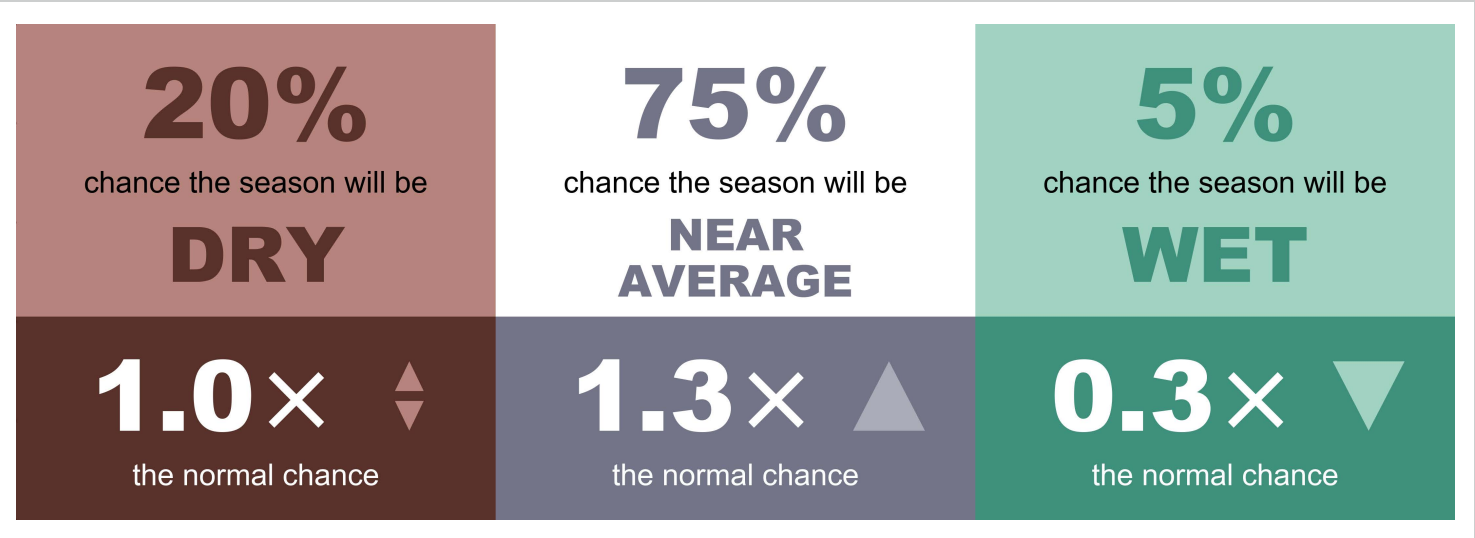| 3-month summary	1-month summary	Guide to the Outlook	Shifts in likelihood	What is average?	Q&A

