

MONTHLY WEATHER REPORT OF THE METEOROLOGICAL OFFICE

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

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MARCH, 1941.—Rather cold; wet in England and Wales and Northern Ireland.

The month was cold, particularly in Scotland. On the whole rainfall was above the average in England and Wales and Northern Ireland and below the average in Scotland. A notable feature of the weather was a severe snowstorm in the north of Scotland on the 26th and 27th.

During the opening days of the month an almost stationary depression was centred near Thorshavn and a secondary depression moved north-east across the British Isles. On the 3rd and 4th the main depression moved first south-south-east and then south-east, while relatively high pressure became established over Iceland. Squally, showery weather prevailed with local thunderstorms, and gales were reported at exposed places, chiefly in the south-west, on the 1st and 2nd. On the 5th a new depression approached south-west Ireland and moved in an easterly direction to the English Channel; precipitation was almost general and was rather heavy locally in England on the 6th and 7th. Subsequently another depression situated off north Spain moved north-east to the English Channel and later became less deep; meanwhile a wedge of high pressure off our north-west coasts spread slowly south-east. There was scattered rainfall on the 8th and precipitation occurred in parts of England on the 9th and 10th also, but little rainfall was recorded in Scotland or Northern Ireland on these two days.

Thereafter the anticyclone centred off the north of Scotland moved south-east to the North Sea and for a period dominated conditions over the British Isles. Except locally in the south-west, practically no rainfall was reported from the 11th-16th inclusive and sunshine, though variable, was good on the whole. There was considerable fog on the 16th. On the 17th a feeble trough of low pressure approached the west of Ireland and rain occurred generally in Ireland during the night of the 17th-18th, but dry weather persisted for the most part elsewhere. The trough drifted slowly eastward and filled up; there was scattered rain in the west on the 18th. By the 19th anticyclonic conditions were re-established and a further spell of mainly fair weather prevailed over most of the country, but slight rain occurred in the north on the 20th.

Subsequently pressure became high again in the Iceland region leaving a path for depressions across the British Isles. Unsettled weather prevailed, with occasional precipitation, often in the form of sleet or snow in the north, and persisted until the end of the month. On the 26th a trough of low pressure extending from the Hebrides to East Anglia moved slowly north-east; it was associated with a severe snowstorm in north Scotland. Secondary depressions off the west of Scotland moving south-east caused considerable snow locally in Scotland on the night of the 30th-31st.

Pressure and Wind.—Mean pressure exceeded the average in the north and was somewhat below the average in the south; the deviation from the average at 7h. ranged from +6.4 mb. at Lerwick to -2.4 mb. at the Scilly Isles. Mean pressure was therefore very uniform over a large part of the country. Winds from north-east or east were more frequent than usual. Local gales were reported at times, particularly at exposed stations in the south-west; they were recorded on 7 days at St. Ann's Head, 6 days at Hartland Point and 5 days at the Lizard, Plymouth and Tynemouth. Among the highest speeds registered in gusts were 77 m.p.h. at St. Ann's Head and 75 m.p.h. at St. Mary's, Scilly on the 31st and 67 m.p.h. at Lerwick on the 21st.

Temperature.—Mean temperature was below the average particularly in the north, the deviation from the average being -1.9°F. over Scotland and -0.9°F. over England and Wales. At some stations on the east coast of Scotland the mean temperature was between 3°F. and 4°F. below the average. For Scotland as a whole, the period January to March was the coldest first quarter of the year since 1895. Severe frost was registered at times. Temperature reached or slightly exceeded 60°F. in some places, chiefly between

the 14th and 16th and locally in the north of Scotland on the 17th.

The extremes for the month include:—(England and Wales) 62°F. at Barnstaple and Tavistock on the 15th and 16th and at Cullompton on the 16th, 14°F. at Thetford on the 19th; (Scotland) 61°F. at Gordon Castle on the 14th, Forres on the 14th and 15th and Achnashellach on the 17th, 14°F. at Balmoral on the 30th; (Northern Ireland) 60°F. at Armagh on the 16th and 26°F. at Garvagh on the 14th, 17th and 20th and at Aldergrove on the 30th.

Precipitation.—The general precipitation expressed as a percentage of the average for the standard period 1881-1915 was 137 over England and Wales, 85 over Scotland and 126 over Northern Ireland. Over most of Scotland rainfall was below the average, less than half the average being received over large areas in the north and approximately one-third of the average locally within those areas. An excess occurred at numerous stations south of a line from the Firth of Tay to the Isle of Arran, the highest percentages of the average being registered in the south-east. In England and Wales, less than the average occurred over an area in south Wales and another in north-west England as well as at one or two isolated stations elsewhere. Over much of the rest of the country there was a considerable excess; in a small area in the West Riding of Yorkshire and an area in the neighbourhood of the Wash twice the average or more occurred. In Northern Ireland the excess was general and percentages of the average ranged from 107 at Aldergrove and Ballymena to 148 at Armagh.

Among the heaviest falls in 24 hours were:—

- 25th. 2.93 in. at Machynlleth (Montgomery)
- 26th. 2.02 in. at Cullen House Gardens (north Banffshire)
- 31st. 2.00 in. at Okehampton and 2.78 in. at Fofanny Reservoir (County Down).

Thunderstorms occurred locally, mainly on the 1st, 3rd, 4th, 7th, 10th, 27th and 28th.

Snow or sleet occurred fairly frequently in Scotland. An unusually severe storm occurred in Sutherland and the adjoining parts of Ross and Caithness on the 26th and 27th. An observer at Borgie, near Tongue, reported that all roads were blocked. At Tain there was a level fall of from 2½ to 3 ft. with deep drifts. It was said to be the worst snowstorm in the district since 1879-80. There was moderately heavy snow on the night of the 30th-31st when a depth of 9 inches was reported at Oban. Some slight snow was reported at times locally in the south of the British Isles, chiefly between the 7th and 10th and on the 23rd, 29th, and 30th.

Sunshine.—Over the country as a whole sunshine was somewhat below the average, but in the north and extreme west of Scotland there was a considerable excess. On the other hand a substantial deficiency was reported in south-west England, parts of Wales, on the east coast of Scotland south of Montrose and in the extreme north-east of England. The chart of mean daily sunshine shows that the sunniest areas were the south-east coast of England and the islands off north-west Scotland; Worthing and Tiree each had a daily mean of slightly more than 5 hours. Less than 2.5 hours occurred in parts of Northumberland and Durham and in a small area on the south-east coast of Scotland.

Fog.—Fog was reported rather frequently, mainly on the 4th, 5th, 9th, 10th, 14th-22nd, 24th-26th and 28th.

Miscellaneous Phenomena.—The aurora was seen in Scotland on 21 nights; this was the highest frequency in any one month for several years. The display on the 1st was probably the finest of the winter. The aurora was seen as far south as Plymouth on the night of the 30th-31st. Solar halos were noted at Oxford on 12 days. An unusually complete halo display was observed in the west Midlands and at Aberporth, Cardigan, on the 6th. A lunar halo with horizontal circle and mock moons was observed at South Farnborough on the evening of the 9th.