

Official Report

M.O. 236 (Section II.).

AIR MINISTRY.

METEOROLOGICAL OFFICE.

THE BOOK OF NORMALS

OF

METEOROLOGICAL ELEMENTS

FOR THE

BRITISH ISLES

FOR PERIODS ENDING 1915.

Section II.—Weekly, Monthly, Quarterly and
Seasonal Normals for Districts.

Normals of Temperature, Rainfall and Sunshine for the
twelve Districts of the Weekly Weather Report.

Published by the Authority of the Meteorological Committee.



LONDON:

PRINTED BY HIS MAJESTY'S STATIONERY OFFICE

And to be purchased from the METEOROLOGICAL OFFICE, Air Ministry,
Kingsway, W.C.2, or Exhibition Road, S.W.7.

1920.

Price 9d. Net.

LIST OF SOME OF THE PUBLICATIONS ISSUED BY THE AUTHORITY OF THE METEOROLOGICAL COMMITTEE.

The Book of Normals.—Sections I. and II.

CORRIGENDA.

1. Hand-books, Text-books, Tables. (8vo)

- (M) Calendar, with Notes and Diary of Operations for the use of Observers. (No. 213.) Issued annually. 1s. 6d. Postage 2d.
- The Observer's Handbook. Approved for the use of Meteorological Observers by the Meteorological Office, the Royal Meteorological Society, the Scottish Meteorological Society, and the British Rainfall Organization. (No. 191.) Issued annually. 3s. 6d. Postage 4d.
- The Marine Observer's Handbook. (No. 218.) Second Edition. 1918. 3s. 6d. Postage 4d.
- Barometer Manual for the Use of Seamen. A Text-book of Marine Meteorology. (No. 61.) 1s. 6d. Postage 4d.
- Manual of Meteorology. Part 4. The Relation of the Wind to the Distribution of Barometric Pressure. By Sir Napier Shaw, Sc.D., F.R.S. (No. 234.) 12s. 6d. Postage 5d.
- The Seaman's Handbook of Meteorology. A companion to the Barometer Manual for the use of Seamen. (No. 215.) Third Edition. 1918. 3s. 6d. Postage 5d.
- The Weather of the British Coasts. (No. 230.) 1918. 4s. 6d. Postage 5d.
- Cloud Forms according to the International Classification. The Definitions and Descriptions approved by the International Meteorological Committee in 1910, with an Atlas of Photographs of Clouds selected from the collection of Mr. G. A. Clarke, of the Observatory, Aberdeen. (No. 233.) 1918. 6d. Postage 2d.
- (M) The Computer's Handbook. (No. 223.)—The following Sections have been issued :—
- Introduction. C.G.S. Units of Measurement in Meteorology, with their Abbreviations and their Equivalents. 1916. 1s. Postage 2d.
- Section I. Computations based on the Physical Properties of Atmospheric Air :—Humidity and Density. 1916. 6d. Postage 2d.
- Section II. Dynamical Meteorology : Calculus of the Upper Air.
- Sub-section I.—The Computation of Wind Components from Observations of Pilot Balloons.
- Sub-sections II.-IV.—Computation of Height and Temperature by means of Registering Balloons.—The Dynamics of the Upper Air.—Tables for the Estimation of Geostrophic Winds. 1917. 1s. 3d. Postage 2d.
- Section V. Computations related to the Theory of Probabilities. 1915. 6d. Postage 2d.
- Section V. (Continuation). Tables of Correlation Coefficients from Meteorological Papers. 4s. Postage 2d.
- FORECASTING :—
- The Weather Map. An introduction to Modern Meteorology. (No. 225i. 1918.) (Royal 16mo) 4d. Postage 2d.
- Meteorological Glossary in continuation of the Weather Map. (No. 225ii. 1918.) (Royal 16mo) 1s. Postage 3d.
- (¶) Forecasting Weather.—By W. N. Shaw, Sc.D., F.R.S. Constable & Co., Ltd. 12s. 6d. (Demy 8vo) [Out of print.]

The following tables, etc., to be substituted as indicated :—

Table 1, p. 4.			Table 2, p. 26.			Table 3, p. 59.			Table 5c, p. 107.		
Aberdeen*. 57° 10' N. 2° 6' W. 46 ft. Aberdeen.			Aberdeen*. 57° 10' N. 2° 6' W. 46 ft. Aberdeen.			Clifton. 51° 27' N. 2° 37' W. 229 ft. Gloucester.			Ireland. (South), District 10.		
Max.	Min.	Mean.	Max.	Min.	Mean.	Total.	Total	Days.	No. of wks., etc., Dist. 10.		
°F.	°F.	°F.	a	a	a	in.	mm.				
42·3	33·2	37·8	78·7	73·7	76·2	2·84	72	16	40	Oct. 1	74
43·4	33·1	38·3	79·3	73·6	76·5	2·36	60	14	41	8	61
46·0	34·3	40·2	80·8	74·3	77·6	2·52	64	14	42	15	60
									43	22	46
									44	29	45
50·2	37·5	43·9	83·1	76·1	79·6	2·15	55	13			
54·9	41·7	48·3	85·7	78·4	82·1	2·10	53	13			
60·2	47·0	53·6	88·7	81·3	85·0	2·48	63	13			
63·1	50·2	56·7	90·3	83·1	86·7	2·83	72	13	45	Nov. 5	42
62·7	49·8	56·3	90·1	82·9	86·5	3·49	89	15	46	12	32
59·5	46·6	53·1	88·3	81·1	84·7	2·35	60	12	47	19	28
									48	26	27
53·0	41·6	47·3	84·7	78·3	81·5	3·77	96	16			
46·9	37·2	42·1	81·3	75·9	78·6	3·15	80	17			
42·9	34·0	38·5	79·1	74·1	76·6	3·83	97	19			
52·1	40·5	46·3	84·2	77·7	80·9	33·87	861	175			

* The thermometers to which the table refers are in the Stevenson Screen.

Note.—The temperature tables for Aberdeen, as published originally, were not derived from homogeneous data.

Table 1, p. 24.—Princetown. Mean Temp. for Year, 46·2° F.

Table 2, p. 42. " " " " " 280·9a.

Table 3, p. 57.—Belper. Rainfall for March, 2·35 in.

Table 4, p. 73.—Hull. Delete whole table (see p. 121).

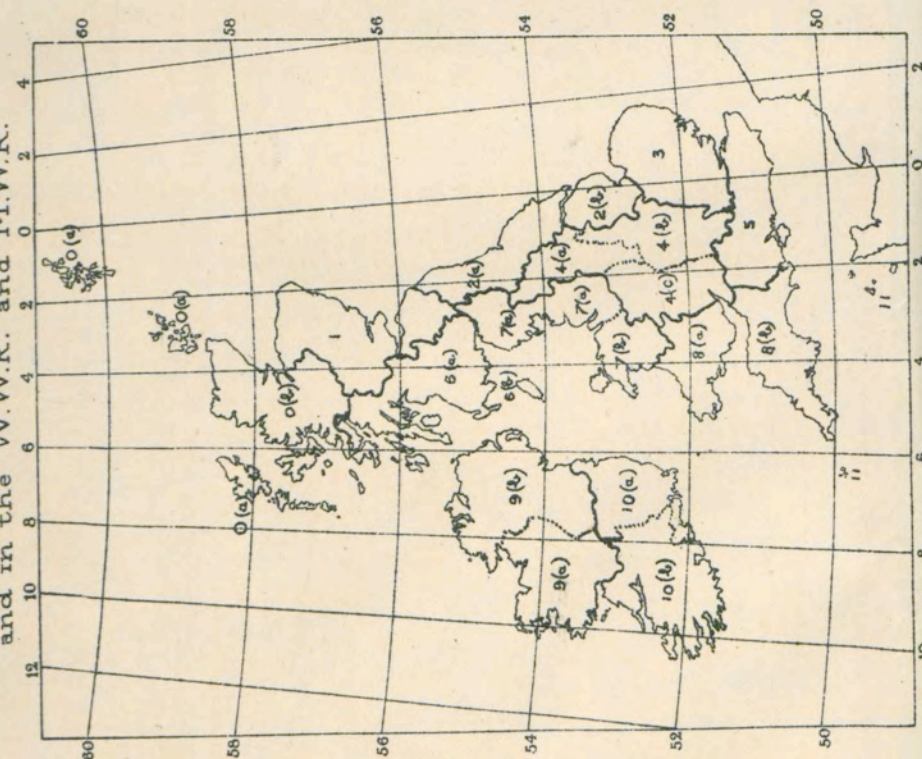
Table 4, p. 79.—Southport. Height (50 ft. + 17 ft.).

List of Stations, p. 91, } Greenwich. { Years of Sunshine, 20.
No. 104. } Weighted with 105.

The United Kingdom divided into Districts.

OLD.

As used in the following Tables
and in the W.W.R. and M.W.R.



NEW.

As used in the Daily Weather
Report from June, 1919.



M.O. 236 (Section II.).

AIR MINISTRY.

METEOROLOGICAL OFFICE.

THE BOOK OF NORMALS

OF

METEOROLOGICAL ELEMENTS

FOR THE

BRITISH ISLES

FOR PERIODS ENDING 1915.

Section II.—Weekly, Monthly, Quarterly and
Seasonal Normals for Districts.

Normals of Temperature, Rainfall and Sunshine for the
twelve Districts of the Weekly Weather Report.

Published by the Authority of the Meteorological Committee.



LONDON:
PRINTED BY HIS MAJESTY'S STATIONERY OFFICE,
And to be purchased from the METEOROLOGICAL OFFICE, Air Ministry,
Kingsway, W.C. 2, or Exhibition Road, S.W.7.

1920.

Price 9d. Net.

THE BOOK OF NORMALS OF METEOROLOGICAL ELEMENTS
OF THE BRITISH ISLES FOR PERIODS ENDING 1915.

Section II.—Weekly, Monthly, Quarterly and Seasonal
Normals for Districts.

CONTENTS.

	PAGE
<i>Frontispiece</i> .—Map of the United Kingdom divided into Districts.	
Notes on the Tables	97
Normal Weekly District Values—	
Table 5A—Temperature (Fahr.)	102
Table 5B—Temperature (Abs.)	104
Table 5C—Accumulated Temperature	106
Table 5D—Raindays	108
Table 5E—Rainfall	110
Table 5F—Sunshine	112
Normal Monthly District Values—	
Table 6—Temperature, Rainfall and Sunshine	114
Normal Quarterly and Half-yearly District Values—	
Table 7—Temperature, Rainfall and Sunshine	116
Normal Seasonal and Annual District Values—	
Table 8—Temperature, Rainfall and Sunshine	117

THE BOOK OF NORMALS.

SECTION II.

DISTRICT VALUES.

For the purpose of following the course of the seasons in the several districts of the British Isles the Weekly Weather Report was initiated in the Meteorological Office in 1878 and is still continued on the same lines. An account of the way in which the Report deals with the representation of the climates of the several parts of the country is given in a paper on the "*Seasons in the British Isles from 1878*" in Part II. of Vol. 68 of the Journal of the Royal Statistical Society.

