

OCTUBRE 2022

**Boletín Informativo
Monitoreo del
Fenómeno El Niño /
La Niña**



PERÚ

Ministerio
del Ambiente

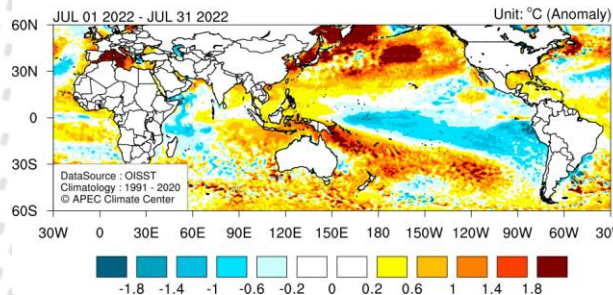


Siempre
con el pueblo

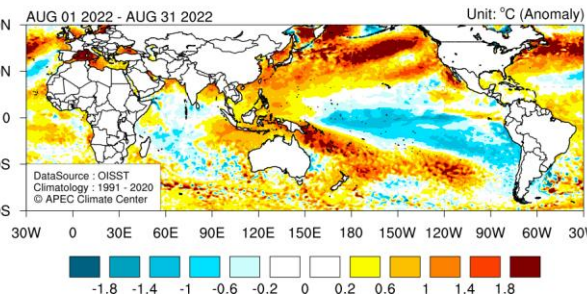
Este producto contempla la evolución de las condiciones atmosféricas a nivel global y regional durante octubre y los primeros días de noviembre de 2022. Este monitoreo se realiza a partir de diferentes fuentes, incluidos datos de modelos numéricos de tiempo y clima, datos de vientos satelitales, entre otros. Este producto es insumo para las reuniones del GTCT-ENFEN

TEMPERATURA SUPERFICIAL DEL MAR

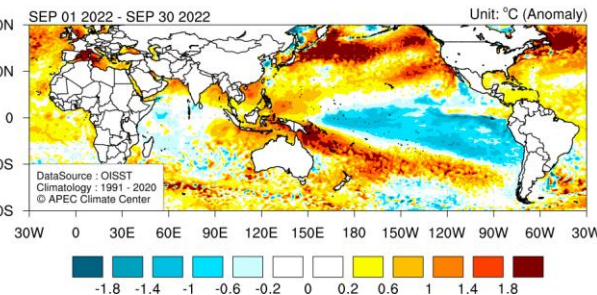
Sea Surface Temperature



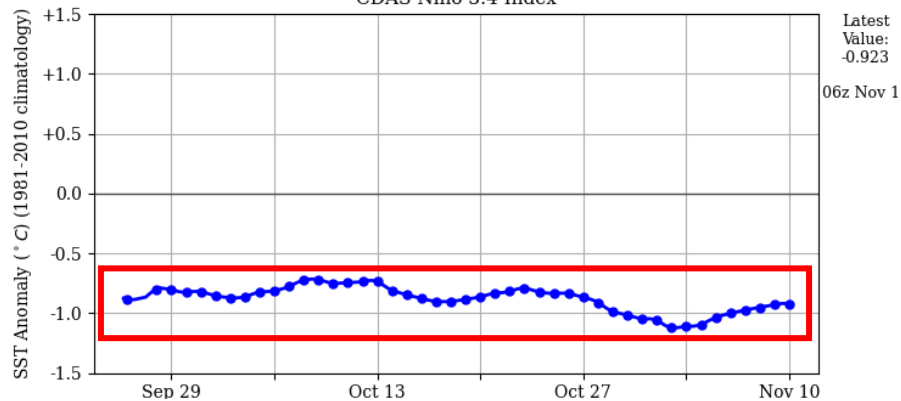
Sea Surface Temperature



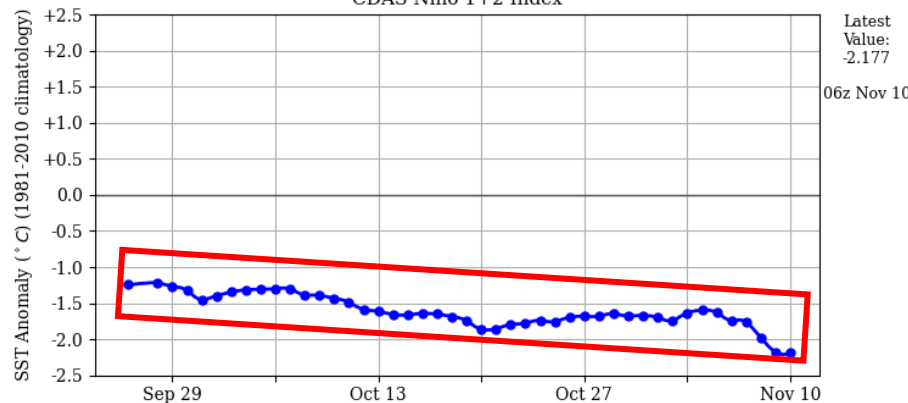
Sea Surface Temperature



CDAS Niño 3.4 Index

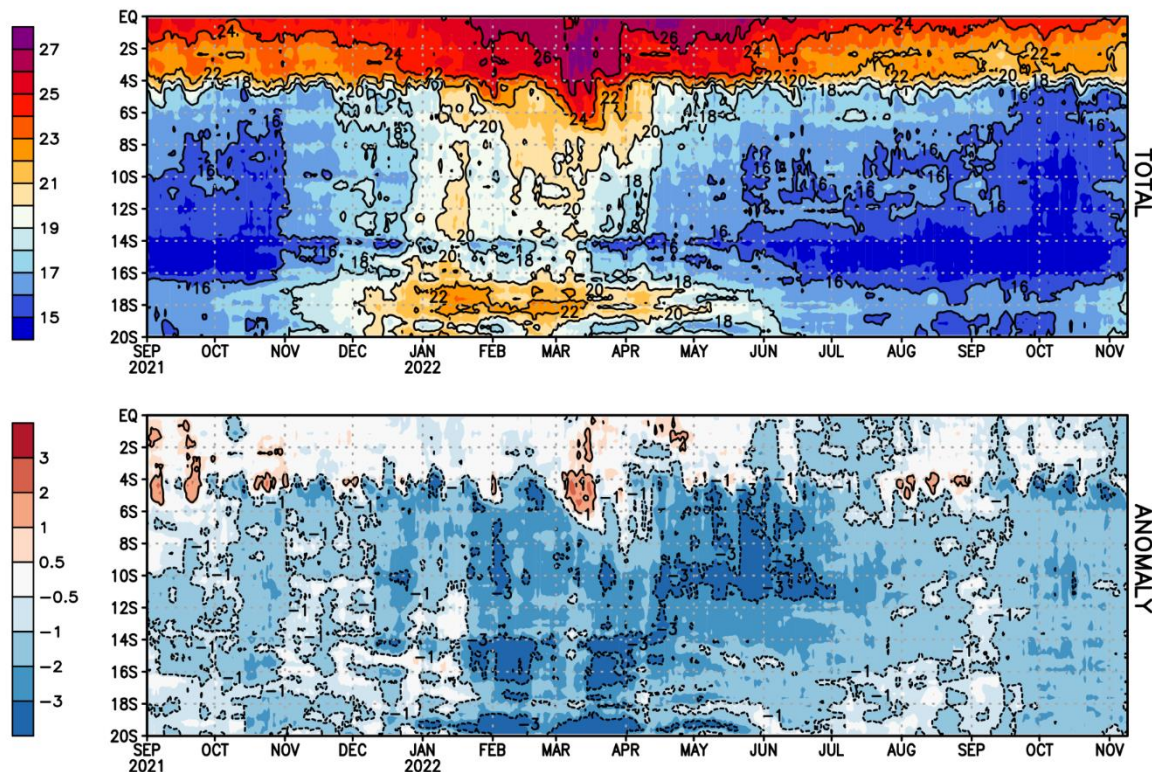


CDAS Niño 1+2 Index

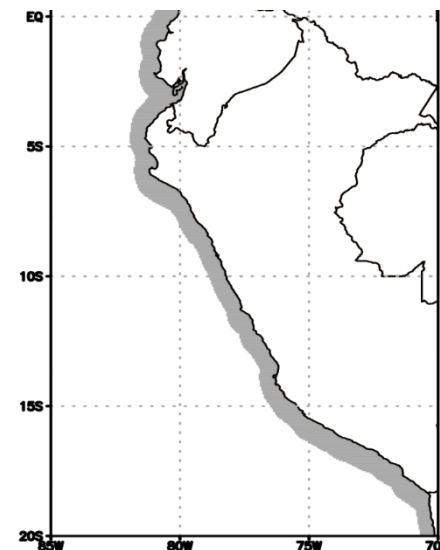


TSM FRENTE A LA COSTA PERUANA

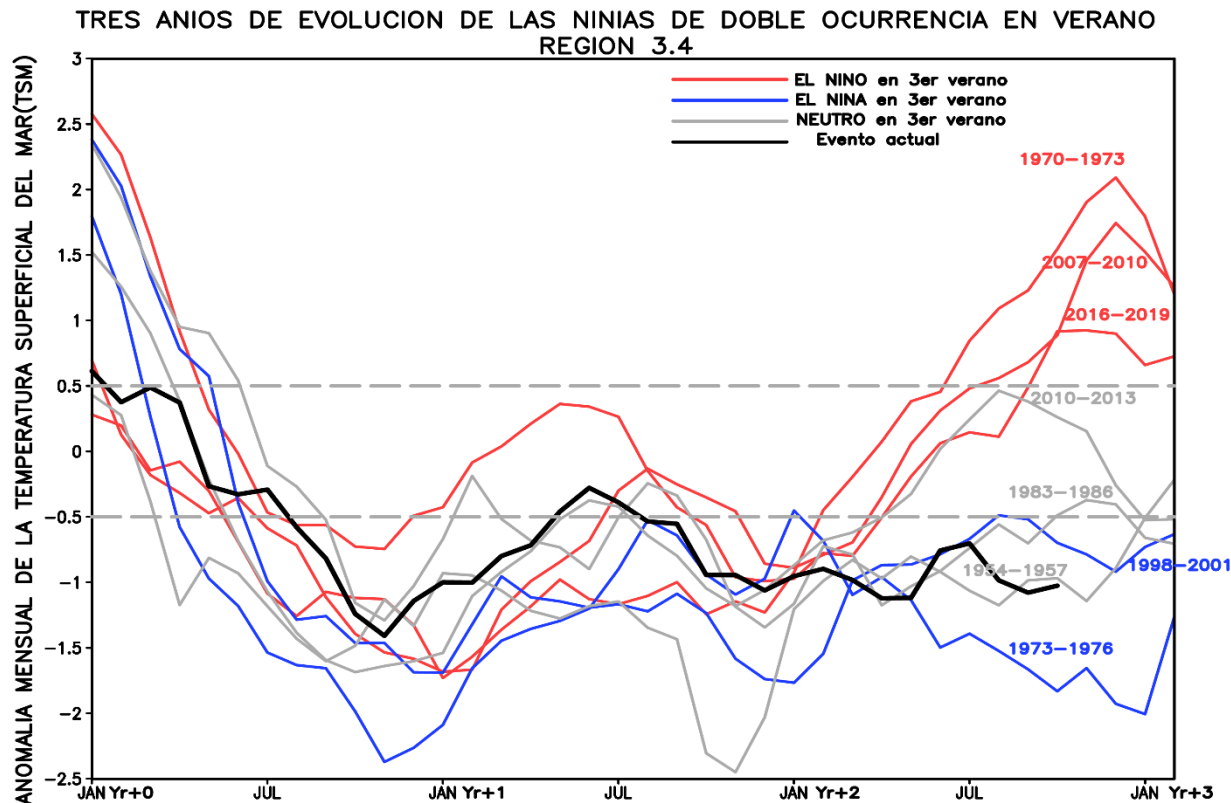
Temperatura Superficial del Mar frente a la costa peruana



Source: OSTIA
CLIM: 2007 – 2019
Processing: SENAMHI/DMA/SPC

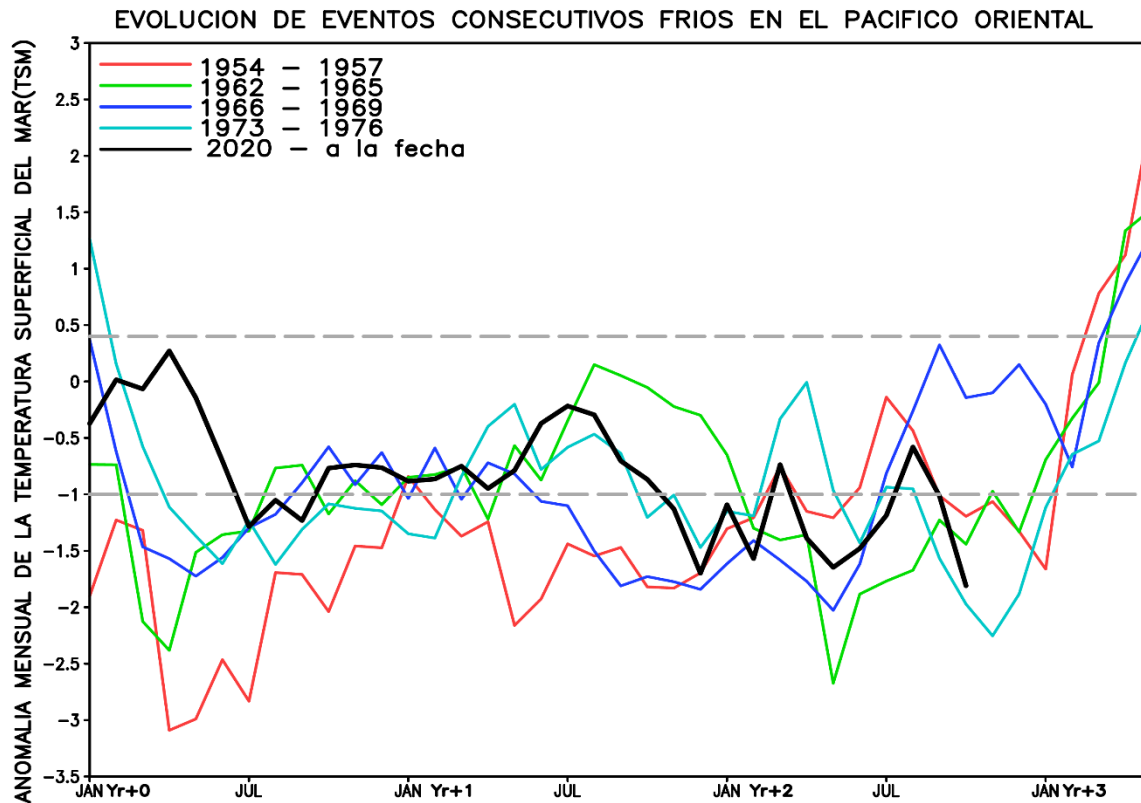


EVOLUCIÓN DE LAS NIÑAS EN EL PAC. CENTRAL



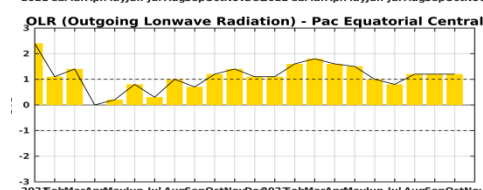
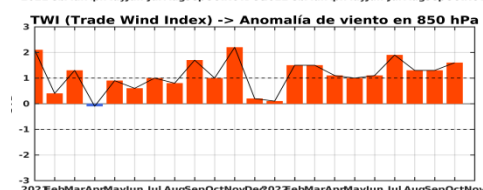
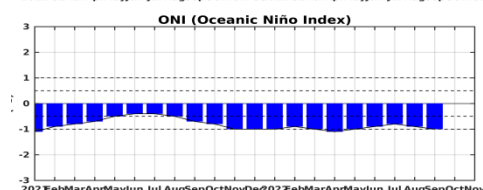
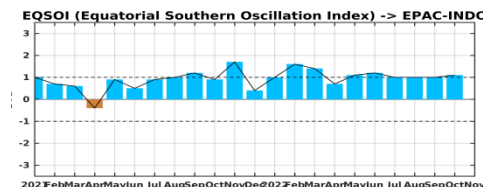
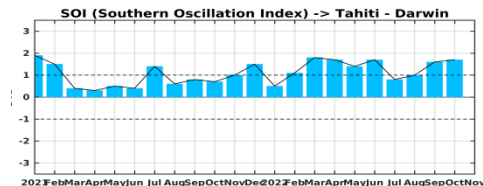
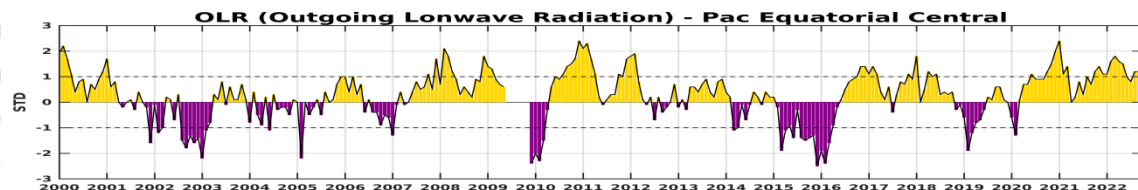
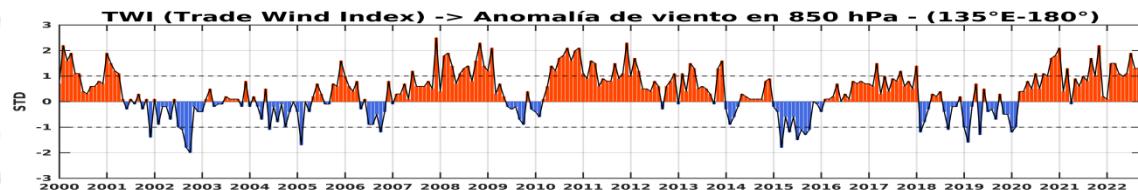
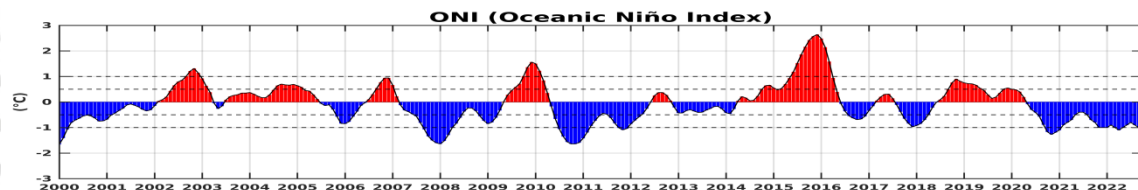
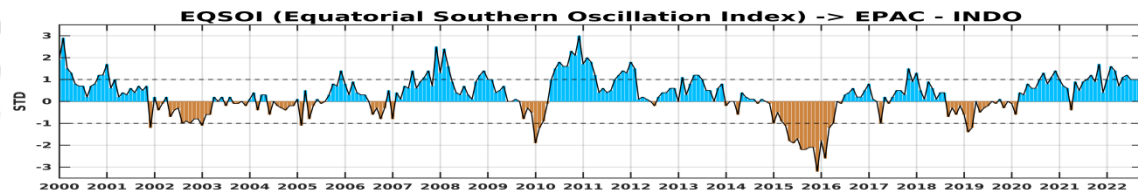
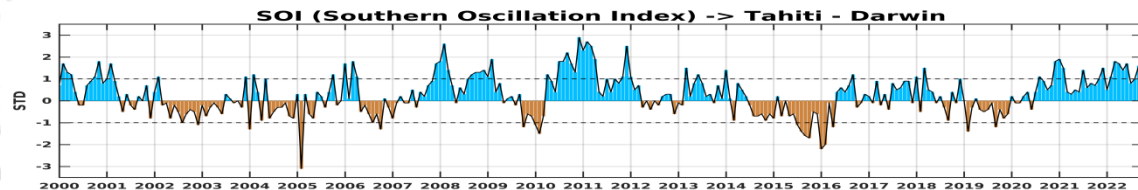
Source: ERSST.v5
CLIM: 1991 - 2020
Processing: SENAMHI/DMA/SPC

