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THE CLIMATE AND WEATHER  
OF THE  
FALKLAND ISLANDS  
AND  
SOUTH GEORGIA.

BY

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# THE CLIMATE AND WEATHER OF THE FALKLAND ISLANDS AND SOUTH GEORGIA.

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## § 1. GENERAL CHARACTERS.

THE Falkland Islands lie in the South Atlantic Ocean, 250 miles east of the south-eastern extremity of South America; South Georgia lies also in the South Atlantic, but 900 miles still further east and slightly south. The relative positions are shown on the accompanying map, fig. 1.

The islands have a comparatively rich flora of grasses and shrubs (including the well-known tussock grass—isolated dense tufts of reed-like grass growing to a height of 6 to 10 feet). The native fauna is small, consisting mainly of land and sea birds. Geologically, both the Falkland Islands and South Georgia consist entirely of older Palæozoic and Metamorphic rocks.

The *Falkland Islands* (fig. 2) consist of a group of more than one hundred islands and islets, with a total area of 6500 square miles; but of these only two, East and West Falkland, are of any considerable size. Both islands are mountainous, rising to 2300 feet, with a very irregular and indented coast line. The population is about 2000—mostly shepherds of Scottish origin. The climate would be very healthy were it not that ordinary epidemic diseases prevail in a very virulent form.

The first observations taken in the Falkland Islands were by Sir James Ross in April to August 1842 (*Voyage to the Southern Seas*, vol. ii. pp. 428–437). Observations have been taken at Cape Pembroke Lighthouse since 1850, with occasional intervals; but in the absence of adequate supervision and instruction the records were of little value until the visit of the *Scotia* in January 1903 gave the necessary stimulus. Since 1903 the observations, taken under the supervision of Mr John Pearce, the principal lighthouse-keeper, have been excellent. In 1903, also, Mr Mossman, the meteorologist to the *Scotia* expedition, set up a sunshine recorder at Stanley, in charge of Sir William Wilson, the Governor of the islands; thanks to the supervision of the latter and later to that of another Governor, His Excellency W. L. now Sir William Allardyce, this has continued in working order until the present day, with various gaps owing to the supply of cards running short. The observations at Cape Pembroke for 1903 and 1904, and the sunshine records at Stanley for 1903 and part of 1904, were published in the *Scientific Results of the "Scotia" Expedition*, 1902–04, vol. ii., "Physics." In the Appendix are given summaries of the observations at Cape Pembroke from 1905 to 1915, with a gap of fourteen months in 1907–08, when only incomplete observations were taken, and also the summary of a tabulation of the sunshine cards at Stanley from 1906 to 1915.

A very good station was set up by Mr F. E. Cobb at Stanley Harbour in January 1875, and apparently continued until December 1883. The observations from 1873 to 1875, inclusive, were summarised by the late Mr Marriott in the *Quarterly Journal of the Royal Meteorological Society*, vol. vi., 1880, pp. 199 to 202. From 1876 to June 1881 the observations appear to have been published, along with those from other Colonial stations, in the *Colonist*, but I have been unable to obtain access to these tables. From July 1881 to December 1883, corresponding tables appeared in *Symons's Meteorological Magazine*; copies of these summaries converted to absolute units are given in the Appendix, together with a summary of thirteen months' observations by Kapitan Seemann in 1882-83, summarised from the *Meteorologische Zeitschrift*. Rainfall observations were taken at Stanley for a few months in 1891, and recommenced under the supervision of Sir William Wilson in August 1904; the last available is the return for June 1914.

*South Georgia* (fig. 3) is a mountainous island, with an area of about 1600 square miles, rising into snowy peaks of 6000 to 8000 feet, separated by deep gorges filled by glaciers. It is almost uninhabited, but is in summer an important whaling station. The first meteorological observations were taken at Royal Bay, on the south-east side, by a German expedition sent out to observe the transit of Venus in 1882-83. After this no further observations were taken until the establishment by the Argentine Fishery Company, in January 1905, of a second order station at Grytviken, on the shores of Cumberland Bay, on the north-east of the island; ten years' good observations are now available for this station. Less complete series of observations, mostly referring to the summer months only, are available for Leith Harbour, Godthull Harbour, Husvik Harbour, and New Fortune Bay. Complete rainfall observations for three years, 1911 to 1913, were taken at King Edward Cove. The positions of these places are shown on the map, fig. 3. In 1913, also, a large Richard barograph was sent to Leith Harbour and kept in good working order until 1915. From this, with the aid of the tri-daily eye observations at Grytviken, bi-hourly means of pressure have been calculated for each month for nearly three years. For the general meteorological observations, Grytviken is sufficiently representative; summaries of the records here and of the hourly observations at Royal Bay are given in the Appendix, and rainfall data for all stations are given in Table XVI.

*Physical Conditions.* — The general eastward drift of the Southern Ocean is interrupted by the long peninsula of Patagonia, and deflected southward to Cape Horn, where it sweeps up considerable numbers of icebergs from the Antarctic. After rounding Cape Horn it divides into two branches (see fig. 1), of which the westerly or Falkland current travels due northward west of the Falkland Islands; while the easterly, the main part of the Cape Horn current, travels in an east-north-east direction towards South Georgia. Owing to these two ice-laden currents a rapid fall of temperature is experienced in passing from west to east, the mean temperatures being: Ushuaia ( $55^{\circ}$  S.,  $68^{\circ}$  W.), 279.3a; Cape Pembroke, 279.0a; South Georgia, 275.2a.

Meteorologically, the islands lie in the southern temperate storm belt, but north of the line along which the cyclonic centres most frequently pass; so that, remembering that in the southern hemisphere Buys Ballot's law is reversed, the winds are almost invariably between south-west and north-west, while a large proportion of them are fresh or strong, and gales are frequent. The islands being thus constantly exposed to strong westerly winds blowing from a cold ice-bearing sea have, as will be expected,

a uniformly dismal climate. The rainfall is not excessive in amount on the eastern side of the islands where the settlements are situated, but is distributed over a large number of days; while cloudiness and humidity range high.

The Falkland Islands are largely covered by peat-bogs and numerous small lakes; the colder, loftier island of South Georgia has its western side snow-covered throughout the year, with large glaciers occupying the valleys. The snow-line here lies at only 2000 feet—lower than the tree line of Tierra del Fuego in the same latitude. The north-east side of South Georgia shows remarkably different conditions owing to the presence of a warm Föhn wind which sweeps down from the mountains and so prevents the accumulation of snow even in winter.

### § 2. PRESSURE.

Barometric pressure (Tables I. and II., fig. 4) is highest in September (Cape Pembroke, 1005 mb.; Grytviken, 1001 mb.), and lowest in November (Cape Pembroke,

TABLE I.—ANNUAL AND DIURNAL VARIATION OF PRESSURE AT CAPE PEMBROKE.

	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
Mean pressure in mb. at M.S.L. (1903-1915):—													
	999·7	1000·4	1002·0	1001·4	1000·5	1000·5	1003·7	1002·9	1005·0	1004·9	999·2	1000·7	1001·7
Deviations from mean at various hours (local time), 10 years, 1905-1915. Unit 0·01 mb.:—													
0 h.	+36	+61	+36	+16	+11	+27	+7	+23	+33	+29	+41	+23	+29
4 h.	+22	-13	+5	-8	-7	-13	-36	-26	-21	-4	-3	-6	-9
8 h.	+21	0	+13	+18	+7	-7	-6	+10	+18	+2	-5	+7	+6
12 h.	-27	-46	-29	-13	-12	-1	+17	-8	-23	-34	-40	-25	-20
16 h.	-42	-29	-38	-19	-10	-17	-2	-20	-25	-25	-32	-38	-25
20 h.	-7	+27	+16	+10	+12	+13	+19	+18	+36	+46	+42	+44	+23

999 mb.; Grytviken, 992·5 mb.). This difference of about 5 mb. between the pressures at Cape Pembroke and South Georgia persists throughout the year, and is due to the

TABLE II.—ANNUAL AND DIURNAL VARIATION OF PRESSURE IN SOUTH GEORGIA.

	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
Mean pressure at Grytviken in mb. at M.S.L. (1906-1915.) $\frac{1}{3}(8+14+20)$ h.:—													
	994·3	995·8	997·2	995·5	994·2	998·2	997·4	999·4	1001·4	999·4	992·5	997·3	996·9
Deviations from mean at various hours (local time) at Leith Harbour (see Appendix). Unit 0·01 mb.:—													
Dec. to Feb.	+5	+4	+4	+1	+3	+2	+1	+1	+4	+3	+1	+4	+3
2 h.	+4	+1	+1	-1	+3	+2	+1	+1	0	0	0	0	0
4 h.	+2	-1	-1	-1	+2	+1	+1	+1	+1	+1	+1	+1	+1
6 h.	+1	-1	-1	-1	+1	+1	+1	+1	0	0	0	0	0
8 h.	0	-1	-1	-1	+1	+1	+1	+1	+1	+1	+1	+1	+1
10 h.	-3	-2	-3	-2	0	-1	-1	-1	0	0	-1	-1	-1
12 h.	-4	-3	-3	-2	-1	-1	-1	-1	-3	-3	-3	-3	-3
14 h.	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4
16 h.	-3	-2	-2	-2	-5	-5	-5	-5	-5	-5	-5	-5	-5
18 h.	-1	-1	-1	-1	-3	-3	-3	-3	-2	-2	-2	-2	-2
20 h.	+1	+4	+4	+5	+1	+1	+1	+1	+2	+2	+2	+2	+1
22 h.	+4	+5	+5	+2	+2	+2	+2	+2	+5	+5	+5	+4	+4

more southerly position of the latter, the isobars running almost parallel to the lines of latitude. The annual variation corresponds to the migration of the southern temperate storm belt, which is more northerly in summer (*i.e.* January) and more southerly in winter, but the rapid fall of pressure between October and November is remarkable. The diurnal variation (Tables I., II., fig. 5) shows only one maximum at South Georgia, occurring about 23 h.; but these figures, being based on the tabulation of an aneroidograph, are not so reliable as the ten years' eye observations at Cape Pembroke, which shows a slight morning maximum (about 7 h.), and a more important evening maximum (about 23 h. 30 m.). The Fourier coefficients for the various months are shown in Table XXVII., from which it is seen that the diurnal component has a marked annual variation in amplitude, with a maximum in summer, and also a variation of phase, the daily maximum which throughout the year has an average occurrence about midnight, being on the whole about four hours earlier in winter than in summer, though the extreme months show a difference of  $150^\circ$  or 10 hours (July  $197^\circ$  or max. at 17 h., January  $44^\circ$  or max. at 3 h.). The semidiurnal variation is on the average slightly less than the diurnal, with maxima about 9 h. and 21 h.; it varies little from month to month. The analysis of the annual figures for South Georgia gives the series:

$$p = 996.8 + 0.34 \sin(t + 77^\circ) + 0.10 \sin(2t + 141^\circ).$$

Here the maximum of the diurnal wave occurs about 1 h., and its range is more than three times that of the semidiurnal wave—a fact in agreement with the higher latitude of South Georgia. The maxima of the semidiurnal wave occur about 10 h. and 22 h.

Table III. contains the individual monthly averages of pressure at Cape Pembroke,

TABLE III.—MONTHLY MEANS OF PRESSURE AT CAPE PEMBROKE.  
Mean of Day at M.S.L.

	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
	mb.												
1895	1000.9	1004.6	993.0	999.2	1001.4	1000.8	998.6	1003.0	1009.4	1000.9	1002.2	997.9	1001.0
1896	997.4	1007.2	1000.5	1003.1	1000.5	1005.0	1003.8	1001.7	1007.8	1001.6	990.9	996.6	1001.3
1897	1000.1	1000.4	1005.1	993.6	1001.7	1005.3	1004.8	1004.2	1010.9	1003.0	1002.7	997.1	1002.4
1898	998.6	998.0	997.6	1001.7	1006.4	1008.8	1001.9	1009.1	1007.5	1007.9	999.9	1001.1	1003.2
1899	999.3	1001.9	999.2	997.7	995.5	1009.0	995.8	1006.5	1006.8	999.5	997.8	997.5	1000.5
1900	993.9	...	999.2	1004.4	1006.4	1007.7	1000.5	1010.7	1006.5	1003.5	992.6	999.7	1002.1
1901	1005.3	998.1	1000.8	1002.5	998.9	1002.8	996.4	1007.0	1005.8	1001.4	1004.1	1000.3	1002.0
1902	999.0	995.7	1002.6	1000.8	997.0	1004.0	997.2	996.3	1003.0	999.5	997.6	998.2	999.2
1903	1000.2	997.0	992.9	1003.8	1003.8	999.6	1009.2	1008.1	1007.5	1011.6	1009.1	1007.4	1004.2
1904	1001.8	1003.3	999.0	1007.1	1005.4	1004.6	1004.3	1003.2	996.4	1002.8	1001.9	1005.5	1002.9
1905	1000.8	996.7	1003.1	1002.7	1005.0	990.7	1003.5	996.3	1002.8	1001.0	1003.9	1001.6	1000.7
1906	1003.2	1003.4	997.7	1001.2	997.1	1005.8	1004.4	1005.4	1008.5	1004.0	999.2	995.8	1002.1
1907	999.3	1003.1	1002.5	1003.6	996.6	999.4	1007.6	1016.8	1005.5	1005.8	995.0	994.7	1002.5
1908	1001.0	1003.7	1003.4	998.4	1004.2	1002.8	...	1006.9	1003.7	998.6	996.1	998.4	1001.7
1909	999.4	999.1	1000.6	998.8	999.8	998.0	1002.1	999.7	1008.7	1007.8	1001.9	995.9	1001.0
1910	991.4	1001.6	1009.5	1002.7	998.4	996.8	1003.8	995.1	1002.4	1008.2	999.9	1004.5	1001.2
1911	995.0	1003.2	1003.0	1001.3	1007.1	1003.9	1005.7	995.3	1009.6	1004.7	995.5	1002.7	1002.3
1912	1001.0	992.2	998.2	1000.9	998.2	1000.6	1003.9	1008.0	1003.3	1004.9	992.2	996.6	1000.0
1913	1000.9	998.5	998.5	996.9	995.4	1003.2	998.8	1003.3	1003.3	1002.3	1000.5	1003.4	1000.4
1914	999.7	999.3	1007.6	1005.9	1001.1	997.1	1004.4	1005.0	1005.9	1003.6	994.6	1003.7	1002.3
1915	999.7	999.8	1005.8	992.5	991.1	1000.3	996.4	993.1	1006.0	1007.3	999.2	998.5	999.1
Mean	999.4	1000.3	1000.9	1000.9	1000.5	1002.2	1002.2	1003.6	1005.8	1003.8	998.9	999.9	1001.5

and Table IV. the corresponding figures at Grytviken, showing that there is a fairly considerable range from month to month: at Cape Pembroke of 26.1 mb. from 1016.8 mb. in August 1907 to 990.7 mb. in June 1905; and at Grytviken of 18.5 mb.

3 of June 1911  
10 Aug 11

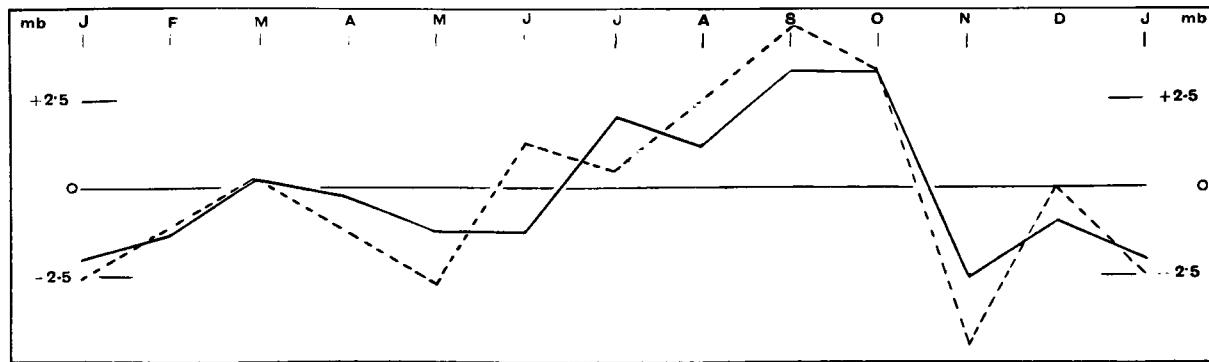


Fig. 4.—ANNUAL VARIATION OF PRESSURE, CAPE PEMBROKE — GRYTVIKEN. — — — CAPE PEMBROKE. ······ MEAN.

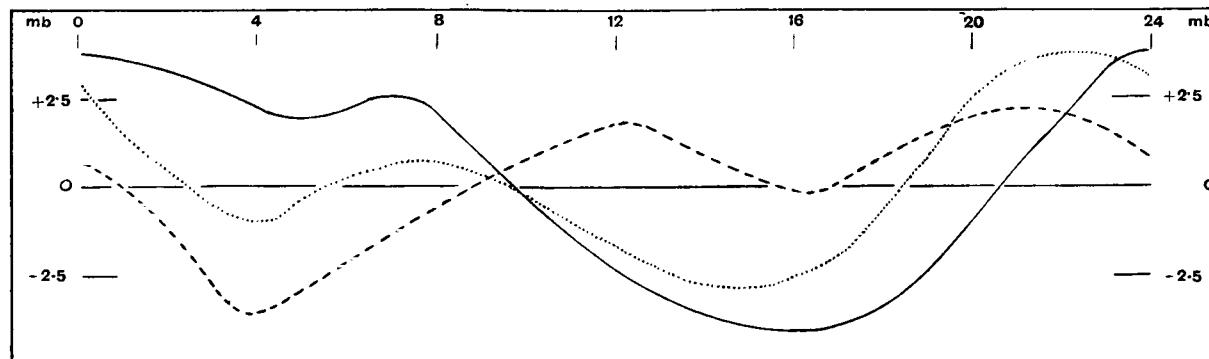


Fig. 5.—DIURNAL VARIATION OF PRESSURE AT CAPE PEMBROKE, JANUARY — JULY — — YEAR ······ JANUARY.

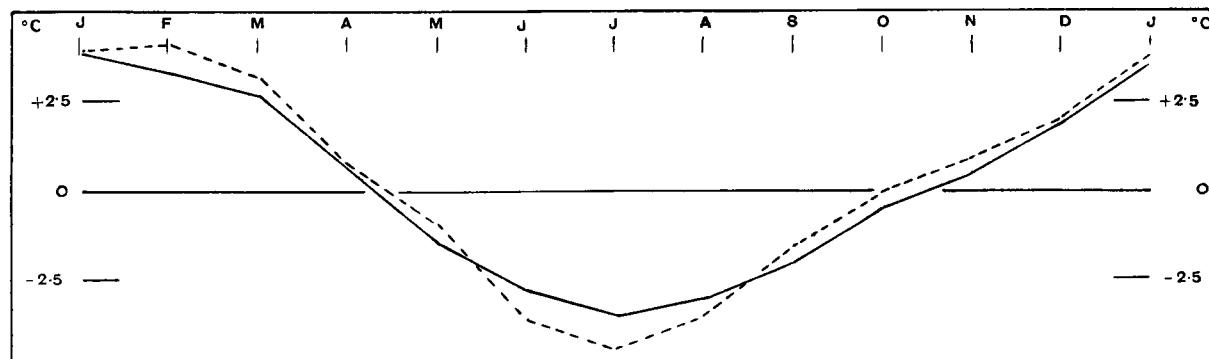


Fig. 6.—ANNUAL VARIATION OF TEMPERATURE, CAPE PEMBROKE — GRYTVIKEN — — — CAPE PEMBROKE. ······ MEAN.

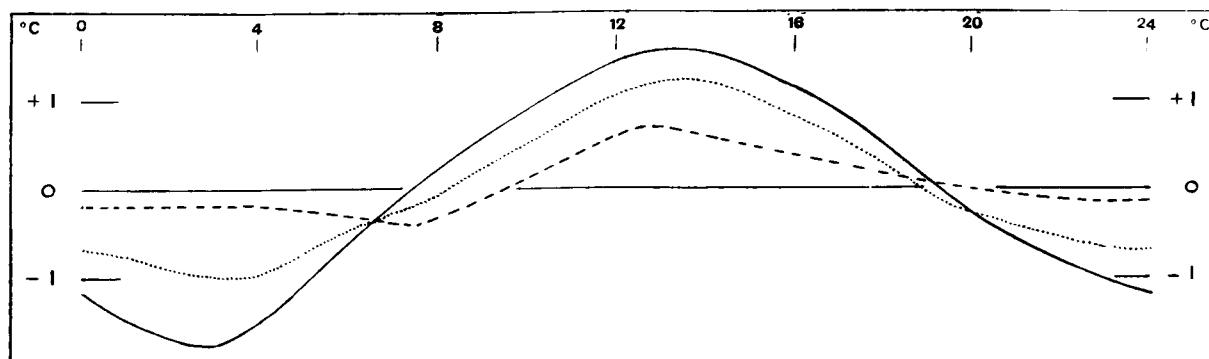


Fig. 7.—DIURNAL VARIATION OF TEMPERATURE AT CAPE PEMBROKE, JANUARY — JULY — — — YEAR ······ JANUARY.



TABLE IV.—MONTHLY MEANS OF PRESSURE AT GRYTVIKEN, SOUTH GEORGIA, AT M.S.L.  
Based on Observations at 8 h., 14 h., and 20 h.

	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
	mb.	mb.											
1906	999.9	992.0	991.2	996.1	989.0	1003.5	997.8	996.2	998.0	1000.6	989.1	992.4	995.5
1907	987.0	997.8	995.4	996.9	988.1	993.7	1001.1	1004.0	1001.1	1005.2	990.8	993.4	996.2
1908	994.5	996.6	1002.4	999.2	998.5	1001.8	989.8	1005.3	1005.5	999.5	992.9	994.7	998.4
1909	994.6	997.3	1000.4	991.7	994.8	1002.6	1001.3	999.1	1003.9	1004.6	995.9	995.8	998.5
1910	993.2	1003.2	1002.2	995.9	998.1	995.2	1001.8	998.3	1002.0	...	996.8	...	999.4
1911	...	...	...	...	1000.5	995.6	994.4	1005.1	998.0	989.6	1001.5	...	...
1912	1000.5	993.6	988.4	990.2	991.6	997.2	994.8	998.3	997.6	999.7	987.9	993.3	994.4
1913	991.5	993.8	994.2	996.0	998.9	993.7	993.7	1004.2	995.4	992.9	991.3	1000.0	995.5
1914	995.2	994.5	998.9	1001.8	994.7	996.2	1001.6	999.3	1000.2	989.0	992.5	1000.6	997.0
1915	999.2	993.0	1001.5	991.7	994.4	997.2	996.0	995.2	1005.5	1005.4	998.2	992.9	997.5
Mean	994.3	995.8	997.2	995.5	994.2	998.2	997.4	999.4	1001.4	999.4	992.5	997.3	996.9

from 1005.5 mb. in September 1908 and 1915 to 987.0 mb. in January 1907; at both places the range is larger in winter than in summer; the greater variability at Cape Pembroke is presumably due to its nearness to the South American continent and to the variable ice-streams from the Antarctic. The table for Cape Pembroke has been extended to include the figures from 1895 to 1901, which, however, are not so reliable as the later data. From June 1907 to July 1908, observations were taken every third hour instead of every fourth.

### §. 3. TEMPERATURE.

At Cape Pembroke (Table V., fig. 6) temperature is highest in January (282.6a or 49.3° F.) and lowest in July (275.6a or 36.7° F.), giving a range of only 7.0a or

TABLE V.—ANNUAL AND DIURNAL VARIATION OF TEMPERATURE AT CAPE PEMBROKE.

	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.
Mean of 6 daily observations, 10 years 1905-1915.	282.6	282.3	281.6	279.5	277.6	276.1	275.6	276.0	277.1	278.5	279.6	280.9	279.0
Mean daily max. .	285.7	285.5	284.6	282.1	279.7	278.0	277.5	278.0	279.8	281.4	282.9	284.0	281.6
Mean daily min. .	280.0	279.7	278.9	276.8	275.1	273.6	273.4	273.7	274.7	275.9	276.9	278.4	276.4
Mean monthly max. .	292.2	291.1	289.8	286.6	283.1	281.2	280.9	281.2	283.8	286.3	288.9	290.1	293.3
Mean monthly min. .	276.2	276.6	275.1	272.0	271.3	269.3	268.4	270.4	271.4	272.9	273.2	274.6	267.9
Highest max. .	295.2	296.9	291.9	288.0	286.3	282.4	284.7	283.0	285.2	288.0	292.4	294.1	296.9
Lowest min. .	274.1	273.6	273.0	270.2	270.8	266.9	265.8	266.9	270.2	271.3	270.8	273.0	265.8
Deviations from mean at various hours (local time):—													
0 h.	-1.2	-1.0	-0.8	-0.6	-0.3	-0.2	-0.2	-0.4	-0.7	-1.0	-1.1	-0.9	-0.7
4 h.	-1.5	-1.4	-1.1	-0.9	-0.3	-0.3	-0.2	-0.5	-0.9	-1.2	-1.5	-1.3	-1.0
8 h.	+0.2	0.0	-0.2	-0.3	-0.3	-0.3	-0.3	-0.3	-0.2	+0.1	+0.2	+0.2	-0.1
12 h.	+1.4	+1.5	+1.5	+1.2	+0.8	+0.5	+0.6	+1.0	+1.4	+1.4	+1.4	+1.2	+1.1
16 h.	+1.1	+1.2	+1.1	+0.9	+0.4	+0.3	+0.3	+0.6	+1.0	+1.0	+1.1	+0.9	+0.8
20 h.	-0.3	-0.2	-0.3	-0.3	-0.2	0.0	-0.1	-0.1	-0.3	-0.5	-0.3	-0.2	-0.3

12.6° F. The corresponding figures for Kew (40 years normal) are 290.1a (62.7° F.) in July and 276.8a (38.8° F.) in January, so that at Cape Pembroke the winters are slightly colder and the summers several degrees cooler, while the mean for the year (279.0a or 42.8° F., compared with 282.8a or 49.6° F. at Kew) is appreciably lower.

The latitudes of the two places are almost identical (Cape Pembroke,  $51^{\circ} 41' S.$ ; Kew,  $51^{\circ} 28' N.$ ).

Grytviken (Table VI.) is considerably colder, the mean temperature of January ( $279.0a$  or  $42.8^{\circ} F.$ ) being the same as that of the year at Cape Pembroke; while that of the warmest month, February is only  $279.4a$  or  $43.5^{\circ} F.$ , which is lower than the

TABLE VI.—ANNUAL AND DIURNAL VARIATION OF TEMPERATURE AT GRYTVIKEN.

	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
Mean of mean daily max. and mean daily min., 1905–1915.	a. 279.0	a. 279.3	a. 278.3	a. 275.9	a. 274.0	a. 271.4	a. 270.7	a. 271.5	a. 273.7	a. 275.1	a. 276.5	a. 277.2	a. 275.2
Mean daily max., 1905–1915.	282.7	283.3	282.1	279.1	277.1	274.0	273.7	274.8	277.3	278.7	279.8	280.7	278.6
Mean daily min., 1905–1915.	275.2	275.3	274.6	272.6	270.9	268.7	267.6	268.2	270.1	271.5	273.1	273.6	271.8
Mean monthly max., 1906–1915.	290.6	292.3	290.9	286.5	283.6	281.1	281.4	281.1	283.8	287.0	286.8	287.0	293.3
Mean monthly min., 1906–1915.	272.0	272.0	272.1	268.0	266.1	263.2	261.9	261.5	264.0	266.1	269.2	270.6	260.2
Absolute max., 1906–1915.	297.0	299.5	298.5	287.5	288.5	285.0	285.5	285.0	290.0	292.5	290.0	293.5	299.5
Absolute min., 1906–1915.	270.8	271.2	268.8	265.9	264.0	260.4	260.2	253.8	260.4	263.7	267.7	267.6	253.8
Mean at 8 h., 1906–1915.	278.5	278.4	277.6	275.4	273.9	271.1	270.6	270.8	273.1	274.7	276.1	276.9	274.8
Mean at 14 h., 1906–1915.	280.5	280.9	280.1	277.1	274.9	272.0	271.7	272.7	275.1	276.3	277.5	278.7	276.5
Mean at 20 h., 1906–1915.	278.4	278.5	277.7	275.7	273.9	271.3	270.7	271.3	273.2	274.3	275.5	276.5	274.8

January temperature of Valencia in  $51^{\circ} 56' N.$  Three months of the year at Grytviken have a mean temperature below freezing, July falling lowest with  $270.7a$  ( $27.9^{\circ} F.$ ). These figures indicate how “sub-arctic” is the climate of South Georgia, an oceanic island in a latitude comparable with that of the south of the British Isles.

The diurnal range at Cape Pembroke is  $5.2a$  or  $9.4^{\circ} F.$ , with a slight variation from  $6.0a$  in November to  $4.1a$  in July. At Grytviken the corresponding figures are  $6.8a$  ( $12.2^{\circ} F.$ ) for the year,  $8.0a$  in February, and  $5.3a$  in June. These differ little from Kew, where the range is  $7.4a$  ( $13.3^{\circ} F.$ ) in the mean for the year. The minimum, as is usual, most frequently occurs about sunrise, and the maximum during the early afternoon; but, owing to the cyclonic control of the weather, the maximum or minimum may occur at any hour, and the mean daily range of the aperiodic extremes is several times the range of the mean values at the different hours, especially in winter. The harmonic coefficients of the diurnal variation are shown in Table XXVII., from which it is seen that the diurnal component varies from  $1.5a$  in January to  $0.4a$  in June and July, with a maximum usually between 13 h. and 14 h. The semidiurnal term is small in comparison, especially in summer. The curves of diurnal variation of temperature at Cape Pembroke are given in fig. 7.

At Cape Pembroke there is astonishingly little variation in the mean temperature from year to year (Table VII.), conditions being almost tropical in this respect. In ten years the variation was only from  $278.7a$  to  $279.2a$ , a range of  $0.5a$  or  $0.9^{\circ} F.$ . January shows a range of mean temperature of  $1.4a$  and July of  $2.1a$ . At Grytviken

(Table VIII.) the temperature is more variable ; the range here is 2·1a or 3·8° F. for the year, 4·6a in January and 3·5a in July.

TABLE VII.—MONTHLY MEANS OF TEMPERATURE AT CAPE PEMBROKE.  
Mean of Six Daily Observations.

	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.
1905	282·2	281·1	281·7	279·4	276·8	276·1	274·7	275·7	277·0	278·4	280·4	280·8	278·7
1906	283·4	282·3	281·0	278·9	275·8	275·8	275·0	276·3	276·8	278·4	279·9	280·8	278·7
1907	283·1	283·0	282·2	279·8	277·9	...	...	...	...	...	...	...	...
1908	...	...	...	...	...	...	...	276·6	277·8	277·9	279·2	279·9	...
1909	282·6	281·6	281·5	280·2	278·4	277·2	276·2	276·6	277·1	278·7	279·4	280·6	279·2
1910	282·3	282·0	281·6	279·1	278·0	275·9	275·8	276·6	277·4	278·4	280·3	281·8	279·1
1911	282·2	282·2	281·4	279·3	278·5	277·2	276·8	276·0	277·2	277·9	278·7	281·1	279·0
1912	283·1	282·3	281·2	279·8	277·1	275·8	275·4	275·1	277·0	278·9	279·2	280·6	278·8
1913	282·4	282·6	280·8	279·7	277·7	275·6	275·2	276·1	277·8	279·0	280·0	281·2	279·0
1914	282·2	283·2	282·7	280·5	278·8	275·9	275·2	276·1	276·1	278·2	278·3	281·2	279·0
1915	282·0	282·9	282·2	278·2	277·1	275·3	276·1	275·2	277·1	278·7	280·3	281·4	278·9

TABLE VIII.—MONTHLY MEANS OF TEMPERATURE  $\left(\frac{\text{MAX.} + \text{MIN.}}{2}\right)$  AT GRYTVIKEN,  
SOUTH GEORGIA.

	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.	a.
1906	280·5	280·0	280·0	276·2	272·9	270·8	272·5	274·1	274·9	276·4	278·3	280·4	276·4
1907	281·4	283·3	280·2	277·0	276·3	272·0	271·3	268·1	271·6	273·8	276·1	276·3	275·6
1908	278·3	280·0	279·9	277·3	274·3	270·6	270·7	273·5	275·7	274·9	277·5	276·3	275·8
1909	279·6	278·2	277·9	275·7	274·0	271·7	271·5	273·7	272·6	275·5	276·3	277·4	275·4
1910	279·2	278·8	277·9	275·6	273·0	271·8	272·0	271·7	273·4	...	277·1	...	...
1911	...	...	...	...	...	271·0	271·0	271·6	272·9	275·2	274·2	275·2	...
1912	278·5	278·9	277·4	274·4	274·0	271·3	269·0	269·8	273·8	274·2	274·4	276·1	274·3
1913	276·8	277·9	276·1	274·7	274·6	269·6	269·0	270·5	274·2	275·3	275·2	277·4	274·3
1914	278·3	279·3	278·6	277·0	275·6	272·1	270·2	271·4	273·3	273·8	275·0	278·3	275·2
1915	278·4	278·1	278·6	275·5	272·4	270·4	270·7	269·3	273·2	274·7	278·8	277·0	274·8

Tables IX. and X. show the frequency distribution of daily maximum and minimum temperatures at Cape Pembroke within various limits in the different months. These

TABLE IX.—FREQUENCY DISTRIBUTION OF DAILY MAX. TEMPERATURES AT CAPE PEMBROKE, 1905–1915, Reduced to Percentages and Steps of 2·5 a.

	265– 267·5.	267·5– 270.	270– 272·5.	272·5– 275.	275– 277·5.	277·5– 280.	280– 282·5.	282·5– 285.	285– 287·5.	287·5– 290.	290– 292·5.	292·5– 295.	295– 297·5.
Jan.	...	...	...	...	...	1	11	36	24	20	6	2	...
Feb.	...	...	...	...	...	0	10	38	33	14	4	0	1
Mar.	...	...	...	...	...	3	18	43	28	6	2	...	...
April	...	...	...	...	3	16	38	32	10	1	...	...	...
May	...	...	...	2	14	36	42	5	1	...	...	...	...
June	...	...	0	10	26	54	10	...	...	...	...	...	...
July	...	...	1	12	36	44	6	1	...	...	...	...	...
Aug.	...	...	0	3	33	52	11	1	...	...	...	...	...
Sept.	...	...	...	1	10	51	28	9	1	...	...	...	...
Oct.	...	...	...	...	3	32	33	23	8	1	...	...	...
Nov.	...	...	...	...	1	11	35	33	14	5	1	...	...
Dec.	...	...	...	...	...	3	29	39	20	7	2	0	...
Year	...	...	0	2	11	25	23	22	12	4	1	0	0

"0" indicates between 0·01 and 0·5; blank indicates no observations.

show that really hot days are unknown, and on only about four days in the year (1 per cent.) does the maximum temperature exceed 290a ( $62.6^{\circ}$  F.). On the other hand, minimum temperatures below 272.5a ( $31.1^{\circ}$  F.) may be expected on about forty days in each year (11 per cent.). It is noticeable, also, that the minimum temperature of a day in January, the warm month, may be several degrees below the minimum of a day in July, the cold month; this is, however, less true of the maximum temperatures. Spring, summer, and autumn, and also the year, show a "skew" frequency curve, with the slope steep to the left; this indicates that temperatures below the average are more frequent than those above, but the latter may deviate more greatly from it. In the winter months the reverse holds, the frequency curves being steeper to the right.

