

July 2025 Monthly Weather Report

This document provides a summary of the UK's weather and climate statistics for July 2025.

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UK overview

July began with high temperatures in the south of the UK, with the hottest temperature of the year so far, 35.8°C, recorded in Faversham, Kent. The weather then turned unsettled as frontal systems moved in, bringing rain to many areas. In particular, Scotland and northwestern regions saw heavy downpours, some thundery. Temperatures dropped to below average in most areas for a couple days, before returning to around average for the rest of the first week. Pressure built again and brought more settled weather, although there were still outbreaks of light rain and drizzle in the north and northwest. Above-average temperatures and dry weather persisted for most of the second week of July before showers began to arrive, some heavy in parts of Scotland and northeast England. Temperatures then returned to around average, with outbreaks of occasionally thundery showers. For the rest of the month, temperatures were slightly above average for most and the weather was unsettled. Frontal systems brought more organised rainfall between the 19th and 21st, with particularly heavy rain experienced in Scotland and Northern Ireland. There were also convective showers, some thundery, across central and southeastern England. The month closed with unsettled weather bringing rain and showers across parts of the country.

Provisional temperatures for the UK were above average, with the UK seeing a mean temperature of 16.8°C, 1.5°C above the long-term average and the UK's fifth warmest July on record. Minimum temperatures in particular were high, with the UK recording its second highest minimum temperatures for July on record. Rainfall was below average for all four nations, although there was strong regional variation: provisionally, Wales saw only 59% of the long-term average rainfall while Scotland saw 99% of the average. Southeast England was much wetter than southwest England, with Kent provisionally recording 186% of the average rainfall compared to Dorset seeing just 44% of the average. Sunshine hours were above average for Scotland, Wales and England, but Northern Ireland saw slightly below average sunshine hours. Wales and northern Scotland were particularly sunny.

Reference climatology used for calculating anomalies is the period 1991-2020 unless otherwise stated.

Weather impacts

- **Heavy downpours, some thundery, led to surface water flooding**
- **The combination of prolonged dry weather and heat mid-month in some areas led to wildfires and damage to railway lines**

July was warmer than average but offered more changeable weather than previous months. The opening day saw the highest temperature of the month with 35.8C recorded at Faversham, Kent. There followed about a week of changeable, westerly conditions before the next pronounced period of hot temperatures developed between the 9th and 14th as high pressure built across the UK. The heat left behind a legacy of warm, humid air which was conducive to heavy showers and thunderstorms. Two amber warnings, one for thunderstorms and a second for rain, were issued on the 18th and 20th respectively. The last ten days of the month saw relatively benign west to northwesterly conditions. Wales and southwest England had a relatively dry month whilst Scotland saw near average rainfall. The higher frequency of thundery downpours in Kent led to a much wetter than average month for the county.

The 6th saw various impacts across England resulting from surface water excess as overnight rain was followed by heavy showers and thunderstorms in response to daytime heating and latent instability. Reports from Cheshire and Staffordshire indicated road flooding across parts of Stoke-on-Trent and in Crewe. Meanwhile in Letchworth, Hertfordshire, the local outdoor swimming pool was reportedly forced to close due to floodwater spilling over from a nearby stream. In Kent, locally torrential downpours on the 6th affected the Maidstone and Dover areas with reports of flooded roads, and the rail line in Farnham was reported closed due to flooding.

The next period of impactful weather was the fine, hot spell between the 9th and 14th which saw amber heat health warnings issued by the UK Health Security Agency. On the 12th a wildfire was reported near to Bromsgrove, Worcestershire which resulted in several families being evacuated. Meanwhile a wildfire in Dagenham, east London on the 15th saw further house evacuations with around eight hectares of land scorched, according to local Fire and Rescue service reports. The 12th saw temperatures reaching 33C in Cardiff and on the same day there were reports of the heat damaging railway lines at Abercynon, Rhonda Cynon Taf, with replacement buses laid on to cover the stretch of affected route linking Pontypridd, Aberdare and Merthyr Tydfil. The high temperatures also resulted in some West Midland trams being forced to travel at reduced speeds.

The period between the 15th and 23rd saw severe weather warnings activity as unsettled conditions dominated with various heavy rain/thunderstorm episodes. The 15th and 16th

saw thundery downpours affect parts of northern England and Scotland. In Cumbria the rail line between Oxenholme and Windermere was reportedly closed for a time due to flooding whilst in Glasgow the rail line at Bishopbriggs was affected by flooding which caused delays and cancellations to services in and out of Queen Street station. The first of the two amber warnings for heavy rain/thunderstorms was issued for parts of southeast England and London on the 18th for the following day, with the second issued for the east of Northern Ireland later on the 20th for the overnight period into the 21st. There were a few reports of road flooding in west London on the 19th whilst on the 20th there emerged reports of flooding at the Marble Arch caves in County Fermanagh with visitors having to be assisted out as the water gushed in from above after a prolonged heavy downpour. The 20th was the wettest July day on record at Killowen, County Down.

The 21st saw various reports of surface water flooding across the UK as a complex centre of low pressure covered the UK and heavy showers developed widely. In Northern Ireland, significant surface water flooding was reported in Enniskillen where many roads were reported impassable for a time. In Manchester a tram line in the Didsbury area was reported closed for a time due to flooding, while the Ely to Norwich rail line reportedly closed for a time due to track flooding. Additional reports of road flooding were received from Edinburgh and Perth in Scotland whilst there were reported sightings of funnel clouds from Nidderdale in North Yorkshire.

Renewed heavy rain on the night of the 21st/22nd across the Scottish Highlands resulted in the suspension of all services on the 22nd between Inverness and Kyle of Lochalsh as floodwater covered a section of the line between Garve and Achanalt. On the 23rd attention shifted southwards again with reports of flooding closing the rail line between Hastings and Ashford International. In the southwest of England, prolonged dry weather from spring caused the embankments of several sections of rail line to suffer damage to the track bed, resulting in no trains being able to call at Crewkerne, Somerset from the 28th with bus replacement services operating instead. The month ended with heavy thundery downpours affecting mainly south and southeast England but also parts of southeast Wales with reports of surface water flooding in Cardiff, Southampton, and the Isle of Wight. In the Isle of Wight, the local fire and rescue service received a high volume of calls with the Sainsbury's supermarket in Newport reportedly suffering a partially collapsed roof after an intense downpour.

Monthly extremes

The table below lists UK monthly weather extremes recorded at individual weather stations during July 2025 from data available on 04/08/2025. The map shows the location of these stations.

Highest Maximum	35.8°C on 1st at Faversham (Kent, 46mAMSL)
Lowest Maximum	12.6°C on 4th at Fair Isle (Shetland, 57mAMSL)
Highest Minimum	22.2°C on 1st at Heathrow (Greater London, 24mAMSL)
Lowest Minimum	1.1°C on 8th at Altnaharra No 2 (Sutherland, 81mAMSL)
Lowest Grass Minimum	-2.4°C on 3rd at Fettercairn, Glensaugh No 2 (Kincardineshire, 171mAMSL)
Most Rainfall	91.8mm on 4th at Honister Pass (Cumbria, 358mAMSL)
Most Sunshine	16.4hr on 13th at Lerwick (Shetland, 82mAMSL) also on 12th at Kirkwall (Orkney, 26mAMSL)
Highest Gust	54Kt 62mph on 15th at Aberdaron (Gwynedd, 86mAMSL)
Highest Gust (mountain*)	77Kt 89mph on 4th at Aonach Mor (Inverness-shire, 1130mAMSL)
Greatest Snow Depth at 0900 UTC	No non-zero values.

