

3-month summary	1-month summary	Guide to the Outlook	Shifts in likelihood	What is average?	Q&A
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3-month summary

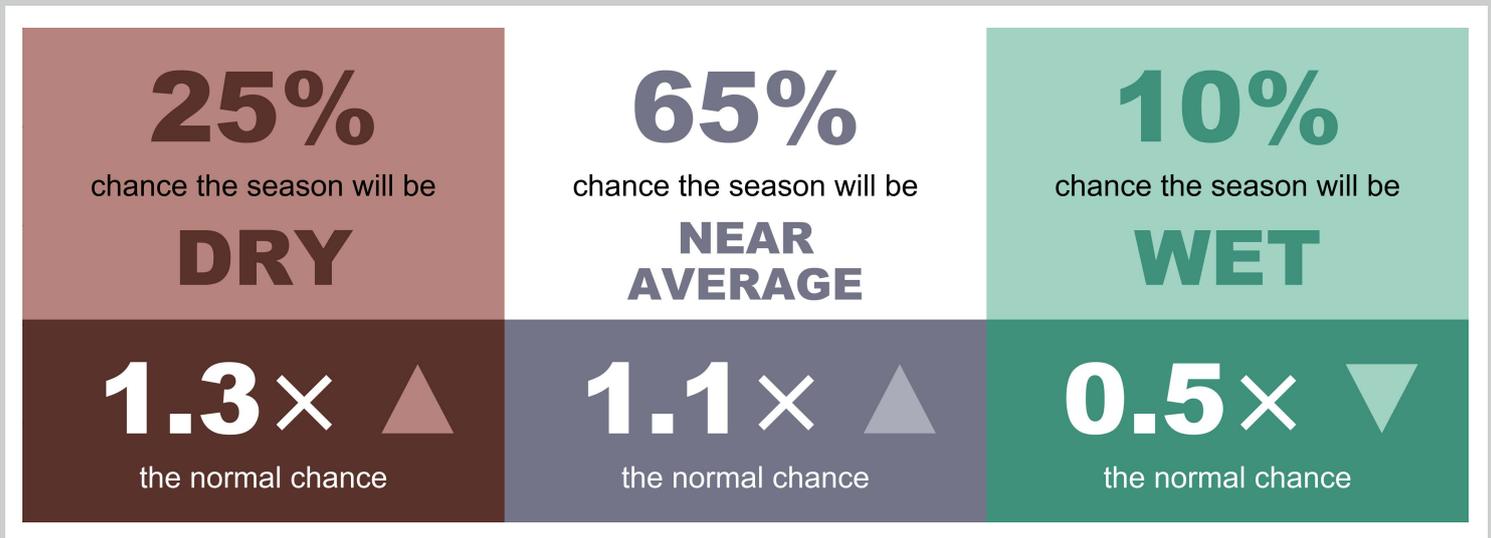
- Near average rainfall most probable with a slight increase in the likelihood of dry
- Heaviest and most widespread rain will likely be across western and northern areas
- Whilst there is a reduction in the likelihood of a cold period overall, impacts from cold weather remain possible later in the period
- A probable decrease in storminess as compared to normal for late autumn and early winter

