

Weather Front

February 2021/1921

February 2021

Observers Notes.

Mountsorrel: A month of two halves. The first half saw the coldest February week since 2012, with temperatures only creeping above freezing between the 8th and 14th. We also had 5 cm of lying snow on the 9th. The second half of the month was mostly very mild, with temperatures peaking at 16 C on the 24th. February 2021 was similar to February 2012, with a very cold first half and a mild second half.

Ely: A very cold spell between the 7th and 14th was more than offset by most of the rest of the month being mild. The maximum temperature of 17.8 C, on the 24th, was the highest on that day in 50 years of records.

Lowdham: A fall of dust was noted on the 23rd/24th.

Middleton: The mean temperature of the second half of the month was 6.3 C higher than that of the first half. Six "ice days" were noted, which was the most for February since 1996.

Derby: While there were two days of lying snow, none were measurable, and nothing more than a dusting at any time. A month of two very greatly differing halves; a cold first half, and between the 8th and 14th, with maxima in the period between 1 and 2 C, except 4 C on the 14th. The second half, all maxima were at least 10 C and no air frosts between the 15th and 26th.

Mickleover: The highest minimum temperature occurred on the 24th and equalled the highest for February in 2004. Snowfall on the 8th only amounted to 0.5 cm at the morning observation.

Pitsford: Unsettled through the first week, then a cold spell lasting a good week with some initial snow, then becoming drier. Becoming mild again around the middle of the month and continuing so through to the end with some unsettled weather returning.ⁱ

Coton in the Elms: The mean temperature was close to average, but the lowest for February since 2018 (2.5 C). The "average" month concealed the fact that a cold spell, and a

mild spell, cancelled each other out. Frost was generally typical for February and, although the month started wet, rainfall for the month was close to the station average. The month ended with settled, sunny weather, mild days, and cold nights. Between the 12th and 13th windy, and very dry air, made it feel bitterly cold and, on the 24th, a maximum of 15.9 C made this the 4th mildest February day on the 30-year record.

Desford: A very average February. A month that started with some snow, frosty nights, and some cold days. Turning milder and more settled during the second half.

Lincoln (non-instrumental observations): Days of Frost; 13, Days of Snow Falling; 3, Days of Snow Lying; 7, Days of Frost at 0900; 1. Possible 2Freezing Day" on the 12th and 13th.

February 1921.

Observers Notes.

Derby/Burton on Trent: The local records reveal that February 1921 was an unusually dry month, the driest February since 1895, and any month since July 1897. Most of the local rainfall yielded around 7 or 8 mm, while a couple of "wetter" ones achieved 11 to 13 mm. The February of 1921 was not matched for dryness again until 1932. There were ten air frosts observed in Burton, the lowest temperatures were only about -2 C, so not too severe. The frostiest conditions occurred during the early month. Any mild weather was short lived, and the highest temperatures were reserved for the 23rd or 24th, when 13 to 15 C was recorded. The overall mean temperature at Burton was around 4 C.ⁱⁱ

Copdock (Ipswich): The total rainfall (4mm) was the smallest ever recorded in any month at this station during the past twenty years.

Totland Bay (Isle of Wight): The rainfall for February amounted to 5 mm on four days, which amount is less than any preceding February at this station, except 3 mm in February 1895, also on four days. The absolute drought lasted for 21 days, from the 3rd to the 23rd inclusive, the nearest approach to this being the 18-day drought in February 1895. On the 27th the barometer rose to 1045.0 mb and was the highest point touched since December 12th, 1905.

Sheepstor (Dartmoor): The total rainfall for the month (11 mm) was the lowest for any month at this station during the last fourteen years, the previous lowest being April 1912 with 12 mm. At [0400] on the 27th the barometer reached 1047.1 mb, which is easily the record here.

Dublin (Fitzwilliam Square): The outstanding features at this station were, a high atmospheric pressure, which held almost without interruption from the evening of the 5th, to the close of the month; a scanty rainfall on only seven days; a remarkable prevalence of cloud, particularly at night; a complete absence of snow and hail; very little frost; and a preponderance of anticyclonic winds, at one period from the south-east and, at another,

from the west. On the 10th, at [0900] the barometer rose to 1044.7 mb and to 1045.7 mb at [2100] on the 26th.ⁱⁱⁱ

Overview of February 1921.

