

## September 2021

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

The weather through much of September was reasonably settled and quiet, though there were outbreaks of rain at times. It was also rather warm, especially around the 7th/8th. A marked change came about on the 27th, with much more unsettled and notably cooler conditions for the last few days of the month. Mean monthly temperatures were well above average, with rainfall and sunshine near average, although Northern Ireland was particularly dull.

The provisional UK mean temperature was 14.7 °C, which is 2.1 °C above the 1981-2010 long-term average. This was only slightly cooler than August's mean temperature, and ranks it as the second warmest September in a series from 1884. Mean monthly maxima and minima were both similarly elevated relative to normal. Most parts of the UK saw rainfall totals not far from average, with a few areas rather drier, and much of this rainfall fell in the final four days. The UK overall had 82% of average September rainfall. Sunshine was rather above average in many eastern areas, but below average in the north-west of the UK, giving an overall figure of 96% of average.

The UK monthly extremes were as follows: A maximum temperature of 30.8 °C was recorded at Hartpury College (Gloucestershire) on the 7th. A minimum temperature of -1.4 °C was recorded at Aboyne (Aberdeenshire) on the 30th. In the 24 hours ending at 0900 UTC on the 29th, 76.6 mm of rain fell at White Barrow (Devon). A wind gust of 64 knots (74 mph) was recorded at Needles (Isle of Wight) on the 27th.

### Weather impacts

The spell of settled weather was broken around the 8th when there were thunderstorms in very warm and humid air. Damage was caused in Eastbourne on the 10th due to a lightning strike, and some trains to and from Hastings were disrupted due to signalling issues caused by lightning. In the south-west there were some reports of surface water flooding. There were reports of flooding in Flintshire, and across parts of the Wirral where some schools were forced to close.

In the East of England there were reports of flooding on the 14th, affecting the A414 in Harlow, one road in Hinxton, and the entrance to Cambridge railway station, as well as property flooding in Kings Lynn. In London there were reports of flooding around Tower Bridge, and long delays on the Piccadilly line, the District line, the A41, and the A406 North Circular. There were also reports of flooding at Peckham Rye, and the Blackwall Tunnel was closed due to flooding.

On the 19th in Norfolk a person was rescued from a car stranded in floodwater. The main road through Melford (Essex) was impassable, and parts of Sudbury were flooded due to heavy rain.

On the 27th in Scotland, one lane of the M8 West Street on-ramp was closed due to flooding. There were reports of flooding on the A469 in Wales on the 27th, and a tornado was observed in Humberston (Lincolnshire), damaging some homes and vehicles. The following day had reports of standing water around Swansea and at junction 43 of the M4. On the 30th trains were delayed at Talerddig and North Llanrwst due to speed reductions imposed due to wet conditions. Elsewhere, fallen trees blocked roads and railway lines across parts of the east and south-east of England, including London.

### England diary of highlights

**Much of the month was fine and settled, though with some wetter days. It was briefly very warm around the 7th and 8th, and the rest of the month was rather warm for much of the time before a marked change to chilly and wet weather arrived on the 27th.**

The mean temperature for September was provisionally 2.1 °C above the 1981-2010 long-term average, making this the equal third warmest September in a series from 1884. Maximum temperatures were nearly 3 °C above average in parts of the East Midlands. Rainfall was broadly near average, though parts of the north-east and the south-east were rather drier. The overall figure for England was 81% of average. Sunshine was slightly above average in many central and eastern areas, with an overall figure of 103%.

