

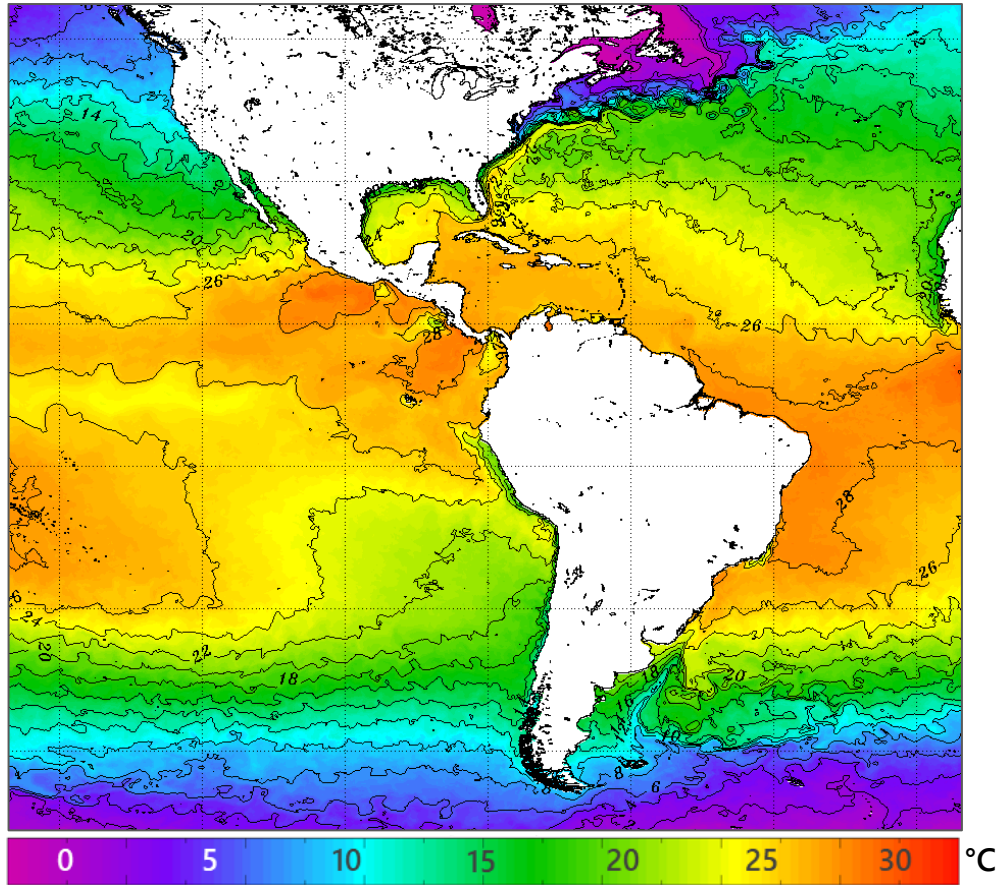
Monthly Regional Focus Group Session

Wednesday 9 March 2022

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

Sea Surface Temperatures

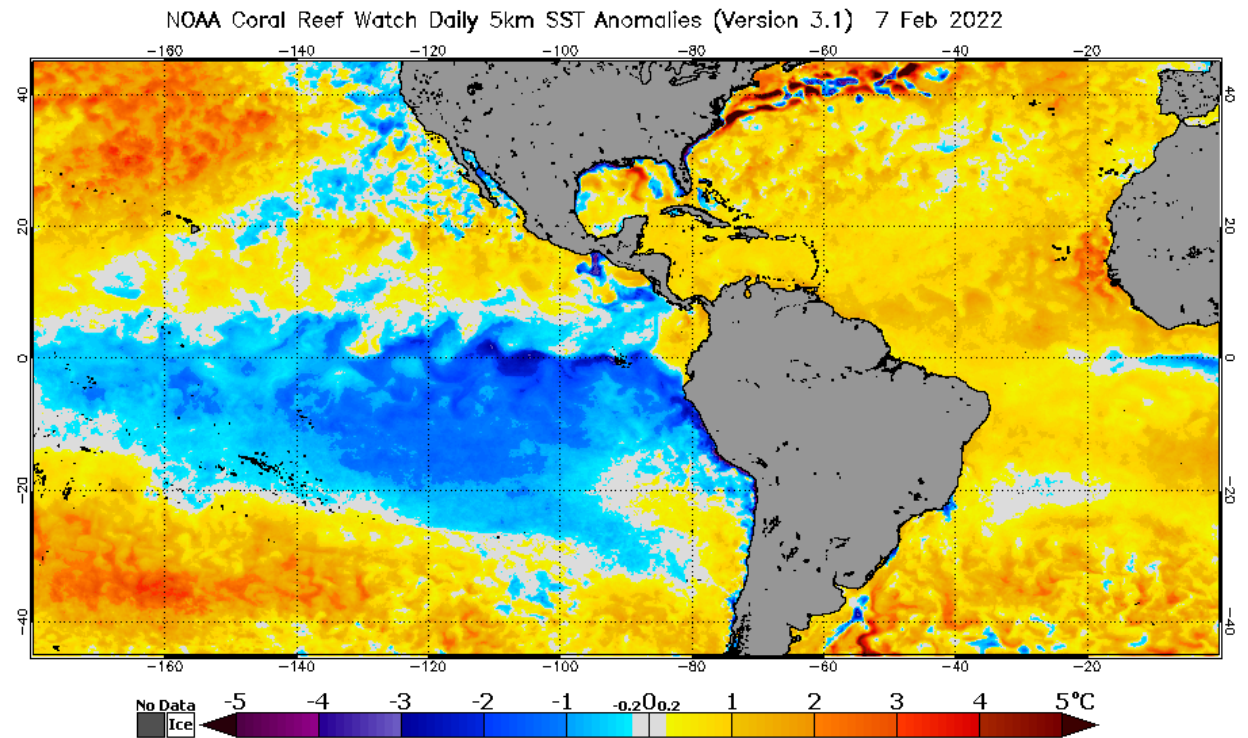
Daily SST Mar 07



NOAA OSPO

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

Anomaly Evolution



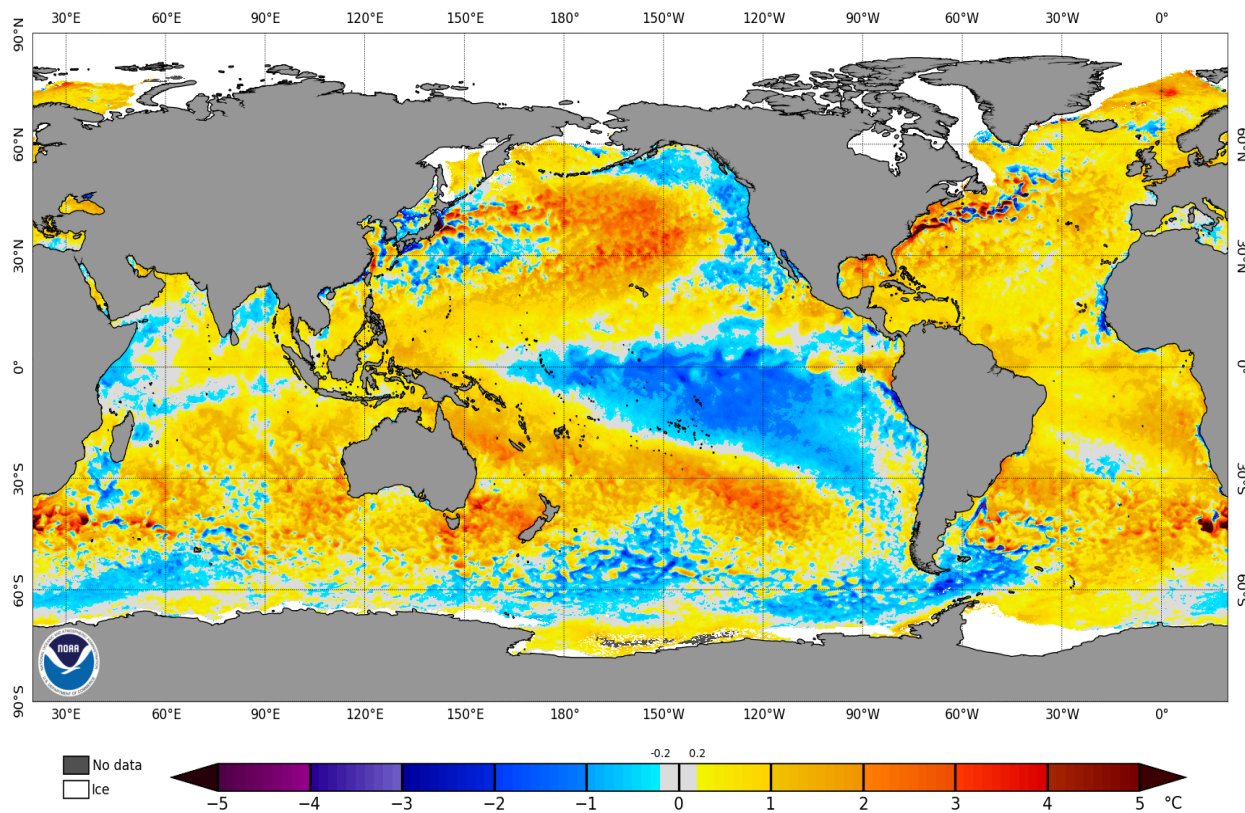
