

The forecast presented here is for September and the average of the September-October-November period for the United Kingdom as a whole. The forecast for September will be superseded by the long-range information on the public weather forecast web page (www.metoffice.gov.uk/public/weather/forecast/#?tab=regionalForecast), starting from 7 September 2013. This forecast is based on information from observations, several numerical models and expert judgement.

SUMMARY - PRECIPITATION:

During September uncertainty is large, with above- and below-average rainfall both equally probable. For September-October-November as a whole the forecast signal is similar to climatology, but with slightly higher probabilities for near-average rainfall.

The probability that UK precipitation for September-October-November will fall into the driest of our five categories is around 15% and the probability that it will fall into the wettest category is around 15% (the 1981-2010 probability for each of these categories is 20%).

CONTEXT:

As discussed in the temperatures section, there is large uncertainty in the predicted atmospheric circulation pattern across northern Europe for September. This is reflected in the forecast for precipitation during September, with wet and dry outcomes both equally probable – as can be seen on the left of figure P2.

Autumn is regarded as a season of transition from summertime to wintertime weather patterns and is notorious for unsettled conditions. As cold polar air moves progressively further south, it meets warm air from the tropics, creating strong temperature gradients. Large temperature contrasts combined with a warm ocean, which has been heated throughout the spring and summer, produce the unsettled weather of autumn. Consequently Atlantic depressions typically become more intense, often carrying large amounts of moisture, making autumn generally the stormiest and

wettest time of year, as can be seen figure P1. The remnants of hurricanes moving north and east across the Atlantic can also contribute to making depressions at this time some of the most intense and wettest of the year.

For the September-October-November period there is a preference in the forecast for pressure to be higher than average across northern Europe. As noted for temperature, this is a transitional period where the association between circulation and rainfall changes through the period. Overall, the forecast is largely indistinguishable from climatology, although with a slight preference for near-average conditions. However, the slight reduction in the risk of a very wet season overall does not exclude the possibility of some periods of heavy rainfall due to the enhanced risk of stormy weather discussed above.

