

# December 2019

The averaging period used for the following assessment was 1981-2010.

December began with transient high pressure close to the UK, but by the 4th low pressure and the regular passage of frontal systems resumed, with some very large daily rainfall totals during the next three weeks. The final week brought rather drier weather to most areas, and became particularly mild at times. The month overall was rather mild, with only limited colder interludes and fewer frosts than average.

The provisional UK mean temperature was 5.1 °C, which is 1.3 °C above the 1981-2010 long-term average. Mean maximum temperatures were mostly around 1.0 °C above average, but nearer 2 °C above in parts of the south-east. Mean minimum temperatures were around 1 °C above average for most areas, but up to 2 °C above average in much of Scotland and northern England. Rainfall was 116% of average, and it was a very wet month for East Anglia and southern England with a few places getting close to double the average rainfall, and rather wet over central and western Scotland also, but notably drier over north-east England. Sunshine was 113% of average, and was well above average in many eastern areas but rather below average in some western parts.

The UK monthly extremes were as follows: A maximum temperature of 18.7 °C was recorded at Achfary (Sutherland) on the 28th. A minimum temperature of -10.3 °C was recorded at Tulloch Bridge (Inverness-shire) on the 1st. In the 24 hours ending at 0900 GMT on the 6th, 135.0 mm of rain fell at Seathwaite (Cumbria). A wind gust of 72 knots (83 mph) was recorded at the Needles (Isle of Wight) on the 8th. A snow depth of 25 cm was recorded at Malham Tarn (North Yorkshire) on the 16th.

## Weather impacts

December started cold, frosty and foggy and there were numerous road traffic accidents in Wales due to icy conditions. The weather turned milder as Atlantic fronts started to cross the country by the end of the first week, and wet and windy weather on the 5th and 7th brought flooding on the M74, A82, A83 and A9 and led to the temporary closure of the West Highland Main Line. In southwest England, 5500 customers were left without power due to strong winds.

Further wet weather on the 10th led to flooding on the M77, M8 and M80, with trees and debris blocking other main roads. Rail services between Gleneagles and Perth were disrupted due to flooding, and a village on the Isle of Skye was cut off due to a landslide. In Northern Ireland the Rathlin Island ferry was cancelled, with some disruption along the Portaferry Road and to rail services between Dublin and Belfast. In North-west England, there was flooding on roads and power cuts to around 700 customers. In south-west England, strong winds led to disruption to roads and local ferry services and the Skybus service to the Isles of Scilly was delayed. Around the 15th/16th, colder weather led to some roads becoming impassable due to snow, with cars stranded on the A59 between Kesgill and Blubberhouses. In the south-east, the main line between Epsom and Motspur Park was blocked due to a landslip.

Between the 18th and 21st, frequent rain caused some disruption. In Northern Ireland the Department for Infrastructure reported 74 high-priority incidents on the roads, mostly fallen branches, and some flooding. Difficult driving conditions were experienced in Wales, and some sheep had to be rescued in Monmouthshire. In the West Midlands, there were some road closures and water rescues by the fire service. There were delays to trains between Derby and Nottingham, and disruption in Leicestershire. Flooding caused disruption in Suffolk and a landslip

at Woodbridge blocked some rail lines. In the south-east of England there were a number of reports of flooded roads, and traffic accidents. Rail lines were impacted by flooding and/or landslips, and the line between Fareham and Eastleigh was blocked. There was a tornado in Chertsey on the 21st, causing some local damage.

Heavy rain and thunderstorms caused disruption in parts of Wales and southern England on the 24th. There was disruption to roads and railways in Wales, Essex and Sussex. There was a landslip on the A470 in Wales, delays to trains between Barking and West Ham in Essex due to flooding, and delays near Redhill caused by a landslip.

## **England diary of highlights**

December started with a spell of cold dry frosty weather with high pressure and plenty of sunshine, but it quickly turned mild and unsettled with westerly winds, and this regime persisted until Christmas. Temperatures fell close to the seasonal norm around midmonth, but with snow mainly confined to high ground. The last week was generally dry and mild and often cloudy.

The mean temperature for December was provisionally 1.3 °C above the 1981-2010 long-term average. It was a dry December in Northumberland and Tyne and Wear but wetter than average in the south, while sunshine was mostly above average in central and eastern counties but near or below normal in the west. Overall, England had 118% of average rainfall and 123% of average sunshine.

