



Met Office

# Met Office 3-month Outlook

Period: June – August 2012 Issue date: 23.05.12

The forecast presented here is for June and the average of the June-July-August period for the United Kingdom as a whole. This forecast is based on information from observations, several numerical models and expert judgement.

## SUMMARY - TEMPERATURE:

Relative to summer-time UK temperatures recorded in the last decade, forecasts for June and for June-July-August 2012 both favour outcomes at the cooler end of the range, but still warmer than the 1971-2000 climatology.

Although ‘heatwaves’ are certainly possible during summer 2012, the probability of the UK experiencing protracted hot spells comparable to those seen in the hot summers of 2003 and 2006 appears to be low.

The probability that the UK-mean temperature for June-July-August will fall into the coldest of our five categories is 5-10%, whilst the probability that it will fall into the warmest of our five categories is around 20% (the 1971-2000 climatological probability for each of these categories is 20%).

## CONTEXT:

The state of the Earth’s surface can exert an important influence on the atmosphere. In summer, soil moisture in particular can affect cloudiness, temperature and rainfall. At present soil moisture levels across the UK and the near continent are relatively high, due to an exceptionally wet April, which slightly reduces the likelihood of hot, dry weather in the near future. Sea temperature patterns across the North Atlantic also slightly favour increased cloudiness and suppressed temperatures over the UK.

The La Niña event that has influenced the world’s weather for the last two years has finally decayed and the upcoming months are promising either neutral or weak El Niño conditions. At the current time signals are not strong enough to provide any assistance with long-range forecasts for the UK.

Atmospheric circulation patterns around the UK are crucial for determining our weather, and at present computer models do not show any particularly strong circulation signals, for any of the

summer months. This could be for several reasons, such as an intrinsic lack of predictability, or because the summer as a whole will be rather ‘average’ with some fine, very warm spells, but also some periods of cooler and more unsettled weather.

The slight shift of the forecast probability curves on the two panels on Figure T2 (pink and blue) towards the warm side of the 1971-2000 climatological range (black curves) is consistent with climate warming. However note also that the forecast points lie somewhat towards the cooler end of the range of values experienced in the last decade (grey stars). Indeed many of the forecast points have temperatures comparable to last year, which, for June-July-August, was actually the coolest since 1993.

Our forecast suggests that the risk of heatwaves this year is no different from normal. Ordinarily the greatest risk of heatwaves occurring in the UK is in July and August.

