

Global Tropics Hazards And Benefits Outlook

11/26/2021

Adam Allgood

Outline

1. Review of Recent Conditions
2. Synopsis of Climate Modes
3. GTH Outlook and Forecast Discussion
4. Connections to U.S. Impacts

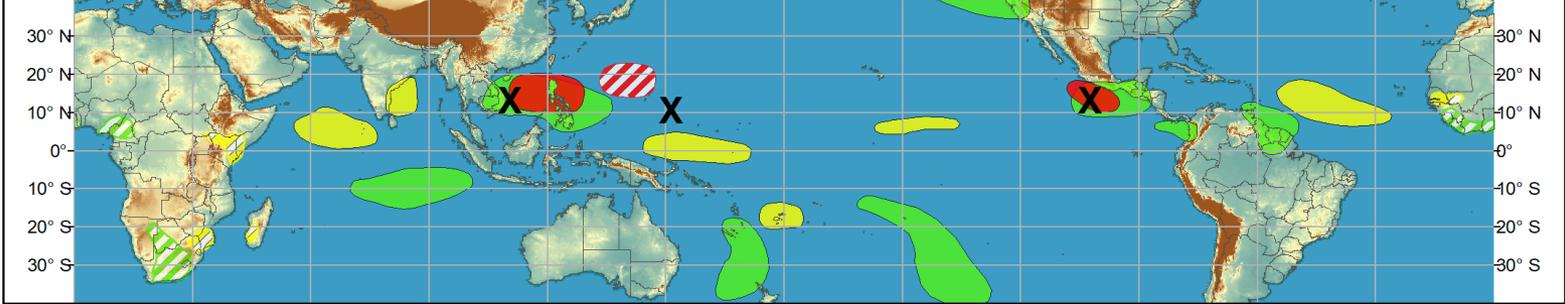
Outlook Review



Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



Week 1 - Valid: Oct 20, 2021 - Oct 26, 2021



Week 2 - Valid: Oct 20, 2021 - Oct 26, 2021

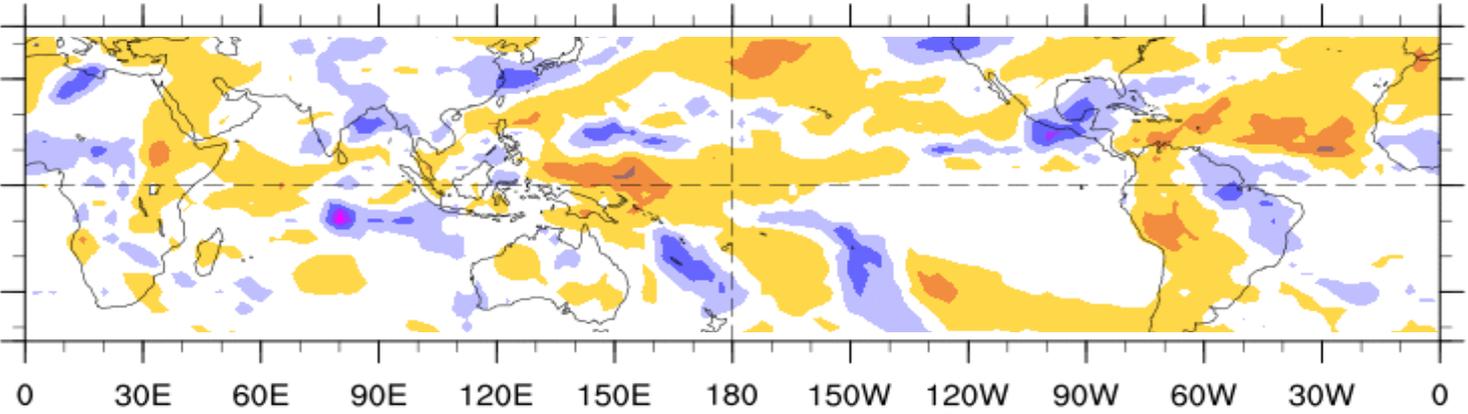


7-Day Average OLR Anomaly

2021/10/18 - 2021/10/24

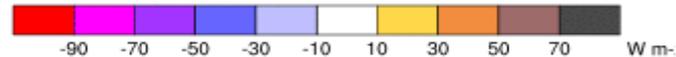
Cool shading
More clouds/rain

Warm shading
Less clouds/rain



NOAA/PSL

Base Period: 1981-2010



Synopsis of Climate Modes

ENSO: (September 10, 2020 Update)

next update on 11th of Nov.!

- ENSO Alert System Status: [La Niña Advisory](#)
- La Niña conditions have developed and are expected to continue with an 87% chance of La Niña in December 2021- February 2022.

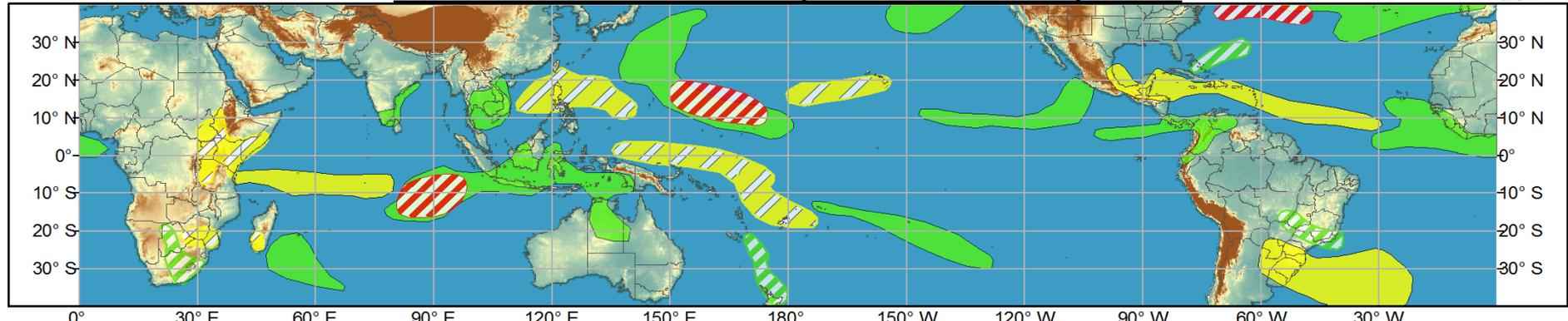
MJO and other subseasonal tropical variability:

- The MJO remained weak over the past week, following destructive interference with the La Niña base state.
- Enhanced convection has developed over the eastern Indian Ocean, and dynamical models favor a slow eastward evolution back towards the base state over the next few weeks.
- Western Hemisphere/I.O. enhancement may provide some opportunity for late season Atlantic tropical cyclone development.
- The MJO is not anticipated to influence the midlatitude pattern; however, recurving Pacific tropical cyclones (e.g., TS Malou) may play a role in a North America pattern change.

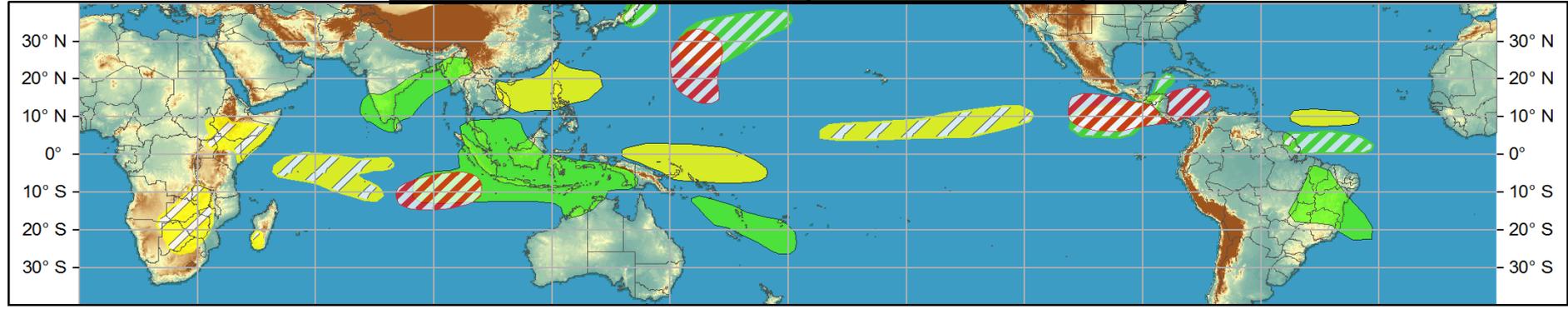


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Week 2 - Valid: Nov 03, 2021 - Nov 09, 2021



