

Weather Front

January 2025/1925

January 2025

Derby: 3 cm snow lying on the 5th and a dusting on the 7th. There were three consecutive nights with minima around -5 C, the most in January since 1987.

Bablake: The coolest, wettest, and dullest January since 2021. The 5th was the wettest day of the month, and the wettest January on record back to 1892.

Ely: The coldest January since 2010 overall, the driest since 2023; observer suggests "almost like winters used to be!" Mild on the 1st, but only 3 more days exceeded 10 C. 14 days with no measurable rain from the 7th to the 20th, but a wet final week. Air pressure on the 6th was 970 mb, the second lowest in January on the station record (1971).

Middleton: The coldest January since 2021, and the 15th coldest in the last 48 years. 38.3 mm of rain and melted snow, on the 5th, was the second largest daily fall on the January record, behind 44.1 mm, on the 25th, in 1995. There were 23 ground frosts, the most since 2015.

Mickleover: The 5th was the wettest for January on the station record (1981).

Mountsorrel: January was the coldest, wettest and dullest since 2021. The mean temp of 3.3c was 1.3c below normal. Only 4 max temps reached double figures and there was our first ice day since December 2023 on the 11th. There were 9 air frosts with our lowest minimum being recorded at -6.6C. It was also the wettest since 2021 (130mm) with 78.2mm being logged (128%) but most of this fell in the first week with just 9 wet days being recorded in the month. Once again it was a very dull month with just 54.4 hrs of sun or 85%. We must go back to last January to see an above average sun total for this location. After a mild first day a cold N established itself on the 2nd. There was a little snow between the 3rd and the 5th, but a huge temperature contrast was noted on the 5th with a sudden rise of temperature of 5c in 20 minutes, then a subsequent fall in the same time scale, something I have not observed in 25 years or recording. A large amount of rain fell on the 6th with 32.3mm falling overnight 5th/6th. Extensive flooding was caused once again, similar to Storm Henk on almost the same date last year. Many local residents had only just got back into their homes from last year's floods for them to strike again, with 1 in 50-year floods being repeated just 12 months on.

Several local schools were flooded out and some were so badly affected that it may be September before all the children can return.

After the very wet first week High pressure established itself to give us a very cold week with low night-time mins down to -6.6c, and our first ice day since December 2023. Temperatures recovered somewhat, but there were very few mild days. Storm EOWYN then arrived on the 24th, with winds gusting to 49mph at my station, and 58mph at East Midlands airport, but rainfall totals were only moderate here this time. The month ended on a showery note.

Saltfleeby:

Wind Direction					
N	NE	Е	SE	S	
0	0	1	5	0	

SW	W	NW	Calm
22	1	2	0

I	Wind Force				
ſ	0	1	2	3	4
	0	8	14	4	1
Γ	5	6	7	8	9
L	2	1	1	0	0

10 Day Mean Temperatures.			
Date	Max	Min	Mean
1-10	5.3	-0.6	2.3
11-20	6.0	0.1	3.0
1-20	5.6	-0.3	2.7
21-31	8.0	1.1	4.5

Lowdham: The 5th was the wettest day, 33.0 mm, for January on the station record, and the wettest day in the Nottingham area since 28th January 1958, (35.3 mm, Newark, I T Lyall). There were 84.7 hours of sunshine (133%) at Radcliffe-on-Trent.ⁱ

UK overviewii

January started with an Arctic maritime airmass bringing cold temperatures to the UK as well as wintry showers, especially in northern regions. From the 4th to the 6th a low-pressure system brought extensive rain, freezing rain, sleet and snow to the UK, with large amounts of snowfall in northern England and southern Scotland while central England and Wales saw predominantly rain. High pressure brought more settled conditions in the second week of January, although temperatures were still below average and widespread frosts and freezing fog brought some disruption. Altnaharra (Sutherland) saw its lowest January temperature

