

RMD ENSO Report:

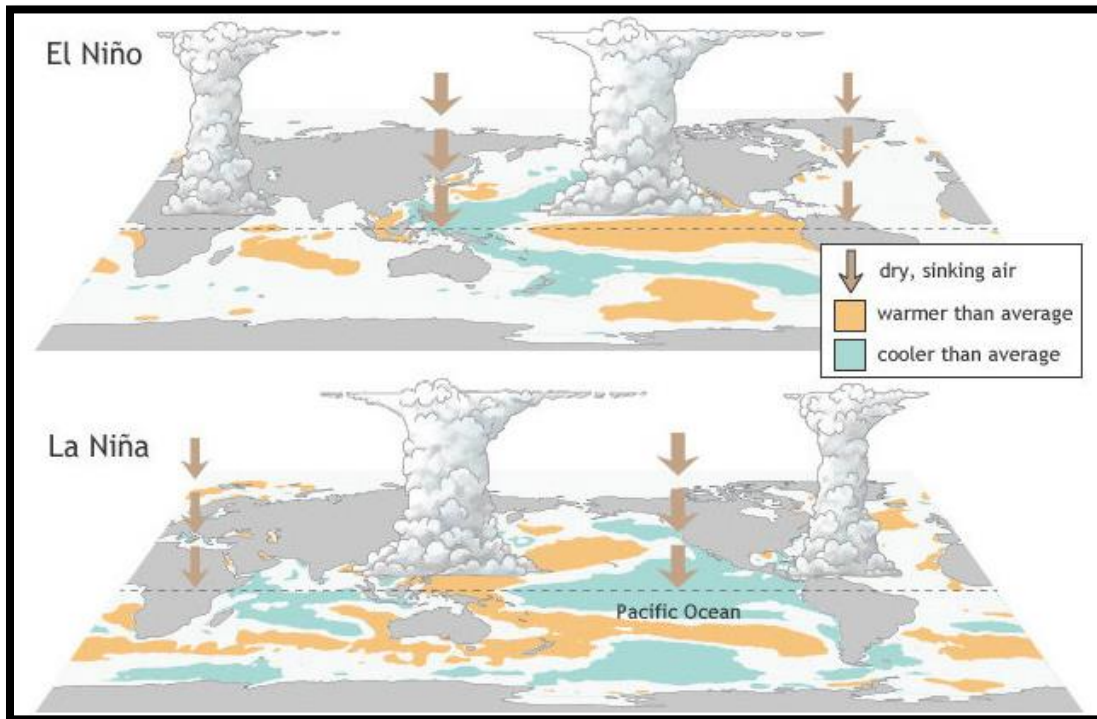
15 October 2024

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 and IOD remain neutral

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

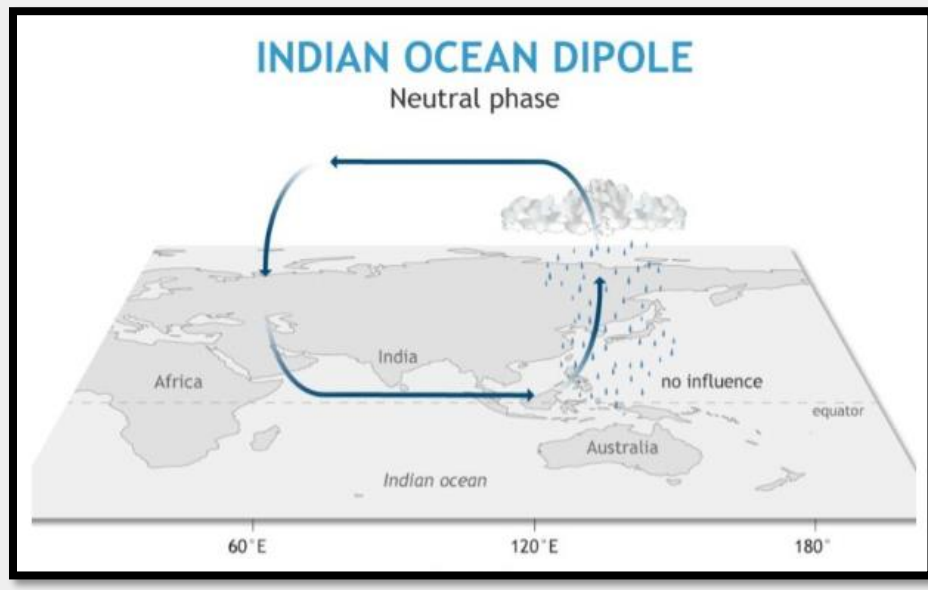
The El Niño–Southern Oscillation (ENSO) is neutral, with both sea surface temperatures (SSTs) in the central equatorial Pacific Ocean and atmospheric patterns at ENSO-neutral levels. Atmospheric indices, such as those related to patterns of surface pressure, cloud and trade winds, are broadly consistent with an ENSO-neutral state. Although some have displayed La Niña-like signals over the past several weeks, these signals have not been consistent.

