

MONTHLY WEATHER REPORT OF THE METEOROLOGICAL OFFICE

SUMMARY OF OBSERVATIONS COMPILED FROM RETURNS OF OFFICIAL STATIONS AND VOLUNTEER OBSERVERS

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JANUARY, 1935.—Dry in most districts; mild on the whole.

The weather of the month was distinguished by a marked deficiency of rainfall except in east and north-east England and at some places in the west and north of Scotland.

With pressure high southward of the British Isles and a small trough of low pressure moving eastward across the country, the first few days were unusually mild. Between the 3rd and 4th a depression moved from the north of Iceland to Norway and, in its rear, high pressure was established from south-westward of Ireland to Iceland. This distribution caused rather cold, northerly winds over the British Isles. Meanwhile the depression over Norway moved south and became less deep and, subsequently, an extension of the Russian anticyclone spread westward to Scotland and then moved south over England and France. Cold continental air caused a further drop in temperature until the 9th and some wintry precipitation occurred between the 6th and 9th. With the approach of an Icelandic depression temperature rose generally on the 10th, and between the 10th and 12th another deep depression moved rapidly eastward from the Atlantic to southern Norway, causing widespread gales and heavy rain locally.

Thereafter the Azores anticyclone moved north-east and dominated conditions over the British Isles from the 14th to 22nd. Its movements were rather complex, the centre being found over southern England on the 16th, over Scotland from the 17th–20th and finally off west Ireland on the 22nd. Between the 24th and 26th a very deep depression moved from the west of Iceland to the Baltic, causing widespread westerly gales veering to north. The polar winds behind this depression caused a decided fall of temperature and were accompanied by hail, snow and sleet, particularly in northern and eastern districts. On the 28th and 30th, shallow troughs of low pressure crossed the country, while pressure continued high south-westward of the British Isles.

Pressure and Wind.—Mean pressure markedly exceeded the normal in all districts, the excess being generally greatest in the western half of the country and varying at 7h. from 15.0 mb. at Valentia to 6.6 mb. at Yarmouth. The observer at Newquay states, that the mean pressure was the highest in January since 1907. Westerly or northerly winds predominated and those from between east and south were infrequent. Widespread gales occurred from the 10th–12th and 24th–26th. Those during the latter period were severe and caused some damage locally: on the 25th, gusts exceeding 80 m.p.h. were registered at numerous stations, while one of 100 m.p.h. was recorded at Butt of Lewis.

Temperature.—Mean temperature exceeded the average over the country as a whole, the excess for districts 1–10 being 0.7°F. Northern districts were most affected and the deviation from the average varied from +1.8°F. in Scotland, E. to -0.1°F. in the Channel Islands. (See Table I.) The first three days were exceptionally mild but temperature was also rather high around the 14th and 24th. The coldest periods were experienced as a rule from the 7th–9th and 26th–29th. Maxima of 55°F. or above were registered locally in most districts on one or other of the first three days and 58°F. was touched at Arbroath and Sidmouth on the 2nd. Minima of 20°F. or below were registered at a number of

stations in Scotland on the 28th and in England on the 9th and 28th.

The extremes for the month were:—(England and Wales) 58°F. at Sidmouth on the 2nd, 14°F. at Castleton on the 9th; (Scotland) 58°F. at Arbroath on the 2nd, 16°F. at Dalwhinnie and West Linton on the 28th; (Ireland) 56°F. at Mallarany on the 1st and 23°F. at Birr Castle on the 8th.

Precipitation.—The general precipitation of the British Isles expressed as a percentage of the normal for the period 1881–1915 was 65, the values for the constituent countries being, England and Wales 65, Scotland 81 and Ireland 45.

Rainfall exceeded the average in east and north-east England and at some places in the west and north of Scotland. The excess amounted to more than 50 per cent. locally in Sutherland and the North Riding of Yorkshire and approached 50 per cent. locally in eastern England. Elsewhere there was a deficiency which was most striking in the extreme south of Ireland, south-west England and locally in Perthshire. Less than 30 per cent. of the normal was recorded at many places in south and south-west England and south Ireland and less than 20 per cent. locally near the south coast of Ireland. At Valentia Observatory, it was the driest January since records were started in 1866, at Teignmouth it was the driest since 1896, at Eastbourne since 1901 and at Malvern since 1902.

Among the heaviest falls in 24 hours were, 61 mm. at Clunes and 37 mm. at Inverness on the 10th, 36 mm. at Dolgelley on the 24th and 63 mm. at Glenquoich, 50 mm. at Achnashellach, 41 mm. at Ardtornish, 38 mm. at Glenbranter and 36 mm. at Dunoon on the 31st.

Thunderstorms occurred locally on the 4th, 7th, 11th, 24th–26th and on the 31st. Local snow or sleet occurred between the 7th and 9th, 11th and 13th, and 25th and 28th. In Scotland, snow was lying over the greater part of the country from the 25th–28th and in eastern districts of England from the 27th–29th or 30th. On the 27th, the depth was nearly 9 inches at Durham and between 4 and 5 inches as far south as Hampstead (London).

Sunshine.—Sunshine was generally deficient in Ireland and northern Scotland and excessive in southern Scotland. In England totals were very variable, but the district values slightly exceeded the average except in England, S.W. and the Channel Islands. In England, N.W. the excess was appreciable (115 per cent. of the average). The lack of sunshine was very marked in Ireland, N. (62 per cent.) and the greatest excess was enjoyed in Scotland, W. (146 per cent.). Among the sunniest days may be mentioned the 4th, 12th, 18th, 26th, 27th, 29th and 31st.

Fog.—Local fog occurred fairly frequently, notably from the 1st–3rd, 10th, 28th–30th and during the mainly anticyclonic spells from the 8th–9th and 15th–18th. It was rather widespread and thick locally on the 8th, 9th, 15th–17th and 29th–30th.

Miscellaneous Phenomena.—The aurora was observed in northern districts of Scotland on the 1st, 21st, 23rd, 27th and 28th, and at Stonyhurst on the 27th. At Oxford, solar halos were noted on 9 days and the zodiacal light on the 27th. A sun pillar was observed at Linlithgow on the 8th and at Edgbaston on the 30th.