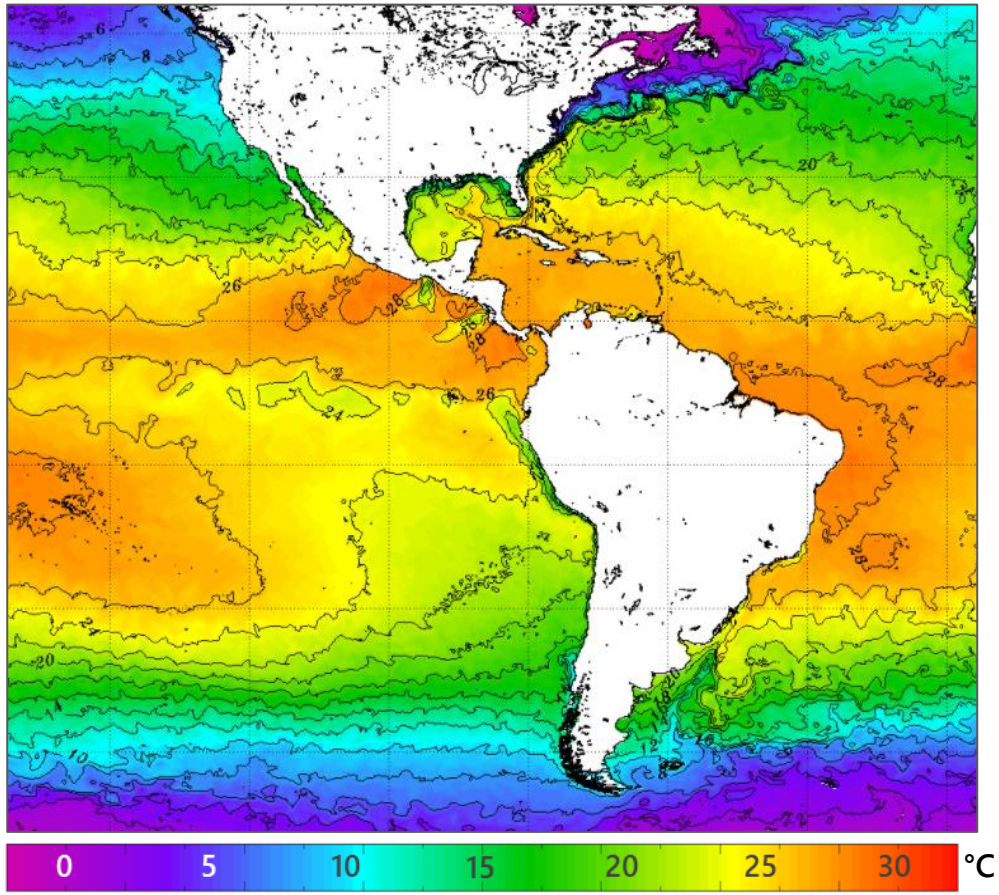
Monthly Regional Focus Group Session

Thursday 17 February 2022

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

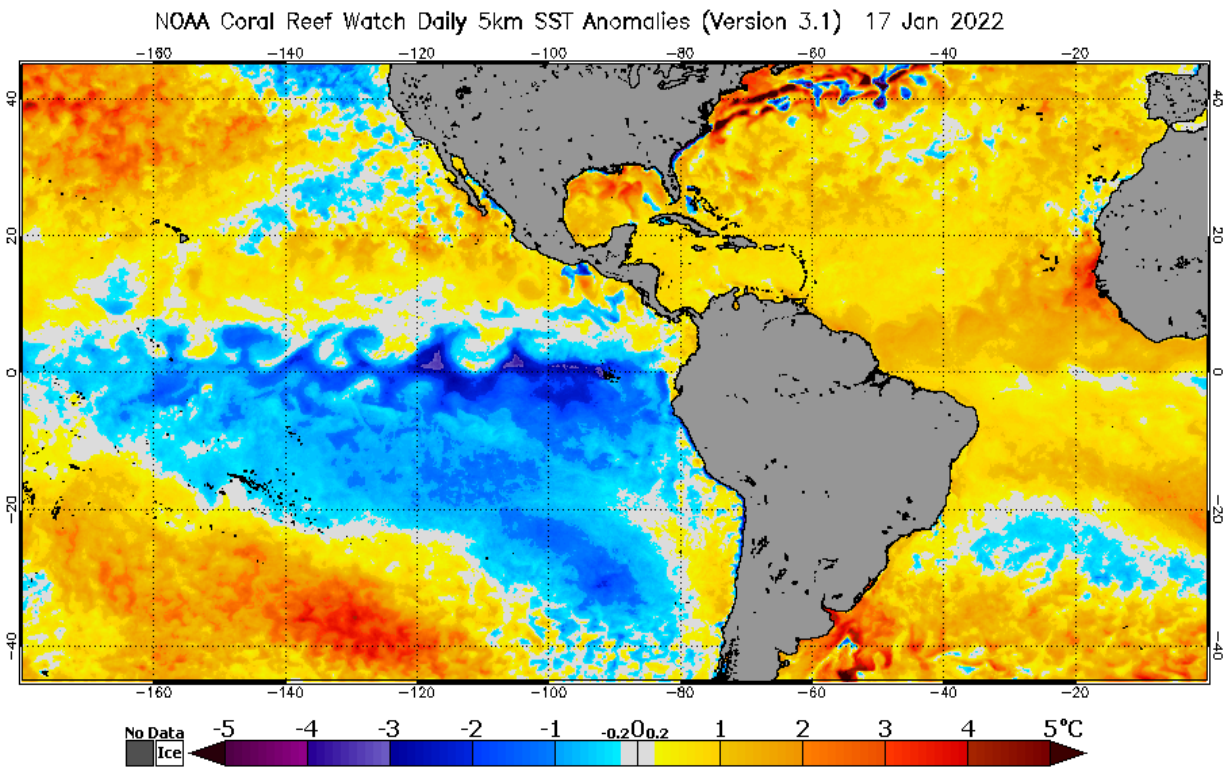
Sea Surface Temperatures

Daily SST Feb 15



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

Anomaly Evolution

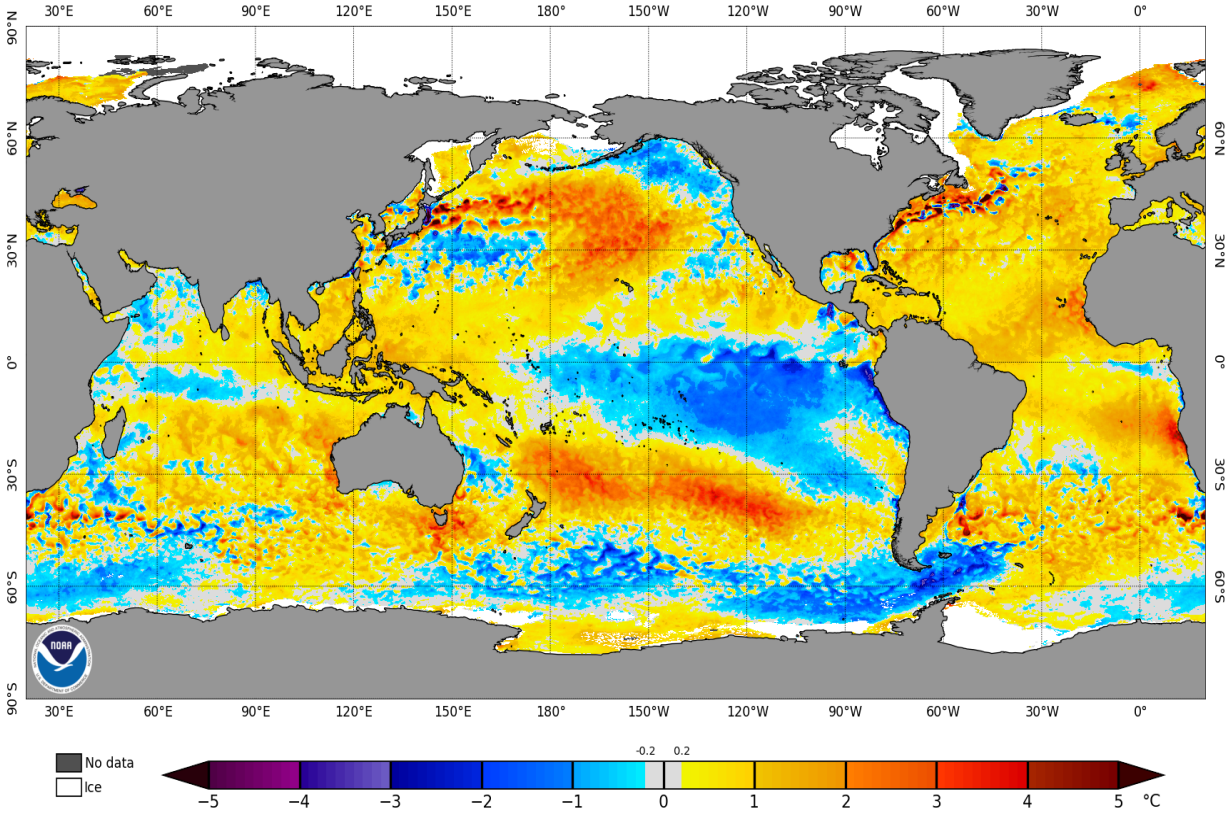


NOAA Coral Reef Watch
https://coralreefwatch.noaa.gov/

Are the anomalies deep?

Deep anomalies last longer, becoming useful for subseasonal forecasting.

