

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

JULY 1888.

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General Summary.—Weather of July was most unseasonable, pressure was low, several depressions passed over England, producing very heavy and constant rains, with frequent thunderstorms. Temperature was much below its normal value, but the most remarkable feature of the season was the appearance of snow at many stations, and even in the Isle of Wight, on the 11th.

Pressure.—*Mean for the Month at 8 a.m.* ranged from 29·85 ins. at Jersey and from about 29·75 ins. off our north-east coasts, to about 29·72 ins. in the north of England. The values were considerably below the average* for the month—to the extent of nearly 0·2 in. over England and Ireland, and of 0·1 in. in the north. The defect over England arose from the unusual number of depressions which passed over the country. *Highest* readings occurred in the west (Valencia 30·28 ins., and Scilly 30·22 ins.) on the 12th, and Valencia (30·17 ins.) on the 17th. *Lowest* readings were recorded on the 3rd at North Shields (29·20 ins.) on the 23rd at Belmullet (29·28 ins.), and on the 27th at Scilly (29·29 ins.).

Depressions were very frequent for the time of year; the tracks of three passed across southern England. The deepest during the month was that which crossed the north of England between the 2nd and the 4th.

Anticyclones were very slightly developed. All that can be said is that an area of high pressure lay to the south-west of these Islands from the 10th to the 18th, and passed over Spain and France between the 20th and 22nd.

Wind at the southern stations was principally from the Westward, while in Scotland Northerly and North-easterly winds were most prevalent. At Holyhead the frequency was nearly equal all round the compass, while in the west of Ireland the wind was principally North-westerly. The force was strong for the season, but there were no serious storms. Slight gales were reported in Scotland from the northward on the 2nd and 9th, and gales of similar force from southward and along the Channel coast, and from north in Ireland, towards the end of the month.

Temperature.—*Mean at sea-level* varied from 50° in the Shetlands to 60° at Jersey, and 59° in the south of England, inland. It was much below the average* for the month—to the extent of nearly 6° in the south-east of England, and from 3° to 5° in Ireland and Scotland. *Highest* readings occurred generally on the 19th or 20th. The absolute maximum was 77°·0, at Lairg, and several other stations recorded readings above 70°, but it may be remembered that the maximum for June had been 88°·0, which makes the remarkable chilliness of July more apparent. *Lowest* readings were recorded at most stations about the 11th, when the thermometer fell below 40° at several places in England. In Scotland the coldest weather came earlier, and 32°·0 was actually recorded at Stornoway, on the 7th, in the dog-days! *Range* was greatest (over 40°) in Scotland and was as large as 44° at Lairg; it did not reach half that amount at several stations on the Channel coast (17°·0 at Scilly, 19° at Falmouth); in London it was about 30°. *Vapour Tension* was about 0·40 in. all over the south of England and Ireland (0·425 in. Hurst Castle). It was least (0·298 in.) at Sumburgh Head. *Relative Humidity* exceeded 90 per cent. over Devonshire, and also over the North Channel and along the west coast of Scotland. It was least (80 per cent.) along the east coast of Scotland, and in Ireland also it was low.

Rainfall was locally excessive, being generally about twice, and at St. Ann's Head nearly three times its average* amount. In Ireland the excess was less. In the extreme north of Scotland the conditions were reversed, as a deficit occurred—Stornoway only having one half its proper quantity. The total varied from 8·31 ins. at Stonyhurst, 8·19 ins. at Durham and Hawes Junction, and 7·85 ins. at Roche's Point, to 1·57 ins. at Stornoway, and 1·68 ins. at Sumburgh Head. The excessive amounts were principally caused by particularly heavy falls; the 2nd produced 2·48 ins. at Stonyhurst, and 2·19 ins. at Manchester, the 25th gave 3·18 ins. at Hawes Junction, and 2·25 ins. at Durham, and on the 31st 2·31 ins. fell at Hastings. The most remarkable fact in connection with precipitation was that early on the 11th snow showers occurred in many parts of the country, even as far south as the Isle of Wight. Thunderstorms were very prevalent, occurring on eight days in London, seven at Cambridge, and six at Yarmouth.

Bright Sunshine was not abundant. 34, the highest per-centage of possible duration recorded at any station, was reached at Falmouth, Jersey followed with 32, Plymouth with 31, and Valencia and Stornoway with 30. The least sunny station was Stowell (16), but Glasgow, Durham, Scarborough, and Bawtry did not fare much better.

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