Produced: 10/26/2021

Forecaster: Allgood

Confidence		
High	Moderate	
		Tropical Cyclone Formation Development of a tropical cyclone (tropical depression - TD, or greater strength).
		Above-average rainfall Weekly total rainfall in the upper third of the historical range.
		Below-average rainfall Weekly total rainfall in the lower third of the historical range.
		Above-normal temperatures 7-day mean temperatures in the upper third of the historical range.
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IR Satellite & 200-hpa Velocity Potential Anomalies

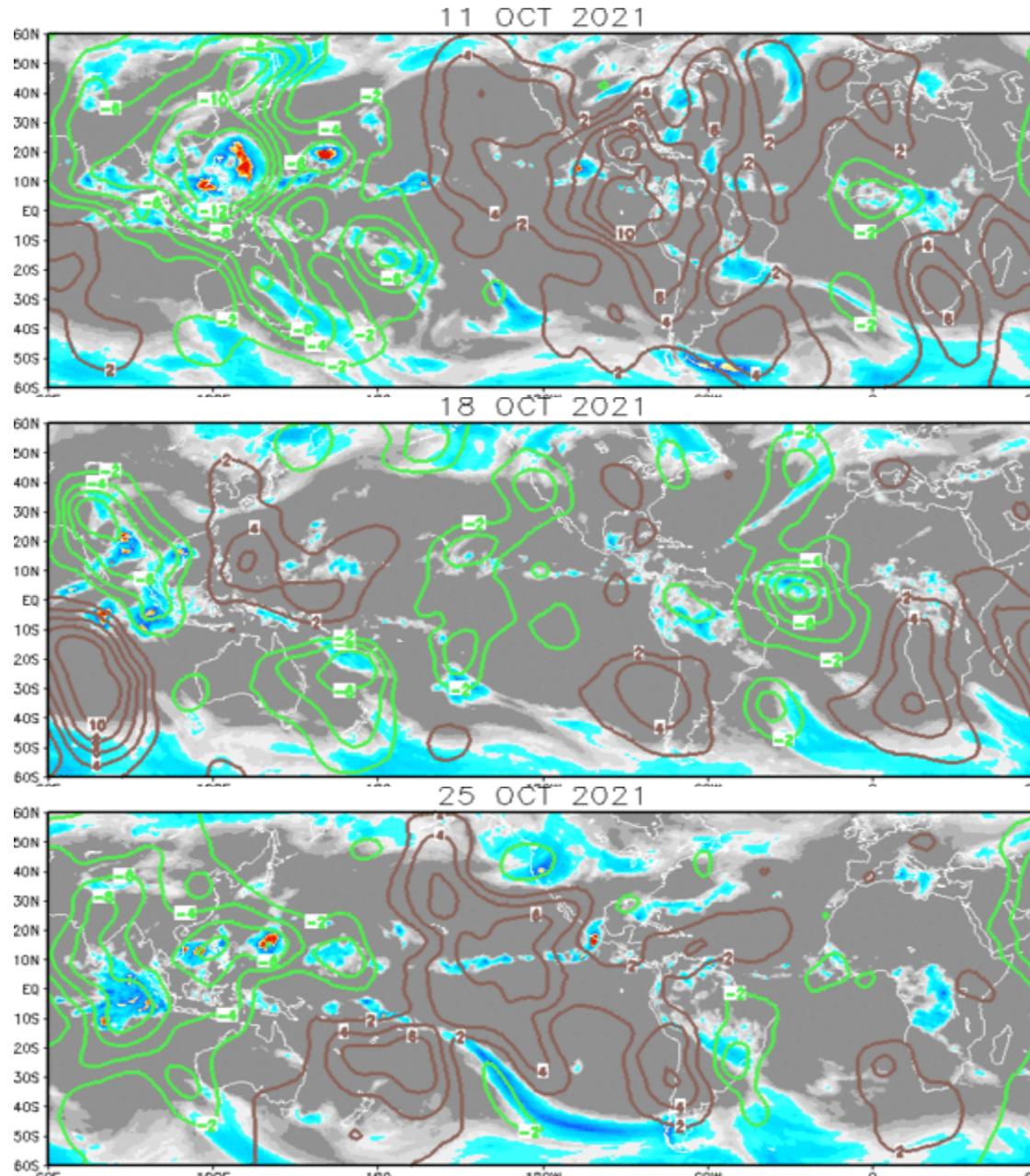
Green: Enhanced Divergence

Brown: Enhanced Convergence

Fairly coherent subseasonal signal, with the enhanced phase entering the West Pacific.

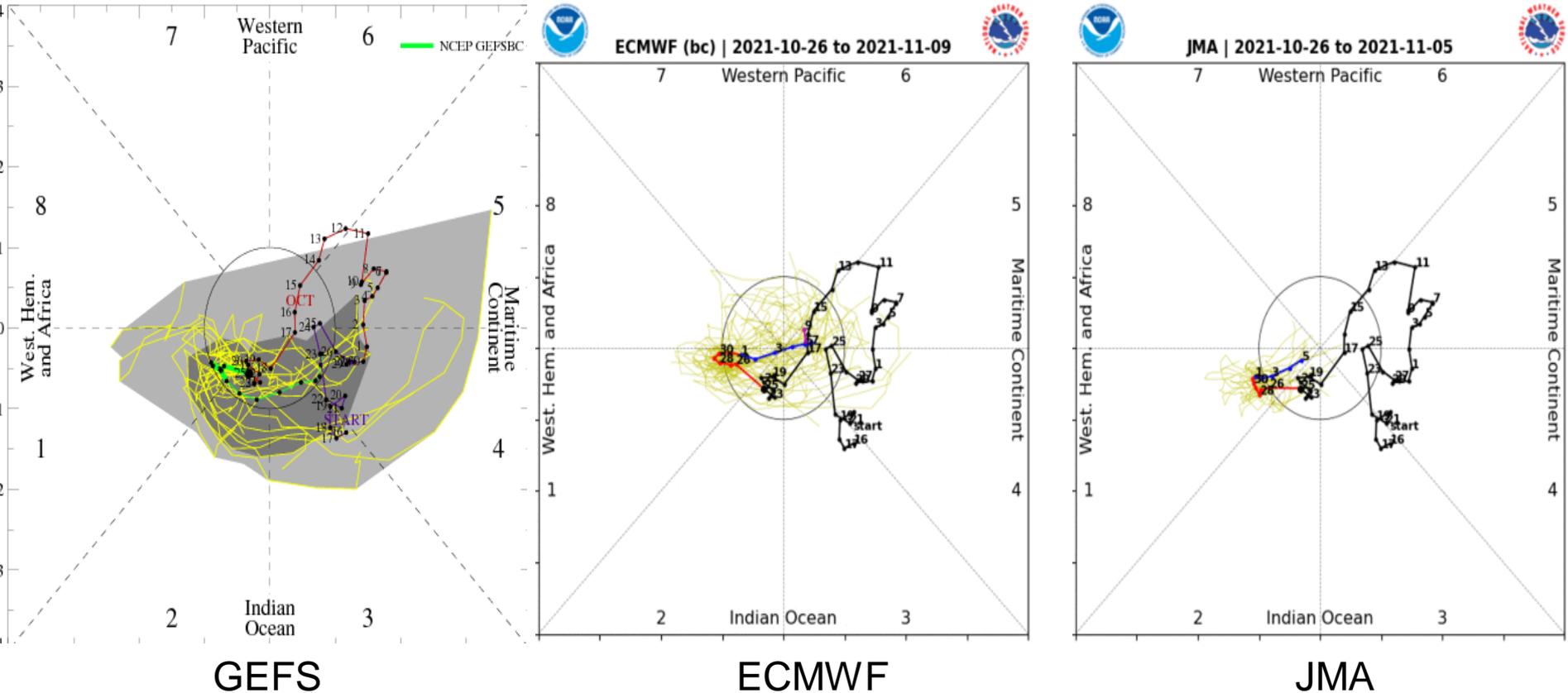
Rapid weakening during mid-October as the enhanced phase destructively interfered with the base state (La Niña). Rossby wave activity over the I.O.

