



Met Office

Met Office 3-month Outlook

Period: July– September 2016 Issue date: 24.06.16

The forecast presented here is for July and the average of the July-August-September period for the United Kingdom as a whole. The forecast for July will be superseded by the long-range information on the public weather forecast web page (www.metoffice.gov.uk/public/weather/forecast/#?tab=regionalForecast), starting from 30 June 2016. This forecast is based on information from observations, several numerical forecast systems and expert judgement.

SUMMARY – TEMPERATURE:

For July, near-normal temperatures are slightly more likely than either above- or below-normal temperatures. For July-August-September, above-average temperatures are more probable than below-average values, though the size of the shift in probability is relatively small. Overall, the probability that the UK-mean temperature for July-August-September 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 around 25% (the 1981-2010 probability for each of these categories is 20%).

CONTEXT:

Sea surface temperatures across the tropical Central and Eastern Pacific continued to cool through May, bringing the strong El Niño to an end. El Niño peaked in late 2015 and ranked amongst the strongest events on record, similar to the events in 1982-83 and 1997-98. The majority of long-range forecast systems, including the Met Office system, signal the cooling trend to continue with a high probability for the development of La Niña conditions by the end of the Northern Hemisphere summer. There is some uncertainty in how quickly La Niña conditions will develop, and also how pronounced any event will be.

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. The effects of a developing La Niña on UK weather patterns during the coming three months are expected to be relatively subtle. Previous cases have shown a slight increase in the occurrence of westerly winds across the UK compared to average.

In the North Atlantic Ocean, sea surface temperatures in the central North Atlantic remain below normal. To the north and west of the UK however, marine temperatures are above average, likely as a result of the warm and settled spell experienced across these areas during May and early June. This additional warmth will act to moderate any cooling influence from further west. As suggested above, global influences on the weather across the UK during this period are expected to be fairly weak. The Met Office forecast system, and systems from other centres around the world, do agree on an increased likelihood of higher pressure to the west, or south-west of the UK, which would moderately increase the chances of winds from the west. In July this is consistent with the increased chance of near-normal temperatures highlighted above (see also Fig. T2). For the period July-August-September, forecast systems suggest a slightly increased chance of anticyclonic conditions and winds from the south-west. These factors favour above-average temperatures, rather than below, although the size of this shift is relatively small.