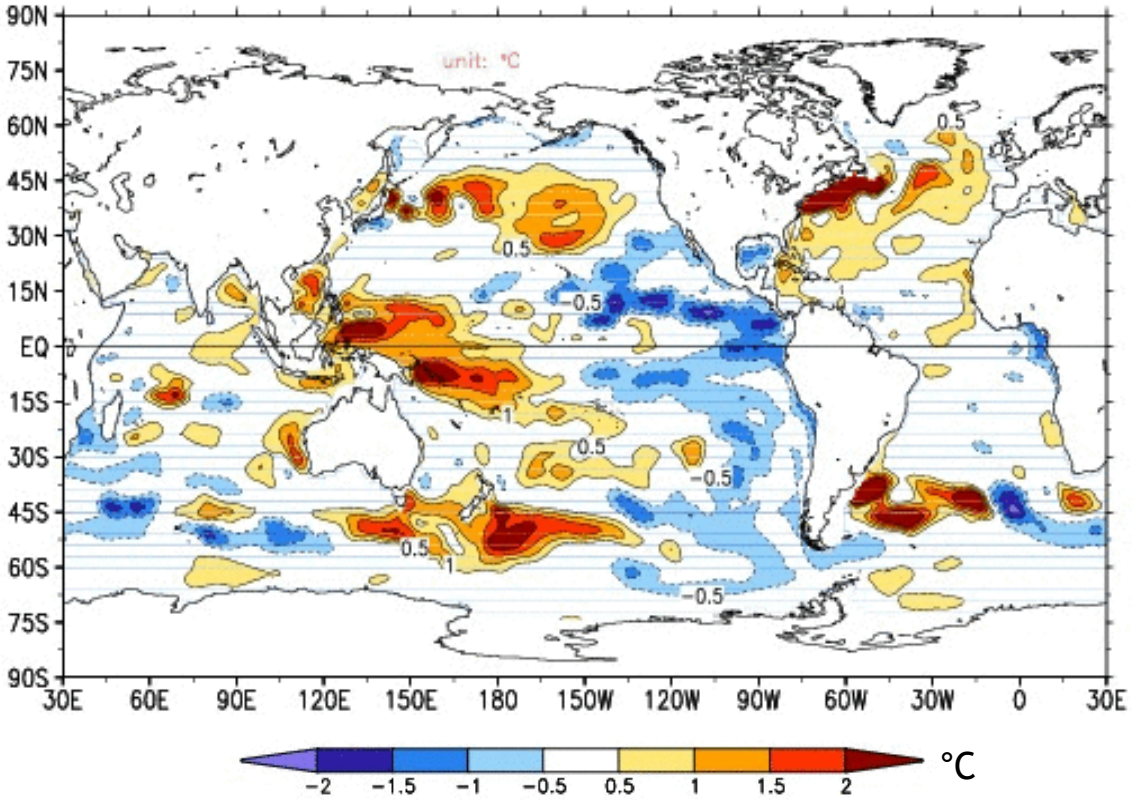
Feb 15 SST Anomalies



NOAA Coral Reef Watch

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

Feb 12 GODAS Top 300m Layer Anomaly

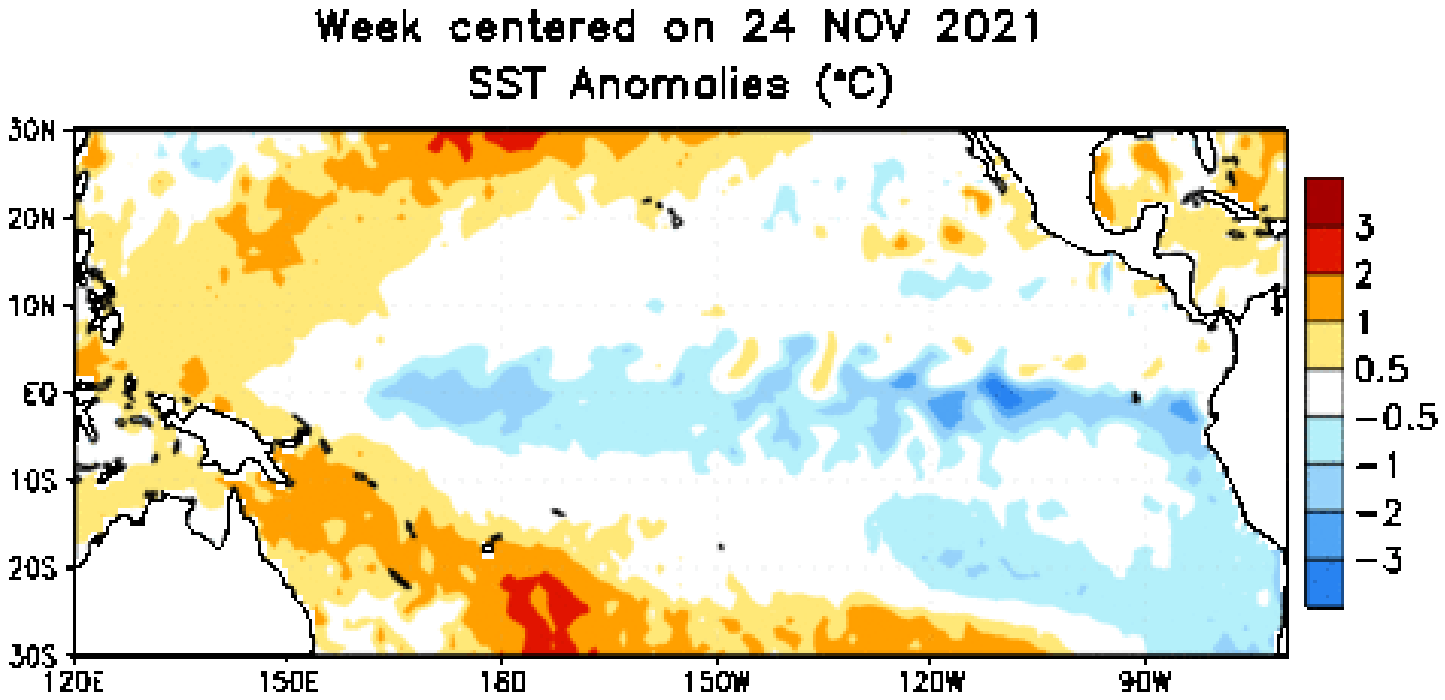


NOAA CPC

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

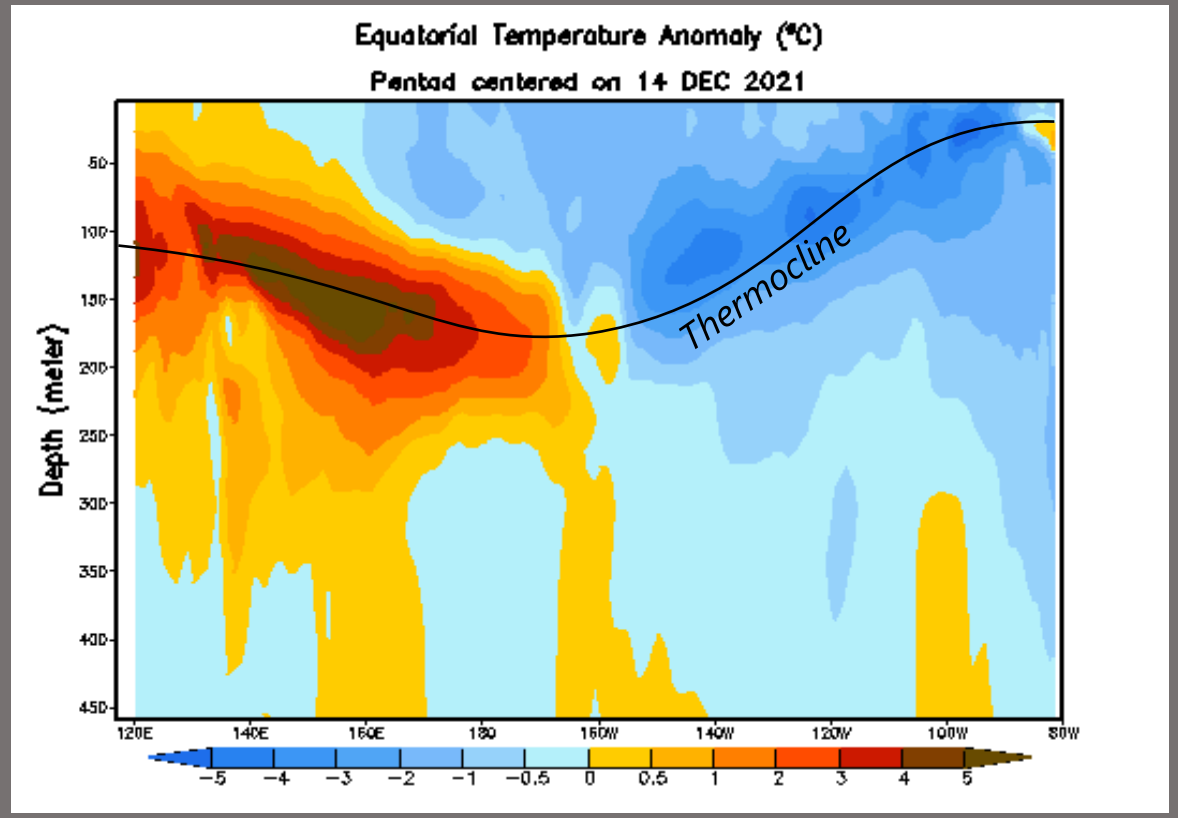
ENSO: La Niña

- La Niña is present.*
- Equatorial sea surface temperatures (SSTs) are below average across the east-central and eastern Pacific Ocean.
- The tropical Pacific atmosphere is consistent with La Niña.



