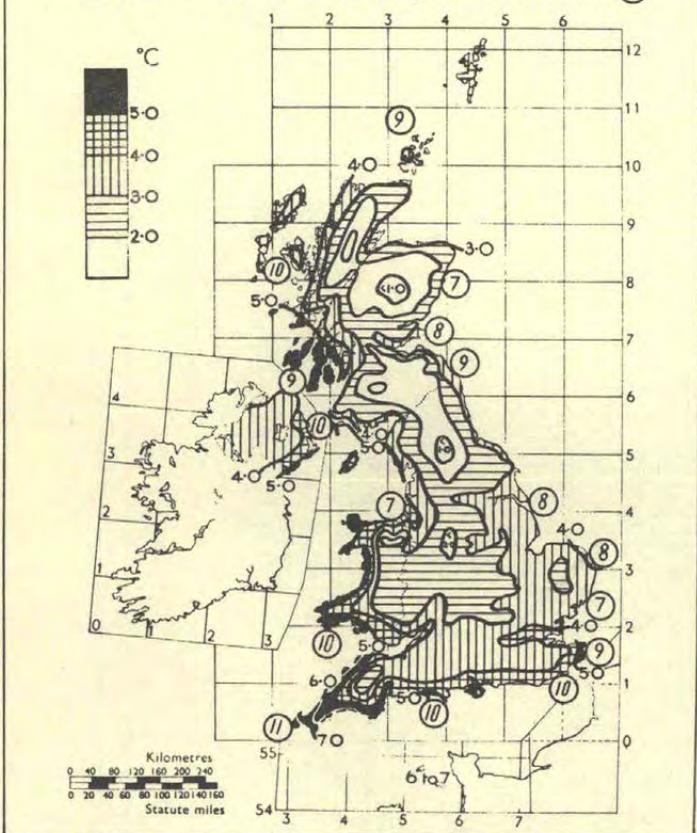


BRIGHT SUNSHINE



MEAN AIR TEMPERATURE

Reduced to sea level by a correction of 1°C. for 500 ft. Sea temperatures are shown by figures in circles thus (10)



ANOMALY OF MEAN 1 ft. EARTH TEMPERATURE

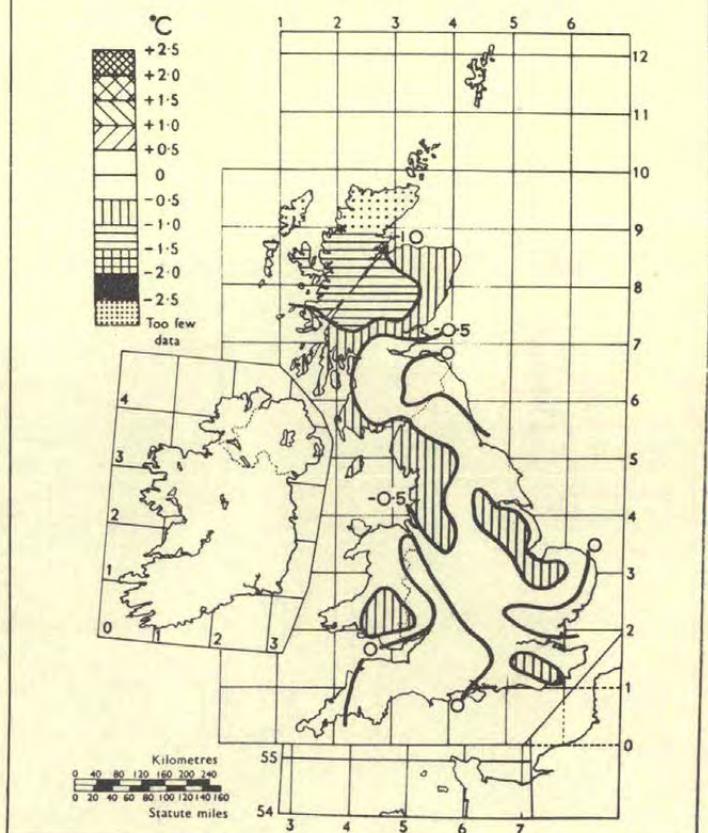


TABLE III (continued)—SUMMARY OF OBSERVATIONS OF TEMPERATURE, RAINFALL, SUNSHINE AND WEATHER DECEMBER, 1964

DISTRICT, COUNTY AND PLACE	Terminal Hours of Observation	Height of Station above Mean Sea Level	AIR TEMPERATURE IN DEGREES CELSIUS								MEAN EARTH TEMPERATURE		RAINFALL (Terminal hour 9 G.M.T.)				WEATHER										BRIGHT SUNSHINE					
			Means of				Highest Maximum and Lowest Minimum				1 ft.	4 ft.	Total Fall	Percentage of Average	Most in a Day	Precip'n		Number of days										Daily Mean	Percentage of Average			
			A. Max.	B. Min.	Mean of A and B	Difference from Average	Maximum	Date	Minimum	Date						0.1 in. (0.2mm.) or more	0.01 in. (0.1mm.) or more	Snow or Sleet	Snow lying at 9h.	Hail	Ice or snow pellets etc.	Thunder heard	Fog at 9h.	Air Frost †	Grass min. below 0° C.	Gale						
			°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	in.	%	in.	Date											hr	%				
1 SCOTLAND, E.—cont.																																
Midlothian	Balerno ...	9 9	700	4.8	-1.2	1.8	-	10.6	8,11	-8.9	28	-	-	3.27	-	.60	11	20	16	-	-	-	-	-	-	5	19	21	-	-	-	
	Turnhouse ...	21-9	114	5.7	0.7	3.2	-1.0	12.5	11	-8.2	28	-	-	2.49	123	.50	7	18	13	8	2	3	0	0	0	0	14	20	3	1.25	-	
	Edinburgh—E. Craigs	9 9	200	5.9	-0.1	2.9	-	12.2	8,11	-6.7	26,28	-	-	2.39	-	.48	7	16	12	4	4	0	2	0	0	0	15	22	0	1.32	- S	
	Davidson's Mains	9 9	200	5.8	0.1	2.9	-1.4	12.2	8,11	-6.7	28	3.2	-	2.53	-	.50	7	19	13	4	4	0	0	0	0	1	15	21	3	1.32	- S	
	Penicuik ...	9 9	620	4.7	-1.2	1.7	-	11.1	11	-9.4	28	2.8	-	4.04	-	.66	7	20	16	5	4	0	0	0	0	1	15	23	4	1.02	-	
	Bush House ...	9 9	605	5.2	-0.9	2.1	-	11.7	11	-9.4	28	3.0	5.5	3.99	-	.66	7	22	17	4	4	0	0	0	0	1	19	23	0	1.31	-	
	Edinburgh—																															
	Blackford Hill ¶	9 9	441	5.7	0.7	3.2	-1.4	13.3	11	-5.6	28	-	-	2.37	112	.45	7	17	14	4	2	1	0	0	0	10	22	11	1.35	96		
	Liberton ...	9 9	200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Royal Bot. Gdns.	9 9	74	6.2	-0.9	2.7	-1.6	12.8	11	-7.2	28	3.3	-	2.31	-	.49	7	14	14	4	3	2	0	0	0	2	15	26	2	1.36	132	
E. Lothian	Haddington ...	9 9	162	5.9	-0.3	2.8	-	12.8	11	-7.8	26	-	-	2.05	-	.34	7	18	13	4	0	0	0	0	0	1	14	22	3	1.45	- S	
	North Berwick ...	9 9	152	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Dunbar ...	9 9	75	6.8	1.6	4.2	-0.7	13.3	11	-4.4	26	-	-	1.42	-	.27	7,12	18	9	2	0	0	0	0	0	0	6	17	0	1.79	117	
Berwick	Mertoun ...	9 9	225	5.5	-1.5	2.0	-	11.7	11	-11.7	28	-	-	2.55	-	.59	7	23	12	2	-	0	0	0	0	-	17	27	0	1.61	-	
	Lauder ...	9 9	600	4.7	-2.4	1.1	-	11.7	11	-15.0	28	-	-	2.78	-	.58	7	23	16	6	5	0	0	0	0	0	20	28	2	1.55	-	
	Marchmont ¶	9 9	498	4.9	-0.8	2.1	-1.5	10.6	6,8,11	-8.9	28	-	-	2.09	89	.46	7	19	14	3	5	0	0	0	0	0	0	16	-	0	1.34	116 S
	Whitcheater ...	9 9	838	4.4	-1.7	1.3	-	10.6	6,11	-8.3	26	-	-	2.52	-	.41	7	22	18	8	7	0	0	0	0	-	19	-	1	-	-	
	St. Abb's Head ...	9 9	245	5.8	2.2	4.0	-	12.1	12	-5.2	26	-	-	-	-	-	-	-	-	-	5	0	0	0	0	0	7	9	6	-	-	
Feesbles	Stanhope Farm ...	9 9	741	5.2	-1.3	1.9	-	11.7	11	-11.1	28	-	-	6.38	-	1.17	7	22	18	6	4	0	0	0	0	0	1	17	24	1	-	-
	Blyth Bridge ...	9 9	830	4.9	-1.6	1.7	-	11.1	11	-9.4	28,29	-	-	4.63	-	.81	7	24	19	12	6	0	0	0	0	0	1	17	27	1	1.08	-
	West Linton ...	9 9	800	5.1	-1.6	1.7	-	11.1	11	-13.3	28	2.3	5.3	4.47	-	.73	7	22	17	7	5	0	0	0	0	1	17	22	0	-	-	
	Glentress ...	9 9	580	5.3	-3.1	1.1	-	12.2	11	-14.4	28	-	-	2.95	-	(.60)	7	15	15	7	2	0	0	0	0	4	23	-	0	-	-	
Selkirk	Bowhill ...	9 9	600	4.9	-1.5	1.7	-	10.6	11,12	-11.7	28	-	-	4.17	-	.97	7	21	17	9	4	0	1	3	0	17	-	3	-	-		
Roxburgh	Wauchope ...	9 9	560	4.5	-2.0	1.3	-	10.6	7,8,11	-12.8	28	-	-	5.36	-	.97	8	21	15	10	6	1	0	1	0	20	-	2	-	-		
	Sourhope ...	9 9	900	4.7	-1.2	1.7	-	11.1	11	-10.6	26	-	-	2.73	-	.59	8	18	12	-	4	-	-	-	1	15	24	-	1.46	-		
6a SCOTLAND, W.																																
Argyll	Tiree ... ¶	21-9	29	7.2	3.6	5.4	-1.0	11.7	8	-1.8	18	-	-	5.60	120	.61	11	27	23	6	1	0	17	3	1	6	12	7	1.11	118		
	Rhuvaal ...	21-9	65	7.3	3.6	5.5	-	11.7	11	-0.5	25,26	-	-	8.00	-	1.09	29	26	23	8	0	9	0	2	0	2	11	3	-	-	-	
	Colonsay ...	9 9	87	7.6	2.3	4.9	-1.0	11.1	8,11	-1.7	2,3,26	-	-	7.15	126	.78	7	27	25	11	-	10	0	2	2	5	-	6	-	-		
	Tobermory ...	9 9	270	6.5	1.4	3.9	-	11.7	8	-3.3	26	-	-	10.12	-	1.30	11	24	24	-	-	-	-	-	-	6	18	-	-	-		
	Craighouse ...	9 9	10	7.8	2.9	5.3	-	11.7	8,11	-1.1	26	-	-	7.60	-	1.24	11	24	22	-	0	-	-	-	0	2	7	-	-	-		
	Campbeltown ...	9 9	10	8.6	2.7	5.7	-	11.7	6,7	-3.3	26	-	-	5.34	-	1.04	11	21	19	3	0	0	0	0	11	5	-	0	1.39	-		
	Achaglachgach ...	9 9	40	6.8	0.8	3.8	-	11.1	8,11	-5.0	26	-	-	7.83	-	.86	11	24	23	7	-	8	0	0	0	0	13	30	0	-	-	
	Oban ...	9 9	229	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Lephinmore ...	9 9	30	6.6	1.4	4.0	-	11.7	8	-4.4	26	-	-	8.43	-	1.10	29	22	20	7	2	3	0	0	0	8	21	0	86	- S		
	Glenbranter ...	9 9	120	5.7	-0.7	2.5	-1.6	11.1	8,11	-8.3	26	-	-	12.26	117	1.77	11	22	21	-	5	-	-	-	1	19	26	-	-	-		
	Benmore																															
	Forestry Sch.	9 9	46	6.3	-0.3	3.0	-1.7	12.2	8,11	-6.7	26	3.4	6.0	10.90	106	2.05	11	21	19	3	4	0	0	0	3	20	22	0	-	-		
	Younger Bot. Gdns.	9 9	40	6.4	0.2	3.3	-	12.8	11	-5.6	26	-	-	10.28	-	2.02	11	20	20	7	5	0	0	0	2	14	22	0	-	-		
Bute	Rothsay ¶	9 9	150	7.1	1.9	4.5	-0.8	12.8	8	-3.9	26	4.2	6.3	5.18	87	.66	11	21	19	3	0	1	1	0	0	4	12	0	-	-		
	Millport ...	9 9	16	7.7	3.0	5.3	-	12.2	11	-2.2	26	-	-	5.34	111	.91	11	23	18	6	0	0	0	0	0	3	2	-	-	-		
Dunbarton	Helensburgh ...	9 9	293	5.7	0.3	3.0	-1.2	10.6	7,8,11	-6.1	28	-	-	5.99	97	1.00	11	23	20	3	4	0	0	0	1	9	-	0	1.28	168		
	Cumbernauld ...	9 9	310	4.9	-1.2	1.9	-	11.1	8,11	-13.3	28	-	-	4.87	-	.86	11	22	19	7	5	0	0	0	2	19	20	0	-	-		
Stirling	Earls Hill ...	9 9	1100	6.3	0.3	3.3	-1.0	12.2	11	-7.8	28	3.6	7.8	4.71	125	.99	11	21	17	5	5	0	2	0	2	9	23	1	1.10	-		
	Stirling ...	9 9	151	6.3	0.3	3.3	-1.0	12.2	11	-7.8	28	-	-	4.51	-	.65	11	22	17	-	-	-	-	-	-	16	-	-	-			
	Falkirk ...	9 9	100	6.1	-0.4	2.9	-1.3	11.7	8,11	-10.0	28	-	-	8.34	119	1.71	11	25	20	5	4	0	0	0	2	5	21	0	0.91	- S		
Renfrew	Greenock ...	9 9	200	6.6	1.7	4.1	-1.1	11.7	8,11	-6.1	28	-	-	6.07	131	1.26	11	22	18	5	2	3	0	0	3	7	19	0	1.12	153		
	Paisley ...	9 9	106	6.0	1.2	3.6	-1.2	11.7	8	-5.0	28	4.3	7.4	6.07	131	1.26																

TABLE III (continued)—SUMMARY OF OBSERVATIONS OF TEMPERATURE, RAINFALL, SUNSHINE AND WEATHER DECEMBER, 1964

DISTRICT, COUNTY AND PLACE	Terminal Hours of Observation	Height of Station above Mean Sea Level	AIR TEMPERATURE IN DEGREES CELSIUS								MEAN EARTH TEMPERATURE		RAINFALL (Terminal hour 9 G.M.T.)				WEATHER Number of days								BRIGHT SUNSHINE						
			Means of		Mean Temperature Mean of A and B	Highest Maximum and Lowest Minimum				1 ft.	4 ft.	Total Fall	Percentage of Average	Most in a day	Precip'n			Snow or Sleet	Snow lying at 9h.	Hail	Ice or snow pellets etc.	Thunder heard	Fog at 9h.	Air Frost	Grass min. below 0° C	Gale	Daily Mean	Percentage of Average			
			A	B		Maximum	Date	Minimum	Date						0.01 in. (0.25 mm) or more	0.04 in. (1.0 mm) or more	in.														
			Max.	Min.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	in.	%	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	
2 ENGLAND, N.E.—cont.																															
Northum-berland cont.	9 9	270	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Haydon Bridge	9 9	160	6.1	-2.2	1.9	-	12.8	6	-10.6	28	-	-	-	2.14	-	.42	8	17	12	5	0	0	0	0	0	0	0	20	23	2	-
Corbridge	9 9	76	6.3	0.8	3.5	-1.2	12.8	11	-6.1	26,28	-	-	-	1.56	92	.45	12	15	9	2	0	2	1	1	1	14	20	3	1.39	95	
Berwick-on-Tweed	9 9	326	5.7	0.1	2.9	-1.1	12.2	11	-6.7	26	3.3	-	-	2.01	80	.46	8	17	10	2	5	0	2	0	0	0	12	20	1	1.59	104
Cockle Park	21-9	138	5.6	0.5	3.0	-	12.5	11	-8.2	26	-	-	-	1.98	-	.45	12	15	12	9	3	0	6	0	0	0	17	21	1	1.46	-
Acklington	21-9	95	5.8	1.7	3.7	-1.7	12.7	6,12	-5.7	26	-	-	-	1.83	77	.48	12	18	11	6	3	3	0	0	0	0	10	18	2	1.29	121
Tynemouth	9 9	446	5.4	-0.8	2.3	-1.7	12.2	6	-6.7	26,28	-	-	-	2.32	92	.47	29	21	14	4	3	0	0	0	0	0	18	26	1	-	S
Chopwellwood	9 9	594	4.8	-0.8	2.0	-1.8	11.1	6,8	-8.3	26	-	-	-	2.47	98	.53	12	16	14	4	6	0	0	0	0	11	17	3	-	-	
Ushaw College	9 9	123	6.1	-1.8	2.1	-1.8	12.8	8	-11.7	26	-	-	-	2.04	85	.54	12	18	15	3	5	0	0	0	2	19	23	0	1.26	106	
Houghall	9 9	336	5.6	-1.3	2.1	-2.0	12.2	8	-9.4	26	3.9	7.6	-	2.15	94	.50	12	21	15	-	6	-	-	-	-	19	25	-	1.44	101	
Durham	9 9	509	5.3	0.3	2.8	-	12.2	6,11,12	-6.1	26	-	-	-	1.88	-	.53	12	19	12	-	5	-	-	-	-	1	13	17	-	1.53	-
Gateshead	21-9	115	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Middleton St. George	9 9	30	6.5	0.3	3.4	-	12.8	6,8	-7.8	26	-	-	-	2.42	-	.90	12	19	14	3	5	1	0	0	4	15	20	0	.86	-	
West Hartlepool	21-9	105	5.0	0.4	2.7	-1.6	12.5	9	-8.4	26	-	-	-	1.75	80	.54	8	18	8	4	3	1	1	1	4	16	19	2	1.52	99	
Dishforth	9 9	111	5.5	-1.4	2.1	-	12.2	8,12	-10.0	26	-	-	-	1.43	-	.36	8	18	10	4	2	1	0	1	5	20	24	0	-	-	
Thirsk	9 9	57	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
York	9 9	313	5.7	-0.7	2.5	-1.5	12.8	8	-7.8	26,27	-	-	-	1.89	70	.63	8	18	13	4	-	1	0	1	3	18	24	1	-	-	S
Ampleforth	9 9	25	7.1	1.2	4.1	-	12.8	6,8,12	-7.8	26	-	-	-	2.40	119	1.03	12	18	14	4	5	0	2	0	0	10	-	4	1.11	-	
Redcar	9 9	143	5.4	-1.6	1.9	-	12.2	8,12	-14.4	26	-	-	-	2.62	-	.64	8	25	14	4	6	0	0	1	7	20	21	0	-	-	
Pickering	9 9	135	6.8	0.2	3.5	-	12.8	8,12	-9.4	26,27	-	-	-	.63	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Whitby	9 9	118	6.4	1.2	3.8	-1.5	12.2	8,12	-6.1	26,27	5.1	8.1	2.78	113	.50	8	21	19	6	5	0	0	0	1	9	16	3	1.17	98	S	
Scarborough	9 9	665	5.7	-0.8	2.5	-	11.1	12	-7.2	26	3.8	-	-	3.63	-	.60	12	26	19	5	6	0	1	0	2	21	25	0	1.68	-	
Silpho Moor	21-9	200	6.1	1.4	3.7	-	12.7	9	-9.2	26	-	-	-	1.74	-	.61	12	16	8	5	5	3	1	1	0	9	14	6	-	-	
Whitby C/Guard	9 9	574	5.0	-0.6	2.2	-	11.7	12	-11.1	26	3.3	-	-	2.00	67	.54	8	22	12	-	6	-	-	-	-	1	13	24	0	1.79	-
High Mowthorpe	9 9	8	6.4	0.6	3.5	-1.4	13.9	8	-7.8	26	4.2	7.7	1.30	58	.27	12	20	12	3	5	0	1	0	2	14	22	1	1.35	130		
Hull	21-9	24	5.6	0.9	3.3	-	13.5	8	-7.5	26	-	-	-	1.43	-	.27	8	16	10	5	0	2	1	4	11	21	1	1.49	-		
Leconfield	9 9	122	6.2	-0.3	2.9	-	12.2	8,12	-11.1	27	-	-	-	1.65	-	.35	24	18	9	5	6	0	3	1	3	16	19	1	.90	-	
Filey	9 9	157	6.4	-0.4	3.0	-	12.8	8,12	-10.6	26	-	-	-	2.54	-	.64	25	23	14	4	6	0	6	1	3	15	17	3	1.79	-	
Bridlington	21-9	29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Spurn Head	9 9	110	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Gainsborough	9 9	60	5.6	0.9	3.3	-	14.4	8	-9.4	26	-	-	-	1.14	-	.30	12	17	10	4	3	0	0	0	6	18	-	1	-	-	
Navenby	21-9	224	5.1	0.7	2.9	-1.3	13.9	8	-8.6	16	-	-	-	1.06	-	.26	12	17	8	8	4	1	0	0	6	11	19	1	1.72	-	
Waddington	9 9	22	5.8	-1.1	2.3	-	13.9	8	-8.9	26	4.9	7.3	1.12	-	-	.25	12	19	10	1	0	0	0	0	6	19	24	0	1.30	-	
Lincoln	9 9	205	6.2	-0.3	2.9	-1.3	14.0	8	-7.7	16,29	3.7	6.8	.97	51	.24	12	13	9	6	3	0	1	0	2	17	21	0	1.95	124		
Cranwell	21-9	353	5.2	0.9	3.1	-	13.3	8	-7.6	26	-	-	-	1.64	-	.25	12	22	14	9	6	0	5	0	2	13	21	0	-	-	
Binbrook	9 9	23	6.7	0.8	3.7	-1.1	13.9	8	-7.2	26	-	-	-	1.58	77	.42	8	16	13	3	5	0	0	0	3	13	20	2	1.73	121	
Cleethorpes	21-9	55	5.8	1.0	3.4	-	13.8	9	-9.3	29	-	-	-	1.82	-	.28	24	20	14	7	5	0	1	0	3	11	18	0	1.80	-	
Manby	9 9	15	6.7	0.1	3.4	-1.3	13.3	8,9	-7.8	26	-	-	-	2.11	105	.65	24	17	14	4	5	0	0	0	2	17	-	0	1.56	105	
Skegness	3 ENGLAND, E.																														
Norfolk	9 9	13	6.3	0.0	3.1	-	13.9	8,9	-9.4	29	4.4	-	1.13	66	.18	5	17	10	3	6	0	0	0	5	16	20	2	1.49	-		
Terrington	21-9	76	5.5	0.8	3.1	-	14.3	9	-11.1	29	-	-	-	1.86	-	.39	24	15	13	5	5	0	0	0	3	13	18	0	-	-	
St. Clement	9 9	80	6.4	-1.0	2.7	-	15.0	8	-8.3	26	4.3	6.9	1.39	-	-	.28	7	14	10	-	7	-	-	-	2	22	24	-	1.35	-	
Marham	21-9	250	5.3	0.8	3.1	-	13.6	8	-10.2	29	-	-	-	2.16	-	.34	24	18	15	8	6	0	3	0	3	16	20	0	1.40	-	
Santon Downham	9 9	178	7.1	1.4	4.3	-0.7	14.4	8,9	-8.3	29	-	-	-	2.67	104	.52	3	19	14	-	5	-	-	-	1	8	19	-	1.12	70	
West Raynham	9 9	93	6.6	0.3	3.5	-1.1	13.9	8,9	-8.3	29	5.4	-	2.33	102	.51	25	17	13	4	5	0	1	1	1	15	24	2	.96	69	S	
Cromer	21-9	55	6.3	1.1	3.7	-	14.0	8,9	-13.6	27	-	-	-	2.76	-	.43	25	21	13	9	7	1	0	0	1	13	20	0	-	-	
Sproston	9 9	89	6.8	0.6	3.6	-	13.9	8	-10.6	27	-	-	-	2.31	102	.50	25	20	13	7	7	0	0	0	2	13	21	2	1.02	-	
Coltishall	21-9	12	6.4	2.6	4.5	-0.8	14.0	9	-6.2	29	5.7	7.9	3.69	171	.73	3															

TABLE III (continued)—SUMMARY OF OBSERVATIONS OF TEMPERATURE, RAINFALL, SUNSHINE AND WEATHER DECEMBER, 1964

DISTRICT, COUNTY AND PLACE	Terminal Hours of Observation	Height of Station above Mean Sea Level	AIR TEMPERATURE IN DEGREES CELSIUS								MEAN EARTH TEMPERATURE		RAINFALL (Terminal hour 9 G.M.T.)				WEATHER Number of days										BRIGHT SUNSHINE					
			Means of		Mean Temperature Mean of A and B	Difference from Average	Highest Maximum and Lowest Minimum				1 ft.	4 ft.	Total Fall	Percentage of Average	Most in a day		Precip'n		Snow or Sleet	Snow lying at 9h.	Hail	Ice or snow pellets etc.	Thunder heard	Fog at 9h.	Air Frost	Grass min. below 0°C	Gale	Daily Mean	Percentage of Average			
			A	B			Maximum	Date	Minimum	Date					Amount	Date	-01in. (0.4mm.) or more	-001in. (0.025mm.) or more														
			°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	°C.	in.	%	in.																	
8b ENGLAND, S.W.—cont.																																
Devon	Clawton ...	9 9	412	8.0	-1.9	3.1	-	13.3	8	-8.9	28	-	-	4.95	-	(.73)	26	20	18	2	-	2	0	0	0	0	0	19	-	0	-	
	Hartland Point ...	21-9	298	7.9	4.8	6.3	-	12.8	9	-3.1	29	-	-	3.55	-	.55	26	21	18	3	0	0	0	0	0	0	3	2	3	12	1.74	
	Mount Batten ...	21-9	87	8.4	3.5	5.9	-1.3	13.1	8	-5.7	29	-	-	3.31	73	.68	26	19	15	2	0	0	0	0	0	0	8	14	3	1.99	118	
	Plymouth, The Hoe	9 9	119	8.8	2.7	5.7	-1.2	13.3	8	-5.0	29	6.9	9.8	2.77	62	.59	26	19	15	2	1	0	0	0	0	4	8	21	4	2.13	122	
	Tavistock	9 9	457	8.2	0.3	4.3	-1.6	15.0	8	-7.8	29	-	-	5.34	-	.73	12	19	18	4	1	2	0	0	0	0	14	25	1	-	-	
	Chivenor	21-9	20	8.2	3.1	5.7	-	14.4	9	-5.4	28	-	-	2.69	-	.50	7	18	11	3	0	0	2	0	0	0	8	15	6	1.84	-	
	Ilfracombe	9 9	25	8.8	4.5	6.7	-0.7	14.4	8	-2.2	29	7.1	10.0	5.42	124	.89	26	18	17	2	0	0	0	0	0	0	1	10	0	-	-	
	Totnes	9 9	120	8.4	1.3	4.9	-	13.9	8	-8.3	29	7.2	10.2	5.32	94	.93	12	21	12	1	0	0	0	0	0	1	12	19	0	2.01	-	
	Slapton	9 9	104	8.6	2.4	5.5	-	13.3	8	-4.4	29	-	-	4.88	-	.90	26	16	14	-	0	-	-	-	-	1	5	14	-	-		
	Newton Abbot	9 9	272	7.7	1.6	4.7	-1.4	12.8	8,12	-7.2	29	-	-	4.22	90	.75	12	17	12	2	1	0	0	0	0	0	11	21	0	2.42	133	
	Paignton	9 9	8	-	2.5	-	-	-	-	-5.0	29	-	-	3.73	83	.55	26	21	17	0	0	0	0	0	0	0	0	7	-	3	2.12	123
	Torquay	9 9	26	8.9	3.1	6.0	-0.8	14.4	8	-4.4	29	-	9.5	3.58	88	.62	12	17	14	2	0	0	0	0	0	0	7	13	5	2.44	127	
	Teignmouth §§	9 9	20	8.7	3.1	5.9	-1.2	14.4	8,9	-5.0	29	-	-	2.35	61	.41	27	19	12	1	-	-	-	-	-	8	7	11	-	2.35	126	
	Starcross	9 9	29	8.3	2.6	5.5	-	14.4	8	-6.7	29	5.8	-	3.01	79	.85	26	14	9	1	0	1	0	0	4	9	14	-	2.04	-		
	Exeter, Southam	9 9	160	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Exmouth	9 9	195	8.0	1.8	4.9	-1.2	13.3	13	-5.6	29	-	-	2.51	68	.55	26	16	9	3	0	0	0	2	12	0	2	2.21	118	-		
	Exeter	21-9	106	7.8	2.4	5.1	-	14.1	8	-8.2	29	-	-	1.97	54	.53	26	18	8	3	1	0	0	0	5	12	18	2	1.94	-		
	Sidmouth	9 9	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Cornwall	St. Mary's, Scilly	21-9	158	9.4	6.7	8.1	-0.5	13.1	9	1.6	28	-	-	3.37	96	.58	7	22	13	1	0	1	0	0	0	0	0	-	13	1.45	79	
	Penzance	9 9	82	9.8	4.4	7.1	-0.9	13.9	8	-3.3	29	-	-	4.50	93	.73	27	25	21	1	0	2	0	0	0	0	5	13	5	2.08	113	
	Guilva	9 9	50	9.5	4.3	6.9	-0.9	13.9	8	-2.2	29	-	-	4.38	94	.87	26	24	18	-	0	-	-	-	-	0	2	12	-	1.79	103	
	Culdrose	9 9	268	9.1	2.9	6.0	-	13.3	9	-5.0	28,29	-	-	3.10	-	.73	26	21	14	3	0	0	2	0	0	10	11	3	2.16	-		
	Rosewarne	9 9	250	8.8	3.9	6.3	-	12.8	8,12	-3.9	28,29	6.8	9.3	3.90	88	.59	7	23	18	2	0	1	0	0	1	3	14	6	2.02	-		
	Lizard	9 9	240	9.2	4.5	6.9	-1.1	12.9	9	-3.3	28	-	-	3.04	78	.46	26	23	16	2	0	0	0	0	0	0	3	-	7	2.29	-	
	Falmouth §§	9 9	167	8.8	2.9	5.9	-1.6	12.8	8,12	-4.4	29	-	-	5.78	109	.90	8	21	18	1	0	0	0	0	0	6	15	0	1.61	102		
	Newquay	9 9	176	9.1	4.1	6.6	-0.6	13.9	8	-3.9	29	-	-	3.59	94	.81	26	21	17	2	-	0	0	0	0	0	6	-	1	2.02	117	
	St. Mawgan	21-9	337	8.0	3.8	5.9	-	13.2	9	-4.5	29	-	-	4.21	-	.81	26	22	19	3	0	2	2	0	0	0	5	9	1	2.09	-	
	St. Austell	9 9	310	8.6	3.0	5.8	-	13.3	8	-3.3	29	-	-	4.48	80	.87	26	20	18	2	1	1	0	0	0	0	5	0	-	-		
	Fowey	9 9	51	9.6	2.9	6.3	-1.1	13.9	9	-2.8	28	-	-	3.64	-	.91	26	18	15	1	1	1	0	0	0	0	8	-	0	-		
	Bude	9 9	50	9.1	2.4	5.7	-1.2	14.4	8	-6.1	28	5.1	-	3.69	97	.68	26	20	16	-	0	-	-	-	-	8	-	-	1.83	110		
	Ellbridge	9 9	190	8.6	1.6	5.1	-1.0	13.3	8	-6.7	29	-	-	4.18	85	.84	26	22	16	1	1	2	0	0	2	13	18	5	2.13	116		
9 NORTHERN IRELAND																																
Londonderry	Loughmore Forest	9 9	570	6.3	0.6	3.5	-	11.7	11	-4.4	27	-	-	5.63	-	.72	7	26	24	5	4	0	0	0	0	0	11	21	0	-		
	Ballykelly §§	21-9	6	7.1	2.5	4.8	-0.8	13.0	5,8,11	-3.6	27	-	-	3.95	103	.59	30	25	18	6	2	7	0	0	0	0	11	14	0	1.14	91	
	Derrynoyd Forest	9 9	290	6.6	0.9	3.7	-	11.7	5,11	-1.7	11,26,28	-	-	5.66	-	.90	8	26	20	5	4	0	0	0	0	0	11	26	0	-		
	Somerset Forest	9 9	140	7.1	1.0	4.1	-	12.8	11	-2.2	29	-	-	4.13	-	.54	6	22	20	7	3	2	0	0	1	11	19	0	-			
	Garvagh Forest	9 9	290	6.7	0.7	3.7	-	12.2	8,11	-2.8	27	-	-	5.40	-	.72	8	26	19	3	4	3	0	0	0	0	11	24	0	-		
	Moneydig §	21-9	112	6.5	1.3	3.9	-0.8	12.9	11	-2.8	24	5.4	-	4.35	100	.60	8	24	19	8	4	2	3	0	2	11	18	1	-			
Antrim	Portrush	-	17	-	-	-	-	-	-	-	-	-	-	4.08	-	.59	7	21	19	-	-	-	-	-	-	-	-	-	-	1.02		
	Lisnafillan	9 9	124	6.8	0.2	3.5	-	11.7	5,8,11	-4.4	28	-	-	4.21	-	.55	7	26	20	4	3	0	1	0	2	11	19	0	1.13			
	Aldergrove §§	21-9	225	5.9	1.1	3.5	-1.4	11.3	8,12	-5.6	25	4.9	8.6	4.26	-	.50	12	23	18	10	4	3	0	1	0	10	15	0	1.17	104		
	Greenmount	9 9	105	6.7	0.4	3.5	-	11.7	8,11	-5.0	25	5.0	-	3.95	-	.48	7,8	23	17	5	4	0	0	0	0	12	24	-	-			
	Black Mountain	21-9	959	4.5	-0.6	1.9	-	10.5	8,11	-4.5	25	-	-	4.98	-	.77	8	24	21	9	7	0	0	0	9	14	-	-				
	Ballypatrick Forest	9 9	500	6.3	0.8	3.5	-	11.7	11	-2.8	24	-	-	5.26	-	.55	7,31	24	21	11	8	2	0	0	1	10	15	6	-			
	Larne	9 9	140	7.3	1.9	4.6	-	12.2	8,11	-2.2	26,27,28	-	-	4.72	-	.69	11	23	19	3	2	1	0	0	0	7	-	0	-			
	Kilroot	9 9	71	7.4	1.9	4.7	-	12.8	11	-2.2	27,28	-	-	3.76	-	.54	11	19	17	4	2	0	0	0	2	7	17	0	-			
	Newry Abbey	9 9	32	7.3	0.9	4.1	-	13.3	11	-5.6	28	-	-	4.13	-	1.05	11	17	13	4	1	0	0	0	6	10	-	1				
	Hillsborough §	9 9	379	6.4																												

