

September 2025 Monthly Weather Report

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

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UK overview

In a change from recent months, September was wetter than average for many in the UK. Temperatures were also variable with several cooler spells resulting in an overall temperature slightly below average, bringing an end to the run of warmer than average months. September saw predominantly unsettled weather, with frontal systems bringing rain for much of the first three weeks of the month. There were also periods of strong winds and heavy downpours, sometimes associated with thunderstorms, at several points in the month. Settled conditions crept in with high pressure on the 21st, but the rain returned on the 27th, widespread but particularly heavy over the west coast of Scotland. Temperatures were also unsettled, with the first and third weeks seeing above average temperatures while the second and fourth weeks saw below average temperatures. The end of the month in particular saw cooler than average temperatures, with frosts in rural areas.

By mid-month, England, Wales and Northern Ireland had all recorded over 100% of their average September rainfall, and the rain only continued. By the end of the month, Wales had provisionally recorded 174% of the average September rainfall, although not threatening any records. Scotland was relatively drier but still provisionally recorded above average rainfall for the month. The UK overall provisionally saw 132% of the average September rainfall, with much of this in northern England and Wales. Cumbria in particular saw large amounts of rainfall, recording 198% of the average September rainfall and provisionally its fourth wettest September on record. Temperatures overall were slightly below average, as the warmer spells were balanced out by the cooler spells. The UK provisionally recorded an average temperature of 12.8°C, just 0.1°C below the long-term average. Wales was slightly colder, seeing temperatures 0.4°C below the long-term average. Sunshine hours meanwhile were slightly above average, with the UK seeing 110% of the average sunshine hours. England and Scotland saw above average sunshine, but Wales and Northern Ireland were a bit duller than average.

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

Weather impacts

- **Widespread and occasionally heavy rain throughout the month brought surface water flooding to various areas**
- **Strong winds impacted central England and Wales mid-month, resulting in fallen trees and disrupted traffic**

September brought an end to the run of warmer-than-average and predominantly drier-than-average months, and it was the first month since January that the overall mean temperature for the UK has been below average. A much more progressive weather pattern meant that unsettled spells featured more prominently than in previous months, but this allowed the large deficit in reservoir and river levels, built up over the spring and summer months, to begin to reduce. Rainfall was a regular occurrence over the first three weeks of the month, and the only proper dry spell occurred from the 21st to the 26th. Overall, it was appreciably wetter than average across northern England and Northern Ireland, together with much of Wales and southwest England, whilst the eastern fringes of the UK were at least able to boast sunnier than average skies, given the predominantly westerly to southwesterly airflow.

The first three weeks of the month saw a steady stream of Atlantic weather features affecting the UK. The tone was set on the very first day of the month when heavy rain affected western Scotland and the A83 in Argyll was reported closed due to a landslide. The initial diversionary route then also fell victim to a second landslide. The 2nd and 3rd saw widespread rain and some heavy thundery downpours affecting the southern halves of both England and Wales with reports of flooding on the roads, rails and some damage to properties including a school in Leighton Buzzard which was forced into an emergency closure due to flood damage. In Doncaster, the local B&M store was reportedly damaged when flood water burst through the roof during a thunderstorm. The rail line between Bristol and Taunton was hit by flooding, and the M1, M4 and M5 all reported incidences of surface water flooding closing lanes. A number of fallen trees were also reported, resulting in road closures. On the 4th came a report from Camarthenshire, south Wales of hundreds of sheep drowned in an adjacent field due to a rapidly rising river after heavy rainfall the previous day.

On the 7th, active weather fronts, tied to a deep low pressure centre west of the UK, brought widespread heavy rain to western England with short-period intense downpours followed by reports of road flooding in and around the Bristol area with a section of the M32 closed for a time. The following day saw a very unstable southerly to southwesterly airflow across the UK with thunderstorms, hail and torrential rain reported from southwest England in particular. There were a couple of social media postings of funnel clouds from Bournemouth and the Isle of Wight. The 9th saw further intense downpours affecting parts of southwest England with reports of surface water flooding and some minor property flooding in St. Ives and on

some minor roads between St. Ives and Penzance. The 11th saw further thundery downpours; in Cardiff, three separate houses were reported as having been struck by lightning, one suffering both external and internal damage as a result.

On the 14th another deep low pressure centre and its weather fronts brought widespread and at times heavy rain to much of Wales, especially the south where South Wales Fire and Rescue Service were reportedly dealing with multiple incidents in the Swansea area. Strong winds also featured at this time with a clutch of fallen trees reportedly blocking roads across a wide swathe of England and Wales during the 15th. Northern Ireland saw three successive wet days over the middle of the month with several minor surface water impacts reported on the roads on the morning of the 17th.

By the 18th there was a clear signal in the forecast for further widespread heavy rainfall over the coming weekend, especially Saturday 20th with two medium impact yellow rain warnings issued. The 20th was the wettest day of the month across the middle of the UK as a low centre crossed with widespread heavy rain affecting Wales and northern England. Some 50 to 80mm of rain was recorded at a good number of sites in a swathe from north Wales across the southern half of northwest England and into West/North Yorkshire. Impacts from the rain were mainly across northwest England but were mostly of the 'low' category. Road flooding was reported from St. Helens and Warrington with lane closures reported on both the M56 in Cheshire and the M62 in West Yorkshire. The rail line between Shrewsbury and Machynlleth was reported to be closed due to flooding. Parts of Greater Manchester saw road flooding and there were one or two isolated reports of property flooding including bistro cafes in Hale and Altrincham. The Bolton to Blackburn rail line was closed due to floodwaters and the Blackburn Rovers/Ipswich Town match had to be abandoned 10 minutes before the end due to unplayable conditions brought on by the sustained intense rainfall. A five-day dry spell from the 21st to the 26th then followed before unsettled (especially across western Scotland) but largely impactful weather closed out the month.

