

The atmospheric circulation remained incoherent with respect to the MJO, and other modes (Kelvin and Equatorial Rossby Waves) are dominating the pattern. Tropical Storm 19W developed over the Western Pacific and Tropical Storm Simon is moving northward over the eastern Pacific. During the next 4 days, additional tropical cyclone formation is unlikely over the Pacific and the Atlantic. From days 5-11, odds of tropical cyclone formation are slightly enhanced over the Western North Pacific.

The areas of enhanced rainfall have been modified to be consistent with recent model guidance products, forecast tracks of tropical cyclones, and coherent modes of tropical variability. A Kelvin wave moving across the Indian Ocean now is likely to support enhanced convection over the West Pacific. Convection is anticipated to wane over the tropical East Pacific during the next 4 days, with a potential return to near normal conditions through day 11.

----- Previous discussion follows -----

The MJO remained weak during the past week with the CPC velocity potential index and the Wheeler-Hendon RMM-based index indicating the lack of a MJO signal. Dynamical models indicate a strengthening signal over the Maritime Continent and West Pacific, with little to no propagation. Statistical forecasts of the MJO indicate a continued weak signal during the next two weeks. Therefore, the MJO is not expected to influence convection or tropical cyclone activity during the next two weeks. Diagnostic tools reveal the presence of a Kelvin wave crossing Africa with other modes (Equatorial Rossby Wave) impacting the Maritime Continent.

As of 11am on 30 Sep 2014, Tropical Depression Rachel is still active over the East Pacific, with Tropical Storm Phanfone over the West Pacific. Tropical Storm Kammuri has become extratropical during the past 24 hours. During the next 2 weeks, tropical cyclone activity is likely to be enhanced over the East Pacific, and over the western North Pacific, east of 140E. The National Hurricane Center (NHC) outlooks indicated a 90% chance of formation during the next 5 days near the southern coast of Mexico. There is also a lower confidence threat of tropical cyclone formation from around 10N/130-140E, near and north of Palau. Some models are depicting a tropical cyclone over the Arabian Sea during the latter portions of Week-1, although confidence is low to moderate, at best. The western North Pacific is likely to remain active through Week-2, although the confidence decreases into Week-2. Meanwhile, tropical cyclone development is expected to remain below climatology across the Atlantic basin. Currently, NHC indicates a near 0% chance of development during the next 5 days.

The Kelvin wave moving across Africa is expected to contribute to the variability over the Indian Ocean, but likely to increase convection over the western Pacific later in Week-1. This is due to the out of phase interaction with the Equatorial Rossby Wave currently located over the Maritime Continent. The Asian Monsoon circulation is likely to be weaker during Week-1, favoring below-average precipitation across much of India and Southeast Asia. The normal monsoon retreat dates are 7-12 October for most of Southeast Asia and India. Above average rains are likely over southern Mexico along with an increased threat of tropical cyclone formation. SSTs in near the tip of Baja California are below average now, compared to being much above average earlier in the summer. That does favor less precipitation than in previous weeks for this wet region. Below average rains are likely over Central America, where drought is still plaguing some countries, especially Belize.

During Week-2, enhanced rainfall is likely over the southernmost portions of Southeast Asia and portions of the western North Pacific. Below average rains are favored over India and Central America.

Rainfall forecasts over Africa are based on local scale circulation features and produced by the CPC International Desk. For details, please see

http://www.cpc.ncep.noaa.gov/products/african_desk/cpc_intl/africa/africa.shtml