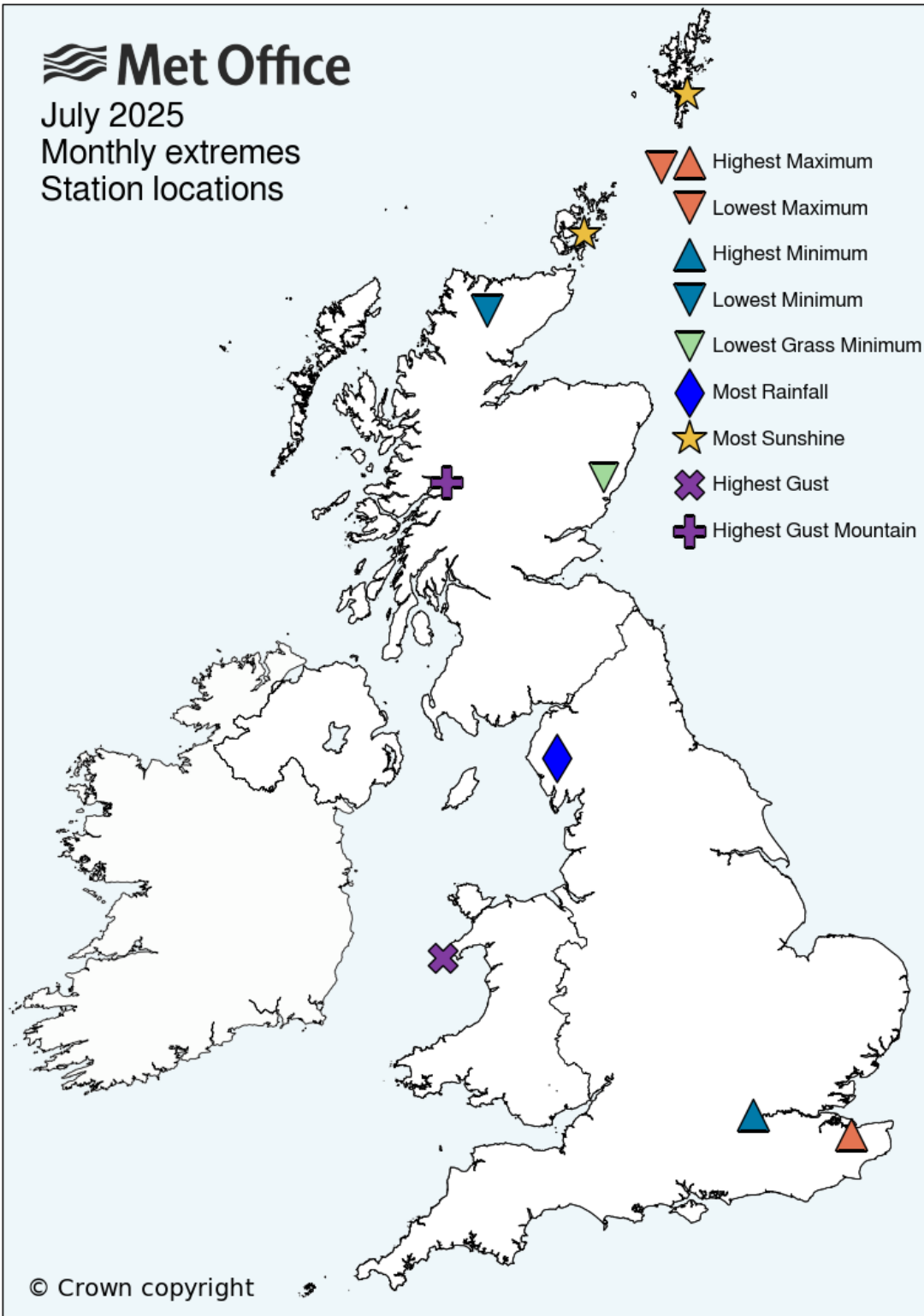
mAMSL refers to station elevation in metres above mean sea level.

*Mountain stations are above 500mAMSL.

July 2025

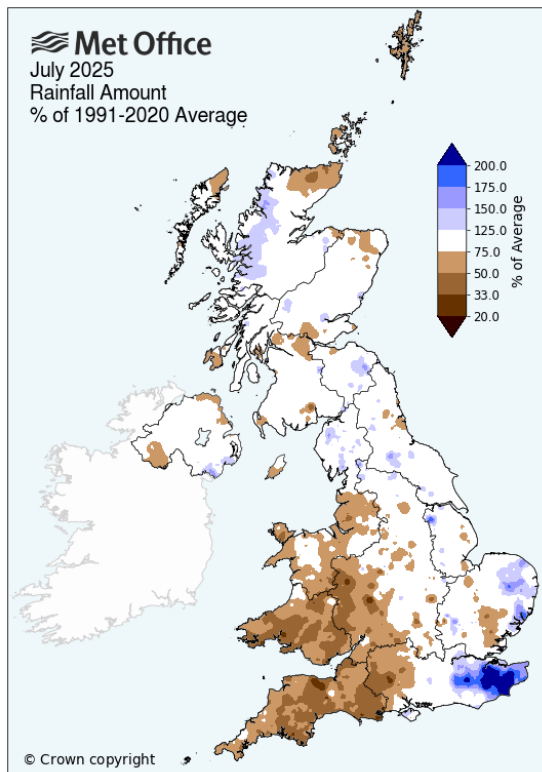
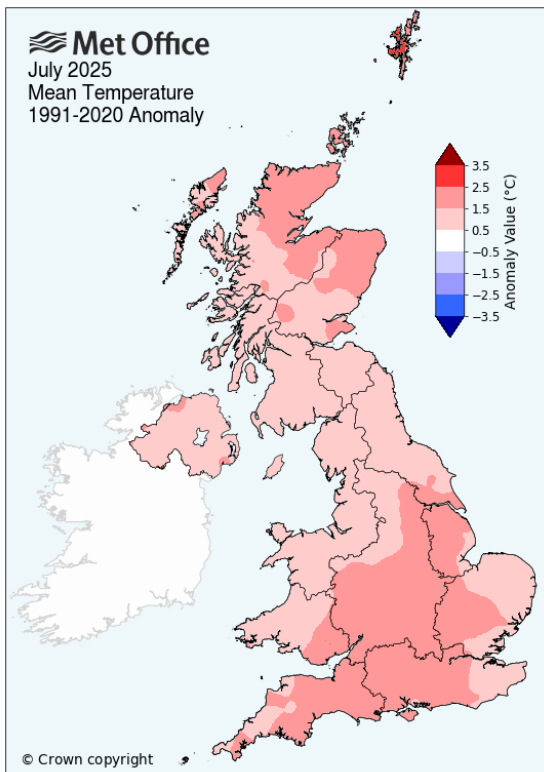
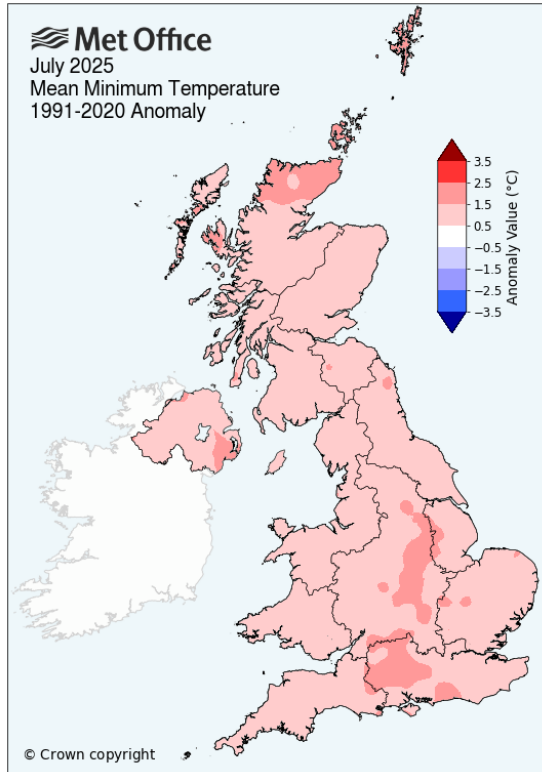
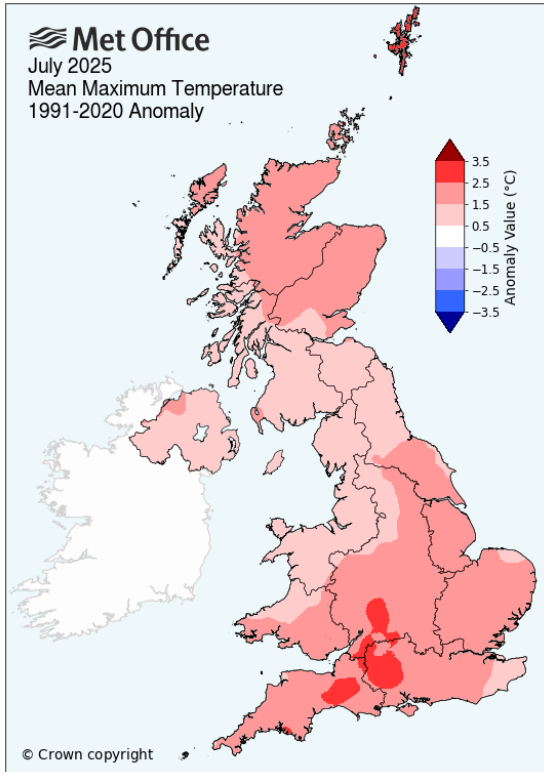
Monthly extremes