Monthly extremes

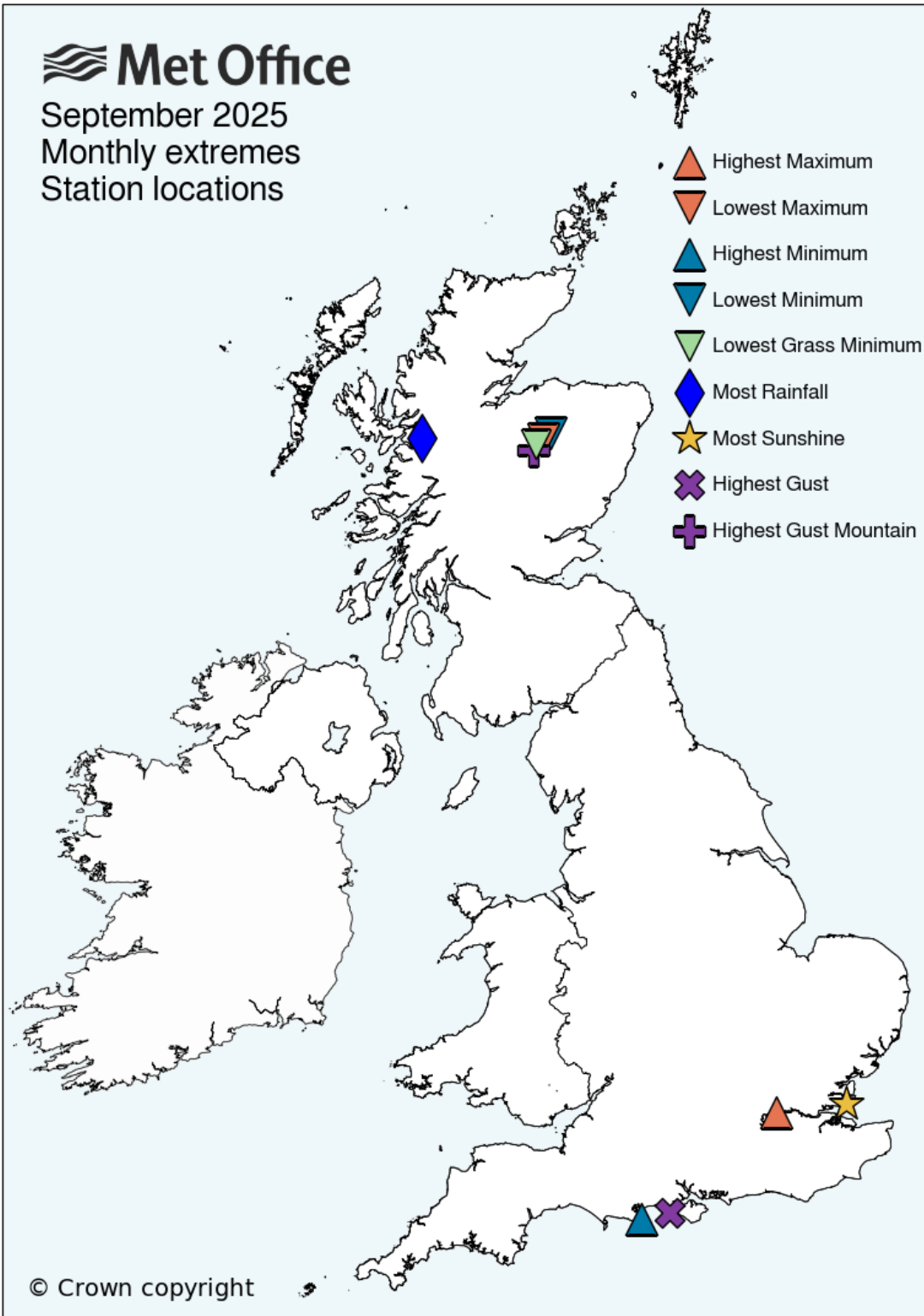
The table below lists UK monthly weather extremes recorded at individual weather stations during September 2025 from data available on 03/10/2025. The map shows the location of these stations.

Highest Maximum	27.8°C on 19th at London, St James's Park (Greater London, 5mAMSL)
Lowest Maximum	8.3°C on 21st at Tomintoul No 6 (Banffshire, 320mAMSL)
Highest Minimum	18.5°C on 7th at Swanage (Dorset, 10mAMSL)
Lowest Minimum	-5.0°C on 29th at Tomintoul No 6 (Banffshire, 320mAMSL)
Lowest Grass Minimum	-6.6°C on 29th at Tomintoul No 6 (Banffshire, 320mAMSL)
Most Rainfall	87.8mm on 11th at Achnagart (Ross & Cromarty, 15mAMSL)
Most Sunshine	11.7hr on 5th at Shoeburyness, Landwick (Essex, 2mAMSL)
Highest Gust	68Kt 78mph on 14th at Wight: Needles Old Battery (Isle Of Wight, 80mAMSL)
Highest Gust (mountain*)	88Kt 101mph on 18th at Cairngorm Summit (Inverness-shire, 1237mAMSL)
Greatest Snow Depth at 0900 UTC	No non-zero values.

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

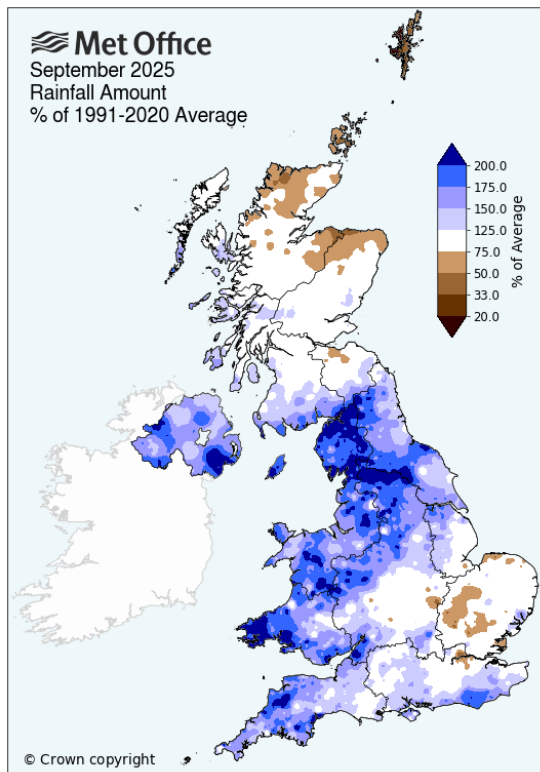
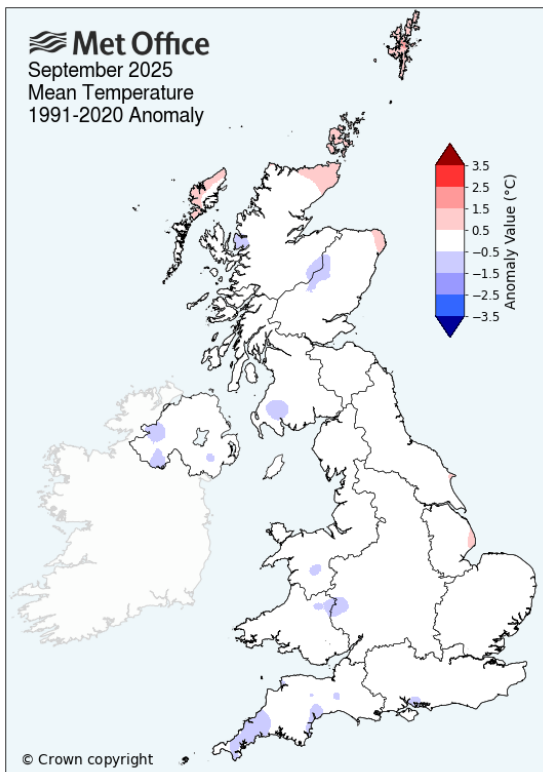
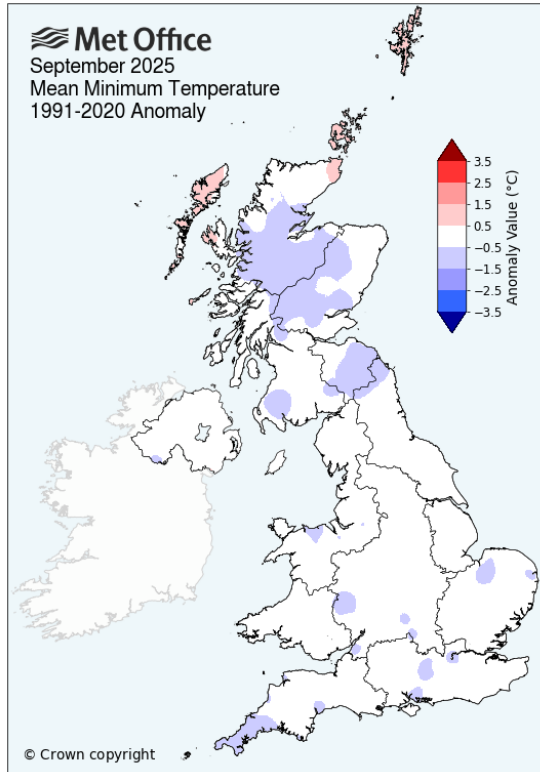
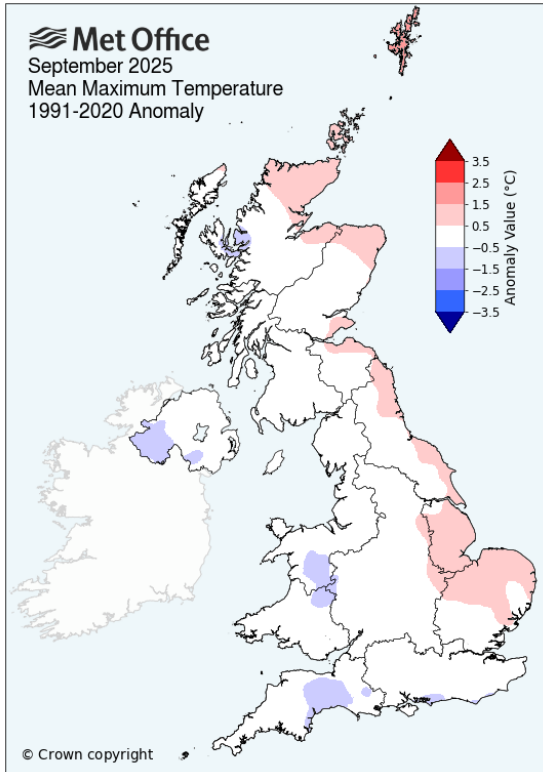
*Mountain stations are above 500mAMSL.

