

The MJO signal remained weak during the past week. Much of the recent tropical weather can be attributed to variations in the Inter Tropical Convergence Zone (ITCZ), tropical cyclone activity, and intrinsic variability of the coupled ocean-atmosphere system, given the low amplitude of many coherent climate forcings, (i.e., ENSO and MJO). During the past week, enhanced rainfall was observed from parts of the Bay of Bengal to the South China Sea, the Philippines, and parts of the northwest Pacific Ocean. Suppressed rainfall was observed across northeast southern India and Indonesia. Numerical model forecasts of the MJO indicate a continued weak signal during the next two weeks.

Tropical Storm Don developed over the Gulf of Mexico and weakened as it moved toward southern Texas. Hurricane Eugene (currently a category 1 with maximum winds of 90mph) remains offshore of the Mexican coast. Typhoon Nock\_Ten affected the Philippines, South China Sea, and parts of Southeast Asia. Typhoon Muifa strengthened (currently a category 3 storm with maximum winds of 110kts) over the northwest Pacific. As of August 2, the Joint Typhoon Warning Center forecasts it to continue to move northwestward toward China, Korea, and southern Japan, bringing heavy rainfall to these regions.

Tropical Storm Emily is currently moving across the Caribbean Islands. As of August 2, the National Hurricane Center indicates that Tropical Storm Emily is expected to move toward the Bahamas and Florida, bringing heavy rainfall along its track.

During the first week of the assessment period, heavy rainfall is expected in the East China and Yellow Seas as Typhoon Muifa is expected to move across the region. Landfall is forecast to be anywhere from eastern China, to Korea, to southern Japan. Model guidance indicates another tropical storm may form in the northwest Pacific during this time. Current satellite imagery and model guidance supports above median precipitation across parts of the Bay of Bengal. To the south of this enhanced rainfall area, suppressed rainfall is expected near the equator in Indonesia. Heavy rainfall is expected in southern Brazil associated with a front moving across the region. An eastward propagating Kelvin wave, along with cross equatorial flow is expected to enhance the rainfall across central Africa.

Uncertainty is high during week-2, with numerical model guidance indicating enhanced changes for above-average rainfall lifting northward across the Bay of Bengal, impacting India, Bangladesh and Burma. Heavy rainfall is expected during the early part of this period in the East China, Yellow Seas and surrounding land areas from Typhoon Muifa. Climatology and forecast low wind shear elevate the chances for tropical cyclone development in the western Atlantic during week-2, while model guidance indicates below median precipitation in the Gulf of Mexico.