



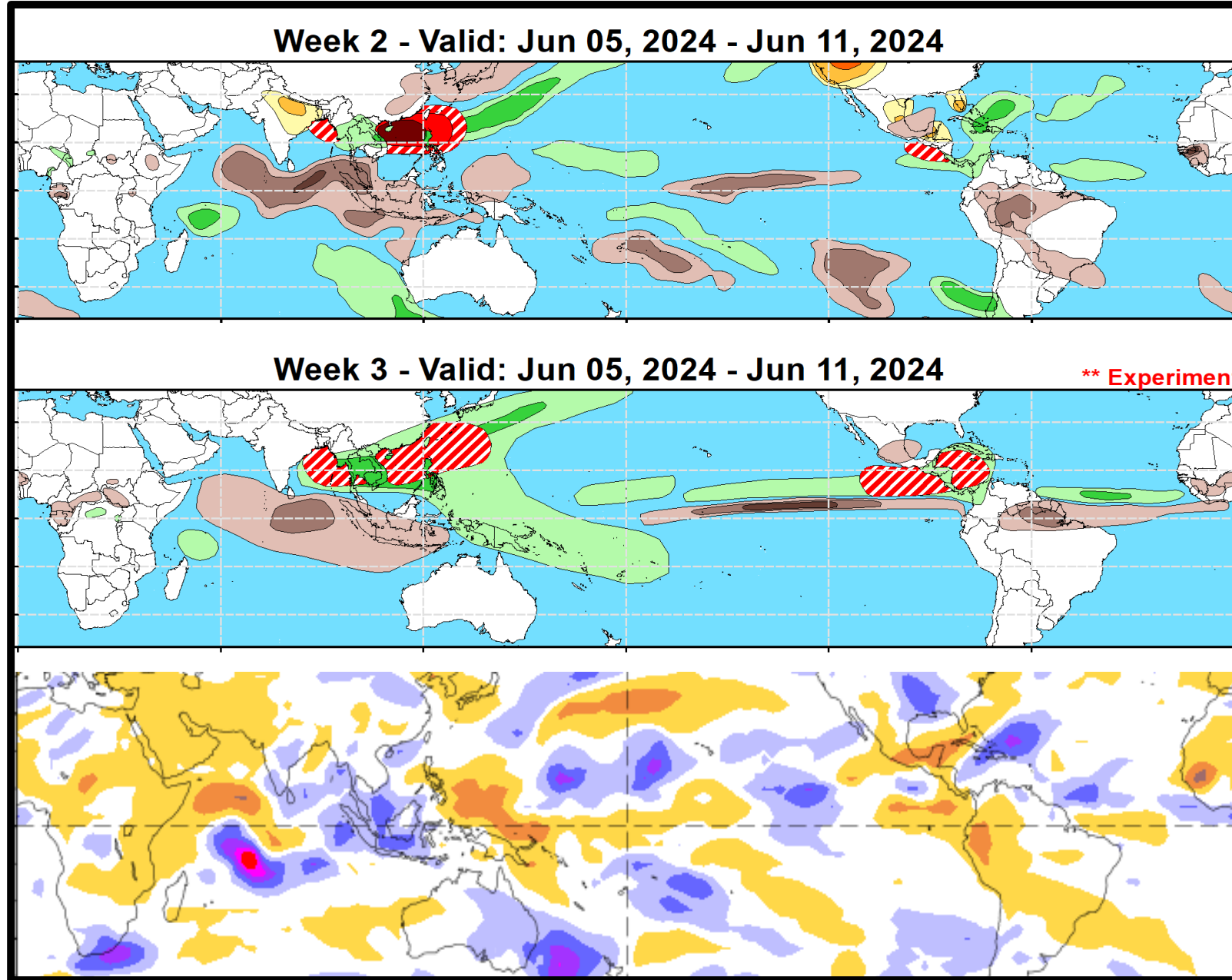
Weeks 2-3 Global Tropics Hazards Outlook

6/11/2024

Danny Barandiaran
NWS / NCEP / Climate Prediction Center

Outlook Review: TC development & anomalous precipitation during the past week

- No TCs this week



Synopsis of Climate Modes:

ENSO: (May 9, 2024 Update) *next update on Thursday, Jun 13th*

- ENSO Alert System Status: [El Niño Advisory](#) / [La Niña Watch](#)
- A transition from El Niño to ENSO-neutral is likely in the next month. La Niña may develop in June-August (49% chance) but more likely by July-September (69% chance).

MJO and other subseasonal tropical variability:

- The RMM index has continued to weaken over the last week, with the RMM index currently near the center of the unit circle.
- Interference from the evolving Pacific base state and frequent Rossby wave activity appear to be weakening the intraseasonal signal.
- Dynamical models depict a weak signal over the next few weeks, though the GEFS favors a coherent eastward propagation of the weak signal across the Pacific to the Western Hemisphere.

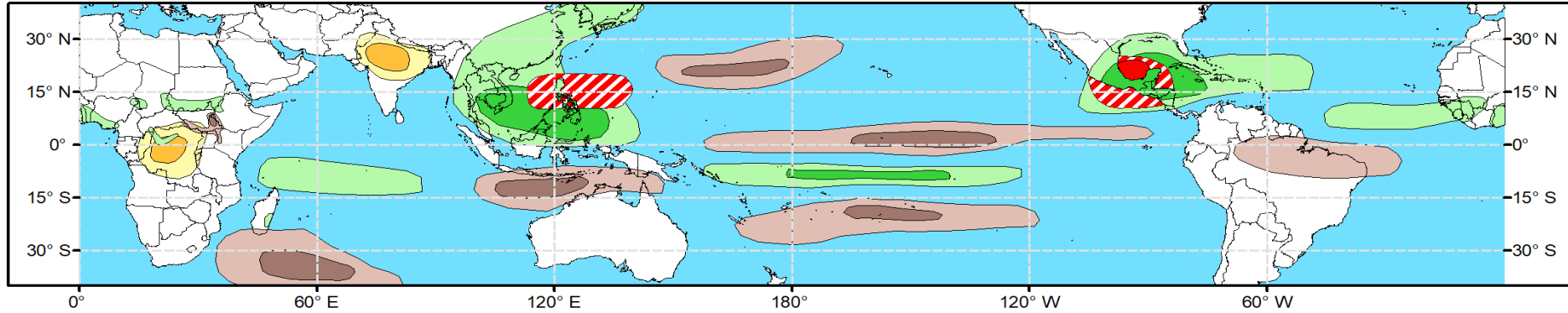
GTH Outlook:



Global Tropics Hazards Outlook Climate Prediction Center

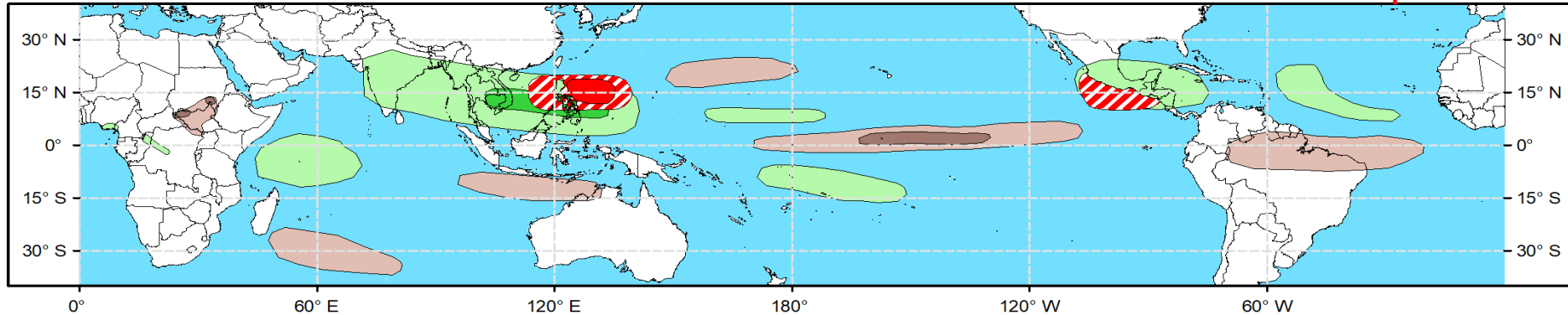


Week 2 - Valid: Jun 19, 2024 - Jun 25, 2024



Week 3 - Valid: Jun 26, 2024 - Jul 02, 2024

**** Experimental ****



**Tropical Cyclone (TC)
Formation Probability**



>20% >40% >60%

*Tropical Depression (TD)
or greater strength*

**Above-Average
Rainfall Probability**



>50% >65% >80%

*Weekly total rainfall in the
Upper third of the historical range*

**Below-Average
Rainfall Probability**



>50% >65% >80%

*Weekly total rainfall in the
Lower third of the historical range*

**Above-Average
Temperatures Probability**



>50% >65% >80%

*7-day max temperatures in the
Upper third of the historical range*

**Below-Average
Temperatures Probability**



>50% >65% >80%

*7-day min temperatures in the
Lower third of the historical range*

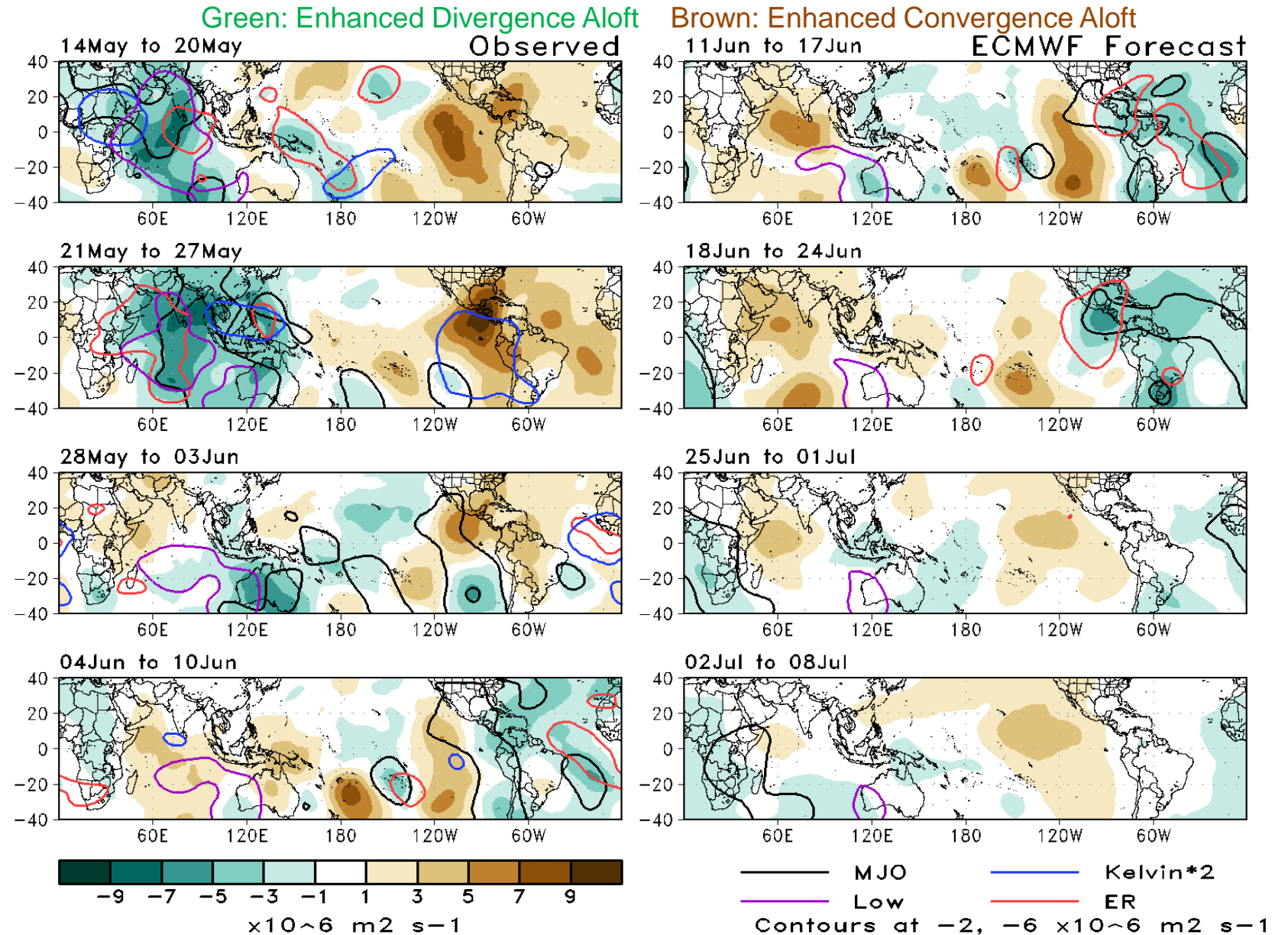
Issued: 06/11/2024

Forecaster: Barandiaran

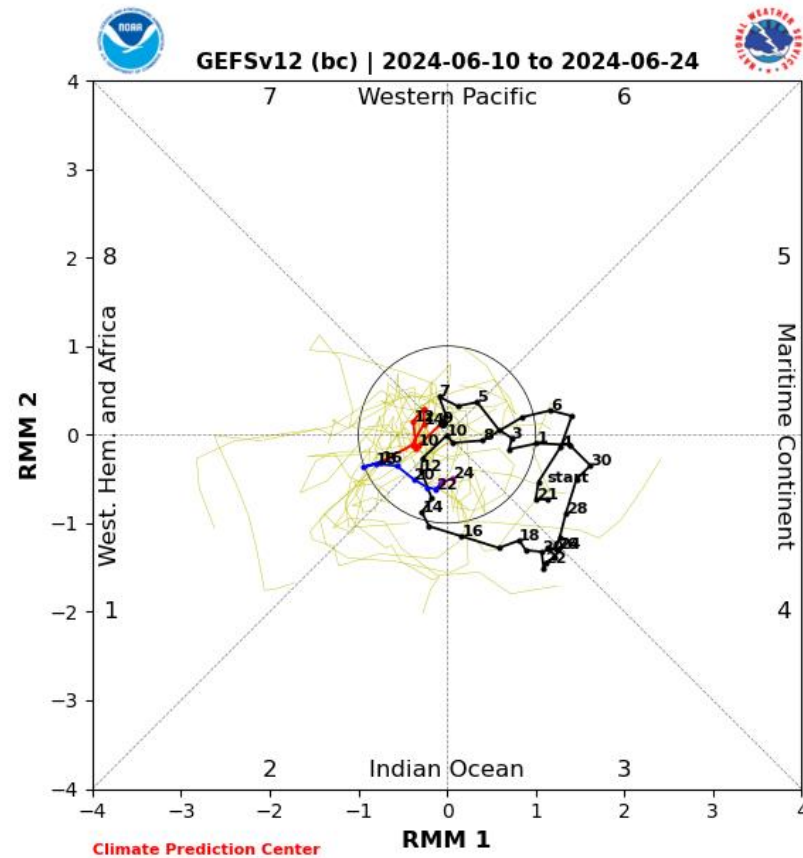
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200-hPa Velocity Potential Anomaly Maps:

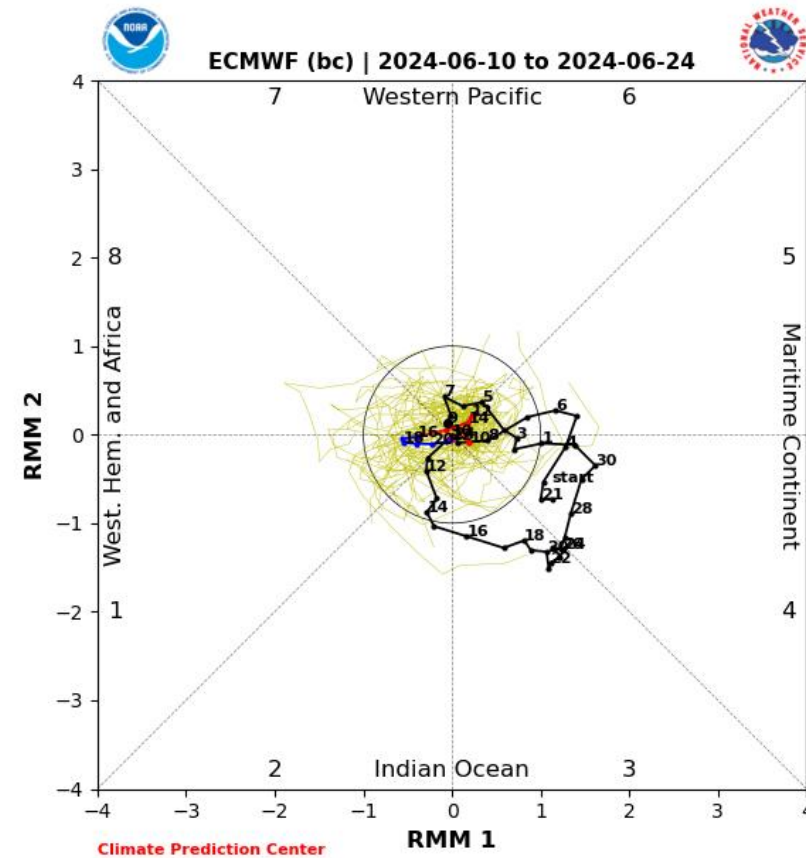
- As May came to a close the MJO went from a fairly high amplitude to a much weaker state. Wave-1 symmetry has become less defined.
- Model solutions generally favor a continuance of this weakened state of the MJO for the next several weeks.



MJO Index: Forecast Evolution



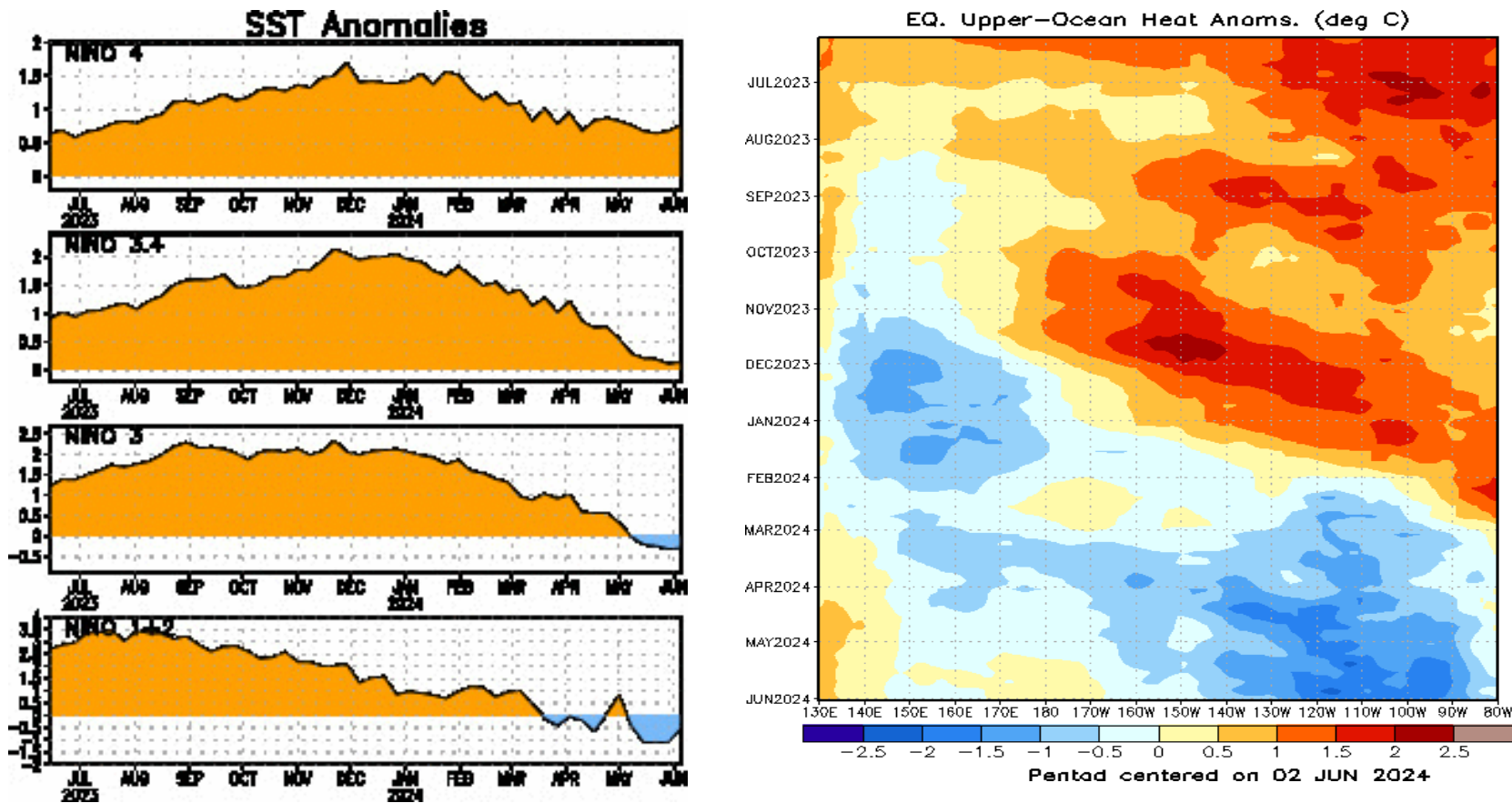
GEFS Forecast



ECMWF Forecast

- The ECMWF and GEFS (as well as most other operational models) favor a continuation of very weak RMM index and therefore MJO activity over the coming weeks.

SSTs and Weekly Heat Content Evolution in the Equatorial Pacific

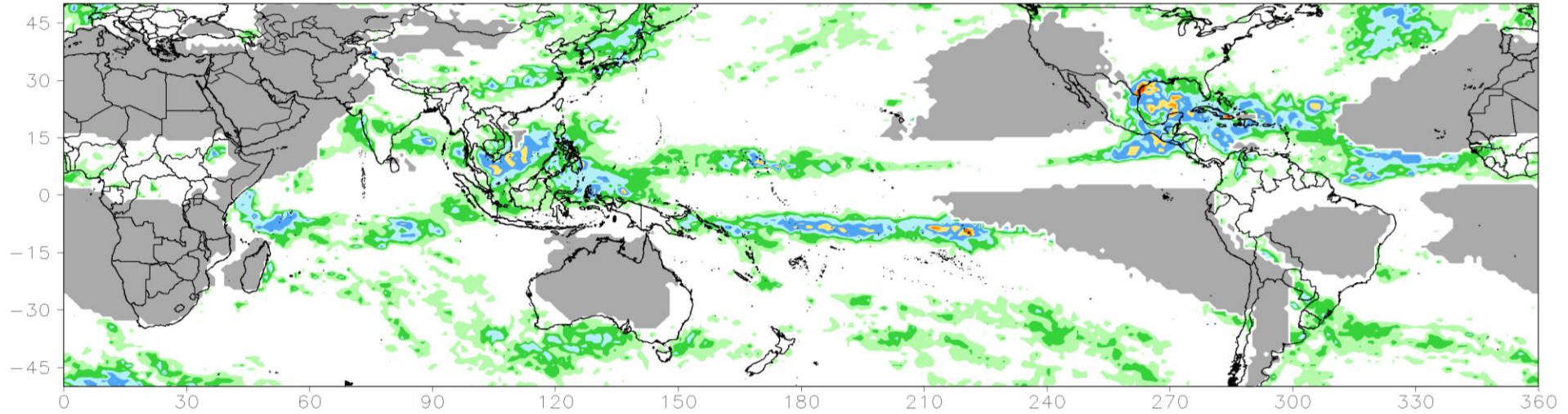


- SSTs in the easternmost Niño regions continue to trend downward since February, indicative of a decaying El Niño and potentially developing La Niña.
- Negative subsurface temperature anomalies continue to be observed across nearly the entire Pacific, with cooling most pronounced across the Eastern Pacific.