since 2010 with -18.9°C recorded on the 11th, before warmer air moved in and brought above average temperatures to northern Scotland and Northern Ireland, before spreading further south across the country over the next few days. High pressure persisted for around a week, with some frontal systems bringing showers but otherwise settled conditions. On the 24th, the fifth named storm of the season, Eowyn, brought destructive winds to northwestern parts of the UK and the first red warnings for wind in 2025. Gusts of over 90mph were recorded across parts of Northern Ireland, Wales and Scotland. Northern Ireland also recorded its lowest January MSLP on the 24th, with 948.1mb recorded at Magilligan (Londonderry). Further wet and windy weather followed Eowyn as storm Herminia, named by the Spanish Meteorological Service, brought heavy rain and strong winds to southern England and Wales. Temperatures for the UK were below average, with the UK recording a provisional mean temperature of 3.0°C, -0.9°C below the long-term average. All four nations recorded provisional mean temperatures below average for January. Although rainfall for the UK overall was below average, with provisionally 79% of the long-term average recorded, there was strong regional variation, with some areas experiencing much heavier rainfall. England, in particular southern England, saw over 100% of the average rainfall, while Scotland and Northern Ireland saw around half the average rainfall. Nottinghamshire and South Yorkshire recorded nearly 150% of the average rainfall for January, and counties including Wiltshire and Cornwall recorded over 125% of the average January rainfall. However, despite the cold and stormy weather, January was sunnier than average, with the UK provisionally recording 61.8 hours of sunshine, 130% of the long-term average. Northern Ireland, northern England and Scotland were particularly sunny, provisionally recording 148%, 143% and 140%, respectively, of the long-term average sunshine duration, but areas further south were closer to average. Reference climatology used for calculating anomalies is the period 1991-2020 unless otherwise stated.

Weather impacts

- Storm Eowyn, the strongest UK storm for 10 years, brought strong winds and heavy rain to Northern Ireland, Scotland and northern England, with widespread travel disruption, closure of schools and loss of power.
- Prolonged rainfall in southern England at the end of the month led to flooding.

January started with flooding before a cold spell moved in and there was appreciable snowfall in places. The cold then gave way to quieter, milder conditions either side of mid-month. The final third was much more unsettled and included a powerful storm, Eowyn. Temperatures were below the 1991-2020 average with much of Scotland and Northern Ireland drier than average, while much of England and Wales saw near or above average rainfall. Arctic air early in the month, combined with anticyclonic conditions mid-month, helped make it a relatively sunny month for many areas. New Years Day saw persistent rain from the previous day finally clearing to the south after an amber rain warning had been issued on New Years Eve for southern parts of northern England. Significant flooding affected parts of Lancashire and the

south side of Manchester, where one of the principal flood storage basins in Didsbury overtopped as the nearby River Mersey reached record levels. Several hundred properties in northwest England were reported as having flooded with around 1300 reported as evacuated from flood risk zones in south Manchester. Both road and rail disruption were extensive across the south of northwest England, whilst in Cheshire the Bridgwater canal at Little Bollington was reported as suffering a major breach which resulted in extensive flooding of adjacent farmland. After the 1st, cold air spread south to most of the UK, but there were already clear signs that a developing low centre would attempt to push much milder air back north into the UK for a time around the 5th. Both snow and rain were set to feature and, with initial concerns more focussed on the snow aspect, two medium impact amber snow warnings were issued on the 3rd for large areas of England and Wales. On the 5th, widespread snow moved north across England and Wales, giving way to prolonged rain across southern and central areas but staying as snow across the Pennines and northernmost counties of England. Before the snow began, there were some pre-emptive road closures. Overnight on the 4th/5th as the snow arrived airport runway closures were reported at Bristol, Birmingham, Liverpool, Manchester, Leeds/Bradford and Teesside. Multiple Pennine-road closures followed, along with some rail service suspensions. Meanwhile, the prolonged rainfall across southern/central England brought reports of road flooding in Essex and a combination of river and surface water flooding in Berkshire. Road closures were reported in Lincolnshire, Hereford and Worcestershire. In Leicestershire, probably the county worst affected, a severe flood warning and emergency alert were issued on the 6th for Barrow-upon-Soar where a caravan park had to be evacuated. Colder air then returned, and the following week saw some severe overnight frosts (-18.9C at Altnaharra, northern Scotland on the 11th) and further snow showers. More widespread snow affected parts of southwest England on the 8th, resulting in an amber warning with numerous school closures reported across southwest England and Northern Ireland on the 9th. The cold spell finally relinquished its grip around the 12th/13th with largely benign weather for the next week. In northern Scotland it became exceptionally mild from the 12th to the 17th, with rapid melting of the existing snowpack. By the morning of the 20th a major low-pressure centre was being signalled to impact the UK around the 24th. On the 21st, this impending low was named Storm Eowyn, the fifth named storm of the 24/25 season. Numerous rain/wind warnings were issued for Eowyn, including a high impact yellow wind warning for northern England, Scotland and Northern Ireland which was escalated to amber on the 22nd, and escalated further on the 23rd to separate red wind warnings for Northern Ireland and southern/central Scotland, with a further amber wind warning following for northern Scotland and the Isles. Eowyn intensified by some 52hPa in 24 hours before fringing Northern Ireland and northern Scotland on the 24th. It would prove to be the strongest UK storm in 10 years with a maximum gust of 100mph recorded at Drumalbin, southern Scotland. Impacts across Northern Ireland, Scotland and northern England were widespread with pre-emptive closures of schools and suspension of public transport reported widely. In Northern Ireland some 285,000 customers (around 30% of households) lost power whilst an estimated 3500 homes suffered some form of damage. Both

