



Met Office

Met Office 3-month Outlook

Period: August - October 2015 Issue date: 23.07.15

The forecast presented here is for August and the average of the August-September-October period for the United Kingdom as a whole. The forecast for August will be superseded by the long-range information on the public weather forecast web page (www.metoffice.gov.uk/public/weather/forecast/#?tab=regionalForecast), starting from 31 July 2015.

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

SUMMARY - TEMPERATURE:

For August near- to below-average temperatures are most likely. For August-September-October, although above-average temperatures are more probable than below-average, uncertainty is large.

Overall, the probability that the UK-mean temperature for August-September-October will fall into the coldest of our five categories is around 20% and the probability that it will fall into the warmest of our five categories is around 25% (the 1981-2010 probability for each of these categories is 20%).

CONTEXT:

El Niño is now firmly established with sea surface temperatures in the eastern tropical Pacific Ocean continuing to rise. Climate models suggest that sea surface temperatures will remain above El Niño thresholds for the rest of the year and that a moderate to strong event is likely. However, El Niño is not known to have a significant influence on the climate across northern Europe at this time of year.

In the North Atlantic, sea surface temperatures to the south of Greenland and in the tropics are colder than in recent years; this pattern of sea surface temperatures is thought to increase the probability of above-average pressure over northern Europe in summer and early autumn.

Computer model signals are quite strong regarding the most probable atmospheric circulation pattern, with higher-than-average pressure favoured near the UK during August and August-September-October as a whole. Usually, at this time of year, higher-than-average pressure is associated with above-average temperatures. However, the position of

the high pressure in relation to the UK is a factor to consider. During August, models are in good agreement in suggesting that pressure will be higher-than-average to the west of the UK, which would allow more of an Atlantic influence than if the high pressure was centred over northern Europe. As already noted above, sea surface temperatures are colder-than-average in the North Atlantic and this lends some support to the increased likelihood to below-average temperatures during August.

Beyond August, it is less clear where the areas of high pressure will be located in relation to the UK and therefore whether above- or below-average temperatures are more likely. Having said that, computer models are consistent in having a small signal for above-average temperatures. This can be seen in the right hand graph in figure T2 which shows an increased likelihood of above-average temperatures but also a broad range of solutions. It is worth noting that the probability of below-average temperatures is similar to climatology.

