

July 2013

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

UK overview

Much of July was settled with high pressure established over the UK and with plenty of sunshine in most areas. As the month progressed there was an increasing tendency for high daytime temperatures, exceeding 28 °C somewhere in the UK on 19 consecutive days from 6th to 24th, with values exceeding 30 °C on several days. This was the UK's most notable summer heat wave since 2006. The UK overall had a rather dry month compared to normal, with nearly all of the month's rain falling during the last ten days, often as thundery outbreaks.

The UK mean temperature was 17.0 °C, which is 1.9 °C above the 1981-2010 average, placing it at third warmest in a series from 1910 (exceeded only in 2006 and 1983). The month was drier than average overall, especially in parts of South West England, East Anglia and north-west Scotland. However, central areas from the Midlands to southern and eastern Scotland received near or above average rainfall. The UK overall received 84%, making this the driest July since 2006, in contrast to the recent run of wet Julys. There was 249 hours of sunshine for the UK overall, 144% of the long-term average, with the sunniest areas being towards the west. It was the third sunniest July in a series from 1929.

A maximum temperature of 33.5 °C was recorded at Heathrow and Northolt (both Greater London) on the 22nd. A minimum temperature of 2.0 °C was recorded at Aboyne (Aberdeenshire) on the 2nd. In the 24 hours ending at 0900 GMT on the 28th, 99.2 mm of rain fell at Ashford Hall (Derbyshire). Wind gusts of 52 mph were recorded at Loftus (Cleveland) on the 28th and at Needles Old Battery (Isle of Wight) on the 29th.

Weather impacts

Very little rain fell over the UK during the first three weeks of the month. With dry ground and high temperatures, a number of wildfires were reported across southern England, including the London area. The prolonged heat led to numerous Heat-Health Watch warnings from 13th to 23rd, mainly across the South East.

Later in the month, the weather broke down with a lot of showery activity, some of it thundery, giving some very large rainfall totals over localised areas. On 23rd, lightning strikes disrupted train and tram services in Birmingham, Manchester and Edinburgh. There was flooding reported in parts of Nottinghamshire on the 23rd, around Glasgow on the 25th and West Yorkshire on the 30th.

England diary of highlights

The first three weeks of the month were settled, although with some showers on the first two days. High pressure was dominant, and sunshine was plentiful, with almost no rain between 3rd and 22nd. It became increasingly warm, with temperatures exceeding 30 °C in parts of central and southern England between 13th and 19th and again on 22nd. This was the most notable summer heat wave since July 2006. As the high pressure gradually moved away, the remainder of the month was more unsettled with widespread thundery outbreaks leading to some very high localised rainfall totals, and temperatures returned to more typical levels.

Temperatures for the month were well above average everywhere, especially maxima, although eastern coastal areas were cooler at times with low cloud. The mean temperature for England was 1.8 °C above the 1981-2010 average, the equal-third warmest July in a series from 1910 (shared with 1995 and behind 2006

and 1983). Heavy showery rainfall towards the end of the month led to monthly totals above average in many areas from the Midlands to the Pennines and Cumbria, but rainfall was below average in eastern and southern areas, with less than half the average for most of East Anglia and the South West. England overall received 88% of average. Sunshine totals were highest towards the west, with over 150% of average widely. It was the second sunniest July in a series from 1929 (2006 was the sunniest).

1st to 2nd:

It was generally bright and sunny on 1st although there were scattered showers in the north-west. A band of rain spread from the west during the morning of 2nd, clearing to leave showers in the afternoon.

3rd to 22nd:

This period was dry, mostly sunny, and becoming hot, with high pressure dominating. Somewhere in England exceeded 28 °C every day from 6th onwards, and 30 °C was exceeded for 7 successive days from 13th to 19th; Northolt (Greater London) reached 32.0 °C on 17th. There was more cloud for some areas on 20th and 21st, and consequently it was less hot. Some heavy showers edged into the far south-west later on 21st. The 22nd was again dry and hot, with the highest maximum temperatures of the year so far, 33.5 °C, recorded at both Northolt and Heathrow (Greater London). Some showers developed later in the evening and overnight into the 23rd.