TABLE X.—FREQUENCY DISTRIBUTION OF DAILY MIN. TEMPERATURES AT CAPE PEMBROKE, 1905–1915, Reduced to Percentages and Steps of 2.5 a.

	265– 267.5.	267.5– 270.	270– 272.5.	272.5– 275.	275– 277.5.	277.5– 280.	280– 282.5.	282.5– 285.	285– 287.5.	287.5– 290.	290– 292.5.	292.5– 295.	295– 297.5.
Jan.	...	...	...	3	13	37	33	12	1	1	...	...	...
Feb.	...	...	...	1	17	39	34	9	...	...	...	...	...
Mar.	...	...	...	6	24	41	25	4	...	...	...	...	...
April	...	...	8	18	32	30	11	1	...	...	...	...	...
May	...	...	17	34	31	16	2	...	...	...	...	...	...
June	1	5	26	41	24	3	...	...	...	...	...	...	...
July	1	7	25	43	23	1	...	...	...	...	...	...	...
Aug.	1	2	19	54	23	1	...	...	...	...	...	...	...
Sept.	...	...	13	45	38	4	...	...	...	...	...	...	...
Oct.	...	...	4	28	51	17	0	...	...	...	...	...	...
Nov.	...	...	5	18	40	29	8	...	...	...	...	...	...
Dec.	...	...	...	4	32	44	18	2	...	...	...	...	...
Year	0	1	10	25	29	22	11	2	0	0	...	...	...

Table XI. shows the average change of temperature from noon of one day to noon of the next day at Cape Pembroke. This average is 1.8a for the year, and is greater in summer than in winter. The variation in the annual means is not great, but it is interesting that the minimum corresponds with the years of sunspot minimum, and the maximum with the years of sunspot maximum, though, of course, many more years are needed to show whether the connection is real.

TABLE XI.—AVERAGE CHANGE OF TEMPERATURE FROM NOON ONE DAY TO NOON NEXT DAY AT CAPE PEMBROKE, 1905–1915, in Degrees Absolute.

	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
1905	1.5	1.9	1.7	1.7	1.3	2.1	1.8	1.5	2.1	2.1	2.4	2.8	1.9
1906	2.2	1.9	2.3	2.0	2.4	1.6	1.6	1.6	1.8	1.1	2.7	1.9	1.9
1907	3.3	2.7	1.6	1.5	1.6	...	...	...	...	...	...	...	...
1908	...	...	...	...	...	...	...	0.9	2.2	1.8	2.4	2.1	...
1909	2.1	2.1	2.1	2.1	1.6	1.6	1.7	1.7	1.9	2.2	2.4	1.7	1.9
1910	1.8	2.3	2.3	1.6	1.3	1.4	1.6	1.7	1.7	2.1	2.2	2.1	1.8
1911	2.7	1.9	2.2	1.1	1.1	1.2	1.6	1.4	1.6	2.4	1.3	1.4	1.7
1912	1.8	1.1	1.9	2.1	2.0	1.6	1.4	1.2	1.7	1.9	2.1	1.5	1.7
1913	1.8	2.2	1.7	1.6	1.8	1.9	1.4	1.3	1.6	1.7	1.8	1.9	1.7
1914	2.0	2.2	2.0	1.9	1.8	1.3	1.3	1.6	1.1	2.6	2.2	1.9	1.8
1915	2.6	2.4	2.2	1.8	1.7	1.9	1.0	1.6	1.6	1.7	2.3	1.1	1.8
Mean	2.2	2.1	2.0	1.7	1.7	1.6	1.5	1.5	1.7	2.0	2.2	1.8	1.8



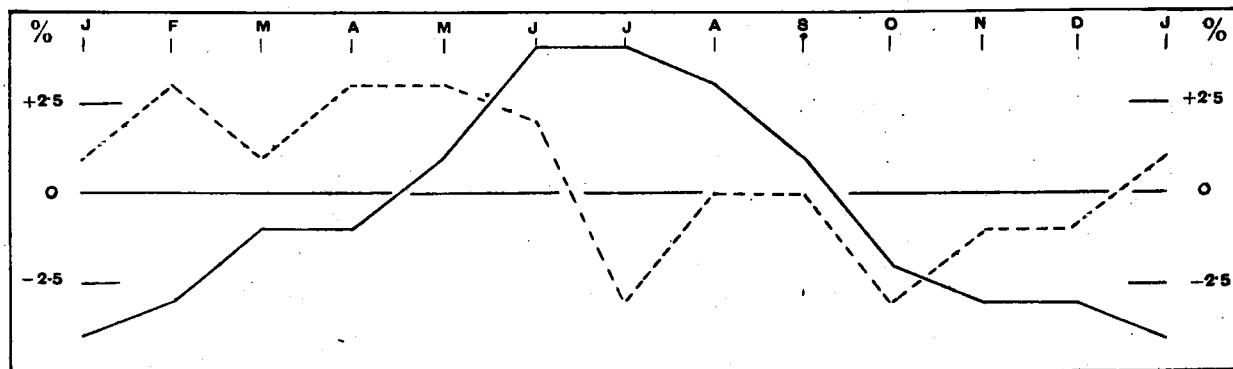


Fig. 8.—ANNUAL VARIATION OF RELATIVE HUMIDITY, CAPE PEMBROKE—GRYTVIKEN —— GRYTVIKEN ---

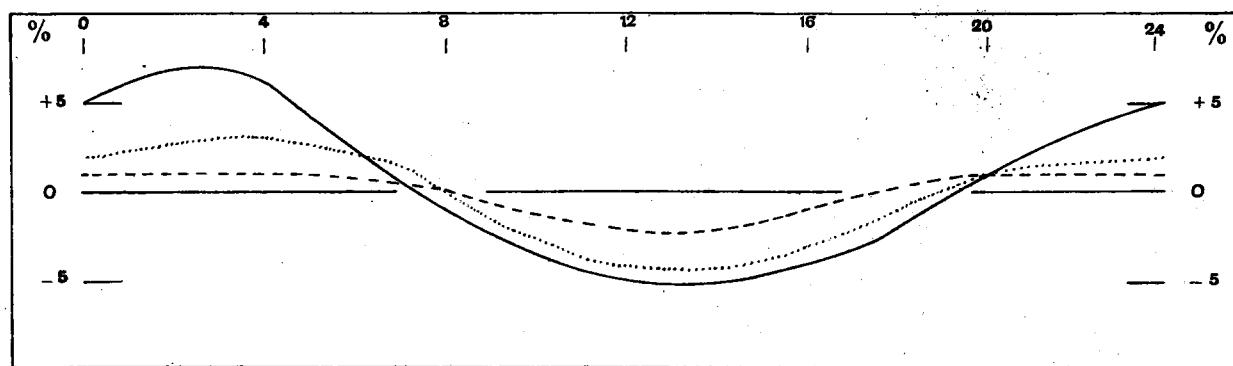


Fig. 9.—DIURNAL VARIATION OF RELATIVE HUMIDITY AT CAPE PEMBROKE, JANUARY—JULY—YEAR -----

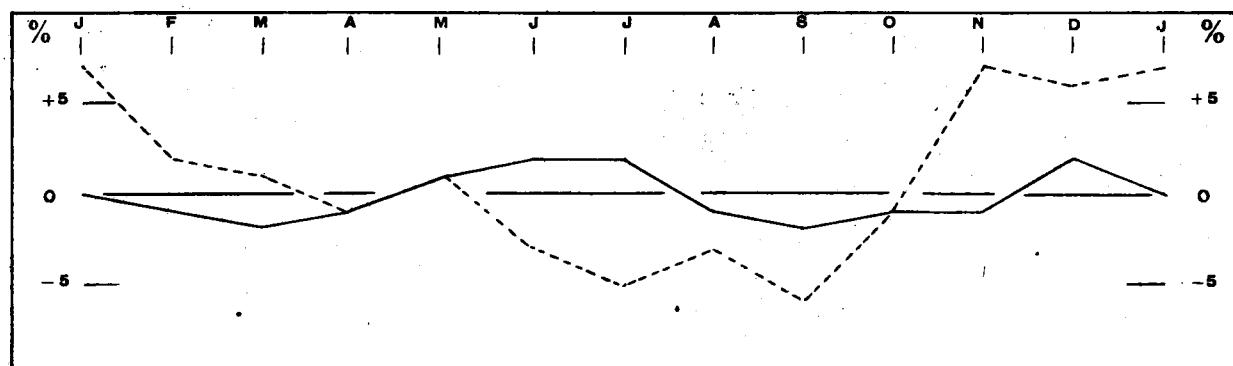


Fig. 10.—ANNUAL VARIATION OF CLOUDINESS, CAPE PEMBROKE —— GRYTVIKEN ---

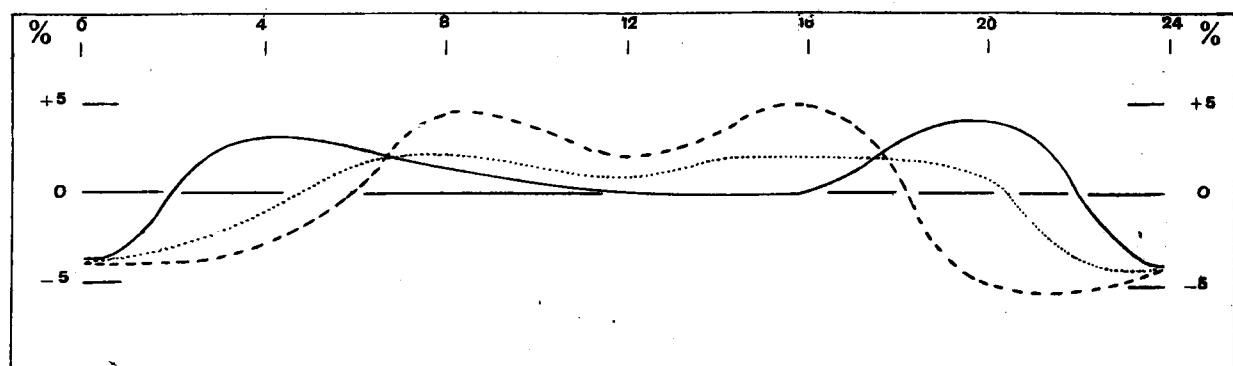


Fig. 11.—DIURNAL VARIATION OF CLOUDINESS AT CAPE PEMBROKE, JANUARY—JULY—YEAR -----

## § 4. RELATIVE HUMIDITY.

Table XII. shows the annual and diurnal variation of relative humidity at Cape Pembroke, and Table XIV. the annual variation at Grytviken. At the former the annual mean is as high as 84 per cent., and in winter the air is moister than in summer

TABLE XII.—ANNUAL AND DIURNAL VARIATION OF RELATIVE HUMIDITY AT CAPE PEMBROKE, 1905–1915. Percentage of Saturation.

	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
Mean	80	81	83	83	85	88	88	87	85	82	81	81	84
Deviation at various hours :—													
0 h.	+5	+4	+3	+3	+1	0	+1	+1	+3	+4	+4	+4	+2
4 h.	+6	+5	+4	+4	+2	+1	+1	+1	+3	+4	+5	+5	+3
8 h.	-1	0	+1	+2	+1	0	0	+1	+2	0	-1	-1	0
12 h.	-5	-5	-6	-4	-2	-2	-2	-3	-4	-4	-5	-3	-4
16 h.	-4	-4	-4	-2	-1	-1	-1	-2	-3	-3	-5	-3	-3
20 h.	+1	+1	+1	+2	0	0	+1	0	+2	+2	+1	+1	+1

(June–July 88 per cent.; January, 80 per cent.). This is the usual course of variation; but at Grytviken it is reversed (for comparison, see fig. 8), the air being on the whole drier in winter and spring than in summer and autumn, while the mean for the year, 75 per cent., is 9 per cent. lower than at Cape Pembroke. Both the reversal of the annual variation and the greater dryness are probably to be attributed to the “Föhn” winds descending from the mountainous glaciated interior of South Georgia.

At Cape Pembroke (fig. 9) the relative humidity is greatest in the early morning (2 h.) and least in the early afternoon; this calls for no remark. The results of the harmonic analysis of the diurnal variation are shown in Table XXVII.; the diurnal term ranges from 5·8 per cent. in January to 1·2 per cent. in June; the semidiurnal component is unimportant.

## § 5. CLOUDINESS.

The annual variation of cloudiness, shown in Tables XIII. and XIV. and fig. 10, corresponds to that of the relative humidity, being greatest in winter at Cape Pembroke

TABLE XIII.—ANNUAL AND DIURNAL VARIATION OF CLOUDINESS AT CAPE PEMBROKE, 1905–1915. Tenths of Sky Covered.

	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
Mean	7·1	7·0	6·9	7·0	7·2	7·3	7·3	7·0	6·9	7·0	7·0	7·3	7·1
Deviation at various hours :—													
0 h.	-·4	-·7	-·3	-·4	-·3	-·5	-·4	-·5	-·4	-·4	-·4	-·4	-·4
4 h.	+·3	+·1	-·1	-·4	-·3	-·3	-·3	-·3	-·3	+·2	+·1	+·3	-·1
8 h.	+·1	+·2	+·3	+·3	+·4	+·5	+·4	+·2	+·3	+·2	+·1	0	+·2
12 h.	0	+·1	+·2	+·2	+·4	+·3	+·2	+·3	+·2	+·1	0	-·2	+·1
16 h.	0	+·1	+·1	+·4	+·5	+·5	+·5	+·7	+·2	+·1	0	0	+·2
20 h.	+·4	+·1	0	-·2	-·3	-·4	-·5	-·3	-·4	-·2	+·2	+·2	-·1

and in summer at Grytviken; while the skies at both places are greatly clouded, Cape Pembroke is the cloudier. The diurnal variation at Cape Pembroke (fig. 11) shows the nights to be clearer than the days to an extent of about 6 per cent., with a minimum about 1 h. The harmonic coefficients are shown in Table XXVII., which indicates a

TABLE XIV.—ANNUAL VARIATION OF RELATIVE HUMIDITY AND CLOUDINESS AT GRYTVIKEN, 1906–1915. Mean of Observations at 8 h., 14 h., and 20 h.

	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Y
R.H., per cent.	76	78	76	78	78	77	72	75	75	72	74	74	75
Cloud, tenths.	7.5	7.0	6.9	6.7	6.9	6.5	6.3	6.5	6.2	6.7	7.5	7.4	6.8

remarkable change from a predominantly semidiurnal variation in December–January (max. 6 h. and 18 h.) to a predominantly diurnal variation in April to September (max. about 11 h.). July shows two marked maxima about 8 h. and 16 h. (fig. 11).

#### § 6. SUNSHINE.

The average proportion of bright sunshine in each hour of the day for each month recorded at Stanley, Falkland Islands, in 9–10 years 1906–1915, is shown in Table XV., which also gives the relative frequencies of days with various amounts of sunshine. The figures for the individual years are given in the Appendix. In Table XV. the

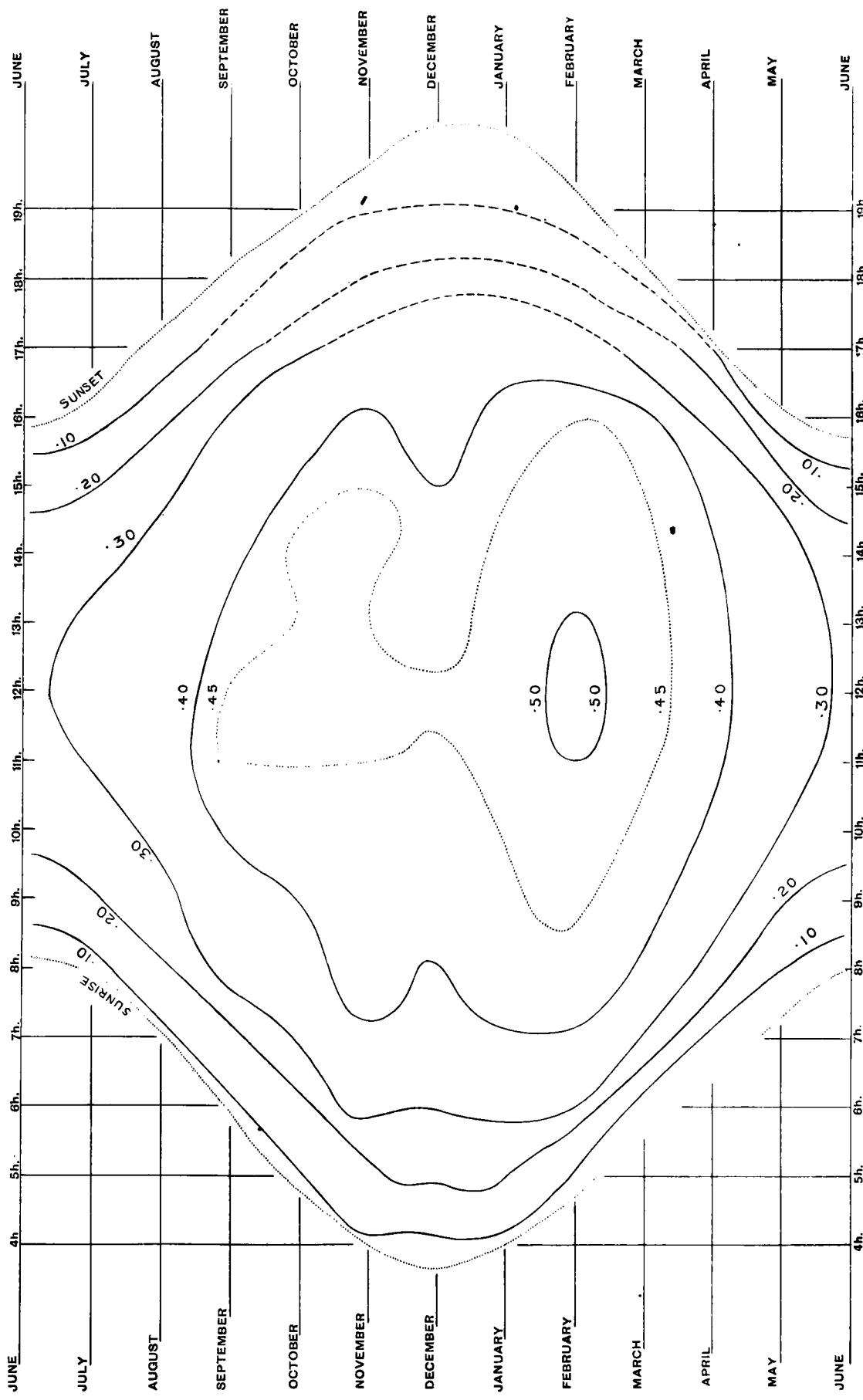
TABLE XV.—AVERAGE PROPORTION OF BRIGHT SUNSHINE AT STANLEY, FALKLAND ISLANDS (9–10 YEARS, 1906–1915), AND FREQUENCIES OF VARIOUS DAILY AMOUNTS.

	4 h.	5 h.	6 h.	7 h.	8 h.	9 h.	10 h.	11 h.	12 h.	13 h.	14 h.	15 h.	16 h.	17 h.	No. of Days of:						
															Hrs. o.	Hrs. 0–3	Hrs. 3–6	Hrs. 3–9	Hrs. >9		
January .	.02	.21	.32	.38	.43	.44	.45	.47	.48	.47	.46	.45	.43	.35	5.36	2	8	8	8	5	
February .	...	.05	.30	.39	.43	.47	.49	.50	.52	.51	.47	.43	.45	.34	5.35	1	7	7	8	5	
*March .	...	...	.05	.25	.39	.42	.43	.46	.47	.46	.47	.45	.42	.22	4.49	3	9	8	7	4	
*April .	...	...	...	.08	.27	.34	.38	.41	.43	.40	.40	.39	.27	.07	3.44	4	12	8	5	1	
*May .	...	...	...	...	.08	.24	.30	.34	.35	.34	.33	.25	.07	...	2.30	9	10	8	4	0	
June (9 yrs.)	...	...	...	...	.02	.15	.24	.26	.28	.26	.25	.15	.01	...	1.62	10	13	6	1	0	
July .	...	...	...	...	.03	.20	.26	.31	.34	.31	.26	.20	.03	..	1.24	10	13	6	2	0	
*August .	...	...	...	...	.02	.16	.27	.32	.35	.34	.34	.34	.28	.18	.02	2.62	7	13	8	3	0
*September .	...	...	...	...	.02	.18	.31	.37	.42	.45	.45	.42	.39	.38	.32	1.12	3.83	5	9	7	2
October .	...	.01	.16	.30	.36	.40	.43	.45	.46	.45	.46	.41	.37	.22	4.48	3	9	8	7	4	
*Nov. (9 yrs.)	.01	.18	.34	.39	.43	.42	.43	.45	.47	.45	.44	.45	.42	.31	5.19	2	7	9	8	4	
Dec. (9 yrs.)	.04	.21	.30	.36	.39	.42	.43	.44	.46	.43	.43	.40	.37	.33	5.01	3	8	8	7	5	
Year .	..	.01	.05	.12	.20	.28	.34	.38	.41	.42	.40	.39	.35	.28	.17	3.80	59	118	91	67	30

\* Cards missing for: May 26, 1911; August 2, 21, November 5, 1912; September 1–10, November 1–5, 1913; March 3, 1914; April 11, 21–30, May 1–12, 14, 27, 29, 1915.

amount entered to each hour refers to the period from half-an-hour before to half-an-hour after the hour; fig. 12 gives the corresponding isopleth diagram. From this table and diagram we see that the average duration only reaches 50 per cent. of the possible during the three mid-day hours of February; in June it does not reach 30 per cent. even

STANLEY, FALKLAND ISLANDS.  
HELIOSCOPETH.  
(9-10 YEARS, 1906-1915.)





at mid-day. January and February are the sunniest months (5·4 hours) and June the least sunny (1·6 hours). During the year an average of 177 days, or nearly half, have less than three hours of bright sunshine. It must be noted that the exposure is imperfect to the west and south-west, so that no sunshine is recorded after 17 h. 30 m.

## § 7. PRECIPITATION.

The data are not sufficient for a detailed discussion of the distribution of rainfall over the islands, since all the stations are on the sheltered eastern sides where the falls

TABLE XVI.—PRECIPITATION.

*Annual Variation of Precipitation in mm. and max. fall in 24 hours in the Falkland Islands and South Georgia.*

are not excessive (Table XVI.). At Stanley the average annual rainfall is only about 640 mm. (25 inches), but in South Georgia it is about 1400 mm. (56 inches). On the exposed western coasts and on the high ground of the interior the falls must be much greater. The amounts are fairly evenly distributed throughout the year, but are greatest in the Falkland Islands in summer and in South Georgia in summer and especially in autumn (fig. 13), corresponding to the period of the year when the pressure is lowest and the storm tracks furthest north.

The rainfall is distributed among a large number of rainfall days (Tables XIX., XX.), so that excessive falls in one day are not frequent, especially at Stanley, where the greatest daily fall in thirteen years was only 43 mm. (1·7 inch). At Grytviken, 103 mm.

TABLE XVII.—MONTHLY RAINFALL AT STANLEY, FALKLAND ISLANDS, IN MM.

	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
1875	83	84	45	61	37	36	30	23	21	27	32	74	554
1876	83	51	54	27	42	28	70	43	40	33	23	25	519
1877	41	31	31	65	50	45	40	23	26	43	32	50	477
1881	...	...	...	...	...	...	79	51	47	50	45	88	...
1882	71	61	70	77	132	57	21	51	43	55	70	65	773
1883	84	76	136	84	43	44	67	30	36	14	52	81	747
1891	52	86	42	22	30	...	...	...	...	...	...	...	...
1904	...	...	...	...	...	...	...	52	62	71	41	72	...
1905	91	116	48	54	71	64	66	53	9	33	27	70	702
1906	53	47	68	55	56	74	53	38	23	59	41	85	652
1907	27	43	19	31	53	45	47	31	35	39	66	91	527
1908	62	56	63	51	46	33	65	27	44	72	78	45	642
1909	59	54	58	90	63	52	31	38	3	40	17	51	556
1910	96	62	21	68	111	44	50	76	28	6	64	77	703
1911	166	42	60	84	100	62	109	104	34	40	72	63	936
1912	51	109	68	54	39	33	23	42	25	34	66	88	632
1913	45	44	115	68	59	61	36	57	15	33	64	66	663
1914	80	41	36	53	36	62	...	...	...	...	...	...	...

(4·1 inch) was recorded on March 7th, 1909. The occurrence of rain is noted at Cape Pembroke, but there is no rain-gauge, and the average of 253 rain days probably includes some with inappreciable amounts.

The individual monthly falls at Stanley are shown in Table XVII. and at Grytviken

TABLE XVIII.—MONTHLY RAINFALL AT GRYTVIKEN, SOUTH GEORGIA, IN MM.

	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
1906	104	284	175	45	91	28	24	24	80	69	98	67	1089
1907	80	64	97	130	110	87	113	47	111	44	67	158	1108
1908	53	114	72	98	118	66	253	139	107	201	128	69	1418
1909	52	90	227	208	147	88	98	136	100	94	167	184	1590
1910	58	31	102	187	185	124	131	176	165	...	75	...	...
1911	...	...	...	...	...	141	107	217	36	62	105	46	...
1912	64	222	147	112	166	35	71	97	67	66	158	144	1349
1913	105	126	230	99	335	177	124	94	76	34	133	80	1613
1914	87	64	54	148	85	115	164	112	35	53	75	54	1046
1915	51	146	94	221	181	237	196	206	65	22	99	44	1562

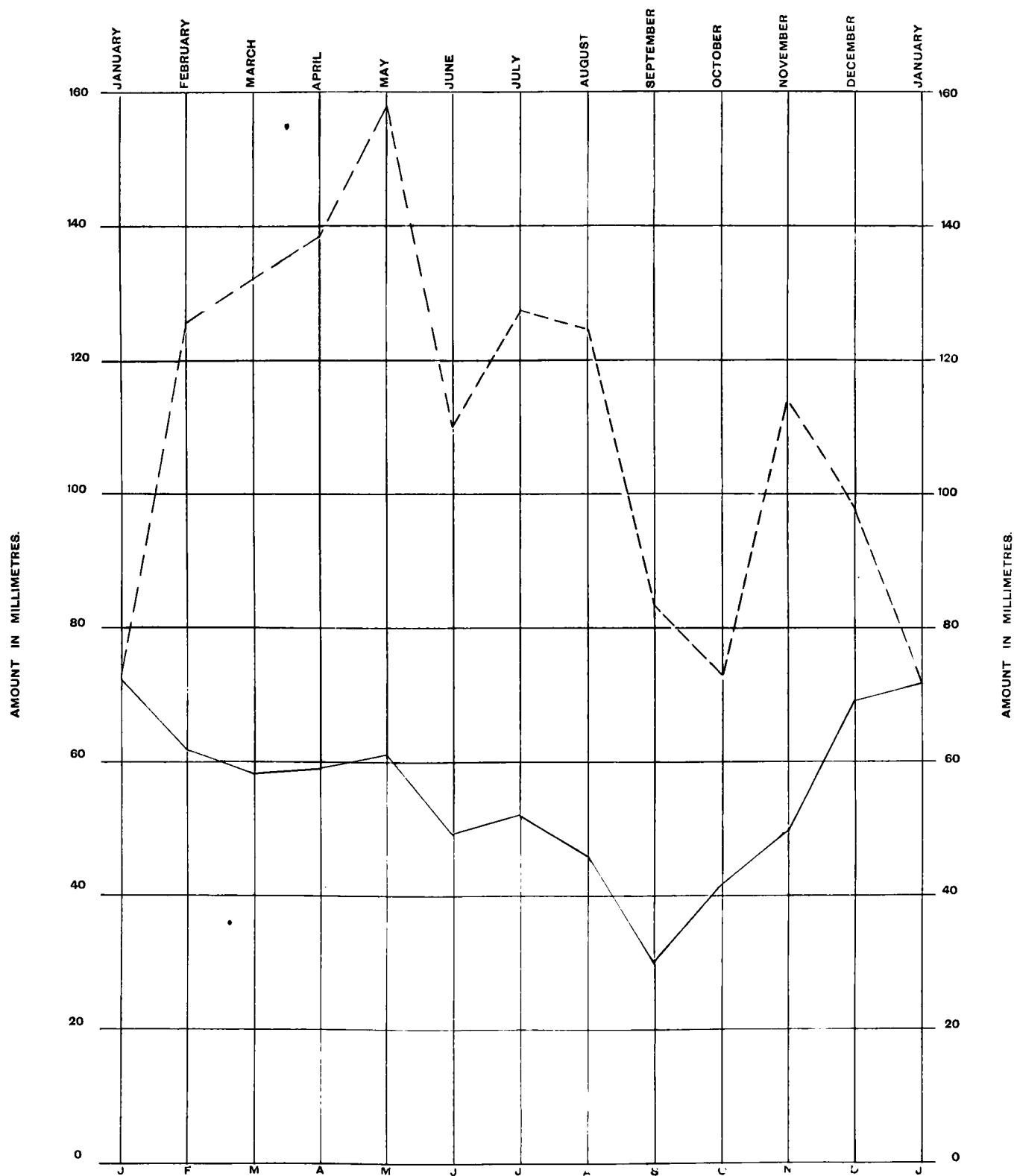


Fig. 13.—ANNUAL VARIATION OF RAINFALL AT STANLEY— AND GRYTVIKEN — — —



in Table XVIII. From these it is seen that the variation is not extreme, no month being entirely rainless at Stanley, though the fall in September 1909 was only 3 mm.; the smallest monthly total at Grytviken was 22 mm. in October 1915. In no month at either station did the fall reach three times the average for that month, though 335 mm. (13·3 inches) were recorded in May 1913 at Grytviken. The relative variation from year to year is greater at Stanley, probably owing to its lesser distance from the South American continent.

*Snow* (Tables XIX., XX.) has occurred in every month except January and February at Cape Pembroke, though it is rare in December and March, and the annual total averages

TABLE XIX.—AVERAGE FREQUENCY OF DAYS WITH HYDROMETEORS AT CAPE PEMBROKE, 1905–1915.

	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
Precipitation .	22	21	19	21	23	24	23	22	17	18	22	21	253
Snow . .	0	0	1	4	7	10	11	8	5	3	4	1	54
Hail . .	2	2	2	4	3	2	2	2	2	3	4	3	31
Thunderstorms.	0·9	0·6	0·5	0·3	0·0	0·0	0·0	0·0	0·0	0·1	0·4	1·0	3·8
Fog . .	6	3	5	4	3	5	6	4	5	5	3	5	54

only 54 days. At Grytviken the annual total averages 109 days, and snow is fairly frequent even in the summer months. *Hail* occurs on an average two or three times a month, and is fairly evenly distributed through the year at both stations.

TABLE XX.—AVERAGE FREQUENCY OF DAYS WITH HYDROMETEORS AT GRYTVIKEN, 1906–1915.

	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
Precipitation	16	16	17	19	20	15	17	16	14	13	18	15	196
Snow . .	4	4	6	9	12	11	13	14	10	9	10	7	109
Hail . .	2	3	2	3	4	2	1	1	2	1	2	2	25
Thunderstorms.	0·0	0·1	0·1	0·0	0·1	0·0	0·0	0·0	0·0	0·0	0·0	0·2	0·5
Fog . .	3	3	3	3	3	1	1	1	2	2	1	2	25

*Thunderstorms* (Tables XIX., XX.) are rare at Cape Pembroke, where they average four a year, confined to the summer months; at Grytviken they are very rare, averaging only one in two years.

#### § 8. FOG.

*Fog* (Tables XIX., XX.) is of great importance at Cape Pembroke, as it occurs on an average of 54 days, distributed through the year. At Grytviken it is less frequent (25 days), and occurs chiefly in the summer and autumn. The diurnal variation at Cape Pembroke is not marked in winter, but is fairly evident in summer. Table XXI. shows the average number of occurrences of at least fifteen minutes' fog at Cape Pembroke, grouped into six four-hourly intervals. Dividing the year into two periods we have:

Hours.	0-4.	4-8.	8-12.	12-16.	16-20.	20-24.	Sum.
Nov.-Apr.	12	12	8	7	10	11	60
May-Oct.	9	11	10	9	11	10	60

TABLE XXI.—DIURNAL VARIATION OF FOG AT CAPE PEMBROKE, 1905–1915.  
Number of Occurrences of at least 15 minutes' Fog between the hours specified.

Hours.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
0–4	3	1	2	2	1	1	2	1	2	2	1	3	21
4–8	2	1	3	2	1	1	2	2	3	2	1	3	23
8–12	1	1	2	1	1	2	2	1	2	2	1	2	18
12–16	1	1	1	1	1	2	2	1	2	1	1	2	16
16–20	2	1	2	2	1	2	2	2	2	2	1	2	21
20–24	3	1	2	2	1	2	2	1	2	2	1	2	21

These figures show that in summer there is a maximum of fog frequency about 4 h. and a minimum about 13 h., while in winter there is practically no diurnal variation; the total numbers of occurrences in the two seasons are equal.

### § 9. WINDS.

Table XXII. shows the percentage frequency of calms and of winds from various directions at Cape Pembroke, and Table XXIII. the corresponding figures at Grytviken.

TABLE XXII.—PERCENTAGE OF WINDS UNDER DIFFERENT DIRECTIONS AT CAPE PEMBROKE, 1905–1915. Summary of Six Observations Daily.

	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
Calm	2	1	1	1	1	1	1	1	1	0	1	2	1
N	13	15	19	15	16	14	15	18	21	18	16	16	16
NE	9	6	6	6	6	7	7	7	5	6	5	9	7
E	3	2	1	1	2	2	2	2	1	1	2	4	2
SE	3	2	1	2	2	6	3	2	1	2	1	5	3
S	6	6	6	6	8	11	8	6	3	7	5	6	7
SW	24	21	20	18	14	14	14	15	15	18	24	24	18
W	20	25	20	25	24	21	27	24	23	20	23	15	22
NW	20	22	26	26	27	24	23	25	30	28	23	19	24

These show the predominant winds to be from NW. at both stations; winds between E. and SE. are comparatively rare; they are more frequent in summer and winter than in spring and autumn, especially at Cape Pembroke.

TABLE XXIII.—PERCENTAGE OF WINDS UNDER DIFFERENT DIRECTIONS AT GRYTVIKEN, 1906–1915, at 8 h., 14 h., and 20 h.