The Districts used for the purpose are shewn in the Frontispiece map. It should be mentioned that the exact boundaries of the Districts have been altered from time to time; in the first instance when they were adopted for the Daily Weather Report in 1881, they did not conform to county boundaries and District 4 (The Midland Counties), which was merely the residue after various segments had been cut from Great Britain, was shewn on the map with cusps reaching to the coast. The most important change was perhaps the transfer of Cumberland from District 6 to District 7 in 1906. The Isle of Man has somewhat illogically remained in District 6 with

Stations for District Values.

District.	Temperature and Rainfall.		Sunshine.	
	1881.	1915.	1881.	1915.
0 SCOTLAND, N.—	<i>Stornoway.</i> <i>Wick.</i>	<i>Lerwick.</i> <i>Stornoway.</i> <i>Wick.</i> <i>Strathpeffer.</i> <i>Glencarron.</i> <i>Ft. Augustus.</i> <i>Ft. William.</i>	<i>Stornoway.</i>	<i>Deerness.</i> <i>Stornoway.</i> <i>Strathpeffer.</i> <i>Ft. Augustus.</i> *
1 SCOTLAND, E.—	<i>Nairn.</i> <i>Aberdeen.</i> <i>Leith.</i>	<i>Gordon Castle.</i> <i>Nairn.</i> <i>Aberdeen.</i> <i>Balmoral.</i> <i>Crieff.</i> <i>Leith.</i> <i>West Linton.</i> <i>Marchmont.</i>	<i>Aberdeen.</i>	<i>Crathes, S.</i> <i>Nairn.</i> <i>Aberdeen.</i> <i>Balruddery.</i> <i>Marchmont.</i> <i>Edinburgh.</i>
6 SCOTLAND, W.—	<i>Laudale (Loch Sunart).</i> <i>Glasgow Obsy.</i> <i>Ardrossan.</i> <i>Silloth (Cumberland).</i>	<i>Poltalloch.</i> <i>Glasgow Obsy.</i> <i>Rothsay.</i> <i>Kilmarnock.</i> <i>Colmonell.</i> <i>Cally (Gatehouse).</i>	<i>Glasgow Obsy.</i> <i>Silloth (Cumberland).</i>	<i>Glasgow Obsy.</i>
ISLE OF MAN—	<i>Douglas.</i>	<i>Douglas.</i>	<i>Douglas.</i>	<i>Douglas.</i>
2 ENGLAND, N.E.—	<i>Alnwick Castle.</i> <i>Shields.</i> <i>Durham.</i> <i>York.</i> <i>Spurn Head.</i> <i>Brigg.</i>	<i>Alnwick Castle.</i> <i>Tynemouth.</i> <i>Durham.</i> <i>Rounton.</i> <i>Scarborough.</i> <i>York.</i> <i>Spurn Head.</i> <i>Lincoln.</i> <i>Fulbeck.</i>	<i>Durham.</i> <i>York.</i> <i>Brigg.</i>	<i>Cockle Park.</i> <i>Durham.</i> <i>Scarborough.</i> <i>York.</i> <i>Rauceby.</i> <i>Skegness.</i>

District.	Temperature and Rainfall.		Sunshine.	
	1881.	1915.	1881.	1915.
3 ENGLAND, E.—	Hillington. Yarmouth. Geldeston. Cambridge. Rothamsted.	Cromer. Little Massing- ham. Yarmouth. Norwich. Geldeston. Cambridge. Clacton-on-Sea. Rothamsted. Tottenham.	Hillington. Geldeston. Cambridge.	Cromer. Little Massing- ham. Yarmouth. Geldeston. Cambridge. Clacton-on-Sea. Rothamsted. Tottenham.
4 MIDLAND COUNTIES—	Bawtry. Nottingham. Loughborough. Leicester. Birmingham (Oscott). Oxford. Cheadle. Churchstoke. Hereford. Cirencester.	Harrogate. Bawtry. Nottingham. Birmingham (Edgbaston). Raunds. Oxford. Cheadle. Shrewsbury. Hereford. Cirencester. Bath.	Leicester. Churchstoke. Oxford. Cirencester.	Harrogate. Sheffield. Workop. Nottingham. Birmingham (Edgbaston). Oxford. Cirencester. Bath.
5 LONDON AND ENGLAND, S.E.—	London (Brixton). Marlborough. Strathfield Turgis. Dover. Hastings. Southampton. Hurst Castle.	Kew Obsy. Marlborough. Margate. Wiseley, Surrey. Salisbury (Wilton). Tunbridge Wells. Dungeness. Hastings. Southampton. Ventnor.	London. Marlborough. Southampton.	Kew Obsy. Marlborough. Margate. Wiseley, Surrey. Worthing. Tunbridge Wells. Hastings. Southampton. Ventnor.
7 ENGLAND, N.W. AND N. WALES—	Barrow-in-Furness. Stonyhurst. Blackpool. Liverpool (Bidston). Manchester (Prestwich). Llandudno. Holyhead.	Aspatria. Newton Rigg. Stonyhurst. Blackpool. Liverpool (Bidston). Manchester (Whitworth Pk). Llandudno. Holyhead.	Stonyhurst. Llandudno.	Hoylake. Aspatria. Newton Rigg. Stonyhurst. Blackpool. Llandudno. Aberdovey
8 S. WALES AND ENGLAND, S.W.—	St. Ann's Head (Pembroke). Arlington. Plymouth. Falmouth. Prawle Point.	St. Ann's Head (Pembroke). Llangammarch Wells. Cardiff. Clifton Shaftesbury. Arlington. Cullompton. Portland Bill. Plymouth. Falmouth.	St. Ann's Head (Pembroke). Plymouth. Falmouth.	St. Ann's Head (Pembroke). Aberystwyth Llangammarch Wells. Newquay. Cullompton. Plymouth. Falmouth.
9 IRELAND, N.—	Londonderry. Mullaghmore. Markree Castle. Brookeborough. Armagh. Donaghadee.	Malin Head. Blacksod Point. Markree Castle. Birr Castle. Armagh. Donaghadee.	Markree Castle. Armagh.	Markree Castle. Armagh.
10 IRELAND, S.—	Dublin City. Birr Castle. Waterford. Foynes. Roche's Point. Valencia Obsy. (Valencia Island).	Dublin City. Kilkenny. Waterford. Birr Castle. Foynes. Cahir. Killarney. Valencia Obsy. (Cahiriveen). Roches Point.	Dublin City. Birr Castle. Valencia Obsy. (Valencia Island).	Dublin (Phoenix Pk.). Birr Castle. Valencia Obsy. (Cahiriveen). Ballinacurra.
11 ENGLISH CHANNEL—	Scilly. Jersey (Noir- mont).	Scilly. Jersey (St. Aubin's). Guernsey (Villa Carey).	Jersey (Noir- mont).	Scilly Jersey (St. Helier's). Guernsey (Villa Carey).

Scotland West. The Districts have been sub-divided for certain purposes, though not for the computation of District Values. It will be seen that the sub-divisions agree to a great extent with the new Districts adopted for the Daily Weather Service in 1919 and shewn on the second map of the Frontispiece to this Section.

The District Values of Temperature, Rainfall and Sunshine published week by week in the Weekly Weather Report are the means of the figures supplied by the District Value Stations, information from other stations being ignored.

The number of stations utilised in a District for any element does not exceed ten; there are cases where the number is much smaller. In District 11 the land area to be represented, the Channel Islands and Scilly, is very small and three stations are sufficient. In Scotland and also in Ireland the absence of recorders for sunshine has restricted the number of stations for that element. The lists for 1881 and 1915 are given on pp. 97 and 98. In the case of Districts 0 and 11 the 1881 stations are shown in italics, as the District Values for the earlier years were not computed at the time, but they have been worked up and utilised in the preparation of the normals.

The District Values for the earlier years of the Weekly Weather Report were adjusted in 1907 to allow for changes in the list of stations. Care has been taken to substitute new stations of the same type when any drop out, seaside stations for example being succeeded by seaside ones so that continuity is secured as far as possible, but the changes must not be overlooked when variations covering a long period are under discussion.

For convenience of reference the District Values of the various elements are set out in an Appendix to the Weekly Weather Report, values for all the weeks of a year and all districts occupying one page. The data for the years 1878 to 1884 were published together in the Appendix to the 1884 volume of the Report, those for 1885 and 1886 with the 1886 volume.

Averages for lengthening periods have been given in Appendices to the Weekly Weather Report for the years 1886, 1890, 1895.

It is of interest to notice that the period of 35 years has not been long enough to smooth out irregularities in the annual variation of the elements. For example, looking at Table 5F we see that the 15th week averaged less sunshine than the 14th in the Scottish and English Districts, with the exception of the far north and the S.W. but more than either the 14th or the 16th in Ireland. Though not probable it is possible that these are permanent characteristics of climate and therefore no process of smoothing has been applied to the computed figures.

The data of Table 5A, *Normal Temperature*, are computed from the mean temperatures published week by week. These are not the simple arithmetic means of the maximum and minimum temperatures for the several days. The method of correction devised by General Strachey (Quarterly Weather Report, 1878, App. II) to reduce such arithmetic means to the true means for the period has been used throughout the history of the Weekly Weather Report. The corrections are made according to the scheme set out below.

The mean temperature differs from half the sum of the means of the daily maxima and minima by an amount proportional for each month to the difference between these two means. If X and N are the means of the daily maxima and minima, the amounts to be added or subtracted from $\frac{1}{2}(X + N)$ to get the mean temperature are shown in the upper line in the following table; simple approximate values are given in the bottom line.

Jan. and Dec.	Feb. and Nov.	Mar. and Oct.	April and Sept.	May and Aug.	June and July.
Add $\frac{1}{30}(X-N)$	Nil.	Subtract $\frac{5}{30}(X-N)$	Subtract $\frac{6}{30}(X-N)$	Subtract $\frac{7}{30}(X-N)$	Subtract $\frac{7}{30}(X-N)$
		$\frac{1}{30}(X-N)$	$\frac{1}{30}(X-N)$	$\frac{1}{30}(X-N)$	$\frac{1}{30}(X-N)$

In Table 5B the same values of *Normal Temperature* are given in the Absolute Scale.

Table 5C shows the *Normal Amounts of Accumulated Temperature*.

The Tables of Accumulated Temperature in the Weekly Weather Report were designed to give persons engaged in agriculture better means of estimating the manner in which vegetation was affected by temperature than that afforded by the more usual methods of treating the readings of the thermometer. The base temperature 42° F. was considered to be the critical value above which temperature was mainly effectual in starting and maintaining the growth of agricultural crops in a European climate. If θ represents the actual temperature the "accumulated temperature over 42° F." is the integral of $(\theta-42)$ with respect to time, the integration being confined to positive values of $(\theta-42)$. In the same way the "accumulated temperature below 42°" is the integral of $(42-\theta)$ with respect to the time. This element has not the same biological interest as accumulated temperature above 42° F.

An inspection of Table 5C shows what great difference there is in accumulated temperature above 42° F., firstly, between the different weeks of the year and, secondly, between the different districts of the British Isles. Take for example the first week in December (the 49th week) and the last week in July (the 31st week) for district 0. Whereas in the 49th week only 9 day-degrees are recorded, for the 31st a total of 94 is shown. If we now compare these figures with corresponding weeks for district 11 (English Channel) the widely different values (viz., 39 and 138 day-degrees) illustrate what an enormous advantage the more southerly districts have for the production of plant growth.

