



Met Office 3-month Outlook

Period: February – April 2017 Issue date: 26.01.17

The forecast presented here is for February and the average of the February-March-April period for the United Kingdom as a whole. The forecast for February will be superseded by the long-range information on the public weather forecast web page (www.metoffice.gov.uk/public/weather/forecast/#?tab=regionalForecast), starting from 3 February 2016.

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

SUMMARY – PRECIPITATION:

During February, above-average precipitation is more probable than below-average. For February-March-April as a whole, above- and below-average precipitation are equally probable.

The probability that UK-average precipitation for February-March-April will fall into the driest of our five categories is 20% and the probability that it will fall into the wettest of our five categories is around 20% (the 1981-2010 probability for each of these categories is 20%).

CONTEXT:

As highlighted in the temperature outlook, drivers of predictability from across the globe, such as ENSO, are expected to have only a weak influence on UK weather. If a sudden stratospheric warming (SSW) were to occur, however, this would increase the chances of cold and dry conditions. Although not certain, the probability of an SSW is higher-than-normal in February.

In February, the Met Office seasonal prediction system, along with other long-range forecasting systems, has an increased probability of low pressure near the UK compared to normal, which increases the chance of wetter-than-average conditions. The left-hand graph in figure P2 highlights this, showing an increase in the chance of above-average precipitation. It should be noted, however, that the competition of weather patterns described in the temperature section

leads to greater uncertainty than usual. More incidence of blocking patterns would lead to a continuation of the relatively dry conditions that have affected the UK so far this winter. For the season as a whole (February-March-April) neither above- nor below- average precipitation is more likely than usual. The outlook for February gives the UK an above-average chance of experiencing frequent Atlantic depressions and higher-than-usual precipitation. Nevertheless, the increased chances of a sudden stratospheric warming event, which would lead to cold and dry conditions later in the season, offset this tendency in the 3-month total precipitation. This can be seen in the right hand graph of figure P2, which shows very similar probabilities in the outlook for the February to April period to the usual probabilities expected at this time of year.

