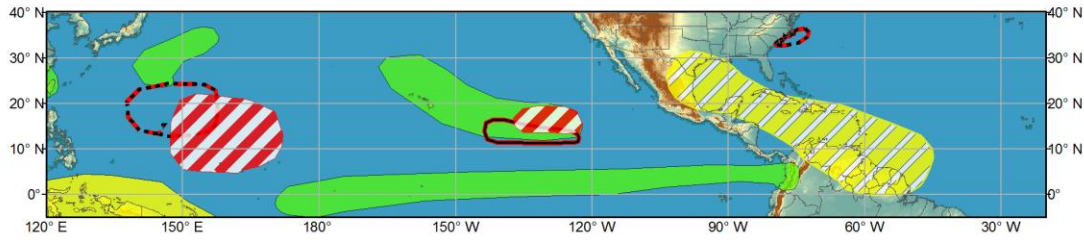




Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



Week 1 - Valid: Aug 08 2015 - Aug 11 2015



Week 2 - Valid: Aug 12 2015 - Aug 18 2015



Confidence
High Moderate

Produced: 08/07/2015
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 MJO has remained weak over the past few days, as expected. The global tropical pattern of convection remains largely dominated by tropical cyclone activity and the low-frequency base state. The enhanced phase of an equatorial Rossby wave may be contributing to enhanced convection over parts of Southeast Asia and the Maritime Continent. Suppressed convection is currently observed over much of the western Atlantic Basin and parts of the Americas. The dynamical model consensus continues to favor a weak MJO signal over the next two weeks.

Typhoon Soudelor is expected to make landfall over Taiwan later today. Tropical Storm Molave developed in the West Pacific as forecast and is expected to recurve southeast of Japan. Tropical Storm Guillermo has weakened to a tropical depression and will continue to dissipate northwest of Hawaii. Tropical Storm Hilda formed as expected over the East Pacific, and is forecast to strengthen to hurricane status while taking a track to the east of Hawaii. This system should be monitored closely, however, as Hawaii still lies within the Joint Typhoon Warning Center's cone of uncertainty around Hilda's forecast track.

Additional tropical cyclone formation is favored over the West Pacific either very late in Week-1 or early in Week-2. Over remaining 11 days of the original two-week period, two tropical cyclones are possible over the East Pacific.

Areas favoring enhanced or suppressed rainfall were updated to account for the latest dynamical model guidance.

The original discussion, issued August 4, follows below:

The MJO has remained inactive over the past week as the low-frequency ENSO state dominates the pattern of anomalous tropical convection. The wave-1 pattern observed over the past several days has become less coherent. Anomalous upper-level divergence is centered near the Date Line and the Prime Meridian with the former consistent with the base state and the latter likely due to a convectively-coupled Kelvin wave. A time-longitude analysis of OLR anomalies reveals two Kelvin waves, one over the Pacific and the aforementioned wave over West Africa. There is also westward-moving variability consistent with equatorial Rossby waves, but this signature may also be influenced by ongoing tropical cyclone activity.

The MJO is forecast to remain incoherent over the next two weeks, with all dynamical ensemble systems in fairly good agreement. The GFS ensemble maintains a weak westward propagating signal, but that is an outlier among the other guidance that suggests a weak, nearly stationary signal over the West Pacific.

The rainfall forecast for Week-1 is informed largely by the dynamical model consensus between the CFS and the ECMWF, as well as the ENSO base state and ongoing/forecast tropical cyclone activity. Notable large-scale climate signals include suppressed (enhanced) convection over the western Atlantic basin, including the Gulf of Mexico and Caribbean Sea, and Maritime Continent (central and eastern Pacific). Enhanced odds for above-average rainfall extending from the Indian Ocean to the South China Sea are based on model guidance, and possibly influenced by the enhanced phase of an equatorial Rossby wave.

The National Hurricane Center is monitoring a northeastward-moving disturbance along the Southeast U.S. coast that has a moderate chance of developing into a tropical cyclone very early in Week-1. Tropical cyclone formation is likely over the east Pacific during Week-1, while ongoing Tropical Storm

Guillermo is forecast to pass northeast of Hawaii. The next tropical cyclone likely to develop over the east Pacific is likely to follow a path similar to Guillermo, so interests near the Hawaiian Islands should remain aware of the situation. Super Typhoon Soudelor is forecast to make landfall over northern Taiwan and again over mainland China Friday or Saturday. Additional tropical cyclogenesis is possible over the West Pacific during Week-1 with a forecast track generally northward near 150E. Over the South Pacific, there is a chance that the remnants of Tropical Storm One will redevelop into a tropical cyclone near Vanuatu.

For Week-2, the model guidance emphasizes the low-frequency pattern in the absence of any coherent MJO variability. The forecast wet and dry shapes are generally depicted only where the ongoing El Niño favors enhanced or suppressed convection, and where forecast TC tracks are likely to bring potentially heavy rain near Hawaii. Tropical cyclogenesis is favored over parts of the West Pacific and East Pacific based on climatology and canonical ENSO impacts, but only with moderate confidence.

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.