EVOLUCIÓN DE EVENTOS FRÍOS EN EL PAC. ORIENTAL



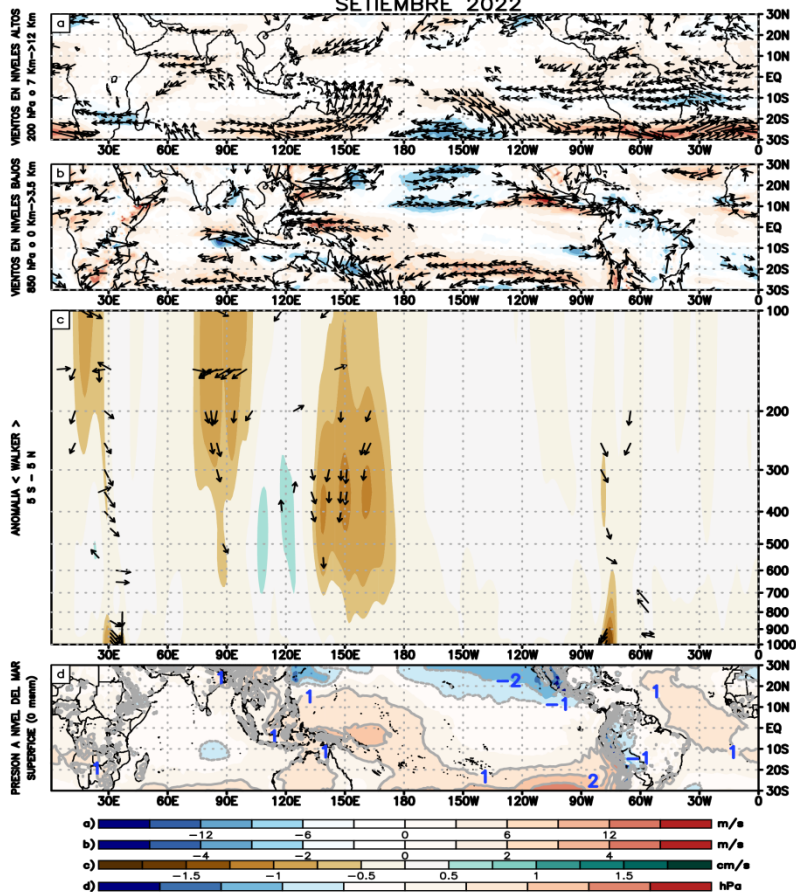
Source: ERSSTV5
CLIM: 1991 - 2020
Processing: SENAMHI/DMA/SPC

Pacífico Ecuatorial



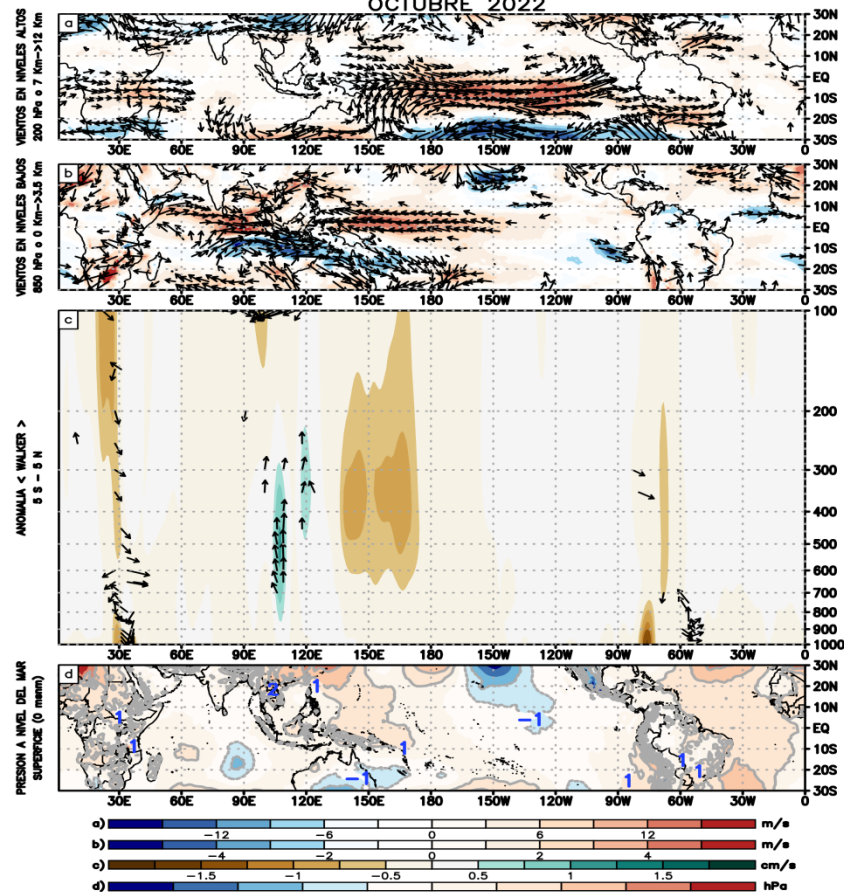
Pacífico Ecuatorial

SETIEMBRE 2022



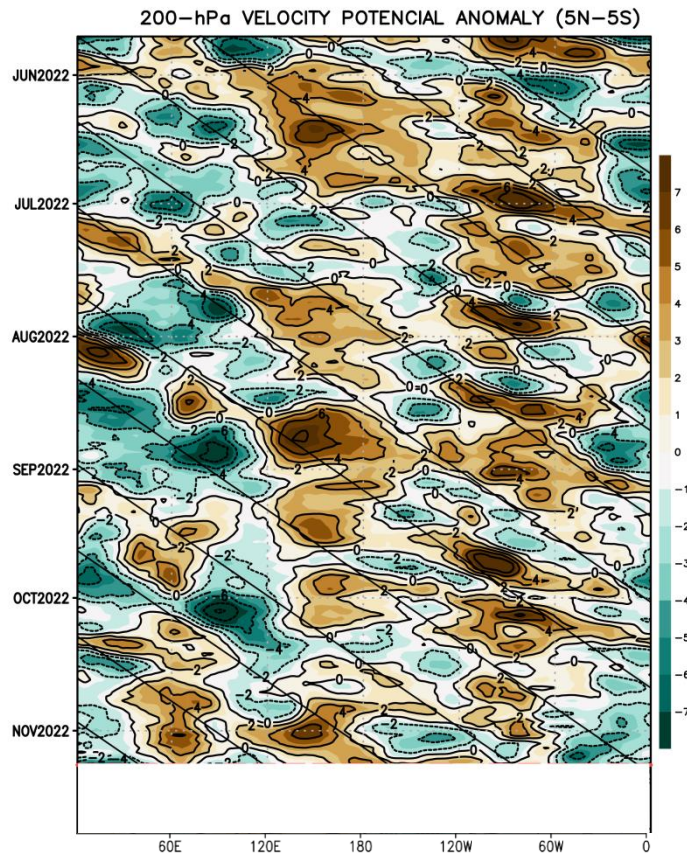
Processing: SENAMHI/DMA/SPC

OCTUBRE 2022



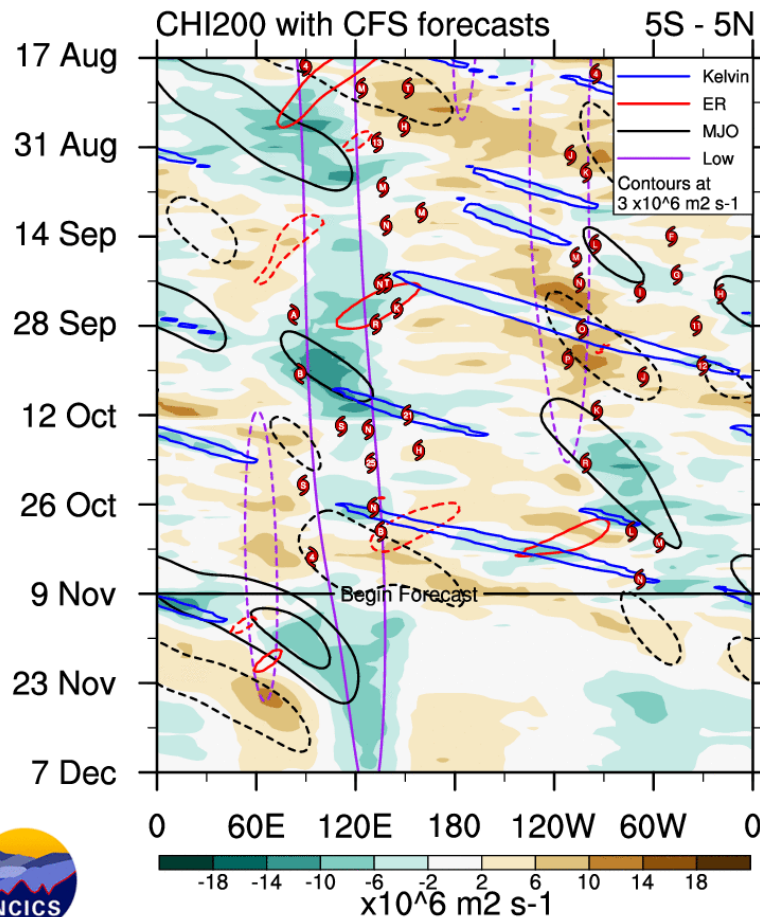
Processing: SENAMHI/DMA/SPC

Variabilidad intraestacional: Forzantes externas de Variabilidad - OMJ



Source: GFS
Processing: SENAMHI/DMA/SPC

Begin GFS Forecast—green line
Forecast up to 00Z25NOV2022

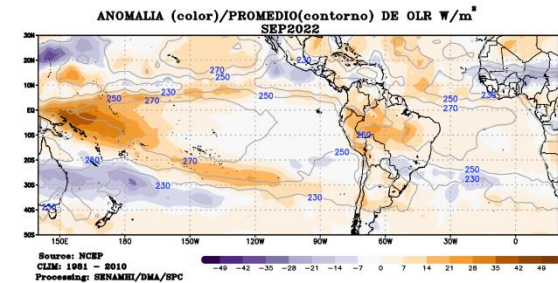
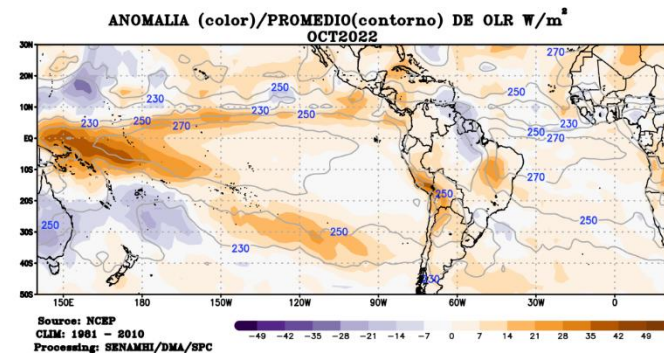
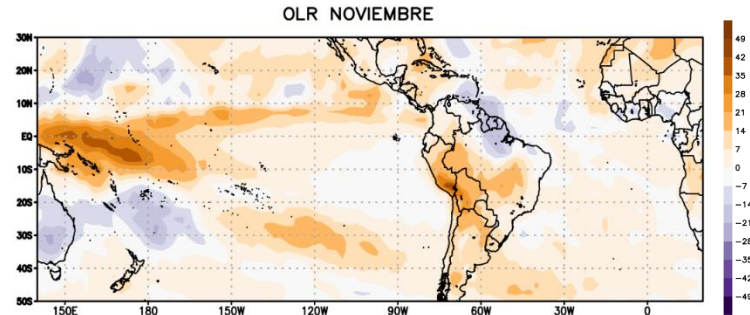
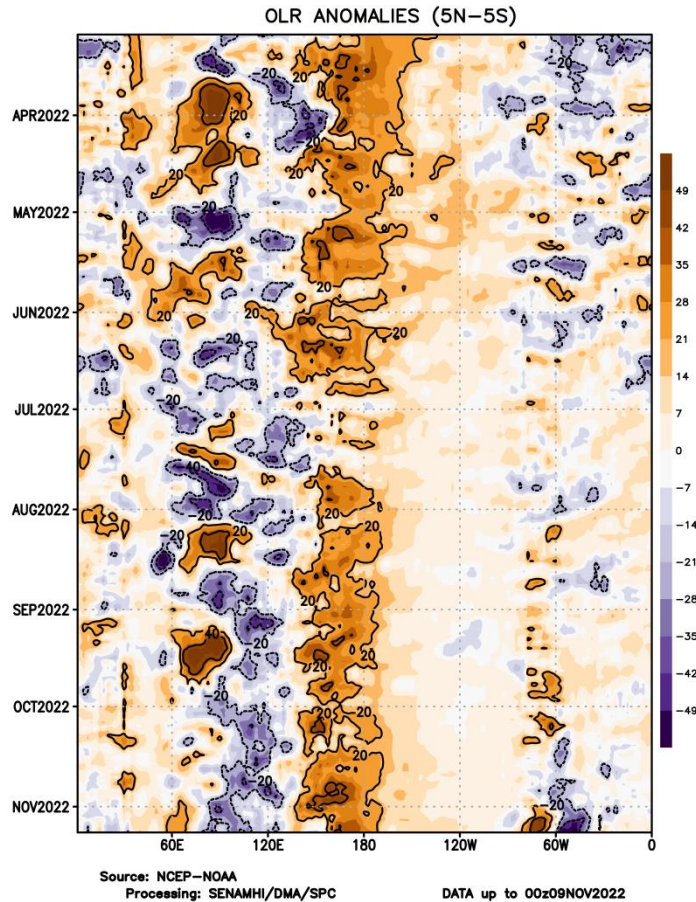


