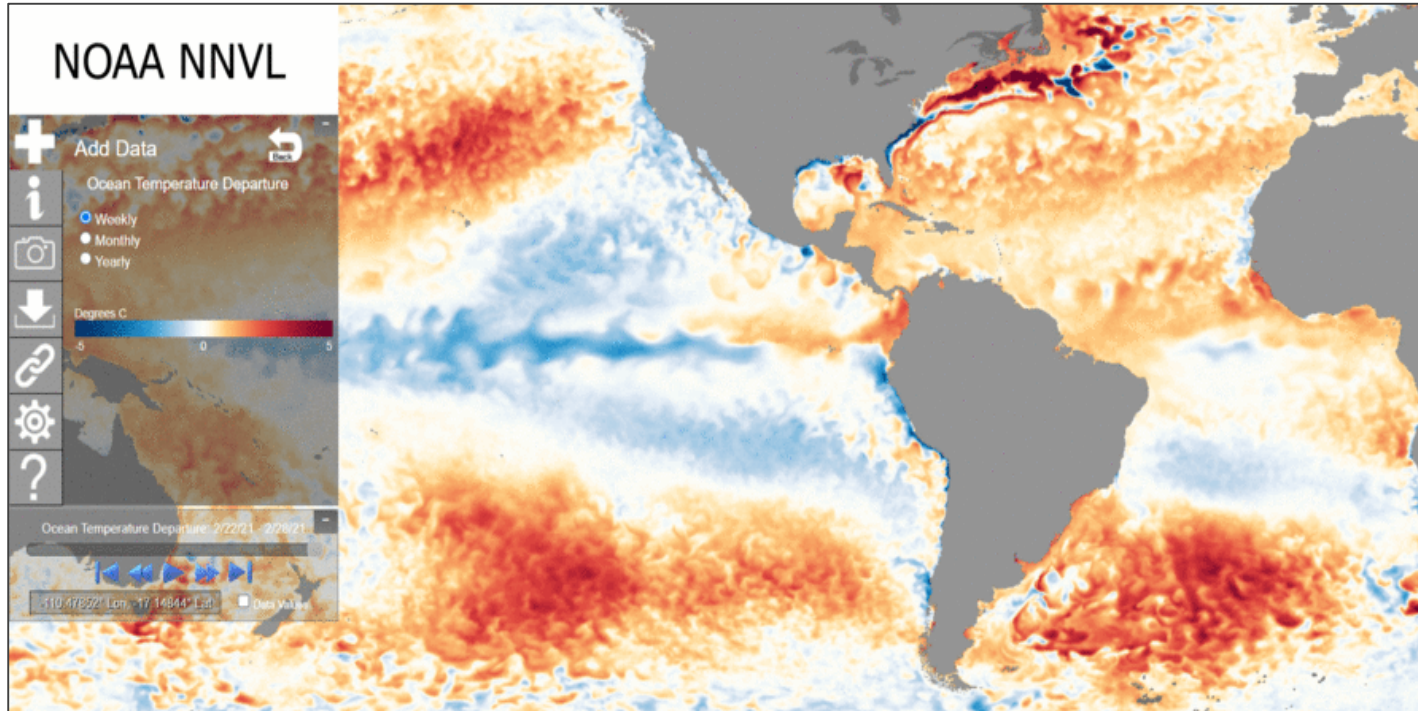


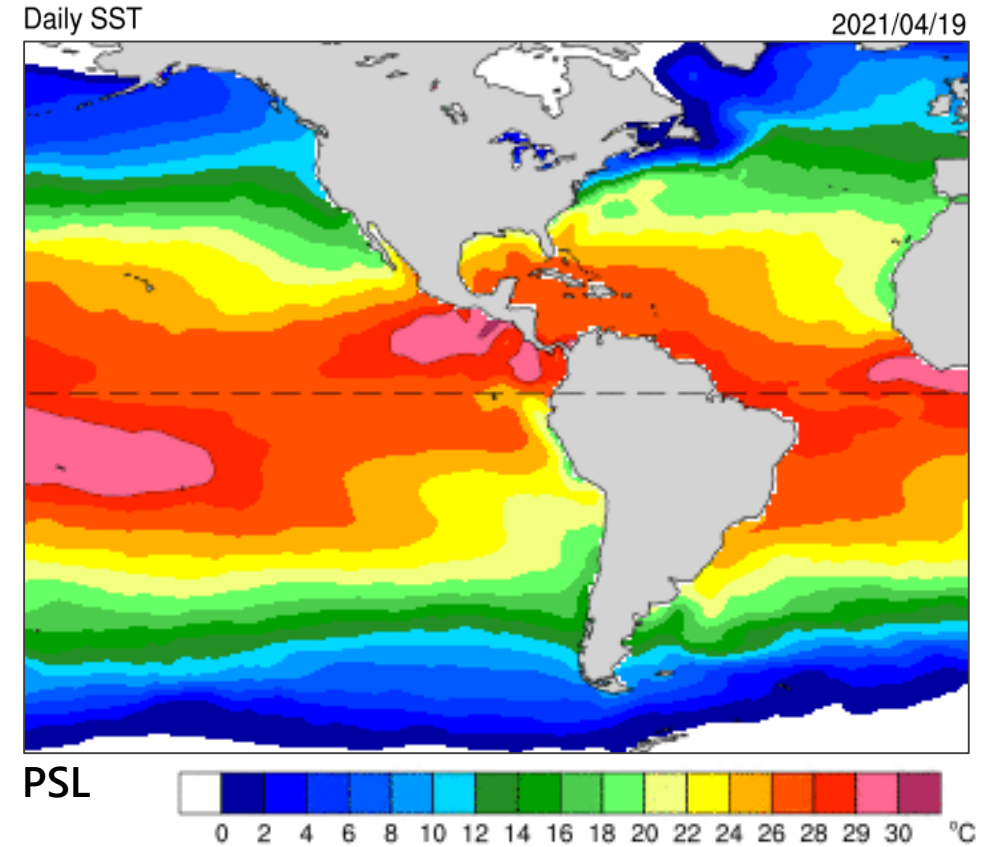
Monthly Regional Focus Group Session

Wednesday 28 April 2021

Anomaly Evolution Feb - April 25