3-month likelihood of impact

Temperature



Precipitation



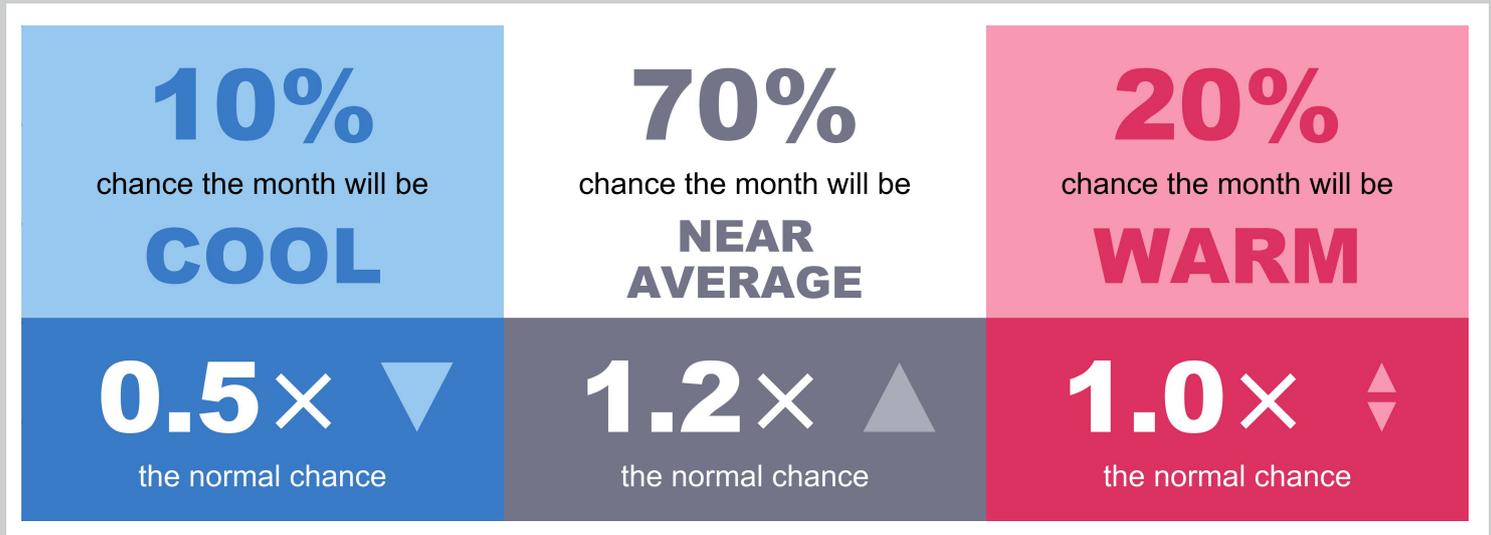
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1-month summary

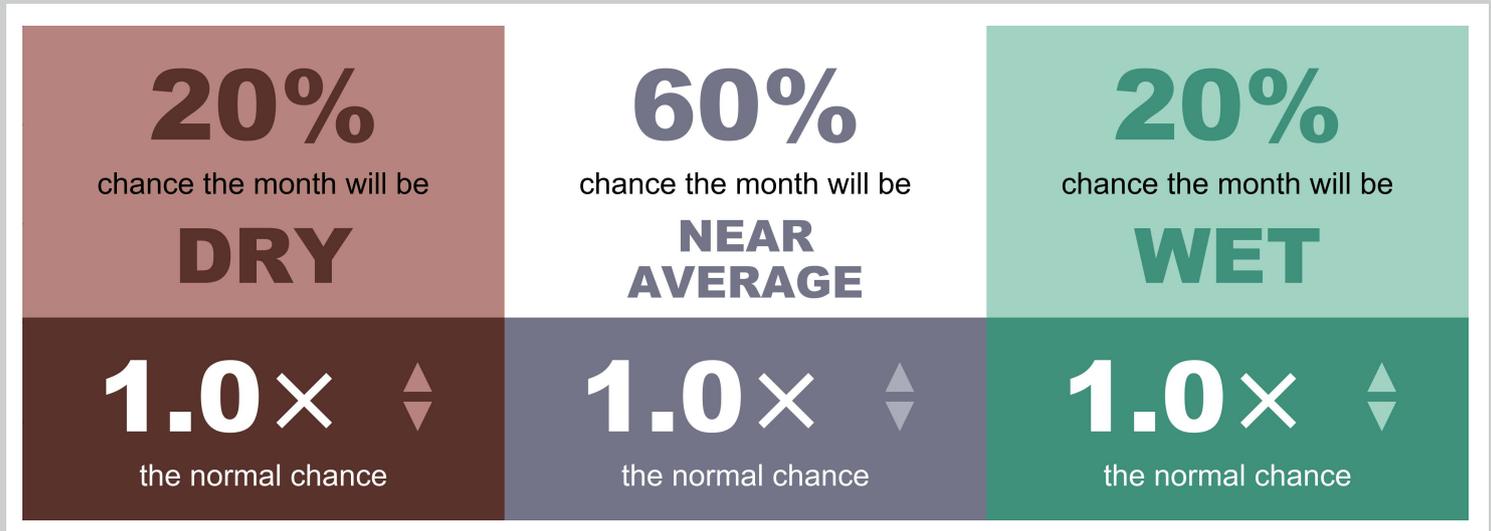
- The likelihoods of either a wet or dry October are balanced
- Near average temperatures most likely with a reduced likelihood of a cool October