September 2025
Monthly extremes
Station locations

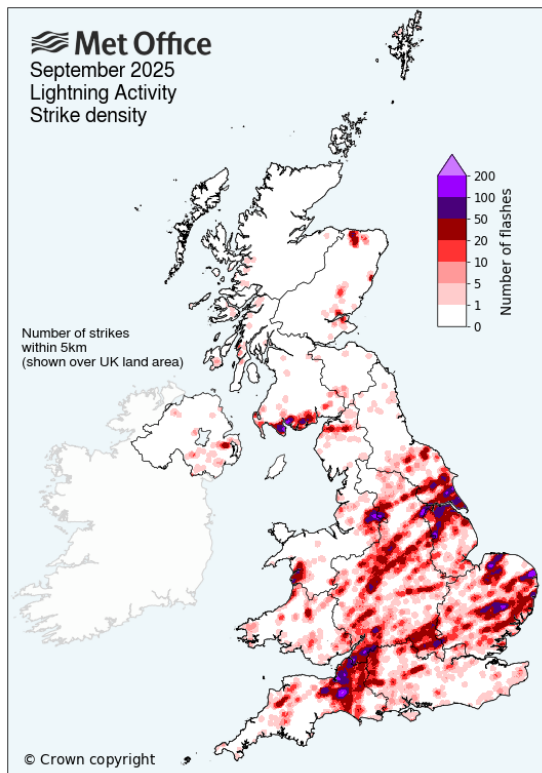
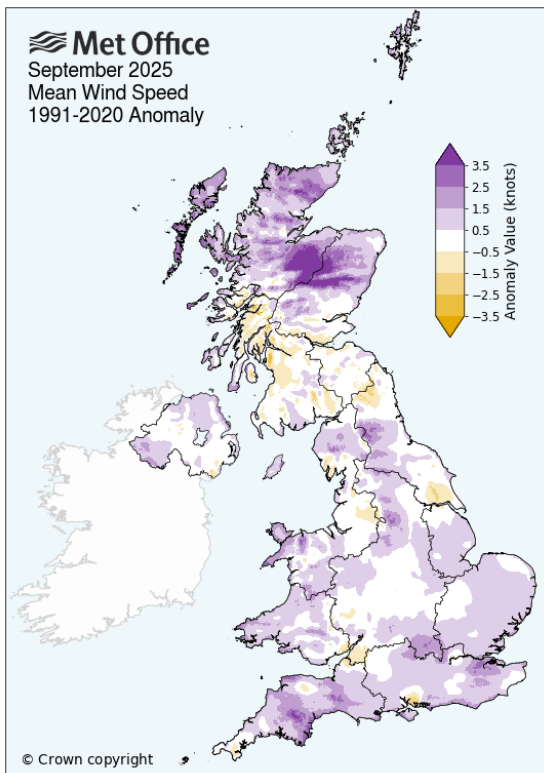
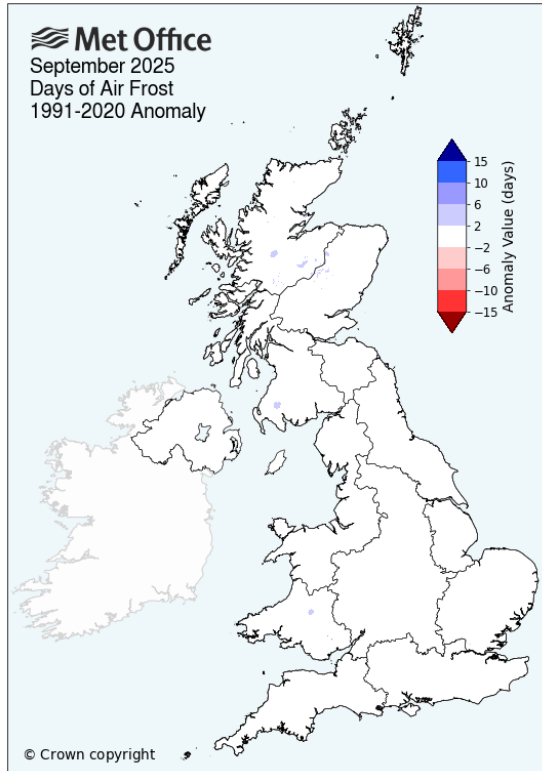
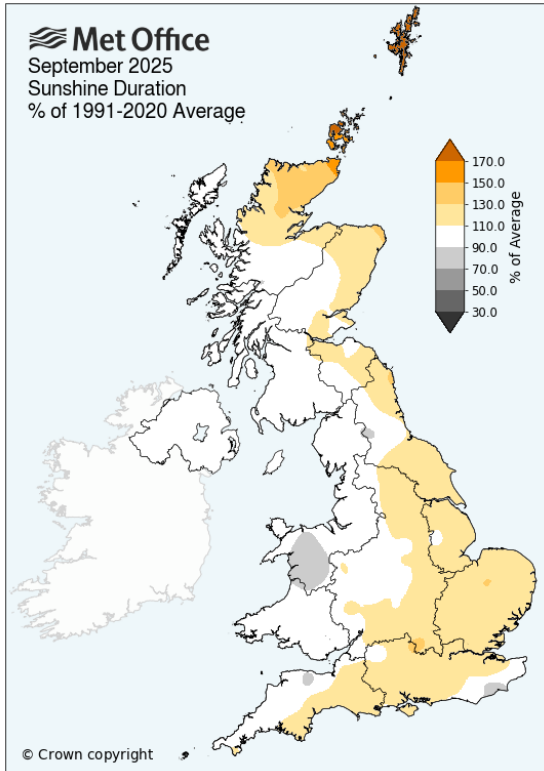


Monthly maps

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



These maps show monthly sunshine, monthly air frost and monthly windspeed for September 2025 as anomalies relative to the September 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 September 2025 for max, min and mean temperature, rainfall, sunshine and windspeed as actual values and anomalies relative to the September 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	16.9	0.1	42	101	142
England	18.2	0.1	44	99	142
Wales	16.5	-0.3	61	82	142
Scotland	15.0	0.2	36	107	142
Northern Ireland	15.9	-0.4	61	82	142
Central England	18.4	0.1	42	107	148

Mean minimum temperature

Region	Mintemp (°C)	1991-2020 Anomaly (°C)	Rank - warmest	Rank - coldest	Series length (yrs)
UK	8.7	-0.3	60	83	142
England	9.4	-0.3	58	85	142
Wales	9.0	-0.3	66	77	142
Scotland	7.6	-0.3	56	87	142
Northern Ireland	8.7	-0.2	49	94	142
Central England	9.8	-0.4	68	81	148