SST April 18-24

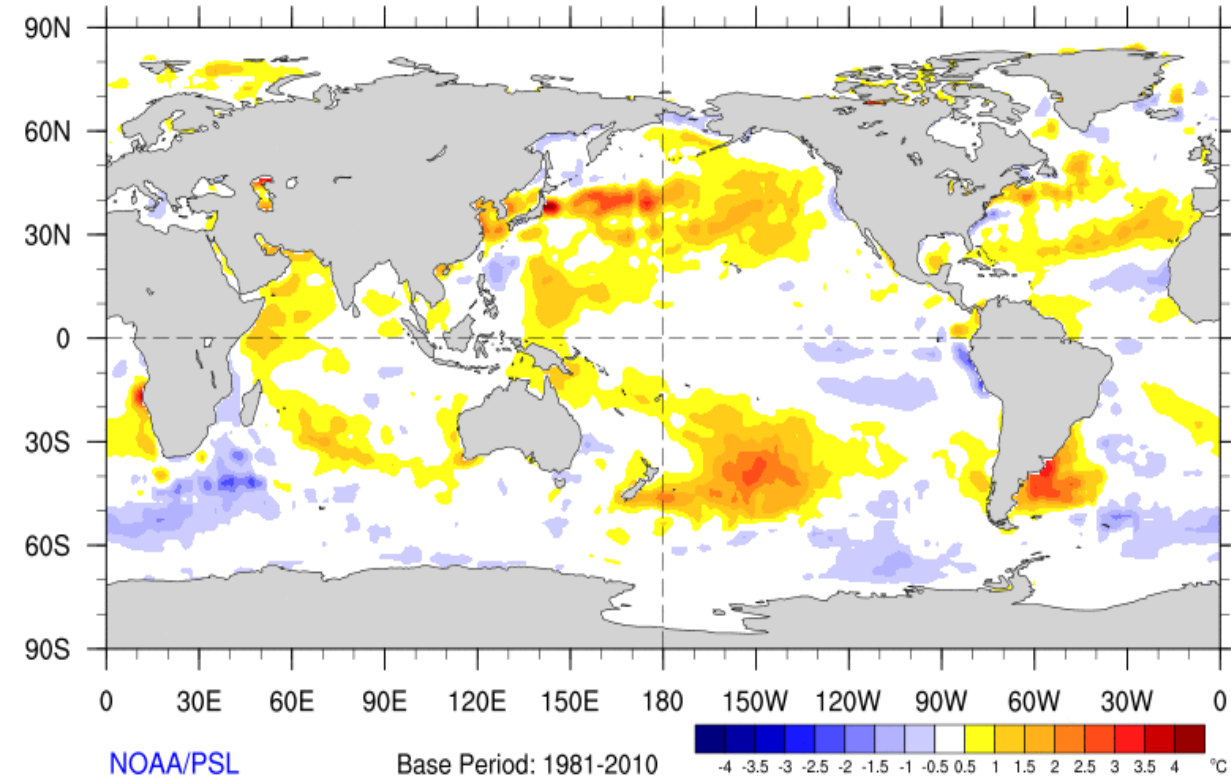


Are the anomalies deep?

Deep anomalies tend to last longer and are useful for subseasonal forecasting.