1-month likelihood of impact

Temperature



Precipitation



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Understanding the Outlook

The Outlook uses 3 categories for possible UK temperature and precipitation in the next 1 and 3 months:

COOL, NEAR AVERAGE and WARM for 1-month temperature
 COLD, NEAR AVERAGE and MILD for 3-month temperature
 WET, NEAR AVERAGE and DRY for precipitation

These are linked to observed UK conditions in past years. The NEAR AVERAGE category represents typical conditions for the period and has a normal likelihood of 60%. The higher and lower categories represent more unusual conditions that are more likely to produce impacts. Each has a normal likelihood of 20%.

The Outlook shows how the chances of occurrence of the categories differ from normal, based on knowledge of expected global meteorological patterns. It does not identify which category will actually occur.

Same 3-month period over the last 10 years

2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
COLD	NEAR AVERAGE	MILD	MILD	NEAR AVERAGE	MILD				
NEAR AVERAGE	NEAR AVERAGE	NEAR AVERAGE	WET	DRY	NEAR AVERAGE	NEAR AVERAGE	NEAR AVERAGE	WET	NEAR AVERAGE

Same 1-month period over the last 10 years

2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
COOL	WARM	NEAR AVERAGE	NEAR AVERAGE	NEAR AVERAGE	WARM	NEAR AVERAGE	NEAR AVERAGE	NEAR AVERAGE	NEAR AVERAGE
NEAR AVERAGE	NEAR AVERAGE	NEAR AVERAGE	DRY	DRY	NEAR AVERAGE	NEAR AVERAGE	NEAR AVERAGE	WET	WET

Outlook in context

Drivers of UK weather for October to December

The impact of global weather patterns on the UK increases through this period, particularly during late autumn and into winter. Drivers relevant to the current Outlook are:

- La Nina influencing global weather patterns, which can bring higher pressure regimes to parts of western Europe during late autumn and early winter
- Sea-surface temperatures around the UK are above average, favouring above average land temperatures
- Atlantic Tropical Cyclones – the season typically ends by December, forecasts suggest late season activity is likely to be above average, this acting to reduce confidence in the forecast

Long-range weather predictions

The Met Office and other prediction centres around the world routinely produce long-range predictions of conditions in the months ahead. There is relatively good agreement for an increased likelihood of higher-than-average pressure to the west and southwest of the UK. However, there is greater variation in the extent that high pressure extends across the UK. Early in the period, westerly winds are favoured which means northern and western areas will see the greatest influence of rain-bearing systems and a greater chance of strong winds at times. Towards the latter part of the period, there is a suggestion that high pressure will be centred closer to the UK which would see a reduction in the frequency of rain-bearing systems.

Impact

For the whole country, the likelihood of impacts from strong winds is decreased as compared to typical conditions for late autumn and early winter. However, this doesn't preclude the chance of stormy spells at times. Even with a reduction in the likelihood of cold, some colder spells remain possible later in this period bringing a risk of wintry hazards.

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Outlook compared to normal likelihood

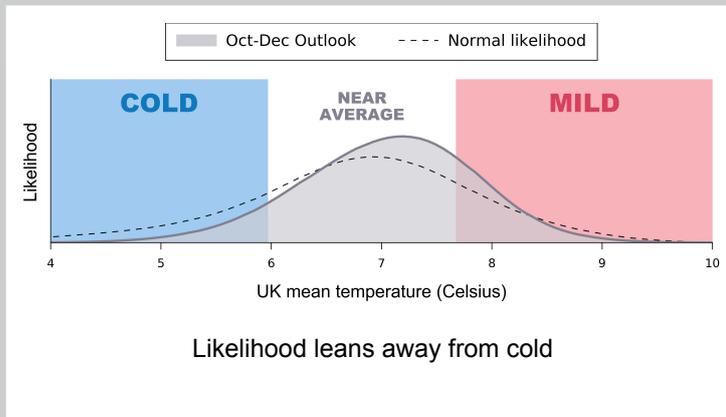
The curves below show the likelihood of the 1- and 3-month average temperature and precipitation taking specific values. In each case:

- The dashed curve shows the normal likelihood based on how often each value has been recorded in past years
- The solid curve shows the current likelihood based on the Outlook for this year

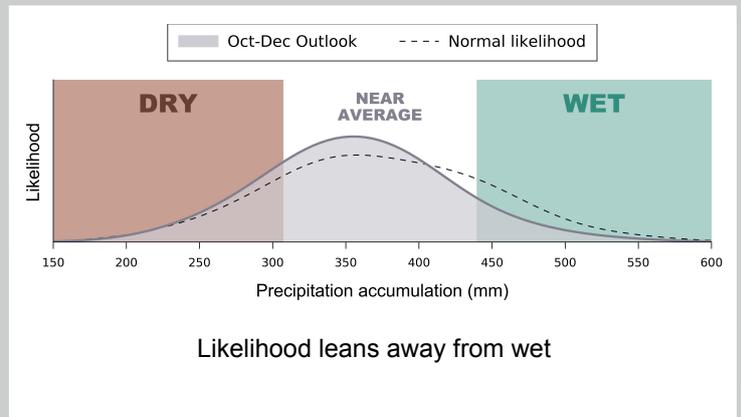
The differences in these curves show how the probabilities for the coming periods differ compared to past years. Where the solid curve (corresponding to this year's Outlook) lies above the dashed curve (normal likelihood), the temperature or precipitation at that point has a greater-than-normal likelihood of occurring. Likewise, wherever it is below the dashed curve, the likelihood of those values is less than normal.

A shift of the solid curve to the left of the dashed curve indicates an increase in the chance of below-average temperature or precipitation. A shift to the right, meanwhile, indicates increased chances of above-average values.

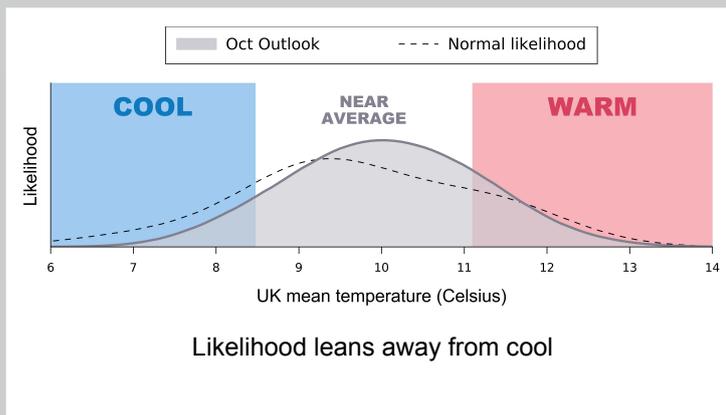
3-month temperature Outlook compared to normal



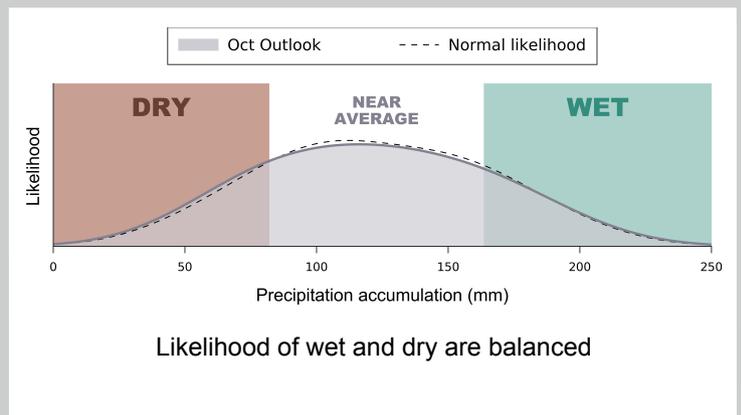
3-month precipitation Outlook compared to normal



