

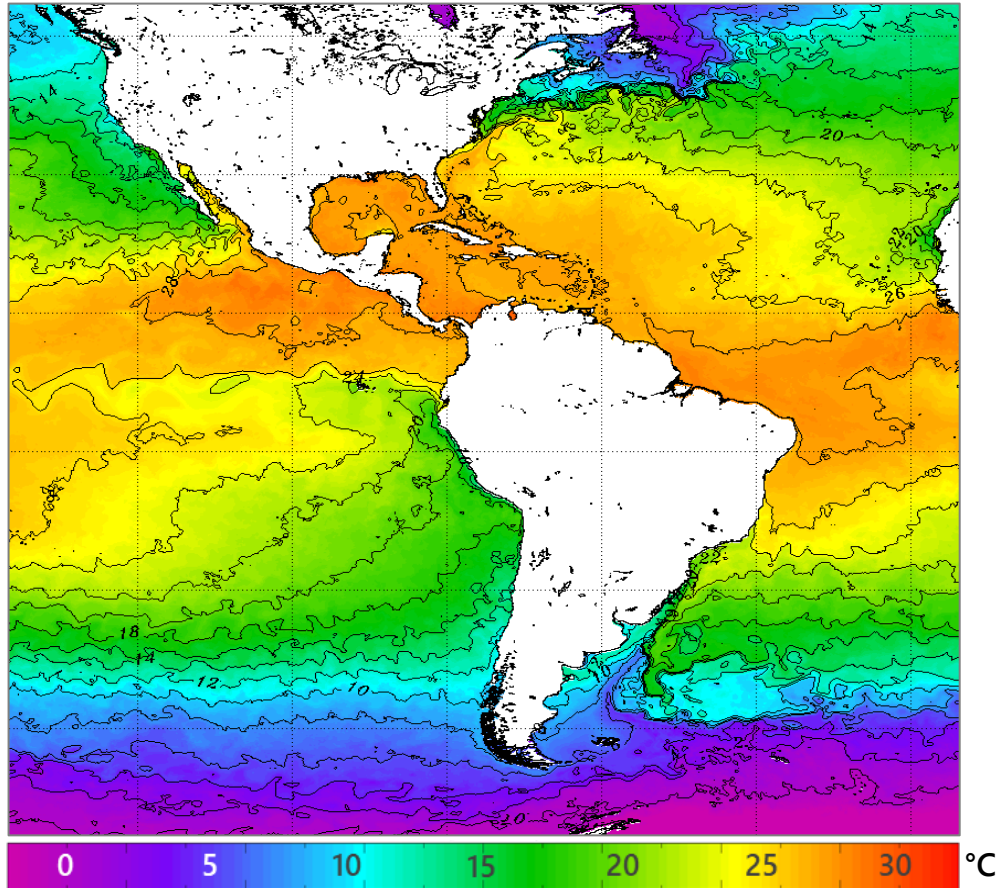
Monthly Regional Focus Group Session

Wednesday 8 June 2022 at 15 UTC

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

Sea Surface Temperatures

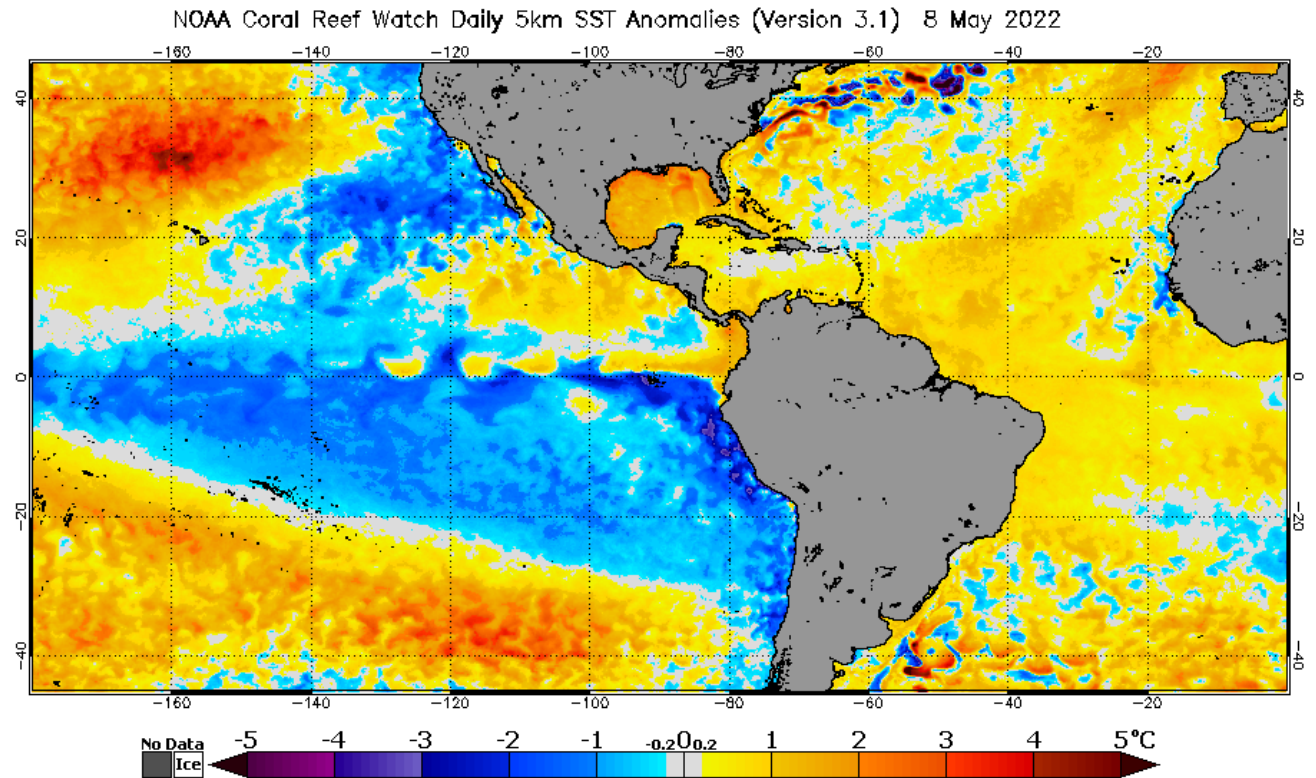
Daily SST June 06



NOAA OSPO

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

Anomaly Evolution



NOAA Coral Reef Watch

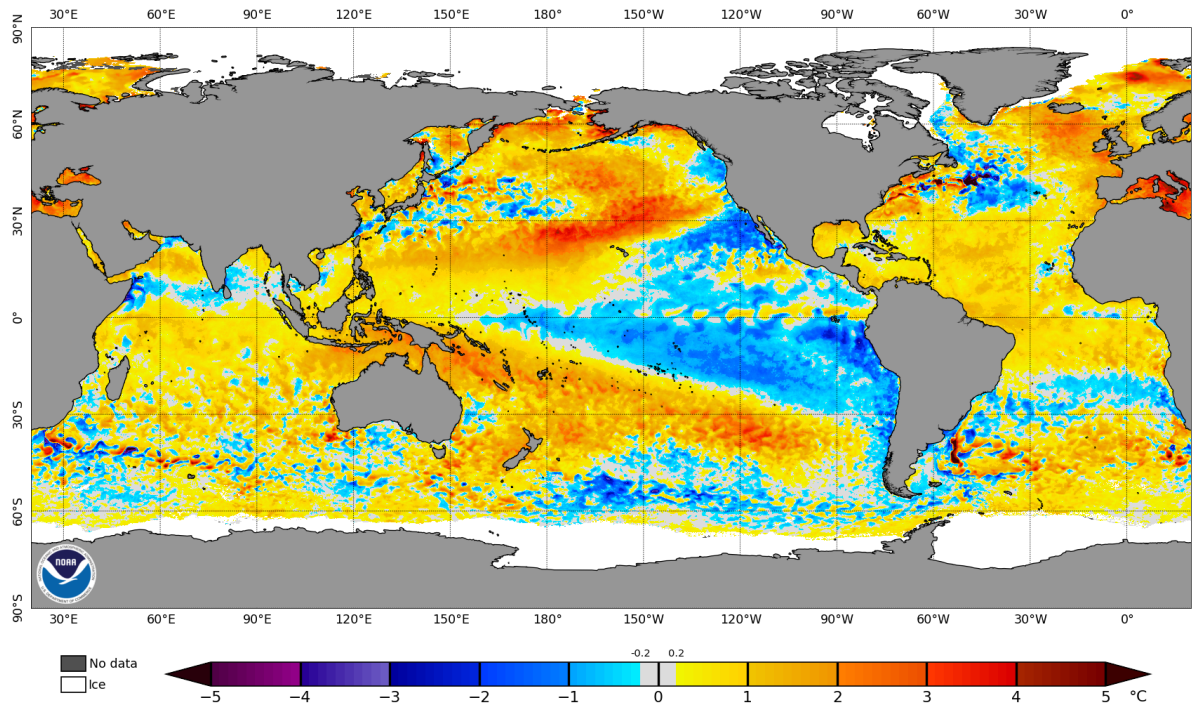
<https://coralreefwatch.noaa.gov/>

Are ocean temperature anomalies deep?

