

SUMMARY of the OBSERVATIONS made at the STATIONS included in the DAILY and WEEKLY WEATHER REPORTS, for the CALENDAR MONTH,

JANUARY 1893.

(Issued as a Supplement to the Weekly Weather Report, 1893.)

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON; R. H. SCOTT, F.R.S., SECRETARY.
PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C.; JOHN MENZIES & Co., 12, HANOVER ST., EDINBURGH, and 90, WEST NILE STREET, GLASGOW; AND HODGES, FIGGIS, & Co., LIMITED, 134, GRAFTON STREET, DUBLIN.

General Summary.—The weather during the early part of the month was exceedingly cold, with dense fogs over the inland districts, and falls of snow in nearly all places. Towards the middle of the period, however, a gradual change set in, and by the close of the month the weather had become unusually mild and damp. Pressure was above the average; temperature was low, especially in the south and east of England; the winds were rather variable in the south, but mainly Westerly in the north. Rainfall was generally small; and Bright Sunshine, though rather deficient in Ireland and the south-eastern parts of England, was in excess of the average in most other localities.

Pressure.—*Mean for the Month at 8 a.m.* varied from 30·05 ins. and upwards over the south of Ireland and the central and southern parts of England to between 29·85 ins. and 29·90 ins. in Caithness and the Shetlands. The general distribution of pressure had a rather more anticyclonic tendency than usual, and the actual values were everywhere in excess of the average,* the difference being least (0·4 in. to 0·5 in.) in the south-east of England, and greatest (0·15 in. to 0·20 in.) in Ireland and Scotland. *Highest* readings occurred mainly on the 21st, when the barometer rose to between 30·3 ins. to 30·5 ins. in all the more northern and eastern districts, and to 30·6 ins. or more on our south-west coasts. *Lowest* readings were registered on the morning of the 29th, and were below 29·5 ins. in the southern and eastern parts of our Islands, and below 29·1 ins. on the west coasts of Ireland and Scotland. *Range* was somewhat small for the season.

Depressions.—Very few depressions of importance appeared in our immediate neighbourhood, the paths of the Atlantic cyclones lying as a rule well to the north-westward and northward. On the 2nd and 3rd a clearly defined system advanced in a *westerly* direction from North Germany to our east coasts, where it gradually dispersed, while from the 13th to the 15th a series of depressions spread over Great Britain and the North Sea from the northward. The latter systems were too ill-defined and their tracks too irregular to be laid down on Map 2, Plate I.

Anticyclones.—Between the 1st and the 5th a large anticyclone spread over our Islands from Northern and North-Eastern Europe, the barometer at the time being unusually high (31·2 ins. and upwards) in Central Russia. After the 6th the anticyclone moved away from our neighbourhood, but on the 9th and 10th a new high-pressure area extended over us from the north. The latter system moved away to the westward on the 11th, but on two subsequent occasions, viz., between the 14th and 15th and the 19th and 23rd, it spread temporarily over a considerable portion of Ireland and England.

Winds were chiefly from the Westward in the northern and eastern parts of the United Kingdom, but rather variable in the west and south-west. Gales were frequent on our extreme western and northern coasts, the number being as large as 14 at Mullaghmore, 12 at Roches Point, and 11 at Donaghadee. At the Channel Stations there were not more than two or three gales, and on some parts of our east coasts there were none.

Temperature.—*Mean at sea level* ranged from between 43° and 44° on our extreme south-west coasts to 39° as less over central Ireland and to 35 or less in the east and south-east of England, as well as in the inland parts of the north of Scotland. The actual values were below the average* in all localities excepting the north of Ireland, the deficit varying from less than a degree over the inland parts of Scotland and Ireland to between three and four degrees in the south and east of England generally, and to as much as five and a half degrees at Dungeness. *Highest* readings were observed mainly on the 30th or 31st, when the thermometer rose to between 50° and 55° in most places. *Lowest* readings occurred between the 3rd and the 6th, when severe frost was experienced very generally. Over England the lowest minima were 5° at Stamford, 7° at Llandovery, and 8° at Hillington, but in Scotland readings were observed as low as -4° at Braemar, and +2° at Fort Augustus. *Range* amounted to over 40° at several of the inland stations in Great Britain, the largest amounts being 51° at Braemar, 49° at Fort Augustus, and 47° at Stamford. *Vapour Tension* ranged from 0·25 in. and upwards on our extreme south-west coasts to 0·18 in. at several stations in England. *Relative Humidity* varied from 96 per cent. at Spurn Head, and 95 at Stornoway to 85 at Aberdeen, and to 82 at Valencia.

Rainfall exceeded the average* in Norfolk, and at several stations in the north of Scotland and the south-east of Ireland. Elsewhere there was a deficiency, the weather being relatively driest in the south of Scotland and the north-west of England, where the total fall amounted to less than half the normal. The number of rainy days was mostly large, 20 or more such occasions being recorded in portions of nearly all districts. At Wick and Belmullet there were 26 days with rain, and at Sumburgh Head 28.

Bright Sunshine was rather deficient in Ireland and also in the east and south of England, but in the western and southern parts of Great Britain the amount was in excess of the average.* The percentage of the possible duration ranged from 28 at Tenby, 25 at Pembroke, and 24 at Torquay to 9 at Braemar and Hillington, 5 at Fort Augustus and in London, and 4 at Manchester.

* The averages employed are—*Pressure* and *Temperature* for the 20 years 1871–90; *Rainfall* for the 25 years 1866–90; *Bright Sunshine* for the 10 years 1881–90.