

# Weather Front.

# March 2024/1924

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# **Observers Notes.**

**Mickleover:** This was the third wettest March on the station record (1981) and locally since 1952.

**Derby:** This March was one of a record five 10 C or higher minima since 1952. It was also the sixth war mest March on record, again since 1952. This concludes the warmest January-March period since 1990.

**Coton-in-the-Elms:** A mild March with very little wintry weather. This was the mildest March since 2017 with frost occurrence below average. Rainfall was well above average, continuing the wet theme, but not as wet as last year!

**Mountsorrel:** Another wet month with rainfall well above average. Another mild, and dull, month. The last six months have seen 595 mm of rain which is 85% of the annual average.

**Middleton:** The 5<sup>th</sup> warmest and 7<sup>th</sup> wettest March on record, with 21 consecutive wet days. This is the longest wet spell on record and just a day short of the previous record at my station just a few miles away, set in September-October 1976. 25 wet days was the most recorded in March, and in the last 47 years has been exceeded in only one month (January 2014 with 26 wet days), and equalled in December 1993, and October 2000. Both the 6 month and 18 month periods ending in March are the wettest on record with 1001.3 mm and 2326.0 mm respectively.

Bablake: Only 9 March months have been warmer since 1892, and only 9 wetter since 1870.

**Lowdham:** There were 20 wet days in March which is the highest for March on the station record (1991) and, with four other months, the 2<sup>nd</sup> highest for any month on record. The running total of rainfall for the last 12 months has exceeded 1000 mm. Sunshine total for Radcliffe-on-Trent is 90.3 hours (78% of average).<sup>i</sup>

**Ely:** Overall temperatures and rainfall just above average. Temperarures were often cool up to the 11<sup>th</sup>, but after that generally just above normal. Rainfall was fairly steady throughout

the month with no dry spell longer than 3 days, only one really wet day on the 10<sup>th</sup>. No snow or frost which was well below normal. Cumulative rainfall to March was 214.1 mm, which is the highest on the station record, but mainly due to a very wet February.

**Desford:** Remaining very mild, and the rain continues.

# UK overview<sup>ii</sup>

#### March overall was unsettled, wet and dull.

The month began colder than normal across the UK, with temperatures across the UK cooler than average and southern areas recording notably low daily minimum temperatures (for instance, Benson in Oxfordshire recorded - 4.6°C on the 3rd). Snow fell on the 2nd across parts of southwest England, causing some travel disruption. However, the cool weather was replaced with milder weather for much of the rest of the month, with temperatures widely into the mid to high teens at times (for instance, a maximum of 18.8°C was recorded at Charlwood, Surrey on the 20th). Temperatures dipped again towards the end of the month, and on the 27th/28th, some areas around Plymouth and Dartmoor experienced snowy conditions overnight. Overall, the weather was unsettled, with a succession of frontal systems bringing rain and wind. By midmonth, several counties including London and Kent had already provisionally experienced their whole-month average rainfall and continued to be soaked throughout the rest of the month. The month ended on an unsettled note, with widespread showers and strong winds across the UK. Overall, the provisional mean temperature for the UK was 6.7°C, 1.0°C above average. Southern England was much milder than areas further north, with a provisional mean temperature of 8.2°C (anomaly of 1.4°C) for southern England and 5.0°C (anomaly of 0.6°C) for Scotland. England provisionally recorded the seventh-warmest March on record in a series from 1884. The UK overall recorded provisionally 127% of the long-term average rainfall for March, with much of this concentrated in the south. England and Wales both recorded more than 150% of their long-term average monthly rainfall, while Scotland recorded just 90% of the average March rainfall. County Down in Northern Ireland provisionally experienced its third wettest March on record (145.9mm) in a series from 1836. As well as wet, the month was also dull, with the UK provisionally recording just 95.2 hours of sunshine (87% of the long-term average). Reference climatology used for calculating anomalies is the period 1991-2020 unless otherwise stated.

#### Weather impacts

• Snow across Ireland, southwest Midlands and the Bristol area caused traffic disruption and road closures.

• Persistent rain across the country throughout the month, particularly in southern England, caused groundwater and surface water flooding.

