

## September 2019

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

The first few days of September saw a westerly type, with a succession of fronts bringing rainfall to much of the country. It then became rather quieter for a time, and some days were pleasantly warm, with particularly high temperatures around 19th-24th. Rainfall was below average up until the 20th, but after that a much more unsettled spell of weather set in, with 25-50 mm of rain within 24 hours reported at various stations on certain days. Thus by the end of the month the UK had easily exceeded its September average rainfall; it was also quite a sunny month, with some pleasant early-autumn days during the middle third of the month.

The provisional UK mean temperature was 13.1 °C, which is 0.5 °C above the 1981-2010 long-term average. Mean maximum temperatures were about 1.0 °C above normal across the south-eastern half of England, but nearer normal for some other regions. Mean minimum temperatures were about 0.5 °C above average in western areas, but closer to normal further east. Rainfall was 127% of average, and most areas from southern Scotland southwards had a wet month, with below-normal rainfall totals confined to northern Scotland and parts of East Anglia and Kent. Sunshine was 115% of average, and it was generally sunniest relative to average in England and Wales, with closer to average sunshine elsewhere.

The UK monthly extremes were as follows: A maximum temperature of 27.7 °C was recorded at Weybourne (Norfolk) on the 22nd. A minimum temperature of -1.6 °C was recorded at Aboyne (Aberdeenshire) on the 8th. In the 24 hours ending at 0900 GMT on the 24th, 59.4 mm of rain fell at Fontmell Magna (Dorset). A wind gust of 61 knots (70 mph) was recorded at Baltasound (Shetland) on the 15th.

### Weather impacts

On the 9th a thunderstorm warning was issued for some southern areas, but the only impact reported was localised flooding in Ottery St Mary, Devon. The weather was then more settled for the next two weeks.

There were numerous warnings and impacts during a much more unsettled period in the last ten days of the month. In Northern Ireland on the 22nd, around 30 properties were flooded, some roads in Sion Mills and Lisnaskea were closed, and a landslide was reported in the area. On the 23rd, Wales suffered poor driving conditions and flooding on roads, with a landslide on the A4107. In north-west England there were blocked roads due to flooding, including the B5192 and the A5058 in Merseyside. In London, four central stations were affected by flooding resulting in delays to rail services. Liverpool Street station saw water pouring in through the roof, and some platforms were closed as well as the eastbound Metropolitan, Hammersmith and City and Circle lines being closed for a time also. British Airways cancelled several flights due to the weather. In other areas some flooding on roads caused travel disruption, with some properties flooded too.

Renewed heavy rain affected parts of England and Wales from the 28th onwards. A number of roads and bridges were closed in Mid and South Wales. Trains in the Machynlleth area were disrupted due to flooding, while a landslide blocked the A490. In North Yorkshire, a cycling race was cut short as heavy rain made conditions very difficult. Roads and some rail lines were flooded in West Yorkshire, with the railway line at Harrogate flooded also. The Debenhams store in Norwich was closed due to flooding. On the 29th, in South-west England, some campers on

Dartmoor had to be rescued overnight due to the severe weather; the Trelissick Ferry was cancelled due to poor sea conditions, a fallen tree blocked the B3212, and the A30 at Innis Down was closed due to flooding. The Severn Bridge had a 40mph speed restriction, while some events were cancelled or curtailed due to the weather. Further rain on the 30th affected all of Wales and western/northern areas of England. There was flooding in York; the River Ouse burst its banks but, thanks to Environment Agency flood warnings, property and land were able to be protected. There were also delays and flooded roads in Hertfordshire and Cambridgeshire.

## England diary of highlights

**The first six days of September were dominated by changeable westerlies, then the weather turned more settled. There were numerous dry sunny days between the 13th and 20th, with warm days and cool nights. The weather turned very wet at times during the last third of September, which raised rainfall totals above the long-term average in most parts of the country.**

The mean temperature for September was provisionally 0.5 °C above the 1981-2010 long-term average. Parts of East Anglia and the south-east were a little drier than average, but it was a wet month elsewhere, with 154% of average rainfall overall. The dry sunny weather around mid-month ensured that sunshine totals were generally above average, with England overall having 121% of average.

