

The MJO convective phase propagated over the Maritime Continent during the previous week, while influence from other modes of tropical intraseasonal variability reduced the signal in the Wheeler-Hendon MJO Index. The CPC MJO Index indicated a more classical MJO appearance, but with decreasing amplitude at the end of the period. An equatorial Kelvin Wave propagated over the Pacific Ocean, with the enhanced convective phase currently over the Eastern Pacific as observed in the 200-hPa velocity potential and OLR anomaly patterns. A second Kelvin Wave has also propagated ahead of the main MJO envelope over the western Pacific. Additionally, a persistent region of enhanced convection remained apparent over the Maritime Continent, particularly south of the equator.

Dynamical models depict a continuation of a weak MJO signal during the upcoming two weeks, with the bias-corrected European ensembles maintaining continued eastward propagation over the Pacific Ocean. The GFS ensembles depict a faster propagation of the MJO signal into the Western Hemisphere by Week-2, possibly due to influence from the equatorial Kelvin Waves. Statistical model forecasts depict a continued eastward propagation of the MJO, with suppressed convection forecasted over the eastern Indian Ocean and Maritime Continent by Week-2.

The Atlantic and eastern Pacific tropical cyclone basins were inactive during the previous week. Tropical Storm Cimaron passed south of Taiwan and made landfall over Fujian Province in southeastern China on 18 July, generating heavy rainfall and gusty winds. Following this system, no additional tropical cyclone development was observed. Tropical cyclogenesis is likely over the eastern Pacific basin as the active phases of the Kelvin Waves increase the environmental favorability for storm formation. A disturbance near 120W is currently moving westward over the tropical Pacific and is forecasted to become a tropical cyclone. Dynamical models favor a continued westward progression of this system, with some ensemble forecast members bringing the tropical cyclone or its remnants as far west as the Hawaiian Islands. Dynamical models indicate less favorability for tropical cyclogenesis over the western Pacific basin, but the current MJO phase and climatology would support potential tropical cyclone development during the upcoming two weeks. A vigorous tropical wave emerged over the eastern Atlantic and has some potential for short term development, but environmental conditions are forecast to become increasingly unfavorable for continued development of this system further into the Week-1 period.

The Week-1 outlook is based on observational evidence of continued MJO influence on the global tropical circulation, with additional impacts from other modes of subseasonal variability, including the Kelvin Waves over the Pacific Ocean. Enhanced rainfall is favored over India, the Bay of Bengal, the northern Maritime Continent, and the equatorial western Pacific Ocean, while suppressed convection is anticipated near the equator over the central Indian Ocean. An active North American Monsoon pattern is forecast to continue over northwestern Mexico and the southwestern United States.

During Week-2, enhanced convective rainfall is favored over the western Indian Ocean. Suppressed convection is anticipated to lift northward over the Indian Ocean into southern Asia and spread eastward into parts of Southeast Asia and the western Maritime Continent. Areas of enhanced rainfall associated with the African Monsoon are possible over portions of the Sahel region.