A larger-scale signal has recently redeveloped over the eastern Indian Ocean.



MJO Observation/Forecast

[RMM1, RMM2] forecast for Oct-26-2021 to Nov-09-2021



GEFS and ECWMF both show some amplification towards Africa, followed by a return towards the base state (enhanced Maritime Continent) during Week-2.

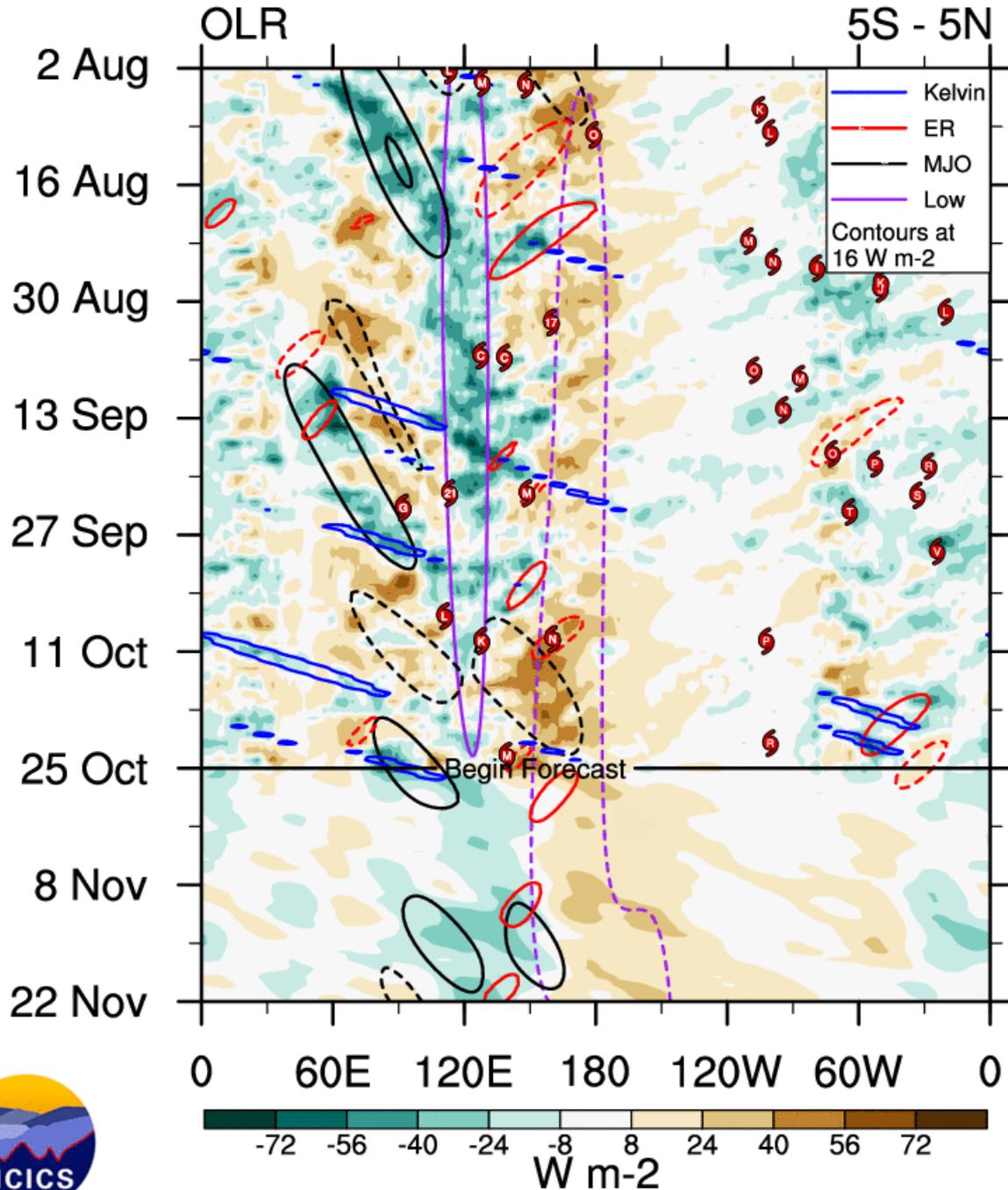
There is a fairly large spread among the ensemble members.

The ECMWF depicts a weaker pattern overall compared to the GEFS.

MJO activity coming through the filtering near 120E is out of phase with the prior event in late September.

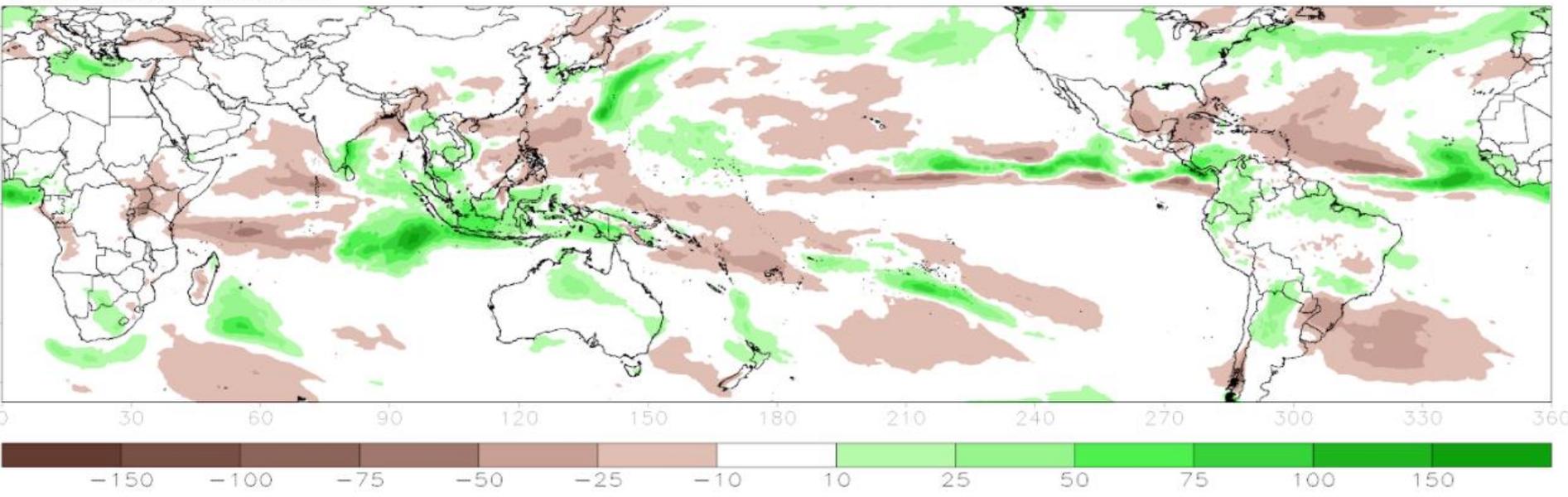
Kelvin wave activity over the East Pacific may have helped the formation of Hurricane Rick.

Low frequency contours depict ENSO cold conditions.