Deep anomalies last longer, becoming useful for subseasonal forecasting.

SST Anomaly – June 06

NOAA Coral Reef Watch Daily 5km SST Anomalies (v3.1) 6 Jun 2022

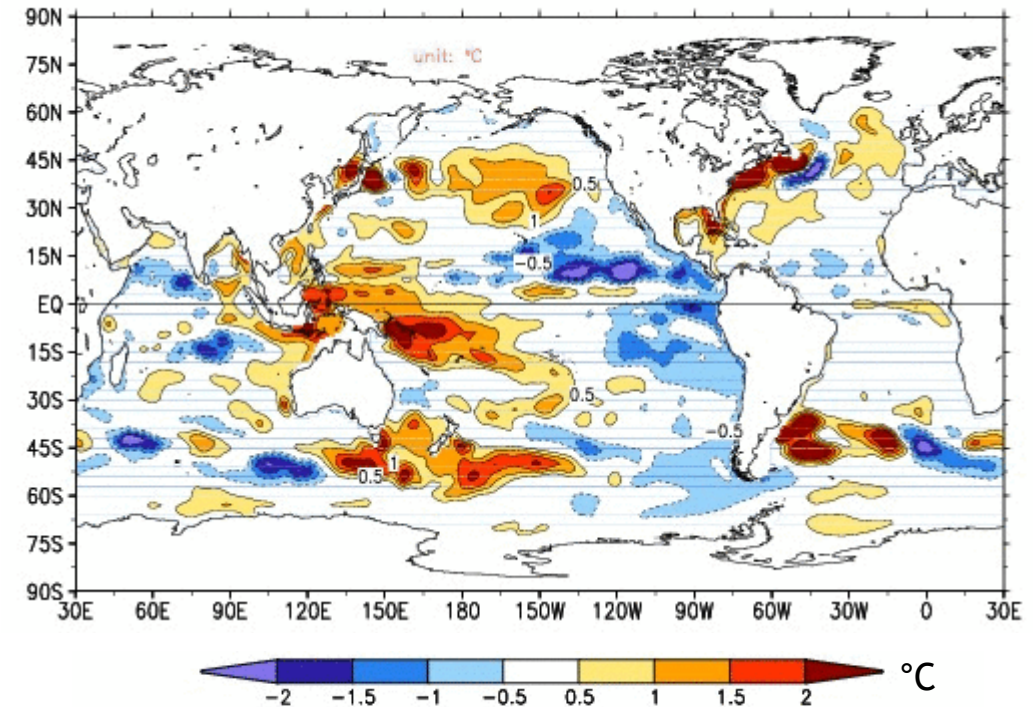


NOAA Coral Reef Watch

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

Top 300m-Layer Anomaly – June 02

GODAS 300m Ave Temp Anomaly, 2022 Jun 02



NOAA CPC

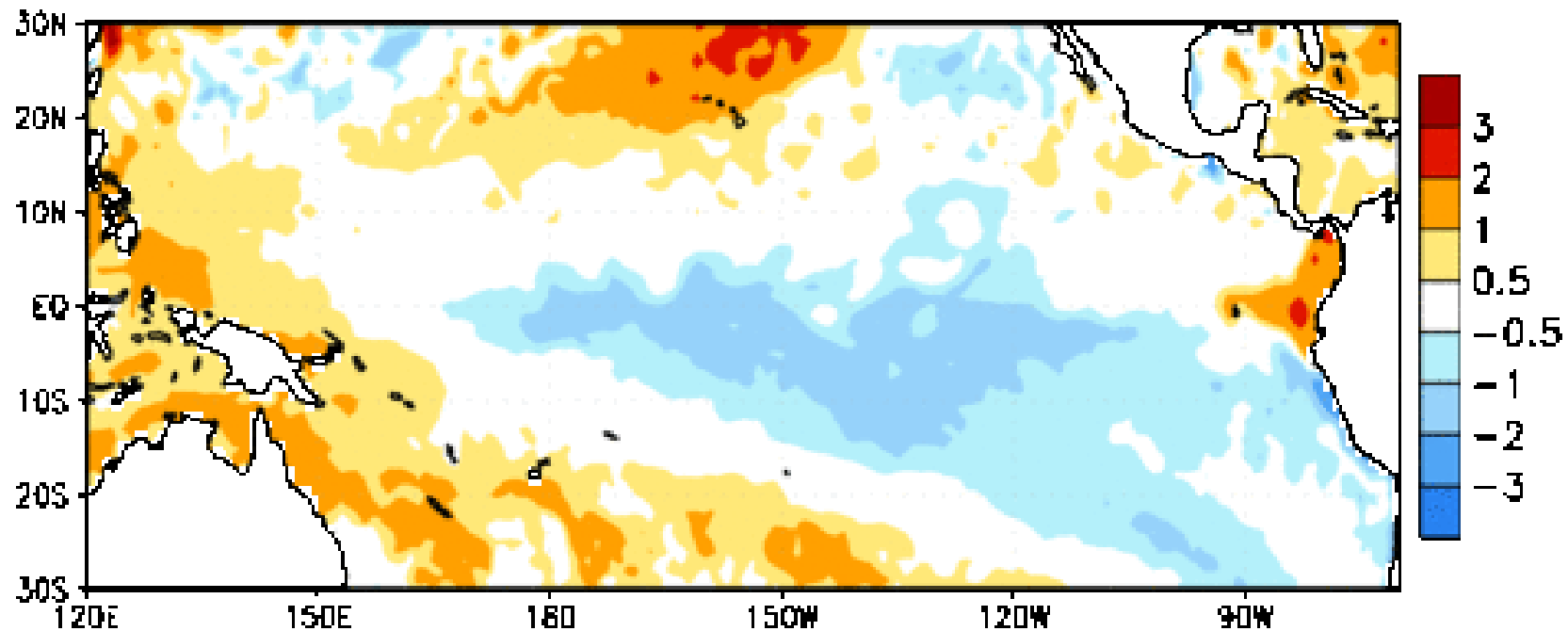
Source: CPC GODAS, <https://www.cpc.ncep.noaa.gov/products/GODAS/>

ENSO: La Niña

(no changes since April)

