



Weather Front.

November 2022/1922

November 2022

Observers Notes.

Pitsford: Largely unsettled with outbreaks of rain, heavy at times. Unseasonably mild until the very end and then cold.ⁱ

Desford: Very mild and often wet at times with significantly above average rainfall. First late season thunderstorm at 1526 GMT. Only the seventh occurrence recorded this year.

Middleton: The fourth warmest, and the fourth wettest, November on record (before 1977). It was the dullest November since 2015, the wettest since 2019, and the dullest on record (since 2000).

Mickleover: The fifth wettest November since 1984, and the fourth mildest on the station record (1981).

Derby: The fourth mildest November since 1952.

Bablake: -This was the mildest November since 2015; only two November months have been milder since 1892 (1994 and 2015). It was the wettest November since 2019; eleven have been wetter since 1870.

Ely: Often dull and damp, with only five dry days, and frequent fog early and late month. Fourth highest mean temperature for November in the 52-year record.

Lowdham: First Air Frost of the season occurred on the 21st, giving an Air Frost free period of 224 days. There were 49.6 hours of sunshine (66% of 1991-2000 average) recorded at Radcliffe-on-Trent.ⁱⁱ

Mountsorrel: It has been the wettest November in 20-years of records. The month was very mild throughout, with a mild SW air flow for much of the time.

Weather impacts

Heavy overnight rain across parts of eastern Scotland on the 1st gave rise to surface water flooding in Aberdeen with several roads in the city reported to be impassable. Further south heavy rain followed by bands of heavy showers impacted the M40 in Buckinghamshire which was closed for a time between J4 and J5, with many minor roads in the area affected by deep standing water. The south coast of England saw very strong winds early on the 1st, with trees brought down and power outages in Hampshire and Dorset. Northern Ireland and south-west Scotland suffered heavy rain on the 2nd, with various roads being affected by flooding in Northern Ireland, and rail services were suspended between Kirkcubbin and Dumfries. Heavy rain on the 2nd also caused rail disruption in south-west England, whilst strong winds in Tayside on the same evening caused a trailer to overturn on the Tay Bridge, resulting in temporary closure. After heavy overnight rain, flooding impacted both roads and rail services on the 3rd, including some London Underground stations. Parts of Essex also saw roads flooded, whilst numerous Environment Agency flood alerts and warnings were posted across London, Sussex and Kent. Further heavy rain in south-east England led to renewed flooding on the M20 and M25 on the morning of the 6th. During the 10th and 11th there was prolonged rainfall over the north-west Highlands of Scotland and the Western Isles, with flooding near Gairloch and on the island of Harris. The 15th to the 18th saw heavy rain in south-east England; flooding affected key routes including the M20, M25, M40 and the A27 where up to 20 cars were trapped. Heavy rain in north-east England was followed by significant disruption to train services around Sheffield later on the 17th. Rain in eastern Scotland, especially parts of Angus and Aberdeenshire, led to widespread impacts with reports of flooding on roads and railways from as far apart as Edinburgh and Inverness. Several severe river flooding warnings were issued by SEPA. The 21st saw locally intense rain across Wales and south-west England. There were numerous reports of surface water flooding across Pembrokeshire, and also in parts of south-west England with the A30 and A38 adversely affected, and the latter closed for a time near Saltash, while a landslip closed the rail line near Honiton, Devon. Heavy rain also impacted Northern Ireland that day, most notably across counties Down and Tyrone. Further bands of locally heavy rain affected the UK during the next few days, but the weather finally calmed down for the last three days.

From The Press.

Overnight on the 9th temperatures across central and western Canada, as well as many western states of the USA, plunged to at least 10 C below average, with parts of Canada recording temperatures 20 C below average.

Temperatures fell below freezing from Arizona and New Mexico up to much of Canada. Across many parts of Western Canada minima as low as -25 C to -30 C were recorded.

In Lisbon, heavy rain brought flooding, and an active front from the Atlantic saw a tornado form, briefly during the afternoon of the 8th, toppling trees and damaging vehicles. Another tornado was reported to the north of the city earlier in the day.ⁱⁱⁱ

After causing significant damage in Florida during the week prior to the 15th, Hurricane Nicole passed across the US coast and across the Atlantic towards Europe as an extratropical cyclone. Heavy rain

and strong winds were experienced in Ireland, the UK, and northern France during the Monday night.

