

The MJO continued an eastward propagation over the Indian Ocean and Maritime Continent during the previous week, but with decreasing amplitude of the signal according to the Wheeler-Hendon MJO Index. The CPC MJO Index also indicated eastward propagation of the MJO active phase across the Indian Ocean, with decreasing amplitude at the end of the week. Other modes of subseasonal variability remain apparent in the global tropical convective pattern, including an Equatorial Rossby Wave over the eastern Indian Ocean and a Kelvin Wave propagating over the western Pacific. The 200-hPa velocity potential pattern continues to resemble a classical MJO pattern, with large scale anomalous divergence over the Indian Ocean and Maritime Continent, and positive anomalies over the Western Hemisphere.

Dynamical model outputs depict a large variance of solutions for future MJO evolution, with the GFS forecasting a complete loss of MJO coherence, and the bias-corrected European model and the UKMet projecting eastward propagation of a very weak signal over the Maritime Continent into the western Pacific during the upcoming two weeks. Statistical model forecasts depict a continued eastern propagation of the MJO active phase over the Maritime Continent.

The Atlantic and eastern Pacific tropical cyclone basins became less active during the previous week. Tropical Storm Chantal dissipated over the Caribbean Sea, and no tropical cyclone activity was observed over the eastern Pacific. In the western Pacific, Super Typhoon Soulik made landfall at Category-1 intensity over both northern Taiwan and Fujian Province in China, while a new tropical depression formed east of the Philippines. Additional tropical cyclogenesis is favored over the western Pacific basin and South China Sea during the upcoming two weeks, consistent with the current phase of the MJO. Tropical cyclogenesis is less likely over the Atlantic basin as the suppressed phase of the MJO propagates over the Western Hemisphere. An atmospheric Kelvin Wave propagating eastward over the equatorial Pacific may increase the potential for a tropical cyclone over the eastern Pacific basin during Week-2.

The Week-1 outlook is based on the anticipation that the currently observed MJO signal will continue an eastward propagation over the Maritime Continent. Enhanced rainfall associated with the MJO active phase is favored over the Maritime continent northwestward through South Asia. Suppressed convection is forecasted over the eastern Pacific and adjacent areas of Mexico and Central America. A small area of enhanced precipitation is possible over Africa's central Sahel region.

During Week-2, enhanced convection is favored over the Maritime Continent, Southeast Asia, and South Asia, while suppressed convection is possible over the equatorial central Indian Ocean as the MJO signal continues an eastward propagation into the western Pacific Ocean. Suppressed convection is anticipated over the Caribbean, while enhanced precipitation associated with African Easterly Waves is forecasted over western Africa.