# Met Office 3-month Outlook

Period: October – December 2020  Issue date: 25.09.20

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 The forecast for October will be superseded by the long-range information on the public weather forecast web page (www.metoffice.gov.uk/public/weather/forecast/#?tab=regionalForecast), starting from 2nd October 2020.

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

**SUMMARY – TEMPERATURE:**

For October and October-November-December as a whole, above-average temperatures are more likely than below-average temperatures.

Overall, the probability that the UK-average temperature for October-November-December will fall into the coldest of our five categories is 15% and the probability it will fall into the warmest of our five categories is 30% (the 1981-2010 probability for each of these categories is 20%).

**CONTEXT:**

Global drivers of UK weather, such as the El Niño-Southern Oscillation (ENSO), become more influential during autumn and winter. This leads to better predictability than in summer.

A La Niña event is now underway in the tropical Pacific Ocean and is expected to be present throughout the Outlook period. La Niña is the cold counterpart to El Niño, and at this time of year it causes a greater-than-usual likelihood of northerly or northwesterly winds over the UK, leading to increased chances of below-average temperatures.

In autumn, sea temperatures at the surface of the North Atlantic Ocean reconnect with those in the layers below, allowing sub-surface features to affect the atmosphere. Currently, there is a pattern of temperatures below the surface that moderately favours westerly winds in the latter part of the Outlook period.

For both October and October-November-December as a whole, the Met Office long-range prediction system and other systems from prediction centres around the world are in good agreement on an increased likelihood of winds from the west or northwest. Climate change means UK winter temperatures in recent years have tended to be warmer than the long-term average (see graphs in figure T2). La Niña's influence increases the chance that this warming effect will be offset. This makes the probability of below-average temperatures higher than in equivalent outlooks in recent years and only moderately smaller than the average probability in long-term records.

