

M.O. 377

AIR MINISTRY

METEOROLOGICAL OFFICE

AVERAGES OF BRIGHT SUNSHINE

for

THE BRITISH ISLES

For periods ending 1930

*Published by the Authority of the
Meteorological Committee*

Crown Copyright Reserved



LONDON

PUBLISHED BY HIS MAJESTY'S STATIONERY OFFICE

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

1934

Price 1s. 6d. Net.

MET/2/1/3/159

COPY FOR OFFICIAL USE

ABRIDGED LIST OF PUBLICATIONS PUBLISHED BY THE AUTHORITY OF THE METEOROLOGICAL COMMITTEE

A complete list will be forwarded on application to the Director, Meteorological Office, Air Ministry, London, W.C.2.

Publications may be ordered (unless otherwise indicated) directly from the Sale Offices of His Majesty's Stationery Office at the addresses shown on the title page, or through any bookseller.

1. HANDBOOKS, TEXT-BOOKS, TABLES

Barometer Manual for the use of Seamen. A text-book of Marine Meteorology. (No. 61. 11th edition, 1932.) (8vo.) 2s. 6d. Postage 3d.

Computer's Handbook. Issued in Sections. (No. 223.) (8vo.):—

Introduction. C.G.S. Units of Measurement in Meteorology, with their abbreviations and their equivalents. 1921. 3s. 6d. Postage 1d.

Section II. Subsection I. The Computation of Wind Components from Observations of Pilot Balloons and Shell Bursts. 1920. 2s. Postage 1d.

Section V. Subsection 3. A collection of Correlation Co-efficients from Meteorological Papers and a Note on the Partial Correlation Co-efficient. 1919. 4s. Postage 2d.

(The remaining sections are out of print.)

Decode for use with the International Code for Wireless Weather Messages from Ships, adopted by the International Meteorological Conference, Copenhagen, September, 1929. (No. 329. 2nd edition. Revised to February, 1933.) (8vo.) 3d. Postage ½d.

Dines Balloon Meteorograph and the method of using it. By L. H. G. Dines, M.A. (No. 321. 1929.) (8vo.) 2s. Postage 2d.

Examples of Weather Maps showing Typical Distributions of Pressure. (Reproduced from the *Weather Map, q.v.*) (No. 337. 2nd edition, 1932.) (8vo.) 3d. Postage ½d.

Fishery Barograph. A note on the use of the barograph in anticipating gales and instructions for the care and maintenance of barographs lent to fishing communities. (No. 333. 1931.) (8vo.) 2d. Postage ½d.

Gazetteer of British Meteorological Stations used in the preparation of Synoptic Reports. (No. 319. 1931.) (8vo.) 8s. Postage 5d.
Overseas Supplement. (No. 319/1. 1933.) 2s. Postage 1d.

Hygrometric Tables for the Computation of Relative Humidity, Vapour Pressure and Dew Point from Readings of Dry and Wet Bulb Thermometers exposed in Stevenson Screens. (No. 265. 3rd edition, 1931.) (8vo.) 1s. Postage 1d.

International Codex of Resolutions adopted at Congresses, Conferences, and at Meetings of the Permanent International Meteorological Committee. 1872-1907. (No. 200. 1909.) (8vo.) 1s. 3d. Postage 2d.

Marine Observer's Handbook. (8vo.) With separate Cloud Plate (11 in. x 15 in.) (No. 218. 5th edition, 1930.) 2s. 6d. Postage 4d.

M.O. 377

AIR MINISTRY

METEOROLOGICAL OFFICE

AVERAGES OF BRIGHT SUNSHINE

for

THE BRITISH ISLES

For periods ending 1930

*Published by the Authority of the
Meteorological Committee*

Crown Copyright Reserved



LONDON

PUBLISHED BY HIS MAJESTY'S STATIONERY OFFICE

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

1934

Price 1s. 0d. Net.

AVERAGES OF BRIGHT SUNSHINE FOR THE BRITISH ISLES

CONTENTS

	Page
Introduction	5
Table I. Monthly and annual averages of total sunshine, daily mean sunshine and per- centage of possible duration, at stations in the British Isles	13
Table II. Monthly and annual average number of days, also percentage number of days, with sunshine between stated limits, at 18 selected stations in the British Isles.	35
Appendix. Daily Mean duration of possible sunshine in latitudes 50°N. to 60°N.	40
Alphabetical index of stations..	41

AVERAGES OF BRIGHT SUNSHINE FOR THE BRITISH ISLES

INTRODUCTION

Summary of contents. - This publication contains, in Table I, station averages for each calendar month and for the year, of the total duration of bright sunshine, the mean daily duration and the "percentage of possible". For the purpose of calculating the latter quantity the theoretically possible duration is regarded as equivalent to the mean interval between sunrise and sunset, allowance being made for refraction. The mean value of the daily duration of possible sunshine for each month and the year in latitude 50°N. to 60°N. at intervals of 2° is given in the Appendix.

In Table I averages are given for all stations having ten or more complete years of observations in the period of 30 years ended 1930. The longest period of years dealt with in the table is therefore, thirty, no data prior to the year 1901 being included. The period of years to which the averages relate is printed for each station at the head of the table. In each case the average printed is the direct arithmetical mean of the observations available, no attempt having been made to adjust or "weight" averages for shorter periods to the standard period of 30 years.

Table II contains, for certain stations, the average and percentage number of days in each month when the recorded sunshine was (a) nil (b) 0.1 to 3.0 hours, (c) 3.1 to 6.0 hours, (d) 6.1 to 9.0 hours, (e) more than 9.0 hours.

The Observations. - At all stations the instrument is of the Campbell-Stokes pattern in which the duration of sunshine is recorded in the form of a scorched or burnt line traced on a graduated card by means of a spherical lens acting as a burning glass. Details of the instrument will be found in "The Meteorological Observer's Handbook" (M.O.191). The height in feet above sea level of the site to which the observations refer

is given as the sum of two figures, thus, $\frac{a}{b} + \frac{a}{b}$, $\frac{a}{b}$ representing the height of the ground above M.S.L. and $\frac{a}{b}$ the height of the instrument above the ground. Where a change of site has occurred, the height printed refers to the site in use in 1930.

At certain stations obstacles project above the horizon in the path of the sun and consequently prevent the registration of sunshine at certain periods. In some cases obstacles only affect the records in certain months, in other cases the record is curtailed at all times of the year. Following the practice introduced in the Monthly Weather Report in 1926 a letter S is used to indicate the months in which registration is prevented for more than 5 per cent. of the time during which the sun's angular altitude above the horizon is 3 degrees or more. No correction on account of such obstacles has been applied to the averages. In this connexion it must be remembered that the average recorded duration of sunshine within an hour of sunrise or sunset is in all cases small owing to the effects of cloud, haze and atmospheric absorption, even when the horizon is unobstructed.

At a large majority of the stations the spherical lens has been tested and certified in the Meteorological Office. In certain cases where a laboratory test showed that the sphere was optically defective, a comparison with a standard recorder was carried out and the percentage loss of record due to the use of the defective sphere was thus ascertained. In such cases corrections were applied to past records in order to obtain corrected averages comparable with the records subsequently obtained from certified spheres. Records from the old-established stations at Strelley and Worksop (Hodsock Priory) which are now known to have been seriously vitiated by the use of spheres of incorrect focal length, and which could not be satisfactorily corrected, have not been included in this publication.

At Kirkwall (Orkney), the record began in 1927 but it was possible to compute a 30 years average by utilising the Deerness records corrected by the application of monthly factors derived from a comparison extending over a period of 5 years.

The data are described as referring to "bright" sunshine, because it is known that the Campbell-Stokes recorder fails to record sunshine below a certain limit of intensity. On a clear day with a cloudless sky the record does not usually begin until about half-an-hour after sunrise and it usually terminates half-an-hour or more before sunset. The loss of record near sunrise and sunset is mainly due to the reduction of intensity of the transmitted sunlight by atmospheric absorption and scattering, but is partly due to an instrumental factor which does not come into play when the sun has reached a higher altitude, namely, the reduction of the effective optical aperture of the sphere by the projecting horns of the frame which holds the cards. The loss from this cause has been shown, however, to be small.*

On the other hand it is certain that during periods of bright intermittent sunshine the recorded duration exceeds the real duration, owing to the "spread of the burn". Theoretically, the diameter of the sun's image formed by the sphere is about 0.7 mm., but the breadth of the burnt spot formed on the card by a few seconds exposure to bright sunshine is about 2 mm. Consequently the record obtained when the passage of clouds renders the sunshine intermittent may be indistinguishable from a record obtained in uninterrupted sunshine. Observers are instructed to make allowance for the spread of the burn when measuring the traces,† and approximate uniformity of practice in this and other respects is ensured by systematically checking the observer's estimates, but some exaggeration of the recorded duration, except during periods of uninterrupted, or very weak sunshine, cannot be avoided.

General Remarks on the New Tables. - As compared with previous tables of sunshine averages published by the Meteorological Office, a list of which will be found at the end of this Introduction, the tables now presented reflect two changes of policy. These are (a) the limitation of the period to a maximum of 30 years,

*London Meteor. Office, Prof. Notes No.45. Addendum pp. 10-11.

†See Meteorological Observer's Handbook (ed.1934)p.100.

(b) the publication of averages for varying periods with no attempt to weight or adjust averages for shorter periods.

These changes are consonant with the policy adopted in "Averages of Temperature for the British Isles" (M.O. 364) and the reasons for making them are explained at length in the Introduction to that publication. It may be remarked that the considerations which make it desirable to limit the period for the computation of working averages to a maximum of 30 years apply with special force in the case of sunshine. In the first place the number of stations from which we have homogeneous records of sunshine extending back beyond the year 1901 is small and we know now that at certain of those stations the records have been affected by the use of a defective sphere. In the second place there is good reason to believe that a secular change is occurring in the incidence of sunshine in certain areas. A striking example is furnished by Westminster, where the annual duration of sunshine increased by 20 per cent between the lustrum 1896-1900 and the lustrum 1911-1915. In this case the magnitude of the change is probably exceptional, but it cannot be doubted that an examination of other records would show progressive changes due to such causes as the expansion of towns into what were formerly rural areas, the erection of new factories, the substitution of gas and electricity for coal in domestic cooking appliances and the abatement of smoke pollution from industrial sources, some tending to decrease and some to increase the amount of sunshine recorded in particular areas. The effects of these human activities form an interesting study but their existence makes it inadvisable to make use of a very long period in computing sunshine averages for present day use.

Averages for varying periods. - Perhaps the most important change of policy adopted in these tables is the abandonment of the former system whereby averages for shorter periods were corrected to the standard period by comparing the records for the short period with those at a neighbouring station for which averages for the standard period were available. The system is based on the assumption that the ratio of the sunshine

at a station A to that at a neighbouring station B is constant. It is evident that the method must fail when one of the stations is subject to a secular change and experience shows that even when there is no such obvious source of error, the weighted averages are subject to considerable uncertainty. It has been found, for example, that if the weighted averages for a station A are determined by comparison with a reference station B and then with another reference station C the two sets of results may differ by substantial amounts.

It has been decided, therefore, to print the actual averages derived from the observations for the years available by simple summing and meaning. For the purpose of affording the reader some idea of the variation in the average due to variation in the number of years employed, a table (Table A) is given which shows, in the case of one station, Eastbourne, (a) the monthly and annual average daily duration for the 30 years 1901 to 1930, and (b) the difference in the average resulting from the use of periods of from 10 to 29 years (all terminating in the year 1930). It will be observed that although differences of the order of 0.5 hour occur occasionally in the monthly averages for 14 years or less, the differences are in general small even for a period of only 10 years. Ignoring the signs, the average value in the monthly differences for 10 years is .15 hour, for 15 years .15 hour, for 20 years .09 hour and for 25 years .07 hour. Only about 15 per cent. of the entries in the table lie outside the range $\pm .20$ to $-.20$ hour.

Table B gives for another station, York, the differences from the 30-year average 1901-1930 which arise when the period used is the 10-years 1921-1930, the 20 years 1911-1930 and the 50 years 1881-1930. It will be observed that the differences between the 30 year average and the 50 year average are, in some months, relatively substantial. This result serves to emphasize the fact that a period of 30 years or even 50 years is insufficient to determine the true "normal" daily sunshine in any month to two places of decimals. From a consideration of the fluctuations from year to year it can be shown, in fact, that the probable error of a "normal" based on 50 years observations is, for a summer

TABLE A: EASTBOURNE: AVERAGE DAILY SUNSHINE

	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	YEAR
1901-30	hr. 2-01	hr. 3-03	hr. 4-34	hr. 6-04	hr. 7-85	hr. 7-84	hr. 7-66	hr. 7-07	hr. 5-91	hr. 3-83	hr. 2-66	hr. 1-67	hr. 5-00
Differences from 30-year average													
1902-30	-01	+01	+06	-04	-05	-07	-06	-03	+03	+04	-02	-02	-01
1903-30	-01	+01	+06	-05	+01	-04	-07	00	00	+07	00	-01	00
1904-30	00	+03	+07	-03	00	-01	-07	+03	+02	+11	-02	+03	+02
1905-30	+03	+06	+10	-01	+10	-02	-15	-01	00	+13	-02	+04	+02
1906-30	-01	+07	+10	+08	+07	+04	-20	+02	+05	+14	+01	+05	+04
1907-30	-04	+06	+10	00	+12	-01	-26	-03	+04	+11	+05	+03	+02
1908-30	-05	+06	-01	-03	+21	+06	-29	-02	+01	+16	+07	+02	+01
1909-30	-10	+06	-02	-04	+27	-01	-30	-05	00	+13	+04	+04	00
1910-30	-12	-01	+06	-14	+12	+09	-23	-09	+04	+17	-05	+04	-01
1911-30	-15	-01	-02	-10	+15	+09	-13	-05	+04	+21	-07	+04	00
1912-30	-17	-01	00	-11	+11	+06	-39	-18	-11	+21	-05	+05	-05
1913-30	-12	+03	+02	-25	+13	+10	-34	-05	-04	+15	+02	+07	-02
1914-30	-09	+03	+07	-18	+14	+11	-21	+01	-01	+17	+03	+06	+01
1915-30	-07	-02	+12	-35	+15	+03	-16	-06	-12	+22	00	+09	-01
1916-30	-05	-05	+20	-35	+16	+08	-20	-01	-15	+33	-08	+13	+01
1917-30	-03	-05	+33	-47	+19	+19	-12	-03	-06	+46	-08	+17	+04
1918-30	-01	-02	+45	-48	+25	+11	-09	+06	-07	+40	-05	+10	+06
1919-30	-05	-01	+41	-35	+19	+06	-12	+09	-10	+50	-06	+13	+06
1920-30	+01	+06	+54	-30	+08	+04	+14	-01	-14	+40	-01	+17	+08
1921-30	+02	-02	+52	-19	+07	00	+29	+06	+04	+26	-06	+22	+10

Computed by A.H. Hookham, Observer.

TABLE B: YORK: AVERAGE DAILY SUNSHINE

	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	YEAR
1901-30	hr. 1-00	hr. 1-79	hr. 2-97	hr. 4-48	hr. 5-05	hr. 5-87	hr. 5-27	hr. 4-81	hr. 4-23	hr. 2-82	hr. 1-65	hr. 0-83	hr. 3-40
Differences from 30-year average													
1911-30	-06	-12	-06	-12	+08	00	-17	-20	00	+12	-01	+03	-05
1921-30	-01	-10	+18	-01	+12	-08	+11	-05	-23	+42	+21	+15	+04
1881-30	-01	+12	+18	00	+34	-06	+15	-01	-12	-02	-16	-01	+03

month, about .10 hour or if 30 years are used, about .13 hour.

The new Averages. - The data now presented in Table I are, in virtue of the considerations set out in previous paragraphs, described not as "normals" but as averages for stated periods. Since the average is dependent to some extent on the period used, the values for different stations are not to be regarded as strictly comparable. It is the intention that fresh averages for the preceding 30 years should be computed and published at the end of each lustrum period, that is to say, at the end of the years 1935, 1940, 1945, etc.

The frequency data given in Table II have been extended to the year 1932 in order to include a period of 20 years for the majority of the selected stations.

Previous Publications containing Monthly Averages of Sunshine -

Sunshine in the British Isles 1881-1890 (Official No.98)

Appendices to the Weekly Weather Report, 1891, 1895, 1901, 1906, and 1913.

Book of Normals of Meteorological Elements for the British Isles, (M.O.236), Sec.I (1881-1915)

APPENDIX

Daily Mean Duration of Possible Sunshine in hours and decimals for each Month and the Year in Latitudes 50°N. to 60°N.