ncics.org/mjo

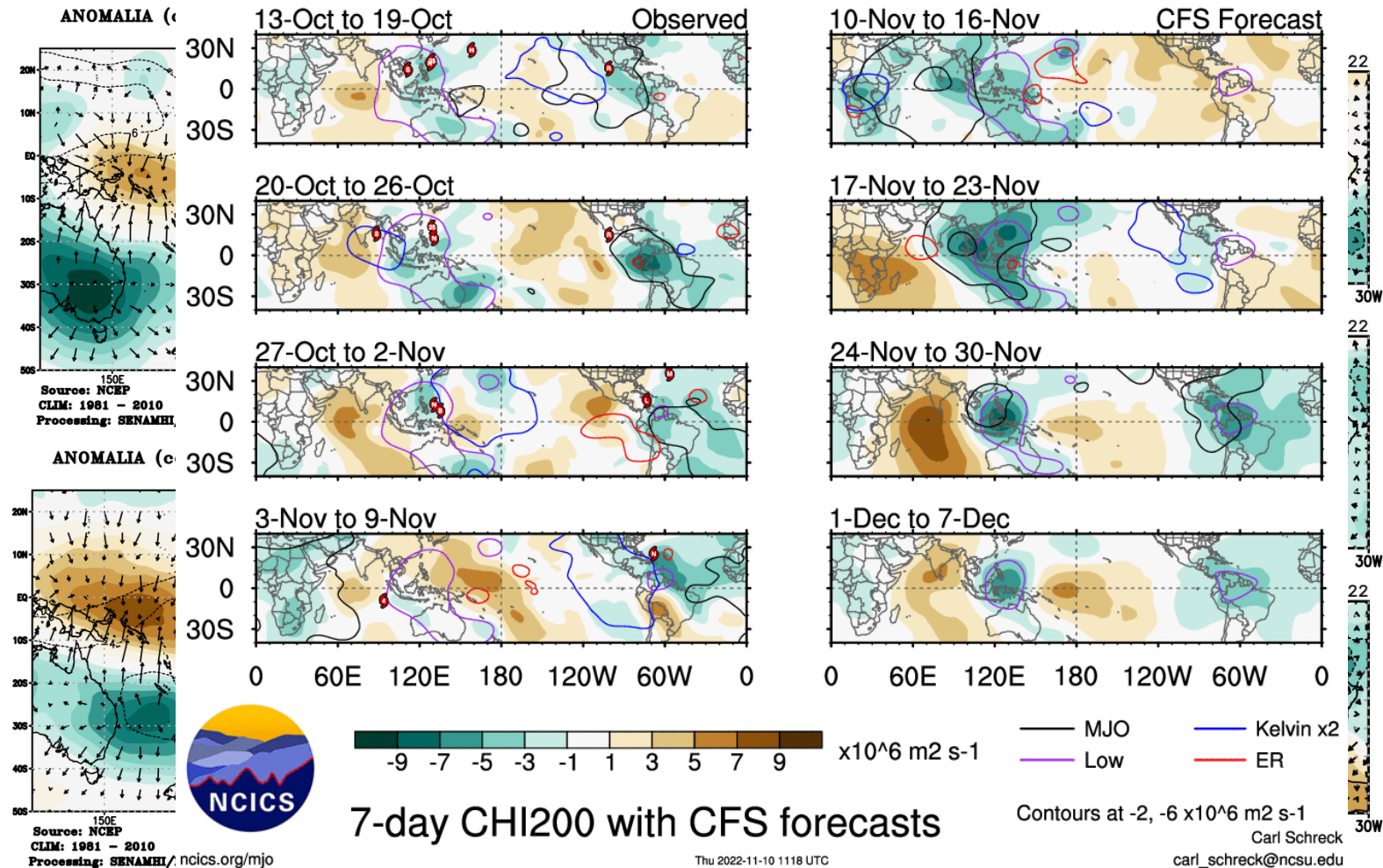
Thu 2022-11-10 11:14 UTC

Carl Schreck
carl_schreck@ncsu.edu

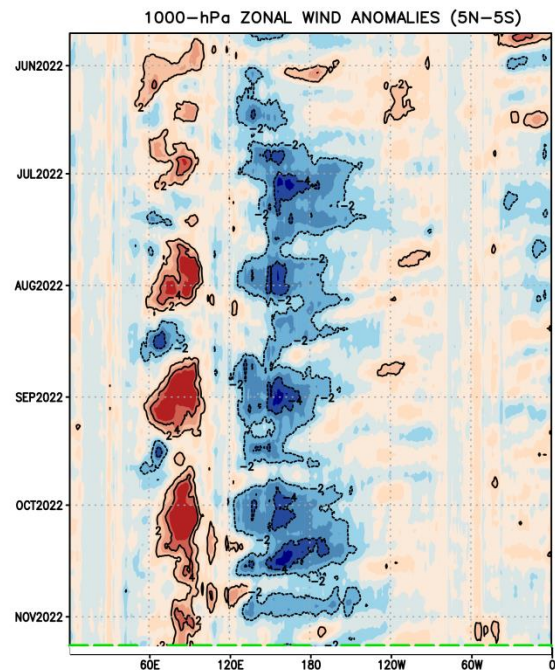
Anomalías de la ORL



Anomalía de la velocidad potencial a 200 hPa

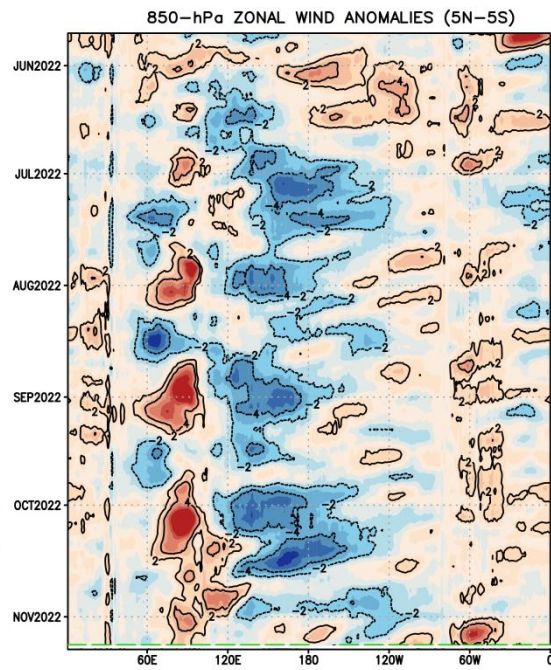


Condiciones en el Pacífico Ecuatorial: *Estes/Oestes*



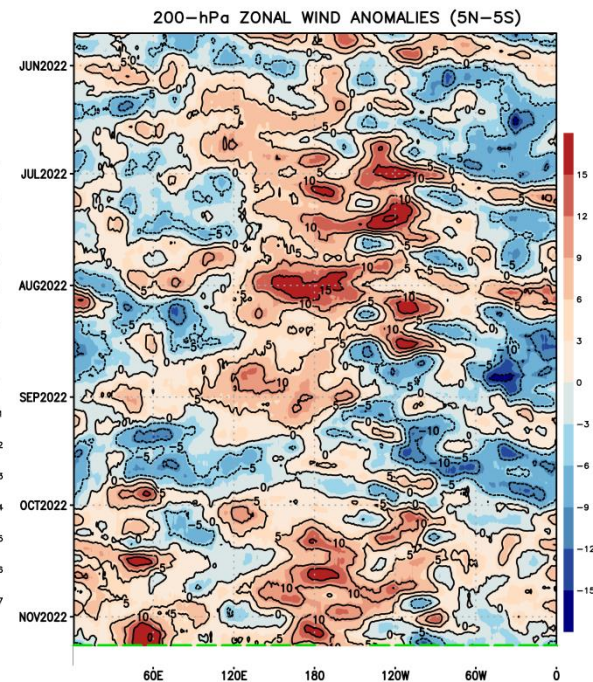
Source: GFS
Processing: SENAMHI/DMA/SPC

Begin GFS Forecast—green line
Forecast up to 00Z25NOV2022



Source: GFS
Processing: SENAMHI/DMA/SPC

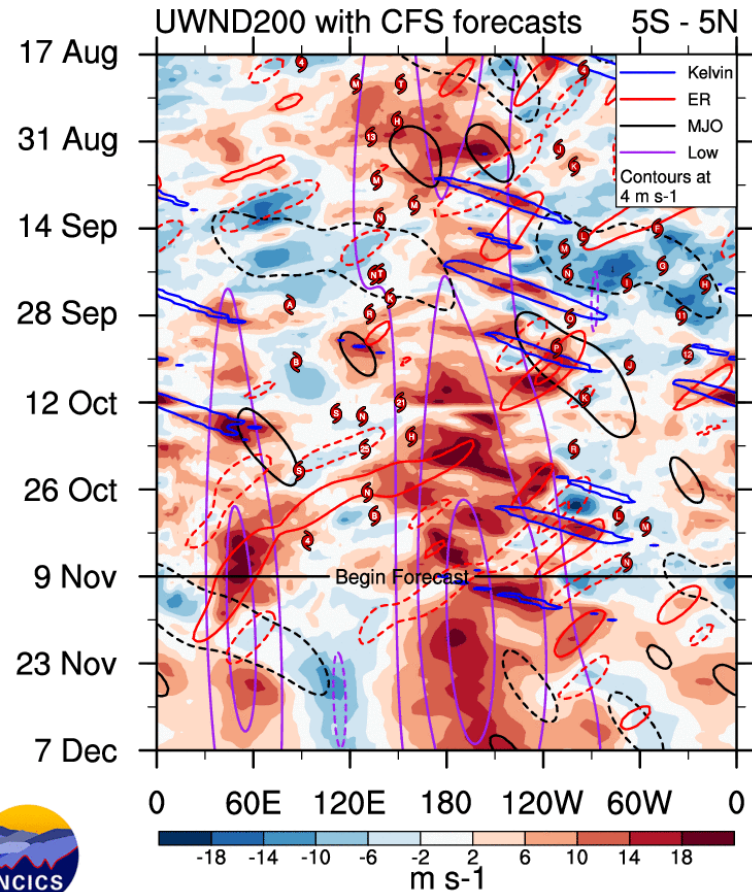
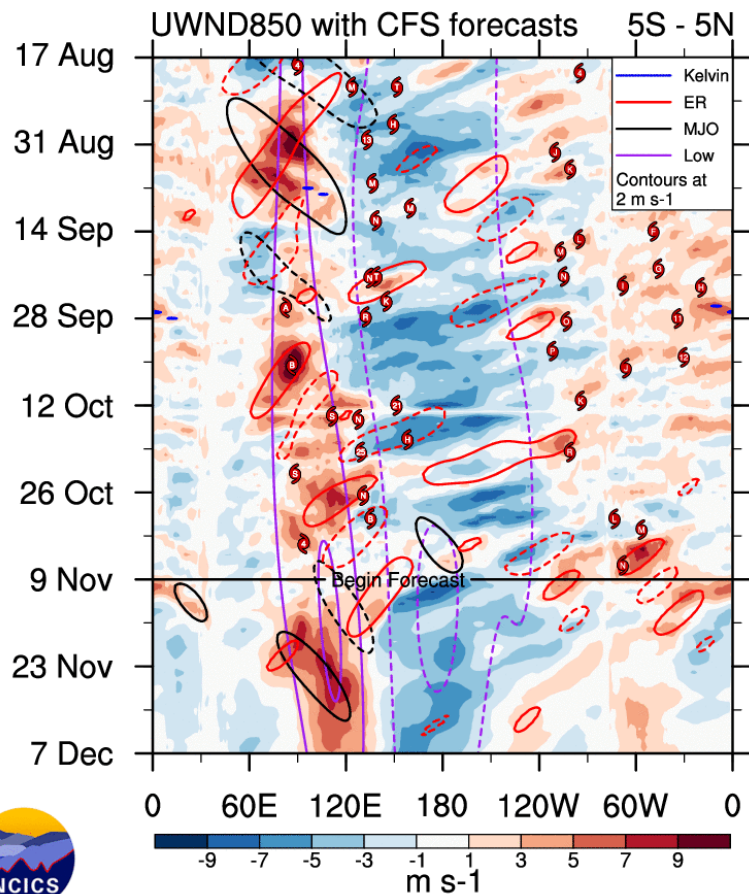
Begin GFS Forecast—green line
Forecast up to 00Z25NOV2022