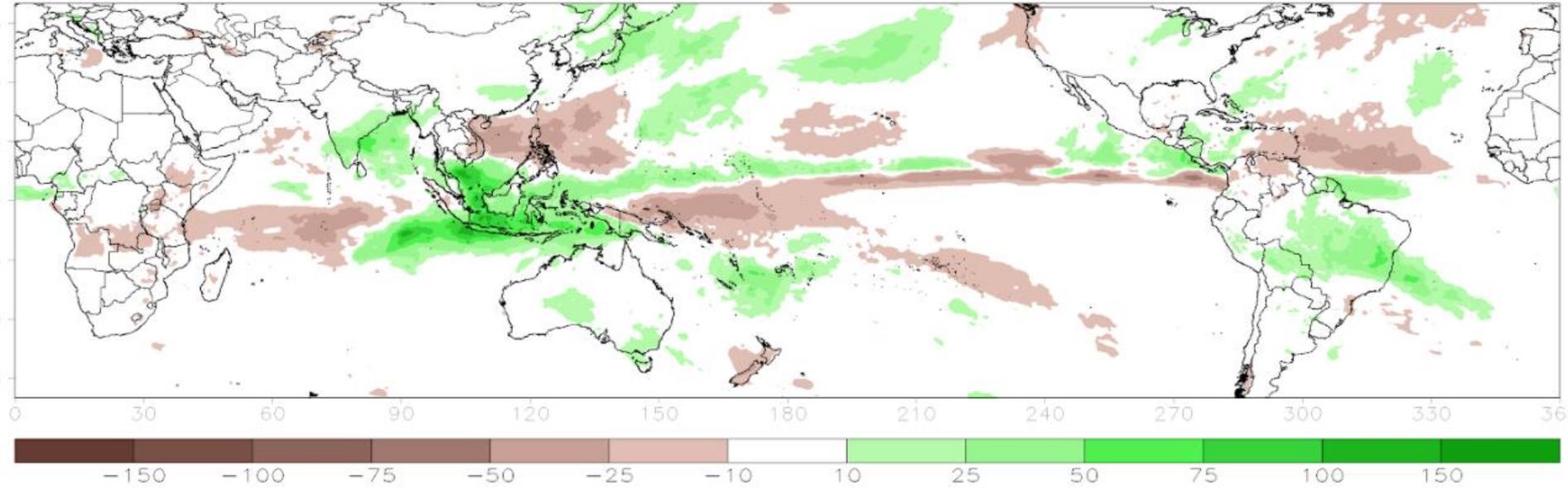
GEFSv12 00z Ensemble Mean: Week1 Total Rainfall Anomaly (mm)

Valid: 27Oct2021-02Nov2021



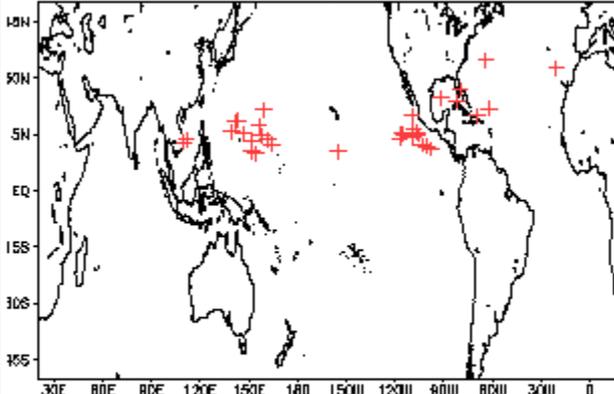
GEFSv12 00z Ensemble Mean: Week2 Total Rainfall Anomaly (mm)

