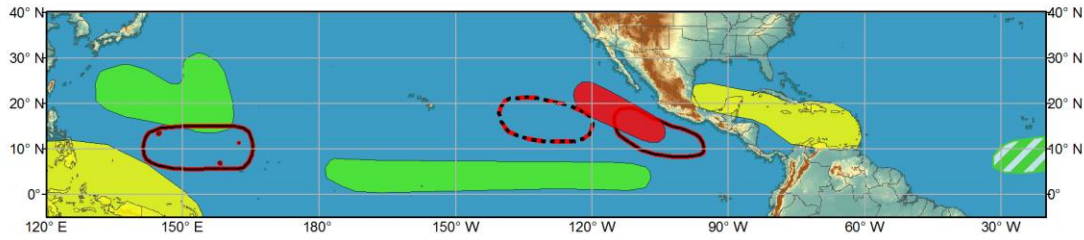




Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



Week 1 - Valid: Aug 15 2015 - Aug 18 2015



Week 2 - Valid: Aug 19 2015 - Aug 25 2015



Confidence
High Moderate

Produced: 08/14/2015
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.



The MJO remained weak during the past 3 days. The low-frequency state, an equatorial Rossby wave, and tropical cyclone activity regulating the distribution of convection across the tropics. Two tropical depressions (16W and 17W) developed over the West Pacific, with 16W likely to impact the Northern Mariana Islands. During the next 4 days, tropical cyclone formation is likely across the East Pacific, east of 135W, which is a slight northwestward shift from the initial outlook on Tuesday. Of the two areas for potential tropical cyclone formation in the routine issuance, the western area highlighted for potential development, with moderate confidence, has been removed. An area of above average rainfall has been added over the tropical Atlantic, reflecting multiple African Easterly Waves that are forecast to move off the west coast of Africa. During Week-2, tropical cyclone formation odds are again increased, relative to normal, over the East Pacific and West Pacific. Over the East Pacific, the threat area is shifted slightly westward, spanning from about 140W to 100W, while the area over the West Pacific is shifted northwestward from the Tuesday issuance.

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

The MJO has remained inactive over the past week as the low-frequency ENSO state dominates the pattern of anomalous tropical convection. An equatorial Rossby wave (ERW) is also contributing to the pattern of convection. The upper-level velocity potential pattern is largely wave-1, but has some noise over the Indian Ocean from the ERW. Some analyses show a residual MJO signal working around the planet and currently over Africa, but that signal is weak and opposing the low-frequency state, so difficult to decipher.

The MJO is forecast to remain incoherent over the next two weeks, with all dynamical ensemble systems in fairly good agreement. Some statistical models predict eastward movement of the current, weak signal, though those models disagree with most of the dynamical models.

During the past week, Hurricane Hilda developed over the East Pacific, and will likely have an impact on Hawaii in the coming days. Tropical Storm Molave developed a couple hundred miles southeast of Tokyo, and moved northwest before recurving near 140E. During the next two weeks, tropical cyclone formation is likely over the west Pacific, from near Guam to about 165E. The East Pacific is also expected to have enhanced tropical cyclone activity, with one area west of 120W highlighted with a moderate confidence of tropical cyclone formation, and another area centered on 100W with higher odds of tropical cyclone formation during Week-1. Some models are indicating the potential for tropical cyclone formation over the equatorial Atlantic, later in Week-2. The confidence in development of a tropical cyclone over the Atlantic Basin is low.

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. The ERW and a weakened residual MJO signal are likely to support convection over the Indian Ocean. Below (above) average rains are favored over the Maritime Continent and Central America (Central and East Pacific), supported by the low-frequency state.

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 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.