



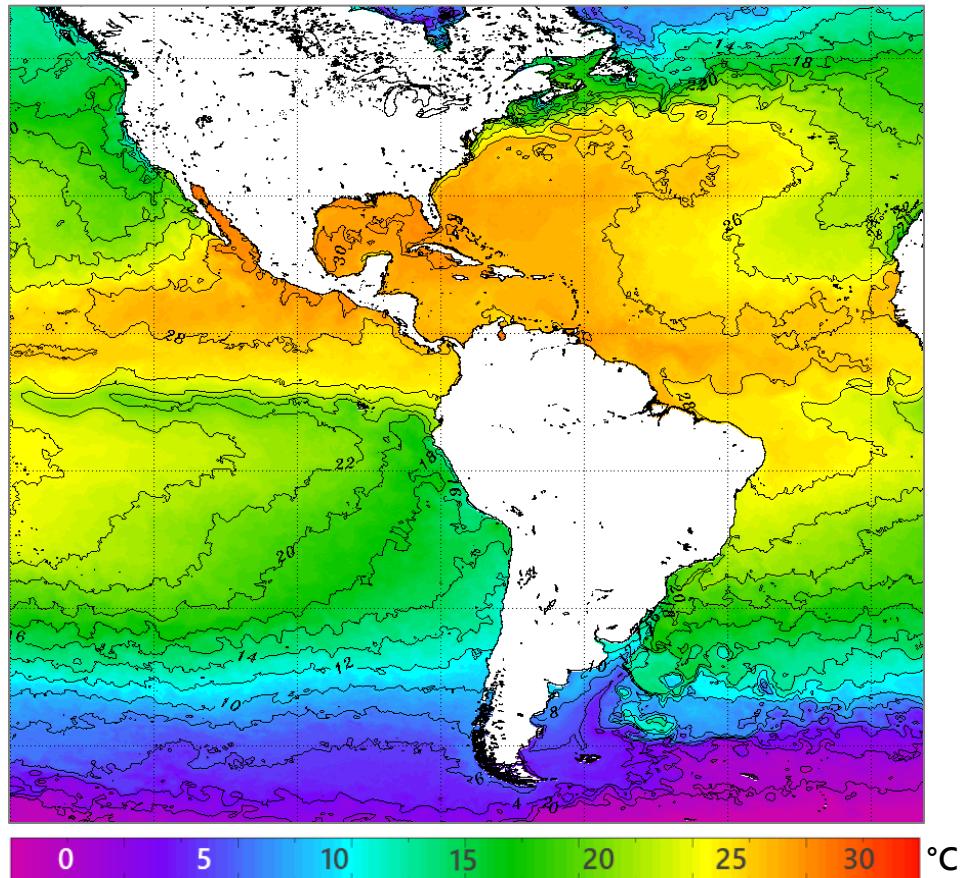
Monthly Regional Focus Group Session

Wednesday 17 August 2022 at 15 UTC

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

Sea Surface Temperatures (SST)