Mean temperature

Region	Meantemp (°C)	1991-2020 Anomaly (°C)	Rank - warmest	Rank - coldest	Series length (yrs)
UK	12.8	-0.1	44	99	142
England	13.8	-0.1	46	97	142
Wales	12.7	-0.4	65	78	142
Scotland	11.3	-0.0	41	102	142
Northern Ireland	12.2	-0.3	65	78	142
Central England	14.1	-0.1	101	267	367

Rainfall

Region	Rainfall (mm)	% of 1991-2020 Average	Rank - wettest	Rank - driest	Series length (yrs)
UK	120.1	132	31	160	190
England	102.0	149	30	161	190
Wales	193.7	174	15	176	190
Scotland	125.8	102	86	105	190
Northern Ireland	144.6	165	18	173	190
EWP (England and Wales)	108.2	142	61	200	260

Sunshine

Region	Sunshine (hours)	% of 1991-2020 Average	Rank - sunniest	Rank - dullest	Series length (yrs)
UK	140.3	110	23	94	116
England	158.9	112	20	97	116
Wales	127.5	99	51	66	116
Scotland	117.7	110	22	95	116
Northern Ireland	111.1	98	49	68	116

Windspeed

Region	Windspeed (knots)	1991-2020 Anomaly (knots)	Rank - windiest	Rank - calmest	Series length (yrs)
UK	9.2	0.8	18	40	57
England	8.2	0.7	18	40	57
Wales	9.6	0.9	18	40	57
Scotland	10.9	1.0	20	38	57
Northern Ireland	8.2	0.5	22	36	57

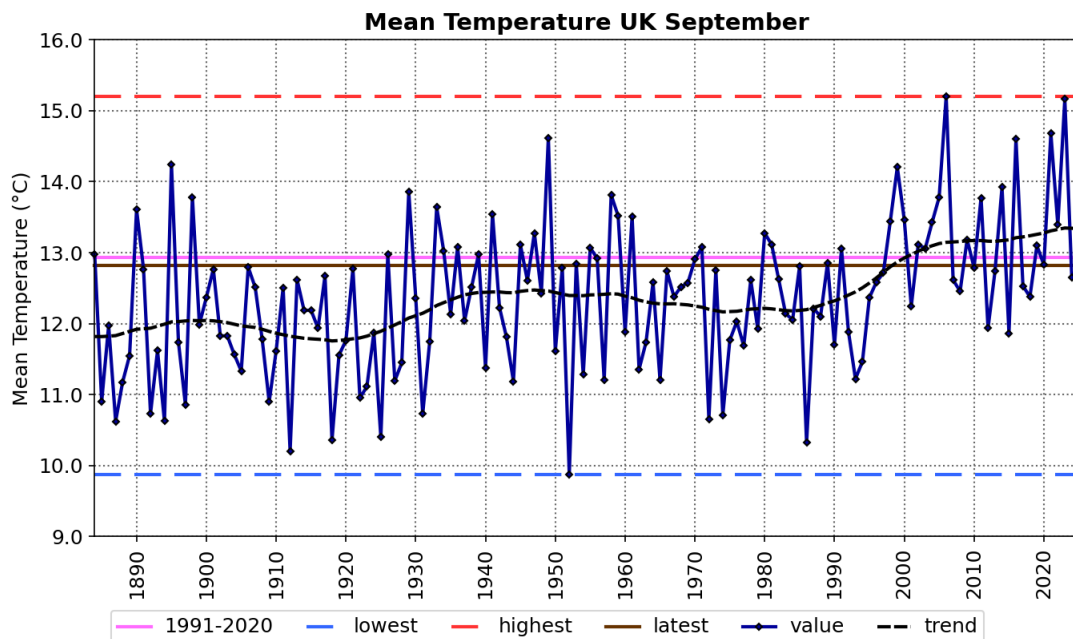
Monthly time-series

These charts show time-series for the UK for September 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.

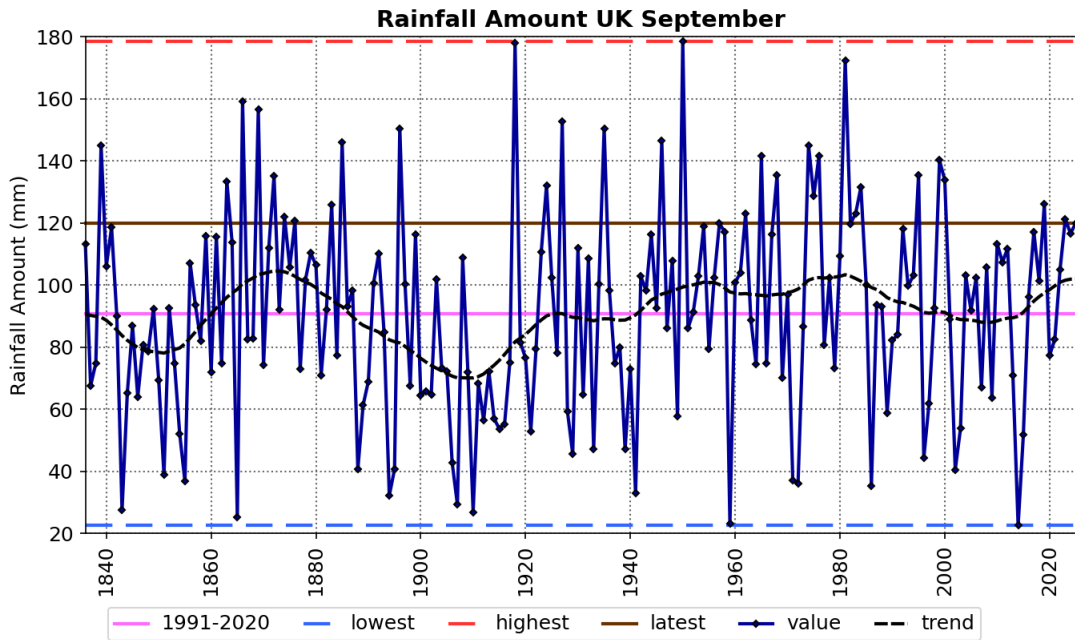


Source: HadUK-Grid 01/10/2025 11:38

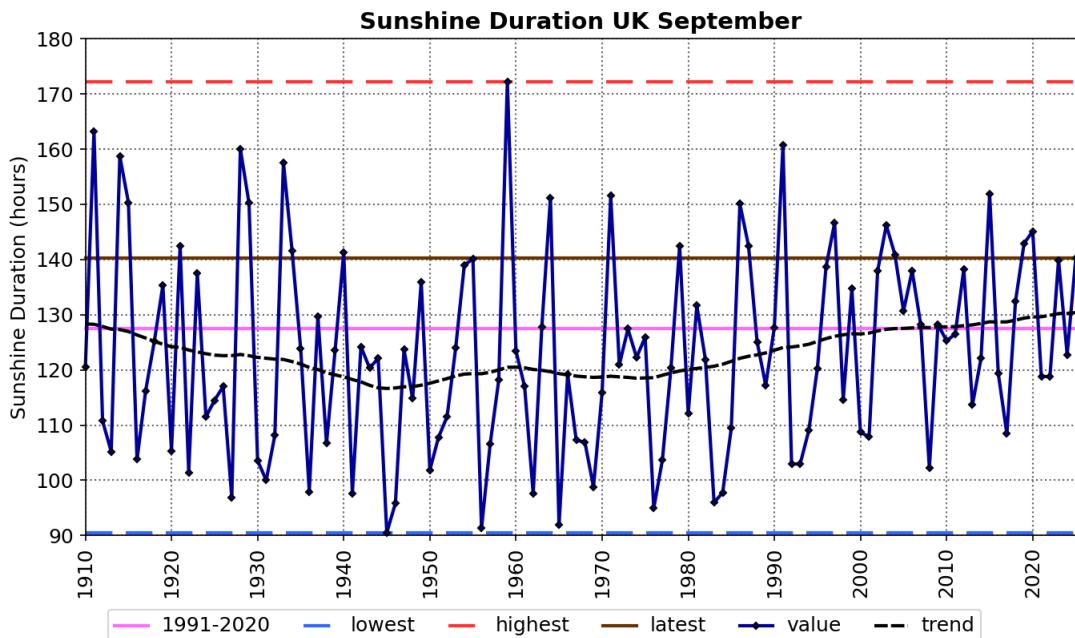
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Period	1961-1990	1991-2020	2016-2025	2025
Meantemp (°C)	12.2	12.9	13.4	12.8