### **1st to 8th**

It was generally cloudy on the 1st, with patchy light rain for eastern coastal counties. The 2nd was overcast for all parts too, with patchy rain or drizzle over the south-east, cloud breaking in the north-west later on. The 3rd was again cloudy, though remaining mostly dry, with cloud tending to break in southern areas during the morning. The 4th was brighter in the south-west, but mostly cloudy elsewhere with patchy rain or drizzle in some areas. Any mist and fog soon cleared to give a fine, bright and warmer day on the 5th, though with rain pushing into the far north-east in the evening. The 6th began cloudy for many, with widespread mist or fog patches along with patchy rain in the east, generally clearing by the afternoon to give warm sunshine except in the far north. After any early mist or fog patches, the 7th was sunny and very warm, though some cloud encroached into the south-west by late afternoon, Hartpury College (Gloucestershire) warmest with a maximum of 30.8 °C. It was a warm night, with a minimum of 20.2 °C at Hastings (East Sussex), then mostly sunny on the 8th, warm and locally hot, but rain and isolated thunderstorms pushed into the south-west, quickly weakening, and further thunderstorms moved into the south-east by dusk, with cloud continuing to spread north-eastwards but most northern and eastern areas remaining sunny.

### **9th to 19th**

Many areas began wet on the 9th, with heavy showery rain, though the Midlands and south-east began the day fine; some thunderstorms developed in northern areas, while the east remained brightest and warmest. The 10th was mostly cloudy with some showers, locally thundery in the east, but also sunny spells, especially in the north-east. The 11th saw some sunshine, but also patchy rain or drizzle in some areas. The south-east began fine on the 12th, but it was mostly cloudy elsewhere with isolated mist or fog patches, and patchy rain in places; cloud thickened in the afternoon with more organised rain pushing into the north-west. Rain and drizzle in western areas on the 13th, reaching central counties at times, was occasionally heavy over the north-west, while East Anglia and parts of the south-east were fine and bright, with further rain spreading later into the south-west. Fog in parts of the south-west on the 14th lasted until late morning, while rain over the rest of the country moved north and east through the day, turning particularly heavy across the east Midlands and East Anglia in the afternoon, but clearing most parts by evening. Many areas began cloudy on the 15th, with drizzly rain in some central parts, though north-western areas were brighter, and most places saw some sunshine later. Much of the south started foggy on the 16th, but it became largely sunny and quite warm everywhere. After another foggy start in the south on the 17th, most areas were bright, but cloud increased in the west with rain into westernmost counties from early afternoon. The north-west was cloudy with some rain on the 18th, after isolated patches of early fog, with drier and brighter weather further south and east, and the odd heavy shower; it was quite warm. Bands of cloud and fragmented rain pushed eastwards during the 19th, while western areas were brightest.

### **20th to 26th**

The 20th saw sunshine for most areas, though south-eastern areas remained mostly cloudy with isolated showers. The 21st started mostly cloudy, any scattered mist or fog patches clearing by midday, with sunny spells for many by the afternoon, especially in the south. The 22nd was breezier for some, but with further sunshine especially towards the south-east. There was more

cloud on the 23rd, with isolated patchy rain or drizzle, although the sun broke through in some central and southern areas. The 24th was a warm day, with sunshine in south-eastern areas, but with more cloud and breeze further north and west bringing patchy rain or drizzle at times. It was rather cloudy on the 25th, with fog in places clearing by midday, patchy rain or drizzle at times, but some sunny spells developing in the afternoon, and remaining warm. Central and north-eastern areas were fine and bright on the 26th following some early mist or fog, with more cloud elsewhere giving isolated showers and sunny intervals.

### **27th to 30th**

After a dry start in the east on the 27th, rain across the bulk of the country, heavy in places, moved quickly east during the morning, then it brightened up but with scattered blustery showers spreading eastwards, and isolated thunderstorms in the south during the afternoon; it was windy with Needles (Wight) reporting gusts to 74 mph. After a bright start in the east on the 28th, rain or showers elsewhere spread east during the day, turning persistent and heavy across most parts, with isolated thunderstorms during the afternoon in the south, White Barrow (Devon) recording 76.6 mm of rainfall, and it was much cooler too with Pennerley (Shropshire) reaching only 10.8 °C. The 29th was much brighter, with scattered showers across the west spreading to central and eastern counties in the afternoon. After a cold night, Kielder Castle (Northumberland) falling to 0.7 °C, the 30th became wet and windy with showers or longer spells of rain, heavy at times, for all parts.