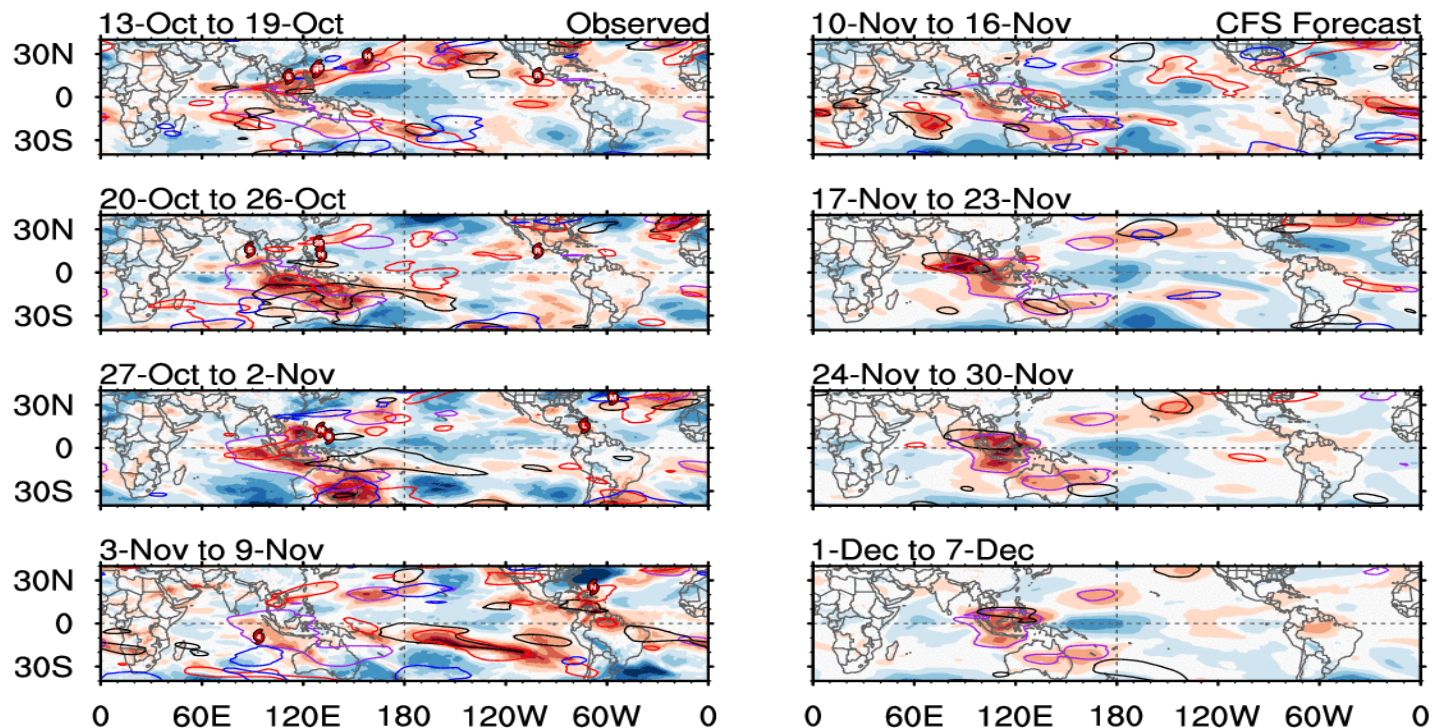
Source: GFS
Processing: SENAMHI/DMA/SPC

Begin GFS Forecast—green line
Forecast up to 00Z25NOV2022

Condiciones en el Pacífico Ecuatorial: *Estes/Oestes*



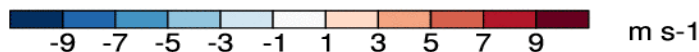
Anomalia de vientos en 850 hPa



ncics.org/mjo

7-day UWND850 with CFS forecasts

Thu 2022-11-10 11:19 UTC



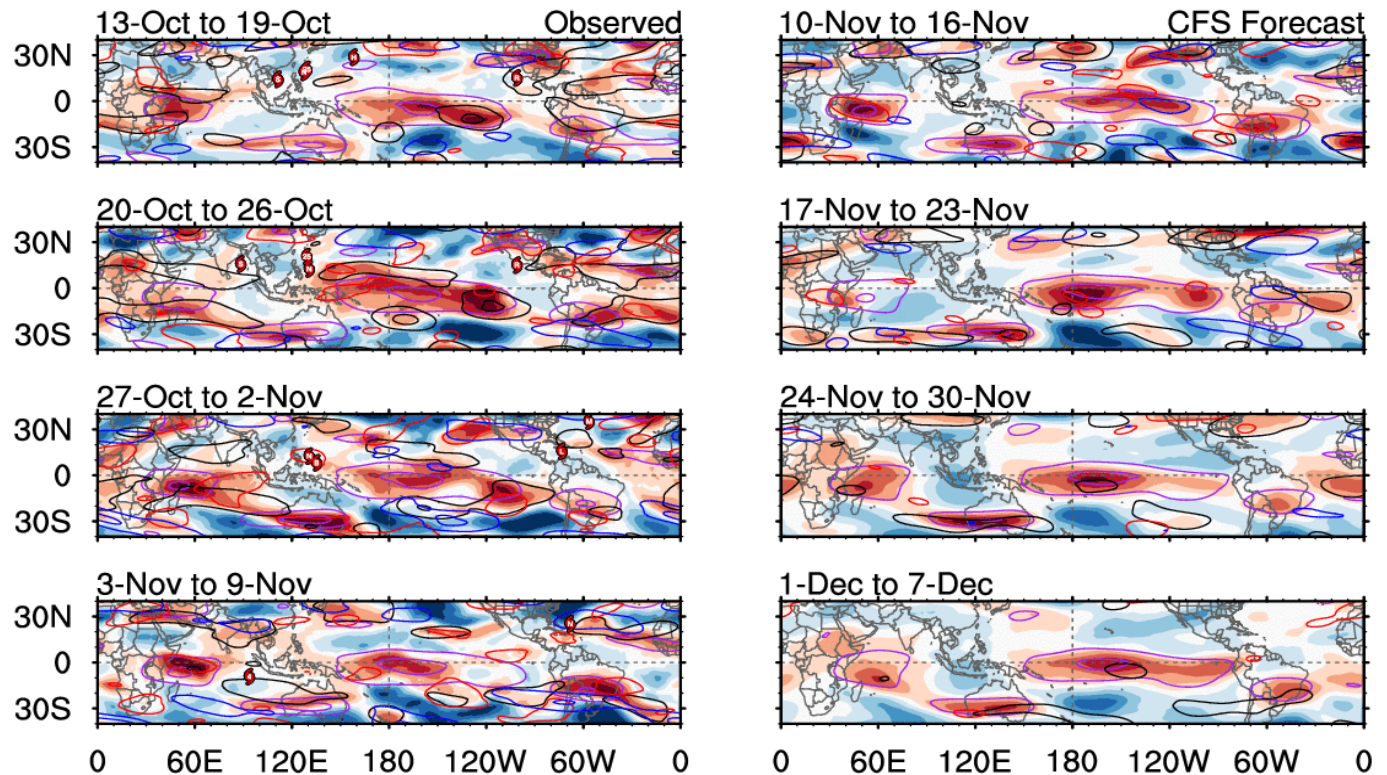
m s⁻¹

— MJO — Kelvin x2
— Low — ER

Contours at 2, 6 m s⁻¹

Carl Schreck
carl_schreck@ncsu.edu

Anomalia de vientos en 200 hPa

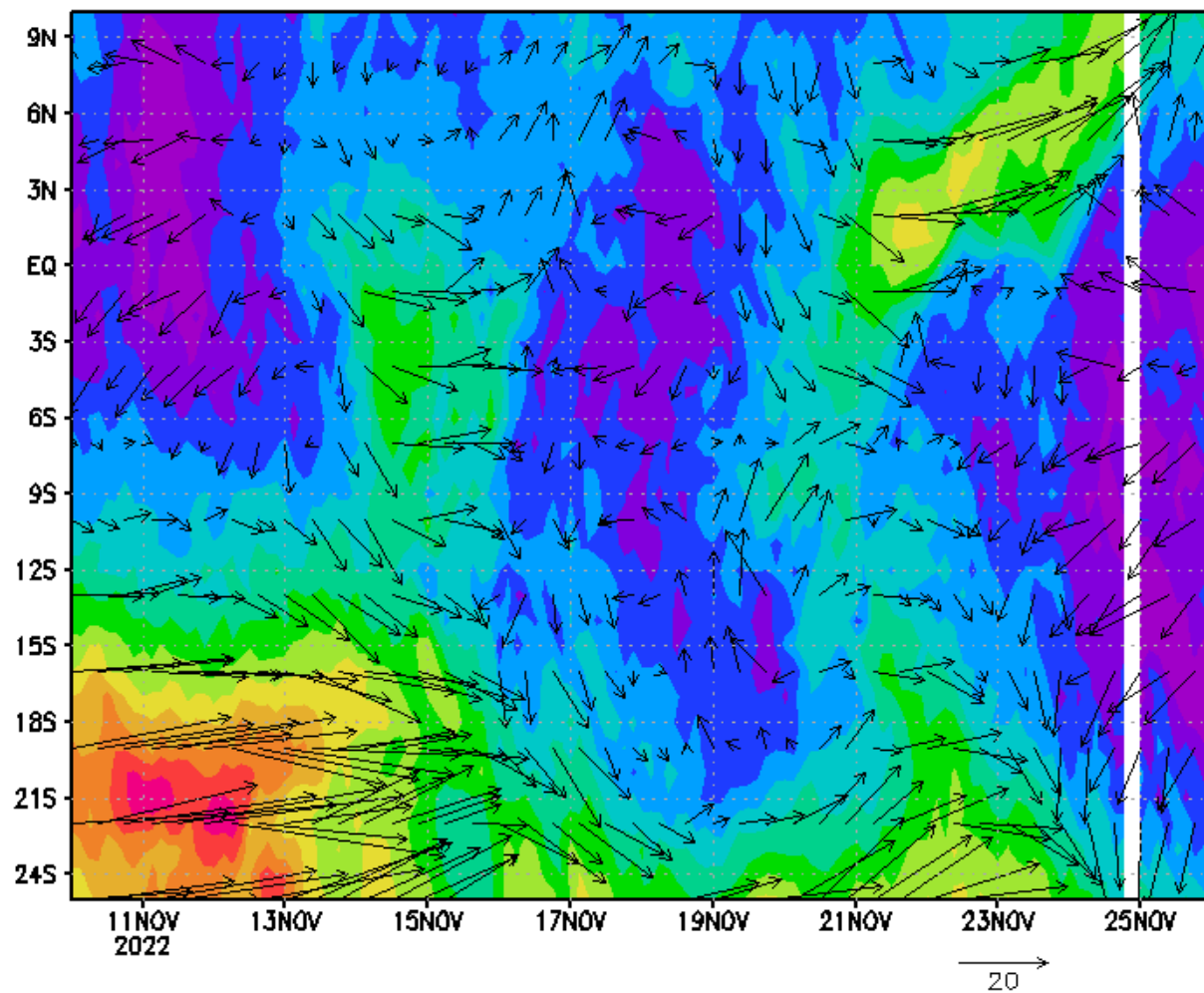


7-day UWND200 with CFS forecasts

— MJO — Kelvin x2
— Low — ER

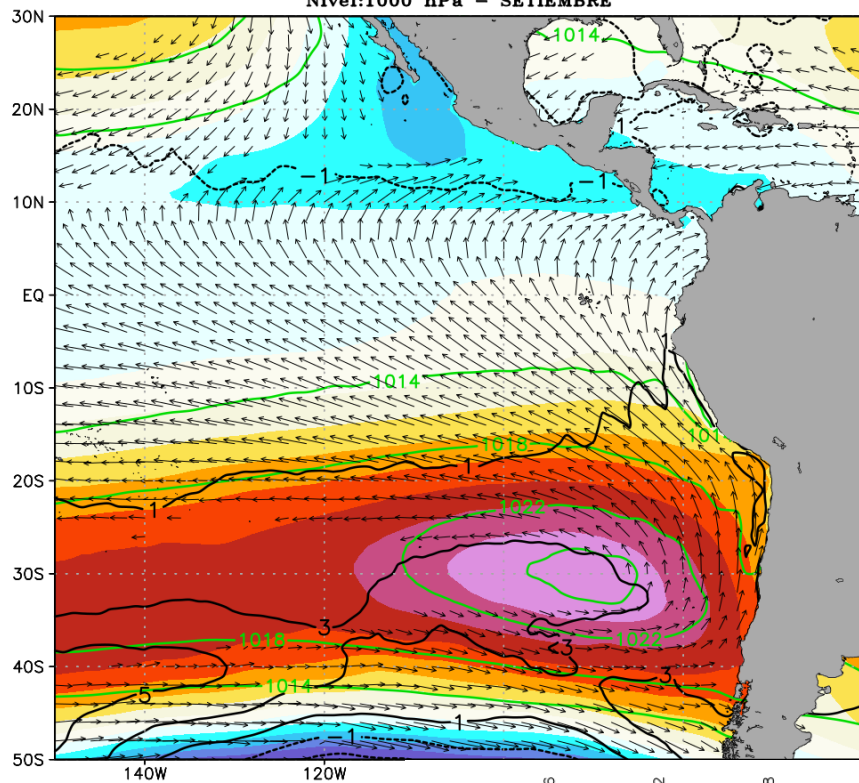
Contours at 4, 12 m s⁻¹

HOVMOLLER / LON 72W / 200 hPa

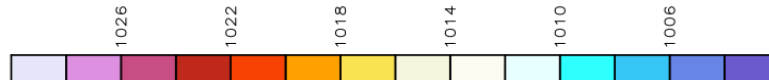
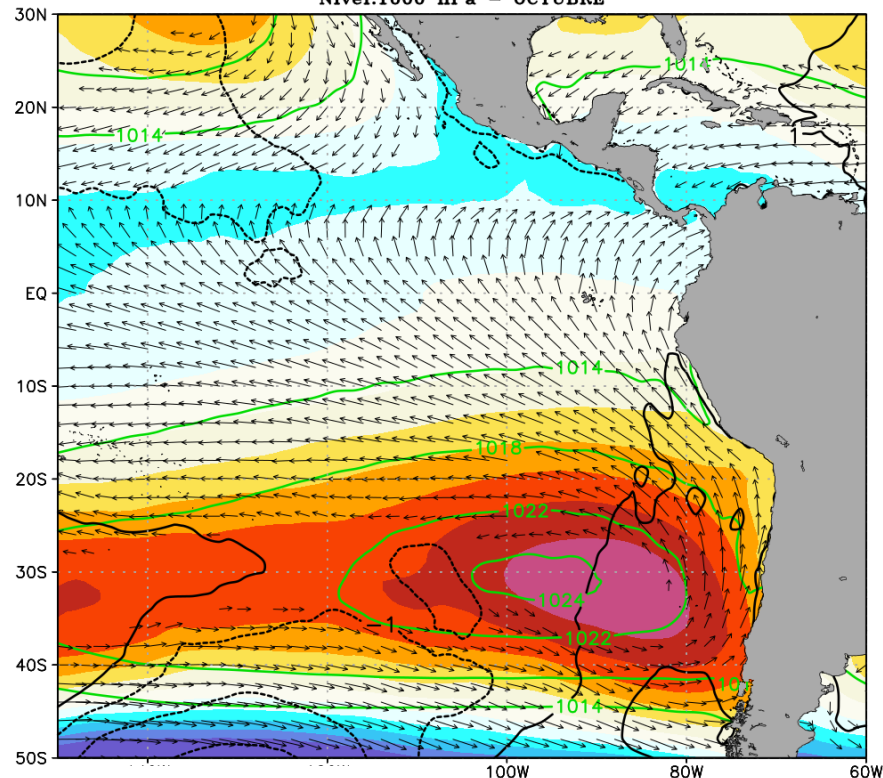


Anticiclón del Pacífico Sur

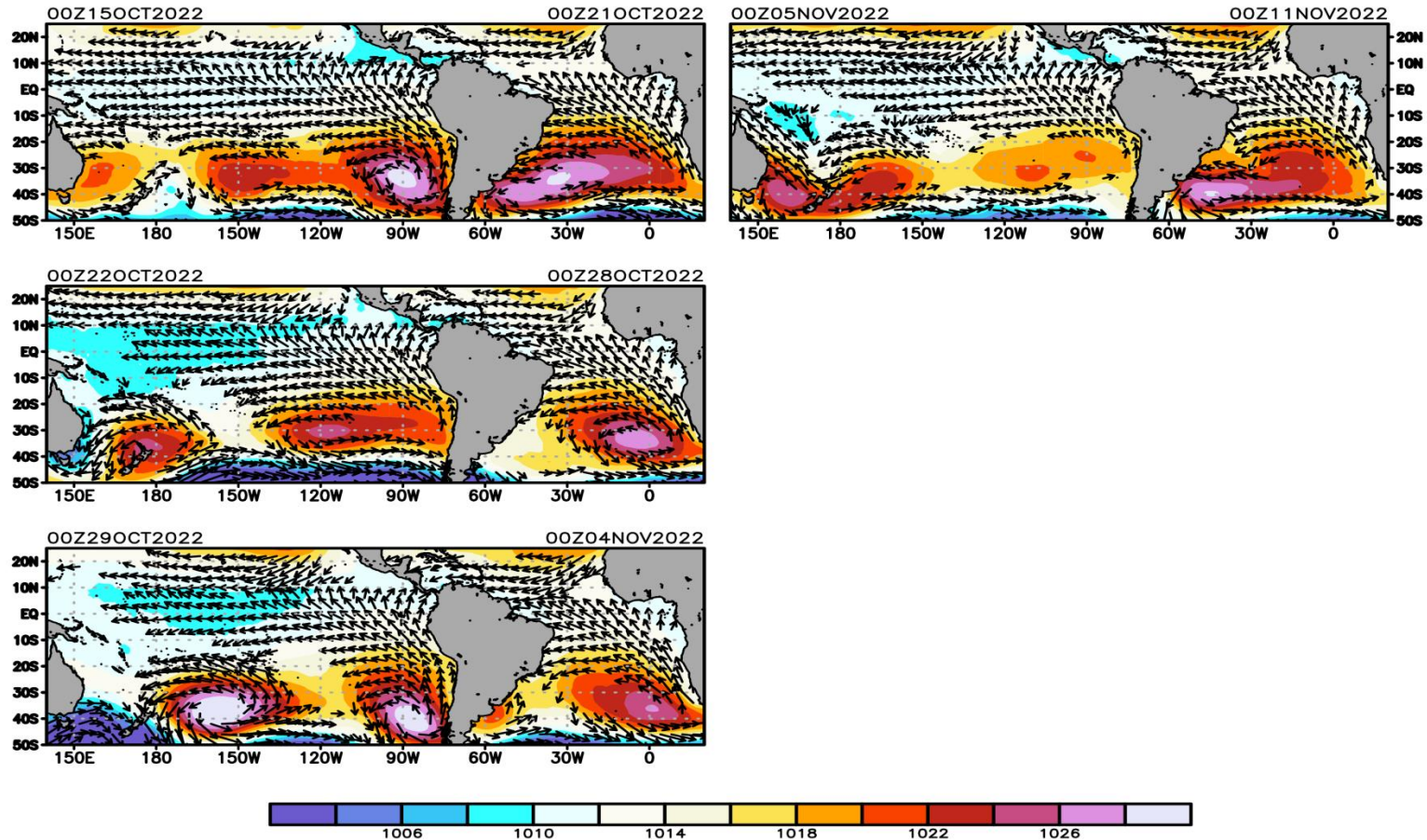
PROMEDIO DE LA PRSML (hPa) (color) – VIENTOS (m/s) (vector)
CLIMATOLOGIA(contorno verde) ANOMALIA (contorno negro)
Nivel:1000 hPa – SETIEMBRE

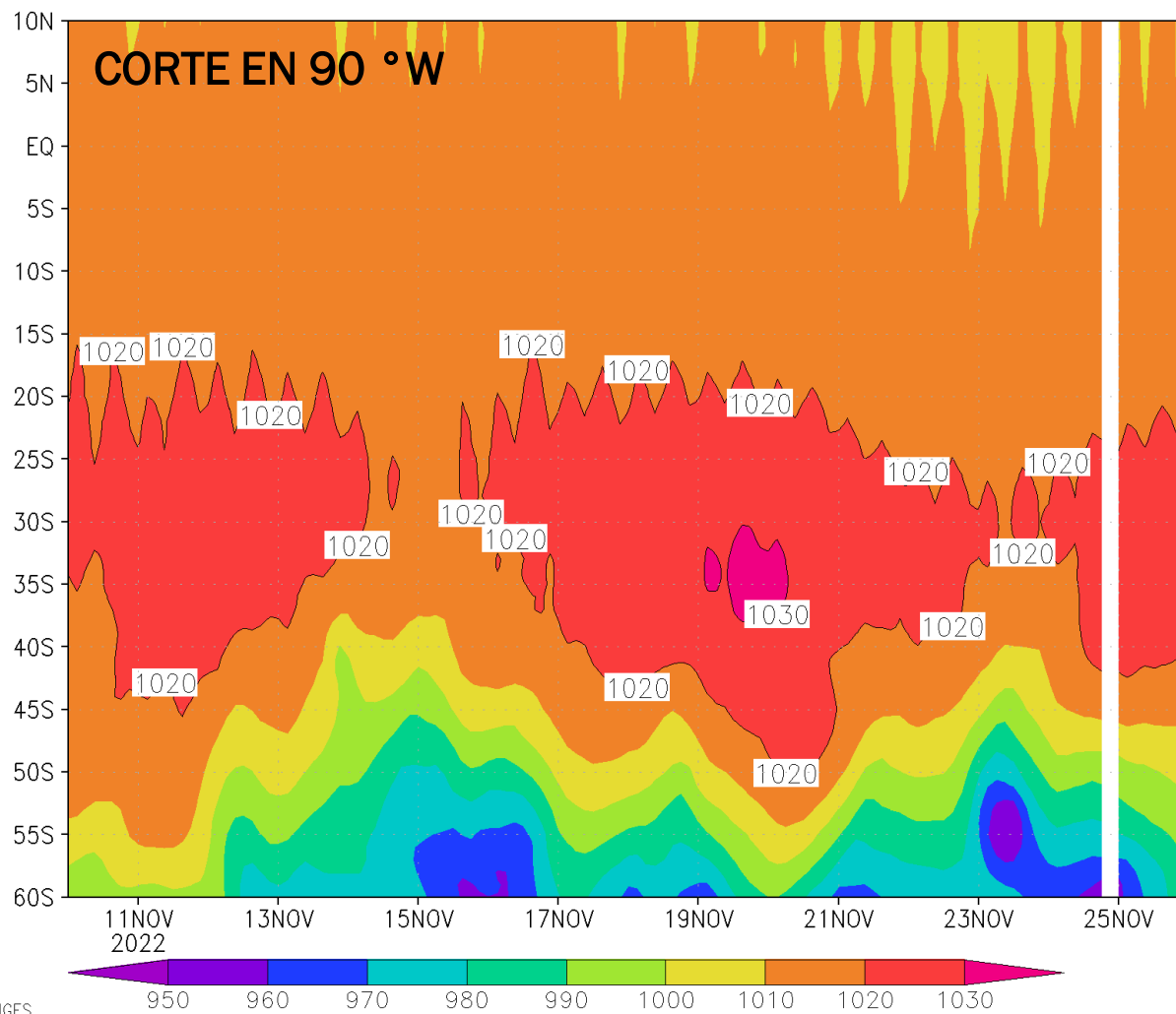


PROMEDIO DE LA PRSML (hPa) (color) – VIENTOS (m/s) (vector)
CLIMATOLOGIA(contorno verde) ANOMALIA (contorno negro)
Nivel:1000 hPa – OCTUBRE