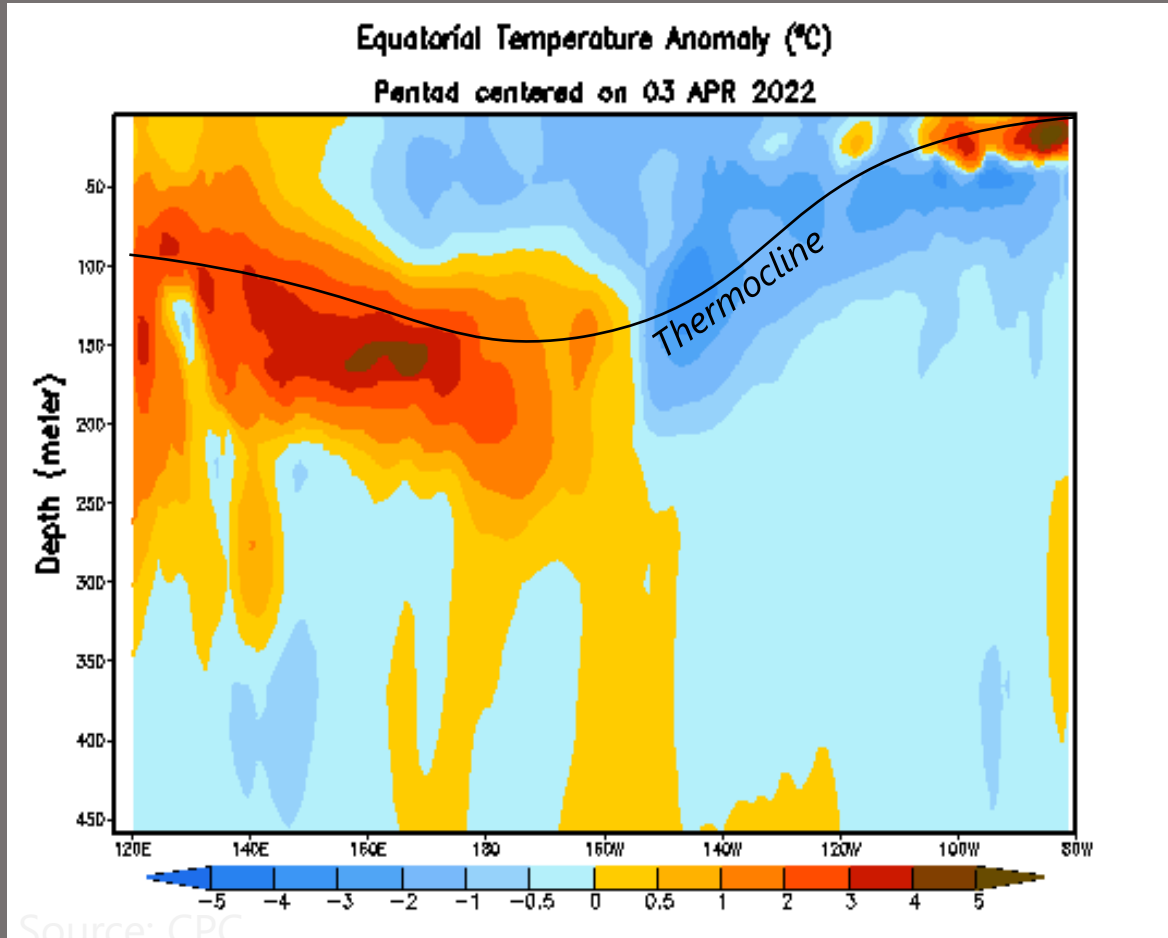
- ☉ La Niña is present.*
- ☉ Equatorial sea surface temperatures (SSTs) are below average across most of the Pacific Ocean.
- ☉ The tropical Pacific atmosphere is consistent with La Niña.

Week centered on 16 MAR 2022
SST Anomalies (°C)

