

Weather Front

January 2021/1921

January 2021

Observers Notes.

Pitsford: Very wet and changeable. Milder spells followed by brief cold snaps with some notable snow on the 23rd.ⁱ

Coton in the Elms: A very cold January. There were frequent sharp frosts and very-little mild weather other than a couple of brief interludes. It was also a very wet month with some snow.

Desford: A cold and wet January compared to the long-term average. With low pressure and a blocking "high" some interesting wintry conditions emerged. Only 3 days recorded very mild conditions of greater than 10 C. Ice days were noted on the 7th and 24th. Storm Christoph brought unusually mild conditions on the 20th, only to be replaced by cold air as the rain turned to snow; the temperature fell from 9 C at 2100 to 1 C by 2320. Moderate snow was noted from 0930 on the 24th, which settled readily, and continued as slight snow through to 2100; depth of snow was recorded as 6 cm.

Saltfleeby: By mid-morning on the 8th fog developed and became dense for the rest of the day. Snow, on the 16th, at daybreak, gave a slight dusting but soon melted.

Derby: The minimum of -5.2 C, on the 25th, was the lowest for January since 2010, and it was further noted that it was the lowest for that date since 1963! January 2021 was the wettest January on the combined records for Littleover and Derby (began 1952), but on the Derby Arboretum (began 1901) it was the wettest January since 1928 (136.4 mm). Severe flooding of the rivers Trent and Dove was noted during the month.

Lowdham: The total rainfall for January was the highest on the station record (1992) and in the Nottingham area since before 1840. A daily total of 24.4 mm, on the 13th, was the wettest January day since 1999.

Ely: The wettest January since 1988 and the second wettest in 50 years.

Mountsorrel: The second wettest January on the station's 20-year record. There was extensive flooding in the River Soar catchment for much of the month. There were 10 days of snow falling, but only lying once on the 24th. This is the highest number of days in any month since March 2013. The 24th saw the heaviest fall of snow since February 2012, with 10 cm falling in just 6 hours.

Middleton: The eleventh coldest January in 44 years and the 6th wettest on the station record.

Mickleover: The maximum snow depth of 16 cm on the 25th) was the highest for January on the station record. January 2021 was the wettest on record (1981) and the second coldest since 1997.

Lincoln (non-instrumental): 17 days of frost, 2 days of snow falling, 1 day of snow lying and 1 day of fog at 0900.

January 1921

Observers Notes.

Copdock (Ipswich): The outstanding feature of January 1921 was the unprecedented warmth, the mean maximum temperature [9.7 C], the mean minimum [4.4 C] and the mean temperature for the month [7.1 C] all exceeding the readings in 1916, which was itself a record January. There were no less than 17 days on which the temperature exceeded [10 C].

Meltham (Yorkshire): With the exception of January 1916, which was a little warmer, it was the mildest January in 42 years.

Worksop (Notts): A very mild month, though the day temperatures were not quite so high as in 1916. The minimum temperature during the night of the 9th {11 C] was exceptionally high and was higher than any previous night reading in either January, February, or March.

Malvern (Worcester): Abnormally mild with temperatures on eight occasions rising during the night.

Bromyard (Hereford): Very mild; snowdrops in bloom on the 9th.

Ross-on-wye: The mildest January on record at this station. On 20 days the maximum temperature reached [10 C] and on no occasion was it below [4 C]. The warmth of the nights was unparalleled at this station during 45 years.

Totland Bay (Isle of Wight): The smallest amount of sunshine (38 hours) for any January here. On the other hand, the mean temperature [8.3 C] was, except in 1916, the highest for January during 35 years.

Leyland (Lancashire): The wettest January (136 mm) yet recorded here.

Dublin (Fitzwilliam Square): Only thrice during the past 55 Januarys has the mean temperature exceeded that of January this year [8.4 C]; in 1875 it was [8.6 C], in 1898 [8.8 C], and in 1916 [8.7 C].ⁱⁱ

Derby/Burton on Trent: The first month of what became a notably dry year, produced a slightly above normal rainfall total in the area. Most gauges were showing around 60 to 65 mm, but a couple were in the 50-60 mm range. Quite a mild month of about 6 to 6.5 C (rather lower than the Central England and Midlands Met Office mean for the month). [See Central England data below]. The range of extremes were from 13 C or even 15 C around the 9th and 10th to -4 C on the 15th. Only four air frosts were recorded in Burton.ⁱⁱⁱ

Weather in 1921.^{iv}

January 1921 was an "abnormally mild" month. The mild weather started just before Christmas 1920 and continued throughout almost the whole of January. At South Kensington, a roof site, the temperature remained above freezing throughout. [It is unfair however to compare a roof site with a standard observing enclosure, and could be misleading.] The weather throughout the month was cyclonic so that the high temperatures were accompanied by considerable precipitation. The month was unusual in that Sheepstor (Devon), at a height of 749 ft (approx. 230 m) did not report any snow falling during the month. The Monthly Weather Report for January 1921 noted that it was unique, given the climatological history of the station. North of the border however, sleet and snow were not infrequent occurrences, with heavy snowstorms being reported at St Andrews on the 24th.