### 1st to 6th

The 1st was a dry sunny cold day except for a few showers in eastern coastal counties which penetrated into East Anglia and the south-east, with a minimum of -7.9 °C at Shap (Cumbria) and a maximum of just -0.9 °C at Bewcastle (Cumbria). From the 2nd to 4th it turned milder by day and it was mostly cloudy in the north with some light rain on the 2nd and 4th, but central and southern areas remained dry and sunny with overnight frosts and some patchy fog, which was particularly widespread early on the 4th. East Malling (Kent) recorded 7.8 hours of bright sunshine on the 3rd. After a frosty start in the south on the 5th, with some fog in central southern and south-western counties, milder air spread to all parts. A belt of rain spread south-eastwards across the country late on the 5th and early on the 6th, followed by sunshine and showers. Thornes Park (West Yorkshire) reached 14.3 °C on the 6th.

### 7th to 17th

The 7th was a mild, generally cloudy and windy day, but with some brief sunny spells in some central and southern counties, and it turned wet in the north with gales in exposed places. Rain spread from the west overnight 7th/8th followed by sunshine and showers on the 8th, and it remained windy with a gust to 83 mph at the Needles (Isle of Wight). A ridge of high pressure brought a sunny day on the 9th with showers increasingly confined to coastal areas, but the next depression brought further wet and windy weather on the 10th with 48.8 mm recorded at Keswick (Cumbria). The 11th was brighter with a mix of sunshine and showers, then another depression brought a very wet day on the 12th with some snow, mainly on high ground, in the north. Sunshine and showers dominated from the 13th to 15th with some longer spells of rain at times, particularly in the south. Thunder occurred quite widely on the 15th, particularly in the south-west, and there was some snow in the north, mainly on high ground, with a snow depth of 25 cm at Malham Tarn (North Yorkshire) on the 16th. The 16th and 17th were quieter in the north and west with some sunshine but also some persistent fog on the 17th, while East Anglia and the south-east were affected by a slow-moving band of rain.

## 18th to 24th

After a widespread frost early on the 18th away from the south-west, with fog persisting over a wide swathe of the Midlands and south-west, milder weather with rain spread north-eastwards. Bands of rain spread north-eastwards across the country on the 19th and 20th, with some thundery showers in southern coastal counties for a time on the 19th also. Brighter showery weather spread from the west on the 20th, and this persisted for most of the 21st with a tornado reported in Surrey, but rain spread from the south-west late in the day. This rain cleared eastern counties early on the 22nd followed by sunshine and showers, most of the showers in the west. There was a westerly flow on the 23rd and 24th, with generally quieter weather, but a belt of rain spread north-eastwards across the country late on the 23rd and patchy light rain persisted in the north on the 24th. There were some heavy, locally thundery, showers in the south-west on the 24th.

### 25th to 31st

Most places were dry and sunny on the 25th with isolated fog patches and some slight frost in places. Mild cloudy weather then approached from the south-west, with rain and drizzle spreading through most areas on the 26th. The rain and drizzle became more confined to northern areas on the 27th, but it remained cloudy even in the south, and under the cloud sheet it was very mild overnight with St Mary's (Scilly) not falling below 10.9 °C. From the 28th to 30th the weather was mostly mild, dry and cloudy with light rain and drizzle at times in the north, but it turned brighter in the south on the 29th and more widely in the south and east on the 30th, with some fog patches forming overnight under clear skies. The 31st was sunny in the north after a frost, but cloudy and mild in the south with rain in the Isles of Scilly.

# Wales diary of highlights

December began cold, bright and frosty, but it quickly turned unsettled and mild from the west, and this westerly type persisted until the 24th. There was some colder weather midmonth with snow on high ground. The last week was generally dry, mild and cloudy.

The mean temperature for the month was provisionally 1.1 °C above the long-term average. Rainfall was 109% of average and sunshine was just 95% of average. It was generally wetter than average in the south-east, and sunshine was above average in the far east but below average over much of the west and north-west.

## 1st to 9th

The 1st was cold and sunny with 6.7 hours of bright sunshine at Lake Vyrnwy (Powys), and this was followed by a frosty night away from coasts with a minimum of -6.5 °C at St Harmon (Powys). The 2nd was cloudier with some light rain at times in the north, but clearer weather returned on the 3rd with 6.7 hours of bright sunshine at Hawarden (Clwyd). It was milder by day on the 3rd and 4th but nights remained frosty in places under clear skies. The weather turned cloudier from the north-west late on the 4th, but the south was again cold overnight 4th/5th with some patchy fog. A belt of rain crossed the country on the 5th, followed by brighter weather with showers on the 6th, and the night of the 5th/6th was notably mild with Prestatyn (Clwyd) not falling below 10.4 °C. Another depression brought cloudy, windy, mild weather on the 7th with some rain in the north-west. A belt of rain crossed the country overnight 7th/8th followed by sunshine and blustery showers on the 8th with gales in exposed places, the showers locally thundery in the south. A ridge of high pressure brought sunshine on the 9th, with any scattered showers tending to die out after midday.

