

## July 2010

The averaging period used for the following assessment was 1971-2000.

### UK overview

July saw the largely settled, static weather patterns of spring and early summer replaced by a more changeable Atlantic type. This airstream was relatively warm but often cloudy. Whilst the north-western half of the UK saw more rainfall than in recent months, the south-eastern half remained drier than average with many warm days. There was a west-east gradient in mean temperature, ranging from close to average in much of Scotland, Northern Ireland, Wales and western England to over 2.0 °C above average in East Anglia. July saw over twice the normal rainfall in a broad swathe from west Wales through north-west England, southern and eastern Scotland to Shetland. It was also wetter than normal across most of the rest of Scotland and Wales, and in Northern Ireland. In sharp contrast, much of south-east England was very dry with less than half the normal amount in Sussex and the Home Counties. Overall, it was duller than average, especially in many western areas. The only places with more sunshine than normal were Kent and in the Northern Isles.

A maximum temperature of 31.7 °C was recorded at Gravesend (Kent) on 9th - the highest UK temperature of 2010. A minimum temperature of 0.1 °C was recorded at Kinbrace (Highland) early on 23rd. In the 24 hours ending at 0900 on 19th, 101.0 mm of rainfall was recorded at Seathwaite (Cumbria). A wind gust of 84 mph was recorded at Aberdaron (Gwynedd) on 16th.

### England diary of highlights

Atlantic air-streams brought rather warm, but often cloudy, weather. There were several wet spells in northern and western areas but much of southern and eastern England had plenty of dry, fine weather. There was also a west-east gradient in mean temperature, ranging from close to average in western districts to about 2.0 °C above in East Anglia. Norfolk enjoyed the second warmest July in 100 years of records, with only July 2006 warmer. It was wetter than normal in some western and northern areas, with around twice the normal amount in Lancashire and Cumbria although July 2009 was wetter. In marked contrast, most of the eastern half of England was drier than normal and many parts of the south-east had another very dry month, with some places receiving less than 20 mm of rain. Sunshine was well below average over most of England, with only parts of East Anglia and the south-east recording near-normal amounts.

#### 1st to 8th:

The month began with an unseasonably deep area of low pressure in the Atlantic and weather fronts bringing occasional rain to western areas. Much drier conditions were experienced further south-east. This pattern continued through the rest of this period, with low pressure bringing some spells of rain to the north and west and mostly drier and warmer weather towards the south-east.

#### 9th to 11th:

The highest UK temperature of the year was measured at Gravesend (Kent) on 9th (31.7 °C), influenced by warm air from the continent. Meanwhile it was cooler and breezier across the west and north with some cloud and rain for a time. Mainly dry and very warm in the south-east and the Midlands again on 10th, with the temperature reaching 30.9 °C at Gravesend. Meanwhile, further cloud and outbreaks of rain affected northern and western parts.

### **12th to 16th:**

Some welcome rain managed to reach the south-east, with Manston (Kent) recording 28.0 mm on 12th. This also marked the end of the high temperatures experienced here over the previous days. Further spells of rain continued for much of the country, with some thunderstorms in the Midlands on 14th. An unusually active low pressure system developed on the evening of 15th and ran through the Irish Sea during the early hours of 16th. This brought some strong winds and heavy rain to western areas, with 21.4 mm of rainfall recorded at Cardinham (Cornwall) in 24 hours to 0900 on 16th. The system tracked quickly north-eastwards, leaving drier and brighter conditions but with some heavy showers in the west; 22.4 mm fell at Filton (Bristol) in 24 hours to 0900 on 17th.

### **17th to 22nd:**

Higher pressure re-established itself in the south-east, keeping the weather dry and relatively warm here and preventing the eastward progress of weather fronts. As a result, much of the west and north-west continued to see persistent cloud and occasional rain, often heavy, with 101.0 mm of rainfall recorded at Seathwaite (Cumbria) in 24 hours to 0900 on 19th. There were reports of flooding in Merseyside on 20th where hourly rainfall rates were often in excess of 20 mm, and then again on 21st and 22nd with some torrential downpours and thunderstorms associated with a weather front. Examples of 24-hour rainfall totals, from 0900 20th to 0900 21st, were 47.2 mm at Ness Gardens (Cheshire) and 45.4 mm at Preston (Lancashire).