NOAA Coral Reef Watch

<https://coralreefwatch.noaa.gov/>

Are the anomalies deep?

Deep anomalies last longer, becoming useful for subseasonal forecasting.

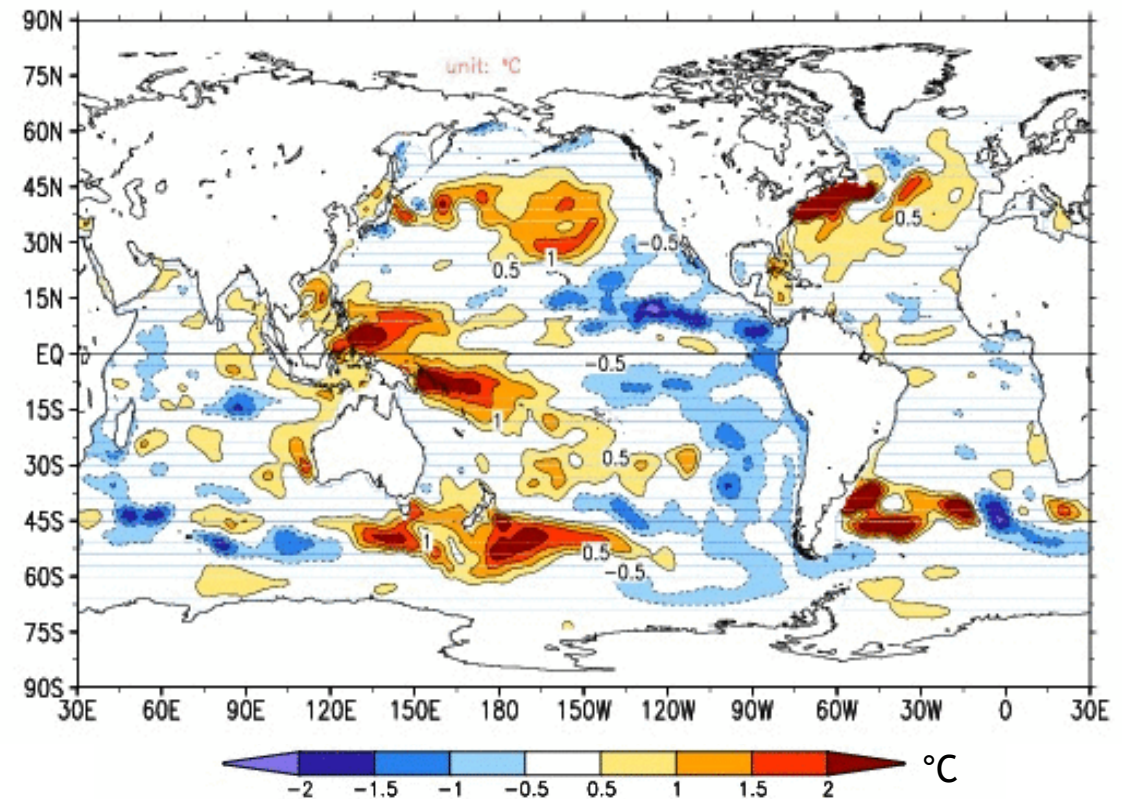
Mar 07 SST Anomalies



NOAA Coral Reef Watch

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

Mar 04 Top 300m Layer Anomaly (GODAS)

