



Met Office

Met Office 3-month Outlook

Period: October-December 2014 Issue date: 24.09.14

The forecast presented here is for October and the average of the October-November-December period for the United Kingdom as a whole. The forecast for October will be superseded by the long-range information on the public weather forecast web page (www.metoffice.gov.uk/public/weather/forecast/#?tab=regionalForecast), starting from 3 October 2014.

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

SUMMARY - TEMPERATURE:

The latest predictions for UK-mean temperature favour above-average temperatures for both October and October-November-December as a whole.

Overall, the probability that the UK-mean temperature for October-November-December will fall into the warmest of our five categories is around 35% and the probability of falling into the coldest of our five categories is close to 10% (the 1981-2010 probability for each of these categories is 20%).

CONTEXT:

After returning to nearer normal values during late summer, sea surface temperatures across much of the tropical Pacific, particularly west of the International Date Line, have started warming again. Computer models and expert opinion continue to suggest that there remains a chance of an El Niño event becoming established by the end of the year. A weak event remains then most likely, though there is also a chance that El Niño conditions will not become established at all. Either way, with El Niño conditions not yet established this factor is not expected to exert an influence on weather patterns in Europe during the next three months.

Of other potential drivers of large-scale seasonal variability at this time of year it is worth noting that whilst Arctic Sea ice extent is both at its annual minimum and substantially lower than what is climatologically usual, there are no clear indications of its influence on UK weather. Sea surface temperatures remain above average across the western side of the North Atlantic. During early autumn the predicted jet stream intensity and position over the Atlantic leaves the UK a little more likely than usual to be under the influence of areas of high pressure and thus episodes of settled weather.

Later in the autumn, computer models show remarkable similarity in showing a transition to a much more cyclonic regime developing across the Atlantic and northwestern Europe from mid-October onwards through November and into December. This suggests a greater frequency of episodes of unsettled weather relative to climatology.

As autumn is a transitional time of year, it is worth noting that a given circulation pattern can result in very different temperature outcomes between early and late autumn. For example, settled weather in early October would usually lead to above-average daytime temperatures but a similar pattern in November or December would likely result in colder than average conditions. Conversely, a particularly unsettled weather pattern can also produce very mild conditions, especially by night, from late October. This is particularly so when there are positive sea surface temperature anomalies around British waters, as is currently the case.

Consequently, with settled conditions more likely than not early in the forecast period and more unsettled synoptic types considered more likely than not to dominate from later in October, above-average temperatures are favoured (Figure T2).