Fig T1

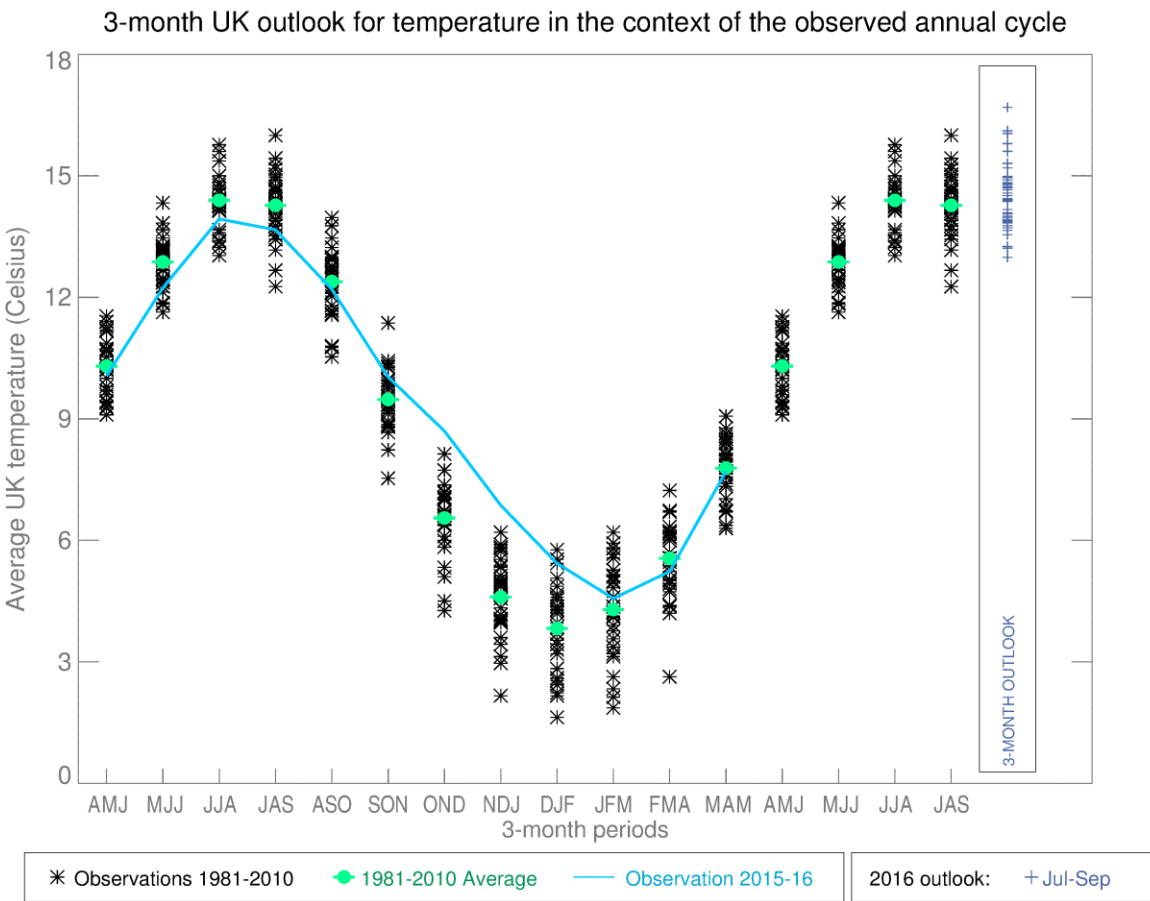


Fig T2

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