1-month temperature Outlook compared to normal



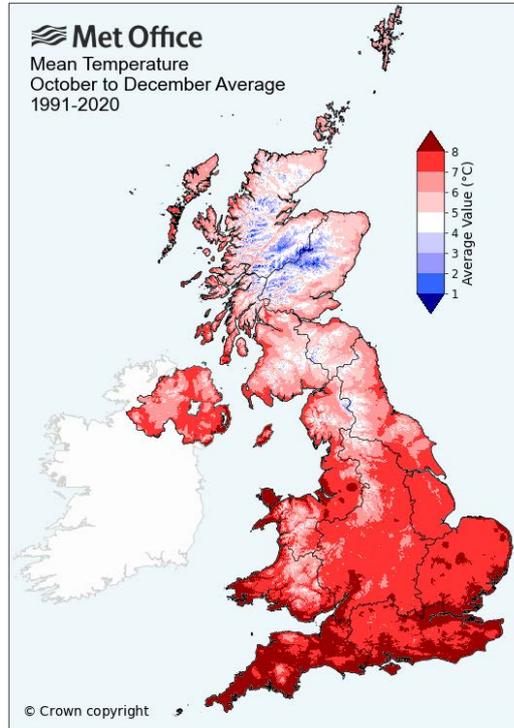
1-month precipitation Outlook compared to normal



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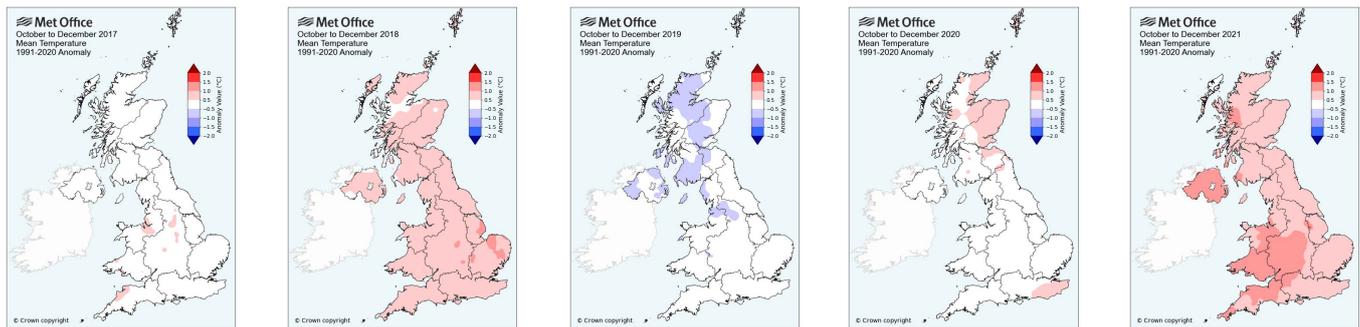
Long-term average temperatures (3-month)

This page shows the long-term average temperatures across the UK for the 3-month Outlook period. Long-term average temperatures for the 1-month period are on page 6. Long-term precipitation averages are shown on pages 7 (3-month) and 8 (1-month).



Average temperatures for October - December based on observations from past years.

Last 5 years' temperatures, difference from average (3-month)



Oct-Dec 2017

Oct-Dec 2018

Oct-Dec 2019

Oct-Dec 2020

Oct-Dec 2021

Anomaly (°C)

