

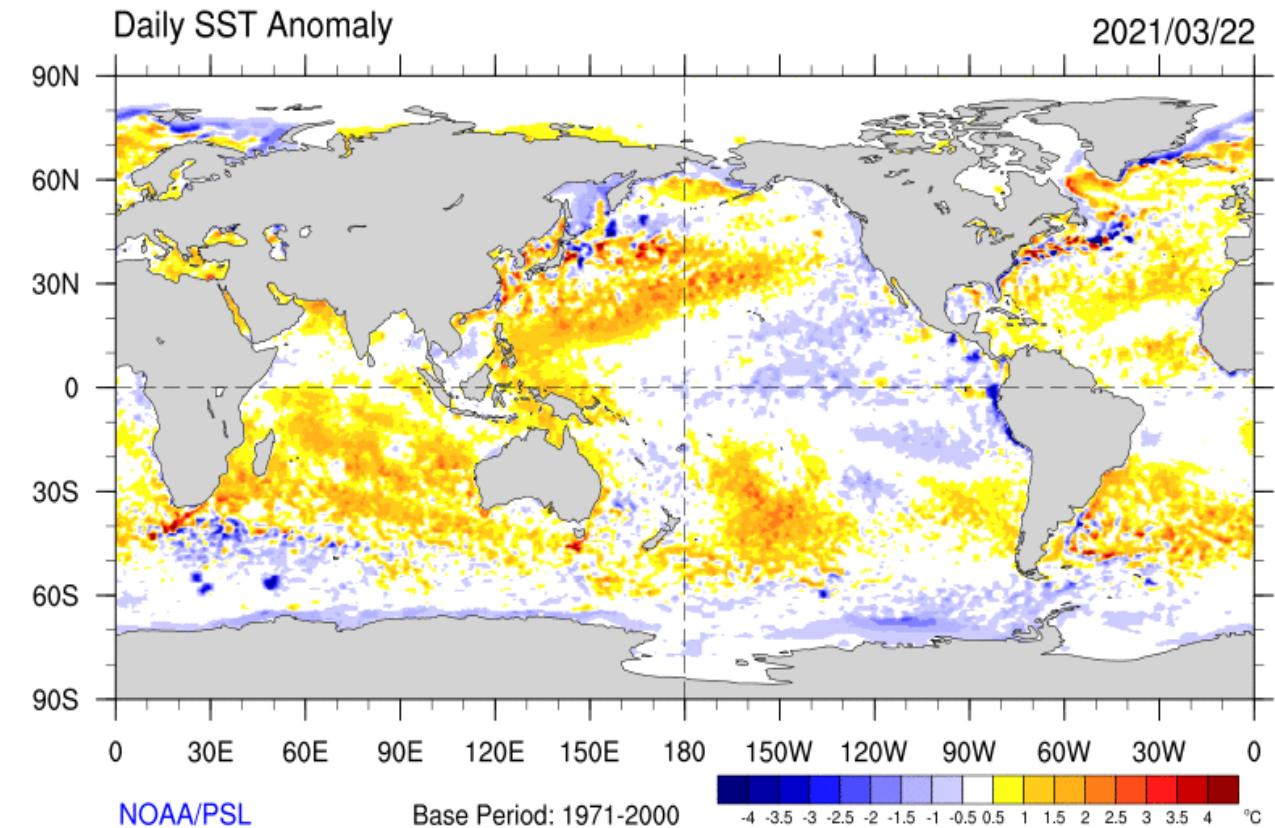
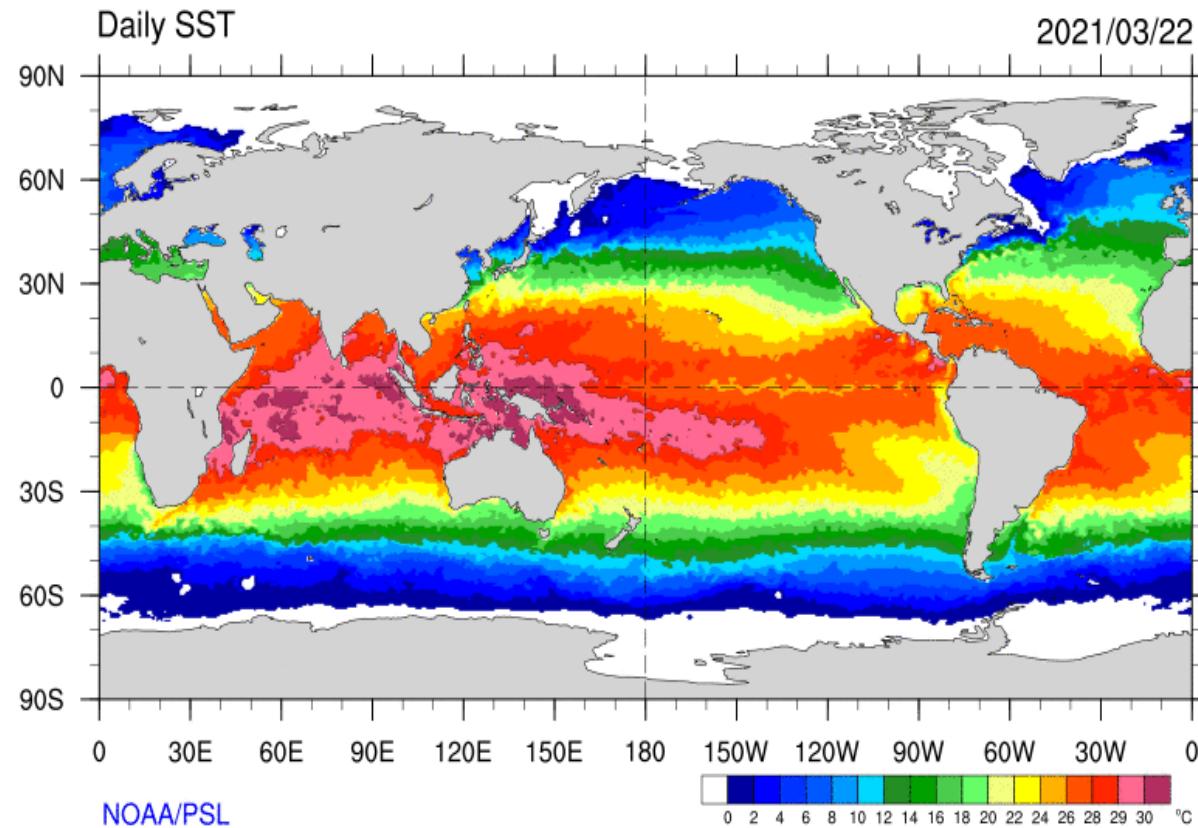