3-month summary

- More than double the chance of a warm autumn compared to normal
- Colder spells of weather remain possible, especially in late autumn
- Autumn is more likely to be dry than wet
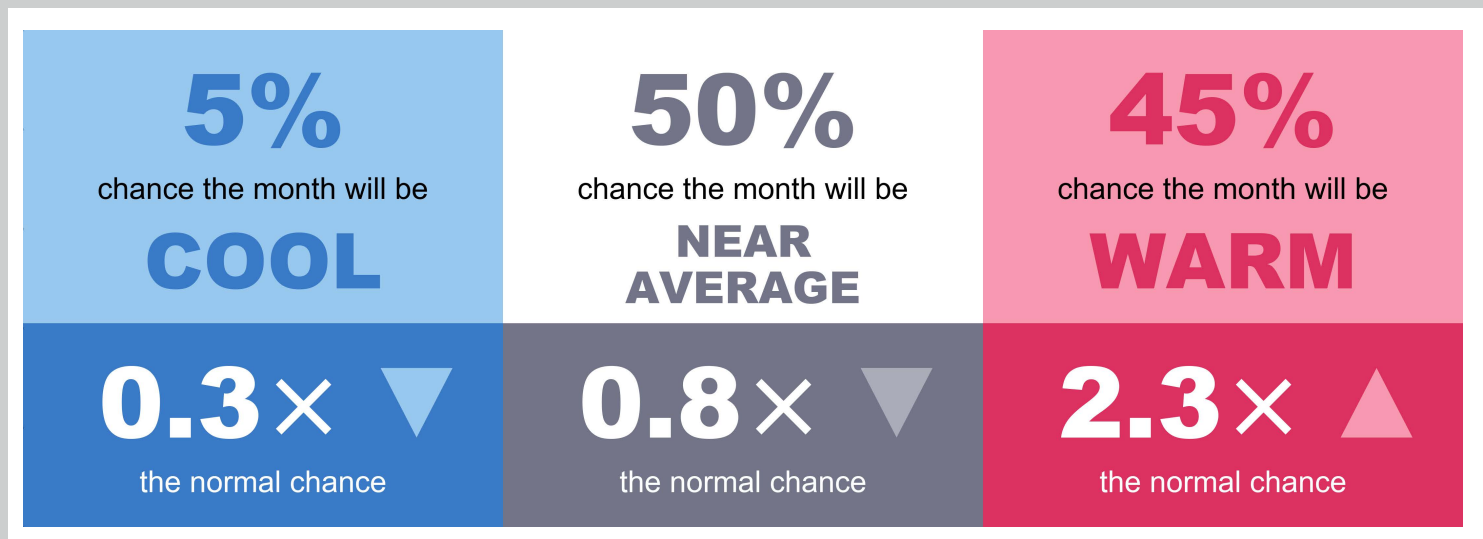
3-month likelihood of impact
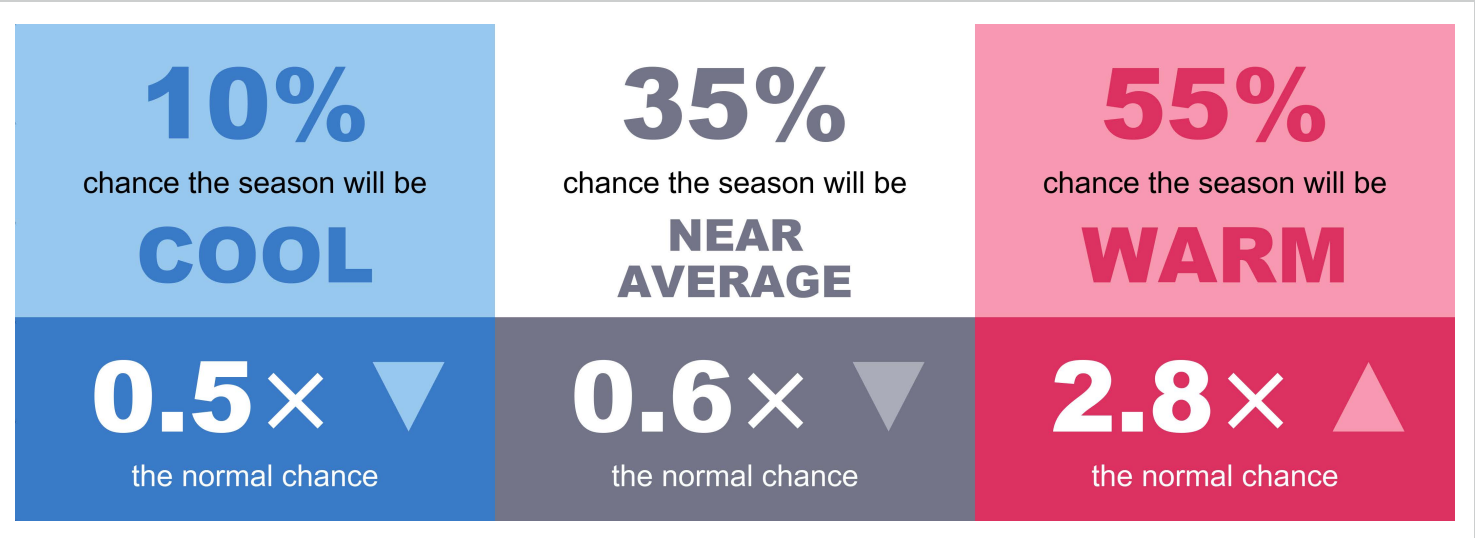
Temperature

10%	35%	55%
chance the season will be **COOL**	chance the season will be **NEAR AVERAGE**	chance the season will be **WARM**
0.5× ▼	0.6× ▼	2.8× ▲
the normal chance	the normal chance	the normal chance

Precipitation

20%	75%	5%
chance the season will be **DRY**	chance the season will be **NEAR AVERAGE**	chance the season will be **WET**
1.0× ▲▼	1.3× ▲	0.3× ▼
the normal chance	the normal chance	the normal chance

