

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

FEBRUARY 1891.

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General Summary.—The weather of February was exceptionally dry, but over England a large amount of fog prevailed, especially during the third week. Pressure was abnormally high; temperature was also above the average; the winds were mainly anticyclonic, being Easterly in the south, but South-westerly or Westerly in the north; and rainfall was remarkably deficient, the total amount over England generally being less than a tenth of an inch. Bright sunshine was very abundant, especially on our south and south-west coasts.

Pressure.—*Mean for the month at 8 a.m.* varied from 30·45 ins. and upwards over the southern half of England, to 30·15 ins. or a little less in the Shetlands, and was everywhere greatly in excess of the average.* Over England, where the mean distribution was of an anticyclonic type, the values were nearly half an inch above the normal; over the greater part of Ireland and Scotland the excess amounted to more than 0·4 in., while even in the Shetlands and Hebrides it was more than 0·35 in. *Highest* readings were observed very generally on the 4th, when the values exceeded 30·5 ins. over nearly the whole of the United Kingdom, and rose above 30·7 ins. over the southern parts of Ireland and England. *Lowest* readings were observed over the northern parts of the country either on the 11th or 28th, but in the south they occurred mostly on the 26th. In no case, however, did the barometer fall below 29·5 ins., so that the extreme *Range* for the month was unusually small.

Depressions.—No depressions appeared immediately over our Islands. During the early part of the month a series of large disturbances travelled south-eastwards across the northern parts of Scandinavia to Russia, while on the 22nd and 25th some depressions moved outside our western coasts in the direction shown by the generalized arrow A. in Map 2, Plate II.

Anticyclones.—During nearly the whole of the month the weather over our Islands was under the influence of a large anticyclone which advanced in the first instance from the south-westward. The central portion of the system was occasionally forced southwards by depressions which appeared in the far north, and on two occasions (viz., the 22nd and 25th) it moved temporarily to the eastward owing to the advance of depressions over our western coasts. In each case, however, the anticyclone quickly re-asserted itself.

Winds were very variable in the south-east, but mainly Easterly in the south, Southerly in the west, and South-westerly in the north; in the Hebrides the South-westerly wind blew on no fewer than 17 days. Calms were very frequent over England, ten being reported in London and nine at Oxford and Holyhead. There were no gales on the English coasts and very few in the east of Ireland, but at Aberdeen there were 6, at Mullaghmore 7, and at Stornoway 9.

Temperature.—*Mean at Sea Level* ranged from between 46° and 47° in the Scilly Islands and the extreme west and south of Ireland to about 42° in the east of Scotland, 40° or less over a considerable portion of England, and to only 36°·5 at Yarmouth. The winter type of distribution was less strongly marked than is usual in February, and the actual values were considerably above the average except over the east and south-east of England, where there was a slight deficiency. *Highest* readings were recorded on the 23rd or 24th in Ireland, Scotland, and the north of England, but on the 27th or 28th over our eastern, midland, and southern counties. On one or other of these dates the thermometer exceeded 60° in nearly all districts, the highest reading of all being 67° at Cambridge and Llandudno. *Lowest* values were recorded on very irregular dates,—mostly on the 9th or 10th in Ireland, but during the last week of the month in Great Britain. *Range* was large, especially at the inland stations; in many parts of the kingdom it amounted to over 40°, and at Cambridge to 45°. *Vapour Tension* ranged from 0·17 in. at Oxford and 0·20 in. or less over the greater part of England and the east of Scotland to 0·26 in. at Stornoway, Belmullet, and Scilly, and to 0·27 in. at Valencia. *Relative Humidity* amounted to less than 90 per cent. at many of our western stations, and was as low as 80 per cent. at Mullaghmore; at Donaghadee, however, the per-centage was as high as 95, while at Hurst Castle it reached 97.

Rainfall was unusually deficient, the total amount being less than one tenth of an inch over nearly the whole of England and also at Dublin; at some stations in our eastern, midland, and southern counties there was an entire absence of precipitation, while in many other localities the trifling amounts collected in the gauge were due entirely to wet fogs or heavy dews. In the north-west of England and in the west and south of Ireland the total fall amounted to between half an inch and an inch, while in the north-west of Scotland the aggregate varied from 3·3 ins. in the Hebrides to 12·1 ins. at Glencarron. With the exception, however, of the north-west of Scotland, the rainfall of the month was everywhere greatly below the average.*

Bright Sunshine.—The amount of bright sunshine was upon the whole very large, especially over England, where the per-centage of the possible quantity was in some places nearly twice as much as the average.* At Jersey the per-centage was as high as 60, at Hastings 49, and at Plymouth 48; even at Braemar it amounted to 43. At Fort Augustus, however, the value was as low as 16, in London 15, and at Glasgow 13.

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