

During the approximately 30-day period from early October to early November, a robust MJO signal circumnavigated the global tropics, starting from and ending over the Maritime Continent region. This signal was on the high-frequency end of the conventional 30-60 day MJO period. All that remains now is a very weak intraseasonal signal over the Maritime Continent, as confirmed by both CPC's velocity potential based index and the RMM index. Dynamical model MJO forecasts display significant differences in both the forecast amplitude and phase of a potential developing MJO signal over the next one to two weeks. A general consensus of solutions favors an amplifying signal over the eastern Indian Ocean and western Maritime Continent during Week-1, followed by eastward propagation of this signal during Week-2. A modal decomposition technique that attempts to identify various subseasonal modes of variability (and uses the CFS model to predict outgoing longwave radiation anomalies for the next few weeks) reveals the most significant players during this period are likely to be the low-frequency base state (La Nina) with likely modulation by eastward-moving Kelvin waves, and westward-moving equatorial Rossby waves, with the MJO portion of the intraseasonal continuum expected to play a more subdued role.

In the past week, Tropical Storm Kirogi formed over the South China Sea and tracked westward into Vietnam. Peak winds with Kirogi reached 40 kts. However, the remainder of the global tropics remained quiet, as the Northern Hemisphere tropical cyclone (TC) season rapidly winds down. Late in Week-1 and early in Week-2, TC development is possible over the southern Bay of Bengal region. The 0z ECMWF and the 6z and 12z GFS solutions differ on exactly where and when this TC may form, but they do agree that if one forms, it will track westward towards Sri Lanka and far southern India.

For Week-1, areas of above-average rainfall are predicted over the eastern North Indian Ocean (in part related to expected TC development), the Maritime Continent area (due to Kelvin wave activity), and southeast of Hawaii (related to sustained easterly flow and possibly a weak low pressure area). Areas of above-average rainfall are also anticipated near/along the South Pacific Convergence Zone well east of Australia and New Zealand, the central tropical and western subtropical Atlantic (related to the Intertropical Convergence Zone and to passing cold fronts, respectively), and over southern Brazil and adjacent waters of the South Atlantic (mid-latitude activity). Areas of below-average rainfall are anticipated over the tropical East Pacific, and off the northeast coast of Brazil.

For Week-2, above-average rainfall is more likely over central and eastern portions of the North Indian Ocean (related to possible TC activity), near New Guinea (possible intraseasonal activity), and near/over the Hawaiian Islands (as mentioned above). Below-average rainfall is favored over the tropical central Pacific.

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