## **Wales diary of highlights**

**The first part of the month was cloudy and quiet, but it was often fine and warm after that, briefly very warm on the 7th/8th, but some rain in the second week, before a marked change to cooler rainy weather for the last few days.**

Mean temperatures for the month were provisionally 2.0 °C above average, the third warmest September on record. Most of Wales was close to average for both rainfall and sunshine, though a few spots were rather wetter, and the south-west slightly duller. There was 99% of average rainfall overall, and 95% of average sunshine.

### **1st to 8th**

The 1st was dull and overcast, and the 2nd was mostly cloudy although the sun eventually broke through late in the afternoon. The 3rd began mostly overcast, with just the odd spot of rain or drizzle in places, but brighter spells developed in some southern and south-eastern counties during the afternoon. The 4th was dry, with the best of the sunshine in the southeast. The 5th was dry, warm, and mostly sunny, after any mist and low cloud had cleared. Scattered mist and fog patches early on the 6th cleared, leaving plentiful sunshine and a very warm day. The 7th was sunny, and very warm or locally hot, Gogerddan (Dyfed) recording a maximum temperature of 30.7 °C. The warmth continued overnight into the 8th, with Aberporth (Dyfed) recording a minimum of 20.5 °C, then the north started sunny before cloud spread from the south, giving a mixture of sunny spells and heavy showers, with thunder in places, and it was again very warm.

### **9th to 18th**

It was wet with heavy rain in parts of the south early on the 9th, the rain pushing northwards and fragmenting to give heavy and thundery showers with sunny spells at times. Much of the 10th was cloudy, with isolated fog patches lingering until midday, and rain or showers continuing throughout the day, becoming heavier in the afternoon. On the 11th, northern parts were cloudy with rain or drizzle continuing in places, but central and southern areas were brighter and drier. The 12th was mostly cloudy, with rain soon pushing into the west, patchy at first but more organised by the afternoon. The 13th started dull, with rain and drizzle, this soon turning patchy and clearing northwards, but further rain moved into the south-west in the afternoon, spreading north and east

to most counties by early evening. Rain in the east cleared away by midday on the 14th, then it became brighter with occasional showers. Fog early on the 15th in some central and northern counties quickly cleared, then all areas were fine, though some cloud bubbled up later. Some fog was seen in southern parts on the morning of the 16th, which was otherwise a fine day. After a bright start on the 17th, cloud increased with patchy rain affecting western and central areas from early afternoon onwards. The 18th started with patchy rain, with heavier and more persistent rain developing later.

### **19th to 26th**

A band of cloud and patchy rain crossed eastwards through the morning of the 19th, followed by long spells of sunshine with the odd shower. After a chilly night, St Harmon (Powys) falling to 1.9 °C, the 20th was mostly dry and sunny after any early fog patches. The 21st was dry with sunny spells. The 22nd saw more cloud and a breeze, with patchy light rain in places. The 23rd started cloudy for many areas, with some patchy rain, and was windy in exposed spots, but it was increasingly sunny by the afternoon for most. The 24th was mainly dry, bright and warm. The 25th was rather cloudier, with some patchy rain or drizzle, and sunny spells developing near the north coast. After some early brightness in the north, the 26th was mostly cloudy with isolated showers, and windy in exposed locations.

### **27th to 30th**

Widespread, locally heavy, rain early on the 27th, cleared during the morning, then it was brighter with scattered showers, and isolated thunderstorms in the early afternoon. The 28th was very wet, with widespread, locally heavy, and persistent rain, and unseasonably cold with temperatures at Sennybridge (Powys) struggling to only 10.8 °C. The 29th was a day of sunshine and scattered showers. The 30th was wet and windy, with showers and spells of rain, heavy at times, affecting all parts through the day, Treherbert and Mumbles (both Mid-Glamorgan) recording 70.8 mm of rain and 58 mph gusts respectively.

## **Scotland diary of highlights**

**The first part of the month was mostly settled, becoming very warm for a time, but there were spells of rain at times during the rest of the month, with modest amounts of rain except towards the end of the month when it was much more unsettled and colder.**

The provisional mean temperature for the month was 2.1 °C above the long-term average, with 2006 having been the only September on record to have exceeded this. Rainfall was rather below average in many areas, but above average for Orkney, with Scotland as a whole having 78% of average rainfall. Western areas and the Northern Isles had a dull month, with an overall sunshine figure of 86% of average.

