

Monthly Regional Focus Group Session

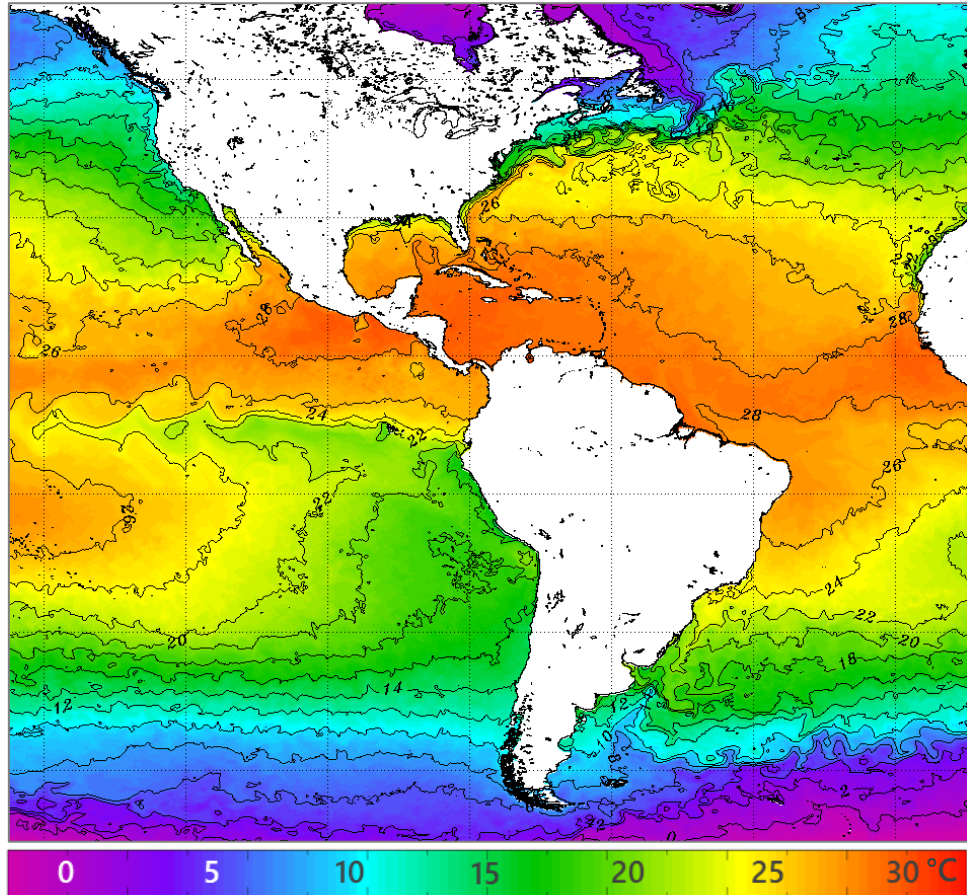
Wednesday 16 November 2022 at 16 UTC

<https://rammb2.cira.colostate.edu/training/rmtc/focusgroup/>

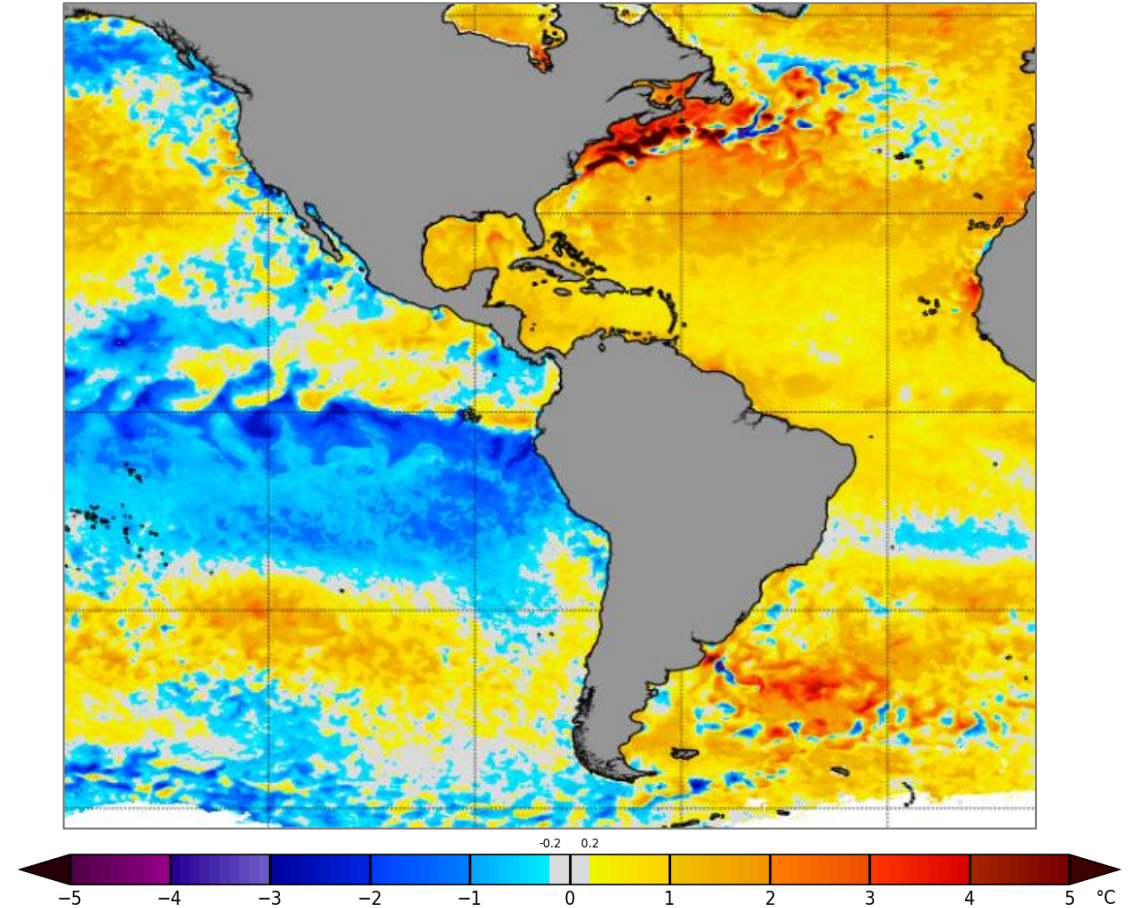
Sea Surface Temperatures (SST)