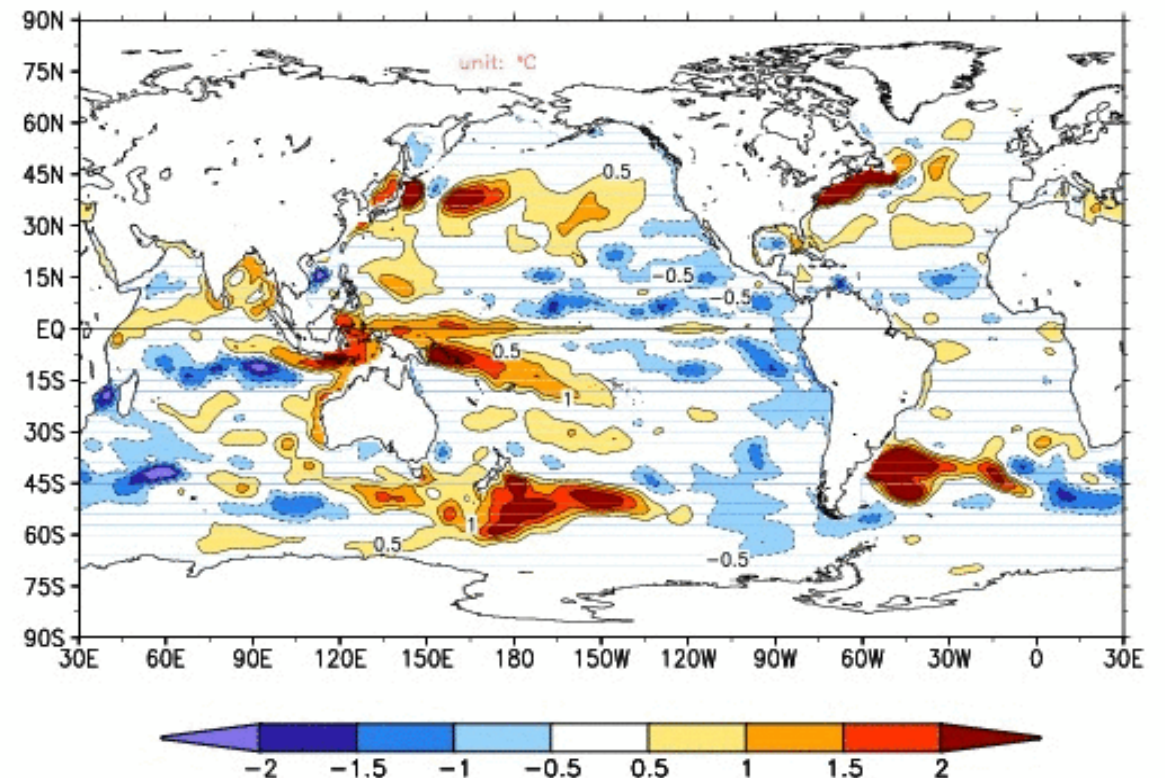
Weekly SST Anomaly

2021/04/18 - 2021/04/24



Top 300m Layer Anomaly

GODAS 300m Ave Temp Anomaly, 2021 Apr 23



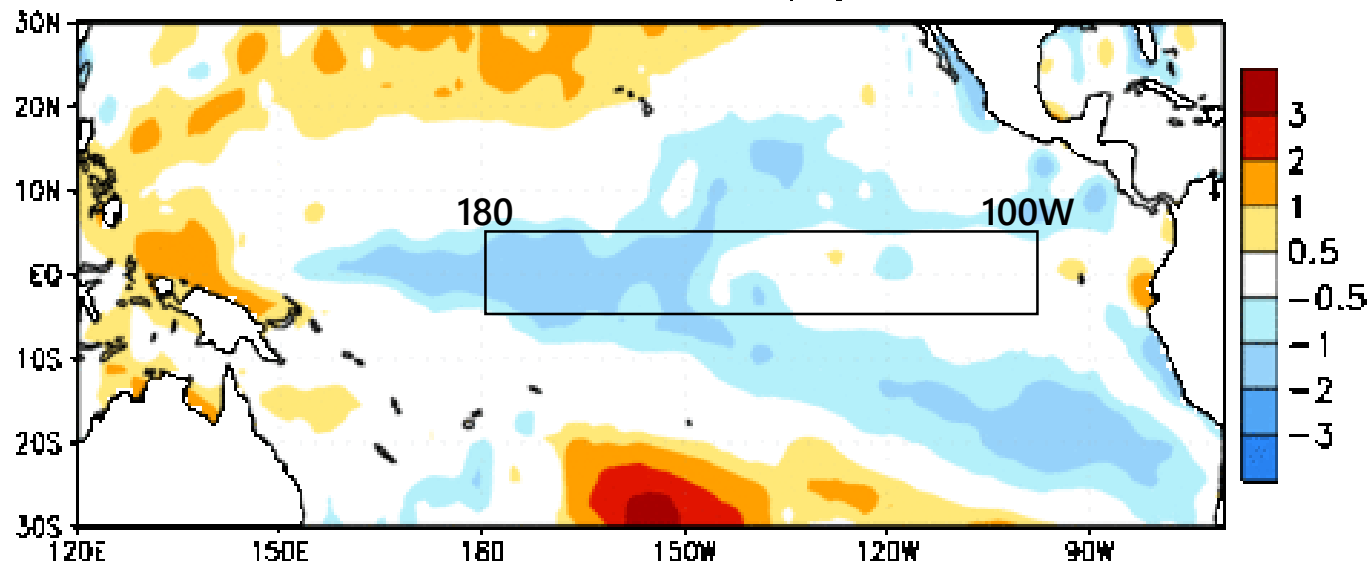
Source: CPC GODAS, <https://www.cpc.ncep.noaa.gov/products/GODAS/>

ENSO:

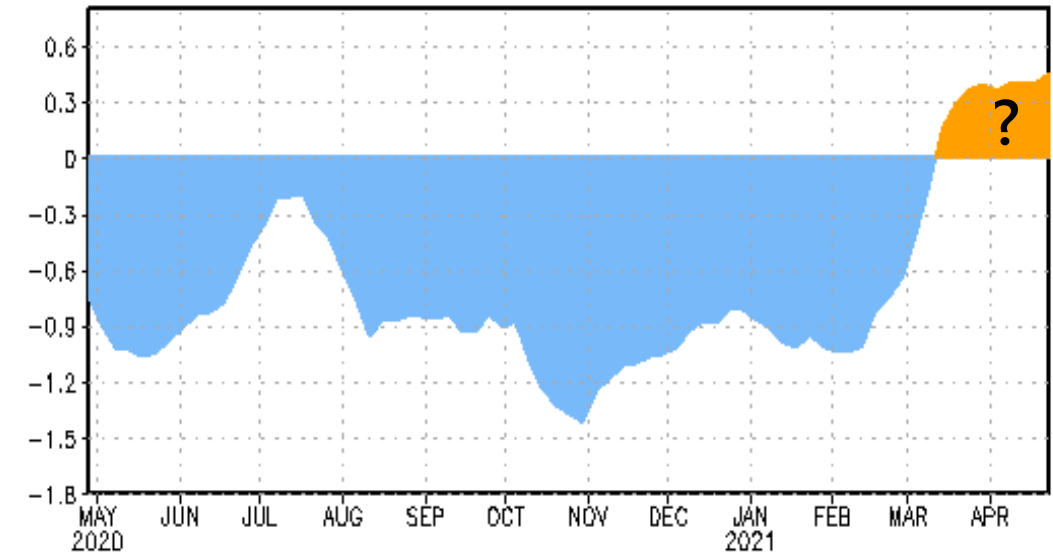
La Niña

- La Niña is present.*
- Equatorial sea surface temperatures (SSTs) are below average from the west-central to eastern Pacific Ocean.
- The tropical atmospheric circulation is consistent with La Niña.

Week centered on 03 FEB 2021
SST Anomalies (°C)