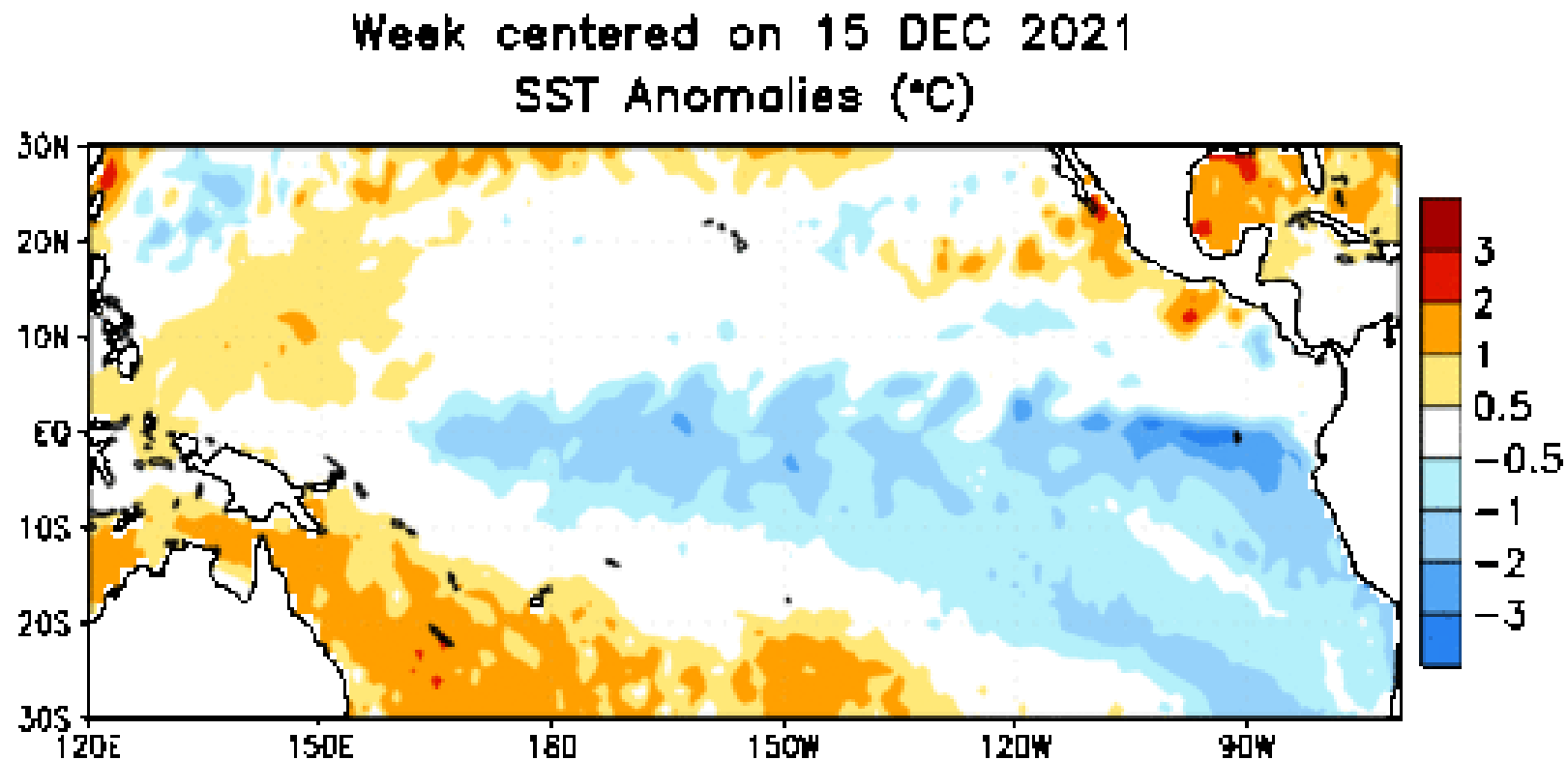


NOAA CPC

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

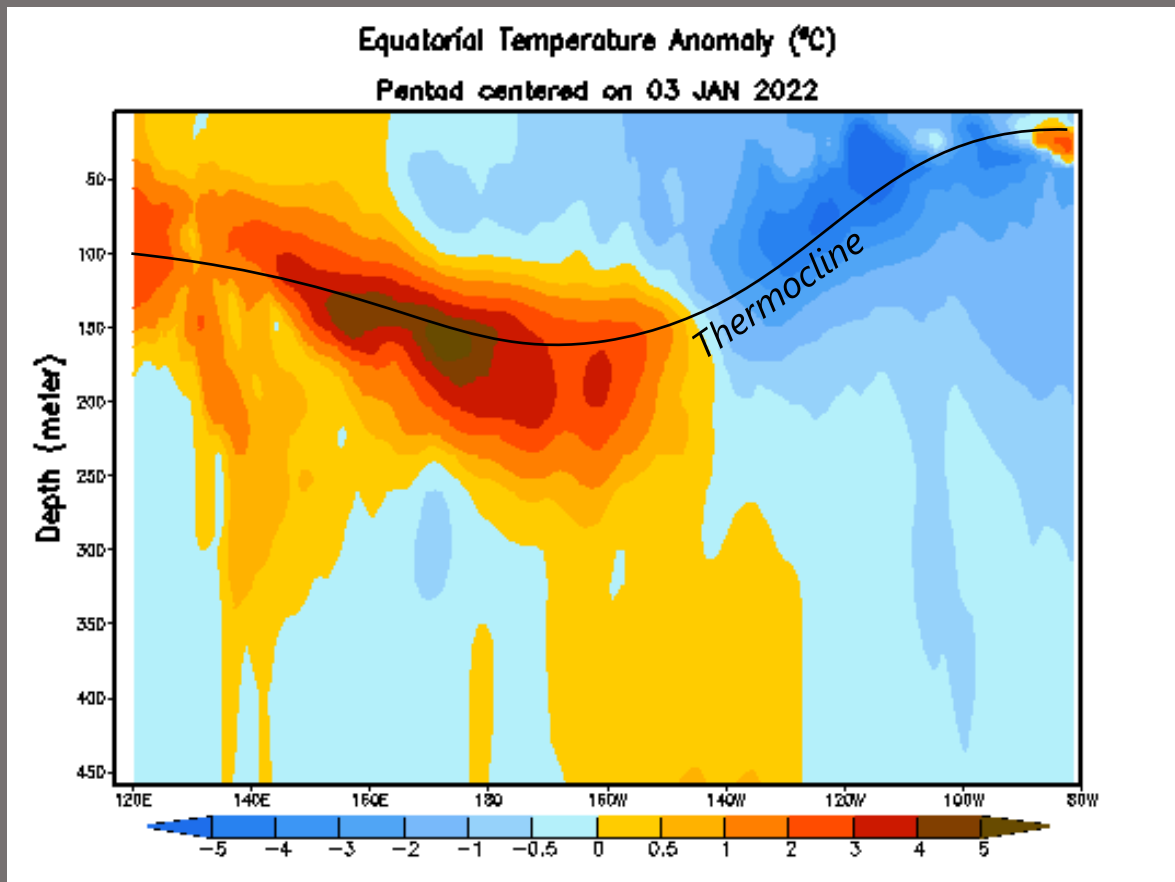
ENSO: La Niña

- ☯ 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.