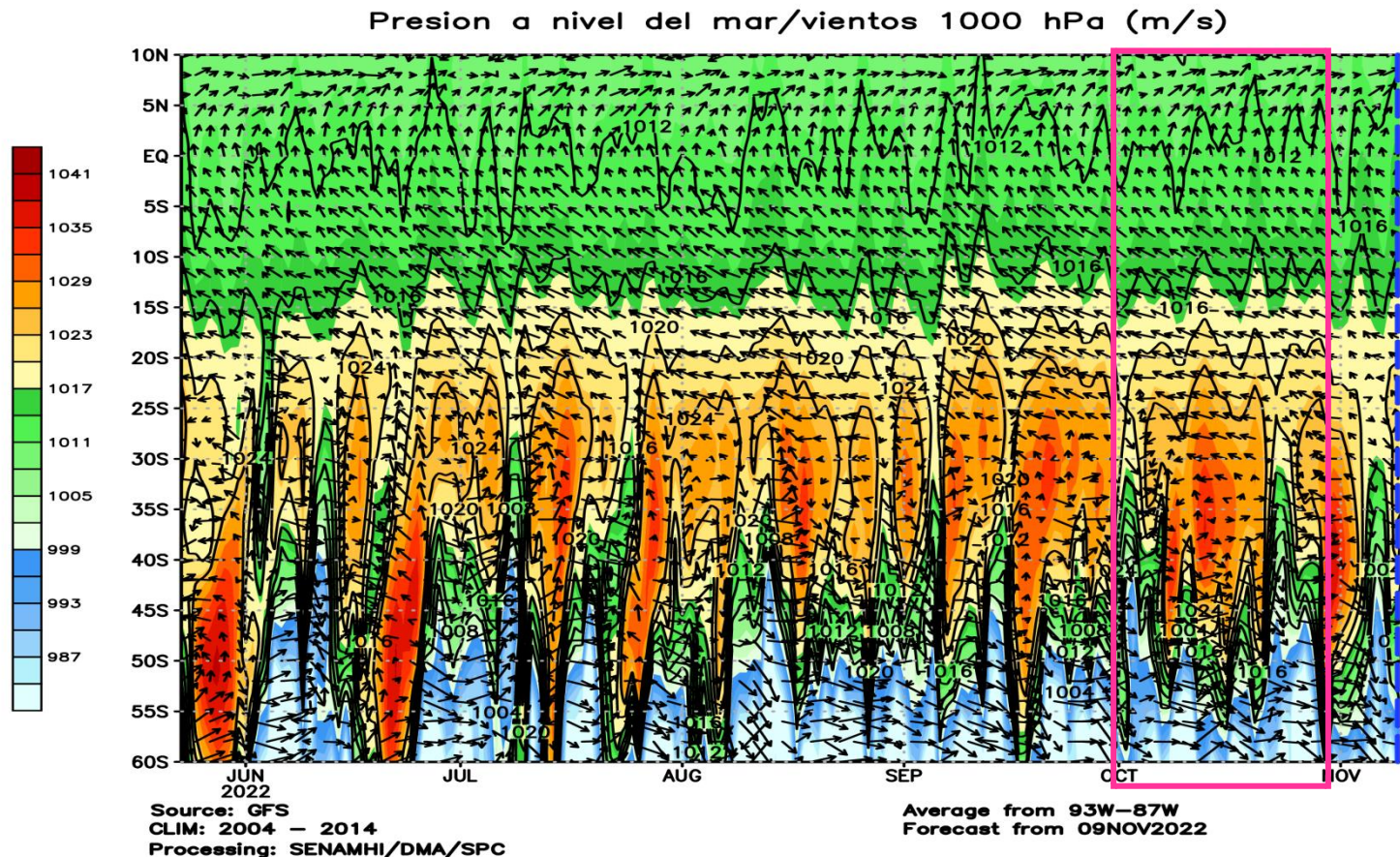


Anticiclón del Pacífico Sur

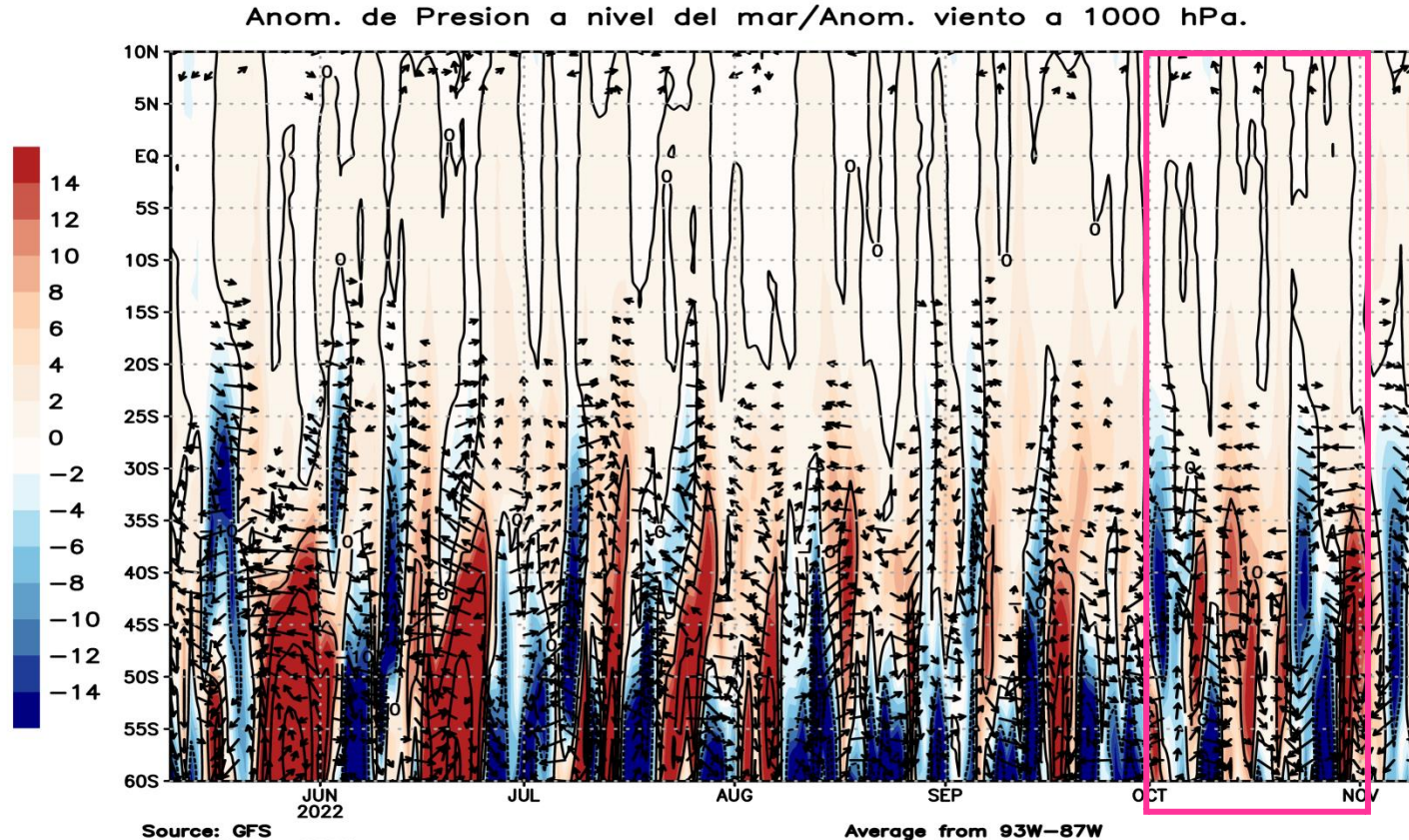




Presión a nivel del mar / vientos a 1000 hPa

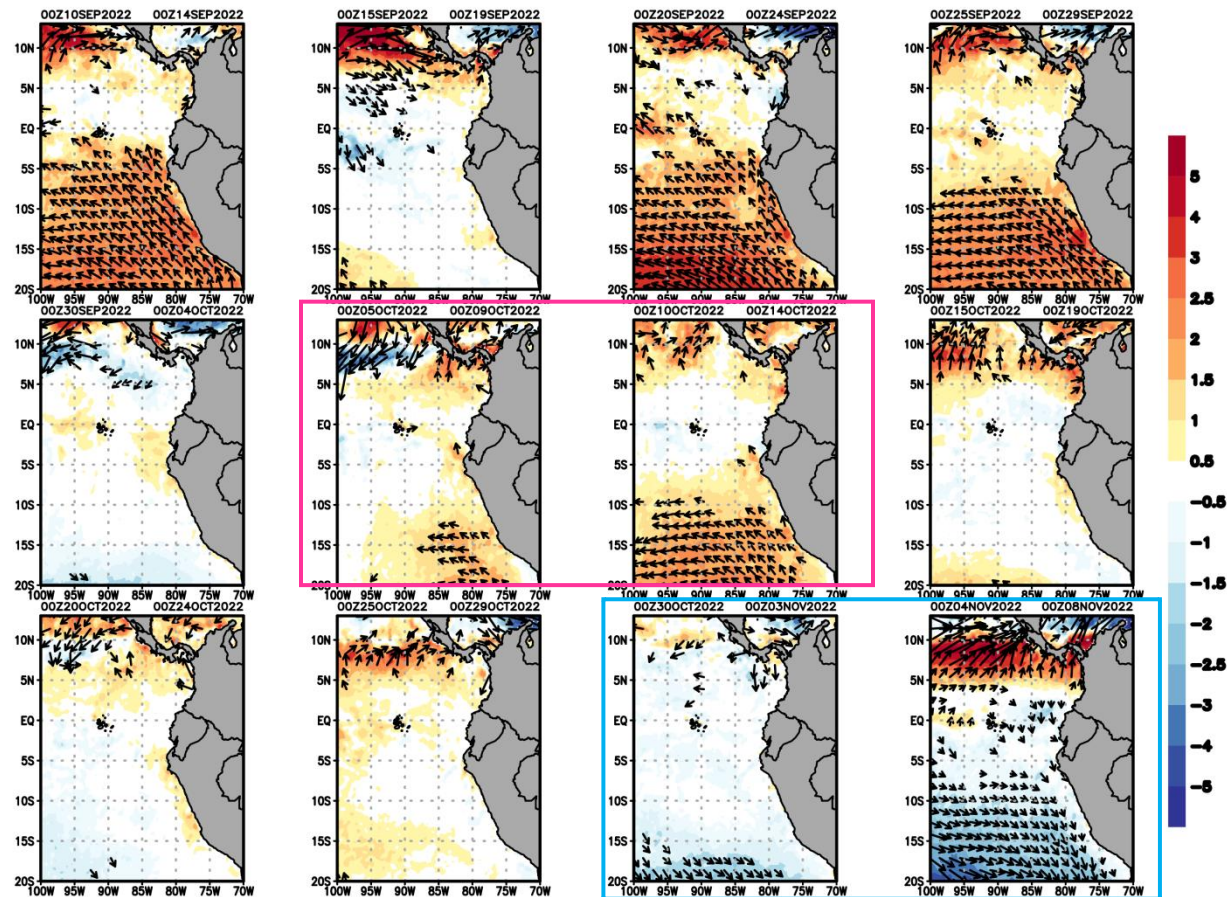


Anomalía de presión a nivel del mar y vientos a 1000 hPa



Condiciones regionales: *Vientos a 10 m - ASCAT*

Anomalia de viento 10m

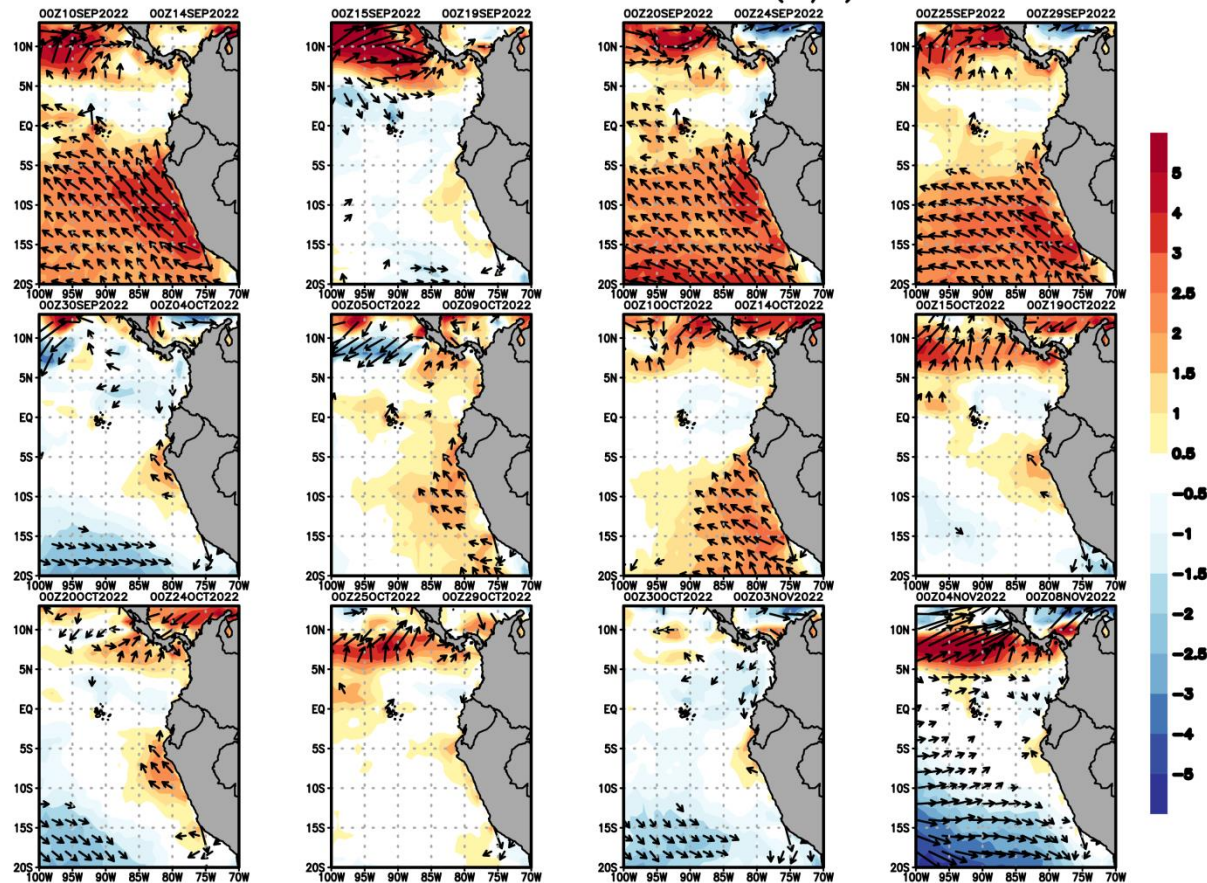


Source: ASCAT

Processing: SENAMHI/DMA/SPC

Condiciones regionales: *Vientos a 1000 hPa - GFS*

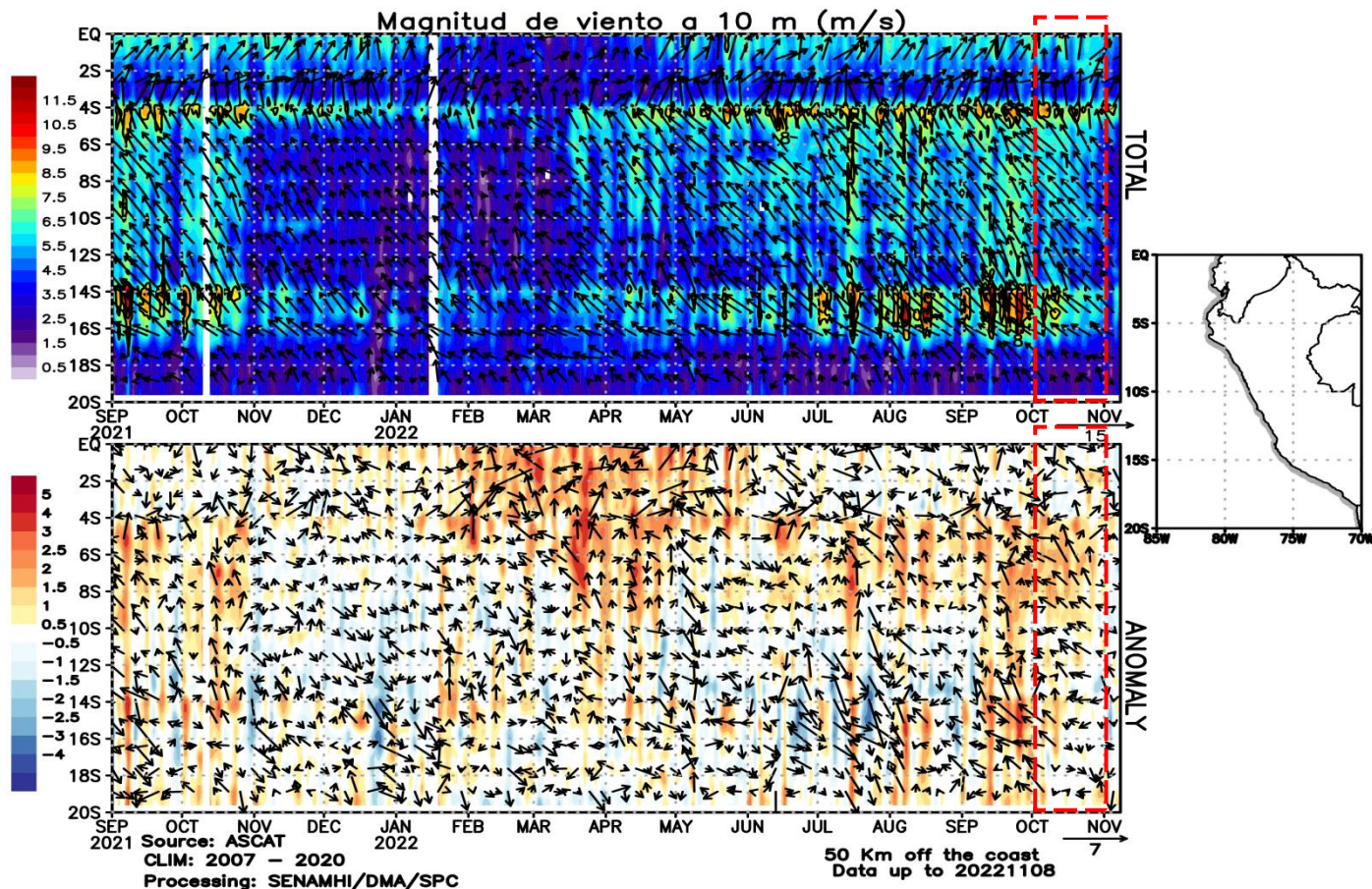
Anomalia de viento 1000 hPa (m/s)



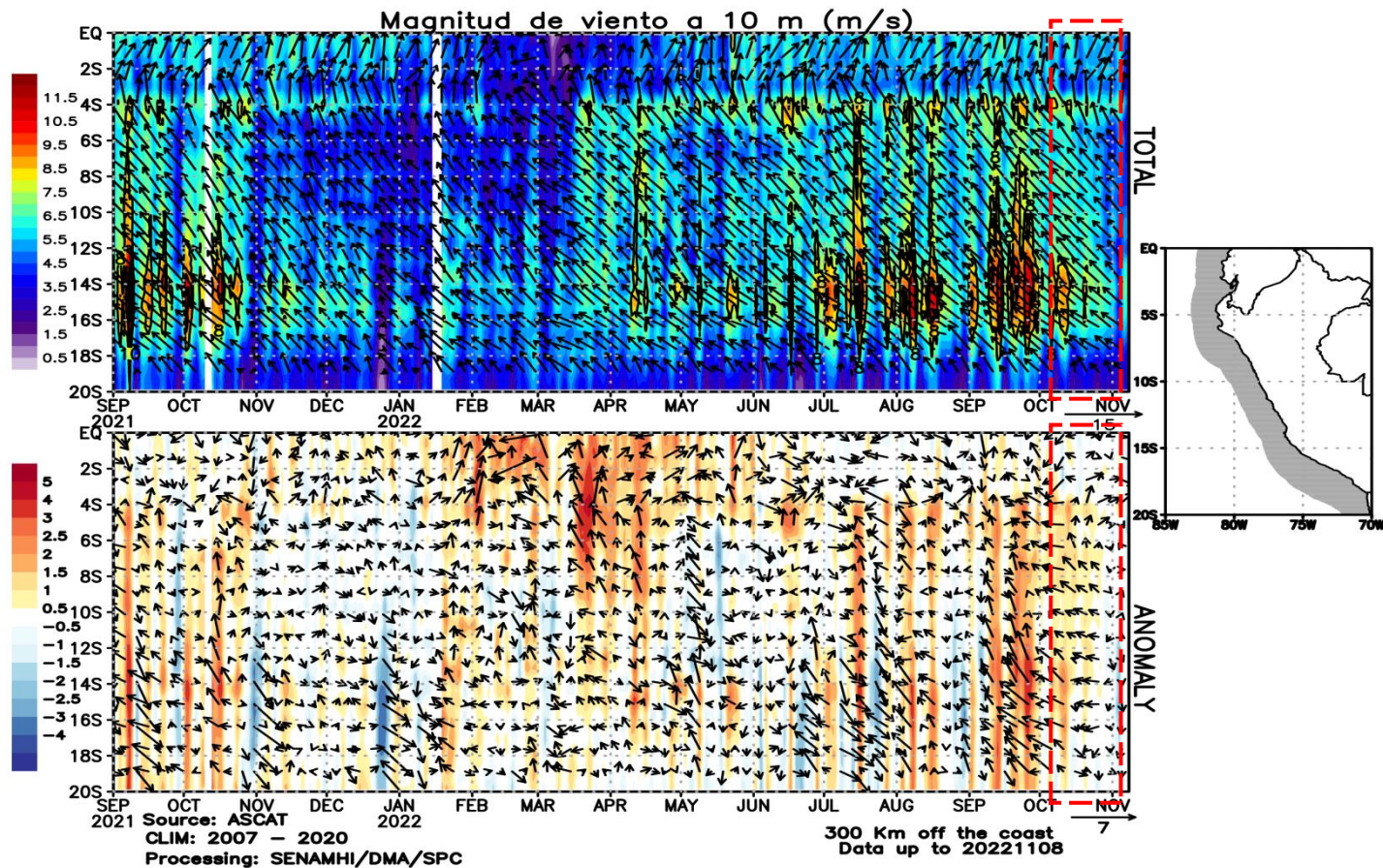
Source: GFS

Processing: SENAMHI/DMA/SPC

Condiciones regionales: Flujo de viento a 10m - 50 Km fuera de costa.

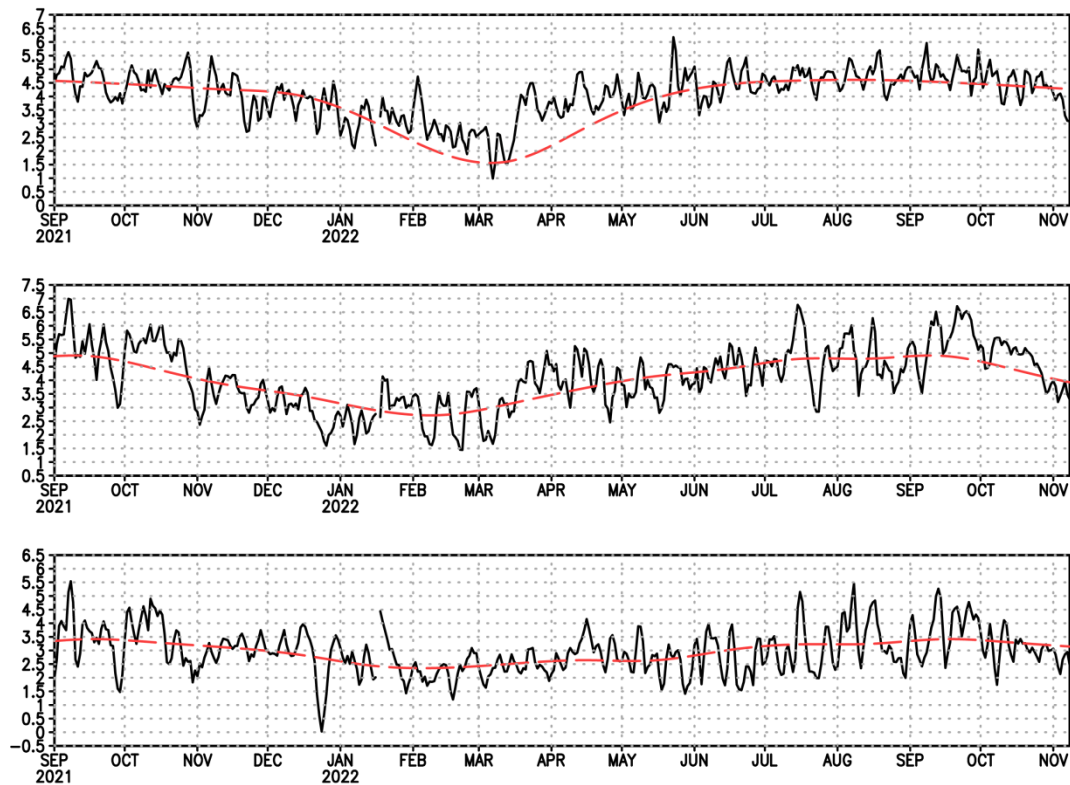


Condiciones regionales: Flujo de viento a 10m - 300 Km fuera de costa



Condiciones regionales: *Flujo de viento a 10m*

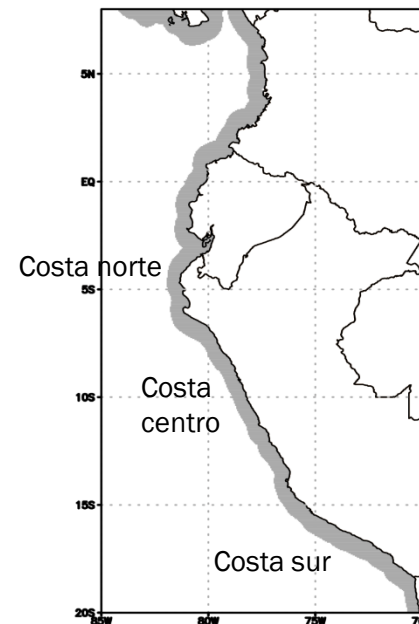
Magnitud de viento meridional a 10 m



NORTE

CENTRO

SUR



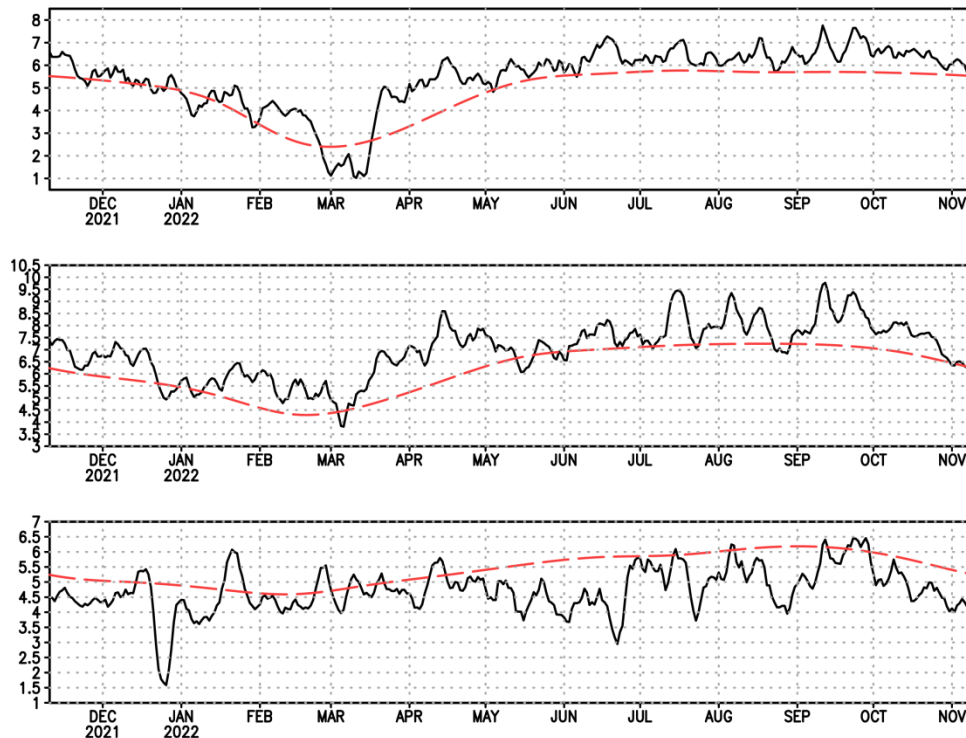
Source: ASCAT WIND
CLIM: 2007 - 2020
Processing: SENAMHI/DMA/SPC

