



Met Office

Met Office 3-month Outlook

Period: May-July 2016 Issue date: 21.04.16

The forecast presented here is for May and the average of the May-June-July period for the United Kingdom as a whole. The forecast for May will be superseded by the long-range information on the public weather forecast web page (www.metoffice.gov.uk/public/weather/forecast/#?tab=regionalForecast), starting from 29 April 2016. This forecast is based on information from observations, several numerical forecast systems and expert judgement.

SUMMARY - TEMPERATURE:

For May, the probabilities of above-average and below-average temperatures are fairly well balanced, with above-average only slightly more likely. Likewise, for May-June-July above-average temperatures are slightly more probable than below-average temperatures. Overall, the probability that the UK-mean temperature for May-June-July will fall into the coldest of our five categories is around 15% and the probability that it will fall into the warmest of our five categories is between 20% and 25% (the 1981-2010 probability for each of these categories is 20%).

CONTEXT:

El Niño reached a peak in late 2015 and ranked amongst the strongest on record, similar to the events in 1982-83 and 1997-98. In recent months El Niño has declined and sea-surface temperatures in the tropical East Pacific Ocean will continue to fall in the coming months. Several seasonal prediction systems, including the Met Office system, give a high probability for the development of La Niña conditions by the end of the forecast period. La Niña is the counterpart to El Niño, and is marked by lower-than-normal sea-surface temperatures in the equatorial East Pacific Ocean. Historically, there is a tendency for La Niña events to develop after strong El Niño events, and while there is some uncertainty over the speed and extent of the transition, there is growing evidence to suggest that a La Niña event will develop during the summer.

The effects of a developing La Niña on UK weather patterns during the coming three months are expected to be relatively subtle. However, past cases show that on average it slightly increases the chances of

westerly winds. At this time of year this tends to bring near- or below-average temperatures to the UK.

In the North Atlantic Ocean, sea-surface temperatures in the south and west are above-average, whilst in the north and east are below-average; this pattern of sea-surface temperatures is thought to moderately increase the probability of above-average pressure over northern Europe in summer. At this time of year such a pressure pattern is often associated with above-average temperatures.

For May and May-June-July as a whole, the Met Office seasonal prediction system, along with systems from other forecast centres, shows an increased probability of lower-than-average pressure to the north of the UK and higher-than-average to the south. Despite this, and the seemingly good agreement between seasonal predictions systems, the signal is only small, so the chances of above- and below-average temperatures are approximately similar. This can be seen in both the graphs in figure T2 which show only a slight shift in probability towards above-average temperatures.