TABLE IV—SUMMARY OF OBSERVATIONS AT FIXED HOURS

DECEMBER,

1964

DISTRICT, COUNTY AND PLACE	Hour of Observation	Height of Barometer above Mean Sea Level	MEAN PRESSURE		MEAN TEMPERATURE AND HUMIDITY				CLOUD AMOUNT (OKTAS)					VISIBILITY										WIND, NUMBER OF OBSERVATIONS														
			At Mean Sea Level	Difference from Average	Dry Bulb	Depression of Wet Bulb	Vapour Pressure	Relative Humidity	NO. OF OBSERVATIONS					NUMBER OF OBSERVATIONS					FORCE (0-12)					DIRECTION														
									Mean Amount	0	1	2 to 3	4 to 7	8	9	0-44 yd.	45-210 yd.	220-430 yd.	440-1,000 yd.	1,100-2,190 yd.	2,200-4,390 yd.	3-6 mi.	7-12 mi.	13-24 mi.	25 mi. or over	8 or more	6 to 7	4 to 5	1 to 3	Calm	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
			ft.	mb.	°C	°C	mb.	%	0	1	2 to 3	4 to 7	8	9	0-44 yd.	45-210 yd.	220-430 yd.	440-1,000 yd.	1,100-2,190 yd.	2,200-4,390 yd.	3-6 mi.	7-12 mi.	13-24 mi.	25 mi. or over	8 or more	6 to 7	4 to 5	1 to 3	Calm	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	
9 SCOTLAND, N.																																						
Zetland Lerwick Observatory	3	273	1003.1	-	3.0	0.5	7.0	90	6.1	0	8	1	6	16	0	0	0	0	1	1	5	10	11	3	2	6	15	7	1	6	0	0	2	5	8	5	4	
	9	273	1003.7	-3.1	2.9	0.7	6.6	87	6.5	0	8	11	12	0	0	0	0	0	1	0	1	3	10	12	4	1	4	16	10	0	4	0	0	0	7	6	6	6
	15	273	1004.0	-	3.2	0.8	6.8	86	6.2	0	1	7	19	4	0	0	0	0	1	0	1	3	10	12	4	1	4	16	10	0	4	0	0	0	3	6	7	5
	21	273	1004.0	-	3.0	0.7	6.7	88	5.9	0	4	6	9	12	0	0	0	0	0	0	0	7	10	11	3	1	4	15	9	2	5	0	0	0	3	6	7	5
Orkney Kirkwall	3	36	1004.9	-	3.7	0.9	7.0	86	6.8	0	7	4	8	14	0	0	0	0	0	0	2	11	15	3	1	7	12	10	1	2	0	0	0	6	11	4	7	
	9	36	1005.7	-	3.6	0.9	6.7	83	6.0	0	5	4	14	7	1	0	0	0	1	0	0	3	5	15	7	1	5	17	7	1	3	0	0	0	9	8	6	4
	15	36	1005.8	-	3.9	1.0	6.9	84	6.1	0	2	8	14	7	0	0	0	0	0	0	3	3	15	10	1	5	15	9	1	4	0	0	1	8	9	5	5	
	21	36	1005.4	-	3.6	0.8	6.9	85	5.6	0	8	5	8	12	0	0	0	0	0	0	4	5	14	8	1	3	19	8	2	3	1	0	1	8	8	4	4	
Caithness Wick	3	121	1005.4	-	2.9	0.7	6.6	87	5.3	0	10	2	11	8	0	0	0	0	0	0	1	6	19	5	0	8	13	8	2	4	0	0	2	5	12	3	3	
	9	121	1006.4	-1.2	3.0	0.9	6.5	85	5.2	0	9	2	14	6	0	0	0	0	0	0	0	5	17	9	0	2	18	10	1	4	0	0	3	11	5	4	3	
	15	121	1006.4	-	3.5	0.9	6.7	84	6.1	0	4	2	20	5	0	0	0	0	0	1	0	3	7	9	11	0	3	11	18	0	3	0	0	14	6	5	3	
	21	121	1006.0	-	2.9	0.7	6.6	87	6.0	0	4	5	11	11	0	0	0	0	0	1	1	8	16	4	0	3	11	14	3	2	0	0	1	11	6	4	4	
Sutherland Cape Wrath	3	371	1003.9	-	4.6	0.9	7.4	86	6.3	0	1	6	15	8	1	0	0	0	0	0	0	0	5	25	2	3	11	7	3	1	5	0	0	6	7	5	4	
	9	371	1004.7	-	4.6	0.8	7.4	86	6.1	0	2	8	12	9	0	0	0	0	0	0	2	1	26	2	3	10	15	1	2	3	0	0	8	8	5	4		
	15	371	1004.9	-	4.7	0.9	7.4	86	6.6	0	0	5	16	8	2	0	0	0	0	0	0	1	4	24	1	3	11	16	0	3	3	0	1	8	9	2	5	
	21	371	1004.9	-	4.6	0.9	7.3	86	6.5	0	2	5	11	13	0	0	0	0	0	0	1	0	2	28	0	5	12	13	1	2	4	0	1	4	8	3	8	
Ross & Cromarty Stornoway	3	16	1006.1	-	3.8	0.7	7.3	89	5.0	1	8	7	4	11	0	0	0	0	0	0	3	8	19	1	1	4	13	11	2	3	0	0	0	7	9	3	7	
	9	16	1007.0	0.0	3.7	0.7	7.2	89	5.6	0	5	6	15	5	0	0	0	0	1	0	0	3	11	13	3	0	0	15	14	2	3	0	0	6	10	5	4	
	15	16	1006.8	-	4.5	0.7	7.6	89	6.4	0	2	6	15	7	1	0	0	0	1	0	1	4	6	14	5	0	4	10	15	2	6	0	0	9	4	8	2	
	21	16	1006.3	-	3.7	0.5	7.4	92	4.6	3	7	5	7	9	0	0	0	0	0	0	1	6	6	16	2	0	4	16	9	0	4	4	0	2	8	4	6	3
Inverness Benbecula	3	21	1006.8	-	5.1	1.0	7.5	85	5.1	0	7	8	10	6	0	0	0	0	0	0	0	2	4	16	9	0	6	16	9	0	4	4	0	2	8	5	7	6
	9	21	1007.5	-	4.9	1.0	7.4	85	5.3	0	5	8	14	4	0	0	0	0	1	0	1	3	14	11	0	5	12	14	0	7	2	0	3	5	7	6	1	
	15	21	1007.1	-	5.3	1.0	7.6	84	6.3	0	1	5	20	5	0	0	0	0	0	0	2	9	9	11	0	7	10	14	0	6	0	1	2	5	6	7	4	
	21	21	1006.7	-	4.9	0.8	7.6	86	5.8	0	6	5	10	10	0	0	0	0	0	0	1	11	12	7	2	6	10	12	1	7	0	2	0	8	4	6	3	
1 SCOTLAND, E.																																						
Moray Kinloss	3	19	1007.2	-	3.2	1.1	6.4	82	5.3	3	5	4	10	9	0	0	0	0	1	0	0	1	5	17	7	0	6	8	16	1	2	1	0	8	13	5	1	
	9	19	1007.9	-	2.9	1.0	6.4	84	5.9	0	4	4	19	4	0	0	0	0	0	0	0	4	7	8	12	0	3	12	16	0	1	2	1	4	13	6	3	
	15	19	1007.9	-	3.8	1.1	6.6	82	6.0	0	5	3	14	9	0	0	0	0	0	0	1	5	8	9	8	0	3	15	13	0	2	1	2	1	8	5	4	
	21	19	1007.5	-	2.9	0.9	6.5	85	5.6	1	5	4	10	11	0	0	0	0	0	0	0	4	7	14	6	0	1	13	16	1	1	1	2	4	15	4	2	
Aberdeen Dyce	3	193	1007.4	-	1.7	0.8	6.0	86	4.5	6	6	2	9	8	0	0	0	0	0	0	1	7	9	10	4	0	4	10	11	6	1	0	0	3	6	7	5	
	9	193	1008.3	-1.1	1.7	0.9	5.9	84	5.3	0	7	6	11	7	0	0	0	0	0	1	6	10	11	2	0	1	14	9	7	2	0	0	1	7	3	6	5	
	15	193	1008.2	-	2.9	1.1	6.1	81	5.6	0	5	6	12	8	0	0	0	0	0	1	6	7	11	6	0	0	2	15	6	8	2	0	0	0	4	7	5	
	21	193	1007.8	-	2.0	0.9	6.0	84	4.6	3	8	3	11	5	1	0	0	0	1	3	4	9	13	4	0	0	2	15	6	8	2	0	0	0	4	7	5	
Rattray Head	3	108	1006.6	-	3.0	1.0	6.3	82	5.1	1	5	6	19	0	0	0	0	0	0	0	0	2	29	0	0	2	5	11	12	1	4	0	0	0	12	6	7	
	9	108	1007.3	-	2.8	1.1	6.1	80	5.1	0	4	12	15	0	0	0	0	0	0	0	0	1	23	7	0	2	4	15	8	2	3	0	1	1	11	5	3	
	15	108	1007.4	-	3.7	1.3	6.2	77	5.3	0	3	10	17	1	0	0	0	0	0	0	0	2	21	8	0	1	6	8	15	1	5	0	0	13	3	7	2	
	21	108	1007.2	-	3.0	1.0	6.3	83	5.3	1	5	5	19	1	0	0	0	0	0	0	0	2	29	0	0	2	5	11	12	1	4	0	0	0	12	6	7	
Fife Leuchars	3	38	1008.3	-	2.1	0.8	6.3	87	4.2	4	9	4	8	6	0	0	0	0	0	0	0	6	11	10	4	0	4	5	20	2	1	0	0	1	10	13	3	
	9	38	1009.1	-1.1	2.3	0.7	6.4	87	5.7	0	6	2	16	7	0	0	0	0	0	1	1	8	8	6	7	0	2	11	20	3	0	1	1	9	13	2		
	15	38	1008.7	-	3.9	1.0	6.8	83	5.6	0	6	4	14	7	0	0	0	0	0	0	5	8	4	10	4	0												

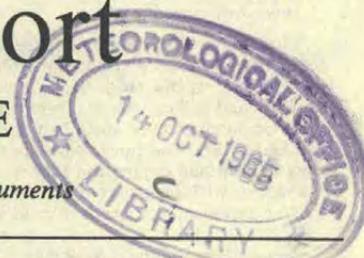
TABLE IV (continued)—SUMMARY OF OBSERVATIONS AT FIXED HOURS DECEMBER, 1964

Table with columns for District, County and Place; Hour of Observation; Height of Barometer; Mean Pressure; Mean Temperature and Humidity; Cloud Amount; Visibility; Wind, Number of Observations; and Direction. The table is organized into sections for 4 MIDLAND COUNTIES and 5 ENGLAND, S.E., with sub-sections for various counties like Nottingham, Northampton, Warwick, Shropshire, Worcester, Hereford, Gloucester, Middlesex, Surrey, Kent, Sussex, Berkshire, Hampshire, and Wiltshire.

Monthly Weather Report

OF THE METEOROLOGICAL OFFICE

Including monthly and annual tables of wind based on the records of autographic instruments



Volume 81 Number 13

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Annual Summary 1964

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REMARKS ON THE WEATHER OF THE YEAR

1964—An unusually dry year

The year 1964 was one of the driest on record in England and Wales, the total rainfall, 27.8 inches, being the second lowest since comparable records began in 1887. The lowest was 24.7 inches in 1921. It was also the third successive year with rainfall in England and Wales below the average, the 36 month period ending December 1964 being in fact the driest period of this duration since 1889; April 1904 to March 1907, however, was nearly as dry.

The year began with two very dry months following a dry December making the winter, December 1963 to February 1964, the driest winter in England and Wales in more than 250 years of records and estimations. Over Scotland and Northern Ireland, too, the general rainfall for the winter of 1963/64 was the lowest in these countries since comparable records began in 1869 and 1900 respectively. The spring and early summer, March to June, were mainly dull and wet but once June was out weather became generally fine, and this fine weather with above average sunshine, but with temperature a little below average, lasted until November, apart from periods of heavy thundery rain and thunderstorms. Some of the Royal Ascot programme had to be postponed owing to heavy rain, and much damage was caused in east Lancashire during July by three severe storms; 2.2 inches of rain fell at Bolton in 15 minutes during one of these storms, believed to be the greatest intensity ever recorded in the British Isles for such a period. Heavy and prolonged rain during the second week of December led to some of the most widespread floods ever known in the Lake District and Wales. In some districts flood levels exceeded those recorded after months of heavy rain in 1960. It is estimated that on the higher ground rainfall amounts must have reached about 20 inches during the week.

Other noteworthy features of the year included: the very cold weather during Easter week-end (in the London area it was the coldest Easter Day for 81 years); the warm sunny spells during May, at the beginning and end of August and the first week of September; the storm in the English Channel on October 9 when a gust of 94 kt was recorded at Jersey Airport; the cold spell and severe frosts during the second week of November and the traditional "white" Christmas at many places.

Synoptic Features

Over the year as a whole weather was more frequently anticyclonic in character than cyclonic. The table below gives the number of days each month when weather over the British Isles was judged to be mainly cyclonic in character, and shows that these were most frequent during the late spring and early summer (April to June) and in December, and that, except for February, March and August when weather was cyclonic in character a little less than half the time each month, the remaining months of the year (January, July, September, October and November) displayed this activity on only 4-11 days.

Estimated number of days of cyclonic activity in 1964

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
4	13	14	30	24	21	10	14	7	11	7	22	177

The main changes each month are set out below. The months are grouped in seasons for easy reference.

January and February

January weather was predominantly anticyclonic in character except during the last four days when it was of a westerly cyclonic type. Anticyclones over or to the south of the British Isles dominated the weather during the first twelve days of February, but depressions to the south and west of the country maintained generally cyclonic weather thereafter except on the 18th-21st.

March, April and May

The first ten days and last week of March were mainly anticyclonic in character with pressure high over Scandinavia or to the north of the British Isles, but from the 11th to the 24th troughs of low pressure from the Atlantic brought un-

settled weather. Generally cyclonic weather persisted throughout April and May except for a short anticyclonic spell on May 14th-20th.

June, July and August

During June troughs or depressions over or near the British Isles maintained generally cyclonic weather until the 21st, but the remainder of the month was anticyclonic with a ridge of high pressure extending from the Azores across England and Wales to west Germany. Weather remained predominantly anticyclonic in character until July 6th and was also anticyclonic on the 15th-16th and 19th-31st. The intervening periods were mainly cyclonic as were also some days in Scotland during the last week. August weather was mainly anticyclonic in character, with pressure high either to the south-west, west or north of the British Isles, apart from cyclonic spells on the 6th-9th, 16th-19th and 23rd-28th.

September, October, November

Weather during September was predominantly anticyclonic in character except during the third week when the country was under the influence of rather a complex low pressure area; small disturbances from the Atlantic, however, brought changeable cyclonic weather to Scotland on the 5th-11th and to western and northern districts on the 24th-26th. October weather was also predominantly anticyclonic in character with pressure high mostly to the south and east of the country, except for the 5th-15th when troughs or small depressions passed over or near the British Isles. Weather was mainly anticyclonic in November except on the 11th-17th when a series of troughs and ridges moved across the country and during the last five days of the month when deep depressions were centred to the north of Scotland or disturbances moved south over the British Isles.

December

In December weather was mainly cyclonic in character until the 16th and during the last few days of the month but mainly anticyclonic on the 17th-25th with pressure high to the west of Scotland.

General Weather

January and February

Both January and February were very dry months. After three mild days with a southwesterly airstream winds became light and variable on January 4th and weather quiet and dull with rather persistent fog. Dry easterly winds cleared most of the fog on the 10th, and the next few days were cold with frequent showers. Mild southerly winds brought a return of the fog and drizzle to Southern England on the 14th, but it was not until the 19th that an airstream from the Atlantic brought a general return of milder weather. Thereafter weather was unsettled and rather wet until February 5th but winds became light and variable on the 6th and weather sunny and dry with about average day temperatures. Easterly winds brought a sharp fall of temperature on the 16th. Snow fell in all districts during the next few days with moderate falls on high ground from the Peak District northwards. Mild wet weather spread over the country on the 22nd-24th, but the remainder of the month was changeable, occasional fog and drizzle at first giving place, on the 27th and 28th, to thundery showers with good sunny periods.

March, April and May

Spring began cold but ended with day temperatures 8°C above average in many districts. The exceptional dryness of the previous three winter months continued during the first 10 days of March, but thereafter heavy rainfall brought March totals far above the monthly average in many districts. March was a cold month generally, easterly winds bringing scattered wintry showers to many districts during the first week. The second week was somewhat milder with widespread rain on the 12th, but on the 15th winds over southern England backed to east and the rain turned to snow. The cold spell was broken on the 19th by about a week of mild wet weather, but easterly winds set in again on the 27th and weather became dull and progressively colder with rain at times and some snow in eastern coastal districts.

The cold weather lasted over the first four days of April especially in the south-east. During the second week day temperatures were about average and there were long sunny periods although rain fell at times in the west and north. Thundery rain, locally heavy, with scattered thunderstorms spread from France to south-east England during the third week; in the warm southerly airstream afternoon temperatures reached 19°C on the 18th. The remainder of the month was changeable with bright showery weather broken by rather wet days on the 25th and 28th.

The changeable weather continued throughout May. The first week was generally sunny with scattered showers on most days but with more prolonged rain on the 2nd, 6th and 7th. The second week was mainly sunny and dry especially in southern and eastern England by day but rain spread over the area during the nights of the 9th/10th and 10th/11th. Most of the third week was fine and quiet with progressively rising day temperatures but on the 18th thundery rain reached northern England and spread over the rest of the country during the night. An easterly airstream became established on the 23rd and weather over southern England became cloudy with occasional rain and scattered thunderstorms until the 25th, but over the remainder of the country away from the east coast it was fine and very warm. The weather broke in thundery rain and thunderstorms during the last two days of the month.

June, July and August

June began very cool and wet with heavy rain and thunderstorms over southern England. Temperature rose to about average on the 3rd but weather remained

generally unsettled with thundery outbreaks until the end of the first week. A warm dry spell, which began in the south-east on the 8th, extended to most other districts on the 10th; it ended in widespread thunderstorms two days later. About 10 days of cool showery weather followed; there were periods of more continuous rain on the 17th and 18th, and northerly winds brought light snow showers to the Scottish Highlands on the 20th and 21st. The rest of the month was dry and sunny, and weather became very warm especially in south-east England on the 26th and 27th.

The dry sunny weather continued during most of the first week of July but northerly winds kept temperatures well below average after the 3rd. The second week was generally stormy and wet. Gales were widespread on the 7th and 8th with 24 hours of rain in most places. After two showery days with broken sunshine rain was again widespread on the 11th and for much of the 12th, and was heavy at times in western districts on the 14th. Most of the third week was warm and thundery; temperatures increased progressively until the 17th, but after widespread rain and thunderstorms on the 17th and 18th the latter part of the week was somewhat cooler. From the 22nd until the end of the month weather was changeable in the north but sunny and very warm in the south-east.

August began with fresh north-westerly winds, but these moderated on the 2nd and the next three days were fine and warm especially in the south. Rain on the 5th, the first measurable rain in many south-eastern districts for about two weeks, was followed by cooler weather. An unstable westerly airstream brought four or five days of scattered thundery showers, but winds became east to north-east on the 11th and from then until the 15th weather was mainly cloudy although there were good sunny periods in sheltered western districts. Rain on the 16th heralded two days of stormy but milder weather, but winds from the north brought a sharp drop in temperature on the 19th. Weather became dry and sunny again until rain from the Atlantic, which reached northern districts on the 22nd, became widespread and heavy at times on the night of the 23rd/24th. A warm southerly airstream cleared most of the rain the following night, except over Scotland. The 26th and 27th were hot days over the Midlands and south-east England with almost continuous sunshine and with temperatures reaching 32°C in places. Apart from a day of cool thundery rain on the 28th the month ended dry and sunny.

September, October and November

The first few days of September were warm and sunny but rain from the Atlantic reached western Scotland on the 5th spreading to all districts during the evening. After a generally showery day on the 6th weather became mainly fine and dry in the south until the 11th but remained unsettled in the north. Two fine warm days on the 12th and 13th were followed by a week of changeable weather; gales were widespread on the 16th. Another fine sunny spell began over southern England on the 20th (temperatures reached 25°C on the 25th) but in the north the cool changeable weather continued. The 27th was dull and cool in most places but the month ended with three fine sunny days nearly everywhere.

This dry sunny weather continued during the first four days of October but an unsettled rather wet period began on the 5th. A feature of this period, which lasted about ten days, was the severe gales in the English Channel on the 9th. The 17th-20th was dry with good sunny periods in the south but with rain at times in the north. Another cold period began on the 21st. Rain belts, which moved south-east over the country on the 21st and 22nd were followed by wintry showers in an airstream of arctic origin on the 23rd. The showers slowly died out on the next day and from then until the 27th weather was mild with south-westerly winds, dry with broken sunshine over most of England, but dull with occasional rain in Scotland. During the last four days of the month weather was generally dull and cooler with occasional drizzle.

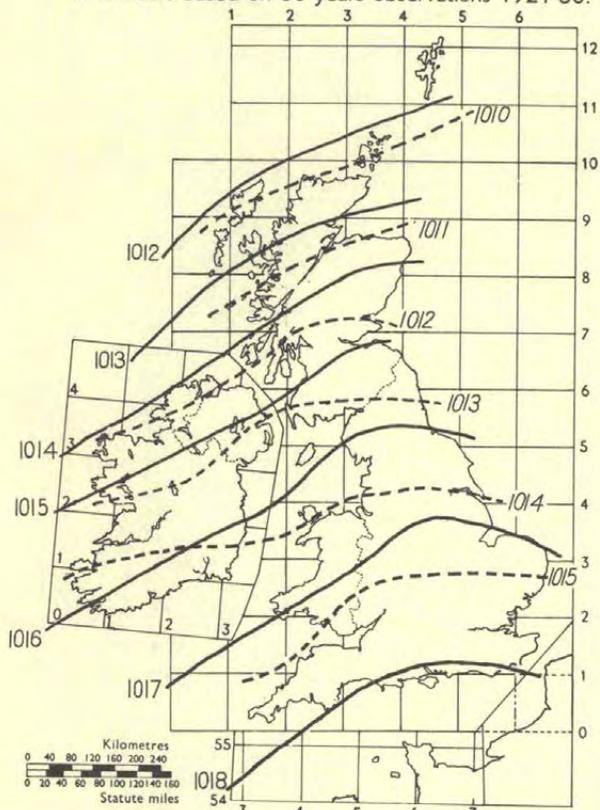
November started foggy but this cleared on the 2nd, and there were good sunny periods with light scattered showers in an easterly airstream during most of the first week. Clouds broke nearly everywhere on the 7th, but the next day fog returned to the north and Midlands as winds became light and variable. Weather changed on the 11th as mild westerly winds from the Atlantic cleared the fog and brought rain to all districts. From then until the 15th periods of rain alternated with sunnier spells. Winds veered to north-west on the 16th and it became temporarily colder in Scotland with scattered snow showers. Westerly winds brought mild dull weather with rain at times to all districts on the 18th-25th but there was little measurable rain in the south and Midlands. A belt of heavier rain, however, spread across the country during the evening of the 26th, and weather became colder the next day as winds veered towards the north-west. A northerly airstream brought wintry showers of rain, hail or snow to all areas on the 28th and 29th, and the month ended cold and rather wet with the higher ground snow-covered in parts of the north and with widespread freezing fog in the south.

December

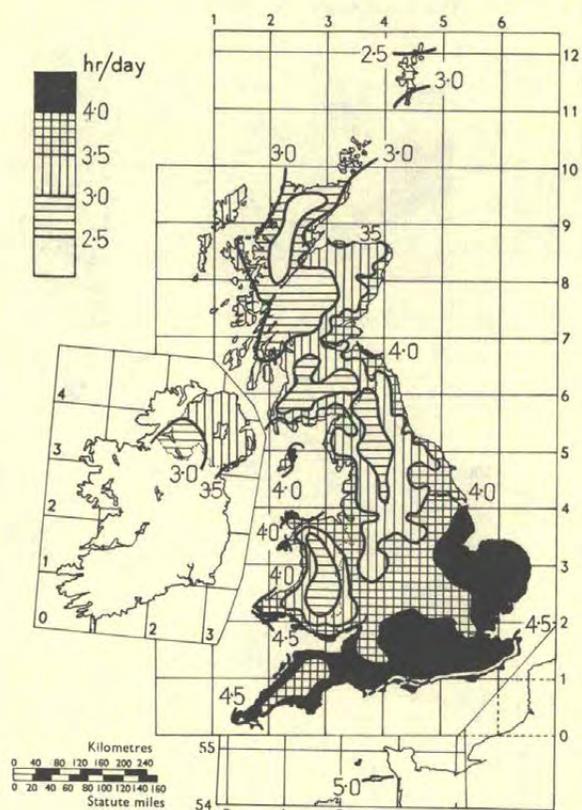
December began dull and rather cold with northerly winds and scattered wintry showers in all areas. Warmer maritime air from the Atlantic brought widespread rain on the 5th preceded by snow in a few places. The rain persisted locally on the 6th. The next day winds reached hurricane force in the south-west and torrential rain caused widespread flooding in Wales and the Lake District. After an interval of four days, two of which were dull and wet, gales again became severe in northern and western districts and rain heavy and prolonged. In North Wales the rain, which followed a period of earlier flooding, was more or less continuous for 36 hours and resulted in the worst floods known in the districts. The relatively mild weather ended abruptly on the 14th as easterly winds brought snow and sleet to southern England. Winds remained between east and north-east, and weather dry and cold for about a week. On the 24th an airstream of arctic origin brought snow showers to most northern districts. Wintry showers continued in the north and east on Christmas Day, and on Boxing Day snow spread south-east over the country reaching the London area during

MEAN PRESSURE AT 9 G.M.T.