Valid: 03Nov2021-09Nov2021

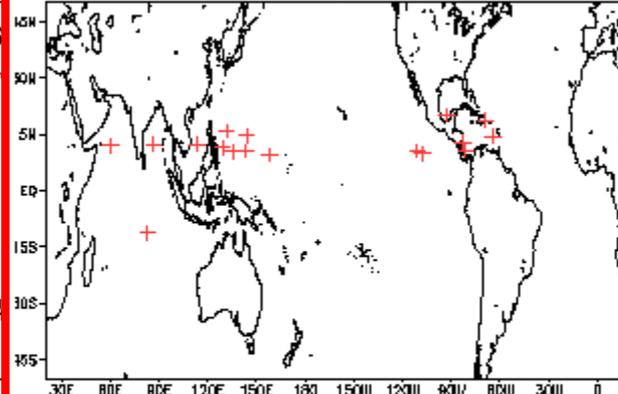


October Tropical Storm Formation by MJO phase

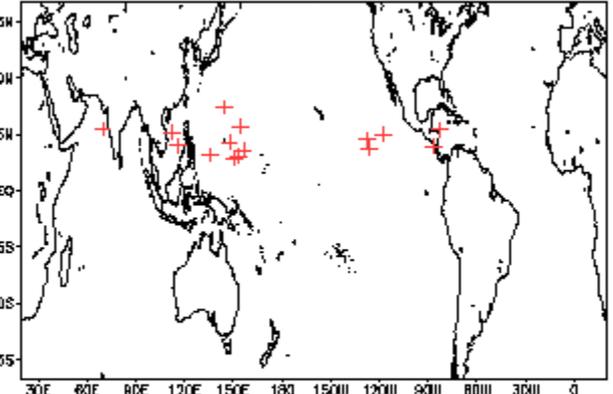
Phase 1 (94 days) 34 storms



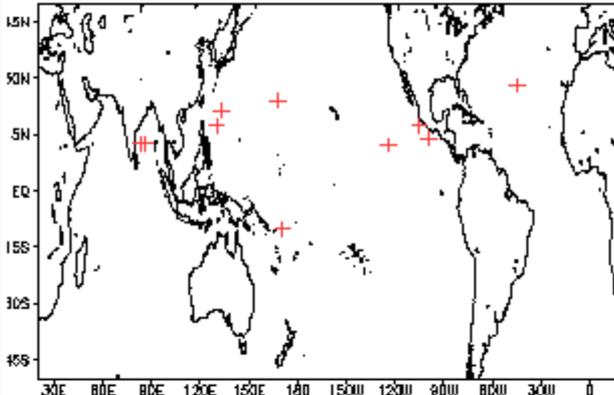
Phase 4 (85 days) 18 storms



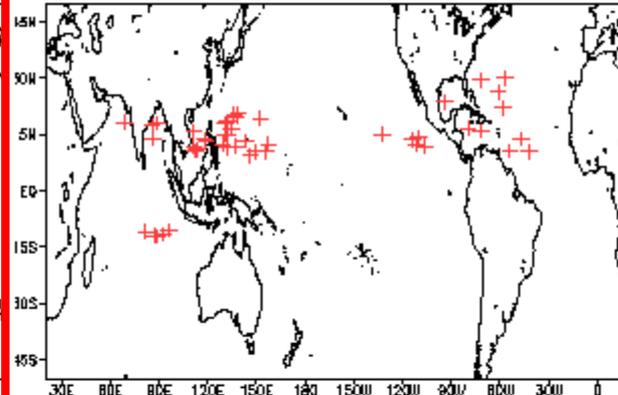
Phase 7 (48 days) 16 storms



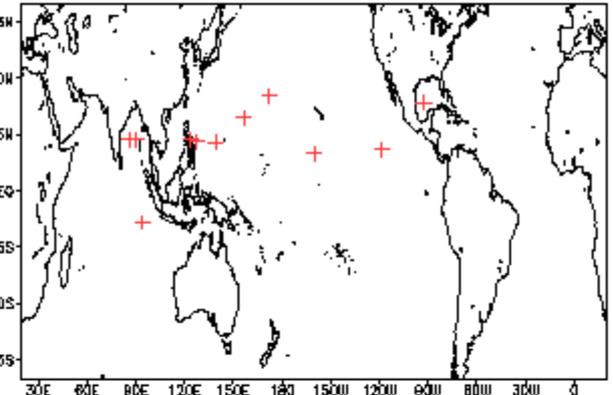
Phase 2 (75 days) 11 storms



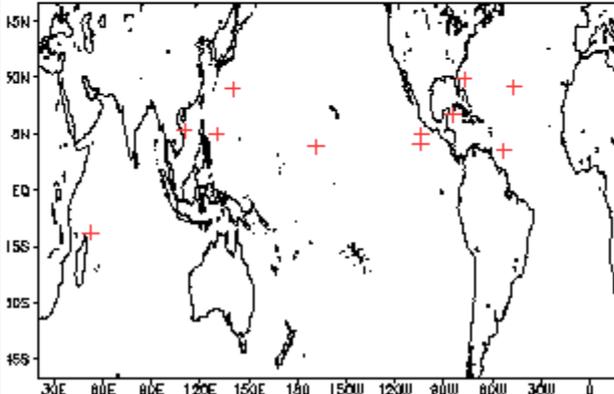
Phase 5 (133 days) 48 storms



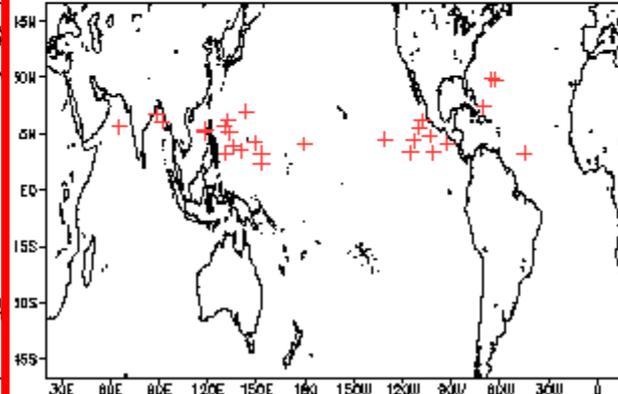
Phase 8 (66 days) 12 storms



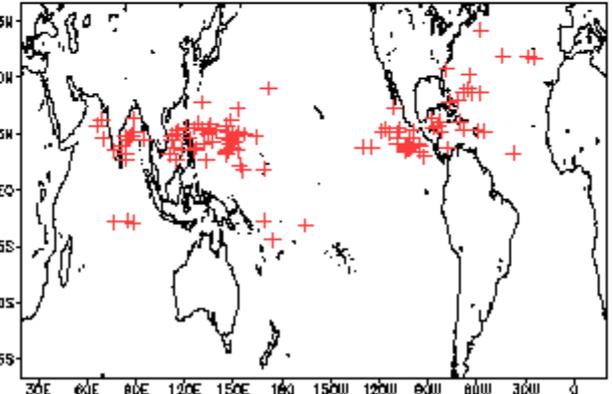
Phase 3 (41 days) 12 storms



Phase 6 (78 days) 30 storms



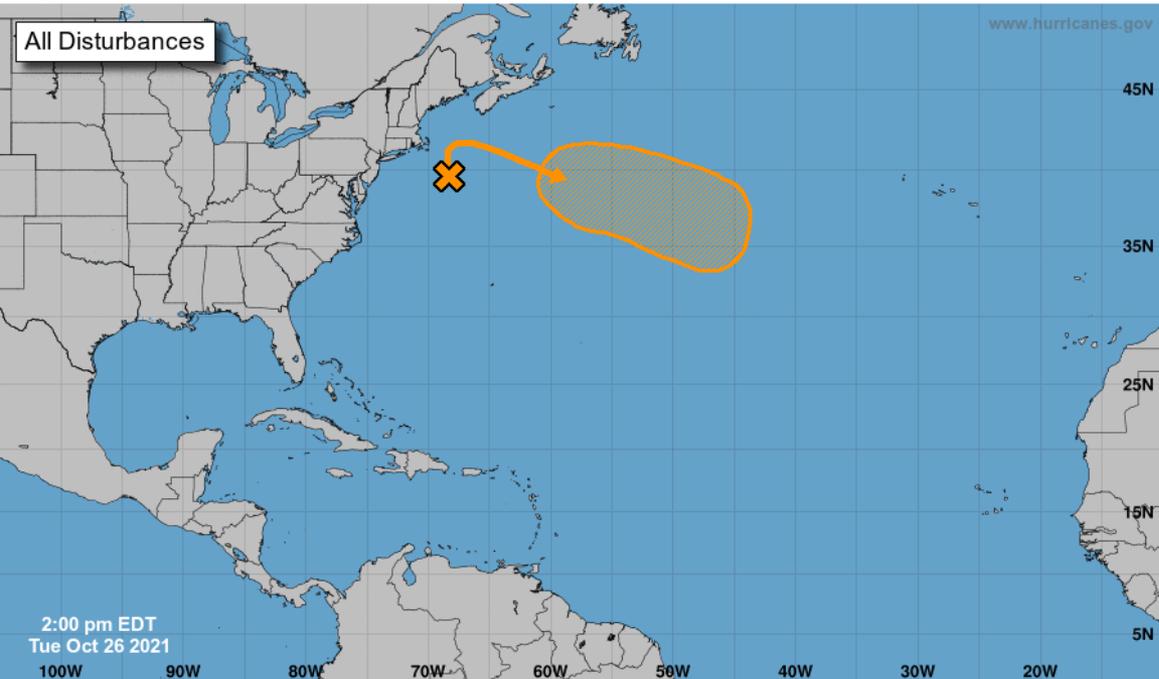
Null (422 days) 119 storms





Five-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida



Current Disturbances and Five-Day Cyclone Formation Chance: < 40% 40-60% > 60%

Tropical or Sub-Tropical Cyclone: Depression Storm Hurricane

Post-Tropical Cyclone or Remnants

Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida



No new tropical cyclones are expected during the next five days.