Parts of Australia also experienced turbulent weather. During the 12th and 13th low pressure developed across South Australia and the Great Australian Bight. It tracked along the coast and was accompanied by a cold front which was responsible for stormy conditions. It also brought heavy rain and flooding to Victoria, New South Wales, and South Australia; 56 mm of rain were recorded at Port Lincoln, and winds gusted to 66 mph at Adelaide airport.^{iv}

A major lake-effect snow event hit the Great Lakes of the USA on the 16th producing intense snow fall. Lake-effect snow occurs when cold air blows across an unfrozen lake that is relatively warm, heating the cold air from below and creating heavy snow showers. These showers often form in narrow, slow moving, bands and cause heavy snow to fall over a small area.^v

There were strong temperature contrasts over Europe during the latter part of the month, with the Mediterranean basking in unusually warm weather while cold air from Siberia brought freezing conditions to northern Europe. Temperatures of 25-26 C in Greece and southern Italy were recorded on the 18th, about 7 C above average, While, parts of Central Europe were up to 10 C colder than average, temperatures falling to -10 C overnight on the 19th.^{vi}

Flooding, caused by heavy rain, killed six people, prompted evacuations, and caused significant damage in parts of the Balkans. Albania was badly hit, with up to 400 mm of rain in 12 hours on the 22nd, causing the Drini River to break its banks. In Montenegro rain caused the Moraca River to rise more than 4 meters in 10 hours. Storm Denise brought heavy rain and strong winds to Spain and Mallorca late on the 21st producing waves of up to 5 metres in height. Meanwhile, the weather in New York state turned milder after the prolonged period of intense snowfall.^{vii}

On Saturday 26th, five people were confirmed missing after a landslide, in Ischia, southern Italy, was triggered by a violent storm, sent debris from the 789-metre peak of Monte Epomeo crashing into the hamlet of Casamicciola Terme. It is suggested that illegal construction of buildings is the cause.^{viii}

November 1922

Observers Notes.

Derby/Burton-on-Trent: All rainfall sites experienced an unusually dry November, with totals under 30 mm, and most just either side of 20 mm. The least amount was 16.5 mm at one of the Derby sites. This suggests an anticyclonic month, and the temperatures might reflect this as well. The lowest values were around -5 C to -6 C on the 25th, and the maximum were in the 12-13 C range on the 9th, 17th, and 29th. Few days exceeded 10 C. There were fourteen air frosts in Burton. The overall mean temperature was about 5.5 C.

Ipswich (Suffolk): For the third year running the rainfall for November is much below the average; the sunshine also is deficient. So far as temperature is concerned, there is an absence of any extreme cold and the figures do not differ very much from the normal.

Redruth (Cornwall): The month was about normal except as to rainfall, which was only fifty-seven per cent of the average for the twenty years 1901-20.

Dublin (City): For the second month in succession the rainfall was markedly in defect, only 0.21 inch [5.3 mm] being registered on nine days, compared with averages of 2.67 inch [67.8 mm] and seventeen days respectively.

Seskin (Co Waterford): The low rainfall for October and November has greatly diminished the water supply. Rivers, streams, and wells are unusually low.

Summary of November 1922

November 1922 was mainly quiet and cloudy with a widespread lack of rain. The first ten days saw considerable cyclonic activity and unsettled weather. This was followed by high pressure which dominated for the next fortnight. This contributed to much inland fog, particularly in the London area. The anticyclone became centred to the south-west of the British Isles resulting in variable weather.

The month opened with a large depression centred off the north of Scotland, resulting in a warm south-westerly airstream over the country producing heavy rain and gales. By the evening of the 1st the depression had moved east into Norway and allowed colder, arctic, air into the area, resulting in sleet and hail showers, night frosts and a cold, bright day to follow. Another depression, on the 3rd, was centred over south-west England which produced rain over southern England and northern France. The centre moved up-channel, into the Netherlands, and then towards Russia; fairer weather followed.

On the 5th a new depression approached the Hebrides producing rain over western parts of the country. It moved north over Scotland, but secondaries produced rain over the English Channel and southern Scandinavia on the 8th. While a ridge of high pressure tried to become established, a secondary, deep, depression over Iceland crossed the country on the 10th. However, by the morning of the 11th the ridge had become established from the Azores to northern Russia and became the dominant feature for the rest of the month. There were local variations in the weather as the centre moved, and with the passage of depressions to the north. From the 12th to the 16th, with low pressure north of Iceland, strong south-westerlies produced relatively high temperatures in Iceland and northern Scandinavia. However, low temperatures and fog were reported over England, the Netherlands, and Germany as a result of the clear skies and calm conditions. On the 16th the anticyclone drifted west and extended north producing a strong north-westerlies, and low temperatures, into Scandinavia. The airstream over the British Isles however, even though it was from the north, appears to be returning tropical maritime, and was warm. On the 20th the anticyclone drifted east again and was centred over London on the 21st. Central London, "experienced remarkable gloom on that day as the result of the formation of a pall of smoke at a height comparable with that of the roofs of buildings. Neither horizontal nor

vertical air currents capable of dispersing the pollution existed, and darkness as intense as that of night persisted almost throughout the day”.^{ix}

By the 24th, high pressure dominated the area from Iceland, over France, to the Black Sea and, with the centre established off south-west Ireland, a north-westerly, polar airmass, resulted in cold weather over Scandinavia and Central Europe, but over the British Isles the weather was much milder.