Station locations

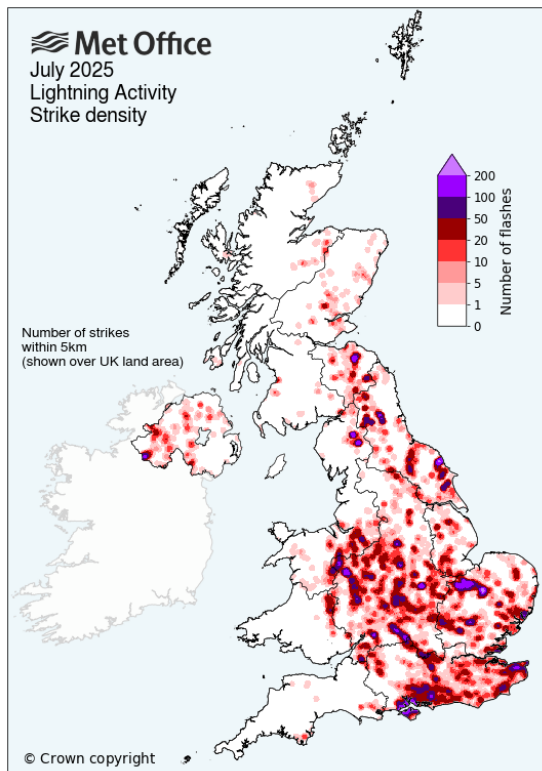
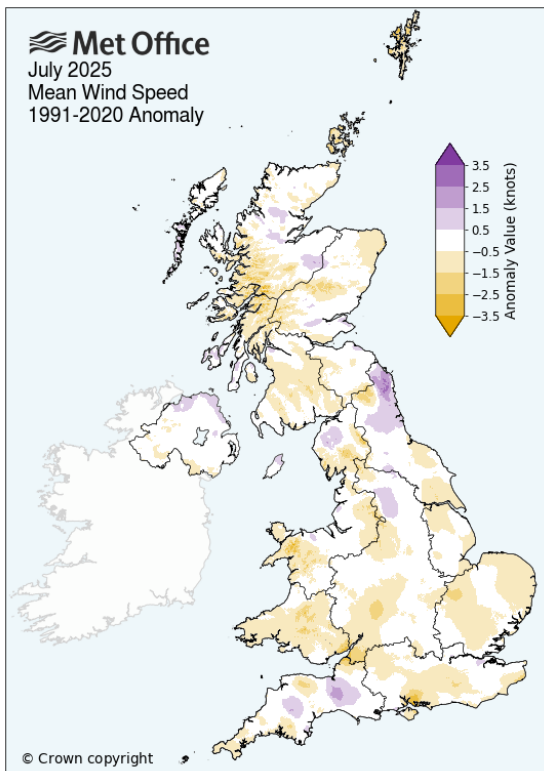
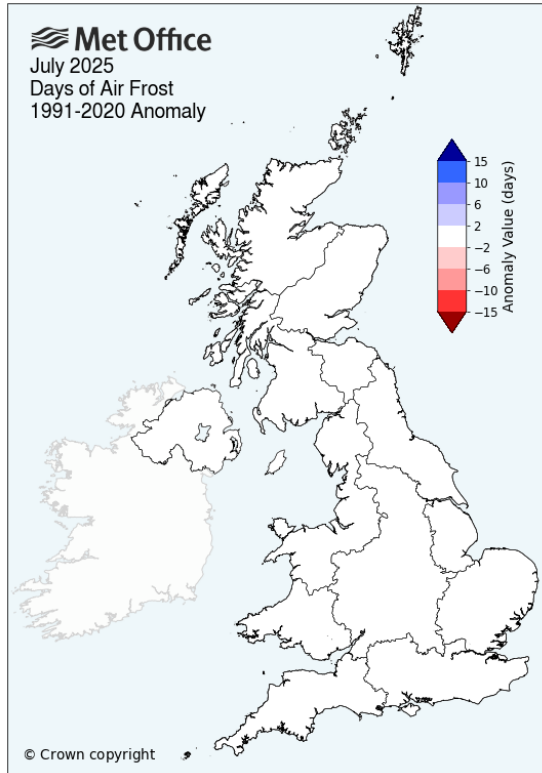
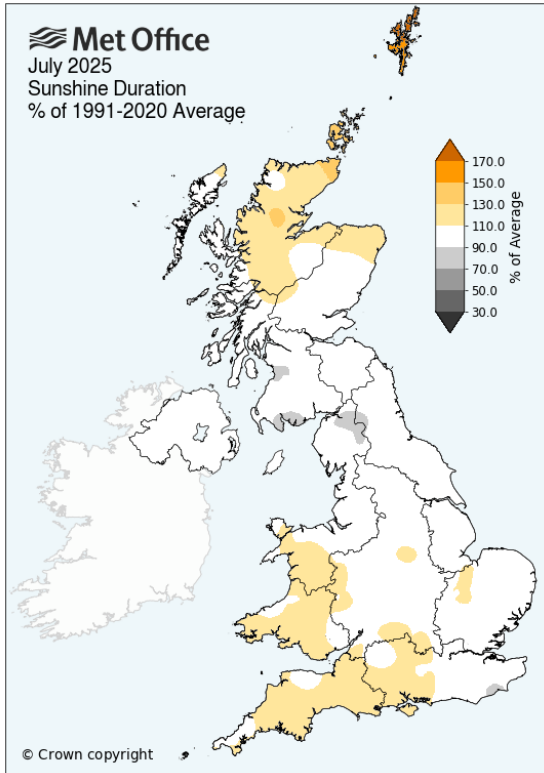


Monthly maps

These maps show monthly average daily maximum, monthly average daily minimum and monthly mean temperature and monthly rainfall for July 2025 as anomalies relative to the July 1991-2020 long term average.



These maps show monthly sunshine, monthly air frost and monthly windspeed for July 2025 as anomalies relative to the July 1991-2020 long term average, plus a map showing lightning activity as the number of strikes within a 5km radius of any land location.



Monthly climate statistics - actuals and anomalies

These tables show the UK and national climate statistics for July 2025 for max, min and mean temperature, rainfall, sunshine and windspeed as actual values and anomalies relative to the July 1991-2020 long term average. The position of the value within the full series (in both ascending and descending order) is shown in the two 'Rank' columns. Central England Temperature (CET) and England & Wales Precipitation (EWP) are also included.

Mean maximum temperature

Region	Maxtemp (°C)	1991-2020 Anomaly (°C)	Rank - warmest	Rank - coldest	Series length (yrs)
UK	21.3	1.7	13	130	142
England	22.9	1.8	12	131	142
Wales	20.8	1.5	19	124	142
Scotland	18.9	1.6	11	132	142
Northern Ireland	19.8	1.3	12	131	142
Central England	23.3	1.8	13	136	148

Mean minimum temperature

Region	Mintemp (°C)	1991-2020 Anomaly (°C)	Rank - warmest	Rank - coldest	Series length (yrs)
UK	12.3	1.3	2	141	142
England	13.1	1.3	2	141	142
Wales	12.4	1.1	4	139	142
Scotland	11.0	1.3	5	138	142
Northern Ireland	12.1	1.4	2	141	142
Central England	13.6	1.4	3	146	148

Mean temperature

Region	Meantemp (°C)	1991-2020 Anomaly (°C)	Rank - warmest	Rank - coldest	Series length (yrs)
UK	16.8	1.5	5	138	142
England	18.0	1.5	7	136	142
Wales	16.5	1.3	10	133	142
Scotland	14.9	1.5	6	137	142
Northern Ireland	16.0	1.3	6	137	142
Central England	18.4	1.6	10	358	367

Rainfall

Region	Rainfall (mm)	% of 1991-2020 Average	Rank - wettest	Rank - driest	Series length (yrs)
UK	74.2	90	116	75	190
England	58.9	89	126	65	190
Wales	58.3	59	154	37	190
Scotland	102.9	99	95	96	190
Northern Ireland	79.9	89	112	79	190
EWP (England and Wales)	63.2	88	175	86	260

Sunshine

Region	Sunshine (hours)	% of 1991-2020 Average	Rank - sunniest	Rank - dullest	Series length (yrs)
UK	183.4	106	32	85	116
England	205.9	105	29	88	116
Wales	198.3	112	28	89	116
Scotland	150.9	107	36	81	116
Northern Ireland	132.5	97	54	63	116