Monthly Regional Focus Group Session

Wednesday 24 March 2021

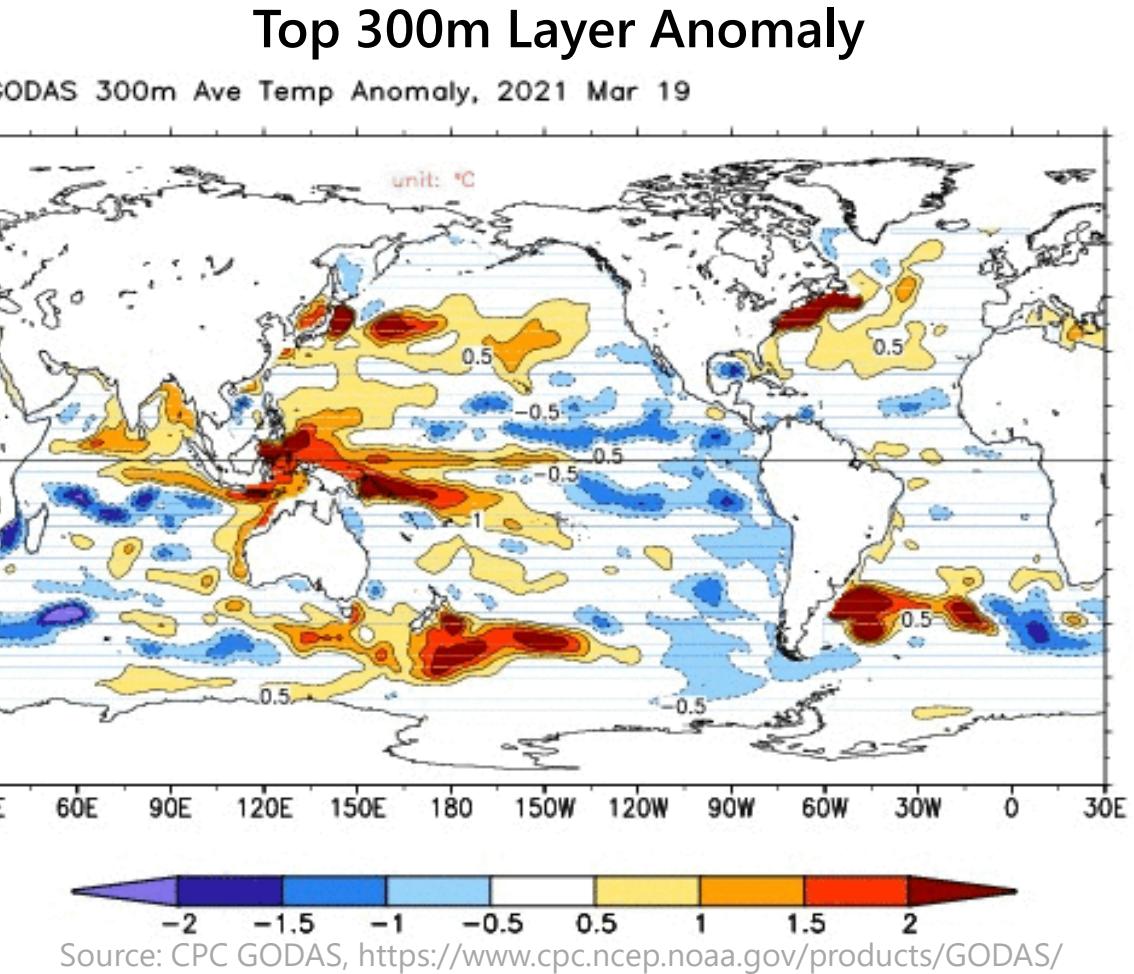
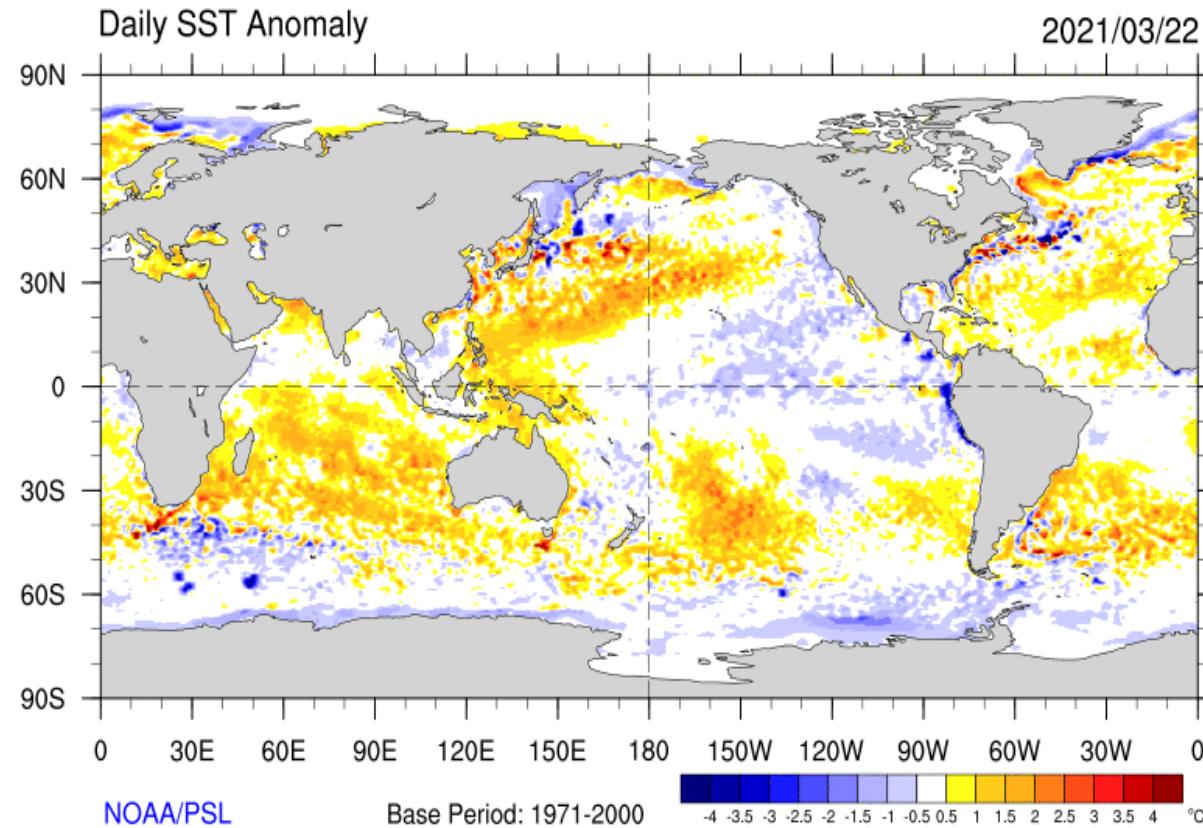


Sea Surface Temperatures (Last Week)



