

The MJO remained active during the past week, though the amplitude has backed off the record highs observed earlier in the month. The enhanced convective phase is currently located over the East Pacific and Americas, with both the CPC velocity potential index and the Wheeler-Hendon RMM based index indicating the same general geographic region for enhanced activity. Propagation has slowed and the amplitude has continued to decrease over the past several days. Upper-level anomalies of velocity potential and zonal winds continue to indicate a wave-1 structure. The MJO is currently constructively interfering with the strong ENSO signal.

Most dynamical model forecasts of the MJO indicate significant weakening during the next week, with some suggesting some westward propagation. This is likely due to the westward movement of ongoing TC activity, as well as the reemergence of the ENSO state as the dominant pattern of variability over the global tropics. Our team agrees with the model consensus, though uncertainty is fairly high regarding how atmospheric Kelvin waves, emanating from the main envelope of enhanced convection, will interact with the large-scale tropical pattern over the next two weeks.

Several tropical cyclones developed during the past week. Hurricane Dolores and Tropical Storm Enrique formed in the East Pacific; the latter has a small chance of contributing moisture to parts of the Southwest U.S. late in Week-1 into Week-2. A weak tropical depression formed southwest of Hawaii, while Typhoon Halola formed near the Date Line. The latter is expected to track west-northwestward while strengthening over the next week. Ongoing Typhoon Nangka is forecast to make landfall over southern Japan later this week. Over the North Atlantic basin, a weak tropical storm, Claudette, formed, but is not forecast to be a major player for that region. Tropical cyclogenesis is most likely late in Week-1 Week-2 over the East Pacific, where climatic conditions remain favorable.

Precipitation outlooks for Week-1 and Week-2 harvested the model consensus between the CFS and ECMWF coupled systems, the ENSO background state, and ongoing/predicted tropical cyclone activity. Enhanced rainfall is favored over much of the central and eastern Pacific basins, while large-scale suppression is forecast for much of the Maritime Continent and the western Atlantic for the next two weeks. Below-average rainfall is favored over western India during the period, while enhanced rainfall is more likely over parts of Southeast Asia and China. Favorable MJO activity makes enhanced rainfall over parts of southeastern South America likely during Week-1, with increased uncertainty beyond that.

Forecasts for enhanced or suppressed rainfall across Africa are provided in collaboration with CPC's Africa Desk and are based on regional scale anomaly features.