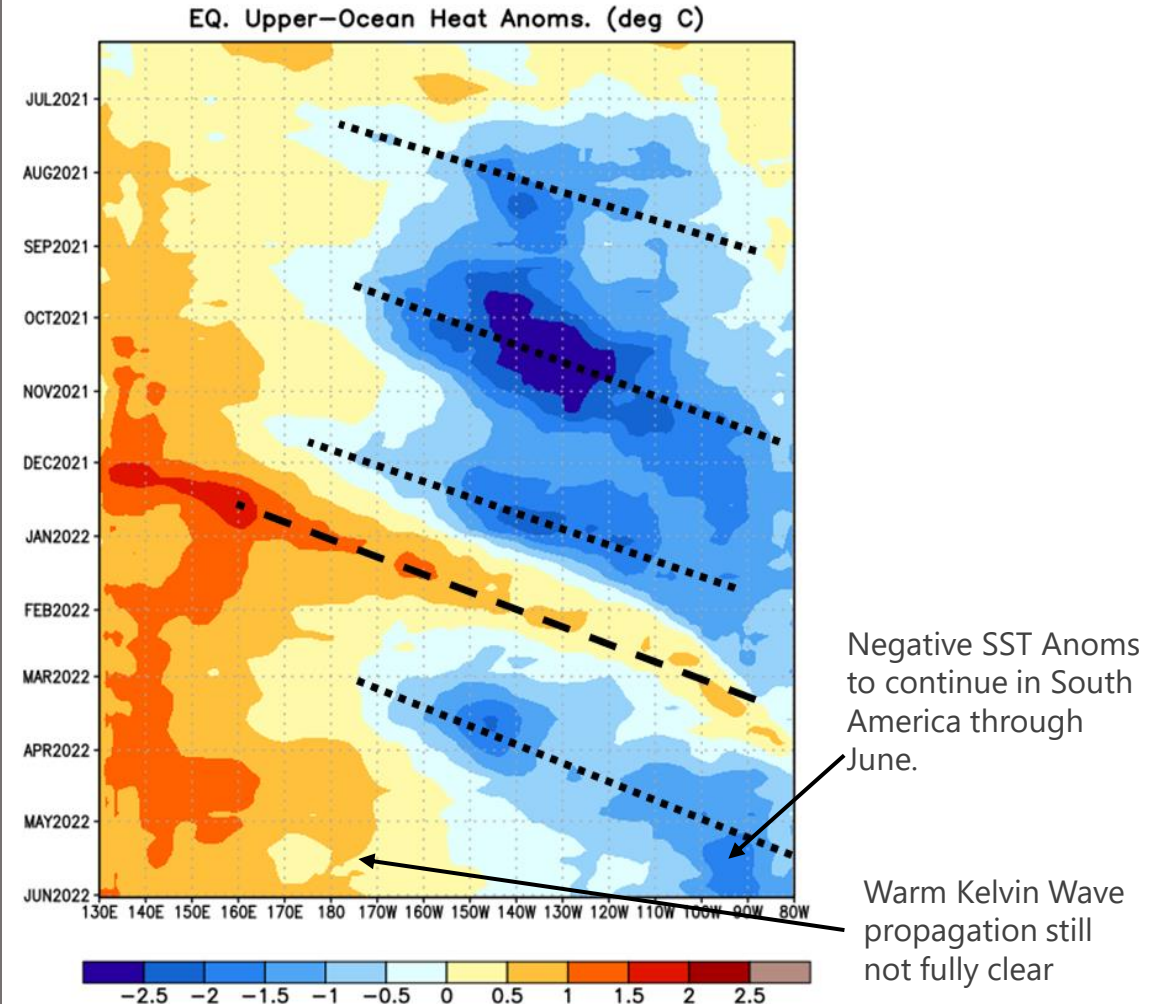


ENSO: Oceanic Kelvin Waves

Equatorial Pacific Temperature Anomaly Cross Section



Heat Content Hovmöller

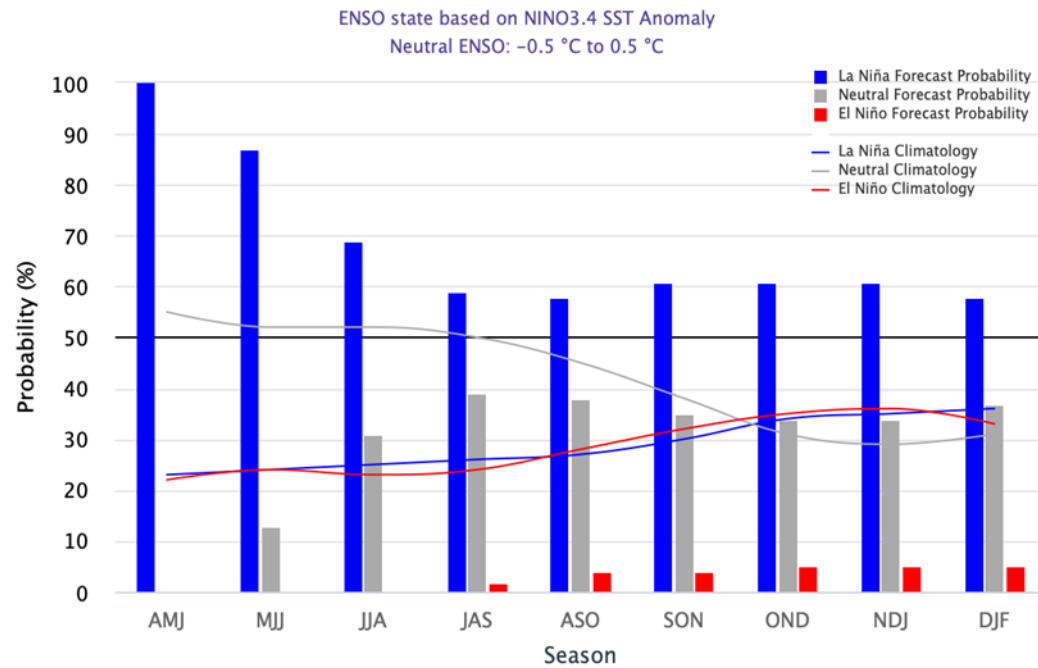


ENSO Outlook

Though La Niña is favored to continue, the odds for La Niña decrease into the late Northern Hemisphere summer (58% chance in August-October 2022) before slightly increasing through the Northern Hemisphere fall and early winter 2022 (61% chance).*

CPC/IRI Probabilistic Forecast

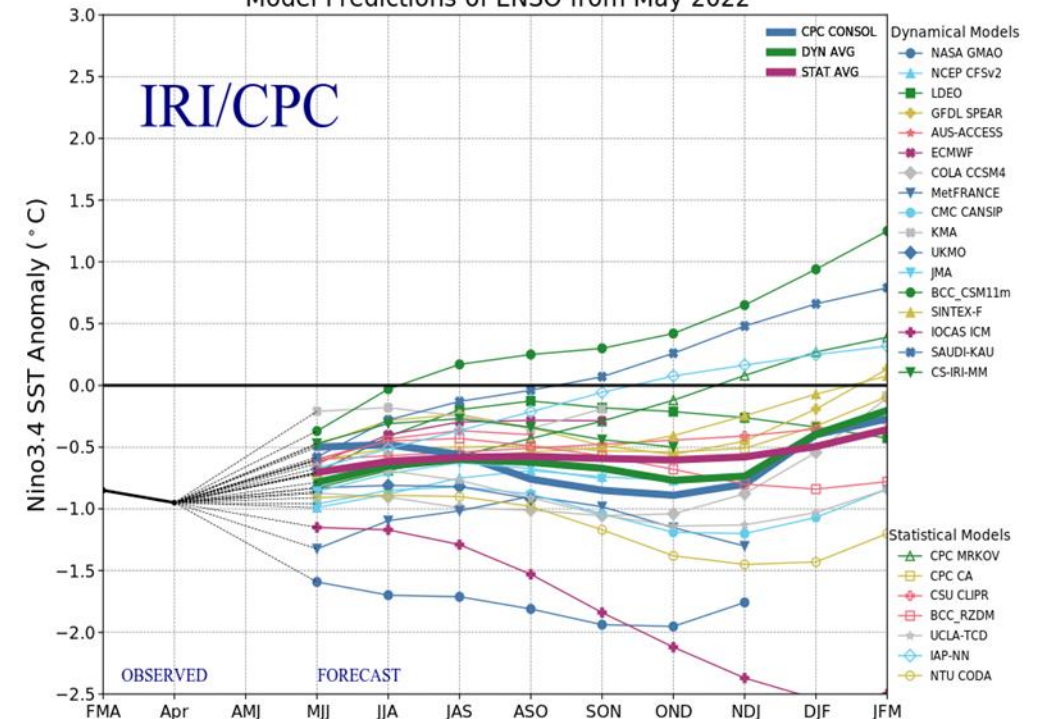
Early-May 2022 CPC/IRI Official Probabilistic ENSO Forecasts