As a matter of interest the great contrast between the warm summer of 1911 and the cool summer of 1907 is well shown in the total accumulated temperatures for District 5, 1940 and 1427 day-degrees respectively.

The rules utilised for obtaining approximate values of accumulated temperature are based on an investigation carried out by General Strachey.*

They may be summarised thus, X and N being written for the maximum and minimum temperatures, S for the "Strachey mean" and the accumulated temperatures being given in day-degrees.

Condition.	Accd. temp. above 42° F.	Accd. temp. below 42° F.
$N > 42$	$S - 42$	0
$S > 42 > N$	$(S - 42) - \frac{2}{3}(42 - N)$	$(42 - N)$
$X > 42 > S$	$\frac{2}{3}(X - 42)$	$(42 - S) - \frac{2}{3}(X - 42)$
$42 > X$	0	$42 - S$

* Quarterly Weather Report, 1878, p. 19.

The formulæ are not entirely satisfactory from a theoretical point of view. Under the second of the conditions of the tables for a given maximum temperature the "accumulated temperature above 42° F." increases as the minimum temperature is lowered. Moreover there is a discontinuity on passage from the second to the third condition, i.e., when the mean temperature is 42° F. As an example we suppose the maximum temperature is 52° F. and give different values to the minimum temperature. Thus—

Maximum	52	52	52	52	52	52
Minimum	46	44	42	32·1	31·9	22
Accumulated temperature above 42° F.			7	6	5	6	4	4

Fortunately the contribution to the total accumulated temperature of the year, made in the weeks when the temperature is fluctuating about 42° F. is small and therefore the doubtful validity of the method employed in the computation is of minor importance.

Table 5D gives the *Normal Number of Raindays*. A rainday has been taken as a day on which there was measurable precipitation; the smallest measurements being ·01 in., the limit is virtually ·005 in.

In Table 5E the *Normal Rainfall* is given in millimetres: for this element more than any other it is perhaps necessary to emphasize the fact that the District Value is merely the average for certain stations, not a true general average for the area.

In Table 5F the *Normal Daily Duration of Sunshine* is shown, records from the Campbell-Stokes Sunshine Recorder being utilised throughout.

Monthly District Values.

District Values for the Months were not published until the year 1908. The normals used here have accordingly been derived from the weekly values by suitable formulæ which allow for the weeks falling in the several months. These formulæ are to be set out in the Computer's Handbook. It may be mentioned here that a similar process has been adopted to obtain the normals for the weeks of the year for individual stations. The differences between the monthly normals for a station and those for the District determine the corresponding differences between the weekly normals; in the cases of rainfall and sunshine ratios are utilised instead of differences.

Quarterly District Values.

The observance of the Calendar Quarters, January to March, April to June, etc., in the practice of the Meteorological Office dates from the publication of the Quarterly Weather Report in which the observations at the Observatories for the years 1869 to 1880 were incorporated. The Reports of the Registrar General are also issued quarterly and accordingly for the investigation of the relation of public health to weather the quarterly averages of the meteorological elements may be of service.

Such averages are published in Appendix I of the Weekly Weather Report, the figures for the last few years being reproduced together with those for the current quarters. The appendix for 1920 is to contain the complete set of Quarterly Values for the period 1878-1920.

Continued p. 118.

TABLE 5A.—NORMAL TEMPERATURE for each week in the twelve Districts of the British Isles. (Compiled from the tables of the Weekly Weather Report, 1881-1915.)

District.	0	1	6	2	3	4	5	7	8	9	10	11
	North and Islands.	Eastern Counties.	West and I. of Man.	North-East Counties.	Eastern Counties.	Midland Counties.	South-East Counties.	North-West and N. Wales.	South-West and S. Wales.	North.	South.	English Channel.
	Scotland			England and Wales.					Ireland.			
WINTER—	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.
No.												
49 Dec. 3	39	38	41	40	41	40	42	42	44	41	43	47
50 10	39	38	41	40	40	40	42	41	43	42	43	47
51 17	39	38	40	39	39	39	40	40	42	41	43	46
52 24	39	37	40	39	38	38	40	40	42	41	43	45
New Year.												
1 Jan. 1	38	37	39	38	38	38	40	39	41	40	42	45
2 8	38	36	39	38	37	37	39	39	40	40	41	44
3 15	39	38	40	38	38	38	39	39	41	41	43	44
4 22	38	38	40	38	38	38	39	40	41	41	42	44
5 29	38	37	39	39	39	39	40	40	41	41	42	44
6 Feb. 5	38	37	39	38	39	39	40	40	41	41	42	44
7 12	38	37	39	39	39	39	40	40	41	40	42	44
8 19	38	38	40	39	39	39	40	40	41	41	42	44
9 26	38	38	39	39	39	39	40	40	41	42	43	44
SPRING—												
10 Mar. 5	38	38	40	40	40	40	41	40	41	41	42	44
11 12	39	39	41	41	41	41	42	42	43	42	44	45
12 19	40	40	41	41	42	41	42	42	43	42	43	45
13 26	41	40	42	42	43	43	44	43	44	43	45	47
14 Apl. 2	42	42	44	43	44	44	46	44	45	44	46	48
15 9	42	42	44	44	45	45	46	44	46	45	46	48
16 16	43	44	45	45	46	46	47	46	47	46	48	49
17 23	44	45	46	46	48	47	49	47	48	47	48	50
18 30	45	45	47	47	48	48	49	48	49	48	49	51
19 May 7	47	47	49	48	50	50	51	49	51	49	51	52
20 14	47	48	50	49	51	51	52	51	52	50	52	53
21 21	49	50	51	51	53	53	54	52	53	51	53	54
22 28	51	52	53	53	55	55	56	54	55	53	54	56

TABLE 5A (cont.).—NORMAL TEMPERATURE for each week in the twelve Districts of the British Isles. (Compiled from the tables of the Weekly Weather Report, 1881-1915.)

District.	0	1	6	2	3	4	5	7	8	9	10	11
	North and Islands.	Eastern Counties.	West and I. of Man.	North-East Counties.	Eastern Counties.	Midland Counties.	South-East Counties.	North-West and N. Wales.	South-West and S. Wales.	North.	South.	English Channel.
	Scotland.			England and Wales.					Ireland.			
SUMMER—	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.
No.												
23 June 4	51	52	54	54	56	56	57	55	56	54	56	57
24 11	52	53	55	54	56	56	57	56	56	55	56	57
25 18	53	54	56	56	58	57	58	57	57	56	57	58
26 25	54	56	57	58	60	59	60	58	58	57	58	60
27 July 2	55	56	57	58	60	59	60	58	59	57	59	60
28 9	54	57	57	59	61	60	61	59	60	57	59	61
29 16	55	57	57	59	61	60	62	59	60	57	59	61
30 23	55	56	57	58	60	60	61	59	60	57	59	61
31 30	55	57	58	59	61	60	62	59	60	58	59	62
32 Aug. 6	55	57	57	59	61	60	61	59	60	57	59	62
33 13	55	56	57	58	60	59	61	59	59	57	57	62
34 20	54	56	56	58	60	59	61	58	59	57	58	62
35 27	53	54	55	57	59	57	60	57	58	55	57	61
AUTUMN—												
36 Sept. 3	53	54	55	56	58	57	59	56	58	55	57	61
37 10	53	53	54	55	57	56	58	56	57	55	56	60
38 17	51	52	53	54	56	54	56	54	56	54	55	59
39 24	50	51	52	53	54	53	55	53	54	53	54	58
40 Oct. 1	49	49	50	51	52	51	53	52	53	51	52	56
41 8	47	47	49	49	51	49	52	50	51	49	51	55
42 15	46	46	48	48	49	48	51	49	51	49	50	54
43 22	44	44	46	46	47	46	49	47	48	46	47	52
44 29	44	44	46	46	47	46	48	47	48	46	48	52
45 Nov. 5	43	43	45	45	45	45	46	47	45	47	47	51
46 12	41	40	42	43	43	42	44	43	45	43	45	49
47 19	40	40	42	42	42	44	43	43	44	43	44	48
48 26	40	40	42	41	41	41	43	42	44	43	44	47

TABLE 5B.—NORMAL TEMPERATURE (Absolute Scale) for each week in the twelve Districts of the British Isles. (Compiled from the tables of the Weekly Weather Report, 1881-1915.)

District.	0	1	6	2	3	4	5	7	8	9	10	11
Number of WEEK with average date of first day.	North and Islands.	Eastern Counties.	West and I. of Man.	North-East Counties.	Eastern Counties.	Midland Counties.	South-East Counties.	North-West and N. Wales.	South-West and S. Wales.	North.	South.	English Channel.
	Scotland.			England and Wales.						Ireland.		
	Temperature in Degrees Absolute above 200a.											
WINTER—												
No.												
49 Dec. 3	76.8	76.4	77.9	77.5	77.7	77.4	78.7	78.3	79.4	78.3	79.3	81.4
50 10	77.0	76.4	77.8	77.4	77.6	77.3	78.6	78.1	79.2	78.3	79.2	81.2
51 17	77.0	76.2	77.7	76.8	76.8	76.7	77.7	77.6	78.7	78.2	79.0	80.6
52 24	76.8	76.0	77.4	76.7	76.5	76.5	77.6	77.4	78.5	77.9	79.0	80.4
1 Jan. 1	76.4	75.7	77.0	76.3	76.2	76.2	77.2	77.1	78.2	77.7	78.6	80.1
2 8	76.1	75.5	76.0	76.2	75.9	75.8	76.8	76.9	77.7	77.4	78.2	79.6
3 15	76.8	76.3	77.4	76.5	76.2	76.3	77.1	77.2	78.0	77.9	78.8	79.8
4 22	76.5	76.1	77.2	76.6	76.5	76.6	77.2	77.3	78.1	78.1	78.8	79.8
5 29	76.1	75.9	77.1	76.8	76.8	76.9	77.6	77.4	78.2	77.8	78.7	79.8
6 Feb. 5	76.1	75.8	76.9	76.6	76.7	76.7	77.3	77.2	78.0	77.7	78.7	79.6
7 12	76.3	76.1	77.1	76.8	76.7	76.8	77.6	77.3	78.2	77.7	78.6	79.8
8 19	76.6	76.1	77.2	76.8	76.9	76.7	77.5	77.3	77.9	78.1	78.7	79.7
9 26	76.4	76.1	77.2	76.9	77.1	77.1	77.7	77.4	78.2	78.3	78.9	79.7
SPRING—												
No.												
10 Mar. 5	76.5	76.6	77.4	77.3	77.5	77.4	78.1	77.6	78.3	78.0	78.7	79.8
11 12	76.9	77.0	77.9	77.9	78.1	78.2	78.7	78.3	78.9	78.8	79.4	80.4
12 19	77.2	77.3	78.1	78.1	78.3	78.2	78.8	78.4	79.0	78.6	79.4	80.5
13 26	77.7	77.7	78.5	78.6	79.1	79.0	79.7	78.9	79.7	79.2	80.1	81.3
14 Apl. 2	78.4	78.6	79.5	79.2	79.7	79.8	80.6	79.7	80.4	79.8	80.7	81.7
15 9	78.4	78.7	79.6	79.4	80.1	80.1	80.7	79.9	80.7	80.1	80.8	81.9
16 16	79.4	79.5	80.3	80.1	80.7	80.7	81.3	80.7	81.2	80.8	81.6	82.4
17 23	79.9	80.1	80.9	80.8	81.6	81.6	82.2	81.4	82.0	81.2	82.1	83.0
18 30	80.2	80.5	81.3	81.2	82.1	81.9	82.7	81.7	82.3	81.7	82.5	83.4
19 May 7	81.1	81.4	82.3	82.1	82.9	82.8	83.7	82.6	83.3	82.6	83.3	84.1
20 14	81.4	81.9	82.9	82.6	83.7	83.7	84.2	83.4	84.1	83.1	84.0	84.8
21 21	82.4	82.9	83.7	83.4	84.6	84.4	85.1	84.1	84.7	83.8	84.6	85.3
22 28	83.3	83.9	84.6	84.7	85.8	85.6	86.2	85.2	85.7	84.6	85.4	86.3

TABLE 5B (contd.).—NORMAL TEMPERATURE (Absolute Scale) for each week in the twelve Districts of the British Isles. (Compiled from the tables of the Weekly Weather Report, 1881-1915.)