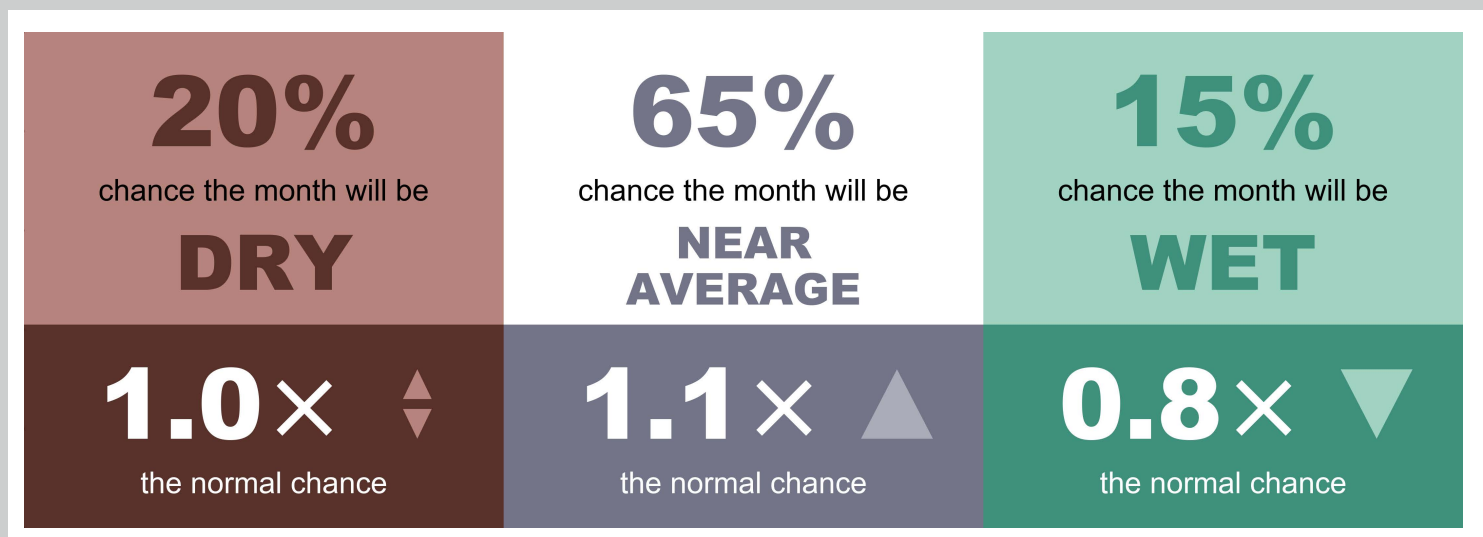| 3-month summary	**1-month summary**	Guide to the Outlook	Shifts in likelihood	What is average?	Q&A

1-month summary

- September is more likely to be warm than cool
- Chances of a dry September are similar to normal
- Slightly lower-than-normal chance of a wet September
- Near-average rainfall is the most likely outcome

1-month likelihood of impact

Temperature

5% chance the month will be **COOL**	**50%** chance the month will be **NEAR AVERAGE**	**45%** chance the month will be **WARM**
0.3× ▼ the normal chance	**0.8×** ▼ the normal chance	**2.3×** ▲ the normal chance

Precipitation

20% chance the month will be **DRY**	**65%** chance the month will be **NEAR AVERAGE**	**15%** chance the month will be **WET**
1.0× ↕ the normal chance	**1.1×** ▲ the normal chance	**0.8×** ▼ the normal chance

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

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 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

2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
WARM	COOL	NEAR AVERAGE	WARM	NEAR AVERAGE	NEAR AVERAGE	NEAR AVERAGE	NEAR AVERAGE	NEAR AVERAGE	NEAR AVERAGE
NEAR AVERAGE	NEAR AVERAGE	NEAR AVERAGE	NEAR AVERAGE	NEAR AVERAGE	DRY	NEAR AVERAGE	NEAR AVERAGE	NEAR AVERAGE	NEAR AVERAGE

Same 1-month period over the last 10 years

2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
WARM	NEAR AVERAGE	NEAR AVERAGE	WARM	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	NEAR AVERAGE	NEAR AVERAGE

Outlook in context

Drivers of UK weather for September to November

Global weather patterns can affect UK weather in the coming season and their influence acts to shift the chances of the categories in the Outlook. During autumn, these drivers typically become stronger and have more influence on weather patterns across Western Europe as the season progresses. Drivers relevant to the current Outlook are:
• Sea-surface temperatures in the vicinity of the UK are above-average, increasing the chances of warmer conditions in early autumn
• The El Niño-Southern Oscillation (ENSO) is currently neutral but there is a strong signal for La Niña to develop over the next three months. La Niña moderately increases the likelihood of high pressure in the vicinity of the UK, increasing the chance of dry conditions dominating overall, especially in late autumn

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 a consistent signal for high pressure to be close to the UK during autumn, increasing the chances of dry conditions. This signal is strongest later in the season.

