

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, WITH A CHART OF RAINFALL CONTRIBUTED BY THE BRITISH RAINFALL ORGANISATION.

ISSUED BY THE AUTHORITY OF THE METEOROLOGICAL COMMITTEE.

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THIRTY-NINTH YEAR.
Vol. XXXI. (New Series)

No. X.

OCTOBER, 1914.

[Price 6d.]

TWO GREAT ANTICYCLONES.

No rain for many days: no general gales: few fogs.

WEATHER MILD AND DULL.

The general character of the winds and weather differed very materially from the normal October conditions. Very few cyclonic disturbances came directly over these islands and none of any great intensity appeared in their immediate neighbourhood. During the whole month there was not one general gale over the United Kingdom, and unusually little wind on every part of the coast, while on only one day—the 25th—was rain reported over the country generally.

Barometric pressure, as will be seen on chart 1, page 111, was considerably above the average, and the general distribution entirely different from the normal. The arrangement of the mean isobars over these islands and their vicinity was, indeed, quite abnormal not only for October but for any other month. The highest pressure was recorded in Scandinavia, and relatively high pressure in an irregular band extending south-westward to beyond the south-west of the United Kingdom, the readings being lower both to the north-westward and south-eastward.

The anticyclone which became established over the British Isles towards the 20th September continued the dominating factor until the 11th, reaching its maximum on the 4th, when the barometer stood at 1034 millibars in the south of Ireland and the English Channel. During these three weeks the anticyclonic centre lay either to the south or south-west or directly over these Islands, and the winds experienced were very light, and generally from some point between North and West; the greater part of the Kingdom had no rain, while in the outlying districts of the west and north, where the conditions were sometimes influenced by distant depressions, rain was slight and infrequent. There was, nevertheless, a brief and partial interruption in the quiet conditions on the 5th, when a depression over the North Sea, marked A on the map on page 111, caused the wind to increase to gale force in gusts in some parts of Scotland.

By the 12th the high pressure had become transferred to Finland and the Gulf of Bothnia, while the centre of a depression of moderate depth lay to the westward of the Hebrides and another to the westward of the Scilly Islands. The former, marked B on the map, moved north-eastward after causing a moderate amount of rain and some increase in the force of the Southerly wind; the latter, marked B', after giving unusually heavy rain locally in the extreme south-west of Ireland and a moderate quantity in the south-west generally, travelled slowly eastward, at the same time undergoing considerable modification, and finally moved south-south-eastward to France and dispersed. On the 13th another small depression travelled south-eastward from the south of Ireland to France. These disturbances broke the drought in nearly all parts of the Kingdom on the 12th, although the rain was generally slight or moderate. Off Teignmouth a waterspout was observed. Here and there, however, in the south and east of England there was no rain until the 13th.

From the 15th till the 20th the anticyclone over Scandinavia extended over these Islands, and in the north of Scotland the barometer rose to its highest figure for the month, 1032 millibars; there was a renewal of dry weather generally, although further rain occurred locally, with thunderstorms at Thetford and Tavistock. On the morning of the 21st the first important depression of the month, marked D on the map, appeared off the south-west coast of Ireland and subsequently travelled east north-eastward to the North Sea, where it dispersed during the night of the 24th: on several parts of the coast the force of a gale was reached either on the 21st or 22nd; at Quilty the gust velocity was 20 m/s (metres per second), Weaver Point 25 m/s, Scilly 21 m/s, Plymouth 22 m/s, and at Pendennis 26 m/s. Heavy rain was not general with either the easterly or westerly wind during the passage of the disturbance, but on the 22nd 1.6 in. fell at Brecon, and more than 1.0 in. at Tyn-y-Vaun, Nettlebed, and Wexcombe (Wiltshire), and thunderstorms were experienced at some stations in Staffordshire. After a small secondary depression had advanced to the Bristol Channel on the evening of the 24th, a larger and deeper system, F on the map, appeared off the west of Ireland, and caused a copious fall of rain very generally. At several places in the north and north-west of England and in some parts of Ireland the fall equalled or exceeded an inch. At Douglas, Isle of Man, and at Dungeon Ghyll, Westmoreland, the figure was 1.4 in., at Pen-y-Gwryd 1.5 in., and at Fofany, Co. Down, 2.1 in. The depression subsequently travelled north north-eastward with its centre outside the United Kingdom, and a secondary developed over England. This finally became a separate disturbance, moved south-eastward, and covered a large portion of the North Sea. Except in the far north the wind veered to the West or North-West, and at Spurn Head it reached the force of a gale at 2 a.m. on the 26th.

