



Met Office

Met Office 3-month Outlook

Period: September – November 2017 Issue date: 24.08.17

The forecast presented here is for September and the average of the September-October-November period for the United Kingdom as a whole. The forecast for September will be superseded by the long-range information on the public weather forecast web page (www.metoffice.gov.uk/public/weather/forecast/#?tab=regionalForecast), starting from 1 September 2017.

This forecast is based on information from observations, several numerical models and expert judgement.

SUMMARY – TEMPERATURE:

For September and September-October-November, above-average temperatures are more probable than below-average temperatures.

Overall, the probability that the UK-average temperature for September-October-November will fall into the coldest of our five categories is around 10% and the probability that it will fall into the warmest of our five categories is 50% (the 1981-2010 probability for each of these categories is 20%).

CONTEXT:

The El Niño-Southern Oscillation (ENSO) in the tropical Pacific Ocean is currently in a neutral phase. Some modest cooling of sea surface temperatures in the tropical Pacific Ocean is possible in the coming months. However, ENSO is likely to remain neutral until the end of the year and is therefore not expected to influence weather patterns near the UK.

Sea surface temperatures to the west and southwest of the UK remain slightly below average. This suggests winds blowing off the Atlantic towards the UK will be slightly cooler than they otherwise would be during September. Sea surface temperatures can change quickly at this time of year, however, so this does not necessarily indicate a significant effect later in the season. Meanwhile, warmer-than-average sea surface temperatures persist in western parts of the North Atlantic Ocean and in the Labrador Sea. This pattern does not increase the northward gradient of temperatures, however, so is not expected to produce stronger westerly winds.

Autumn is a transitional time of year and the effect of some weather patterns on UK temperatures can change between the start and end

of the season. For example, a pattern of unsettled weather with westerly winds would likely result in cooler-than-average conditions in September and milder-than-average conditions in November. Likewise, winds from the east would favour warmer-than-average conditions early on but colder-than-average conditions later. For September and September-October-November as a whole, the Met Office seasonal prediction system, along with systems from other centres around the world, shows a slight increase in the likelihood of lower-than-average pressure near or to the north of the UK, which would be expected to bring an increased frequency of westerly and southwesterly winds. This increases the likelihood of above-average temperatures later in the season. In addition, increased chances of warmer-than-average temperatures are expected throughout the outlook period as a result of the broad background warmth associated with the present high global temperatures. This shift is consistent with the warmer temperatures seen in the last 10 years compared to the 1981-2010 period used to assess 'normal' conditions (see figure T2).

