

## MONTHLY WEATHER REPORT OF THE METEOROLOGICAL OFFICE

(Supplement to the Weekly Weather Report.)

SUMMARY OF OBSERVATIONS COMPILED FROM THE 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,

AND PUBLISHED FOR H.M. STATIONERY OFFICE BY WYMAN AND SONS, LTD., FETTER LANE, E.C.; OR OLIVER AND BOYD, EDINBURGH; OR E. PONSONBY, LTD., 116, GRAFTON STREET, DUBLIN.

THIRTY-SIXTH YEAR.  
Vol. XXVIII. (New Series) } No. VIII.  
Weekly Weather Report.

AUGUST, 1911.

[Price 6d.]

## SUMMARY OF OBSERVATIONS.

**Pressure, Winds and Weather.**—During the period to which this summary relates the distribution of atmospheric pressure over the United Kingdom and the surrounding regions was somewhat more variable than was the case in June and July, each of these two months being almost equally divided between comparatively simple anticyclonic and cyclonic systems. August, however, admits of being separated into four fairly well-defined pressure types. The combination of land observations on both sides of the Atlantic and wireless reports from vessels out on the ocean showed that the first ten days of the month had a distinct prevalence of anticyclonic conditions extending from the Eastern States eastward along the middle latitudes of the Atlantic, and thence away to Eastern and North-eastern Europe. The minor systems which made up this great belt varied a little in shape and position from day to day, but their changes of intensity were unimportant. To the northward of the high belt lay a well-developed area of low pressure, whose movements in any direction were so slight that the system may be regarded as practically stationary over the upper part of the ocean, with its central space situated between our north-western coasts and Southern or South-western Iceland. From this it will be seen that the British Isles occupied an intermediate position between the high and the low pressure systems. The depression does not appear to have been of any great depth, 29½ in. in 55° N., 25° W. on the 1st being the lowest barometer reading reported. By the 10th the pressure at the centre had increased to nearly 30 in., the system was dispersing over Iceland, and on the 11th the anticyclone previously over North-eastern Europe took up a position over the British Isles and the regions to the northward, and in the next four days the highest pressure during the month, nearly 30½ in., was attained—at stations in Scotland, Norway and Iceland. After the 15th the system diminished in intensity and in extent as it moved slowly southward across the British Isles to France by the 18th. Another change in the pressure distribution now took place. In addition to the anticyclone near the Azores there was an area of relatively high barometer readings about the Arctic Circle, and the conditions had thus become favourable to the advance of disturbances from the Atlantic to the British Isles, the Bay of Biscay, and the Continent. This type was maintained until the 23rd, and on the following day the distribution of pressure reverted to something like what it had been from the 1st to the 10th. The barometer again stood relatively high along the middle latitudes of the Atlantic and across Europe, and low to the northward, but instead of a stationary depression between our north-western coasts and Iceland, the closing week witnessed a succession of disturbances, following each other quickly across the ocean, bearing away on a north-easterly course close to the Farøe, and disappearing beyond the Arctic Circle. As a rule these disturbances were not of much depth, but on the closing day as the centre of one passed across Iceland, the barometer fell very rapidly to 28½ in., then rose as quickly as the system crossed the Arctic Circle.

The mean distribution of pressure for the whole month was consequently more nearly allied to the conditions experienced during the very similar first and last periods, high on the Continent, and low out on the upper Atlantic. The mean barometric values ranged from above 30.05 in. across the north of France, and 30.04 in. at Jersey to 29.88 in. at Blacksod Point, and 29.83 in. in the south-west of Iceland. Over the south-west quarter of Ireland the values were a trifle below the normal, but over the rest of the United Kingdom they were in excess, to the extent of 0.1 in. at Aberdeen, Leith and Shields, and 0.12 in. in Shetland. The gradient, usually about Westerly to South-Westerly, was thus South-Westerly to Southerly, and the winds experienced were in accordance with the pressure results, but with four different types of pressure during the month there was a fair proportion of breezes from other directions. The absolute range of pressure for the month did not differ materially from what is usual at this season—about an inch in the extreme north-west and north, and less than ¼ in. over England and Southern Ireland.

Although the month as a whole was rather more breezy than June and July, winds exceeding the force of a strong breeze were uncommon, and in nearly every instance the highest forces occurred at the more exposed situations in the west and north, and were from some Southerly point. While the depression of the first part of the month remained outside our north-western coasts, a strong gale was felt at Malin Head early in the morning of the 1st, and in the following night gale force was reached at Blacksod Point and Malin Head. The anemometrical records showed that on the 2nd there was a gust at the rate of 52 miles per hour at Quilty, and of 57 miles at Roche's Point, the only instances during the month of gusts exceeding 45 miles. Between the 7th and the 12th a high wind was reported at a few places, and it was not until the 31st that a higher force was attained, the passage of a very deep depression across Iceland being marked by a gale at Blacksod

Point, Stornoway and Lerwick, and a strong gale at Malin Head. Out on the Atlantic also many ships encountered a gale on this day.