23rd to 31st:

The 23rd saw the start of a breakdown as thunderstorms and heavy showers spread from the south during the day. Nottingham recorded 41 mm of rain, of which 36 mm fell during one hour in the late afternoon, causing local flooding. The showers were well scattered and lighter on 24th, although it remained warm and humid. On 25th heavy rain with occasional thunder spread into the South West and the Lake District in the early hours, continuing eastwards during the day. The 26th was fine and increasingly sunny, with temperatures reaching 27°C in parts of the South East. The 27th started dry but an area of at times heavy rain spread north during the afternoon with 60 mm falling in parts of the Midlands and 80 mm at Carlisle (Cumbria), again leading to some flooding. The rain continued to move north on 28th; Keswick (Cumbria) recorded 35 mm and there were scattered showers over the rest of the country, and again it remained warm and humid. The 29th was a day of sunshine and heavy showers, with thunder in many areas, and Lyneham (Wiltshire) recorded 35 mm of which 21 mm fell in one late-morning thunderstorm. The 30th was drier for northern parts with only some scattered showers, but some southern areas saw rain spread from the south during the morning clearing in the afternoon. Rain spread into western areas during the morning of 31st, and with southerly winds temperatures rose to 26°C in the south-east.

Wales diary of highlights

The month began with a little rain in places, but from 5th onwards there was a spell of very warm and settled weather with plenty of sunshine. Temperatures exceeded 28 °C widely on several days and reached 30 °C for the first time in Wales since July 2006. The latter part of the month was rather more unsettled but still generally warm.

Temperatures for the month were well above average everywhere, especially daytime maxima. The mean temperature for Wales was 2.0 °C above the 1981-2010 average, the third warmest July in a series since 1910 (behind 1983 and 2006). Rainfall totals for the month were well below normal in the south but near normal in the north, with an overall figure 68% of average. Sunshine was well above average, with an overall total of 162% of the month's long-term average, the second sunniest July in a series since 1929 (1955 was sunnier).

1st to 4th:

Sunny intervals on 1st, and mainly dry apart from isolated light showers in the north. Duller with patchy rain in the afternoon on 2nd. After early light rain on 3rd it became dry with some sunny spells. Becoming dry and sunny on the 4th after early cloud and patchy rain.

5th to 22nd:

High pressure dominated throughout this period, giving dry, warm and sunny weather. Temperatures gradually rose, exceeding 30 °C at a few stations on 13th, and culminating in a maximum of 31.4 °C at Porthmadog (Gwynedd) on 19th, the highest temperature recorded in Wales since 2006. Little or no rain fell during this spell and there were prolonged periods of unbroken sunshine.

23rd to 31st:

The 23rd was generally cloudy with isolated light showers but still warm. Sunshine and showers merged into a band of rain from the south-west in the evening of 24th. It was mainly dry and sunny on 25th after early showers died out. Dry and sunny again on 26th. After another sunny start on 27th, cloud increased with rain during the afternoon and evening. Sunshine and showers during 28th, 29th and 30th, some of the showers heavy on the latter two days. The 31st was overcast with rain, heavy at times, during the day; 41.8 mm was recorded at Capel Curig (Gwynedd).

Scotland diary of highlights

The month began rather unsettled with some rain or showers, but by 7th high pressure began to build. A spell of fine and very warm weather ensued, with plenty of sunshine, although there was some showery rain at times in the north from 13th onwards. The last nine days of the month were more generally unsettled, with heavy rain and thunderstorms in places, but still quite warm.

Temperatures for the month were well above average everywhere, especially for maxima away from the Western and Northern Isles. The mean temperature was 2.0 °C above the 1981-2010 average, making it the second warmest July in a series since 1910 (only 2006 was warmer). Monthly rainfall totals were rather below normal in the north-west but above average in parts of the east and south, with 82% for Scotland overall. Sunshine totals were well above average, especially over the Highlands, with more than 150% widely. It was the third sunniest July for Scotland in a series from 1929.

1st to 6th:

It was an unsettled start to the month, with frequent showers on 1st. Wet and windy on 2nd, rain spreading across the country from the west. After a drier day on 3rd with only a few scattered showers, winds increased on 4th with rain at first and showers in the west later. Scattered showers early on 5th but becoming dry, bright and breezy. Apart from some rain in the north-west, 6th was fine and very warm, with 26.0 °C recorded at Fyvie Castle (Aberdeenshire).