The next and last depression, marked G, appeared over our north-western districts during the afternoon of the 28th, and after bringing the barometer down to its lowest point for the month in Scotland, travelled very rapidly thence to the west of France. From this position it moved slowly to the south-west of France, whence it doubled back north north-westward to Brittany and the mouth of the Channel, and in England and Ireland gave the lowest pressure of the month on the 31st. Over the Kingdom generally the rain during the presence of this depression was moderate to heavy. At Canterbury and Ardross Castle the fall was 1.0 in., and in some parts of Dartmoor about 1.5 in. On the 27th, 28th, or 29th local thunderstorms were experienced in various districts of England and the east of Ireland, and on the 31st at Tavistock. Aurora was observed at Gordon Castle, Stornoway, and Malin Head on the 28th. Gales from the Eastward or North-Eastward occurred in Great Britain some time between the 29th and 31st, especially in the east and south. At Tyne-mouth on the 30th the force of "9" Beaufort Scale was reported, and at Holyhead a gust velocity of 23 m/s; at Pendennis on the 31st there was a gust velocity of 24 m/s. On the 30th at 4 a.m., when a South-East gale prevailed, the Admiralty Hospital Ship "Rohilla" was wrecked on Whitby Rocks, with a loss of 70 lives.

Rainfall.—Over the Kingdom as a whole the rainfall was again much below the normal; in Scotland, the percentage of the average was only 47. The drought which ended on the 12th or 13th had extended over 23 or 24 days at numerous stations in England, while at Ryde, Malvern, and Dursley it had lasted 25 days, and at Worcester Lodge, Forest of Dean, 26 days. At Tenbury, after a drought of 23 days, "black rain" was reported on the 13th. The observer at Mareham-le-Fen commented—"Rain much wanted, ponds dry, and wells have little water." And at Kings Somborne—"The level of water in my well continues to fall." At Dyce—"Weather remarkably warm, and during most of the month very dry. Rivers continued very low until the 30th, when they began to rise. Rod Salmon fishing has been quite a failure on the Don at this part owing to lack of water. Turnip crop poor, with a good deal of mildew, owing to want of rain." In a few isolated localities the rainfall for the month equalled or slightly exceeded the average, although at other stations in the same districts the amount was much below normal. At Valencia the percentage of the average was 108, while at Roche's Point it was only 42. Rousdon and Marlborough both had a percentage of 108, Margate 107, Oxford 106, Totland Bay 103, and Cambridge 100. The lowest percentages were 19 at Fort Augustus, 24 at Fort William, 27 at Glencarron, 31 at Strathpeffer and Llandudno, 32 at Newton Rigg, and 38 at Aspatria.

Temperature.—Generally the temperature was above the average, the mean excess ranging from 1° to 3°. The seasonal change to a lower temperature was fairly well marked, the earlier weeks of the period being appreciably warmer than the latter. Until about the 10th maxima of 65° and upward were rather common, but subsequently that figure was recorded very rarely. The highest reading occurred at Halstead (Essex), and Scarborough, on the 3rd, when the maximum was 70°. Over a large portion of the Kingdom, including considerable inland tracts of England and Ireland, and some in Scotland, the sheltered thermometer remained above 32° throughout. Slight frost was, however, experienced at a large number of stations, and at Braemar and Balmoral the minimum readings were 20° and 19° respectively.

The mean temperature of the sea surface water was higher than that of the air on some parts of the west and south-west coasts, but generally the difference was slight. Coastal fogs were neither numerous nor prolonged. Until after the 15th they were very rarely reported, but from that date until the 27th they occurred occasionally on various parts of the western coasts and more seldom on the east coast.

Bright Sunshine.—Except during the unsettled, cyclonic period late in the month the duration of sunshine was less than the normal, and for the month as a whole the deficiency was considerable. Many localities had only 70 to 80 per cent. of the average, and some less than 70 per cent. The lowest figures were 66 per cent. at Little Massingham, and 65 at Aberdeen. In some parts of the north-west and the extreme south-west the values were much higher. At Fort Augustus the percentage was 115, at Scilly 114, Jersey 110, and Newquay 107.