	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
Calm	18	21	21	29	25	28	19	24	19	21	16	13	21
N	13	12	12	15	9	8	12	11	14	18	10	13	12
NE	9	7	8	5	5	5	7	7	7	9	7	12	7
E	6	5	5	4	3	2	3	4	2	4	6	10	5
SE	10	7	4	5	4	8	5	5	4	4	8	13	7
S	3	4	3	2	1	4	3	2	2	4	3	3	3
SW	5	7	6	5	6	5	5	8	7	5	7	5	6
W	15	13	15	14	16	12	17	15	20	10	15	9	14
NW	21	24	26	21	31	28	29	24	25	25	28	22	25



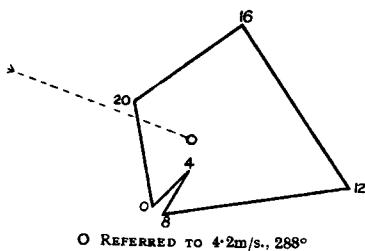
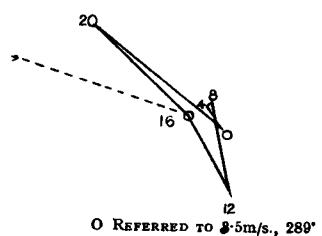
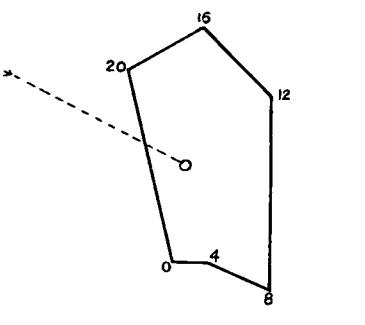
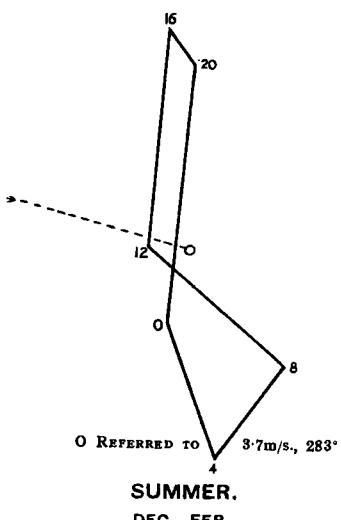
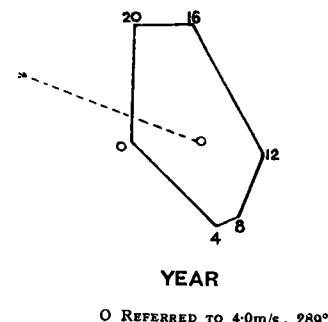
## CAPE PEMBROKE.

## VARIATION OF WIND.

1905-1915.

## DIURNAL.

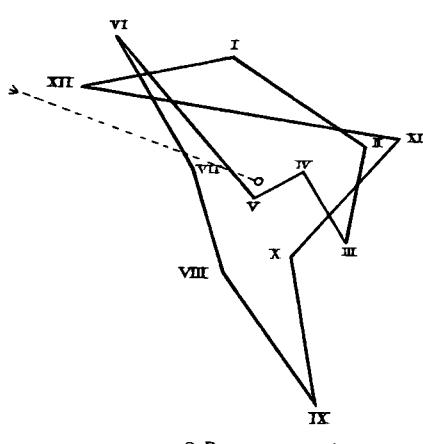
SCALE 1 INCH = 0.5 m/s.

AUTUMN.  
MAR - MAY.WINTER.  
JUNE - AUG.SPRING.  
SEPT. - NOV.SUMMER.  
DEC. - FEB.

YEAR

## ANNUAL.

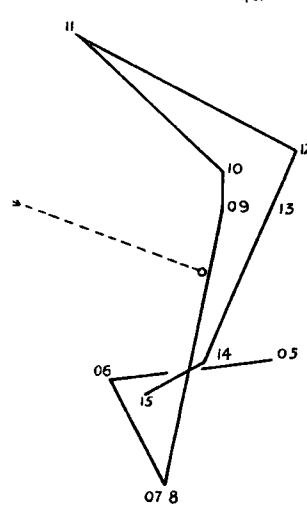
SCALE 1 INCH = 1 m/s.



O REFERRED TO 4.0m/s., 280°

## SECULAR.

SCALE 1 INCH = 1 m/s.



O REFERRED TO 4.0m/s., 289°

At Cape Pembroke an estimate has been made of the resultant wind direction and velocity. The method of calculation was as follows : The average wind-force (Beaufort Scale) was found under each direction (16 points), and converted to metres per second ; this was multiplied by the total number of occurrences of wind of that direction. These figures were then resolved into N.-S. and E.-W. components, and all the components in each direction were summed. From these two sums the final resultant wind direction and velocity were calculated. This was done for each hour separately and also for all the hours together ; the results are shown in Table XXIV. Taking the monthly means first, there is seen to be a semi-annual variation, the winds being most northerly in autumn

TABLE XXIV.—RESULTANT WIND DIRECTION IN DEGREES AND VELOCITY IN METRES PER SECOND AT CAPE PEMBROKE, 1905–1915.

	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
<i>Mean of day :—</i>													
Direction . . .	280	284	290	287	290	279	289	297	302	293	283	285	289
Velocity . . .	3.64	4.57	4.55	4.24	4.01	2.96	3.58	3.98	4.86	4.36	4.67	2.88	4.00
<i>Resultants at various hours :—</i>													
0 h.													
Direction . . .	287	286	290	291	295	277	292	295	299	301	288	287	291
Velocity . . .	3.62	4.29	4.43	4.37	3.98	2.98	3.88	4.05	4.83	4.39	4.89	3.19	4.06
4 h.													
Direction . . .	287	293	290	288	293	281	286	295	303	296	288	293	292
Velocity . . .	3.89	4.57	4.69	4.36	3.82	2.93	3.53	4.13	4.93	4.45	5.00	3.45	4.13
8 h.													
Direction . . .	282	290	296	291	288	277	286	299	306	292	286	286	291
Velocity . . .	3.82	4.79	4.67	4.24	3.91	3.15	3.66	3.86	5.37	4.61	5.07	3.36	4.17
12 h.													
Direction . . .	279	285	293	288	286	282	292	298	301	288	278	285	288
Velocity . . .	3.47	4.77	5.04	4.50	4.62	3.26	3.69	4.25	5.25	4.51	4.67	2.49	4.17
16 h.													
Direction . . .	269	274	287	278	288	280	288	296	301	288	274	280	284
Velocity . . .	3.49	4.84	4.54	4.42	3.94	2.97	3.51	4.04	4.84	4.38	4.67	2.31	3.94
20 h.													
Direction . . .	271	274	286	286	289	275	289	293	300	292	279	280	285
Velocity . . .	3.75	4.49	4.01	4.21	3.92	2.91	3.18	3.53	4.72	3.93	4.53	2.66	3.78

(March and May,  $290^\circ = \text{W}20^\circ\text{N}$ ) and in spring (September,  $302^\circ = \text{W}32^\circ\text{N}$ ). The mean for the year is  $289^\circ$  ( $\text{W}19^\circ\text{N}$ ). The direction most nearly approaches west in January ( $280^\circ = \text{W}10^\circ\text{N}$ ) and June ( $279^\circ = \text{W}9^\circ\text{N}$ ). The resultant velocity for the year is 4.00 metres per second or 9.0 miles per hour, a total run of nearly 80,000 miles in a year. This semi-annual oscillation is brought out in the first diagram of fig. 15.

The diurnal variation is marked in summer, but is almost obliterated in winter. The seasonal and annual diagrams are shown in fig. 14 ; the latter is very regular, and indicates a simple cyclic movement, the resultant moving from its most northerly point ( $292^\circ$  or almost WNW) at 4 h., with a velocity above the average, to its most southerly point ( $284^\circ$  or W14°N) at 16 h., and back again during the night, but with a velocity below the average. The results of the harmonic analysis of the daily variation of the two components is given in Table XXVII.

The second diagram of fig. 15 shows the variation of the resultant velocity from year to year, and is interesting as showing apparently a cyclic variation of the wind direction, the northerly component increasing to a maximum in 1907–08 (W $33^{\circ}$ N), then decreasing to a minimum in 1911 (W $1^{\circ}$ N), after which the increase recommenced, the resultant in 1915 being W $31^{\circ}$ N. The resultant velocity also had a decided minimum in 1911, being only 3·1 metres per second, compared with an average of 4·0.

Table XXV. shows the percentage of time during which gales and strong winds were blowing at Cape Pembroke, and also the average wind force. The gales reached a

TABLE XXV.—PERCENTAGE OF TIME DURING WHICH GALES AND STRONG WINDS (BEAUFORT FORCE 4–7) BLEW AT CAPE PEMBROKE, AND MEAN WIND FORCE (BEAUFORT SCALE), WITH EQUIVALENT VELOCITY IN METRES PER SECOND, 1905–1915.

	Jan.	Feb.	March.	April.	May.	June.	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
Gales, per cent.	1·9	3·3	3·5	4·1	3·0	2·6	3·1	1·7	1·8	2·8	2·6	1·8	2·7
Strong winds, per cent.	67	70	71	70	69	66	64	65	70	69	74	65	68
Mean force . . .	4·4	4·6	4·6	4·6	4·4	4·3	4·3	4·3	4·5	4·5	4·6	4·2	4·4
Equivalent m.p.s.	7·8	8·2	8·3	8·3	7·8	7·4	7·5	7·5	7·9	8·1	8·3	7·2	7·8

maximum frequency of 4 per cent. in April, equivalent to nearly 30 hours during the course of the month ; the average time for the whole year is 2·7 per cent. or 237 hours. Strong winds (force 4 to 7, Beaufort Scale) prevail during more than two-thirds of the time. The average force of the wind is 4·4 on the Beaufort Scale, equivalent to 7·8 metres per second ; the force is greatest in spring and autumn (mean 4·6) and least in summer and winter (mean 4·3).

At Grytviken the average number of occurrences of wind of gale force is only 3 per annum, or less than one-third per cent., but as the scale of wind force in use is not precisely known, it is possible that this is an underestimate. The maximum frequency is in September, 0·8 per month, or one per cent. ; no gales have been recorded in January.

*Motion of Upper Clouds.*—Table XXVI. gives the result of an analysis of

TABLE XXVI.—PERCENTAGES OF MOTION OF UPPER CLOUDS FROM VARIOUS DIRECTIONS AT CAPE PEMBROKE, 1905–1915.

	N.	NE.	E.	SE.	S.	SW.	W.	NW.
Oct.–March (413 obs.) . . .	9	8	4	7	9	12	22	29
April–Sept. (281 obs.) . . .	12	7	4	3	3	10	26	35

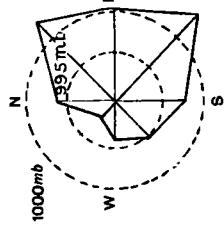
694 observations of upper cloud motion during the ten years 1905 to 1915 at Cape Pembroke. These give the unexpected result that winds from between E. and S. are more frequent at the upper levels than at the surface, especially in summer ; a conclusion which needs confirmation before inferences are drawn from it.



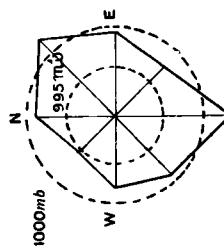
## CAPE PEMBROKE, WIND ROSES.

1905-1915.  
PRESSURE.

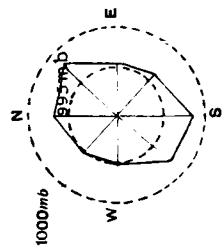
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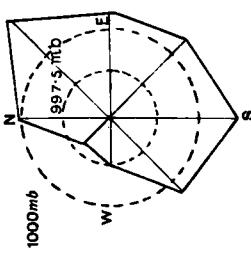
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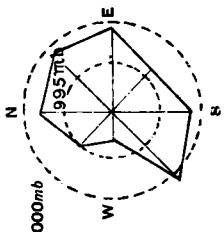
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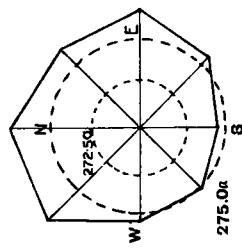
YEAR



OCTOBER



## TEMPERATURE.



## HUMIDITY.

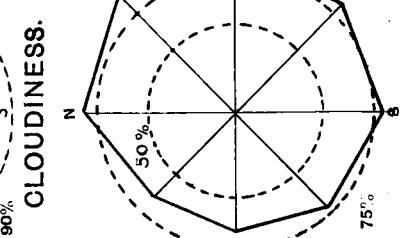
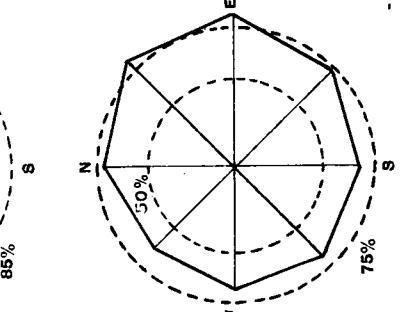
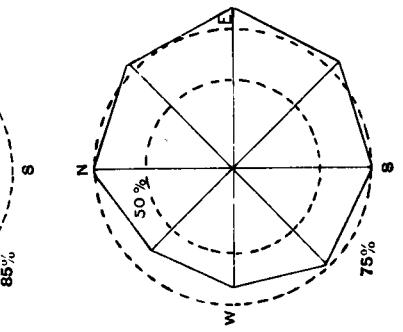
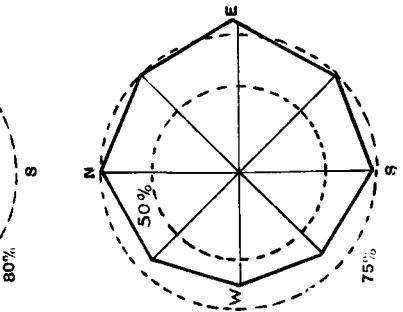
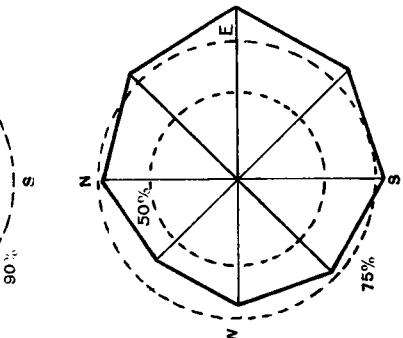
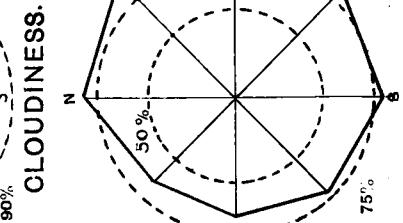
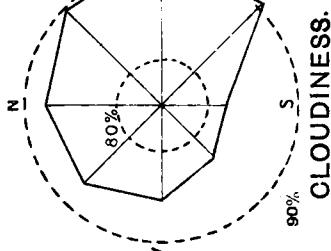
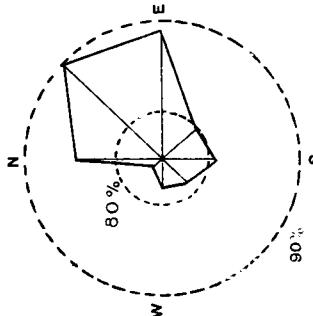


TABLE XXVII.—DIURNAL VARIATION OF METEOROLOGICAL ELEMENTS AT CAPE PEMBROKE, according to the Formula  $d = a_1 \sin(t + A_1) + a_2 \sin(2t + A_2)$ , 1905–1915.

	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
Pressure. Unit of $a_1$ and $a_2$ 0.01 mb:—													
$a_1$	36	38	30	10	8	14	18	9	20	33	40	29	21
$A_1$	43	94	67	55	94	109	195	116	102	102	98	93	91
$a_2$	10	21	18	16	10	16	19	23	29	23	21	28	19
$A_2$	159	159	171	178	184	130	140	159	179	195	181	185	169
Temperature. $a_1$ and $a_2$ in degrees absolute:—													
$a_1$	1.6	1.5	1.3	1.0	0.5	0.4	0.3	0.7	1.2	1.4	1.5	1.3	1.1
$A_1$	247	243	242	240	242	224	233	236	243	251	247	246	244
$a_2$	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.3
$A_2$	120	90	65	60	55	60	50	60	60	75	115	125	75
Relative Humidity. $a_1$ and $a_2$ in percentage of saturation:—													
$a_1$	6	5	5	4	2	1	2	2	4	5	6	5	3.8
$A_1$	65	65	60	65	45	60	80	50	65	70	65	70	65
$a_2$	1	1	1	2	1	0.5	1	1	2	1	0.3	1	0.8
$A_2$	320	270	245	250	270	270	240	220	225	245	270	335	255
Cloudiness. $a_1$ and $a_2$ in percentage of sky covered:—													
$a_1$	0.5	2	3	5	6	6	6	6	5	2	0.5	1	3.2
$A_1$	90	280	275	260	265	275	275	255	280	305	270	65	272
$a_2$	3	3	1	1	1	1	1	2	0	2	2	3	1.5
$A_2$	260	265	230	245	300	285	320	315	...	300	255	275	274
Wind, N.–S. component. $a_1$ and $a_2$ in metres per second:—													
$a_1$	6.2	8.1	4.5	3.5	2.0	1.2	0.3	2.4	3.8	3.8	6.5	5.8	3.1
$A_1$	20	2	320	25	75	294	198	305	319	48	34	45	9
$a_2$	2.2	1.1	1.4	2.8	1.4	1.5	2.7	1.4	1.4	1.5	.08	1.0	1.1
$A_2$	80	68	120	135	60	28	86	54	225	82	135	357	85
Wind, E.–W. component. $a_1$ and $a_2$ in metres per second:—													
$a_1$	1.0	3.4	2.2	1.3	2.8	1.3	1.7	0.7	1.4	3.5	1.7	4.9	1.3
$A_1$	233	58	122	42	77	115	159	160	115	112	151	208	129
$a_2$	1.7	0.9	2.5	1.5	2.4	1.0	1.4	2.5	1.3	0.8	0.4	1.4	0.5
$A_2$	63	99	215	193	282	313	246	214	288	180	116	35	236

### § 10. WIND ROSE DATA.

Table XXVIII. gives the average values of the pressure, temperature, relative humidity, and cloudiness for January, April, July, October, and the Year under different wind directions at Cape Pembroke, 1905–1915. The figures refer to noon; but for the less frequent wind directions E., SE., and S., figures at all hours were taken and were reduced to the noon values by a correction for diurnal variation. The results are indicated graphically in fig. 16. Pressure is highest with winds from between NE. and S., and lowest with winds from W. and NW., the difference between E. and NW. for the year being 5.9 mb. Temperature is invariably lowest with S. winds, i.e. Antarctic winds, and highest with NW. or N. winds, but the mean annual difference is only 3.7°a. and, curiously enough, is less in July than in January. The diagrams of relative humidity are remarkable, showing an extraordinarily marked minimum with NW. winds, except in July; the maximum occurs with NE. or E. winds, and the annual difference is 12 per cent., but as much as 17 per cent. in January and 16 per cent. in

TABLE XXVIII.—AVERAGE VALUES OF VARIOUS ELEMENTS AT NOON AT CAPE PEMPROKE, 1905–1915, under Different Wind Directions.

	N.	NE.	E.	SE.	S.	SW.	W.	NW.	
<i>Pressure in mb. at station level :—</i>									
Jan.	. .	997·3	998·5	995·9	996·6	998·6	997·6	995·1	994·9
April	. .	999·0	1002·1	999·4	997·8	1002·9	999·4	998·0	995·7
July	. .	1001·4	1007·3	1005·2	1008·1	1003·5	1000·8	999·7	997·5
Oct.	. .	1002·4	1004·1	1004·3	1001·3	1003·7	1005·2	998·0	1000·3
Year	. .	1000·0	1003·0	1001·2	1001·0	1002·2	1000·8	997·7	997·1
<i>Temperature, degrees absolute :—</i>									
Jan.	. .	284·9	284·1	283·2	282·2	281·5	282·9	284·4	285·9
April	. .	282·0	280·8	279·9	279·4	278·4	278·9	280·4	282·1
July	. .	277·3	276·4	276·6	275·4	274·6	274·9	275·3	277·1
Oct.	. .	280·2	278·8	278·3	278·9	277·7	278·7	280·0	281·9
Year	. .	281·1	280·0	279·5	279·0	278·1	278·9	280·0	281·8
<i>Relative Humidity, per cent. :—</i>									
Jan.	. .	78	80	83	80	78	75	71	66
April	. .	84	90	89	80	81	79	78	76
July	. .	88	90	92	91	82	83	86	87
Oct.	. .	82	87	77	85	81	79	78	71
Year	. .	83	87	85	84	81	79	78	75
<i>Cloudiness, per cent. :—</i>									
Jan.	. .	76	75	82	74	73	68	64	70
April	. .	78	84	96	88	81	75	69	63
July	. .	81	90	89	86	81	76	68	67
Oct.	. .	74	84	85	75	69	70	69	66
Year	. .	77	83	88	81	76	72	68	67

October. The cloudiness also differs considerably with different directions, and on the whole resembles the variation of the humidity, though the minimum with NW. winds is not so marked, and is not brought out in the diagram owing to the need for a closer scale. The extreme cloudiness of E. winds in April, 96 per cent., is very remarkable.

### § 11. DEPRESSIONS.

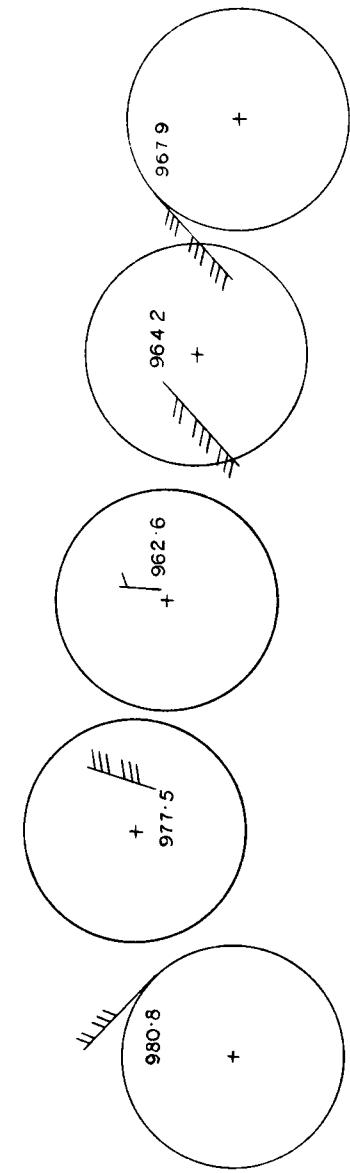
During the ten years at Cape Pembroke there were twenty storms in which the barometer fell below 965 mb. or 28·5 inches. These were distributed through the year as follows: five in winter, two in spring, five in summer, and eight in autumn. 1915 had four; 1905, 1909, and 1911 had three each; and there were none in 1908, 1913, and 1914. There were five occasions when the barometer fell below 960 mb. or 28·35 inches.

Copies of the records for some of the worst storms are given at the end of the Appendix. That of February 10–13, 1905, is interesting because, though the pressure did not fall below 962 mb. and the wind force did not exceed nine, the cyclone had a calm centre which passed very close to Cape Pembroke, the wind associated with the lowest pressure being only force one from N. Bearing in mind that in the Southern Hemisphere Buys Ballot's Law is reversed, the path of this depression relative to Cape Pembroke would have been as shown in the accompanying diagram, fig. 17.

DEPRESSION OF FEBRUARY 11<sup>TH</sup>, 1915.

## AT CAPE PEMBROKE.

4h.                    8h.                    12h.                    16h.                    20h.



The circles represent a depression travelling from West to East across the Falkland Islands. The + represents the centre of the depression and the point of the wind arrow gives the position of Cape Pembroke, to which the observations of wind refer. The figures are the corresponding readings of the barometer at Cape Pembroke, corrected and reduced to Mean Sea Level.



## A P P E N D I C E S.

## APPENDIX I.

OBSERVATIONS AT ROYAL BAY, SOUTH GEORGIA (LAT. 54° 31' S., LONG. 36° 0' W.), SEPTEMBER 1882 TO AUGUST 1883.

## HOURLY OBSERVATIONS AND SUMMARY.

## HEIGHT OF BAROMETER CISTERNS ABOVE M.S.L. = 6.5 METRES.

HOURLY VALUES OF METEOROLOGICAL ELEMENTS AT ROYAL BAY, SOUTH GEORGIA, SEPTEMBER 1882 TO SEPTEMBER 1883.

(VALUES GIVEN FOR SEPTEMBER = MEAN OF 1882 AND 1883.)

Hours.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.	Max.	Min.	Mean Daily
Sept.	1001.1	1001.0	1001.2	1001.4	1001.7	1001.9	1002.1	1002.2	1002.3	1002.4	1002.6	1002.7	1002.9	1003.1	1003.3	1003.5	1003.7	1003.9	1004.1	1004.3	1004.5	1004.7	1004.9	1005.1	1005.3	1005.5	1005.7	
Oct.	996.6	996.4	996.2	996.0	996.4	996.4	996.4	996.4	996.4	996.4	996.3	996.3	996.3	996.3	996.3	996.3	996.3	996.3	996.3	996.3	996.3	996.3	996.3	996.3	996.3	996.3	996.3	
Nov.	995.0	994.8	994.7	994.8	994.8	994.7	994.7	994.7	994.7	994.7	994.0	994.0	994.0	994.0	994.0	994.0	994.0	994.0	994.0	994.0	994.0	994.0	994.0	994.0	994.0	994.0	994.0	
Dec.	990.9	990.7	990.7	990.6	990.7	990.9	991.0	991.0	991.1	991.1	991.0	991.0	991.0	991.0	991.0	991.0	991.0	991.0	991.0	991.0	991.0	991.0	991.0	991.0	991.0	991.0	991.0	
Jan.	988.2	988.0	987.9	987.9	988.2	988.2	988.3	988.4	988.4	988.4	988.3	988.3	988.3	988.3	988.3	988.3	988.3	988.3	988.3	988.4	988.4	988.4	988.4	988.4	988.4	988.4	988.4	
Feb.	994.1	993.9	993.7	993.6	993.6	993.6	993.6	993.6	993.6	993.6	994.0	994.1	994.1	994.1	994.1	994.1	994.1	994.1	994.1	994.2	994.2	994.2	994.2	994.2	994.2	994.2	994.2	
Mar.	992.4	992.2	991.9	991.8	991.8	991.8	991.9	991.9	991.9	991.9	992.1	992.1	992.1	992.1	992.1	992.1	992.1	992.1	992.1	992.1	992.1	992.1	992.1	992.1	992.1	992.1	992.1	
Apr.	990.9	990.9	990.7	990.7	990.7	990.7	990.9	990.9	990.9	990.9	991.0	991.0	991.0	991.0	991.0	991.0	991.0	991.0	991.0	991.1	991.1	991.1	991.1	991.1	991.1	991.1	991.1	
May	1003.0	1003.0	1002.8	1002.8	1002.8	1002.8	1002.9	1002.9	1002.9	1002.9	1003.0	1003.1	1003.1	1003.2	1003.2	1003.2	1003.2	1003.2	1003.2	1003.4	1003.4	1003.4	1003.4	1003.4	1003.4	1003.4	1003.4	
June	999.4	999.3	999.2	999.0	998.9	998.9	998.9	998.9	998.9	998.9	999.1	999.1	999.1	999.1	999.1	999.1	999.1	999.1	999.1	999.2	999.2	999.2	999.2	999.2	999.2	999.2	999.2	
July	999.7	999.8	1000.0	1000.1	1000.1	1000.1	1000.1	1000.1	1000.1	1000.1	1000.1	1000.1	1000.1	1000.1	1000.1	1000.1	1000.1	1000.1	1000.1	1000.1	1000.1	1000.1	1000.1	1000.1	1000.1	1000.1	1000.1	
Aug.	1001.6	1001.6	1001.3	1001.3	1001.3	1001.3	1001.3	1001.3	1001.3	1001.3	1001.2	1001.2	1001.2	1001.2	1001.2	1001.2	1001.2	1001.2	1000.9	1000.8	1000.8	1000.8	1000.8	1000.8	1000.8	1000.8		
Year	996.0	995.9	995.9	995.8	995.9	996.0	996.1	996.1	996.2	996.3	996.3	996.3	996.3	996.3	996.3	996.3	996.3	996.3	995.8	995.7	995.6	995.6	995.6	995.6	995.6	995.6	995.6	
Sept.	271.9	271.9	271.7	271.5	271.2	271.2	270.9	271.2	271.2	271.2	271.0	271.0	271.0	271.0	271.0	271.0	271.0	271.0	271.0	271.0	271.0	271.0	271.0	271.0	271.0	271.0	271.0	
Oct.	273.4	273.4	273.3	273.3	273.3	273.3	273.3	273.3	273.3	273.3	273.6	273.6	273.6	273.6	273.6	273.6	273.6	273.6	273.6	274.0	274.0	274.0	274.0	274.0	274.0	274.0	274.0	
Nov.	274.8	274.7	274.6	274.6	274.6	274.6	274.6	274.6	274.6	274.6	275.0	275.0	275.0	275.0	275.0	275.0	275.0	275.0	275.0	275.0	275.0	275.0	275.0	275.0	275.0	275.0	275.0	
Dec.	275.3	275.1	275.1	275.1	275.1	275.1	275.1	275.1	275.1	275.1	275.3	275.3	275.3	275.3	275.3	275.3	275.3	275.3	275.3	275.5	275.5	275.5	275.5	275.5	275.5	275.5	275.5	
Jan.	276.5	276.5	276.3	276.3	276.1	276.1	276.1	276.1	276.1	276.1	276.3	276.3	276.3	276.3	276.3	276.3	276.3	276.3	276.3	276.3	276.5	276.5	276.5	276.5	276.5	276.5	276.5	276.5
Feb.	277.6	277.3	277.0	276.6	276.6	276.6	276.6	276.6	276.6	276.6	277.1	277.1	277.1	277.1	277.1	277.1	277.1	277.1	277.1	277.1	277.3	277.3	277.3	277.3	277.3	277.3	277.3	277.3
Mar.	277.9	277.6	277.4	277.4	277.4	277.4	277.4	277.4	277.4	277.4	277.8	277.8	277.8	277.8	277.8	277.8	277.8	277.8	277.8	277.8	277.8	277.8	277.8	277.8	277.8	277.8	277.8	
Apr.	278.1	277.9	277.7	277.6	277.5	277.5	277.5	277.5	277.5	277.5	277.8	277.8	277.8	277.8	277.8	277.8	277.8	277.8	277.8	277.8	277.8	277.8	277.8	277.8	277.8	277.8	277.8	
May	278.4	278.2	278.0	277.9	277.8	277.8	277.8	277.8	277.8	277.8	278.0	278.0	278.0	278.0	278.0	278.0	278.0	278.0	278.0	278.0	278.0	278.0	278.0	278.0	278.0	278.0	278.0	
June	278.8	278.6	278.4	278.3	278.2	278.2	278.2	278.2	278.2	278.2	278.5	278.5	278.5	278.5	278.5	278.5	278.5	278.5	278.5	278.5	278.5	278.5	278.5	278.5	278.5	278.5	278.5	
July	279.1	278.9	278.7	278.6	278.5	278.5	278.5	278.5	278.5	278.5	279.0	279.0	279.0	279.0	279.0	279.0	279.0	279.0	279.0	279.0	279.0	279.0	279.0	279.0	279.0	279.0	279.0	
Aug.	279.4	279.2	279.0	278.9	278.8	278.7	278.7	278.7	278.7	278.7	279.1	279.1	279.1	279.1	279.1	279.1	279.1	279.1	279.1	279.1	279.1	279.1	279.1	279.1	279.1	279.1	279.1	
Year	273.7	273.7	273.6	273.6	273.5	273.5	273.5	273.5	273.5	273.5	273.6	273.6	273.6	273.6	273.6	273.6	273.6	273.6	273.6	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7	273.7

Hours.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	Mean.	Max.	Min.	Mean Daily
Sept.	271.7	271.9	272.0	272.1	272.2	272.3	272.4	272.5	272.6	272.7	272.8	272.9	273.0	273.1	273.2	273.3	273.4	273.5	273.6	273.7	273.8	273.9	273.9	273.9	273.9	273.9	273.9	273.9
Oct.	273.4	273.4	273.4	273.4	273.4	273.4	273.4	273.4	273.4	273.4	273.4	273.4	273.4	273.4	273.4	273.4	273.4	273.4	273.4	273.4	273.4	273.4	273.4	273.4	273.4	273.4	273.4	273.4
Nov.	274.8	274.7	274.6	274.6	274.6	274.6	274.6	274.6	274.6	274.6	274.6	274.6	274.6	274.6	274.6	274.6	274.6	274.6	274.6	274.6	274.6	274.6	274.6	274.6	274.6	274.6	274.6	274.6
Dec.	275.3	275.1	275.1	275.1	275.1	275.1	275.1	275.1	275.1	275.1	275.1	275.1	275.1	275.1	275.1	275.1	275.1	275.1	275.1	275.1	275.1	275.1	275.1	275.1	275.1	275.1	275.1	275.1
Jan.	276.5	276.5	276.3	276.3	276.1	276.1	276.1	276.1	276.1	276.1	276.3	276.3	276.3	276.3	276.3	276.3	276.3	276.3	276.3	276.3	276.3	276.3	276.3	276.3	276.3	276.3	276.3	276.3
Feb.	277.6	277.3	277.0	276.6	276.2	275.9	275.7	275.5	275.3	275.1	274.8	274.6	274.4	274.2	274.0	273.8	273.6	273.4	273.2	273.0	272.8	272.6	272.4	272.2	272.0	271.8	271.6	271.4
Mar.	278.9																											

## APPENDIX I.—continued.

## SUMMARY OF OBSERVATIONS AT FIXED HOURS.

1882-3.	Mean Pressure At M.S.L.	Temperature.				Humidity.								Wind, No. of Observations. Percentage.									
		A. Hourly.	B. 8+14+20 3	A-B. Diff.	Vapour Pressure.				Percentage.				Wind Force Mean.	Maximum.	Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
					A. Hourly.	B. 8+14+20 3	A-B. Diff.	A.	B.	A.	B.	A-B.											
1882	mb.	a.	a.	a.	mb.	mb.	mb.	%	%	%	%	%	m/s.	m/s.									
*Sept.	1001.7	272.1	272.3	-0.2	...	...	...	...	...	...	...	...	7.7	...	2.5	12.1	6.0	2.4	3.0	10.4	15.6	28.4	19.6
Oct.	996.0	274.3	274.6	-0.3	...	...	...	...	...	...	...	...	6.6	22.9	1.9	15.0	6.7	5.5	6.5	8.2	16.6	22.2	17.4
Nov.	994.1	275.9	276.5	-0.6	5.7	5.8	-0.1	76	74	+2	5.2	23.3	0.0	19.0	9.8	11.5	5.1	3.8	13.4	22.9	14.5		
Dec.	990.7	276.7	277.2	-0.5	5.9	5.9	0.0	74	71	+3	7.2	25.3	0.1	11.5	5.6	5.6	4.5	4.5	13.2	36.1	18.9		
1883																							
Jan.	988.4	277.6	277.9	-0.3	6.1	6.1	0.0	72	71	+1	6.3	26.3	0.0	11.2	7.4	7.8	9.0	4.8	17.1	29.2	13.5		
Feb.	994.1	278.4	278.7	-0.3	6.3	6.4	-0.1	71	70	+1	7.0	20.4	0.0	9.9	7.4	4.8	5.0	9.4	21.7	28.8	13.0		
Mar.	992.0	276.5	276.7	-0.2	5.8	5.9	-0.1	73	73	0	6.7	...	0.0	10.3	4.9	6.0	7.8	6.0	14.3	30.0	20.7		
Apr.	991.2	273.5	273.5	0.0	5.1	5.1	0.0	77	77	0	6.9	26.3	0.0	16.3	2.4	3.3	11.0	3.0	15.5	35.4	13.1		
May	1003.1	272.8	272.9	-0.1	...	...	...	...	...	...	6.4	23.3	0.1	10.6	6.5	3.4	4.8	6.8	24.7	31.5	11.6		
June	999.2	270.1	270.1	0.0	3.9	3.8	+0.1	76	76	0	5.7	20.3	0.1	11.5	4.9	13.1	5.1	4.0	15.2	31.0	15.1		
July	1000.1	270.7	270.8	-0.1	3.8	3.9	-0.1	73	73	0	7.1	20.0	0.4	8.7	3.4	3.1	5.2	5.0	21.3	35.5	17.4		
Aug.	1000.8	274.2	274.4	-0.2	4.9	4.9	0.0	72	72	0	8.4	25.2	0.1	13.4	9.2	3.0	5.3	4.5	15.5	33.7	15.3		
Year	996.0	274.4	274.6	-0.2	...	...	...	...	...	...	6.8	...	0.4	12.5	6.2	5.8	6.0	5.9	17.0	30.4	15.8		

\* Sept. 14-30, 1882; 1-3, 1883.

