

The MJO remained weak during the past week, but has become slightly more organized in recent days. The low frequency state continues to influence anomalous convection throughout the global tropics. Dynamical model forecasts of the RMM index indicate a weak MJO signal with fast eastward propagation into the Western Hemisphere during the next two weeks. Due to the low amplitude of the predicted MJO signal and time of year, the MJO is expected to have little to no impact on the extratropical circulation.

On April 6, Tropical Cyclone Ernie developed over the South Indian Ocean at 13.3S/110.8E and intensified rapidly with maximum sustained winds of 130 knots. Ernie dissipated a few days later on April 10. Meanwhile, a pair of tropical cyclones formed over the South Pacific during early April. Short-lived Tropical Cyclone 14P developed east of the Date Line, while Tropical Cyclone Cook originated near Vanuatu and tracked south across New Caledonia with maximum sustained winds of 85 knots.

Satellite imagery indicates a broad area of low pressure located across the West Pacific at 5-10N/140E. Model guidance is in good agreement that this broad area of low pressure becomes a TC early in Week-1

as it tracks west towards the Philippines. Elsewhere, TC development with moderate confidence is favored for the Bay of Bengal later in Week-1, based on GFS ensemble forecasts. There is an increased risk of TC development across the Coral Sea during Week-1, but the latest GFS model runs have less support for this region, and thus no potential hazard is indicated on the forecast map.

Anomalous rainfall across the global tropics during the next two weeks is expected to be influenced by a fast MJO signal or atmospheric Kelvin wave shifting east from the West Pacific and into the Western Hemisphere. Therefore, MJO precipitation composites from Phases 6 to 8 are considered in making the outlooks. The fast MJO signal will be destructively interfering with the low frequency state, reducing forecast confidence. The favored areas of anomalous rainfall are also based on a consensus of the precipitation forecasts among the dynamical models. During Week-1, the highest confidence for above-average rainfall is related to tropical cyclone activity. As multiple tropical cyclones move away from the equator, a drying trend is expected during the next week across much of the Maritime Continent and West Pacific. Parts of the West and Central Pacific are expected to remain drier-than-normal during Week-2. The weak MJO signal is expected to contribute to enhanced convection across parts of the South Pacific during the next two weeks, while above-average rainfall is expected to return to parts of Colombia, Ecuador, Peru, and the far eastern Pacific by Week-2.

Forecasts over Africa are made in consultation with CPCs international desk, and can represent local-scale conditions in addition to global-scale variability.