

The MJO remained active during the past week with the enhanced convective phase centered across the Maritime Continent (MC). Convection remained above-average over much of the Indian Ocean (IO), slightly further west than was anticipated last week. Areas of below normal convective activity and rainfall were evident over eastern Brazil and Uruguay, the central Pacific near the Date Line, and Madagascar. An atmospheric Kelvin Wave is likely to have played a role in persisting convection further to the west than what was expected.

Two tropical cyclones formed over the southern Indian Ocean during the past week. Tropical Cyclone Koji moved westward over the central, southern Indian Ocean. Tropical cyclone Lua recently formed northwest of Australia, and is expected to contribute to significant rains there during the next week.

The forecast for the upcoming week indicates enhanced rainfall for much of the Maritime Continent and northern Australia. Additional tropical cyclone activity is forecast north of Australia, consistent with the JTWC TCFA currently in place. MJO phases during week-1 (phases 5 and 6) support an increased threat of tropical cyclone formation across the Timor Sea and the Gulf of Carpentaria. Some composites of

tropical cyclone formation locations, based on MJO phases, indicate a small chance for TC formation over the Central Indian Ocean during week-1, but confidence is low, so no hazard is depicted at this time. Suppressed convection is likely across the Indian Ocean, north of the equator, and across equatorial portions of South America. La Nina conditions and the forecast phases of the MJO support suppressed rainfall near the Date Line over the equatorial Pacific.

During Week-2, the interplay between La Nina and the MJO increases the uncertainty in the forecast. Currently, the forecast favors drier than average conditions across the Central Indian Ocean, central Pacific (near the Date Line), and over northern South America. Enhanced rainfall is favored across the Philippines, northern Australia, Indonesia, the Coral Sea, and the South Pacific to near 170W. The chances of tropical cyclone formation near Australia remain elevated during Week-2, with the highest threat area straddling Australia, extending east to over the Coral Sea.