Fig T2

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

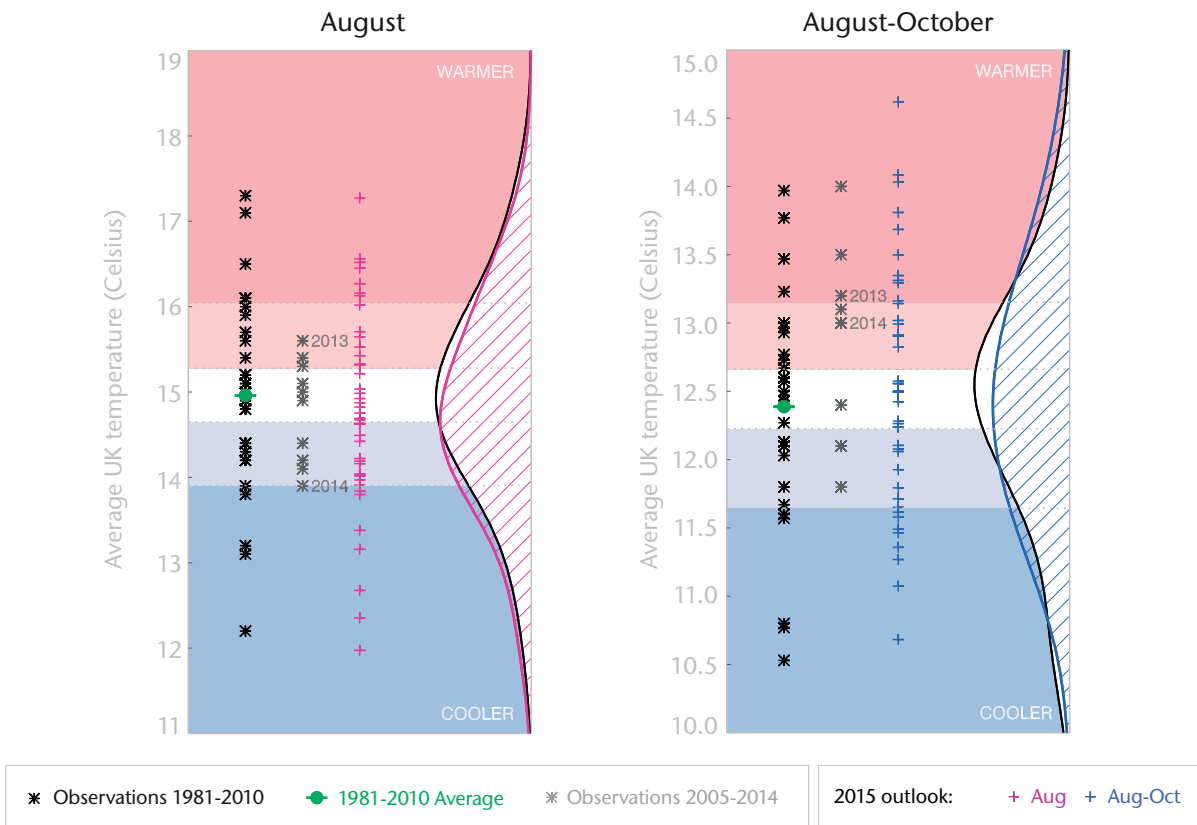


Fig T1

3-month UK outlook for temperature in the context of the observed annual cycle