Belfast International and Belfast City Airports were reduced to backup generators, as were many acute hospitals. In Scotland some 280,000 homes lost power with full restoration taking around a week. There was one tree-related fatality reported from Mauchline, Ayrshire. Some roads in southern Scotland were closed for a time, and almost 90% of schools and the entire rail network were reported as closed throughout the 24th. Several large buildings including Celtic Park stadium sustained structural damage. Northernmost counties of England also suffered widespread power outages and some structural damage. Thousands of trees were lost to the winds right across the amber/red warning areas including a 166-year-old Himalayan Cedar in Edinburgh's Royal Botanic Garden. A second deep low centre then affected the more southern areas of the UK on the 26th/27th. This system was named storm Herminia by the Spanish Meteorological Service. Although less severe than Eowyn, multiple low/medium impact yellow wind/rain warnings were issued across England and Wales. Widespread heavy showers and spells of more prolonged rainfall occurred with some road flooding and reports of both river and surface water flooding affecting Chard and Ilminster in Somerset, where tens of properties were reported as flooded. Meanwhile in White Cross, Cornwall, a housefire early on the 27th was attributed to a lightning strike.

January 1925

Observers notes.iii

Cleethorpes: Very cloudy month with little frost. Mean Max; 45.8 F [7.7 C], Mean Min; 35.2 F [1.8 C], Mean Temperature; 40.5 F [4.7 C], Total Rain; 1.37 ins, 34.8 mm,

Copdock: The driest January since 1909, and the mildest since 1902, except 1916 and 1921. Land still very wet. The fog on the 19th was the densest I remember here. A warm month.

Falmouth: A very mild month. Since 1871 the percentage of southerly wind components has only twice been higher in January, in 1872 and 1875.

Morwenstow (Cornwall): A very wet, mild month, with many very dark days.

Newport (IOW): An exceptionally wet month with local floods and serious landslips.

Ross-on-Wye: The tenth successive month with excess of rain. This has not occurred since January to October 1903.

Teignmouth: A warm, dull, and cloudy month with considerable amounts of fog from 12th to 20th inclusive.

Torquay: Wet, cloudy, and unsettled weather prevailed almost throughout the month. The temperatures were generally high. Sunshine was below normal and rainfall considerably in excess.

Falkirk: Wet and stormy with intervals of fine weather.

Ullapool (Ross and Cromarty): A remarkably mild month.

Cork (University College): A wet, gloomy month with gale, flood, and thunderstorm on the 13th.

Dublin: For the third year in succession January has proved an open month. There was a complete absence of winds from northerly points of the compass.

