

RMD ENSO Report:

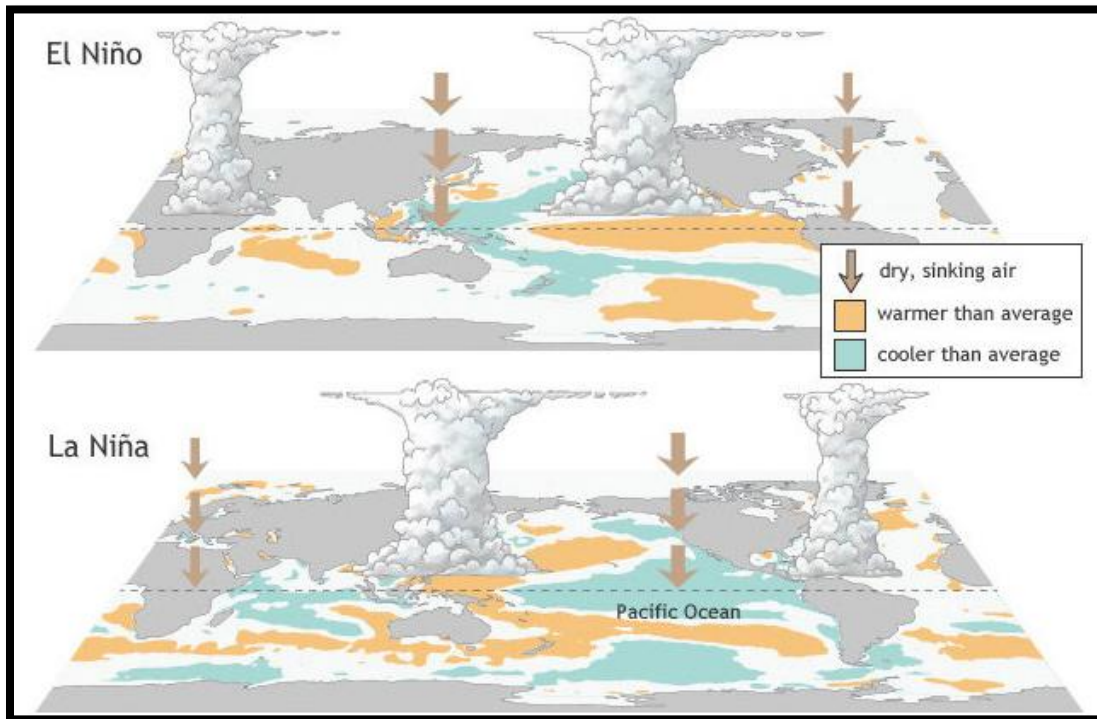
12 November 2024

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.

ENSO neutral, IOD values tending negative

ENSO is the oscillation between El Niño and La Niña states in the Pacific region. El Niño typically produces drier seasons, and La Niña drives wetter years, but the influence of each event varies, particularly in conjunction with other climate influences.

