

Monthly Climate Statement – October 2017

Key messages

- The probability of exceeding median rainfall for the coming summer is currently near-normal for much of Queensland.
- This outlook is based on sea-surface temperatures in the Pacific Ocean which are strongly related to Queensland summer rainfall.
- The outlook for summer rainfall will be updated in November to take into account any changes in sea-surface temperatures.

Summary as at 12 October 2017

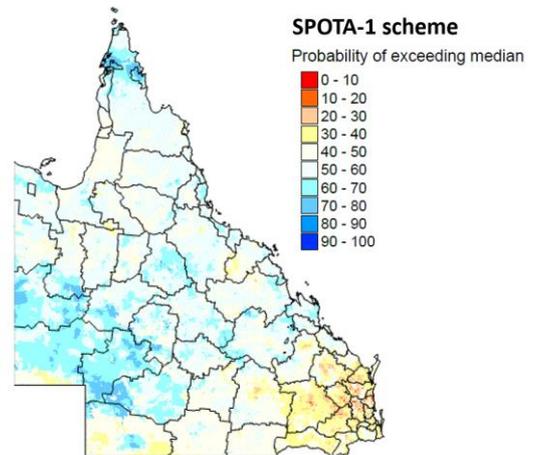
The Department of Science, Information Technology and Innovation (DSITI) monitors sea-surface temperature (SST) anomalies in key regions of the Pacific Ocean over autumn, winter and spring and provides objective outlooks for summer (November to March) rainfall on this basis. **The Science Division of DSITI considers that the probability of exceeding median rainfall for the coming summer (November to March) is currently near-normal for much of Queensland.**

Rainfall in Queensland over spring and summer is strongly influenced by the El Niño-Southern Oscillation (ENSO) — a coupled atmospheric and oceanic phenomenon which is strongly persistent at seasonal timescales. The key oceanic indicator of ENSO is the SST anomaly in the Niño 3.4 region of the Pacific Ocean. The September SST anomaly was -0.5°C , a monthly value which is on the threshold between ENSO-neutral and La Niña classifications. The Southern Oscillation Index (SOI) is the key atmospheric indicator of ENSO. The average value of the SOI over July to September was $+5.4$, a three-month value which likewise is on the threshold between ENSO-neutral and La Niña classifications.

DSITI provides outlooks for summer rainfall based on an objective analysis of Pacific Ocean SSTs. This analysis currently indicates a near-normal probability of exceeding median rainfall for the coming summer across much of Queensland (see map below). DSITI will provide a final outlook for summer rainfall in November which will take into account any changes in the Pacific Ocean SST pattern.

Probability of Exceeding Median Summer Rainfall

November 2017 – March 2018
based on the SPOTA-1 Index
as at October 1, 2017



When interpreting seasonal climate outlook information it should be appreciated that seasonal climate outlooks are probabilistic, rather than deterministic, in nature. For example, if an outlook is described as having a 70 per cent probability of exceeding median rainfall, then there will also be a 30 per cent probability of below median rainfall. Furthermore, in cases where there are high probabilities for a specified outcome, it does not mean that a less probable event will not occur.

For more information please visit the Queensland Government Long Paddock website at: www.longpaddock.qld.gov.au/seasonalclimateoutlook. Alternatively please contact Stuart Burgess at: stuart.burgess@dsiti.qld.gov.au.