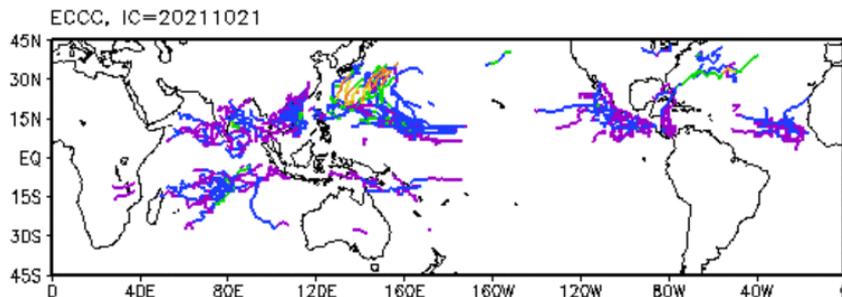
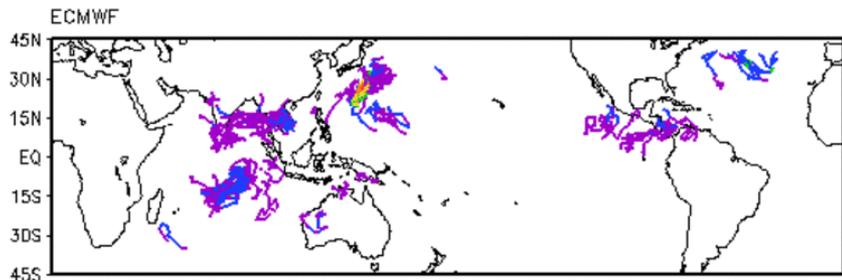
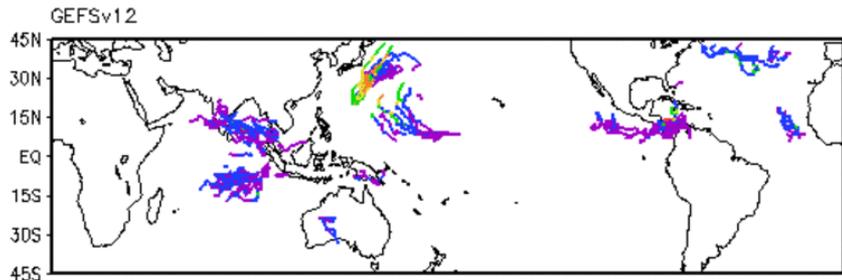
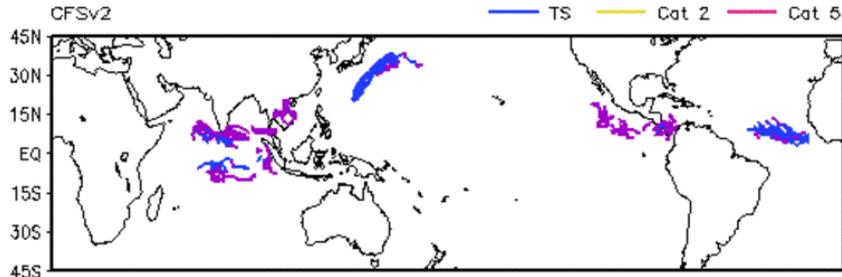
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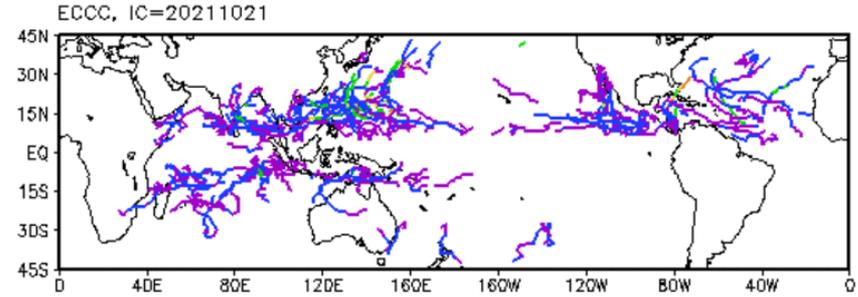
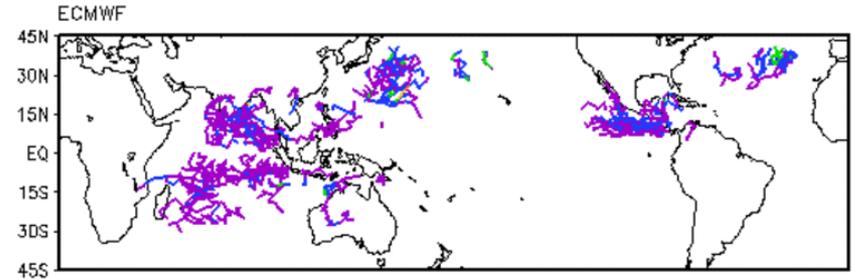
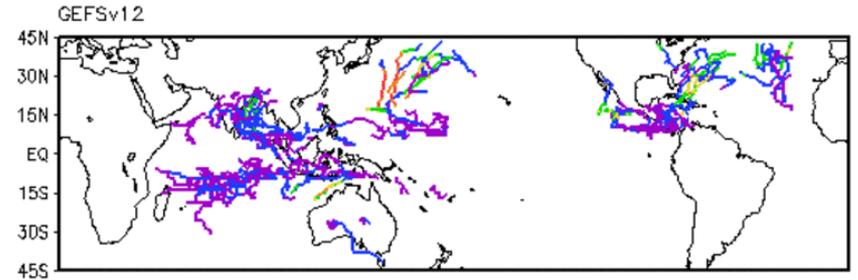
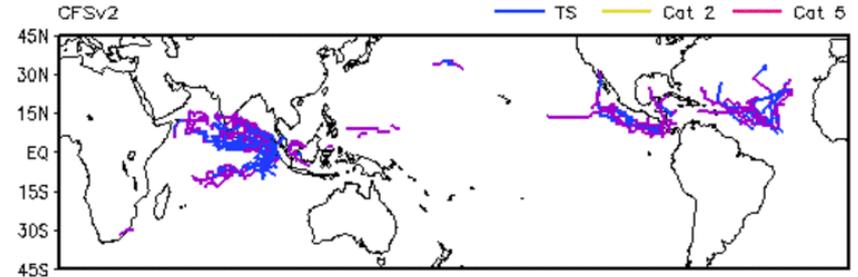
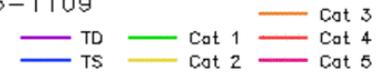
Tropical Cyclone Storm Tracks, IC=20211025

Week 1: 1027-1102



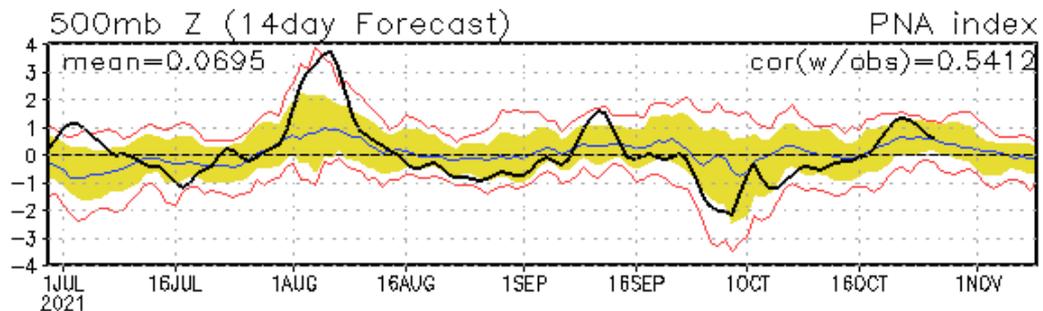
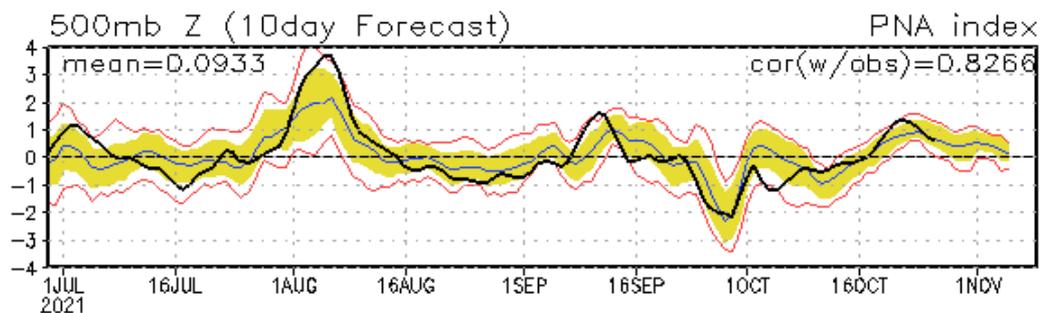
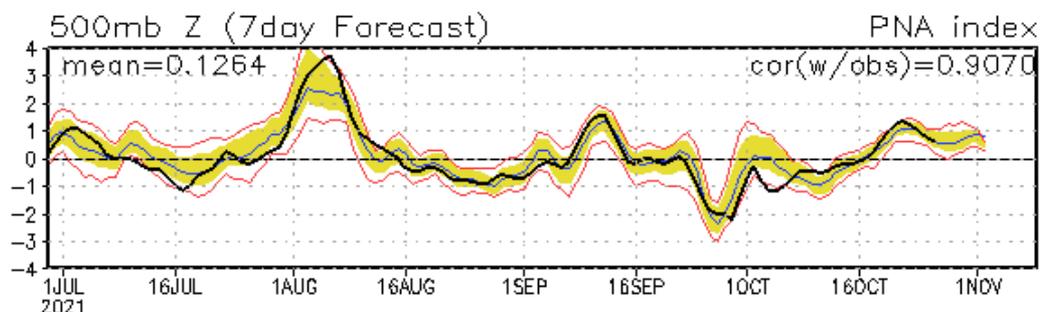
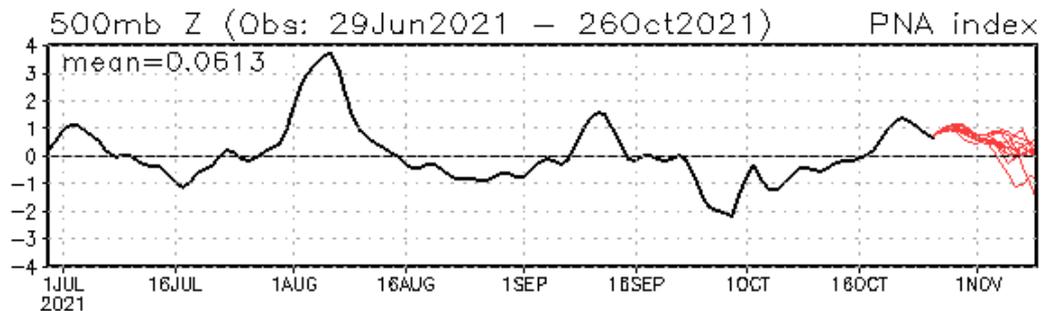
Tropical Cyclone Storm Tracks, IC=20211025