### 1st to 6th

A changeable westerly type dominated during this period. The 1st was a day of sunshine and showers, and some of the showers were thundery in the north and east, but many southern parts remained dry. On the 2nd and 3rd, a ridge of high pressure brought dry weather with some sunshine to southern areas, but rain affected the north and north-west. A band of rain spread south-eastwards through all parts late on the 3rd and early on the 4th, followed by sunshine and showers, the showers heaviest in the north and north-west with some thunder in the far north-east. The 5th had sunshine and fewer showers, then on the 6th cloudy skies and bands of showers and longer spells of rain spread southwards, with much brighter weather following in the north.

### 7th to 12th

A ridge of high pressure brought mostly dry sunny weather on the 7th and 8th, following a cloudy start on the 7th in most areas. The intervening night was cold and locally frosty with a minimum of -0.5 °C at Benson (Oxfordshire) early on the 8th. Frontal systems brought a wet day for most on the 9th, the rain heaviest and most persistent in the south-west. There were widespread fog patches early on the 10th, followed by a dry day with most places brightening up. A belt of rain spread slowly southwards on the 11th, clearing all but southern coastal counties before evening. Rain spread to northern areas on the 12th, while it became dry, bright and warm in the south and especially south-east.

### 13th to 20th

High pressure brought fine, sunny weather; sometimes it was warm by day but some nights were chilly. It was sunny almost everywhere on the 13th, with 12.3 hours of sunshine at Lyneham (Wiltshire). It turned cloudier in the north on the 14th and 15th, while the south held onto dry, sunny and increasingly warm weather by day. Rain spread slowly and erratically southwards through northern areas on the 15th, then dry sunny weather returned in the north on the 16th while cloud and drizzle affected southern areas. Between the 17th and 20th it was dry and generally sunny with some overnight mist and fog patches, and East Malling (Kent) recorded 12.3 hours of sunshine on the 19th and 20th. The north was cloudier on the 18th.

## 21st to 30th

The high pressure moved away to the east on the 21st, bringing warm southerlies and a breakdown to more unsettled weather from the west. Most places were sunny and warm on the 21st, but showers and longer spells of rain developed over the south-west from late morning. The night of the 21st/22nd was notably warm for some with the temperature not falling below 18.0 °C at Bognor Regis (West Sussex). Bands of showers and longer spells of rain, with some embedded thunderstorms, crossed the country on the 22nd, while it was very warm in East Anglia with a high of 27.7 °C at Weybourne (Norfolk). Most places had a quieter day on the 23rd but an area of heavy persistent rain spread north-east from the West Country with 65.8 mm at Kingston Maurward (Dorset). The rain affected most areas on the 24th, slowly clearing eastwards followed by sunshine and showers for the south, but another area of rain reached the south-west from mid-afternoon. The 25th was mostly cloudy with showers and longer spells of rain for most parts. A belt of rain spread north-eastwards overnight 25th/26th, followed by a day of sunshine and showers. Showers merged into longer spells of rain on the 27th, especially in the north, with thunderstorms in places. The 28th was generally brighter with some showers, but an area of wet and windy weather moved into the West Country from early afternoon, and this especially affected northern and eastern parts during the 29th, with a maximum of only 11.0 °C at Spadeadam (Cumbria) and gusts to 60 knots (69 mph) at Needles (Isle of Wight). After a dry sunny start on the 30th, further rain spread into western areas.

## Wales diary of highlights

**September started off with changeable westerly winds. The weather gradually settled down after the 6th, and from the 13th to 20th there was a lot of fine sunny weather, but during the last third of the month it turned increasingly wet.**

The mean temperature for the month was provisionally 0.5 °C above the long-term average. Due mainly to the very wet end of the month, rainfall was 159% of average, making it the wettest September since 1999, although rainfall was locally near normal on the north coast. Numerous sunny days around mid-month ensured that sunshine totals were also above average, with 120% of average for Wales as a whole.

### 1st to 6th

Westerly winds dominated on the first six days. The 1st was mainly sunny, with 12.0 hours of sunshine at St Athan (South Glamorgan), but with scattered showers in the north. After a mainly sunny start to the 2nd, cloud increased from the north-west and some rain and drizzle moved in, albeit tending to die away as it pushed south. The 3rd was mainly cloudy, with some rain and drizzle near western coasts, then a belt of rain moved south-eastwards across Wales overnight 3rd/4th, followed by sunshine and showers on the 4th, and strong winds with gusts of 56 knots (64 mph) at Capel Curig (Gwynedd). There was sunshine with fewer showers on the 5th, then on the 6th rain spread south-eastwards followed by brighter and drier weather but still with some showers.

