RMD ENSO Report:

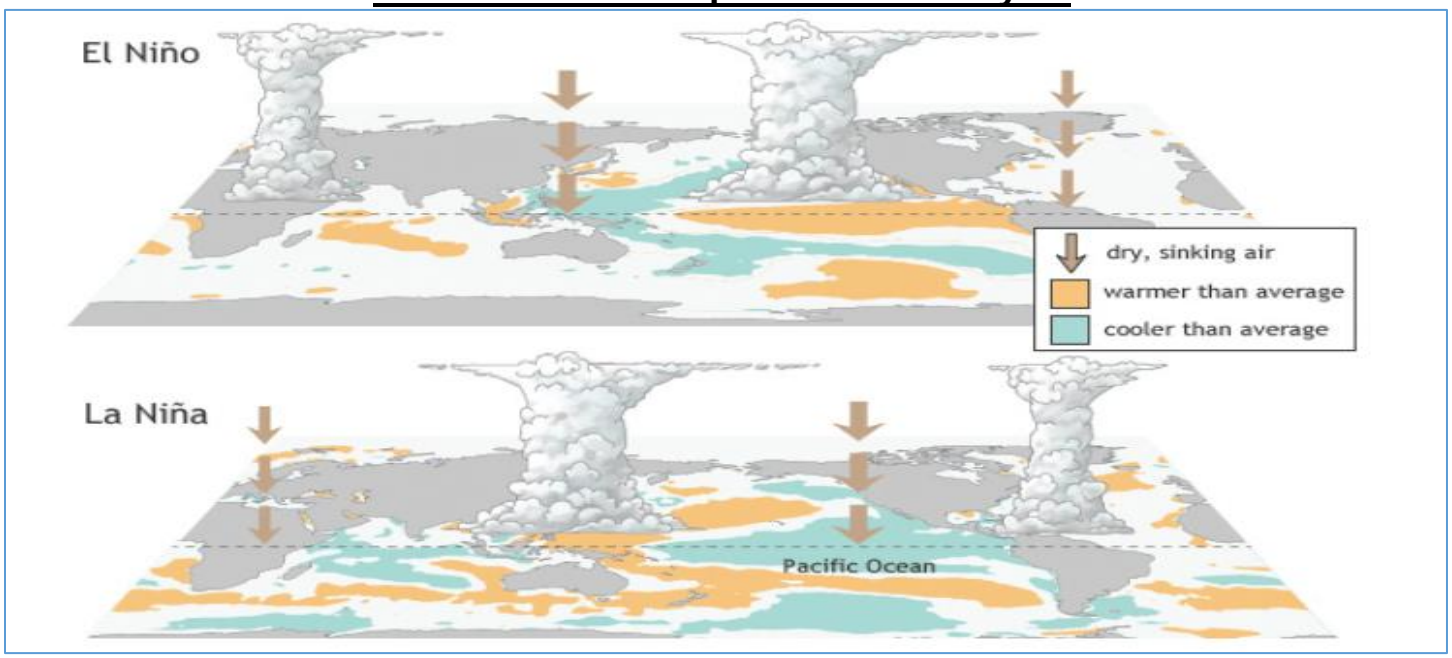
10 December 2025 Compiled by Dirk J Fourie

This is not presented as a commodity trading recommendation. Weather is only one of many factors which can influence the market on any given day.

La Niña in the tropical Pacific; negative Indian Ocean Dipole weakening

The Pacific Ocean is monitored closely for the current state of the El Niño–Southern Oscillation (ENSO). ENSO refers to the oscillation between warmer (El Niño) and cooler (La Niña) states of the central and eastern tropical Pacific region. ENSO is considered one of the dominant modes of climate variability in Australia. The influence of each individual event varies, particularly in conjunction with other climate indicators such as the Indian Ocean Dipole (IOD).
The ENSO signal is characterised by sea surface temperature (SST) patterns in the central and eastern tropical Pacific. Cooler than average SSTs are associated with La Niña, while warmer SSTs are associated with El Niño.