November 14th

SST



Anomaly



NOAA OSPO

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

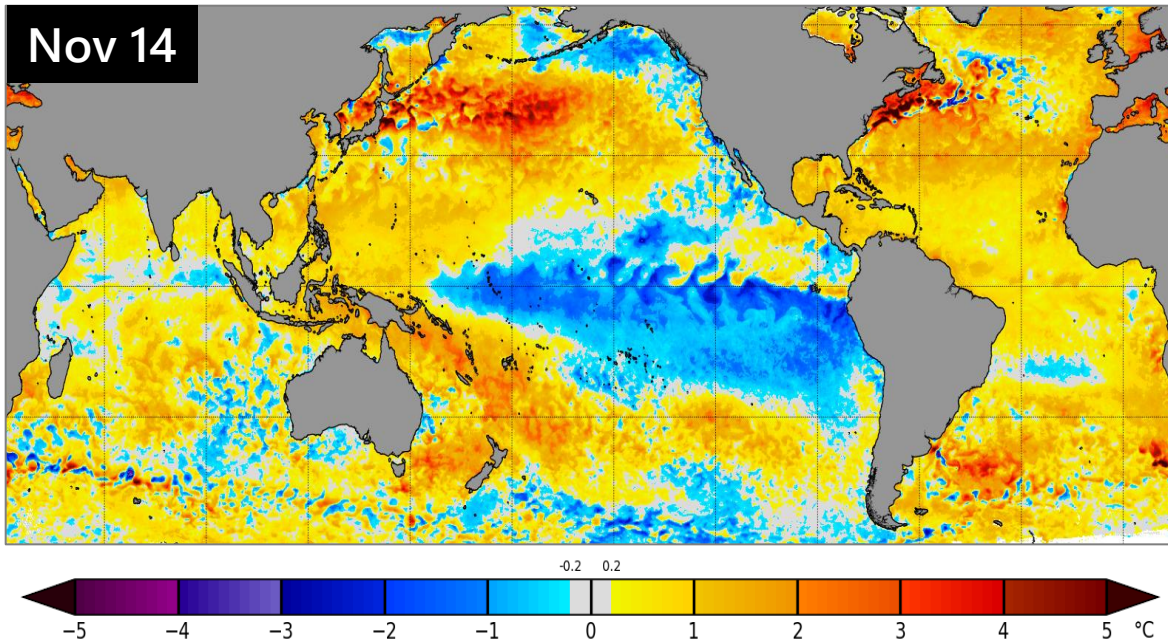
NOAA Coral Reef Watch

https://coralreefwatch.noaa.gov/product/5km/index_5km_ssta.php

Sea Temperature Anomalies in top layer

DEEP ANOMALIES LAST LONGER, THUS USEFUL FOR SUBSEASONAL FORECASTING

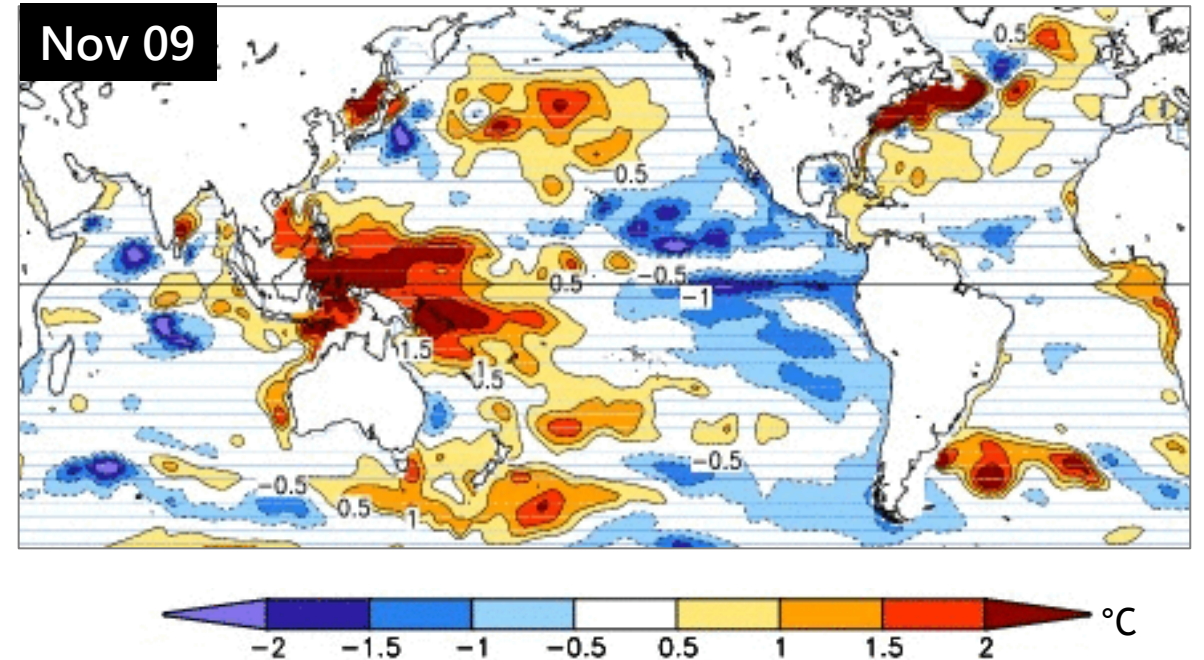
Surface Anomaly



NOAA Coral Reef Watch

https://coralreefwatch.noaa.gov/product/5km/index_5km_ssta.php

Top 300m-Layer Anomaly (GODAS)



NOAA CPC

Source: CPC GODAS, <https://www.cpc.ncep.noaa.gov/products/GODAS/>

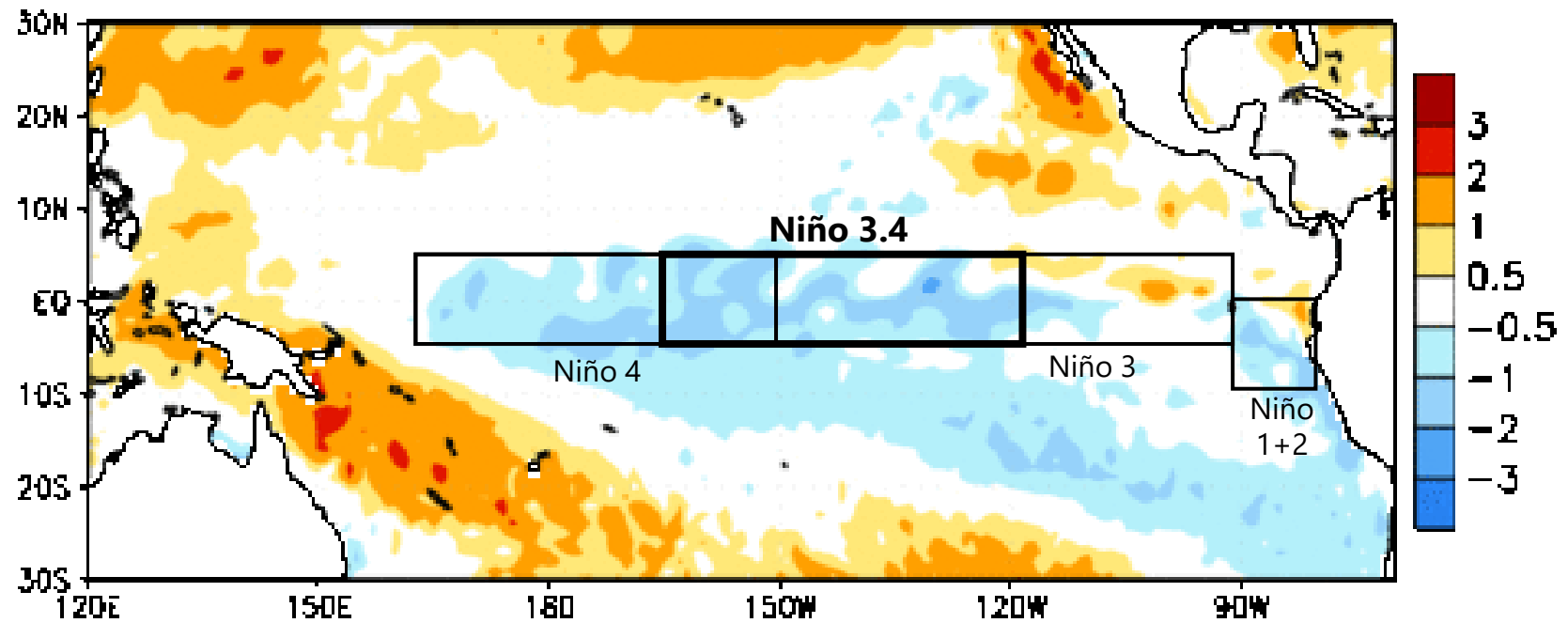
ENSO:

La Niña

(no changes since April)

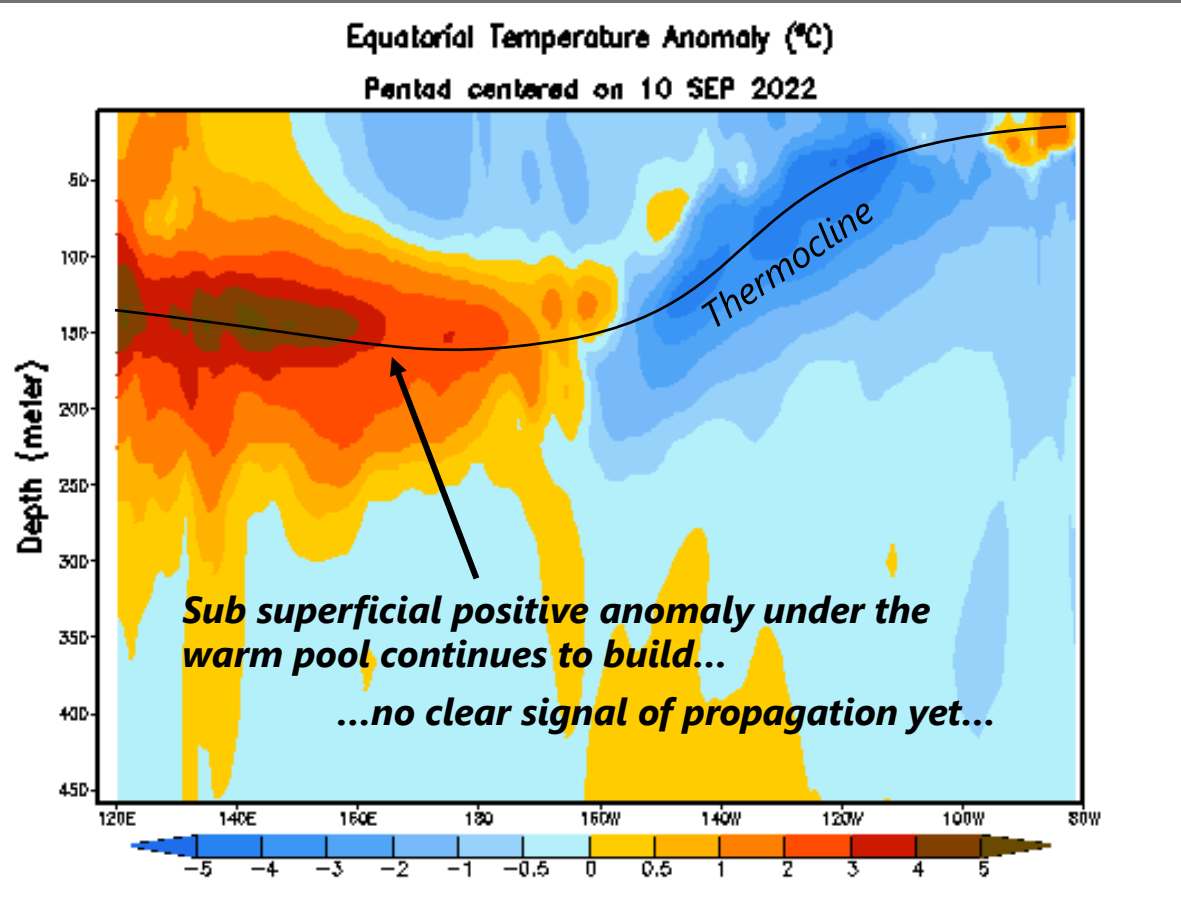
- ☉ La Niña is present.*
- ☉ Equatorial SSTs are below average across most of the Pacific Ocean.
- ☉ The tropical Pacific atmosphere is consistent with La Niña.

Week centered on 24 AUG 2022
SST Anomalies (°C)



