



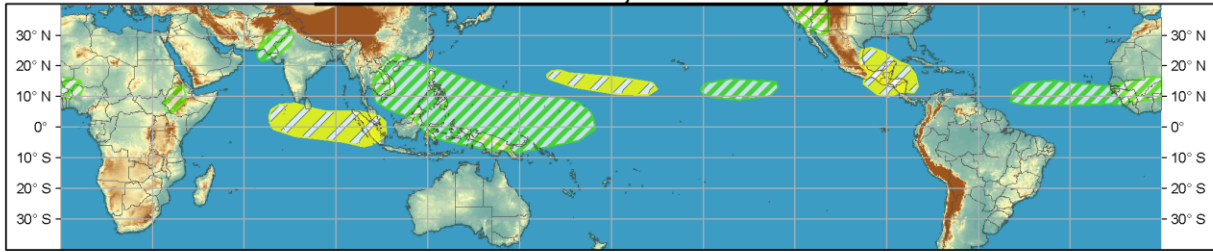
# Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



**Week 1 - Valid: Jul 12, 2017 - Jul 18, 2017**



**Week 2 - Valid: Jul 19, 2017 - Jul 25, 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.

Produced: 07/11/2017

Forecaster: Baxter

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.



The Madden-Julian Oscillation (MJO) remained generally weak during the past seven days, though some organization is evident in recent days. The recent 850-hPa zonal wind, 200-hPa velocity potential, and outgoing longwave radiation (OLR) data suggest possible development of an MJO event over the eastern Indian Ocean. This is against a noisy background state that includes prominent westward-moving variability as well as low-frequency enhanced convection over the Maritime Continent. The ECMWF ensemble system continues to depict coherent MJO evolution over the next two weeks, with the enhanced phase propagating across the Maritime Continent to the West Pacific. The latest GEFS has trended slightly in that direction but generally forecasts weak MJO activity during the period. Because of its higher levels of historical skill, the ECMWF forecast is weighted more heavily both in terms of expected MJO evolution and the precipitation forecasts.

Tropical Depression Four developed over the Atlantic Basin near 13N/39W at 00Z on 6 July before dissipating less than two days later. Hurricane Eugene formed over the East Pacific Basin near 12N/111W has tracked northwestward with time, reaching a peak strength with 115 mph winds and a minimum central pressure of 965 hPa on 9 July. The system is forecast to dissipate rapidly over the coming one to two days as it continues a northwest track. A tropical wave that was being monitored by

NHC over the Main Development Region of the Atlantic Basin is not expected to become a tropical cyclone, as thermodynamic conditions are not conducive for development. The GFS was the lone model depicting TC formation, and it has backed off in recent runs. NHC is currently monitoring a tropical disturbance over the East Pacific for development early in the period. This system is forecast to track generally westward, possibly passing south of Hawaii during Week-2. The West Pacific is forecast to remain unusually quiet, with only a low chance of TC formation near the Philippines in Week-1.

Above-average rainfall is most likely during Week-1 for parts of South Asia, the Maritime Continent, and West Pacific, albeit at moderate confidence. This is consistent with both the forecast MJO evolution from the ECMWF, as well as dynamical model forecasts. This area extends westward to southern Pakistan where enhanced rainfall is expected to continue associated with anomalous southwesterly flow. Below-average rainfall is favored over the Indian Ocean, again consistent with forecast MJO evolution and dynamical model guidance. Elsewhere, shapes are based largely on the model consensus between the ECMWF, the GEFS, and the CFS.

During Week-2, some eastward propagation is noted based on forecast MJO activity, but all shapes are depicted with moderate confidence given large uncertainty. Enhanced rainfall is more likely southeast of Hawaii associated with potentially ongoing TC activity. Below-average rainfall is more likely over Central America based on forecast MJO evolution and the ECMWF dynamical model forecast.

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