Source: CPC

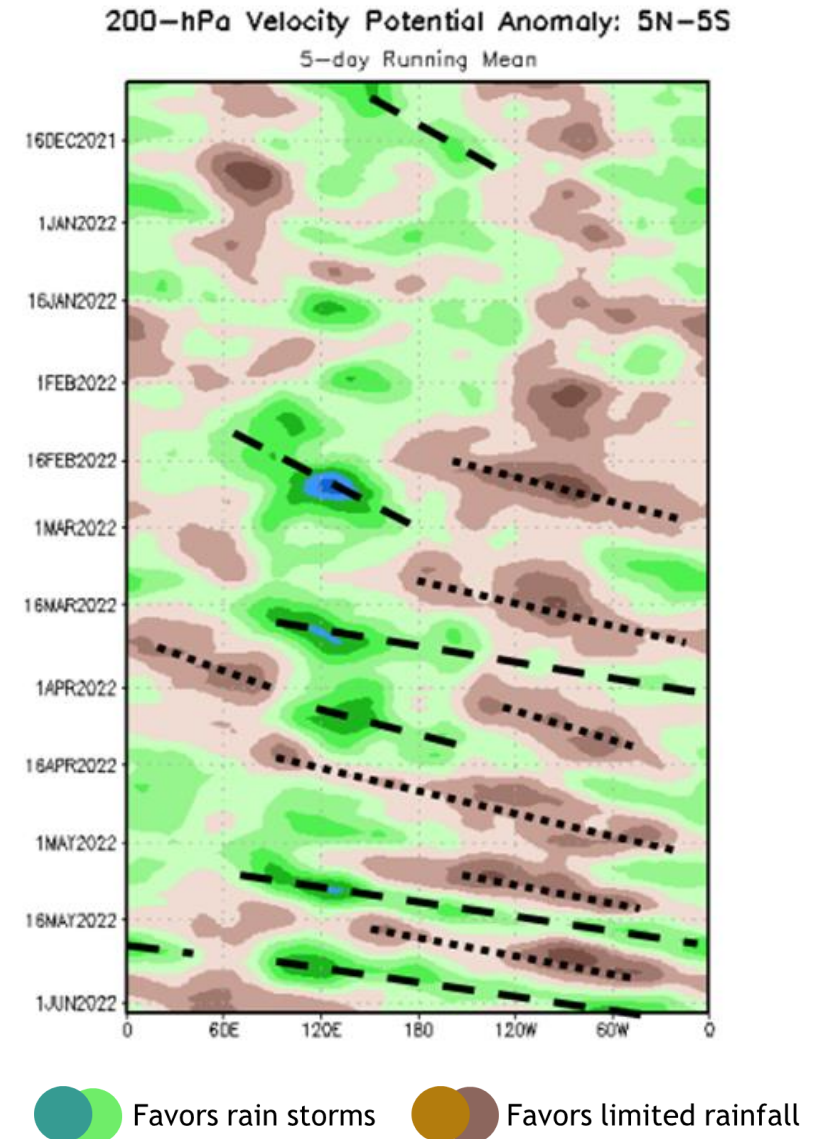
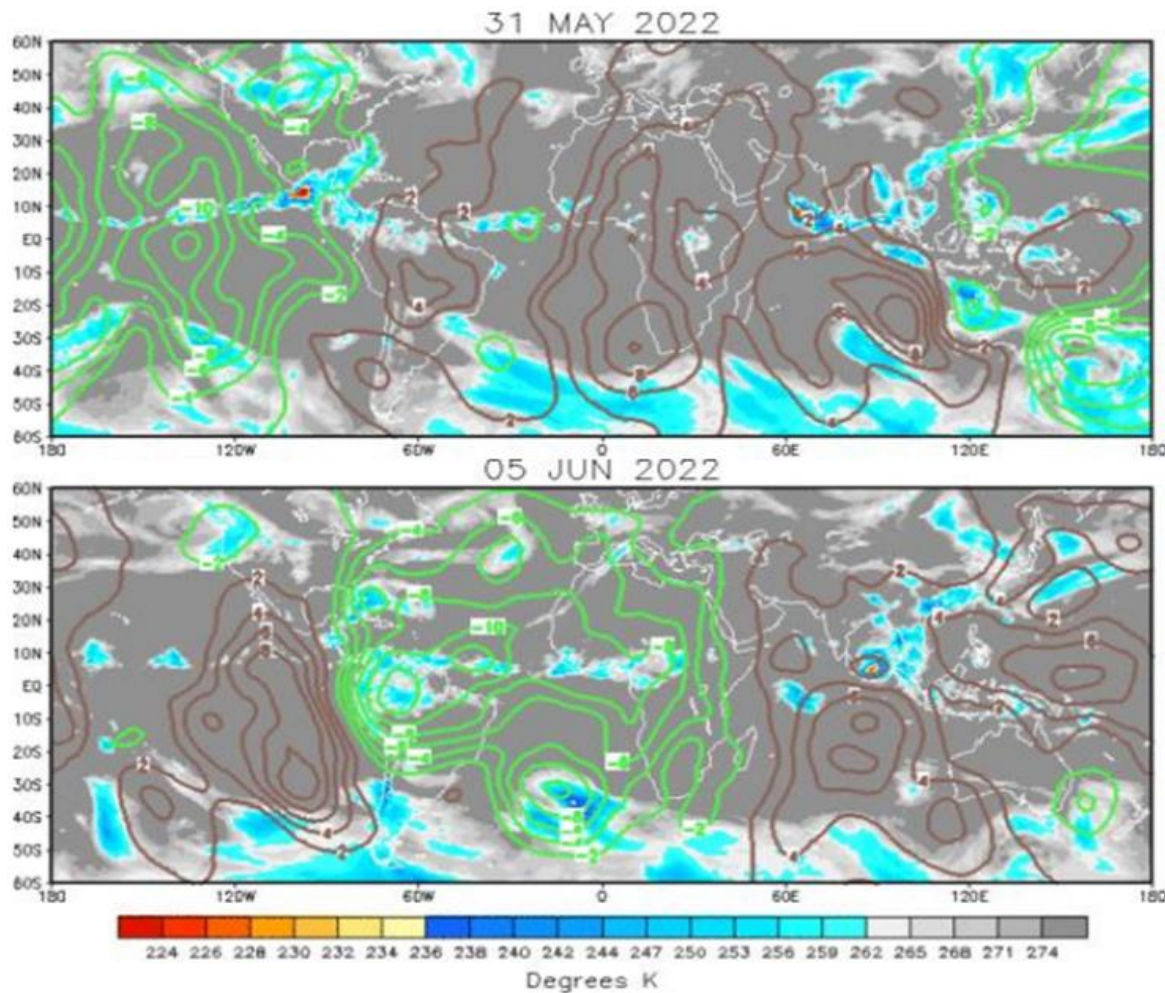
IRI/CPC Dynamic Models

Model Predictions of ENSO from May 2022



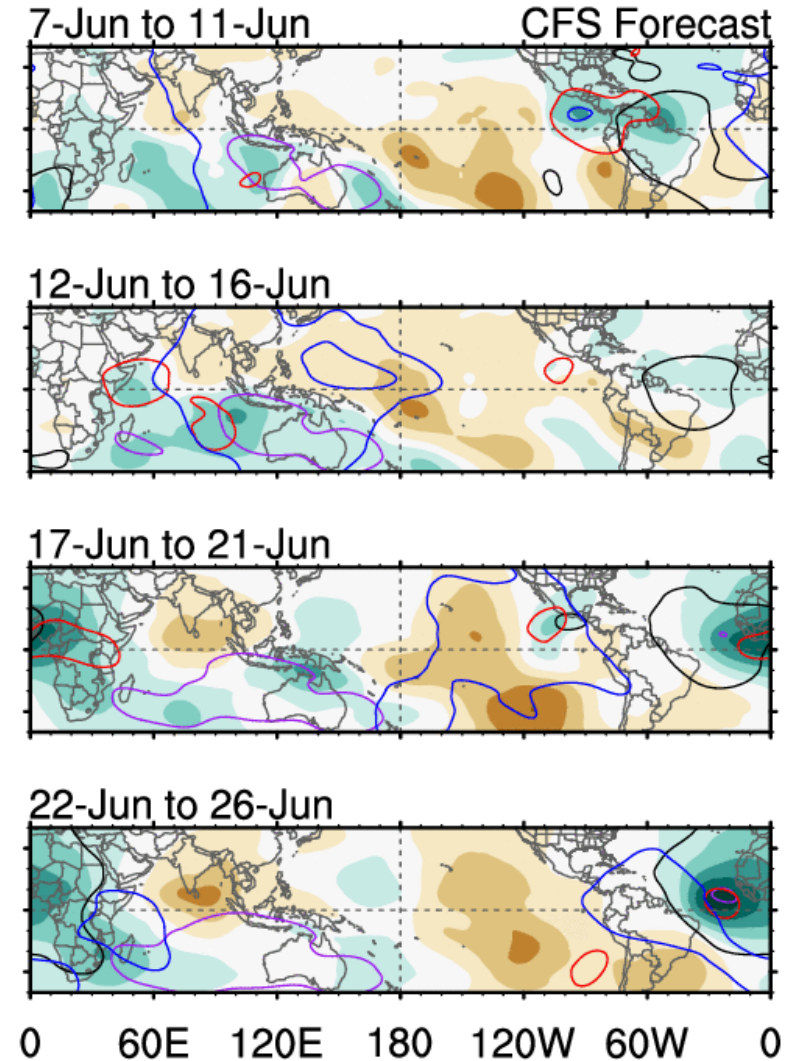
Madden-Julian Oscillation (MJO)

- Wave #1 Mode, fast propagation.
- Currently: Atlantic, entering Africa



Tropospheric Equatorial Waves

- Wet MJO: Atlantic, moving into Africa
- Weak Kelvin: Central America
- Stronger Kelvin: June 21-25
- Upper convergent (dry): Arriving in late June/early July