March started with heavy snow across southern and western parts of Northern Ireland, with the Enniskillen area reporting numerous traffic incidents and several fallen trees because of the snow. Parts of the Peak District and south Pennines also experienced snow, with several roads reported closed for a period. Further south, a heavy hailstorm in Sussex on the 1st may have contributed to a major road traffic collision on the M23. Further snow on the 2nd hit the south-western Midlands and Bristol area, with reports of several snow-related traffic incidents and the use of snow ploughs to clear

a section of the M4. The rest of the month saw unsettled weather with regular bouts of rain. Ongoing groundwater flooding in Suffolk that began in February continued well into March, bringing significant traffic disruption. However, there was otherwise relatively little in the way of impactful rain up until the final week of the month. The last week of March brought rain, snow, and strong winds. Heavy rain in Cornwall on the 25th/26th because of a stalling weather front led to flooding; the Cornwall Fire and Rescue service reported rescuing six people from flooding incidents on the roads which included rescues from flooded cars. On the 27th, the rain turned to snow across southwest England, leading to travel disruption including reports of abandoned vehicles around Dartmoor and further road disruption in mid-Wales as the area of precipitation moved north. Strong winds and locally intense rainfall on the 28th affected southern areas of Wales and England, resulting in several incidents of surface water flooding that led to the closure of several roads in Wiltshire and Oxfordshire to allow the floodwater to drain. The month closed with scattered heavy showers on the 29th, before the weather settled a little over the Easter weekend.

### March 1924.

#### Observers Notes.<sup>iii</sup>

**Ardingly (Sussex):** Bright sunny days from the 6<sup>th</sup> to 21<sup>st</sup>, with sharp frost at night. Snow lying in places until the 16<sup>th</sup>.

**Berwick-on-Tweed:** Cold, calm, dry, and foggy. River very low on the 9<sup>th</sup>, probably due to freezing of tributaries.

**Copdock (Suffolk):** The sunniest March in my records, except March 1907, also the driest one.

**Newquay:** The warmth of the sun in conjunction with the biting wind of the second week was very trying.

**Skegness:** The sunniest March since 1907 and the driest since 1910, with a drought from the 3<sup>rd</sup> to the 20<sup>th</sup>. Average temperature, but with a marked predominance of light easterly winds.

**Southport:** Only one third of the normal duration of SW wind and one half that of W, NW, and N winds, the duration of E and SE ones being more than doubled. Fine and dry with warm afternoons but very cold nights.

Torquay: A cold month, the long spell of bitter E and S winds being most unusual.

Walton-on-Naze: Unusually dry and cold, with abundance of the proverbial "dust".

Ballintuim (Perthshire): Frost nearly every night.

Glenelg (Inverness): The driest month since the start of the record in January 1899.

**Jardington (Dumfries):** Dry bright weather prevailed throughout most of the month. Frost on 26 nights.

**Ullapool (Ross and Cromarty):** The blizzard of February continued into the first week of March.

**Dublin:** A cold dry month with a mild period from the 22<sup>nd</sup> to the 26<sup>th</sup>.

**Derby/Burton-on-Trent**:<sup>iv</sup> A dry and cold moth. Rainfall (or likely snow early on) totals were either side of only 20 mm (range 18 to 25 mm) and there were very low minimum temperatures; -6 or -7 values occurred on the 4<sup>th</sup>. However, overall maxima achieved 17 to 19 C not long after. The 13<sup>th</sup> to 15<sup>th</sup> were cited as very warm days, as was the 20<sup>th</sup> with an apparent 21 C reportedly after a minimum of -1 C, however this cannot be verified. There were 21 air frots at Burton-on-Trent, and the overall mean temperature was 4.3 C.