## CLIMATOLOGICAL SUMMARY.

1882-3.	Air Temperature from Index Thermometers.								Amount of Cloud 0-10.	Precipita- tion.	Weather, No. of Hours of					
	Means of		Maximum and Minimum combined.	Absolute Extremes.				A. Hourly.	Total.	Precipi- tation.	Snow.	Ice Crystals.	Hail.	Fog.		
	Maximum.	Minimum.		Highest Maximum.	Lowest Minimum.	Lowest Maximum.	Highest Minimum.									
1882	a.	a.	a.	a.	a.	a.	a.			mm.						
†Sept.	275.8	269.5	272.6	278.3	265.7	273.1	273.1	6.5	127.9	80	61	12	0	11		
Oct.	277.6	271.4	274.5	281.1	266.0	271.7	274.7	7.3	117.8	218	92	68	0	16		
Nov.	279.1	273.4	276.3	283.7	271.2	274.7	276.6	7.2	69.8	194	126	1	2	65		
Dec.	280.3	274.6	277.4	285.5	272.6	274.9	278.0	7.6	74.0	237	109	12	9	53		
1883																
Jan.	280.8	274.9	277.8	284.9	272.5	276.4	278.8	7.2	82.1	187	85	1	2	13		
Feb.	282.0	275.3	278.6	292.7	272.1	276.0	278.4	7.3	85.6	168	52	1	7	69		
Mar.	279.9	274.2	277.1	285.6	269.9	274.6	278.7	7.7	146.8	219	72	26	3	13		
Apr.	276.3	270.7	273.5	282.4	266.1	272.1	275.5	7.4	81.6	223	124	51	1	9		
May	276.0	270.1	273.0	282.5	264.1	268.7	277.6	6.5	15.5	174	93	54	4	31		
June	272.7	267.7	270.2	278.9	262.6	266.6	272.7	7.2	52.2	208	114	79	3	10		
July	274.2	267.5	270.9	284.0	259.8	266.6	275.8	6.8	35.0	217	86	101	2	11		
Aug.	277.2	270.9	274.1	285.9	262.0	270.3	277.6	6.0	100.0	140	68	18	1	25		
Year	277.7	271.7	274.7	292.7	259.8	266.6	278.8	7.1	988.3	2265	1082	424	34	326		

† Sept. 18-30

## APPENDIX II.

OBSERVATIONS AT GRYTVIKEN, CUMBERLAND BAY, SOUTH GEORGIA. LAT.  $54^{\circ} 14' S.$ ,  
Height of Bar. Cistern, 3 Metres. Dry and Wet Bulb (no corrections known) in Stevenson's Screen on East Wall of House.

## SUMMARY OF OBSERVATIONS AT FIXED HOURS.

1906.	Mean Pressure At M.S.L.	Temperature.			Humidity.									Amount of Cloud. 0-10.	Number of Days of	Wind, No. of Observations referred to a total of 93, 90, 87, or 84 for the month.																
					Depression of Wet Bulb.			Vapour Pressure.			Percentage.						Clear Sky 8 and above. <sup>†</sup>		Overcast. <sup>†</sup>	Wind Force 8 and above. <sup>†</sup>	Strong Wind (4-7). <sup>†</sup>	Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.		
		I.	II.	III.	I.	II.	III.	I.	II.	III.	I.	II.	III.																			
Jan.	mb.	a.	a.	a.	a.	a.	a.	mb.	mb.	mb.	%	%	%	8.7	7.1	7.4	o	16	o	30	43	4	5	4	9	4	3	12	9			
Feb.	999.9	278.5	282.3	280.0	1.6	2.5	1.7	7.0	8.2	7.7	78	79	77	8.7	7.1	7.4	o	o	o	16	51	12	4	0	1	0	3	4	12			
Mar.	992.0	277.0	282.5	279.0	1.1	2.7	1.9	6.8	8.1	7.0	84	68	75	6.4	6.1	6.2	2	7	o	43	30	22	3	1	2	0	3	9	23			
Apr.	991.2	277.9	282.0	278.5	1.9	3.0	1.6	6.4	7.4	7.0	74	65	78	7.1	6.5	7.4	3	14	o	28	48	19	1	0	4	1	0	1	16			
May	996.1	275.9	277.8	276.4	1.4	1.7	1.6	5.9	6.5	5.9	78	76	76	6.4	5.6	6.5	4	11	o	33	46	3	0	0	4	0	0	0	14	26		
June	1003.5	272.8	273.6	272.9	0.4	0.6	0.3	5.4	5.6	5.6	90	88	92	8.1	8.0	7.3	2	20	o	34	31	6	4	1	14	1	0	8	25			
July	997.8	272.6	272.6	272.6	0.5	0.5	0.5	5.2	6.1	5.8	88	91	88	5.5	6.4	6.8	4	12	o	57	20	14	0	5	0	0	0	13	41			
Aug.	996.2	272.1	276.7	273.5	0.2	0.4	0.4	5.3	7.4	5.8	94	93	91	5.7	4.8	5.5	6	9	o	41	28	9	0	0	0	0	0	0	14	42		
Sept.	998.0	273.4	277.5	274.3	0.3	1.2	0.4	5.9	6.9	6.2	93	82	93	6.2	5.6	6.0	4	8	o	56	24	11	0	0	0	0	0	0	30	25		
Oct.	1000.6	273.9	278.8	275.4	0.8	1.4	0.8	5.6	7.4	6.3	85	81	87	7.0	6.8	7.1	2	13	o	13	48	18	5	5	4	5	1	0	7	21		
Nov.	989.1	276.2	279.5	277.6	1.2	2.0	1.1	6.3	7.2	7.1	84	72	74	8.6	7.2	6.3	3	14	o	25	30	24	3	0	1	4	2	5	5			
Dec.	992.4	278.4	282.4	279.4	1.6	2.5	1.5	7.0	8.2	7.6	78	70	80	5.8	5.8	5.5	5	7	o	38	29	15	1	7	9	0	0	4	28			
Year	995.5	275.0	278.3	275.9	1.0	1.6	1.0	5.9	7.0	6.3	84	78	84	6.8	6.4	6.5	35	141	1	414	428	157	26	18	53	15	9	114	275			
1907.																																
Jan.	987.0	280.4	283.6	280.3	1.2	1.6	0.9	8.6	10.2	9.0	84	80	88	6.1	7.0	6.9	1	11	o	46	21	14	1	2	6	0	0	0	10	39		
Feb.	997.8	281.1	285.3	281.8	0.5	0.9	0.3	10.0	12.6	10.8	93	89	96	7.1	6.6	6.9	1	10	o	47	220	9	1	8	4	0	0	0	0	8	32	
Mar.	995.4	278.5	282.7	279.3	1.3	2.5	1.5	7.3	8.3	7.6	81	70	80	6.4	6.2	6.1	3	8	o	42	27	9	0	0	1	0	0	0	13	43		
Apr.	996.9	275.3	278.6	276.3	1.0	1.8	0.9	6.0	6.9	6.7	84	76	86	6.0	6.9	6.0	3	7	o	25	47	16	0	2	2	0	0	0	5	18		
May	988.1	275.5	277.3	276.1	0.7	0.9	0.7	6.4	7.2	6.8	88	87	89	7.1	6.7	7.0	2	15	o	49	28	8	0	0	1	0	0	0	8	45		
June	993.7	271.7	272.8	271.8	0.6	0.7	0.7	4.6	5.0	4.5	83	84	81	7.2	6.8	5.7	1	12	o	28	27	6	0	0	1	1	0	0	2	43		
July	1001.1	271.0	272.3	271.2	1.4	1.5	1.1	3.2	3.7	3.6	60	64	67	5.6	6.3	5.3	2	7	o	9	22	12	6	1	0	1	0	0	0	11	40	
Aug.	1004.0	267.3	270.1	267.7	0.8	1.2	0.8	2.5	2.9	2.5	63	59	61	6.4	6.2	4.7	2	6	o	12	21	16	16	3	7	3	0	0	8	19		
Sept.	1001.1	271.2	272.7	271.1	1.0	1.3	1.1	3.7	4.3	3.5	69	72	67	6.7	7.2	6.6	1	9	o	14	15	19	15	6	3	3	3	3	14	12		
Oct.	1005.2	274.0	274.9	272.9	1.4	1.6	1.2	5.0	5.2	4.5	76	74	74	7.6	7.6	6.9	2	15	o	9	17	33	13	5	4	2	1	7	11	11		
Nov.	990.8	276.1	277.3	275.4	1.6	2.1	1.6	5.7	5.9	5.5	76	71	75	7.5	7.5	7.3	0	12	o	16	19	11	7	3	10	0	4	5	21			
Dec.	993.4	276.4	277.3	275.2	1.6	1.9	1.2	5.9	6.0	5.8	76	73	81	7.7	7.6	7.9	1	15	o	14	10	10	10	11	20	4	4	7	17			
Year	996.2	274.9	277.1	274.9	1.1	1.5	1.0	5.7	6.5	5.9	78	75	79	6.7	6.9	6.4	19	127	3	311	274	163	69	41	59	14	14	104	340			
1908.																																
Jan.	994.5	278.2	279.4	277.0	1.6	2.0	1.3	6.9	7.1	6.6	78	74	81	7.5	7.8	7.6	0	17	o	10	13	4	8	12	11	2	3	23	17			
Feb.	996.6	279.3	279.1	278.6	1.5	1.9	1.5	7.6	8.3	7.1	80	76	79	7.2	6.1	5.6	1	8	o	16	18	5	11	7	2	14	11	12				
Mar.	1002.4	280.1	281.6	278.9	1.7	2.2	1.5	7.8	8.0	7.3	77	73	79	6.4	6.0	5.5	0	1	2	20	11	6	7	4	3	2	5	20	35			
Apr.	999.2	276.1	277.8	276.4	1.1	1.7	1.3	6.3	6.5	6.2	83	76	80	8.0	7.2	5.1	2	12	o	10	22	9	7	6	11	5	4	16	10			
May	998.5	274.0	274.3	273.9	1.6	1.4	1.4	4.7	5.1	4.9	72	76	75	6.7	7.5	5.5	2	9	o	13	19	11	4	1	5	4	11	23				
June	1001.8	270.3	271.1	270.3	0.5	0.8	0.6	4.1	3.9	3.9	81	74	77	6.6	6.0	5.1	4	7	o	4	46	3	4	5	6	7	9	8	2			
July	989.8	270.0	271.1	270.6	0.9	1.1	0.9	3.5	3.6	3.6	68	67	71	6.1	7.3	5.9	3	9	o	17	13	11	5	1	2	4	5	24				
Aug.	1005.3	272.9	274.1	273.2	1.4	1.6	1.4	4.3	4.7	4.4	71	72	71	6.6	6.6	4.9	1	5	o	30	18	19	5	1	2	1	10	21				
Sept.	1005.5	275.5	277.1	274.5	1.5	1.9	1.2	5.5	5.9	5.4	76	73	79	7.0	6.6	5.1	1	9	o	17	16	8	12	6	6	1	8	23				
Oct.	1005.5	274.7	275.9	274.3	1.2	1.7	1.3	5.5	5.6	5.1	80	74	77	7.6	6.9	6.0	1	12	o	14	12	8	6	9	8	1	13	24				
Nov.	999.5	274.7	278.5	276.3	2.1	2.3	1.4	5.9	6.2	6.1	71	69	71	7.1	7.6	8.1	0	13	o	11	9	6	4	3	11	6	6	23				
Dec.	994.7	276.1	277.7	275.6	1.3	2.0	1.3	6.1	6.2	5.8	80	72	80	7.5	8.1	8.0	0	12	o	1	11	3	7	11	18	9	6	14				
Year	998.4	275.4	276.7	275.0	1.4																											

## APPENDIX III.

36° 33' W., 1906-1915, EXCEPT FOR OCTOBER AND DECEMBER 1910 AND JANUARY TO MAY 1911.

Wind Direction, "True." Raingauge Exposure stated to be good. Observations at 8 h, 14 h, and 20 h.

## CLIMATOLOGICAL SUMMARY.

1906.	Air Temperature in Degrees Fahrenheit.												Highest Wet Bulb.	Rainfall.			Weather, No. of Days of						
	Means of		Max. and Min. com- bined.	Absolute Extremes.						Total.	Max.	Day.	Precipitation.	Snow.	Thunder Storm.	Hail.	Ground Frost.	Gale.					
	Max.	Min.		Highest Max.	Day.	Lowest Min.	Day.	Lowest Max.	Day.					Precipitation. 1 mm. or more.	Snow lying.	Precipitation. 1 mm. or more.	Snow.	Fog.	Force 3 or more.				
Jan.	a.	a.	280.5	293.0	1	273.5	28	279.0	10	279.0	7	284.0	103.7	43.4	22	9	8	3 ..	0	0	2 ..	..	0
Feb.	284.7	275.2	280.0	292.0	28	272.0	1	276.0	16	278.5	1, 2	286.0	284.1	84.9	25	15	14	6 ..	0	0	1 ..	..	0
Mar.	284.6	275.4	280.0	298.5	1	273.0	10, 28	276.5	26, 28	278.5	7	290.0	174.8	44.2	8	10	8	9 ..	0	0	0 ..	..	0
Apr.	279.4	272.9	276.2	285.0	11	268.0	20	274.5	25, 26	278.5	7	282.0	47.7	22.5	5	5	5	2 ..	1	0	0 ..	..	0
May	275.1	270.7	272.9	279.5	29	264.5	31	271.0	22, 31	274.5	7	278.0	137.9	34.4	28	15	15	14 ..	0	1	0 ..	..	0
June	273.2	268.3	270.8	278.5	19	264.5	5	269.5	11, 18	274.5	15	275.5	31.6	24.6	14	3	3	3 ..	0	0	1 ..	..	0
July	275.7	269.3	272.5	283.0	26	261.0	24	269.0	23	273.5	4, 5	282.0	48	10	6, 19	6	6	4 ..	0	0	0 ..	..	0
Aug.	278.6	269.6	274.1	285.0	29	263.0	4	269.0	3	276.5	13	284.0	37.3	8	3, 5	7	7	3 ..	1	0	0 ..	..	0
Sept.	279.3	270.5	274.9	290.0	16	263.5	9	270.0	19	280.0	12	286.0	109.4	27.2	5	10	10	7 ..	0	0	0 ..	..	1
Oct.	281.8	271.0	276.4	292.5	21	266.0	1	274.5	2	278.5	22	283.5	87.3	27.1	30	10	9	5 ..	0	0	0 ..	..	0
Nov.	282.3	274.2	278.3	290.0	5	271.0	9, 15	278.0	9, 22	280.0	30	284.0	110.1	37.9	12	10	-10	2 ..	1	0	1 ..	..	0
Dec.	285.1	275.7	280.4	293.5	22	272.3	16	279.5	14	278.5	24	285.5	67.3	23.6	14	8	7	1 ..	0	1	2 ..	..	0
Year	280.4	272.4	276.4	298.5	Mar. 1	261.0	July 24	269.0?	July 23	280.0	Sept. 12	290.0	1239	84.9	Feb. 25	108	102	59 ..	3	2	9 ..	1	
1907.																							
Jan.	286.0	276.8	281.4	297.0	27	273.5	2, 17	278.0	1	281.3	12	292.8	81.2	21.9	1	13	10	3 ..	4	0	2 ..	..	0
Feb.	287.9	278.6	283.3	299.5	19	273.5	3	281.5	2	285.0	16	295.3	64.1	30.4	10	5	5	0 ..	1	0	4 ..	..	0
Mar.	284.5	275.9	280.2	296.0	5	272.0	18, 26, 27	277.5	16	280.5	5	292.5	97.0	33.5	3	10	10	..	..	..	..	..	1
Apr.	280.7	273.3	277.0	287.5	20	268.5	17	275.0	24	278.0	6	282.2	129.6	46.2	7	12	10	..	..	..	..	..	0
May	279.2	273.3	276.3	285.5	17, 18	268.5	24	272.8	13	279.5	18	281.8	110.5	54.6	10	12	11	..	..	..	..	..	1
June	274.7	269.3	272.0	282.0	21	262.0	16	266.2?	16	277.9	22	278.4	86.7	19.5	22	13	13	..	..	..	..	..	0
July	274.3	268.2	271.3	282.6	15	260.2	27	264.2	26	278.8	16	278.2	113.5	27.1	6	18	16	13 ..	0	0	2 ..	..	0
Aug.	272.2	264.0	268.1	280.2	31	253.8	12	264.7	6	271.5	2	275.3	47.3	11.5	27	14	8	12 ..	1	0	4 ..	..	0
Sept.	275.2	267.9	271.6	280.3	20	261.6	25	267.8	2	274.7	5	275.2	111.5	50.3	6	18	14	13 ..	2	0	3 ..	..	1
Oct.	277.0	270.5	273.8	283.5	17, 19	264.5	10	272.6	1, 2	275.4	27	278.9	43.7	25.8	28	12	7	..	3	0	1	..	0
Nov.	279.6	272.6	276.1	289.4	4	267.7	3	275.0	11	279.4	5	281.3	66.5	18.9	7	20	14	18 ..	1	0	1	..	0
Dec.	279.7	272.9	276.3	287.2	7	270.5	12	274.0	22	276.0	15	281.0	157.7	67.1	30	16	11	9 ..	5	1	0	..	0
Year	279.3	271.9	275.6	299.5	Feb. 19	253.8	Aug. 12	264.2	July 26	285.0	Feb. 16	295.3	1109.5	67.1	Dec. 30	163	128	..	..	..	..	..	3
1908.																							
Jan.	281.7	274.9	278.3	287.2	10	271.0	5	275.8	3	279.3	29	282.1	53.4	11.5	21	17	10	5 ..	1	0	6 ..	..	0
Feb.	284.4	275.5	280.0	293.7	5	271.5	22	278.1	1	279.7	7	285.8	113.8	50.5	9	14	13	1 ..	2	1	7 ..	..	0
Mar.	284.1	275.6	279.9	292.7	15	271.1	6	280.3	2, 6, 17	280.5	19	287.1	71.7	19.3	21	15	11	0 ..	0	0	5 ..	..	2
Apr.	280.7	273.8	277.3	287.2	14	268.0	27	274.6	17	283.0	2	282.8	98.3	36.6	20	23	15	7 ..	2	0	7 ..	..	0
May	277.7	270.9	274.3	287.6	12	266.4	23	271.6	23	281.8	14	282.8	118.3	25.2	20	19	16	11 ..	4	0	2 ..	..	0
June	272.8	268.3	270.6	282.5	7	263.6	17	266.6	17	273.5	8	275.6	65.6	14.8	12	11	8	7 ..	1	0	0 ..	..	0
July	274.0	267.4	270.7	279.9	25	261.4	11	267.0	15	273.0	28, 29	274.9	252.5	32.4	23	24	22	20 ..	4	0	1 ..	..	0
Aug.	276.8	270.1	273.5	283.4	18	264.0	5	269.2	4	277.5	12	278.2	139.5	52.9	9	18	14	12 ..	1	0	1 ..	..	0
Sept.	279.0	272.3	275.7	286.4	12	268.6	21	273.8	4, 22	280.7	13	282.0	107.4	39.3	22	14	9	4 ..	7	0	4 ..	..	1
Oct.	278.0	271.7	274.9	283.0	6	267.8	4	274.0	25	275.2	13	277.0	200.8	64.1	13	13	11	9 ..	2	0	2 ..	..	0
Nov.	281.2	273.7	277.5	289.4	3	270.9	17	276.4	10	278.0	27	282.7	127.9	30.9	4	22	16	11 ..	6	0	3 ..	..	1
Dec.	279.4	273.2	276.3	283.0	10, 12	270.4	5	274.9	4	275.7	11	280.0	68.9	15.3	14	19	16	14 ..	1	0	3 ..	..	0
Year	279.2	272.3	275.8	293.7	Feb. 5	261.4	July 11	266.6	June 17	283.0	Apr. 2	287.1	1418.1	64.1	Oct. 13	209	161	101 ..	26	1	41 ..	..	4
1909.																							
Jan.	283.4	275.8	279.6	292.0	20	272.6	27	277.0	30	284.3	22	285.0	51.5	8.7	19	17	13	5 ..	0	0	..	..	0
Feb.	281.8	274.6	278.2	291.2	22	271.8	18	277.6	27	278.2	8	282.5	90.2	16.8	27	20	14	5 ..	0	+	..	..	0
Mar.	281.3	274.5	277.9	286.5	3	270.7	31	275.9	30	283.2	26	282.8	226.8	102.8	7	19	14	7 ..	1	0	..	..	0
Apr.	278.9	272.4	275.7	287.0	4	265.9	28	271.5	27	277.8	2	279.1	208.3	29.8	2	28	23	17 ..	6	0	0 ..	..	0
May	277.1	270.8	274.0	282.8	12	265.1	21	270.7	27	276.3	14	278.8	147.3	36.3	25	25	19	15 ..	6	0	1 ..	..	0
June	274.7	268.8	271.7	280.8	18	264.6	3, 4	267.5	3	276.2	26	277.8	87.6	36.8	19	17	9	7 ..	3	0	2 ..	..	0
July	274.7	268.3	271.5	280.3	8	260.7	11	265.8	11	275.5	13	276.4	97.9	22.3	3								

## APPENDIX II.—continued.

## SUMMARY OF OBSERVATIONS AT FIXED HOURS—continued.

1910.	Mean Pressure At M.S.L.	Temperature.			Humidity.									Amount of Cloud, 0-10.	Number of Days of	Wind, No. of Observations referred to a total of 93, 90, 87, or 84 for the month.																			
					Depression of Wet Bulb.			Vapour Pressure.			Percentage.						Clear Sky.*			Overcast. †			Wind Force † 8 and above.												
		I.	II.	III.	I.	II.	III.	I.	II.	III.	I.	II.	III.	I.	II.	III.	Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.										
Jan.	mb.	a.	a.	a.	a.	a.	a.	mb	mb	mb	%	%	%	7·3	7·7	7·2	76	76	80	7·3	7·1	7·8	0	15	0	38	11	4	5	14	10	2	4	23	20
Feb.	993·2	279·4	280·3	278·5	1·6	1·7	1·3	7·3	7·7	7·2	76	76	80	7·3	7·1	7·8	0	15	0	16	12	3	8	4	5	1	10	22	19						
Mar.	1003·2	278·3	280·3	278·5	0·9	1·8	1·1	7·6	7·6	7·5	86	74	83	7·2	6·1	6·6	0	9	0	16	12	3	8	4	5	1	10	22	19						
Apr.	1002·2	277·6	279·5	277·4	0·8	1·2	0·7	7·3	8·0	7·3	87	83	89	7·4	7·1	6·3	1	11	0	17	15	8	14	11	7	1	3	20	14						
May	995·9	275·2	276·8	275·4	1·0	0·7	6·3	6·7	6·4	87	83	87	7·5	7·9	6·4	2	14	1	22	24	2	6	8	1	2	10	23	14							
June	998·1	273·1	274·4	273·2	0·9	1·1	0·8	5·1	5·3	5·2	83	80	86	7·0	6·3	4·8	1	7	0	30	27	3	1	11	5	1	13	10	22						
July	995·2	271·9	273·8	272·0	0·9	1·7	0·8	4·5	4·5	4·7	81	69	83	7·8	7·9	6·2	1	13	0	29	32	3	3	3	12	4	0	13	20						
Aug.	1001·8	272·1	272·8	271·9	0·9	0·9	0·7	4·7	4·9	4·7	81	82	84	7·0	6·3	5·5	12	0	26	28	2	8	10	1	9	16	17								
Sept.	998·3	271·2	272·5	272·0	1·2	1·0	0·9	3·9	4·7	4·5	73	80	81	6·9	7·3	6·8	1	13	1	42	15	2	0	6	9	1	18	20	22						
Oct.	1002·0	273·1	274·6	272·9	0·8	1·5	1·0	5·2	4·9	4·9	85	73	80	6·4	7·0	5·5	4	8	1	24	15	2	2	1	6	2	12	17	33						
Nov.	996·8	277·3	278·2	276·4	1·4	1·3	1·0	6·4	7·1	6·5	77	80	83	7·3	8·0	7·8	1	16	0	39	12	6	5	8	3	0	4	16	36						
Dec.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..							
Year	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..							
1911.																																			
Jan.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..							
Feb.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..							
Mar.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..							
Apr.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..							
May	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..							
June	1000·5	270·6	271·4	271·1	1·1	1·1	1·0	3·7	4·1	4·1	74	76	77	5·6	5·5	5·6	7	10	0	17	23	7	3	0	13	3	3	13	25						
July	995·6	270·6	271·5	270·5	1·2	1·4	1·1	3·7	3·9	3·7	72	70	74	5·6	6·5	6·1	6	12	0	12	21	5	1	1	4	14	31								
Aug.	994·7	270·9	272·4	271·6	0·8	0·9	1·1	4·3	4·8	4·1	81	82	86	5·6	6·7	6·3	2	5	0	10	31	16	1	3	2	1	15	23							
Sept.	1005·1	273·5	274·4	272·6	1·9	1·8	1·3	4·1	4·7	4·4	65	69	74	5·7	5·5	5·4	4	5	0	12	21	26	3	1	9	3	0	10	17						
Oct.	998·0	275·2	276·7	275·4	2·2	3·2	2·4	4·4	3·9	4·3	61	48	57	6·4	5·9	6·1	2	6	0	8	19	32	1	0	4	2	2	11	22						
Nov.	989·6	274·3	275·2	273·5	1·6	2·0	1·3	4·8	4·7	4·8	72	65	76	7·9	7·4	7·2	0	13	0	6	17	11	1	2	19	7	10	9	14						
Dec.	1001·5	274·3	275·4	276·5	2·1	2·4	1·6	4·5	4·7	4·9	63	60	71	7·8	7·8	7·7	0	17	0	5	23	15	5	6	16	3	3	8	14						
Year	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..							
1912.																																			
Jan.	1000·5	277·8	280·0	278·2	1·6	2·2	1·7	6·4	6·8	6·5	74	69	74	8·2	7·5	7·4	0	16	0	3	32	13	8	5	18	5	2	2	8						
Feb.	993·6	278·0	279·6	278·2	1·6	2·1	1·6	6·5	6·8	6·7	75	70	75	8·3	7·6	7·7	1	17	0	6	24	20	6	5	4	3	0	19							
Mar.	988·4	275·9	277·8	276·4	1·7	2·4	1·8	5·3	5·3	5·5	71	62	70	7·8	7·8	7·0	1	18	0	10	19	18	2	1	13	10	22								
Apr.	990·2	273·9	275·2	274·3	1·4	1·7	1·7	4·9	5·1	4·7	75	70	70	7·0	7·3	5·1	0	7	0	15	20	27	0	1	9	1	3	13	16						
May	991·6	273·9	275·5	273·9	1·3	2·2	1·7	4·9	5·4	5·5	77	61	70	8·1	8·1	5·2	0	12	0	17	2	12	1	0	1	0	4	12	61						
June	997·2	271·2	272·0	271·9	0·7	0·9	1·2	4·5	4·5	4·3	84	81	75	7·0	6·8	4·9	4	10	0	12	12	16	0	0	6	0	6	50							
July	994·8	268·6	270·1	269·0	0·9	1·0	1·1	3·3	3·7	3·5	73	75	72	6·8	6·7	5·7	7	16	0	26	15	26	18	0	4	0	0	1	29						
Aug.	998·3	269·6	271·6	270·6	1·2	1·3	1·6	3·3	4·0	3·2	70	62	64	7·5	7·5	5·6	6	10	0	22	19	15	11	4	0	0	0	0	44						
Sept.	997·6	272·8	275·7	273·8	1·8	2·1	1·9	3·9	5·2	4·3	65	65	66	4·9	7·2	4·3	5	7	0	15	20	21	2	0	2	2	0	6	37						
Oct.	999·7	274·6	275·5	273·9	2·2	2·2	1·7	4·3	4·9	4·5	62	63	70	6·4	6·9	5·5	1	9	0	12	15	20	3	0	2	2	0	3	48						
Nov.	987·9	276·0	277·5	274·8	2·1	2·9	1·7	4·9	4·5	4·8	64	54	59	7·5	7·9	8·2	0	16	1	13	16	9	1	5	8	3	0	11	37						
Dec.	993·3	275·8	276·3	275·6	1·4	2·3	1·5	5·7	5·7	5·5	75	65	74	7·6	7·5	7·5	8·2	0	16	2	30	8	9	12	5	3	6	6	18						
Year	994·4	274·0	275·7	274·3	1·5	1·9	1·6	4·8	5·1	4·8	72	67	71	7·3	7·4	6·2	19	152	1	164	196	227	60	30	75	23	28	70	389						
1913.																																			
Jan.	991·5	276·9	276·8	274·1	1·4	1·5	1·2	6·4	6·8	6·6	81	79	84	8·0	8·4	8·2	0	20	0	20	7	43	7	1	8	1	11	2	13						
Feb.	993·7	277·4	277·1	1·9	2·5	1·8	6·2	6·4	6·1	74	68	75	7·2	7·6	8·4	0	14	0	14	6	5	5	12	9	18	20	21								
Mar.	994·2	275·3	275·2	1·2	2·1																														

## APPENDIX II.—continued.

## CLIMATOLOGICAL SUMMARY—continued.

1910.	Air Temperature in Degrees Fahrenheit.												Highest Wet Bulb.	Rainfall.			Weather, No. of Days of								
	Means of		Max. and Min. com- bined	Absolute Extremes.										Total	Max.	Day.	Precipita- tion mm. or more.	Snow.	Snow lying.	Hail.	Thunder Storm.	Fog.	Ground Frost.	Gale, Force 8 or more.	
	Max.	Min.		Highest Max.	Day.	Lowest Min.	Day.	Lowest Max.	Day.	Highest Min.	Day.	a.		mm.	mm.										
	—	—		—	—	—	—	—	—	—	—	—		—	—	—									
Jan.	282.5	275.8	279.2	289.4	5	272.4	22	275.2	31	283.0	3	284.9	57.8	12.6	19	13	9	4	..	0	0	2	..	0	
Feb.	282.5	275.0	278.8	291.0	6	272.0	22	277.4	4	278.8	24	285.8	30.5	8.4	24	14	5	3	..	0	0	1	..	0	
Mar.	281.3	274.4	277.9	290.1	20	271.2	29	277.5	27, 28	278.0	15	284.7	102.4	44.5	25	14	7	4	..	0	0	2	..	0	
Apr.	278.2	273.0	275.6	286.6	7	268.6	30	273.0	29	276.6	8	281.3	78.1	10	18	13	8	..	1	0	0	3	..	1	
May	275.4	270.6	273.0	281.1	19	266.4	15	272.4	15, 24	276.5	19	278.0	185.4	55.8	4	19	14	13	..	1	0	0	0	0	
June	274.1	269.5	271.8	279.7	5	264.9	14	268.9	12	276.0	6	278.0	123.7	26.2	29	17	10	16	..	1	0	0	0	0	
July	274.3	269.8	272.0	285.2	22	264.0	27	267.5	27	278.3	24	280.2	130.9	32.5	12	16	14	14	..	0	0	0	0	0	
Aug.	274.5	268.9	271.7	279.2	22	263.0	6	267.0	9	273.4	16	277.2	175.8	41.7	17	22	14	17	..	1	0	0	0	1	
Sept.	276.6	270.1	273.4	282.8	24	265.0	1	269.2	2	274.7	26	279.3	164.7	82.0	3	14	9	10	..	1	0	3	..	1	
Oct.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Nov.	280.2	274.0	277.1	286.8	8	271.0	7	275.5	13	277.0	17	280.9	75.1	13.9	23	19	18	8	..	1	0	4	..	0	
Dec.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Year	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
1911.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Jan.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Feb.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mar.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Apr.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
May	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
June	273.5	268.5	271.0	280.7	18	264.4	22	267.5	21	274.8	24	276.0	140.8	47.3	27	15	14	12	..	0	0	0	0	0	
July	273.9	268.1	271.0	281.8	11	262.7	6, 7	267.6	5	278.8	12	270.7	107.3	35.4	2	16	14	11	..	0	0	0	0	0	
Aug.	274.6	268.5	271.6	278.2	2	261.7	31	271.5	26	273.2	3	275.0	216.9	48.9	14	16	16	15	..	0	0	1	..	0	
Sept.	276.3	269.5	272.9	281.1	24	260.4	1	272.6	9	275.6	24	276.9	35.9	15.0	26	10	6	8	..	0	0	0	0	0	
Oct.	278.9	271.5	275.2	289.2	16, 17	263.7	2	268.3	1	283.5	17	281.5	61.6	20.9	14	17	8	10	..	0	0	0	0	0	
Nov.	277.4	270.9	274.2	282.3	1	268.4	23	273.4	3	273.7	19	276.8	105.0	43.6	4	19	11	15	..	0	0	1	..	0	
Dec.	278.4	271.9	275.2	286.0	10	268.9	1	275.8	30	277.0	11	277.7	46.3	21.3	19	14	9	9	..	0	0	1	..	0	
Year	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
1912.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Jan.	282.3	274.7	278.5	289.9	29	270.8	8	267.5	6	279.6	17	283.0	64.3	24.9	21	20	12	1	..	0	0	5	..	0	
Feb.	282.5	275.2	278.9	289.2	14	272.5	23	276.9	21	278.5	18	283.6	222.1	62.0	4	20	15	2	..	0	0	0	1	..	
Mar.	280.1	274.7	277.4	285.0	31	268.8	18	276.1	17	276.5	29	280.3	147.4	26.1	2	26	22	11	..	0	0	1	..	0	
Apr.	277.9	270.9	274.4	286.1	28	267.0	16	272.6	24	276.3	1	280.6	112.1	20.7	2	21	18	10	..	0	0	0	3	..	
May	277.0	270.9	274.0	282.2	6	264.0	29	268.8	31	277.2	4	278.5	165.5	24.5	27	23	23	5	..	0	0	3	..	0	
June	274.4	268.2	271.3	285.0	23	263.0	18	267.2	19	273.9	24	282.3	34.5	20.6	16	10	6	4	..	0	0	0	0	0	
July	272.2	265.8	269.6	278.6	15	262.0	1	265.0	1	272.1	14	275.0	70.8	21.0	25	10	10	7	..	0	0	0	0	0	
Aug.	273.2	266.4	269.8	280.5	1	259.7	13	264.0	17	274.5	3	278.0	97.1	26.9	2	12	9	..	0	0	0	0	0	0	
Sept.	278.0	269.5	273.8	285.5	13, 14	266.0	10	273.0	28	274.3	26	280.5	67.1	28.0	8	5	5	5	..	0	0	1	..	0	
Oct.	277.7	270.6	274.2	280.8	28	263.8	5	270.0	3	278.0	29	285.0	65.6	26.1	23	8	8	5	..	0	0	1	..	0	
Nov.	279.2	269.6	274.4	288.9	27	268.1	6	272.9	17	276.2	28	280.2	158.1	47.5	14	15	13	6	..	0	0	1	..	0	
Dec.	281.0	271.1	276.1	288.2	23	267.6	2	276.0	27	274.5	27	280.5	144.4	19.2	25	20	18	7	..	0	0	1	..	0	
Year	278.0	270.6	274.3	290.8	28	259.7	13	264.0	17	279.6	17	285.0	134.9	62.0	4	190	162	72	..	5	0	13	..	1	
1913.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Jan.	279.5	274.1	276.8	284.9	26	271.3	16	275.0	21	280.2	27	280.7	105.1	18.1	12	18	15	6	0	1	0	1	..	0	
Feb.	281.5	274.4	277.9	292.7	17	271.7	24	275.4	25	277.1	18	283.5	125.5	30.5	13	21	16	8	1	8	0	0	1	..	
Mar.	279.1	273.1	276.3	283.6	7	270.6	25, 29	275.7	29, 31	278.4	23	279.4	230.4	76.0	7	21	15	14	1	6	0	1	..	0	
Apr.	277.6	271.7	274.7	285.6	12	268.3	24	273.6	29	274.7	11	280.0	98.5	21.6	1	17	13	10	1	2	0	6	..	0	
May	277.8	271.4	274.6	284.0	18	265.5	7	272.3	21	276.7	18	280.5	335.2	56.1	8	26	20	13	1	4	0	3	..	0	
June	272.7	266.5	277.9	279.4	13	260.4	26	266.8	28	271.4	6	275.1	177.4	37.9	5	20	14	20	5	2	0	1	..	0	
July	272.2	265.8	269.0	278.3	28</td																				