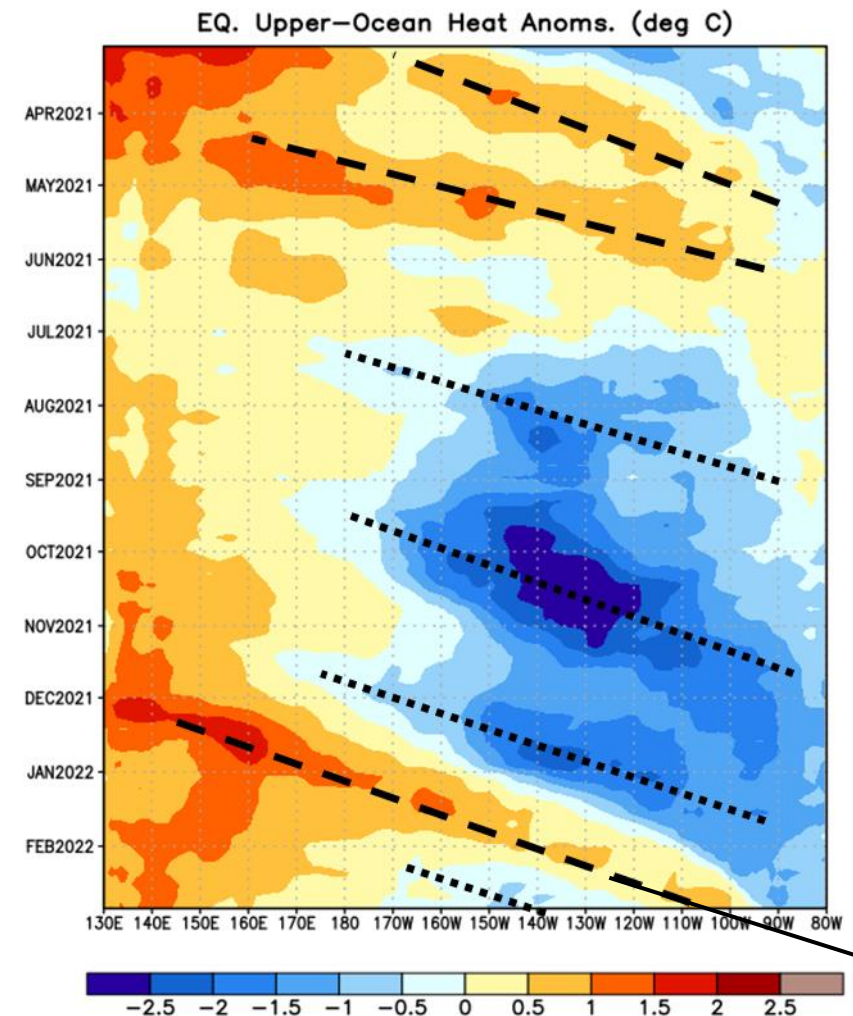
ENSO: Oceanic Kelvin Waves

Equatorial Pacific Temperature Anomaly Cross Section



Source: CPC

Heat Content Hovmöller

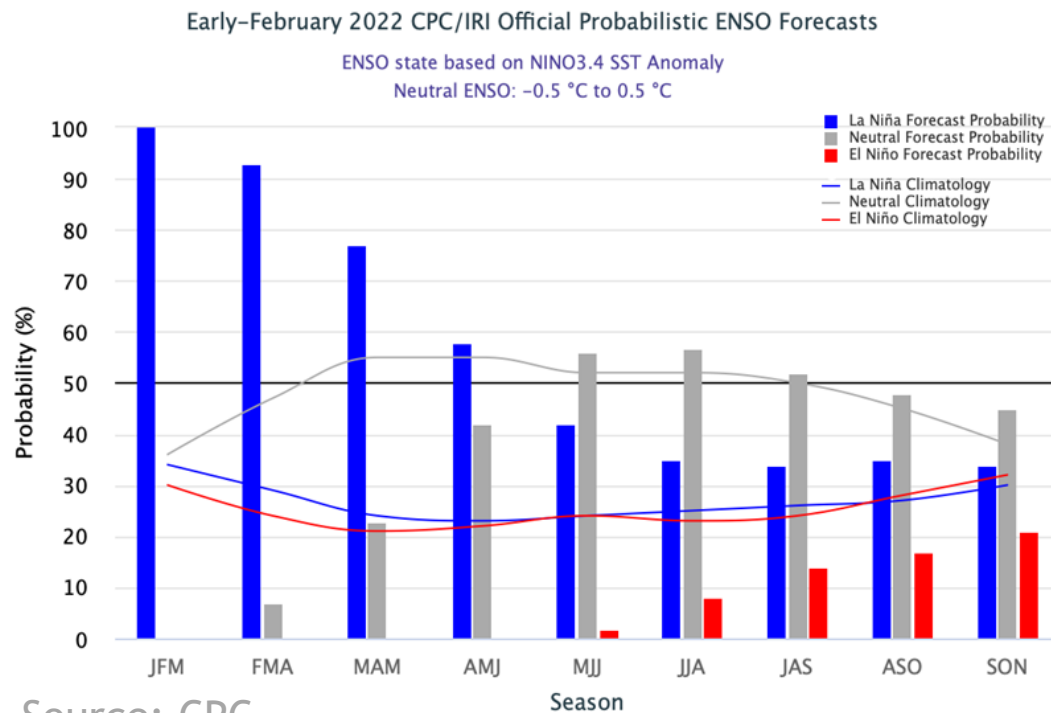


Brief Warming in
South America by
Late March.