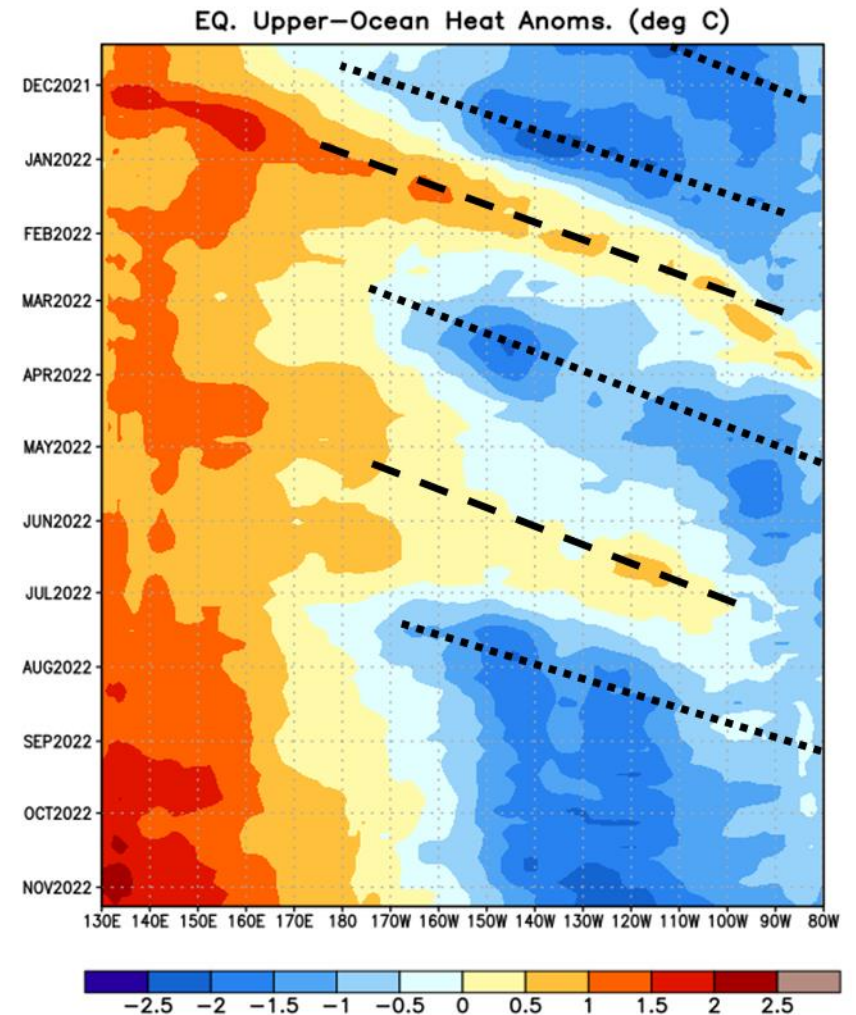
ENSO: Oceanic Kelvin Waves

Equatorial Pacific Temperature Anomaly Cross Section



Source: CPC

Heat Content Anomaly Hovmöller



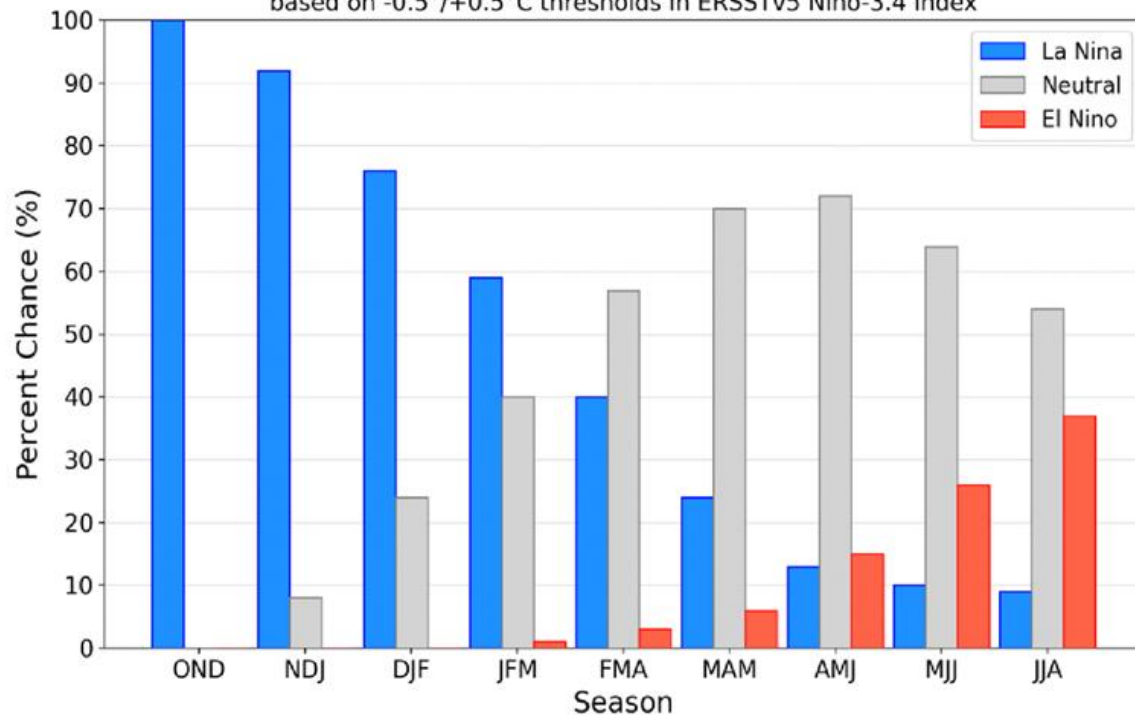
ENSO Outlook

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).*

CPC Probabilistic Forecast

Official NOAA CPC ENSO Probabilities (issued Nov. 2022)

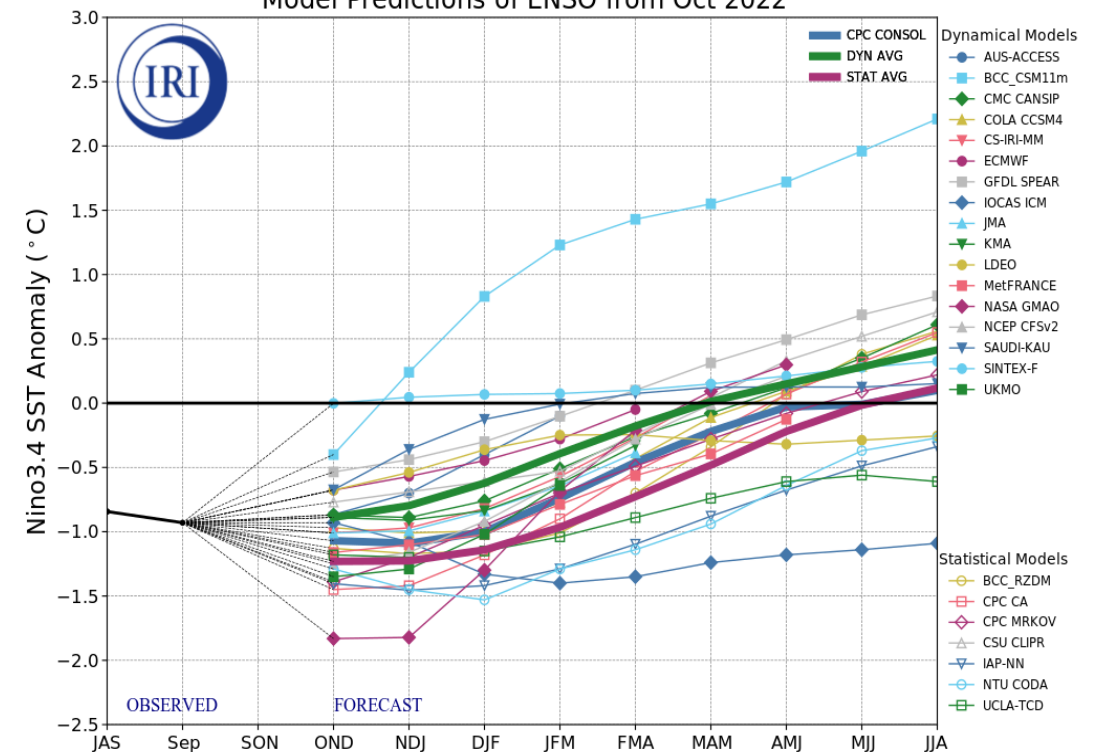
based on $-0.5^{\circ}/+0.5^{\circ}\text{C}$ thresholds in ERSSTv5 Niño-3.4 index