APPENDIX II.—*continued.*

SUMMARY OF OBSERVATIONS AT FIXED HOURS—*continued.*

1914	Mean Pressure	Temperature.			Humidity.						Amount of Cloud. 0-10.			Number of Days of		Wind, No. of Observations referred to a total of 93, 90, 87, or 84 for the month.													
					Depression of Wet Bulb.			Vapour Pressure.			Percentage.																		
	At M.S.L.	I.	II.	III.	I.	II.	III.	I.	II.	III.	I.	II.	III.	I.	II.	III.	Clear Sky.*	Overscast.*	Wind Force† 8 and above.	Strong Wind.‡ (4-7).	Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
Jan.	mb.	a.	a.	a.	a.	a.	a.	mb	mb	mb	%	%	%																
995·2	278·1	279·9	277·8	1·9	2·5	1·7	6·5	6·8	6·5	74	68	76	7·9	7·8	7·8	1	19	0	12	13	11	15	2	1	1	2	21	27	
Feb.	994·5	279·8	281·4	278·6	1·9	2·8	1·7	7·4	7·2	7·0	75	66	76	6·1	6·9	7·7	1	12	0	14	7	10	4	4	10	4	2	12	31
Mar.	998·9	278·0	280·4	278·0	1·8	2·9	2·1	6·5	6·6	6·2	75	64	71	7·1	6·7	5·9	2	8	1	24	15	14	17	4	1	2	7	12	21
Apr.	1001·8	276·8	278·1	277·0	1·8	2·4	1·9	5·9	6·0	5·9	74	68	73	7·5	7·0	5·7	1	11	1	28	22	15	8	4	1	2	5	11	24
May	994·7	275·4	276·2	275·2	1·6	1·7	1·3	5·5	5·9	5·7	75	75	79	6·6	7·5	7·0	2	11	0	22	20	13	13	4	2	1	3	20	17
June	996·2	272·4	272·9	272·4	1·3	1·4	1·2	4·1	4·3	4·2	70	71	72	7·3	7·3	7·4	0	15	1	14	19	12	9	3	5	8	4	9	21
July	1001·6	270·3	270·9	270·0	1·4	1·2	1·2	2·8	3·4	2·9	55	65	59	6·8	7·0	5·6	3	13	0	17	18	11	7	5	6	4	5	13	24
Aug.	999·3	271·3	272·6	271·4	1·3	1·4	1·1	3·5	4·1	3·8	66	69	69	7·3	6·9	7·0	1	12	0	18	25	11	8	5	4	3	11	11	11
Sept.	1000·2	272·9	274·7	273·3	1·3	1·8	1·5	4·4	4·9	4·4	72	71	71	7·1	6·9	5·8	0	8	0	20	16	13	9	2	3	1	9	17	20
Oct.	989·0	274·2	275·1	273·3	1·6	1·8	1·4	4·8	5·1	4·5	72	72	73	7·8	7·1	6·9	0	15	3	34	9	13	8	4	1	4	10	18	26
Nov.	992·5	275·3	276·5	274·4	1·6	1·9	1·3	5·4	5·6	5·3	75	72	78	7·6	7·0	8·5	0	15	0	18	13	7	14	11	9	2	4	6	24
Dec.	1000·6	278·4	280·1	278·1	2·1	2·6	1·8	6·4	6·7	6·5	71	67	75	6·5	6·7	6·7	0	10	0	14	9	12	15	2	5	5	7	9	29
Year	997·0	275·2	276·6	275·0	1·6	2·0	1·5	5·3	5·6	5·2	71	69	73	7·1	7·1	6·8	11	149	6	235	186	142	127	50	48	35	69	163	275
1915.																													
Jan.	992·2	278·5	280·3	277·7	1·9	1·8	1·7	6·7	7·8	6·4	74	76	76	7·3	7·4	7·9	0	14	0	10	3	15	15	8	7	3	4	8	30
Feb.	993·0	277·6	279·6	277·2	1·2	1·9	1·2	6·9	7·3	6·7	82	75	82	8·4	7·3	7·2	0	12	1	20	10	14	10	4	2	3	8	9	24
Mar.	1001·5	277·9	279·9	277·6	1·1	1·8	0·9	7·3	7·6	7·3	84	76	87	7·7	7·1	7·4	0	14	0	13	21	14	17	7	2	3	2	7	20
Apr.	991·7	275·7	277·0	275·6	1·2	1·5	1·2	5·8	6·3	5·9	81	78	81	7·9	7·2	6·5	0	15	0	22	13	17	8	3	0	1	1	13	34
May	994·4	272·2	273·1	272·3	0·9	1·0	0·9	4·4	4·8	4·6	77	79	78	7·7	8·2	7·0	0	15	0	15	30	10	10	4	7	1	4	10	17
June	997·2	270·4	271·4	271·0	1·0	1·3	1·1	3·4	3·6	3·5	67	65	67	7·0	6·8	5·9	2	10	1	20	15	8	15	4	3	4	4	7	30
July	996·0	270·2	271·1	270·7	1·0	1·2	1·2	3·2	3·4	3·1	66	64	62	7·8	7·2	5·8	1	13	0	15	21	11	15	9	2	1	4	13	17
Aug.	995·2	269·4	270·6	269·7	0·7	0·7	0·6	3·4	4·0	3·7	74	74	77	8·5	8·7	7·7	0	20	0	13	18	7	10	8	3	2	7	11	19
Sept.	1000·5	272·3	274·7	273·5	0·9	1·2	1·3	4·5	5·5	4·7	78	80	75	6·7	6·4	5·7	3	11	0	14	22	12	9	3	2	2	3	12	25
Oct.	1005·4	274·8	276·4	274·2	1·5	1·9	1·4	5·2	5·6	5·1	76	72	76	6·8	6·5	6·2	1	8	0	12	20	13	21	4	2	9	6	0	18
Nov.	998·2	277·2	278·2	276·3	1·8	2·3	1·8	6·1	6·1	5·6	74	69	73	7·4	7·6	7·9	0	14	0	8	7	13	16	10	8	1	4	10	21
Dec.	992·9	276·8	278·5	276·4	1·5	2·0	1·6	6·2	6·6	6·0	78	73	77	8·0	8·2	7·7	0	16	0	9	3	9	19	13	16	0	9	4	20
Year	996·9	274·4	275·9	274·4	1·2	1·6	1·2	5·3	5·7	5·2	76	73	76	7·6	7·4	6·9	7	162	2	171	183	143	165	79	59	31	56	104	275

\* On a day of clear sky the mean cloud amount at hours of observation  $< 2$ ; on an overcast day  $> 8$ .

The wind force is probably estimated on a scale of 0-10.

### APPENDIX III.

SUMMARY OF OBSERVATIONS AT PORT LOUIS, EAST FALKLAND ISLANDS, TAKEN BY SIR JAMES ROSS.

The Tables are summaries of daily observations given in

## SUMMARY OF OBSERVATIONS AT FIXED HOURS.

## APPENDIX II.—continued.

## CLIMATOLOGICAL SUMMARY—continued.

1914.	Air Temperature in Degrees Fahrenheit.												Highest Wet Bulb.	Rainfall.			Weather, No. of Days of							
	Means of			Max. and Min. com- bined.	Absolute Extremes.									Total.	Max.	Day.	Precipitation.	Thunder Storm.	Fog.	Ground Frost.	Gale.	Force 8 or more.		
	Max.	Min.	Highest Max.		Day.	Lowest Min.	Day.	Lowest Max.	Day.	Highest Min.	Day.													
	a.	a.	a.		a.	a.	a.	a.	a.	a.	a.													
Jan.	282.2	274.4	278.3	291.4	19	271.6	8	276.0	23	277.0	13	286.6	86.6	23.8	4	19	13	4	..	+	c	4	..	o
Feb.	283.3	275.2	279.3	291.5	16	271.2	27	277.7	26	280.8	13	285.5	63.9	13.4	3	16	13	4	..	3	o	3	..	o
Mar.	282.6	274.6	278.6	293.8	9	270.8	8	276.4	12	280.5	20	284.4	54.3	13.4	24	20	13	4	..	4	o	5	..	i
Apr.	280.3	273.6	277.0	286.3	4	269.2	14	273.0	19	278.7	24	280.8	147.6	33.7	5	20	17	4	..	4	o	7	..	i
May	279.1	272.1	275.6	288.5	5	268.2	27	274.1	9	283.8	17	283.4	85.0	28.7	29	20	14	10	..	7	o	7	..	o
June	274.6	269.5	272.1	281.9	1	262.9	20	269.4	5	273.5	25, 26	276.5	114.6	24.2	7	21	15	16	..	2	o	4	..	i
July	273.0	267.4	270.2	278.5	25	261.8	9	265.9	17	274.4	3	275.5	163.9	48.8	24	20	16	17	..	3	o	o	..	o
Aug.	274.2	268.5	271.4	280.7	20	263.1	1	267.3	1	275.1	21	276.7	112.1	73.3	14	18	13	16	..	2	o	o	..	o
Sept.	276.5	270.1	273.3	280.7	10	263.9	26	270.1	26	275.4	2	276.7	35.0	7.8	23	18	6	12	..	3	o	o	..	o
Oct.	277.4	270.1	273.8	283.3	31	267.6	5	273.3	6	273.4	18	278.5	53.6	9.9	14	21	14	18	..	1	o	2	..	o
Nov.	278.1	271.9	275.0	283.9	14	268.0	9	272.5	9	275.7	1	279.0	75.3	16.8	16	22	11	12	..	5	o	2	..	o
Dec.	282.3	274.2	278.3	290.9	20	271.5	7	276.3	8	277.5	20, 23	283.6	53.9	15.4	2	14	10	2	..	3	o	3	..	o
Year	278.6	271.8	275.2	293.8	Mar. 9	261.8	July 9	265.9	July 17	283.5	May 17	286.6	1045.8	73.3	Aug. 14	229	155	119	..	44	o	36	..	6
1915.																								
Jan.	282.4	274.4	278.4	291.1	20	271.4	17	277.0	6	278.5	10	282.7	50.6	16.4	23	16	9	3	..	3	o	2	..	i
Feb.	281.9	274.2	278.1	289.2	15	271.8	18	277.0	24	280.2	15	283.7	145.8	23.7	11	21	17	5	..	5	o	5	..	i
Mar.	283.1	274.0	278.6	292.3	8, 14	270.9	29, 30	275.3	27	277.6	9, 22	288.2	94.1	20.0	5	17	11	2	..	3	o	10	..	o
Apr.	278.7	272.2	275.5	286.8	7	268.0	23	274.4	14	276.6	8	283.5	221.5	41.4	8	26	20	11	..	4	o	3	..	i
May	275.1	269.6	272.4	280.9	15	266.0	8	270.6	7	274.6	16	279.1	181.1	28.1	17	24	19	16	..	3	o	5	..	o
June	273.3	267.5	270.4	282.2	14	262.0	3	266.3	5	274.8	14	278.0	236.6	96.9	30	19	15	11	..	5	o	o	..	i
July	273.9	267.4	270.7	285.5	10	262.8	24	266.8	18	273.7	11	279.6	195.7	68.5	15	16	11	12	..	1	o	o	..	o
Aug.	272.1	266.5	269.3	278.7	31	260.4	21	265.7	20	271.8	16	275.0	206.3	51.5	29	23	13	21	..	3	o	1	..	o
Sept.	277.0	269.3	273.2	281.1	4	264.6	18	271.3	1	274.2	23	277.8	65.1	22.6	12	15	8	9	..	4	o	5	..	o
Oct.	278.3	271.1	274.7	287.6	20	266.0	1	273.7	1	276.5	21	280.9	22.0	12.9	11	10	3	6	..	o	2	..	o	o
Nov.	280.2	277.3	278.8	288.0	29	269.9	17	273.6	16	277.5	28	281.5	99.3	40.0	21	16	10	6	..	7	o	1	..	o
Dec.	279.7	274.2	277.0	285.4	29	270.5	6	275.8	5	279.0	29	281.2	44.3	7.1	4	20	11	7	..	7	o	5	..	o
Year	278.0	271.5	274.8	292.3	Mar. 8, 14	260.4	Aug. 21	265.7	Aug. 20	280.2	Feb. 15	288.2	1562.4	96.9	June 30	223	147	109	..	45	o	40	..	4

## APPENDIX III.

APRIL TO AUGUST 1842. LAT. 51° 30' S., LONG. 58° W. OBSERVATIONS AT 9 h.

Sir James Ross' *Voyage to the Southern Seas*, vol. ii. pp. 428–437.

## CLIMATOLOGICAL SUMMARY.

1842.	Air Temperature.												Total.	Rainfall.			Weather, No. of Days of						
	Means of			Max. and Min. com- bined.	Absolute Extremes.									Max.	Day.	Precipitation.	Thunder Storm.	Fog.	Ground Frost.	Gale.	Force 8 or more.		
	Max.	Min.	Highest Max.		Day.	Lowest Min.	Day.	Lowest Max.	Day.	Highest Min.	Day.												
	a.	a.	a.		a.	a.	a.	a.	a.	a.	a.												
Apr.	281.8	277.2	279.5	285.8	21	274.7	18	278.0	4, 28, 30	280.8	15	..	..	..	16	..	1	..	..	o	3	..	o
May	280.3	274.9	277.6	283.6	2, 9	269.7	31	273.0	31	279.1	4, 11	66.3	13.0	20	22	17	1	..	..	o	3	..	..
June	276.2	271.9	274.1	279.1	16, 19	266.9	28, 29	271.3	28	276.9	18	103.9	18.8	16	27	21	4	..	..	o	3	..	..
July	275.8	272.4	274.1	278.6	5	268.0	1	271.9	3	275.8	25	58.2	13.0	19	26	14	1	..	..	o	3	..	..
Aug.	276.4	272.2	274.3	282.4	30	266.6	7, 8	269.7	7	276.3	29, 30	79.0	22.6	21	18	9	6	..	..	o	3	..	..

## APPENDIX IV.

## OBSERVATIONS AT STANLEY, FALKLAND ISLANDS.

1875 to 1877: Observations at 9 a.m., based on London, *Q. J. R. Meteor. Soc.*, vi., 1879-80, p. 200.

## SUMMARY OF OBSERVATIONS AT FIXED HOURS.

1875.	Mean Pressure corrected to 273 a. and Lat. 45°.	Temperature.	Humidity.			Amount of Cloud. 0-10.	Wind, No. of Observations reduced to a total of 31, 30, or 28 for the month.								
			M.S.L.	Depres-	Vapour		Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
				sion of Wet Bulb.	Pressure.			9 a.m.							
Jan.	mb.	a.	mb.	%	7·4	0	1	0	0	0	4	12	7	7	
Feb.	..	283·5	2·6	8·9	71	7·6	0	2	0	0	0	4	7	7	8
Mar.	..	283·1	2·0	9·3	77	5·6	0	2	0	0	0	0	9	9	10
Apr.	..	283·5	1·7	10·0	80	5·2	0	2	1	0	1	1	8	13	3
May	1001·2	279·6	1·3	8·0	82	5·2	2	1	0	0	0	0	1	12	6
June	1008·2	278·2	0·8	7·7	88	..	0	4	3	5	0	0	1	12	5
July	1002·2	276·6	0·7	7·0	89	7·5	1	2	0	3	3	4	3	9	5
Aug.	1004·7	275·2	0·3	6·9	96	6·9	2	2	0	0	2	4	4	12	5
Sept.	1008·4	277·1	0·8	7·1	88	6·3	3	2	0	0	0	4	2	13	7
Oct.	1006·7	279·0	1·8	7·1	76	4·9	1	1	0	0	2	1	6	15	4
Nov.	1008·0	279·3	1·6	7·6	80	7·4	1	2	0	0	0	6	10	8	4
Dec.	999·3	281·7	2·3	8·1	72	6·9	0	1	1	1	3	8	8	6	2
Year	..	279·9	1·5	8·8	81	..	10	23	8	13	14	40	76	118	63
1876.															
Jan.	998·0	282·4	2·0	8·9	75	7·8	0	2	0	1	0	3	15	5	5
Feb.	994·2	282·3	2·4	8·4	70	6·4	0	1	1	0	2	3	7	11	4
Mar.	999·1	281·4	1·5	8·8	81	7·4	1	6	1	1	1	2	5	9	5
Apr.	1003·5	280·3	1·0	8·6	86	8·2	0	2	0	1	0	2	5	13	7
May	997·0	277·2	0·8	7·2	89	6·4	2	2	0	0	0	2	8	11	6
June	1006·5	275·7	0·6	6·8	91	7·3	5	1	2	1	0	3	4	10	4
July	1002·4	275·8	0·8	6·4	87	6·5	1	6	1	0	0	3	4	14	2
Aug.	1005·2	275·6	0·8	6·4	88	6·8	4	1	0	1	0	4	6	10	5
Sept.	1005·9	278·2	1·1	7·4	84	7·3	1	2	1	1	0	4	6	8	7
Oct.	1009·7	278·0	1·4	7·0	81	8·0	0	5	2	1	3	6	11	2	1
Nov.	1010·4	280·0	1·8	7·6	77	8·4	0	1	5	0	3	5	8	2	6
Dec.	1008·2	282·4	2·1	8·7	75	6·7	1	1	1	2	3	6	9	5	2
Year	1003·5	279·1	1·4	7·7	82	7·3	15	30	14	9	12	43	88	100	54
1877.															
Jan.	1004·3	285·1	2·7	9·8	70	6·4	0	0	0	2	1	3	10	10	5
Feb.	1004·5	283·1	1·7	9·8	80	7·5	1	1	1	1	1	5	6	9	3
Mar.	1006·8	283·7	1·4	10·5	83	6·9	0	3	0	0	0	2	5	12	8
Apr.	998·7	279·5	1·2	8·1	84	5·7	2	1	1	2	0	2	5	10	7
May	1000·8	277·8	0·6	8·1	92	7·4	1	1	1	2	0	1	4	10	10
June	1002·9	276·5	0·6	7·2	92	7·9	2	0	0	0	0	2	7	11	8
July	1006·8	274·9	0·6	6·5	91	8·2	9	5	1	0	2	3	5	4	2
Aug.	1004·5	275·9	0·7	6·8	89	6·9	4	1	1	4	1	5	3	11	5
Sept.	997·0	276·3	1·1	6·4	84	6·4	0	1	0	1	3	8	12	5	5
Oct.	1000·8	278·4	1·2	7·5	84	7·7	3	2	0	1	2	2	9	8	4
Nov.	1001·8	281·0	1·8	8·2	78	8·5	0	1	3	2	0	4	9	8	3
Dec.	995·8	281·9	1·8	8·7	77	8·3	0	2	1	0	3	9	10	5	5
Year	1002·0	279·5	1·2	8·1	84	7·3	22	18	9	15	9	31	82	107	71

## APPENDIX IV.

LAT.  $51^{\circ} 41'$  S., LONG.  $57^{\circ} 51'$  W.July 1881 to Dec. 1883: Observations probably at 9 a.m., based on *Symons's Meteorological Magazine*.

## CLIMATOLOGICAL SUMMARY.

1875.	Air Temperature.						Rainfall.			Weather, No. of Days of						Bright Sunshine.						
	Means of		Max. and Min. com- bined.	Absolute Extremes.			Total.	Max.	Day.	Precipitation.	Snow.	Snow lying.	Hail.	Thunder Storm.	Fog.	Ground Frost.	Gale.	Force 8 or more.	Daily Mean.	Total.	Per Cent.	
	Max.	Min.		Highest Max.	Day.	Lowest Min.																
Jan.	a.	a.	a.	a.	20	275.2	25	83.1	14.2	26	21	..	o	..	i	i	o	..	..	..	..	
Feb.	285.9	278.6	282.3	290.8	4	275.8	16	84.3	42.9	14	18	..	o	..	i	i	1	..	..	..	..	
Mar.	286.0	279.2	282.6	292.4	18	273.4	13	44.7	11.2	3	17	..	o	..	o	o	3	..	..	..	..	
Apr.	282.3	276.5	279.4	287.4	19	273.5	25	61.0	7.9	11	24	..	i	..	i	o	1	..	..	..	..	
May	280.3	275.7	278.0	283.6	14	268.6	12	36.8	9.7	26	15	..	2	..	o	o	1	5	..	..	..	
June	278.3	274.9	276.6	280.6	4	271.4	26	36.3	6.1	3	18	..	1	..	o	o	2	..	..	..	..	
July	278.1	273.5	275.8	281.9	15	270.3	26	30.0	3.6	14	17	..	+	..	o	o	o	4	..	..	..	
Aug.	279.4	273.9	276.7	284.1	19	268.4	30	23.1	6.6	2	16	..	6	..	o	o	3	..	..	..	..	
Sept.	281.8	275.0	278.4	285.1	19	271.2	2, 23	21.3	4.3	2	14	..	3	..	o	o	4	..	..	..	..	
Oct.	281.8	275.4	278.6	287.9	27	271.7	12	27.2	3.3	24	20	..	1	..	o	o	1	..	..	..	..	
Nov.	284.2	277.7	281.0	293.1	11	273.6	10	31.5	18.0	26	14	..	1	..	o	o	1	..	..	..	..	
Dec.	284.1	277.3	280.7	291.0	9	272.2	2	74.2	17.3	17	25	..	1	..	2	o	2	..	..	..	..	
Year	282.3	276.4	279.4	293.1	Nov.	268.4	30	553.5	42.9	Feb.	219	..	20	..	5	3	26	..	..	..	..	
1876.																						
Jan.	284.9	278.2	281.5	289.3	13	273.7	5	83.1	31.5	30	24	..	o	..	3	2	1	..	..	..	..	
Feb.	285.2	278.1	281.7	293.1	15	274.4	12	50.8	8.9	26	22	..	o	..	1	1	0	..	..	..	..	
Mar.	283.9	277.4	280.7	288.0	7	272.4	29	53.8	8.1	3	22	..	o	..	1	1	3	..	..	..	..	
Apr.	282.8	277.6	280.2	287.9	1	274.7	20	27.2	6.1	17	21	..	o	..	0	3	..	..	..	..	..	
May	279.4	274.7	277.1	282.9	9	268.7	28	41.7	7.1	28	21	..	4	..	3	0	4	..	..	..	..	
June	277.9	273.7	275.8	279.9	17	269.5	21	27.9	6.9	10	19	..	5	..	o	1	6	..	..	..	..	
July	278.2	273.6	275.9	280.7	31	270.6	14	70.1	10.9	20	22	..	6	..	1	0	2	..	..	..	..	
Aug.	278.3	273.3	275.8	280.9	2	270.1	16	43.2	11.4	20	28	..	5	..	o	o	2	..	..	..	..	
Sept.	280.3	275.3	277.8	285.4	6	271.9	2	40.1	11.4	15	14	..	1	..	1	0	0	..	..	..	..	
Oct.	279.9	274.8	277.3	284.0	27	270.2	20	32.5	4.1	7	24	..	2	..	o	o	1	..	..	..	..	
Nov.	282.2	276.3	279.2	289.0	20	271.9	4	23.1	5.3	21	15	..	2	..	o	o	0	..	..	..	..	
Dec.	285.1	278.3	281.7	292.9	17	273.6	3	25.1	5.8	6	17	..	o	..	o	1	2	..	..	..	..	
Year	281.5	275.9	278.7	293.1	Feb.	15	268.7	May	518.6	31.5	Jan.	249	..	25	..	10	6	24	..	..	..	..
1877.																						
Jan.	288.3	280.7	284.5	297.4	27	275.8	24	40.6	5.3	19	19	..	o	..	o	o	1	..	..	..	..	
Feb.	286.3	278.9	282.6	293.6	19	273.6	8	31.2	7.4	5	18	..	o	..	2	1	3	..	..	..	..	
Mar.	286.2	280.3	283.3	292.1	16	274.1	30	30.5	5.6	19	16	..	o	..	o	o	2	..	..	..	..	
Apr.	282.3	275.7	279.0	286.6	5	272.4	22	64.5	16.3	3	22	..	1	..	1	o	1	..	..	..	..	
May	280.3	275.1	277.7	283.4	7	271.2	17	50.3	7.4	1	22	..	2	..	o	o	3	..	..	..	..	
June	278.6	274.0	276.3	282.0	10	269.4	7	45.2	7.1	26	23	..	5	..	o	o	2	..	..	..	..	
July	277.2	272.6	274.9	280.8	12	265.7	17	39.9	10.9	9	22	..	3	..	o	o	4	..	..	..	..	
Aug.	278.1	273.7	275.9	282.6	9	269.6	27	22.9	2.5	19	22	..	6	..	1	o	2	..	..	..	..	
Sept.	278.9	273.3	276.1	284.7	4	267.8	15	25.9	4.6	18	19	..	9	..	o	o	0	..	..	..	..	
Oct.	281.2	274.9	278.0	287.4	6	270.8	29	43.4	6.4	3	20	..	4	..	o	o	0	..	..	..	..	
Nov.	283.6	276.8	280.2	287.9	19	273.3	16	32.3	4.8	2	17	..	o	..	o	o	o	..	..	..	..	
Dec.	284.8	277.6	281.2	289.4	6	272.9	10	50.0	9.1	27	21	..	o	..	1	2	3	..	..	..	..	
Year	282.2	276.1	279.2	297.4	Jan.	27	265.7	July	476.7	16.3	Apr.	241	..	30	..	5	3	21	..	..	..	..

From *Quarterly Journal of Royal Meteorological Society*, vol. vi., 1879-80, p. 200.

APPENDIX IV.—*continued.*

METEOROLOGICAL OBSERVATIONS TAKEN AT STANLEY HARBOUR, FALKLAND ISLANDS.  
By F. E. COBB. From *Symons's Meteorological Magazine*.

	Shade Temperature.					Absolute		Relative Humidity.	Rainfall.		Cloudiness.
	Mean Max.	Mean Min.	Mean.	Absolute Max.	Absolute Min.	Max. in Sun.	Min. on Grass.		Amount.	Days.	
1881.											
July	277·4	273·4	275·4	280·0	265·3	302·9	264·0	94	78·5	22	7·8
Aug.	278·0	273·4	275·7	282·7	268·6	308·7	266·7	92	51·1	20	6·4
Sept.	278·9	274·1	276·5	283·7	270·2	313·6	266·2	90	47·5	22	8·0
Oct.	282·7	276·1	279·4	289·9	272·8	323·5	269·7	80	49·5	12	5·7
Nov.	284·8	276·9	280·9	290·6	273·2	325·7	268·2	75	45·0	16	6·4
Dec.	285·3	278·1	281·7	292·2	273·6	326·5	270·2	76	87·6	24	7·2
1882.											
Jan.	286·3	278·7	282·5	291·7	273·6	329·7	270·2	76	70·9	18	7·3
Feb.	286·3	279·8	283·1	290·1	275·4	325·8	271·9	82	60·5	12	8·5
Mar.	284·0	277·1	280·6	289·8	271·3	323·1	266·4	81	70·1	25	7·3
Apr.	280·3	274·8	277·6	285·9	270·3	313·7	267·0	87	77·0	23	7·1
May	278·3	273·6	276·0	282·3	268·8	313·1	266·3	88	131·8	28	6·6
June	277·3	272·8	275·1	280·3	266·1	303·1	265·1	90	56·9	20	7·4
July	277·5	273·1	275·3	281·3	268·1	302·4	266·3	92	21·3	21	7·1
Aug.	278·0	273·8	275·9	281·3	271·8	314·8	268·4	93	50·8	22	7·1
Sept.	279·2	274·9	277·1	283·4	272·1	314·7	268·7	91	43·2	17	8·4
Oct.	282·3	275·7	279·0	287·3	271·9	321·9	269·4	86	54·6	16	7·0
Nov.	285·1	277·3	281·2	288·2	274·8	325·2	271·9	77	69·9	18	7·2
Dec.	286·1	278·4	282·3	293·6	275·5	329·8	270·7	76	65·5	15	6·9
Year	281·7	275·8	278·8	293·6	266·1	329·8	265·1	85	772·5	235	7·3
1883.											
Jan.	285·8	278·6	282·2	293·0	273·9	329·7	271·4	81	84·1	22	7·5
Feb.	285·6	278·6	282·1	289·8	273·6	324·6	271·2	86	75·9	14	7·2
Mar.	283·4	277·0	280·2	289·0	271·4	321·7	268·6	87	135·6	23	7·7
Apr.	281·6	275·4	278·5	286·7	268·7	321·3	269·8	91	83·8	23	8·0
May	279·8	275·1	277·4	282·3	270·9	309·8	266·9	90	42·9	21	7·7
June	277·8	273·1	275·5	280·2	261·8	303·9	262·8	95	43·9	23	7·9
July	278·1	273·7	275·9	281·9	266·9	306·9	267·7	90	66·8	19	6·4
Aug.	278·8	273·7	276·3	283·2	267·6	313·0	265·7	90	29·7	17	6·7
Sept.	279·7	275·1	277·4	283·6	270·2	318·0	269·6	86	36·3	20	7·1
Oct.	283·7	275·2	279·4	289·3	270·9	322·8	267·6	76	14·0	9	6·1
Nov.	283·9	276·3	280·1	290·1	272·6	322·8	268·7	75	52·6	21	6·2
Dec.	283·6	276·7	280·2	289·0	273·1	...	...	75	80·8	21	6·8
Year	281·8	275·7	278·8	293·0	261·8	...	262·8	85	746·4	233	7·1

APPENDIX V.

OBSERVATIONS AT CAPE PEMBROKE, FALKLAND ISLANDS, LAT.  $51^{\circ} 41' S.$ , LONG.  $57^{\circ} 42' W.$ , 1905 TO 1915, EXCEPT JUNE 1907 TO JULY 1908.  
Observations at 4 h., 8 h., 12 h., 16 h., 20 h., and 24 h. Height of Barometer Cistern above M.S.L. = 21 metres.

