



Weather Front.

November 2024/1924

November 2024.

Observers Notes.

Derby: The maximum temperature of 16.0 C, recorded on the 24th, is the highest, late November, maximum on record since 1952.

Mickleover: The most days of snow lying at 0900 for late November, and the lowest grass minimum was the lowest for November, both since 2010. The diurnal range of 15.5 C, on the 23rd, was the highest on the station record for November.

Bablake: The dullest November since 2015. The first eleven months of 2024 have been the wettest on record since before 1892, and the dullest since 1993.

Middleton: The coolest November since 2019. A cold and snowy spell mid-month gave a maximum lying snow depth of 21.5 cm on the 23rd, the most in November since 2010. There were eleven consecutive sunless days from 30th October to 9th November, and was the longest sunless spell since March 1996. The first half of the month was the driest on record for November since 1963 with just 2.9 mm of rain being recorded.

Ely: Dull, quiet, and cloudy for most of the first half, second half either very cold or very mild. Rainfall below average, but two days in double figures, 18th and 26th.

Desford: A drier than average month with a very brief, but notable, early cold snap, with some persistent rain that turned to snow. The snow only gave less than half cover, mainly on the grass, cars, and house roofs.

UK overview

November was a month of two very contrasting halves. The first half of the month was dominated by high pressure, leading to dull, dry and mild conditions with very low sunshine levels. This 'anticyclonic gloom' persisted until mid-month, at which point there was a shift to lower pressure brought by an Arctic maritime airmass. This airmass resulted in colder temperatures and wintry precipitation, especially in northern areas but extending into southern England. The second half of November saw continued cold conditions with frequent

wintry showers, particularly in northern and western regions. The second named storm of the season, Storm Bert, arrived on the 23rd and brought exceptionally wet and windy weather to the UK, particularly south Wales and south-west England. A few days later, the third named storm of the season, Storm Conall, brushed along the southern coast of England, bringing heavy rainfall. Although November started with mild temperatures, cold spells in the latter half of the month brought the overall mean temperature to near average. The provisional UK average mean temperature for November was 6.6°C, 0.1°C above the long-term average. Northern Ireland was slightly warmer than other countries, recording a provisional mean temperature of 7.5°C, 0.8°C above average. The first half of the month was dry, with only 6% of the long term average rain falling by the 16th. However, the second half of the month saw increased rainfall, although not quite reaching the average November rainfall. Overall rainfall was below average, with the UK provisionally recording only 68% of the average month's rainfall. Storm Bert brought exceptionally wet weather to the southwest, particularly south Wales, with more than 150mm of rain falling in the wettest upland areas. Around three-quarters of the whole-monthly rainfall fell in a swathe from Gwent to Wiltshire to Northamptonshire. With anticyclonic gloom dominating the first half of the month, the month's sunshine hours were below average, with the UK provisionally experiencing 51.8 hours, just 89% of the average. Scotland, however, recorded near-average sunshine hours, with 47.3 hours, 99% of the average November sunshine. Reference climatology used for calculating anomalies is the period 1991-2020 unless otherwise stated.

Weather impacts

- **Widespread snow led to school closures and travel disruption from the 18th to the 21st.**
- **The second named storm of the season, Storm Bert, was a multi-hazard event that brought heavy rain, wintry precipitation and strong winds across the country, but especially to South Wales.**

November was a month of two very contrasting halves. The high pressure across the UK that marked the closing days of October proved remarkably resilient, lasting through the first half of November and giving over a fortnight of relatively static, mild and impact-free conditions. The anticyclonic block was finally broken mid-month as the high centre retrogressed to the central N Atlantic. This allowed the first southwards incursion of Arctic air into the UK, leading to snow and ice across initially northern parts but spreading to Wales and central England by the 18th/19th. As much as 15cm of snow was reported in parts of the East Midlands on the morning of the 19th, and the snow brought widespread disruption to roads in the Pennines, Midlands and north Wales. Wintry conditions led to the closure of around 50 schools in the west Midlands on the 19th. The cold spell persisted until the 23rd with some sharp overnight frosts recorded, especially in northern Scotland. Further snow showers affected northern Scotland and western parts of the UK, with more organised snow affecting parts of southern and south-western England on the 21st. Numerous school closures were reported during these days across Scotland and southern England. Reports of more than 10cm of snow were