Consolidated Probabilistic Precipitation: Weeks 2 & 3

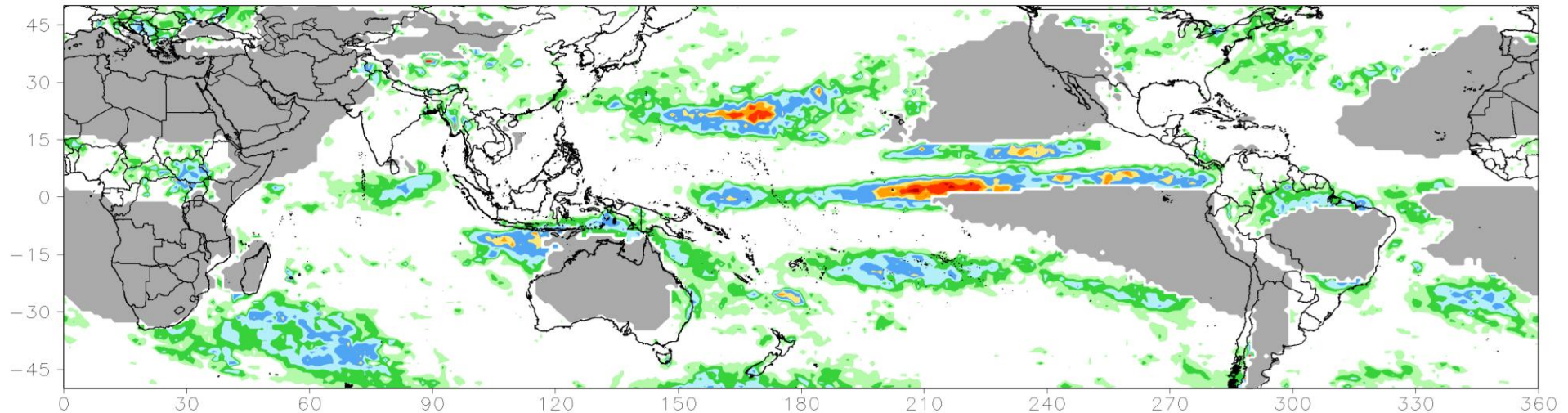
CONS 00z: Week2 Probability for Total Rainfall Above Upper Tercile (%)

Valid: 19Jun2024–25Jun2024



CONS 00z: Week2 Probability for Total Rainfall Below Lower Tercile (%)

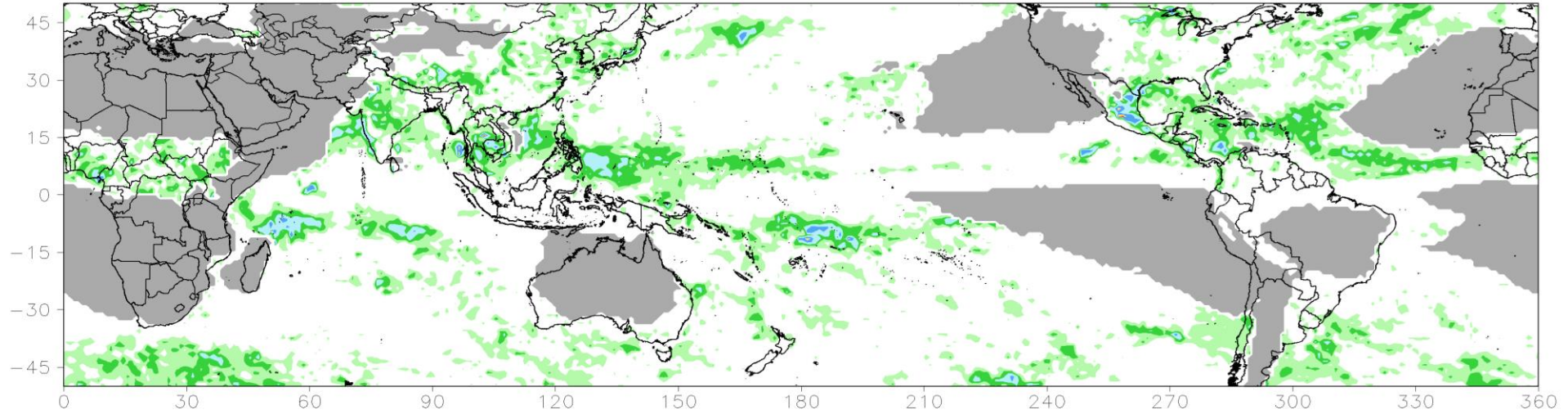
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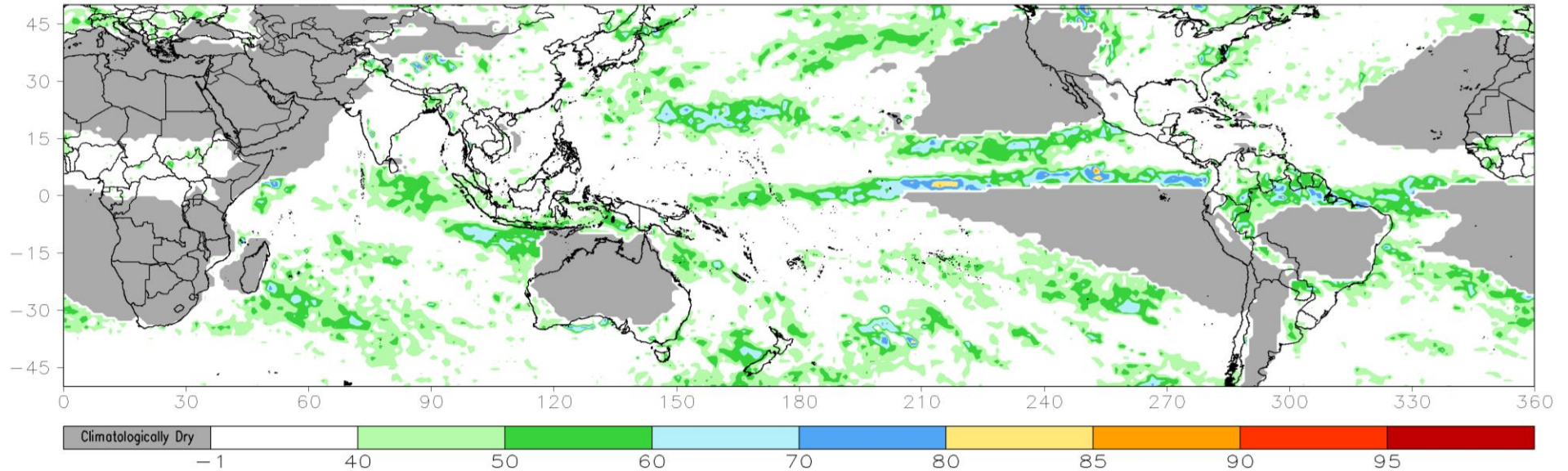
CONS 00z: Week3 Probability for Total Rainfall Above Upper Tercile (%)

Valid: 26Jun2024-02Jul2024



CONS 00z: Week3 Probability for Total Rainfall Below Lower Tercile (%)

