

MONTHLY WEATHER REPORT OF THE METEOROLOGICAL OFFICE

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

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FEBRUARY, 1941.—Rather cold; considerable snow.

The weather of the month was remarkable for frequent snow; the snowfall of the period 18th–20th was notable in north-east England and south-east Scotland. Rainfall totals were excessive except in the north-west.

The month opened with pressure high near Iceland and the Azores; on the 1st a depression near the Shetlands moved south-south-east and on the 2nd another disturbance situated off south-west Ireland moved east-south-east; weather was rather cold and there was widespread precipitation, mostly in the form of snow. On the 3rd and 4th a wedge of high pressure moved south-east across the British Isles; cold, mainly fair weather prevailed temporarily over much of the country as the wedge passed but heavy rain was reported in parts of Ireland on the night of the 4th–5th. Subsequently a depression over Iceland and an associated trough extending to south-west Ireland moved eastward giving precipitation generally; a good deal of snow was reported in some parts on the 5th. Thereafter a period of milder, rather unsettled weather ensued with Atlantic depressions moving east or north-east along our northern or north-western seaboard. A fair, sunny day was enjoyed over a large part of the country on the 10th. Early on the 12th a depression approached south-west Ireland and during the subsequent days followed a complicated track off the west coast of that country; unsettled weather prevailed over the British Isles with frequent rain. On the 15th a depression near the Azores moved north-east to Portugal becoming very deep and thence moved to south-west England; later it crossed southern England to the North Sea. Rain fell in many places between the 15th and 17th and there was snow or sleet in Scotland on the 17th and widespread sleet and snow occurred from the 18th–20th, while the depression lay over southern England and later the southern North Sea. On the 22nd a depression off south-west Ireland moved east-south-east to the English Channel giving rather heavy precipitation in the south-west. A feeble anti-cyclone moved east-south-east over the British Isles between the 24th and 26th; precipitation was only slight and sunshine reports good on the 24th and 25th, but almost general precipitation occurred during the night of the 26th with the approach of a large, deep, Atlantic depression. The closing days were mild and unsettled with widespread gales.

Pressure and Wind.—Mean pressure was substantially below the average generally, the deficiency at 7h. ranging from 7.6 mb. at Lerwick to 13.9 mb. at Holyhead. Local gales were reported at times mainly on the 5th, 7th, 16th, 17th, 22nd and 26th–28th; gales were most widespread on the 5th and 27th–28th. Among the highest speeds recorded in gusts at anemograph stations were 76 m.p.h. at Bidston on the 1st, 85 m.p.h. at Lerwick and 79 m.p.h. at Stornoway on the 5th and 80 m.p.h. at Aldergrove and 77 m.p.h. at St. Ann's Head on the 28th. A mean hourly velocity of 58 m.p.h. was registered at Lerwick and one of 57 m.p.h. at Stornoway on the 5th.

Temperature.—Mean temperature was below the average, the deficiency being greatest in Scotland and northern England (See Table I). At individual stations in Scotland the deficiency was more than 4°F. The first six days and the period 19th–26th were cold, while the periods 7th–15th and 27th–28th were rather mild. Temperature in the screen fell to 20°F. or below at many places in Great Britain on the 4th, 5th and 23rd–26th.

The extreme temperatures for the month were:— (England and Wales) 59°F. at Cleethorpes on the 28th, 3°F. at Houghall on the

26th; (Scotland) 55°F. at Edinburgh on the 8th and 7°F. at Braemar on the 4th; (Northern Ireland) 54°F. at Donaghadee on the 8th and at Armagh on the 27th, 20°F. at Armagh on the 25th.

Precipitation.—The general precipitation expressed as a percentage of the average for the period 1881–1915 was 164 over England and Wales, 122 over Scotland and 113 over Northern Ireland. Over much of west Scotland and at a few scattered stations in central and south Scotland less than the average occurred, while locally in Morayshire, along the coasts of Angus and Fife and in parts of Berwickshire more than twice the average was recorded. In England and Wales the excess was general except at isolated stations in the south-east. The greatest excess was received in a coastal strip in the north-east; locally in this area considerably more than four times the average was registered. At Durham Observatory it was the wettest February since before 1850. In Northern Ireland, less than the average was recorded locally in Londonderry and Tyrone and more than the average elsewhere. The percentages of the average at individual stations ranged from 68 at Omagh to 148 at Donaghadee.

Among the largest falls in 24 hours were:—

8th	2.33 in. at Blaenau Festiniog.
12th	2.27 in. at Fairlie (Ayrshire).
19th	2.75 in. at Ushaw, 2.49 in. at Tynemouth, 2.45 in. at Cockle Park and 2.33 in. at Chopwellwood.
26th	2.55 in. at Holne (Devon) and 2.20 in. at Princetown.

Snow or sleet occurred frequently during the month; it was most considerable from the 1st to 5th and 17th or 18th to 21st. Appreciable snow fell on the 2nd in south-west England; it was 8 inches deep at Newton Abbot and 5 inches deep at Princetown and Collumpton and even 3 inches at Bude on the Atlantic coast of Cornwall. At Lake Vyrnwy, Montgomery, the depth of snow was 14 inches on the morning of the 6th. In Scotland, the falls of the first week were heaviest in the central Highlands, Balmoral reporting a depth of 27 inches on the morning of the 6th. The snowfall of the 18th–20th was abnormal, particularly in north-east England and south-east Scotland and in some places it was probably the heaviest fall of the century; traffic was greatly disorganised. Durham Observatory reported 42 inches, Chopwellwood and Ushaw 33 inches and Newcastle 29½ inches, and in Scotland Marchmont reported 26 inches.

Local thunderstorms were reported on a number of days and were, at times, accompanied by snow.

Sunshine.—Sunshine was variable but broadly speaking it was above the average in the west and below the average in the east. In some western areas the excess was appreciable, the percentage of the average being 117 in England, N.W. and 116 in Scotland, W. The month was sunny also in Northern Ireland; at Armagh the percentage of the average was 141. In England, E. on the other hand the deficiency was almost general.

Fog.—Some local fog was reported rather frequently during the month; it was fairly widespread from 11th to 14th.

Miscellaneous Phenomena.—The aurora was seen on 10 nights in Scotland, mostly at northern stations. Solar halos were noted at Oxford on 12 days. A sun pillar was observed at South Farnborough on the evening of the 21st.