



Met Office 3-month Outlook

Period: November 2019 – January 2020 Issue date: 24.10.19

The forecast presented here is for November and the average of the November-December-January period for the United Kingdom as a whole. The forecast for November will be superseded by the long-range information on the public weather forecast web page (www.metoffice.gov.uk/public/weather/forecast/#?tab=regionalForecast), starting from 1st November 2019.

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

SUMMARY – TEMPERATURE:

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

Overall, the probability that the UK-average temperature for November-December-January will fall into the coldest of our five categories is around 5% and the probability that it will fall into the warmest of our five categories is between 50% and 55% (the 1981-2010 probability for each of these categories is 20%).

CONTEXT:

The El Niño-Southern Oscillation (ENSO) is currently in a neutral phase, with very little likelihood of a significant El Niño or La Niña event developing during the outlook period. It is therefore not expected to have any influence on UK weather patterns.

The Indian Ocean Dipole (IOD) is currently in a near-record positive phase, with warmer-than-average sea surface temperatures in the western part of the Tropical Indian Ocean and cooler-than-average temperatures in the east. The IOD is disrupting rainfall patterns in the Tropics, which in turn exerts an influence on the European region, increasing the chances of mild westerly winds during the outlook period.

Sub-surface temperatures in the North Atlantic Ocean typically reconnect with the surface at this time of year. Currently, sub-surface conditions favour the emergence of surface patterns that moderately increase the chances of more frequent westerly winds from the Atlantic and milder-than-average conditions.

For November, long-range forecast systems show greater-than-usual chances of high pressure in the European region. There is less agreement on its likely location, however, and this increases

uncertainty in temperatures in this period. Overall, however, with the contribution from global warming the likelihood of above-average temperatures is greater than the likelihood of below-average temperatures (see left-hand graph of figure T2).

For November-December-January, the Met Office long-range forecast system and systems from other centres around the world show good agreement on an increased likelihood of mild westerly winds crossing the UK. Along with the warming of climate, this contributes to an increase in the chances of above-average temperatures (see right-hand graph of figure T2). Note that below-average temperatures remain possible, although less likely. The relatively high probability of our warmest category does not imply extreme or unseasonal temperatures throughout the 3-month period. Indeed, the outlook does not identify weather for a particular day or week. The increased likelihood of this category could mean greater chances of days with temperatures that are above average to a more modest degree. Above-average temperatures at this time of year do not imply sunny and dry conditions.