Fig T1

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

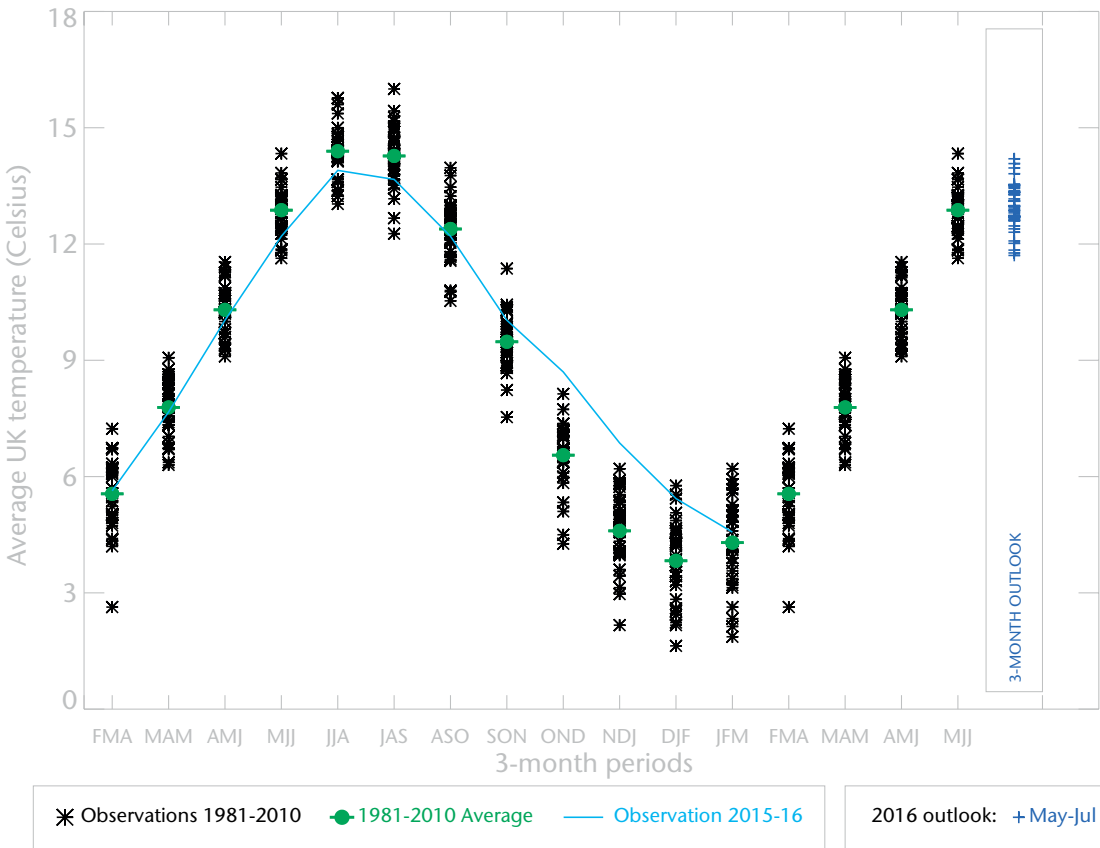


Fig T2

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

