

# SUMMARY of OBSERVATIONS made at the STATIONS included in the DAILY and WEEKLY WEATHER REPORTS, for the CALENDAR MONTH, OCTOBER 1889.

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**General Summary.**—The weather of October was cold, unsettled, and wet. Pressure was everywhere below the average and deep cyclonic disturbances appeared at times over or in the immediate neighbourhood of our Islands. Temperature was low and its range moderate. The wind varied greatly in direction, but was frequently strong in force, a severe gale being experienced in most places on the 7th. Rainfall was as a rule in excess of the average, especially in the extreme south. The amount of bright sunshine was somewhat less than usual.

**Pressure.**—*Mean for the Month at 8 a.m.*, varied from 29·60 ins. and less, off the west of Scotland, to about 29·70 ins. and more over the North Sea, the greater part of the English Channel, and the extreme south-west of Ireland. Gradients were therefore slight, and the distribution of pressure was irregular. The mean was everywhere less than the average,\* the difference varying from about 0·20 inch in the south-eastern parts of England to a very few hundredths in the north of Scotland. *Highest* values were recorded on the 25th or 26th, when the readings varied from about 30·1 ins. on our extreme south-west coasts to 30·4 ins. in the east of Scotland. *Lowest* were observed on the 9th, when the barometer in the extreme north of Ireland fell below 28·6 ins. *Range* was somewhat large, especially on our extreme north-west coasts.

**Depressions** were very numerous and moved in various directions. The two most important were:—(1) a deep disturbance which passed across our northern districts on the 7th, occasioning a general and severe gale; and (2) a somewhat serious, though less deep, depression which advanced northwards across the Bay of Biscay on the 26th–27th, producing a strong Easterly gale on our southern coasts. Between the 12th and 15th two well-defined systems travelled *northwards* from central Europe to the north of Scandinavia.

**Anticyclones.**—No complete anticyclonic system passed over us, but a well-marked ridge extended south-westwards from Scandinavia to our northern districts between the 23rd and 25th.

**Wind** varied greatly in direction. In the south-west it was chiefly Westerly and North westerly, in the south-east of England Southerly and South-westerly, but in the north there was a large proportion of wind from the Eastward and North-eastward. Gales were numerous over Ireland and England; at Spurn Head and Jersey there were 10, and at Mullaghmore 13.

**Temperature.**—*Mean at Sea Level* ranged from 46° or less in several of the more central parts of Ireland and Scotland to 51° or more on the south and south-west coasts of England, to 52°·5 at Scilly, and to 54° in the Channel Islands. The distribution was fairly normal, but the mean values were everywhere below the average.\* In Scotland the deficit was not more than a degree, but in England it varied from one and a half to two degrees, while in Ireland it amounted to two and a half or three degrees. *Highest* values were recorded on very variable dates, but mostly during the earlier half of the month. *Lowest* were registered as a rule between the 11th and 15th over England, but on the 25th or 29th in many parts of Scotland and Ireland. *Range* was not large. *Vapour Tension* varied from 0·26 inch or rather less over the central parts of Ireland, Scotland, and the north-west of England, to between 0·32 inch and 0·34 inch over the Channel and the south and east of England. *Relative Humidity* was fairly uniform, the values ranging from 83 per cent. at Scilly and Jersey to 95 at Stornoway and 96 at Hawes Junction.

**Rainfall** was more than the average\* in all localities excepting the north-west of England, the north of Ireland, and the west of Scotland, where there was a marked deficiency. At most of the Channel stations the aggregate fall ranged from six and a quarter to eight and a quarter inches, and was nearly twice as much as the average for October.

**Bright Sunshine** amounted to 38 per cent. of the possible duration at Valencia, and 42 per cent. at Stornoway, but to only 13 per cent. at Durham, Scarborough, and Bawtry, and 14 per cent. at Fort Augustus, Marchmont, York, and Glasgow.

\* The averages employed are—*Pressure and Temperature*, for 20 years 1861–80; *Rainfall* for 20 years 1866–85.