



Met Office 3-month Outlook

Period: July - September 2015 Issue date: 24.06.15

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 The forecast for July will be superseded by the long-range information on the public weather forecast web page (www.metoffice.gov.uk/public/weather/forecast/#?tab=regionalForecast), starting from 3 July 2015.

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

SUMMARY - TEMPERATURE:

The latest predictions for UK-mean temperature for both July and July-August-September as a whole are largely indistinguishable from climatology.

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

CONTEXT:

During recent months El Niño conditions have become established across the tropical Pacific Ocean. Further warming of sea surface temperatures has taken place during recent weeks with the largest anomalies near the coast of South America. Other factors, such as weaker trade winds and increased cloudiness near the International Date Line, suggest that the atmosphere and ocean have coupled and are reinforcing each other leaving El Niño significantly more likely than not to both intensify and persist through the rest of this summer onwards into the autumn. At the very least a moderate El Niño event with the largest anomalies over the eastern Pacific is expected. However, it is worth noting that El Niño is not known to have a significant influence on weather conditions across northern Europe during the summer and early autumn.

Closer to home, sea surface temperatures across the northeastern Atlantic south of Greenland and Iceland and west of Scotland remain below average. Persistent sea surface temperature anomalies in this area can have some impact on weather conditions over parts of Europe and Africa during the summer: cooler-than-average sea surface temperatures are thought to increase the probability of above-average atmospheric pressure which at this time of year often leads to above-average temperatures, at least by day.

Computer model signals are remarkably consistent in showing higher-than-average pressure likely dominating across a large part of Europe through the rest of this summer and the early autumn. This leaves a strong signal for above-average temperatures across central and southern Europe for both July and July-August-September as a whole.

However, for the UK things are less clear-cut; the position of the British Isles in relation to areas of high pressure is key to the magnitude of temperature. High pressure centred south of Britain would allow an Atlantic influence to be exerted and leave temperature in many regions lower than if high pressure was centred over northern Europe allowing higher temperatures from central and southern Europe to spread into the UK. This uncertainty leaves southern and eastern UK with the best chance of seeing spells of above-average temperatures during the rest of this summer.

This uncertainty is reflected in the graphs for mean temperature shown in T2 which show a relatively broad forecast distribution which is similar to climatology.

It is also worth noting that even average or below-average mean temperatures could come about as a result of colder-than-average nights and warmer-than-average days. This means that average temperatures should not be taken as a sign of an absence of spells of pleasantly warm weather.