Fig T1

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

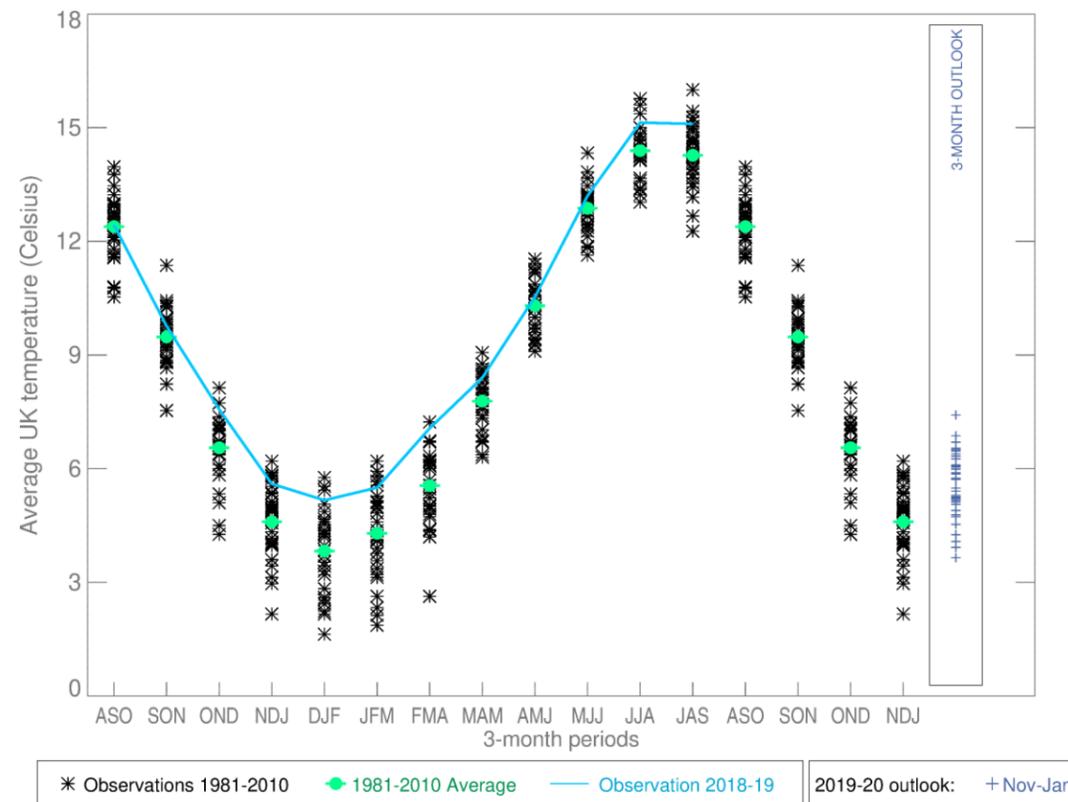


Fig T2

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

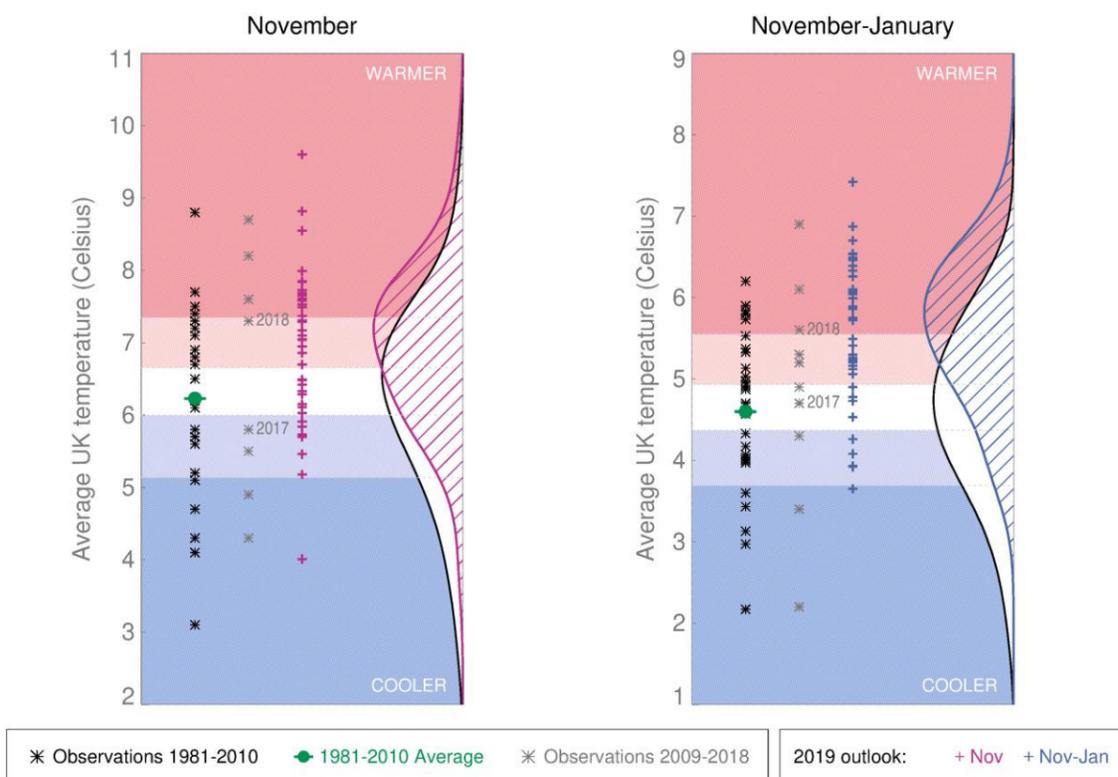
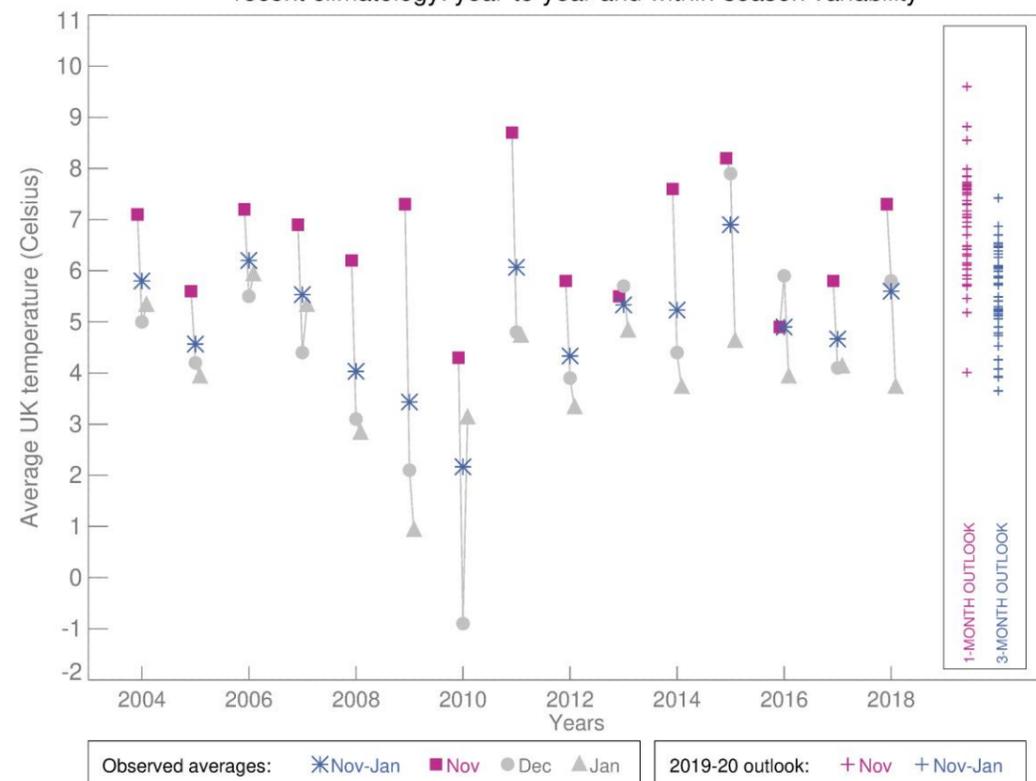


Fig T3

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