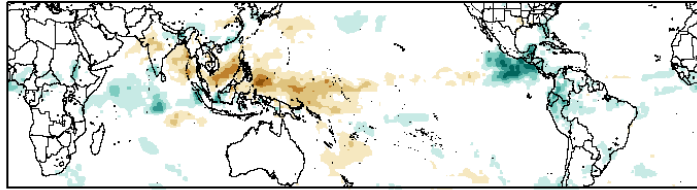
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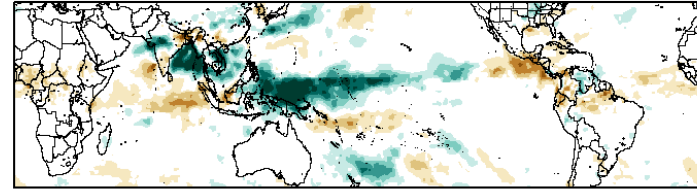
Historical Precipitation Anomalies By MJO Phase:

MJJ MJO Composite: GPCP1DD (mm/day)

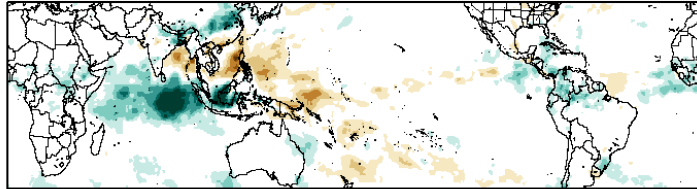
Phase 1



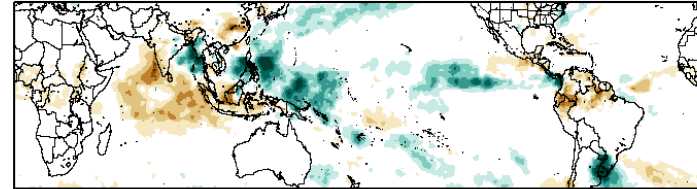
Phase 5



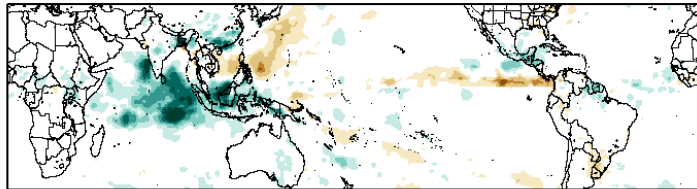
Phase 2



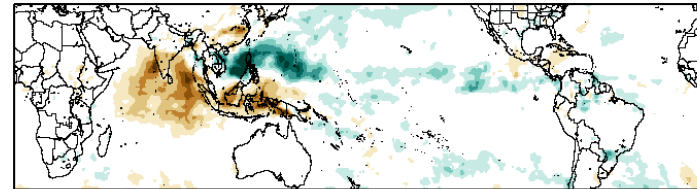
Phase 6



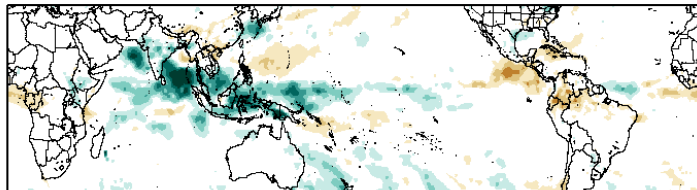
Phase 3



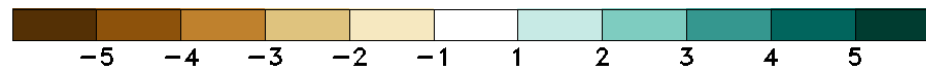
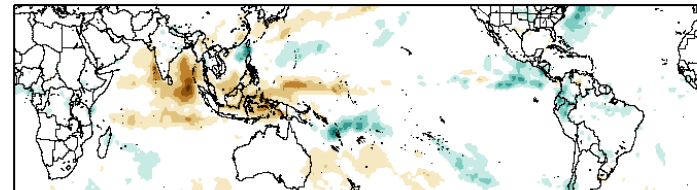
Phase 7



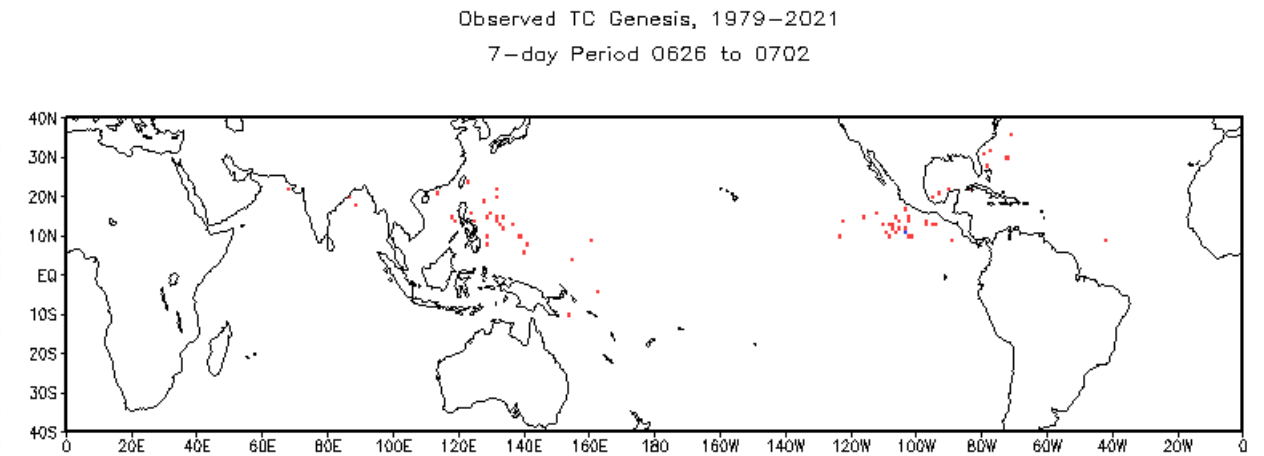
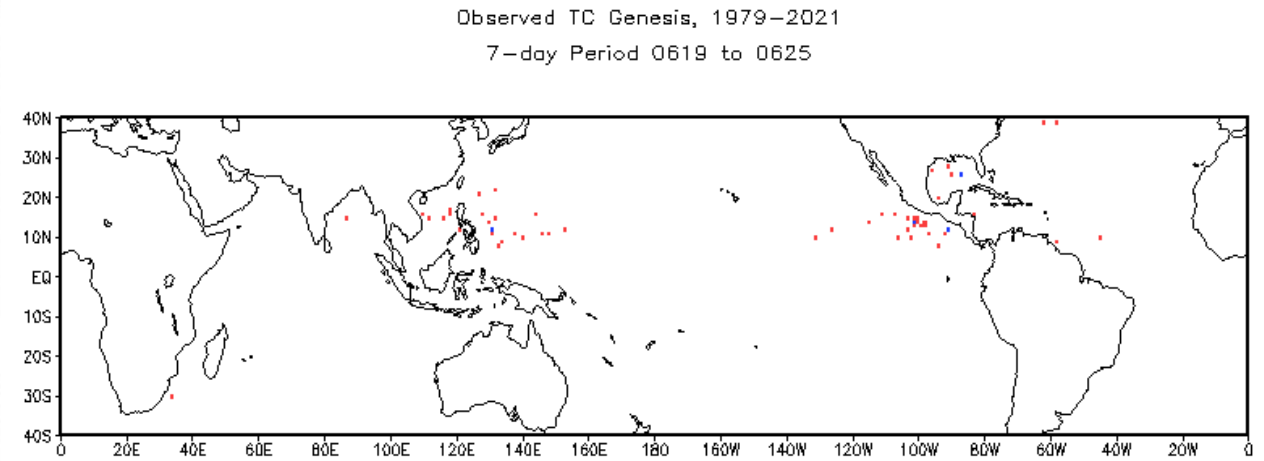
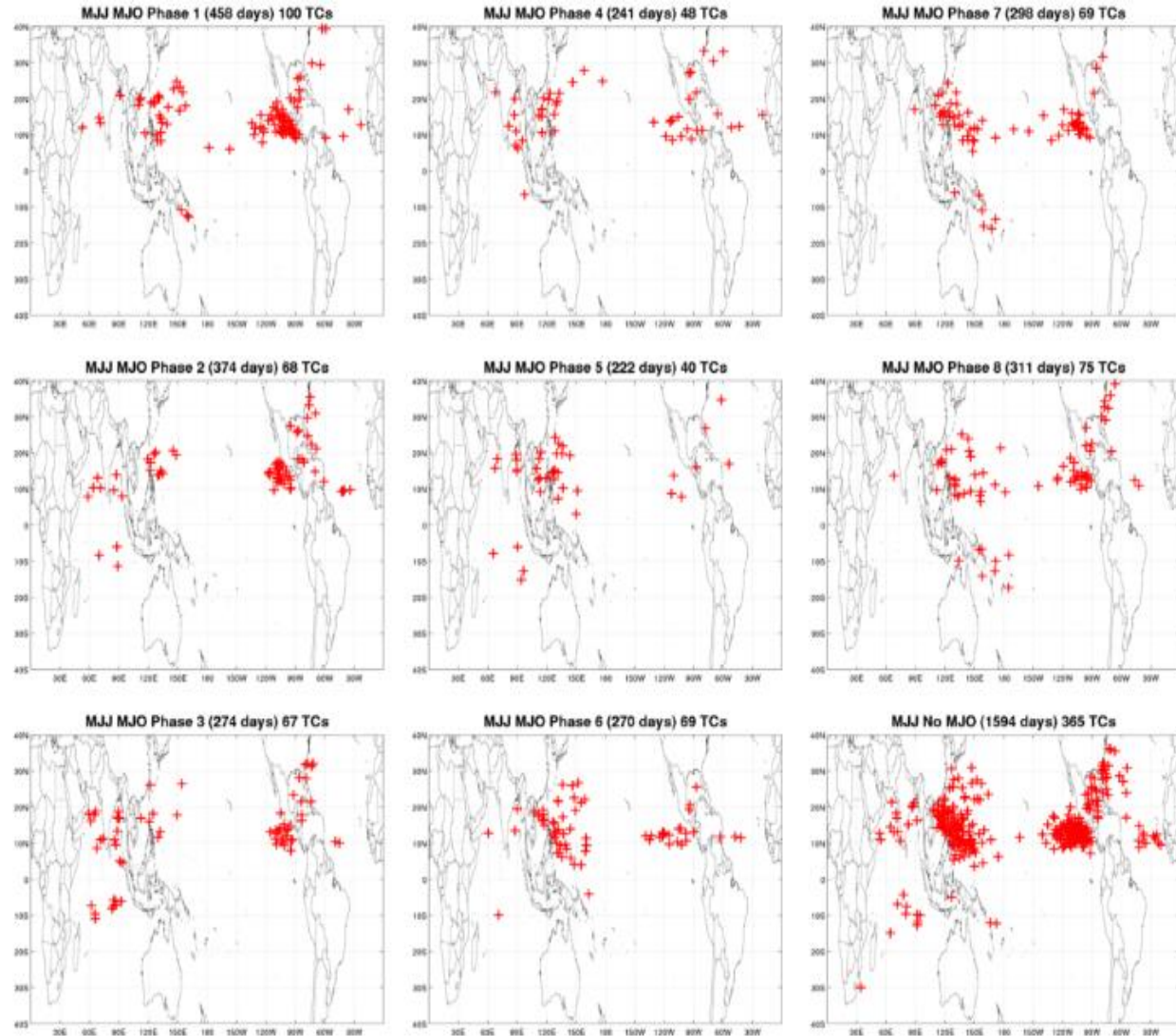
Phase 4