District.	0	1	6	2	3	4	5	7	8	9	10	11
Number of WEEK with average date of first day.	North and Islands.	Eastern Counties.	West and I. of Man.	North-East Counties.	Eastern Counties.	Midland Counties.	South-East Counties.	North-West and N. Wales.	South-West and S. Wales.	North.	South.	English Channel Islands and Scill.
	Scotland.			England and Wales.						Ireland.		
SUMMER—	Temperature in Degrees Absolute above 200a.											
No.												
23 June 4	83.7	84.3	85.3	85.1	86.3	86.3	86.8	85.8	86.4	85.3	86.2	86.8
24 11	84.1	84.8	85.6	85.4	86.2	86.2	86.7	86.1	86.4	85.6	86.4	86.9
25 18	84.7	85.4	86.1	86.4	87.4	87.1	87.5	86.7	86.9	86.1	86.9	87.6
26 25	85.4	86.3	86.7	87.3	88.4	88.1	88.6	87.4	87.7	86.7	87.6	88.3
27 July 2	85.6	86.5	86.9	87.6	88.5	88.3	88.8	87.6	88.1	86.9	87.8	88.7
28 9	85.2	86.6	86.9	87.9	88.8	88.4	89.3	87.8	88.3	86.9	87.8	89.1
29 16	85.8	86.7	87.1	87.9	89.1	88.7	89.4	88.0	88.6	87.1	88.2	89.3
30 23	85.7	86.3	86.9	87.7	88.8	88.4	89.3	87.9	88.5	86.9	88.0	89.3
31 30	86.1	86.9	87.2	88.2	89.1	88.6	89.4	88.1	88.5	87.2	88.2	89.5
32 Aug. 6	85.9	86.7	87.1	87.8	88.9	88.4	89.4	87.9	88.6	87.2	88.1	89.7
33 13	85.6	86.2	86.8	87.6	88.7	88.2	89.2	87.7	88.3	87.1	87.8	89.6
34 20	85.4	86.1	86.5	87.3	88.4	87.8	88.8	87.5	88.1	86.7	87.6	89.4
35 27	84.7	85.2	85.7	86.8	87.8	87.1	88.3	86.8	87.5	86.1	87.0	88.9
AUTUMN—	Temperature in Degrees Absolute above 200a.											
No.												
36 Sept. 3	84.7	85.1	85.6	86.3	87.3	86.7	87.9	86.5	87.2	85.8	86.7	88.8
37 10	84.4	84.7	85.2	85.8	86.8	86.2	87.4	86.2	86.8	85.6	86.2	88.4
38 17	83.7	83.9	84.6	85.1	86.1	85.4	86.6	85.5	86.2	85.1	85.8	87.9
39 24	83.1	83.3	84.1	84.6	85.2	84.6	85.9	84.8	85.5	84.4	85.2	87.3
40 Oct. 1	82.4	82.6	83.3	83.7	84.3	83.5	84.8	83.9	84.6	83.7	84.2	86.2
41 8	81.3	81.4	82.3	82.7	83.4	82.7	84.0	83.1	83.8	82.5	83.3	85.6
42 15	81.0	81.0	81.8	82.1	82.7	81.9	83.4	82.5	83.3	82.4	83.0	85.2
43 22	79.8	79.7	80.5	81.0	81.4	80.8	82.2	81.2	82.2	80.9	81.6	84.3
44 29	79.7	79.6	80.7	80.8	81.3	80.6	82.1	81.2	82.0	80.9	81.7	83.8
45 Nov. 5	79.3	79.0	80.1	80.1	80.4	79.9	80.9	80.6	81.4	80.4	81.2	83.5
46 12	78.3	77.7	78.8	78.9	79.2	78.6	79.9	79.3	80.3	79.3	80.1	82.4
47 19	77.7	77.2	78.4	78.3	78.3	78.1	79.1	78.8	79.7	79.1	79.7	81.9
48 26	77.6	77.2	78.6	78.2	78.2	77.9	79.1	78.8	79.6	78.9	79.6	81.6

TABLE 5C.—NORMAL amount of ACCUMULATED TEMPERATURE above 42°F. for each week in the twelve Districts of the British Isles. (Compiled from the tables of the Weekly Weather Report, 1881-1915.)* Unit: day-degree—Fahrenheit.

District.	0	1	6	2	3	4	5	7	8	9	10	11
Number of WEEK with average date of first day.	North and Islands.	Eastern Counties.	West and I. of Man.	North-East Counties.	Eastern Counties.	Midland Counties.	South-East Counties.	North-West and N. Wales.	South-West and S. Wales.	North.	South.	English Channel.
	Scotland.			England and Wales.						Ireland.		
WINTER—												
No.												
49 Dec. 3	9	8	14	10	14	14	21	15	25	15	25	39
50 10	9	9	13	11	13	13	20	14	23	15	23	36
51 17	10	8	12	9	10	11	14	12	18	14	22	31
52 24	7	6	11	8	8	10	14	12	17	14	21	20
1 Jan. 1	6	6	9	7	9	9	13	10	17	13	20	27
2 8	5	4	7	6	7	8	11	9	14	11	17	22
3 15	7	6	10	7	6	8	10	8	15	14	21	24
4 22	8	9	12	10	9	11	11	10	15	13	20	24
5 29	7	7	9	9	10	11	13	11	16	13	20	24
6 Feb. 5	5	7	9	10	10	11	13	10	15	14	20	23
7 12	8	9	11	11	13	14	15	12	18	16	22	25
8 19	7	8	9	10	12	13	14	10	16	14	20	24
9 26	6	7	10	12	15	16	17	12	18	16	22	24
SPRING—												
No.												
10 Mar. 5	8	10	11	14	17	17	19	13	18	16	22	25
11 12	9	13	15	19	23	24	23	18	24	20	27	31
12 19	13	17	19	20	26	26	26	20	25	22	28	30
13 26	18	22	23	24	30	32	32	24	31	26	34	37
14 Apl. 2	22	26	28	28	35	38	38	30	36	31	38	42
15 9	21	28	31	29	37	39	40	32	38	34	40	44
16 16	28	34	37	34	42	45	45	38	43	39	45	48
17 23	31	37	41	39	48	50	50	42	48	41	49	57
18 30	35	41	43	41	52	52	55	44	50	44	52	61
19 May 7	42	47	54	49	60	63	66	55	53	54	62	70
20 14	45	51	60	54	68	69	76	63	71	58	69	79
21 21	51	58	66	62	77	76	84	71	77	67	77	85
22 28	60	67	76	78	92	90	97	83	90	77	87	97

* Districts 0, 1 and 6 are for the period 1886-1915 only.

TABLE 5C (cont.)—NORMAL amount of ACCUMULATED TEMPERATURE above 42°F. for each week in the twelve Districts of the British Isles. (Compiled from the tables of the Weekly Weather Report, 1881-1915.)* Unit: day-degree—Fahrenheit.

Districts.	0	1	6	2	3	4	5	7	8	9	10	11
Number of WEEK with average date of first day.	North and Islands.	Eastern Counties.	West and I. of Man.	North Counties.	Eastern Counties.	Midland Counties.	South-East Counties.	North-West and N. Wales.	South-West and S. Wales.	North.	South.	English Channel.
	Scotland.			England and Wales.						Ireland.		
SUMMER—												
No.												
23 June 4	67	75	88	82	97	97	104	91	99	85	97	103
24 11	72	80	89	86	96	97	103	94	99	89	100	106
25 18	79	87	96	98	112	108	114	103	106	95	105	114
26 26	85	97	102	110	124	120	126	112	116	103	114	126
27 July 2	86	98	105	113	125	122	130	114	120	105	116	128
28 9	89	100	105	116	130	124	133	117	122	105	117	133
29 16	91	104	109	117	132	127	137	119	127	108	122	136
30 23	90	99	106	115	130	124	135	117	125	106	119	136
31 30	94	104	108	121	132	126	137	120	125	110	121	138
32 Aug. 6	92	102	107	117	130	124	136	118	126	108	120	140
33 13	89	96	105	114	128	121	134	115	123	107	116	139
34 20	87	95	101	111	124	116	131	113	121	103	114	137
35 27	79	87	92	104	116	108	123	104	113	95	107	131
AUTUMN—												
No.												
36 Sept. 3	78	84	90	98	111	103	117	100	109	92	103	129
37 10	73	78	84	92	104	96	111	95	104	89	97	124
38 17	65	67	75	83	96	87	101	87	96	83	91	118
39 24	59	62	70	76	84	77	92	79	88	73	83	110
40 Oct. 1	52	55	63	65	73	66	80	69	76	65	103	99
41 8	42	47	52	55	65	58	72	59	68	52	97	89
42 15	39	41	48	48	57	50	64	52	62	52	91	82
43 22	30	30	36	37	44	38	51	40	50	39	83	72
44 29	27	28	34	36	42	38	49	38	47	37	74	68
45 Nov. 5	23	23	29	29	34	31	41	33	43	32	61	63
46 12	17	16	22	21	25	21	31	24	33	24	60	50
47 19	14	13	18	17	18	17	23	19	27	21	46	44
48 26	12	12	17	15	17	16	22	19	25	20	45	40

* Districts 0, 1 and 6 are for the period 1886-1915 only.

TABLE 5D.—The NORMAL NUMBER OF RAIN-DAYS for each week of the year in the twelve Districts of the British Isles. (Compiled from the Tables of the Weekly Weather Report, 1881-1915.)

NOTE.—The numbers show the average number of days out of the seven in the week on which rain has been recorded in the 35 years. To avoid decimal fractions, more than 3 days and less than $3\frac{1}{2}$ are denoted by 3+, more than $3\frac{1}{2}$ and less than 4 by 4-, and so on.

