

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,

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SUMMARY OF OBSERVATIONS.

Pressure, Winds and Weather.—After the very striking reversal in the distribution of atmospheric pressure which formed an almost constant feature of March, the conditions last month assumed a more normal character. The means of the barometric readings show that over the British Isles generally the values differed only slightly from the average, being in excess to the extent of 0.12 in. at Jersey, and in defect by 0.07 in. at Blacksod Point, the divergence in most cases not amounting to 0.05 in. From a mean of 30.04 ins. at Jersey the results diminished to 29.81 ins. at Blacksod Point, the diminution continuing over the ocean to slightly below 29.7 ins. at Reykjavik, in the southwest of Iceland. The extreme range of pressure was moderate to slight, less than 0.8 in. at Jersey, between that and an inch from the Thames Valley southward, and amounting to or slightly exceeding 1.5 in. in the northwest of Ireland. In close agreement with the general pressure distribution the winds were in most parts of the country from between South and West, but with a fair proportion from South-East or East in several localities. As may be inferred from the slight gradient and the absence of any great range of pressure the month as a whole was of a quiet character; the wind exceeding the force of a strong breeze on various days, but seldom reaching the force of a gale.

The morning of April 1st witnessed a sudden change in the type of weather. The last of the long series of depressions of the previous month was passing away eastward across the Netherlands and Germany, and a well-marked anticyclone was spreading down from beyond the Arctic Circle. For ten days this high pressure system was the dominating factor over Western Europe; its central space at first covered Britain, then drifted slowly eastward as far as the Baltic, and afterwards returned to this country. On the 2nd the barometer stood above 30.5 ins. in most parts of the Kingdom, 30.56 ins. at Dover being the highest record for the month. On the return of the system readings of about 30.5 ins. were again registered in several localities. The eastward transference of this high pressure in the first part of the period was associated with a corresponding eastward expansion of an extensive disturbance, which wireless reports from steamers showed occupying the greater portion of the northern half of the Atlantic. While, therefore, England and Eastern Scotland were wholly within the influence of the high pressure area, the more western parts of the Kingdom, although the barometer was also high there, were affected by the ocean depression. At the west coast stations strong to high southerly winds were experienced during the first five days, attaining gale force in places, a strong gale at Roche's Point on the 2nd. Extremely unsettled weather also ruled in those regions, falls of more than an inch of rain in a day occurring in Ireland and Western Scotland:—on the 2nd 1.5 in. at Ballinacurra, 1.6 in. at Hurdlestown and Waterford and 2 ins. at Newmarket-on-Fergus; on the 3rd, 1.6 in. at Ballinacurra, Roche's Point and Rothesay, and 1.9 in. at Killybegs (Donegal); and on the 4th 1.5 in. at Gruline (Mull). Subsequently these districts were favoured with the exceptionally brilliant weather which had set in over the eastern parts of the Kingdom at the commencement of the month. At a very large number of stations in England, Wales and Eastern Scotland no rain was measured during the first ten to twelve days, and the sky generally was cloudless. During the week ending on the 10th many neighbourhoods in the south and east of England had more than 80 hours of sunshine, up to 85 hours at Lowestoft. At Felixstowe, Greenwich, Worthing, Tunbridge Wells, Hastings, Yarmouth and Lowestoft the week's record was 93 per cent. of the time the sun was above the horizon.

In the Monthly Summary for March, 1907, p. xxiii., special direction was directed to "Cloudless Weather and Coast and Inland Temperatures." The period now under notice provided numerous instances of the same nature, the daily range of temperature on the coast being very much smaller than it was inland. Thus, on April 10th, Llangammarch Wells had a range of 47°, Marlborough 44°, and Shrewsbury 43°, against 19° at Felixstowe, 18° at Margate and Douglas, 15° at Falmouth and Sandown, 14° at Bexhill-on-Sea, and 13° at Aberystwyth. It was during this very fine spell that the highest and the lowest temperatures of the month were registered, maxima of 70° and upwards occurring in several localities. On the 10th, the temperature at Hereford and Shrewsbury rose to 73°, and at Cullompton and Maidenhead to 74°. In Ireland 72° was reached at Killarney on the 9th; and in Scotland 69° at Crieff and Dumfries on the 8th. Night minima below the freezing point in the shade were experienced in numerous neighbourhoods, below 25° in several instances—on the 2nd, 22° at Newton Rigg, Cally, West Linton and Fort William, 21° at Balmoral and 20° at Wokingham and Fort Augustus; on the 6th, 18° at Balmoral; and on the 10th, 22° at Llangammarch Wells.