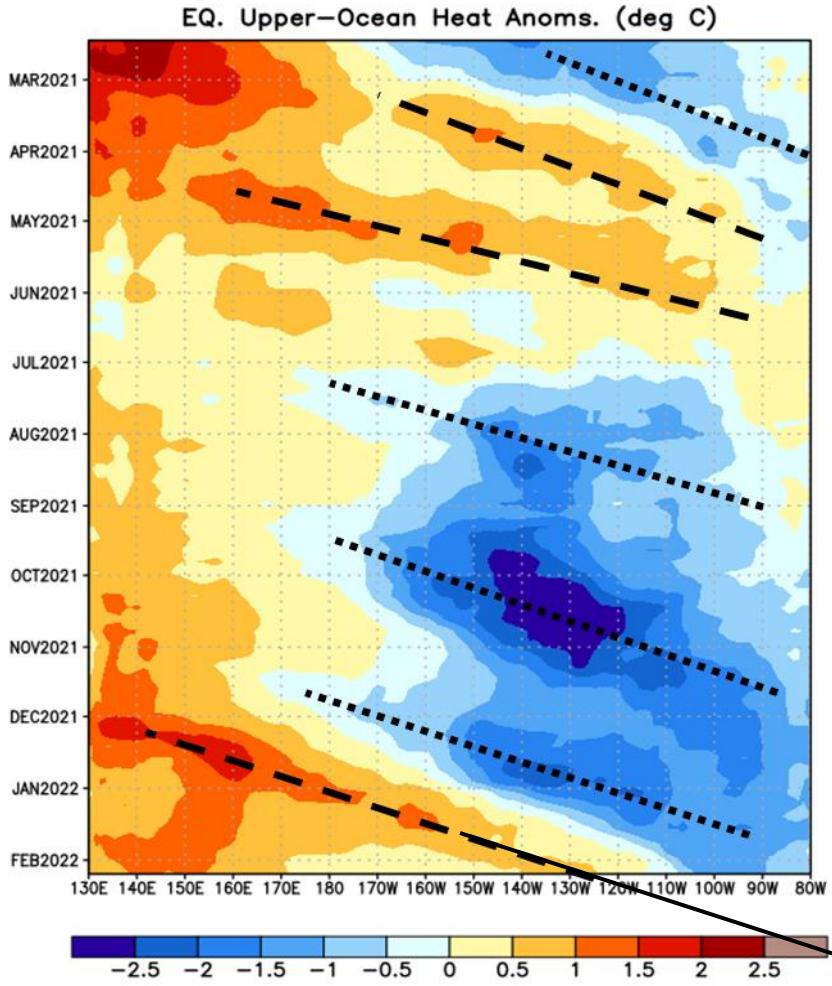
ENSO: Oceanic Kelvin Waves

Equatorial Pacific Temperature Anomaly Cross Section



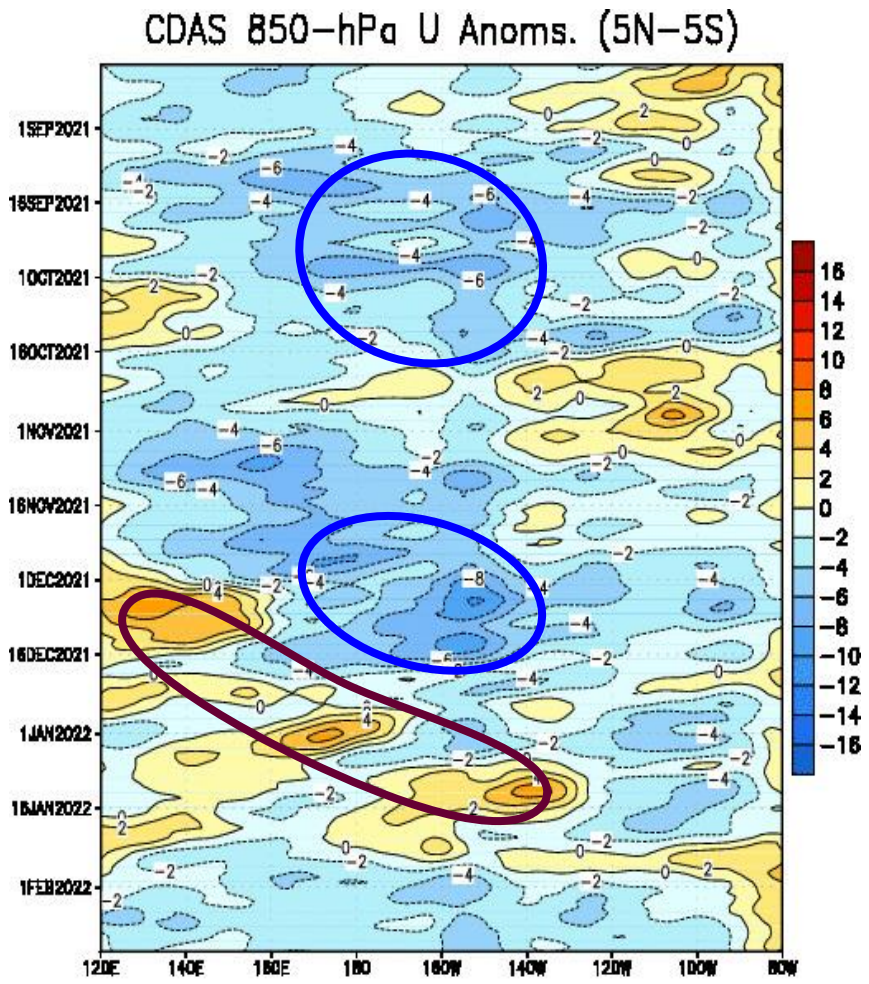
Source: CPC

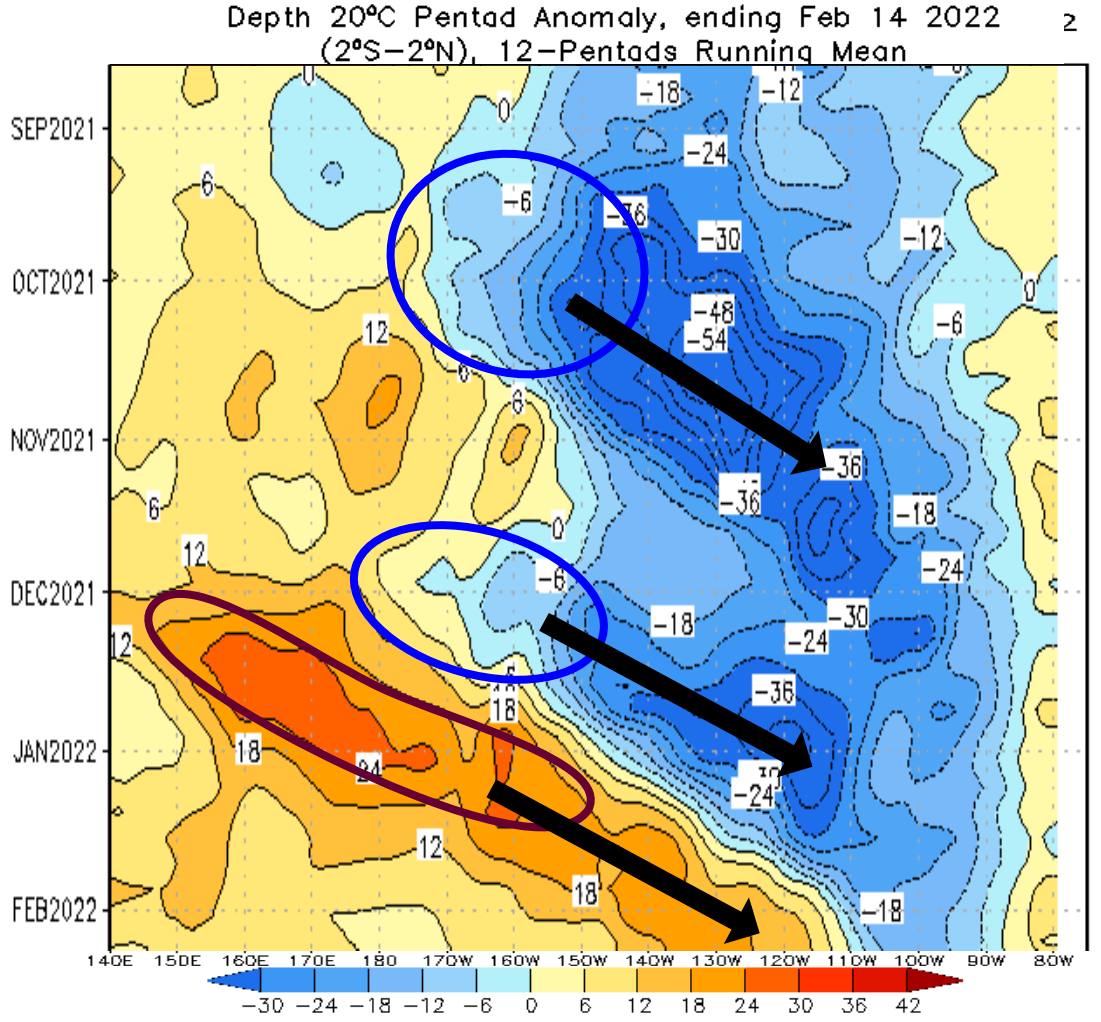
Heat Content Hovmöller

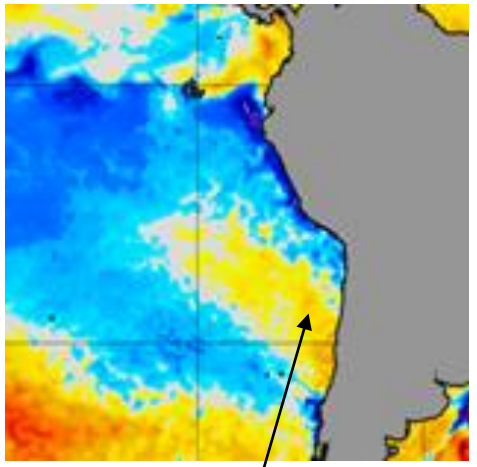


