

## MONTHLY WEATHER REPORT OF THE METEOROLOGICAL OFFICE

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

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## JANUARY, 1944.—Mild, dull and windy.

The weather of the month was unsettled, mild and dull, with predominating south-westerly to westerly winds and there were many gales.

During the opening days an anticyclone was situated south-west of the British Isles. Meanwhile a secondary depression moved quickly east across north Scotland on the 1st, and subsequently troughs of low pressure moved south-east or south over the British Isles. Rain and widespread strong winds and local gales were reported in the north and west. On the 4th the anticyclone moved north-east and a deep depression off south Greenland moved north-east and later east: scattered rain occurred but sunshine records were good on the whole. On the 5th there was further rain in the north-west and north and gales occurred in the north of Scotland. Thereafter the depression off Norway moved further east and a trough over Scotland moved south-east; weather continued unsettled in the north, with rain and local gales. By the 8th the anticyclone was situated over France, while a small depression moved quickly east over Scotland and on the 9th a depression near the Shetlands moved south-east and a small secondary off west Ireland moved east-south-east; there was further rain and local gales were reported. In the rear of the depression over Norway an anticyclone near Iceland moving quickly south-south-east gave a cold, mainly fair day, apart from rain in the south-west, on the 10th. Subsequently an intense depression south of Greenland moved north-north-east and became almost stationary, while associated troughs crossed the British Isles; from the 11th-13th dull, mainly wet weather prevailed. A welcome, short break in the unsettled conditions occurred on the 14th and 15th, when an anticyclone off our south-west coasts moved east-north-east, though gales were reported locally in the extreme north. Over most of England and east Scotland the fair weather persisted over the 16th. On the 17th a trough of low pressure west of Ireland moved east causing rain in Ireland and England. On the 18th another trough crossed the British Isles and was associated with almost general rain, and on the 19th a small secondary depression moved north-east over England causing general rain there. Rain fell in most parts except south-east and east England on the 20th and 21st.

One of the most disturbed periods of the month ensued from the 22nd-25th. On the 22nd a deep depression near the Faeroes moved east-north-east and on the 24th an intense depression west-north-west of Ireland also moved east-north-east. There were widespread gales daily from the 22nd-25th and general rain; the rain was heavy at times, particularly on the 22nd. Further rain on the 26th was associated with a trough of low pressure which moved east over the British Isles.

Thereafter until the end of the month, high pressure persisted southward of the British Isles, while Atlantic depressions approached Iceland from the south-west. Weather continued unsettled in the north and west but fair on the whole in the south and east. Gales were fairly widespread in the northern half of the country on the 27th and were reported locally in the extreme north from the 28th-31st.

**Pressure and Wind.**—Mean pressure was about or slightly below the average in the extreme north of Scotland and above the average elsewhere, the deviation at 7 h. ranging from  $-2.2$  mb. at Sumburgh to  $+7.3$  mb. at Plymouth. The pressure gradient was thus greatly increased, south-westerly to westerly winds predominated, the month was much windier than usual and there were many gales. Gales were reported on 22 days at Sumburgh, 16 days at Sullom Voe and 15 days at Stornoway. On the whole the stormiest period with the most widespread gales, was the 22nd-25th. On the 24th a mean hourly velocity of 65 m.p.h. and a gust of 94 m.p.h. were registered at St. Ann's Head. Among other high speeds registered in gusts

were 85 m.p.h. at Kirkwall on the 22nd, 88 m.p.h. at Bidston on the 24th and 82 m.p.h. at Sealand (Chester) on the 25th.

**Temperature.**—Mean temperature substantially exceeded the average, the excess ranging from  $1.4^{\circ}\text{F}$ . in Scotland, N. to  $3.4^{\circ}\text{F}$ . in the Midlands and England, S.E. As far as can be estimated over Great Britain as a whole it was the mildest January since 1932 and at Ross-on-Wye it was the mildest since 1921. The warmest spell occurred on the whole from the 26th-31st but other mild days included the 1st, 2nd, 13th and 14th. The coldest spell was the 10th-11th but it was rather cold also on the 4th-5th and in southern districts from the 15th-17th. Screen minimum temperatures of  $20^{\circ}\text{F}$ . or below were registered at numerous stations on the 11th and locally on the 5th and 10th.

The extremes for the month were:—(England and Wales)  $61^{\circ}\text{F}$ . at Wrexham on the 30th,  $17^{\circ}\text{F}$ . at Bellingham and Huddersfield on the 11th; (Scotland)  $57^{\circ}\text{F}$ . at Gordon Castle and Stonehaven on the 30th and at Montrose on the 30th and 31st,  $13^{\circ}\text{F}$ . at Balmoral and Braemar on the 11th; (Northern Ireland)  $56^{\circ}\text{F}$ . at Bishops Court on the 29th and at Castlerock and Castle Archdale on the 30th and  $27^{\circ}\text{F}$ . at Garvagh on the 11th.

**Precipitation.**—The general precipitation expressed as a percentage of the average for the period 1881-1915 was 109 over England and Wales, 125 over Scotland and 133 over Northern Ireland. Less than the average occurred in a coastal belt extending from north of Aberdeen to Flamborough Head and also over a large area in southern England stretching from Suffolk to Hereford in the north and from Kent to the border of Devon and Cornwall in the south; less than 50 per cent. occurred in a small coastal strip in north-east England. More than 150 per cent. of the average was registered over much of the mainland of northern Scotland, in small areas round Inveraray and Ayr, over most of north-west England and north Wales and locally in the Midlands. More than 200 per cent. was received over part of Sutherland and Snowdonia.

Daily falls exceeding 1 in. were numerous in the west and north-west. Among the largest falls in 24 hours were:—

- 1st 3.25 in. at Achfary (Loch More).
- 4th 3.25 in. at Kinlochquoich (Inverness-shire).
- 22nd 4.70 in. near Blaenau Festiniog (Merioneth) and 4.64 in. at Machynlleth (Montgomery).

Snow or sleet occurred at times. In Scotland, it was reported in one place or other on each day except the 16th, 17th and 18th, and falls were widespread but mainly light from about the 20th-25th.

Thunder was reported locally at times, mainly on the 3rd, 14th, 21st-23rd and 27th.

**Sunshine.**—Sunshine was substantially below the average particularly in the west and north. The percentages of the average for the districts ranged from 56 in Scotland W. to 94 in England E. At Aldergrove the total was the lowest for January since records were first taken in 1927. At a few stations, chiefly in eastern Britain, there was a small excess. The mean daily duration in hours ranged from less than 0.5 over most of north and west Scotland, a small area in south Scotland and around Manchester to about 2 hours locally on the south-east and east coast of England.

**Fog.**—There was less fog than usual in Scotland. At large towns in England it developed fairly frequently, for example it was noted at the morning observation hour on 15 days at Nelson, Lancs., 14 days at Huddersfield, 12 at Darwen and 10 at Nottingham and Whitworth Park, Manchester. The most considerable fog occurred from the 11th-12th, 15th-18th and 20th.

**Miscellaneous Phenomena.**—The aurora was observed at some northern stations in Scotland on ten nights. Solar halos were noted at Oxford on eight days.