

December 2021

The averaging period used for the following assessment was 1991-2020.

The weather during the early part of December was rather unsettled and chilly, though towards the middle of the month we entered a quieter spell and it turned milder. Unsettled conditions returned in time for Christmas, and, after some very cold nights in northern areas, milder air spread north gradually to all parts, and the last three days of the month were unusually mild. Overall it was a mild, dull month, with rainfall broadly near average.

The provisional UK mean temperature was 5.3 °C, which is 1.1 °C above the 1991-2020 long-term average. Northernmost areas were close to average, whereas southern areas were up to 2 °C warmer than average for the month; frosts were fewer than average except in Scotland, and mean minimum temperatures were particularly high relative to average. Parts of Scotland and northern England saw less rainfall than average, while other areas were closer to average, with some places ending up with slightly more rainfall than normal. The UK overall had 90% of average December rainfall. Sunshine was below average except in northern Scotland, with less than half the average in a few places, giving an overall figure of 65% of average, the dullest December for the UK since 1956 and the fifth dullest in a series from 1919.

The UK monthly extremes were as follows: A maximum temperature of 16.5 °C was recorded at Bala (Gwynedd) on the 31st. A minimum temperature of -10.2 °C was recorded at Braemar (Aberdeenshire) on the 22nd. In the 24 hours ending at 0900 UTC on the 31st, 97.2 mm of rain fell at Honister Pass (Cumbria). A wind gust of 75 knots (86 mph) was recorded at Aberdaron (Gwynedd) on the 7th. A snow-depth of 9 cm was measured at Copley (Durham) on the 26th.

Weather impacts

Snow caused road closures on the 6th in Derbyshire and parts of Cumbria. Storm Barra arrived the next day, and in Northern Ireland there were reports of up to 6,000 properties without power, while all ferries between Belfast and Cairnryan were cancelled as well as all local ferries. Fallen trees affected rail services, and coastal routes were impacted due to large waves. Flooding and fallen trees affected a number of roads across Britain. In Wales, some fallen trees blocked roads, with a small number of properties without power, and the roof of a school in Llanelli was damaged by the strong winds. Snow fell on higher ground in north-west England, with some reports of fallen trees impacting both rail and road travel. In East Anglia some trees were brought down, impacting rail services between Norwich and Lowestoft and reducing the speed limit on the Orwell Bridge. In the south-east of England including London there were reports of flooding and fallen trees impacting travel, with delays to some train services.

A spell of high pressure gave settled weather across the UK, but some fog warnings were issued during this time.

Snow affected some roads across the Pennines on the 26th, including the A66, and the Honister Pass in Cumbria.

In Northern Ireland on the 29th, strong winds and fallen trees impacted road travel, with closure of a temporary vaccination centre in Belfast and a temporary speed limit for high-sided vehicles on the Foyle Bridge. South-west England also saw some flooding and fallen trees. Sections of the A35 and A303 were temporarily closed due to flooding, and the M48 Severn Crossing was closed due to high winds. Rain on the 30th and 31st brought some travel disruption across the north-west of England, with flooding on the M6, M61, M66, and A6 and some lane closures reported. Flooding also affected some rail services such as between Preston and Lancaster, and between Carlisle and Workington.

England diary of highlights

The first ten days of the month were unsettled, rather chilly, and often windy, but it became milder after this, with high pressure building around mid-month. It turned colder for a few days, but by Christmas it became much more unsettled again. The last few days of the month were unusually mild, with temperature records broken at numerous sites. It was a notably dull month but with rainfall totals near average.

The mean temperature was provisionally 1.1 °C above the 1991-2020 long-term average, with southern areas being warmest relative to average. Night-time temperatures were particularly high, and frosts were few. Rainfall was broadly close to average, with some regional variations; the overall figure for England was 96% of average. Sunshine was well below average in almost all places, with an overall figure of 60%, making it provisionally England's 8th dullest December in a series from 1919.