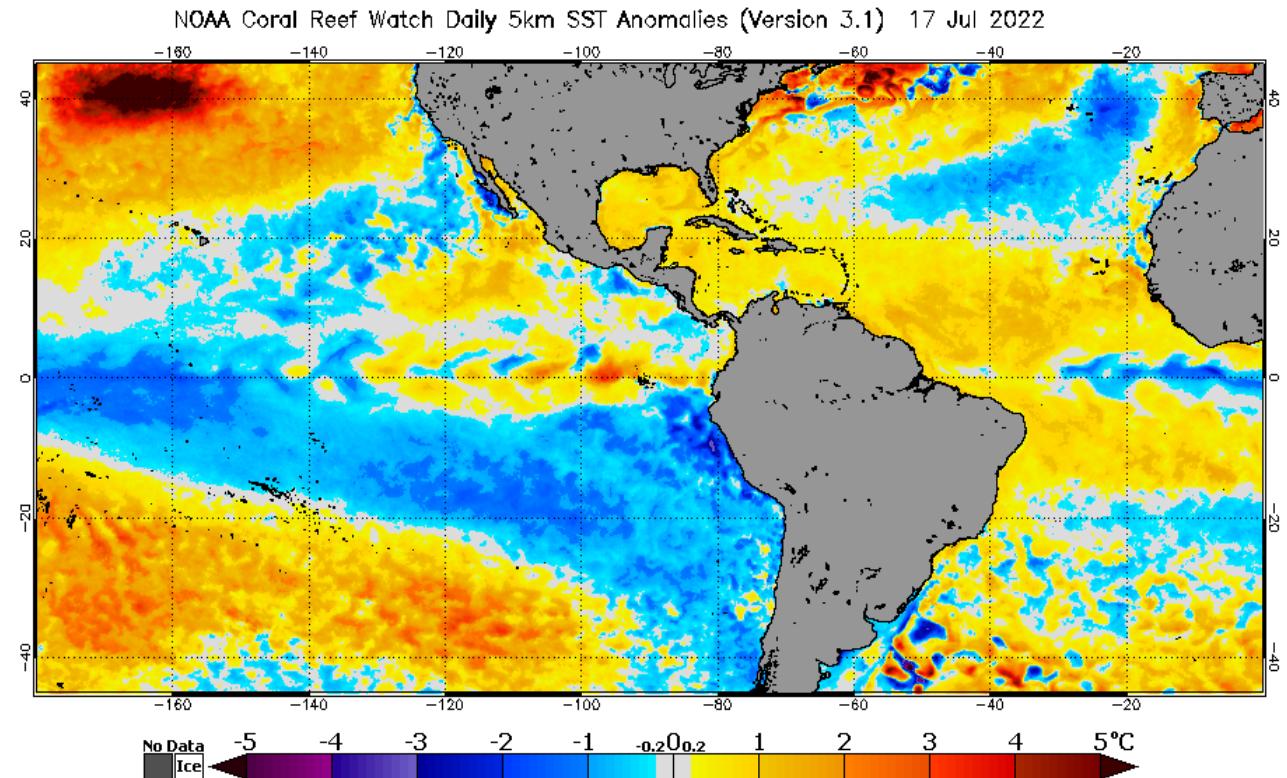
Daily SST August 15



NOAA OSPO

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

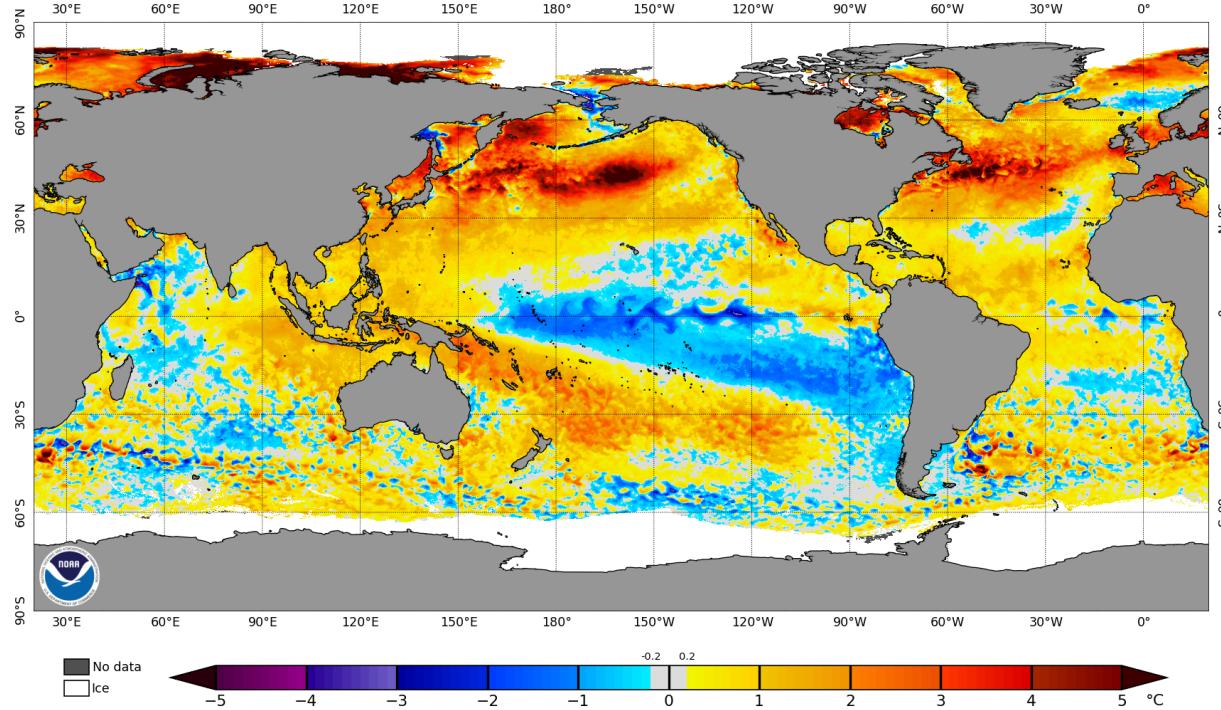
Anomaly Evolution



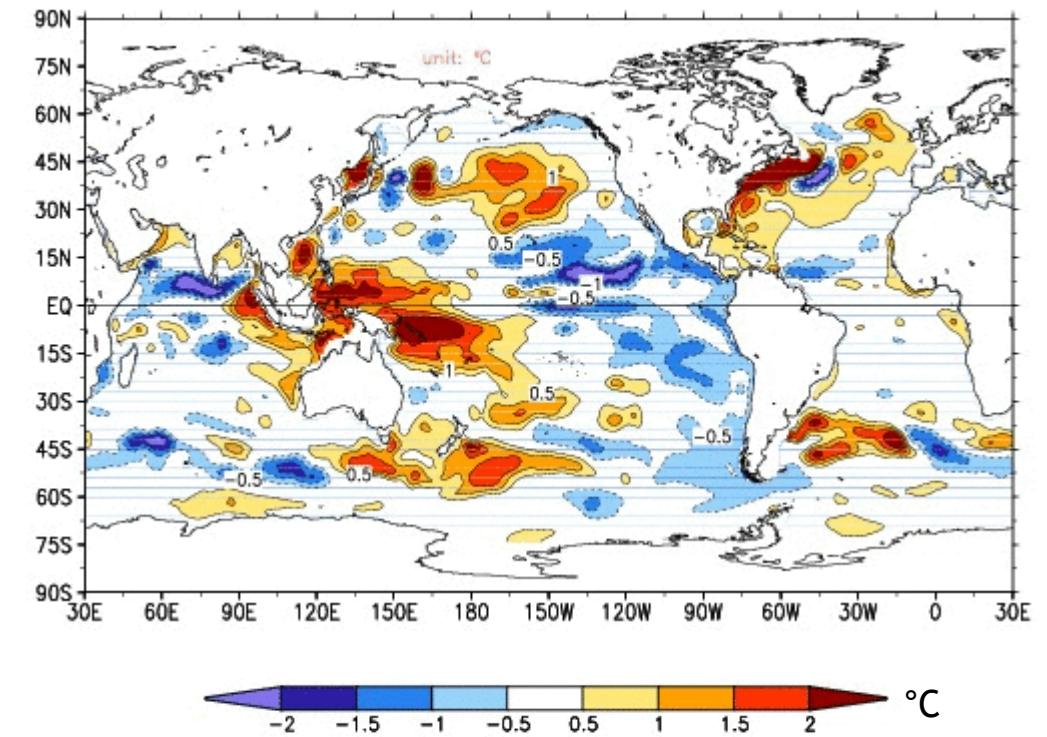
Are sea temperature anomalies deep?

Deep anomalies last longer, becoming useful for subseasonal forecasting.