Period	1961-1990	1991-2020	2016-2025	2025
Rainfall (mm)	99.2	90.9	106.4	120.1



Period	1961-1990	1991-2020	2016-2025	2025
Sunshine (hours)	119.2	127.5	128.9	140.3

Daily time-series

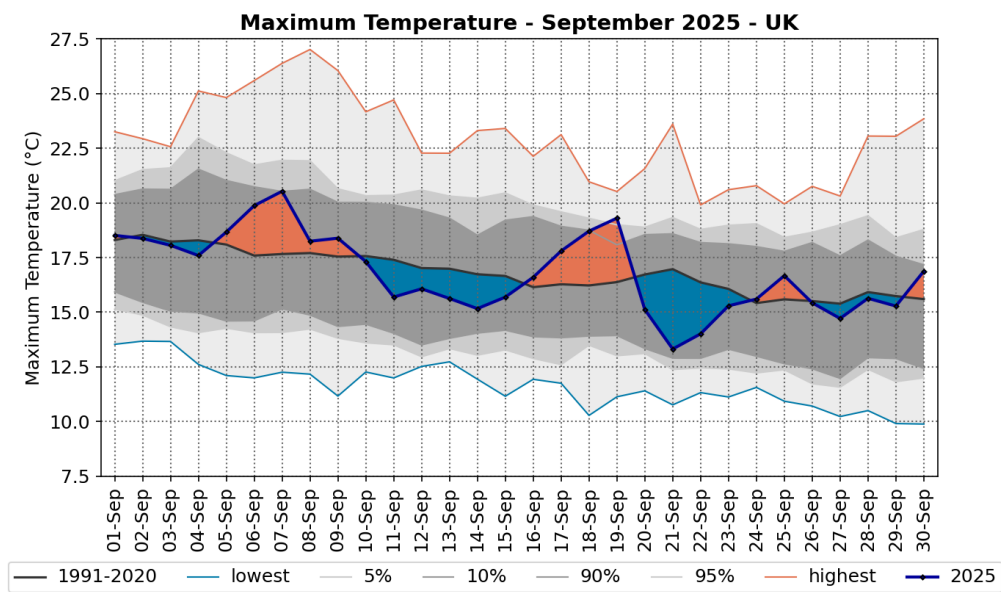
These charts show time-series of UK area-average daily maximum and daily minimum temperature and daily rainfall for each day of September 2025. The areas shaded in grey show the highest and lowest values in the daily temperature series (from 1960) and daily rainfall series (from 1891) together with percentiles 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



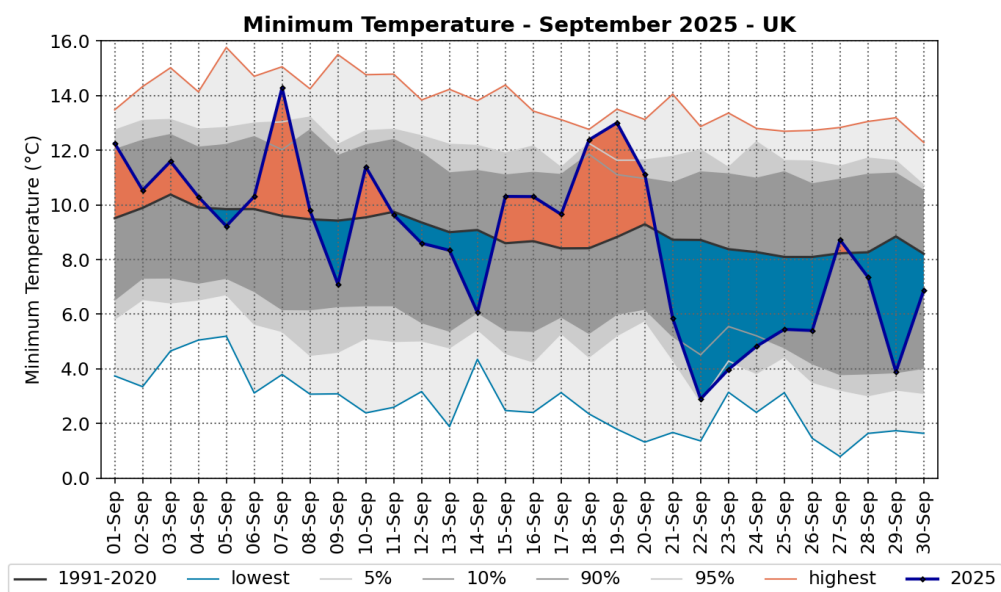
Source: HadUK-Grid 01/10/2025 11:43

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Source: HadUK-Grid 01/10/2025 11:44

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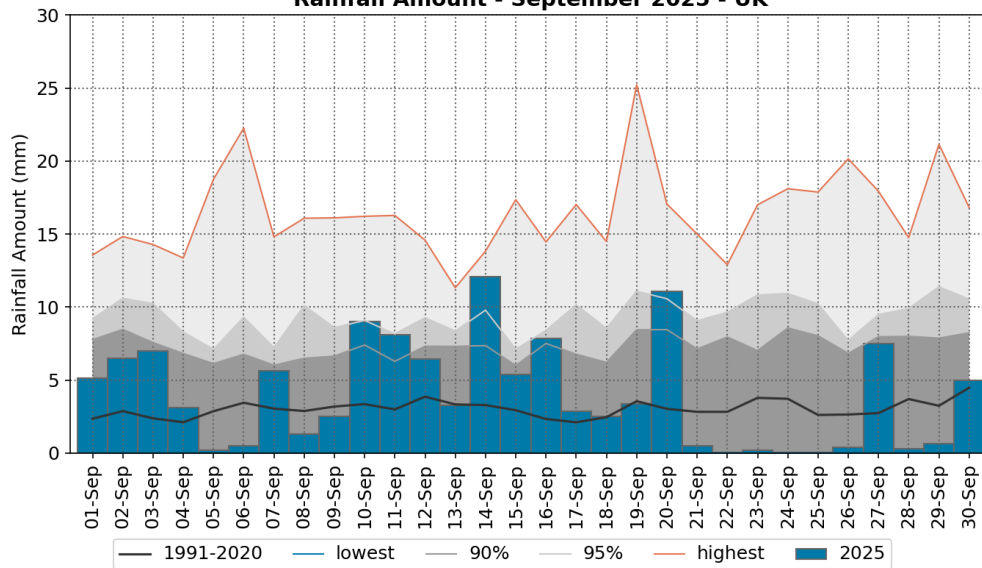
Daily rainfall and rainfall accumulation

Met Office

Source: HadUK-Grid 01/10/2025 11:44

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Rainfall Amount - September 2025 - UK