Phase 8

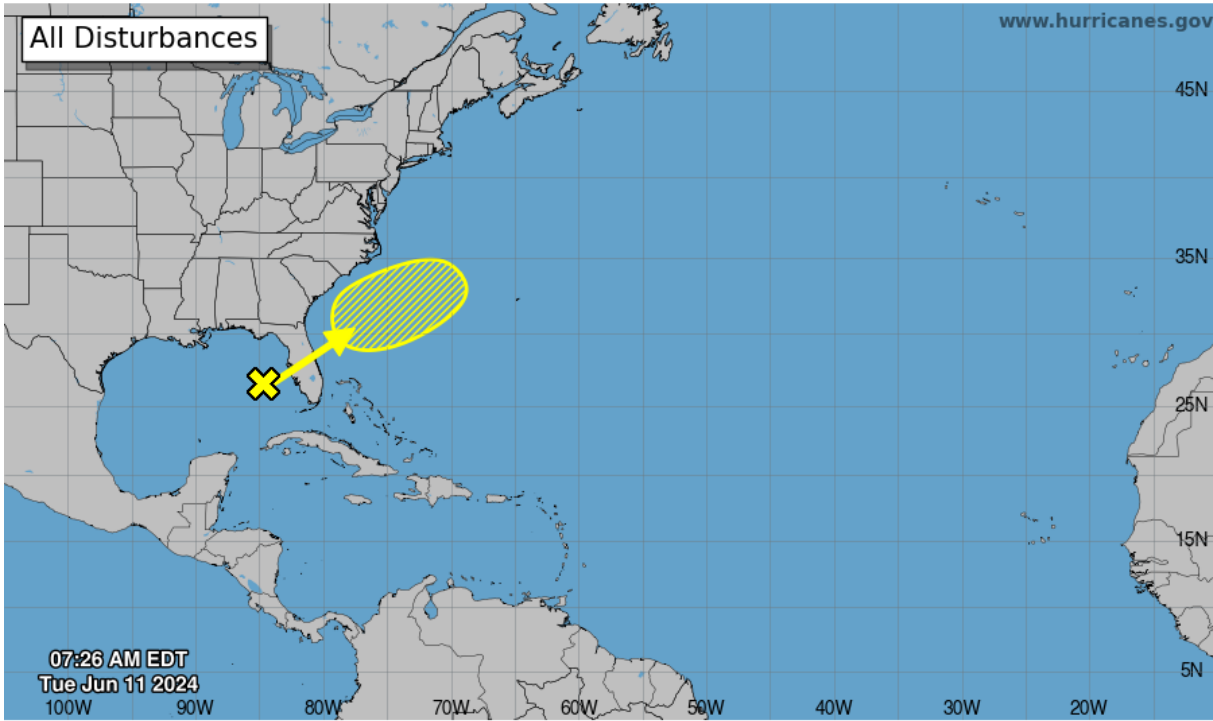


Historical TC Origin Anomalies By MJO Phase & Weeks 2+3 Genesis Climo:





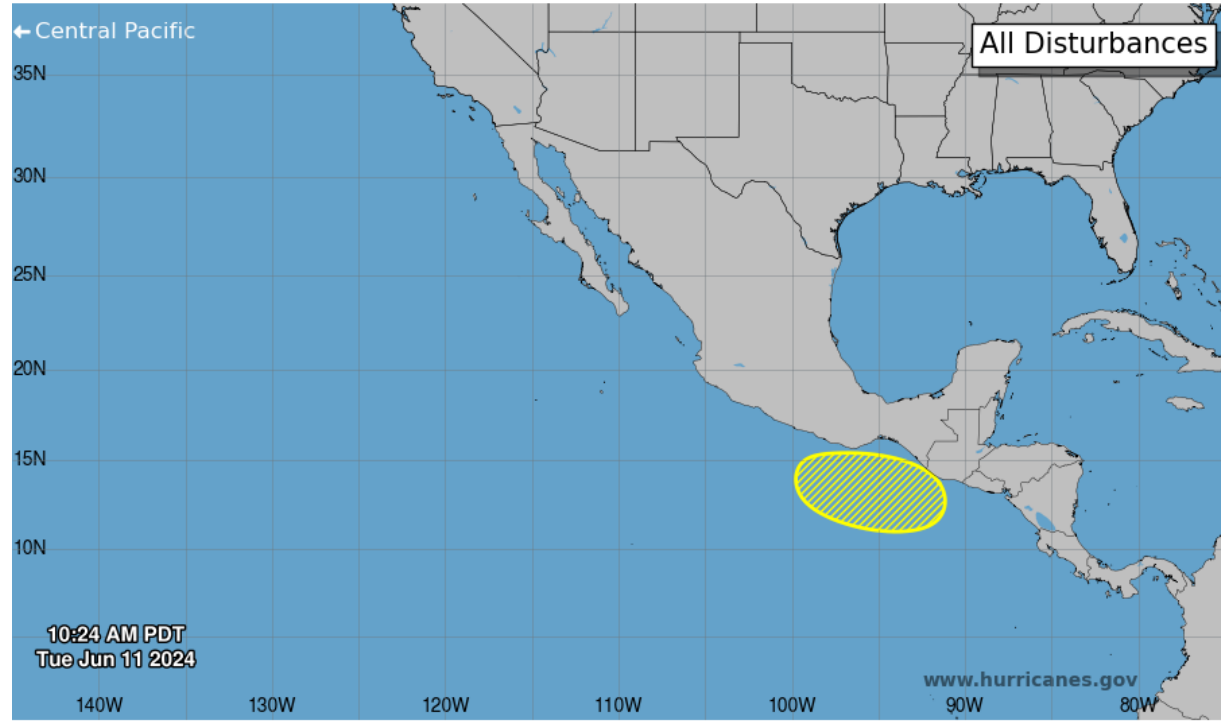
Tropical Cyclone Monitoring/Forecast: NHC / CPHC