El Niño vs La Niña phases- ENSO cycle

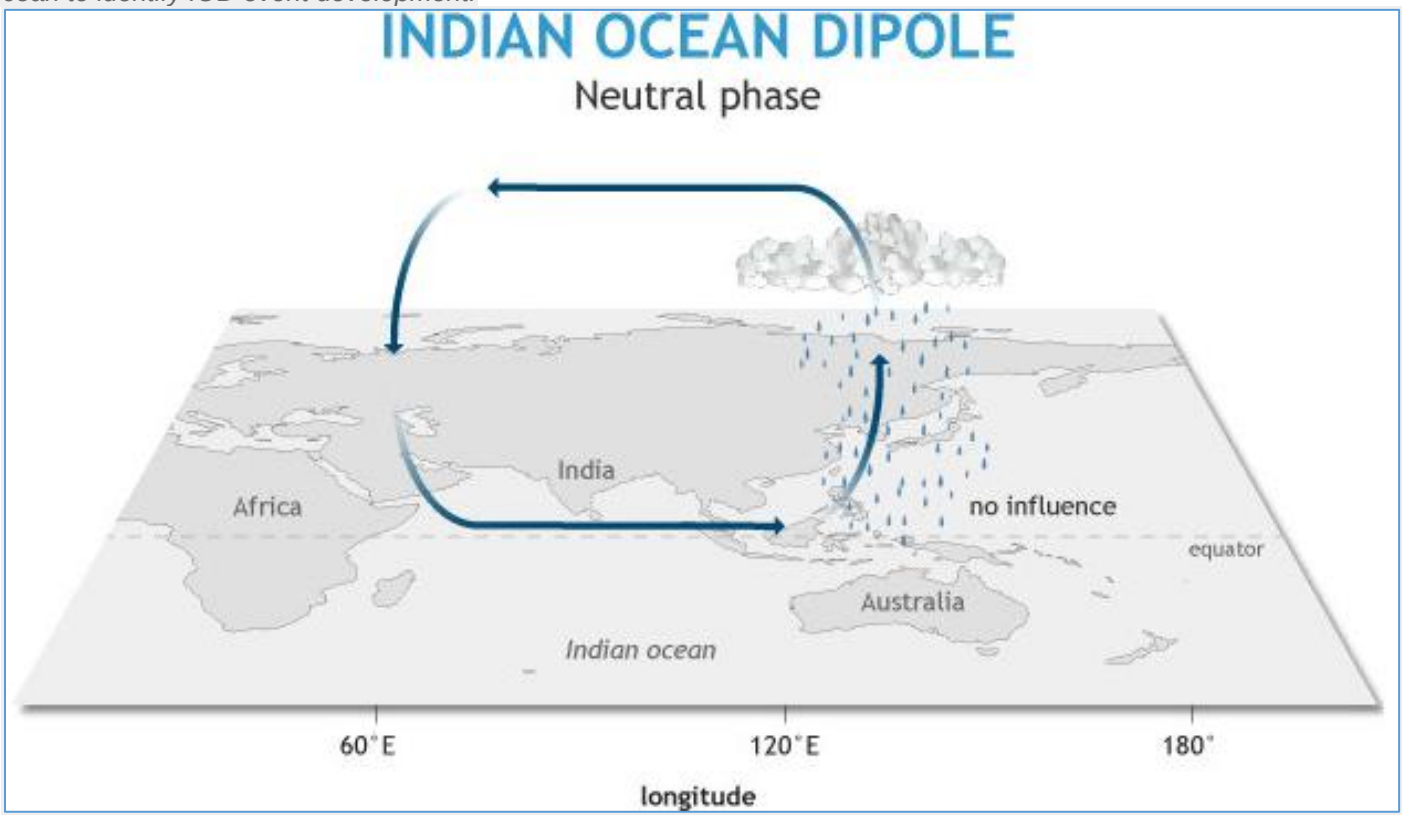


El Niño /La Niña map

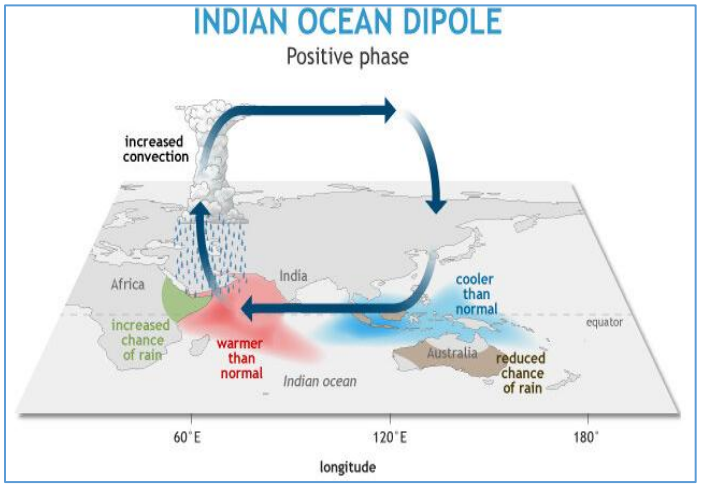
La Niña is active in the tropical Pacific, with ocean-atmosphere coupling reinforcing the pattern. The latest weekly Niño-3.4 anomaly (7 Dec 2025) is −0.74 °C, close to the −0.8 °C threshold, after fluctuating near La Niña levels since late September.
Trade winds, pressure, and cloud patterns have shown consistent La Niña signals since mid-to-late September. The 30-day SOI briefly dipped to +2.2 due to transient tropical activity, but longer-term indicators remain supportive.
Recent westerly wind anomalies linked to an active MJO pulse are warming surface temperatures and may mark the beginning of La Niña weakening. Most models now forecast La Niña persisting into early 2026 before a relatively early return to neutral ENSO conditions.