Brief Warming in South America by Mid March.

What to monitor for warmings along the west coast of South America







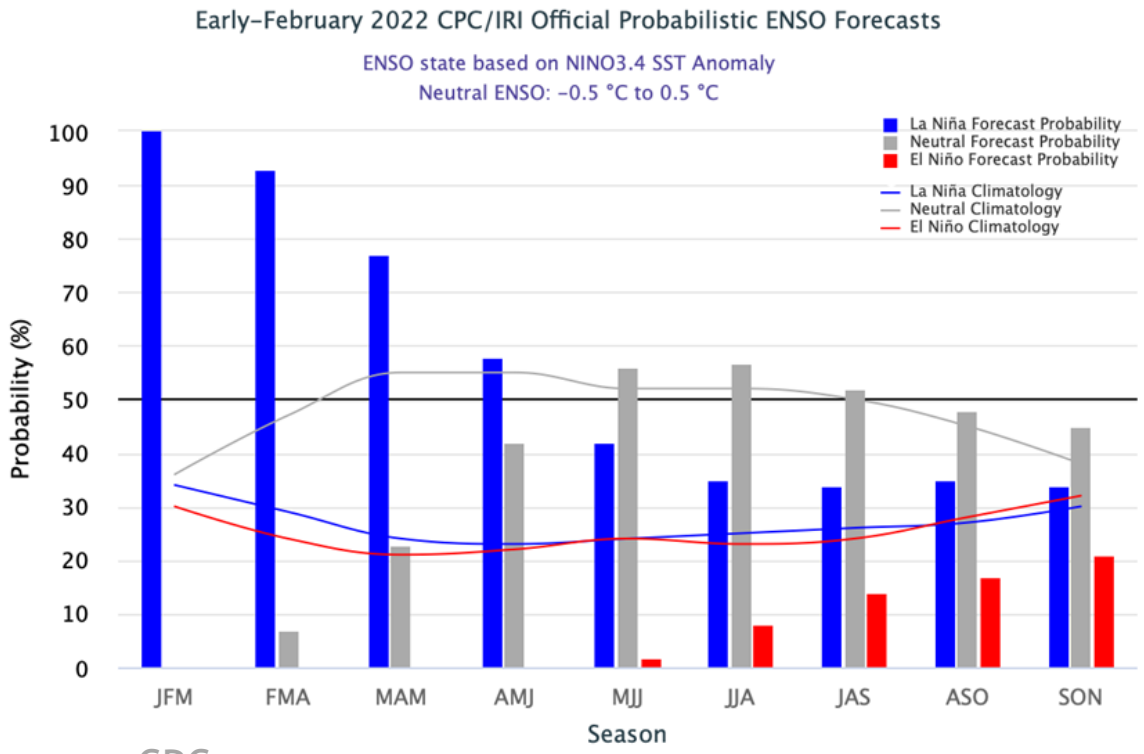
Warm Anomalies in northern Chile

- Bolivian High displaced to the SW
- NW flow anomalies at 850 and 925 hPa
- Upper divergent MJO

