



Weeks 2-3 Global Tropics Hazards Outlook 6/17/2025

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

Western Pacific

• Wutip (6/11)

Eastern Pacific

- Dalila (6/13)
- Erick (6/17)



Synopsis of Climate Modes:

ENSO: (Jun 12, 2025 Update) next update on Thursday, Jul 10th

- ENSO Alert System Status: <u>Not Active</u>
- ENSO-Neutral is likely in the Northern Hemisphere summer 2025 and may continue into winter 2025-26, though confidence is lower.

MJO and other subseasonal tropical variability:

- During the past week, the RMM-based MJO index rapidly weakened back into the unit circle following a more amplified signal across the Western Pacific in early June.
- Despite the weakening, some coherency remained in its propagation across the Western Hemisphere, and the phase speed has been suggestive of a Convectively Coupled Kelvin Wave (CCKW).
- Dynamical models indicate increased upper-level divergence developing over the Western Pacific with additional CCKW activity possible across the Western Hemisphere during late June and early July.

GTH Outlook:



Forecaster: Collow

Consult your local responsible forecast agency.

200-hPa Velocity Potential Anomaly Maps:

- Constructive interference between Kelvin and Rossby Wave activity resulted in a pronounced region of enhanced divergence aloft across the Americas during the past week.
- While this is favored to subside, an enhanced low frequency convective signal is predicted to develop across the Western Pacific.
- Additional Kelvin Wave activity may eject out of this envelope into the Western Hemisphere.



- Low wind shear across the Eastern Pacific, combined with a favorable convective environment aloft, has contributed to the quick start of the Eastern Pacific Hurricane Season.
- These conditions are forecast to persist into early July.
- Higher wind shear across the Gulf of America and western Caribbean favors decreased chances for TC development.





RMM Index Observations & Forecasts:



- While ensemble spread regarding the MJO is large in all models, there is a weak propagating signal in the ensemble means from the eastern Indian Ocean and Maritime Continent into the Western Hemisphere, particularly in the GEFS and ECMWF.
- This may be indicative of CCKW activity pulling the RMM-based signal eastward.

Outgoing Longwave Radiation (OLR) Anomaly Time/Lon Plots:





CONS (CFS+ECMWF+GEFS): Week2 Probability for Total Rainfall Below(Above) Lower(Upper) Tercile (%) Valid: 25Jun2025-01Jul2025



CONS (CFS+ECMWF+GEFS): Week3 Probability for Total Rainfall Below(Above) Lower(Upper) Tercile (%) Valid: 02Jul2025-08Jul2025



Historical Precipitation Anomalies By MJO Phase:

MJJ MJO Composite: GPCP1DD (mm/day)







Phase 6



Phase 3



Phase 7



Phase 4



Phase 8





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



Experimental

Tropical Cyclone Monitoring/Forecast: NHC / CPHC



Ø Post-Tropical Cyclone or Remnants

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Tropical or Sub-Tropical Cyclone: O Depression Storm Storm Ø Post-Tropical Cyclone or Remnants



Tropical Cyclone Monitoring/Forecast: JTWC











 EPS Mean MSLP (mb), Ensemble Member Pressure Centers (Lows: red | Highs: blue), & Normalized Spread (or)

 Init: 002 Jun 17 2025
 Forecast Hour: [252] valid at 12z Fri, Jun 27 2025









15 Apr

01 Apr

01 May

15 May

15 Jun

01 Jun

01 Jul

-4

01 Mar

15 Mar

PNA Index: Observed & GEFS Forecasts

AO Index: Observed & GEFS Forecasts



Historical 500-hPa Height & U.S. Temperatures By MJO Phase:



^{-50 -40 -30 -20 -10 10 20 30 40 50}

-2 -1.5 -1 -0.5 -0.25 0.25 0.5 1 1.5 2

Mean 500-hPa Height Anomaly Forecasts: Weeks 2+3



Official Temperature & Precipitation Forecasts:





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Climate Prediction Center



Week 2 - Valid: Jun 25, 2025 - Jul 01, 2025



Issued: 06/17/2025 Forecaster: Collow This product is updated once per week and targets broad scale conditions integrated over a 7-day period for US interests only. Consult your local responsible forecast agency.