7-day CHI200 with CFS forecasts

Wed 2020-09-16 10:18 UTC

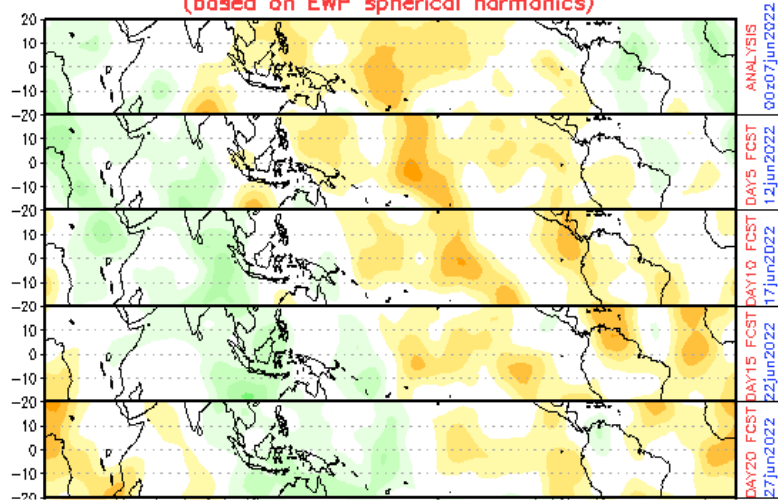
— MJO — Kelvin x2
— Low — ER

Contours at -2, -6 x10^6 m2 s-1
Carl Schreck
carl_schreck@ncsu.edu

MJO Forecasts for the Americas

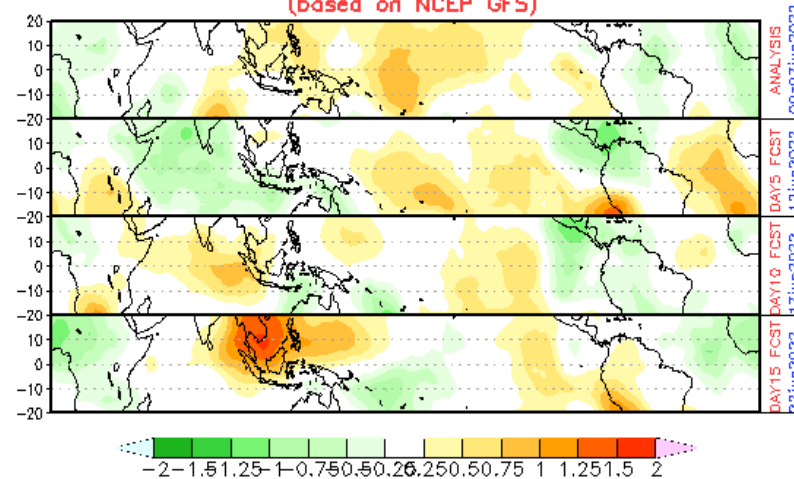
EWP

CHI 200 hPa 40-DAY forecast (00z07jun2022–17jul2022)
(based on EWP spherical harmonics)



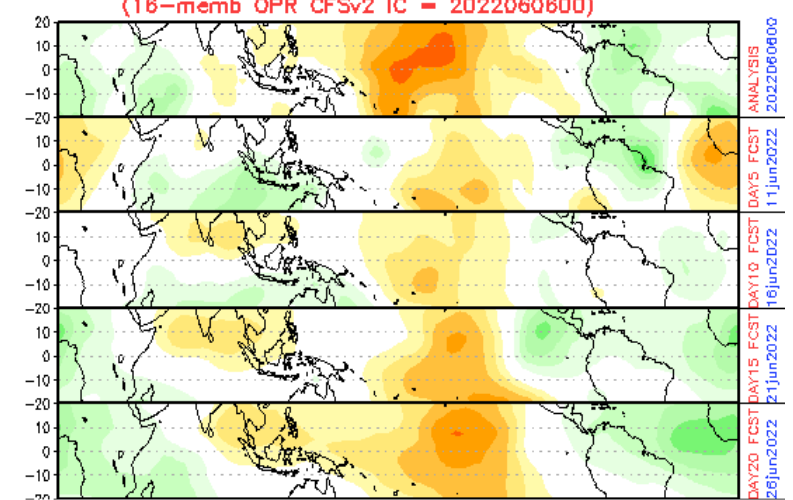
GFS

CHI 200 hPa 15-DAY forecast (00z07jun2022–22jun2022)
(based on NCEP GFS)



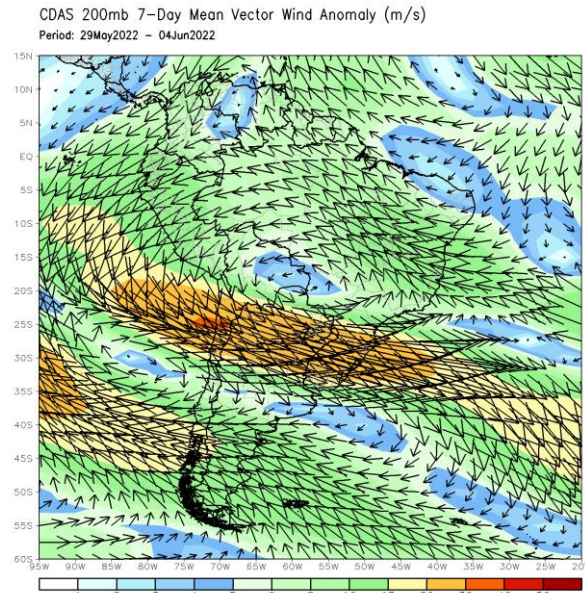
CFS

CHI 200 hPa 40-DAY forecast (00z06jun2022–16jul2022)
(16-memb OPR CFSv2 IC = 2022060600)