Impact

The influence of global drivers, coupled with consistent and fairly robust signals in the seasonal predictions systems, result in an increase in the likelihood of warm and dry conditions overall. Autumn is one of the wettest and stormiest parts of the year so although dry conditions are more probable overall, occasional spells of wet and windy weather are still likely. An increased chance of warm conditions through this period is consistent with our warming climate. At this time of year, the chances of impacts from hot weather are waning but remain possible early in the period.

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

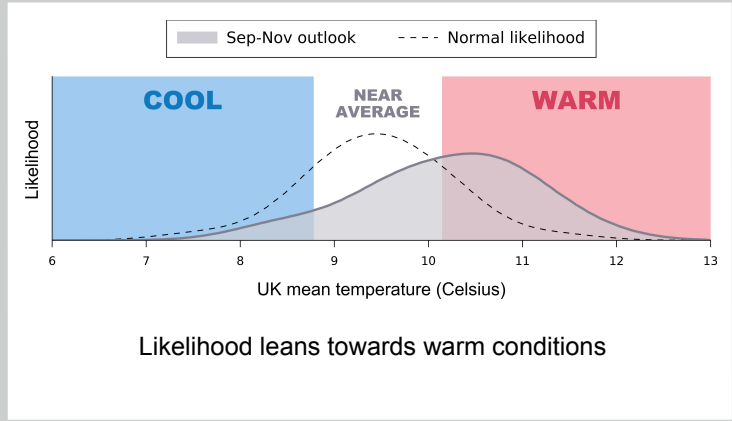# Outlook compared to normal likelihood

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.
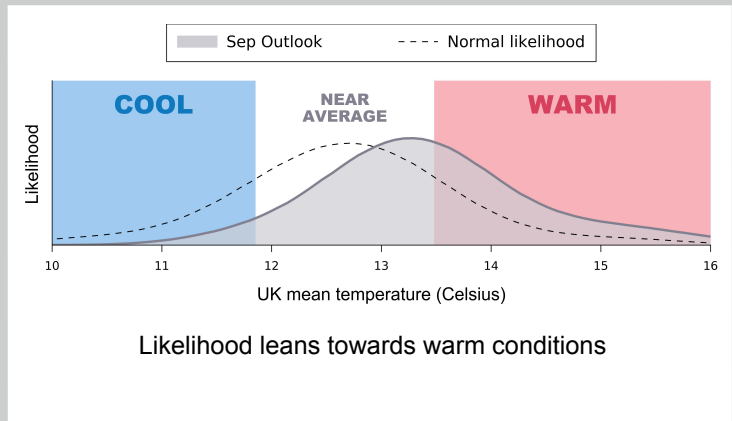
3-month temperature Outlook compared to normal