Windspeed

Region	Windspeed (knots)	1991-2020 Anomaly (knots)	Rank - windiest	Rank - calmest	Series length (yrs)
UK	7.5	-0.4	38	20	57
England	6.9	-0.4	37	21	57
Wales	7.5	-0.8	37	21	57
Scotland	8.5	-0.4	42	16	57
Northern Ireland	7.3	0.0	33	25	57

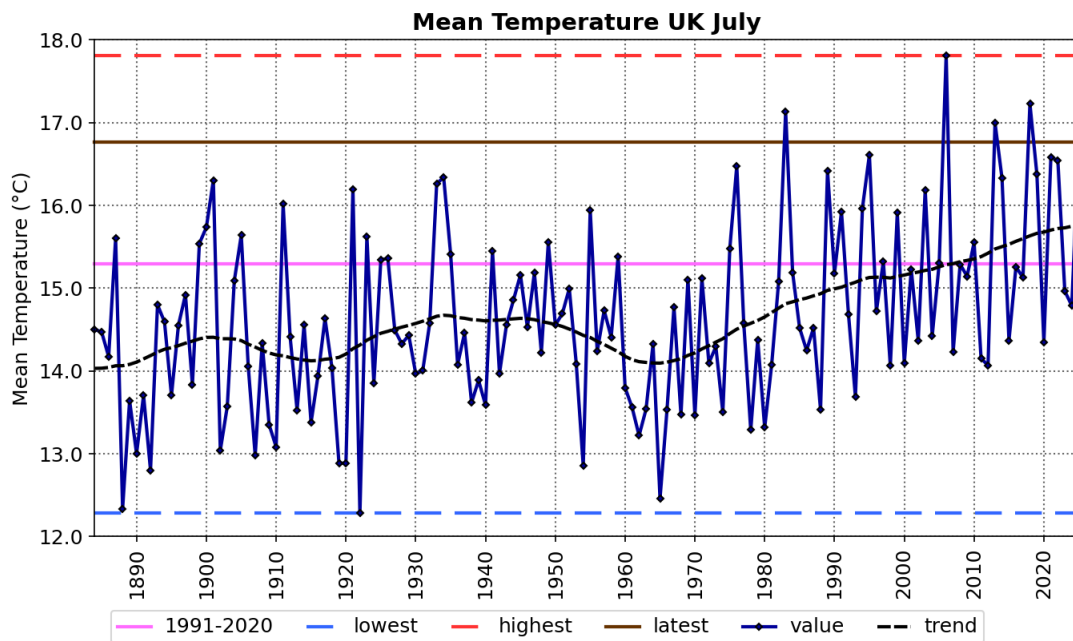
Monthly time-series

These charts show time-series for the UK for July for monthly mean temperature (from 1884), monthly rainfall (from 1836) and monthly sunshine (from 1919). The brown line shows the latest (2025) value. The hatched black line is a smoothing filter which shows the long-term trend. The tables below show statistics for the latest year, latest 10 years 2016-2025, the most recent 30-year climate reference period 1991-2020 and the 30-year baseline climate reference period 1961-1990.

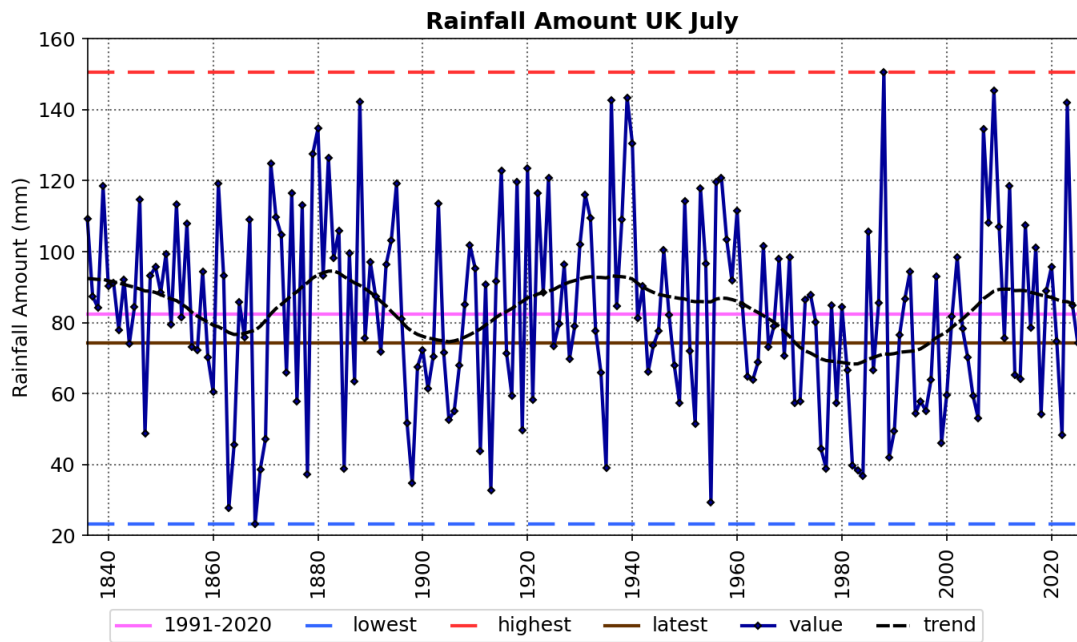


Source: HadUK-Grid 01/08/2025 11:38

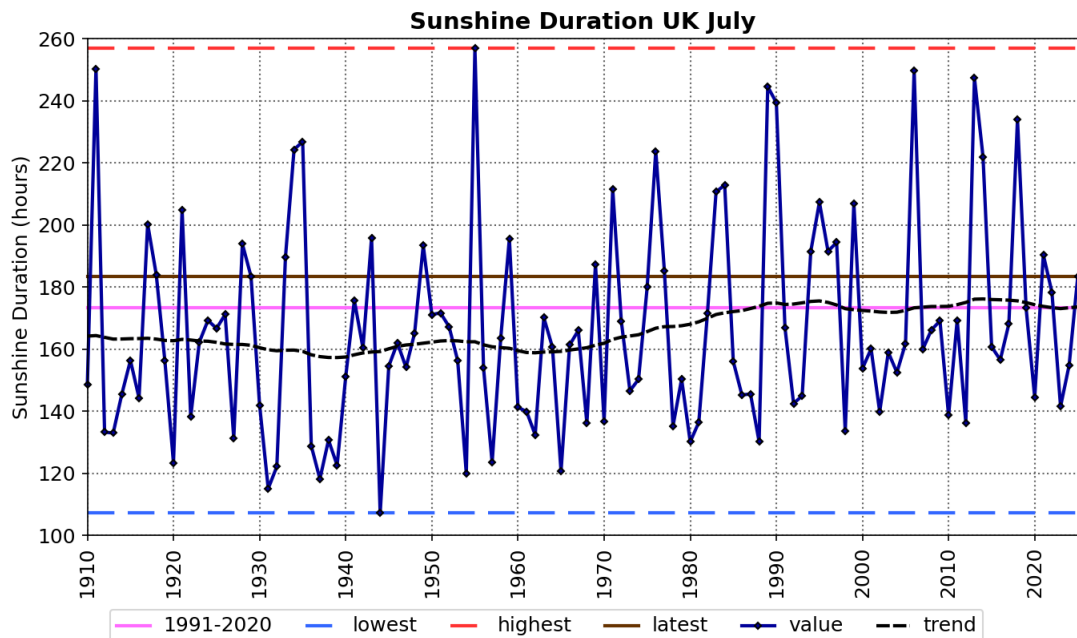
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Period	1961-1990	1991-2020	2016-2025	2025
Meantemp (°C)	14.4	15.3	15.8	16.8



Period	1961-1990	1991-2020	2016-2025	2025
Rainfall (mm)	72.1	82.5	84.2	74.2



Period	1961-1990	1991-2020	2016-2025	2025
Sunshine (hours)	166.2	173.4	172.5	183.4

