The RMM based MJO index indicates a weak signal during the past week, with only a couple of days outside the unit circle. The CPC velocity potential based index indicates little to no signal, as well. Any remaining MJO signal is currently over the eastern Indian Ocean, although enhanced convection over the Indian Ocean may in part be due to a transitory feature. Enhanced convection remains in place near the Date Line, with suppressed convection over the Maritime Continent. Given the persistent locations of the convective anomalies, the low-frequency state is controlling much of the pattern of tropical convection, with other subseasonal modes contributing little.

Dynamical model outputs generally indicate a weak MJO signal during the next week, with some models depicting a strengthening signal over the Western Hemisphere during Week-2. This could be a reflection of a slight eastward shift in the background state, or models developing Kelvin Wave like responses to convection near the Date Line. Statistical tools indicate continued eastward propagation from the Indian Ocean to the Maritime Continent, which is an unlikely scenario given the background El Nino.
No tropical cyclones developed during the past week. During the next 7 days, tropical cyclone formation odds are enhanced over the western North Pacific, along 10N from about 140-170E. Slightly enhanced odds for tropical cyclone formation are depicted in some models over the Coral Sea, but uncertainty is high there due to the potential for increased shear. During Week-2, no specific areas where tropical cyclone formation odds are enhanced can be confidently delineated. Some models indicate the potential for tropical cyclone formation over the southeast Indian Ocean, and the East Pacific. The traditionally observed tropical cyclone season for the East Pacific does not start until May 15, so this would be an early start to the season over that basin.

During Week-1, convection is likely to be enhanced over the western North Pacific along 10N and from the Date Line to about 150E, and also over the Central Pacific, south of Hawaii. Suppressed convection is likely over the eastern Indian Ocean, and over the eastern portions of the Maritime Continent. Dry conditions are favored over northeast South America, as far west as Venezuela. All of those conditions are typically associated with El Nino conditions, and the forecast reflects the relative weakness of any other modes of variability.

For Week-2, convection is forecast to be above average from the about 165E to about 160W, between 10N and 10S. East of 160W, most of the above average rains are likely to be north of the equator. Some models are indicating substantial rains for western Colombia and Ecuador during Week-2. Some model outputs also indicate above average rains for The northernmost islands of Hawaii. Below average rains are forecast over the Maritime Continent and portions of the western North Pacific. Below average rains are also likely to continue over northeast South America, expanding from Week-1 to potentially as far west as Colombia. These forecast conditions represent consensus between the low-frequency state and outputs from CFS and GFS models.

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