The duration of possible sunshine is defined as the interval between the ascending and descending transits of the centre of the sun's disc across the horizon, allowance being made for refraction. The values here given were computed from the basic data given in the International Meteorological Tables and are applicable without appreciable error to any year.

The corresponding values for intermediate latitudes can be obtained by interpolation between adjacent columns of the Table. Values for individual dates will be found in Form 3301.

Month	Latitude (North)					
	50°	52°	54°	56°	58°	60°
January	hr. 8.55	hr. 8.26	hr. 7.95	hr. 7.60	hr. 7.19	hr. 6.70
February	10.00	9.85	9.67	9.48	9.26	9.02
March	11.81	11.79	11.77	11.75	11.73	11.70
April	13.69	13.82	13.96	14.11	14.28	14.47
May	15.33	15.60	15.89	16.22	16.60	17.03
June	16.22	16.57	16.96	17.41	17.94	18.59
July	15.81	16.13	16.48	16.88	17.34	17.88
August	14.40	14.59	14.79	15.01	15.26	15.55
September	12.60	12.64	12.69	12.74	12.80	12.86
October	10.73	10.63	10.52	10.40	10.26	10.12
November	9.03	8.80	8.53	8.24	7.90	7.51
December	8.09	7.77	7.40	6.98	6.49	5.93
Year	12.20	12.22	12.23	12.25	12.27	12.30

AVERAGES OF BRIGHT SUNSHINE

TABLE I. MONTHLY TOTALS, DAILY MEANS AND PERCENTAGES OF POSSIBLE DURATION.

SCOTLAND, N.

Station County Latitude Longitude Above M.S.L. Years Used	BALTASOUND Shetland 60° 44' N. 0° 48' W. 31ft. + 5ft. 1907-1930			DEERNESS Orkney 58° 56' N. 2° 45' W. 160ft. + 8ft. 1901-1930			KIRKWALL Orkney 58° 59' N. 2° 57' W. 113ft. + 5ft. 1901-1930		
	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent
January	hr. 17	hr. .56	% 9	hr. 28	hr. .90	% 13	hr. 33	hr. 1.08	% 16
February	37	1.32	15	52	1.83	20	59	2.10	23
March	81	2.60	22	91	2.93	25	100	3.22	28
April	132	4.41	30	141	4.69	33	148	4.93	34
May	173	5.58	32	165	5.32	32	168	5.43	32
June	149	4.96	26	155	5.16	28	155	5.16	28
July	130	4.21	23	132	4.25	24	132	4.25	24
August	123	3.96	25	118	3.79	25	118	3.79	25
September	93	3.10	24	101	3.27	24	103	3.44	27
October	62	2.01	20	78	2.51	25	82	2.63	26
November	27	.89	12	39	1.29	17	42	1.42	18
December	11	.36	6	19	.63	10	22	.72	12
Year	1035	2.83	23	1119	3.06	25	1162	3.18	26
Station County Latitude Longitude Above M.S.L. Years Used	STORNOWAY Hebrides 58° 12' N. 6° 24' W. 79ft. + 12ft. 1901-1930			FORTROSE Ross and Cromarty 57° 35' N. 4° 8' W. 69ft. + 4ft. 1911-1930			INVERNESS Inverness 57° 26' N. 4° 13' W. 242ft. + 4ft. 1904-15; 1921-30		
	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent
January	hr. 27	hr. .87	% 12	hr. 43	hr. 1.39	% 19	hr. 47	hr. 1.50	% 20
February	54	1.90	21	69	2.46	26	74	2.61	28
March	105	3.39	29	114	3.68	31	114	3.67	31
April	157	5.23	37	149	4.97	35	139	4.65	33
May	181	5.85	35	172	5.55	34	158	5.09	31
June	168	5.59	31	184	6.13	34	168	5.60	31
July	148	4.78	28	161	5.20	30	146	4.71	27
August	131	4.23	28	134	4.31	28	125	4.05	27
September	114	3.80	30	117	3.88	30	116	3.86	30
October	79	2.55	25	98	3.15	31	91	2.94	29
November	45	1.51	19	56	1.87	23	53	1.78	22
December	22	.70	11	34	1.10	17	34	1.10	17
Year	1231	3.37	27	1331	3.64	30	1265	3.46	28

AVERAGES OF BRIGHT SUNSHINE
TABLE I. SCOTLAND, N. AND E.

Months	NAIRN Nairn 57° 36' N. 3° 52' W. 20ft. + 7ft. 1907-1930			GORDON CASTLE Moray 57° 37' N. 3° 5' W. 104ft. + 18ft. 1909-1930			BANFF Banff 57° 40' N. 2° 31' W. 130ft. + 4ft. 1915-1930			ABERDEEN Aberdeen 57° 10' N. 2° 6' W. 79ft. + 68ft. 1901-1930		
	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent
J.	43	1.40	19	42	1.35	19S	43	1.38	19S	44	1.43	19
F.	72	2.54	27	73	2.58	28S	71	2.52	27S	67	2.39	26
M.	113	3.65	31	111	3.57	31S	108	3.50	30S	107	3.47	30
A.	141	4.70	33	142	4.72	33S	140	4.65	33S	151	5.03	35
M.	166	5.35	32	172	5.55	34S	174	5.60	34	173	5.60	34
J.	169	5.63	32	173	5.78	32S	181	6.05	34	181	6.03	34
J.	144	4.66	27	149	4.81	28S	152	4.90	28	151	4.89	29
A.	126	4.08	27	129	4.17	27S	132	4.27	28S	139	4.47	30
S.	112	3.74	29	113	3.75	29S	118	3.93	31S	124	4.12	32
O.	97	3.13	30	98	3.17	31S	101	3.25	32S	96	3.09	30
N.	55	1.83	23	54	1.80	23S	59	1.97	25S	60	2.00	25
D.	36	1.15	17	35	1.14	17S	31	1.00	15S	37	1.18	18
Y.	1274	3.49	28	1291	3.54	29S	1310	3.59	29S	1330	3.64	30
Months	CARNOUSTIE Angus 56° 30' N. 2° 42' W. 39ft. + 36ft. 1912-1930			DUNDEE (Mayfield) Angus 56° 28' N. 2° 56' W. 147ft. + 70ft. 1916-1930			MONTROSE Angus 56° 42' N. 2° 28' W. 16ft. + 25ft. 1917-1930			PERTH Perth 56° 24' N. 3° 27' W. 76ft. + 11ft. 1914-1930		
	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent
J.	41	1.32	18S	49	1.58	21	47	1.51	20	39	1.26	17
F.	63	2.23	24S	69	2.42	26	67	2.39	25	60	2.11	22
M.	113	3.66	31	99	3.20	27	109	3.53	30	105	3.39	29S
A.	154	5.14	36	144	4.79	34	145	4.83	34	152	5.07	36
M.	178	5.75	35	164	5.30	33	167	5.40	33	170	5.49	34
J.	201	6.71	38	194	6.46	37	200	6.67	38	205	6.82	39
J.	171	5.53	33	166	5.35	31	167	5.38	32	171	5.53	33
A.	149	4.79	32	145	4.67	31	146	4.70	31	143	4.63	31
S.	131	4.37	34	120	3.99	31	132	4.39	34	128	4.26	34
O.	98	3.15	30	98	3.15	30	103	3.33	32	91	2.93	28S
N.	62	2.06	25S	69	2.31	28	69	2.31	28	59	1.96	24
D.	37	1.21	18S	46	1.49	22	46	1.48	22	36	1.16	17
Y.	1398	3.83	31	1363	3.73	30	1398	3.83	31	1359	3.72	30

For explanation of S see Introduction p.6

AVERAGES OF BRIGHT SUNSHINE

TABLE 1. SCOTLAND, E. AND W.

Months	LEUCHARS Fife 56° 23' N. 2° 53' W. 35ft. + 5ft. 1921-1930			ST. ANDREWS Fife 56° 20' N. 2° 47' W. 13ft. + 55ft. 1913-1930			EDINBURGH (Blackford Hill) Midlothian 55° 55' N. 3° 11' W. 44ft. + 5ft.* 1901-1930			MARCHMONT Berwick 55° 44' N. 2° 25' W. 498ft. + 4ft. 1901-1930		
	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent
J.	53	1.71	23	43	1.40	19	46	1.47	19	38	1.23	16S
F.	69	2.45	26	67	2.38	25	71	2.52	27	59	2.10	22S
M.	116	3.74	32	112	3.61	31	109	3.50	30	101	3.27	28S
A.	154	5.12	36	149	4.98	35	141	4.69	33S	143	4.75	34S
M.	177	5.72	35	169	5.45	33	164	5.29	33S	170	5.48	34S
J.	209	6.95	40	200	6.65	38	188	6.26	36S	193	6.44	37S
J.	168	5.43	32	169	5.45	32	165	5.33	32S	166	5.36	32S
A.	153	4.95	33	147	4.74	31	146	4.70	31S	145	4.66	31S
S.	136	4.52	36	132	4.41	35	129	4.30	34	125	4.17	33S
O.	110	3.55	34	98	3.16	30	100	3.21	31	81	2.61	25S
N.	76	2.53	31	65	2.18	27	65	2.16	26	54	1.80	22S
D.	47	1.53	22	40	1.30	19	43	1.37	20	34	1.11	16S
Y.	1468	4.02	33	1391	3.81	31	1367	3.74	31	1309	3.58	29S
Months	OBAN Argyll 56° 25' N. 5° 30' W. 229ft. + 6ft. 1906-1930			ROTHERSAY Bute 55° 50' N. 5° 4' W. 200ft. + 70ft. 1914-1930			CARDROSS (Kilmahew) Dumbarton 55° 58' N. 4° 38' W. 130ft. + 2ft. 1909-1930			HELENSBURGH Dumbarton 56° 0' N. 4° 45' W. 21ft. + 6ft. 1911-1930		
	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent
J.	30	1.06	14	33	1.05	14	31	1.00	13S	31	1.00	13S
F.	52	2.11	22	48	1.71	18	44	1.56	16S	46	1.64	17S
M.	101	3.70	32	105	3.37	29	97	3.13	27S	94	3.03	26S
A.	150	5.14	36	152	5.07	36	139	4.63	33S	137	4.57	32
M.	181	5.85	36	174	5.60	35	158	5.11	32S	165	5.33	33
J.	182	6.07	35	199	6.63	38	176	5.86	34S	181	6.03	35
J.	152	4.91	29	157	5.05	30	147	4.75	28S	152	4.89	29
A.	126	4.06	27	136	4.40	29	120	3.87	26S	124	3.99	27
S.	105	3.84	30	118	3.93	31	111	3.71	29S	105	3.50	28S
O.	73	2.75	26	80	2.57	25	76	2.44	23S	77	2.50	24S
N.	48	1.82	22	52	1.72	21	51	1.69	21S	50	1.67	20S
D.	27	.90	13	33	1.08	15	29	.93	13S	31	.99	14S
Y.	1227	3.51	29	1287	3.51	29	1179	3.22	26S	1193	3.26	27S

For explanation of S see Introduction p.6
*5ft. in summer; 30ft. in winter.

AVERAGES OF BRIGHT SUNSHINE

TABLE 1. SCOTLAND, W.

Months	STIRLING Stirling 56° 7'N. 3° 56'W. 151ft. + 9ft. 1918-1930			PAISLEY Renfrew 55° 51'N. 4° 28'W. 108ft. + 45ft. 1903-1930			RENFREW Renfrew 55° 52'N. 4° 24'W. 19ft. + 20ft. 1921-1930			THORNTONHALL Lanark 55° 46'N. 4° 15'W. 440ft. + 8ft. 1907-1930		
	Total	Daily Mean	Per Cent	Total	Daily Mean	Per Cent	Total	Daily Mean	Per Cent	Total	Daily Mean	Per Cent
	hr.	hr.	%	hr.	hr.	%	hr.	hr.	%	hr.	hr.	%
J.	31	·99	13S	31	1·00	13S	31	1·00	13	28	·91	12
F.	49	1·75	18S	51	1·80	19	40	1·43	15	50	1·76	19
M.	104	3·37	29	98	3·18	27	93	3·02	26	93	3·00	25S
A.	136	4·53	32S	142	4·72	33	137	4·54	32	132	4·41	31S
M.	152	4·89	30S	160	5·17	32	163	5·27	33	157	5·05	31S
J.	186	6·20	36S	181	6·02	35	183	6·11	35	171	5·70	33S
J.	146	4·72	28S	151	4·88	29	143	4·60	27	140	4·51	27S
A.	128	4·14	28S	137	4·43	30	128	4·14	28	127	4·10	27S
S.	125	4·15	33	117	3·90	31	118	3·92	31	111	3·69	29S
O.	89	2·99	28	78	2·52	24	82	2·63	25	76	2·46	24
N.	52	1·72	21S	45	1·51	18S	49	1·62	20	45	1·50	18
D.	29	·94	13S	27	·87	12S	31	·99	14	27	·87	12
Y.	1227	3·36	27S	1218	3·33	27	1198	3·27	27	1157	3·18	26
Months	KILMARNOCK (Agric. College) Ayr. 55° 36'N. 4° 29'W. 130ft. + 3ft. 1908-1930			TURNBERRY Ayr 55° 19'N. 4° 50'W. 30ft. + 5ft. 1910-1930			DUMFRIES Dumfries 55° 4'N. 3° 36'W. 140ft. + 6ft. 1910-1930			ESKDALEMUIR OBSERVATORY Dumfries 55° 19'N. 3° 12'W. 794ft. + 5ft. 1910-1930		
	Total	Daily Mean	Per Cent	Total	Daily Mean	Per Cent	Total	Daily Mean	Per Cent	Total	Daily Mean	Per Cent
	hr.	hr.	%	hr.	hr.	%	hr.	hr.	%	hr.	hr.	%
J.	31	1·00	13	36	1·15	15	39	1·27	16	33	1·05	14
F.	51	1·82	19	59	2·10	22	53	1·89	20	50	1·78	19
M.	100	3·24	27	117	3·77	32	105	3·40	29	99	3·18	27
A.	143	4·75	34	162	5·41	38	146	4·87	35	132	4·40	31
M.	177	5·73	36	194	6·25	39	179	5·78	36	160	5·17	32
J.	187	6·23	36	197	6·58	38	199	6·65	39	179	5·95	34
J.	157	5·05	30	175	5·68	34	161	5·19	31	146	4·72	28
A.	134	4·32	29	145	4·69	31	138	4·44	30	120	3·87	26
S.	120	3·99	31	127	4·22	33	125	4·15	33	111	3·72	29
O.	80	2·59	25	85	2·73	26	87	2·81	27	83	2·68	26
N.	47	1·55	19	51	1·71	21	57	1·89	23	59	1·95	23
D.	28	·90	13	30	·96	13	34	1·11	15	32	1·03	14
Y.	1255	3·43	28	1378	3·77	31	1323	3·62	30	1204	3·29	27

For explanation of S see Introduction p.6

AVERAGES OF BRIGHT SUNSHINE

TABLE I. SCOTLAND, W. AND ENGLAND, N.E.

