

Monthly Weather Report

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

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December 1953—Unusually mild; very dry but dull in England and Wales; sunny in Scotland.

Until the 18th the dominant type of weather was a mild southerly; owing to the influence of a continental anticyclone, over a large area in the south-east there was little rain but a good deal of drizzle and fog and little sunshine. From the 19th onwards a changeable mainly westerly type of weather prevailed finally becoming north-west to north.

The month was unusually mild; it was mainly dry except over a large area in central and east Scotland, dull on the whole in England and Ireland but sunnier than usual in Scotland. There was a good deal of fog and it was less windy than is usual in December, particularly in England and Wales.

Southerly winds from low latitudes resulted in exceptionally high temperatures on the 2nd, lasting over the 4th in southern England and East Anglia. A rainy cold front moved slowly south-east over Scotland on the 2nd becoming almost stationary over the Irish Sea and the Scottish Border on the 3rd when a depression moved north-east along it from south-west of Ireland to the North Sea giving heavy rain in the west and north of the British Isles; there was flooding in parts of Scotland and Ireland. The cold front crossed England on the 4th but in the south-east it gave only drizzle. An intensifying anticyclone moved eastward over south Scotland on the 5th and the centre reached Poland the next day; frost occurred in parts of Ireland and Scotland and valley fog in south Scotland. A dull, mild south-easterly to easterly type of weather followed which lasted with minor variations until the 9th; rainfall was slight from the 5th to the 7th but heavier in the north-west on the 8th and 9th. Subsequently pressure was high on the Continent and low to the west and north-west of the British Isles and mild southerly conditions prevailed; fronts associated with northward moving secondary depressions caused frequent rain in the west and north but amounts were very small in the south-east. There was a good deal of fog in eastern England and the Midlands on the 9th and 10th. On the 14th a cold front moved right across the country giving some rain in all districts and behind it a new anticyclone developed over the eastern districts of Great Britain which was soon absorbed into the anticyclone on the Continent. On the 16th–17th there was keen frost over much of Scotland, particularly the north-east; fog occurred in many districts between the 15th and 18th, notably in London and the Midlands on the 15th and 18th. The formation of a small depression over the North Sea early on the 19th, together with a new anticyclone off west Ireland saw the end of the long southerly spell. Early on the 21st a ridge of high pressure gave frost in south-east England, with renewed fog which recurred on the 23rd. Meanwhile troughs of Atlantic depressions brought rain to the west and north on the 20th and 21st and to most of the country on the 22nd and 23rd, though falls were still small in the south-east. A changeable south-west to west type of weather then set in finally becoming north-west to north, with somewhat colder weather; rain or showers occurred at times but there were also long sunny periods on several days.

Pressure and Wind.—Mean pressure considerably exceeded the average, the deviation from the average at 9h. for the period 1901–30 ranging from +10.7 mb. at Tynemouth to +6.1 mb. at Scilly. The pressure gradient was thus below average and the month was less windy than usual, particularly in England; the total run of the wind was less than in any December at Kew since before 1930, at Oxford since 1933 and at Southport since 1939. Gales occurred at times at exposed stations in the west and north, chiefly on the 1st, 2nd, 14th, 21st and 23rd, the most widespread and severe being that of the 21st. Among the highest gusts, registered, in knots, were 72 at Edinburgh, 65 at Stornoway, 64 at Tiree and 56 at Lerwick all on the 21st.

Temperature.—Mean temperature exceeded the average for the period 1921–50 by 4.6°F. in England and Wales, 2.9°F. in Scotland and 3.6°F. in Northern Ireland. As far as can be estimated it was the mildest December over Great Britain since 1934. The high temperatures experienced during the period 2nd to 4th were exceptional; 64°F. was registered at Aber and Llandudno on the 2nd, this reading being the highest at Llandudno in December since before 1901, while the reading 59°F. at Falmouth on the 2nd was the highest there in December since before 1871 and the same value at Kew Observatory on the 4th equalled that on December 4th, 1931, which was the highest in December since before 1871. At some places the night temperatures were also very high; at Oxford no air frost was registered throughout the four months September to December; the previous latest date for the first air frost of this period was November 22nd, 1898. Keen air frost occurred in Scotland and Northern Ireland on the 5th, and locally at times during the latter half of the month, particularly on the 16th, 17th and 31st.

Extreme temperatures for the month included:—(England and Wales) 64°F. at Aber and Llandudno on the 2nd, 23°F. at Alston on the 31st; (Scotland) 59°F. at Achnashellach and Fort William on the 13th and 14th, 16°F. at Logie Coldstone on the 17th; (Northern Ireland) 56°F. at Armagh and Hillsborough on the 2nd and Nutt's Corner on the 3rd, 23°F. at Garvagh on the 5th and 6th.

Precipitation.—The general precipitation expressed as a percentage of the average for the period 1881–1915 was 36 over England and Wales, 95 over Scotland and 92 over Northern Ireland. It was more than average in a large area of central and east Scotland, in the Shetland Islands and around Armagh. Less than average was registered at most places elsewhere and less than 25 per cent over a large area in the south of England and at a few isolated places in south Wales. Heavy rain on the 2nd and 3rd caused flooding in parts of Scotland and Northern Ireland.

Among the heavier falls in 24 hours were:—

2nd 2.10 in. at Onich, Inverness-shire and 2.06 in. at Tyn-drum, Perthshire.

3rd 2.22 in. at Kilkeel, County Down and 2.11 in. at Leadhills, Lanarkshire.

Thunderstorms occurred locally in the west and north on the 2nd and 22nd–24th and at some places in northern England on the 24th and 25th.

Sunshine.—The general sunshine expressed as a percentage of the average for the period 1921–50 was 77 over England and Wales, 128 over Scotland and 74 over Northern Ireland. Except at a few places in the north-west and locally on the north coast of Devon and Cornwall sunshine in England and Wales and Northern Ireland was mainly considerably below the average. Over much of Scotland there was a large excess; at Inverness it was the sunniest December for 33 years and at Nairn and Edinburgh the sunniest since 1929. In London up to the 23rd there was remarkably little sunshine but five of the six days 24th to 29th were sunny and it was one of the sunniest Christmas periods of the century.

Fog.—There was a great deal of fog, particularly in eastern and Midland districts of England and in the neighbourhood of large towns. It was dense in the Forth-Clyde belt on the 5th and it was widespread and locally persistent on the 7th to 10th, 15th to 18th, 21st. The fog held up or delayed aircraft at times.

Miscellaneous Phenomena.—The aurora was observed in Scotland on 16 days. Solar halos were noted at Oxford on seven days.