

Over the past week, enhanced convection has developed across the Indian Ocean while drier than average conditions were evident for much of the western Pacific Ocean and southern Asia. Tropical cyclone Paul resulted in above-median rainfall for portions of Baja California and northwest Mexico early in the past week. A robust easterly wave entered the Caribbean Sea and resulted in heavy rainfall for the Caribbean and has developed into Tropical cyclone Sandy. Enhanced convection was also observed across parts of the eastern Pacifc, Central America and northwest South America.

The latest observations indicate that the MJO has become better organized with the enhanced convective phase centered across Africa and enhanced easterly winds are evident over the Indian Ocean and eastern Africa feeding active convection during the past week over Africa. The majority of dynamical model MJO index forecasts show a generally weak signal with some eastward propagation during the next two weeks, shifting to and perhaps across the Indian Ocean. It remains too early to say whether the current activity will develop into a more coherent long-lived MJO, but it does appear that the MJO will remain active during the upcoming 1-2 week period. An equatorial Rossby (ER) wave is also likely to impact the Maritime continent region and Indian Ocean during the outlook period.

In the short term, tropical cyclone Sandy is likely to strengthen to hurricane status and impact Jamaica, Cuba and the Bahamas with heavy rain, srong winds and high seas. Heavy rainfall is also possible for southeast Florida later this week and high winds and high seas with likely beach erosion is possible along the eastern seaboard with this system as it moves north-northeast later this week. There is high uncertainty for the eventual path of Sandy after Day 5, but some model guidance shows Sandy may move northwestward and impact the mid-atlantic and Northeast and offshore waters with very stormy conditions. Please see CPC U.S. Hazards Outlook for additional details this week. http://www.cpc.ncep.noaa.gov/products/predictions/threats/threats.php

Model guidance is consistent in favoring below-median rainfall for interior South America and abovemedian rainfall for southern Brazil. The MJO and ER wave favor above median rainfall for the Indian Ocean, southern Bay of Bengal and southern India as well as elevated chances for tropical cyclogenesis for the southern Arabian Sea and southern Bay of Bengal. GFS model guidance also favors these precipitation and tropical genesis areas. The MJO and model guidance also favors above-median rainfall for the Gulf of Guinea and

Greater Horn of Africa areas of Africa. A disturbance east of the Philippines is likely to develop into a tropical cyclone near the Pilippines early in the period and likely will result in areas of heavy rain from the Pilippines to Taiwan. The suppressed phase of the MJO and model guidance favor drier-than-average conditions for the western Pacific.

As we enter the Week-2 period, above-median rainfall remains favored for the Indian Ocean and is also forecast to extend to the western Maritime continent and is supported by MJO phase and the ER wave. Drier-than-average conditions are favored to continue in the western Pacific, albeit with a lower confidence. Conflicting signals in forecast tools and uncertainty in the strength of the MJO lead to no highlighted areas across the Americas. Above-median rainfal is also favored across southeast Africa related to forecast anomalous low-level convergence.