ENSO Outlook

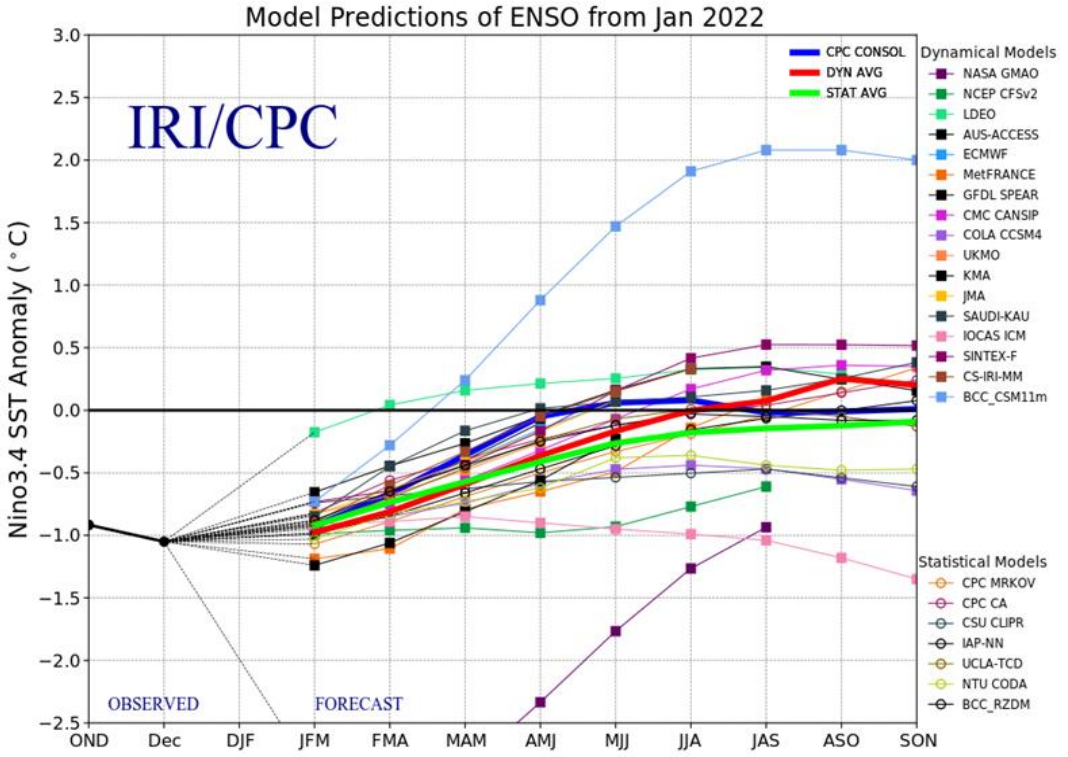
La Niña is likely to continue into the Northern Hemisphere spring (77% chance during March-May 2022) and then transition to ENSO-neutral (56% chance during May-July 2022).*

CPC/IRI Probabilistic Forecast



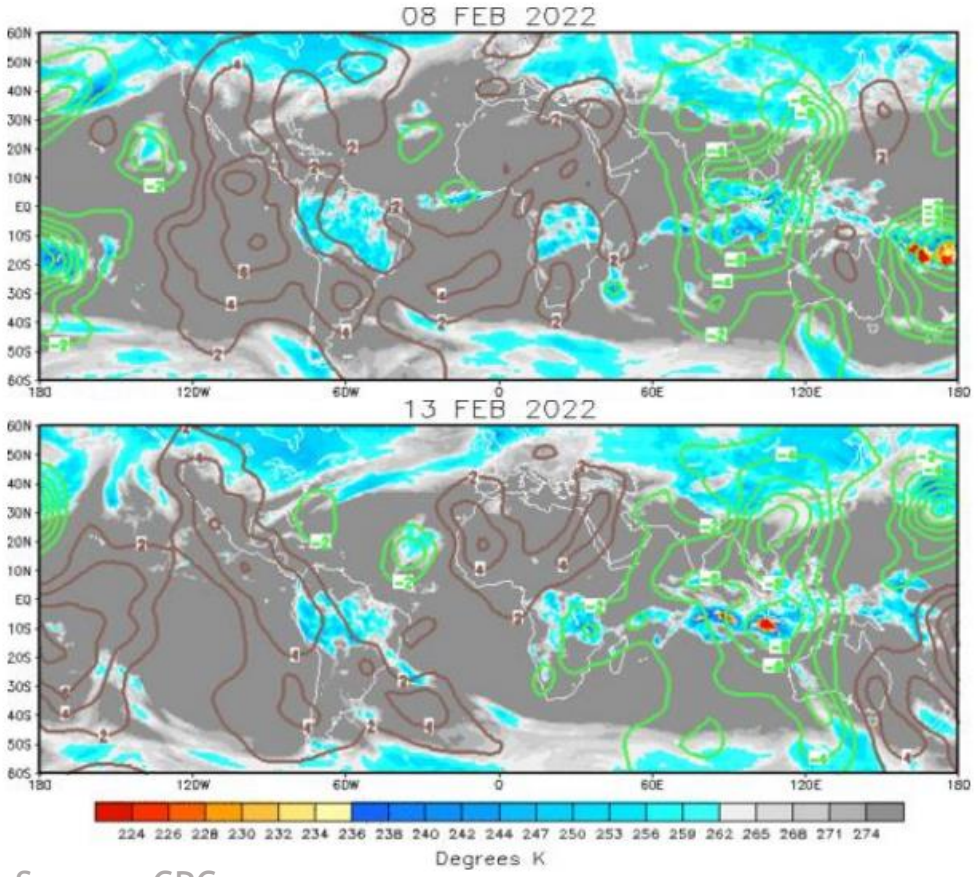
Source: CPC

IRI/CPC Dynamic Models

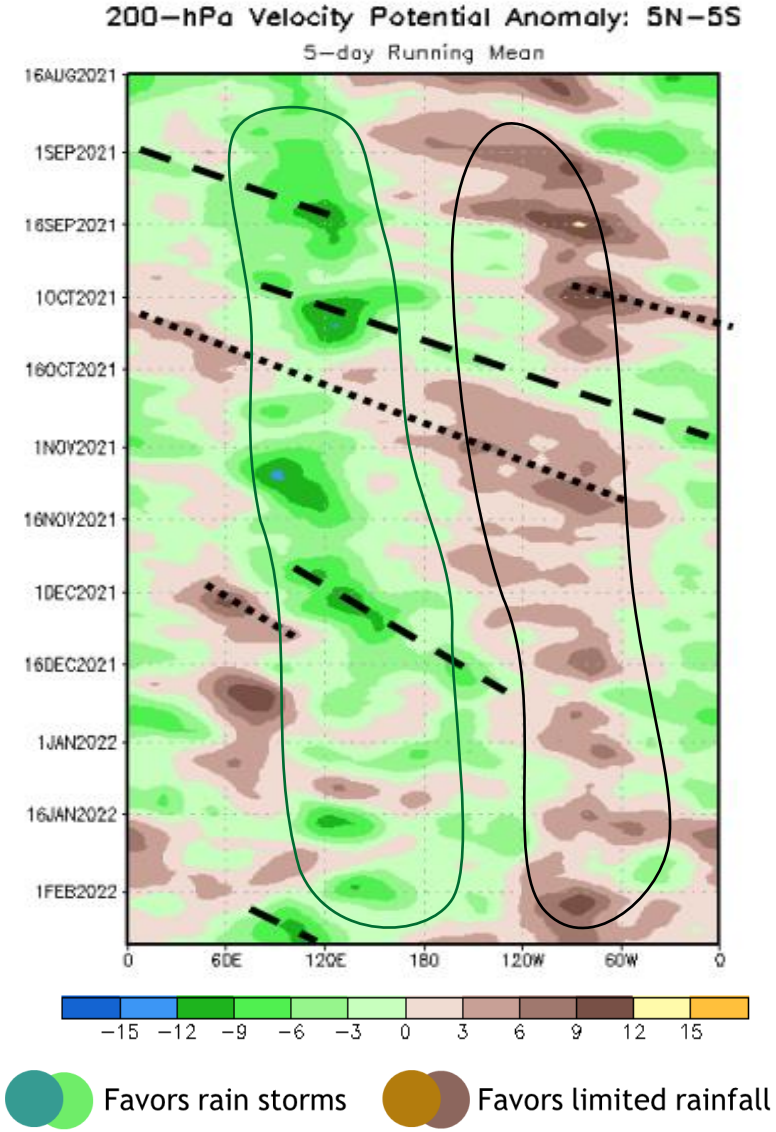


Madden-Julian Oscillation (MJO)