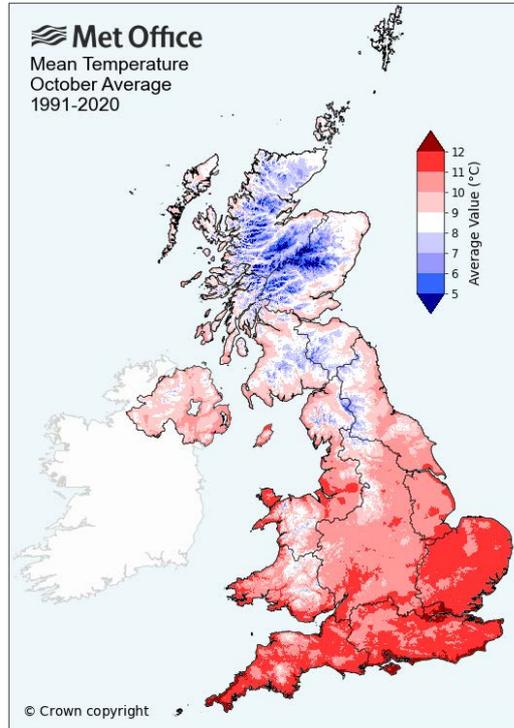


These maps show how October - December temperatures in the last five years differed from the long-term average temperatures shown in the upper panel. Pink and red colours indicate warmer-than-average conditions while blue shades indicate colder-than-average conditions. Detailed information on the climate of the UK is available at www.metoffice.gov.uk/climate.

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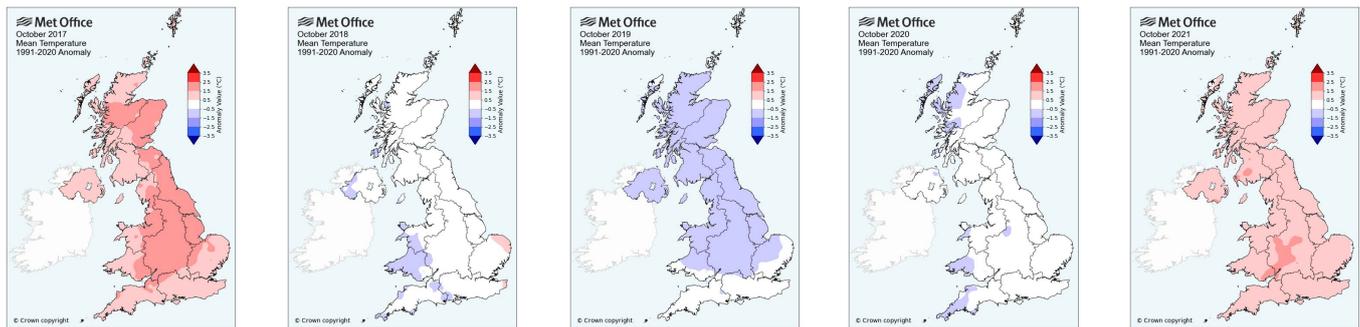
Long-term average temperatures (1-month)

This page shows the long-term average temperatures across the UK for the 1-month Outlook period.



Average temperatures for October based on observations from past years.

Last 5 years' temperatures, difference from average (1-month)



Oct 2017

Oct 2018

Oct 2019

Oct 2020

Oct 2021

Anomaly (°C)

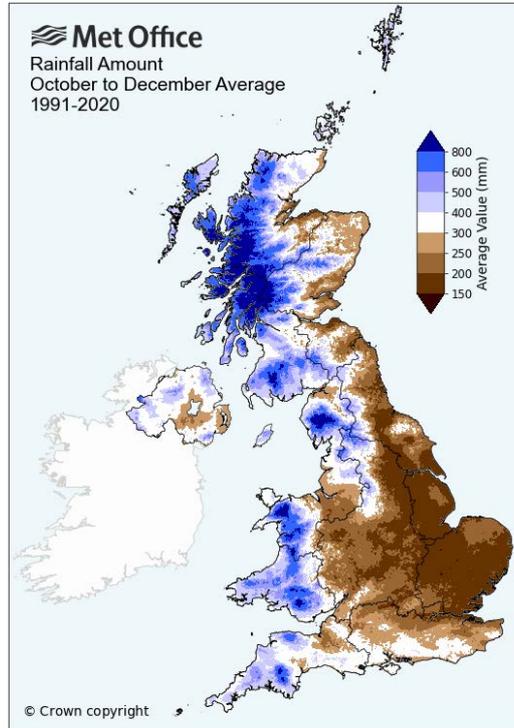


These maps show how October temperatures in the last five years differed from the long-term average temperatures shown in the upper panel. Pink and red colours indicate warmer-than-average conditions while blue shades indicate cooler-than-average conditions. Detailed information on the climate of the UK is available at www.metoffice.gov.uk/climate.

