

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

SEPTEMBER 1893.

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General Summary.—The weather of September was rainy and unsettled in the northern and also in the extreme southern parts of the United Kingdom, but mostly fair and dry in the intermediate districts. Snow or sleet was experienced at many of the northern stations between the 22nd and 24th. Pressure was low, the deficiency being greatest in the north; temperature differed but little from the normal; the winds were chiefly Westerly; rainfall was less than the average in most places, but showed a considerable excess in the north of Scotland as well as at some of the English Channel stations. The duration of bright sunshine was in excess of the normal.

Pressure.—*Mean for the Month at 8 a.m.* ranged from 29·90 ins. and upwards in the extreme southern and south-western parts of our Islands to a little above 29·55 ins. in the Shetlands. The values were below the average* in all districts, the deficit being greatest (0·15 in. to 0·20 in.) in Scotland and least (about 0·02 in.) in the south of Ireland. The mean gradient was therefore steeper than usual, and the general distribution of pressure was favourable for winds from a more Westerly quarter than is shown by the map of normal values. *Highest* readings were observed mostly on the 12th, when the barometer rose to between 30·1 ins. and 30·2 ins. in Scotland and to 30·3 ins. or more over the greater part of Ireland and England. *Lowest* readings occurred on the 29th or 30th, when the mercury fell to a little below 28·7 ins. in the Hebrides to 29·0 ins., or less, over Scotland generally, and to about 29·3 ins. on our extreme southern coasts. *Range* was moderate in the south, but rather larger in the north.

Depressions.—Throughout the greater part of the month a series of large cyclonic systems passed from the westward across the northern parts of Scandinavia, their tracks lying in most cases outside the limits of Map 2, Plate IX. In some few instances, however, secondary disturbances were developed over the North Sea and the south of Scandinavia, the path followed by the system of the 21st and 23rd being somewhat irregular. The only depression of note which appeared in the neighbourhood of our southern coasts was a rather well-defined system which advanced towards the mouth of the Channel on the 10th, and which afterwards travelled south-eastwards and southwards to the Bay of Biscay and Spain.

Anticyclones.—The only anticyclones observed over our Islands were:—(1.) An area of moderate intensity, which moved eastwards across the United Kingdom on the 2nd and 3rd, and which afterwards travelled south-eastwards to the Continent; and (2.) A large system which spread over from the north-westward on the 10th and 11th, and which finally passed away to the southward on the 15th.

Winds were chiefly from the Westward, and a considerable number of gales occurred on our southern and extreme northern coasts. At Stornoway the wind reached the force of a gale on as many as 11 days.

Temperature.—*Mean at Sea Level* ranged from a little below 62° at Jersey and from between 58° and 59° over the south-east counties and on the extreme south-western coasts of England, to a little below 50° in the Shetlands, the general distribution agreeing very closely with the normal. The actual values were slightly above the average* in the western, central, and southern parts of England, and also in the north of Ireland, but a trifle below it in nearly all other districts. *Highest* readings were observed mainly between the 4th and 6th, when the thermometer rose to 70° or more in Ireland and Scotland, and to 75° or more over the inland parts of England; at Cambridge the reading on the 6th was as high as 80°, and that in London 81°. *Lowest* readings occurred in most instances between the 21st and 24th, when slight frost was observed in many parts of the kingdom. *Range* amounted to over 40° at a large number of the inland stations, the highest values of all being 48° at Lairg and Cullompton and 47° at Bawtry. *Vapour Tension* was least (0·30 in. to 0·32 in.) in the north-eastern parts of Great Britain and about 0·35 in. over central Ireland, and greatest (0·40 in. to 0·41 in.) on our extreme southern coasts. *Relative Humidity* ranged from 76 per cent. at Jersey and 77 per cent. at Aberdeen to 89 at Valencia, 90 and more in the north of Scotland, and to 96 per cent. at Hawes Junction.

Rainfall was in excess of the average* over the northern parts of Scotland, as well as at some stations in the north-west of Ireland, and the north-west and extreme south of England. Elsewhere there was a deficit, the amounts over the east of Ireland and a considerable portion of England being less than half the average. The largest aggregates were 15·4 ins. at Glencarron, 9·4 ins. at Fort William, and 7·9 ins. at Stornoway, the smallest 0·6 in. at Oxford and Cirencester, and 0·7 in. at Cambridge, Geldeston, Dublin, and Roche's Point. Falls exceeding 1 in. in 24 hours were recorded at several of the extreme northern stations, and also in the Scilly and Channel Islands, the largest of such amounts being 3·6 ins. at Glencarron, and 2·9 ins. at Fort William on the 12th, and 1·9 ins. at Jersey on the 16th.

Bright Sunshine exceeded the normal quantity in nearly all places, but the amount of excess varied greatly in different localities. More than 40 per cent. of the possible duration was registered over nearly the whole of England, the highest values of all being 51 per cent. at Jersey, and 50 per cent. at Torquay. In Scotland less than 30 per cent. was recorded at the majority of the stations, the smallest value being 23 per cent. at Fort Augustus.

* The averages employed are—*Pressure and Temperature* for the 20 years 1871–90; *Rainfall* for the 25 years 1866–90; *Bright Sunshine* for the 10 years 1881–90.