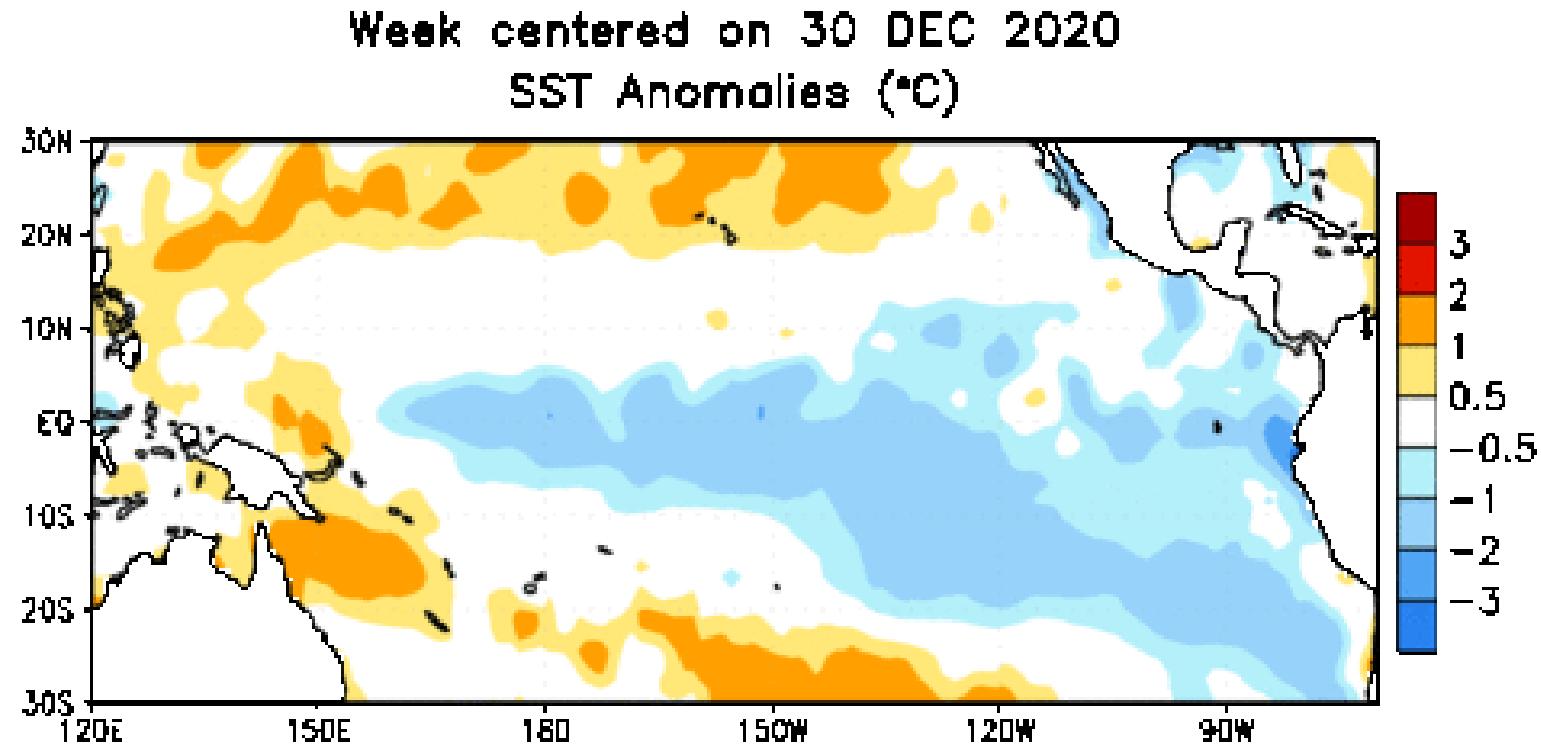
Are the temperature anomalies deep?

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



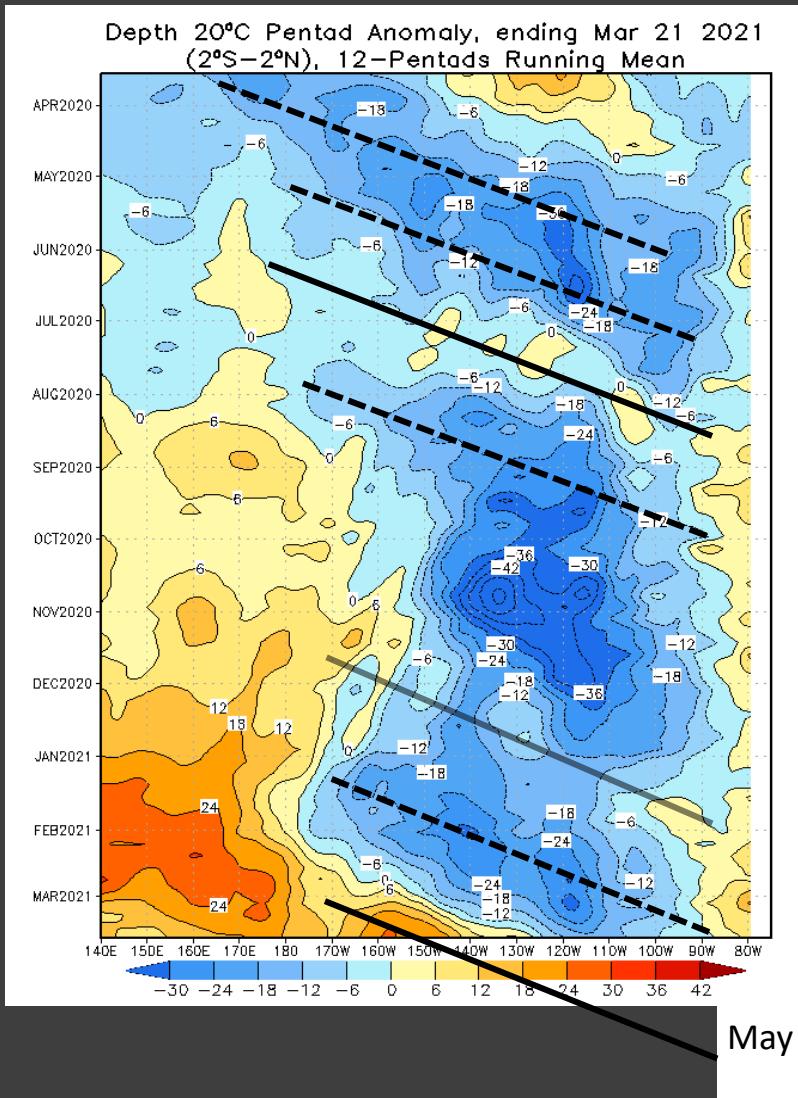
ENSO: La Niña

- 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.