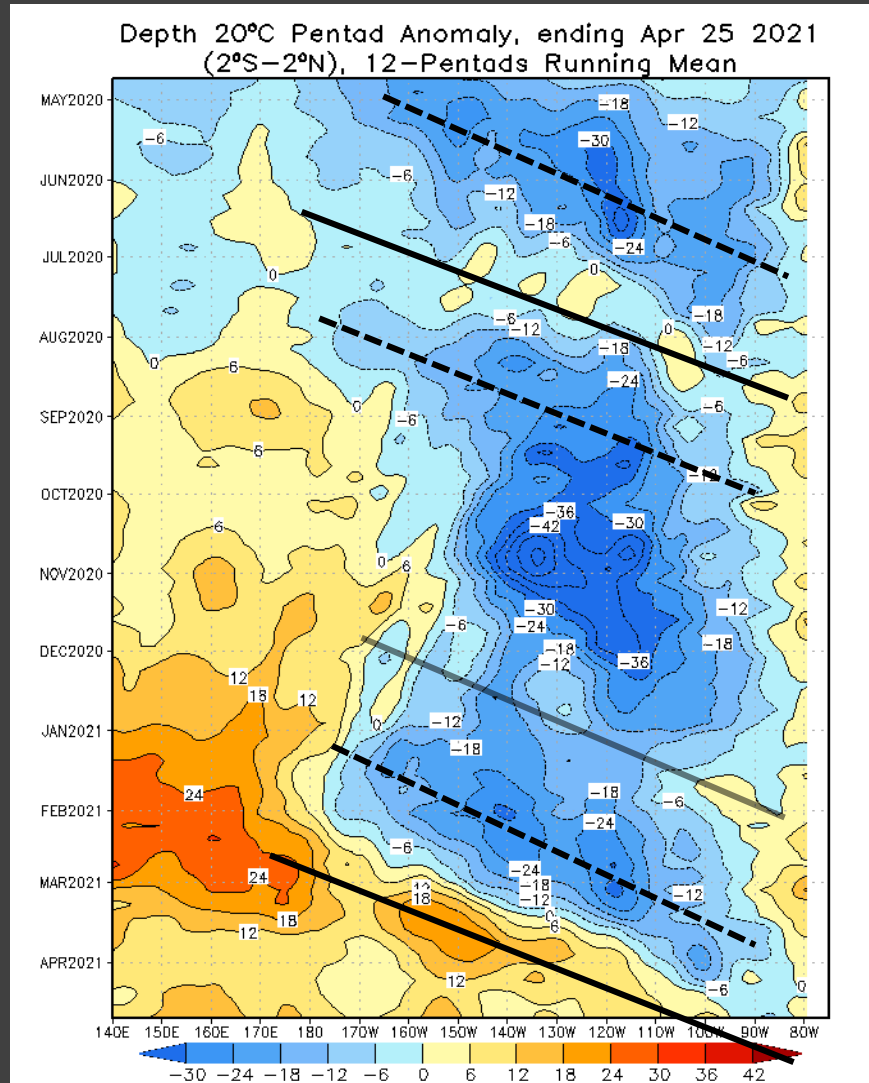


EQ. Upper-Ocean Heat Anoms. (deg C) for 180–100W

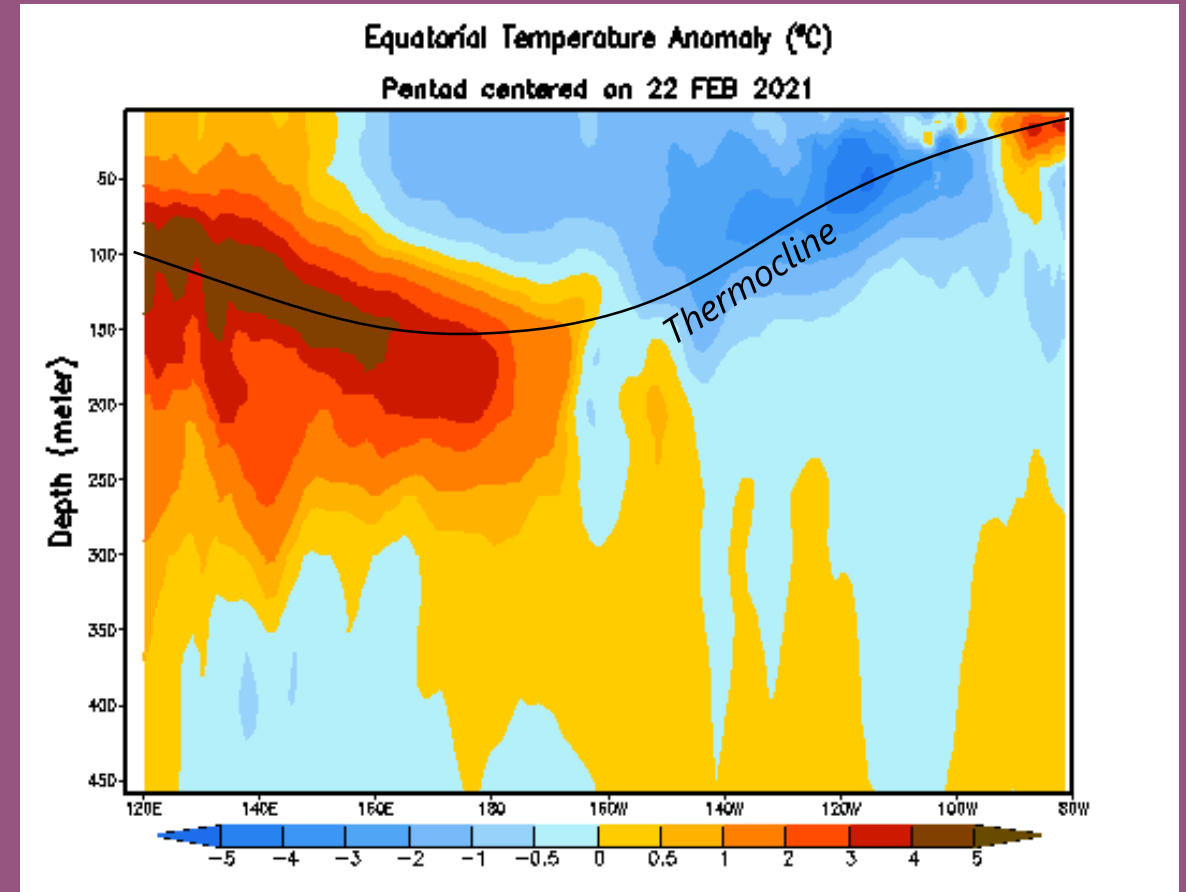


ENSO: Oceanic Kelvin Waves

Hovmöller: Heat Content



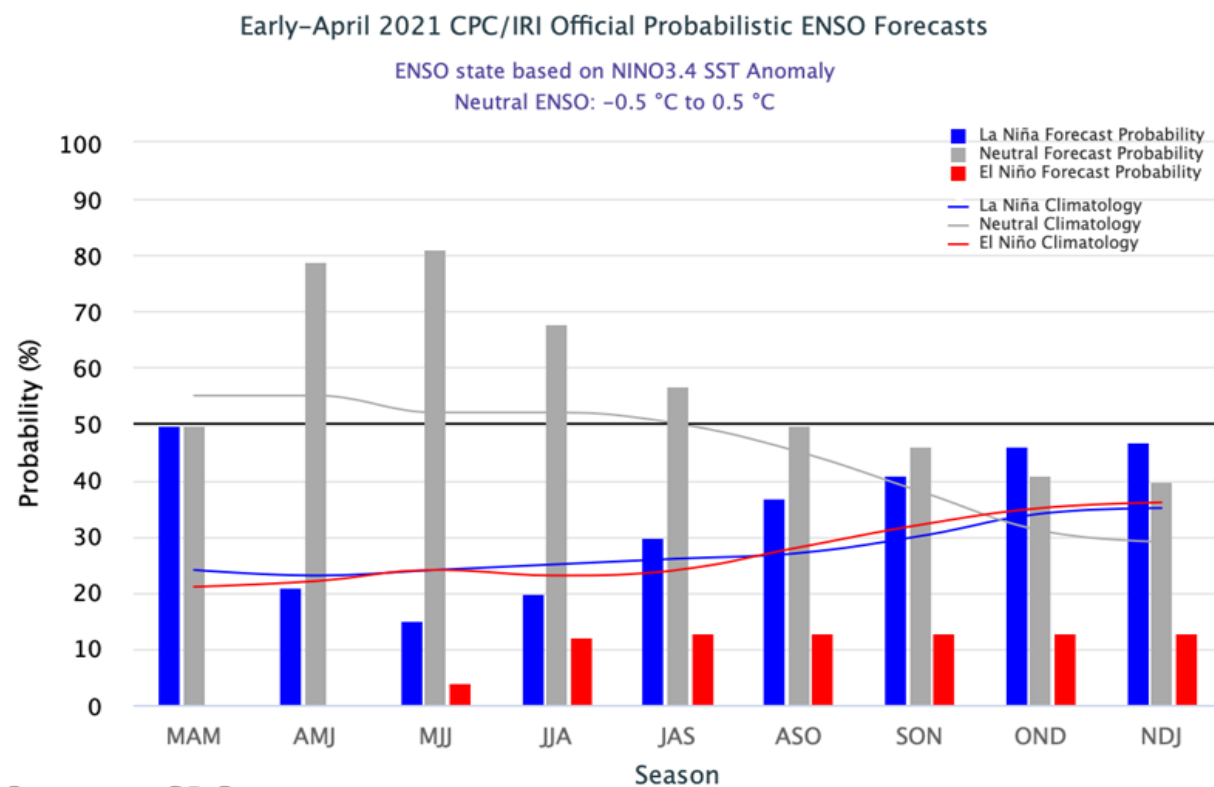
Equatorial Pacific Temp. Anomaly



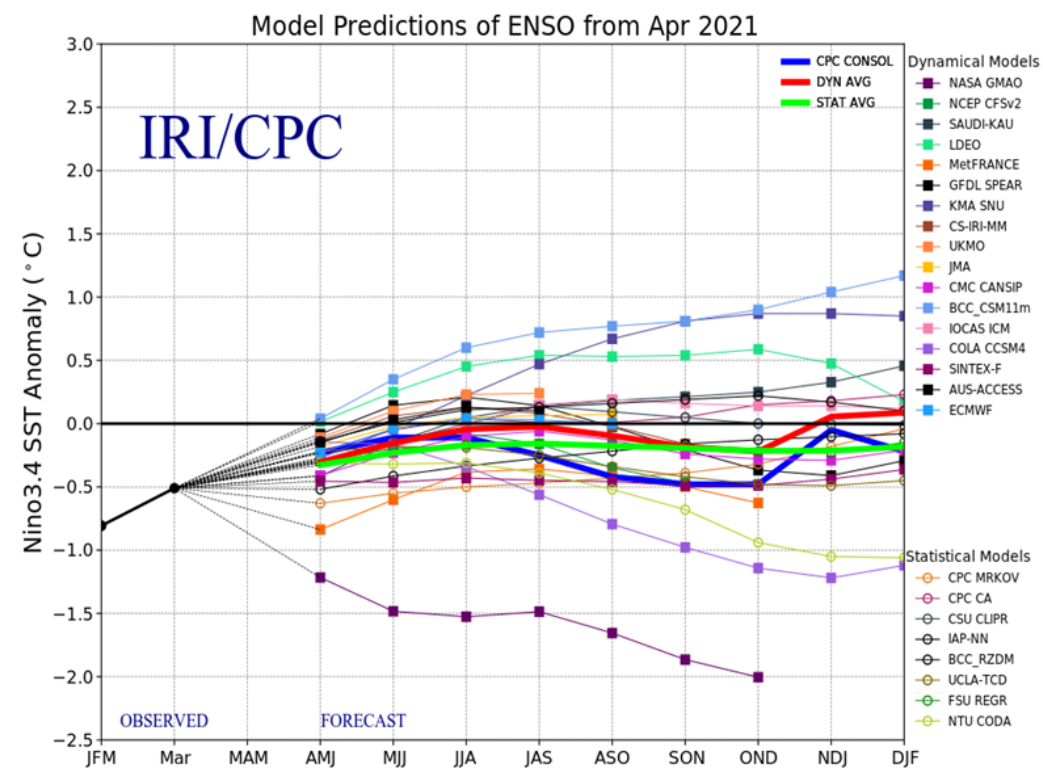