Likelihood leans towards warm conditions

3-month precipitation Outlook compared to normal

Likelihood leans moderately towards dry conditions

1-month temperature Outlook compared to normal

Likelihood leans towards warm conditions

1-month precipitation Outlook compared to normal

Likelihood leans moderately towards dry conditions
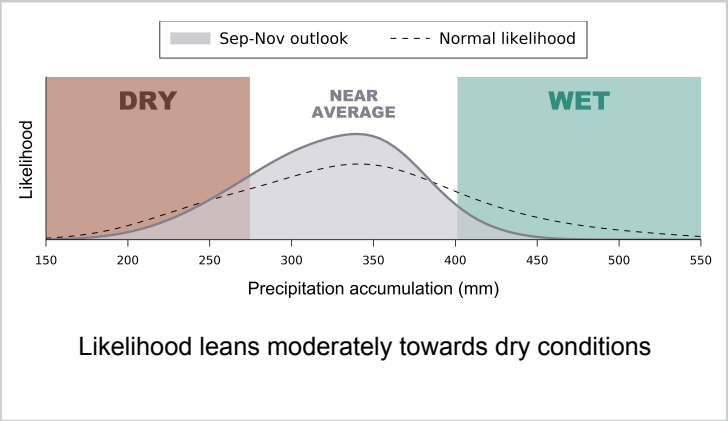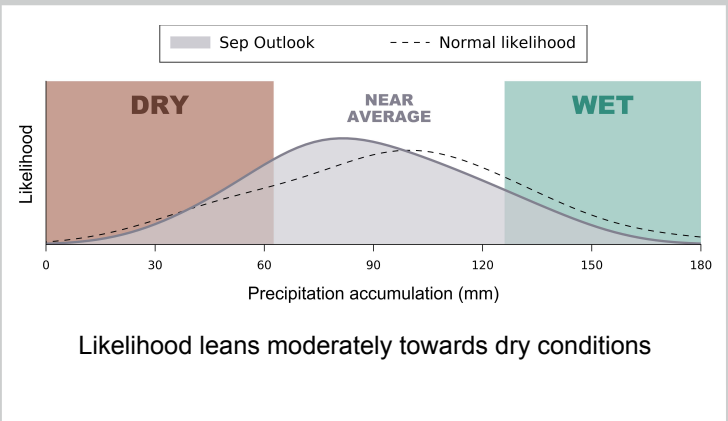
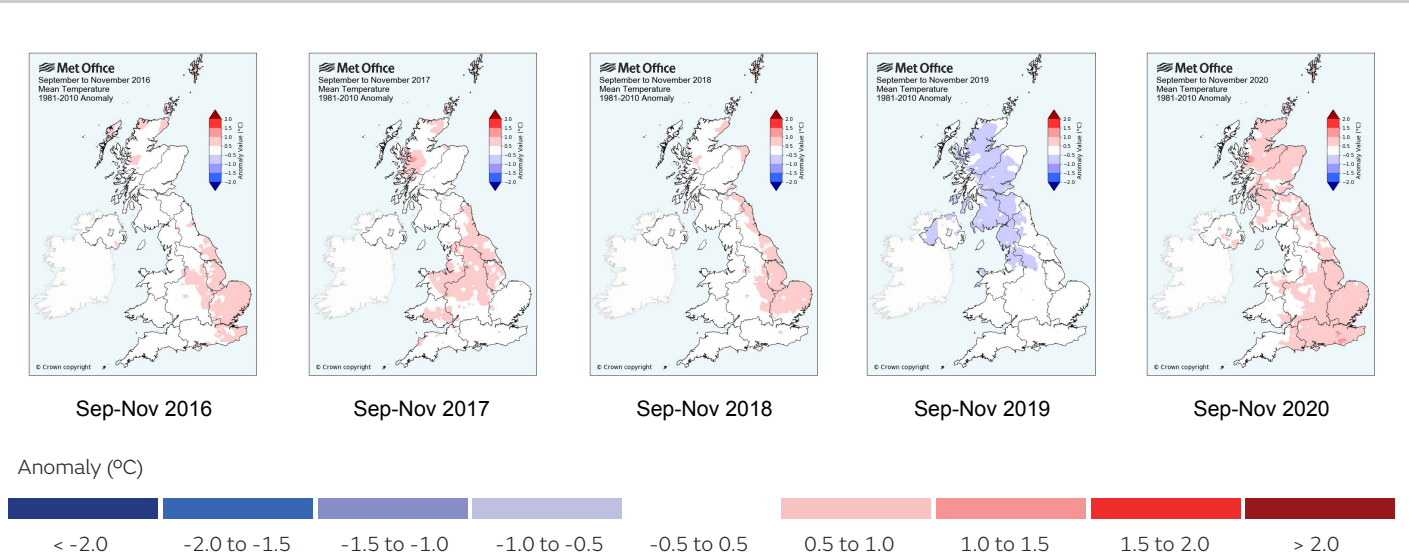| 3-month summary | 1-month summary | Guide to the Outlook | Shifts in likelihood | What is average? | Q&A |

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).
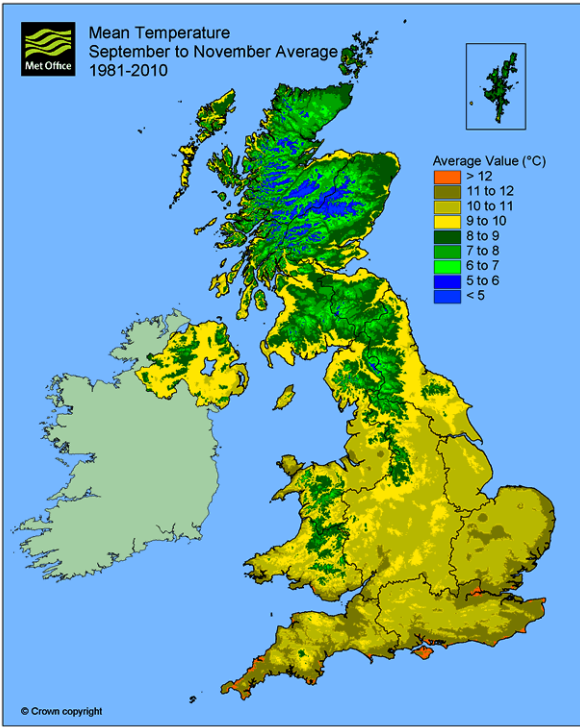
Mean Temperature
September to November Average
1981-2010

