

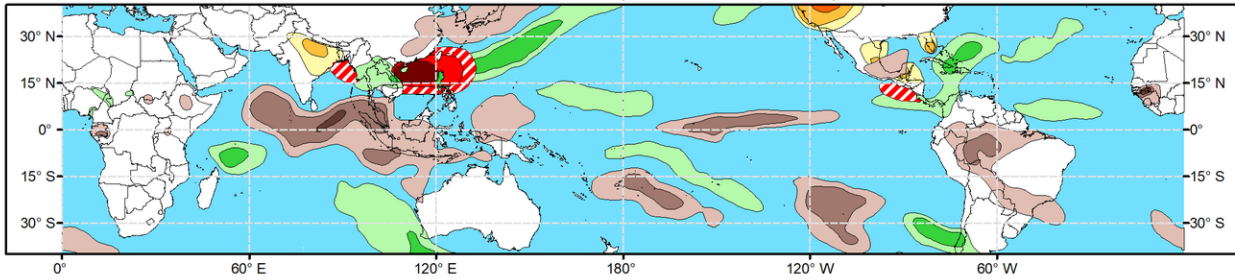


# Global Tropics Hazards Outlook

## Climate Prediction Center

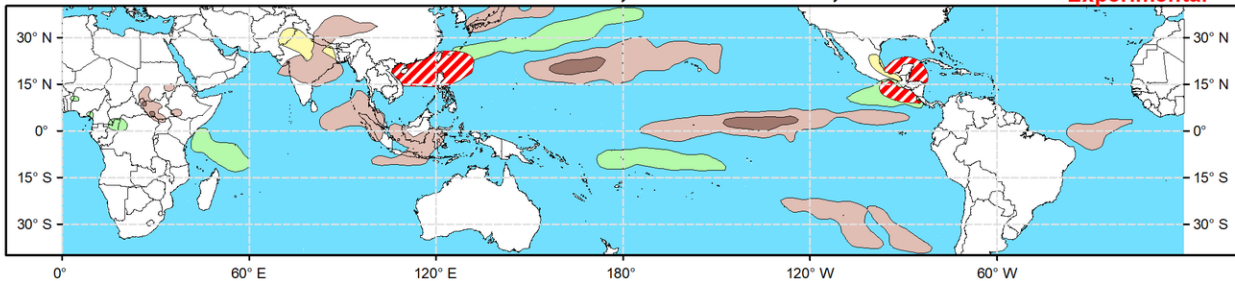


**Week 2 - Valid: Jun 05, 2024 - Jun 11, 2024**



**Week 3 - Valid: Jun 12, 2024 - Jun 18, 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: 05/28/2024**  
**Forecaster: Pugh**

**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.**

The MJO strengthened and propagated eastward over the Indian Ocean during the latter half of May. The RMM-based MJO index depicts this amplitude increase since mid-May with a eastward shift from phase 2 (Indian Ocean) to phase 4 (Maritime Continent). The 200-hPa velocity potential anomaly observations became more coherent with a wave-1 pattern this past week, featuring enhanced upper-level divergence (convergence) over the eastern (western) Hemisphere. According to the ECMWF model forecasts of the RMM-based index and 200-hPa velocity potential anomalies, the MJO would continue propagating eastward through mid-June with its enhanced phase overspreading the Americas and tropical Atlantic during weeks 2 and 3. However, the GEFs favors a slower speed with anomalous upper-level divergence only making it to around the Date Line by week-3. Also, a larger spread exists among the GEFs members with its RMM index forecasts.

Tropical Cyclone Remal developed over the Bay of Bengal on May 25 and then tracked to the north, making landfall near the border of Bangladesh and India. Heavy rainfall (locally more than 200 mm) triggered flooding across northeastern India and Bangladesh. The first tropical cyclone (TC) in the West Pacific basin of 2024 formed on May 25, as Ewiniar developed near Luzon of the Philippines. The Joint Typhoon Warning Center indicates that Ewiniar tracks northeast and gradually weakens when it reaches the middle latitudes near or offshore of central Japan. During week-2 (June 5-11), the most likely area (> 60 percent chance) for TC genesis is forecast across the South China Sea which is supported by dynamical models and MJO composites for phase 6. A broader 40 to 60 percent area for TC genesis extends east of the Philippines. The GEFs and ECMWF models favor a 20 to 40 percent chance of TC development across the northeastern Bay of Bengal for week-2. By week-3 (June 12-18), the outlook for favored areas of TC genesis becomes more uncertain due to diverging model

solutions on the MJO evolution. Based on MJO composites for phase 7 and recent model support, a 20 to 40 percent chance of TC development is posted for the South China Sea and to the northeast of the Philippines. Based largely on the ECMWF model, a 20 to 40 percent chance of TC development is posted for the East Pacific during week-2 and this slightly favored area expands east to include the western Caribbean Sea and southwestern Gulf of Mexico one week later.

The precipitation outlook for weeks 2 and 3 are based on a historical skill weighted blend of the GEFS, CFS, ECCO, and ECMWF models along with considerations of MJO precipitation composites for phases 6, 7, and 8. During week-2 (June 5-11), an axis of increased above-average rainfall probabilities is forecast from Southeast Asia northeastward to the Northwest Pacific. Multiple TCs could be ongoing during this 7-day period across the South China Sea and northeast of the northern Philippines. Another favored area of above-average rainfall with probabilities exceeding 65 percent extends from eastern Cuba to the Bahamas. By week-3 (June 12-18), a drying trend compared to week-2 is anticipated for Southeast Asia.

Based on dynamical model output but also consistent with the MJO, increased above-average temperature probabilities are forecast for northern India and eastern Pakistan during weeks 2 and 3. Above-average temperatures are also strongly favored for western areas of the United States, Florida, southern Texas, and parts of Mexico to Central America during week-2.

For hazardous weather conditions in your area during the coming two-week period, please refer to your local NWS office, the Medium Range Hazards Forecast produced by the Weather Prediction Center, and the CPC Week-2 Hazards Outlook. Forecasts made over Africa are made in coordination with the International Desk at CPC.