

The MJO remained active during the past week as the enhanced phase propagated eastward across the Maritime Continent. Dynamical model MJO index forecasts generally indicate a weak eastward propagating signal during the upcoming two week period, but model spread and uncertainty remains high. Based on the latest observations and most model forecasts, the MJO is forecast to remain active with the enhanced convective phase located across the western Pacific during the period.

In the West Pacific, Tropical Storm Sanba continued moving northwestward and impacted Korea. Hurricanes Lane and Kristy developed in the eastern Pacific while TD14 in the central Atlantic became Hurricane Nadine and moved northward.

The enhanced convective phase of the MJO is forecast to be over the western Pacific (phase 6) during Week-1. Anomalous rainfall forecasts (both above and below average areas) are largely based on MJO rainfall composites for this phase. Above average rainfall is forecast from southeast Asia to the Philippines and into the western Pacific, while below average rainfall is forecast for the eastern equatorial Indian Ocean, southern India, and the western Maritime Continent. Model guidance and

current satellite imagery also support these areas of enhanced and suppressed rainfall. Above average sea surface temperatures also support enhanced precipitation for the western Pacific. There are elevated chances for tropical cyclone development in the western Pacific, consistent with the enhanced phase of the MJO in phase 6. An atmospheric Kelvin wave supports elevated chances for tropical cyclogenesis for the eastern Pacific as well. Model guidance also indicates a weak area of low pressure in the eastern Pacific near the Central America coast, but models do not forecast tropical cyclone development at this time. Confidence for both tropical cyclone areas is moderate. In western Africa and the adjacent waters southeast of the Cape Verde Islands, there is an increased chance for above average rainfall associated with a weak area of low pressure expected in the region.

The enhanced phase of the MJO is forecast to move across the western Pacific (phase 7) during Week-2 and rainfall likely will begin to increase for parts of the western hemisphere at the end of Week-2. Rainfall forecasts are heavily based on MJO rainfall composites for this phase. Above average rainfall is forecast from the Philippines to the Date Line in the western Pacific, while below average rainfall is forecast for the eastern Indian Ocean, southern India, and much of the Maritime Continent. Model guidance also supports these precipitation areas. Above average rainfall is forecast for Central America as the enhanced phase of the MJO approaches the western hemisphere. There are enhanced chances for tropical cyclone development in the western Pacific, due to the enhanced phase of the MJO in the region, and also for the eastern Pacific, as the MJO approaches this area.