Months	RUTHWELL Dumfries 55° 0'N. 3° 26'W. 67ft. + 5ft. 1910-1930			DOUGLAS Isle of Man 54° 10'N. 4° 28'W. 284ft. + 8ft. 1901-1930			COCKLE PARK (Worpeth) Northumberland 55° 13'N. 1° 41'W. 325ft. + 4ft. 1901-1930			CHOPWELLWOOD Durham 54° 55'N. 1° 47'W. 445ft. + 20ft. 1911-1930		
	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent
	hr.	hr.	%	hr.	hr.	%	hr.	hr.	%	hr.	hr.	%
J.	39	1·26	16S	49	1·58	20	47	1·52	20	46	1·49	19
F.	58	2·04	21S	71	2·52	26	68	2·41	25	65	2·30	24
M.	109	3·53	30S	129	4·18	35	116	3·74	32	104	3·37	29
A.	146	4·86	35S	180	6·01	43	147	4·90	35	138	4·59	33
M.	176	5·67	35S	207	6·69	42	174	5·62	35	168	5·41	34
J.	191	6·36	37S	217	7·25	43	185	6·15	36	187	6·23	36
J.	153	4·94	30S	198	6·38	39	164	5·30	32	164	5·29	32
A.	130	4·20	28S	174	5·62	38	155	4·99	33	146	4·70	32
S.	119	3·98	31S	147	4·91	39	136	4·52	36	134	4·46	35
O.	92	2·97	28S	99	3·18	30	97	3·14	30	97	3·12	30
N.	58	1·92	23S	66	2·21	26	70	2·35	28	67	2·25	27
D.	32	1·04	14S	43	1·38	19	45	1·45	20	47	1·51	21
Y.	1303	3·56	29S	1580	4·33	35	1404	3·84	31	1363	3·73	30
Months	DURHAM Durham 54° 46'N. 1° 35'W. 336ft. + 25ft. 1901-1930			SCARBOROUGH Yorks. N.R. 54° 17'N. 0° 24'W. 118ft. + 60ft. 1901-1930			YORK Yorks. N.R. 53° 57'N. 1° 5'W. 56ft. + 49ft. 1901-1930			BRIDLINGTON Yorks. E.R. 54° 5'N. 0° 13'W. 76ft. + 24ft. 1920-1930		
	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent
	hr.	hr.	%	hr.	hr.	%	hr.	hr.	%	hr.	hr.	%
J.	46	1·49	19	43	1·38	17	31	1·00	13S	45	1·46	18
F.	63	2·23	23	63	2·24	23	50	1·77	18S	61	2·17	22
M.	106	3·41	29	111	3·57	30	92	2·97	25	113	3·66	31
A.	141	4·69	33	154	5·12	37	135	4·48	32	150	5·01	36
M.	164	5·28	33	182	5·87	37	156	5·05	32	187	6·03	38
J.	178	5·93	35	182	6·06	36	176	5·87	35	178	5·93	35
J.	160	5·15	31	169	5·44	33	163	5·26	32	180	5·79	35
A.	147	4·74	32	161	5·21	35	149	4·81	33	163	5·27	36
S.	125	4·16	33	137	4·58	36	127	4·23	33	132	4·41	35
O.	91	2·95	28	98	3·17	30	87	2·82	27	110	3·55	34
N.	63	2·09	25	60	1·99	23	49	1·65	19S	63	2·10	25
D.	42	1·35	19	34	1·10	15	26	·83	11S	43	1·39	19
Y.	1326	3·62	30	1394	3·82	31	1241	3·40	28	1425	3·90	32

For explanation of S see Introduction p.6

AVERAGES OF BRIGHT SUNSHINE

TABLE I. ENGLAND, N.E. AND E.

Months	SPURN HEAD Yorks, E.R. 53° 34' N. 0° 7' E. 29ft. + 102ft. 1921-1930			CRANWELL Lincoln 53° 1' N. 0° 30' W. 240ft. + 20ft. 1921-1930			SKEGNESS Lincoln 53° 9' N. 0° 21' E. 15ft. + 47ft. 1921-1930			CROMER Norfolk 52° 56' N. 1° 17' E. 178ft. + 6ft. 1903-1930		
	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent
J.	hr. 45	hr. 1.47	% 18	hr. 52	hr. 1.69	% 21	hr. 56	hr. 1.81	% 22	hr. 56	hr. 1.80	% 22
F.	67	2.38	25	67	2.38	24	73	2.58	26	75	2.67	27
M.	115	3.72	32	114	3.69	31	123	3.95	33	128	4.12	35
A.	153	5.10	37	146	4.86	35	165	5.50	40	164	5.47	39
M.	190	6.13	39	200	6.64	42	209	6.75	43	206	6.65	42
J.	186	6.19	37	202	6.74	40	205	6.85	41	194	6.46	39
J.	191	6.15	37	205	6.82	41	201	6.47	40	194	6.26	38
A.	173	5.59	38	181	5.84	40	188	6.06	41	184	5.95	41
S.	142	4.74	37	143	4.78	38	159	5.29	42	156	5.21	41
O.	112	3.62	34	118	3.80	36	115	3.72	35	114	3.66	35
N.	69	2.29	27	73	2.45	28	69	2.32	27	69	2.30	27
D.	44	1.43	19	49	1.58	21	46	1.49	20	45	1.45	19
Y.	1487	4.07	33	1550	4.25	35	1609	4.41	36	1585	4.34	35
Months	NORWICH Norfolk 52° 37' N. 1° 16' E. 110ft. + 25ft. 1911-1930			YARMOUTH (Gorleston) Norfolk 52° 35' N. 1° 43' W. 5ft. + 32ft. 1908-1930			COPDOCK Suffolk 52° 2' N. 1° 5' E. 164ft. + 6ft. 1914-1930			FELIXSTOWE Suffolk 51° 57' N. 1° 20' E. 15ft. + 55ft. 1905-1930		
	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent
J.	hr. 49	hr. 1.57	% 19	hr. 55	hr. 1.78	% 22	hr. 50	hr. 1.63	% 20	hr. 62	hr. 2.01	% 24
F.	69	2.44	25	75	2.67	27	69	2.42	25	83	2.93	30
M.	118	3.82	32	123	3.97	34	119	3.85	33	135	4.35	37
A.	157	5.23	38	170	5.68	41	150	5.00	36	179	5.96	43
M.	221	7.12	45	229	7.38	47	222	7.15	46	240	7.75	50
J.	205	6.84	41	208	6.94	42	210	7.00	42	225	7.49	45
J.	197	6.36	39	206	6.65	41	196	6.31	39	222	7.16	45
A.	184	5.93	40	195	6.30	43	180	5.80	40	208	6.70	46
S.	156	5.21	41	158	5.27	41	153	5.12	41	176	5.86	47
O.	116	3.73	35	117	3.76	35	117	3.78	36	128	4.13	39
N.	67	2.24	26	70	2.33	27	69	2.31	26	76	2.55	29
D.	42	1.36	18	43	1.37	17	49	1.59	20	50	1.62	21
Y.	1581	4.33	35	1649	4.52	37	1584	4.34	35	1784	4.88	40

AVERAGES OF BRIGHT SUNSHINE

TABLE 1. ENGLAND, E.

Months	LOWESTOFT Suffolk 52° 29' N. 1° 45' E. 83ft. + 42ft. 1901-1930			CAMBRIDGE (Botanic Gardens) Cambridge 52° 12' N. 0° 8' E. 41ft. + 19ft. 1901-1930			LUTON Bedford 51° 54' N. 0° 25' W. 390ft. + 9ft. 1921-1930			WOBURN Bedford 52° 1' N. 0° 35' W. 291ft. + 7ft. 1901-1930		
	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent
J.	hr. 60	hr. 1.95	% 24	hr. 54	hr. 1.74	% 21	hr. 51	hr. 1.65	% 20	hr. 51	hr. 1.65	% 20
F.	78	2.75	28	70	2.47	25	64	2.27	23	66	2.33	24
M.	133	4.30	36	114	3.69	31	123	3.96	34	108	3.48	29
A.	183	6.08	44	156	5.20	38	138	4.61	33	145	4.82	35
M.	221	7.12	45	204	6.57	42	203	6.53	42	188	6.08	39
J.	209	6.97	42	203	6.78	41	208	6.93	42	189	6.31	38
J.	221	7.15	44	196	6.33	39	201	6.50	40	180	5.82	36
A.	208	6.71	46	186	6.01	41	185	5.95	41	176	5.68	39
S.	171	5.70	45	149	4.98	39	150	5.00	40	143	4.76	38
O.	115	3.73	35	109	3.50	33	115	3.70	35	100	3.23	30
N.	71	2.37	27	63	2.10	24	63	2.10	24	63	2.10	24
D.	46	1.50	20	41	1.33	17	45	1.46	19	38	1.21	16
Y.	1716	4.70	38	1545	4.23	35	1546	4.23	35	1447	3.96	32
Months	ROTHAMSTED Hertford 51° 48' N. 0° 22' W. 420ft. + 40ft. 1901-1930			CLACTON Essex 51° 47' N. 1° 9' E. 55ft. + 40ft. 1905-1930			SHOEBURYNESSE (Gt. Wakering) Essex 51° 33' N. 0° 50' E. 11ft. + 5ft. 1919-1930			SOUTHEND Essex 51° 30' N. 0° 45' E. 90ft. + 7ft. 1906-1930		
	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent
J.	hr. 54	hr. 1.75	% 21	hr. 58	hr. 1.87	% 23	hr. 56	hr. 1.80	% 22	hr. 56	hr. 1.80	% 22
F.	69	2.45	25	78	2.76	28	75	2.64	27	79	2.80	28
M.	114	3.67	31	130	4.20	36	133	4.28	36	118	3.79	32
A.	155	5.16	37	173	5.77	42	154	5.15	37	165	5.51	40
M.	202	6.52	42	232	7.47	48	235	7.57	49	226	7.30	47
J.	206	6.85	42	218	7.28	44	222	7.39	45	214	7.13	43
J.	197	6.35	39	210	6.78	42	221	7.13	44	205	6.62	41
A.	185	5.95	41	202	6.52	45	207	6.66	46	201	6.49	45
S.	151	5.05	40	171	5.70	45	161	5.35	42	161	5.37	43
O.	106	3.42	32	121	3.89	37	129	4.17	39	117	3.77	35
N.	68	2.26	26	72	2.40	27	71	2.38	27	68	2.25	25
D.	43	1.40	18	45	1.47	19	52	1.68	21	45	1.46	19
Y.	1550	4.24	35	1710	4.68	38	1716	4.69	38	1655	4.53	37

AVERAGES OF BRIGHT SUNSHINE

TABLE I. ENGLAND, E. AND MIDLAND COUNTIES.

Months	WALTON-ON-NAZE Essex 50° 51'N. 1° 16'E. 60ft. + 25ft. 1913-1930			BRADFORD Yorks. W.R. 53° 49'N. 1° 46'W. 439ft. + 6ft. 1908-1930			GIGGLESWICK Yorks. W.R. 54° 4'N. 2° 18'W. 575ft. + 40ft. 1911-1930			HARROGATE Yorks. W.R. 54° 0'N. 1° 33'W. 478ft. + 13ft. 1901-1930		
	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent
J.	hr. 53	1.70	20	hr. 27	.85	11	hr. 29	.93	12	hr. 44	1.42	18
F.	74	2.62	26	45	1.60	17	48	1.71	18	61	2.16	22
M.	125	4.03	34	87	2.82	24	93	3.01	25	107	3.44	29
A.	170	5.65	41	131	4.35	31	131	4.36	31	150	4.99	36
M.	225	7.25	47	163	5.25	33	157	5.07	32	170	5.50	35
J.	214	7.15	44	185	6.16	36	169	5.62	33	191	6.37	37
J.	215	6.94	43	165	5.34	32	144	4.65	28	175	5.64	34
A.	195	6.30	43	147	4.75	32	123	3.97	27	159	5.15	35
S.	169	5.65	45	119	3.97	31	115	3.84	30	135	4.50	35
O.	118	3.80	36	77	2.48	24	81	2.60	25	93	2.98	28
N.	72	2.41	27	43	1.44	17	47	1.58	19	61	2.02	24
D.	51	1.64	21	18	.59	8	27	.86	12	40	1.29	17
Y.	1681	4.60	38	1207	3.31	27	1164	3.19	26	1386	3.79	31
Months	HUDDERSFIELD Yorks. W.R. 53° 38'N. 1° 45'W. 325ft. + 54ft. 1907-1930			SHEFFIELD Yorks. W.R. 53° 23'N. 1° 29'W. 428ft. + 48ft. 1901-1930			WAKEFIELD Yorks. W.R. 53° 40'N. 1° 30'W. 124ft. + 13ft. 1914-1930			BUXTON Derby 53° 16'N. 1° 55'W. 1007ft. + 5ft. 1908-1930		
	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent
J.	hr. 29	.95	12	hr. 41	1.32	16	hr. 25	.82	10S	hr. 30	.98	12S
F.	45	1.59	16	56	1.98	20	43	1.51	16S	49	1.72	18
M.	84	2.72	23	93	2.99	25	79	2.54	22S	87	2.79	24
A.	120	4.00	29	133	4.45	32	120	4.00	29	129	4.31	31
M.	153	4.93	31	162	5.23	33	151	4.86	31	173	5.56	35
J.	171	5.71	34	182	6.07	36	176	5.87	35	179	5.97	36
J.	156	5.02	31	172	5.54	34	159	5.15	31	162	5.24	32
A.	138	4.45	30	157	5.07	34	141	4.56	31	143	4.60	31
S.	112	3.73	29	123	4.09	32	115	3.85	30S	122	4.06	32
O.	77	2.47	24	85	2.76	26	74	2.39	23S	82	2.65	25
N.	38	1.27	15	51	1.70	20	41	1.35	16S	46	1.54	18
D.	23	.75	10	32	1.04	14	24	.77	10S	22	.71	9S
Y.	1146	3.14	26	1287	3.52	29	1148	3.14	26S	1224	3.35	27

For explanation of S see Introduction p.6

AVERAGES OF BRIGHT SUNSHINE

TABLE I. MIDLAND COUNTIES.

Months	NOTTINGHAM Nottingham 52° 56'N. 1° 9'W. 192ft. + 83ft. 1904-1930			BELVOIR CASTLE Leicester 52° 54'N. 0° 47'W. 259ft. + 4ft. 1906-1930			OUNDLIE Northampton 52° 29'N. 0° 28'W. 147ft. + 6ft. 1916-1930			RAUNDS Northampton 52° 20'N. 0° 31'W. 213ft. + 6ft. 1912-1930		
	Total	Daily Mean	Per Cent	Total	Daily Mean	Per Cent	Total	Daily Mean	Per Cent	Total	Daily Mean	Per Cent
J.	hr. 34	1.10	14	hr. 53	1.70	21	hr. 47	1.50	18	hr. 52	1.67	20
F.	53	1.89	19	72	2.55	26	60	2.14	22	69	2.43	25
M.	98	3.17	27	111	3.57	30	106	3.42	29	111	3.58	30
A.	134	4.47	32	157	5.24	38	128	4.26	31	149	4.98	36
M.	169	5.45	35	197	6.35	40	190	6.13	39	196	6.32	40
J.	181	6.02	36	194	6.45	39	188	6.25	37	201	6.72	40
J.	166	5.36	33	180	5.80	36	177	5.72	35	172	5.56	34
A.	158	5.11	35	176	5.67	39	168	5.36	37	171	5.51	38
S.	126	4.20	33	143	4.78	38	137	4.56	36	142	4.74	37
O.	87	2.80	26	107	3.46	33	111	3.57	34	109	3.53	33
N.	45	1.49	17	69	2.29	26	62	2.08	24	69	2.28	26
D.	25	.82	11	43	1.37	18	43	1.38	18	44	1.42	18
Y.	1276	3.49	29	1502	4.11	34	1415	3.87	32	1485	4.07	33
Months	BIRMINGHAM (Edgbaston) Derby 52° 29'N. 1° 56'W. 535ft. + 100ft. 1901-1930			COVENTRY Warwick 52° 23'N. 1° 29'W. 241ft. + 5ft. 1906-1930			LEAMINGTON SPA Warwick 52° 18'N. 1° 30'W. 163ft. + 49ft. 1912-1930			OXFORD Oxford 51° 46'N. 1° 16'W. 208ft. + 100ft. 1901-1930		
	Total	Daily Mean	Per Cent	Total	Daily Mean	Per Cent	Total	Daily Mean	Per Cent	Total	Daily Mean	Per Cent
J.	hr. 43	1.38	17	hr. 37	1.20	15	hr. 41	1.33	16	hr. 55	1.79	20
F.	54	1.91	19	56	1.99	20S	57	2.03	21	69	2.43	25
M.	89	2.88	24	95	3.07	26S	93	3.01	25	109	3.51	30
A.	131	4.37	31	140	4.67	34	136	4.53	33	153	5.11	37
M.	176	5.66	36	177	5.69	36	187	6.04	39	188	6.06	39
J.	178	5.94	36	186	6.21	37	193	6.43	39	199	6.64	40
J.	171	5.52	34	171	5.53	34	169	5.44	34	190	6.12	38
A.	161	5.21	36	165	5.32	36	161	5.20	36	176	5.68	39
S.	123	4.10	32	129	4.29	34S	124	4.14	33	145	4.85	39
O.	87	2.81	27	90	2.91	27S	96	3.10	29	103	3.31	31
N.	52	1.75	20	50	1.66	19	55	1.85	21	66	2.21	25
D.	33	1.08	14	28	.91	12	34	1.09	14	45	1.47	19
Y.	1298	3.56	29	1324	3.63	30	1346	3.68	30	1496	4.10	34

For explanation of S see Introduction p.6

AVERAGES OF BRIGHT SUNSHINE

TABLE 1. MIDLAND COUNTIES AND LONDON.

