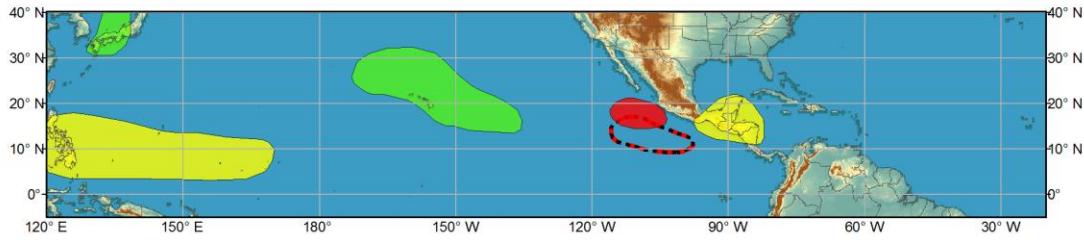




Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



Week 1 - Valid: Aug 09 2014 - Aug 12 2014



Week 2 - Valid: Aug 13 2014 - Aug 19 2014



Confidence
High Moderate

Produced: 08/08/2014
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.



The MJO remained weak during the past couple of days with a stagnant signal in the Wheeler-Hendon RMM Index and a weak signal in the CPC Velocity Potential Index. Tropical Storm Iselle is moving across Hawaii while Hurricane Julio is likely to move north of the Islands. Flow around Hurricane Julio could likely lead to heavy rains on leeward sides of the islands and places not accustomed to heavy rains. Hurricane Genevieve continues to churn across the Central Pacific and Typhoon Halong is forecast to impact Japan in the very near future.

Adjustments to areas of above average rains were made based on tropical cyclone tracks and latest GFS and CFS outputs. The largest change was the removal of the area of forecast above average rains over Central America in Week-2, as the CFS and GFS model outputs exhibited too much disagreement.

The threat of tropical cyclone formation remains low over the East Pacific, with NHC having a low chance of formation during the next 5 days. During Week-2, the threat of tropical cyclone formation increased slightly over the eastern Pacific. Some models are hinting at a potential tropical cyclone formation from a strong African Easterly Wave over the Main Development Region of the Atlantic. The chances of that

are very low, so no area is delineated, although the signal in the models is slightly stronger than in the routine, Tuesday release of the GTH.

Previous discussion follows.

The atmospheric circulation remained generally incoherent respect to with the MJO during the previous week. Other

modes of variability in tropical convection are more prevalent in the pattern. The RMM index indicated enhanced convection over the Indian Ocean, while the CPC Velocity Potential index indicated enhanced upper-level divergence over the Central Pacific. Each index is picking up on a different portion of the current circulation anomalies. Two Kelvin waves traversed the Pacific during the past two weeks, with the first due to emerge over Africa and the western Indian Ocean during Week-1, and the second likely to traverse the Atlantic during Week-1.

Many of the dynamical models, including those from the GFS, ECMWF, JMA, and UKMET Office, indicate enhanced convection remaining nearly stationary over Africa, likely associated with the arrival of the Kelvin wave and its impact on the West African Monsoon. The Canadian ensemble mean indicates eastward propagation during Week-2. Statistical models such as the Constructed Analog favor eastward propagation but quickly weaken the signal to near 0 by the start of Week-2. Based on recent observations, the future evolution of any MJO signal is highly uncertain.

Tropical Depression Genevieve became reinvigorated south of Hawaii, while Major Hurricane Iselle and Tropical Storm Julio formed over the East Pacific. The western North Pacific was active as well, with Tropical Storm Nakri forming and Typhoon Halong intensifying to Super-Typhoon strength. During Week-1, tropical cyclone formation chances return to near or below-average levels, although low chances of formation exist near the southern coast of Mexico. GFS and CMC outputs have exhibited high run-to-run variability in developing a system there. During Week-2, the threat of tropical cyclone formation increases over the western North Pacific, east of 150E, and over the eastern Pacific. A low

confidence and low chance threat exists for tropical cyclone formation over the main development region of the Atlantic during Week-2, with the CFS and GFS hinting at formation.

During Week-1, above-average rains are likely across Northern Indian and into Pakistan, associated with a Monsoon Depression. Above-average rains associated with tropical cyclone activity are also likely across Japan and Hawaii. Below-average rains are likely across the western Pacific, from the equator to 15N, and from the Philippines to the Date Line. The subsident phase of an equatorial Rossby Wave is likely to move across that region.

Above-average rains are likely across southern India and western portions of the Maritime Continent during Week-2, likely associated with a Kelvin Wave. Above-average rains are likely to return to the eastern Pacific and portions of Central America during Week-2, associated with the evolving background state. Below-average rains are likely over small portions of Southeast Asia and the Philippines due to a break in the monsoon trough.

Forecasts of enhanced or suppressed convection across some parts of Africa are based on regional scale anomaly features and were produced based on collaboration with the CPC Africa Desk.