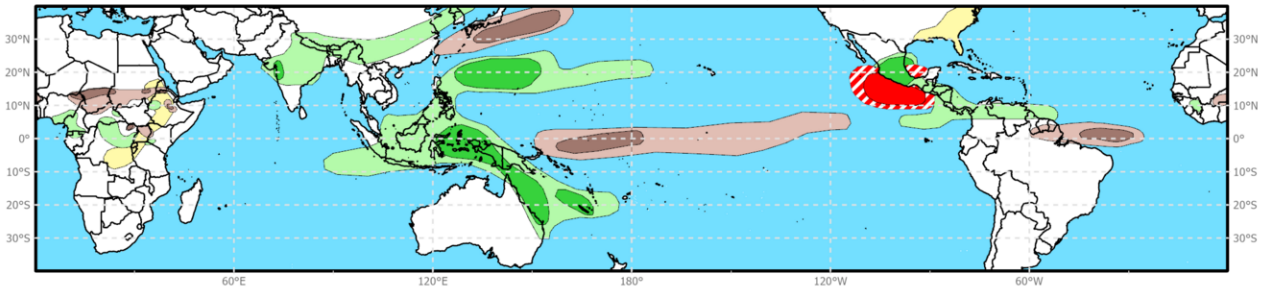
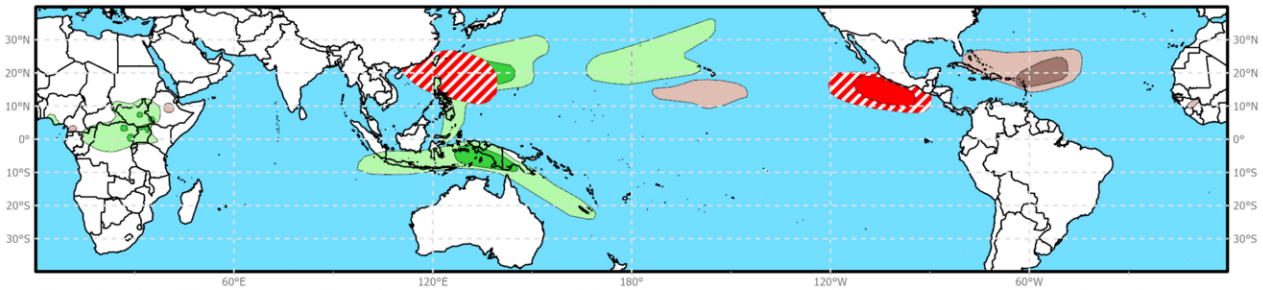
Global Tropics Hazards Outlook

Climate Prediction Center

Week 2 - Valid: Jun 18, 2025 - Jun 24, 2025



Week 3 - Valid: Jun 25, 2025 - Jul 01, 2025



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 mean temperatures in the Upper third of the historical range

Below-Average Temperatures Probability

>50% >65% >80%

7-day mean temperatures in the Lower third of the historical range

Issued: 06/10/2025

Forecaster: Allgood

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.

Both the RMM-based and CPC upper-level velocity potential based Madden-Julian Oscillation (MJO) indices reflected strong amplification of the instraseasonal signal as well as sustained eastward propagation during the past week. Upper-level velocity potential anomalies exhibit a robust Wave-1 pattern indicative of an active MJO footprint, and zonal wind anomalies at both the upper and lower levels of the troposphere are consistent with a Pacific MJO signal. Despite the organized structure apparent in the wind fields, the convective anomalies across the Pacific remain fairly lackluster. Dynamical model guidance is almost unanimous showing that this recently developed intraseasonal signal will be ephemeral, with RMM-index forecasts from the GEFS, ECMWF, CFS, and other model systems depicting a crash of amplitude into the unit circle, followed by a period of relative inactivity. It is possible that the broader intraseasonal signal that appears to be an MJO is really the superposition of two higher frequency modes: a strong Kelvin wave currently crossing the Pacific, and equatorial Rossby wave activity moving westward over the Maritime Continent and Indian Ocean. As signals increasingly diverge zonally, the broader enhanced envelope may break down into two smaller centers of activity, one reaching the East Pacific by Week-2, and the other remaining over the Maritime Continent. A lower frequency enhanced convective signal over the Maritime Continent would also provide a counterweight to any attempted MJO progression across the Western Hemisphere. Therefore, the MJO is not anticipated to play a role in the global tropical convective pattern during the Weeks 2-3 period.

Two tropical cyclones developed over the East Pacific basin during the past week: Hurricane Barbara, which developed south of Mexico on 8 June, and Tropical Storm Cosme, which also formed on 8 June in the vicinity of Barbara. Both systems are currently weakening, and the latest forecasts from the National Hurricane Center show both systems dissipating over open waters during the next few days. Quiet conditions prevailed across the other tropical cyclone basins of the globe. The East Pacific is favored to remain active during the next few weeks, with additional tropical cyclogenesis likely by this weekend. During Week-2, a Kelvin wave passage may provide additional fodder for further tropical cyclone development, which is strongly supported by dynamical model forecasts. Therefore, a 40-percent chance of tropical cyclone development is

indicated south of Mexico during Week-2. During Week-3, the ECMWF ensemble mean depicts a remarkably coherent Kelvin wave passage through the East Pacific basin, which may provide yet another period of favorability. Therefore, a 40-percent chance of formation is also depicted during Week-3. Across the Atlantic basin, strong and persistent ridging would provide an unfavorable environment for development overall during the outlook period. Development, should any occur, would be limited to the Bay of Campeche. There is modest support in the dynamical model guidance for a subtropical or tropical system to develop just offshore of the US East Coast, but confidence is too low to depict a hazard on the outlook. Elsewhere, tropical cyclogenesis is not favored during Week-2. During Week-3, conditions appear increasingly favorable for development along the monsoon trough over the Northwest Pacific, in the region west of Guam, near the Philippines, or over the South China Sea.

Absent clear subseasonal to seasonal forcing modes, the forecasts for above- and below-normal precipitation are based heavily on a consensus of operational dynamical model guidance. A low frequency signal favoring above-normal precipitation across the Maritime Continent yields some confidence in above-normal precipitation across the region, with the signal extending southward across eastern Australia during Week-2, and more zonally aligned just south of the Equator during Week-3. Enhanced precipitation across Central America during Week-2 appears to taper off rapidly late in the week and early in Week-3, possibly due to the suppressed phase of the initial Kelvin wave. For hazardous weather concerns in your area during the next two weeks, please refer to your local NWS office, the Medium Range Hazard Forecast produced by the Weather Prediction Center (WPC), and the CPC Week-2 Hazards Outlook. Forecasts issued over Africa are made in coordination with the International Desk at CPC.