Month.	Barometer Readings.		Dry Bulb. a.		Depression of Wet Bulb. a.		Vapour Pressure. mb.		Relative Humidity.					
	Station Level.	mb.	8 h.	12 h.	16 h.	20 h.	24 h.	Mean.	8 h.	12 h.	16 h.	20 h.	24 h.	Mean.
1905.	4 h.	998.2	998.4	998.2	998.4	998.3	998.4	998.3	281.3	281.3	281.3	281.3	281.3	281.3
Jan.	8 h.	998.3	998.4	998.3	998.4	998.3	998.4	998.3	281.3	281.3	281.3	281.3	281.3	281.3
Feb.	12 h.	998.3	998.4	998.3	998.4	998.3	998.4	998.3	281.3	281.3	281.3	281.3	281.3	281.3
Mar.	16 h.	998.3	998.4	998.3	998.4	998.3	998.4	998.3	281.3	281.3	281.3	281.3	281.3	281.3
Apr.	20 h.	998.3	998.4	998.3	998.4	998.3	998.4	998.3	281.3	281.3	281.3	281.3	281.3	281.3
May.	24 h.	998.3	998.4	998.3	998.4	998.3	998.4	998.3	281.3	281.3	281.3	281.3	281.3	281.3
June.	1906.	998.3	998.4	998.3	998.4	998.3	998.4	998.3	281.3	281.3	281.3	281.3	281.3	281.3
July.	998.3	998.4	998.3	998.4	998.3	998.4	998.3	998.3	281.3	281.3	281.3	281.3	281.3	281.3
Aug.	998.3	998.4	998.3	998.4	998.3	998.4	998.3	998.3	281.3	281.3	281.3	281.3	281.3	281.3
Sept.	998.3	998.4	998.3	998.4	998.3	998.4	998.3	998.3	281.3	281.3	281.3	281.3	281.3	281.3
Oct.	998.3	998.4	998.3	998.4	998.3	998.4	998.3	998.3	281.3	281.3	281.3	281.3	281.3	281.3
Nov.	998.3	998.4	998.3	998.4	998.3	998.4	998.3	998.3	281.3	281.3	281.3	281.3	281.3	281.3
Dec.	998.3	998.4	998.3	998.4	998.3	998.4	998.3	998.3	281.3	281.3	281.3	281.3	281.3	281.3
Year.	999.0	999.0	998.8	998.8	998.8	998.8	998.8	998.8	279.5	279.5	279.5	279.5	279.5	279.5

Month.	Temperature Extremes. a.		Highest Date.		Lowest Date.		Highest Date.		Highest Min.		Date.		Cloud Amount.	
	Mean Daily Max.	Mean Daily Min.	Highest Max.	Mean.	Highest Date.	Lowest Date.	Mean.	Highest Date.	Highest Min.	Mean.	Date.	Highest Min.	Mean.	Cloud Amount.
1905.	A.	B.	289.7	5	..	..	281.3	24, 29	..	..	..	..	4 h.	8 h.
Jan.	284.5	2	288.6	28	..	..	280.2	15, 16	..	..	..	..	8 h.	12 h.
Feb.	283.8	..	288.0	10	..	..	278.6	17, 18	..	..	..	..	12 h.	16 h.
Mar.	284.2	..	288.3	12	..	..	278.6	19, 26, 27	..	..	..	..	16 h.	20 h.
Apr.	281.6	..	283.0	2	..	..	274.1	2, 3	..	..	..	..	20 h.	24 h.
May.	278.7	..	281.9	14, 16	..	..	274.1	4, 8	..	..	..	..	4 h.	8 h.
June.	278.0	..	275.8	19	..	..	274.2	18	..	..	..	..	8 h.	12 h.
July.	276.2	..	275.3	19	..	..	274.2	19	..	..	..	..	12 h.	16 h.
Aug.	277.7	..	276.4	31	..	..	275.2	18, 19	..	..	..	..	16 h.	20 h.
Sept.	279.8	..	277.8	21	..	..	275.8	21	..	..	..	..	20 h.	24 h.
Oct.	281.7	..	279.5	22	..	..	275.6	7	..	..	..	..	4 h.	8 h.
Nov.	284.2	..	279.7	3	..	..	275.9	14	..	..	..	..	8 h.	12 h.
Dec.	284.3	..	282.0	13	..	..	275.8	13	..	..	..	..	12 h.	16 h.
Year.	281.2	..	291.9	Nov. 25	..	..	272.4	July 4, 8	..	..	..	..	4 h.	8 h.

Month.	Resultant Wind Direction in Degrees and Mean Velocity in Metres per Second.												Number of Days of Fog Diurnal Variation.								
	Gales.	Strong Winds.	Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	4 h.	8 h.	12 h.	16 h.	20 h.	24 h.	Mean.	Wind Force. Mean Beaufort.		
1905.	..	..	..	..	..	..	..	..	..	..	..	26	28.0	25.8	24.7	23.7	22.8	2.2	23	0	
Jan.	6	138	4	21	27	10	13	16	40	29	21	2.3	24.1	25.2	26.7	27.3	26.4	2.7	23	0	
Feb.	21	134	2	13	3	0	1	15	45	44	27.2	6.5	27.1	26.8	26.0	27.4	26.7	6.9	26	3	
Mar.	6	140	1	41	27	2	1	13	33	42	310	4.8	314	3.6	315	3.0	317	3.2	1	3	
Apr.	9	136	0	18	13	6	4	16	22	56	45	283	4.8	288	5.0	284	4.8	23	1	2	
May.	13	151	0	14	10	2	1	16	37	61	44	270	5.1	268	5.6	275	4.4	270	5	3	
June.	18	136	1	18	12	6	5	20	56	57	291	4.8	295	5.2	293	5.7	283	5.5	291	5	
July.	11	128	0	30	24	4	1	21	34	45	268	3.1	263	3.7	267	3.0	268	3.1	262	1	
Aug.	14	144	0	38	12	0	3	15	25	41	293	4.4	298	5.0	295	4.4	287	4.1	273	1	
Sept.	4	127	0	46	10	2	0	19	39	62	311	6.3	315	6.6	316	6.1	317	5.5	316	0	
Oct.	4	156	0	43	18	0	1	19	40	65	312	6.1	308	6.5	318	7.4	310	7.6	315	3	
Nov.	8	136	1	42	15	2	4	3	32	38	43	397	5.6	300	6.6	299	5.4	286	4.5	293	2
Dec.	3	142	1	33	12	9	9	11	28	35	327	5.3	308	4.4	291	4.4	269	4.7	289	4	
Year.	107	1668	9	357	183	43	44	134	354	511	555	296	47	293	49	286	48	287	42	300	18

APPENDIX V.—continued.

OBSERVATIONS AT CAPE PEMBROKE, FALKLAND ISLANDS—continued.

Height of Barometer Cistern above M.S.L. = 21 Metres Jan. to Mar., 15 Metres Apr. to Dec.

Month.	Barometer Readings. Station Level, mb.			Dry Bulb. a.			Depression of Wet Bulb. a.			Vapour Pressure, mb.			Relative Humidity, %.															
	1906.	1907.	1908.	1906.	1907.	1908.	1906.	1907.	1908.	1906.	1907.	1908.	1906.	1907.	1908.													
Jan.	1001.3	1001.0	1000.7	12 h.	16 h.	20 h.	4 h.	8 h.	12 h.	16 h.	20 h.	24 h.	Mean.	4 h.	8 h.	12 h.	16 h.	20 h.	24 h.	Mean.	4 h.	8 h.	12 h.	16 h.	20 h.	24 h.	Mean.	
Feb.	1000.9	1000.5	1000.2	1000.9	1000.6	1000.3	1000.9	1000.6	1000.3	1000.9	1000.6	1000.3	1000.9	1000.6	1000.3	1000.9	1000.6	1000.3	1000.9	1000.6	1000.3	1000.9	1000.6	1000.3	1000.9	1000.6	1000.3	
Mar.	995.1	995.6	995.3	995.0	995.6	995.3	995.0	995.6	995.3	995.0	995.6	995.3	995.0	995.6	995.3	995.0	995.6	995.3	995.0	995.6	995.3	995.0	995.6	995.3	995.0	995.6	995.3	995.0
Apr.	994.9	994.5	994.2	994.9	994.6	994.3	994.0	994.7	994.4	994.1	994.6	994.3	994.0	994.7	994.4	994.1	994.6	994.3	994.0	994.7	994.4	994.1	994.6	994.3	994.0	994.7	994.4	994.1
May	994.8	994.9	995.0	995.1	995.6	995.3	995.9	995.8	995.5	995.2	995.6	995.3	995.9	995.8	995.5	995.2	995.6	995.3	995.9	995.8	995.5	995.2	995.6	995.3	995.9	995.8	995.5	995.2
June	995.8	1000.1	1000.6	1000.9	1000.6	1000.9	1000.9	1000.6	1000.9	1000.6	1000.9	1000.6	1000.9	1000.6	1000.9	1000.6	1000.9	1000.6	1000.9	1000.6	1000.9	1000.6	1000.9	1000.6	1000.9	1000.6	1000.9	
July	1002.1	1002.5	1003.0	1002.7	1002.5	1003.0	1003.7	1003.5	1003.6	1003.4	1003.5	1003.6	1003.7	1003.5	1003.6	1003.7	1003.6	1003.5	1003.7	1003.6	1003.5	1003.7	1003.6	1003.5	1003.7	1003.6	1003.5	
Aug.	1003.5	1003.7	1003.9	1003.5	1003.6	1003.8	1003.6	1003.5	1003.7	1003.6	1003.5	1003.7	1003.6	1003.5	1003.7	1003.6	1003.5	1003.7	1003.6	1003.5	1003.7	1003.6	1003.5	1003.7	1003.6	1003.5	1003.7	
Sept.	1006.3	1007.0	1006.9	1006.5	1006.6	1006.7	1006.4	1006.5	1006.6	1006.5	1006.6	1006.5	1006.4	1006.5	1006.6	1006.5	1006.6	1006.5	1006.6	1006.5	1006.6	1006.5	1006.6	1006.5	1006.6	1006.5	1006.6	
Oct.	1002.0	1002.2	1001.9	1002.7	1002.5	1002.7	1002.5	1002.2	1002.4	1002.6	1002.5	1002.7	1002.5	1002.2	1002.4	1002.6	1002.5	1002.7	1002.5	1002.7	1002.5	1002.7	1002.5	1002.7	1002.5	1002.7	1002.5	1002.7
Nov.	997.7	997.5	996.9	996.8	996.7	996.8	996.7	996.5	996.9	996.8	996.7	996.8	996.7	996.5	996.9	996.8	996.7	996.9	996.8	996.7	996.8	996.7	996.9	996.8	996.7	996.8	996.7	996.8
Dec.	993.7	994.0	993.8	993.9	994.2	994.0	994.1	994.2	994.0	994.1	994.2	994.0	994.1	994.2	994.0	994.1	994.2	994.0	994.1	994.2	994.0	994.1	994.2	994.0	994.1	994.2	994.0	994.1
Year	1000.2	1000.4	1000.2	1000.2	1000.2	1000.8	1000.5	1000.3	1000.3	1000.5	1000.2	1000.3	1000.5	1000.2	1000.3	1000.5	1000.2	1000.3	1000.5	1000.2	1000.3	1000.5	1000.2	1000.3	1000.5	1000.2	1000.3	

Month.	Temperature Extremes. a.			Cloud Amount.			Wind Force. Mean Beaufort.																								
	Mean Daily Max.	Mean Daily Min.	Highest Max.	Highest Date.	Lowest Date.	Lowest Min.	Highest Date.	Lowest Date.	Highest Min.	Date.	Mean.	4 h.	8 h.	12 h.	16 h.	20 h.	24 h.	Mean.													
1906.	A.	B.	A+B.																												
Jan.	287.3	282.5	284.9	293.6	6	279.7	8, 16, 22	281.9	16	288.0	6	284.7	22, 28	7.4	7.5	7.1	7.1	7.0	7.0	7.3	7.2	7.2	7.1	7.0	7.3	7.2	7.1				
Feb.	285.5	281.5	283.9	291.9	10	279.1	15, 16	280.8	16	284.7	28	283.6	1	279.7	7.3	8.2	8.3	8.3	7.6	7.7	7.4	7.5	7.6	7.7	7.5	7.6	7.4				
Mar.	284.1	280.1	284.1	290.8	1	275.8	4	279.7	28	280.8	19	280.8	7.8	279.7	7.6	7.2	6.9	7.1	6.7	6.7	7.0	6.9	7.1	7.0	6.7	7.1	7.0				
Apr.	281.8	278.2	280.0	286.9	1, 5	273.6	13	277.4	17	274.1	29	279.7	1	273.6	6.5	7.7	7.4	7.4	7.3	7.4	7.2	7.3	7.5	7.4	7.3	7.2	7.4	7.3			
May	277.8	275.3	276.4	276.4	16	271.3	12	273.8	20	273.6	21	279.1	11	273.6	8.2	8.7	8.5	8.5	8.1	8.1	7.5	8.2	8.3	8.4	8.1	8.2	8.3	8.4			
June	277.4	275.3	275.3	275.6	280.8	31	265.8	14	271.3	15	277.4	1, 3, 30	6.5	7.1	7.5	7.2	7.6	7.7	7.4	7.5	7.6	7.7	7.4	7.5	7.6	7.7	7.4				
July	276.9	274.3	275.4	276.9	281.3	6, 29	272.4	13	274.7	13	274.7	13	278.0	6	278.0	11	6.8	6.8	6.8	6.8	6.8	6.8	6.7	6.8	6.7	6.8	6.7	6.8	6.7	6.8	
Aug.	278.4	275.4	277.9	275.9	283.0	23	273.0	7, 8	274.1	8	274.1	8	278.0	11	278.0	7.2	7.4	7.4	7.4	7.0	7.0	6.9	7.1	7.2	7.1	7.0	7.1	7.2	7.1		
Sept.	279.4	275.9	277.4	277.4	284.1	11	274.7	3	276.9	1	279.1	19, 20, 28	8.1	8.1	8.1	8.1	8.1	8.1	7.8	7.8	7.8	7.8	7.7	7.7	7.7	7.8	7.7				
Oct.	280.7	277.7	278.7	281.1	289.7	11	274.7	8, 9	278.0	9	281.8	4	284.1	5	284.1	20	7.0	7.6	7.5	7.5	7.5	7.5	7.4	7.5	7.4	7.5	7.4	7.5	7.4	7.5	
Nov.	283.4	278.7	278.7	281.8	281.8	30	289.7	30	275.2	4	275.2	4	275.2	30	275.2	30	7.1	7.2	6.9	7.1	7.1	7.2	7.1	7.2	7.1	7.2	7.0	7.1	7.2	7.1	7.2
Dec.	284.1	279.6	279.6	279.6	293.6	Jan. 6	265.8	July 14	271.3	July 15	288.0	Jan. 6	7.0	7.6	7.5	7.5	6.9	6.7	7.2	7.2	7.4	7.3	7.4	7.3	7.4	7.3	7.4	7.3			
Year	281.4	277.8	279.6	279.6	293.6																										

Month.	Number of Observations of												Resultant Wind Direction in Degrees and Mean Velocity in Metres per Second.																
	Gales.	Strong Winds.	Calm.	N.	E.	S.E.	S.	S.W.	W.	N.W.	4 h.	8 h.	12 h.	16 h.	20 h.	24 h.	Mean.	m/s											
1906.	136	1	32	7	1	7	30	38	33	318	3.6	314	4.2	313	4.2	304	3.2	319	3.5	317	14	1	1	10	5	5			
Jan.	7	134	1	24	15	3	2	43	42	38	289	5.0	287	5.3	286	5.0	280	6.1	292	5.3	292	1	1	1	2	1	1		
Feb.	13	150	1	27	13	2	0	3	26	64	50	290	7.0	289	5.9	291	7.2	294	6.7	294	6.7	22	0	0	0	0	0	0	
Mar.	105	1	40	17	4	6	10	19	46	37	306	3.2	317	3.0	321	4.0	306	3.5	310	3.8	310	17	3	6	1	4	2	2	
Apr.	11	123	0	33	22	13	1	3	19	49	36	333	3.7	343	3.4	320	3.5	315	3.2	334	3.1	322	21	11	1	0	0	0	0
May	3	115	0	23	9	1	8	21	23	34	270</																		

## APPENDICES.

Height of Barometer Cistern above M.S.L. = 15 Metres.

**APPENDIX V.—continued.**

OBSERVATIONS AT CAPE PEMBROKE, FALKLAND ISLANDS—*continued*

I observation missing.

## APPENDIX V.—*continued.*

OBSERVATIONS AT CAPE PEUPOUR FAYLAND ISLANDS—continued

Height of Barometer Cistern above M.S.L. = 21 Metres.

## APPENDICES.

APPENDIX V.—continued.

OBSERVATIONS AT CAPE PEMBROKE, FALKLAND ISLANDS—continued.  
Height of Barometer Cistern above M.S.L. = 21 Metres.

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GEOGRAPHICAL MEMOIRS, NO. 15.

Month.	Barometer Readings, Station Level, mb.			Dry Bulb, °a.			Depression of Wet Bulb, °a.			Vapour Pressure, mb.			Relative Humidity, %						
	4 h.	8 h.	12 h.	16 h.	20 h.	24 h.	4 h.	8 h.	12 h.	16 h.	20 h.	24 h.	4 h.	8 h.	12 h.	16 h.	20 h.	24 h.	Mean.
Jan.	989.8	989.7	989.0	989.6	990.4	989.9	989.7	989.6	989.6	989.6	989.6	989.6	988.8	988.8	988.8	988.8	988.8	988.8	988.8
Feb.	1000.1	1000.3	1000.5	999.6	999.6	1000.2	1000.4	1000.0	1000.6	1000.2	1000.1	1000.0	999.9	999.9	999.9	999.9	999.9	999.9	999.9
Mar.	1007.2	1007.6	1007.5	1008.1	1007.5	1008.2	1007.9	1007.9	1007.9	1007.9	1007.9	1007.9	1007.9	1007.9	1007.9	1007.9	1007.9	1007.9	1007.9
Apr.	1000.6	1001.0	1001.1	1001.1	1001.1	1001.1	1000.9	1000.9	1000.9	1000.9	1000.9	1000.9	1000.9	1000.9	1000.9	1000.9	1000.9	1000.9	1000.9
May	997.1	997.3	996.4	996.7	996.7	996.4	996.0	996.3	996.3	996.3	996.3	996.3	996.3	996.3	996.3	996.3	996.3	996.3	996.3
June	994.9	994.8	995.2	995.7	995.3	995.0	995.0	995.0	995.0	995.0	995.0	995.0	995.0	995.0	995.0	995.0	995.0	995.0	995.0
July	1001.4	1001.6	1002.3	1002.3	1002.3	1002.3	1002.3	1002.3	1002.3	1002.3	1002.3	1002.3	1002.3	1002.3	1002.3	1002.3	1002.3	1002.3	1002.3
Aug.	993.3	993.3	993.2	993.1	993.5	993.5	993.5	993.5	993.5	993.5	993.5	993.5	993.5	993.5	993.5	993.5	993.5	993.5	993.5
Sept.	1000.5	1000.4	1000.4	1000.4	1000.4	1000.4	1000.6	1000.6	1000.6	1000.6	1000.6	1000.6	1000.6	1000.6	1000.6	1000.6	1000.6	1000.6	1000.6
Oct.	1006.4	1006.3	1005.9	1005.9	1006.3	1006.7	1006.7	1006.7	1006.7	1006.7	1006.7	1006.7	1006.7	1006.7	1006.7	1006.7	1006.7	1006.7	1006.7
Nov.	997.9	997.9	997.7	997.7	997.9	998.5	998.5	998.5	998.5	998.5	998.5	998.5	998.5	998.5	998.5	998.5	998.5	998.5	998.5
Dec.	1002.1	1002.2	1002.6	1003.0	1003.1	1003.1	1003.1	1003.1	1003.1	1003.1	1003.1	1003.1	1003.1	1003.1	1003.1	1003.1	1003.1	1003.1	1003.1
Year	999.3	999.1	999.2	999.2	999.9	999.8	999.8	999.8	999.8	999.8	999.8	999.8	999.8	999.8	999.8	999.8	999.8	999.8	999.8

Month.	Temperature Extremes, °a.			Cloud Amount.			Wind Force, Mean Beaufort.																
	Mean Daily Max.	Mean Daily Min.	A+B	Highest Max.	Lowest Min.	Date	Lowest Max.	Highest Min.	Date	4 h.	8 h.	12 h.	16 h.	20 h.	24 h.	4 h.	8 h.	12 h.	16 h.	20 h.	24 h.	Mean.	
1910.	A.	B.	2	275.8	9	275.8	20	284.1	5	5.8	6.1	6.1	6.1	6.1	6.1	6.0	4.0	4.0	4.0	4.0	4.0	4.0	
Jan.	285.5	279.1	282.3	291.3	290.2	11	274.7	17	274.7	18	283.4	4	5.8	6.5	6.5	6.5	6.3	3.5	3.5	3.5	3.5	3.5	3.5
Feb.	284.7	279.2	281.9	286.6	291.9	17	274.7	28	274.7	28	283.9	20	6.5	6.4	6.5	6.5	6.6	4.0	4.0	4.0	4.0	4.0	4.0
Mar.	284.4	278.7	281.6	286.9	286.9	12	273.3	28	273.8	29	281.3	13	6.7	7.4	7.4	7.4	6.9	4.3	4.3	4.3	4.3	4.3	4.3
Apr.	284.5	276.1	278.8	277.5	277.5	17	270.8	30	278.3	30	28.0	10	6.2	6.5	6.5	6.5	6.4	4.6	4.6	4.6	4.6	4.6	4.6
May	279.7	275.2	277.5	281.3	281.3	4	269.7	27	273.6	12	275.8	10	6.2	6.4	6.4	6.4	5.8	4.0	4.0	4.0	4.0	4.0	4.0
June	278.1	272.8	275.4	280.8	280.8	18	274.1	27	274.1	18	277.4	10	7.2	7.4	7.4	7.4	7.3	4.6	4.6	4.6	4.6	4.6	4.6
July	277.7	272.6	275.1	278.8	278.8	26	275.2	26	275.2	26	276.9	21	6.5	7.4	7.4	7.4	6.7	3.9	3.9	3.9	3.9	3.9	3.9
Aug.	278.4	274.1	276.3	280.8	280.8	22	274.2	27	274.2	27	276.9	14	6.7	7.7	7.7	7.7	6.3	3.8	3.8	3.8	3.8	3.8	3.8
Sept.	280.7	274.2	277.4	284.1	284.1	3	271.3	28	271.3	28	276.9	21	6.7	7.2	7.2	7.2	6.7	4.8	4.8	4.8	4.8	4.8	4.8
Oct.	281.4	275.4	278.4	286.3	286.3	7	274.1	11	274.1	11	280.2	1, 24	6.3	6.5	6.5	6.5	6.3	4.3	4.3	4.3	4.3	4.3	4.3
Nov.	283.8	276.6	280.2	289.7	289.7	17	278.1	273.0	278.1	273.0	279.1	8	6.7	7.0	7.0	7.0	6.8	4.7	4.7	4.7	4.7	4.7	4.7
Dec.	285.3	278.1	281.7	291.3	291.3	17	273.0	273.0	273.0	273.0	273.6	5	6.7	7.1	7.1	7.1	6.9	4.7	4.7	4.7	4.7	4.7	4.7
Year	276.0	278.9	291.9	291.9	291.9	20	268.0	268.0	268.0	268.0	268.4	5	6.6	6.9	6.9	6.9	6.7	4.1	4.1	4.1	4.1	4.1	4.1

Month.	Resultant Wind Direction in Degrees and Mean Velocity in Metres per Second.												Fog Diurnal Variation.												
	Strong Winds.	Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	4 h.	8 h.	12 h.	16 h.	20 h.	24 h.	Mean.	High	Med.	Low	High	Med.	Low	High	Med.
1910.	6	118	6	18	11	1	6	45	53	294	4.3	2.7	2.7	2.7	2.7	2.7	2.7	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Jan.	0	98	29	9	2	2	20	39	35	294	3.6	3.0	3.0	2.8	2.8	2.8	2.8	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
Feb.	0	12	1	26	3	1	4	25	46	262	4.1	2.6	2.6	2.5	2.5	2.5	2.5	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
Mar.	0	114	10	28	19	9	6	19	36	55	4.0	3.8	3.8	3.7	3.7	3.7	3.7	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
Apr.	7	127	2	18	8	1	6	22	49	273	5.0	2.6	2.6	2.5	2.5	2.5	2.5	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
May	17	125	4	21	13	5	31	36	37	256	3.7	2.7	2.7	2.6	2.6	2.6	2.6	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
June	0	108	6	22	10	2	17	24	49	43	3.4	2.7	2.7	2.6	2.6	2.6	2.6	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
July	9	128	3	43	1	7	15	41	48	27	2.7	2.7	2.7	2.6	2.6	2.6	2.6	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
Aug.	0	114	10	28	19	9	6	19	36	55	4.0	3.8	3.8	3.7	3.7	3.7	3.7	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
Sept.	5	122	2	30	3	0	6	22	59	299	6.0	3.0	3.0	2.9	2.9	2.9	2.9	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
Oct.	5	111	4	35	12	1	3	14	24	50	4.6	2.7	2.7	2.6	2.6	2.6	2.6	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
Nov.	2	140	3	31	8	0	6	16	37	45	34	291	5.0	2.9	2.9	2.8	2.8	2.8	2.8	2.9	2.9	2.9	2.9	2.9	2.9
Dec.	2	125	3	9	6	2	9	11																	

## APPENDIX V.—*continued.*

## OBSERVATIONS AT CAPE PEMBROKE, FALKLAND ISLANDS—*continued.*

Height of Barometer Cistern above M.S.L. = 21 Metres.

Month.	Temperature Extremes. a.						Cloud Amount.						Wind Force. Mean Beaufort.													
	Mean Daily Max.	Mean Daily Min.	Highest Max.	Lowest Min.	Date.	Lowest Max.	Date.	Highest Min.	Date.	4 h.	8 h.	12 h.	16 h.	20 h.	4 h.	8 h.	12 h.	16 h.	20 h.	4 h.	8 h.	12 h.	16 h.	20 h.	Mean.	
	A	B	A+B	2																						
1911.																										
Jan.	285.2	279.3	282.3	292.4	6	275.2	24	279.7	23	281.9	4, 6, 10	7.5	7.4	7.0	7.5	6.8	7.4	4.2	4.5	4.5	4.2	3.9	4.3	4.3	4.3	
Feb.	285.6	279.0	282.3	290.8	8, 9, 19	276.9	5, 25	281.3	3, 4	282.4	20	6.9	7.0	6.7	6.5	7.0	6.6	4.3	4.8	4.7	4.3	3.8	4.3	4.4	4.4	
Mar.	284.5	277.9	281.2	289.1	3, +	274.1	20	279.7	12	282.4	2	6.8	6.8	7.0	7.4	6.9	7.0	4.6	4.6	4.6	4.6	4.9	4.7	4.8	4.8	
Apr.	281.3	276.8	279.1	285.7	10	272.4	25	278.0	15, 16	279.1	1, 10, 11	8.0	8.0	7.5	7.3	6.6	7.4	4.6	4.6	4.6	4.6	4.5	4.5	4.6	4.6	
May	280.0	275.9	278.0	281.9	1, 25	271.3	11	278.0	17, 18, 28	279.1	3, 5	8.0	8.2	8.5	8.8	8.4	8.2	4.6	4.6	4.6	4.6	4.7	4.7	4.7	4.7	
June	278.9	275.1	277.0	284.2	4	270.2	26	274.7	26	278.0	+16	7.3	8.3	8.2	8.1	7.9	7.9	4.2	4.2	4.2	4.2	3.9	4.0	4.0	4.0	
July	278.0	274.2	275.5	284.7	30	269.7	27	278.0	30	275.8	10	7.1	7.8	7.5	7.9	7.4	7.4	4.4	4.4	4.4	4.4	4.3	4.3	4.3	4.3	
Aug.	278.0	272.7	275.3	280.8	13	271.3	27	278.2	29	275.8	23, 30	7.5	7.5	7.2	7.8	7.0	7.0	4.3	4.3	4.3	4.3	3.7	3.7	3.7	3.7	
Sept.	279.4	274.8	277.1	284.1	14	270.2	29	275.8	29	277.4	17, 22, 23	7.6	7.7	7.6	7.7	7.3	7.3	4.8	4.8	4.8	4.8	4.7	4.7	4.7	4.7	
Oct.	280.5	274.8	277.7	284.1	30, 31	272.4	9, 20, 29	276.3	3, 8	278.0	15, 16	7.1	7.5	7.5	7.5	6.4	6.4	4.4	4.4	4.4	4.4	5.0	5.0	5.0	5.0	
Nov.	281.0	276.1	278.7	287.4	26	271.3	4	276.3	4	279.1	25, 27	7.9	7.6	7.5	7.8	7.2	7.2	4.2	4.2	4.2	4.2	4.0	4.0	4.0	4.0	
Dec.	283.4	278.6	281.0	291.3	9	274.7	12, 13	279.7	11	281.3	28, 29	7.9	7.5	7.7	7.5	7.5	7.5	3.9	3.9	3.9	3.9	3.8	3.8	3.8	3.8	
Year	281.4	276.3	278.8	292.4	Jan. 6	269.7	July 30	274.7	June 26	282.4	Feb. 20	7.3	7.6	7.4	7.6	7.4	7.4	4.3	4.3	4.3	4.3	4.2	4.2	4.2	4.2	

APPENDIX V.—*continued.*

OBSERVATIONS AT CAPE PEMBROKE, FALKLAND ISLANDS—*continued.*  
Height of Barometer Cistern above M.S.L. = 21 Metres.

Month.	Barometer Readings, Station Level, mb.			Dry Bulb, a.			Depression of Wet Bulb, a.			Vapour Pressure, mb.			Relative Humidity, %			
	Mean.	12 h.	16 h.	20 h.	4 h.	8 h.	12 h.	16 h.	20 h.	4 h.	8 h.	12 h.	16 h.	20 h.	4 h.	
1912.	4 h. 999.6	8 h. 999.0	12 h. 998.8	16 h. 999.2	20 h. 999.4	Mean. 999.2	4 h. 281.8	8 h. 283.0	12 h. 284.1	16 h. 283.1	20 h. 283.1	4 h. 1.3	8 h. 1.8	12 h. 1.2	16 h. 1.0	20 h. 1.0
Jan.	999.2	999.0	998.8	999.2	999.4	999.4	999.4	999.4	999.4	999.4	999.4	999.4	999.4	999.4	999.4	999.4
Feb.	999.4	999.4	999.1	999.5	999.5	999.5	999.5	999.5	999.5	999.5	999.5	999.5	999.5	999.5	999.5	999.5
Mar.	997.1	997.0	995.9	995.4	996.1	996.6	996.6	996.6	996.6	996.6	996.6	996.6	996.6	996.6	996.6	996.6
Apr.	998.7	999.2	998.8	999.5	999.8	999.8	999.8	999.8	999.8	999.8	999.8	999.8	999.8	999.8	999.8	999.8
May	995.5	995.7	996.1	996.6	996.6	996.6	996.4	997.3	997.3	997.3	997.3	997.3	997.3	997.3	997.3	997.3
June	998.8	999.1	999.6	999.6	999.6	999.6	999.5	999.5	999.5	999.5	999.5	999.5	999.5	999.5	999.5	999.5
July	1001.9	1002.3	1002.6	1002.1	1001.9	1002.1	1002.1	1002.1	1002.1	1002.1	1002.1	1002.1	1002.1	1002.1	1002.1	1002.1
Aug.	1005.4	1006.3	1006.2	1006.4	1006.1	1005.9	1006.2	1006.2	1006.2	1006.2	1006.2	1006.2	1006.2	1006.2	1006.2	1006.2
Sept.	1001.8	1000.8	1000.8	1000.5	1000.5	1000.5	1000.5	1000.5	1000.5	1000.5	1000.5	1000.5	1000.5	1000.5	1000.5	1000.5
Oct.	1003.1	1003.4	1003.0	1002.9	1003.0	1002.9	1002.9	1002.9	1002.9	1002.9	1002.9	1002.9	1002.9	1002.9	1002.9	1002.9
Nov.	989.7	989.9	990.1	990.7	990.7	990.7	990.7	990.7	990.7	990.7	990.7	990.7	990.7	990.7	990.7	990.7
Dec.	995.3	994.9	994.6	993.7	993.7	993.7	993.7	993.7	993.7	993.7	993.7	993.7	993.7	993.7	993.7	993.7
Year	998.1	998.3	998.0	997.9	997.9	998.5	998.5	998.5	998.5	998.5	998.5	998.5	998.5	998.5	998.5	998.5

Month.	Temperature Extremes, a.			Cloud Amount.			Wind Force, Mean Beaufort										
	Mean Daily Max.	Mean Daily Min.	Highest Max.	Lowest Min.	Date.	Lowest Max.	Date.	Highest Min.	Date.	4 h.	8 h.	12 h.	16 h.	20 h.	24 h.		
1912.	A. 286.1	B. 280.3	C. 283.2	D. 282.0	E. 279.1	F. 279.2	G. 278.0	H. 275.2	I. 274.9	J. 24.28	K. 7.6	L. 7.8	M. 7.0	N. 7.1	O. 7.7		
Jan.	284.9	284.9	284.9	284.9	284.9	284.9	284.9	284.9	284.9	284.9	284.9	284.9	284.9	284.9	284.9	284.9	
Feb.	284.5	277.9	281.2	290.2	275.2	8, 16, 26	279.7	16	280.2	6	6.7	8.2	7.1	7.1	7.1	7.1	7.1
Mar.	276.1	279.3	288.0	288.0	278.0	8, 18, 24	281.3	11	275.4	7.5	6.8	7.5	7.5	6.5	6.3	6.3	6.3
Apr.	282.4	276.1	279.3	283.0	276.8	6, 18, 24	275.2	18	24.27	277.4	5	6.6	7.6	7.5	6.5	6.3	6.3
May	279.4	273.1	276.3	283.0	280.8	22	273.6	28	277.4	22	7.9	8.1	7.1	7.7	7.8	7.8	7.8
June	277.6	273.5	275.0	280.2	266.9	26	272.4	15	277.4	15	6.9	7.4	7.6	7.7	6.5	6.5	6.5
July	277.4	272.6	275.0	280.2	268.0	1	274.1	4	275.2	22, 24	7.0	7.1	7.1	7.1	6.8	6.8	6.8
Aug.	277.2	272.4	274.8	284.7	270.2	25	274.8	30	276.9	13, 25	5.9	7.0	7.3	6.6	5.9	6.5	6.5
Sept.	279.9	273.9	276.9	284.7	271.9	1, 3	277.4	2,	278.6	26	7.1	6.5	7.0	6.6	6.1	6.7	6.7
Oct.	282.2	275.5	278.8	288.0	271.9	9	271.3	14, 15	278.6	9, 11	6.5	6.4	6.2	6.9	6.7	4.4	4.4
Nov.	282.9	275.2	279.1	292.4	274.1	25	286.9	28	279.7	3, 13	7.2	7.4	7.2	7.2	7.5	3.8	4.1
Dec.	283.1	276.6	279.9	286.9	274.1	28	274.1	28	278.6	14, 18	7.2	7.4	7.2	7.2	7.2	4.5	4.2
Year	281.4	275.5	278.5	292.4	266.9	28.1	266.9	28	274.28	24, 28	7.0	7.4	7.1	7.3	6.8	4.4	4.4

Month.	Number of Observations of			Resultant Wind Direction in Degrees and Mean Velocity in Metres per Second.			Fog Diurnal Variation.		
	Strong Winds.	Calm.	N. E. S. E. S. W. W. N.W.	4 h.	8 h.	12 h.	16 h.	20 h.	24 h.
1912.	—	—	—	—	—	—	—	—	—
Jan.	0	112	4	33	25	3	14	31	2.9
Feb.	3	123	2	26	12	7	9	32	2.3
Mar.	7	146	0	22	3	1	0	29	2.1
Apr.	13	130	4	9	9	3	2	25	2.8
May	2	144	1	15	3	4	4	27.5	4.4
June	4	100	3	28	14	5	7	28.1	1.9
July	7	126	0	20	0	4	21	27.6	5.0
Aug.	2	108	6	24	3	8	4	26.3	4.8
Sept.	16	120	1	32	0	1	0	27.0	4.7
Oct.	1	132	2	38	4	3	10	29.3	4.4
Nov.	7	138	2	14	4	1	7	27.9	3.7
Dec.	4	116	7	26	10	6	9	25.7	2.7
Year	66	1495	32	287	87	42	57	180	4.29

Month.	Fog Diurnal Variation.			Number of Days of			Precipitation.		
	0-4 h.	4-8 h.	8-12 h.	12-16 h.	16-20 h.	20-24 h.	Thunderstorms.	Snow.	Rain.
1912.	—	—	—	—	—	—	—	—	—
Jan.	0	0	0	0	0	0	0	0	0
Feb.	0	0	0	0	0	0	0	0	0
Mar.	0	0	0	0	0	0	0	0	0
Apr.	1	1	1	1	1	1	1	1	1
May	2	2	2	2	2	2	2	2	2
June	4	4	4	4	4	4	4	4	4
July	7	7	7	7	7	7	7	7	7
Aug.	2	2	2	2	2	2	2	2	2
Sept.	16	16	16	16	16	16	16	16	16
Oct.	1	1	1	1	1	1	1	1	1
Nov.	0	0	0	0	0	0	0	0	0
Dec.	1	1	1	1	1	1	1	1	1
Year	66	1495	32	287	87	42	57	180	4.29

APPENDIX V.—*continued.*

OBSERVATIONS AT CAPE PEMBROKE, FALKLAND ISLANDS—*continued.*  
 Height of Barometer Cistern above M.S.L. = 21 Metres.