### **1st to 8th**

The 1st was a fine and warm day, with sunshine in most areas but cloudier in the north and east. The west began sunny on the 2nd, with cloud elsewhere dissolving by mid-afternoon. The 3rd was cloudier, with the odd spot of rain or drizzle in places, brighter in the Northern Isles for a time, and cloud tending to break over central and western parts during the afternoon. The 4th was rather cloudy with some patchy rain or drizzle. The 5th started mostly cloudy with isolated showers, but brighter further south, with heavy rain soon spreading from the west to all parts. Most areas were cloudy on the 6th, with patchy rain or drizzle most persistent in central and southern areas. After a mild night, Grangemouth (Stirlingshire) recording an overnight minimum of 17.2 °C, the 7th was fine, isolated mist or fog patches soon clearing to give a fine warm afternoon in the south, but remaining cloudier further north-west. Most areas were sunny and very warm on the 8th, Floors Castle (Roxburghshire) reaching 29.1 °C, but further north and west it was cloudier with rain in places, some heavy and thundery.

## **9th to 19th**

The 9th was a wet day, with bands of heavy and thundery rain pushing northwards through the morning, lingering in the west and the far north, followed by showers and occasional sunny spells. There were sunny spells and scattered showers on the 10th, after early mist and fog patches, with heavy rain developing late and continuing overnight, particularly in northern and eastern areas. Northern areas continued wet on the 11th, the rain heavy in places and lingering in the far north and Northern Isles, but further south it was brighter with just patchy rain at times. The 12th was mostly cloudy and cooler, with some rain or drizzle in places, but brighter spells at times. The 13th began cloudy, with occasional rain and drizzle at first, but sunny spells developed in many areas, with isolated showers breaking out in western and southern parts. The 14th was generally overcast, with rain spreading northwards through the day, but becoming lighter and patchier in the afternoon. The 15th started cloudy for most, with early fog patches in some areas soon clearing, and brighter spells developing, especially in the south-west, but scattered showers over western parts spreading eastwards during the afternoon. After patchy rain cleared the north-east during the morning of the 16th it was generally fine, but cloud increased from the west in the afternoon with patchy rain for central and southern parts and more persistent and locally heavy rain across the west. Most areas started with rain on the 17th, this rain tending to die out into the afternoon, but further rain moved into the west and became heavy and persistent by evening. Most areas were cloudy on the 18th, with heavy rain pushing into the Western Isles and far west in the morning, and scattered showers elsewhere, then further heavy rain developing in central areas overnight. The 19th began cloudy and wet, with heavy rain in parts of the north-east, followed by sunny spells and showers.

## **20th to 25th**

Southern and eastern areas started sunny on the 20th, while other areas were cloudier and breezy with some rain, this cloud spreading to most parts by the afternoon. The 21st was mostly cloudy, with isolated showers in the Northern Isles, patchy rain affecting some northern parts with strong winds in the north-west, but increasingly sunny in the afternoon, and warm in the east. The 22nd saw rain, after early sunshine in the east, with heavy rain spreading south-eastwards and strong winds in exposed areas. After sunshine for a time in the north, the 23rd was mostly cloudy, with cloud and rain pushing in, becoming locally heavy in the far north and Northern Isles, and strong winds in exposed parts, Fair Isle (Shetland) recording gusts to 69 mph. The 24th was rather cloudy and breezy in western areas with light rain at times, but brighter and warmer further east. Showery rain affected western areas at times on the 25th, which was cloudy for most areas but with some sunshine in the north-east during the afternoon.