SST Anomaly – 15 August



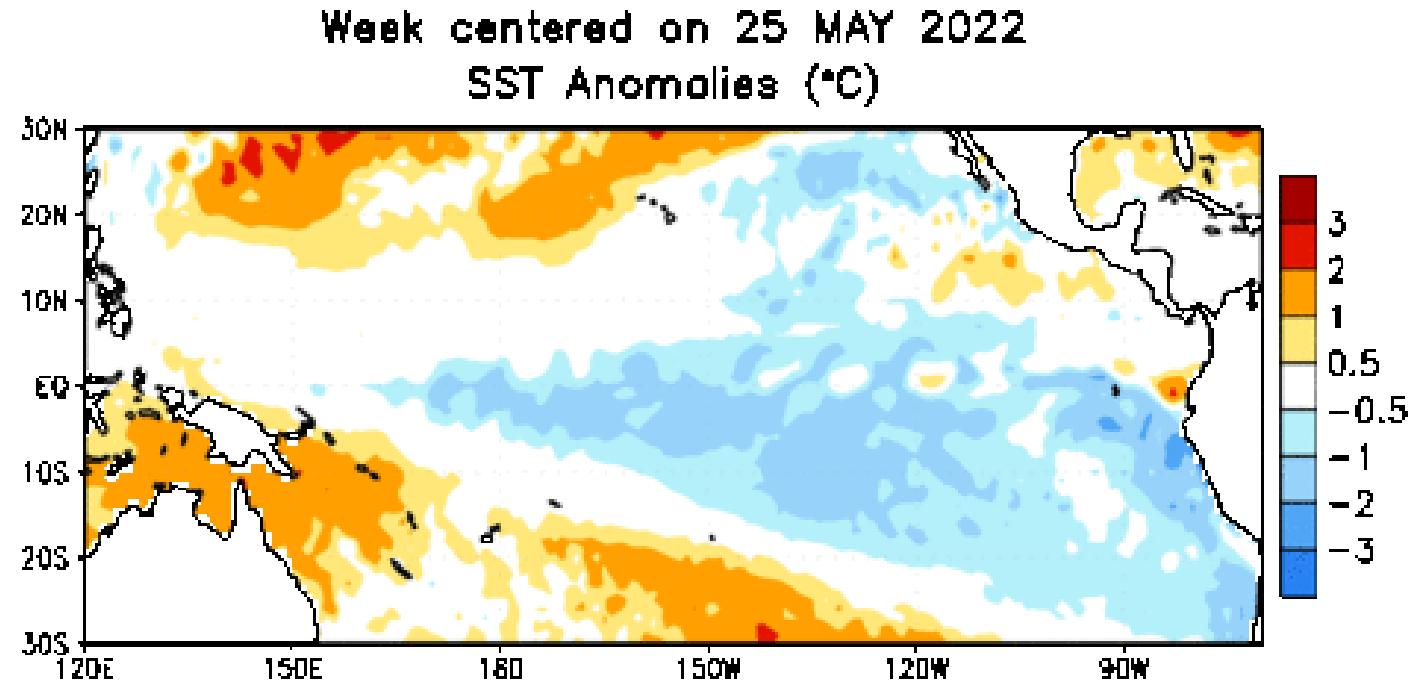
GODAS Top 300m-Layer Anomaly – 11 August



ENSO: La Niña

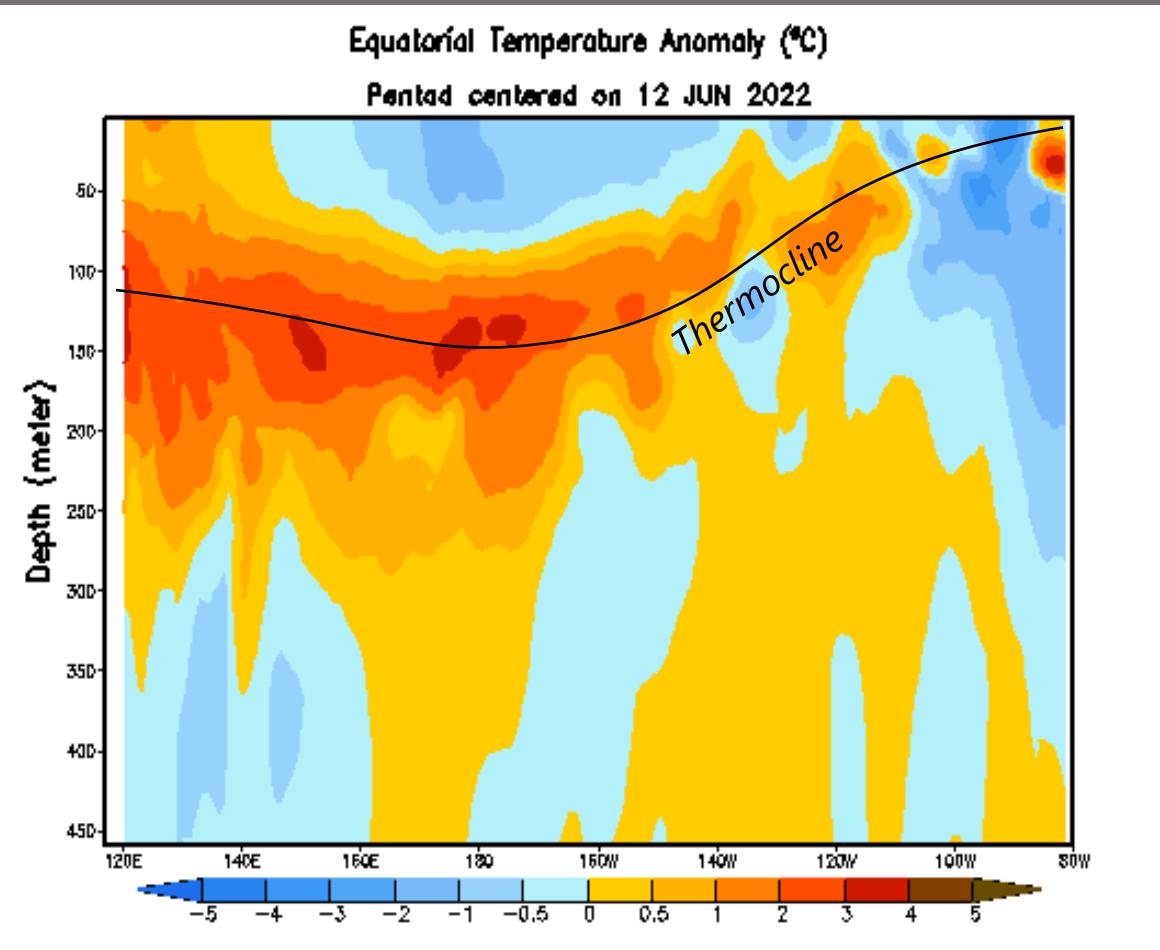
(no changes since April)