## 10th to 17th

It remained unsettled and turned colder at times. A deep depression brought a very mild, wet and windy day on the 10th, with a maximum temperature of 14.2 °C at Prestatyn (Clwyd), while Capel

Curig (Gwynedd) recorded 47.8 mm of rain and gusts to 78 mph. The 11th was a day of sunshine and showers, then another depression brought a wet day on the 12th. The 13th and 14th had sunshine and scattered blustery showers, wintry over high ground, and longer spells of rain accompanied by strong winds crossed the country overnight 13th/14th and again late on the 14th. There were frequent showers, wintry on high ground, on the 15th, with thunder in places. The 16th was cool and mostly cloudy with scattered showers. Under clearing skies, frost and widespread fog developed early on the 17th, and the daytime temperature reached only 0.5 °C at Llysdinam (Powys).

## 18th to 24th

The weather remained unsettled, while turning generally mild with mainly southerly and southwesterly winds. There was fog and frost in some areas, especially the east, early on the 18th, but rain quickly spread from the west, reaching all parts by mid-afternoon. A belt of persistent heavy rain spread from the south on the 19th, the rain clearing eastern counties on the 20th followed by drier conditions with a few scattered showers in the far south and south-west. Further rain spread from the south-west on the 21st after a mostly dry start, though the far north remained mostly dry. The 22nd was a mainly showery day, then the 23rd had fewer showers, with many places staying dry. Some heavier, occasionally thundery showers affected southern counties on the afternoon of the 24th.

## 25th to 31st

A ridge of high pressure brought a dry sunny day on the 25th, following a slight overnight frost in places. Bands of rain spread from the south-west overnight 25th/26th, clearing north-eastwards on the 26th, but further rain and drizzle spread from the south at times. The 27th was overcast with some mist and fog patches, and it remained generally mild, dry and cloudy on the 28th and 29th, with isolated pockets of drizzle, though the 29th turned brighter in the far south. The 30th was a generally sunny day away from the west, but the 31st was cloudier again with some localised fog patches in the morning.

# Scotland diary of highlights

December was a generally mild and unsettled month, but with some short-lived cold snaps particularly towards the far north. It was exceptionally mild at times during the last week, again especially in the north, as southerly and south-westerly winds pulled up tropical maritime air.

The mean temperature for December was provisionally 1.3 °C above the long-term average, rainfall was 118% of average and sunshine was 94% of average. It was a dry sunny month in the north-east but dull in the west, and wet in central and western areas.

### 1st to 7th

The month opened with a cold sunny day but with wintry showers in the far north, and Tulloch Bridge (Inverness-shire) fell to -10.3 °C early on the 1st. Eskdalemuir (Dumfries & Galloway) recorded 6.6 hours of bright sunshine. Mild wet weather spread to all parts on the 2nd, and the rain cleared by the 3rd leaving a dry sunny day in most central and eastern areas but it was cloudy in the south-west. A belt of rain moved eastwards across the country on the 4th followed by brighter weather with showers, and further rain crossed the country on the 5th. The 6th started off wet and windy but turned drier and brighter with some showers, then further wet and windy weather spread from the west on the 7th, with 79.2 mm at Achnagart (Ross & Cromarty) and gales in exposed places.

## 8th to 17th

It remained unsettled and turned colder at times. There were strong winds, frequent showers and longer spells of rain on the 8th, locally thundery, but the far north-east stayed mainly dry and sunny. A ridge of high pressure brought a mostly dry sunny day on the 9th with just scattered showers, wintry over higher ground. A deep depression brought wet and windy weather on the 10th, although parts of the north-east stayed dry until after dark. It continued very windy in the north on the 11th with gusts to 78 mph at Lerwick (Shetland), with showers and longer spells of rain, heavy and locally thundery with hail, although drier across the south and north-east. On the 12th showers affected the north and an area of rain and drizzle crossed southern parts, wintry over higher ground. South-western and western areas were dry and sunny on the 13th but other areas were often affected by rain or showers. Showers especially affected central parts on the 14th and western parts on the 15th, with snow on high ground. An area of rain spread from the south-west on the 16th with snow on higher ground, while the far north was very cold with a maximum of -2.2 °C at Altnaharra (Sutherland). Central and southern areas had showers on the 17th, again with snow on high ground, and it was very cold in the far north. A snow depth of 3 cm was measured at Loch Glascarnoch (Ross & Cromarty) on the 17th.