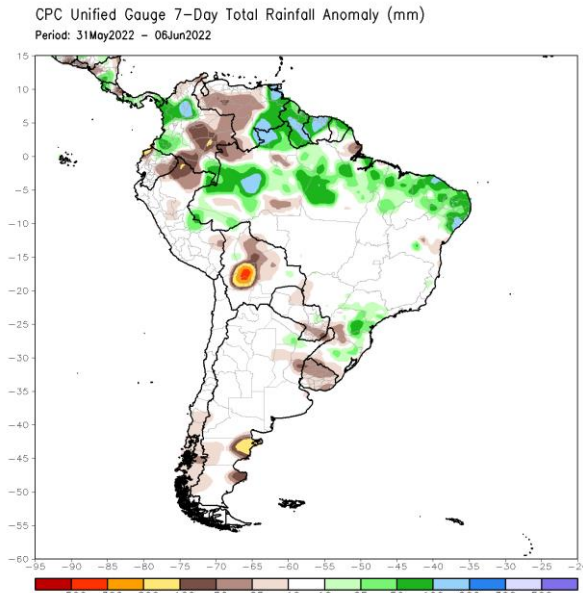


Flow and Rainfall Anomalies, Last 7 Days

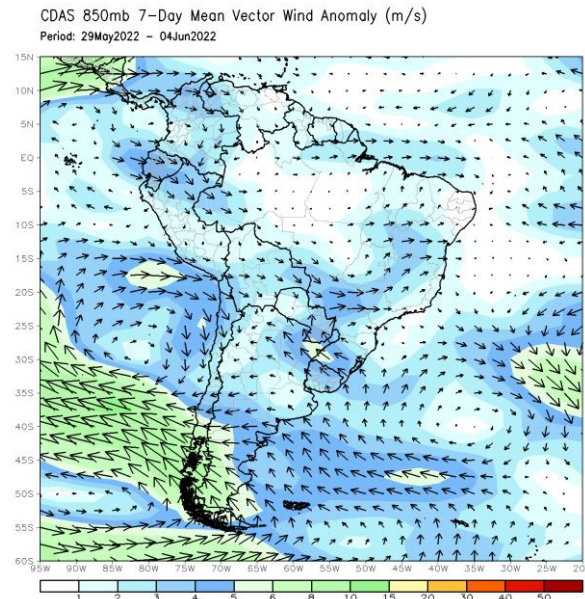
200 hPa Flow
Anomalies



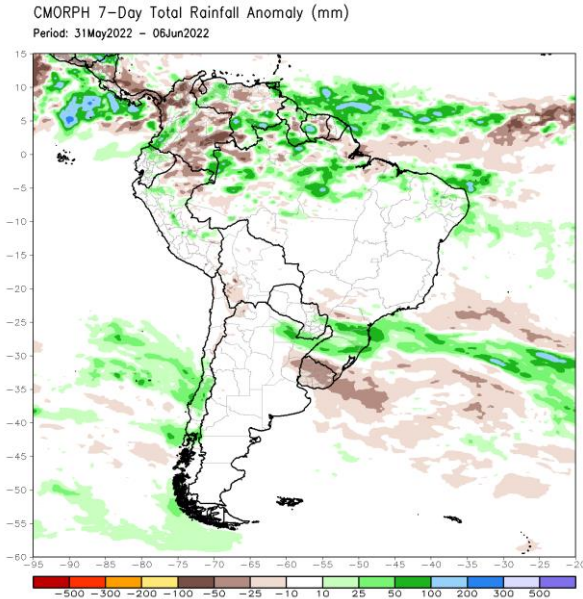
Gauges



850 hPa Flow
Anomalies

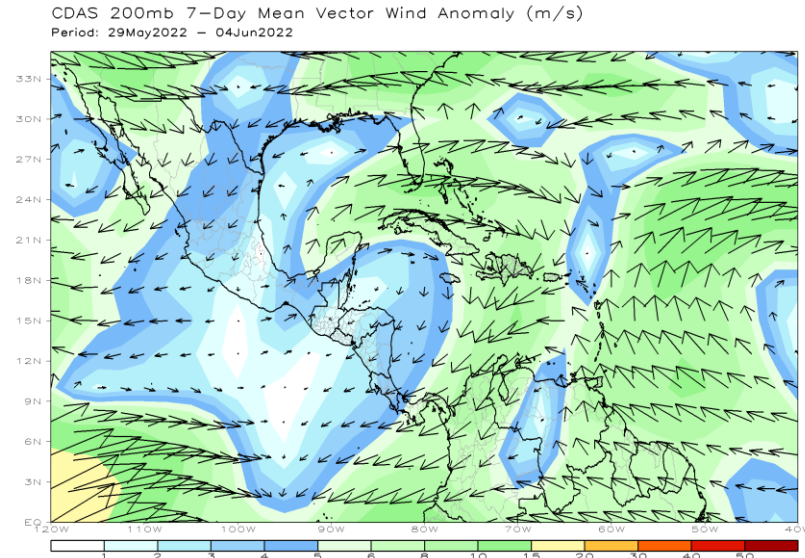


CMORPH

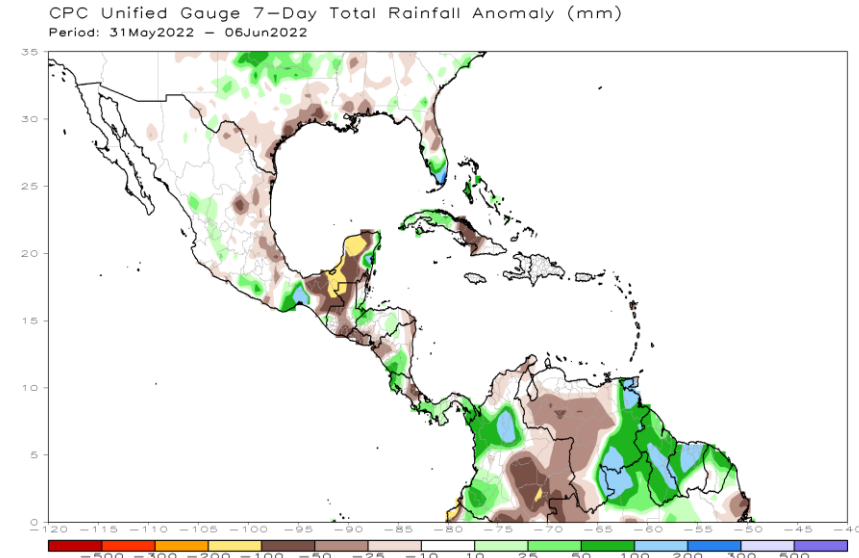


Flow and Rainfall Anomalies, Last 7 Days

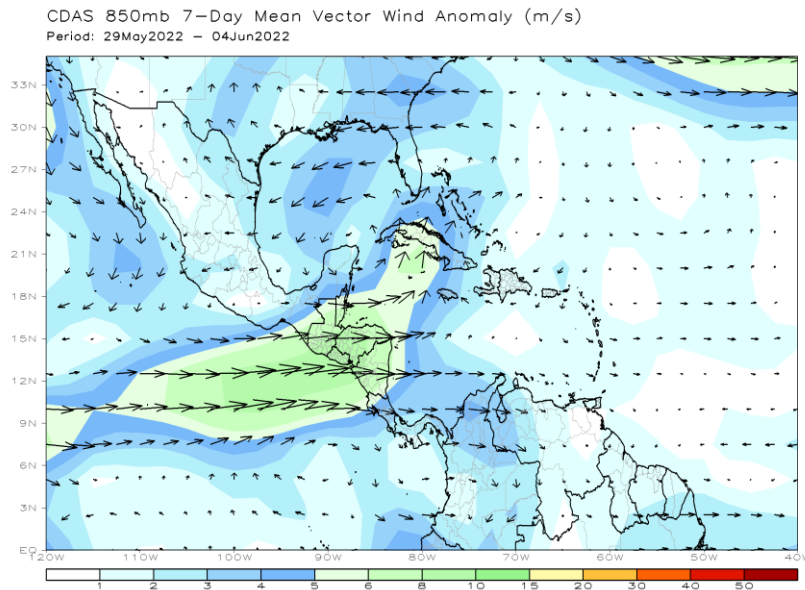
200 hPa Flow
Anomalies



