M.O. No. 207.

1911-14

METEOROLOGICAL OFFICE.

BRITISH METEOROLOGICAL AND MAGNETIC YEAR BOOK,

PART III., SECTION 2.

(40)
212
T-Pett

GEOPHYSICAL JOURNAL, 1911,

COMPRISING

DAILY VALUES OF THE METEOROLOGICAL AND GEOPHYSICAL ELEMENTS

OBSERVED AT THE

CENTRAL OBSERVATORY (KEW), MAGNETIC OBSERVATORY (ESKDALE), AND WESTERN OBSERVATORY (VALENCIA)

TOGETHER WITH

WIND COMPONENTS AT FIXED HOURS AT FOUR ANEMOGRAPH STATIONS OF THE METEOROLOGICAL OFFICE.

Published by Authority of the Meteorological Committee.

LONDON:
PRINTED FOR HIS MAJESTY'S STATIONERY OFFICE,
BY NEILL & CO., LIMITED, BELLEVUE, EDINBURGH.

And to be purchased from
THE METEOROLOGICAL OFFICE, EXHIBITION ROAD, LONDON, S.W.

Price Five Shillings.

1912.

METEOROLOGICAL OFFICE.

BRITISH METEOROLOGICAL AND MAGNETIC YEAR-BOOK: GEOPHYSICAL JOURNAL.

PREFACE.

THE Geophysical Journal gives daily values for the meteorological and geophysical elements observed at the three observatories of the Meteorological Office. Data are given for Meteorology, Solar Radiation, Seismology, Atmospheric Electricity, and Terrestrial Magnetism. Wind components are also given for four additional anemograph stations.

All values are referred to Greenwich Mean Time, and the hours are counted from midnight and numbered 1 to 24.

All the units employed are based on the C.G.S. system.

The tables are as follows :—

1. A table of notes on the records derived from the **Galitzin Seismograph** (two horizontal components) at **Eskdalemuir**, giving the period and amplitude of the microseisms not attributed directly to wind or other local disturbance of like character; the character of the earthquakes according to the following notation, with notes on the computed distance of the epicentre, and the "phases" shown by the traces. The magnitude of an earthquake is indicated by—

I. Perceptible, II. Conspicuous, or III. Strong. When it is possible to assign the distance Δ of the epicentre, one of the following letters is added, viz. :—

d (domesticus) Local.
v (vicinus) $\Delta <$ 1000 km.
r (remotus) Δ 1000 to 5000 km.
u (ultimus) $\Delta >$ 5000 km.

P. is the time of arrival of the first phase (longitudinal waves).
S. is the time of arrival of the second phase (transverse waves).
L. is the time of arrival of the long waves.

The co-ordinates of the epicentre relative to the station are—

Δ = distance measured along the arc of the great circle.
a = azimuth.

This table is intended as a Journal of seismological events for purposes of reference so far as concerns the more violent incidents recorded in the trace.

Wt. 41467/309—375—8/11. N. & Co., Ltd. Gp. XV.

2. **Daily meteorological data** at 9 h. and 21 h. G. M. T. for **Valencia Observatory** in the form customary for entering the corresponding data which are published for sixteen stations in the British Isles in Section III. of the Year Book (Daily Observations at Stations of the First and Second Orders). The instrumental values in the table are taken from the self-recording instruments at the Observatory.

Pressure is given in "bars," *i.e.* megadynes per square centimetre. One bar is approximately equivalent to the pressure of 750 mm. of mercury. The unit has been employed for two years in the data for the upper air in the Weekly Weather Report. The name is used in the Journal, following the example of Professor Bjerknes of Christiania in his work for the Carnegie Institute of Washington. The expression of atmospheric pressure in bars involves any necessary reduction of the readings of the barometer to standard temperature and latitude.

Temperatures are given in units on the Kelvin Absolute Scale, *i.e.* in centigrade degrees measured from a zero 273° below the normal Freezing Point of water. Temperatures below 273° A. (0° C.) are printed in small type.

Vapour Pressure, deduced from the readings of the dry and wet bulb by Glaisher's Tables, is given in millibars.

Wind Velocity is expressed in metres per second.

Wind Direction is given in points of the Compass, 32 to the complete revolution, from True North (32), through East (8). No direction is given when the anemometer shows a smaller velocity than 1·8 metres per second.

Precipitation is given in millimetres of equivalent rainfall.

Sunshine, from the Campbell-Stokes instrument, in hours. The estimation of cloud amount and the symbols for weather are in accordance with the conventions of the International Meteorological Committee.

A column of **Remarks** in which a summary of the weather for each day is given, the international weather symbols and the letters of the Beaufort Notation being used as far as possible. These symbols and letters are as follows :—

BEAUFORT NOTATION AND INTERNATIONAL WEATHER SYMBOLS.

b. blue sky.	w. ⌓ dew.	h. ▲ hail.
c. clouds (detached).	x. ⌴ hoar frost.	△ soft hail.
o. overcast.	← ice crystals.	t. ⊤ thunder.
g. gloomy, dull appearance.	V rime.	l. ≺ lightning.
u. ugly, threatening appearance.	~ glazed frost.	⋉ thunderstorm.
v. visibility, unusually clear atmosphere.	e. water deposited copiously on exposed surfaces, without rain falling.	gale.
z. ∞ haze.	p. passing showers.	q. squally.
m. ≡⁰ mist, light fog.	d. drizzling rain.	⊙ solar corona.
f. ≡ fog.	r. • rain.	⊕ solar halo.
fe. ≡⁝ wet fog, *i.e.*, fog which deposits water copiously on exposed surfaces.	s. ✻ snow.	⋓ lunar corona.
	⊹ snow drift.	⊡ lunar halo.
	⊠ snow lying (more than half the surrounding country covered with snow).	⌒ rainbow.
		⋓ aurora.
		zodiacal light.

A bar (—) under a letter indicates persistency, and a dot (.) intensity. The figure ⁰ attached to a symbol indicates very slight, whilst the figure ² indicates strong or heavy : thus •⁰ = slight rain, •² = heavy rain.

The table also contains the measurements of the **Magnetic elements** made at Valencia on selected days.

3. A corresponding **meteorological table** for **Kew Observatory**, with a column for **Solar Radiation** in watts per square centimetre, observed between 11 h. and 13 h. unless otherwise stated. The usual conventional unit for solar radiation, the gramme-calorie per square centimetre per minute, is equivalent to seven hundredths of a watt per square centimetre (·0697 Callendar and Barnes 1902). Instead of the magnetic data, columns are provided for **readings at 10 h. of thermometers exposed in the ground** at depths of 1 foot (0·31 m.) and 4 feet (1·22 m.) below the surface.

4. A corresponding **meteorological table** for **Eskdalemuir Observatory**.

5. A table of values of **electrical and magnetic measurements** for **Kew Observatory**. Daily values of the **potential gradient**, volts per metre in the open, are given for the four hours, 3 h., 9 h., 15 h., 21 h., except on the occasions when the trace is so disturbed that a satisfactory reading cannot be obtained. The potential gradient is positive when the potential in the atmosphere is positive compared with the earth. The values are the means for the period from half an hour before to half an hour after the hour named. A negative potential gradient is indicated by a short thick "-" before the number. When the true value is lost because the trace goes beyond the limit of registration within the hour, a value may be assigned to the hour, which is essentially an underestimate. Such values are marked with an asterisk (*). When the fluctuations are too large to permit of such an estimate of the hourly mean but the dominant sign of the potential gradient is known, "x" is inserted with an appropriate sign.

The value of the **potential gradient** "in the open" is computed from the readings of the trace of an electrograph with a water-dropping collector projecting from the observatory wall, by means of a factor determined by observations with a standardised electrometer above a flat area.

The **number of ions**, positive and negative, per cubic centimetre and their respective mobilities are separately determined by a measurement of each with Ebert's Aspiration apparatus, extending over about an hour, between 14h. and 16h. unless it is otherwise stated. In computing the number of ions from the quantity of positive or negative electricity collected it is assumed that the charge upon an ion is $3{\cdot}4 \times 10^{-10}$ electrostatic units or $1{\cdot}1 \times 10^{-20}$ C.G.S. electromagnetic units.

The **conductivity** in electromagnetic units is computed from the quantity of positive and negative electricity collected and the velocity of the ions for a volt per centimetre; the figure obtained is multiplied by 10^{25} before it is inserted in the table.

The **Air-Earth Current**, c_1, is computed from the conductivity and the potential gradient, and it is therefore dependent upon measurements recorded in the other columns; but a corresponding quantity is determined, independently of the conductivity measurements, with the apparatus designed by Mr. C. T.R. Wilson, and measurements with this apparatus are made at Kew. For these measurements a second column, headed c_2, is provided, and c_1 is computed in order that comparison may be made between the two values. At Eskdalemuir only the values of c_1 are obtained, and these are given for comparison with the corresponding data for Kew.

The **electric character of the day** is indicated both for Kew and for Eskdalemuir by the figures 0, 1, or 2, according to the character of the trace of the electrograph as regards negative electric potential, thus 0 means no negative potential; 1, one or more

excursions of limited duration to the negative side of the scale; 2, negative potential extending in the aggregate over a number of hours.

For Eskdalemuir an estimate is also given of the character of the days as regards the range of potential irrespective of sign within the hourly periods for which an estimate of the mean potential has to be made in the process of tabulation. This characterisation of the day is indicated by the letters a, b, c, according to the range of oscillation within the hour, using a range of about 1000 volts as a criterion: a means that for no hour of the day was there a range of 1000 volts; b that that range of oscillation was reached in one hour at least but in fewer than six hours; c that the critical range was reached in six hours or more.

These specifications must not be understood to be rigid criteria. More definite specifications can be given after longer experience.

The Magnetic Tables are sufficiently explained in the headings. The magnetic character of the day is given in accordance with the precepts of the International Magnetic Commission.

The values of magnetic force are all given in terms of γ, or ·00001 C.G.S. magnetic unit, so that 18564 γ = ·18564 C.G.S.

6. Gives tables of **electrical and magnetic data** for **Eskdalemuir** corresponding with those for Kew, except that at Eskdalemuir the geographical components of magnetic force are directly recorded.

7. A table of **wind components** for four principal anemograph stations of the Meteorological Office. The components resolved along the directions of the four cardinal points are given in metres per second.

W. N. SHAW
(*Director*).

Meteorological Office,
London, S.W.,
August 1911.

METEOROLOGICAL OFFICE OBSERVATORIES—GEOPHYSICAL JOURNAL.

JANUARY 1911.—DAILY VALUES REFERRED TO GREENWICH MEAN TIME AND UNITS, BASED ON THE C.G.S. SYSTEM. [*Price 4d.*

First Year.—No. 1. *Meteorology, Solar Radiation, Seismology, Atmospheric Electricity, and Terrestrial Magnetism.*

1. SEISMOLOGICAL JOURNAL:—ESKDALEMUIR.—Long. 3° 12′ W. Lat. 55° 19′ N.

Date.	Microseisms. Period.	Microseisms. Amp.	Earthquakes.	Remarks.
	s	μ		
1	4	2·5	IIIu, IIu.	1st IIIu, P=10 h. 26 m. 52 s., S=10 h. 33 m. 52 s., Δ=5320 kms., α=82° 26′ E of N, Epicentre 37°·5 N 64° E, IIu, S=15 h. 19 m.
2	7	1·4	I, I.	
3	4	1·1	I, Iu, IIIu.	2nd I Long waves 3 h. 50 m. and I 11 h. 30 m.–12 h.
4	6	1·6	IIIu, IIu, Iu.	
5	7	1·4		3rd I waves 0 h.–12 h., Iu, P=7 h. 46 m. 34 s., S=7 h. 54 m. 24 s., Δ=6250 kms., α=52° 38′ E of N? Epicentre 48° N 78° E, IIIu,
6	6–8	5·1	I.	P=23 h. 34 m. 56 s., S=23 h. 42 m. 24 s., Δ=5850, α=69° 49′ E of N, Epicentre 41° N 77° E. Immediately after S the limits
7	8	2·7	IIu.	of registration were exceeded on the W component Galvanometer and on 4th at 0 h. 19 m. the needle jammed and did not return
8	7–8	4·1		till 8 h. 37 m. considerably strained. The pendulums had not suffered any permanent dislocation.
9	7–8	5·5	I.	
10	7–8	2·8		4th IIu max. at 10 h. 6 m. Iu max. at 22 h. 2 m. 32 s.
11	5	2·8		
12	6	1·6	I.	6th I, long waves at 15 h. 40 m.
13	5–6	1·0		
14	6	0·8	Iu.	7th IIu P? =2 h. 33 m. 50 s., S?=2 h. 43 m. 10 s., Δ=8000 kms. max. at 2 h. 49 m. 6 s.
15	6	1·6		
16	7–8	2·5		9th I Long waves at 4 h. 23 m.
17	6–7	2·3		
18	6–7	2·3		12th I Long waves at 19 h. 12 m.
19	6–7	2·3		
20	7–8	1·4		14th Iu, P=18 h. 3 m. 21 s. ; S=18 h. 14 m. 29 s., Δ=10220 kms.
21	6	1·3		
22	5–6	1·6		25th I Long waves at 1 h. 28 m.
23	6–7	0·8		
24	6–7	1·5		30th I small disturbance 0 h. 34 m.–0 h. 48 m.
25	6–7	3·1	I.	
26	8–9	1·9		
27	5–6	2·6		
28	6–7	1·5		
29	6–7	2·0		
30	6	1·1	I.	
31	5	1·1		

An explanation of the notation used is given in the preface.

2. VALENCIA OBSERVATORY, CAHIRCIVEEN (KERRY).—Long. 10° 15′ W. Lat. 51° 56′ N.

Heights above Mean Sea Level:—Station, H = 9·2 m. Barometer Cistern, H_b = 13·7 m.
Heights above Ground:—Thermometers, h_t = 1·2 m. Rain-gauge, h_r = 0·6 m. Sunshine Recorder, h_s = 12·8 m. Cups of Anemometer, h_a = 13·7 m.

Day.	Pressure at Station Level. 9 h.	21 h.	Air Temperature in Degrees Absolute. 9 h.	21 h.	Max.	Min.	Humidity. Vapour Pressure. 9 h.	21 h.	Percentage. 9 h.	21 h.	Wind Direction in points (8=E 16=S) and Velocity (*metres per second*). 9 h.		21 h.		Cloud Amount and Weather. 10 h.	22 h.	Rain 24 hours beginning 10 h.	Sunshine.	Remarks.	Magnetism. Horizontal Force.	Declination West.	Inclination.
	bar.	bar.	200+°	200+°	200+°	200+°	millibar.		%	%	m/sec.		m/sec.		Tenths of Sky covered.		mm.	hrs.		γ·	° ′	° ′
1	1·0260	1·0265	82·6	80·1	83·2	78·8	11·5	8·6	97	87	22 6·7		7 5·4		10≡0●0	10≡0	1·0	—		...	...	...
2	·0279	·0238	74·8	77·3	79·1	74·1	5·4	6·5	78	79	— 0·9		3 2·2		1	2	—	3·1	Fine.	...	...	...
3	·0226	·0254	75·2	76·7	77·9	74·6	6·0	6·0	84	75	— 1·3		8 5·4		1	0	—	6·2	Fine.	...	...	...
4	·0261	·0216	74·5	78·4	78·8	74·3	5·8	6·9	84	78	6 1·8		14 4·9		7≡0	10	2·5	—	Dull.	...	...	...
5	·0159	·0091	81·3	81·7	82·6	78·5	10·6	10·3	98	93	16 4·5		16 5·4		10≡0	10≡0	8·4	—	Misty.	...	...	...
6	·0060	·0182	80·3	79·5	83·2	78·2	7·2	8·2	71	85	25 10·7		28 3·1		7	3	1·8	2·4	▲ showers *a*.	...	...	...
7	·0206	·0235	81·8	82·5	83·6	79·8	10·3	11·7	91	99	19 5·4		18 3·1		10≡0●	10≡0●0	1·5	—	Heavy mist.	17885	20 41·4	68 12·9
8	·0237	·0248	83·0	82·4	83·8	81·8	12·1	11·7	99	99	20 4·9		— 0·9		10≡0●	*10*≡0●	6·6	—	●0 from 16 h. 30 m.	...	...	...
9	·0288	·0366	80·6	79·6	82·0	75·4	8·4	7·3	81	74	32 3·1		32 1·8		8	*0*	—	3·1	●0 till 5 h., then fair.	...	...	...
10	·0363	·0201	74·0	81·3	82·5	73·4	6·2	10·6	93	98	10 1·8		15 9·4		1	*10*≡0●	13·7	0·9	⌣ *a*. Visibility. ● 16 h. 30 m.–21 h.	...	...	...
11	·0038	·0127	81·3	79·4	83·0	76·8	10·3	6·6	95	69	20 4·5		1 14·3		6≡0	*8*	4·3	0·9	●0 till 7 h. ● showers.	...	...	...
12	·0229	·0289	77·4	77·2	78·4	75·1	5·8	5·6	70	68	1 9·8		4 4·5		7	*6*	0·3	4·8	Squally.	...	...	...
13	·0301	·0283	75·7	75·4	78·4	74·6	5·4	6·8	72	94	8 2·7		7 1·8		8	*10*	—	1·7	Fair.	...	...	...
14	·0276	·0271	77·4	79·2	79·9	76·1	7·5	7·8	91	82	— 0·9		17 2·7		10	*10*	—	—	Dull.	...	...	...
15	·0255	·0282	79·9	81·7	82·2	79·0	7·9	10·9	80	98	16 4·5		17 3·6		10	*10*≡0●	3·8	0·3	●0 17 h.–21 h.	...	...	...
16	·0337	·0348	75·2	82·5	82·7	75·1	7·1	11·8	99	100	— 1·3		15 5·4		10≡0	*10*≡0	2·5	—	Misty. ●0 14 h.–18 h.	...	...	...
17	·0370	·0389	81·2	80·9	82·4	80·7	10·5	9·2	97	87	15 4·9		16 4·0		10≡0	*10*	—	—	●0 5 h.–8 h. Dull.	...	...	...
18	·0398	·0370	80·4	81·2	81·3	80·1	8·6	9·1	84	84	16 2·2		13 3·1		7	*8*	—	3·5	Fair.	...	...	...
19	·0354	·0338	81·1	80·2	82·8	79·2	9·4	8·8	88	87	16 3·1		15 4·9		7	*8*	—	4·0	Fair.	...	...	...
20	·0297	·0242	79·2	79·8	80·7	76·8	8·5	8·6	89	88	14 4·5		15 7·2		8	*5*	—	0·7	Fair.	...	...	...
21	·0197	·0210	80·7	79·8	81·3	79·1	9·1	8·3	88	84	15 4·5		32 4·9		10	*8*	14·5	—	● 11 h.–14 h. 30 m., then ●2 till 16 h.	17913	20 41·4	68 12·7
22	·0226	·0243	74·0	76·1	79·6	74·0	6·4	7·1	98	93	5 1·8		— 1·3		1	*0*	0·8	6·0	Fine.	...	...	...
23	·0258	·0252	76·7	80·3	81·8	76·2	7·3	10·0	91	98	— 1·3		16 3·1		4	*9*	1·3	5·1	Visibility 14 h.	...	...	...
24	·0243	·0225	80·3	82·3	82·8	79·8	8·6	10·3	85	88	18 4·5		16 5·4		10	*10*	0·5	—	Visibility 14 h.	...	...	...
25	·0214	·0245	83·7	83·2	84·1	82·4	12·3	12·0	96	97	19 8·1		20 4·9		10≡0	*10*	1·0	—	● showers.	...	...	...
26	·0271	·0265	82·1	81·5	83·1	81·2	11·0	9·1	96	83	17 3·1		16 5·4		10≡0	*10*	0·8	—	Misty.	...	...	...
27	·0232	·0229	81·8	82·9	84·0	81·2	10·2	11·9	91	98	15 4·9		15 5·8		10	*10*≡0	0·5	1·6	Gloomy *a*. and *p*.	...	...	...
28	·0229	·0206	82·7	81·8	83·3	81·6	10·5	9·2	89	82	15 6·3		15 9·4		8	*10*	7·6	0·5	Visibility 10 h.	...	...	...
29	·0188	·0140	82·1	82·2	83·4	81·5	10·6	9·2	92	79	13 8·1		12 7·2		5	*9*	—	0·5	● 4 h.–6 h.	...	...	...
30	·0186	·0236	80·6	78·8	82·5	77·1	8·0	6·2	78	67	9 8·5		10 3·1		3	*0*	—	5·2	Fine.	...	...	...
31	1·0287	1·0343	77·8	77·4	80·0	76·1	6·3	5·6	74	67	7 2·7		8 6·3		0	*0*	—	7·5	Fine.	...	...	...
Means	1·0249	1·0253	79·3	80·1	81·8	77·8	8·5	8·8	88	86		4·3		4·8	7·1	7·3	73·4	58	Monthly **Totals** or **Means**.	17899	20 41·4	68 12·8
Normal 35 years	1·0128	1·0130	79·8	79·9	82·4	77·5	8·5	8·6	87	86		6·5 25 years		6·5 25 years	—	—	152·1	51 25 yrs	**Normals**, 35 years.			
									20 years													

3. Kew Observatory, Surrey.—Long. 0° 19′ W. Lat. 51° 28′ N.

Heights above Mean Sea Level :—Station, H = 5·5 m. Barometer, H_b = 10·4 m.
Heights above Ground :—Thermometers, h_t = 3·0 m. Rain-gauge, h_r = 0·5 m. Sunshine Recorder, h_s = 14·3 m. Cups of Anemometer, h_a = 21·3 m.

Day.	Pressure at Station Level.		Air Temperature in Degrees Absolute.				Humidity.				Wind Direction in Points (8 = E, 16 = S) and Velocity (*metres per second*).				Cloud Amount and Weather.		Rain 24 hours beginning 10 h.	Sunshine.	Solar Radiation, Watts per cm².	Min. Temp. on Grass.	Earth Temperature at 10 h.		Remarks.
							Vapour Pressure.		Percentage.														
	9 h.	21 h.	9 h.	21 h.	Max.	Min.	9 h.	21 h.	9 h.	21 h.	9 h.		21 h.		7 h.	18 h.					1 ft.	4 ft.	
			200+	200+	200+	200+														200+	200+	200+	
	bar.	bar.	°	°	°	°	millibar.		%	%	m/sec.		m/sec.		Tenths of Sky covered.		mm.	hrs.		°	°	°	
1	1·0203	1·0224	79·3	74·3	81·1	74·1	8·4	4·5	85	67	21	4·9	30	2·7	2	0	0·5	—		74·1	76·7	80·3	● 10 h. 25 m.–11 h. 5 m.
2	·0147	·0097	74·8	76·3	76·8	74·1	4·6	5·8	66	74	27	5·4	31	5·4	0	4	4·1	1·0		68·2	76·3	80·2	✲ 15 h.
3	·0156	·0231	74·7	76·1	77·3	74·0	6·2	5·4	89	71	5	5·4	3	4·9	10	8	—	—		72·2	75·9	80·2	✲● *a.*
4	·0209	·0198	77·0	76·9	78·1	75·8	6·6	6·1	81	77	1	7·6	4	4·5	10	10●	0·3	—		73·2	76·1	80·1	Dull.
5	·0191	·0184	75·7	76·9	77·1	75·2	6·3	7·4	86	92	1	2·2	—	0·9	10	10≡	0·3	—		74·3	76·4	79·9	● 3 h.–4 h. and 17 h. 15 m.
6	·0110	·0106	76·8	76·9	78·7	74·6	7·0	6·9	89	86	15	4·0	27	2·2	10	10●	6·4	—		71·6	76·7	79·8	● 11 h. 55 m.–18 h. 50 m.
7	·0221	·0269	73·6	74·9	77·8	73·2	5·5	5·9	86	85	—	1·3	18	1·8	0	0	0·8	4·7		67·5	76·2	79·8	Fine during day.
8	·0269	·0272	80·6	82·4	82·4	77·2	10·1	10·9	97	94	20	3·1	20	3·6	10	10●≡	3·6	—		67·7	76·0	79·6	● 0 h. 30 m.–2 h. 30 m.
9	·0258	·0288	82·1	78·1	83·1	77·1	11·1	6·9	96	79	22	3·6	29	3·1	10●	10	2·8	—		80·3	77·8	79·6	● *a.* and *p.*
10	·0351	1·0308	75·2	76·1	79·3	74·8	5·6	6·6	79	86	27	3·1	21	2·2	0≡	10?	1·0	5·4		69·9	77·4	79·6	Fine. ⊔ in evening.
11	·0135	0·9977	78·9	80·3	80·6	75·6	7·8	9·4	84	92	19	8·1	18	7·2	10	10	7·9	—		71·8	76·9	79·6	● *a.* and *p.*
12	·0003	1·0126	77·4	74·7	80·3	73·9	5·4	5·1	64	74	1	10·3	1	6·3	10	9	0·5	0·1		75·3	77·4	79·6	● 2 h.–5 h. ✲ 16 h.–16 h.
13	·0218	·0249	75·2	73·8	76·3	72·4	5·8	4·5	81	70	32	5·4	32	1·8	9	2	—	2·6		69·4	76·4	79·6	Fair *a.* [40 m.
14	·0267	·0289	72·0	72·0	77·1	71·2	4·1	4·9	73	86	—	0·9	—	0·9	2≡	0≡	—	4·6		65·5	75·8	79·6	Fine throughout.
15	·0302	·0312	71·5	70·4	76·8	68·6	4·6	4·2	83	84	—	0·5	—	0·9	7?≡	*0*≡	—	3·4		65·6	75·2	79·5	Fine most of day. ≡ *n.*
16	·0362	·0401	73·6	77·1	80·2	68·2	5·3	7·1	82	88	32	0·9	—	0·5	*10*≡	*10*≡	—	2·0		64·1	74·9	79·4	Fine 10 h. 30 m.–12 h. 30 m.
17	·0415	·0413	77·2	78·7	79·4	76·8	7·1	7·9	87	87	23	1·8	25	1·8	10?≡	10≡	—	—		72·9	74·8	79·2	≡ during day.
18	·0415	·0397	78·7	78·2	79·3	78·0	7·3	7·2	81	82	26	1·8	—	0·9	10≡	10	—	—		76·3	75·5	79·1	Dull *a.*, fair later.
19	·0378	·0363	76·7	76·0	78·0	75·4	6·7	6·7	85	89	—	0·9	—	0·9	10	10≡	—	—		75·6	76·2	79·1	Dull throughout.
20	·0350	·0307	74·5	76·5	77·0	74·3	6·0	7·1	87	92	—	0·9	15	1·8	10≡	10≡	—	—		73·9	76·3	79·0	Dull, with ≡.
21	·0261	·0241	76·3	76·7	76·9	76·1	7·0	7·1	91	91	—	0·9	—	0·9	10	10≡	—	—		75·2	76·4	79·0	Dull, with damp air.
22	·0262	·0289	76·6	76·3	76·9	75·7	6·3	6·3	80	82	—	0·9	14	2·2	10≡	10≡	2·3	—		75·0	76·5	79·1	Dull throughout.
23	·0290	·0294	76·4	75·2	77·1	74·5	7·1	6·6	92	92	—	1·3	—	0·9	10≡	0≡	—	—		74·6	76·5	79·0	● 0 h. 10 m.–4 h. 45 m.
24	·0295	·0269	73·0	79·2	80·4	72·4	5·4	8·1	88	86	—	0·9	20	5·8	*10*≡	7?≡	—	3·7		69·1	76·2	79·0	≡² *a.* Fine from 10 h. 30 m.
25	·0251	·0251	79·8	81·3	82·3	79·5	8·0	10·0	81	92	21	4·9	22	4·5	10	10	—	—		77·6	76·9	79·0	Fair during day.
26	·0285	·0309	81·6	82·1	83·2	81·2	9·4	9·3	84	82	23	3·6	23	4·5	5	10	—	3·1		78·2	77·9	79·0	Fine intervals.
27	·0314	·0303	79·9	80·1	81·7	79·5	7·5	8·1	75	82	23	2·7	19	3·6	10	10	—	—		78·5	78·6	79·0	Dull most of day.
28	·0319	·0315	74·8	75·8	82·3	72·0	6·4	6·8	92	92	—	0·5	—	0·5	3	0≡	—	6·3		68·2	77·8	79·0	Fine throughout.
29	·0301	·0269	74·7	78·5	78·5	71·4	6·2	7·3	90	81	11	1·8	10	3·1	*10*≡	*10*≡	—	—		68·8	76·9	79·1	≡ all day.
30	·0266	·0315	76·4	74·7	78·5	73·8	6·2	4·3	80	62	7	8·1	8	8·9	9≡	0≡	—	5·2		73·6	77·1	79·1	Fine during day.
31	1·0373	1·0392	72·4	73·1	74·9	71·7	3·0	4·1	51	66	9	7·6	6	4·5	0≡	0	—	6·3		68·7	76·1	79·1	Fine all day.
Means	1·0264	1·0263	76·4	76·8	79·0	74·6	6·6	6·7	83	83	—	3·4	—	3·0	7·6	6·8	30·5	48		72·2	76·5	79·4	Monthly **Totals** or **Means**.
Normal 35 years	1·0162	1·0161	76·2	76·7	79·1	74·3	6·8	6·9	87	86	—	3·5	—	3·5	—	—	45·5	41		—	—	—	**Normals**, 35 years.
							20 years				25 years		25 years					25 yrs					

4. Eskdalemuir Observatory, Dumfriesshire.—Long. 3° 12′ W. Lat. 55° 19′ N.

Heights above Mean Sea Level :—Station, H = 243·2 m. Barometer, H^b = 237·1 m.
Heights above Ground :—Thermometers, h_t = 0·8 m. Rain-gauge, h_r = 0·3 m. Sunshine Recorder, h_s = 1·5 m. Vane of Anemometer, h_a = 15·2 m.

															9 h.	21 h.	9 h.						
1	0·9923	0·9949	74·7	73·3	80·6	71·7	4·8	3·8	69	61	32	4·9	30	6·7	6	3	—	2·3	—	—	—	—	Very stormy early *a.*
2	·9921	0·9903	74·8	74·8	76·4	72·5	6·9	5·9	99	84	32	13·4	32	10·3	6	10△	1·8	4·6	—	—	—	—	✲● showers *p.*
3	0·9974	1·0019	73·8	69·9	75·3	69·1	5·8	4·1	90	84	4	1·8	—	0·5	7✲	0	1·0	3·0	—	—	—	—	⊠
4	1·0006	0·9954	73·0	73·5	74·4	68·6	5·8	5·8	94	91	—	1·3	—	0·5	6	10	—	0·6	—	—	—	—	Fine *a.* Cloudy *p.*
5	0·9928	·9857	73·9	71·8	74·8	71·3	6·2	4·6	95	81	—	0	—	0	10	10	10·9	—	—	—	—	—	Blue sky 17 h. 30 m.–19 h 30 m.
6	·9677	·9804	74·3	74·1	76·1	71·3	6·5	6·0	96	89	16	7·6	28	3·1	10	2	12·2	1·1	—	—	—	—	✲ early *a.*
7	·9907	·9889	68·0	77·6	77·6	68·0	3·8	8·3	91	99	—	0	16	4·5	8	10●≡	6·6	—	—	—	—	—	● noon–18 h.
8	·9892	·9936	79·8	77·4	81·4	77·0	9·7	6·5	99	77	16	8·1	24	2·2	10●≡	4	3·0	—	—	—	—	—	≡● early *a.*
9	0·9952	·9979	74·5	74·9	77·5	74·5	6·4	5·6	94	80	—	1·3	26	10·3	9	3	0·8	1·9	—	—	—	—	● 16 h.–17 h.
10	1·0023	·9923	74·3	76·2	77·0	74·2	5·8	6·7	85	87	20	3·1	18	8·1	9	10●	28·7	—	—	—	—	—	⊔ 17 h.
11	0·9676	·9736	80·2	71·9	80·6	71·5	9·3	5·7	92	100	22	20·1	32	13·4	10●	10✲²	8·4	—	—	—	—	—	⊔ 16 h.–19 h.
12	·9856	·9938	71·4	73·1	73·6	70·4	5·0	5·6	92	90	32	12·5	32	8·9	2	5	—	6·2	·066	—	—	—	✲ 14 h.–16 h.
13	·9975	·9953	70·2	73·8	74·2	68·9	2·4	5·5	48	85	32	1·8	22	3·1	4	10	1·5	1·1	—	—	—	—	✲ 19 h.–21 h.
14	·9952	·9967	75·6	76·2	77·3	69·0	7·0	7·1	95	93	20	3·1	20	3·6	10≡	9	1·0	—	—	—	—	—	● *p.*
15	0·9957	0·9939	75·8	77·1	77·1	75·1	5·7	7·8	76	95	22	10·3	18	16·5	9	10●	3·8	0·5	—	—	—	—	Damp air *p.*
16	1·0048	1·0058	73·0	75·7	79·2	73·0	5·3	7·2	87	97	20	2·2	20	8·9	2	10≡	1·8	5·1	—	—	—	—	≡ after 21 h.
17	·0048	·0075	79·6	79·8	81·2	75·2	9·3	8·6	96	88	22	14·8	20	8·9	10●≡	10	—	—	—	—	—	—	
18	·0086	·0081	79·5	77·4	79·8	77·0	7·7	6·9	79	83	24	6·7	20	7·6	10	4	—	—	—	—	—	—	
19	·0070	1·0058	76·8	77·0	77·5	75·8	7·0	7·9	87	96	16	3·6	18	4·5	9	10	—	0·2	—	—	—	—	≡ early *a.*
20	1·0038	0·9992	75·9	73·5	77·4	73·0	6·7	5·8	89	92	20	5·8	18	5·4	9	10	0·3	—	—	—	—	—	High fog.
21	0·9931	0·9925	75·3	76·9	77·5	73·1	7·2	8·0	99	99	18	8·9	20	3·6	10●≡	10≡	0·5	—	—	—	—	—	≡ frequently.
22	·9979	1·0004	76·3	75·7	77·1	74·2	6·9	6·4	89	87	4	7·2	8	7·6	9	9	1·0	—	—	—	—	—	Frequent ●.
23	·9979	0·9949	75·0	76·2	76·5	75·0	6·6	7·1	94	93	16	1·8	18	6·3	10	10●	7·1	—	—	—	—	—	Dull and mist.
24	·9911	·9845	77·9	78·8	78·8	76·1	8·1	8·8	94	96	20	11·6	20	20·6	10●	10●	5·6	—	—	—	—	—	
25	·9835	·9850	80·6	82·5	82·7	78·1	9·9	10·6	96	91	20	14·3	20	14·3	10●≡	10	8·9	—	—	—	—	—	
26	·9909	·9926	82·0	80·3	83·5	79·5	10·4	8·4	92	83	22	12·5	22	17·9	9	7	—	0·4	—	—	—	—	Fine *p.*
27	·9955	·9956	78·2	79·1	80·3	78·2	7·8	8·6	89	92	20	5·4	20	8·1	10	5	2·0	—	—	—	—	—	Dull.
28	·9997	·9992	79·0	78·7	79·8	76·7	9·1	8·5	98	93	18	3·6	20	7·2	10≡	10≡	0·8	—	—	—	—	—	≡●.
29	0·9985	0·9979	77·1	75·3	78·7	75·1	7·1	6·2	88	85	20	4·9	14	4·9	9	10	—	—	—	—	—	—	Cloudy.
30	1·0011	1·0056	76·3	71·4	76·5	71·3	6·4	4·5	83	85	12	3·1	8	3·1	9	0	—	3·0	—	—	—	—	⌣
31	1·0096	1·0112	66·8	65·9	76·9	65·2	2·8	2·3	74	66	—	0	—	0	0	0	—	6·4	·07	—	—	—	Very fine throughout. ⌣.
Means	0·9951	0·9955	75·6	75·4	78·0	73·0	6·8	6·6	89	88		6·3		7·1	8·1	7·5	107·7	36	—	—	—	—	Monthly **Totals** or **Means**.
Normal — years	—	—	—	—	—	—	—	—	—	—	—		—		—	—	—	—	—	—	—	—	

The solar radiation is the mean of the readings within the nominal hour of observation (11 h. 30 m.–12 h. 30 m.) unless some other hour is specified.

5. Kew Observatory.

Day.	Potential Gradient, Volts. per metre. Factor 1·75.				Number of Ions per cc.		Velocities of Ions for 1 volt. per centimetre.		Conductivity $\times 10^{25}$.	Air-Earth Current $\times 10^{16}$.		Electric Character of Day.	Magnetic Character of Day.	Horizontal Force.					West Declination.				
	3 h.	9 h.	15 h.	21 h.	+.	−.	+.	−.		c_1.	c_2.			Maximum 18000 γ +.		Minimum. 18000 γ +.		Range.	Maximum 15° +.		Minimum 15° +.		Range.
	v/m.	v/m.	v/m.	v/m.	n/cc.	n/cc.	cm/sec.	cm/sec.	E.-m.U.	Amp/cm².				γ	h m	γ	h m	γ	′	h m	′	h m	′
1	350	215	330	495								1	1	564	21 8	500	22 48	64	60·6	12 20	55·5	20 55	5·1
2	245	350	+ x	385								0	1	533	6 53	447	17 40	86	62·7	15 48	53·3	24 0	9·4
3	± x	± x	475	500								2	1	556	0 20	463	11 20	93	60·6	11 54	51·4	24 0	9·2
4	225	305	330	415								1	1	508	7 15	454	17 51	54	56·7	14 18	50·4	0 20	6·3
5	−35	435	240	260								1	1	519	17 23	463	16 56	56	60·6	23 44	49·0	17 10	11·6
6	120	330	−265	380								2	1	528	21 19	459	17 10	69	62·0	12 35	51·3	17 22	10·7
7	380	750	515	805								0	0	507	17 20	483	12 10	24	57·7	0 45	54·3	20 25	3·4
8	165	210	135	140								0	1	536	22 3	466	20 30	70	60·3	18 22	45·4	21 9	14·9
9	55	210	160	515								1	1	517	20 30	459	16 36	58	61·5	12 25	46·3	16 54	15·2
10	345	650	495	510								0	1	509	7 8	460	15 34	49	59·1	12 3	52·3	20 40	6·8
11	340	−315	175	45								2	1	521	3 0	469	10 29	52	60·9	12 15	52·8	4 15	8·1
12	−700*	440	440	425								2	1	505	23 10	476	11 3	29	—	—	—	—	—
13	255	440	615	690								0	1	514	6 40	450	17 48	64	—	—	—	—	—
14	650	665	630	640								0	0	523	6 54	490	14 44	33	58·9	13 40	54·2	21 23	4·7
15	425	470	810	775								0	0	523	22 51	485	16 40	38	58·4	15 48	52·6	22 56	5·8
16	635	595	645	495	No		No		No Observations.	No		0	1	525	6 33	469	11 58	56	60·4	8 53	52·8	0 13	7·6
17	405	565	525	420	Observations.		Observations.			Observations.		0	0	518	23 30	492	2 4	26	60·6	17 13	57·0	23 57	3·6
18	305	700	405	415								0	1	524	6 18	485	21 50	39	63·3	13 33	54·3	18 55	9·0
19	210	380	435	425								0	0	523	6 48	478	11 45	45	62·4	13 5	57·8	19 24	4·6
20	200	565	370	400								0	0	524	20 52	492	12 17	32	62·8	12 44	57·3	22 18	5·5
21	300	535	275	330								0	0	517	8 13	495	2 12	22	61·0	4 30	58·4	0 12	2·6
22	155	285	175	400								0	0	527	0 50	486	11 28	41	63·7	12 38	57·3	0 30	6·4
23	140	510	455	625								1	1	525	9 6	480	20 25	45	61·3	1 30	54·6	18 10	6·7
24	650	910	470	430								0	2	527	8 22	429	17 55	98	66·8	17 2	33·3	18 14	33·5
25	105	365	135	30								1	2	530	19 59	456	15 21	74	60·7	13 26	45·7	0 50	15·0
26	85	290	225	225								0	2	545	1 11	453	12 12	92	64·3	12 38	52·3	2 40	12·0
27	135	—	405	525								0	1	536	0 3	475	17 34	61	62·5	2 45	53·2	17 42	9·3
28	400	400	435	210								1	2	539	21 40	417	13 41	122	63·6	13 25	46·5	21 28	17·1
29	—	420	415	440								0	1	552	21 28	478	15 42	74	58·9	14 4	50·4	21 20	8·5
30	175	485	665	630								0	1	510	19 15	453	18 48	57	60·2	13 45	51·8	19 2	8·4
31	260	630	705	595								0	2	548	20 3	447	11 50	101	62·8	12 26	47·4	19 56	15·4
M.	281	445	388	435								—	1	527	—	468	—	59	61·2	—	51·7	—	9·5

* Oscillating beyond the limit of registration. x Indeterminate.

6. Eskdalemuir Observatory.

Day.	Potential Gradient, Volts per metre. Factor 5·2.				Number of Ions per cc.		Velocities of Ions for 1 volt. per centimetre.		Conductivity $\times 10^{25}$.	Air-Earth Current $\times 10^{16}$.		Electric Character of Day.	Magnetic Character of Day.	North Component.			West Component.				Vertical Component.§			
	3 h.	9 h.	15 h.	21 h.	+.	−.	+.	−.		c_1.	c_2.			Maximum. 15000 γ +.		Minimum 15000 γ +.	Maximum 5000 γ +.		Minimum. 5000 γ +.		Maximum 45000 γ +.		Minimum 45000 γ +.	
	v/m.	v/m.	v/m.	v/m.	n/cc.	n/cc.	cm/sec.	cm/sec.	E.-m.U.	Amp/cm².				h m	γ	γ	h m	γ	γ	h m	h m	γ	γ	h m
1	x	172	309	240								1 b	0	21 0	1083	980	22 15	12 40	290	230	20 52	20 40	314	308	2 0
2	149	126	217	x								1 b	1	21 32	1030	943	17 24	2 34	311	197	17 45	17 42	340	281	3 43
3	86	103	498	406	480	120	1·36	0	0·72	3·6	—	1 b	2	0 18	1083	948	11 20	0 30	297	223	18 23	15 15	319	288	3 0
4	372	315	355	383								0 b	1	17 55	1022	957	17 46	13 45	299	233	17 50	17 51	339	303	0 0
5	40	189	280	692								1 a	1	17 20	1044	957	16 55	23 40	307	209	17 8	17 5	333	295	24 0
6	−194	x	x	463								2 c	1	21 10	1043	965	16 52	16 18	298	221	17 22	17 33	340	279	0 35
7	194	309	x	212								1 b	1	20 28	1012	977	12 5	13 20	298	262	20 22	16 0	324	313	0 0
8	189	137	63	194								1 a	1	21 54	1063	964	23 3	18 15	307	170	21 5	20 32	388	323	10 0
9	x	286	223	183								1 b	1	20 4	1031	969	13 52	12 20	310	202	16 38	16 45	353	324	21 0
10	132	194	223	x								1 b	1	1 0	1018	959	15 25	12 4	305	253	16 3	16 20	343	306	1 15
11	x	0	x	x								2 c	1	3 0	1025	971	10 20	2 40	325	245	4 12	16 0	335	289	3 0
12	143	149	x	246								0 b	0	23 8	1012	987	10 55	12 40	290	272	8 50	17 5	337	331	5 0
13	120	286	395	132	390	0	0·44	1·1	0·19	0·75	—	1 a	1	6 50 / 21 20	1016	944	17 40	11 5	308	234	18 6	18 0	369	328	2 30
14	x	46	x	263								1 c	1	6 55	1020	985	14 24	13 15	299	260	21 20	21 10	365	339	1 25
15	223	114	92	86								1 b	1	22 50	1042	980	16 30	3 0	304	240	21 55	21 40	371	339	3 30
16	120	246	338	486	180	60	—	—	—	—	—	0 a	1	2 40	1029	959	12 0	9 12	318	238	0 47	18 40	379	352	9 30
17	143	246	120	297								0 a	0	23 25	1030	992	12 30	14 15	292	257	24 0	20 0	382	367	0 0
18	183	206	286	309								0 a	1	18 55	1031	981	11 58	13 32	306	241	18 58	21 25	389	369	6 20
19	212	286	292	338								0 a	1	6 50	1020	970	11 40	7 40	301	268	19 23	19 53	391	371	10 0
20	160	263	297	675								0 a	0	19 50	1022	983	12 15	13 35	298	266	16 38	16 50	388	373	3 40
21	338	200	206	275								0 a	0	10 20	1016	998	1 35	12 46	293	273	0 12	8 0	388	377	1 15
22	332	109	97	−137								1 b	1	0 47	1037	972	11 47	12 38	307	265	0 35	20 20	389	376	13 0
23	74	280	x	x								2 c	1	9 5	1021	976	20 0	1 30	301	256	18 8	20 30	415	375	3 0
24	x	92	109	x								2 c	2	18 19	1077	929	19 50	17 3	345	109	18 13	18 9	555	384	24 0
25	11	29	11	69								1 a	1	17 14	1065	945	15 20	11 44	309	196	0 45	17 0	431	347	2 10
26	46	92	126	160								1 a	1	1 10	1066	962	11 48	12 38	316	242	2 38	19 0	419	376	1 50
27	97	206	166	x								1 b	1	0 0	1036	974	17 30	3 5	315	247	17 42	17 40	411	372	0 45
28	532	503	252	335								0 a	1	21 34	1079	905	13 40	13 6	315	210	21 24	14 25	426	381	0 55
29	114	177	235	292								0 a	1	21 26	1102	984	15 45	4 10	307	230	21 19	16 20	414	380	4 40
30	194	292	315	744	360	270	0·29	1·1	0·44	1·4	—	0 a	1	19 6	1047	968	18 45	16 40	300	216	18 50	18 50	433	385	2 30
31	606	589	583	704								0 a	1	19 58	1120	937	12 5	14 55	314	202	19 52	16 0	437	382	23 35
M.	212	231	255	339	353	113	0·70	0·7	0·45	3·8	—	—	—	—	1043	965	—	—	306	231	—	—	381	342	

The potential gradient is the computed value "in the open." The means for potential gradient are for the days on which values for each of the four hours are given in the table. The number of ions positive and negative respectively, is that given by the Ebert aspiration apparatus. In computing the number the charge upon an ion is assumed to be $1{\cdot}1 \times 10^{-20}$ C.G.S. El.-mag. units. For the Air-earth current c_1 is the value computed from the data in the columns for conductivity and potential gradient, and c_2 is that deduced from observations with Wilson's apparatus. The hour of observation of the number of ions, etc., is between 14 h. and 16 h. unless some other hour is indicated.

§ The values for the vertical component are uncorrected for variations in the zero of the instrument. The final values adopted will be published in the annual volume.

7. Tables of Wind Components in metres per second at fixed hours.

Together with the mean velocity (horizontal movement) in metres per second for the hour with the maximum hourly run for each day, or the greatest velocity attained in a gust and the time of its occurrence.

HOLYHEAD.†§

Height of Head above—Roof 8·8 m., Ground 13·7 m., M.S.L. 19·2 m.
Height of Cups above—Roof 4·6 m, Ground 7·6 m., M.S.L. 15·2 m.

Date.	3 h.				9 h.				15 h.				21 h.				Max. in a Gust.	Time of Gust.	
	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.			
																	V.	Hrs.	Min.
1	6·7	...	6·7	...	...	8·9	3·6	...	...	9·8	...	...	...	9·4	1·8	...	18·3	6	15
2	...	13·0	...	...	...	11·6	...	...	...	13·9	2·7	...	...	12·1	4·9	...	20·1	18	15
3	...	13·0	...	5·4	...	5·8	...	8·9	...	1·3	...	5·8	2·2	...	...	2·2	20·1	5	30
4	...	1·3	...	2·7	...	2·2	...	4·9	...	0·5	...	2·7	...	0·5	...	1·8	7·6	8	40
5	...	...	...	1·8	1·3	...	...	1·8	4·9	...	...	2·9	9·4	...	...	1·8	18·8	23	50
6	11·2	...	...	2·2	2·7	...	13·9	...	...	2·2	12·1	...	...	4·9	12·1	...	21·0	5	15
7	...	3·6	5·4	...	2·2	...	3·1	...	8·1	...	1·8	...	6·7	...	9·8	...	13·4	16	40
8	5·8	...	1·3	...	6·3	...	2·7	...	6·3	...	2·7	...	0·5	...	3·1	...	15·2	6	0
9	0·5	...	...	...	...	0·5	3·1	...	...	1·8	9·4	...	...	2·2	11·2	...	14·3	21	50
10	...	...	9·4	...	...	...	9·4	...	3·1	...	3·1	...	10·7	...	4·5	...	21·0	22	20
11	12·1	...	4·9	...	8·5	...	5·8	...	4·9	...	7·6	...	...	15·2	6·3	...	28·2	23	30
12	...	17·4	3·6	...	...	16·5	3·1	...	...	16·1	3·1	...	...	15·2	...	3·1	29·1	0	5
13	...	10·3	...	1·8	...	6·3	...	2·7	...	3·1	...	1·3	...	4·0	5·8	...	17·4	0	40
14	...	3·6	5·4	...	...	2·2	4·9	...	...	1·3	6·3	...	...	...	3·1	...	9·8	11	50
15	2·2	...	3·1	...	3·6	...	3·6	...	6·7	...	4·5	...	6·3	...	4·0	...	14·8	17	55
16	...	0·9	5·4	...	0·9	...	...	1·8	2·7	...	...	...	4·9	...	...	0·9	11·2	23	50
17	7·6	...	3·1	...	6·7	...	2·7	...	3·6	...	3·6	...	3·6	...	2·7	...	13·9	3	55
18	3·1	...	4·5	...	2·2	...	2·2	...	3·6	...	2·7	...	2·7	...	2·7	...	8·9	3	20
19	4·5	...	1·8	...	4·0	...	1·8	...	2·7	...	1·8	...	2·7	...	1·3	...	10·7	4	40
20	3·1	...	0·5	...	3·6	...	...	0·9	4·5	...	...	0·9	5·4	...	...	...	13·0	21	35
21	6·3	...	...	2·7	4·9	...	2·2	...	3·6	...	3·6	...	1·8	...	1·8	...	12·1	0	5
22	2·2	...	...	...	3·1	...	...	1·3	4·9	...	...	3·1	2·7	...	1·3	...	9·8	18	40
23	4·5	...	...	0·9	4·5	..	...	0·9	4·0	...	4·0	...	3·6	...	3·6	...	11·2	6	45
24	5·4	...	3·6	...	5·8	...	5·8	...	5·8	...	5·8	...	7·6	...	5·4	...	16·5	20	5
25	7·6	...	5·4	...	8·1	...	5·4	...	5·4	...	3·6	...	5·4	...	3·6	...	17·4	1	5
26	5·4	...	5·4	...	6·7	...	4·5	...	5·4	...	2·2	...	5·8	...	4·0	...	14·8	23	35
27	4·0	...	4·0	...	4·5	...	3·1	...	6·3	...	2·7	...	4·5	...	3·1	...	13·0	0	5
28	4·0	...	1·8	...	4·5	...	0·9	...	5·4	...	...	...	6·7	...	...	...	14·8	23	10
29	6·7	...	1·3	...	4·5	...	...	3·1	5·4	...	...	3·6	4·5	...	...	3·1	13·4	1	15
30	1·8	...	...	4·0	...	...	...	0·9	...	1·8	...	8·1	...	1·3	...	6·7	13·9	17	20
31	...	...	...	5·8	0·5	...	...	2·2	...	0·9	0·9	...	...	0·9	0·9	...	9·4	0	10
S+N & W+E	167·8		103·9		143·1		111·2		150·0		110·6		163·4		116·6				
S−N & W−E	41·6		49·3		35·1		52·4		44·6		57·8		32·0		77·4				

DEERNESS.†

Height of Cups above—Roof 1·5 m., Ground 4·9 m , M.S.L. 57·3 m.

Date.	3 h.				9 h.				15 h.				21 h.				Vel. in Max. Hourly Run.	Time of Max.
	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.		
																	V.	Hour.
1	...	13·9	5·8	...	...	12·5	8·5	...	...	13·9	9·4	...	...	12·1	8·1	...	17·9	11
2	...	13·9	2·7	...	...	11·2	...	...	...	7·6	...	5·4	...	2·7	...	6·3	16·1	2
3	2·7	...	...	4·0	5·8	...	...	4·0	5·4	...	...	0·9	3·6	...	0·9	...	7·2	9, 10, 12
4	3·1	...	2·2	...	3·6	...	0·9	...	8·1	...	...	1·8	11·6	...	...	2·2	13·4	23
5	11·2	...	...	2·2	10·3	...	..	1·8	11·2	...	...	2·2	15·7	...	...	6·7	19·2	22
6	16·5	...	...	6·7	14·8	...	...	3·1	1·3	...	2·7	...	0·9	...	5·4	...	19·2	2, 4, 6
7	3·6	...	3·6	...	5·4	...	3·6	...	11·6	...	...	...	6·3	...	2·7	...	12·5	14, 16
8	8·1	...	3·6	...	4·9	...	4·9	...	...	...	10·3	...	1·8	...	10·3	...	12·5	12
9	1·8	...	8·5	...	...	...	8·9	...	2·2	...	10·7	...	...	...	11·6	...	13·0	23
10	...	2·7	12·5	...	...	1·8	8·1	...	1·8	...	9·4	...	3·1	...	4·9	...	13·0	7
11	4·0	...	2·7	...	...	5·4	0·9	...	...	16·1	...	3·1	...	13·4	5·8	...	17·4	14
12	...	14·3	...	...	...	15·2	10·3	...	...	14·3	...	...	...	7·6	5·4	...	20·1	11
13	...	5·4	3·6	...	...	0·5	1·8	...	0·9	...	4·5	...	0·9	...	5·4	...	7·6	1, 20, 23, 24
14	1·8	...	8·1	...	1·8	...	8·9	...	2·2	...	5·8	...	2·7	...	3·6	...	10·3	11, 13
15	4·0	...	4·0	...	8·5	...	1·8	...	11·6	...	4·9	...	3·1	...	15·7	...	17·4	24
16	...	4·5	11·2	...	...	...	12·1	...	4·0	...	4·0	...	11·2	...	2·2	...	20·6	2
17	8·5	...	8·5	...	4·9	...	12·5	...	5·8	...	8·5	...	5·4	...	13·0	...	14·3	11, 20, 24
18	5·4	...	13·4	...	7·2	...	10·7	...	4·5	...	10·3	...	3·6	...	8·5	...	15·2	6
19	4·9	...	7·6	...	6·7	...	6·7	...	3·6	...	0·9	...	4·9	...	7·2	...	11·6	6
20	3·1	...	3·1	...	4·0	...	...	...	1·3	...	1·3	...	0·9	...	0·5	...	5·4	1
21	2·7	...	1·8	...	8·1	...	3·1	...	2·2	...	12·1	...	...	11·6	2·2	...	12·5	15
22	...	4·9	...	2·2	...	3·6	...	2·7	0·9	..	...	3·6	4·5	...	...	3·1	8·5	1
23	8·1	...	...	5·4	9·8	...	...	1·8	7·2	...	...	...	7·6	...	3·1	...	11·2	4
24	3·6	...	2·7	...	7·2	...	7·6	...	11·2	...	2·2	...	...	...	12·5	...	13·4	19
25	...	...	7·2	...	4·9	...	4·9	...	...	...	10·3	...	...	...	9·8	...	10·7	24
26	...	2·2	11·2	...	...	2·7	4·0	...	...	0·5	0·5	...	2·7	...	...	6·3	14·3	24
27	5·8	...	13·9	...	5·4	...	8·1	...	4·0	...	6·3	...	1·8	...	8·1	...	15·2	3
28	...	0·9	4·9	...	3·6	...	...	5·4	5·8	...	...	5·8	6·7	...	...	1·3	9·4	14
29	9·4	...	...	1·8	2·7	...	2·7	...	2·7	...	0·9	...	5·4	...	...	3·6	10·3	24
30	9·4	...	...	...	8·9	...	1·8	...	4·0	...	1·8	...	2·7	...	0·9	...	12·1	1
31	3·1	...	...	...	3·6	...	...	2·7	3·1	...	...	3·1	0·9	...	...	0·5	5·4	11
S+N & W+E	183·5		165·1		185·0		154·3		169·0		142·7		155·4		177·8			
S−N & W−E	58·1		120·5		79·2		111·3		64·2		90·9		60·6		117·8			

SCILLY.‡§

Height of Head above—Ground 9·8 m., M.S.L. 50 m.
Height of Cups above—Ground 5·8 m., M.S.L. 45·7 m.

Date.	3 h.				9 h.				15 h.				21 h.				Max. in a Gust.	Time of Max.	
	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.			
																	V.	Hrs.	Min.
1	...	6·3	2·7	...	...	8·9	3·6	...	...	4·9	11·6	...	...	5·4	...	2·2	14·8	18	5
2	...	4·5	...	...	...	5·8	1·3	...	...	6·7	...	...	...	8·1	3·6	...	13·9	22	50
3	...	9·8	...	...	...	9·8	...	...	...	4·0	...	9·8	...	3·1	...	7·2	18·8	5	30
4	...	2·7	...	2·7	...	2·2	...	4·9	...	4·5	...	0·9	...	2·7	...	0·9	10·7	6	15
5	...	3·6	1·3	...	...	2·7	...	...	...	...	...	...	6·7	...	...	...	11·6	24	0
6	8·5	...	3·6	...	2·2	...	12·1	...	...	8·1	8·1	...	...	8·5	8·5	...	19·2	10	35
7	...	4·9	4·9	...	...	0·9	4·9	...	1·3	...	5·8	...	...	...	9·8	...	12·1	0	15
8	...	6·3	6·3	...	1·8	...	8·9	...	1·8	...	8·9	...	1·3	...	7·2	...	11·2	0	20
9	0·5	...	2·7	...	1·8	...	9·4	...	...	9·4	4·0	...	...	7·2	...	...	14·3	16	30
10	...	5·4	...	...	...	0·5	...	0·0	3·1	...	...	...	7·2	...	1·3	...	13·4	22	55
11	9·8	...	6·7	...	7·2	...	2·2	...	3·1	...	7·2	...	...	9·8	6·3	...	26·4	23	15
12	...	19·7	4·0	...	...	17·4	...	7·2	...	15·2	...	6·3	...	13·0	...	5·4	30·9	6	35
13	...	10·7	...	4·5	...	6·3	...	4·0	...	3·6	...	2·7	...	4·9	...	...	22·4	0	15
14	...	4·0	...	...	...	4·0	...	1·8	...	1·8	...	1·8	...	...	...	3·1	9·4	5	10
15	...	...	...	1·3	0·0	...	...	0·9	...	...	2·2	...	...	0·9	2·7	...	4·5	22	45
16	...	0·0	0·5	...	...	...	...	...	...	...	...	...	0·5	...	...	0·5	3·1	6	15
17	0·9	...	...	1·3	1·8	...	...	1·8	1·8	...	...	1·8	1·8	...	...	1·8	4·0	12	50
18	1·8	...	...	2·7	1·8	...	...	1·8	2·2	...	...	0·5	0·5	...	...	...	3·6	3	35
19	0·5	...	...	0·0	...	...	...	...	...	...	...	...	...	...	...	0·9	2·2	23	30
20	...	...	...	2·7	1·8	...	...	1·8	2·7	...	...	2·7	2·2	...	...	1·3	4·9	18	20
21	2·2	...	...	0·9	2·2	...	1·3	...	1·8	...	1·8	...	3·6	...	1·3	...	7·2	23	55
22	...	1·3	6·3	...	...	2·7	2·7	...	...	...	3·6	...	...	...	3·1	...	10·7	6	30
23	...	...	4·5	...	2·2	...	5·4	...	1·3	...	3·6	...	1·3	...	2·2	...	10·3	9	5
24	3·6	...	2·7	...	4·0	...	...	4·0	4·5	...	4·5	...	...	...	8·9	...	10·3	21	15
25	1·8	...	8·9	...	3·1	...	7·2	...	3·1	...	8·1	...	2·7	...	6·3	...	11·6	17	20
26	3·6	...	8·1	...	2·2	...	5·4	...	4·5	...	4·5	...	3·1	...	3·1	...	10·7	1	5
27	4·5	...	1·8	...	5·4	...	0·9	...	4·9	...	0·9	...	4·0	...	0·9	...	8·1	11	35
28	2·7	...	...	...	5·8	...	...	2·2	6·3	...	...	2·7	4·5	...	...	0·9	9·4	16	5
29	4·5	...	...	4·5	4·9	...	4·9	...	6·3	...	...	6·3	5·8	...	...	5·8	11·6	16	45
30	3·1	...	...	4·9	...	...	...	9·8	...	...	...	14·8	...	...	...	16·1	19·2	22	40
31	...	...	..	15·2	...	...	...	15·7	...	...	...	16·5	...	...	..	12·5	20·6	13	25
S+N & W+E	127·2		105·7		109·4		126·1		106·9		141·6		108·8		123·8				
S−N & W−E	−31·2		24·3		−13·0		14·3		−9·5		8·0		−18·4		6·6				

GREAT YARMOUTH.†§

Height of Head above—Roof 10·7 m., Ground 12·8 m., M.S.L., 15·9 m.
Height of Cups above—Roof 3·7 m., Ground 18·3 m., M.S.L., 22·3 m.

Date.	3 h.				9 h.				15 h.				21 h.				Max. in a Gust (Gorleston).	Time of Gust.	
	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.			
																	V.	Hrs.	Min.
1	3·1	...	4·5	...	2·7	...	6·3	...	...	2·7	2·7	...	2·7	...	6·3	...	17·0	13	35
2	...	1·8	8·9	...	...	2·2	0·5	...	...	6·7	...	...	2·7	...	4·0	...	18·8	15	50
3	...	4·9	...	12·1	2·7	...	...	13·9	8·1	...	...	12·1	...	10·3	...	7·2	17·9	7	25
4	...	9·4	...	4·0	...	8·1	...	8·1	5·8	...	...	8·9	...	5·8	...	8·5	16·5	5	50
5	...	2·2	...	3·1	3·6	...	...	5·4	2·7	...	...	6·7	...	0·5	...	0·9	11·6	0	5
6	...	0·5	...	0·9	4·5	...	...	...	6·7	...	...	...	5·4	...	...	...	18·3	12	5
7	...	...	4·5	...	...	...	4·5	...	...	0·5	2·7	...	0·9	...	2·7	...	8·5	5	5
8	4·5	...	1·8	...	3·1	...	2·2	...	4·5	...	4·5	...	1·8	...	3·1	...	10·7	10	30
9	1·3	...	2·7	...	0·9	...	2·2	...	...	2·7	1·8	...	...	1·8	4·0	...	9·4	14	45
10	...	2·2	4·9	...	...	1·3	3·6	...	...	1·3	2·7	...	...	...	2·2	...	8·9	10	35
11	3·1	...	3·1	...	5·4	...	3·6	...	5·4	...	3·6	...	4·9	...	3·1	...	17·0	12	0
12	...	9·8	...	...	...	15·2	...	...	...	9·8	...	...	...	9·8	...	...	24·1	5	50
13	...	8·1	...	...	...	5·4	...	...	...	2·2	2·2	...	...	1·8	1·8	...	16·1	5	10
14	...	1·8	1·8	...	...	1·3	2·2	...	0·5	...	1·8	...	0·5	...	2·7	...	5·4	1	30
15	0·5	...	3·1	...	0·5	...	2·7	...	0·5	...	1·3	...	0·5	...	2·2	...	4·9	1	30
16	0·5	...	2·7	...	1·3	...	3·1	...	...	...	1·8	...	...	...	1·3	...	6·3	6	55
17	2·2	...	2·2	...	2·7	...	2·7	...	1·3	...	2·7	...	1·3	...	3·1	...	8·5	10	25
18	0·5	...	1·8	...	0·5	...	1·3	...	...	...	2·2	...	...	...	3·1	...	7·6	12	40
19	...	...	1·8	...	...	...	1·3	...	0·9	...	1·8	...	0·9	...	1·8	...	5·4	11	50
20	0·9	...	1·8	...	0·5	...	0·9	...	1·3	...	0·9	...	1·8	...	1·3	...	7·2	13	45
21	2·7	...	...	...	3·1	...	...	...	1·3	...	2·7	...	...	...	3·1	...	7·2	0	40
22	...	...	1·8	...	...	...	1·8	...	...	...	0·9	...	...	...	0·9	...	4·9	2	15
23	...	...	1·3	...	4·5	...	...	3·1	2·7	...	...	...	2·2	...	0·9	...	10·7	6	30
24	1·3	...	1·8	...	1·8	...	3·1	...	2·7	...	2·7	...	4·0	...	4·0	...	12·1	20	25
25	3·1	...	4·9	...	3·6	...	5·4	...	3·6	...	5·4	...	2·7	...	6·3	...	14·3	21	5
26	1·8	...	4·5	...	2·2	...	4·9	...	...	...	5·4	...	2·7	...	4·0	...	13·0	13	10
27	0·9	...	2·2	...	1·8	...	2·7	...	1·3	...	2·7	...	1·8	...	3·1	...	8·5	11	50
28	1·8	...	3·1	...	2·2	...	3·1	...	0·5	...	0·9	...	0·9	...	1·3	...	6·7	3	55
29	0·5	...	0·5	...	0·9	...	0·9	...	0·5	...	0·5	...	...	...	...	8·1	11·6	22	35
30	2·2	...	...	10·7	...	...	...	12·1	...	...	...	12·1	2·7	...	...	13·4	15·7	19	10
31	2·2	...	...	12·1	4·0	...	...	9·4	...	...	...	5·4	...	1·3	...	6·3	15·2	4	15
S+N & W+E	73·8		108·6		86·0		111·0		76·2		99·1		71·7		110·7				
S−N & W−E	−7·6		22·8		19·0		7·0		24·4		8·7		9·1		21·9				

The velocities at fixed hours are means for the interval from 30 minutes before to 30 minutes after the hour. The hours are numbered 1 h. to 24 h. Time is referred to Greenwich Mean Time.

† Robinson Cup Anemometer; Arms 0·61 m.; Diameter of Cup, 0·229 m.; Factor 2·2. ‡ Robinson Cup Anemometer; Arms 0·305 m.; Diameter of Cups 0·127 m.; Factor 2·8.

§ Dines Pressure Tube Anemometer. At Great Yarmouth, Holyhead, and Scilly the readings at fixed hours are taken from the Robinson Anemometer, the maxima quoted are the greatest winds in a gust as recorded by the Dines Pressure Tube.

METEOROLOGICAL OFFICE OBSERVATORIES—GEOPHYSICAL JOURNAL.

FEBRUARY 1911.—DAILY VALUES REFERRED TO GREENWICH MEAN TIME AND UNITS, BASED ON THE C.G.S. SYSTEM. [*Price 4d.*

First Year.—No. 2. *Meteorology, Solar Radiation, Seismology, Atmospheric Electricity, and Terrestrial Magnetism.*

1. SEISMOLOGICAL JOURNAL:—ESKDALEMUIR.—Long. 3° 12′ W. Lat. 55° 19′ N.

Date.	Microseisms. Period.	Microseisms. Amp.	Earthquakes.	Remarks.
	s	μ		
1	6	1·1		4th I Long waves at 10 h. 33 m.–10 h. 36 m.
2	7	2·2		
3	7	1·4		5th Iu, P ?=4 h. 36 m. 30 s., S=4 h. 45 m. 43 s., Δ=7860 kms.
4	6-7	0·8	I.	
5	6	0·6	Iu.	7th Iu waves S=2 h. 42 m. 40 s., L=2 h. 57 m., I Long waves 10 h. 47 m.–11 h. 30 m.
6	6-7	0·5		
7	6	0·6	Iu, I.	11th I about 12 h. Phases indeterminate.
8	5	0·6		
9	6-7	1·4		12th Feeble waves about 22 h.
10	6	1·6		
11	6-7	1·5	I.	18th IIIu, P=18 h. 50 m. 22 s., S=18 h. 57 m. 37 s., Δ=5600 kms., α=64° 45′ E of N, Epicentre 44° N 80° E, IIIr P=21 h. 40 m. 16 s., S=21 h. 44 m. 10 s., Δ=2360 kms., α=55° 56′ E of S, Epicentre 40°·3 N 20°·5 E.
12	5	0·9	I.	
13	7	2·2		
14	6-7	1·5		23rd I Max. long waves at 12 h. 12 m 30 s. Phases indeterminate on account of wind disturbances.
15	6-7	1·5		
16	5	1·9		26th Iu P=12 h. 49 m. 5 s., S=12 h. 59 m. 50 s., Δ=9700 kms. α uncertain on account of microseisms.
17	5	3·5		
18	6	4·8	IIIu, IIIr.	
19	6	4·0		
20	5	1·9		
21	5-6	1·8		
22	6	1·6		
23	6-7	4·6	I.	
24	6	4·8		
25	5-6	1·6		An explanation of the notation used is given in the preface.
26	6	4·8	Iu.	
27	6	2·4		
28	6-7	3·1		

2. VALENCIA OBSERVATORY, CAHIRCIVEEN (KERRY).—Long. 10° 15′ W. Lat. 51° 56′ N.

Heights above Mean Sea Level:—Station, H = 9·2 m. Barometer Cistern, H_b = 13·7 m.
Heights above Ground:—Thermometers, h_t = 1·2 m. Rain-gauge, h_r = 0·6 m. Sunshine Recorder, h_s = 12·8 m. Cups of Anemometer, h_a = 13·7 m.

Day.	Pressure at Station Level. 9 h.	21 h.	Air Temperature in Degrees Absolute. 9 h.	21 h.	Max.	Min.	Humidity. Vapour Pressure. 9 h.	21 h.	Percentage. 9 h.	21 h.	Wind Direction in points (8=E, 16=S) and Velocity (*metres per second*). 9 h.		21 h.		Cloud Amount and Weather. 10 h.	22 h.	Rain 24 hours beginning 10 h.	Sunshine.	Remarks.	Magnetism. Horizontal Force.	Declination West.	Inclination.
	bar.	bar.	200+ °	200+ °	200+ °	200+ °	millibar.		%	%	m/sec.		m/sec.		Tenths of Sky covered.		mm.	hrs.		γ.	° ′	° ′
1	1·0400	1·0406	72·9	72·2	79·6	71·8	4·8	4·3	79	74	—	1·3	5	1·8	0	*0*	—	8·0	Fine.	…	…	…
2	·0393	·0375	69·9	71·8	78·5	**69·6**	3·6	5·2	74	92	7	1·8	7	2·2	0	*2*	—	7·3	Fine. ∞	…	…	…
3	·0359	·0354	71·3	76·7	78·5	70·2	5·0	6·6	93	84	—	1·3	10	2·7	2≡0	*0*	—	6·0	Fine. ∞	…	…	…
4	·0354	·0346	78·9	79·0	79·5	77·9	7·7	7·3	84	79	8	3·1	7	1·8	10∞	*10*	—	—	Dull. ∞	…	…	…
5	·0339	·0344	77·4	78·5	79·0	76·8	6·4	6·8	76	77	6	3·1	9	5·4	10≡0	*10∞*	—	—	Gloomy.	…	…	…
6	·0363	·0387	76·9	77·4	80·4	76·5	6·6	7·3	83	87	—	0·9	8	1·8	0∞	*10∞*	—	6·2	Fine. ∞	…	…	…
7	·0388	·0383	76·8	78·5	80·4	76·7	7·4	7·4	93	83	—	0·9	10	1·8	10∞	*9*	—	—	∞ all day.	17897	20 40·6	68 12·0
8	·0357	·0287	78·5	79·7	80·3	77·2	6·4	7·0	72	72	9	4·5	13	7·2	10∞	*7*	—	0·5	Dull.	…	…	…
9	·0196	·0080	80·1	81·5	81·9	79·5	7·7	8·9	77	81	12	8·5	14	10·7	10∞	*10*	7·1	—	Gloomy. ● from 21 h.	…	…	…
10	·0123	·0198	79·9	77·8	82·0	75·3	6·7	7·4	**67**	87	27	8·1	28	2·7	2	*5*	0·5	6·9	● till 2 h. Visibility.	…	…	…
11	·0218	·0225	74·2	77·6	81·2	72·4	6·3	7·5	94	89	7	1·8	16	3·1	0	*5*	0·5	7·4	⌣ *a.* Visibility.	…	…	…
12	·0225	·0234	80·0	82·0	82·4	77·3	7·9	9·3	79	82	15	6·3	16	6·3	9	10	—	—	Dull.	…	…	…
13	·0241	·0237	82·4	82·3	82·8	81·5	10·5	10·3	90	88	15	5·8	15	8·1	10	10	24·9	—	Gloomy.	…	…	…
14	·0231	·0280	82·7	80·6	84·6	79·2	11·6	9·9	96	96	16	4·5	—	0·9	10●≡0	8	0·5	0·2	Misty.	…	…	…
15	·0305	·0237	79·6	83·1	83·4	75·5	8·4	11·8	86	96	9	4·0	17	6·7	10	9	1·0	0·7	⌣ *a.* Visibility.	…	…	…
16	·0190	·0178	83·8	84·0	84·5	82·9	11·6	12·2	90	93	19	10·3	20	9·4	10≡0	8	1·0	—	Gloomy and misty.	…	…	…
17	·0215	1·0173	82·3	83·8	84·8	81·2	11·3	12·3	97	96	16	2·7	20	6·7	10≡0	10≡0	1·3	—	Misty.	…	…	…
18	·0067	0·9991	84·6	81·7	85·0	80·1	12·7	8·3	93	75	20	11·6	22	13·4	10≡0	3	2·0	—	● showers *a.* Gloomy.	…	…	…
19	·0034	1·0138	81·0	79·5	82·2	78·7	7·5	7·6	71	78	24	15·7	29	7·2	10	6	1·3	5·5	Squally, with ●▲ showers *p.*	…	…	…
20	·0185	1·0129	74·5	80·9	82·2	74·5	6·3	9·2	93	88	9	2·2	15	5·8	2	10	6·1	3·6	⌣ *a.* Visibility *p.* ●0 10 h.	…	…	…
21	·0032	0·9968	83·8	82·0	**85·1**	80·7	12·8	11·0	99	97	16	7·6	23	9·4	10≡0	10	3·6	—	Misty, with ● showers.	…	…	…
22	1·0074	1·0054	80·7	82·8	83·9	78·8	8·4	10·1	81	84	21	10·7	16	8·9	5	8	7·6	5·3	▲ before 10 h. Fair.	17858	20 39·8	68 15·0
23	0·9874	0·9972	82·2	80·7	84·1	78·8	9·5	9·1	82	88	21	15·7	23	13·0	6	10●	4·6	2·0	Squally and misty.	…	…	…
24	1·0111	1·0026	80·7	84·1	84·2	80·0	8·3	12·4	80	94	23	9·4	21	13·0	5	10≡0	8·6	—	Misty, with ● showers.	…	…	…
25	·0039	·0088	83·5	83·4	84·5	81·7	11·6	10·8	92	87	22	11·6	21	13·0	10≡0	3	0·3	—	Misty.	…	…	…
26	·0210	1·0146	81·2	80·2	82·9	80·2	7·6	9·4	71	93	25	7·2	14	7·2	5	10●	20·8	1·5	Fair *a.* ● from 19 h.	…	…	…
27	1·0029	0·9956	84·0	84·2	84·9	82·0	12·8	12·6	99	96	16	7·2	16	8·1	10●≡0	10≡0	2·0	—	● till 1 h. Misty.	…	…	…
28	0·9900	1·0073	81·5	80·1	83·8	77·7	9·7	7·1	88	70	20	8·1	25	10·3	10≡0	2	2·8	4·2	Misty. ▲ showers *p.*	…	…	…
Means	1·0195	1·0188	79·5	80·2	82·4	77·7	8·5	8·9	85	86		6·3		6·7	7·0	7·3	96·5	65	Monthly **Totals** or **Means**.	17878	20 40·2	68 13·5
Normal 35 years	1·0125	1·0125	79·6	79·9	82·6	77·5	8·4	8·4	87	86		5·9 25 years		6·0 25 years	—	—	125·7	71·5 25 yrs	**Normals**, 35 years.			
									20 years													

3. Kew Observatory, Surrey.—Long. 0° 19′ W. Lat. 51° 28′ N.

Heights above Mean Sea Level :—Station, H = 5·5 m. Barometer, H_b = 10·4 m.
Heights above Ground :—Thermometers, h_t = 3·0 m. Rain-gauge, h_r = 0·5 m. Sunshine Recorder, h_s = 14·3 m. Cups of Anemometer, h_a = 21·3 m.

Day.	Pressure at Station Level.		Air Temperature in Degrees Absolute.				Humidity.				Wind Direction in Points (8 = E, 16 = S) and Velocity (*metres per second*).				Cloud Amount and Weather.		Rain 24 hours beginning 10 h.	Sunshine.	Solar Radiation, Watts per cm².	Min. Temp. on Grass.	Earth Temperature at 10 h.		Remarks.
							Vapour Pressure.		Percentage.														
	9 h.	21 h.	9 h.	21 h.	Max.	Min.	9 h.	21 h.	9 h.	21 h.	9 h.		21 h.		10 h.	22 h.					0·3 m.	1·2 m.	
	bar.	bar.	200+ °	200+ °	200+ °	200+ °	millibar.		%	%	m/sec.		m/sec.		Tenths of Sky covered.		mm.	hrs.		200+ °	200+ °	200+ °	
1	1·0417	1·0420	69·6	72·6	74·6	68·2	3·3	4·4	70	74	—	0·9	—	0·9	0≡	*10*≡	—	—	—	61·5	75·2	79·1	⌣ *a.* ≡ most of day.
2	·0416	·0369	69·1	74·0	74·1	68·2	3·1	5·1	68	78	—	0·9	30	3·1	0≡	*10*≡^{0}	—	—	—	62·1	74·6	79·1	⌣ *a.* ≡ *a.* Cleared *p.*
3	·0339	·0352	75·9	77·9	78·3	73·3	6·2	7·2	83	84	—	0·9	4	3·6	10≡^{0}	*10*●^{0}≡^{0}	—	—	—	69·9	74·5	79·0	Dull. ●^{0} at times *p.*
4	·0345	·0331	76·8	77·6	79·0	76·2	6·8	7·3	86	86	1	3·1	32	3·1	10≡^{0}	*10*	0·3	0·1	—	71·8	74·5	78·8	Dull during day.
5	·0329	·0344	77·0	77·3	78·7	76·3	6·9	7·1	84	85	1	3·1	2	2·7	10≡^{0}	10	—	—	—	73·2	74·9	78·6	Dull all day.
6	·0365	·0382	75·6	75·6	76·8	75·1	5·7	5·6	78	76	32	2·7	—	0·9	10≡^{0}	10≡^{0}	—	—	—	73·9	75·7	78·5	Dull all day.
7	·0380	·0379	74·9	74·7	76·9	74·1	5·4	5·6	78	80	—	0·9	—	0·5	10≡^{0}	10≡^{0}	—	0·2	—	72·4	75·7	78·5	Dull most of day.
8	·0379	·0366	76·5	76·6	77·6	74·6	5·5	6·3	69	80	1	2·7	—	0·9	10≡^{0}	10≡^{0}	—	—	—	66·4	75·6	78·5	Dull during day.
9	·0319	·0245	76·2	75·7	77·2	74·9	5·2	5·0	68	68	11	3·1	14	2·2	10≡^{0}	10	—	—	—	72·6	75·7	78·5	Dull all day. [m.–23 h. 50 m.
10	·0167	·0145	73·6	76·7	78·8	71·3	4·6	7·0	72	89	13	1·8	—	0·9	8≡^{0}	10●≡^{0}	2·8	2·3	—	65·1	75·4	78·5	⊕ *a.* ●21 h.–22 h. and 22 h. 20
11	·0186	·0221	75·4	75·4	79·7	73·9	6·1	5·8	84	79	27	3·1	28	2·2	1≡^{0}	0≡^{0}	—	5·7	—	70·8	75·9	78·5	●^{0} 0 h. 10 m. and 1 h. 45 m.
12	·0265	·0292	74·6	78·0	80·1	72·1	5·7	5·2	83	60	—	1·3	29	1·8	5≡^{0}	9	—	4·8	—	65·9	75·4	78·5	⌣ early *a.* Fine.
13	·0321	·0335	76·3	76·4	81·0	74·5	6·6	5·9	85	75	—	0·9	17	1·8	10≡^{0}	3≡^{0}	—	0·4	—	70·4	75·4	78·4	Dull most of day.
14	·0338	·0317	71·4	78·0	80·5	70·6	4·5	6·9	83	80	—	0·9	20	4·5	3≡^{0}	10⋃	1·5	5·1	—	64·5	75·4	78·4	Fine.
15	·0318	·0339	79·9	76·3	82·2	75·4	8·8	6·2	90	79	25	2·7	29	1·8	8	0?≡^{0}	1·0	6·2	—	75·1	76·0	78·4	● 1 h. 25 m.–3 h.
16	·0262	·0196	81·0	82·1	82·9	76·2	9·1	9·5	87	83	20	6·7	21	8·1	10	3	—	—	—	68·8	76·5	78·4	● 1 h. 50 m.–3 h. and 4 h. 40 m.
17	·0184	1·0192	82·8	83·1	85·3	82·2	8·9	9·9	74	81	25	5·4	20	5·8	8	10	—	4·7	—	79·2	77·9	78·4	Fair *a.*; fine later.
18	1·0117	0·9994	83·7	84·5	**85·6**	82 5	10·9	10·9	85	80	20	6·3	20	10·3	10	10	4·6	0·1	—	79·4	78·8	78·4	Dull. ● from 23 h. 30 m.
19	0·9972	1·0088	80·1	78·0	83·2	75·9	7·1	5·9	71	68	24	8·1	27	3·6	4	0	—	7·1	—	75·6	79·5	78·5	● till 1 h. 30 m. ●^{2} 7 h.
20	1·0138	·0187	76·3	78·5	81·8	74·1	6·3	6·6	81	74	22	3·1	24	3·6	1	0	0·5	6·4	—	67·2	77·9	78·6	Fine most of day. [–20 h.
21	·0175	·0076	78·7	82·4	83·0	74·6	8·0	10·8	88	92	19	4·9	19	9·4	10	10	2·8	—	—	68·2	77·5	78·8	● 8 h. 10 m.–9 h. 20 m. and 18 h.
22	·0042	1·0145	81·9	80·2	83·8	79·9	7·1	8·1	64	81	23	9·4	20	5·4	4	1	—	7·9	—	78·9	78·9	78·9	● 4 h. 30 m.–5 h. and 6 h. 30 m.
23	·0016	0·9916	81·4	82·4	84·1	79·9	8·6	8·6	79	72	18	11·6	22	9·4	10	10	2·3	0·9	—	77·0	78·8	78·9	● 12 h. 15 m.–13 h. ●^{2} 14 h.
24	·0016	1·0108	80·6	79·9	83·6	79·6	6·5	7·5	63	75	24	8·5	22	4·5	3	10	3·0	7·4	·063	76·5	79·0	79·0	Fine. [15 m.
25	·0026	·0076	83·4	81·7	85·5	78·9	10·4	8·1	83	73	23	5·4	25	4·0	10	0	0·3	0·3	—	76·5	79·1	79·1	● 0 h. 15 m.–2 h. 40 m.
26	·0119	·0215	79·9	78·5	82·5	76·9	6·0	6·5	**59**	72	26	8·1	25	2·7	3	0	0·8	7·4	—	75·2	79·1	79·1	●^{0} 4 h. 25 m.
27	·0174	1·0078	78·1	82·4	82·7	75·4	7·7	11·1	89	95	18	2·7	19	5·8	10●≡^{0}	10	**9·7**	—	—	71·2	**78·2**	**79·2**	● 10 h.–14 h. Dull.
28	1·0009	0·9994	83·0	81·3	84·3	80·6	**11·3**	9·5	93	87	18	8·1	21	4·5	10●	9	3·8	—	—	80·4	79·3	79·2	Dull. ● *a.* and *p.*
Means	1·0219	1·0218	77·6	78·5	80·9	75·6	6·9	7·3	78	79	—	4·2	—	3·9	7·1	7·0	33·4	67	—	71·8	76·8	78·7	Monthly **Totals** or **Means**.
Normal 35 years	1·0152	1·0152	76·7	77·2	80·1	74·9	6·6	6·7	85	84	—	3·7	—	3·6	—	—	39·1	55·0	—	—	—	—	**Normals**, 35 years.
							20 years				25 years		25 years					25 yrs					

4. Eskdalemuir Observatory, Dumfriesshire.—Long. 3° 12′ W. Lat. 55° 19′ N.

Heights above Mean Sea Level :—Station, H = 243·2 m. Barometer, H_b = 237·1 m.
Heights above Ground :—Thermometers, h_t = 0·8 m. Rain-gauge, h_r = 0·3 m. Sunshine Recorder, h_s = 1·5 m. Vane of Anemometer, h_a = 15·2 m.