ENSO Outlook

A transition from La Niña to ENSO-Neutral is likely in the next month or so, with an 80% chance of ENSO-neutral during May-July 2021.*

CPC/IRI Probabilistic Forecast

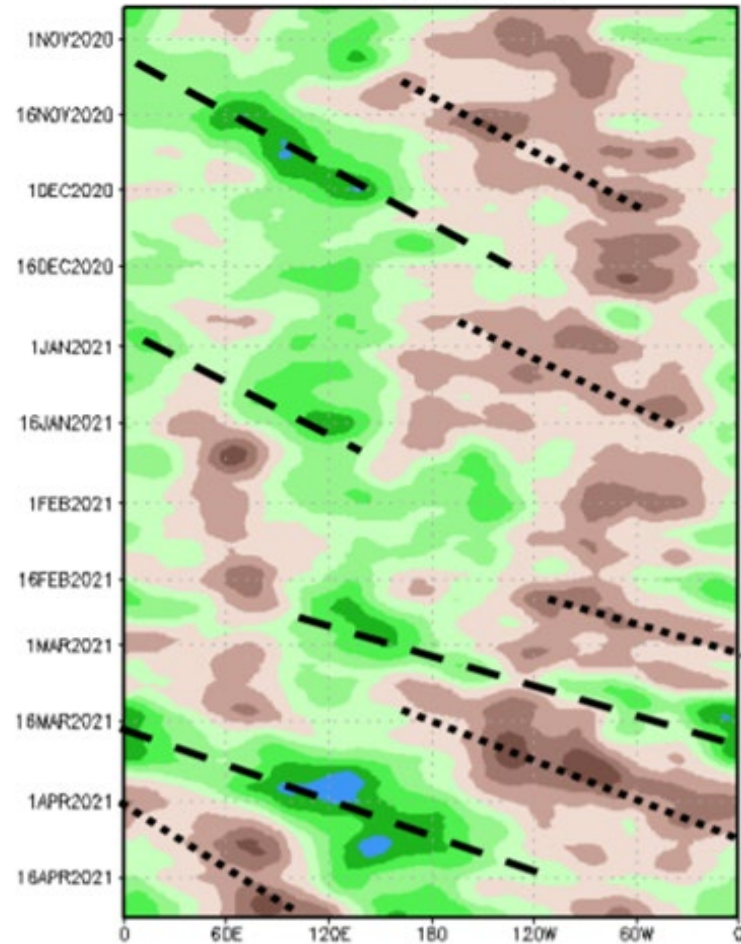


IRI/CPC Dynamic Models



Madden-Julian Oscillation (MJO)