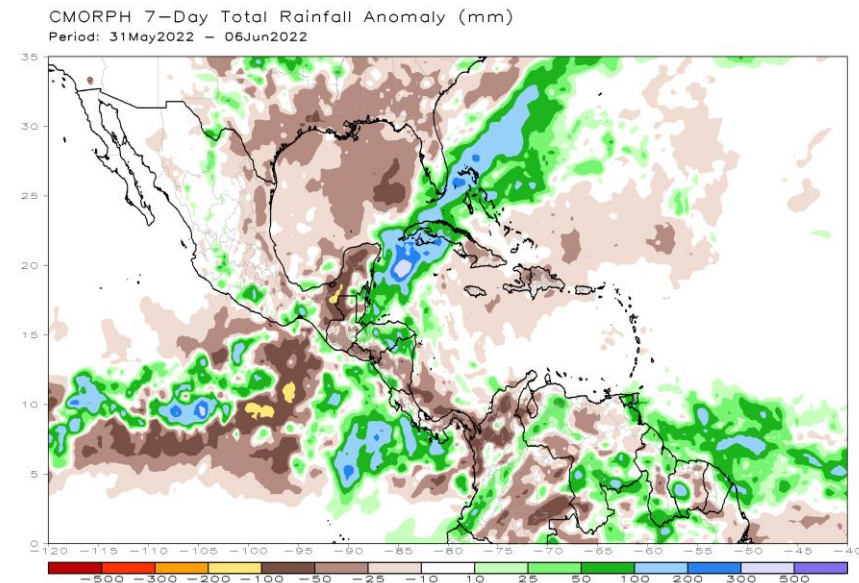
Gauges



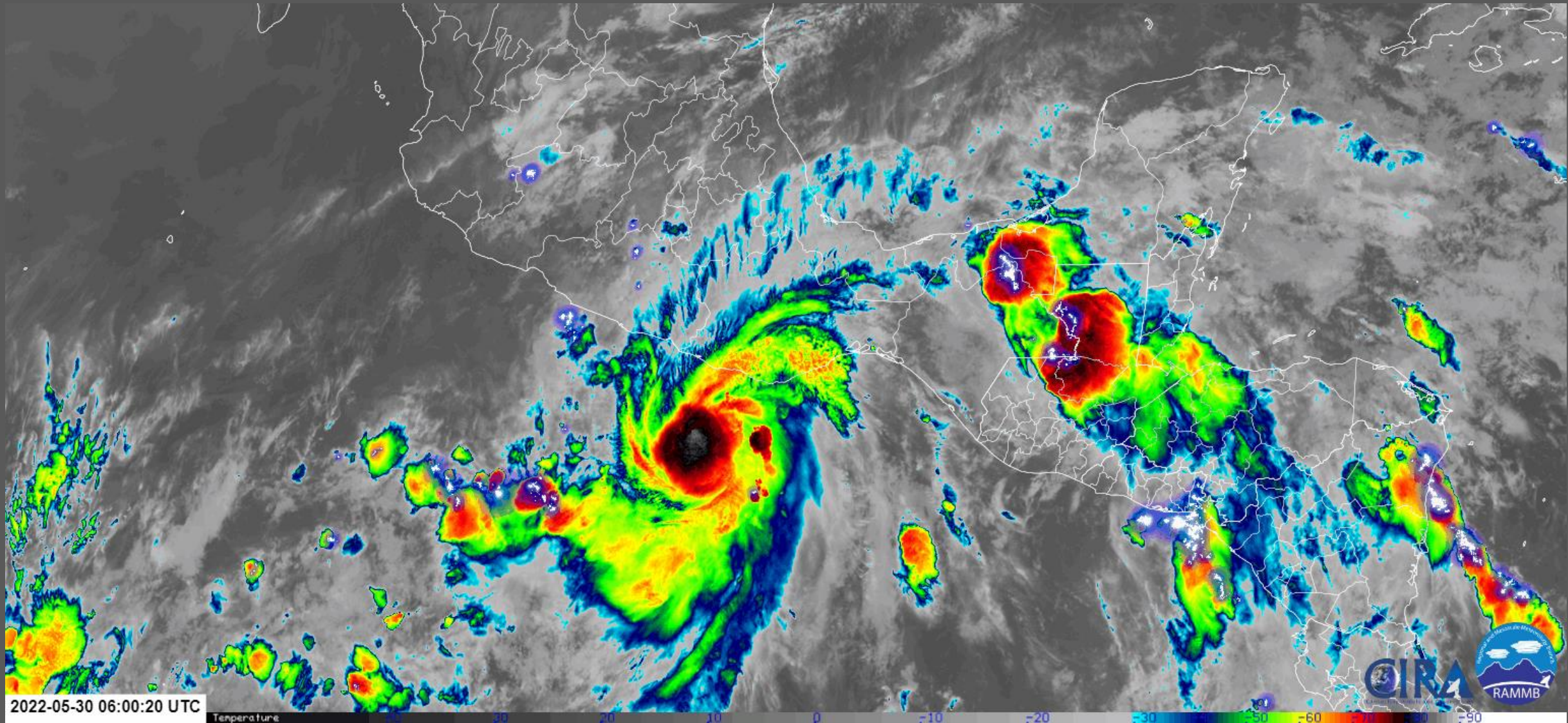
850 hPa Flow
Anomalies



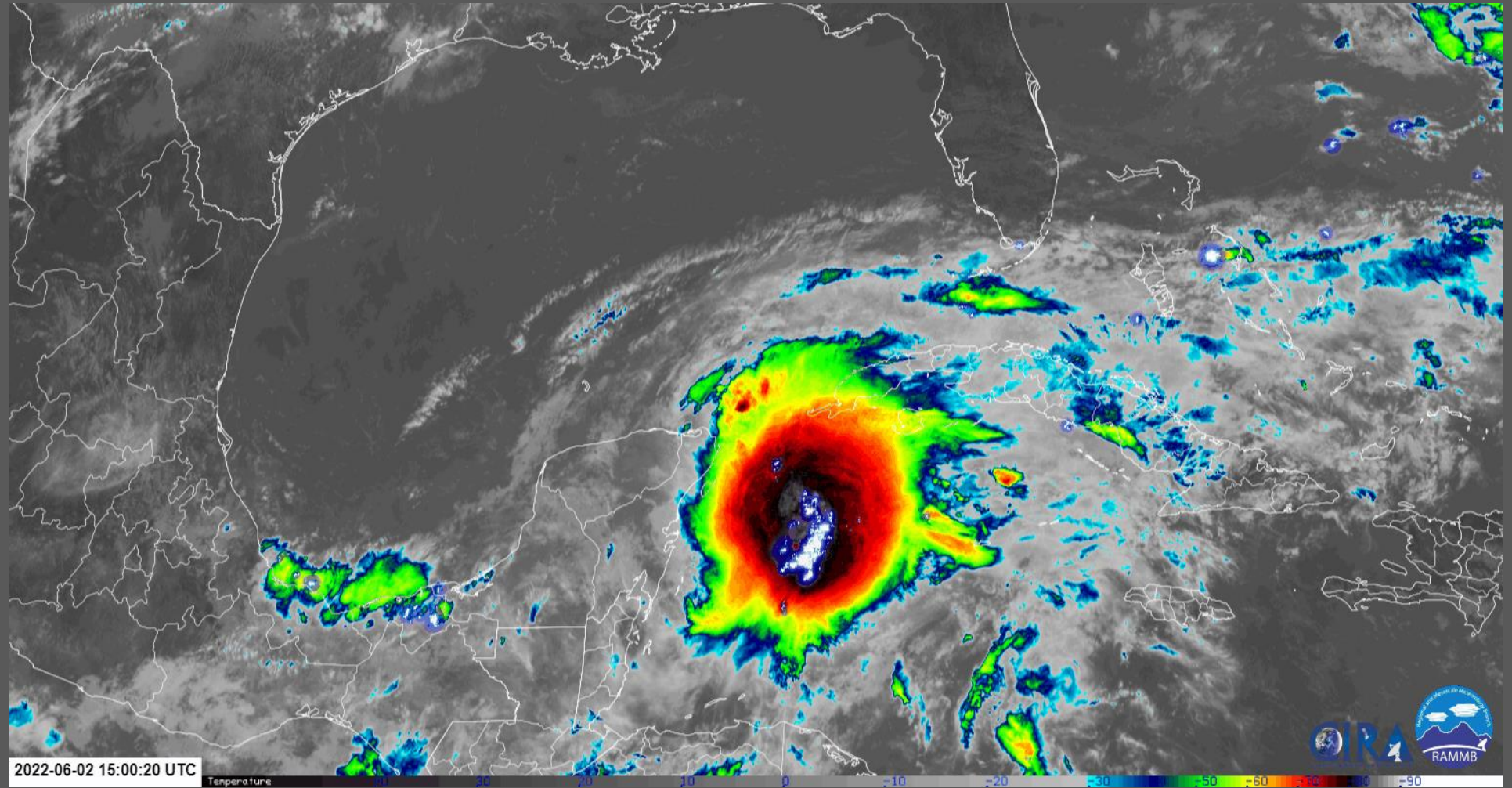
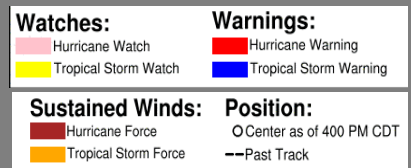
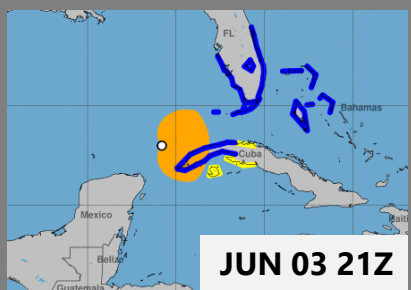
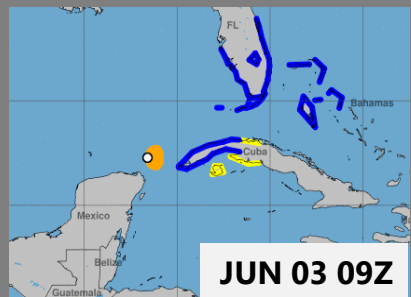
CMORPH



Hurricane Agatha



Tropical Storm Alex



¡Gracias!

Thank you!

Next session: To be defined, late July

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