

## MONTHLY WEATHER REPORT OF THE METEOROLOGICAL OFFICE.

(Supplement to Weekly Weather Report.)

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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**Sunny and mostly Dry in England; Wet in Scotland and Ireland.**

The general distribution of pressure differed widely from that of the preceding month. Most of the depressions moved eastward along tracks beyond Scotland, while others, which cannot be traced on map 2, p. 39, travelled north-eastward between Iceland and Norway. Only one of importance, marked D on the map, came directly across these Islands, although small irregularities of pressure exercised considerable effect on the winds and weather from time to time. The Bay region, the south-west, and south of this country were often under the influence of the Azores anticyclone, and occasionally this system extended to the southern half of these Islands, or a detached portion of it moved directly across the country. These latter conditions were generally prevalent until the 11th, but depressions to the north of these Islands caused rough weather on various parts of the coast. A sustained gale was, however, seldom experienced in any part of the Kingdom. On the 4th, with the depression marked A, a brief gale from North North-West occurred at Deerness, and between the 8th and 16th the depressions in the far north caused gusts of gale force locally. On the 10th a gale from North-West prevailed at Blacksod Point for some hours, and on the 12th the same station had a gale from South-West. On the 14th a gale from North-West was experienced at Southport, and on the 16th one from South South-East at Lerwick. The highest velocity recorded in the gusts at the anemometrical stations on these dates was 27 m/s at Pendennis Castle on the 12th, and the same value on the south coast of Ireland on the 13th. Accompanying the South-Westerly winds of the 11th there was heavy rain in Snowdonia and at some stations in the north-west of England, but over the Kingdom as a whole little rain fell during the first fortnight. In many parts of England there was no rain, or only a shower or two, until after the 9th.

A change in the type of pressure distribution came about after the 17th, when depression D moved south-eastward over Scotland to the North Sea. During the passage of this disturbance the wind blew a very strong breeze from South-West and West over the south and south-east of England, reaching gale force in gusts, while on the north-west coast of Ireland, and at Southport, a gale from North-West occurred. By the 18th the wind had become more generally North-Westerly, and gales were felt on several parts of the western seaboard. At Blacksod Point a gale from North-West, beginning on the 17th, continued for 53½ hours. During the gradual filling up of the depression the wind became light but continued its cyclonic circulation. Further heavy rains were experienced in Wales and the Peak District on the 17th and 18th. Some stations in Snowdonia received more than 130 mm. during the two days, and Pen-y-Gwryd as much as 139 mm.; at Buxton the figure was 57 mm. Another depression, track E, brought the wind into the Northward in these Islands, but the passage north-eastward of a large depression centred far to the north-westward of Scotland between the 23rd and 25th caused it again to back to the Southward in the north and to South-West or West elsewhere. On the 24th the velocity in a gust reached 28 m/s at Edinburgh. The Southerly and South-Westerly winds of the 23rd and 24th brought more rain to the western districts. At Killarney there was 41 mm. on the 23rd and 46 mm. on the 24th. In Snowdonia the amount was larger. The southern half of England was mainly under anticyclonic influence subsequent to the dispersal of the depression on the 22nd, and experienced very little rain. At numerous stations there was no rain after the 20th. There was, however, one notable exception on the 27th, when a thunderstorm at Thetford yielded 32 mm. of rain in an hour, of which 13 mm. fell in 10 minutes.

**Air Pressure.**—The general arrangement of the isobars differed considerably from the normal except in the extreme north, being more in favour of Westerly and North-Westerly winds. The mean level of the barometer was below the normal in the northern districts and above it in the south. The highest readings were recorded either on the 1st, when the central area of a large anticyclone covered all except the northern districts, or on the 29th, when a large high-pressure system extended from the north of these Islands to Scandinavia and the Baltic. The highest value reached was 1031 mb. in England East and South-West on the 1st, but with the northern anticyclone the readings were only slightly lower. The barometer reached its lowest level for the month in the north of Scotland during the presence of the depression of the 13th, marked C on the map, but over the Kingdom generally the lowest readings occurred during the passage of the depression appearing on the 17th. In Scotland North the range of pressure for the month was 50 mb., and in the English Channel district 35 mb.

