

The MJO remained weak during most of the last week, with some strengthening evident in the Wheeler-Hendon MJO index and some increased spatial coherence in the CPC-MJO Index during the last 2 days. The convectively active phase is located over the eastern Indian Ocean. Other modes of tropical atmospheric variability are evident and likely to play a significant role in the near future.

Tropical Storm 03W (Yagi) developed on June 8. The current forecast for Tropical Storm Yagi does not include landfall along the coast of any major landmass. The current Global Tropical Hazards/Benefits Outlooks calls for the continued threat of tropical cyclogenesis over the South China Sea and just to the north and northeast of the Philippines. Additionally, Kelvin wave activity is likely to enhance the threat of tropical cyclogenesis near the Yucatan, late during week-1 and early during week-2. The development of a tropical cyclone near Central America would be in opposition to the forecast state of the MJO.

Dynamical model outputs generally indicate continued strengthening and increasing coherence of the MJO signal during the next 2 weeks. Statistical model forecasts align with the dynamical model

forecasts, so the current outlook reflects a stronger and more coherent MJO, moving across the Maritime Continent to the Western Pacific during the next 2 weeks.

The week-1 outlook is based on variability associated with the MJO (composites and dynamical model outputs) and Kelvin wave activity. The outlook calls for an increased threat of above-average rainfall from India to the Philippines (related to the MJO), and across Central America (related to Kelvin waves and potential tropical cyclone activity). Below-average rainfall is likely near the Date Line, east of the main convective region associated with the MJO.

The week-2 outlook is based largely on the forecast MJO state, with some residual impacts of the transitory Kelvin waves. The week-2 outlook indicates an enhanced likelihood of above-average rains from Southeast Asia to the western North Pacific, with below-average rainfall over southern China and the equatorial Indian Ocean. A lingering threat for above-average rainfall is indicated over Central America, but the confidence in that area is much lower than during the week-1 portion of the outlook.