Daily time-series

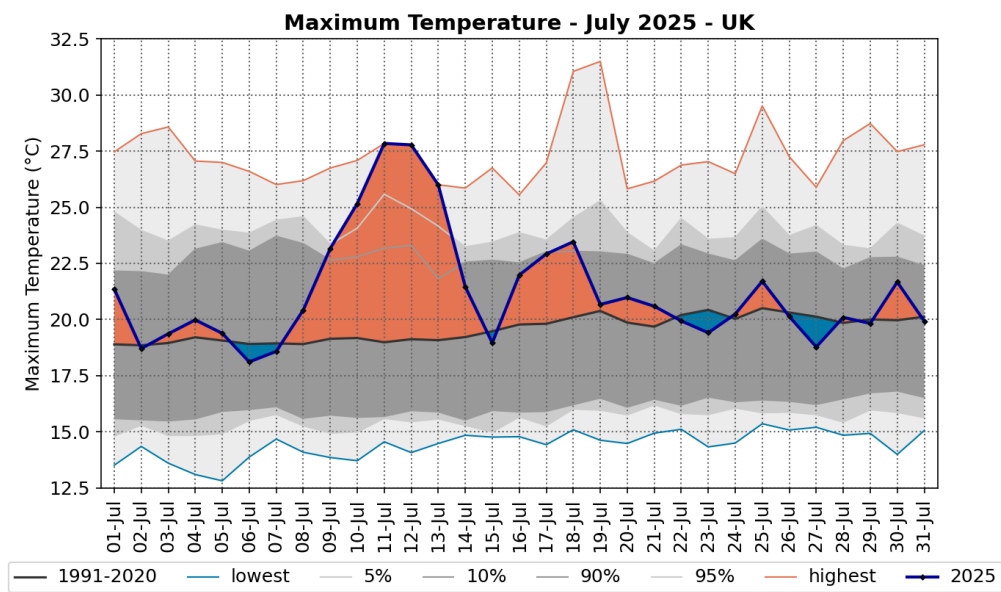
These charts show time-series of UK area-average daily maximum and daily minimum temperature and daily rainfall for each day of July 2025. The areas shaded in grey show the highest and lowest values in the daily temperature series (from 1960) and daily rainfall series (from 1891) together with percentiles and the 1991-2020 long term averages for each day. The rainfall accumulation chart shows the daily rainfall series as an accumulation through the month.

Daily maximum and daily minimum temperature



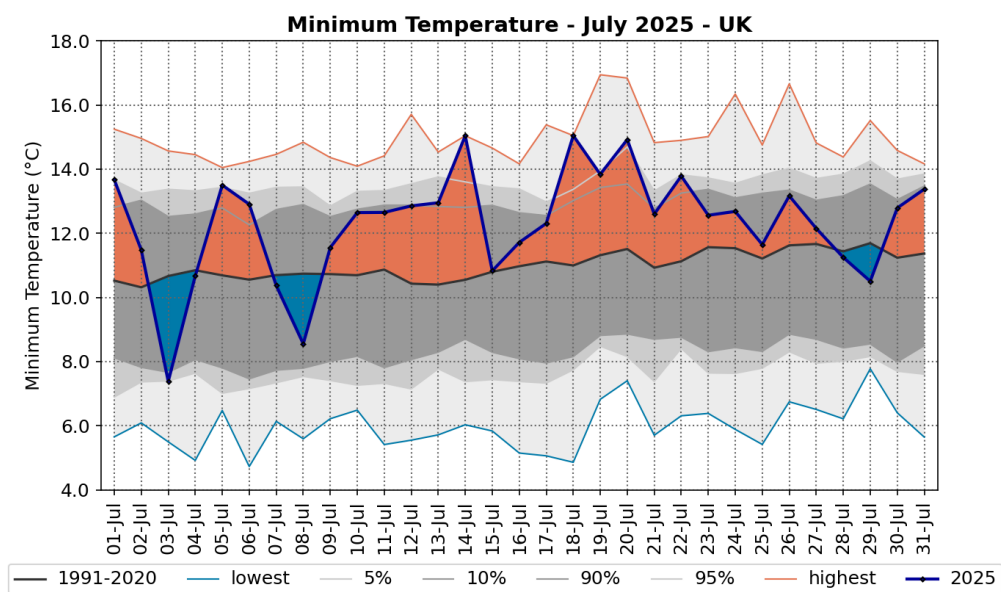
Source: HadUK-Grid 01/08/2025 11:43

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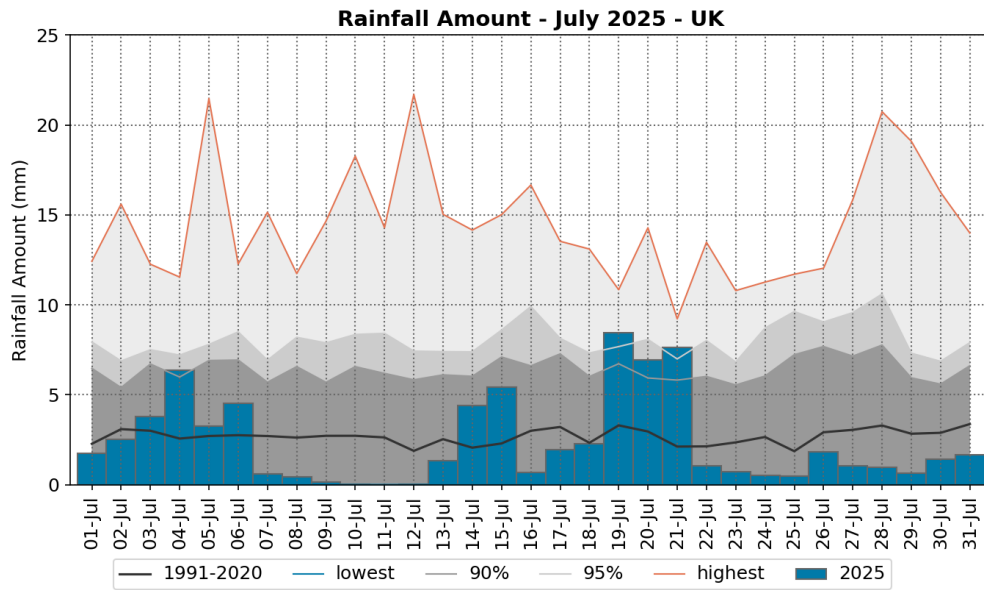


