

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

SEPTEMBER 1898.

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General Summary.—In some of the western and extreme northern districts the weather of September was rather changeable with occasional falls of heavy rain. Elsewhere, however, it was mostly fair and very dry, the latter characteristic being especially marked over the eastern half of England. During the early part of the month thunderstorms were experienced in many places, while on the 9th a brilliant aurora was seen over nearly the whole kingdom. Pressure was above the average; temperature was also high, especially in Ireland; the winds were variable in the south, but Westerly in the north; rainfall was very deficient over England, but exceeded the normal in the north of Ireland and the west and north of Scotland; bright sunshine was, as a rule, far in excess of the average.

Pressure.—*Mean at 8 a.m.* ranged from 30·1 ins. and upwards over the central and southern parts of England to 29·9 ins. or a little less in the north of Scotland, the general distribution being of an anticyclonic type. The mean values were everywhere above the average,* the excess being slight (0·06 in. to 0·07 in.) on our extreme western and northern coasts, but much larger (0·12 in. to 0·14 in.) over the eastern and central parts of England. *Highest* readings were observed very generally on the 3rd or 4th, when the barometer rose to 30·4 ins. and upwards over England, and to 30·3 ins. and upwards in Ireland and Scotland. *Lowest* readings occurred mostly on the 29th or 30th, when the barometer fell to between 29·4 ins. and 29·5 ins. over Ireland and Wales, to about 29·6 ins. in the south of England, and to 29·8 ins. and less on our north and east coasts. In the north of Scotland lower readings occurred at several other times during the month, the lowest of all (29·5 ins. and less) being observed on the 10th. *Range* was moderate for the time of year.

Depressions.—The depressions observed in our immediate neighbourhood were few in number and, as a rule, of very little importance. On the 29th, however, a rather deep disturbance advanced over Ireland, the system ultimately moving south-eastwards across Wales and the south of England to France, where it quickly dispersed.

Anticyclones.—During the first six or seven days of the month, and again between the 12th and 17th, an anticyclone advanced from the Atlantic and gradually spread over a considerable portion of Europe, the system in each case breaking up over the more central countries. On the 19th and 20th our southern districts were affected by an area of moderate size and height which moved eastwards across the Bay of Biscay and France; while on the 21st another anticyclone spread over our islands from the north-westward, the system remaining over North-western Europe until the 25th, when it moved away to the north-eastward and dispersed.

Winds varied greatly in direction in the south, but were mostly from the Westward or South-westward in the north. At the majority of our eastern and southern stations the wind never reached the force of a gale, but on most parts of our western and northern coasts this occurred on one or two days, at Aberdeen on four days, and at Scilly on five.

Temperature.—*Mean at sea level* ranged from a little below 64° in the Channel Islands, and from 62° and upwards over a considerable portion of the south of England, to 56° and less in the north-west and north-east of Scotland, and to 53° and less in the Shetlands. Over Great Britain the general distribution was in fair agreement with the normal, but in Ireland there was an absence of the cold area which usually appears over the more northern parts of that country in September. The mean values were in nearly all places considerably above the average,* the excess being upon the whole greatest over the inland parts of Ireland, where it amounted to between four and a half and five degrees. *Highest* readings were observed at the western and northern stations between the 4th and 6th, but in the eastern, central and southern districts on the 8th or 9th. The readings about this time were unusually high for the time of year, the thermometer rising to between 80° and 85° in nearly all parts of Great Britain, as well as at some of the Irish stations, and reaching 90° in several parts of England. On the 8th a maximum of 91° was recorded in London, and 92° at Cambridge and Hillington. *Lowest* readings occurred on various dates between the 24th and 29th, when frost occurred in many parts of Great Britain, the lowest reading in the screen being 29° at Loughborough, Shirley, Churchstoke, and Hereford. *Vapour Tension* ranged from 0·48 in. in the Scilly Islands and 0·44 in. and upwards on our south and south-west coasts generally, to between 0·36 in. and 0·38 in. in the north and east of Scotland and the north-western and central parts of England. *Relative Humidity* varied from 93 per cent. at Sumburgh Head and 92 per cent. at Malin Head, to 79 per cent. at Liverpool and the North Foreland, and to 78 per cent. at Aberdeen and Jersey.

Rainfall was in excess of the average,* in the north of Ireland and the west and north of Scotland, but was very deficient elsewhere, and especially in the eastern parts of England, where the amount was, as a rule, the smallest recorded in September for more than 30 years past. The largest aggregates reported were 10·2 ins. at Fort William, 9·4 ins. at Glencarron, and 8·8 ins. at Laudale; the smallest were 0·12 in. at Spurn Head, 0·13 in. at Shields, and 0·16 in. at Scarborough, less than half-an-inch being collected at many other stations in the eastern and central parts of England. At many of the English stations there were less than five days with rain, and at Stamford and Cambridge only two. The largest falls in 24 hours occurred mainly on the 29th, when 1·7 in. fell at Ochertyre, and 1·6 in. at Donaghadee and Shaftesbury.

Bright Sunshine was considerably in excess of the average* over the country generally, but was rather deficient in the north of England and the south of Scotland. The percentage of the possible duration exceeded 55 at most of our south coast stations, and was as high as 71 at Guernsey, and 68 at Jersey. The lowest percentages were 19 at Glasgow, 24 at Newcastle-on-Tyne and 27 at Edinburgh and Morpeth.

* 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.