1st to 8th

Rain over the south-east cleared late morning on the 1st, with showers persisting over western counties, while a band of rain over the north moved southwards through the day, with brighter but colder weather behind and showers for the east coast. Many places started frosty on the 2nd, with showers and isolated thunderstorms over eastern coastal counties and the far south-west, other areas seeing some sunshine but with cloud increasing from the north later. After patchy fog for many places, the 3rd was generally cloudy, with rain over the south-east clearing away by midday, further patchy light rain in places, and turning wet in the south-west from late afternoon. Rain across parts of East Anglia and the south-east first thing on the 4th, locally heavy, cleared late morning, then it was brighter but with showers for the south-west, and a band of rain moved south over northern counties, reaching the north Midlands by evening. Rain and showers persisted all day on the 5th over central and eastern counties and the far south-west, with other areas mainly fine. Fog over East Anglia and the south-east on the 6th lasted until midday in some places, while rain in central and western counties spread quickly east to all parts and didn't clear the far east until after dark, followed from the west by sunshine and blustery, locally heavy showers. After a frosty start in some eastern counties on the 7th, rain and strong winds from Storm Barra, already into western areas, with snow on higher ground, spread quickly north and east, reaching all parts by lunchtime, and clearing all but East Anglia, with blustery showers and isolated thunderstorms to follow, Needles (Wight) recording gusts to 79 mph. On the 8th many areas saw showers, the south was breezy, and further north rain was more persistent.

9th to 15th

Generally cloudy but fine for most areas on the 9th, with rain spreading into the west during the afternoon, reaching central counties by dusk. Rain persisted over eastern parts of East Anglia until late afternoon on the 10th, with sunshine elsewhere but also showers in western counties. After a clear frosty start for parts of East Anglia and the south-east on the 11th, it was soon cloudy and mild everywhere with bands of rain crossing west to east through the day, this rain persisting over central and eastern counties. After local mist and fog in the north on the 12th, it was generally cloudy with patchy rain and drizzle in the south and parts of the north-west, but brighter with some sunny spells for the north Midlands and north-eastern counties in the afternoon. The 13th was cloudy, with light rain and drizzle for southern areas, and more persistent and locally heavy rain affecting the north. Fog in central and north-western counties on the 14th didn't clear until early afternoon in some spots, with patchy rain and drizzle affecting Midland and southern counties through the day. The 15th was bright for the north and east Midlands and parts of Yorkshire, cloudier elsewhere with patchy drizzle in the south and occasional outbreaks of rain in the north.

16th to 21st

It grew colder over the next few days, with a lot of cloud. Eastern areas and the Vale of York had fog clearing to sunshine on the 16th, other areas staying cloudy, with patchy drizzly rain in a few spots. The 17th began frosty and foggy in parts of the north and east on the 17th, with some sunshine to follow, but was dull elsewhere. Some areas saw mist and fog on the 18th, persisting all day in some places, after a frosty start in the far north, but the majority of places stayed dull and cloudy. Most areas began misty or foggy on the 19th, lingering all day in some places, with frost early in the north-west; generally cloudy but clearer spells for some western counties. The 20th was mostly cloudy or overcast, with any mist or fog clearing by lunchtime. The 21st was also generally overcast and rather cold, Redesdale Camp (Northumberland) struggling to a maximum of only 0.8 °C, though brighter in parts of the south-west, and also over central southern and south-eastern England in the afternoon.

22nd to 31st

The 22nd began with widespread frost except in the south-west, South Farnborough (Hampshire) falling to -6.1 °C, but rain already in the south-west spread north and east to reach all except East Anglia and the south-east by evening. It was dull on the 23rd, with mist and fog for many, and outbreaks of light rain affected many parts especially further north. The 24th was dull, with mist and fog in certain areas, and patchy light rain and drizzle persisting over the north and more general rain spreading from the south-west to the Midlands and south-east by dusk. Christmas Day was generally cloudy, any mist and fog in the south clearing by noon, and patchy rain over the north and east dying out around lunchtime, before more general rain spread from the south-west to reach the Midlands and parts of the south-east by evening. Most areas were cloudy and wet on the 26th, with mist and fog persisting all day in some spots; rain across the east, heavy at times, fell as snow over higher ground, Copley (Durham) reporting 9 cm of lying snow, with showers to follow; the far south-west was brighter and milder. Mist and fog in central and northern counties on the 27th mostly cleared by late morning, with rain over the south spreading slowly north but becoming lighter and patchier into the afternoon, ahead of another active area of rain skirting southern districts around dusk. Rain, heavy in places, affected most places early on the 28th, the heavier rain clearing away east by early afternoon but many areas remaining dull, misty and cloudy with patchy rain or drizzle. Widespread rain on the 29th spread north-eastwards, but cleared all parts by early afternoon, with central counties becoming brighter and drier, but with further patchy rain and drizzle where the cloud stayed thicker. After a mild night, Exeter Airport (Devon) not falling below 13.6 °C, with some mist and fog along the west coast, it turned very wet in the north during the afternoon of the 29th, Honister Pass (Cumbria) recording 97.2 mm, while remaining dry but cloudy in the east with patchy rain or showers elsewhere. Heavy rain for East Anglia and the south-east early on the 31st soon cleared east, with patchy rain or showers elsewhere, and brighter skies through the Midlands from late morning, and very mild with local records being broken in some places, Edge (Shropshire) warmest with a maximum of 16.0 °C.