Months	MAYFIELD Stafford 53° 0' N. 1° 46' W. 374ft. + 40ft. 1913-1930			MALVERN Worcester 52° 8' N. 2° 18' W. 380ft. + 4ft. 1909-1930			ROSS-ON-WYE Hereford 51° 54' N. 2° 35' W. 223ft. + 35ft. 1915-1930			CHELTENHAM Gloucester 51° 54' N. 2° 3' W. 214ft. + 66ft. 1907-1930		
	Total	Daily Mean	Per Cent	Total	Daily Mean	Per Cent	Total	Daily Mean	Per Cent	Total	Daily Mean	Per Cent
J.	hr.	hr.		hr.	hr.		hr.	hr.		hr.	hr.	
F.	33	1.08	138	58	1.87	23	52	1.67	20	51	1.65	20
M.	54	1.92	208	70	2.48	25	65	2.30	23	69	2.43	25
	98	3.17	278	112	3.60	31	108	3.49	30	113	3.65	31
A.	139	4.65	33	158	5.27	38	147	4.89	35	156	5.19	38
M.	179	5.78	37	203	6.56	42	193	6.21	40	195	6.29	40
J.	187	6.24	37	208	6.93	42	210	7.01	43	199	6.63	40
J.	161	5.18	32	189	6.09	38	188	6.06	38	182	5.86	36
A.	149	4.81	33	175	5.64	39	167	5.39	37	169	5.46	37
S.	131	4.37	34S	145	4.82	38	136	4.54	36	141	4.72	37
O.	87	2.81	27S	104	3.35	32	100	3.23	30	108	3.49	33
N.	58	1.93	22	75	2.49	28	66	2.21	25	65	2.17	25
D.	32	1.05	14S	51	1.63	21	48	1.54	20	41	1.33	17
Y.	1308	3.58	29	1548	4.23	35	1480	4.05	33	1489	4.08	33
Months	CIRENCESTER (Agric. Coll.) Gloucester 51° 42' N. 2° 0' W. 443ft. + 10ft. 1901-1915			BUNHILL ROW London 51° 31' N. 0° 5' W. 80ft. + 80ft. 1901-1930			ENFIELD London 51° 40' N. 0° 10' W. 148ft. + 45ft. 1912-1930			GREENWICH London 51° 29' N. 0° 0' W. 149ft. + 50ft. 1901-1930		
	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent
J.	hr.	hr.	%	hr.	hr.	%	hr.	hr.	%	hr.	hr.	%
F.	50	1.60	19	16	.51	6	39	1.27	15	40	1.29	15
M.	72	2.55	26	34	1.20	12	55	1.94	20	60	2.13	22
	111	3.59	30	76	2.45	21	107	3.45	29	102	3.28	28
A.	169	5.62	41	124	4.14	30	151	5.05	37	143	4.75	34
M.	195	6.28	40	183	5.92	38	209	6.73	43	202	6.50	42
J.	190	6.32	38	186	6.21	38	208	6.92	42	202	6.73	41
J.	192	6.18	38	180	5.81	36	185	5.95	37	198	6.40	40
A.	178	5.73	40	170	5.49	38	178	5.74	40	189	6.09	42
S.	155	5.18	41	127	4.23	34	147	4.90	39	151	5.02	40
O.	88	2.85	27	73	2.37	22	102	3.28	31	98	3.17	30
N.	64	2.15	24	25	.84	9	58	1.93	22	50	1.68	19
D.	37	1.18	15	9	.31	4	37	1.20	15	31	1.00	13
Y.	1501	4.10	34	1203	3.30	27	1476	4.03	33	1466	4.01	33

For explanation of S see Introduction p.6

AVERAGES OF BRIGHT SUNSHINE

TABLE 1. LONDON AND ENGLAND, S. E.

Months	HAMPSTEAD London 51° 34' N. 0° 11' W. 450ft. + 7ft. 1911-1930			REGENTS PARK London 51° 31' N. 0° 9' W. 129ft. + 10ft. 1901-1930			KEW OBSERVATORY Surrey 51° 28' N. 0° 19' W. 18ft. + 44ft. 1901-1930			TOTTENHAM London 51° 36' N. 0° 5' W. 51ft. + 65ft. 1907-1930		
	Total	Daily Mean	Per Cent	Total	Daily Mean	Per Cent	Total	Daily Mean	Per Cent	Total	Daily Mean	Per Cent
J.	hr.	hr.	%	hr.	hr.	%	hr.	hr.	%	hr.	hr.	%
F.	39	1.24	15	28	.90	11	44	1.43	17	30	.97	12
M.	57	2.00	20	44	1.55	16	61	2.14	22	49	1.72	17
	104	3.36	28	81	2.61	22	103	3.31	28	96	3.10	26
A.	152	5.05	37	128	4.26	31	149	4.98	36	145	4.84	35
M.	211	6.79	44	196	6.34	41	203	6.54	42	209	6.75	44
J.	212	7.08	43S	194	6.47	39	199	6.65	40	205	6.84	41
J.	193	6.23	39S	191	6.17	38	195	6.29	39	189	6.09	38
A.	176	5.69	39	173	5.58	38	183	5.90	41	1184	5.95	41
S.	151	5.02	40	124	4.13	33	145	4.83	38	146	4.86	39
O.	104	3.35	31	77	2.48	23	93	3.02	28	91	2.92	27
N.	55	1.85	21	38	1.27	14	53	1.79	20	47	1.58	18
D.	37	1.18	15	21	.69	9	37	1.20	15	22	.71	9S
Y.	1491	4.09	33	1295	3.54	29	1465	4.01	33	1413	3.87	32
Months	WESTMINSTER (St. James Park) London 51° 30' N. 0° 8' W. 27ft. + 82ft. 1901-1930			CROYDON Surrey 51° 21' N. 0° 7' W. 217ft. + 18ft. 1921-1930			WISLEY Surrey 51° 17' N. 0° 26' W. 150ft. + 7ft. 1904-1930			BIGGIN HILL Kent 51° 19' N. 0° 2' E. 567ft. + 7ft. 1921-1930		
	Total	Daily Mean	Per Cent	Total	Daily Mean	Per Cent	Total	Daily Mean	Per Cent	Total	Daily Mean	Per Cent
J.	hr.	hr.	%	hr.	hr.	%	hr.	hr.	%	hr.	hr.	%
F.	27	.97	10	51	1.63	19	52	1.67	20	51	1.65	20
M.	45	1.60	16	64	2.27	23	67	2.39	24	69	2.45	25
	86	2.77	23	115	3.71	31	111	3.56	30	128	4.14	35
A.	136	4.55	33	137	4.57	33	151	5.03	36	147	4.91	36
M.	194	6.25	40	205	6.62	43	208	6.70	43	216	6.98	45
J.	194	6.46	39	209	6.98	42	207	6.89	42	216	7.19	44
J.	188	6.08	38	218	7.03	44	201	6.50	41	225	7.27	45
A.	178	5.73	40	191	6.16	43	187	6.05	42	199	6.41	44
S.	135	4.50	36	151	5.02	40	151	5.05	40	160	5.33	42
O.	83	2.68	25	109	3.52	33	101	3.27	31	117	3.76	35
N.	34	1.14	13	58	1.92	22	59	1.98	22	62	2.08	23
D.	21	.67	9	42	1.35	17	40	1.30	17	45	1.47	19
Y.	1321	3.61	30	1550	4.24	35	1535	4.21	34	1635	4.48	37

For explanation of S see Introduction p.6

AVERAGES OF BRIGHT SUNSHINE

TABLE 1. ENGLAND, S. E.

Months	BROADSTAIRS Kent 51° 21' N. 1° 26' E. 140ft. + 60ft. 1901-1930			DEAL Kent 51° 13' N. 1° 24' E. 25ft. + 56ft. 1921-1930			DOVER Kent 51° 7' N. 1° 19' E. 22ft. + 7ft. 1908-1930			FOLKESTONE Kent 51° 5' N. 1° 11' E. 101ft. + 40ft. 1906-1930		
	Total	Daily Mean	Per Cent	Total	Daily Mean	Per Cent	Total	Daily Mean	Per Cent	Total	Daily Mean	Per Cent
J.	hr. 62	hr. 2.01	% 24	hr. 59	hr. 1.92	% 23	hr. 61	hr. 1.97	% 23	hr. 60	hr. 1.93	% 23
F.	84	2.96	30	77	2.74	28	84	2.96	30	81	2.86	29
M.	128	4.12	35	133	4.28	36	127	4.10	35	130	4.21	36
A.	177	5.91	43	181	5.35	39	174	5.31	42	185	6.15	45
M.	236	7.61	49	237	7.65	49	239	7.70	50	234	7.56	49
J.	219	7.31	44	220	7.32	45	224	7.48	46	224	7.48	46
J.	226	7.29	45	242	7.79	49	210	6.77	42	228	7.37	46
A.	212	6.84	47	215	6.92	48	209	6.75	47	211	6.80	47
S.	173	5.78	46	162	5.41	43	173	5.76	46	174	5.81	46
O.	120	3.87	36	119	3.83	36	123	3.98	37	117	3.77	35
N.	74	2.46	28	73	2.44	27	79	2.63	30	75	2.51	28
D.	50	1.60	20	50	1.63	21	50	1.62	20	52	1.68	21
Y.	1761	4.92	43	1748	4.78	39	1753	4.80	39	1771	4.85	40
Months	LYMPNE Kent 51° 5' N. 1° 1' E. 346ft. + 4ft. 1921-1930			MARGATE Kent 51° 24' N. 1° 24' E. 51ft. + 65ft. 1901-1930			RAMSGATE Kent 51° 20' N. 1° 25' E. 80ft. + 45ft. 1904-1930			TUNBRIDGE WELLS Kent 51° 8' N. 0° 16' E. 351ft. + 78ft. 1901-1930		
	Total	Daily Mean	Per Cent	Total	Daily Mean	Per Cent	Total	Daily Mean	Per Cent	Total	Daily Mean	Per Cent
J.	hr. 58	hr. 1.86	% 22	hr. 59	hr. 1.91	% 23	hr. 60	hr. 1.94	% 23	hr. 54	hr. 1.73	% 21
F.	84	2.96	30	83	2.95	30	83	2.92	29	74	2.63	27
M.	142	4.58	39	132	4.27	36	129	4.17	35	119	3.85	33
A.	165	5.51	40	182	6.08	44	177	5.91	43	180	5.35	39
M.	235	7.59	49	239	7.71	50	235	7.59	49	219	7.07	46
J.	220	7.34	45	224	7.47	45	218	7.27	44	210	7.00	43
J.	236	7.61	48	228	7.35	46	223	7.20	45	214	6.91	43
A.	207	6.68	46	213	6.57	45	213	6.86	47	197	6.35	44
S.	168	5.61	45	179	5.96	47	173	5.77	46	162	5.40	43
O.	124	3.99	37	118	3.92	36	122	3.94	37	109	3.52	33
N.	78	2.61	29	71	2.37	27	72	2.41	27	69	2.30	26
D.	59	1.99	24	44	1.43	18	48	1.54	20	43	1.39	18
Y.	1776	4.96	40	1772	4.85	40	1753	4.80	39	1630	4.47	37

AVERAGES OF BRIGHT SUNSHINE

TABLE I. ENGLAND, S.E.

Months	BOGNOR REGIS Sussex 50° 47' N. 0° 41' W. 24ft. + 61ft. 1906-1930			BRIGHTON Sussex 50° 49' N. 0° 8' W. 31ft. + 82ft. 1901-1930			EASTBOURNE Sussex 50° 46' N. 0° 17' E. 35ft. + 100ft. 1901-1930			EMSWORTH (Watergate) Sussex 50° 42' N. 0° 55' W. 30ft. + 5ft. 1906-1930		
	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent
J.	hr. 65	hr. 2.11	% 25	hr. 61	hr. 1.95	% 23	hr. 62	hr. 2.01	% 24	hr. 54	hr. 1.75	% 21
F.	91	3.21	32	83	2.93	29	85	3.00	30	77	2.74	28
M.	140	4.53	38	132	4.26	36	135	4.34	37	132	4.25	36
A.	184	6.12	45	175	5.83	43	181	6.04	44	172	5.74	42
M.	235	7.57	49	230	7.43	48	243	7.85	51	222	7.16	47
J.	236	7.86	48	223	7.44	45	235	7.82	48	223	7.45	46
J.	221	7.13	45	225	7.25	46	238	7.66	48	212	6.94	43
A.	211	6.80	47	208	6.70	46	219	7.07	49	192	6.20	43
S.	178	5.94	47	173	5.78	46	177	5.91	47	165	5.50	44
O.	126	4.06	38	118	3.80	36	119	3.85	36	109	3.51	33
N.	83	2.77	31	77	2.58	29	80	2.66	30	67	2.24	25
D.	57	1.85	23	49	1.59	20	52	1.67	21	47	1.50	19
Y.	1827	5.00	41	1754	4.80	39	1826	5.00	41	1672	4.57	37
Months	HASTINGS Sussex 50° 51' N. 0° 33' E. 178ft. + 40ft. 1901-1930			LITTLEHAMPTON Sussex 50° 48' N. 0° 32' W. 15ft. + 26ft. 1916-1930			WORTHING Sussex 50° 49' N. 0° 22' W. 25ft. + 73ft. 1901-1930			BOURNEMOUTH Hampshire 50° 43' N. 1° 53' W. 145ft. + 160ft. 1904-1930		
	Daily	Daily Mean	Per cent	Daily	Daily Mean	Per cent	Daily	Daily Mean	Per cent	Daily	Daily Mean	Per cent
J.	hr. 65	hr. 2.08	% 25	hr. 63	hr. 2.03	% 24	hr. 65	hr. 2.09	% 25	hr. 65	hr. 2.09	% 25
F.	85	3.02	30	84	2.97	30	86	3.06	31	85	2.99	30
M.	133	4.28	36	143	4.63	39	139	4.48	38	135	4.35	37
A.	177	5.90	43	169	5.65	41	183	6.11	45	179	5.97	44
M.	239	7.71	50	233	7.52	49	237	7.63	49	227	7.31	47
J.	226	7.55	46	237	7.89	48	235	7.82	48	228	7.59	47
J.	230	7.43	46	225	7.27	46	234	7.55	47	221	7.12	45
A.	213	6.88	47	206	6.64	46	215	6.93	48	206	6.64	46
S.	177	5.90	47	173	5.77	46	180	5.99	47	167	5.56	44
O.	121	3.91	37	129	4.18	39	123	3.97	37	119	3.93	36
N.	81	2.68	30	79	2.64	30	83	2.75	31	83	2.77	31
D.	54	1.75	22	59	1.89	24	54	1.74	22	59	1.91	24
Y.	1801	4.93	40	1800	4.92	40	1834	5.02	41	1774	4.85	40

AVERAGES OF BRIGHT SUNSHINE

TABLE I. ENGLAND, S.E.

Months	CALSHOT Hampshire 50° 49'N. 1° 18'W. 8ft. + 21ft. 1921-1930			GRAYSHOTT Hampshire 51° 7'N. 0° 46'W. 661ft. + 26ft. 1901-1930			SOUTHAMPTON Hampshire 50° 55'N. 1° 24'W. 64ft. + 124ft. 1901-1930			SOUTH FARNBOROUGH Hampshire 51° 17'N. 0° 45'W. 237ft. + 39ft. 1914-1930		
	Total	Daily Mean	Per Cent	Total	Daily Mean	Per Cent	Total	Daily Mean	Per Cent	Total	Daily Mean	Per Cent
J.	63	2.02	24	59	1.90	23	54	1.75	21	53	1.72	21
F.	80	2.84	29	76	2.69	27	75	2.64	27	72	2.56	26
M.	144	4.65	39	119	3.85	33	122	3.93	33	116	3.75	32
A.	165	5.50	40	163	5.45	39	169	5.65	41	151	5.04	37
M.	227	7.32	48	211	6.82	44	219	7.05	45	216	6.97	45
J.	239	7.96	49	215	7.17	44	219	7.30	45	220	7.33	45
J.	229	7.38	46	208	6.70	42	215	6.94	43	201	6.47	40
A.	198	6.38	44	188	6.05	42	197	6.37	44	187	6.05	42
S.	173	5.75	46	160	5.33	42	164	5.47	43	156	5.21	41
O.	125	4.04	38	111	3.58	33	109	3.53	33	112	3.62	34
N.	78	2.61	29	74	2.47	28	72	2.39	27	67	2.25	25
D.	60	1.93	24	48	1.55	20	48	1.54	19	46	1.49	19
Y.	1781	4.87	40	1632	4.46	37	1663	4.55	37	1597	4.38	36
Months	SOUTHSEA Hampshire 50° 48'N. 1° 6'W. 15ft. + 41ft. 1908-1930			RYDE Isle of Wight 50° 44'N. 1° 10'W. 13ft. + 11ft. 1914-1930			SANDOWN Isle of Wight 50° 39'N. 1° 9'W. 13ft. + 45ft. 1906-1930			TOTLAND BAY Isle of Wight 50° 41'N. 1° 33'W. 140ft. + 45ft. 1902-1930		
	Total	Daily Mean	Per Cent	Total	Daily Mean	Per Cent	Total	Daily Mean	Per Cent	Total	Daily Mean	Per Cent
J.	62	1.99	24	55	1.78	21	64	2.06	24	64	2.07	24
F.	84	2.97	30	79	2.80	28	86	3.03	30	84	2.97	30
M.	135	4.35	37	125	4.03	34	141	4.53	38	135	4.35	37
A.	179	5.96	43	167	5.57	41	180	5.99	44	176	5.86	43
M.	239	7.70	50	229	7.40	48	234	7.55	49	226	7.29	47
J.	237	7.92	48	235	7.82	48	241	8.04	49	230	7.67	47
J.	222	7.15	45	221	7.13	45	230	7.42	47	227	7.34	48
A.	209	6.73	46	214	6.89	48	210	6.78	47	202	6.52	45
S.	173	5.75	46	161	5.35	42	173	5.78	46	165	5.52	44
O.	124	4.00	37	119	3.94	36	120	3.88	36	117	3.78	35
N.	82	2.72	30	75	2.49	28	79	2.64	29	82	2.72	30
D.	55	1.78	22	51	1.63	20	56	1.81	23	55	1.79	22
Y.	1801	4.93	40	1731	4.74	39	1814	4.96	41	1763	4.83	40

AVERAGES OF BRIGHT SUNSHINE

TABLE 1. ENGLAND, S.E. AND N.W.

