

The tropics are relatively quiet for this time of the year. The MJO, which has been weak throughout the past month, is expected to remain weak during the next two weeks. The GEFS provides some weak evidence that the MJO will strengethen into Phase 4 soon, but we believe that this forecast is a consequence of the model producing a trade wind surge east of the Date Line, which projects onto the lower-level RMM wind field and creates a false jump in the RMM index. Elsewhere, the main source of tropical wave activity during the next week is an equatorial Rossby wave that has been associated with the development of at least three tropical cyclones in the western Pacific and is expected to propagate westward over the Indian ocean during the next 10 days. A convectively coupled Kelvin wave is expected to pass through the central and eastern Pacific towards the end of Week-1 and early Week-2, producing a favorable environment for tropical cyclogenesis.

The main tropical activity during Week-1 will be in the western Pacific. Above normal rainfall is expected around the East China Sea in association with tropical storms Lekima, Francisco, and Krosa. A monsoon low in the northern Bay of Bengal is expected to bring above-normal rainfall to much of the surrounding region during Week-1. There is a small chance that the low could reach tropical storm status before making landfall in northeastern India on Wednesday morning, but we do not think the probability of this

happening is high enough to warrant a shape on the map. Below normal rainfall is expected over much of the Maritime Continent and Indian Ocean south of India during Week-1 in association with the passage of the aforementioned equatorial Rossby wave. There is a moderate risk of tropical cyclogenesis in the East Pacific towards the end of Week-1 in association with a Kelvin wave, which is evident in the latest ECMWF ensemble runs.

There are indications that the eastern Pacific will become more active during Week-2. Both the GFS and ECMWF predict multiple lows to develop into tropical storms during this time as the aforementioned Kelvin wave passes through. The probability of TC development increases in the eastern Pacific during Week-2 and there is a secondary moderate risk area in the central Pacific. Models also indicate below normal ranifall over the Maritime Continent and India as tropical wave activity over the region diminishes.