

The RMM-based MJO index indicates a weak signal during the past week, while the CPC velocity potential based index indicates little coherent signal, as well. The pattern of convection continues to be largely dominated by the high-amplitude low-frequency state, though robust atmospheric Kelvin Wave activity is also contributing. This is most evident over parts of the Maritime Continent where enhanced convection is currently observed, which is at odds with the ongoing ENSO state.

Dynamical model outputs generally indicate a weak MJO signal during the next two weeks, although the GEFS forecast has a very weak signal over the Western Hemisphere during Week-2. This could be a reflection of the evolution of the background state, or due to continuing Kelvin Wave activity. In either case, the MJO is not expected to contribute to any significant portion of tropical convective variability. Statistical tools indicate little coherent MJO signal as well. Therefore, the forecast is based on the ENSO state and dynamical guidance from the CFS and ECMWF coupled systems.

No tropical cyclones developed during the past week. During the next 7 days, tropical cyclone formation odds are enhanced near the Kimberley Coast of Australia. There is a low chance of a weak tropical

cyclone forming near Madagascar during the next several days, though the probability is too low to warrant a map depiction. During Week-2, the only region that can be delineated on the map is a fairly large region in the Northwest Pacific, where overall conditions seem somewhat favorable. Over the Indian Ocean near Sri Lanka, there is a low risk of formation associated with a forecast area of enhanced convection. The latest 06Z run of the GEFS indicates about a 10 to 15 percent chance of formation over the eastern Pacific basin, and the coupled CFS system suggests the first system in that basin could form as early as Week-3. This will continue to be monitored closely.

During Week-1, convection is likely to be enhanced over much of the Pacific cold tongue extending to near the Date Line due to the ENSO state. This convection could bring heavy rains all the way to the South American coast. Suppressed convection is more likely over parts of Southeast Asia from the Bay of Bengal to the South China Sea, as well as parts of the Maritime Continent. In spite of the robust lowfrequency state, confidence is lower here due to the enhanced phase of a Kelvin wave impacting this region early in the period. Dry conditions are favored over northeast South America and parts of the Caribbean Sea, with above-average rainfall favored farther south over parts of South America.

For Week-2, convection is forecast to be above average from west of the Date Line all the way to the South American coast. Both the CFS and ECMWF are in agreement on this point. In the wake of the enhanced Kelvin wave convection over the Maritime Continent early in Week-1, suppressed rainfall is highly likely over most of the Maritime Continent and Southeast Asia. Models are in good agreement indicating enhanced rainfall over the Gulf of Mexico and adjacent coastal regions. The low-frequency state is expected to continue to favor the pattern indicated over South America, namely, suppressed rainfall across the northern part of the continent and enhanced rainfall to the south.

Depicted areas of enhanced or suppressed rainfall over Africa are produced in collaboration with CPC's Africa Desk.