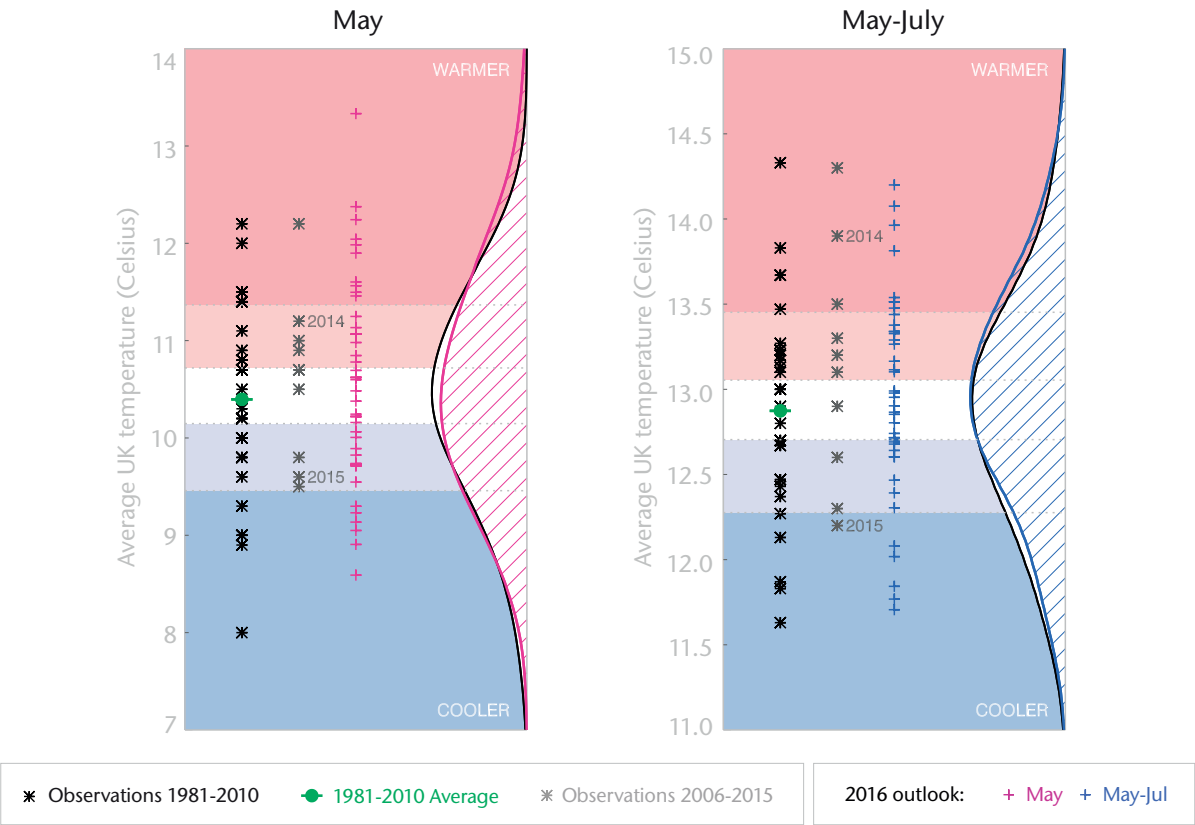
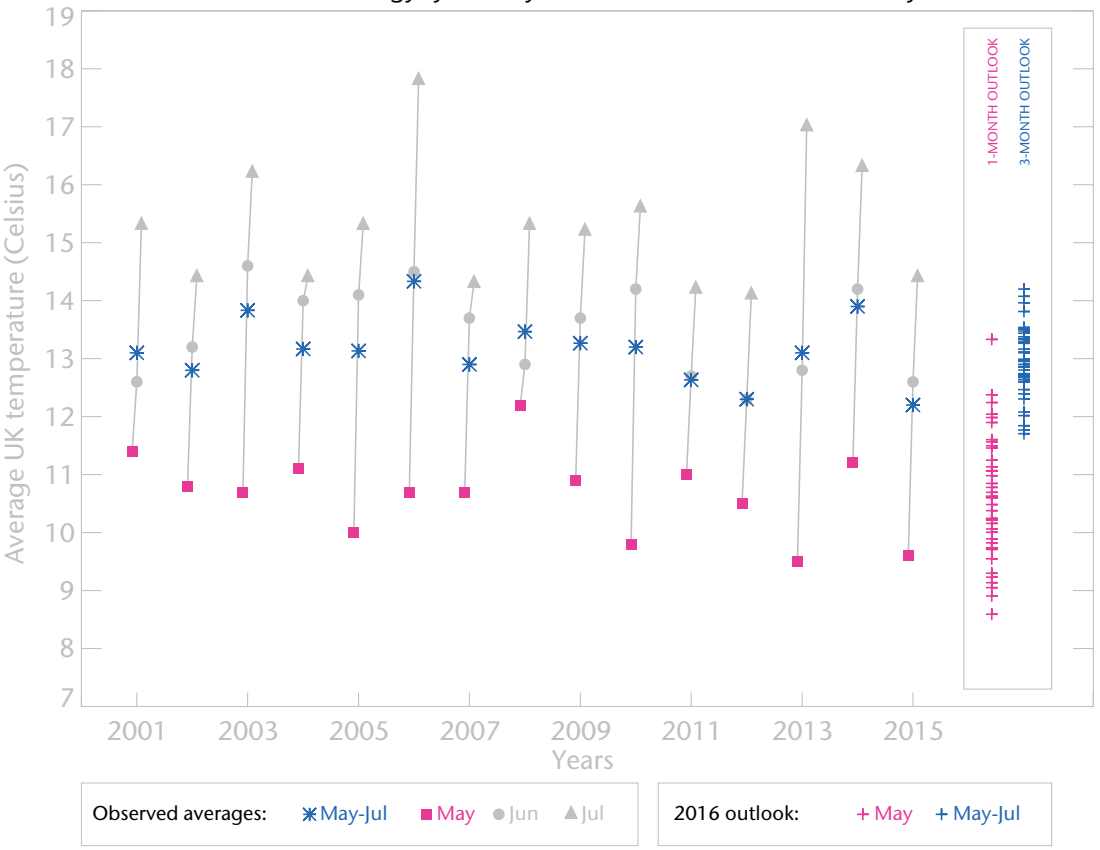


Fig T3

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.