### 7th to 12th

High pressure moved in from the west for the 7th and 8th, giving a mostly dry sunny day on the 7th with just isolated showers. The following night was cold and locally frosty, with a minimum of 0.7 °C at St Harmon (Powys) early on the 8th, then it began mostly sunny on the 8th, before cloud increased from the west during the afternoon. Fronts brought locally heavy rain on the 9th, especially in the south where isolated thunderstorms also developed. A transient ridge brought a mostly sunny day on the 10th following a cloudy start, then light rain on the 11th moved slowly southwards, with brighter weather following into the north. The 12th was generally cloudy with some rain at times.

## 13th to 20th

High pressure dominated, giving mostly dry sunny weather. The 13th and 14th were dry and mostly sunny, but it turned cloudy from the north on the 15th, with rain reaching the north coast by dusk. The rain spread slowly southwards on the 16th, mainly affecting central and southern districts during the day, and the temperature only reached 12.7°C at Lake Vyrnwy (Powys). It was dry and mostly sunny from the 17th to 20th inclusive, with some mist and fog patches overnight, although it turned cloudy across the far north on the afternoon of the 18th. 12.0 hours of sunshine was recorded at Aberporth (Dyfed) on the 18th and 20th. It also turned increasingly warm by day, while nights were often cool.

## 21st to 30th

Low pressure moved in from the west and the weather turned very wet at times. The 21st was sunny again for most, with a high of 27.4 °C at Valley (Gwynedd), but showers reached the south-west from mid-afternoon. The night of the 21st/22nd was unusually warm with the temperature falling no lower than 17.8 °C at Porthmadog (Gwynedd). The 22nd had showers and longer spells of rain, and after a mostly dry bright start to the 23rd, persistent and locally heavy rain spread from the south-west. The rain slowly cleared north-eastwards on the 24th followed by sunshine and showers, then further rain spread into the south-west later on. The 25th started foggy in the north, and remained mostly cloudy with some rain and drizzle. From the 26th to 28th, there was a mix of sunshine and showers, and the 27th had some longer spells of rain, heavy and thundery at times, with a high of only 12.7 °C at Lake Vyrnwy (Powys). Heavy persistent rain spread from the south-west late on the 28th, giving 53.8 mm of rain at Sennybridge (Powys). The rain continued to affect much of the country on the 29th, and after a dry bright start in northern parts on the 30th, further persistent rain spread from the south-west.

## Scotland diary of highlights

**September was dominated by changeable westerlies and south-westerlies early and late in the month, but high pressure brought plenty of dry sunny weather in the third week.**

The mean temperature for September was provisionally 0.5 °C above the 1981-2010 average. Averaged nationally, both rainfall and sunshine were near normal, with 104% of average sunshine and 97% of average rainfall, but it was a wet month in southernmost areas and rather drier further north.

### 1st to 6th

Westerly winds dominated during this period. The 1st was a day of sunshine and showers, the showers occasionally thundery in the far south-east. Most places were cloudy with rain at times on the 2nd and 3rd, and it was also breezy on the 2nd. The 4th was a brighter showery day for many but a belt of more persistent rain slipped south-eastwards during the day. Persistent rain affected the west and north early on the 5th, but it generally became drier and brighter. Rain moved south-eastwards early on the 6th, with a wet start in north-western areas, followed by sunshine and showers.

### 7th to 15th

A ridge of high pressure brought a dry and mostly sunny day on the 7th with 12.3 hours of sunshine at Prestwick (Ayrshire). The following night was cold and locally frosty, with a minimum of -1.6 °C at Aboyne (Aberdeenshire), and the 8th was another sunny day for eastern parts, but cloud and rain spread into the west. This rain spread eastwards across all parts on the 9th, turning lighter as the day progressed. The 10th started off cloudy, then brightened up, before heavy and persistent rain spread from the west. The rain cleared from all parts by dawn on the

11th, leaving sunshine and showers. A band of persistent rain spread across the south on the 12th, clearing away by the 13th leaving a dry sunny day, while the north had sunshine and showers on both days. Another depression brought windy wet weather on the 14th with heavy persistent rain for the north-west, giving 47.8 mm of rainfall at Kinlochewe (Ross & Cromarty). The rain cleared southwards on the 15th leaving sunshine and isolated showers, and it was windy for a time in the north, with gusts to 61 knots (70 mph) at Baltasound (Shetland).