Seven-Day Graphical Tropical Weather Outlook
 National Hurricane Center Miami, Florida
 



Current Disturbances and Seven-Day Cyclone Formation Chance:
 X < 40%
 X 40-60%
 X > 60%
 Tropical or Sub-Tropical Cyclone:
 ○ Depression
 ● Storm
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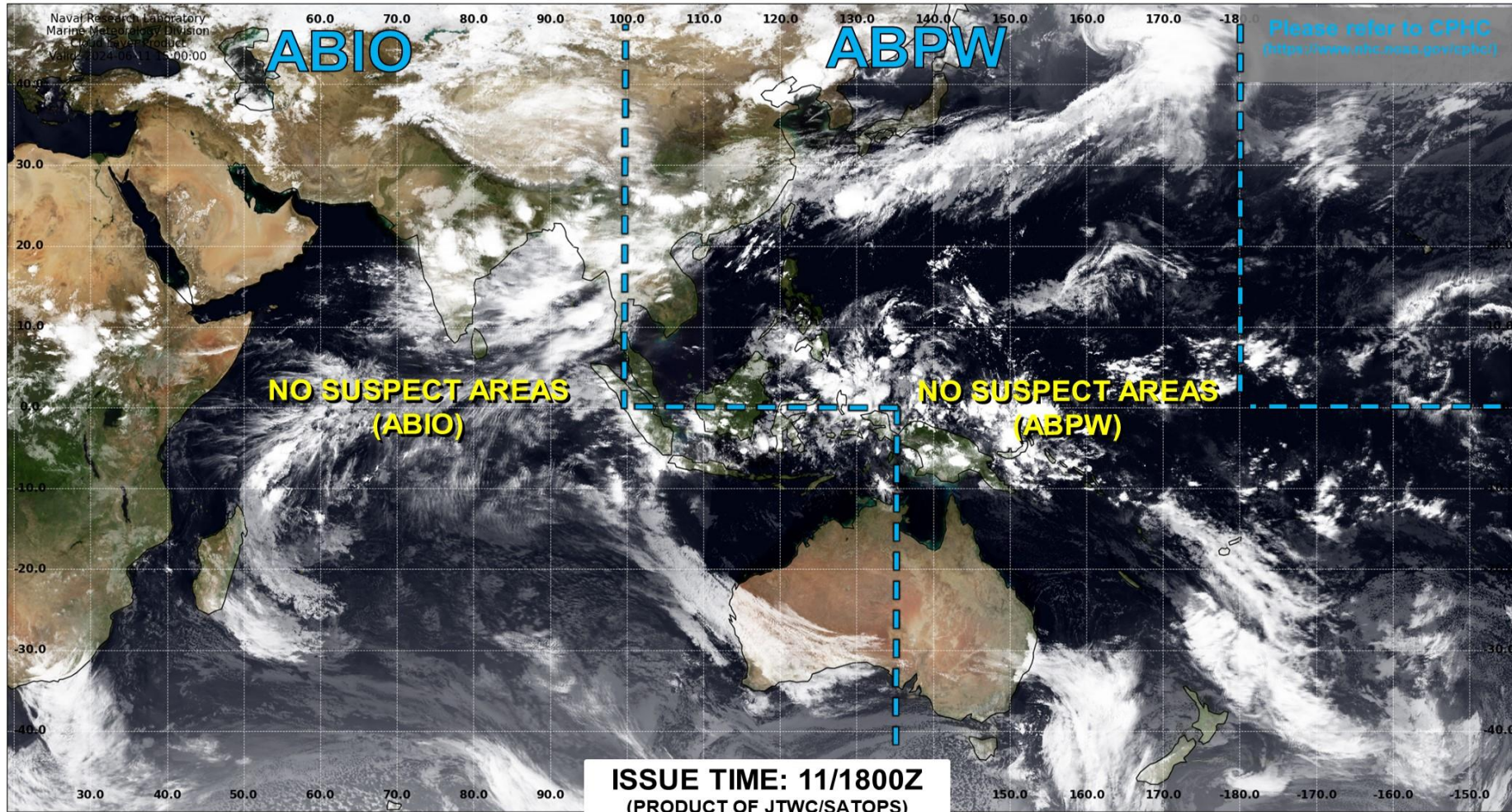


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Tropical Cyclone Monitoring/Forecast: JTWC



JOINT TYPHOON WARNING CENTER



TC development unlikely within 24 hours



TC development likely, but expected to occur beyond 24 hours



TC development likely within 24 hours (Reference TCFA)