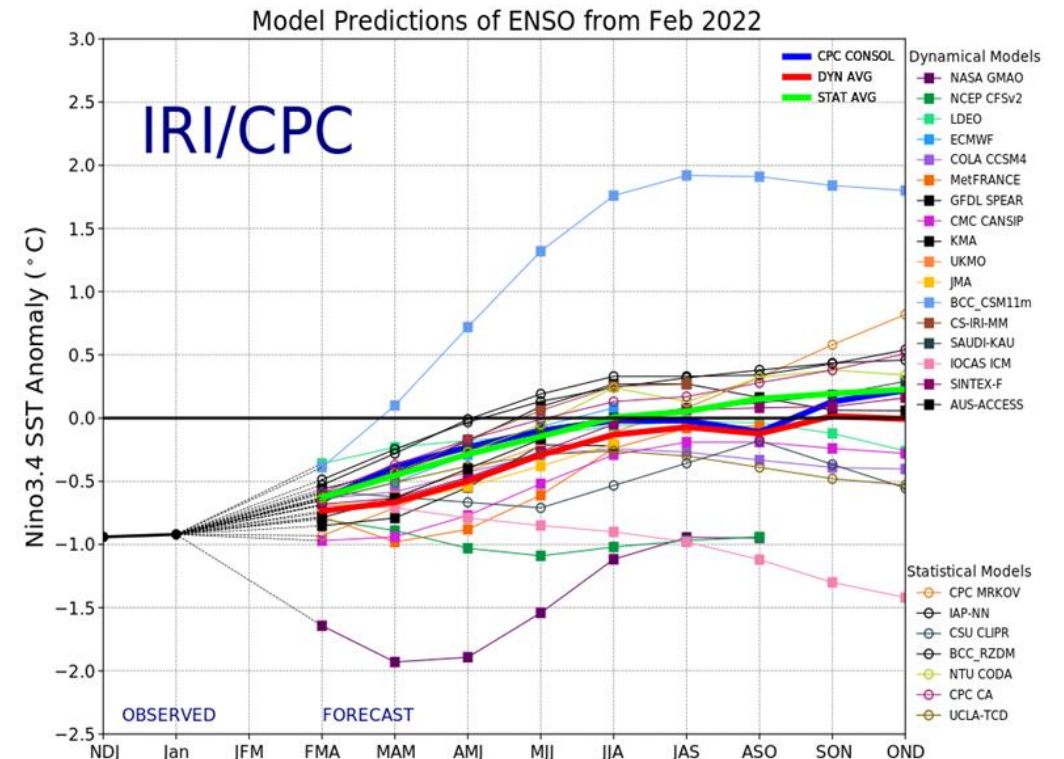
ENSO Outlook

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

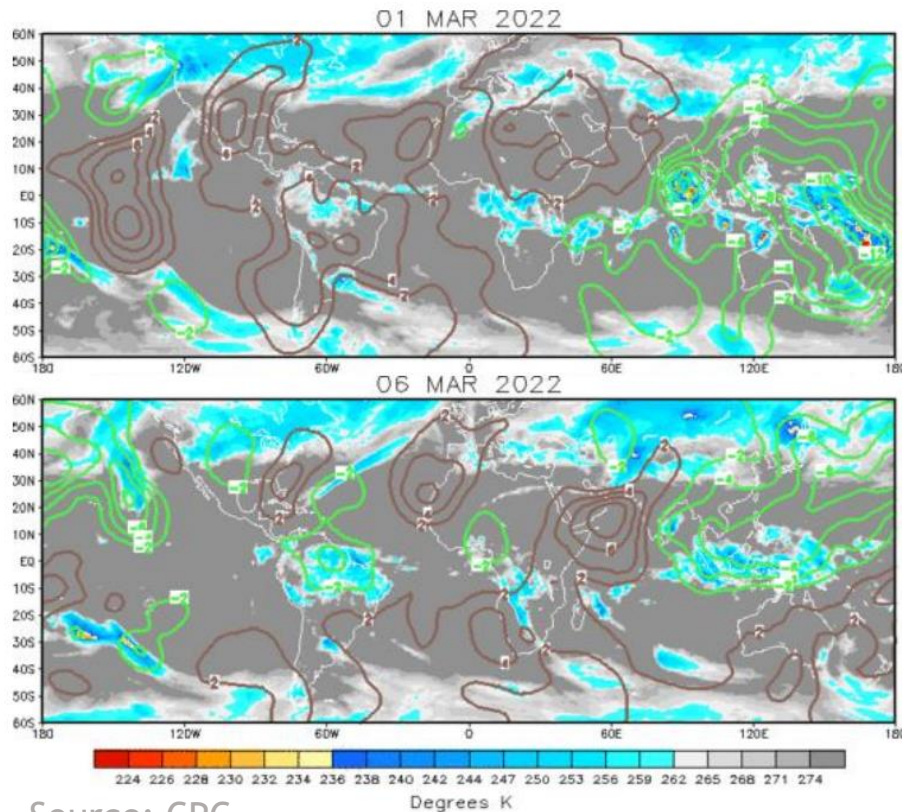


IRI/CPC Dynamic Models

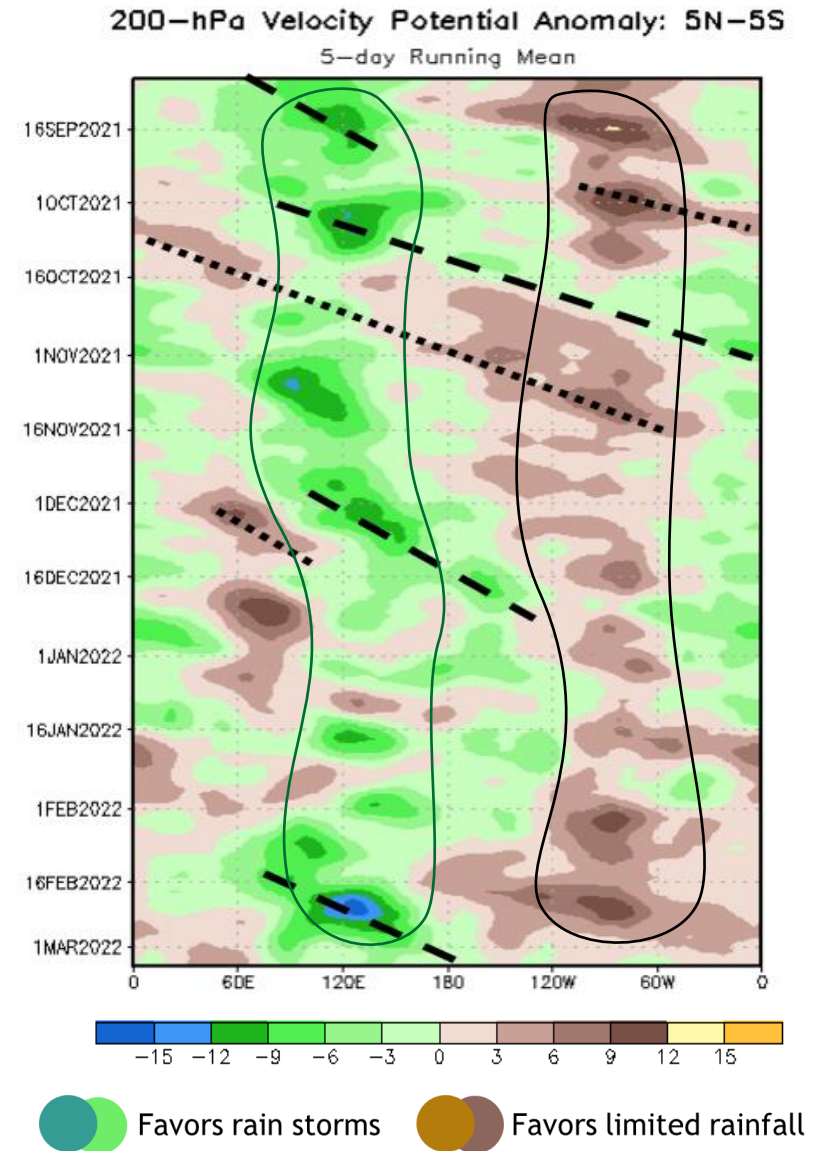


Madden-Julian Oscillation (MJO)