Wales diary of highlights

The first part of the month was rather cold and very unsettled, with strong winds at times, but it became milder and gradually quieter towards mid-month. A spell of high pressure followed for a while, but the last ten days were unsettled again, albeit with a very mild end to the month.

Mean temperatures for the month were provisionally 1.5 °C above average. A few places were slightly wetter than average, with 105% of average rainfall overall. Sunshine was 69% of average, with only parts of the north coast reaching their long-term average sunshine totals.

1st to 8th

The 1st was wet and windy with frequent showers or longer spells of rain. The 2nd began frosty for a few inland spots, St Harmon (Powys) falling to -4.8 °C, with showers over the west coast clearing south by late morning and sunshine developing. After some fog patches in central parts, the 3rd was cloudy with a few spots of rain, and generally rather wetter by late afternoon. The 4th brought sunshine and showers, with more general rain reaching the north by late afternoon. A band of rain and showers lay along the west coast on the 5th, with other areas brighter except for some patchy light rain affecting the north-east early in the afternoon. Widespread rain early on the 6th cleared by lunchtime, followed by sunshine and scattered blustery showers. Storm Barra brought a wet and very windy day on the 7th, with widespread and occasionally heavy rain, snow on higher ground, clearing east by early afternoon, followed by bands of showers and isolated thunderstorms, Aberdaron (Gwynedd) experiencing gusts to 86 mph. The 8th saw further widespread rain or showers throughout.

9th to 15th

The 9th started dry and fine, but cloud increased by the afternoon with rain spreading east to all parts by dusk. The 10th brought sunshine and some showers. Rain affected most parts through the day on the 11th, but it was milder, turning drier and brighter later on. After early mist and fog on the 12th, mainly in the north, it remained cloudy with light rain and drizzle in places throughout. The 13th was dull and wet, with rain affecting all parts, heaviest in the north, more patchy in the south. There was some fog in the north on the 14th, slow to clear, and patchy rain and drizzle in some places. The north-east corner was brighter on the 15th, but cloud elsewhere was thick enough at times to produce patchy light rain or drizzle.

16th to 21st

The 16th was overcast but dry and mild. The 17th was similar, but some coastal areas were brighter during the afternoon. Patchy fog in parts of the north on the 18th persisted all day in a few spots, and it remained dry, with brightness in the west. Mist, fog and frost for many parts on the 19th were slow to clear in some places, but some sunshine broke through. Local mist and fog cleared by late morning on the 20th, with any brightness limited to the north-west. The 21st was bright in the west, cloudy further east, and generally cold with Lake Vyrnwy (Gwynedd) struggling to a maximum of only 1.5 °C.

22nd to 31st

After a clear and frosty start on the 22nd, Capel Curig (Gwynedd) falling to -4.8 °C overnight, cloud increased during the morning with rain in all parts by mid-afternoon. The 23rd was cloudy with mist and fog and outbreaks of mainly light rain through the morning, but somewhat drier and brighter from mid-afternoon. The 24th was cloudy, with rain spreading from the south to reach all parts by dusk. Showery rain in the south early on the 25th spread slowly north, becoming more coherent through the day, heavy at times and widespread by early evening. The 26th was again cloudy, with mist and fog in central parts first thing, and showers or longer spells of rain, but much drier by evening. Rain already in the south by dawn on the 27th spread slowly north, displacing any fog patches, the rain becoming lighter and patchier into the afternoon, the far north staying mainly dry. The 28th saw widespread rain clearing quickly east, but it remained cloudy, with patchy light rain and drizzle mainly for the south-west. Widespread and locally heavy rain on the 29th cleared north-eastwards by lunchtime, giving way to a dry and brighter afternoon. The 30th was cloudy and wet, and misty along the west coast at times, the rain heaviest over the north, but more patchy or showery in the south, Capel Curig (Gwynedd) recording 92.4 mm. It was dull and cloudy but very mild on the 31st with some coastal mist and fog, and patchy light rain and drizzle through the day, Colwyn Bay (Clwyd) reporting an overnight minimum of 13.0 °C and Bala (Gwynedd) a maximum of 16.5 °C.