### 18th to 24th

Following a frosty start with 3 cm of snow still lying at Loch Glascarnoch (Ross & Cromarty), rain spread to all but the north-east by dusk on the 18th and introduced much milder air. The 19th was mainly cloudy with some areas of rain spreading northwards, and more persistent, heavy rain spread from the south from late afternoon. The 20th was a mainly cloudy and dry day but with patchy rain and drizzle in the west and some isolated sunny spells in the far north early on. The 21st and 22nd were mainly cloudy and fairly mild for most, with some showers or patchy rain especially in the south-west, but in the far north it was brighter and turned colder. An area of rain affected central and south-western parts for much of the 23rd, and the 24th was mostly cloudy with brief sunny intervals in places, and some light rain and drizzle. It remained cold in the far north, but otherwise it was quite mild.

### 25th to 31st

After a frost in the north, a ridge of high pressure brought a dry sunny day on the 25th, and also isolated showers in the far north. Rain spread from the south-west on the 26th introducing much milder air, dying out as it reached the north-east. The 27th was mostly cloudy with some rain and drizzle, while turning very mild especially in the north. More organised areas of rain affected many areas on the 28th, but despite this it was again very mild. A high of 18.7 °C was recorded at Achfary (Sutherland) in the early hours, provisional at the time of writing but, if confirmed, this is a new UK December record. The night of the 28th/29th was also very mild with Kinlochewe (Ross & Cromarty) not falling below 10.9 °C. The 29th was again mostly cloudy with some light rain and drizzle in northern, western and south-western counties, and windy in exposed parts but with some brighter spells in eastern/central parts. A belt of rain spread south-eastwards on the 30th followed by a frosty sunny day in the south on the 31st, but cloudy and mild weather reestablished in the north.

# Northern Ireland diary of highlights

The month began cold and frosty but quickly became mild and wet with westerly winds. It was mostly mild and changeable for most of the month but it was colder than average around mid-month. Sunshine was mostly above average.

The mean temperature for December was provisionally 0.9 °C above the 1981-2010 average. Rainfall was 95% of average and sunshine was 118% of average.

## 1st to 7th

A ridge of high pressure and polar air brought a dry sunny day on the 1st, apart from some isolated showers during the morning. It turned somewhat cloudier from the west by the 2nd, and the cloudy weather persisted on the morning of the 3rd but it brightened up in the afternoon. A belt of rain cleared south-eastwards by early afternoon on the 4th, followed by brighter weather with just a few showers in the north. It turned very mild and windy on the 5th, with widespread rain and a high of 14.2 °C at Murlough (County Down). The rain cleared south-eastwards on the 6th followed by brighter weather with showers. Another depression brought overcast and windy weather on the 7th; heavy rain spread from the west later on, with gusts to 71 mph at Ballypatrick (County Antrim).

### 8th to 17th

The 8th had frequent blustery and locally thundery showers, though with brief sunny interludes in the south. A ridge of high pressure brought sunshine and just scattered showers on the 9th. Another depression gave wet and windy weather on the 10th, which cleared late in the day followed by brighter, showery weather, and it remained showery on the 11th. Slow-moving fronts brought a generally cloudy day with some rain and drizzle sweeping through most parts during the day, and the 13th was a mainly cloudy showery day. It turned colder on the 14th with sunshine and showers, isolated rumbles of thunder, some snow on high ground, and gales in exposed parts. It continued cold on the 15th with a maximum of only 1.2 °C at Altnahinch (County Antrim), with isolated showers in the far north and south, again falling as snow on high ground. There were showers, wintry on high ground, in the north-west on the 16th, but elsewhere it was dry and sunny with 5.8 hours of sunshine at Katesbridge (County Down). Many places were frosty and foggy on the 17th but once the fog cleared it was sunny with just isolated showers.

### 18th to 24th

There was fairly widespread frost and fog early on the 18th, with a minimum of -4.7 °C at Katesbridge (County Down), but a belt of heavy persistent rain spread from the west introducing milder air, with 35.2 mm at Banagher (County Londonderry). Most areas had a mainly dry day on the 19th before an area of rain, heavy at times, swept in from the south from late afternoon. There were some light showers early on the 20th followed by brighter intervals, then the 21st was a mostly dry cloudy day. The 22nd and 23rd were mostly bright and showery, with the showers more isolated on the 23rd, then the 24th was cloudier with some light rain and drizzle early on.

### 25th to 31st

A ridge of high pressure brought a bright and dry day on the 25th, but then further rain spread from the south-west overnight, clearing north-eastwards during the 26th. It was cloudy and very mild on the 27th and 28th, with some light rain and drizzle on the 27th and more general rain moving north-eastwards on the 28th, affecting mainly northern and western counties. The temperature did not fall below 10.0 °C at Magilligan (County Londonderry) overnight 27th/28th. The 29th and 30th were generally cloudy with a little rain, but the rain cleared south-eastwards overnight 30th/31st, allowing some overnight frost. A cold bright day followed for most on the 31st, but cloud increased from the south before evening.