200-hPa Velocity Potential Anomaly: 5N-5S
5-day Running Mean

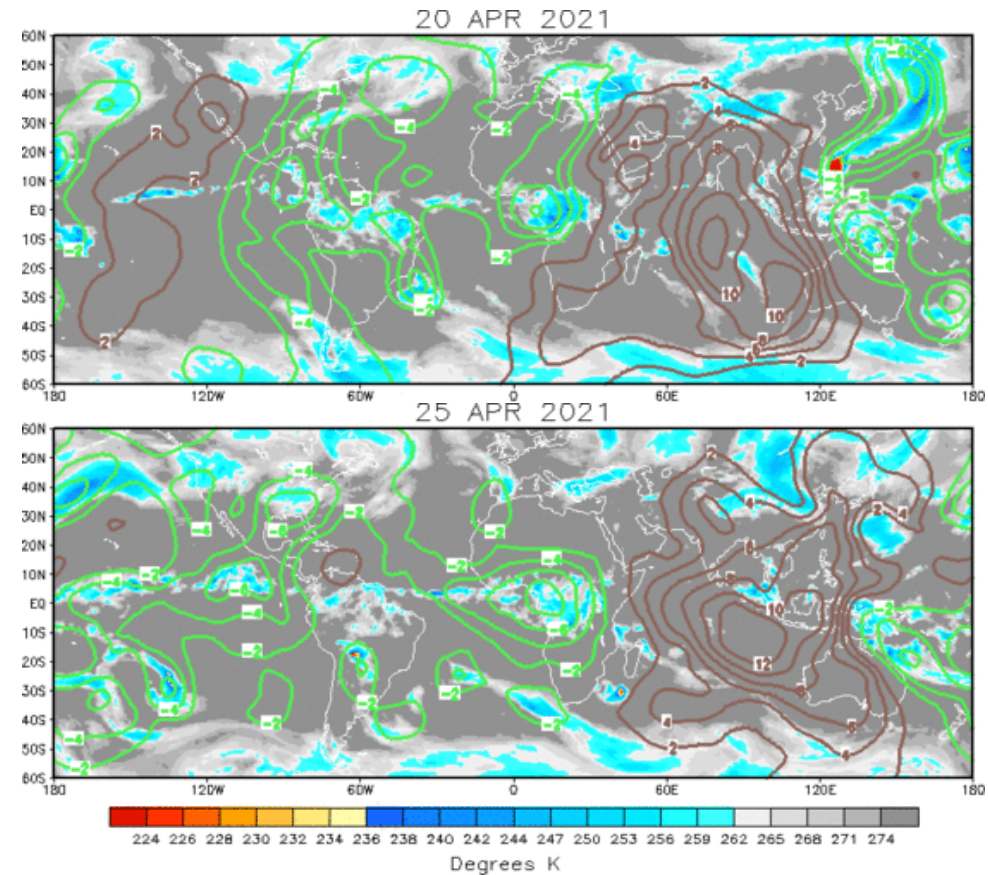


Favors rain storms



Favors limited rainfall

Source: CPC



ncics.org/mjo

7-day CHI200 with CFS forecasts

7-day CHI200 with CFS forecasts

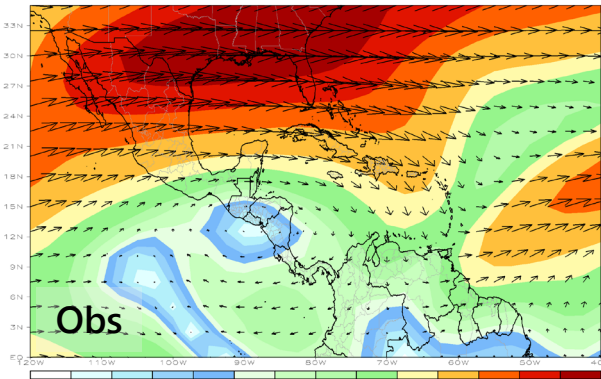
Wed 2020-09-16 1018 UTC

— MJO — Kelvin x2
— Low — ER
Contours at -2, -6 $\times 10^6$ m² s⁻¹
Carl Schreck
carl_schreck@ncsu.edu

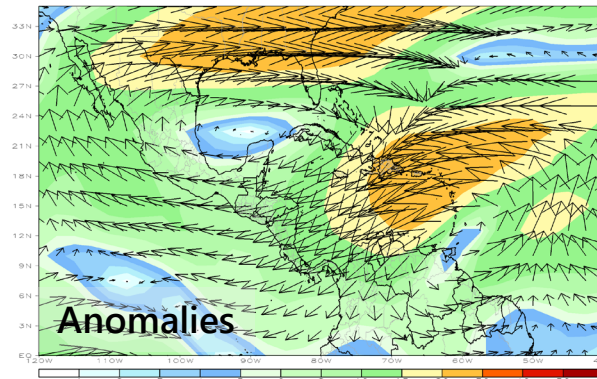
Last Week's Circulation and Rainfall – Tropical Americas