Daily rainfall and rainfall accumulation

Met Office

Source: HadUK-Grid 01/08/2025 11:43

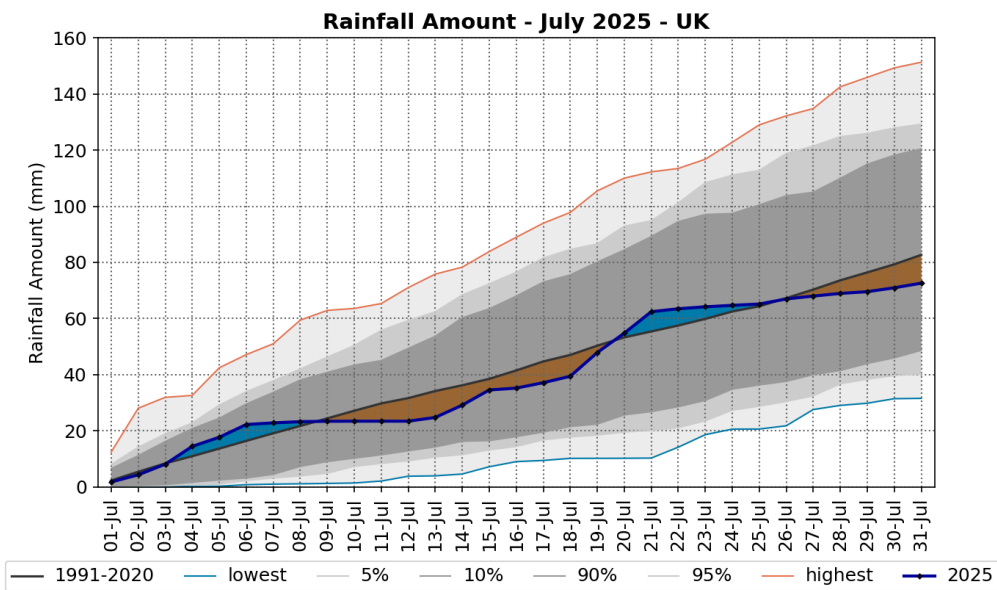
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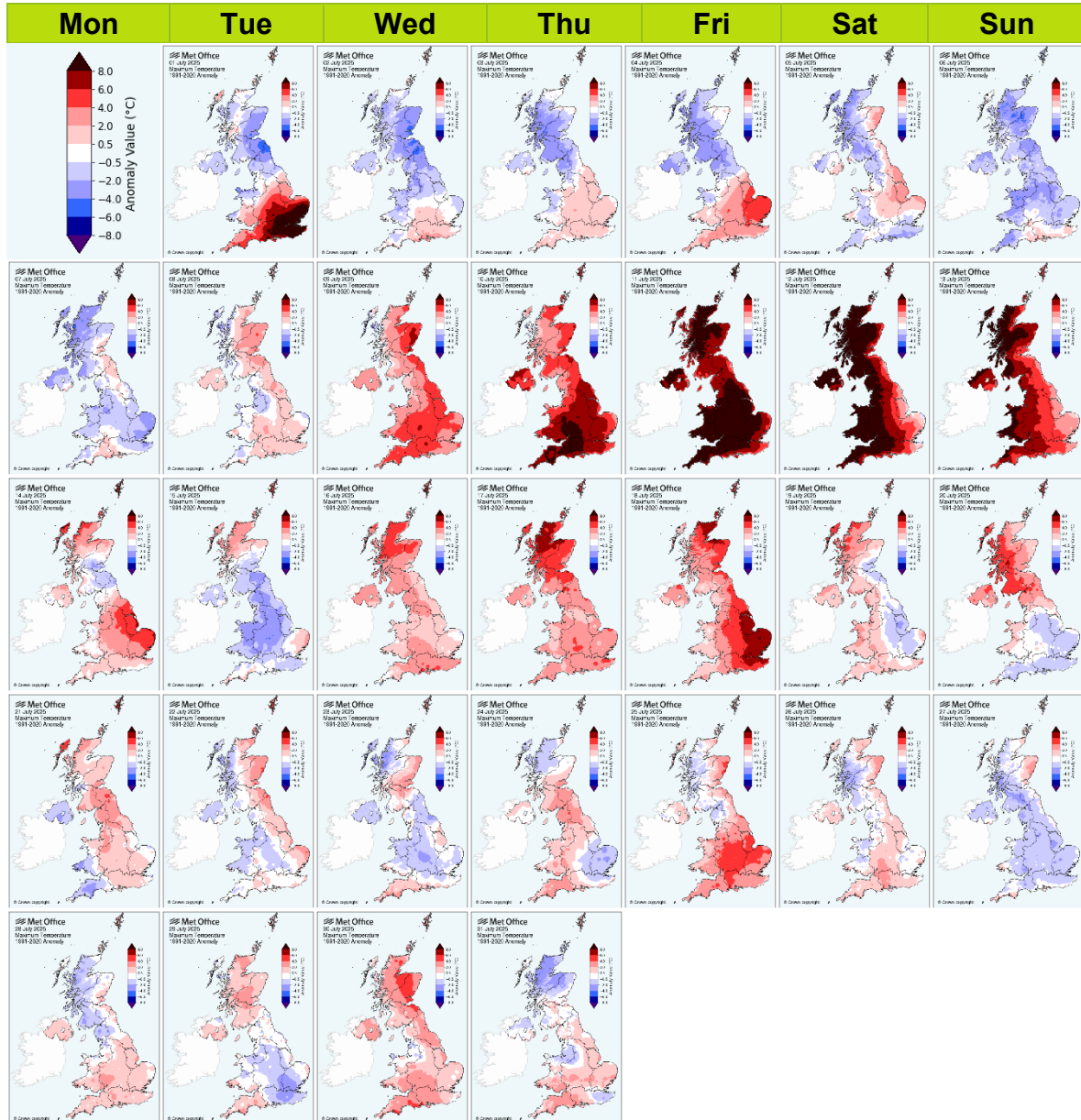
Source: HadUK-Grid 01/08/2025 11:45

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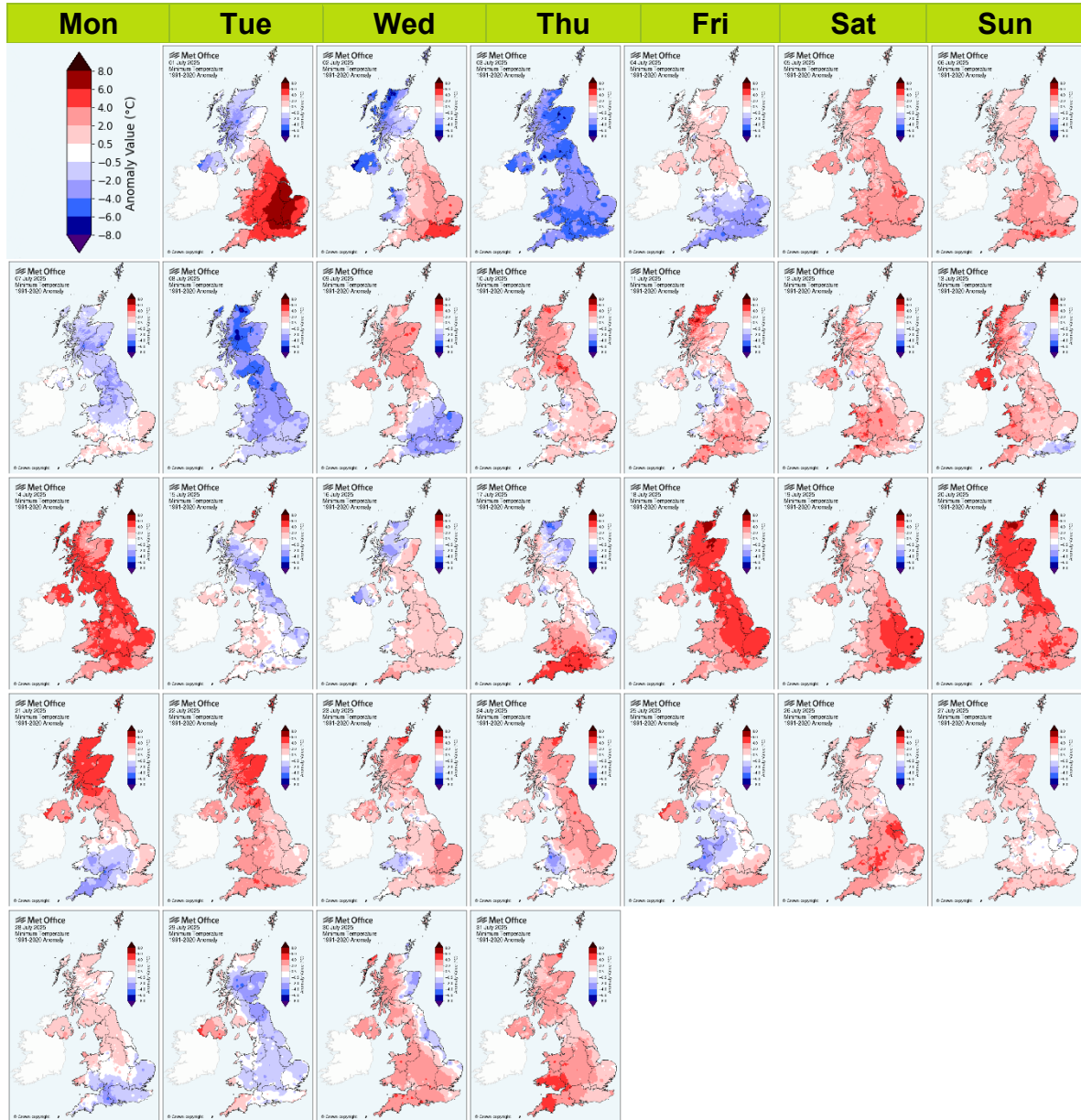
Daily maximum temperature maps - calendar view

These maps show daily maximum temperatures for each day of July 2025 as anomalies relative to the July 1991-2020 long term average. The daily maximum temperature is the maximum from 0900UTC on the day in question to 0900UTC the following day. Normally, the maximum occurs in the early afternoon.



