

# MONTHLY WEATHER REPORT.

MARCH 1887.

## SECTION I.

### GENERAL SUMMARY FOR THE MONTH.

THE weather of March was of a changeable character, cyclonic and anticyclonic conditions alternating frequently, especially about the middle of the month, but neither of them were of great intensity. On the whole, however, the anticyclones were the more prevalent of the two. Pressure was high, and its range not large; temperature was rather below its average value, and its range considerable; the wind was variable in direction, and light to moderate in force; rainfall was rather below the mean for March, while the amount of bright sunshine large in the north and north-east, but only a little above the average in most other places. The month was free from extremes of any kind, so far as its meteorological condition was concerned.

March 1-8.—The dominant weather system over our area during this period was anticyclonic, being a continuation of the conditions which prevailed during the latter part of February. The central area of the anticyclone at first lay over France and the southern parts of the United Kingdom, but gradually moved north-westwards and northwards, until on the 7th it covered the more northern and eastern parts of the United Kingdom. Its winds were light and variable, its weather was dry, and, as a rule, bright, but local fogs of considerable density occurred from time to time, especially over the inland parts of England. Temperature was low generally; very low during the night time, but rose considerably in the day, especially over the north-eastern parts of Great Britain, where on one occasion maxima were recorded varying from  $57^{\circ}$  to  $61^{\circ}$ , while readings of 50 to 54 degrees were registered in England. The rainfall in our Islands was almost inappreciable, except in the north of Scotland, and even there it was slight; but in the north-west of Norway large quantities fell on two occasions, viz., between the mornings of February 28th and March 1st, and again between the mornings of March 3-4; these falls were occasioned by disturbances which travelled from the Atlantic across Lapland and the Arctic Sea, at too great a distance from the British Islands for their characteristics to be quoted in Section II.

The anticyclonic system was very large, covering the whole of Central Europe as well as our Islands and their neighbourhood; but over Russia the barometer was relatively low, gradients for North-westerly winds prevailed over eastern Europe, and frost was reported daily; in the British Isles and France frost occurred only at night-time.

March 9-11.—The anticyclonic system now broke up and the distribution of pressure over our Islands became irregular, though the gradients were not very steep. The wind became light and variable, snow, sleet, and rain showers were prevalent, and temperature changed irregularly. Some very small and shallow depressions began to pass over the British Isles and North Sea in a south-easterly direction, and, in their rear, the barometer rose fast, and North-



easterly to Northerly winds again spread temporarily over the country accompanied by cold squally weather, snow showers in the north and east, and rain in the west. The disturbances were, however, too small and shallow to be noticed in Section II.

March 12-13.—In this brief period there was a renewal of anticyclonic conditions over the British Islands with gradients favourable for Northerly (North-east to North-west) winds, which set in first at the north-western stations, as the depressions just mentioned passed away to the Continent. Temperature fell decidedly as the system spread over us, so that early on the 13th minimum readings were recorded in the shade as low as  $19^{\circ}$  at Parsonstown,  $21^{\circ}$  at Oxford and Cambridge, and  $22^{\circ}$  at Loughborough and Shields. The weather cleared up quickly, and the wind, after blowing freshly, lulled as it backed round to North and North-west and the barometer rose somewhat.

March 14-15.—Again the anticyclonic system gave way, and a fresh series of small shallow depressions appeared, and moved over our area in a more southerly direction than their predecessors. One was developed near the Mull of Cantyre early on the 14th, and, travelling southwards, reached the Bay of Biscay two days later, where it dispersed, after causing Northerly gales and snow at our western stations. Another appeared over the North Sea early on the 15th, and seems to have filled up during the following night without moving much. Temperature rose a little, showers of rain and wet snow fell in many places, and the wind, though chiefly Northerly, varied greatly in direction.

March 16-21.—High-pressure conditions now ensued, the system appearing at first in the form of a "col" which advanced over our area from the northward. At 8 a.m. on the 16th it lay from west-south-west to east-north-east across Scotland, apparently uniting a large anticyclonic system over the Baltic and Northern Europe with another such system lying over the Atlantic to the westward of Ireland. Westerly breezes were felt in the far north, North-easterly in the south, and variable airs within the col itself. The whole united system then moved slowly to the south-eastward, so that on the 18th and 19th the western anticyclone covered the whole of the United Kingdom and France; the weather consequently became cold again, but not so cold as in the earlier part of the month, calms and fogs were experienced, and the snow showers decreased. The anticyclone now moved eastward to the Baltic, Easterly winds of no great force set in over the kingdom and then gradually veered, until at 6 p.m. on the 21st Southerly and South-easterly breezes were prevalent all over the kingdom, while temperature was rising, and sleet and cold rain were spreading over us from the westward. (See maps in the Weekly Weather Report.)

March 22-25.—This was a period in which the dominant systems were cyclonic, the gradients variable, but never very steep; rainfall was above the average except over the north-eastern parts of Great Britain. The depressions which passed over us during this interval, though of moderate depth, were larger and deeper than any that had appeared for several weeks, and the wind, after being South-easterly for a short time, veered quickly to West and North-west, and blew strongly from the former point at several stations on the 23rd; a gale was felt from the latter along our western coast on the 25th. Temperature changed frequently and considerably, but was not high at any time. Much rain fell on the 22nd, and showers in most places subsequently. The first well-defined system observed was No. X.,\* which on reaching our north-western coast on the 22nd moved exceedingly slowly to the north-eastward and eastward while its "V"-shaped secondary passed quickly to the north-eastward and filled up. (See Daily and Weekly Reports.) Depression No. XI.\* then advanced, and it was this disturbance which brought the bulk of the rain to our coasts; on reaching the North Sea, however, it speedily filled up.

\* See Section II. and Map 2 Plate VI., for the history and tracks of depressions.



March 26-30.—The barometer now rose decidedly in the south-west, and while a new anticyclone appeared over Spain and the Bay of Biscay, a fresh depression (No. XII.)\* appeared off our northern coasts early on the 27th, accompanied by strong Westerly to North-westerly winds with renewed showers of rain and hail. As this depression passed off the anticyclone advanced north-eastwards, the North-westerly wind lulled, the weather dried up, and anticyclonic airs, with the warmest day temperatures of the month, were experienced on the 28th, 29th, and 30th. On the 31st, however, unsettled conditions again appeared—for an account of which see the Monthly Report for April.

\* See Section II. and Map 2 Plate VI., for the history and tracks of depressions.