

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

## FEBRUARY 1899.

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**General Summary.**—During the earlier part of the month the weather was extremely unsettled, especially in the west and south, where frequent gales and heavy rains occurred; thunder and lightning were reported in many parts of England and Ireland between the 12th and 14th. After the 16th the conditions became much finer and quieter, with a large amount of sunshine, but with frost and fog in many of the inland districts at night. Pressure was below the average; temperature was high, especially in the east and south of England; the winds were rather variable, but mostly Southerly over Ireland and England; rainfall was deficient in the north and east, but in excess of the average in the west and south; bright sunshine was unusually prevalent, especially at coast stations in the east and south.

**Pressure.**—*Mean at 8 a.m.* ranged from 29·9 ins. and upwards over the south-east of England, to between 29·66 ins. and 29·64 ins. in the Hebrides and the west of Ireland, the gradient being normal as regards steepness, but favourable for winds from a more Southerly quarter than is usual in February. The mean values were in all cases below the average,\* the deficiency being greatest (0·20 in. to 0·27 in.) over the Scilly Isles and the south and west of Ireland, and least (0·08 in. to 0·10 in.) over the northern and eastern parts of Great Britain. *Highest* readings occurred on the 28th, when the barometer rose to 30·7 ins. and upwards at several stations in the southern parts of England and Ireland, to 30·5 ins. and upwards over those countries generally, and to 30·3 ins. and upwards in Scotland. *Lowest* readings occurred very generally on the 13th, when the barometer fell to about 28·6 ins. on our extreme north-west coasts, to 29·0 ins. and less over the western and northern parts of the kingdom generally, and to 29·3 ins. and less in the eastern and south-eastern districts. *Range* was somewhat large, especially in the extreme north-west, where it amounted to nearly 2 inches.

**Depressions.**—Between the 4th and 6th two depressions of moderate depth appeared off the south-west of Ireland, each disturbance throwing off a small secondary system which advanced eastwards along the English Channel or our southern counties. Later on a long series of depressions skirted our extreme western coasts, the centres keeping as a rule well to the westward, but in one instance (between the 9th-10th) passing north-eastwards across Ireland and Scotland. After the 16th the flow of depressions came to an end, and for the remainder of the month the distribution of pressure was anticyclonic.

**Anticyclones.**—At the beginning of the month the anticyclone existing over our islands at the close of January gradually broke up, and for the next fortnight or so the nearest high pressure systems were located at first over Eastern, and afterwards over Southern Europe. After the 17th, however, a large anticyclone in the latter regions spread northwards over nearly the whole of Europe, the system remaining in force over all but the extreme northern countries until the close of the month.

**Winds** varied considerably in direction over Scotland, but were mainly from some Southerly point over England and Ireland. Gales were rather frequent on our south-west coasts, but were in no case of any great severity.

**Temperature.**—*Mean at sea level*, ranged from a little above 48° at Scilly, and from 46° and upwards on our extreme south-west coasts generally, to 41° and less in inland parts of the north of Ireland, and to 38° or less at several stations in the northern and central parts of Scotland, the general distribution over our islands agreeing very closely with the normal. The actual values were, however, in excess of the average\* in nearly all places, the excess being large (3° and upwards) at stations in the east and south of England. *Highest* readings were recorded mostly between the 9th and 11th, but at several stations in the north of Scotland and the south of Ireland they occurred on the 28th. In many parts of England the thermometer on the 10th rose above 60°, the maximum of 66° in London being the highest on record for the month of February. *Lowest* readings were observed at the beginning or end of the month, either between the 3rd and 5th, or on the 27th or 28th. At each of these times sharp frosts were experienced in most places, the lowest readings of all being 11° at Braemar, 12° at Nairn, and 15° at Glenlee. *Range* amounted to 40° or more in several parts of Great Britain, to 44° in London and at Rothamsted, and to 45° at Cambridge and Llandoverly. *Vapour Tension* ranged from 0·28 in. at Roche's Point and Scilly to 0·20 in. and less at several stations in the northern and central parts of Great Britain, the lowest value of all being 0·17 in. at Nairn. *Relative Humidity* was as high as 96 per cent. at Ardrossan and Dungeness, and was above 90 per cent. over nearly the whole of Ireland, the west of Scotland, and the north and east of England; the lowest values were 85 per cent. at Liverpool, 83 per cent. at Nairn, and 82 per cent. at Valencia.

**Rainfall** was more than the average\* in the west and south generally, the excess being considerable in all the south-western districts. Elsewhere, however, there was a deficiency, the amount at some of the northern stations being less than half the average. The largest aggregates reported were 8·2 ins. at Killarney, 7·2 ins. at Valencia, and 5·7 ins. at Falmouth; the smallest being 0·7 in. at Shields, 0·9 in. at Lairg, and 1·0 in. at Yarmouth and Geldeston. The number of days with rain was mostly small; at Scarborough, Bawtry, and Jersey there were only nine such occasions. Of the 24 rainy days reported at Belmullet there were eight on which the fall did not amount to more than a hundredth of an inch. Snow or sleet showers occurred in many parts of the kingdom between the 1st and 6th.

**Bright Sunshine** was in excess of the average,\* especially in the south and east of England. The percentage of the possible duration ranged from 49 at Bognor, 48 at Felixstowe and 46 at Westbourne to 30 or less at several of our northern stations, to 22 in London and at Newcastle-on-Tyne, and to only 14 at Glasgow.

\* 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.