															9 h.	21 h.	9 h.						
1	1·0135	1·0147	65·4	67·7	75·9	64 1	2·7	3·7	81	92	—	0	—	0	0	9	—	7·3		—	—	—	Very fine. ∞ *p.*
2	·0124	·0101	65·7	70·2	74·2	65·2	3·5	4·0	100	81	*4*	2·7	—	0	7≡^{0}	0∞	—	2·0		—	—	—	⌣ *a.* ⋃ early *p.*
3	·0103	·0110	76·7	75·8	78·8	68·7	6·3	5·9	79	79	4	2·2	—	0	9	10	—	—		—	—	—	
4	·0098	·0084	74·7	74·7	77·4	74·3	5·5	5·1	80	74	—	0·5	—	1·3	10	10	—	—		—	—	—	
5	·0072	·0068	72·9	73·7	75·0	72·5	4·7	6·1	77	95	—	0·9	28	2·7	10	10	—	—		—	—	—	Overcast throughout.
6	·0082	·0098	68·7	73·7	76·4	67·3	2·9	5·9	67	91	—	0	—	0	9	9	—	—		—	—	—	∞
7	·0094	·0105	73·6	75·8	79·4	72·5	5·7	6·8	89	91	—	0	—	0·5	9	10	—	—		—	—	—	Dull *p.*
8	1·0111	1·0063	74·1	73·9	78·5	73·8	5·7	5·8	85	89	—	0	—	0	10	10	0·3	1·1		—	—	—	✻^{0} *a.*
9	0·9996	0·9909	74·2	73·2	75·7	72·6	6·0	5·1	89	81	*20*	3·6	16	4·9	10≡^{0}	10≡^{0}	—	—		—	—	—	≡^{0}
10	·9825	·9855	73·0	74·2	75·7	72·5	5·5	5·3	89	78	18	6·3	12	2·7	10	1	2·5	—		—	—	—	✻● 10 h.–16 h.
11	·9912	·9942	69·8	69·1	77·6	67·3	3·9	4·3	82	94	—	0	—	0	0	1	—	6·4		—	—	—	⊠∞
12	·9960	·9965	72·3	76·1	76·8	65·9	5·8	7·3	99	96	—	0·5	16	3·1	*10*≡	10≡^{0}●^{0}	4·1	—		—	—	—	≡^{0}
13	·9974	·9973	77·5	78·0	78·7	76·1	8·2	8·6	97	98	18	8·9	18	10·7	10≡^{0}●^{2}	10≡^{0}●^{0}	15·2	—		—	—	—	≡^{0}●^{2} *a.*
14	0·9956	·9933	77·9	77·6	79·2	77·4	8·3	8·3	97	98	18	8·1	20	7·2	10≡^{0}●	5≡^{0}	6·1	—		—	—	—	● 0 h.–17 h.
15	1·0001	·9987	75·1	74·6	79·2	74·1	5·5	6·3	76	92	24	10·7	24	3·6	1	8	16·8	5·7		—	—	—	⊕ 15 h.–16 h. 30 m.
16	0·9818	·9766	79·8	82·0	82·2	74·5	9·7	11·2	98	99	20	19·2	20	16·5	10	10●	10·7	—		—	—	—	
17	·9834	·9778	79·1	81·0	82·0	78·2	6·6	10·4	70	98	24	16·5	20	13·4	7	10●	15·2	—		—	—	—	⊕ 8 h.
18	·9701	·9589	81·9	76·9	**82·5**	76·9	10·5	7·3	93	90	20	11·2	24	7·6	10●	6	32·8	—		—	—	—	● all day.
19	·9614	·9768	75·2	73·7	77·3	72·5	6·1	3·8	84	**60**	28	7·6	28	5·8	9	2	3·8	7·7		—	—	—	∞ *p.*
20	·9793	·9858	75·2	73·3	78·9	71·9	6·0	5·2	84	82	28	10·3	—	0·5	5	2	7·4	6·2		—	—	—	∞ *p.*
21	·9765	·9625	75·8	80·3	80·3	71·8	6·9	10·1	93	99	16	6·7	20	14·3	10✻●	10●≡^{0}	**35·6**	—		—	—	—	● all day.
22	·9649	·9723	76·9	77·2	80·9	74·8	6·7	7·5	84	92	22	8·1	22	13·4	10	10	32·8	2·5		—	—	—	✻● showers.
23	·9514	·9457	79·1	78·3	80·2	76·3	9·3	6·9	99	78	20	18·8	22	14·8	10●^{2}	8	13·0	0·6		—	—	—	
24	·9653	·9761	77·0	74·3	79·7	73·9	6·0	6·0	75	88	26	17·0	24	3·1	2	3	3·6	8·4		—	—	—	● showers midday.
25	·9666	·9713	76·2	76·8	79·8	73·7	7·5	5·8	98	72	26	2·2	24	10·3	10≡^{0}	1	9·1	2·7		—	—	—	●^{0} showers.
26	·9771	·9892	75·0	73·0	77·8	73·0	5·6	5·2	79	84	28	13·9	22	3·1	10✻^{0}	1	2·5	6·8		—	—	—	✻● showers.
27	·9817	·9687	74·7	79·8	80·1	68·9	5·0	9·7	72	99	14	4·9	20	8·9	9	10●	16·8	—		—	—	—	●^{0} showers.
28	0·9591	0·9655	79·7	75·3	80·4	75·0	9·7	5·5	99	75	20	13·4	24	8·9	10≡^{0}	3	5·3	—		—	—	—	● till 17 h.
Means	0·9880	0·9879	74·9	75·4	78·6	72·3	6·3	6·5	86	87		6·9		5·6	8·1	6·8	233·6	57		—	—	—	Monthly **Totals** or **Means**.
Normal — years	—	—	—	—	—	—	—	—	—	—	—		—		—	—	—	—		—	—	—	

No observations.

The solar radiation is the mean of the readings within the nominal hour of observation (11 h. 30 m.–12 h. 30 m.) unless some other hour is specified.

5. KEW OBSERVATORY.

Day.	Potential Gradient, Volts. per metre. Factor 1·75.				Number of Ions per cc.		Velocities of Ions for 1 volt. per centimetre.		Conductivity $\times 10^{25}$.	Air–Earth Current $\times 10^{16}$.		Electric Character of Day.	Magnetic Character of Day.	Horizontal Force.						West Declination.					
														Maximum 18000 γ +.		Minimum. 18000 γ +.		Range.		Maximum 15° +.		Minimum 15° +.		Range.
	3 h.	9 h.	15 h.	21 h.	+.	−.	+.	−.		c_1.	c_2.			γ	h m	γ	h m	γ		′	h m	′	h m	′
	v/m.	v/m.	v/m.	v/m.	n/cc.	n/cc.	cm/sec.	cm/sec.	E.-m.U.	Amp/cm².														
1	565	505	630	375								0	1	510	0 25	435	16 39	75		63·0	13 30	49·0	0 17	14·0
2	460	440	475	325								0	1	536	20 26	419	10 15	117		60·9	11 0	48·1	17 4	12·8
3	365	525	300	470								0	0	505	17 50	474	12 53	31		59·3	11 28	53·3	0 0	6·0
4	340	635	280	495								1	0	508	16 51	482	21 10	26		59·9	13 28	53·0	21 15	6·9
5	350	85	425	340								1	1	519	20 18	455	21 26	64		61·9	11 50	46·5	20 15	15·4
6	270	440	255	465								0	1	535	21 29	469	15 58	66		61·3	11 11	52·5	16 13	8·8
7	190	440	440	485								0	1	512	22 28	472	17 51	40		60·3	13 23	49·0	18 13	11·3
8	340	535	560	680								0	1	514	6 9	477	15 11	37		62·3	12 28	53·6	18 15	8·7
9	335	510	310	390								0	0	515	7 53	483	17 45	32		64·8	12 23	54·2	18 6	10·6
10	195	695	270	−270								2	1	532	20 49	464	10 9	68		65·1	11 57	56·6	20 30	8·5
11	35	350	270	305								1	0	523	23 56	472	16 5	51		64·3	13 14	58·1	23 28	6·2
12	230	290	205	315								0	0	544	22 13	500	3 26	44		63·1	13 15	55·5	22 6	7·6
13	375	560	325	850								0	2	553	22 33	447	19 34	106		63·2	14 50	37·9	19 50	25·3
14	430	300	270	440								0	1	529	22 40	472	14 39	57		62·6	13 12	50·6	19 46	12·0
15	135	135	270	535	No		No		No			1	0	524	8 18	493	11 3	31		63·1	12 22	56·8	0 20	6·3
16	35	120	170	185	Observations.		Observations.		No Observations.	No Observations.		0	1	526	6 54	478	17 8	48		65·1	14 40	50·8	17 30	14·3
17	0	220	185	325								0	1	545	23 42	478	16 29	67		64·5	12 6	49·0	17 5	15·5
18	85	110	70	120								1	1	556	20 52	485	13 18	71		63·6	14 58	50·0	20 45	13·6
19	35	125	185	310								1	1	525	21 43	497	4 0	28		64·3	2 16	53·1	18 12	11·2
20	270	375	190	360								0	0	527	8 12	503	16 15	24		60·6	15 22	53·2	21 38	7·4
21	245	−375	185	25								2	2	559	22 31	411	19 29	148		70·8	15 3	40·6	18 5	30·2
22	15	155	195	270								1	2	614	19 32	429	13 29	185		65·0	12 42	37·1	19 21	27·9
23	85	130	−135	155								1	1	546	20 40	468	13 25	78		61·2	12 30	49·0	20 30	12·2
24	75	220	155	290								0	1	548	20 3	452	16 41	96		62·9	14 5	51·5	21 36	11·4
25	0	155	170	330								2	1	527	21 38	458	11 55	69		64·1	13 20	54·1	23 58	10·0
26	100	165	205	325								1	1	506	22 18	453	11 35	53		64·1	14 41	52·9	0 58	11·2
27	255	400	210	−120								1	1	539	19 44	463	14 23	76		64·5	14 38	50·1	20 29	14·4
28	30	60	10	35								1	2	554	21 19	450	13 5	104		65·7	14 6	47·5	22 10	18·2
M.	209	297	253	315								—	—	533	—	466	—	68		63·3	—	50·5	—	12·8

6. ESKDALEMUIR OBSERVATORY.

Day.	Potential Gradient, Volts per metre. Factor 5·2.				Number of Ions per cc.		Velocities of Ions for 1 volt. per centimetre.		Conductivity $\times 10^{25}$.	Air–Earth Current $\times 10^{16}$.		Electric Character of Day.	Magnetic Character of Day.	North Component.§				West Component.§				Vertical Component.§			
														Maximum. 15000 γ +.		Minimum 15000 γ +.		Maximum 5000 γ +.		Minimum. 5000 γ +.		Maximum 45000 γ +.		Minimum 45000 γ +.	
	3 h.	9 h.	15 h.	21 h.	+.	−.	+.	−.		c_1.	c_2.			h m	γ	γ	h m	h m	γ	γ	h m	h m	γ	γ	h m
	v/m.	v/m.	v/m.	v/m.	n/cc.	n/cc.	cm/sec.	cm/sec.	E.-m.U.	Amp/cm².															
1	417	423	569	881								1 *a*	1	16 55	1057	941	16 36	13 38	304	219	0 17	16 52	444	?	?
2	628	294	499	892								0 *a*	1	17 18	1064	906	10 16	14 41	309	214	17 3	17 0	441	362	3 0
3	247	188	135	259								0 *a*	1	17 50	1022	973	12 52	13 25	295	258	18 8 / 0 0	16 0 / 17 0	408	389	0 0
4	200	276	235	364								0 *a*	0	22 13	1021	990	12 45	16 20	299	249	21 12	21 20	417	414	9 0
5	135	147	141	434								0 *a*	1	20 20	1091	960	11 20	11 50	304	201	20 12	20 0	430	388	24 0
6	276	247	211	270								0 *a*	1	21 25	1064	970	11 21	13 0	304	242	16 13	16 27	433	388	0 0
7	188	235	153	164								0 *a*	1	18 55	1025	979	8 37	3 15	307	200	18 11	18 20	430	393	3 40
8	94	59	188	188								1 *a*	1	22 10	1025	973	12 48	14 50	302	238	18 11	15 30	424	402	1 30
9	176	182	194	399								0 *a*	0	18 7	1036	985	13 0	12 25	301	236	18 5	18 0	419	402	11 0
10	117	206	41	288								1 *b*	1	20 40	1059	955	10 7	13 30	307	252	20 27	19 40	420	395	12 40
11	82	229	206	798								0 *a*	0	23 54	1030	969	16 3	13 13	310	261	16 14	16 30	424	405	13 0
12	282	558	481	358								1 *a*	0	22 11	1063	998	12 40	13 50	300	255	22 4	20 45	412	393	24 0
13	153	100	294	335								1 *a*	1	22 30	1071	965	19 23	12 40	308	132	19 53	19 52	450	364	23 35
14	*x*	*x*	159	652	No		No		No			2 *b*	1	22 24	1046	965	11 35	13 12	308	227	19 44	14 40	443	370	1 50
15	*x*	135	170	487	Observations.		Observations.		No Observations.	No Observations.		1 *b*	0	5 44	1022	979	12 39	1 42	303	268	8 45	16 0	420	397	2 20
16	*x*	41	35	*x*								2 *c*	1	23 55	1022	967	16 37	13 16 / 14 42	323	209	17 26	17 30	449	403	11 30
17	53	106	12	*x*								2 *b*	1	23 38	1073	960	12 15	14 52	306	203	17 0	17 0	442	403	1 42
18	6	0	*x*	*x*								2 *c*	1	20 46	1082	966	13 41	14 55	313	233	20 20	20 18	430	392	23 35
19	*x*	94	194	200								1 *b*	1	21 42	1036	995	12 40	15 44	292	237	18 10	18 10	424	392	2 45
20	*x*	270	*x*	458								1 *b*	0	22 56	1030	994	23 38	15 0	294	248	21 30	21 45	421	404	10 4
21	299	*x*	*x*	311								2 *c*	2	22 21	1129	883	22 4	15 2	369	149	18 2	17 43	544	352	22 2
22	*x*	47	117	*x*								1 *c*	2	19 25	1196	919	13 28	19 41	326	130	19 21	19 21	442	353	2 48
23	76	*x*	129	*x*								2 *c*	1	20 38	1074	952	10 47	12 31	304	208	18 54	16 45	442	368	3 55
24	*x*	100	188	259								1 *c*	1	20 0	1090	967	16 40	13 38	313	225	21 34	16 54	453	351	2 35
25	*x*	147	*x*	176								2 *c*	1	21 25	1048	951	11 55	13 22	322	250	23 57	19 10	433	401	22 30
26	82	*x*	188	323								1 *c*	1	22 15	1036	961	11 32	14 40	321	237	0 56	17 35	439	386	0 40
27	129	123	475	*x*								1 *b*	1	19 26	1086	960	14 23	14 38	327	225	20 29	17 34	457	390	3 7
28	*x*	112	*x*	159								2 *b*	1	21 16	1092	952	13 8	21 23	329	199	22 8	16 14	477	392	1 30
M.	230	242	257	433								—	—	—	1060	962	—	—	311	222	—	—	438	387	

x Indeterminate.

An explanation of the Headings of the columns is given in the Preface.

§ The Magnetic values at Eskdalemuir Observatory are at present only provisional, and subject to correction at the end of the year.

7. Tables of Wind Components in metres per second at fixed hours.

Together with the mean velocity (horizontal movement) in metres per second for the hour with the maximum hourly run for each day, or the greatest velocity attained in a gust and the time of its occurrence.

HOLYHEAD.†§

Height of Head above—Roof 8·8 m., Ground 13·7 m., M.S.L. 19·2 m.
Height of Cups above—Roof 4·6 m, Ground 7·6 m., M.S.L. 15·2 m.

Date.	3 h.				9 h.				15 h.				21 h.				Max. in a Gust.	Time of Gust.	
	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.			
																	V.	Hrs.	Min.
1	...	0·9	0·9	...	...	0·9	0·9	...	...	2·2	...	2·2	...	1·3	...	1·3	? 6·7	19	25
2	...	2·7	...	2·7	...	2·2	...	2·2	...	2·2	...	0·5	...	5·8	1·3	...	9·8	16	35
3	...	3·1	...	2·2	...	2·7	...	0·9	...	1·3	...	1·3	...	2·2	...	5·8	8·5	0	5
4	...	1·3	...	3·1	...	1·3	...	3·6	...	3·1	...	3·1	...	1·8	0·9	...	? 6·7	11	10
5	...	1·8	...	2·7	...	1·3	...	1·8	...	0·5	...	0·9	...	0·5	...	1·3	? 5·8	2	40
6	...	0·5	...	1·3	...	2·7	...	...	...	3·1	1·8	...	...	1·8	...	0·9	? 6·7	11	5
7	...	0·5	2·7	...	...	4·9	2·2	...	...	0·9	...	0·5	...	0·5	0·5	...	? 7·6	11	55
8	...	2·7	1·8	...	...	...	...	...	...	1·3	0·5	...	2·7	...	0·5	...	? 6·3	23	50
9	4·5	...	...	1·8	4·9	...	...	4·9	7·6	...	...	3·1	8·5	...	...	3·6	16·1	23	50
10	9·4	...	...	4·0	8·5	...	...	1·8	...	3·6	8·1	...	...	3·1	7·6	...	18·3	0	35
11	...	2·7	6·7	...	...	2·2	4·9	...	...	2·7	3·6	...	...	0·9	1·8	...	9·8	0	30
12	0·5	...	2·7	...	2·7	...	3·6	...	5·4	...	3·6	...	5·4	...	3·6	...	12·1	21	10
13	5·4	...	3·6	...	7·2	...	1·3	...	6·3	...	2·7	...	8·1	...	1·8	...	14·8	22	35
14	8·5	...	3·6	...	8·5	...	1·8	...	8·1	...	3·1	...	7·2	...	4·9	...	16·1	2	50
15	...	3·6	8·1	...	...	1·8	4·0	...	2·7	...	1·3	...	7·6	...	...	1·3	15·7	24	0
16	8·1	...	5·4	...	9·4	...	4·0	...	10·7	...	4·5	...	10·7	...	2·2	...	19·7	7	40
17	5·4	...	13·4	...	5·4	...	7·6	...	7·6	...	5·4	...	9·4	...	4·0	...	22·4	2	25
18	8·1	...	3·6	...	8·9	...	3·6	...	10·7	...	4·5	...	7·2	...	10·3	...	26·8	18	45
19	8·1	...	12·1	...	...	...	13·4	...	...	4·5	10·7	...	...	2·2	2·2	...	24·1	5	50
20	...	4·5	10·7	...	...	...	12·1	...	...	...	10·7	...	2·2	...	4·9	...	16·5	8	50
21	6·7	...	2·7	...	10·3	...	...	...	9·4	...	4·0	...	10·3	...	1·8	...	20·6	9	40
22	3·6	...	8·5	...	3·1	...	14·8	...	6·7	...	9·8	...	8·1	...	1·8	...	25·5	7	15
23	13·9	...	2·7	...	12·5	...	4·9	...	12·1	...	8·1	...	4·5	...	11·2	...	25·5	20	45
24	6·7	...	16·5	...	3·6	...	17·4	...	2·2	...	11·2	...	4·5	...	3·1	...	28·6	4	5
25	3·1	...	4·9	...	6·3	...	...	2·7	...	4·0	9·4	...	4·5	...	6·7	...	20·6	23	55
26	...	...	19·2	...	...	3·1	15·2	...	..	...	9·8	...	...	...	1·8	...	26·8	3	15
27	5·8	...	...	2·2	10·7	...	...	4·5	7·6	...	1·3	...	8·5	...	3·6	...	19·2	8	50
28	9·4	...	1·8	...	9·4	...	4·0	...	7·6	...	4·9	...	2·2	...	11·2	...	18·8	16	40
S+N & W+E	131·5		151·6		134·5		138·1		134·1		130·6		131·7		101·9				
S−N & W−E	82·9		111·6		88·3		93·3		75·3		107·4		91·5		73·5				

DEERNESS.†

Height of Cups above—Roof 1·5 m., Ground 4·9 m , M.S.L. 57·3 m.

Date.	3 h.				9 h.				15 h.				21 h.				Vel. in Max. Hourly Run.	Time of Max.
	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.		
																	V.	Hour.
1	...	0·5	1·8	...	...	0·9	2·2	...	...	0·9	5·4	...	...	1·3	6·3	...	7·2	24
2	...	1·3	6·7	...	...	1·8	8·9	...	...	3·6	8·9	...	...	5·8	5·8	...	11·2	14
3	...	4·9	4·9	...	...	4·0	4·0	...	...	3·1	4·5	...	...	4·0	4·0	...	6·7	3, 4, 5
4	...	4·5	3·1	...	...	4·0	4·0	...	*	*	*	*	*	*	*	*	*	?
5	*	*	*	*	*	*	*	*	...	0·9	5·4	...	...	...	5·4	...	*	?
6	0·9	...	4·9	...	3·1	...	7·2	...	...	1·8	9·4	...	...	1·8	0·9	...	10·3	13
7	...	4·5	...	0·9	...	4·5	...	3·1	...	4·5	...	0·9	...	1·8	...	0·5	7·2	11
8	...	0·9	...	0·0	...	0·9	...	0·0	4·5	...	1·8	...	0·9	...	0·9	...	4·9	15
9	1·3	...	0·9	...	5·4	...	0·9	...	6·7	...	1·3	...	6·7	...	...	...	10·3	24
10	12·1	...	...	2·2	11·2	...	..	2·2	...	1·8	8·1	...	...	0·9	4·5	...	12·5	3
11	...	1·3	2·7	...	0·5	...	2·7	...	0·5	...	3·1	...	3·1	...	2·2	...	5·8	24
12	7·2	...	1·3	...	8·1	...	3·6	...	9·8	...	...	...	9·8	...	1·8	...	11·2	23, 24
13	10·3	...	...	...	10·3	...	1·8	...	9·4	...	1·8	...	4·5	...	1·8	...	11·2	2
14	1·8	...	0·9	...	3·1	...	1·8	...	3·6	...	5·4	...	...	...	3·1	...	8·1	14
15	...	0·9	4·5	...	...	1·3	7·2	...	1·3	..	6·7	...	5·4	...	3·6	...	10·3	11
16	10·3	...	...	...	6·3	...	2·7	...	6·7	...	16·5	...	5·8	...	5·8	...	18·3	13, 14
17	2·7	...	13·0	...	...	4·9	3·1	...	3·1	...	...	1·3	3·6	...	2·7	...	15·2	1
18	2·2	...	11·2	...	3·6	...	8·5	...	2·7	...	13·0	...	7·2	...	10·7	...	14·3	19
19	...	5·8	13·4	...	...	12·1	8·1	...	...	11·2	11·2	...	2·7	...	3·6	...	16·5	12
20	7·2	...	7·2	...	...	10·7	10·7	...	...	8·1	8·1	...	...	2·2	5·8	...	15·2	7, 9
21	...	0·0	0·9	...	13·4	...	...	5·4	11·6	...	...	2·2	4·9	...	4·9	...	16·5	11, 12
22	...	...	12·1	...	...	...	11·6	...	2·7	...	13·9	...	5·8	...	13·4	...	15·7	20
23	10·3	...	1·8	...	8·5	...	3·6	...	4·5	...	11·2	...	...	...	8·5	...	14·3	7
24	...	10·3	10·3	...	...	7·2	10·7	...	...	6·3	9·8	...	...	1·3	1·8	...	17·0	5
25	4·9	...	0·9	...	7·2	...	...	...	3·6	...	5·4	...	6·3	...	9·8	...	12·1	24
26	6·7	...	9·8	...	...	12·5	8·5	...	...	7·6	11·2	...	...	...	4·5	...	15·2	9
27	0·5	...	2·2	...	7·6	...	...	1·3	15·7	...	...	6·7	13·0	...	...	2·7	17·9	16
28	9·8	...	...	...	9·8	...	...	...	6·7	...	15·7	...	2·7	...	12·5	...	17·0	15
S+N & W+E	123·1		117·6		162·9		123·8		142·9		188·9		101·5		127·5			
S−N & W−E	53·3		111·4		33·3		99·8		43·3		166·7		63·3		121·1			

SCILLY.‡§

Height of Head above—Ground 9·8 m., M.S.L. 49·7 m.
Height of Cups above—Ground 5·8 m., M.S.L. 45·7 m.

Date.	3 h.				9 h.				15 h.				21 h.				Max. in a Gust.	Time of Max.	
	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.			
																	V.	Hrs.	Min.
1	...	...	...	12·5	...	1·8	...	8·9	...	1·8	...	8·1	...	...	...	8·1	16·1	1	10
2	...	...	...	7·2	...	...	...	6·7	...	...	...	7·6	...	...	...	5·8	9·8	13	45
3	...	0·5	...	3·1	...	...	...	4·9	...	1·3	...	5·8	...	...	...	7·6	9·8	20	40
4	...	1·3	...	6·3	...	1·3	...	5·8	...	...	...	7·6	...	2·2	...	5·4	? 8·9	6	50
5	...	1·3	...	6·7	...	0·9	...	4·9	...	1·3	...	2·2	...	...	...	4·9	8·9	15	35
6	...	...	...	1·8	...	1·8	...	1·8	...	0·5	...	1·8	...	2·7	...	2·7	4·9	19	45
7	...	2·2	...	0·5	...	0·5	...	1·8	...	1·8	...	1·8	...	1·8	...	1·8	5·8	5	10
8	...	1·3	0·5	...	...	...	...	6·3	3·6	...	...	8·1	5·8	...	...	5·8	11·2	22	0
9	6·7	...	...	4·5	6·3	...	...	4·0	7·6	...	...	7·6	10·3	...	...	7·2	14·3	21	40
10	8·1	...	..	3·6	...	3·6	8·1	...	...	7·6	7·6	...	...	5·8	5·8	...	14·3	12	55
11	...	4·0	2·7	...	...	2·7	0·9	...	...	1·8	1·8	...	...	0·9	0·5	...	7·2	6	30
12	...	...	...	...	...	...	...	...	2·2	...	0·5	...	2·7	...	2·7	...	5·4	18	45
13	2·2	...	2·2	...	3·6	...	0·9	...	...	...	...	5·4	5·4	...	...	...	8·5	15	30
14	...	...	...	4·9	5·4	...	0·9	...	7·2	...	1·3	...	6·3	...	6·3	...	12·1	20	55
15	4·9	...	7·6	...	2·2	...	4·9	...	4·5	...	3·1	...	5·8	...	4·0	...	10·3	1	30
16	4·9	...	4·9	...	3·1	...	7·6	...	5·4	...	8·1	...	4·5	...	10·3	...	?	?	
17	...	...	12·1	...	1·3	...	7·2	...	3·6	...	8·1	...	4·9	...	7·6	...	?14·8	2	25
18	3·1	...	8·1	...	4·5	...	10·3	...	9·4	...	9·4	...	6·3	...	14·8	...	19·2	18	50
19	...	...	15·2	...	...	...	18·3	...	...	4·9	12·5	...	4·5	...	10·7	...	23·7	4	45
20	...	5·8	5·8	...	...	4·5	1·8	...	0·9	...	4·0	...	4·0	...	4·0	...	12·1	1	55
21	7·2	...	...	...	11·6	...	4·9	...	8·1	...	5·4	...	9·8	...	6·7	...	18·3	22	45
22	...	...	19·2	...	...	...	14·8	...	2·2	...	12·1	...	5·8	...	5·8	...	24·1	3	0
23	11·6	...	4·9	...	10·3	...	10·3	...	4·0	...	19·7	...	...	...	18·8	...	26·4	21	0
24	...	4·0	19·7	...	...	2·7	13·9	...	...	...	9·8	...	9·4	...	9·4	...	25·0	2	10
25	2·7	...	13·0	...	2·7	...	14·3	...	...	...	13·9	...	1·8	...	8·9	...	17·4	0	10
26	...	5·8	14·3	...	...	5·8	5·8	...	...	...	4·9	...	2·7	...	...	0·5	20·1	3	50
27	7·2	...	4·9	...	8·1	...	3·1	...	6·3	...	6·3	...	8·1	...	3·6	...	14·3	23	55
28	9·4	...	6·3	...	3·6	...	5·4	...	3·6	...	8·9	...	...	8·9	8·9	...	17·4	19	40
S+N& W+E	94·2		192·5		88·3		178·5		89·6		193·4		120·4		178·6				
S−N& W−E	41·8		90·3		37·1		88·3		47·6		81·4		75·8		79·0				

GREAT YARMOUTH.†§

Height of Head above—Roof 10·7 m., Ground 12·8 m., M.S.L., 15·9 m.
Height of Cups above—Roof 3·7 m., Ground 18·3 m., M.S.L., 22·3 m.

Date.	3 h.				9 h.				15 h.				21 h.				Max. in a Gust (Gorleston).	Time of Gust.	
	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.			
																	V.	Hrs.	Min.
1	...	0·0	...	0·9	...	0·0	...	0·5	...	0·0	...	0·9	...	0·0	...	0·5	8·1	0	10
2	...	1·8	1·3	...	0·5	...	3·1	...	...	...	3·1	...	...	2·2	4·9	...	8·1	19	20
3	...	2·7	2·7	...	...	5·4	0·9	...	...	5·4	...	...	...	2·7	...	...	11·2	9	50
4	...	2·7	...	...	...	1·8	...	...	...	3·6	1·3	...	...	2·7	1·3	...	11·6	13	50
5	...	2·7	1·3	...	...	2·7	1·3	...	...	2·7	0·5	...	...	1·8	0·9	...	9·4	4	0
6	...	3·1	1·8	...	...	1·8	2·7	...	...	1·8	1·8	...	...	1·3	1·3	...	9·4	2	40
7	...	1·8	1·8	...	...	1·8	4·5	...	...	1·8	4·0	...	...	0·9	2·7	...	8·9	11	55
8	...	2·2	0·9	...	...	4·0	...	...	...	2·7	...	1·8	...	1·8	...	0·9	9·4	0	20
9	...	1·3	...	0·5	...	1·3	...	0·5	2·2	...	...	2·2	0·5	...	...	0·5	8·1	22	0
10	5·4	...	...	2·2	1·3	...	...	0·9	4·5	...	...	0·9	3·1	...	...	...	11·2	13	50
11	1·8	...	1·8	...	...	...	3·1	...	...	1·3	6·7	...	...	0·9	4·5	...	11·6	15	50
12	...	1·8	4·0	...	...	1·8	4·5	...	...	1·8	1·8	...	...	1·3	1·3	...	10·3	14	0
13	...	1·3	1·3	...	...	0·9	1·3	...	3·1	...	...	0·5	3·6	...	0·9	...	6·7	14	40
14	2·7	...	1·8	...	1·8	...	1·8	...	3·6	...	1·3	...	3·1	...	2·2	...	10·3	23	30
15	4·0	...	4·0	...	...	1·3	6·7	...	...	1·8	2·7	...	1·8	...	1·8	...	13·4	10	45
16	4·9	...	...	...	4·5	...	3·1	...	5·4	...	5·4	...	5·4	...	7·6	...	16·5	21	40
17	3·6	...	8·9	...	...	...	9·4	...	...	...	5·8	...	4·9	...	4·9	...	17·9	6	5
18	5·4	...	7·6	...	3·1	...	8·1	...	*	*	*	*	*	*	*	*	19·7	22	55
19	*	*	*	*	*	*	*	*	...	...	8·1	...	...	1·8	8·1	...	19·2	0	40
20	...	0·9	3·6	...	1·3	...	5·8	...	...	...	8·5	...	...	...	5·8	...	17·9	14	25
21	...	...	3·1	...	2·7	...	1·8	...	6·3	...	...	...	5·8	...	5·8	...	17·9	23	50
22	8·1	...	3·6	...	...	...	8·1	...	...	...	11·6	...	4·0	...	4·0	...	23·7	10	10
23	5·4	...	3·6	...	10·3	...	1·8	...	7·6	...	4·9	...	6·3	...	9·4	...	26·0	12	30
24	3·6	...	8·1	...	...	...	11·2	...	...	...	9·4	...	...	...	5·4	...	21·5	11	30
25	2·2	...	2·2	...	3·6	...	...	...	1·8	...	4·0	...	...	...	7·2	...	17·0	18	50
26	1·8	...	3·1	...	...	2·7	12·5	...	...	2·2	11·2	...	...	0·9	4·9	...	23·3	10	20
27	...	...	3·1	...	...	...	1·3	...	7·2	...	...	1·3	4·9	...	...	...	19·2	18	10
28	6·3	...	2·7	...	6·3	...	2·7	...	5·8	...	1·3	...	4·0	...	4·0	...	15·7	10	50
S+N & W+E	77·5		75·9		60·9		97·6		72·6		101·0		65·7		90·8				
S−N & W−E	32·9		68·7		9·9		93·8		22·4		85·8		29·1		87·0				

The velocities at fixed hours are means for the interval from 30 minutes before to 30 minutes after the hour. The hours are numbered 1 h. to 24 h. Time is referred to Greenwich Mean Time.

* No record.

† Robinson Cup Anemometer; Arms 0·61 m.; Diameter of Cup, 0·229 m.; Factor 2·2. ‡ Robinson Cup Anemometer; Arms 0·305 m.; Diameter of Cups 0·127 m.; Factor 2·8.

§ Dines Pressure Tube Anemometer. At Great Yarmouth, Holyhead, and Scilly the readings at fixed hours are taken from the Robinson Anemometer, the maxima quoted are the greatest winds in a gust as recorded by the Dines Pressure Tube.

METEOROLOGICAL OFFICE OBSERVATORIES—GEOPHYSICAL JOURNAL.

MARCH 1911.—DAILY VALUES REFERRED TO GREENWICH MEAN TIME AND UNITS, BASED ON THE C.G.S. SYSTEM. [*Price* 4*d.*

First Year.—No. 3. *Meteorology, Solar Radiation, Seismology, Atmospheric Electricity, and Terrestrial Magnetism.*

1. SEISMOLOGICAL JOURNAL:—ESKDALEMUIR.—Long. 3° 12′ W. Lat. 55° 19′ N.

Date.	Microseisms. Period.	Microseisms. Amp.	Earthquakes.	Remarks.
	s	μ		
1	7	2·9		6th Iu, P?=17 h. 55 m. 15 s., S?= 18 h. 6 m. 47 s., Δ=10820 kms. Max. long waves 18 h. 33 m.
2	5-6	1·8		
3	6	2·4		11th Iu, P=3 h. 46 m. 41 s., S=3 h. 58 m. 35 s., Δ=11320 kms., α=39° 2′ E of N, Epicentre 16° N 143° E. I occurred late, but time cannot be given, as the recording drum had slipped and several hours' trace are superposed.
4	7	3·3		
5	6	2·1		
6	6	1·4	Iu.	13th Long waves 15 h. 36 m.–16 h., record much disturbed by wind.
7	7	1·2		
8	8	2·7		19th I Long waves 5 h. 6 m.–5 h. 30 m.
9	8	2·0		
10	7	2·9		22nd I Feeble waves 14 h. 16 m.–15 h. 18 m.
11	7	2·6	Iu, I.	
12	5-6	0·9		24th A few feeble waves 4 h. 6 m.–4 h. 9 m.
13	6	1·0	I.	
14	6	1·4		26th I 13 h. 12 m.–13 h. 22 m. Phases indistinguishable.
15	4-5	0·8		
16	4-5	0·6		
17	5	1·1		
18	4	0·9		
19	4	0·5	I.	
20	4-5	0·9		
21	5	0·5		
22	6	0·1	I.	
23	4	0·2		An explanation of the notation used is given in the preface.
24	4	0·2	I.	
25	4	0·4		
26	5	0·6	I.	
27	4	0·4		
28	6	0·5		
29	6	0·6		
30	5-6	0·5		
31	4	0·2		

2. VALENCIA OBSERVATORY, CAHIRCIVEEN (KERRY).—Long. 10° 15′ W. Lat. 51° 56′ N.

Heights above Mean Sea Level:—Station, H = 9·2 m. Barometer Cistern, H_b = 13·7 m.
Heights above Ground:—Thermometers, h_t = 1·2 m. Rain-gauge, h_r = 0·6 m. Sunshine Recorder, h_s = 12·8 m. Cups of Anemometer, h_a = 13·7 m.

Day.	Pressure at Station Level. 9 h.	21 h.	Air Temperature in Degrees Absolute. 9 h.	21 h.	Max.	Min.	Humidity. Vapour Pressure. 9 h.	21 h.	Percentage. 9 h.	21 h.	Wind Direction in points (8=E, 16=S) and Velocity (*metres per second*). 9 h.		21 h.		Cloud Amount and Weather. 10 h.	22 h.	Rain 24 hours beginning 10 h.	Sunshine.	Remarks.	Magnetism. Horizontal Force.	Declination West.	Inclination.
	bar.	bar.	200+ °	200+ °	200+ °	200+ °	millibar.		%	%	m/sec.		m/sec.		Tenths of Sky covered.		mm.	hrs.		γ·	° ′	° ′
1	1·0204	1·0222	80·7	83·7	84·2	78·8	8·9	11·4	86	89	21	5·4	20	8·9	7	10	—	3·9	Fair *a.* Gloomy *p.*	…	…	…
2	·0273	·0302	83·9	83·5	85·1	83·1	12·3	11·3	95	90	21	9·4	20	5·4	10	8	—	—	Dull and misty.	…	…	…
3	·0282	·0223	83·5	83·1	85·7	82·9	11·8	12·0	93	98	19	6·3	17	5·4	10	10●	8·9	0·4	Misty.	…	…	…
4	·0178	·0244	80·6	78·4	83·2	75·3	8·4	7·0	81	79	1	9·4	—	1·3	7	2	—	5·6	● 1 h.–4 h.	…	…	…
5	·0216	·0168	79·0	81·2	81·3	74·5	7·6	9·3	82	87	14	5·4	25	6·3	10	2	9·1	—	Dull. ● 15 h. 30 m.–19 h. 30 m.	…	…	…
6	·0205	·0268	79·1	79·0	80·9	75·3	6·3	6·5	68	69	31	12·5	32	6·7	4	2	0·3	7·6	Squally, with ▲.	…	…	…
7	·0266	·0210	75·7	79·6	81·7	73·6	6·6	9·3	90	96	—	1·3	16	5·4	8	10●	5·8	2·4	⌣ *a.* Fair to dull.	…	…	…
8	·0169	·0155	80·1	76·7	83·4	76·5	9·5	6·6	95	84	—	0·9	30	8·9	7	4	2·5	2·7	Cloudy, with ●▲ showers.	17872	20 38·5	68 12·1
9	·0215	·0202	80·3	79·2	81·4	77·3	7·3	8·0	72	85	28	7·2	21	4·5	5	9●	23·6	6·8	▲● showers.	…	…	…
10	·0021	·0088	80·6	80·6	83·8	78·9	10·1	8·2	97	79	15	8·1	31	8·5	10●	10	2·0	1·2	●² 5 h.–10 h. Cloudy.	…	…	…
11	·0171	·0173	79·6	79·5	82·2	78·4	8·1	8·5	83	89	28	4·9	22	3·1	7	10	15·7	6·3	● showers *a.* and *p.*	…	…	…
12	·0019	·0069	80·5	79·6	81·9	77·6	9·9	7·4	96	76	14	5·4	1	8·1	10●	6	1·0	2·1	● 3 h.–10 h. 20 m. Squally *p.*	…	…	…
13	·0120	·0168	79·0	77·9	80·6	77·6	7·3	6·3	78	73	1	5·4	2	6·7	4	4	—	8·2	Fine.	…	…	…
14	·0180	·0149	79·6	79·2	81·7	77·8	6·2	6·9	64	74	2	4·5	32	5·8	4	5	1·3	7·0	Fine.	…	…	…
15	·0095	·0074	79·0	77·8	80·7	75·2	7·1	6·6	77	77	3	4·0	32	3·1	8	3	—	6·5	Fine.	…	…	…
16	·0060	1·0052	75·2	77·7	81·8	72·3	6·8	6·6	95	78	—	0	11	4·0	3	1	—	6·2	⌣ *a.* Fine.	…	…	…
17	·0004	0·9974	78·5	78·5	81·2	77·9	6·8	7·1	76	80	7	7·6	7	10·3	10	10∞	0·5	0·2	Gloomy, with ∞.	…	…	…
18	·0011	1·0024	77·6	78·4	79·3	77·2	6·6	7·5	78	85	6	10·3	5	9·4	10∞	10	2·0	—	Gloomy.	…	…	…
19	·0016	·0029	79·8	80·9	82·9	78·2	8·4	8·2	85	78	12	5·4	8	10·7	10●	10	0·5	2·6	Gloomy.	…	…	…
20	·0032	·0059	79·4	81·7	83·9	78·0	7·9	9·5	82	85	6	9·4	7	1·8	10∞	8	—	1·0	Dull, with ∞.	…	…	…
21	·0063	·0076	80·7	79·6	84·9	78·1	9·0	8·4	86	87	—	1·3	—	1·3	3∞	3∞	—	9·0	Fine, with ∞.	17895	20 39·3	68 13·0
22	·0088	·0102	81·0	81·7	83·0	78·0	8·8	9·4	83	85	5	2·7	7	5·4	10∞	5	2·5	1·4	Cloudy, with ∞.	…	…	…
23	·0140	·0141	82·3	81·4	83·6	80·7	9·9	8·9	85	82	9	5·4	8	4·5	8	10	—	2·4	● showers *a.* ∞	…	…	…
24	·0136	·0180	79·8	80·7	82·9	78·1	8·3	7·8	84	74	6	9·8	6	5·8	7∞	3	—	6·8	Fine, with ∞.	…	…	…
25	·0240	·0281	79·2	77·3	81·4	76·0	7·0	5·8	74	70	4	7·6	5	3·6	4	1	—	9·6	Fine.	…	…	…
26	·0280	·0219	76·2	79·6	80·2	73·5	5·2	6·2	68	64	6	5·4	2	10·3	9	3	—	4·3	Dull *a.*	…	…	…
27	·0187	·0143	76·2	80·0	81·8	75·1	5·5	5·6	71	56	4	9·4	3	4·0	2	0	—	11·2	Fine.	…	…	…
28	·0072	·0056	77·2	78·2	80·2	76·5	6·9	7·1	85	81	6	6·7	8	4·9	10	10	14·0	0·4	Dull and gloomy. ●² *p.*	…	…	…
29	·0064	·0084	80·3	78·7	83·9	75·5	8·2	8·2	81	90	13	5·4	6	1·8	8	1	—	7·1	Fine.	…	…	…
30	·0052	·0020	80·6	81·3	82·1	74·1	7·4	9·9	70	92	5	4·0	7	4·5	10	10●	8·9	—	⌣ *a.* Dull. ● from 18 h.	…	…	…
31	1·0042	1·0066	82·7	83·2	86·3	81·2	9·9	8·7	83	71	9	5·4	8	8·9	3	1	—	9·9	Fine.	…	…	…
Means	1·0132	1·0136	79·6	79·9	82·5	77·2	8·1	8·1	82	81		6·0		5·8	7·4	5·8	98·6	133	Monthly **Totals** or **Means**.	17884	20 38·9	68 12·6
Normal 35 years	1·0122	1·0125	80·1	80·1	83·4	77·4	8·4	8·5	85	85		5·7 (25 years)		5·6 (25 years)	—	—	107·9	127 (25 yrs)	**Normals**, 35 years.			
								20 years														

3. Kew Observatory, Surrey.—Long. 0° 19′ W. Lat. 51° 28′ N.

Heights above Mean Sea Level :—Station, H = 5·5 m. Barometer, H_b = 10·4 m.

Heights above Ground :—Thermometers, h_t = 3·0 m. Rain-gauge, h_r = 0·5 m. Sunshine Recorder, h_s = 14·3 m. Cups of Anemometer, h_a = 21·3 m.

Day.	Pressure at Station Level.		Air Temperature in Degrees Absolute.				Humidity. Vapour Pressure.		Humidity. Percentage.		Wind Direction in Points (8 = E, 16 = S) and Velocity (*metres per second*).				Cloud Amount and Weather.		Rain 24 hours beginning 10 h.	Sunshine.	Solar Radiation, Watts per cm².	Min. Temp. on Grass.	Earth Temperature at 10 h.		Remarks.
	9 h.	21 h.	9 h.	21 h.	Max.	Min.	9 h.	21 h.	9 h.	21 h.	9 h.		21 h.		10 h.	22 h.					0·3 m.	1·2 m.	
			200 +	200 +	200 +	200 +														200 +	200 +	200 +	
	bar.	bar.	°	°	°	°	millibar.		%	%	m/sec.		m/sec.		Tenths of Sky covered.		mm.	hrs.		°	°	°	
1	1·0184	1·0257	78·6	80·4	83·4	76·6	6·6	7·8	74	75	24	5·4	22	5·4	0	9	—	8·9	·072	72·2	79·3	79·3	Fine all day.
2	·0234	·0283	83·2	83·2	87·3	79·9	10·5	10·7	85	87	23	4·9	24	3·1	9	1	—	3·2	·085	76·4	79·5	79·5	Fine most of day.
3	·0283	·0263	83·1	82·6	85·0	81·7	10·5	9·8	86	82	24	4·5	24	3·1	10	10	—	0·3	—	78·8	80·3	79·6	Dull during day.
4	·0192	·0172	82·4	78·7	83·4	77·6	9·6	7·6	81	84	20	4·5	32	5·4	10	10	1·3	0·4	—	77·9	80·6	79·6	Dull most of day.
5	·0222	·0201	75·9	76·8	81·1	74·2	6·3	6·8	84	86	32	1·8	—	0·9	4 ? ≡0	9 ? ≡0	—	5·2	—	66·8	79·8	79·8	Fine day.
6	·0138	·0143	76·6	78·1	80·2	74·3	6·3	8·2	81	94	—	0·9	27	1·8	9≡0	10≡0	3·3	—	—	68·8	78·7	79·8	● 15 h.–20 h. 45 m.
7	·0199	·0215	78·6	77·0	81·3	75·2	7·5	6·7	83	82	32	4·5	2	2·2	9	0	—	1·8	—	76·2	79·1	79·8	Fair most of day.
8	·0203	·0159	75·3	78·5	81·3	72·5	6·3	7·7	86	86	32	1·8	21	2·7	7≡0	10	4·3	0·8	—	66·4	78·1	79·8	⌣ early *a*. ≡ 7 h. ⊕ 9 h.
9	·0119	·0187	78·7	77·4	81·5	75·3	8·3	5·9	92	70	23	1·8	27	2·2	10	0	0·3	3·9	·087	73·4	78·6	79·8	● 3 h.–9 h. ●0 15 h.
10	·0201	·0129	76·5	*80·0*	82·8	72·8	6·8	*7·1*	88	*72*	20	2·2	17	6·7	5	10●0	2·0	4·0	—	66·8	77·8	79·8	Fine *a*. ● from 11 h. 10 m.
11	·0119	1·0151	79·1	78·2	81·0	76·0	8·1	8·1	86	92	18	4·5	—	0·9	10	2 ? ≡0	—	—	—	76·9	78·3	79·8	● till 4 h. 45 m.
12	1·0108	0·9974	77·4	76·8	81·0	74·4	7·0	7·3	84	92	21	2·2	17	2·7	10≡0	10≡0●	10·9	—	—	67·1	77·8	79·7	⌣ early *a*. ● from 16 h. 30 m.
13	0·9959	1·0032	75·9	76·3	78·9	74·3	5·0	6·0	66	77	29	8·1	29	4·5	3	3	1·5	5·8	—	73·1	77·8	79·6	● till 4 h. 20 m. ✲ 16 h. 35
14	1·0039	1·0041	76·3	75·3	79·6	74·1	5·1	5·3	66	73	29	8·9	26	3·1	9	3≡0	0·3	4·6	—	72·5	77·4	79·6	✲. Fine most of day. [m.–17 h.
15	0·9975	0·9963	74·6	76·4	78·8	74·2	5·7	6·5	82	84	25	4·5	29	4·0	10≡0	10	1·8	—	—	69·4	77·0	79·6	✲ 9 h. ● 11 h., 14 h. 30 m.,
16	1·0005	1·0057	76·5	76·3	80·2	75·4	6·5	6·4	83	82	4	3·1	1	1·8	9≡0	10	—	3·0	—	74·2	77·0	79·6	Fine most of day. [and 16 h.
17	·0076	·0103	74·6	77·4	81·3	72·3	6·1	7·0	89	85	—	1·3	8	8·1	6 ? ≡0	10≡0	0·3	0·5	—	66·3	76·9	79·5	⌣ early *a*. ● 14 h. 25 m.
18	·0089	·0102	78·3	78·5	79·9	76·9	6·8	7·7	77	86	7	9·4	6	6·7	10≡0	10≡0	—	—	—	75·0	77·2	79·5	Dull all day.
19	·0108	·0095	77·9	78·0	79·1	77·2	7·2	7·3	84	84	7	8·1	4	5·4	10≡0	9	—	—	—	77·1	77·5	79·5	Dull, with ≡0.
20	·0073	·0072	80·1	78·0	83·0	77·4	8·0	6·7	80	77	7	8·1	4	5·8	0 ? ≡0	6	—	6·6	—	74·4	77·7	79·3	Fine most of day.
21	·0071	·0094	79·7	81·9	85·4	77·2	8·5	9·2	86	82	5	4·0	6	3·1	10≡0	0≡0	—	2·3	·037*	74·6	78·0	79·2	Dull till 11 h.
22	·0123	·0142	79·0	83·2	**88·0**	77·3	8·4	9·9	90	80	6	1·8	4	4·5	0 ? ≡	10	3·3	2·9	—	73·2	78·7	79·2	≡ *a*. ; fine later.
23	·0161	·0168	80·7	78·2	82·6	77·4	9·8	7·9	94	90	3	4·5	4	6·7	9≡0	10	1·5	—	—	79·1	79·5	79·3	●0 *a*. and *p*. Dull all day.
24	·0163	·0154	78·4	76·8	81·3	75·2	6·5	5·9	74	74	5	7·2	2	2·7	10≡0	0	0·8	1·4	·044*	75·9	79·1	79·5	Dull *a*. ; fine later.
25	·0164	·0192	73·9	75·0	77·9	73·2	*4·2*	5·1	*65*	71	1	6·3	1	7·2	7	3	0·3	6·7	·072	69·1	78·2	79·5	✲ showers. Bright intervals.
26	·0162	·0131	76·3	76·6	79·5	74·6	4·8	5·8	63	73	2	11·6	3	9·4	10	10	0·5	2·0	—	72·1	77·4	79·6	Dull *a*. ; finer later.
27	·0101	·0085	76·7	76·1	77·5	75·6	7·1	6·6	90	86	2	7·6	8	8·1	10≡0●0	10●	1·0	—	—	75·7	77·4	79·6	●0 8 h.–10 h. and 19 h.–22 h.
28	·0106	·0113	78·8	78·4	84·3	75·2	6·9	7·7	76	87	7	5·4	7	6·7	0≡0	10≡0	—	7·0	·051*	71·8	77·2	79·5	Fine.
29	·0110	·0091	79·1	79·6	82·8	78·0	8·7	9·0	93	92	4	4·0	3	4·5	10≡0	10≡0	—	—	—	76·3	78·4	79·5	Dull all day.
30	·0047	·0054	78·6	80·3	81·3	77·4	8·4	10·0	94	98	2	3·1	—	0·9	10≡0	10≡0	—	—	—	77·2	78·8	79·4	Dull all day.
31	1·0095	1·0122	81·8	82·0	86·7	80·0	10·1	10·2	91	90	23	2·2	32	1·8	10≡0	0≡0	—	0·1	—	79·1	79·3	79·5	Dull *a*. ; finer later.
Means	1·0124	1·0127	78·1	78·5	81·9	75·9	7·3	7·5	82	83	—	4·8	—	4·3	7·6	6·9	33·4	71	—	73·3	78·3	79·6	Monthly **Totals** or **Means**.
Normal 35 years	1·0131	1·0130	78·2	78·4	82·4	75·2	7·2	7·3	81	82	—	4·3	—	3·5	—	—	38·9	105	—	—	—	—	**Normals**, 35 years.
								20 years			25 years		25 years					25 yrs					

* With easterly winds the solar radiation is affected by smoke from London.

4. Eskdalemuir Observatory, Dumfriesshire.—Long. 3° 12′ W. Lat. 55° 19′ N.

Heights above Mean Sea Level :—Station, H = 243·2 m. Barometer, H_b = 237·1 m.

Heights above Ground :—Thermometers, h_t = 0·8 m. Rain-gauge, h_r = 0·3 m. Sunshine Recorder, h_s = 1·5 m. Vane of Anemometer, h_a = 15·2 m.

															9 h.	21 h.	9 h.						
1	0·9829	0·9834	76·3	78·8	80·3	74·2	5·6	8·6	72	95	22	5·4	20	13·4	7	10●2	**13·0**	5·4	—		—	—	● after 18 h.
2	·9865	·9944	80·2	79·2	**82·5**	77·9	7·9	7·9	78	84	24	14·3	24	5·8	8	4	—	6·7	—		—	—	
3	·9934	·9906	80·7	80·3	82·3	79·0	9·8	9·2	94	90	20	13·4	20	4·5	9≡0	10	7·1	—	—		—	—	≡0 ●0
4	·9867	·9905	77·3	75·0	81·4	74·7	7·2	5·8	87	81	—	0	28	8·1	10	2	—	4·6	—		—	—	●0 2 h.–8 h. ⅄ *p*.
5	·9930	·9877	71·3	74·9	78·7	69·2	4·7	6·5	88	93	—	0	—	0·5	8	10	3·8	1·7	—		—	—	⊕ 13 h.
6	·9816	·9901	74·8	75·2	78·4	73·9	6·8	5·8	98	81	—	0	30	8·9	10●0	4	0·5	—	—		—	—	Gloomy *a*.
7	·9965	·9932	76·3	74·0	79·6	73·0	5·4	5·7	69	86	2	7·2	—	0	1	9	3·0	7·3	—		—	—	∞ *a*.
8	·9861	·9814	75·4	76·9	79·2	73·6	7·0	7·9	97	98	20	8·1	16	5·4	10●0	10≡0	3·8	—	—		—	—	Overcast.
9	·9801	·9871	76·4	73·6	80·3	73·6	5·4	5·1	68	79	26	13·4	24	3·6	7	3	—	9·1	—		—	—	▲ early *a*.
10	·9797	·9728	76·8	77·8	78·5	71·8	6·7	8·1	84	95	20	13·0	20	10·3	9	10●	5·3	—	—		—	—	● showers.
11	·9817	·9806	75·0	76·5	79·1	70·2	4·9	6·9	68	89	—	1·3	20	11·6	1	9●	11·9	6·4	—		—	—	⌒ noon.
12	·9726	·9720	76·6	72·8	79·6	72·7	6·7	4·3	84	71	24	8·1	28	4·9	3	1	—	10·3	—		—	—	✲● showers *a*.
13	·9732	·9794	74·2	73·9	79·3	69·7	5·4	4·7	80	73	32	12·5	32	12·5	7	1	0·5	6·7	—		—	—	✲0 showers *a*.
14	·9804	·9782	75·2	74·1	76·3	72·2	4·8	4·3	66	65	32	12·1	32	10·3	8	3	1·3	0·2	—		—	—	✲0 showers.
15	·9746	·9746	75·1	74·3	78·3	72·0	6·3	5·8	88	85	32	12·1	4	5·8	10	8	2·5	2·6	—		—	—	✲0●0 showers.
16	·9780	·9797	75·4	74·0	78·4	73·5	6·7	5·9	93	89	4	4·5	2	8·5	10	10●✲	10·2	4·9	—		—	—	✲0 ●0 showers,
17	·9801	·9885	73·8	74·1	77·1	73·1	6·2	6·0	97	90	4	13·0	8	7·6	9	8	**5·1**	2·9	—		—	—	✲2 showers.
18	·9895	·9911	74·2	73·1	76·7	72·5	6·1	5·3	90	86	6	8·9	8	8·1	10	10	1·3	2·7	—		—	—	✲2 showers.
19	·9897	·9895	74·2	73·7	75·8	72·0	5·2	5·2	78	81	6	10·3	8	5·4	8	10	0·3	2·8	—		—	—	✲ showers.
20	·9876	·9873	74·9	74·4	77·0	73·1	6·7	5·8	96	84	4	8·1	2	6·3	10	4	—	—	—		—	—	Overcast.
21	·9864	·9867	74·8	74·6	77·6	73·2	5·3	5·4	75	78	6	8·5	6	6·3	9	10	—	2·4	—		—	—	∞ *p*.
22	·9887	·9932	75·0	75·3	78·1	73·6	6·1	6·1	86	84	4	5·8	4	4·5	10	10	—	—	—		—	—	≡0
23	·9956	·9958	75·5	74·2	76·6	73·8	5·8	5·3	79	78	4	6·7	4	4·9	10	9	—	—	—		—	—	Gloomy.
24	·9942	0·9931	76·3	76·3	80·4	72·5	5·9	6·4	76	83	6	6·7	4	5·8	8	9●0	1·0	6·6	—		—	—	✲● n.
25	·9978	1·0018	76·7	71·3	78·2	71·1	5·1	3·6	64	67	4	11·2	4	3·6	7	1	0·3	3·2	·092		—	—	Cloudy.
26	·9992	0·9974	77·0	73·1	79·3	70·6	6·2	4·9	77	79	4	9·8	4	6·3	10	2	0·8	10·9	—		—	—	✲● showers noon.
27	·9946	·9898	77·7	75·0	80·7	72·6	5·7	6·2	67	88	4	9·8	4	11·2	1	10	1·5	5·1	—		—	—	● showers afternoon.
28	·9884	·9884	77·4	75·2	78·9	74·1	6·3	6·0	76	83	4	8·1	4	5·4	2∞	9	—	4·9	—		—	—	
29	·9885	·9858	75·2	75·8	77·0	73·8	6·5	7·0	91	94	8	4·9	4	3·6	10	10	—	—	—		—	—	Dull.
30	·9819	·9810	76·1	76·0	78·1	74·2	7·2	7·4	95	97	4	5·8	32	6·3	10	10≡0	0·3	—	—		—	—	Dull.
31	0·9847	0·9880	76·2	76·5	78·7	75·5	7·3	6·9	95	88	2	8·9	4	2·2	10≡0	10	—	—	—		—	—	Dull.
Means	0·9863	0·9869	75·9	75·2	78·8	73·1	6·2	6·1	82	84	—	8·1	—	6·5	7·8	7·3	73·5	107	—		—	—	Monthly **Totals** or **Means**.
Normal 35 years	—	—	—	—	—	—	—	—	—	—	—		—		—	—	—	—	—		—	—	

No observations.

The solar radiation is the mean of the readings within the nominal hour of observation (11 h. 30 m.–12 h. 30 m.) unless some other hour is specified.

5. Kew Observatory.

Day.	Potential Gradient, Volts. per metre. Factor 1·90.				Number of Ions per cc.		Velocities of Ions for 1 volt. per centimetre.		Conductivity $\times 10^{25}$.	Air–Earth Current $\times 10^{16}$.		Electric Character of Day.	Magnetic Character of Day.	Horizontal Force.					West Declination.				
	3 h.	9 h.	15 h.	21 h.	+.	−.	+.	−.		c_1.	c_2.			Maximum. 18000 γ +.		Minimum. 18000 γ +.		Range.	Maximum. 15° +.		Minimum. 15° +.		Range.
	v/m.	v/m.	v/m.	v/m.	n/cc.	n/cc.	cm/sec.	cm/sec.	E.-m.U.	Amp/cm².				γ	h m	γ	h m	γ	′	h m	′	h m	′
1	145	325	265	380								1	1	533	20 10	459	13 28	74	62·9	15 0	49·0	0 40	13·9
2	95	75	195	210								0	0	514	0 14	482	16 13	32	62·6	13 32	55·4	0 15	7·2
3	80	185	225	190								0	1	531	18 54	467	13 24	64	65·2	13 52	48·9	18 43	16·3
4	75	285	180	95								1	1	531	19 13	483	20 43	48	64·1	13 55	53·6	20 38	10·5
5	310	455	215	190								1	1	545	21 5	433	17 5	112	64·8	14 0	51·0	17 9	13·8
6	310	485	−190	265								2	1	**565**	**18 46**	471	11 35	94	64·1	12 30	51·4	19 8	12·7
7	180	500	760	755								0	1	530	21 47	471	13 8	59	62·1	15 12	54·8	9 40	7·3
8	210	530	250	385								0	1	519	8 17	435	11 54	84	64·1	12 38	56·5	9 10	7·6
9	−40	−245	x+	645								2	0	518	23 55	472	11 7	46	63·8	13 22	56·1	20 28	7·7
10	435	590	285	265								1	0	517	0 4	485	11 25	32	62·9	14 41	54·8	8 30	8·1
11	−355	180	340	360								2	0	511	6 55	482	11 43	**29**	62·3	13 0	55·2	8 55	7·1
12	305	500	40	420								2	0	515	6 53	477	11 35	38	63·1	14 5	55·4	9 13	7·7
13	x+	475	420	485							0·05	2	0	530	18 36	488	11 5	42	62·3	15 43	52·1	8 53	10·2
14	305	350	310	455							0·35	1	1	545	5 47	491	12 13	54	65·2	5 24	54·0	23 53	11·2
15	295	$x\pm$	x+	265	No		No					2	1	545	23 50	460	12 33	85	63·2	14 13	54·0	0 9	9·2
16	250	815	470	555	Observations.		Observations.					1	0	537	0 0	472	11 3	65	64·0	14 42	53·9	9 0	10·1
17	290	610	x+	480								1	0	514	6 50	473	10 32	41	62·9	13 18	54·6	9 6	8·3
18	340	590	465	320								0	0	513	8 12	482	11 44	31	60·1	13 21	53·0	9 13	7·1
19	95	375	460	520								0	0	520	23 30	488	12 20	32	62·2	14 10	55·1	9 25	7·1
20	380	560	770	700							0·75	0	2	544	19 18	**415**	**10 38**	**129**	65·3	11 20	**34·5**	**18 55**	**30·8**
21	420	410	185	330							0·15	1	2	554	18 16	438	10 49	116	65·2	13 53	44·1	16 12	21·1
22	235	290	570	350							0·90	1	1	554	23 42	455	9 55	99	62·6	12 36	48·3	19 40	14·3
23	$x\pm$	$x\pm$	220	420								2	1	552	0 0	457	15 25	95	59·0	14 0	45·1	21 18	13·9
24	160	570	530	530								0	1	527	22 16	445	11 43	82	59·6	13 32	43·0	21 17	16·6
25	150	$x\pm$	720	515							0·70	2	1	529	22 48	435	9 40	94	62·1	1 56	48·5	18 11	13·6
26	165	285	395	295								0	1	524	17 43	452	12 44	72	63·1	14 10	44·2	21 40	18·9
27	130	570	565	−35								2	1	547	19 55	439	9 45	108	65·7	11 40	48·9	19 48	16·8
28	345	855	895	455								0	1	525	20 48	464	2 23	61	**67·7**	**18 15**	52·9	21 50	14·8
29	230	435	270	260							0·70	0	1	515	1 5	452	11 20	63	66·0	12 48	53·8	3 55	12·2
30	180	265	120	20								1	0	510	22 54	460	10 45	50	61·5	14 44	55·1	18 38	**6·4**
31	75	130	225	260							0·55	0	1	504	0 6	459	19 18	45	63·4	13 38	54·1	19 26	9·3
M.	204	424	352	341							—	—	—	530	—	463	—	67	63·3	—	51·3	—	12·0

6. Eskdalemuir Observatory.

Day.	Potential Gradient, Volts per metre. Factor 5·2.				Number of Ions per cc.		Velocities of Ions for 1 volt. per centimetre.		Conductivity $\times 10^{25}$.	Air–Earth Current $\times 10^{16}$.		Electric Character of Day.	Magnetic Character of Day.	North Component.§			West Component.§				Vertical Component.§			
	3 h.	9 h.	15 h.	21 h.	+.	−.	+.	−.		c_1.	c_2.			Maximum. 15000 γ +.		Minimum. 15000 γ +.			Maximum. 5000 γ +.		Minimum. 5000 γ +.		Maximum. 45000 γ +.		Minimum. 45000 γ +.	
	v/m.	v/m.	v/m.	v/m.	n/cc.	n/cc.	cm/sec.	cm/sec.	E.-m.U.	Amp/cm².				h m	γ	γ	h m		h m	γ	γ	h m	h m	γ	γ	h m
1	89	142	178	x								2 b	1	19 50	1049	953	11 17		15 0	302	198	0 38	13 28	320	**254**	**0 43**
2	53	x	190	x								1 b	0	0 10	1024	979	16 10		15 26	297	247	1 0	16 18	325	297	9 30
3	x	x	184	154								1 b	1	18 53	1058	953	13 24		16 15	308	191	18 40	18 37	341	308	23 50
4	x	x	208	291								1 b	0	19 10	1032	978	14 10		13 40	304	237	20 36	21 3	347	302	0 0
5	202	202	148	391								0 a	1	21 0	1074	924	14 38		3 42	325	195	17 6	17 5	385	304	4 0
6	x	x	208	267								2 b	1	**18 38**	**1127**	963	13 3		13 43	305	225	18 34	18 30	349	322	**0** 0
7	249	190	**237**	463								0 a	0	21 43	1045	970	13 7		15 32	302	251	9 40	20 45	351	324	21 50
8	225	x	243	326								1 b	1	0 0	1023	924	11 53		14 40	305	261	10 4	17 0	349	330	0 **0**
9	95	178	243	**285**								1 b	0	23 54	1029	971	12 38		13 23	298	256	9 37	16 12	351	335	13 6
10	255	107	x	x								1 b	0	0 0	1025	988	12 0 / 13 0		14 2	295	259	9 30	22 23	355	332	1 24
11	178	142	130	x								1 b	0	20 30	1015	984	12 30		13 40	296	259	9 25	16 37	359	345	12 20
12	x	107	142	350								2 c	0	6 50	1035	978	12 3		14 22	304	260	9 50	23 0 / 24 0	364	346	7 50
13	285	652	243	243								0 b	0	7 44	1039	987	11 48		15 39	312	260	21 18	21 35	385	351	9 20
14	154	178	**261**	249	No		No					0 a	1	5 45	1047	988	11 23		5 23	339	258	24 0	22 20	386	347	8 0
15	486	x	x	x	Observations.		Observations.					1 c	1	23 46	1062	958	12 33		14 9	311	251	0 7	17 0	382	357	4 0
16	172	148	237	x								1 c	1	17 48	1026	972	15 3		14 42	316	257	9 33	17 17	405	368	0 10
17	x	x	x	x								2 c	0	22 15	1025	980	11 58		13 17	305	267	9 5	19 0	399	384	2 0
18	172	x	219	125								2 c	0	22 56	1023	984	12 7		14 16	310	252	9 14	19 53	403	389	13 **0**
19	89	101	160	130								1 b	0	23 29	1030	980	12 18		15 16	306	267	9 23	22 0	408	385	13 3
20	12	30	225	362								1 a	2	19 2	1105	**895**	**10 24**		13 54	329	**130**	**18 52**	15 50	475	345	24 0
21	172	160	225	249								0 a	2	18 13	1113	924	10 47		15 47	329	186	16 14	18 3	483	345	0 0
22	89	107	113	130								0 a	1	19 47	1091	957	9 58		23 42	322	234	19 38	19 14	436	345	2 10
23	119	130	130	160								0 a	2	17 25	1075	947	15 24		14 17	312	200	17 1	17 0	471	357	0 55
24	59	59	125	x								1 b	1	21 20	1066	937	11 42		13 21	311	182	21 14	16 25	447	373	0 40
25	65	101	119	285								1 a	2	18 17	1083	937	9 47		22 13	320	216	18 8	18 7	454	387	2 15
26	95	89	95	279								1 b	1	17 41	1082	952	12 38		14 10	322	181	21 39	19 15	461	408	0 0
27	95	219	148	219								1 a	2	19 50	1110	941	11 52		23 45	319	216	19 30	19 40	460	407	24 0
28	83	172	202	338								1 a	1	20 45	1056	960	5 38		**6 13**	**351**	239	1 53	19 0	469	397	0 40
29	142	95	130	142								1 a	1	0 57	1036	953	12 55		14 32	321	249	1 53	16 0	480	386	2 10
30	350	320	**285**	362								0 a	1	22 53	1033	966	11 53		14 39	313	259	18 35	18 53	478	450	2 45
31	166	225	225	154								0 a	1	0 6	1019	972	12 8		14 11	312	247	19 23	**18 52**	**501**	453	11 53
M.	145	185	188	261								—	—	—	1053	960	—		—	313	232	—	—	406	356	—

x Indeterminate.
An explanation of the Headings of the columns is given in the Preface.
§ The Magnetic values at Eskdalemuir Observatory are at present only provisional, and subject to correction at the end of the year.

7. Tables of Wind Components in metres per second at fixed hours.

Together with the mean velocity (horizontal movement) in metres per second for the hour with the maximum hourly run for each day, **or** the greatest velocity attained in a gust and the time of its occurrence.

HOLYHEAD.†§

Height of Head above—Roof 8·8 m., Ground 13·7 m., M.S.L. 19·2 m.
Height of Cups above—Roof 4·6 m, Ground 7·6 m., M.S.L. 15·2 m.

Date.	3 h. S.	3 h. N.	3 h. W.	3 h. E.	9 h. S.	9 h. N.	9 h. W.	9 h. E.	15 h. S.	15 h. N.	15 h. W.	15 h. E.	21 h. S.	21 h. N.	21 h. W.	21 h. E.	Max. in a Gust.	Time of Gust. Hrs.	Time of Gust. Min.
																	V.		
1	...	...	13·0	...	2·2	...	10·7	...	6·7	...	4·5	...	10·3	...	4·5	...	19·7	22	0
2	4·9	...	4·9	...	5·4	...	8·1	...	6·3	...	6·3	...	4·9	...	4·9	...	17·0	0	5
3	2·7	...	2·7	...	4·0	...	4·0	...	5·8	..	4·0	...	4·9	...	4·9	...	14·3	24	0
4	7·6	...	3·1	...	5·4	...	5·4	...	...	8·5	1·8	...	...	7·2	3·1	...	15·7	0	15
5	...	4·9	3·1	...	...	1·3	3·6	...	4·5	...	3·1	...	4·0	...	2·7	...	11·2	23	25
6	5·4	...	3·6	...	...	4·5	10·7	...	...	8·9	8·9	...	...	13·4	5·4	...	20·1	16	20
7	...	10·3	1·8	...	...	7·2	...	3·1	...	2·2	0·9	...	...	1·3	0·5	...	14·3	0	25
8	4·5	...	3·1	...	5·8	...	4·0	...	6·3	...	2·7	...	3·6	...	1·3	...	17·9	23	5
9	...	...	11·6	...	...	2·2	11·6	...	...	3·1	7·6	...	...	...	6·7	...	19·2	6	35
10	3·6	...	5·4	...	9·8	...	4·0	...	12·5	...	2·7	...	6·3	...	2·7	...	22·4	15	35
11	...	5·4	5·4	...	...	3·6	5·4	...	...	...	7·2	...	2·2	...	5·4	...	13·9	1	25
12	4·5	...	6·7	...	6·7	...	6·7	...	0·9	...	4·9	...	...	11·6	4·9	...	17·9	24	0
13	...	10·3	4·5	...	...	11·6	4·9	...	...	10·7	4·5	...	...	12·1	4·9	...	19·2	8	5
14	...	11·6	2·2	...	...	10·3	4·5	...	...	6·7	1·3	...	...	10·3	...	...	19·7	11	10
15	...	8·5	5·8	...	...	10·7	4·5	...	...	9·8	...	...	...	8·1	...	...	18·3	2	10
16	...	9·8	1·8	...	...	5·4	...	3·6	...	5·4	...	3·6	...	2·2	...	2·2	13·0	3	0
17	...	5·8	...	1·3	...	3·1	2·2	...	...	1·8	...	8·1	...	2·2	...	11·2	15·7	23	50
18	...	2·7	...	13·4	...	2·7	...	12·5	...	2·7	...	12·5	...	2·7	...	13·9	20·1	20	25
19	...	3·1	...	14·8	...	...	...	16·1	...	3·1	...	15·7	...	...	...	13·0	22·4	9	20
20	...	...	...	11·6	...	2·7	...	12·5	...	3·6	...	8·9	...	4·9	...	11·6	20·6	9	50
21	...	4·9	...	12·1	...	4·5	...	11·2	...	3·6	...	5·4	...	8·5	...	1·8	20·1	1	5
22	...	0·9	...	4·5	...	1·3	...	6·7	...	1·3	...	7·2	...	2·2	...	11·2	15·7	23	0
23	..	4·5	...	10·3	...	6·3	...	9·8	...	3·6	...	8·5	...	1·8	...	9·4	17·4	8	10
24	...	2·7	...	12·5	...	4·0	...	9·8	...	6·3	...	6·3	...	3·1	...	2·2	18·3	1	50
25	...	8·5	...	5·8	...	10·3	...	7·2	...	8·9	...	8·9	...	6·7	...	6·7	20·1	11	40
26	...	7·6	...	5·4	...	9·4	...	6·3	...	8·9	...	3·6	...	4·0	...	9·4	18·3	7	50
27	...	8·1	...	8·1	...	9·8	...	9·8	...	10·3	...	7·2	...	10·3	...	7·2	20·6	18	10
28	...	4·5	...	11·2	...	2·7	...	13·4	...	...	...	7·6	...	1·8	...	8·9	20·6	7	30
29	...	1·8	...	8·9	...	0·9	...	4·9	...	0·9	5·4	...	...	2·2	...	2·2	13·0	1	35
30	...	0·9	...	2·2	...	4·9	...	4·9	...	6·3	...	1·3	...	4·0	...	1·8	10·3	10	25
31	0·5	...	0·5	...	...	...	..	2·7	...	1·8	...	4·0	...	3·1	...	8·1	12·5	20	10
S+N & W+E	150·5		201·3		158·7		224·8		161·4		174·6		159·9		172·7				
S−N & W−E	−83·1		−42·9		−80·1		−44·2		−75·4		−43·0		−87·5		−68·9				

DEERNESS.†

Height of Cups above—Roof 1·5 m., Ground 4·9 m., M.S.L. 57·3 m.

Date.	3 h. S.	3 h. N.	3 h. W.	3 h. E.	9 h. S.	9 h. N.	9 h. W.	9 h. E.	15 h. S.	15 h. N.	15 h. W.	15 h. E.	21 h. S.	21 h. N.	21 h. W.	21 h. E.	Vel. in Max. Hourly Run.	Time of Max. Hour.
																	V.	
1	...	...	15·2	...	...	3·6	17·0	...	...	2·2	11·2	...	...	11·6	4·9	...	20·1	11
2	...	4·0	9·4	...	...	4·5	4·5	...	...	4·9	7·2	...	0·9	...	4·0	...	16·5	1
3	6·3	...	...	...	4·9	...	4·9	...	2·2	...	11·2	...	1·8	...	8·1	...	12·1	13
4	...	...	8·5	...	...	1·8	8·5	...	...	3·6	8·5	...	...	8·1	8·1	...	11·6	11, 12, 14, 18
5	...	3·1	4·9	...	...	0·9	1·3	...	2·2	..	3·1	...	4·5	...	0·9	...	8·1	1
6	2·7	...	0·9	...	...	2·2	2·2	...	...	10·3	1·8	...	...	8·1	3·1	...	11·6	14
7	...	2·7	1·3	...	...	0·9	0·5	...	1·8	...	2·7	...	4·9	...	2·2	...	6·7	18
8	6·3	...	2·7	...	4·0	...	2·7	...	...	1·8	8·5	...	0·0	...	0·9	...	10·3	11, 12
9	5·4	...	0·9	...	1·3	...	3·6	...	...	7·2	7·2	...	4·0	...	0·9	...	12·1	14
10	9·8	...	4·0	...	13·0	...	2·7	...	1·8	...	8·1	...	2·7	...	13·9	...	15·2	12
11	4·5	...	10·7	...	...	4·5	11·2	...	4·0	...	5·8	...	2·2	...	5·8	...	13·9	5, 7
12	4·0	...	5·8	...	...	5·4	3·6	...	...	11·2	2·2	...	...	11·2	...	...	12·5	12
13	...	13·9	...	5·8	...	15·2	...	...	...	16·5	...	...	...	13·4	2·7	...	17·9	4
14	...	10·3	...	...	...	11·2	2·2	...	...	12·5	2·7	...	...	11·2	...	...	14·3	14
15	...	9·8	...	4·0	...	6·7	...	2·7	...	3·6	...	5·4	...	0·9	...	4·9	11·6	1
16	...	0·9	...	4·9	...	0·5	...	2·7	...	5·4	...	3·6	1·3	...	...	6·7	8·5	16, 18
17	...	...	...	7·2	...	...	...	6·3	1·3	...	...	7·2	...	...	0·9	...	5·4	7·6	11, 13
18	1·3	...	...	3·6	1·8	...	...	4·0	1·3	...	...	7·2	2·7	...	...	6·7	8·5	18, 19, 24
19	1·8	...	...	8·9	1·3	...	...	6·7	3·1	...	...	7·6	4·5	...	...	6·7	9·8	13, 20
20	5·8	...	...	5·8	3·6	...	...	5·4	5·8	...	...	5·8	4·9	...	...	4·9	9·4	1
21	7·6	...	...	4·9	7·6	...	...	4·9	6·7	...	...	4·5	5·4	...	...	3·6	9·4	12
22	5·4	...	...	2·2	4·5	...	...	3·1	3·1	...	...	1·8	1·3	...	...	2·2	6·7	2
23	0·9	...	...	1·3	0·0	...	..	0·9	...	4·5	...	...	...	2·2	...	0·5	4·9	16
24	...	2·2	2·2	...	...	4·9	2·2	...	...	11·2	...	...	...	5·8	...	2·2	11·2	15
25	...	4·5	...	4·5	...	2·2	...	3·1	...	4·9	2·2	...	...	4·9	...	0·9	6·7	2
26	...	1·8	...	0·9	...	2·7	0·5	...	...	1·8	...	...	...	1·8	...	0·5	3·6	1
27	...	1·3	0·9	...	...	2·2	1·3	...	...	4·5	...	...	...	2·2	...	0·5	4·5	15
28	...	0·5	..	1·3	...	0·5	...	1·3	...	1·8	...	4·5	0·5	...	...	3·1	5·8	14
29	1·3	...	...	1·3	4·0	...	...	4·0	5·8	...	...	4·0	8·1	...	...	9·8	9·8	20, 21
30	5·4	...	...	0·9	1·8	...	0·5	...	...	4·0	0·9	...	...	1·8	...	0·5	8·1	1
31	...	4·0	...	0·9	...	5·4	...	5·4	...	3·1	...	3·1	...	0·5	...	1·3	8·1	8
S+N & W+E	127·5		125·8		123·1		119·9		154·1		138·0		134·3		115·9			
S−N & W−E	9·5		9·0		−27·5		18·9		−75·9		28·6		−33·1		−4·9			

SCILLY.‡§

Height of Head above—Ground 9·8 m., M.S.L. 49·7 m.
Height of Cups above—Ground 5·8 m., M.S.L. 45·7 m.

Date.	3 h. S.	3 h. N.	3 h. W.	3 h. E.	9 h. S.	9 h. N.	9 h. W.	9 h. E.	15 h. S.	15 h. N.	15 h. W.	15 h. E.	21 h. S.	21 h. N.	21 h. W.	21 h. E.	Max. in a Gust.	Time of Max. Hrs.	Time of Max. Min.
																	V.		
1	...	7·2	10·3	...	...	1·8	8·1	...	3·6	...	8·1	...	4·9	...	7·6	...	14·8	0	5
2	2·2	...	11·2	...	...	...	10·3	...	...	...	9·8	...	...	...	8·1	...	13·9	7	15
3	...	...	5·8	...	1·3	...	6·7	...	1·3	...	6·3	...	1·3	...	6·3	...	9·4	23	40
4	4·0	...	6·3	...	5·4	...	5·4	...	...	1·3	7·2	...	...	11·2	...	2·2	18·8	18	30
5	...	4·0	...	2·7	...	1·8	...	1·3	1·8	...	...	1·8	1·3	...	2·2	...	10·7	0	5
6	4·9	...	3·1	...	...	11·2	11·2	...	...	15·2	6·3	...	...	13·4	5·4	...	22·8	4	25
7	...	10·7	...	...	...	8·9	...	...	...	5·4	...	2·2	...	2·2	...	0·9	17·4	0	40
8	...	1·3	2·2	...	2·2	...	3·1	...	6·3	...	4·0	...	...	...	7·2	...	17·4	21	35
9	...	9·8	9·8	...	...	10·7	4·5	...	...	6·3	6·3	...	...	4·0	5·8	...	18·8	1	5
10	2·2	...	5·4	...	10·3	...	4·5	...	15·7	...	3·1	...	8·5	...	...	1·8	23·3	13	30
11	...	13·4	2·7	...	...	9·8	...	...	...	8·1	...	...	...	2·7	1·3	...	20·1	3	20
12	...	0·9	5·4	...	5·8	...	4·0	...	12·5	...	...	...	...	15·2	3·1	...	23·3	19	35
13	...	13·9	5·8	...	...	8·5	5·8	...	...	12·1	...	...	...	8·5	1·8	..	21·5	1	25
14	...	8·1	3·6	...	...	8·5	3·6	...	...	8·1	3·6	...	...	8·1	8·1	...	17·9	22	35
15	...	7·6	4·9	...	...	8·1	3·6	...	...	7·6	4·9	...	...	5·8	5·8	...	17·0	1	20
16	...	5·8	5·8	...	...	6·3	2·7	...	...	2·7	...	1·3	...	0·9	...	0·5	15·2	7	0
17	0·5	...	...	3·1	5·4	...	...	7·6	...	...	...	16·1	...	...	...	21·0	22·8	20	5
18	...	...	...	19·2	3·1	...	...	...	1·3	...	...	6·5	4·5	...	...	11·2	22·8	0	20
19	2·2	...	...	11·2	2·7	...	...	13·9	...	...	...	16·5	...	...	...	17·9	20·1	21	50
20	...	...	...	14·8	...	...	...	13·9	...	...	...	10·7	...	2·2	...	11·2	17·4	0	15
21	...	1·3	...	6·3	...	4·5	...	4·5	...	...	...	9·4	...	...	...	7·6	11·2	11	45
22	4·9	...	...	4·9	5·8	...	...	5·8	4·9	...	...	4·9	3·1	...	...	3·1	8·5	6	50
23	1·3	...	...	3·6	1·3	...	...	5·8	...	...	...	6·3	...	...	...	7·2	10·7	23	25
24	...	...	...	11·2	...	...	...	1·3	...	2·2	...	10·7	7·6	...	1·3	...	16·1	9	55
25	...	3·6	...	8·1	...	1·3	...	1·3	...	7·2	...	7·2	10·7	...	2·2	...	18·8	10	10
26	...	6·3	...	6·3	...	6·3	...	6·3	...	8·9	...	3·6	...	7·2	...	7·2	19·2	9	25
27	...	7·2	...	7·2	...	6·3	...	6·3	...	7·2	...	4·9	...	3·6	...	3·6	14·8	0	55
28	...	1·3	...	1·8	...	...	...	4·0	2·7	...	...	2·7	1·8	...	...	3·1	? 8·1	9	35
29	...	...	...	...	...	1·8	...	1·8	...	...	...	2·7	...	3·6	...	1·3	5·8	18	45
30	...	...	...	5·8	...	...	...	8·5	2·7	...	...	6·3	2·7	...	...	0·5	9·8	7	5
31	3·1	...	...	1·3	3·1	...	...	7·2	...	...	...	9·8	1·3	...	...	7·6	10·7	10	45
S+N & W+E	127·7		189·8		142·2		163·0		145·1		183·0		136·3		174·1				
S−N & W−E	−77·1		−25·2		−49·4		−16·0		−39·5		−63·8		−40·9		−41·7				

GREAT YARMOUTH.†§

Height of Head above—Roof 10·7 m., Ground 12·8 m., M.S.L., 15·9 m.
Height of Cups above—Roof 3·7 m., Ground 18·3 m., M.S.L., 22·3 m.

Date.	3 h. S.	3 h. N.	3 h. W.	3 h. E.	9 h. S.	9 h. N.	9 h. W.	9 h. E.	15 h. S.	15 h. N.	15 h. W.	15 h. E.	21 h. S.	21 h. N.	21 h. W.	21 h. E.	Max. in a Gust (Gorleston).	Time of Gust. Hrs.	Time of Gust. Min.
																	V.		
1	...	1·3	7·6	...	...	...	7·2	...	...	...	6·7	...	3·1	...	3·1	...	14·8	10	20
2	4·5	...	6·7	...	...	...	9·8	...	...	3·1	8·1	...	...	1·3	2·7	...	20·1	12	35
3	...	0·9	0·9	...	...	0·9	4·9	...	...	0·9	5·4	...	1·3	...	3·1	...	11·6	12	10
4	1·8	...	2·7	...	4·0	...	4·0	...	1·8	...	4·5	...	...	2·7	1·3	...	13·0	17	10
5	...	1·8	2·7	...	...	0·9	1·3	...	...	1·8	1·8	...	...	...	...	...	11·6	10	55
6	3·1	...	1·8	...	1·3	...	0·9	...	...	...	2·2	...	0·0	...	0·9	...	8·5	11	55
7	...	1·3	0·9	...	...	1·8	0·9	...	...	4·5	...	...	...	1·3	0·5	...	10·3	14	55
8	...	1·3	1·3	...	...	...	2·7	...	2·7	...	1·8	...	2·2	...	0·5	...	7·6	15	15
9	3·6	...	...	...	3·1	...	1·8	...	...	...	2·2	...	...	1·3	2·7	...	10·3	6	5
10	...	0·5	3·1	...	1·8	...	2·7	...	3·6	...	2·7	...	6·7	...	...	...	14·3	21	0
11	6·3	...	2·7	...	4·0	...	4·0	...	...	4·5	...	...	...	2·2	...	0·5	16·5	4	20
12	1·3	...	2·7	...	2·2	...	2·2	...	4·0	...	4·0	...	3·1	...	2·2	...	13·0	14	5
13	...	6·7	...	...	...	5·4	3·6	...	...	4·9	4·9	...	...	3·1	4·5	...	21·0	13	55
14	...	4·0	2·7	...	...	4·0	4·0	...	...	5·8	5·8	...	...	2·7	6·7	...	21·5	9	30
15	...	...	6·7	...	0·9	...	4·9	...	...	1·3	1·3	...	3·6	...	...	5·4	12·1	23	40
16	...	...	...	7·6	...	1·8	...	1·8	...	3·6	1·3	...	...	...	2·7	...	12·1	0	5
17	0·9	...	2·7	...	2·7	...	0·9	...	...	...	...	4·9	...	1·3	...	7·6	10·3	18	10
18	...	...	...	10·7	...	3·1	...	14·8	...	6·3	...	14·8	...	3·1	...	14·8	18·8	19	25
19	...	5·4	...	13·0	...	4·9	...	12·5	...	4·9	...	12·1	...	4·9	...	11·6	15·7	3	15
20	...	2·2	...	10·7	...	...	...	10·7	...	8·1	...	12 1	...	4·9	...	7·2	15·7	15	45
21	...	5·4	...	7·6	...	3·1	...	7·6	...	1·8	...	4·5	...	0·9	...	1·8	10·3	1	10
22	...	2·7	...	1·8	...	3·1	...	1·8	...	4·0	...	2·7	...	2·7	...	2·7	7·2	16	20
23	...	3·1	...	2·2	...	3·6	...	8·1	...	7·2	...	7·2	...	8·1	...	8·1	17·0	10	55
24	...	8·1	...	8·1	...	6·7	...	6·7	...	7·6	...	...	...	4·0	4·0	...	16·1	23	45
25	...	13·4	...	5·4	...	11·6	...	7·6	...	13·9	...	5·8	...	16·5	...	6·7	27·3	6	20
26	...	15·2	...	6·3	...	14·8	...	9·8	...	14·8	...	9·8	...	14·3	...	9·8	24·1	0	20
27	...	12·1	...	12·1	...	11·2	...	11·2	...	4·5	...	10·7	...	...	...	8·5	21·0	6	35
28	...	1·8	...	8·1	...	1·8	...	10·3	...	1·3	...	6·7	...	4·9	...	4·9	13·4	0	20
29	...	2·7	...	2·7	...	6·3	...	6·3	...	4·5	...	4·5	...	5·4	...	3·6	9·4	6	40
30	...	4·0	0·9	...	...	3·6	0·9	...	...	4·0	...	...	...	1·8	...	...	8·5	2	25
31	1·8	...	4·0	...	2·7	...	3·6	...	0·9	...	4·5	...	0·5	...	2·7	...	8·9	13	15
S+N & W+E	117·2		146·4		111·3		169·5		126·3		153·0		107·9		130·8				
S−N & W−E	−70·6		−46·2		−65·9		−48·9		−100·3		−38·6		−66·9		−55·6				

The velocities at fixed hours are means for the interval from 30 minutes before to 30 minutes after the hour. The hours are numbered 1 h. to 24 h. Time is referred to Greenwich Mean Time.

* No record.

† Robinson Cup Anemometer; Arms 0·61 m.; Diameter of Cups, 0·229 m.; Factor 2·2. ‡ Robinson Cup Anemometer; Arms 0·305 m.; Diameter of Cups 0·127 m.; Factor 2·8.

