

The MJO was weak and atmospheric circualation was largely inconsistent with a structure expected during a coherent and robust MJO. The Wheeler-Hendon MJO Index and the CPC MJO Index both indicate the breakdown of the MJO signal. Atmospheric Kelvin waves are still playing a role in the circulation and the forecast.

Most dynamical and statistical models depict little to no MJO signal during the next two weeks. The deterministic GFS and ECWMF from 30 July depict strengthening, with the GFS indicating an emergence of the singal in Phase 1 and the ECMWF inidicating a signal in Phase 3. The bias corrected versions of those two models indicate little or no signal.

Tropical Storm Dorian formed over the central Atlantic on 24 July, then decayed in strength as it approached the islands of the Caribbean. During Week-1, the Atlantic Basin is expected to remain quiet through the period. Over the eastern Pacific, Tropical Storm Flossie formed on 25 July. Flossie weakened to a Tropical Depression on 30 July and is currently affecting the Hawaiian Islands. During Week-1 and Week-2, tropical cyclone formation chances remain elevated for the eastern Pacific, as two

atmopsheric Kelvin Waves are expected to cross that region. Additionally, tropical cyclone formation odds are forecast to be elevated over the Western Pacific and South China Sea.

During Week-1, convection is likely to be above-average across an area from north-central India to Southeast Asia to the Maritime Continent. This is due to fluctuations in the Monsoon and the residual of the MJO signal. Over the Americas, a break in the North American Monsoon is likely to bring belownormal rains to much of Mexico and the Rio Grande Valley, while the remnants of Tropical Storm Dorian are likely to bring wet weather to the Great Antilles, Bahamas, and south Florida. Rainfall over the African Sahel is likely to be elevated due to anomalously strong monsoonal flow, which would also bring below-average rains to the coastal areas of western Africa.

During Week-2, rainfall is likely to be above-normal from southern China to the Maritime Continent, while dry conditions are likely to develop over India as the monsoonal rains are forecast to diminish slightly. Below-average rains are likely over Mexico and extreme southern U.S. due to a break in the monsoon as tropical cyclone activity is likely to shift moisture westward. Rainfall is likely to continue to be above-average over Sahelian Africa, although the spatial coverage is likely to be significantly reduced from Week-1 to Week-2.