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



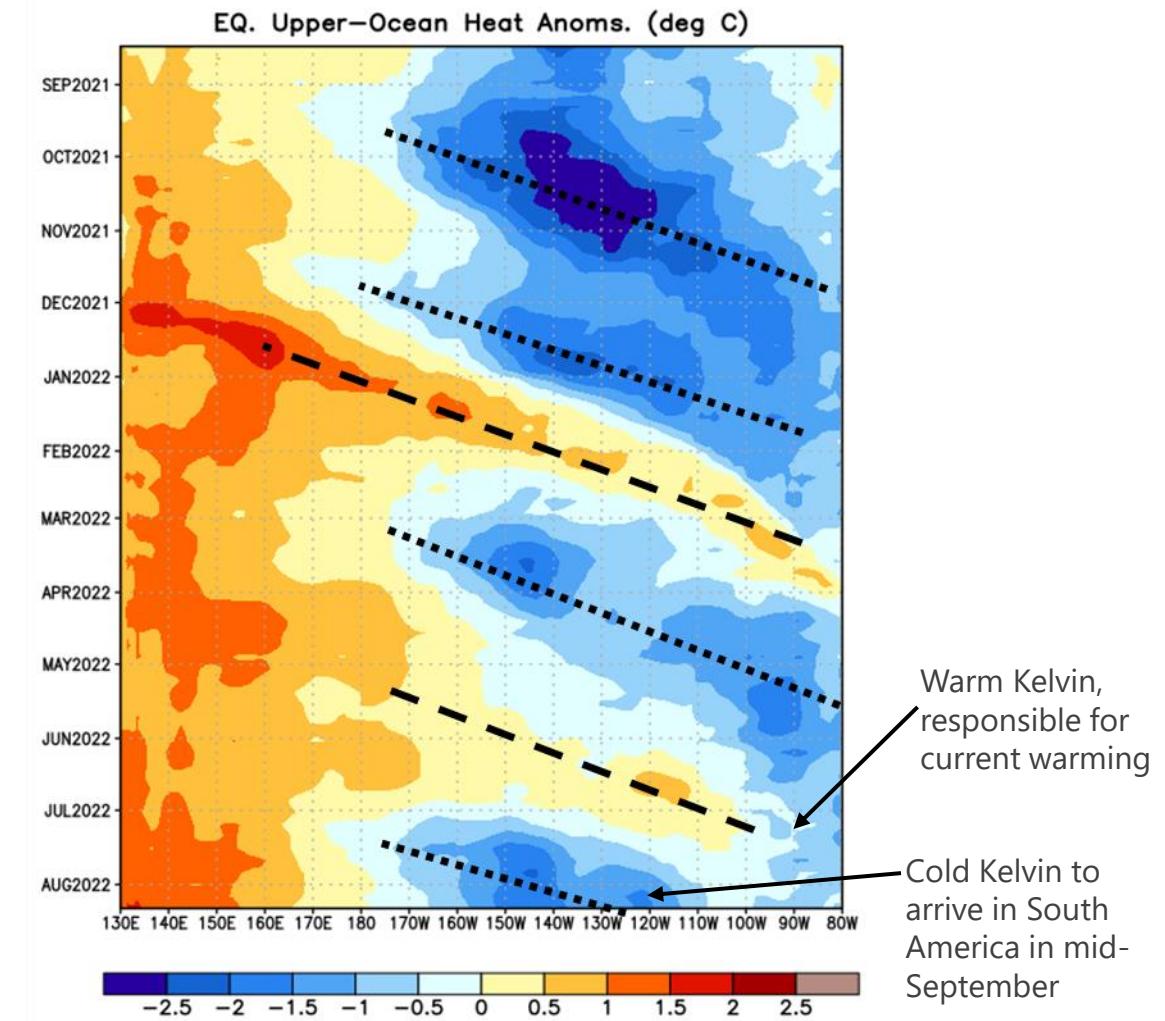
ENSO: Oceanic Kelvin Waves

Equatorial Pacific Temperature Anomaly Cross Section



Source: CPC

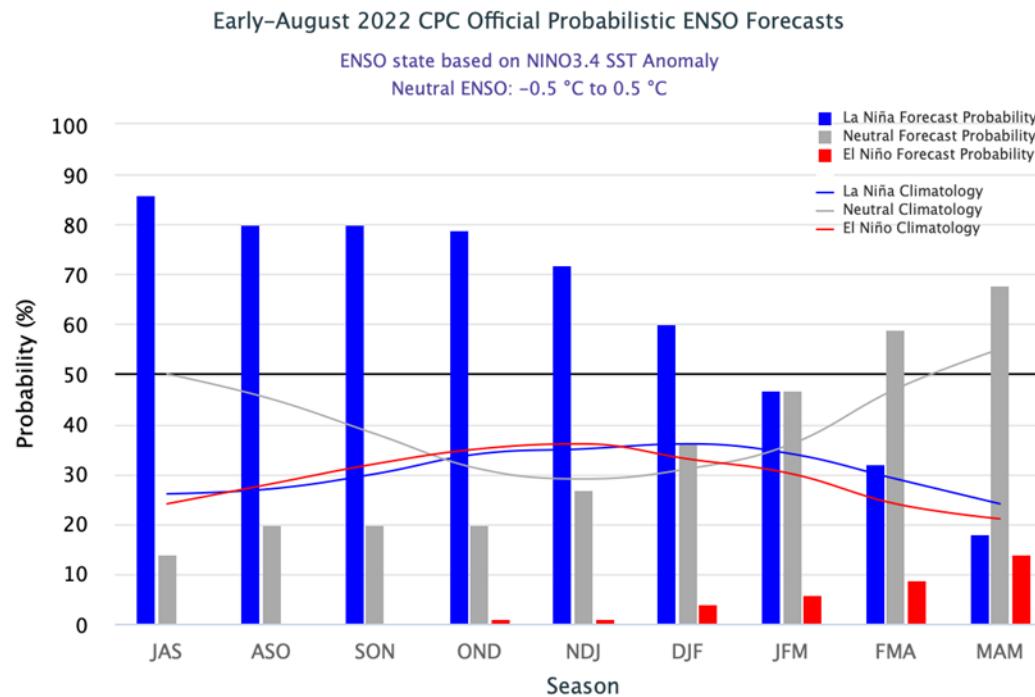
Heat Content Hovmöller



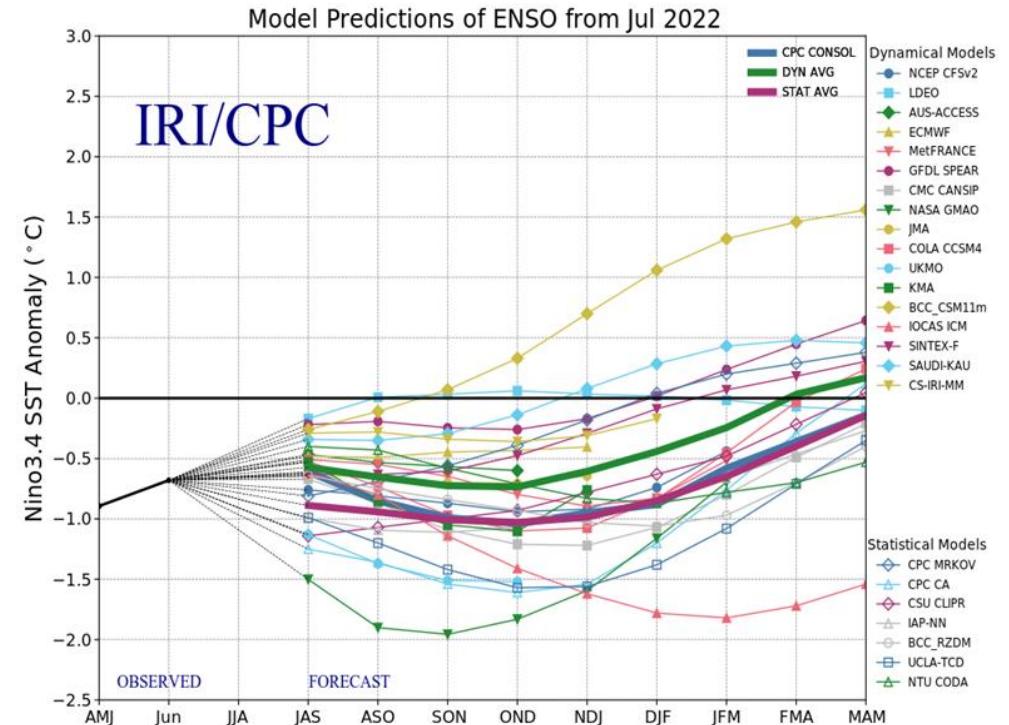
ENSO Outlook

La Niña is expected to continue, with chances for La Niña gradually decreasing from 86% in the coming season to 60% during December-February 2022-23.*

