

The MJO remained weak during the past week and eastward propagation in some MJO measures are more related to atmospheric Kelvin wave activity which act on a much faster time scale. Much of the recent tropical weather can be ascribed to variations in the Inter Tropical Convergnece Zone (ITCZ), the development and propagation of tropical cyclone activity, and intrinsic internal variability of the coupled ocean-atmosphere system, given the lack of many coherent climate forcings, (i.e., ENSO and MJO), apart from the above Kelvin wave. During the past week, enhanced rainfall was observed across parts of the northwest Pacific Ocean, South China Sea, and northern India. Suppressed rainfall continued across southern India and extended eastward into parts of Indonesia. Numerical model forecasts of the MJO indicate a continued weak signal during the next two weeks.

Tropical Storm Bret and Cindy tracked northeast away from the continental United States and rapidly weakened late last week. Meanwhile, powerful Hurricane Dora (Category 4 with maximum winds of 155mph) remained offshore of the Mexican coast and weakened as it tracked over cooler waters. Typhoon Ma-On in the northwest Pacific Ocean affected southern Japan.

As of Tuesday morning (July 26), the National Hurricane Center indicates that there is a 20 percent chance that a tropical wave south of Cuba will become a tropical cyclone during the next 48 hours as it enters the Gulf of Mexico. At the current time, for this assessment we do not favor tropical cyclone development in this region during Week-1, but interest are advised to monitor the latest statements from the National Hurricane Center. Regardless of tropical cyclone development, locally heavy rainfall may affect the lower Rio Grande Valley and northeast Mexico.

During the first week of the assessment period, a pair of tropical cyclones are expected to play a major role in the rainfall across the Asian Continent. Tropical Storm Nock-Ten is forecast to track westward across southern Luzon of the Philippines, the South China Sea, and reach northern Vietnam during the weekend. Along its path, very heavy rainfall can be expected. Tropical Depression 11W is forecast to strengthen and become a typhoon as it tracks northward across the northwest Pacific. A westward propagating Rossby wave is also expected to enhance the rainfall across a broad area of Southeast Asia including parts of the Bay of Bengal. To the south of this enhanced rainfall area, suppressed rainfall is expected along the equator in the far eastern India Ocean and Sumatra. Climatology, an atmospheric Kelvin wave, and relatively low wind shear elevate the chances for tropical cyclone development in the eastern Pacific later during week-1. Cross equatorial flow increase the chances for above median rainfall across western Ethiopia, western Kenya, and southern Sudan.

Uncertainty is high during week-2, with numerical model guidance indicating enhanced rainfall anomalies lifting northward across parts of the northwest Pacific, and suppressed rainfall anomalies across Indonesia. An elevated chance of TC genesis remains in the western and eastern Pacific during Week-2. Late in the Week-2 period, conditions may become more favorable for tropical cyclone development in the western Atlantic Ocean near the islands.