### **23rd to 31st:**

Eastward-moving weather fronts brought cloud and some showers at times, but it was still largely dry in the south and east. Overall, temperatures were just above normal, especially in the south-east where it was also relatively warm overnight 30th / 31st, the temperature falling no lower than 17 °C at several places.

## **Wales diary of highlights**

July was a mainly unsettled month, as a westerly flow brought cloud and some wet spells especially to the west and north. Temperatures were generally close to normal. Rainfall totals were above normal in all areas and it was particularly wet in west and north Wales, where over twice the normal amount fell. Over Anglesey and Carnarvonshire it was the second wettest July in 100 years of records. It was a relatively dull month, with around 60% of the normal July sunshine and the third dullest July in a series from 1929.

### **1st to 4th:**

An unsettled start to the month. A cold front moving in from the west brought some heavy rain across the south-west on the evening of 1st, with 15 to 25 mm in six hours in places. Another set of fronts spread some rain across most parts later on 4th.

### **5th to 6th:**

A brief dry spell as a ridge of high pressure moved across from the west, with minimum overnight temperatures as low as 7 °C in places; 6.7 °C was recorded at Sennybridge (Powys) early on 6th.

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

A return to rather changeable weather as a succession of weather fronts moved north-eastwards through this period bringing some bands of mostly light rain, although some heavy and persistent rain occurred on the evening of 10th. Some brief drier spells also occurred, mainly on 8th and 11th.

### **13th to 16th:**

An unsettled, windy spell as low pressure became established over the UK. Some rain or showers, heavy at times, moved northwards on 13th and 14th. There was a brief, drier interlude on 15th before a deepening area of low pressure moved north through the St George's Channel and Irish Sea through the evening of 15th and overnight into 16th. This brought some very strong winds, particularly to the north-west, where gusts of 84 mph were recorded at Aberdaron (Gwynedd) and 71 mph at Valley (Anglesey).

#### **17th to 22nd:**

After another brief dry spell on 17th, the unsettled weather returned with outbreaks of rain at times during 18th and 19th, with the rain heavy at times across north-western areas later on 19th. A slow-moving cold front brought some very heavy and at times thundery rain over most parts on 20th and early on 21st. Totals in the 24 hours to 0900 on 21st included 68.2 mm at Hawarden Airport (Flintshire), 53 mm at Swyddffynnon (Ceredigion), 43.8 mm at Lake Vyrnwy (Powys) and 38.6 mm at Trawsgoed (Ceredigion). Further heavy and thundery showers occurred across most parts during 22nd.

#### **23rd to 31st:**

Generally more settled and drier, but some generally weak weather fronts still moved in from the Atlantic at times. These brought mostly only light rain or drizzle, but there were some heavier bursts of rain over the north-west later on 30th. It was also quite humid and warm at times overnight through this period.

## **Scotland diary of highlights**

A generally unsettled month, with frequent showers or longer spells of rain. Mean temperatures were close to, or slightly above, the 1971-2000 normal. It was a very wet month, with rainfall totals widely over 150% of normal and over twice the normal amount recorded in much of the Borders, eastern Scotland and in Shetland. It was the fourth-wettest July over Scotland in 100 years of record. Overall, it was duller than average, especially in south-western areas. The main exceptions were the Northern Isles which were sunnier than normal.

#### **1st to 10th:**

Rain on 1st, most persistent and locally heavy in west, cleared away to leave some warm sunshine and a few showers. Early heavy rain in eastern areas on 2nd, then bright with showers developing in west. Bright on 3rd with some sunshine in the east but scattered showers in the north-west. A wet and windy day on 4th with thunderstorms; 52.2 mm was recorded at Tyndrum (Stirling) and 40.4 mm at Bishopton (Glasgow). A mixture of sunny intervals and scattered showers on 5th, the showers most frequent over the north-west. A few showers in the north-west at first on 6th then rain swept north-eastwards across all parts by evening. On 7th, rain cleared by morning then windy, with severe gales in the north-west. A few showers in the north and west on 8th, otherwise dry and bright before rain in the south-west later. Mainly cloudy on 9th with a band of rain sinking south, this heaviest in the north-west. Mostly cloudy on 10th with rain, heavy at times.

