

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

MARCH 1890.

(Issued as a Supplement to the Weekly Weather Report, 1890.)

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PUBLISHED BY EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C.; ADAM AND CHARLES BLACK, 6, NORTH BRIDGE, EDINBURGH; AND HODGES, FIGGIS, & Co., 104, GRAFTON STREET, DUBLIN.

General Summary.—The weather of March was changeable and unsettled, but not rough. The wind, though chiefly from the Westward, was constantly varying; pressure was below its average value, especially in the north; temperature was slightly above the normal; rainfall was in excess at the most northern stations, but deficient (except in a few instances) in the South, and the amount of bright sunshine was considerable, but nowhere very large.

Pressure.—*Mean for the Month at 8 a.m.* varied from between 29·88 ins. and 29·92 ins. over the English Channel, to 29·52 ins. at the southern extremity of the Shetland Islands, the gradients between these localities being very uniform, and favourable for Westerly winds. It was below the average* everywhere—by nearly 0·25 ins. in the extreme north, and by only a few hundredths of an inch in the extreme south. The mean gradients were consequently steep. *Highest values*, 30·5 ins. to 30·6 ins., occurred on the 2nd, when an elongated anticyclone was moving southwards over the kingdom; *lowest*, 28·9 ins. to 29·1 ins., occurred on the 24th as a depression was moving over our western and northern districts. *Range* was consequently considerable—about 1·7 ins. in the extreme north-west, but not so large elsewhere.

Depressions were numerous, but not very deep; they travelled over almost all parts of our area, and from all kinds of directions. Some were formed and several filled up within the limits of our area, while others remained for a long time under our observation and moved in a remarkable manner—especially those observed between the 18th and 21st. The largest systems were those which passed north-eastwards outside our extreme north coasts.

Anticyclones.—Two well-marked systems of this kind passed over our Islands during the month, each of them moving from a northerly or north-westerly direction. The first came over us between the 1st and 4th, and was remarkable for the very low temperatures which it brought to many parts of England—notably to certain parts of Surrey on the morning of the 4th. The second reached our western coasts on the 30th, and after advancing to Scotland moved south-eastwards, its central parts being over our north-eastern counties when the month closed.

Wind varied greatly in direction, and was often somewhat strong in force. In the north-east of Great Britain, and the west of Ireland and Scotland, gales were rather frequent, the numbers reported being 15 at Aberdeen and 12 at Spurn Head, on the one hand, and 14 at Mullaghmore, 10 at Stornoway, and 7 at Malin Head, on the other. The dominant direction of the wind was Westerly, but there was a large per-centage of Southerly wind at Shields, South-westerly at Mullaghmore, and Northerly at Scilly.

Temperature.—*Mean at Sea Level* varied from 47°·1 at the Scilly Islands, 46°·3 at Jersey, and 45°·5 at Valencia to rather below 41° at Stornoway and Sumburgh Head. Cold patches are shown in Map 3 over the northern half of Ireland and in several parts of the north of England and south of Scotland, but over the south and east of England temperature was *relatively* rather high, some tendency to the summer type of distribution being observed. It was rather above the average in all districts—most in the south of Scotland, where the excess amounted to 2°. *Highest* readings were observed over England and the north of Ireland between the 26th and 28th, when moderate gradients for Westerly and South-westerly winds were prevalent, but in the north-west of England and over the greater part of Scotland they occurred on the 16th. *Lowest* values occurred very generally between the 2nd and 4th, as the well-marked anticyclone, mentioned above, moved southwards over the kingdom. The cold on this occasion was very severe for the time of year in several localities—notably over our south-eastern counties. At our own stations the minima were 6° at Hillington, 10° at Braemar, and 11° at Rothamstead; but values as low as 5° in the shade are reported from the Caterham Valley and adjacent regions. *Range* was consequently very large in some places (as much as 56° at Hillington), but not generally. *Vapour Tension* varied from about 0·26 in. at Valencia, Belmullet, Pembroke, and Scilly, to about 0·21 in. over the north-east of Scotland and at Hawes Junction. *Relative Humidity* at 8 a.m. ranged from between 90 and 95 per cent. on our extreme north-western coasts, and from 90 and more in the extreme east of England to between 84 and 87 at our extreme south-western stations and to between 82 and 84 in the east of Scotland.

Rainfall varied from about 0·9 in. at Oxford, Hereford, and Cirencester, and from nearly an inch at Hurst Castle, to more than 4 ins. in the south of Ireland, and at Stonyhurst, Lairg, Stornoway, and Sumburgh Head, to nearly 6 ins. at Fort Augustus, to 9·2 ins. at Laudale, and to 13·1 ins. at Glen Carron. In most places the fall was short of the average, especially in the south of England; at the more northern of the Scotch stations there was some excess, and at Sumburgh Head it was large. The number of rainy days exceeded 20 over many parts of our western and northern districts (26 at Stornoway and Hawes Junction, 25 at Glencarron and Stornoway, and 24 in several other places), but was much smaller elsewhere (11 at Bawtry, 12 at Spurn Head, Cirencester, and Jersey).

Bright Sunshine.—The per-centage of possible duration actually recorded was as low as 18 at Fort Augustus, but was higher elsewhere, the values ranging, roughly speaking, from between 24 and 27 over our northern and north-eastern counties to between 34 and 39 over Ireland, the south-west of England, and the Channel Islands. In London the per-centage was only 23, at Glasgow 22.

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