

The MJO remained active during the past week, with the enhanced convective envelope over the Maritime Continent. The RMM-based MJO index indicates a much more contiguous signal than the CPC Velocity Potential based index during the past month, but both indices now indicate a signal over the Maritime Continent with prior progression across the Indian Ocean. The MJO is now constructively interfering with the Indian Ocean Dipole mode and any residual La Nina signal.

Dynamical and statistical model forecasts of the MJO indicate that signal will continue propgating eastward, with a slight amplification. The dynamical models indicate a faster progression than the statistical models, though both are well within the MJO timeband. The IOD is expected to continue influenging the pattern, while the impacts of La Nina are expected to wane in February. During Week-2, the interaction between the intraseasonal signal and lower-frequency modes increases the uncertainty as the two signals are likely to destructively interfere.

Tropical storm 03S formed in the South Indian Ocean, near the northwest coast of Australia. Going forward, tropical cyclone formation odds over the Southeast Indian Ocean, Timor Sea and Gulf of

Carpenteria are increased during Week-1, with a slight westward shift down the Kimberly Coast during Week-2. Additionally, formation odds northeast of Madagascar are enhanced during Week-1. With the MJO predicted to move to the West Pacific, there is also a slight increase in the odds of formation over the northwest Pacific during Week-1.

The constructive interference of modes favors above median precipiation over the Maritime Continent, Australia, and the Western Pacific during Week-1. Drier than average conditions are likely over the Central Pacific, though spatially the area should be smaller than prior weeks. Drying should also begin to build in over the western and central, equatorial Indian Ocean. Mid-latitdue influence favors above meidan rains for northern portions of Hawaii. Additionally, later in Week-1 some MJO signal is likely to impact the west coast of South America.

During Week-2, the MJO and mid-latitude influences are likely to enhance convection over the Americas. Some influence from the IOD is likely over the Maritime Continent and northwest Australia as well. In between both of those signal, below median convection is likely over the central Pacific.

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