Months	VENTNOR (Hospital) Isle of Wight 50° 36'N. 1° 13'W. 59ft. + 6ft. 1901-1930			MARLBOROUGH Wilts 51° 25'N. 1° 44'W. 424ft. + 50ft. 1901-1930			ASPATRIA Cumberland 54° 46'N. 3° 13'W. 487ft. + 40ft. 1902-1930			KESWICK Cumberland 54° 36'N. 3° 9'W. 254ft. + 4ft. 1919-1930		
	Total	Daily Mean	Per Cent	Total	Daily Mean	Per Cent	Total	Daily Mean	Per Cent	Total	Daily Mean	Per Cent
J.	63	2.05	24	43	1.39	17	39	1.27	16	28	.90	11
F.	83	2.94	30	58	2.07	21	64	2.27	24	53	1.87	19
M.	139	4.48	38	98	3.17	27	109	3.51	30	101	3.27	28
A.	181	6.04	44	145	4.93	35	147	4.90	35	129	4.30	31
M.	227	7.31	47	184	5.93	38	182	5.86	37	173	5.59	35
J.	223	7.42	45	182	6.06	37	200	6.66	39	186	6.20	36
J.	223	7.20	45	184	5.95	37	169	5.47	33	148	4.77	29
A.	206	6.85	46	166	5.36	37	145	4.89	31	125	4.03	27
S.	172	5.74	46	141	4.71	37	131	4.36	34	114	3.80	30
O.	118	3.80	36	90	2.91	27	92	2.97	28	85	2.73	26
N.	83	2.77	31	57	1.90	21	59	1.98	23	50	1.68	20
D.	55	1.76	22	36	1.15	15	32	1.04	14	22	.71	10
Y.	1773	4.95	40	1384	3.79	31	1369	3.75	31	1214	3.32	27
Months	NEWTON RIGG Cumberland 54° 40'N. 2° 49'W. 860ft. + 8ft. 1901-1930			BLACKPOOL Lancashire 53° 49'N. 3° 3'W. 67ft. + 25ft. 1901-1930			BOLTON Lancashire 53° 35'N. 2° 27'W. 342ft. + 13ft. 1901-1930			BURNLEY Lancashire 53° 48'N. 2° 15'W. 458ft. + 6ft. 1908-1930		
	Total	Daily Mean	Per Cent	Total	Daily Mean	Per Cent	Total	Daily Mean	Per Cent	Total	Daily Mean	Per Cent
J.	37	1.21	15	43	1.37	17	19	.61	8S	21	.68	9S
F.	61	2.15	22	69	2.43	25	32	1.13	12S	42	1.49	15S
M.	105	3.40	29	120	3.87	33	67	2.15	18S	81	2.61	22
A.	149	4.95	35	170	5.68	41	108	3.61	26S	125	4.16	30
M.	183	5.92	37	203	6.55	41	146	4.71	30S	162	5.21	33
J.	202	6.74	39	212	7.06	42	161	5.37	32S	170	5.65	33
J.	173	5.58	34	198	6.39	39	149	4.81	29S	148	4.78	29
A.	147	4.75	32	171	5.52	37	125	4.05	28S	129	4.17	28
S.	125	4.17	33	140	4.65	37	98	3.25	26S	108	3.61	28
O.	91	2.92	28	99	3.18	30	62	2.01	19S	77	2.50	24S
N.	59	1.95	23	59	1.98	23	31	1.04	12S	37	1.24	15S
D.	33	1.05	14	37	1.18	16	14	.44	6S	14	.45	6S
Y.	1365	3.74	31	1521	4.16	34	1012	2.77	23S	1114	3.05	25S

For explanation of S see Introduction p.6

AVERAGES OF BRIGHT SUNSHINE

TABLE I. ENGLAND, N.W.

Months	DARWEN Lancashire 53° 41 N. 2° 28 W. 724ft. + 14ft. 1908-1930			HUTTON Lancashire 53° 44 N. 2° 40 W. 82ft. + 5ft. 1913-1930			LANCASTER Lancashire 54° 3 N. 2° 47 W. 311ft. + 11ft. 1906-1930			LEYLAND Lancashire 53° 41 N. 2° 42 W. 125ft. + 50ft. 1911-1930		
	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent
J.	hr. 26	hr. .83	11	hr. 33	hr. 1.07	13	hr. 41	hr. 1.31	16	hr. 35	hr. 1.13	14
F.	45	1.59	16S	53	1.88	19	65	2.30	24	55	1.93	20
M.	85	2.75	23S	102	3.28	27	111	3.57	30	101	3.25	28
A.	127	4.23	30	143	4.78	34	152	5.08	36	146	4.87	35
M.	164	5.28	33	183	5.88	37	184	5.95	37	182	5.86	37
J.	168	5.61	33	197	6.56	39	191	6.38	38	196	6.52	39
J.	148	4.77	29	163	5.25	32	169	5.46	33	169	5.45	33
A.	130	4.20	29	146	4.72	32	144	4.65	31	148	4.76	32
S.	111	3.71	29S	126	4.19	33	129	4.31	34	127	4.22	33
O.	81	2.60	25S	86	2.79	27	97	3.12	30	91	2.92	28
N.	44	1.45	17S	47	1.58	19	63	2.10	25	53	1.78	21
D.	20	.64	9	30	.98	13	35	1.14	15	31	.99	13
Y.	1149	3.14	26S	1309	3.58	29	1381	3.78	31	1334	3.64	30
Months	MANCHESTER (Whitworth Park) Lancashire 53° 28 N. 2° 14 W. 125ft. + 11ft. 1904-1930			MANCHESTER (Oldham Rd.) Lancashire 53° 29 N. 2° 13 W. 191ft. + 5ft. 1906-1930			MORECAMBE Lancashire 54° 4 N. 2° 52 W. 25ft. + 23ft. 1915-1930			SOUTHPORT Lancashire 53° 39 N. 2° 59 W. 35ft. + 20ft. 1901-1930		
	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent
J.	hr. 18	hr. .59	7	hr. 11	hr. .36	4S	hr. 42	hr. 1.36	17	hr. 43	hr. 1.40	17
F.	37	1.30	13	29	1.03	11S	60	2.13	22	66	2.34	24
M.	71	2.28	19	74	2.38	20S	118	3.81	32	119	3.82	32
A.	109	3.64	28	115	3.83	28S	160	5.33	38	170	5.65	41
M.	147	4.73	30	142	4.57	29S	205	6.63	42	204	6.59	42
J.	157	5.25	31	156	5.19	31S	220	7.34	43	215	7.17	42
J.	144	4.65	28	138	4.44	27S	189	6.08	37	197	6.35	39
A.	123	3.98	27	116	3.75	26S	155	5.01	34	174	5.61	38
S.	104	3.45	27	102	3.40	27S	135	4.49	35	140	4.66	37
O.	66	2.13	20	61	1.96	19S	103	3.31	32	98	3.15	30
N.	27	.91	11	19	.63	7S	63	2.09	25	57	1.91	22
D.	13	.40	5	7	.23	3S	38	1.22	17	38	1.21	16
Y.	1016	2.78	23	970	2.65	22S	1488	4.07	33	1521	4.16	34

For explanation of S see Introduction p.6

AVERAGES OF BRIGHT SUNSHINE

TABLE 1. ENGLAND, N. W. AND WALES.

Months	STONYHURST Lancashire 53° 51' N. 2° 28' W. 377ft. + 5ft. 1901-1930			HOYLAKES Cheshire 53° 3' N. 3° 12' W. 23ft. + 50ft. 1901-1930			LIVERPOOL (Bidston) Cheshire 53° 24' N. 3° 4' W. 198ft. + 7ft. 1908-1930			RHYL Flint 53° 19' N. 3° 29' W. 31ft. + 12ft. 1902-1930		
	Total	Daily Mean	Per Cent	Total	Daily Mean	Per Cent	Total	Daily Mean	Per Cent	Total	Daily Mean	Per Cent
J.	hr. 31	hr. 1.01	13S	hr. 51	hr. 1.64	20	hr. 52	hr. 1.69	21	hr. 57	hr. 1.85	23
F.	54	1.90	20S	67	2.37	24	66	2.33	24	76	2.68	28
M.	101	3.25	28	113	3.64	31	104	3.37	29	124	3.99	34
A.	146	4.86	35	165	5.49	39	159	5.30	38	170	5.67	41
M.	177	5.71	36	197	6.34	40	199	6.43	41	205	6.62	42
J.	182	6.06	36	207	6.90	41	204	6.79	40	213	7.11	42
J.	165	5.32	32	191	6.16	38	183	5.91	36	200	6.45	39
A.	146	4.71	32	171	5.53	38	159	5.12	35	176	5.68	38
S.	125	4.16	33	139	4.65	37	131	4.36	34	147	4.89	39
O.	85	2.74	26	98	3.13	30	93	3.00	28	102	3.30	31
N.	51	1.70	20S	61	2.02	23	63	2.10	24	66	2.19	25
D.	28	.91	12S	42	1.37	18	43	1.40	19	45	1.47	20
Y.	1291	3.53	29S	1502	4.11	34	1456	3.99	33	1581	4.33	35
Months	HOLYHEAD Anglesey 53° 19' N. 4° 37' W. 26ft. + 14ft. 1913-1930			COLWYN BAY Denbigh 53° 16' N. 3° 44' W. 118ft. + 17ft. 1909-1930			LLANDUDNO Carnarvon 53° 20' N. 3° 50' W. 13ft. + 11ft. 1901-1930			ABERYSTWYTH Cardigan 52° 25' N. 4° 4' W. 69ft. + 5ft. 1906-1930		
	Total	Daily Mean	Per Cent	Total	Daily Mean	Per Cent	Total	Daily Mean	Per Cent	Total	Daily Mean	Per Cent
J.	hr. 47	hr. 1.53	19	hr. 51	hr. 1.64	20	hr. 52	hr. 1.68	21	hr. 54	hr. 1.75	21
F.	73	2.60	27	77	2.71	28	73	2.59	27	75	2.64	27
M.	123	3.98	34	119	3.84	33	120	3.87	33	121	3.90	33
A.	177	5.88	42	165	5.52	40	172	5.72	41	162	5.40	39
M.	206	6.64	42	207	6.66	42	207	6.69	42	188	6.06	39
J.	220	7.33	44	208	6.93	41	212	7.07	42	193	6.42	38
J.	189	6.10	37	190	6.13	38	194	6.27	38	180	5.81	36
A.	167	5.38	36	162	5.24	36	171	5.51	37	154	4.99	34
S.	140	4.66	37	137	4.57	36	142	4.74	37	147	4.88	38
O.	99	3.20	30	103	3.32	31	100	3.22	30	103	3.33	31
N.	63	2.10	24	63	2.10	24	62	2.07	24	69	2.30	26
D.	41	1.34	18	40	1.28	17	40	1.29	17	39	1.27	17
Y.	1545	4.23	35	1522	4.17	34	1545	4.23	35	1485	4.07	33

For explanation of S see Introduction p.6

AVERAGES OF BRIGHT SUNSHINE

TABLE 1. WALES AND ENGLAND, S. W.

Months	HAVERFORDWEST Pembroke 51° 48'N. 4° 58'W. 250ft. + 5ft. 1902-1930			TENBY Pembroke 51° 40'N. 4° 42'W. 64ft. + 40ft. 1901-1930			ST. ANNS HEAD Pembroke 51° 41'N. 5° 11'W. 142ft. + 5ft. 1901-1930			RHAYADER Radnor 52° 18'N. 3° 31'W. 757ft. + 4ft. 1917-1930		
	Total	Daily Mean	Per Cent	Total	Daily Mean	Per Cent	Total	Daily Mean	Per Cent	Total	Daily Mean	Per Cent
	hr.	hr.	%	hr.	hr.	%	hr.	hr.	%	hr.	hr.	%
J.	53	1.73	21	55	1.76	21	50	1.63	20	43	1.38	17
F.	71	2.52	26	73	2.59	26	71	2.52	26	57	2.03	21
M.	126	4.05	34	127	4.10	35	125	4.03	34	102	3.30	28
A.	172	5.74	42	178	5.93	43	175	5.83	42	137	4.57	33
M.	203	6.54	42	208	6.71	43	204	6.58	42	177	5.72	37
J.	225	7.49	45	221	7.36	45	215	7.16	43	202	6.72	41
J.	209	6.75	42	211	6.79	42	205	6.63	41	172	5.54	34
A.	174	5.62	38	184	5.92	41	178	5.75	40	142	4.59	31
S.	149	4.97	39	151	5.05	40	145	4.82	38	128	4.26	34
O.	100	3.22	30	105	3.39	32	99	3.20	30	102	3.29	31
N.	70	2.33	26	73	2.42	27	67	2.24	25	54	1.79	20
D.	49	1.57	20	47	1.53	20	44	1.43	18	34	1.11	14
Y.	1601	4.38	36	1633	4.47	37	1578	4.32	35	1350	3.69	30
Months	CARDIFF Glamorgan 51° 28'N. 3° 10'W. 202ft. + 3ft. 1908-1930			SWANSEA Glamorgan 51° 37'N. 3° 55'W. 27ft. + 20ft. 1910-1930			BATH Somerset 51° 23'N. 2° 21'W. 67ft. + 13ft. 1901-16; 1920-30			LONG ASHTON Somerset 51° 26'N. 2° 40'W. 162ft. + 31ft. 1921-1930		
	Total	Daily Mean	Per Cent	Total	Daily Mean	Per Cent	Total	Daily Mean	Per Cent	Total	Daily Mean	Per Cent
	hr.	hr.	%	hr.	hr.	%	hr.	hr.	%	hr.	hr.	%
J.	51	1.65	20	46	1.48	18	50	1.60	19	47	1.53	18
F.	72	2.55	26	67	2.38	24	71	2.53	26	69	2.45	25
M.	114	3.67	31	115	3.69	31	114	3.67	31	124	4.00	34
A.	170	5.68	41	161	5.36	39	158	5.27	38	165	5.51	40
M.	207	6.66	43	193	6.22	40	195	6.31	41	202	6.52	42
J.	225	7.52	46	209	6.98	42	200	6.66	40	223	7.43	45
J.	209	6.73	42	196	6.31	39	199	6.43	40	207	6.67	41
A.	183	5.90	41	167	5.37	37	180	5.81	40	179	5.78	40
S.	147	4.91	39	141	4.71	37	149	4.98	40	151	5.04	40
O.	107	3.47	32	102	3.28	31	99	3.18	30	109	3.50	33
N.	67	2.25	25	61	2.03	23	65	2.18	25	65	2.16	24
D.	51	1.63	21	45	1.44	18	43	1.37	17	44	1.41	18
Y.	1603	4.39	36	1503	4.11	34	1523	4.17	34	1585	4.33	35

AVERAGES OF BRIGHT SUNSHINE

TABLE I. ENGLAND, S.W.

