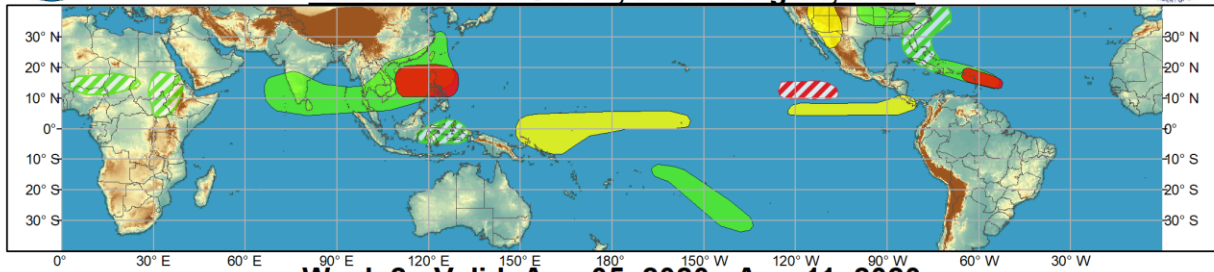




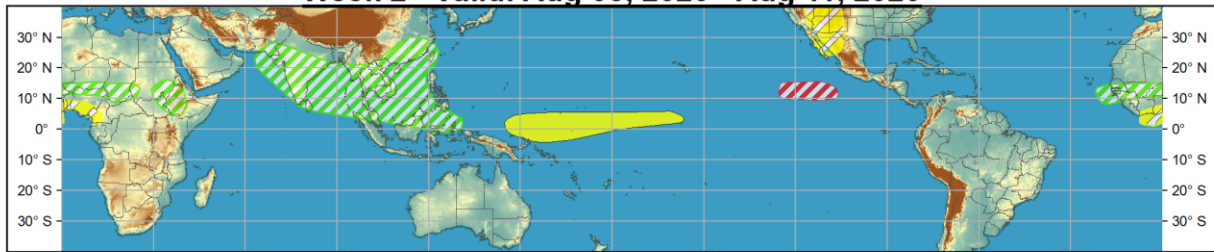
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



Week 1 - Valid: Jul 29, 2020 - Aug 04, 2020



Week 2 - Valid: Aug 05, 2020 - Aug 11, 2020



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.

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Forecaster: Pugh



The Madden-Julian Oscillation (MJO) is beginning to strengthen as its enhanced phase has propagated eastward across the Indian Ocean during late July. The RMM index reveals that a MJO signal has shifted to the east from Phases 2 to 3. A Kelvin wave continues to cross the Western Hemisphere, from the East Pacific to the tropical Atlantic during the past week. A low frequency state with suppressed (enhanced) convection has persisted over the West-Central Pacific (Indian) Ocean since the Boreal spring. Dynamical model solutions depict that the MJO propagates eastward to the Maritime Continent at the beginning of August. Beyond that time, spread among ensemble members increases as the MJO begins to destructively interfere with the low-frequency base state.

Hurricane Douglas developed on July 20 over the East Pacific (13.7N/119.8W) and eventually tracked very close to the Hawaiian Islands on July 26 and 27. Douglas has since weakened due to increasing vertical wind shear and is forecast to dissipate by July 31 across the Central Pacific. On July 23, a Tropical Depression formed over the Gulf of Mexico and rapidly intensified to Hurricane Hanna (maximum sustained winds of 90mph) only two days later. Hanna made landfall on Padre Island, Texas and resulted in heavy rainfall (locally more than 10 inches) across the Lower Rio Grande Valley.

As of 2pm EDT on July 28, a broad area of low pressure is located several hundred miles east of the Lesser Antilles. Environmental conditions are favorable for a tropical depression to form and this system is likely to become a Tropical Storm before it reaches the Leeward Islands. Early in Week-1, heavy rainfall is likely from the Lesser Antilles northwest to Hispaniola. Since there is considerable model spread regarding the track later in Week-1, a broad moderate confidence of above average rainfall is posted, including the Bahamas, Cuba, and the southeastern United States. As this potential tropical cyclone approaches the southeastern United States, an amplified mid-latitude trough, extending from the Ohio Valley south to the Gulf Coast, is expected to influence its future track. Please refer to the National Hurricane Center for the latest updates and forecasts on this system.

The precipitation outlook during the next two weeks is based on the model consensus among the CFS, ECMWF, and GFS models, MJO precipitation composites for Phases 3 and 4, and influences from the low frequency base state. Above average rainfall is likely from southern India eastward to Southeast Asia, the South China Sea, and the northern Philippines during Week-1. Also, model guidance remains consistent that a tropical cyclone forms either just east of the Philippines or over the South China Sea. Only two tropical cyclones have formed this year across the Northwest Pacific basin. During Week-2, above average rainfall is expected to expand and shift north across South and Southeast Asia. The low frequency base state continues to strongly favor below average rainfall across the equatorial west-central Pacific.

Although the predicted evolution of the MJO would tend to suppress tropical cyclone development across the East Pacific during the next two weeks, model guidance indicates a moderate chance of at least one TC forming. This will be reevaluated on the Friday update, July 31. The 500-hPa ridge axis is likely to remain in an unfavorable location for monsoon rainfall across the southwestern United States through early August.

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