Scotland diary of highlights

The first ten days were unsettled and also rather cold, but the weather settled down towards mid-month. The final ten days were again unsettled and often windy, but after some hard frosts it became gradually milder.

The provisional mean temperature for the month was 0.4 °C above the long-term average, though the north and north-east were very close to average. Rainfall was rather below average in many areas, especially the north and north-west, and Scotland overall had 79% of average rainfall. Northern parts had the best of any sunshine, but further south it was a dull month, giving an overall sunshine figure of 79% of average.

1st to 8th

A band of rain moved south on the morning of the 1st, with brighter but colder conditions following from the north but showers near the east coast, wintry over higher ground. The 2nd began frosty for many, then it was fine for a while, though with showers around the north and east coasts, wintry over higher ground, before cloud increased with rain over the Western Isles spreading erratically south and east through the rest of the day, and Fettercairn (Kincardineshire) reporting 6 cm of lying snow. The 3rd saw patchy rain in southern counties, some sunshine elsewhere but with showers, wintry over the hills, and heavy rain in the north-west from late afternoon. Widespread rain on the 4th moved steadily south and east through the day, clearing all but eastern counties by evening, then it became brighter from the north but with showers. Showery rain and showers plagued the east coast during the 5th, which was dry elsewhere, with sunshine in the south. The 6th began with widespread rain, clearing east by lunchtime, followed by showers, locally heavy and thundery, most frequent over the west and north. After a frosty start in places, the 7th saw rain and strong winds from Storm Barra already in the south, and snow on higher ground, spread quickly north and east, reaching all parts by mid-afternoon, followed by frequent blustery showers, locally heavy. The 8th was more showery, with isolated thunderstorms across the north and east, and rain in the south clearing away before midday with scattered showers for the afternoon.

9th to 14th

On the 9th, showers across western districts soon fizzled out ahead of more general rain reaching the west by early in the afternoon, spreading east to most parts by dusk. Generally much brighter on the 10th, with showers, wintry over hills, for northern and western counties. A few places saw a frost on the 11th, before bands of rain moved across the country, the rain becoming lighter and patchier after dark. The 12th was cloudy, mainly dry in the north-east but misty with rain and drizzle elsewhere. The 13th was cloudy in the south with patchy light rain affecting the Borders, brighter but very windy further north, with blustery showers over the west, and Lerwick (Shetland) reporting gusts to 78 mph. The 14th was dull for all, with rain for western and northern counties, Achnagart (Ross & Cromarty) reporting 52.8 mm.

15th to 22nd

It was dull and overcast for central and southern counties on the 15th with light rain and drizzle, brighter in the north with a few showers. Rain over the north and east on the 16th cleared away by the afternoon, with brighter interludes developing in the south and over the north-east during the afternoon. Fog around the Borders and Moray Firth on the 17th persisted well into the day, which was brightest in the east after a frosty start here. Mist and fog over much of the country on the 18th remained all day in some places, with some sunshine elsewhere after a frosty start. The 19th began frosty for many areas, with fog, slow to clear in many places, but some brightness in the west. The 20th was generally cloudy and cold, any mist and fog clearing by late morning. After a very frosty start for the north on the 21st, with Balmoral (Aberdeenshire) recording -5.2 °C

overnight, there were some sunny spells away from the south, although cloud was thick enough in the far north for some patchy light rain or drizzle. The 22nd saw another widespread frost, severe in places with Balmoral down to -10.2 °C, but cloud soon increased, with rain spreading from the south-west to all parts by early evening.

