

MONTHLY WEATHER REPORT OF THE METEOROLOGICAL OFFICE

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

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OCTOBER, 1936.—Mainly anticyclonic at first; unsettled, with frequent gales after the 14th.

The month was dry on the whole in England, Ireland (except the extreme north) and east and south-east Scotland while sunshine was variable but exceeded the average generally. The last half of the month was very disturbed, with frequent strong winds and gales, particularly in northern districts.

An anticyclone centred, for the most part, to the north or north-east of Scotland maintained dry, quiet conditions in most districts for the first 11 days. Strong winds were, however, reported at times on the west and south-west coasts and rain fell locally chiefly in east and south-east England. Between the 9th and 10th the anticyclone north of Scotland moved southward and the Azores anticyclone spread north-east and by the 11th the highest pressure was situated to the west of Ireland. Thereafter, depressions passed on some easterly track to the north of these Islands, while associated secondary depressions or troughs extended further south. Meanwhile pressure continued high as a rule to the south-west or south. A deep depression which moved from south-westward of Iceland to the south of Norway between the 16th and 18th and a secondary which moved south-east across Scotland on the 19th caused widespread strong winds and gales from the 17th-19th and heavy rain in the north-west and north on the 16th and 17th. On the 24th a deep depression developed on the Atlantic south-west of Iceland and moved north-east and on the 26th an intense secondary depression situated west of Scotland moved rapidly east-north-east. This period was one of widespread strong winds and gales. The gales on the night of the 26th-27th were very severe, particularly in Scotland and northern Ireland and caused much damage and some loss of life. Unusually heavy falls of rain were recorded in north-west England and in Scotland on the 24th. Quieter conditions prevailed on the 29th and 30th, but a secondary depression moving eastward up the English Channel caused strong winds in the south on the 31st.

Pressure and Wind.—Pressure exceeded the average generally, the excess being greatest in the south-west and least in the north-east and varying at 7 h. from 8.5 mb. at St. Mary's, Scilly to 0.2 mb. at Lerwick in the Shetland Isles.

During the latter half of the month, strong winds and gales occurred frequently; gales were recorded on 9 days of the month at Lerwick and Stornoway, 8 days at Kirkwall and Rothesay and on 7 days at Southport, Holyhead, St. Ann's Head, Duntulm (Skye) and Eskdalemuir. The periods of strongest winds were the 17th-19th and 25th-27th. During the gale on the night of the 26th-27th, hangars and aeroplanes were wrecked at Abbotsinch and a tramcar weighing 15 tons was blown off the rails in Glasgow. Among the highest speeds recorded in gusts were 87 m.p.h. at Lerwick and Kirkwall on the 17th, 104 m.p.h. at Tiree, 94 m.p.h. at Bell Rock and 88 m.p.h. at Abbotsinch on the 26th and 95 m.p.h. at Paisley and 87 m.p.h. at Eskdalemuir and Bidston Observatory on the 27th.

Temperature.—Mean temperature, though variable, slightly exceeded the average in Scotland and Ireland; in England and Wales it was somewhat below the average, particularly in England, E. and England, S.E. where the deficiency amounted to 1.5°F. and 2°F. respectively (see Table I). The week ending the 10th was very cold in some districts, the deviation from the average daily mean temperature for the week amounting to 6.6°F. in England, S.E. and 5.3°F. in England, E. The highest day temperatures occurred as a rule between the 14th and 17th or on

the 22nd, but in some places the highest temperature was registered on one of the first five days or on the 29th or 30th. The lowest minima were recorded usually between the 4th and 9th but the 29th was also a cold morning.

The extremes for the month were:—(England and Wales) 68°F. at Scarborough on the 22nd and at Rickmansworth, Shoeburyness, South Farnborough and Newton Abbot on the 15th, 19°F. at Rickmansworth on the 29th; (Scotland) 67°F. at Stonehaven on the 22nd, 22°F. at Dalwhinnie on the 8th and at Braemar on the 7th; (Ireland) 65°F. at Ballinacurra and Cork on the 15th and 27°F. at Markree Castle on the 7th.

Precipitation.—The general precipitation expressed as a percentage of the average for the period 1881-1915 was 75, the values for the constituent countries being England and Wales 62, Scotland 105 and Ireland 72. In Scotland, rainfall exceeded the average in the west and north-west and was deficient in the east, while the distribution was rather variable in the south. Inveraray, Argyllshire, received twice the average and Montrose only one quarter of the average. In Ireland less than 50 per cent of the average occurred in a coastal strip in the south and south-east and more than 100 per cent at some places in the north. In England and Wales an excess was recorded only at a few places in the north; less than 50 per cent occurred in rather large areas in the southern half of the country, while less than 30 per cent was recorded at isolated stations in south Wales, Devon and Sussex.

Heavy rain occurred locally at times in the latter half of the month and among heavy falls in 24 hours were:—

- 16th. 78 mm. at Tyndrum (Perthshire) and 76 mm. at Glenquoich (Inverness-shire).
- 17th. 104 mm. at Kinlochquoich (Inverness-shire).
- 24th. 135 mm. at Watendlath (Cumberland), 116 mm. at Borrowdale (Cumberland), 79 mm. at New Dungeon Ghyll (Westmorland) and 76 mm. at Kinlochquoich (Inverness-shire).

Local thunderstorms occurred at times, particularly between the 24th and 27th. Hail was fairly frequent in the north and north-west; it was recorded on 7 days at Baltasound and Skallary, on 6 days at Malin Head and on 5 days at Duntulm (Skye), Carluke, Meltham and Southport. Thunder, hail, sleet and snow were widespread on the 27th. Snow or sleet occurred locally in the north of Scotland on each day from the 14th to 22nd and was reported rather widely in Scotland from the 25th-27th.

Sunshine.—Sunshine was rather variable but exceeded the average for the country as a whole. The only district with a deficiency was England, E. with 98 per cent of the average.

Compared with the average the sunniest districts were, Scotland, N. (114 per cent), Ireland, N. (112 per cent); Midlands (110 per cent) and Scotland, W. (110 per cent). Among sunny days may be mentioned the 3rd, 4th, 6th, 7th, 18th and 28th.

Fog.—Local fog occurred at times particularly from the 1st-8th, 12th, 24th, 29th and 30th.

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