Fig T1

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

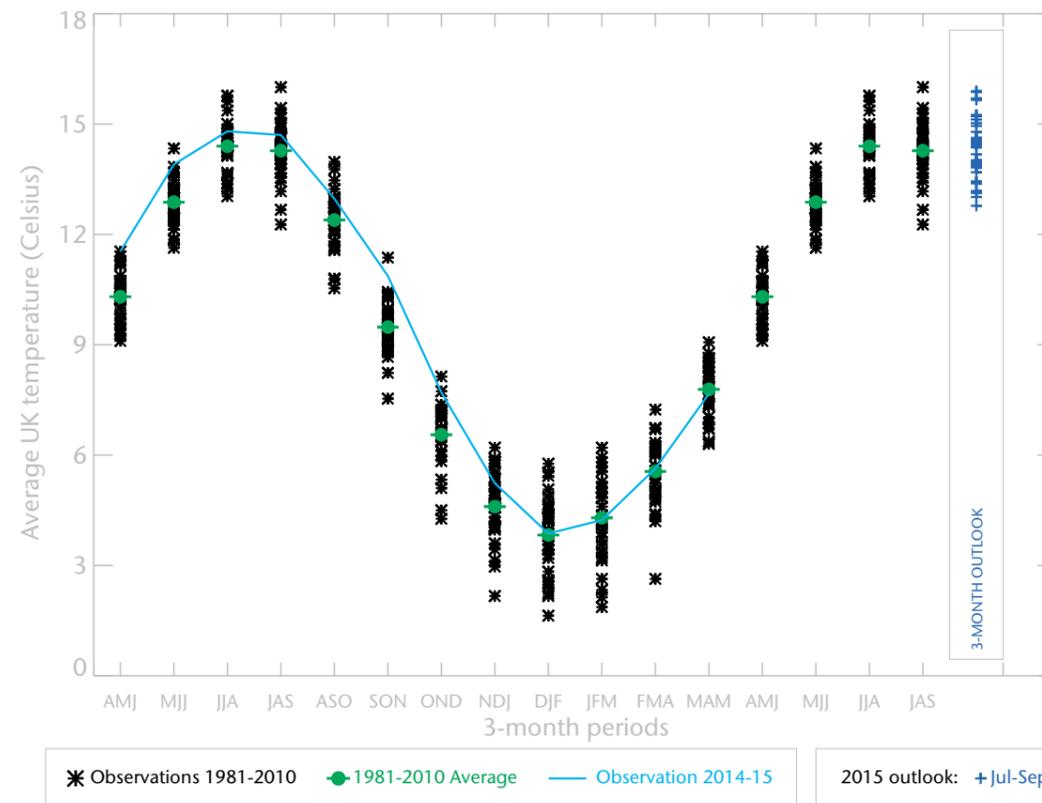


Fig T2

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

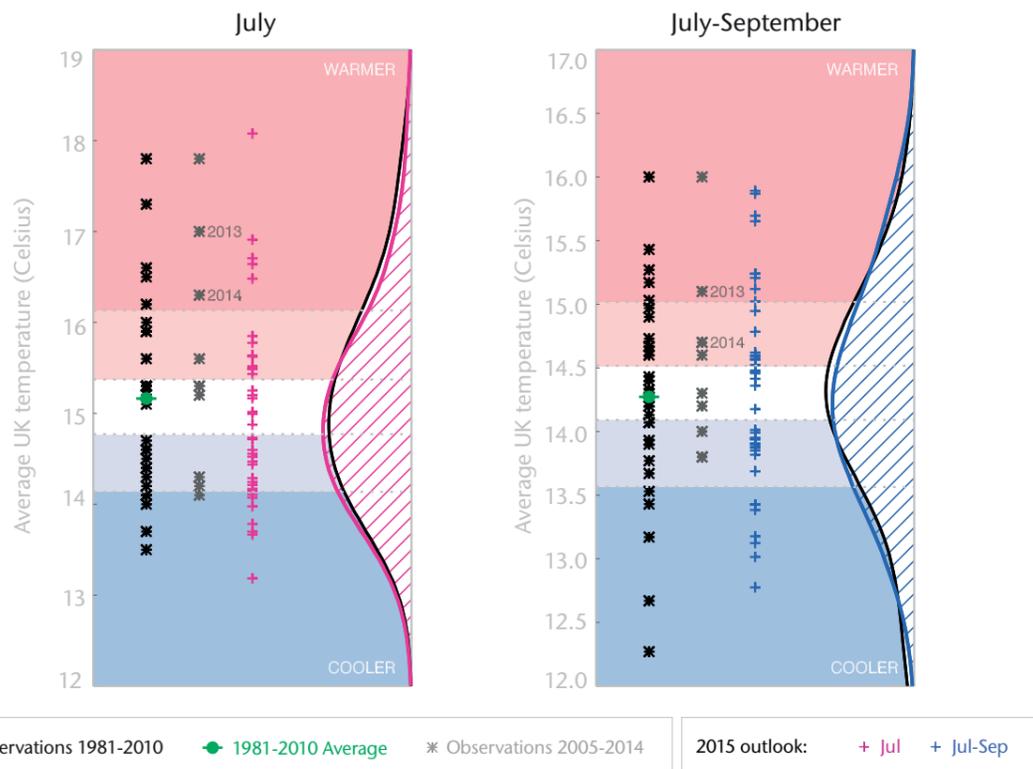
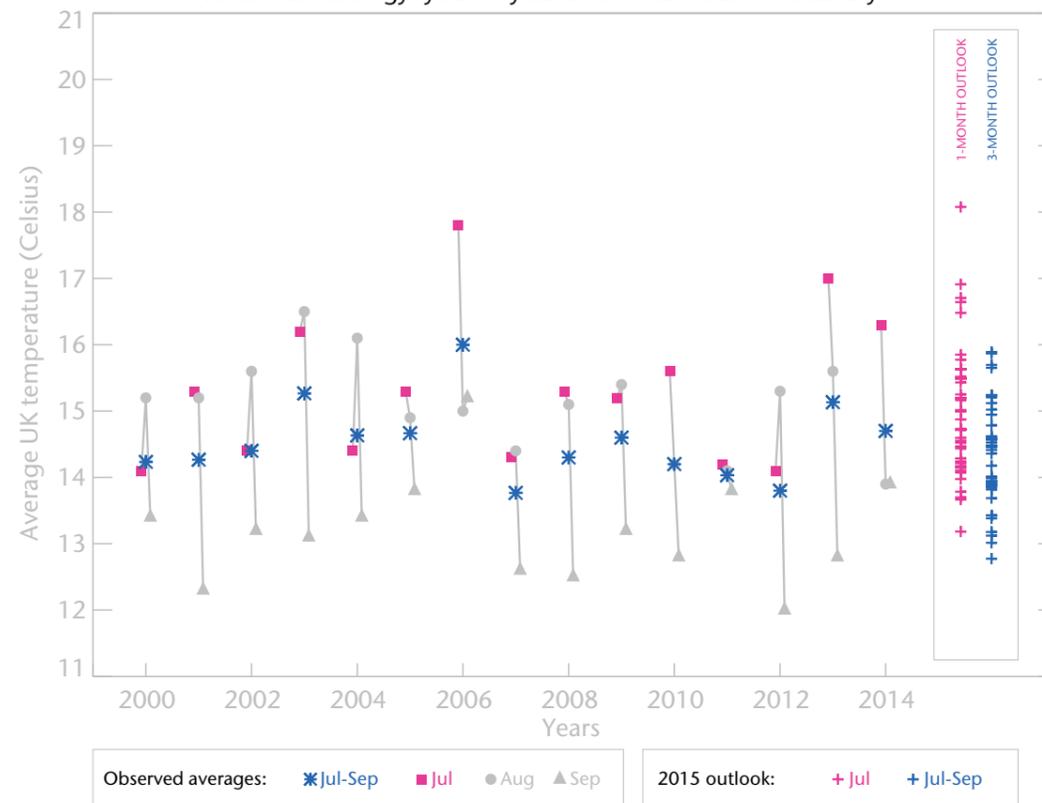


Fig T3

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.