Week 2: 1103-1109

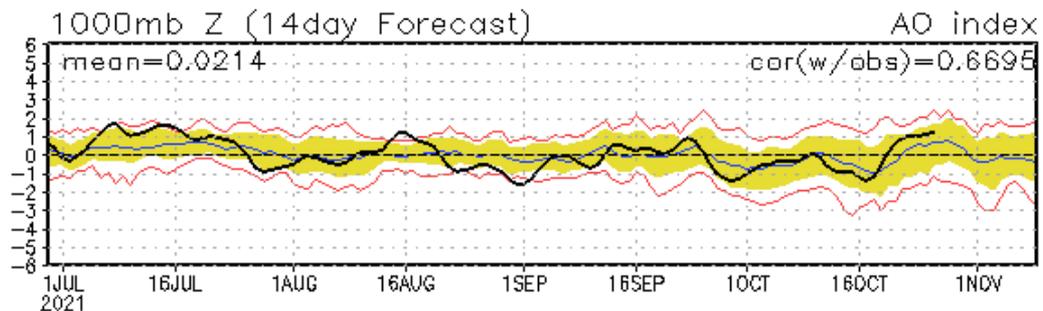
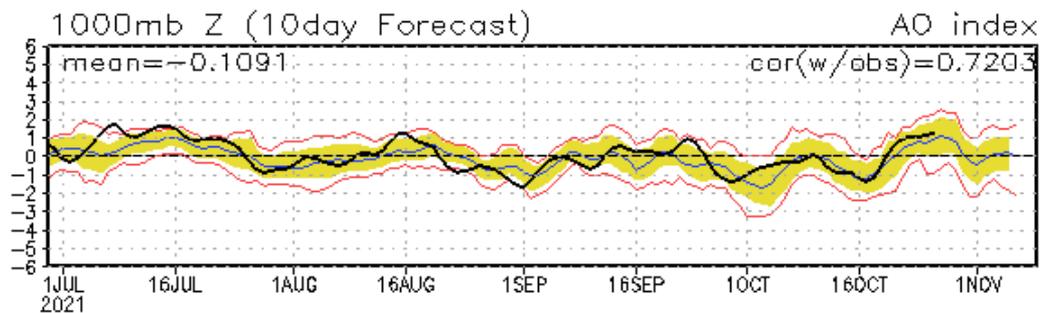
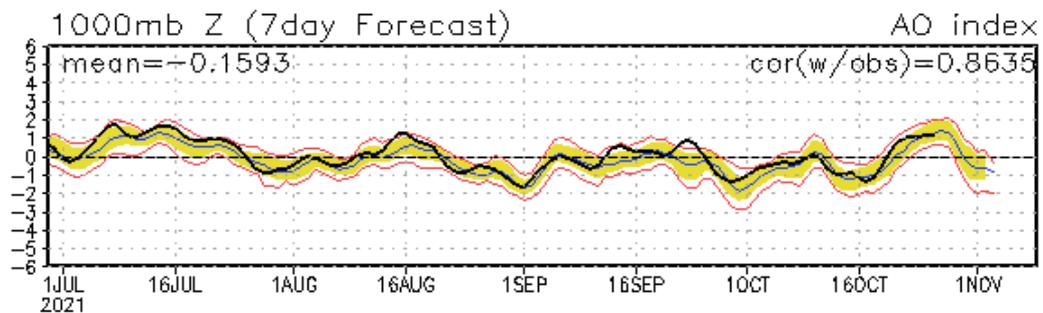
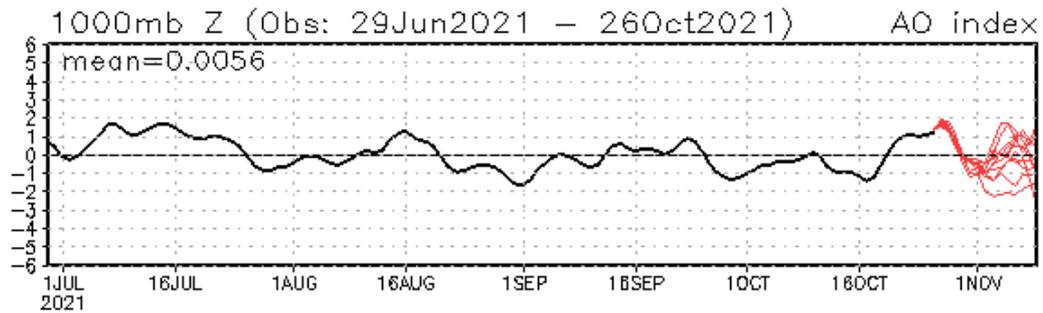