Months	WESTON-SUPER-MARE Somerset 51° 21'N. 2° 59'W. 28ft. + 60ft. 1906-1930			HOLTON HEATH Dorset 50° 43'N. 2° 5'W. 64ft. + 4ft. 1920-1930			WEYMOUTH Dorset 50° 36'N. 2° 27'W. 20ft. + 23ft. 1901-1930			CULLOMPTON Devon 50° 51'N. 3° 23'W. 202ft. + 42ft. 1901-1930		
	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent
	hr.	hr.	%	hr.	hr.	%	hr.	hr.	%	hr.	hr.	%
J.	50	1.61	19	54	1.75	21	62	2.00	24	53	1.71	20
F.	70	2.49	25	77	2.74	28	81	2.86	29	75	2.65	27
M.	112	3.60	31	137	4.41	37	131	4.23	36	123	3.95	33
A.	157	5.24	38	163	5.42	40	180	6.00	44	175	5.85	43
M.	190	6.13	40	220	7.08	46	222	7.17	47	207	6.69	43
J.	201	6.71	41	237	7.89	48	224	7.48	46	217	7.23	44
J.	193	6.23	39	220	7.08	45	225	7.27	46	208	6.72	42
A.	177	5.70	39	197	6.36	44	207	6.66	46	187	6.04	42
S.	146	4.87	39	151	5.03	40	163	5.42	43	156	5.21	41
O.	99	3.20	30	116	3.75	35	112	3.62	34	101	3.26	30
N.	65	2.16	24	72	2.40	27	80	2.65	30	71	2.38	27
D.	43	1.38	18	51	1.65	21	53	1.71	21	45	1.46	18
Y.	1503	4.11	34	1695	4.64	38	1740	4.76	39	1618	4.43	36
Months	EXMOUTH Devon 50° 36'N. 3° 24'W. 195ft. + 12ft. 1914-1930			ILFRACOMBE Devon 51° 12'N. 4° 8'W. 25ft. + 5ft. 1911-1930			PAIGNTON Devon 50° 26'N. 3° 34'W. 12ft. + 30ft. 1910-1930			PLYMOUTH HOE Devon 50° 22'N. 4° 8'W. 117ft. + 11ft. 1901-1930		
	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent
	hr.	hr.	%	hr.	hr.	%	hr.	hr.	%	hr.	hr.	%
J.	59	1.90	22	43	1.38	16	57	1.84	22	55	1.78	21
F.	73	2.60	26	70	2.49	25	74	2.63	26	79	2.79	28
M.	118	3.82	32	119	3.85	33	130	4.20	36	131	4.24	36
A.	169	5.64	41	166	5.53	40	181	6.02	44	178	5.92	43
M.	201	6.48	42	203	6.55	42	210	6.79	44	210	6.78	44
J.	230	7.67	47	221	7.36	45	234	7.80	48	216	7.20	44
J.	209	6.73	42	207	6.67	42	220	7.09	45	211	6.82	43
A.	183	5.92	41	175	5.63	39	199	6.41	45	190	6.13	43
S.	141	4.68	37	145	4.84	38	157	5.25	42	159	5.31	42
O.	108	3.49	33	99	3.20	30	113	3.64	34	113	3.64	34
N.	78	2.59	29	57	1.91	21	76	2.54	28	77	2.57	29
D.	59	1.89	24	38	1.23	16	56	1.81	23	52	1.67	21
Y.	1628	4.45	36	1543	4.22	35	1707	4.68	38	1671	4.58	38

AVERAGES OF BRIGHT SUNSHINE

TABLE I. ENGLAND, S.W.

Months	PLYMOUTH (Mount Batten) Devon 50° 22' N. 4° 8' W. 82ft. + 6ft. 1921-1930			SALCOMBE Devon 50° 14' N. 3° 46' W. 39ft. + 5ft. 1904-1930			TEIGNMOUTH Devon 50° 32' N. 3° 29' W. 20ft. + 42ft. 1906-1930			TORQUAY Devon 50° 28' N. 3° 31' W. 27ft. + 8ft. 1901-1930		
	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent
J.	hr. 52	hr. 1.68	% 20	hr. 63	hr. 2.02	% 24	hr. 61	hr. 1.95	% 23	hr. 63	hr. 2.02	% 24
F.	81	2.85	29	83	2.93	29	78	2.77	28	83	2.93	29
M.	138	4.45	38	138	4.46	38	134	4.32	37	136	4.40	37
A.	176	5.88	43	185	6.16	45	181	6.05	44	184	6.13	45
M.	202	6.51	42	219	7.05	46	208	6.70	43	223	7.19	47
J.	231	7.70	47	236	7.86	48	226	7.52	46	232	7.72	47
J.	207	6.68	42	232	7.48	47	218	7.03	44	231	7.46	47
A.	173	5.58	39	207	6.69	46	195	6.31	44	206	6.64	46
S.	156	5.20	41	168	5.61	45	161	5.38	43	166	5.53	44
O.	117	3.76	35	119	3.85	36	111	3.59	34	114	3.69	34
N.	77	2.55	28	83	2.76	31	77	2.58	29	80	2.68	30
D.	55	1.76	22	58	1.88	23	58	1.88	23	59	1.92	24
Y.	1665	4.56	37	1791	4.90	40	1708	4.68	38	1777	4.87	40
Months	EUDE Cornwall 50° 50' N. 4° 33' W. 50ft. + 4ft. 1914-1930			PALMOUTH Observatory Cornwall 50° 9' N. 5° 5' W. 167ft. + 34ft. 1901-1930			POWEY Cornwall 50° 21' N. 4° 38' W. 51ft. + 7ft. 1911-1930			NEWQUAY Cornwall 50° 25' N. 5° 4' W. 190ft. + 15ft. 1901-1930		
	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent
J.	hr. 56	hr. 1.81	% 21	hr. 59	hr. 1.89	% 22	hr. 57	hr. 1.83	% 22	hr. 57	hr. 1.82	% 21
F.	80	2.84	29	79	2.80	28	75	2.66	27	79	2.80	28
M.	137	4.42	37	135	4.37	37	132	4.26	36	133	4.29	36
A.	185	6.15	45	188	6.27	46	183	6.10	45	180	6.00	44
M.	203	6.56	43	215	6.94	45	199	6.41	42	212	6.83	44
J.	226	7.53	46	222	7.41	46	226	7.52	46	217	7.24	44
J.	198	6.37	40	221	7.13	45	210	6.77	43	208	6.72	42
A.	178	5.75	40	198	6.38	44	182	5.86	41	191	6.15	43
S.	154	5.13	41	160	5.34	42	157	5.23	42	157	5.24	42
O.	112	3.62	34	113	3.66	34	116	3.75	35	113	3.65	34
N.	73	2.44	27	79	2.62	29	76	2.53	28	76	2.54	28
D.	55	1.78	22	56	1.80	22	58	1.88	23	51	1.63	20
Y.	1657	4.53	37	1725	4.73	39	1671	4.57	37	1674	4.58	38

AVERAGES OF BRIGHT SUNSHINE

TABLE I. ENGLAND, S.W. AND IRELAND.

Months	PENZANCE Cornwall 50° 7' N. 5° 32' W. 55ft. + 5ft. 1901-1930			MARKREE CASTLE Sligo 54° 11' N. 8° 27' W. 122ft. + 16ft. 1901-1930			MALLARANNY Mayo 53° 55' N. 9° 47' W. 113ft. + 4ft. 1916-1930			MALIN HEAD Donegal 55° 23' N. 7° 24' W. 83ft. + 10ft. 1915-1930		
	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent
J.	hr. 60	hr. 1.92	% 22	hr. 41	hr. 1.31	% 17	hr. 38	hr. 1.22	% 15	hr. 35	hr. 1.11	% 14S
F.	80	2.84	28	60	2.12	22S	60	2.11	22	65	2.30	24
M.	134	4.32	37	105	3.38	29	111	3.58	30	119	3.82	32
A.	186	6.21	45	151	5.05	36	151	5.04	36	174	5.81	41
M.	209	6.74	44	171	5.52	35	173	5.60	35	196	6.31	39
J.	216	7.19	44	161	5.37	32	162	5.41	32	174	5.81	34
J.	214	6.90	43	142	4.57	28	147	4.73	29	154	4.97	30
A.	197	6.37	44	126	4.06	27	128	4.14	28	133	4.29	29
S.	158	5.26	42	110	3.66	29	115	3.82	30	118	3.94	31
O.	117	3.78	35	83	2.67	25S	79	2.56	24	85	2.73	26
N.	77	2.58	29	54	1.81	21	54	1.79	21	52	1.74	21S
D.	55	1.78	22	35	1.11	15	32	1.04	14	33	1.06	15S
Y.	1703	4.66	38	1239	3.39	28	1250	3.42	28	1338	3.66	30
Months	ARMAGH Armagh 54° 21' N. 6° 39' W. 204ft. + 50ft. 1901-1930			DUBLIN (Phoenix Park) Dublin 53° 22' N. 6° 21' W. 155ft. + 40ft. 1901-1930			BIRR CASTLE Offaly 53° 6' N. 7° 56' W. 173ft. + 48ft. 1901-1930			SESKIN (Carrick-on-Suir Waterford 52° 21' N. 7° 24' W. 535ft. + 4ft. 1914-1930		
	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent
J.	hr. 44	hr. 1.41	% 18	hr. 54	hr. 1.75	% 22	hr. 48	hr. 1.54	% 19	hr. 55	hr. 1.79	% 22
F.	62	2.19	23	75	2.64	27	64	2.26	23	69	2.44	25
M.	107	3.45	29	117	3.76	32	110	3.55	30	117	3.77	32
A.	154	5.14	37	162	5.40	39	154	5.13	37	163	5.44	39
M.	170	5.49	35	187	6.03	38	174	5.62	36	186	6.02	39
J.	169	5.62	33	186	6.19	37	161	5.37	32	199	6.63	40
J.	144	4.66	28	172	5.55	34	148	4.76	29	175	5.65	35
A.	137	4.40	30	156	5.02	34	138	4.46	30	148	4.77	33
S.	119	3.97	31	133	4.43	35	119	3.98	31	135	4.50	35
O.	88	2.83	27	97	3.13	30	91	2.92	28	94	3.02	29
N.	62	2.06	24	70	2.33	27	61	2.02	23	71	2.37	27
D.	40	1.29	18	46	1.48	20	43	1.39	18	52	1.69	22
Y.	1296	3.54	29	1455	3.98	33	1311	3.58	29	1464	4.01	33

For explanation of S see Introduction p.6

AVERAGES OF BRIGHT SUNSHINE

TABLE I. IRELAND, AND ENGLISH CHANNEL

Months	CAHIRCIVEEN (Valentia Obs.) Kerry 51° 56'N. 10° 15'W. 30ft. + 42ft. 1901-1930			BALLINACURRA Cork 51° 52'N. 8° 10'W. 24ft. + 4ft. 1906-1930			SCILLY Cornwall 49° 56'N. 6° 18'W. 163ft. + 6ft. 1901-1930			GUERNSEY Channel Islands 49° 27'N. 2° 23'W. 175ft. + 37ft. 1905-1930		
	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent
J.	42	1.36	16S	48	1.54	19	60	1.95	23	62	1.99	23
F.	65	2.28	23S	67	2.39	24	78	2.78	28	87	3.08	31
M.	115	3.71	31S	119	3.85	33	137	4.40	37	143	4.62	39
A.	159	5.28	38	164	5.47	40	189	6.30	46	198	6.60	48
M.	189	6.11	39	183	5.89	38	212	6.84	45	238	7.68	50
J.	176	5.87	35	191	6.37	39	218	7.28	45	247	8.22	51
J.	158	5.09	32	184	5.92	37	213	6.86	43	248	7.99	51
A.	150	4.84	33	155	5.02	34	197	6.35	44	235	7.58	53
S.	124	4.14	33	136	4.52	36	161	5.38	43	184	6.15	49
O.	92	2.97	28S	94	3.04	29	116	3.74	35	126	4.07	38
N.	64	2.12	24S	65	2.17	25	77	2.57	28	71	2.38	26
D.	38	1.23	16S	44	1.41	18	53	1.72	21	50	1.61	20
Y.	1372	3.75	31S	1450	3.97	33	1711	4.68	38	1889	5.16	42
Months	JERSEY Channel Islands 48° 11'N. 2° 6'W. 28ft. + 5ft. 1901-1930			MALTA 35° 54'N. 14° 31'E. 231ft. + 6ft. 1921-1930								
	Total	Daily Mean	Per cent	Total	Daily Mean	Per cent						
J.	67	2.15	25	156	5.03	51						
F.	92	3.25	32	156	5.54	51						
M.	143	4.60	39	203	6.55	55						
A.	191	6.38	47	250	8.33	64						
M.	227	7.33	48	293	9.45	67						
J.	234	7.81	49	311	10.35	70						
J.	241	7.78	50	364	11.75	82						
A.	229	7.38	52	339	10.95	81						
S.	182	6.08	48	267	8.91	72						
O.	125	4.04	37	230	7.43	66						
N.	79	2.63	29	175	5.82	57						
D.	52	1.68	20	156	5.05	52						
Y.	1862	5.09	42	2900	7.94	66						

For explanation of S see Introduction p.6

AVERAGES OF BRIGHT SUNSHINE

TABLE II. AVERAGE AND PERCENTAGE NUMBER OF DAYS WITH BRIGHT SUNSHINE BETWEEN STATED LIMITS.

STATION	JANUARY					FEBRUARY					MARCH				
	0.1 Nil	3.1 3.0	6.1 6.0	to 9.0	Over 9.0	0.1 Nil	3.1 3.0	6.1 6.0	to 9.0	Over 9.0	0.1 Nil	3.1 3.0	6.1 6.0	to 9.0	Over 9.0
DEERNESS* (1913-1932)	14.5 47	13.3 43	3.1 10	0.1 0	0	9.8 34	11.2 40	5.5 20	1.8 6	0	7.1 23	12.1 39	6.5 21	4.6 15	0.7 2
ABERDEEN (1913-1932)	12.4 40	11.9 39	6.0 19	0.7 2	0	8.7 31	10.6 37	5.6 20	3.4 12	0	5.9 19	10.9 35	6.9 22	5.6 18	1.7 6
COCKLE PARK (1913-1932)	13.2 43	10.2 33	6.3 20	1.3 4	0	9.8 35	9.4 33	5.8 21	3.3 11	0	6.5 21	9.6 31	7.0 23	5.7 19	2.2 7
CAMBRIDGE (1913-1932)	13.4 43	10.1 33	6.5 21	1.0 3	0	9.6 34	9.4 33	5.5 20	3.7 13	0.1	6.3 21	8.8 28	7.2 23	6.7 22	2.0 6
RICHMOND (KEW) (1913-1932)	14.3 46	10.1 33	5.6 18	1.0 3	0	8.9 32	11.3 40	5.7 20	2.3 8	0.1	6.1 20	10.2 33	7.5 24	5.9 19	1.3 4
SOUTHAMPTON (1913-1932)	12.3 40	11.4 37	5.9 19	1.4 4	0	8.0 28	10.0 35	5.1 18	5.0 19	0.2	4.5 15	9.5 31	7.4 24	7.2 23	2.4 7
RENFREW (1921-1932)	15.7 51	11.1 36	3.8 12	0.4 1	0	11.1 39	11.0 39	4.6 16	1.6 6	0	6.5 21	11.0 36	7.5 24	5.0 16	1.0 3
ESKDALEMUIR (1913-1932)	15.7 51	10.8 35	3.5 11	1.0 3	0	10.9 39	10.1 36	4.5 16	2.7 9	0.1	6.9 22	10.5 34	6.5 21	5.1 17	2.0 6
DOUGLAS (1913-1932)	13.0 42	10.1 32	6.1 20	1.8 6	0	9.1 32	9.5 34	5.5 19	4.1 14	0.1	5.5 19	7.9 26	7.5 24	7.2 23	2.9 9
SOUTHPORT (1921-1932)	13.7 44	10.9 35	5.3 17	1.1 4	0	9.2 32	10.1 36	5.5 20	3.4 12	0	5.3 17	8.3 27	8.3 27	6.8 22	2.3 7
STONYHURST (1913-1932)	15.1 49	11.5 37	4.0 13	0.4 1	0	10.5 37	10.3 37	5.3 19	2.1 7	0.1	6.4 21	10.5 34	7.1 23	5.8 19	1.2 4
HOLYHEAD (1921-1932)	12.1 39	11.2 36	5.9 19	1.8 6	0	7.7 27	8.8 31	6.5 23	4.8 17	0.5	4.4 14	8.7 28	7.9 25	6.7 22	3.3 11
FALMOUTH (1913-1932)	10.7 34	11.7 39	6.6 21	2.0 7	0	7.1 25	10.2 36	6.2 22	4.6 16	0.2	4.3 14	8.6 28	7.2 23	7.5 24	3.4 11
MARKREE CASTLE (1913-1932)	13.1 42	12.6 41	4.8 15	0.5 2	0	9.1 33	10.2 36	6.2 22	2.7 9	0	5.9 19	10.3 33	7.8 25	5.6 18	1.4 5
ARMAGH (1913-1932)	12.7 42	11.9 38	5.3 17	1.1 3	0	8.0 28	10.9 38	6.2 22	3.0 11	0.1	5.8 19	9.8 32	8.1 26	5.3 17	2.0 6
DUBLIN (PHOENIX PARK) (1913-1932)	11.1 36	12.0 39	6.3 20	1.6 5	0	8.3 29	9.8 35	5.9 21	4.1 14	0.2	5.5 18	9.5 31	8.1 26	5.9 19	2.0 6
BIRR CASTLE (1921-1932)	12.1 39	11.6 37	6.4 21	0.9 3	0	9.3 33	9.2 33	7.4 26	2.3 8	0.1	5.0 16	9.7 31	8.1 26	6.5 21	1.7 6
CAHIRCIVEEN (VALENTIA) (1913-1932)	11.8 38	13.3 43	5.0 16	0.9 3	0	8.3 29	10.9 38	5.6 20	3.3 12	0.1	5.4 17	9.3 30	7.7 25	5.5 18	3.1 10

*Kirkwall data for 1931 and 1932.
Percentages are shown by italic figures.

