

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

JANUARY 1898.

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General Summary.—The weather of January was dull, dry, and abnormally mild, the mean temperature at many of the northern stations being the highest on record for the time of year. Aurora was seen in the north of Scotland on the 15th and 16th. Pressure and temperature were considerably above the average; the winds were mainly from the South-Westward, with a singular absence of gales in the east and south; rainfall and bright sunshine were very deficient, excepting in the north-west and extreme north.

Pressure.—*Mean at 8 a.m.* ranged from 30·35 ins. and upwards in the Channel Islands, and from 30·30 ins. and upwards over the south of England generally to 29·82 ins. and less in the Shetlands. The general distribution was fairly normal, but the actual values were above the average,* and as the excess was greatest (0·30 in. to 0·35 in.) in the more southern districts, and least (0·20 in. or less) in the extreme north, the gradient over our islands was somewhat steeper than usual. *Highest* readings occurred mostly on the 22nd or 23rd, when the barometer rose to 30·6 ins. and upwards over the south of Ireland and the central and southern parts of England, and to 30·4 ins. and upwards in all but the extreme northern parts of the Kingdom. At many stations in the south of England, however, the readings were equally high at various times between the 12th and 15th, and again on the 28th. *Lowest* readings occurred on the 1st, the barometer falling below 29·3 ins. in the northern and also in the south-western parts of the United Kingdom, and below 29·4 ins. over the more central districts. *Range* was small for the time of year.

Depressions.—No depressions of any importance were observed in the immediate neighbourhood of our islands. Throughout nearly the whole month, however, large disturbances were observed in the far north, their centres moving in a direction shown approximately by the arrow A in Map 2, Pl. I. In some cases the main systems were accompanied by secondary depressions which passed very close to our own extreme north-western and northern coasts.

Anticyclones.—On the 3rd an anticyclone spread over our islands from the Continent, but this soon passed away to the southward. After the 9th, however, a more permanent system resulted from the union of an anticyclone advancing from the Atlantic, with another area previously existing over northern Russia. The combined system remained in force until very nearly the end of the month, and embraced as a rule all but the most northern and north-western parts of Europe. Between the 18th and 20th, however, and again on the 26th, the anticyclone receded temporarily southwards from the neighbourhood of our islands.

Winds were chiefly from the South-westward or Westward, excepting on our south-west coasts, where they were more Southerly. Gales were rare, especially on the English coasts; at some stations in the east and south there were none at all.

Temperature.—*Mean at sea level* ranged from 49°·8 at Scilly, and 48° and upwards on our extreme south-west coasts generally, as well as over the St. George's Channel, to 43° and less over the east of England and the north and north-east of Scotland. The ordinary winter type of distribution over our islands was less strongly marked than usual, and the actual values were considerably above the average,* the excess ranging from five degrees or more in the east and south of England, to six degrees or more at our northern stations generally, to seven degrees at Alnwick Castle, and to more than seven and a half degrees at Gilcrux. At most places situated in the northern half of the United Kingdom the mean temperature was in excess of anything recorded in January for at least 27 years past. *Highest* readings occurred mainly on the 19th or 20th, or on the 30th or 31st. On each of these occasions the thermometer exceeded 55° in most parts of the country, the highest points recorded being 60° at Wick on the 19th, and 61° at Dublin on the 30th. *Lowest* readings occurred at various times in the different districts, the most notable feature in this respect being the absence of anything in the way of severe frost. *Range* was moderate. *Vapour Tension* ranged from 0·30 in. and upwards, on our extreme south-west coasts, to 0·24 in. and less at several stations in the east of Scotland and the eastern and central parts of England, and to 0·22 in. at Aberdeen. *Relative Humidity* varied from 98 per cent. at Ardrossan and 95 per cent. at Cambridge, to 81 per cent. at Liverpool and 80 per cent. at Valencia.

Rainfall.—Over the United Kingdom generally the amount of rainfall was considerably less than the average,* the only stations showing any excess being a few in the north-west of England and the west and north of Scotland. The largest aggregates recorded were 13·6 ins. at Fort William, 13·0 ins. at Glencarron, and 7·4 ins. at Laudale; the smallest being 0·3 in. at Hereford, and Dungeness, 0·5 in. at Bawtry, Oxford and Cirencester, and 0·6 in. at Scarborough, York and Southampton. Snow or sleet fell in the Scilly and Channel Islands on the 9th and 10th (the thermometer at the time being at or very little below 50°), and in the north of Scotland on the 21st.

Bright Sunshine was very deficient in most places, but exceeded the average* in the north of Scotland, as well as at Llandudno and Guernsey. Over the country generally less than 20 per cent. of the possible duration was recorded, and at many of the inland stations less than 10 per cent., the smallest values of all being 3 per cent. at Manchester (Prestwich), and 6 per cent. at Fort William, Newcastle-on-Tyne and in London.

* The averages employed are—*Pressure and Temperature* for the 25 years, 1871–95; *Rainfall* for the 30 years, 1866–95; and *Bright Sunshine* for the 15 years, 1881–95.