

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

FEBRUARY 1889.

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General Summary.—The first half of the month was very stormy, large and deep depressions passing from north and north-west over the northern and eastern parts of our area, and causing severe North-westerly and Northerly gales, with snow, sleet, hail, and much thunder and lighting in almost all parts of the kingdom. The remainder of the month was quieter. Pressure was high in the south-west, low in the east and north-east; temperature was low generally, but especially in the east of England, and rainfall was less than the average except in the north of Scotland.

Pressure.—*Mean for the Month, at 8 a.m.*, varied from 30·05 ins. and more, over the south-west of Ireland and near the Scilly Islands, to 29·83 ins. at Yarmouth, 29·73 ins. at Wick, and 29·66 ins. at Sumburgh Head. It was lower than that of January at all stations. It was below the average* for February by about 0·12 in. in the east of Norfolk and by about 0·03 in. in the east of Scotland, and the Shetlands, but above the average* by 0·15 in. to 0·20 in. in the south and south-west of Ireland. Gradients were uniform and favourable for North-westerly winds. *Highest* values were recorded—at the northern stations on the 23rd, in the north-west on the 4th, in the south-west and south on the 19th, and varied in value from 30·3 ins. to 30·5 ins. *Lowest* were recorded in the extreme north on the 2nd, when a large depression was approaching the Shetlands, and the barometer fell to about 28·3 ins.; at our south-western and southern stations on the 10th or 11th, when a complex series of depressions passed across Ireland and England. *Range* was very large (more than 2·4 ins.) in the far north, but only half as great (about 1·2 ins.) in the south-west.

Depressions were numerous. Those experienced during the first half of the month were deep, and travelled from the north-westward or northward. The most important were those of the 2nd—3rd, and the 8th—9th, both of which were very deep. The disturbance of the 10th was complex and also travelled from the north-westward. Between the 24th and 26th some depressions advanced towards our Islands from Germany, but filled up before reaching our coasts.

Anticyclones.—No anticyclonic system advanced over our area until after the middle of the month, but it was apparent that a large one lay over the Atlantic to the westward of our Islands from the beginning of the month until this time. On the 14th the Continental high-pressure system began to re-appear over Russia, but soon gave way again, while that from the Atlantic spread eastwards over western and central Europe, and gave way on the 19th and 20th as low-pressure systems spread from the northern to the central countries. The barometer then became high in the north, as well as over Spain and Algeria.

Wind was Northerly and North-westerly; it was strong as a whole and on many occasions blew with the force of a gale. The gales experienced between the 1st and 10th were very severe.

Temperature.—*Mean, at Sea Level*, ranged from between 44° and 45° on our extreme south-western coasts to a little below 39° over Tyrone, Fermanagh, Leitrim, and Cavan, and to a little below 36° on the extreme eastern coasts of England and over the most northern parts of Scotland. It was lower than that of January by about 1° over Ireland and the extreme east of England, by about 2° over the south-west and west of England, and by nearly 5° in the north of Scotland. In Cambridgeshire and the west of Norfolk (where the January values were very low) it had risen 1° or 2°. It was below the average* by about 3° in the north of Scotland 1° to 2° over the northern half of Ireland, and 3° over Wales and some of our southern counties, but by about 5° in the extreme east of England. *Highest* readings occurred very generally over Scotland and Ireland on the 1st, and over England between the 16th and 18th. At no station did the "shade" temperature exceed 58°. *Lowest* were recorded very generally over Great Britain between the 10th and 13th (lowest of all on the 12th), and in Ireland between the 24th and 28th. *Range* was large over some of our south-eastern counties (where the morning of 12th was intensely cold), moderate elsewhere. *Vapour Tension* varied from 0·18 in. and less in the east of Scotland and over the south Midland counties of England to upwards of 0·22 in. over the western and southern parts of Ireland and the extreme south-west of England, and to nearly 0·26 in. at Valencia and Scilly. *Relative Humidity* varied irregularly; it exceeded 95 per cent. at Stornoway, but was only 84 to 88 over our Midland counties, and 82 at Aberdeen.

Rainfall varied from an inch, or little more, over many parts of our north-eastern counties, to more than 2 ins. in the east of Scotland and south-west of England, to more than 4 ins. in the west of Ireland and the Hebrides, 6·5 ins. at Laudale, and 11·6 ins. at Glencarron. It was on the whole less than the average* except over the northern half of Scotland, where it was more; the excess was as much as 100 per cent. at Wick.

Bright Sunshine.—The amounts recorded varied from only 10 per cent. of the total possible duration at Glencarron, 13 per cent. at Stowell, and 15 per cent. in London, to 23 at Stornoway, 24 on our south-eastern coasts, 25 to 30 in Ireland and the north-west and south-west of England, 30 at Aberdeen, and 31 at Glenlee.

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