Derby/Burton-on-Trent:^{iv} Most rainfall sites received 49-55 mm during the month, with one Burton gauge having just 40 mm. Temperatures varied between -4 C on the 13th, and 13 C on the 2nd. The overall mean was around 4.3 C, CET is quoted as 5.3 C. There were eight air frosts in Burton-on-Trent

Skegness: Mean Max; 45.3 F [7.4 C], Mean Min; 37.0 F [2.8 C], Mean Temperature; 41.1 F [5.1 C], Total Rain; 1.50 in, 38.1 mm (87%).

Brocklesby: Mean Max; 44 F [6.5 C], Mean Min; 35 F [1.9 C], Mean Temperature; 40 F [4.2 C], Total Rain; 1.67 in, 42.4 mm.

10 Day Mean Temperatures.

Date	Max	Min	Mean
1-10	44	35	39
11-20	44	36	40
1-20	44	35	40
21-31	43	36	40

Rainfall.

Louth (Westgate): 1.80 in, 45.7 mm, 83%.

Brigg: 1.60 in, 40.6 mm, 89%.

Belvoir Castle: 2.05 in, 52.1 mm, 116%.

Worksop (Hodsock): 1.74 in, 44.2 mm, 98%.

Mickleover (Clyde House): 2.2 in, 55.9 mm, 112%.

Buxton (Devon Hospital): 4.79 in, 121.7 mm, 107%.

Cambridge (Botanic Gardens): 1.29 in, 32.8 mm, 87%.

Worksop: 1.74 in, 44.2 mm, 100%.

Overview, UK, January 1925.

The first few days saw a continuation of the rough weather experienced during December 1924, with gales being reported in many parts of the country. In some places mean windspeeds reached 60 mph [50 kt], while gusts of 80 mph [70 kt] were reported at Weaver Point on the 1at, and at Southport on the 2nd. Widespread heavy rain was noted during the first two days, the greatest falls being in Wales and Westmoreland [Cumbria]. A fall of 51 mm was recorded at Orton (Westmoreland) on the 1st, and 90 mm at Blaenau (Brecon) on the 2nd. In Scotland the precipitation started as snow in many places, and there was a renewal of flooding, particularly in the Border Region. Lying snow was recorded in many parts of Scotland and northern England during the first week, a depth of 5 ½ in [14 cm] being recorded at Balmoral on the 3rd.

A secondary depression crossed the country on the 3rd and 4th, introducing a ridge of high pressure which spread northwards to Iceland from the Azores producing faire, colder weather, which lasted for a week, except for the passage of a "V shaped depression" [possibly a trough], which caused some general rain.

Six or seven hours of bright sunshine were reported on several days, particularly in south-east England, together with some low minimum temperatures. By the 10th weather in western Ireland and Scotland was being influenced by the passage of depressions traveling north-eastwards across the Atlantic, but anticyclonic conditions persisted in the south-east, with dense fog and smoke, prevailing over a wide area in, and around, London, from the 10th to 12th. On the 11th maxima did not rise above 32 F [0 C] at several stations.

Milder weather, with local rain and strong south-westerlies spread over the whole country by the 13th. On the 12th a fall of rain of 46 mm was recorded at Killarney, and on the following day one, of 48 mm, while at Killin, in Perthshire, a fall of 62 mm was noted on the 13th.

Severe gales were reported on the night of the 13th/14th, with gusts of 74 mph [64 kt] being registered at Paisley and Weaver Point while, at Holyhead, a gust of 71 mph [61 kt] was recorded. Large trees were blown down in the Menai Straits (North Wales), and at Lerwick winds exceeding Force were recorded from 2200 on the 13th to 0800 on the 15th; for nearly seven hours on the 14th the lowest lull was above force 8, and a gust, at 1730 on the 14th, reached 96 mph [83 kt]. Rainfall on one or other of these days amounted to nearly 50 mm at many places in Ireland. On the morning of the 15th a line squall was reported at Kew.

There was a change to sunny and drier weather, with some local mist and fog, but after the 22nd, which was wet and stormy in Scotland, the weather returned to unsettled conditions. There was considerable rain on the 25th and 26th, particularly in south-west England, a fall of 48 mm being recorded at Ippleden, in Devon, on the 25th. Heavy rain was also noted in northern England and parts of Scotland between the 28th and 30th, 83 mm being recorded at

Kinlochquoich (Inverness) on the 30th. Severe gales were widespread on the 29th and 30th, a line squall being recorded in south-eastern England and the Midlands on the 31st.