Fig P1

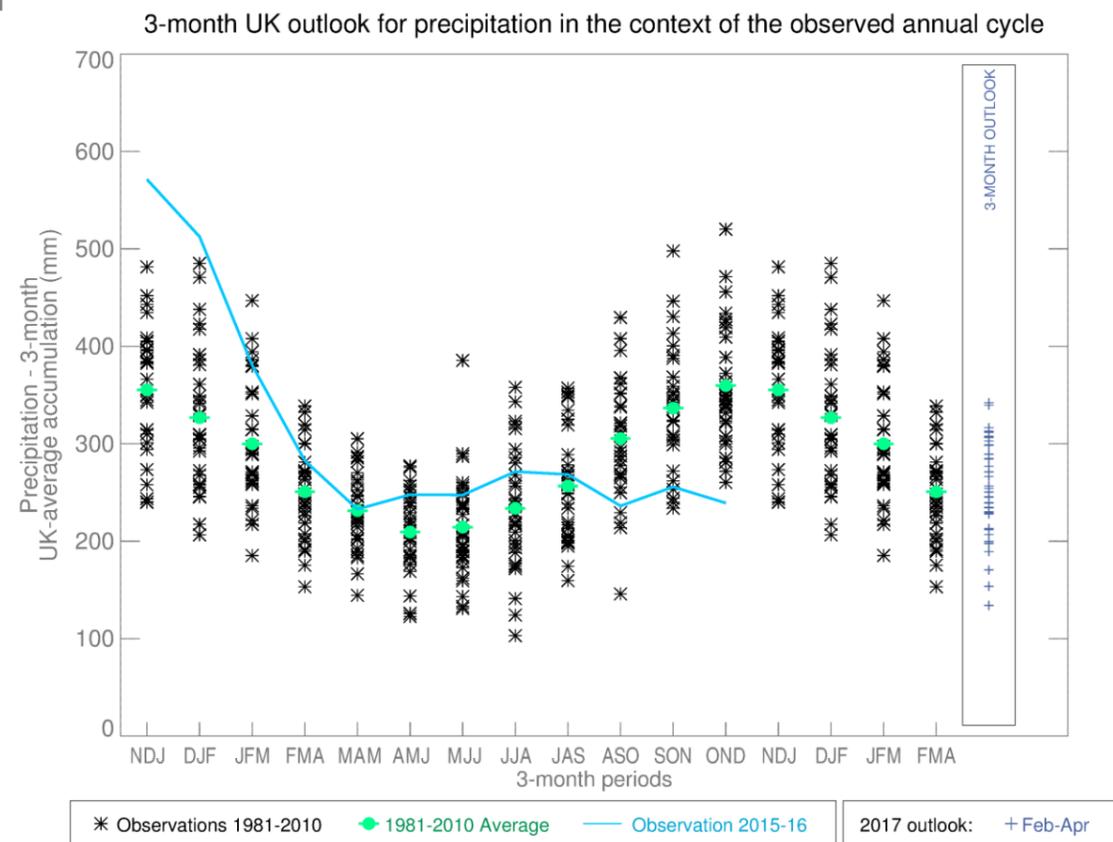


Fig P2

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

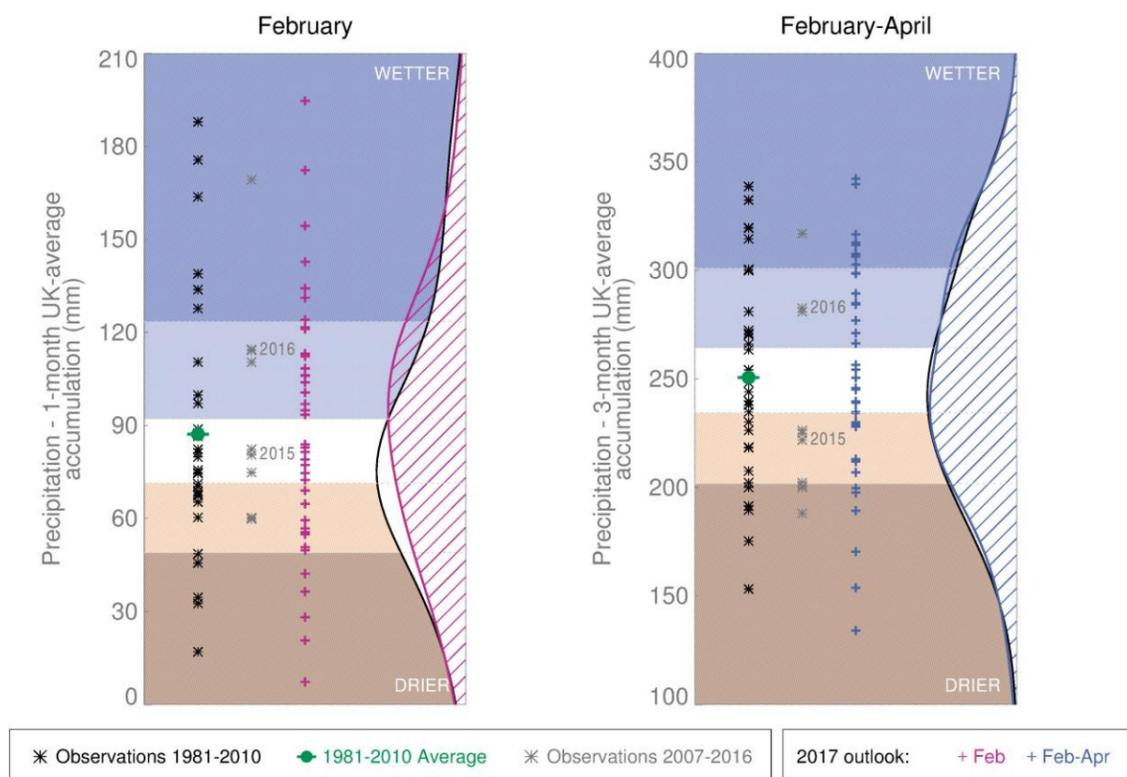
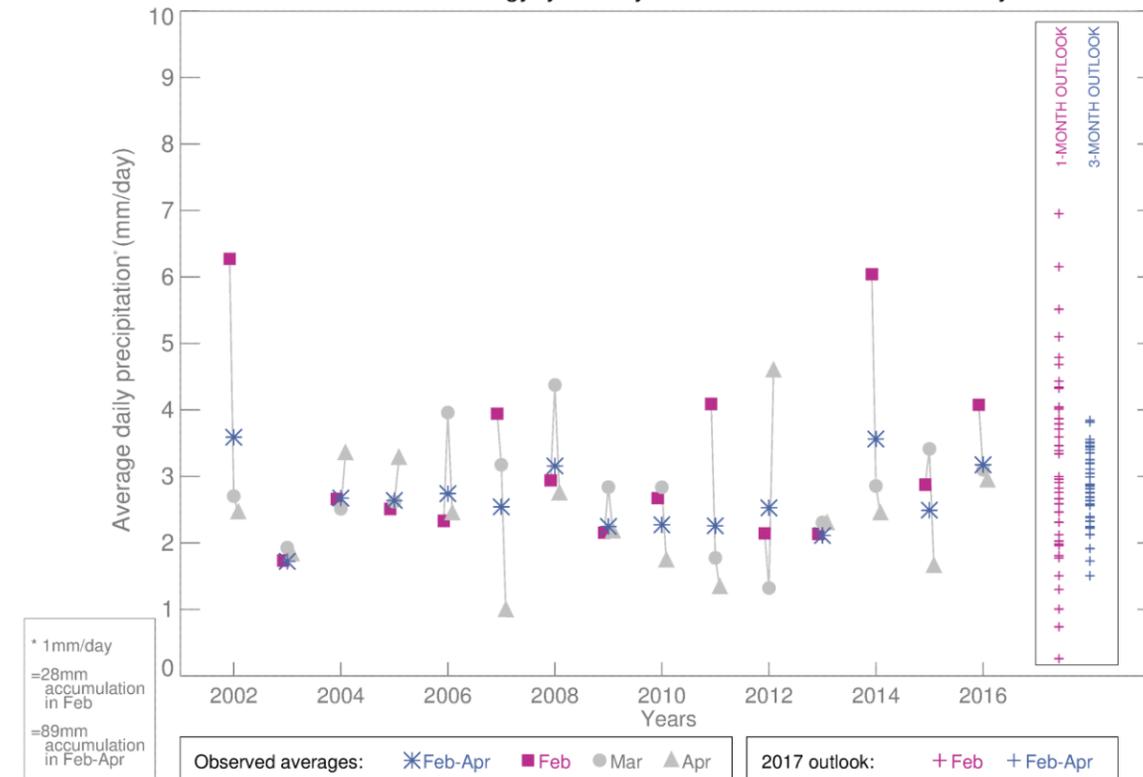


Fig P3

1-month and 3-month UK outlook for precipitation 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.