

The MJO remained active during the past week, though the RMM based MJO index is depicting a weakening signal. Other measures (quantitative and qualitative) such as the CPC velocity potential based index indicate a stronger signal than depicted by the RMM based MJO index. Despite the disagreement in the amplitude of the MJO, the indices agree that the convectively enhanced phase of the MJO is likely over the east-central Pacific, moving toward the Americas. El Nino remains in place as well, but the seasurface temperature anomalies are decreasing. The enhanced phase of an Equatorial Rossby wave is just west of the Date Line, while a Kelvin wave is moving across the eastern Pacific. Both of those modes further complicating the picture of tropical convection.

Dynamical model guidance indicates a continued propagation of a weak MJO signal across the Americas and Africa, with a signal emerging over the Indian Ocean in Week-2. Statistical guidance is a bit slower, but maintains about the same amplitude.

Tropical cyclone 17S developed over the Southern Indian Ocean, though the season continues to be quieter than average for that basin. During the next week, the most likely area for tropical cyclone

development is over the South Pacific and Coral Sea. Statistical models based on past tropical cyclone formation locations during different phases of MJO activity indicate a slight favorability across the western North Pacific, but dynamical models do not indicate a heightened potential, so confidence in tropical cyclone formation there is low. The MJO is likely to emerge over the Indian Ocean later in Week-2, so a slight increase in potential for tropical cyclone formation there is possible, but an increased threat is more likely realized in Week-3.

Precipitation forecasts in this outlook are based on consensus of CFS and ECMWF models, as well as MJO, ENSO, and activity from other modes. During Week-1, above average rainfall is likely over the central Pacific and South Pacific Convergence Zone, with suppressed rainfall over the Maritime Continent. Other small areas of enhanced precipitation are associated with frontal activity (southeast U.S.) or tropical cyclone activity (South Indian Ocean). During Week-2, some enhanced rainfall is likely to linger over the central Pacific, with an eastward extension of areas of above average rains. Model uncertainty about the emergence of a signal over the Indian Ocean and uncertainty associated with the continued westward propagation of the ERW, preclude the depiction of any areas over the Indian Ocean.

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