

The MJO became more organized during the past seven days. The RMM-based MJO index indicated some strengthening and eastward propagation over the Maritime Continent and West Pacific, while the CPC velocity potential index also shows more organization of the convection signal over the West Pacific. The upper-level velocity potential pattern now depicts wave-1 structure, with enhanced convection centered over the western and central Pacific, and subsidence from the Americas to the Indian Ocean.

Dynamical model forecasts of the MJO are in excellent agreement, and all indicate continued propagation of the pattern across the western and central Pacific during the next 7-10 days. Beyond that the models all suggest that the intraseasonal signal slows down over the central Pacific and/or Western Hemisphere as it begins to constructively interfere with the background ENSO state. Some solutions, especially from the GEFS, suggest a notable interference between the MJO signal and westward-moving variability during the next few days. This may be due to an equatorial Rossby wave over the West Pacific.

Tropical storm Tatiana and Cyclone Winston each formed in the South Pacific during the past week. The former dissipated fairly quickly while the latter is forecast to intensify while remaining nearly stationary south of American Samoa. Tropical Storm Daya and Cyclone Uriah formed over the South Indian Ocean, the former just east of Madagascar and dissipating quickly. Cyclone Uriah is forecast to track southwestward before recurving between 75E and 80E. There is low confidence in the formation of any new tropical cyclones over the next week.

Above-median precipitation is forecast across the western and central Pacific Ocean during Week-1, while below-median rainfall is anticipated for parts of the Maritime Continent and northern Australia. These regions are closely association with both the ongoing ENSO signal as well as the intraseasonal MJO signal. Other regions favoring above- or below-median precipitation are based largely on model guidance and ongoing tropical cyclone activity.

During Week-2, the strongest signals are all consistent with constructive interference between the MJO and ENSO. Above-median precipitation is likely over the Central Pacific, while below median precipitation is likely over the Maritime Continent and northern South America. Above-average rainfall with tropical origins is possible over parts of southeastern North America, while model guidance suggests that enhanced rainfall may continue over parts of the western and central Indian Ocean. There is a moderate risk of tropical cyclogenesis over the South Pacific, east of the Date Line.

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