After the 7th the anti-cyclone diminished in intensity, and by the evening of the 10th it was withdrawing across the Bay of Biscay.

Concurrently, the depression situated far out on the Atlantic moved north-eastward towards Iceland, then eastward to Shetland by the morning of the 12th. The distribution of pressure over these islands underwent a complete alteration, and for the rest of the month cyclonic conditions prevailed. From Shetland the disturbance already referred to passed across Denmark to North Germany and Russia. It was followed immediately by another which appeared off the South of Iceland on the morning of the 12th. Over Britain these systems produced the lowest barometer readings of the month, 29.19 ins. at Stornoway on the evening of the 12th. From the 14th to the 20th, a large system of low pressure occupied the ocean beyond our western coasts. On the 21st, it advanced towards Ireland, where on the following day the barometer fell rapidly, until at 4 p.m. on the 22nd it touched 28.8 ins. at Blacksod Point. The system then withdrew to the Atlantic, to about 53°N., 25°W., on the morning of the 24th. From this position it advanced slowly towards the south-west of Ireland, and between the 26th and 28th, it moved north-eastward across Ireland and Scotland to Southern Norway. Smaller secondary disturbances visited the country on the 24th, 28th and 29th. During this disturbed period of nearly three weeks strong or high winds were felt on most days. On the 13th, Stornoway had a westerly gale; on the 21st, Roche's Point a strong southerly gale, with gusts attaining a velocity up to 66 miles per hour; on the 22nd, Blacksod Point a south-westerly gale, Holyhead and Pendennis and Roche's Point a southerly gale; and on the 23rd, Malin Head a south-easterly gale. The weather throughout this period was of a typical April character in all parts of the Kingdom, with bright sunshine more than usually abundant, and yet rain was almost of daily occurrence, mostly in gentle showers, but on the 15th, an inch was measured at Ballinacurra; on the 22nd, 1.3 in. at Abersychan (Monmouth), and 1.1 in. at Sheepstor (Dartmoor); on the 23rd, an inch at Abersychan; and next day an inch at Uldale (Cumberland). In the closing days hail, and on the 30th, sleet and snow fell in many districts. Mildness prevailed during the first fortnight of this broken weather, with no great variations of temperature, but the last week was distinctly colder, and on the 30th, the maximum was below 50° over a large extent of country, violent fluctuations of as much as 10° or 12° occurring with some of the snow squalls. Thunderstorms were experienced at one or other of our stations on nearly every day in some parts of the country, but with the exception of Norwich on the 27th, and Newquay on the 29th, they were not noted as of any great severity.

Aurora was observed at Deerness on the 11th, and at Gordon Castle on the 16th.

There was a good deal of fog reported on the western and eastern coasts from the 7th to the 10th, and on the English Channel from the 14th to the 19th; at times it was rather thick.

On all coasts there was a general increase in the temperature of the sea water since March, the greatest being along the coast of Sussex and Kent. Off the west of Ireland and the north-east of Scotland the water was slightly warmer than the air on shore, but in nearly all other localities it was colder, by as much as 4° or 5° along the east of England.

Rainfall.—In many parts of eastern, central and southern England, and at some places in the north of Scotland, the total rainfall for the month was slightly below the average. In all other districts an excess was reported, and in parts of Ireland and the west of Scotland affected by the heavy downpour of the first 5 days the excess was large, the aggregate being in many places more than twice as much as the normal. At Dublin (City) so large an April rainfall had not been recorded since the year 1877. Our map shows the heaviest rainfall—over 8 ins.—in two small areas situated in the south-west of Ireland and the central part of North Wales respectively. The largest total shown in the tables is 6.6 ins. at Ballinacurra. In many parts of eastern, central and southern England less than an inch and a half was collected, the smallest amounts being 0.9 in. at Cromer and Jersey and 1.0 in. at Brighton. Ireland and the west and north of Scotland experienced a measureable quantity of precipitation on 20 or more days, and Foynes and Roche's Point on as many as 27 days, the number decreasing to 15 or less in the drier portions of England generally, to 10 at Rauceby, Lincoln and Cambridge, and to 9 at Raund.

Bright Sunshine.—Over the country generally the aggregate duration was in excess of the normal, the finest weather occurring in the east and south east of England, where the total amounted in many places to more than 60 per cent. of the possible duration. In London (at Westminster) the total of 220 hours was as many as 107 above the average, and was 13 hours in excess of anything registered in April since the recording instrument was installed in 1883. In Scotland and in some portions of the south west of England the amount agreed very closely with the normal.