Fig T1

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

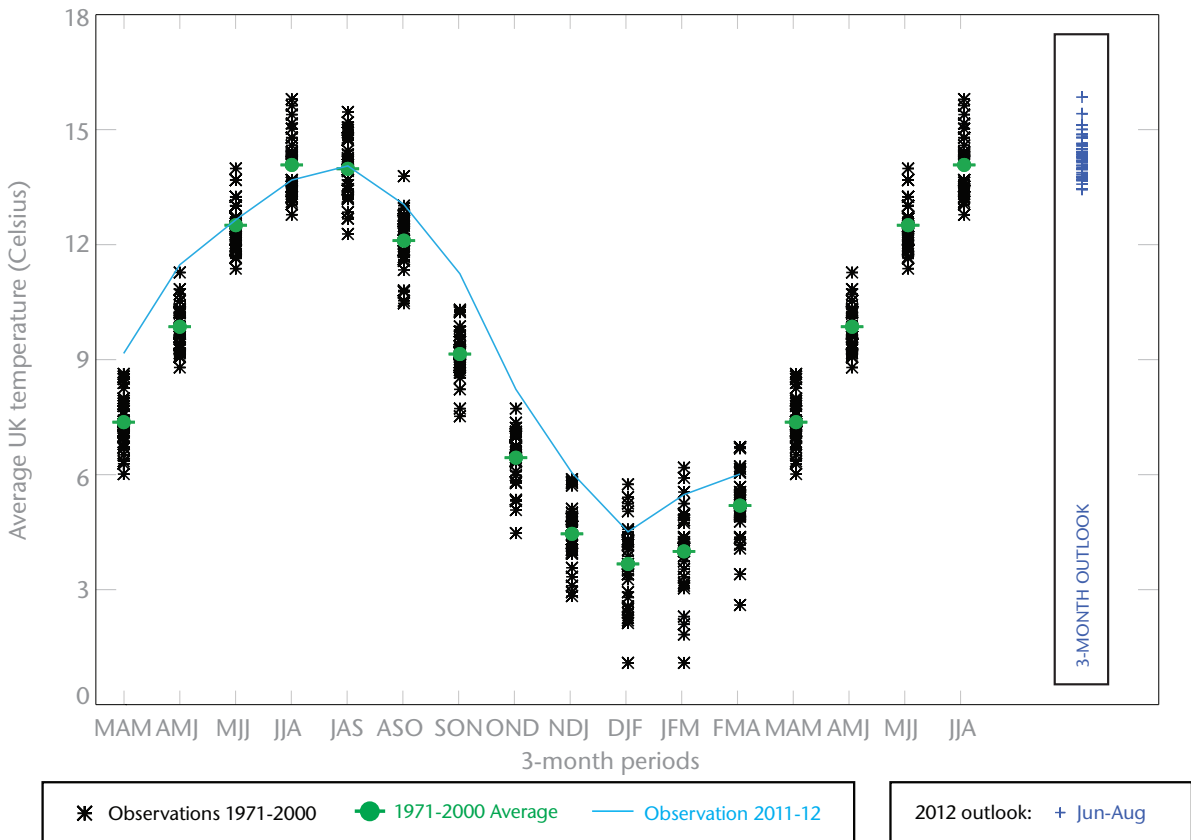


Fig T2

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