Fig P1

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

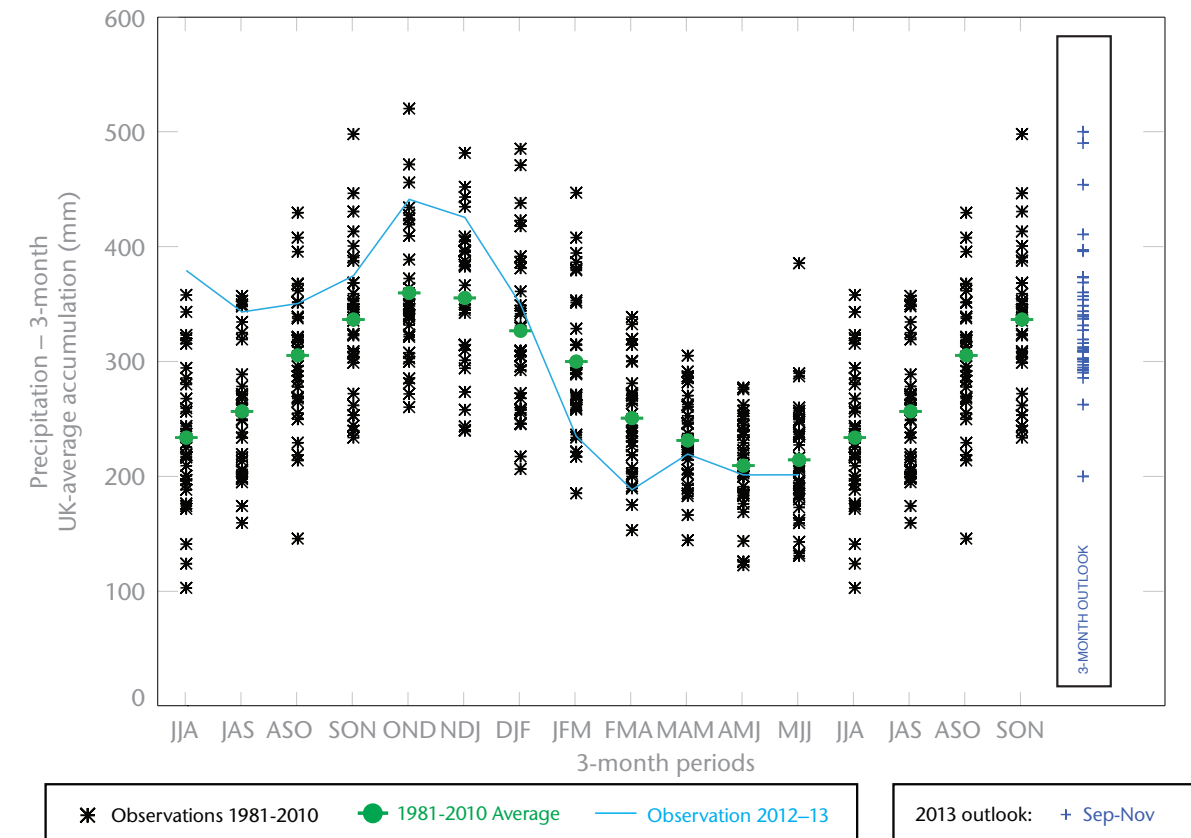


Fig P2 1-month and 3-month UK outlook for precipitation in the context of observed climatology