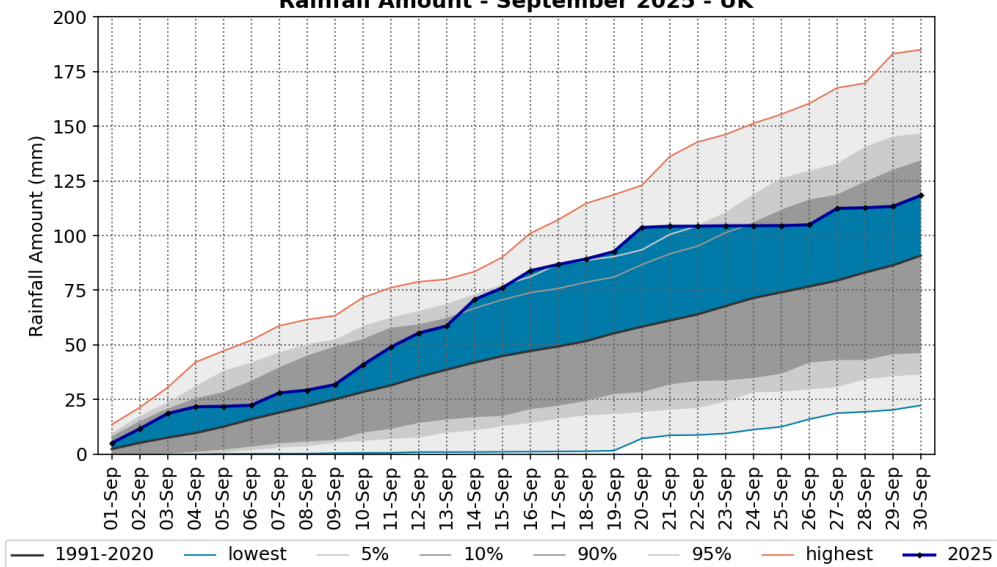


Met Office

Source: HadUK-Grid 01/10/2025 11:46

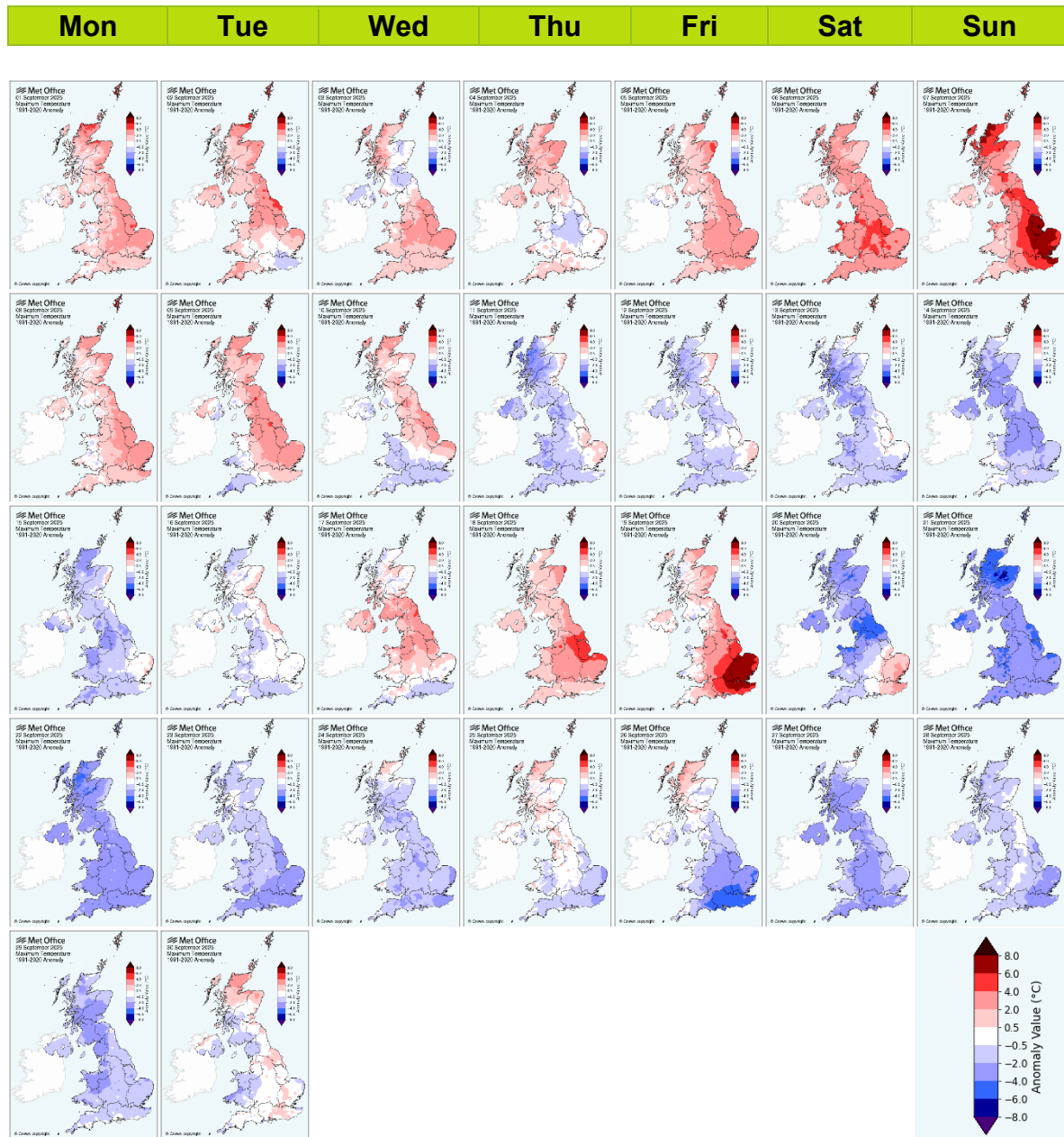
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Rainfall Amount - September 2025 - UK



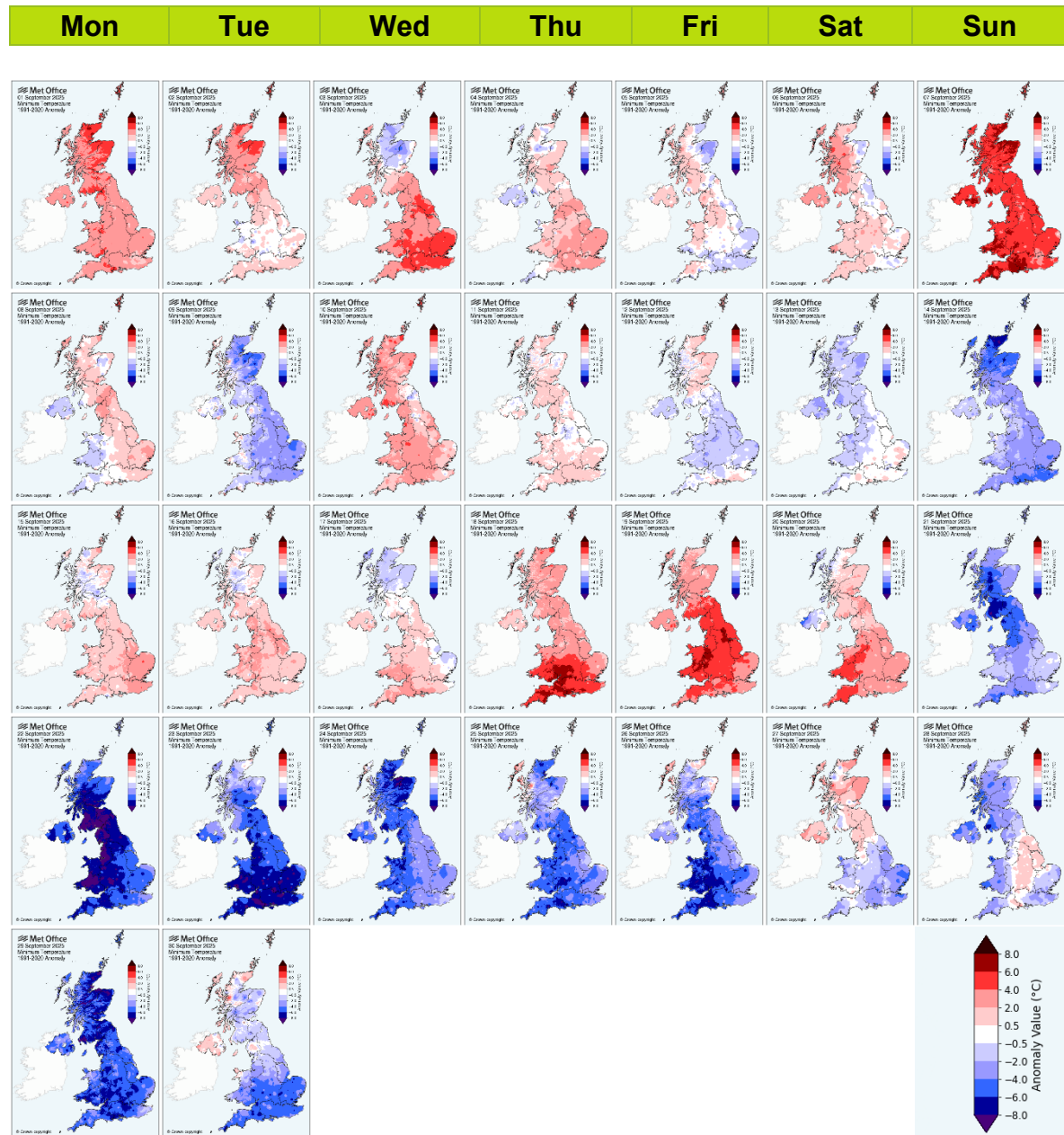
Daily maximum temperature maps - calendar view