CPC/IRI Probabilistic Forecast



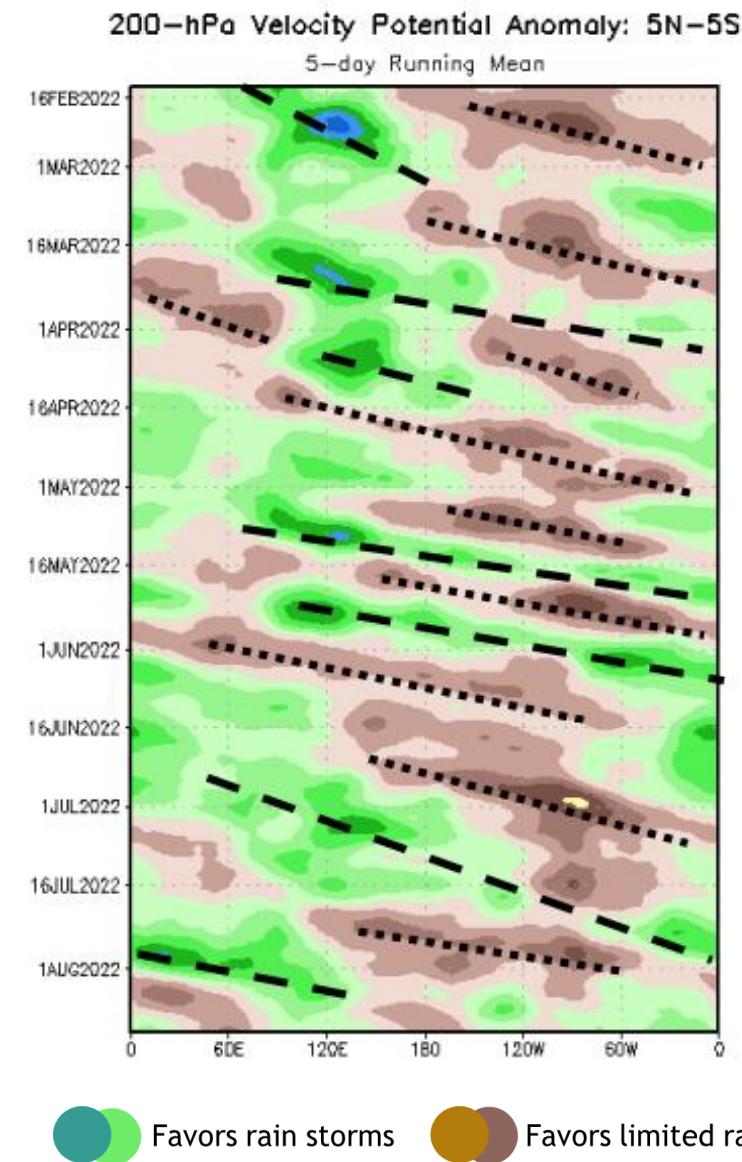
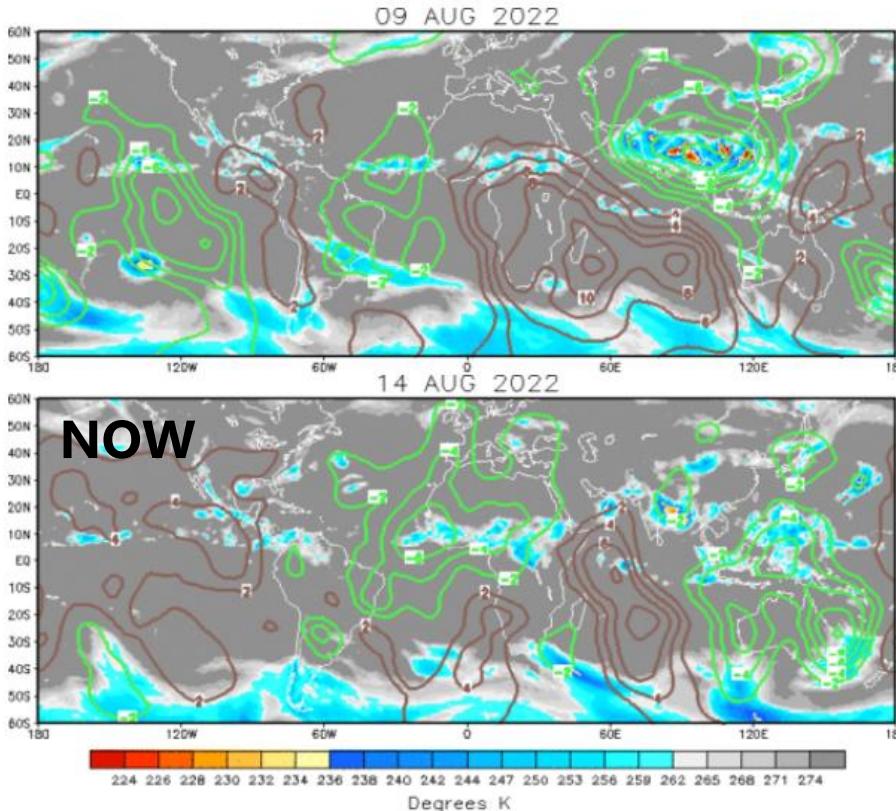
IRI/CPC Dynamic Models



Source: CPC

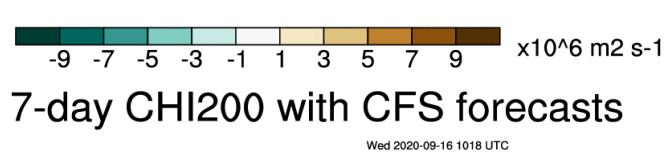
Madden-Julian Oscillation (MJO)

- MJO-related Velocity Potential poorly defined in early August.
- Kelvin wave in Africa, another in the western Pacific (to monitor for late August).