AVERAGES OF BRIGHT SUNSHINE

TABLE II. AVERAGE AND PERCENTAGE NUMBER OF DAYS WITH BRIGHT SUNSHINE BETWEEN STATED LIMITS.

STATION	APRIL					MAY					JUNE				
	0.1	3.1	6.1			0.1	3.1	6.1			0.1	3.1	6.1		
	Nil	to	to	to	Over	Nil	to	to	to	Over	Nil	to	to	to	Over
	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.
DEERNES*	3.4	8.7	7.5	5.9	4.5	3.3	9.1	6.1	6.2	6.3	3.9	8.6	4.9	5.1	7.5
	11	29	25	20	15	11	29	20	20	20	13	28	17	17	25
ABERDEEN	3.6	7.8	8.3	6.1	4.2	3.5	7.2	7.1	6.7	6.5	2.3	7.3	6.2	5.6	8.6
	12	26	27	21	14	11	23	23	22	21	7	24	21	19	29
COCKLE PARK	4.7	7.6	6.3	6.4	5.0	3.5	7.3	6.3	6.4	7.5	2.0	6.4	6.5	6.7	8.4
	16	25	21	21	17	11	24	20	21	24	7	21	22	22	28
CAMBRIDGE	3.7	9.2	6.8	5.4	4.9	2.7	6.9	4.9	6.1	10.4	1.7	6.5	5.9	5.4	10.5
	12	31	23	18	16	9	22	16	19	34	5	22	20	18	35
RICHMOND (KEW)	3.4	9.3	6.9	6.2	4.2	2.0	6.9	5.9	6.1	10.1	1.3	6.1	6.1	6.7	9.8
	11	31	23	21	14	7	22	19	20	32	5	20	20	22	33
SOUTHAMPTON	2.9	8.0	6.5	6.9	5.7	1.9	6.6	5.5	5.6	11.4	1.5	5.1	5.1	5.5	12.8
	10	27	21	23	19	6	21	18	18	37	5	17	17	18	43
RENFREW	3.6	9.5	6.1	6.0	4.8	3.5	7.3	7.8	6.4	6.0	3.1	7.3	5.4	6.3	7.9
	12	32	20	20	16	12	23	25	21	19	11	24	18	21	26
ESKDALEMUIR	3.7	8.8	7.7	5.9	3.9	3.7	8.7	6.5	5.8	6.3	2.5	7.9	5.9	5.4	8.3
	12	29	26	20	13	12	28	21	19	20	8	26	20	18	28
DOUGLAS	3.1	7.3	5.0	5.9	8.7	3.2	6.3	5.9	4.9	10.7	2.4	5.4	5.6	5.3	11.3
	10	24	17	20	29	10	20	19	16	35	8	18	19	18	37
SOUTHPORT	2.6	7.6	6.6	6.4	6.8	1.5	7.8	5.9	6.1	9.7	1.4	6.4	5.3	5.1	11.8
	9	25	22	21	23	5	25	19	20	31	5	21	18	17	39
STONYHURST	3.1	9.5	6.8	6.3	4.3	2.9	8.7	6.5	4.8	8.1	1.6	8.3	5.9	5.3	8.9
	10	32	22	21	15	9	28	21	16	26	5	28	19	18	30
HOLYHEAD	2.6	6.1	6.3	7.1	7.9	2.0	6.3	5.5	6.0	11.2	1.9	6.3	4.5	4.7	12.6
	9	20	21	24	26	7	20	18	19	36	6	21	15	16	42
FALMOUTH	2.7	6.3	5.8	6.0	9.2	3.0	5.9	6.0	5.7	10.4	1.9	5.1	3.7	5.9	13.4
	9	21	19	20	31	10	19	19	18	34	6	17	12	20	45
MARKREE CASTLE	3.0	8.5	5.8	7.8	4.9	3.1	7.4	7.4	6.0	7.1	3.1	9.1	6.2	4.7	6.9
	10	29	19	26	16	10	24	24	19	23	10	30	21	16	23
ARMAGH	3.0	8.3	6.3	6.6	5.8	3.2	7.9	6.8	6.7	6.4	2.7	8.4	5.9	4.9	8.1
	10	28	21	22	19	10	25	22	22	21	9	28	20	16	27
DUBLIN (PHOENIX PARK)	2.5	8.1	6.5	6.4	6.5	2.7	7.9	6.5	6.1	7.8	1.9	7.3	5.7	5.8	9.3
	9	27	22	21	21	9	25	21	20	25	6	25	19	19	31
BIRR CASTLE	3.5	6.5	6.9	8.0	5.1	3.1	7.2	7.5	6.3	6.9	3.0	7.8	6.4	5.8	7.0
	11	22	23	27	17	10	23	25	20	22	10	26	22	19	23
CAHIRCIVEEN (VALENTIA)	2.9	7.4	6.4	6.8	6.5	3.3	7.1	5.8	6.1	8.7	3.3	8.7	4.7	4.7	8.6
	10	24	21	23	22	11	23	19	19	28	11	29	15	16	29

*Kirkwall data for 1931 and 1932.
Percentages are shown by italic figures.

AVERAGES OF BRIGHT SUNSHINE

TABLE II. AVERAGE AND PERCENTAGE NUMBER OF DAYS WITH BRIGHT SUNSHINE BETWEEN STATED LIMITS.

STATION	JULY					AUGUST					SEPTEMBER				
	0.1	3.1	6.1			0.1	3.1	6.1			0.1	3.1	6.1		
	Nil	to	to	to	Over	Nil	to	to	to	Over	Nil	to	to	to	Over
	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.
DEERNES*	4.8	10.1	7.0	4.3	4.8	3.9	11.4	7.7	4.5	3.5	4.9	12.4	6.5	4.5	1.7
	16	32	23	14	15	13	37	25	14	11	16	41	22	15	6
ABERDEEN	2.9	9.7	7.9	5.7	4.8	3.5	10.2	7.3	6.3	3.7	4.0	9.3	7.3	6.3	3.1
	9	31	26	18	16	11	33	24	20	12	14	31	24	21	10
COCKLE PARK	3.5	7.9	8.2	5.9	5.5	2.9	8.8	8.4	6.0	4.9	3.9	8.4	6.9	7.9	2.9
	11	25	27	19	18	10	28	27	19	16	13	28	23	26	10
CAMBRIDGE	2.3	7.5	7.1	6.4	7.7	1.6	7.3	7.6	6.7	7.8	3.7	7.5	6.6	8.0	4.2
	7	24	23	21	25	5	24	24	22	25	12	25	22	27	14
RICHMOND (KEW)	1.7	8.7	6.3	6.7	7.6	1.3	7.9	7.9	7.1	6.8	2.9	8.6	6.7	7.5	4.3
	5	28	20	22	25	4	26	25	23	22	10	28	22	25	15
SOUTHAMPTON	1.9	7.3	5.3	6.5	10.0	1.5	7.5	5.8	7.7	8.5	2.7	7.7	5.9	7.4	6.3
	6	24	17	21	32	5	24	19	25	27	9	25	20	25	21
RENFREW	3.7	9.7	7.1	6.8	3.7	2.8	11.7	7.2	6.2	3.1	5.1	8.4	7.3	7.3	1.9
	12	31	23	22	12	9	38	23	20	10	17	28	25	24	6
ESKDALEMUIR	2.9	11.2	7.1	5.4	4.4	3.4	11.9	7.3	5.5	2.9	5.5	9.9	7.3	5.0	2.3
	10	36	23	17	14	11	39	23	18	9	18	33	24	17	8
DOUGLAS	2.7	8.0	5.4	5.8	9.1	2.5	8.9	6.4	6.0	7.2	3.9	8.4	5.7	6.8	5.2
	9	26	17	19	29	8	29	21	19	23	13	28	19	23	17
SOUTHPORT	1.7	8.6	6.6	6.0	8.1	2.1	8.9	7.2	5.5	7.3	3.9	8.1	7.3	6.8	3.9
	6	28	21	19	26	7	29	23	17	24	13	27	24	23	13
STONYHURST	2.7	10.0	7.1	5.7	5.5	3.3	9.3	8.3	5.6	4.5	4.5	9.4	6.9	6.2	3.0
	9	32	23	18	18	10	30	27	18	15	15	31	23	21	10
HOLYHEAD	2.7	7.6	6.1	6.0	8.6	2.6	9.5	6.4	5.2	7.3	3.7	8.7	6.3	7.2	4.1
	9	24	20	19	28	8	30	21	17	24	12	29	21	24	14
FALMOUTH	2.1	6.5	5.1	6.5	10.8	1.9	7.3	5.6	7.3	8.9	3.7	7.5	5.8	6.8	6.2
	6	21	17	21	35	6	24	18	23	29	12	25	19	23	21
MARKREE CASTLE	4.0	11.1	6.9	4.3	4.7	3.9	10.9	7.5	5.6	3.1	5.1	9.7	7.6	5.9	1.7
	13	36	22	14	15	13	35	24	18	10	17	33	25	20	5
ARMAGH	3.3	11.3	7.5	4.9	4.0	4.1	9.3	7.7	6.4	3.5	4.5	10.0	6.4	6.0	3.1
	11	36	24	16	13	13	30	25	21	11	15	33	22	20	10
DUBLIN (PHOENIX PARK)	2.0	9.4	7.3	6.3	6.0	2.7	8.3	7.9	6.8	5.3	4.1	8.8	6.9	6.5	3.7
	7	30	24	20	19	9	27	25	22	17	14	29	23	21	13
BIRR CASTLE	3.5	10.9	7.5	4.9	4.2	3.2	10.3	7.5	6.0	4.0	4.5	10.0	5.4	7.5	2.6
	11	35	24	16	14	11	33	24	19	13	15	34	18	24	9
CAHIRCIVEEN (VALENTIA)	3.7	10.7	5.5	4.8	6.3	4.1	9.0	6.3	5.5	6.1	5.3	9.4	5.9	5.9	3.5
	12	35	18	15	20	13	29	20	18	20	18	31	20	19	12

*Kirkwall data for 1931 and 1932.
Percentages are shown by italic figures.

AVERAGES OF BRIGHT SUNSHINE

TABLE II. AVERAGE AND PERCENTAGE NUMBER OF DAYS WITH BRIGHT SUNSHINE BETWEEN STATED LIMITS.

STATION	OCTOBER					NOVEMBER					DECEMBER				
	0.1	3.1	6.1	Over		0.1	3.1	6.1	Over		0.1	3.1	6.1	Over	
	Nil	3.0	6.0	9.0	hrs.	Nil	3.0	6.0	9.0	hrs.	Nil	3.0	6.0	9.0	hrs.
DEERNESS*	6.5	13.2	8.1	2.9	0.3	11.1	14.1	4.1	0.7	0	17.3	11.7	1.5	0	0
	21	43	26	9	1	37	47	14	2	0	57	38	5	0	0
ABERDEEN	5.9	10.3	8.7	5.6	0.5	9.4	10.9	8.2	1.5	0	11.9	13.8	5.3	0	0
	19	33	28	18	2	31	36	28	5	0	39	44	17	0	0
COCKLE PARK	6.4	10.6	7.0	6.2	0.8	9.3	10.5	6.7	3.5	0	12.3	11.8	6.6	0.3	0
	20	34	23	20	3	31	35	23	11	0	40	38	21	1	0
CAMBRIDGE	5.5	9.3	8.1	7.5	0.6	10.5	9.7	7.2	2.5	0	15.1	9.4	6.1	0.4	0
	18	30	26	24	2	35	32	24	9	0	49	31	19	1	0
RICHMOND (KEW)	5.0	11.5	8.9	5.3	0.3	11.2	10.7	6.0	2.1	0	14.7	10.5	5.5	0.3	0
	16	37	29	17	1	37	36	20	7	0	47	34	19	1	0
SOUTHAMPTON	4.7	10.0	7.7	7.6	1.0	8.5	10.7	6.9	3.9	0	12.5	10.7	6.9	0.9	0
	15	32	25	25	3	29	35	23	13	0	40	35	22	3	0
RENFREW	6.8	12.0	7.2	4.5	0.5	12.9	10.4	5.3	1.4	0	16.8	10.5	3.7	0.2	0
	22	39	23	15	1	43	35	17	5	0	54	34	11	1	0
ESKDALEMUIR	8.6	10.7	5.5	5.4	0.8	11.5	10.1	5.6	2.8	0	16.7	9.3	4.5	0.5	0
	28	34	18	17	3	38	33	19	10	0	54	30	14	2	0
DOUGLAS	6.4	10.7	6.7	6.0	1.2	9.3	11.1	6.5	3.1	0	13.9	10.2	6.2	0.7	0
	21	35	21	19	4	31	37	22	10	0	45	33	20	2	0
SOUTHPORT	5.0	10.7	7.7	6.7	0.9	10.0	12.2	5.5	2.3	0	13.7	11.7	5.4	0.2	0
	16	35	25	21	3	33	41	18	8	0	44	38	17	1	0
STONYHURST	6.4	12.3	6.8	5.3	0.2	10.9	11.9	5.7	1.5	0	15.6	11.1	4.1	0.2	0
	21	39	22	17	1	36	40	19	5	0	50	36	13	1	0
HOLYHEAD	5.7	10.3	7.3	6.3	1.4	9.2	11.6	5.9	3.3	0	12.9	13.3	4.5	0.3	0
	18	33	24	20	5	30	39	20	11	0	41	43	15	1	0
FALMOUTH	4.5	10.3	7.6	7.1	1.5	7.5	11.5	7.0	4.0	0	9.3	13.5	6.8	1.4	0
	15	33	24	23	5	25	38	23	14	0	30	43	22	5	0
MARKREE CASTLE	7.1	11.7	7.6	4.5	0.1	10.4	11.5	6.5	1.6	0	13.3	13.3	4.3	0.1	0
	23	37	25	14	1	35	39	21	5	0	43	43	14	0	0
ARMAGH	7.3	10.9	6.8	5.3	0.7	9.9	11.2	6.3	2.6	0	13.9	11.4	5.4	0.3	0
	24	35	22	17	2	33	37	21	9	0	45	37	17	1	0
DUBLIN (PHOENIX PARK)	6.3	10.3	7.8	5.9	0.7	8.7	10.5	7.5	3.3	0	11.5	12.3	6.4	0.8	0
	20	34	25	19	2	29	35	25	11	0	37	40	21	2	0
BIRR CASTLE	6.2	11.7	7.5	5.1	0.5	10.8	9.8	7.5	2.1	0	12.7	12.1	6.0	0.2	0
	20	38	24	16	2	35	33	25	7	0	41	39	19	1	0
CAHIRCIVEEN (VALENTIA)	7.0	11.1	7.1	4.9	1.0	9.4	12.1	5.6	2.9	0	11.8	14.5	3.9	0.7	0
	23	36	23	15	3	31	40	19	10	0	38	47	13	2	0

*Kirkwall data for 1931 and 1932.
Percentages are shown by italic figures.

AVERAGES OF BRIGHT SUNSHINE

TABLE II. AVERAGE AND PERCENTAGE NUMBER OF DAYS WITH BRIGHT SUNSHINE BETWEEN STATED LIMITS.