§ Dines Pressure Tube Anemometer. At Great Yarmouth, Holyhead, and Scilly the readings at fixed hours are taken from the Robinson Anemometer, the maxima quoted are the greatest winds in a gust as recorded by the Dines Pressure Tube.

METEOROLOGICAL OFFICE OBSERVATORIES—GEOPHYSICAL JOURNAL.

APRIL 1911.—DAILY VALUES REFERRED TO GREENWICH MEAN TIME AND UNITS, BASED ON THE C.G.S. SYSTEM. [*Price* 4*d*.

First Year.—No. 4. *Meteorology, Solar Radiation, Seismology, Atmospheric Electricity, and Terrestrial Magnetism.*

1. SEISMOLOGICAL JOURNAL:—ESKDALEMUIR.—Long. 3° 12′ W. Lat. 55° 19′ N.

Date.	Microseisms. Period.	Microseisms. Amp.	Earthquakes.	Remarks.
	s	μ		
1	4	0·7	I.	1st I, very feeble movements from 2 h. 24 m.–3 h. 0 m.
2	4–5	0·5		
3	6–5	0·8		4th Ir, P=15 h. 49 m. 34 s., S=15 h. 54 m. 4 s., Δ=2825 kms., α=60° 25′ E of S, Epicentre 38°·5 N 25°·2 E.
4	5–6	0·5	Ir.	
5	5	0·7	I.	5th I, A single wave at 15 h. 35 m. 40 s.
6	5	1·0		
7	6	0·5	Iu.	7th Iu, P=6 h. 55 m. 38 s., S=7 h. 4 m. 54 s., Δ=7920 kms.
8	5–6	0·7		
9	5	0·7		10th Iu, P=18 h. 53 m. 45 s., S=19 h. 3 m. 7 s., Δ=8040 kms. ? α=68° 8′ W of S, Epicentre 3° N 59° W.
10	5	0·7	Iu.	
11	6	0·5	Iu.	11th Iu, P=13 h. 49 m. 46 s., S=14 h. 2 m. 45 s., Δ > 13000 kms.
12	5	0·6		
13	6	0·6	I.	13th Long waves about 1 h. 45 m. 14th Long waves at 6 h.
14	7–8	1·4	I.	
15	7	2·2	I.	15th Much disturbed by microseisms. Max. at 12 h. 30 m.
16	5–6	1·8		
17	5	0·9	I.	17th Start about 5 h. 4 m., S=5 h. 9 m. 28 s.
18	5	1·7	I, IIu.	
19	5–6	3·5		18th I Long waves at 12 h., IIu, P=18 h. 23 m. 20 s., S=18 h. 30 m. 11 s., Δ=5160 kms.
20	6–7	1·5		
21	5	0·9	I.	21st Start 2 h. 48 m. 16 s. Diagram much disturbed. 23rd Long waves 14 h.–14 h. 30 m.
22	5–6	0·9		
23	5–6	0·9	I.	28th I, Long waves 0 h. 3 m.–0 h. 8 m., Iu, P? S=10 h. 13 m. 23 s. very sharp and followed in a few seconds by maximum movement.
24	5	0·9		
25	5	0·9		29th S=5 h. 48 m. 10 s.
26	5	1·1		
27	5	0·9		30th Iu, P=4 h. 46 m. 34 s., I, Long waves 20 h. 54 m.–21 h. 14 m.
28	5–6	1·4	I, Iu.	
29	6–7	1·5	Iu.	
30	5	0·9	Iu, I.	

An explanation of the notation used is given in the preface.

2. VALENCIA OBSERVATORY, CAHIRCIVEEN (KERRY).—Long. 10° 15′ W. Lat. 51° 56′ N.

Heights above Mean Sea Level:—Station, H=9·2 m. Barometer Cistern, H_b=13·7 m.
Heights above Ground:—Thermometers, h_t=1·2 m. Rain-gauge, h_r=0·6 m. Sunshine Recorder, h_s=12·8 m. Cups of Anemometer, h_a=13·7 m.

Day.	Pressure at Station Level. 9 h.	21 h.	Air Temperature in Degrees Absolute. 9 h.	21 h.	Max.	Min.	Humidity. Vapour Pressure. 9 h.	21 h.	Percentage. 9 h.	21 h.	Wind Direction in points (8=E, 16=S) and Velocity (*metres per second*). 9 h.		21 h.		Cloud Amount and Weather. 10 h.	22 h.	Rain 24 hours beginning 10 h.	Sunshine.	Remarks.	Magnetism. Horizontal Force.	Declination West.	Inclination.
			200+	200+	200+	200+									Tenths of Sky covered.							
	bar.	bar.	°	°	°	°	millibar.		%	%	m/sec.		m/sec.				mm.	hrs.		γ·	° ′	° ′
1	1·0092	1·0136	83·5	81·1	86·4	78·5	10·1	9·7	80	90	8	5·4	—	0·9	10	0	—	5·9	Fair.	...	...	...
2	·0160	·0185	79·6	80·7	84·3	76·7	9·7	9·8	100	95	—	0·5	28	2·2	10≡²	2	—	2·4		...	...	...
3	·0233	·0263	80·6	78·5	82·0	76·5	8·0	6·5	78	72	3	5·4	7	8·1	5	10	—	7·2	Fair.	...	...	...
4	·0295	·0269	79·5	78·5	81·2	75·8	6·1	6·5	62	73	8	2·2	3	5·4	3∞	10	—	10·3	Fine.	...	...	...
5	·0263	·0287	77·5	76·1	80·7	74·2	6·3	4·9	74	64	4	3·6	5	8·9	2	3	—	9·7	Fine.	...	...	...
6	·0290	·0273	74·6	77·5	79·8	72·4	4·9	5·4	72	63	5	10·7	5	8·5	3	0	—	11·1	Fair.	...	...	...
7	·0256	·0244	77·6	79·5	80·9	75·4	6·7	7·5	80	77	4	6·7	7	2·2	7	10	—	4·7		17881	20 36·2	68 13·3
8	·0288	·0302	79·6	79·4	84·1	76·3	5·9	7·0	61	74	7	4·9	5	5·4	4	0	—	9·3	Fine.	...	...	...
9	·0318	·0288	80·2	79·0	83·9	76·7	7·1	7·8	70	83	6	4·5	5	2·7	2∞	2∞	—	11·7		...	...	...
10	·0252	·0250	80·3	80·4	83·8	77·9	7·4	6·7	73	65	4	7·6	8	3·1	6	1	—	8·5	Fair.	...	...	...
11	·0263	·0266	78·9	78·5	84·6	75·2	6·4	7·8	70	87	5	4·5	—	0·9	6	2≡⁰	—	10·8	Fine.	...	...	...
12	·0263	·0278	79·5	80·1	85·4	73·1	7·9	8·8	81	88	—	1·3	—	0·9	1⌣∞	1∞	—	9·6	Fine.	...	...	...
13	·0298	·0300	81·7	81·3	85·1	75·2	9·6	9·0	87	84	—	0·5	—	1·3	2⌣∞	1∞	—	12·3	Fine.	...	...	...
14	·0292	·0275	82·1	79·9	84·3	76·5	8·8	8·6	77	87	2	3·6	—	1·3	9◔	1	—	10·5		...	...	...
15	·0229	·0177	82·6	82·5	85·1	75·2	10·2	9·7	86	82	24	4·9	22	7·6	10	10	0·3	2·9	Fair.	...	...	...
16	·0135	1·0099	83·5	82·2	86·2	81·5	11·1	10·0	88	86	22	6·7	19	2·2	10●	10	—	2·2		...	...	...
17	1·0035	0·9959	83·0	82·5	84·6	81·8	10·9	11·4	90	96	16	4·5	16	6·7	10≡⁰	10≡⁰●	19·3	—	Dull. ● from 19 h. 30 m.	...	...	...
18	0·9819	·9691	83·1	81·7	84·2	80·5	11·0	9·3	90	83	15	9·8	13	9·8	10≡⁰	10●	8·9	1·2	● till 6 h. ● showers *p*.	...	...	...
19	0·9758	0·9994	82·6	81·0	83·6	79·8	10·2	7·3	86	69	22	4·9	25	16·5	10	10	1·3	0·5	Visibility 10 h. ● showers.	...	...	...
20	1·0147	1·0102	81·7	82·2	83·9	79·2	8·3	11·0	74	95	21	8·1	15	8·9	9	10≡⁰●	10·7	1·7	Visibility. ● 17 h.–midt.	...	...	...
21	·0174	·0180	84·5	83·9	85·3	83·8	13·0	12·4	97	96	16	6·7	15	8·5	10≡⁰	10≡⁰●	4·3	—	Heavy mist. ● 19 h.–midt.	17878	20 35·7	68 14·7
22	·0183	·0160	84·3	84·3	86·3	83·8	13·0	12·6	98	94	16	5·8	17	5·8	10≡⁰	10	0·8	0·1	Heavy mist.	...	...	...
23	·0150	·0191	84·6	82·0	86·0	81·2	11·4	10·2	85	90	21	9·4	22	4·5	10≡⁰●	*1*	—	6·3	● showers *a*.	...	...	...
24	·0155	·0108	83·9	83·8	85·4	80·6	11·5	12·4	89	97	16	5·4	16	5·4	10≡⁰	*10*≡⁰	6·4	—	Misty. ●⁰ 17 h.–18 h. 30 m.	...	...	...
25	·0027	·0075	84·5	80·7	85·4	80·6	13·0	9·0	97	86	19	5·8	28	4·9	10≡⁰	*8*	9·7	—	●⁰ 2 h.–4 h. ● 16 h. 30 m.–midt.	...	...	...
26	1·0124	·0029	82·3	81·7	84·5	80·1	9·3	10·7	81	96	24	6·7	15	7·2	7	*10*≡⁰●	18·0	4·3	Visibility. ● 17 h.–23 h.	...	...	...
27	0·9958	1·0006	83·5	82·9	85·7	82·4	11·8	10·2	94	85	21	10·3	22	11·6	9	*9*	1·0	2·2	● showers *a*. and *p*.	...	...	...
28	·9992	0·9939	84·0	79·6	84·6	79·1	10·3	8·8	79	91	19	6·7	19	4·9	7	*9*●	10·4	5·7	Visibility. ● showers.	...	...	...
29	0·9876	0·9994	82·6	82·0	84·2	79·2	10·5	9·1	89	81	15	3·6	32	9·8	7	*8*	1·3	3·3	●² showers.	...	...	...
30	1·0090	1·0146	83·5	82·4	86·2	81·2	9·6	11·0	76	94	27	4·9	24	3·6	3	*6*	0·5	11·7				
Means	1·0147	1·0149	81·6	80·9	84·3	78·3	9·3	9·0	82	84		5·5		5·7	7·1	6·1	92·9	166	Monthly **Totals** or **Means**.	17880	20 36·0	68 14·0
Normal 35 years	1·0106	1·0109	82·1	81·7	85·2	79·1	9·5	9·5	82	85		5·4 (25 years)		4·9 (25 years)	—	—	100·1	158 (25 yrs)	**Normals**, 35 years.			
									20 years													

Wt. 41467/309—375—11/11. N. & Co., Ltd. Gp. XV.

3. Kew Observatory, Surrey.—Long. 0° 19′ W. Lat. 51° 28′ N.

Heights above Mean Sea Level :—Station, H = 5·5 m. Barometer, H_b = 10·4 m.
Heights above Ground :—Thermometers, h_t = 3·0 m. Rain-gauge, h_r = 0·5 m. Sunshine Recorder, h_s = 14·3 m. Cups of Anemometer, h_a = 21·3 m.

Day.	Pressure at Station Level.		Air Temperature in Degrees Absolute.				Humidity.				Wind Direction in Points (8 = E, 16 = S) and Velocity (*metres per second*).				Cloud Amount and Weather.		Rain 24 hours beginning 10 h.	Sunshine.	Solar Radiation, Watts per cm².	Min. Temp. on Grass.	Earth Temperature at 10 h.		Remarks.
							Vapour Pressure.		Percentage.														
	9 h.	21 h.	9 h.	21 h.	Max.	Min.	9 h.	21 h.	9 h.	21 h.	9 h.		21 h.		10 h.	22 h.					0·3 m.	1·2 m.	
	bar.	bar.	200+°	200+°	200+°	200+°	millibar.		%	%	m/sec.		m/sec.		Tenths of Sky covered.		mm.	hrs.		200+°	200+°	200+°	
1	1·0151	1·0145	80·7	80·9	83·7	78·9	8·5	8·7	82	83	4	3·1	2	2·7	10≡⁰	10●	20·3	0·5	—	74·0	80·0	79·5	Dull. ● 21 h. 25m.–midt.
2	·0143	·0148	78·5	78·9	79·5	78·2	8·3	7·9	93	86	—	0·5	—	0·9	10≡⁰●	10	7·4	—	—	77·8	80·2	79·6	Dull. ● 0 h. 20 m.–15 h.
3	·0185	·0228	77·2	75·9	80·3	74·6	5·7	4·9	69	65	2	6·7	1	4·5	10	0	—	5·2	·083	76·1	79·6	79·6	Dull *α*.
4	·0231	·0190	75·8	75·0	78·7	73·7	5·3	5·4	72	77	1	6·7	1	4·5	8	8	1·0	4·9	—	70·3	78·6	79·7	✻⁰ early *α*. ●⁰ 12 h. 25 m.–13 h.
5	·0193	·0228	73·1	71·4	74·4	70·3	3·3	3·1	54	56	4	11·6	3	8·5	9	3	0·3	5·3	—	71·8	78·0	79·8	✻ showers. Bright intervals.
6	·0227	·0230	73·4	74·6	75·9	70·9	3·0	4·5	42	66	4	10·3	4	7·2	8	10	0·3	4·2	—	68·2	76·8	79·8	Fine at intervals.
7	·0213	·0227	75·9	75·4	78·1	72·9	5·7	4·8	76	65	3	5·8	5	1·8	9≡⁰	0≡⁰	0·3	4·4	—	69·6	76·3	79·6	✻⁰ 9 h. 15 m.–9 h. 30 m. ●⁰
8	·0246	·0260	78·2	77·4	82·3	73·9	7·0	6·8	81	82	2	5·4	2	5·4	10	0	—	1·5	—	67·3	76·4	79·6	Dull most of day. [11 h.
9	·0276	·0230	79·3	79·7	81·6	76·6	7·4	7·7	78	78	1	3·6	2	3·1	10≡⁰	10	0·5	—	—	72·9	77·4	79·6	Dull all day.
10	·0175	·0178	78·1	78·0	79·3	76·9	6·3	6·3	73	73	1	7·6	2	9·4	9	10	0·5	1·1	·061	74·5	78·0	79·5	Fair *α*., dull later.
11	·0231	·0251	79·2	79·6	82·9	76·9	7·2	6·7	76	69	4	6·7	7	4·0	10≡⁰	0≡⁰	—	1·3	—	76·8	78·1	79·4	Dull most of day.
12	·0248	·0240	78·0	84·3	87·4	72·8	6·7	8·0	77	61	17	1·8	5	5·4	1	7≡⁰	—	6·6	·067	66·5	77·9	79·4	Fine most of day. ⊕ 15 h.
13	·0291	·0291	79·6	79·5	84·9	76·8	6·8	7·1	70	74	4	4·0	11	3·1	8	4≡⁰	—	8·8	·072	70·4	79·3	79·5	Fine during day.
14	·0274	·0235	80·8	83·1	90·2	75·2	8·3	10·2	79	83	21	2·7	21	3·1	1≡⁰	0≡⁰	—	10·3	—	69·2	79·8	79·6	Very fine all day.
15	·0228	·0164	82·4	83·5	92·4	76·7	8·6	9·4	72	74	—	1·3	24	4·0	4	2	—	10·3	—	70·0	80·7	79·6	Very fine all day.
16	·0147	·0128	83·4	82·1	86·8	78·2	8·8	8·3	71	73	24	5·4	27	1·8	8●	0	—	4·5	—	74·0	81·3	79·6	Fine intervals. ⊕ 16 h. 45 m.
17	·0113	1·0092	82·8	82·7	89·2	77·3	9·1	8·5	76	71	—	0·9	20	3·1	6	2	—	5·3	—	71·1	81·1	79·8	Fine most of day.
18	1·0062	0·9973	84·1	86·9	89·9	77·1	10·5	9·5	80	60	17	6·7	17	9·8	9	3	—	4·2	—	72·2	81·7	80·1	Fine till 14 h.
19	0·9991	1·0061	85·4	81·2	86·4	80·2	9·0	8·0	64	75	17	11·2	17	5·4	5	0	—	10·1	—	78·5	82·2	80·2	Fine all day.
20	1·0156	·0263	83·2	83·0	86·9	79·7	7·9	8·3	64	68	23	5·8	21	2·7	6●	6	—	9·6	·080	76·5	81·8	80·2	Fine all day.
21	·0289	·0309	83·4	84·3	87·1	79·7	9·6	11·5	77	86	19	10·7	20	6·7	10≡⁰	9	—	—	—	76·6	81·9	80·4	Dull during day.
22	·0288	·0242	85·7	84·8	90 3	81·6	8·9	10·0	61	73	19	8·1	20	4·9	6	9	—	7·2	·079	79·1	82·1	80·6	Fine most of day.
23	·0193	·0170	86·2	84·8	89·1	82·6	11·8	8·9	78	65	19	6·7	25	5·8	10	10	—	2·7	—	81·7	82·9	80·7	Fair during day.
24	·0180	·0164	83·9	84·8	89·9	79·9	8·9	9·2	70	68	26	4·0	22	2·2	3	1	—	11·1	·088	73·2	82·8	80·8	⊕ 7 h. and 13 h. 15 m.
25	·0133	·0087	84·2	84·1	87·7	80·7	9·7	10·8	73	83	22	5·8	20	4·5	10	9	1·8	1·1	—	75·4	83·2	80·9	Dull. ⊕ 13 h.
26	1·0064	1·0116	83·3	82·1	87·4	81·1	11·0	7·0	89	61	26	5·4	23	3·6	4●	0	5·1	9·1	·087	81·7	83·4	81·1	Fine from 9 h.
27	0·9985	0·9959	82·8	83·5	87·1	79·2	11·0	9·4	92	75	18	6·7	23	7·6	10	3	1·3	1·3	—	76·7	83·0	81·3	● 2 h.–7 h. ●⁰ *p*.
28	1·0017	·9956	84·1	82·8	88·4	81·3	9·2	10·6	71	88	24	5·8	17	4·5	10	10	7·6	4·9	·083	80·4	83·0	81·3	●² 16 h. 15 m. and 21 h.–22h.
29	0·9943	0·9950	81·4	81·3	85·2	79·5	8·4	9·6	77	89	22	5·8	20	1·8	10	8	1·3	5·9	·091	76·5	82·8	81·4	● 10 h. 25 m. and 17 h.
30	1·0006	1·0107	82·4	82·5	86·5	80·1	8·8	10·0	75	84	32	3·1	—	0·9	8	5	0·3	7·0	—	76·0	82·9	81·5	Fine most of day. ●⁰ 19h.–20 h.
Means	1·0163	1·0161	80·9	80·9	84·9	77·5	8·0	8·0	74	74	—	5·7	—	4·4	7·7	5·0	48·0	148	—	74·2	80·4	80·1	Monthly **Totals** or **Means**.
Normal 35 years	1·0119	1·0119	81·4	80·9	85·8	77·3	8·3	8·2	76	78	—	4·3	—	3·3	—	—	41·4	147	—	—	—	—	**Normals**, 35 years.
							20 years				25 years		25 years					25 yrs					

4. Eskdalemuir Observatory, Dumfriesshire.—Long. 3° 12′ W. Lat. 55° 19′ N.

Heights above Mean Sea Level :—Station, H = 243·2 m. Barometer, H_b = 237·1 m.
Heights above Ground :—Thermometers, h_t = 0·8 m. Rain-gauge, h_r = 0·3 m. Sunshine Recorder, h_s = 1·5 m. Vane of Anemometer, h_a = 15·2 m.

															9 h.	21 h.	9 h.						
1	0·9884	0·9873	76·2	77·4	82·7	73·0	6·0	6·4	77	76	4	3·6	—	1·3	9	7	—	7·5	—		—	—	Variably cloudy.
2	·9865	0·9884	78·6	77·6	81·5	77·4	7·5	6·5	84	77	—	0·0	4	1·8	3	8	—	4·5	—		—	—	∞ in evening.
3	0·9962	1·0012	74·7	72·2	78·0	70·8	6·2	4·9	89	91	4	12·1	4	4·5	3	6	0·3	9·2	—		—	—	✻² showers 15 h.–21 h.
4	1·0003	0·9972	74·0	73·9	76·2	69·7	6·0	6·2	91	94	32	6·3	2	8·1	9	10	0·5	0·9	—		—	—	✻ showers.
5	0·9997	1·0036	72·8	70·3	75·9	70·0	6·1	3·7	82	76	2	10·7	4	8·1	3	1	0·3	9·9	—		—	—	✻ showers. ▲ 11 h. 30 m.
6	1·0027	1·0014	76·0	75·2	79·4	70·6	5·1	6·7	67	93	4	8·9	4	6·7	9	10●	2·0	3·8	—		—	—	✻ showers. ▲ 12 h. 30 m.
7	0·9980	0·9997	76·8	76·5	79·5	75·3	7·5	7·0	95	89	4	11·2	4	7·6	10●⁰	10	0·3	1·9	—		—	—	Dull and damp.
8	1·0018	1·0037	77·3	77·2	79·7	75·4	7·7	6·6	92	80	4	9·8	4	6·7	9	10	—	2·3	—		—	—	[21 h.
9	1·0032	0·9981	80·2	78·5	84·2	75·2	6·7	7·0	65	79	28	3·1	32	7·6	9	9	—	5·2	—		—	—	∞ in afternoon. ⊕ 15 h. Ψ
10	0·9971	·9987	76·2	74·8	77·8	74·1	5·2	6·1	67	88	2	13·0	2	7·6	9	9⁰	1·0	0·6	—		—	—	✻● showers 13 h.–15 h.
11	1·0008	·9986	77·0	74·7	81·8	72·6	6·9	6·2	85	90	2	5·4	—	0·9	10	2	—	3·7	—		—	—	Cloudy till 14 h., then very fine.
12	0·9955	·9986	80·6	79·7	85·2	72·7	7·6	9·0	74	92	28	4·5	28	2·7	8	9	—	0·8	—		—	—	Cloudy.
13	1·0012	·9986	82·4	80·2	85·9	74·1	9·2	8·4	79	85	—	1·3	24	3·1	8	7	—	2·9	—		—	—	Distant T frequently.
14	0·9956	·9897	80·7	79·7	84·4	74·5	7·0	7·1	67	72	24	8·1	24	15·7	8	9	—	7·5	—		—	—	Cloudy.
15	·9862	·9789	80 6	80·3	82·0	78·3	7·7	8·6	74	85	24	12·1	20	11·2	9	9	6·9	2·5	—		—	—	Cloudy and windy.
16	·9786	·9810	78·6	75·2	81·5	74·6	7·0	5·4	78	75	24	11·6	24	4·9	9	6	3·8	7·5	—		—	—	▲ 8 h.
17	·9790	·9748	74·0	79·1	80·5	73·4	6·2	9·3	93	99	—	0·5	18	9·8	10●⁰	10●	5·1	0·2	—		—	—	✻ early *α*., then ●.
18	·9705	·9623	79·6	82·1	82·5	78·7	9·1	10·3	94	90	16	5·8	16	7·6	10●⁰	10●⁰	8·6	0·3	—		—	—	Dull and damp.
19	·9615	·9645	80·6	79·0	82·0	76·3	7·5	8·7	72	93	16	11·6	16	10·7	10	10●	22·9	1·3	—		—	—	↯ 12 h.–13 h.
20	·9765	·9891	77·6	77·4	80·8	75·1	7·0	7·1	83	85	20	13·0	20	5·8	10	10	16·0	4·1	—		—	—	▲● frequently.
21	·9864	·9913	80·6	80·4	83·8	76·4	10·4	10·3	100	100	20	7·6	20	11·6	10≡⁰●	10≡⁰	18·0	0·2	—		—	—	Wet and stormy.
22	·9896	·9891	80·4	79·8	81·9	79·5	10·3	9·8	100	100	20	9·8	20	6·3	10●⁰	10≡⁰	15·0	—	—		—	—	Misty and damp.
23	·9807	·9804	81·5	79·7	83·0	79·2	10·6	8·1	96	83	20	10·3	22	11·6	10≡⁰	10●⁰	18·8	0·4	—		—	—	Frequent ●² showers.
24	·9842	·9815	79·8	80·4	81·8	79·3	8·7	10·3	89	100	20	6·7	20	4·0	10●⁰	10≡⁰●	13·0	0·1	—		—	—	Frequent ● showers.
25	·9760	·9724	80·1	80·3	81·8	79·9	10·0	10·2	100	100	20	10·7	—	0·5	10≡⁰●	10≡⁰	13·5	—	—		—	—	Misty.
26	·9732	·9756	79·5	78·5	83·0	76·8	7·8	7·1	81	80	24	6·7	24	5·8	9	7	1·8	8·3	—		—	—	▲ 11 h.
27	·9661	·9595	79·1	78·5	80·4	76·1	7·9	8·6	85	96	16	1·8	4	7·2	10	10●⁰	9·4	—	—		—	—	Continuous ●⁰ from 9 h.
28	·9675	·9632	79·6	79·1	83·3	74·0	8·5	9·1	88	98	20	6·3	20	2·2	10●⁰	10	12·4	1·7	—		—	—	● showers from 9 h.
29	·9596	·9657	79·4	77·8	82·9	75·7	8·4	8·1	87	94	2	5·4	—	0·0	10●⁰	9	2·8	0·1	—		—	—	↯ 15 h.–16 h.
30	0·9742	0·9821	78·9	78·1	81·3	74·7	6·6	6·8	72	77	32	4·5	28	2·2	9	9	—	0·1	—		—	—	Cloudless from 22 h. 30 m.
Means	0·9859	0·9859	78·4	77·8	81·5	74·9	7·6	7·7	84	88	—	7·4	—	6·1	8·8	8·6	172·4	88	—		—	—	Monthly **Totals** or **Means**.
Normal 35 years	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		—	—	

No observations.

The solar radiation is the mean of the readings within the nominal hour of observation (11 h. 30 m.–12 h. 30 m.) unless some other hour is specified.

5. KEW OBSERVATORY.

Day.	Potential Gradient, Volts. per metre. Factor 1·40.				Number of Ions per cc.		Velocities of Ions for 1 volt. per centimetre.		Conductivity $\times 10^{25}$.	Air-Earth Current $\times 10^{16}$.		Electric Character of Day.	Magnetic Character of Day.	Horizontal Force.					West Declination.				
														Maximum. 18000 γ +.		Minimum. 18000 γ +.		Range.	Maximum. 16° +.		Minimum. 15° +.		Range.
	3 h.	9 h.	15 h.	21 h.	+.	−.	+.	−.		c_1.	c_2.												
	v/m.	v/m.	v/m.	v/m.	n/cc.	n/cc.	cm/sec.	cm/sec.	E.-m.U.	Amp/cm².				γ	h m	γ	h m	γ	′	h m	′	h m	′
1	175	270	200	110								1	0	525	22 59	472	18 15	53	1·6	13 2	52·3	23 8	9·3
2	x±	x±	110	190								2	0	512	20 10	479	1 40	33	0·6	13 46	53·5	0 48	7·1
3	160	335	350	525								1	1	540	0 28	469	11 8	71	0·0	14 40	48·8	19 28	11·2
4	225	390	310	620								1	1	540	20 47	463	11 18	77	3·2	12 52	52·4	20 32	10·8
5	215	585	x+	615								1	0	511	21 13	470	11 15	41	0·5	12 53	51·5	9 3	8·0
6	405	590	545	695								0	0	529	20 20	475	11 0	54	1·5	13 26	52·4	8 30	9·1
7	335	530	560	1010								0?	0	514	7 38	484	11 25	30	1·6	14 17	50·5	21 57	11·1
8	—	—	265	405								–	1	556	19 46	475	23 20	81	6·0	13 9	44·3	23 25	21·7
9	110	175	140	225								2	2	541	22 26	403	10 46	138	18·3	5 26	41·7	2 40	33·6
10	30	275	210	320								1	1	517	23 41	451	3 43	66	2·0	14 2	48·2	23 37	13·8
11	380	490	515	615								0	1	527	0 8	466	1 13	61	1·8	13 17	46·4	0 28	15·4
12	390	475	310	525								0	1	525	18 47	452	12 10	73	3·1	12 58	52·0	18 40	11·1
13	275	390	270	420								0	0	515	22 10	475	10 55	40	2·2	13 30	53·3	8 30	8·9
14	140	150	100	185								0	0	507	19 2	472	10 46	35	2·9	13 6	53·9	9 0	9·0
15	195	425	80	140	No		No			No		0	0	535	23 17	474	10 15	61	3·2	12 57	52·9	8 54	10·3
16	155	145	100	380	Observations.		Observations.		No Observations.	Observations.		0	2	563	18 0	448	15 5	115	11·2	14 50	45·7	21 25	25·5
17	320	290	125	330								0	1	553	20 58	430	9 22	123	5·2	12 38	53·6	1 55	11·6
18	95	170	140	65								1	1	530	23 46	429	11 43	101	5·9	14 30	52·5	20 28	13·4
19	70	−210	−15	160								2	1	531	20 31	456	11 30	75	4·2	13 41	49·3	0 47	14·9
20	65	100	85	240								0	1	**574**	**20 58**	465	11 6	109	2·9	12 50	50·3	22 26	12·6
21	120	55	85	140								0	1	540	19 12	444	13 23	96	4·3	13 8	47·2	18 57	17·0
22	110	195	170	280								0	1	531	15 33	460	12 20	71	3·4	14 30	51·9	0 0	11·5
23	60	95	90	90								0	1	529	0 18	455	12 14	74	3·0	13 25	53·1	19 18	9·9
24	85	265	140	260								0	0	516	21 56	457	11 32	59	3·6	13 48	52·2	23 57	11·4
25	170	140	260	260								0	0	515	16 41	476	5 50	39	2·2	12 46	52·0	7 40	10·2
26	85	x−	70	245								1	0	**517**	21 40	473	10 27	44	2·7	12 9	52·4	7 18	10·3
27	x−	210	140	180								2	0	529	**20 53**	483	8 25	46	4·2	13 25	52·2	7 25	12·0
28	85	125	155	x±								1	1	525	16 5	479	11 44	46	5·3	13 10	52·8	18 5	12·5
29	—	170	100	350								2?	0	516	0 5	471	13 5	45	0·2	12 58	53·2	6 50	**7·0**
30	365	280	155	215								1	1	549	17 10	461	8 11	88	4·2	13 57	46·1	23 26	18·1
M.	193	262	214	340								—	—	530	—	462	—	68	3·7	—	50·8	—	12·9

Note.—On the 8th and 29th the Potential Gradient record was lacking for several hours.

6. ESKDALEMUIR OBSERVATORY.

Day.	Potential Gradient, Volts per metre. Factor 5·2.				Number of Ions per cc.		Velocities of Ions for 1 volt. per centimetre.		Conductivity $\times 10^{25}$.	Air-Earth Current $\times 10^{16}$.		Electric Character of Day.	Magnetic Character of Day.	North Component.§				West Component.§				Vertical Component.§			
														Maximum. 15000 γ +.		Minimum. 15000 γ +.		Maximum. 5000 γ +.		Minimum. 5000 γ +.		Maximum. 45000 γ +.		Minimum. 45000 γ +.	
	3 h.	9 h.	15 h.	21 h.	+.	−.	+.	−.		c_1.	c_2.															
	v/m.	v/m.	v/m.	v/m.	n/cc.	n/cc.	cm/sec.	cm/sec.	E.-m.U.	Amp/cm².				h m	γ	γ	h m	h m	γ	γ	h m	h m	γ	γ	h m
1	60	103	241	356								0 *a*	1	22 54	1053	974	11 10	13 2	320	246	23 9	18 36	363	329	11 54
2	289	193	187	205								1 *a*	0	20 8	1033	983	11 37	13 46	307	249	0 43	17 0 / 18 0	358	336	12 15
3	24	96	241	163								1 *b*	1	19 37	1072	959	11 23	13 15	320	225	19 16	19 23	374	323	1 23
4	253	241	181	175								1 *b*	2	20 40	1066	952	11 15	12 52	312	253	20 18	18 50	374	343	12 45
5	115	302	199	241								1 *b*	0	20 55	1019	968	11 32	13 0	304	254	9 23	21 0 / 22 0	371	356	12 30
6	96	151	205	x								1 *b*	0	20 16	1049	965	11 2	13 23	297	253	9 5	20 0	377	357	12 0
7	x	66	175	151								1 *b*	1	22 7	1031	985	12 29	14 26	304	227	21 47	21 48	389	365	12 50
8	103	x	151	151								1 *b*	2	19 43	1070	960	23 2	13 45	331	183	23 21	21 4	416	320	23 6
9	72	199	223	90								1 *a*	2	2 44	1082	**821**	**5 29**	**5 27**	**401**	**174**	**2 36**	16 43	394	**195**	**1 57**
10	72	109	223	145								1 *b*	2	23 40	1038	942	3 42	13 0	288	204	23 30	14 47	411	345	24 0
11	66	66	187	145								1 *a*	0	0 8	1026	975	11 53	14 10	292	182	0 31	18 30	406	314	0 30
12	277	223	289	235								0 *a*	1	18 43	1056	945	12 9	14 23	298	248	8 48	18 20	425	399	6 34
13	247	229	217	314								0 *a*	1	22 7	1038	973	11 47	13 32	295	246	9 2	19 20	425	406	12 0
14	199	115	169	115	No		No			No		0 *a*	0	18 52	1019	980	11 30	14 0	294	248	9 13	17 0	435	417	9 40
15	78	90	18	66	Observations.		Observations.		No Observations.	Observations.		1 *b*	0	23 17	1045	979	11 23	13 43	293	247	8 54	18 0 / 20 0	435	421	12 15
16	84	54	127	187								1 *b*	2	17 50	1114	944	15 5	14 49	369	182	21 23	**17 23**	**508**	390	4 5
17	96	0	187	−139								1 *b*	2	20 55	1085	921	9 23	2 19	304	243	4 35	17 53	446	401	3 0
18	36	109	x	109								2 *c*	2	20 28	1057	923	11 36	14 22	314	242	23 3	17 44	441	381	24 0
19	115	115	223	x								2 *c*	1	21 10	1055	960	10 57	20 23	312	210	0 48	18 0	439	375	3 0
20	x	42	96	151								2 *c*	1	**20 52**	**1125**	960	11 5	14 25	310	213	22 25	20 0	434	381	3 45
21	−271	127	217	175								2 *b*	2	19 8	1089	946	13 23	13 8	304	205	18 50	18 50	451	387	23 20
22	− 54	−482	x	362								2 *c*	2	15 30	1063	951	12 17	14 43	314	231	0 36	19 0	450	385	1 35
23	368	84	x	36								2 *c*	1	19 20	1057	950	12 13	0 20	304	245	2 2	19 10	438	395	0 37
24	36	72	157	157								1 *b*	1	22 58	1039	954	11 7	14 25	321	242	7 15	18 0	449	415	0 0
25	−241	157	109	223								2 *c*	1	16 40	1032	978	13 5	12 47	310	247	7 40	20 40	437	411	12 10
26	−157	96	205	127								2 *c*	0	21 35	1038	974	11 9	13 52	309	252	7 10	21 0	438	418	12 30
27	181	145	− 60	308								2 *c*	1	17 49	1045	991	11 6	13 27	318	247	7 33	6 40	437	417	12 0
28	302	241	145	265								2 *c*	1	18 8	1049	967	11 43	13 9	326	253	17 56	17 54	449	411	11 50
29	− 84	x	x	181								2 *c*	1	0 7	1035	978	13 5	15 6	299	253	6 49	20 0	443	424	3 50
30	60	139	157	259								0 *a*	2	17 8	1104	962	8 10	13 53	321	189	23 23	16 58	482	409	23 26
M.	88	143	172	182								—	—	—	1056	957	—	—	313	230	—	—	423	374	—

x Indeterminate.

An explanation of the Headings of the columns is given in the Preface.

§ The Magnetic values at Eskdalemuir Observatory are at present only provisional, and subject to correction at the end of the year.

7. Tables of Wind Components in metres per second at fixed hours.

Together with the mean velocity (horizontal movement) in metres per second for the hour with the maximum hourly run for each day, or the greatest velocity attained in a gust and the time of its occurrence.

HOLYHEAD.†§

Height of Head above—Roof 8·8 m., Ground 13·7 m., M.S.L. 19·2 m.
Height of Cups above—Roof 4·6 m., Ground 7·6 m., M.S.L. 15·2 m.

Date.	3 h.				9 h.				15 h.				21 h.				Max. in a Gust.	Time of Gust.	
	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.			
																	V.	Hrs.	Min.
1	...	1·3	...	2·7	...	0·5	...	0·9	...	1·8	0·9	...	...	0·9	...	...	10·7	0	5
2	...	1·8	...	...	...	1·8	...	...	...	4·9	3·1	...	...	4·9	4·9	...	10·3	20	40
3	...	3·1	1·3	...	...	4·5	...	11·2	...	8·1	...	3·6	...	4·5	...	3·1	17·0	8	0
4	...	2·7	...	3·6	...	7·6	...	1·3	...	4·9	4·9	...	...	8·5	...	5·8	16·1	23	10
5	...	11·6	...	4·9	...	10·3	...	10·3	...	7·2	...	10·3	...	7·2	...	10·7	21·5	19	0
6	...	7·2	...	10·7	...	8·1	...	8·1	...	7·6	...	5·4	...	5·8	...	8·5	18·3	4	35
7	...	1·8	...	3·1	...	5·8	...	4·0	...	7·2	...	4·9	...	2·7	...	3·6	12·5	14	5
8	...	1·3	...	2·2	...	4·5	...	3·1	...	7·2	...	1·3	...	3·6	...	2·7	12·5	11	45
9	...	0·9	...	4·5	...	1·8	...	3·1	...	2·7	1·3	...	...	12·5	4·9	...	11·6	19	40
10	...	3·6	..	8·1	...	9·8	...	6·3	...	10·7	..	4·5	...	4·0	...	4·0	17·0	15	55
11	...	5·4	...	5·4	...	3·1	...	8·1	...	5·4	...	3·6	...	2·7	...	1·3	15·2	0	15
12	...	1·3	...	...	..	2·2	1·3	...	...	2·2	2·2	...	...	3·1	1·8	...	9·4	21	10
13	...	1·8	0·9	...	...	1·8	0·9	...	...	0·9	2·2	...	2·2	...	0·5	...	6·3	11	55
14	1·8	...	0·5	...	1·8	...	0·9	...	5·4	...	2·2	...	5·4	...	2·2	...	14·3	23	15
15	...	0·5	3·1	...	3·1	...	3·1	...	8·1	...	3·1	...	3·6	...	3·6	...	14·3	22	40
16	5·8	...	8·9	...	4·5	...	6·7	...	4·0	...	2·7	...	0·9	...	1·8	...	15·7	3	10
17	3·6	...	...	...	6·3	...	2·7	...	8·5	...	1·8	...	7·6	...	...	...	13·9	14	25
18	8·1	...	...	1·8	9·8	...	...	4·0	9·4	...	...	6·3	11·2	...	...	...	25·5	20	10
19	13·9	...	...	9·4	14·3	...	...	5·8	14·3	...	...	...	10·3	...	...	...	29·5	11	5
20	4·5	...	10·7	...	5·8	...	8·5	...	7·2	...	3·1	...	8·1	...	3·1	...	17·9	1	35
21	12·5	...	...	...	9·8	...	4·0	...	10·7	...	4·5	...	10·3	...	1·8	...	20·1	2	10
22	11·2	...	2·2	...	8·9	...	1·8	...	8·1	...	3·6	...	7·6	...	1·8	...	19·7	3	20
23	8·1	...	3·1	...	8·5	...	3·6	...	6·3	...	4·0	...	1·3	...	6·7	...	17·4	19	55
24	2·2	...	4·9	...	4·5	...	4·5	...	8·5	...	3·6	...	8·1	...	3·1	...	14·3	15	5
25	8·5	...	1·8	...	9·4	...	...	...	8·5	...	3·6	...	4·5	...	4·5	...	17·9	12	20
26	...	1·8	10·3	...	...	...	10·7	...	4·9	...	4·9	...	2·7	...	3·6	...	16·5	8	0
27	5·4	...	0·9	...	6·3	...	6·3	...	7·2	...	4·9	...	4·0	...	9·4	...	17·4	22	20
28	2·2	...	11·2	...	6·7	...	6·7	...	8·1	...	3·6	...	2·2	...	5·4	...	19·2	0	25
29	4·5	...	6·7	...	5·4	...	7·6	...	3·1	...	4·5	...	...	...	2·7	...	13·4	8	10
30	...	4·0	6·3	...	...	3·1	4·9	...	...	1·8	1·8	...	...	0·9	1·3	...	10·7	3	45
S+N & W+E	142·4		129·2		170·0		140·4		194·9		106·4		151·3		102·8				
S−N & W−E	42·2		16·4		40·2		8·0		49·7		26·6		28·7		23·4				

DEERNESS.†

Height of Cups above—Roof 1·5 m., Ground 4·9 m , M.S.L. 57·3 m.

Date.	3 h.				9 h.				15 h.				21 h.				Vel. in Max. Hourly Run.	Time of Max.
	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.		
																	V.	Hour.
1	...	...	...	0·9	1·8	...	...	1·8	0·9	...	...	0·5	0·5	...	...	...	2·2	9
2	0·0	...	0·9	...	...	2·2	3·1	...	...	10·3	1·8	...	...	12·5	2·7	...	13·4	20
3	..	9·8	...	1·8	...	12·1	...	2·2	...	10·3	...	...	...	8·5	...	...	12·5	9
4	...	8·1	...	...	...	8·1	1·8	...	...	9·4	...	...	...	4·0	...	1·8	9·8	11
5	...	1·8	...	2·7	...	1·8	...	3·1	...	0·9	...	1·8	...	0·0	0·9	...	5·4	1
6	...	0·9	1·3	...	...	3·1	1·3	...	...	4·9	...	...	...	8·5	...	...	6·7	11, 16
7	...	4·5	...	...	...	4·9	...	...	...	6·3	...	...	...	4·5	...	...	6·7	14
8	...	2·7	1·3	...	..	4·5	3·1	...	...	5·4	3·6	...	...	2·7	2·7	...	6·7	13, 14, 16
9	...	2·2	3·1	...	...	2·2	10·7	...	...	12·1	2·2	...	...	11·2	2·2	...	13·0	12, 14
10	...	10·3	...	...	..	8·5	...	...	...	5·4	...	0·9	...	0·5	2·7	...	10·3	3, 4, 12
11	...	1·8	3·1	...	...	0·9	4·9	...	1·8	...	8·5	...	...	...	10·3	...	10·3	17, 21
12	...	...	10·7	...	...	5·4	7·6	...	...	8·5	3·6	...	...	1·3	0·5	...	13·0	2
13	2·2	...	1·3	...	1·3	...	6·3	...	2·7	...	6·7	...	6·3	...	4·0	...	8·9	23
14	1·8	...	8·9	...	5·4	...	13·0	...	6·7	...	16·5	...	...	...	14·3	...	19·2	18
15	...	...	10·3	...	1·8	...	8·9	...	5·8	...	5·8	...	1·8	...	8·9	...	13·0	1
16	...	...	10·3	...	...	4·0	...	1·8	...	4·9	...	...	...	4·9	...	0·9	11·6	4
17	...	5·4	...	3·6	...	0·9	...	4·5	...	...	...	7·2	1·3	...	...	5·8	8·1	16
18	...	1·3	...	6·7	0·9	...	...	4·5	8·9	...	...	1·8	10·3	...	...	1·8	10·7	20
19	7·2	...	...	7·2	7·6	...	...	5·4	8·9	...	...	8·9	8·5	...	...	12·5	15·7	17, 20, 23
20	12·1	...	...	8·1	12·1	...	...	8·1	8·5	...	...	1·8	5·4	...	13·0	...	16·5	19
21	5·8	...	4·0	...	8·1	...	1·8	...	4·5	...	0·9	...	6·7	...	...	...	8·1	4, 24
22	7·6	...	3·1	...	4·0	...	5·8	...	1·8	..	8·1	...	4·0	...	4·0	...	10·3	1, 2
23	4·5	...	0·9	...	4·5	...	..	0·9	1·3	...	7·2	...	...	3·6	2·7	...	8·5	16
24	...	4·0	...	0·9	0·5	...	...	3·1	0·5	...	...	3·1	0·5	...	0·9	...	5·8	13
25	...	2·2	1·3	...	3·1	...	...	4·5	5·8	...	...	1·3	...	...	6·3	...	7·2	12, 13
26	...	...	4·0	...	...	2·2	4·9	...	...	3·1	4·9	...	...	0·9	0·9	...	6·3	11, 14
27	...	0·5	2·2	...	0·9	...	5·4	...	...	2·7	2·7	...	...	...	1·8	...	5·4	8, 9
28	...	...	3·1	...	0·5	...	3·1	...	2·7	...	...	1·3	0·9	...	...	1·3	4·0	7, 8
29	...	0·5	...	2·2	...	4·0	...	4·0	...	6·7	...	4·5	...	6·3	...	4·0	9·4	17
30	...	7·6	...	1·3	...	7·2	...	...	...	7·2	1·3	...	...	4·5	0·9	...	9·4	11
S+N & W+E	104·8		105·2		124·5		125·6		158·9		106·9		120·5		107·8			
S−N & W−E	−22·4		34·4		−19·5		37·8		−37·3		40·7		−29·1		51·6			

SCILLY.‡§

Height of Head above—Ground 9·8 m., M.S.L. 49·7 m.
Height of Cups above—Ground 5·8 m., M.S.L. 45·7 m.

Date.	3 h.				9 h.				15 h.				21 h.				Max. in a Gust.	Time of Max.	
	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.			
																	V.	Hrs.	Min.
1	2·7	...	...	2·7	2·2	...	...	3·1	3·1	...	...	4·5	1·8	...	...	1·8	5·4	0	10
2	0·5	...	...	0·5	*	*	*	*	...	1·8	1·8	...	...	3·1	3·1	...	6·3	21	35
3	...	3·1	...	1·3	...	5·8	...	1·3	...	6·7	...	1·3	...	2·7	...	6·7	11·2	22	45
4	...	1·3	...	6·7	...	2·7	...	4·0	...	8·1	...	1·8	...	8·1	...	3·1	14·3	15	40
5	...	0·9	...	4·9	...	7·2	...	7·2	...	7·2	...	10·3	...	5·8	...	13·9	20·6	22	45
6	...	5·8	...	13·4	...	5·8	...	8·9	...	5·4	...	8·1	...	4·5	...	10·3	21·5	3	30
7	...	4·0	...	6·3	...	5·4	...	8·1	...	...	...	7·6	...	2·7	...	6·7	14·8	6	55
8	...	1·3	...	7·2	...	2·7	...	3·6	...	6·7	...	1·3	...	7·2	...	3·1	11·2	0	10
9	...	3·1	..	7·2	...	0·9	...	5·4	...	4·9	...	2·2	...	4·5	...	1·8	10·3	2	55
10	...	2·2	...	2·2	...	3·1	...	3·1	...	6·3	...	6·3	...	5·4	...	5·4	14·3	16	20
11	...	6·3	...	6·3	...	3·6	...	8·9	...	4·0	...	5·8	...	5·4	...	4·9	15·7	8	5
12	...	1·3	...	7·2	...	1·8	...	4·5	...	3·1	...	4·5	...	3·1	...	1·3	8·9	3	20
13	...	1·8	...	1·8	...	1·3	...	2·2	...	2·7	...	6·7	0·9	...	...	2·2	7·2	11	45
14	0·5	...	...	e·9	1·8	...	...	1·8	...	1·3	3·6	...	...	1·8	...	...	2·7	10	45
15	...	0·0	...	0·9	...	...	3·6	...	...	1·3	3·1	...	...	1·3	6·3	...	7·6	23	25
16	...	0·9	3·6	...	...	...	4·5	...	...	...	3·6	...	...	...	1·8	...	8·5	1	55
17	3·6	...	...	...	4·5	...	...	...	6·3	...	...	1·3	6·7	...	...	...	11·6	24	0
18	9·8	...	...	4·0	16·1	...	...	6·7	16·5	...	...	6·7	16·5	...	...	...	26·0	23	40
19	10·7	...	7·2	...	10·7	...	10·7	...	5·4	...	13·4	...	...	...	13·9	...	25·5	1	50
20	...	2·2	11·2	...	...	...	8·5	...	4·0	...	4·0	...	8·9	...	...	...	18·3	4	35
21	10·3	...	4·5	...	7·2	...	7·2	...	7·2	...	3·1	...	8·5	...	1·8	...	16·5	0	25
22	8·1	...	1·8	...	8·5	...	...	...	7·2	...	3·1	...	5·4	...	2·2	...	12·5	5	0
23	4·5	...	4·5	...	3·6	...	5·4	...	...	...	8·1	...	...	...	7·2	...	9·4	3	35
24	...	1·3	6·3	...	0·9	...	4·0	...	3·1	...	4·5	...	4·0	...	1·8	...	6·7	0	10
25	4·9	...	3·1	...	5·8	...	2·2	...	7·6	...	4·9	...	4·0	...	4·0	...	12·5	11	45
26	...	7·6	11·6	...	...	1·8	8·9	...	1·8	...	8·5	...	6·3	...	4·0	...	17·0	23	20
27	8·9	...	8·9	...	4·5	...	...	...	5·8	...	13·9	...	3·1	...	14·8	...	20·6	21	40
28	2·2	...	12·1	...	4·5	...	4·5	...	8·9	...	3·6	...	1·8	...	8·9	...	17·9	1	55
29	...	...	11·6	...	4·9	...	7·6	...	7·6	...	4·9	...	6·7	...	2·7	...	19·2	1	20
30	...	10·3	4·5	...	...	8·5	8·5	...	...	3·1	7·6	...	...	1·3	7·2	...	16·5	4	5
S+N & W+E	120·1		164·4		125·8		144·4		147·1		160·1		131·5		140·9				
S−N & W−E	13·3		17·4		14·6		6·8		21·9		23·3		17·7		18·5				

GREAT YARMOUTH.†§

Height of Head above—Roof 10·7 m., Ground 12·8 m., M.S.L , 15·9 m.
Height of Cups above—Roof 3·7 m., Ground 18·3 m., M.S.L., 22·3 m.

Date.	3 h.				9 h.				15 h.				21 h.				Max. in a Gust (Gorleston).	Time of Gust.	
	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.			
																	V.	Hrs.	Min.
1	0·5	...	2·2	...	0·5	...	1·8	...	...	3·6	1·3	...	...	1·8	0·9	...	7·6	19	10
2	...	2·2	0·9	...	...	2·7	1·3	...	...	2·7	1·3	...	...	1·8	0·9	...	8·9	17	20
3	...	2·7	2·7	...	...	7·6	3·1	...	...	10·3	1·8	...	...	8·5	...	...	28·2	14	50
4	..	6·7	1·3	...	...	7·6	1·3	...	...	5·4	0·9	...	...	4·9	...	2·2	19·7	6	25
5	...	7·2	...	10·7	...	12·1	...	12·1	...	12·1	...	12·1	...	11·6	...	11·6	25·5	15	50
6	...	6·3	...	14·8	...	4·9	...	12·1	...	10·3	...	10·3	...	8·9	...	8·9	21·9	1	50
7	...	3·6	...	5·4	...	1·8	...	4·5	...	4·9	...	4·9	...	6·7	...	2·7	12·5	0	5
8	...	2·7	...	1·3	...	6·7	...	...	...	9·8	...	4·0	...	6·7	...	1·3	13·9	15	5
9	...	4·9	...	...	...	4·0	1·8	...	...	5·4	2·2	...	...	3·6	2·7	...	14·8	11	45
10	...	6·3	2·7	...	...	8·1	1·8	...	...	12·1	...	4·9	...	13·0	...	5·4	22·8	8	35
11	...	8·5	...	5·8	...	6·7	...	4·5	...	4·5	...	3·1	...	4·9	...	2·2	13·9	0	5
12	...	1·8	...	1·3	...	3·6	...	1·3	...	4·0	4·0	...	...	3·1	1·8	...	12·5	15	5
13	...	4·5	1·3	...	...	4·9	0·9	...	...	4·5	...	0·9	...	1·8	...	0·5	12·5	7	45
14	2·2	...	0·5	...	2·2	...	3·1	...	...	...	...	1·8	...	...	3·6	...	8·5	15	0
15	...	...	3·6	...	3·1	...	3·1	...	4·9	...	4·9	...	2·2	...	4·9	...	13·9	13	15
16	1·8	...	4·5	...	...	...	6·3	...	1·3	...	5·8	...	0·9	...	2·2	...	12·1	8	30
17	0·9	...	2·2	...	4·0	...	...	1·8	4·0	...	...	2·7	2·2	...	...	0·5	10·3	11	25
18	4·0	...	...	...	6·3	...	...	2·7	5·4	...	...	3·6	4·0	...	...	1·8	14·3	22	50
19	4·0	...	...	0·9	7·6	...	...	5·4	8·5	...	...	3·6	4·5	...	...	0·9	21·5	15	30
20	4·0	...	...	...	5·4	...	0·9	...	2·2	...	5·8	...	1·3	...	2·2	...	12·5	6	45
21	4·0	...	...	...	8·9	...	1·8	...	5·8	...	5·8	...	4·5	...	1·8	...	20 6	9	55
22	4·5	...	3·1	...	5·4	...	3·6	...	5·4	...	...	3·6	*	*	*	*	15·2	9	5
23	*	*	*	*	*	*	*	*	2·2	...	5·8	...	4·0	...	4·0	...	14·3	16	25
24	0·9	...	4·5	...	...	...	5·4	...	...	...	4·9	...	0·9	...	1·8	...	11·2	13	40
25	1·3	...	3·1	...	2·7	...	3·6	...	8·9	...	...	...	5·8	...	4·0	...	12·1	19	45
26	6·3	...	4·0	...	6·7	...	6·7	...	..	...	9·4	...	...	...	4·0	...	19·7	15	15
27	4·0	...	4·0	...	8·5	...	...	...	4·9	...	4·9	...	2·2	...	5·4	...	15·7	17	50
28	2·2	...	5·8	...	...	...	8·1	...	...	...	4·5	...	4·5	...	1·8	...	16·1	7	20
29	2·7	...	6·3	...	2·7	...	6·7	...	5·8	...	5·8	...	1·3	...	2·7	...	17·4	16	20
30	1·3	...	2·7	...	*	*	*	*	...	3·6	3·6	...	...	1·3	1·3	...	13·4	12	30
S+N & W+E	102·0		95·6		134·7		105·7		152·5		128·2		116·9		84·0				
S−N & W−E	−12·8		15·2		−6·7		16·9		−33·9		17·2		−40·3		8·0				

The velocities at fixed hours are means for the interval from 30 minutes before to 30 minutes after the hour. The hours are numbered 1 h. to 24 h. Time is referred to Greenwich Mean Time.

* No record.

† Robinson Cup Anemometer ; Arms 0·61 m. ; Diameter of Cups, 0·229 m. ; Factor 2·2.

‡ Robinson Cup Anemometer ; Arms 0·305 m. ; Diameter of Cups 0·127 m. ; Factor 2·8.

§ Dines Pressure Tube Anemometer. At Great Yarmouth, Holyhead, and Scilly the readings at fixed hours are taken from the Robinson Anemometer, the maxima quoted are the greatest winds in a gust as recorded by the Dines Pressure Tube.

METEOROLOGICAL OFFICE OBSERVATORIES—GEOPHYSICAL JOURNAL.

MAY 1911.—DAILY VALUES REFERRED TO GREENWICH MEAN TIME AND UNITS, BASED ON THE C.G.S. SYSTEM. [*Price 4d.*

First Year.—No. 5. *Meteorology, Solar Radiation, Seismology, Atmospheric Electricity, and Terrestrial Magnetism.*

1. SEISMOLOGICAL JOURNAL:—ESKDALEMUIR.—Long. 3° 12′ W. Lat. 55° 19′ N.

Date.	Microseisms. Period.	Microseisms. Amp.	Earthquakes.	Remarks.
	s	μ		
1	5	0·9		4th Iu, P ?=13 h. 53 m. 22 s., S ?=14 h. 7 m. 0 s., Δ > 13000 kms., IIIu, P=23 h. 48 m. 2s., S=23 h. 57 m. 3 s., Δ=7620 kms.,
2	5	0·6		α=12° 14′ E of N, Epicentre 55°·2 N, 162°·7 E.
3	6	1·0		
4	5-6	0·7	Iu, IIIu.	9th P ?=19 h. 51 m. 18 s., S=19 h. 59 m. 50 s., Δ=7050 kms.
5	5	0·7		
6	5-6	0·4		10th Long waves 0 h. 56 m.–1 h. 30 m.
7	5	0·4		
8	5-6	0·9		11th P=4 h. 21 m. 20 s., S=4 h. 34 m. 54 s., Δ > 13,000 kms.
9	6	1·3	Iu.	
10	5-6	0·2	I.	13th Long waves at 4 h. 9 m.–4 h. 36 m.
11	5-6	0·1	Iu.	
12	4	0·0		14th I, A few long waves at 1 h. 24 m., I Record lost owing to overrun.
13	4	0·1	I.	
14	4	0·1	I, I.	15th Long waves 3 h. 54 m.–4 h. 4 m.
15	5	0·2	I.	
16	4-5	0·3		17th Disturbance 12 h. 54 m.–13 h. 42 m.
17	4	0·3	I.	
18	4-5	0·4		21st Long waves at 22 h. 18 m.–22 h. 23 m. and at 23 h. 11 m.–23 h. 18 m.
19	5-6	0·3		
20	6	0·8		22nd Disturbed 6 h. 48 m.–7 h. 30 m.
21	6	0·6	I, I.	
22	5-6	0·7	I.	26th S=21 h. 10 m. 1 s., disturbed till 22 h. Start lost by change of sheet.
23	7	1·4		
24	7-8	2·0		27th Feeble disturbances 15 h. 56 m.–16 h. 24 m., 18 h. 24 m.–18 h. 34 m., 23 h. 49 m.–24 h. 3 m.
25	6	0·8		
26	5	0·8	I.	28th Long waves 10 h. 28 m.–11 h. 0 m.
27	5	0·4	I, I, I.	
28	5-6	0·5	I.	29th P=19 h. 28 m. 2 s., S=19 h. 41 m. 36 s., Δ > 13,000 kms.
29	5-6	0·5	Iu.	
30	4	0·1		An explanation of the notation used is given in the preface.
31	5	0·2		

2. VALENCIA OBSERVATORY, CAHIRCIVEEN (KERRY).—Long. 10° 15′ W. Lat. 51° 56′ N.

Heights above Mean Sea Level:—Station, H = 9·2 m. Barometer Cistern, H_b = 13·7 m.
Heights above Ground:—Thermometers, h_t = 1·2 m. Rain-gauge, h_r = 0·6 m. Sunshine Recorder, h_s = 12·8 m. Cups of Anemometer, h_a = 13·7 m.

Day.	Pressure at Station Level. 9 h.	21 h.	Air Temperature in Degrees Absolute. 9 h.	21 h.	Max.	Min.	Humidity. Vapour Pressure. 9 h.	21 h.	Percentage. 9 h.	21 h.	Wind Direction in points (8=E, 16=S) and Velocity (*metres per second*). 9 h.		21 h.		Cloud Amount and Weather. 10 h.	22 h.	Rain 24 hours beginning 10 h.	Sunshine.	Remarks.	Magnetism. Horizontal Force.	Declination West.	Inclination.
	bar.	bar.	200+ °	200+ °	200+ °	200+ °	millibar.		%	%	m/sec.		m/sec.		Tenths of Sky covered.		mm.	hrs.		γ.	° ′	° ′
1	1·0100	1·0005	84·0	83·4	84·3	81·2	12·0	12·4	92	99	16	7·2	15	9·4	10≡0	10≡0	17·3	—	Gloomy and misty. ● *p.*	…	…	…
2	1·0030	·0079	82·5	81·8	84·4	80·2	9·7	8·9	82	80	22	7·2	20	6·7	3	10	25·7	10·8	Showery and bright alternately.	…	…	…
3	0·9945	·0073	84·0	81·3	84·2	81·2	12·6	9·0	94	84	20	13·4	24	6·7	10≡0	*2*	0·8	5·8	●2 early *a.*, then gloomy to fair.	…	…	…
4	1·0101	·0149	83·5	82·8	86·0	80·1	10·6	11·2	85	94	20	4·5	28	3·1	10	5	0·8	1·3	Dull till 16 h.	…	…	…
5	·0198	·0241	84·0	83·4	85·6	82·1	12·7	12·6	98	98	27	4·9	—	1·3	10≡0	10≡0	—	0·3	≡0. Very cloudy.	…	…	…
6	·0249	·0224	84·5	83·7	86·3	83·2	12·5	11·8	93	93	16	2·2	16	4·5	10≡0	10	2·5	—	Dull, with visibility.	…	…	…
7	·0181	·0171	83·5	82·8	84·5	82·6	12·2	11·6	97	97	15	5·4	—	0·0	10≡0	*10*≡0	1·5	—	Overcast, with ≡0 ●0.	…	…	…
8	·0179	·0161	83·7	84·1	84·7	81·6	10·3	12·2	81	93	3	4·0	11	2·7	10	*10*	3·3	0·1	Dull, with ≡0 ●0.	17883	20 39·6	68 13·5
9	·0140	·0128	86·0	86·3	89·1	83·2	9·7	9·5	65	61	8	6·3	10	5·4	7	*3*	—	9·9	Fair.	…	…	…
10	·0110	·0105	88·5	84·6	92·3	83·2	12·3	12·4	71	92	6	3·6	—	0·9	8∞	*3∞*	1·5	7·6	Fine, but with ∞.	…	…	…
11	·0095	·0102	88·1	86·4	91·9	81·8	14·4	13·4	85	87	4	1·8	4	1·8	5∞	*10*ϟ	8·6	3·6	Fine to showery. ϟ after 13 h.	…	…	…
12	·0100	·0084	89·9	87·6	92·5	85·5	13·5	14·3	71	86	2	3·6	7	1·8	0	*9∞*	2·3	8·7	Fine. ϟ● in evening.	…	…	…
13	·0035	·0014	88·7	88·2	92·1	84·1	14·9	13·3	85	78	—	1·3	3	1·8	3∞	*9∞*	—	6·2	Fine to thundery-looking.	…	…	…
14	·0000	·0007	88·2	85·1	89·3	83·2	13·0	11·8	76	85	4	4·5	6	3·1	2	*2*	0·5	13·8	Bright and sunny.	…	…	…
15	·0026	·0067	84·3	82·6	86·7	81·3	11·2	9·7	83	81	32	4·0	27	1·8	9	*3*	—	4·8	Fair.	…	…	…
16	·0114	·0138	84·5	82·6	87·4	78·5	10·6	10·4	78	88	—	0·9	—	0·9	8	*2*	—	7·6	Fair to fine.	…	…	…
17	·0123	·0131	85·1	83·6	86·7	79·1	9·5	10·5	68	83	12	4·9	17	4·5	8	*10*	5·3	2·1	≡0. Fair to gloomy. ● 15 h.	…	…	…
18	·0140	·0229	85·0	83·9	88·9	81·4	12·7	11·5	91	89	15	4·9	—	0·9	7	*2*	—	6·5	Fair.	…	…	…
19	·0257	·0249	87·2	84·5	89·9	79·5	13·9	11·1	85	83	—	0·9	3	1·8	1	*1*	—	14·3	⌓. Fine.	…	…	…
20	·0254	·0245	86·0	83·5	88·4	81·1	12·9	10·8	87	86	—	0·9	31	4·0	1∞	*1*	—	13·9	⌓. Fine.	…	…	…
21	·0231	·0211	84·9	85·2	89·3	80·4	11·1	12·6	80	90	31	1·8	28	6·7	10	*10*	—	5·9	Dull to fair.	…	…	…
22	·0195	·0161	86·1	84·9	87·4	82·1	11·5	12·1	76	88	25	3·6	22	5·4	6	*10*	0·5	12·5	Fine. Cloudy evening.	17884	20 38·8	68 12·2
23	·0132	·0126	85·4	85·6	86·2	84·4	13·6	14·0	95	97	20	8·1	20	8·5	10≡0	*10*≡0	1·8	—	Overcast, with ≡0 ●0.	…	…	…
24	·0141	·0105	85·7	85·2	87·6	84·9	14·4	13·9	99	99	17	4·5	16	7·6	10≡0	*10*≡0●	9·4	—	Very dull with heavy mist.	…	…	…
25	·0048	·0120	85·0	82·7	85·2	81·2	13·3	9·0	95	74	16	6·7	28	3·1	10●≡0	*5*	—	2·5	≡0 ● *a.* Fair *p.*	…	…	…
26	·0151	·0185	84·2	83·5	87·2	80·3	9·8	9·9	74	79	2	7·2	—	1·3	7	*2*	—	8·1	Fair to fine.	…	…	…
27	·0213	·0244	85·4	83·8	87·6	80·9	10·4	9·5	73	74	32	4·5	6	1·8	2	*0*	—	14·9	Fine and bright all day.	…	…	…
28	·0243	·0228	87·4	87·3	91·8	80·0	11·9	14·0	73	86	—	0·5	—	0·0	1	10	—	12·3	Fine. Dull evening.	…	…	…
29	·0213	·0205	88·9	87·8	94·6	82·8	14·9	14·6	84	87	—	0·5	—	0·0	0	3≡0	0·3	13·6	∞0. Fine. Distant ϒ in after-	…	…	…
30	·0176	·0144	90·1	87·1	94·3	83·6	15·9	12·9	82	81	—	0·5	—	0·0	1∞	1∞	—	14·7	∞0. Fine. [noon.	…	…	…
31	1·0120	·0148	89·1	85·9	91·5	81·1	12·2	13·5	67	91	—	1·3	—	0·0	3∞	2≡0	—	14·5	Fine but hazy. ≡0 *n.*	…	…	…
Means	1·0137	1·0145	85·9	84·6	88·3	81·8	12·3	11·8	83	87		4·1		3·1	6·2	6·0	82·1	216	Monthly **Totals** or **Means.**	17884	20 39·2	68 12·9
Normal 35 years	1·0144	1·0151	84·7	83·8	87·5	80·9	10·9 (20 years)	10·8 (20 years)	78	83		5·1 (25 years)		4·4 (25 years)	—	—	76·4	213 (25 yrs)	**Normals,** 35 years.			

Note.—The cloud amounts in italic type at Valencia were taken at 21 h.

3. Kew Observatory, Surrey.—Long. 0° 19′ W. Lat. 51° 28′ N.

Heights above Mean Sea Level :—Station, H = 5·5 m. Barometer, H_b = 10·4 m.
Heights above Ground :—Thermometers, h_t = 3·0 m. Rain-gauge, h_r = 0·5 m. Sunshine Recorder, h_s = 14·3 m. Cups of Anemometer, h_a = 21·3 m.

Day.	Pressure at Station Level.		Air Temperature in Degrees Absolute.				Humidity.				Wind Direction in Points (8 = E, 16 = S) and Velocity (*metres per second*).				Cloud Amount and Weather.		Rain 24 hours beginning 10 h.	Sunshine.	Solar Radiation, Watts per cm².	Min. Temp. on Grass.	Earth Temperature at 10 h.		Remarks.
							Vapour Pressure.		Percentage.														
	9 h.	21 h.	9 h.	21 h.	Max.	Min.	9 h.	21 h.	9 h.	21 h.	9 h.		21 h.		10 h.	22 h.					0·3 m.	1·2 m.	
	bar.	bar.	200+ °	200+ °	200+ °	200+ °	millibar.		%	%	m/sec.		m/sec.		Tenths of Sky covered.		mm.	hrs.		200+ °	200+ °	200+ °	
1	1·0158	1·0161	83·5	83·8	89·5	78·4	8·6	10·8	68	84	20	1·8	18	3·1	2	10	—	9·5	—	72·8	83·0	81·7	Fine. Overcast *n*.
2	·0124	·0102	84·8	83·2	86·8	80·0	9·9	11·9	72	96	17	7·2	20	3·6	10	0	4·6	—	—	80·0	83·7	81·7	Dull. ● in evening.
3	·0126	·0054	83·4	83·4	85·8	78·2	9·2	11·7	74	93	19	6·3	20	8·1	8	10	3·3	4·6	—	73·1	83·0	81·8	Fine *a*. Dull, with ● *p*.
4	·0112	·0143	83·1	84·1	88·1	78·9	8·1	8·8	66	68	22	3·6	25	1·8	3	1	—	12·8	·090	**72·9**	82·9	81·8	Fine and clear.
5	·0176	·0214	83·0	85·4	88·1	77·5	9·4	9·7	77	68	25	3·1	—	1·3	7	10	—	6·3	—	71·7	83·5	81·9	Fine to fair.
6	·0250	·0250	84·1	82·2	89·0	79·1	9·1	7·5	70	64	—	1·3	10	1·8	8≡⁰	0	—	7·3	—	71·9	83·6	81·9	Fine till 15 h., then dull.
7	·0246	·0224	84·1	84·7	91·0	76·0	8·1	9·4	62	69	—	0·9	—	0·5	3 ?	10	—	8·0	—	70·3	83·0	82·0	Cloudy to bright.
8	·0218	·0193	87·1	84·8	91·1	81·4	9·5	7·4	59	55	—	1·3	8	5·4	9≡⁰	0	—	11·0	·047	77·6	84·3	82·0	Fine. ⊕ 10 h.
9	·0166	·0138	87·1	88·4	92·9	80·2	10·5	13·0	66	74	3	3·6	3	4·0	9	2	—	10·4	—	75·2	84·2	82·2	Fine.
10	·0122	·0096	84·2	89·3	95·3	81·8	11·4	12·6	86	69	1	4·5	3	2·2	6≡⁰	0	—	6·5	·051	79·6	84·8	82·3	Dull, with ≡⁰ till 9 h.
11	·0096	·0085	85·7	86·9	94·7	82·8	12·4	13·6	85	86	32	3·1	5	1·8	2≡⁰	2	0·3	4·9	·053	79·6	85·4	82·4	Dull to bright *a*. ☇●⁰ *p*.
12	·0082	·0055	83·8	87·4	92·2	82·3	11·7	14·0	91	85	32	2·2	1	1·8	10≡⁰	2 ?≡⁰	11·7	4·5	—	80·0	85·6	82·4	Cloudy and misty, then bright.
13	·0046	·0031	85·7	89·4	95·1	83·7	14·3	14·6	98	79	32	1·8	19	1·8	?7≡⁰	7	3·8	8·5	·062	78·8	85·7	82·6	Dull, with ● till 9 h.
14	·0022	·0028	87·1	85·7	89·1	84·8	14·6	13·0	91	89	—	0·0	20	2·2	10●	3	3·6	0·2	—	80·6	86·4	82·9	Dull, with ● till 18 h.
15	·0054	·0067	86·9	86·2	90·9	83·2	13·4	14·3	85	95	20	1·8	—	0·9	10	0≡⁰	—	1·2	—	80·2	86·3	82·9	Overcast *a*. Fair from 15 h.
16	·0103	·0116	89·2	88·2	94·1	82·9	13·3	13·0	73	76	18	1·8	9	2·2	7 ?≡⁰	2≡⁰	—	4·9	—	77·9	86·3	83·1	Fine to fair. ≡⁰ ⊕
17	·0124	·0131	89·7	87·3	93·8	83·5	13·1	12·9	70	79	32	3·1	10	1·8	4 ?≡⁰	0	—	6·6	—	76·7	86·7	83·3	Fine most of day.
18	·0159	·0192	86·6	84·9	89·6	83·4	11·7	11·4	78	82	3	1·8	2	3·6	8 ?≡⁰	3	—	2·7	—	80·4	86·9	83·5	Cloudy. Bright 10 h.–14 h.
19	·0213	·0205	85·6	83·4	86·0	82·1	9·8	8·4	69	67	32	3·1	1	4·9	10	10	—	3·8	—	78·7	86·8	83·5	Fine till 9 h., then dull.
20	·0210	·0230	81·8	82·0	83·8	81·1	7·7	8·4	68	74	32	5·4	2	4·5	10	10	—	—	—	80·2	85·8	83·6	Overcast, with cold wind.
21	·0222	·0197	81·1	80·2	84·7	77·6	7·8	9·0	73	89	31	2·2	—	0·0	10	0≡⁰	—	—	—	79·7	84·8	83·7	Dull. ≡⁰ in evening.
22	·0175	·0149	83·7	86·0	93·2	**74·8**	10·5	12·8	82	86	20	2·2	17	1·8	3 ?≡⁰	0≡⁰	—	12·9	·060	**70·1**	84·2	83·7	Fine and bright.
23	·0158	·0164	86·7	86·7	91·4	81·5	11·8	11·6	76	73	21	2·2	24	1·8	7	5	—	7·8	·059	74·9	85·4	83·7	Cloudy early, then fine.
24	·0179	·0185	88·7	89·2	93·6	85·6	13·7	15·1	77	83	22	4·5	26	1·8	10	0	—	3·1	·069	82·2	86·3	83·7	Cloudy, with bright intervals.
25	·0166	·0129	90·0	88·9	96·2	82·4	13·1	13·2	69	74	—	0·9	—	1·3	8	9	—	6·0	—	78·1	86·8	83·9	Fair to fine.
26	·0117	·0130	91·3	90·2	92·5	87·0	15·2	13·2	73	68	1	2·7	—	1·3	10≡⁰	9≡⁰	0·8	1·1	—	80·2	87·4	83·9	Dull. ●⁰ in afternoon.
27	·0167	·0208	88·8	90·3	96·1	86·4	14·4	12·0	81	62	2	1·8	7	2·2	10≡⁰	0	—	6·6	—	82·1	87·3	84·1	Overcast *a*. Fine *p*.
28	·0231	·0211	91·4	91·3	96·2	84·5	12·6	13·2	60	63	3	4·9	4	6·7	4 ?	9	—	14·0	—	76·5	87·4	84·1	Fine and bright throughout.
29	·0201	·0185	92·4	90·1	97·4	85·4	15·7	10·0	70	**52**	2	3·6	2	3·6	1	0	—	14·1	·059	82·2	88·2	84·2	Very fine.
30	·0163	·0138	90·6	89·8	95·2	83·8	13·8	16·1	69	85	1	4·0	3	2·7	4	9	—	6·9	·061	80·9	88·2	84·5	Fine to dull.
31	1·0136	1·0132	88·1	90·7	**97·6**	86·5	14·6	18·6	86	93	32	1·8	4	3·1	5 ?≡⁰	9≡⁰	11·4	5·7	·046	83·3	88·2	84·6	Fine till 15 h. ☇●² later.
Means	1·0152	1·0147	86·4	86·6	91·6	81·8	11·6	12·0	75	77	—	2·9	—	**2·7**	6·9	4·3	39·5	192	—	77·7	85·6	83·0	Monthly **Totals** or **Means**.
Normal 35 years	1·0151	1·0150	84·8	83·9	89·1	79·8	9·9 (20 years)	10·0 (20 years)	71	75	—	3·9 (25 years)	—	2·8 (25 years)	—	—	43·4	199 (25 yrs)	—	—	—	—	**Normals**, 35 years.

4. Eskdalemuir Observatory, Dumfriesshire.—Long. 3° 12′ W. Lat. 55° 19′ N.

Heights above Mean Sea Level :—Station, H = 243·2 m. Barometer, H_b = 237·1 m.
Heights above Ground :—Thermometers, h_t = 0·8 m. Rain-gauge, h_r = 0·3 m. Sunshine Recorder, h_s = 1·5 m. Vane of Anemometer, h_a = 15·2 m.

															9 h.	21 h.	9 h.						
1	0·9840	0·9806	80·2	80·3	82·5	70·5	7·1	10·2	71	100	16	4·9	20	10·7	9	10≡⁰	7·6	2·2	—	—	—	—	≡⁰● after 14 h.
2	·9720	·9767	81·4	78·6	82·2	75·7	10·3	7·0	94	78	16	13·4	20	6·3	10●	8●⁰	11·4	1·1	—	—	—	—	Stormy in forenoon.
3	·9696	·9691	77·9	78·0	80·6	74·9	8·2	7·3	95	84	16	17·0	24	8·9	10●²	3	**28·2**	0·3	—	—	—	—	●² 7 h.–15 h.
4	·9775	·9824	80·1	78·1	84·0	75·5	8·5	8·6	85	98	20	7·2	16	3·1	9	8	2·8	5·8	·092	—	—	—	Cloudy. ▲ *a*.
5	·9870	·9934	81·8	78·4	84·3	74·1	8·4	7·1	75	80	24	4·5	—	0·5	9	2	—	5·7	—	—	—	—	●⁰ showers early *a*.
6	·9961	·9945	82·3	80·9	86·0	**70·4**	8·0	9·6	68	91	20	3·1	16	2·2	1	9	—	11·3	—	—	—	—	Cloudless early. Fine.
7	·9918	·9898	81·5	81·1	82·8	80·7	10·6	10·1	96	95	20	7·6	18	9·8	? 10≡⁰	10	2·3	—	—	—	—	—	Damp and misty throughout.
8	·9921	·9928	81·8	82·1	83·4	80·6	10·9	10·9	97	95	18	3·6	—	0·0	10●⁰	7	0·5	—	—	—	—	—	●⁰ before 9 h. Overcast.
9	·9935	·9937	84·7	80·3	90·1	78·1	11·9	7·0	87	69	4	5·8	32	3·6	4∞	2	—	11·2	—	—	—	—	Very fine, but with ∞.
10	·9917	·9895	82·0	81·1	89·7	77·7	9·6	10·0	84	93	4	5·4	4	1·8	8	1∞	—	9·7	·085	—	—	—	Cloudy to bright.
11	·9892	·9893	85·2	82·4	91·9	77·5	12·0	10·2	86	88	4	7·2	4	6·7	8∞	2	—	9·8	—	—	—	—	∞. Fine.
12	·9866	·9832	86·7	83·0	91·8	79·7	11·4	11·2	72	92	4	8·5	4	3·1	7	7	—	11·2	—	—	—	—	Fine till 21 h., cloudy later.
13	·9794	·9772	84·6	81·7	87·6	80·5	11·9	10·6	87	95	4	4·9	4	6·7	10	9	12·2	0·4	—	—	—	—	Cloudy to overcast.
14	·9745	·9736	82·5	84·5	88·1	80·3	11·7	13·2	99	98	4	3·1	—	0·0	10	10	4·3	0·8	—	—	—	—	Very cloudy. ☇● 15 h.–17 h.
15	·9755	·9783	84·1	80·4	87·8	77·1	12·3	8·7	94	85	14	3·6	—	0·5	10	8	0·5	7·0	—	—	—	—	Damp and misty till 9 h.
16	·9829	·9865	82·5	80·1	87·5	76·3	11·8	8·1	100	81	20	4·0	—	0·9	10●⁰≡⁰	3	—	5·8	—	—	—	—	●⁰ *a*. Fine *p*.
17	·9873	·9872	87·4	81·8	90·8	74·8	8·2	9·8	50	87	—	0·5	28	2·7	2	4	—	13·0	·078	—	—	—	∞⁰. Fine till 18 h.
18	·9904	·9930	81·3	81·9	88·8	79·6	10·2	9·9	95	88	4	3·6	—	0·0	10	5∞	—	4·3	—	—	—	—	≡⁰ till 11 h., fine later.
19	·9963	·9975	82·2	79·7	84·9	76·9	8·1	8·0	70	81	4	7·2	32	4·0	9	2	—	6·7	—	—	—	—	Fine.
20	·9976	·9973	80·6	76·8	85·8	75·1	7·1	7·5	69	94	4	7·2	32	1·8	9	1	—	7·6	·090	—	—	—	Fine.
21	·9937	·9899	82·5	81·7	90·0	72·2	9·7	7·7	82	69	10	4·0	—	1·3	7	1	—	10·5	—	—	—	—	∞. Fine throughout.
22	·9872	·9841	85·2	82·9	87·6	74·2	10·2	10·6	72	88	22	6·7	20	5·8	8	10●⁰	0·5	7·8	—	—	—	—	Fine till 18 h., then cloudy.
23	·9814	·9809	82·9	83·7	85·0	81·8	11·4	12·8	95	100	20	8·9	20	6·7	10●⁰	10●⁰≡⁰	6·4	—	—	—	—	—	Overcast. ● after 8 h.
24	·9842	·9850	85·2	83·7	88·9	83·4	9·8	12·7	69	100	22	7·2	20	8·9	7	10●⁰≡⁰	3·6	5·7	—	—	—	—	Fine 6 h.–13 h. ● after 18 h.
25	·9837	·9856	86·0	82·3	88·8	78·4	10·1	10·4	68	89	18	13·9	18	1·8	1	2	—	12·5	·092	—	—	—	Very fine throughout.
26	·9879	·9887	88·8	86·3	92·3	76·9	11·6	14·8	65	98	6	5·8	—	0·5	7	10	4·8	8·9	—	—	—	—	Fair. ☇●² 18 h.–19 h.
27	·9912	·9956	90·0	87·4	93·4	83·1	14·3	15·5	75	94	—	0·9	2	3·1	7∞	5∞	—	7·3	—	—	—	—	Fine generally.
28	·9989	·9997	90·0	84·3	94·7	82·0	13·8	10·6	72	79	4	3·1	—	0·9	0∞	0∞⁰	—	14·1	—	—	—	—	∞. Fine.
29	·9996	·9987	91·2	85·5	**94·8**	80·2	12·1	8·3	58	57	4	7·6	32	4·5	0	0	—	15·5	—	—	—	—	Fine.
30	·9960	·9935	90·8	85·9	94·2	81·9	12·5	10·2	62	69	4	7·2	30	3·1	1	5	0·5	14·6	—	—	—	—	Fine.
31	0·9894	0·9906	86·2	88·6	92·7	81·5	11·9	14·1	78	80	4	7·2	—	0·9	10●	9∞	2·3	3·9	—	—	—	—	●² shower 8 h. ; fine later.
Means	0·9874	0·9877	84·2	82·0	88·2	77·8	10·5	10·1	80	87	—	6·3	—	3·6	7·2	5·6	87·9	215	—	—	—	—	Monthly **Totals** or **Means**.
Normal 35 years	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

The solar radiation is the mean of the readings within the nominal hour of observation (11 h. 30 m.–12 h. 30 m.) unless some other hour is specified.