Source: CPC

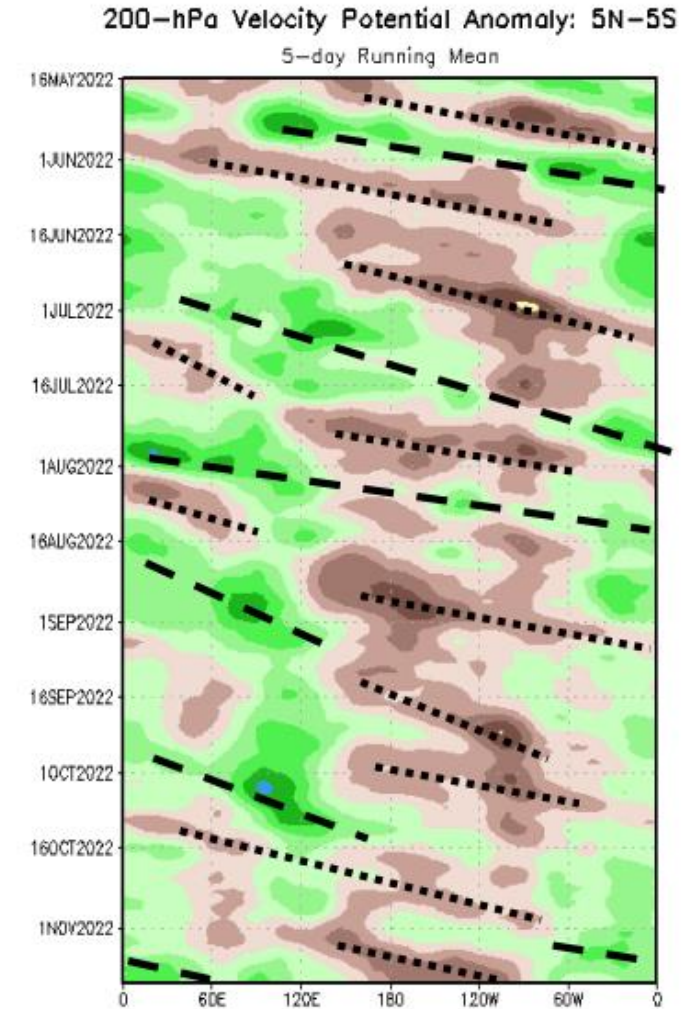
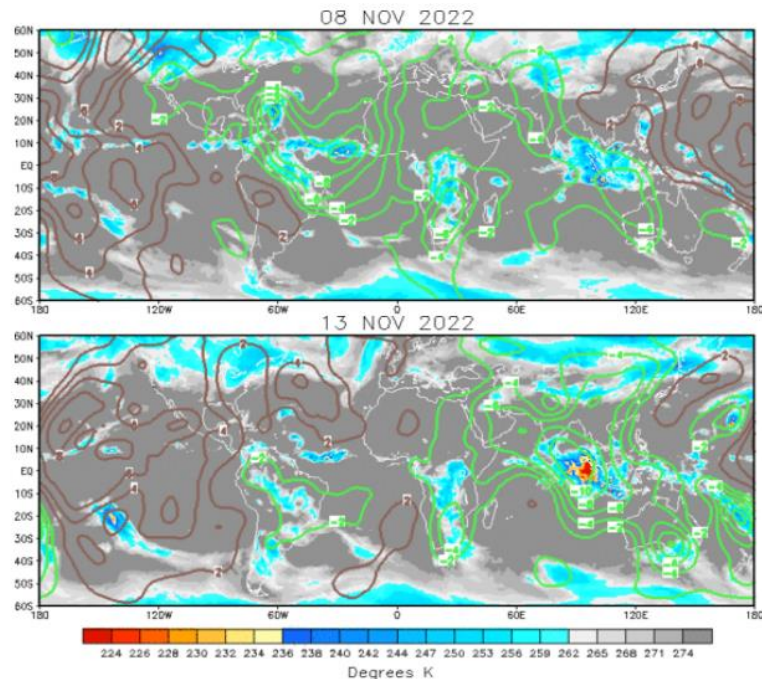
IRI/CPC Dynamic Models

Model Predictions of ENSO from Oct 2022



Madden-Julian Oscillation (MJO)

- The MJO is organizing after a period of disorganization.
- Closer to Wave-1 mode. Upper convergent region (dry) is moving into/across the Americas this week.
- Upper divergent in the Indian Ocean, likely to arrive in late November/early December.



 Favors rain storms  Favors limited rainfall

MJO Forecasts for the Americas

- Wet Kelvin Nov 20-24.
- Followed by wet MJO Nov 25-Dec 5.
- Areas of interest: Northern Amazon, Colombia, Venezuela, southern Caribbean, southern Central America.
- Can highlight systems that develop in central South America from Nov 25-Dec 5.



