Weather situation

A strong high pressure system well southeast of Tasmania is slowly moving east maintaining a ridge along the New South Wales coast.

The next low pressure trough is expected to cross the state during Thursday and Friday bringing unsettled weather conditions to most districts.

CLIMATE RISK MANAGEMENT FOR AGRICULTURE:

THE AUSTRALIAN EXPERIENCE

Australia has remarkably high year-to-year variability in both rainfall and agricultural yield.

However, a feature of this variability is that it is strongly El Niño-Southern Oscillation (ENSO) dominated.

suggesting good opportunity for use of seasonal forecasts to aid risk management, especially if based on aspects of ENSO.

However, seasonal forecasts can provide higher value to users in aiding climate risk management if integrated with agricultural simulation models and so provide more decision-relevant outputs such as agricultural yield or pasture growth rates.

El Niño likely past its peak

A number of El Niño-Southern Oscillation (ENSO) indicators suggest that the 2015-16 El Niño has peaked in recent weeks.

Tropical Pacific Ocean temperatures suggest this event is one of the top three strongest El Niño events of the past 50 years.

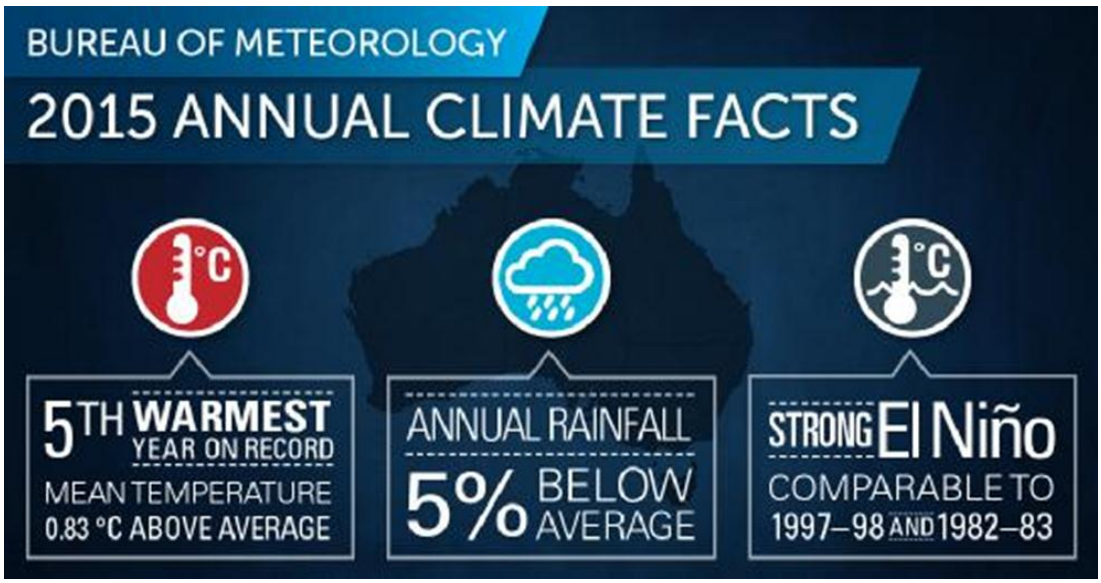
Climate models suggest the 2015-16 El Niño will decline during the coming months, with a return to ENSO neutral likely during the second quarter of 2016.

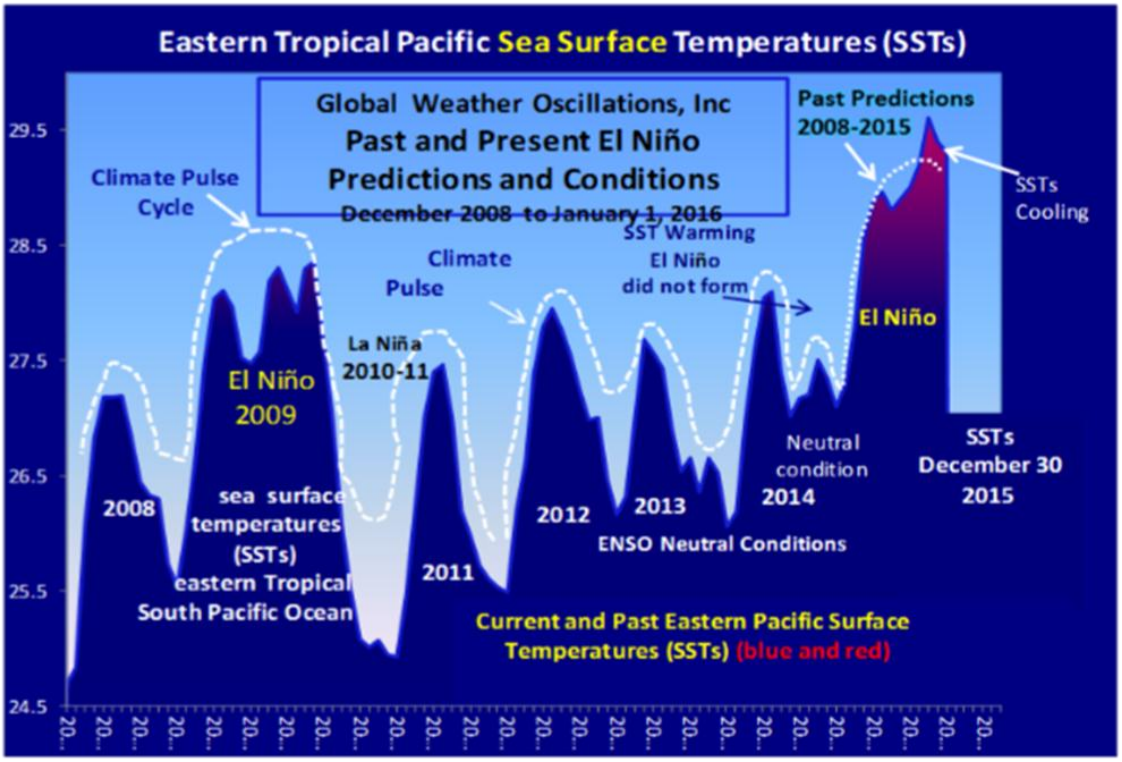
Based on the 26 El Niño events since 1900, around 50% have been followed by a neutral year, while 40% have been followed by La Niña.

Models also suggest neutral and La Niña are equally likely for the second half of 2016, with a repeat El Niño the least likely outcome.

Historically, the breakdown of strong El Niño events brings above average rainfall to parts of Australia in the first half of the year.

The Indian Ocean Dipole has little influence on Australian climate between December and April. However, Indian Ocean sea surface temperatures remain very much warmer than average across the majority of the basin. This basin-wide warmth may provide extra moisture for rain systems across Australia.





•2015 was another warm year, especially during the last three months

•Strong El Niño, comparable to the El Niño events of 1997–98 and 1982–83

●Overall, it was Australia's fifth-warmest year on record with the annual national mean temperature 0.83 °C above average

●Warmest October on record nationally, for both maxima and minima, with the largest mean temperature anomaly on record for any month

●Western Australia, Queensland, Victoria, South Australia, and New South Wales ranked in the ten warmest years on record

●Nationally-averaged rainfall 5% below average for the year, at 443.7 mm (1961–1990 average 465.2 mm)

●Rainfall below average for parts of the Top End, most of Queensland, Victoria, Tasmania, southeast and western South Australia, and southwest Western Australia

●Rainfall above average for the Gascoyne and Pilbara in Western Australia, most of the central Northern Territory, north-eastern South Australia, and north-western New South Wales.