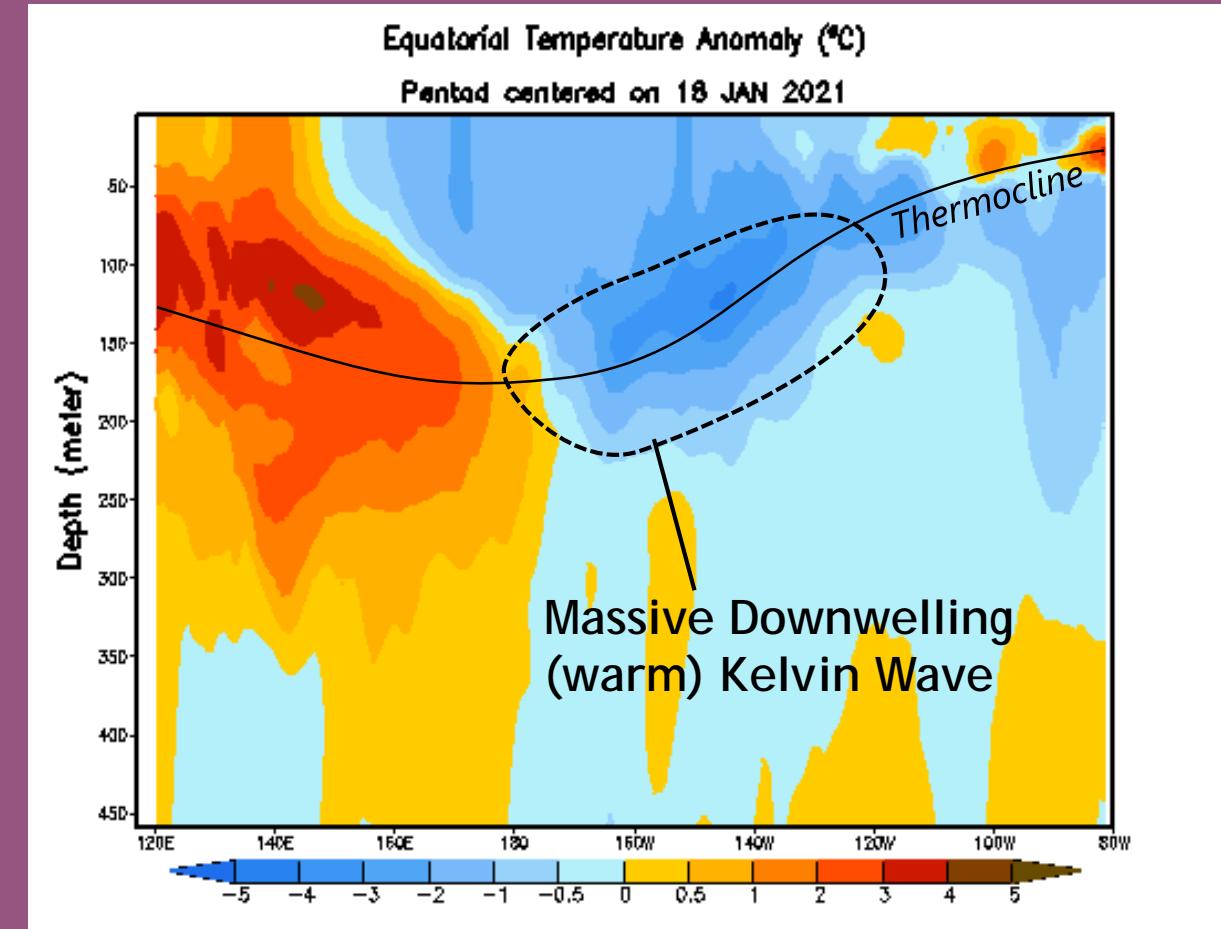


ENSO

Hovmöller: Heat Content



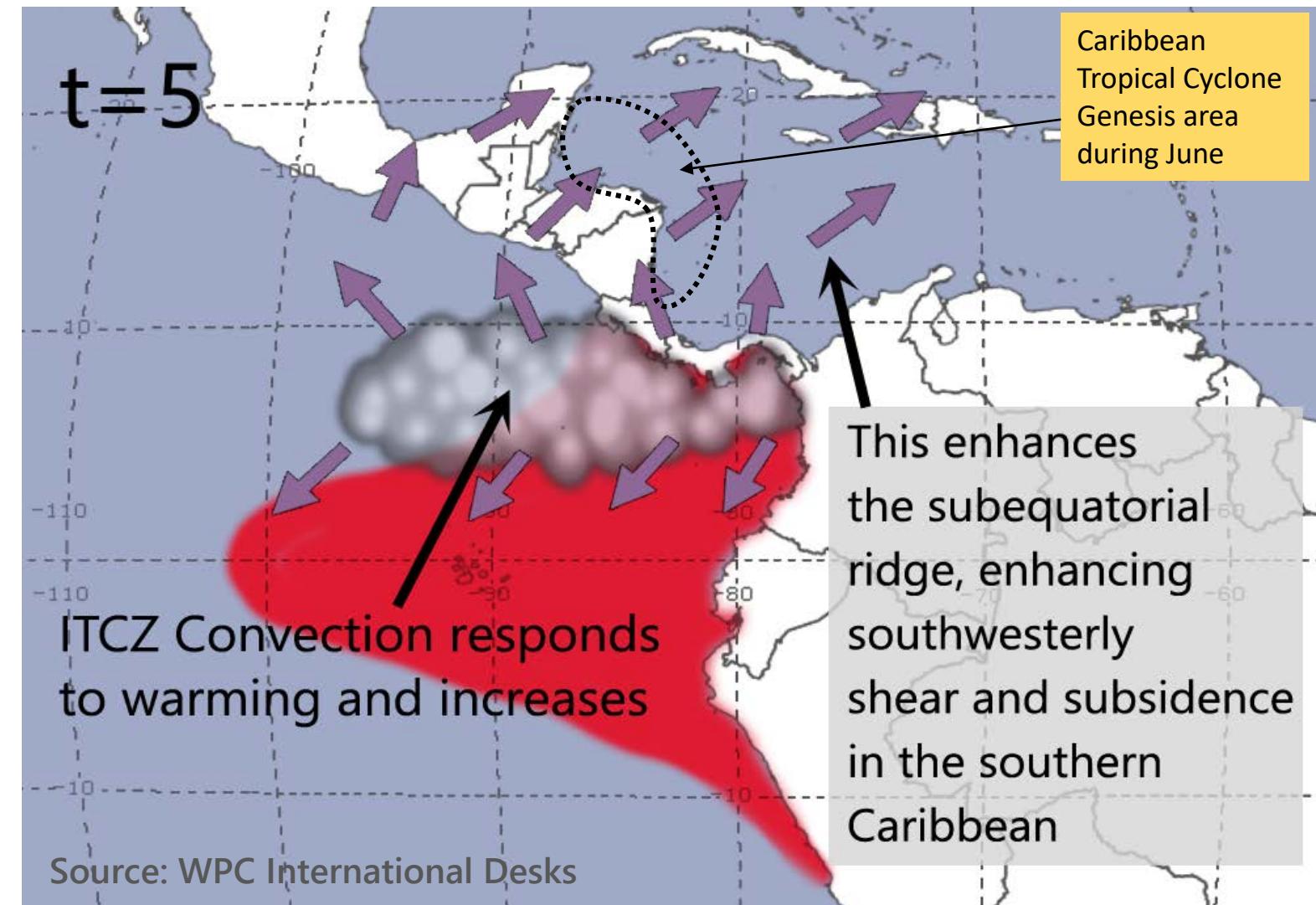
Equatorial Pacific Temp. Anomaly



Source:
CPC

Potential SST Warming in May/June

- Potential SST Warming in May/June in the Eastern Pacific
- Tends to favor more SW shear in the region where tropical cyclones form = less chance for cyclones.
- Could mean a more active Pacific season during onset.