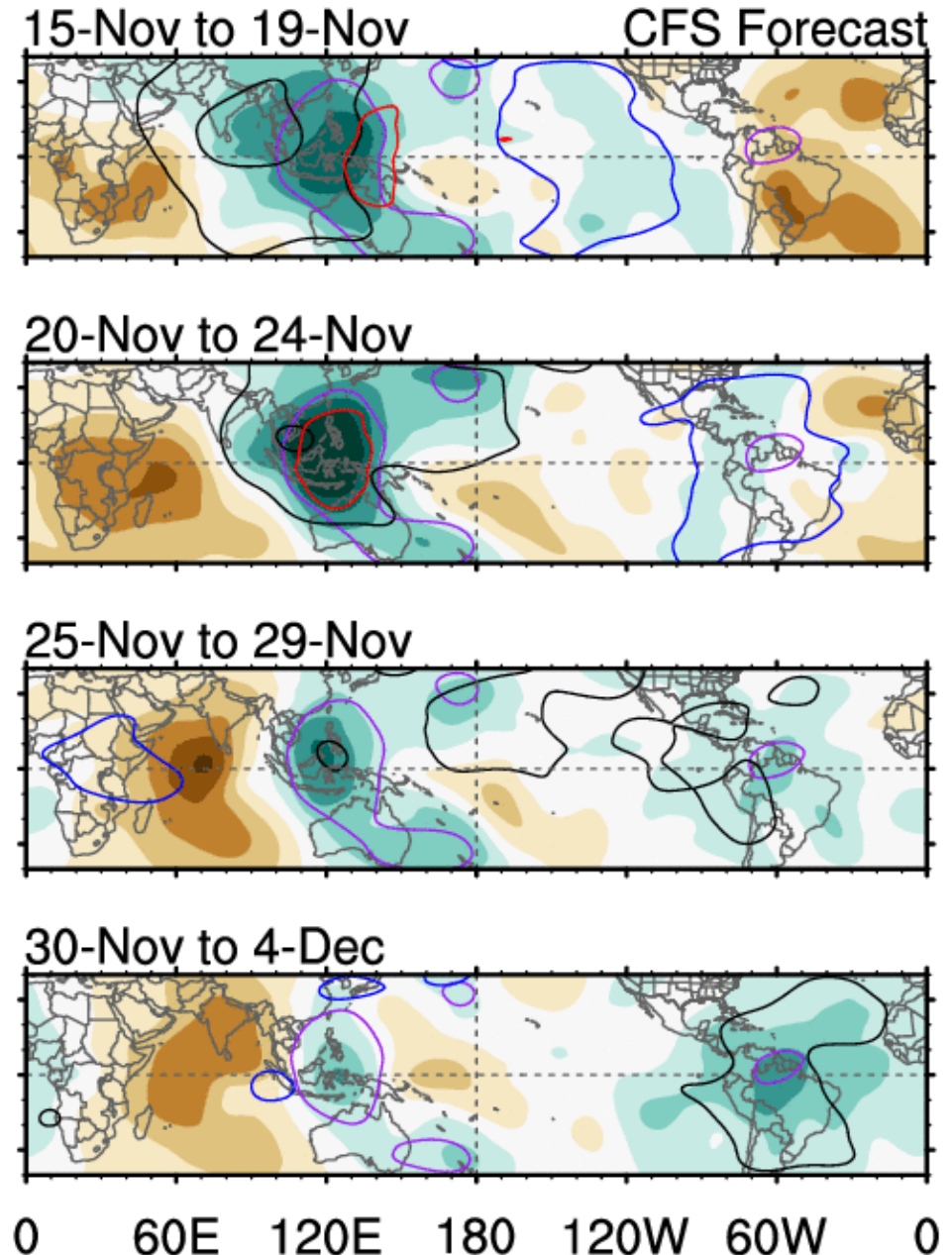
5-day CHI200 with CFS forecasts

Tue 2022-11-15 11:17 UTC

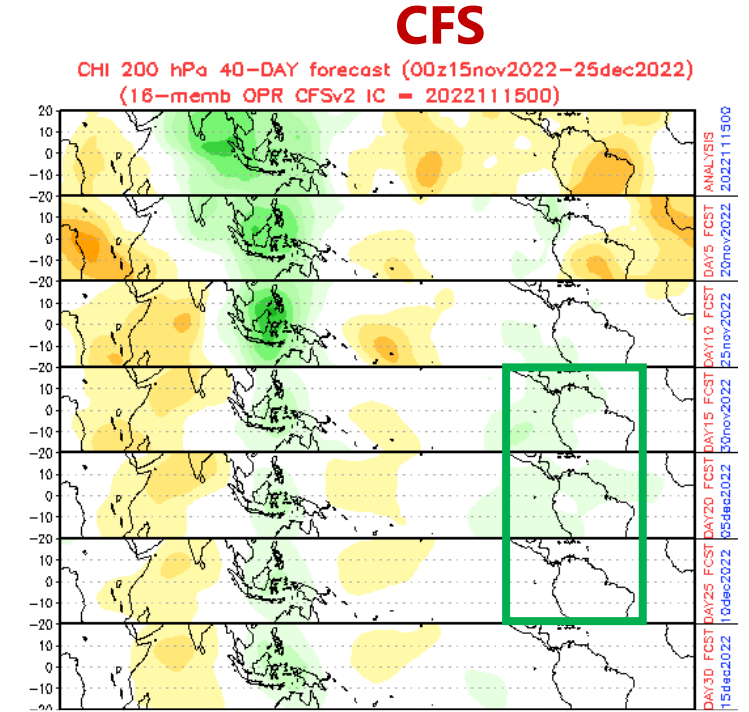
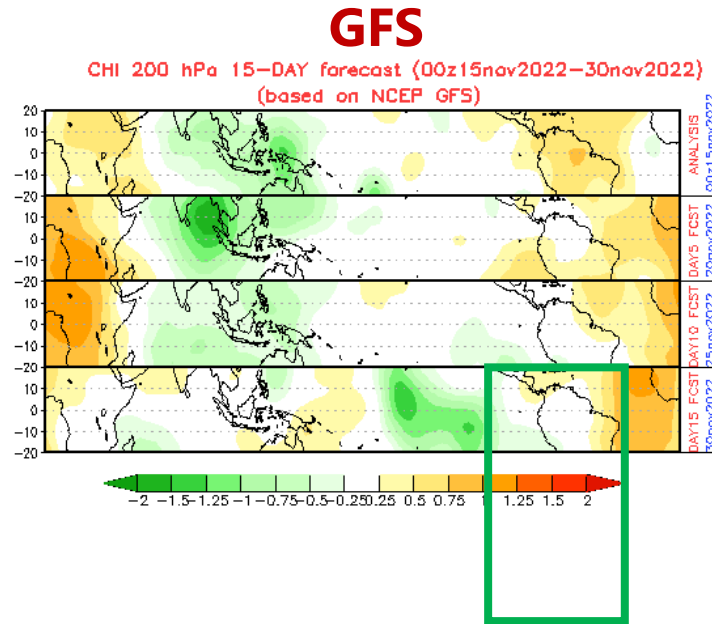
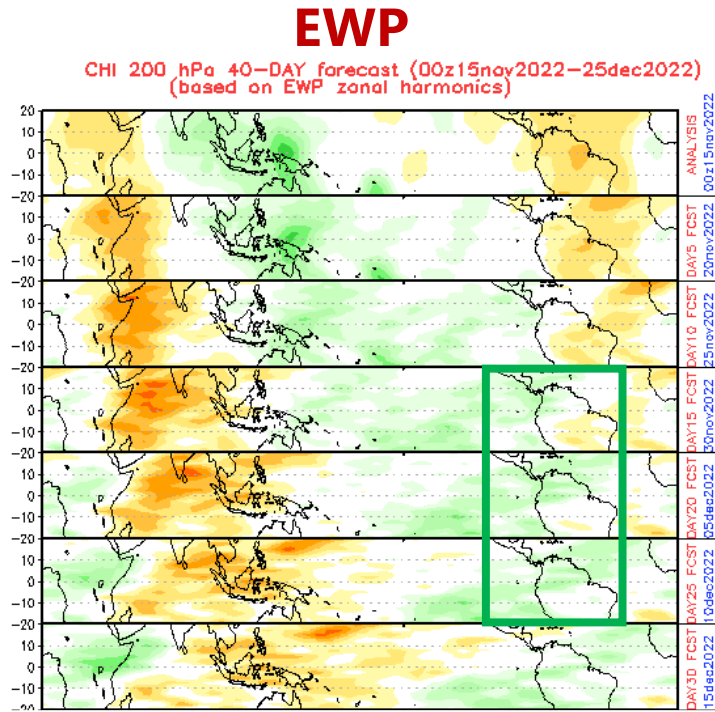
— MJO — Kelvin x2
— Low — ER

Contours at -2, -6 $\times 10^6 \text{ m}^2 \text{ s}^{-1}$

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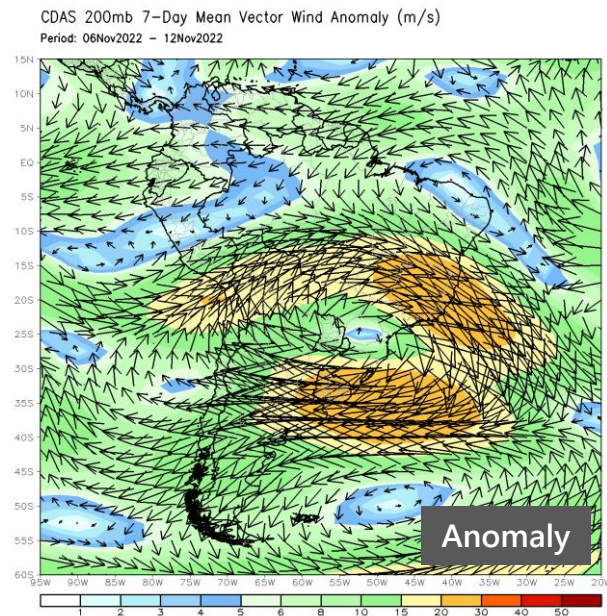
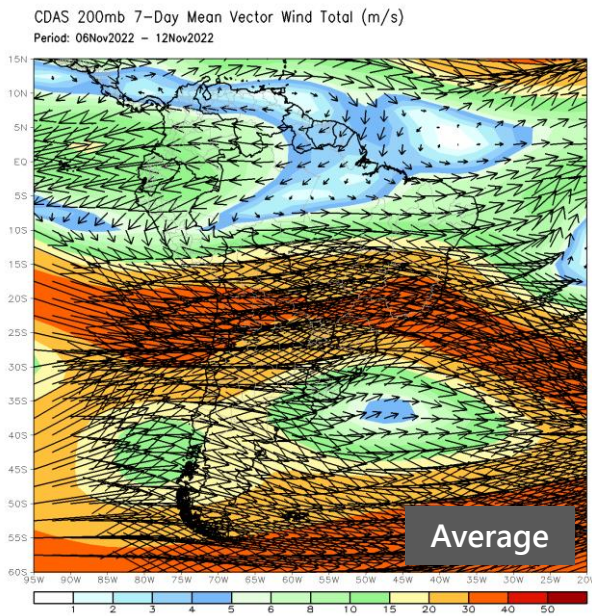
MJO Forecasts for the Americas