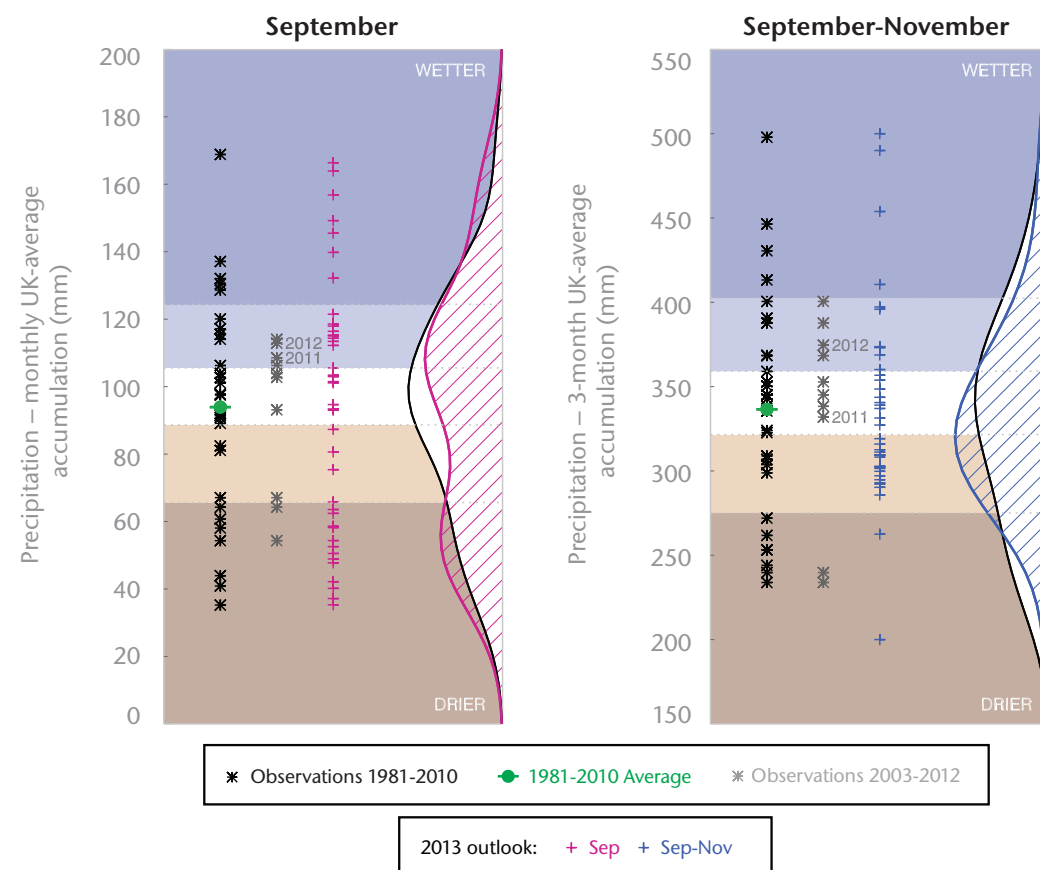
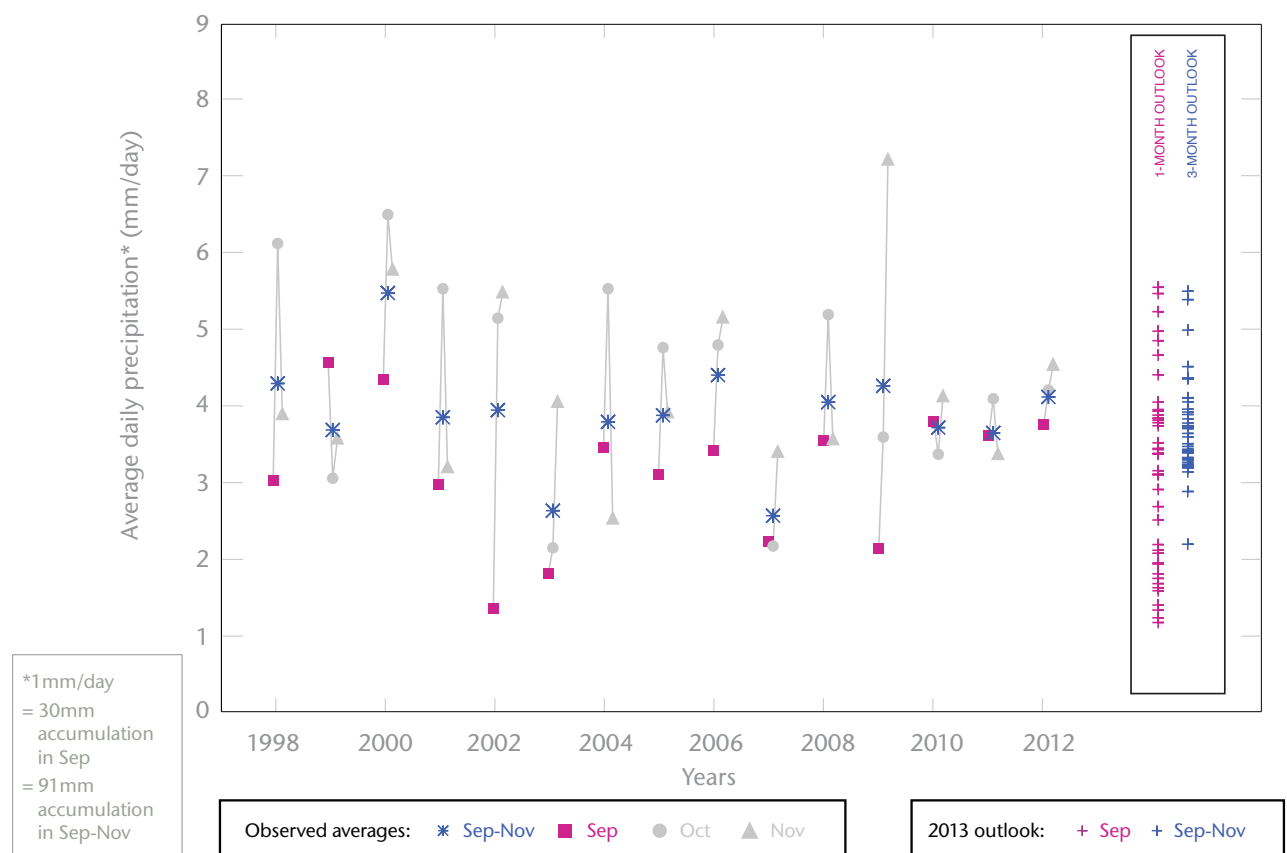


Fig P3

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.