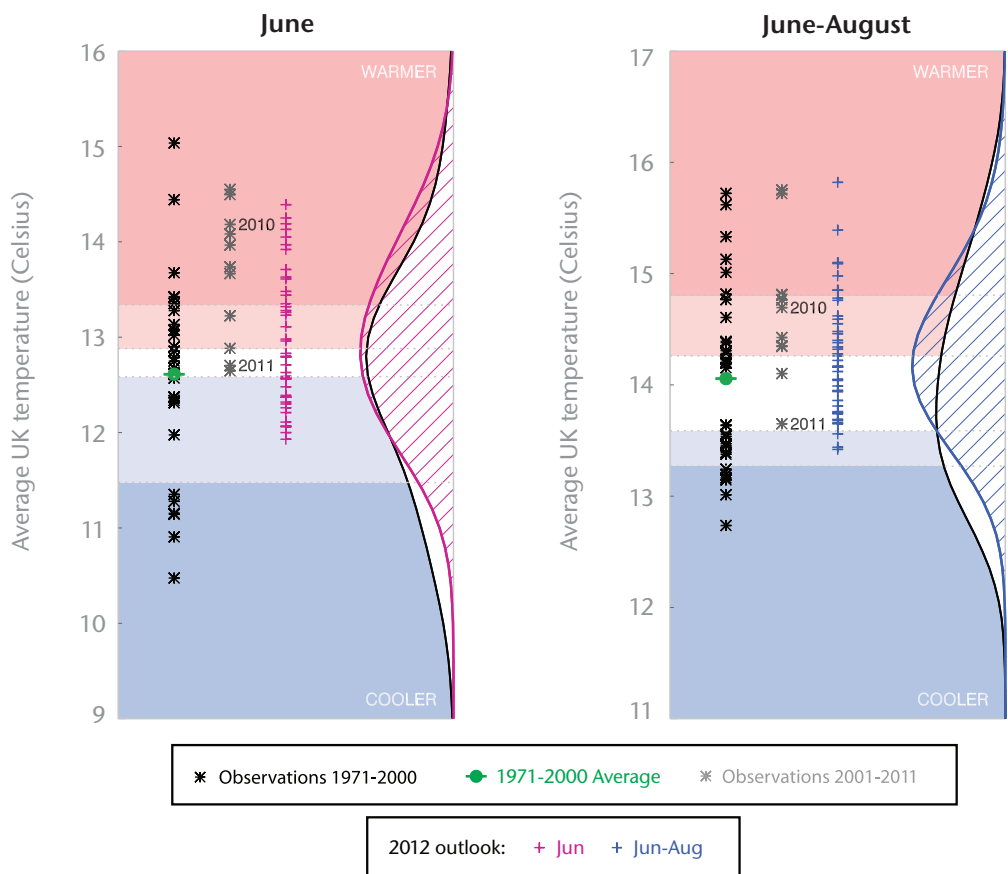
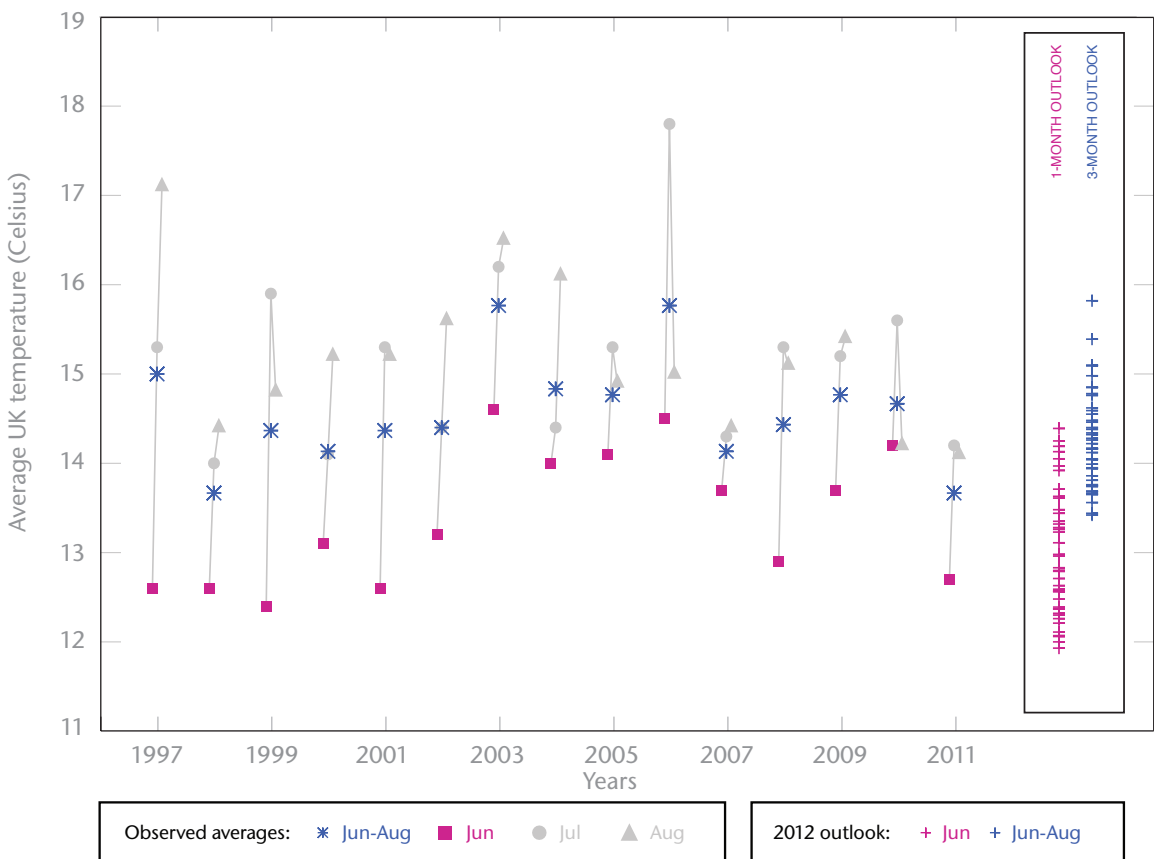


Fig T3

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.