

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

AUGUST 1891.

(Issued as a Supplement to the Weekly Weather Report, 1891.)

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General Summary.—The month of August was exceedingly cool and unsettled, with heavy rain in nearly all parts of the United Kingdom and with strong gales during the last week. Thunderstorms were of frequent occurrence over England. Pressure and temperature were each below the average; the winds were mainly Westerly or South-westerly; and rainfall was greatly in excess of the normal, especially in the western and southern districts. The amount of bright sunshine was small for the time of year.

Pressure.—*Mean for the month at 8 a.m.* ranged from a little above 29·90 ins. in the Channel Islands and a little above 29·85 ins. in the extreme south of England to between 29·60 ins. and 29·62 ins. in the Shetlands and Hebrides. The distribution was therefore of a fairly normal character, but the actual values were everywhere below the average*; and as the deficit was least (0·05 in. to 0·10 in.) in the extreme south, and greatest (0·15 in. to 0·20 in.) over the northern parts of the kingdom, the mean gradient over England and Ireland was steeper than is ordinarily the case in August. *Highest* readings occurred very generally on the 6th or 7th, when the barometer rose to between 29·9 ins. and 30·0 ins. in Scotland and to between 30·1 ins. and 30·3 ins. over Ireland and England. *Lowest* readings were observed in the northern parts of the kingdom on the 25th or 26th, when the barometer fell as low as 28·6 ins. in the Shetlands, and below 29·0 ins. over our northern districts generally. In the south of England, however, the minimum readings were recorded on the 20th or 21st. *Range* was considerable for the time of year.

Depressions.—During the earlier half of the month numerous depressions passed over our Islands, but the systems were too shallow and ill-defined for their tracks to be shown in Map 2, Plate VIII. Towards the close of the period some very deep disturbances skirted our north-western and northern coasts, the two most important being those of the 25th–26th and the 31st August–1st September, each of which produced strong gales over nearly the whole kingdom.

Anticyclones.—No well-defined anticyclones appeared immediately over our Islands. On the 6th a small system spread from the Atlantic over our western coasts, but this soon passed away to the southward. At other times the highest pressures were located to the southward or south-eastward of the United Kingdom.

Winds.—The prevailing winds were Westerly and South-westerly, excepting in the extreme north, where variable and North-easterly breezes were reported; at Sumburgh Head there was a large proportion of calms. Very few gales were experienced in the north, but an unusually large number at some of our western and southern stations; at Dungeness there were 7, at Hurst Castle 8, and at Mullaghmore as many as 13.

Temperature.—*Mean at sea level* ranged from a little below 62° at Jersey and slightly above 60° over the inland parts of our southern counties to a little above 52° in the Shetlands, the distribution over the more central parts of the kingdom being very irregular. The values were everywhere below the average,* the deficit varying from rather less than a degree in the north of Scotland to between two and three degrees over the greater part of England and also in the south of Ireland. *Highest* readings were observed on varying dates, but mostly between the 13th and 18th; in very few instances did the thermometer reach a maximum as high as 75°. *Lowest* readings occurred mainly on the 30th, when the thermometer fell below 40° in many parts of the kingdom; at Glenlee it sank to 34°, at Nairn to 33°, and at Lairg to 30°. *Range* is somewhat small for the time of year. *Vapour Tension* ranged from 0·36 in. at Aberdeen to between 0·42 in. and 0·46 in. in the south of England. *Relative Humidity* was below 85 per cent. in all the more eastern and central parts of Great Britain, but above 90 per cent. in the extreme north and north-west of our Islands, and also in the south-west of England; the highest value of all was 95 per cent. at Stornoway.

Rainfall was considerably more than the average* in all localities excepting the north of Scotland, the excess being especially great over the western and southern parts of the kingdom. On the south and south-west coasts of England and at several stations in the eastern and central parts of Scotland the fall amounted to between 5 and 7 ins., while in central Ireland, the north-west of England, and portions of Wales and Devonshire it exceeded the latter figure, the largest aggregates of all being 14·8 ins. at Hawes Junction, 9·9 ins. at Stonyhurst, and 9·6 ins. at Arlington. The most important fall in the space of 24 hours occurred during the progress of the depression of the 20th (shown in Map 2, Plate VIII.), when amounts varying from an inch to an inch and a half or rather more were recorded over all the southern and south-eastern counties of England. An equally heavy fall occurred in some parts of Lancashire between the 13th and 14th and resulted in heavy floods, but in this case the occurrence was purely local. The number of days with rain was very large, 25 or more being reported in many districts; at Llandoverly, Belmullet, and Foynes there were no fewer than 29.

Bright Sunshine was very deficient, the per-centage of the possible amount of duration being under 30 at a large majority of our stations and less than 20 in some parts of Scotland and the north of England. At the Channel stations, however, more than 40 per cent. of the possible amount was recorded, the highest per-centage of all being 45 at Guernsey.

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