The dotted lines show the normal distribution of pressure in millibars based on 30 years observations 1921-50.

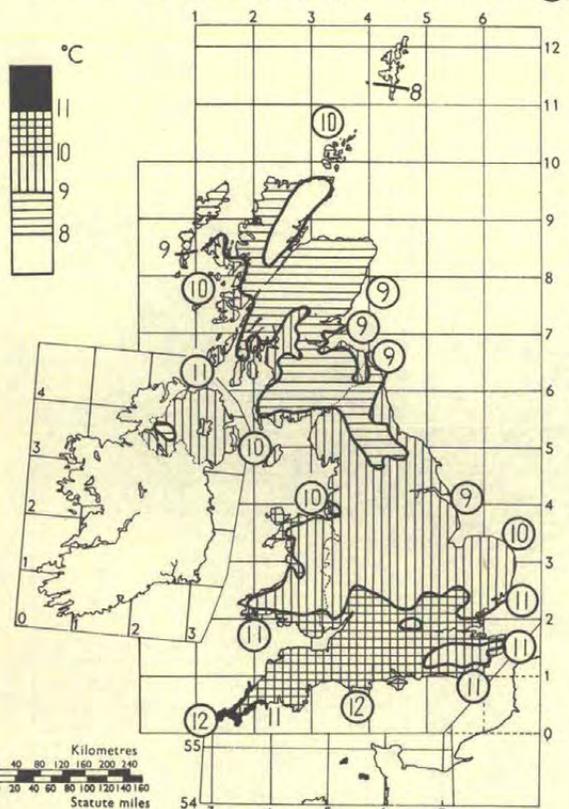


BRIGHT SUNSHINE

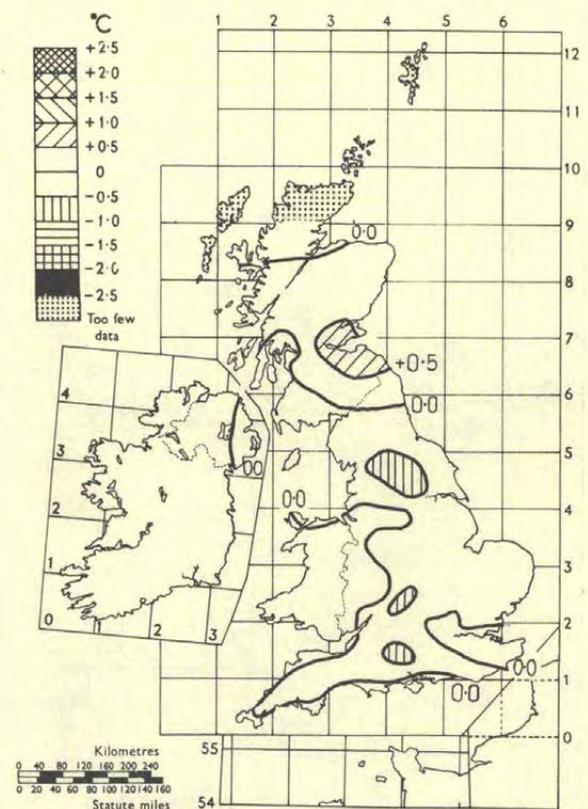


MEAN AIR TEMPERATURE

Reduced to sea level by a correction of 1°C. for 500 ft. Sea temperatures are shown by figures in circles thus (10)



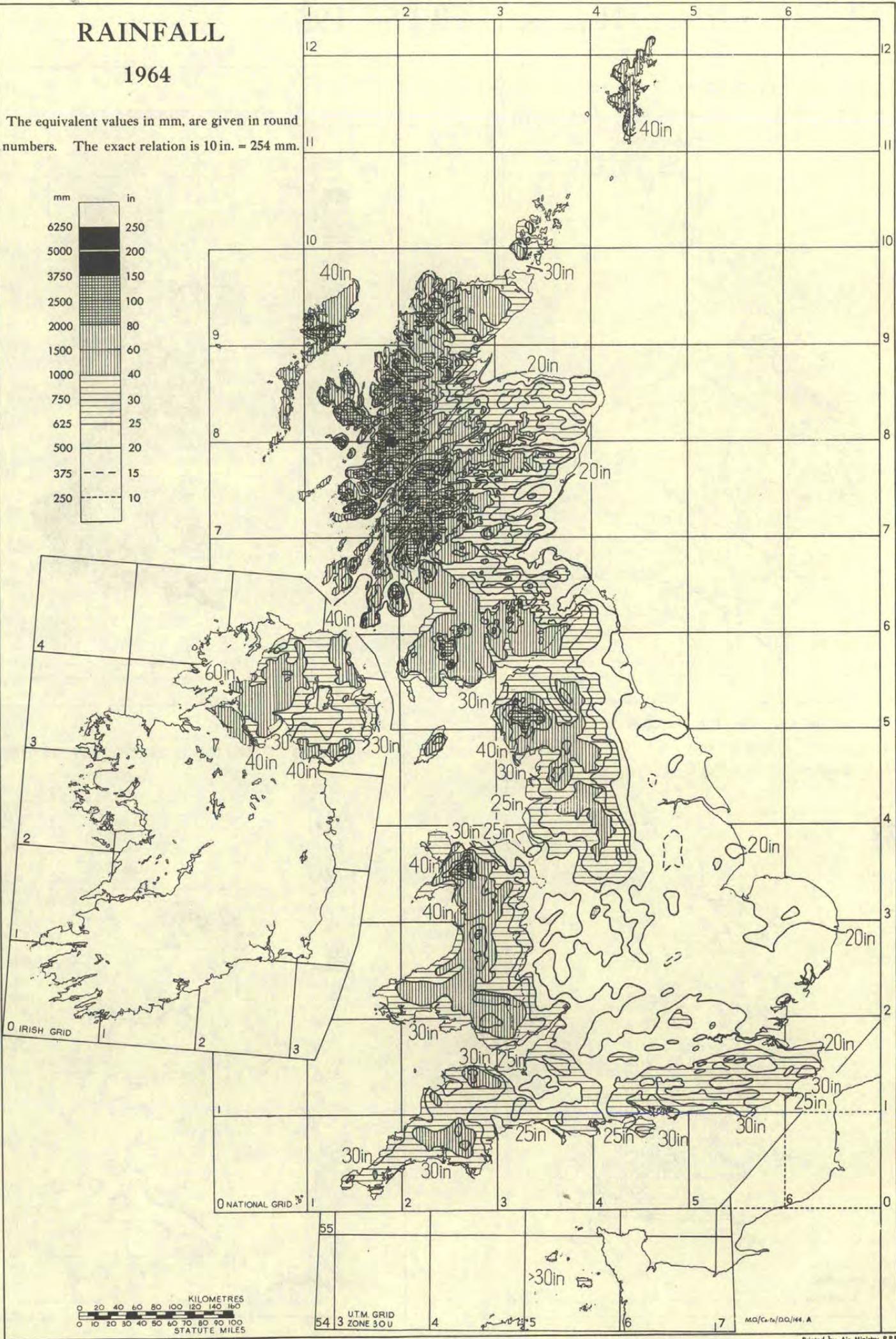
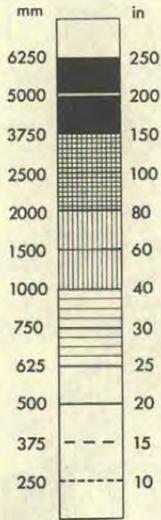
ANOMALY OF MEAN 1 ft. EARTH TEMPERATURE



RAINFALL

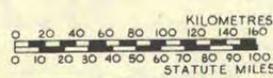
1964

The equivalent values in mm. are given in round numbers. The exact relation is 10 in. = 254 mm.



IRISH GRID

NATIONAL GRID



UTM GRID
ZONE 30U

MA/C-71/DA/144. A

the evening. Milder air, accompanied by rain, spread across the country from the west on the 29th. The 30th was also wet but the last day of the month was mainly fine and sunny.

Pressure and Wind

Mean pressure at 9 hr was above the average over the whole of the United Kingdom during January, August, October and November, and was above the average over the major part of the country during February, March, July and September, deficits occurring only in southern districts in February and March, and only in northern districts in July and September. Mean pressure was mainly below the average during the remaining months of the year, April, May, June and December, but excesses were recorded in parts of southern England during April and May.

An indication of the general surface wind direction over the United Kingdom is given in the section on "General Weather" from which it will be seen that, during January, February and March, surface winds were predominantly easterly or variable; that after the first week of April winds during the remainder of the spring were mainly between south-west and west but reverted to easterly during the last 10 days of May. Surface winds during the summer months were very variable in direction, but after a period of south-westerlies during the second week of June, winds rather frequently swung round to north-west. During the autumn westerly winds predominated though each month began with a spell of easterlies. South-westerlies predominated during the first half of December and easterlies during the second half.

The figures in brackets give the approximate number of days of winds from various directions during 1964. South-westerly (130); light and variable (100); easterly (90); north-westerly (45).

Surface winds reached gale force in England and Wales on 14-16 days during each of the months February, March, April and December and on 4-7 days in each of the months January and June to October. May and November had 10-11 days. Gales were more frequent in Scotland except during April when they were recorded on only 8 days. They were most frequent in Scotland in January, February, November and December (17-20 days) and least frequent during June when only 6 days of gale were recorded.

Highest Gusts

Gusts of 70 kt and over were recorded during January, February, May, October and December; on January 2nd in the Hebrides, on February 1st in the Orkneys and Hebrides, and on May 9th at Edinburgh. In October gales were unusually severe in the English Channel on the 9th. At 1300 GMT on that day Jersey Airport wind was 260 degrees 45 kt gusting to 71 kt, and 20 minutes later a mean wind (over a period of 10 mins) of 74 kt with a gust up to 94 kt was recorded. This is the highest gust recorded in the United Kingdom during October. Gusts of 70 to 80 kt were frequent that afternoon until 1800 GMT. In December gales were widespread and severe on the 7th and on the night of the 11th/12th. On the 7th a gust of 77 kt was recorded at Ronaldsway in the Isle of Man, and one of 94 kt at the high level station, Great Dun Fell (2780 ft.) in Westmorland. On the night of the 11th/12th a gust of 73 kt was recorded at Turnhouse at 2350 GMT and one of 88 kt at Edinburgh (Blackford Hill) at 0120 GMT.

Temperatures

Taking the year as a whole mean temperature was below the average for the third year in succession; over England and Wales it was 0.2°C below the 1931-60 average but over Scotland only 0.1°C below. Apart from a slight deficit over England and Wales in January, mean temperatures exceeded the average over the three major divisions of the United Kingdom during the winter months of January and February. Spring started cold but ended fine and warm, a deficit of nearly 2°C in March being replaced over England and Wales by an excess of nearly 2°C in May. During the summer months mean temperatures were generally below the average, the deficit over England and Wales and over Northern Ireland being greatest during June and least in July, but in Scotland the August deficit was greatest. During the remaining months of the year, apart from a slight deficit in Scotland in September, mean temperature was alternately above and below the average, autumn temperatures being mainly above the average except during October, and mean temperature in December being well below.

January and February

January temperature was above the average in Scotland but below in eastern and southern England. In south-east England a cold spell from the 10th to the 20th was preceded and followed by about a week of near average day temperatures. In Scotland, however, the cold spell lasted only three or four days around the 16th. The mildest periods were during the first few days and at the end of the month.

February mean temperature was everywhere above the average. The mild weather at the end of January, which lasted over the first three or four days of February, was followed by a short cold spell with widespread and locally severe frost in southern England; at Hurn, near Bournemouth, temperature fell to -8°C on the 6th. After a number of unusually mild nights during the second week, the third week was generally cold but the month ended with a week of unusually mild weather. A feature of the month was the large variation of afternoon temperatures, ranging at some places from only 1°C on the 18th to 13°C on the 27th.

March, April and May

March temperatures were everywhere below the average except in the extreme north of Scotland, day temperatures being particularly low in eastern

England. In England and Wales temperatures were below average nearly everywhere during the first three weeks though they approached average, and were even a little above in places, around the 13th. In Scotland, however, day temperatures were above the average generally until about the 10th. The fourth week began mild but easterly winds set in on the 27th and the remainder of the month was dull and cold.

The cold weather at the end of March lasted over the first four days of April with day temperatures in parts of south-east England as much as 8°C below average giving London its coldest spell of early April weather since 1911. Over the month as a whole, however, temperature was above average mainly owing to mild nights. Minimum temperatures were mostly well above the average after the 8th and maximum temperatures were above the average at the beginning of the third week and towards the end of the month.

During the first 10 days of May temperatures were above average. The 12th was a warm day; it was the warmest day in May since 1959 at some places in the London area with temperatures locally reaching 27°C. During the second half of the month day temperatures were well above average; in parts of north-west England afternoon temperatures were about 5°C above the average daily from the 22nd to the 29th. Night temperatures continued mostly above average except on the 14th/15th when air frost was recorded at a few places.

June, July and August

June temperatures were below the average mainly owing to low day temperatures; these were lowest in western districts. In England and Wales the month started with two very cold days; day temperature was 8°C below average at many places on the 2nd. Temperature was also below average from about the 14th to the 23rd (6°C below in many places around the 20th), but above average, especially in south-east England, during the second and fourth weeks. In Scotland, though the general temperature pattern was similar, the deviations from normal were rather less. Night temperatures were mostly above average on the 3rd-18th and during the last week of the month.

During July day temperatures were below the average except in south-east England. They were mostly below average during the first ten days, with the deficit increasing northwards, and above average during the third week the excess being greatest in south-east England. Day temperatures were close to the average around the 21st, but from the 23rd onwards they were above the average in south-east England and below the average in Scotland and Northern England.

August temperatures were generally below the average but there were some very warm days in south-east England and the Midlands during the first and last weeks. Temperatures reached 27°C at a number of places on the 3rd and 5th and exceeded 32°C locally on the 28th. During the remainder of the month, apart from a few days around mid-month with temperatures during the day slightly above the average, temperatures were below average especially in Scotland. Nights were particularly cold on the 19th/20th and 20th/21st when temperature fell to -2°C at Eskdalemuir, the lowest August temperature recorded there for at least 50 years.

September, October and November

Mean temperatures during September were above average in England and Wales mainly due to high day temperatures in the Midlands and in east and south-east England. They were below average in Scotland. During the first half of the month day temperatures were above average almost everywhere in England and Wales. The third week was rather cold with wide-spread air frost at night. A warm spell lasting for four or five days began on the 21st; on the 25th afternoon temperatures reached 25°C in parts of Lincolnshire and East Anglia and also in the London area where it was the warmest September day for 16 years. Temperature at night was mainly below average during the second half of the month; at Elmdon it fell to -1°C on the 21st, the lowest September temperature there since records began in 1949.

The warm weather at the end of September continued in most places during the first week of October. Both day and night temperatures were below average from the 8th to the 16th; with afternoon temperatures only reaching 10°C, the 9th was the coldest October day in the London area for 20 years. The coldest night was the 13th, when air temperature at Elmdon fell to -5°C. During the second half of the month temperature was mostly below average, except for milder periods of three or four days, around the 19th and 26th, which were most pronounced in Scotland and northern England.

The rather cold weather at the end of October continued in many places until November 10th; in parts of Scotland temperature remained below freezing day and night throughout the 9th and 10th. From the 12th until the 27th temperatures were above average both day and night over most of the country; in south-east England afternoon temperatures were as much as 5°C above average around the 13th, 19th and 25th and in parts of Scotland minimum temperatures were 8°C above average around the 21st. The last few days of the month were cold with temperature at some places not rising above 2°C on the 29th.

December

The cold weather at the end of November continued in many places until December 5. From the 6th until the 15th temperature was considerably above average especially in south-east England where both maximum and minimum temperatures were 7° or 8°C above average on the 6th-10th and the 12th. Temperatures were mostly below average during the second half of the month (the coldest periods being around the 17th and 24th-27th) except during the last two or three days.

The following table gives in degrees Centigrade the monthly and annual deviation from the 1931-60 average temperature for (a) England and Wales, (b) Scotland and (c) Northern Ireland.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
a	-0.3	+0.5	-1.7	+0.2	+1.8	-0.6	-0.1	-0.3	+0.4	-1.6	+0.7	-1.2	-0.1
b	+1.6	+0.8	-0.7	+0.6	+1.0	-0.5	-0.5	-1.0	-0.3	-0.7	+0.3	-1.3	0.0
c	+1.2	+0.3	-1.1	+0.4	+1.2	-0.8	-0.2	-0.6	+0.1	-1.0	+0.2	-1.1	0.0

Precipitation

1964 was a dry year. In England and Wales it was the third successive year with rainfall below the average and the second driest year since comparable records began in 1887. Rainfall was below the average every month except March, April, June and December. The winter months of January and February were very dry but both the spring and summer seasons began with rather a wet month. In Scotland the pattern was very different rainfall being above the average every month from April to September, except for July.

January and February

The outstanding feature of January was its dryness; there has been no drier January over England and Wales since 1880. Over the month as a whole much of southern England (except Kent and Sussex) had less than 25 per cent of average rainfall; there was little or no rain during the first 10 days of the month. In Scotland most rain fell during the first and last few days of the month.

In February most of the rain fell during the last week of the month. Rainfall was less than 30 per cent of the average in North Wales, north-west England and the north Midlands; only around Plymouth, in the Wick area and near Rattray Head was rainfall more than the average.

March, April and May

The dry weather of the winter months continued until March 10, but during the next few days rain was heavy and prolonged in southern England, many places having more than their average for the month. By the end of the month rainfall was more than twice the average over much of the north and east Midlands, Lincolnshire, the Thames Valley, Surrey and Hampshire. In Scotland, while many eastern areas had more than twice their average amount of rain, parts of Skye, west Inverness-shire and west Argyll-shire recorded less than 25 per cent of their average. At Stornoway it was the driest March since 1876.

The first half of April was rather dry, but over the month as a whole rainfall was about average except in parts of west Scotland and south-east England where values reached 150 per cent of the average, and in parts of eastern Scotland and south-west England where only 75 per cent of the average was recorded.

May rainfall was less than half the average in coastal areas of eastern Scotland, over much of England east of the Pennines and in the east Midlands. Amounts exceeded twice the average near the Great Glen (Scotland) and in parts of Wiltshire, Hampshire and Sussex. Heavy falls of 3 and 5 inches in 24 hours were recorded on the Sussex coast and in the Oldham area respectively towards the end of the month.

June, July and August

In June, mainly owing to heavy thunderstorms, rainfall was more than twice the average south-east of a line from the Wash to the Isle of Wight, and three times the average in some coastal areas of Essex and Kent. The wettest spell of the month was on the 17th-18th when little short of 3 inches was recorded in Kent. In eastern Scotland excesses were also mainly due to heavy rain on one or two days; near the mouth of the Tay amounts were 175 per cent of the average. It was the wettest June at Worthing since rainfall records began there in 1887.

July rainfall was less than half the average over much of eastern, central and southern England, but heavy localised rain brought amounts up to double the average in parts of Buckinghamshire and Lancashire. On the 18th-19th the eastern part of Lancashire suffered severe damage during three major storms; at Bolton 2.20 inches of rain is estimated to have fallen in 15 min. in one of these storms, which is believed to be the greatest intensity ever recorded for such a period in the United Kingdom. Most eastern districts of Scotland had less than half their average amount of rainfall (Kelso had its driest July since 1888) but parts of the western Highlands recorded double their averages.

Rainfall in England and Wales during August was below average nearly everywhere except in parts of Northumberland, Lincolnshire and Suffolk. Over most of southern England amounts were less than 25 per cent of the average. In Scotland, on the other hand, rainfall was above the average except in the extreme south; in the north-east amounts were locally twice the average. Wick had its wettest August since 1930. The 16th-19th was the wettest period of the month when rainfall was especially heavy in hilly western districts. In Northern Ireland at Tollymore Park, Co. Down, more than 5 inches was recorded in two days.

September, October and November

September rainfall was again below the average in England and Wales but above in Scotland. It was 25 per cent of the averages over much of East Anglia, Kent, Montgomery, Warwickshire, Leicestershire and Lincolnshire but 150 per cent of the average in parts of western Scotland and the extreme north-east of Scotland. The wettest days in England and Wales were around the 14th and 15th; in Scotland the wettest were around the 8th-10th and 21st-22nd.

October rainfall was less than the average nearly everywhere in the United Kingdom except around Gorleston and in coastal areas of east Kent and east Sussex where totals exceeded 125 per cent of the average mainly owing to heavy rain on the 14th. Less than half the average was recorded in parts of the Thames

Valley, the east Midlands and in counties east of the Pennines as well as over most central and eastern districts north of the Firth of Forth and over most of Inverness-shire. The last week of the month was very dry.

In England and Wales rainfall in November was below the average everywhere except for a few places in the extreme north of Devon. It was less than 50 per cent of the average over most of the Midlands and over most of England east of the Pennines. In Scotland rainfall ranged from 150 per cent of the average in parts of western Ross to 25 per cent of the average locally in Aberdeen-shire and Angus. The 6th-12th was a very stormy and wet week. Falls of 14 and 16 inches were recorded during the week in the Lake District and North Wales leading to extensive flooding; it was estimated that on the peaks in both districts rainfall amounts would have been about 20 inches during that period.

December

During the first few days of December, wintry showers brought some substantial snowfalls to East Anglia and Scotland but there was an abrupt change on the 5th when stormy, very wet weather which lasted until the 12th brought widespread floods to Wales and the Lake District. Falls of 14 inches were recorded in the week 6th-12th in the Lake District and 16 inches in North Wales. The heaviest daily fall was 6.82 inches on the 12th at Ceinws, Montgomeryshire. A sharp transition to a very cold Arctic airstream occurred on the 24th and this brought a "white Christmas" to many parts of the country. The last three days were stormy and wet with falls of 2 inches in places.

The following table gives the revised monthly and annual general rainfall amounts expressed as a percentage of the 1916-50 average for (a) England and Wales (b) Scotland and (c) Northern Ireland.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
a	29	47	169	110	96	141	63	64	43	66	58	111	78
b	44	48	85	115	119	103	78	124	116	69	85	114	88
c	47	45	131	89	92	107	56	105	89	126	78	107	88

Thunder was heard more frequently in England and Wales than in Scotland during every month of the year except January, August and November. It was most frequent in England and Wales during May and June (17 days each month) and during August (17 days) in Scotland. It was heard on four days or less both in England and Wales and in Scotland during January, February and March. Otherwise it was heard in England and Wales on 5 days in November and on 10-13 days in April, July, August, September and October. In Scotland it was heard on 6-8 days during April, July, September and October, and on 10-14 days during May, June and November.

Snow or sleet fell more frequently in Scotland than in England and Wales, and was most frequent during March (21 or 20 days) in both countries. In Scotland it was reported on 18 days in February, 13-15 days in January and November, 9 days in April and October, 5-6 days in May and June, and on one day over the higher ground in August and September. In England and Wales there were 10 or 11 days of snow in January and February, 4-5 in April, October and November but there was none from May to September.

Ground was snow-covered in Scotland on 16 days in February, 12 days in March, 7 days in November and 4 days or less during the remaining months. In England and Wales during 13 days of snow-cover in March it lay 6-12 inches deep in the Midlands on the 16th; during 4 days of snow-cover in February it lay 3-4 inches deep in northern England on the 16th-19th, and in 2 days of snow-cover during January it lay 2-4 inches deep in the Midlands and eastern England on the 13th and 14th; an unusually heavy fall gave 9½ inches of snow at Huddersfield on the 14th.

Sunshine

Over the year as a whole sunshine during 1964 was slightly below average, but the dull weather occurred mainly during the first half of the year. The winter months January and February were dull over the United Kingdom as a whole as also were the spring months, March, April and May, apart from a slight excess in England and Wales during May. The summer also began dull but ended with a sunny month. Sunshine in England and Wales was above average during the remaining months of the year, but in Scotland and Northern Ireland autumn sunshine was below the average during October.

January and February

January was mainly dull especially in southern England. Sunshine was above the average, however, in parts of northern and eastern Scotland and parts of northern England. In Scotland excesses were generally small except in East Lothian; North Berwick had 50 per cent more sunshine than usual. Over England and Wales percentages ranged from 171 at Huddersfield to 41 at Sidmouth. At Weymouth it was the duller January since 1912.

February sunshine was also below the average in most places, with the most numerous deficits in southern England. In Scotland the largest deficits were in northern areas and in the Western Isles while there were marked excesses in areas near the Great Glen. In England and Wales percentages were rather higher generally in the north-west than elsewhere; at Malvern sunshine was only 55 per cent of the average.

March, April and May

March was a very dull month, the duller over England and Wales as a whole since comparable records began in 1909. Some north-eastern districts were particularly dull, many places in Northumberland and Durham having only about

30 per cent of their usual amount of sunshine. Only in the extreme north-west of Scotland was sunshine above the average in some places. At Worthing it was the dulllest March since 1900.

The dull weather continued during April with sunshine below the average almost everywhere. In Scotland only at Gordon Castle and Tiree did measured amounts almost reach the average. In England and Wales percentages ranged from 100 at Aberystwyth to 57 at Watnall.

May was the first month of the year with sunshine over England and Wales as a whole above the average. The excesses were most numerous in the east and the deficits most numerous in the west; at Ross-on-Wye it was the 15th successive month with sunshine below the average. Cromer recorded 135 per cent of its average sunshine, but Morecambe and Falmouth only 74 per cent. In Scotland sunshine was below the average except for one or two places in the east.

June, July and August

June sunshine was below the average almost everywhere except in parts of northern and eastern Scotland; it was 120 per cent of the average at Aberdeen. In England and Wales percentages of the local average ranged from 100 at Berwick-on-Tweed to 58 at Sheffield.

During July sunshine was generally above the average in the south and east of the United Kingdom but below average in the north-west; parts of east Scotland had their sunniest July since 1955. Amounts ranged from 126 per cent of the local averages at North Berwick to 69 per cent at Ballytelly; Northern Ireland.

August sunshine in parts of north and north-east Scotland was about 92 per cent of the average, some stations having a deficit of 35-40 hours. In western Scotland sunshine was more generally above average. In England and Wales most places had more than average sunshine, percentages ranging from 93 at Bude and Trawscoed to 33 at Sutton Bonington.

September, October and November

September sunshine was below the average in the north of Scotland and over the Western Isles—Stornoway had its dulllest September since 1895—but most other parts of Scotland reported an excess. In England and Wales sunshine was everywhere above the average; it was 60 per cent above the average in parts of the Midlands and also in the London area where amounts were more than during the unusually sunny September of 1959. At Worthing, apart from 1959, it was the sunniest September for 36 years. During the last week of the month sunshine was more than twice the average for the period in all districts of the British Isles except the north-west.

During October sunshine was below the average over Northern Ireland and over most of Scotland except in parts of the north and along the Moray Firth coast. In England and Wales it was mostly above average especially in the Midlands and south-east England. Amounts ranged from 72 per cent of the average at Cockle Park to about 140 per cent of the average at Ringway, Askham Bryan and Luton.

November sunshine was very variable from place to place. It exceeded the average over most of Northern Ireland and in parts of east and south Scotland. In England and Wales excesses were highest in the north and north-west, amounts ranging from 165 per cent of the averages at Morecambe to 65 per cent at Torquay.

December

December sunshine was above average in most places in Scotland, only a few places in the north reported deficits. The sunniest place was West Freugh,

Wigtownshire. In England and Wales sunshine was above average nearly everywhere except in the extreme east. Amounts ranged from 62 per cent of the averages at Margate to 202 and 206 per cent at Sheffield and Ringway respectively.

The following table gives monthly and annual general values of sunshine expressed as a percentage of the 1931-60 average for (a) England and Wales (b) Scotland (c) Northern Ireland.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
a	89	86	53	79	104	74	103	112	135	115	105	114	97
b	98	95	66	83	84	97	103	96	106	93	103	111	92
c	62	84	62	86	88	80	77	104	119	78	125	102	88

The sunniest stations in each month were as follows: - January, Silpho Moor 87.0 hr; February, Elgin Cemetery 96.6 hr; March, Poolewe 134.2 hr; April, Jersey (St. Helier) 181.0 hr; May, Cromer 263.2 hr; June, Jersey (St. Helier) 249.1 hr; July, Jersey (Gorey Castle) 299.9 hr; August, Jersey (Gorey Castle) 259.7 hr; September, Littlehampton 247.7 hr; October, Worthing 159.2 hr; November, Kilkeel 98.3 hr; December, Bournemouth 58.2 hr.

The following were the three sunniest places in England and Wales during 1964. 1. Jersey (Gorey Castle) 1868.2 hr; 2. Jersey (St. Helier) 1843.1 hr and 3. Shanklin 1823.4 hr; in Scotland, 1. Dunbar 1525.6 hr; 2. Leuchars 1400.7 hr and 3. Arbroath 1380 hr; in Northern Ireland, 1. Kilkeel 1330.0 hr; 2. Ballyhalbert 1326.0 hr and 3. Lisnafillan 1219.9 hr.

Fog

Fog was observed at 9 hr almost daily from January to March; at some places in the Midlands it was reported on 10 mornings during each of these months. Early morning fog was widespread on January 4th-9th, and 18th-23rd (persisting throughout the day in some places), on February 23rd-26th and 29th (persisting all day locally); on the 26th and 29th, and on March 21st and 22nd. In April fog was rarely widespread but in May early morning fog was fairly extensive on the 24th and 27th-29th clearing only slowly during the morning. During the summer months, June to August few places had more than one or two mornings with fog around 9 hr, but in September fog was widespread night and morning on the 3rd-5th persisting throughout the 4th in north-east coastal areas. Overnight fog, which was observed on about 27 mornings during both October and November, occurred at many places 8-10 mornings each month; it was slow to clear on October 22nd, 26th and 29th-31st and was widespread and dense locally on November 9th, 10th and 11th. During December fog was observed in Scotland every morning except on the 4th and 18th. In England and Wales many places in the Midlands had fog on 7 mornings, and it was widespread on the 15th-18th.