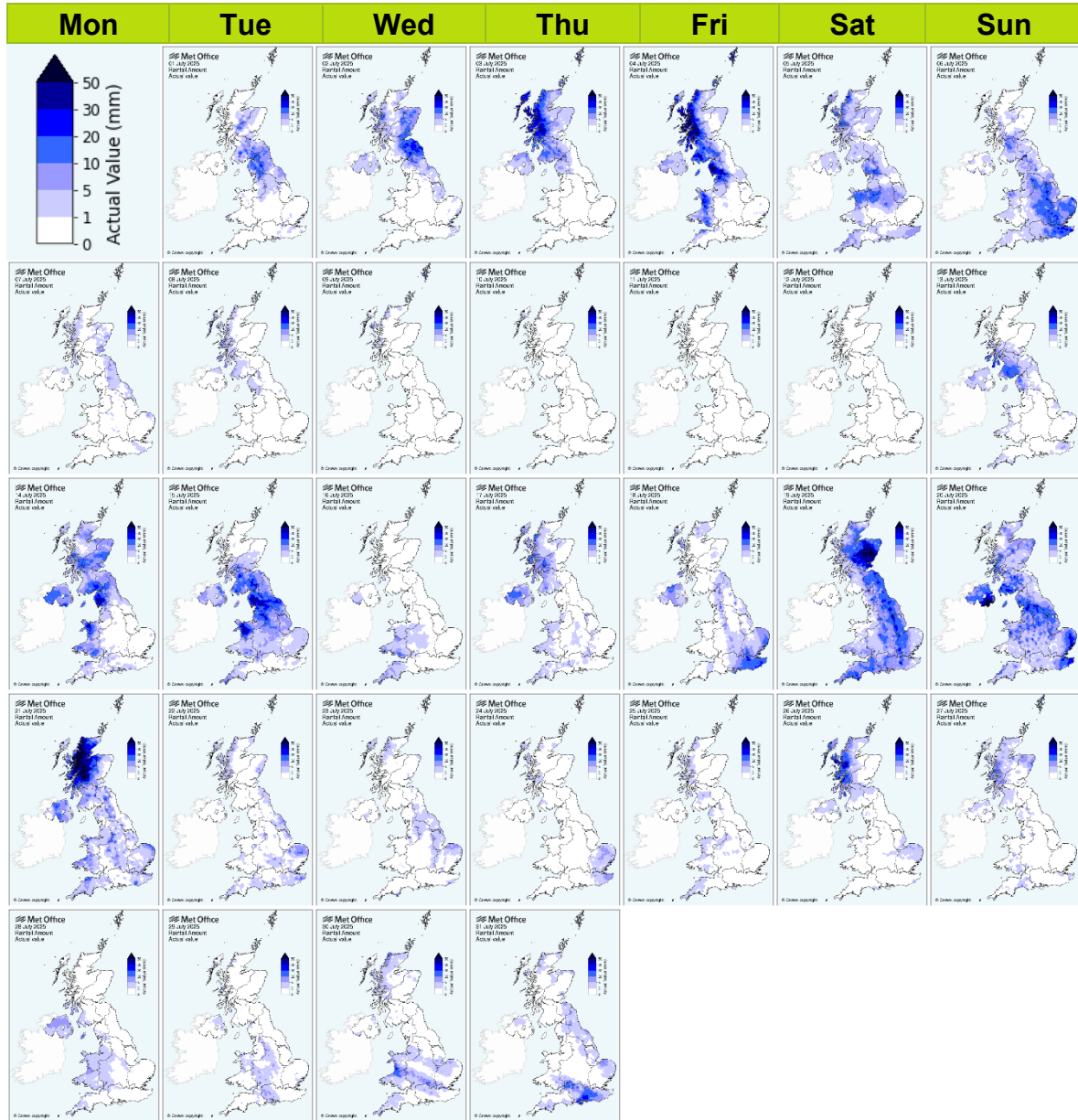
Daily minimum temperature maps - calendar view

These maps show daily minimum temperatures for each day of July 2025 as anomalies relative to the July 1991-2020 long term average. The daily minimum temperature is the minimum from 0900UTC the previous day to 0900UTC on the day in question. Normally, the minimum occurs in the early morning.



Daily rainfall maps - calendar view

These maps show daily rainfall for each day of July 2025 as daily totals. The daily rainfall is the total from 0900UTC on the day in question to 0900UTC the following day.

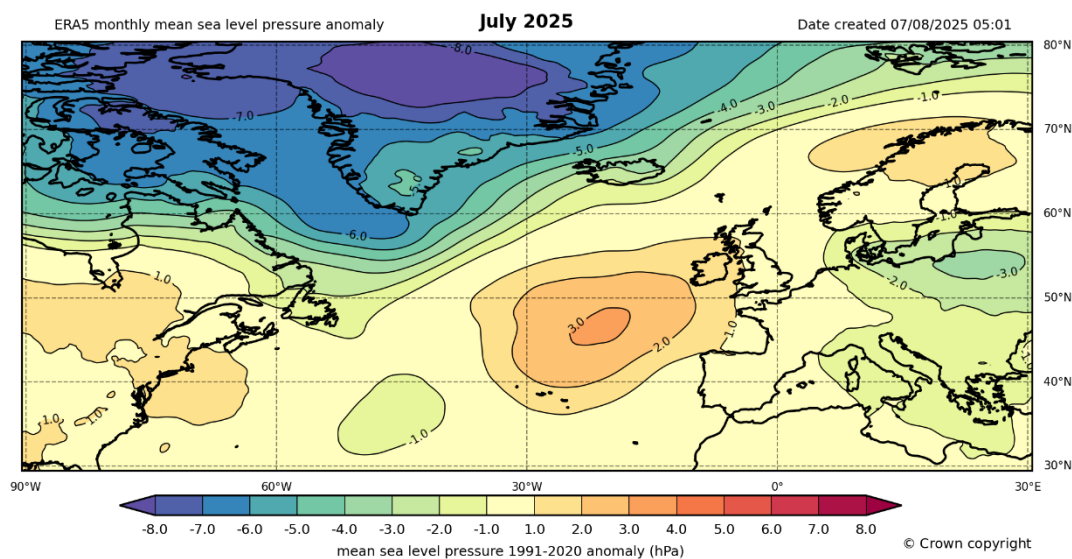
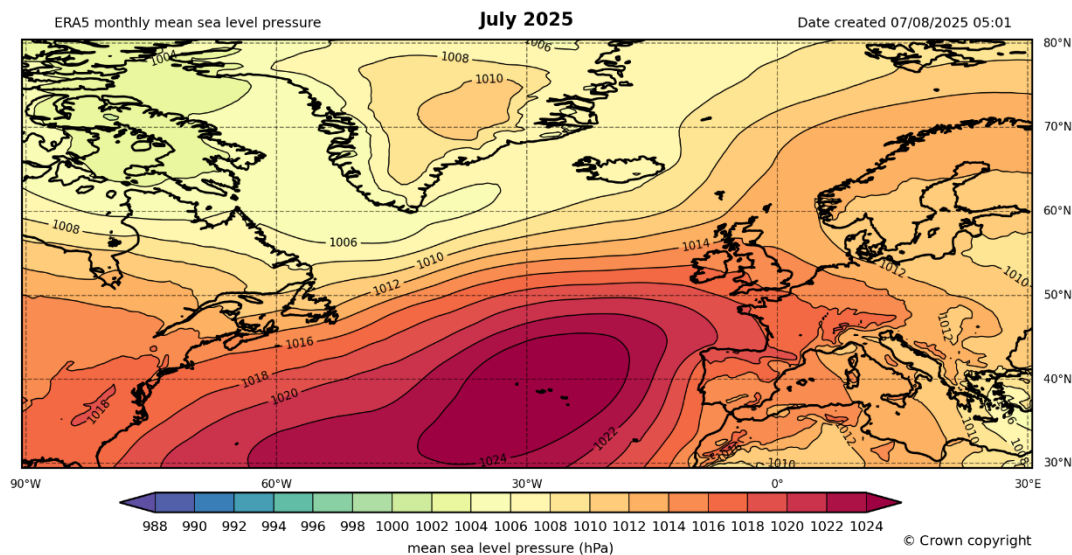


Monthly atmospheric circulation

Mean sea level pressure

These charts show the monthly mean sea level pressure for July 2025 for the UK and north Atlantic, based on the ERA5 reanalysis (Hersbach et al, 2019), both as actual values and as an anomaly relative to the July long term average. These charts provide an indication of the weather characteristics of the month overall i.e. whether the weather type has been generally settled (high pressure) or unsettled (low pressure) during the month.

