

The MJO indices indicated slight stengthening during the past week, but overall the atmospheric pattern is not consistent with a robust MJO so the signal is likely shorter-term variability mapping onto the MJO signal more than robust event. The Wheeler-Hendon RMM index indicates that the enhanced convective phase is over the western Indian Ocean, while the CPC Index is slightly lagged, showing the strongest upper-air signal over Africa. Any coherent MJO signal is likely located over the western Indian Ocean. Convection over Africa and the Maritime Continent are likely related to Kelvin Waves while East Pacific convection is associated with Tropical Cyclones (Hurricane Amanda and TD-Two).

Dynamical model MJO forecasts differ on the forecast of the MJO in WH-RMM phase space, although agreement has increased slightly during the past 48 hours. The GFS ensemble depicts a weak signal over the Indian Ocean with a stronger signal emerging in Phase 3 during Week-2. The ECMWF and UKMET models indicate an emergence in Phase 4 with propagation toward Phase 5. The latter solutions are favored as much of the signal is likely related to faster moving Kelvin Waves.

The outlooks for Week-1 and Week-2 are based largely on dynamical model consensus, supplemented by MJO composites in phases 3-5. Additionally, the low-frequency state is accounted for, with the outlook reflecting the tendency toward El Niño conditions across the tropical Pacific.

During Week-1, enhanced convection is expected to remain over the western Indian Ocean. A slightly enhanced threat of tropical cyclogenesis is present in multiple model forecasts for the Arabian Sea during Week-1, with a likely track toward the Arabian Peninsula. The seasonal march of the leading edge of the Asian Monsoon is also likely to result if above-normal rains over southeast Asia and dry conditions near the Philippines. The background seasonal cycle is likely to support enhanced rainfall near the Date Line. During Week-1, enhanced rainfall is likely across southern Mexico and the southern Gulf of Mexico.

Future movement of TD-Two after landfall over Mexico is uncertain, so no area of enhanced rainfall is depicted over the Gulf of Mexico or southeastern U.S., although model forecasts depict heavy rains anywhere from Mississippi to Florida. The background state and the annual march of the Asian Monsoon also play a role in the outlook. There is a weak signal for tropical cyclone formation over the South China Sea, near the northern Philippines during Week-2.