Average Value (°C)
> 12
11 to 12
10 to 11
9 to 10
8 to 9
7 to 8
6 to 7
5 to 6
< 5

© Crown copyright

Average temperatures for September - November based on observations from past years.

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

Sep-Nov 2016   Sep-Nov 2017   Sep-Nov 2018   Sep-Nov 2019   Sep-Nov 2020

Anomaly (ºC)

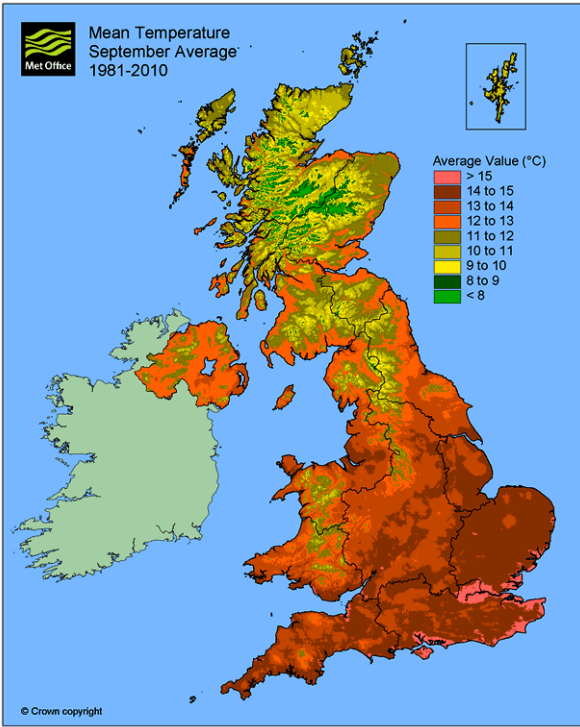| < -2.0 | -2.0 to -1.5 | -1.5 to -1.0 | -1.0 to -0.5 | -0.5 to 0.5 | 0.5 to 1.0 | 1.0 to 1.5 | 1.5 to 2.0 | > 2.0 |

These maps show how September - November 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.

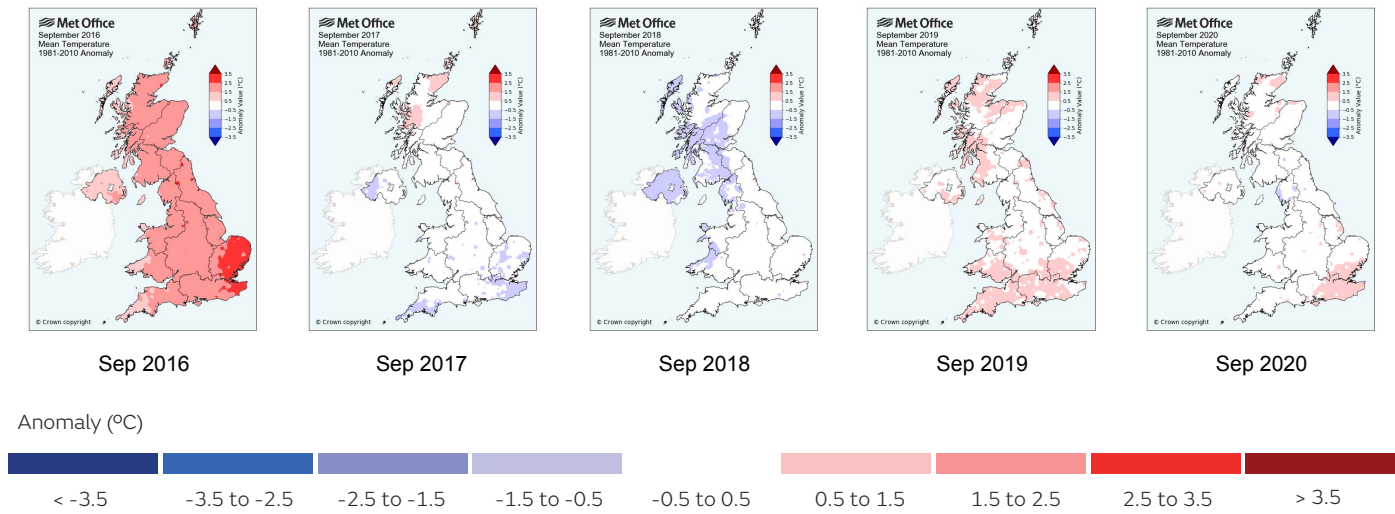| 3-month summary | 1-month summary | Guide to the Outlook | Shifts in likelihood | What is average? | Q&A |