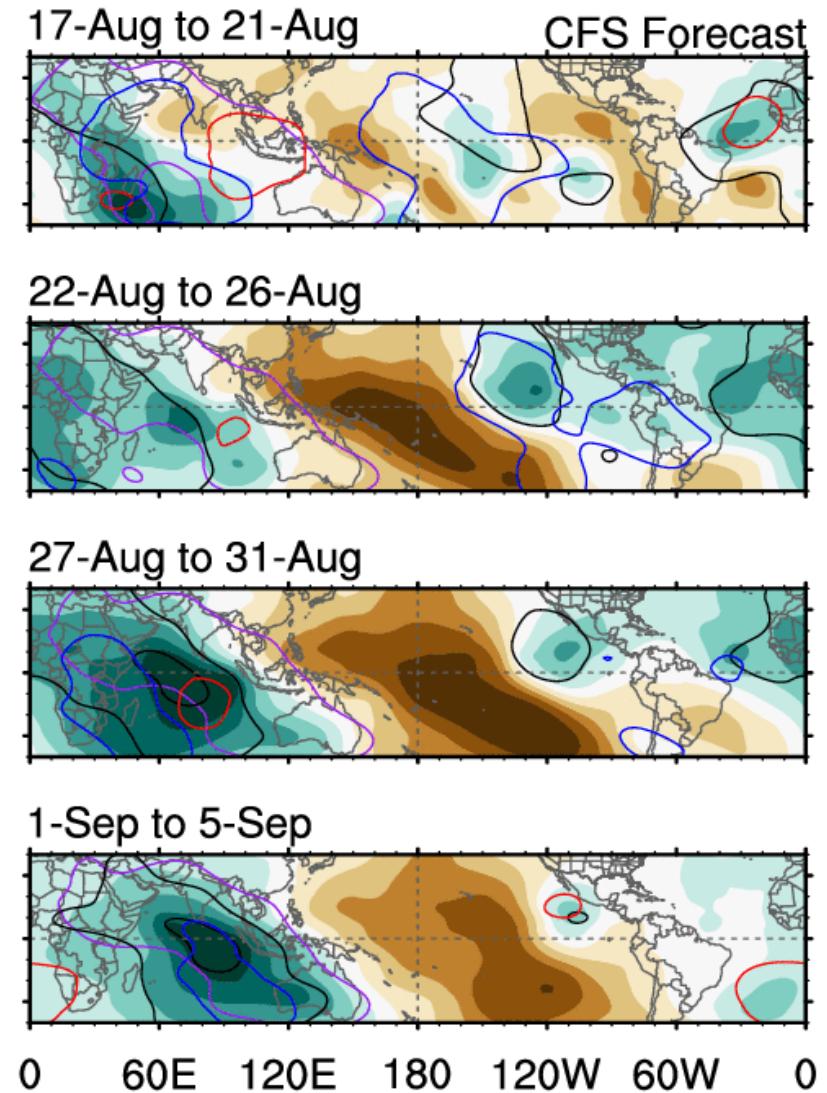


Tropospheric Equatorial Waves

- August 25-31: Wet Kelvin embedded in weak MJO Pulse
- Neutral in early September?

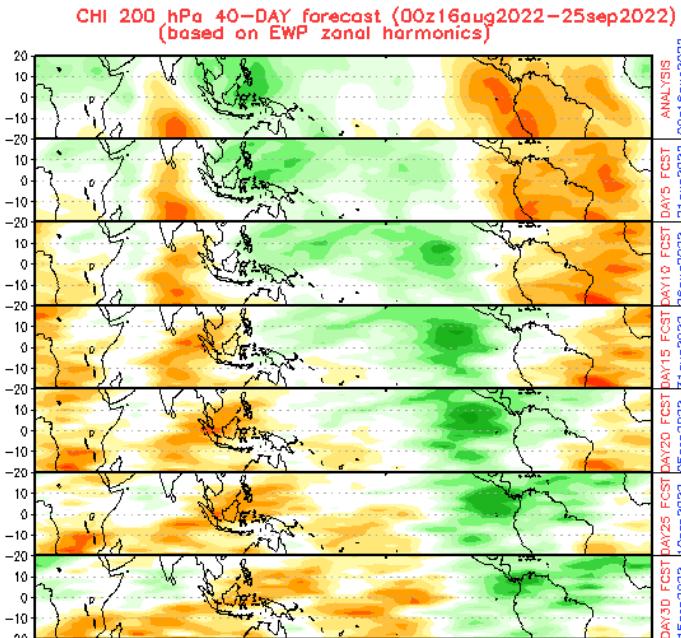


— MJO — Kelvin x2
— Low — ER
Contours at $-2, -6 \times 10^6 \text{ m}^2 \text{ s}^{-1}$
Carl Schreck
carl_schreck@ncsu.edu

