

The MJO propagated across the Maritime Continent, maintaining amplitude similar to last week, according to the Wheeler-Hendon MJO Index. The CPC index indicates a slightly weaker MJO signal with eastward propagation. Both indices indicate a convectively active phase over the western North Pacific and show influence from others modes of tropical variability (atmospheric Kelvin Waves and tropical cyclones).

Dynamical model outputs generally indicate continued propagation of the MJO signal during the next two weeks, with the convectively active phase moving across the Central Pacific to the Americas and Africa, with some models depicting a resurgent signal over the Indian Ocean by late in week 2. Statistical model forecasts align with the dynamical model forecasts, although the signals in those are less amplified, so the current outlook reflects a stronger and more coherent MJO, aligned with the dynamical models.

The tropics were active with Tropical Storm Bebinca forming over the South China Sea on 20 Jun, and Tropical Storm Cosme developing over the eastern Pacific on 23 Jun. Tropical Storm Bebinca made

landfall twice, first in Hainan and second in Vietnam. Tropical Storm Cosme is not predicted to impact any major land mass. The chancers for tropical cyclogenesis are enhanced over the eastern Pacific during the end of week 1 and during week 2. Tropical cyclogenesis odds are also slightly elevated over the western Caribbean, during latter portions of week 1, although the confidence in that is low, so no hazard is depicted. Additionally, the threat of tropical cyclogenesis near the Most MJO associated tropical cyclone formations over the tropical Atlantic in July occur when the MJO is transitioning from phase 1 to phase 2, which likely to occur near the end of week 2 and during week 3.

The week 1 outlook is based on a continued, significant MJO signal, with enhanced convection likely over the northeast India, northern Thailand, and across the southern China, as a residual, northward movement from the prior phase of the MJO. The core convection associated with the MJO is likely to be over Mexico, Central America, the Caribbean, and portions of the southeast US. Local enhancement of the West African Monsoon is likely to bring enhanced rainfall to western Africa and the Gulf of Guinea region, with drier than average conditions likely over central Africa. Enhanced odds for below-average rainfall are anticipated from Southern India to the Philippines and across much of Indonesia.

During week 2, the odds for above-average rainfall are enhanced over Central America, the Caribbean, southeast US, and northern South America. Additionally, the MJO is likely to emerge over the Indian Ocean during late week 2, yielding an area of above-average rainfall over the Central Indian Ocean. Enhanced odds for below-normal rainfall stretch from northern India, across Southeast Asia, to the western North Pacific.