## **26th to 30th**

The 26th was cloudy and windy, with showery rain at first, but some brightness in the east, followed by heavy rain spreading in from the west, giving a fall of 37.4 mm at Tyndrum (Perthshire). The 27th was much cooler, with widespread and sometimes heavy rain clearing eastwards, replaced by brighter conditions but with showers becoming widespread and locally heavy, and a few thunderstorms across the south late in the afternoon, and temperatures at Strathy East (Sutherland) reaching only 9.8 °C. Western areas had showers from the start on the 28th, becoming heavy and prolonged with isolated thunderstorms in the afternoon; other areas began fine, but rain spreading into southern and central areas during the morning and persisting until evening late into the day. The east began fine and bright on the 29th, but showers across the west and south spread eastwards to all parts by the afternoon. A cold night followed, Aboyne (Aberdeenshire) falling to -1.4 °C, and the 30th became wet and windy with showers and spells of rain, heavy at times, affecting all parts throughout.

## **Northern Ireland diary of highlights**

**The start of the month was mainly settled, then the second week saw more in the way of rain. After a quiet and rather warm spell, the weather turned colder and wetter for the last four days.**

The mean temperature was 1.9 °C above the 1981-2010 average, making it provisionally the equal warmest September in a series from 1884. Rainfall was near or slightly below average, with 93% of average overall. It was the third dullest September in a series from 1919, with a provisional figure of just 65% of average.

### **1st to 7th**

All areas began cloudy on the 1st but turned brighter by midday. Fog in western parts cleared by late morning on the 2nd, then it was mostly cloudy, but with breaks developing from the east by late afternoon. The 3rd and 4th were mostly overcast, with just the odd spot of drizzle in places. After early sunshine on the 5th, heavy rain arrived in the west by the afternoon and persisted until late. The 6th brought patchy rain or drizzle to some places, with occasional breaks in the cloud giving some sunny spells. After a very mild start to the 7th, Castlederg (Tyrone) and Magilligan (Londonderry) both having not fallen below 16.7 °C overnight, isolated mist or fog patches soon cleared to give a mainly sunny and warm afternoon.

### **8th to 18th**

The 8th saw some sunny spells, and it was very warm, with showers and fragmented rain pushing northwards through the day, and Ballywatticock (Down) reaching a maximum of 25.7 °C. There was a mixture of sunshine and heavy showers on the 9th, showers becoming fewer by the afternoon but not before Banagher (Londonderry) had recorded 48.6 mm. Showers soon developed on the 10th, coalescing into longer spells of rain in the east. The north was wet on the 11th, with heavy rain in places, but the south remained mainly bright and dry. The 12th was dry, but cooler, with only a few sunny intervals. The 13th was mostly dull and overcast, with some rain and drizzle, turning more showery in the afternoon, especially in the south. It was cloudy with a few showers, locally heavy, on the 14th, and continued mainly overcast on the 15th with further rain and drizzle. The 16th was again cloudy, with further light rain or showers throughout. The 17th was wet, with rain in most places persisting through the day. After a bright start, especially further east, heavy rain slowly edged in from the west on the 18th.

### **19th to 26th**

The 19th was a day of sunshine and scattered showers. After early brightness, the 20th was rather cloudy with patchy rain at times. On the 21st, cloud broke up to give increasing amounts of sunshine by the afternoon. After early sunshine on the 22nd, cloud and wind soon increased with patchy rain developing. The 23rd soon became overcast, with a few spots of rain, and it was breezy in the north with Orlock Head (Down) recording gusts to 43 mph. The 24th was cloudy, with patchy rain for some areas. It was mostly cloudy on the 25th too with isolated heavy showers developing later. The 26th saw some early brightness along with patchy rain in parts, before heavy and persistent rain pushed in during the afternoon, but it remained warm.

### **27th to 30th**

The 27th was bright and breezy, with some showers, and isolated thunderstorms during the afternoon. The 28th began bright but chilly, with showers developing by the afternoon, becoming increasingly widespread and locally heavy with isolated thunderstorms, the temperature at Banagher (Londonderry) reaching only 12.5 °C. After another cold night, Katesbridge (Down) falling to 1.7 °C, the 29th brought sunshine and scattered showers. The 30th was wet and windy with showers or longer periods of rain, some heavy, affecting all parts through the day, and Ballypatrick (Antrim) reporting gusts of 43 mph.