Sea Surface Temperature (SST)

[Map of Sea Surface Temperature (SST) for Jun 19]

NOAA OSPO
https://www.ospo.noaa.gov/data/sst/contour/global_small.c.gif

NOAA Coral Reef Watch
https://coralreefwatch.noaa.gov/product/5km/index_5km_ssta.php
Top Layer Temperature Anomaly

Anomalies in a layer take longer to dissipate than superficial ones, and can last for weeks.

Top 300m-Layer Anomaly


Surface Anomaly

NOAA Coral Reef Watch
https://coralreefwatch.noaa.gov/product/5km/index_5km_ssta.php
CPC Official Statement

**Status: El Niño Advisory**

- El Niño conditions are observed.*
- Equatorial sea surface temperatures (SSTs) are above average across the east-central and eastern Pacific Ocean.
- The tropical Pacific atmospheric anomalies are consistent with weak El Niño conditions.

**TAKEAWAYS**

- EPAC warming is spreading west.
- Niño 3.4 has now T anomalies between +0.5 and +1.5°C.
- The warming in the SAM coast is neither increasing nor decreasing in strength.
Westerly wind bursts can trigger warm Kelvin Waves that propagate towards South America.

- Downwelling (warm) Kelvin propagating near 165W.
- To arrive in South America in 1.5 months or near early August, reinforcing surface warming.
**ENSO: Oceanic Kelvin Waves**

- Generalized sub-superficial warming of the equatorial Pacific.

**TAKEAWAYS**

- A warm Kelvin is propagating near 165W. No warm Kelvins are trailing behind at the moment.
El Niño conditions are expected to gradually strengthen into the Northern Hemisphere winter 2023-24.*

*Source: CPC, IRI
Madden-Julian Oscillation (MJO)

Current Observations:
- Propagation slower and not as well defined as in previous months.
- Positive interference with ENSO, enhancing convection west of the dateline.
- Extrapolating propagation, next wet MJO in early to mid July.

Source: CPC
TAKEAWAYS

• MJO slower and discrepancies in models.
• Wet likely during the first half of July.
Outlook for the next few days:

- Wet Kelvin arriving in Central America, but coinciding with large scale upper convergent pattern = limited impacts.

Source: NCICS
South America, Last 7 Days

200 hPa Flow

850 hPa Flow

Average

Anomaly

Satellite – Estimated (CMORPH)

Gauges
¡Gracias! Thank you! ¡Obrigado!

Next Session: To be discussed

Recorded sessions and more information available at: https://rammb2.cira.colostate.edu/training/rmtc/focusgroup/

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