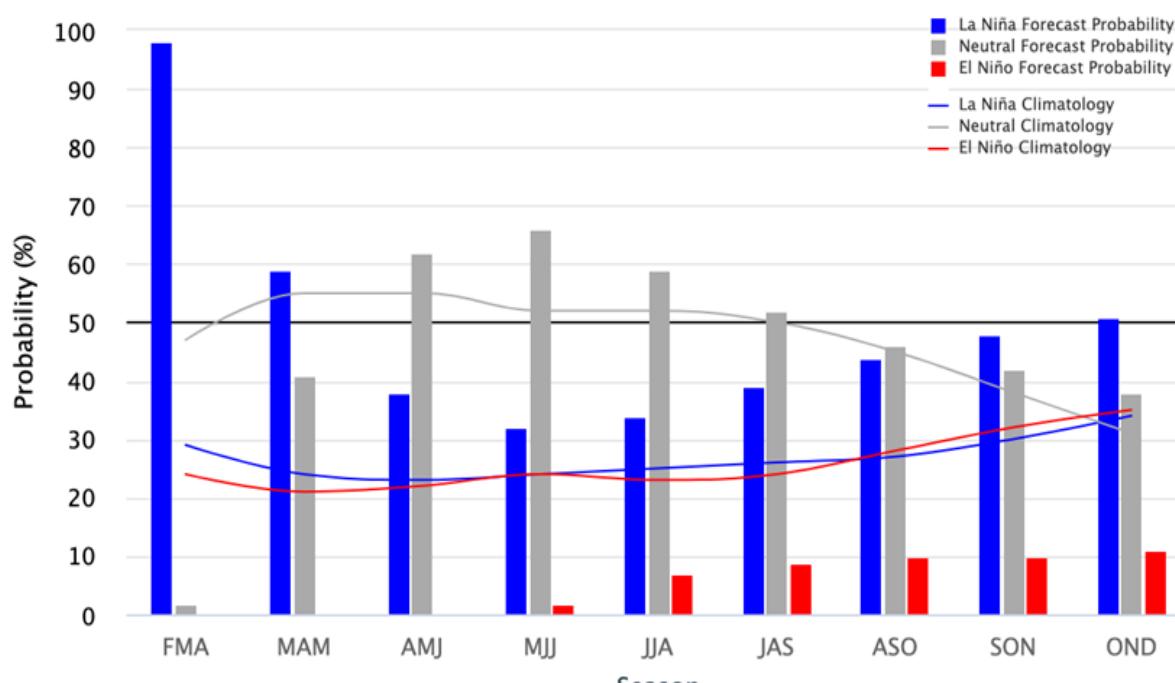


ENSO Outlook

There is a ~60% chance of a transition from La Niña to ENSO-Neutral during the Northern Hemisphere spring 2021 (April-June).*