The lack of rainfall in October continued into November, which gave two consecutive months of abnormally low rainfall. The general rainfall during November was the smallest recorded since 1909. The distribution differed from October showed a decreased tendency for excess along the east coast. Average rainfall appeared to be mainly in the north-west as opposed to a 25% deficiency in the previous month. In Scotland most of the rain occurred during the first ten days with as much as 82 mm at Loch Fyne on the 5th, and 52 mm at Mull on the 9th. Over the British Isles generally the major area below average extended from south-west Ireland to the north-east of England, culminating at Dublin with a total 88% below average. Less than a third of average was recorded near the Scottish border, with less than 6 mm at Kelso. Over much of southern England rainfall was between 50% and 70% of average. A small area on the Irish coast from Drogheda to Dublin experienced a total for the month of about 8mm and a considerable area in eastern central Ireland, central England, and the north-east of England had totals of less than 25 mm. Generally, the rainfall for England and Wales was 55% of average, Scotland 70%, and Ireland 42%.

It was noted that there had been reports from many parts of the country of unusually large numbers of small bird migration, such as finches as well as woodcock. It was suggested that this was a direct consequence of the generally quiet conditions.

Apart from the low rainfall the weather was not unusual.

Europe and Beyond^x.

Heavy floods occurred at Naples on the 4th, causing landslides and the collapse of several buildings, with some casualties. On the 28th a heavy snowstorm was noted in Silesia and had caused serious problems with the frontier traffic on the Polish border.

Severe weather occurred in mid-Atlantic from the 12th to the 14th. The Italian steamer “Monte Grappa” foundered on the 14th because of the shifting of her cargo. The crew were rescued by the White Star liner “Pillsburgh”. The following week was remarkably fine, an officer of the “Aquitania” was reported as stating that, “he could not recall a November voyage with so much sunshine and such smooth seas within the last ten years”.

From the 21st to the 23rd a violent gale was reported from Sydney, Nova Scotia (Cape Breton Island) which affected the whole island. Telegraph, telephone, and power wires were blown down. It was also reported that the city lacked light, or power for the trams, for over 24

hours. It is understood that the gale was the worst, up to that date, in the history of the island.

A report from Paris, on the 25th, gave details of torrential rain which had fallen in the Algerian sector of the Sahara. The railway line between Biskra and Tuggourt was broken at five points, one train being surrounded by a flooded area extending for nearly 40 square miles. Tuggourt station was abandoned, and a large number of houses collapsed in places where there had been no rain since 1917.

In the early part of the month storms, accompanied by floods, were reported over wide areas of the Cape and Transvaal. Shipping at Port Elizabeth had to leave the roadstead and seek shelter. In many parts the rain was needed and “proved beneficial”.

Central England Data.^{xi} (Averaging period is 1891 to 1920.)

Mean Maximum Temperature: 9.1 C. Average: 9.3 C.

Mean Minimum Temperature: 2.7 C. Average: 3.4 C.

Mean Temperature: 5.9 C. Average: 6.2 C.

England and Wales Rainfall: 48.7 mm. Average: 82.2mm. (59%).

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

Midlands Mean Maximum Temperature: 8.7 C. Average: 8.6 C.

Midlands Mean Minimum Temperature: 1.6 C. Average: 2.2 C.

Midlands Mean Temperature: 5.1 C. Average: 5.4 C.

Midlands Rainfall: 37.1 mm. Average: 63.5 mm. (58%).

2022 (Provisional)

Central England (Averaging period is 1991-2020).

Mean Maximum Temperature: 11.9 C. Average: 10.3 C.

Mean Minimum Temperature: 6.4 C. Average: 4.5 C.

Mean Temperature: 9.2 C. Average: 7.4 C.

England and Wales Rainfall: 158.8 mm. Average: 106.1 mm. (150%).

ⁱ Monthly Weather Summary, November 2022, Pitsford Weather Centre.

ⁱⁱ J Osborne, by email, vice T Scholey.

ⁱⁱⁱ The Guardian, 12 November 2022.

^{iv} The Guardian, 15 November 2022.

^v The Guardian, 19 November 2022.

^{vi} The Guardian, 22 November 2022.

^{vii} The Guardian, 26 November 2022.

^{viii} The Guardian, 28 November 2022.

^{ix} Monthly Weather Report, November 1922, Meteorological Office, HMSO, December 1922.

^x Meteorological Magazine, December 1922, Meteorological Office, HMSO, December 1922, pp. 317-322.

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