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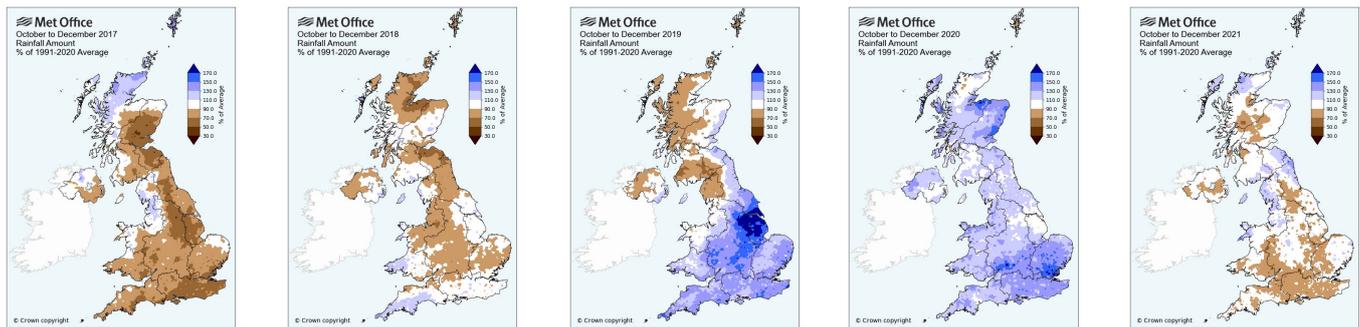
Long-term average precipitation (3-month)

This page shows the long-term average precipitation across the UK for the 3-month Outlook period.



Average precipitation for October - December based on observations from past years.

Last 5 years' precipitation, difference from average (3-month)



Oct-Dec 2017

Oct-Dec 2018

Oct-Dec 2019

Oct-Dec 2020

Oct-Dec 2021

% of average

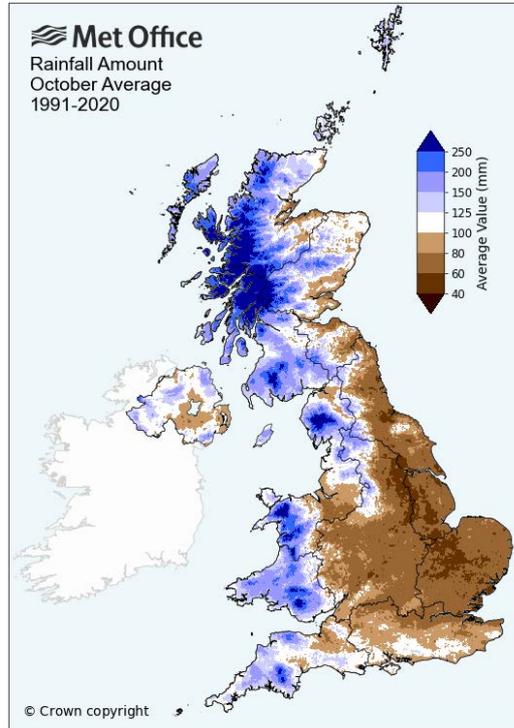


These maps show how October - December precipitation in the last five years differed from the long-term average precipitation shown in the upper panel. Brown colours indicate drier-than-average conditions while blue shades indicate wetter-than-average conditions. Detailed information on the climate of the UK is available at www.metoffice.gov.uk/climate.

