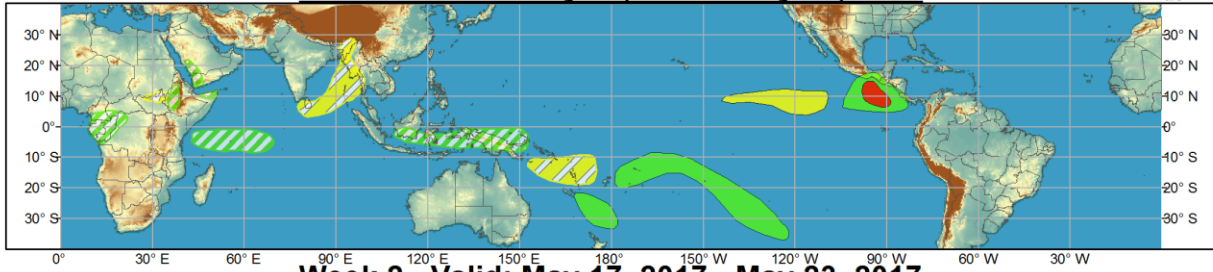




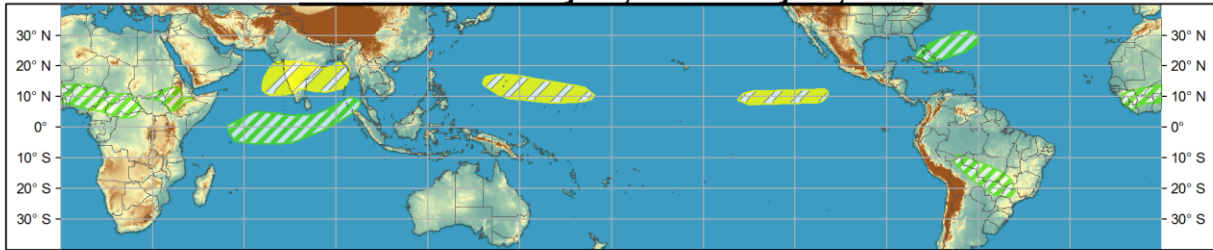
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



Week 1 - Valid: May 10, 2017 - May 16, 2017



Week 2 - Valid: May 17, 2017 - May 23, 2017



Confidence
High Moderate

Tropical Cyclone Formation		Development of a tropical cyclone (tropical depression - TD, or greater strength).
Above-average rainfall		Weekly total rainfall in the upper third of the historical range.
Below-average rainfall		Weekly total rainfall in the lower third of the historical range.
Above-normal temperatures		7-day mean temperatures in the upper third of the historical range.
Below-normal temperatures		7-day mean temperatures in the lower third of the historical range.

Product is updated once per week, except from 6/1 - 11/30 for the region from 120E to 0, 0 to 40N. The product targets broad scale conditions integrated over a 7-day period for US interests only. Consult your local responsible forecast agency.

Produced: 05/09/2017
Forecaster: Rosencrans



During the past week, two indices used to measure MJO activity both showed continued activity, though with some stagnation in the propagation. The convectively enhanced phase is currently over the East Pacific and Americas. Low-level winds and upper-level velocity potential anomalies have become more organized, moving toward a wave-1 structure, in the last 10 days. OLR signals are still noisy near the Date Line and Central Pacific, exhibiting west-east oriented anomalies, but from the Americas to the Indian Ocean, there is more north-south extent in some of the anomalies.

Dynamical model outlooks favor a slight weakening of the signal during the first week, with eastward propagation of the enhanced convection phase to the Indian Ocean. Some of the models are a little slower in propagation, and hold a signal over Africa, while others move the signal to the eastern Indian Ocean. Statistical tools are in the middle of the pack, and represent canonical MJO propagation from phase 8 to phase 1, then 2. Given the outlooks, the MJO is likely to play an increasing role in the patterns of tropical convection through the next two weeks. Additionally, most analyses are picking up on a Kelvin wave moving across the Maritime Continent, while some models indicate the influence of an equatorial Rossby Wave over the Maritime Continent.

During the last week, Tropical Cyclone Donna reached category-4 intensity over the Coral Sea. Tropical storm Ella then developed near American Samoa. During the next week, tropical cyclone development is likely over the East Pacific, with the National Hurricane Center indicating a 90% chance of formation during the next 5 days, for an area near 10N/90W. This development, should it occur and attain tropical storm intensity, would be the earliest forming East Pacific named tropical cyclone on record. During week-2, some models are indicating slightly enhanced odds for the development of a tropical or subtropical system over the western North Atlantic, near the Bahamas and Greater Antilles. Confidence in a formation in that region is low, as the model output signal has become more diffuse in the past 24 hours. Models also initially developed a weak tropical cyclone near the southern Philippines, but that signal has also weakened with subsequent model runs. During week-2, that signal shifts to the South China Sea, but remains weak. Elsewhere, tropical cyclone formation is not likely.

Above median precipitation is likely in the regions near tropical cyclones. With the MJO predicted to move over Africa during the period, above average rains are likely for portions of central Africa, and over the western Indian Ocean. Below average rains are likely over the Bay of Bengal and southern India. The enhanced convection signal is likely to slide eastward during week-2, while the dry signal over India is likely to expand, and move northward. An MJO in phases 1 and 2 would support enhanced convection over the western Atlantic, South America, and Africa, along with suppressed convection over the western North Pacific and some of the central Pacific, all indicated in the outlook. The Kelvin wave over the Maritime Continent is likely to enhance convection in a narrow strip over that region during week-2, with that signal fading during week-2.

Forecasts over Africa are made in consultation with CPCs international desk, and can represent local-scale conditions in addition to global-scale variability.