200
hPa

CDAS 200mb 7-Day Mean Vector Wind Total (m/s)
Period: 19Apr2021 – 25Apr2021

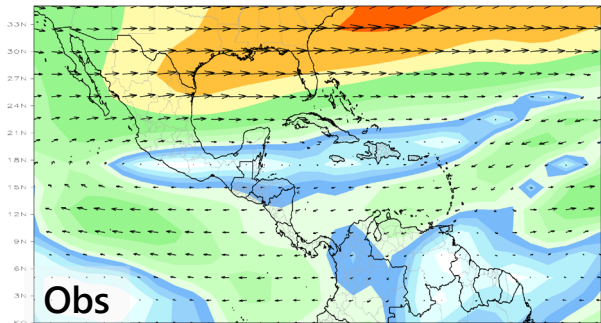


CDAS 200mb 7-Day Mean Vector Wind Anomaly (m/s)
Period: 19Apr2021 – 25Apr2021

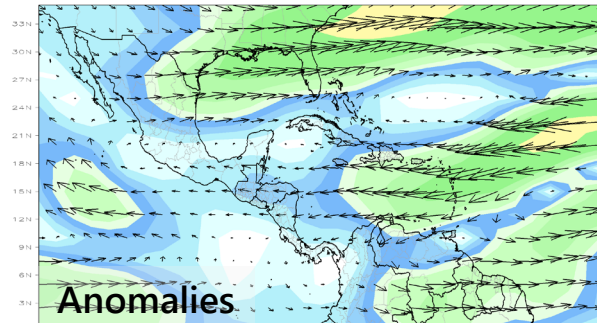


500
hPa

CDAS 500mb 7-Day Mean Vector Wind Total (m/s)
Period: 19Apr2021 – 25Apr2021

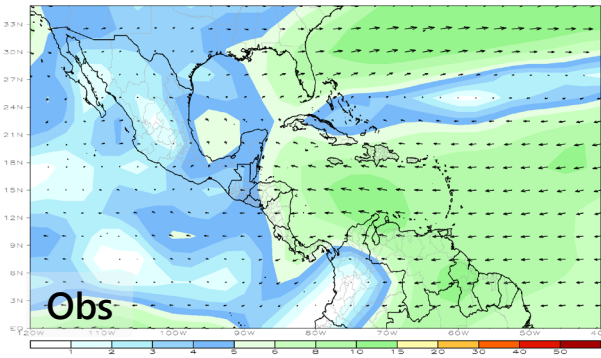


CDAS 500mb 7-Day Mean Vector Wind Anomaly (m/s)
Period: 19Apr2021 – 25Apr2021

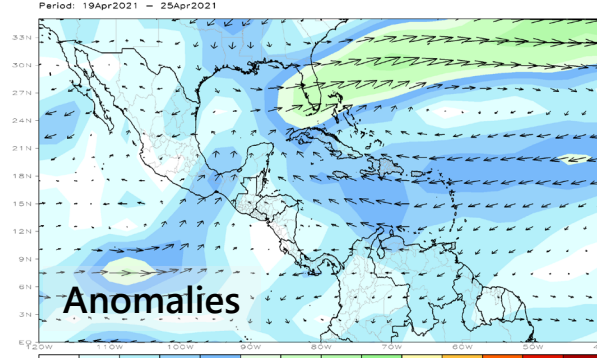


850
hPa

CDAS 850mb 7-Day Mean Vector Wind Total (m/s)
Period: 19Apr2021 – 25Apr2021

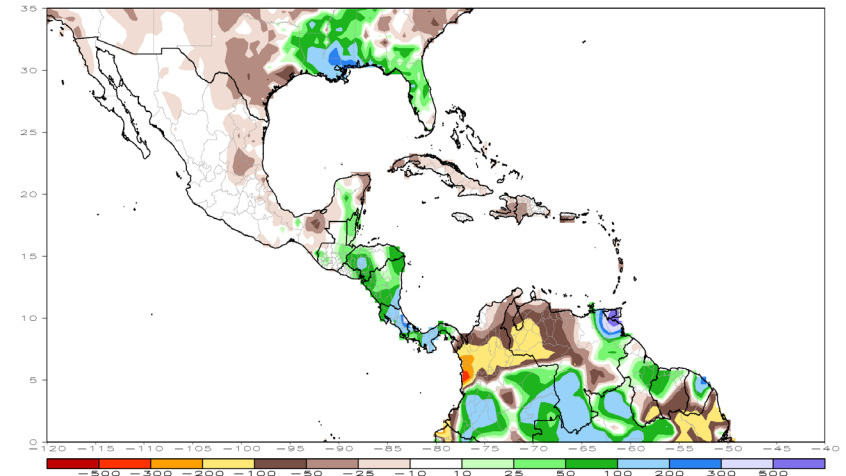


CDAS 850mb 7-Day Mean Vector Wind Anomaly (m/s)
Period: 19Apr2021 – 25Apr2021

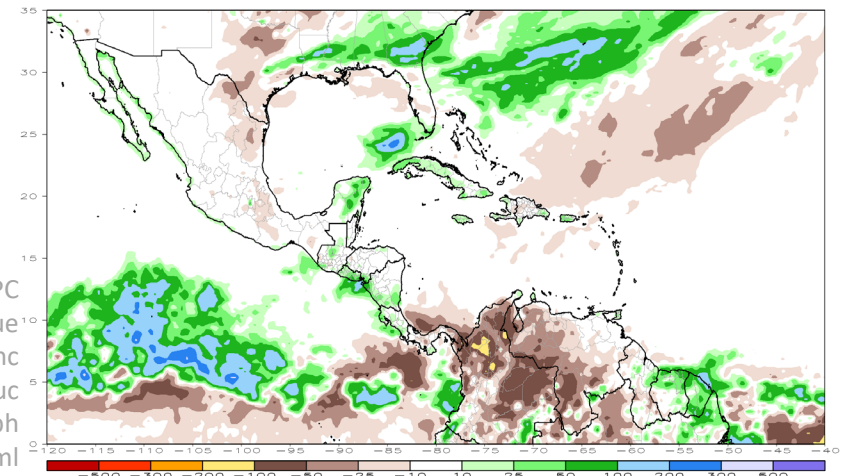


Rainfall

CPC Unified Gauge 30-Day Total Rainfall Anomaly (mm)
Period: 28Mar2021 – 26Apr2021



CMORPH 7-Day Total Rainfall Anomaly (mm)
Period: 20Apr2021 – 26Apr2021

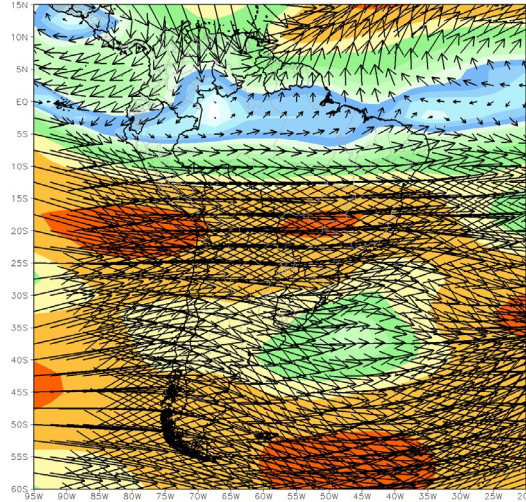


CMORPH: CPC
Morphing Technique
https://www.cpc.ncep.noaa.gov/products/janowiak/cmorph_description.html

