

The MJO remained active during this past week, with the convectively active phase centered over the Indian Ocean, and the subsident phase over the Americas. The weak signal of the MJO, as indicated by the Wheeler-Hendon MJO Index, was likely a result of competing signals, with some persistent convection near the Date Line adding noise to the pattern. The signal has gained strength during the past couple of days. Above-average precipitation was inferred from satellite measurements over equatorial Africa, the Indian Ocean, and the western Pacific near the Date Line. Drier than average conditions were indicated over South America and the Atlantic Ocean, with mixed conditions over the Maritime Continent. Atmospheric Kelvin waves also impacted the precipitation and circulation over Africa and the Indian Ocean.

No tropical cyclones developed this past week.

The dynamical models are in fair agreement about the forecast state of the MJO during the next two weeks, with most predicting some strengthening during Week-1, followed by eastward propagation during Week-2. The bias corrected versions of the dynamical models contain more eastward

propagation, indicating that the bias corrections are compensating for the known problems with model propagation of the MJO across the Maritime Continent. The statistical tools indicate more propagation than the dynamical models, but with lower amplitude of the signal.

The Week-1 outlook is based primarily on the forecast phase of the MJO and the interaction with Kelvin Waves. Wet conditions are likely across the eastern Indian Ocean and the Maritime Continent, a zonally elongated area, reflective of the influence of the atmospheric Kelvin Waves. Drier than average conditions are likely across the southwest Pacific, northern South America, and central Africa, all influenced by the convectively inactive phase of the MJO. Tropical cyclone formation is more likely than average across the southern Indian Ocean. Some model forecasts indicate slightly enhanced odds for a strong, low-level circulation to develop over the Bay of Bengal, but due to the high shear in the region, tropical cyclogenesis is not expected during this outlook period.

Wetter than average conditions are likely to continue across the Maritime Continent during Week-2. Dry conditions are forecast to expand across Africa and northern South America. Some model forecasts indicate a prolonged period of rainy conditions across the Caribbean and western North Atlantic during this period. No areas of enhanced likelihood for tropical cyclone formation can be identified at this time.