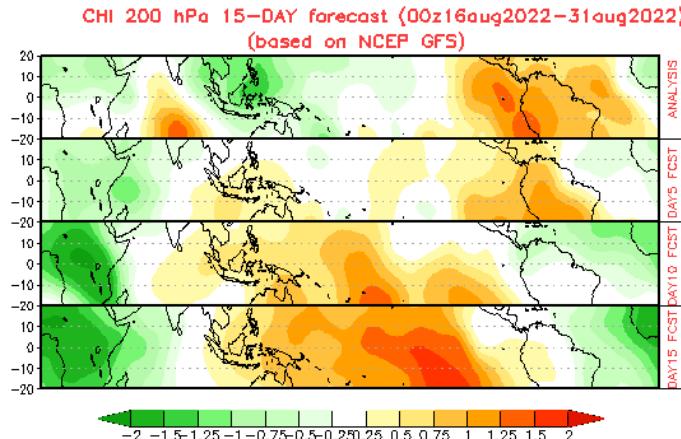


MJO Forecasts for the Americas

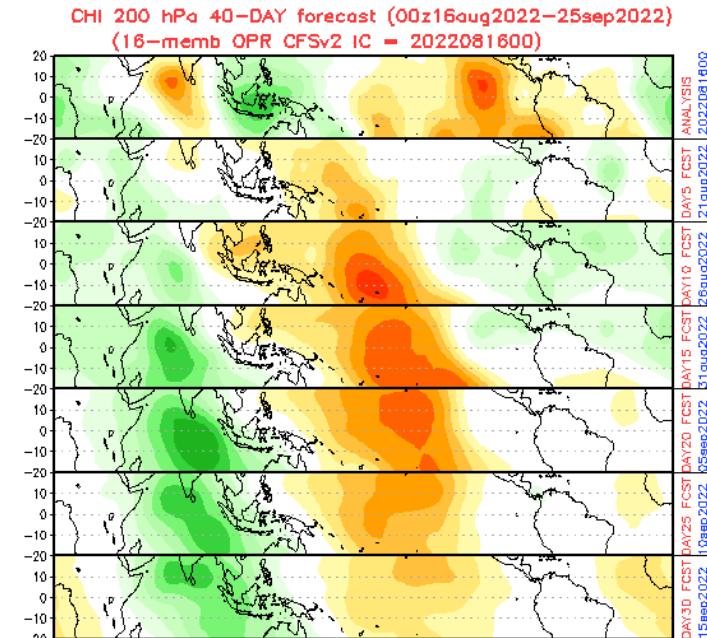
EWP



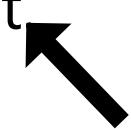
GFS



CFS



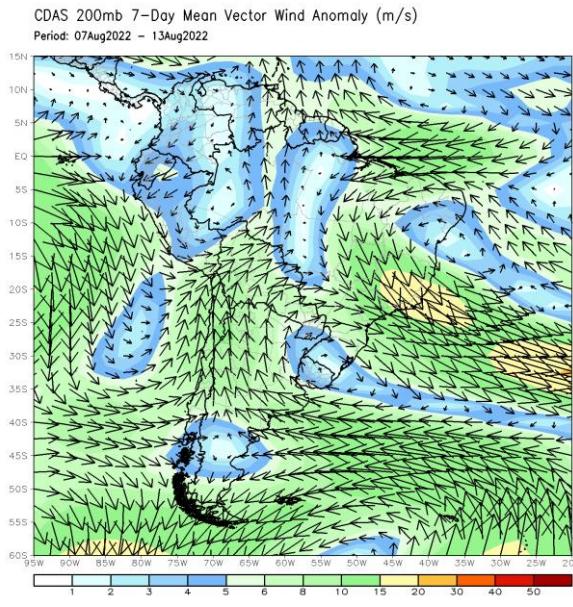
- Weak upper divergent: last week of August
- Neutral in September



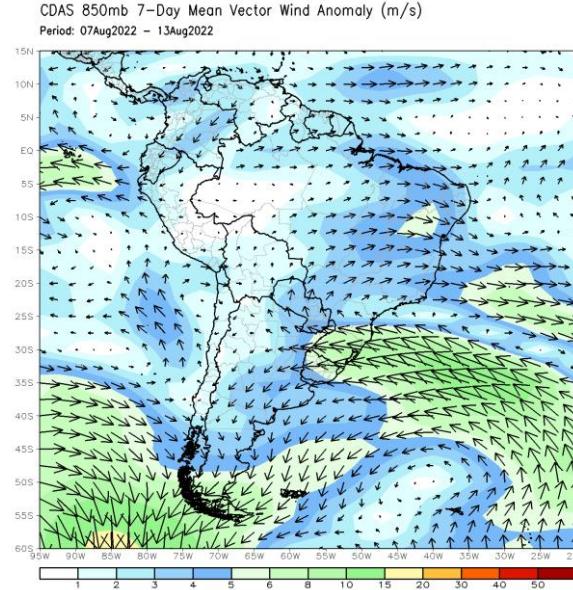
Tropical Cyclogenesis in the Atlantic?

Flow and Rainfall Anomalies, Last 7 Days

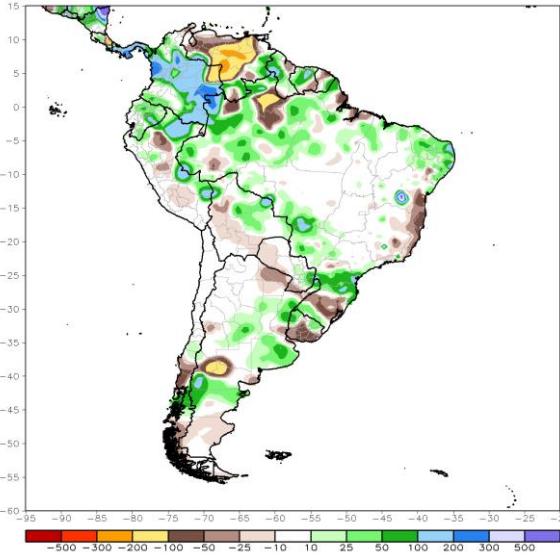
200 hPa Flow Anomalies



850 hPa Flow Anomalies

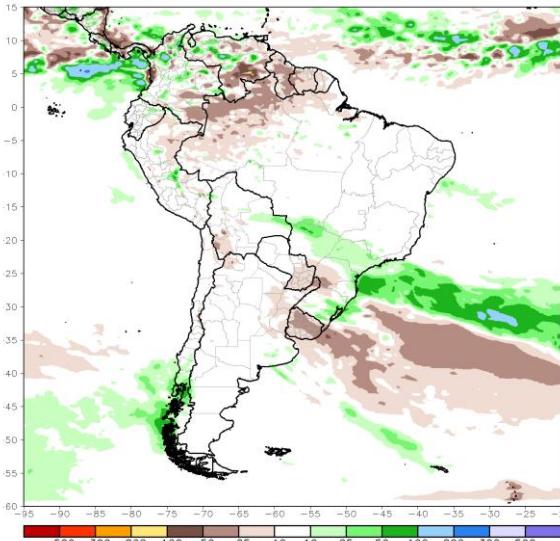


CPC Unified Gauge 30-Day Total Rainfall Anomaly (mm)
Period: 17Jul2022 – 15Aug2022



