

## A staged communication approach to advising Australian industry on the risk of El Niño or La Niña developing

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Communicating the development of El Niño and La Niña is often challenging due to the general misconception that transition to an event can happen rapidly, and that impacts will suddenly appear - just like flicking a switch. Additionally, the association of El Niño with drought in Australia and La Niña with floods can often complicate the message, meaning that probabilistic information is often treated as deterministic.

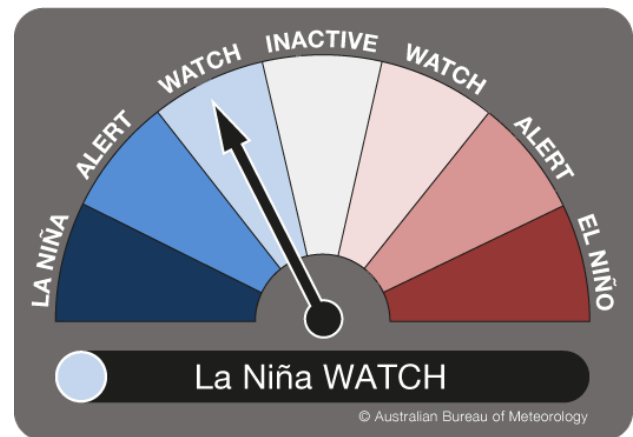
In Australia, the Bureau of Meteorology (the Bureau) is responsible for issuing updates on the current status and outlook of the El Niño-Southern Oscillation (ENSO), including declaring the onset and end of an event. To assist in the communication of ENSO as events develop, the Bureau has developed an online climate watch tool, the ENSO Outlook. This tool advises stakeholders of the potential for El Niño or La Niña development over the coming months using a staged approach (*i.e.* watch, alert, and declaration of an event as shown in Fig. 1) and includes the likelihood (percentage chance) of an event occurring.

The development and success of the tool was presented, including selection of criteria, assessment of hit and miss rate (Table 1), objectivity of the tool, and user feedback.

Visit the Bureau's ENSO Outlook service on the web: <http://www.bom.gov.au/climate/enso/outlook/>

### References

Gamble, F., A. Watkins, D. Jones, V. Webb and A. Evans, 2016: Tracking the El Niño-Southern Oscillation in real-time: A staged communication approach to event onset. *Journal of Southern Hemisphere Earth Systems Science*, submitted.



**Fig. 1** A staged approach to communication of the ENSO Outlook.

<i>Hit Rate</i>	El Niño	La Niña	<i>Miss Rate</i>	El Niño	La Niña
<b>WATCH</b>	50%	56%	<b>WATCH</b>	0%	11%
<b>ALERT</b>	71%	73%	<b>ALERT</b>	0%	0%
<b>EVENT</b>	91%	70%	<b>EVENT</b>	0%	4%

**Table 1** Hit and miss rate of ENSO Outlook based on historical analysis from January 1980 to December 2015.