These maps show daily maximum temperatures for each day of September 2025 as anomalies relative to the September 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.



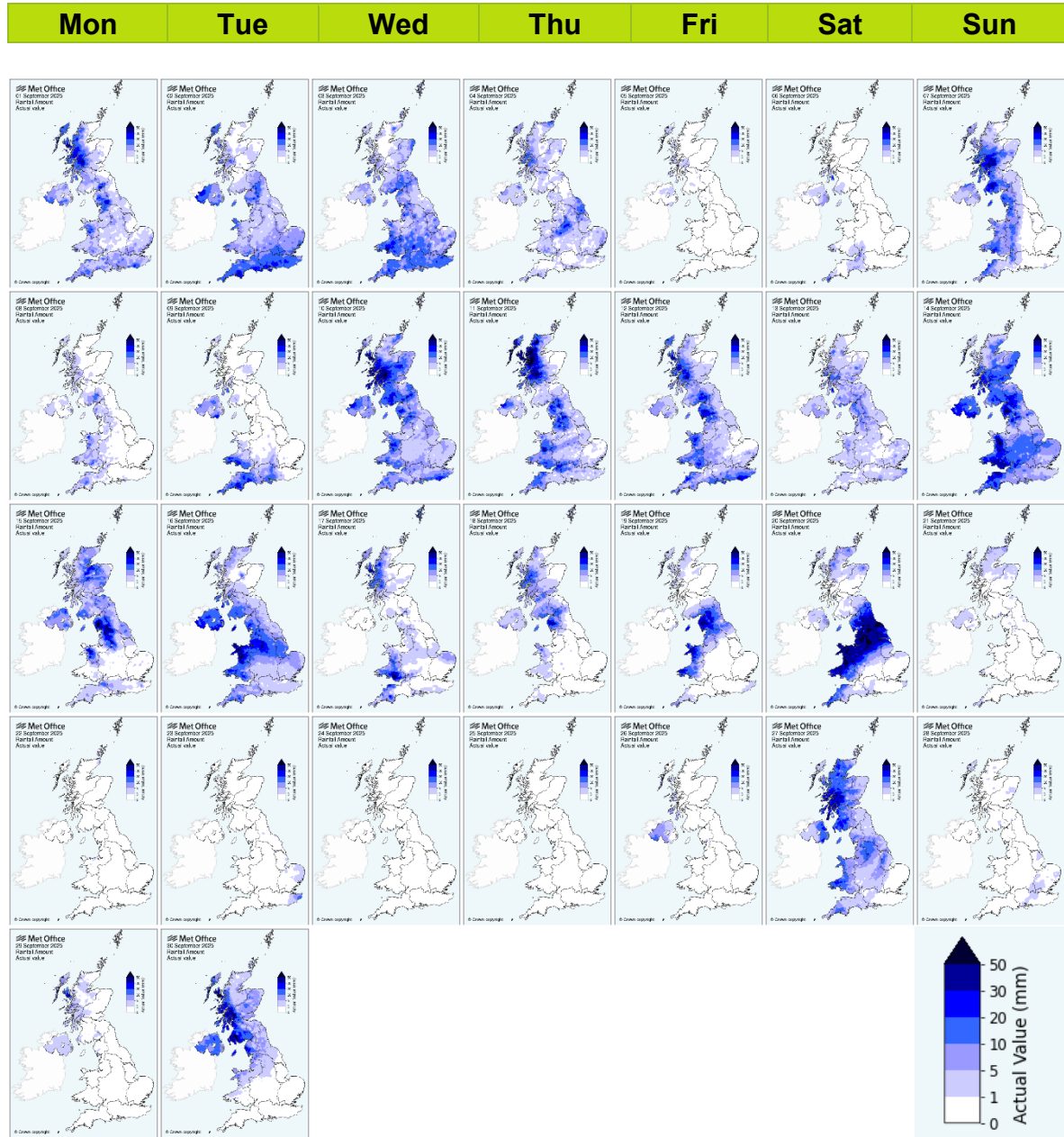
Daily minimum temperature maps - calendar view

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

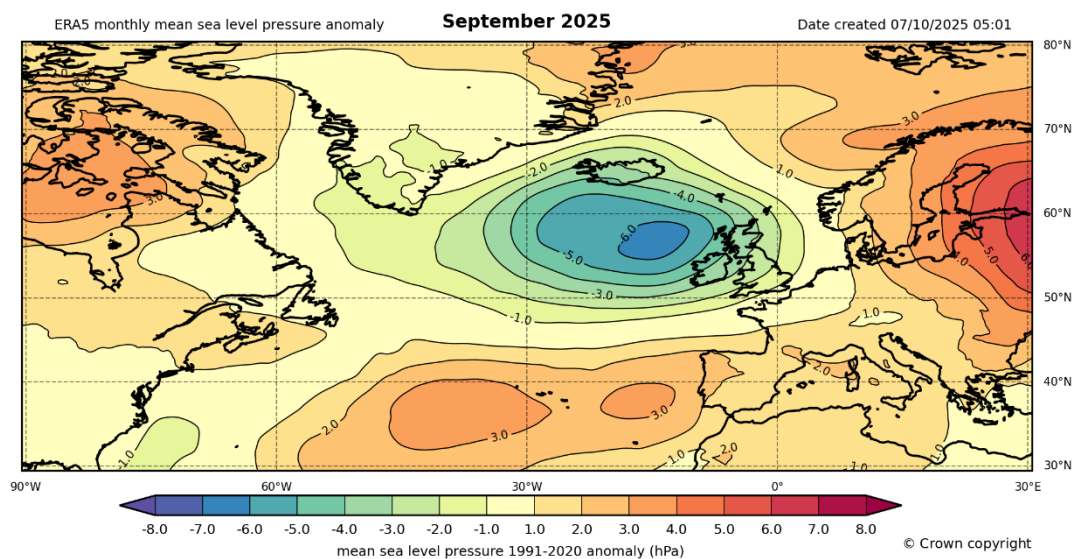
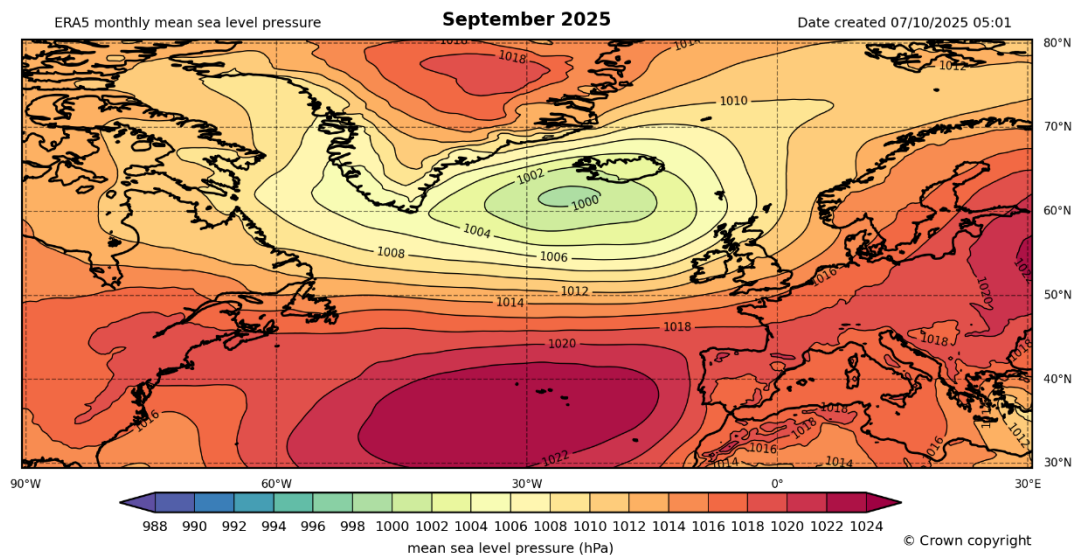