District.	0	1	6	2	3	4	5	7	8	9	10	11
	North and Islands.	Eastern Counties.	West and I. of Man.	North-East Counties.	Eastern Counties.	Midland Counties.	South-East Counties.	North-West and N. Wales.	South-West and S. Wales.	North.	South.	English Channel.
	Scotland.			England and Wales.					Ireland.			
WINTER—	days	days	days	days	days	days	days	days	days	days	days	days
No.												
49 Dec. 3	6-	5	5+	4+	5-	5-	5+	5	5+	5+	5+	6
50 10	6-	4+	5	4	4	4+	5	5	5	5+	5	5+
51 17	5	4	4+	4-	4-	3-	4+	4	4	5	4+	5-
52 24	5+	4	5	4-	4	4-	5	4	4+	5	5	5
New Year.												
1 Jan. 1	5	4	5-	4	4+	4	4	4+	4+	5	5	5
2 8	5	4	4+	4	4	4	4-	4	4	5-	4+	5-
3 15	5-	4	5-	3+	4-	3+	3+	4	4	5-	4+	4+
4 22	5+	4	5-	3+	4-	3+	4-	4	4+	4+	4+	5-
5 29	5+	4+	5-	4	4	4	4	5-	4+	5+	5	5-
6 Feb. 5	5+	4	5	3+	4-	4-	4-	4	4	5	5-	4+
7 12	5	4-	4+	4-	4	3+	4-	4	4	4+	4+	5-
8 19	5-	4	4	3+	3+	3	3	3+	4-	4+	4	4
9 26	5	4	4	4+	4	4-	4-	4	4	5	4+	4+
SPRING—												
10 Mar. 5	5+	4+	4+	4	4	4-	4-	4	4+	5	4+	5-
11 12	5	4	4+	3+	3	3	3	4	4-	5-	4	4-
12 19	5	4	4	4	4	3+	3	4-	4-	4+	4	4+
13 26	5-	4	4	3+	3	3+	3	4-	4-	4+	4	4
14 Apl. 2	4	3+	4-	3	3	3	3	3+	4	4	4	3+
15 9	5-	4	4-	3+	3	3+	3	3+	3+	4	4-	3+
16 16	4	4-	3+	3	3	3	3	3	3	4	4-	3+
17 23	4+	4	4	4	4-	4-	4-	4	4	4+	4+	4
18 30	5-	4	4	3+	3+	3+	3	4	4	4+	4	4
19 May 7	4+	4-	4-	3	3	3	3-	3+	3	4	4-	3
20 14	4-	3+	3+	3	3	3	3	3	3	4-	3+	3
21 21	4	4-	3+	3	3	3	3	3	3	3+	3+	3
22 28	4	3	3+	3	3	3	2+	3	3	4-	3+	3

TABLE 5D (cont.).—The NORMAL NUMBER OF RAIN-DAYS for each week of the year in the twelve Districts of the British Isles. (Compiled from the tables of the Weekly Weather Report, 1881-1915.)

NOTE.—The numbers show the average number of days out of the seven in the week on which rain has been recorded in the 35 years. To avoid decimal fractions, more than 3 days and less than $3\frac{1}{2}$ are denoted by 3+, more than $3\frac{1}{2}$ and less than 4 by 4-, and so on.

District.	0	1	6	2	3	4	5	7	8	9	10	11
	North and Islands.	Eastern Counties.	West and I. of Man.	North-East Counties.	Eastern Counties.	Midland Counties.	South-East Counties.	North-West and N. Wales.	South-West and S. Wales.	North.	South.	English Channel.
	Scotland.			England and Wales.					Ireland.			
SUMMER—	days	days	days	days	days	days	days	days	days	days	days	days
No.												
23 June 4	3	3-	3	3-	3	3	3	3-	3	3	3	3
24 11	4	3+	3+	3	3	3	3-	3	3	4-	3	3
25 18	4+	4	4	3+	3	3+	3	4-	3+	4+	4	3+
26 25	4	3+	4	3	2+	3	2+	3+	3	4	3+	3
27 July 2	4	4-	3+	3	3	3	3+	3	3	4	3+	3
28 9	4	4-	4	3	3	3	4	3+	3+	4+	4	3
29 16	5-	4	4	3+	3+	3	4	4-	4-	5	4	3+
30 23	4+	4	4	4-	3+	3+	4	4	4-	5-	4	4-
31 30	5	4-	4	3	3-	3	4	4-	3+	5-	4	3
32 Aug. 6	5-	4	4	3+	3	3+	4	4	4-	4+	4	3+
33 13	5-	4	4+	4-	3	3+	4+	4	4-	5	4	4-
34 20	5-	4	4+	4	4-	3+	4+	4	4	5	4+	4
35 27	5	4+	4+	4	4-	4-	4+	4	4	5	4	4
AUTUMN—												
36 Sept. 3	5-	4-	4-	3+	3+	3	4-	4-	3+	4	4	3+
37 10	4+	3+	3+	2+	2+	2+	3	3-	4-	3	3	3
38 17	4	3	3+	3	3	3	3	3	4-	3+	3	3
39 24	5	4	4	4-	3	3+	4	4	5-	4+	4+	4
40 Oct. 1	5	4	4	4	4-	4-	4	4	4+	4	4	4+
41 8	5	4	4+	4	4-	4-	4	4	4+	4	4	4+
42 15	5	4	4	4	4	4	4	4	4	5-	4+	5-
43 22	5	4+	4	4	4	4	4	4	4+	4+	4+	5
44 29	5+	5-	5-	4+	4+	4+	5-	5	5	5	5	5
45 Nov. 5	5	4+	4+	4	4	4	4+	4+	5-	5	5	5
46 12	5	4	4+	4	4+	4	4+	4	4	4+	4+	5
47 19	5	4+	4+	4	4	4	4+	4+	4	4	4+	5
48 26	5+	4	5-	4	4	4	5-	5	5	5	5	5

TABLE 5E.—The NORMAL RAINFALL for each week of the year in the twelve Districts of the British Isles. (Compiled from the tables of the Weekly Weather Report, 1881-1915.)

NOTE.—The rainfall is given in millimetres (mm.). The average general rainfall of the British Isles is 1000 mm. a year. One millimetre is one twenty-fifth of an inch (1 mm. = .04 in.; 1 in. = 25 mm.).

District.	0	1	6	2	3	4	5	7	8	9	10	11
	North and Islands.	Eastern Counties.	West and I. of Man.	North-East Counties.	Eastern Counties.	Midland Counties.	South-East Counties.	North-West and N. Wales.	South-West and S. Wales.	North.	South.	English Channel.
	Scotland.			England and Wales.					Ireland.			
WINTER—	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.
No.												
49 Dec. 3	42	24	40	17	16	18	24	26	36	27	29	33
50 10	38	17	32	13	15	18	19	23	31	23	26	26
51 17	28	14	27	11	9	11	13	17	22	21	25	17
52 24	32	16	30	11	12	15	16	19	27	22	28	23
New Year.												
1 Jan. 1	29	16	28	13	13	15	14	19	23	21	25	20
2 8	29	14	23	10	10	11	12	16	19	20	23	18
3 15	34	15	26	8	9	10	12	16	18	18	20	14
4 22	40	14	26	9	9	12	12	18	21	20	20	16
5 29	35	15	26	11	11	13	14	18	21	20	20	17
6 Feb. 5	39	15	26	9	9	12	14	17	20	20	23	16
7 12	31	14	27	9	11	12	14	15	20	16	21	19
8 19	24	13	22	8	7	9	10	14	16	17	20	14
9 26	24	14	21	12	10	12	13	16	20	19	20	16
SPRING—												
10 Mar. 5	30	15	24	12	11	12	14	17	21	18	20	19
11 12	26	14	18	9	8	9	10	13	14	15	15	11
12 19	24	14	20	10	12	11	12	14	17	16	17	15
13 26	21	13	20	10	8	10	9	15	15	18	19	12
14 Apr. 2	20	10	16	7	7	9	8	11	13	14	14	10
15 9	22	13	16	10	10	10	9	12	13	13	14	10
16 16	17	10	15	8	7	8	8	10	11	14	14	10
17 23	17	12	18	11	12	13	15	14	19	15	19	15
18 30	18	13	20	11	10	12	10	16	16	18	17	13
19 May 7	17	13	16	11	10	10	9	12	12	13	14	8
20 14	16	14	16	11	11	12	11	13	12	14	14	10
21 21	13	12	15	12	11	13	11	11	13	12	13	11
22 28	15	13	17	11	10	12	10	14	11	15	15	12

TABLE 5E (cont.).—The NORMAL RAINFALL for each week of the year in the twelve Districts of the British Isles. (Compiled from the tables of the Weekly Weather Report, 1881-1915.)

NOTE.—The rainfall is given in millimetres (mm.). The average general rainfall of the British Isles is 1000 mm. a year. One millimetre is one twenty-fifth of an inch (1 mm. = .04 in.; 1 in. = 25 mm.).

District.	0	1	6	2	3	4	5	7	8	9	10	11
	North and Islands.	Eastern Counties.	West and I. of Man.	North-East Counties.	Eastern Counties.	Midland Counties.	South-East Counties.	North-West and N. Wales.	South-West and S. Wales.	North.	South.	English Channel.
	Scotland.			England and Wales.					Ireland.			
SUMMER—	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.
No.												
23 June 4	12	9	12	11	13	14	14	10	14	13	14	13
24 11	16	13	17	10	12	10	10	12	14	15	12	8
25 18	19	16	22	15	11	14	11	18	15	20	21	12
26 25	17	12	17	12	11	14	10	16	15	17	15	9
27 July 2	19	16	17	13	11	11	11	14	13	14	14	12
28 9	17	17	22	13	13	14	11	17	16	18	18	12
29 16	23	18	20	15	15	12	14	17	18	20	16	13
30 23	17	16	20	18	15	19	15	22	21	20	23	15
31 30	22	15	21	13	10	13	10	20	17	20	20	12
32 Aug. 6	22	18	23	14	12	13	10	18	16	23	22	14
33 13	23	19	25	15	12	14	13	19	18	21	21	14
34 20	23	17	26	17	15	17	15	24	22	23	25	16
35 27	32	21	31	15	15	17	17	23	24	23	20	16
AUTUMN—												
36 Sept. 3	23	11	21	11	12	12	16	16	16	17	17	14
37 10	21	12	17	7	9	8	8	14	12	14	13	11
38 17	17	13	20	9	9	10	10	14	14	15	16	12
39 24	26	15	26	12	14	13	15	20	21	22	19	19
40 Oct. 1	32	17	26	15	13	14	18	21	24	20	19	21
41 8	29	20	27	18	16	19	19	22	27	22	23	23
42 15	25	18	25	18	15	16	19	22	25	20	23	23
43 22	28	18	26	18	16	17	22	23	27	22	24	28
44 29	33	22	32	15	16	18	23	24	29	24	24	24
45 Nov. 5	33	20	34	14	13	17	21	23	28	25	27	28
46 12	30	18	27	14	15	14	17	20	22	22	23	22
47 19	33	16	30	11	11	11	14	20	21	22	21	19
48 26	39	17	30	16	15	17	24	26	22	24	24	25

TABLE 5F.—NORMAL DAILY DURATION of SUNSHINE in hours for each week of the year in the Twelve Districts of the British Isles. (Compiled from the tables of the Weekly Weather Report, 1881–1915.)