7th to 12th:

Most areas were dry, sunny and very warm on 7th, 8th and 9th, with 29.3 °C recorded at Grangemouth (Stirlingshire) on 9th. Cloudier and cooler on 10th in the east but warm and sunny again further west. After early cloud in the south, 11th was sunny and warm once more, but with a few showers in the Highlands. Very warm again on 12th with plenty of sunshine for most areas but a few showers in the north.

13th to 22nd:

A weak cold front moved south on 13th, bringing fresher and cooler conditions across the country. The 14th was breezy, but fine except for some rain in the far north. Mostly cloudy on 15th with a few scattered showers, and fine on 16th apart from a few scattered showers in the north. Dry, bright and warm on 17th apart from some rain in the north during the morning. Mostly dry again on 18th, with only scattered showers, and

continuing to get warmer in the south and east. Most of the country was dry, sunny and very warm on 19th, with 30.5 °C recorded at Glenlee (Kircudbrightshire), Scotland's highest temperature so far this year. Mainly dry, sunny and warm for all areas from 20th to 22nd, although the east coast was slightly cooler.

23rd to 31st:

Many areas were wet on 23rd with heavy rain and thunderstorms spreading northwards across the country; 60.4 mm was recorded at Livingston Mill (West Lothian). Dry at first for most of the country on 24th, but heavy thundery showers built up through the day. Rain, heavy and thundery at times, spread north during 25th, with flash floods reported in the Glasgow area. Some areas again had thundery showers and longer spells of rain on 26th, but other areas escaped and remained mostly fine. A dry and bright morning on 27th, but scattered thundery showers developed later. Heavy rain for all areas on 28th cleared from the south during the afternoon. Heavy thundery showers or longer spells of rain for most areas on 29th. Most areas started dry on 30th but scattered showers, some heavy, built up through the day. Mostly dry on 31st but rain spread in from the south-west later in the afternoon.

Northern Ireland diary of highlights

The month began rather unsettled, but within a few days there was a long spell of fine warm weather with plentiful sunshine and temperatures exceeding 28 °C widely on several days. The last ten days of the month were much more unsettled with heavy thundery rain at times.

Temperatures for the month were well above average, with the mean temperature 2.4 °C above the 1981-2010 average. This was the warmest July in a series from 1910 and second-warmest calendar month on record with only August 1995 warmer. Monthly rainfall totals were variable, with the overall figure 91% of average. Sunshine totals were well above average, with 159% overall, the third sunniest July in a series from 1929.

1st to 4th:

The 1st was dry but rather cloudy. Remaining cloudy on 2nd with periods of rain or showers, some heavy. Rain continued at first on 3rd, clearing during the morning, but further rain spread from the west later. The rain had cleared by the morning of 4th to leave a dry day with sunny spells.

5th to 22nd:

It was dry and settled throughout this period. Maximum temperatures were in the mid to high 20s generally, but a few degrees lower along northern coasts. Thomastown (County Fermanagh) reached 28.2 °C on 9th. The 13th was fresher and cloudier, though remaining dry, as a weak cold front passed through from the north; temperatures along the north coast barely reached 15 °C. The warm sunny weather resumed on 14th with temperatures well into the 20s again but still cooler along the north coast. There was more in the way of cloud on 15th and 16th but it was still warm. It became particularly warm from 17th to 20th, and sunny, the temperature reaching 30.1 C at Castlederg (County Tyrone) on the 19th. With more cloud on 21st, temperatures were lower. After a sunny start on 22nd, rain spread in from the west later heralding a more unsettled spell.

23rd to 31st:

The 23rd was warm and humid, with heavy rain at times and thunderstorms in some areas. After morning sunshine on 24th, heavy rain or showers developed later and Katesbridge (County Down) recorded 41 mm. The 25th was another day of sunshine and showers. The showers became more scattered on 26th but with thunderstorms for northern areas in the afternoon. Any showers were lighter and well scattered on 27th with more in the way of sunshine. Heavy showers returned to all parts on 28th, thundery over northern and eastern coastal areas. On 29th the showers become heavier and more widespread, with a scattering of thunderstorms

during the afternoon. The 30th started dry and bright, but a band of heavy showers with thunder spread from the west during the afternoon. After a dry start on 31st, rain quickly spread from the south during the morning to reach all areas by late afternoon.

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