100 Km off the coast

RED LINE: MERIDIONAL WIND CLIMATOLOGY
BLACK LINE: MERIDIONAL WIND

Condiciones regionales: *Flujo de viento en 1000 hPa*

Magnitud de viento meridional a 1000 hPa (m/s)

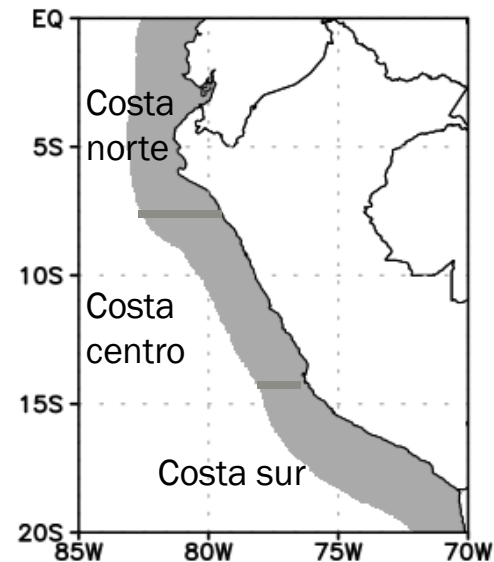


Source: GFS
CLIM: 2004 - 2014
Processing: SENAMHI/DMA/SPC

300 Km off the coast
Forecast from 09NOV2022

RED LINE: MERIDIONAL WIND CLIMATOLOGY
BLACK LINE: MERIDIONAL WIND

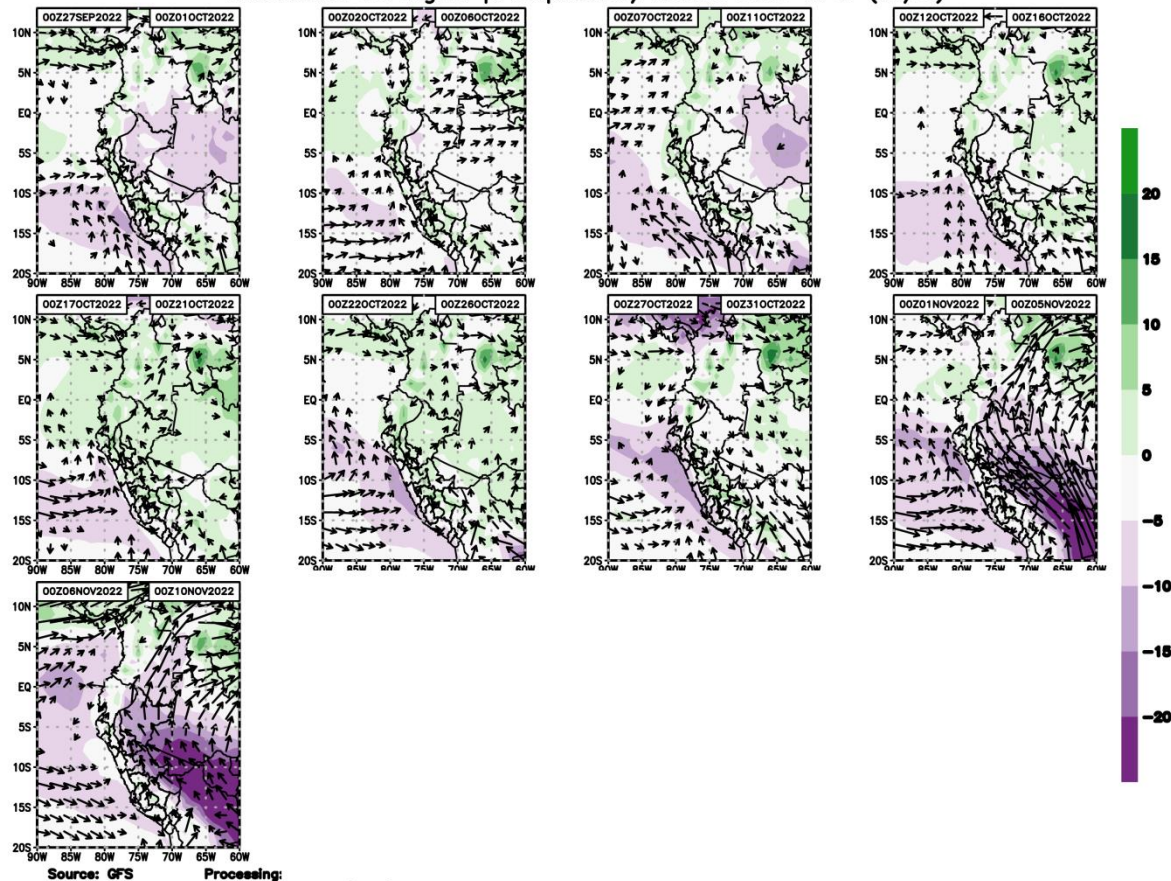
NORTE
CENTRO
SUR



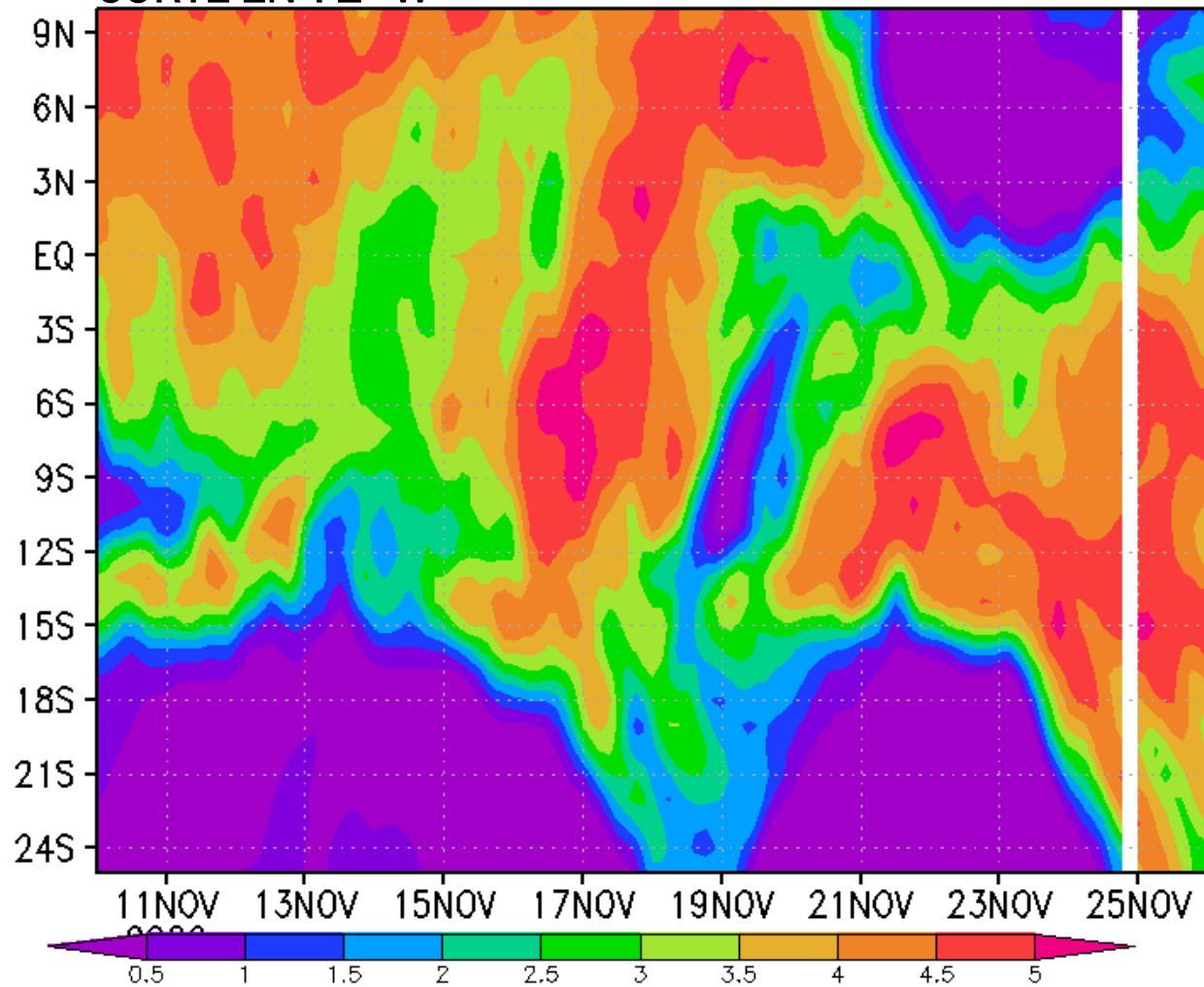
Condiciones regionales:

Agua Precipitable y Flujo de viento en 850 hPa fuera del litoral

Anomalia de Agua precipitable/viento 850 hPa (m/s)

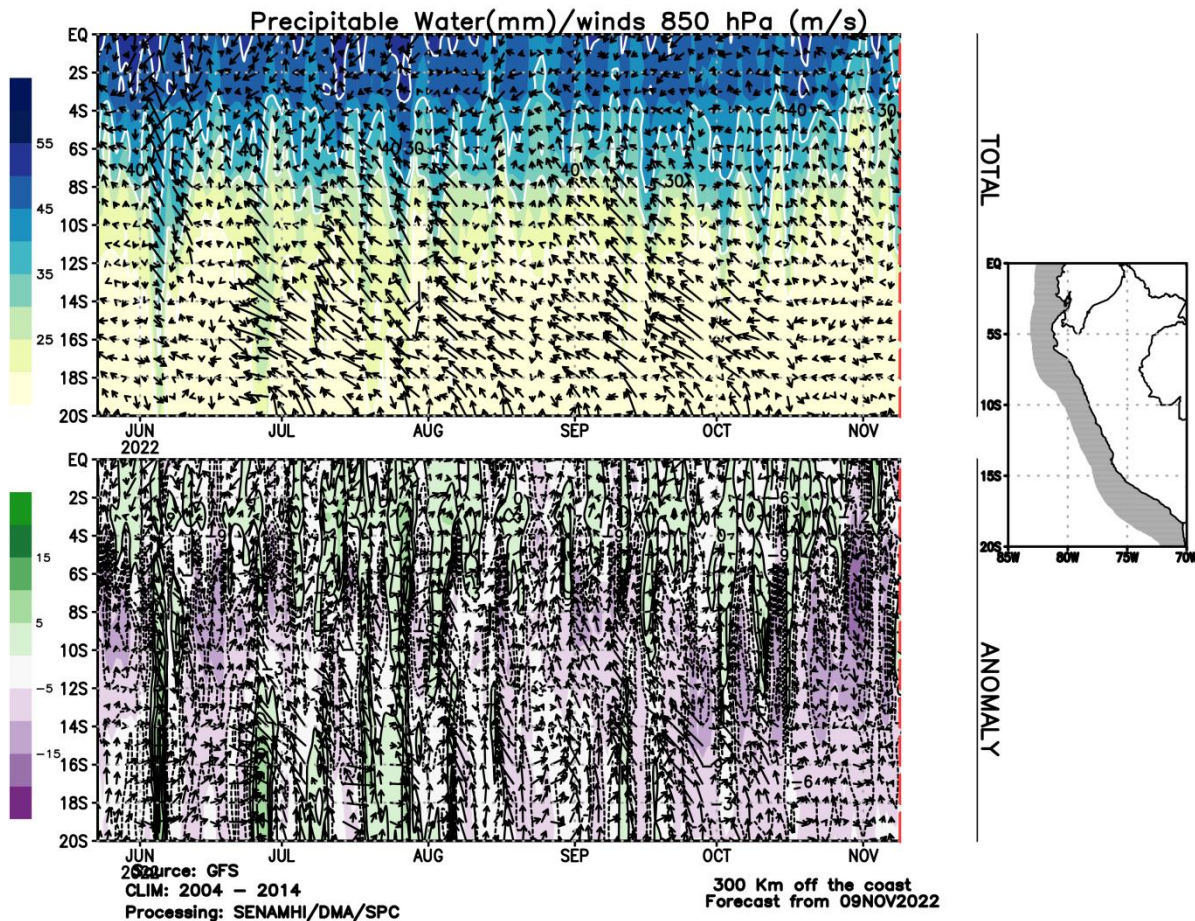


CORTE EN 72°W

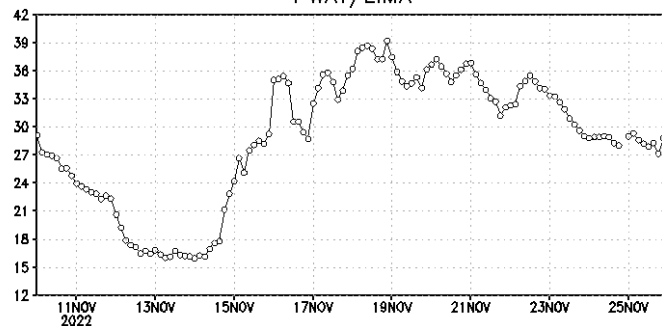


Condiciones regionales:

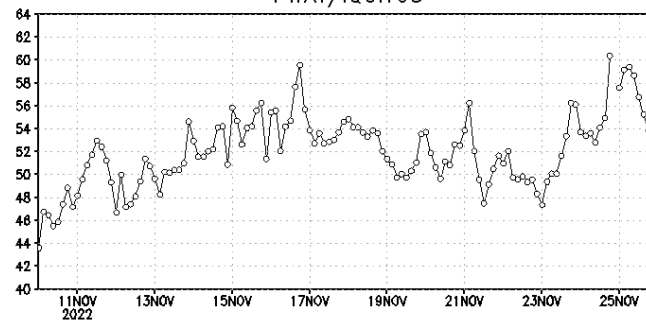
Agua Precipitable y Flujo de viento en 850 hPa fuera del litoral



