

The MJO remained generally weak during the past week. The CPC Velocity Potential Index indicates a stronger signal than the RMM based index. The upper-level pattern is close to a wave-1 structure while the lower-level wind field has weak anomalies, so the difference in the strengths of the indices is not abnormal. Many dynamical models indicate a strengthening signal over the East Pacific/Americas, likely linked to a Kelvin Wave moving through that region and constructive interference from other modes. An Equatorial Rossby Wave is also moving across the Indian Ocean. Some monitoring tools are picking up on an Equatorial Rossby Wave over the Atlantic as well, but that is less well defined.

Tropical Storms Fay and Gonzalo developed over the tropical Atlantic while Super Typhoon Vongfong moved northward to impact Japan before recurving over the North Pacific. Tropical Storm Ana developed about 1100 miles east-southeast of Honolulu and is forecast to move directly toward the island chain. Through Week-1, the Kelvin wave moving across the East Pacific is likely to support tropical cyclone formation there. A low confidence, enhanced threat of tropical cyclone formation (20% chance) is indicated by NHC over the central tropical Atlantic, most likely to develop later this week. A moderate confidence threat of tropical cyclone formation is also indicated over the Western North Pacific in response to the projected location of an equatorial Rossby Wave. For Week-2, the threat continues over the East Pacific, while the most likely area for formation over the Atlantic shifts to near Central America and the Bay of Campeche. Additionally, later in Week-2, some dynamical models indicate a threat of tropical cyclone formation over the Southwest Indian Ocean. A formation during Week-2 would be among the earlier formations, but not unprecedented in the historical record.

During Week-1, heavy rains are favored over Hawaii along the track of what is currently Tropical Depression Two-C. Above average rains are likely across Central America and portions of the Caribbean, likely associated with a Kelvin Wave moving through the area. Below average rains are likely from the Bay of Bengal to Papua New Guinea, and also across Brazil, Bolivia, Paraguay, and Peru.

The Week-2 outlook reflects little to no influence from coherent MJO related features, but rather the positions of other modes of varibility. An equatorial Rossby Wave is likely to suppress convection over the Indian Ocean, while a Kelvin wave and local circulation features are forecast to support convection over west-central Africa.

An Equatorial Rossby Wave is likely to enhance precipitation over central Africa during Week-1. The remaining areal forecasts over Africa are larely based on local conditions.