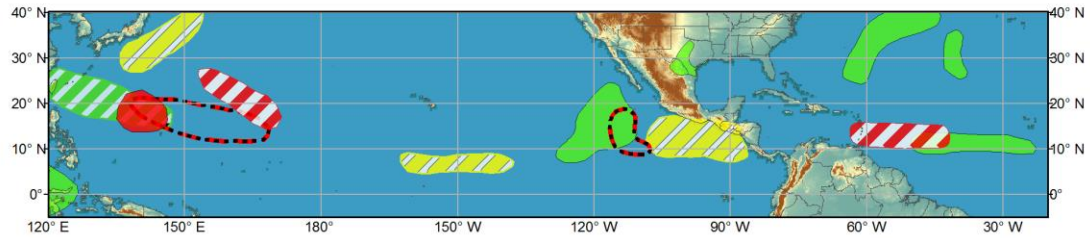


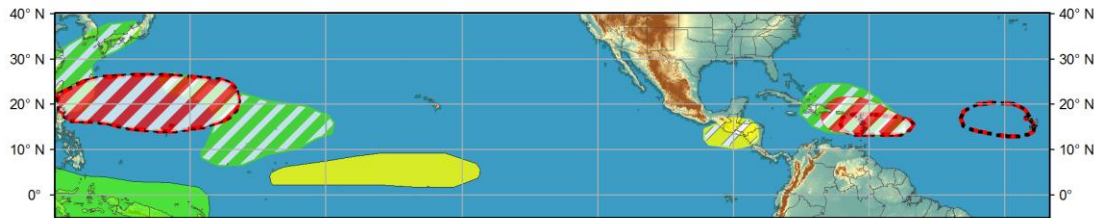


## Global Tropics Hazards and Benefits Outlook - Climate Prediction Center

**Week 1 - Valid: Sep 24 2016 - Sep 27 2016**



**Week 2 - Valid: Sep 28 2016 - Oct 04 2016**



Confidence  
High Moderate

Produced: 09/23/2016  
Forecaster: Rosencrans

- |                                   |  |  |
|-----------------------------------|--|--|
| <b>Tropical Cyclone Formation</b> |  | Development of a tropical cyclone (tropical depression - TD, or greater strength). |
| <b>Prior TC Formation Outlook</b> |  | Tropical cyclone outlook from previous release.                                    |
| <b>Above-average rainfall</b>     |  | Weekly total rainfall in the upper third of the historical range.                  |
| <b>Below-average rainfall</b>     |  | Weekly total rainfall in the lower third of the historical range.                  |
| <b>Above-normal temperatures</b>  |  | 7-day mean temperatures in the upper third of the historical range.                |
| <b>Below-normal temperatures</b>  |  | 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.**



中央氣象局  
Central Weather Bureau



UNIVERSITY AT ALBANY  
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The MJO weakened slightly during the past few days, especially according to the RMM-based index. The CPC velocity potential index indicates a stagnant signal, with enhanced convection supported over the Maritime Continent. Forecasts range from a spatially stagnant signal to slow eastward propagation. The update reflects a continuation of enhanced convective activity over the Maritime Continent and western Pacific.

The National Hurricane Center indicates a 90 percent chance of tropical cyclone formation over the eastern Pacific during the next 5 days. Tropical cyclone formation odds are slightly enhanced near the Lesser Antilles for the next 5 days, then over the Caribbean and Great Antilles into Week-2. Tropical storm Megi developed just west of Saipan, and is forecast to move toward Taiwan. Tropical cyclone formation odds are enhanced for the western North Pacific for the extent of the outlook.

Areas of above/below average rains have been adjusted, in accordance with predicted tropical cyclone activity and model guidance. Heavy rains are likely over northern Mexico and southern Texas during the

early portion of next week. Any disturbance, whether declared as tropical cyclone or not, will likely bring heavy rains to the Caribbean and surrounding islands.

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

The MJO strengthened during the past 7-days, with the RMM-based index and the CPC velocity potential based anomalies indicating conditions associated with enhanced convection over the Maritime Continent. Spatially, velocity potential anomalies indicate support for convection from the Indian Ocean to the Central Pacific, with subsident conditions from the Americas to Africa, and that pattern is slowly sliding eastward. An equatorial Rossby wave (ERW) and a Kelvin wave are also impacting the circulation near the Date Line. Going forward in time, most models predict a slow eastward propagation of the signal, with convection remaining over the Maritime Continent and western Pacific for the next 10 days. GFS and Environment Canada model based solutions have slower propagation, likely due to more emphasis on the ERW.

During the past week, Hurricane Paine developed over the eastern Pacific and both Tropical Storm Karl and Tropical Storm Lisa developed over the Atlantic, continuing the active period for tropical cyclone activity. Typhoon Malakas continued to spin over the West Pacific, directly impacting Japan. During the next two weeks tropical cyclone formation is likely over the western Pacific, from about 130E to 165E along 15N. During the next 5 days, the National Hurricane Center indicated a 50% chance of tropical cyclone formation over the East Pacific. During Week-2, the West Pacific is likely to remain active from near Taiwan out to 165E, while some activity is also indicated over the Atlantic, likely tied to Kelvin wave activity across this region.

During Week-1, moderate likelihood areas of above average rainfall are forecast over India, associated with a monsoon depression that developed over the country last week, which is forecast to slide westward in time. Above average rainfall is also likely over the Maritime Continent due to the MJO/ERW interactions there. Tropical cyclones are likely to bring heavy rains to Japan, northwest Mexico, and portions of the Atlantic Ocean and eastern Pacific. Below average rains are likely over the western Indian Ocean, due to MJO and ERW influences, and over central and eastern Pacific. Confidence over the central and eastern Pacific are lower due to the potential influence of a Kelvin wave to move through that region and disrupt the subsidence from the MJO.

For Week-2, below average rains are likely over the eastern Indian Ocean and western Maritime Continent, while above average rains are likely to stretch eastward to Papua New Guinea and portions of the western Pacific. Below average rains over the central Pacific are likely where SSTs are below average and areas east of the projected influence of the MJO.

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