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 September based on observations from past years.

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

Sep 2016   Sep 2017   Sep 2018   Sep 2019   Sep 2020

Anomaly (ºC)

| < -3.5 | -3.5 to -2.5 | -2.5 to -1.5 | -1.5 to -0.5 | -0.5 to 0.5 | 0.5 to 1.5 | 1.5 to 2.5 | 2.5 to 3.5 | > 3.5 |

These maps show how September 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.

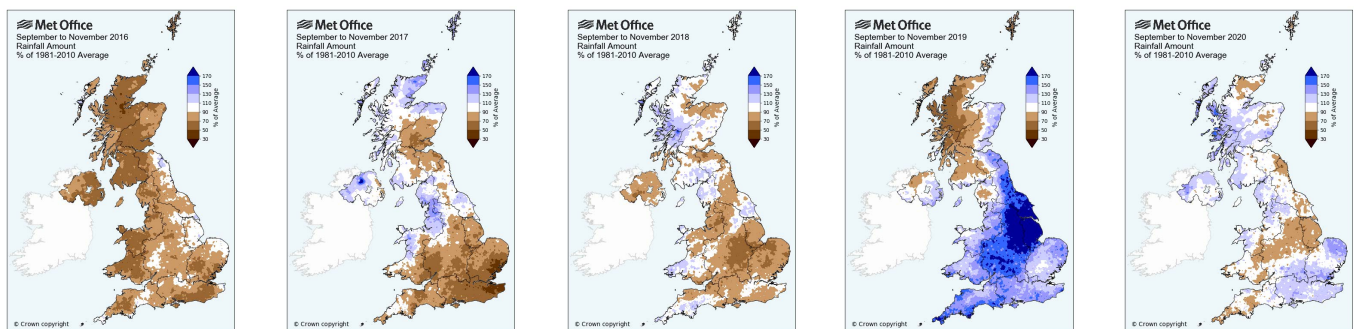| 3-month summary | 1-month summary | Guide to the Outlook | Shifts in likelihood | What is average? | Q&A |

Long-term average precipitation (3-month)

This page shows the long-term average precipitation across the UK for the 3-month Outlook period.
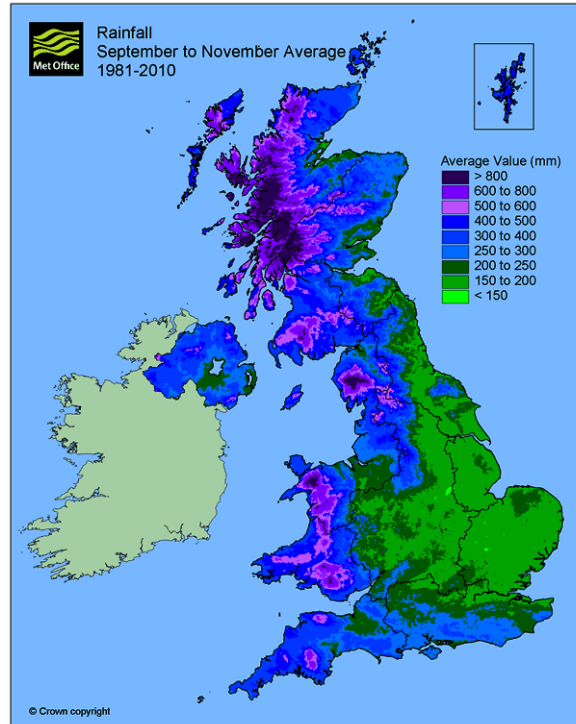
Average precipitation for September - November based on observations from past years.

