

The MJO continues to be disorganized with other tropical modes providing the bulk of variability throughout the global tropics. Upper-level velocity potential anomalies continue to show a wave-1 pattern heading into early July, however there is little to no sign of eastward propagation characteristic of a reorganizing MJO, with this pattern remaining stationary but growing stronger. With this low-frequency response established , some model guidance favors a strengthening of the stationary envelope of enhanced convection over the Maritime Continent and West Pacific, and suppressed convection favored to persist over the central and eastern Pacific and the western Indian Ocean during July. Even with the growing low frequency footprint, model ensembles also generally indicate a potential reemergence of MJO during the forecast period. With both of these drivers potentially at play, the large-scale environment looks to be less favorable for tropical cyclogenesis in the eastern Pacific and Atlantic basins during the next several weeks. However, the same factors tend to favor tropical cyclone development over the Western Pacific.

Three tropical cyclones (TCs) formed during the last week, two in the Western Pacific and one in the Atlantic. On July 1 the Joint Typhoon Warning Center (JTWC) issued advisories for TD04W, which formed east of the Mariana Islands, and was named Mun after further development the following day. Mun drifted generally northward towards Japan, and is anticipated to become a post tropical system. On July 4, TC Danas formed in the South China Sea and quickly intensified to become the first typhoon of the 2025 Western Pacific season. On July 6 Danas made landfall on the western coast of Taiwan and moved north along the coast, then moving back over the ocean near Taipei. TC Danas is still active, and is anticipated to make landfall again along the Chinese coast south of Shanghai in the next day or so. For the latest information on TCs Mun and Danas please refer to the JTWC. Also on July 4, TC Chantal formed in the Atlantic Ocean east of the Florida Peninsula. Chantal strengthened to a tropical storm the following day and moved generally northward, making landfall east of Charleston, SC on July 6, resulting in heavy rainfall and flooding over portions of the Mid-Atlantic region.

Dynamical model RMM-based forecasts indicate a strengthening MJO signal, with solutions generally moving through phases 5-7. Along with a potentially revived

MJO, the low-frequency enhancement of divergence aloft over the Western Pacific creates a very favorable environment for TC genesis. This is well-indicated by model guidance, which show high probabilities of TC activity throughout the forecast period. Therefore, a high risk (>60% chance) of TC genesis is posted for week-2 over the Western Pacific east of Luzon, with moderate (40-60%) to slight (20-40%) risks extending into the South China Sea. The moderate and slight risks extend into week-3, although the high risk is removed due to increased divergence of model solutions with regard to MJO positioning. A slight risk of TC genesis is also posted for the northern Gulf Coast of the U.S. for week-2, where weak troughing and surface convergence over warm Gulf waters has the potential to spin up a closed low.

The precipitation outlook for weeks 2 and 3 is based on potential TC activity, the anticipated low frequency response and the MJO, and informed by GEFS, CFS, Canadian, and ECMWF ensemble mean solutions. 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.