Weather as remarkable as that of July was again experienced, drought, large records of bright sunshine, and exceptionally high temperatures forming the most striking features of the month, and rendered more striking by their forming a continuation of such unusual weather through a period of many weeks. Our more western and northern districts being influenced in the main by the various disturbances which appeared on the Atlantic, had much more changeable weather than Southern, Central and Eastern England, affected by the Continental anticyclones. Early in the month there were some heavy rainstorms, the largest falls on the 2nd being 1.2 in. at Caragh Lake, and 1.3 in. at Sheepstor; on the 4th, 1.5 in. at Bettws-y-Coed and Graythwaite, 1.8 in. at Bethesda, and 2.5 in. at Seathwaite; and on the 5th, 1.4 in. at Darwen and Liverpool. As early as the 2nd, however, a spell of very dry weather set in over the southern and eastern counties, and at scores of stations the drought was maintained for a fortnight or more, many places having no rain on as many as 18 consecutive days, Barnet on 19 days. Then on the 20th small irregularities of pressure brought the atmosphere into an electrical state over the country generally, there were numerous reports of thunderstorms, and considerable rains on two days, 1.4 in. at Ruthin and Bexhill-on-Sea on the 20th; and 1.4 in. at Portsmouth, Wilton (Wilts.) and Hereford, and 1.5 in. at Bromyard and Llandrindod Wells on the 21st. These changeable conditions were maintained through the remainder of the month, with thunder and lightning here and there daily, and occasional heavy local rainfalls. The deep disturbance of the 31st produced a very heavy rainstorm in Western Scotland, 1.8 in. at Fort William and Ford (Argyll), 2.3 in. at Cruachan, and 2.5 in. at Inverary.

The heat of the month was without precedent in the records of the country. Maximum temperatures well above 80° were registered in Scotland and Ireland, while stations in England yielded hundreds of records of 90° and upwards, the hottest day being the 9th, when the thermometer reached 97° at Hillington, Wokingham and in various parts of London, 98° at Canterbury, Epsom and Raunds, 99° at Isleworth, and 100° at the Royal Observatory, Greenwich, 3° higher than the previous maximum registered since the establishment of regular meteorological observations in 1841. Many night minima were above 65°, as high as 71° at Llandudno, and 72° at Lancaster on the morning of the 13th. As a result the mean temperature of the whole month was exceptionally high. Vegetation is represented as having suffered very severely under the unusual intensity of the drought, sunshine and heat.

Aurora borealis was visible at Stornoway and Sumburgh Head on the 23rd, at the latter station it was of a very bright green.

In a report from Mr. Spencer Compton Collin, it is stated that on the 7th "we saw the stars in daylight. It was a beautiful day, and towards afternoon the wind lulled, and in a cloudless sky, with a brilliant sun from 5 p.m. to 6 p.m., the stars in the eastern meridian shone. Vega and Aquila were brightest, and we counted 20 stars visible in that quarter. At about 6 o'clock they became invisible—still in a cloudless sky. This happened in West Essex, near Saffron Walden. I was helping in my harvest, and my labourers were sadly disconcerted at seeing stars in the daylight and sunshine."

An earthquake shock was recorded at Mungret College, Limerick, from 11.1 p.m., 16th, till 1.20 a.m., 17th.

Fog was fairly frequent on the western and eastern coasts, but on the south coast it was seldom reported.

The temperature of the coastal water was warmer than in July, by as much as 4° or 5° in the south-east, between the Isle of Wight and the Humber, but the water was nearly everywhere colder than the air on shore, by 5° on the coasts of Berwick and Down.

**Rainfall.**—With a few unimportant exceptions the month's precipitation was everywhere deficient, in numerous instances between 2 in. and 3 in. less than usual. In various parts of Britain the total fall was less than 25 per cent. of the normal, 22 per cent. at Gordon Castle and Guernsey (Brooklyn), 21 per cent. at Geldeston, London (Camden Square), Totland Bay, Guernsey (Villa Carey), and Jersey, 20 per cent. at Bennington, and 19 per cent. at Brighton. In several places the fall was less than ½ in. There were few instances of more than 20 days with rain, while below 10 they were numerous, only 4 rain days at Rothamsted, Heathfield and Eastbourne.

**Bright Sunshine.**—A great excess of insolation was noticeable practically everywhere, from two to three hours per day in many places, the Llandudno aggregate being 100 hours, and that of Blackpool 104 hours in excess. Strathpeffer's record was 107 per cent. of the normal, the results elsewhere ranging up to 158 per cent. at Fort Augustus, 160 per cent. at Llandudno, and 164 per cent. at Blackpool.