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

Sep-Nov 2016   Sep-Nov 2017   Sep-Nov 2018   Sep-Nov 2019   Sep-Nov 2020

% of average

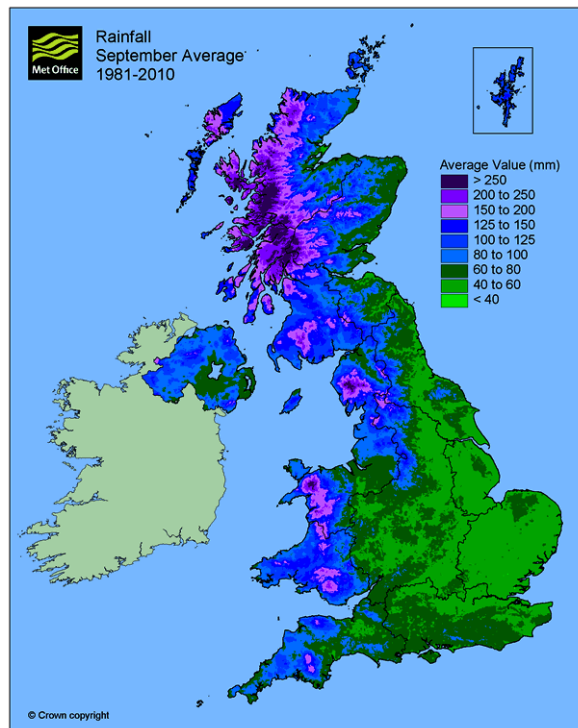| < 30 | 30 to 50 | 50 to 70 | 70 to 90 | 90 to 110 | 110 to 130 | 130 to 150 | 150 to 170 | > 170 |

These maps show how September - November 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.

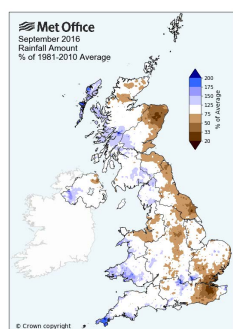| 3-month summary | 1-month summary | Guide to the Outlook | Shifts in likelihood | **What is average?** | Q&A |

Long-term average precipitation (1-month)

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

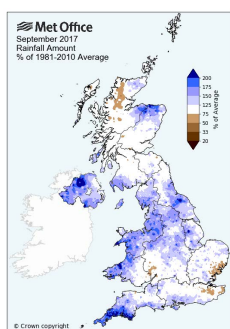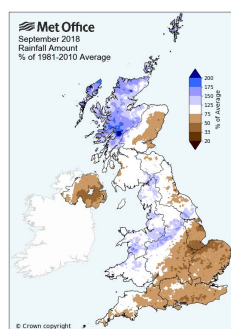Average precipitation for September based on observations from past years.

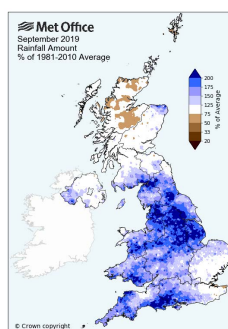# Last 5 years' precipitation, difference from average (1-month)

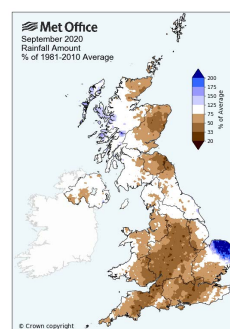Sep 2016   Sep 2017   Sep 2018   Sep 2019   Sep 2020

% of average

| < 20 | 20 to 33 | 33 to 50 | 50 to 75 | 75 to 125 | 125 to 150 | 150 to 175 | 175 to 200 | > 200 |

These maps show how September 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.

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

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 this Outlook mean we are likely to see an Indian Summer?
A. An Indian Summer is generally a warm spell that occurs in autumn. Although the Outlook indicates a warm autumn is the most likely outcome, it doesn't guarantee warm conditions or identify weather for a particular day or week. This Outlook does not rule out the possibility of some cooler conditions and it should be noted that higher-than-average temperatures can be due to warm nights as much as warm days.

Q. Autumn is often stormy - does the Outlook mean there will be fewer named storms this year?
A. The outlook shows a consistent signal for high pressure close to UK during autumn increasing the chances of dry conditions and potentially reducing the risk of wet and windy weather. However, autumn is one of the wettest and stormiest parts of the year and whilst dry conditions overall are more probable, occasional spells of wet and windy weather are likely. The outlook does not predict the number of named storms, since the naming of storms is based on their likely impacts. These will depend on exact timing and location of weather features rather than the more general trends identified by the Outlook.

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 September will be superseded by the long-range information on the public weather forecast web page, starting from 27 August 2021.

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 1981-2010.