

The MJO remained incoherent during the previous week. The CPC 200-hPa velocity potential based MJO index began to show a weak signal during the past week while the Wheeler-Hendon MJO Index amplitude remained below 1.0. Continued equatorial Rossby wave activity forced by extratropical intrusions into the tropics is evident over the eastern Pacific. Two atmospheric Kelvin Waves are also impacting the circulation, with the largest impact coming over the Indian Ocean as convection there is anomalously strong. The second Kelvin wave is located over the eastern Pacific.

Dynamical model guidance has come into better agreement indicating the development of a more coherent MJO pattern later in Week-1 and into Week-2, with enhanced convection along the equatorial Indian Ocean, and suppressed convection across the western Pacific. Above-normal sea surface temperatures across the Indian Ocean suggest that conditions may be supportive for the development of enhanced convection, with the existing Kelvin wave over the eastern Pacific possibly serving as a trigger as it enters the western Indian Ocean. Considerable uncertainty remains in the forecast due to the competing influence of each of the Kelvin waves and the extratropical influence over the Atlantic Basin. The statistical models suggest only a weak MJO signal based on weak initial conditions.

Cyclone Lehar weakened quite rapidly near the west coast of India. Tropical Depression 33 formed near Guam, and is expected to become a Tropical Storm shortly. During the next two weeks, there are enhanced odds for tropical cyclone formation across the Bay of Bengal, although the confidence there is only moderate as the Bay of Bengal tropical cyclone season is winding down. Additionally, the threat of tropical cyclone formation is increased across the Southern Indian Ocean during both Week-1 and Week-2, with the Week-2 threat slightly further east than during Week-1. The increased threat rests on the assumption of an MJO developing with the enhanced convective phase centered across the Indian Ocean.

The precipitation outlook for Week-1 is based largely on recent observations and consensus from dynamical model guidance. Enhanced rainfall is forecast for most of the Indian Ocean and portions of the Maritime Continent, consistent with a developing MJO. Additionally, enhanced rainfall is likely to the east of Australia and near New Zealand later in Week-1. Enhanced rainfall is likely across the northern portions of South America from Ecuador to Venezuela due to the atmospheric Kelvin Wave early in the period and southerly displacement of the ITCZ. Suppressed convection is indicated across the South China Sea, western North Pacific, and central Pacific near the Date Line as a result of anticipated MJO activity. Anomalous westerly flow into sub-Saharan Africa should support above-average rainfall over Angola and neighboring countries.

During Week-2, the MJO is forecast to propagate eastward, bringing rains to more of the Maritime Continent and portions of the Southern Indian Ocean. Suppressed convection should remain in place over the central Pacific and over northern South America in the wake of the Kelvin Wave.