Miscellaneous Phenomena

The aurora was seen less frequently than usual during 1964 and reports of displays were confined to Scottish stations. It was most frequently observed during the late winter and early spring (10 nights in February and 9 nights in both March and April), and during the autumn (10 nights in September and 8 nights in both October and November). It was only visible on one night in August during the summer months.

TABLE I—DISTRICT VALUES FOR THE YEAR 1964 [FIRST PUBLISHED 1908, REVISED 1928, 1941, 1956 and 1964]

DISTRICTS	AIR TEMPERATURE °C					EARTH TEMP °C		No of RAIN DAYS	RAIN-FALL	SUNSHINE
	Highest Max.	Lowest Min.	Max.	Min.	Mean	Mean 1 ft.	Mean 4 ft.			
			Difference from Average							
0 SCOTLAND N.	24.4	-13.9	-0.1	-0.1	-0.1	—	—	-10	101	90
1 SCOTLAND E.	27.8	-15.6	-0.1	+0.3	+0.1	—	—	-17	77	95
2 ENGLAND N.E.	30.7	-14.4	-0.2	0.0	-0.1	-0.2	-0.1	-24	71	98
3 ENGLAND E	32.8	-13.6	-0.3	-0.2	-0.2	-0.2	-0.2	-20	87	97
4 MIDLAND COUNTIES	30.5	-15.5	-0.3	-0.1	-0.2	-0.1	0.0	-22	72	98
5 ENGLAND S.E.	31.1	-12.4	-0.1	+0.1	0.0	0.0	-0.1	-20	87	97
6 SCOTLAND W.	25.0	-14.6	-0.3	+0.1	-0.1	+0.3	-0.1	-14	90	92
7 ENGLAND N.W. (and N. Wales)	28.3	-15.0	-0.3	+0.1	-0.1	-0.3	0.0	-25	86	98
8 ENGLAND S.W. (and S. Wales)	27.8	-13.9	-0.5	-0.1	-0.3	+0.1	0.0	-31	77	91
NORTHERN IRELAND	24.4	-7.2	0.0	0.0	0.0	—	—	-13	88	88
SCOTLAND	27.8	-15.6	-0.2	+0.1	0.0	—	—	-14	88	92
ENGLAND and WALES	32.8	-15.5	-0.3	0.0	-0.1	—	—	-24	78	97

TABLE II—SUMMARY OF AUTOGRAPHIC RECORDS OF WIND—THE YEAR 1964 [First Published 1914]

The summary showing the duration of wind speed between stated limits and extreme speeds at anemograph stations, will be found at Table IX, in the Wind Section.

TABLE III (continued)—SUMMARY OF OBSERVATIONS OF TEMPERATURE, RAINFALL, SUNSHINE AND WEATHER, YEAR 1964

DISTRICT, COUNTY AND PLACE	Terminal Hours of Observation	Height of Station above Mean Sea Level	AIR TEMPERATURE IN DEGREES CELSIUS								MEAN EARTH TEMPERATURE		RAINFALL (Terminal hour 9 G.M.T.)				WEATHER Number of days							BRIGHT SUNSHINE						
			Means of		Mean Temperature Mean of A and B	Difference from Average	Highest Maximum and Lowest Minimum		ft.	4ft.	Total Fall	Percentage of Average	Most in a day		Precip'n		Snow or Sleet	Snow lying at 9h.	Hail	Ice or snow pellets etc.	Thunder heard	Fog at 9h.	Air Frost †	Grass min. below 0°C	Gale	Daily Mean	Percentage of Average			
			A	B			Maximum	Minimum					Amount	Date	0-1 in. (0-2 mm.) or more	0-4 in. (1-0 mm.) or more														
			Max.	Min.	°C	°C	°C	°C	°C	°C	°C	°C	in.	%	in.	Date	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.
6a SCOTLAND, W. Argyll	T	ft.	21-9	29	11.3	7.1	9.2	-0.1	20.1	-3.6	-	-	43.66	99	0.97	6 Oct	233	180	14	1	2	32	5	2	10	59	36	3.40	86	
			21-9	65	11.5	7.3	9.4	-	21.5	-0.5	-	-	51.78	-	1.11	14 Mar	225	187	12	0	19	0	4	3	2	23	34	-	-	
			9-9	87	11.9	6.3	9.1	-0.1	23.3	-1.7	-	-	50.78	96	1.29	6 Oct	265	201	23	0	26	1	6	8	16	1	31	-	-	
			9-9	270	11.3	6.0	8.7	-	22.2	-3.3	-	-	66.54	-	1.71	18 Nov	224	204	-	-	-	-	-	-	-	10	52	-	-	
			9-9	10	12.3	6.9	9.6	-	23.3	-1.1	-	-	63.89	-	1.40	9, 21 Sept	253	200	-	0	-	-	-	-	-	0	2	23	-	-
			9-9	10	12.3	-	-	-	22.2	-3.3	-	-	39.91	-	1.20	19 Mar	186	146	9	0	3	0	2	133	10	1	3.47	-	-	
			9-9	40	12.2	5.2	8.7	-	23.3	-5.6	-	-	62.29	-	1.57	21 Sept	244	220	15	0	21	0	5	0	39	145	1	-	-	
			9-9	229	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			9-9	30	11.9	6.0	8.9	-	22.2	-4.4	-	-	61.99	-	1.54	21 Sept	226	192	16	3	19	0	7	7	25	109	1	2.52	-	-
			9-9	120	11.4	4.8	8.1	-0.2	23.3	-4.3	-	-	82.97	88	1.81	7 July	235	201	-	6	-	-	-	-	4	65	117	-	-	
			9-9	46	11.8	4.6	8.2	-0.5	22.8	-7.2	8.7	-	83.89	90	2.05	11 Dec	226	197	12	6	1	0	3	30	66	112	1	-	-	
			9-9	40	-	5.5	-	-	-	-	-	-	85	-	2.02	11 Dec	229	200	18	8	6	1	3	12	41	111	0	-	-	
			9-9	150	11.7	6.4	9.1	+0.1	22.8	-3.9	8.9	8.9	46.66	98	1.11	17 Aug	226	174	19	0	4	4	4	0	10	59	0	-	-	
			9-9	16	11.9	7.2	9.5	-	22.2	-2.9	-	-	43.37	96	1.42	14 Aug	205	185	15	0	0	0	1	0	7	-	20	-	-	
			9-9	283	11.5	5.4	8.5	-0.1	21.7	-6.1	-	-	49.69	86	1.30	17 Aug	220	179	7	5	0	0	0	12	39	-	4	3.06	93	
9-9	310	11.5	4.4	7.9	-	23.9	-13.3	-	-	40.69	-	0.96	17 Aug	209	168	14	10	0	1	1	18	68	4	-	-					
9-9	1100	9.4	3.6	6.5	-	22.3	-8.3	-	-	53.65	-	1.76	11 Dec	222	173	-	-	-	-	-	46	76	99	1	3.25	-				
9-9	151	12.2	5.7	8.9	-0.1	25.0	-7.8	9.7	9.4	32.29	84	1.48	6 June	195	138	12	10	1	2	2	19	33	97	1	3.47	-				
9-9	100	-	-	-	-	-10.0	-	-	-	30.72	-	0.94	6 June	180	138	-	-	-	-	-	-	-	-	-	-	-				
9-9	200	11.7	6.3	9.0	-0.2	21.7	-6.1	-	-	56.34	90	1.71	11 Dec	215	178	13	6	1	1	2	18	24	103	2	3.15	-				
9-9	106	12.1	6.1	9.1	-0.3	22.8	-5.0	9.5	9.1	40.58	92	1.45	17 Aug	206	158	17	3	6	2	8	36	25	72	9	2.99	90				
9-9	97	11.9	5.2	8.5	-	21.7	-8.9	-	-	43.02	-	1.42	6 June	197	161	10	4	4	0	7	13	51	90	0	-	-				
9-9	26	12.2	5.8	9.0	+0.1	22.7	-8.0	-	-	34.97	86	1.76	6 June	194	152	23	3	9	3	9	18	42	96	1	3.15	93				
9-9	75	-	5.5	-	-	23.3	-6.7	-	-	33.75	-	1.33	17 Aug	203	148	13	7	1	2	3	14	45	0	-	3.14	-				
9-9	453	11.2	4.8	8.0	-	21.1	-8.3	-	-	40.14	-	1.71	17 Aug	204	159	8	5	1	0	0	-	58	134	0	-	-				
9-9	351	11.5	5.2	8.3	-0.2	22.2	-7.2	-	-	36.94	93	1.20	17 Aug	211	161	16	7	4	1	12	13	43	104	3	3.13	100				
9-9	256	11.9	5.1	8.5	-	22.2	-7.2	-	-	30.94	-	0.89	17 Aug	202	143	14	7	3	1	5	47	-	0	-	-					
9-9	675	10.9	3.3	7.1	-	22.5	-11.5	7.7	-	37.22	-	1.42	6 Oct	206	151	27	9	7	2	9	2	93	142	15	3.09	-				
9-9	2377	6.7	1.5	4.1	-	19.0	-9.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
9-9	1270	9.8	3.5	6.7	-	21.7	-11.7	-	-	53.05	-	1.81	6 Oct	229	189	33	23	0	6	7	8	76	96	3	-	-				
9-9	706	11.0	5.6	7.3	-	22.6	-12.2	-	-	28.85	-	1.11	6 Oct	216	141	24	12	8	1	7	11	83	-	19	-	-				
9-9	969	10.0	3.3	6.7	-	21.1	-10.6	-	-	39.22	-	0.22	6 Oct	230	166	22	14	2	0	6	31	80	5	2.67	-					
9-9	25	12.3	6.0	9.1	-0.2	22.8	-5.0	-	-	36.49	-	1.38	3 Jan	198	149	8	0	4	0	2	1	28	0	3.43	-					
9-9	20	12.3	6.6	9.5	0.0	22.8	-3.9	-	-	46.56	-	1.30	17 Aug	198	172	10	5	0	0	1	6	11	59	0	3.06	-				
9-9	400	11.9	4.4	8.1	-	23.3	-8.3	-	-	51.58	-	1.65	6 Oct	225	180	9	5	7	2	4	66	2	5	3.29	-					
9-9	147	12.0	5.6	8.8	-0.1	23.9	-5.6	9.0	9.1	33.97	86	1.14	21 Sept	191	144	13	0	9	2	8	1	41	114	5	3.39	94				
9-9	51	12.1	5.9	9.0	-	24.5	-6.4	-	-	34.03	92	1.15	21 Sept	180	138	20	2	6	6	8	0	53	90	2	3.54	-				
9-9	115	12.1	5.7	8.9	-0.1	22.2	-5.6	9.3	9.4	40.82	82	1.14	21 Sept	195	159	6	0	1	0	1	6	35	95	0	3.20	88				
9-9	480	10.9	4.2	7.5	-	22.8	-11.1	-	-	51.58	-	2.15	17 Aug	202	168	15	5	2	0	12	15	64	122	3	-	-				
9-9	140	11.6	5.2	8.4	-0.4	22.2	-10.6	9.2	9.3	39.27	82	1.87	6 Oct	182	142	6	-	2	0	6	10	49	116	2	3.43	97				
9-9	794	10.7	3.9	7.3	0.0	22.1	-14.6	8.7	8.4	54.47	97	2.47	6 Oct	211	168	50	15	19	7	13	11	81	120	6	3.06	92				
9-9	360	11.9	4.5	8.2	-	23.3	-7.8	-	-	53.27	-	1.64	9 June	234	181	15	2	4	3	3	5	64	146	0	-	-				
9-9	50	12.1	4.4	8.3	-	23.9	-7.8	-	-	46.84	-	1.52	8 Aug	198	169	8	3	0	0	1	7	67	-	1	-	-				
9-9	585	-	-	-	-	-	-	-	-	67.59	-	2.02	11 Dec	218	177	-	-	-	-	-	-	-	-	-	3.22	-				
9-9	181	12.2	4.2	8.2	-0.3	23.3	-11.7	-	-	53.87	-	1.79	11 Dec	206	172	14	6	4	0	2	5	75	102	3	-	-				
9-9	390	11.5	3.7	7.6	-	23.3	-13.3	8.4	-	48.97	-	2.09	6 Oct	208	172	22	6	1	0	7	4	89	-	5	-	-				
9-9	154	11.9	4.9	8.4	-	23.3	-8.9	-	-	47.10	-	2.12	6 Oct	209	163	-	4	-	-	-	10	58	-	-	-					
9-9	240	11.7	4.7	8.2	-	23.9	-9.4	-	-	45.58	-	1.89	6 Oct	183	152	9	5	4	0	5	11	62	117	1	-	-				
9-9	196	11.8	-	-	-	23.3	-10.6	8.6	-	42.05	-	1.98	6 Oct	185	143	-	3	-	-	-	17	-	130	-	3.61	-				
9-9	50	11.9	5.6	8.7	-	21.8	-7.5	-	-	36.78	92	1.18	21 Sept	187	143	-	-	-	-	-	44	-	-	3.55	-					
9-9	546	-	4.8	-	-	-	-	-	-	55.05	-	1.78	21 Sept	189	169	-	7	7	1	0	0	24	50	100	1	2.87	-			
9-9	257	11.3	7.3	9.3	-	21.1	-1.6	-	-	-	-	-	-	-	-	10	0	0	0	5										

TABLE IV (continued)—SUMMARY OF OBSERVATIONS AT FIXED HOURS DURING THE YEAR 1964

DISTRICT, COUNTY AND PLACE	Hour of Observation	Height of Barometer above Mean Sea Level	MEAN PRESSURE		MEAN TEMPERATURE AND HUMIDITY		CLOUD-AMOUNT (OKTAS)								VISIBILITY								WIND, NUMBER OF OBSERVATIONS																				
			At Mean Sea Level	Difference from Average	Dry Bulb	Depression of Wet Bulb	Vapour Pressure	Relative Humidity	Mean Amount	NO. OF OBSERVATIONS				NUMBER OF OBSERVATIONS				FORCE (0-12)				DIRECTION																					
										0	1	2	3	4	5	6	7	8	9	0-4 yd.	45-210 yd.	220-430 yd.	440-1,090 yd.	1,100-2,190 yd.	2,200-4,390 yd.	3-8 mi.	7-12 mi.	13-24 mi.	25 mi. or over	8 or more	6	4	2	0	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	
			ft.	mb.	°C	°C	mb.	%	0	1	2	3	4	5	6	7	8	9	0-4 yd.	45-210 yd.	220-430 yd.	440-1,090 yd.	1,100-2,190 yd.	2,200-4,390 yd.	3-8 mi.	7-12 mi.	13-24 mi.	25 mi. or over	8 or more	6	4	2	0	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.		
5a SCOTLAND, W.		G.M.T.	ft.	mb.	°C	°C	mb.	%	0	1	2	3	4	5	6	7	8	9	0-4 yd.	45-210 yd.	220-430 yd.	440-1,090 yd.	1,100-2,190 yd.	2,200-4,390 yd.	3-8 mi.	7-12 mi.	13-24 mi.	25 mi. or over	8 or more <td>6</td> <td>4</td> <td>2</td> <td>0</td> <td>N.</td> <td>N.E.</td> <td>E.</td> <td>S.E.</td> <td>S.</td> <td>S.W.</td> <td>W.</td> <td>N.W.</td>	6	4	2	0	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.		
Argyll	Tree	H	3	34	1013-0	-	8-5	0-8	1-1	88	5-6	20	55	52	104	135	0	0	0	0	1	6	19	76	100	96	66	6	76	154	99	31	37	23	26	51	62	54	56	26			
			9	34	1013-3	+2.2	9-5	1-1	10-4	85	5-9	1	58	55	141	110	1	0	0	0	1	2	5	13	81	100	80	84	6	74	176	90	20	37	15	29	66	64	53	59	28		
			15	34	1013-2	-	10-4	1-5	10-5	81	5-8	2	59	47	155	102	1	0	0	0	2	2	1	9	83	96	70	105	9	64	200	84	9	51	9	24	55	60	60	38	30		
Rhuvaal	H	H	21	34	1013-4	-	8-9	1-0	10-1	86	5-5	15	71	54	99	125	2	0	0	0	0	3	12	83	91	93	79	8	72	155	99	32	45	20	27	59	53	57	45	28			
			3	63	-	-	8-7	1-1	9-9	85	5-5	1	63	98	99	104	1	0	0	0	1	0	1	24	38	182	120	18	42	137	168	1	33	4	32	46	88	70	53	39			
			9	63	-	-	9-5	1-3	10-1	83	6-0	0	28	97	139	100	2	1	0	0	2	1	1	0	28	46	155	132	16	40	147	161	2	23	13	38	43	93	49	58	47		
Renfrew	Renfrew	H	15	63	-	-	10-4	1-5	10-3	80	6-0	0	27	96	145	97	1	0	0	0	1	0	1	0	36	40	158	130	9	51	144	161	1	30	11	25	47	69	38	90	55		
			21	63	-	-	9-2	1-2	10-1	84	5-6	1	60	91	99	110	5	0	0	0	2	0	1	0	36	40	151	140	11	47	141	165	2	45	14	33	40	75	43	74			
			3	29	1014-4	-	3	3	0-8	9-5	89	5-8	29	40	46	104	136	9	2	4	8	2	16	25	78	133	77	23	0	5	96	159	106	6	38	43	4	28	73	62	6		
Lanark	Lowther Hill	H	9	63	-	-	3-4	0-2	7-9	97	7-0	0	33	36	16	26	255	40	180	34	4	0	3	12	30	45	18	24	81	171	81	9	18	28	43	36	42	59	81	50			
			15	63	-	-	3-9	0-3	8-0	96	7-1	1	17	37	52	40	219	36	143	32	15	2	3	28	34	44	29	23	87	166	84	6	18	18	47	42	41	67	67	60			
			21	63	-	-	5-4	0-7	8-3	90	7-1	1	11	33	95	67	159	27	105	23	5	4	3	5	45	61	60	27	50	177	65	7	12	21	36	33	51	70	71	65			
Ayr	Prestwick Airport	H	3	29	1014-4	-	3	3	0-8	9-5	89	5-8	29	40	46	104	136	9	2	4	8	2	16	25	78	133	77	23	0	5	96	159	106	6	38	43	4	28	73	62	6		
			9	29	1014-8	+2.3	8-6	1-2	9-7	84	6-2	10	30	51	162	107	6	1	7	0	10	36	45	138	69	30	30	0	8	118	160	80	6	37	46	13	33	67	76	8			
			15	29	1014-3	-	11-1	2-3	10-0	74	6-4	4	21	50	171	117	3	2	1	2	7	20	35	160	58	35	46	0	9	172	141	44	12	28	55	13	41	77	79	17			
Dumfries	Eakdalemuir Observatory	H	21	29	1014-7	-	8-8	1-2	9-8	84	5-8	26	35	52	120	130	3	2	1	1	9	26	55	154	83	30	5	0	7	195	87	30	5	0	7	195	87	30	5	0	7	195	87
			3	29	1014-3	-	3-4	0-2	7-9	97	7-0	0	33	36	16	26	255	40	180	34	4	0	3	12	30	45	18	24	81	171	81	9	18	28	43	36	42	59	81	50			
			9	29	1014-7	-	3-9	0-3	8-0	96	7-1	1	17	37	52	40	219	36	143	32	15	2	3	28	34	44	29	23	87	166	84	6	18	18	47	42	41	67	67	60			
Wigtown	Mull of Galloway	H	15	260	1015-0	-	5-4	0-7	8-3	90	7-1	1	11	33	95	67	159	27	105	23	5	4	3	5	45	61	60	27	50	177	65	7	12	21	36	33	51	70	71	65			
			21	260	1015-3	-	3-9	0-3	8-0	96	7-0	1	19	43	47	47	209	46	107	25	4	0	1	3	5	45	61	60	27	50	177	65	7	12	21	36	33	51	70	71	65		
			3	29	1014-4	-	7-3	0-7	9-5	89	5-7	29	42	45	112	137	0	0	0	0	1	3	5	83	154	114	6	0	8	118	208	34	16	34	73	40	60	50	42	17			
Isle of Man	Ronaldsway	H	9	68	1015-2	-	8-8	1-2	9-9	83	6-1	4	38	51	179	94	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
			15	68	1015-4	-	11-0	2-1	10-2	75	6-2	3	24	70	168	101	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
			21	68	1015-6	-	8-5	1-0	9-9	86	5-8	24	37	50	139	116	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2 ENGLAND, N.E.	Acklington	H	3	151	1014-9	-	8-8	0-7	9-3	90	5-5	36	51	52	83	133	11	1	7	5	9	12	37	51	72	105	67	2	12	110	210	32	31	21	12	23	49	87	86	25			
			9	151	1015-2	-	8-7	1-3	9-7	83	5-9	4	47	58	148	103	6	0	4	3	1	12	45	62	79	94	66	0	25	150	175	16	39	25	21	23	53	88	74	27			
			15	151	1014-8	-	10-6	2-0	10-1	76	6-1	2	32	73	159	98	2	0	1	2	4	13	35	55	86	86	84	1	36	155	168	6	39	41	33	54	45	67	68	13			
Durham	Middleton St. George	H	3	130	1015-3	-	7-8	0-9	10-2	88	5-1	35	44	78	154	55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
			9	130	1015-3	-	7-9	1-0	9-5	85	5-5	48	27	52	106	124	9	4	4	0	5	10	17	71	159	96	0	3	20	161	157	25	32	16	17	21	32	38	131	16			
			15	130	1015-7	+2.6	8-7	1-5	9-4	81	6-0	8	29	85	109	124	11	2	6	2	5	44	44	101	110	52	0	0	3	28	179	139	17	36	22	17	23	67	32	125	27		
Yorks., N. Riding	Dishforth	H	3	131	1015-9	-	8-7	1-1	9-8	86	5-4	26	66	43	102	118	11	0	8	6	10	29	38	87	80	70	38	0	5	94	241	26	54	19	24	39	50	46	80	28			
			9	131	1016-3	-	8-7	1-1	9-8	86	5-4	26	66	43	102	118	11	0	8	6	10	29	38	87	80	70	38	0	5	94	241	26	54	19	24	39	50	46	80	28			
			15	131	1016-3	-	8-4	1-1	9-6	86	5-4	26	66	43	102	118	11	0	8	6	10	29	38	87	80	70	38	0	5	94	241	26	54	19	24	39	50	46	80	28			
Yorks., E. Riding	Leconfield	H	3	210	1015-7	-	8-7	1-4	9-8	82	5-9	7	38	63	141	109	8	2	6	2	2																						

TABLE IV (continued)—SUMMARY OF OBSERVATIONS AT FIXED HOURS DURING THE YEAR 1964

DISTRICT, COUNTY AND PLACE	Hour of Observation	Height of Barometer above Mean Sea Level	MEAN PRESSURE		MEAN TEMPERATURE AND HUMIDITY		CLOUD-AMOUNT (OKTAS)					VISIBILITY							WIND, NUMBER OF OBSERVATIONS																							
			At Mean Sea Level	Difference from Average	Dry Bulb	Depression of Wet Bulb	Vapour Pressure	Relative Humidity	Mean Amount	NO. OF OBSERVATIONS					NUMBER OF OBSERVATIONS							FORCE (0-12)					DIRECTION															
										0	1	3	6	8	0-44 yd.	45-210 yd.	220-430 yd.	440-1,090 yd.	1,100-2,190 yd.	2,200-4,300 yd.	3-8 mi.	7-12 mi.	13-24 mi.	25 mi. or over	Beaufort Force					N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.					
			2	4	7	8	9	8 or more	7	5	3	2	1	0	8 or more	7	5	3	2	1	0																					
Essex	Stansted	H	3	334	1017.2	-	6.9	0.5	9.6	92	5	2	7	10	142	15	0	21	10	12	23	69	126	79	25	1	0	3	69	249	45	36	32	30	28	33	75	54	33			
			9	334	1017.5	-	9.0	1.3	10.1	85	5	8	19	47	50	127	108	15	0	11	9	13	23	54	93	80	73	30	0	2	132	205	27	42	31	31	24	41	70	65	35	
			15	334	1016.8	-	12.0	2.9	10.0	70	5	6	19	46	65	134	94	8	2	6	2	7	5	31	71	73	83	86	0	2	169	179	16	34	36	42	15	40	63	88	32	
			21	334	1017.6	-	8.6	1.2	10.0	85	5	0	55	53	57	116	12	1	12	5	4	22	52	115	86	63	6	0	1	7	2	256	37	35	43	39	29	37	72	56	22	
			15	17	1017.8	+2.1	10.1	1.4	10.9	83	5	8	23	33	57	114	128	9	1	7	5	15	23	66	152	76	17	4	0	14	121	217	14	40	27	37	29	44	58	83	34	
	Shoeburyness	H	15	17	1017.1	-	12.3	2.3	11.1	74	5	6	23	49	58	125	107	4	3	3	2	12	14	51	127	101	43	10	0	14	155	166	11	29	43	61	21	37	65	72	27	
			21	17	1017.8	-	9.7	1.1	10.8	85	4	9	63	46	60	74	115	8	1	9	3	3	19	51	150	99	24	7	0	9	104	243	10	33	34	47	20	50	79	61	32	
			3	390	1017.1	-	8.4	0.4	10.2	82	4	7	83	47	81	54	132	17	3	10	5	4	16	32	222	89	5	0	0	20	57	240	9	32	24	36	30	26	47	66	76	
			9	21	1017.5	-	9.8	1.4	10.5	83	5	7	26	32	71	100	127	10	1	8	2	17	18	41	220	59	0	0	0	34	146	190	6	23	30	47	28	54	56	68	74	
			15	21	1017.0	-	11.5	2.1	10.8	77	5	5	30	36	79	113	99	0	6	1	12	16	45	216	68	2	0	0	1	18	166	175	6	22	27	60	34	58	73	54	52	
4 MIDLAND COUNTIES	Yorks, W.R.	Huddersfield	3	769	1015.8	-	6.0	0.8	8.5	87	5	6	37	23	90	37	176	3	3	17	10	23	21	67	152	28	39	6	9	104	212	35	20	42	30	21	45	62	77	34		
			9	769	1016.1	-	8.1	1.2	9.5	84	6	0	16	29	69	106	143	3	3	10	10	18	22	79	140	37	38	9	0	14	101	230	21	26	49	30	19	52	65	89	15	
			15	769	1015.5	-	10.4	2.3	9.5	92	6	0	7	28	79	128	121	3	3	6	5	6	11	46	133	44	91	21	1	12	129	198	26	25	37	27	26	52	64	93	19	
			21	769	1016.3	-	7.5	1.0	9.3	85	5	3	44	37	64	81	157	6	5	7	11	22	55	136	54	66	10	2	7	105	189	63	20	35	20	52	39	93	22			
			3	390	1016.8	-	6.6	0.2	9.5	83	5	4	56	31	45	79	142	13	5	9	5	34	50	45	137	96	5	0	3	105	235	19	47	27	26	47	65	85	27			
	Nottingham	Watnall	H	3	390	1016.9	-	8.6	1.1	10.0	85	6	0	18	32	47	119	134	16	5	15	11	23	50	53	110	74	23	2	0	3	92	240	31	21	46	37	16	22	64	95	34
				15	390	1016.1	-	11.7	2.5	10.2	73	5	9	17	26	72	148	99	4	1	2	5	14	24	44	88	91	88	9	0	132	211	23	19	29	54	16	25	52	108	40	
				21	390	1016.9	-	8.2	1.0	9.8	87	5	2	49	41	66	80	122	8	3	10	3	28	53	48	144	71	6	0	0	1	58	260	47	22	55	16	21	49	91	37	
				3	46	1016.3	-	7.2	0.8	9.4	88	5	2	67	32	45	81	125	16	4	15	9	21	25	65	117	75	31	4	0	9	102	201	54	53	15	30	17	59	46	62	30
				9	46	1016.7	-	9.3	1.5	9.9	81	5	9	20	39	55	129	108	15	2	12	5	21	26	39	113	110	32	6	0	20	158	159	29	57	28	21	20	56	50	82	43
Northampton	Wittering	H	15	46	1016.7	-	12.4	3.0	10.0	69	5	9	12	37	64	154	94	5	2	3	1	6	19	26	88	144	63	14	0	33	186	127	20	38	30	35	27	41	51	84	40	
			21	46	1016.7	-	8.9	1.3	9.9	83	5	3	44	44	53	107	110	8	5	2	2	14	31	52	161	83	16	0	1	8	115	205	37	37	23	26	47	59	68	34		
			9	219	1017.2	-	9.3	2.1	10.2	82	5	5	55	44	44	73	131	19	0	17	1	19	19	62	111	90	38	5	0	7	105	235	19	47	27	26	47	65	85	27		
			15	219	1016.5	-	9.0	1.4	9.9	83	5	9	18	38	48	133	113	16	0	14	6	10	37	34	73	96	71	25	1	12	147	189	17	43	40	20	21	47	65	74		
			21	219	1016.5	-	12.3	2.9	10.0	69	5	8	11	42	65	146	98	4	0	4	1	2	19	22	64	108	105	41	0	7	191	158	10	43	38	34	19	44	67	80	31	
Warwick	Edgbaston	H	15	542	1016.6	-	8.6	1.3	9.6	83	5	7	26	48	109	124	13	3	4	7	22	58	48	89	95	39	1	0	1	76	285	4	40	34	36	23	55	74	63	37		
			21	542	1016.6	-	11.6	2.9	9.5	69	5	9	16	30	70	133	115	2	0	1	6	7	33	32	98	84	67	38	0	1	119	244	2	29	34	43	23	55	79	77	44	
			9	542	1017.3	-	9.2	1.6	9.7	80	5	4	40	47	58	89	125	7	2	3	11	35	50	112	108	40	1	0	2	53	306	5	33	38	19	18	50	86	48	49		
			3	362	1016.9	-	6.8	0.7	9.3	90	5	5	41	45	40	102	128	12	1	15	3	13	33	45	106	101	43	6	0	4	89	214	79	32	21	21	18	58	59	45		
			9	362	1017.1	-	8.7	1.4	9.7	83	6	1	12	34	51	140	115	14	4	8	11	9	35	77	102	95	24	1	0	3	124	210	29	41	31	28	26	53	83	51		
Shropshire	Shawbury	H	15	362	1016.4	-	11.9	3.0	9.7	66	6	1	9	22	64	174	94	3	1	3	2	14	62	102	95	73	11	0	5	173	177	11	30	40	34	31	36	73	70	41		
			21	362	1017.1	-	8.7	1.4	9.5	82	5	5	38	36	55	126	103	8	1	7	3	13	28	136	82	12	1	0	2	83	238	43	19	44	29	18	58	68	47	40		
			3	249	1016.6	-	6.7	0.6	9.3	91	5	5	41	30	47	106	132	10	0	15	4	13	30	51	76	77	91	9	0	5	64	242	55	34	15	37	24	56	68	62		
			9	249	1016.9	-	8.7	1.3	9.9	84	6	1	6	34	61	155	101	9	1	9	2	15	26	34	89	70	80	40	0	8	106	210	42	37	16	38	35	48	62	66		
			15	249	1016.2	-	11.9	2.7	10.1	70	6	0	18	24	55	130	111	3	0	1	0	8	14	26	73	92	70	82	0	15	176	162	13	47	22	47	28	50	52	81		
Worcester	Pershore	H	3	117	1017.1	-	8.3	1.1	9.8	85	5	7	25	37	59	130	85	4	1	5	2	7	25	44	80	80	32	0														

