

MONTHLY WEATHER REPORT.

FEBRUARY 1886.

SECTION I.

GENERAL SUMMARY FOR THE MONTH.

THE weather of February was peculiarly dull, cold, and quiet. Pressure was largely in excess of its normal value, and its distribution was almost continuously anticyclonic after the 5th. Temperature was very low (as much as 8° below the average over our eastern counties), the winds were light—gales over England generally being absent, and very few in number, even at our own extreme western and northern stations, and the air was dry, but foggy. It was the coldest February recorded over England for very many years, and the cold seems to have been still more continuous and severe over the Continent. At the close of the month there were some indications of a change approaching from the westward.

February 1-3.—The dominant pressure systems over our Islands and their neighbourhood during this period were cyclonic, and the type of gradient chiefly north-westerly; the gradients, however, were slight or moderate, and the winds (except on some exposed parts of the coast) were not strong after the 1st. Two well-marked depressions appeared during this interval—one (No. XIII.*) large and moderately deep. This reached the neighbourhood of the Shetlands on January 31st, and moving eastwards with a retarded rate of motion, arrived off the south of Norway early on the 1st of February. North-westerly gales and strong winds were experienced over the kingdom as the centre passed by our northern coasts, with cold showers, but these soon after gave way to more moderate breezes, drier weather, and clearer skies. The second, and less important disturbance soon followed, and taking a more southerly track passed across the north of Ireland, central England, and the eastern parts of France, producing a temporary revival of the strong North-westerly winds in the west, while variable airs and calms were felt in the east, together with a renewal of the cold showers in most places. In the rear of this disturbance the barometer rose, and a change of conditions ensued; the sky cleared as night came on, and temperature fell decidedly.

On the Continent the weather during this time was changeable, showery, and cold; and a large wide band of somewhat low pressure lying over France, Germany, and south-eastern Europe, having in it several shallow minima, separated the Atlantic anticyclone over and to the south-westward of Spain from a large similar system over central Russia.

February 4-5.—The weather of this period was cold, quiet, and transitional. The Atlantic anticyclone spread northwards up our western coasts, and began to advance eastwards across the United Kingdom and France, bringing with it very light breezes and calms, low temperatures (the night frosts being very sharp), dry weather, and in many places fog. The centre of the anticyclone reached Ireland on the evening of the 4th, and moving thence in an easterly and south-easterly direction, finally formed a well-

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

marked "ridge," to the continental system, which in the meantime spread westwards over Finland and Lapland to Scandinavia, as the depression No. XIII.* passed away to the Mediterranean.

February 6-11.—Throughout this period the distribution of pressure was mainly anticyclonic, the form of the system being that of a ridge, stretching south-eastwards or westwards to our extreme west and south-west coasts from a large anticyclone which lay over Europe, and in which readings exceeded 30·8 inches. This large anticyclone lay at first over northern Europe, and the "ridge" covered the whole of the North Sea and the United Kingdom, so that while Easterly and North-easterly breezes prevailed at the southern stations, Southerly and South-westerly winds were felt in the north. It was at this time that the depression No. XVI.* passed by our extreme north-western coasts, causing a South-westerly gale in the extreme north-west, and producing such variations of temperature that at 8 a.m. on the 7th and 8th the thermometer stood at 44° to 50° on our extreme western coasts, while sharp frost prevailed over England. The whole of the anticyclonic system then moved slowly to the south-eastward, and Southerly to South-easterly breezes spread all over the kingdom, being light in force in the east and south, with very cold foggy dry weather, but fresh to strong in the west and north-west, with comparatively mild weather and occasional showers.

All over the Continent the weather was very cold until after the 8th, the thermometer at 8 a.m. on the 7th being as low as -13° over the north-east of Russia generally, while the 8 a.m. line of frost embraced the whole of the Continent, excepting the shores of the Black Sea, the Mediterranean, Spain, and the British Isles. In the neighbourhood of Moscow the barometer stood at above 30·9 inches. As, however, the anticyclonic area moved southwards, and Westerly breezes spread over northern Europe, the cold became less severe in Russia, but grew sharper over Germany and France.

