

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

AUGUST 1889.

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General Summary.—The weather of August was cool, windy, and wet. Pressure was considerably below the average in the north and gradients (for Westerly winds) steep for the time of year. Temperature was below the average generally; the range being small in Ireland, moderate elsewhere. The prevailing winds were Westerly or South-westerly; on our western and southern coasts they were frequently strong in force. Rainfall was largely in excess of the average, and thunderstorms were very prevalent during the earlier part of the month.

Pressure.—*Mean for the Month* varied from 29·65 ins. and less in the neighbourhood of the Shetlands to 29·9 ins. and upwards over England and the southern parts of the English Channel. In the latter region the values agreed fairly well with the average,* but in the extreme north they were nearly two tenths of an inch below the normal; and the mean gradient was therefore considerably steeper than is usual in August. *Highest* values were recorded generally on the 31st, when the readings over the United Kingdom and its immediate neighbourhood varied between 30·1 ins. and 30·2 ins. or a little above. *Lowest* were observed during the passage of some well-marked depressions over our Islands on the 20th and 21st, when the barometer fell in most districts to between 29·1 ins. and 29·5 ins. *Range* was moderate—less than an inch in many places.

Depressions were unusually numerous for the time of year, and in many cases their centres passed eastwards and north-eastwards directly across the kingdom. (See Map 2, Plate VIII.) The two most important were those of the 19th–20th and 21st–22nd; on the former date the centre travelled north-eastwards from the Bristol Channel to the west coast of Norway, while in the latter case it moved in about an east-north-easterly direction from the west of Ireland to the extreme south of Norway, after which it travelled northwards.

Anticyclones.—The highest pressures lay as a rule to the southward or south-westward of our Islands, but on the 26th and 27th an anticyclonic system extended northwards over the southern parts of the kingdom, while at the close of the month another area was in process of formation directly over us.

Wind.—The prevailing winds were Westerly in the west and south, South-westerly in the north and north-east, but in the Shetland Islands there was a somewhat large admixture of breezes from the eastward. Gales were unusually frequent for the time of year, especially on our southern coasts; at Pembroke and Hurst Castle there were nine such occurrences.

Temperature.—*Mean at Sea Level* ranged from 60° to 61°, and a little more, over the central and south-eastern parts of England and from 58° and a little more over the east and south of Ireland and some isolated parts of central Scotland, to a little below 54° in the Shetlands. The values were below the average* for August in all parts excepting the extreme north of Scotland, the deficit being from two to three degrees over England and a little above three degrees in many parts of Ireland. *Highest* readings were recorded either on the 1st of the month or on the 30th or 31st; in the western and northern parts of the kingdom the earlier date was as a rule the warmer, while in the south the absolute maxima were registered at the close of the period. *Lowest* readings occurred at varying times during the concluding week. *Range* was small in Ireland (only 17° at Valencia and 22° at Armagh), greater over England (42° at Hillington). *Vapour Tension* varied from 0·36 inch in the north-east of Scotland and 0·38 inch over the central parts of southern Ireland to between 0·46 inch and 0·49 inch over the central portion of the English Channel. *Relative Humidity* was least in the east of Scotland (77 at Aberdeen), but in other districts the value differed considerably; the highest were observed respectively in the Shetlands, the Hebrides, the north-east of Ireland, and the north-west and extreme south of England, in each of which localities the humidity exceeded 90.

Rainfall was least in the east and south-east of England (Dungeness 1·77 ins., Cambridge 1·86 ins.), greatest over the northern and western parts of the kingdom; more than 11 inches at Hawes Junction, nearly 9 inches at Glencarron, and more than 7 inches at several stations in the west of Ireland, as well as at Laudale and Braemar. Over Ireland, the north of England, and the south of Scotland the largest daily fall was observed on the 19th, but elsewhere the heaviest amount occurred on varying dates. The aggregate fall for the month was slightly less than the average* in some parts of central and southern England, but considerably more in all the western and north-eastern districts. At some of the northern Irish stations and also at Hillington the amount was more than double the average.

Bright Sunshine varied from less than 20 per cent. of the possible duration in some of the central parts of Ireland and Scotland to 40 per cent. and upwards in the east and south of England. The lowest per-centages were 6 at Glencarron and 17 at Armagh; the highest were 48 at Jersey and 47 at Hastings.

* The averages employed are—*Pressure* and *Temperature*, for 20 years 1861–80; *Rainfall* for 20 years 1866–85.