**Temperature.**—A sudden outbreak of warmth was general over the southern half of England on the 3rd, and several places registered

maximum readings above 292° A. (66° F.), but as a rule the temperature was about the normal or a little below it until late in the month, and not many nights passed without frost in some part of the country. There were, however, but few severe frosts for the time of year, and these were experienced on some date between the 2nd and 8th. The lowest minima recorded were 267° A. (21° F.) at Eskdalemuir, and 267°·5 A. (22° F.) at Garforth, Wellington (Shropshire), and Llangammarch Wells. In many localities, some inland and more on the coast, the thermometer remained above the freezing point throughout. On several occasions the day temperature was very low. At Glasgow and Tynemouth on the 7th the respective maxima were 277°·5 A. (40° F.) and 278° A. (41° F.). After the 24th, when the weather became bright, temperature rose rapidly to a maximum of 294° A. (70° F.) or above over a very considerable portion of Great Britain. On the 27th the thermometer touched 298°·5 A. (78° F.) at New Malden and Isleworth, 298° A. (77° F.) at Ardingley and South Kensington, and 297° A. (75° F.) over a larger area extending as far north as Bawtry, as far east as Norwich, and as far west as Fowey. The nights towards the end of the month were also warm. Minima above 283° A. (50° F.) were common except in the north and over Ireland. In Ireland the bright weather was retarded until the 28th, and the highest temperature was 293°·5 A. (69° F.) at Waterford on the 29th, and at Killarney on the 30th. For the month as a whole temperature was just equal to the normal in England South-West, above it in all other districts of Great Britain, and below it in Ireland. The departure was nowhere large, the most marked being 0°·8 A. (1°·4 F.) in England North-East.

Temperature of the sea surface water was below that of the air off north-eastern England, but elsewhere there was little difference. Coastal fogs were common from the 1st to the 3rd in the west and north-east, and again between the 20th and 30th.

At Belper the temperature of the Derwent was 281°·2 A. (46°·8 F.), and of the air 281°·1 A. (46°·6 F.).

**Rainfall.**—Over the greater part of England the total fall was less than the normal, but in England East the amount was normal, and in England North-West and over Ireland and Scotland it was above it. The deficiency was most marked in the south-western counties, the Isle of Wight, and Hampshire. Over a considerable area the fall was less than 50 per cent. of the normal, at Rousdon 29 per cent., Totland Bay 24, and at Teignmouth 16. At Buxton the percentage was 165, Belfast and Stonyhurst 174, Killarney 182, and at Markree Castle 238. At 19 stations measuring twice in 24 hours the hourly rate of fall between 9 a.m. and 6 p.m. was 1·1 mm., and between 6 p.m. and 9 a.m. 2·8 mm. At nine stations measuring for the 12 hours ending 9 p.m. and 9 a.m. the hourly rates of fall were 1·7 mm. and 2·8 mm. During the peculiar distribution of pressure in March the rainfall was relatively much greater in the low-lying country of the east than in the hilly regions of the west and north-west, but during the month under review, with the pressure distribution favourable for winds from the Atlantic, the incidence of rainfall was reversed. At the stations in Snowdonia the aggregate fall varied between 330 mm. and 432 mm.

At Kew the underground water level varied from 432 cm. above M.S.L. on the 1st to 311 cm. on the 30th.

Thunderstorms, or thunder only, occurred frequently for the time of year over England, especially over the eastern half. They were not generally prolonged or accompanied by heavy rain; in most cases the amount was moderate or slight.

**Bright Sunshine.**—In Scotland North and over Ireland the sky was more cloudy than usual, but in all other districts the duration of sunshine exceeded the normal, the greatest excess being 1·5 hour per day in England South-East, 1·6 hour in the English Channel, and 1·7 hour in England South-West. At Deerness the percentage of the average was only 78, and at Markree Castle 84, but over a wide area in southern England it exceeded 120, reaching 141 at Torquay, 145 at Falmouth, and 149 at Westminster. Only one period—the 16th to the 22nd—was generally dull in Great Britain.

**Aurorae, etc.**—At Eskdalemuir aurora was observed on the 25th, and at Benson there was a fairly bright display. On the 26th and 29th an auroral glow and streamers were seen at Eskdalemuir, and on the 28th aurora was reported at Blackford Hill (Edinburgh). At Oxford a Sun Pillar was observed on the evening of the 26th, and at South Farnborough on the evening following.