## **RMD ENSO Report:**

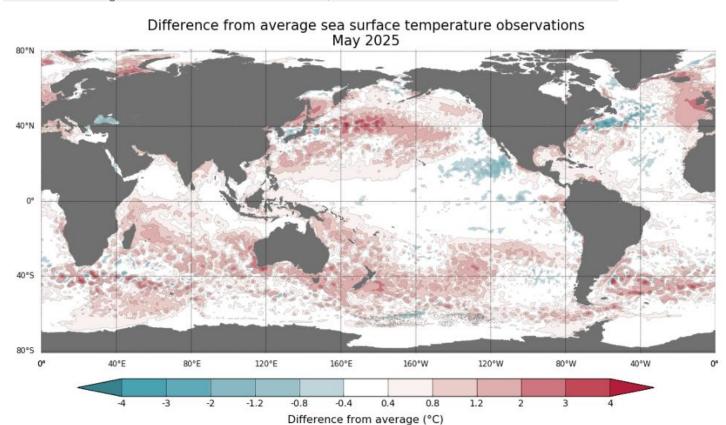
#### 13 June 2025

### 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.

# El Niño-Southern Oscillation and Indian Ocean Dipole remain neutral; negative IOD possible in late winter to early spring.

The Pacific Ocean is monitored closely for the current state of the <u>El Niño</u>—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.



Data: GAMSSA SST Climatology baseline: 1991 to 2020 © Commonwealth of Australia 2025, Australian Bureau of Meteorology

http://www.bom.gov.au/climate

Monthly average: May 2025 Created: 09/06/2025

El Niño /La Niña map

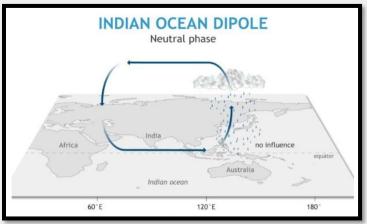
 The El Niño–Southern Oscillation (ENSO) is neutral. The latest Niño3.4 value for the week ending 8 June is −0.07 °C. Neutral ENSO values are between −0.8 °C and +0.8 °C.

 The Bureau's model predicts a neutral ENSO (neither El Niño nor La Niña) until at least November. This is consistent with forecasts from 7 out of 8 international models. However, there is a larger spread in the model forecasts towards the end of the outlook period, indicating greater uncertainty towards the end of spring.

## **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.



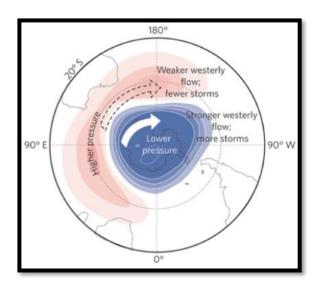
### The Indian Ocean Dipole.

The Indian Ocean Dipole (IOD) is neutral. The latest value of the IOD index for the week ending 8 June is -0.17 °C. The IOD index has steadily decreased over the last month, but remains within the neutral IOD range of -0.4 °C to +0.4 °C. This follows a warming of waters to the north-west of Australia and cooling near the Horn of Africa.

## 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 neutral, as of 17 May. Forecasts are mixed with the SAM expected to either remain neutral or become positive again in the coming weeks. A tendency towards positive index values is forecast for June.

- Sea surface temperatures (SSTs) in the Australian region during May 2025 were +0.62 °C above the 1991–2020 average; the warmest May on record since observations began in 1900. Since July 2024, SSTs have been the warmest or second warmest on record for each respective month.
- The SST analysis for the week ending 8 June 2025 shows warmer than average waters around most of the Australian coastline, except for parts of the north. Large parts of the coastline are up to 2 °C warmer than average, with small patches off the south-west Australian coastline more than 3 °C warmer than average.
- Global SSTs remain substantially above average. Monthly averaged SSTs in 2025 have been the second warmest on record for each respective month, second only to temperatures recorded in 2024.

#### 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

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