Models 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, 4 also suggest SSTs will remain within the ENSO-neutral thresholds. 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 November to January, with another forecasting SSTs to briefly exceed the threshold, but only during December and January. The chance of a La Niña event developing in the coming months has decreased compared to recent outlooks. If a La Niña were to develop, it is forecast to be relatively weak (in terms of the strength of the SST anomaly) and short-lived, with all models forecasting neutral values in February.

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.

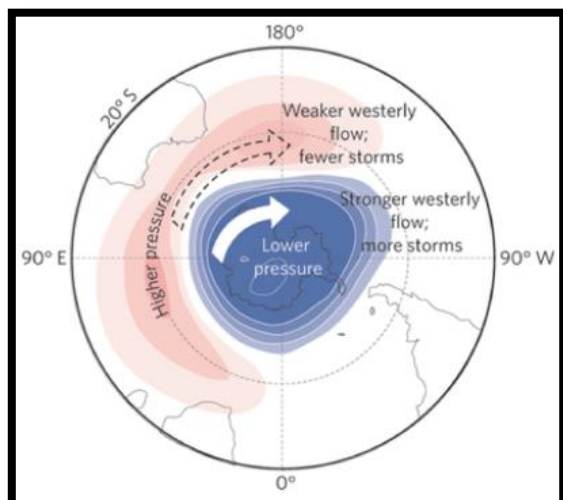


The Indian Ocean Dipole.

IOD is currently neutral, despite the weekly IOD index value ($-0.58\text{ }^{\circ}\text{C}$) dropping below the negative IOD threshold ($-0.40\text{ }^{\circ}\text{C}$) in the week ending 13 October. All models indicate that the IOD is likely to remain neutral, but weakly negative, for the rest of the year. Forecasts indicate a sustained period of negative values is unlikely, but due to fluctuations in the tropical Indian Ocean SST patterns, the IOD index may drop, briefly, below the negative IOD threshold.

Southern Annular Mode (SAM)

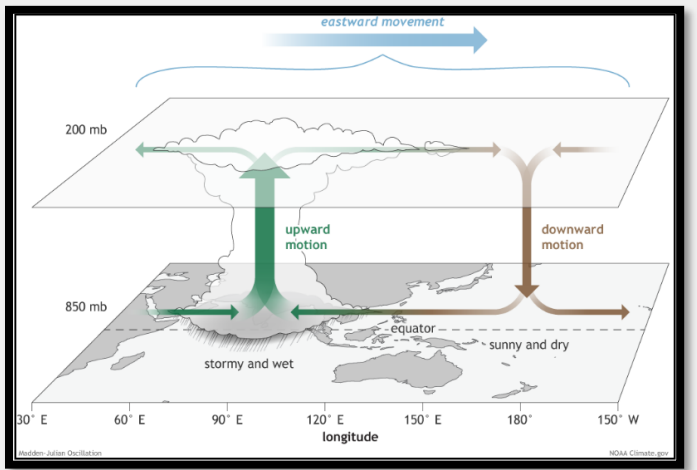
The SAM has three phases: neutral, positive, and negative. Each positive or negative SAM event tends to last for around one to two weeks, though longer periods may also occur. The time frame between positive and negative events is quite random, but typically in the range of a week to a few months. The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



SAM is neutral (as at 12 October) and forecast to remain neutral over the coming fortnight.

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.



is currently indiscernible (as at 12 October). Most models suggest a moderately strong MJO pulse will emerge in the Maritime Continent over the coming days, and then move eastward in the coming week.

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