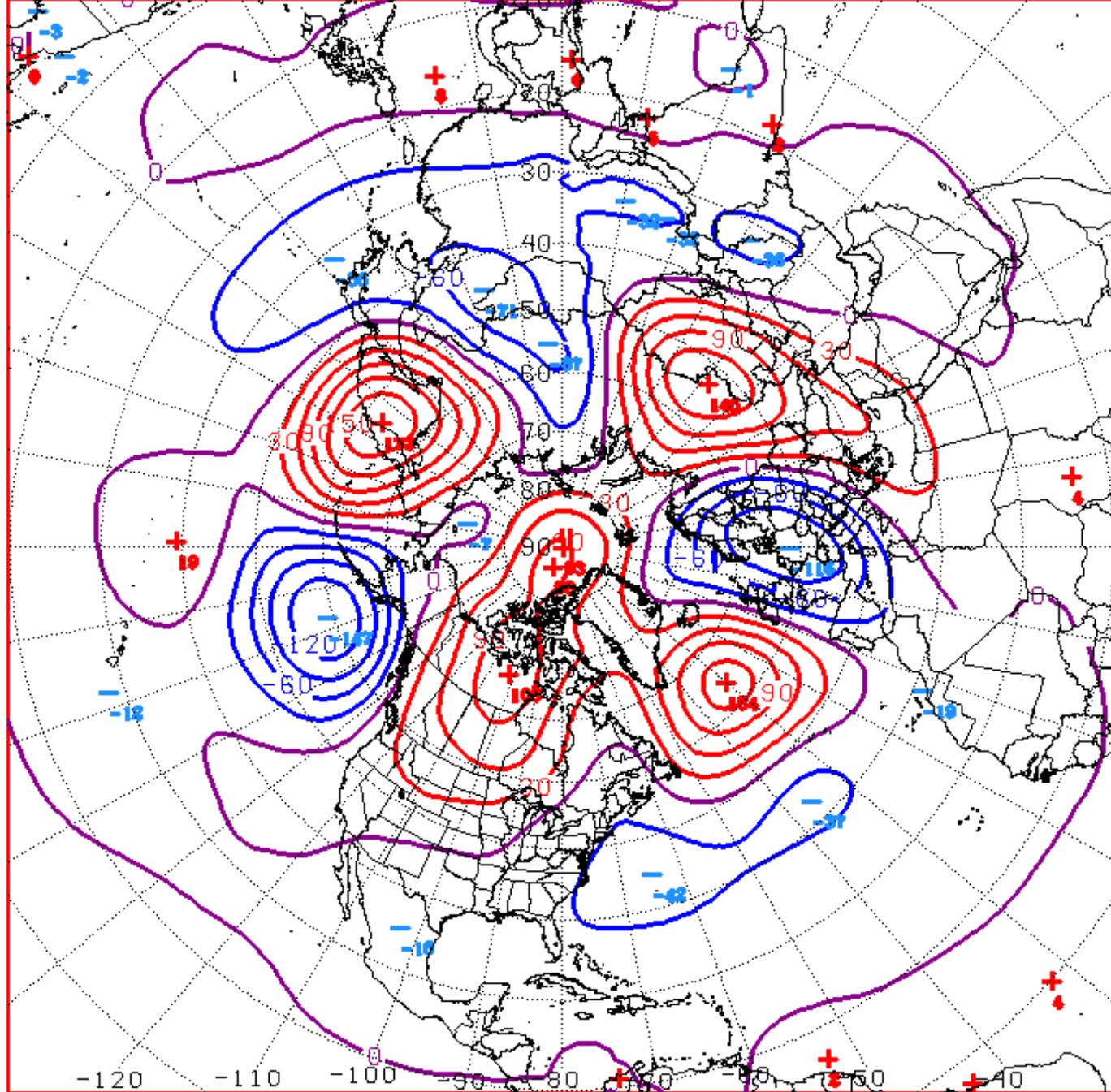
Connections to U.S. Impacts

PNA: Observed & ENSM forecasts



AO: Observed & ENSM forecasts





D+11 500 MB ANOMALIES FROM ALZ ENSM
 CPC MAP MADE OCT 26 2021 1357 UTC CNTD NOV 06 2021

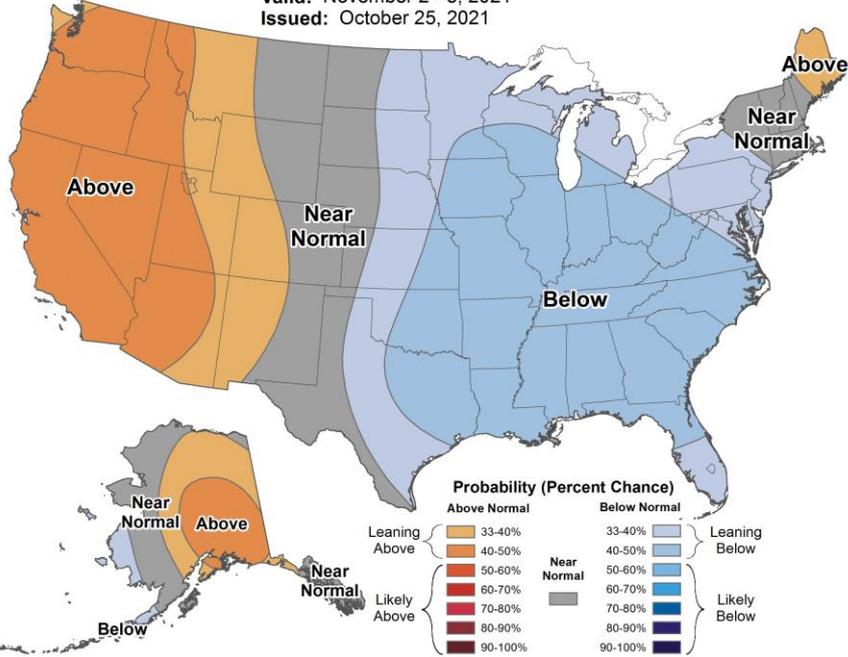
Week 2 – Temperature and Precipitation



8-14 Day Temperature Outlook



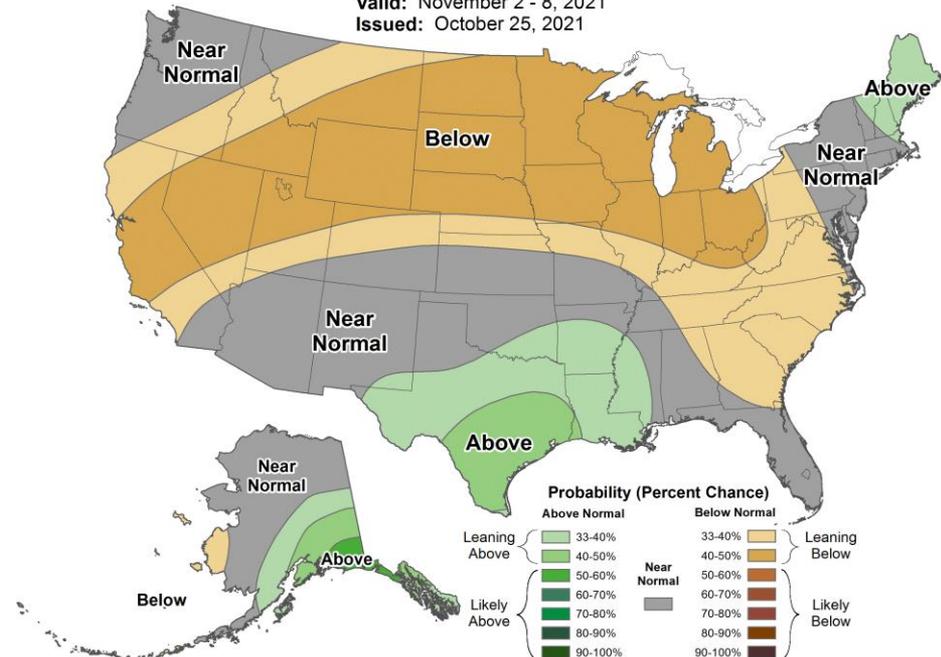
Valid: November 2 - 8, 2021
 Issued: October 25, 2021



8-14 Day Precipitation Outlook



Valid: November 2 - 8, 2021
 Issued: October 25, 2021

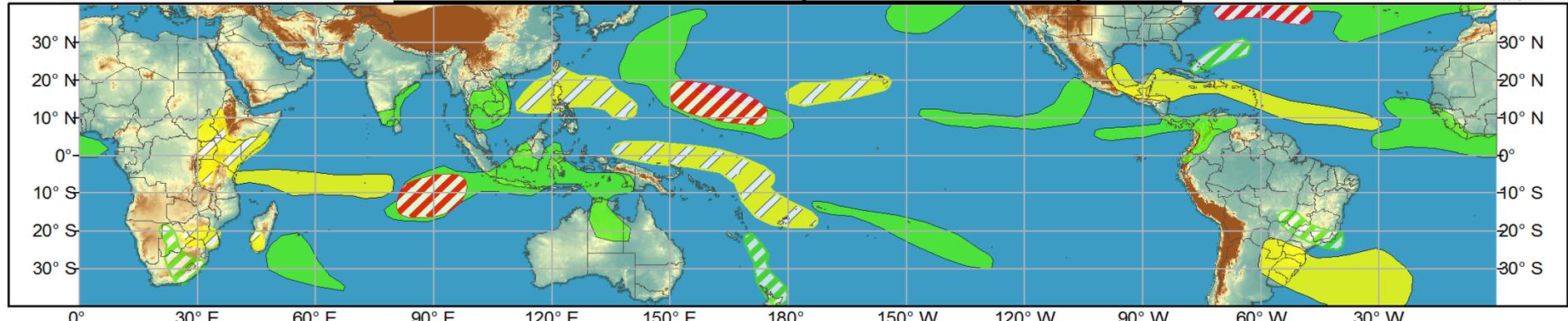


Since we are in an amplified, stable pattern today's outlooks are likely to be similar.

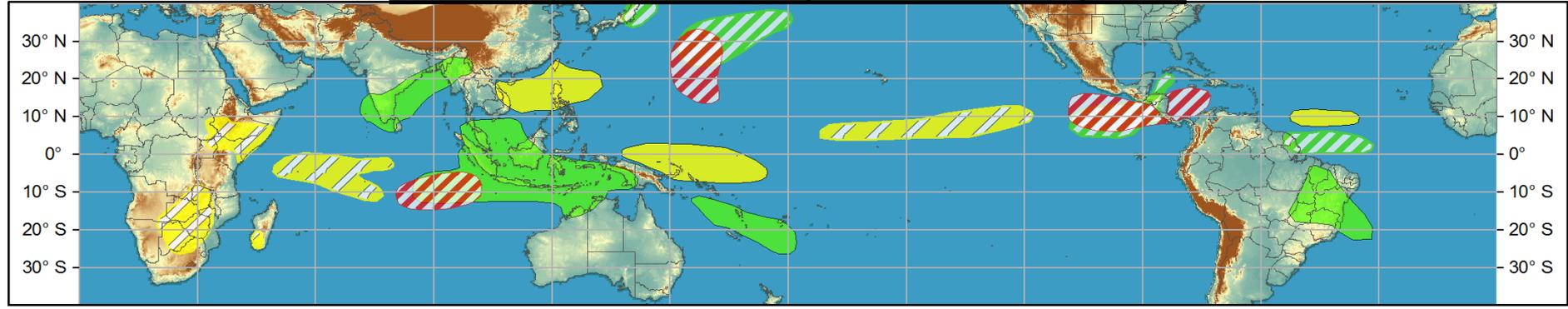


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