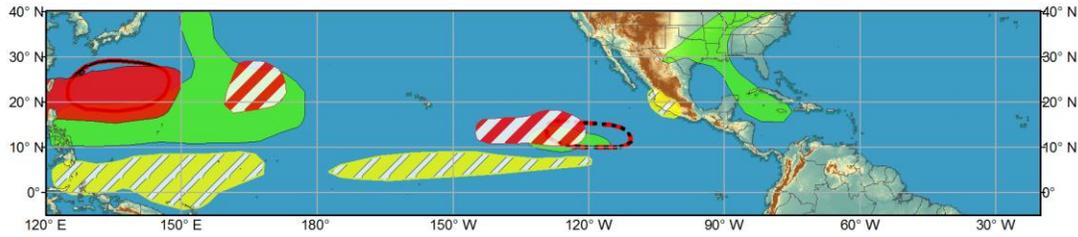




Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



Week 1 - Valid: Aug 13 2016 - Aug 16 2016



Week 2 - Valid: Aug 17 2016 - Aug 23 2016



Confidence
High Moderate

Produced: 08/12/2016
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 signal increased in amplitude, according to both of the RMM-based index and the CPC velocity potential index. The signal strengthened most likely due to an increase in convection over the western Pacific. The signal is forecast to continue to strengthen over the western Pacific, with little to no propagation, so that stationary nature contributes to the uncertainty of delineating this as a full MJO event versus convection that maps to the MJO time band.

Tropical Storm Conson continues to churn over the western Pacific, with a track almost due north toward northern Japan. During the next 4 days, tropical cyclone formation is most likely over the western Pacific, with the strongest signals west and north of the Northern Mariana Islands. Some models indicate lower odds of formation further east, near the Date Line. There is a weak signal for formation over the eastern Pacific, from near 140W to 120W, between 10 and 20N latitude.

Above average rains are likely over the western North Pacific with below average rains along the equatorial Pacific. A plume of moisture is forecast to extend from the Caribbean to the southeast U.S., with some potential for that moisture feed to extend into next week. Above average rains are likely to

extend into next week for the western North Pacific, with the same areas of the equatorial Pacific likely to receive below average precipitation.

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

The MJO signals increased in amplitude this past week, with the RMM and the CPC Velocity Potential based indices each indicating an emerging signal over the Maritime Continent. Convection associated with the MJO was located over the Maritime Continent, but there were also extensions northwestward to India and northeastward over the western North Pacific. Dynamical model forecasts generally indicate a strengthening signal over the western Pacific though the amplitude varies greatly among the models. Additional uncertainty is introduced as some models indicate a signal moving westward in time, while others indicate an initial westward move then eastward propagation, and still others indicate amplification in the same location. Some models are likely overemphasizing a Rossby wave analyzed near 120E. The net result from them all is amplification over the western Pacific for most of the next 2 weeks, with the potential for Kelvin waves to radiate eastward.

During the past week, two tropical cyclones (Tropical Storms Omais and Conson) developed over the western Pacific. Tropical Storm Ivette and Tropical Storm Javier formed over the East Pacific, with Javier moving very close to Baja California. Tropical Storm Earl developed over the Caribbean and made landfall in Belize before moving across southern Mexico. During the next two weeks the highest chances for tropical cyclone formation are over the western North Pacific. The Joint Typhoon Warning Center is also highlighting the potential for tropical cyclone formation over the Bay of Bengal right at the start of the outlook period. Over the East Pacific, the National Hurricane Center has a 20% chance of tropical cyclone formation during the next 5 days, and some models continue that slightly enhanced threat out through the remainder of Week-1. During Week-2, the largest threat of tropical cyclone formation remains over the western Pacific, from the South China Sea to out near 25N/150E. Some models are also indicating the potential for formation over the western Gulf of Mexico along the tail end of a cold front forecast to settle southward from the CONUS.

The forecast of a strengthening MJO over the Maritime Continent and western Pacific favors enhanced rainfall from Southeast Asia to the western Pacific, although the forecast area is offset from the traditional equatorial region of enhanced convection associated with MJO activity. Some below average precipitation is favored from India to the Maritime Continent, more typically associated with MJOs progressing from Phase 5 to Phase 7, though the model available outputs support that forecast and it would align with influence from the Rossby wave currently analyzed near 120E. Some suppressed

(enhanced) convection is likely over the equatorial (off-equatorial) central Pacific, likely related to the narrow band of below (above) average SSTs over the central Pacific.

During Week-2, below average precipitation is likely to move northward over India, allowing for above average temperatures to work in over southern and southeast India. Above average rains are likely to persist from the South China Sea to the western North Pacific. The newly emerging background state and the subsiding portion of an MJO forecast to be in Phase 6 are likely to support below (above) average rains over the equatorial (off-equatorial) central Pacific.

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