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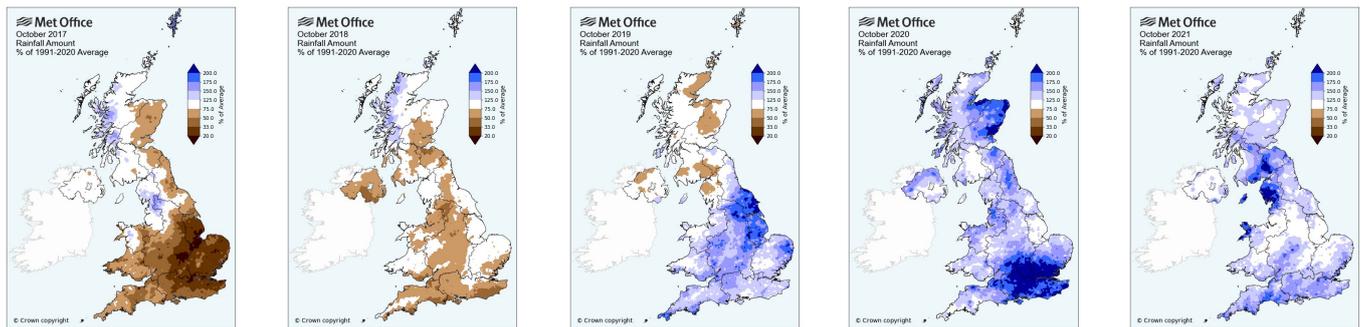
Long-term average precipitation (1-month)

This page shows the long-term average precipitation across the UK for the 1-month Outlook period.



Average precipitation for October based on observations from past years.

Last 5 years' precipitation, difference from average (1-month)



Oct 2017

Oct 2018

Oct 2019

Oct 2020

Oct 2021

% of average



These maps show how October precipitation in the last five years differed from the long-term average precipitation shown in the upper panel. Brown colours indicate drier-than-average conditions while blue shades indicate wetter-than-average conditions. Detailed information on the climate of the UK is available at www.metoffice.gov.uk/climate.

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Q&A

Q. What is the point of the Outlook, who is it meant for?

A. This Outlook is produced for planners in government and business who make risk-based decisions. These users are aware of the complexities of this type of outlook and will include those factors in their decision-making process.

Q. How did you decide on the Outlook? What are the main factors affecting it?

A. It is based on information from observations, several numerical prediction systems and expert judgement. See the 'Outlook in Context' section of the Outlook for more details.

Q. Is the Outlook for the whole country?

A. The Outlook is for the average of conditions over the UK as a whole. Regional deviations from the UK average can occur. For example, average UK precipitation can result from below-average rainfall for the northwest and above-average for the southeast.

Q. How confident are you in this Outlook?

A. The percentages in the 'Likelihood of Impact' sections of the Outlook give the level of confidence.

Q. Does the increased likelihood of a dry weather mean drought conditions will continue to be a problem?

A. Drought is a complex issue that goes far beyond how much it rains, and it will take more than a week or two of rain to undo the effects of the prolonged periods of below average rainfall, which has particularly been the case across England and Wales over the last 6-months. The Environment Agency and Natural Resources Wales will therefore continue to work closely with water companies to assess what actions over the winter may be needed in those areas currently affected by drought.

Q. Does this Outlook mean we won't see any cold weather in early winter?

A. Whilst there is an increased likelihood of near average temperatures through the whole period, the chance of a spell of colder than average weather does increase slightly later in the period. In recent years, the likelihood of our coldest category has often been quite small reflecting the fact that UK climate has warmed compared to the long-term average.

Q. Autumn is often stormy - does the Outlook mean there will be fewer named storms this year?

A. The Outlook suggests a reduction in the frequency of wet and windy spells compared to average during November and December. However, stormy spells remain possible, the Outlook does not predict the number of named storms, as the naming of storms is based on expected impacts.

About the Outlook

The Outlook presented here is for the United Kingdom as a whole and is based on information from observations, several numerical prediction systems and expert judgement. It is updated monthly to reflect the latest information on global weather patterns and their effect on the UK. The Outlook is designed to be used in conjunction with shorter-range forecasts - detailed weather forecast information is available on the Met Office website (<https://www.metoffice.gov.uk>).

Information for October will be superseded by the long-range information on the public weather forecast web page, starting from 1 October 2022.

In this product, temperature refers to the average of daytime maxima and night-time minima. All numerical values relate to averages (temperature) or totals (precipitation – rain, sleet, snow and hail) over 1 or 3 months, which are further averaged over the UK land area as a whole. Normal likelihood and long-term averages are established using the period 1991-2020.