- Starting to organize into a 1-wave pattern
- Propagation is still ill-defined
- Low frequency anomalies reappearing: dry over the Americas

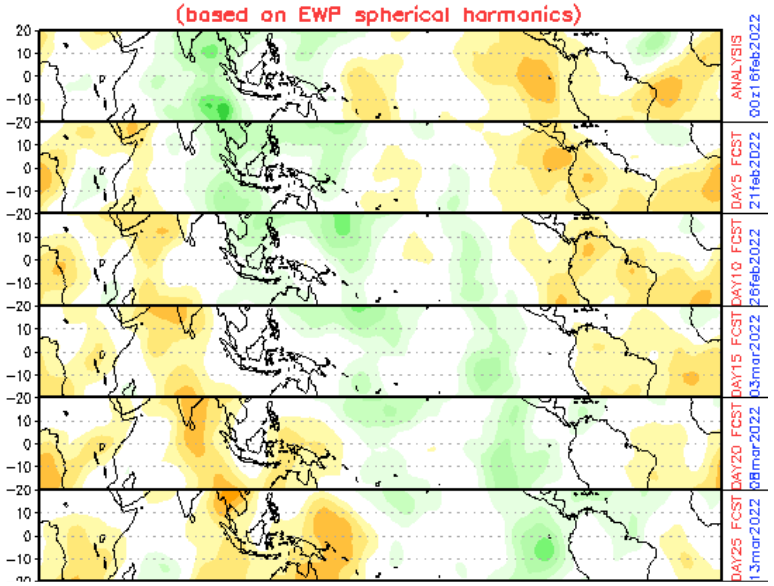


Source: CPC

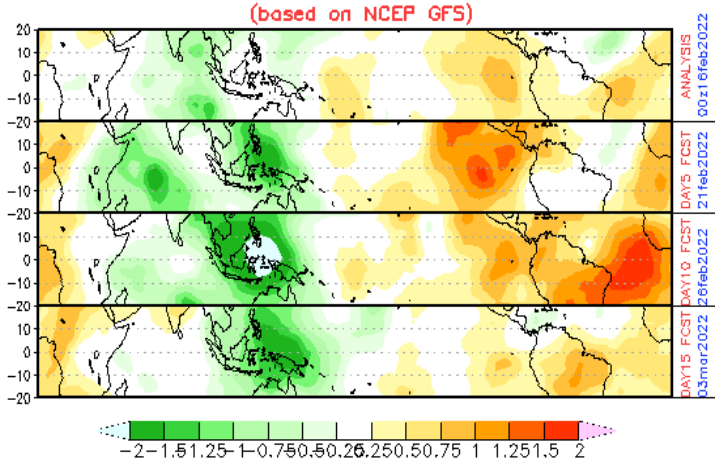


MJO Forecasts for the Americas

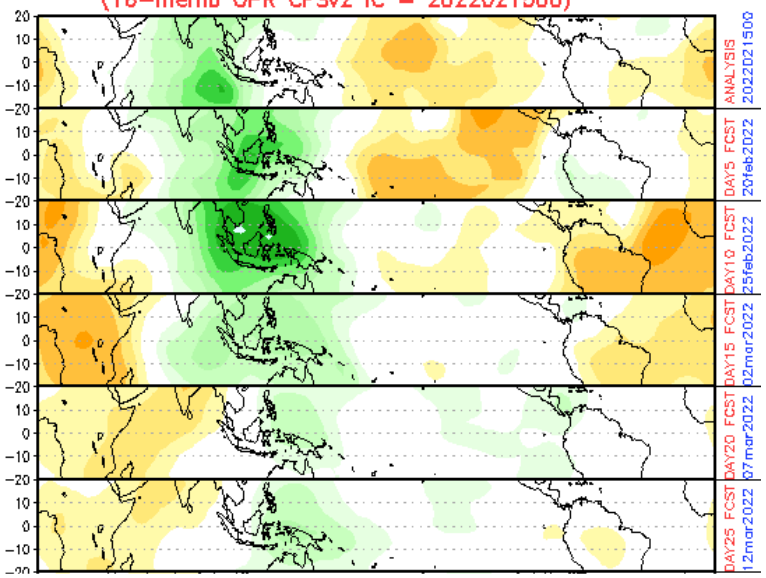
EWP



GFS



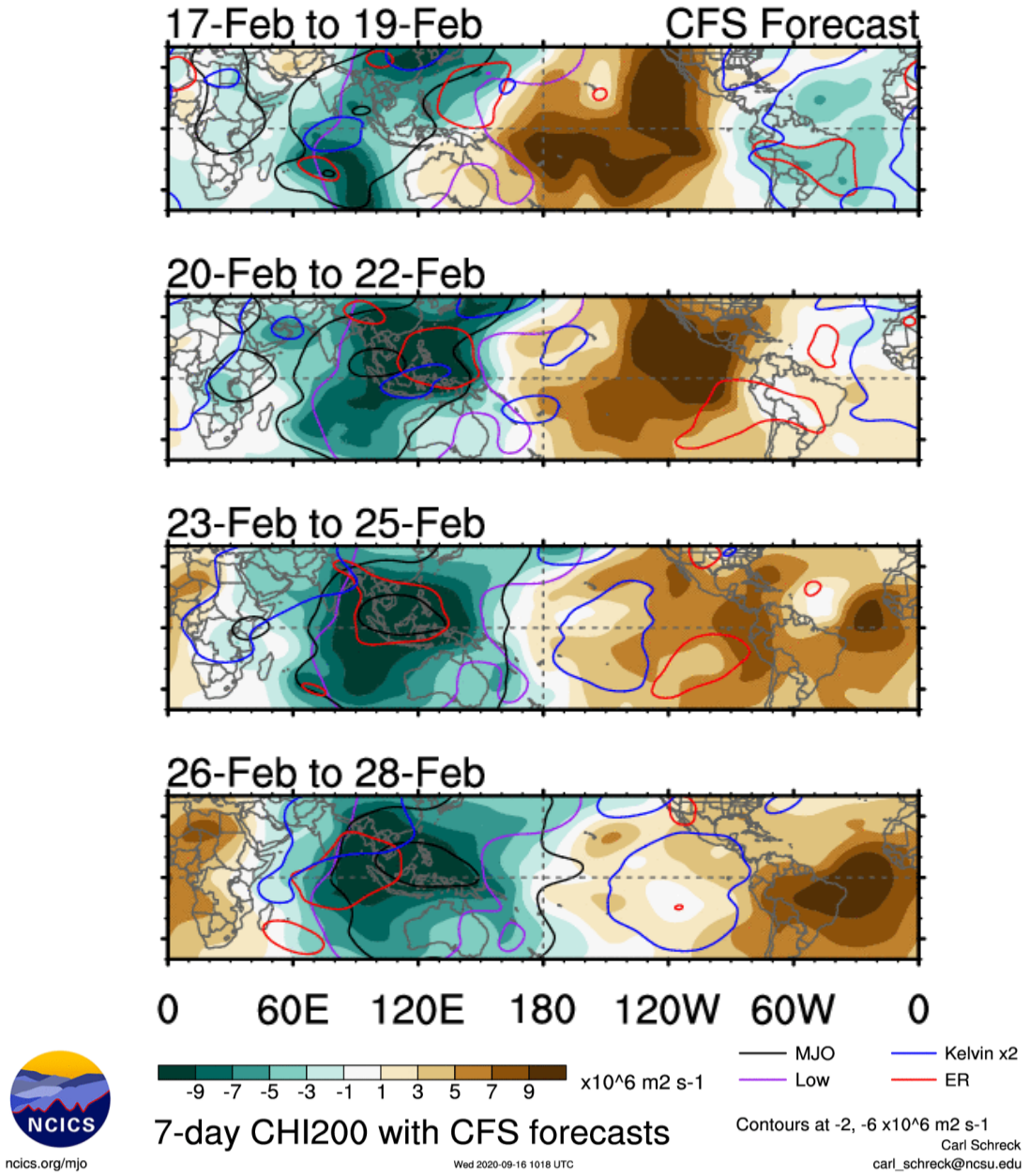
CFS



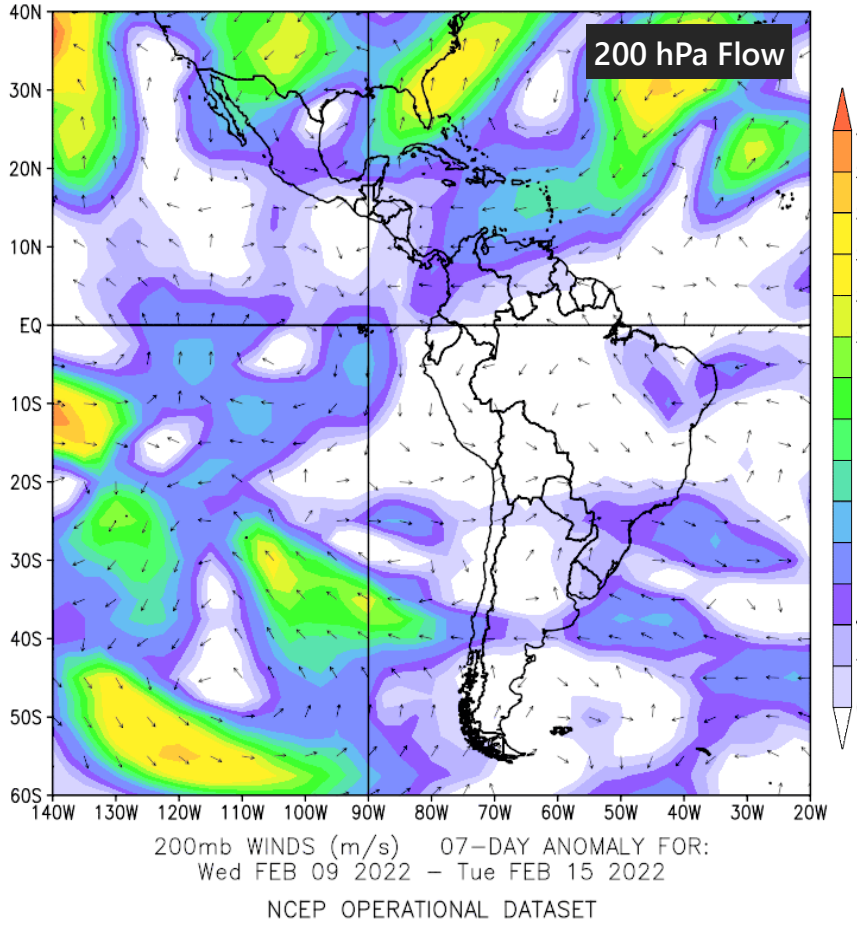
