



Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



Week 1 - Valid: Aug 01 2015 - Aug 04 2015



Week 2 - Valid: Aug 05 2015 - Aug 11 2015



Confidence
High Moderate

Produced: 07/31/2015
Forecaster: Rosencrans

- 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.



Since the previous issuance of the GTH product, Hurricane Guillermo developed over the eastern Pacific. The five-day forecast track for Guillermo indicated a tropical storm about 200 mi ESE of the big island of Hawaii by next Wednesday. Tropical Storm Soudelor developed over the west-central Pacific, and is forecast to move near Saipan, then toward the southern islands of Japan. The areas of enhanced odds of formation, associated with those two events, have been removed, and the graphic now highlights where additional tropical cyclone formation is likely during the next 11 days.

That National Hurricane Center is highlighting an area for potential development over the central Atlantic Ocean, assigning a 10% chance of formation during the next 5 days. Given the low confidence of formation, that area is left off the map.

Areas of above or below average precipitation were modified to reflect tropical cyclone tracks and the latest model guidance. The most significant changes were over the west Pacific, where below average precipitation was trimmed away from the area between Luzon and Guam, due to the potential for Tropical Storm Soudelor to impact that region. The rest of the map remained relatively unchanged.

-----Previous discussion follows -----

The MJO weakened significantly during the past week, with the tropical circulation pattern not reflective of influence from the MJO. Both the CPC Velocity Potential based index and the Wheeler-Hendon, RMM based index indicate no MJO activity, with both indices indicating westward movement during the past week. The upper-level velocity potential pattern exhibits a wavenumber-3 pattern. The low-frequency, El Nino state continues to be reflected in the circulation pattern, with enhanced divergence over the eastern Pacific, and generally enhanced subsidence over the Atlantic and western Pacific. Low-level and upper-level wind anomalies continue to reflect the low-frequency state as well, with low-level westerly anomalies across much of the western and central equatorial Pacific Ocean. Some oscillations in the South Asian Monsoon are also evident in time lapse images.

Dynamical model forecasts continue to depict a significant spread in potential outcomes related to the MJO. Most of the global models indicate a westward moving signal, with strengthening over the West Pacific. That signal is likely due to an equatorial Rossby wave currently indicated in some analyses near the Date Line, along with tropical cyclone activity likely to occur over the West Pacific.

Tropical depression 8E formed over the East Pacific on Monday, July 27. The forecast track from the National Hurricane Center takes the depression toward Hawaii, with longer range model guidance indicating a cluster of tracks mostly south of Hawaii. High significant wave heights near Hawaii are likely later this week, but impacts from precipitation and wind are too uncertain at this time to depict on the outlook map. Additional tropical cyclogenesis, in the wake of TD8E, is likely later in Week-1 over the East Pacific, as well as over the West Pacific between 145E and 170E. A stalled front across the southeast U.S. could serve as a focal point for tropical cyclone development, later in Week-1, although confidence in the actual development of a tropical depression is low. During Week-2, the favored areas for tropical cyclogenesis move eastward over the East Pacific (100W - 120W) and westward over the West Pacific (125E-150E).

During Week-1, above average rainfall is likely across northern India and southern Pakistan, associated with a pulse in the South Asian Monsoon. The low-frequency state supports above average rains near the Date Line and over the east Pacific, with below average rainfall likely from southern India to the Philippines and Maritime Continent, as well as over the Caribbean, Mexico, and extreme southern Texas.

During Week-2, the low-frequency state and potential tropical cyclones are likely to dominate the pattern of tropical convection. Below average rains are likely from South Asia to the Maritime Continent, as well as over the South China Sea, with above average rains from the just west of the Date Line to the East Pacific. Dry conditions are likely to prevail from Central America to the Lesser Antilles.

Forecasts for enhanced or suppressed rainfall across Africa are provided in collaboration with CPC's Africa Desk and are based on MJO composites and regional scale anomaly features.