

Consistent with the dynamical model forecasts from last week, the CPC velocity potential-based and RMM-based MJO indices both depict an enhanced MJO signal that has returned to the Indian Ocean, similar to the beginning of March. The period of this intraseasonal signal is around 20 days, which is considerably faster than a canonical MJO and more in line with values expected from Kelvin wave activity. Additionally, while the signal is well represented in the wind field, particularly in the upper troposphere, the convective pattern across the global tropics, observed via OLR anomalies, is not consistent with robust MJO activity. The low frequency base state favoring enhanced (suppressed) convection over the western Indian Ocean and Date Line (Maritime Continent) continues to be the primary driver of large-scale convective anomalies, with the fast intraseasonal signal failing to couple substantially with the convection. There is some evidence, however, that the suppressed phase of the intraseasonal signal has weakened the persistent enhanced signal near the Date Line. Dynamical model MJO index forecasts continue to show a fast eastward propagation of the intraseasonal envelope, with the GEFS ensemble mean maintaining some amplitude across the West Pacific during Week-1 and the Western Hemisphere by Week-2. The ECMWF weakens the signal considerably over the Pacific, as the forecast convective anomalies remain weak and reflect the base state rather than MJO activity.

No new tropical cyclones developed during the past week. During Week-1, there is some dynamical model support for a potential low-latitude formation in the vicinity of the Philippines, either just west of Mindanao early in the period, or the South China Sea later in the period. Additionally, an area of enhanced convection currently over the Gulf of Carpentaria has a moderate potential for development as it moves slowly westward towards the Kimberley Coast late in Week-1 or during Week-2. Finally, several ensemble members of the GEFS depict a formation further west over the southwestern Indian Ocean during Week-1, but confidence is too low to include a hazard on the outlook.

Given the lack of substantial convective coupling to the intraseasonal signal, the precipitation forecast is based largely on dynamical model consensus, and is more reflective of the ongoing low-frequency state. During Week-1, enhanced convection is favored across parts of eastern Africa, the southern Indian Ocean, and extending from the eastern Maritime Continent across the North Pacific ITCZ region. Additionally, enhanced storminess is favored for parts of the northern Mediterranean region and Middle East, while widespread heavy precipitation is forecast to extend from eastern China to southern and central Japan. Precipitation anomalies across South America are based primarily on the ECMWF ensemble mean. During Week-2, the low-frequency base state and dynamical model consensus favor enhanced (suppressed) convection over the southern Indian Ocean and the central Pacific (Maritime Continent), while the fast moving intraseasonal signal may help bring enhanced rainfall to the equatorial Atlantic.

Forecasts over Africa are made in consultation with CPCs international desk in addition to dynamical model consensus, and can represent local-scale conditions in addition to global-scale variability.