

MONTHLY WEATHER REPORT OF THE METEOROLOGICAL OFFICE.

SUMMARY OF OBSERVATIONS COMPILED FROM RETURNS OF OFFICIAL STATIONS AND VOLUNTEER OBSERVERS IN THE UNITED KINGDOM, AND AT GIBRALTAR AND MALTA, WITH A CHART OF RAINFALL CONTRIBUTED BY THE BRITISH RAINFALL ORGANIZATION.

ISSUED BY THE AUTHORITY OF THE METEOROLOGICAL COMMITTEE.

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Dull, Damp and Sunless.

Very generally the month was dull, damp, unsettled, and sunless. The rainfall was moderate, although in many parts of the country the number of rain-days was excessive, and owing to the wet fogs and mists, which were frequent especially during the latter half of the month, the ground never had a chance to dry. Winds blew mainly from points between South and West, and although there were one or two very cold nights the temperature as a whole was very uniform. In Scotland the first ten days of the month in nearly all except some northern districts were almost continuously wet, with some heavy falls towards the South on the 3rd, in the West on the 4th, and in the West and North-West on the 9th. Thereafter until near the end of the month rain of importance occurred only from the 13th to 15th in the North-West and somewhat widely between the 17th and 19th, and on the 24th towards the North-West. Very stormy weather prevailed from the 5th to 7th.

The following notes, supplied by observers, illustrate the general character of the month:—*Allans Green, Northumberland*.—October was one of the wettest months in a long period of rain. A great deal of corn has been spoilt in the field, and potatoes are being hurt by the excessive wet, and the autumn ploughing is in arrears. *Ipswich, Suffolk*.—A mild, damp, dull month, with steady barometer and a marked absence of wind, the latter half of the month being curiously calm. A few fine days emphasised the general gloominess. *Weston Turville, Bucks*.—A very mild month and most valuable for autumn tillage. A field of barley in this parish was not cleared until the 19th of the month. *Tenbury, Worcester*.—A generally fine, dry, and mild month, and although there were so many rain-days the total rainfall for the month was the smallest in October since 1904. The temperature was very uniform and there were no great extremes either by day or night. It was a good time for grain sowing, the land generally being in good working condition. *Warlingham, Surrey*.—Although the amount of rainfall was small for October, the number of days on which deposition of moisture was measured was above the normal, and the weather of the month was generally dull and damp rather than wet. *Dublin (City)*.—The cold weather which was so marked a feature in September continued with only slight intermission until the 27th. A mild period accompanied by fine conditions then set in and lasted until the 30th, when the weather broke with a freshening South-West wind. *Carrigoran, Co. Clare*.—Between the 17th and 24th there was a rainless spell of weather which proved of inestimable service to agriculture in the opportunity it provided of clearing off arrears in harvest work and securing much of the potato crop. Otherwise the month was of a most gloomy, sunless description and persistently rainy. There was an absence of gales and violent winds. *Hurdlestown, Co. Clare*.—The rainfall of the month was 40 mm. above the October normal, and the number of rain-days one above. The first half of the month was very wet, but the last half was fairly dry, although with damp fog and mist on many days. Great damage was done to hay and corn during the six weeks ended October 14th, during which period 320 mm. of rain fell.

On the 24th newspapers reported that hay-making was still being carried on in the Peak district, and that a basket of raspberries had been gathered during the week in a Burnham-on-Crouch (Essex) garden; on the 30th that strawberries, plums, and raspberries had been gathered that week at Buntingford (Herts).

Air Pressure.—As shown by map 2 on p. 111, the majority of the depressions which affected the weather of the British Isles during the month passed between Iceland and Scotland, many of them being secondaries. The most important of these disturbances occurred between the 3rd and 8th. On the morning of the 3rd a deep secondary depression, which over-night had shown itself off the North-West of Ireland, moved North-Eastwards and caused gales along the Western coasts. At 7 h. on the 5th a depression was centred to the northward of the Hebrides, and had developed considerable intensity, gales from between South and West-South-West being experienced in the Shetlands, in the North-West of Scotland, and locally in the South-West of England. On the 6th at 7 h. an extensive and deep cyclonic system was centred between Iceland and Scotland and a severe gale was felt over a large area, reaching storm to hurricane force off the Mayo and Donegal coasts. By 7 h. on the 7th a fresh depression, which caused a rapid fall of the barometer in Ireland, was centred off the West of Scotland, and high winds and gales were again experienced on many parts of the western and northern coasts. During the passage of this system hail fell at many western and northern stations and lightning was seen over a wide area, with thunder in parts of Scotland and the South-West of Ireland.

On this day a kind of line-squall passed Benson at 9 h. 55 m., the characteristic marks of such disturbances being shown on the barograph, rain-gauge, and thermograph, and on the direction—but not on the velocity—part of the anemograph. The wind dropped rather than rose.

On the 11th and 14th depressions passed across the South of England.

