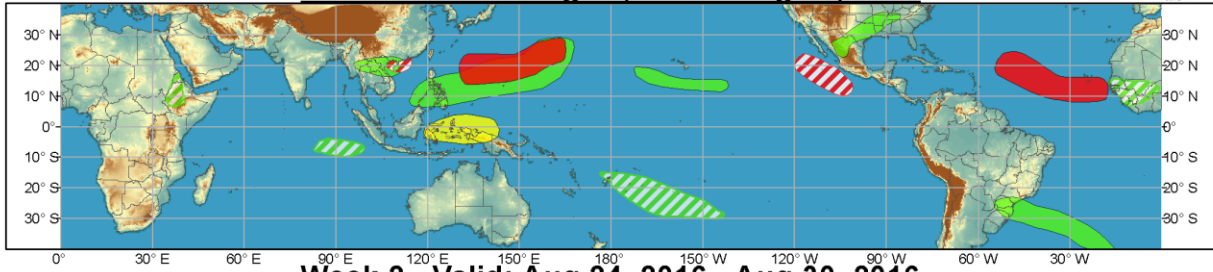




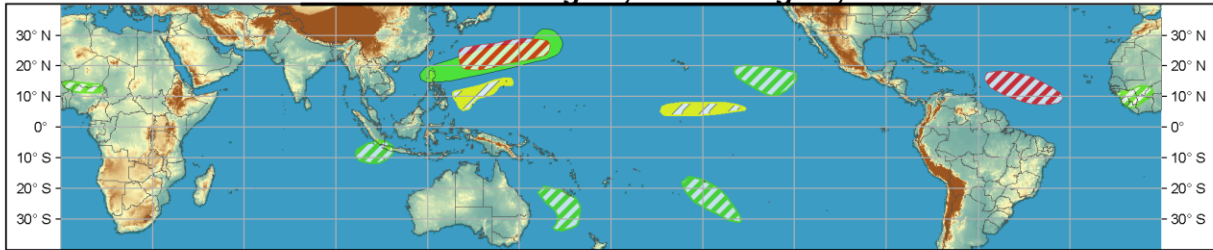
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



Week 1 - Valid: Aug 17, 2016 - Aug 23, 2016



Week 2 - Valid: Aug 24, 2016 - Aug 30, 2016



Confidence
High Moderate

- Tropical Cyclone Formation**
 - High: Red box
 - Moderate: Red box with diagonal lines
- Above-average rainfall**: Green box with diagonal lines
- Below-average rainfall**: Yellow box with diagonal lines
- Above-normal temperatures**: Orange box with diagonal lines
- Below-normal temperatures**: Blue box with diagonal lines

Produced: 08/16/2016

Forecaster: D.Harnos

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.



Over the previous week the MJO shifted from the Maritime Continent into the Western Pacific in both the RMM and CPC velocity potential-based indices. Discrepancies developed however in regards to the amplitude of the MJO signal, with the RMM index indicating gradual strengthening while the velocity potential-based index suggests relative weakness. A robust monsoon trough near 20N in the western Pacific appears that to be interacting with the intraseasonal MJO signal may be the source of some of these discrepancies. Over the forecast period dynamical model guidance generally supports an atypical westward shift of the MJO signal, potentially returning to over the Maritime Continent. This westward shift may be tied to the enhanced phase of an equatorial Rossby wave forecast to develop across the western Pacific or active tropical cyclone activity expected within the monsoon trough. Some guidance does suggest continued growth of the MJO signal within the RMM framework, however once again questions persist as to how much of this signal is explicitly coming from the MJO.

During the past week Tropical Storm Chanthu developed over the western Pacific and is forecast to make landfall and impact Japan near the outset of the forecast period. Elsewhere in the western Pacific the Joint Typhoon Warning Center (JTWC) is highlighting tropical cyclogenesis potential for two existing disturbances. The first is currently located east of the Hainan Peninsula near 20N/115E that is expected

to track near the coastline and is given a moderate chance of development on the outlook, assuming it does not form before the valid outlook period. The second disturbance targeted by JTWC is near 20N/160E and could develop as it moves west-northwest over Week-1. A high risk of tropical cyclogenesis is forecast for much of the northern monsoon trough encompassing the preceding storm and any subsequent depression development within this favorable environment throughout the week. One such disturbance may become a tropical depression west of Guam on the 19th or 20th. Further east, the Central Pacific Hurricane Center is monitoring a disturbance near 10N/150 W for potential development that could pass south of Hawaii during Week-1, however formation potential currently appears low with a 20% chance of development in the next 48 hours. The National Hurricane Center (NHC) gives a region from 13-17N/105-115W a 50% chance of tropical cyclogenesis through 5 days in the East Pacific, resulting in a moderate likelihood forecast on this product. The best odds of tropical cyclogenesis however appear to be across the eastern North Atlantic, where a tropical wave currently near 10N/30W has a 90% chance of developing over the next 5 days before expected recurvature away from US interests. Behind this system another tropical wave could form later in week-1, thus the high risk shape is extended eastward from NHC's guidance to the African Coast. For more information relating to these systems, guidance is available from the respective regional tropical cyclone centers:

National Hurricane Center: <http://www.nhc.noaa.gov/>

Joint Typhoon Warning Center: <https://metoc.ndbc.noaa.gov/en/JTWC/>

Central Pacific Hurricane Center: <http://www.prh.noaa.gov/cphc/>

The Week-1 forecast features above normal precipitation across the monsoon trough region in addition to areas associated with each of the tropical disturbances mentioned in the preceding paragraph. Dry conditions are favored south of the monsoon front. Mid-latitude frontal activity is expected to bring a high probability of above-normal rainfall to portions of North and South America. Remaining regions forecast to see enhanced or suppressed rainfall during Week-1 are based primarily on dynamical model guidance.

During Week-2 a moderate risk of tropical cyclogenesis continues throughout the monsoon trough approximately between 20-25N and 130-160W. A moderate tropical cyclogenesis risk also exists during Week-2 in the Atlantic between approximately 7-17N/32-57W associated with the wave earlier described to be entering the Atlantic late in Week-1. Heavy rains are once more favored within the monsoon trough, although shifted slightly northward from Week-1. Anomalous dryness from Week-1 across the Maritime Continent is favored to shift northward towards Guam and the Mariana Islands during Week-2 as the monsoon trough drifts northward. Remaining forecast regions of above- or below-normal precipitation fall in line with dynamical model guidance.

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