TABLE IV (continued)—SUMMARY OF OBSERVATIONS AT FIXED HOURS DURING THE YEAR 1964

DISTRICT, COUNTY AND PLACE	Hour of Observation	Height of Barometer above Mean Sea Level	MEAN PRESSURE		MEAN TEMPERATURE AND HUMIDITY				CLOUD-AMOUNT (OKTAS)					VISIBILITY							WIND, NUMBER OF OBSERVATIONS																				
			At Mean Sea Level	Difference from Average	Dry Bulb	Depression of Wet Bulb	Vapour Pressure	Relative Humidity	NO. OF OBSERVATIONS					NUMBER OF OBSERVATIONS							FORCE (0-12)				DIRECTION																
									Mean Amount	0	1	3	5	7	8	9	0-44 yd.	45-210 yd.	220-430 yd.	440-1,090 yd.	1,100-2,190 yd.	2,200-4,390 yd.	3-6 mi.	7-12 mi.	13-24 mi.	25 mi. or over	8 or more	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	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.		
			ft.	mb.	°C	°C	mb.	%	0	1	3	5	7	8	9	0-44 yd.	45-210 yd.	220-430 yd.	440-1,090 yd.	1,100-2,190 yd.	2,200-4,390 yd.	3-6 mi.	7-12 mi.	13-24 mi.	25 mi. or over	8 or more	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	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.			
7a ENGLAND, N.W.—cont.		G.M.T.	ft.	mb.	mb.	°C	°C	mb.	%	0	1	3	5	7	8	9	0-44 yd.	45-210 yd.	220-430 yd.	440-1,090 yd.	1,100-2,190 yd.	2,200-4,390 yd.	3-6 mi.	7-12 mi.	13-24 mi.	25 mi. or over	8 or more	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	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.		
Lancashire	Squires Gate	H	3 35	1015.7	—	7.7	0.7	9.9	9.0	5.8	30	39	40	119	131	7	1	3	5	17	16	50	88	104	69	13	0	26	143	177	20	25	30	64	46	35	39	73	31		
			9 35	1016.2	—	9.3	1.2	10.4	8.5	6.1	11	36	46	165	106	2	1	3	4	11	17	57	91	99	69	36	1	29	196	132	8	14	19	42	46	30	39	106	62		
			15 35	1015.9	—	11.4	1.9	10.9	7.8	5.8	9	47	61	158	89	2	2	2	0	4	17	37	91	99	69	36	1	0	21	162	167	16	15	28	69	40	31	46	83	38	
			3 85	1016.2	—	9.2	1.0	9.8	8.8	5.4	35	36	74	94	120	7	3	4	3	7	18	35	96	119	69	12	1	15	99	217	34	27	33	30	63	58	28	63	30		
	Speke	H	9 85	1016.5	—	9.5	1.5	9.9	8.1	6.2	7	26	55	173	98	7	2	5	2	8	30	52	130	77	50	10	0	11	145	184	26	19	22	39	70	55	33	71	31		
			15 85	1016.2	—	12.1	2.7	10.1	7.0	6.0	6	30	66	182	82	0	0	0	1	3	17	31	118	92	70	34	0	22	187	140	17	14	25	32	54	51	36	87	50		
			21 85	1016.5	—	9.7	1.5	10.1	8.0	5.5	24	48	67	123	102	2	2	0	0	7	32	54	130	92	44	5	1	8	130	204	23	27	31	39	50	48	48	65	35		
			3 251	1016.1	—	7.5	1.1	9.2	8.5	5.6	42	42	45	81	148	8	1	4	5	9	25	50	135	97	37	3	0	5	63	228	70	15	32	33	24	106	38	37	11		
Cheshire	Ringway	H	9 251	1016.5	—	8.9	1.8	9.3	7.7	5.9	17	36	52	141	113	7	1	0	1	11	19	66	145	93	21	1	0	4	106	206	46	16	30	33	24	94	41	63	17		
			15 251	1015.9	—	11.7	5.1	9.9	6.5	6.0	13	26	75	147	100	2	1	0	0	7	15	52	109	111	59	12	0	9	145	197	15	17	28	37	24	69	51	86	39		
			21 251	1016.4	—	9.0	1.7	9.3	7.8	5.7	29	37	52	110	130	8	2	1	1	6	29	56	155	98	18	0	0	5	141	230	50	9	30	47	31	81	43	50	25		
7b NORTH WALES																																									
Anglesey	Valley	H	3 36	1015.7	—	8.7	0.7	10.5	9.0	5.3	46	38	59	87	135	1	0	1	0	2	7	20	83	134	100	19	7	61	139	123	36	24	48	29	23	89	45	63	19		
			9 36	1016.2	+2.3	10.0	1.1	10.9	8.5	6.2	5	31	52	164	110	4	1	0	0	4	9	25	65	110	102	20	3	72	170	105	16	23	44	36	21	95	54	49	28		
			15 36	1015.8	—	11.7	1.7	11.3	7.9	5.6	7	41	69	160	89	1	0	0	4	1	4	13	54	113	97	73	7	6	182	104	9	23	45	15	17	106	66	50	35		
			21 36	1016.1	—	9.4	0.9	10.8	8.9	5.9	31	41	69	114	108	6	0	1	1	4	5	23	74	124	93	41	11	55	141	137	22	28	53	35	13	100	45	52	18		
8a. SOUTH WALES																																									
Cardigan	Aberporth	H	3 382	1016.3	—	8.5	0.9	10.0	8.7	5.4	47	45	39	85	144	6	0	0	5	2	4	14	108	129	82	22	1	34	140	152	39	14	13	30	41	106	47	62	24		
			9 382	1016.7	—	9.5	1.3	10.3	8.3	5.9	10	47	40	155	110	4	0	2	1	2	7	14	81	133	85	41	1	35	180	134	18	22	33	43	97	45	53	36			
			15 382	1016.4	—	11.2	1.9	10.6	7.7	5.8	6	52	57	167	83	1	0	1	1	0	2	9	82	108	94	69	0	39	189	132	6	29	23	62	36	48	68	46	24		
			21 382	1016.8	—	9.1	1.1	10.2	8.5	5.4	32	62	40	111	118	3	0	0	1	2	6	9	117	181	47	2	11	40	167	140	8	46	51	61	19	17	53	70	41		
Glamorgan	Mumbles Head	H	3 123	—	—	—	—	—	—	—	—	—	—	—	—	2	1	0	1	5	7	30	178	105	38	1	7	54	167	126	12	32	47	68	27	26	56	64	34		
			9 123	—	—	—	—	—	—	—	—	—	—	—	—	2	1	0	1	5	7	30	178	105	38	1	7	54	167	126	12	32	47	68	27	26	56	64	34		
			15 123	—	—	—	—	—	—	—	—	—	—	—	—	2	1	0	1	5	7	30	178	105	38	1	7	54	167	126	12	32	47	68	27	26	56	64	34		
			21 123	—	—	—	—	—	—	—	—	—	—	—	—	2	1	0	1	5	7	30	178	105	38	1	7	54	167	126	12	32	47	68	27	26	56	64	34		
			3 225	1017.1	—	7.9	0.6	10.2	9.1	5.3	58	40	47	83	150	8	0	4	4	5	21	41	89	101	78	23	0	15	114	203	34	26	48	67	21	15	34	67	94		
			9 225	1017.5	—	9.5	1.1	10.7	8.6	5.9	6	53	56	138	105	8	0	3	3	10	15	63	82	97	69	24	0	19	151	179	17	42	33	24	106	38	37	11			
			15 225	1016.9	—	11.8	2.0	11.1	7.8	5.8	8	50	54	156	96	2	0	2	0	6	10	33	88	84	77	66	9	35	178	153	2	8	24	57	39	22	26	152	26		
			21 225	1017.6	—	9.1	0.9	10.9	8.8	5.3	40	51	55	72	142	6	0	3	1	6	13	31	100	112	66	34	0	16	126	209	15	29	45	42	28	18	31	94	64		
8b ENGLAND, S.W.																																									
Dorset	Portland Bill	H	3 35	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
			9 35	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
			15 35	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
			21 35	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Devon	Hartland Pt.	H	3 306	1016.3	—	9.8	0.8	11.0	8.9	5.2	38	55	64																												

TABLE V (continued) [FIRST PUBLISHED 1913]—WARMEST DAY AND NIGHT AND COLDEST DAY AND NIGHT IN THE YEAR 1964 AT EACH STATION

*DISTRICT AND PLACE	WARMEST				COLDEST				*DISTRICT AND PLACE	WARMEST				COLDEST			
	DAY		NIGHT		DAY		NIGHT			DAY		NIGHT		DAY		NIGHT	
	Highest Maximum and date	°C	Highest Minimum and date	°C	Lowest Maximum and date	°C	Lowest Minimum and date	°C		Highest Maximum and date	°C	Highest Minimum and date	°C	Lowest Maximum and date	°C	Lowest Minimum and date	°C
1 SCOTLAND E—cont.																	
Lossiemouth	July 30	23.9	Aug. 5	13.9	Dec. 25	1.7	Dec. 26	-8.3	6a SCOTLAND W—cont.	Aug. 13	23.3	May 28	13.9	Dec. 25, 26	2.2	Dec. 26	-5.0
Gordon Castle	July 30	24.4	Aug. 5	15.6	Dec. 25	0.0	Dec. 26	-5.6	Achaglachgach	July 20	22.2	July 14, 22	13.9	Dec. 25	1.7	Dec. 26	-4.4
Banff	Aug. 3	23.3	Aug. 5	14.4	Dec. 25	0.6	Dec. 26	-6.1	Lephinmore	Aug. 13	23.3	July 14, 18	13.9	Dec. 24, 25	1.1	Dec. 26	-8.3
Braemar	Aug. 4, 12	22.2	July 23, Aug. 4	12.8	Dec. 25	-3.3	Dec. 26	-13.9	Glenbranter								
Balmoral	Aug. 3	23.9	July 23	12.2	Dec. 25	-2.8	Dec. 26	-14.4	Bennmore—	Aug. 27, 29	22.8	July 18	14.4	Dec. 25, 26	1.1	Feb. 5	-7.2
Dinnet	July 30, Aug. 3	24.4	Aug. 4	13.9	Dec. 25	-3.3	Dec. 26	-12.8	Forestry Sch.			July 18	15.0	Dec. 25	0.6	Feb. 20	-5.6
Huntley	July 30	25.0	Aug. 5	13.7	Dec. 25	-1.6	Dec. 26	-9.5	Younger Bot.			July 18	14.4	Feb. 18	2.2	Dec. 26	-3.9
Fyvie Castle	July 30	25.0	June (27), July 15, 18, 30, Aug. 5, 18	12.8	Dec. 25	1.1	Dec. 26	-6.7	Gardens	Aug. 12	22.8	July 18	14.4	Feb. 18, 19	3.3	Dec. 26	-2.2
Craibstone	July 30	25.6	July 17	13.9	Dec. 25	-1.1	Dec. 26	-6.7	Millport	Aug. 12	22.2	July 22, Aug. 5	14.4	Jan. 17, 0.6	Dec. 28	-6.1	
Dyce	Aug. 3	26.8	Aug. 26	14.3	Dec. 25	-1.0	Dec. 26	-11.7	Helensburgh	May 26, 29, July 22, Sept. 4	21.7	July 18	15.0	Dec. 26			
Aberdeen	July 30, Aug. 3	26.1	July 17	13.9	Dec. 25	-1.1	Dec. 26	-9.4	Cumbernauld	Sept. 4	23.9	July 15, 24, Aug. 4, Sept. 10	13.3	Dec. 26	(-1.7)	Dec. 28	-13.3
Hilton	July 30, Aug. 3	26.1	July 17	14.4	Dec. 25	-0.6	Dec. 26	-5.6	Earls Hill	Sept. 4	22.3	July 22	12.4	Feb. 18	-2.2	Dec. 28	-8.3
Udny	July 30	24.4	June 27, Aug. 5	12.8	Dec. 25	-1.1	Dec. 26	-8.9	Stirling	Sept. 4	25.0	Aug. 5	15.0	Nov. 9	-0.6	Dec. 28	-7.8
Rattray Head	Aug. 3	24.6	Aug. 5	14.0	Dec. 25	1.5	Dec. 26	-7.5	Falkirk			Sept. 10	14.4	Jan. 17	0.0	Dec. 28	-10.0
Fettercairn	Aug. 3	25.6	July 18, Aug. 18	12.8	Dec. 25	-2.2	Dec. 26	-8.3	Greenock	Aug. 12	21.7	July 18	15.6	Dec. 25	0.6	Dec. 28	-6.1
Strachan	Aug. 3	27.8	June 27, Sept. 23 (13.3)	13.3	Dec. 25	-2.2	Dec. 26	-15.6	Paisley	May 29, Sept. 4	22.8	Aug. 5	15.6	Nov. 9	-0.6	Feb. 21	-5.0
Stonehaven	Aug. 3	27.2	June 27	13.9	Dec. 25	-0.6	Dec. 26	-8.3	Barrhead	June 26, Aug. 12	21.7	July 18	15.0	Jan. 17, Nov. 9, 10	-0.6	Dec. 28	-8.9
Muchalls	Aug. 3	26.1	July 17, Aug. 5	13.3	Dec. 25	-0.6	Dec. 26	-6.1	Renfrew	May 29, Aug. 12	22.7	Aug. 5	14.6	Nov. 10	-1.5	Dec. 28	-8.0
Mynefield	Aug. 3, 4	25.0	June 27, July 15	13.9	Nov. 9, Dec. 25	-0.6	Dec. 28	-7.8	Crossmyloof	Aug. 7, Sept. 4	23.3	Aug. 5	15.0			Dec. 28	-6.7
Auchterhouse	Aug. 4	25.6	June 27, Aug. 18	12.2	Dec. 25	-2.2	Dec. 28	-8.3	Thorntonhall	May 17	21.1	Aug. 5	14.4	Nov. 10	0.0	Dec. 28	-7.2
Dundee	Aug. 4	26.7	July 15, Aug. 5, Feb. 18, Dec. 25	14.4	Jan. 17, Dec. 25	1.1	Dec. 26	-5.6	Glasgow (Springburn)	Sept. 4	22.2	Aug. 5	13.9	Dec. 25	-0.6	Dec. 28	-7.2
Glamis Castle	Aug. 4	25.0	July 15	13.9	Dec. 25	0.0	Nov. 11	-7.8	Coatbridge	May 17, Aug. 11, Dec. 25	22.2	Aug. 5	14.4	Dec. 25	0.0	Nov. 10	-11.5
Whitehills	Aug. 3, 4	23.9	July 15	12.2	Dec. 25	-3.3	Dec. 26	-10.6	Happenden St.	Sept. 4	22.5	Aug. 18	13.8	Dec. 25	-2.3	Dec. 28	-11.5
Buddon Ness	Aug. 3, 4	25.0	Aug. 5	14.4	Dec. 25	-0.6	Feb. 21	-8.9	Leath Hill	May 28	19.0	July 18	12.5	Dec. 25	-6.0	Dec. 4	-9.1
Carnoustie	Aug. 3	25.0	July 31	15.0	Dec. 25	-0.6	Dec. 26	-6.1	Lowthills	Sept. 3	21.7	July 22	12.8	Feb. 18, Dec. (25), 27	-1.1	Dec. 26	-11.7
Arbroath	Aug. 3, 4	25.6	Aug. 4, 5	13.9	Dec. 25	0.0	Dec. 26	-5.0	Carnwath	Sept. 4	22.8	Aug. 4, 5, Sept. 10	13.3	Dec. 25	-1.7	Dec. 26	-12.2
Montrose	Aug. 3	26.1	Aug. 5	13.9	Dec. 25	-1.7	Dec. 26	-7.2	Camps Res.	Sept. 3	21.1	Sept. 10	12.8	Dec. 25	-2.8	Dec. 28	-10.6
Dall	May 29	23.3	July 15, 30, Aug. 4	12.8	Dec. 25	-2.2	Dec. 26	-10.6	Turnberry	May 26, 27	22.8	Aug. 5	15.0	Feb. 17, 19, 20, Mar. 17, Dec. 27	3.9	Feb. 21	-5.0
Strathyre	July 2, Sept. 4	22.2	Aug. 1	14.4	Dec. 25	-1.1	Dec. 26	-10.0	Largs	May 27, 29, Aug. 12	22.8	July 22	14.4	Feb. 18, 20, Mar. 17, Dec. 27	3.9	Feb. 21	-3.9
Callander	July 22, Sept. 4	23.3	Aug. 5	14.4	Dec. 25	-0.6	Dec. 28	-9.4	Barr	May 28	25.0	Aug. 5, 17, 18	13.9	Dec. 25	1.1	Feb. 20	-8.3
Ardtnaig	July 22	24.4	July 15, Aug. 5, Dec. 25	13.9	Jan. 17, Dec. 25	-1.1	Dec. 26	-6.7	Auchincruive	May 28	23.9	Aug. 5	14.4	Dec. 25, 27	1.7	Dec. 26	-5.6
Pitlochry	Aug. 4	23.3	Aug. 4	13.9	Dec. 25	-2.2	Dec. 26	-11.1	Prestwick Airport	May 28	24.5	Aug. 5	14.7	Dec. 25	0.4	Dec. 26	-6.4
Faskally	Aug. 4	22.8	Aug. 4	15.0	Dec. 25	-0.6	Dec. 26	-11.1	Kilmarnock	May 29, Aug. 19	22.2	Aug. 5	15.6	Dec. 25	0.0	Dec. 25, 26	-5.6
Dunning	July 23, Aug. 4, Sept. 10	22.8	July 15, Aug. 4, Sept. 10	13.9	Dec. 25	-1.7	Dec. 28	-9.4	Dalmacallan	Aug. 4	22.8	Sept. 10	13.9	Dec. 25	-1.7	Dec. 28	-11.1
Perth	Aug. 4	24.4	Aug. 5	15.0	Dec. 25	-1.1	Dec. 26	-7.8	Dumfries	May 28, Sept. 4	22.2	Aug. 26	14.4	Dec. 25	0.0	Dec. 28	-10.6
Inverlorn	Aug. 4	25.0	July 18	14.4	Nov. 9	0.0	Dec. 26, 28	-8.3	Eskdalemuir	May 28	22.1	July 30	13.8	Dec. 25	-1.9	Dec. 28	-14.6
Blairstown	Aug. 4	25.0	July 15, Aug. 4	13.9	Dec. 25	-0.6	Dec. 26	-7.8	Bargrennan	May 27	23.3	Aug. 17, 26	13.3	Dec. 25	0.6	Dec. 26	-7.8
Glenishe Lodge	Aug. 4	23.3	Aug. 4	13.3	Dec. 25	-3.3	Dec. 26	-12.8	Palnure	May 27	23.9	Aug. 18	13.9	Dec. 27	1.7	Dec. 26	-7.8
Pitreavie	Aug. 4	24.7	Aug. 3, Sept. 9	13.9	Dec. 25	-0.4	Dec. 28	-7.5	Glenlee	May 28, Aug. 4	23.3	Aug. 3, 26	13.9	Jan. 17	1.7	Dec. 28	-11.7
Ballingry	Aug. 4	22.8	July 24, Sept. 10	13.3	Feb. 18	0.0	Dec. 28	-8.9	Dundeugh	May 27	23.3	Aug. 18, Sept. 10, 11	13.9	Dec. 25	-0.6	Dec. 28	-13.3
Kircaldy	Aug. 4	23.3	July 24, Aug. 5, Sept. 10	14.4	Dec. 25	-0.6	Dec. 28	-7.8	Glenloch Barrage	May 28	23.3	Sept. 10	14.4	Dec. 25	0.0	Dec. 28	-8.9
Cupar	July 23, Aug. 4	25.0	Aug. 5	14.4	Dec. 25	-0.6	Feb. 21	-7.8	Threave	May 28	23.9	Sept. 25	14.4	Dec. 25	0.6	Dec. 28	-9.4
Leuchars	Aug. 4	26.1	Aug. 5, 26	14.3	Dec. 25	-0.3	Feb. 21	-8.9	Castle Douglas	May 28	23.3	Aug. 17, 26, Sept. 11	13.9	Dec. 18, 27	1.1	Dec. 28	-10.6
St. Andrews	Aug. 4	25.6	Aug. 5	15.6	Dec. 25	0.6	Feb. 21	-7.2	West Freugh	Aug. 13	21.8	Aug. 18	14.3	Dec. 26	2.7	Mar. 7	-5.5
Balerno	Sept. 4	22.2	Aug. 5 (15.0)	15.0	Dec. 25	0.0	Feb. 20, Dec. 28	-8.9	Penwhirn			Aug. 17, 18	13.3	Mar. 17, Dec. 27	0.0	Dec. 28	-7.8
Turnhouse	June 26	23.7	Aug. 26	14.5	Nov. 10, Dec. 25	0.0	Dec. 28	-8.2	Mull of Galloway	May 25	21.1	Aug. 17	14.2	Dec. 25	2.0	Feb. 17	-1.6
Edinburgh—									Newton Stewart	May 27	23.9	July 22, Aug. 17	14.4	Dec. 25	1.1	Dec. 26	-6.7
East Craigs	July 23	22.8	Aug. 5	14.4	Dec. 25	-0.6	Feb. 21, Nov. 10, Dec. 26, 28	-6.7	6b ISLE OF MAN								
Davidson's Mains	June 26	23.9	June 27, July 24, Aug. 5, 26, Sept. 10, 23	13.9	Dec. 25	-0.6	Feb. 21, Dec. 28	-6.7	Ronaldsway	Aug. 4	21.6	Aug. 4	14.9	Dec. 25	2.2	Dec. 26	-5.1
Penicuik	June 26, July 23, Aug. 4	22.2	Aug. 5	13.9	Dec. 25	-1.7	Feb. 20, Dec. 28	-9.4	Douglas	May 28, Aug. 4	21.7	Aug. 4, Sept. 10	14.4	Feb. 19, Dec. 25	2.2	Dec. 28	-2.8
Bush House	June 26, Aug. 4, Sept. 4	21.7	Aug. 5, Sept. 10	13.9	Dec. 25	-1.7	Dec. 28	-9.4	Point of Ayre	June 26	24.5	July 24, Sept. 11	15.3	Dec. 25	2.6	Dec. 28	-4.5
Edinburgh—									2 ENGLAND, N. E.								
Blackford Hill	Aug. 4	23.9	Aug. 5	15.6	Dec. 25	-0.6	Dec. 28	-5.6	Kielder Castle	May 17	22.8	July 25, Sept. 10	13.9	Dec. 25	-1.7	Dec. 28	-14.4
Liberton	June 26, July 23, Aug. 4	22.8	Aug. 5	15.6					Crobridge	Aug. 4	25.0	July 25	15.0	Dec. 25	-0.6	Feb. 21	-11.7
Royal Botanic Gardens	June 26, Aug. 4	22.8	July 24, Aug. 4, Sept. 10, 23	14.4	Dec. 25	0.0	Feb. 21, Dec. 28	-7.2	Berwick-on-Tweed	June 26, Aug. 3	22.8	July 15, Aug. 4, 24, Sept. 10	14.4	Dec. 25	0.6	Dec. 26	-6.1
Haddington	Aug. 4	23.9	Aug. 5, 24, Sept. 10	14.4	Dec. 25	-1.1	Dec. 26	-7.8	Cockle Park	Aug. 5	25.0	July 25, Aug. 26	14.4	Dec. 25	-1.7	Dec. 26	-6.7
North Berwick	Aug. 4	23.9	Aug. (5)	16.1	Feb. 18 (1.7)	Feb. 20, 21	-3.3	Acklington	Aug. 3	24.7	July 25	15.5	Dec. 26	-1.2	Dec. 26	-8.2	
Dunbar	Aug. 4	24.4	Aug. 5	17.8	Dec. 25	0.6	Dec. 26	-4.4	Tynemouth	Aug. 25	26.0	July 15	16.5	Dec. 25	-1.0	Dec. 26	-5.7
Mertoun	Aug. 4, Sept. 4	25.0	Sept. 10	14.4	Dec. 25	-1.7	Dec. 28	-11.7	Chopwellwood	June 26	23.9	July 15, 25	15.0	Dec. 25	-1.1	Dec. 26, 28	-6.7
Lauder	May 29, Aug. 4	22.8	Sept. 10	13.9	Dec. 25	-1.1	Dec. 28	-15.0	Ushaw			July 25	15.0	Dec. 25	-1.7	Dec. 26	-8.3
Marchmont	Aug. 4	23.3	July 18, Aug. 4, 5, 24, Sept. 10, 11	13.3	Dec. 25	-1.7	Dec. 28	-8.9	Houghall	July 17, Sept. 5	25.0	Sept. 11	15.6	Dec. 16	-0.6	Feb. 21, Dec. 26	-11.7
Whitchester	Aug. 4	23.9	Sept. 10	12.8	Dec. 25	-2.2	Dec. 26	-8.3	Durham	Aug. 4							

TABLE V (Continued) [FIRST PUBLISHED 1913]—WARMEST DAY AND NIGHT AND COLDEST DAY AND NIGHT IN THE YEAR 1964 AT EACH STATION