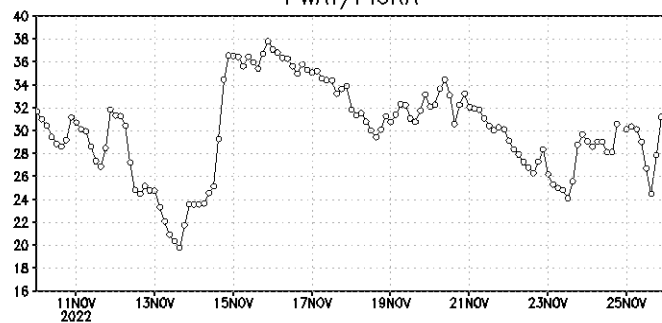
PWAT/LIMA



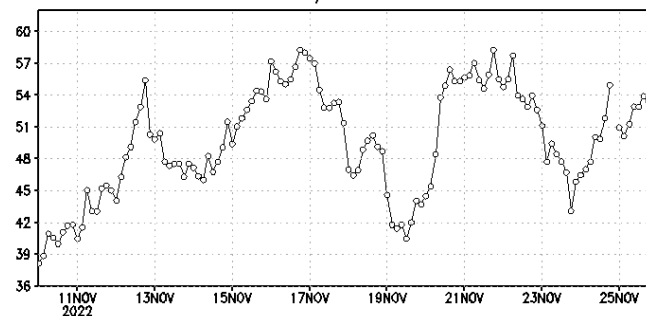
PWAT/IQUITOS



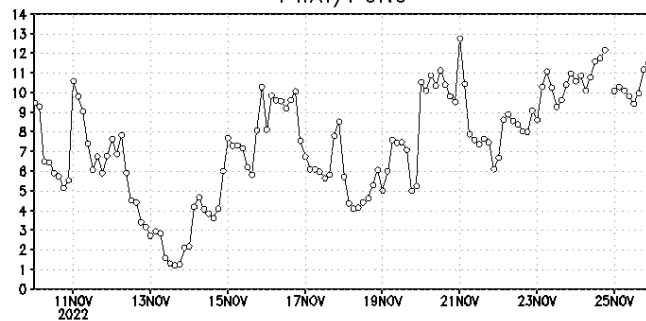
PWAT/PIURA



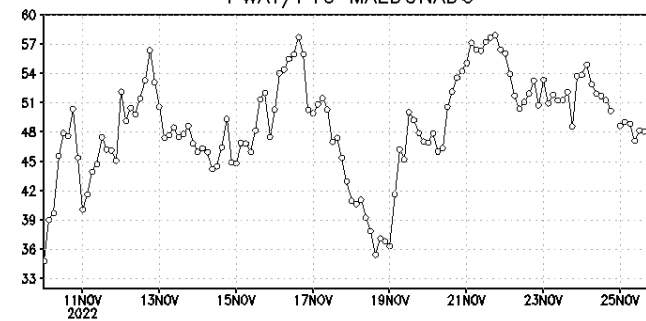
PWAT/PUCALLPA



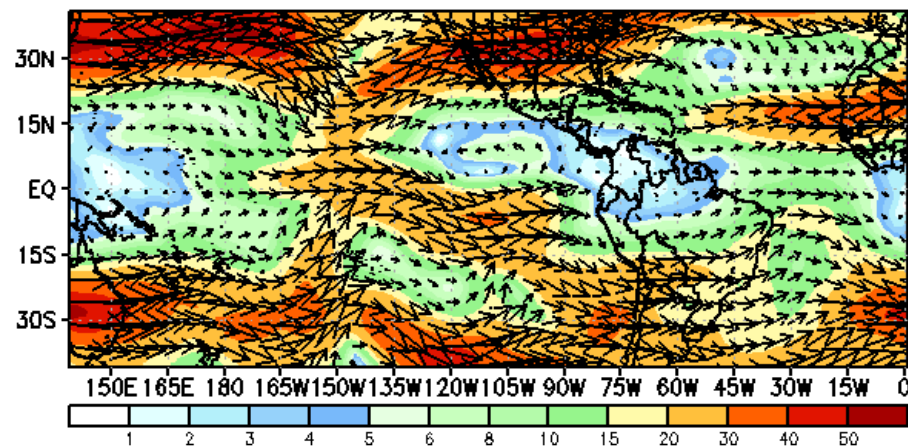
PWAT/PUNO



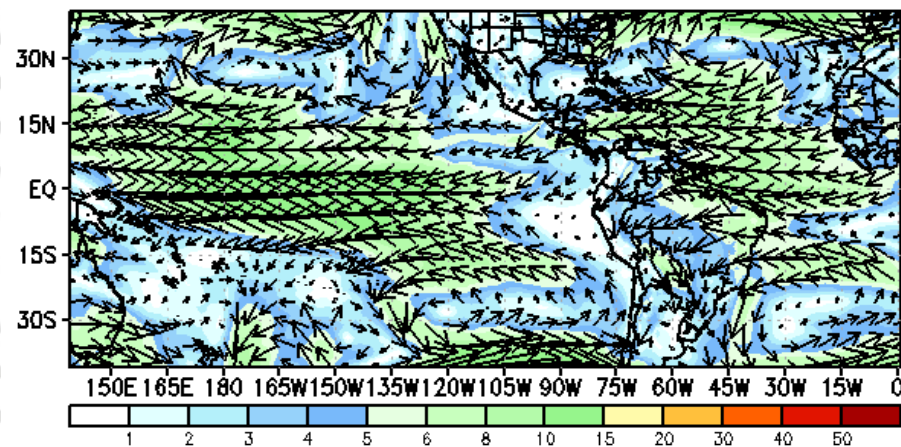
PWAT/PTO MALDONADO



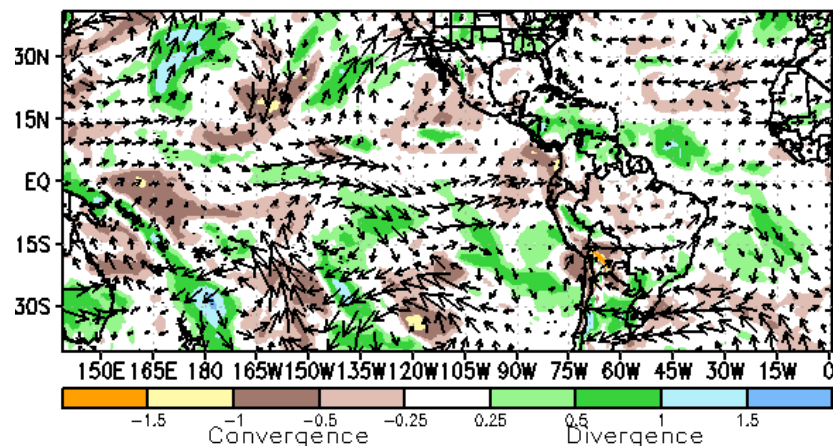
GEFS Week-1 200-hPa Div. and Wind
Valid: 20221111 - 20221117



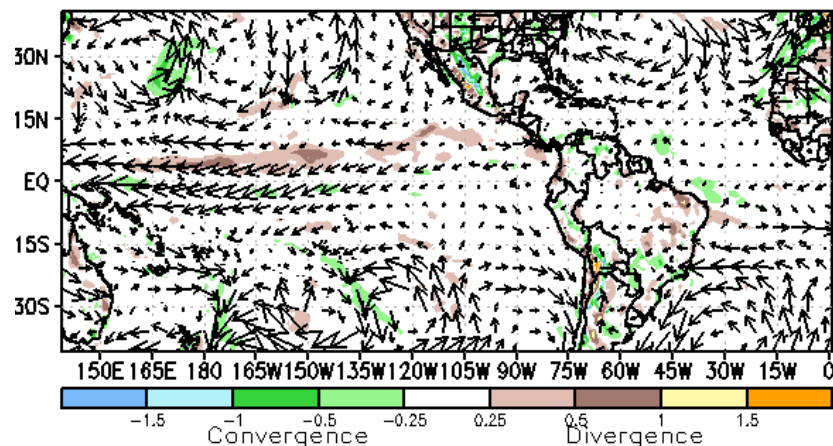
GEFS Week-1 850-hPa Div. and Wind
Valid: 20221111 - 20221117



GEFS Week-1 200-hPa Div. and Wind Anom.
Valid: 20221111 - 20221117

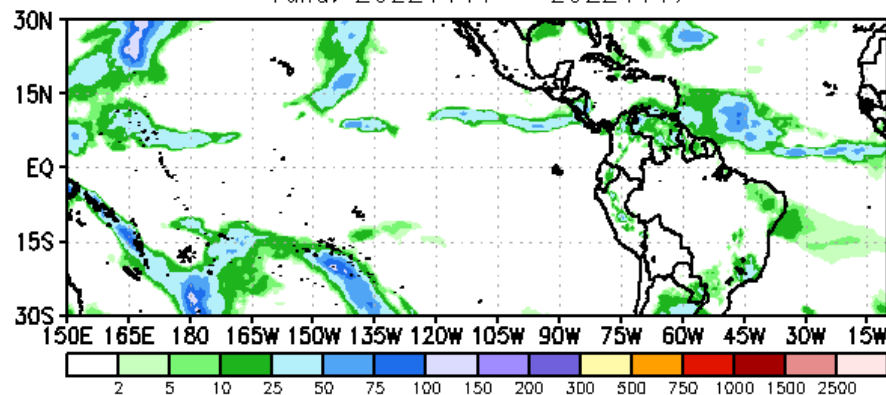


GEFS Week-1 850-hPa Div. and Wind Anom.
Valid: 20221111 - 20221117



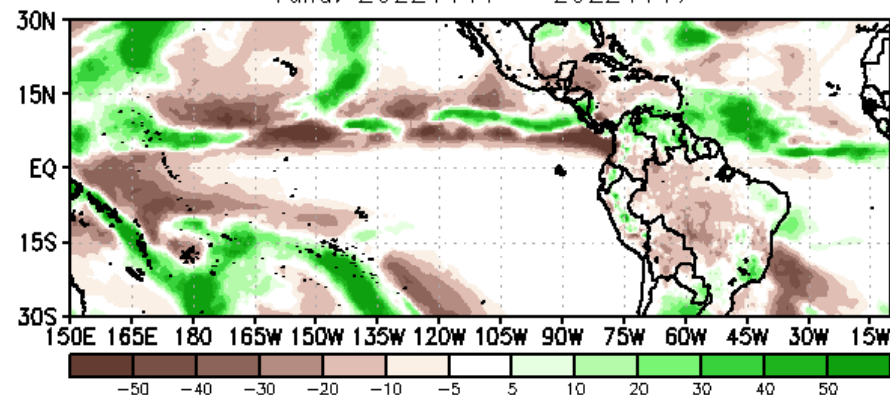
GEFS Week-1 Precip Total

Valid: 20221111 - 20221117



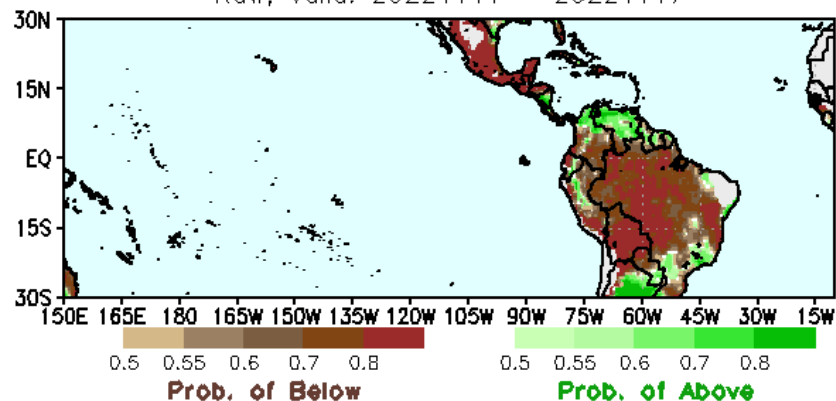
GEFS Week-1 Precip Anomaly

Valid: 20221111 - 20221117



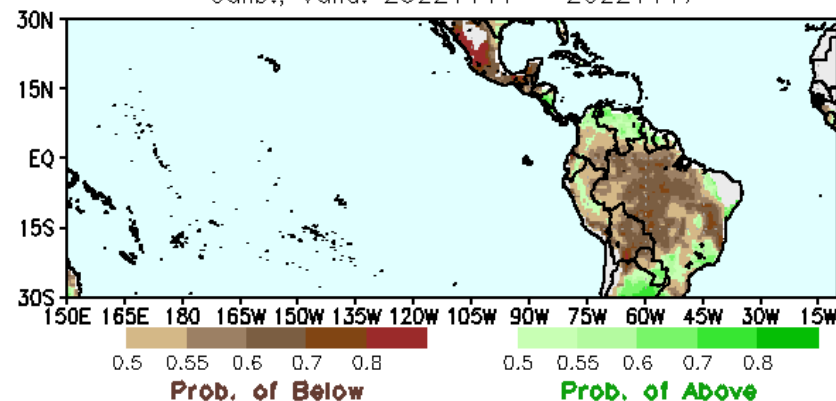
GEFS Week-1 2-Category Precip Fcst.

Raw, Valid: 20221111 - 20221117

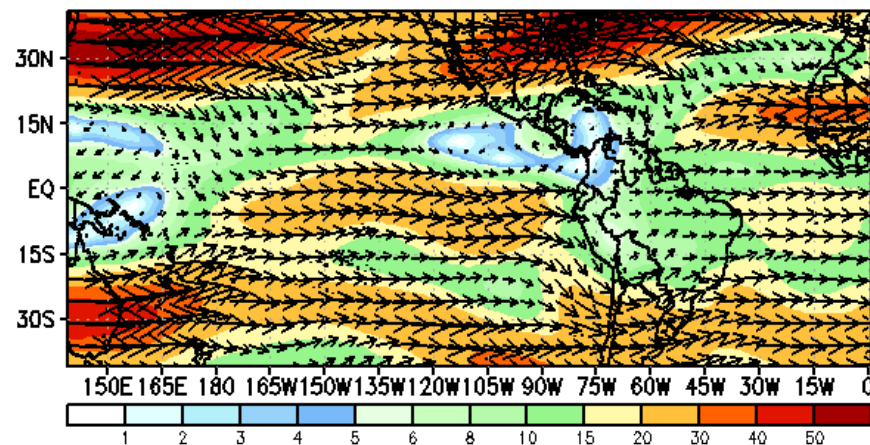


GEFS Week-1 2-Category Precip Forecast

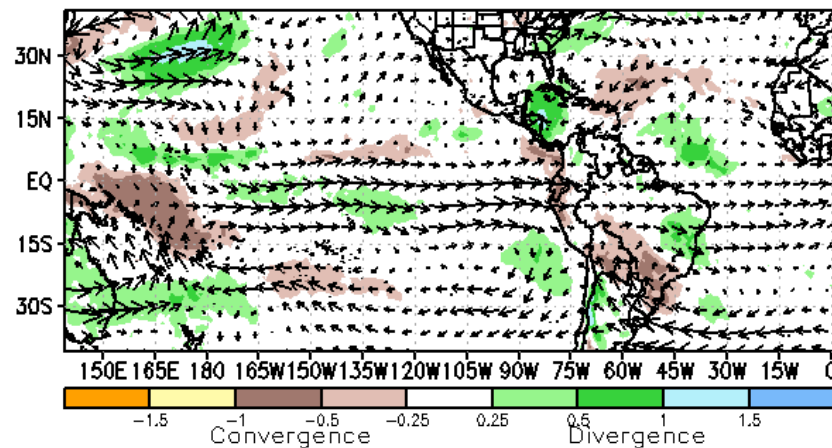
Calib., Valid: 20221111 - 20221117



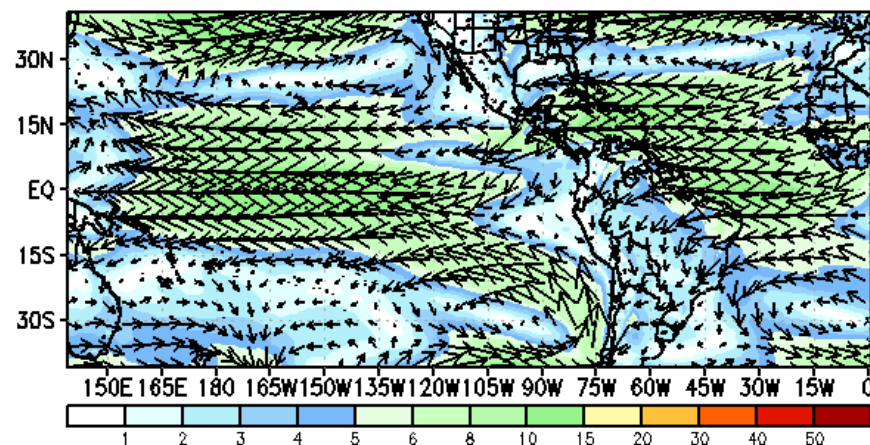
GEFS Week-2 200-hPa Div. and Wind
Valid: 20221118 - 20221124



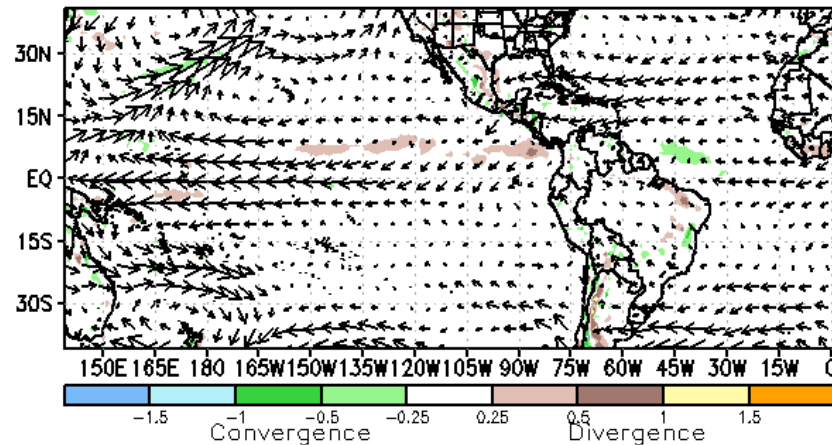
GEFS Week-2 200-hPa Div. and Wind Anom.
Valid: 20221118 - 20221124



GEFS Week-2 850-hPa Div. and Wind
Valid: 20221118 - 20221124

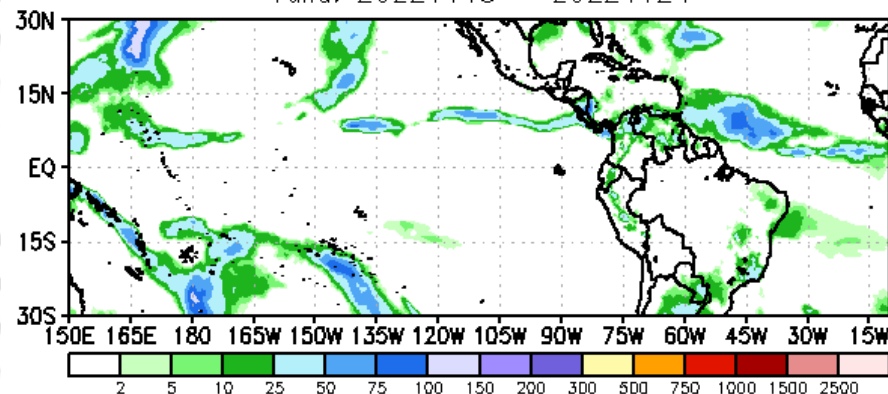


GEFS Week-2 850-hPa Div. and Wind Anom.
Valid: 20221118 - 20221124



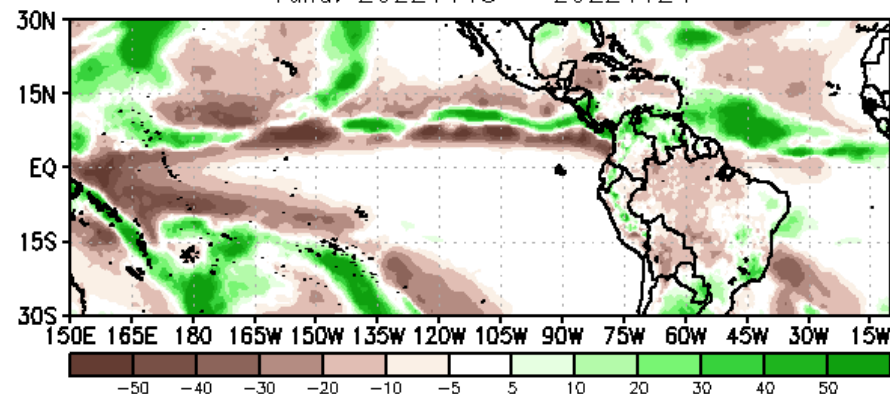
GEFS Week-2 Precip Total

Valid: 20221118 - 20221124



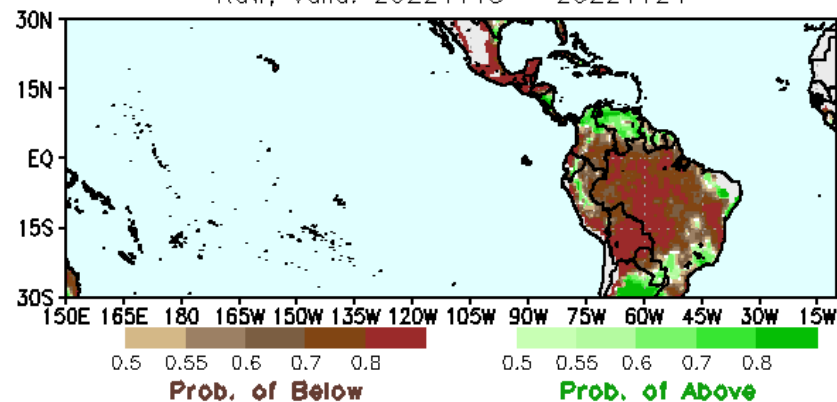
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Valid: 20221118 - 20221124



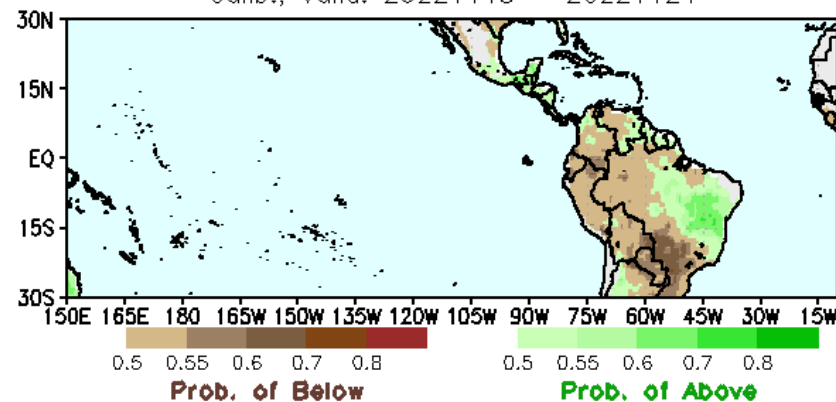
GEFS Week-2 2-Category Precip Fcst.

