

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

AUGUST 1890.

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General Summary.—The weather of August was cool, showery, and unsettled, with severe thunderstorms in many parts of the country. Pressure was below the average generally, the deficiency being greatest in the north; temperature was also below the normal, especially in the more western and northern parts of the kingdom; the wind was chiefly Westerly, and blew with considerable strength in the west and south; and rainfall was considerably in excess of the average in most of the western and northern districts. Bright sunshine was fairly prevalent in the south, but very deficient in the north and north-west.

Pressure.—*Mean for the month at 8 a.m.* ranged from about 29·96 ins. in the Channel Islands and from between 29·90 ins. and 29·93 ins. over the southern parts of England and Ireland generally, to 29·75 ins. in the Hebrides and 29·72 in the Shetlands. The relative distribution of pressure was therefore of a fairly normal character, but the values were everywhere below the average*; and, as the deficit was greatest (about 0·10 in.) in the extreme north, and least (about 0·05 in.) in the south, the gradients were somewhat steeper than usual for the time of year. *Highest* values were observed over the country generally on the 31st, when the barometer rose to between 30·1 ins. and 30·3 ins., but in many districts readings of almost equal height were observed on various occasions during the earlier half of the month. *Lowest* readings were recorded mostly on the 27th, when the barometer fell to between 29·2 ins. and 29·4 ins. In the northern parts of the kingdom, however, lower readings (29·0 ins. to 29·1 ins.) were registered during the passage of the well-marked depression of the 15th. *Range* was moderate.

Depressions.—The depressions observed were mostly shallow, but on the 15th a rather deep one moved north-eastwards across the northern parts of the kingdom, and occasioned gales over Ireland and England. The majority of the low-pressure systems travelled in an easterly or north-easterly direction across our Islands and the North Sea to Scandinavia, where they dispersed.

Anticyclones.—Four such systems were observed. In two cases the central portion of the anticyclone lay over France, and its influence was therefore confined to our southern districts. Between the 6th and 10th, however, a well-marked system moved slowly north-eastwards across the British Islands to Scandinavia, while at the close of the month a definite anticyclone spread over the United Kingdom from the westward.

Wind was mainly from some Westerly point, but at most stations there was a fair proportion of winds from the Eastward, while at Sumburgh Head there was much calm weather. Gales were numerous on many parts of our western and southern coasts; at Pembroke and Prawle Point there were as many as six, at Hurst Castle seven, and at Dungeness and Mullaghmore nine. At Valencia, however, there were only two, and at Belmullet and Roche's Point none at all.

Temperature.—*Mean at Sea Level* varied from 61° and upwards over Surrey, Hampshire, and portions of Sussex and Devonshire to a little below 55° in the inland parts of the north-west of Ireland and to a little below 53° in the Shetland Islands. These values were everywhere below the average,* the deficit being small in the south of England, but large in all other districts. A well-marked area of cold is shown over the north-western and central parts of Ireland, where the mean temperature was as much as 4° or 5° below the normal. In the north of Scotland the general distribution was of a fairly normal character, but in other parts of Great Britain the ordinary summer type was greatly marked, while in Ireland it was altogether wanting. *Highest* readings were observed, as a rule, some time between the 4th and 8th; in Scotland the thermometer did not reach 75°, but over England it rose considerably above that point, the highest readings of all being 82° at Cambridge and 81° at Hillington, Loughborough, and in London. *Lowest* readings were observed mostly on the 30th or 31st, when the thermometer fell below 40° in nearly all districts. At Braemar and Markree Castle the absolute minimum was 32°, while at Glenlee and Llandoverly it was as low as 31°. *Range* was generally moderate, but at Bawtry, Loughborough, and in London it amounted to 42°, while at Hillington, Cambridge, Strathfield Turgiss, and Llandoverly it reached 43°. *Vapour Tension* ranged from 0·35 in. at Sumburgh Head and Aberdeen, and 0·37 in. at Malin Head and Mullaghmore, to between 0·40 in. and 0·45 in. over the south-west of Ireland and the south of England. *Relative Humidity* varied from 79 per cent. at Jersey and less than 85 per cent. over the northern and eastern parts of England, the south and east of Scotland, and most of the coasts of Ireland, to 90 per cent. at Hurst Castle, 91 per cent. at Stornoway, and 93 per cent. at Hawes Junction and Pembroke.

Rainfall was less than the average* in the south-east of Ireland and the eastern, central, and south-western parts of England, the measurements in these localities varying between 1·5 ins. and 2·5 ins. In all other parts of the kingdom, however, there was a decided excess, the amounts being particularly large in the west of Scotland and the northern parts of Ireland and England; at Stonyhurst the total was as much as 7·0 ins. and at Glencarron 9·4 ins., while at Hawes Junction there was as much as 9·7 ins. The number of rainy days was somewhat large, especially in the western and northern districts, where it exceeded 20; at Stornoway there were as many as 25, and at Lairg 26, while at Aberdeen there were no fewer than 27. Amounts exceeding 1 in. in the space of 24 hours were recorded at one time or another in most districts.

Bright Sunshine was fairly abundant over the southern parts of the United Kingdom, the percentage of the possible amount of duration being as high as 59 at Jersey, 51 at Pembroke, 49 at Southampton, and 48 at Falmouth, Plymouth, and Valencia. In the north and north-west, however, there was a marked deficiency, the per-centage values being as low as 21 at Fort Augustus, 25 at Fort William and Braemar, 26 at Leith, and 27 at Armagh.

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