

## MONTHLY WEATHER REPORT OF THE METEOROLOGICAL OFFICE

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

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**NOVEMBER, 1937.—Dry; considerable fog; cold at times from the 10th—28th.**

The month was dry, notably so in Scotland, with considerable fog, particularly in England. Sunshine was variable, but for the country generally did not differ greatly from the average.

A shallow depression over south-west England and north-west France, moving south-east caused considerable rain, chiefly in south-eastern districts, on the 1st. In its rear a belt of high pressure moved south-east over the British Isles, while an Atlantic depression approached Ireland, causing rain in the extreme west and north-west on the 3rd. On the 4th, a secondary depression off north-west Ireland moved rapidly north and another off the mouth of the Channel moved south-east; rain fell locally on the 4th, mainly in the south-west and west, and gales were reported in the west and north between the 3rd and 5th. On the 6th an extension of the Russian anticyclone covered most of the country but on the 7th and 8th a depression off the south-west coasts spreading north-east and a trough off the north-west coasts moving north-east caused some rain in the west and north on the 7th and more generally on the 8th.

Thereafter, until the 14th, an anticyclone was situated off our north-west coasts while pressure was low eastward of this country. This was a somewhat cold period, with mainly northerly winds, occasional local showers, and on the whole, considerable sunny periods.

A spell of unsettled, cold weather ensued; between the 17th and 20th a depression off south-west Ireland moved to Denmark, while another depression west of Iceland moved south-east; gales were reported locally from the 16th–18th and were fairly widespread on the 17th. Heavy local rain occurred at times from the 17th–19th and considerable falls of snow were reported in Scotland and northern England on the 19th and 20th. From the 21st to 23rd a depression moved south over Ireland to the Bay of Biscay.

A wedge of high pressure moved southward over the British Isles on the 24th and 25th, while a depression near Iceland moved north-east causing some rain in the north and a gale in the Orkney and Shetland Isles on the 25th. Subsequently mainly anticyclonic conditions prevailed until the 28th but an Atlantic depression moving north-east brought a change to mild unsettled weather on the 29th and 30th.

**Pressure and Wind.**—Mean pressure exceeded the average throughout the country, the excess being greatest in the north and least in the south-west; the deviation from the average at 7 h. ranged from +8.4 mb. at Stornoway to +0.9 mb. at the Scilly Isles. As a result the map of mean pressure was quite different from the average, the lowest pressure being found off the south-west coasts while a large closed area of high pressure extended from north-north-west to south-south-east across Great Britain. The month was a quiet one over a large part of the country; at Southport, it was the calmest November since the Marshside Anemometer Station was established 40 years ago. Gales occurred at times in the west and north mainly from the 3rd–5th, 16th–18th and in the extreme north on the 25th; the gale on the 17th was more widespread. Among the highest speeds recorded in gusts were 78 m.p.h. at Lerwick on the 25th and 63 m.p.h. at Pendennis Castle on the 16th and at Point of Ayre and Valentia Observatory on the 17th. Strong, squally northerly winds were reported locally on the north-east coast of England on the 9th and 10th; a gust of 57 m.p.h. was registered at Spurn Head on the 10th.

**Temperature.**—In Scotland, Ireland and north-east England, mean temperature was not very different from the average on the whole, though the deviations at individual stations were somewhat variable. In other parts of England and Wales mean temperature was, as a rule, below the average, particularly in the south and parts of the Midlands; locally in these districts the deficiency was as much as 3°F. and equalled 3.3°F. at Usk (Monmouth) and East Malling (Kent).

The first eight days were generally mild and there was a return to mild conditions in the west and north on the 29th and throughout the country on the 30th. It was cold at times between the 10th and 28th.

The extremes for the month were:—(England and Wales) 63°F. at Plymouth (Mount Batten) on the 2nd, 16°F. at South Farnborough, Larkhill, Marlborough and Porton on the 21st; (Scotland) 61°F. at Achnashellach on the 2nd and 3rd and at Edinburgh (University) on the 2nd, 15°F. at Braemar on the 23rd and 24th; (Ireland) 60°F. at Rathfarnham on the 3rd and 4th and 22°F. at Birr Castle on the 14th and 21st.

**Precipitation.**—The general precipitation of the British Isles expressed as a percentage of the average for the period 1881–1915 was 54, the values for the constituent countries being England and Wales 62, Scotland 30 and Ireland 61. The deficiency was almost general, an excess being confined to a few stations on or near the coast of north-east England and one or two stations in Counties Kerry and Cork. The deficiency was most striking in Scotland and the extreme north of England; at Appleby the total was only 10 per cent of the average and locally in Perthshire and Angus it was somewhat less than 10 per cent. Many widely separated stations in Scotland reported that it was the driest November on record; at Edinburgh the total, 0.24 in., is the lowest for November in a record covering 160 years.

Among the heavier falls of rain in 24 hours were:—

- 1st 1.66 in. at Peaslake, Surrey.
- 3rd 1.56 in. at Valentia Observatory.
- 17th 2.58 in. at Holne, Devon.
- 18th 2.07 in. at Fofanny, County Down, 1.68 in. at Carndonagh, County Donegal, and 1.61 in. at Castle Archdale, County Fermanagh.
- 29th 2.00 in. at Blaenau Festiniog, Merioneth.
- 30th 1.86 in. at Blaenau Festiniog.

Some sleet and snow were reported locally, chiefly in Scotland, between the 8th and 15th, 17th and 24th and on the 27th. The fall on the 19th and 20th in northern England and in Scotland was considerable.

Scattered thunderstorms were reported on the 19th and a thunderstorm occurred at Cromer on the 13th and at St. Ann's Head, Pembrokeshire, on the 22nd.

**Sunshine.**—Sunshine was unusually variable but considering the country as a whole, it differed little from the average. The percentage of the average for districts 1–10 was 99 (see Table I). In Scotland sunshine was below the average except at Lerwick and at a number of places in the south-west. In Ireland it was dull generally except locally in the south-west, where Valentia Observatory recorded an excess of more than 50 per cent. In England and Wales the variability was exceedingly pronounced; this was doubtless due, in certain cases, to the incidence of fog; for example, in south-east England the percentage of the average ranged from 66 at Greenwich to 161 at Wye, Kent, and in the Midlands from 70 at Sheffield to 148 at Giggleswick.

**Fog.**—The frequent and often thick fogs which were experienced over wide areas in England and Wales were an important feature of the weather of the month. Fog occurred mainly from the 1st–8th, 13th–16th, 18th and 21st–28th. A number of deaths resulted from collisions in fog. In Scotland fog was somewhat frequently experienced along the east coast and in the Clyde area, while in Ireland morning and evening fogs were fairly prevalent.

**Miscellaneous Phenomena.**—The aurora was observed in Scotland on 16 nights; an unusually brilliant display was seen in Skye and at Fort Augustus on the night of the 30th. Solar halos were noted at Oxford on 5 days.