Louth (Westgate): Total rainfall for the month was 16.5 mm.<sup>v</sup>

#### Brocklesby:vi

Date	Max	Min	Mean
1-10	41	26	34
11-20	50	27	38
1-20	46	26	36
21-31	47	35	41

#### 10 Day Mean Temperatures.

## Weather Summary, UK, March 1924.

A deep depression, centered near Shetland at the end of February, continued to dominate the UK during the first five days of March, with the air mass originating in northern Europe and the Arctic. Temperatures were lower than in February, and those in Scotland were bitterly cold. Snow and hail was reported in many parts of the country, and snow lying to a depth of several inches was noted at a number of stations. Pressure rose rapidly around the 6<sup>th</sup> over England and the continent, resulting in fine, sunny weather, and a gradual increase in maximum temperatures, but the nights continued cold. There was plenty of sunshine and, combined with the light winds after the 6<sup>th</sup>, there were wide ranges of temperature around the middle of the month. There was very little rain between the 6<sup>th</sup> and the 20<sup>th</sup> which produced absolute drought conditions at many stations. After the 20<sup>th</sup> Atlantic depressions dominated the Brithish Isles, with south-westerly winds and mild rainy weather in the south while, in the north, snow or hail was reported. During the final week winds were between E and NE together with cold and cloudy weather with sleet and hail showers being reported in places.

The mean temperature in each part of the country was below average, the largest departure from average was -3.1 F [-1.5 C] in NE Engalnd, and the smallest was -0.1 F [<0.05 C] in the channel Isles and the Isles of Scilly. The first week of the month was the coldest and the

second the warmest, while the third was "fairly" cold. The highest temperatures were in the middle of the month, but the nights were cold throughout. These temperatures, combing with the cold winds and warm sunshine, made the month a difficult one to judge. At Paisley and Perth the mean temperature was 5 F [2.5 C] lower than that of February. Very large ranges of temperature were reported around the middle of the month, ranges of 30 F [approx. 15 C] were recorded in some places, and on the 15<sup>th</sup> South Farnborough reported a range of 40 F [approx. 20 C]. However, in a few places, where the sky was overcast, mainly in Scotland and Ireland, the range was only 2 F or 3 F [1 or 2 C].

Ground frosts were numerous, occurring on 25 or more nights at a large number of stations, and grass thermometers were frequently below 20 F [-7 C]; -2 F [-19 C] was reported at Balmoral on the 3<sup>rd</sup>. At Copdock the grass minimum was 32 F [0 C] or below every night from February 12<sup>th</sup> to March 21<sup>st</sup>, which was a record [at that time] since observations started.

Rainfall was well below average, except for the Channel Isles and the Isles of Scilly where it was normal. In only a few places was 75% of average achieved, parts of the South-West Peninsula, southern Kent, and much of Sussex being the main areas affected. Two areas had less than 25%, the Cumbrian coast, a large area around the extreme northern Irish coast, and a large part of the west coast and centre of Scotland. In this latter area a considerable area around Loch Linnhe had only 8% of average rainfall. With few exceptions rainfall was below average during each week of the month, the driest being from the 6<sup>th</sup> to the 20<sup>th</sup>, which was an absolute drought at some stations, for example Berkhamsted. The observer at Belper noted that the total rainfall for the first three months of the year was 121 mm, and that since 1877 there had been only two years 1887 and 1891, with less. The monthly total at Ilderston (Northumberland) was only 7 mm, and at Parson Drove (Cambridge) 9 mm.

Snowfall was generally reported throughout the country, very few stations having none, and occurred mainly in the first half of the month. Snow lying was frequently reported, Balmoral 15 days, West Witton (Yorkshire) 12 days, and Rhyader (Radnor) 10 days. The blizzard, which started on February 29<sup>th</sup> in Scotland, was followed by a further two or three days of snow and, at Achnashellach, the depth of snow lying on March 1<sup>st</sup> was 15 in [38 cm].

Hail was reported on four days at Southport and Guernsey, with several stations noting from one to three days. Thunder was noted on one day at a few stations in England, and at Malin Head, while Newquay had two days.

There was a considerable number of reports of mist and fog, particularly around the 23<sup>rd</sup> and 25<sup>th</sup>, but the number of days reported varied. A few stations noted 10 or more days, while Southampton noted 20.

The month can be said to have been cold and very dry.vii

# Europe and the Rest of the World.

Reports of avalanches, which had been noted in previous months, continued through March. Reports of damage and loss of life were received from various parts of Europe, and were espescially serious at Salzburg, in Austria, and also in Switzerland. A sudden thaw towards the end of the month, after heavy snowfall, produced flooding in Poland, and resulted in extensive suffering and damage; it was reponsible for the destruction of a newly built dam in Jutland. The vistula continued to rise until the end of the month, rising in some places to 27 ft [about 8 metres] above normal, a height not seen since 1570.