Gauges

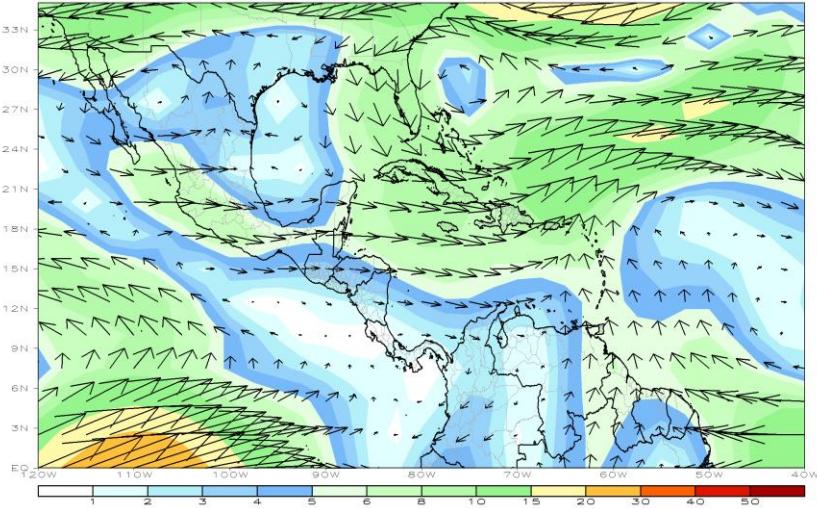
CMORPH 7-Day Total Rainfall Anomaly (mm)
Period: 09Aug2022 – 15Aug2022



CMORPH

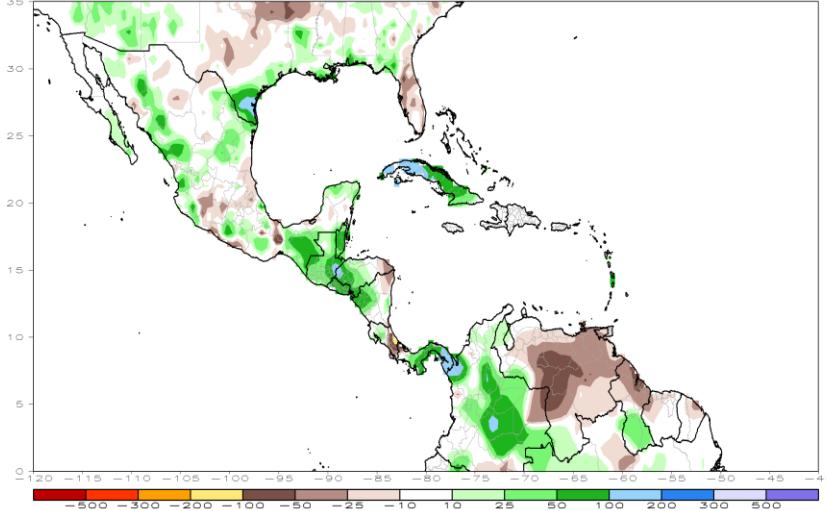
Flow and Rainfall Anomalies, Last 7 Days

CDAS 200mb 7-Day Mean Vector Wind Anomaly (m/s)
Period: 07Aug2022 – 13Aug2022



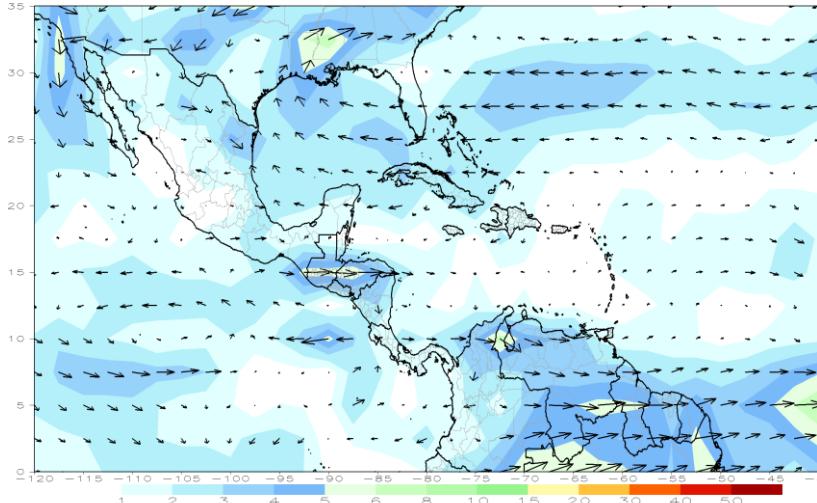
200 hPa Flow Anomalies

CPC Unified Gauge 7-Day Total Rainfall Anomaly (mm)
Period: 09Aug2022 – 15Aug2022



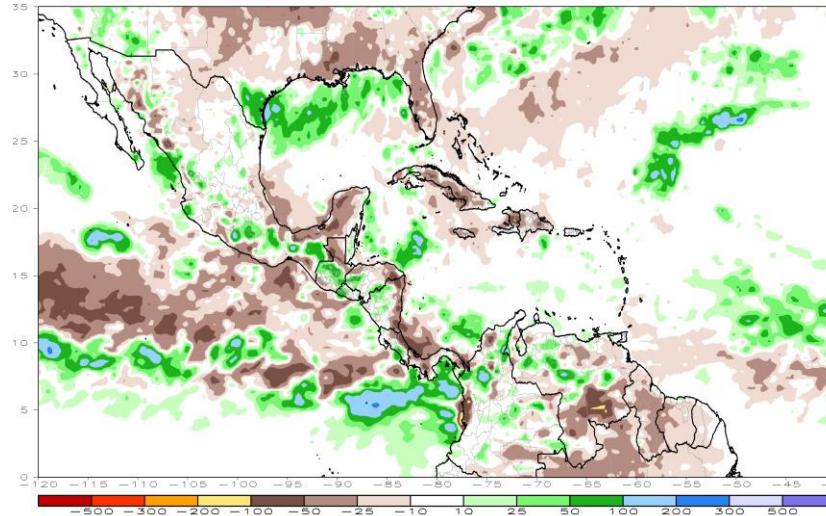
Gauges

GFS 850mb week1 Mean Vector Wind Anomaly (m/s)
Period: 06z18Aug2022 – 06z24Aug2022



850 hPa Flow Anomalies

CMORPH 7-Day Total Rainfall Anomaly (mm)
Period: 09Aug2022 – 15Aug2022



CMORPH

¡Gracias!
Thank you!
¡Obrigado!

Next session: Wed 14 September at 15 UTC

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