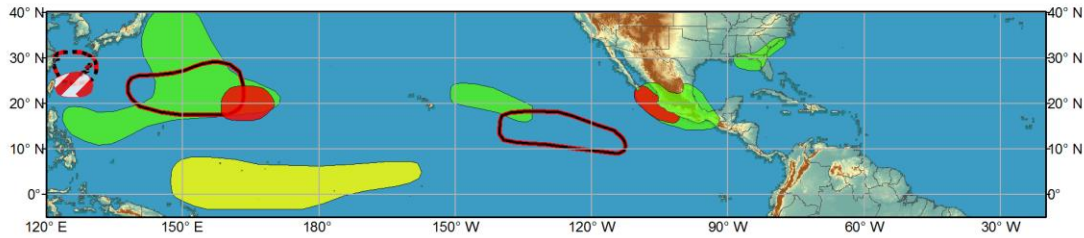




Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



Week 1 - Valid: Aug 06 2016 - Aug 09 2016



Week 2 - Valid: Aug 10 2016 - Aug 16 2016



Confidence
High Moderate

Produced: 08/05/2016
Forecaster: Pugh

- 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 signal remained weak during the past few days, according to the Wheeler-Hendon RMM index and the CPC index based on the 200-hpa Velocity Potential. Dynamical model forecasts continue to indicate a weak MJO signal for the next several days with an increase in amplitude by mid-August over the Maritime Continent or west Pacific. This amplitude increase may be related to tropical cyclone activity over the west Pacific.

Convection, associated with the remnant enhanced phase of the MJO, helped to initiate the development of Tropical Storm Omais over the northwest Pacific on August 4. Omais is forecast to become a typhoon within 48 hours. The predicted track of Omais extends from near Tokyo, Japan to 150 degrees E. For more information, please refer to the latest updates from the Joint Typhoon Warning Center at: <https://metoc.ndbc.noaa.gov/JTWC/>. The GFS model remains consistent in the development of another tropical cyclone (TC) in the northwest Pacific, between 160 and 170E and centered along 20N, from August 6 to 9. Moderate confidence exists that a TC forms east of Taiwan during the next several days. Enhanced convection is expected to persist over the northwest Pacific, where a moderate risk of TC development is forecast from August 10 to 16.

Hurricane Earl formed in the northwest Caribbean Sea on August 2 and made landfall near Belize City on August 4. Heavy rain and flooding are likely inland as the remnants of Earl track west into southern Mexico. Currently, a disorganized area of convection is located near the Gulf of Tehuantepec. This disturbance is expected to merge with the remnants of Earl, increasing the potential for low pressure development near the southwest coast of Mexico. As of 2pm EDT on August 5, the National Hurricane Center states that this disturbance has a 80 percent chance of TC formation as it moves northwest towards the Baja California peninsula.

Meanwhile, Tropical Storm Ivette developed in the east Pacific this week. Ivette is forecast to weaken rapidly next week as it encounters increasing wind shear, east of the Hawaiian Islands.

Precipitation forecasts from the latest GFS and CFS models are used to modify the favored areas of above and below-median rainfall areas that were posted on the August 2 outlook. The most notable addition to the map includes above-average rainfall forecast for the coastal Southeast, the Florida Panhandle, and northeast Gulf of Mexico. An upper-level low combined with abundant low-level moisture is likely to result in very heavy rainfall (3 to 5 inches, or more) and localized flooding across these areas from August 6 to 9. Above-average rainfall is likely to affect parts of the Gulf Coast and Southeast from August 10 to 16 as the upper-level low drifts west. Increasing moisture from the east Pacific favors above-average rainfall across northern Mexico north to the Big Bend of Texas from August 10 to 16.

The previous discussion released on August 2 follows.

The amplitude of the MJO signal decreased during the final week of July according to the RMM and 200-hpa Velocity Potential indices. However, convection associated with its remnant enhanced phase continues to shift north across India, Southeast Asia, and the northwest Pacific which is a typical response during the Northern Hemisphere summer. Dynamical model forecasts generally indicate a continued weak MJO signal during the next week with an increase in amplitude during Week-2. This increasing amplitude by mid-August may be related to multiple tropical cyclones that are forecast to develop over the northwest Pacific.

During the past week, Typhoon Nida originated east of the Philippines and resulted in heavy rainfall (more than 10 inches) across northeast Luzon Island of the Philippines. Nida intensified as it crossed the South China Sea and made landfall near Hong Kong on August 2 with maximum sustained winds of 80 knots. Meanwhile, Tropical Storm Howard developed in the east Pacific at 14N/120W and is forecast to gradually weaken during the next 72 hours. On August 2, Tropical Storm Earl formed in the northwest Caribbean Sea and is forecast to track west across Belize and the Yucatan peninsula early in Week-1.

The remnant MJO signal and current satellite imagery support above-average rainfall during Week-1 across northeast India and the northern Bay of Bengal. Moisture associated with Nida is expected to result in above-average rainfall across southern China during the next week. The CFS and ECMWF model are in good agreement with a broad area of above-average rainfall across the northwest Pacific where at least one tropical cyclone is likely to develop during Week-1. Another favored area for tropical cyclone development is the East China Sea although with lower confidence. Below-average rainfall is forecast for the west Pacific, to the south of the enhanced convection, and is expected to extend to the Date Line. A broad area of low pressure is likely to become a tropical cyclone in the east Pacific (10-15N/120-140@) during the next five days. Improved model agreement raises forecast confidence for above-average rainfall (and the potential for flooding) along the future track of Tropical Storm Earl. This includes Belize, northern Guatemala, and southern Mexico. Another tropical wave is expected to bring above-average rainfall to parts of the tropical Atlantic, Less Antilles, and the Caribbean Sea later in Week-1. Models have trended towards less development with this tropical wave, but it will be monitored for the update released on Friday, August 5.

During Week-2, the precipitation outlook is based on model guidance and the slowly emerging low frequency state. Above-average rainfall is expected to persist across parts of the northwest Pacific where moderate confidence exists for tropical cyclone development, centered along 20N. Below-average rainfall is favored near the equator across the west-central Pacific. A lack of model agreement and uncertainty in the MJO evolution preclude additional favored areas of anomalous rainfall, except for Africa.

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