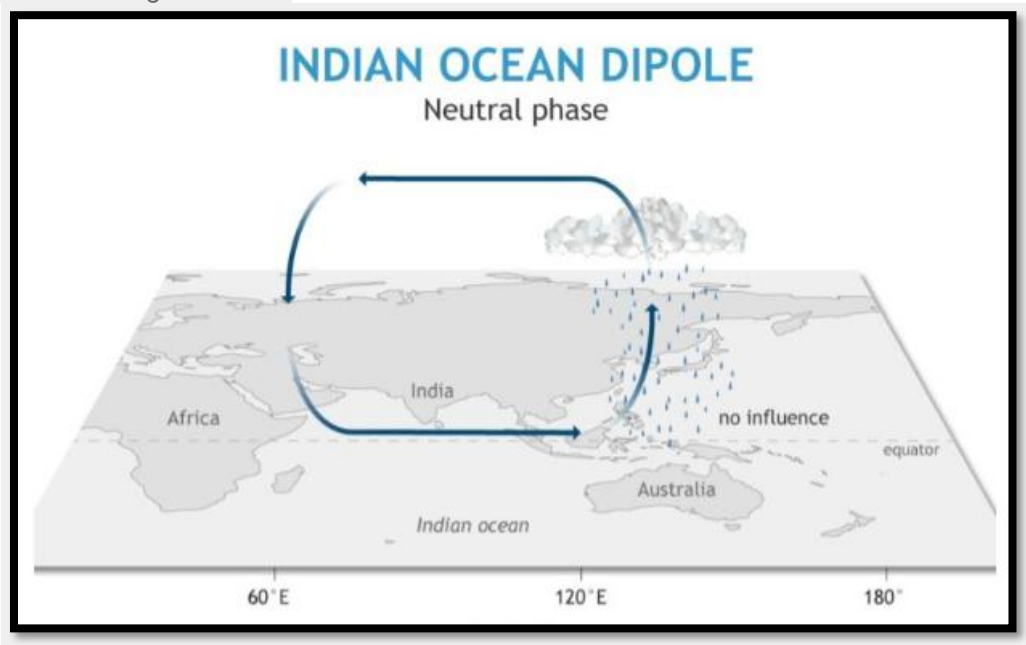


El Niño /La Niña map

- The El Niño–Southern Oscillation (ENSO) remains neutral, with sea surface temperatures (SSTs) in the central equatorial Pacific Ocean at ENSO-neutral levels.
- Atmospheric indices, such as those related to patterns of surface pressure, cloud and trade winds, are broadly consistent with an ENSO-neutral state. While some have displayed La Niña-like signals over recent months, a consistent and sustained shift in the atmosphere has not been observed.
- The Bureau's model suggests SSTs are likely to remain within the ENSO-neutral thresholds ($-0.8\text{ }^{\circ}\text{C}$ to $+0.8\text{ }^{\circ}\text{C}$) throughout the forecast period to February 2025. Of the 6 other climate models surveyed, only one model suggests SSTs in the tropical Pacific are likely to exceed the La Niña threshold (below $-0.8\text{ }^{\circ}\text{C}$) throughout December to February, which is sufficient time to be classified as a La Niña event. All models forecast neutral ENSO values by March.

Indian Ocean

The Indian Ocean Dipole (IOD) is defined by the difference in sea surface temperatures between the eastern and western tropical Indian Ocean. A negative phase typically sees above average summer rainfall in Southern Africa, while a positive phase brings drier than average seasons.

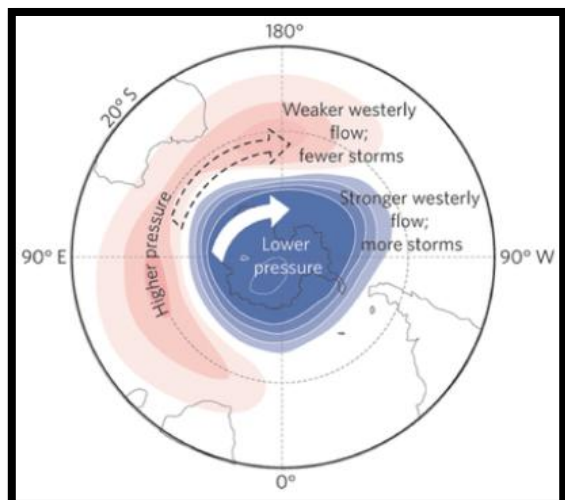


The Indian Ocean Dipole.

The latest Indian Ocean Dipole (IOD) index value is $-0.69\text{ }^{\circ}\text{C}$ for the week ending 10 November, marking the fifth week below the negative IOD threshold ($-0.40\text{ }^{\circ}\text{C}$). All models indicate that the IOD index will meet or exceed negative IOD thresholds in November, with all but one returning to neutral levels in December.

Southern Annular Mode (SAM)

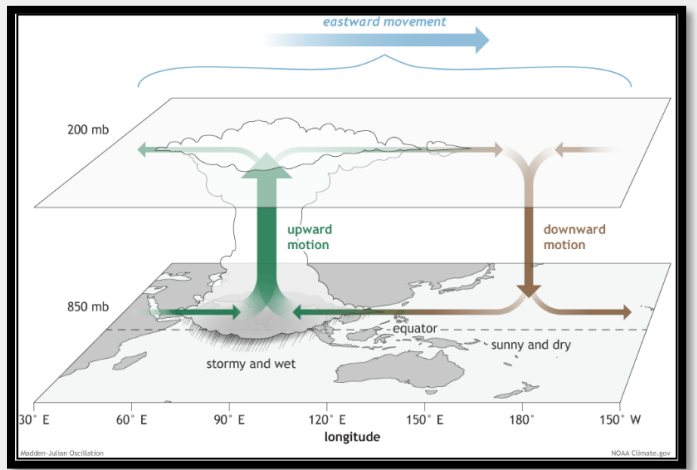
The SAM has three phases: neutral, positive, and negative. Each positive or negative SAM event tends to last for around one to two weeks, though longer periods may also occur. The time frame between positive and negative events is quite random, but typically in the range of a week to a few months. The effect that the SAM has on rainfall varies greatly depending on season and region.



SAM is positive as at 10 November and is forecast to remain mostly positive over the second half of November. SAM is also forecast to have a greater than usual chance of being in the positive phase during December.

Madden–Julian Oscillation (MJO)

The Madden–Julian Oscillation (MJO) is the major fluctuation in tropical weather on weekly to monthly timescales. It can be characterised as an eastward moving 'pulse' of cloud and rainfall near the equator that typically recurs every 30 to 60 days.



MJO is in the Western Hemisphere as at 10 November. Climate models indicate the MJO will continue to move eastwards towards the Indian Ocean over the coming week. Models show a spread on the likely strength, with most suggesting the MJO will become indiscernible, but some maintaining a weak to moderate MJO pulse as it moves over the Indian Ocean in the coming fortnight.

Global SSTs remain at near-record levels, with temperatures since July being just short of the record temperatures observed during 2023, yet well above all other years since observations began in 1854. The sustained nature of this significant global ocean heat suggests that climate indicators such as ENSO and IOD may not necessarily behave or evolve as they have in the past.

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 / iweather / Columbia / weather-atlas / ec.europa.eu / NASA / nasagrace / usda.gov / USDA/WAOB