At 7 h. on the 18th there was a large area of uniform pressure over England and France, with an anticyclone to the northward and a "low" over the Western Mediterranean, and in opposition to the normal distribution of wind the region of calm was associated with the low and the strong winds with the high. On the 28th at 7 h. there was an extensive low-pressure system to the West and North-West, with centres over Iceland and the Azores, which brought a south-west wind, overcast skies, and local rain showers to the British Isles generally. Owing to the influences of a depression which at 7 h. on the 30th was centred off the West of Ireland the close of the month was mild, sunless, and unsettled. As shown by map 1 on p. 111, the general run of the isobars was West and East, mean pressure ranging from 1007 mb. to the North of Scotland to 1018 mb. in the neighbourhood of the English Channel. The departures of the individual monthly means from the normal were very diverse and varied from — 2.0 mb. at Stornoway to + 5.1 mb. at Scilly. Of the telegraphic reporting stations the highest reading was 1033 mb. at Aberdeen and Nairn on the 20th, and the lowest 968 mb. at Stornoway on the 6th. The highest gusts recorded by the anemometers were 39 m/s at Quilty on the 7th, 34 m/s at Aberdeen and Edinburgh on the 7th, and 33 m/s at Paisley on the 6th and at Valencia Observatory on the 7th.

Temperature.—The temperature record of the month was comparatively uneventful, and very generally the monthly means differed but little from the normal, the departures from the latter ranging from — 0.6a in Ireland South and the English Channel to + 0.2a in England North-East. Of the individual readings the highest in Scotland was 291a at Thorntonhall on the 9th and the lowest 267a at Logie Coldstone on the 26th. In England the highest value was 292a at Alnwick Castle, Geldeston, Skegness, Wakefield, and York on the 10th, and the lowest 270a at Mayfield, Porton, and Wokingham on the 1st, at Garforth on the 24th, and at Raunds on the 26th. The corresponding values in Wales were 291a at Swansea on the 7th and at Llandudno on the 10th, and 270a at Rhayader on the 13th; and in Ireland 292a at Killarney on the 9th and 270a at Dublin (Phoenix Park) on the 23rd. The very small daily range at many places in Scotland on the 20th, hardly 1a at Wick and Aberdeen, was noteworthy, as were high night temperatures on the 29th and 30th, with a southerly air current.

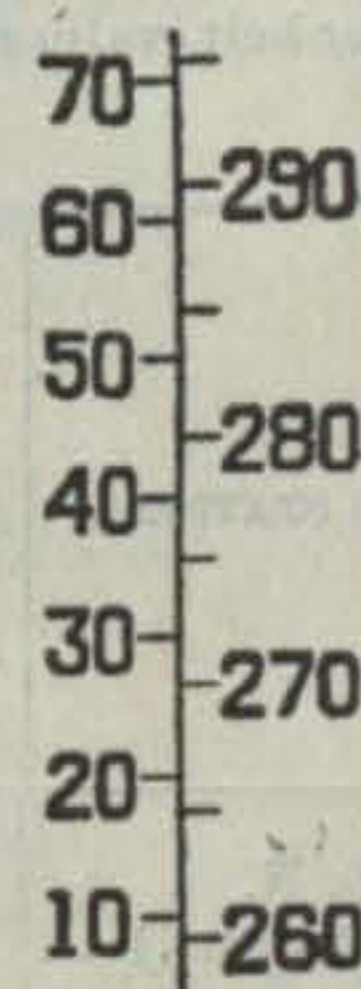
Precipitation.—In conformity with the tracks followed by the depressions the heaviest rainfalls of the month occurred in the North and West of Scotland and in the North and South of Ireland. The aggregates for the two former districts were 154 mm. (+ 27 mm.) and 166 mm. (+ 47 mm.), and in the two latter 116 mm. (+ 22 mm.) and 117 mm. (+ 17 mm.). In all other districts the month's total rainfall was below the normal, the deficiency ranging from 6 mm. in Scotland East to 48 mm. in England South-West. In Scotland some of the stations had a large excess of rain, among the greatest excesses being Stronvar 122 mm., Poltalloch 117 mm., Fort William 109 mm., and Drumlanrig 107 mm. On the other hand, at many stations in the South and West of England there was a large deficit, amounting to 70 mm. at Bournemouth, 69 mm. at Ashburton, and 63 mm. at Grayshott, Portsmouth, and Southampton. The heaviest of the daily measurements were 82 mm. at Beddgelert on the 9th (at which station there were no less than six days with individual falls of more than 25 mm.), 73 mm. at Fort William on the 9th, 52 mm. at Eskdalemuir on the 3rd, 51 mm. at Stronvar on the 6th, and 44 mm. at Aspatria on the 3rd. In Snowdonia the total for the month at Copper Mill was 692 mm. and at Intake 638 mm. At the following stations the duration of the month's rainfall is given in hours: Aberdeen 52, Eskdalemuir 188, Huddersfield 73, Worksop 36, Kew Observatory 35, New Malden 58, Sevenoaks 90, Blundellsands 62, Bolton 83, Darwen 140, Hutton 80, Lancaster 82, and Valencia Observatory 96.

Sunshine.—The sunshine was below the normal in all districts, the deficiency ranging from 1.07 hour per day in England East to 0.24 hr. in England North-West. The sunniest district was the English Channel (3.45 hr. per day), and the least sunny Ireland North (2.05 hr. per day).

Thunderstorms and Hail were experienced at many stations on the 6th, 7th, and 8th, the hail being especially frequent at some Lancashire stations on these dates.

Optical Phenomena.—Solar and lunar halos were reported on various dates and lunar coronæ at a few stations between the 13th and 21st.

Aurora was seen at Meltham and Malin Head on the 6th, and there was a more brilliant and a more generally observed display on the 8th. An illustration of a remarkable auroral band observed at Aberdeen on the latter date is reproduced in M.O. Circular No. 30.



Temperature Scales.