Fig T1

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

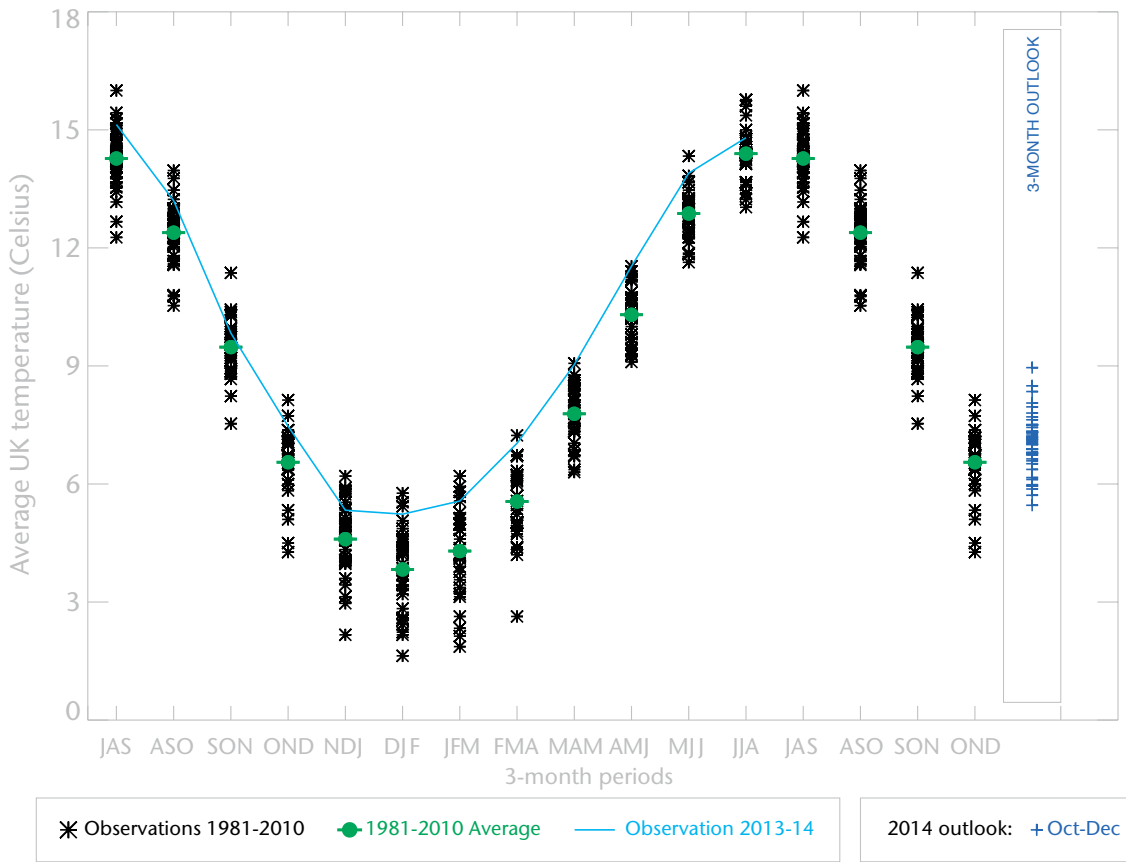


Fig T2

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