Monthly atmospheric circulation

Mean sea level pressure

These charts show the monthly mean sea level pressure for September 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 September 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.

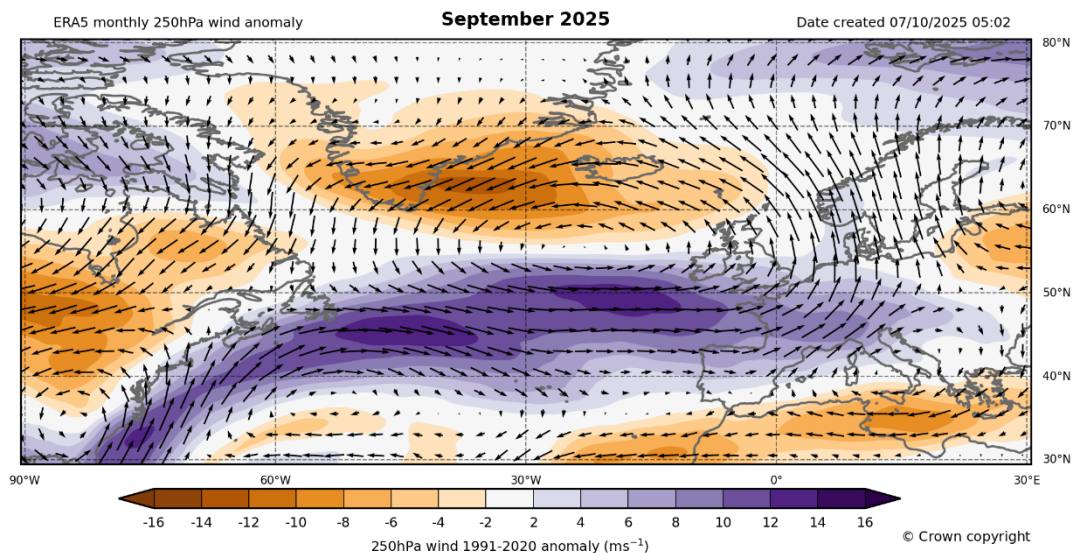
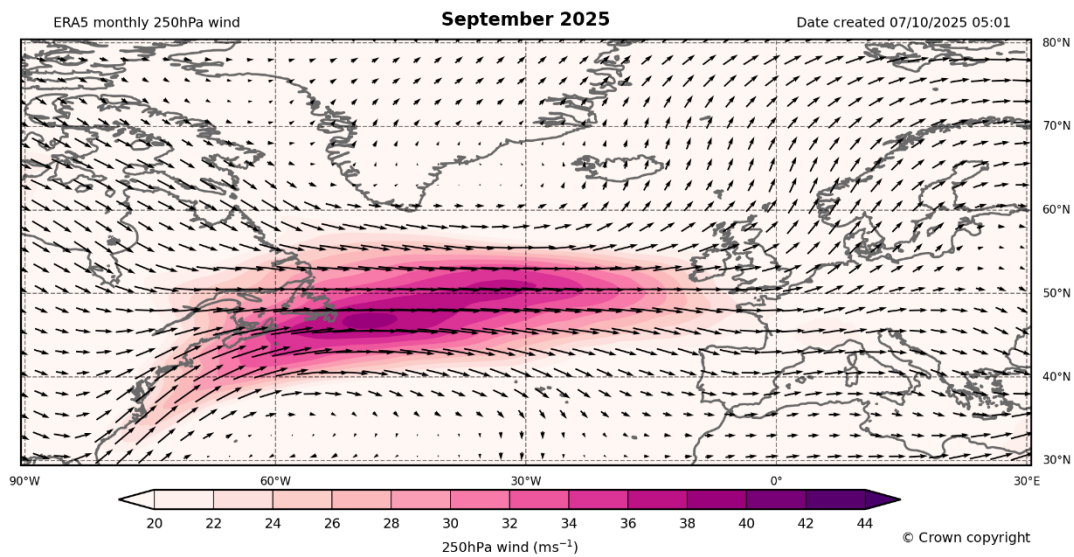
September saw anomalously low pressure to the west of Scotland, and higher pressure near the Azores.



250hPa wind speed and direction

These charts show the monthly 250hPa wind speed and direction for September 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 September 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.

There was a stronger than normal westerly flow to the south of the UK.



Weather diary

- **Generally very wet and windy with only brief settled spells**

September is widely regarded as a month that often brings some late summer warmth and dry, settled days but, as with September 1976, this month was quite the opposite. With the exception of some very brief warm, settled spells, theme of the weather was frequent wet and windy periods.

The 1st to the 4th saw the weather over the UK influenced by a series of Atlantic depressions with their associated frontal systems bring some significant rainfall to all regions. By the 5th, however, an area of high pressure had become established over the near continent, keeping any weather systems out in the Atlantic and introducing a very warm southerly airstream over the UK. On the 7th, these maxima were exceeding 20deg Celsius across all regions, and as high as 27deg Celsius in southeast England. Night-time minima were generally up around the mid to high teens Celsius too.

It wasn't to last though and, by the 8th, the Atlantic had won out again with low pressure areas making their way across the UK. Rainfall was plentiful between the 11th and 17th with all regions recording totals between 50 and 88mm in places. The 14th saw the first air frosts of the autumn with temperatures falling to minus 2 C in northern Scotland, as well as very strong winds especially along the south coast of England, with some places recording gusts up to 78mph.

On the 18th, high pressure was well established over western Europe, pushing any fronts northwards over the Midlands and northern England, introducing a form of north south split certainly with temperatures. While maxima in northern England, Wales, Scotland and Northern Ireland were restricted to the mid to high teens Celsius, the continental warmth produced maxima around 28deg Celsius in southern England on the 19th.

As the influence of the continental high pressure waned, temperatures cooled and yet more depressions were able to bring more rain and wind to the UK. Several places in Wales and northern England registered their highest daily rainfall totals on the 20th, some reporting in excess of 60mm. On the 21st, high pressure developed to the west of Ireland with ridges extending over the UK, bringing cooler but dry conditions. Fog through the month was generally patchy and short lived but more extensive on the 29th. The month ended quietly with a ridge of high pressure covering the UK on the 30th.

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 07/10/2025 11:13. 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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