

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

SEPTEMBER 1899.

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General Summary.—The weather of September was very unsettled, especially during the closing week, when thunderstorms and heavy rains occurred in nearly all districts. On the 6th and 7th similar weather was experienced over the south and east of England, a torrential fall of rain being experienced in London during a short but sharp thunderstorm which occurred on the former date. Pressure was low; temperature was below the average in the north and north-west, but above it elsewhere; the winds were chiefly Westerly, with frequent gales on the more exposed parts of our north and north-west coasts; rainfall was in excess of the average at all but our south-western and a few of our southern stations; bright sunshine was rather deficient in Ireland, but considerably above the normal in nearly all parts of Great Britain.

Pressure.—*Mean at 8 a.m.* ranged from 29.95 ins. and upwards in the south-west of Ireland and the Channel Islands, and from 29.90 ins. and upwards over the south-western parts of the Kingdom generally to 29.6 ins. and less in the extreme north of Scotland. The values were in all cases below the average,* the amount of deficit being very small in the south-west, but large (0.20 in. or more) in the extreme north and north-east of Scotland. The gradient over our islands was consequently much steeper than usual, the difference between the mean readings at our extreme northern and extreme southern stations being nearly twice as great as that shown by the average values. *Highest* readings were reported between the 9th and 11th, when the barometer rose to 30.3 ins. and upwards in the west and south of Ireland, to 30.2 ins. and upwards over our western and southern districts generally, and to 30.1 ins. and upwards on our north and east coasts. *Lowest* readings occurred in the north on the 26th, the barometer falling below 28.8 ins. in Caithness and below 29.0 ins. over Scotland generally. Over the central and southern parts of the kingdom the lowest readings (29.2 ins. to 29.4 ins.) were recorded on the 30th. *Range* was moderate generally, but rather large in the extreme north.

Depressions.—These were very numerous, the centres passing, in the majority of cases, along our extreme northern coasts, and thence on to Scandinavia and Denmark. A striking feature in connection with these systems was the very strong tendency they evinced to disperse on reaching the neighbourhood of the Baltic. On the 30th of the month a well-marked depression was developed over England near the Welsh border, the centre moving, firstly, in a southerly direction to the mouth of the Channel and, afterwards, in a north-easterly direction across England and the North Sea.

Anticyclones.—The only anticyclone observed in the immediate neighbourhood of our islands spread in from the Atlantic on the 8th, its central area remaining almost stationary off our extreme west and south coasts until the 12th, when it extended temporarily over nearly the whole of Ireland and England. After the 14th the entire system moved away, first to the south-westward and afterwards to the southward.

Winds were chiefly from the Westward, the tendency being to draw into South-west in the north, but into North-west in the south. On the more exposed parts of our north-west, north and east coasts gales were rather numerous, the number of days affected being as large as 11 at Holyhead and Malin Head, and 10 at Liverpool, as well as at Portland Bill.

Temperature.—*Mean at sea level* ranged from 62° and upwards at Jersey, and 60° and upwards at all the English Channel stations west of Southampton, to 54° and less in inland parts of the north of Ireland, to 52° and less on the north coasts of Scotland, and to 50° and less in the Shetlands. The general distribution agreed very fairly with the normal, but as the actual mean values were below the average,* in the north and north-west, and above it elsewhere, the thermal gradient over our islands was somewhat steeper than usual. *Highest* readings occurred mostly on the 4th or 5th, when the thermometer rose to between 80° and 85° at many of the English stations, to 88° at Hillington and Cambridge, and to 89° in London. In Ireland and Scotland it did not rise much above 70°. *Lowest* readings were registered very generally on the 28th or 29th, but in many parts of Ireland and the south-west of England on the 30th; on one or other of these dates the thermometer in the screen fell slightly below 32° at many of our northern and central stations, the lowest reading reported being 29° at Markree Castle and Parsonstown. *Range* was generally large, especially in the east and south-east of England, where it amounted, in many places, to over 50°; at Stamford and Geldeston it was no less than 55°. *Vapour Tension* ranged from between 0.40 in. and 0.45 in. over the English and Bristol channels, to 0.34 in. and less over the whole of Scotland, and to 0.31 in. at Sumburgh Head and Aberdeen. *Relative Humidity* varied from 91 per cent. at Shields and 90 per cent. at Portland Bill, to 78 per cent. in London and at Aberdeen, and to 77 per cent. at Jersey.

Rainfall.—This varied considerably in amount in different localities. Over all the more northern and eastern parts of the kingdom it was, as a rule, in excess of the average*, and in the north of Scotland the excess was large. At the south-western and many of the southern stations, however, there was a deficit, especially marked about the mouth of the St. George's Channel. The largest amounts reported were 16.1 ins. at Glencarron, 9.1 ins. at Stonyhurst, and 8.9 ins. at Laudale; the smallest being 0.8 in. at Roche's Point, 1.4 in. at Pembroke, and 1.7 in. at Felixstowe. Falls exceeding an inch in 24 hours were recorded in many places, the more general of these occurring:—(1) on the 6th and 7th over all the more southern and eastern parts of England; (2) on the 29th and again in the same locality, and (3) on the 30th in Scotland. In London (at Brixton) during a smart thunderstorm on the 6th, an inch of rain was collected in the space of half-an-hour.

Bright Sunshine.—Over the country generally the amount of bright sunshine was in excess of the average,* a slight deficiency being shown, however, in Ireland, and at some stations in the north of Scotland. The percentage of the possible duration ranged from 50 and upwards on several parts of our south and east coasts to 25 at Braemar, 24 at Strathpeffer Spa, 22 at Fort Augustus, and 19 at Fort William.

* 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.