reported at modest altitudes inland, and significant damage to trees from the weight of snow was reported in parts of Devon. A few localised power outages were also logged in the worst affected areas. By the 20th there were clear signals that the cold spell would be brought to a decisive end during the 23rd with a major Atlantic low forecast to develop and spread much milder air north-eastwards across all parts of the UK. Storm Bert was named by Met Eireann on the 21st and brought heavy snow to Scotland and northern England, widespread heavy rain across Wales, southern parts of northern England, the Midlands and southern England, and a rapid rise in temperature that resulted in a thaw of the earlier snow. Around 6000 properties in Northern Ireland reportedly lost power with widespread road flooding and a number of trees reported fallen. Scotland saw road disruption during the heavy snow with reports of various weather-related accidents. The main surge of impacts from Storm Bert centred around its rainfall with over 150mm recorded across upland south Wales and Dartmoor on the 23rd and 24th. The river response across southern Wales, the Midlands and southern England was strong with well over 100 flood warnings posted. In south Wales, Pontypridd was affected by severe flooding after the River Taff overtopped, whilst a landslide at Cwmtillery, Blaenau Gwent brought mud and sludge down onto the main street. Some 400 properties were reportedly flooded across south Wales with the water treatment works at Tynywaun impacted, resulting in various communities in the Rhondda being without drinking water for over a week. Tenbury Wells in Worcester suffered significant flooding when a wall gave way under pressure from a rapidly rising brook. Both Chippenham town centre and Bradford-on-Avon (Wiltshire) were reportedly flooded after the River Avon overtopped. Northampton railway station was reportedly flooded with the nearby Billing Aquadome Caravan Park inundated by the River Nene, forcing evacuations and invoking a severe flood warning and a major incident declaration. The National Grid reported over 350,000 homes without power for a time during Storm Bert, whilst at least five deaths were directly linked to the adverse weather conditions associated with the storm. The last main weather event of the month occurred early on the 27th when Storm Conall, named by the Dutch meteorological service, brushed across the far south of England, bringing widespread rainfall and some road/rail disruption to central southern and southeastern England.

November 1924.

Observers Notes.

Belper, Quarry Bank: On the whole a very pleasant month.

Berwick-on-Tweed: Warm, calm, and gloomy. Small rainfall but high humidity.

Copdock (Suffolk): Again, a month with excessive rainfall, and sunshine considerably below normal.

Newport (IOW): A dull and rather mild month.

Raunds: Generally dull, temperature above normal, rainfall below normal.

Skegness: An average November, winds mainly from the south.

Southport: A notably south-easterly month of the high pressure variety. Calm, dry, and rather mild. Normally sunny.

Teignmouth: Dull, alternating with thick fog. Occasional thunder, lightning and hail, at the end of the month.

Torquay: A mild month with deficient sunshine, but little fog.

Walton-on-Naze: Temperature mainly above normal. Sunshine above, and rainfall below normal. Most of the rain fell at night.

Arrochar (Argyllshire): The first half of the month pleasant and dry, very heavy rains subsequently.

Forglen Castle (Banffshire): Dull, foggy, and mild throughout.

Dublin: A very open month, in marked contrast to November 1923.

Belvoir Castle: Total rainfall 1.93 in, 49.0 mm, 87%.

Skegness Estate Office: Total rainfall 1.53 in, 38.9 mm, 71%.

Louth, Westgate: Total rainfall 1.76 in, 44.7 mm, 68%.

Mickleover, Clyde House: Total rainfall 1.68 in, 42.7 mm, 75%.

Buxton, Devon Hospital: Total rainfall 2.56 in, 65 mm, 55%.