*DISTRICT AND PLACE	WARMEST				COLDEST				*DISTRICT AND PLACE	WARMEST				COLDEST			
	DAY		NIGHT		DAY		NIGHT			DAY		NIGHT		DAY		NIGHT	
	Highest Maximum and date		Highest Minimum and date		Lowest Maximum and date		Lowest Minimum and date			Highest Maximum and date		Highest Minimum and date		Lowest Maximum and date		Lowest Minimum and date	
3 ENGLAND, E.		°C		°C		°C		°C	4 MIDLAND COUNTIES—contd.		°C		°C		°C		°C
Terrington	Aug. 26	31.7	July 26, 30	16.1	Jan. 22, Dec. 25	-0.6	Dec. 29	-9.4	Stratford-on-Avon	Aug. 5, 26	28.3	July 15, 26, Aug. 6	16.1	Dec. 15	-1.7	Dec. 29	-10.5
St. Clement	Aug. 26	31.2	July 26	16.8	Dec. 26	-2.6	Dec. 29	-11.1	Elmdon	Aug. 6	27.2	Aug. 6	15.7	Dec. 16	-3.3	Jan. 14	-11.6
Marham	Aug. 26	32.2	July 30, Aug. 25	16.1	Jan. 22, Dec. 25	-0.6	Dec. 18	-9.4	Shipston-on-Stour	Aug. 26	28.3	July 26	16.1	Dec. 15	-2.2	Jan. 14	-10.0
Santon Downham	Aug. 26	31.1	Aug. 26	16.1	Dec. 26	-3.1	Dec. 29	-10.2	Wellsbourne	Aug. 26	28.3	July 26	16.1	Dec. 15	-1.7	Jan. 14	-10.6
West Raynham	Aug. 26	32.8	July 15, 18, Aug. 6, 25	15.6	Jan. 21, 22, Dec. 26, 27	1.1	Dec. 29	-8.3	Moreton Morrell	Aug. 26	28.9	July 26	16.7	Dec. 15	-1.1	Jan. 14	-12.2
Cromer	Aug. 26	31.7	July 15, Aug. 25	16.7	Jan. 21, 22	0.0	Dec. 29	-8.3	Coventry	Aug. 26	27.2	July 26, Aug. 3, 6	15.5	Dec. 15	-2.2	Dec. 26	-11.1
Sprowston	Aug. 26	32.4	Aug. 25	17.0	Dec. 26	-2.5	Dec. 27	-13.6	Rugby	Aug. 26	28.3	Aug. 3, 17	15.5	Dec. 15	-1.1	Jan. 14	-9.4
Coltishall	Aug. 26	31.7	July 15, Aug. 6, 25	16.7	Jan. 22	0.0	Dec. 27	-10.6	Oxford	Aug. 26	30.5	July 15, 31, Aug. 2, 17, Sept. 11	16.1	Dec. 16	0.5	Jan. 14	-7.8
Burlingham	Aug. 26	27.0	July 15	17.0	Jan. 22	0.4	Dec. 29	-6.2	Medmenham	Aug. 26	28.9	Aug. 3	16.1	Jan. 12, 13	1.1	Dec. 29	-11.7
Mildenhall	Aug. 26	32.2	July 30	17.2	Jan. 22, Dec. 26	-0.9	Jan. 14	-9.5	Grendon Underwood	Aug. 26	29.5	June 28, July 15, Aug. 17	15.0	Dec. 28	0.5	Dec. 29	-12.2
East Berholt	Aug. 26	32.2	June 13, Aug. 17	16.7	Jan. 22	0.0	Jan. 14	-10.0	Aylesbury	Aug. 26	29.5	July 15, Aug. 3, 17	15.5	Jan. 12, 13, Dec. 25	0.0	Dec. 29	-9.5
Wattisham	Aug. 26	31.7	July 15, Aug. 17	16.4	Dec. 26	-2.0	Dec. 29	-7.6	Keel	Aug. 26	25.5	July 17	15.5	Dec. 28	-1.1	Dec. 29	-8.3
Aldeburgh	Sept. 10	25.0	July 15, Aug. 17	17.6	Dec. 26	-0.8	Dec. 29	-5.9	Oaken	Aug. 26	27.2	July 18, Sept. 10, 11	15.0	Dec. 18	-1.1	Jan. 14	-10.0
Lowestoft	July 25	27.2	July 15, Aug. 6	16.7	Jan. 22, Dec. 26	0.0	Dec. 29	-10.0	Stone	Aug. 26	26.1	July 15, 17	15.0	Dec. 18, 25	-0.5	Dec. 29	-10.0
Boxworth	Aug. 26	31.1	July 30	16.7	Jan. 12, 22, Dec. 16	0.0	Jan. 14	-10.0	Penkridge	Aug. 26	27.2	July 15	15.5	Dec. 18	-1.7	Jan. 14	-9.4
Cambridge Bot. Gdns.	Aug. 26	31.7	July 26	17.2	Jan. 22	-0.6	Jan. 14	-9.4	Oneote	Aug. 26	23.9	July 17, 18	13.3	Dec. 25	-5.0	Dec. 29	-8.3
Cambridge N.I.A.B.	Aug. 26	31.7	July 26	17.2	Jan. 22	-0.6	Jan. 14	-9.4	Oswestry	Aug. 5	23.3	July 15, 19, Aug. 2, 6	14.5	Jan. 17, Feb. 21	0.0	Dec. 29	-7.2
Monkswood	Aug. 26	31.1	July 26, 30	15.6	Jan. 22	0.0	Jan. 14	-10.6	Shrewsbury	Aug. 26	26.7	Sept. 11	16.1	Dec. 18	-1.1	Dec. 29	-8.9
Wyton	Aug. 26	31.0	July 30	16.7	Jan. 22	-1.0	Jan. 14	-10.0	Shawbury	Aug. 26	26.3	Sept. 11	15.9	Dec. 28	-4.3	Dec. 28	-10.8
Woburn	Aug. 26	30.0	June 28, July 15, 30	15.6	Jan. 12, 13, Dec. 16	0.0	Jan. 14	-12.2	Newport	Aug. 26	27.2	July 15, 26, Aug. 3, 17, Sept. 11	15.0	Dec. 18	-2.3	Dec. 28	-8.3
Luton	Aug. 26	30.0	July 26	16.1	Jan. 13	-0.6	Jan. 14	-11.1	Malvern	Aug. 5	27.2	July 18, 26, Aug. 2	16.1	Dec. 15	-2.8	Dec. 29	-8.3
Silsoe	Aug. 26	30.6	June 28, July 15, Aug. 17	16.1	Jan. 12, Dec. 16	0.0	Jan. 14	-10.0	Worcester	Aug. 5	27.8	Aug. 2	16.1	Dec. 15	-2.2	Dec. 29	-9.5
Cardington	Aug. 26	31.3	July 30	16.2	Dec. 16	-1.5	Jan. 13	-11.8	Pershore (Institute of Horticulture)	Aug. 5	27.8	July 26	16.7	Dec. 15	-2.2	Jan. 14	-7.8
Letchworth	Aug. 26	32.2	Aug. 17	16.7	Jan. 13, Dec. 16, 28	0.6	Jan. 14	-11.1	Pershore	Aug. 5	27.3	Aug. 2	16.7	Dec. 15	-2.7	Jan. 14	-9.6
Bovingdon	Aug. 26	28.9	June 28, Aug. 3, 17	15.0	Jan. 13	-1.5	Dec. 29	-10.3	Halesowen	Aug. 26	27.2	July 15, 26	15.0	Dec. 18	-0.5	Jan. 14	-12.8
Garston	Aug. 26	30.0	Aug. 28	16.1	Jan. 12, Feb. 19, Dec. 25, 28	0.6	Dec. 29	-10.6	Lyonshall	Aug. 26	27.8	Aug. 2	15.5	Jan. 13	-0.6	Jan. 14	-8.9
Rothamstead	Aug. 26	30.0	July 30	15.6	Dec. 28	-0.6	Dec. 29	-12.8	Credehill	Aug. 26	27.2	July 26, Sept. 10	16.1	Dec. 15	0.0	Jan. 14	-10.6
St. Albans	Aug. 26	30.0	June 28, July 30	16.1	Dec. 28	0.0	Dec. 29	-11.1	Ross-on-Wye	Aug. 5	26.8	Aug. 2	16.7	Dec. 16	-2.0	Dec. 29	-10.7
Stanstead Abbotts	—	—	July 30	17.2	Dec. 28	0.0	Dec. 29	-12.2	Preston Wynne	Aug. 26	27.2	Aug. 2	16.1	Dec. 15	-2.3	Dec. 29	-9.5
Hoddesdon	Aug. 26	30.6	July 30	16.7	Jan. 12, Feb. 19, Dec. 16, 28	0.6	Dec. 29	-11.1	Avonmouth	Aug. 4	27.2	Aug. 2	17.2	Jan. 13	1.1	Jan. 14	-6.1
Eastwick Lodge	Aug. 26	31.7	July 30	17.2	Dec. 16, 28	0.6	Dec. 29	-12.2	Filton	Aug. 26	26.0	July 18	17.5	Dec. 28	-1.0	Dec. 28	-7.6
Stanstead Airport	Aug. 26	30.7	July 30	16.4	Dec. 25, 28	-2.5	Jan. 14	-8.9	Hempstead	Aug. 5, 26	26.1	July 18, Aug. 2	17.2	Dec. 15	-0.5	Dec. 28	-8.3
Writtle	Aug. 26	30.6	July 30	17.2	Jan. 12	0.6	Dec. 29	-12.2	Gloucester	Aug. 5	27.7	Aug. 2	17.4	Dec. 16	-3.1	Dec. 26	-7.8
Southend	Aug. 26	29.4	June 28, July 15, 26, Aug. 28	16.7	Dec. 25	0.6	Dec. 29	-5.0	Cheltenham	Aug. 26	27.8	July 18, Aug. 2, 5	16.7	Jan. 13	-0.6	Jan. 14	-7.8
Malden	Aug. 26	31.7	Aug. 17	17.2	Jan. 22	0.6	Dec. 29	-11.7	Cirencester	Aug. 26	28.3	July 18	16.7	Jan. 13	-0.6	Dec. 29	-10.0
Earls Colne	Aug. 26	31.7	June 13	16.7	Jan. 22	0.0	Jan. 14	-11.1	Little Rissington	Aug. 26	28.4	July 18	15.6	Dec. 28	-2.4	Dec. 29	-9.1
Shoeburyness	Aug. 26	29.0	July 15, Aug. 17	18.1	Dec. 25	0.6	Jan. 13, 14	-5.8	5 ENGLAND, S. E.	Aug. 26	29.5	June 28, July 15, 27, Aug. 3, 17	16.7	Jan. 12, Dec. 28	1.1	Dec. 29	-6.1
Clacton	June 27, Aug. 3	25.6	Aug. 6, 26	17.8	Dec. 25	0.6	Dec. 29	-5.0	Kensington Palace	Aug. 26	29.5	July 18, Aug. 5	16.7	Jan. 12, Dec. 28	0.0	Dec. 26	-6.1
Walton-on-Naze	July 24	24.9	Aug. 6	18.4	Dec. 25	0.9	Dec. 29	-5.5	Hampstead	Aug. 26	30.5	July 26	18.3	Jan. 5, 12, Feb. 19, Dec. 26	1.7	Dec. 26	-5.5
Dovercourt	Aug. 26	27.2	Aug. 17	17.2	Jan. 22	0.6	Jan. 18	-6.1	St. James Park	Aug. 26	30.0	July 15, 27	17.2	Jan. 12	0.6	Dec. 29	-5.5
4 MIDLAND COUNTIES									Camden Square	Aug. 26	30.5	July 15, 26, Aug. 5	16.7	Jan. 12	0.6	Dec. 29	-4.5
Slaidburn	July 17	23.3	July 14, 30, Aug. 4	13.9	Dec. 25, 27	0.0	Dec. 26	-9.4	Greenwich M.M.	Aug. 26	30.0	July 26, 30, Aug. 3	17.2	Jan. 12, Dec. 25	1.1	Jan. 14	-6.7
Malham Tarn	May 17	21.1	July 22	13.3	Dec. 25	-2.8	Dec. 26	-8.9	London Airport	Aug. 26	30.1	July 18	17.4	Jan. 13	0.6	Dec. 29	-7.1
Huddersfield	Aug. 26	26.7	July 15, Aug. 28	16.1	Feb. 18, Mar. 5	0.0	Dec. 26	-7.2	Hampton	Aug. 26	29.5	July 18, 27, Aug. 5, 17	17.2	Jan. 12, Dec. 28	1.1	Dec. 29	-6.7
Huddersfield (Oakes)	Aug. 26	26.5	July 15	14.5	Jan. 18	-1.6	Dec. 26	-7.1	Southgate	Aug. 26	30.0	June 28	16.7	Jan. 12	0.6	Jan. 14	-6.1
Bradford	Aug. 26	25.0	July 30, Sept. 11	15.0	Dec. 15, 25	-0.6	Dec. 26	-7.2	Wisley	Aug. 26	29.5	Aug. 2, 3	16.7	Feb. 19, Dec. 16	1.1	Dec. 29	-8.3
Ilkley	July 17, Aug. 5, 26	25.0	July 30, Aug. 26	15.6	Jan. 17, Dec. 16, 25	0.0	Dec. 26	-7.8	Mickleham	—	—	—	—	Dec. 27	0.5	Dec. 29	-11.1
Sheffield	Aug. 26	27.2	July 15, 30, Aug. 1, 27, Sept. 11	15.0	Feb. 21, Dec. 25	-0.6	Jan. 18, 19, Feb. 21	-5.6	Kew Observatory	Aug. 26	28.1	July 27	17.2	Jan. 13	0.8	Dec. 29	-6.1
Wakefield	Aug. 26	27.2	July 15, 30	16.1	Dec. 15	-0.6	Dec. 26	-10.0	Watwick	July 17	28.5	June 28	16.4	Jan. 13	-0.4	Dec. 29	-11.0
Pontefract	Aug. 26	26.7	July 30	15.8	Dec. 16	-0.6	Dec. 26	-6.7	Waddon	July 17	28.3	Aug. 6	16.7	Dec. 27	0.0	Jan. 17, 18, Feb. 6, 21, Dec. 26	-6.1
Bramham	Aug. 26	27.2	July 15, Sept. 11	15.0	Dec. 16	-1.7	Dec. 26	-7.8	Addington	Aug. 26	28.3	July 18	16.7	Jan. 12	-0.6	Dec. 26	-6.1
Cawood	Aug. 26	27.2	July 30, Aug. 6, Sept. 9	15.0	Dec. 16	-1.7	Dec. 26	-9.4	Bromley	Aug. 3	27.3	July 15, 27, Aug. 5	16.7	Dec. 25, 28	0.5	Dec. 29	-8.3
Askham Bryan	Aug. 26	27.2	Sept. 9	15.6	Dec. 15, 28	-1.1	Dec. 26, 27	-7.2	Swanley	Aug. 26	28.9	June 28	16.7	Jan. 12, Mar. 6, Dec. 27	1.1	Jan. 14	-9.4
Buxton	Aug. 26	24.5	July 15, 18	14.5	Dec. 25	-2.2	Dec. 26	-10.0	Dartford	Aug. 26	30.0	June 28	17.2	Jan. 12, Dec. 27, 28	1.1	Jan. 14	-9.4
Chapel-en-le-Frith	Aug. 26	25.5	July 15	15.0	Dec. 25	-1.7	Dec. 26	-11.1	Goudhurst	July 17, Aug. 26	28.3	July 30	16.1	Jan. 12, Dec. 27	0.0	Dec. 29	-10.6
Mackworth	Aug. 26	27.2	July 15	15.5	Dec. 25	0.0	Dec. 29	-10.0	East Malling	Aug. 26	29.4	July 30, Aug. 3	16.7	Jan. 12	0.6	Jan. 14	-10.0
Belper	—	—	—	—	Dec. 26	0.0	Jan. 18	-7.8	Gillingham	Aug. 26	31.1	July 30	17.7	Jan. 12, Dec. 25, 27	1.1	Jan. 14	-7.8
Derby	Aug. 26	28.3	July 15, Aug. 6, 25	16.1	Dec. 16	0.5	Jan. 18, Dec. 26, 29	-7.2	Sittingbourne	Aug. 26	29.4	July 15, 30, Aug. 17	16.7	Jan. 16	-0.6	Jan. 14	-10.0
Morley	Aug. 26	27.2	July 15, Aug. 6	15.5	Jan. 21, Dec. 16, 28	0.0	Dec. 26, 29	-7.8	Isle of Grain	Aug. 26	30.5	July 30	17.2	Jan. 12	1.1	Dec. 29	-4.5
Chesterfield	Aug. 26	27.2	July 15, Aug. 6, Sept. 11	15.0	Dec. 25	0.0	Feb. 21	-8.3	Faversham	Aug. 26	29.4	July 15	17.2	Dec. 25, 27	0.6	Jan. 14	-9.4
Sutton Bonington	Aug. 26	27.8	July 15	15.5	Dec. 16	-0.5	Jan. 18, Dec. 29	-8.9	Dungeness	Aug. 1	23.5	Aug. 17	17.2	Dec. 25	0.7	Dec. 29	-8.2
Wainall	Aug. 26	28.1	July 15	15.4	Dec. 16	-1.3	Dec. 29	-7.9	Wye	Aug. 27	29.4	July 15, Aug. 17, 16.1	16.1	Dec. 25	0.0	Dec. 29	-10.0
Nottingham	Aug. 26	28.3	July 15	16.1	Mar. 17, Dec. 18	0.0	Jan. 18, 19	-7.2	Whitstable	Aug. 26	30.0	July 15	17.7	Jan. 12	0.6	Dec. 29	-6.7
Nottingham T. College	Aug. 26	27.2	July 15, 30	15.5	Feb. 18, Dec. 25	0.0	Dec. 29	-7.2	Folkstone	July 17, Aug. 1	24.5	Aug. 26	17.3	Dec.			

TABLE V (continued) [FIRST PUBLISHED 1913]—WARMEST DAY AND NIGHT AND COLDEST DAY AND NIGHT IN THE YEAR 1964 FOR EACH STATION

*DISTRICT AND PLACE	WARMEST				COLDEST				*DISTRICT AND PLACE	WARMEST				COLDEST			
	DAY		NIGHT		DAY		NIGHT			DAY		NIGHT		DAY		NIGHT	
	Highest Maximum and date	°C	Highest Minimum and date	°C	Lowest Maximum and date	°C	Lowest Minimum and date	°C		Highest Maximum and date	°C	Highest Minimum and date	°C	Lowest Maximum and date	°C	Lowest Minimum and date	°C
5 ENGLAND, S. E.—cont.									7b NORTH WALES								
Fernhurst	July 17	28.9	Aug. 2	16.1	Jan. 12	0.6	Dec. 29	-8.9	Rhyl	May 17, 27	25.0	July 14	16.1	Dec. 27	1.7	Dec. 28	-7.2
Littlehampton	—	—	—	—	Jan. 12	1.7	Dec. 29	-6.1	Prestatyn	July 17	25.0	Aug. 24	16.7	Dec. 27	1.7	—	—
Rustington	—	—	Aug. 2, 17	16.1	Mar. 7	Dec. 25	1.7	Dec. 29	-6.7	Aug. 26	26.1	Sept. 10, 11	16.1	Feb. 21	1.1	Dec. 28	-11.1
Worthing	Aug. 27	25.6	Aug. 2	17.8	Jan. 14	1.1	Jan. 14	-3.9	Valley	May 17, June 12	23.0	Aug. 26	15.4	Dec. 27	2.7	Feb. 20	-5.5
Brighton	July 17	26.1	Aug. 2, 17	17.8	Jan. 12	1.1	Dec. 29	-5.0	Colwyn Bay	May 17	23.9	Aug. 24	16.1	Feb. 18	2.2	Feb. 21	-5.0
East Grinstead	July 17, Aug. 26	27.8	Aug. 3	16.1	—	—	—	—	Alwen	July 17	22.8	July 14, 31,	13.3	Jan. 16,	0.0	Dec. 29	-14.4
East Hoathly	July 17	27.9	Aug. 2, 3	16.7	Jan. 13	0.1	Dec. 29	-9.8	Ruthin	Aug. 26	24.4	July 14	15.6	Dec. 25, 27	1.1	Dec. 28	-10.0
Eastbourne	Aug. 26	25.6	Aug. 2	17.8	Jan. 12,	1.7	Dec. 29	-5.0	Loggerheads	Aug. 26	23.9	July 14, Aug. 26,	14.4	Feb. 21	-0.6	Dec. 28	-15.0
—	—	—	—	—	Feb. 19,	—	—	—	Bwlchgwyn	June 26, Aug. 26,	21.7	July 18, Aug. 26	13.9	Jan. 16,	-1.7	Dec. 28	-8.9
—	—	—	—	—	Dec. 25	—	—	—	—	Sept. 4	—	—	—	Mar. 16	—	—	—
Eastbourne C.G.	Aug. 27	26.3	Aug. 2	17.3	Dec. 25	1.1	Dec. 29	-8.7	Wrexham	Aug. 5	26.1	July 18	15.6	Jan. 17	0.0	Dec. 28	-10.0
Bexhill	July 17	25.6	July 17, Aug. 26	17.2	Dec. 25	1.1	Dec. 29	-10.6	May 17	20.5	Aug. 24	15.1	Feb. 20	2.5	Mar. 5	-1.5	—
Bodiam	Aug. 27	29.4	July 30, Aug. 3	16.1	Feb. 19,	1.1	Dec. 29	-10.6	Botwnnog	May 26	23.9	Aug. 17, 26,	15.0	Feb. 19, 20,	2.2	Dec. 28,	-5.6
Hastings	July 17	26.7	Aug. 6, 26	17.2	Dec. 25	0.6	Dec. 26,	-3.9	—	—	—	—	—	—	—	—	—
Letcombe Regis	Aug. 26	29.4	Aug. 2	16.1	Jan. 13	0.0	Jan. 14	-10.6	Bryn Adda	July 17,	24.4	Sept. 14	15.6	—	—	Dec. 28	-5.0
Abingdon	Aug. 26	30.7	Aug. 2	16.8	Dec. 16	-2.8	Jan. 14	-9.8	—	—	—	—	—	—	—	—	—
Compton	Aug. 26	28.9	Aug. 1, 2	16.1	Jan. 12, 13	0.0	Jan. 14	-11.1	Cwm Dyll	May 17	25.0	July 18, Aug. 4	15.0	Feb. 18	1.1	Dec. 28	-6.7
Woolhampton	Aug. 26	28.3	Aug. 2	16.1	—	—	—	—	Aber	Sept. 2	23.9	Aug. 25	15.6	Dec. 27	2.8	Dec. 6	-9.4
Wallingford	Aug. 26	30.0	Aug. 2	16.7	Dec. 15	-0.6	Jan. 14,	-9.4	Llandudno	May 27	23.9	Aug. 24, Sept. 14	16.7	Dec. 27	1.7	Dec. 28	-5.6
—	—	—	—	—	—	—	—	—	Llyn Stwlan	May 27	20.6	—	—	—	—	—	—
Shinfield	Aug. 26	29.4	Aug. 2	16.7	Jan. 12, 13	0.6	Dec. 29	-8.3	Corwen	July 17, Aug. 25,	23.3	July 31	14.4	Dec. 18	-1.1	Dec. 28	-13.3
Reading	Aug. 26	30.0	Aug. 2	17.2	Dec. 16	0.6	Dec. 29	-7.2	Ceinws	—	—	—	—	—	—	—	—
Reading S.T.G.	Aug. 26	30.0	Aug. 2	17.2	Jan. 12,	0.6	Dec. 29	-8.9	—	—	—	—	—	—	—	—	—
—	—	—	—	—	Dec. 16	—	—	—	—	—	—	—	—	—	—	—	—
Finchampstead	July 17, Aug. 26	28.3	Aug. 2, Sept. 15	16.7	Jan. 12,	0.6	Dec. 29	-9.4	Lake Vyrnwy	May 17, 26,	24.4	July 26, Aug. 3	15.0	Dec. 26	-1.1	Dec. 28,	-9.4
—	—	—	—	—	Dec. 25, 28	—	—	—	—	—	—	—	—	—	—	—	—
Hurley	Aug. 26	29.4	Aug. 3	16.1	Dec. 16, 25	0.6	Dec. 29	-10.0	8a SOUTH WALES	—	—	—	—	—	—	—	—
Bracknell	July 17, Aug. 26	28.9	Aug. 2, 3	16.1	Jan. 12	0.6	Dec. 29	-8.9	Aberporth	May 17	23.3	Aug. 24	15.4	Dec. 28	0.7	Dec. 28	-5.4
Bournemouth	Aug. 3	29.1	Aug. 2	17.2	Jan. 12	1.1	Dec. 29	-7.8	Aberystwyth	May 17	26.7	May 31	13.9	Feb. 20	2.2	Jan. 14, 17,	-4.4
Hurn	Aug. 3	28.9	Aug. 2	17.3	Dec. 28	-0.8	Dec. 29	-10.5	—	—	—	—	—	—	—	—	—
Christchurch	Aug. 2, 3	28.1	Aug. 2	17.2	Jan. 12,	1.7	Dec. 29	-8.3	Aberystwyth P. B. S.	May 17, Aug. 27	24.4	Aug. 18	15.6	Feb. 19,	1.7	Feb. 21	-7.2
—	—	—	—	—	Dec. 25	—	—	—	—	—	—	—	—	—	—	—	—
Everton	July 17, Aug. 2	26.1	Aug. 2	16.7	Jan. 12	1.1	Dec. 29	-7.2	Gogerddan	May 17	25.6	Sept. 14	16.1	Feb. 19, 20,	2.2	Feb. 6	-7.2
Southampton	Aug. 3	28.3	Aug. 2, 5	16.7	Jan. 12	1.7	Dec. 29	-7.2	—	—	—	—	—	—	—	—	—
Leckford	July 17, Aug. 26	28.3	July 15, 27,	15.0	Jan. 12	0.0	Dec. 29	-7.8	Swyddfynnon	Aug. 4, 5	23.9	July 22	17.2	Feb. 20	0.6	Dec. 29	-8.3
—	—	—	—	—	—	—	—	—	Trawscroed	May 17	24.4	July 14, 26,	15.6	Jan. 13,	1.7	Feb. 6	-8.3
Winchester	Aug. 3	28.3	Aug. 2	16.7	Jan. 13	0.6	Dec. 29	-9.4	Llety-Evan-Hen	May 17	22.8	Aug. 26	14.4	Jan. 13,	-0.6	Dec. 29	-7.8
Martyr Worthy	July 17, Aug. 3	28.3	Aug. 2	16.1	—	—	—	—	—	—	—	—	—	—	—	—	—
Southsea	July 17, Aug. 3,	26.1	Aug. 5	17.2	Jan. 12	1.1	Dec. 26,	-4.4	Cwmystwyth	May 17, 26	22.2	Aug. 26	15.6	Feb. 18	-1.1	Dec. 29	-11.1
—	—	—	—	—	—	—	—	—	Dale Fort	Aug. 4	24.4	July 17, Aug. 2,	15.6	Feb. 19	2.8	Jan. 14	-3.9
Hayling Island	July 17	27.2	Aug. 2	17.2	Jan. 12, 13,	2.2	Dec. 27	-6.1	Brawdy	July 17	22.2	July 17, 24,	14.4	Jan. 13,	1.7	Jan. 14,	-7.2
—	—	—	—	—	Feb. 19,	—	—	—	Haverfordwest	Aug. 4	26.1	Aug. 6, 24,	15.6	Feb. 19, 20	—	—	—
—	—	—	—	—	Dec. 25	—	—	—	—	—	—	—	—	—	—	—	—
Long Sutton	July 17,	27.2	July 18, Aug. 2	16.1	Feb. 19,	0.0	Jan. 14	-7.2	Carmarthen	May 26, July 17,	25.0	July 18, 26,	15.6	Jan. 13,	2.2	Feb. 6	-7.2
—	—	—	—	—	Mar. 5,	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	Dec. 25	—	—	—	Llandrindod Wells	Aug. 4, 5	25.0	Aug. 2, 17	16.1	Feb. 19, 20	-2.8	Dec. 29	-13.9
Alice Holt Lodge	July 17	27.8	Aug. 2	16.7	Jan. 12	0.0	Dec. 29	-9.4	—	—	—	—	—	—	—	—	—
South Farnborough	Aug. 26	29.3	Aug. 2	17.0	Dec. 16	-2.0	Jan. 14	-12.4	Llandrindod Wells	July 26, Aug. 5	25.0	July 18	16.1	Dec. 15	-2.8	Dec. 29	-13.9
S. Catherine's Point	July 17	22.3	Aug. 2	17.3	Feb. 19	2.0	Jan. 14	-4.3	—	—	—	—	—	—	—	—	—
Ventnor	Aug. 2	25.0	July 17, Aug. 4	16.7	Jan. 12	1.1	Dec. 26,	-3.9	Llyndyn	Aug. 4	23.9	Aug. 2	15.0	Jan. 13,	0.0	Dec. 29	-12.2
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Shanklin	Aug. 4	25.6	Aug. 2	16.7	Jan. 12	1.1	Dec. 29	-6.1	Mumbles	July 17	24.2	July 17, Aug. 26	16.3	Dec. 28	0.5	Dec. 28	-4.0
Sandown	Aug. 27	26.1	July 20	18.9	Jan. 12	2.2	Dec. 29	-5.0	Swansea	May 26	25.6	July 18	17.2	Feb. 20	1.7	Feb. 6	-3.9
Ryde	Aug. 3	27.2	Aug. 4	17.8	Jan. 12	1.7	Dec. 29	-5.0	Port Talbot	July 17	25.6	July 19, Aug. 2	16.7	Feb. 20	1.7	Dec. 29	-6.1
Lacock	Aug. 26	27.8	July 15, 18,	15.6	Jan. 12	0.0	Jan. 14	-9.4	Neath	May 26, July 17,	24.4	July 18	16.7	Mar. 7	2.2	Dec. 29	-7.8
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
West Lavington	July 17, Aug. 26	28.3	July 18, Aug. 2	15.6	Jan. 12, 13	0.0	Dec. 26,	-8.9	Rhoose	July 17	25.0	Aug. 2	15.9	Dec. 28	-2.1	Dec. 29	-7.9
—	—	—	—	—	—	—	—	—	Cardiff	Aug. 5	25.6	July 18	16.7	Jan. 17	0.0	Dec. 29	-8.3
Lyneham	Aug. 26	27.3	July 18	16.6	Dec. 16	-3.0	Jan. 14	-9.2	Tredeggar	Aug. 5	23.9	July 18	15.6	Feb. 20	-1.1	Dec. 29	-8.9
Chiseldon	Aug. 26	28.9	July 18	16.1	Jan. 13	-0.6	Dec. 16	-8.9	Newport	Aug. 5	26.1	Aug. 3	18.3	Dec. 16	-0.6	Dec. 29	-8.9
Larkhill	Aug. 26	27.9	July 18	16.0	Jan. 12	-0.2	Dec. 29	-9.4	Usk	Aug. 5	25.6	Aug. 2	17.2	Dec. 27	0.0	Dec. 29	-12.2
Boscombe Down	Aug. 26	29.1	July 18	15.4	Dec. 28	-0.4	Dec. 29	-10.0	Crumbland	Aug. 5	24.4	July 18	16.1	Jan. 13	-1.1	Jan. 14	-7.8
Upavon	Aug. 26	27.9	Aug. 2	16.0	Dec. 28	-1.3	Dec. 29	-9.5	—	—	—	—	—	—	—	—	—
Porton	July 17, Aug. 26	27.6	Aug. 17	15.3	Jan. 12	0.5	Dec. 29	-9.5	8b ENGLAND, S.W.	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	Hawkridge	July 17	23.9	—	—	Jan. 13,	-1.1	Dec. 29	-10.0
7a ENGLAND, N. W.									—	—	—	—	—	—	—	—	—
Sellfield	May 26	25.6	Aug. 26	15.6	—	—	Dec. 28	-8.3	Cannington	Aug. 5	27.2	July 18, Aug. 2	16.7	Jan. 13	0.6	Feb. 6	-9.4
Carlisle	July 17	24.4	July 14, 30	15.0	Dec. 25	0.1	Dec. 28	-8.9	Weston-super-Mare	Aug. 4	25.6	July 18					

TABLE V (continued) [FIRST PUBLISHED 1913]—WARMEST DAY AND NIGHT AND COLDEST DAY AND NIGHT IN THE YEAR 1964 FOR EACH STATION

