Monthly Regional Focus Group Session

Wednesday 22 September 2021
Sea Surface Temperatures

Anomaly Evolution

Aug 16 - Aug 22

OISST, NOAA NNVL

https://www.nnvl.noaa.gov/view/globaldata.html#SSTA

Daily SST Sep 20

PSL

https://psl.noaa.gov/map/clim/sst.shtml
Are the anomalies deep?

Deep anomalies tend to last longer, becoming useful for subseasonal forecasting.


ENSO: Neutral

ENSO Alert System Status: La Niña Watch
ENSO-neutral conditions are present.*
Equatorial sea surface temperatures (SSTs) are near-to-below average across most of the Pacific Ocean.
ENSO: Oceanic Kelvin Waves

Hovmöller: Heat Content

Equatorial Pacific Temp. Anomaly

Source: CPC
A transition from ENSO-neutral to La Niña is favored in the next couple of months, with a 70-80% chance of La Niña during the Northern Hemisphere winter 2021-22.*
Madden-Julian Oscillation (MJO)

CPC Analysis:
• Wave-1 of the MJO continues
• Upper divergent (wet) in the Maritime Continent
• Upper convergent (dry) over the Americas
• Increasing evidence of limited propagation
Upper convergent pattern to continue dominating the Americas through Oct 5-10 (GFS, CFS, ECMWF), with weak Kelvin wave activity over the Americas.

Less upper convergence by mid-October? Unclear...
Tropospheric Equatorial Waves

- Upper convergent (drier) pattern continues dominant
- Kelvin Wave Sep 22-25
- Second Kelvin Wave/weak MJO for early October (3-5).
Last Week’s Circulation and Rainfall – Tropical Americas

Rainfall

CMORPH: CPC Morphing Technique
https://www.cpc.ncep.noaa.gov/products/janowiak/cmorph_description.html
Last Week’s Circulation and Rainfall – South America

Rainfall

CMORPH: CPC Morphing Technique
https://www.cpc.ncep.noaa.gov/products/janowiak/cmorph_description.html
¡Gracias!
Thank you!
Hail / Severe Weather Event in Uruguay (Sep 12-13)

BRIEF ANALYSIS OF MODEL GRIDS: 12 UTC Sep 13

- 60-70kt LLJ in Bolivia
- Upper jets coupled in divergent side
- Short Wave Upper Trough
- PWAT Percent of Normal > 200%

250 hPa Winds

850 hPa Winds

Courtesy: Nestor Santayana (INUMET)
Hail / Severe Weather Event in Uruguay

- PWAT Percent of Normal > 200%
- ALPW: Moist plumes at different levels
Hail / Severe Weather Event in Uruguay

Geocolor (Night) and GLM Total Optical Energy
Hail / Severe Weather Event in Uruguay

Nocturnal Microphysics RGB and GLM Total Optical Energy
Hail / Severe Weather Event in Uruguay

Band 10.3 um (Band 13)