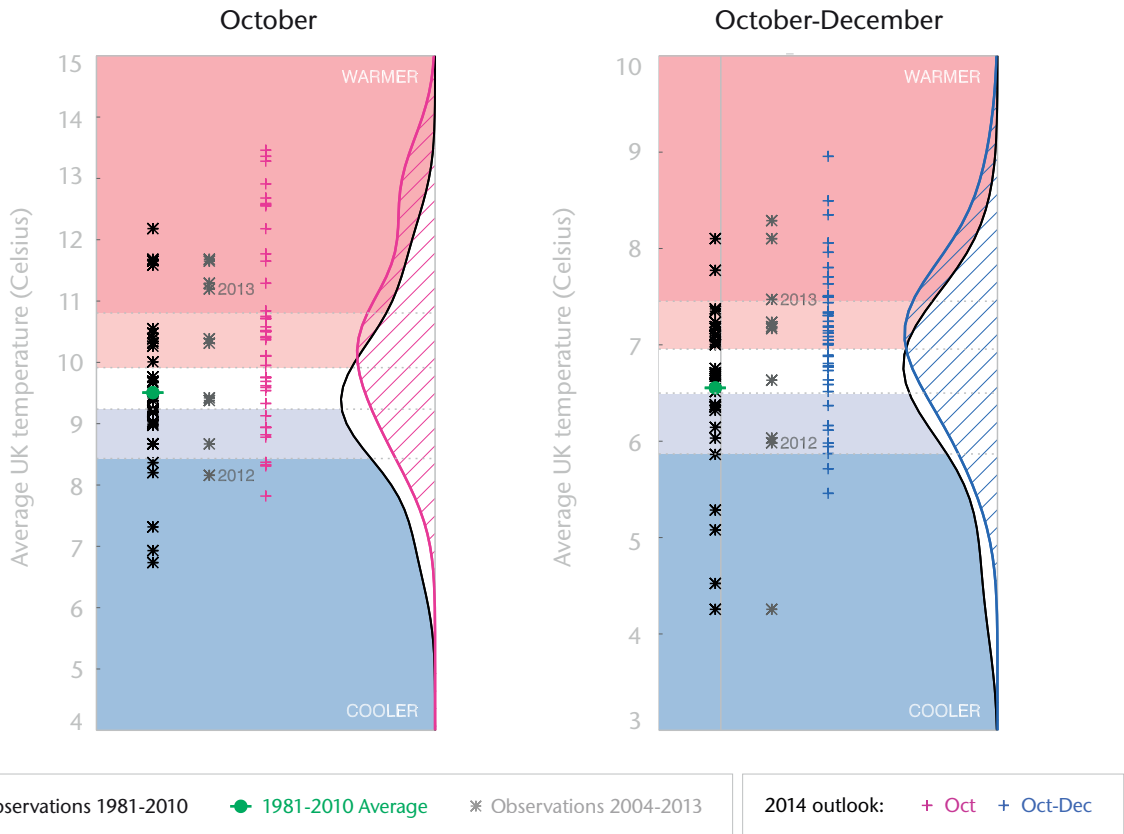
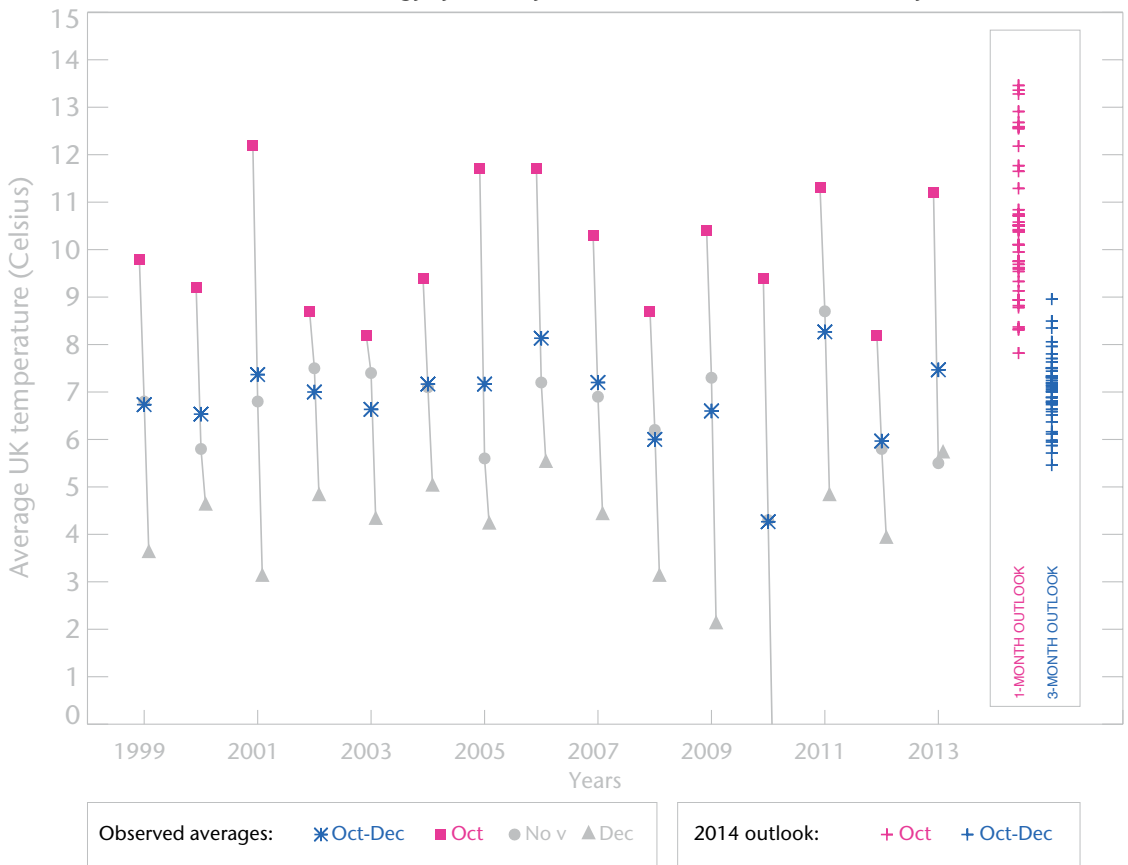


Fig T3

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.