* DISTRICT AND PLACE	WARMEST				COLDEST				* DISTRICT AND PLACE	WARMEST				COLDEST			
	DAY		NIGHT		DAY		NIGHT			DAY		NIGHT		DAY		NIGHT	
	Highest Maximum and date	°C	Highest Minimum and date	°C	Lowest Maximum and date	°C	Lowest Minimum and date	°C		Highest Maximum and date	°C	Highest Minimum and date	°C	Lowest Maximum and date	°C	Lowest Minimum and date	°C
8b ENGLAND, S.W.—cont. Penzance	July 17, 23, Aug. 5	22-8	July 18, 31, Aug. 6, 24, Sept. 9, 10	15-6	Jan. 13 Mar. 7	3-3	Dec. 29	-3-3	9 NORTHERN IRELAND,—cont. Stormont Castle	Aug. 3	23-3	July 24, Aug. 3, 5, Sept. 10	14-4	Dec. 25, 26	1-7	Dec. 25, 27	-2-8
Gulval	July 23	24-4	Aug. 6, 24, Sept. 10	16-1	Jan. 13	2-2	Mar. 9	-2-8	Crossgar	Aug. 3	23-9	Aug. 5, Sept. 10	15-6	Dec. 25	2-2	Dec. 28, 29	-4-4
Culdrose	Aug. 25	22-8	Aug. 17	16-1	Mar. 7	2-2	Dec. 28, 29	-5-0	Creighton's Green	—	—	—	—	Dec. 25	0-6	Dec. 27	-3-3
Rosewarne	Aug. 4	22-8	Aug. 17, Sept. 9, 10	15-6	Jan. 13	2-2	Mar. 9	-5-6	Helen's Bay	Aug. 4	23-9	Aug. 5	15-6	Dec. 25	1-1	Dec. 28, 29	-1-7
Lizard	July 2	23-5	Aug. 17	15-5	Mar. 7	2-1	Dec. 28	-3-3	Killough	Aug. 3	22-5	Aug. 3	15-0	Dec. 25	1-0	Dec. 25	-4-5
Falmouth	July 17	23-9	Aug. 17, 24, Sept. 9	15-6	Dec. 28	1-1	Dec. 29	-4-4	Armagh	Aug. 4	24-4	Aug. 5	15-6	Dec. 25	1-1	Nov. 9, 10	-4-4
Newquay	Aug. 4, 26	23-3	July 24, Aug. 17	16-1	Jan. 13	1-7	Dec. 29	-3-9	Loughgall	Aug. 4	23-3	Aug. 5, Sept. 10	15-6	Nov. 9, Dec. 25	1-7	Feb. 8, 9, Mar. 7, 8, Dec. 25	-4-4
St. Austell	May 31	22-9	Aug. 17	15-5	Dec. 28	-0-2	Dec. 29	-4-5	Glenanne	Aug. 4	22-5	Sept. 10	15-0	Dec. 25	0-5	Nov. 10	-4-5
Fowey	July 17	24-4	Aug. 2, 17	15-6	Mar. 7	0-0	Dec. 29	-3-3	Lough Bradan	July 30, Aug. 4	21-7	Aug. 4	11-7	Dec. 25	0-6	Nov. 10	-6-1
Bude	July 17	25-0	Aug. 2, Sept. 26	16-7	Jan. 13	2-8	Feb. 8	-3-3	Baronscourt Forest	May 26	22-8	Aug. 4, 5	14-4	Dec. 25	0-6	Feb. 8	-6-7
Eilbridge	Aug. 25, Sept. 2	23-9	July 24, Aug. 2	16-1	Jan. 13	1-1	Dec. 28	-6-1	Carrigans	July 30	22-3	July 18, Sept. 10	14-6	Dec. 25	1-0	Feb. 9	-4-3
	July 17, Sept. 4	26-1	Sept. 10, 14	15-6	—	—	Dec. 29	-6-7	Lislap Forest	July 30, Aug. 11	21-1	Sept. 10	13-9	Dec. 25	1-1	Dec. 25	-5-0
9 NORTHERN IRELAND									Knockmany Forest	Aug. 4	22-8	Aug. 4, Sept. 10	14-4	Dec. 25, 27	1-7	Feb. 8, 9	-7-2
Loughmore Forest	July 30	21-7	Aug. 5	13-9	Dec. 25	1-1	Mar. 8	-6-1	Pomeroy Forest	Aug. 4	22-8	Sept. 10	13-9	Dec. 25	1-1	Feb. 8, 9, Dec. 15, 25	-3-3
Ballykelly	July 30	22-5	Sept. 10	15-0	Dec. 25	2-2	Mar. 8	-5-3	Cookstown	Aug. 4	22-2	Sept. 10	14-4	Dec. 25	1-1	Feb. 9	-4-4
Derrynoyd Forest	July 30, Aug. 4	22-8	July 24, Sept. 10	14-4	Dec. 25, 27	1-7	Feb. 9	-4-4	Roscor	May 27	22-2	July 24, 30, Aug. 2, 5	13-3	Feb. 20, 25, 29	2-2	Mar. 8, Dec. 25, 29	-3-3
Somerset Forest	July 30	22-8	July 30, Aug. 4, Sept. 10	14-4	Dec. 27	1-7	Feb. 8, Mar. 8	-3-9	Lough Navar Forest	Aug. 4	22-8	July 24, Aug. 4, 5	13-9	Feb. 20	1-1	Feb. 8, Mar. 7	-4-4
Garvagh Forest	July 30	23-3	July 24, Aug. 4, 24, Sept. 9, 10	13-9	Dec. 27	1-1	Mar. 8	-3-9	Ely Lodge	July 30	22-5	Sept. 10	14-8	Feb. 20, Dec. 25	2-1	Feb. 8, 9	-3-7
Moneydig	Aug. 4	24-2	Sept. 10	14-7	Dec. 27	1-4	Mar. 8	-5-2	Castle Archdale Forest	July 30	22-2	July 18	14-4	Feb. 20, Dec. 25, 27	1-7	Feb. 9	-5-6
Lisnafillan	Aug. 3, 4	22-8	July 30, Aug. 5, Sept. 10	14-4	Dec. 25	0-6	Feb. 8	-5-6	Pubble Forest	July 30, Aug. 4	22-2	Sept. 10	14-4	Dec. 25	1-1	Feb. 8, 9	-7-2
Aldergrove	Aug. 4	24-2	Aug. 5	15-1	Dec. 25	0-1	Dec. 25	-5-6									
Greenmount	Aug. 3, 4	23-3	Aug. 5	15-6	Dec. 25	1-1	Mar. 7, Dec. 25	-5-0	CHANNEL ISLES								
Black Mountain	Aug. 4	21-2	Aug. 5	13-2	Dec. 25	-0-4	Dec. 25	-4-5	Guernsey	Aug. 26	26-2	July 17	17-4	Jan. 13	1-0	Jan. 13, Mar. 7, Dec. 28	-2-0
Ballypatrick Forest	Aug. 4	21-1	Aug. 5	14-4	Dec. 25	1-1	Mar. 8	-3-9	Alderney	Aug. 25	25-0	July 17, Aug. 4	16-1	—	—	Jan. 14, Mar. 7, 8	-2-2
Larne	July 30, Aug. 3	22-8	Aug. 3, 4	15-0	Dec. 25, 26	2-8	Feb. 8, Mar. 7	-2-8	Jersey Airport	Aug. 27	28-0	July 17	18-2	Jan. 12	1-2	Jan. 23	-2-6
Kilroot	July 30, Aug. 4	22-2	Aug. 4	15-0	Dec. 25	1-7	Mar. 7	-2-8	St. Helier	Aug. 26	29-4	Aug. 26	17-8	Jan. 12	1-1	Dec. 26	-2-8
Newry Abbey	Aug. 3	23-3	Aug. 5	15-6	Dec. 25, 27	1-7	Feb. 8	-6-1									
Hillsborough	Aug. 4	22-2	Aug. 5, Sept. 10	15-0	Dec. 25, 26	1-1	Dec. 28	-3-9									
Kilkeel	Aug. 3	23-2	July 23	14-9	Dec. 26	3-1	Feb. 6	-2-0									
Tollymore Park	Aug. 4	23-9	Aug. 4	15-0	Feb. 18, Dec. 27	2-2	Mar. 7, 8, Apr. 3, Dec. 25	-2-2									

* For Counties, terminal hours of observation and altitudes see Table III

TABLE VI—MONTHLY FREQUENCIES OF sunshine for twenty stations:—
Number of days in each month of 1964 on which the DURATION OF SUNSHINE was:—
(i) nil (ii) 3 hr or less (iii) more than 3 hr but not more than 6 hr
(iv) between 6 and 9 hr (v) more than 9 hr

STATION	JANUARY					FEBRUARY					MARCH					APRIL					MAY					JUNE				
	Sunless	0-1-3-0 hr.	3-1-6-0 hr.	6-1-9-0 hr.	>9-0 hr.	Sunless	0-1-3-0 hr.	3-1-6-0 hr.	6-1-9-0 hr.	>9-0 hr.	Sunless	0-1-3-0 hr.	3-1-6-0 hr.	6-1-9-0 hr.	>9-0 hr.	Sunless	0-1-3-0 hr.	3-1-6-0 hr.	6-1-9-0 hr.	>9-0 hr.	Sunless	0-1-3-0 hr.	3-1-6-0 hr.	6-1-9-0 hr.	>9-0 hr.	Sunless	0-1-3-0 hr.	3-1-6-0 hr.	6-1-9-0 hr.	>9-0 hr.
Lerwick Observatory	17	11	3	0	0	9	15	5	0	0	12	11	3	2	3	6	12	6	5	1	3	9	8	5	6	2	9	7	4	8
Stornoway	13	13	4	1	0	8	11	5	3	0	6	9	6	9	1	1	10	10	7	2	2	11	7	6	5	4	8	3	9	6
Craibstone	10	12	9	0	0	11	7	5	6	0	18	8	4	1	0	4	11	4	8	3	2	10	7	5	7	0	6	8	7	9
Rothsay	16	8	7	0	0	15	5	6	3	0	13	8	6	4	0	7	3	10	8	2	4	7	8	7	5	4	6	6	8	6
Renfrew	19	9	3	0	0	8	10	9	2	0	12	12	4	3	0	3	12	6	8	1	4	5	7	8	7	2	6	5	8	9
Eskdalemuir Observatory	15	10	3	3	0	9	10	7	3	0	13	11	2	4	1	3	17	4	4	2	6	7	6	4	8	4	6	11	6	3
Douglas	16	9	6	0	0	11	9	5	4	0	15	5	6	4	1	4	10	4	4	8	4	7	5	6	9	6	3	7	7	11
Cockle Park	13	8	8	2	0	12	10	5	2	0	23	2	5	1	0	4	13	5	6	2	3	6	6	5	11	4	9	6	5	6
Gorleston	15	8	5	3	0	12	7	4	6	0	15	10	2	4	0	4	7	7	7	5	3	6	6	5	11	4	9	6	5	8
Cambridge (N.I.A.B.)	16	9	6	0	0	15	4	6	4	0	16	8	4	1	2	4	12	5	6	3	1	8	3	11	8	3	10	3	7	7
Birmingham	16	9	5	1	0	10	13	4	2	0	16	8	2	4	1	5	10	5	0	0	10	9	4	8	16	7	3	1	1	1
Kew Observatory	19	6	4	2	0	14	5	5	5	0	13	10	2	4	2	6	10	3	5	1	6	7	9	8	3	8	6	3	10	10
Hastings	18	8	3	2	0	11	8	6	4	0	11	8	5	6	1	4	5	9	5	7	1	6	7	4	13	3	6	4	4	13
Southampton	21	6	2	2	0	10	11	6	2	0	9	16	3	2	1	5	7	8	6	4	0	9	6	8	8	4	8	5	4	9
Stonyhurst	16	11	2	2	0	9	9	9	2	0	13	12	3	2	1	3	13	9	3	2	4	5	6	8	8	2	13	6	5	4
Bidston Observatory	14	10	7	0	0	10	8	8	3	0	13	10	6	2	0	1	9	11	5	4	2	9	3	6	11	3	7	5	11	4
Holyhead (Valley)	15	10	2	4	0	6	9	9	4	1	7	8	7	5	4	0	14	4	6	6	4	5	7	6	9	5	4	6	10	9
Falmouth	14	9	7	1	0	8	11	5	5	0	9	13	4	4	1	1	13	5	6	5	4	11	4	2	10	4	6	4	7	9
Aldergrove	15	12	4	0	0	9	10	6	4	0	10	10	5	5	1	0	13	7	8	2	3	8	9	4	7	3	9	7	5	6
Armagh	16	12	3	0	0	5	14	6	4	0	9	13	5	3	1	0	13	8	8	1	2	6	8	12	3	3	12	6	6	3

TABLE VII [First published 1914] Number of Days in 1964 with Rainfall between given limits

STATION	Rainfall Limits (mm)								STATION	Rainfall Limits (mm)							
	0 in. 0-0.1 mm.	.01-.04 in. 0.2-1.0 mm.	.05-.20 in. 1.1-5.0 mm.	.21-.40 in. 5.1-10.0 mm.	.41-.60 in. 10.1-15.0 mm.	.61-.80 in. 15.1-20.0 mm.	.81-1.01 in. 20.1-25.1 mm.	> 1.01 in. > 25.1 mm.		0 in. 0-0.1 mm.	.01-.04 in. 0.2-1.0 mm.	.05-.20 in. 1.1-5.0 mm.	.21-.40 in. 5.1-10.0 mm.	.41-.60 in. 10.1-15.0 mm.	.61-.80 in. 15.1-20.0 mm.	.81-1.01 in. 20.1-25.0 mm.	> 1.01 in. > 25.1 mm.
Lerwick Observatory	106	76	108	40	22	6	8	1	Shoeburyness	233	36	67	17	7	2	0	1
Stornoway	116	67	99	58	18	2	4	2	Birmingham	199	70	58	29	6	1	1	2
Fort William	138	59	71	48	21	13	8	8	Ross-on-Wye	214	51	70	24	5	1	0	0
Nairn	-	-	-	-	-	-	-	-	Kew Observatory	234	43	58	21	2	2	3	3
Craibstone	167	100	66	22	5	1	1	4	Hastings	220	48	51	30	13	2	0	2
Leuchars	210	51	73	21	6	3	1	1	Southampton	219	53	55	25	8	3	2	1
Rothsay	140	63	75	49	17	14	3	5	Moor House	124	64	85	40	19	11	11	12
Renfrew	172	47	94	29	15	5	1	3	Stonyhurst	190	38	70	37	16	6	3	6
Eskdalemuir Observatory	156	46	82	39	20	9	7	7	Bidston Observatory	205	48	86	18	3	3	2	1
Douglas	196	46	62	27	22	3	6	4	Holyhead (Valley)	198	46	67	31	9	7	4	4
Cockle Park	197	69	67	23	6	3	0	2	Llandrindod Wells	182	58	76	27	17	4	0	2
Scarborough	218	52	75	16	4	0	1	0	Long Ashton	219	49	54	24	13	5	2	0
Cranwell	225	51	67	17	5	0	0	1	Falmouth	203	47	58	29	14	6	6	3
Gorleston	222	52	56	22	6	5	1	2	Aldergrove	162	57	98	31	12	3	2	1
Cambridge	228	53	59	16	7	1	0	2	Armagh	163	63	94	31	9	2	0	4

TABLE VIII—NUMBER OF DAYS IN 1964 WITH MAXIMUM AND MINIMUM TEMPERATURES between given limits. [First published 1913].

STATION	MAXIMUM TEMPERATURE °C											STATION	MINIMUM TEMPERATURE °C																				
	0° or less	0.1° to 5.0°	5.1° to 10.0°	10.1° to 15.0°	15.1° to 20.0°	20.1° to 25.0°	25.1° to 30.0°	Above 30.0°	15.0° or less	14.9° to 10.0°	9.9° to 5.0°		4.9° to 0.0°	0.1° to 5.0°	5.1° to 10.0°	10.1° to 15.0°	Above 15.0°																
Lerwick Observatory	2	45	164	148	7	0	0	0	0	0	28	137	184	17	0	Edgbaston	4	57	81	82	87	53	2	0	0	0	2	34	106	130	91	3	
Stornoway	1	18	127	176	44	0	0	0	0	0	32	117	176	41	0	Kew Observatory	0	41	76	86	84	68	11	0	0	0	1	24	99	122	97	23	
Craibstone	1	60	104	116	75	9	1	0	0	0	1	42	158	134	31	0	Hastings	0	47	86	91	102	39	1	0	0	0	24	106	107	109	18	
Rothsay	0	29	116	130	89	2	0	0	0	0	0	15	134	144	73	0	Southampton	0	29	72	64	82	83	6	0	0	2	34	106	115	98	11	
Renfrew	2	33	95	115	99	22	0	0	0	0	5	37	121	130	73	0	Stonyhurst	0	48	87	109	98	24	0	0	0	5	52	117	120	72	0	
Eskdalemuir Observatory	2	66	101	101	82	14	0	0	2	15	63	130	113	43	0	Bidston	0	47	87	111	94	27	0	0	0	0	5	26	109	120	72	0	
Douglas	0	25	126	121	89	5	0	0	0	0	14	132	153	87	0	Valley	0	10	99	133	103	21	0	0	0	0	2	16	109	120	72	0	
Cockle Park	1	56	98	100	96	15	0	0	0	0	4	39	138	134	57	0	Falmouth	0	14	87	129	118	18	0	0	0	0	2	16	85	147	114	2
Gorleston	0	66	89	88	102	37	4	0	0	0	1	24	119	114	92	16	Aldergrove	0	29	99	113	103	22	0	0	0	0	1	34	128	130	72	1
Cambridge	1	62	60	83	68	79	12	1	0	0	8	57	112	109	73	7	Armagh	0	24	95	109	115	23	0	0	0	0	40	126	128	71	1	

TABLE IX [First published 1914] Distribution of Winds of stated speeds at Anemograph Stations, and Maximum Speeds for the Year 1964

DISTRICT AND STATION	Distribution of Mean Hourly Values of Wind Speed								Mean Hourly Wind Speed	Highest Velocities										
	34 knots or more		22 to 33 knots		11 to 21 knots	4 to 10 knots	Less than 4 knots	No Record		Highest Hourly Wind			Highest Gust							
	No. of Days	Duration		No. of days	Duration	Duration	Duration	Duration		veer from N.	Speed	Hour ended at			Speed	Day and Time				
		1964	Average									hr.	hr.	hr.		hr.	hr.	hr.	hr.	hr.
SCOTLAND																				
0	Lerwick Observatory	28	175	240	172	1409	3737	2768	695	0	13.8	240	47	December	12	11	68	November	26	2205
	Kirkwall	14	93	79	123	1045	4082	2832	732	0	12.9	270	50	February	1	04	74	February	1	0330
	Dounreay	19	132	-	144	1178	4236	2938	127	173	14.0	150	47	March	14	15	74	December	2	1305
	Shin	4	6	-	52	221	2439	2937	3151	30	7.5	230	43	May	12	17	69	May	12	1620
	Stornoway (Coastguard)	45	247	220	185	1693	3926	1862	1056	0	14.8	190	52	January	2	09	75	February	31	2255
	Duirinish	19	97	-	119	785	3397	3213	1164	128	11.3	270	45	February	1	01	70	January	31	2255
	Benbecula	35	237	145	177	1723	4335	2079	410	0	15.6	170	51	January	2	24	77	December	8	2225
1	Lossiemouth	4	4	-	84	417	2809	3435	2094	25	9.0	200	36	December	31	01	62	November	16	1710
	Dyce	1	1	6	59	237	2978	3376	2192	0	8.5	210	34	September	25	06	54	September	25	0420
	Auchterhouse	2	2	-	59	247	2848	3761	1705	221	9.0	270	34	January	31	24	57	December	8	2225
	Bell Rock Lighthouse	43	257	295	202	1842	4181	1705	799	0	15.7	130	48	March	14	14	62	March	14	1450
	Leuchars	2	13	8	89	532	3216	3903	1120	0	10.3	110	40	March	14	13	57	January	31	2055
	Turnhouse	5	7	-	83	495	3289	3589	1404	0	10.1	190	41	December	12	01	73	December	11	2350
	Edinburgh, Blackford Hill	36	107	16	140	1084	3560	2843	913	277	12.5	180	60	December	12	01	68	December	12	0120
6a	Tiree	51	377	115	199	2001	4044	1517	845	0	16.2	210	45	December	8	22	72	December	8	2145
	Paisley	0	0	0.9	22	79	1663	4337	2685	0	6.7	260	32	September	11	14	62	September	11	1305
	Renfrew	0	0	4	48	203	2888	3940	1753	0	8.6	220	32	February	3	03	58	February	1	0025
	Lowther Hill	83	508	-	239	2342	4097	1533	215	89	18.2	310	58	December	8	02	84	February	1	0025
	Prestwick Airport	0	0	9	42	222	3479	3908	1175	0	9.7	100	33	March	14	10	56	December	8	0020
	Eskdalemuir Observatory	1	3	26	48	167	1542	3637	3431	4	6.3	200	38	December	7	24	69	December	8	0155
	West Freugh	7	20	-	75	478	3376	3656	1254	0	10.2	300	40	December	8	01	64	December	7	2345
ENGLAND and WALES																				
6b	Ronaldsway	34	215	-	154	1421	3931	2536	681	0	14.2	250	56	December	7	24	77	December	7	2215
	Point of Ayre	12	63	57	127	1062	4575	2708	376	0	13.5	260	42	December	8	01	67	December	7	2350
2	Durham	2	5	5	41	183	2780	3907	1838	71	8.6	260	37	February	1	09	75	December	8	0155
	South Shields	3	11	12	47	271	2973	4120	1409	0	9.2	130	37	March	14	14	59	December	8	0045
	Cranwell	0	0	3	50	221	2864	4221	1431	47	9.1	240	31	May	7	22	52	May	7	2210
3	Mildenhall	0	0	3	16	61	1938	4443	2342	0	7.1	220	38	December	13	08	52	May	7	2140
	Bedford	0	0	-	29	135	2863	4469	1230	87	8.8	200	30	December	9	02	50	December	9	0200
	Cardington	4	15	20	64	427	3972	3480	886	4	10.9	180	37	December	7	24	60	December	7	2325
	Garston	0	0	-	2	3	836	5803	2142	0	5.9	270	23	November	16	07	49	December	8	0135
	Rothamsted	0	0	0	1	5	968	4913	2789	109	5.6	210	22	December	9	05	47	November	16	0535
	Stansted	0	0	-	12	55	2696	4680	1259	94	8.4	210	27	December	30	13	46	December	9	0215
	Coryton	0	0	0	12	27	2289	4840	1179	449	8.1	270	26	December	13	05	53	December	8	0150
	Shoeburyness	12	65	26	105	735	3915	3472	564	33	12.1	210	41	December	8	02	62	October	7	1010
4	Sheffield	0	0	-	4	8	777	3656	4318	25	4.5	280	26	February	1	05	64	February	1	0455
	Edgbaston	0	0	0.7	6	18	1040	6337	1389	0	6.6	200	26	October	7	06	47	December	3	0405
	Elmdon																			

TABLE IX (continued)—[First Published 1914] Distribution of Winds of stated speeds at Anemograph Stations, and Maximum Speeds for the Year 1964

DISTRICT AND STATION	Distribution of Mean Hourly Values of Wind Speed								Mean Hourly Wind Speed knots	Highest Velocities									
	34 knots or more		22 to 33 knots		11 to 21 knots	4 to 10 knots	Less than 4 knots	No Record		Highest Hourly Wind			Highest Gust						
	No of Days	Duration		No of days	Duration	Duration	Duration	Duration		Duration	veer from N.	Speed	Hour ended at			Speed	Day and Time		
		1964	Average										Month	Day	Hour		Month	Day	Hour
hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	kn.	kn.	Month	Day	Hour	Kn.	Month	Day	Hour		
ENGLAND AND WALES—cont.																			
Gatwick	0	0	—	18	82	1803	4515	2384	0	6-9	220	32	December	13	08	55	December	13	0750
Isle of Grain	0	0	2	21	77	1791	3517	3322	77	6-3	180	30	April	21	07	50	December	13	0720
Dover	0	0	15	45	246	2540	3899	1931	168	8-5	200	30	October	7	09	56	December	9	0035
Thorney Island	0	0	0-7	15	59	2043	3862	2820	0	6-9	210	29	December	8	01	46	May	7	2000
Hurn	0	0	—	23	95	2822	4256	1611	0	8-5	220	28	December	13	07	50	December	8	0020
Calshot	0	0	17	41	243	4206	3940	395	0	11-1	190	32	December	7	24	43	December	13	0440
S. Farnborough	0	0	4	18	71	2409	4308	1996	0	7-9	250	29	September	16	16	48	December	30	1240
Abingdon	0	0	0-1	19	69	2893	3353	2301	168	8-0	250	28	September	16	15	43	September	16	1340
Larkhill	0	0	4	30	144	2559	3955	2126	0	8-1	290	28	August	1	16	53	December	8	0025
Boscombe Down	1	1	5	32	183	2905	3978	1717	0	8-7	230	34	December	13	05	51	December	8	0035
Porton	0	0	2	28	120	1996	3325	3343	0	6-7	210	32	December	8	24	53	December	30	1140
7a Carlisle	1	2	—	49	231	2686	3881	1984	0	8-4	220	37	December	7	24	60	December	8	0135
Sellafield	4	6	11	58	355	3326	4094	859	144	10-3	260	41	December	8	01	63	December	8	0020
Spadeadam	3	4	—	70	366	3406	3776	1175	57	10-2	170	35	December	8	01	(65)	December	8	0140
Great Dun Fell	104	811	—	247	2588	3390	1181	529	285	19-2	(230)	68	December	7	24	(94)	December	7	2330
Moor House	38	142	—	178	1634	3962	2215	603	228	14-8	(270)	44	February	4	12	(65)	December	7	2325
Squires Gate	10	26	—	115	958	4296	2972	532	0	13-0	250	44	December	8	01	65	December	8	0010
Southport	1	1	83	54	414	2458	3176	2635	100	8-3	260	35	December	8	01	55	December	3	0230
Speke	2	2	22	53	350	3347	4028	1057	0	10-0	230	35	December	7	24	57	December	3	0320
Manchester W/Centre	0	0	—	14	37	2036	4889	1842	0	7-5	200	28	December	7	23	66	November	16	0535
Bidston Observatory	4	6	34	65	404	3359	4111	738	166	—	260	36	September	16	16	66	December	8	0030
Ringway	0	0	9	37	128	2496	4042	2118	0	8-0	260	30	November	16	07	59	December	7	2256
7b Valley	26	164	69	163	1508	3885	2582	845	0	14-1	210	50	December	7	23	70	December	7	2200
8a Aberporth	12	43	34	149	1288	4034	2634	785	0	13-3	110	39	March	17	03	(61)	December	12	0145
Brawdy	16	56	—	113	933	3991	2930	857	17	12-5	200	42	December	7	18	65	August	17	1310
Port Talbot	1	1	10	61	406	3328	3641	1408	0	9-9	250	35	September	16	12	56	June	1	0705
Rhoose	4	7	—	72	470	3576	4293	438	0	10-9	270	38	September	16	13	59	December	13	0805
8b Plymouth Hoe	6	15	44	59	343	2849	3475	2102	0	8-9	—	(41)	November	15	24	(51)	December	7	1905
St. Mary's, Scilly	20	91	133	145	1640	4316	2142	595	0	14-7	310	42	October	9	13	65	October	9	1400
The Lizard	29	170	194	146	1354	3973	2611	491	185	14-2	200	44	December	7	19	65	October	9	1310
NORTHERN IRELAND																			
9 Ballykelly	3	6	8	61	286	2654	3141	2697	0	8-1	140	36	March	14	08	57	March	17	0210
Aldergrove	0	0	5	58	346	4063	3273	1102	0	10-6	180	32	January	2	24	60	May	9	1435
											250		March	14	07				
											200		May	7	21				
											310		September	24	24				
											200		December	7	23				
											310		September	24	23				
Castle Archdale	1	1	—	42	129	2740	3969	1945	0	8-4	200	34	September	24	23	56	September	24	2220
CHANNEL ISLES																			
Jersey Airport	9	50	74	83	671	4526	3211	326	0	12-6	280	68	October	9	14	94	October	9	1325

Note: Stations with 500 hours or more defective record have been omitted. These are indicated in Table X by symbols in column headed "YEAR"

TABLE X [First published 1934]—Number of hours in each Month of 1964 with Gusts Exceeding (a) 33 kt. and (b) 47 kt.

District and Station	Number of Hours exceeding 33 kt.												Number of Hours exceeding 47 kt.														
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	
0 Lerwick Obs'y	175	219	217	85	79	71	96	97	44	48	153	173	1457	28	41	55	2	27	1	15	15	5	4	28	36	257	
Kirkwall	83	120	185	36	45	65	72	71	49	35	94	146	1001	4	20	43	0	2	0	13	16	0	0	8	41	147	
Dounreay	52	(144)	202	20	66	31	91	106	(76)	45	128	(168)	*	2	(40)	68	0	7	0	10	7	10	2	28	35	*	
Shin	26	46	88	34	69	(36)	92	33	18	3	50	48	*	2	13	2	0	6	0	6	0	4	0	5	5	43	
Stornoway	179	104	55	101	123	40	73	77	92	42	221	129	1236	54	29	0	2	14	0	0	0	33	28	3	33	41	235
Duirinish	(77)	(52)	(56)	(40)	106	29	101	57	55	43	121	149	*	42	(15)	0	(1)	17	3	9	1	10	3	30	32	*	
Benbecula	322	231	224	156	200	72	125	69	78	78	165	185	1905	79	75	61	8	30	0	13	15	12	9	33	33	368	
1 Lossiemouth	45	(71)	127	28	68	37	106	48	47	33	78	121	*	1	11	16	0	9	0	15	3	1	2	14	24	96	
Dyce	5	17	29	0	13	18	38	24	35	8	17	48	252	0	2	0	0	0	0	0	0	3	0	2	2	9	
Auchterhouse	35	(29)	(33)	(26)	44	15	(45)	18	(7)	4	(36)	(29)	*	1	4	(1)	0	1	0	0	0	0	0	1	1	*	
Bell Rock	68	93	166	12	37	13	48	38	67	41	116	207	906	8	7	36	0	8	0	8	5	0	0	20	31	123	
Rannoch	80	93	(93)	(13)	36	(60)	19	22	(7)	(68)	(58)	*	6	26	(6)	(0)	4	0	(2)	0	0	(0)	(4)	(5)	*		
Leuchars	59	42	74	34	79	20	65	12	23	12	52	53	525	6	6	13	0	8	0	9	0	0	0	4	4	50	
Turnhouse	58	45	23	52	89	23	96	26	35	11	87	84	629	3	7	1	1	9	0	5	2	0	0	0	6	14	48
Edinburgh	(146)	90	67	(55)	(165)	130	(142)	92	158	42	229	224	*	(39)	24	3	(1)	32	7	(41)	20	28	7	58	92	*	
6 Tiree	215	253	262	72	145	52	133	75	123	101	225	268	1924	55	40	103	1	12	0	18	12	17	16	56	81	411	
Millport	51	(40)	86	3	1	1	1	1	1	1	1	1	1	2	0	8	0	1	1	1	1	1	1	1	1	1	
Paisley	62	37	19	14	44	7	45	9	25	9	35	52	358	11	3	0	0	7	0	4	0	5	5	2	5	42	
Renfrew	47	33	21	7	43	5	33	4	18	8	38	33	290	2	3	0	0	4	0	1	0	1	0	0	1	12	
Lowther Hill	162	219	(133)	162	212	154	201	116	235	83	198	190	*	48	53	66	9	33	14	50	10	32	16	65	61	457	
Prestwick	39	23	55	5	20	0	26	1	8	9	52	66	304	0	1	3	0	2	0	0	0	0	0	0	2	6	
Eskdalemuir Obs'y	40	48	37	27	68	17	53	26	37	16	98	80	547	1	4	0											

Table X (continued)—[First published 1934] Number of Hours in each Month of 1964 with Gusts Exceeding (a) 33 kt. and (b) 47 kt.