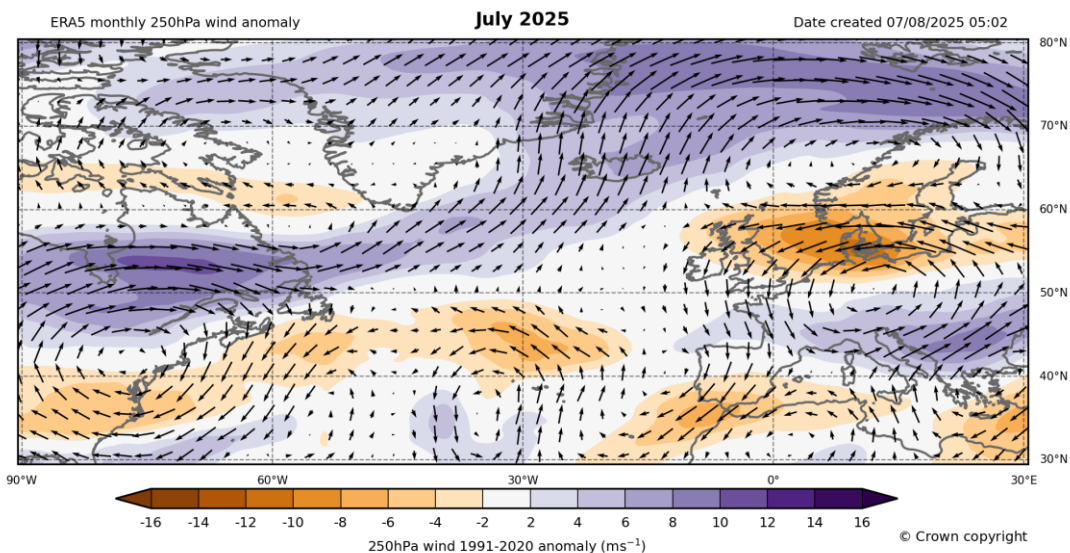
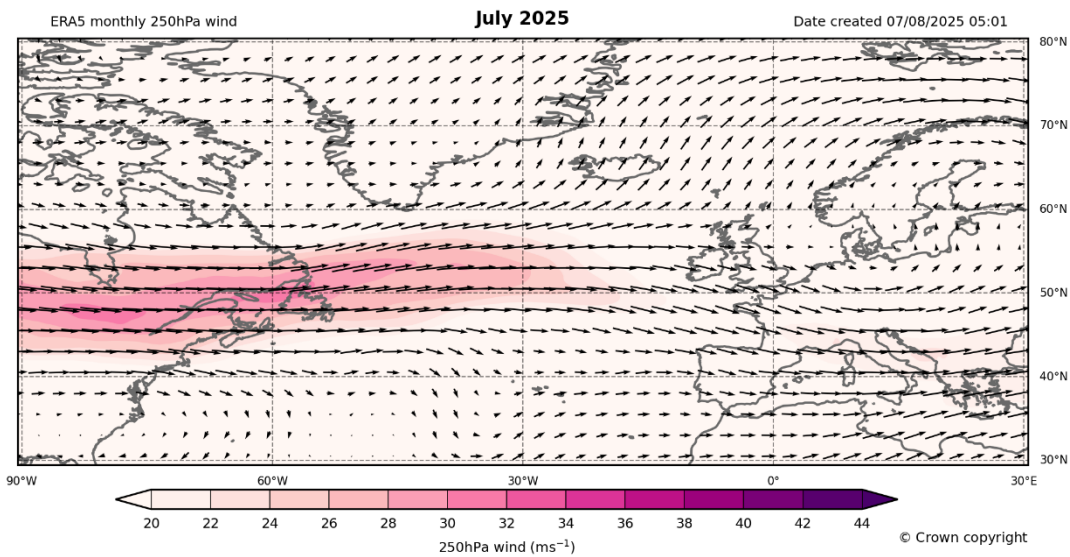
July was dominated by high pressure, with higher than average pressure over the Azores and extending over the UK.



250hPa wind speed and direction

These charts show the monthly 250hPa wind speed and direction for July 2025 for the UK and north Atlantic, based on the ERA5 reanalysis (Hersbach et al, 2019), both as actual values and as an anomaly relative to the July long term average. This provides an indication of the mean strength and position of the jet stream compared to normal. The wind anomaly map shows shaded (scalar) wind speed anomalies with arrows as (vector) wind anomalies.

The jetstream was displaced away from the UK, with an easterly anomaly across the UK.



Weather diary

- **A changeable month, very warm at times but also wet**

The weather throughout July was characterized by a lack of any prolonged settled and dry periods, with regular incursions of depressions of the Atlantic. Although with high pressure never far away, the south of the UK did experience the warmer and drier conditions, with the north suffering the cooler and wetter weather.

The month began with a slow moving but active front straddled across northern parts of England and Wales, bringing some significant rainfall to these areas. Daily totals in excess of 25mm were widely recorded between the 1st and 4th. Over the Cumbrian fells, totals up to 90mm were seen. As the front moved away east, it allowed showery troughs to develop over Scotland, again producing some large totals particularly over the northwest. Some places saw values exceeding 35mm fall in a short space of time.

From the 4th, a ridge of high pressure established itself over southern UK, introducing a classic north south split with the weather over the country. The south staying generally dry and warm, with the north experiencing a series of frontal systems with their attendant wind and rain and cooler temperatures. By the 6th however, the ridge had declined with frontal systems able to make their way into the south bringing some parts their first proper rainfall for the month.

The weather remained unsettled until the 10th when an area of high pressure finally settled over the UK bringing some significant warmth across all regions. Temperatures ranged from the low 30s Celcius in the southeast to the low to mid 20s Celcius as far north as the Northern Isles. All regions saw maximum temperatures hit 30 Celcius. By the 14th however, low pressure had taken over, subjecting the UK to a series of depressions bringing generally cooler and wetter weather to all parts, with a mix of rain, showers and thunderstorms. Scotland and Northern Ireland saw their highest daily totals on the 20th and 21st with some places recording in excess of 65mm.

From the 22nd to the end of the month, the UK saw a mix of Atlantic weather systems and transient ridges determining the weather with rather cloudy but benign conditions.

Notes

The Met Office National Meteorological Library and Archive holds a near-continuous record of monthly weather reports from 1884, and this report forms a continuation of that series. The purpose of each report is to provide an overview of the weather conditions across the UK for that month. The emphasis is mainly based on observations from the surface network of weather stations. Climate series based on data from these stations are used to provide long term context.

This summary was produced on 07/08/2025 08:54. The statistics are a provisional assessment of the observational data available at the time of production. Ongoing data receipt and quality assurance processes may result in subsequent updates to the statistics presented.

If you have any questions or feedback about this product, spot any data errors or omissions, or wish to obtain further data, please contact the Met Office.

For historical monthly weather reports please visit the Library and Archive.

- The land-surface observations presented in this report are from the Met Office official weather station network which includes both automatic weather stations and manual climate stations operated by volunteer observers. Rainfall data are from the official registered rain-gauge network which includes rain-gauges operated by a number of key partners including the Environment Agency, Scottish Environmental Protection Agency and Northern Ireland Water.
- The observations are carefully managed such that they conform to current best-practice observational standards as defined by the World Meteorological Organization (WMO). The observations also pass through a range of quality assurance procedures at the Met Office before application for climate monitoring.
- Daily and monthly maps, monthly statistics and monthly time-series are primarily based on the HadUK-Grid dataset of 1km resolution UK gridded climate data (Hollis et al, 2019). Monthly statistics from the monthly Central England temperature series 1659 (Manley, 1974) and England and Wales precipitation series from 1766 (Wigley et al, 1984) provide long term context.
- The monthly lightning activity map is based on data from the Met Office LEELA (Lightning Electromagnetic Emission Location by Arrival time difference) system. This is an automatic lightning location network comprising around ten lightning outstation sensors located across Europe.
- The monthly maps of mean sea level pressure and 250hPa wind speed and direction are based on the ERA5 reanalysis (Hersbach et al, 2019). ERA5 is the fifth generation ECMWF reanalysis for the global climate and weather for the past 4 to 7 decades. Reanalysis combines model data with observations from across the world into a globally complete and consistent dataset using the laws of physics.

Hersbach, H., Bell, B., Berrisford, P., Biavati, G., Horányi, A., Muñoz Sabater, J., Nicolas, J., Peubey, C., Radu, R., Rozum, I., Schepers, D., Simmons, A., Soci, C., Dee, D., Thépaut, J-N. (2019): ERA5 monthly averaged data on single levels from 1959 to present. Copernicus Climate Change Service (C3S) Climate Data Store (CDS).
<https://doi.org/10.24381/cds.f17050d7>

Hollis, D, McCarthy, MP, Kendon, M, Legg, T, Simpson, I. HadUK-Grid - A new UK dataset of gridded climate observations. *Geosci Data J.* 2019; 6: 151-159.
<https://doi.org/10.1002/gdj3.78>

Manley, G. (1974), *Central England temperatures: Monthly means 1659 to 1973.* *Q.J.R. Meteorol. Soc.*, 100: 389-405. <https://doi.org/10.1002/qj.49710042511>

Wigley, T.M.L., Lough, J.M. and Jones, P.D. (1984), *Spatial patterns of precipitation in England and Wales and a revised, homogeneous England and Wales precipitation series.* *J. Climatol.*, 4: 1-25. <https://doi.org/10.1002/joc.3370040102>

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