Raw, Valid: 20221118 - 20221124

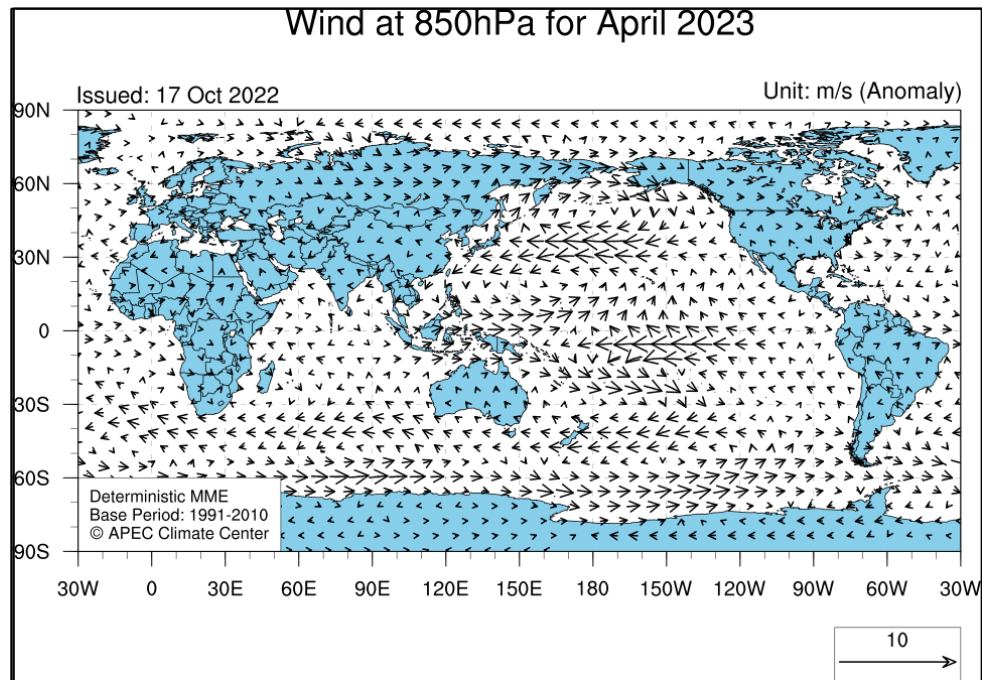
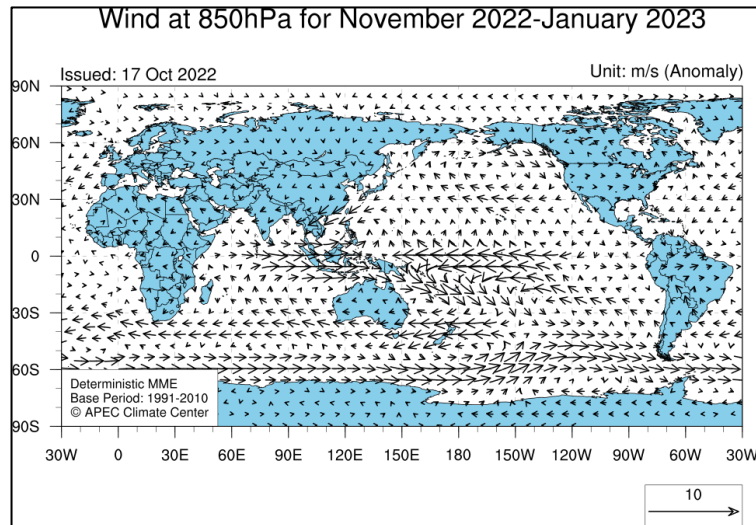


GEFS Week-2 2-Category Precip Forecast

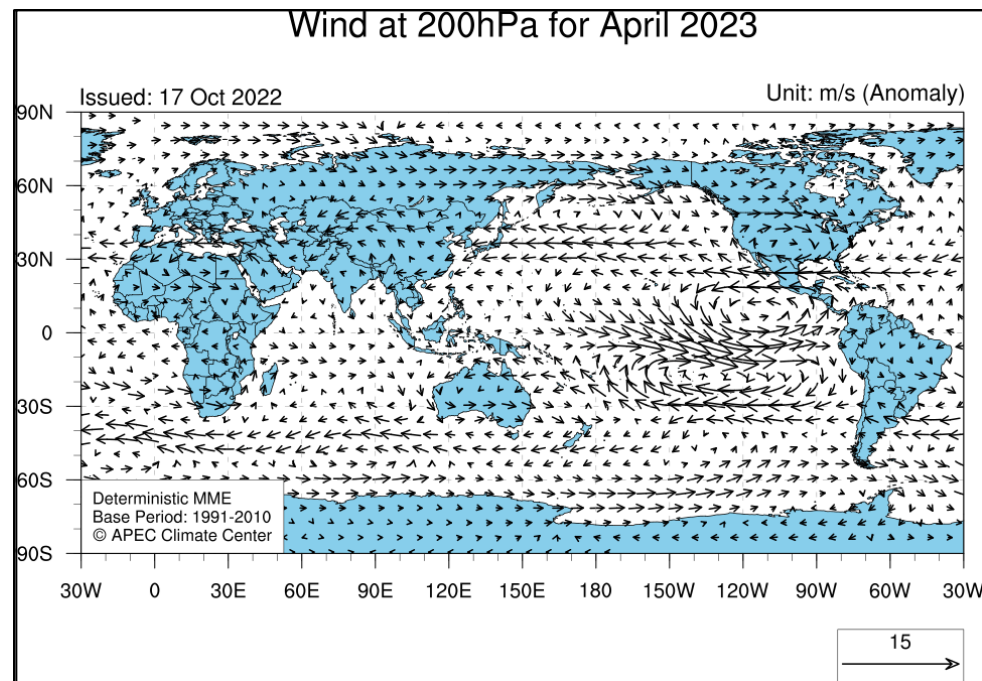
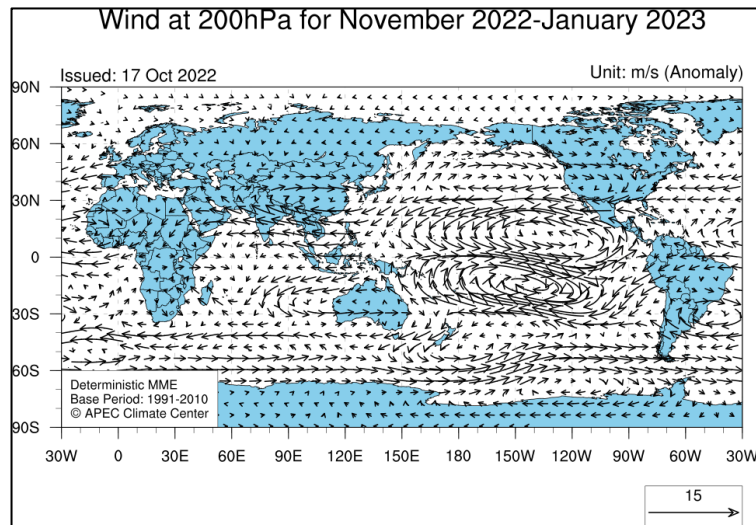
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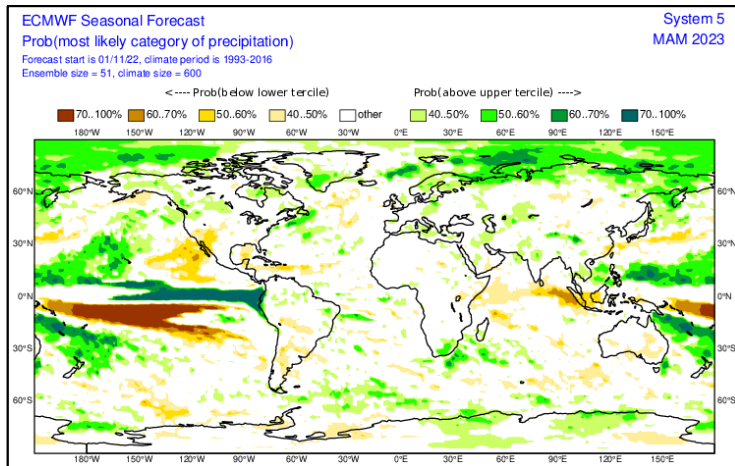
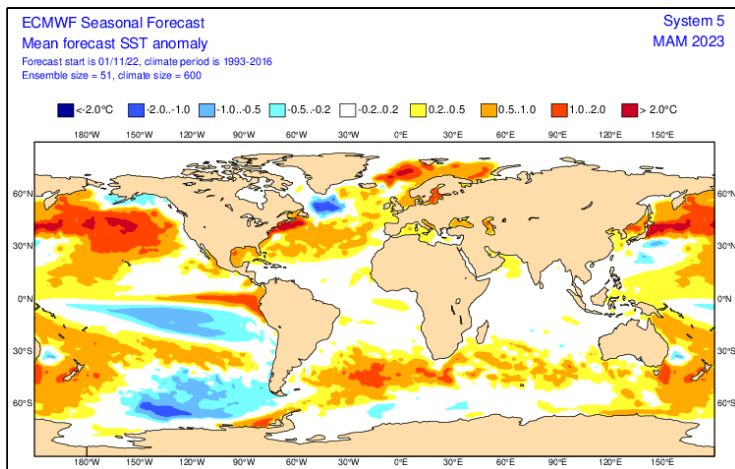
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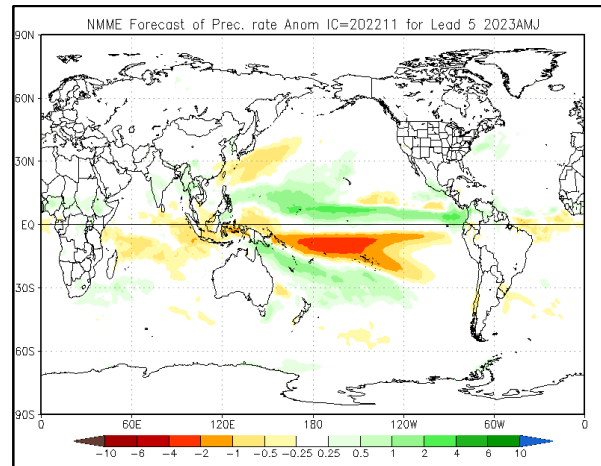
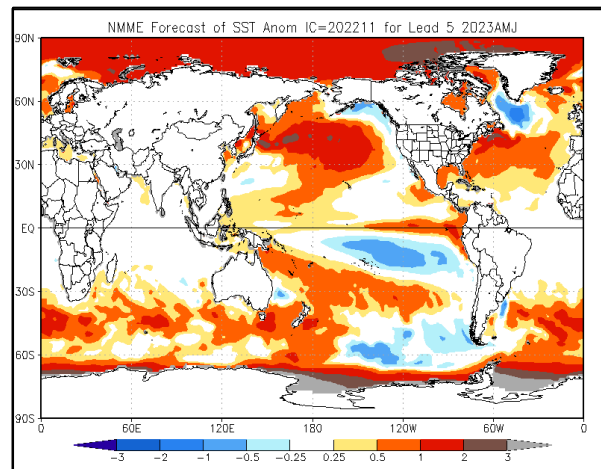
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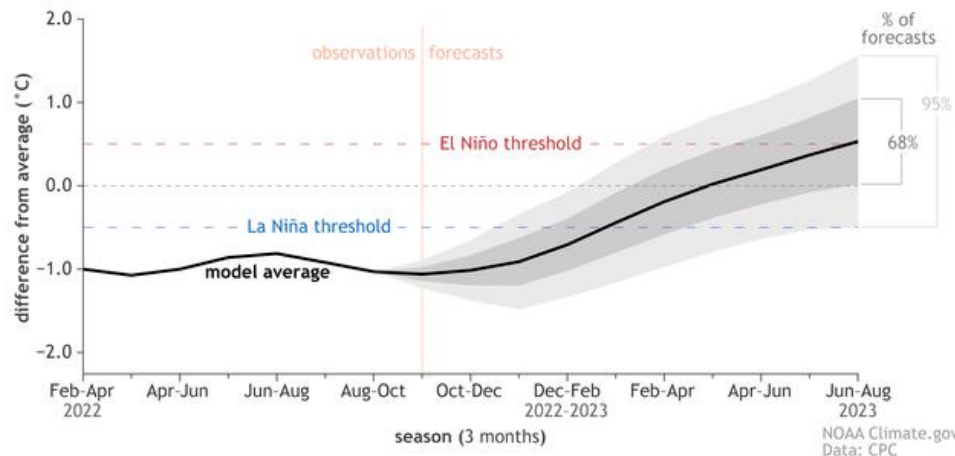
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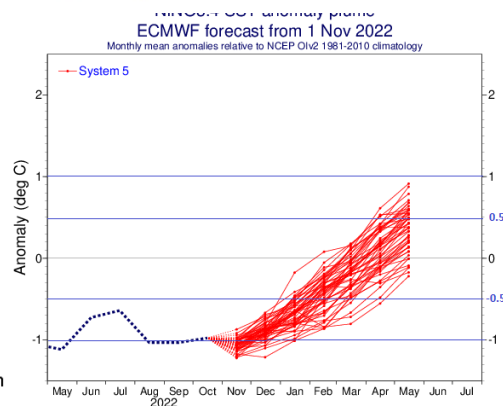
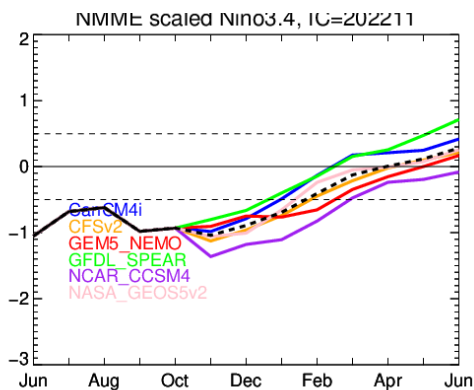
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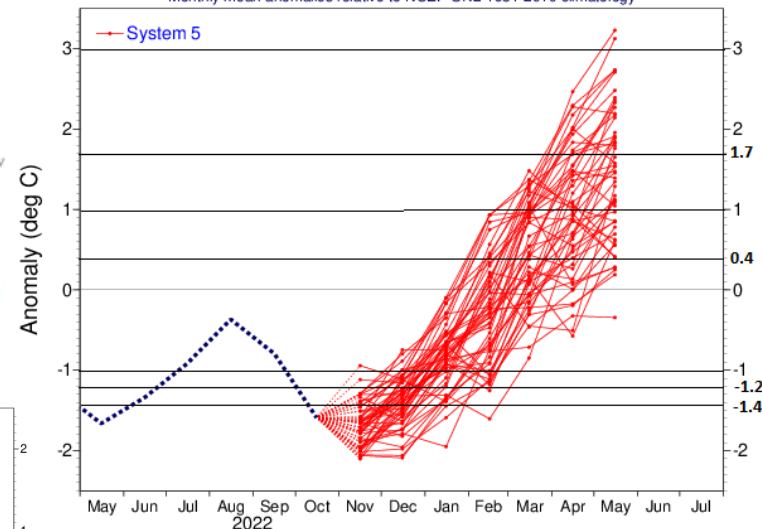
Seasonal forecasts for Niño 3.4-region sea surface temperatures as of November 2022



Climate model forecasts for the Niño-3.4 temperature anomalies in 2022–23. Average dynamical model data (black line) from the **North American Multi-Model Ensemble (NMME)**: darker gray envelope shows the range of 68% of all model forecasts; lighter gray shows the range of 95% of all model forecasts. NOAA Climate.gov image from University of Miami data.



NINO1+2 SST anomaly plume ECMWF forecast from 1 Nov 2022 Monthly mean anomalies relative to NCEP OIv2 1981-2010 climatology



EL NIÑO/SOUTHERN OSCILLATION (ENSO) DIAGNOSTIC DISCUSSION

issued by

CLIMATE PREDICTION CENTER/NCEP/NWS

10 November 2022

ENSO Alert System Status: **La Niña Advisory**

Synopsis: There is a 76% chance of La Niña during the Northern Hemisphere winter (December-February) 2022-23, with a transition to ENSO-neutral favored in February-April 2023 (57% chance).

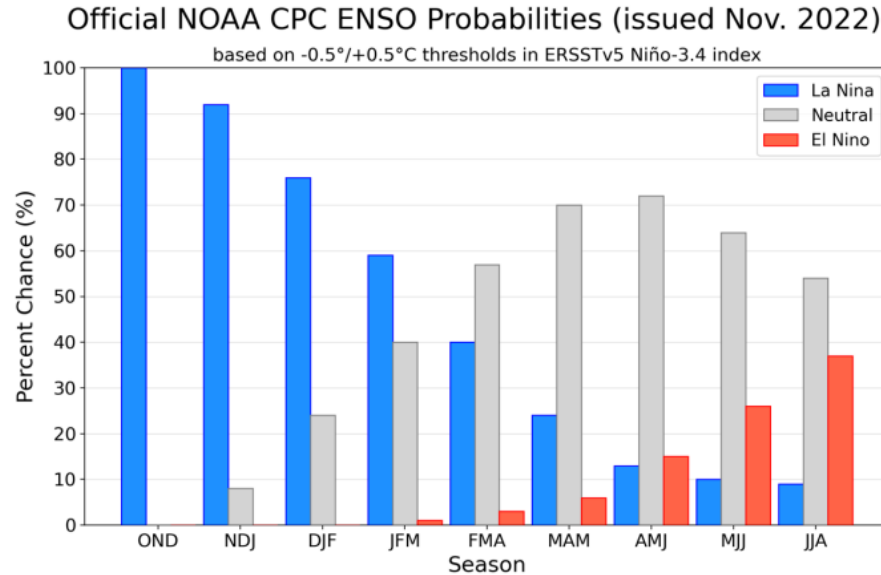


Figure 7. Official ENSO probabilities for the Niño 3.4 sea surface temperature index (5°N - 5°S , 120°W - 170°W). Figure updated 10 November 2022.

GRACIAS!

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HIDROLOGÍA DEL PERÚ**

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