

Monthly Weather Report

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OF THE METEOROLOGICAL OFFICE

Summary of observations compiled from returns of official stations and voluntary observers

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February 1958—*Changeable; wet, heavy snow at times*

Predominantly mild, wet weather over most of the country alternated with short unusually cold spells of 2 to 4 days beginning on the 5th, 16th and 25th. The cold spells were longer in north Scotland.

The month opened with high pressure to the south of England. Weather was cloudy and mild over most of the country and there was occasional rain, chiefly in the north and west.

On the 5th there was a pronounced ridge at 500 mbs. over Greenland, an upper trough over Europe and a strong north-westerly airstream at high levels over the British Isles; winds at Liverpool reached 138 kt. at 267 mb. At the surface a small but complex depression skirted the north of Scotland and intensified over the northern North Sea as it moved towards Denmark. Behind the depression cold northerly winds spread over the British Isles bringing a general fall of day temperature of 10–15°F. and severe frosts at night. Temperature, which had risen to 56°F. at Aberdeen during the afternoon of the 4th, was below 29°F. throughout the 6th and fell to 2°F. early the following morning. On the 7th the European upper trough began to extend westwards and a broad westerly flow in the upper air was established, south of 50°N. longitude, across the Atlantic into eastern Europe. That evening a deepening depression moved east across Ireland and, turning north-east, crossed southern Scotland the following morning. There were substantial falls of snow over much of the country, particularly in Scotland and northern England, where it lay 4–8 in. deep in many areas. From the 8th to the 10th the mild air advanced slowly northwards, giving widespread rain preceded by snow, as an upper trough of the west of the British Isles, associated partly with the retrogressing European upper trough, intensified.

A deep depression to the southwest of Ireland on the 10th gave gales in western districts as it moved northwards, widespread and locally heavy rain and a very rapid rise in temperature; in southern England temperature rose to the middle fifties during the afternoon. Thunderstorms and heavy showers occurred the following day and from 13th to 15th small depressions moving eastward across the country gave widespread and sometimes heavy rain. During this period temperatures in some southern districts remained above 50°F. day and night and reached 59°F. at several places on the 14th.

On the 16th an upper ridge near southern Greenland moved north-east and strong north-westerly winds in excess of 100 kt. at 500 mb., developed over the British Isles. An intense depression with a circulation in depth was situated in the Norwegian Sea, and northerly winds, spreading over the British Isles on the 16th and 17th, brought a fall of temperature of 10–15°F. and scattered snow showers to many districts, although there were long sunny periods. The cold spell was short-lived, however, as on the 18th an airstream of Atlantic origin spread over the country, around an anticyclone which formed to the west of Ireland, bringing temperatures back nearer to their normal values. During the next four or five days the anticyclone moved slowly south and weakened while minor disturbances moving south-east over the British Isles, maintained dull weather with occasional rain in the south and snow or sleet in the north.

By the 24th a well marked frontal belt lay east-west across the country and snow was falling in the cold easterly winds to the north of it. A complex depression from the Atlantic moved across southern England during the night accompanied by gales and heavy falls of snow. In parts of the Midlands and southern England level snow lay 6–12 in. deep and there were drifts of 10–15 ft. in places. As the depression moved away eastward an anticyclone developed to the west of Ireland but moved southward on the 27th allowing air from mid-Atlantic to spread over the country from the north-west bringing a return to mild dull weather with occasional rain.

Pressure and wind. Mean pressure was everywhere below the average, the deficit ranging from 5.2 mb. at Gorleston to 2.8 mb. at Stornoway. Winds were mainly between west and south-west during the first few days of the month becoming north-westerly on the 5th, predominantly south-westerly on 9th–15th and north-westerly on 16th–21st. On 22nd–24th winds were mainly south-westerly in the south and easterly in the north but became generally northerly on 25th and 26th, afterwards backing and becoming south-westerly on the 28th. Gales occurred on 16 days and were widespread on the 11th, 12th and 25th; in south-west England they were reported daily from 9th to 14th. A gust of 71 kt. was recorded at Stornoway on the 1st and one of 68 kt. at Bell Rock on the 8th. On the 11th gusts reached 60 kt., 65 kt. and 66 kt. at Cardington, Scilly and Tiree respectively.

Temperature. Mean temperature was 1.2°F. above the 1921–50 average in England and Wales, about equal to the average in Northern Ireland and 1.8°F. below the average in Scotland. Temperature was extremely variable, unusually cold periods around the 6th, 17th and 25th alternating with mild ones around the 4th, 14th, 20th and 28th. Severe night frosts occurred on 6th–10th; in Scotland screen temperature fell to 0°F. at Logie Coldstone on the 7th and 8th and in north-east England to 16°F. at several stations on the 7th. Temperature was unusually high on the 14th and 15th when 59°F. was recorded at many places in England.

Extreme temperatures included:—(England and Wales) 60°F. at Cambridge on the 14th and Jersey Airport on the 15th, 13°F. at Moor House on the 7th; (Scotland) 56°F. at Dyce and Logie Coldstone on the 4th, –2°F. at Lairg on 7th; (Northern Ireland) 57°F. at Ballykelly on the 28th, 12°F. at Aldergrove on the 7th.

Precipitation. The general precipitation was 179 per cent. of the 1916–50 average in England and Wales, 115 per cent. in Scotland and 146 per cent. in Northern Ireland. It was less than the average in the Central Lowlands and western districts of Scotland but more than twice the average over the west coast of Wales and the Mersey estuary, over an area extending from mid-Wales to Warwickshire, over most eastern coastal districts from Lowestoft to Northumberland, and in the Spey Valley, Scotland.

Snow. A feature of the month was the heavy snow around the 7th–9th and 23rd–25th. After the earlier period most main roads in Scotland were blocked and many rural areas isolated, while in parts of north-east England and the Midlands snow lay to a level depth of 6–9 in. During the latter period the Midlands and south-east England were heavily affected. Snow lay to a depth of 12 in. at Pontefract and Rotherham and 16 in. at Sheffield and gale force winds piled it into drifts up to 15 ft. deep in places.

Thunder. There were thunderstorms in most parts of the country on the 11th and thunder was also heard on the 7th, 10th, 12th and 26th.

Sunshine. The general sunshine expressed as a percentage of the 1921–50 average was 86 in England and Wales, 84 in Scotland and 85 in Northern Ireland. Some places in Scotland and northern England had more than the average, but there was a deficit of 20 hr. or more at most places south of the Thames, much of the south coast and Kent being particularly dull.

Fog. Fog was reported at one place or another on 19 days, and occurred fairly frequently in parts of Scotland and northern England; there was fog at Gateshead on 13 days.

Miscellaneous Phenomena. The aurora was seen in Scotland every night from 5th to 26th except the 24th.