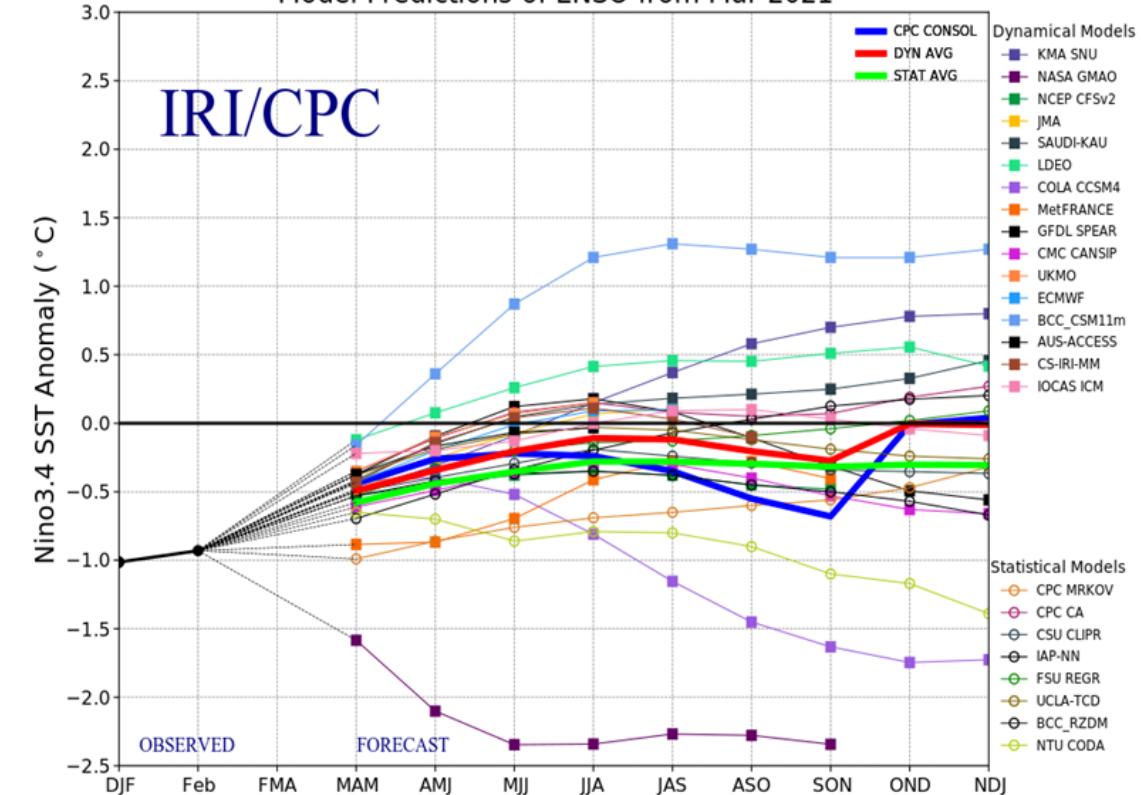
CPC/IRI Probabilistic Forecast

Early-March 2021 CPC/IRI Official Probabilistic ENSO Forecasts



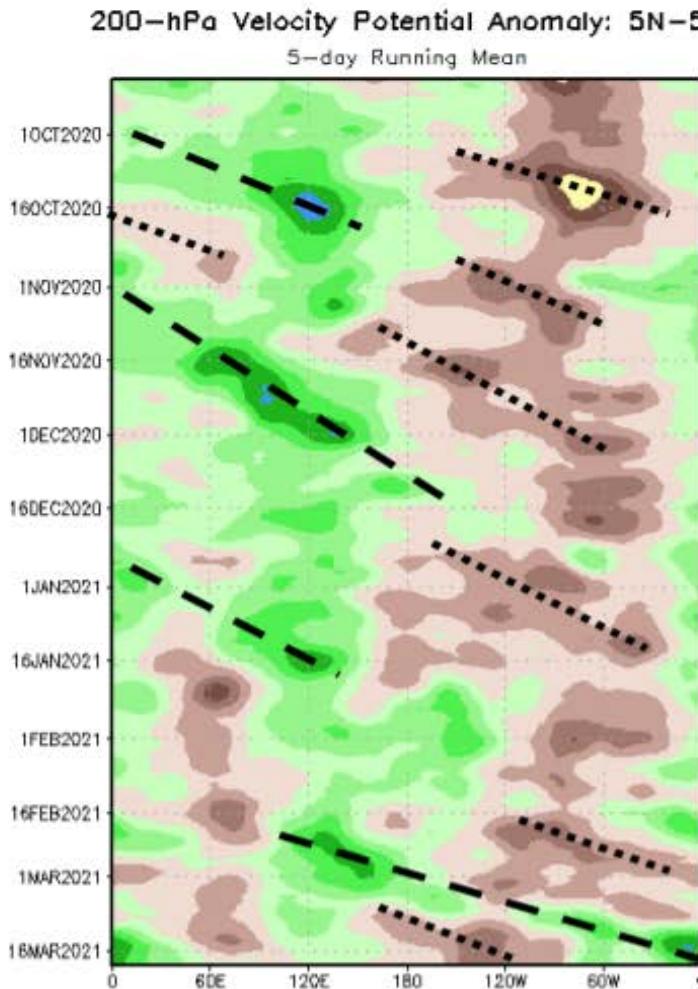
IRI/CPC Dynamic Models

Model Predictions of ENSO from Mar 2021



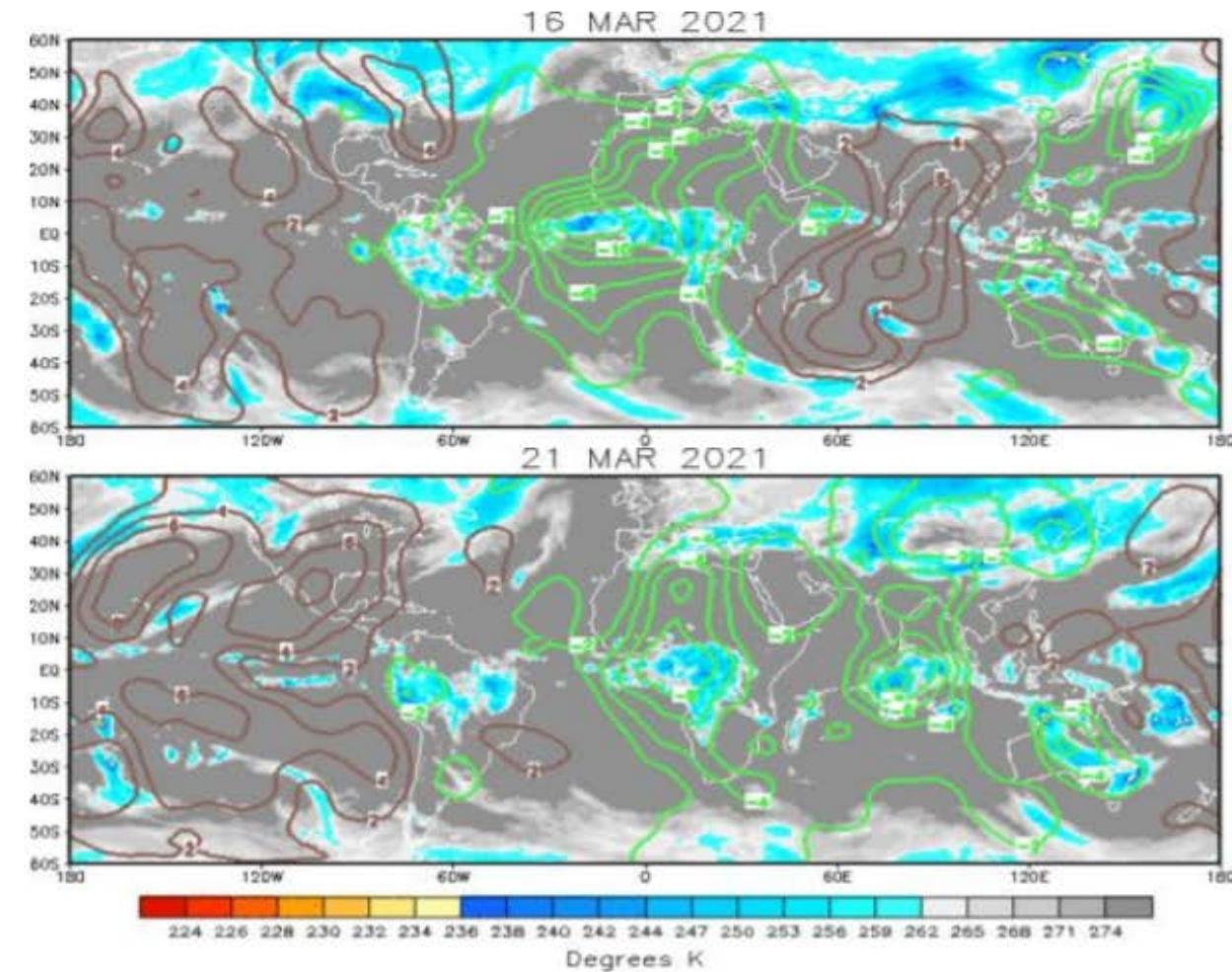


Madden-Julian Oscillation (MJO)



Favors rain storms

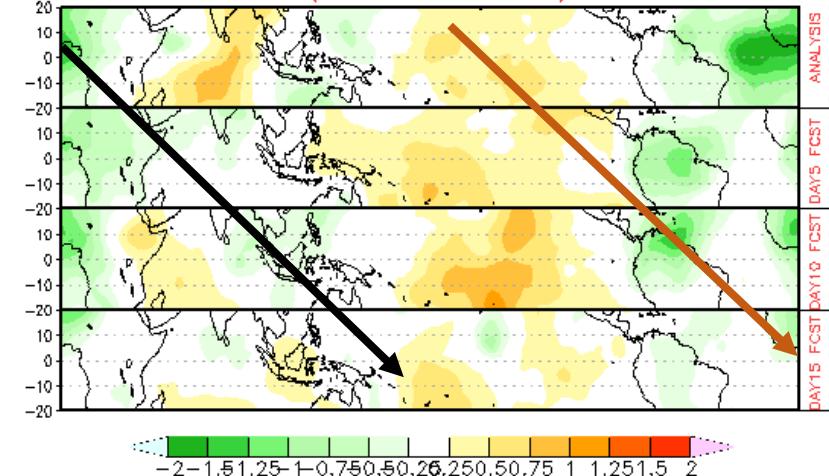
Favors limited rainfall



MJO Forecasts

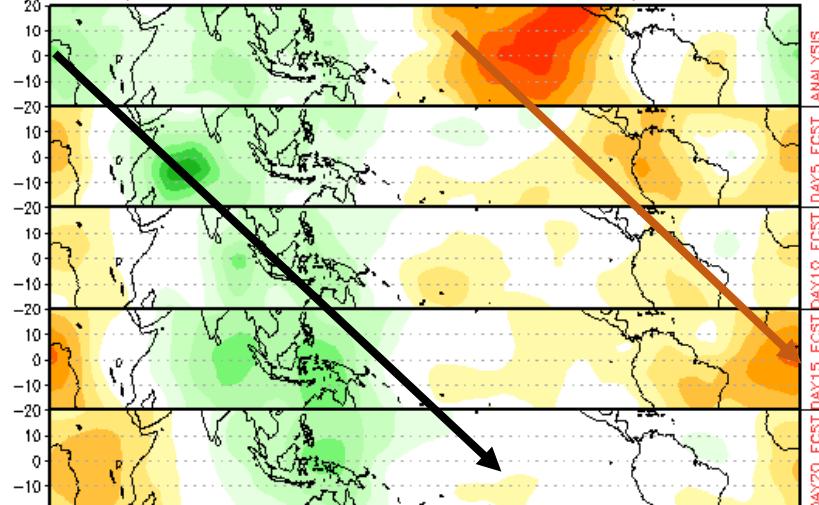
GFS

CHI 200 hPa 15-DAY forecast (00z15mar2021–30mar2021)
(based on NCEP GFS)



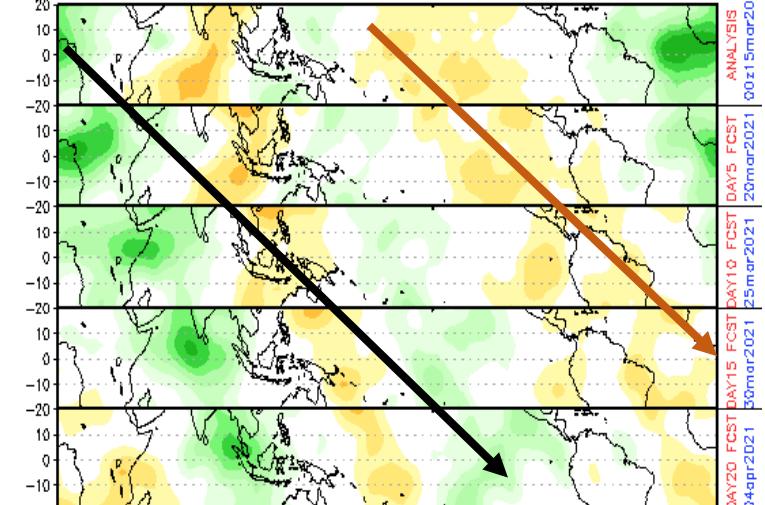
CFS

CHI 200 hPa 40-DAY forecast (00z22mar2021–01may2021)
(16-memb OPR CFSv2 IC – 2021032200)

