

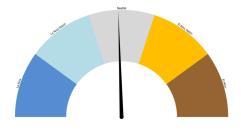
# TRINIDAD AND TOBAGO METEOROLOGICAL SERVICE

Telephone: 1-868-669-4392 ext. 120/121 | Fax: 1-868-669-4727 Email: ClimateTTMet@metoffice.gov.tt Website: www.metoffice.gov.tt F 750-04-10

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### El Nino / La Nina Watch: Update

### La Niña conditions end, neutral conditions forecast April through October 2025



The El Niño-Southern Oscillation (ENSO) cycle is presently neutral, that is neither La Niña nor El Niño. Following the emergence of La Niña (or cold episode ENSO) conditions in early December, the equatorial Pacific Ocean has transitioned from weak La Niña conditions to an ENSO-neutral phase. In March 2025, the below-average sea surface temperatures (SSTs) weakened in the central equatorial Pacific to become near-average over the tropical Pacific Ocean, see figure 1.

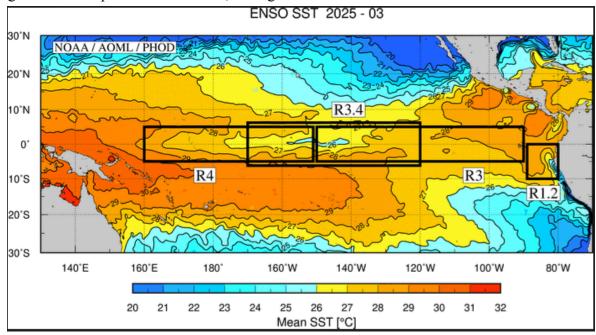


Figure 1: Monthly mean SST in equatorial Pacific Ocean. Source: NOAA Physical Oceanography Division (PHOD) of AOML.

This atmospheric and oceanic shift has been marked by higher area-averaged sea surface temperatures in the central Pacific (Niño 3.4 region), with a 3-month mean SST of 26.58°C and -0.39°C anomaly ending March 2025, well above the -0.5°C threshold required for La Niña conditions.

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The previous 3-month mean SST of December-January-February was 26.05°C and -0.6°C anomaly. November-December-January had a mean SST of 26.09°C and a -0.5° anomaly. For a La Niña (or an El Niño), onset conditions must have been met for 5 consecutive 3-month periods. The atmospheric changes have resulted in suppressed convection around the International Date Line in the Pacific Ocean and enhanced convection in southeast Asia near Indonesia. This coupled ocean-atmosphere system in the Pacific has been reflected in ENSO-neutral conditions.

The ENSO-neutral phase is forecast to persist into May 2025. ENSO-neutral is favored during the Northern Hemisphere summer, with a greater than 50% chance through August-October 2025.

#### What does this mean for Trinidad and Tobago?

Historically during an ENSO-neutral event, near-normal rainfall amounts would occur within Trinidad and Tobago, but not always. The ENSO-neutral condition will likely have little influence on local rainfall and therefore, will allow local and regional rainfall climatic systems to influence rainfall amounts through August 2025, see <u>Rainfall and Temperature Outlook Update | Trinidad & Tobago Meteorological Service</u>.

**Guide:** The El Niño/Southern Oscillation comprises three phases: El Niño, La Niña and neutral. A La Niña (El Niño) is declared when the average SSTs in the central and eastern equatorial Pacific Ocean (Niño 3.4 region) become at least -0.5°C cooler than average (0.5°C warmer than average) in the preceding month and the cooling (warming) is expected to persist for five consecutive overlapping three-month periods. This must occur together with a corresponding change in the overlying atmospheric circulation. The TTMS La Niña/El Niño Watch is activated when the ENSO Outlook indicates a probability of approximately 50% chance or greater for the development of La Niña or El Niño.

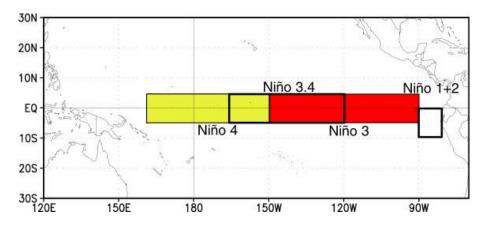


Figure 2: The map shows the graphical description of the four Niño regions. Source: NOAA.

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