

The MJO remained weak over the past seven days, with most of the active weather in the tropics dominated by the Boreal-Summer, Intraseasonal Oscillation (BSISO) within the Asian Monsoon and variations in the position of the ITCZ (Intertropical Convergence Zone). Enhanced low-level southwesterly flow across the Arabian Sea brought moisture into southern Asia, supporting above-average rainfall from Myanmar to Nepal, and across northern India. Southern and Central India, as well as portions of Southeast Asia had drier than average conditions. Rainfall across the African Sahel was near average in some locations, with below-average rainfall across the Ethiopian and Sudanese Highlands.

Tropical Storm Arlene formed over the Bay of Campeche early last week and moved westward into Mexico. Above-average rainfall was observed across much of central and eastern Mexico. The rainfall spurred mudslides and destruction over a wide area.

The forecast of the MJO, from numerical models, favors a strengthening signal later in Week-1 and during Week-2. At this time, this signal cannot be explicitly linked to coherent, eastward propagating MJO activity, but is more likely related to severl other factors.

During the first week of the assessment period, the Asian monsoon circulation is expected to remain weak, resulting in below-average rains for much of Southern Asia. Rainfall across the African Sahel is forecast to be above average farther inland, from Ghana to western Nigeria, with below-average rainfall near the coast. A northward displacement of the ITCZ across the Eastern Pacific and Central America is expected to impact the area from Southern Mexico to Honduras with heavy rainfall. Tropical cyclone formation chances are enhanced across the eastern Pacific early in Week-1, then a slight decrease in probabilities is expected as the ITCZ shifts northward over the land. Tropical cyclone formation is also more likely between the Philippines and Guam early in Week-1 with the threat lessening later in the week.

During Week-2, large scale factors do not favor tropical cyclone formation across the western northern Pacific early in the week, but chances increase later during the week. Across southern and southeast Asia, variations in winds and rainfall across the monsoon region (BSISO) are expected to contribute to a return in rainfall across southeast Asia after the forecast dry period during Week-1. An area of belowaverage precipitation is likely across parts of western Indonesia.

Enhanced chances for above-average rainfall are likely to continue through Week-2 across Central America and Mexico with the highest chances of threatening heavy rainfall from Guatemala to Nicaragua. A northward shift in the ITCZ is expected to support rainfall totals that would be 3-5 inches above average for Week-2. Associated with this northward shift of convective activity is an enhanced threat of tropical cyclone formation across the Bay of Campeche, Gulf of Honduras, and along the southern coast of Mexico.

Additional rains are likely across the African Sahel, from Ghana to eastern Nigeria as Easterly waves have begun to move across the continent in a more regular manner and should contribute to ehanced rainfall. At the far western portions of Africa, south of Senegal, some model forecasts indicate a period of abnormally dry conditions during Week-2. Uncertainty prohibits the inclusion of a hazard at this time across this region.