Fig T1

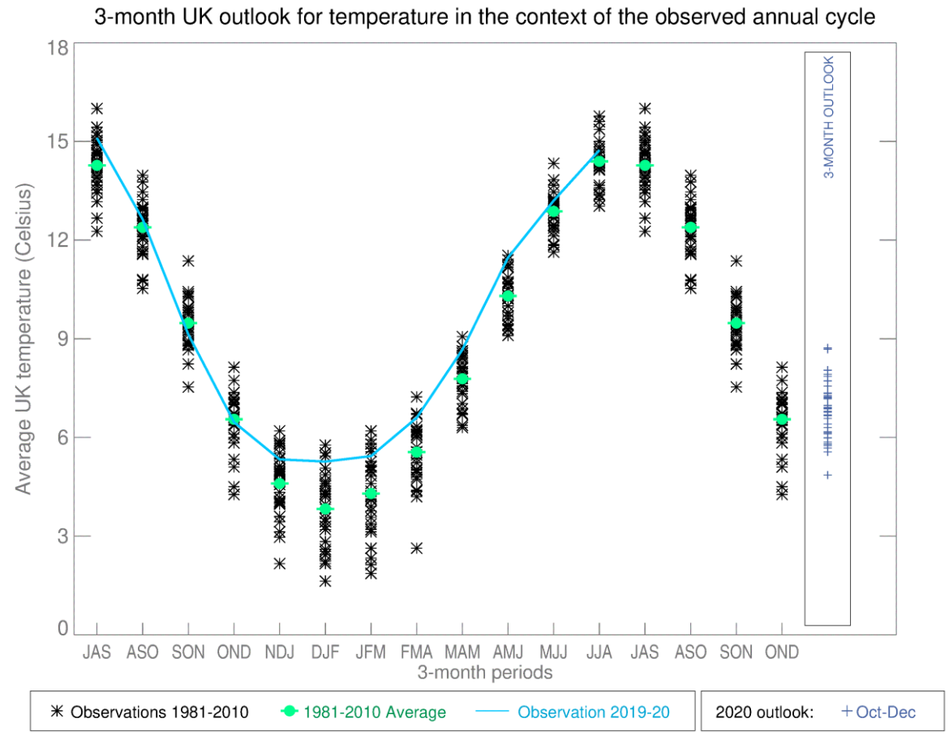



Fig T2

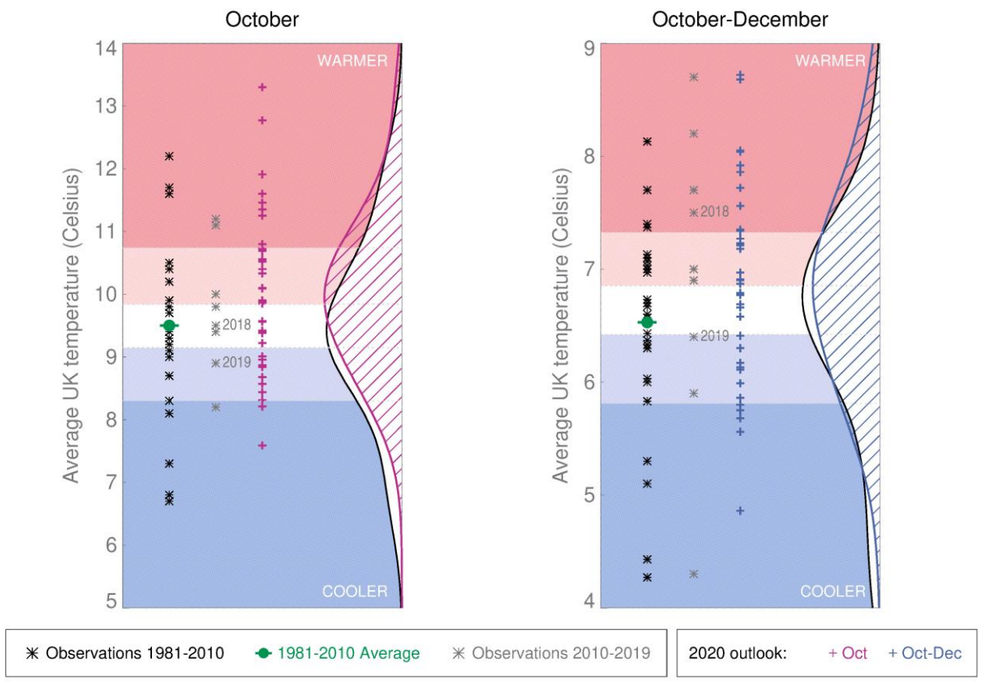
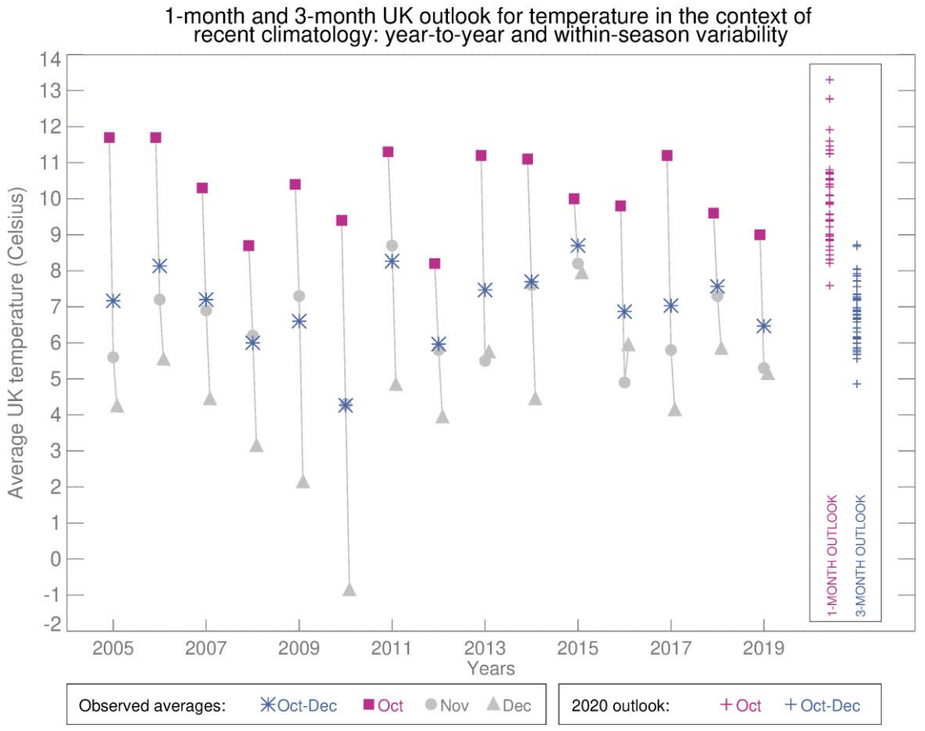



Fig T3




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-7-day) forecasts and warnings available to the contingency planning community from the Met Office.