

The MJO remained active during the past week with the enhanced convective phase shifting across the eastern Indian Ocean (IO) to the Maritime Continent. Equatorial Rossby Wave (ERW) activity continues to be very evident with enhanced phases currently located across Africa and the western Pacific with a suppressed phase entering the western IO. There was some destructive interference across the central IO between the enhanced phase of the MJO and the suppressed phase of the ERW this past week.

Enhanced convection was observed over eastern Africa, the southern Indian Ocean, Maritime Continent, and large portions of Australia. The areas of enhanced rainfall and convection across the southwestern IO and Madagascar were mainly associated with tropical cyclone activity (Irina and TC 15S). The largest areas of suppressed convection were observed over the central equatorial pacific and eastern Brazil.

The forecast for the WH MJO Index calls for continued eastward propagation over the Maritime Continent during Week-1. The dynamical models vary with respect to the strength of the MJO signal during week-1, but most maintain a significant signal. During week-2, uncertainty increases as model

spread increases. Some of the spread is due to different propagation speeds among the model solutions, but most model solutions indicate propagation of the MJO signal to the Western Pacific.

During the first week of this outlook period, enhanced rainfall is favored for the Maritime Continent and Hawaii, consistent with the convectively active phase of the MJO. Enhanced rainfall is also likely over southeast Africa due to the remnants of Tropical Cyclone Irina. Drier than average conditions are most likely from equatorial Africa to the central equatorial Indian Ocean, across the central Pacific near the Date Line, and across eastern Brazil.

The areas of enhanced and suppressed rainfall are not expected to move significantly from Week-1 to Week-2. An ERW is expected to slow the pattern slightly across the Maritime Continent and equatorial Pacific despite the forecast eastward movement in the MJO. Drier than average conditions are favored to move eastward and spread across most of the Indian Ocean.

The chances of tropical cyclone formation are elevated across the southeastern Indian Ocean and north of Australia during the entire two week period. Confidence of formation is higher during week-1 over the south central and southeastern Indian Ocea. The area for the highest likelihood of tropical cyclone formation does shift eastward during week-2, covering the Gulf of Carpentaria.