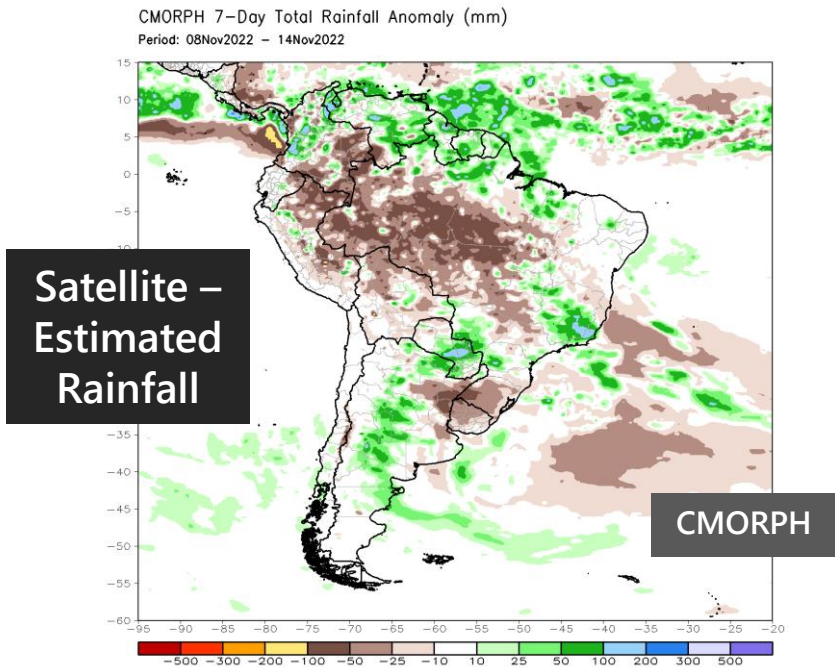
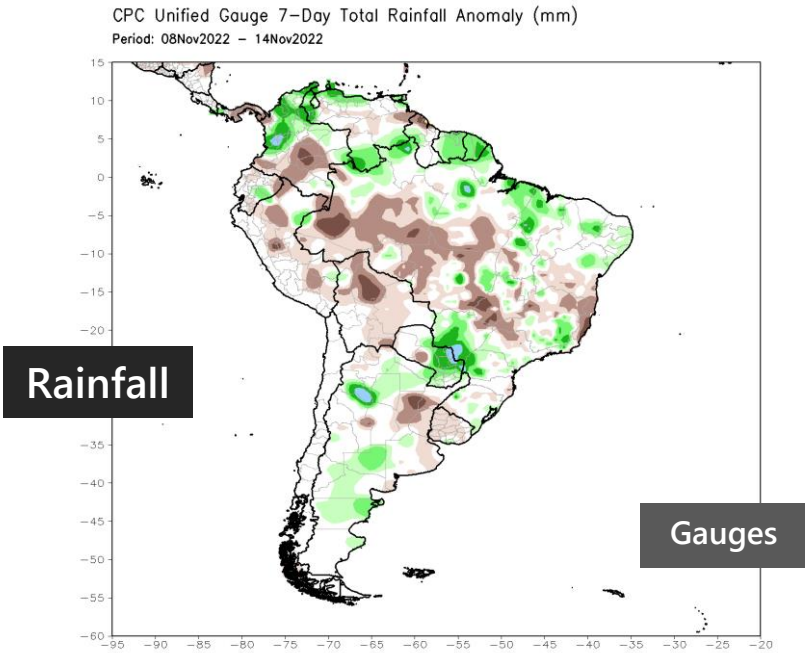
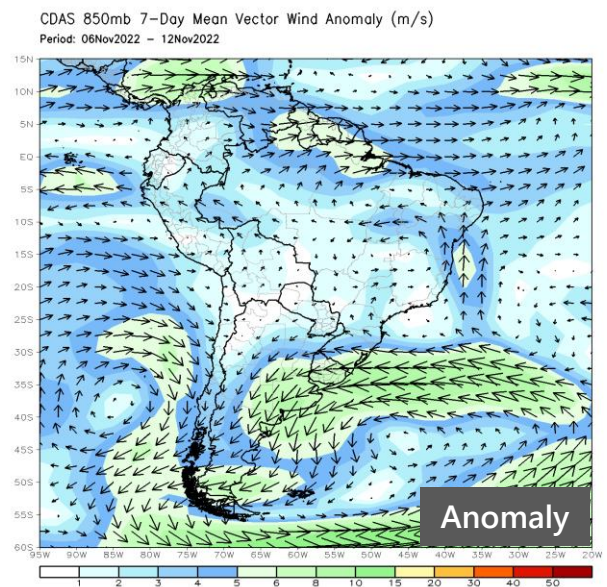
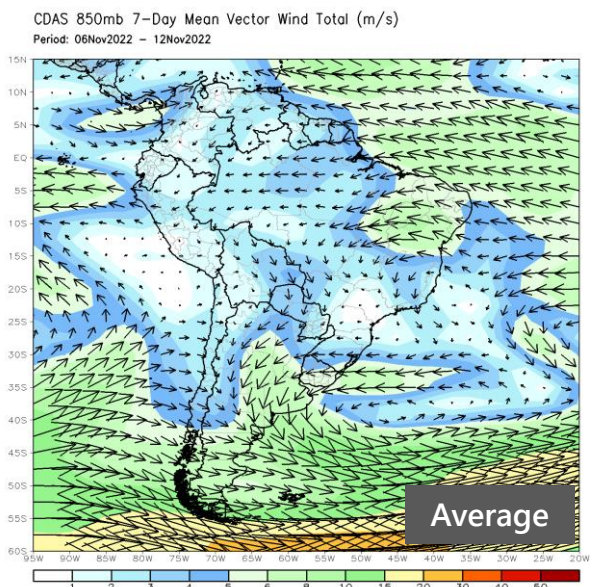
- We can consider EWP this time, propagation is improving.
- Wet: Late November/early December. Consistency among the 3 forecast tools.

