

The MJO index amplitude was weak during the past seven days and other modes of tropical subseasonal variability remain generally weak. During the past week, enhanced rainfall was observed across the western equatorial Indian Ocean, northern India, parts of southeast Asia, and the eastern Maritime Continent. Enhanced rainfall was also observed in the Gulf of Campeche and south-central Mexico, associated with Tropical Storm Nate. Suppressed rainfall was observed over the eastern equatorial Indian Ocean. Tropical Storm Maria formed in the eastern Atlantic and brought precipitation to the eastern Caribbean Sea. In the northwest Pacific, Tropical Storm Kulap developed and moved into the Yellow Sea. Tropical Depression 18 also formed in this region and is moving toward the Yellow Sea.

There is a lot of spread amongst the dynamical model MJO index forecasts during the upcoming 1-2 week period. A few models indicate some eastward propagation of a weak signal during Week-2. Based on recent observations and the high degree of uncertainty with the MJO index model forecasts, the MJO is forecast to remain weak during the period. The MJO is not expected to contribute substantially to anomalous tropical convection across the global tropics during the period at this time.

During Week-1, an enhanced monsoon flow is expected to enhance rainfall in northern India, the Bay of Bengal, and Southeast Asia. Above average sea surface temperatures are likely to enhance rainfall in the western equatorial Indian Ocean. Lower tropospheric convergence over central Africa is expected to enhance rainfall in the region, while a ridge of high pressure and anomalous northerly flow is expected to suppress convection in north-central Mexico.

A high chance of tropical cyclone development exists in the northwest Pacific as tropical depression 18W is forecast to intensify to a tropical storm. Behind this system is another disturbance that has a moderate chance of developing into a tropical cyclone since upper level conditions are favorable for development at this time. A broad area of low pressure in the western Caribbean Sea is expected to bring widespread precipitation to the region and Central America. A tropical wave in the eastern Atlantic increases the threat for tropical cyclone development in the region.

During week-2, signals are rather weak for anomalous convection across the global tropics. However, monsoon flow is expected to remain enhanced across the Bay of Bengal and parts of Southeast Asia. Model guidance and above average sea surface temperatures also favor enhanced convection in the western Indian Ocean. Moderate chances for tropical cyclone development are expected in the main development region of the eastern tropical Atlantic as robust easterly waves continue to exit Africa. There is a moderate chance of tropical cyclone development in the western Caribbean Sea associated with a broad area of low pressure, forecast low wind shear, and warm sea surface temperatures.