Derby/Burton-on-Trent:ⁱ The month was a little drier than normal with all sites receiving a little either side of 40 mm of rain. Temperatures ranged between -4 C or so on the 4th and 18th, and about 17 C on the 6th. Overall mean was around 6.9 C compared with the CET figure of 7.1 C. It was about a degree above, the then, normal. There were five air frosts in Burton-on-Trent.

Brocklesby: 10 Day Mean Temperatures.

Date	Max	Min	Mean
1-10	69	52	60
11-20	68	50	59
1-20	68	51	60
21-31	62	48	55

Overview of November 1924.ⁱⁱ

The first two days of the month were unsettled due to the passage of a depression over southern Scotland. Strong winds and gales were reported along the south-western coasts, together with heavy rain in the south. The heaviest falls were at Tynywaun, in Glamorgan (46mm); Brushford, Somerset (41 mm), and at Holne in Devon (40 mm). On the 2nd and 13th, a gust of 60 mph was recorded at St Ann's Head. Floods occurred in the area of Exeter, and in the Thames Valley. At Bude the floods noted on the 1st were the worst for 20 years. In Scotland snow fell over a wide area to the north of the Grampians on the 2nd and 3rd. An anticyclone developed in the rear of this depression and passed slowly east across the country, bringing quiet, fair weather, with local mist and fog. At first northerly winds dominated producing slight showers of hail or snow in a few places, together with a drop in temperature, which spread slowly south on the 3rd and 4th. Severe frost was reported at inland stations on the 4th, 5th, and 6th, with a grass minimum of 10 F [-12 C] being recorded at West Linton (Peebles) on the 6th, and 11 F [-11.7 C] at Rhayader (Radnor) on the 5th. Winds backed southerly from the 9th to 11th producing more mild weather, and rain in the west. A further depression developed on the 12th, and crossed southern England, producing heavy rain, 30 mm falling at Shoeburyness. Further depressions over the North Atlantic continued the unsettled weather in the extreme west and north until the end of the month, but in the south, under the influence of an anticyclone, which spread south-west from Scandinavia, quiet, fair weather dominated for nearly a week. Clear skies, and air flow from the continent, saw minima fall to 20 F [-6.7 C] in some places on the 17th and 18th, while maxima did not reach 40 F [4.4 C] at several stations on these two days local fog and mid-day sunshine was associated with the frost. During the last ten days Atlantic depressions became re-established over the country. Producing strong winds and frequent, locally heavy, rain; 46 mm at Arrochar (Argyll) on the 21st, 85 mm at Dungeon Ghyll, and 50 mm at Sedburgh (Yorkshire) on the 22nd, and 48 mm at Watchet (Devon) on the 26th.

On the night of the 26th/27th a gale developed in the south of England which was associated with a depression located over the Bay of Biscaya at midday on the 26th. This depression tracked north over Brittany and the western coasts of Great Britain on the 27th and 28th. Gusts of 72 mph were recorded at Petersfield and South Farnborough early on the 27th, with Calshot and Shoeburyness noting gusts of 68 mph. Considerable damage was done to shipping, as well as coastal and inland towns. During high tide the sea broke over the front at several south coast towns and flooded the streets. At Bournemouth it was said to be the worst gale since 1881.

Ground frosts occurred throughout the month with a number of stations reporting 10 or more occasions; Burnley and Chopwellwood noted 17 occasions. A few stations, mainly in Scotland, reported snow, however snow was also seen on the hills at Newcastle (Wicklow) on the 28th, and Dungeness reported 3 days. A few stations had one or two days of thunder.

Sunshine was above average in north-west England, northern and western Scotland, and the Channel Isles, but below average elsewhere. The Channel Isles had 29% of possible duration,

but eastern England had only 16%. The first week was the sunniest with a number of stations reporting over 8 hours on the 4th. At Aberdeen it was the dullest November on record.

A considerable amount of fog occurred throughout the month, most stations reporting one or more days, but northern, and eastern Scotland were fog free. Several stations had more than 10 days with fog being reported; 21 days at Aberystwyth, 17 at Wallasey, and 14 at Lerwick. At Renfrew fog persisted all day on the 6th, 7th, 10th, 13th, and 15th.

