

The MJO remained quite weak over the past seven days and the main areas of tropical forcing were primarily related to an enhanced southern Asia monsoon circulation and the continuation of atmospheric Kelvin wave activity. An anomalous flow from the equatorial Indian Ocean across India to the far western Pacific resulted in an above-average enhanced rainfall area oriented northwest to southeast from India to the western Pacific. Drier-than-average conditions continued across the equatorial Indian Ocean. Enhanced convection intensified across the eastern Pacific and Central America during the past week while very dry conditions continued across central Mexico and the southern CONUS. The North American monsoon rainfall across Mexico is very late to start this year. With respect to tropical cyclone activity, an atmospheric Kelvin wave contribued to the development of Tropical cyclone Beatriz in the eastern Pacific and this strom is currently threatening the Mexican coast with very strong winds and heavy rainfall. The remnants of Tropical storm 6W also developed just east of the Philippines crossed the islands and is now currently located in the South China Sea.

Over the next week, the anomalous monsoon flow across southern Asia is forecast to shift further to the north and result in suppressed rainfall across the southern half of India, the equatorial Indian Ocean and the western Maritime continent. A monsoon depression is forecast to move westward across north-

central India and this is forecast to result in aresas of heavy rainfall early in the period in this part of India. Tropical systems, above-normal SSTs and anomalous low-level convergence favor enhanced rainfall across the western Pacific, northern Philippines, South China Sea. A tropical cyclone expected to develop just prior to the start of the period or just thereafter is forecast to track towards Korea and Japan and result in areas of heavy rainfall in this region. Recent observations indicate that the monsoon across central Mexico may strengthen and this favors enhanced rainfall across southern Mexico and with a southwesterly flow of tropical moisture enhanced rainfall is also forecast across the western Gulf of Mexico to just along the U.S. Gulf Coast and may contribute to some drought relief. Active convection and an atmospheric Kelvin wave may produce favorable conditions for tropical development across the eastern Pacific, but at the current time the threat for this is considered low and this was not highlighted on the outlook. An additional potential threat, although confidence is low, is for tropical development across the Bay of Campeche during the period.

During Week-2, the northward migration of the monsoon across Mexico is the most important feature as these areas are well overdue for enhanced rainfall. In addition, a frontal boundary oriented across the Gulf of Mexico or southern Gulf Coast or flow ahead of this frontal boundary favors enhanced rainfall and provide considerable drought relief to Florida and potentially the eastern Gulf Coast during the period. Considerable mixed signals are present across much of the Eastern Hemisphere during Week-2, so no areas are highlighted from the Indian Ocean to the western Pacific. An atmospheric Kelvin wave may excite convection across portions of Africa during this period and enhance rainfall but uncertainty is high at the current time.