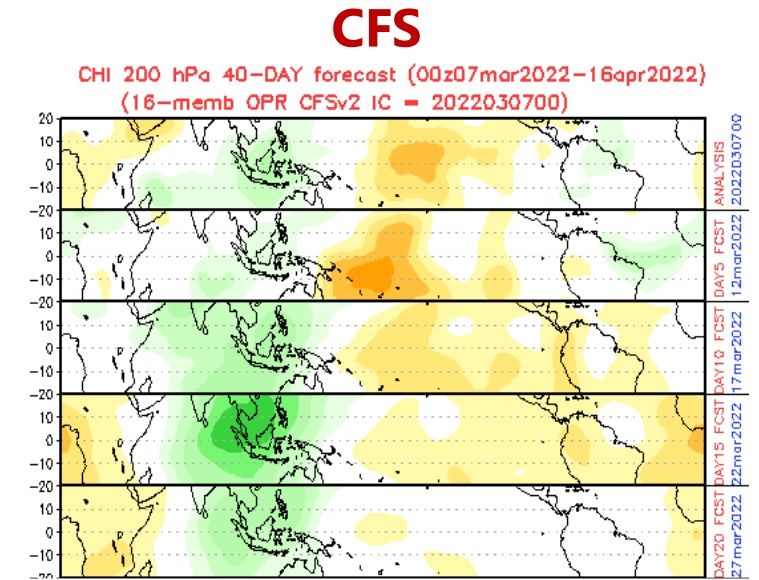
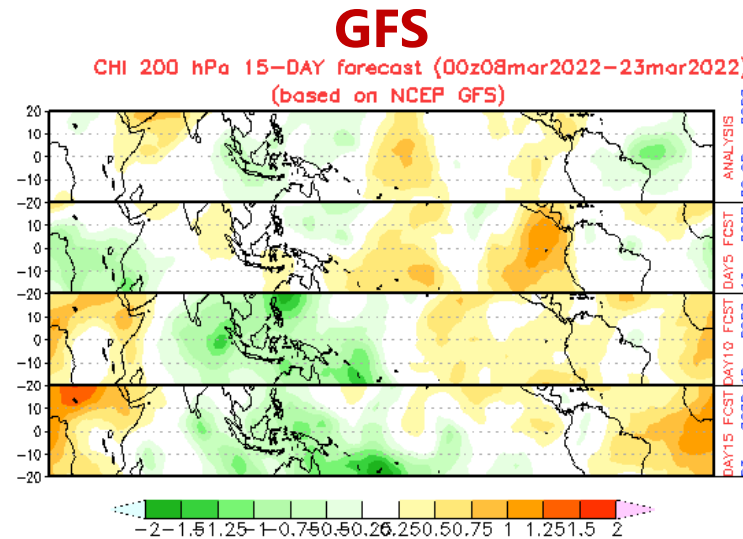
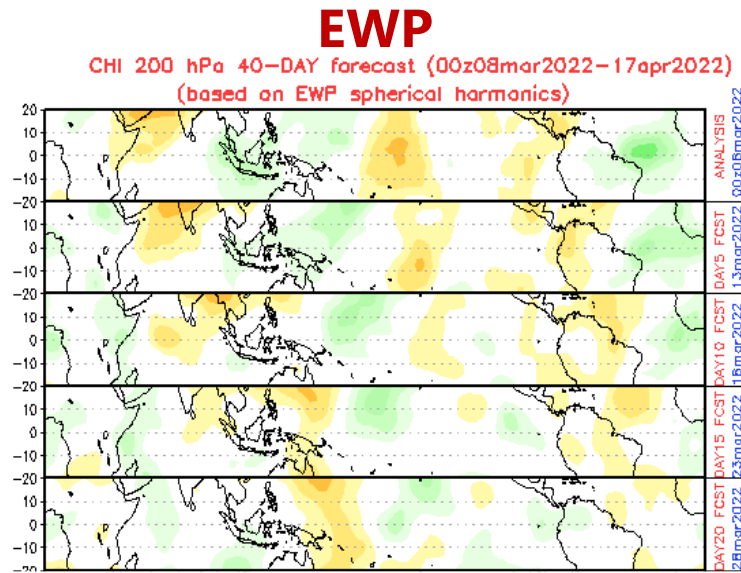
- Better organized than during the last two months, when Rossby Wave influence was prevalent.
- La Niña Low-frequency signal still dominant.
- Weak wet pulse crossing the Americas, now over the Atlantic.



Source: CPC



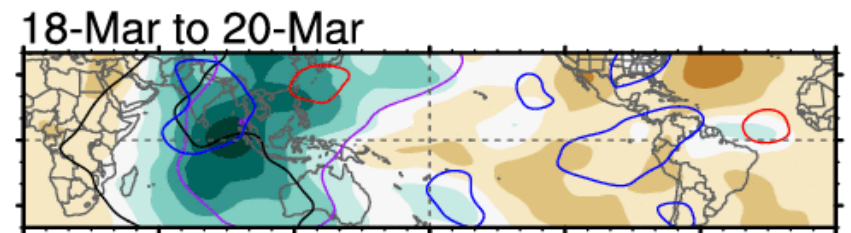
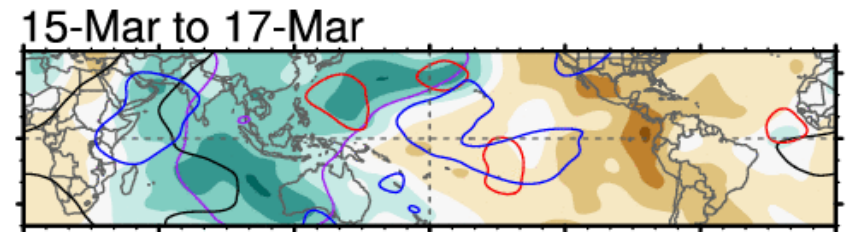
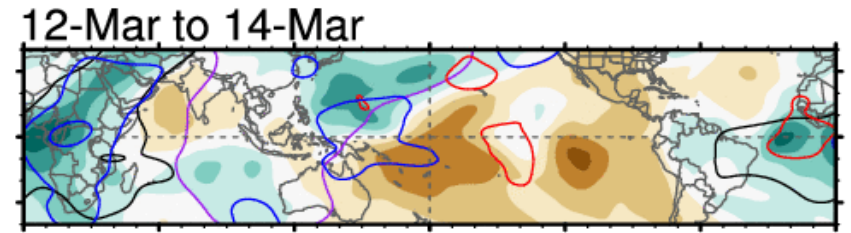
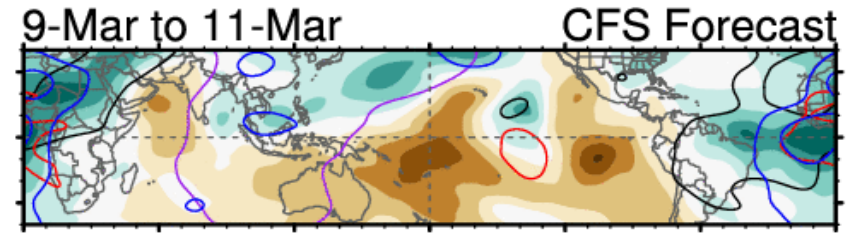
MJO Forecasts for the Americas