#### **11th to 20th:**

Rain at first on 11th, heavy over Shetland with almost 24.8 mm recorded at Baltasound in two hours, before becoming brighter with showers. Rain affected the north-west during morning of 12th, otherwise bright with scattered showers. Mostly dry on 13th with sunny spells, but heavy showers with thunder affected the north-west and around Inverness. Persistent rain reached the south during the evening. Rain moved northwards during 14th with some heavier outbreaks especially in the south and east during the evening. Cool east winds, with temperatures reaching only 13.6 °C at Leuchars (Fife) and 13.3 °C at Lossiemouth (Moray). Heavy thundery rain move north early on 15th with Auchincruive (Ayrshire) recording 74.0 mm up to 0900, much of which fell in about 4 hours. Rain and scattered showers again on 16th. Overnight rain in west cleared early on 17th to leave showers. Bright on 18th, again with scattered showers and more persistent rain in the south during evening. Further rain spread eastwards on 19th, turning thundery in north with 21.0 mm falling at

Lossiemouth. The 20th was warm with sunshine and scattered showers, though Shetland stayed dull and misty.

### **21st to 31st:**

Mostly cloudy on 21st with persistent, heavy rain in places, especially from Perthshire to the Central Lowlands and in the north-east; 57.8 mm was recorded at Rosehearty (Aberdeenshire) in the 48 hours ending at 0900 on 22nd. The rain finally cleared southwards on morning of 22nd, with sunny spells developing. The 23rd was dry with plenty of sunshine and a top temperature of 20.5 °C at Gogarbank (Edinburgh). Rather cloudy on 24th with patchy light rain but brighter in east. Mostly cloudy on 25th, with showers across the north. Rain on 26th, mainly across the north and west, and brighter in the south and east, with 21.5 °C at Leuchars. Cloudy with rain in north-west on 27th. Drier, brighter in south and east although a few showers developed. The 28th was bright with sunshine and scattered showers, these heavy in the north-east. Showers became isolated on 29th, with 11 hours of sunshine recorded in the Glasgow area. The 30th was cloudy with rain moving eastwards, heavier outbreaks in the west but mainly dry along the east coast. Rather cloudy with showers on 31st, heaviest in the north-east.

## **Northern Ireland diary of highlights**

**A generally unsettled month, with showers or longer spells of rain. Mean temperatures were slightly above the 1971-2000 normal. It was a wet month, with rainfall totals generally more than 175% of normal and over 200% in much of County Down. It was the fifth-wettest July over Northern Ireland in a 100-year series, slightly wetter than July 2009 and 2007. It was also a relatively dull month, with around 70% of the average sunshine.**

### **1st to 10th:**

On 1st locally heavy overnight rain, with over 20 mm in County Down, cleared to leave sunny spells and a few showers. Bright on 2nd and 3rd with a few showers. On 4th a band of rain moved eastwards during the morning accompanied by gale-force winds, to leave a drier, brighter afternoon. The 5th was bright with scattered showers. A dry start to 6th but rain developed during the morning. On 7th rain soon cleared with scattered showers following. Bright and dry on 8th with rain later. Cloudy on 9th and 10th with outbreaks of rain, heavy at times.

### **11th to 20th :**

Rain at first on 11th, becoming brighter with showers later. Mainly dry on 12th with some sunshine, but showers in the west. Dry for much of 13th with some sunshine, then rain during evening. Heavy rain crossed most areas in the early hours of 14th, becoming lighter during morning and followed by a drier, brighter afternoon. Rather showery on 15th with some locally torrential downpours, and 53.4 mm was recorded at St Angelo (County Fermanagh). Heavy rain cleared on morning of 16th, then bright with scattered showers. Overnight rain soon cleared on 17th to leave sunny spells and occasional showers. Bright on 18th but cloudy with rain during evening. Rain cleared early on 19th then bright and warm, with the temperature reaching 22 °C widely. The 20th had a mixture of sunny intervals and scattered heavy showers.

### **21st to 31st:**

Rain on 21st, most persistent and heavy in the north and west; 36.6 mm was recorded at Castlederg (County Tyrone). Thundery showers affected mainly Counties Down and Armagh during the afternoon and evening, resulting in flooding in Armagh city centre. The rain finally cleared south-eastwards on morning of 22nd, followed by sunny spells, continuing on 23rd. Mainly dry on 24th with bright spells. Cloudy on 25th with patchy light rain, mainly in the north and west. Brighter and warm on 26th with temperatures up to 22 °C, then rain later. The 27th and 28th were bright with scattered showers. The 29th was mainly dry and rather cloudy. Rain on morning of 30th then drier and brighter in the afternoon. The month ended with sunshine and scattered showers.