District.	0	1	6	2	3	4	5	7	8	9	10	11
Number of WEEK with average date of first day.	North and Islands.	Eastern Counties.	West and I. of Man.	North-East Counties.	Eastern Counties.	Midland Counties.	South-East Counties.	North-West and N. Wales.	South-West and S. Wales.	North.	South.	English Channel.
	Scotland.	England and Wales.							Ireland.			
	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.
WINTER—												
No.												
49 Dec. 3	0·8	1·3	1·1	1·3	1·4	1·3	1·5	1·1	1·6	1·4	1·6	1·9
50 10	0·5	1·0	0·9	1·2	1·3	1·2	1·5	1·0	1·4	1·2	1·5	1·8
51 17	0·6	0·9	0·9	1·1	1·4	1·1	1·6	1·1	1·4	1·1	1·5	1·7
52 24	0·5	0·9	0·8	1·1	1·1	1·0	1·2	0·9	1·2	1·0	1·3	1·7
New Year.												
1 Jan. 1	0·7	1·0	1·0	1·0	1·4	1·2	1·5	1·0	1·5	1·3	1·5	1·9
2 8	0·8	1·1	1·1	1·2	1·6	1·3	1·6	1·2	1·6	1·2	1·6	1·9
3 15	0·8	1·5	1·2	1·4	1·5	1·4	1·5	1·3	1·6	1·4	1·6	2·0
4 22	0·9	1·7	1·3	1·6	2·1	1·6	1·9	1·6	1·8	1·6	1·8	2·3
5 29	1·3	1·9	1·6	2·0	2·4	2·0	2·3	1·7	2·2	1·7	2·0	2·7
6 Feb. 5	1·4	2·3	2·0	2·4	2·4	2·1	2·1	2·0	2·2	2·0	2·2	2·6
7 12	2·1	2·7	2·2	2·6	2·6	2·4	2·7	2·5	2·7	2·4	2·6	3·4
8 19	2·3	2·7	2·2	2·7	3·0	2·6	3·0	2·7	3·1	2·5	2·9	3·5
9 26	2·4	2·8	2·6	2·9	2·9	2·6	3·1	2·8	3·0	2·5	2·9	3·8
SPRING—												
10 Mar. 5	2·7	3·1	3·1	3·4	3·3	3·0	3·3	3·0	3·4	3·0	3·7	3·9
11 12	2·9	3·5	3·4	4·0	3·8	3·5	3·8	3·4	3·8	3·1	3·4	4·9
12 19	3·2	3·9	3·9	4·4	4·3	3·8	4·4	4·0	4·4	3·8	4·2	4·9
13 26	4·0	4·0	4·3	4·4	4·7	4·2	4·9	4·4	4·8	4·1	4·7	5·8
14 Apr. 2	4·1	5·0	5·2	5·5	5·6	5·0	5·6	5·2	5·2	4·8	5·2	6·0
15 9	4·3	4·6	4·9	4·9	5·2	4·7	5·3	5·0	5·5	5·0	5·5	6·3
16 16	4·9	5·0	5·2	5·2	5·6	5·0	5·7	5·5	5·6	4·8	5·2	6·6
17 23	4·6	5·2	5·3	5·3	5·8	5·4	6·0	5·3	5·9	5·0	5·5	6·7
18 30	5·0	5·1	5·5	5·9	6·4	5·6	6·6	5·7	6·0	5·1	6·6	7·2
19 May 7	5·2	5·7	5·8	6·0	6·4	5·8	6·7	6·1	6·6	5·9	6·0	8·1
20 14	5·7	5·9	6·5	6·2	6·6	6·0	7·0	6·6	6·9	6·2	6·8	7·7
21 21	5·4	5·9	6·5	6·2	6·8	5·8	7·0	6·4	6·6	6·1	6·5	7·8
22 28	5·5	6·9	6·6	6·3	7·2	6·3	7·4	6·7	6·9	6·1	6·5	8·1

TABLE 5F (cont.).—NORMAL DAILY DURATION of SUNSHINE in hours for each week of the year in the Twelve Districts of the British Isles. (Compiled from the tables of the Weekly Weather Report, 1881–1915.)

District.	0	1	6	2	3	4	5	7	8	9	10	11
Number of WEEK with average date of first day.	North and Islands.	Eastern Counties.	West and I. of Man.	North-East Counties.	Eastern Counties.	Midland Counties.	South-East Counties.	North-West and N. Wales.	South-West and S. Wales.	North.	South.	English Channel.
	Scotland.	England and Wales.							Ireland.			
	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.
SUMMER—												
No.												
23 June 4	5·6	6·1	6·7	6·1	6·7	6·1	6·9	6·8	6·7	5·9	6·4	7·3
24 11	5·7	6·3	6·8	6·4	6·7	6·4	7·1	7·1	7·2	5·9	6·3	8·2
25 18	4·7	5·4	6·7	5·9	6·6	5·8	6·9	5·7	6·2	5·3	5·6	7·5
26 25	4·4	6·1	6·0	6·3	6·3	6·5	7·8	6·3	7·0	4·7	5·5	8·6
27 July 2	4·3	5·3	6·2	6·5	7·1	6·5	7·4	6·5	7·1	5·1	5·6	8·3
28 9	4·6	5·5	6·2	6·1	6·8	6·0	7·2	6·3	6·5	5·0	5·5	7·9
29 16	4·0	5·0	5·5	5·6	6·5	5·6	6·7	5·6	6·1	4·3	4·9	7·3
30 23	4·1	4·5	5·1	5·2	5·9	5·2	6·4	5·2	5·7	4·4	4·9	6·9
31 30	3·6	5·0	5·4	5·9	6·7	5·9	7·0	5·8	6·5	4·3	5·0	8·3
32 Aug. 6	3·6	4·8	5·2	5·5	6·1	5·6	6·6	5·4	6·2	4·3	5·2	8·0
33 13	4·0	4·7	5·1	5·2	6·3	5·6	6·7	5·3	6·2	4·7	5·2	7·7
34 20	3·8	4·6	4·8	4·9	5·6	5·2	6·2	5·0	5·9	4·2	4·8	7·2
35 27	3·4	4·3	4·4	4·9	5·7	4·9	5·9	4·5	5·4	3·8	4·3	6·4
AUTUMN—												
36 Sept. 3	4·0	4·7	5·0	5·0	5·2	4·8	5·7	5·0	5·3	4·3	4·9	6·2
37 10	3·9	4·2	4·6	4·9	5·5	4·8	5·8	4·7	5·3	4·0	4·7	6·6
38 17	3·1	3·8	3·9	4·3	5·0	4·3	5·3	4·3	4·9	3·8	4·4	6·4
39 24	3·1	3·4	3·4	4·1	4·8	4·1	4·9	3·8	4·1	3·3	3·9	5·0
40 Oct. 1	2·8	3·3	3·1	3·7	3·8	3·3	3·9	3·4	3·8	2·9	3·6	4·4
41 8	2·6	2·3	2·8	3·3	3·7	3·1	3·7	3·0	3·4	2·8	3·4	4·4
42 15	2·4	2·6	2·5	2·3	3·2	2·9	3·4	2·7	3·3	3·0	3·2	4·1
43 22	2·5	2·6	2·5	2·6	2·8	2·5	3·1	2·6	2·9	2·9	3·1	3·4
44 29	1·7	2·0	2·1	2·2	2·6	2·2	2·8	2·2	2·5	2·4	2·7	3·1
45 Nov. 5	1·4	2·0	1·6	2·0	2·5	1·9	2·4	1·7	2·2	2·0	2·2	2·6
46 12	1·2	1·7	1·7	1·9	2·2	1·9	2·3	1·9	2·4	2·2	2·5	2·7
47 19	1·0	1·6	1·5	1·8	1·8	1·5	1·8	1·6	1·9	1·7	2·0	2·0
48 26	0·9	1·2	1·1	1·4	1·5	1·4	1·6	1·3	1·7	1·4	1·6	1·8

TABLE 6.—Mean Temperature, Daily Sunshine, and
derived from weekly normals

Dist.	Temperature.			Sun-shine.		Rainfall.	Temperature.			Sun-shine.		Rainfall.
	°F.	a.	hrs.	in.	mm.		°F.	a.	hrs.	in.	mm.	
JANUARY.						FEBRUARY.						
0	38.4	276.6	0.84	5.79	147	38.3	276.5	1.89	4.57	116		
1	37.2	275.9	1.37	2.57	65	37.4	276.0	2.50	2.24	57		
6	39.4	277.1	1.17	4.57	116	39.3	277.1	2.10	3.94	100		
2	38.2	276.4	1.39	1.77	45	38.8	276.8	2.53	1.50	38		
3	37.9	276.3	1.70	1.81	46	38.8	276.8	2.66	1.54	39		
4	37.9	276.3	1.42	2.13	54	38.8	276.8	2.34	1.85	47		
5	39.4	277.1	1.68	2.20	56	40.1	277.5	2.64	2.05	52		
7	39.4	277.1	1.32	3.03	77	39.8	277.3	2.34	2.52	64		
8	41.0	278.0	1.67	3.58	91	41.1	278.1	2.63	3.03	77		
9	40.6	277.8	1.39	3.43	87	40.8	277.9	2.23	2.91	74		
10	42.1	278.6	1.66	3.86	98	42.3	278.7	2.53	3.35	85		
11	44.3	279.8	2.08	2.99	76	44.1	279.7	3.17	2.64	67		
MARCH.						APRIL.						
0	39.2	277.0	3.05	4.41	112	42.9	279.1	4.55	3.23	82		
1	39.2	277.0	3.51	2.48	63	43.2	279.2	4.94	1.85	47		
6	40.7	277.8	3.51	3.58	91	44.7	280.1	5.15	2.76	70		
2	40.7	277.8	3.87	1.85	47	44.4	279.9	5.22	1.54	39		
3	41.1	278.1	3.87	1.69	43	45.6	280.6	5.55	1.50	38		
4	41.0	278.0	3.47	1.89	48	45.5	280.5	5.02	1.73	44		
5	42.1	278.6	3.94	2.05	52	46.7	281.2	5.65	1.69	43		
7	41.3	278.2	3.56	2.56	65	45.4	280.4	5.21	2.05	52		
8	42.8	278.9	3.96	2.99	76	46.5	281.1	5.53	2.36	60		
9	42.0	278.6	3.35	2.95	75	45.5	280.5	4.89	2.40	61		
10	43.4	279.3	3.84	3.15	80	46.9	281.3	5.38	2.60	66		
11	45.3	280.4	4.70	2.52	64	48.7	282.3	6.39	1.93	49		
MAY.						JUNE.						
0	48.1	281.9	5.36	2.80	71	52.4	284.3	5.17	2.72	69		
1	48.2	282.0	5.76	2.24	57	53.7	285.1	6.03	2.13	54		
6	49.7	282.8	6.16	2.91	74	55.0	285.8	6.32	2.87	73		
2	49.4	282.7	6.10	1.93	49	55.2	285.9	6.20	2.01	51		
3	51.3	283.7	6.65	1.81	46	57.1	286.9	6.86	2.01	51		
4	51.0	283.6	5.87	2.09	53	56.8	286.8	6.20	2.20	56		
5	52.2	284.2	6.90	1.77	45	57.7	287.3	7.20	1.89	48		
7	50.5	283.3	6.27	2.28	58	56.0	286.3	6.51	2.40	61		
8	51.6	283.9	6.58	2.24	57	56.7	286.7	6.79	2.36	60		
9	50.1	283.1	5.88	2.48	63	55.0	285.8	5.54	2.72	69		
10	51.6	283.9	6.47	2.56	65	56.6	286.7	5.99	2.64	67		
11	53.0	284.7	7.78	1.89	48	57.7	287.3	7.92	1.77	45		

Rainfall for twelve districts for the calendar months
for districts (1881-1915).