Month.	Temperature Extremes. B.						Cloud Amount.						Wind Force. Mean Beaufort.														
	Mean. Daily Max.	Mean. Daily Min.	Highest Max.	Mean.	Highest Max.	Mean.	A+B	Lowest Min.	Date.	Lowest Max.	Date.	Highest Min.	Date.	Highest Min.	Date.	8 h.	12 h.	16 h.	20 h.	24 h.	4 h.	8 h.	12 h.	16 h.	20 h.	24 h.	Mean.
1913.																											
Jan.	285.6	278.3	289.7	16.31	274.1	21	280.2	21	281.3	14	281.3	14	281.3	14	281.3	14	281.3	14	281.3	14	281.3	14	281.3	14	281.3	14	
Feb.	286.7	277.6	282.2	296.9	273.6	19	282.4	12, 28	281.9	1	281.9	1	281.9	1	281.9	1	281.9	1	281.9	1	281.9	1	281.9	1	281.9	1	
Mar.	282.9	276.6	279.8	285.2	21, 31	273.0	11, 12	279.1	10	279.1	3, +	279.1	3, +	279.1	3, +	279.1	3, +	279.1	3, +	279.1	3, +	279.1	3, +	279.1	3, +		
Apr.	282.0	275.4	278.3	285.2	21, 30	270.2	26	277.4	26	278.6	1, 11, 15	277.4	26	278.6	1, 11, 15	277.4	26	278.6	1, 11, 15	277.4	26	278.6	1, 11, 15	277.4	26		
May	280.1	273.4	276.8	281.9	21, 10, 17	270.8	21	274.7	21	274.7	21	274.7	21	274.7	21	274.7	21	274.7	21	274.7	21	274.7	21	274.7	21		
June	277.3	271.8	274.6	280.8	13	266.9	21	272.4	22	275.2	19	272.4	22	275.2	19	272.4	22	275.2	19	272.4	22	275.2	19	272.4	22		
July	276.6	272.8	274.7	279.7	14	268.6	22	274.1	9, 21	275.8	5	274.1	9, 21	275.8	5	274.1	9, 21	275.8	5	274.1	9, 21	275.8	5	274.1	9, 21		
Aug.	278.0	274.8	276.8	280.8	27	268.0	27	274.1	5, 6	275.8	10	274.1	5, 6	275.8	10	274.1	5, 6	275.8	10	274.1	5, 6	275.8	10	274.1	5, 6		
Sept.	260.8	254.8	277.8	285.2	23, 27, 28	271.9	13	275.8	13	277.4	9	275.8	13	277.4	9	275.8	13	277.4	9	275.8	13	277.4	9	275.8	13		
Oct.	282.2	275.2	278.7	287.4	20	271.9	30, 31	278.0	29	279.1	3	278.0	29	279.1	3	278.0	29	279.1	3	278.0	29	279.1	3	278.0	29		
Nov.	283.4	276.3	279.8	288.0	9	273.6	17, 18	280.2	8, 12, 17	278.6	25, 29	280.2	8, 12, 17	278.6	25, 29	280.2	8, 12, 17	278.6	25, 29	280.2	8, 12, 17	278.6	25, 29	280.2	8, 12, 17		
Dec.	283.8	278.2	281.0	287.4	20	274.1	6, 12	279.7	12	279.7	12	279.7	12	279.7	12	279.7	12	279.7	12	279.7	12	279.7	12	279.7	12		
Year.	281.6	275.3	278.5	296.9	Feb. 3	266.9	272.4	June 21	272.4	June 22	281.9	Feb. 3	266.9	272.4	June 21	272.4	June 22	281.9	Feb. 3	266.9	272.4	June 21	272.4	June 22	281.9	Feb. 3	266.9

APPENDIX V.—*continued.*

OBSERVATIONS AT CAPE PEMBROKE, FALKLAND ISLANDS—*continued.*

Height of Barometer Cistern above M.S.L. = 21 Metres.

Month.	Barometer Readings.			Dry Bulb. °a.			Depression of Wet Bulb. °a.			Vapour Pressure, mb.			Relative Humidity. %.							
	Station Level, mb.			Mean. 4 h.	8 h.	12 h.	16 h.	20 h.	24 h.	Mean. 4 h.	8 h.	12 h.	16 h.	20 h.	24 h.					
1914.	4 h.	8 h.	12 h.	16 h.	20 h.	24 h.	Mean. 4 h.	8 h.	12 h.	16 h.	20 h.	24 h.	Mean.	4 h.	8 h.	12 h.	16 h.	20 h.	24 h.	
Jan.	997.8	998.1	998.0	997.7	997.9	997.9	998.3	998.3	998.3	998.3	998.3	998.3	998.3	998.3	998.3	998.3	998.3	998.3	998.3	998.3
Feb.	997.0	997.4	997.0	997.8	997.9	997.9	997.6	997.8	997.8	997.8	997.8	997.8	997.8	997.8	997.8	997.8	997.8	997.8	997.8	997.8
Mar.	1005.8	1005.7	1005.6	1005.6	1005.6	1005.6	1005.7	1005.7	1005.7	1005.7	1005.7	1005.7	1005.7	1005.7	1005.7	1005.7	1005.7	1005.7	1005.7	1005.7
Apr.	1004.0	1004.6	1004.1	1004.1	1004.3	1003.8	1004.1	1004.3	1004.3	1004.3	1004.3	1004.3	1004.3	1004.3	1004.3	1004.3	1004.3	1004.3	1004.3	1004.3
May	1000.0	999.6	999.6	999.6	999.9	1000.0	999.8	1000.0	1000.0	1000.0	1000.0	1000.0	1000.0	1000.0	1000.0	1000.0	1000.0	1000.0	1000.0	1000.0
June	995.2	995.3	995.2	995.2	995.5	995.5	995.5	995.5	995.5	995.5	995.5	995.5	995.5	995.5	995.5	995.5	995.5	995.5	995.5	995.5
July	1002.1	1002.4	1002.7	1002.7	1002.9	1002.9	1002.7	1002.7	1002.7	1002.7	1002.7	1002.7	1002.7	1002.7	1002.7	1002.7	1002.7	1002.7	1002.7	1002.7
Aug.	1002.4	1003.5	1003.1	1003.2	1003.3	1003.6	1003.2	1003.5	1004.0	1004.5	1004.0	1004.5	1004.0	1004.5	1004.0	1004.5	1004.0	1004.5	1004.0	1004.5
Sept.	1004.5	1004.8	1004.8	1004.8	1004.7	1002.7	1002.7	1002.7	1002.7	1002.7	1002.7	1002.7	1002.7	1002.7	1002.7	1002.7	1002.7	1002.7	1002.7	1002.7
Oct.	1001.5	1001.5	1001.2	1001.2	1001.2	1001.2	1001.2	1001.2	1001.2	1001.2	1001.2	1001.2	1001.2	1001.2	1001.2	1001.2	1001.2	1001.2	1001.2	1001.2
Nov.	992.7	992.9	992.7	992.7	992.6	992.6	992.6	992.6	992.6	992.6	992.6	992.6	992.6	992.6	992.6	992.6	992.6	992.6	992.6	992.6
Dec.	1002.0	1002.0	1001.3	1001.4	1002.2	1001.9	1001.9	1001.9	1001.9	1001.9	1001.9	1001.9	1001.9	1001.9	1001.9	1001.9	1001.9	1001.9	1001.9	1001.9
Year	1000.4	1000.7	1000.4	1000.5	1000.5	1000.8	1000.8	1000.6	1000.6	1000.6	1000.6	1000.6	1000.6	1000.6	1000.6	1000.6	1000.6	1000.6	1000.6	1000.6

Month.	Mean Daily Max.			Highest Max.			Date.			Lowest Max.			Date.			Highest Min.			Date.		
	Mean Daily Min.	Max.	Mean.	A+B	2	3	4	14,	23	21	9	19	28	18,	30	28	9	19	28	18,	30
1914.	A.	B.	C.	D.	E.	F.	G.	H.	I.	J.	K.	L.	M.	N.	O.	P.	Q.	R.	S.	T.	U.
Jan.	285.3	278.8	282.1	291.3	30	5	30	275.2	276.9	281.9	281.4	281.9	281.9	281.9	281.9	281.9	281.9	281.9	281.9	281.9	281.9
Feb.	286.6	279.4	283.0	293.0	30	5	30	275.2	276.9	281.9	281.4	281.9	281.9	281.9	281.9	281.9	281.9	281.9	281.9	281.9	281.9
Mar.	285.9	278.9	282.4	291.9	4	12	21	279.6	278.4	279.1	279.0	279.1	279.0	279.1	279.0	279.1	279.0	279.1	279.0	279.1	279.0
Apr.	283.2	276.6	279.4	286.3	3	12	21	279.6	278.6	278.3	278.2	278.3	278.2	278.3	278.2	278.3	278.2	278.3	278.2	278.3	278.2
May	275.9	275.9	278.6	286.3	3	12	21	279.6	278.6	278.3	278.2	278.3	278.2	278.3	278.2	278.3	278.2	278.3	278.2	278.3	278.2
June	277.9	273.1	275.5	275.5	2	12	21	279.6	275.5	275.2	275.1	275.2	275.1	275.2	275.1	275.2	275.1	275.2	275.1	275.2	275.1
July	277.3	273.1	275.5	275.5	2	12	21	279.6	275.5	275.2	275.1	275.2	275.1	275.2	275.1	275.2	275.1	275.2	275.1	275.2	275.1
Aug.	278.6	273.2	275.7	275.7	2	12	21	279.6	275.7	275.4	275.3	275.4	275.3	275.4	275.3	275.4	275.3	275.4	275.3	275.4	275.3
Sept.	278.2	273.1	275.7	275.7	9	16	274.7	13, 16	276.3	276.2	276.3	276.2	276.3	276.2	276.3	276.2	276.3	276.2	276.3	276.2	276.3
Oct.	281.7	274.5	278.1	286.9	30	23	271.9	3	13	277.4	4	14	276.9	30	28.6	27.9	27.8	27.7	27.6	27.5	27.4
Nov.	281.4	274.7	278.1	286.3	23	23	271.9	5	15	276.9	5	15	276.9	7	28.1	27.9	27.8	27.7	27.6	27.5	27.4
Dec.	284.7	277.9	281.3	290.2	23	23	275.2	7	18	278.8	7	18	278.8	7	28.4	27.9	27.8	27.7	27.6	27.5	27.4
Year	281.8	275.7	278.8	293.0	Feb.	5	269.1	273.0	273.0	273.0	273.0	273.0	273.0	273.0	273.0	273.0	273.0	273.0	273.0	273.0	273.0

Month.	Number of Observations of			Resultant Wind Direction in Degrees and Mean Velocity in Metres per Second.												Number of Days of						
	Cloud Amount.	Wind Force. Mean Beaufort.	Cloud Amount.	4 h.	8 h.	12 h.	16 h.	20 h.	24 h.	4 h.	8 h.	12 h.	16 h.	20 h.	24 h.	4 h.	8 h.	12 h.	16 h.	20 h.	24 h.	
1914.	18	1	1	18	30	28	28	28	28	18	30	28	28	28	28	18	30	28	28	28	28	28
Jan.	3	30	12	5	2	9	52	35	38	284	39	298	40	283	40	268	40	260	38	29	29	29
Feb.	3	28	12	1	0	4	39	44	40	366	379	290	44	283	46	275	53	290	49	308	47	308
Mar.	6	119	1	44	8	1	2	7	37	54	303	44	311	47	305	44	306	44	303	46	316	47
Apr.	3	129	1	43	2	0	10	25	41	290	510	306	50	297	58	308	51	311	54	302	53	
May	6	124	1	38	4	0	10	22	46	61	314	45	296	50	297	61	305	45	313	59	300	50
June	0	112	1	23	11	12	21	15	37	48	326	16	23	14	292	20	305	22	310	19	308	21
July	5	111	1	14	34	7	11	14	13	51	41	306	17	317	20	326	22	324	21	316	19	
Aug.	140	1	40	9	1	0	13	30	50	43	286	51	288	50	292	48	304	44	296	52	294	41
Sept.	2	125	0	39	15	2	12	32	28	50	312	41	308	41	302	44	300	42	305	37	304	41
Oct.	9	134	0	28	11	3	1	3	43	53	37	284	55	286	59	278	41	272	58	284	47	291
Nov.	6	134	1	28	11	3	1	6	32	29	49	321	51	312	40	312	45	311	40	318	44	315
Dec.	3	118	5	32	24	8	1	6	32	29	49	321	51	312	40	312	45	311	40	318	44	315
Year	44	1468	13	377	144	46	41	105	393	493	578	298	4									

## APPENDIX V.—*continued.*

OBSERVATIONS AT CAPE PEMBROKE, FALKLAND ISLANDS—*continued.*  
Height of Barometer Cistern above M.S.L. = 21 Metres.

Month.	Barometer Readings. Station Level. mb.												Relative Humidity. %.																
	Dry Bulb. a.						Depression of Wet Bulb. b.						Vapour Pressure. mb.						Mean. 4 h.										
	8 h.	12 h.	16 h.	20 h.	24 h.	Mean.	8 h.	12 h.	16 h.	20 h.	24 h.	Mean.	8 h.	12 h.	16 h.	20 h.	24 h.	8 h.	12 h.	16 h.	20 h.	24 h.	8 h.	12 h.	16 h.	20 h.	24 h.		
1915.	4 h.	998.8	997.8	996.9	996.9	996.9	996.9	283.3	283.3	283.3	283.3	283.3	998.0	284.3	284.3	284.3	284.3	284.3	995.9	995.9	995.9	995.9	995.9	998.8	998.8	998.8	998.8	998.8	
Jan.		998.8	997.8	996.9	996.9	996.9	996.9	283.3	283.3	283.3	283.3	283.3	998.0	284.3	284.3	284.3	284.3	284.3	995.9	995.9	995.9	995.9	995.9	998.8	998.8	998.8	998.8	998.8	
Feb.		997.9	997.8	997.3	997.3	997.3	997.3	283.3	283.3	283.3	283.3	283.3	998.0	284.3	284.3	284.3	284.3	284.3	995.9	995.9	995.9	995.9	995.9	998.7	998.7	998.7	998.7	998.7	
Mar.		1003.9	1004.0	1004.1	1004.1	1004.1	1004.1	281.7	281.7	281.7	281.7	281.7	998.0	282.3	282.3	282.3	282.3	282.3	995.9	995.9	995.9	995.9	995.9	998.6	998.6	998.6	998.6	998.6	
Apr.		991.0	990.7	990.2	990.2	990.2	990.2	990.7	990.7	990.7	990.7	990.7	990.7	277.4	277.4	277.4	277.4	277.4	995.9	995.9	995.9	995.9	995.9	998.5	998.5	998.5	998.5	998.5	
May.		999.1	998.1	998.9	998.9	998.9	998.9	276.6	276.6	276.6	276.6	276.6	998.0	277.1	277.1	277.1	277.1	277.1	995.9	995.9	995.9	995.9	995.9	998.6	998.6	998.6	998.6	998.6	
June		999.0	998.8	998.4	998.0	998.0	998.0	275.0	274.9	274.9	274.9	274.9	998.3	275.3	275.3	275.3	275.3	275.3	995.9	995.9	995.9	995.9	995.9	998.9	998.9	998.9	998.9	998.9	
July		994.2	994.3	994.4	994.5	994.5	994.5	995.0	995.0	995.0	995.0	995.0	995.1	275.9	275.9	275.9	275.9	275.9	995.9	995.9	995.9	995.9	995.9	992.9	992.9	992.9	992.9	992.9	
Aug.		992.9	991.7	990.9	990.3	990.3	990.3	991.3	274.8	274.8	274.8	274.8	274.8	991.4	275.7	275.7	275.7	275.7	275.7	995.9	995.9	995.9	995.9	995.9	991.9	991.9	991.9	991.9	991.9
Sept.		1004.5	1004.7	1003.9	1003.9	1003.9	1003.9	1004.4	1004.4	1004.4	1004.4	1004.4	1004.4	275.5	275.5	275.5	275.5	275.5	995.9	995.9	995.9	995.9	995.9	998.0	998.0	998.0	998.0	998.0	
Oct.		1005.4	1005.4	1005.1	1005.3	1005.3	1005.3	1006.1	1005.5	1005.5	1005.5	1005.5	1005.5	275.5	275.5	275.5	275.5	275.5	995.9	995.9	995.9	995.9	995.9	998.4	998.4	998.4	998.4	998.4	
Nov.		998.0	997.6	996.9	996.8	996.8	996.8	997.5	997.5	997.5	997.5	997.5	997.5	280.6	280.6	280.6	280.6	280.6	995.9	995.9	995.9	995.9	995.9	998.3	998.3	998.3	998.3	998.3	
Dec.		996.6	996.9	996.9	996.5	996.5	996.5	996.7	996.7	996.7	996.7	996.7	996.7	281.6	281.6	281.6	281.6	281.6	995.9	995.9	995.9	995.9	995.9	998.0	998.0	998.0	998.0	998.0	
Year		997.5	997.5	997.1	996.9	996.9	996.9	997.4	997.4	997.4	997.4	997.4	997.4	277.9	277.9	277.9	277.9	277.9	995.9	995.9	995.9	995.9	995.9	998.7	998.7	998.7	998.7	998.7	

Month.	Temperature Extremes. a.						Cloud Amount.						Wind Force. Mean Beaufort.											
	Mean Daily Max.	Mean Daily Min.	Highest Max.	Mean.	Lowest Min.	Date.	Lowest Max.	Date.	Highest Date.	Min.	Date.	Lowest Max.	Date.	Highest Date.	Min.	Mean.	4 h.	8 h.	12 h.	16 h.	20 h.	24 h.	Mean.	
Jan.	A.	B.	2.	295·2	281·6	295·2	16	274·1	27·29	280·2	28	281·3	10	77	73	6·5	6·9	8·0	7·2	7·3	4·2	4·3	4·2	
Feb.	285·2	277·9	282·5	290·8	282·5	282·5	13	276·3	9, 11, 24	282·4	2, 24	281·9	14	7·4	6·8	7·0	6·9	6·9	5·9	6·8	4·0	4·1	4·2	
Mar.	286·3	278·2	281·7	289·1	282·8	282·8	5	273·6	27, 28	278·6	27	281·3	7, 8	7·3	7·6	6·9	6·9	7·8	7·2	7·3	4·0	4·2	4·2	
Apr.	285·1	278·2	277·7	277·7	277·7	277·7	13	270·2	275·8	275·8	1+	279·1	1, 5	5·9	6·4	7·2	7·1	6·6	6·1	6·6	4·5	4·9	4·7	
May	281·5	274·0	276·7	285·8	285·8	285·8	8, 20,	271·3	17	276·3	17	278·6	26	7·8	7·8	8·0	8·0	7·5	7·5	3·3	3·5	3·8	3·7	
June	279·4	277·4	274·8	281·9	281·9	281·9	13	268·6	23, 24	273·0	24	276·9	13	6·3	7·6	7·5	7·5	6·4	6·9	3·9	4·4	4·6	4·3	
July	278·0	273·2	275·6	280·8	280·8	280·8	10	269·1	2	274·1	2	275·8	8, 9	7·1	8·4	7·9	8·6	7·8	7·6	3·4	3·9	3·8	3·8	
Aug.	277·0	271·8	274·4	283·0	283·0	283·0	12	266·9	18, 19	270·8	17	274·7	5, 12	7·8	7·7	7·6	7·8	6·8	6·5	7·3	4·1	4·4	4·3	
Sept.	279·9	273·8	276·3	283·0	283·0	283·0	14, 25	270·8	17	277·4	8	276·3	19	7·1	7·3	7·1	6·0	5·3	6·4	5·5	4·7	4·6	4·3	
Oct.	281·8	275·5	278·6	287·4	287·4	287·4	30	273·0	6, 12, 13	279·1	12, 14	277·4	19, 22, 30	6·6	7·0	7·6	7·4	6·5	7·1	4·1	4·5	4·6	4·5	
Nov.	284·1	276·7	280·4	289·1	289·1	289·1	15	273·0	1, 5	279·1	15	279·1	24	6·4	6·7	6·5	6·5	6·4	6·4	5·0	5·2	4·2	4·5	
Dec.	284·8	277·7	281·3	294·1	294·1	294·1	29	274·7	23	281·9	3, 4, 24	281·3	31	7·4	7·0	6·8	7·3	7·1	6·7	7·1	4·4	4·5	4·2	4·3
Year	281·7	275·3	278·5	295·2	295·2	295·2	Jun.	266·9	Aug., 18, 19	270·8	Aug., 17	281·9	Feb., 14	6·9	7·3	7·2	7·4	6·8	6·5	7·0	4·0	4·2	4·5	4·3

Month,	Tides,	Number of Observations of								Resultant Wind Direction in Degrees and Mean Velocity in Metres per Second.						Number of Days of						Fog Diurnal Variation.										
		Strong Winds,	Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	4 h.	8 h.	12 h.	16 h.	20 h.	24 h.	Mean.	Precipit.	Snow.	SeaL.	Thunder- storms.	Fog.	○-4 h.	4-8 h.	8-12 h.	12-16 h.	16-20 h.	20-24 h.			
1915.																																
Jan.	0	131	4	27	11	4	1	8	54	38	39	281	47	264	54	266	53	263	46	269	39	284	39	271	46	22	1	4	3	3	3	
Feb.	3	113	3	29	7	6	2	8	21	47	45	315	47	300	49	292	58	294	50	290	42	299	47	18	0	0	5	2	1	1		
Mar.	0	121	4	54	14	1	2	11	31	23	46	312	37	315	41	309	44	320	42	313	35	320	40	315	40	12	0	1	6	7	9	
Apr.	3	137	0	24	9	2	0	2	34	44	65	301	52	305	48	288	61	280	59	298	53	298	52	27	9	5	0	1	1	1		
May	0	97	0	37	16	12	10	9	24	46	62	323	27	323	25	308	30	315	22	292	29	321	28	313	26	6	0	5	2	3	2	
June	0	129	1	22	12	4	11	12	31	44	43	287	25	285	31	275	41	280	36	274	38	277	31	279	33	23	5	1	0	0	0	0
July	2	95	1	42	18	9	3	8	20	42	43	313	18	317	35	312	31	308	30	312	31	315	30	313	29	22	8	1	0	1	2	1
Aug.	5	115	4	30	19	7	1	5	29	41	50	281	36	306	32	298	45	295	45	298	46	304	40	291	40	23	11	4	0	6	2	2
Sep.	1	116	0	45	12	4	1	3	18	59	59	323	52	319	52	320	47	322	52	319	55	311	53	318	51	15	1	0	1	2	1	
Oct.	5	113	0	53	22	4	3	0	27	24	53	323	40	323	41	314	42	316	43	317	44	324	47	320	43	21	2	3	2	2	2	
Nov.	0	139	0	40	12	6	1	1	25	38	57	316	53	315	53	309	55	304	60	303	45	368	49	309	52	22	3	1	0	1	1	
Dec.	3	130	4	29	13	3	4	7	52	31	43	277	41	291	44	286	42	270	34	278	44	268	41	278	39	22	0	4	1	1	1	
Year.	22	1432	21	1436	62	39	74	74	366	446	585	305	37	305	40	298	41	297	40	297	39	302	39	301	39	2	68	26	29	21	22	26

## APPENDIX VI.

## RAINFALL OBSERVATIONS:

1. *King Edward Cove, South Georgia, 1911-1913.*
2. *Stanley, Falkland Islands, 1904-1914.*

KING EDWARD COVE, SOUTH GEORGIA. LAT. 54° 18' S., LONG. 36° 27' W.

Month.	No. of Days.	Total Fall.	Max. Fall.	Date.	No. of Days.	Total Fall.	Max. Fall.	Date.	No. of Days.	Total Fall.	Max. Fall.	Date.
	1911.				1912.				1913.			
Jan.	11	25·2	...	...	20	63·5	...	...	18	103·9	...	...
Feb.	13	98·4	...	...	20	201·0	...	...	21	124·1	...	...
Mar.	20	134·3	...	...	26	140·6	...	...	21	227·9	...	...
Apr.	14	140·4	...	...	21	110·4	...	...	17	97·5	...	...
May	5	16·3	...	...	23	163·7	...	...	26	331·7	...	...
June	15	143·9	...	...	9	32·9	...	...	20	175·6	...	...
July	16	107·5	...	...	10	69·6	...	...	19	122·2	...	...
Aug.	16	215·0	...	...	12	96·0	...	...	11	92·8	...	...
Sept.	10	35·5	...	...	5	66·4	...	...	22	74·9	...	...
Oct.	16	60·5	...	...	8	64·9	...	...	15	33·7	...	...
Nov.	19	103·7	...	...	15	156·5	...	...	16	131·7	...	...
Dec.	16	46·6	...	...	20	143·0	...	...	11	79·2	...	...
Year	171	1127·3	...	...	189	1308·5	...	...	217	1595·2	...	...

STANLEY, FALKLAND ISLANDS. LAT. 51° 41' S., LONG. 57° 51' W.

	1904.				1905.				1906.			
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Jan.	...	...	...	...	17	90·7	21·8	23rd	12	53·0	21·3	21st
Feb.	...	...	...	...	25	116·0	18·8	11th	17	47·5	10·3	2nd
Mar.	...	...	...	...	16	48·3	12·4	27th	23	67·7	9·4	3rd, 10th
Apr.	...	...	...	...	23	53·5	6·1	16th	11	54·7	15·5	13th
May	...	...	...	...	26	71·4	10·2	18th	22	56·3	15·2	8th
June	...	...	...	...	24	64·4	7·9	9th	23	73·7	28·4	4th
July	...	...	...	...	28	65·5	15·5	29th	20	53·2	16·8	16th
Aug.	20	51·7	17·3	15th	25	53·2	10·2	17th	20	37·7	8·9	3rd
Sept.	23	62·0	13·0	24th	12	9·0	2·3	25th	16	23·2	6·0	4th
Oct.	19	71·4	19·8	2nd	15	32·6	8·0	26th	17	59·1	16·8	5th
Nov.	18	40·8	8·9	3rd	12	27·2	5·5	17th	13	40·9	10·7	16th
Dec.	22	71·6	9·1	3rd	18	70·2	15·5	13th	23	84·8	20·3	18th
Year	...	...	...	...	241	702·0	21·8	Jan. 23	217	651·8	28·4	June 4
	1907.				1908.				1909.			
Jan.	12	26·7	5·6	31st	17	61·6	11·2	24th	19	59·3	9·1	12th
Feb.	12	42·7	20·6	8th	14	55·8	10·9	1st	20	54·4	12·7	4th
Mar.	10	18·5	7·4	1st	19	63·2	14·5	4th	16	58·2	9·7	5th
Apr.	16	31·5	6·6	6th	21	50·9	10·7	14th	20	89·9	12·7	23rd
May	21	52·7	8·9	11th	22	46·1	12·2	2nd	20	62·9	22·4	23rd
June	23	44·8	7·6	1st	19	33·4	6·9	18th	21	51·6	10·9	3rd
July	21	46·9	9·7	30th	26	64·9	7·4	23rd	16	30·5	9·4	18th
Aug.	16	31·2	6·1	20th	17	26·9	7·1	28th	19	38·3	14·5	4th
Sept.	16	34·9	8·4	5th	17	44·1	9·4	13th	12	2·9	1·0	7th
Oct.	21	39·5	7·9	9th	27	71·9	12·2	8th	14	39·6	20·3	11th
Nov.	16	66·0	15·2	26th	23	78·1	12·7	15th	17	16·7	12·7	5th
Dec.	20	91·4	15·7	26th	22	44·6	8·9	14th	22	51·3	17·9	24th
Year	204	526·8	20·6	Feb. 8	244	641·5	14·5	March 4	216	555·6	22·4	May 23

APPENDIX VI.—*continued.*RAINFALL OBSERVATIONS : STANLEY, FALKLAND ISLANDS—*continued.*

Month.	No. of Days.	Total Fall.	Max. Fall.	Date.	No. of Days.	Total Fall.	Max. Fall.	Date.	No. of Days.	Total Fall.	Max. Fall.	Date.
	1910.				1911.				1912.			
Jan.	19	95.8	2.0	22nd	19	166.1	23.0	21st	14	50.5	16.0	8th
Feb.	15	61.5	0.9	23rd	15	42.4	12.7	1st	26	108.7	10.9	1st
Mar.	11	20.8	0.6	23rd	16	59.7	10.3	28th	21	68.3	14.2	25th
Apr.	23	67.8	5.1	17th	25	84.1	12.8	26th	19	54.4	15.0	29th
May	24	111.5	38.6	3rd	26	100.6	29.5	3rd	17	38.6	5.1	19th
June	22	43.9	0.6	5th	20	61.7	9.7	30th	16	32.8	6.6	29th
July	22	49.8	7.7	22nd	24	109.0	29.5	3rd	17	23.1	2.8	7th, 27th
Aug.	21	76.5	25.9	7th	25	103.6	10.4	22nd	18	41.9	10.9	11th
Sept.	14	28.4	0.4	3rd	14	34.3	7.9	18th	13	25.1	7.4	8th
Oct.	7	6.4	0.3	4th	19	39.9	6.9	17th	8	33.8	9.1	16th
Nov.	12	63.8	20.5	23rd	19	71.9	15.7	16th	26	66.5	9.4	25th
Dec.	15	77.0	22.9	1st	18	63.0	17.3	24th	22	88.4	13.7	5th
Year	205	703.2	38.6	May 3	240	936.3	29.5	May 3 July 3	217	632.1	16.0	Jan. 8
	1913.				1914.				Summary, 10 Years.			
Jan.	16	44.5	7.9	23rd	24	79.8	10.7	12th	17	72.8	23.0	21st/1911
Feb.	16	44.5	11.9	23rd, 26th	13	40.9	10.7	28th	17	61.4	20.6	8th/1907
Mar.	22	114.6	19.6	3rd	14	36.1	7.1	21st	17	55.5	19.6	3rd/1913
Apr.	17	68.1	9.7	9th	15	53.3	17.5	8th	19	60.8	17.5	8th/1914
May	21	59.2	12.4	28th	19	36.3	9.1	30th	22	63.6	38.6	3rd/1910
June	26	61.2	11.4	28th	22	61.7	15.5	15th	22	52.9	28.4	4th/1906
July	19	36.3	10.4	13th	...	...	...	...	21	53.2	29.5	3rd/1911
Aug.	16	56.6	9.7	8th	...	...	...	...	20	51.8	25.9	7th/1910
Sept.	12	15.0	2.0	1st, 10th, 19th	...	...	...	...	15	27.9	13.0	24th/1904
Oct.	19	32.5	11.9	6th	...	...	...	...	17	42.7	20.3	11th/1909
Nov.	15	64.0	17.8	26th	...	...	...	...	17	53.6	20.5	23rd/1910
Dec.	15	66.0	22.1	31st	...	...	...	...	20	70.8	22.9	1st/1910
Year	214	662.5	22.1	Dec. 31	...	...	...	...	224	667.0	38.6	3. v. 1910

## APPENDIX VII.

RESULTS OF TABULATION OF THE RECORDS OF THE RICHARD BAROGRAPH AT  
LEITH HARBOUR, SOUTH GEORGIA, 1913-1915.

Bi-hourly Differences of Pressure, in mb., from the mean for the day, corrected and reduced by comparison with the eye observations at Cumberland Bay, South Georgia, three times daily (8 h., 14 h., 20 h.).

