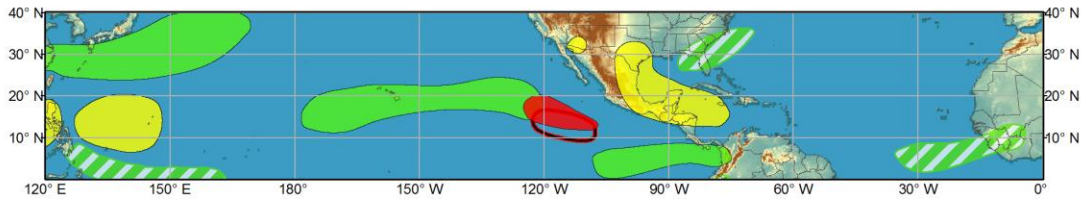




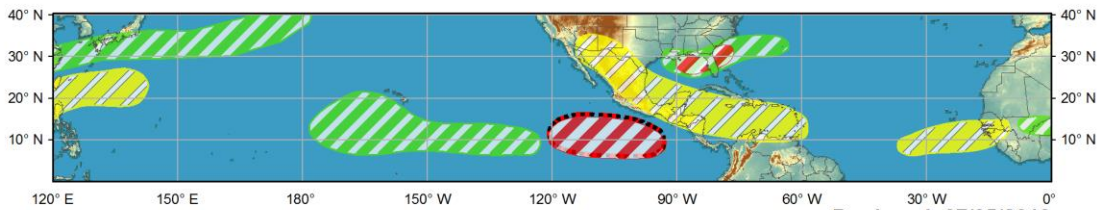
# Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



## Week 1 - Valid: Jul 06 2019 - Jul 09 2019



## Week 2 - Valid: Jul 10 2019 - Jul 16 2019



Confidence  
High Moderate

Produced: 07/05/2019  
Forecaster: Baxter

- 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 outlook remains largely on track with respect to MJO evolution. The MJO is expected to reemerge over Africa and the western Indian Ocean over the next several days and resume more canonical eastward propagation for a time.

Tropical Storm Barbara is forecast to continue to weaken as it moves westward; its remnants are likely to pass near Hawaii early next week. Tropical cyclogenesis remains highly likely during the remainder of the Week-1 period over the East Pacific, where NHC currently has a 90% chance of tropical cyclone formation over the next five days. Another tropical cyclone may form near 10N over the East Pacific during the modified Week-2 period, and this would also be consistent with forecast MJO evolution.

A stalled frontal zone over the Southeast CONUS may serve as a breeding ground for tropical cyclogenesis over the northeastern Gulf of Mexico or just off the Southeast Coast. Recent runs of the ECMWF high-resolution model are especially bullish, though there is also a developing signal in recent runs of the GEFS.

Elsewhere, regions favoring above- or below-average rainfall are updated based on the latest consensus among the ECMWF, GEFS, and CFSv2 ensemble means.

The original discussion, issued 2 July, follows below:

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The MJO was fairly weak over the past several days, but there remain several diagnostic tools that place the MJO enhanced phase over the Pacific. Interference from atmospheric Kelvin waves and a strong equatorial Rossby wave have limited the impact of the background MJO state on observed rainfall anomalies of late. The upper- and lower-level zonal wind fields along with 200-hPa velocity potential retain some MJO footprint, and this is expected to continue for much of the upcoming two weeks. The GEFS and ECMWF ensemble forecasts are in reasonably good agreement on strengthening of the MJO signal over Africa and the western Indian Ocean during Week-2; both also predict more canonical eastward propagation as well.

Hurricanes Alvin and Barbara formed over the East Pacific during the past week. Alvin dissipated on 29 June, while Barbara is forecast to become a major hurricane on 2 July and track generally westward while weakening to tropical storm strength by this weekend. Its remnants are forecast to pass near or south of Hawaii late in Week-1 and early in Week-2. NHC currently depicts a 70% chance of tropical cyclone formation during the next five days over the East Pacific; at present this system is forecast to eventually take a more northerly track than Barbara. The forecast MJO evolution would support a favorable environment for tropical cyclone formation during Week-2, and so a moderate risk of cyclogenesis is depicted for that period. There is broad support for this from both the GEFS and ECMWF ensemble systems.

Tropical cyclogenesis is imminent (or already occurred) over the West Pacific basin just east of the Chinese province of Hainan. This system is forecast to cross Hainan on 3 July and affect northern Vietnam shortly thereafter. Elsewhere, the West Pacific is forecast to remain inactive.

Precipitation forecasts during Week-1 are based largely on the dynamical model consensus among the ECMWF, GEFS, and CFS. Enhanced rainfall remains likely associated with the Meiyu front over parts of southern and eastern Asia. Above-average rainfall is also more likely over parts of the Indian subcontinent after a slow start to the wet season. Below-average rainfall is more likely over much of the

eastern Indian Ocean and Maritime Continent, consistent with the background MJO state. Below-average rainfall is also favored over parts of Central America and the southwestern CONUS.

During Week-2 a drying trend is expected over the Americas and East Pacific (the elevated tropical cyclogenesis risk notwithstanding). Above-average rainfall is favored over the central Pacific basin and the Hawaiian Islands in part associated with the remnants of Barbara. The enhanced rainfall over Asia is forecast to shift northward, while above-average rainfall becomes more likely over parts of the western Indian Ocean.

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