5. KEW OBSERVATORY.

Day.	Potential Gradient, Volts. per metre. Factor 1·76.				Number of Ions per cc.		Velocities of Ions for 1 volt. per centimetre.		Conductivity $\times 10^{25}$.	Air-Earth Current $\times 10^{16}$.		Electric Character of Day.	Magnetic Character of Day.	Horizontal Force.					West Declination.				
														Maximum. 18000 γ +.		Minimum. 18000 γ +.		Range.	Maximum. 15° +.		Minimum. 15° +.		Range.
	3 h.	9 h.	15 h.	21 h.	+.	−.	+.	−.		c_1.	c_2.												
	v/m.	v/m.	v/m.	v/m.	n/cc.	n/cc.	cm/sec.	cm/sec.	E.-m.U.	Amp/cm².				γ	h m	γ	h m	γ	′	h m	′	h m	′
1	100	370	165	300	—	—						0	1	515	19 50	482	0 0	**33**	62·4	13 11	50·5	0 0	11·9
2	160	175	95	270	—	—						1	0	513	20 6	469	10 34	44	64·2	13 32	54·8	7 28	9·4
3	235	320	155	35	—	—						1	0	525	15 33	475	10 54	50	63·7	11 58	53·5	19 55	10·2
4	225	270	160	125	—	—						0	0	514	15 32	474	11 0	40	61·4	13 5	52·1	8 10	9·3
5	215	385	130	225	—	—						0	1	529	18 25	476	10 20	53	63·4	13 25	52·5	23 57	10·9
6	190	640	310	160	—	—						0	1	533	20 50 / 18 6	478	8 41	55	63·2	12 39	50·0	23 4	13·2
7	225	130	100	185	—	—						1	2	547	15 51	435	12 43	112	**71·2**	**15 52**	51·3	5 30	**19·9**
8	65	450	320	705	—	—						0	1	520	0 58	466	10 50	54	62·5	12 23	52·5	2 53	10·0
9	290	610	390	450	—	—						0	0	524	20 12	476	8 36	48	62·5	12 20	51·5	7 25	11·0
10	190	270	255	560	600	410						0	1	520	1 28	477	8 58	43	61·5	12 30	51·7	23 55	9·8
11	190	280	$x\pm$	190	—	—						2	1	534	1 5	474	13 28	60	63·4	12 41	50·5	2 4	12·9
12	265	255	260	145	—	—						1	0	511	19 0	462	10 13	49	59·6	12 20	51·5	8 10	8·1
13	85	$x-$	180	425	—	—						2	0	524	23 17	475	8 18	49	61·5	12 53	52·4	7 8	9·1
14	165	−560	0	495	—	—						2	2	**571**	**22 48**	435	24 0	136	63·5	12 55	51·5	7 12	12·0
15	110	175	150	175	—	—						0	2	558	19 11	**419**	**9 33**	**139**	64·5	4 3	**47·5**	**19 3**	17·0
16	165	370	290	175	1080	580						0	1	525	17 50	439	13 5	86	62·5	12 35	49·4	7 58	13·1
17	165	160	360	305	—	—						0	1	523	18 20	445	13 34	78	63·4	13 2	51·0	8 48	12·4
18	120	325	175	325	750	360						0	1	529	18 44	457	8 38	72	61·3	12 36	52·9	7 48	8·4
19	130	210	210	465	580	310						1	1	557	19 20	456	8 30	101	61·5	12 38	52·3	3 35	9·2
20	180	400	320	440	—	—						0	1	525	22 51	465	9 15	60	64·3	13 45	51·4	8 12	12·9
21	130	180	130	145	—	—						0	1	533	20 48	446	10 24	87	60·9	10 41	50·5	7 0	10·4
22	330	145	135	230	530	410						0	0	520	22 31	481	13 21	39	60·4	12 39	52·5	2 40	**7·9**
23	175	225	100	305	680	310						0	1	533	22 33	472	11 53	61	60·8	13 30	48·2	23 18	12·6
24	95	115	95	200	880	890						0	0	522	19 30	479	14 46	43	59·2	14 22	50·7	7 40	8·5
25	160	380	175	190	—	—						0	1	565	17 9	478	16 14	87	60·6	15 36	49·6	8 18	11·0
26	−15	370	$x\pm$	350	—	—						2	1	526	14 35	487	17 12	39	62·5	1 34	53·4	7 20	9·1
27	155	240	305	370	—	—						0	0	522	19 30	473	9 40	49	58·8	13 38	50·5	6 55	8·3
28	240	215	130	215	—	—						0	1	528	19 20	481	6 3	47	62·4	12 43	52·0	4 20	10·4
29	140	305	160	625	1220	680						1	1	538	14 40	484	9 20 / 11 10	54	61·1	13 24	50·9	8 7	10·2
30	95	260	145	400	990	680						1	1	524	0 27	476	11 0	48	62·7	14 40	48·3	23 36	14·4
31	100	145	160	$x+$	—	—						2	1	528	2 14	441	10 55	87	63·5	13 25	48·3	0 10	15·2
M.	175	260	193	304	—	—						—	—	530	—	466	—	65	62·4	—	51·2	—	11·2

6. ESKDALEMUIR OBSERVATORY.

Day.	Potential Gradient, Volts per metre. Factor 5·2.				Number of Ions per cc.		Velocities of Ions for 1 volt. per centimetre.		Conductivity $\times 10^{25}$.	Air-Earth Current $\times 10^{16}$.		Electric Character of Day.	Magnetic Character of Day.	North Component.§				West Component.§				Vertical Component.§			
														Maximum. 15000 γ +.		Minimum. 15000 γ +.		Maximum. 5000 γ +.		Minimum. 5000 γ +.		Maximum. 45000 γ +.		Minimum. 45000 γ +.	
	3 h.	9 h.	15 h.	21 h.	+.	−.	+.	−.		c_1.	c_2.														
	v/m.	v/m.	v/m.	v/m.	n/cc.	n/cc.	cm/sec.	cm/sec.	E.-m.U.	Amp/cm².				h m	γ	γ	h m	h m	γ	γ	h m	h m	γ	γ	h m
1	187	162	69	293								1 *a*	1	19 47	1035	988	11 16	14 0	293	230	0 0	4 30– 5 30	369	345	0 0
2	94	50	− 12	*x*								2 *c*	1	6 12	1033	975	11 23	13 29	305	253	8 8	16 42	372	348	12 30
3	212	*x*	−1365	144								2 *c*	1	20 0	1047	975	12 7	13 47	307	250	19 53	18 52	375	353	12 30
4	131	150	119	306								1 *c*	0	18 6	1031	980	11 28	13 58	289	241	8 20	6 0	371	350	12 20
5	94	156	181	281								1 *b*	1	19 10	1054	981	10 20	14 8	305	230	23 54	19 25	383	344	23 22
6	137	125	200	387								0 *a*	1	20 47	1077	975	10 43	11 7	301	220	23 3	19 10	391	347	13 0
7	150	219	87	81								1 *a*	2	15 45	1089	925	12 37	**15 50**	**379**	228	5 30	**17 0**	441	348	8 57
8	268	262	168	262								0 *a*	1	3 17	1035	973	12 2	1 0	298	241	1 55	20 0	383	329	1 52
9	37	187	243	306								0 *a*	1	20 0	1045	983	9 55	12 21	293	241	7 21	15 52	391	361	11 50
10	181	337	349	605								0 *a*	1	22 49	1043	987	9 56	1 20	303	247	23 54	17 0	384	361	11 0
11	537	318	187	324								0 *a*	2	17 5	1071	976	13 26	1 2	333	223	1 44	17 47	402	336	1 31
12	449	187	200	318								0 *a*	0	19 3	1034	973	10 27	1 48	290	**238**	8 52	8 0 / 16 0 / 20 0	382	363	0 12
13	443	187	125	*x*								1 *c*	0	23 16	1043	983	9 53	12 0	298	247	6 27	7 40	383	363	10 40
14	*x*	343	− 25	181								2 *c*	1	22 45	1090	898	23 23	12 55	314	233	23 58	17 32	385	202	23 33
15	206	243	156	431								0 *a*	2	**19 7**	**1128**	914	2 53	**22 6**	323	**204**	**1 10**	15 45	415	220	4 9
16	175	112	187	256								1 *a*	2	17 50	1077	942	13 7	6 13	307	226	7 56	17 36	415	340	6 30
17	324	81	144	187								0 *a*	2	18 21	1040	937	13 33	13 40	304	237	8 49	17 36	396	364	12 10
18	144	94	119	349								0 *a*	1	18 40	1053	966	8 37	23 4	304	245	8 36	18 13	402	362	24 0
19	125	69	62	200								1 *a*	2	19 15	1096	970	12 6	13 46	300	249	5 13	19 7	395	355	23 30
20	62	100	187	312								0 *a*	1	16 26	1044	971	11 50	13 44	321	238	8 35	17 53	405	357	0 0
21	212	150	268	200								0 *a*	2	18 8	1047	937	10 24	15 14	304	235	7 33	16 21	403		11 20
22	306	137	144	94								0 *a*	1	19 30	1033	981	12 20	13 56	298	253	2 23	18 40	399	375	0 0
23	106	56	219	324								1 *a*	1	22 15	1040	981	12 50	22 30	315	228	23 20	20 44	396	376	22 56
24	175	106	75	368								0 *a*	1	18 48	1036	979	14 44	14 20	303	249	0 0	6 40	394	384	10 40
25	300	237	187	131								0 *a*	2	17 7	1094	969	14 22	17 6	332	245	8 20	20 5	404	372	11 0
26	156	69	119	137								1 *b*	1	16 38	1039	992	10 51	1 33	325	255	8 47	17 30	403	367	2 10
27	343	219	100	112								0 *a*	0	2 53	1034	977	10 18	2 45	299	246	6 55	21 10	393	372	3 45
28	300	162	150	493								0 *a*	1	19 18	1044	981	10 52	2 10	317	251	4 23	20 40	401	367	2 35
29	131	94	144	243								0 *a*	0	14 38	1048	980	11 10	14 38	324	250	8 5	6 38	398	377	11 34
30	181	137	125	187								0 *a*	2	3 26	1037	980	12 7	16 26	323	237	21 4	19 0	430	380	11 23
31	75	*x*	*	*								1 *b*	2	18 48	1050	939	10 39	17 29	323	228	0 10	19 24	429	336	2 17
M.	208	160	161	276								—	—	—	1054	967	—	—	311	239	—	—	306	350	—

x Indeterminate. * No record. An explanation of the Headings of the columns is given in the Preface.

§ The Magnetic values at Eskdalemuir Observatory are at present only provisional, and subject to correction at the end of the year; the zero of the recorder of the Vertical Component set up in December 1909 is still liable to variation.

7. Tables of Wind Components in metres per second at fixed hours.

Together with the mean velocity (horizontal movement) in metres per second for the hour with the maximum hourly run for each day, **or** the greatest velocity attained in a gust and the time of its occurrence.

HOLYHEAD.†§

Height of Head above—Roof 8·8 m., Ground 13·7 m., M.S.L. 19·2 m.
Height of Cups above—Roof 4·6 m., Ground 7·6 m., M.S.L. 15·2 m.

Date.	3 h.				9 h.				15 h.				21 h.				Max. in a Gust.	Time of Gust.	
	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.	V.	Hrs.	Min.
1	…	0·5	0·9	…	4·9	…	2·2	…	8·1	…	1·8	…	8·5	…	1·8	…	16·5	21	35
2	10·3	…	…	…	10·3	…	…	…	2·7	…	3·6	…	2·7	…	2·7	…	20·1	5	40
3	7·2	…	3·1	…	13·4	…	…	…	7·2	…	7·2	…	3·6	…	8·9	…	24·6	12	15
4	1·8	…	9·8	…	3·6	…	5·4	…	8·1	…	3·6	…	4·0	…	4·0	…	14·8	0	15
5	0·9	…	4·9	…	2·2	…	4·9	…	0·5	…	3·1	…	0·5	…	0·9	…	8·9	10	25
6	…	…	0·9	…	1·8	…	…	0·9	4·0	…	1·8	…	4·0	…	1·8	…	7·2	18	35
7	5·8	…	1·3	…	5·8	…	1·3	…	7·6	…	3·6	…	7·2	…	3·1	…	13·9	15	0
8	6·3	…	…	…	4·9	…	0·9	…	0·9	…	4·0	…	…	1·8	…	0·9	9·8	3	25
9	…	0·9	…	1·3	…	0·9	…	1·8	…	…	…	8·9	…	…	…	8·5	12·5	23	50
10	…	2·2	…	10·7	…	3·6	…	8·5	…	6·7	…	6·7	…	1·3	…	7·6	14·8	2	15
11	…	1·8	…	4·0	…	3·1	…	7·6	…	5·8	…	5·8	…	3·6	…	3·6	13·4	8	15
12	…	4·9	…	4·9	…	4·5	…	…	…	4·9	…	2·2	…	2·7	…	1·8	14·3	0	50
13	…	3·1	0·5	…	…	1·8	…	…	…	3·1	…	…	2·2	…	0·9	…	8·1	0	5
14	3·1	…	2·2	…	3·6	…	0·9	…	4·0	…	2·7	…	4·0	…	1·8	…	8·9	13	20
15	2·7	…	1·8	…	3·1	…	1·8	…	4·0	…	2·7	…	2·7	…	0·5	…	8·1	3	30
16	4·0	…	1·8	…	0·9	…	0·9	…	…	1·3	1·3	…	…	0·9	…	…	8·1	1	35
17	…	3·6	…	1·3	…	1·8	…	1·8	…	4·5	..	…	4·0	…	0·9	…	7·2	18	15
18	2·2	…	1·3	…	2·2	…	2·2	…	…	1·3	2·2	…	…	0·9	0·9	…	6·7	6	20
19	…	1·3	2·2	…	…	5·4	2·2	…	…	7·2	…	3·1	…	2·7	…	2·7	12·5	12	30
20	…	2·2	…	0·5	…	4·9	…	3·1	…	4·9	…	0·9	…	3·1	…	0·5	11·2	9	25
21	…	0·9	…	…	…	0·5	0·9	…	…	2·2	2·2	…	…	0·5	0·5	…	5·4	14	0
22	1·8	…	…	…	…	0·5	3·1	…	3·6	…	2·7	…	2·7	…	4·0	…	10·3	17	45
23	3·1	…	3·1	…	6·7	…	4·5	…	7·2	…	4·9	…	7·6	…	4·9	…	16·1	13	50
24	5·4	…	7·6	…	4·9	…	4·9	…	7·6	…	4·9	…	8·1	…	3·1	…	15·7	20	10
25	7·6	…	1·3	…	8·5	…	3·6	…	8·5	…	5·8	…	2·7	…	…	…	16·1	8	15
26	0·9	…	…	0·5	…	3·1	…	3·1	…	6·3	2·7	…	…	5·4	…	…	9·8	16	25
27	…	5·4	0·9	…	…	5·8	1·3	…	…	4·0	0·9	…	…	3·1	2·2	…	8·5	5	45
28	…	4·5	0·9	…	…	3·6	0·9	…	…	6·3	1·3	…	…	3·1	…	4·5	8·5	19	45
29	…	1·3	…	5·8	…	3·1	1·3	…	…	4·5	…	4·5	…	2·7	…	6·3	11·2	23	20
30	…	1·3	…	3·6	…	2·7	…	6·3	…	4·5	…	4·5	…	3·6	…	8·1	12·1	22	25
31	…	…	…	8·9	…	0·9	…	4·9	…	2·2	2·2	…	…	0·5	0·5	…	12·1	3	0
S+N & W+E		97·0		86·0		123·0		81·2		143·7		101·8		100·4		87·9			
S−N & W−E		29·2		3·0		30·6		5·2		4·3		28·6		28·6		−1·1			

DEERNESS.†

Height of Cups above—Roof 1·5 m., Ground 4·9 m , M.S.L. 57·3 m.

Date.	3 h.				9 h.				15 h.				21 h.				Vel. in Max. Hourly Run.	Time of Max.
	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.	V.	Hour.
1	…	1·8	1·3	…	4·5	…	…	0·9	8·5	…	…	5·8	10·7	…	…	2·2	12·1	16, 19
2	8·9	…	…	1·8	13·4	…	…	5·4	1·3	…	7·6	…	0·5	…	2·7	…	15·2	11
3	7·6	…	1·3	…	13·4	…	…	5·4	15·2	…	…	6·3	4·5	…	10·3	…	17·4	12, 13, 14
4	4·0	…	4·0	…	1·8	…	10·3	…	6·3	…	9·4	…	2·2	…	5·8	…	12·5	10
5	2·2	…	4·9	…	3·1	…	7·2	…	…	4·9	7·2	…	…	1·3	2·7	…	9·8	11
6	0·5	…	1·8	…	6·3	…	1·3	…	5·4	…	…	0·9	6·3	…	1·3	…	8·1	12
7	6·3	…	1·3	…	1·3	…	6·3	…	4·5	…	…	4·5	12·5	…	…	2·7	13·0	21
8	4·5	…	11·2	…	3·6	…	3·6	…	1·8	…	…	0·5	0·5	…	…	…	13·0	2
9	0·9	…	…	…	…	…	…	4·5	0·9	…	…	1·8	1·8	…	…	4·5	5·8	20
10	0·5	…	…	3·1	…	…	…	5·4	…	1·3	…	6·3	…	0·9	…	3·6	8·1	10
11	..	…	…	2·7	2·2	…	…	4·9	0·9	…	…	5·4	0·5	…	…	3·1	6·3	11
12	…	0·5	…	2·2	…	0·5	…	1·8	…	…	…	4·5	…	3·1	…	7·2	9·4	22
13	…	1·8	…	8·1	…	5·8	…	1·3	…	6·7	…	4·5	…	6·3	…	2·7	8·9	2, 14
14	…	6·3	…	2·7	…	5·8	…	5·8	2·2	…	…	5·4	0·9	…	…	4·5	8·1	9
15	0·9	…	…	5·4	…	1·3	…	6·3	…	1·3	…	6·3	…	0·9	…	3·6	8·9	11
16	1·3	…	2·7	…	…	…	6·7	…	*	*	*	*	*	*	*	*	*	*
17	*	*	*	*	*	*	*	*	…	3·1	2·2	…	…	1·8	0·5	…	*	*
18	…	1·8	0·5	…	…	3·1	0·5	…	…	4·9	2·2	…	…	6·7	4·5	…	8·1	24
19	…	7·2	3·1	…	…	6·7	…	…	…	6 7	…	1·3	…	6·3	…	2·7	8·5	2, 13
20	…	4·9	…	2·2	..	4·0	…	…	…	3·1	…	0·5	0·5	…	…	1·3	5·4	3, 5
21	3·6	…	0·9	…	2·7	…	0·5	…	…	2·7	6·3	…	…	0·5	2·2	…	6·7	15
22	1·3	…	1·3	…	5·4	…	0·9	…	6·7	…	4·5	…	5·8	…	4·0	…	9·4	24
23	7·6	…	3·1	…	1·8	…	8·5	…	…	…	8·9	…	1·8	…	1·8	…	12·1	11
24	1·8	…	1·8	…	4·5	…	0·9	…	8·1	…	…	…	7·2	…	1·3	…	9·4	17, 18
25	8·1	…	1·8	…	8·9	…	…	1·8	9·8	…	…	1·8	…	2·7	2·7	…	10·3	5
26	…	2·7	1·3	…	…	…	…	1·8	…	6·7	…	1·3	…	3·6	…	0·9	7·2	11
27	…	0·0	…	0·5	2·7	…	1·8	…	…	3·6	5·4	…	…	0·5	…	…	6·7	15
28	0·9	…	1·3	…	2·7	…	…	1·3	0·9	…	…	4·9	1·8	…	…	4·0	5·4	13, 16
29	4·0	…	…	2·7	5·8	…	…	1·3	3·6	…	…	2·7	1·8	…	…	1·8	5·8	6, 9
30	1·3	…	…	1·8	0·9	…	…	4·0	…	1·3	…	6·7	…	…	…	4·0	7·6	16
31	…	0·9	…	2·2	…	1·3	…	5·8	3·6	…	…	3·6	3·6	…	…	2·7	7·2	18
S+N & W+E		94·1		79·0		111·5		106·2		126·0		128·7		97·5		91·3		
S−N & W−E		38·3		8·2		54·5		−9·2		33·4		−21·3		28·3		−11·7		

SCILLY.‡§

Height of Head above—Ground 9·8 m., M.S.L. 49·7 m.
Height of Cups above—Ground 5·8 m., M.S.L. 45·7 m.

Date.	3 h.				9 h.				15 h.				21 h.				Max. in a Gust.	Time of Max.	
	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.	V.	Hrs.	Min.
1	…	1·3	6·3	…	4·0	…	4·0	…	6·3	…	2·7	…	8·9	…	…	…	12·1	22	50
2	10·7	…	…	…	11·2	…	2·2	…	…	1·8	8·9	…	…	…	6·3	…	18·3	7	0
3	4·9	…	4·9	…	11·2	…	4·5	…	8·1	…	12·1	…	…	…	8·9	…	20·1	13	30
4	…	…	7·2	…	…	…	4·5	…	2·2	…	2·2	…	0·9	…	0·9	…	10·3	1	50
5	…	3·1	4·9	…	…	2·2	3·1	…	…	1·3	2·7	…	…	0·9	0·9	…	8·1	4	35
6	…	0·5	0·5	…	…	0·9	0·9	…	…	0·9	1·3	…	…	1·3	2·2	…	3·6	1	10
7	…	0·9	1·3	…	2·7	…	0·5	…	1·8	…	1·8	…	0·5	…	0·5	…	3·1	11	10
8	0·9	…	…	0·9	…	…	…	4·9	0·9	…	…	5·4	0·9	…	…	5·4	6·3	15	15
9	…	…	…	5·8	…	…	…	8·1	…	…	…	8·1	…	1·3	…	2·2	9·8	9	30
10	…	…	…	4·9	…	1·3	…	6·7	…	…	…	7·2	0·5	…	…	3·1	11·2	11	30
11	…	0·9	…	3·6	…	…	…	3·6	0·9	…	…	4·0	0·5	…	…	1·3	7·6	12	50
12	…	2·2	…	…	…	2·7	…	0·5	…	2·2	…	0·9	…	0·5	…	0·9	3·6	5	30
13	…	0·9	…	1·3	1·3	…	…	2·2	3·1	…	…	0·5	2·7	…	0·9	…	6·3	23	15
14	2·7	…	2·7	…	3·1	…	0·5	…	2·2	…	2·2	…	c·9	…	0·9	…	4·9	3	10
15	1·8	…	0·9	…	2·7	…	0·5	…	1·8	…	…	1·8	0·5	…	0·5	…	2·7	5	0
16	0·5	…	0·5	…	…	0·9	1·8	…	…	4·0	2·7	…	…	3·1	1·3	…	7·2	15	15
17	…	2·7	0·5	…	…	2·2	0·9	…	…	0·5	3·1	…	…	…	2·7	…	4·9	23	30
18	…	4·0	5·8	…	…	2·2	4·9	…	…	1·8	2·7	…	…	0·9	0·9	…	9·4	4	55
19	…	3·1	1·3	…	…	6·3	2·7	…	…	4·5	…	…	…	5·8	1·3	…	11·2	19	10
20	…	3·6	..	2·7	…	4·5	…	3·1	…	3·6	…	1·3	…	2·7	…	1·3	10·3	0	30
21	…	0·9	…	0·5	…	0·9	…	0·5	*	*	*	*	*	*	*	*	3·1	15	30
22	*	*	*	*	*	*	*	*	…	3·1	2·2	…	…	4·5	4·5	…	6·3	21	45
23	…	2·2	5·4	…	0·9	…	4·9	…	1·3	…	7·6	…	2·2	…	5·4	…	8·5	23	20
24	2·2	…	5·8	…	2·2	…	4·9	…	1·8	…	4·5	…	3·6	…	…	…	9·4	6	50
25	6·3	…	1·3	…	6·3	…	…	…	2·7	…	2·7	…	0·5	…	…	…	7·0	11	45
26	…	0·9	1·8	…	…	6·7	…	2·7	…	4·5	…	…	…	4·5	…	0·9	7·6	8	20
27	…	3·1	…	…	…	7·2	…	1·3	…	6·3	…	2·7	…	7·2	…	1·3	9·4	12	20
28	…	2·7	…	3·6	…	2·7	…	2·7	…	0·9	…	4·5	…	0·5	…	2·2	7·6	12	30
29	…	2·2	…	1·3	0·5	…	…	3·1	0·9	…	…	2·7	2·2	0·9	…	…	4·9	22	30
30	…	1·8	…	1·8	…	0·9	…	1·8	1·3	…	…	1·8	0·5	…	…	0·0	4·0	0	10
31	0·5	…	0·5	…	0·9	…	…	…	2·2	…	…	…	…	1·3	1·3	…	3·1	24	0
S+N & W+E		67·5		78·0		88·6		82·0		72·9		100·3		59·8		58·9			
S−N & W−E		−6·5		25·2		5·4		−0·4		2·1		18·5		−13·6		21·7			

GREAT YARMOUTH.†§

Height of Head above—Roof 10·7 m., Ground 12·8 m., M.S.L., 15·9 m.
Height of Cups above—Roof 3·7 m., Ground 18·3 m., M.S.L., 22·3 m.

Date.	3 h.				9 h.				15 h.				21 h.				Max. in a Gust (Gorleston).	Time of Gust.	
	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.	V.	Hrs.	Min.
1	…	0·9	2·2	…	1·3	…	2·2	…	4·9	…	…	3·1	2·7	…	…	…	12·5	12	50
2	2·7	…	1·3	…	5·4	…	…	0·9	6·3	…	…	…	5·4	…	…	…	17·0	11	45
3	1·3	…	2·2	…	*	*	*	*	8·1	…	3·6	…	7·2	…	3·1	…	20·6	15	35
4	…	…	2·7	…	…	1·8	4·0	…	…	2·2	…	4·9	3·1	…	0·5	…	9·8	8	45
5	1·3	…	2·2	…	…	…	3·1	…	…	1·8	…	0·5	0·0	…	…	0·9	7·2	11	20
6	…	1·8	0·5	…	…	1·8	…	…	…	…	…	3·6	2·2	…	…	2·2	5·4	22	0
7	1·3	…	…	0·9	4·9	…	…	2·2	5·4	…	…	3·6	4·9	…	…	3·1	10·7	12	20
8	0·9	…	…	0·9	1·8	…	…	1·8	…	0·5	…	2·7	…	3·6	…	5·4	7·2	21	45
9	…	5·4	…	3·6	…	5·4	…	2·2	…	4·9	…	2·2	…	4·9	…	…	9·8	5	5
10	…	4·5	…	…	…	4·9	…	2·2	…	6·7	…	1·3	…	4·5	…	…	9·4	17	0
11	…	2·7	…	2·7	…	3·6	…	1·3	…	4·0	…	1·8	…	4·5	…	3·1	9·8	18	20
12	…	3·1	…	0·5	…	2·7	..	2·7	…	0·9	…	2·2	…	0·5	…	1·3	5·8	0	10
13	0·9	…	0·5	…	1·3	…	…	0·9	3·1	…	…	1·3	2·2	…	…	1·3	9·8	14	25
14	1·3	…	…	0·9	1·8	…	…	0·9	3·1	…	…	2·2	1·8	…	…	…	8·1	15	0
15	1·8	…	1·8	…	1·3	…	2·7	…	3·6	…	…	1·3	0·5	…	…	0·0	9·4	14	30
16	1·8	…	…	0·9	…	2·7	…	…	…	1·3	…	1·3	…	1·8	…	2·7	4·0	13	5
17	…	0·9	…	0·5	…	4·0	…	0·9	…	4·0	…	2·7	…	3·6	…	2·7	7·6	8	0
18	…	2·7	…	2·7	…	3·1	…	0·5	…	3·1	…	…	…	4·0	0·9	…	10·7	22	35
19	…	1·8	1·8	…	…	5·4	…	…	…	5·8	1·3	…	…	3·1	2·2	…	13·9	22	55
20	…	6·3	…	…	…	7·2	…	…	…	7·6	…	…	…	4·5	…	…	14·3	4	10
21	…	1·8	0·9	…	…	2·7	…	3·6	…	4·5	…	0·9	…	0·9	0·5	…	7·2	0	50
22	…	1·3	0·5	…	2·2	…	2·2	…	*	*	*	*	3·1	…	…	…	10·3	12	45
23	…	…	2·2	…	4·0	…	4·0	…	0·9	…	4·5	…	1·8	…	2·7	…	9·4	13	30
24	1·8	…	2·7	…	0·9	…	5·4	…	0·9	…	5·4	…	0·5	…	1·8	…	8·9	8	55
25	0·5	…	2·7	…	2·2	…	…	2·2	3·1	…	…	3·1	1·8	…	…	2·7	6·3	13	30
26	2·2	…	…	2·2	…	…	…	5·4	…	2·7	…	3·6	4·0	…	…	4·0	7·6	9	25
27	…	…	…	3·1	…	…	…	2·7	..	1·3	…	2·7	…	2·2	…	3·1	5·8	3	50
28	…	2·7	…	1·8	…	5·4	…	…	…	6·7	…	…	…	7·6	…	5·4	13·0	20	35
29	…	4·9	…	4·9	…	4·9	…	4·9	…	6·3	…	6·3	…	7·6	…	5·4	12·5	20	55
30	…	5·8	…	5·8	…	7·6	…	4·9	…	6·7	…	6·7	…	4·0	1·8	…	12·1	18	50
31	0·5	…	…	2·2	…	…	…	3·1	…	1·8	…	8·1	…	2·7	…	6·3	8·9	19	10
S+N & W+E		64·9		57·8		90·3		68·2		112·2		80·9		101·2		63·1			
S−N & W−E		−28·3		−9·4		−36·1		−21·0		−33·4		−51·3		−18·8		−36·1			

The velocities at fixed hours are means for the interval from 30 minutes before to 30 minutes after the hour. The hours are numbered 1 h. to 24 h. Time is referred to Greenwich Mean Time.

* No record.

† Robinson Cup Anemometer ; Arms 0·61 m. ; Diameter of Cups, 0·229 m. ; Factor 2·2. ‡ Robinson Cup Anemometer ; Arms 0·305 m. ; Diameter of Cups 0·127 m. ; Factor 2·8.

§ Dines Pressure Tube Anemometer. At Great Yarmouth, Holyhead, and Scilly the readings at fixed hours are taken from the Robinson Anemometer, the maxima quoted are the greatest winds in a gust as recorded by the Dines Pressure Tube.

METEOROLOGICAL OFFICE OBSERVATORIES—GEOPHYSICAL JOURNAL.

JUNE 1911.—DAILY VALUES REFERRED TO GREENWICH MEAN TIME AND UNITS, BASED ON THE C.G.S. SYSTEM. [*Price* 4*d.*

First Year.—No. 6. *Meteorology, Solar Radiation, Seismology, Atmospheric Electricity, and Terrestrial Magnetism.*

1. SEISMOLOGICAL JOURNAL:—ESKDALEMUIR.—Long. 3° 12′ W. Lat. 55° 19′ N.

Date.	Microseisms. Period.	Microseisms. Amp.	Earthquakes.	Remarks.
	s	μ		
1	4–5	0·1	I.	1st Start 14 h. 51 m., end 15 h. 41 m. Phases indistinct. 2nd Long waves 16 h. 43 m.–16 h. 48 m.
2	5	0·4	I.	
3	5–6	0·5	Iu.	3rd P=20 h. 40 m. 40s., S Indeterminate, disturbed till 23 h. 4th Disturbed 13 h. 44 m.–14 h. 4 m.
4	5	0·3	I.	
5	5	0·2	I.	5th Disturbed 4 h. 19 m.–5 h. 4 m. 6th Disturbed 8 h. 50 m.–9 h. 13 m. (change of sheet).
6	5–6	0·5	I.	
7	4–5	0·3	IIIu, Ir.	7th IIIu, P=11 h. 14 m. 56 s., S=11 h. 25 m. 27 s., Δ=9410 kms., α=81° 38′ W of N, Epicentre 9°·5 N, 103°·3 W. Ir, P=19 h. 47 m. 8s., S=19 h. 50 m. 21 s., Δ=1890 kms., α nearly true N, Epicentre probably Iceland.
8	4–5	0·2	Ir.	
9	4	0·1	I.	
10	4	0·1		8th Ir, P=0 h. 6 m. 6 s., S=0 h. 11 m. 51 s., Δ=3960 kms., α? but probably towards E.
11	4–5	0·0	I.	
12	4	0·0		9th I, disturbed 23 h. 5 m.–23 h. 27 m. 11th Long waves 10 h. 55 m.–11 h. 17 m.
13	4	0·1		
14	4	0·2		15th Iu, P=5 h. 45 m. 56 s., S? disturbed till 6 h. 35 m.
15	4–5	0·3	Iu, IIIu.	IIIu, P=14 h. 38 m. 33 s., S=14 h. 48 m. 36 s., Δ=8850, α=46° 43′ E of N, Epicentre 32°·5 N, 119° E.
16	4–5	0·2		
17	3	0·5	Iu, I.	17th Iu, P=5 h. 23 m. 48 s., S=5 h. 34 m. 14 s., Δ=9310 kms., α? but probably towards NE.
18	4	0·2		I, very small disturbance about 22 h. 37 m.
19	4	0·2	I.	
20	4	0·1	I.	19th Occasional long waves between 13 h. 30 m.–16 h. 40 m. 20th Long waves 4h. 54 m.–5 h. 20 m.
21	4	0·5	I.	
22	5	1·1		21st Disturbed 10 h. 53 m.–11 h. 21 m. Unusual type of Seismogram. Record much disturbed by wind.
23	5–6	1·4		
24	4–5	0·2		25th Long waves about 9 h. 40 m. Record disturbed by wind and microseisms.
25	4	0·9	I.	
26	4–5	1·0		28th Iu, P=18 h. 14 m. 52 s., S?=18 h. 31 m. 38 s., Δ > 13,000 kms.
27	5	0·6		
28	4–5	0·4	Iu.	
29	5	0·8		
30	5	0·6		

An explanation of the notation used is given in the preface.

2. VALENCIA OBSERVATORY, CAHIRCIVEEN (KERRY).—Long. 10° 15′ W. Lat. 51° 56′ N.

Heights above Mean Sea Level:—Station, H = 9·2 m. Barometer Cistern, H_b = 13·7 m.
Heights above Ground:—Thermometers, h_t = 1·2 m. Rain-gauge, h_r = 0·6 m. Sunshine Recorder, h_s = 12·8 m. Cups of Anemometer, h_a = 13·7 m.

Day.	Pressure at Station Level. 9 h.	21 h.	Air Temperature in Degrees Absolute. 9 h.	21 h.	Max.	Min.	Humidity. Vapour Pressure. 9 h.	21 h.	Percentage. 9 h.	21 h.	Wind Direction in points (8=E, 16=S) and Velocity (*metres per second*). 9 h.		21 h.		Cloud Amount and Weather. 10 h.	22 h.	Rain 24 hours beginning 10 h.	Sunshine.	Remarks.	Magnetism. Horizontal Force.	Declination West.	Inclination.
	bar.	bar.	200+ °	200+ °	200+ °	200+ °	millibar.		%	%	m/sec.		m/sec.		Tenths of Sky covered.		mm.	hrs.		γ.	° ′	° ′
1	1·0188	1·0204	87·9	86·5	90·6	85·4	14·0	13·5	83	88	—	0·5	—	0·0	10∞	10	—	1·1	Dull, with ∞.	…	…	…
2	·0182	·0137	88·1	86·7	90·8	82·7	13·4	12·9	79	82	13	4·0	—	0·0	7	10	3·1	11·5	Fine.	…	…	…
3	·0138	·0183	86·2	85·9	87·8	85·4	14·0	13·3	93	90	—	1·3	32	5·8	10≡0	10	—	—	Dull. ● showers 8 h.–9 h.	…	…	…
4	·0228	·0262	86·4	85·6	89·0	83·4	12·8	11·8	84	81	32	4·5	31	4·5	10	*9*	—	1·8	Overcast till 15 h.	…	…	…
5	·0291	·0306	86·8	88·1	91·2	**80·0**	11·2	14·6	71	86	30	3·1	3	1·8	7	*2*	—	13·6	Fair to fine and clear.	…	…	…
6	·0329	·0307	90·3	90·2	93·2	85·2	15·9	13·2	81	68	4	6·7	2	3·1	7	*0*	—	15·1	Fine.	17870	20 36·7	68 12·0
7	·0291	·0268	93·2	87·9	97·0	85·4	16·3	14·2	70	85	8	2·2	—	0·0	0∞	*1∞*	—	14·0	Fine but ∞ throughout.	…	…	…
8	·0230	·0193	92·9	88·2	**97·8**	85·2	13·1	14·0	**56**	82	5	3·1	—	0·9	0∞	*0*	—	15·4	Fine.	…	…	…
9	·0166	·0157	91·7	88·8	93·7	82·4	13·5	12·7	64	72	3	6·3	2	3·6	0	*1*	—	15·7	Bright and sunny.	…	…	…
10	·0156	·0152	89·6	87·5	92·6	83·4	14·1	13·9	76	84	—	1·3	—	0·0	3∞	*7∞*	—	13·8	Fine.	…	…	…
11	·0144	·0153	88·8	87·8	91·4	83·3	13·6	15·4	77	93	—	0·0	—	0·0	7≡0	*8≡0*	—	5·1	Fair *a*. Very hazy *p*.	…	…	…
12	·0145	·0142	88·1	86·3	90·1	83·0	12·5	11·1	73	72	31	4·5	32	6·7	2	*1*	—	15·3	Fine.	…	…	…
13	·0160	·0150	85·1	85·7	89·0	82·8	9·0	10·0	64	69	2	8·1	2	3·1	2	*0*	—	15·7	Fine and bright.	…	…	…
14	·0165	·0182	88·5	86·8	90·9	81·5	11·8	9·9	67	63	11	3·6	12	5·4	8∞	*5*	—	8·3	∞, but fair generally.	…	…	…
15	·0153	·0097	86·8	86·8	88·3	85·1	10·1	13·0	65	83	8	5·8	8	11·6	10∞	*10*	7·1	0·3	Dull. ● *p*.	…	…	…
16	1·0087	1·0032	88·8	87·8	91·0	86·0	13·9	14·5	78	87	9	1·8	—	0·5	10	*10*	6·1	1·0	Dull, but brightening midday.	…	…	…
17	0·9978	0·9948	87·8	87·4	91·8	85·3	15·2	15·2	91	94	13	4·0	—	0·5	7	*7*	7·4	6·9	Showers and unsettled-looking.	…	…	…
18	0·9972	1·0002	87·5	87·2	91·6	85·4	15·5	13·3	94	82	22	1·8	—	1·3	9≡0	*6∞*	—	9·8	Fair after 8 h.	…	…	…
19	1·0030	·0089	87·3	86·1	88·3	85·1	11·9	10·9	73	73	28	4·5	25	6·3	10	*6*	0·8	3·3	Dull. Clearing in evening.	…	…	…
20	·0107	·0143	87·3	86·5	88·9	84·3	14·3	14·0	88	91	22	6·7	22	7·6	10	*10*	0·3	1·0	Cloudy, but clear.	…	…	…
21	·0137	·0047	88·8	87·6	90·0	85·1	14·3	15·8	81	96	17	6·3	16	8·1	8	*10≡0*	8·1	1·1	Dull. ● showers *p*.	17883	20 36·8	68 10·9
22	·0032	·0068	86·7	85·6	87·4	84·9	13·9	12·6	89	88	19	8·1	23	5·4	10	*6*	4·3	0·7	Misty and showery.	…	…	…
23	·0069	·0088	85·0	83·8	86·8	83·1	10·1	10·8	73	82	26	5·4	28	8·5	4	*10●*	6·6	10·5	Fair till 20 h., then ● showers.	…	…	…
24	·0053	·0135	85·0	83·7	87·6	82·8	11·3	11·1	80	86	32	13·4	32	12·5	6	*10≡0●*	0·8	7·7	Very squally. Frequent ●0 showers.	…	…	…
25	·0149	·0197	84·0	83·6	85·1	81·7	9·7	9·3	74	73	31	13·9	31	9·8	9	*10*	0·5	2·1	Squally.	…	…	…
26	·0205	·0194	84·6	84·9	86·5	83·4	9·9	13·1	73	93	29	5·8	—	0·9	10	*10≡0*	1·0	—	Dull, with ≡0.	…	…	…
27	·0241	·0264	86·6	86·7	89·9	85·7	14·9	14·8	96	95	27	4·9	23	6·7	6	*10●≡0*	—	2·4	Fair to dull and misty.	…	…	…
28	·0256	·0232	87·4	86·8	88·4	86·2	15·6	14·2	96	91	22	6·7	18	4·5	10≡0	*10*	0·8	—	Heavy mist all day.	…	…	…
29	·0193	·0118	86·8	86·0	88·5	84·9	13·4	14·4	86	97	22	6·7	22	9·8	8	*10≡0●*	**9·4**	2·2	Fair to dull. ≡0●.	…	…	…
30	1·0094	1·0078	86·1	85·9	89·0	84·7	13·2	12·4	88	84	28	2·7	26	3·6	8	*10*	0·8	2·9	Dull. Brighter after 9 h.	…	…	…
Means	1·0152	1·0151	87·7	86·6	90·1	84·1	13·1	13·0	79	84		4·9		4·4	6·9	7·0	57·1	198	Monthly **Totals** or **Means**.	17877	20 36·8	68 11·5
Normal 35 years	1·0148	1·0150	87·3	86·3	90·0	83·7	13·3	13·1	79	84		4·7 (25 years)		4·0 (25 years)	—	—	93·5	193 (25 yrs)	**Normals**, 35 years.			
									20 years													

Wt. 41467/309—375—1/12. N. & Co., Ltd. Gp. XV.

Note.—The cloud amounts in italic type at Valencia were taken at 21 h.

3. Kew Observatory, Surrey.—Long. 0° 19′ W. Lat. 51° 28′ N.

Heights above Mean Sea Level :—Station, H = 5·5 m. Barometer, H_b = 10·4 m.

Heights above Ground :—Thermometers, h_t = 3·0 m. Rain-gauge, h_r = 0·5 m. Sunshine Recorder, h_s = 14·3 m. Cups of Anemometer, h_a = 21·3 m.

Day.	Pressure at Station Level.		Air Temperature in Degrees Absolute.				Humidity. Vapour Pressure.		Humidity. Percentage.		Wind Direction in Points (8 = E, 16 = S) and Velocity (*metres per second*).				Cloud Amount and Weather.		Rain 24 hours beginning 10 h.	Sunshine.	Solar Radiation, Watts per cm².	Min. Temp. on Grass.	Earth Temperature at 10 h.		Remarks.
	9 h.	21 h.	9 h.	21 h.	Max.	Min.	9 h.	21 h.	9 h.	21 h.	9 h.		21 h.		10 h.	22 h.					0·3 m.	1·2 m.	
	bar.	bar.	200+ °	200+ °	200+ °	200+ °	millibar.		%	%	m/sec.		m/sec.		Tenths of Sky covered.		mm.	hrs.		200+ °	200+ °	200+ °	
1	1·01So	1·0205	93·5	91·4	97·0	87·3	14·1	11·6	59	55	8	6·7	7	4·9	0 ≡⁰	0	—	12·8	·062	83·0	89·1	84·6	Fine throughout.
2	·0197	·0153	91·5	90·9	96·4	84·9	12·9	14·0	61	68	3	3·1	6	3·6	0 ≡⁰	0	—	14·2	·068	79·5	89·1	84·8	≡ᶜ early. Fine.
3	·0134	·0148	91·8	90·7	98·4	87·0	15·9	17·8	75	89	—	0·9	—	1·3	3 ≡⁰	1	—	10·3	·064	81·5	89·4	85·0	≡⁰ early, then fine generally.
4	·0191	·0210	90·3	93·8	99·5	85·6	16·9	18·1	86	75	—	0·9	—	0·9	0 ≡⁰	1	—	8·2	—	80·3	89·9	85·2	≡ early, clearing after 8 h.
5	·0250	·0259	94·6	95·3	100·0	87·3	17·0	15·7	66	58	—	0·9	5	2·2	0	0 ≡⁰	—	13·2	—	82·1	90·7	85·2	Very fine and warm.
6	·0290	·0307	94·3	89·9	97·8	86·7	14·3	13·3	56	71	2	3·1	5	6·7	0	1	—	11·9	·046	81·4	91·0	85·4	Fine, but hazy.
7	·0319	·0287	86·8	87·0	94·1	84·3	10·1	11·9	65	75	4	5·4	8	4·5	0	0● ⁰	—	12·3	·063	83·1	90·3	85·7	Bright during day. ≡⁰ *n*.
8	·0257	·0192	91·9	90·2	98·0	83·8	12·9	14·9	60	77	7	5·4	6	1·8	0	0	—	14·3	·081	77·6	90·0	85·8	Cloudless all day.
9	·0119	·0142	92·1	86·0	95·6	82·2	15·7	9·5	72	64	29	2·2	2	5·4	1	3	—	6·9	·068	79·8	90·2	85·9	Fine *a*. Dull *p*.
10	·0161	·0160	84·7	85·6	88·6	79·2	8·1	7·5	59	52	1	4·5	2	1·8	9	2	—	9·5	—	74·3	88·8	86·1	Bright to cloudy.
11	·0165	·0152	87·4	86·8	92·5	78·8	9·3	10·3	57	65	20	1·8	19	3·6	1	10	—	10·0	—	72·5	88·1	86·2	≡⁰, then fine. Dull *n*.
12	·0131	·0093	88·4	88·6	93·2	83·9	11·5	11·7	66	66	19	1·8	19	2·2	8	10	—	2·9	—	80·1	88·5	86·2	Cloudy to overcast.
13	·0105	·0131	86·0	83·4	89·5	81·9	8·9	8·2	60	66	2	4·5	1	2·7	7	10	—	8·6	·087	81·8	88·5	86·2	Fine generally.
14	·0155	·0200	84·6	84·5	90·1	78·7	8·8	8·8	65	65	30	4·5	4	3·1	10	8	—	7·7	—	72·0	87·6	86·2	Fair.
15	·0220	·0224	85·4	85·9	91·7	79·1	8·0	10·2	56	69	1	2·7	16	2·2	1	4	—	12·6	·061	71·1	87·6	86·2	Bright day. Cloudy evening.
16	·0197	·0130	88·8	89·9	95·0	83·4	11·3	10·4	64	55	9	3·1	8	4·5	8	10	13·7	1·3	—	78·3	88·0	86·2	Dull. ●² 24 h.
17	1·0070	·0048	91·0	89·6	94·5	86·3	15·7	14·7	77	79	16	2·7	19	3·6	6	3	0·5	6·0	—	85·0	88·5	86·2	● till 6 h., then fair.
18	0·9997	·0062	88·1	88·6	93·0	86·4	14·2	13·7	83	78	18	9·8	19	5·4	9	1	0·5	6·4	—	83·5	88·7	86·2	● showers. T< 15 h. 30 m.
19	1·0040	·0036	89·9	86·4	90·7	85·4	14·4	14·0	76	91	16	4·9	19	4·5	10	10●	5·1	1·1	—	80·8	88·5	86·2	Dull, with ●.
20	·0099	·0154	88·7	88·0	92·4	84·7	13·3	11·2	76	66	23	4·5	23	2·2	8	7	—	8·2	—	81·5	88·0	86·2	Fair to fine. [shine.
21	·0174	·0179	89·6	88·4	92·1	86·0	12·4	12·2	66	71	21	4·5	19	3·1	9	2	—	1·7	—	82·6	88·6	86·3	Cloudy, with occasional sun-
22	·0139	·0106	89·0	88·1	90·0	85·8	13·8	15·6	78	92	18	7·6	18	5·4	10	10	0·3	—	—	82·8	88·2	86·3	Dull throughout.
23	1·0079	·0034	89·8	87·1	92·4	85·5	14·1	14·4	75	90	20	4·0	—	0·9	8	10●	16·3	1·0	—	84·9	88·2	86·3	Dull. ● from 19 h.
24	0·9977	·0021	85·6	86·3	90·9	85·0	12·6	11·7	88	77	23	4·5	18	6·7	10	2	0·8	6·8	—	84·1	88·0	86·3	≡⁰ or ● till 11 h.
25	1·0036	·0086	86·3	85·2	87·1	84·4	12·6	12·0	83	85	19	4·0	23	3·1	10● ⁰	10	6·4	—	—	81·1	87·5	86·3	Overcast all day. ● 8 h.–16 h.
26	·0122	·0165	84·4	83·2	87·4	83·0	9·9	10·6	73	86	25	4·9	22	2·7	9	10	2·0	2·2	—	82·8	87·3	86·3	Unsettled-looking all day.
27	·0215	·0236	85·2	90·2	93·8	83·5	9·0	12·9	64	66	29	3·1	24	1·8	10	1	—	6·8	·070	82·0	87·1	86·3	Dull *a*. Fine *p*.
28	·0250	·0247	90·8	89·3	95·1	85·5	14·3	14·3	71	78	23	4·9	22	4·0	9	4	—	10·8	·083	82·2	88·5	86·3	Fine. [30 m.
29	·0224	·0153	89·8	88·0	92·5	86·9	12·6	13·5	67	80	21	5·4	18	6·3	9	10	4·6	3·5	—	85·4	89·1	86·2	Fair during day. ● after 22 h.
30	1·0092	1·0067	87·8	87·8	90·3	85·9	13·4	15·1	79	90	19	5·4	20	2·2	10	10	0·3	—	—	84·5	88·7	86·3	Overcast all day.
Means	1·0153	1·0153	88·9	88·2	93·3	84·3	12·6	12·7	69	73	—	4·1	—	3·4	5·8	5·0	50·5	211	—	80·7	88·8	86·0	Monthly **Totals or Means.**
Normal 35 years	1·0154	1·0152	88·3	87·5	92·8	83·4	12·3	12·4	71	75	—	3·6	—	2·7	—	—	55·4	195 25 yrs	—	—	—	—	**Normals**, 35 years.
									20 years		25 years		25 years										

4. Eskdalemuir Observatory, Dumfriesshire.—Long. 3° 12′ W. Lat. 55° 19′ N.

Heights above Mean Sea Level :—Station, H = 243·2 m. Barometer, H_b = 237·1 m.

Heights above Ground :—Thermometers, h_t = 0·8 m. Rain-gauge, h_r = 0·3 m. Sunshine Recorder, h_s = 1·5 m. Vane of Anemometer, h_a = 15·2 m.

															9 h.	21 h.	9 h.						
1	0·9936	0·9967	93·7	89·2	97·3	84·0	14·6	12·2	59	67	—	1·3	—	0·5	0	2∞	—	11·8	—	—	—	—	Fine. ∞
2	·9955	·9926	90·8	83·7	94·9	80·1	10·3	9·1	51	72	8	4·9	4	1·8	0∞	0∞	—	15·9	—	—	—	—	Fine. ∞
3	·9903	·9896	87·4	85·9	93·9	80·5	12·9	13·2	79	90	32	4·5	32	3·1	1	0∞	—	15·2	—	—	—	—	Fine. ∞
4	·9925	0·9951	92·1	87·4	96·3	79·8	14·6	14·3	67	88	—	0·0	—	0·5	0	4	—	8·5	—	—	—	—	Fine *a*. ⊕ 19 h. 20 m.
5	0·9984	1·0014	90·4	85·8	94·0	83·1	7·5	13·3	38	91	24	4·9	28	5·4	2	4	—	13·6	—	—	—	—	Very fine.
6	1·0059	·0068	87·3	85·4	92·6	79·1	12·9	13·0	79	91	4	5·8	—	0·5	9	3	—	9·7	—	—	—	—	Cloudy *a*. Very fine *p*.
7	1·0051	1·0021	92·2	89·7	98·5	76·9	11·1	15·7	51	83	24	3·1	—	0·5	0	1∞	—	13·9	—	—	—	—	Cloudless *a*. ; less bright later.
8	0·9983	0·9924	93·1	87·3	97·5	82·4	16·1	13·1	69	81	14	3·6	32	4·5	3∞	2	—	15·2	—	—	—	—	Fine. Distant T.
9	·9899	·9908	83·9	77·6	86·3	74·9	9·7	7·0	75	83	6	8·5	4	3·1	9	1	—	9·6	—	—	—	—	Cloudy to fine.
10	·9901	·9875	81·7	81·3	86·9	74·7	7·8	8·8	70	81	20	3·6	22	1·8	9	3	—	3·3	—	—	—	—	Fine generally.
11	·9882	·9881	84·2	83·4	89·1	74·9	9·9	9·5	74	76	4	3·1	—	0·0	8	9∞	—	5·8	—	—	—	—	≡⁰ early *a*., then fine.
12	·9849	·9857	87·0	78·5	90·2	74·0	10·2	7·7	64	86	26	3·1	—	0·9	8∞	1	—	8·5	—	—	—	—	Fine generally.
13	·9875	·9882	81·7	77·9	84·2	73·8	6·5	6·8	58	79	4	5·8	—	1·3	9	1	—	7·5	—	—	—	—	Variably cloudy.
14	·9911	·9936	83·0	79·2	87·2	76·1	7·4	7·2	61	77	2	5·8	—	1·3	7	4	—	12·0	·084	—	—	—	Fine to hazy.
15	·9951	·9948	84·9	81·9	88·5	73·5	8·3	8·5	61	75	—	0·9	4	2·2	9	4	—	6·5	—	—	—	—	Fine to cloudy.
16	·9922	·9859	86·6	85·2	90·3	75·9	10·3	9·9	67	70	—	1·3	8	5·8	8∞	10	3·6	3·9	—	—	—	—	Fair *a*. Dull *p*.
17	·9767	·9732	84·8	85·8	89·1	81·4	12·6	13·4	92	91	12	6·7	—	1·3	10	10	14·2	1·6	—	—	—	—	●² showers *n*. Distant T.
18	·9685	·9720	85·9	83·8	87·0	83·7	13·5	12·7	91	98	—	1·3	—	1·3	10	8	9·9	0·2	—	—	—	—	Variable, with ● showers.
19	·9731	·9734	85·6	83·3	89·2	80·2	13·6	11·1	94	89	20	2·7	—	0·5	9	3	5·1	3·2	—	—	—	—	Variable, with ● showers.
20	·9777	·9820	87·2	84·1	89·3	79·8	12·6	12·1	78	93	24	7·6	20	4·5	8	8	1·5	5·2	—	—	—	—	Cloudy, with ● showers.
21	·9830	·9809	85·0	84·3	86·3	81·2	12·5	13·2	90	99	20	8·9	20	8·5	10	10●	17·0	0·2	—	—	—	—	Fine early. ● after 13 h.
22	·9712	·9736	85·2	82·6	86·1	81·7	14·0	10·8	99	91	20	15·7	—	0·9	10	10● ⁰	12·2	—	—	—	—	—	Overcast with frequent ●.
23	·9763	·9772	84·9	82·4	87·3	80·7	10·1	10·1	73	87	20	8·1	—	0·0	8	8	2·3	12·3	—	—	—	—	Fine.
24	·9740	·9693	81·4	82·3	82·6	81·1	10·9	9·8	100	84	32	13·4	32	13·4	10●	10● ⁰	12·4	—	—	—	—	—	Dull and cold. ✻⁰ *p*.
25	·9703	·9767	83·2	83·0	87·8	81·3	10·2	11·0	83	90	28	6·7	28	6·7	9	9	0·5	1·7	—	—	—	—	Variably cloudy.
26	·9809	·9849	83·3	81·4	86·3	78·6	8·6	9·3	69	85	28	7·2	28	8·1	9	2	—	6·0	—	—	—	—	Cloudy. Finer in evening.
27	·9904	·9923	84·1	83·6	87·5	73·6	9·0	9·9	69	78	20	5·8	20	6·3	8	9	0·5	6·3	—	—	—	—	≡⁰. Dull generally.
28	·9882	·9912	85·6	83·0	88·2	81·6	14·1	11·2	97	92	20	13·9	24	4·0	10	10●	0·5	7·9	—	—	—	—	Dull generally.
29	·9848	·9775	84·1	83·2	87·3	80·8	13·1	12·1	100	98	20	7·6	20	10·3	10 ≡⁰	10● ⁰	7·1	—	—	—	—	—	Dull. ● *p*.
30	0·9760	0·9758	84·1	81·5	88·1	81·1	10·2	9·2	78	84	24	7·2	26	2·7	9	3	0·5	5·0	—	—	—	—	Fine generally. ⌒ 18 h.
Means	0·9863	0·9864	86·1	83·5	89·7	79·0	11·2	10·8	75	85	—	5·8	—	3·4	7 1	5·3	87·3	210	—	—	—	—	Monthly **Totals** or **Means.**
Normal 35 years	—	—	—	—	—	—	—	—	—	—	—		—		—	—	—	—	—	—	—	—	

The solar radiation is the mean of the readings within the nominal hour of observation (11 h. 30 m.–12 h. 30 m.) unless some other hour is specified.

5. KEW OBSERVATORY.

Day.	Potential Gradient, Volts. per metre. Factor 1·62.				Number of Ions per cc.		Velocities of Ions for 1 volt. per centimetre.		Conductivity $\times 10^{25}$.	Air-Earth Current $\times 10^{16}$.		Electric Character of Day.	Magnetic Character of Day.	Horizontal Force.					West Declination.				
														Maximum. 18000 γ +.		Minimum. 18000 γ +.		Range.	Maximum. 15° +.		Minimum. 15° +.		Range.
	3 h.	9 h.	15 h.	21 h.	+.	−.	+.	−.		c_1.	c_2.												
	v/m.	v/m.	v/m.	v/m.	n/cc.	n/cc.	cm/sec.	cm/sec.	E.-m.U.	Amp/cm².				γ	h m	γ	h m	γ	′	h m	′	h m	′
1	180	430	310	355	670	910	—	1·50	—	—		0	1	527	17 15	469	11 59	58	60·7	15 9	46·7	0 36	14·0
2	245	525	355	310	720	780	0·70	0·40	0·94	3·3		0	0	522	19 2	482	10 10	40	59·8	13 15	51·3	7 10	8·5
3	135	190	145	90	—	—	—	—	—	—		0	0	530	21 50	492	13 13	38	58·7	14 13	50·2	7 24	8·5
4	120	195	75	145	—	—	—	—	—	—		0	2	**569**	**18 20**	487	20 3	82	60·8	18 20	45·4	23 25	15·4
5	140	215	125	370	—	—	—	—	—	—		0	1	534	18 3	462	8 24	72	61·1	12 53	49·7	20 42	11·4
6	105	500	250	235	—	—	—	—	—	—		0	1	548	19 58	459	10 43	89	60·8	12 43	48·9	8 15	11·9
7	120	310	380	280	900	960	0	0·60	0·67	2·6		0	0	519	14 50	484	9 2	35	60·0	13 12	50·1	2 22	9·9
8	215	470	245	400	—	—	—	—	—	—		0	0	515	18 46	482	9 52	33	58·5	13 35	50·4	7 23	8·1
9	90	160	295	325	—	—	—	—	—	—		1	2	567	20 25	484	22 18	83	60·8	13 4	**42·9**	**22 25**	**17·9**
10	235	295	175	310	—	—	—	—	—	—		0	2	538	17 25	468	7 29	70	63·7	14 30	48·2	0 43	15·5
11	75	80	45	120	—	—	—	—	—	—		0	1	538	20 22	**443**	**7 4**	**95**	61·4	14 9	49·4	7 3	12·0
12	45	90	45	90	670	210	1·50	2·10	1·61	0·7		0	1	529	22 8	468	10 12	61	59·8	11 53	50·8	8 40	9·0
13	60	235	120	165	—	—	—	—	—	—		0	1	518	15 12	462	10 34	56	61·0	13 50	48·9	7 50	12·1
14	90	140	95	235	640	670	0·35	2·30	2·00	1·9		0	1	524	18 52	463	12 20	61	59·9	11 49	49·1	23 38	10·8
15	165	275	335	140	—	—	—	—	—	—		0	0	523	15 24	464	8 34	59	60·1	12 43	49·9	6 40	10·2
16	160	250	110	265	630	530	0·50	0·85	0·87	1·0		1	0	530	14 44	485	9 40	45	61·0	14 39	50·7	7 4	10·3
17	55	190	145	250	—	—	—	—	—	—		1	0	515	16 13	484	10 43	31	58·9	16 50	50·2	8 15	8·7
18	60	0?	$x\pm$	145?	—	—	—	—	—	—		1	0	515	18 17	483	8 26	32	60·1	12 30	50·8	5 51	9·3
19	*	*	75?	−15?	—	—	—	—	—	—	No Observations.	1	0	518	17 18	483	9 0	35	59·5	14 13	51·8	7 25	7·7
20	*	90	110	220	850	690	0·80	0·70	1·32	1·5		0	0	527	18 13	483	11 50	44	60·9	14 11	50·8	7 50	10·1
21	*	60?	105	205	1090	490	0·55	0·20	0·80	0·8		0	1	535	20 33	473	11 25	62	62·7	15 14	51·1	20 25	11·6
22	130	130	90	140	—	—	—	—	—	—		0	1	531	18 13	471	10 56	60	58·3	1 54	51·8	6 12	**6·5**
23	90	165	*	−250	—	—	—	—	—	—		2	1	529	18 34	461	9 40	68	**64·1**	**13 14**	50·8	8 22	13·3
24	20	75	130	220	—	—	—	—	—	—		2	0	516	17 36	487	8 30	29	60·2	14 42	51·9	6 14	8·3
25	145	60	−15	160	—	—	—	—	—	—		2	0	515	22 10	478	8 45	37	62·1	14 30	51·6	5 38	10·5
26	60	$x-$	$x-$	15	—	—	—	—	—	—		2	0	514	14 48	488	8 42	**26**	60·7	14 24	50·8	8 17	9·9
27	140	130	170	195	920	730	0·50	0·65	1·04	1·7		0	0	528	20 28	491	11 57	37	59·7	13 46	51·4	7 48	8·3
28	120	130	120	135	—	—	—	—	—	—		0	1	527	17 13	487	12 58	40	60·7	13 40	49·1	7 5	11·6
29	90	120	145	135	270	280	1·65	0·55	0·67	1·0		1	0	519	18 45	485	11 0	34	60·0	14 28	50·6	8 30	9·4
30	75	145	120	160	—	—	—	—	—	—		1	1	533	21 54	491	9 53	42	59·7	14 3	48·9	23 30	10·8
M.	123	223	167	218	—	—	—	—	—	—		—	—	528	—	477	—	52	60·5	—	49·8	—	10·7

6. ESKDALEMUIR OBSERVATORY.

Day.	Potential Gradient, Volts per metre. Factor 5·2.				Number of Ions per cc.		Velocities of Ions for 1 volt. per centimetre.		Conductivity $\times 10^{25}$.	Air-Earth Current $\times 10^{16}$.		Electric Character of Day.	Magnetic Character of Day.	North Component.§				West Component.§				Vertical Component.§			
														Maximum. 15000 γ +.			Minimum. 15000 γ +.		Maximum. 5000 γ +.			Minimum. 5000 γ +.		Maximum. 45000 γ +.			Minimum. 45000 γ +.	
	3 h.	9 h.	15 h.	21 h.	+.	−.	+.	−.		c_1.	c_2.																	
	v/m.	v/m.	v/m.	v/m.	n/cc.	n/cc.	cm/sec.	cm/sec.	E.-m.U.	Amp/cm².				h m	γ	γ	h m	γ	h m	γ	γ	h m	γ	h m	γ	γ	h m	γ
1	*	*	*	*	—	—	—	—	—	—		*	1	17 14	1050	975	11 59	17	14	301	208	0 48	17 54	397	339	4 0	
2	*	*	171	323	—	—	—	—	—	—		0 *a*	0	0 40	1040	996	10 58	13	26	286	244	0 16	18 30	385	359	1 33	
3	139	108	133	235	—	—	—	—	—	—		0 *a*	0	21 31	1044	995	11 13	14	27	286	242	7 30	9 10	384	369	12 0	
4	197	108	108	266	—	—	—	—	—	—		0 *a*	1	**19 4**	**1094**	996	19 59	18	18	323	203	23 22	**19 38**	**439**	329	23 0	
5	279	139	311	311	—	—	—	—	—	—		0 *a*	2	20 43	1064	961	8 3	23	21	292	231	0 38	17 50	404	363	0 0	
6	139	120	178	171	—	—	—	—	—	—		0 *a*	1	19 43	1074	959	10 37	12	41	283	227	7 18	18 12	397	374	0 0	
7	273	247	146	197	—	—	—	—	—	—		0 *a*	0	1 42	1035	993	10 32	13	55	290	235	2 22	18 0	395	357	1 46	
8	380	203	254	165	—	—	—	—	—	—		0 *a*	0	18 43	1034	989	11 23	14	57	283	236	8 55	16 35	394	378	11 50	
9	178	57	127	146	—	—	—	—	—	—		0 *a*	1	20 24	1082	1001	9 3	20	23	306	**182**	**22 20**	22 25	403	373	12 0	
10	51	51	70	247	—	—	—	—	—	—		0 *a*	2	17 24	1066	967	7 27	**14**	**29**	**326**	216	0 40	18 0 / 20 29	402	**311**	**1 23**	
11	463	114	101	139	—	—	—	—	—	—		0 *a*	2	17 3	1078	**945**	4 42	15	22	301	208	7 3	18 35	404	**311**	**1 54**	
12	317	114	51	254	—	—	—	—	—	—		0 *a*	1	21 55	1058	973	10 57	14	50	288	235	9 5	20 10	396	365	1 30	
13	101	89	95	203	—	—	—	—	—	—		1 *a*	1	15 10	1045	974	10 22	15	32	295	226	7 49	17 20	414	367	1 39	
14	171	165	120	146	—	—	—	—	—	—		0 *a*	2	18 53	1051	965	11 59	21	58	297	233	23 39	16 41	396	367	8 8	
15	114	44	108	165	—	—	—	—	—	—		0 *a*	1	19 48	1049	982	8 36	13	45	294	234	6 49	20 4	400	354	0 30	
16	178	133	101	203	300	360	1·32	1·1	0·87	0·9		1 *b*	1	20 0	1054	991	11 5	14	40	304	241	7 39	19 30	405	377	13 0 / 14 35	
17	6	304	*x*	273	—	—	—	—	—	—		2 *c*	0	19 32	1032	980	10 41	16	20	286	235	6 12	18 40	396	367	12 3	
18	146	203	*x*	412	—	—	—	—	—	—		2 *c*	0	18 87	1035	991	12 28	15	13	287	241	6 22	5 15	394	370	11 25	
19	178	235	*x*	380	—	—	—	—	—	—		2 *c*	0	18 0	1036	992	12 28	14	39	288	246	7 25	19 25	397	375	11 40	
20	*x*	197	95	317	660	90	0·94	1·02	0·78	0·7		1 *b*	1	18 12	1042	991	13 49	15	0	304	241	5 56	19 0	401	379	7 10	
21	114	101	108	−89	—	—	—	—	—	—		1 *b*	1	20 33	1061	965	11 22	14	34	320	235	6 25	19 0	406	376	11 10	
22	−51	114	120	−127	—	—	—	—	—	—		1 *b*	1	18 11	1060	973	10 42	1	53	293	237	3 45	19 5	397	366	2 16	
23	323	178	184	228	—	—	—	—	—	—		1 *a*	1	20 3	1066	969	13 37	13	15	323	235	7 43	19 53	403	370	12 30	
24	13	−760	−387	−120	—	—	—	—	—	—		2 *c*	0	17 34	1031	998	11 14	14	40	300	243	8 27	18 10	398	380	12 19	
25	−32	120	114	184	—	—	—	—	—	—		1 *b*	0	21 0	1026	991	9 23	14	30	305	243	6 25	18 13	398	369	12 20	
26	108	139	152	190	—	—	—	—	—	—		1 *a*	0	20 1	1027	996	9 55	14	26	303	242	9 15	5 0	397	357	11 42	
27	171	235	82	152	—	—	—	—	—	—		0 *a*	0	20 29	1041	987	11 56	13	45	292	248	6 8	18 0	398	375	12 35	
28	38	*	139	101	—	—	—	—	—	—		1 *a*	1	23 26	1049	977	12 55	13	39	311	235	7 40	5 0 / 18 45	394	368	12 0	
29	82	260	19	139	—	—	—	—	—	—		1 *b*	0	18 43	1040	996	11 45	14	45	296	247	10 13	18 30	398	377	9 15	
30	120	120	178	266	—	—	—	—	—	—		1 *a*	0	21 56	1049	996	11 42	13	57	297	235	23 41	5 0 / 18 0	397	376	11 20	
M.	166	96	108	160	—	—	—	—	—	—		—	—	—	1050	982	—	—		298	232	—	—	397	363	—	

x Indeterminate. * No record. An explanation of the Headings of the columns is given in the Preface

§ The Magnetic values at Eskdalemuir Observatory are at present only provisional, and subject to correction at the end of the year; the zero of the recorder of the Vertical Component set up in December 1909 is still liable to variation.

7. Tables of Wind Components in metres per second at fixed hours.

Together with the mean velocity (horizontal movement) in metres per second for the hour with the maximum hourly run for each day, or the greatest velocity attained in a gust and the time of its occurrence.

HOLYHEAD.†§

Height of Head above—Roof 8·8 m., Ground 13·7 m., M.S.L. 19·2 m.
Height of Cups above—Roof 4·6 m., Ground 7·6 m., M.S.L. 15·2 m.

Date.	3 h.				9 h.				15 h.				21 h.				Max. in a Gust.	Time of Gust.	
	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.			
																	V.	Hrs.	Min.
1	...	0·5	0·5	...	...	0·9	...	0·5	...	1·3	1·3	..	...	0·5	...	...	6·3	7	10
2	0·5	...	...	2·2	...	...	...	0·9	..	1·8	2·7	...	...	...	...	6·7	9·4	21	35
3	...	...	...	1·3	...	...	...	4·5	...	0·9	2·2	...	...	0·9	0·5	...	8·1	8	0
4	...	1·3	2·7	...	...	4·5	3·1	...	...	3·6	1·3	...	...	2·7	1·8	...	9·8	12	20
5	...	3·1	0·5	...	...	1·8	0·5	...	...	1·8	0·5	...	...	1·8	0·5	...	7·6	23	20
6	...	4·5	...	1·8	...	8·1	...	...	...	4·9	0·9	...	...	4·5	...	3·1	11·6	4	55
7	...	1·8	...	3·1	...	1·8	...	4·0	...	5·8	..	2·2	...	1·8	...	0·5	10·7	11	45
8	...	0·9	0·9	...	...	2·2	2·2	...	...	3·1	2·2	...	...	4·5	0·9	...	7·2	22	5
9	...	6·3	2·7	...	..	10·3	1·8	...	...	4·9	...	9·4	...	5·4	...	3·6	15·2	8	10
10	...	1·3	...	7·2	1·8	...	0·5	...	...	1·8	1·8	...	...	0·9	...	0·5	9·4	5	25
11	0·9	...	1·3	...	2·7	...	1·3	...	...	2·2	1·3	...	...	1·3	0·9	...	5·4	9	5
12	...	1·8	1·3	..	...	2·7	1·8	...	...	3·6	2·7	...	...	2·7	3·6	...	11·2	23	45
13	...	1·3	...	7·2	...	5·4	...	3·6	...	4·9	...	...	...	5·4	...	...	10·7	3	0
14	...	0·9	...	2·7	...	4·9	...	3·1	...	3·6	0·9	...	...	3·1	0·5	...	9·4	7	25
15	...	0·9	...	1·8	...	1·8	...	...	...	4·0	...	1·8	...	2·7	...	3·6	8·9	19	50
16	0·9	...	...	2·2	2·7	...	...	4·0	3·6	...	...	5·4	3·6	...	...	5·4	11·6	23	25
17	8·5	...	...	1·8	7·2	...	1·3	...	7·6	...	1·3	...	4·9	...	0·9	...	14·3	1	25
18	3·1	...	...	...	4·5	...	3·1	...	6·7	...	4·5	...	4·9	...	3·1	...	13·4	13	45
19	3·6	...	2·7	...	...	0·5	0·9	...	...	0·9	1·3	...	1·8	...	4·5	...	12·1	23	55
20	...	...	8·9	...	5·4	...	5·4	...	6·3	...	4·0	...	3·1	...	4·5	...	13·4	10	25
21	2·7	...	3·6	...	5·8	...	4·0	...	8·5	...	3·6	...	8·9	...	1·8	...	16·1	22	20
22	10·3	...	1·8	...	12·1	...	4·9	...	9·8	...	4·0	...	3·1	...	8·1	...	19·2	5	5
23	1·8	...	2·7	...	1·8	...	2·7	...	3·6	...	1·3	...	0·5	...	0·9	...	6·7	17	40
24	...	3·1	0·5	...	...	6·7	4·5	...	...	12·1	8·1	...	...	8·1	8·1	...	20·6	17	10
25	...	10·3	10·3	...	...	8·5	8·5	...	...	7·2	10·7	...	...	8·1	8·1	...	21·0	1	40
26	...	7·6	11·6	...	...	6·3	9·8	...	...	5·4	8·1	...	...	1·3	3·1	...	19·7	2	0
27	...	5·4	3·6	...	...	1·3	3·1	...	6·3	...	2·7	...	3·1	...	1·3	...	12·1	23	55
28	1·8	...	4·5	...	6·7	...	6·7	...	3·1	...	4·5	...	3·1	...	4·5	...	14·3	8	45
29	6·7	...	4·5	...	8·5	...	5·8	...	7·2	...	4·9	...	5·8	...	4·0	...	17·4	8	40
30	...	2·2	4·9	...	...	...	6·7	...	4·9	...	4·9	...	2·7	...	3·6	...	13·9	0	5
S+N & W+E	94·0		100·8		126·9		99·2		140·5		100·5		101·2		88·6				
S−N & W−E	−12·4		38·2		−8·5		58·0		−5·3		62·9		−10·2		41·8				

DEERNESS.†

Height of Cups above—Roof 1·5 m., Ground 4·9 m , M.S.L. 57·3 m.

Date.	3 h.				9 h.				15 h.				21 h.				Vel. in Max. Hourly Run.	Time of Max.
	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.		
																	V.	Hour.
1	4·0	...	...	...	5·4	...	...	2·2	6·3	...	...	1·3	8·1	...	...	1·8	8·9	24
2	8·1	...	...	1·8	8·1	...	...	1·8	6·7	...	...	4·5	7·6	...	...	3·1	9·4	22
3	4·9	...	...	2·2	4·9	...	...	4·9	5·8	...	...	4·0	4·0	...	...	1·8	8·9	12
4	2·7	...	...	1·8	3·6	...	0·9	...	...	5·4	5·4	...	...	1·3	...	...	8·1	13, 14
5	2·7	...	0·5	...	5·4	...	0·9	...	...	...	10·7	...	...	1·8	8·9	...	10·7	15
6	..	1·8	10·3	...	...	5·8	8·9	...	...	3·1	7·6	...	...	0·9	5·4	...	10·7	8, 9
7	1·8	...	8·9	...	...	2·2	11·2	...	...	4·5	10·7	...	...	2·7	6·7	...	13·0	5
8	...	5·4	7·6	...	...	4·0	9·8	...	...	4·9	7·6	...	...	2·7	...	1·3	12·5	11
9	...	4·9	...	3·1	...	5·8	...	...	...	8·1	1·8	...	...	4·9	0·9	...	9·4	14
10	...	3·6	2·7	...	...	4·5	0·9	...	...	4·0	...	...	...	1·3	...	0·5	6·3	10, 11
11	0·5	...	1·3	...	...	2·7	0·5	...	...	4·9	2·2	...	...	3·1	2·2	...	5·8	11
12	...	4·0	4·0	...	...	9·4	1·8	...	...	10·3	...	...	...	6·3	...	2·7	10·7	11, 14
13	...	6·3	...	1·3	..	9·4	...	...	...	10·3	...	1·8	...	8·1	...	...	10·3	14
14	...	5·4	...	0·9	...	6·7	1·3	...	...	5·8	1·3	...	...	4·0	0·9	...	7·2	11
15	...	2·2	0·5	...	...	...	0·9	...	0·9	...	...	0·9	...	0·0	...	0·9	3·1	1, 2, 6
16	0·5	...	0·5	...	...	0·5	0·5	...	2·7	...	...	4·0	2·7	...	...	3·6	6·7	23
17	4·5	...	...	6·7	3·1	...	...	7·6	3·1	...	...	7·6	2·7	...	...	6·7	9·4	5, 8, 10
18	1·3	...	...	7·2	...	...	...	4·5	2·2	...	...	3·1	0·9	...	...	3·6	8·9	4
19	0·5	...	...	1·8	0·9	...	...	1·8	2·7	...	...	1·8	0·9	...	...	0·9	3·1	15, 16
20	...	0·5	...	0·9	...	0·9	...	0·5	...	1·3	0·5	...	...	...	...	2·7	5·4	19
21	1·8	...	0·5	...	5·4	...	0·9	...	5·4	...	...	0·9	1·8	...	...	0·9	8·9	11
22	6·3	...	...	2·7	8·1	...	...	3·6	5·8	...	...	1·3	1·3	...	2·7	...	11·2	S
23	4·0	...	0·9	...	3·6	...	...	1·3	4·0	...	...	4·0	0·9	...	...	1·8	7·6	16
24	...	0·9	...	1·8	...	2·2	...	2·2	...	6·7	...	4·5	...	13·0	...	2·7	14·8	24
25	...	12·1	...	2·2	...	4·5	...	3·1	...	5·4	...	...	...	7·2	7·2	...	14·8	1
26	...	7·2	7·2	...	...	8·1	5·4	...	...	8·5	5·8	...	...	8·9	5·8	...	11·2	7
27	...	5·8	4·0	...	...	...	5·4	...	1·3	...	3·6	...	...	...	8·5	...	9·4	1
28	2·2	...	5·4	...	3·1	...	4·5	...	...	...	10·7	...	...	...	6·7	...	11·6	18
29	3·6	...	3·6	...	6·3	...	2·7	...	5·8	...	5·8	...	2·7	...	3·6	...	8·1	14
30	...	...	6·7	...	...	7·2	7·2	...	...	5·8	8·5	...	...	1·3	6·3	...	11·6	11
S+N & W+E	109·5		99·0		131·8		97·2		141·7		121·9		101·1		99·9			
S−N & W−E	−10·7		30·2		−16·0		30·2		−36·3		42·5		−33·9		37·1			

SCILLY.‡§

Height of Head above—Ground 9·8 m., M.S.L. 49·7 m.
Height of Cups above—Ground 5·8 m., M.S.L. 45·7 m.

Date.	3 h.				9 h.				15 h.				21 h.				Max. in a Gust.	Time of Gust.	
	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.			
																	V.	Hrs.	Min.
1	...	3·1	...	...	...	1·8	4·0	...	...	4·9	2·2	...	...	3·1	1·3	...	8·5	11	0
2	...	3·6	...	...	...	2·2	...	...	...	2·7	...	...	...	1·8	...	...	4·9	1	15
3	...	0·9	...	0·0	...	0·9	...	0·0	...	0·5	2·2	...	...	0·5	1·3	...	2·2	0	10
4	...	0·0	0·9	...	...	1·3	...	0·5	...	4·0	...	...	...	4·0	...	0·9	6·7	17	50
5	...	6·3	...	...	...	7·6	...	...	...	7·2	...	1·5	...	7·6	...	1·3	10·7	13	15
6	...	4·5	...	3·1	...	4·0	...	4·0	...	5·4	...	3·6	...	2·7	...	3·6	11·2	15	55
7	...	...	...	7·6	...	6·7	...	6·7	...	...	...	9·8	...	1·2	...	7·2	13·4	13	10
8	...	...	..	11·2	...	...	...	11·2	4·0	...	...	5·4	...	1·3	...	2·7	13·4	3	5
9	...	4·0	...	2·7	...	4·0	...	1·8	...	8·9	...	...	...	7·2	...	...	12·1	16	10
10	...	...	...	8·9	...	...	...	8·1	0·9	...	...	5·4	0·5	...	...	1·3	13·4	0	10
11	0·5	...	...	1·3	...	...	...	4·0	0·9	...	...	4·5	...	2·2	...	2·2	4·9	23	40
12	...	3·1	...	3·1	...	2·2	...	3·1	...	3·6	...	3·6	...	1·3	...	1·3	8·1	2	25
13	...	1·8	...	1·8	...	4·5	...	...	...	4·0	...	...	...	3·1	...	1·8	6·7	16	45
14	...	2·2	...	2·2	...	0·9	...	4·5	4·0	...	...	4·0	0·9	...	...	2·7	5·8	9	30
15	...	...	...	6·3	4·5	...	...	10·7	1·8	...	...	9·8	4·9	...	...	11·6	17·0	22	40
16	2·7	...	...	®·9	2·2	...	...	5·8	8·1	...	...	...	5·8	...	1·3	...	13·4	0	5
17	5·8	...	...	...	6·3	...	...	...	7·6	...	...	...	9·8	...	1·8	...	15·7	20	35
18	1·8	...	8·5	...	2·2	...	4·9	...	7·6	...	1·3	...	5·4	...	0·9	...	9·8	3	5
19	3·1	...	0·5	...	1·8	...	1·8	...	...	6·7	6·7	...	...	4·0	9·8	...	12·5	19	45
20	...	3·6	8·1	...	...	...	5·4	...	2·2	...	5·4	...	...	...	7·6	...	11·6	0	35
21	...	...	7·6	...	1·8	...	4·0	...	4·5	...	4·5	...	8·1	...	3·6	..	13·4	0	50
22	9·4	...	4·0	...	3·1	...	8·1	...	4·9	...	4·9	...	...	...	5·8	...	14·3	4	5
23	...	...	4·0	...	...	...	3·6	...	...	2·7	3·6	...	...	4·9	7·2	...	12·5	23	5
24	...	5·4	7·6	...	...	...	8·5	...	...	6·7	...	2·7	...	5·8	5·8	...	17·0	22	15
25	...	9·8	9·8	...	...	9·8	6·3	...	...	8·1	8·1	...	...	8·1	8·1	...	16·5	1	0
26	...	9·4	6·3	...	...	5·8	5·8	...	...	1·3	7·2	...	...	3·1	7·2	...	13·4	3	20
27	...	0·9	2·7	...	...	0·9	2·2	...	...	...	2·7	...	...	2·2	5·8	...	7·2	23	40
28	...	1·3	7·2	...	...	1·3	5·8	...	...	...	6·3	...	...	...	5·8	...	8·5	18	5
29	1·8	...	4·0	...	2·2	...	5·4	...	3·6	...	5·4	...	3·6	...	8·1	...	11·6	21	20
30	1·8	...	9·8	...	1·8	...	9·8	...	0·9	...	4·9	...	...	0·9	4·5	...	13·0	1	15
S+N & W+E	86·8		130·1		79·8		136·0		117·7		115·5		106·4		122·5				
S−N & W−E	−33·0		31·9		−28·0		15·2		−15·7		15·3		−28·4		49·3				

GREAT YARMOUTH.†§

Height of Head above—Roof 10·7 m., Ground 12·8 m., M.S.L., 15·9 m.
Height of Cups above—Roof 3·7 m., Ground 18·3 m., M.S.L., 22·3 m.

Date.	3 h.				9 h.				15 h.				21 h.				Max. in a Gust (Gorleston).	Time of Gust.	
	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.			
																	V.	Hrs.	Min.
1	...	1·3	...	6·7	...	...	...	4·5	...	3·6	...	3·6	...	3·6	...	8·1	10·7	23	20
2	...	3·6	...	8·5	...	2·7	...	6·7	...	2·7	...	3·6	...	0·5	...	1·8	9·8	3	5
3	...	3·6	...	5·4	1·3	...	...	3·1	0·5	...	...	3·1	0·9	...	...	1·3	6·7	3	0
4	...	0·0	...	0·5	...	0·5	...	1·8	...	4·0	...	1·8	...	0·9	0·0	...	7·2	16	15
5	...	0·9	0·9	...	...	2·7	1·8	...	...	5·4	0·9	...	...	1·8	0·9	...	9·4	13	20
6	...	1·8	0·9	...	...	4·5	...	...	...	6·3	...	2·7	...	7·6	...	3·1	11·6	23	10
7	...	5·4	...	3·6	...	4·0	...	1·8	...	3·6	...	2·7	...	1·3	...	0·9	10·7	0	45
8	...	0·9	...	0·9	...	2·2	...	1·3	3·6	...	...	3·6	...	3·6	0·9	...	8·5	18	45
9	...	0·5	0·5	...	...	4·0	...	1·8	...	8·1	...	...	...	6·3	2·7	...	13·4	20	0
10	...	2·2	1·3	...	...	6·3	1·3	...	...	5·4	...	...	...	1·3	0·5	...	11·6	6	30
11	0·9	...	1·8	...	...	...	1·8	...	2·7	...	...	3·6	1·3	...	...	2·7	7·2	14	10
12	...	...	...	1·8	...	0·9	...	1·8	0·9	...	...	3·6	...	...	...	3·6	8·9	22	50
13	...	3·1	...	...	...	6·7	...	...	...	5·4	0·9	...	...	2·7	...	...	13·4	14	50
14	0·9	...	4·5	...	...	4·9	4·9	..	...	5·4	5·4	...	...	3·1	3·1	...	17·9	14	10
15	...	1·3	3·1	...	...	7·2	...	...	...	6·3	...	...	...	0·9	...	...	10·3	8	5
16	...	1·3	0·5	...	...	...	...	3·6	1·3	...	...	7·6	...	...	...	9·4	11·2	23	35
17	4·0	...	...	9·8	6·3	...	4·0	...	6·3	...	...	2·7	1·8	...	1·3	...	13·9	2	25
18	3·1	...	...	...	6·7	...	...	2·7	5·8	...	5·8	...	2·7	...	2·7	...	18·8	10	50
19	2·7	...	2·7	...	4·5	...	...	...	2·7	...	2·7	...	1·3	...	0·9	...	14·8	13	50
20	1·3	...	1·3	...	...	0·9	5·4	...	...	0·9	5·4	...	0·9	...	2·2	...	12·5	12	0
21	1·3	...	2·2	...	2·7	...	2·7	...	3·1	...	1·3	...	1·8	...	1·3	...	9·4	15	55
22	4·0	...	1·8	...	8·1	...	1·8	...	6·7	...	4·5	...	7·2	...	3·1	...	17·4	11	20
23	3·6	...	0·9	...	3·6	...	...	...	3·6	...	...	1·3	4·9	...	...	3·1	12·5	14	0
24	2·2	...	...	5·8	3·6	...	3·6	...	4·9	...	7·2	...	8·1	...	1·8	...	18·3	17	45
25	8·1	...	3·1	...	4·5	...	3·1	...	3·6	...	2·7	...	3·1	...	1·8	...	18·3	3	45
26	1·8	...	3·1	...	0·9	...	5·4	...	...	0·9	1·8	...	1·3	...	3·1	...	10·3	9	40
27	...	...	3·1	...	...	0·9	3·6	...	...	0·9	...	2·7	2·7	...	0·5	...	6·3	16	50
28	0·9	...	1·3	...	1·8	...	4·0	...	2·2	...	4·9	...	...	...	3·1	...	10·7	16	10
29	1·8	...	2·7	...	3·1	...	4·5	...	4·0	...	4·0	...	3·1	...	3·1	...	12·5	16	10
30	1·3	...	2·7	...	2·2	...	4·9	...	1·8	...	4·0	...		Ca	lm		11·6	14	5
S+N & W+E	63·8		81·4		97·7		81·9		112·6		94·1		77·4		69·7				
S−N & W−E	12·0		−4·6		0·9		23·7		−5·2		8·9		12·0		1·7				

The velocities at fixed hours are means for the interval from 30 minutes before to 30 minutes after the hour. The hours are numbered 1 h. to 24 h. Time is referred to Greenwich Mean Time.

* No record.

† Robinson Cup Anemometer; Arms 0·61 m.; Diameter of Cups, 0·229 m.; Factor 2·2. ‡ Robinson Cup Anemometer; Arms 0·305 m.; Diameter of Cups 0·127 m.; Factor 2·8.

§ Dines Pressure Tube Anemometer. At Great Yarmouth, Holyhead, and Scilly the readings at fixed hours are taken from the Robinson Anemometer, the maxima quoted are the greatest winds in a gust as recorded by the Dines Pressure Tube.

METEOROLOGICAL OFFICE OBSERVATORIES—GEOPHYSICAL JOURNAL.

JULY 1911.—DAILY VALUES REFERRED TO GREENWICH MEAN TIME AND UNITS, BASED ON THE C.G.S. SYSTEM. [*Price 4d.*

First Year.—No. 7. *Meteorology, Solar Radiation, Seismology, Atmospheric Electricity, and Terrestrial Magnetism.*

1. SEISMOLOGICAL JOURNAL:—ESKDALEMUIR.—Long. 3° 12′ W. Lat. 55° 19′ N.

Date.	Microseisms. Period.	Microseisms. Amp.	Earthquakes.	Remarks.
	s	μ		
1	4-5	0·3	Iu.	1st Iu, P=22 h. 11 m. 47s., S=22 h. 21 m. 12 s., Δ=8100 kms. 1st impulse very small, but Epicentre probably to W.
2	4	0·5		
3	4-5	0·3	I.	3rd I, North component failed, time shutter stuck. Start about 19 h. 25 m. Long waves 20 h.-21 h.
4	4	0·5	IIIu.	I, North component failed, time shutter stuck. Disturbed from 22 h.-23 h.
5	5	0·6	Iu, Iu.	
6	5-6	0·9		4th IIIu, Phases very sharply marked. P=13 h. 42 m. 22s., S=13 h. 49 m. 39 s., Δ=5400 kms., α=75° 46′ E of N,
7	5-6	0·4		Epicentre 39° N, 71°·4 E.
8	4	0·1	I, I.	
9	*	0·0		5th Iu, P=2 h. 21 m. 44s., S=2 h. 28 m. 47 s., Δ=5380 kms.
10	4	0·0	I.	Iu, P=18 h. 59 m. 10 s., S=19 h. 6 m. 46 s., Δ=6000 kms., α =75° 4′ E of N, Epicentre 37° N, 75° E.
11	*	0·0	I, I, Iu.	
12	*	0·0	IIIu, Ir.	8th I, S?=1 h. 9 m. 14 s., max. at 1 h. 12 m. I, Disturbance 17 h. 28 m.-18 h. 39 m. 10th I, Long waves at 18 h. 30 m.-19 h.
13	*	0·0	I.	
14	*	0·0	I, I.	11th I, Disturbance 1 h. 32 m.-1 h. 39 m. I, Long waves 3 h. 18 m., Iu, P=21 h. 41 m. 20 s., S=21 h. 50 m. 54 s., Δ=8280 kms.
15	4	0·1	I.	
16	4	0·2		12th IIIu, P=4 h. 21 m. 41s., S=4 h. 32 m. 2 s., Δ=9210 kms., α=51° 44′ E. of N., Epicentre 27° N. 116° E.
17	4	0·2		Ir, P=13 h. 15 m. 5 s., S=13 h. 20 m. 14 s., Δ=3410 kms.
18	4-5	0·3		
19	4	0·2	Iu, I.	13th I, about 9 h. North trace missing, time shutter stuck.
20	4-5	0·4	I.	
21	4-5	0·6		14th I, I about 3 h. and 21 h. North trace missing, time shutter not acting well. 15th I, Long waves 12 h. 30 m.-12 h. 45 m.
22	5	0·8		
23	4-5	0·6	Iu.	19th Iu, P=10 h. 20 m. 36s., S=10 h. 31 m. 4 s., Δ=9280 kms. I, P=20 h. 39 m. 7 s., S?
24	4	0·1		
25	4-5	0·2	I.	20th I, Disturbed at 14 h. 11 m. and 14 h. 50 m. 23rd Iu, P=16 h. 44 m. 49 s., ?S=16 h. 57 m. 6 s., L=17 h. 15 m., Δ=11890 kms.
26	4	0·2		
27	3-4	0·2	Ir.	25th I, P=4 h. 15 m. 57 s., S? 27th Ir, ?S=1 h. 8 m. 37 s., L=1 h. 12 m. Disturbed till 1 h. 39 m.
28	4	0·1		
29	4	0·0	I.	29th Iu, P=9 h. 51 m. 12 s., S=10 h. 7 m. 42 s., Δ > 13,000 kms.
30	4	0·2		
31	4	0·3		An explanation of the notation used is given in the preface. * Imperceptible.