The mean temperature in all districts was above average, ranging from $+3.7 \, F \, [+1.9 \, C]$ in western England, to $+2.5 \, F \, [+1.3 \, C]$ in eastern Scotland and the Channel Isles. The period 11^{th} to 17^{th} was the warmest, with very high deviations from the weekly average being noted. Some warm nights were experienced, at Renfrew, on the night $17^{th}/18^{th}$, the temperature did not fall below 50 F [10 C]. Ground frosts were reported generally throughout the month. On the 4^{th} and 5^{th} , the grass minimum was 12 F [-11 C] at Balmoral, and 17 F [-8 C] at Leuchars on the 23^{rd} , and at Sealand, on the 25^{th} .

Precipitation was below average in most areas, being above only in south-eastern and south-western England, the Channel Isles, and southern Ireland. Small areas in the south of Sussex, Hampshire, and Devon had more than 200% of average. In the English and Welsh coastal areas (apart from the south coast of England) parts of the Midlands, the greater part of the Scottish coast, and much of Northern Ireland, rainfall was below average. However, over the remainder of the country rain fall was between 100 and 150% of average. The period 11th to 17th was the driest, and the last week the wettest.

Thunder was reported at a number of stations, mainly in the north and west, on one or more days; Baltasound reporting 6 days. Hail was also reported from var Baltasound reporting 11.

There was little snowfall in the south, but there were reports on several days in Scotland, the largest number being 8 days at West Linton.

The number of days of reported fog was very variable, Aberystwyth had 20 days, and Geldeston and Balbriggan (Dublin) 18 days. The fog of the 10th to 12th in London was very dense and contained much smoke in inner London. Bonacina noted considerable variation between central London and the suburbs. Fog in Oxford Street, Regent Street, the Strand, and Fleet Street was a dark, pungent, unsaturated haze, which left pavements and clothes dry; it also caused little hindrance to traffic, visibility being "at least 50 yards" [thick fog]. In the open spaces of parks, squares, and the Thames Embankment the fog was saturated waterfog, very wet and impenetrable to vision which paralysed traffic. At Hampstead there was thick, water-fog which was very wet and very dirty. Bonacina concluded that it was the waterfog that interfered with the movement of traffic. If the water-fog included smoke the effect is worse. In his experience "Central London's fogs were chiefly pungent, dry, smoke clouds or hazes, which...do not hold up street traffic except at places where condensation is actually going on." He concludes," ... if the smoke problem is effectively solved inner London will see far less fog than the suburbs or surrounding country where the conditions are far more favourable to nocturnal radiation."vi [The Clean Air Act was introduced after the Great Smog in London during the 1950's.]

The World, January 1925.vii

Pressure was above average over Central and Southern Europe, and over the Mediterranean, particularly Nice, Switzerland, and southern Sweden. In the north however, over Iceland, Spitzbergen, and northern Sweden pressure was below average. This distribution of pressure appears to have favoured warm south-westerly winds, producing higher than normal temperatures, particularly at Haparanda, at the head of the Gulf of Bothnia, where the mean temperature at 0700 GMT was 28 F [-2 C], compared to the January average of 11 F [-12 C]. Rainfall was about normal in most parts of Europe, with generally unsettled weather prevailing during the first few days of the month. Heavy rain fell in the Rhine basin, giving widespread flooding. On the 6th an anticyclone spread from the Atlantic and extended over the whole of Central Europe, persisting until almost the end of the month, fog being reported from most districts, particularly in France. The Mediterranean experienced mainly fair weather until the last few days of the month. Some low temperatures were recorded; 21 F [-6 C] at Milan on the 10th and 14th, and 25 F [-4 C] at Colomb-Bechar, in the Sahara, on the 14th. In Italy the first ten days were favourable for the crops in all districts, but in Switzerland and Austria there was a shortage of water. The anticyclone had no influence on the weather in northern Europe, which experienced some very stormy weather; rainfall in Sweden being 140% of average, but the weather was generally favourable for agriculture.