Around the Worldⁱⁱⁱ

The mean pressure for November was above average over much of Europe, the greatest being over the North Sea and Denmark, but over western Iceland and northern Scandinavia the pressure was below average. Depressions passing to the north of Britain produced gales on northern and western coasts, and "heavy weather" in the Atlantic resulted in trans-Atlantic traffic being delayed. Temperatures were above normal, and rainfall below, except in the extreme north where precipitation was slightly above average. The unsettled weather of October continued into the first few days of November, but then settled down to a fine, quiet period, with mist and fog predominating. There were some high temperatures recorded at the beginning of the month, Geneva, on the 3^d, recording 73 F [22.8 C]. The Meteorological Magazine notes that, "a temperature of 74 F [23.3 C] was recorded at Geneva in November 1895. This was the only occasion of such a high reading in November in the years 1851-1900". Toulouse recorded a maximum of 72 F [22.2 C] on the 6th.

Towards the end of the month much colder temperatures were recorded generally, with intense frost persisting in northern Scandinavia, -8 F [-22 C] being recorded at Gillivare on the 30th. On the 26th/27th a gale swept across north-west Europe. While its effect was mainly felt on the English Channel coast, a wind of force 9 was reported at Rochefort at 0800 on the 16th.

The continuing drought in the north-western USA did not break until the middle of the month, and many forest fires were reported. A light fall of snow was noted in New York on the 9th. Heavy rains were reported in Jamaica and Cuba, and large areas of Jamaica were flooded.

Floods were also reported in India at the beginning of the month, near Allahabad, but did not cause any interruption to traffic. On the 19th a tropical cyclone, from the Bay of Bengal, made landfall to the south of Calcutta [Kolkata] causing considerable damage.

Rainfall reports from Australia showed that it was generally sufficient. Parts of New South Wales were threatened with floods in the middle of the month, but the rain moderated, and the threat passed.

In Brazil rainfall was 9 mm and 30 mm below average in the northern and southern districts respectively. In the central region rainfall was irregular, but by the end of the month the total was 32 mm above average. The grain crops in the south, and the cane in the north, suffered from lack of rain.

Central England Data.^{iv} November 1924 (Averaging period is 1891 to 1920.)

Mean Maximum Temperature: 9.5 C. Average: 9.0 C.

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

Mean Temperature: 7.1 C. Average: 6.2 C.

England and Wales Rainfall: 72.8 mm. Average: 82.2 mm.

Midlands Data. (Averaging period is 1911 to 1920).

Midlands Mean Maximum Temperature: 9.1 C. Average: 8.6 C.

Midlands Mean Minimum Temperature: 3.7 C. Average: 2.2 C.

Midlands Mean Temperature: 6.4 C. Average: 5.4 C.

Midlands Rainfall: 60.5 mm. Average: 63.5 mm.

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

Mean Maximum Temperature: 10.1 C. Average: 10.3 C.

Mean Minimum Temperature: 4.3 C. Average: 4.5 C.

Mean Temperature: 7.2 C. Average: 7.4 C.

England and Wales Rainfall: 85.7 mm. Average: 106.1 mm.

Midlands Data.

Mean Maximum Temperature: 9.7 C. Average: 9.9 C.

Mean Minimum Temperature: 3.9 C. Average: 3.9 C.

Mean Temperature: 6.8 C. Average: 6.9 C.

Midlands Rainfall: 75.0 mm. Average: 80.6 mm.

Sunshine: 58.4 hours. Average: 62.1 hours.

ⁱ D J Stanier, by email, 1 December 2024.

ⁱⁱ Monthly Weather Report, November 1924, Meteorological Office, HMSO, December 1924, p. 141, and Meteorological Magazine, December 1924, Meteorological Office, HMSO, December 1924, pp. 271 and 272.

ⁱⁱⁱ Meteorological Magazine, November 1924, Meteorological Office, HMSO, December 1924, pp. 272 and 273.

^{iv} Hadley Centre, Central England and Midlands, Meteorological Office.