

SUMMARY of the OBSERVATIONS made at the STATIONS included in the DAILY and WEEKLY WEATHER REPORTS for the CALENDAR MONTH,

JULY 1900.

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General Summary.—In Ireland and Scotland the weather during July was very changeable, with frequent, and in many cases heavy, falls of rain. Similar conditions prevailed over England during the opening week, and also at the close of the month, but at other times the weather was mostly fine and very warm. Thunderstorms were, however, of frequent occurrence throughout nearly the whole month, and in many places they were accompanied by exceedingly heavy falls of rain and hail. Pressure was slightly above the average; temperature was high, especially over England; the winds were mainly from points between South and West; rainfall was very deficient over England, but exceeded the average in Scotland and many parts of Ireland; bright sunshine was abundant at all but the Scotch stations.

Pressure.—*Mean at 8 a.m.* ranged from a little above 30·05 ins. at Jersey, and from 30·0 ins. and upwards over the southern parts of the United Kingdom generally, to 29·9 ins. and less in the north of Scotland. The general distribution agreed very closely with the normal, but the mean values were above the average,* the excess varying in most places between 0·06 in. and 0·08 in. *Highest* readings occurred on the 7th or 8th, when the barometer rose to 30·3 ins. and upwards over Ireland, Wales, and the south-west of England, and to 30·2 ins. and upwards in nearly all other parts of the Kingdom. *Lowest* readings were recorded on the 1st or 2nd, when the barometer fell to 29·4 ins. and less in the north of Scotland, and to 29·7 ins. or less in all other districts. *Range* was rather small for the time of year.

Depressions were fairly numerous for the season, but were of slight intensity. Most of the systems moved in the usual easterly or north-easterly track, but at the close of the month (between the 27th and 30th) a rather well marked depression advanced due northwards over our western coasts. On reaching the west of Scotland the system changed its course and travelled in an irregular north-easterly direction across the North Sea and on to Central Scandinavia, where it appears to have dispersed.

Anticyclones.—In the course of the month several anticyclones of moderate intensity drifted across these islands from the Atlantic, their presence in our neighbourhood being, as a rule, very brief. On the 15th and 16th a large system extended over the eastern parts of Great Britain from the Continent, but this soon moved away to the southward. On the 20th a small system was formed between the Scotch and Norwegian coasts, the system moving away to the northward on the 22nd.

Winds were mainly from the Southward or South-westward in Ireland and from the Westward over England, but were very variable in Scotland. Slight North-westerly gales were experienced on some of the more exposed parts of our north-west, north, and north-east coasts on the 6th and 7th, and again on the 30th or 31st; with these exceptions the wind was usually light or moderate in force.

Temperature *Mean at sea level* ranged from 68° in London, and 66° and upwards over central and the inland parts of southern England generally, to 57° and less on the north coasts of Scotland and to a little below 54° in the Shetlands. The general distribution was of the ordinary July type, but the thermometric gradient between coast and inland stations was steeper than that shown on the chart of normal values. The individual means were in all cases above the average*, the excess being slight in Scotland, but larger in Ireland, and still larger over England; at many inland stations in England the mean values were more than four degrees above the average, while at Cambridge the excess amounted to more than five degrees. *Highest* readings were recorded over the northern parts of the United Kingdom mostly between the 10th and 12th, in the central and southern parts of England on the 19th, and in Ireland and the east of England on the 24th and 25th. Over the greater part of Ireland and Scotland the thermometer rose very little above 75°, but in England it exceeded 85°, the highest readings reported being 95° at Cambridge, 92° in London, 91° at Hillington, and 90° at Oxford. In London and at Cambridge a shade maximum of 90° or more was recorded on four days. *Lowest* readings occurred mostly on the 8th, when the thermometer fell to 40° or less at many of our northern and central stations, the lowest reading being 36° at Llandovery. A reading of 37° was, however, recorded at Braemar on the 1st, and at Wick on the 4th. *Range* was large, especially over central England, where it amounted in many places to more than 45°; at Cambridge and Llandovery it was as much as 52°. *Vapour Tension* ranged from 0·48 in. at Spurn Head, and 0·45 in. and upwards on all our eastern and southern coasts, to 0·40 in. and less on the north and north-east coasts of Scotland. *Relative Humidity* ranged from 91 per cent. at Pembroke, and 85 per cent. or more on our south-western, western and extreme northern coasts generally, to 73 per cent. at Jersey, and 72 per cent. at Loughborough, Oxford, and London.

Rainfall was in excess of the average* over the greater part of Scotland, and also at some of the Irish stations. Over England there was a general deficiency, the amounts in the south being as a rule considerably less than half the normal. The largest aggregates reported were 5·6 ins. at Glencarron, 4·6 ins. at Laudale, and 4·5 ins. at Fort Augustus, Fort William, and Dublin; the smallest being 0·5 in. at Dungeness, 0·6 in. at Portland Bill, and 0·7 in. at Felixstowe. In the extreme northern and north-western parts of the Kingdom the number of days with rain was very large (28 at Glencarron and 29 at Laudale); in the south, however, there were very few such occasions—less than 10 in many places, and only 4 at Dungeness. Thunder rains of considerable weight occurred in several parts of England on the 12th, 16th, and 20th, and over a large portion of Ireland on the 27th or 28th, the heavy rain being accompanied in some instances by destructive falls of hail.

Bright Sunshine was rather deficient in Scotland, but exceeded the average* in England and Ireland. The percentage of the possible duration ranged from 66 at Hollesley Bay, Hastings, Jersey, and Guernsey, and 60 or more on many other parts of our south and east coasts, to 30 or less in the north of Ireland, and to 20 or less in the north and west of Scotland.

* The averages employed are—*Pressure and Temperature* for the 25 years 1871–95; *Rainfall* for the 30 years 1866–95; and *Bright Sunshine* for the 15 years 1881–95. (See preface to "Weekly Weather Report, 1895," and preface to "Daily Weather Reports, July–December, 1896.")