STATION	YEARS USED	YEAR				
		0.1	3.1	6.1	Over	
		Nil	3.0	6.0	9.0	hrs.
DEERNESS*	1913 - 1932	91.1	135.7	68.6	40.5	29.4
		25	37	19	11	8
ABERDEEN	1913 - 1932	74.1	119.9	84.7	53.5	33.1
		20	33	23	15	9
COCKLE PARK	1913 - 1932	78.1	108.4	82.1	59.6	37.1
		22	30	22	16	10
CAMBRIDGE	1913 - 1932	76.1	101.8	79.5	59.7	48.2
		21	28	22	16	13
RICHMOND (KEW)	1913 - 1932	72.9	111.8	78.9	57.3	44.4
		20	30	22	16	12
SOUTHAMPTON	1913 - 1932	62.9	104.7	73.9	65.5	58.3
		17	29	20	18	16
RENFREW	1913 - 1932	91.1	120.6	73.8	52.6	27.2
		25	33	20	14	8
ESKDALEMUIR	1913 - 1932	91.9	120.1	71.9	50.5	30.9
		25	33	20	14	8
DOUGLAS	1913 - 1932	74.8	103.9	72.5	57.7	56.4
		21	28	20	16	15
SOUTHPORT	1921 - 1932	70.0	111.4	76.8	56.3	50.9
		19	31	21	15	14
STONYHURST	1913 - 1932	83.0	122.7	74.5	49.2	35.9
		23	34	20	13	10
HOLYHEAD	1921 - 1932	67.5	108.2	73.4	59.3	56.9
		18	30	20	16	16
FALMOUTH	1913 - 1932	58.9	104.2	73.5	64.7	64.0
		16	29	20	18	17
MARKREE CASTLE	1913 - 1932	80.9	126.6	78.2	49.6	29.9
		22	35	21	14	8
ARMAGH	1913 - 1932	78.7	121.2	78.7	53.0	33.7
		21	33	22	15	9
DUBLIN (PHOENIX PARK)	1913 - 1932	67.3	115.0	82.7	58.8	41.5
		19	31	23	16	11
BIRR CASTLE	1913 - 1932	76.8	117.7	83.7	55.8	31.3
		21	32	23	15	9
CAHIRCIVEEN (VALENTIA)	1913 - 1932	76.4	123.5	69.3	52.1	43.9
		21	34	19	14	12

*Kirkwall data for 1931 and 1932.
Percentages are shown by italic figures.

Station	Years Used	Page	Station	Years Used	Page
Aberdeen	1901-30	12	Douglas	1901-30	15
Aberystwyth	1906-30	27	Dover	1908-20; 24-30	22
Armagh	1901-30	31	Dublin	1901-30	31
Aspatia	1901-30	25	(Phoenix Pk.)		
Ballinacurra	1906-30	32	Dumfries	1910-30	14
Baltasound	1907-30	11	Dundee	1916-30	12
Banff	1915-30	12	(Mayfield)		
Bath	1901-16; 20-30	28	Furham	1901-30	15
Belvoir Castle	1906-30	19	Eastbourne	1901-30	23
Bidston	1908-30	27	Edgbaston	1901-30	19
(Liverpool)			(Birmingham)		
Biggin Hill	1921-30	21	Edinburgh	1901-30	13
Birmingham	1901-30	19	(Blackford Hill)		
(Edgbaston)			Emsworth	1906-30	23
Birr Castle	1901-30	31	(Watergate)		
Blackpool	1901-30	25	Enfield (London)	1912-30	20
Bognor Regis	1906-30	23	Eskdalemuir	1910-30	14
Bolton	1901-30	25	Exmouth	1914-30	29
Bournemouth	1904-30	23			
Bradford	1908-30	18	Falmouth	1901-30	30
Brillington	1920-30	15	Felixstowe	1905-30	16
Brighton	1901-30	23	Folkestone	1906-30	22
Broadstairs	1901-30	22	Fortrose	1911-30	11
Bude	1914-30	30	Fowey	1911-30	30
Bunhill Row	1901-30	20			
(London)			Giggleswick	1911-30	18
Burnley	1908-30	25	Gordon Castle	1909-30	12
Buxton	1908-30	18	Gorleston	1908-30	16
			(Yarmouth)		
Cahirciveen			Grayshott	1901-30	24
(Valentia)	1901-30	32	Gt. Woking	1919-30	17
Celshot	1921-30	24	(Shoeburyness)		
Cambridge	1901-30	17	Greenwich (Royal)	1901-30	25
(Botanic Gdns.)			Observatory)		
Cardiff	1908-30	28	Guernsey	1905-30	32
Cardross	1909-30	13			
(Kilmahew)			Hampstead	1911-30	21
Carnoustie	1912-30	12	(London)		
Carrick-on-Suir	1914-30	31	Harrogate	1901-30	18
(Seskin)			Hastings	1901-30	23
Cheltenham	1907-30	20	(St. Leonards)		
Chopwellwood	1911-30	15	Haverfordwest	1902-30	28
Cirencester	1901-15	20	Helensburgh	1911-30	13
(Agric. Coll.)			Holton Heath	1920-30	29
Clacton	1905-30	17	Holyhead	1913-30	27
Cockle Park	1901-30	15	Hoylake	1901-30	27
(Morpeth)			Huddersfield	1907-30	18
Colwyn Bay	1909-30	27	Hutton	1913-30	26
Copdock	1914-30	16			
Coventry	1906-30	19	Ilfracombe	1911-30	29
Cranwell	1921-30	16	Inverness	1904-15; 21-30	11
Cromer	1903-30	16			
Croydon	1921-30	21	Jersey	1901-30	32
Cullompton	1901-30	29			
			Keswick	1919-30	25
Darwen	1908-30	26	Kilmahew	1909-30	13
Deal	1921-30	22	(Cardross)		
Deerness	1901-30	11			

Station	Years Used	Page	Station	Years Used	Page
Kilmarnock (Agric.Coll.)	1908-30	14	Pembroke (St. Ann s Head)	1901-30	28
Kirkwall	1901-30	11	Penzance	1901-30	31
Lancaster	1906-30	26	Perth	1914-30	12
Leamington	1912-30	19	Plymouth	1901-30	29
Leuchars	1921-30	13	(The Hoe)		
Leyland	1911-30	26	Plymouth	1921-30	30
Littlehampton	1916-30	23	(Mount Batten)		
Liverpool (Bidston)	1908-30	27	Portsmouth	1908-30	24
Llandudno	1901-30	14	(Southsea)		
Long Ashton	1921-30	28	Ramsgate	1904-30	22
London	1901-30	20	Raunds	1912-16: 18-30	19
(Bunhill Row)			Regents Park	1901-30	21
Enfield	1912-30	20	(London)		
Greenwich	1901-30	25	Renfrew	1921-30	14
Observatory			Rhayader	1917-30	28
Hampstead	1911-30	21	Rhyl	1902-30	28
Kew	1901-30	21	Richmond (Kew Observatory)	1901-30	21
Observatory			Ross-on-Wye	1915-30	20
Regent s Park	1901-30	21	Rothamsted	1901-30	17
Tottenham	1907-30	21	Rothsay	1914-30	13
Westminster	1901-30	21	Ruthwell	1910-30	15
Lowestoft	1901-15: 21-30	17	Ryde	1914-30	24
Luton	1921-30	17			
Lympne	1921-30	22	St. Andrew s	1913-30	13
			St. Ann s Head	1901-30	28
Malin Head	1915-30	31	(Pembroke)		
Mallaranny	1916-30	31	St. Leonards	1901-30	23
Malvern	1909-30	20	(Hastings)		
Manchester	1906-30	26	Salcombe	1904-30	30
(Oldham Rd.)			Sandown	1906-30	24
Manchester	1904-30	26	Scarborough	1901-30	15
(Whitworth Park)			Scilly	1901-30	32
Marchmont	1901-30	13	Seskin (Carrick- on-Suir)	1914-30	31
Margate	1901-30	22	Sheffield	1901-30	18
Markree Castle	1901-30	31	Shoeburyness	1919-30	17
Marlborough	1901-30	25	(Gt. Wakering)		
Mayfield	1913-30	20	Skegness	1904-30	16
Montrose	1917-30	12	Southampton	1901-30	24
Morecambe	1915-30	26	Southend	1906-30	17
Morpeth	1901-30	15	Sth. Farnborough	1914-30	24
(Cockle Park)			Southport	1901-30	26
Nairn	1907-30	12	Southsea	1908-30	24
Newquay	1901-30	30	(Portsmouth)		
Newton Rigg	1901-30	25	Spurn Head	1921-30	16
Norwich	1911-30	16	Stirling	1918-30	14
Nottingham	1904-20: 25-30	19	Stonyhurst	1901-30	28
(Castle)			Stornoway	1901-30	11
			Swansea	1910-30	28
Oban	1906-30	13			
Oundle	1916-30	19	Teignmouth	1906-30	30
Oxford	1901-30	19	Tenby	1901-30	28
			Thorntonhall	1907-30	14
Paignton	1910-30	29	Torquay	1901-30	30
Paisley	1903-30	14	Totland Bay	1902-30	24

Station	Years Used	Page	Station	Years Used	Page
Tottenham (London)	1907-30	21	Watergate (Emsworth)	1906-30	23
Tunbridge Wells	1901-30	22	Westminster	1901-30	21
Turnberry	1910-30	14	(St. James Park)		
			Weston-super-	1906-30	29
Valentia Obs. (Cahirciveen)	1901-30	32	Mare		
Ventnor	1901-30	25	Weymouth	1901-30	29
(Hospital)			Wisley	1904-30	21
			Woburn	1901-30	17
			Worthing	1901-30	23
Wakefield	1914-17: 20-30	18			
Walton-on- Naze	1913-17: 21-30	18	Yarmouth (Gorleston)	1908-30	16
			York	1901-30	15
			Malta	1921-30	32

1. HANDBOOKS, TEXT-BOOKS, TABLES—cont.

Meteorological Corrections for the use of Gunners. Notes on. By D. Brunt, M.A., and J. Durward, M.A. (No. 241. 1921.) (8vo.) 3d. Postage $\frac{1}{2}$ d.

Meteorological Glossary (continuation of the *Weather Map, q.v.*) (No. 225ii. 2nd edition, 1930. Entirely rewritten.) (8vo.) 4s. 6d. Postage 5d.

Meteorological Observer's Handbook. Approved for the use of Meteorological Observers by the Meteorological Office and the Royal Meteorological Society. (No. 191. 1934 edition.) (8vo.) 5s. Postage 4d.

Supplement No. 1. Instructions for Meteorological Telegraphy. (No. 191/1. 2nd edition, 1930.) (8vo.) 2s. 6d. Postage 2d.

Supplement No. 2. Instructions to Observers at Auxiliary Climatological Stations. (No. 191/2. 2nd edition, 1933.) (8vo.) 3d. Postage $\frac{1}{2}$ d.

Supplement No. 3. Instructions to Observers at Normal Climatological Stations. (No. 191/3. 2nd edition, 1931.) (8vo.) 2d. Postage $\frac{1}{2}$ d.

Supplement No. 4. Instructions to Observers at Climatological Stations at Health Resorts. (No. 191/4. 2nd edition, 1931.) (8vo.) 3d. Postage $\frac{1}{2}$ d.

Meteorology, Elementary. A short Course in. By W. H. Pick, B.Sc., F.C.P. (No. 247. 4th edition, completely revised, 1933.) (8vo.) 2s. 6d. Postage 3d.

Meteorology in Relation to Air Pilotage. (Reprint of Chapter XI of the "Manual of Air Pilotage.") (No. 327. 1930.) (Demy 8vo.) 6d. Postage 1d.

Observer's Primer, being Short Instructions in the Method of Taking and Reporting Readings of Temperature and Rainfall, specially prepared for Meteorological Observers in the British Colonies. (No. 266. 2nd edition 1930.) (8vo.) 3d. Postage $\frac{1}{2}$ d.

Tables for the Reduction of Meteorological Observations. Published by the Indian Meteorological Department. Includes Tables for finding the Absolute and Relative Humidities from Readings of Wet and Dry Bulb Thermometers. (4to.) 2s. Postage 5d.

Weather Map. An introduction to Modern Meteorology. (No. 225i. 2nd edition, 1930, reprinted 1933.) (8vo.) 3s. Postage 2d.

(See also **Meteorological Glossary**, in continuation of the *Weather Map*.)

Wireless and Weather—An Aid to Navigation. By Captain L. A. Brooke Smith, R.D., R.N.R. Reprinted from the *Marine Observer*, Vol. IV. (No. 297. 1928.) (4to.) 5s. Postage 6d.

2. JOURNALS

Marine Observer. From January, 1924. (No. 262.) (12 $\frac{1}{2}$ in. \times 9 $\frac{1}{2}$ in.) In substitution for the monthly issues of Meteorological Charts of the North Atlantic Ocean and East Indian Seas. Published monthly to December, 1932, and thereafter quarterly for the first month of each quarter, with supplements for the intervening months. Quarterly numbers, 4s. each. Postage 3d. Monthly supplements, 6d. each. Postage 1d.

(Annual subscription, including Supplements, 21s., post free.)

Meteorological Magazine. Symons's Meteorological Magazine, incorporated with the Meteorological Office Circular. (8vo.) Published monthly. 6d. Postage 1d.

(Annual subscription, from February to January, 6s. 6d., post free.)

3. PUBLICATIONS OF DATA (Current Periodical Issues)

British Rainfall. (8vo.). A Report upon the progress of Rainfall Investigations and full records of the Rainfall of each year, with Maps and Illustrations:—

1865 to 1879, each 5s.
1880 to 1918, each 10s.
1919 to 1921, each 12s. 6d.
1922 to 1932, each 15s.

(Some of the earlier volumes are out of print.)

Daily Weather Report. 1. British Section. (12½ in. × 13 in.) 2. International Section. (4to.) 3. Upper Air Section. (4to.) Subscription 13s. post free, per official quarter for two or three sections, 6s. 6d. per official quarter for one section. Single copies, price 1d. each. Postage ½d.

Orders or correspondence should be addressed to the Director, Meteorological Office, Air Ministry, Kingsway, London, W.C.2. Cheques and Postal Orders should be made payable to the "Secretary, Air Ministry," and crossed "Bank of England, a/c of H.M. Paymaster-General."

Monthly Weather Report. (4to.) The publication of the Monthly Weather Report began in 1884. Contains summaries of observations from about 330 stations in the British Isles, with Charts. Monthly Parts and Annual Summary, each 1s. Postage 1d.

(Annual subscription, including Introduction and Annual Summary, 15s., post free.)

Observatories' Year Book, from 1922. (4to.) In continuation of Parts III (2) and IV of the British Meteorological and Magnetic Year Book. Volumes for 1922 and 1923, each 63s. 1924, 57s. 6d. 1925 to 1931, each 63s.; 1932, 42s.

Réseau Mondial. (4to.) Monthly and Annual Summaries of Pressure, Temperature, and Precipitation at Land Stations, generally two for each 10 degree square of Latitude and Longitude. From 1910:—

Charts.—1910, 8s. 6d.; 1911, 3s. 6d.

Tables.—1910, 15s.; 1911 to 1913, each 7s. 6d.; 1914, 18s.; 1915, 24s.; 1916, 22s. 6d.; 1917, 22s. 6d.; 1918, 21s.; 1919, 22s. 6d.; 1920 and 1921, each 24s.; 1922 to 1925, each 25s.; 1926, 12s. 6d.

Weekly Weather Report. (4to.). Published in weekly numbers from February, 1878, to February 25, 1928 (at prices ranging from 2d. to 9d. each) and thereafter in annual volumes referring to the Seasonal Year (i.e., from the beginning of Spring to the end of Winter.) Volumes for 1928-9 to 1931-2, each 15s.; 1932-3 to 1933-4, 7s. 6d.

4. PUBLICATIONS OF NORMALS OR AVERAGES

Averages of Temperature for the British Isles, for periods ending 1930. (No. 364. 1933.) (8vo.) 9d. Postage 1d.

Normals of Meteorological Elements for the British Isles. Book of. (No. 236.) (8vo.):—

Section I. Monthly Normals of Temperature, Rainfall and Sunshine for Stations. 2s. (*Out of print*—see "Averages of Temperature" above.)

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

Section III. Maps of the Normal Distribution of Temperature, Rainfall and Sunshine. 1s. 6d. Postage 1d.

Section IV. (a) Range of Variation of Temperature and Rainfall; (b) Frequency Tables for Hail, Thunder, Snow, Snow Lying and Ground Frost. 3s. 6d. Postage 1d.

Section V. Monthly Normals of Rainfall. 4s. Postage 1d.

Section VI. Normals of Relative Humidity. 9d. Postage 1d.