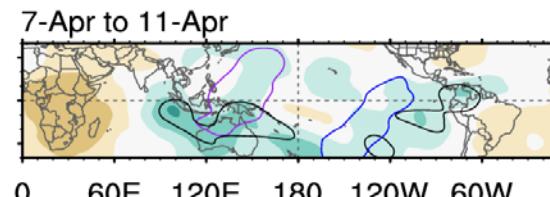
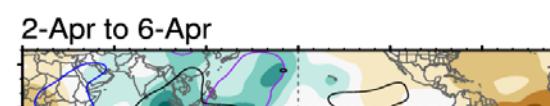
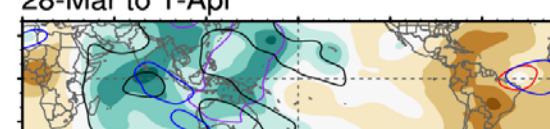


EWPs

CHI 200 hPa 40-DAY forecast (00z15mar2021–24apr2021)
(based on EWP spherical harmonics)



Upper divergent phase:
Weak and in Mid April?



7-day CHI200 with CFS forecasts
Wed 2020-09-16 1018 UTC
Contours at -2, -6 x10^6 m2 s-1
Carl Schreck
carl_schreck@ncsu.edu

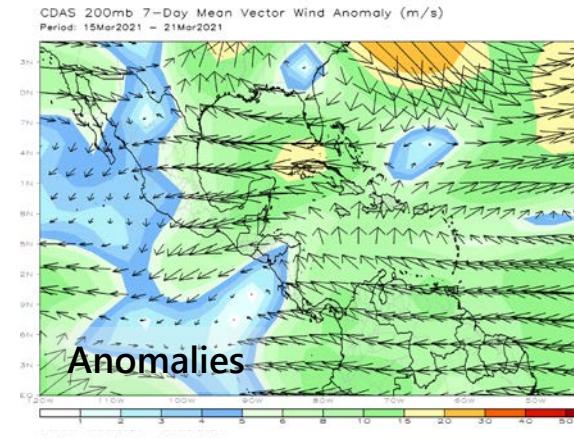
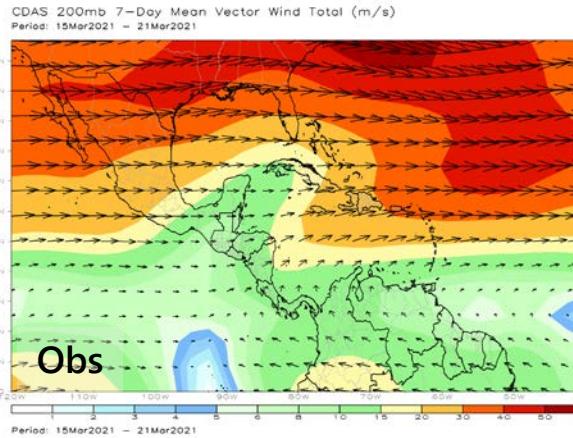
MJO Kelvin x2
Low ER

-9 -7 -5 -3 -1 1 3 5 7 9 x10^6 m2 s-1
Contours at -2, -6 x10^6 m2 s-1
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carl_schreck@ncsu.edu

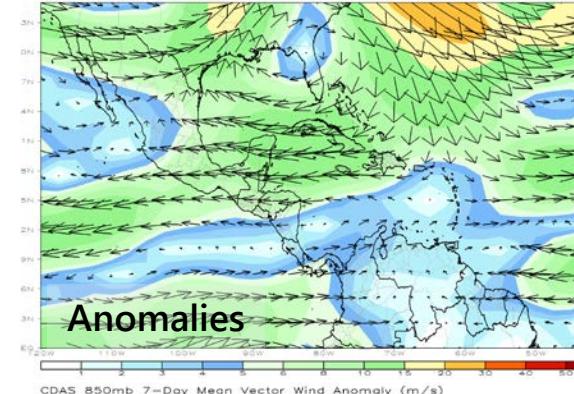
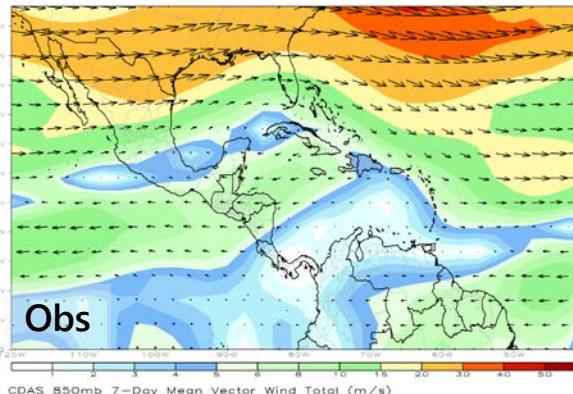


Last Week's Circulation and Rainfall – Tropical Americas

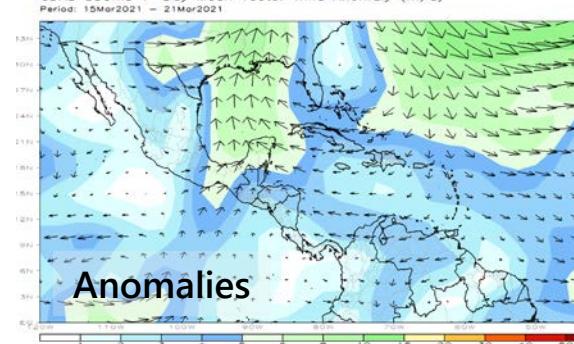
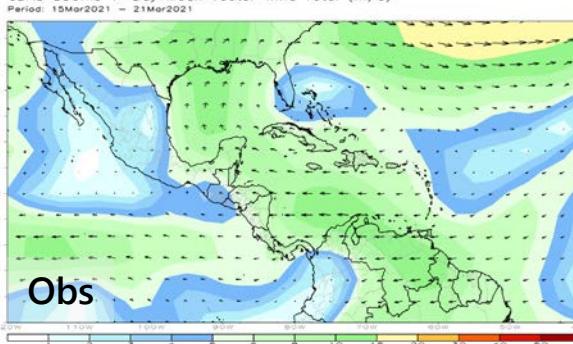
200
hPa