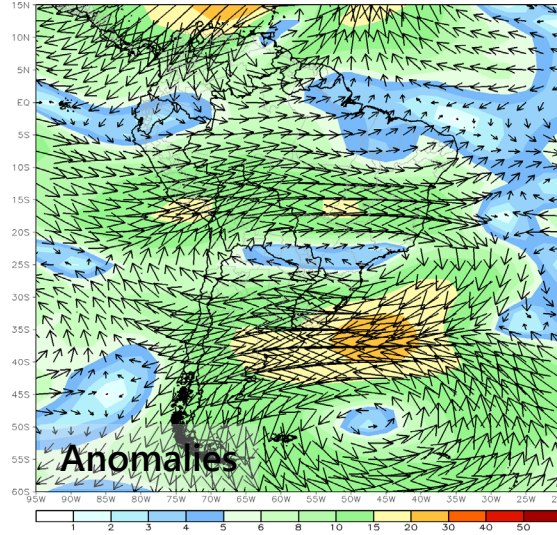
Last Week's Circulation and Rainfall – South America

200
hPa

CDAS 200mb 7-Day Mean Vector Wind Total (m/s)
Period: 19Apr2021 – 25Apr2021

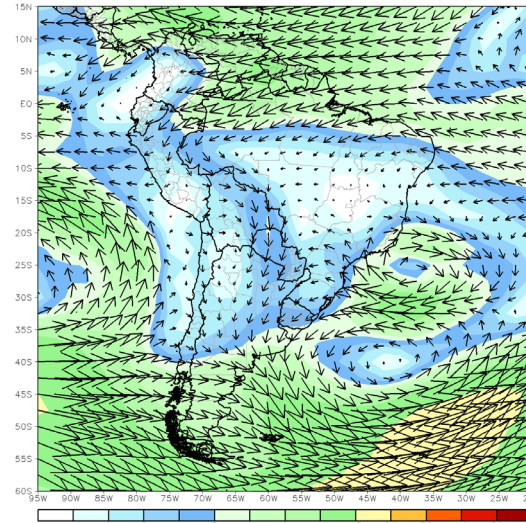


CDAS 200mb 7-Day Mean Vector Wind Anomaly (m/s)
Period: 19Apr2021 – 25Apr2021

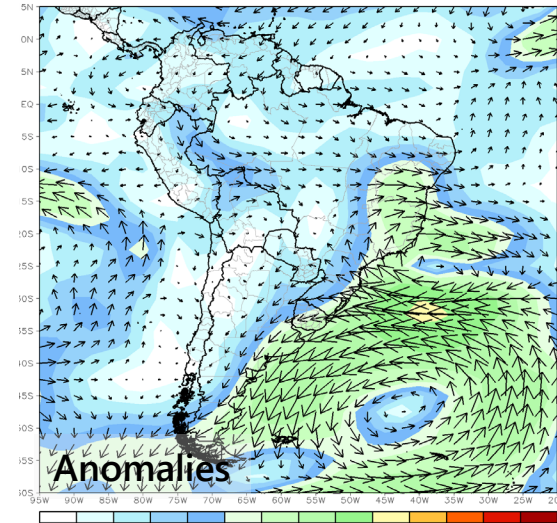


850
hPa

CDAS 850mb 7-Day Mean Vector Wind Total (m/s)
Period: 19Apr2021 – 25Apr2021

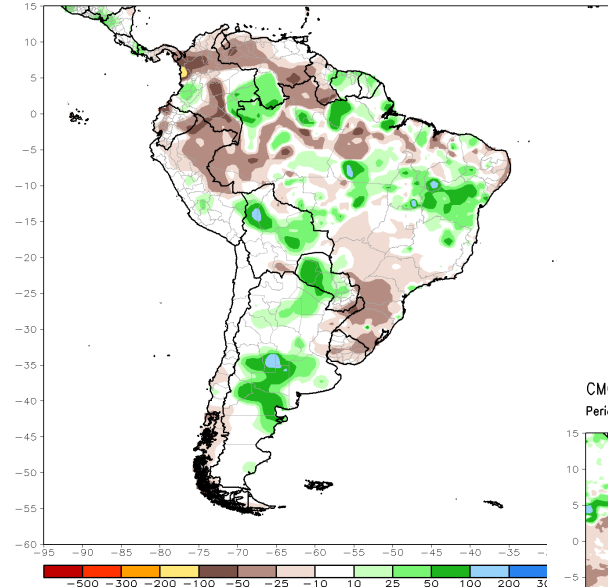


CDAS 850mb 7-Day Mean Vector Wind Anomaly (m/s)
Period: 19Apr2021 – 25Apr2021

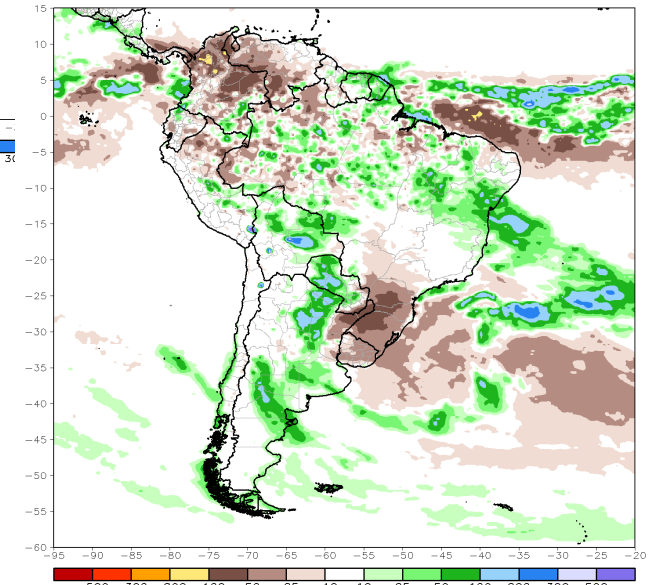


Rainfall

CPC Unified Gauge 7-Day Total Rainfall Anomaly (mm)
Period: 20Apr2021 – 26Apr2021



CMORPH 7-Day Total Rainfall Anomaly (mm)
Period: 20Apr2021 – 26Apr2021



CMORPH: CPC Morphing Technique
https://www.cpc.ncep.noaa.gov/products/janowiak/cmorph_description.html



¡Gracias!

Thank you!