

OFFICIAL COPY.

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

FEBRUARY 1901.

(Issued as a Supplement to the Weekly Weather Report, 1900.)

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON; W. N. SHAW, 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, 104, GRAFTON STREET, DUBLIN.

General Summary.—The weather of February was for the most part cold and cloudy, and although the actual amount of precipitation was not large, snow and sleet showers were very frequent, especially in the English districts. Pressure was above the average; temperature was below the normal, the deficit being large in the south; the winds were chiefly from the Northward (North-west to North-east) and gales unusually rare; rainfall was very deficient in most places; bright sunshine also amounted to less than the average excepting at the south-western and a few of the north-western stations.

Pressure.—*Mean at 8 a.m.* ranged from 30·15 ins. and upwards in the west and south of Ireland to very little above 30·00 ins. on the east coasts of Great Britain generally, and to about 29·95 ins. in the Shetlands. The gradient for South-westerly winds, ordinarily prevalent in February, was therefore replaced by a rather decided gradient for North-westerly and Northerly breezes. The actual values were everywhere above the average,* the excess being slight in the east and south, but large in the west and north, and greatest of all in the extreme north-west, where it amounted to between 0·25 in. and 0·31 in. *Highest* readings occurred on the 15th, when the barometer rose to 30·7 ins. or slightly above it on the west coast of Ireland, and to 30·6 ins. and upwards on all but our extreme north and east coasts, where the readings were mostly above 30·5 ins. *Lowest* readings were recorded over the country generally on the 26th or 27th, when the barometer fell a trifle below 29·2 ins. in most districts. In Ireland, however, the mercury on the evening of the 28th fell to between 28·7 ins. and 29·0 ins. *Range* was moderate.

Depressions.—During the first few days of the month, when a large depression lay almost motionless off the Norwegian coasts, the weather in these islands was influenced by two secondary systems, one of which was formed over the Bristol Channel on the night of the 1st, while the other advanced over our north-west coasts on the 4th, both disturbances subsequently moving south-eastwards. After the 5th no depression was observed in our immediate neighbourhood until very nearly the end of the month, when several disturbances (mostly shallow) passed eastwards across the United Kingdom.

Anticyclones.—Between the 6th and the 22nd the weather was affected almost continuously by a large anticyclone which spread in from the Atlantic on the former date, and which ultimately spread over the greater part of the Continent. The anticyclone receded temporarily westwards on the 16th in the face of a large depression which moved southwards across Northern and Central Europe, but spread north-eastwards on the 17th and again covered the greater part of Europe until the 22nd. After the 23rd it gradually broke up and moved away finally to the south-westward.

Winds were chiefly from some Northerly point (North-west to North-east), the predominance of polar breezes being especially marked in the north. At Sumburgh Head and Wick there were as many as 22 days with winds either from the Northward or North-westward. Gales were very rare for the time of year, and were at no time severe. At a large majority of our stations the wind never exceeded force 7, and in many places it did not once reach that point.

Temperature.—*Mean at sea level* ranged from 42·8° at Scilly, 42° at Malin Head, and 40° and upwards on our extreme west and south-west coasts generally to 37° and less over Central Ireland, to 36° and less in the east of Scotland and in the Shetlands, and to 35° and less in Norfolk. The general distribution agreed very closely with the normal, but the actual values were below the average* at all stations excepting Lairg, the deficit being large (four to four-and-three-quarter degrees) in the south of Ireland and the south and east of England. *Highest* readings were recorded in most places between the 25th and 28th, but in the north of Scotland they occurred on the 20th or 21st. As a rule the thermometer rose very little above 50°, and at the majority of our northern stations it failed to reach that level; at Lairg, however, a reading as high as 58° was recorded on the 20th. *Lowest* readings were registered mainly on the 14th and 15th, when sharp frost prevailed very generally; at many of the northern and central stations the sheltered thermometer fell below 20°, the lowest readings reported being 1° at Braemar, 10° at Geldeston, and 13° at Hillington and Nairn. *Range* was slight for the time of year. *Vapour Tension* ranged from 0·22 in. and upwards over northern and central Ireland to 0·17 in. or less over similar portions of England. *Relative Humidity* varied from 90 per cent. and upwards over the west and north of England and the northern parts both of Ireland and Scotland to 85 per cent. or less on our extreme south-west coasts generally, and to 77 per cent. at Scilly.

Rainfall was generally deficient, but exceeded the average* at some of the most eastern stations both in England and Scotland. In the south of Ireland and the south-west of England, as well as in the central and southern parts of Scotland, the amount was, as a rule, less than half the average. The largest aggregates reported were 4·4 ins. at Glencarron, 3·5 ins. at Laudale, and 3·4 ins. at Stornoway; the smallest being 0·5 in. at Cambridge, and 0·9 in. at Newton Reigny (Penrith), Bawtry, Cirencester, and Bath. Over the southern parts of the kingdom the number of rainy days was considerably below the average, less than 10 being reported in many places, and only 6 at Clifton. In the earlier half of the month snow or sleet occurred very generally, the falls of the 4th and the 11th being heavy in places; later on the English districts were alone affected, snow showers being of almost daily occurrence in some portion of that country between the 13th and the 21st.

Bright Sunshine amounted to less than the average* over the United Kingdom as a whole, but showed an excess in the south-west of England and at one or two of our north-western stations. The percentage of the possible duration ranged from 39 at Falmouth and 30 and upwards on our south-west coasts generally to 15 or less in most of the larger towns, and to only 9 in London.

* The averages employed are—*Pressure and Temperature* for the 30 years 1871–1900; *Rainfall* for the 35 years 1866–1900; and *Bright Sunshine* for the 20 years 1881–1900. (The averages will be published shortly as an appendix to the "Weekly Weather Report.")