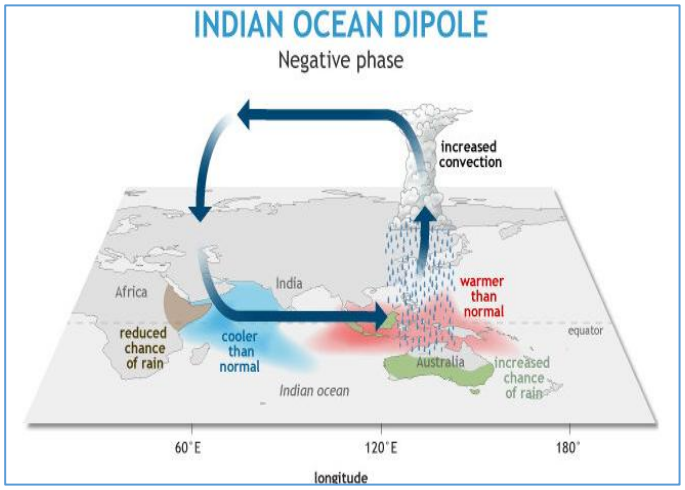
Indian Ocean

The Indian Ocean Dipole (IOD) is defined by the difference in sea surface temperatures between the eastern and western tropical Indian Ocean. The influence of the IOD varies in conjunction with other climate indicators such as the El Niño–Southern Oscillation (ENSO).
During a negative IOD, waters are typically warmer than average in the eastern parts of the tropical Indian Ocean and cooler than average in the west. During a positive event, the reverse occurs, with cooler than average waters in the eastern parts of the tropical Indian Ocean and warmer in the west. Specific regions are monitored in the eastern and western Indian Ocean to identify IOD event development.



The negative Indian Ocean Dipole (IOD) remains active but continues to weaken, with the latest weekly value at −0.63 °C (7 Dec 2025). Most models agree it will return to neutral during December, in line with the typical IOD lifecycle.

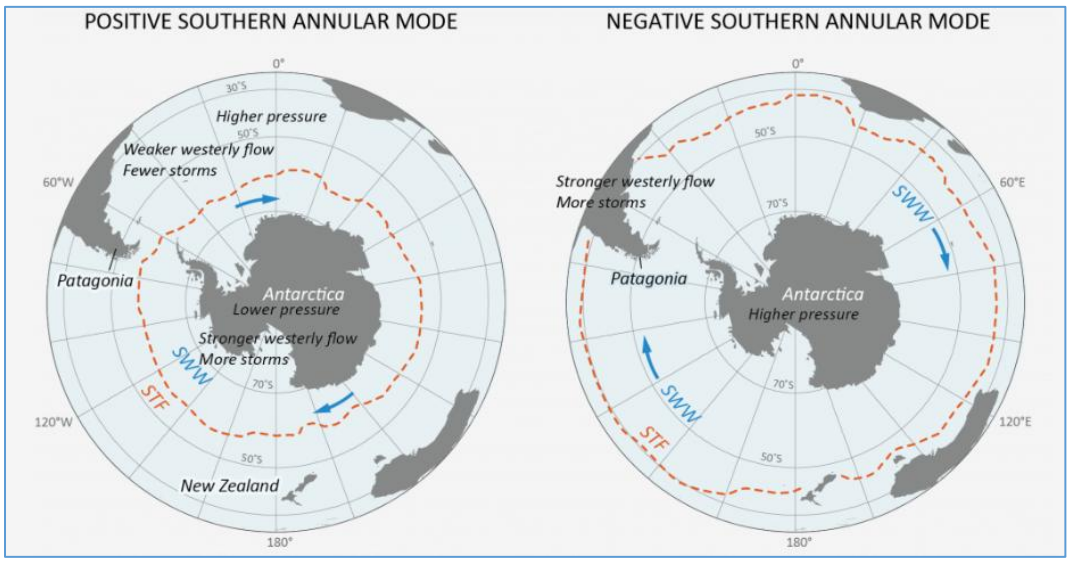




Southern Annular Mode (SAM)

The Southern Annular Mode (SAM) refers to the north-south movement of rain-bearing westerly winds and weather systems in the Southern Ocean, compared to the usual seasonal position. A positive SAM refers to a southward shift while a negative SAM refers to a northward shift. The typical impact on Australian rainfall from positive and negative phases of SAM depends on the time of year and interaction with other climate indicators such as El Niño or La Niña.

Sustained values of the SAM index above +1 indicate a positive SAM event, while sustained values below -1 indicate a negative SAM event



The Southern Annular Mode (SAM) is currently negative (as of 6 Dec 2025) and has been negative for the past 10 days. It is expected to stay negative for the next week and a half, then forecasts become uncertain for the final week of December.

Source:

bom.gov / SAWB / GRADS/ NASS / DTN / AWB / CWB / Intellicast / FNMOC / Unisys/ NOAA/ YR / KBWS / Wunderground / TWC / WordPress / WXRisk / Drovers / TWC / AG-BoM / Accuweather / SPC / NOAA / soybeansandcorn / Windy / agrimoney / en sat24 / agweb / blackseagrain / Europa / woeurope / timeanddate / myweather2 / meteox / meteoblue / intellicast / iweathar / Columbia / weather-atlas / ec.europa.eu / NASA / nasagrace / usda.gov / *USDA/WAOB*