

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

NOVEMBER 1898.

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General Summary.—At the commencement of the month the weather was very rough and unsettled, especially in the north and north-west, where extremely heavy rain fell, resulting in serious floods in the English lake Districts. After the first few days, however, the conditions became much quieter, and for more than a fortnight the weather was cloudy and mild, with very little rain, but with a good deal of wet mist or fog. Towards the end of the month another spell of rough wet weather set in, the rains being preceded and followed by snow in all the northern and central districts. Thunder and lightning occurred in South Wales and the South West of England on the 24th or 25th, and at several of the English Channel stations on the 27th. Pressure was rather low; temperature was above the average; the winds were variable in the south, but chiefly Westerly or South-westerly in the north; rainfall was deficient in all the central districts, but more than the average elsewhere; bright sunshine was mostly in excess of the normal.

Pressure.—*Mean at 8 a.m.* ranged from 29·85 ins. and upwards over the south-eastern parts of England to 29·70 ins. and less in the north of Scotland generally, and to 29·65 ins. and less in the Shetlands—the actual values being in all cases a trifle below the average.* The general distribution over our islands agreed very closely with the normal, the principal feature of interest in map 1, plate XI. being the peculiar manner in which the isobar of 29·8 ins. dips southwards over the Bristol Channel and the Scilly islands. The relatively low mean pressures in this region were due to the influence of a cyclonic disturbance which hung persistently over our south-west coasts between the 23rd and 26th. *Highest* readings occurred on the 18th or 19th, when the barometer rose to 30·4 ins. and upwards in the north-east of England, and to 30·2 ins. and upwards in all other parts of the kingdom. *Lowest* readings occurred as a rule on the 24th and 25th, the barometer falling to 28·7 ins. and less in the south-west of England, and to 29·2 ins. and less in all but the extreme northern parts of the kingdom. In the latter region the lowest readings (28·8 ins. to 29·0 ins.) were observed either on the 2nd or the 4th. *Range* was moderate for the time of year.

Depressions.—Until very nearly the end of the month no important depressions were observed in our own immediate neighbourhood, the large Atlantic disturbances moving in a track lying far to the northward of our islands, and passing across the north of Scandinavia. Towards the close of the month, however, the low pressure systems came more directly over us, the most important case being observed between the 23rd and 26th, when the centre of a deep depression advanced over Ireland from the north-westward and afterwards moved slowly, and in a very erratic course, over our south-west coasts. The influence of this disturbance upon the mean pressure in the south-west of England has already been noticed.

Anticyclones.—On the 6th an anticyclone spread temporarily from the Continent over the south-east of England, while on the 8th and 9th it again extended over all the more eastern parts of Great Britain, the system soon receding, however, in the direction from which it had originally advanced. On the 13th a new high pressure area spread over our islands from the westward and ultimately joined the European anticyclone, the combined system remaining in force until the 21st, when it broke into two portions—one moving away to the eastward, and the other to the westward.

Winds.—Over our southern districts the winds varied considerably in direction, but in the north they were mainly from the South-westward or Westward. Gales were somewhat frequent in the west and north, the number of days affected being as large as 12 at Donaghadee, 11 at Scilly and 10 at Aberdeen and Valencia. The Easterly and South-easterly gale which prevailed on our northern coasts between the 23rd and 26th was severe and prolonged, and occasioned a very high sea off the north and east of Scotland.

Temperature.—*Mean at sea level* ranged from 52° at Scilly, and 49° and upwards on the south-west coasts of England generally, to 45° and less over the central parts of Ireland, and to 42° and less over the northern and central parts of Scotland. The general distribution over our islands agreed very closely with the normal, but the actual values were in nearly all places above the average*, the excess being greatest in the south of England. *Highest* readings occurred mostly on the 2nd or 3rd, when the thermometer rose to 60° or more in nearly all parts of the kingdom, and to 66° at Killarney. *Lowest* readings were observed in the central and southern districts on the 22nd or 23rd, but in the more northern districts between the 28th and 30th. Sharp frost occurred at these times in most parts of the United Kingdom, the lowest temperatures reported being 9° at Braemar, 10° at Lairg, and 11° at Fort Augustus. *Range* was moderate generally, but large at some of the northern stations; at Fort Augustus and Braemar it amounted to 46°, and at Lairg to as many as 50°. *Vapour Tension* ranged from 0·30 in. and upwards on most parts of our south and south-west coasts to 0·22 in. and less in the eastern and central parts of Scotland. *Relative Humidity* exceeded 90 per cent. at several of the more central stations, and was as high as 97 per cent. at Spurn Head and Ardrossan; the lowest values were 84 per cent. at Valencia, and 86 per cent. at Aberdeen, Liverpool, Pembroke and Scilly.

Rainfall was rather deficient over all the more central parts of England, as well as at a few stations in the north of Ireland and west of Scotland, but exceeded the average* in almost all other localities. The largest aggregates reported were 9·9 ins. at Stornoway, 9·1 ins. at Glencarron, and 8·0 ins. at Belmullet; the smallest being 1·5 in. at Dungeness, 1·7 in. at Cambridge and Liverpool, and 1·8 in. at Stamford and Hereford. Heavy falls occurred over the north-western and extreme northern parts of the kingdom between the 1st and 3rd, the amount on the 1st being as large as 3·1 ins. at Fort William, and 3·0 ins. at Laudale. Snow occurred at most of the northern and central stations between the 22nd and 23rd, followed by heavy and protracted rains in nearly all districts, and especially in Ireland; during the four days 22nd–25th the aggregate amount was as large as 4·7 ins. at Bray, 4·2 ins. at Phoenix Park, Dublin, and 3·6 ins. at Killiney.

Bright Sunshine was mostly in excess of the average*, a slight deficiency being, however, reported at some stations in the south of Scotland and the northern parts of England and Ireland. The percentage of the possible duration ranged from 34 at Jersey, and 30 or more at several stations in the south and east of England to 20 or less in many of the northern and central districts, and to only 7 at Glasgow.

* 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.