23rd to 31st

It was generally dull with mist and fog in places on the 23rd, and rain for most places persisting throughout the day, only the far north staying dry. Patchy rain or drizzle affected most parts through the 24th, while it turned brighter but colder in the north with scattered showers. Christmas Day was dry for most, after a cold start, brightest in the north-east, but rain reached the south-west by early evening. The 26th was cloudy, cold and rather wet, with rain over southern and central parts moving northwards, turning to snow over higher ground, and showers following from the west, only the far north staying mainly dry. Mainly cloudy with rain or showers for most places on the 27th, but turning generally drier and brighter through the day with showers becoming confined to coastal areas. The 28th began frosty with some mist and fog in the north, and was cloudy, with patchy rain or showers around coastal areas. After another frosty start for the north on the 29th, it turned much milder, with rain already in the west and south spread steadily northwards to all areas by midday, clearing all bar the far north by dusk, with showers developing over the west. The 30th saw showers in the west, some brightness in the north-east, and rain spreading into the Borders from mid-afternoon. It was cloudy but very mild on the 31st, Dawyck Botanic Gardens (Peebles-shire) recording an overnight minimum of 11.0 °C, with rain for central and southern parts, and Kinlochewe (Ross & Cromarty) reaching a maximum of 16.1 °C.

Northern Ireland diary of highlights

The first part of the month was rather cold and unsettled, but the middle part became milder and drier. It was then colder for a few days, but much more unsettled and turning milder again towards the end.

The mean temperature was 1.4 °C above the 1981-2010 average, and the nights were particularly mild. Rainfall was near or above average, with 113% of average overall. Sunshine was well below average, especially towards the west, with a figure of 54%, provisionally the third dullest December for the Province in a series from 1919.

1st to 8th

The 1st was wet and windy, with frequent showers or longer spells of rain. Most of the 2nd saw isolated showers, but rain, heavy in places, spread into all parts from late afternoon. It was cloudy again on the 3rd with patchy light rain or showers. The 4th was a day of sunshine and frequent blustery showers, but by the 5th showers were much fewer. Chilly winds on the 6th brought frequent, locally heavy, blustery showers, merging into longer spells of rain at times. Storm Barra crossed the Province on the 7th, bringing wet and windy weather with Orlock Head (Down) recording gusts to 76 mph, and snow on higher ground, as widespread rain cleared east during the morning to be replaced by frequent and locally heavy and blustery showers with isolated thunder. There was further general rain during the morning of the 8th, becoming more showery in the afternoon.

9th to 21st

After a dry start on the 9th, rain moved across the country followed by scattered showers. A cold start on the 10th gave way to sunshine and showers. The 11th was milder with bands of rain crossing west to east during the day, but it was drier and brighter later with just patchy light rain at times. There was mist and widespread rain during the morning of the 12th, tending to become patchier and more drizzly in the afternoon. The 13th and 14th were cloudy and dry. Sunshine

remained scarce on the 15th, with occasional rain or drizzle in a few places. After early sunshine in the north on the 16th it became cloudy everywhere, with the 17th cloudy and dry too. Patchy fog around the north-west early on the 18th cleared around noon, then it remained cloudy and cool. Central parts had some patchy fog, slow to clear, on the 19th, another cold cloudy day with Banagher Caugh Hill (Londonderry) reaching a maximum of only 3.0 °C. It was cloudy everywhere on the 20th, with any mist or fog clearing late morning, and dry but cloudy again on the 21st.

22nd to 31st

The 22nd brought widespread rain, becoming more showery in nature during the afternoon. After fog for central parts first thing on the 23rd, rain moved west to east during the morning, becoming drier and brighter through the afternoon. The 24th started with patchy rain, then a band of more significant rain moved in from the south in the early afternoon, reaching other parts by dark. Rain, heavy at times, spread slowly from the south-west on the 25th to reach all parts by early evening, Trassey (Down) recording 82.5 mm. The 26th was generally cloudy, with showers or longer spells of rain throughout. It was generally brighter with just a few showers on the 27th, after early fog and frost in the south-east. A dull, misty start on the 28th, with fog in some eastern spots, gave way to some sunshine. The remaining three days were particularly mild, with widespread and locally heavy rain on the 29th clearing by late morning to leave slightly brighter skies. The 30th was cloudy, with rain spreading slowly and erratically north and east in the afternoon, eventually reaching all parts. Killowen (Down) fell no lower than 11.1 °C overnight, then the 31st was cloudy but very mild with patchy light rain and drizzle, Magilligan (Londonderry) reaching a maximum of 15.0 °C, but more general rain spread in from late afternoon.