Dist.	Temperature.		Sun-shine.	Rainfall.		Temperature.		Sun-shine.	Rainfall.	
	°F.	a.	hrs.	in.	mm.	°F.	a.	hrs.	in.	mm.
JULY.						AUGUST.				
0	54.7	285.6	4.18	3.35	85	54.6	285.6	3.69	4.18	106
1	56.4	286.6	5.09	2.87	73	55.8	286.2	4.70	3.15	80
6	57.1	286.9	5.73	3.46	88	56.6	286.7	4.99	4.41	112
2	58.6	287.8	5.87	2.52	64	58.2	287.6	5.27	2.60	66
3	60.5	288.8	6.58	2.32	59	60.1	288.6	6.05	2.20	56
4	59.8	288.4	5.86	2.44	62	59.0	288.0	5.43	2.56	65
5	61.1	289.2	6.96	2.17	55	60.9	289.1	6.48	2.32	59
7	58.7	287.8	5.90	3.03	77	58.3	287.6	5.19	3.62	92
8	59.7	288.4	6.39	2.95	75	59.4	288.2	6.04	3.31	84
9	57.2	287.0	4.67	3.15	80	57.0	286.9	4.29	3.86	98
10	58.9	287.9	5.22	3.11	79	58.5	287.7	4.97	3.86	98
11	61.0	289.1	7.70	2.24	57	61.6	289.4	7.55	2.56	65
SEPTEMBER.						OCTOBER.				
0	51.8	284.0	3.49	3.78	96	46.4	281.0	2.50	5.00	127
1	52.3	284.3	4.06	2.24	57	46.5	281.1	2.80	3.27	83
6	53.5	284.9	4.24	3.66	93	47.9	281.8	2.68	4.69	119
2	54.5	285.5	4.61	1.73	44	48.6	282.2	3.03	2.95	75
3	56.2	286.4	5.15	1.89	48	49.6	282.8	3.33	2.64	67
4	55.1	285.8	4.51	1.93	49	48.3	282.1	2.88	2.91	74
5	57.3	287.1	5.43	2.13	54	50.8	283.4	3.44	3.46	88
7	55.1	285.8	4.46	2.76	70	49.2	282.6	2.85	3.82	97
8	56.3	286.5	4.96	2.80	71	50.6	283.3	3.27	4.57	116
9	54.1	285.3	3.85	2.95	75	48.6	282.2	2.87	3.70	94
10	55.5	286.1	4.45	2.80	71	49.8	282.9	3.27	3.94	100
11	59.3	288.2	6.11	2.40	61	54.0	285.2	3.97	4.14	105
NOVEMBER						DECEMBER.				
0	41.8	278.4	1.22	5.63	143	39.1	276.9	0.61	6.18	157
1	41.1	278.1	1.73	3.11	79	37.9	276.3	1.04	3.11	79
6	43.2	279.2	1.59	5.16	131	40.6	277.8	0.96	5.63	143
2	43.1	279.2	1.87	2.32	59	39.5	277.2	1.20	2.28	58
3	43.5	279.4	2.12	2.32	59	39.5	277.2	1.33	2.28	58
4	42.7	278.9	1.79	2.52	64	39.2	277.0	1.16	2.76	70
5	44.9	280.2	2.15	3.07	78	41.3	278.2	1.44	3.11	79
7	44.0	279.7	1.73	3.66	93	40.8	277.9	1.04	3.74	95
8	45.6	280.6	2.14	4.22	107	42.8	279.0	1.42	5.00	127
9	44.0	279.7	1.95	3.86	98	41.4	278.2	1.20	4.06	103
10	45.3	280.4	2.21	4.02	102	43.1	279.2	1.47	4.69	119
11	49.3	282.6	2.43	3.98	101	46.3	280.9	1.76	4.29	109

TABLE 7.—Mean Temperature, Daily Sunshine, and aggregate Rainfall for twelve districts for the quarters and the two half-years.

Dist.	Temperature.					Sun-shine.					Rainfall.				
	°F.	a.	hrs.	in.	mm.	°F.	a.	hrs.	in.	mm.	°F.	a.	hrs.	in.	mm.
1ST QUARTER.															
0	38.5	276.6	1.96	14.80	375	47.7	281.7	5.04	8.66	220	47.7	281.7	5.04	8.66	220
1	37.9	276.3	2.48	7.28	185	48.6	282.2	5.60	6.26	159	48.6	282.2	5.60	6.26	159
6	39.9	277.4	2.27	12.17	309	50.0	283.0	5.91	8.50	216	50.0	283.0	5.91	8.50	216
2	39.4	277.1	2.63	5.12	130	49.8	282.9	5.87	5.43	138	49.8	282.9	5.87	5.43	138
3	39.4	277.1	2.76	5.04	128	51.3	283.7	6.41	5.35	136	51.3	283.7	6.41	5.35	136
4	39.4	277.1	2.44	5.87	149	51.3	283.7	5.73	5.95	151	51.3	283.7	5.73	5.95	151
5	40.6	277.8	2.76	6.38	162	52.5	284.4	6.51	5.35	136	52.5	284.4	6.51	5.35	136
7	40.3	277.6	2.42	8.15	207	50.7	283.4	6.05	6.73	171	50.7	283.4	6.05	6.73	171
8	41.5	278.3	2.78	9.65	245	51.8	284.0	6.44	6.93	176	51.8	284.0	6.44	6.93	176
9	41.2	278.1	2.36	9.29	236	50.4	283.2	5.45	7.56	192	50.4	283.2	5.45	7.56	192
10	42.6	278.9	2.70	10.36	263	51.8	284.0	5.91	7.68	195	51.8	284.0	5.91	7.68	195
11	44.6	280.0	3.35	8.11	206	53.1	284.7	7.40	5.55	141	53.1	284.7	7.40	5.55	141
3RD QUARTER.															
0	53.8	285.1	3.79	11.50	292	42.4	278.8	1.46	16.85	428	42.4	278.8	1.46	16.85	428
1	54.9	285.7	4.60	8.19	208	41.7	278.4	1.89	9.41	239	41.7	278.4	1.89	9.41	239
6	55.8	286.2	4.96	11.46	291	43.9	279.6	1.77	15.32	389	43.9	279.6	1.77	15.32	389
2	57.2	287.0	5.24	6.73	171	43.7	279.5	2.07	7.52	191	43.7	279.5	2.07	7.52	191
3	59.0	288.0	5.93	6.34	161	44.2	279.8	2.29	7.21	183	44.2	279.8	2.29	7.21	183
4	58.1	287.5	5.25	6.85	174	43.3	279.3	1.98	8.11	206	43.3	279.3	1.98	8.11	206
5	59.9	288.5	6.21	6.54	166	45.7	280.6	2.35	9.61	244	45.7	280.6	2.35	9.61	244
7	57.4	287.1	5.19	9.29	236	44.6	280.0	1.90	11.11	282	44.6	280.0	1.90	11.11	282
8	58.5	287.7	5.80	9.02	229	46.2	280.9	2.32	13.74	349	46.2	280.9	2.32	13.74	349
9	56.1	286.4	4.27	9.84	250	44.6	280.0	2.02	11.54	293	44.6	280.0	2.02	11.54	293
10	57.6	287.2	4.88	9.65	245	45.9	280.7	2.33	12.59	320	45.9	280.7	2.33	12.59	320
11	60.6	288.9	7.11	7.09	180	49.8	282.9	2.78	12.32	313	49.8	282.9	2.78	12.32	313
HALF YEAR.															
APRIL TO SEPTEMBER.								OCTOBER TO MARCH.							
0	50.8	283.4	4.42	20.16	512	40.5	277.7	1.71	31.65	803	40.5	277.7	1.71	31.65	803
1	51.8	284.0	5.10	14.45	367	39.8	277.3	2.19	16.69	424	39.8	277.3	2.19	16.69	424
6	52.9	284.6	5.44	19.96	507	41.9	278.5	2.02	27.49	698	41.9	278.5	2.02	27.49	698
2	53.5	284.9	5.56	12.16	309	41.6	278.3	2.35	12.64	321	41.6	278.3	2.35	12.64	321
3	55.2	285.9	6.17	11.69	297	41.8	278.4	2.53	12.25	311	41.8	278.4	2.53	12.25	311
4	54.7	285.6	5.49	12.80	325	41.4	278.2	2.21	13.98	355	41.4	278.2	2.21	13.98	355
5	56.2	286.4	6.36	11.89	302	43.2	279.2	2.56	15.99	406	43.2	279.2	2.56	15.99	406
7	54.2	285.3	5.62	16.02	407	42.5	278.8	2.16	19.26	489	42.5	278.8	2.16	19.26	489
8	55.2	285.9	6.12	15.95	405	43.9	279.6	2.55	23.39	594	43.9	279.6	2.55	23.39	594
9	53.3	284.8	4.86	17.40	442	42.9	279.1	2.19	20.83	529	42.9	279.1	2.19	20.83	529
10	54.7	285.6	5.40	17.33	440	44.3	279.8	2.52	22.95	583	44.3	279.8	2.52	22.95	583
11	56.8	286.8	7.26	12.64	320	47.2	281.4	3.07	20.43	519	47.2	281.4	3.07	20.43	519

TABLE 8.—Mean Temperature, Daily Sunshine, and aggregate Rainfall for twelve districts for the seasons and the year.