2. VALENCIA OBSERVATORY, CAHIRCIVEEN (KERRY).—Long. 10° 15′ W. Lat. 51° 56′ N.

Heights above Mean Sea Level:—Station, H = 9·2 m. Barometer Cistern, H_b = 13·7 m.
Heights above Ground:—Thermometers, h_t = 1·2 m. Rain-gauge, h_r = 0·6 m. Sunshine Recorder, h_s = 12·8 m. Cups of Anemometer, h_a = 13·7 m.

Day.	Pressure at Station Level. 9 h.	21 h.	Air Temperature in Degrees Absolute. 9 h.	21 h.	Max.	Min.	Humidity. Vapour Pressure. 9 h.	21 h.	Percentage. 9 h.	21 h.	Wind Direction in points (8=E, 16=S) and Velocity (*metres per second*). 9 h.		21 h.		Cloud Amount and Weather. 10 h.	22 h.	Rain 24 hours beginning 10 h.	Sunshine.	Remarks.	Magnetism. Horizontal Force.	Declination West.	Inclination.
	bar.	bar.	200+ °	200+ °	200+ °	200+ °	millibar.		%	%		m/sec.		m/sec.	Tenths of Sky covered.		mm.	hrs.		γ.	° ′	° ′
1	1·0085	1·0129	85·6	84·9	87·8	84·5	11·9	10·8	82	78	27	6·3	28	5·4	8	*5*	0·3	5·0	Fair.	...	...	...
2	·0174	·0243	85·6	85·4	88·2	83·4	10·3	10·3	71	72	28	7·2	28	4·5	5	*7*	—	11·8	Fair.	...	...	...
3	·0279	·0292	87·0	86·2	89·9	83·4	13·0	13·3	82	88	22	4·0	18	3·1	10	*8*	—	1·4	Dull.	...	...	...
4	·0305	·0310	87·8	87·6	90·6	86·3	14·6	15·0	88	90	18	3·1	20	2·7	10	*10*	—	—	Dull.	17891	20 36·7	68 10·6
5	·0304	·0279	88·5	87·4	92·4	85·9	15·3	14·3	88	88	20	2·7	17	2·2	8	*6*	—	8·1	Fair.	...	...	...
6	·0255	·0253	90·0	87·0	92·1	83·5	15·4	14·2	80	89	12	3·1	—	1·3	7	*6*	—	11·1	Fine.	...	...	...
7	·0251	·0255	87·3	88·9	94·0	84·0	14·5	15·8	89	88	—	1·3	—	0·9	1	*0*	—	12·7	Heavy mist *a.* Fine.	...	...	...
8	·0267	·0265	92·2	94·5	97·8	84·5	17·2	17·6	78	69	—	0·9	5	4·9	0	*2*	—	15·9	Fine.	...	...	...
9	·0277	·0284	94·0	91·7	97·8	87·0	18·1	18·4	74	86	—	0·9	—	0·0	0	*1*	—	15·7	Fine.	...	...	...
10	·0301	·0309	95·0	91·1	97·6	88·1	18·4	12·2	70	**59**	15	1·8	—	0·9	0∞	*2*	—	15·4	Fine, but with ∞.	...	...	...
11	·0319	·0326	92·8	89·6	97·5	84·2	14·1	15·1	61	81	9	1·8	—	0·0	0∞	*0∞*	—	15·0	Fine, but with ∞.	17902	20 37·9	68 11·5
12	·0330	·0323	91·2	91·4	98·9	**82·2**	14·3	16·1	69	77	—	0·0	—	0·0	0∞	*3∞*	—	15·2	Fine, but with ∞.	...	...	...
13	·0317	·0306	94·1	92·5	**100·2**	88·1	17·3	15·0	69	67	—	0·0	—	0·0	0∞	*2*	—	14·2	Fine, but with ∞.	...	...	...
14	·0302	·0291	91·7	91·1	93·8	86·5	16·8	15·7	79	77	32	3·6	—	0·9	0∞	*1∞*	—	15·5	Fine, but with ∞.	...	...	...
15	·0294	·0273	91·2	88·7	92·9	86·5	17·1	13·8	83	79	32	3·1	—	0·5	10	*3*	—	13·3	Fine.	...	...	...
16	·0247	·0206	89·0	88·5	90·8	84·7	15·7	14·6	87	84	31	3·1	27	4·0	8∞	*10∞*	—	5·0	Fair *a.* Dull *p.*	...	...	...
17	·0153	·0102	89·9	88·4	94·1	87·2	15·4	15·6	81	90	—	1·3	23	5·4	6∞	*10≡⁰*	0·3	6·3	●⁰ shower 21 h.	...	...	...
18	·0092	·0116	88·7	87·8	91·2	87·1	13·9	13·6	79	82	23	6·7	22	3·1	8	*10*	—	2·3	Fair, but dull.	...	...	...
19	·0125	·0132	90·1	90·2	93·0	86·3	16·8	18·2	87	93	16	2·7	14	4·0	10∞	*10≡⁰*	**47·2**	0·8	Hazy and misty. ● showers *p.*	...	...	...
20	·0105	·0119	89·4	90·4	91·3	87·8	18·1	19·1	98	97	13	6·3	14	8·1	10≡⁰●	*10≡⁰*	4·3	—	●² 3 h.-9 h. ● showers *p.*	...	...	...
21	·0128	·0190	91·3	88·1	91·4	86·7	19·8	15·6	96	92	15	8·1	—	1·3	10≡⁰	*7*	—	—	● showers *a.*	...	...	...
22	·0231	·0254	89·6	87·5	91·2	86·0	13·4	13·3	72	81	20	4·5	26	1·8	3	*7*	—	10·3	Fair.	...	...	...
23	·0252	·0235	88·2	86·9	91·5	84·6	13·4	13·8	78	88	28	1·8	—	0·0	3	*1*	1·0	14·3	Fine.	...	...	...
24	·0171	·0119	89·6	89·0	92·4	84·6	17·9	16·9	96	95	16	3·1	18	3·1	10≡⁰	*10≡⁰*	2·5	2·7	● showers *a.* and *p.*	...	...	...
25	·0109	·0070	87·9	86·9	91·0	86·1	13·0	14·7	77	93	—	0·5	6	1·8	7	*4*	8·1	3·8	●⁰ showers. ↯ 19 h.-20 h.	...	...	...
26	·0058	·0004	90·1	89·6	92·1	85·9	16·3	18·4	84	99	10	1·8	14	4·9	10	*10≡⁰●*	13·2	—	●² showers.	...	...	...
27	·0050	·0061	91·0	90·2	92·6	88·5	18·7	17·6	91	91	14	3·1	14	5·4	7≡⁰	*10*	0·5	2·2	Dull and misty.	...	...	...
28	·0130	·0153	87·5	87·9	90·2	86·8	13·7	12·6	82	74	27	6·3	2	4·0	8	*7*	2·8	0·4	Fair.	...	...	...
29	·0109	·0026	90·7	92·4	94·9	86·0	16·7	17·0	83	76	—	0·9	6	4·5	7	*10*	5·8	3·7	Visibility *a.* T●² showers.	...	...	...
30	·0009	·0055	89·0	89·1	91·1	88·2	17·1	16·5	95	92	18	4·5	14	2·7	10≡⁰●	5	5·1	1·3	Heavy mist. ≺ *n.* ● from 23 h.	...	...	...
31	1·0045	1·0010	90·4	89·1	93·5	87·4	16·9	17·2	86	96	12	5·4	12	7·2	7	10≡⁰●	17·0	6·4	● till 1 h. Visibility. ●² 17 h.-19 h.	...	...	...
Means	1·0196	1·0193	89·9	89·0	93·0	85·9	15·6	15·2	82	84		3·2		2·9	5·9	6·0	108·1	230	Monthly **Totals** or **Means**.	17897	20 37·3	68 11·1
Normal 35 years	1·0143	1·0147	88·3	87·4	90·8	85·2	14·5	14·2	83	86		4·7 (25 years)		4·0 (25 years)	—	—	101·3	154 (25yrs)	**Normals**, 35 years.			
								(20 years)														

Wt. 41467/309—375—1/12. N. & Co., Ltd. Gp. XV.

Note.—The cloud amounts in italic type at Valencia were taken at 21 h.

3. Kew Observatory, Surrey.—Long. 0° 19′ W. Lat. 51° 28′ N.

Heights above Mean Sea Level :—Station, H = 5·5 m. Barometer, H_b = 10·4 m.
Heights above Ground :—Thermometers, h_t = 3·0 m. Rain-gauge, h_r = 0·5 m. Sunshine Recorder, h_s = 14·3 m. Cups of Anemometer, h_a = 21·3 m.

Day.	Pressure at Station Level.		Air Temperature in Degrees Absolute.				Humidity. Vapour Pressure.		Humidity. Percentage.		Wind Direction in Points (8 = E, 16 = S) and Velocity (*metres per second*). 9 h.		21 h.		Cloud Amount and Weather.		Rain 24 hours beginning 10 h.	Sunshine.	Solar Radiation, Watts per cm².	Min. Temp. on Grass.	Earth Temperature at 10 h.		Remarks.
	9 h.	21 h.	9 h.	21 h.	Max.	Min.	9 h.	21 h.	9 h.	21 h.					10 h.	22 h.					0·3 m.	1·2 m.	
	bar.	bar.	200+ °	200+ °	200+ °	200+ °	millibar.		%	%	m/sec.		m/sec.		Tenths of Sky covered.		mm.	hrs.		200+ °	200+ °	200+ °	
1	1·0045	1·0075	88·7	88·2	91·9	86·1	13·4	12·7	77	74	20	4·0	24	1·8	10	9	—	3·9	—	82·2	88·5	86·3	Fair, with bright intervals.
2	·0111	·0188	87·6	87·0	91·2	83·7	9·5	10·3	57	66	28	4·5	23	1·8	6	2	—	11·3	—	82·2	88·6	86·3	Fine.
3	·0254	·0294	87·1	87·7	92·5	**82·4**	9·3	11·6	59	69	29	4·5	—	0·5	4	7	—	11·3	·082	**75·6**	88·6	86·3	Fine throughout. ⊕ 17 h.
4	·0314	·0299	89·3	91·1	94·2	83·5	11·7	13·6	64	66	21	3·1	—	1·3	8	**2**	—	5·9	—	76·7	89·1	86·4	Fine *a.*, fair later.
5	·0301	·0271	92·3	93·5	99·5	87·6	15·8	17·1	71	71	—	0·9	19	1·8	9	0	—	10·2	·082	83·0	89·9	86·4	Fine.
6	·0258	·0229	94·2	95·1	101·4	87·2	14·0	18·4	57	69	—	0·9	15	1·8	0	2≡0	—	14·0	·070	82·5	91·1	86·5	Fine all day.
7	·0240	·0247	95·2	93·8	101·3	88·5	17·4	14·6	65	60	3	2·2	8	3·1	0	0	—	11·4	·059	84·1	91·9	86·7	Fine throughout.
8	·0254	·0261	95·8	93·9	102·5	88·1	16·0	14·4	58	58	—	0·5	7	8·1	0	0	—	12·8	·064	83·2	92·1	86·8	Fine all day.
9	·0304	·0318	90·1	89·2	95·2	85·8	13·2	12·4	68	68	3	4·5	8	3·6	7	9	—	10·8	—	85·0	92·2	87·2	Fine generally.
10	·0339	·0325	87·5	89·3	94·8	83·1	10·4	14·0	64	76	2	5·8	8	2·7	8	0	—	9·2	·065	79·9	91·0	87·3	Very cloudy till 9 h. 30 m.
11	·0335	·0321	90·5	92·4	98·7	84·1	10·5	11·6	53	51	2	3·6	1	4·0	0	0	—	13·8	—	81·7	90·9	87·4	Fine throughout.
12	·0315	·0302	93·8	92·4	99·3	86·1	13·7	10·4	56	47	32	4·5	1	3·6	0	0	—	15·2	·078	82·0	91·4	87·4	Fine throughout.
13	·0292	·0280	94·2	92·0	99·0	85·8	11·0	12·2	**44**	56	3	5·4	2	4·0	1	1	—	15·4	·078	81·1	91·4	87·4	Fine throughout.
14	·0278	·0245	93·5	93·2	100·5	86·3	11·6	14·1	49	59	2	4·0	10	1·8	4	0≡0	—	14·1	·076	81·8	91·8	87·5	Fine throughout.
15	·0230	·0233	92·0	88·6	92·4	84·6	14·5	12·0	67	68	32	5·8	1	1·8	10	0	—	4·6	—	81·4	92·0	87·6	Very fine till 9 h. 30 m. then,
16	·0181	·0153	91·0	90·1	97·2	83·2	12·6	12·3	62	64	27	4·0	30	3·1	1	0	—	13·9	—	77·1	90·7	87·8	Fine throughout. [dull.
17	·0126	·0073	90·8	92·3	97·5	85·9	12·9	11·9	64	53	25	2·2	23	4·0	10	3	—	7·0	—	79·6	90·8	87·9	Cloudy till 10 h., then fine.
18	·0065	·0106	92·2	90·7	95·5	87·6	14·4	11·6	66	57	22	4·5	22	3·1	6	1	—	10·2	·088	86·3	91·2	88·0	Cloudy early *a.*, then fine.
19	·0157	·0201	91·4	92·6	96·4	85·7	13·6	16·0	64	71	23	3·6	20	3·1	9	2	—	10·0	·086	81·5	91·0	88·0	Fine throughout.
20	·0226	·0227	94·8	94·2	100·7	87·6	15·4	16·1	60	65	17	4·5	18	2·2	4	1	—	7·1	—	82·5	91·4	88·0	Fine generally. ⊕ 16 h.
21	·0233	·0230	97·1	96·1	103·8	87·4	17·2	16·5	57	59	18	3·1	19	1·8	1	0	—	14·1	·084	82·6	92·0	88·0	Very fine and hot.
22	·0226	·0224	97·6	96·8	**104·3**	87·8	16·1	19·1	52	65	20	1·8	29	1·8	2	1	—	14·1	—	82·0	92·6	88·0	Very fine and hot.
23	·0224	·0215	93·7	91·8	98·8	89·5	13·4	13·4	54	63	2	3·6	9	4·0	6	9	—	8·4	—	86·7	93·1	88·1	Fine greater part of day.
24	·0203	·0152	93·7	92·4	100·7	89·0	12·8	16·4	52	73	9	4·5	9	3·1	0	10	—	9·2	·061	86·0	92·8	88·1	Fine all day.
25	·0122	·0109	93·8	94·6	101·3	90·1	17·6	12·2	72	48	22	1·8	18	2·2	2	1	**14·2**	11·2	·061	86·0	93·1	88·2	Fine throughout.
26	·0105	·0130	89·5	92·4	98·6	88·5	16·8	16·8	91	75	—	0·9	18	2·2	10	3		1·5	7·0	—	84·8	88·4	☈● 5 h. 40 m.–7 h. 20 m. ● 10 h. 30 m.
27	·0145	·0152	95·4	93·6	101·2	87·4	17·6	17·6	65	74	14	4·5	—	0·9	4	1		1·8	14·5	·087	84·0	92·6	88·5	Fine throughout. [–11 h. 30 m.
28	·0157	·0161	95·8	95·9	102·9	89·6	19·8	19·7	72	72	—	0·9	7	3·6	0	7		0·8	9·5	·058	86·0	93·3	88·5	Fine most of day ●21 h. 30 m.
29	·0146	·0097	96·1	92·8	104·0	90·9	18·6	19·8	67	86	6	4·5	27	2·2	?5≡0	10		2·8	9·1	—	87·6	93·9	88·5	⊕ *p.* ☈● 19 h. 30 m.–20. h. 30 m.
30	·0131	·0162	93·9	91·3	98·0	89·3	17·7	15·2	73	73	18	6·7	—	1·3	4	1		—	12·2	—	86·0	93·6	88·6	Fine throughout. ⊕ 17 h.
31	1·0155	1·0157	94·9	92·6	100·3	86·4	16·9	15·6	64	69	18	3·1	—	1·3	6	0		—	12·3	—	81·7	93·0	88·7	Fine all day.
Means	1·0209	1·0208	92·7	92·2	98·6	86·7	14·4	14·5	63	65		3·5		2·6	4·4	2·6	21·1	334	—	82·7	91·5	87·6	Monthly **Totals** or **Means**.
Normal 35 years	1·0145	1·0144	90·2	89·6	94·8	85·4	13·7	14·1	70	75	—	3·4	—	2·4	—	—	62·0	208	—	—	—	—	**Normals**, 35 years.
								20 years			25 years		25 years					25 yrs					

4. Eskdalemuir Observatory, Dumfriesshire.—Long. 3° 12′ W. Lat. 55° 19′ N.

Heights above Mean Sea Level :—Station, H = 243·2 m. Barometer, H_b = 237·1 m.
Heights above Ground :—Thermometers, h_t = 0·8 m. Rain-gauge, h_r = 0·3 m. Sunshine Recorder, h_s = 1·5 m. Vane of Anemometer, h_a = 15·2 m.

											9 h.		21 h.		9 h.						
1	0·9739	0·9763	83·9	81·1	87·3	79·5	10·1	8·8	77	82	22	4·5	28	5·4	9	3	1·3	8·3	—	—	—	—	⊛ showers till evening.
2	·9812	·9881	83·0	80·9	87·2	79·3	8·8	8·2	73	78	28	4·5	28	6·7	9	5	1·0	9·0	—	—	—	—	●² showers in afternoon.
3	·9961	0·9988	84·8	82·8	87·6	**76·8**	9·6	10·8	70	89	24	4·9	20	5·4	7	10	1·3	7·4	—	—	—	—	⊕ in afternoon.
4	0·9977	1·0002	85·5	85·6	88·1	82·5	14·1	14·5	97	100	20	8·9	20	3·6	10	10≡0	0·3	0·1	—	—	—	—	Generally dull and misty.
5	1·0001	0·9992	87·5	86·3	89·2	85·6	16·2	15·1	99	100	20	7·2	20	4·0	10	10≡0	—	0·3	—	—	—	—	High mist throughout.
6	0·9963	·9960	89·0	87·6	89·2	84·8	13·4	15·2	75	92	20	7·6	20	2·7	6	10	0·3	3·2	—	—	—	—	Very fine *a.*; then overcast.
7	·9969	0·9964	89·1	88·7	90·6	86·4	16·5	17·4	91	99	20	4·5	20	2·2	10●0	9	—	—	—	—	—	—	Overcast till 19 h.
8	0·9974	1·0021	89·8	84·5	92·8	83·7	15·9	11·7	84	87	4	4·9	4	3·6	8	10	—	5·1	—	—	—	—	Hazy.
9	1·0051	·0070	87·5	83·6	91·5	80·1	10·1	11·1	61	84	6	4·5	—	1·3	3	1	—	15·4	—	—	—	—	Very fine throughout.
10	·0085	·0073	89·5	88·0	96·1	76·9	13·7	14·9	74	89	—	0·9	32	2·7	1	2	—	16·0	·096	—	—	—	Very fine throughout.
11	·0081	·0073	94·1	87·4	97·7	79·6	13·3	14·4	53	88	—	1·3	32	1·8	1	4	—	15·3	·091	—	—	—	Very fine throughout.
12	·0070	·0054	96·0	91·3	**100·8**	81·2	11·9	15·3	**42**	74	—	0·0	—	0·0	1	8	—	12·8	·089	—	—	—	Very fine throughout.
13	·0054	1·0039	92·8	89·1	97·8	83·7	10·8	15·2	47	84	4	6·7	32	3·1	0	2∞	—	15·0	·088	—	—	—	Very fine throughout. ∞0
14	·0014	0·9967	93·5	90·1	98·1	82·2	16·9	16·1	70	83	20	2·7	28	10·3	0∞	4	—	14·6	—	—	—	—	Fine till evening, then cloudy.
15	1·0000	·9949	86·6	86·3	92·9	83·0	12·1	9·5	77	62	4	4·0	16	2·7	8	8	—	9·9	—	—	—	—	Dull to fair.
16	0·9887	·9867	86·3	85·0	91·4	84·3	12·6	11·5	83	82	26	2·2	28	5·8	9	10	3·8	7·7	—	—	—	—	Generally dull.
17	·9804	·9748	85·4	84·7	86·8	84·0	13·7	12·6	96	92	20	6·7	24	6·3	10●0	8	3·3	—	—	—	—	—	Overcast with ● showers till
18	·9741	·9786	84·7	83·7	89·2	81·3	11·0	9·4	81	74	24	6·7	24	3·6	9	4	0·3	4·3	—	—	—	—	●0 showers in afternoon. [20 h.
19	·9833	·9879	85·3	84·4	88·2	81·4	10·4	11·8	73	89	24	7·6	—	0·5	9	8	0·8	6·2	—	—	—	—	●0 about noon.
20	·9906	·9898	87·7	86·9	88·7	82·5	15·0	15·0	90	95	20	6·3	16	3·6	10	10●	17·8	—	—	—	—	—	Overcast. ● after 14 h.
21	·9900	·9900	87·9	87·3	88·7	86·4	16·7	16·2	99	100	16	10·7	16	8·9	10●0≡0	10●0≡0	5·1	—	—	—	—	—	Continuous ●. Misty.
22	·9906	·9957	87·9	83·6	89·7	80·8	11·2	10·7	67	84	20	13·0	24	4·9	7	2	—	7·2	—	—	—	—	Fine generally.
23	·9964	·9944	84·6	83·4	89·8	80·2	10·3	11·2	76	89	20	3·1	16	1·8	10	4	—	3·9	—	—	—	—	Fine after noon.
24	·9911	·9855	85·8	86·3	90·3	79·1	12·0	11·8	82	78	16	5·8	—	0·5	10	9	0·5	1·1	—	—	—	—	Dull to fair.
25	·9817	·9830	87·2	84·8	90·2	81·1	16·0	12·4	100	91	18	6·3	—	0·9	9≡0	9	—	2·8	—	—	—	—	Cloudy. ●0 showers noon.
26	·9829	·9824	86·7	87·4	91·7	79·2	13·9	15·0	89	91	—	1·3	—	0·5	9	7	0·8	4·6	—	—	—	—	Variable. Dull in evening.
27	·9820	·9853	87·6	87·1	89·3	83·9	16·2	15·9	100	100	16	6·7	—	0·5	10●0	10●0	**19·8**	—	—	—	—	—	● after 8 h. Dull.
28	·9865	·9913	88·9	86·8	92·6	85·1	17·9	15·5	100	99	16	9·8	—	0·0	10●	3	1·5	6·3	—	—	—	—	Dull till noon, then fine.
29	·9927	·9855	90·2	88·1	95·6	85·4	17·7	17·0	91	100	4	4·5	32	6·3	9≡0	9≡0	0·8	7·0	—	—	—	—	Fine to dull. ●0 showers in
30	·9809	·9854	93·5	89·0	94·2	87·6	18·9	16·7	80	93	14	6·7	20	2·2	8	3	—	8·0	—	—	—	—	Hazy. ● 22 h. [evening.
31	0·9876	0·9868	91·3	89·1	94·2	86·3	15·2	17·0	74	94	12	6·7	—	0·0	8	8	—	7·4	—	—	—	—	Fine generally.
Means	0·9921	0·9924	88·2	86·2	91·5	82·4	13·6	13·5	80	89		5·5		3·3	7·4	6·8	58·7	199	—	—	—	—	Monthly **Totals** or **Means**.
Normal 35 years	—	—	—	—	—	—	—	—	—	—	—		—		—	—	—	—	—	—	—	—	

The solar radiation is the mean of the readings within the nominal hour of observation (11 h. 30 m.–12 h. 30 m.) unless some other hour is specified.

5. KEW OBSERVATORY.

Day.	Potential Gradient, Volts. per metre. Factor 1·77.				Number of Ions per cc.		Velocities of Ions for 1 volt. per centimetre.		Conductivity $\times 10^{25}$.	Air-Earth Current $\times 10^{16}$.		Electric Character of Day.	Magnetic Character of Day.	Horizontal Force.					West Declination.				
	3 h.	9 h.	15 h.	21 h.	+.	−.	+.	−.		c_1.	c_2.			Maximum. 18000 γ +.		Minimum. 18000 γ +.		Range.	Maximum. 15° +.		Minimum. 15° +.		Range.
	v/m.	v/m.	v/m.	v/m.	n/cc.	n/cc.	cm/sec.	cm/sec.	E.-m.U.	Amp/cm².				γ	h m	γ	h m	γ	′	h m	′	h m	′
1	80	95	140	175	—	—	—	—	—	—	—	0	2	**601**	**15 8**	457	15 35	**144**	65·9	15 23	48·2	2 13	17·7
2	105	65	95	180	—	—	—	—	—	—	—	1	1	532	23 2	470	8 21	62	58·9	14 1	49·7	6 55	9·2
3	130	195	135	115	—	—	—	—	—	—	—	1	1	539	18 22	493	2 19	46	59·8	15 21	51·0	1 56	8·8
4	95	165	130	185	—	—	—	—	—	—	—	0	1	540	21 58	484	10 40	56	59·8	13 13	50·7	7 10	9·1
5	75	175	115	185	730	520	0·15	1·45	0·95	1·2	—	0	0	539	18 52	489	7 21	50	59·9	14 40	51·7	7 0	**8·2**
6	80	160	115	195	—	—	—	—	—	—	0·4	0	1	544	18 20	484	15 50	60	61·0	13 43	51·1	7 49	9·9
7	105	275	320	320	—	—	—	—	—	—	—	0	1	546	16 53	460	9 26	86	64·2	14 9	49·0	7 13	15·2
8	120	165	115	355	—	—	—	—	—	—	—	0	1	547	16 37	**447**	**9 18**	100	63·2	12 58	49·7	6 14	13·5
9	185	260	210	215	—	—	—	—	—	—	—	0	0	522	18 57	470	10 51	52	62·0	12 34	50·3	6 56	11·7
10	225	445	*	290	—	—	—	—	—	—	—	0	1	554	22 55	473	10 12	81	61·4	13 2	46·0	**22 50**	15·4
11	195	530	290	355	610	970	0·55	0·25	0·65	2·1	—	0	0	526	19 33	483	11 57	43	59·1	13 5	48·3	3 1	10·8
12	230	385	285	300	1340	1330	0·75	0·30	1·55	4·9	—	0	0	523	0 23	474	8 8	49	59·3	13 50	47·6	7 43	11·7
13	275	450	210	355	1450	1170	—	—	—	—	1·2	0	0	525	0 22	480	10 12	45	60·0	14 26	46·7	8 40	13·3
14	260	500	175	275	1200	1130	—	—	—	—	—	0	0	529	17 20	488	10 29	41	61·0	13 42	49·2	8 9	11·8
15	70	210	240	290	—	—	—	—	—	—	—	1	0	526	20 25	479	10 23	47	60·2	13 50	47·6	7 26	12·6
16	80	105	85	140	—	—	—	—	—	—	—	0	0	536	16 43	492	10 34	44	59·9	13 49	48·0	7 0	11·9
17	110	115	80	130	480	580	—	—	—	—	—	0	1	551	18 21	494	12 28	57	59·0	13 29	**42·7**	**22 40**	16·3
18	95	115	15	115	—	—	—	—	—	—	—	1	1	542	19 53	482	11 5	60	61·2	14 3	49·0	22 15	12·2
19	100	145	65	125	—	—	—	—	—	—	—	1	1	532	21 8	474	9 25	58	61·9	2 20	49·3	3 10	12·6
20	105	195	65	195	—	—	—	—	—	—	—	0	0	532	18 43	485	7 38	47	59·0	13 30	50·2	2 22	8·8
21	130	265	80	330	—	—	—	—	—	—	0·6	0	0	541	21 28	486	10 10	55	58·5	13 35	50·0	7 43	8·5
22	135	190	65	130	—	—	—	—	—	—	—	0	0	531	16 40	483	9 31	48	59·1	14 52	49·4	7 45	9·7
23	115	260	165	180	—	—	—	—	—	—	—	0	0	521	22 15	492	7 53	**29**	58·8	14 0	49·9	5 25	8·9
24	105	305	200	$x\pm$	640	320	—	—	—	—	—	1	1	538	14 31	498	13 5	40	58·3	12 40	48·0	8 15	10·3
25	105	130	80	160	—	—	—	—	—	—	0·4	0	0	523	20 57	493	9 31	30	61·5	12 0	50·9	7 23	10·6
26	130	$x\pm$	105	290	—	—	—	—	—	—	—	2	0	521	21 23	492	8 50	**29**	59·7	13 39	50·1	8 23	9·6
27	155	260	165	130	1990	1250	—	—	—	—	—	0	0	553	23 59	493	9 48	60	61·0	12 30	49·9	7 47	11·1
28	$x\pm$	320	130	405	—	—	—	—	—	—	—	1	2	592	18 13	458	11 0	134	**68·2**	**13 46**	42·8	19 54	**25·4**
29	140	355	385	$x\pm$	—	—	—	—	—	—	—	2	1	532	19 19	464	10 53	68	61·9	12 48	45·9	0 33	16·0
30	80	160	145	175	—	—	—	—	—	—	—	0	1	539	18 58	460	9 20	79	60·9	12 42	50·0	1 28	10·9
31	240	320	130	320	—	—	—	—	—	—	0·9	1	0	519	19 27	456	8 58	63	58·2	13 49	50·0	7 58	**8·2**
M.	133	227	143	217	—	—	—	—	—	—	—	—	—	539	—	478	—	60	60·7	—	48·8	—	11·9

6. ESKDALEMUIR OBSERVATORY.

Day.	Potential Gradient, Volts per metre. Factor 5·2.				Number of Ions per cc.		Velocities of Ions for 1 volt. per centimetre.		Conductivity $\times 10^{25}$.	Air-Earth Current $\times 10^{16}$.		Electric Character of Day.	Magnetic Character of Day.	North Component.§			West Component.§			Vertical Component.§			
	3 h.	9 h.	15 h.	21 h.	+.	−.	+.	−.		c_1.	c_2.			Maximum. 15000 γ +.		Minimum. 15000 γ +.			Maximum. 5000 γ +.		Minimum. 5000 γ +.		Maximum. 45000 γ +.		Minimum. 45000 γ +.	
	v/m.	v/m.	v/m.	v/m.	n/cc.	n/cc.	cm/sec.	cm/sec.	E.-m.U.	Amp/cm².		*		h m	γ	γ	h m	h m	γ	γ	h m	h m	γ	γ	h m	h m
1	− 26	− 59	156	195	—	—	—	—	—			1 *b*	2	15 7	1125	929	15 28	**15 7**	**370**	229	21 29	16 0	371	306	12 0
2	156	78	*x*	202	—	—	—	—	—			1 *b*	2	19 6	1044	973	1 59	15 23	295	235	6 58	19 18	348	297	2 15
3	137	150	137	195	930	660	1·39	0·96	2·12			1 *a*	1	18 13	1062	990	12 35	17 34	294	238	1 58	18 8	358	326	11 28
4	111	241	26	234	—	—	—	—	—			1 *a*	1	21 53	1045	981	{ 9 33 / 10 39 }	13 22	286	228	7 53	18 25	354	316	11 30
5	345	150	98	390	—	—	—	—	—			1 *a*	1	18 45	1051	996	6 42	13 53	287	236	6 57	{ 18 0 / 20 0 }	347	326	11 10
6	130	247	169	371	420	390	0·70	1·65	1·03			0 *a*	1	18 17	1050	982	15 47	13 43	297	237	9 32	15 52	353	331	11 30
7	150	189	111	312	—	—	—	—	—			1 *a*	1	16 53	1053	950	9 23	16 48	327	218	7 10	18 10	358	320	4 0
8	59	137	202	46	—	—	—	—	—			1 *a*	2	16 32	1074	938	9 8	15 50	316	225	5 37	17 3	360	**268**	**2 50**
9	72	111	169	221	—	—	—	—	—			1 *a*	1	18 14	1037	964	10 50	14 17	293	232	7 1	18 0	352	331	0 0
10	182	98	137	319	900	0	0·00	1·87	0·00			0 *a*	1	22 53	1086	969	10 58	13 47	306	224	7 30	17 42	349	325	23 20
11	299	111	143	247	—	—	—	—	—			0 *a*	1	17 2	1037	974	11 56	14 23	288	238	3 2	17 43	362	327	0 0
12	117	78	111	111	780	570	0·11	0·31	0·11			0 *a*	0	19 57	1034	974	8 6	14 38	299	224	7 40	20 0	358	336	{ 0 40 / 12 30 }
13	111	65	202	169	420	210	1·24	0·77	0·75			0 *a*	0	20 38	1030	980	11 53	15 19	300	230	8 33	19 0	357	334	13 40
14	163	156	267	221	330	90	1·91	1·97	0·89			1 *a*	0	17 43	1033	987	12 18	13 40	307	242	8 30	18 30	358	336	13 30
15	78	78	150	293	—	—	—	—	—			1 *a*	0	19 53	1034	972	11 38	14 20	296	234	7 51	18 0	358	344	11 30
16	208	163	117	169	—	—	—	—	—			0 *a*	0	16 42	1042	984	11 3	14 35	300	238	5 30	17 45	363	344	11 30
17	− 33	124	98	169	—	—	—	—	—			1 *b*	1	18 15	1063	974	11 51	16 3	305	**199**	**22 40**	20 0	376	334	23 53
18	39	85	*x*	169	—	—	—	—	—			1 *b*	2	19 51	1068	961	11 7	14 40	295	233	22 14	19 33	371	335	0 0
19	78	104	130	202	—	—	—	—	—			0 *a*	2	21 3	1052	964	9 26	2 18	320	231	3 20	18 12	370	287	2 56
20	72	52	78	20	—	—	—	—	—			1 *b*	1	17 41	1044	968	7 37	14 0	288	243	6 47	18 10	366	341	0 0
21	150	488	176	*x*	—	—	—	—	—			1 *b*	1	21 28	1044	981	11 1	13 23	289	243	5 56	19 24	358	345	13 40
22	371	124	111	156	—	—	—	—	—			1 *a*	1	16 33	1036	974	9 30	14 53	294	242	7 33	18 40	367	345	4 0
23	202	111	117	442	—	—	—	—	—			0 *a*	0	3 9	1025	985	9 30	13 10	286	245	**4 42**	20 53	359	341	10 30
24	247	143	156	*	—	—	—	—	—			1 *a*	1	16 44	1051	974	13 3	14 29	300	236	8 0	17 30	366	333	12 37
25	*	*	163	215	—	—	—	—	—			1 *a*	0	20 56	1026	975	9 32	12 26	302	250	7 18	{ 17 30 / 18 30 }	365	335	11 30
26	111	130	137	137	—	—	—	—	—			0 *a*	0	16 58	1027	982	10 11	13 36	300	243	8 25	17 20	371	346	11 30
27	130	319	195	150	—	—	—	—	—			1 *a*	1	24 0	1062	982	10 6	12 32	302	249	6 31	19 35	371	347	11 50
28	221	163	169	169	930	900?	1·15	0·59	1·76			1 *b*	2	**18 11**	**1153**	**916**	**11 2**	13 45	339	205	20 56	**16 30**	**395**	299	24 0
29	33	156	195	572	—	—	—	—	—			1 *b*	2	18 45	1043	947	13 0	**15 35**	310	208	0 33	16 40	377	295	0 30
30	*x*	150	163	202	—	—	—	—	—			1 *b*	2	18 51	1061	960	8 57	12 40	298	234	1 28	16 10	384	336	1 33
31	137	260	117	124	210	180	0·68	0·00	0·16			0 *a*	1	{ 19 23 / 23 16 }	1026	956	9 50	15 32	288	242	8 47	18 0	376	356	12 30
M.	138	138	142	225	—	—	—	—	—			—	—	—	1052	969	—	—	302	233	—	—	364	327	—

x Indeterminate. * No record. An explanation of the Headings of the columns is given in the Preface.

§ The Magnetic values at Eskdalemuir Observatory are at present only provisional, and subject to correction at the end of the year; the zero of the recorder of the Vertical Component set up in December 1909 is still liable to variation.

7. Tables of Wind Components in metres per second at fixed hours.

Together with the mean velocity (horizontal movement) in metres per second for the hour with the maximum hourly run for each day, or the greatest velocity attained in a gust and the time of its occurrence.

HOLYHEAD.†§

Height of Head above—Roof 8·8 m., Ground 13·7 m., M.S.L. 19·2 m.
Height of Cups above—Roof 4·6 m., Ground 7·6 m., M.S.L. 15·2 m.

Date.	3 h.				9 h.				15 h.				21 h.				Max. in a Gust.	Time of Gust.	
	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.			
																	V.	Hrs.	Min.
1	...	1·3	6·7	...	...	1·3	7·6	...	3·6	...	5·4	...	...	2·2	4·9	...	12·1	23	35
2	...	5·4	7·6	...	...	1·8	9·8	...	...	...	5·4	...	...	2·2	3·1	...	13·4	0	45
3	...	1·3	2·7	...	...	1·8	2·7	...	4·0	...	1·8	...	5·4	...	2·2	...	10·3	0	20
4	3·6	...	2·7	...	4·5	...	3·1	...	5·8	...	4·0	...	3·6	...	2·7	...	11·2	14	25
5	0·9	...	1·8	...	...	...	0·9	...	3·6	...	2·7	...	4·0	...	1·8	...	8·5	22	5
6	5·8	...	1·3	...	3·1	...	1·3	...	4·0	...	4·0	...	1·8	...	0·9	...	9·8	11	15
7	1·8	...	0·9	...	...	0·9	1·8	...	...	1·3	1·3	...	...	0·5	0·5	...	4·0	11	55
8	...	0·5	0·5	...	...	2·2	2·2	...	...	1·8	1·8	...	...	1·8	...	0·5	5·8	19	30
9	...	1·8	...	0·9	...	3·1	...	3·1	...	3·1	...	7·6	...	3·6	...	8·1	11·6	21	30
10	...	...	...	2·2	...	0·5	...	2·7	...	...	5·4	...	...	3·6	...	2·7	8·9	7	30
11	...	...	...	3·1	...	...	...	0·9	...	6·3	...	1·3	...	0·9	0·5	...	8·9	14	20
12	...	0·9	0·9	...	...	1·8	1·3	...	...	3·1	3·1	...	...	0·9	0·9	...	8·1	15	15
13	...	0·9	0·9	...	...	2·2	2·2	...	...	1·8	1·8	...	...	1·3	0·9	...	6·7	11	20
14	...	1·8	1·8	...	...	2·2	2·2	...	...	4·0	1·8	...	...	6·7	...	1·3	12·5	20	40
15	...	4·9	...	...	...	6·7	1·3	...	...	5·4	...	...	...	2·7	0·5	...	13·9	7	50
16	0·9	...	1·8	...	...	3·1	8·1	...	...	2·7	3·6	...	...	2·2	5·4	...	11·2	5	20
17	...	1·8	9·4	...	1·3	...	5·8	...	7·6	...	3·1	...	...	1·8	4·5	...	13·4	14	15
18	...	...	6·7	...	3·1	...	8·1	...	5·8	...	4·0	...	1·8	...	8·1	...	14·8	21	35
19	...	...	5·8	...	2·7	...	6·3	...	8·1	...	3·1	...	4·9	...	4·9	...	13·9	14	30
20	6·7	...	1·3	...	4·9	...	2·2	...	7·2	...	1·3	...	6·3	...	4·0	...	13·9	17	20
21	5·8	...	1·3	...	7·6	...	...	...	9·4	...	1·8	...	8·1	...	3·6	...	16·5	14	5
22	4·9	...	4·9	...	2·2	...	4·9	...	4·9	...	3·1	...	0·5	...	1·3	...	12·1	0	30
23	0·9	...	1·3	...	...	...	...	3·1	...	2·2	0·9	...	...	1·3	0·5	...	4·9	8	35
24	1·8	...	...	...	5·4	...	...	...	4·0	...	4·0	...	6·3	...	1·3	...	10·7	18	5
25	7·6	...	3·1	...	6·3	...	2·7	...	4·0	...	4·0	...	2·7	...	...	...	13·4	15	5
26	3·1	...	...	...	5·4	...	0·9	...	4·9	...	2·2	...	5·4	...	...	...	10·7	21	55
27	8·1	...	...	...	8·1	...	...	...	6·3	...	...	...	5·4	...	...	...	21·0	11	15
28	6·3	...	...	1·3	6·3	...	1·3	...	3·1	...	3·1	...	1·8	...	...	...	12·1	5	45
29	...	2·7	...	3·6	...	1·8	...	...	...	1·8	...	8·5	1·8	...	...	...	17·0	17	40
30	...	...	...	7·6	8·1	...	...	...	8·1	...	1·8	...	5·8	...	...	...	15·2	13	50
31	4·9	...	...	2·2	7·6	...	...	5·4	6·7	...	1·3	...	3·1	...	...	0·5	16·5	11	20
S+N & W+E	86·4		84·3		106·0		91·9		134·6		93·2		100·4		65·6				
S−N & W−E	39·8		42·5		47·2		61·5		67·6		58·4		37·0		39·4				

DEERNESS.†

Height of Cups above—Roof 1·5 m., Ground 4·9 m., M.S.L. 57·3 m.

Date.	3 h.				9 h.				15 h.				21 h.				Vel. in Max. Hourly Run.	Time of Max.
	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.		
																	V.	Hour.
1	...	0·5	2·2	...	0·5	...	3·1	...	...	4·0	1·8	...	...	2·7	1·8	...	5·8	16
2	...	3·6	2·7	...	...	6·7	4·5	...	...	5·8	5·8	...	...	4·0	4·0	...	10·3	14
3	...	4·5	3·1	...	...	2·7	1·3	...	...	0·9	4·5	...	3·6	...	...	1·3	5·4	2, 3
4	4·5	...	0·9	...	4·5	...	1·8	...	...	...	7·6	...	0·9	...	4·0	...	8·5	17, 18
5	3·1	...	...	0·5	3·6	...	5·4	...	4·9	...	7·2	...	6·7	...	1·3	...	10·7	14
6	8·1	...	3·6	...	3·1	...	2·2	...	...	4·5	6·7	...	...	...	4·9	...	9·4	11
7	0·9	...	2·2	...	1·8	...	2·7	...	3·6	...	...	2·7	1·8	...	...	1·3	5·4	17
8	...	6·3	1·3	...	...	5·4	3·6	...	...	5·4	3·6	...	...	2·2	0·5	...	7·2	6
9	...	0·9	0·0	...	1·8	...	...	1·3	3·1	...	...	0·5	1·8	...	...	0·5	3·6	14
10	1·8	...	0·5	...	1·8	...	...	...	1·8	...	...	0·9	0·5	...	...	0·0	2·7	12, 13
11	0·5	...	1·3	...	...	0·9	...	0·5	1·3	...	...	0·9	0·9	...	...	0·5	3·1	14
12	1·3	...	...	0·9	0·9	...	...	0·9	...	3·1	1·3	...	...	3·1	1·8	...	5·4	13
13	...	1·8	2·7	...	...	3·1	4·9	...	...	3·1	2·2	...	...	4·0	5·8	...	7·6	20
14	...	1·3	6·7	...	...	1·8	9·8	...	...	5·8	5·8	...	...	5·8	2·2	...	10·7	11
15	...	5·4	0·9	...	...	2·2	2·2	...	1·3	...	7·6	...	4·5	...	6·7	...	10·3	22
16	...	5·4	5·4	...	...	8·1	3·6	...	...	6·7	4·5	...	...	2·7	3·6	...	9·4	1, 11
17	..	0·9	0·9	...	2·7	...	...	1·3	7·6	...	...	4·9	1·3	...	0·9	...	8·9	14, 15
18	...	...	0·9	...	...	1·3	...	1·3	0·9	...	...	0·9	5·4	...	...	3·1	7·2	12, 14
19	0·5	...	...	1·8	0·5	...	...	1·8	0·9	...	...	0·9	1·3	...	1·3	...	3·1	16
20	0·9	...	0·9	...	1·8	...	0·5	...	3·1	...	...	1·3	3·6	...	...	5·4	8·1	23
21	4·9	...	...	4·9	4·9	...	...	2·2	4·5	...	...	3·1	...	...	3·1	...	8·1	1
22	5·8	...	2·2	...	10·3	...	...	...	6·7	...	6·7	...	1·8	...	9·4	...	14·3	17
23	...	...	5·4	...	3·6	...	5·4	...	5·8	...	1·3	...	2·7	...	2·7	...	8·1	5
24	0·9	...	4·5	...	3·1	...	...	0·5	5·8	...	...	4·0	5·4	...	...	...	7·2	15
25	3·6	...	...	...	3·1	...	1·3	...	...	5·8	1·3	...	...	3·6	0·9	...	7·2	16
26	...	1·8	0·5	...	...	0·5	...	0·9	0·9	...	...	2·7	1·8	...	...	2·7	4·5	18
27	3·1	...	...	7·2	6·7	...	...	6·7	8·5	...	...	1·8	0·5	...	1·8	...	10·7	6
28	0·9	...	...	3·6	4·9	...	...	...	...	0·5	3·1	...	...	2·7	1·8	...	5·4	11, 16
29	...	2·7	0·5	...	...	3·6	...	5·4	...	1·8	...	8·5	...	0·9	...	5·4	8·5	13, 14, 15
30	...	...	...	5·4	2·7	...	...	6·3	5·8	...	...	5·8	4·5	...	1·8	...	8·9	14
31	2·7	...	...	1·8	3·6	...	...	2·7	4·5	...	...	4·5	4·5	...	...	3·1	6·3	15, 19
S+N & W+E	78·6		75·4		102·2		84·1		118·4		118·9		79·8		83·6			
S−N & W−E	8·4		23·2		29·6		20·5		23·6		23·1		16·4		37·0			

SCILLY.‡§

Height of Head above—Ground 9·8 m., M.S.L. 49·7 m.
Height of Cups above—Ground 5·8 m., M.S.L. 45·7 m.

Date.	3 h.				9 h.				15 h.				21 h.				Max. in a Gust.	Time of Gust.	
	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.			
																	V.	Hrs.	Min.
1	...	...	6·3	...	...	1·3	5·8	...	...	3·1	7·2	...	...	4·0	9·4	...	10·3	20	45
2	...	4·5	4·5	...	...	2·7	4·0	...	...	1·8	4·0	...	...	1·8	4·5	...	9·4	1	50
3	...	3·6	1·3	...	...	2·7	1·8	...	...	2·7	0·9	...	...	1·8	0·9	...	7·6	3	50
4	...	0·9	0·5	...	...	1·8	0·9	...	...	1·3	2·2	...	...	1·3	2·7	...	5·8	23	25
5	...	1·8	0·9	...	...	0·9	0·5	...	...	1·8	1·3	...	...	2·7	...	...	4·9	0	10
6	...	2·2	...	0·9	...	2·7	...	1·3	...	4·0	...	0·9	...	2·7	...	0·9	3·6	15	10
7	...	2·7	...	1·3	...	2·2	...	1·3	...	2·7	...	0·9	...	1·8	...	2·7	5·4	22	5
8	...	0·9	...	2·2	...	1·3	...	2·7	...	0·9	...	2·7	...	4·0	...	4·0	8·1	19	45
9	...	1·3	..	3·6	2·2	...	...	10·7	...	...	...	10·7	...	...	...	9·4	13·0	13	20
10	1·8	...	...	10·3	1·8	...	...	9·4	1·8	...	...	9·8	...	...	...	2·2	12·5	6	40
11	...	...	...	3·6	1·8	...	...	8·5	...	...	...	5·4	...	0·9	...	1·3	10·3	7	20
12	...	1·3	...	2·2	...	1·3	...	5·8	...	2·2	...	2·2	...	2·7	...	2·7	8·9	10	50
13	...	1·3	...	3·6	...	1·8	...	4·0	...	1·3	...	2·2	...	1·3	...	2·2	6·7	9	0
14	...	1·3	...	2·2	...	2·2	...	1·3	...	3·1	...	0·5	...	4·0	...	0·9	6·7	0	5
15	...	4·9	...	2·2	...	8·1	...	3·6	...	4·9	...	2·2	...	5·4	0·9	...	11·6	9	50
16	...	2·2	...	1·3	...	2·7	...	0·5	...	3·6	3·6	...	...	2·2	4·9	...	7·6	15	45
17	...	2·2	1·3	...	...	2·7	3·6	...	...	...	5·8	...	...	...	8·1	...	6·7	5	55
18	...	1·8	8·5	...	...	...	5·4	...	...	...	6·7	...	...	...	5·4	...	10·7	23	10
19	1·3	...	3·6	...	2·2	...	2·2	...	4·9	...	2·2	...	4·9	...	...	0·9	9·8	7	0
20	5·4	...	...	2·2	6·3	...	...	...	6·7	...	...	...	5·8	...	...	...	7·6	13	35
21	4·9	...	2·2	...	4·0	...	1·8	...	*	*	*	*	1·8	...	1·8	..	?10·3	13	10
22	0·5	...	0·5	...	0·9	...	0·9	...	...	1·8	...	0·5	...	2·7	...	1·3	*		*
23	...	2·7	...	0·9	...	2·2	...	0·9	...	3·1	...	...	...	3·1	...	1·3	*		*
24	...	3·1	...	...	...	3·1	...	0·5	...	2·7	2·7	...	...	1·3	1·3	...	*		*
25	...	...	4·0	...	...	...	2·7	...	1·3	...	2·7	...	0·9	...	2·2	...	6·3	5	0
26	1·8	...	1·8	...	1·8	...	3·1	...	5·8	...	...	...	6·7	...	...	...	9·4	21	15
27	8·5	...	...	...	6·3	...	...	...	5·4	...	...	...	5·4	...	...	...	13·9	4	55
28	4·0	...	...	...	2·2	...	...	...	0·5	...	...	...	...	0·5	...	2·7	5·8	0	20
29	...	3·6	...	3·6	...	...	...	4·0	*	*	*	*	*	*	*	*	13·4	15	15
30	*	*	*	*	*	*	*	*	5·8	...	...	...	6·7	...	...	2·7	12·1	13	40
31	7·6	...	...	1·3	4·0	...	...	...	6·3	...	...	1·3	8·9	...	...	1·8	12·1	21	40
S+N & W+E	78·1		+76·8		73·2		87·2		79·5		78·6		85·3		79·1				
S−N & W−E	− 6·5		− 6·0		− 6·2		−21·8		− 2·5		0·0		− 3·1		5·1				

GREAT YARMOUTH.†§

Height of Head above—Roof 10·7 m., Ground 12·8 m., M.S.L., 15·9 m.
Height of Cups above—Roof 3·7 m., Ground 18·3 m., M.S.L., 22·3 m.

Date.	3 h.				9 h.				15 h.				21 h.				Max. in a Gust (Gorleston).	Time of Gust.	
	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.			
																	V.	Hrs.	Min.
1	0·0	...	0·9	...	...	0·9	4·0	...	0·9	...	4·0	...	0·9	...	2·7	...	8·1	11	20
2	0·5	...	3·1	...	...	...	5·4	...	...	2·2	3·1	...	...	0·5	0·9	...	14·8	9	10
3	1·3	...	2·7	...	...	4·0	4·0	...	...	4·9	...	0·9	3·1	...	...	0·5	13·0	9	20
4	0·9	...	0·9	...	0·5	...	1·3	...	0·9	...	4·0	...	...	0·5	1·3	...	6·3	12	55
5	...	0·5	1·8	...	...	...	3·1	...	1·8	...	...	2·7	1·8	...	...	0·9	8·1	12	10
6	2·2	...	0·5	...	2·7	...	...	1·3	3·6	...	...	2·7	0·9	...	...	0·5	7·6	12	40
7	1·3	...	0·5	...	...	2·2	0·5	...	...	3·6	...	0·9	...	0·5	...	0·0	7·6	11	45
8	0·9	...	1·8	...	...	0·9	4·0	...	...	4·5	...	0·9	...	1·8	0·9	...	10·3	12	50
9	...	2·7	...	1·8	...	4·0	...	...	...	5·4	...	0·9	...	6·7	...	...	11·6	22	55
10	...	6·3	...	1·3	...	5·4	...	2·2	...	6·7	...	1·3	...	5·8	...	2·2	12·1	3	30
11	...	2·2	0·5	...	...	3·1	2·2	...	...	5·8	1·3	...	...	2·7	1·8	...	12·1	16	30
12	...	1·3	1·3	...	...	4·9	2·2	...	...	6·7	1·3	...	...	2·7	1·8	...	15·2	12	30
13	...	2·7	0·9	...	...	4·9	2·2	...	...	5·8	2·2	...	...	4·0	1·8	...	16·1	13	30
14	...	2·7	1·3	...	...	3·6	1·3	...	...	4·0	...	0·9	...	0·9	...	0·0	9·4	11	10
15	1·8	...	...	...	...	6·7	...	...	...	6·3	1·3	...	...	1·3	0·9	...	12·1	9	15
16	0·5	...	2·7	...	...	0·9	4·9	...	...	1·8	4·0	...	0·5	...	2·2	...	9·4	8	5
17	...	0·9	0·0	...	1·8	...	2·7	...	2·7	...	2·7	...	1·3	...	0·9	...	8·5	16	35
18	1·3	...	3·6	...	...	...	6·3	...	...	...	4·5	...	...	0·9	0·9	...	9·8	11	50
19	1·3	...	3·6	...	0·9	...	4·5	...	...	2·7	...	6·3	2·7	...	2·7	...	8·1	14	30
20	1·3	...	1·8	...	3·1	...	2·2	...	4·5	...	...	3·1	4·5	...	...	...	10·7	12	5
21	1·8	...	1·8	...	2·2	...	...	0·9	4·5	...	...	1·8	4·0	...	0·9	...	10·7	15	45
22	2·2	...	2·2	...	1·8	...	...	...	2·7	...	...	3·1	...	...	1·8	...	9·8	22	35
23	...	2·2	0·9	...	...	4·9	...	2·2	...	4·5	...	1·8	...	2·7	...	1·3	8·5	12	40
24	...	0·5	...	0·0	...	0·5	...	2·7	2·7	...	...	6·3	...	8·5	...	...	9·4	23	55
25	3·6	...	...	3·6	3·6	...	...	2·7	5·4	...	...	3·6	2·7	...	...	1·3	12·1	12	25
26	1·3	...	...	0·5	0·9	...	...	0·9	1·3	...	1·8	...	1·8	...	...	1·3	8·1	9	45
27	1·8	...	1·8	...	4·0	...	...	4·0	2·7	...	...	2·7	2·2	...	...	2·2	9·4	9	15
28	0·9	...	...	1·3	...	4·0	...	...	...	4·5	...	...	...	1·8	...	0·9	8·1	11	40
29	...	...	...	0·9	...	2·2	...	2·2	...	1·3	...	3·1	...	...	...	8·1	12·1	22	15
30	1·8	...	1·8	...	3·1	...	3·1	...	5·4	...	...	5·4	1·8	...	...	0·9	12·5	12	0
31	3·1	...	...	4·5	...	4·5	...	0·9	...	1·8	...	2·7	1·8	...	...	0·9	8·9	2	45
S+N & W+E	51·8		50·3		82·2		73·9		111·6		80·0		73·5		43·8				
S−N & W−E	7·8		22·5		−33·0		33·9		− 33·4		−19·6		−13·5		1·8				

The velocities at fixed hours are means for the interval from 30 minutes before to 30 minutes after the hour. The hours are numbered 1 h. to 24 h. Time is referred to Greenwich Mean Time. * No record.

† Robinson Cup Anemometer; Arms 0·61 m.; Diameter of Cups, 0·229 m.; Factor 2·2. ‡ Robinson Cup Anemometer; Arms 0·305 m.; Diameter of Cups 0·127 m.; Factor 2·8.

§ Dines Pressure Tube Anemometer. At Great Yarmouth, Holyhead, and Scilly the readings at fixed hours are taken from the Robinson Anemometer, the maxima quoted are the greatest winds in a gust as recorded by the Dines Pressure Tube.

METEOROLOGICAL OFFICE OBSERVATORIES—GEOPHYSICAL JOURNAL.

AUGUST 1911.—DAILY VALUES REFERRED TO GREENWICH MEAN TIME AND UNITS, BASED ON THE C.G.S. SYSTEM. [*Price* 4*d.*

First Year.—No. 8. *Meteorology, Solar Radiation, Seismology, Atmospheric Electricity, and Terrestrial Magnetism.*

1. SEISMOLOGICAL JOURNAL:—ESKDALEMUIR.—Long. 3° 12′ W. Lat. 55° 19′ N.

Date.	Microseisms. Period.	Microseisms. Amp.	Earthquakes.	Remarks.
	s	μ		
1	4-5	0·4		2nd Iu, S= 1 h. 4 m. 43 s., L 1 h. 27 m. 4th Iu, P=1 h. 32 m. 26 s., S?=1 h. 39 m. 57 s., L=2 h. 3 m.
2	5	0·4	Iu.	6th I, P? S=15 h. 3 m. 37 s., L=15 h. 10 m. 58 s.; I, S=17 h. 2 m. 29 s., L=17 h. 6 m. 17 s.
3	6	0·5		
4	5	0·4	Iu.	8th I, P=14 h. 48 m. 49 s., S?=14 h. 59 m. 8 s.; I., Phases doubtful. 18 h. 45 m. to 20 h.
5	4	0·1		
6	3-4	0·2	I, I.	10th I, Long waves 1 h. 10 m.-1 h. 40 m. Iu, P?=19 h. 11 m. 42 s., S=19 h. 18 m. 6 s., L=19 h. 21 m.
7	4-5	0·3		
8	4-5	0·4	I, I.	11th I, S=19 h. 25 m. 5 s., L=19 h. 32 m.
9	5	0·3		
10	* 2½	0·8	I, Iu.	12th Ir, P=22 h. 6 m. 6 s., S=22 h. 9 m. 42 s., Δ=2150 kms., 1st impulse, nearly true S. Epicentre probably Iceland.
11	†	—	I.	14th I, P=21 h. 17 m. 16 s., S?=21 h. 30 m. 19 s.
12	4	0·1	Ir.	
13	4	0·1		16th During the day a number of small artificial-looking impulses; a few long waves at 17 h. 35 m. IIIu, P=22 h. 55 m. 37 s., S=23 h. 9 m. 44 s., Δ=14940 kms., α=51° 44′ E. of N. Epicentre 19° S 140° E.
14	4	0·2	I.	
15	4	0·2		17th Ir, P?=12 h. 19 m. 23 s., S= 12 h. 25 m. 32 s., Δ=4380 kms., L=12 h. 19 m.; unusual type of disturbance at 19 h.
16	4	0·3	IIIu.	
17	4	0·2	Ir.	18th Iu, P?=3 h. 12 m. 46 s., S=3 h. 22 m. 12 s., L=3 h. 45 m., Δ= 8120 kms. 19th I, Long waves at 1 h.
18	4	0·2	Iu.	
19	4-5	0·3	I.	21st Iu, P=16 h. 48 m. 0 s., S=17 h. 1 m. 8 s., Δ=13360 kms., α=11° 51′ W of N. Epicentre 4° N, 173° W.
20	3	0·3		
21	4	0·2	Iu.	23rd Iu, P=16 h. 12 m. 31 s., S=16 h. 20 m. 19 s., Δ=6220 kms., α=26° 15′ W of S, or E of N. Epicentre 2° N, 25° W, or 62° N 125° E.
22	3-4	0·3		
23	4	0·3	Iu.	27th Iu, P?=11 h. 11 m. 8 s., S=11 h. 20 m. 49 s., L?=11 h. 32 m., Δ=8420 kms.
24	4	0·5		28th Ir, P=6 h. 37 m. 19 s., S=6 h. 41 m. 33 s., Δ=2610 kms., L=6 h. 45 m.
25	4	0·4		
26	4	0·4		29th I, Between 7 h. and 8 h. phases indistinct owing to wind disturbance. Ir, P=14 h. 58 m. 35 s., S=15 h. 1 m. 51 s., Δ=1920 kms.
27	4-5	0·6	Iu.	30th Iu, P=14 h. 17 m. 39 s., S=14 h. 29 m. 57 s., Δ= 11920 kms. I, P? = 19 h. 11 m. 59 s., S?=19 h. 14 m. 55 s., Δ? =1700 kms., unusual type. No long waves indicated.
28	5	0·6	Ir.	
29	3-4	0·3	I, Ir.	
30	4-5	0·4	Iu, I.	
31	4-5	0·6		

An explanation of the notation used is given in the preface.

* Unusually, short period starting about 6 h. and continuing to 20 h. † Imperceptible.

2. VALENCIA OBSERVATORY, CAHIRCIVEEN (KERRY).—Long. 10° 15′ W. Lat. 51° 56′ N.

Heights above Mean Sea Level:—Station, H = 9·2 m. Barometer Cistern, H_b = 13·7 m.
Heights above Ground:—Thermometers, h_t = 1·2 m. Rain-gauge, h_r = 0·6 m. Sunshine Recorder, h_s = 12·8 m. Cups of Anemometer, h_a = 13·7 m.

Day.	Pressure at Station Level. 9 h.	21 h.	Air Temperature in Degrees Absolute. 9 h.	21 h.	Max.	Min.	Humidity. Vapour Pressure. 9 h.	21 h.	Percentage. 9 h.	21 h.	Wind Direction in points (8=E, 16=S) and Velocity (*metres per second*). 9 h.		21 h.		Cloud Amount and Weather. 10 h.	22 h.	Rain 24 hours beginning 10 h.	Sunshine.	Remarks.	Magnetism. Horizontal Force.	Declination West.	Inclination.
	bar.	bar.	200+ °	200+ °	200+ °	200+ °	millibar.		%	%	m/sec.		m/sec.		Tenths of Sky covered.		mm.	hrs.		γ.	° ′	° ′
1	1·0033	1·0120	90·6	88·5	92·3	87·4	17·2	15·4	87	89	14	6·7	16	3·1	7	7	5·3	9·6	● showers *a.* Visibility *p.*	...	...	...
2	·0096	·0092	89·1	87·9	91·3	87·3	16·7	14·3	93	85	14	8·1	16	5·8	10≡0●	4	18·3	3·0	● 8 *a.*-noon. Fair *p.*	...	...	...
3	·0100	·0138	89·0	87·8	91·2	86·8	16·0	15·3	89	92	18	6·7	19	3·1	8	3	1·0	7·1	●2 showers *n.* and *a.* Visibility *p.*	...	...	...
4	·0117	·0033	89·0	89·3	91·2	86·6	16·5	18·2	91	99	14	3·1	15	3·1	10≡0	10≡0	4·3	—	Dull. ●0 showers *p.*	...	...	...
5	·0046	·0071	87·8	87·3	90·7	86·7	15·2	14·8	91	91	21	4·5	20	4·5	6	3	9·1	8·2	Visibility. ● showers.	...	...	...
6	·0060	·0134	88·9	89·1	92·0	86·8	17·4	16·0	98	89	19	8·9	17	5·4	10≡0●	10	0·3	1·9	●0 1 h. 30 m.-8 h. 30 m.	...	...	...
7	·0145	·0154	90·7	89·6	91·7	88·7	17·7	17·8	89	96	14	6·3	15	6·7	7	10≡0	4·6	3·6	Dull. ●0 from 22 h. 30 m.	...	...	...
8	·0138	·0101	90·8	89·5	93·0	88·6	17·9	17·7	89	95	14	8·1	14	7·2	7	10≡0	0·5	7·1	●0 till 3 h. Visibility.	...	...	...
9	·0186	·0219	88·8	87·4	92·0	85·4	15·8	14·7	90	91	19	3·1	—	1·3	10	4	—	7·0	Fair, with visibility.	...	...	...
10	·0240	·0233	89·1	87·8	91·3	83·2	14·8	14·9	82	89	—	0·9	—	0·5	5	5	—	12·9	⊅ *a.* Fine, with visibility.	...	...	...
11	·0200	·0169	89·9	90·0	93·7	82·8	14·7	16·5	77	85	2	2·2	—	0·9	4	10	12·2	9·0	⊅ *a.* Fine.	...	...	...
12	·0140	·0139	90·3	91·8	93·9	88·5	17·9	16·8	91	78	5	4·5	8	5·8	10≡0	8≡0	—	0·6	☈2 7 h. 30 m.-8 h. 30 m. Dull.	...	...	...
13	·0169	·0189	92·1	89·7	94·0	88·2	19·3	17·3	88	92	—	0·9	—	0·5	6	*2*∞	—	10·1	Fine.	...	...	...
14	·0198	·0199	90·4	90·7	95·7	87·2	18·9	18·6	96	93	—	0·5	—	0·9	8∞	*9*∞	0·3	2·1	●0 shower midday. Distant T *p.*	17900	20 39·5	68 13·0
15	·0190	·0181	92·9	91·2	**97·3**	89·1	18·3	18·1	80	87	—	0·0	—	0·9	1∞	*1*∞	—	12·0	Fine.	...	...	...
16	·0172	·0180	93·1	91·9	95·9	90·2	15·0	18·8	**64**	87	11	4·9	14	3·6	7∞	*9*	—	8·1	Fair.	...	...	...
17	·0163	·0174	91·6	88·7	92·2	87·4	18·5	16·0	87	91	13	5·4	26	4·0	10≡0	*10*≡0	1·0	—	Dull and misty.	...	...	...
18	·0169	·0144	89·5	88·7	92·4	84·6	14·5	15·8	79	89	1	3·1	—	0·9	7	*5*	—	12·2	Fine.	...	...	...
19	·0108	·0087	90·6	89·1	91·6	86·8	17·0	15·7	86	87	—	0·5	26	4·0	6∞	*6*	—	7·9	Fine.	...	...	...
20	·0065	·0040	89·5	89·3	92·6	86·0	16·3	15·1	88	82	—	0·0	—	0·5	5	*5*	—	7·9	Fair.	...	...	...
21	·0041	·0081	89·8	90·6	92·1	86·5	15·6	14·5	82	73	3	4·5	1	6·3	8∞	*8*	—	10·8	Fair.	17933	20 37·0	68 10·5
22	·0111	·0128	89·1	87·4	90·9	84·6	12·0	13·2	66	81	1	4·9	—	0·5	5	*2*	—	9·0	Fair.	...	...	...
23	1·0114	·0050	87·5	88·1	91·3	**82·2**	14·8	14·0	90	82	—	0·0	13	5·4	7	*10*●	15·2	6·8	Fine. ⊕ *p.* ● from 21 h.	...	...	...
24	0·9997	·0055	87·4	88·4	90·9	87·4	14·8	14·1	92	82	20	6·3	22	6·7	8	*8*	0·5	9·7	● showers early *a.* Visibility.	...	...	...
25	1·0086	·0125	89·3	87·9	91·1	87·0	15·5	15·0	84	89	21	7·2	21	1·8	7	*10*	1·8	7·7	Fair, with visibility.	17880	20 37·2	68 12·1
26	·0085	·0107	89·3	88·4	91·3	87·2	17 6	16·2	96	94	15	5·8	—	0·9	10≡0●0	*10*	0·5	0·4	Heavy mist and ●0 *a.*	...	...	...
27	·0088	·0078	89·8	88·5	91·8	87·2	17·1	15·7	91	90	17	3·1	17	3·1	10≡0	6	1·0	0·7	Misty *a.* Fair *p.*	...	...	...
28	·0065	·0092	90·2	86·8	91·6	86·7	14·8	13·4	76	86	17	6·7	20	5·4	7	6	3·3	10·6	Visibility.	...	...	...
29	·0140	·0202	88·6	87·8	91·2	84·8	13·4	13·9	76	83	21	7·6	—	0·9	7	2	1·3	10·3	Visibility.	...	...	...
30	·0234	·0237	87·6	86·7	90·5	83·4	14·0	13·8	84	88	21	3·1	17	2·7	4	2	0·5	9·4	Visibility.	...	...	...
31	1·0187	1·0161	89·5	88·9	91·3	87·1	14·7	15·2	80	85	16	6·3	15	5·8	9	9	—	2·7	● showers early. Visibility.	...	...	...
Means	1·0125	1·0133	89·7	88·9	92·3	86·5	16·1	15·7	86	88		4·3		3·3	7·3	6·6	81·0	208	Monthly **Totals** or **Means.**	17904	20 37·9	68 11·9
Normal 35 years	1·0130	1·0133	88·3	87·4	91·0	85·3	14·5	14·2	84	87		4·9 25 years		4·2 25 years	—	—	130·4	153 25yrs	**Normals,** 35 years.			
									20 years													

Wt. 41467/309—6—6—375—3/12. N. & Co., Ltd. Gp. XV.

Note.—The cloud amounts in italic type at Valencia were taken at 21 h.

3. Kew Observatory, Surrey.—Long. 0° 19′ W. Lat. 51° 28′ N.

Heights above Mean Sea Level :—Station, H = 5·5 m. Barometer, H_b = 10·4 m.
Heights above Ground :—Thermometers, h_t = 3·0 m. Rain-gauge, h_r = 0·5 m. Sunshine Recorder, h_s = 14·3 m. Cups of Anemometer, h_a = 21·3 m.

Day.	Pressure at Station Level.		Air Temperature in Degrees Absolute.				Humidity.				Wind Direction in Points (8 = E, 16 = S) and Velocity (*metres per second*).				Cloud Amount and Weather.		Rain 24 hours beginning 10 h.	Sunshine.	Solar Radiation, Watts per cm².	Min. Temp. on Grass.	Earth Temperature at 10 h.		Remarks.
							Vapour Pressure.		Percentage.		9 h.		21 h.								0·3 m.	1·2 m.	
	9 h.	21 h.	9 h.	21 h.	Max.	Min.	9 h.	21 h.	9 h.	21 h.					10 h.	22 h.							
	bar.	bar.	200+°	200+°	200+°	200+°	millibar.		%	%	m/sec.		m/sec.		Tenths of Sky covered.		mm.	hrs.		200+°	200+°	200+°	
1	1·0151	1·0175	94·8	91·3	100·0	87·4	17·0	17·3	65	83	19	3·1	19	1·8	5	1	2·0	4·6	·082	82·2	92·6	88·8	● 16 h.–16 h. 20 m and 16 h.
2	·0219	·0207	92·3	90·7	98·5	87·2	16·6	15·7	75	78	20	2·2	17	1·8	5	9	—	9·5	—	82·3	92·3	88·9	Fine most of day. [35 m.–17 h.
3	·0181	·0164	93·2	92·4	97·0	88·5	16·8	16·4	71	73	16	4·5	19	3·1	10	4	—	6·5	—	84·5	92·4	89·0	●0 11 h. 30 m.
4	·0169	·0160	92·2	92·3	97·3	87·4	13·6	15·4	62	69	27	3·6	20	3·1	5	2	—	10·4	·088	83·4	92·2	89·0	Fine during day.
5	·0111	·0089	94·0	92·1	97·4	88·6	17·2	17·3	71	79	16	6·7	19	4·0	10	9	—	1·7	—	84·0	92·2	89·0	Fair most of day.
6	·0142	·0171	91·9	92·2	96·8	86·2	14·0	16·9	65	77	19	4·9	20	4·9	7	5	—	8·0	—	82·0	91·7	89·0	Fine till 15 h. ⊔ 22 h.
7	·0215	·0230	93·4	94·2	100·2	88·9	16·3	17·6	69	71	18	4·0	18	1·8	6●	0	—	12·3	—	85·8	92·0	89·0	Fine throughout.
8	·0236	·0203	95·3	95·9	104·1	87·1	15·3	18·1	57	66	15	2·7	8	3·1	0	0≡0	—	12·6	·083	82·8	92·8	89·0	Fine all day.
9	·0180	·0163	98·1	98·4	**107·4**	89·8	20·5	17·8	65	55	—	0·9	—	0·9	0≡0	0	—	12·4	·074	85·0	93·6	89·0	Very fine and extremely hot.
10	·0191	·0200	94·3	92·4	99·8	89·4	16·0	12·9	61	57	32	4·5	4	4·0	4≡0	2	—	12·0	—	85·2	93·9	89·1	Fine throughout.
11	·0188	·0178	91·2	92·5	102·5	89·1	16·9	18·5	82	82	3	5·8	2	3·1	10	3	—	7·4	—	87·0	93·2	89·1	Dull till 10 h. ; fine later.
12	·0156	·0164	94·9	96·9	104·2	88·4	18·1	16·4	69	56	3	4·5	7	5·8	3≡0	3	—	10·9	—	83·6	93·5	89·1	Fine during day.
13	·0188	·0198	97·5	97·4	105·2	92·4	18·6	14·2	61	**46**	7	1·8	6	3·1	?3≡0	0	—	12·9	—	84·9	93·9	89·1	Fine and very hot all day.
14	·0212	·0202	96·4	94·8	102·8	89·8	15·9	13·8	55	53	3	4·5	4	3·1	0≡0	0	—	13·4	—	84·0	94·0	89·2	Very fine all day.
15	·0205	·0199	90·6	90·4	96·5	87·3	12·8	12·3	64	62	1	4·0	3	4·5	2	0	—	11·9	—	81·6	93·5	89·3	Fine during day.
16	·0206	·0213	89·1	90·9	96·7	84·1	11·7	14·2	64	69	2	3·1	5	4·5	0	0	—	13·4	—	**77·5**	93·1	89·3	Very fine throughout.
17	·0218	·0184	91·5	93·5	100·5	87·6	16·2	13·7	77	56	19	2·7	20	3·1	0	0	—	8·5	—	82·0	93·4	89·4	Fine most of day.
18	·0155	·0126	93·3	95·1	100·0	87·9	15·8	16·7	67	63	24	3·1	25	2·2	7	0	—	10·7	—	82·4	93·5	89·4	⊕ 7 h. Fine during day. [10 m.
19	·0125	·0097	91·3	92·2	99·1	87·5	15·5	18·8	75	85	6	1·8	8	2·2	0≡0	10	0·3	7·7	—	81·6	93·5	89·5	Fine till 15 h. 30 m. ⊼● 17 h.
20	·0076	·0029	93·1	92·4	101·8	87·6	17·0	18·6	73	83	6	3·1	32	4·0	0≡0	3	4·6	8·9	—	82·7	93·5	89·5	Fine till 15 h. 30 m. ⊼● *p*.
21	·0012	·0019	91·3	90·4	95·2	89·8	19·6	19·3	94	98	16	3·1	—	0·5	10≡0	10	**5·8**	0·1	—	89·4	93·2	89·5	Dull, with ●. ⊼ 16 h.–19 h.
22	·0046	·0087	90·7	88·4	92·8	87·1	17·2	14·5	85	84	1	3·1	2	1·8	10≡0	3	—	0·1	—	87·8	92·5	89·6	Dull during day. Fine *n*.
23	·0107	·0115	88·5	89·7	93·8	86·0	14·5	15·4	84	82	32	4·0	9	1·8	6	0	—	4·5	—	79·9	91·4	89·5	Fine intervals.
24	·0093	·0084	92·8	89·3	95·1	86·3	16·1	16·8	69	92	16	4·0	20	1·8	7	0	1·3	2·9	—	81·5	91·3	89·5	Fine *a*. ● 13 h. 50 m.–14 h.
25	·0102	·0133	91·2	89·7	95·3	86·4	15·6	14·4	76	77	22	4·5	21	1·8	10	0	—	7·8	—	81·2	90·8	89·5	Fine most of day. [10 m.
26	·0162	·0160	91·3	91·2	95·5	84·9	13·1	16·4	62	80	22	3·6	19	4·5	7●	7	—	5·5	—	78·7	90·6	89·3	Fine at times till 15 h.
27	·0161	·0137	93·0	92·5	96·3	89·6	19·5	16·6	84	74	18	5·8	19	4·9	9	1	—	1·9	—	88·2	91·1	89·2	Dull *a*. ; fine later.
28	·0128	·0132	93·6	89·8	94·9	87·0	17·3	17·5	72	93	18	5·4	21	2·2	8	10	2·5	1·1	—	81·5	91·0	89·2	Fine *a*. ● at times *p*.
29	·0166	·0194	91·2	89·6	94·9	86·8	15·0	12·7	73	68	20	4·5	25	1·8	7●	5	—	9·7	—	83·8	90·8	89·1	Fine during day.
30	·0222	·0240	89·3	86·9	96·4	85·4	14·6	14·5	80	92	22	1·8	—	0·9	7	2≡0	4·1	5·3	—	82·7	90·2	89·1	⊼ 17 h.–19 h. ●2 17 h.–18 h.
31	1·0250	1·0215	86·5	89·2	95·2	**81·9**	13·7	12·9	89	71	21	1·8	18	2·7	4	0	—	9·1	—	78·8	89·9	89·1	≡2 early. ⊕ noon. Fine all day.
Means	1·0160	1·0157	92·5	92·1	98·5	87·5	16·1	15·9	71	73		3·6		2·9	5·2	2·9	20·6	244	—	83·2	92·4	89·2	Monthly **Totals or Means.**
Normal 35 years	1·0140	1·0139	89·5	88·7	94·0	85·0	13·8	14·0	74	80	—	3·5	—	2·5	—	—	57·3	189	—	—	—	—	**Normals,** 35 years.
							20 years				25 years		25 years					25 yrs					

4. Eskdalemuir Observatory, Dumfriesshire.—Long. 3° 12′ W. Lat. 55° 19′ N.

Heights above Mean Sea Level :—Station, H = 243·2 m. Barometer, H_b = 237·1 m.
Heights above Ground :—Thermometers, h_t = 0·8 m. Rain-gauge, h_r = 0·3 m. Sunshine Recorder, h_s = 1·5 m. Vane of Anemometer, h_a = 15·2 m.

															9 h.	21 h.	9 h.						
1	0·9850	0·9868	90·0	87·4	92·4	84·3	15·3	16·1	80	99	12	4·9	—	1·3	10	9	0·5	4·1	—	—	—	—	
2	·9909	·9882	88·9	87·4	91·5	86·2	15·3	15·4	86	95	18	4·9	18	3·1	9	10	4·6	4·4	—	—	—	—	⊕ 15 h.
3	·9852	·9844	87·9	85·9	90·2	80·6	13·4	14·2	79	96	16	8·5	22	3·6	8●	1	0·8	4·8	—	—	—	—	
4	·9857	·9852	88·5	84·6	90·8	80·1	12·7	12·8	72	95	22	6·3	—	1·3	1	4	8·9	9·4	—	—	—	—	
5	·9764	·9764	88·7	85·4	88·8	84·1	17·6	13·9	100	97	18	10·7	20	4·9	10●	7	9·4	0·2	—	—	—	—	
6	·9788	·9825	85·8	86·7	88·8	82·9	11·0	13·7	75	88	20	8·1	20	4·0	9	9	6·6	2·2	—	—	—	—	
7	·9880	·9915	88·4	87·9	90·4	85·8	14·3	15·9	83	95	20	8·9	20	9·4	8	10	—	1·8	—	—	—	—	
8	·9937	·9922	88·8	88·6	94·9	87·3	15·3	15·7	87	90	18	8·5	—	0·9	10	0	—	8·7	—	—	—	—	
9	·9905	·9909	92·8	88·5	94·7	84·6	17·0	14·7	74	85	20	8·1	—	1·3	0	4<	—	13·9	—	—	—	—	Distant ⊼ in E.
10	·9950	·9976	89·6	85·7	92·6	82·3	11·0	11·9	**58**	82	32	4·0	32	2·7	0	1	—	13·8	·090	—	—	—	∞ in N. during afternoon.
11	·9977	·9963	87·5	85·9	90·1	81·8	12·3	13·5	75	91	4	8·1	4	5·8	2	10	0·3	10·9	—	—	—	—	
12	·9957	·9953	89·1	87·2	92·4	85·8	16·0	16·0	89	99	4	6·3	2	7·2	9	10≡0●0	—	8·7	—	—	—	—	
13	·9973	·9980	89·7	89·1	**96·1**	86·3	16·5	16·7	88	93	2	5·8	28	1·8	1	0p	—	11·6	—	—	—	—	
14	·9986	·9974	88·7	84·6	92·8	80·7	15·4	10·9	88	80	6	4·9	4	4·0	0	2	—	11·8	—	—	—	—	≡1 early *a*. ⊕ 13 h.
15	·9958	·9951	85·8	84·6	91·1	79·8	12·9	11·5	88	85	4	3·1	32	2·2	10	0	—	8·4	—	—	—	—	[ing day.
16	·9944	·9946	84·8	84·1	90·3	77·7	12 4	12·0	90	91	—	0·0	—	0·9	10	3	—	0·5	—	—	—	—	Clouds almost motionless dur-
17	·9923	·9895	89·8	88·0	94·6	77·5	15·4	16·9	81	100	16	1·8	20	3·1	3∞	9	—	7·8	—	—	—	—	≡1 early *a*. and after 21 h.
18	·9863	·9868	90·2	86·7	94·1	85·6	15·4	14·4	79	93	24	4·5	—	1·3	9	8	—	7·9	—	—	—	—	
19	·9854	·9825	88 2	84·2	91·9	81·8	15·0	12·8	88	97	4	2·2	—	0·9	8	3	—	4·9	—	—	—	—	⊕ 15 h. and 17 h. 25 m.
20	·9807	·9792	89·1	86·8	92·9	81·2	15·6	14·9	86	95	16	2·2	20	3·6	4	7	1·5	7·5	—	—	—	—	⊕ 14 h.–15 h.
21	·9781	·9797	85·7	85·0	88·0	84·4	14·1	12·5	97	90	2	4·0	4	5·8	10	10	—	0·6	—	—	—	—	
22	·9823	·9846	85·4	80·7	88·3	78·6	12·1	9·4	84	90	4	6·3	—	1·3	7	0	—	5·8	—	—	—	—	
23	·9849	·9838	85·9	80·8	90·3	76·3	12·1	9·7	82	92	—	1·3	—	0·9	7	4	—	9·0	—	—	—	—	
24	·9772	·9734	87·0	86·3	88·7	79·2	13·6	14·8	85	97	12	5·4	18	8·9	10●	9	3·1	0·8	—	—	—	—	
25	·9768	·9798	86·3	86·1	89·2	84·6	12·4	13·6	81	91	22	8·9	22	6·7	7	8	1·3	5·1	—	—	—	—	
26	·9828	·9793	86·8	87·9	88·4	83·8	13·0	16·9	83	100	20	8·1	22	8·5	7	10≡0●0	10·7	0·5	—	—	—	—	≡1 evening and *n*.
27	·9836	·9819	86·7	85·3	88·4	80·2	12·0	13·6	77	96	20	5·4	20	4·0	3	10	6·9	2·6	—	—	—	—	
28	·9809	·9796	88·7	84·4	89·9	83·9	15·7	12·2	89	90	20	7·6	20	4·0	6	4<	2·3	8·5	—	—	—	—	< 21 h.–22 h.
29	·9794	·9880	86·3	83·5	89·8	81·9	11·9	11·0	81	87	22	13·4	24	1·8	8●	2	—	10·5	·093	—	—	—	
30	·9938	·9952	86·0	82·9	89·8	**75·7**	10·2	11·4	68	94	26	4·0	—	0·5	2	8	—	9·7	—	—	—	—	
31	0·9907	0·9846	85·8	86·3	87·5	82·5	12·1	14·9	83	99	20	8·9	20	14·3	10	10●	**25·1**	0·1	—	—	—	—	
Means	0·9872	0·9871	87·8	85·8	91·0	82·2	13·8	13·7	83	93		6·0		3·9	6·4	5·9	82·0	197	—	—	—	—	Monthly **Totals** or **Means.**
Normal 35 years	—	—	—	—	—	—	—	—	—	—	—		—		—	—	—	—	—	—	—	—	

The solar radiation is the mean of the readings within the nominal hour of observation (11 h. 30 m.–12 h. 30 m.) unless some other hour is specified.