### **16th to 21st**

Pressure built more extensively, bringing increasingly warm dry sunny weather by day but some cool nights. There were some showers for central and northern districts on the 16th but the south was dry and sunny. Most places were dry and sunny on the 17th, but it was cloudier in the north with persistent rain moving into the north-west from midday, and most places were cloudy on the 18th with some light rain or drizzle. The grey drizzly weather became confined to the far north on the 19th, and other areas became sunny and dry. The 20th and 21st were dry and sunny for most. On the 21st temperatures reached 25.5 °C at Port Henderson (Ross & Cromarty), but it was a cloudy day along the east coast, and showers reached the far south-west by the evening.

### **22nd to 30th**

The night of the 21st/22nd was notably warm in western areas, with the temperature not falling below 15.4 °C at Achnagart (Ross & Cromarty). On the 22nd, showers or longer spells of rain, together with isolated thunderstorms in the south, spread steadily north to all parts, with only the north-east staying dry. Cloud and rain became confined to the north by the 23rd, and there was a warm sunny spell before more rain spread from the south-west late in the day. Most places saw rain on the 24th, but the far north-west was dry, bright and warm. Cloudy damp weather continued on the 25th, when it became particularly wet around the Borders. The rain cleared away by the 26th, but bands of showers and spells of rain crossed west to east on the 26th and 27th, and there was thunder locally on the 27th. An area of persistent rain remained over the north-east on the 28th, but elsewhere it was brighter with isolated showers. Rain affected the south on the 29th, clearing away during the afternoon, with sunshine and showers elsewhere. Rain spread into the south-west later on the 30th, but elsewhere it remained cool and mostly cloudy with a high of only 8.9 °C at Lerwick (Shetland), although there were some bright spells.

## **Northern Ireland diary of highlights**

**September was a mostly changeable month with westerly winds, but a settled spell from the 13th to 20th brought a fair amount of dry and sunny weather with cool nights.**

The mean temperature for September was provisionally 0.4 °C above the long-term average. Rainfall was 121% of average and sunshine was 108% of average, with above average sunshine towards the east.

### **1st to 6th**

The weather during this period was dominated by westerly winds. The 1st was a day of sunshine and showers, then areas of persistent rain moved across the country on the 2nd and 3rd, though the 3rd had some brighter interludes in the south-east. The rain cleared on the 4th, followed by sunshine and showers, and it was windy in exposed parts with gusts to 49 knots (56 mph) at Orlock Head (County Down). After a cloudy start, the 5th became mostly dry and sunny, then the 6th was another day of sunshine and showers.

### **7th to 12th**

Pressure was generally higher during this period, but it remained unsettled. The 7th started off mainly cloudy, although the sun did break through, and a weak front brought cloud and patches of

light rain and drizzle on the 8th. Persistent rain spread from the west overnight 8th/9th, followed by sunshine and showers on the 9th. Rain spread from the west again on the 10th, followed by sunshine and showers on the 11th. The 12th saw another area of rain for most parts, before turning drier and brighter from the west.

### **13th to 20th**

High pressure built more extensively and brought some dry sunny weather and chilly nights. The 13th was a dry sunny day following a cold night with a minimum of 0.2 °C at Katesbridge (County Down). Most places had further sunshine on the 14th but it clouded over from the north, giving patchy light rain for the far north, with rain moving slowly southwards through all parts on the 15th. The weakening frontal system brought a cloudy start on the 16th, but many places brightened up. Between the 17th and 20th most places were dry and sunny, with some mist and fog patches overnight, and the 20th saw 11.6 hours of sunshine at Aldergrove (County Antrim) and at Magilligan (County Londonderry).

### **21st to 30th**

The weather quickly turned very unsettled and often wet. The night of the 20th/21st was unusually warm in places with temperatures not dropping below 15.5 °C at Killowen (County Down), and daytime temperatures on the 21st reached 22.3 °C at Armagh, with showers and thunderstorms moving up from the south during the afternoon. The 22nd was a wet day with showers and longer spells of rain, amounting to 29.2 mm at Derrylin (County Fermanagh). After a dry bright interlude, another area of wet and breezy weather spread from the south-west on the 23rd, and further rain affected mainly eastern parts on the 24th. The 25th was another mostly cloudy day with some rain and drizzle, following a foggy start in many places. A showery westerly flow was maintained from the 26th to 28th, with showers and longer spells of rain on the 26th and 27th, but the 28th was brighter, with showers more scattered. Rain then spread across the country overnight, but cleared by dawn on the 29th, leaving sunshine and showers. After a dry, mostly cloudy start on the 30th, heavy persistent rain spread from the south-west, and it was cool with highs of only 11.1 °C at Derrylin and Thomastown (County Fermanagh).