- Models agree better than last month.
- Upper convergent (dry) through early March
- Upper divergent (wetter) peaking near mid-March (potentially)

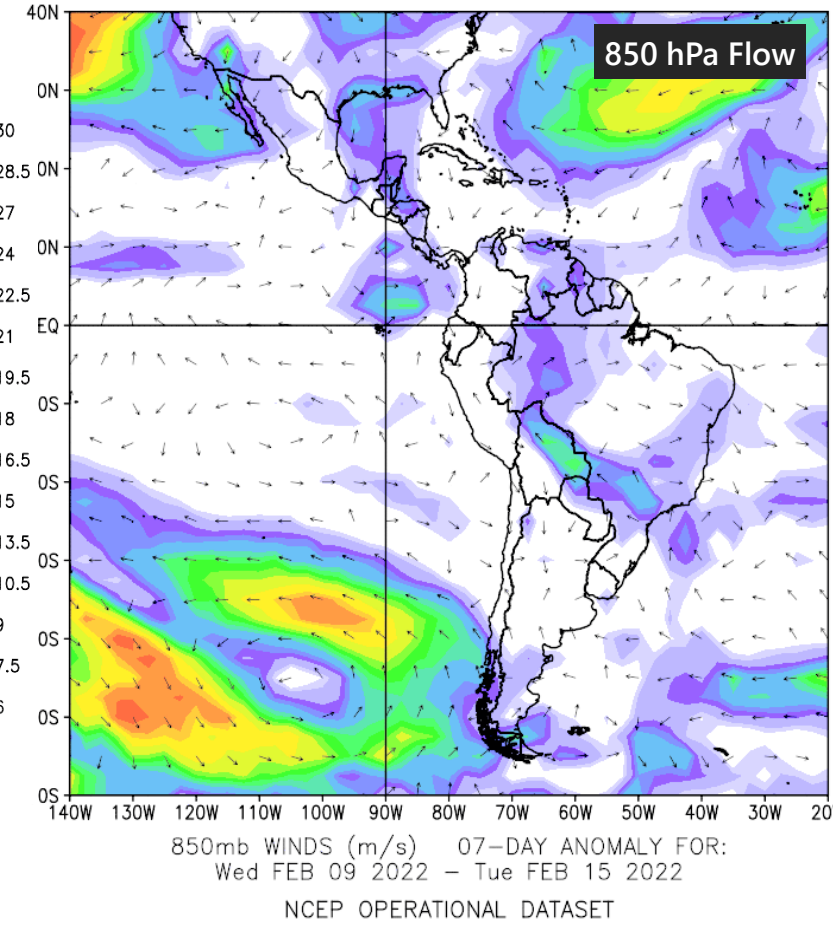
Tropospheric Equatorial Waves

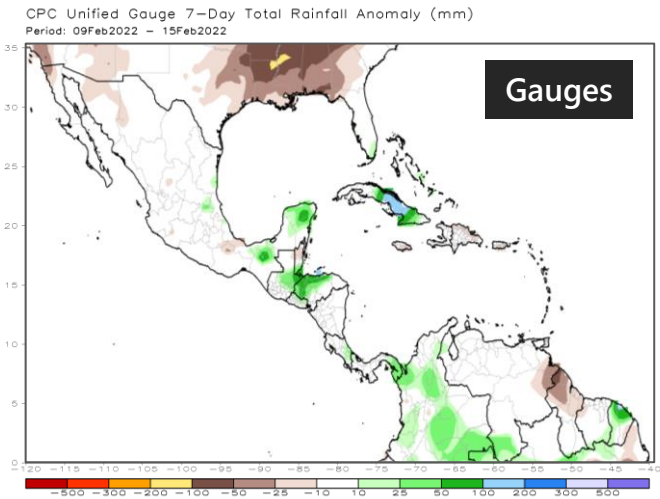
- Kelvin (wet) through Feb 19
  - Impacts mostly in South America
- Upper convergent (dry) last week of February
- Kelvin (wet) first week of March

