

# Monthly Weather Report

M.O. 701

## OF THE METEOROLOGICAL OFFICE

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

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### December 1961 — *Cold particularly during the latter half*

The first half of the month was cyclonic and changeable, but from the 16th to the 22nd weather was mainly anticyclonic with easterly or variable winds. Winds remained easterly during most of the rest of the month associated with persistent low pressure to the south-west of the British Isles. There were some heavy snowfalls during the month.

During the first week pressure was low over Scandinavia and high over Greenland with a cold northerly airstream over the Norwegian Sea which frequently spread over the British Isles. On the 1st a shallow depression moved from Wales to the southern North Sea bringing mild wet weather to southern England, but further north it was brighter and colder with northerly winds and snow showers. The cold northerly airstream spread to southern England on the 2nd but a polar depression skirting the Scottish coast gave severe gales and considerable snow in the north. The next day milder weather spread back over the southern part of the country as a small disturbance moved east along the English Channel heralding the approach of a vigorous Atlantic depression which, on the 4th, brought gales to most coastal districts, widespread rain to the south and prolonged snow to Scotland. Much of the Midlands and North became snow-covered and snow lay 4-6 in. deep over higher ground. As the depression moved away north-eastwards gales became severe over Scotland on the night of the 4th/5th. Behind the depression strong north-westerly winds again covered the country on the 5th, but they slowly moderated the following day. There were scattered sleet and snow showers in most districts on the 5th and 6th but the 7th was generally fine and sunny with a ridge of high pressure over the country.

During the second week, which was generally mild, a succession of troughs associated with a persistent low pressure area in the eastern Atlantic, crossed the British Isles. On the 8th, an almost sunless day, a belt of frontal rain, preceded by snow mainly in the Midlands and North, spread slowly north-east across the country. In the moister airstream which spread in from the Atlantic from the south-west, fog became widespread, and was thick locally on the 9th and 10th. During the next few days weather continued generally dull and wet with heavy rain at times, but on the 13th an exceptionally rapid rise of pressure brought a complete change.

High pressure extended from northern Russia across Scandinavia to the British Isles on the 14th and thereafter weather over the whole country was quiet and mainly dry for about a week, with increasing frost and fog. Fog formed widely soon after midnight on the 14th, was thickest in eastern England on the 15th, in southern Scotland on the 17th and covered most of England and southern Scotland on the 21st. Widespread night frost was severe in many places, temperature falling as low as  $-8^{\circ}\text{C}$  on several mornings and remaining below freezing point all day in persistently foggy areas.

Weather during the remainder of the month was dominated by easterly winds with pressure high to the north of the British Isles and with low pressure systems moving towards the Bay of Biscay. Freshening easterly winds cleared most of the fog on the 22nd, except in East Anglia and the Clyde Valley. A fine and sunny, but exceptionally cold spell followed, with temperatures remaining below freezing point over most of the country until the 28th. It was one of the coldest Christmas periods of the century almost everywhere; temperature fell to  $-11^{\circ}\text{C}$  at Eskdalemuir early Christmas morning. On the 28th

day temperatures failed to rise above  $-5^{\circ}\text{C}$  at many places. Milder air, brought up by a wave depression from the Atlantic, reached the southern half of England on the 29th, when in parts of Cornwall  $10^{\circ}\text{C}$  was recorded. But, on the last day of the month, a depression over France moved north-east bringing heavy falls of snow to south-east England; in the Chilterns level snow lay up to 15 in. and there were drifts 3 ft. deep.

**Pressure and Wind** — Mean pressure was considerably below the average in the south but above average in the north of the British Isles, the deviation at 9 hr ranging from  $+2.7$  mb at Stornoway to  $-5.0$  mb at Scilly. Surface winds varied mainly between south-west and north-west at first becoming more generally south-westerly on the 6th and 13th, between south and south-east on the 14th-17th and then light and variable until the 21st. Easterly winds predominated during the remainder of the month. Winds reached gale force on 21 days in Scotland and on the 1st, 3rd, 5th, 10th, 11th, 13th, 22nd-26th, and 30th (13 days) in England and Wales. Gales were widespread on the 5th and 11th, and were recorded on ten days at the Lizard, four days (22nd-25th) being consecutive.

**Temperature** — Mean temperature was generally below the 1921-50 average the deficit being  $-1.9^{\circ}\text{C}$  in England and Wales,  $-2.6^{\circ}\text{C}$  in Scotland and  $-2.5^{\circ}\text{C}$  in Northern Ireland. Apart from the second week, when it was above the average, temperature was generally below the average especially during the last week. On the morning of the 31st temperature fell to  $-19^{\circ}\text{C}$  at Eskdalemuir,  $6^{\circ}\text{C}$  below the previous lowest recorded there in 1912.

Extremes reported were (England and Wales)  $15.6^{\circ}\text{C}$  and Aber on the 10th and at Teignmouth on the 11th,  $-17.2^{\circ}\text{C}$  at Kilder Castle on the 31st; (Scotland)  $15.6^{\circ}\text{C}$  at Achnashellach on the 15th,  $-22.2^{\circ}\text{C}$  at Cannich on the 30th; (Northern Ireland)  $13.9^{\circ}\text{C}$  at Eglinton on the 13th,  $-11.1^{\circ}\text{C}$  at Ballykelly on the 31st.

**Rainfall** — The general precipitation expressed as a percentage of the 1916-50 average was 114 over England and Wales, 91 over Scotland and 78 over Northern Ireland. Less than half the average rainfall occurred in the Lochalsh area of Ross-shire while more than 150 per cent of the average fell in the London area, the east Midlands, on the north coast of Kent and in the Spey Valley.

Thunder was heard on six days in Scotland and five days in England and Wales mainly during the first week.

Snow or sleet fell daily in Scotland except on the 14th-21st. In England and Wales it fell mainly during the first and last week. In parts of the Midlands snow lay 4-6 in. deep on the 7th and 8th and 12-16 in. deep on the 30th and 31st.

**Sunshine** — The month was exceptionally sunny in parts of Wales, north-east and south-east England, the general sunshine expressed as a percentage of the 1921-50 average being 133 over England and Wales, 115 over Scotland and 88 over Northern Ireland.

**Fog** — In Scotland fog occurred at one place or another on 26 days and in England and Wales every day except the 23rd and 24th; it was widespread on the 17th-21st and during the last few days of the month.

**Miscellaneous Phenomena** — The aurora was visible in Scotland on ten nights; it was seen as far south as Exeter on the night of the 2nd/3rd.

**Please Note:** As from the July issue, all page numbers should be advanced by one.