A brief period of cold weather occurred between the 11th and 16th, during which significant falls of snow were noted. On the 10th a rapid fall in temperature was reported in England and Ireland; temperatures reported at 0700, at some stations, showed a fall of around [8C] compared to the previous day. It has been suggested that the reason for the decrease in temperature was the passage of a line squall which traversed south-east England during the afternoon of the 9th. During the night of the 15-16th, with high pressure dominating England and France, severe frost occurred inland, together with dense fog in some parts of London. Apart from this brief interlude there was no cold weather at all with temperatures, day after day, reaching abnormal levels.

Maximum temperatures, recorded at many stations, although equalled, mainly in 1916, had never been exceeded and, in some cases, over the last fifty years. It is noteworthy that the frequency of maxima between [11 C] and [15 C] were remarkable; 24 such days at Falmouth, 22 at Dublin (Phoenix Park), 21 at Baldonnell (Dublin), 20 at Isle of Grain (Kent) and Birr Castle, and 19 at Kew and Nottingham. While at Llandudno a maximum of [16 C] was recorded on the 4th.

The mean temperature was above average everywhere, ranging from [+3.8 C] in the Midlands and eastern England to [+1.2 C] in eastern Scotland. During the week ending the 29th, the mean temperatures at Hawarden Bridge and Hereford were [5.7 C] above average.

In Scotland the mild conditions reflected those further south, with colder conditions predominating after the first ten days; the minimum at Braemar on the 15th was [-8 C]. Milder weather was reintroduced after the 15th with maxima, on the 20th, at St Andrews and Kettins rising to [14 C]. Generally, the month was mild, though less so than in January 1916 and 1898.

During the first ten days there were heavy falls of rain in the west and south (at Glenquoich a fall of 81 mm was noted on the 5th), but from the 13th to 15th any precipitation was mainly of snow, with moderate to heavy falls on the 16th and 17th. From the 21st onwards precipitation consisted of rain in many areas. Over the greater part of Scotland, the month was wet with over 200% of average being reported in many places. At Glencarron (447 mm), it was the wettest for 35 years, at Poltalloch, the wettest for at least 55 years and at Rothesay the wettest since 1872. There was some snow between the 11th and 18th, and on the 24th a fall along the east coast resulted in 8 in [20 cm] at Dundee.

Rainfall, in general, reflected the topography of the British Isles with the heaviest precipitation being confined to the high ground of the west and a gradual lowering of totals towards the east coast.

While rainfall and sunshine appear to have been generally unexceptional, temperatures, in many cases, were on a par with 1916, and were abnormally mild.^v

Note from 1810.

January 19th, 1810.

Fahrenheit's thermometer this day stood at 12 degrees, in a yard in the High Street, Doncaster; and on being removed half a mile into the country, and hung up in a Northern aspect, free from any influence, it stood at 10 degrees, making a difference of only two degrees between the centre of town and the open country. The thermometer at Gainsborough was 17 degrees below the freezing point.^{vi} [Does this mean that the temperature in Doncaster was – 11 C, and in the country and -12 C? Similarly, in Gainsborough -4 C?]

Central England Data. Averaging period 1891 to 1920:vii

Mean Maximum Temperature: 9.4 C, average: 6.3 C.

Mean Minimum Temperature: 5.2 C, average: 1.3 C.

Mean Temperature: 7.3 C, average: 3.7 C.

England and Wales Rainfall: 107.2 mm, average: 77.1 mm.

Midlands Mean Maximum Temperature: 9.2 C.

Midlands Mean Minimum Temperature: 4.0 C.

Midlands Mean Temperature: 6.6 C.

Midlands Rainfall: 86.0 mm.

ⁱ Headline, Pitsford Monthly Weather Report, January 2021, p. 3.

ⁱⁱ Monthly Weather Report, January 1921, Meteorological Office, HMSO 1922, p. 2.

iii D J Stanier, by email, 2 February 2021.

^{iv} Monthly Weather Report, January 1921, Meteorological Office, HMSO 1922, pp. 2 and 3.

^v Monthly Weather Report, January 1921, p. 2.

^{vi} Gentleman's Magazine, January 1810, p. 77.

^{vii} Central England Data, Hadley Centre, Meteorological Office.