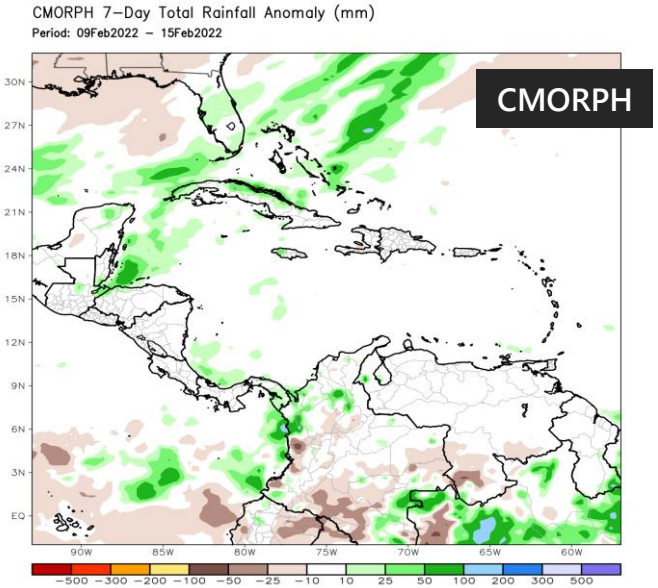


Flow and Rainfall Anomalies, Last 7 Days









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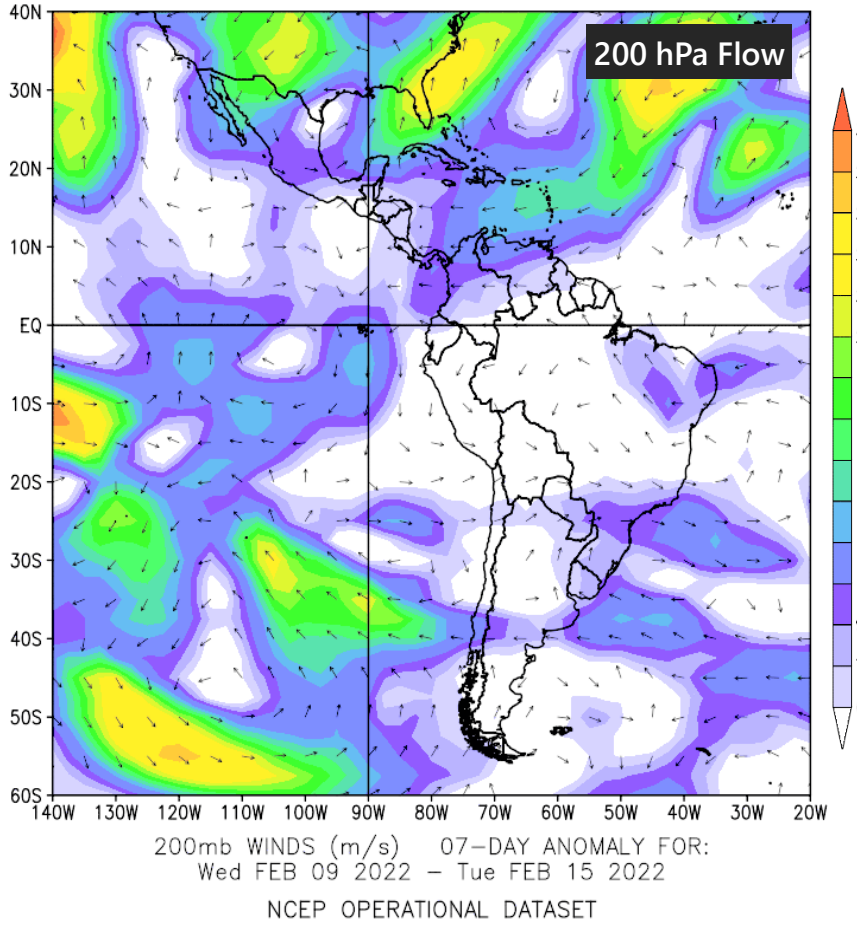

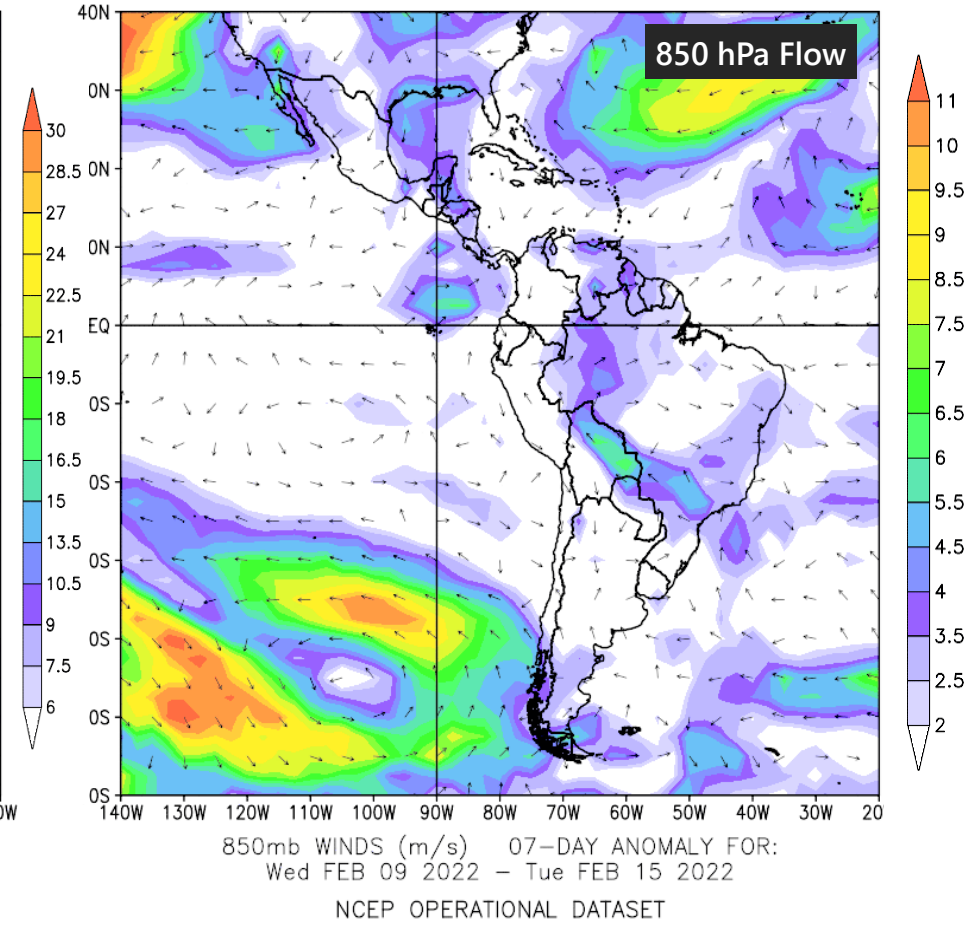

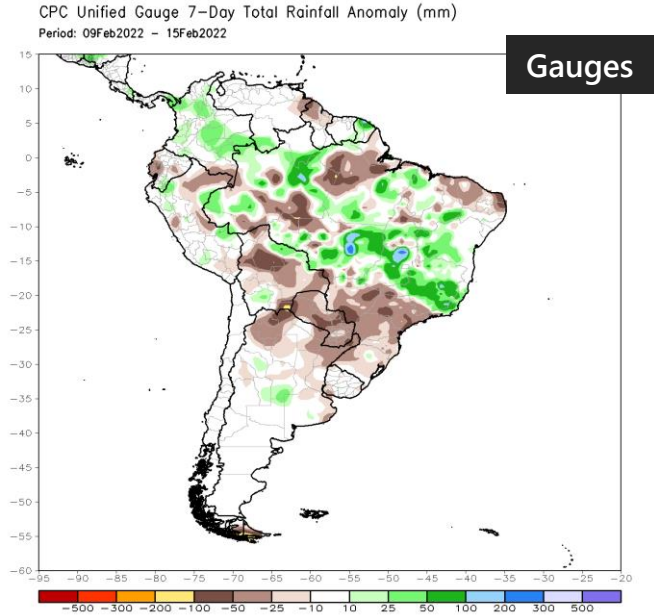

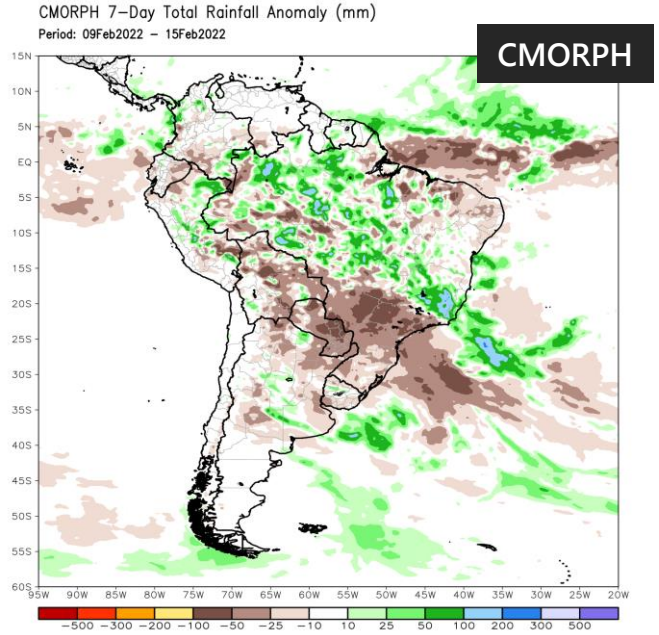

¡Gracias! Thank you!

Next session:
Wednesday 9 March at 16 UTC

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