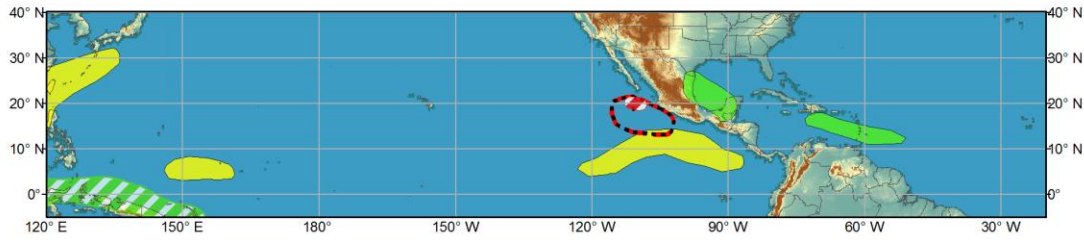




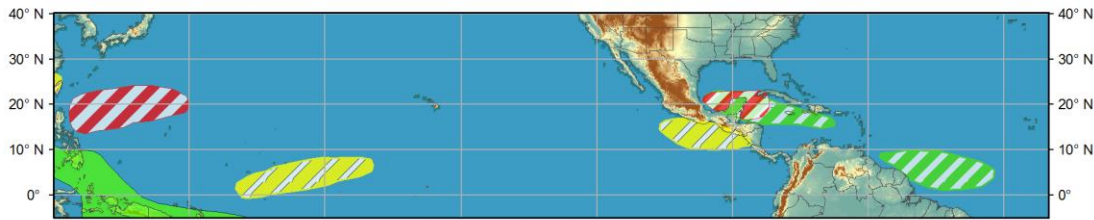
# Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



**Week 1 - Valid: Jun 18 2016 - Jun 21 2016**



**Week 2 - Valid: Jun 22 2016 - Jun 28 2016**



Confidence  
High Moderate

Produced: 06/17/2016  
Forecaster: Rosencrans

- Tropical Cyclone Formation** Development of a tropical cyclone (tropical depression - TD, or greater strength).
- Prior TC Formation Outlook** Tropical cyclone outlook from previous release.
- 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. The product targets broad scale conditions integrated over a 7-day period for US interests only. Consult your local responsible forecast agency.**



The MJO remained active over the Indian Ocean. Most model forecasts continue to indicate a progression of the signal east to the Maritime Continent for the remainder of Week-1. The consistency among the models resulted in minimal changes to the outlook for the remainder of Week-1. After that, model solutions diverge, split between propagation across the western Pacific or a breakdown of the MJO signal with a return to enhanced convection over the Indian Ocean. Modifications to the Week-2 portion of the precipitation outlook include a slight eastward shift of the anomalies over the western Pacific and an expansion of the enhanced likelihood of drier than average conditions near Central America.

The latest tropical weather outlook from the National Hurricane Center indicates a 40% chance of tropical cyclone formation over the eastern Pacific, and a 20% chance of formation over the Bay of Campeche in the next 5 days. Model outputs from the GEFs indicate an enhanced threat of tropical cyclone formation near the Yucatan through the latter portions of Week-2. Also, model outputs and statistical analyses indicate that as the active phase of the MJO shifts toward Phase 5, there is an increased threat of tropical cyclone formation over the western North Pacific.

----- Previous discussion follows -----

The MJO strengthened during the past week, with a signal emerging over the Indian Ocean. The CPC velocity potential index and the RMM based index both indicate the enhanced convective phase over the western Indian Ocean. Spatially, velocity potential anomalies indicate enhanced divergence from the Atlantic to Maritime Continent, with enhanced divergence from the Western Pacific to the Americas. Based on OLR observations, there is some influence from a Kelvin wave over Africa during the past week, which is contributing to the emerging signal over the Indian Ocean.

Model forecasts of the MJO indicate a continued signal through Week-1 that moves across the Maritime Continent. During Week-2, model solutions diverge, with the GEFS based solutions depicting a complete breakdown of the signal and 4 other models indicating a continued signal moving to the western Pacific. The GEFS solutions are discounted for the bulk of the outlook this week, given the consensus among the other models.

No tropical cyclones of depression (or greater) strength developed during the last week. The National Hurricane Center has a 50% chance of tropical cyclone formation over the eastern Pacific during the next 5 days. Some models are also indicating a slight increase in the potential for tropical cyclone formation over the Bay of Campeche with a track to toward the Gulf Coast late in Week-1 to early in Week-2. There are also weak signals over the South China Sea during the latter portions of Week-1 and into Week-2, which would be consistent with the convectively enhanced phase of the MJO moving into the region.

The precipitation outlook during Week-1 is based on CFS and ECMWF model guidance and expectations for a moderate MJO signal in Phases 2-4. The impacts of a Kelvin wave over Africa are also incorporated. Enhanced convection is forecast over the Indian Ocean and western Maritime Continent, with lower confidence of the signal over the eastern Maritime Continent later in Week-1. Drier than average conditions are likely over north-central India, southeast China, and some southern Japanese Islands. Below average rains are also forecast over portions of the central and eastern Pacific. Above normal temperatures are forecast across Southeast Asia and Northwestern Australia during Week-1. Temperatures are forecast to be 8-12 degrees F above normal over Southeast Asia, until the rains set in and break the heat.

The Week-2 outlooks indicates an eastward propagation of the MJO signal, with higher confidence for above average precipitation from India to the eastern Maritime Continent, reduced coverage of below average precipitation over Southeast China, and less coverage for below average precipitation over the western Pacific. Below average precipitation is also forecast near Central America due to the forecast position of the MJO.

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