Fig T1

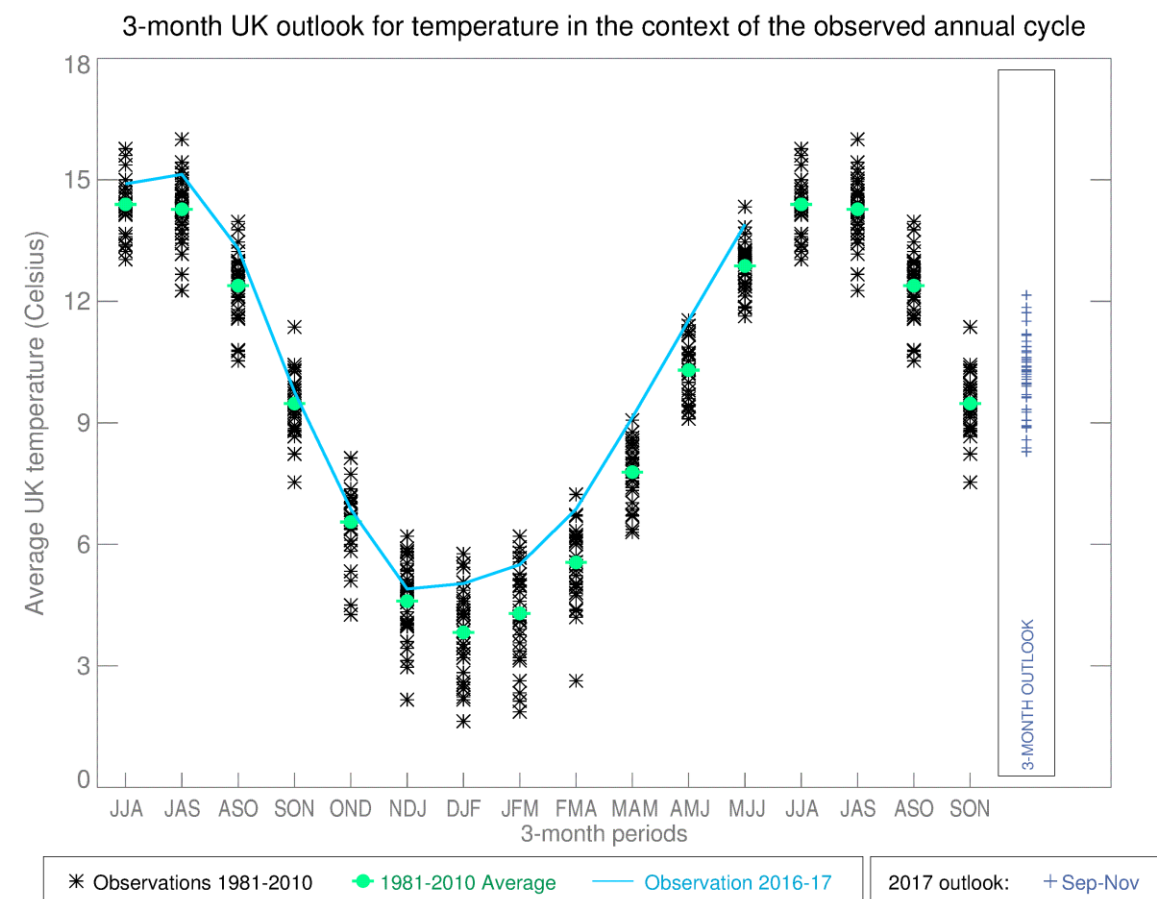


Fig T2

1-month and 3-month UK outlook for temperature in the context of observed climatology