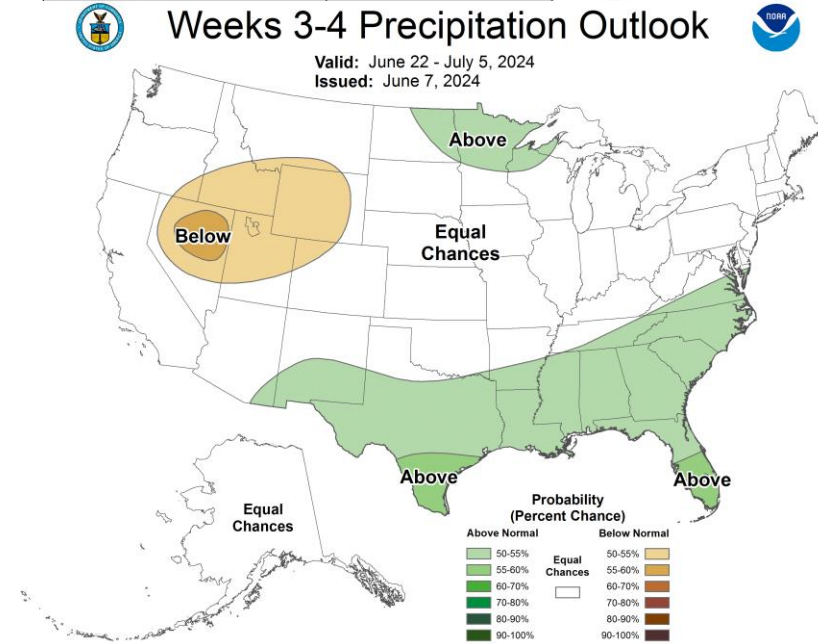
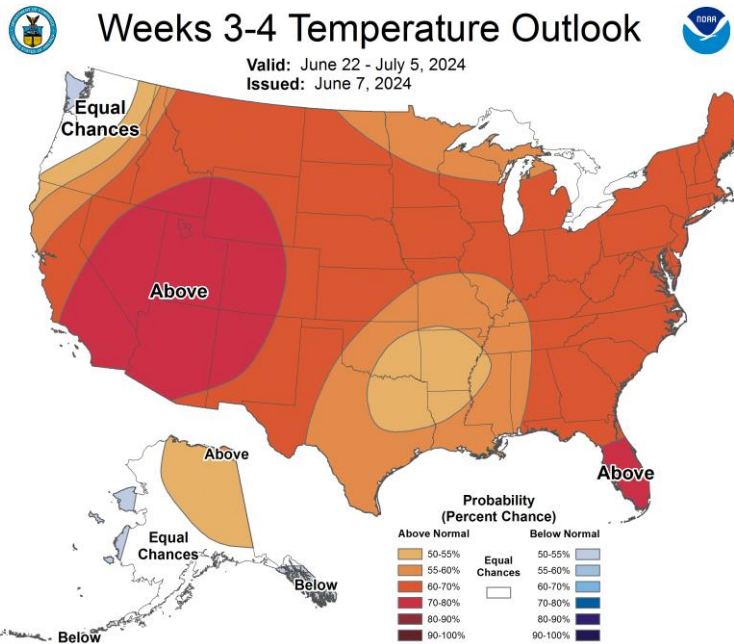
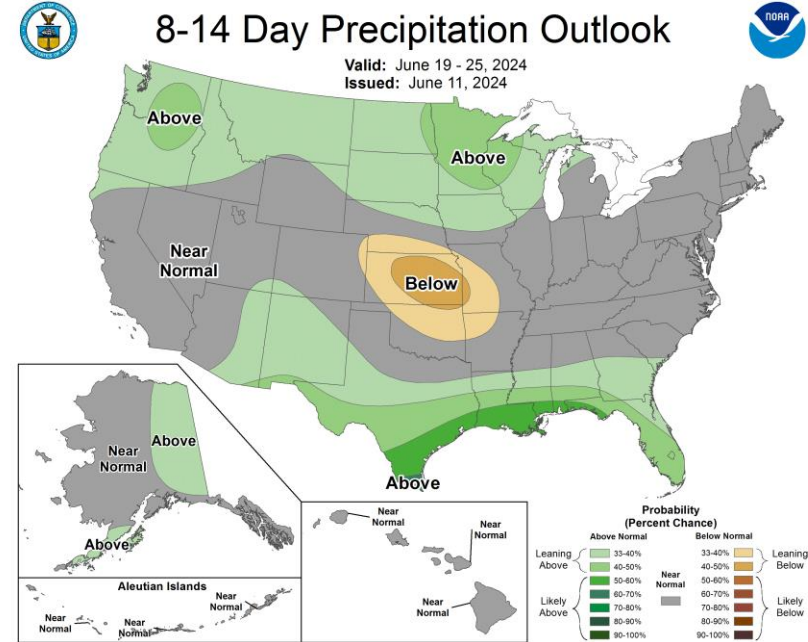
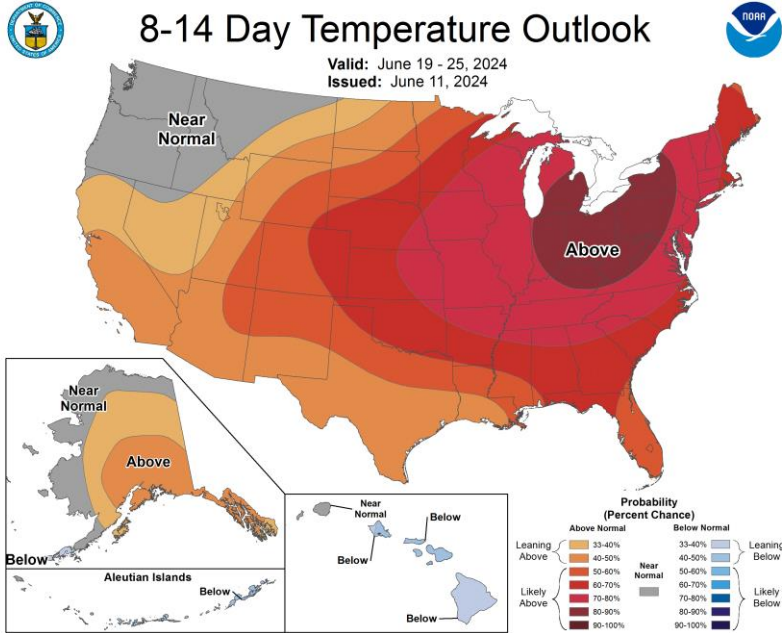


Monitoring for potential transition to TC. Invest label color denotes tropical transition probability



Tropical Cyclone (Reference Warning)

Official Temperature & Precipitation Forecasts:



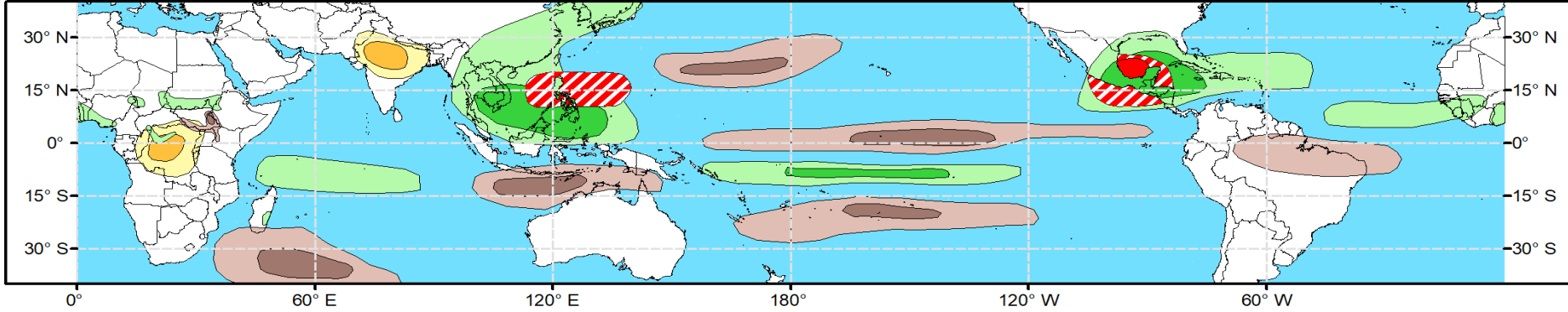
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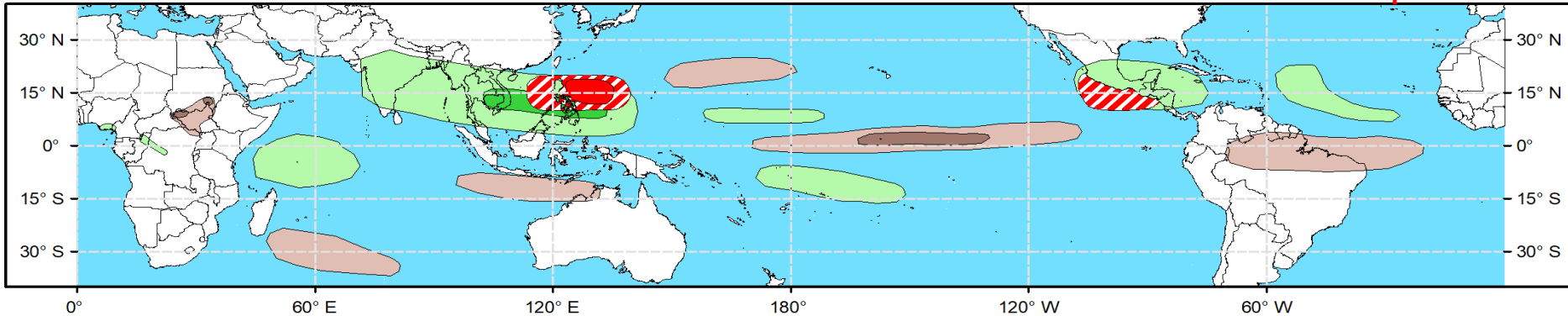


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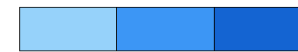
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