Numerous rivers in Spain and Portugal overflowed their banks resulting in substantial loss of life. Exceptional heavy rain at Amalfi, Italy, caused a series of landslides towards the end of the month, again resulting in much loss of life.

Heavy rain in Sinai resulted in the railway bridge at El Arish being washed away.

In the USA two violent storms were reported during March. The first, on the 11<sup>th</sup>, traveled along the Atlantic seaboard and isolated Washington for several hours. Damage to overhead telephone and telegraph wires was reported, as well as interrupting wireless communications. The second, during the 28<sup>th</sup> and 29<sup>th</sup>, mainly affected the central states. At St Paul, Minnesota, 18 inches [about 46 cm] of snow fell in 24 hours, the lowlands of Ohio were flooded, and considerable damage was done in Maryland, Pennsylvania, and West Virginia.

A serious accident occurred near Bareilly, north-east of Agra, near the Nepalese border, when a train was struck by a violent wind when crossing a bridge. The train fell into the river and many lives were lost.

Reports from Brazil noted that the rainfall in the north was excessive, being 109 mm above average, and flooding had occurred in many places. In the central region rainfall was 10 mm above average, while in the south it was irregular, and around 50 mmbelow normal. The temperature was below average in the north and irregular in both the central and southern districts. The coffee, cotton, and cocao crops were reported to be in good condition.<sup>viii</sup>

#### Central England Data.<sup>ix</sup> March 1924 (Averaging period is 1891 to 1920.)

Mean Maximum Temperature: 8.4 C. Average: 8.8 C.

Mean Minimum Temperature: -0.2 C. Average: 1.8 C.

Mean Temperature: 4.1 C. Average: 5.3 C.

England and Wales Rainfall: 37.6 mm. Average: 70.5 mm. 53%.

#### Midlands Data. March 1924 (Averaging period is 1911 to 1920).

Midlands Mean Maximum Temperature: 8.2 C. Average: 8.3 C.

Midlands Mean Minimum Temperature: -1.3 C. Average: 1.1 C.

Midlands Mean Temperature: 3.4 C. Average: 4.7 C.

Midlands Rainfall: 30.1 mm. Average: 75.7 mm. 40%.

#### Central England Data March 2024 (Provisional) (Averaging period is 1991-2020).

Mean Maximum Temperature: 11.5 C. Average: 10.4 C.

Mean Minimum Temperature: 4.8 C. Average: 3.1 C.

Mean Temperature: 8.1 C. Average: 6.7 C.

England and Wales Rainfall: 111.5 mm. Average: 65.4 mm. 170%.

#### Midlands Data March 2024.

Mean Maximum Temperature: 11.1 C. Average: 10.1 C.

Mean Minimum Temperature: 4.2 C. Average: 2.5 C.

Mean Temperature: 7.6 C. Average: 6.3 C.

Midlands Rainfall: 97.1 mm. Average: 54.5 mm. 178%.

Sunshine: 90.5 hours. Average: 114.6 hours.

<sup>&</sup>lt;sup>i</sup> Courtesy T Scholey.

<sup>&</sup>quot; Weather Summary, March 2024, Meteorological Office, p. 1

<sup>&</sup>lt;sup>III</sup> Monthly Weather Report, March 1924, Meteorological Office, HMSO, April 1924, p. 29.

<sup>&</sup>lt;sup>iv</sup> D J Stanier, by email, 1 April 2024.

<sup>&</sup>lt;sup>v</sup> British Rainfall, 1924, Meteorological Office, HMSO, p.97.

<sup>&</sup>lt;sup>vi</sup> YARB 14/1, March 1924, Lincoln Archive Office.

<sup>&</sup>lt;sup>vii</sup> Monthly Weather Report, March 1924, Meteorological Office, HMSO, April 1924, p. 29.

viii Meteorological Magazine, April 1924, Meteorological Office, HMSO, p.73.

<sup>&</sup>lt;sup>ix</sup> Hadley Centre, Central England and Midlands, Meteorological Office.