

Enhanced convection persisted across the eastern half of the Indian Ocean and spread eastward to the west Pacific. Suppressed convection prevailed across northern South America. The MJO remained active during the past week with the enhanced phase entering the western Maritime Continent. There is considerable spread among the dynamical model MJO index forecasts. Most model forecasts indicate an eastward propagation but differ on the strength. The MJO index forecasts likely continue to struggle with the representation of other subseasonal tropical variability (Kelvin wave crossing the Pacific) and we favor a continuation of MJO activity. Based on the latest observations and some model MJO index forecasts, the MJO is forecast to remain active during the next 1-2 weeks with the enhanced convective phase located across the Pacific.

During Week-1, the outlook is based primarily on the MJO precipitation composites and model guidance. The ensemble means of the Canadian and UKMET models indicate an eastward propagating signal. The most recent forecasts from the GFS and ECMWF models also show an eastward propagation but a smaller amplitude of the MJO index. The enhanced convective phase of the MJO favors above average rainfall across the Bay of Bengal, parts of Southeast Asia, and the west Pacific. Ongoing convection and warmer-than-normal SSTs increase chances for tropical cyclone development over the

Bay of Bengal. This is consistent with the past several runs of the GFS model and MJO composites for Phase 5 during November. The small area for tropical cyclone formation near southern Vietnam is designated for a disturbance that may develop prior to the outlook period. Following a brief break in enhanced convection across the west-central Pacific, convection is expected to increase across this region later in week-1. Above average rainfall is expected to persist across parts of southern Brazil, while below average rainfall is forecast from Tanzania to South Africa.

Since an active MJO is expected to continue, above average rainfall is favored for New Guinea and parts of the southwest Pacific Ocean. The CFS and to some extent the GFS, indicates above average rainfall for parts of Brazil. Meanwhile, below average rainfall is expected to spread east and affect the western and central Indian Ocean.

Although a wet area is not currently posted for Hawaii, the potential for heavy rainfall exists during week-2 as the enhanced phase of the MJO propagates east across the Pacific Ocean. The warmer-thannormal temperatures favored across the western and central U.S. during week-2 is consistent with the expected upcoming phase of the MJO. Beyond week-2, a continued eastward propagating signal along with a negative Arctic Oscillation (forecast by most GFS ensemble members) increases the chances for below normal temperatures in the north-central U.S. during early December.