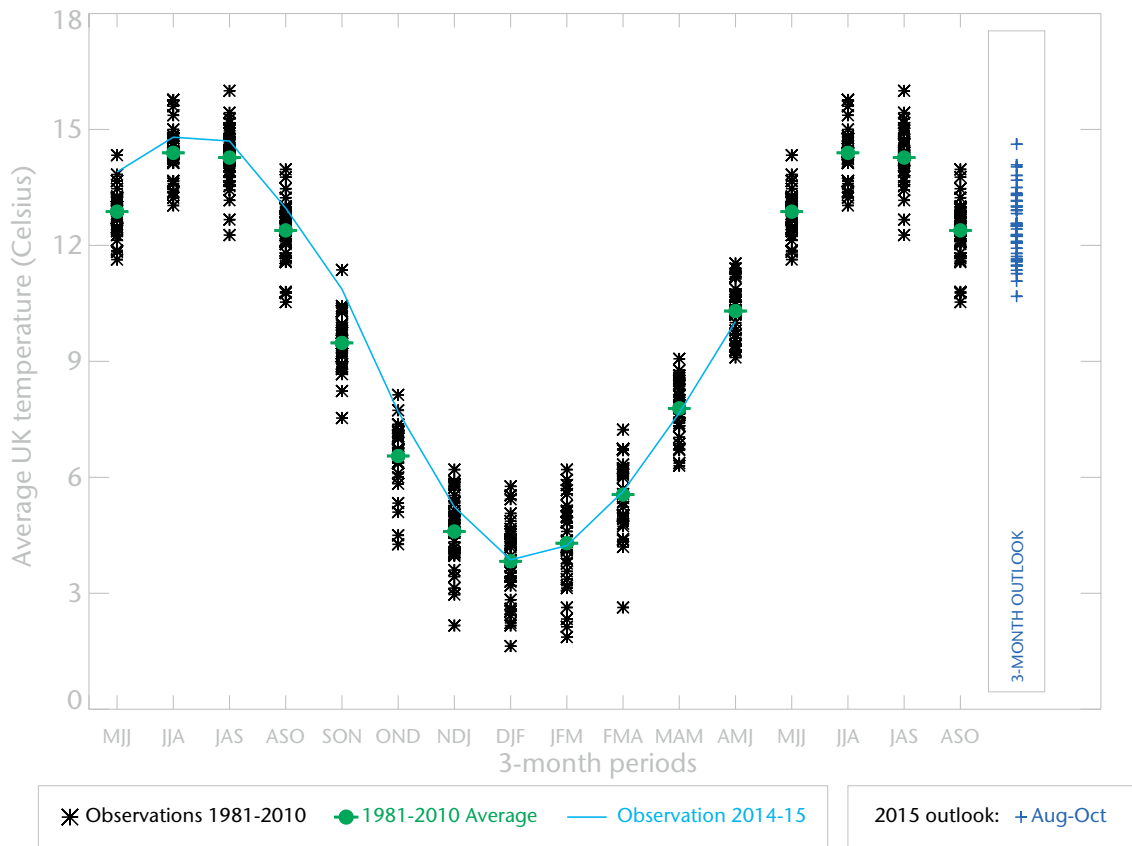
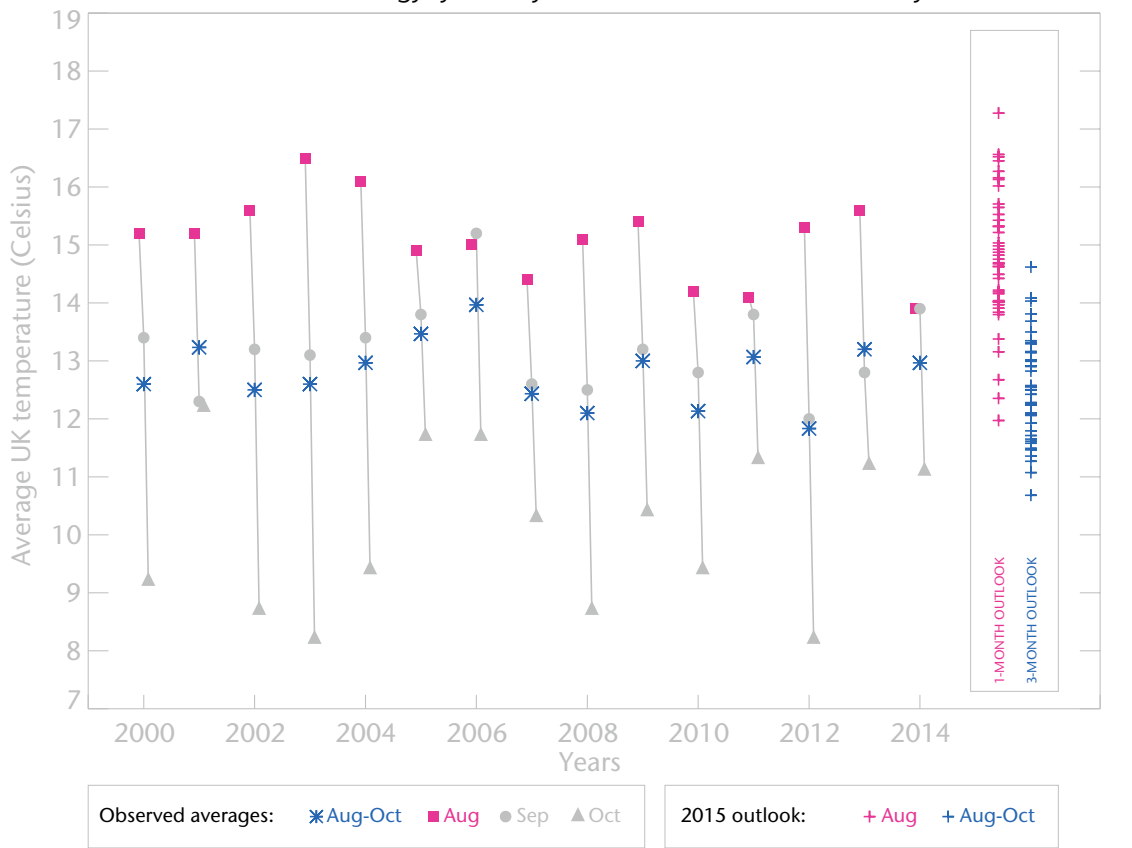


Fig T3

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.