- Drier the rest of March
- Potentially wetter by the first week of April

Tropospheric Equatorial Waves

- **Wet MJO:** Guianas/N Brasil
 - Through March 12/13
- **Upper convergent (dry):** Rest of the month
- **Next Kelvin (wet):** March 18-23, equatorial South America
 - Limited influence due to dry MJO



0 60E 120E 180 120W 60W 0



-9 -7 -5 -3 -1 1 3 5 7 9 $\times 10^6 \text{ m}^2 \text{ s}^{-1}$

7-day CHI200 with CFS forecasts

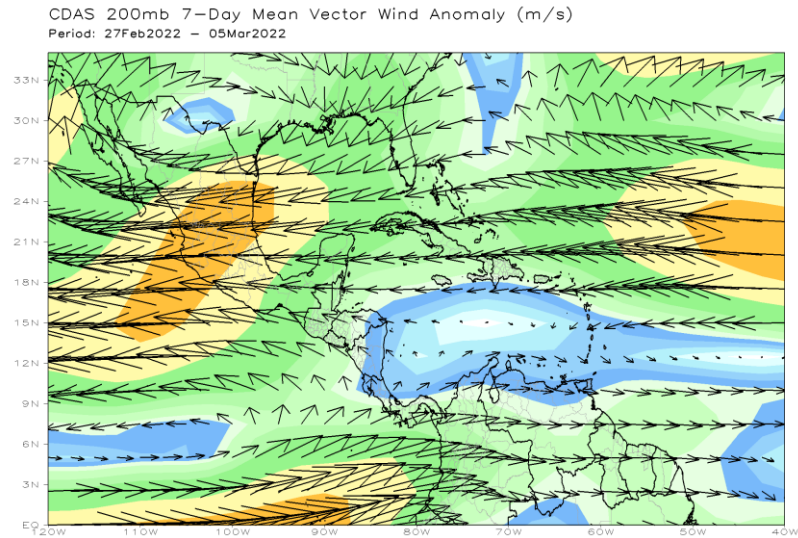
Wed 2020-09-16 10:18 UTC

— MJO — Kelvin x2
— Low — ER

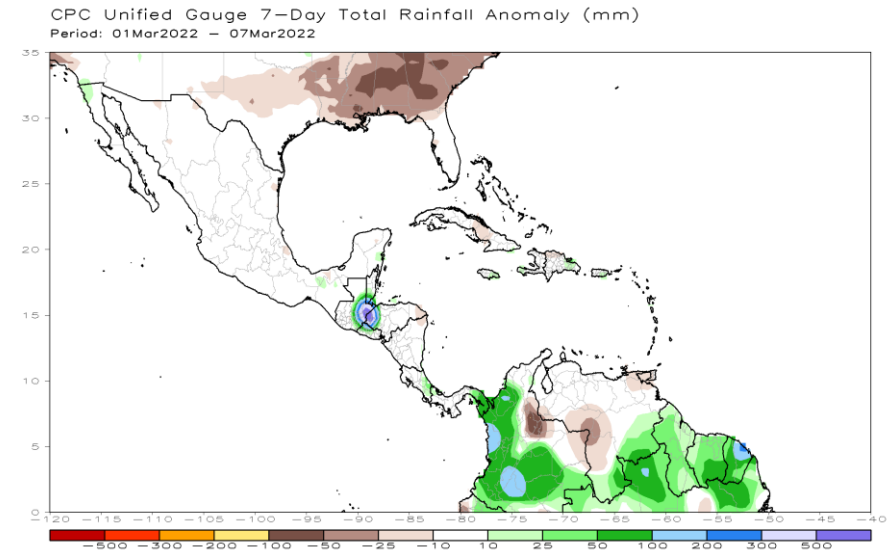
Contours at -2, -6 $\times 10^6 \text{ m}^2 \text{ s}^{-1}$
Carl Schreck
carl_schreck@ncsu.edu