It was reported from Persia, now Iran, that there had been heavy rain in Kain [about 36N 60E] and Seistan (about 30N 60E), near the border with Afghanistan, and that an expedition from Guinea [West Africa] to Lake Chad had been hampered by floods.

Canada and the USA were still suffering from intense cold and widespread snowstorms. At White River, Ontario, the temperature on the 14th was -48 F [-44 C], at Doucet, Quebec, -52 F [-47 C] was reported on the 19th, and on the 27th the temperature reached -54 F [-48 C], again at Doucet, while at Canton [probably Ohio] a temperature of -42 F [-41 C] was reported on the 28th. Exceptionally stormy weather was reported from Newfoundland, and the St Lawrence River froze for about 100 miles from Lake Ontario. On the 30th a severe snowstorm swept across the north-eastern USA.

A tropical cyclone passed over "the northern part of western Australia" on the 25th resulting in considerable damage, especially to Melbourne. Rainfall was slightly above average for the month in Western Australia, Victoria, and New South Wales, elsewhere it was "well" above average.

In Buenos Aires the severe drought was ended by a violent thunderstorm on the 12th. It is understood that 121 mmm of rain fell in seven hours, streets were flooded, and considerable damage done. It is also understood that, from 15th September 1924 to 11 January 1925 only 84 mm of rain was recorded. December 1924 was remarkably warm, and in the first eleven days of January 1925 the mean temperature was 92.8 F [33.7 C], which was 8.1 F [+4 C] above average, and the maximum on the 6th exceeded 103 F [39.4 C].

In Brazil the rainfall was scanty in central regions, being 95 mm below average, and irregular, though mainly below average in southern regions. Depressions passed across the country more frequently than in earlier months, and areas of high pressure were unusually far to the south. It is understood that crops were generally in good condition.

Central England Data.ix 1924 (Averaging period is 1891 to 1920.)

Mean Maximum Temperature: 7.8 C. Average: 6.1 C.

Mean Minimum Temperature: 2.8 C. Average: 1.3 C.

Mean Temperature: 5.3 C. Average: 3.7 C.

England and Wales Rainfall: 82.3 mm. Average: 77.1 mm.

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

Midlands Mean Maximum Temperature: 7.4 C. Average: 5.9 C.

Midlands Mean Minimum Temperature: 1.7 C. Average: 0.7 C.

Midlands Mean Temperature: 4.5 C. Average: 3.3 C.

Midlands Rainfall: 61.6 mm. Average: 72.2 mm.

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

Mean Maximum Temperature: 6.3 C. Average: 7.4 C.

Mean Minimum Temperature: 0.5 C. Average: 2.0 C.

Mean Temperature: 3.4 C. Average: 4.7 C.

England and Wales Rainfall: 109.6 mm. Average: 94.2 mm.

Midlands Data.

Mean Maximum Temperature: 5.8 C. Average: 7.0 C.

Mean Minimum Temperature: -0.1 C. Average: 1.5 C.

Mean Temperature: 2.8 C. Average: 4.2 C.

Midlands Rainfall: 84.5 mm. Average: 72.8 mm.

Sunshine: 69.6 hours. Average: 53.1 hours.

ⁱ Courtesy T Scholey, By email, J E Osborne, 8 February 2025.

^{II} Monthly Weather Summary, January 2025, Meteorological Office, HMSO, February 2025.

iii Monthly Weather Report, January 1925, Meteorological Office, HMSO, February 1925, p. 1.

iv D J Stanier, by email, 2 February 2025.

^v Monthly Weather Report, January 1925, Meteorological Office, HMSO, February 1925, p. 1.

vi "Notes on the fog of January 10th-12th, 1925", Bonacina L C W, Meteorological Magazine, Meteorological Office, HMSO, February 1925, pp. 7 and 8.

vii Meteorological Magazine, January 1925, Meteorological Office, HMSO, February 1925, pp. 24 and 25.

viii From the description in the Meteorological Magazine the track of the cyclone appears to have been from The Great Australian Bight and making landfall near Melbourne.

ix Hadley Centre, Central England and Midlands, Meteorological Office.