5. KEW OBSERVATORY.

Day.	Potential Gradient, Volts. per metre. Factor 1·79.				Number of Ions per cc.		Velocities of Ions for 1 volt. per centimetre.		Conductivity $\times 10^{25}$.	Air–Earth Current $\times 10^{16}$.		Electric Character of Day.	Magnetic Character of Day.	Horizontal Force.					West Declination.				
	3 h.	9 h.	15 h.	21 h.	+.	−.	+.	−.		c_1.	c_2.			Maximum. 18000 γ +.		Minimum. 18000 γ +.		Range.	Maximum. 15° +.		Minimum. 15° +.		Range.
	v/m.	v/m.	v/m.	v/m.	n/cc.	n/cc.	cm/sec.	cm/sec.	E.-m.U.	Amp/cm².				γ	h m	γ	h m	γ	′	h m	′	h m	′
1	325	260	130	*	1060	800					—	1	0	524	19 37	475	11 5	49	60·8	13 30	51·0	7 48	9·8
2	160	215	145	345	740	590					—	0	0	532	19 5	494	12 53	38	59·5	14 3	51·4	8 58	8·1
3	155	210	180	195	—	—					1·35	0	1	529	14 4	489	14 33	40	62·5	14 6	50·4	7 51	12·1
4	175	210	125	245	600	480					—	0	1	549	22 16	478	10 2	71	59·1	13 38	50·4	3 25	8·7
5	125	225	210	200	—	—					—	0	1	**550**	**22 22**	489	8 33	61	59·4	13 58	46·8	23 40	12·6
6	170	210	95	180	—	—					—	0	1	531	22 12	485	7 41	46	59·4	13 1	48·4	0 0	11·0
7	180	180	130	205	—	—					—	0	0	522	19 12	483	11 55	39	58·4	13 52	50·7	7 40	7·7
8	170	275	145	335	700	700					—	1	0	528	19 3	497	9 52	31	61·7	13 56	49·4	7 20	12·3
9	80	325	95	260	1490	1170					—	0	0	521	23 32	480	9 43	41	62·4	12 50	51·0	6 58	11·4
10	105	225	245	325	630	420					—	0	0	519	19 48	473	10 30	46	62·1	13 16	48·4	7 30	13·7
11	135	280	390	290	—	—					1·35	0	0	521	19 23	478	9 2	43	61·2	12 50	50·0	7 45	11·2
12	190	430	260	300	—	—					—	0	0	525	20 9	480	9 13	45	61·4	13 1	50·7	7 35	10·7
13	160	290	130	245	—	—					—	0	0	520	2 9	471	8 47	49	60·5	12 40	47·6	7 5	12·9
14	125	390	225	585	1620	540					—	0	0	514	23 54	484	11 10	30	59·6	12 2	51·3	7 1	8·3
15	130	310	225	520	—	—					—	0	1	519	17 17	448	12 40	71	56·8	16 48	51·5	7 8	**5·3**
16	245	215	185	325	420	320					—	0	0	526	6 2	487	**12 48**	39	58·1	13 2	48·0	3 43	10·1
17	50	130	95	185	620	160					—	0	0	520	22 15	485	13 43	35	59·6	12 52	50·1	3 10	9·5
18	80	220	80	160	730	320					—	0	0	517	19 43	499	9 54	**18**	58·9	13 38	51·0	0 8	7·9
19	85	365	160	190	—	—					—	1	1	525	19 40	484	9 5	41	62·9	12 45	48·4	23 29	14·5
20	80	280	*	$x\pm$	—	—					—	2	1	512	20 4	488	15 34	24	60·2	13 43	49·0	0 3	11·2
21	$x+$	− 65	195	$x\pm$	920	260					—	2	0	509	21 50	474	9 50	35	60·4	12 47	50·3	7 20	10·1
22	160	380	245	145	250	150					—	0	0	519	20 25	481	7 49	38	60·4	12 28	50·9	6 50	9·5
23	105	155	280	245	660	560					—	1	2	539	14 58	**434**	**15 18**	**105**	**69·7**	**23 20**	48·3	22 25	**21·4**
24	115	210	145	285	—	—					—	1	2	527	19 56	**434**	**9 1**	93	61·6	12 2	**46·4**	**18 8**	15·2
25	265	180	$x+$	225	1300	1610					—	1	1	518	23 37	448	10 53	70	62·4	13 4	50·1	6 30	12·3
26	210	190	115	245	—	—					—	0	1	537	20 8	453	9 55	84	60·2	13 50	49·4	21 59	10·8
27	110	160	150	260	—	—					—	0	1	539	22 48	444	10 45	95	60·5	14 3	49·0	17 43	11·5
28	130	260	150	50	—	—					—	1	0	513	19 58	466	9 30	47	60·4	13 3	49·3	19 53	11·1
29	210	190	135	245	1270	680					—	0	0	510	23 53	469	10 39	41	59·2	13 50	51·3	8 15	7·9
30	145	330	160	290	—	—					0·85	2	0	507	{18 38 / 0 0}	461	10 33	46	59·4	13 14	51·1	7 47	8·3
31	*	*	160	365	—	—					0·70	0	1	517	15 58	473	8 33	44	62·0	13 16	50·3	6 57	11·7
M.	143	253	173	264	—	—					—	—	—	524	—	474	—	50	60·7	—	49·7	—	10·9

6. ESKDALEMUIR OBSERVATORY.

Day.	Potential Gradient, Volts per metre. Factor 5·2.				Number of Ions per cc.		Velocities of Ions for 1 volt. per centimetre.		Conductivity $\times 10^{25}$.	Air–Earth Current $\times 10^{16}$.		Electric Character of Day.	Magnetic Character of Day.	North Component.§			West Component.§			Vertical Component.§			
	3 h.	9 h.	15 h.	21 h.	+.	−.	+.	−.		c_1.	c_2.			Maximum. 15000 γ +.		Minimum. 15000 γ +.	Maximum. 5000 γ +.		Minimum. 5000 γ +.		Maximum. 45000 γ +.		Minimum. 45000 γ +.	
	v/m.	v/m.	v/m.	v/m.	n/cc.	n/cc.	cm/sec.	cm/sec.	E.-m.U.	Amp/cm².		*		h m	γ	γ	h m	γ	γ	h m	h m	γ	γ	h m
1	259	68?	116	253	—	—	—	—	—			1 *a*	1	19 32	1032	967	11 3	286	234	7 57	17 14	359	340	11 48
2	218	178	320	273	540	360	0·99	0·00	0·59	1·9		1 *a*	0	19 25	1033	986	12 33	279	235	8 52	7 30	358	340	11 40
3	279	164	123	300	—	—	—	—	—	—		1 *a*	1	21 28	1039	975	14 33	304	233	7 54	19 45	359	325	12 13
4	116?	191?	204	320	—	—	—	—	—	—		0 *a*	1	22 13	1065	962	10 2	278	232	3 40	17 50	355	332	5 52
5	*x*	294	234	294	—	—	—	—	—	—		1 *c*	1	19 19	1066	986	9 30	293	214	23 40	19 5	356	323	2 40
6	260	180	180	187	—	—	—	—	—	—		1 *b*	1	22 8	1037	982	9 42	281	221	1 13	21 12	352	332	2 30
7	106	227	133	128	—	—	—	—	—	—		0 *a*	0	19 6	1030	978	10 16	282	235	8 13	{17 to 20 / 18 20}	349	332	11 10
8	93	106	194	180	—	—	—	—	—	—		0 *a*	0	21 42	1034	983	11 10	288	233	6 51	20 18	348	328	11 0
9	313	220	247	267	990	510	0·31	0·00	0·34	0·8		0 *a*	0	18 59	1031	964	11 48	299	231	6 59	17 40	352	319	12 0
10	113	160	128	174	450	210	1·61	0·59	0·93	1·2		0 *a*	0	19 24	1029	973	10 29	294	220	8 30	16 16	351	334	12 40
11	140	133	120	160	—	—	—	—	—	—		0 *a*	0	19 19	1030	972	10 27	290	231	7 57	8 0	351	326	12 10
12	*x*	167	100	380	—	—	—	—	—	—		2 *b*	0	20 7	1029	985	10 50	297	240	7 2	4 48	350	331	13 0
13	307	247	153	227	—	—	—	—	—	—		0 *a*	1	{2 38 / 15 5}	1033	971	{8 59 / 11 38}	285	224	7 8	17 0	353	335	11 10
14	187	227	106	254	450	450	1·06	0·46	0·74	0·8		0 *a*	0	20 43	1024	980	11 50	279	239	6 7	18 0	349	333	13 0
15	260	100	153	174	540	450	0·16	1·57	0·87	1·3		0 *a*	1	17 15	1039	970	12 38	286	244	7 10	17 25	363	335	{10 30 / 12 0}
16	353	73	73	160	—	—	—	—	—	—		1 *a*	1	18 58	1042	980	12 20	279	222	3 42	19 40	352	312	8 40
17	140?	294	214	380	330	120	0·00	1·00	0·13	0·3		0 *a*	1	23 43	1028	973	13 22	279	232	3 13	19 41	349	331	3 0
18	260	227	234	180	210	180	0·99	0·94	0·43	1·0		0 *a*	0	{0 0 / 19 30}	1025	990	12 52	279	235	0 8	19 0	349	327	12 20
19	146	66	140	200	—	—	—	—	—	—		0 *a*	2	21 33	1042	974	12 17	305	217	23 40	{17 23 / 21 51}	352	324	12 45
20	153	260	174	420	—	—	—	—	—	—		0 *a*	2	17 51	1028	981	11 29	285	219	0 3	{17 to 40 / 18 0}	350	326	12 25
21	534	140	66	86	—	—	—	—	—	—		0 *a*	0	16 53	1022	973	10 7	286	226	7 20	7 20	346	322	12 0
22	100	100	153	214	1050	450	0·68	0·88	1·11	1·7		0 *a*	0	18 45	1031	989	8 50	282	238	6 42	5 10	340	323	11 30
23	*	*	*	260	—	—	—	—	—	—		0 *a*	2	**14 59**	**1123**	**853**	**23 28**	**354**	**204**	**15 19**	**15 19**	**438**	**198**	**23 36**
24	160	113	160	207	—	—	—	—	—	—		1 *b*	2	19 56	1069	930	9 1	295	209	2 7	17 50	367	224	0 0
25	106	120	80	140	—	—	—	—	—	—		1 *b*	2	16 40	1029	942	10 53	294	224	7 13	17 7	348	312	2 50
26	180	174	53	153	—	—	—	—	—	—		1 *b*	2	22 3	1062	956	9 25	293	233	17 51	18 10	361	311	0 30
27	240	180	13	207	—	—	—	—	—	—		1 *a*	1	22 47	1053	941	10 47	296	217	17 40	17 41	365	311	2 30
28	*x*	*	181	188	—	—	—	—	—	—		1 *b*	1	19 57	1038	957	11 12	291	226	19 52	16 31	346	317	11 6
29	139	76	125	472	—	—	—	—	—	—		1 *b*	0	23 53	1021	975	10 40	282	230	7 58	16 5	348	329	12 0
30	166	125	139	278	990	660	0·81	1·52	1·98	2·8		0 *a*	0	18 38	1036	965	10 30	281	236	7 16	18 30	345	318	12 30
31	152	*	−368	−424	—	—	—	—	—	—		2 *c*	1	15 58	1036	965	11 23	307	228	8 32	16 20	340	312	12 5
M.	205	160	146	231	—	—	—	—	—			—	—	—	1040	967	—	291	228	—	—	355	318	—

x Indeterminate. * No record. An explanation of the Headings of the columns is given in the Preface.

§ The Magnetic values at Eskdalemuir Observatory are at present only provisional, and subject to correction at the end of the year; the zero of the recorder of the Vertical Component set up in December 1909 is still liable to variation.

7. Tables of Wind Components in metres per second at fixed hours.

Together with the mean velocity (horizontal movement) in metres per second for the hour with the maximum hourly run for each day, or the greatest velocity attained in a gust and the time of its occurrence.

HOLYHEAD.†§

Height of Head above—Roof 8·8 m., Ground 13·7 m., M.S.L. 19·2 m.
Height of Cups above—Roof 4·6 m., Ground 7·6 m., M.S.L. 15·2 m.

Date.	3 h.				9 h.				15 h.				21 h.				Max. in a Gust.	Time of Gust.	
	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.			
																	V.	Hrs.	Min.
1	6·3	...	...	2·7	6·7	...	...	1·3	7 2	...	3·1	...	4·9	...	2·2	...	13·4	15	40
2	4·0	...	2·7	...	6·3	...	...	...	7·2	...	1·3	...	8·9	...	...	1·8	17·9	21	30
3	4·9	...	2·2	...	7·6	...	1·3	...	*	*	*	*	4·0	...	4·0	...	16·5	12	55
4	...	...	4·0	...	2·7	...	0·9	...	6·7	...	1·3	...	6·7	...	...	4·5	16·1	22	20
5	8·1	...	1·8	...	4·5	...	3·1	...	3·6	...	...	...	4·5	...	4·5	...	15·2	4	20
6	3·6	...	5·4	...	8·1	...	3·1	...	7·6	...	4·9	...	3·6	...	5·4	...	16·5	11	15
7	5·4	...	3·6	...	7·6	...	5·4	...	8·5	...	3·6	...	6·7	...	2·7	...	15·7	14	5
8	6·7	...	1·3	...	5·4	...	...	...	6·7	...	...	1·3	3·1	...	...	0·5	12·1	0	50
9	4·0	...	...	...	4·0	...	4·0	...	1·3	...	1·3	...	...	...	4·5	...	11·2	10	45
10	...	4·5	10·7	...	...	3·1	1·3	...	...	4·5	0·9	...	...	4·0	0·9	...	7·6	23	50
11	...	...	...	8·5	...	3·1	...	7·6	...	6·3	...	2·7	...	3·6	...	8·5	13·9	21	5
12	...	1·8	...	8·9	...	1·8	...	9·8	...	3·6	...	8·5	...	1·3	...	6·7	13·4	9	35
13	0·9	...	...	5·4	...	...	...	4·0	...	...	...	6·7	...	...	...	6·3	10·7	11	50
14	...	...	...	6·7	...	...	...	5·4	...	6·7	...	4·5	...	2·7	...	3·6	13·0	14	50
15	...	0·9	...	0·9	...	2·7	...	1·8	...	4·9	...	3·1	...	2·2	...	2·2	8·9	23	20
16	0·9	...	...	5·4	...	...	...	4·9	0·5	...	...	3·1	...	1·3	...	2·7	8·5	0	15
17	0·9	...	...	1·8	4·0	...	1·8	...	6·3	...	4·0	...	5·4	...	2·2	...	11·6	12	50
18	4·5	...	3·1	..	...	7·6	1·3	...	...	2·2	0·9	...	...	2·2	2·2	...	8·9	6	40
19	...	2·2	2·2	...	...	2·7	...	0·9	...	3·1	..	...	...	2·7	0·5	...	?4·5	13	55
20	...	0·5	...	1·3	...	4·0	...	1·8	...	4·5	...	1·8	...	3·1	...	2·2	8·1	16	55
21	...	1·8	...	2·7	...	3·1	...	4·5	...	6·3	...	4·0	...	7·6	...	3·1	9·8	6	55
22	...	5·4	...	3·6	...	4·0	...	2·7	...	4·9	...	3·1	...	4·5	...	...	10·7	11	40
23	...	4·0	...	1·8	...	1·8	...	0·5	...	2·2	...	...	...	1·3	...	1·3	7·2	0	30
24	4·5	...	...	3·1	8·1	...	...	8·1	8·9	...	3·6	...	2·7	...	4·0	...	19·7	8	55
25	2·7	...	4·0	...	5·8	...	5·8	...	6·7	...	4·5	...	3·1	...	4·5	...	13·9	10	40
26	2·7	...	4·0	...	5·4	...	3·6	...	8·9	...	3·6	...	5·8	...	5·8	...	15·7	14	45
27	...	...	3·1	...	3·6	...	1·3	...	3·1	...	1·8	...	4·9	...	2·2	...	11·2	22	0
28	4·5	...	3·1	...	5·4	...	3·6	...	7·6	...	3·1	...	6·3	...	4·0	...	13·4	15	55
29	3·6	...	5·4	...	4·5	...	6·7	...	5·8	...	4·0	...	1·8	...	4·0	...	15·7	8	5
30	...	1·8	4·0	...	...	0·9	1·8	...	...	0·9	1·3	...	3·1	...	1·8	...	?7·2	21	20
31	1·3	...	1·8	...	6·3	...	4·0	...	9·8	...	6·3	...	8·5	...	5·8	...	18·8	19	35
S+N & W+E	92·4		115·2		130·8		102·3		156·5		88·3		120·5		104·6				
S−N & W−E	46·6		9·6		61·2		−4·3		56·3		10·7		47·5		17·8				

DEERNESS.†

Height of Cups above—Roof 1·5 m., Ground 4·9 m., M.S.L. 57·3 m.

Date.	3 h.				9 h.				15 h.				21 h.				Vel. in Max. Hourly Run.	Time of Max.
	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.		
																	V.	Hour.
1	1·8	...	...	3·1	2·7	...	...	3·6	4·9	...	...	4·9	4·9	...	...	3·1	8·1	14, 18
2	3·1	...	...	1·3	2·2	...	...	...	0·9	...	...	4·5	5·8	...	...	1·3	7·2	2
3	2·7	...	...	1·8	6·7	...	...	1·3	5·4	...	...	0·9	1·8	...	0·9	...	8·5	8
4	0·5	...	1·3	...	4·0	...	...	...	4·5	...	1·8	...	0·9	...	...	1·8	4·9	15
5	2·2	...	...	1·3	4·5	...	...	4·5	6·7	...	...	4·5	4·0	...	0·9	...	9·4	13
6	2·2	...	3·1	...	0·9	...	4·0	...	...	...	...	3·6	1·8	...	...	...	4·0	3, 8, 9, 10
7	1·8	...	...	...	5·4	...	...	...	3·1	...	1·3	...	5·4	...	2·2	...	6·7	20
8	4·9	...	0·9	...	5·4	...	...	...	5·8	...	...	...	...	1·8	...	1·8	6·7	14
9	2·7	...	...	1·3	4·9	...	...	3·1	5·8	...	...	1·3	...	...	0·9	...	6·7	12
10	...	0·9	5·4	...	...	0·9	5·4	...	...	4·0	4·0	...	...	1·8	0·9	...	7·2	14
11	...	...	...	0·9	...	...	...	1·8	...	0·9	...	4·5	...	0·5	...	2·7	4·5	14, 15, 16, 17
12	...	0·9	...	3·6	...	0·9	..	4·5	...	0·9	...	4·9	...	0·5	...	3·1	5·4	17
13	...	0·5	...	3·1	...	...	...	4·9	...	...	...	4·5	...	0·9	...	2·2	6·3	11
14	...	0·9	...	0·9	...	3·1	...	0·5	...	3·1	...	0·5	...	3·1	1·8	...	5·4	18
15	...	4·0	2·7	...	...	8·1	1·8	...	...	5·4	...	...	...	4·0	1·8	...	8·9	11
16	...	4·5	...	...	...	4·0	...	...	...	...	...	1·3	0·9	...	...	0·9	4·5	1, 2
17	0·5	...	0·0	...	...	0·9	...	0·9	1·8	...	...	3·1	1·8	...	...	3·1	3·6	15, 16, 21, 22
18	1·3	...	...	1·8	1·3	...	...	1·8	0·9	...	...	4·0	0·9	...	...	4·0	4·9	20
19	0·5	...	...	1·3	...	...	...	3·1	1·8	...	...	4·0	1·3	...	...	3·6	4·9	10
20	0·9	...	...	4·0	0·9	...	...	5·4	3·1	...	...	4·5	2·7	...	...	4·0	7·6	10
21	1·8	...	...	4·0	...	...	...	5·4	...	0·9	...	5·4	...	0·5	...	1·3	5·4	8, 9, 12, 14, 15
22	...	0·5	...	0·9	...	0·5	2·2	...	...	5·4	...	...	...	3·1	...	0·5	5·8	16
23	...	0·9	0·9	...	0·9	...	2·7	...	3·6	...	...	...	2·2	...	...	2·2	4·5	16, 24
24	0·9	...	...	4·0	3·6	...	...	0·9	5·4	...	...	5·4	6·7	...	...	4·5	8·1	16
25	5·4	...	...	3·6	5·4	...	5·4	...	2·7	...	1·8	...	1·8	...	2·7	...	8·5	5
26	1·3	...	6·7	...	1·8	...	8·5	...	2·7	...	...	...	5·8	...	...	...	8·5	8, 9, 10
27	4·9	...	4·9	...	5·8	...	5·8	...	...	...	5·8	...	...	...	...	0·5	9·4	10, 11
28	1·8	...	0·9	...	4·0	...	1·8	...	2·2	...	...	...	4·0	...	...	...	4·9	20, 24
29	2·7	...	0·9	...	1·8	...	4·0	...	...	4·9	7·2	...	...	4·5	4·5	...	9·4	16
30	...	3·1	4·9	...	0·9	...	4·5	...	0·9	...	5·4	...	2·7	...	0·9	...	6·7	13, 14
31	4·0	...	1·8	...	8·5	...	...	1·8	9·8	...	...	...	8·1	...	3·1	...	10·7	12, 13
S+N & W+E	64·1		71·3		90·0		89·6		97·5		89·1		86·0		61·2			
S−N & W−E	31·7		−2·5		53·2		2·6		46·5		−34·5		44·6		−20·0			

SCILLY.‡§

Height of Head above—Ground 9·8 m., M.S.L. 49·7 m.
Height of Cups above—Ground 5·8 m., M.S.L. 45·7 m.

Date.	3 h.				9 h.				15 h.				21 h.				Max. in a Gust.	Time of Gust.	
	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.			
																	V.	Hrs.	Min.
1	8·5	...	...	1·8	4·9	...	3·1	...	3·6	...	3·6	...	0·9	...	2·7	...	12·5	2	20
2	2·2	...	1·3	...	4·5	...	3·1	...	8·5	...	1·8	...	8·1	...	3·1	...	12·5	17	25
3	...	...	4·0	...	2·2	...	5·8	...	2·2	...	5·8	...	0·9	...	4·5	...	10·3	23	25
4	...	...	4·9	...	2·7	...	0·9	...	8·1	...	1·8	...	8·1	...	3·1	...	11·6	15	50
5	8·5	...	...	...	...	2·2	5·8	...	...	1·3	7·2	...	...	...	6·7	...	11·6	16	10
6	1·3	...	7·6	...	3·1	...	7·6	...	3·1	...	7·2	...	0·9	...	5·4	...	11·6	12	25
7	1·3	...	2·7	...	4·0	...	0·9	...	3·6	...	1·3	...	1·3	...	...	...	6·7	9	0
8	2·2	...	...	1·3	1·3	...	...	6·3	4·0	...	...	4·0	2·7	...	0·9	...	9·4	10	30
9	...	2·2	5·4	...	...	3·1	2·2	...	...	4·5	0·9	...	...	6·7	2·7	...	10·7	23	15
10	...	6·3	1·3	...	...	4·0	...	0·9	...	4·9	...	2·2	...	7·2	...	1·3	10·3	1	25
11	...	4·5	..	0·9	...	0·9	...	5·4	1·3	...	...	5·8	...	0·9	...	0·5	12·1	23	2
12	4·9	...	...	4·9	...	1·8	...	1·8	...	1·3	...	6·3	0·0	0·0	0·0	0·0	12·5	2	10
13	0·0	0·0	0·0	0·0	0·9	...	...	0·0	...	0·5	...	...	...	1·8	...	1·8	2·7	21	35
14	...	2·7	0·9	...	...	0·9	...	3·6	...	...	...	6·3	...	0·9	...	1·8	8·9	13	10
15	1·3	...	...	7·2	2·7	...	...	4·0	2·2	...	...	3·1	0·0	...	...	0·5	10·3	11	15
16	0·0	...	...	0·5	1·3	...	...	3·1	2·7	...	...	2·7	1·8	...	...	1·8	5·4	11	50
17	1·8	...	...	1·8	2·7	...	...	1·8	1·3	...	2·2	...	0·0	0·0	0·0	0·0	4·5	7	35
18	0·0	0·0	0·0	0·0	2·2	...	...	0·5	2·2	...	...	0·5	0·0	0·0	0·0	0·0	1·3	10	30
19	0·5	...	...	1·3	0·9	...	...	4·0	0·9	...	...	1·3	0·9	...	...	0·5	5·4	10	20
20	0·0	0·0	0·0	0·0	...	0·9	...	0·9	...	2·2	1·3	...	...	1·8	0·9	...	2·7	22	50
21	0·0	0·0	0·0	0·0	...	1·8	1·3	...	...	3·1	1·3	...	...	2·7	...	0·5	7·6	23	55
22	...	6·3	...	1·3	...	8·1	...	3·1	...	8·1	1·8	...	...	4·9	...	0·9	11·6	8	10
23	...	2·7	...	0·9	...	0·9	...	1·8	2·7	...	...	0·5	0·9	...	...	...	5·4	0	10
24	7·6	...	3·1	...	...	2·7	6·3	...	3·1	...	7·2	...	...	...	4·9	...	14·8	6	55
25	...	0·9	4·5	...	...	...	2·7	...	...	0·5	1·3	...	...	0·9	2·7	...	7·2	5	10
26	...	...	2·7	...	5·4	...	3·6	...	3·6	...	5·4	...	4·9	...	4·9	...	10·3	17	0
27	5·4	...	3·6	...	8·1	...	3·1	...	...	4·5	4·5	...	0·9	...	...	2·7	11·6	9	40
28	0·5	...	2·7	...	...	...	3·6	...	1·3	...	3·6	...	1·3	...	7·2	...	10·3	22	10
29	1·3	...	7·2	...	...	...	4·9	...	0·9	...	4·9	...	...	1·3	3·1	..	9·4	1	25
30	...	1·3	2·2	...	...	1·3	0·9	...	...	2·2	1·3	...	0·0	0·0	0·0	0·0	4·5	14	40
31	0·0	0·0	0·0	0·0	...	0·9	0·5	...	3·1	...	1·3	...	1·8	...	1·8	...	5·4	17	30
S+N & W+E	74·2		76·0		76·4		93·5		91·5		98·4		64·5		66·9				
S−N & W−E	20·4		32·2		17·4		19·1		25·3		33·0		6·3		42·3				

GREAT YARMOUTH.†§

Height of Head above—Roof 10·7 m., Ground 12·8 m., M.S.L., 15·9 m.
Height of Cups above—Roof 3·7 m., Ground 18·3 m., M.S.L., 22·3 m.

Date.	3 h.				9 h.				15 h.				21 h.				Max. in a Gust (Gorleston).	Time of Gust.	
	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.			
																	V.	Hrs.	Min.
1	0·9	...	0·5	...	0·9	...	...	1·8	4·0	...	...	4·0	3·6	...	...	...	8·5	13	15
2	0·9	...	1·3	...	...	...	0·9	..	4·5	...	...	4·5	4·0	...	...	...	9·8	17	35
3	1·8	...	2·7	...	4·9	...	...	4·9	6·7	...	...	4·5	2·7	...	1·3	...	?12·5	14	55
4	1·8	...	1·8	...	1·3	...	2·7	...	*	*	*	*	...	...	...	1·8	9·8	13	10
5	3·1	...	0·5	...	4·9	...	...	4·9	*	*	*	*	3·1	...	1·8	...	15·2	11	40
6	0·5	...	3·1	...	0·9	...	4·9	...	4·9	...	4·9	...	1·8	...	4·5	...	13·9	14	15
7	1·3	...	2·7	...	1·3	...	3·1	...	4·9	...	...	...	2·7	...	...	...	12·5	15	15
8	1·3	...	0·5	...	3·6	...	...	2·7	0·9	...	...	4·0	...	...	...	8·1	9·4	17	40
9	1·8	...	...	4·0	2·2	...	...	2·2	1·8	...	...	3·1	0·9	...	...	1·8	8·5	0	30
10	0·5	...	2·7	...	...	4·0	4·0	...	...	6·3	2·7	...	...	5·4	...	...	15·7	19	50
11	...	4·5	0·9	...	...	6·7	...	...	...	4·0	...	1·8	...	4·9	...	0·9	12·5	0	15
12	...	1·8	..	0·9	...	1·3	...	3·1	...	1·3	...	6·3	...	1·8	...	8·5	8·9	22	5
13	...	1·3	...	3·1	...	2·2	...	2·2	...	3·6	...	3·6	...	4·0	...	4·0	8·1	23	10
14	...	3·6	...	3·6	...	4·9	...	2·2	...	6·3	...	...	...	3·1	0·5	...	9·8	21	50
15	...	3·6	0·9	...	...	4·5	1·8	...	...	3·6	2·7	...	...	1·8	1·8	...	11·6	8	45
16	...	2·7	1·8	...	...	3·1	1·8	...	...	3·6	1·3	...	...	0·9	0·9	...	11·6	10	40
17	...	0·5	2·2	...	...	1·3	...	1·3	5·4	...	...	3·6	3·1	...	...	...	9·8	16	50
18	...	...	2·2	...	...	...	4·5	...	...	1·3	1·8	...	...	1·8	...	0·9	8·5	9	35
19	...	1·8	1·8	...	...	3·1	...	3·1	...	4·9	...	4·9	1·3	...	...	6·3	8·9	23	50
20	...	5·4	...	...	5·8	...	...	5·8	4·5	...	...	6·7	...	...	...	9·8	12·1	20	10
21	1·8	...	...	8·1	...	1·8	...	8·1	...	1·3	...	1·3	...	1·3	1·3	...	11·6	4	30
22	...	4·9	...	3·1	...	3·6	...	1·3	...	3·1	...	...	...	2·7	0·5	...	9·4	2	35
23	...	2·7	...	1·3	...	4·0	...	4·0	...	2·7	...	6·7	...	...	...	6·3	8·1	13	30
24	4·5	...	...	4·5	5·8	...	...	5·8	7·6	...	...	3·1	1·8	...	1·8	...	12·1	15	10
25	1·3	...	1·3	...	1·8	...	1·8	...	3·1	...	0·5	...	1·3	...	0·9	...	13·9	14	15
26	1·3	...	2·7	...	1·3	...	2·7	...	...	2·7	8·6	...	3·1	...	1·8	...	11·2	11	10
27	2·7	...	2·7	...	4·0	...	2·7	...	6·3	...	...	1·3	4·9	...	2·2	...	14·3	16	10
28	3·6	...	1·3	...	3·6	...	3·6	...	1·3	...	1·3	...	2·2	...	1·3	...	11·2	7	5
29	1·3	...	2·7	...	0·9	...	5·4	...	1·3	...	6·3	...	0·5	...	3·1	...	12·5	12	30
30	0·5	...	2·7	...	...	0·9	1·8	...	...	5·4	...	...	...	0·9	...	0·0	8·9	14	45
31	...	0·9	0·9	...	4·5	...	...	1·8	6·3	...	...	1·3	3·1	...	1·3	...	13·9	15	15
S+N & W+E	64·6		68·5		89·1		96·9		113·6		90·8		68·7		73·4				
S−N & W−E	−2·8		11·3		6·3		−13·5		13·4		−30·6		11·5		−23·4				

The velocities at fixed hours are means for the interval from 30 minutes before to 30 minutes after the hour. The hours are numbered 1 h. to 24 h. Time is referred to Greenwich Mean Time.

* No record.

† Robinson Cup Anemometer; Arms 0·61 m.; Diameter of Cups, 0·229 m.; Factor 2·2. ‡ Robinson Cup Anemometer; Arms 0·305 m.; Diameter of Cups 0·127 m.; Factor 2·8.

§ Dines Pressure Tube Anemometer. At Great Yarmouth, Holyhead, and Scilly the readings at fixed hours are taken from the Robinson Anemometer, the maxima quoted are the greatest winds in a gust as recorded by the Dines Pressure Tube.

METEOROLOGICAL OFFICE OBSERVATORIES—GEOPHYSICAL JOURNAL.

SEPTEMBER 1911.—DAILY VALUES REFERRED TO GREENWICH MEAN TIME AND UNITS, BASED ON THE C.G.S. SYSTEM. [*Price* 4*d*.

First Year.—No. 9. *Meteorology, Solar Radiation, Seismology, Atmospheric Electricity, and Terrestrial Magnetism.*

1. SEISMOLOGICAL JOURNAL:—ESKDALEMUIR.—Long. 3° 12′ W. Lat. 55° 19′ N.

Date.	Microseisms. Period.	Microseisms. Amp.	Earthquakes.	Remarks.
	s	μ		
1	7	1·0		4th I, S?=6 h., disturbed till 6 h. 40 m. North trace interrupted by time shutter sticking.
2	6	0·6		5th I, Long waves 3 h. 2 m.–3 h. 14 m.
3	6	0·5		6th Iu, P=1 h. 5 m. 26 s., S=1 h. 14 m. 30 s., Δ=7680 kms., α=42° 19′ E. of N. Epicentre 43½° N, 117° E.
4	5	0·3	I.	7th I, Feeble disturbance 4 h. 37 m.
5	7	0·6	I.	8th Iu, P=22 h. 55′m. 25 s., S=23 h. 4 m. 44 s., Δ=7980 kms., α=13° 50′ E of N. Epicentre 51½° N, 155½° E.
6	5–6	0·7	Iu.	9th I, S?=11 h. 12 m. 33 s. Long waves extremely feeble.
7	5–6	0·4	I.	10th Ir, P doubtful, S=1 h. 21 m. 42 s., L=1 h. 24½ m., Δ<5000 kms., I, Disturbed 2 h. 14 m.–2 h. 27 m. I, Disturbed 3h. 38 m.–3 h. 47 m. Ir, S=6 h. 12 m. 44 s., L=6 h. 15½ m., all very weak. Solitary waves occur on North Component at 1 h. 49 m. 16 s., 3 h. 42 m. 32 s., and on West Component at 2 h. 14 m. 46 s., 4 h. 28 m. 51 s.
8	5	0·2	Iu.	11th Ir, S=1 h. 55 m. 41 s., L 2 h. 12th I, P=13 h. 12 m. 32 s.
9	4	0·1	I.	13th Iu, P=3 h. 15 m. 8 s., S=3 h. 23 m. 41 s., Δ=7170 kms., α=26° 15′ W of N. Epicentre 54½° N, 139½° W. I, 1st and 2nd phases indistinguishable. L=22 h. 37 m. 48 s.
10	4	0·2	Ir, I, I, Ir.	15th IIu, P=13 h. 23 m. 18 s., S=13 h. 34 m. 12 s., Δ=9910 kms., α=55° 29′ W of S. Epicentre 18° S, 63° W.
11	5	0·4	Ir.	16th I, Similar seismogram to 13th I, L=5 h. 36 m. 13 s. I, Long waves 11 h. 52 m.–11 h. 58 m., and I, Long waves 15 h. 41 m.–
12	5–6	0·4	I.	17th IIu, P=3 h. 39 m. 7 s., S=3 h. 48 m. 37 s., Δ= 8200 kms., α=0° N. Epicentre 51° N, 177° E. [15 h. 51 m.
13	6	0·5	Iu, I.	18th I, Disturbed 0 h. 29 m.–0 h. 50 m. ; I, P and S uncertain, L=14 h. 24 m.
14	5	0·4		20th I, P doubtful, S=5 h. 20 m. 59 s. 21st I, L =6 h. 13 m. I, L=8 h. 5 m.
15	5–6	0·5	IIu.	22nd Iu, P=5 h. 11 m. 32 s., S=5 h. 19 m. 51 s., Δ=7000 kms., α?=47° 46′ E of S. Epicentre 0°, 34° E.
16	5	0·5	I, I, I.	24th I, L=4 h. 46 m.
17	5–6	0·3	IIu.	25th Ir, P=8 h. 41 m. 34 s., S=8 h. 55 m. 54 s., L=9 h. 20 m., Δ=4590 kms.
18	5–6	0·5	I, I.	26th Iu, S=14 h. 30 m. 14 s., L=14 h. 46 m.
19	5	0·5		
20	6	0·6	I.	
21	6	0·6	I, I.	
22	5	0·4	Iu.	
23	5	1·1		
24	6	2·0	I.	
25	5	0·6	Ir.	
26	5	0·9	Iu.	
27	6	1·0		
28	5–6	0·9		
29	5–6	0·7		
30	5–6	1·0		

An explanation of the notation used is given in the preface.

2. VALENCIA OBSERVATORY, CAHIRCIVEEN (KERRY).—Long. 10° 15′ W. Lat. 51° 56′ N.

Heights above Mean Sea Level:—Station, H = 9·2 m. Barometer Cistern, H_b = 13·7 m.
Heights above Ground:—Thermometers, h_t = 1·2 m. Rain-gauge, h_r = 0·6 m. Sunshine Recorder, h_s = 12·8 m. Cups of Anemometer, h_a = 13·7 m.

Day.	Pressure at Station Level. 9 h.	21 h.	Air Temperature in Degrees Absolute. 9 h.	21 h.	Max.	Min.	Humidity. Vapour Pressure. 9 h.	21 h.	Percentage. 9 h.	21 h.	Wind Direction in points (8=E, 16=S) and Velocity (*metres per second*). 9 h.		21 h.		Cloud Amount and Weather. 10 h.	10 h.	Rain 24 hours beginning 10 h.	Sunshine.	Remarks.	Magnetism. Horizontal Force.	Declination West.	Inclination.
			200+	200+	200+	200+									Tenths of Sky covered.							
	bar.	bar.	°	°	°	°	millibar.		%	%	m/sec.		m/sec.				mm.	hrs.		γ·	° ′	° ′
1	·0135	·0130	89·3	89·0	91·4	87·7	14·3	16·0	78	89	15 6·7		15 4·0		7	10	—	4·7	Visibility.	…	…	…
2	·0183	·0232	87·9	85·9	90·5	83·5	14·2	12·5	84	85	— 0·0		— 0·0		3	2	—	10·9	Fine.	…	…	…
3	·0261	·0245	86·8	86·8	90·4	82·1	14·7	13·9	94	89	— 0·0		5 1·8		2	*4*	—	11·7	*p a.* Fine.	…	…	…
4	·0215	·0243	88·5	87·8	91·2	84·8	14·4	14·5	83	87	— 0·0		29 2·2		2	*6*	—	11·3	Fine.	…	…	…
5	·0253	·0258	87·6	86·2	90·9	82·8	15·3	14·2	92	95	— 0·5		— 0·9		1	*1*	—	12·1	*p a.* Fine.	…	…	…
6	·0244	·0221	87·8	86·0	90·7	82·5	14·5	14·0	87	95	— 0·0		— 0·9		8	*1*	—	8·7	*p a.* Fine. ∞ *p.*	…	…	…
7	·0196	·0167	87·5	87·8	92·8	81·9	15·0	15·8	91	96	— 0·9		— 0·9		0∞	*1*≡0	—	11·6	*p a.* Fine, but hazy.	17902	20 37·6	68 11·7
8	·0130	·0142	89·6	92·0	**96·4**	84·3	16·1	16·7	87	77	— 0·5		7 3·1		3∞	*0*∞	—	11·4	*p a.* Fine, but hazy.	…	…	…
9	·0145	·0136	89·0	89·2	92·6	85·2	16·1	16·1	90	88	— 0·0		12 3·1		0∞	*9*∞	—	11·3	*p a.* Fine, but hazy.	…	…	…
10	·0116	·0106	91·4	91·3	93·2	89·4	16·8	19·3	81	93	13 7·2		15 4·5		10	10	15·0	0·5	∞ *a.* Very dull late *p.*	…	…	…
11	·0134	·0151	88·5	87·0	91·3	86·6	16·0	14·4	92	90	21 4·0		3 3·1		8	10	**16·0**	0·4	$\bullet^2$ 0 h. 20 m.–0 h. 40 m. ● 16 h.	…	…	…
12	·0156	·0175	86·0	86·5	88 5	85·2	12·3	11·1	83	71	2 7·6		1 6·7		9	2	0·3	4·1	Dull *a.* Fair *p.* [30 m.–19 h. 30 m.	…	…	…
13	·0202	·0229	86·3	86·4	88·3	83·4	12·1	10·9	80	70	— 0·9		1 4·9		8	9	—	3·0	Fair to dull.	…	…	…
14	·0248	·0254	85·2	84·8	87·6	84·0	10·9	10·8	77	78	3 2·2		— 1·3		4	3	0·3	6·3	Visibility *a.* Fair.	…	…	…
15	·0271	·0291	85·1	84·5	87·6	83·1	8·6	9·3	61	69	3 9·4		7 2·7		4	3	—	11·2	Fair.	…	…	…
16	·0302	·0284	83·4	85·1	86·5	80·2	8·5	10·8	68	77	4 5·4		1 1·8		4	10	—	6·8	Fair to dull.	…	…	…
17	·0290	·0301	84·5	83·6	88·1	80·7	12·3	11·7	91	92	— 1·3		— 0·9		10	*1*	—	0·1	Dull *a.* Fine *p.*	…	…	…
18	·0283	1·0220	83·1	86·1	89·0	**78·9**	11 3	13·2	92	87	— 1·3		— 1·3		2	*2*	—	5·6	*p a.* Fine.	…	…	…
19	1·0121	0·9992	86·3	87·0	89·3	81·4	13·3	14·9	88	94	— 1·3		20 6·7		8	*10*	13·2	3·0	*p a.* Fair to dull. $\bullet^0$ *p.*	…	…	…
20	0·9959	0·9961	84·1	82·3	86·0	81·2	9·8	10·2	75	88	20 4·9		21 6·7		6	*5*●	9·4	4·9	▲● showers.	…	…	…
21	1·0038	1·0108	84·1	85·2	86·5	81·8	8·4	9·2	64	65	30 10·7		28 8·9		10≡0 *p*	*3*	11·7	6·6	Squally, with ▲● showers.	17878	20 43·8	68 12·0
22	·0013	·0016	85·4	87·9	88·8	83·2	13·5	16·6	95	99	13 8·5		17 2·2		10≡0●	*10*≡0●	5·6	—	● 3 h.–10 h. Misty.	…	…	…
23	·0002	·0054	88·0	85·7	89·6	85·1	16·1	11·7	95	80	22 4·0		21 5·8		3	*3*	0·8	8·3	Fair.	…	…	…
24	·0094	·0142	86·4	83·7	87·8	83·3	12·8	11·5	84	90	21 4·5		— 0·9		5	*7*	11·4	7·3	●▲ showers.	…	…	…
25	·0106	·0116	84·7	86·3	87·4	83·5	12·5	14·1	92	94	8 2·2		21 5·8		10≡0●	*10*≡0	10·2	4·5	● 6 h.–11 h. 30 m. Visibility *p.*	…	…	…
26	·0167	·0170	86·8	88·5	89·3	84·1	13·2	15·2	84	87	20 4·9		20 8·1		8	*10*	6·1	4·4	● showers early. Fair *p.*	…	…	…
27	·0183	·0215	86·8	85·1	88·4	83·9	15·1	12·6	97	89	26 3·1		22 6·3		10≡0●	*10*≡0	2·3	—	● 7 h.–9 h. $\bullet^0$ 18 h.–23 h.	…	…	…
28	·0238	·0266	85·3	84·0	86·8	83·4	10·6	9·7	75	75	26 3·1		29 1·8		10	*3*	--	4·7	Dull to fair.	…	…	…
29	·0281	·0186	85·7	87·5	88·1	83·7	11·6	15·9	79	97	23 3·1		20 9·4		8≡0●	*10*	8·1	0·3	Fair to dull. ● 19 h. 30 m.–21 h.	…	…	…
30	1·0198	1·0310	85·1	84·1	87·6	83·2	10·9	8·8	77	68	1 10·3		1 6·7		10	*3*	--	5·0	Visibility *a.* Dull to fair.	…	…	…
Means	1·0172	1·0177	86·5	86·4	89·4	83·5	13·0	13·2	84	85	3·6		3·8		6·1	5·6	110·4	181	Monthly **Totals** or **Means**.	17890	20 40·7	68 11·9
Normal 35 years	1·0139	1·0141	86·6	86·1	89·6	83·8	13·3	13·0	84	86	5·0 25 years		4·5 25 years		—	—	118·2	130 25 yrs	**Normals**, 35 years.			
									20 years													

Wt. 41467/309—6—6—375—4/12. N. & Co., Ltd. Gp. XV.

Note.—The cloud amounts in italic type at Valencia were taken at 21 h.

3. Kew Observatory, Surrey.—Long. 0° 19′ W. Lat. 51° 28′ N.

Heights above Mean Sea Level :—Station, H = 5·5 m. Barometer, H_b = 10·4 m.
Heights above Ground :—Thermometers, h_t = 3·0 m. Rain-gauge, h_r = 0·5 m. Sunshine Recorder, h_s = 14·3 m. Cups of Anemometer, h_a = 21·3 m.

Day.	Pressure at Station Level.		Air Temperature in Degrees Absolute.				Humidity.				Wind Direction in Points (8 = E, 16 = S) and Velocity (*metres per second*).				Cloud Amount and Weather.		Rain 24 hours beginning 10 h.	Sunshine.	Solar Radiation, Watts per cm².	Min. Temp. on Grass.	Earth Temperature at 10 h.		Remarks.
							Vapour Pressure.		Percentage.														
	9 h.	21 h.	9 h.	21 h.	Max.	Min.	9 h.	21 h.	9 h.	21 h.	9 h.		21 h.		10 h.	22 h.					0·3 m.	1·2 m.	
	bar.	bar.	200+ °	200+ °	200+ °	200+ °	millibar.		%	%	m/sec.		m/sec.		Tenths of Sky covered.		mm.	hrs.		200+ °	200+ °	200+ °	
1	1·0218	1·0191	89·1	89·9	98·2	83·2	14·1	14·0	78	74	20	3·1	—	0·9	0	0	—	12·4	—	76·1	89·8	89·0	Very fine throughout.
2	·0182	·0201	93·8	93·4	101·4	83·9	15·4	18·2	63	77	17	3·1	20	2·7	0	0	—	11·5	—	79·0	90·4	89·0	Very fine and hot all day.
3	·0241	·0254	91·4	91·1	96·8	87·9	12·9	14·4	61	70	4	2·7	1	1·8	7	0	—	6·7	—	82·8	90·9	88·9	Fine at intervals.
4	·0255	·0207	92·6	89·3	97·4	86·9	13·7	15·7	61	85	12	2·2	—	0·9	7	0≡0	0·5	3·9	—	81·0	90·8	88·9	●0 12 h.–12 h. 30 m. ⊕ 17 h.
5	·0230	·0238	90·4	89·7	98·7	84·7	15·9	14·9	80	79	—	0·9	—	0·9	?1≡0	3≡0	—	9·9	—	79·6	90·3	88·9	Fine during day.
6	·0247	·0226	89·6	93·1	101·3	83·6	14·2	16·9	76	72	—	1·3	17	1·8	0≡0	0≡0	—	10·9	·055	78·4	90·3	88·9	Fine throughout.
7	·0221	·0193	91·0	91·7	103·7	84·3	14·4	16·3	71	77	—	0·9	—	0·5	0≡0	0	—	11·4	·066	78·5	90·8	88·8	Very fine and hot all day.
8	·0168	·0129	92·5	94·0	**104·0**	84·3	15·9	15·7	71	64	—	0·9	—	0·9	0≡0	2≡0	—	11·0	·063	79·0	91·2	88·7	Fine and hot all day.
9	·0140	·0190	91·0	89·5	92·5	87·2	16·1	11·9	78	64	3	6·3	5	6·3	10	1	—	—	—	82·3	91·4	88·7	Dull throughout.
10	·0210	·0185	90·4	89·3	96·9	84·1	12·7	13·5	64	74	11	5·4	8	4·9	?2	0	—	11·3	—	77·7	90·4	88·8	Fine throughout.
11	·0160	·0153	93·5	89·1	101·0	85·6	11·7	13·3	**49**	74	12	3·1	—	0·0	5	2≡0	—	9·6	—	78·4	90·7	88·7	Fine during day.
12	·0131	·0109	93·7	94·2	101·8	85·9	13·0	18·3	53	73	9	2·2	18	2·7	?4≡0	10	0·8	3·7	—	80·2	90·7	88·8	Fine *a*. ●20 h. 50 m.–21 h. 10 m.
13	·0130	·0168	89·6	86·8	92·1	86·2	16·2	14·7	87	94	27	3·6	1	3·1	10	10●	**12·7**	—	—	85·3	90·8	88·7	●0 6 h. ●*p*. Dull throughout.
14	·0184	·0197	87·3	85·3	90·2	83·9	**12·7**	10·9	78	77	1	3·1	2	3·6	7≡0	8	—	3·6	—	81·3	89·6	88·7	Fine intervals.
15	·0209	·0239	85·4	84·5	89·1	81·3	9·8	9·7	69	72	32	6·7	1	4·0	3	3	—	8·9	—	76·2	88·6	88·6	Fine all day.
16	·0253	·0253	85·9	84·3	89·8	81·2	10·0	10·5	68	79	1	6·3	1	1·8	2	2	—	10·2	—	75·9	87·4	88·6	Fine throughout.
17	·0267	·0279	84 7	82·6	89·5	79·5	10·3	10·7	75	90	32	1·8	—	0·9	9	0≡0	—	5·6	—	72·5	86·8	88·5	Fair *a*. Fine *p*.
18	·0281	·0231	84·9	86·3	92·2	78·9	10·6	11·7	76	77	24	2·2	23	2·7	1	0	—	10·6	·066	72·8	86·4	88·4	≡0 early. Very fine all day.
19	1·0190	1·0085	86·2	87·2	91·8	80·4	10·8	14·1	71	88	20	2·7	—	1·3	1	10●	6·4	9·9	—	74·5	86·9	88·1	● 19 h.–19 h. 45 m. and 22 h. ●0
20	0·9996	0·9961	90·2	85·2	91·3	83·4	14·7	12·2	76	86	19	7·2	24	1·8	10	2	1·3	0·9	—	85·2	88·0	88·0	Dull. ● 20 h. 15 m. [midt.
21	0·9964	1·0026	83·7	83·7	89·1	80·8	9·8	10·1	77	79	25	3·1	—	0·5	3	0	—	6·0	·073	76·6	87·0	87·9	Fine most of day. Distant T*p*.
22	1·0095	·0111	81·4	82·0	89·2	**77·4**	9·2	9·5	84	84	—	0·5	—	0·9	0≡0	?0≡0	—	7·6	·051	71·1	85 8	87·9	Fine during day.
23	·0104	·0093	87·5	85·2	91·4	78·1	10·9	13·4	66	95	14	5·4	12	2·2	5	10	5·3	8·1	·051	73·4	85·7	87·9	● 18 h. 35 m.–21 h. 20 m.
24	·0102	·0164	87·8	84·1	91·2	82·0	13·3	11·8	79	91	25	3·1	—	0·9	6	0	—	8·7	—	84·3	86·9	87·6	● 0 h. 50 m.–1 h. 30 m. and 14 h.
25	·0199	·0152	84·8	89·6	92·1	78·7	11·9	13·9	86	75	—	0·5	16	5·4	1	10●0	0·3	8·8	·075	73·6	86·3	87·5	≡ early. [35 m.–15 h. 35 m.
26	·0198	·0219	87·8	86·3	92·6	84·2	12·4	12·6	75	83	23	2·7	—	0·9	1	0	—	10·5	·070	79·7	87·5	87·4	●0 0 h. 20 m. Very fine.
27	·0234	·0198	88·1	89·0	93·1	82·8	13·2	15·4	77	85	21	3·6	19	6·3	3	10	3·3	7·8	·068	75·6	87·4	87·4	Fine most of day.
28	·0222	·0232	86·0	82·9	89·1	80·8	12·4	10·0	84	83	25	2·2	—	1·3	10	1	—	2·6	—	83·8	**87·7**	87·4	● 0 h. 50 m.–2 h. and 2 h. 30 m.–
29	·0241	·0226	83·8	84·5	88·1	**77·4**	8·7	8·9	68	66	25	4·9	26	1·8	1	10	3·6	8·2	·063	**70·3**	86·2	87·4	Fine all day. [4 h.
30	1·0048	1·0162	87·5	81·9	88·5	80·7	12·8	7·1	78	64	24	5·4	30	8·1	10	1	0·5	3·7	·071	81·1	86·3	87·4	● *a*.
Means	1·0177	1·0176	88·4	87·5	94·1	82·6	12·7	13·0	73	78	—	3·2	—	2·4	4·0	3·2	34·7	224	—	78·2	88·6	88·3	Monthly **Totals** or **Means**.
Normal 35 years	1·0153	1·0150	86·8	86·1	91·2	82·7	12·6	12·6	80	83	—	3·1 (25 years)	—	2·3 (25 years)	—	—	54·4	141 (25 yrs)	—	—	—	—	**Normals**, 35 years.
									20 years														

4. Eskdalemuir Observatory, Dumfriesshire.—Long. 3° 12′ W. Lat. 55° 19′ N.

Heights above Mean Sea Level :—Station, H = 243·2 m. Barometer, H_b = 237·1 m.
Heights above Ground :—Thermometers, h_t = 0·8 m. Rain-gauge, h_r = 0·3 m. Sunshine Recorder, h_s = 1·5 m. Vane of Anemometer, h_a = 15·2 m.

															9 h.	21 h.	9 h.						
1	0·9863	0·9864	86·2	86·7	88·2	85 6	14·6	15·0	97	96	20	9·4	20	8·5	10●	8	4·3	3·9	—	—	—	—	
2	·9886	·9920	88·8	84·7	**92·2**	81·9	14·6	11·9	82	87	20	6·7	22	4·0	9	4	—	7·7	—	—	—	—	
3	·9956	·9990	86·5	80·2	90·6	76·1	11·3	8·6	73	86	22	7·6	—	0·9	5	5	—	7·6	—	—	—	—	
4	·9973	·9939	82·9	81·5	90·0	74·5	11·3	10·3	94	93	—	0·0	—	0·0	5	3	—	4·7	—	—	—	—	
5	·9936	·9956	85·6	87·3	90·3	78·2	12·5	14·7	87	91	20	5·4	24	8·9	7	10	—	2·2	—	—	—	—	
6	·9945	·9945	88·2	83·9	91·9	80·6	12·6	11·5	74	89	24	4·5	22	3·6	7	1	—	10·4	·091	—	—	—	
7	·9932	·9921	86 1	83·8	91·4	77·5	14·9	11·7	100	91	20	3·6	—	0·9	10≡0	3	—	3·5	—	—	—	—	
8	·9892	·9908	84·4	82·2	91·7	77·8	13·0	11·2	97	97	—	1·3	2	3·6	8	7	0·3	2·5	—	—	—	—	
9	·9923	·9934	84·5	80·0	88·1	75·0	9·7	8·7	71	88	4	3·1	32	2·2	6	6	—	9·0	—	—	—	—	⊕ 16 h. 45 m. ◫ 20 h. 15 m.
10	·9928	·9894	84·2	83·9	91·7	77·3	10·8	12·0	81	93	—	0·5	—	0·9	5	4	0·3	10·2	—	—	—	—	
11	·9871	·9882	86·2	86·9	91·7	81·9	13·6	14·7	90	93	14	1·8	—	0·9	9	9	0·3	5·3	—	—	—	—	
12	·9881	·9870	84·9	83·0	86·2	81·2	13·1	11·1	95	92	—	1·3	—	1·3	10●0	10	1·0	—	—	—	—	—	Frequent ●0 9 h.–17 h.
13	·9878	·9902	85·2	80·8	87·0	77·4	9·8	8·6	70	83	2	1·8	28	6·3	6	3	—	4·4	—	—	—	—	
14	·9932	0·9953	84·1	78·2	86·7	76·5	9·1	7·2	70	**82**	28	3·6	28	2·2	3	3	—	5·4	—	—	—	—	
15	0·9986	1·0004	81·8	78·6	84·7	77·0	7·7	7·9	68	88	2	5·8	32	1·8	7	1	—	8·4	—	—	—	—	
16	1·0003	0·9986	81·2	76·4	84·3	76·0	7·3	6·8	68	88	—	1·3	—	0·0	10	5	—	1·0	—	—	—	—	
17	0·9975	·9983	84·2	85·0	88·6	75·8	9·9	12·3	74	89	28	6·3	22	4·0	3	9	0·3	9·9	—	—	—	—	
18	·9960	·9910	86·3	84·3	87·8	83·0	13 7	11·5	90	86	22	6·3	24	5·8	10	5	—	0·3	—	—	—	—	Light drizzle about 6 h.
19	·9841	·9728	84·5	84·1	87·2	82·6	11·1	13·1	83	100	20	7·6	20	3·1	10	9	7·4	1·2	—	—	—	—	
20	·9639	·9653	84·6	78·8	86·7	74·3	12·9	7·7	95	84	20	4·0	—	0·5	10	4	0·3	3·9	—	—	—	—	
21	·9687	·9760	81·4	77 4	86·2	71·7	8·4	7·0	77	84	—	0·0	—	0·5	2	0	—	6·2	—	—	—	—	↖ to South 16 h.
22	·9806	·9798	77·4	80·6	85·0	**70·3**	7·8	9·1	95	87	—	0·0	—	0·9	9	7	—	1·4	—	—	—	—	
23	·9762	·9751	83·4	84·6	85·9	79·7	10·9	12·6	88	93	16	7·2	16	2·7	10	10●	**21·8**	—	—	—	—	—	
24	·9801	·9855	82·7	80·4	88·2	78·7	10·8	10·0	90	97	18	3·1	—	0·5	7	8	0·3	7·7	—	—	—	—	
25	·9881	·9819	80·7	82·7	85·7	76·9	10·5	11·8	100	97	—	0·0	16	2·2	10≡0	7	0·5	0·2	—	—	—	—	
26	·9856	·9856	83·7	84·8	86·7	78·9	10·8	11·7	84	85	20	8·1	18	13·4	7	3	3·3	6·2	—	—	—	—	
27	·9851	·9870	84·5	79·5	85·2	78·5	10·5	8·4	78	87	22	14·8	20	4·5	8	7	17·3	1·9	—	—	—	—	
28	·9891	·9902	76·7	78·5	82·8	76·4	7·4	7·7	93	86	22	8·1	24	6·7	4	3	2·8	6·7	—	—	—	—	
29	·9920	·9881	81·1	78·0	83·7	75·7	7·9	8·2	75	94	28	8·1	—	0·9	3	10●	11·9	5·5	—	—	—	—	⊕ 13 h.–14 h. 30 m.
30	0·9850	0·9957	78·6	76·1	82·2	74·6	7·1	5·9	79	77	32	10·7	32	3·6	4	1	—	9·4	—	—	—	—	
Means	0·9884	0·9886	83·7	81·8	87·6	77·7	10·8	10·3	84	89		4·7		3·2	7·1	5·5	72·1	147	—	—	—	—	Monthly **Totals** or **Means**.
Normal 35 years	—	—	—	—	—	—	—	—	—	—	—		—		—	—	—	—	—	—	—	—	

The solar radiation is the mean of the readings within the nominal hour of observation (11 h. 30 m.–12 h. 30 m.) unless some other hour is specified.

5. Kew Observatory.

Day.	Potential Gradient, Volts. per metre. Factor 1·86.				Number of Ions per cc.		Velocities of Ions for 1 volt. per centimetre.		Conductivity $\times 10^{25}$.	Air–Earth Current $\times 10^{16}$.		Electric Character of Day.	Magnetic Character of Day.	Horizontal Force.					West Declination.				
	3 h.	9 h.	15 h.	21 h.	+.	−.	+.	−.		c_1.	c_2.			Maximum. 18000 γ +.		Minimum. 18000 γ +.		Range.	Maximum. 15° +.		Minimum. 15° +.		Range.
	v/m.	v/m.	v/m.	v/m.	n/cc.	n/cc.	cm/sec.	cm/sec.	E.-m.U.	Amp/cm².				γ	h m	γ	h m	γ	′	h m	′	h m	′
1	*	285	150	340	—	—					1·00	0	0	517	23 15	474	9 28	43	59·3	13 40	49·1	7 24	10·2
2	170	390	160	230	—	—					—	1	0	511	0 56	487	10 50	24	59·9	13 0	50·1	7 8	9·8
3	135	315	135	150	—	—					—	1	0	513	14 15	477	10 3	36	59·4	12 53	50·8	5 55	8·6
4	120	330	x±	255	—	—					—	1	0	515	21 26	483	9 56	32	59·2	12 40	51·0	7 8	8·2
5	210	260	205	95	—	—					0·50	1	0	516	12 45	482	8 50	34	62·1	13 40	50·0	7 36	12·1
6	125	255	135	380	—	—					—	0	0	518	12 43	479	8 24	39	62·1	12 38	52·0	8 5	10·1
7	210	350	170	115	—	—					—	1	0	508	0 13	471	10 54	37	61·2	12 52	50·0	6 58	11·2
8	245	370	100	235	—	—					0·60	0	0	505	19 31	479	10 1	26	59·3	13 2	52·0	7 29	7·3
9	255	265	280	265	—	—					—	0	0	515	22 58	477	9 15	38	60·0	12 52	51·0	7 13	9·0
10	130	255	255	375	—	—					—	0	1	512	21 18	473	10 40	39	62·6	12 46	49·8	3 33	12·8
11	235	305	160	295	—	—					—	0	1	527	20 23	460	12 48	67	62·0	13 32	44·0	21 18	18·0
12	90	725	305	x±	—	—					—	1	1	516	23 13	469	13 0	47	63·8	12 43	47·2	20 20	16·6
13	110	35	155	175	—	—					—	1	0	510	19 26	454	9 48	56	62·7	13 3	50·8	7 43	11·9
14	200	305	200	390	—	—					0·60	0	0	510	21 40	476	10 52	34	57·3	12 50	51·0	7 47	6·3
15	235	425	355	310	790	580					—	0	1	527	21 54	485	10 5	42	59·0	11 38	50·7	20 47	8·3
16	255	440	305	345	—	—					—	0	1	526	23 30	452	12 58	74	63·3	12 40	49·0	24 0	14·3
17	265	185	85	110	—	—					—	0	1	517	22 32	482	8 2	35	59·2	12 25	47·6	20 42	11·6
18	255	305	180	315	—	—					—	0	0	519	18 23	490	2 42	29	57·1	13 35	50·3	7 46	6·8
19	175	395	145	255	710	490					—	1	1	544	19 30	490	10 56	54	60·0	12 36	45·0	20 46	15·0
20	70	200	185	405	—	—					—	2	2	552	3 58	417	10 51	135	64·2	11 3	44·2	19 20	20·0
21	210	315	145	250	—	—					—	1	2	544	17 45	433	9 33	111	60·9	13 29	40·6	17 35	20·3
22	135	330	305	185	310	260					—	1	1	526	19 20	422	10 30	104	59·4	11 14	46·4	19 10	13·0
23	*	*	235	180	—	—					—	0	1	520	0 20	468	14 4	52	60·0	13 29	47·4	20 15	12·6
24	25	275	165	285	—	—					—	1	0	501	20 15	465	10 32	36	59·4	11 56	51·9	7 50	7·5
25	315	420	185	170	—	—					0·85	0	0	498	20 40	457	10 47	41	58·3	12 15	50·2	8 5	8·1
26	80	320	180	315	990	410					—	0	0	503	22 54	458	9 59	45	58·4	12 50	49·4	7 45	9·0
27	285	255	150	270	—	—					0·55	0	0	505	1 2	463	12 19	42	57·6	14 33	49·0	9 15	8·6
28	80	285	205	550	460	420					—	0	0	505	19 47	462	11 13	43	57·1	14 15	48·3	8 24	8·8
29	330	350	200	320	1140	880					—	0	0	501	17 48	470	10 35	31	56·3	15 5	48·4	9 8	7·9
30	110	220	150	230	—	—					—	1	0	498	20 2	470	10 21	28	56·3	14 15	49·7	8 24	6·6
M.	187	301	188	270	—	—					—	—	—	516	—	468	—	48	59·9	—	48·9	—	11·0

6. Eskdalemuir Observatory.

Day.	Potential Gradient, Volts per metre. Factor 5·4.				Number of Ions per cc.		Velocities of Ions for 1 volt. per centimetre.		Conductivity $\times 10^{25}$.	Air–Earth Current $\times 10^{16}$.		Electric Character of Day.	Magnetic Character of Day.	North Component.				West Component.				Vertical Component.			
	3 h.	9 h.	15 h.	21 h.	+.	−.	+.	−.		c_1.	c_2.			Maximum. 15000 γ +.		Minimum. 15000 γ +.		Maximum. 5000 γ +.		Minimum. 5000 γ +.		Maximum. 45000 γ +.		Minimum. 45000 γ +.	
	v/m.	v/m.	v/m.	v/m.	n/cc.	n/cc.	cm/sec.	cm/sec.	E.-m.U.	Amp/cm².		*		h m	γ	γ	h m	h m	γ	γ	h m	h m	γ	γ	h m
1	−601	178	137	191	—	—	—	—	—			2 *b*	0	23 12	1023	971	10 53	14 1	290	227	8 17	6h.–7h.	331	316	12 0
2	191	130	164	191	—	—	—	—	—			1 *a*	0	0 54 / 15 53	1021	973	12 0	13 0	289	236	7 9	17 0	331	313	12 0
3	*	*	164	383	—	—	—	—	—			0 *a*	0	16 28	1016	976	11 3	12 53	286	239	8 19	17 0	328	312	12 20
4	240	212	184	458	—	—	—	—	—			0 *a*	0	22 17	1022	979	11 0	13 19	287	243	6 43	6 0	327	307	12 25
5	*	*	144	246	—	—	—	—	—			0 *a*	1	19 19	1028	980	14 49	13 40	305	235	7 36	21 50	330	305	12 33
6	233	219	178	349	—	—	—	—	—			0 *a*	0	19 47	1026	983	10 3	12 45	298	240	8 20	17 18	324	300	12 35
7	397	226	274	479	—	—	—	—	—			0 *a*	1	5 44	1026	965	10 53	12 33	288	232	6 57	16 50	325	308	12 0
8	383	212	206	164	—	—	—	—	—			1 *b*	1	19 41	1021	982	10 36	12 4	280	242	8 43	16 40	326	309	11 50
9	178	144	150	76	—	—	—	—	—			0 *a*	0	23 0	1030	977	10 36	13 20	285	240	7 11	17 33	319	306	11 0 / 12 0
10	130	*	226	*	—	—	—	—	—			0 *a*	1	3 28	1041	965	10 40	14 5	296	233	3 42	16 51	328	302	11 10
11	*	*	*	321	—	—	—	—	—			1 *b*	2	20 20	1054	942	12 49	13 34	298	199	21 18	17 15	343	306	12 0
12	14	76	54	335	—	—	—	—	—			1 *a*	1	4 48	1032	952	12 58	12 44	296	220	20 17	17 0	335	300	0 30
13	226	157	150	274	660	330	1·01	0·80	1·02			0 *a*	1	19 23	1016	951	10 0	13 18	298	240	8 13	16 2	322	305	12 0
14	233	294	206	335	—	—	—	—	—			1 *b*	0	20 22	1020	977	10 50	13 55	274	245	8 25	15 0	316	307	12 20
15	240	280	164	171	—	—	—	—	—			1 *a*	1	21 52	1052	980	12 26	13 32	293	239	4 32	20 45	319	302	11 40
16	103	96	206	274	—	—	—	—	—			0 *a*	2	23 27	1048	933	12 48	15 52	296	236	24 0	17 0	330	299	3 0
17	*	*	206	301	—	—	—	—	—			0 *a*	1	19 16	1040	978	11 12	13 7	283	224	21 8	18 0	315	288	22 50
18	150	130	96	206	780	570	1·19	0·68	1·45			1 *a*	0	18 23	1022	992	11 12	13 46	277	243	7 45	19 26	315	301	15 0
19	144	123	157	328	—	—	—	—	—			1 *a*	1	20 59	1058	980	10 55	18 44	291	204	20 38	20 40	325	296	23 0
20	178	157	137	281	—	—	—	—	—			1 *b*	2	17 34	1072	890	10 50	3 4	310	180	19 17	15 0	340	207	4 5
21	123	157	267	246	—	—	—	—	—			0 *a*	2	17 42	1105	920	9 33	13 23	294	155	17 32	16 30	368	283	0 0
22	*	*	220	377	—	—	—	—	—			0 *a*	2	19 13	1067	915	10 30	23 22	295	208	19 10	17 10	327	279	0 15
23	272	234	325	− 52	—	—	—	—	—			1 *a*	1	20 26	1039	967	14 3	13 27	288	211	20 10	16 30	326	288	2 54
24	487	338	149	377	—	—	—	—	—			1 *a*	1	20 10	1023	960	12 17	12 58	278	233	8 56	16 50	315	306	12 0
25	507	467	104	344	—	—	—	—	—			1 *b*	0	20 34	1016	963	10 56	14 0	275	233	8 23	16 0	314	302	12 30
26	182	247	182	169	—	—	—	—	—			0 *a*	0	22 58	1024	969	10 49	13 30	278	237	9 39	17 40	314	302	12 0
27	−487	136	− 26	169	—	—	—	—	—			2 *c*	1	1 46	1030	967	12 17	14 55	279	230	2 2	19 0	314	292	1 48
28	149	*x*	*x*	254	—	—	—	—	—			2 *c*	1	19 49	1023	972	11 38	14 5	272	229	9 40	21 50	313	303	12 30
29	143	208	272	−780	—	—	—	—	—			1 *b*	0	3 16	1021	979	10 59	13 24	275	230	9 6	0 0	311	301	11 40
30	45	208	117	306	—	—	—	—	—			1 *b*	0	0 0	1016	979	12 59	15 2	274	235	8 2	0 0 / 23 0	309	306	11 32
M.	156	201	168	213	—	—	—	—	—			—	—	—	1034	964	—	—	288	227	—	—	325	298	—

x Indeterminate. * No record.

An explanation of the Headings of the columns is given in the Preface.

7. Tables of Wind Components in metres per second at fixed hours.

Together with the mean velocity (horizontal movement) in metres per second for the hour with the maximum hourly run for each day, **or** the greatest velocity attained in a gust and the time of its occurrence.

HOLYHEAD.†§

Height of Head above—Roof 8·8 m., Ground 13·7 m., M.S.L. 19·2 m.
Height of Cups above—Roof 4·6 m., Ground 7·6 m., M.S.L. 15·2 m.

Date.	3 h. S.	3 h. N.	3 h. W.	3 h. E.	9 h. S.	9 h. N.	9 h. W.	9 h. E.	15 h. S.	15 h. N.	15 h. W.	15 h. E.	21 h. S.	21 h. N.	21 h. W.	21 h. E.	Max. in a Gust.	Time of Gust.
																	V.	Hrs. Min.
1	6·3	...	4·0	...	6·7	...	4·5	...	8·1	...	1·8	...	4·9	...	3·1	...	16·1	1 40
2	2·7	...	1·3	...	...	...	4·5	...	...	1·3	1·8	...	2·2	...	2·2	...	8·5	0 35
3	...	2·2	4·9	...	...	1·8	3·1	...	...	0·9	0·9	...	...	0·5	0·9	...	8·5	1 55
4	...	1·8	...	4·0	0·9	...	0·5	...	...	2·7	0·5	...	...	0·9	...	...	7·2	3 15
5	...	...	0·9	...	...	0·9	4·5	...	4·5	...	3·1	..	4·5	...	1·8	...	8·9	17 35
6	...	...	2·7	...	...	0·5	2·7	...	0·9	...	2·7	...	0·9	...	...	0·5	6·3	1 0
7	4·0	...	1·8	...	3·6	...	0·9	...	1·3	...	3·6	...	...	0·5	0·5	...	8·5	12 0
8	0·9	...	...	4·5	...	...	...	0·9	...	6·7	...	2·7	...	8·1	...	...	12·1	22 10
9	...	3·1	...	7·6	...	1·8	...	9·4	...	1·3	...	2·7	...	...	...	3·1	11·6	0 5
10	1·8	...	...	1·8	5·4	...	...	...	3·1	...	2·2	...	...	0·9	...	1·8	10·7	10 5
11	1·8	...	...	0·5	1·8	...	...	0·5	3·1	...	0·5	...	...	1·8	...	...	5·4	18 55
12	...	...	...	3·6	...	4·5	...	3·1	...	8·1	...	...	...	9·8	...	1·8	12·1	20 5
13	...	9·8	1·8	...	...	8·1	...	...	...	4·9	2·2	...	...	8·1	...	..	13·0	0 45
14	...	8·1	3·1	...	...	6·3	2·7	...	...	6·7	1·3	...	...	8·1	...	1·8	11·6	6 20
15	...	9·4	...	1·8	...	4·0	...	4·0	...	8·5	...	3·6	...	3·6	...	5·4	13·0	15 15
16	...	1·8	...	1·8	...	4·0	1·8	...	...	2·2	0·5	...	...	2·2	...	2·2	8·9	6 15
17	...	3·1	0·5	...	...	4·0	1·8	...	...	2·7	2·7	...	...	0·9	1·8	...	8·5	10 50
18	...	1·8	4·5	...	...	...	6·7	...	4·0	...	4·0	...	...	1·8	9·4	...	12·5	21 30
19	2·7	...	3·6	...	4·9	...	4·9	...	8·1	...	...	...	4·0	...	4·0	...	14·8	16 20
20	6·3	...	2·7	...	...	...	6·7	...	0·5	...	2·2	...	...	1·8	...	0·9	14·3	6 5
21	...	1·8	4·5	..	...	4·0	1·8	...	...	2·2	5·8	...	...	7·6	1·3	...	11·2	15 35
22	...	3·6	3·6	...	1·3	...	2·2	...	7·2	...	...	...	8·1	...	...	1·8	14·8	21 40
23	10·3	...	...	1·8	11·2	...	...	...	6·7	...	...	...	0·9	...	4·0	...	18·8	6 25
24	0·9	...	4·9	...	2·2	...	5·8	...	4·5	...	3·1	...	2·2	...	3·1	...	10·7	17 45
25	0·9	...	1·8	...	4·0	...	1·8	...	4·0	...	0·9	...	...	5·4	...	3·6	17·4	18 35
26	2·7	...	6·3	...	3·1	...	4·9	...	5·8	...	4·0	...	6·3	...	4·0	...	14·3	23 45
27	5·8	...	5·8	...	5·8	...	5·8	...	...	2·2	4·9	...	...	...	10·3	...	14·3	2 35
28	...	...	9·4	...	...	1·8	9·4	...	1·8	...	8·1	...	...	1·8	10·3	...	14·8	23 40
29	...	2·2	11·2	...	...	4·0	9·8	...	...	0·9	4·9	...	7·6	...	4·9	...	17·9	22 35
30	...	...	12·1	...	...	14·3	...	...	...	11·6	2·2	...	...	11·6	...	...	23·3	6 20
S+N & W+E	95·8		118·8		110·9		104·7		126·5		72·9		117·0		84·5			
S−N & W−E	−1·6		64·0		−9·1		68·9		0·7		54·9		−33·8		38·7			

DEERNESS.†

Height of Cups above—Roof 1·5 m., Ground 4·9 m , M.S.L. 57·3 m.

Date.	3 h. S.	3 h. N.	3 h. W.	3 h. E.	9 h. S.	9 h. N.	9 h. W.	9 h. E.	15 h. S.	15 h. N.	15 h. W.	15 h. E.	21 h. S.	21 h. N.	21 h. W.	21 h. E.	Vel. in Max. Hourly Run.	Time of Max.
																	V.	Hour.
1	2·7	...	1·8	...	4·0	...	4·0	...	2·2	...	1·3	...	0·5	...	0·5	...	6·7	4
2	...	1·8	1·3	...	4·0	...	6·3	...	0·9	...	4·0	...	5·4	...	5·4	...	7·6	9, 21
3	1·3	...	7·6	...	1·3	...	7·6	...	...	...	9·8	...	...	0·9	3·6	...	10·3	11
4	...	...	2·2	...	2·2	...	1·3	...	2·7	...	0·9	...	4·5	...	0·9	...	4·5	22, 23
5	4·0	...	4·0	...	1·8	...	8·1	...	...	...	12·5	...	...	...	9·4	...	13·4	14
6	1·8	...	8·1	...	3·1	...	4·9	...	4·9	...	7·6	...	1·8	...	8·1	...	10·7	16
7	3·1	...	7·6	...	1·3	...	6·7	...	1·8	...	10·3	...	1·3	...	5·8	...	11·2	12
8	...	3·1	1·3	...	...	1·8	4·0	...	...	4·5	6·7	...	...	2·2	4·9	...	8·9	16
9	...	5·8	4·0	...	...	4·5	...	0·9	...	0·9	...	0·9	3·1	...	...	3·1	7·6	2
10	7·6	...	...	3·1	8·9	...	...	1·8	4·5	...	...	0·9	3·6	...	...	1·3	10·7	6
11	5·4	...	...	...	4·9	...	0·9	...	...	0·9	4·5	...	...	...	2·7	...	8·1	6, 7
12	1·8	...	2·7	...	1·8	...	2·7	...	4·5	...	0·9	...	2·7	...	5·3	...	7·6	23
13	1·3	...	7·6	...	...	3·1	7·6	...	...	3·6	8·1	...	...	4·5	6·7	...	9·4	13
14	...	3·6	5·4	...	...	4·0	5·8	..	...	7·6	4·9	...	...	5·4	5·4	...	9·4	13, 16
15	...	6·7	4·5	...	...	7·6	3·1	...	...	4·5	1·8	...	...	5·4	3·6	...	8·9	11
16	...	0·5	1·8	...	...	0·5	2·7	...	...	2·7	4·0	...	3·6	...	3·6	...	7·2	24
17	0·9	...	5·4	...	1·3	...	6·7	...	...	...	6·7	...	...	0·9	4·5	...	8·5	6
18	...	0·9	4·5	...	4·0	...	1·8	...	2·2	...	10·7	...	3·1	...	7·2	...	11·6	11
19	6·3	...	6·3	...	...	1·8	4·0	..	4·5	...	...	0·9	9·4	...	1·8	...	9·4	21
20	...	...	2·7	...	...	...	1·3	...	0·9	...	...	...	...	...	2·7	...	5·8	1
21	0·0	...	0·9	...	...	0·5	3·1	...	...	5·8	2·2	...	...	3·6	2·7	...	8·5	22
22	...	2·7	1·3	...	...	0·9	0·5	..	4·9	...	...	2·2	10·3	...	...	1·8	10·7	24
23	13·0	...	...	5·4	15·7	...	...	3·1	12·1	...	...	2·2	8·5	...	...	...	16·1	7, 8, 9,
24	5·8	...	1·3	...	4·9	...	1·8	...	3·6	...	0·9	...	0·9	...	0·9	...	6·7	4, 8
25	2·2	...	1·3	...	3·1	...	1·8	...	5·4	...	...	...	7·2	...	...	...	8·1	24
26	9·4	...	...	...	8·5	...	3·6	...	7·2	...	1·3	...	5·4	...	3·6	...	11·6	17, 18, 19, 20
27	6·7	...	4·5	...	7·6	...	5·4	...	4·5	...	10·3	...	5·4	...	8·1	...	13·4	12
28	5·4	...	8·1	...	4·0	...	9·4	...	...	0·9	5·4	...	...	1·8	4·5	...	12·5	10
29	...	2·2	4·9	...	...	2·7	3·6	...	...	3·6	5·4	...	...	0·9	1·8	...	8·1	6, 11
30	...	4·5	0·9	...	...	11·2	...	2·2	...	12·1	2·2	...	...	9·8	6·3	...	14·3	11
S+N & W+E	110·5		110·5		120·1		116·7		113·9		129·5		112·1		117·2			
S−N & W−E	46·9		93·5		42·9		100·7		19·7		115·3		41·3		104·8			

SCILLY.‡§

Height of Head above—Ground 9·8 m., M.S.L. 49·7 m.
Height of Cups above—Ground 5·8 m., M.S.L. 45·7 m.

Date.	3 h. S.	3 h. N.	3 h. W.	3 h. E.	9 h. S.	9 h. N.	9 h. W.	9 h. E.	15 h. S.	15 h. N.	15 h. W.	15 h. E.	21 h. S.	21 h. N.	21 h. W.	21 h. E.	Max. in a Gust.	Time of Gust.
																	V.	Hrs. Min.
1	3·1	...	...	...	3·1	...	...	0·5	3·1	...	...	1·8	4·0	...	...	2·7	7·2	17 45
2	0·9	...	0·9	...	...	0·9	2·2	...	...	1·3	...	0·9	...	...	...	...	5·8	11 25
3	...	1·3	...	0·9	...	1·3	...	0·9	...	...	...	1·8	...	1·3	...	5·8	9·4	4 0
4	4·9	...	...	12·5	1·8	...	...	8·5	3·1	...	...	1·3	...	3·6	1·3	...	16·5	2 50
5	...	4·0	...	0·9	...	4·0	...	1·8	...	4·0	...	0·9	...	2·2	...	1·3	5·8	0 5
6	...	2·2	...	1·3	...	0·5	...	1·3	...	1·3	...	1·3	...	...	...	3·1	4·0	20 30
7	0·5	...	...	2·7	0·9	...	...	5·4	1·3	...	...	6·7	1·3	...	...	7·6	12·1	23 35
8	3·1	...	...	4·5	2·7	...	...	...	0·9	...	1·8	...	0·5	...	1·3	...	11·6	0 10
9	...	0·0	0·5	...	...	0·5	...	0·5	...	...	...	...	0·5	...	...	0·9	4·0	20 5
10	1·8	...	...	1·8	2·7	...	...	6·7	3·6	...	...	5·4	...	...	...	...	9·4	13 35
11	2·2	...	0·9	...	...	...	...	...	0·9	...	...	0	...	0·5	...	2·7	4·5	20 35
12	...	1·8	...	1·8	...	1·3	...	1·8	...	2·7	...	0·5	...	...	...	...	7·2	12 50
13	...	4·9	...	3·1	...	5·4	...	3·6	...	6·3	...	1·3	...	7·2	...	1·3	11·6	5 30
14	...	3·1	...	1·8	...	4·5	...	3·1	...	7·6	...	3·1	...	6·7	...	4·5	?10·7	21 45
15	...	5·4	...	3·6	...	1·3	...	6·3	...	6·7	...	4·5	...	3·1	...	8·1	12·5	19 35
16	...	1·8	...	9·4	...	4·6	...	5·8	...	5·4	...	3·6	...	3·1	...	3·1	13·0	2 45
17	...	4·0	...	0·9	...	2·2	...	1·3	...	1·8	...	0·9	...	1·8	...	2·7	7·2	1 55
18	...	0·5	...	2·7	0·9	...	...	2·2	1·3	...	...	1·3	0·9	...	...	0·9	4·5	4 30
19	2·7	...	...	2·7	6·3	...	...	4·0	5·4	...	3·6	...	2·2	...	5·8	...	19·2	23 5
20	4·0	...	9·4	...	...	1·8	8·1	...	1·8	...	9·4	...	...	9·4	9·4	...	19·7	14 10
21	...	1·8	9·4	...	...	11·6	7·6	...	...	12·5	4·9	...	...	10·3	10·3	...	27·7	6 35
22	...	8·1	5·4	...	...	...	...	...	9·4	...	...	1·8	...	1·8	4·0	...	18·8	0 10
23	1·8	...	2·7	...	1·8	...	4·5	...	3·6	...	5·4	...	...	2·2	5·8	...	12·5	18 10
24	...	1·8	4·5	...	...	0·9	1·8	...	...	...	2·7	...	...	...	2·7	...	8·5	13 20
25	1·8	...	5·9	...	8·1	...	...	3·6	8·9	...	1·8	...	...	1·8	4·5	...	14·8	15 45
26	...	1·8	2·7	...	...	...	2·7	...	...	0·5	1·8	...	1·3	...	3·1	...	8·5	1 35
27	0·9	...	4·5	...	0·9	...	4·9	...	1·3	...	7·2	...	2·2	...	5·8	...	13·9	22 45
28	...	2·7	4·0	...	...	●·9	0·5	...	0·5	...	...	1·3	...	1·3	...	2·2	8·1	2 30
29	...	4·5	0·9	...	...	4·5	3·1	...	...	0·5	3·1	...	4·9	...	7·2	...	14·8	23 15
30	2·7	...	13·0	...	...	6·7	9·8	...	...	11·6	...	2·2	...	8·1	...	3·1	22·8	6 40
S+N & W+E	80·1		110·3		81·5		102·5		107·3		82·3		82·2		111·2			
S−N & W−E	−19·3		9·1		−23·1		−12·1		−17·1		1·1		−46·6		11·2			

GREAT YARMOUTH.†§

Height of Head above—Roof 10·7 m., Ground 12·8 m., M.S.L., 15·9 m.
Height of Cups above—Roof 3·7 m., Ground 18·3 m., M.S.L., 22·3 m.

Date.	3 h. S.	3 h. N.	3 h. W.	3 h. E.	9 h. S.	9 h. N.	9 h. W.	9 h. E.	15 h. S.	15 h. N.	15 h. W.	15 h. E.	21 h. S.	21 h. N.	21 h. W.	21 h. E.	Max. in a Gust (Gorleston).	Time of Gust.
																	V.	Hrs. Min.
1	1·3	...	2·7	...	2·2	...	4·9	...	4·5	...	3·1	...	2·2	...	...	...	13·0	12 45
2	2·2	...	1·3	...	2·7	...	...	0·9	5·8	...	...	2·2	1·8	...	1·8	...	10·3	16 20
3	...	1·3	2·7	...	...	1·3	1·3	...	...	5·8	...	1·3	...	0·5	...	3·1	9·8	12 45
4	0·5	...	...	1·3	2·7	...	...	2·7	5·4	...	...	...	1·8	...	...	...	14·3	14 50
5	0·5	...	3·1	...	...	2·2	0·9	...	...	2·7	...	1·3	2·2	...	1·3	...	8·5	8 5
6	0·5	...	2·2	...	0·9	...	1·8	...	3·6	...	...	1·3	2·2	...	0·9	...	8·9	13 50
7	...	0·5	1·3	...	...	1·8	0·9	...	1·3	...	...	2·7	1·3	...	...	0·9	5·4	16 55
8	0·9	...	0·9	...	...	1·8	0·5	...	2·7	...	...	2·7	...	5·4	...	5·4	17·0	20 40
9	...	6·3	...	6·3	...	6·7	...	6·7	...	5·4	...	3·6	...	4·5	...	4·5	12·5	7 5
10	...	0·9	...	4·0	0·9	...	...	4·5	3·6	...	...	5·4	4·5	...	...	10·3	12·1	20 50
11	6·3	...	...	6·3	5·4	...	...	3·6	4·0	...	...	4·0	3·6	...	...	3·6	12·1	0 45
12	1·3	...	...	1·3	3·1	...	...	1·3	3·1	...	...	2·2	2·2	...	...	0·9	8·9	15 30
13	1·8	...	0·9	...	...	0·9	4·0	...	...	2·7	1·3	...	...	3·1	0·5	...	9·8	13 30
14	...	3·1	...	...	...	1·8	2·7	...	...	5·4	...	...	...	2·2	0·9	...	11·2	17 10
15	...	5·4	0·9	...	...	4·0	1·8	...	...	5·4	...	...	...	5·8	2·2	...	17·4	23 20
16	...	6·3	1·3	...	...	4·9	2·2	...	...	3·1	2·2	...	...	5·4	...	...	15·7	0 10
17	...	4·5	...	...	...	1·8	1·8	...	...	2·7	0·9	...	...	1·3	1·3	...	10·3	3 0
18	...	...	3·1	...	...	...	...	4·5	...	...	3·6	...	0·9	...	2·7	...	8·1	11 35
19	0·9	...	1·8	...	...	1·8	4·0	...	1·3	...	2·7	...	3·1	...	0·5	...	10·7	16 15
20	5·4	...	...	...	5·4	...	3·6	...	2·7	...	3·6	...	2·2	...	2·2	...	15·2	8 20
21	0·9	...	2·2	...	...	...	3·1	...	...	...	4·5	...	...	0·9	0·9	...	9·4	13 50
22	...	2·2	2·2	...	...	3·6	...	1·3	...	1·3	...	0·9	0·0	...	...	0·9	10·3	9 10
23	0·0	...	...	0·9	2·7	...	...	0·9	6·3	...	...	2·7	4·9	...	...	0·9	12·5	14 45
24	3·1	...	...	...	1·3	...	...	0·5	...	1·8	2·7	...	...	...	2·2	...	14·3	7 15
25	...	...	2·7	...	...	...	1·8	...	4·5	...	...	0·9	4·5	...	...	...	15·7	23 45
26	4·5	...	3·1	...	...	0·9	4·0	...	2·2	...	2·2	...	0·5	...	1·8	...	15·2	0 20
27	1·3	...	2·2	...	4·0	...	4·9	...	2·7	...	3·6	...	3·6	...	2·7	...	11·6	15 5
28	...	1·3	2·7	...	...	...	5·4	...	...	...	6·3	...	1·3	...	2·7	...	11·2	10 45
29	0·5	...	2·2	...	...	...	7·6	...	...	2·7	3·6	...	...	...	3·6	...	16·3	10 45
30	4·0	...	...	...	2·7	...	6·3	...	...	7·2	7·2	...	...	8·9	3·6	...	28·6	17 25
S+N & W+E	67·7		59·6		67·5		90·4		99·9		78·7		80·8		62·3			
S−N & W−E	4·1		19·4		0·5		45·6		7·5		16·3		4·8		1·3			

The velocities at fixed hours are means for the interval from 30 minutes before to 30 minutes after the hour. The hours are numbered 1 h. to 24 h. Time is referred to Greenwich Mean Time.

* No record.

† Robinson Cup Anemometer; Arms 0·61 m.; Diameter of Cups, 0·229 m.; Factor 2·2. ‡ Robinson Cup Anemometer; Arms 0·305 m.; Diameter of Cups 0·127 m.; Factor 2·8.

§ Dines Pressure Tube Anemometer. At Great Yarmouth, Holyhead, and Scilly the readings at fixed hours are taken from the Robinson Anemometer, the maxima quoted are the greatest winds in a gust as recorded by the Dines Pressure Tube.