South America, Last 7 Days

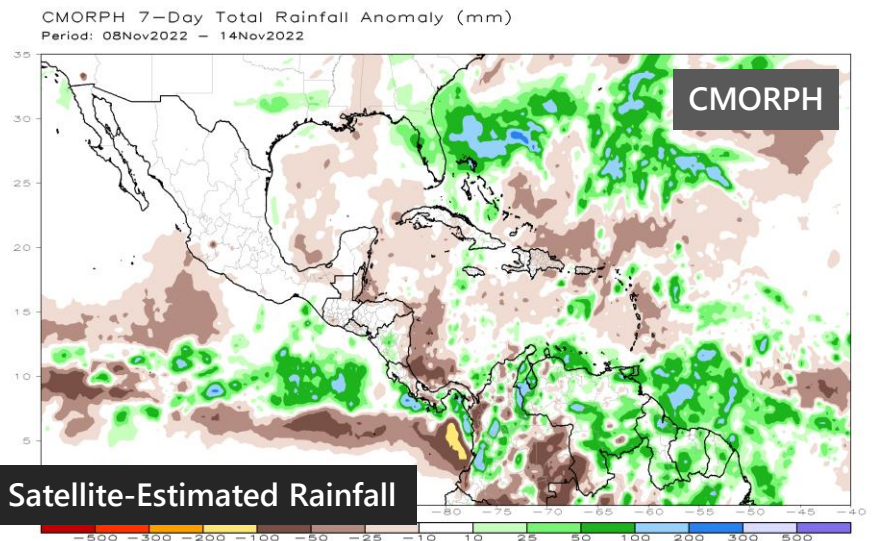
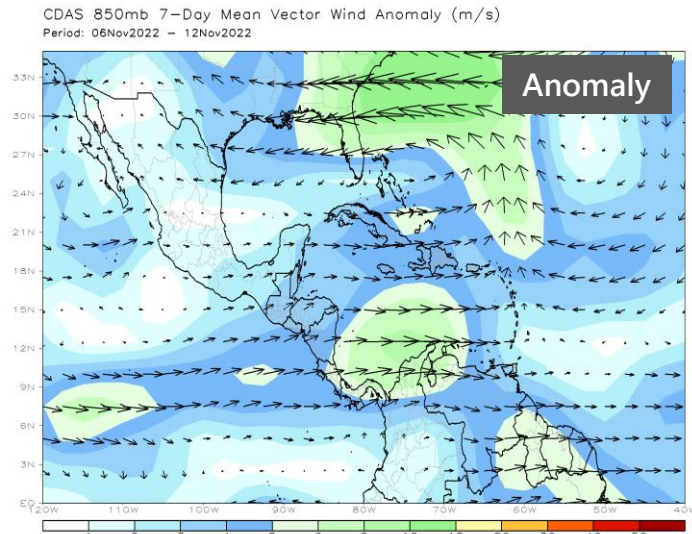
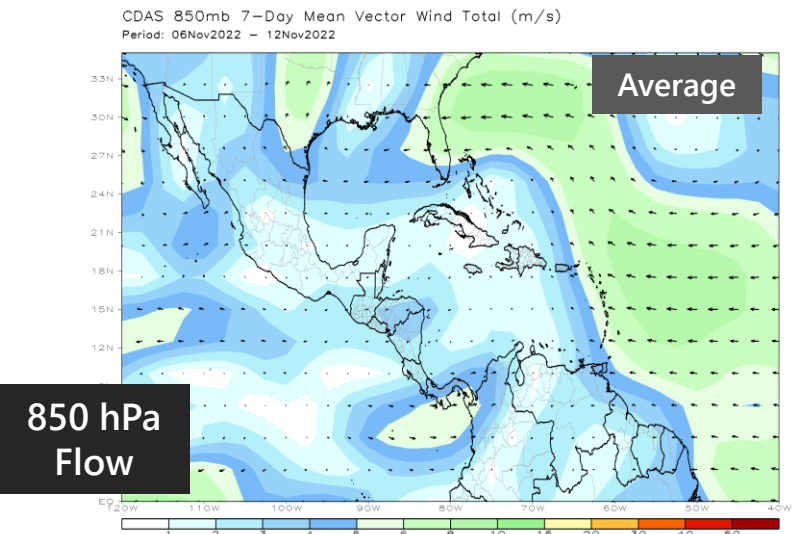
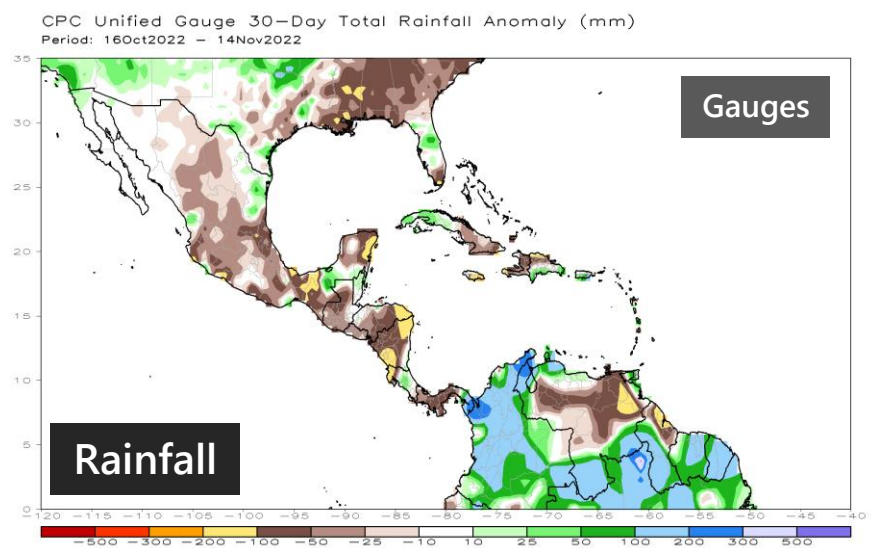
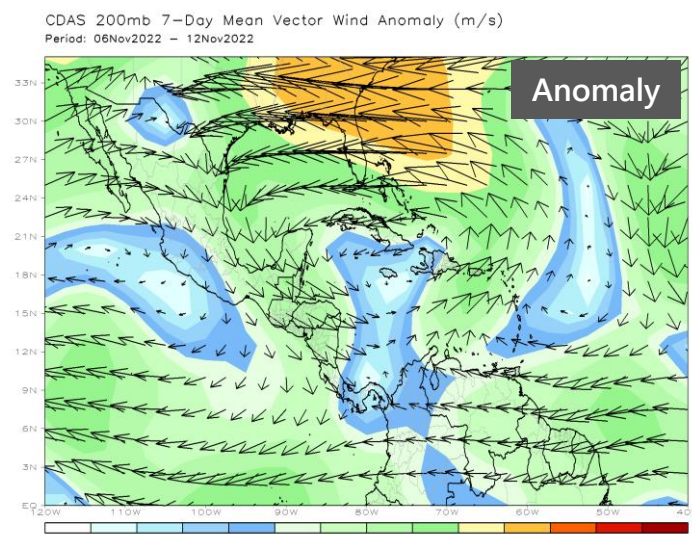
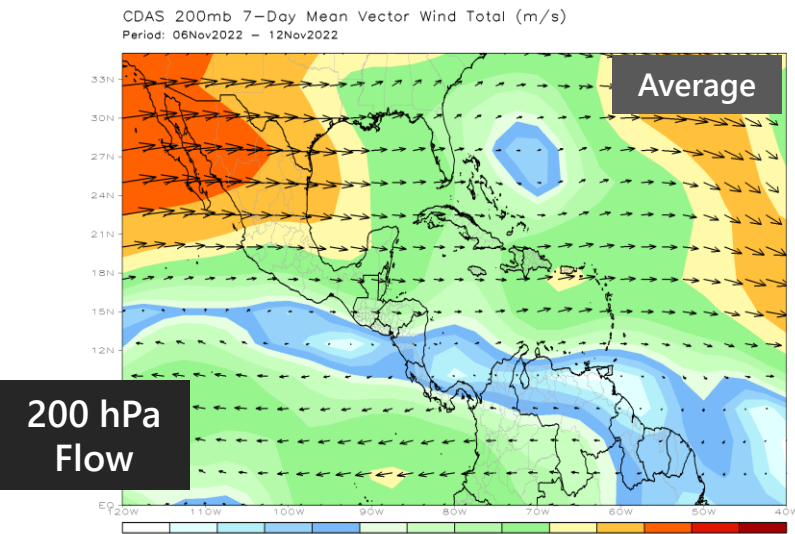
200 hPa
Flow



850 hPa
Flow



Caribbean, Central America and Mexico, Last 7 Days



¡Gracias! Thank you! ¡Obrigado!

Next RFG Session: 7 December 2022 at 17:30 UTC

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

Of Special Interest:

**Barbados RA-IV Satellite Applications Workshop
5-8 December 2022 - English Only.**

More information: <https://rammb2.cira.colostate.edu/training/wmo-ra-iv-barbados-virtual-training-on-satellite-applications-december-2022/>