Dist.	Temperature.					Sun-shine.					Rainfall.				
	°F.	a.	hrs.	in.	mm.	°F.	a.	hrs.	in.	mm.	°F.	a.	hrs.	in.	mm.
SPRING.															
0	43.4	279.1	4.32	10.44	265	53.9	285.2	4.35	10.25	260	53.9	285.2	4.35	10.25	260
1	43.5	279.4	4.74	6.57	167	55.3	285.9	5.27	8.15	207	55.3	285.9	5.27	8.15	207
6	45.0	280.2	4.94	9.25	235	56.2	286.4	5.68	10.74	273	56.2	286.4	5.68	10.74	273
2	44.8	280.1	5.06	5.32	135	57.3	287.1	5.78	7.13	181	57.3	287.1	5.78	7.13	181
3	46.0	280.8	5.36	5.00	127	59.2	288.1	6.50	6.53	166	59.2	288.1	6.50	6.53	166
4	45.8	280.7	4.75	5.71	145	58.5	287.7	5.83	7.20	183	58.5	287.7	5.83	7.20	183
5	47.0	281.3	5.50	5.51	140	59.9	288.5	6.88	6.38	162	59.9	288.5	6.88	6.38	162
7	45.7	280.6	5.01	6.89	175	57.7	287.3	5.87	9.05	230	57.7	287.3	5.87	9.05	230
8	46.9	281.3	5.36	7.59	193	58.6	287.8	6.41	8.62	219	58.6	287.8	6.41	8.62	219
9	45.8	280.7	4.71	7.83	199	56.4	286.6	4.83	9.73	247	56.4	286.6	4.83	9.73	247
10	47.3	281.5	5.26	8.31	211	58.0	287.4	5.39	9.61	244	58.0	287.4	5.39	9.61	244
11	49.0	282.4	6.29	6.34	161	60.1	288.6	7.72	6.57	167	60.1	288.6	7.72	6.57	167
AUTUMN.															
0	46.6	281.1	2.40	14.41	366	38.6	276.7	1.11	16.54	420	38.6	276.7	1.11	16.54	420
1	46.6	281.1	2.86	8.62	219	37.5	276.1	1.63	7.92	201	37.5	276.1	1.63	7.92	201
6	48.2	282.0	2.83	13.51	343	39.8	277.3	1.41	14.14	359	39.8	277.3	1.41	14.14	359
2	48.7	282.3	3.17	7.00	178	38.8	276.8	1.71	5.55	141	38.8	276.8	1.71	5.55	141
3	49.8	282.9	3.53	6.85	174	38.7	276.7	1.90	5.63	143	38.7	276.7	1.90	5.63	143
4	48.7	282.3	3.06	7.26	184	38.6	276.7	1.64	6.74	174	38.6	276.7	1.64	6.74	174
5	51.0	283.6	3.67	8.66	220	40.2	277.6	1.92	7.36	187	40.2	277.6	1.92	7.36	187
7	49.4	282.7	3.01	10.24	260	40.0	277.4	1.67	9.29	236	40.0	277.4	1.67	9.29	236
8	50.8	283.4	3.46	11.59	294	41.6	278.3	1.91	11.61	295	41.6	278.3	1.91	11.61	295
9	48.9	282.4	2.89	10.51	267	40.9	277.9	1.61	10.40	264	40.9	277.9	1.61	10.40	264
10	50.2	283.1	3.31	10.76	273	42.5	278.8	1.89	11.90	302	42.5	278.8	1.89	11.90	302
11	54.2	285.3	4.17	10.52	267	44.9	280.2	2.31	9.92	252	44.9	280.2	2.31	9.92	252
WINTER.															
YEAR.															
0	45.6	280.6	3.05	51.64	1312	45.6	280.6	3.05	51.64	1312	45.6	280.6	3.05	51.64	1312
1	45.7	280.6	3.63	31.26	794	45.7	280.6	3.63	31.26	794	45.7	280.6	3.63	31.26	794
6	47.3	281.5	3.67	47.64	1210	47.3	281.5	3.67	47.64	1210	47.3	281.5	3.67	47.64	1210
2	47.3	281.6	3.93	25.00	635	47.3	281.6	3.93	25.00	635	47.3	281.6	3.93	25.00	635
3	48.4	282.1	4.32	24.01	610	48.4	282.1	4.32	24.01	610	48.4	282.1	4.32	24.01	610
4	47.9	281.8	3.82	26.91	684	47.9	281.8	3.82	26.91	684	47.9	281.8	3.82	26.91	684
5	49.5	282.8	4.49	27.91	709	49.5	282.8	4.49	27.91	709	49.5	282.8	4.49	27.91	709
7	48.2	282.0	3.89	35.47	901	48.2	282.0	3.89	35.47	901	48.2	282.0	3.89	35.47	901
8	49.5	282.7	4.28	39.41	1001	49.5	282.7	4.28	39.41	1001	49.5	282.7	4.28	39.41	1001
9	48.0	281.9	3.51	38.47	977	48.0	281.9	3.51	38.47	977	48.0	281.9	3.51	38.47	977
10	49.5	282.7	3.96	40.58	1031	49.5	282.7	3.96	40.58	1031	49.5	282.7	3.96	40.58	1031
11	52.0	284.1	5.12	33.35	848	52.0	284.1	5.12	33.35	848	52.0	284.1	5.12	33.35	848

Seasonal District Values.

The seasons according to the "farmer's year" are:—1. Autumn: September, October, November, the season of clearing and preparing. 2. Winter: December, January and February, the time for tilling. 3. Spring: March, April, May, the time for sowing and the season of early growth. 4. Summer: June, July, August, the season for maturing and harvesting.*

The normal values for these seasons are set out on page 117. These figures differ slightly from those published in the Meteorological Office Calendar. The former have been computed directly from the monthly values given in this table and the latter from the weekly values from which the monthly values are computed. The figures for the year are affected in the same manner.

* A paper by E. H. Chapman, "The Annual Symmetrical variation of certain elements and a note on choice of seasons" (London: Q. J. Roy. Met. Soc., 45, 1919, pp. 43-57) may be consulted.

2. Reports of Investigations in Meteorology and Geophysics.

(M) Geophysical Memoirs. (4to):—

VOL. I. :—

- No. 2. The Free Atmosphere in the Region of the British Isles. Second Report by W. H. Dines, F.R.S., with a Preface by W. N. Shaw, Sc.D., F.R.S., Director. (No. 210b. 1912.) 1s. Postage 3d.
- No. 5. The International Kite and Balloon Assents, by Ernest Gold, M.A., Superintendent of Statistics. (No. 210e. 1913.) 1s. 6d. Postage 5d.
- No. 6. The Free Atmosphere in the Region of the British Isles. Third Report by W. H. Dines, F.R.S. (210f. 1914.) 3d. Postage 2d.

VOL. II. :—

- No. 11. The South Wales Tornado of October 27, 1913. (No. 220a. 1915.) 6d. Postage 2d.
- No. 12. The Travel of Circular Depressions. By Sir Napier Shaw, F.R.S., Director. (No. 220b. 1917.) 9d. Postage 3d.
- No. 13. The Characteristics of the Free Atmosphere. By W. H. Dines, F.R.S. (No. 220c. 1919.) 2s. Postage 2d.
- No. 14. Soundings with Pilot Balloons in the Isles of Scilly, November and December, 1911. By Captain C. J. P. Cave and J. S. Dines, M.A. (No. 220d.) [In the Press.]
- No. 15. The Climate and Weather of the Falkland Islands and South Georgia. By C. E. P. Brooks, M.Sc. (No. 220e.) [In the Press.]
- No. 16. Aids to Forecasting: Types of Pressure Distribution, with Notes and Tables for the Fourteen Years 1905-18. By E. Gold, F.R.S. (No. 220f.) [In the Press.]

(M) Professional Notes (8vo):—

- No. 1. On the Inter-relation of Wind Direction and Cloud Amount at Richmond (Kew Observatory). By Lt. David Brunt, R.E. (No. 232a. 1918.) 3d. Postage 1d.
- No. 2. Notes on Examples of Katabatic Wind in the Valley of the Upper Thames at the Aerological Observatory of the Meteorological Office at Benson, Oxon. By E. V. Newnham, B.Sc. (No. 232b. 1918.) 3d. Postage 1d.
- No. 3. Incidence of Fog in London, January 31st, 1918. By C. E. P. Brooks, M.Sc. (No. 232c. 1918.) 3d. Postage 1d.
- No. 4. Upper Air Temperatures at Martlesham Heath, February 1917 to January 1918. By W. F. Stacey, Lieutenant, King's Own Royal Lancaster Regiment. (No. 232d. 1919.) Postage 1d.
- No. 5. On the Use of the Normal Curve of Errors in Classifying Observations in Meteorology. By Captain E. H. Chapman, R.E. (No. 232e. 1919.) 6d. Postage 1d.
- No. 6. The Variation of Wind Velocity with Height. By Captain E. H. Chapman, R.E. (No. 232f. 1919.) 1s. Postage 2d.
- No. 7. The Climate of North-West Russia. (No. 232g. 1919.) 1s. 6d. Postage 2d.

(M) Professional Notes (8vo) :—cont.

- No. 8. Temperatures and Humidities in the Upper Air: Conditions favourable for Thunderstorm Development, and Temperatures over Land and Sea. By Captain C. K. M. Douglas, R.A.F. (No. 332h.) [*In the Press.*]
No. 9. An Analysis of Cloud Distribution at Aberdeen during the Years 1916-18. By G. A. Clarke. (No. 232i.) 4d. Postage 1d.

3. The Public Record of the Weather of the British Isles. (4to)

- (M) Daily Weather Report (4to)** 1. British Section. 2. International Section. 3. Upper Air Supplement. Subscription 10s. per official quarter for two or three parts, 5s. per official quarter for one part. Single copies of any of the reports can be obtained from the Meteorological Office, price 1d. each.

BRITISH METEOROLOGICAL AND MAGNETIC YEAR BOOK (4to)
Part I.—*Weekly Weather Report*. 6d. per week. With Appendices priced separately.

Part II.—*Monthly Weather Report, with an Annual Summary*: Summaries of observations from about 300 Stations in the British Isles, and charts. 6d. each part.

Subscriptions for Parts I. and II., inclusive, including postage, 30s. per annum.

- (M) Part III. (in C.G.S. units).—(1) Daily Readings** at 8 stations of the First and Second Orders, 6d. per issue of a month. Annual Volumes, from 1913. 5s.

(2) *Geophysical Journal*: Daily values of meteorological and magnetical data for Cahirciveen (Valencia), Richmond (Kew Observatory) and Eskdalemuir; Electrical data for Richmond and Eskdalemuir; Seismological data for Eskdalemuir; wind components for Holyhead, Scilly, Orkney, and Yarmouth; and the results of observations in the upper air. Commencing 1911. 4d. per issue of a month up to July 1912. 1s. afterwards. Annual Volume for 1911, 5s.; from 1912, 10s.

- (M) Part IV.—Hourly Values from Autographic Records:—**Hourly Readings of Terrestrial Magnetism at Eskdale Observatory; Summaries of the Results obtained in Terrestrial Magnetism, Meteorology, and Atmospheric Electricity at the Meteorological Office Observatories. Commencing 1911. Annual Issue, 1911, 5s.; 1912, 3s.; 1913-4, 5s.; 1915, 7s. 6d.

- (M) Part V.—Réseau Mondial.** Monthly and Annual Summaries of Pressure, Temperature and Precipitation at Land Stations, generally two for each ten-degree square of Latitude and Longitude. Commencing 1911. 1911, Charts, 3s. 6d.; Tables, 7s. 6d. 1912, 1913 (without Charts), 7s. 6d.

AVERAGES :—

- (M) The Book of Normals of Meteorological Elements for the British Isles for periods ending 1915. (No. 236.)**

Section I. Monthly Normals for Stations of Temperature, Rainfall and Sunshine. 2s. Postage 2d.

Section II. Weekly, Monthly, Quarterly and Seasonal Normals for Districts. 9d. Postage 1d.

Publications marked ¶ are on sale by the publishers named in the titles; those marked (M) are on sale only at the Meteorological Office. The remaining publications are on sale through any bookseller, or direct from H.M. Stationery Office in London, Cardiff, Manchester, and Edinburgh, or from E. Ponsonby, Ltd., Dublin.

* * A complete list of publications of the Meteorological Office will be supplied on application to the Director, Meteorological Office, South Kensington, London, S.W.7.