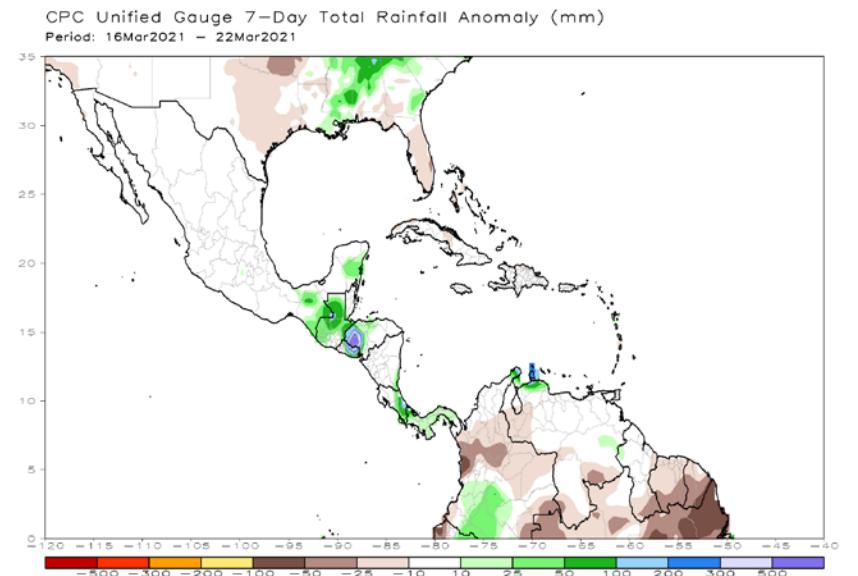
500
hPa



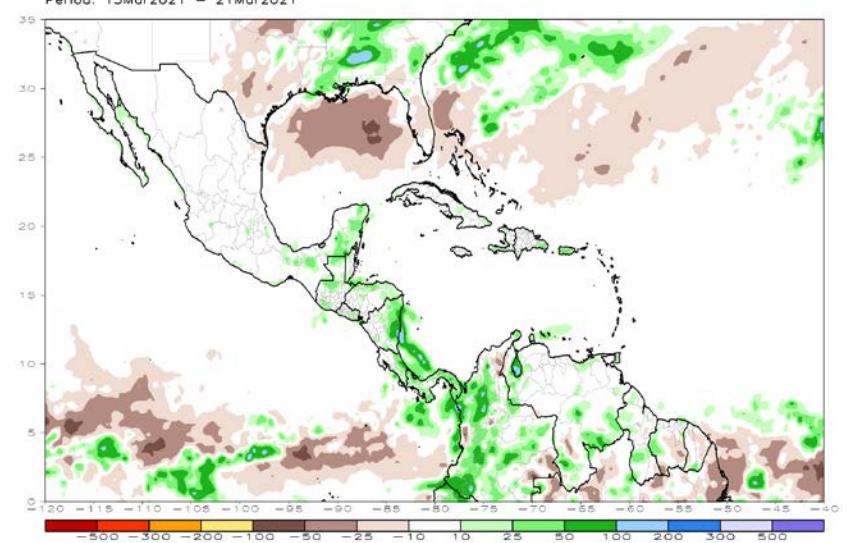
850
hPa



Rainfall



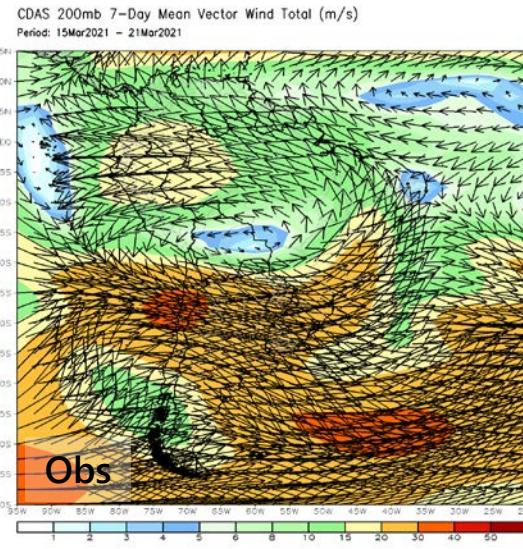
CMORPH: CPC
Morphing Technique
https://www.cpc.ncep.noaa.gov/products/janowiak/cmorph_description.html



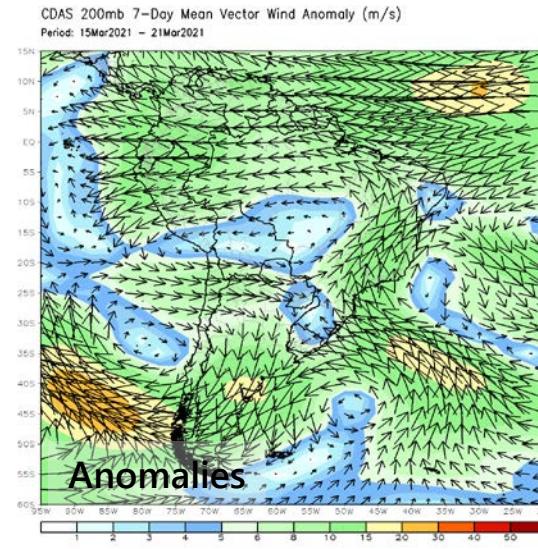


Last Week's Circulation and Rainfall – South America

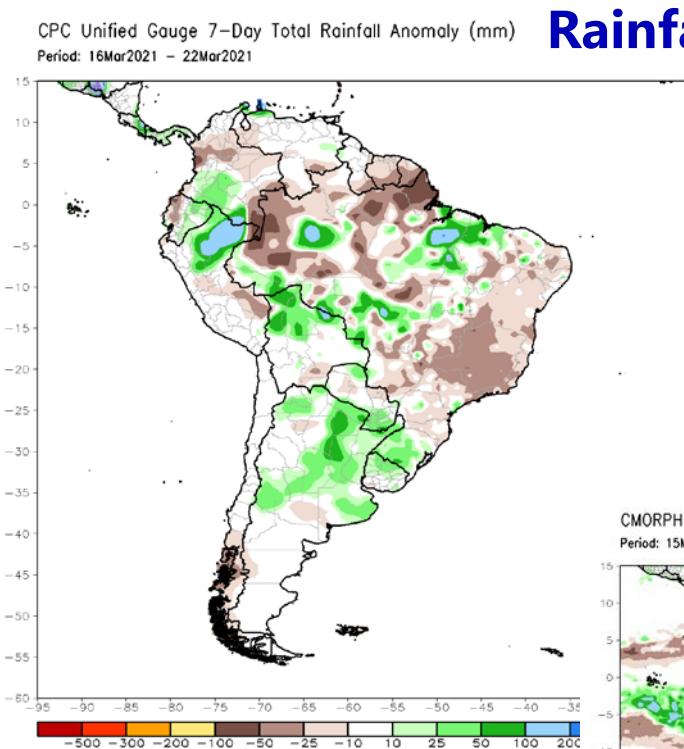
200
hPa



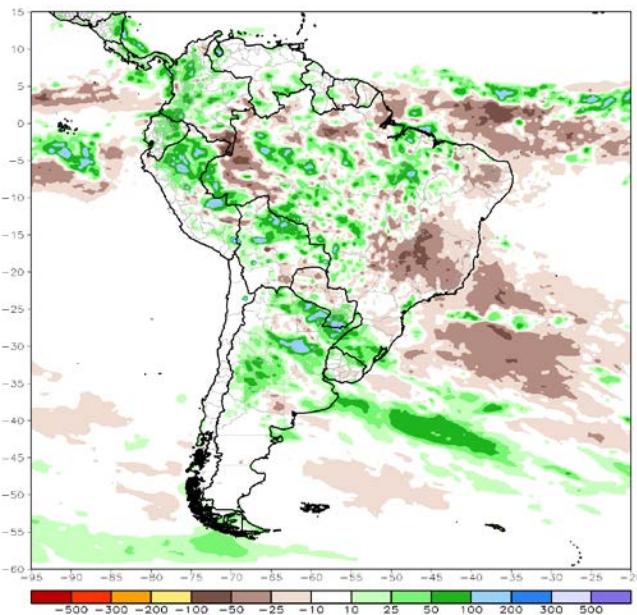
850
hPa



CPC Unified Gauge 7-Day Total Rainfall Anomaly (mm)
Period: 16Mar2021 – 22Mar2021



CMORPH 7-Day Total Rainfall Anomaly (mm)
Period: 15Mar2021 – 21Mar2021



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

¡Gracias!

Thank you!