February 12-14.—Pressure now gave way for a time over the western and north-western parts of our Islands, and for a very brief interval mild Southerly breezes set in over England, as the depressions Nos. XVII. and XVIII.* passed along our north-western coasts. The change, though brief, was so decided, that on the afternoon of the 13th the thermometer rose to between 45° and 50° even over the inland parts of England, and the air felt soft and spring-like. The improvement was, however, very transitory, for on the 14th temperature began to fall again, and by the 15th an anticyclonic ridge, stretching westwards from the large Continental anticyclone over Russia and the Baltic, was again established over the North Sea and the United Kingdom.

It is worth noting that although this Southerly current of wind was confined to quite the western parts of the Continent, the cold, even over Russia, was considerably modified during its continuance, though the thermometer still stood as low as 14° to 23° over Russia and Germany, and frost held in the east of France. Over central Algeria, however, the thermometer fell to 40° F.

February 15-28.—Throughout this period anticyclonic conditions prevailed without any important intermission over the British Islands, France, and the North Sea, a wide "ridge" lying over us day after day, having its origin in the large Continental anticyclone already referred to. Cold, gloomy, foggy weather was continuously prevalent, but as a rule the air was dry and the wind Easterly (North-east to South-east). The coldest days of all over England were the 25th and 26th, at which time the anticyclone occupied a high northerly position, and the winds over England were light, and North-easterly to Northerly in direction. At the close of the month pressure was beginning to give way decidedly on our south-western coasts, where the wind was rising from the South-eastward, with a heavy fall of cold rain, and a generally rough appearance of the sky.

The Continental reports showed that during this period pressure was continuously very high over Russia, the Gulf of Bothnia, and the northern parts of Scandinavia, and (relatively)

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

low over Spain and the adjacent parts of the Atlantic. This distribution of pressure accounts for the persistency of the Easterly wind throughout the interval, and for the steadiness with which temperature remained below its normal level in all parts of Europe, and especially so over Russia. In northern Russia the barometer stood at above 30.9 inches until the 23rd, after which the anticyclone centre moved north-westwards to Lapland, and the system became rather less high. On the 27th the central part lay over Scandinavia and the Baltic, and a large, well-formed, but not deep depression, was formed over the Mediterranean.

Station	Barometer	Thermometer	Wind	Clouds	Remarks
London	30.0	50.0	E	100	
Paris	30.0	50.0	E	100	
Berlin	30.0	50.0	E	100	
Moscow	30.9	50.0	E	100	
St. Petersburg	30.9	50.0	E	100	
Stockholm	30.0	50.0	E	100	
Helsinki	30.0	50.0	E	100	
Oslo	30.0	50.0	E	100	
Copenhagen	30.0	50.0	E	100	
Warsaw	30.0	50.0	E	100	
Vienna	30.0	50.0	E	100	
Budapest	30.0	50.0	E	100	
Bratislava	30.0	50.0	E	100	
Prague	30.0	50.0	E	100	
Amsterdam	30.0	50.0	E	100	
Rotterdam	30.0	50.0	E	100	
Antwerp	30.0	50.0	E	100	
Brussels	30.0	50.0	E	100	
Lyon	30.0	50.0	E	100	
Marseille	30.0	50.0	E	100	
Nice	30.0	50.0	E	100	
Geneva	30.0	50.0	E	100	
Zurich	30.0	50.0	E	100	
Bern	30.0	50.0	E	100	
Basel	30.0	50.0	E	100	
Frankfurt	30.0	50.0	E	100	
Dresden	30.0	50.0	E	100	
Leipzig	30.0	50.0	E	100	
Hamburg	30.0	50.0	E	100	
Kiel	30.0	50.0	E	100	
Stuttgart	30.0	50.0	E	100	
Munich	30.0	50.0	E	100	
Regensburg	30.0	50.0	E	100	
Salzburg	30.0	50.0	E	100	
Innsbruck	30.0	50.0	E	100	
Graz	30.0	50.0	E	100	
Vienna	30.0	50.0	E	100	
Budapest	30.0	50.0	E	100	
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