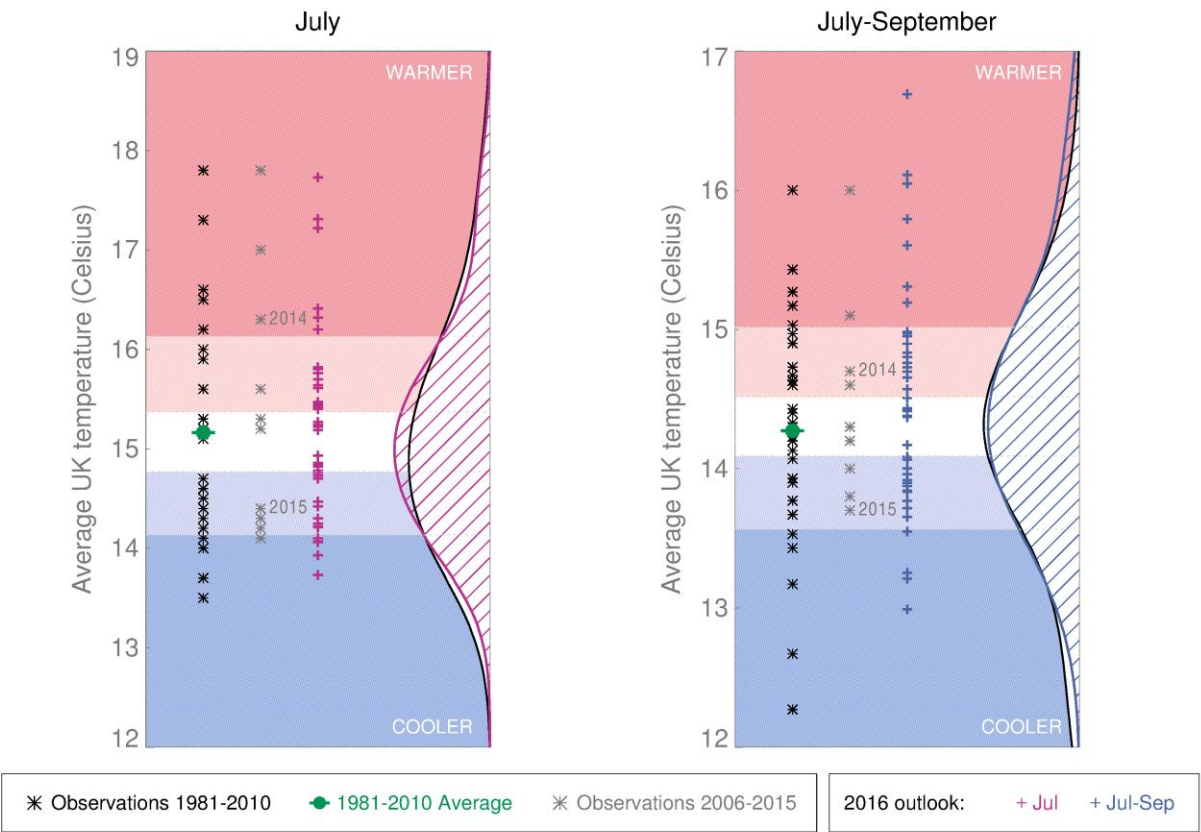
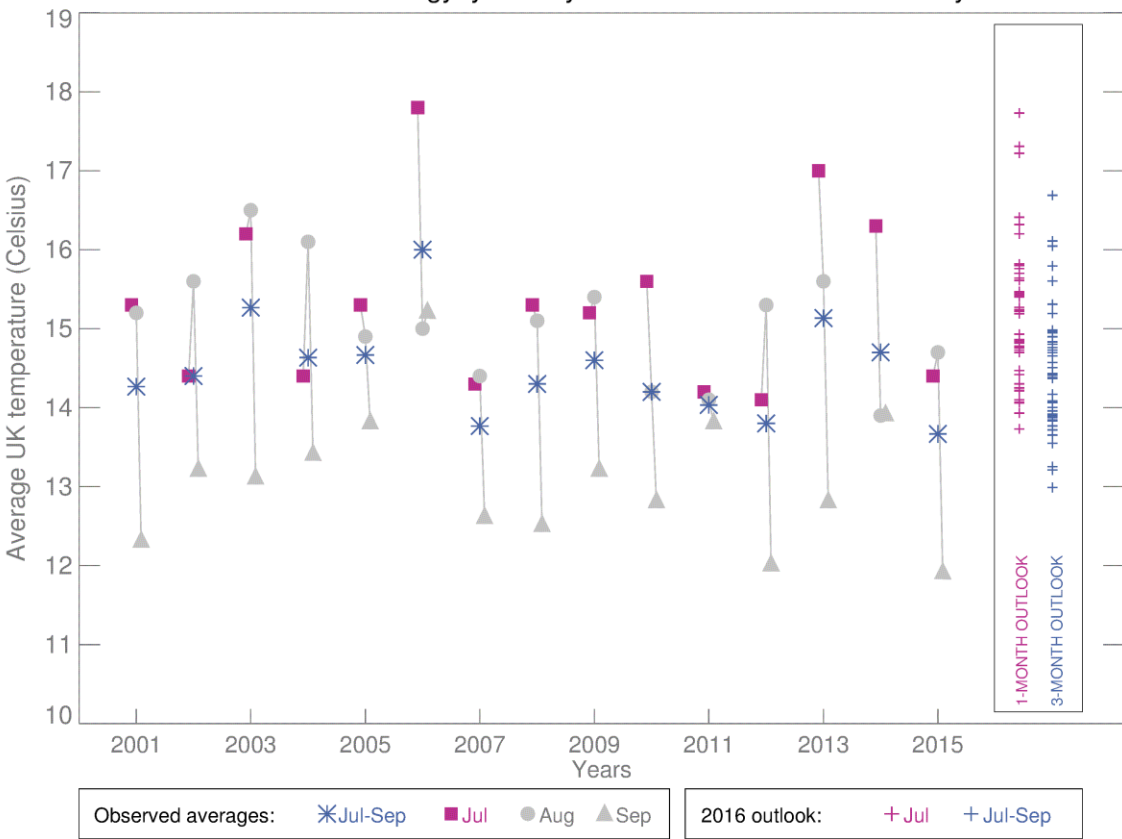


Fig T3

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.