	2 h.	4 h.	6 h.	8 h.	10 h.	12 h.	14 h.	16 h.	18 h.	20 h.	22 h.	24 h.	Mean (M.S.L.).
<b>1913.</b>													
Jan.	+0.2	+0.2	+0.2	+0.3	0.0	-0.2	0.0	0.0	-0.1	-0.3	-0.2	+0.2	991.5
Feb.	+0.1	0.0	+0.1	-0.1	-0.1	-0.4	-0.3	-0.1	+0.2	+0.2	+0.1	-0.2	993.8
Mar.	+0.1	-0.3	-0.4	-0.3	-0.5	-0.6	-0.6	-0.1	+0.4	+0.9	+0.8	+0.6	994.2
Apr.	-0.6	-0.3	+0.1	+0.3	-0.1	-0.1	-0.3	0.0	+0.2	+0.2	+0.3	+0.1	996.8
May	-0.2	-0.5	-0.3	-0.2	-0.3	-0.4	-0.1	+0.4	+0.4	+0.7	+0.4	0.0	998.8
June	+0.7	+0.7	+0.2	+0.1	-0.4	-0.4	-0.7	-0.7	-0.4	0.0	+0.4	+0.5	993.9
July	+0.2	+0.1	+0.1	0.0	+0.2	-0.3	-0.5	-0.4	-0.3	0.0	+0.1	+0.1	993.9
Aug.	+0.3	0.0	-0.1	-0.2	-0.2	-0.4	-0.7	-0.6	-0.3	+0.3	+0.6	+0.5	1004.4
Sept.	+0.5	+0.3	+0.1	-0.2	-0.4	-0.8	-0.7	-0.5	+0.1	+0.5	+0.8	+0.7	995.5
Oct.	0.0	0.0	+0.3	+0.5	+0.5	+0.1	-0.4	-0.8	-0.5	-0.1	+0.1	0.0	992.9
Nov.	+0.5	-0.1	-0.3	-0.2	-0.2	-0.5	-0.5	-0.3	+0.1	+0.8	+1.0	+0.8	991.3
Dec.	+0.2	0.0	-0.1	-0.1	-0.4	-0.2	-0.3	-0.3	-0.1	+0.2	+0.3	+0.2	1000.1
Year	+0.17	+0.01	-0.01	-0.01	-0.16	-0.35	-0.43	-0.28	-0.03	+0.28	+0.39	+0.33	995.59
<b>1914.</b>													
Jan.	+0.7	+0.4	+0.2	+0.1	-0.3	-0.6	-0.4	-0.1	-0.1	+0.1	+0.3	+0.3	995.3
Feb.	+1.1	+0.6	0.0	-0.1	-0.4	-0.7	-1.0	-1.0	-0.6	+0.3	+1.0	+1.2	994.8
Mar.	+0.9	+0.4	0.0	-0.1	-0.2	-0.5	-1.0	-1.0	-0.4	+0.4	+0.9	+1.0	999.1
Apr.	+0.3	-0.3	-0.5	-0.4	-0.1	-0.1	-0.1	-0.3	+0.1	+0.5	+0.6	+0.7	1001.8
May	+0.2	+0.4	+0.2	0.0	+0.2	+0.2	0.0	-0.3	-0.2	-0.2	-0.1	0.0	994.8
June	+0.3	+0.1	+0.2	+0.2	+0.1	+0.1	-0.1	-0.3	-0.2	-0.3	0.0	-0.2	996.3
July	+0.2	-0.1	-0.1	0.0	+0.1	-0.1	-0.2	-0.5	-0.3	+0.1	+0.2	+0.3	1001.6
Aug.	+0.1	+0.2	+0.1	+0.1	-0.1	-0.1	-0.3	-0.5	-0.2	0.0	+0.3	+0.3	999.4
Sept.	+0.6	+0.5	+0.2	+0.2	-0.2	-0.2	-0.4	-0.5	-0.4	-0.2	+0.1	+0.3	1000.3
<b>1915.</b>													
May	+0.1	+0.2	+0.1	0.0	-0.4	-0.6	-0.4	-0.1	0.0	+0.1	+0.3	+0.6	994.5
July	+0.2	+0.3	+0.1	+0.1	+0.3	+0.4	-0.1	-0.4	-0.4	-0.3	0.0	+0.2	996.1
Aug.	+0.5	+0.5	+0.3	+0.5	+0.3	0.0	-0.3	-0.8	-0.6	-0.3	+0.2	+0.3	995.2
Sept.	+0.8	+0.4	+0.2	-0.1	-0.3	-0.6	-0.9	-0.9	-0.2	+0.5	+0.8	+0.9	1005.7
Oct.	-0.1	-0.3	-0.3	+0.2	+0.2	-0.1	-0.1	-0.2	-0.1	+0.1	+0.2	+0.1	1005.3
Nov.	+0.2	+0.1	+0.1	+0.2	+0.3	+0.1	-0.1	-0.4	-0.4	-0.2	+0.2	+0.2	998.2
Dec.	+0.3	0.0	-0.1	-0.2	-0.3	-0.5	-0.1	-0.1	-0.1	+0.1	+0.6	+0.8	993.0

## APPENDIX VIII.

## TABULATION OF SUNSHINE CARDS AT STANLEY, FALKLAND ISLANDS, 1906 TO 1915.

Proportion of Bright Sunshine in each Hour of the Day, and frequencies of various Daily Amounts.

	*17 h.	16 h.	15 h.	14 h.	13 h.	12 h.	11 h.	10 h.	9 h.	8 h.	7 h.	6 h.	5 h.	+ h.	Total	No. of Days of				
																Hrs. o.	Hrs. o-3.	Hrs. 3-6.	Hrs. 6-9.	Hrs. > 9.
<b>1906.</b>																				
Jan.	.38	.51	.56	.57	.53	.45	.44	.48	.43	.42	.42	.39	.27	.03	.588	1	6	8	11	5
Feb.	.30	.47	.49	.50	.54	.47	.47	.46	.35	.43	.32	.25	.01	..	.506	0	9	8	7	+
Mar.	.14	.27	.29	.35	.30	.27	.34	.44	.46	.49	.35	.10	..	..	.380	3	11	11	3	3
Apr.	.16	.39	.53	.52	.57	.46	.44	.34	.39	.26	.07	..	..	..	.413	3	10	7	8	2
May	..	.13	.34	.37	.39	.41	.42	.32	.13	.05	..	..	..	..	.256	9	9	10	3	0
June	..	.02	.16	.26	.17	.22	.13	.07	.04	..	..	..	..	..	.107	11	17	2	0	0
July	..	.10	.32	.36	.33	.34	.33	.35	.23	..	..	..	..	..	.236	7	13	8	3	0
Aug.	..	.21	.36	.35	.38	.39	.40	.35	.26	.16	.02	..	..	..	.288	5	12	9	5	0
Sept.	..	.35	.42	.49	.54	.54	.58	.54	.47	.40	.21	.01	..	..	.455	5	7	7	8	3
Oct.	..	.13	.28	.37	.44	.40	.38	.39	.37	.27	.19	.18	.10	.00	.350	6	11	5	8	1
Nov.	..	.37	.47	.50	.51	.50	.46	.40	.42	.41	.37	.39	.34	.22	.536	0	9	7	9	5
Dec.	..	.42	.47	.41	.42	.54	.58	.52	.57	.53	.52	.49	.31	.02	.621	0	3	12	12	4
Total	..	..	..	..	..	..	..	..	..	..	..	..	..	..	50	117	94	77	27	
Mean	..	.16	.31	.40	.43	.42	.41	.39	.33	.27	.21	.14	.07	.00	3.95	..	..	..	..	..
<b>1907.</b>																				
Jan.	.38	.52	.52	.52	.60	.59	.56	.54	.57	.55	.50	.43	.20	.01	.649	0	4	10	12	5
Feb.	.45	.57	.59	.61	.60	.61	.65	.57	.59	.54	.48	.32	.06	..	.664	1	5	6	6	10
Mar.	.28	.50	.59	.55	.58	.53	.56	.58	.54	.46	.27	.07	..	..	.551	2	6	8	12	3
Apr.	..	.13	.30	.41	.40	.53	.54	.50	.40	.35	.27	.09	..	..	.392	3	11	8	5	3
May	..	.12	.32	.36	.35	.37	.33	.30	.24	.04	..	..	..	..	.243	5	14	8	4	0
June	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
July	..	.03	.19	.24	.31	.38	.35	.24	.14	.02	..	..	..	..	.190	11	12	6	2	0
Aug.	..	.04	.22	.26	.29	.32	.32	.31	.25	.18	.04	..	..	..	.255	6	15	5	4	1
Sept.	..	.10	.26	.37	.37	.39	.39	.36	.34	.31	.25	.14	..	..	.328	8	9	6	7	0
Oct.	..	.23	.30	.30	.38	.36	.42	.39	.31	.32	.40	.27	.10	.01	.379	2	12	9	6	2
Nov.	..	.32	.48	.49	.46	.51	.52	.44	.45	.46	.51	.47	.41	.20	.572	0	4	13	9	4
Dec.	..	.33	.43	.42	.46	.47	.46	.40	.36	.36	.35	.31	.26	.22	.485	4	8	7	7	5
Total	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Mean	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
<b>1908.</b>																				
Jan.	.33	.37	.43	.43	.45	.45	.43	.43	.40	.39	.35	.29	.21	.01	.497	3	7	9	6	6
Feb.	.33	.44	.47	.53	.49	.49	.50	.45	.45	.44	.50	.32	.05	..	.546	2	5	9	7	6
Mar.	.26	.52	.49	.49	.58	.55	.52	.47	.44	.40	.26	.01	..	..	.499	6	7	2	9	7
Apr.	.06	.18	.29	.41	.47	.50	.50	.38	.32	.26	.05	..	..	..	.342	4	11	9	5	1
May	..	.02	.17	.30	.35	.32	.30	.24	.18	.05	..	..	..	..	.193	12	12	3	4	0
June	..	.01	.16	.29	.31	.36	.39	.37	.14	..	..	..	..	..	.203	10	9	10	1	0
July	..	.01	.17	.36	.42	.44	.42	.29	.22	.03	..	..	..	..	.236	5	18	6	2	0
Aug.	..	.03	.09	.19	.29	.35	.38	.30	.34	.28	.17	.01	..	..	.243	9	12	7	2	1
Sept.	..	.21	.47	.54	.48	.55	.57	.52	.49	.30	.26	.17	..	..	.456	3	7	9	9	2
Oct.	..	.22	.33	.30	.36	.38	.32	.32	.31	.24	.16	.06	.01	..	.333	6	9	9	6	1
Nov.	..	.29	.38	.51	.48	.53	.53	.59	.44	.47	.50	.45	.44	.15	.576	0	7	7	12	4
Dec.	..	.28	.33	.34	.38	.34	.32	.28	.20	.17	.11	.04	.01	..	.418	1	14	9	5	2
Total	..	..	..	..	..	..	..	..	..	..	..	..	..	..	61	118	89	68	30	
Mean	..	.17	.26	.34	.40	.44	.42	.39	.32	.26	.20	.11	.04	.00	3.79	..	..	..	..	..
<b>1909.</b>																				
Jan.	.32	.35	.46	.49	.46	.54	.52	.48	.45	.40	.29	.23	.12	..	.511	2	8	7	11	3
Feb.	.31	.37	.33	.26	.36	.38	.39	.38	.28	.28	.25	.21	.03	..	.383	2	11	7	8	2
Mar.	.20	.44	.48	.49	.49	.46	.50	.44	.41	.36	.20	.06	..	..	.453	4	8	7	8	4
Apr.	.05	.24	.38	.43	.40	.42	.45	.42	.37	.25	.05	..	..	..	.346	5	10	8	7	0
May	..	.05	.27	.38	.35	.38	.34	.30	.26	.06	..	..	..	..	.239	10	9	7	5	0
June	..	.03	.14	.29	.35	.38	.34	.31	.21	.02	..	..	..	..	.204	11	11	5	3	0
July	..	.03	.23	.30	.32	.42	.44	.25	.18	.05	..	..	..	..	.222	8	13	7	3	0
Aug.	..	.01	.11	.24	.36	.33	.36	.33	.34	.24	.14	.02	..	..	.248	4	14	9	4	0
Sept.	..	.10	.23	.27	.27	.31	.28	.29	.27	.19	.14	.01	..	..	.263	6	13	6	3	2
Oct.	..	.28	.38	.42	.47	.49	.55	.55	.58	.46	.25	.11	.01	..	.501	3	9	6	8	5
Nov.	..	.27	.34	.32	.39	.41	.37	.41	.34	.35	.28	.25	.15	..	.425	1	12	7	8	2
Dec.	..	.29	.30	.35	.34	.40	.35	.33	.32	.32	.29	.25	.05	..	.424	4	12	5	4	6
Total	..	..	..	..	..	..	..	..	..	..	..	..	..	..	60	130	81	70	24	
Mean	..	.15	.24	.32	.37	.39	.41	.37	.32	.24	.15	.10	.05	.00	3.52	..	..	..	..	..

\* No sunshine was registered later than 17½ h., owing apparently to an obstruction. Stanley being in the Southern Hemisphere, the burn on the card travels from right to left instead of from left to right.

APPENDIX VIII.—*continued.*TABULATION OF SUNSHINE CARDS AT STANLEY, FALKLAND ISLANDS—*continued.*Proportion of Bright Sunshine—*continued.*

	*17 h.	16 h.	15 h.	14 h.	13 h.	12 h.	11 h.	10 h.	9 h.	8 h.	7 h.	6 h.	5 h.	4 h.	Total.	No. of Days of				
																Hrs. ..	Hrs. 0-3.	Hrs. 3-6.	Hrs. 6-9.	Hrs. > 9.
1910.																				
Jan.	.38	.45	.48	.44	.50	.56	.54	.59	.59	.51	.44	.49	.35	.03	6.35	0	5	10	11	5
Feb.	.34	.43	.38	.46	.52	.56	.46	.47	.44	.43	.35	.26	.05	..	5.15	1	8	8	6	5
Mar.	.36	.41	.52	.57	.52	.54	.54	.55	.50	.51	.29	.06	..	..	5.37	3	6	5	12	5
Apr.	.03	.31	.37	.36	.38	.41	.38	.27	.20	.04	..	..	..	..	3.11	1	13	12	3	1
May	..	.04	.26	.28	.30	.32	.31	.27	.23	.04	..	..	..	..	2.05	13	9	6	3	0
June	..	..	.18	.32	.32	.30	.24	.19	.02	..	..	..	..	..	1.89	7	14	9	0	0
July	..	.03	.23	.25	.27	.37	.26	.14	.15	.04	..	..	..	..	1.74	13	12	4	2	0
Aug.	.01	.17	.26	.38	.35	.38	.39	.27	.17	.09	..	..	..	..	2.47	5	16	7	3	0
Sept.	.18	.36	.35	.38	.37	.48	.48	.32	.28	.16	.02	..	..	..	3.63	2	16	4	6	2
Oct.	.30	.42	.52	.53	.54	.51	.46	.47	.45	.38	.30	.20	.02	..	5.10	3	8	7	9	4
Nov.	.39	.56	.55	.52	.47	.54	.55	.58	.56	.57	.47	.44	.32	.03	6.55	1	2	9	11	7
Dec.	.35	.41	.52	.60	.61	.59	.61	.57	.45	.39	.39	.30	.21	.07	6.07	3	6	6	8	8
Total.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	52	115	87	74	37	
Mean.	.19	.30	.39	.42	.43	.46	.44	.40	.36	.29	.20	.15	.08	.01	4.12	..	..	..	..	..
1911.																				
Jan.	.40	.46	.45	.50	.47	.40	.46	.39	.43	.43	.39	.26	.21	.01	5.26	2	9	6	8	6
Feb.	.35	.55	.51	.54	.60	.61	.49	.48	.45	.41	.33	.27	.09	..	5.68	1	9	5	8	5
Mar.	.19	.39	.45	.41	.37	.45	.44	.41	.50	.45	.33	.09	..	..	4.48	2	12	8	6	3
Apr.	.09	.18	.24	.22	.16	.17	.11	.14	.12	.09	.02	..	..	..	1.54	7	18	4	1	0
† May	..	.03	.13	.16	.12	.10	.21	.17	.10	.08	..	..	..	..	1.10	14	12	3	1	0
June	..	.01	.09	.12	.17	.14	.19	.19	.11	.02	..	..	..	..	1.04	16	11	2	1	0
July	..	.02	.25	.29	.36	.36	.32	.27	.21	.02	..	..	..	..	2.10	4	17	8	2	0
Aug.	.01	.18	.26	.31	.27	.35	.41	.37	.34	.20	..	..	..	..	2.70	8	13	2	0	0
Sept.	.14	.31	.32	.32	.41	.38	.40	.38	.36	.27	.13	.01	..	..	3.43	5	12	6	1	1
Oct.	.23	.41	.47	.43	.37	.37	.45	.43	.41	.35	.42	.28	.05	..	4.67	2	14	3	6	6
Nov.	.14	.26	.26	.30	.33	.31	.24	.20	.22	.27	.29	.25	.11	..	3.18	2	15	8	4	1
Dec.	.18	.23	.25	.31	.37	.39	.41	.34	.29	.24	.13	.04	..	..	3.83	5	12	6	4	4
Total.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	68	149	72	49	26	
Mean.	.14	.25	.31	.32	.33	.33	.34	.32	.31	.24	.18	.12	.05	..	3.25	..	..	..	..	..
1912.																				
Jan.	.36	.48	.48	.46	.53	.45	.38	.37	.33	.39	.37	.26	.23	.02	5.11	4	9	5	5	8
Feb.	.27	.32	.25	.31	.30	.40	.41	.40	.46	.48	.47	.32	.05	..	4.44	2	8	9	9	1
Mar.	.17	.36	.42	.45	.41	.42	.39	.34	.30	.24	.19	.07	..	..	3.76	1	15	8	5	2
Apr.	.09	.28	.43	.41	.37	.46	.42	.33	.30	.26	.12	..	..	..	3.47	4	13	6	5	2
May	..	.10	.30	.39	.37	.39	.41	.40	.32	.10	..	..	..	..	2.78	10	6	10	5	0
June	..	.01	.10	.23	.28	.27	.25	.24	.21	.02	..	..	..	..	1.61	8	17	4	1	0
July	..	.02	.19	.22	.30	.30	.18	.26	.28	.05	..	..	..	..	1.80	9	15	5	2	0
† Aug.	..	.01	.11	.31	.38	.39	.31	.36	.29	.31	.18	.03	..	..	2.68	3	14	11	1	0
Sept.	.16	.38	.51	.51	.54	.46	.48	.42	.39	.26	.04	..	..	..	4.66	4	5	9	12	0
Oct.	.26	.49	.50	.53	.60	.59	.54	.48	.50	.35	.33	.14	.03	..	5.34	3	5	10	7	6
Nov.	.42	.50	.47	.48	.48	.65	.65	.62	.53	.59	.46	.33	.20	.02	6.40	1	4	6	13	5
Dec.	.36	.35	.45	.48	.42	.47	.43	.45	.46	.37	.31	.34	.27	.09	5.25	5	5	8	8	5
Total.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	54	116	91	73	29	
Mean.	.17	.28	.37	.40	.42	.44	.41	.39	.37	.28	.21	.13	.06	.01	3.94	..	..	..	..	..
1913.																				
Jan.	.32	.46	.36	.39	.40	.57	.52	.48	.42	.36	.31	.28	.17	.01	5.05	1	8	9	10	3
Feb.	.36	.52	.49	.58	.59	.60	.58	.65	.63	.40	.40	.35	.12	..	6.27	0	7	7	5	9
Mar.	.14	.39	.37	.38	.42	.40	.29	.27	.26	.09	.01	..	..	..	3.42	1	14	10	6	0
Apr.	.05	.37	.51	.48	.49	.57	.51	.56	.57	.50	.19	..	..	..	4.80	3	8	7	.9	3
May	..	.12	.35	.49	.49	.55	.50	.40	.39	.10	..	..	..	..	3.39	7	7	12	5	0
June	..	.01	.13	.21	.20	.24	.21	.19	.11	.02	..	..	..	..	1.32	8	18	3	1	0
July	..	.03	.15	.24	.27	.28	.32	.22	.04	..	..	..	..	..	1.83	10	12	7	2	0
Aug.	.03	.26	.36	.39	.41	.35	.36	.33	.29	.17	.04	..	..	..	2.99	7	9	12	2	1
† Sept.	.11	.40	.49	.51	.55	.61	.67	.60	.49	.28	.05	..	..	..	5.31	1	5	4	8	3
Oct.	.16	.39	.52	.57	.60	.55	.50	.50	.54	.35	.21	.00	..	..	5.44	2	5	9	10	5
Nov.	.32	.33	.46	.42	.43	.39	.28	.35	.33	.35	.32	.29	.15	.01	4.43	5	5	10	0	5
Dec.	.37	.36	.33	.36	.43	.52	.55	.49	.46	.46	.41	.30	.25	.05	5.34	5	6	6	6	8
Total.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	50	104	96	64	36	
Mean.	.15	.30	.38	.42	.44	.44	.44	.40	.31	.20	.12	.06	.01	..	4.13	..	..	..	..	..

\* No sunshine was registered later than 17½ h., owing apparently to an obstruction. Stanley being in the Southern Hemisphere, the burn on the card travels from right to left instead of from left to right.

† Card for May 26 missing.

|| Cards for September 1-10 missing.

‡ Cards for August 2 and 21 missing.

§

Card for November 5 missing.

|| Cards for November 1-5 missing.

APPENDIX VIII.—*continued.*TABULATION OF SUNSHINE CARDS AT STANLEY, FALKLAND ISLANDS—*continued.*Proportion of Bright Sunshine—*continued.*

	17 h.	16 h.	15 h.	14 h.	13 h.	12 h.	11 h.	10 h.	9 h.	8 h.	7 h.	6 h.	5 h.	4 h.	Total.	No. of Days of				
																Hrs. o.	Hrs. 2-3	Hrs. 3-6	Hrs. 6-9	Hrs. > 9
<b>1914.</b>																				
Jan.	.29	.33	.33	.32	.28	.36	.42	.38	.37	.41	.39	.33	.21	.02	.44	3	8	11	5	4
Feb.	.23	.36	.44	.50	.59	.49	.48	.48	.40	.40	.40	.33	.03	..	.21	1	6	10	9	2
*Mar.	.21	.45	.42	.51	.46	.50	.42	.35	.41	.34	.30	.04	..	..	.41	4	7	8	7	4
Apr.	.03	.21	.29	.33	.34	.43	.43	.48	.41	.34	.10	..	..	..	.39	4	11	10	5	0
May	..	.09	.30	.37	.35	.35	.35	.35	.35	.19	..	..	..	..	.70	3	15	8	5	0
June	..	..	.17	.28	.27	.25	.25	.26	.21	.03	..	..	..	..	.72	14	8	6	2	0
July	..	.04	.18	.22	.32	.35	.31	.26	.21	.01	..	..	..	..	.90	16	5	7	3	0
Aug.	.01	.32	.35	.32	.32	.35	.36	.35	.32	.17	..	..	..	..	.87	10	10	3	8	0
Sept.	.07	.19	.18	.19	.28	.35	.39	.28	.22	.22	.08	..	..	..	.45	6	12	8	4	0
Oct.	.21	.41	.49	.46	.43	.42	.48	.42	.38	.36	.35	.20	.01	..	.62	2	10	8	6	5
Nov.	.30	.45	.44	.42	.39	.42	.51	.46	.43	.35	.40	.30	.15	.01	.53	2	7	10	7	4
Dec.	.42	.48	.48	.56	.46	.47	.43	.37	.34	.33	.31	.26	.19	.02	.12	1	7	11	8	4
Total.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	66	106	100	69	23	
Mean.	.15	.28	.34	.37	.38	.40	.40	.37	.35	.26	.19	.12	.05	.00	.66	..	..	..	..	
<b>1915.</b>																				
Jan.	.36	.41	.43	.48	.46	.45	.46	.40	.40	.39	.33	.24	.14	.01	.95	4	9	7	4	7
Feb.	.41	.45	.35	.46	.54	.57	.59	.57	.52	.46	.41	.36	.05	..	.74	2	7	4	12	3
Mar.	.21	.43	.50	.52	.49	.53	.46	.48	.40	.38	.24	.02	..	..	.66	3	7	11	6	4
†Apr.	.05	.25	.41	.41	.31	.32	.34	.39	.34	.26	.12	..	..	..	.20	0	11	4	4	0
‡May	..	.01	.09	.20	.32	.33	.25	.22	.14	.10	..	..	..	..	.66	5	7	4	0	0
June	..	.01	.20	.23	.27	.30	.32	.31	.16	.02	..	..	..	..	.82	8	13	9	0	0
July	..	..	.08	.15	.16	.18	.23	.19	.12	.03	..	..	..	..	.14	15	13	1	1	0
Aug.	.01	.16	.25	.28	.29	.24	.25	.27	.24	.15	.03	..	..	..	.17	9	14	5	2	1
Sept.	.10	.23	.32	.38	.36	.40	.44	.44	.40	.41	.21	.02	..	..	.81	6	6	8	9	1
Oct.	.14	.31	.34	.44	.36	.35	.40	.38	.35	.35	.35	.21	.01	..	.99	6	8	10	4	3
Nov.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Dec.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Total.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Mean.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	

\* Card for March 3 missing.

† Cards for April 11, 21–30 missing.

‡ Cards for May 1–12, 14, 27, 29 missing.

## APPENDIX IX.

METEOROLOGICAL OBSERVATIONS AT CAPE PEMBROKE DURING THE  
PASSAGE OF DEPRESSIONS.

## 1. DEPRESSION OF FEBRUARY 10TH TO 13TH, 1905.

Date.	Hour.	Pressure 273a, Lat. 45° M.S.L.	Dry Bulb.	Wet Bulb.	Wind.		Cloud.		Weather.	Remarks.
					Direction.	Force.	Amount.	Type.		
1905. Feb. 10	h.	mb.	°F.	°F.	WSW	6-7	8	Cu.-Nb.	cbqp	Blue sky overhead. St. to W. (low).
	4	978.9	42	41	WSW	6-7	8	Cu.-Nb.	cbqp	
	8	982.3	45	42	SW	6	8	Cu.-Nb.	cbqph	
	12	983.6	46	42	WSW	6	6	Fr.-Cu.	cbqp	
	16	985.1	45	40	W	5-6	5	Ci.; Cu.	bcqp	
	20	986.2	41	38	NW	5	4	...	bc	
	24	984.9	43	41	NW	5	10	St.	orqm	
	" 11	980.8	44	41	NNE	6	10	St.	orqm	
	4	977.5	44	43	N	1	8	Cu.-Nb.	cbp	
	8	962.6	47	46	SW	8	10	St.	orqm	
	12	964.2	42	40	SW	8-9	10	St.	opqm	
	20	967.9	43	41	WSW	8	9	...	cpq	
" 12	24	975.9	42	40	WSW	6	9	Cu.-Nb.	cbqph	Very heavy rainfall.
	4	979.3	40	39	WSW	6	9	Cu.-Nb.	cbqp	
	8	982.1	45	42	W	5-6	8	Cu.-Nb.; Cu.	cbqp	
	12	983.5	47	45	WSW	5-6	7	Ci.-St.	{ cbqp	
	16	984.8	43	41	NNW	5	8	Cu.-Nb.	cbqph	
	20	985.8	45	42	WSW	5	8	Cu.; Ci.-St.	cbqp	
	24	987.1	43	41	SW	6	8	Cu.-Nb.	cbqp	
	" 13	988.2	42	40	SW	5-6	9	Cu.-Nb.	cbqp	
	4	990.8	44	41	SW	6	8	Cu.-Nb.	cbqph	
	8	993.1	46	44	W	5	4	Cu.-Nb.; Ci.	bc	
	12	994.6	47	44	W	5	8	Fr.-Cu.; Cu.-Nb.	{ cbp	
	20	996.5	45	41	W	4-5	8	Cu.; Cu.-Nb.	cb	
	24	998.6	43	40	NW	3-4	5	St.	bc	

## 2. DEPRESSION OF MARCH 5TH TO 8TH, 1909.

1909. Mar. 5	4	998.5	42	40	W	4	8	Cu.-Nb.	cp.	21.15, wind NW 3—odr. 21.30, wind SW 5--odr.
	8	1000.9	44	41	WNW	5	7	Cu.-Nb.	cbp	
	12	999.7	49	43	W	5-6	7	Cu.-Nb.	cbqp	
	16	999.3	49	44	W	5	7	Cu.-Nb.	cbqp	
	20	997.4	46	43	NW	5	7	Cu.-Nb.	cbp	
	24	989.7	49	47	N	5-6	8	St.	cq	
	" 6	981.6	48	47	N	6	10	St.	oqp	
	4	969.6	50	49	N	5	10	Nb.	cpq	
	8	963.5	46	45	NW	7-8	9	Cu.-Nb.	cbqp	
	12	961.0	46	44	WNW	7-8	8	Cu.-Nb.	cqp	
	20	957.1	45	44	WNW	5-7	8	...	...	
	21.35	956.3	...	...	...	...	...	...	...	
" 7	24	958.4	47	45	SSW	7-9	9	...	cqp	
	4	963.0	too stormy		SSW	8-10	10	...	orq	
	8	973.3	43	41	SSW	9-10	8	Cu.-Nb.	cbqp	
	12	979.3	42	40	SSW	9-10	7	Cu.-Nb.	cbqp	
	16	984.2	42	39	SSW	9-10	7	Cu.-Nb.	cbqp	
	20	988.1	40	38	SSW	9-10	7	Cu.-Nb.	cqp	
	24	989.6	40	39	SSW	8	9	Cu.-Nb.	cqph	
	" 8	993.5	38	37	SSW	8-9	8	Cu.-Nb.	eqph	
	4	996.4	40	38	SSW	8-9	9	Cu.-Nb.	{ eqph	
	8	996.4						Heavy sea running, SSW.		

APPENDIX IX—*continued.*METEOROLOGICAL OBSERVATIONS AT CAPE PEMBROKE DURING THE  
PASSAGE OF DEPRESSIONS—*continued.*2. DEPRESSION OF MARCH 5TH TO 8TH, 1909—*continued.*

Date.	Hour.	Pressure 273a. Lat. 45° M.S.L.	Dry Bulb.	Wet Bulb.	Wind.		Cloud.		Weather.	Remarks.
					Direction.	Force.	Amount.	Type.		
1909. Mar. 8	h.	mb.	°F.	°F.	SSW	6-7	9	Cu.-Nb.	eqp	{ Heavy sea running, SSW.
	12	997.8	41	38						
	16	998.5	41	38						
	20	1000.2	41	38						
	24	1001.8	41	38						

## 3. DEPRESSION OF MAY 2ND TO 5TH, 1910.

1910. May 2	4	996.0	44	43	NNE	5-6	10	...	orm	
	8	992.2	44	43	NNE	5-6	10	Nb.	omp	
	12	985.1	45	45	NE	5-6	10	Nb.	orm	
	16	979.4	45	45	NE	5-6	10	Nb.	orn	
	20	976.6	45	45	N	4	10	Fog	fd	
	24	974.4	45	45	N	4	10	...	odm	
	" 3	971.0	45	45	N	2	10	Wet fog	efl	
	8	969.4	44	44	SE	3	10	Nb.	or	
	12	964.9	44	44	SSW	6-7	10	Nb.	or	{ Very heavy rainfall, a flood.
	16	961.7	43	43	SW	8	10	Nb.	oqrm	
,, 4	20	962.4	...	...	SW	8-9	10	...	oqrm	Thick fog at times. Rain ceased v. slightly.
	24	963.6	...	...	WSW	8-9	10	...	oqrm	
	1'30	965.0	43	42	SW	5	6	...	cbu	
	4	965.6	too stormy		SW	8	10	too stormy	oqrm	
	8	965.0	41	40	SW	8-9	10	Nb.	oqrm	
	12	966.1	42	42	SW	7-8	10	Nb.	oqrm	
	16	965.2	41	40	SW	7-8	10	Nb.	oqua	
	20	965.7	too stormy		SSW	9	10	..	oqr	{ 19 h, heavy squall, SSW 10.
,, 5	24	972.6	"	"	S	8-9	10	...	oqr	
	4	978.8	...	...	S	9	10	...	oqp	
	8	984.3	42	40	S	7-8	8	Roll.-Cu.; Cu.	eq	
	12	989.3	42	40	S	7-8	9	Cu.	cqm	{ Very heavy ground sea, SE.
	16	993.7	41	40	SSE	7	10	Nb.	oqrm	
	20	995.9	41	39	SSE	6-7	7	...	eqpm	
	24	997.8	40	38	SSE	4-5	5	...	bcq	

## 4. DEPRESSION OF OCTOBER 31ST TO NOVEMBER 4TH, 1911.

1911. Oct. 31	4	991.5	39	37	WNW	3	7	St.	cb	
	8	990.0	45	41	WNW	4	5	Ci.-St.; St.	bc	
	12	986.0	49	46	WNW	5	7	St.	cb	
	16	981.2	44	42	NW	6	8	Cu.	cq	
	20	978.3	44	42	NW	4	9	St.	c	
Nov. 1	24	969.8	43	42	N	6	9	..	cqr	
	4	966.3	39	38	W	6-7	9	Nb.; Cu.-Nb.	cqp	
	8	971.2	40	37	SW	6-7	7	Cu.-Nb.	cbqp	
	12	978.3	37	35	SW	6-7	7	Cu.-Nb.	cbqph	
	16	981.3	38	36	SW	6-7	8	Cu.-Nb.; Nb.	cqph	

APPENDIX IX.—*continued.*METEOROLOGICAL OBSERVATIONS AT CAPE PEMBROKE DURING THE  
PASSAGE OF DEPRESSIONS—*continued.*4. DEPRESSION OF OCTOBER 31ST TO NOVEMBER 4TH, 1911—*continued.*

Date.	Hour.	Pressure 273a, Lat. 45° M.S.L.	Dry Bulb.	Wet Bulb.	Wind.		Cloud.		Weather.	Remarks.
					Direction.	Force.	Amount.	Type.		
1911. Nov. 1	h.	n.b.	°F.	°F.	WSW	6-7	9	Cu.-Nb.; Nb.	cqps	
	20	984.7	32	32				Cu.-Nb.		
	24	984.9	35	34				Nb.		
	" 2	984.1	35	34				Roll.-Cu.;		
	8	986.2	37	37				Cu.-Nb.		
	12	987.9	40	35				St.; Roll.-Cu.		
	16	988.2	33	32				St.		
	20	989.3	33	31				Cu.-Nb.		
	24	990.4	35	31				...		
	" 3	988.8	31	30				be		
" 3	8	981.1	38	33	NW	5-6	9	St.;	cb	
	12	969.4	39	38	NW	7-8	10	Cu.	cq	
	16	963.0	38	37	WSW	7-8	9	Nb.	or	
	20	965.9	34	32	WSW	6-7	4	St.	oqrh	
	24	963.3	32	30	WNW	7-8	4	Cu.-Nb.	bcqps	
	" 4	956.6	32	30	WNW	9-10	10	St.	oqs	
	8	966.0	34	33	SSW	9-10	10	St.	oqrs	
	12	976.6	34	32	SSW	8-9	9	Cu.-Nb.	cqp	
	16	984.9	34	32	SSW	8-9	6	Cu.-Nb.	cbqps	
	20	992.5	33	32	SSW	8-9	7	Cu.-Nb.	cbqps	
	24	996.3	34	32	SSW	7-8	7	Cu.-Nb.	cbqps	

## 5. DEPRESSION OF AUGUST 13TH TO 16TH, 1915.

1915. Aug. 13	4	996.5	39	39	ENE	2	10	St.	o	Heavy rain. Heavy rain. Rain ceased at 18.30 Very heavy rainfall.
	8	993.5	39	39	NE	2	10	St.	om	
	12	986.1	39	39	E	5	10	St.	or	
	16	976.1	40	40	ENE	4	10	St.	orm	
	20	972.6	40	39	NE	3	10	St.	opm	
	24	970.8	35	34	WSW	5	10	St.	or	
	" 14	4	969.4	36	36	WSW	6-7	10	St.	org
	8	976.8	37	36	WSW	8	10	St.	orgm	
	12	980.8	36	33	WSW	7	8	Cu.-Nb.	cbqpm	
	16	986.0	34	32	W	6-7	8	Cu.-Nb.	cbqph	
" 15	20	988.5	34	32	WNW	6	4	...	bcp	Very heavy rainfall.
	24	987.3	32	31	WNW	3	2	...	beps	
	4	983.4	37	34	NNW	4	9	...	c	
	8	973.2	36	35	NNE	6-7	10	St.	ors	
	12	965.3	36	35	NW	6-7	6	Cu.-Nb.; Nb.	cbqp	
	16	957.9	34	33	WNW	7-8	7	Cu.-Nb.; Nb.	cbqph	
	18.30	956.6	...	...	SW	10	10	Nb.	s	
	20	964.6	too st	ormy	WSW	10	10	Nb.	s	
	24	972.2	34	33	WSW	8-9	5	...	beqps	
	" 16	4	975.6	33	32	WSW	7-8	7	...	cbqph
	8	977.3	31	30	WSW	7	8	Cu.-Nb.	cbqps	
	12	980.3	27	27	SW	7	8	Cu.-Nb.	cbqps	
	16	986.1	27	27	SW	6	8	Cu.-Nb.	cbqps	
	20	988.4	27	27	SW	5-6	7	...	cbqps	
	24	989.1	26	26	NW	5-6	9	...	cqps	21.20, wind NW 2.