METEOROLOGICAL OFFICE OBSERVATORIES—GEOPHYSICAL JOURNAL.

OCTOBER 1911.—DAILY VALUES REFERRED TO GREENWICH MEAN TIME AND UNITS, BASED ON THE C.G.S. SYSTEM. [*Price* 4*d*.

First Year.—No. 10. *Meteorology, Solar Radiation, Seismology, Atmospheric Electricity, and Terrestrial Magnetism.*

1. SEISMOLOGICAL JOURNAL:—ESKDALEMUIR.—Long. 3° 12′ W. Lat. 55° 19′ N.

Date.	Microseisms. Period.	Microseisms. Amp.	Earthquakes.	Remarks.
	s	μ		
1	5-6	1·0		5th I, Long waves 15 h. 33 m.–15 h. 40 m.
2	5-6	0·9		6th Iu, P=10 h. 26 m. 34s., S=10 h. 34 m. 53 s., Δ=6800 kms., α=True west. Epicentre 23° N, 76° W. I, Disturbance 15 h. 14 m.–15 h. 40 m. I, Disturbance 16 h. 14 m.–17 h.
3	4-5	0·5		
4	4	0·4		
5	4	0·3	I.	7th P ? S=5 h. 12 m. 36 s., L=5 h. 29 m. 8th Disturbance 2 h. 42 m.–3 h. Seismogram much disturbed but no local wind.
6	4-5	0·4	Iu, I, I.	10th I, Disturbance 12 h. 22 m.–13 h. 10 m., L=12 h. 33 m. Iu, P ?=13 h. 24 m. 48 s., S=13 h. 33 m. 46 s., L=13 h. 45 m., Δ=7560 kms.
7	5-6	0·3	Iu.	
8	5	0·5	I.	
9	5	0·5		13th Iu, P=2 h. 45 m. 2 s., S=2 h. 54 m. 32 s., Δ=8200 kms., α=23° 11′ E of N. Epicentre 48½° N, 142° E. I, Long waves 10 h. 7 m.–10 h. 46 s.; I, Disturbance 16 h. 16 m.–17 h. 0 m.
10	5	0·5	I, Iu.	
11	5-6	0·3		14th I, Disturbance 5 h. 24 m.–6 h. 19 m. Iu, P=6 h. 21 m. 51 s., S=6 h. 31 m. 25 s., Δ=8280 kms. Iu, P=12 h. 38 m. 0 s., S=12 h. 47 m. 30 s., Δ=8200 kms., α=nearly true north. Iu, P=16 h. 47 m. 30 s., S=16 h. 56 m. 55 s., Δ=8100 kms. IIu, P=23 h. 34 m. 16 s., S=23 h. 42 m. 34 s., Δ=6780 kms., α=71° 40′ E. of N. Epicentre 33½° N, 82½° E.
12	4-5	0·4		
13	5-6	0·3	Iu, I, I.	
14	4-5	0·4	I, Iu, Iu, Iu, IIu.	
15	4	0·4	I, Iu, Iu.	15th I, P ?=5 h. 45 m. 44 s., L=5 h. 53 m. Iu, P=12 h. 1 m. 53 s., S=12 h. 11 m. 20 s. (not sharply defined), Δ=8260 kms. Iu, P=23 h. 49 m. 15 s., S=23 h. 58 m. 24 s., Δ=7780 kms., continuing into 16th.
16	4-5	0·5	I.	
17	4-5	0·6	I, Iu, Iu.	16th I, Disturbance 13 h. 54 m.–14 h. 8 m.
18	4	0·5	I.	
19	4	0·3	I, I, I.	17th I, P and S imperceptible, L=3 h. 35 m. Iu, Phases very doubtful, P=9 h. 46 m., S=10 h., L=10 h. 19 m., Δ>13000 kms. Iu, P ?=12 h. 4 m. 26 s., S ?=12 h. 14 m. 9s., L=12 h. 27 m., Δ=8450 kms.
20	4	0·3	*	
21	4-5	0·8		18th I, Long waves at intervals 12 h.–13 h.
22	6	0·9	Ir.	19th I, Feeble disturbance 1 h. 56 m.–4 h. Phases uncertain. I, P ? S=9 h. 17 m. 8 s., L=9 h. 28 m. I, Start probably during change of paper 10·25–10·36., L=10 h. 40 m.
23	4-5	0·8		
24	4	0·7	Iu.	20th Record lost owing to sticking of Recording Cylinder.
25	4-5	0·8	I.	
26	7	3·5		22nd P=22 h. 38 m. 54 s., S=22 h. 42 m. 59 s., Δ=4310 kms. P confused by microseisms.
27	5	2·8		
28	6	1·0		24th Iu, P=0 h. 32 m. 15 s., S=0 h. 42 m. 18 s., Δ=8850 kms. 25th I, Feeble disturbance 5 h. 16 m.–5 h. 18 m.
29	5	0·9	I.	29th I, P ?=18 h. 25 m. 34 s., S=18 h. 32 m. 44 s. Seismogram confused by wind and microseisms.
30	5-6	1·8		An explanation of the notation used is given in the preface.
31	6	3·2		

2. VALENCIA OBSERVATORY, CAHIRCIVEEN (KERRY).—Long. 10° 15′ W. Lat. 51° 56′ N.

Heights above Mean Sea Level:—Station, H = 9·2 m. Barometer Cistern, H_b = 13·7 m.
Heights above Ground:—Thermometers, h_t = 1·2 m. Rain-gauge, h_r = 0·6 m. Sunshine Recorder, h_s = 12·8 m. Cups of Anemometer, h_a = 13·7 m.

Day.	Pressure at Station Level. 9 h.	21 h.	Air Temperature in Degrees Absolute. 9 h.	21 h.	Max.	Min.	Humidity. Vapour Pressure. 9 h.	21 h.	Percentage. 9 h.	21 h.	Wind Direction in points (8=E, 16=S) and Velocity (*metres per second*). 9 h.		21 h.		Cloud Amount and Weather. 10 h.	22 h.	Rain 24 hours beginning 10 h.	Sunshine.	Remarks.	Magnetism. Horizontal Force.	Declination West.	Inclination.
	bar.	bar.	200+ °	200+ °	200+ °	200+ °	millibar.		%	%	m/sec.		m/sec.		Tenths of Sky covered.		mm.	hrs.		γ.	° ′	° ′
1	·0340	·0283	82·6	83·1	86·2	80·7	10·1	11·9	85	97	—	0·0	6	2·7	8	10≡0●0	0·8	2·0	Fair to dull and gloomy.	...	...	...
2	·0244	·0175	85·2	84·8	86·1	82·9	10·5	8·7	74	63	32	5·4	31	8·1	10	10	0·8	2·5	Dull *a*. Fair *p*.	...	...	...
3	·0162	·0225	82·0	83·2	85·8	81·5	8·9	8·1	78	66	3	9·4	3	8·9	6	2	0·5	3·7	Fair.	...	...	...
4	·0245	·0244	83·3	84·9	85·4	80·3	9·0	12·1	73	88	3	6·7	2	6·3	8	10	2·8	0·5	Dull and unsettled-looking.	...	...	...
5	·0259	·0215	85·0	85·7	85·9	83·7	10·6	11·8	77	81	4	6·7	2	7·6	7	7	0·8	0·5	Dull.	...	...	...
6	·0191	·0199	83·5	84·9	86·4	82·8	10·3	10·6	82	76	4	9·4	5	6·7	3	5≡0	—	6·1	Fair.	...	...	...
7	·0175	·0160	82·3	82·6	86·2	79·6	10·4	10·8	89	91	—	0·9	—	0·0	8∞	5∞	—	1·2	∞. Fair.	...	...	...
8	·0169	·0223	81·5	83·8	87·1	79·5	10·4	10·8	95	83	—	0·9	7	4·5	2	1	—	9·2	Fine.	...	...	...
9	·0257	·0289	83·2	81·7	86·7	80·6	10·0	8·8	81	80	7	4·0	6	1·8	1∞	3	—	7·3	☾∞. Fine.	17889	20 36·7	68 11·3
10	·0321	·0304	83·0	83·6	85·9	79·8	8·9	9·8	73	78	9	3·1	9	5·4	2∞	0	—	8·6	☾. Fine, but hazy.	...	...	...
11	·0266	·0213	84·9	84·0	87·4	82·6	10·9	10·7	79	82	8	2·7	8	3·1	8∞	5	—	1·6	☾. Cloudy.	...	...	...
12	·0166	·0132	82·4	85·6	88·0	81·2	10·8	12·6	93	87	—	0·0	—	0·9	3∞	5	—	6·5	☾. Fine.	...	...	...
13	·0086	·0078	87·9	87·0	88·9	86·3	14·2	14·9	85	94	9	5·8	13	3·6	8	9	6·4	0·3	Unsettled-looking to showery.	...	...	...
14	·0120	·0128	85·6	86·7	88·9	84·5	13·7	14·1	95	90	—	0·0	6	4·9	8≡0	10●	5·8	0·3	≡0. Dull, with ● *n*.	...	...	...
15	·0191	·0194	87·7	85·9	89·1	85·9	14·2	11·1	85	75	7	3·6	6	6·3	6	4	—	2·6	Fair.	...	...	...
16	·0161	·0160	86·5	86·2	88·7	86·0	12·0	12·2	77	80	8	3·1	4	3·1	7∞	9	—	2·0	∞. Fair.	...	...	...
17	·0140	·0115	86·4	87·2	87·8	86·1	12·9	13·2	84	82	8	8·1	9	6·7	7∞	7	3·3	1·3	Fair to dull and showery.	...	...	...
18	·0114	·0105	87·0	88·2	89·3	86·4	14·8	14·0	93	82	15	4·5	10	6·3	7	8	1·3	5·0	Fair; good visibility.	...	...	...
19	·0056	1·0021	87·9	87·8	89·9	87·4	14·3	15·0	85	90	9	5·4	12	4·5	7	10≡0	25·4	2·0	Fair to dull. ●2 *n*.	...	...	...
20	1·0032	0·9906	84·1	87·2	87·6	84·0	12·3	15·0	95	93	17	2·2	15	9·8	6	10	8·1	0·6	Gloomy and showery.	...	...	...
21	0·9811	·9760	84·9	84·6	86·1	82·9	11·4	11·7	82	87	15	6·3	20	6·7	7	4	8·6	2·2	Showery.	...	...	...
22	0·9831	·9981	84·6	84·6	86·2	82·8	11·7	11·3	87	84	28	7·6	25	13·4	6	10	7·9	1·3	Showery with strong wind.	...	...	...
23	1·0012	·9985	84·0	82·7	85·6	81·9	12·1	10·9	92	91	20	5·8	22	4·0	8	9	16·8	2·7	Showery.	17896	20 34·2	68 11·8
24	0·9940	·9936	81·2	79·2	83·7	77·9	10·1	8·6	94	91	—	0·9	—	0·9	4	3	4·1	5·5	● early. Brighter after 9 h.	...	...	...
25	·9926	·9941	83·1	82·6	84·9	80·2	10·3	10·1	84	85	29	5·4	—	1·3	6	9●	15·7	4·7	● showers. Bright intervals.	...	...	...
26	·9806	·9810	83·9	80·8	84·4	79·8	10·1	9·2	78	88	22	13·0	18	5·4	5	3<	4·6	2·8	● showers. ☈ in evening.	...	...	...
27	0·9768	0·9926	81·5	81·7	84·2	80·1	8·4	8·6	76	77	8	8·1	5	8·1	10	7	—	0·5	Gloomy.	...	...	...
28	1·0015	1·0167	78·4	81·1	82·4	77·0	7·4	7·8	84	74	—	0·9	13	5·4	1∞	10	6·4	8·3	Fine. Dull *n*.	...	...	...
29	·0118	·0052	84·9	86·8	86·8	81·4	12·7	14·7	91	94	17	3·1	19	10·3	10≡0	10≡0	32·8	—	Dull all day, with ●.	...	...	...
30	·0031	·0159	83·5	82·3	86·8	80·8	9·0	8·6	72	73	24	12·1	23	10·3	7	3	3·1	4·5	●2 showers early. Squally.	...	...	...
31	1·0175	1·0206	82·9	83·4	84·5	81·9	9·9	10·0	82	80	23	10·7	24	6·7	7	5	3·8	4·8	Squally and showery.	...	...	...
Means	1·0101	1·0106	84·0	84·3	86·5	82·2	11·0	11·2	84	83		5·0		5·6	6·2	6·5	159·8	101	Monthly **Totals** or **Means**.	17893	20 35·5	68 11·5
Normal 35 years	1·0117	1·0119	83·5	83·4	86·5	80·9	10·9	10·8	86	85		5·3 (25 years)		5·1 (25 years)	—	—	139·9	102 (25 yrs)	**Normals**, 35 years.			
									20 years													

Wt. 41467/309—6—375—5/12. N. & Co., Ltd. Gp. XV.

3. Kew Observatory, Surrey.—Long. 0° 19′ W. Lat. 51° 28′ N.

Heights above Mean Sea Level :—Station, H = 5·5 m. Barometer, H_b = 10·4 m.
Heights above Ground :—Thermometers, h_t = 3·0 m. Rain-gauge, h_r = 0·5 m. Sunshine Recorder, h_s = 14·3 m. Cups of Anemometer, h_a = 21·3 m.

Day.	Pressure at Station Level.		Air Temperature in Degrees Absolute.				Humidity.				Wind Direction in Points (8 = E, 16 = S) and Velocity (*metres per second*).				Cloud Amount and Weather.		Rain 24 hours beginning 10 h.	Sunshine.	Solar Radiation, Watts per cm².	Min. Temp. on Grass.	Earth Temperature at 10 h.		Remarks.
							Vapour Pressure.		Percentage.														
	9 h.	21 h.	9 h.	21 h.	Max.	Min.	9 h.	21 h.	9 h.	21 h.	9 h.		21 h.		10 h.	22 h.					0·3 m.	1·2 m.	
	bar.	bar.	200+ °	200+ °	200+ °	200+ °	millibar.		%	%	m/sec.		m/sec.		Tenths of Sky covered.		mm.	hrs.		200+ °	200+ °	200+ °	
1	1·0231	1·0245	80·7	79·1	84·4	77·2	6·9	6·9	65	75	30	6·7	—	1·3	3	1	—	7·9	—	75·0	84·7	87·4	Fine to fair.
2	·0201	·0118	80·0	79·8	84·6	74·8	6·8	8·3	68	85	—	0·9	—	1·3	3	10≡0	—	7·0	—	69·8	83·4	87·3	Fine most of day.
3	·0104	·0126	80·6	82·6	86·1	78·4	7·9	10·0	77	84	1	3·1	32	4·5	5≡0	10	—	6·0	—	71·7	83·2	87·0	≡0. Fine on the whole.
4	·0116	·0133	82·2	81·9	84·6	79·5	8·4	9·4	72	83	32	5·8	32	4·0	10	3	0·5	1·5	—	76·2	83·4	86·8	Fair to dull. ●0
5	·0164	·0149	83·9	85·3	87·4	81·5	10·7	10·5	76	74	2	5·4	2	5·4	10≡0	10	5·3	—	—	78·4	83·4	86·8	Dull throughout.
6	·0184	·0189	83·7	82·2	87·4	81·3	10·8	10·3	84	89	7	3·6	—	1·3	8≡0	0≡0	—	3·6	·024	77·1	83·7	86·5	≡2●2 early. Fair later.
7	·0123	·0135	82·6	83·2	85·1	80·7	10·6	11·3	90	91	32	3·1	25	1·8	10≡0	10≡0	1·3	—	·031	74·0	83·2	86·3	Dull and gloomy. ●0
8	·0180	·0205	80·1	84·6	87·6	77·1	9·4	11·0	94	82	—	0·9	5	4·0	?2≡0	4≡0	—	4·4	—	72·3	83·1	86·3	≡2 early ; clearing after 9 h.
9	·0238	·0277	83·8	81·1	85·7	80·1	8·8	8·7	69	82	3	7·2	2	3·1	8	2	—	1·7	—	77·0	83·3	86·2	Cloudy. ⊔ 22 h. 15 m.
10	·0332	·0336	81·3	82·1	86·2	77·9	9·4	9·2	87	81	2	1·8	—	1·3	2≡0	10≡0	—	3·4	—	70·4	82·7	86·0	Fine to fair. ⊔ 21 h. 30 m.
11	·0322	·0263	83·9	82·9	88·1	82·1	10·8	10·5	83	87	—	0·9	7	1·8	9≡0	0≡0	—	3·6	·041	74·5	82·8	85·9	Misty *a.* ; clearing in afternoon.
12	·0216	·0182	81·3	83·6	**91·0**	79·1	10·2	11·8	94	93	—	0·9	—	0·9	0≡	*10*≡	0·3	5·7	·026	73·1	82·5	85·7	≡2 till 10 h., then fine.
13	·0163	·0140	83·5	86·5	88·1	81·4	12·1	15·2	96	99	5	1·8	—	0·9	10≡	10≡0●	7·4	—	—	76·6	83·0	85·7	≡ all day. ●*p.*
14	·0154	·0201	85·9	86·3	87·9	84·9	14·5	13·5	98	89	—	0·9	7	4·5	10≡	10	—	—	—	82·8	83·9	85·7	≡2 at first. Dull throughout.
15	·0238	·0231	85·4	85·1	87·3	84·9	12·3	12·5	83	89	5	4·5	5	3·6	10≡0	10≡0●	0·5	—	—	84·5	84·7	85·7	Dull.
16	·0216	·0202	85·3	84·8	85·9	84·6	12·1	12·7	84	93	5	4·9	6	6·3	10≡0	10≡0	—	—	—	83·8	84·8	85·6	Overcast and misty.
17	·0191	·0191	85·6	84·3	87·5	82·4	11·9	12·1	82	91	6	8·1	6	1·8	10≡0	0≡0	—	3·9	—	83·9	84·9	85·6	Dull till 11 h. ; fine later.
18	*·0193*	·0177	81·8	84·9	89·2	79·9	10·8	12·7	97	92	—	0·9	—	1·3	10≡	?0≡0	—	1·6	—	77·3	84·1	85·6	≡2 early, then misty.
19	·0156	·0122	86·7	87·4	90·3	84·5	14·3	14·9	92	91	6	3·1	13	3·1	10≡	9	2·5	—	—	78·2	84·2	85·6	Foggy and cloudy.
20	·0059	1·0118	88·0	86·3	89·9	85·3	16·1	13·8	95	91	14	4·5	18	1·8	10	10	0·8	0·3	—	80·8	85·0	85·6	● *a.* Dull generally.
21	1·0011	0·9940	88·0	84·7	89·7	84·5	13·4	12·6	80	92	13	6·7	18	2·2	10	7	11·4	1·5	—	83·9	85·3	85·6	Overcast to cloudy.
22	0·9827	0·9882	86·3	85·3	88·8	83·8	13·4	12·1	89	84	18	6·3	20	7·6	10	10	4·3	2·3	·052	78·9	85·1	85·6	⊏●2 2 h.–3 h. Fine intervals.
23	1·0020	1·0040	85·8	*85·4*	87·3	83·5	11·6	*11·5*	79	*80*	22	5·4	19	5·4	8	3	0·5	3·8	—	83·2	84·8	85·6	Cloudy to bright.
24	1·0005	0·9905	85·3	83·4	86·4	82·4	12·4	11·9	87	95	16	4·0	17	2·2	10●	10●0	28·7	0·4	—	78·6	84·3	85·6	Dull, with ●.
25	0·9918	·9936	81·0	78·6	84·9	77·7	9·6	8·3	91	92	19	1·8	—	0·9	3	0≡0	1·3	6·5	·068	75·5	83·8	85·5	T●0 about 14 h.–15 h.
26	·9907	·9857	79·1	81·5	85·6	74·1	8·7	8·7	93	79	22	2·2	20	5·4	10●≡0	3	2·3	1·5	—	70·1	82·4	85·4	≡2 early. Dull, with ●.
27	0·9850	0·9920	78·6	81·3	82·9	76·2	8·1	8·7	90	80	—	0·9	32	4·0	?10≡	7	—	—	—	70·4	81·7	85·3	Dull and foggy.
28	1·0043	1·0164	79·1	77·4	82·9	75·8	6·9	6·4	74	77	32	5·4	32	2·2	2	0	—	5·7	—	73·2	81·2	85·2	Fine.
29	·0246	·0187	73·2	81·3	83·1	**72·6**	5·5	9·9	86	91	—	0·9	16	6·3	?4≡0	10●	5·6	3·5	—	67·3	79·7	85·2	⌙. Fine. ⊕ 10 h.–11 h. ●*p.*
30	·0111	·0136	86·4	81·0	87·4	78·9	11·8	8·7	76	82	18	11·6	21	3·6	10	0	3·8	—	—	78·0	81·1	84·9	Dull, with ● and strong wind.
31	1·0180	1·0173	79·9	80·8	85·0	76·7	7·5	8·7	75	83	20	4·5	21	3·6	0	1	—	7·1	—	71·6	80·8	84·7	Fine throughout.
Means	1·0126	1·0125	82·9	83·1	86·7	80·1	10·4	10·7	84	86	—	3·8	—	3·1	7·3	5·8	76·5	83	—	76·4	83·4	85·9	Monthly **Totals** or **Means**.
Normal 35 years	1·0128	1·0129	82·2	82·0	86·1	79·0	10·0	10·1	86	87	—	3·1	—	2·6	—	—	69·5	92	—	—	—	—	**Normals**, 35 years.
							20 years				25 years		25 years					25 yrs					

4. Eskdalemuir Observatory, Dumfriesshire.—Long. 3° 12′ W. Lat. 55° 19′ N.

Heights above Mean Sea Level :—Station, H = 243·2 m. Barometer, H_b = 237·1 m.
Heights above Ground :—Thermometers, h_t = 0·8 m. Rain-gauge, h_r = 0·3 m. Sunshine Recorder, h_s = 1·5 m. Vane of Anemometer, h_a = 15·2 m.

															9 h.	21 h.	9 h.						
1	0·9998	0·9972	78·4	73·7	82·1	73·6	5·9	5·5	66	86	32	7·6	—	0·5	1	6	—	9·2	—	—	—	—	
2	·9919	·9818	79·3	76·7	82·0	*72·5*	7·0	6·8	74	86	—	0·9	—	●0·5	7	1	0·5	2·4	—	—	—	—	
3	·9886	·9909	80·7	79·0	84·6	77·5	8·7	7·4	84	79	32	8·5	32	7·2	7	7	—	8·9	—	—	—	—	⌒ at times.
4	·9919	·9953	79·4	79·2	82·7	77·9	7·9	8·8	82	93	2	8·9	2	5·4	8	10●0≡	—	4·8	—	—	—	—	
5	·9971	·9923	81·0	81·0	82·8	79·5	9·2	10·0	87	94	2	5·4	32	4·9	9	10●0≡0	0·3	—	—	—	—	—	
6	·9973	·9962	82 1	80·8	84·8	79·6	10·1	9·4	88	90	4	6·7	32	4·0	7	10	—	4·5	—	—	—	—	
7	·9899	·9860	81·7	77·4	85·4	77·0	9·8	7·7	89	92	—	1·3	—	0·0	8	8≡0	—	1·6	—	—	—	—	
8	0·9911	0·9987	78·5	79·7	85·6	*71·8*	8·6	8·3	96	84	—	0·0	32	*5·8*	8	10	—	2·9	—	—	—	—	
9	1·0011	1·0041	78·6	78·7	80·9	73·8	6·8	7·1	76	78	32	7·6	32	4·0	2	9	—	3·9	—	—	—	—	
10	·0077	1·0059	80·3	74·0	84·2	*71·5*	7·4	6·0	72	91	26	2·2	—	0·0	1	0	—	9·0	·088	—	—	—	⩛ 19 h. 30 m.–22 h.
11	1·0040	0·9993	76·8	75·9	85·2	*69·8*	6·2	7·0	79	93	—	0·5	—	0·5	2	0	—	8·8	—	—	—	—	
12	0·9941	·9905	74·3	80·3	84·0	*71·7*	5·2	9·4	76	92	—	0·0	—	0·0	4≡0	10≡0	—	1·4	—	—	—	—	
13	·9896	·9881	80·0	81·3	86·4	73·2	9·3	9·5	94	88	—	0·9	32	6·3	1	1∞	—	7·1	—	—	—	—	
14	0·9899	0·9958	82·3	79·1	86·2	79·1	11·0	9·1	94	98	4	3·6	4	*	7≡0	0∞	—	5·0	—	—	—	—	
15	1·0013	1·0016	82·3	82·4	83·5	79·7	10·7	11·2	91	95	4	*	4	4·5	7∞	10●0	0·8	0·7	—	—	—	—	
16	1·0006	0·9990	81·5	81·0	82·8	79·9	9·4	9·7	85	91	8	6·3	8	3·6	10	10	—	—	—	—	—	—	
17	0·9969	·9945	83·5	81·3	85·7	80·1	11·2	9·4	89	87	4	5·4	4	*	8	4	—	7·3	—	—	—	—	
18	·9925	·9921	81·8	82·8	**87·2**	80·2	10·0	11·2	89	93	—	0·0	32	4·5	10	7	—	4·1	—	—	—	—	⊕ 15 h. 15 m.–16 h. 30 m.
19	·9896	·9856	81·3	83·1	84·2	80·4	10·6	12·3	97	100	4	2·7	4	2·2	10●0	10≡0	6·4	—	—	—	—	—	Sun pillar 16 h. 30 m.–
20	·9803	·9790	83·8	84·1	86·2	82·4	12·8	13·0	99	100	—	*0·9*	20	4·9	10≡0	6	0·5	0·3	—	—	—	—	17 h. 45 m. ⩛ 18 h.
21	·9697	·9613	85·1	80·2	86·3	79·9	12·3	9·7	87	96	12	7·6	—	0·0	10	8	7·4	—	—	—	—	—	30 m.–20 h. 30 m.
22	·9556	·9591	80·2	80·3	84·1	77·4	9·3	9·5	92	93	32	4·0	—	1·3	8	3	1·3	2·0	—	—	—	—	
23	·9661	·9680	82·6	81·2	84·0	78·8	11·5	10·2	97	94	20	5·8	20	6·7	9	6	7·1	0·8	—	—	—	—	
24	·9675	·9624	79·0	79·0	80·9	77·4	9·3	8·6	100	92	—	0·0	—	0·9	10●0	10	7·4	—	—	—	—	—	
25	·9609	·9642	78·4	75·4	81·4	73·9	7·6	6·5	86	90	6	2·7	—	0·9	7	7	—	2·3	—	—	—	—	
26	·9600	·9528	75·2	77·2	77·5	74·1	6·6	7·7	92	93	4	7·2	4	8·9	10	10●	8·1	—	—	—	—	—	
27	·9613	·9723	76·2	74·8	78·7	73·6	5·9	6·0	77	86	4	7·2	4	*	6	1	—	3·1	—	—	—	—	Shower of granular ✲ 21 h.
28	·9828	·9991	74·7	*62·5*	77·3	*67·2*	5·2	3·0	75	70	32	*	—	0·0	3	0	—	2·4	—	—	—	—	⌙2 *p.*
29	·9991	·9737	*71·4*	79·8	84·8	**65·9**	4·5	9·8	83	100	—	0·0	16	7·6	10	10●	62·2	—	—	—	—	—	⌙2 *a.*
30	·9655	·9742	82·4	76·4	85·2	75·9	10·9	7·0	93	90	20	4·5	20	8·1	10●	8	22·1	0·2	—	—	—	—	▲ 15 h.
31	0·9754	0·9782	76·7	79 0	79·8	74·8	7·3	8·0	92	85	20	*12·5*	20	9·8	10●0	8	12·2	2·1	—	—	—	—	✲ in afternoon.
Means	0·9855	0·9849	79·7	78·8	83·4	75·8	8·7	8·5	87	90		4·2		3·7	7·1	6·5	136·3	95	—	—	—	—	Monthly **Totals** or **Means**.
Normal 35 years	—	—	—	—	—	—	—	—	—	—	—		—		—	—	—	—	—	—	—	—	

* No record.

The solar radiation is the mean of the readings within the nominal hour of observation (11 h. 30 m.–12 h. 30 m.) unless some other hour is specified.

5. KEW OBSERVATORY.

Day.	Potential Gradient, Volts per metre. Factor 1·83.				Number of Ions per cc.		Velocities of Ions for 1 volt per centimetre.		Conductivity $\times 10^{25}$.	Air-Earth Current $\times 10^{16}$.		Electric Character of Day.	Magnetic Character of Day.	Horizontal Force.					West Declination.				
														Maximum. 18000 γ +.		Minimum. 18000 γ +.		Range.	Maximum. 15° +.		Minimum. 15° +.		Range.
	3 h.	9 h.	15 h.	21 h.	+.	−.	+.	−.		c_1.	c_2.												
	v/m.	v/m.	v/m.	v/m.	n/cc.	n/cc.	cm/sec.	cm/sec.	E.-m.U.	Amp/cm².				γ	h m	γ	h m	γ	′	h m	′	h m	′
1	175	250	195	320	—	—	—	—	—	—	—	0	0	518	22 58	484	10 47	34	56·9	13 50	49·7	9 25	7·2
2	300	360	155	200	—	—	—	—	—	—	0·90	0	0	527	6 27	475	9 45	52	61·4	13 5	48·8	8 44	12·6
3	185	430	560	115	560	150	—	—	—	—	—	1	0	528	20 13	486	11 23	42	59·0	13 12	49·9	20 6	9·1
4	205	235	*x*−	400	—	—	—	—	—	—	—	1	0	520	14 21	494	10 10	26	58·0	12 40	49·6	23 25	8·4
5	105	350	465	390	410	400	—	—	—	—	—	0	0	520	21 48	486	11 20	34	58·0	12 20	49·4	0 29	8·6
6	100	280	615	570	350	320	0·25	0·00	0·10	0·55	—	1	0	518	0 10	485	10 59	33	60·0	13 5	49·6	8 40	10·4
7	350	325	115	225	—	—	—	—	—	—	—	1	0	529	0 36	485	16 18	44	59·1	13 18	51·9	0 55	7·2
8	150	530	380	380	—	—	—	—	—	—	—	0	0	524	1 15	476	10 50	48	60·4	13 18	50·9	3 12	9·5
9	250	500	645	600	710	460	—	—	—	—	—	0	1	526	23 0	469	15 20	57	59·4	13 50	49·6	3 38	9·8
10	380	580	565	490	490	250	—	—	—	—	—	0	2	512	7 25	**416**	**21 14**	96	61·5	13 6	**25·0**	**23 8**	36·5
11	300	440	450	390	460	420	—	—	—	—	0·55	0	2	**547**	**3 55**	448	5 3	99	**68·7**	**5 45**	31·1	0 33	**37·6**
12	165	165	280	325	450	150	—	—	—	—	—	1	0	510	23 5	463	10 40	47	57·7	12 48	50·7	8 25	7·0
13	140	85	*x*−	215	—	—	—	—	—	—	—	2	1	516	21 25	472	9 10	44	58·2	12 15	50·4	20 44	7·8
14	240	290	250	250	—	—	—	—	—	—	—	0	0	501	23 54	475	9 22	26	56·7	13 36	50·5	22 5	6·2
15	175	315	230	280	—	—	—	—	—	—	—	0	0	501	0 45	471	10 22	30	55·8	12 40	49·2	2 50	6·6
16	135	380	390	305	450	400	0·30	?	—	—	0·40	0	1	506	6 18	462	13 23	44	58·6	12 58	48·6	20 40	10·0
17	255	350	450	375	260	380	—	—	—	—	0·70	0	1	518	20 50	435	15 39	83	60·7	14 38	49·0	21 12	11·7
18	230	—	480	—	660	660	0·40	?	—	—	0·55	0	2	538	21 20	433	10 35	**105**	57·6	14 12	41·3	20 8	**16·3**
19	—	—	—	280	—	—	—	—	—	—	—	0	1	507	21 14	435	11 55	72	57·6	14 1	45·5	21 29	12·1
20	160	115	150	325	350	360	1·00	?	—	—	0·55	1	0	504	24 0	461	14 10	43	57·7	13 48	51·1	8 55	6·6
21	140	200	0	315	—	—	—	—	—	—	—	1	1	515	0 45	474	15 40	41	56·3	11 25	47·7	21 20	**8·6**
22	*x*+	− 15	215	100	—	—	—	—	—	—	—	2	1	525	21 38	474	7 48	51	54·9	12 18	48·0	18 34	6·9
23	85	225	215	315	—	—	—	—	—	—	—	1	0	501	6 8	476	10 14	25	54·2	12 53	49·1	8 10	5·1
24	215	380	*x*−	*x*±	—	—	—	—	—	—	—	2	1	510	6 32	470	11 23	40	55·7	14 10	46·7	23 36	9·0
25	270	480	*x*+	340	290	290	0·85	0·30	0·40	—	—	1	1	511	1 20	461	21 18	50	54·3	14 0	46·9	20 50	7·4
26	330	430	230	350	620	390	0·10	0·70	0·40	0·90	0·95	1	0	501	18 13	481	13 26	**20**	54·5	13 3	49·7	8 27	4·8
27	175	415	530	365	470	380	?	1·20	—	—	0·50	0	0	507	17 58	480	9 48	27	54·7	13 3	49·7	8 28	5·0
28	230	400	680	530	—	—	—	—	—	—	—	0	0	502	19 45	480	10 25	22	54·4	12 2	48·9	8 38	5·5
29	330	390	250	− 85	—	—	—	—	—	—	—	1	1	507	17 41	481	19 55	26	55·7	15 4	50·5	9 0	5·2
30	85	205	0	450	—	—	—	—	—	—	—	1	0	508	22 50	483	10 42	25	54·1	12 56	49·5	23 10	4·6
31	265	515	100	215	680	600	0·50	0·70	0·85	0·85	0·30	1	0	511	22 6	483	12 13	28	52·3	12 37	48·3	7 38	**4·0**
M.	211	352	329	333	—	—	—	—	—	—	—	—	—	515	—	469	—	46	57·6	—	47·6	—	9·9

6. ESKDALEMUIR OBSERVATORY.

Day.	Potential Gradient, Volts per metre. Factor 5·4.				Number of Ions per cc.		Velocities of Ions for 1 volt per centimetre.		Conductivity $\times 10^{25}$.	Air-Earth Current $\times 10^{16}$.		Electric Character of Day.	Magnetic Character of Day.	North Component.				West Component.				Vertical Component.			
														Maximum. 15000 γ +.		Minimum. 15000 γ +.		Maximum. 5000 γ +.		Minimum. 5000 γ +.		Maximum. 45000 γ +.		Minimum. 45000 γ +.	
	3 h.	9 h.	15 h.	21 h.	+.	−.	+.	−.		c_1.	c_2.															
	v/m.	v/m.	v/m.	v/m.	n/cc.	n/cc.	cm/sec.	cm/sec.	E.-m.U.	Amp/cm².				h m	γ	γ	h m	h m	γ	γ	h m	h m	γ	γ	h m
1	190	250	232	362	—	—	—	—	—	—		0 *a*	0	22 55	1020	978	11 34	14 20	270	231	9 38	22 0	312	301	14 20
2	398	226	− 53	362	—	—	—	—	—	—		1 *a*	1	6 27	1039	960	11 16	13 10	289	223	8 46	15 40	320	297	12 17
3	65	83	238	362	—	—	—	—	—	—		1 *b*	0	20 8	1049	974	11 24, 12 20	13 16	277	230	9 17	18 0	318	303	10 40
4	190	*	178	119	—	—	—	—	—	—		1 *b*	0	21 37	1024	985	10 42	14 20	278	231	8 20	22 0	315	300	12 9
5	83	119	190	149	1050	330	0·82	1·52	1·50	2·9		1 *b*	0	21 50	1023	976	11 20	13 30	272	223	0 30	16 20	319	301	0 16
6	107	154	154	226	—	—	—	—	—	—		0 *a*	1	21 15	1021	975	11 0	13 5	281	231	8 40	17 20	322	304	11 33
7	125	166	107	487	—	—	—	—	—	—		0 *a*	*	*	*	*	*	*	*	*	*	*	*	*	*
8	273	281	113	83	—	—	—	—	—	—		0 *a*	*	*	*	*	*	*	*	*	*	*	*	*	*
9	30	53	143	262	1110	600	0·89	0·93	1·70	2·4		0 *a*	1	22 55	1046	965	10 17	13 39	289	224	3 36	15 50	338	297	3 10
10	119	107	309	541	—	—	—	—	—	—		0 *a*	1	7 15	1021	909	21 12	13 6	290	**23**	**23 8**	19 16	374	215	24 0
11	184	238	339	404	—	—	—	—	—	—		0 *a*	2	**2 24**	**1075**	**892**	**5 4**	**5 50**	**340**	62	0 26	16 0	321	**141**	**1 45**
12	404	695	297	327	—	—	—	—	—	—		0 *a*	0	23 4	1036	975	10 33	12 47	267	231	8 50	16 0	328	310	2 12
13	493	345	327	356	—	—	—	—	—	—		0 *a*	1	21 24	1040	981	11 7	11 52	273	230	8 40	16 40	330	310	11 52
14	766	582	350	855	—	—	—	—	—	—		0 *a*	1	20 31	1012	984	10 34	23 52	265	223	0 47	17 10	335	314	11 0
15	149	309	160	250	—	—	—	—	—	—		0 *a*	0	2 0, 5 0	1018	984	10 28	13 5	260	228	3 0	21 0	329	314	2 0
16	137	77	101	83	—	—	—	—	—	—		0 *a*	1	6 0	1018	961	13 19	12 55	279	225	20 40	16 16	349	319	10 52
17	190	262	350	309	—	—	—	—	—	—		1 *a*	1	20 49	1044	938	10 12	14 10	299	233	9 48	**15 46**	**382**	322	6 44
18	220	244	256	*	510	120	0·59	1·71	0·56	1·9		0 *a*	2	21 19	1064	926	10 35	13 35	277	171	20 8	17 37	365	308	21 30
19	*	*	−256	523	—	—	—	—	—	—		1 *b*	1	20 35	1043	929	11 54	15 8	271	202	21 29	16 45	348	326	0 1
20	268	374	190	196	—	—	—	—	—	—		1 *a*	1	6 26	1019	964	14 10	13 45	275	239	18 41	16 0	351	331	11 5
21	190	149	*	321	—	—	—	—	—	—		1 *b*	1	20 43	1031	984	9 56	13 26	275	223	21 18	20 0	342	324	1 0
22	315	505	202	368	—	—	—	—	—	—		1 *a*	1	21 35	1051	989	11 0	12 33	266	212	18 22	15 28	341	327	0 50
23	220	285	*	214	—	—	—	—	—	—		2 *b*	0	6 0	1017	981	10 16	13 37	267	238	8 12	16 10	340	331	0 1
24	262	− 42	59	125	—	—	—	—	—	—		2 *b*	1	6 30	1023	974	11 23	14 26	272	205	23 26	15 30	346	329	10 26
25	226	131	321	232	—	—	—	—	—	—		1 *a*	0	1 20	1034	971	21 17	14 15	270	210	20 47	20 42	352	320	1 32
26	345	77	− 24	*	—	—	—	—	—	—		1 *b*	1	21 41	1015	985	13 26	12 56	270	241	0 8	15 10	346	335	11 28
27	*	*	208	131	—	—	—	—	—	—		0 *a*	1	18 30	1021	988	11 4	12 48	271	242	8 29	15 0	343	333	12 0
28	154	160	386	630	—	—	—	—	—	—		0 *a*	0	0 7	1016	990	10 39	12 4	270	239	22 30	15 0	346	339	0 1
29	238	250	−475	*	—	—	—	—	—	—		2 *c*	1	17 42, 21 1	1020	989	14 31	14 7	281	236	21 40	20 0	352	336	7 0
30	*	−190	*	95	—	—	—	—	—	—		2 *c*	0	22 50	1028	989	10 40	12 57	262	241	9 15	21 42	348	339	10 0
31	*	*	*	196	—	—	—	—	—	—		2 *c*	0	21 24	1031	987	12 14	12 36	265	243	8 8	21 52	347	340	0 30
M.	235	242	215	332	—	—	—	—	—	—		—	—	—	1031	968	—	—	277	213	—	—	340	309	—

x Indeterminate. * No record. An explanation of the Headings of the columns is given in the Preface.

7. Tables of Wind Components in metres per second at fixed hours.

Together with the mean velocity (horizontal movement) in metres per second for the hour with the maximum hourly run for each day, or the greatest velocity attained in a gust and the time of its occurrence.

HOLYHEAD.†§

Height of Head above—Roof 8·8 m., Ground 13·7 m., M.S.L. 19·2 m.
Height of Cups above—Roof 4·6 m., Ground 7·6 m., M.S.L. 15·2 m.

Date.	3 h.				9 h.				15 h.				21 h.				Max. in a Gust.	Time of Gust.	
	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.	V.	Hrs.	Min.
1	...	11·2	...	...	...	9·8	...	...	...	7·2	1·3	...	...	4·5	1·8	...	17·0	0	5
2	...	1·8	2·7	...	...	1·3	1·3	...	...	3·6	5·4	...	...	5·8	8·5	...	14·8	21	15
3	...	1·8	...	4·0	...	3·6	...	8·1	...	8·9	...	5·8	...	8·9	...	8·9	17·9	1	25
4	...	12·1	...	...	...	13·9	...	2·7	...	12·5	...	4·9	...	8·1	...	8·1	19·7	10	55
5	...	7·6	...	7·6	...	5·8	...	5·8	...	4·5	...	3·1	...	3·6	...	1·3	15·7	3	30
6	...	1·3	...	6·3	...	1·8	...	9·4	...	3·6	...	8·5	...	2·2	...	4·9	15·7	10	15
7	...	0·5	...	3·1	...	...	...	0·9	...	3·6	0·9	...	...	3·1	3·1	...	8·5	0	15
8	...	1·3	2·2	...	...	0·9	0·5	...	...	4·0	...	1·8	...	3·1	...	4·5	11·6	23	30
9	...	1·8	...	8·5	...	1·8	...	8·1	...	4·9	...	7·6	...	2·7	...	6·3	12·5	14	20
10	2·2	...	...	4·9	...	...	...	4·5	...	0·9	0·9	...	...	...	...	1·8	8·1	5	45
11	1·3	...	...	0·9	1·3	...	...	0·9	0·5	...	...	0·9	...	1·3	...	1·3	6·7	11	30
12	0·5	...	...	1·3	0·9	...	...	...	1·8	...	0·9	..	...	...	...	2·7	4·5	20	15
13	0·5	...	...	0·9	1·3	...	...	2·7	...	2·7	1·8	...	...	0·9	...	0·9	6·7	6	5
14	0·5	...	...	1·3	0·5	...	...	0·9	...	0·9	...	2·2	...	...	...	10·3	14·8	22	20
15	...	...	...	8·5	...	1·8	...	10·3	...	...	...	9·4	...	1·8	...	8·5	14·8	13	5
16	...	1·8	...	8·5	...	...	...	9·8	...	2·2	...	11·2	...	...	...	10·3	18·8	16	5
17	...	...	...	9·8	...	...	...	9·4	...	2·2	...	11·2	0·5	...	...	2·7	16·5	13	5
18	0·5	...	...	3·1	1·3	...	...	1·3	...	1·3	...	2·7	...	...	...	6·7	10·3	21	25
19	...	...	...	3·1	...	...	...	4·9	...	...	...	4·9	0·9	...	...	2·7	9·4	12	25
20	1·3	...	...	1·8	1·3	...	...	1·3	5·4	...	3·6	...	8·1	...	...	3·1	13·9	21	5
21	8·9	...	...	3·6	10·3	...	...	7·2	7·6	...	3·1	...	10·3	...	...	...	23·3	10	20
22	8·1	...	...	5·4	1·8	...	...	2·7	...	...	3·1	...	...	5·8	8·5	...	17·4	0	30
23	2·2	...	11·2	...	2·7	...	12·5	...	3·1	...	4·9	...	6·7	...	9·8	...	19·2	4	50
24	3·1	...	4·5	...	1·3	...	0·9	...	...	1·3	2·2	...	...	1·3	2·7	...	11·6	0	15
25	...	4·5	0·9	...	...	6·7	1·3	...	...	0·9	4·5	...	2·2	...	3·1	...	10·3	6	5
26	1·8	...	4·0	...	4·0	...	...	4·0	...	2·2	11·2	...	...	1·8	9·4	...	21·5	15	5
27	...	2·2	4·9	...	2·2	...	...	4·9	...	1·8	...	9·8	...	...	...	7·6	16·1	12	5
28	...	1·8	...	8·1	...	1·3	...	6·7	...	3·1	...	2·2	...	2·2	2·2	...	12·5	12	10
29	4·5	...	...	0·9	8·9	...	...	...	12·1	...	...	...	8·9	...	5·8	...	21·0	14	20
30	8·9	...	8·9	...	13·4	...	5·8	...	...	...	15·2	...	2·7	...	13·4	...	25·0	10	55
31	4·9	...	12·1	..	4·9	...	11·6	...	2·7	...	12·5	...	...	2·2	12·1	...	22·4	9	0
S+N & W+E	98·9		143·0		104·8		140·4		105·5		157·7		99·6		173·0				
S−N & W−E	− 0·5		− 40·2		7·4		− 72·6		− 39·1		− 14·7		− 19·0		− 12·2				

DEERNESS.†

Height of Cups above—Roof 1·5 m., Ground 4·9 m., M.S.L. 57·3 m.

Date.	3 h.				9 h.				15 h.				21 h.				Vel. in Max. Hourly Run.	Time of Max.
	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.	V.	Hour.
1	...	10·3	4·5	...	...	7·6	5·4	...	...	4·9	4·9	...	...	2·7	1·3	...	11·6	1
2	...	1·3	0·1	...	5·4	...	...	...	...	2·2	3·1	...	...	5·4	...	7·6	11·6	19
3	...	8·9	...	3·6	...	9·8	...	4·0	...	12·1	...	...	...	12·1	...	...	13·0	16, 22
4	...	11·2	...	...	...	4·9	...	0·9	...	5·4	...	0·9	...	4·0	...	0·9	11·6	2
5	...	1·8	2·7	...	...	4·0	4·0	...	...	6·7	...	4·5	...	4·0	...	4·0	9·4	11, 13
6	...	1·3	...	1·3	...	0·5	...	0·9	1·8	...	...	0·5	4·5	...	0·9	...	4·5	21
7	1·3	...	0·9	...	1·3	...	1·3	...	1·8	...	0·9	...	0·0	0·0	0·0	0·0	4·0	13
8	...	5·4	3·6	...	...	9·4	...	4·0	...	6·3	4·0	...	...	8·1	1·8	...	11·6	6
9	...	6·7	2·7	...	...	7·6	1·3	...	...	3·1	4·5	...	...	0·9	4·5	...	8·5	5, 7, 8,
10	...	...	4·9	...	...	1·3	7·6	...	...	...	7·2	...	...	...	7·2	...	9·4	14
11	...	1·3	5·8	...	...	1·3	6·3	...	...	0·9	4·0	...	...	0·9	0·9	...	8·1	1
12	0·5	...	0·5	...	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	...	0·9	...	0·5	2·7	6
13	...	0·9	...	0·5	0·0	0·0	0·0	0·0	0·5	...	...	0·9	0·5	...	...	3·1	3·6	20, 23
14	0·5	...	...	3·1	3·1	...	...	3·1	4·0	...	...	2·7	2·7	...	...	1·8	5·4	11, 12
15	0·5	...	...	0·5	2·2	...	...	0·9	5·4	...	...	0·9	6·3	...	...	2·7	6·7	17,18,19,20,21,22
16	4·9	...	...	2·2	5·4	...	...	3·6	6·7	...	...	4·5	4·9	...	...	4·9	8·9	16
17	5·4	...	...	3·6	5·8	...	...	5·8	7·2	...	...	4·9	7·6	...	...	5·4	10·3	14, 19
18	7·6	...	...	4·9	7·6	...	...	5·4	7·6	...	...	3·1	4·9	...	...	0·9	10·3	1
19	6·3	...	...	0·5	3·1	...	...	0·5	4·5	...	...	3·1	3·6	...	...	5·4	6·7	18, 24
20	4·0	...	...	4·0	3·6	...	...	5·4	2·2	...	...	4·9	2·2	...	...	4·9	6·7	7, 8
21	2·2	...	...	4·9	3·1	...	...	4·9	4·5	...	...	6·7	3·1	...	...	7·6	9·8	18
22	5·4	...	...	0·9	2·7	...	0·5	...	0·0	0·0	0·0	0·0	...	2·2	...	0·5	7·2	1
23	...	3·1	0·5	...	...	6·7	...	4·5	...	4·9	...	3·1	...	0·9	...	4·9	9·4	7
24	...	1·3	...	6·7	...	...	...	5·8	..	1·3	...	5·8	...	5·4	...	3·6	10·3	24
25	...	8·5	...	3·6	...	10·3	1·8	...	...	13·4	...	5·8	...	9·4	...	1·8	14·8	15, 16
26	...	4·5	...	1·8	...	5·4	...	0·9	...	1·3	...	6·7	...	1·3	...	6·7	8·1	18
27	...	4·0	...	4·0	...	5·8	...	1·3	...	6·7	...	2·7	...	5·8	...	1·3	8·1	4
28	...	4·0	...	0·9	...	4·0	...	...	...	1·8	3·1	...	...	0·5	0·5	...	5·4	12
29	2·2	...	...	2·2	10·3	...	...	4·5	13·9	...	...	5·8	14·3	...	...	9·4	17·9	23
30	9·4	...	...	1·8	4·9	...	3·1	...	10·7	...	2·2	...	8·9	...	21·0	...	22·8	19,20,21
31	2·7	...	13·0	...	11·6	...	4·9	...	...	2·7	12·5	...	...	8·9	8·9	...	15·2	11
S+N & W+E	127·4		90·2		148·7		92·6		144·5		113·9		136·0		124·9			
S−N & W−E	− 21·6		− 11·8		− 8·5		− 20·2		− 2·9		− 21·1		− 9·0		− 30·9			

SCILLY.‡§

Height of Head above—Ground 9·8 m., M.S.L. 49·7 m.
Height of Cups above—Ground 5·8 m., M.S.L. 45·7 m.

Date.	3 h.				9 h.				15 h.				21 h.				Max. in a Gust.	Time of Gust.	
	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.	V.	Hrs.	Min.
1	...	8·9	...	...	...	8·1	3·6	...	...	6·3	1·3	...	...	5·4	2·2	...	15·2	7	55
2	...	1·8	1·8	...	...	5·8	4·0	...	...	8·5	1·8	...	...	7·2	4·9	...	16·5	22	40
3	...	8·5	...	...	...	7·6	...	3·1	...	8·1	...	5·4	...	10·7	...	4·5	18·8	2	25
4	...	5·4	...	3·6	...	8·1	1·8	...	...	10·3	...	1·8	...	9·8	...	4·0	17·9	16	40
5	...	9·8	...	4·0	...	8·9	...	3·6	...	8·5	...	3·6	...	9·8	...	4·0	16·1	19	20
6	...	4·5	...	1·8	...	3·1	...	8·1	...	1·3	...	7·2	...	1·8	...	8·1	14·3	10	40
7	...	1·3	...	3·6	...	3·6	...	2·7	...	1·3	...	0·9	...	1·8	...	1·3	7·6	0	5
8	...	1·3	...	0·9	...	0·9	...	4·5	...	1·3	...	3·6	...	2·7	...	6·3	12·5	23	45
9	...	3·6	...	8·5	...	3·6	...	8·5	...	4·0	...	5·8	...	3·6	...	8·1	15·2	4	30
10	...	1·8	...	9·4	...	1·8	...	9·4	...	...	...	8·9	1·8	...	...	10·3	16·5	22	5
11	3·6	...	...	8·9	4·6	...	...	9·8	3·6	...	...	8·5	2·2	...	...	5·8	?17·4	13	25
12	1·3	...	...	2·7	1·8	...	...	1·8	1·3	...	...	3·6	2·7	...	...	4·0	8·1	12	35
13	1·8	...	...	3·1	*	*	*	*	5·4	...	...	3·6	3·6	...	...	3·6	8·9	13	20
14	4·0	...	...	6·3	1·8	...	...	9·8	6·3	...	...	4·0	3·6	...	...	5·4	17·0	10	15
15	*	*	*	*	*	*	*	*	...	2·7	...	12·5	...	...	...	10·7	22·4	11	20
16	...	...	...	10·3	...	...	...	12·5	...	2·7	...	12·5	2·7	...	...	12·5	21·0	14	5
17	...	...	...	10·3	...	1·8	...	8·1	...	...	...	8·9	8·1	...	...	1·8	16·5	10	25
18	4·9	...	...	3·1	0·9	...	...	4·0	1·3	...	...	6·3	2·2	...	...	3·1	12·5	12	40
19	2·7	...	...	6·7	3·6	...	...	5·4	4·0	...	...	4·0	1·8	...	...	4·5	12·1	9	50
20	1·3	...	6·3	...	4·5	...	0·9	...	9·4	...	...	4·0	12·5	...	...	4·9	20·1	23	5
21	19·2	...	...	8·1	6·3	...	6·3	...	7·6	...	7·6	...	6·7	...	4·5	...	25·0	4	30
22	4·9	...	12·1	...	...	...	19·2	...	...	4·0	19·7	...	...	3·6	17·9	...	29·5	5	20
23	...	3·1	14·8	...	...	...	7·6	...	3·1	...	7·6	...	1·8	...	8·9	...	25·5	1	10
24	5·8	...	4·0	...	...	...	8·9	...	...	2·7	6·3	...	...	1·8	8·1	...	17·4	17	15
25	...	1·8	8·1	...	...	...	9·8	...	...	2·7	6·3	...	...	4·5	10·3	...	20·6	7	15
26	3·6	...	5·4	...	*	*	*	*	...	...	13·9	...	1·8	...	8·9	...	23·7	8	45
27	8·1	...	...	1·8	...	1·8	9·8	...	3·1	...	7·6	...	5·8	...	...	4·0	19·2	7	20
28	...	2·2	...	11·6	...	4·9	...	4·9	...	5·8	...	2·2	...	2·2	...	1·3	16·1	2	55
29	2·7	...	...	...	7·6	...	3·1	...	3·6	...	8·9	...	6·3	...	9·4	...	16·5	23	55
30	8·1	...	8·1	...	12·5	...	8·5	...	...	2·7	13·0	...	...	3·6	8·5	...	30·4	11	45
31	...	1·8	9·4	...	2·2	...	10·7	...	...	2·2	11·2	...	...	3·6	8·9	...	23·3	10	20
S+N & W+E	127·8		174·7		105·2		190·4		123·8		212·5		135·7		200·7				
S−N & W−E	16·2		− 34·7		− 14·8		− 2·0		− 26·4		− 2·1		− 8·5		− 5·7				

GREAT YARMOUTH.†§

Height of Head above—Roof 10·7 m., Ground 12·8 m., M.S.L., 15·9 m.
Height of Cups above—Roof 3·7 m., Ground 18·3 m., M.S.L., 22·3 m.

Date.	3 h.				9 h.				15 h.				21 h.				Max. in a Gust (Gorleston).	Time of Gust.	
	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.	V.	Hrs.	Min.
1	...	8·1	3·6	...	...	7·6	3·1	...	...	4·9	3·1	...	...	2·7	2·7	...	24·6	1	25
2	...	1·8	4·0	...	...	2·2	3·1	...	...	2·2	2·2	...	...	0·5	1·8	...	11·6	12	35
3	...	0·5	3·1	...	...	0·9	2·2	...	...	1·8	1·8	...	...	2·7	2·7	...	10·7	20	30
4	...	1·8	2·7	...	...	2·7	...	...	...	5·4	...	3·6	...	5·8	...	5·8	12·1	17	40
5	...	7·6	...	11·6	...	5·8	...	8·5	...	4·9	...	4·9	...	5·8	...	5·8	15·7	3	25
6	...	...	...	9·8	...	1·8	...	2·2	...	3·6	...	5·4	...	...	...	5·4	11·2	1	20
7	...	2·2	...	4·9	...	6·7	...	6·7	...	4·0	...	...	...	1·8	4·0	...	11·2	8	50
8	...	0·9	4·5	...	...	0·5	3·1	...	...	4·0	...	...	...	2·7	...	...	9·4	1	35
9	...	7·2	...	4·9	...	6·7	...	...	...	4·5	...	...	...	7·6	...	4·9	15·7	20	10
10	...	8·1	...	...	...	4·5	...	4·5	...	3·6	...	1·3	...	3·1	...	3·1	13·4	3	45
11	...	0·5	...	0·5	...	1·8	...	0·9	...	0·9	...	2·2	...	2·2	...	5·8	8·5	23	5
12	3·6	...	...	5·4	1·3	...	...	5·8	...	...	...	3·1	...	...	...	1·3	9·4	1	0
13	...	...	...	2·2	...	...	...	3·6	...	...	...	3·6	0·0	...	...	0·9	5·8	7	55
14	0·5	...	...	1·8	...	1·3	...	6·7	...	0·5	...	1·3	...	1·8	...	4·0	9·8	12	45
15	...	5·4	...	5·4	...	4·9	...	4·9	...	3·1	...	7·6	...	2·2	...	12·1	14·8	21	20
16	...	4·0	...	9·8	...	1·8	...	10·3	...	1·8	...	8·0	...	...	...	8·9	13·4	5	50
17	...	...	...	8·5	...	...	...	10·3	...	...	...	9·4	...	...	...	6·7	12·1	0	5
18	0·9	...	...	4·5	...	...	...	4·5	1·8	...	...	1·8	0·5	...	...	2·7	4·9	1	30
19	0·0	...	...	0·9	...	...	...	3·1	...	...	...	4·0	4·0	...	...	0·9	9·8	20	40
20	2·7	...	...	0·5	4·5	...	...	...	1·8	...	4·0	...	3·6	...	3·6	...	17·4	12	50
21	3·1	...	...	...	6·3	...	...	1·3	8·1	...	...	3·6	3·1	...	...	3·1	20·1	16	25
22	5·4	...	...	0·9	5·4	...	...	...	5·8	...	5·8	...	3·1	...	3·1	...	20·6	12	50
23	...	...	5·4	...	2·2	...	5·4	...	2·2	...	5·4	...	2·7	...	2·7	...	12·1	14	5
24	2·2	...	2·2	...	2·7	...	1·8	...	4·5	...	...	...	4·5	...	0·9	...	19·2	17	35
25	1·8	...	4·0	...	1·3	...	3·6	...	0·9	...	4·5	...	0·9	...	1·8	...	9·4	0	30
26	1·3	...	2·7	...	3·1	...	0·5	...	5·4	...	...	...	3·1	...	3·1	...	19·2	16	15
27	4·0	...	4·0	...	1·8	...	4·0	...	...	0·5	1·3	...	...	12·1	...	...	18·8	21	35
28	...	9·4	...	4·0	...	7·2	...	1·3	...	4·9	...	...	...	5·4	...	...	17·0	1	10
29	...	1·3	2·2	...	...	0·9	2·7	...	2·2	...	1·3	...	5·8	...	...	...	19·2	23	35
30	8·1	...	1·8	...	8·1	...	3·1	...	9·8	...	1·8	...	0·9	...	5·4	...	22·4	16	5
31	1·8	...	3·1	...	3·1	...	4·5	...	3·6	...	5·4	...	1·8	...	4·5	...	14·8	13	0
S+N & W+E	94·2		118·9		97·1		111·7		96·7		96·4		90·4		104·6				
S−N & W−E	− 23·4		− 32·3		− 17·5		− 37·5		− 4·5		− 23·2		− 22·4		− 32·0				

The velocities at fixed hours are means for the interval from 30 minutes before to 30 minutes after the hour. The hours are numbered 1 h. to 24 h. Time is referred to Greenwich Mean Time.

* No record.

† Robinson Cup Anemometer; Arms 0·61 m.; Diameter of Cups, 0·229 m.; Factor 2·2. ‡ Robinson Cup Anemometer; Arms 0·305 m.; Diameter of Cups 0·127 m.; Factor 2·8.

§ Dines Pressure Tube Anemometer. At Great Yarmouth, Holyhead, and Scilly the readings at fixed hours are taken from the Robinson Anemometer, the maxima quoted are the greatest winds in a gust as recorded by the Dines Pressure Tube.

METEOROLOGICAL OFFICE OBSERVATORIES—GEOPHYSICAL JOURNAL.

NOVEMBER 1911.—DAILY VALUES REFERRED TO GREENWICH MEAN TIME AND UNITS, BASED ON THE C.G.S. SYSTEM. [*Price* 4*d*.

First Year.—No. 11. *Meteorology, Solar Radiation, Seismology, Atmospheric Electricity, and Terrestrial Magnetism.*

1. SEISMOLOGICAL JOURNAL:—ESKDALEMUIR.—Long. 3° 12′ W. Lat. 55° 19′ N.

Date.	Microseisms. Period.	Microseisms. Amp.	Earthquakes.	Remarks.
	s	μ		
1	5-6	2·6	I.	1st I, 1st and 2nd Phases lost during change of sheet. Long waves have started before 10 h. 15 m.
2	7-8	2·8	I.	
3	6	2·6		2nd I, L=2 h. 13 m. P and S confused by microseisms.
4	6-7	5·0		8th Iu, P?=14 h. 24 m. 34 s., S=14 h. 34 m. 51 s., L=14 h. 53 m., Δ=9120 kms.
5	6-7	5·0		
6	5	3·0		9th I, S?=4 h. 55 m. 57 s., L=5 h. 12 m.
7	5-6	1·2		
8	5-6	1·9	Iu.	13th I, P=16 h. 25 m. 0 s., S=16 h. 33 m. 52 s., Δ=7400 kms.
9	5	1·3	I.	14th No record. Workmen in room.
10	5-6	1·0		
11	5	0·9		16th I, South German Eqke. First phase obliterated by microseisms. S=21 h. 31 m. 31 s., Max. 21 h. 32·5 m.
12	4-5	1·0		
13	5	1·5	Iu.	18th Iu, P=7 h. 45 m. 26 s., S=7 h. 55 m. 40 s., Δ=9060 kms.
14	4-5	1·1		19th L=15 h. 14·5 m. Only long waves clearly shown.
15	6	2·0		
16	5-6	3·3	I.	20th Iu, P=14 h. 1 m. 50 s., S=14 h. 11 m. 30 s., Δ=8390 kms., α=nearly true W. Epicentre 12° N, 84° W. I, Long waves 20 h.
17	6	3·1		
18	5	1·9	Iu.	21st I, L=20 h. 12 m.
19	5	1·3	I.	
20	5	0·9	Iu, I.	22nd Iu, P=23 h. 18 m. 30 s., S=23 h. 28 m. 11 s., Δ=8420 kms.
21	5	1·0	I.	
22	5	0·6	Iu.	25th I, Long waves 20 h. 18 m. Earlier phases uncertain.
23	5	0·5		28th I, P=16 h. 10 m. 46 s., S=16 h. 22 m. 59 s., Δ=11790 kms. Seismogram much confused by microseisms.
24	5	1·0		
25	5	0·8	I.	29th I, Feeble disturbance 5 h. 47 m.–6 h. 12 m.
26	4-5	1·2		30th I, Disturbed 11 h. 37 m.–12 h. 34 m.
27	4-5	1·2		
28	5	1·6	I.	All small earthquakes, and very difficult to analyse on account of microseisms.
29	5-6	1·1	I.	
30	6	2·4	I.	An explanation of the notation used is given in the preface.

2. VALENCIA OBSERVATORY, CAHIRCIVEEN (KERRY).—Long. 10° 15′ W. Lat. 51° 56′ N.

Heights above Mean Sea Level:—Station, H = 9·2 m. Barometer Cistern, H_b = 13·7 m.
Heights above Ground:—Thermometers, h_t = 1·2 m. Rain-gauge, h_r = 0·6 m. Sunshine Recorder, h_s = 12·8 m. Cups of Anemometer, h_a = 13·7 m.

Day.	Pressure at Station Level. 9 h.	21 h.	Air Temperature in Degrees Absolute. 9 h.	21 h.	Max.	Min.	Humidity. Vapour Pressure. 9 h.	21 h.	Percentage. 9 h.	21 h.	Wind Direction in points (8=E, 16=S) and Velocity (*metres per second*). 9 h.		21 h.		Cloud Amount and Weather. 10 h.	22 h.	Rain 24 hours beginning 10 h.	Sunshine.	Remarks.	Magnetism. Horizontal Force.	Declination West.	Inclination.
			200+	200+	200+	200+									Tenths of Sky covered.							
	bar.	bar.	°	°	°	°	millibar.		%	%		m/sec.		m/sec.			mm.	hrs.		γ·	° ′	° ′
1	1·0180	1·0107	82·9	83·9	84·5	81·1	11·1	12·2	92	95	19	5·4	21	7·2	10≡0	10●	12·2	—	Gloomy and showery.	…	…	…
2	·0106	·0130	82·9	81·5	83·9	80·9	10·1	9·4	84	86	22	9·4	18	2·7	6	8	3·8	3·8	Misty to fair. ⊍ 22 h. [●0.	…	…	…
3	·0016	1·0035	84·0	83·5	86·0	82·1	11·4	9·2	88	73	16	10·3	23	10·3	10≡0●	5	4·8	—	≡0. Overcast with intermittent	…	…	…
4	1·0080	0·9900	83·6	86·8	**86·8**	82·9	9·7	14·7	76	94	21	6·3	20	13·0	10	10≡0	9·7	—	Dull and threatening.	…	…	…
5	0·9967	1·0051	82·4	79·8	84·6	78·8	8·4	7·5	72	76	21	19·2	24	12·1	5	10	3·1	—	Overcast and squally. ⁄●0	…	…	…
6	1·0104	1·0126	81·3	81·3	82·9	79·6	8·0	8·5	74	78	24	13·0	21	4·5	4	10	8·6	5·0	▲ showers. Bright intervals.	…	…	…
7	1·0052	0·9980	82·4	79·3	84·3	78·9	10·8	8·0	93	84	16	5·4	21	9·8	7≡0	3	8·4	0·3	≡0 and showery.	17909	20 38·0	68 10·4
8	0·9978	0·9929	77·8	76·5	80·4	76·5	7·4	7·4	86	94	21	8·1	22	3·6	9	8	3·8	1·7	T▲ *a*. Showery.	…	…	…
9	1·0027	1·0070	81·7	80·7	82·4	78·9	7·2	7·2	**66**	69	29	12·1	31	8·9	7	3	0·5	4·0	Cloudy to bright. Squally.	…	…	…
10	1·0081	1·0035	75·7	80·9	81·7	75·6	7·0	8·1	93	77	—	0·9	13	7·2	3	10	2·8	5·9	Fair; clear atmosphere.	…	…	…
11	0·9960	0·9910	82·2	79·5	84·1	78·7	9·7	9·2	83	94	8	9·4	—	0·9	5	4	8·4	2·8	Good visibility; fair to cloudy.	…	…	…
12	0·9872	0·9988	81·3	81·7	81·9	79·6	9·2	7·4	86	**66**	25	16·1	25	16·1	10≡0	3	2·3	—	Unsettled-looking. ≡0●.	…	…	…
13	1·0128	1·0106	81·6	82·3	84·1	80·7	8·0	10·8	72	93	23	8·1	14	11·6	3	10●	28·2	2·8	Fair to dull. ●2 after 18 h.	…	…	…
14	1·0081	1·0020	85·7	85·1	86·1	84·1	14·1	13·7	96	97	16	8·5	16	9·4	10≡0	10≡0●	**37·3**	—	Gloomy all day. ≡0●	…	…	…
15	0·9917	0·9982	83·2	84·4	85·1	82·8	11·9	12·1	96	90	20	5·4	21	13·0	10≡0●	10≡0	1·5	2·5	●2 early. Damp and misty.	…	…	…
16	·9984	·9900	82·9	82·4	85·0	80·2	9·6	10·7	80	91	21	10·3	17	5·4	6≡0	10≡0	17·0	4·7	Fair to showery.	…	…	…
17	·9795	·9819	77·5	80·0	81·4	77·3	8·0	7·6	95	75	30	5·4	31	4·9	10≡0●0	3	2·5	3·3	⊼ 7 h. ●2 6 h.–8 h.	…	…	…
18	·9856	·9911	80·3	80·5	81·1	78·7	7·2	7·5	71	72	1	8·1	30	11·6	6	9	5·6	2·2	Showery. Strong wind *p*.	…	…	…
19	0·9927	0·9967	80·2	80·9	82·0	78·8	8·0	8·2	80	77	30	8·1	32	6·7	5	2	5·8	4·2	● showers. Bright intervals.	…	…	…
20	1·0020	1·0074	79·1	79·2	81·5	77·0	8·9	7·0	94	75	—	0·9	3	5·8	2≡0	1	—	7·0	●0 early; then fine.	…	…	…
21	·0075	·0041	76·5	76·7	79·3	75·6	6·7	6·7	87	85	—	0·9	—	0·9	8	10	—	3·1	Fair.	17922	20 36·1	68 10·7
22	·0032	·0074	75·1	75·7	78·8	**73·9**	5·4	6·2	76	84	3	3·6	3	3·1	1	1	—	7·2	Fine.	…	…	…
23	·0099	·0122	76·2	78·4	78·9	76·0	6·5	7·3	84	**82**	4	7·2	6	6·7	6	3	—	5·2	Fair.	…	…	…
24	·0112	·0105	75·7	80·1	80·7	75·2	6·4	8·0	87	80	6	2·2	9	1·8	3∞	10	—	3·7	Fine, but with ∞0.	…	…	…
25	·0108	·0111	80·0	79·8	80·9	79·5	7·6	7·5	76	75	10	6·3	8	5·4	7	10	—	2·7	Fair to dull and gloomy.	…	…	…
26	·0143	·0182	78·8	76·5	80·4	75·5	7·0	6·2	76	79	9	1·8	8	4·5	2∞	2	—	4·0	Fine.	…	…	…
27	·0139	·0091	75·2	75·2	79·0	74·1	6·6	6·8	92	96	—	0·9	4	1·8	7≡0	2	2·0	—	⌙. Fair but hazy.	…	…	…
28	·0066	·0129	80·2	81·3	81·8	74·9	9·3	9·3	93	86	15	5·8	25	4·5	10≡0●	3	9·4	—	Overcast, with ≡0●.	…	…	…
29	·0211	·0127	80·1	83·4	84·0	76·0	8·6	10·1	86	81	12	6·3	14	15·2	8	10	10·7	—	Dull; good visibility.	…	…	…
30	1·0119	1·0147	83·7	79·6	84·5	79·5	11·5	9·0	90	93	16	5·8	16	3·1	10≡0	1	0·3	1·6	●2, then dull to fine.	…	…	…
Means	1·0041	1·0039	80·3	80·6	82·6	78·4	8·7	8·8	84	83		7·0		7·1	6·7	6·4	188·7	78	Monthly **Totals** or **Means**.	17915	20 37·0	68 10·5
Normal 35 years	1·0118	1·0118	81·4	81·4	84·3	79·0	9·7	9·7	87	87		5·9 (25 years)		5·9 (25 years)	—	—	145·2	65 (25 yrs)	**Normals**, 35 years.			
									(20 years)													

3. Kew Observatory, Surrey.—Long. 0° 19′ W. Lat. 51° 28′ N.

Heights above Mean Sea Level :—Station, H = 5·5 m. Barometer, H_b = 10·4 m.
Heights above Ground :—Thermometers, h_t = 3·0 m. Rain-gauge, h_r = 0·5 m. Sunshine Recorder, h_s = 14·3 m. Cups of Anemometer, h_a = 21·3 m.

Day.	Pressure at Station Level.		Air Temperature in Degrees Absolute.				Humidity. Vapour Pressure.		Humidity. Percentage.		Wind Direction in Points (8 = E, 16 = S) and Velocity (*metres per second*).				Cloud Amount and Weather.		Rain 24 hours beginning 10 h.	Sunshine.	Solar Radiation, Watts per cm².	Min. Temp. on Grass.	Earth Temperature at 10 h.		Remarks.
	9 h.	21 h.	9 h.	21 h.	Max.	Min.	9 h.	21 h.	9 h.	21 h.	9 h.		21 h.		10 h.	22 h.					0·3 m.	1·2 m.	
	bar.	bar.	200+°	200+°	200+°	200+°	millibar.		%	%	m/sec.		m/sec.		Tenths of Sky covered.		mm.	hrs.		200+°	200+°	200+°	
1	1·0214	1·0205	79·7	78·8	84·9	77·3	7·7	8·2	78	90	22	3·1	17	1·8	0	4	—	8·0	—	71·1	80·4	84·6	Fine throughout. ▯ 21 h. 15 m.
2	·0164	·0144	82·5	82·6	85·7	80·0	10·0	11·2	84	95	18	3·6	20	2·7	10	9	4·3	0·1	—	72·5	80·4	84·5	Dull ; ● in afternoon.
3	·0164	·0096	80·1	84·7	85·5	77·3	9·1	10·7	91	78	18	2·2	17	8·5	7	10	1·8	2·7	—	71·2	80·7	84·2	Fair to dull.
4	1·0113	·0050	84·1	84·3	87·5	83·5	10·6	12·3	81	92	19	4·9	17	4·9	9	10●	5·8	1·6	—	80·9	81·9	84·2	Cloudy to overcast.
5	0·9984	·0051	85·2	80·4	**87·7**	79·7	9·8	7·2	69	70	21	6·7	21	6·7	2	8	0·8	6·5	—	81·0	83·0	84·2	●² 5 h.–6 h. Strong wind.
6	1·0086	·0128	79·3	79·6	83·5	77·6	7·2	7·3	76	74	20	6·7	21	5·4	1	0	0·3	7·5	·071	74·9	81·8	84·1	Fine.
7	·0142	·0072	80·6	83·2	84·8	76·9	8·4	10·4	81	84	19	4·5	17	7·2	9	10	7·1	3·6	·062	72·1	80·6	84·1	Fine. ≡⁰ in evening.
8	1·0035	1·0016	82·0	79·1	84·9	78·1	8·6	7·4	76	79	18	4·5	19	1·8	10	10	3·8	—	—	78·8	81·2	84·1	●² 2 h. Dull throughout.
9	0·9990	0·9997	77·9	76·9	82·4	76·4	7·5	6·9	87	86	16	1·8	16	2·2	5	0	—	5·8	·060	71·7	80·4	84·1	Fine, but rather misty.
10	1·0004	1·0070	78·8	77·8	78·9	75·8	7·9	7·5	86	88	16	1·8	23	2·2	10≡⁰	1≡⁰	1·3	0·3	—	70·8	79·6	83·9	Dull.
11	1·0094	1·0008	75·4	80·0	80·8	74·2	6·4	8·8	89	89	21	1·8	8	8·1	6≡⁰	10●≡⁰	15·5	1·3	—	68·4	78·8	83·8	⌴. Fair to dull.
12	0·9923	0·9991	85·2	81·2	86·0	80·1	11·6	7·7	82	73	18	8·1	19	7·6	7	0	7·4	1·7	—	75·9	79·8	83·6	Cloudy and ●. Bright inter-
13	1·0090	1·0235	80·2	81·1	83·1	78·9	8·9	8·7	88	82	19	6·7	22	3·6	10	0	—	0·4	—	76·9	80·2	83·5	Dull most of day. [vals.
14	·0260	·0228	82·4	82·4	85·3	77·4	9·5	10·1	81	86	17	5·4	17	4·0	9	7	—	1·4	—	72·3	80·1	83·5	Fair.
15	·0104	·0011	82·0	83·9	84·6	81·0	8·9	10·5	79	80	15	3·6	18	7·6	10	10●	0·5	—	—	76·6	80·3	83·4	Dull.
16	1·0007	1·0004	85·0	83·4	87·0	83·0	12·0	10·5	86	84	20	6·7	20	4·0	10	10	9·1	—	—	80·1	81·3	83·3	Overcast generally ; mild.
17	0·9901	0·9864	84·1	82·3	84·9	81·9	11·3	9·6	86	82	19	6·7	16	6·7	9	10	9·7	1·6	—	81·0	81·8	83·3	Damp and dull, to fine.
18	·9770	·9731	80·6	79·0	82·4	77·5	9·4	7·0	90	76	14	2·7	26	5·8	10≡⁰	10	13·5	—	—	78·5	81·5	83·2	● most of day.
19	·9771	0·9819	77·6	80·3	80·9	77·0	5·9	8·3	**68**	81	24	7·6	25	6·7	9	10●	3·6	—	—	74·8	80·7	83·2	Dull throughout.
20	0·9939	1·0020	79·2	79·0	81·6	78·0	7·9	7·3	83	79	25	3·1	—	1·3	10≡⁰	9	—	1·0	—	74·0	80·3	83·2	Overcast and misty *a*. Brighter
21	1·0015	0·9979	76·1	73·1	78·0	72·0	5·9	4·5	77	73	29	2·2	29	1·8	8	0≡⁰	0·3	3·2	—	72·9	79·8	83·1	Fine at intervals. [*p*.
22	0·9965	1·0018	74·3	74·2	77·4	**71·6**	5·5	5·5	82	82	—	1·3	3	3·1	5≡⁰	2≡⁰	—	—	—	**66·4**	78·2	82·9	Gloomy and misty ✳⁰ 9 h.
23	1·0038	·0075	78·7	78·4	79·1	75·6	6·6	6·6	73	74	3	10·3	3	10·3	10≡⁰	10	0·8	—	—	70·0	77·9	82·9	Dull ; strong wind all day.
24	·0112	·0126	78·1	79·0	79·1	78·0	6·3	6·5	73	70	4	8·5	5	8·1	10≡⁰	10	—	0·2	—	75·9	78·1	82·7	Generally overcast. ≡⁰
25	·0144	·0150	78·2	76·8	79·2	76·1	6·4	5·6	74	70	3	6·7	3	4·0	9≡⁰	5	—	0·2	—	76·3	78·3	82·4	Dull.
26	·0135	·0123	74·7	74·5	77·5	73·8	5·8	5·7	83	83	2	4·5	2	2·7	2≡⁰	10✳	0·5	3·0	—	70·2	77·6	82·4	Bright, then cloudy with ✳⁰.
27	·0106	·0142	74·1	72·9	75·6	72·1	5·9	5·3	89	87	—	0·5	—	0·9	8≡⁰	10≡⁰●⁰	0·3	—	—	70·1	77·4	82·3	Dull. ≡⁰
28	·0161	·0177	77·1	81·0	81·9	72·8	7·3	10·0	90	95	—	1·3	16	2·7	10≡	10≡⁰	—	—	—	67·4	**76·8**	82·0	Overcast. ≡
29	·0252	·0299	78·4	74·0	82·6	73·1	8·3	6·1	94	92	—	0·9	—	0·0	0≡⁰	*10*≡	0·3	5·1	·036	71·8	77·9	81·8	Fine. ≡² *n*.
30	1·0283	1·0253	77·4	80·5	80·8	74·3	7·7	9·1	93	89	—	1·3	16	3·1	10≡⁰	10	—	—	—	69·9	77·7	81·8	≡², clearing 8 h. Dull.
Means	1·0066	1·0069	79·6	79·5	82·5	77·0	8·1	8·1	82	82	—	4·3	—	4·5	7·5	7·2	86·7	55	—	73·8	79·8	83·3	Monthly **Totals or Means.**
Normal 35 years	1·0135	1·0133	79·0	79·2	82·2	76·5	8·4	8·5	88	88		3·3 (25 years)		3·2 (25 years)	—	—	56·0	49 (25 yrs)	—	—	—	—	**Normals,** 35 years.
									20 years.														

4. Eskdalemuir Observatory, Dumfriesshire.—Long. 3° 12′ W. Lat. 55° 19′ N.

Heights above Mean Sea Level :—Station, H = 243·2 m. Barometer, H_b = 237·1 m.
Heights above Ground :—Thermometers, h_t = 0·8 m. Rain-gauge, h_r = 0·3 m. Sunshine Recorder, h_s = 1·5 m. Vane of Anemometer, h_a = 15·2 m.

															9 h.	21 h.	9 h.						
1	0·9875	0·9811	79·3	81·0	81·3	76·3	8·4	10·3	87	96	20	5·8	20	11·2	3	10●	21·6	4·1	—	—	—	—	●² 19 h.–24 h.
2	·9769	·9782	80·1	78·0	81·3	76·3	8·6	7·9	87	91	20	10·3	20	6·3	7	10	2·8	0·6	—	—	—	—	●² early.
3	·9760	·9657	80·7	80·8	83·1	75·9	9·0	8·9	86	85	20	12·1	20	8·5	10	10	**30·5**	—	—	—	—	—	●² and strong wind 10 h.–20 h.
4	·9713	·9615	79·0	80·7	82·6	78·1	7·0	9·9	76	95	20	10·3	20	15·7	7	10●²	20·3	0·2	—	—	—	—	Strong wind. ●² *n*.
5	·9489	·9610	79·3	77·3	**84·2**	75·9	6·0	7·0	**63**	84	20	*	20	17·4	10	10	13·5	—	—	—	—	—	⁄ midday. ●*p*.
6	·9673	·9766	76·7	76·8	78·7	75·7	6·9	6·8	87	85	20	9·4	24	7·2	10	1	2·8	1·7	—	—	—	—	Fine to cloudy.
7	·9762	·9641	78·5	79·6	81·3	76·0	7·9	9·0	88	92	20	7·6	16	12·1	10	10●	14·5	1·9	—	—	—	—	⌒ about 13 h.
8	·9645	·9660	76·0	74·2	79·3	73·6	6·1	5·9	80	88	20	8·9	20	2·7	8	10	7·9	3·1	—	—	—	—	Generally fine. ● after 18 h.
9	·9679	·9737	74·8	74·0	75·6	71·8	6·1	5·2	88	80	—	1·3	32	2·7	10⊠	1	—	—	—	—	—	—	✳ showers early.
10	·9780	·9794	75·7	75·0	77·8	71·9	6·3	6·3	86	88	32	4·5	—	1·3	8	8	4·8	2·2	—	—	—	—	Fair to showery.
11	·9799	·9763	73·8	73·6	79·7	72·3	5·6	5·9	86	92	—	0·9	4	5·8	1	1≡⁰	0·5	4·5	—	—	—	—	Sunny, but air damp.
12	·9658	·9590	77·2	78·8	78·9	74·4	7·5	8·8	91	96	4	5·8	4	4·9	10●⁰	10●⁰	7·9	—	—	—	—	—	●² after 22 h.
13	·9723	·9878	77·4	77·0	82·0	76·1	7·3	6·7	87	82	16	3·6	22	7·6	9	1	8·4	3·1	—	—	—	—	Cloudy to fair.
14	·9850	·9856	79·7	82·8	83·4	76·7	9·5	11·9	97	99	16	8·1	20	11·6	10●	10●≡⁰	22·9	—	—	—	—	—	Stormy throughout.
15	·9761	·9635	80·3	80·0	82·1	79·5	9·2	9·2	90	93	—	1·3	—	0·9	10●	10●⁰	3·1	—	—	—	—	—	Dull and wet.
16	·9603	·9621	79·8	78·8	81·7	**78·5**	9·5	7·1	97	78	20	*	20	11·2	10●	6	4·1	0·2	—	—	—	—	Wet and stormy 0 h.–15 h.
17	·9559	·9500	78·8	77·3	79·6	76·3	8·2	7·4	90	90	8	4·5	8	2·7	10●	10	11·2	—	—	—	—	—	Frequent ●.
18	·9505	·9507	75·2	74·1	77·5	73·5	5·9	5·0	82	75	32	7·6	32	6·7	9	1	—	3·8	—	—	—	—	Dull early, finer later.
19	·9516	·9613	77·2	78·4	79·2	74·2	7·1	7·6	87	86	32	9·4	**2**	9·4	10	10●	3·6	—	—	—	—	—	Dull and showery 12 h.–24 h.
20	·9716	·9765	76·2	72·7	77·5	71·3	5·5	4·3	72	72	32	6·7	32	5·4	2	1	—	3·8	—	—	—	—	Strong gusty wind early. Fine
21	·9738	·9713	72·8	74·6	76·1	**70·4**	5·1	5·0	83	73	28	8·9	32	10·7	1	1	—	6·3	—	—	—	—	Very fine. [*n*.
22	·9734	·9806	75·4	74·5	76·4	73·9	5·8	5·8	79	85	32	8·5	32	6·7	8	5	3·1	2·9	—	—	—	—	Occasional ✳ and sleet showers.
23	·9871	·9907	73·0	75·2	77·4	72·3	5·3	5·8	86	80	4	2·2	4	4·0	1	9	—	3·3	—	—	—	—	⌴✳⁰
24	·9919	·9917	75·6	75·4	77·3	73·5	5·7	5·8	77	79	4	4·9	8	5·4	9	9	—	1·0	—	—	—	—	∞⁰
25	·9921	·9930	75·7	74·7	77·6	73·3	5·9	5·6	81	81	8	5·4	8	3·1	9	5	—	1·1	—	—	—	—	Cloudy to fine.
26	·9938	·9926	75·1	75·7	77·8	74·0	6·0	6·6	84	89	4	8·1	4	8·9	6	10	9·1	4·3	—	—	—	—	Fine to dull. ✳● (sleet) 15 h.
27	·9838	·9798	74·5	73·0	75·8	72·6	6·2	4·9	91	79	2	9·4	12	3·1	10●	10	3·3	—	—	—	—	—	● till 14 h. ✳⁰ late *p*.
28	·9817	·9862	74·8	76·7	77·4	72·2	6·8	7·4	97	94	20	4·9	20	4·5	10	9	2·5	—	—	—	—	—	✳⁰ ●⁰ early *a*.
29	·9950	·9981	75·4	72·9	79·1	72·1	7·0	5·5	96	90	20	1·8	—	0·5	2	0≡⁰	—	0·3	—	—	—	—	▯ 18 h. 30 m.–19 h.
30	0·9921	0·9904	76·8	80·1	80·3	71·8	7·4	9·4	93	94	18	4·5	16	6·3	10	10	10·4	—	—	—	—	—	⌴. ● after 16 h.
Means	0·9749	0·9752	76·8	76·8	79·4	74·3	7·0	7·1	86	86		6·3		6·8	7·7	6·9	208·8	48	—	—	—	—	Monthly **Totals or Means.**
Normal years	—	—	—	—	—	—	—	—	—	—	—		—		—	—	—	—	—	—	—	—	

* No record.

The solar radiation is the mean of the readings within the nominal hour of observation (11 h. 30 m.–12 h. 30 m.) unless some other hour is specified.