High pressure dominated west, and north-west Europe throughout the whole of the month thus, strong winds and gales were rare, and rainfall was low, except in the Mediterranean. Temperatures were high for the time of year over western Europe and Iceland, but there were severe frosts in Sweden. The track of depressions was, either to the north, or south, of the British Isles. It is noteworthy that the highest pressure for the month, at Valencia Observatory, was 1048.3 mb, which was the highest recorded at that station since 28 January 1905, when 1053.2 mb was noted. At Edinburgh, the mean pressure for the month was 1024.6 mb, the highest in any month since May 1896, and was exceeded in February only in 1890 and 1891.

The mean temperature was above average throughout the country and ranged from [+1.7 C] in northern Scotland to [+0.5 C] in south-west England. The highest temperature recorded was [17 C], on the 24th at East Ham (London) and Leamington Spa, while the lowest was [-9 C], on the 8th, at Braemar. While the mean temperatures for the month were high, they were generally below that of January. In fact, there were more frosts in February than in January, and it was the low night temperatures that reduced the mean.

At Benson and Croydon there were 15 and 13 days respectively when the shade temperature fell below [0 C] compared to 5 and 2 such days in January. In January, at Nottingham, there were 19 days with minima above [10 C] compared to only 3 days in February.

February 1921 was notable for the lack of rainfall, which had not been observed since the dry February's of 1895 and 1891. Everywhere the rainfall was considerably below average and occurred mainly in England and Wales. Less than 10% of the 1881-1915 average was recorded in areas from north Cornwall to southern Shropshire, from Preston to Durham, and in Essex and Suffolk, while more than 50% was recorded only in the south of Ireland and west of a line Galway, along the coast, north to Wick. Rainfall totals of more than 25 mm, were confined to small mountain regions in England and Wales, and to the western half of Scotland, but generally in Ireland. In Seathwaite the rainfall total was the lowest noted in February since records began in 1845. At Camden Square, the rainfall was the lowest in the 64-year record, except for 1891 [2.5 mm]and 1895 [3.0 mm]. Only two other months, April 1912 [1.0 mm], and May 1896 [3,6 mm], had lower totals. At Blundellsands, the total was [5.6 mm] and was the lowest for February since 1891. At Kew, the total was only [4.8 mm], there having been only two dryer February's since 1866, the driest being [2.3 mm], both in 1891 and 1895.

Cloud and fog for much of the month was typically anticyclonic in nature; the cloud base being around 2000 to 3000 ft. Generally, the visibility was fair to good, especially near the coast, but there were periods of fog between the 2nd and 4th, and from the 20th to 24th.^{iv}

In summary, February 1921 was exceptionally dry, "one of the driest February's on record"^v, and dominated by anticyclonic conditions.

Central England Data (averaging period 1891-1920):

Mean Maximum Temperature: 7.7 C, average: 7.2 CC.

Mean Minimum Temperature: 2.0 C, average: 1.2 C.

Mean Temperature: 4.8 C, average: 4.1 C.

England and Wales Rainfall: 10.2 mm, average: 64.3 mm.

Midlands Mean Maximum Temperature: 7.3 C.

Midlands Mean Minimum Temperature: 0.9 C.

Midlands Mean Temperature: 4.1 C.

Midlands Rainfall: 7.6 mm.vi

ⁱ Monthly Weather Report, February 2021, Pitsford Weather Centre, Headline, p. 3.

ⁱⁱ D J Stanier, by email, 2 March 2021.

ⁱⁱⁱ Monthly Weather Report, February 1921, Meteorological Office, HMSO, April 1921, p. 15.

^{iv} MWR, February 1921, p.15.

^v Agricultural Records, Stratton J M and Brown J H, ed. Whitlock R, John Baker, 1978, p. 139.

^{vi} Meteorological Office, Central England data.