District and Station	Number of Hours exceeding 33 kt.												Number of Hours exceeding 47 kt.												
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Thorney Island	3	0	7	17	9	1	21	1	10	2	16	56	143	0	0	0	0	0	0	0	0	0	0	0	0
Hurn	1	1	2	9	2	2	10	5	9	6	13	62	122	0	0	0	0	0	0	0	0	0	0	0	1
Calshot	0	1	3	5	0	1	12	3	4	5	8	57	99	0	0	0	0	0	0	0	0	0	0	0	0
S. Farnborough	(0)	0	1	19	6	0	4	2	7	4	11	61	*	0	0	0	0	0	0	0	0	0	0	1	
Abingdon	3	2	1	3	2	0	1	1	6	2	5	(32)	*	0	0	0	0	0	0	0	0	0	0	0	
Larkhill	10	20	15	51	9	2	16	17	8	8	23	105	284	0	0	0	0	0	0	0	0	0	1	14	
Boscombe Down	4	7	14	25	5	4	5	12	5	6	18	87	192	0	0	0	0	0	0	0	0	0	0	5	
Porton	2	1	8	19	3	3	6	9	8	5	14	68	146	0	0	0	0	0	0	0	0	0	0	6	
7a Carlisle	10	23	21	18	49	4	33	7	7	7	50	81	310	0	1	0	0	2	0	0	0	0	0	4	
Sellafield	11	5	96	1	14	1	11	3	12	16	42	(73)	*	0	0	3	0	0	0	0	0	1	0		
Spadeadam	26	(50)	66	32	94	18	(62)	29	26	26	80	88	*	4	(0)	2	0	7	0	1	2	0	1		
Great Dun Fell	(110)	(127)	(115)	(230)	256	204	220	152	275	(88)	248	(165)	*	32	34	(10)	(27)	48	15	45	29	46	22		
Moor House	131	(103)	(95)	(127)	174	104	152	(101)	164	63	(170)	129	*	14	39	(1)	(7)	11	2	7	8	22	5		
Squires Gate	20	14	72	12	54	11	56	18	46	59	81	120	563	0	0	1	0	5	0	3	0	0	1	3	
Southport	18	15	(44)	7	27	8	44	12	21	(48)	59	(59)	*	0	0	0	0	0	0	0	0	0	1	2	
Fleetwood	†	†	†	(12)	29	16	44	14	27	41	(52)	70	†	†	†	†	†	†	†	†	†	†	†	†	
Speke	24	35	48	11	58	4	22	23	23	27	38	85	398	1	0	1	0	2	0	3	0	0	1	2	
Manchester																									
W./Centre	35	41	41	27	57	19	20	12	17	13	21	62	365	2	1	1	0	3	1	0	0	0	0	2	
Bidston Obs'y	46	99	100	37	82	35	51	26	56	66	89	96	783	6	4	0	0	3	0	2	0	2	1	11	
Ringway	14	28	29	5	29	11	4	2	9	6	9	43	189	0	0	0	0	2	0	0	0	0	0	3	
7b Valley	87	34	21	37	113	36	36	48	87	65	118	197	859	1	0	0	3	7	0	0	0	0	0	3	
8a Aberporth	(88)	(51)	(83)	(127)	(97)	39	54	(40)	(71)	127	(65)	256	*	(2)	(9)	(6)	2	(6)	0	4	0	6	19	6	
Brawdy	66	89	123	55	47	12	28	37	47	59	69	(221)	*	1	12	20	1	5	0	3	1	7	19	(5)	
Port Talbot	35	71	121	23	14	27	18	14	30	15	17	58	443	0	2	11	0	5	0	5	8	5	10	(37)	
Rhoose	13	26	21	44	47	20	37	6	8	34	41	95	392	0	0	0	0	1	0	0	0	3	1	0	
8b Portland Bill	22	(72)	(181)	177	87	42	70	97	124	*	212	328	*	1	(4)	20	8	4	1	12	5	19	*	36	
Plymouth	(21)	(36)	(29)	10	7	2	6	14	27	14	(9)	(56)	*	0	0	1	0	0	0	0	2	0	0	0	
Scilly	172	148	102	172	36	9	30	40	65	159	132	304	1369	3	10	7	9	2	0	0	4	8	43	30	
Lizard	141	105	(85)	73	31	22	19	55	65	140	(154)	(200)	*	12	13	(10)	3	1	0	0	2	3	26	21	
9 Ballykelly	100	67	121	26	61	6	40	31	38	21	53	79	643	4	2	18	0	3	0	0	0	3	2	2	
Aldergrove	50	25	108	7	35	9	30	9	20	16	14	26	349	0	0	7	0	1	0	0	0	1	0	1	
Castle Archdale																									
Forest	56	36	45	18	48	4	(17)	17	20	(11)	51	31	*	5	3	0	0	3	0	0	0	3	2	0	
Jersey	5	15	29	39	2	5	13	41	28	144	98	181	600	1	0	0	0	0	0	0	0	0	43	22	

* Defective record

† Anemograph out of order

‡ Incomplete record

OCCASIONS OF "STRONG GALES" in 1964

TABLE XI [First published 1900]—Occurrences on which the Maximum Hourly Mean Wind was 41 knots or more.

District and Station	Date	Maximum Hourly Mean wind of 41 Knots or more			Maximum Speed in a gust during the day			Hours for which mean speed exceeded 33 Knots on date in second column	District and Station	Date	Maximum Hourly Mean wind of 41 Knots or more			Maximum Speed in a gust during the day			Hours for which mean speed exceeded 33 Knots on date in second column
		Hour ended at	Direction	Speed	Time	Direction	Speed				Hour ended at	Direction	Speed	Time	Direction	Speed	
0 Lerwick Observatory	Jan. 20	15	250	45	1415	250	65	11-16, 21	Bell Rock (cont)	Nov. 14	18	220	47	1140	210	60	02-04, 06-08, 10-24
	Feb. 1	05	270	43	0420	270	64	03-06, 11-14		Nov. 15	04	230	42	0320	230	50	01-06
	Feb. 3	06	220	43	0555	220	62	04-07		Dec. 30	23	230	42	2230	230	53	14-24
	Feb. 17	08	070	41	0810	070	59	07-10		Dec. 31	03	230	45	0200	230	59	01-14
	Mar. 14	13	150	42	1330	150	64	01-03, 07-24	Rannoch	Feb. 1	03	260	44	0125	260	64	01-09
	Aug. 26	12	230	42	1135	230	61	09-15		Mar. 14	15	110	44	—	—	—	02-06, 14-16
	Nov. 26	22	240	45	2205	250	68	18-24	Turnhouse	Dec. 12	01	190	41	0040	190	72	01
	Nov. 27	01	260	41	0220	270	68	01-05	Edinburgh	Jan. 1	24	180	48	2310	180	73	24
	Dec. 11	24	190	42	2330	190	62	21-24	Blackford Hill	Jan. 9	01	180	43	0020	180	65	01-03, 07, 12
	Dec. 12	11	240	47	0950	230	67	01-04, 07-17		July 7	14	200	44	1310	200	75	12-15, 17
Kirkwall	Feb. 1	04	270	50	0330	270	74	01-13		Dec. 7	22	190	50	2255	190	86	21-24
	Mar. 14	14	130	41	1355	130	60	01-24		Dec. 8	19	180	51	1835	180	86	01, 03, 18-24
	Dec. 9	05	250	41	0525	250	60	03-06		Dec. 11	22	180	52	2355	180	87	20-24
Dounreay	Feb. 1	07	290	43	0345	270	70	01-09, 13		Dec. 12	01	180	60	0120	180	88	01-08
	Feb. 4	18	230	42	0325	210	68	01-07, 17-20, 22-24		Dec. 31	01	190	42	0045	190	72	01, 02, 06, 08, 09, 11, 12
	Mar. 13	15	150	41	1010	150	59	03-24	6a Tiree	Mar. 12	16	100	42	1520	100	56	10, 11, 13-24
	Mar. 14	15	150	47	1510	150	70	01-24		Mar. 14	09	110	44	0915	110	60	02-18
	Nov. 16	17	300	44	1655	300	68	15-23		Mar. 17	11	120	44	0905	120	59	01-24
Shin	May 12	17	250	43	1620	230	69	17		Mar. 18	06	120	42	1230	120	57	01-24
Stornoway	Jan. 1	20	180	42	2320	190	53	13, 16, 19-24		May 12	14	200	41	1250	200	61	11, 13-15
	Jan. 2	11	190	52	1030	190	72	1-24		Nov. 14	08	200	42	0630	210	66	04-09, 11, 13-15, 23, 24
	Jan. 3	03	190	48	0225	190	66	01-09		Nov. 28	19	340	44	1630	340	63	15-24
	Jan. 31	24	250	44	2035	260	58	18-24		Nov. 29	01	350	43	0050	350	59	01-05
	Feb. 1	03	270	51	0225	270	75	01-11		Dec. 8	22	210	45	2145	220	72	14-18, 20-24
	Feb. 2	24	200	43	2235	200	61	09, 11, 21-24		Dec. 11	21	170	43	2035	170	64	14-23
	Feb. 3	01	200	46	0220	300	62	01-04, 24		Jan. 2	16	200	44	1950	200	57	01-07, 10-24
	May 3	13	190	43	1220	190	54	10-16		Jan. 30	03	290	42	0225	280	63	02, 03, 05-08
	May 12	15	180	49	1420	180	67	13-20		Jan. 31	24	280	52	2230	280	75	11-17, 21-24
	Sept. 25	11	200	42	0530	180	63	04-20		Feb. 1	01	280	57	0025	290	84	01-13, 16, 17
	Nov. 26	12	180	41	1120	180	55	03-12		Feb. 4	18	320	48	1710	310	73	10-20
	Dec. 8	23	200	42	2250	210	60	15-23		Feb. 18	09	090	43	0820	090	57	02-04, 07-14, 17
	Dec. 9	01	240	41	0045	240	58	01-03		Mar. 12	10	120	45	1250	120	53	09-23
	Dec. 11	19	190	49	1705	180	65	14-24		Mar. 19	15	120	53	1225	120	64	01-19
Duirinish	Dec. 31	03	230	47	0220	230	68	02-05		Mar. 25	06	330	43	0535	330	53	04-17
	Jan. 2	09	180	45	0710	180	68	02, 03, 05-24		May 7	24	240	44	2335	240	71	11, 17-21, 23, 24
	Jan. 3	02	170	43	0310	170	65	01-12		May 8	01	240	44	0030	240	73	01-05
	Jan. 31	24	260	42	2255	260	70	20-24		May 9	18	200	45	1640	200	63	11-18
	Feb. 1	01	270	45	0245	270	66	01-05		July 7	12	220	42	1			

OCCASIONS OF "STRONG GALES" in 1964

TABLE XI (continued)—Occasions on which the Maximum Hourly Mean Wind was 41 knots or more.

District and Station	Date	Maximum Hourly Mean wind of 41 Knots or more			Maximum Speed in a gust during the day			Hours for which mean speed exceeded 33 Knots on date in second column	District and Station	Date	Maximum Hourly Mean wind of 41 Knots or more			Maximum Speed in a gust during the day			Hours for which mean speed exceeded 33 Knots on date in second column
		Hour ended at	Direction	Speed	Time	Direction	Speed				Hour ended at	Direction	Speed	Time	Direction	Speed	
6b Ronaldsway (cont.)	Sep. 24	21	190	43	2030	190	62	19-22	Moor House	Feb. 1	12	270	42	1120	270	61	03-16
	Oct. 6	23	200	49	2205	210	70	19-24		Feb. 4	12	270	44	1530	270	64	02-19
Point of Ayre	Oct. 7	01	200	48	0025	200	65	01-04		Sep. 11	17	270	43	1625	270	59	14-20
	Dec. 7	24	250	56	2215	210	77	12-24		Nov. 25	08	280	43	0615	280	58	05-09
3 Shoeburyness	Dec. 8	18	200	46	0005	260	67	01, 02, 15-23		Dec. 7	24	210	41	2325	210	65	21-24
	Dec. 11	24	200	48	2350	200	67	19-24		Squires Gate	May 7	23	240	41	2220	240	55
7a Sellafeld	Dec. 12	01	210	48	0030	210	63	01-03		Jul. 7	16	240	41	1550	240	58	15, 16, 19-21
	Dec. 8	01	260	42	0005	260	61	01, 02, 18-20		Dec. 7	24	230	44	2315	230	62	23, 24
Great Dun Fell	Dec. 8	02	210	41	0205	220	60	01, 02		Dec. 8	01	250	44	0010	240	65	01, 02
	Dec. 13	06	220	41	0850	230	58	06-11		7b Valley	Oct. 6	24	190	43	2330	190	57
8a Brawdy	Dec. 27	15	120	41	1440	120	51	12-23		Oct. 7	04	200	45	0335	200	63	01-05
	Dec. 7	24	230	41	2310	230	59	23, 24		Nov. 16	06	260	41	0500	260	56	05, 06
8b Portland Bill	Dec. 8	01	260	41	0020	260	63	01, 02		Dec. 7	22	210	50	2200	220	70	10-24
	Jan. 2	08	220	44	0750	220	67	02-16		Dec. 8	21	190	43	2030	190	56	01, 02, 13-24
9 Jersey	Jan. 27	23	230	42	2240	230	54	19-24		Dec. 11	23	170	42	2300	170	56	21-24
	Jan. 30	04	270	46	0150	260	63	01-07		Dec. 12	01	180	42	0010	180	56	01-08, 24
Plymouth Hoe	Jan. 31	24	260	48	2345	260	70	13-24		Dec. 13	04	210	42	0355	210	57	01-04
	Feb. 1	16	280	53	1545	280	68	01-19		Dec. 7	18	200	42	1735	200	62	10, 14-20
Scilly	Feb. 3	03	240	53	0230	230	65	01-07, 10-14, 21, 24		Mar. 11	24	070	41	2010	070	51	17-24
	Feb. 4	16	280	48	1520	280	65	01-03, 10-18		Mar. 12	02	070	45	0001	070	52	01-12
Lizard	Mar. 12	18	110	41	1735	110	50	10, 14-19		Mar. 17	16	090	42	1705	100	50	01-09, 11-20
	Apr. 3	20	060	43	2110	060	50	15-24		Mar. 18	16	090	41	1550	090	48	11, 12, 14-19
Durham	Apr. 9	17	240	47	1050	240	59	01, 04-08, 11-18, 24		Apr. 21	15	230	42	1640	240	54	13-24
	Apr. 15	21	240	45	2020	240	56	02, 16-22		Apr. 28	15	250	41	1500	250	52	08, 10, 12-16
Prestwick	May 5	19	250	41	1520	250	49	13, 16-24		May 7	19	240	42	1855	250	52	18-21, 24
	May 7	23	250	51	2155	240	67	17, 18, 20-24		May 30	23	100	43	2220	100	55	23
Eskdalemuir Obs'y.	May 8	02	250	49	0210	260	67	01-19		Jul. 8	04	230	44	0135	230	56	01-08, 15-20
	May 9	18	230	49	1650	230	65	03-21		Aug. 17	18	220	41	1655	220	55	14-24
West Freugh	May 12	15	230	44	1410	240	57	09, 10, 13-17		Sep. 1	14	090	44	1255	090	51	01-23
	Jul. 7	14	240	55	1425	240	72	08-19		Sep. 16	09	220	45	0855	220	58	05-24
Ronaldsway	Jul. 8	24	260	44	2200	270	55	10-13, 16-24		Nov. 13	17	(240)	47	1605	(240)	59	12-19
	Jul. 9	01	260	42	0025	260	53	01-09, 11-18		Nov. 15	24	(230)	50	2345	(230)	65	06, 07, 20-24
Dunfermline	Jul. 28	08	280	46	0700	280	58	01, 02, 04-17		Nov. 16	02	(250)	55	0120	(250)	67	01-16
	Aug. 23	19	250	49	1830	250	63	11-24		Nov. 17	09	(250)	44	0810	(250)	53	05-16
Dunrobin	Aug. 24	19	270	43	1315	280	57	06, 14-21		Dec. 3	08	(310)	42	0800	(310)	(52)	01-09, 14
	Sep. 11	19	280	46	1810	280	61	02-08, 10-21		Dec. 6	23	(240)	41	2350	(240)	51	14, 15, 17-20, 22-24
Dunrobin	Sep. 24	23	210	50	2310	220	64	20-24		Dec. 7	23	(200)	52	2310	(230)	68	01-03, 08-24
	Sep. 25	01	230	49	0055	230	64	01-10		Dec. 8	01	(250)	51	0010	(240)	66	01-06, 20-24
Dunrobin	Oct. 6	23	240	53	2320	240	67	13, 17-24		Dec. 9	06	(210)	46	0600	(210)	60	01-11
	Oct. 7	06	230	46	0520	240	67	01-07, 12-15		Dec. 12	24	(240)	44	2305	(240)	60	02-24
Dunrobin	Nov. 2	24	070	42	2320	070	55	22-24		Dec. 13	07	(230)	55	0640	(230)	70	01-12, 15, 16
	Nov. 14	07	260	43	0640	280	61	03-24		Dec. 22	07	(070)	41	1545	(070)	52	01-19, 21
Dunrobin	Nov. 16	16	290	46	1500	290	63	04-06, 13-20		Dec. 27	19	(080)	54	1840	(080)	68	06-24
	Nov. 23	23	260	43	2210	270	53	13, 21-24		Dec. 29	13	(210)	44	1330	(210)	57	09-15, 17, 22
Dunrobin	Nov. 24	10	280	43	1435	270	57	01-24		Dec. 30	13	(230)	49	—	—	—	01-16, 22-24
	Nov. 25	09	290	49	0800	290	64	01-11		Nov. 15	24	—	(41)	—	—	(46)	23, 24
Dunrobin	Nov. 26	16	240	47	1510	250	61	07-24		Oct. 9	13	310	42	1400	310	65	12-21, 23
	Dec. 2	21	290	44	1955	290	64	15-24		Nov. 15	23	230	43	2320	240	60	22-24
Dunrobin	Dec. 6	09	260	46	0805	260	56	02, 06-12, 14-19		Nov. 16	01	250	43	0015	240	61	01-16
	Dec. 7	24	230	68	2330	230	94	12-24		Dec. 7	19	200	44	1800	200	62	13-21, 23, 24
Dunrobin	Dec. 8	01	240	66	0005	240	92	01, 02, 04-07, 10-24		Dec. 13	04	220	42	0325	220	59	01-09
	Dec. 9	06	250	45	0605	250	58	01-11		Oct. 9	14	280	68	1325	270	94	13-24
Dunrobin	Dec. 11	24	220	45	2255	230	65	20-24		Nov. 16	05	250	45	0510	250	61	02-18
	Dec. 12	01	230	46	0100	230	62	01-05									
Dunrobin	Dec. 30	08	250	48	0740	250	64	06-09									

TABLE XII [First Published 1908]—Dates on which Gusts of 48 Knots or more occurred in 1964.

For an anemograph 33 ft. above ground in the open the limit corresponds with that of Force 10 (Whole Gale) on the Beaufort Scale. Up to 1916 fuller details were given in this table. The time of occurrence of the maximum gust each month can be found by reference to Table II of the appropriate monthly part of the Monthly Weather Report.

District and Station	Dates	District and Station	Dates
0 Lerwick Obs'y.	Jan. 3, 20, 21, 23, 24, 26, 29, 31. Feb. 1-4, 8, 17, 24. Mar. 13-15, 19, 20. Apr. 11, 20, May 8, 12, 13. June 28. July 1, 2, 28. Aug. 18, 26. Sept. 28. Oct. 22. Nov. 14, 23-27. Dec. 3, 6, 9, 11, 12, 30.	Prestwick	Feb. 4, Mar. 14, 19. May 7, 8. Dec. 8.
Kirkwall	Jan. 20, 31. Feb. 1, 3, 4, 17. Mar. 13-15. May 8. July 28. Aug. 17, 18, 26. Nov. 18, 24-26. Dec. 2, 3, 7-9, 11, 12, 24, 25, 31.	Eskdalemuir Obs'y.	Jan. 31. Feb. 1, 4. May 7-9. July 8. Sept. 11, 24, 25. Oct. 6, 7. Nov. 16, 25. Dec. 2, 6-8, 11, 12.
Dunrobin	Jan. 31. Feb. 1, 3, 4, 22, 23. Mar. 13-19. May 10, 12, 13. July 28. Aug. 17, 18, Sept. 17. Oct. 22, 23. Nov. 15, 16, 23-26. Dec. 2-4, 8, 9, 11, 12, 24, 25, 31.	West Freugh	Mar. 14, 17, 25. May 7, 9. Sept. 24. Oct. 6, 7. Nov. 16. Dec. 2, 3, 7, 8, 11, 12.
Shin	Jan. 31. Feb. 1-4. Mar. 14, 19. May 8, 12. July 28, 31. Sept. 17. Nov. 16, 23-25. Dec. 8, 9, 12.	Ronaldsway	Jan. 1, 2, 30, 31. Feb. 3. Mar. 14, 16-19, 25. May 7-9. July 7. Sept. 24, 26. Oct. 6, 7, 23. Nov. 13-16, 26. Dec. 3, 7, 8, 11, 12, 29-31.
Stornoway	Jan. 1-3, 8, 20, 31. Feb. 1-4. Apr. 13, 20. May 3, 9, 10, 12, 13. Aug. 17, 18, 21, 22, 25, 26. Sept. 11, 14, 17, 25. Oct. 22. Nov. 9, 14, 16, 18, 23, 25, 26, 28, 29. Dec. 2, 6-9, 11, 12, 15, 16, 31.	Point of Ayre	Feb. 3. Mar. 14, 17-19. May 7, 9. Sept. 16. Oct. 6, 7, 23. Nov. 16. Dec. 2, 3, 7, 8, 11, 12.
Dunrobin	Jan. 1-3, 29, 31. Feb. 1-4. Apr. 13. May 3, 5, 8, 9, 12. June 26. July 7, 8. Aug. 22. Sept. 25. Oct. 22. Nov. 14-16, 23, 25, 26, 28. Dec. 2, 3, 6, 8, 9, 11, 12, 30, 31.	Durham	Jan. 30, 31. Feb. 1. Apr. 12, 14. May 7, 8, 12. July 7. Aug. 24. Nov. 14-16. Dec. 7, 8, 31.
Benbecula	Jan. 1-3, 18, 20, 29-31. Feb. 1-4, 22, 25, 29. Mar. 14-18, 27. Apr. 12, 13, 19, 20. May 3, 8-10, 12, 13. July 8, 28. Aug. 17, 18, 25, 26. Sept. 25. Oct. 22, 23. Nov. 13, 14, 16, 25, 26, 28, 29. Dec. 2, 3, 6, 8, 9, 11, 12, 29-31.	South Shields	Jan. 31. Feb. 1. Mar. 14. Dec. 8.
1 Lossiemouth	Jan. 2. Feb. 1, 3, 4. Mar. 13-15. May 8, 9, 12. July 7, 8, 15, 27, 28. Aug. 18. Sept. 11. Oct. 23. Nov. 14, 16, 25. Dec. 2, 3, 9, 11, 12, 25, 30, 31.	Cranwell	May 7. Dec. 13.
Dyce	Feb. 1. Sept. 19, 25. Nov. 14, 16. Dec. 11, 12.	Gorleston	Anemograph out of order Jan-May. Oct. 23. Nov. 3. Dec. 8.
Auchterhouse	Jan. 31. Feb. 1. Mar. 14. May 8. Nov. 25. Dec. 8.	Mildenhall	May 7. Dec. 8, 9, 13.
Bell Rock	Jan. 2, 3, 31. Feb. 1, 3, 4. Mar. 12-15, 19. May 8, 9. July 7, 8. Aug. 18, 19. Nov. 14-16, 29. Dec. 6-8, 11, 12, 30, 31.	Bedford	Dec. 7, 9.
Rannoch	Jan. 30, 31. Feb. 1-4. Mar. 12, 19. May 5, 8, 9, 12. July 7, 28. Nov. 14, 16. Dec. 8, 30	Cardington	Sept. 16. Dec. 7, 9, 13, 30.
Leuchars	Jan. 2, 31. Feb. 1, 3. Mar. 14. May 8. July 7, 8, 2		

TABLE XII (continued) [First Published 1908]—Dates on which Gusts of 48 Knots or more occurred in 1964.

For an anemograph 33 ft. above ground in the open the limit corresponds with that of Force 10 (Whole Gale) on the Beaufort Scale. Up to 1916 fuller details were given in this table.
The time of occurrence of the maximum gust each month can be found by reference to Table II of the appropriate monthly part of the Monthly Weather Report.

District and Station	Dates	District and Station	Dates
7a Carlisle	Feb. 3. May 7, 8. Dec. 7, 8.	8a Aberporth	Jan. 30. Feb. 1, 3, 21. Mar. 11, 14, 16, 18, 25. Apr. 15. May 3, 7-9. July 7, 14.
Sellafield	Mar. 14, 19. Oct. 7. Dec. 3, 7, 8.	Brawdy	Aug. 17. Sept. 16, 24. Oct. 7, 23. Nov. 15, 29. Dec. 3, 6-9, 12, 13, 25, 30, 31.
Spadeadam	Jan. 30, 31. Mar. 19. May 7, 8. July 28. Aug. 19. Nov. 14. Dec. 7, 8, 12.	Port Talbot	Jan. 30. Feb. 13, 14, 21. Mar. 11, 16-18. Apr. 15. May 7, 9. Aug. 17. Sept. 16, 24.
Great Dun Fell	Jan. 1, 2, 27, 28, 30, 31. Feb. 1-4. Mar. 12, 17, 19. Apr. 3, 9, 13-15, 28-30. May 1, 3, 5, 7-12. June 7, 11, 14, 15, 30. July 7-9, 11, 14, 28. Aug. 1, 23-25. Sept. 10, 11, 14-17, 19, 22, 24, 25. Oct. 6, 7, 22. Nov. 2, 11-16, 18, 19, 23-26. Dec. 2, 3, 6-9, 11, 12, 30.	Rhosee	Oct. 7, 23. Nov. 14-16, 29. Dec. 3, 7-9, 12, 13, 30.
Moor House	Jan. 1, 2, 30, 31. Feb. 1, 3, 4. Mar. 14. Apr. 9, 15. May 5, 7-9. June 15, 30. July 7, 8, 28. Aug. 23-25. Sept. 11, 15, 19, 22-25. Oct. 6, 7, 22. Nov. 15, 16, 18, 24-27. Dec. 2, 3, 6-8, 11, 12, 30.	8b Portland Bill	Feb. 13, 14. Mar. 11, 12, 17. June 1. Sept. 16. Oct. 23.
Squires Gate	Mar. 25. May 7, 8. July 7. Oct. 23. Nov. 14, 16. Dec. 2, 3, 7, 8, 13, 30, 31.	May 7. Sept. 16. Oct. 23. Nov. 16. Dec. 3, 7, 8, 13, 31.	Jan. 28. Feb. 18. Mar. 11, 12, 17, 18. Apr. 14, 20, 21, 28. May 7, 30. June 1.
Southport	Oct. 23. Nov. 14, 16. Dec. 3, 7, 8, 30.	July 7, 8. Aug. 17. Sept. 1, 15, 16. Oct. Defective record. Nov. 13-17, 30.	Dec. 3, 6-9, 12, 13, 22, 27-30.
Fleetwood	Anemograph out of order Jan-Mar. Apr. 13. May 7. July 7. Oct. 23. Nov. 16. Dec. 3, 7-9, 30.	Dec. 7.	Mar. 11. Sept. 1, 16. Dec. 7.
Speke	Jan. 30. Mar. 25. May 7. July 7. Oct. 23. Nov. 16. Dec. 3, 6-8, 13, 30.	Plymouth	Jan. 15, 16, 30. Feb. 14, 18, 22, 24. Mar. 11. Apr. 4, 21. May 7. Aug. 17. Sept. 16.
Manchester W/Centre	Jan. 30, 31. Feb. 3. Mar. 19. May 7, 8. June 1. Nov. 16. Dec. 3, 7, 8, 13, 30.	Scilly	Jan. 15, 16, 30. Feb. 14, 18, 22, 24. Mar. 11. Apr. 4, 21. May 7. Aug. 17. Sept. 16.
Bidston Obs'y	Jan. 30, 31. Feb. 1. May 7, 8. July 7, 31. Sept. 16. Oct. 23. Nov. 14-16. Dec. 3, 7, 8, 13, 30.	Lizard	Jan. 16. Feb. 13, 18, 19. Mar. 11, 16. Apr. 17, 21. May 7. Aug. 17, 18. Sept. 1, 16.
Ringway	May 7. Dec. 7, 9, 30.	9 Ballykelly	Oct. 7-10, 15, 16, 23. Nov. 13, 15, 16. Dec. 1, 7-9, 12, 13, 30.
7b Valley	Jan. 30. Apr. 15. May 7, 9. July 7. Sept. 16, 24. Oct. 6, 7, 23. Nov. 14-16. Dec. 3, 7-9, 11-13, 30, 31.	Aldergrove Castle	Jan. 2, 29, 31. Feb. 1, 3. Mar. 14, 16-19. May 9, 12. Sept. 19, 24, 25. Oct. 23.
		Archdale Forest	Nov. 16, 28. Dec. 3, 8, 11, 30.
		Jersey	Mar. 14, 19. May 9. Sept. 24. Oct. 23. Dec. 7.
			Jan. 29-31. Feb. 1, 3, 24. May 7, 9, 12. Sept. 24. Oct. 22.
			Jan. 28. Oct. 7-10, 15, 23. Nov. 15, 16. Dec. 1, 3, 13, 31.

TABLE XIII—SOLAR RADIATION AND ILLUMINATION FOR THE YEAR 1964

STATION	TOTAL RADIATION ON A HORIZONTAL SURFACE milliwatt-hours per square centimetre						DIFFUSE RADIATION ON A HORIZONTAL SURFACE milliwatt-hours per square centimetre						TOTAL ILLUMINATION ON A HORIZONTAL SURFACE kilolux-hours					
	Max.	Date	Min.	Date	Daily Mean	No. of days	Max.	Date	Min.	Date	Daily Mean	No. of days	Max.	Date	Min.	Date	Daily Mean	No. of days
Lerwick Observatory	787	2 June	4	15 Dec	200.8	366	381	1 June	3	16 Dec	130.3	366	811	2 June	4	16 Dec	220.9	366
Eskdalemuir Observatory	784	26 May	4	4 Jan	215.2	366	400	21 June	4	4 Jan	141.7	366	806	1 July	4	4 Jan	230.0	366
Cambridge	808	26 June	8	12 Jan	261.2	366	447	23 June	8	12 Jan	151.6	366	—	—	—	—	—	—
Kingsway	781	13 July	7	12 Dec	255.6	366	413	11 June	7	12 Dec	146.7	366	872	9 June	10	12 Jan	280.6	366
Kew Observatory	759	13 July	7	22 Dec	255.4	366	389	11 June	7	22 Dec	143.3	366	890	13 July	9	16 Feb	288.6	366
Aberporth	793	19 May	7	24 Dec	284.0	366	470	2 July	7	24 Dec	162.6	366	—	—	—	—	—	—

CORRECTION.

The page numbering of Volume 81 No. 12, December 1964 is incorrect.
The page numbering should read 177-192 not 179-194 as shewn.

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