5. Kew Observatory.

Day.	Potential Gradient, Volts per metre. Factor 1·95.				Number of Ions per cc.		Velocities of Ions for 1 volt per centimetre.		Conductivity $\times 10^{25}$.	Air-Earth Current $\times 10^{16}$.		Electric Character of Day.	Magnetic Character of Day.	Horizontal Force.						West Declination.					
														Maximum. 18000 γ +.		Minimum. 18000 γ +.		Range.		Maximum. 15° +.		Minimum. 15° +.		Range.
	3 h.	9 h.	15 h.	21 h.	+.	−.	+.	−.		c_1.	c_2.													
	v/m.	v/m.	v/m.	v/m.	n/cc.	n/cc.	cm/sec.	cm/sec.	E.-m.U.	Amp/cm².				γ	h m	γ	h m	γ	′	h m	′	h m	′
1	205	530	250	390	620	530	0·15	0·70	0·50	1·30	0·65	0	0	506	7 18	488	10 30	18	55·5	12 40	51·6	6 55	3·9
2	210	415	285	415	440	200	—	—	—	—	0·70	1	0	508	20 6	482	10 34	26	57·6	12 25	52·9	7 40	4·7
3	310	495	250	95	470	330	0·10	—	—	—	0·55	0	1	508	6 53	461	18 50	47	57·6	13 50	47·0	19 6	10·6
4	125	320	390	240	—	—	—	—	—	—	—	0	1	514	22 36	471	10 57	43	55·5	12 28	50·3	3 47	5·2
5	35	205	175	265	—	—	—	—	—	—	—	1	0	504	0 42	476	14 57	28	56·9	14 2	49·0	20 55	7·9
6	− 55	325	*	310	630	630	0·70	0·00	0·50	—	—	1	0	510	21 16	482	8 55	28	55·4	12 54	50·2	21 5	5·2
7	170	405	220	275	550	270	0·45	0·40	0·40	0·90	0·55	1	0	506	6 50	488	11 23	18	56·0	13 20	52·4	7 45	3·6
8	− 90	425	380	710	460	250	—	—	—	—	0·75	1	1	515	13 50	447	23 2	68	**58·0**	**13 50**	49·2	22 19	8·8
9	405	865	390	655	390	360	0·00	0·00	0·00	0·00	0·75	1	1	522	22 2	469	22 58	53	56·7	17 10	**42·0**	**21 39**	**14·7**
10	285	405	230	335	—	—	—	—	—	—	—	1	1	521	0 34	475	2 8	46	54·8	12 54	49·6	0 3	5·2
11	380	635	745	230	—	—	—	—	—	—	—	2	0	502	20 21	485	10 12	17	54·9	12 0	50·5	21 35	4·4
12	35	170	175	425	—	—	—	—	—	—	—	2	1	538	**23 37**	485	2 4	53	54·5	11 20	46·8	23 40	7·7
13	175	*x* −	220	290	360	240	0·90	0·20	0·40	0·90	0·50	2	2	530	21 45	443	16 12	87	57·6	14 36	43·7	16 23	13·9
14	400	370	310	335	390	290	0·00	0·75	0·25	0·75	0·60	0	2	519	23 48	**431**	**14 37**	**88**	56·6	12 25	46·7	14 42	9·9
15	170	380	230	255	430	370	—	—	—	—	0·35	0	1	517	19 39	464	15 29	53	56·8	13 2	43·4	19 12	13·4
16	25	210	195	415	480	300	0·00	0·80	0·25	0·55	0·80	0	0	508	0 12	481	1 42	27	53·8	12 18	49·7	22 6	4·1
17	150	250	365	310	350	210	0·85	0·00	0·35	1·20	0·80	2	0	510	23 45	471	10 11	39	55·8	13 1	49·5	18 26	6·3
18	− 70	370	*x*±	290	—	—	—	—	—	—	—	2	0	502	21 39	486	14 2	16	55·3	12 36	50·1	21 48	5·2
19	140	265	−285	0	—	—	—	—	—	—	—	2	0	519	18 50	485	21 24	34	52·6	13 48	48·0	18 48	4·6
20	35	365	390	390	320	130	—	—	—	—	0·55	1	0	509	7 23	481	11 20	28	54·6	13 3	49·7	7 45	4·9
21	400	520	390	460	270	110	0·00	0·00	0·00	0·00	0·45	0	0	510	7 31	470	10 0	40	55·0	10 52	51·5	19 50	3·5
22	250	405	600	645	320	290	0·60	0·00	0·20	1·35	0·50	0	0	504	7 33	489	3 42	**15**	55·4	12 28	52·7	3 0	**2·7**
23	715	600	355	530	—	—	—	—	—	—	—	1	0	509	18 16	493	2 20	16	53·5	10 50	49·3	21 50	4·2
24	335	565	565	575	210	370	0·00	0·00	0·00	0·00	0·55	0	0	509	18 18	479	10 15	30	55·0	12 58	50·0	0 0	5·0
25	325	645	635	780	—	—	—	—	—	—	—	0	0	521	21 13	492	9 50	29	56·6	12 30	53·1	0 0	3·5
26	600	655	425	390	—	—	—	—	—	—	—	1	0	*	*	*	*	*	56·4	1 38	52·5	4 0	3·9
27	210	530	450	655	—	—	—	—	—	—	—	1	0	*	*	*	*	*	57·2	11 8	53·0	0 15	4·2
28	355	575	90	160	—	—	—	—	—	—	0·10	1	0	*	*	*	*	*	57·6	12 20	53·0	0 0	4·0
29	115	240	285	70	430	270	0·00	0·00	0·00	0·00	0·20	1	0	505	0 7	482	15 0	23	57·7	14 40	52·2	23 8	5·5
30	310	125	105	230	—	—	—	—	—	—	—	0	0	508	8 14	486	2 6	22	56·7	14 20	52·5	0 0	4·2
M.	245	429	318	379	—	—	—	—	—	—	—	—	—	512	—	476	—	37	55·9	—	49·8	—	6·2

6. Eskdalemuir Observatory.

Day.	Potential Gradient, Volts per metre. Factor 5·4.				Number of Ions per cc.		Velocities of Ions for 1 volt per centimetre.		Conductivity $\times 10^{25}$.	Air-Earth Current $\times 10^{16}$.		Electric Character of Day.	Magnetic Character of Day.	North Component.				West Component.				Vertical Component.			
														Maximum. 15000 γ +.		Minimum. 15000 γ +.		Maximum. 5000 γ +.		Minimum. 5000 γ +.		Maximum. 45000 γ +.		Minimum. 45000 γ +.	
	3 h.	9 h.	15 h.	21 h.	+.	−.	+.	−.		c_1.	c_2.															
	v/m.	v/m.	v/m.	v/m.	n/cc.	n/cc.	cm/sec.	cm/sec.	E.-m.U.	Amp/cm².				h m	γ	γ	h m	h m	γ	γ	h m	h m	γ	γ	h m
1	177	177	235	*x*	—	—	—	—	—			2 *b*	0	5 12	1021	994	10 30	12 41	268	244	8 4	{23 0 / 24 0}	351	343	0 0
2	*x*	166	74	*x*	—	—	—	—	—			2 *c*	0	20 5	1021	985	10 35	12 19	273	245	8 10	15 40	356	349	{4 0 / 6 0}
3	194	126	*x*	92	—	—	—	—	—			2 *c*	1	5 31	1027	967	14 13	13 51	281	190	19 7	19 28	376	344	3 35
4	34	109	− 74	−1045	—	—	—	—	—			2 *c*	1	22 35	1028	965	10 55	12 20	265	225	{1 17 / 13 41}	15 0	359	344	2 30
5	*	*	*x*	*x*	—	—	—	—	—			2 *c*	1	20 26	1012	977	14 55	14 2	**277**	220	20 45	20 20	365	346	1 40
6	86	114	*x*	217	—	—	—	—	—			2 *c*	1	21 10	1029	988	8 47	12 53	265	226	21 2	14 40	358	346	1 50
7	137	86	51	*x*	—	—	—	—	—			2 *c*	0	6 32	1017	990	11 23	13 22	264	242	9 0	15 0	355	345	0 30
8	114	160	223	*x*	—	—	—	—	—			2 *c*	1	13 50	1022	960	23 0	13 50	281	189	22 14	23 10	371	342	10 20
9	−29	349	355	606	—	—	—	—	—			2 *b*	1	21 41	1060	981	0 18	17 16	271	**148**	**21 36**	21 34	363	342	10 52
10	292	120	*x*	240	—	—	—	—	—			2 *c*	1	0 22	1033	984	2 49	0 24	275	216	0 6	19 35	364	322	0 50
11	217	389	212	435	—	—	—	—	—			0 *a*	1	21 19	1018	991	11 44	12 0	261	231	23 0	18 0	355	344	24 0
12	320	−303	132	160	—	—	—	—	—			1 *b*	1	**23 33**	**1072**	994	9 47	18 5	260	211	23 42	20 40	354	328	24 0
13	132	229	772	263	—	—	—	—	—			1 *b*	2	16 27	1070	942	12 24	**14 33**	**291**	160	16 22	**16 22**	**420**	318	21 50
14	143	−126	74	189	—	—	—	—	—			1 *b*	2	14 52	1037	**928**	**11 58**	23 50	290	185	14 36	14 45	389	**311**	**3 13**
15	40	189	149	366	—	—	—	—	—			1 *b*	1	19 33	1048	962	13 38	**23 31**	265	170	19 10	15 35	358	323	0 12
16	120	246	− 17	160	—	—	—	—	—			1 *b*	1	22 7	1029	983	9 39	11 5	259	225	22 52	14 0	350	321	0 0
17	189	−189	217	194	—	—	—	—	—			2 *c*	1	23 40	1024	970	10 10	13 6	263	208	18 25	18 25	351	339	1 50
18	40	183	606	372	—	—	—	—	—			1 *a*	0	21 31	1012	988	13 59	12 33	257	238	0 20	14 15	347	337	0 0
19	378	−292	183	*x*	—	—	—	—	—			2 *c*	0	18 49	1048	990	21 23	13 50	259	225	19 12	18 33	**347**	338	8 0
20	114	292	326	246	—	—	—	—	—			1 *a*	0	7 15	1021	981	11 19	12 43	262	233	23 18	16 25	345	337	7 10
21	149	418	355	252	—	—	—	—	—			0 *a*	0	19 48	1026	972	10 3	11 30	270	225	19 44	17 20	344	332	11 0
22	240	*x*	*x*	257	—	—	—	—	—			1 *c*	0	4 25	1015	998	11 8	13 22	260	236	18 52	19 0	342	331	10 26
23	166	360	269	320	—	—	—	—	—			0 *a*	0	18 16	1016	1002	10 20	**12 7**	256	238	**22 53**	{15 0 / 24 0}	341	334	10 15
24	97	275	143	120	—	—	—	—	—			0 *a*	0	23 52	1018	991	11 4	12 12	260	238	22 43	13 30	345	338	10 40
25	109	166	149	240	—	—	—	—	—			0 *a*	0	21 12	1032	1000	9 57	13 45	262	238	22 7	24 0	339	337	0 1
26	132	137	160	−337	—	—	—	—	—			2 *c*	1	1 52	1026	999	10 10	1 36	268	234	4 6	20 0	341	332	1 55
27	−498	183	86	154	—	—	—	—	—			2 *c*	0	23 29	1023	998	10 43	12 10	260	235	0 17	18 0	338	334	13 0
28	92	309	229	503	—	—	—	—	—			1 *b*	1	6 26	1021	998	12 55	11 41	256	237	0 39	14 0	342	334	0 0
29	206	652	320	578	390	90	0·78	2·2	0·55			1 *b*	1	0 37	1020	987	14 51	14 42	267	235	2 3	17 30	345	335	10 35
30	343	412	143	212	—	—	—	—	—			1 *a*	1	5 32	1017	995	14 50	14 3	261	236	23 50	18 40	345	336	8 30
M.	106	214	230	199	—	—	—	—	—			—	—	—	1029	982	—	—	267	219	—	—	355	335	—

x Indeterminate. * No record.

An explanation of the Headings of the columns is given in the Preface.

7. Tables of Wind Components in metres per second at fixed hours.

Together with the mean velocity (horizontal movement) in metres per second for the hour with the maximum hourly run for each day, **or** the greatest velocity attained in a gust and the time of its occurrence.

HOLYHEAD.†§

Height of Head above—Roof 8·8 m., Ground 13·7 m., M.S.L. 19·2 m.
Height of Cups above—Roof 4·6 m., Ground 7·6 m., M.S.L. 15·2 m.

Date.	3 h.				9 h.				15 h.				21 h.				Max. in a Gust.	Time of Gust.	
	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.	V.	Hrs.	Min.
1	...	4·5	10·7	...	1·8	...	4·0	...	6·7	...	4·5	...	7·6	...	5·4	...	19·7	23	50
2	8·1	...	5·4	...	4·0	...	5·8	...	3·6	...	8·5	...	1·3	...	7·6	...	19·2	1	30
3	3·1	...	4·5	...	10·7	...	4·5	...	13·9	...	5·8	...	4·5	...	10·7	...	26·8	15	0
4	4·9	...	7·6	...	4·0	...	9·4	...	5·8	...	5·8	...	11·2	...	2·2	...	24·6	22	30
5	7·2	...	17·9	...	7·6	...	18·3	...	7·6	...	18·8	...	5·8	...	13·9	...	33·5	12	55
6	5·8	...	13·4	...	6·3	...	14·8	...	...	...	17·4	...	...	...	11·2	...	28·2	13	35
7	3·6	...	8·1	...	3·1	...	7·6	...	8·5	...	3·6	...	4·9	...	12·1	...	27·3	19	15
8	3·6	...	8·5	...	3·6	...	8·5	...	4·5	...	6·7	...	7·2	...	3·1	...	18·8	20	50
9	2·7	...	3·6	...	4·0	...	4·0	...	...	1·3	...	6·7	...	12·5	2·7	...	22·4	19	45
10	...	8·9	...	3·6	...	3·6	...	2·7	...	4·9	...	...	...	4·5	...	...	16·5	1	0
11	0·9	...	...	1·3	3·1	...	...	1·8	3·1	...	...	3·1	1·8	...	...	8·9	13·9	23	55
12	...	...	...	9·4	...	...	...	8·5	3·1	...	...	4·5	1·8	...	8·9	...	16·1	18	10
13	...	6·3	9·4	...	...	3·6	8·5	...	...	...	10·7	...	0·9	...	4·9	...	16·1	13	40
14	10·3	...	...	...	10·3	...	4·5	...	10·3	...	4·5	...	9·4	...	1·8	...	21·0	4	25
15	9·8	...	...	1·8	12·1	...	...	2·2	7·6	...	3·1	...	2·7	...	6·7	...	21·5	9	55
16	2·2	...	11·2	...	5·8	...	8·9	...	4·9	...	11·6	...	4·5	...	6·7	...	19·7	14	55
17	6·3	...	...	...	5·4	...	8·1	...	10·3	...	10·3	...	0·9	...	4·9	...	25·5	16	25
18	...	...	4·5	...	...	9·8	...	1·8	...	7·6	3·1	...	...	9·4	1·8	...	18·3	18	35
19	...	11·6	4·9	...	...	11·6	7·6	...	...	10·7	...	...	...	11·2	...	...	17·9	7	40
20	...	10·7	...	4·5	...	10·3	...	4·5	...	8·1	...	3·1	...	5·8	...	2·2	15·7	2	15
21	...	4·9	...	3·1	...	4·5	0·9	...	...	8·5	...	1·8	...	9·8	...	1·8	14·8	21	40
22	...	11·2	...	2·2	...	9·8	...	6·7	...	8·1	...	8·1	...	3·6	...	8·5	16·5	17	35
23	...	3·6	...	8·5	...	3·6	...	8·1	...	4·9	...	12·1	...	2·7	...	13·9	20·1	20	45
24	...	...	...	13·4	...	...	...	12·5	...	...	...	13·9	...	...	...	11·6	21·5	2	10
25	...	...	...	9·4	...	...	...	9·4	1·8	...	...	10·3	1·8	...	...	8·1	16·5	17	40
26	...	...	...	6·7	...	...	...	5·4	...	5·8	...	5·8	...	7·2	...	7·2	16·1	22	55
27	...	5·8	...	8·5	...	4·9	...	4·9	...	...	...	0·9	...	...	6·7	...	17·0	5	5
28	3·1	...	4·5	...	4·5	...	0·9	...	4·9	...	2·2	...	4·5	...	...	...	13·4	12	5
29	3·1	...	1·8	...	...	0·9	1·3	...	3·1	...	...	...	7·2	...	...	1·3	14·8	23	55
30	10·3	...	...	...	10·7	...	...	2·2	6·7	...	...	...	6·7	...	...	...	20·1	5	15
S+N & W+E	152·5		188·4		159·6		188·3		166·3		186·9		151·4		174·8				
S−N & W−E	17·5		43·6		34·4		46·9		46·5		46·3		18·0		47·8				

DEERNESS.†

Height of Cups above—Roof 1·5 m., Ground 4·9 m., M.S.L. 57·3 m.

Date.	3 h.				9 h.				15 h.				21 h.				Vel. in Max. Hourly Run.	Time of Max.
	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.	V.	Hour.
1	...	7·6	4·9	...	...	0·5	0·9	...	8·5	...	...	...	11·2	...	2·2	...	13·0	18
2	5·4	...	3·6	...	9·8	...	1·8	...	7·6	...	5·4	...	4·9	...	7·6	...	12·5	10
3	7·6	...	3·1	...	11·6	...	...	...	17·4	...	...	3·6	10·3	...	10·3	...	17·9	15
4	14·8	...	3·1	...	9·4	...	13·9	...	6·7	...	16·5	...	8·1	...	1·8	...	22·8	13
5	13·0	...	...	...	8·9	...	3·6	...	...	5·8	5·8	...	...	3·6	8·9	...	15·2	17
6	...	...	7·2	...	...	...	2·7	...	...	1·8	8·5	...	...	1·3	7·6	...	11·6	22
7	...	1·8	8·1	...	2·2	...	4·9	...	2·2	...	1·3	...	7·2	...	...	7·2	14·3	24
8	5·4	...	5·4	...	10·7	...	2·2	...	10·3	...	1·8	...	3·6	...	2·7	...	14·3	1
9	0·5	...	1·3	...	...	0·0	0·9	...	...	2·7	...	3·6	...	0·9	...	4·0	6·7	18
10	...	1·8	...	2·7	...	2·7	...	2·7	...	1·3	..	3·6	...	0·5	...	3·1	4·5	10, 11
11	...	0·5	...	3·1	...	1·3	...	3·1	...	...	...	2·7	0·9	...	...	4·9	4·9	21, 23
12	1·3	...	...	6·7	2·2	...	...	11·2	...	...	...	11·6	...	...	...	13·4	17·0	23
13	...	11·6	...	11·6	...	0·9	...	4·9	0·9	...	3·6	...	2·2	...	11·2	...	18·3	2
14	4·5	...	6·7	...	5·8	...	2·2	...	2·2	...	...	0·5	2·7	...	...	1·3	9·8	2
15	1·8	...	...	...	0·9	...	0·5	...	...	2·7	...	6·3	...	7·2	...	7·2	10·7	20
16	...	8·5	...	1·8	...	5·4	...	3·6	...	5·4	...	3·6	...	1·8	...	1·3	10·3	1
17	...	1·8	0·5	...	1·3	...	2·2	...	...	1·3	1·8	...	...	6·7	...	...	6·7	21
18	...	3·6	1·3	...	...	4·5	...	0·9	...	7·6	...	...	...	9·8	...	4·0	13·9	20
19	...	2·7	...	1·8	...	2·7	...	2·7	...	8·5	...	5·8	...	12·1	...	4·9	14·3	22
20	...	11·6	...	...	...	12·1	2·2	...	...	10·7	4·5	...	...	11·6	4·9	...	14·8	13
21	...	8·9	8·9	...	...	11·6	...	...	...	11·6	...	...	...	11·2	...	2·2	14·8	7
22	...	10·3	...	1·8	...	8·5	...	...	...	5·8	...	1·3	...	5·8	...	...	11·6	2
23	...	3·1	...	...	...	0·5	1·8	...	...	0·9	1·3	...	0·0	0·0	0·0	0·0	4·0	1
24	...	0·5	...	0·0	0·5	...	...	0·5	1·3	...	...	0·9	4·5	...	...	3·1	6·3	24
25	6·7	...	...	2·7	5·8	...	...	4·0	5·8	...	...	5·8	6·7	...	...	4·5	9·8	23, 24
26	7·6	...	...	4·9	4·9	...	...	4·9	3·6	...	...	5·4	0·9	...	...	5·4	9·8	2
27	3·1	...	...	7·6	...	...	...	8·1	...	...	...	11·6	4·0	...	...	9·4	13·0	11, 16
28	7·6	...	...	...	9·4	...	...	1·8	4·9	...	4·9	...	9·4	...	1·8	...	10·3	6
29	9·4	...	...	...	0·9	...	5·4	...	1·8	...	3·1	...	8·1	...	...	1·8	11·6	24
30	9·8	...	...	6·3	14·3	...	...	5·8	13·4	...	...	5·4	8·5	...	...	1·8	18·3	11
S+N & W+E	172·8		105·1		149·3		99·4		152·7		130·2		165·7		138·5			
S−N & W−E	24·2		3·1		43·9		− 9·0		20·5		− 13·2		20·7		− 20·5			

SCILLY.‡§

Height of Head above—Ground 9·8 m., M.S.L. 49·7 m.
Height of Cups above—Ground 5·8 m., M.S.L. 45·7 m.

Date.	3 h.				9 h.				15 h.				21 h.				Max. in a Gust.	Time of Gust.	
	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.	V.	Hrs.	Min.
1	...	2·2	5·4	...	*	*	*	*	*	*	*	*	4·0	...	5·8	...	12·5	19	55
2	7·6	...	4·9	...	6·7	...	4·5	...	0·9	...	5·4	...	*	*	*	*	14·8	11	50
3	*	*	*	*	8·9	...	1·8	...	8·5	...	5·8	...	11·6	...	7·6	...	18·3	13	10
4	*	*	*	*	*	*	*	*	5·4	...	3·6	...	13·4	...	8·9	...	19·2	20	30
5	5·8	...	13·9	...	2·7	...	14·3	...	...	...	18·3	...	...	3·1	14·8	...	28·2	11	10
6	...	...	20·6	...	...	2·7	13·4	...	...	3·1	14·8	...	...	1·8	9·4	...	29·1	8	10
7	3·6	...	8·9	...	3·1	...	8·1	...	9·4	...	6·3	...	2·2	...	10·7	...	21·5	19	35
8	2·7	...	13·9	...	...	...	15·7	...	*	*	*	*	*	*	*	*	22·8	21	15
9																	23·7	18	45
10																	19·7	3	25
11																	17·0	9	55
12																	30·9	10	35
13																	27·3	5	10
14																	16·5	22	30
15																	22·4	3	50
16																	16·5	10	50
17																	21·5	17	45
18																	27·7	23	20
19									No record.								27·3	6	30
20																	17·4	0	30
21																	13·9	18	30
22																	14·3	15	50
23																	19·2	10	40
24																	15·7	0	50
25																	14·8	23	0
26																	16·5	9	25
27																	10·3	2	25
28																	9·8	22	5
29																	16·1	23	45
30																	17·4	1	10
S+N & W+E	21·9		67·6		24·1		57·8		27·3		54·2		36·1		57·2				
S−N & W−E	17·5		67·6		18·7		57·8		21·1		54·2		26·3		57·2				

GREAT YARMOUTH.†§

Height of Head above—Roof 10·7 m., Ground 12·8 m., M.S.L. 15·9 m.
Height of Cups above—Roof 3·7 m., Ground 18·3 m., M.S.L. 22·3 m.

Date.	3 h.				9 h.				15 h.				21 h.				Max. in a Gust (Gorleston).	Time of Gust.	
	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.	V.	Hrs.	Min.
1	0·9	...	4·5	...	...	...	6·7	...	...	...	3·6	...	3·1	...	1·8	...	11·2	0	55
2	3·1	...	2·2	...	4·9	...	2·2	...	4·9	...	0·9	...	1·8	...	4·0	...	13·0	10	35
3	0·9	...	2·2	...	2·2	...	2·2	...	5·4	...	...	...	9·4	...	1·8	...	19·7	20	45
4	4·9	...	4·9	...	2·7	...	4·0	...	3·1	...	1·8	...	5·8	...	...	...	16·5	1	40
5	7·6	...	5·4	...	5·4	...	7·6	...	4·0	...	9·4	...	4·0	...	9·4	...	21·5	2	30
6	3·1	...	7·6	...	4·9	...	7·6	...	3·1	...	7·2	...	1·3	...	7·2	...	16·1	1	10
7	1·8	...	4·0	...	3·6	...	2·7	...	2·2	...	2·2	...	5·8	...	...	...	16·5	23	30
8	5·8	...	5·8	...	4·5	...	0·9	...	4·5	...	...	...	2·7	...	0·9	...	21·0	2	15
9	7·2	...	3·1	...	1·3	...	1·3	...	1·3	...	1·3	...	2·7	...	1·3	...	8·1	11	25
10	1·8	...	0·9	...	7·2	...	...	7·2	1·8	...	1·8	...	2·2	...	2·2	...	17·0	7	25
11	1·8	...	4·5	...	2·7	...	3·6	...	0·9	...	1·3	...	6·3	...	2·7	...	14·8	23	50
12	2·7	...	...	6·7	7·6	...	3·1	...	4·5	...	...	...	6·7	...	2·7	...	17·9	19	55
13	7·2	...	1·3	...	6·3	...	4·0	...	1·8	...	2·7	...	2·7	...	2·7	...	16·5	9	15
14	1·3	...	2·7	...	4·9	...	...	...	6·7	...	1·3	...	5·4	...	2·2	...	14·8	11	55
15	3·1	...	...	...	5·4	...	...	...	4·9	...	...	...	6·3	...	2·7	...	15·2	13	20
16	...	...	6·7	...	3·6	...	5·4	...	3·1	...	6·7	...	3·6	...	3·6	...	17·4	0	45
17	3·1	...	0·5	...	8·5	...	1·8	...	3·6	...	2·7	...	4·5	...	0·9	...	19·2	8	45
18	6·3	...	1·3	...	3·1	...	0·5	...	0·0	...	...	0·9	...	2·7	3·6	...	17·9	8	40
19	...	...	7·6	...	...	...	7·6	...	0·9	...	4·5	...	...	1·8	1·8	...	14·8	4	10
20	...	...	...	6·7	...	...	4·0	1·8	...	3·1	3·1	...	...	1·8	2·7	...	14·8	15	50
21	...	2·2	3·1	...	...	...	4·5	...	...	0·9	4·9	...	...	...	3·1	...	9·4	1	30
22	0·5	...	1·8	...	...	0·5	1·3	...	0·5	...	1·3	...	...	4·0	...	4·0	10·7	23	45
23	...	4·9	...	12·1	...	9·8	...	14·8	...	6·3	...	15·2	...	9·4	...	13·9	20·6	10	45
24	...	5·8	...	13·9	...	6·7	...	16·5	...	8·1	...	12·1	...	3·1	...	15·2	20·1	9	10
25	...	5·4	...	13·0	...	4·9	...	12·1	...	2·7	...	13·0	...	4·9	...	12·5	18·8	21	50
26	...	4·5	...	10·3	...	6·3	...	9·4	...	1·8	...	9·8	...	...	...	5·4	15·7	6	35
27	0·9	...	...	...	1·3	...	...	...	1·3	...	...	...	3·6	...	1·3	...	10·7	17	40
28	3·1	...	0·5	...	4·5	...	..	0·9	3·1	...	...	0·5	4·5	...	1·8	...	9·8	10	10
29	0·9	...	...	...	0·9	...	...	...	0·0	0·0	0·0	0·0	0·0	0·0	0·0	0·0	7·2	1	0
30	0·9	...	...	0·5	2·7	...	...	...	2·2	...	...	...	1·8	...	0·5	...	8·9	13	5
S+N & W+E	91·7		133·8		116·4		133·7		86·7		108·2		111·9		111·9				
S−N & W−E	46·1		7·4		60·0		8·3		40·9		5·2		56·5		9·9				

The velocities at fixed hours are means for the interval from 30 minutes before to 30 minutes after the hour. The hours are numbered 1 h. to 24 h. Time is referred to Greenwich Mean Time.

* No record.

† Robinson Cup Anemometer; Arms 0·61 m.; Diameter of Cups, 0·229 m.; Factor 2·2. ‡ Robinson Cup Anemometer; Arms 0·305 m.; Diameter of Cups 0·127 m.; Factor 2·8.

§ Dines Pressure Tube Anemometer. At Great Yarmouth, Holyhead, and Scilly the readings at fixed hours are taken from the Robinson Anemometer, the maxima quoted are the greatest winds in a gust as recorded by the Dines Pressure Tube.

METEOROLOGICAL OFFICE OBSERVATORIES—GEOPHYSICAL JOURNAL.

DECEMBER 1911.—DAILY VALUES REFERRED TO GREENWICH MEAN TIME AND UNITS, BASED ON THE C.G.S. SYSTEM. [*Price 4d.*

First Year.—No. 12. *Meteorology, Solar Radiation, Seismology, Atmospheric Electricity, and Terrestrial Magnetism.*

1. SEISMOLOGICAL JOURNAL:—ESKDALEMUIR.—Long. 3° 12′ W. Lat. 55° 19′ N.

Date.	Microseisms. Period.	Microseisms. Amp.	Earthquakes.	Remarks.
	s	μ		
1	6-7	2·6	I.	1st I, Disturbed 0 h. 11 m.-0 h. 20 m.
2	6-7	4·0		
3	6-7	4·0		4th Ir, P=14 h. 44 m. 5 s., S=14 h. 48 m. 22 s., Δ=2650 kms. α confused by microseisms.
4	6	3·2	Ir.	6th Iu, P?=23 h. 27 m. 55 s., S?=23 h. 37 m. 12 s., L=23 h. 46 m. 30 s., Δ=7940 kms.
5	5-6	3·3		
6	5-6	2·1	Iu.	11th I, Disturbed 11 h. 30 m.-13 h. Phases confused by high wind. L=11 h. 49 m.
7	5-6	4·4		
8	5	2·1		12th No record 10 h. to 15 h. 30 m.
9	6	3·2		
10	5	2·1		13th I, Feeble waves between 9 h. and 10 h. interrupted by change of sheet. I, L=23 h. 29 m. First phases indistinguishable.
11	5-6	1·3	I.	16th IIIu, P=19 h. 26 m. 36 s., S=19 h. 37 m. 8 s., Δ=9430 kms., α=76° 14′ W. of N. Epicentre 12°·0 N., 101°·8 W.
12	5	1·3		
13	4-5	1·6	I, I.	20th Iu, P=6 h. 1 m. 55 s., S=6 h. 11 m. 25 s., Δ=8200 kms., α=true north. Epicentre 51° N., 177° E.
14	4-5	1·0		
15	4-5	1·0		21st I, L=3 h. 10 m.
16	4-5	0·9	IIIu.	22nd Iu, P=13 h. 7 m. 21 s., S=13 h. 17 m. 25 s., Δ=8870 kms. α towards W.
17	6	1·2		
18	5	1·5		23rd I, L=18 h. 49 m. I, P during change of paper 21 h. 16 m.-21 h. 21 m. Long waves 21 h. 44 m.
19	5	1·2		
20	5-6	1·0	Iu.	25th I, Disturbed 8 h. 22 m.-8 h. 33 m. I, Disturbed 17 h. 0 m.-17 h. 5 m.
21	5-6	1·0	I.	26th I, Disturbed 12 h. 52 m.-13 h. 2 m.
22	5	1·0	Iu	29th Iu, P?=15 h. 42 m. 28 s., S=15 h. 51 m. 50 s., Δ=8040 kms.
23	5	0·9	I, I.	30th I, Disturbed about 7 h. I, Long waves 10 h. 6 m., change of sheet 10 h. 8 m.
24	5	1·1		
25	4-5	1·5	I.	31st Iu, P=6 h. 20 m. 10 s., S=6 h. 37 m. 15 s., Δ > 16000 kms. I, Disturbed 11 h. 42 m.-11 h. 52 m. I, Disturbed 15 h. 0 m.-15 h. 30 m.
26	5	1·1	I.	
27	5	1·3		
28	5	1·5		
29	5	1·5	Iu.	An explanation of the notation used is given in the preface.
30	5-6	1·4	I, I.	
31	5	1·3	Iu, I, I.	

2. VALENCIA OBSERVATORY, CAHIRCIVEEN (KERRY).—Long. 10° 15′ W. Lat. 51° 56′ N.

Heights above Mean Sea Level:—Station, H = 9·2 m. Barometer Cistern, H_b = 13·7 m.
Heights above Ground:—Thermometers, h_t = 1·2 m. Rain-gauge, h_r = 0·6 m. Sunshine Recorder, h_s = 12·8 m. Cups of Anemometer, h_a = 13·7 m.

Day.	Pressure at Station Level. 9 h.	21 h.	Air Temperature in Degrees Absolute. 9 h.	21 h.	Max.	Min.	Humidity. Vapour Pressure. 9 h.	21 h.	Percentage. 9 h.	21 h.	Wind Direction in points (8=E, 16=S) and Velocity (*metres per second*). 9 h.		21 h.		Cloud Amount and Weather. 10 h.	22 h.	Rain 24 hours beginning 10 h.	Sunshine.	Remarks.	Magnetism. Horizontal Force.	Declination West.	Inclination.
	bar.	bar.	200+ °	200+ °	200+ °	200+ °	millibar.		%	%	m/sec.		m/sec.		Tenths of Sky covered.		mm.	hrs.		γ.	° ′	° ′
1	1·0052	1·0089	83·2	80·2	84·0	79·6	10·7	9·1	87	90	15	9·4	19	3·1	10	1	6·4	—	Gloomy. ●midday. Fine evening.	...	...	...
2	·0011	·0011	82·0	81·8	84·1	78·9	10·0	9·2	89	82	15	8·9	18	6·7	10≡0	10	12·4	—	Unsettled-looking.	...	...	...
3	·0031	1·0042	79·9	77·8	82·3	76·2	8·6	7·8	87	91	19	4·9	21	8·9	10●	10≡0●	4·3	1·4	Showery.	...	...	...
4	1·0088	0·9839	77·0	81·7	83·0	76·3	6·8	9·0	85	81	17	3·1	20	16·1	10	10≡0	19·6	—	Gloomy. ●2 15 h.-18 h.	...	...	...
5	0·9980	1·0094	80·2	79·4	81·3	78·2	6·7	7·0	65	74	25	13·0	25	5·8	3	3	1·0	1·9	Squally with ▲ showers to fair.	...	...	...
6	1·0088	0·9916	79·0	80·4	82·5	76·6	7·7	9·1	84	89	15	4·9	25	8·5	10≡0	10≡0	31·2	—	Gloomy. ≡0●2 *p.*	...	...	...
7	1·0037	1·0065	79·3	77·2	80·6	76·2	7·3	7·5	77	91	26	6·7	13	2·7	2	3	10·9	4·0	▲ 8 h., then clear and fair.	17907	20 34·7	68 11·1
8	0·9859	0·9919	80·1	78·7	81·3	77·3	9·0	6·9	90	77	20	4·5	25	13·4	10≡0	10	4·8	2·5	Frequent ▲● showers.	...	...	...
9	·9981	·9909	78·8	80·5	81·1	77·0	7·6	9·9	83	98	21	9·4	17	3·1	9≡0	10	22·9	0·8	Dull misty, and showery.	...	...	...
10	·9750	·9822	80·1	80·0	80·7	77·2	10·1	6·9	100	69	22	1·8	25	11·2	10	*10*	10·4	0·2	●2 showers during day	...	...	...
11	·9891	·9937	79·4	80·2	81·1	78·2	7·9	9·0	82	90	24	10·3	21	5·8	4	*10*●	2·8	3·1	Fair during day; showery later.	...	...	...
12	·9929	·9884	81·4	82·3	83·2	80·4	10·0	9·5	92	82	15	5·4	14	10·3	10	*10*≡0	5·8	—	Cloudy; ≡0.	...	...	...
13	·9750	·9840	81·2	80·7	82·2	79·3	8·9	8·3	83	80	7	4·0	20	8·1	10●0	*10*	5·6	—	Dull.	...	...	...
14	·9912	0·9910	77·5	78·9	80·6	77·3	8·1	7·7	96	83	16	2·7	2	3·6	6	*4*	1·0	2·2	Showery to fair.	...	...	...
15	·9945	1·0006	78·2	80·1	81·3	77·8	8·2	8·0	93	80	24	2·2	21	7·2	7	*3*	9·4	3·0	Passing showers throughout.	...	...	...
16	·9952	0·9934	83·4	82·4	84·1	80·4	12·3	10·7	98	91	15	7·6	15	5·4	10≡0●	*7*	9·7	—	● and heavy mist most of day.	...	...	...
17	·9931	·9924	82·1	83·4	84·0	80·4	9·6	11·0	84	88	15	7·6	15	9·8	3	*10*≡0	14·2	1·4	≡0; ⌇ 13 h. [misty.	...	...	...
18	·9828	·9878	82·3	81·3	84·8	79·9	10·2	10·0	87	92	19	7·2	15	8·1	9	*10*	5·8	0·8	● early; unsettled-looking and	...	...	...
19	·9935	·9882	82·2	81·8	83·0	80·0	10·1	10·5	88	93	16	6·7	15	4·9	9	*10*≡0	7·1	—	≡0●2 showers.	...	...	...
20	·9932	0·9926	80·6	80·0	82·1	79·0	9·1	9·5	87	95	22	8·1	15	1·8	6	*10*●	7·4	4·2	Fair during day.	...	...	...
21	·9957	1·0064	80·1	80·2	81·4	78·9	9·0	8·2	90	82	25	5·4	22	10·7	10≡0	*3*	11·4	3·4	Showery to fair.	...	...	...
22	0·9941	1·0082	78·8	78·8	80·5	76·2	8·1	7·6	89	83	8	8·5	32	4·9	10≡0●	*2*	7·1	—	Gloomy and misty.	...	...	...
23	1·0136	0·9978	79·4	82·9	83·2	74·6	8·5	11·3	89	94	14	6·7	16	7·2	8	*10*≡0●	11·4	—	Dull and gloomy.	...	...	...
24	0·9921	0·9902	80·6	76·1	83·3	75·7	9·0	7·2	87	94	20	13·9	9	3·1	10	7	11·2	3·0	Showery.	...	...	...
25	·9958	1·0059	80·7	81·0	82·0	78·5	8·3	8 3	80	79	23	13·9	22	9·4	8⌇	9	6·9	2·3	⌇ 9 h., then fair to dull.	...	...	...
26	0·9984	·0055	81·4	81·8	83·9	80·1	10·8	10·9	98	98	15	6·3	—	0·9	10≡0●	10≡0	11·9	1·7	Misty day.	...	...	...
27	1·0071	·0131	82·5	84·2	84·7	80·8	11·5	13·0	98	98	15	5·8	20	5·4	10≡0	10≡0	0·8	—	Overcast and heavy mist.	17900	20 38·0	68 11·4
28	·0151	·0145	83·5	83·6	84·1	83·2	11·9	12·0	94	94	16	5·4	15	4·9	10≡0	10≡0	1·3	—	Gloomy all day. ≡0	...	...	...
29	·0122	·0110	82·4	83·8	83·9	81·3	11·6	12·5	99	98	15	8·1	20	6·3	10≡0	10≡0●	7·1	—	Dull. ≡0 or ● throughout.	...	...	...
30	·0169	·0194	81·3	81·6	82·5	80·0	10·6	10·5	98	94	15	3·1	15	4·5	7≡0	9	1·3	0·6	Misty to fair.	...	...	...
31	1·0225	1·0261	82·8	83·4	84·1	80·7	11·7	12·5	97	99	15	6·7	16	4·0	10≡0●	10	1·3	—	Heavy mist and ●0.	...	...	...
eans	0·9984	0·9994	80·7	80·9	82·6	78·6	9·4	9·4	89	88		6·8		6·6	8·4	8·1	264·4	37	Monthly **Totals** or **Means**.	17903	20 36·3	68 11·2
rmal years	1·0113	1·0114	80·2	80·4	83·0	77·8	9·1	9·2	88	88		6·4 (25 years)		6·5 (25 years)	—	—	160·3	41 (25yrs)	**Normals**, 35 years.			
									20 years													

The cloud amounts in italic type at Valencia were taken at 21 h.

3. Kew Observatory, Surrey.—Long. 0° 19′ W. Lat. 51° 28′ N.

Heights above Mean Sea Level :—Station, H = 5·5 m. Barometer, H_b = 10·4 m.
Heights above Ground :—Thermometers, h_t = 3·0 m. Rain-gauge, h_r = 0·5 m. Sunshine Recorder, h_s = 14·3 m. Cups of Anemometer, h_a = 21·3 m.

Day.	Pressure at Station Level.		Air Temperature in Degrees Absolute.				Humidity.				Wind Direction in Points (8 = E, 16 = S) and Velocity (*metres per second*).				Cloud Amount and Weather.		Rain 24 hours beginning 10 h.	Sunshine.	Solar Radiation, Watts per cm².	Min. Temp. on Grass.	Earth Temperature at 10 h.		Remarks.
							Vapour Pressure.		Percentage.														
	9 h.	21 h.	9 h.	21 h.	Max.	Min.	9 h.	21 h.	9 h.	21 h.	9 h.		21 h.		10 h.	22 h.					0·3 m.	1·2 m.	
			200+	200+	200+	200+									Tenths of Sky covered.					200+	200+	200+	
	bar.	bar.	°	°	°	°	millibar.		%	%	m/sec.		m/sec.				mm.	hrs.		°	°	°	
1	1·0219	1·0200	80·1	81·2	81·5	78·9	8·4	9·9	85	91	13	2·7	17	3·1	10	10	—	—	—	73·1	78·6	81·8	Dull throughout.
2	·0187	·0134	80·8	82·3	82·5	80·4	9·6	10·2	92	87	15	3·6	16	4·9	7 ≡0	10	1·8	0·1	—	77·3	79·2	81·7	Fair, but misty.
3	·0096	·0102	83·8	80·4	84·7	79·1	11·8	9·4	92	92	17	4·9	18	1·8	4	0 ≡0	2·8	2·6	—	79·8	80·1	81·7	●0 till 4 h., then fine to dull.
4	1·0120	·0119	79·0	75·7	80·9	75·6	8·3	5·8	89	79	19	2·2	16	2·2	10 ≡0	10 ≡0	8·4	4·6	·046	70·6	79·3	81·7	Fine after 10 h. 30 m.
5	0·9997	·0094	81·8	77·4	82·3	75·8	10·4	7·0	92	84	18	4·5	21	1·8	10 ≡0 ●	0 ≡0	0·3	1·9	·038	68·8	78·9	81·7	● *a.*, clearing later. [30 m.
6	1·0185	·0143	72·0	77·9	79·8	71·4	4·9	6·9	86	80	—	0·5	16	4·5	0 ≡	10 ≡0	8·1	4·7	—	67·0	77·6	81·7	⌣ ≡2 till 10 h. 30 m. ⏀ 20 h.
7	0·9989	1·0067	79·0	76·0	81·1	74·3	8·0	6·0	86	80	16	8·1	27	2·2	10 ●	0 ≡0	3·1	0·1	—	71·0	77·8	81·6	Squally. Fine evening.
8	1·0070	0·9904	71·9	77·0	79·5	71·3	4·8	7·1	85	88	—	0·9	12	6·7	1 ≡0	10 ●	7·6	1·2	·050	66·5	77·0	81·4	⌣. Fine to dull with ●.
9	0·9964	1·0050	77·6	76·4	80·0	76·2	7·5	6·5	88	84	23	3·6	20	2·7	6	8	2·5	5·3	—	73·5	77·3	81·3	● early, then fine all day.
10	·9938	0·9803	81·2	82·0	82·3	76·9	8·9	9·9	82	87	14	10·7	18	8·5	10 ● ≡0	10	8·4	—	—	70·2	77·3	81·3	● and strong wind mostly.
11	0·9873	0·9969	79·3	77·0	81·2	75·8	7·0	6·7	74	82	20	7·2	20	3·1	7	0	0·3	5·1	·057	76·0	78·4	81·2	Strong wind early ; fine.
12	1·0040	1·0047	75·3	78·6	82·4	73·2	6·6	8·3	92	92	—	0·9	18	1·8	9 ≡0	0	0·5	1·1	—	68·5	77·4	80·9	⌣ ; fair.
13	0·9974	0·9991	79·8	81·7	82·1	78·1	7·8	9·8	78	88	10	6·7	15	4·5	10 ●	10	6·4	0·6	·037	70·5	77·4	80·9	Rather dull.
14	1·0028	1·0028	78·7	81·9	82·7	78·7	8·4	9·0	92	80	20	2·2	13	4·5	0 ≡0	10	9·7	4·1	—	74·6	78·2	80·8	● early, then fine.
15	0·9928	·0060	82·4	79·6	83·1	79·1	10·4	8·0	89	82	14	6·7	18	5·4	10 ●0	0	0·3	0·1	—	77·2	78·9	80·7	Dull with ● to fair.
16	1·0122	·0119	77·2	83·2	83·8	76·1	7·4	10·9	89	89	—	1·3	16	6·3	4 ≡0	10 ●0	0·5	1·5	—	69·3	78·4	80·7	Fine, but misty *a.* Dull *p.*
17	·0121	·0134	84·2	83·5	**85·1**	82·6	11·4	10·3	86	82	17	8·9	16	5·4	10 ●0	10	4·3	—	—	78·2	79·6	80·8	Drizzling ●.
18	·0089	·0052	83·1	83·6	83·8	82·1	10·0	11·1	81	87	15	6·7	17	7·6	10	10 ●	4·8	—	—	80·7	80·2	80·8	Dull. ● in afternoon.
19	1·0067	·0059	83·8	82·0	84·6	80·7	11·6	10·5	90	93	18	4·5	15	3·1	9	9	1·8	1·6	·030	80·9	80·8	80·8	Dull *a.* Finer *p.*
20	0·9896	·0020	83·0	80·2	83·9	79·3	11·3	8·2	93	82	14	4·0	21	5·4	10 ●0 ≡0	0	12·7	—	—	74·3	80·8	80·9	Strong wind and ●.
21	0·9841	1·0054	80·2	79·9	80·9	78·7	9·1	7·8	91	78	10	4·5	23	4·0	10 ●0 ≡0	10 ●0	1·0	—	—	74·0	80·2	81·0	Overcast generally.
22	1·0101	0·9882	77·6	79·7	80·0	76·8	7·4	9·1	88	94	21	4·0	—	1·3	10 ≡0	10 ≡0	9·9	—	—	70·5	79·4	81·2	Dull and misty.
23	·0176	1·0174	75·9	76·7	79·5	75·9	6·5	6·7	86	85	24	3·1	17	2·2	4 ≡0	10	2·0	2·6	—	70·7	79·1	81·2	Fine till 13 h. Cloudy later.
24	1·0009	0·9999	83·8	80·0	84·2	77·9	11·6	7·5	90	75	18	7·6	21	4·0	10	0	5·1	1·4	—	70·2	78·7	81·2	Dull *a.* ; improving in after-
25	0·9941	1·0017	78·1	79·2	80·3	77·4	7·2	7·3	83	77	21	3·6	22	4·5	5	2	0·3	1·3	—	71·5	78·9	81·2	Fine to cloudy. [noon.
26	1·0085	0·9981	78·0	82·6	82·8	77·4	7·6	9·7	87	81	20	3·1	22	5·8	9	6	6·9	—	—	72·4	78·3	81·1	Fair to dull.
27	·0112	1·0172	77·0	78·6	82·5	77·0	7·1	8·3	88	92	21	1·8	—	0·9	?5 ≡0	10 ≡0 ●	3·8	3·1	—	70·6	78·6	81·0	● 20 h.–22 h.
28	·0177	·0178	81·3	82·9	83·9	78·3	10·3	9·7	95	81	18	2·7	23	4·9	10 ≡0	10	—	—	—	73·4	78·6	80·9	Dull all day.
29	·0190	·0184	82·0	81·8	82·9	81·4	10·0	9·2	88	83	20	1·8	20	5·4	10 ≡0	10	—	—	—	77·3	79·7	80·8	Overcast throughout. ≡0
30	·0187	·0227	82·1	81·9	83·8	80·2	9·8	10·5	86	93	19	2·7	—	0·9	10	?6 ≡0	—	0·1	—	79·8	80·0	80·8	Dull generally.
31	1·0276	1·0296	79·8	81·5	81·5	79·3	9·2	10·0	93	91	—	1·3	19	3·1	10 ≡0	10 ≡0	—	—	—	75·6	80·2	80·8	≡ early. Misty and overcast.
Means	1·0065	1·0073	79·7	80·1	82·2	77·6	8·7	8·6	88	85	—	4·1	—	4·0	7·7	6·8	113·3	43	—	73·4	78·9	81·1	Monthly **Totals** or **Means**.
Normal 35 years	1·0140	1·0140	76·8	77·1	79·5	74·6	7·1	7·3	88	87		3·5		3·5	—	—	49·0	36	—	—	—	—	**Normals**, 35 years.
							20 years.				25 years		25 years					25 yrs					

4. Eskdalemuir Observatory, Dumfriesshire.—Long. 3° 12′ W. Lat. 55° 19′ N.

Heights above Mean Sea Level :—Station, H = 243·2 m. Barometer, H_b = 237·1 m.
Heights above Ground :—Thermometers, h_t = 0·8 m. Rain-gauge, h_r = 0·3 m. Sunshine Recorder, h_s = 1·5 m. Vane of Anemometer, h_a = 15·2 m.

															9 h.	21 h.	9 h.						
1	0·9865	0·9821	80·0	79·7	81·4	79·6	9·3	9·0	94	92	16	6·7	16	9·4	10 ●0	10 ●	5·8	1·4	—	—	—	—	[out. Dull, wet and misty through
2	·9829	·9726	78·1	81·8	82·1	77·5	8·6	10·8	98	96	—	0·9	16	13·4	6 ≡0	10 ●	17·8	—	—	—	—	—	Dull and misty. Stormy *n.*
3	·9772	·9757	78·6	76·8	81·4	75·2	8·9	7·6	98	96	16	4·0	—	1·3	10 ≡0	10	7·6	—	—	—	—	—	Dull. ●2 showers. [22 h. 30 m.
4	·9788	·9763	74·3	73·3	75·9	73·1	6·3	5·8	93	92	—	0·5	14	3·6	10 ≡0	4	5·6	—	—	—	—	—	✻2 late *a.* then ●. ⏀ 20 h.–
5	·9638	·9739	79·1	76·2	79·1	74·0	7·3	6·5	79	85	16	10·7	20	8·1	10	9	3·6	—	—	—	—	—	⏀ occasionally *p.*
6	·9839	·9743	72·6	75·7	76·8	72·3	4·9	6·2	82	84	18	3·1	16	9·8	1	10	15·5	2·5	—	—	—	—	Very fine early. ✻● (sleet) ▲
7	·9680	·9751	74·1	74·9	76·7	73·8	5·3	6·2	80	89	24	1·8	20	4·5	1	7	1·3	4·5	—	—	—	—	●2 early *a.* [14 h.
8	·9717	·9604	74·1	74·3	76·3	72·8	5·9	5·9	88	87	16	3·1	16	5·4	8 ≡0	10 ≡0 ●	7·1	0·6	—	—	—	—	●0 shower 6 h. 30 m.
9	·9617	·9679	74·8	72·5	76·3	72·4	6·1	4·9	87	82	24	6·3	16	2·7	9	7	4·6	3·2	—	—	—	—	✻2 early *a.* ⌣ *p.*
10	·9601	·9454	76·0	78·5	78·7	74·2	7·2	7·9	96	88	16	2·7	16	7·2	10 ●	9	16·5	—	—	—	—	—	Nearly continuous ●.
11	·9448	·9593	77·0	76·7	78·6	74·6	7·4	6·9	91	87	24	10·3	20	8·5	10 ●0	10	2·5	—	—	—	—	—	Dull and showery.
12	·9676	·9722	77·8	78·9	79·7	76·0	7·9	8·2	92	89	20	6·3	14	4·9	10	10	0·8	—	—	—	—	—	●0 showers throughout.
13	·9705	·9656	76·5	79·1	79·3	74·9	6·7	7·8	86	83	12	10·3	12	9·4	9	1	0·3	—	—	—	—	—	Dull and showery.
14	·9709	·9731	77·0	75·3	78·2	73·0	7·3	6·5	90	89	—	0·0	—	0·5	10	6	8·6	0·1	—	—	—	—	Dull *a.* Finer *p.*
15	·9649	·9659	79·2	77·5	79·5	76·8	8·3	7·8	87	93	10	12·1	16	8·1	10 ●	10 ●0	4·6	—	—	—	—	—	Showery after 17 h.
16	·9757	·9728	77·6	79·9	81·3	77·4	7·7	9·4	91	95	20	8·1	12	7·2	9	10 ●	15·2	0·1	—	—	—	—	Dull and wet.
17	·9741	·9751	81·2	81·2	82·2	80·6	9·7	9·8	90	91	16	10·7	18	12·5	10	10	7·1	—	—	—	—	—	●2 showers 9 h.–15 h.
18	·9674	·9687	82·9	79·8	83·4	79·7	11·0	9·4	91	95	16	13·0	16	9·4	10 ●	7	34·8	—	—	—	—	—	●2 showers 9 h.–16 h. 30 m.
19	·9696	·9706	79·7	79·7	80·7	77·6	9·2	8·2	94	83	16	11·2	16	8·1	9	10	9·1	—	—	—	—	—	● showers 13 h.–14 h.
20	·9598	·9657	80·0	77·7	80·1	77·4	9·3	7·4	94	87	16	2·7	24	6·7	10 ● ≡0	5	7·6	—	—	—	—	—	● 3 h.–13 h. 30 m.
21	·9636	·9706	75·2	77·1	77·4	74·6	7·2	7·5	100	92	—	0·9	20	6·3	9 ≡0	10 ●0	0·3	—	—	—	—	—	●0 shower 21 h.
22	·9749	·9719	74·8	74·8	77·0	73·2	6·2	5·7	89	82	20	5·8	20	3·1	6	1	—	0·3	—	—	—	—	Blue sky from 18 h. ∞
23	·9862	·9809	73·9	74·7	76·9	71·9	6·2	6·2	94	90	20	3·1	20	2·7	4	10	15·7	2·1	·062	—	—	—	⌒
24	·9585	·9617	79·8	75·8	81·1	74·3	8·7	6·2	89	83	18	13·4	22	11·2	10	6	8·9	—	—	—	—	—	● *a.*
25	·9641	·9660	69·3	74·2	75·4	68·6	3·2	6·0	69	89	—	0·5	18	2·7	3	10	1·5	0·8	—	—	—	—	✻● (sleet) ✻ 19 h.
26	·9726	·9715	76·5	76·3	77·5	74·0	7·3	6·5	94	85	18	6·7	24	4·9	10	6	0·3	—	—	—	—	—	Dull to fair. Occasional ●.
27	·9804	·9851	75·3	75·2	77·8	74·9	6·4	6·7	88	94	26	2·7	—	1·3	6	10 ●	4·1	0·5	—	—	—	—	⊕ 11 h.–15 h.
28	·9824	·9834	78·3	80·0	82·4	76·3	8·6	9·0	98	90	—	1·3	32	1·8	10 ●0 ≡0	6	7·4	—	—	—	—	—	⏀ 21 h. 30 m.–22 h. 30 m.
29	·9866	·9829	77·9	79·6	80·5	75·8	8·6	9·2	99	96	—	0·5	16	12·1	10 ●0	10 ●0 ≡0	12·4	—	—	—	—	—	Dull and misty.
30	·9853	·9920	78·2	77·2	80·0	77·2	7·8	7·8	89	94	18	4·9	24	1·8	10	9	0·5	—	—	—	—	—	⏀ 18 h. 30 m.
31	0·9936	0·9977	78·7	79·2	79·5	77·7	8·7	9·3	96	98	20	7·6	20	4·0	10 ≡0	10 ≡0	1·8	—	—	—	—	—	Dull, wet and misty.
Means	0·9725	0·9728	77·0	77·2	79·1	75·2	7·5	7·5	91	90		5·5		6·2	8·4	8·2	228·9	16	—	—	—	—	Monthly **Totals** or **Means**.
Normal years	—	—	—	—	—	—	—	—	—	—	—		—		—	—	—	—	—	—	—	—	

* No record.

The solar radiation is the mean of the readings within the nominal hour of observation (11 h. 30 m.–12 h. 30 m.) unless some other hour is specified.

5. KEW OBSERVATORY.

Day.	Potential Gradient, Volts per metre. Factor 1·70.				Number of Ions per cc.		Velocities of Ions for 1 volt per centimetre.		Conductivity $\times 10^{25}$.	Air-Earth Current $\times 10^{16}$.		Electric Character of Day.	Magnetic Character of Day.	Horizontal Force.					West Declination.				
	3 h.	9 h.	15 h.	21 h.	+ .	− .	+ .	− .		c_1.	c_2.			Maximum. 18000 γ +.		Minimum. 18000 γ +.		Range.	Maximum. 15° +.		Minimum. 15° +.		Range.
	v/m.	v/m.	v/m.	v/m.	n/cc.	n/cc.	cm/sec.	cm/sec.	E.-m.U.	Amp/cm².				γ	h m	γ	h m	γ	′	h m	′	h m	′
1	145	325	295	230	—	—	—	—	—	—	0·45	0	0	497	1 29	471	15 30	26	57·9	1 30	52·9	18 54	5·0
2	75	295	155	130	—	—	—	—	—	—	—	0	0	508	19 30	489	22 51	19	57·3	12 29	54·0	21 51	3·3
3	75	260	370	375	—	—	—	—	—	—	—	0	0	510	13 11	487	15 33	23	57·4	12 0	53·1	23 30	4·3
4	295	*x* −	270	630	—	—	—	—	—	—	0·60	1	0	513	12 25	491	1 50	22	54·8	0 30	51·6	21 30	3·2
5	110	*x* −	415	495	—	—	—	—	—	—	0·65	2	0	513	14 9	484	15 53	29	55·1	10 35	49·0	23 5	6·1
6	415	445	485	470	—	—	—	—	—	—	0·45	1	2	530	13 45	**388**	**18 18**	**142**	54·3	17 12	**41·1**	**18 20**	13·2
7	85	*x* −	300	640	—	—	—	—	—	—	—	2	0	505	13 5	467	1 33	38	54·1	10 45	48·0	22 53	6·1
8	495	525	385	−260	—	—	—	—	—	—	—	2	0	504	19 45	487	1 5	**17**	51·7	15 23	47·5	7 53	4·2
9	230	245	325	660	—	—	—	—	—	—	—	2	0	504	13 42	484	1 40	20	51·8	1 26	48·7	13 36	**3·1**
10	140	−155	− 75	*x*±	—	—	—	—	—	—	—	2	0	524	20 55	487	7 16	37	54·5	13 12	49·9	0 3	4·6
11	55	310	375	570	430	110	0·60	0·10	0·30	1·15	0·85	0	2	**543**	**4 2**	407	17 23	136	59·8	15 54	41·5	17 38	**18·3**
12	345	540	410	455	160	80	—	—	—	—	0·35	0	0	513	0 0	461	0 58	52	52·8	17 0	46·9	1 0	5·9
13	155	475	310	395	400	350	0·00	0·25	0·10	0·30	0·50	2	0	498	7 38	477	1 50	21	54·1	11 30	50·5	0 15	3·6
14	230	585	370	300	350	240	0·90	2·15	0·95	3·50	0·55	2	0	510	8 9	473	15 40	37	54·8	12 30	49·8	7 45	5·0
15	−310	215	245	475	—	—	—	—	—	—	0·90	2	0	505	14 9	484	2 5	21	55·1	11 18	49·5	20 33	5·6
16	340	680	330	125	—	—	—	—	—	—	—	0	0	507	21 20	488	2 **12**	19	54·8	13 3	49·8	8 8	5·0
17	30	90	− 15	155	—	—	—	—	—	—	—	2	1	518	12 51	467	10 30	51	**62·6**	**10 50**	45·7	19 3	16·9
18	115	375	185	100	—	—	—	—	—	—	—	1	0	512	13 28	478	1 40	34	57·3	11 29	52·2	3 46	5·1
19	40	200	340	370	—	—	—	—	—	—	0·35	1	0	520	13 13	492	1 40	28	56·9	10 23	52·8	21 10	4·1
20	90	75	110	310	—	—	—	—	—	—	—	2	0	515	12 18	493	1 28	22	55·7	1 9	46·2	18 40	9·5
21	0	370	*x*±	330	—	—	—	—	—	—	—	2	0	510	20 42	492	10 14	18	53·6	10 30	46·0	20 32	7·6
22	200	585	*x* −	155	—	—	—	—	—	—	—	2	0	515	13 40	492	21 19	23	52·8	18 0	47·2	0 **2**	5·6
23	90	500	460	515	—	—	—	—	—	—	—	1	0	514	13 13	494	1 5	20	52·2	24 0	45·8	0 50	6·4
24	75	125	225	255	—	—	—	—	—	—	—	1	0	516	14 31	494	0 8	22	56·7	10 0	50·0	20 53	6·7
25	185	325	270	245	—	—	—	—	—	—	—	1	1	515	12 8	478	16 23	37	53·6	1 25	49·3	22 54	4·3
26	175	510	−415	145	—	—	—	—	—	—	—	2	1	513	11 1	438	16 22	75	55·7	14 20	47·3	21 10	8·4
27	125	555	515	−185	—	—	—	—	—	—	—	1	0	500	20 3	471	3 15	29	52·5	0 59	47·2	2 45	5·3
28	310	285	230	160	—	—	—	—	—	—	—	0	0	505	22 17	472	2 43	33	53·7	12 25	49·0	2 5	4·7
29	55	370	295	225	210	190	—	—	—	—	0·55	0	0	503	19 21	485	10 40	18	52·8	12 3	49·5	22 13	3·3
30	90	300	230	225	—	—	—	—	—	—	—	0	0	509	6 52	491	1 40	18	52·7	12 26	47·3	24 0	5·4
31	400	215	185	355	—	—	—	—	—	—	—	0	1	508	4 56	457	15 56	51	52·0	6 0	46·5	0 10	5·5
M.	161	353	267	272	—	—	—	—	—	—	—	—	—	512	—	475	—	37	54·9	—	48·6	—	6·3

6. ESKDALEMUIR OBSERVATORY.

Day.	Potential Gradient, Volts per metre. Factor 5·4.				Number of Ions per cc.		Velocities of Ions for 1 volt per centimetre.		Conductivity $\times 10^{25}$.	Air-Earth Current $\times 10^{16}$.		Electric Character of Day.	Magnetic Character of Day.	North Component.				West Component.				Vertical Component.			
	3 h.	9 h.	15 h.	21 h.	+ .	− .	+ .	− .		c_1.	c_2.			Maximum. 15000 γ +.		Minimum. 15000 γ +.		Maximum. 5000 γ +.		Minimum. 5000 γ +.		Maximum. 45000 γ +.		Minimum. 45000 γ +.	
	v/m.	v/m.	v/m.	v/m.	n/cc.	n/cc.	cm/sec.	cm/sec.	E.-m.U.	Amp/cm².				h m	γ	γ	h m	h m	γ	γ	h m	h m	γ	γ	h m
1	104	191	370	133	—	—	—	—	—	—		1 *b*	1	1 22	1022	988	15 12	1 26	257	225	18 53	19 20	347	328	1 42
2	145	497	87	−983	—	—	—	—	—	—		1 *b*	0	19 27	1013	994	11 42	12 31	255	230	23 34	23 30	341	337	0 40
3	208	416	879	503	—	—	—	—	—	—		2 *c*	1	13 10	1019	994	15 36	13 9	259	233	0 7	14 23	348	338	**2** 0
4	116	347	543	624	—	—	—	—	—	—		1 *b*	c	12 30	1016	1002	1 10	11 8	259	241	0 52	15 50	343	336	11 20
5	−971	150	133	220	—	—	—	—	—	—		1 *b*	0	13 55	1020	1004	0 0	12 2	259	237	23 4	22 20	341	334	8 0
6	197	353	*	428	—	—	—	—	—	—		1 *b*	2	14 23	1037	927	18 11	17 13	282	**140**	**18 32**	18 31	451	335	12 0
7	−1543	208	208	156	—	—	—	—	—	—		2 *b*	1	13 4	1010	975	0 22	11 43	253	222	0 0	15 0	349	342	7 2
8	335	376	399	−538	—	—	—	—	—	—		1 *b*	1	19 38	1017	998	9 20	11 4	253	224	18 59	14 0	346	340	10 0
9	*x*	81	301	451	—	—	—	—	—	—		1 *b*	0	20 16	1014	1001	1 16	12 9	254	240	0 55	16 55	345	339	0 **30**
10	−486	−75	*x*	254	—	—	—	—	—	—		2 *c*	1	19 7	1030	1002	24 0	11 40	255	232	24 0	24 0	346	341	0 0
11	−1572	−197	179	231	—	—	—	—	—	—		2 *c*	2	**21 3**	**1095**	**904**	**8 13**	**5 25**	**324**	146	17 36	**16 53**	**463**	**289**	**5 33**
12	145	289	376	445	—	—	—	—	—	—		1 *a*	1	0 0	1016	967	0 36	11 49	248	215	0 43	14 0	359	307	0 8
13	364	416	110	260	—	—	—	—	—	—		1 *a*	1	22 42	1005	990	11 53	12 15	250	234	0 56	0 0 to 2 0	353	344	9 40
14	289	52	220	457	660	60	1·3	2·2	1·09	—		1 *b*	1	8 1	1017	974	12 33	12 19	274	232	21 28	15 0	358	343	8 30
15	497	*x*	−422	−254	—	—	—	—	—	—		2 *c*	1	6 3	1010	997	17 25	11 44	256	239	0 33 to 2 55	**21 20**	349	346	10 **0**
16	17	208	−208	−815	—	—	—	—	—	—		2 *b*	0	21 38	1010	998	11 12	11 53	255	240	19 17	13 0	352	345	4 0 to 5 0
17	145	150	324	208	—	—	—	—	—	—		1 *b*	2	19 1	1030	955	10 29	11 58	303	191	19 0	18 50	368	340	11 20
18	179	−405	*x*	301	—	—	—	—	—	—		2 *b*	1	23 11	1021	983	1 51	11 28	259	230	1 11	1 40	351	344	2 40 to 3 20
19	*x*	150	243	214	—	—	—	—	—	—		1 *b*	0	18 5	1019	998	9 20	13 19	260	238	0 48	22 30	349	341	9 40
20	208	*x*	*	*	—	—	—	—	—	—		2 *c*	0	0 43	1022	998	1 14	10 32	258	239	6 0	14 20	347	341	10 0
21	*	*	665	214	—	—	—	—	—	—		1 *b*	0	20 36	1025	998	10 40	12 5	257	231	20 22	18 10	351	344	6 **30**
22	208	301	295	341	—	—	—	—	—	—		0 *a*	0	13 36	1019	997	21 20	12 43	252	233	20 43	11 30	348	346	5 0 to 8 0
23	133	191	370	−40	—	—	—	—	—	—		1 *b*	0	6 7	1023	998	24 0	12 6	254	235	22 18	0 0 23 16	346	343	9 0
24	92	*x*	*x*	145	—	—	—	—	—	—		2 *c*	1	15 48	1020	996	0 3	13 7	256	235	20 50	15 0	347	341	8 0 to 9 0
25	191	249	590	−46	—	—	—	—	—	—		1 *a*	1	20 33	1016	978	16 22	15 48	270	240	0 0	16 40	358	342	11 0
26	*x*	335	318	237	—	—	—	—	—	—		1 *b*	1	5 31	1021	943	16 2	11 7	294	188	21 6	16 45	392	344	11 0
27	243	283	1105	*x*	—	—	—	—	—	—		1 *b*	1	20 49	1012	985	17 23	0 50	265	213	2 46	17 25	362	333	1 20
28	168	381	−35	312	—	—	—	—	—	—		1 *a*	1	22 13	1026	985	2 39	1 2	276	222	2 13	15 20	358	339	**2** 0
29	127	23	272	185	—	—	—	—	—	—		1 *a*	0	20 0	1012	995	11 8	12 26	256	241	9 11	14 0	358	353	0 0
30	−514	162	393	624	—	—	—	—	—	—		1 *b*	0	24 0	1022	1002	10 28	12 20	262	205	24 0	23 52	358	351	1 0
31	272	478	145	318	—	—	—	—	—	—		0 *a*	1	0 12	1034	960	15 57	6 9	285	199	0 9	16 0	371	331	6 **25**
M.	−82	244	283	130	—	—	—	—	—	—		—	—	—	1022	983	—	—	265	222	—	—	360	338	—

x Indeterminate. * No record.

An explanation of the Headings of the columns is given in the Preface.

7. Tables of Wind Components in metres per second at fixed hours.

Together with the mean velocity (horizontal movement) in metres per second for the hour with the maximum hourly run for each day, or the greatest velocity attained in a gust and the time of its occurrence.

HOLYHEAD.†§

Height of Head above—Roof 8·8 m., Ground 13·7 m., M.S.L. 19·2 m.
Height of Cups above—Roof 4·6 m., Ground 7·6 m., M.S.L. 15·2 m.

Date.	3 h.				9 h.				15 h.				21 h.				Max. in a Gust.	Time of Gust.	
	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.			
																	V.	Hrs.	Min.
1	6·7	...	...	...	6·3	...	1·3	...	9·8	...	...	...	8·5	...	1·8	...	16·5	15	0
2	1·8	...	2·7	...	5·8	...	...	...	10·7	...	...	...	5·8	...	5·8	...	20·6	13	45
3	1·8	...	2·7	...	4·9	...	4·9	...	4·0	...	5·8	...	3·6	...	5·4	...	13·4	13	10
4	3·1	...	4·5	...	...	...	8·9	...	2·7	...	2·7	...	13·9	...	...	5·8	24·6	23	30
5	9·4	...	4·0	...	8·1	...	8·1	...	1·8	...	10·3	...	1·8	...	9·4	...	24·6	0	5
6	...	...	4·9	...	2·7	...	3·6	...	8·5	...	...	3·6	14·3	...	...	2·7	29·5	23	50
7	8·9	...	8·9	...	...	3·6	8·9	...	...	4·0	8·9	...	1·3	...	6·3	...	27·3	0	50
8	2·7	...	3·6	...	9·8	...	...	4·0	13·4	...	...	5·4	...	1·8	8·9	...	23·7	14	10
9	...	2·7	14·3	...	...	2·7	12·5	...	2·7	...	6·3	...	6·3	...	4·0	...	19·7	1	35
10	6·7	...	2·7	...	5·8	...	...	4·0	4·5	...	6·7	...	3·6	...	0·9	...	18·3	4	40
11	7·2	...	17·5	...	...	...	14·8	...	..	...	10·3	...	3·1	...	7·6	...	24·6	3	40
12	4·5	...	6·7	...	3·1	...	3·1	...	5·4	...	2·2	...	5·4	...	...	0·9	14·8	0	35
13	4·0	...	...	6·3	5·4	...	...	13·4	14·8	...	...	6·3	10·3	...	1·8	...	26·0	11	15
14	5·4	...	0·9	...	2·2	...	...	0·5	7·2	...	...	1·3	1·3	...	...	7·6	14·8	22	40
15	3·6	...	...	8·5	1·8	...	...	2·7	4·9	...	12·5	...	3·6	...	8·5	...	22·8	12	45
16	3·1	...	7·6	...	6·7	...	...	...	10·3	...	...	1·8	8·9	...	...	1·8	18·3	17	15
17	8·5	...	1·8	...	9·4	...	...	...	7·6	...	1·3	...	9·4	...	1·8	...	16·5	8	10
18	10·7	...	...	4·5	14·8	...	...	6·3	6·7	...	2·7	...	6·7	...	...	...	24·6	5	20
19	6·7	...	1·3	...	7·6	...	5·4	...	6·7	...	2·7	...	10·3	...	...	...	18·8	1	15
20	9·4	...	...	1·8	...	4·0	9·8	...	...	1·8	10·3	...	1·8	...	5·8	...	19·7	1	25
21	3·1	...	...	...	...	4·0	...	4·0	...	1·8	9·8	...	...	...	9·8	...	17·9	16	40
22	0·9	...	5·4	...	1·3	...	2·7	...	3·6	...	...	8·5	...	5·8	...	5·8	16·5	17	45
23	...	7·6	5·4	..	...	0·5	3·1	...	7·6	...	1·3	...	11·6	...	...	4·9	22·4	22	55
24	9·4	...	...	...	4·9	...	12·1	...	...	...	...	...	...	...	...	...	26·4	11	50
25	...	...	...	...	...	...	...	...	5·8	...	8·9	...	...	...	15·2	...	25·5	17	10
26	3·6	...	8·1	...	4·5	...	4·5	...	5·4	...	...	2·2	...	5·4	0·9	...	17·9	17	45
27	...	...	3·1	...	0·5	...	1·8	...	3·6	...	...	...	2·2	...	...	3·1	11·2	23	55
28	4·0	...	4·0	...	5·4	...	3·6	...	7·6	...	3·1	...	5·8	...	5·8	...	14·3	16	20
29	4·9	...	3·1	...	8·5	...	3·6	...	10·3	...	1·8	...	8·5	...	3·6	...	17·4	23	20
30	6·7	...	2·7	...	0·5	...	1·8	...	2·2	...	0·9	...	4·0	...	...	...	14·3	0	10
31	4·5	...	...	...	7·6	...	3·1	...	3·6	...	2·7	...	4·9	...	2·2	...	13·9	8	10
S+N & W+E	151·6		136·5		142·4		152·5		179·0		140·3		169·9		138·1				
S−N & W−E	131·0		94·3		112·8		82·7		163·8		82·1		143·9		72·9				

DEERNESS.†

Height of Cups above—Roof 1·5 m., Ground 4·9 m., M.S.L. 57·3 m.

Date.	3 h.				9 h.				15 h.				21 h.				Vel. in Max. Hourly Run.	Time of Max.
	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.		
																	V.	Hour.
1	7·6	...	...	3·1	10·7	...	...	2·2	12·1	...	...	8·1	13·9	...	...	5·8	16·1	22
2	3·1	...	2·2	...	4·0	...	0·9	...	9·8	...	...	6·7	16·1	...	...	10·7	19·2	21
3	11·2	...	2·2	...	8·5	...	...	...	6·7	...	1·3	...	2·7	...	0·5	...	14·3	1
4	0·9	...	0·5	...	1·3	...	0·9	...	5·8	...	...	1·3	5·8	...	...	2·2	10·3	24
5	10·3	...	...	7·2	9·8	...	...	14·8	9·4	...	...	13·9	13·9	...	...	9·4	19·2	10
6	5·4	...	3·6	...	4·5	...	3·1	...	8·1	...	1·8	...	14·8	...	...	6·3	19·2	24
7	17·0	...	...	11·6	3·1	...	1·8	...	4·5	...	3·1	...	5·8	...	5·8	...	21·5	4
8	4·5	...	3·1	...	5·8	...	1·3	...	8·5	...	...	5·8	10·7	...	...	7·2	14·3	22
9	8·5	...	...	8·5	8·9	...	...	8·9	6·7	...	...	9·8	0·9	...	0·9	...	15·2	2
10	6·3	...	...	1·3	10·3	...	...	1·8	4·5	...	...	1·8	2·7	...	...	12·5	16·1	24
11	12·1	...	...	8·1	1·3	...	...	7·2	1·8	...	...	4·0	0·9	...	4·5	...	17·9	1
12	5·4	...	3·6	...	8·9	...	1·8	...	6·7	...	1·3	...	10·3	...	...	...	10·3	20
13	5·8	...	1·3	...	8·1	...	...	1·8	10·7	...	...	7·2	8·9	...	...	13·4	17·4	23
14	11·2	...	...	11·2	8·5	...	...	8·5	6·3	...	...	9·8	4·9	...	...	0·9	16·5	1, 2
15	6·7	...	...	4·5	5·8	...	...	8·5	2·2	...	...	11·2	3·1	...	...	14·8	15·2	20
16	4·5	...	...	10·7	0·9	...	...	4·5	6·7	...	...	2·7	13·0	...	...	5·4	13·9	21, 22, 24
17	11·2	...	...	2·2	6·7	...	...	...	10·7	...	...	4·5	8·1	...	...	1·8	14·8	1
18	4·9	...	0·9	...	9·8	...	...	6·3	13·9	...	...	9·4	4·0	...	0·9	...	17·0	12
19	8·5	...	...	...	9·4	...	1·8	...	6·7	...	1·3	...	11·2	...	...	2·2	11·6	21, 22
20	10·3	...	...	1·8	8·5	...	...	5·8	1·8	...	1·3	...	1·3	...	2·7	...	11·6	6
21	2·7	...	3·6	...	2·2	...	2·2	...	0·5	...	2·2	...	0·9	...	1·3	...	4·9	23
22	1·3	...	3·1	...	2·7	...	4·0	...	...	1·3	3·6	...	...	0·5	3·1	...	5·4	8
23	0·9	...	4·0	...	0·9	...	4·5	...	3·1	...	3·1	...	8·9	...	...	1·8	11·2	24
24	14·8	...	...	6·3	10·3	...	...	1·8	1·8	...	1·8	...	...	4·5	11·2	...	17·9	4
25	...	1·8	9·4	...	4·0	...	5·8	...	4·9	...	3·1	...	5·4	...	2·2	...	9·4	2
26	5·4	...	3·6	...	3·6	...	2·7	...	2·7	...	2·7	...	0·5	...	1·8	...	8·1	1, 4
27	...	0·5	2·2	...	...	5·4	...	...	...	0·9	...	0·0	1·3	...	...	2·7	5·8	8
28	5·8	...	...	2·2	4·5	...	1·8	...	2·7	...	6·7	...	...	1·8	8·5	...	8·5	21
29	...	0·5	1·3	...	1·3	...	...	7·2	5·8	...	...	8·9	9·4	...	...	9·4	14·3	23
30	6·7	...	...	...	0·9	...	5·4	...	2·7	...	3·6	...	6·3	...	1·3	...	11·6	1
31	8·5	...	...	...	8·1	...	...	...	*	*	*	*	*	*	*	*	10·7	2
S+N & W+E	204·3		123·3		178·7		117·3		170·0		142·0		192·5		151·2			
S−N & W−E	198·7		−34·1		167·9		41·3		165·6		−68·2		178·9		−61·8			

SCILLY.‡§

Height of Head above—Ground 9·8 m., M.S.L. 49·7 m.
Height of Cups above—Ground 5·8 m., M.S.L. 45·7 m.

Date.	3 h.				9 h.				15 h.				21 h.				Max. in a Gust.	Time of Gust.	
	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.			
																	V.	Hrs.	Min.
1	*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	*	12·1	23	15
2	*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	*	17·9	14	20
3	*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	*	21·0	21	40
4	*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	*	23·7	2	0
5	*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	*	24·1	7	25
6	*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	*	27·3	23	35
7	*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	*	26·4	0	40
8	*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	*	30·9	22	40
9	*	*	*	*	*	*	*	*	*	*	*	*	6·3	...	6·3	...	29·1	2	20
10	11·6	...	...	2·2	...	...	18·8	...	2·7	...	14·3	...	...	4·5	21·5	...	29·1	19	35
11	...	3·1	15·7	...	...	8·5	12·5	...	...	4·5	10·3	...	...	...	12·1	...	25·5	14	5
12	1·8	...	9·8	...	4·5	...	4·5	...	6·7	...	...	1·3	8·1	...	...	12·1	25·5	23	55
13	8·5	...	...	20·6	12·5	...	8·5	...	8·9	...	8·9	...	2·2	...	5·4	...	32·6	4	30
14	4·9	...	3·1	...	*	*	*	*	16·5	...	...	10·7	10·7	...	...	2·2	23·3	14	50
15	...	12·1	17·9	...	...	2·7	13·4	...	2·2	...	12·1	...	1·8	...	8·5	...	28·2	4	20
16	3·6	...	5·4	...	8·9	...	1·8	...	11·6	...	...	...	9·4	...	6·3	...	17·9	18	20
17	8·9	...	...	...	9·4	...	1·8	...	10·3	...	1·8	...	9·4	...	4·0	...	17·9	23	20
18	19·2	...	...	8·1	17·0	...	...	3·6	8·1	...	3·6	...	10·7	...	...	...	26·8	4	50
19	7·6	...	4·9	...	6·7	...	2·7	...	8·5	...	1·8	...	11·6	...	...	...	18·3	23	30
20	...	1·8	9·8	...	...	6·7	16·1	...	...	...	13·9	...	7·6	...	1·3	...	23·3	8	55
21	8·9	...	...	...	*	*	*	*	...	7·2	17·0	...	...	...	12·1	...	29·5	9	30
22	2·7	...	6·3	...	10·7	...	...	10·7	7·2	...	17·9	...	...	17·9	12·1	...	29·5	21	40
23	...	7·6	5·4	...	...	0·9	0·9	...	13·9	...	...	2·7	8·1	...	3·6	...	22·4	0	5
24	7·6	...	7·6	...	2·7	...	13·9	...	2·2	...	11·6	...	4·9	...	...	12·5	26·0	21	5
25	4·0	...	19·2	...	4·0	...	21·0	...	...	3·6	17·9	...	...	2·7	14·3	...	31·3	7	35
26	...	...	10·3	...	8·5	...	1·8	...	...	2·7	13·4	...	...	2·7	13·0	...	19·2	14	20
27	...	...	2·7	...	...	1·8	8 9	...	...	...	12·1	...	2·2	...	11·2	...	16·1	14	10
28	1·8	...	8·1	...	4·0	...	5·8	...	4·0	...	5·8	...	5·8	...	7·6	...	13·9	0	50
29	5·4	...	5·4	...	7·2	...	3·1	...	5·8	...	4·0	...	4·9	...	4·9	...	11·6	18	30
30	4·0	...	4·0	...	2·7	...	4·0	...	1·3	...	2·7	...	0·5	...	3·1	...	8·9	0	55
31	1·8	...	1·8	...	1·8	...	1·8	...	2·7	...	1·8	...	2·2	...	1·3	...	7·2	22	30
S+N & W+E	126·9		168·3		121·2		155·6		130·6		185·6		134·2		175·4				
S−N & W−E	77·7		106·5		80·0		127·0		94·6		156·2		78·6		121·8				

GREAT YARMOUTH.†§

Height of Head above—Roof 10·7 m., Ground 12·8 m., M.S.L. 15·9 m.
Height of Cups above—Roof 3·7 m., Ground 18·3 m., M.S.L. 22·3 m.

Date.	3 h.				9 h.				15 h.				21 h.				Max. in a Gust (Gorleston).	Time of Gust.	
	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.	S.	N.	W.	E.			
																	V.	Hrs.	Min.
1	3·1	...	...	0·5	3·1	...	...	...	3·1	...	...	...	3·1	...	...	...	11·2	11	35
2	1·8	...	...	...	4·5	...	...	...	3·1	...	...	...	4·5	...	...	...	13·9	20	5
3	5·4	...	...	0·9	4·5	...	...	...	3·1	...	...	...	3·1	...	...	...	14·3	1	45
4	1·8	...	1·8	...	0·9	...	0·9	...	0·5	...	0·9	...	1·8	...	1·8	...	9·8	11	30
5	5·4	...	...	3·6	8·1	...	...	5·4	1·3	...	2·7	...	1·3	...	1·3	...	19·7	10	20
6	0·9	...	2·2	...	0·9	...	2·7	...	1·3	...	1·8	...	3·6	...	...	...	14·3	23	45
7	8·9	...	...	3·6	8·9	...	...	3·6	0·9	...	0·5	...	...	2·2	2·2	...	23·3	8	30
8	...	0·9	2·7	...	...	...	2·7	...	3·1	...	...	...	12·1	...	...	8·1	22·8	22	10
9	7·2	...	...	3·1	1·3	...	3·6	...	0·9	...	4·9	...	2·2	...	2·2	...	17 9	0	15
10	4·5	...	...	...	7·6	...	...	3·1	11·6	...	...	2·2	10·7	...	...	2·2	26·4	13	30
11	8·5	...	...	...	4·9	...	4·9	...	3·1	...	4·5	...	3·1	...	1·8	...	21·0	4	20
12	2·2	...	2·2	...	2·2	...	2·2	...	1·8	...	1·8	...	3·6	...	...	...	8·9	22	35
13	6·3	...	...	4·0	8·9	...	...	8·9	7·6	...	...	7·6	4·0	...	...	0·5	17·4	11	0
14	2·2	...	...	3·1	4·9	...	4·9	...	1·3	...	1·3	...	3·1	...	...	...	14·3	8	25
15	7·2	...	...	7·2	8·1	...	...	8·1	4·9	...	4·9	...	4·0	...	4·0	...	19·7	12	30
16	2·2	...	2·2	...	1·8	...	1·8	...	2·7	...	0·5	...	5·4	...	...	...	1 8	23	25
17	5·8	...	...	...	5·4	...	...	...	7·2	...	...	...	6·3	...	...	...	1 5	19	45
18	4·0	...	...	...	6·7	...	...	1·3	7·2	...	...	...	7·2	...	...	...	1 4	17 5,	20 55
19	4·9	...	...	...	4·5	...	...	...	2·7	...	0·9	...	4·0	...	0·9	...	13·4	2	10
20	4·5	...	...	...	5·4	...	...	2·2	1·8	...	...	0·9	...	...	8·1	...	23·3	16	15
21	1·8	...	1·8	...	5·8	...	...	2·2	...	4·0	...	...	...	...	4·9	...	10·7	7	35
22	1·3	...	5·8	...	2·2	...	5·4	...	1·8	...	1·8	...	...	...	...	13·0	15·7	23	20
23	...	3·1	1·3	...	...	1·8	4·0	...	0·5	...	2·2	...	2·2	...	2·2	...	13·4	0	55
24	6·7	...	...	...	6·3	...	...	...	3·1	...	4·9	...	2·2	...	5·8	...	18·8	12	30
25	1·8	...	0·5	...	...	...	...	1·3	...	...	2·7	...	...	...	1·8	...	8·9	12	30
26	...	...	8·1	...	...	...	3·1	...	1·8	...	1·8	...	...	7·2	...	7·2	15·2	2	50
27	...	2·2	2·2	...	...	0·9	1·8	...	...	...	2·2	...	...	...	2·2	...	8·9	2	10
28	...	...	1·3	...	3·1	...	...	...	2·7	...	2·7	...	...	...	5·4	...	2·5	23	30
29	...	...	4·9	...	...	...	1·8	...	...	...	0·5	...	1·8	...	1·8	...	8·9	3	0
30	2·7	...	2·7	...	1·3	...	2·7	...	...	...	3·1	...	...	...	1·8	...	9·8	6	45
31	...	...	1·8	...	...	...	1·8	...	1·8	...	2·7	...	1·3	...	2·7	...	7·6	18	40
S+N & W+E	107·3		67·5		114·0		80·4		84·9		60·0		100·0		81·9				
S−N & W−E	94·9		15·5		108·6		8·2		76·9		38·6		81·2		19·9				

The velocities at fixed hours are means for the interval from 30 minutes before to 30 minutes after the hour. The hours are numbered 1 h. to 24 h. Time is referred to Greenwich Mean Time. * No record.

† Robinson Cup Anemometer; Arms 0·61 m.; Diameter of Cups, 0·229 m.; Factor 2·2. ‡ Robinson Cup Anemometer; Arms 0·305 m.; Diameter of Cups 0·127 m.; Factor 2·8.

§ Dines Pressure Tube Anemometer. At Great Yarmouth, Holyhead, and Scilly the readings at fixed hours are taken from the Robinson Anemometer, the maxima quoted are the greatest winds in a gust as recorded by the Dines Pressure Tube.