Flow and Rainfall Anomalies, Last 7 Days

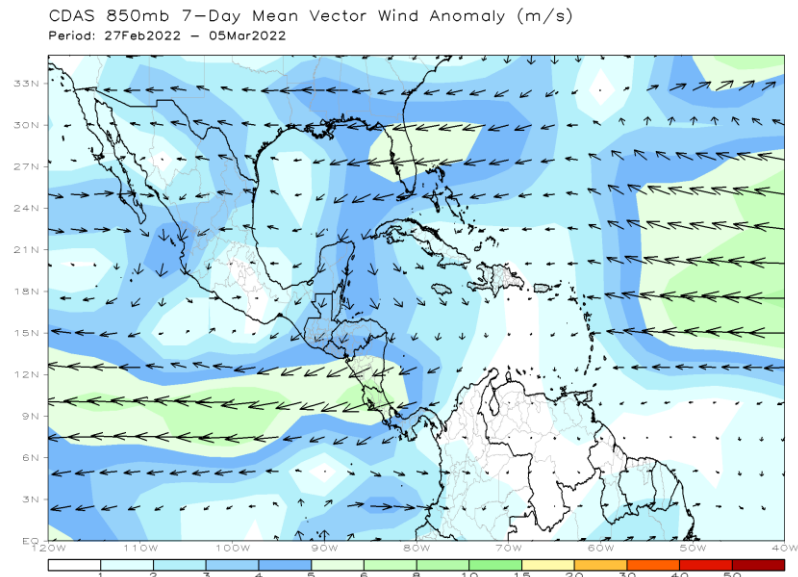
200 hPa Flow
Anomalies



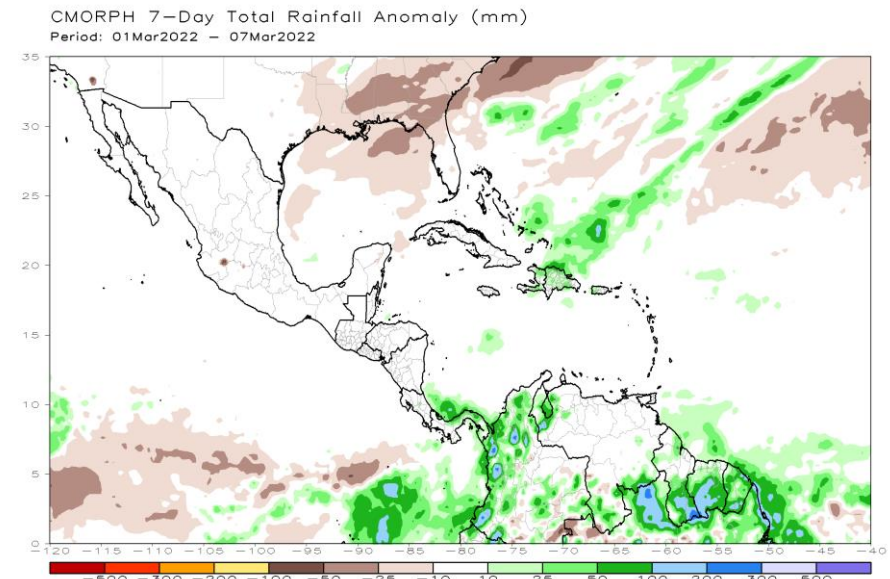
Gauges



850 hPa Flow
Anomalies

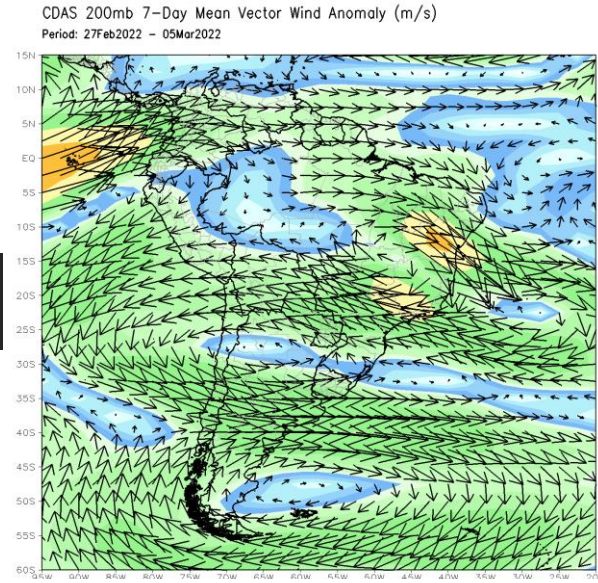


CMORPH

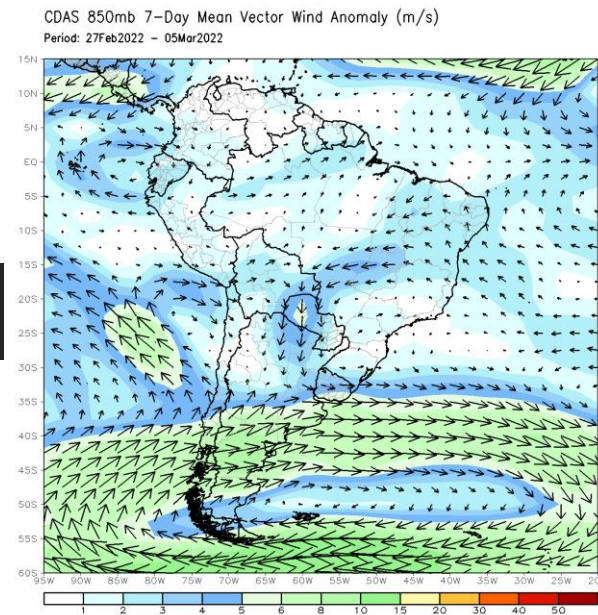


Flow and Rainfall Anomalies, Last 7 Days

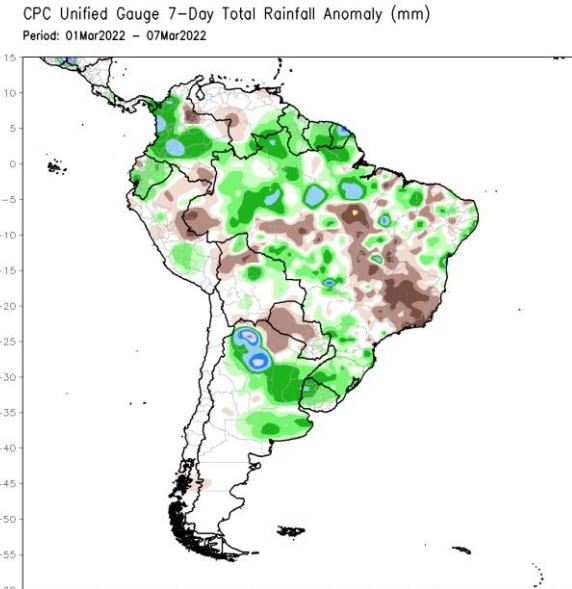
200 hPa Flow
Anomalies



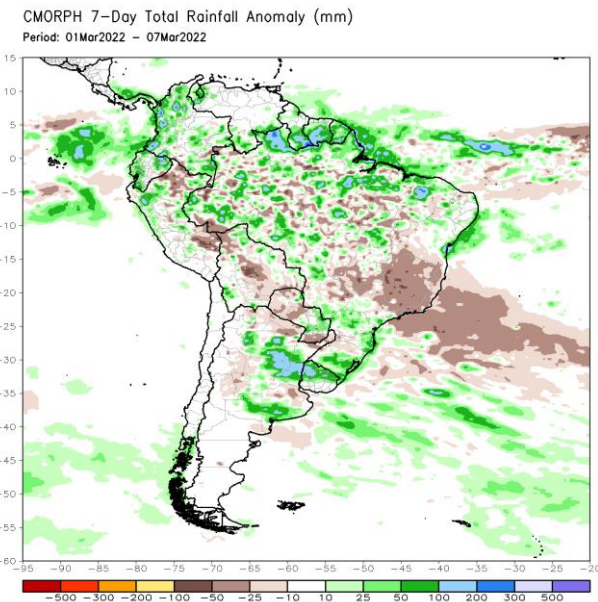
850 hPa Flow
Anomalies



Gauges



CMORPH



¡Gracias! Thank you!

**Next session:
Mid-April, to be defined soon**

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