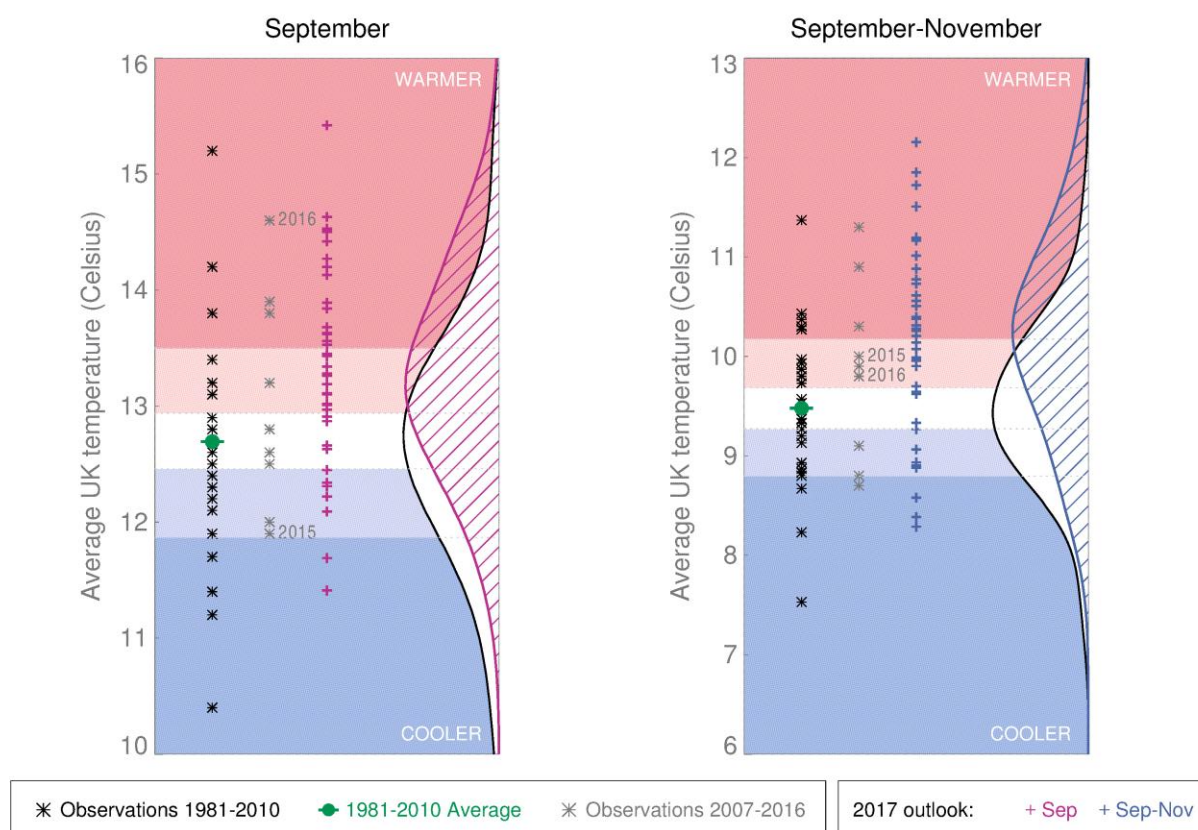
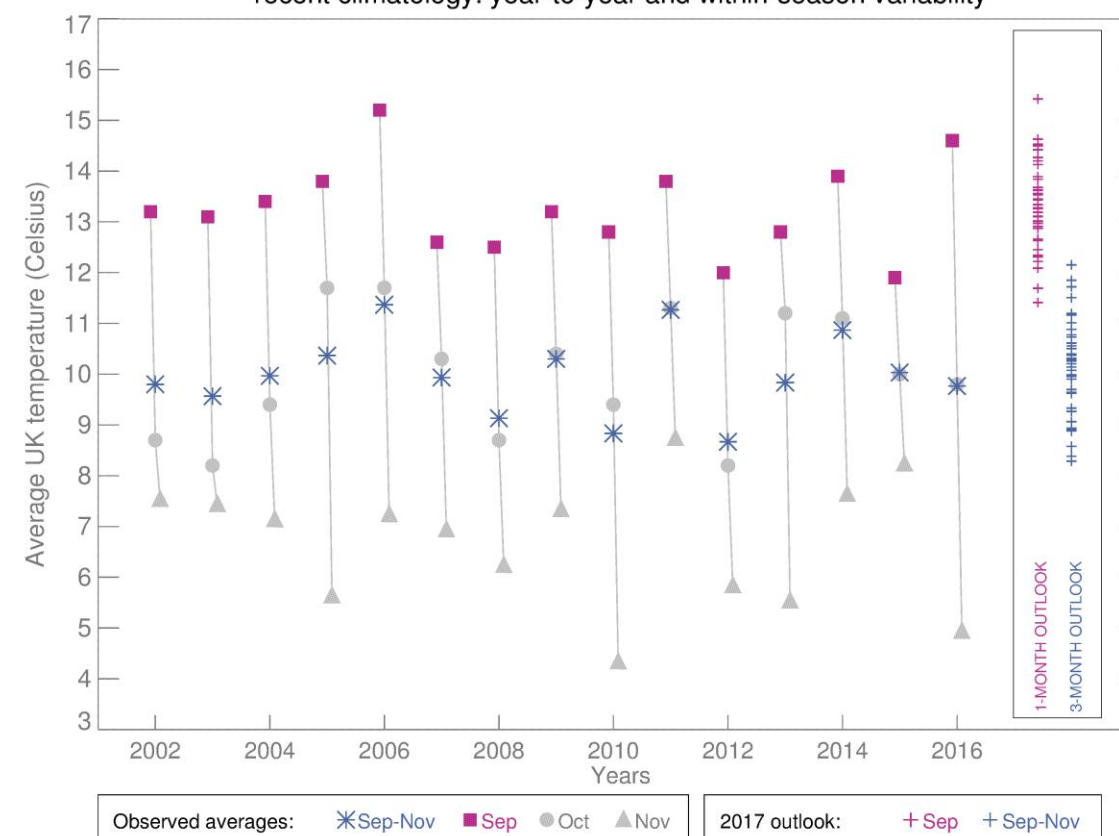


Fig T3

1-month and 3-month UK outlook for temperature in the context of recent climatology: year-to-year and within-season variability



This Outlook provides an indication of possible temperature and rainfall conditions over the next 3 months. It is part of a suite of forecasts designed for contingency planners.

The Outlook should not be used in isolation but should be used with shorter-range and more detailed (30-day, 15-day and 1-to-5-day) forecasts and warnings available to the contingency planning community from the Met Office.