Monthly Regional Focus Group Session

Wednesday 07 December 2022 at 17:30 UTC

Special welcome to our Barbados NOAA/WMO Workshop Participants

RFG Website: https://rammb2.cira.colostate.edu/training/rmtc/focusgroup/
Sea Surface Temperatures (SST)

December 4th

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
DEEP ANOMALIES LAST LONGER, THUS USEFUL FOR SUBSEASONAL FORECASTING

Sea Temperature Anomalies in top layer

Surface Anomaly

Top 300m-Layer Anomaly (GODAS)

Dec 04

Nov 29

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

NOAA CPC

Monthly Regional Focus Session
La Niña
(no changes since April)

- La Niña is present.*
- Equatorial SSTs are below average across most of the Pacific Ocean.
- The tropical Pacific atmosphere is consistent with La Niña.
Sub superficial positive anomaly under the warm pool continues to build...

...no clear signal of propagation yet...

Source: CPC
There is a 76% chance of La Niña during the Northern Hemisphere winter (December-February) 2022-23, with a transition to ENSO-neutral favored in February-April 2023 (57% chance).*
Madden-Julian Oscillation (MJO)

Current Observations:

• Wave-1 Pattern continues. Upper divergent phase (green) was moving across Africa into the Indian Ocean, and Upper Convergent across the Pacific/Date Line.

• Propagation seems to be slowing down.

• Extrapolating propagation, large scale upper convergence should gradually increase over the Americas into mid December.
MJO and Upper Tropospheric Waves

Outlook for the next week:

- Increasing large scale upper convergence (positive velocity potential CHI200).
- This means generally drier.
- No divergent Kelvin until Dec 14-16 (local enhancement in equatorial areas where synoptic systems are favoring rainfall at that time).

5-day CHI200 with CFS forecasts

Contours at -2, -6 x10^6 m2 s-1
Carl Schreck
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Favors rain storms
Favors limited rainfall
MJO Forecasts for the Americas

Empirical Wave Propagation (EWP)

• General agreement on that the pattern is becoming increasingly upper convergent (dry), through Dec 20.

• Potential shift towards wetter conditions past Dec 15, but current model signals are mixed.
South America, Last 7 Days

200 hPa Flow

Gauge Rainfall

850 hPa Flow

Satellite – Estimated Rainfall (CMORPH)
Caribbean/Central America, Last 7 Days

200 hPa Flow

Rainfall from Gauges (CPC)

850 hPa Flow

Satellite – Estimated Rainfall (CMORPH)
¡Gracias!   Thank you!   ¡Obrigado!

Next RFG Session (January):   Date to be discussed

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

For enrolling in the distribution list for RFG announcements, please send an email to jose.galvez@noaa.gov or bernie.connell@colostate.edu