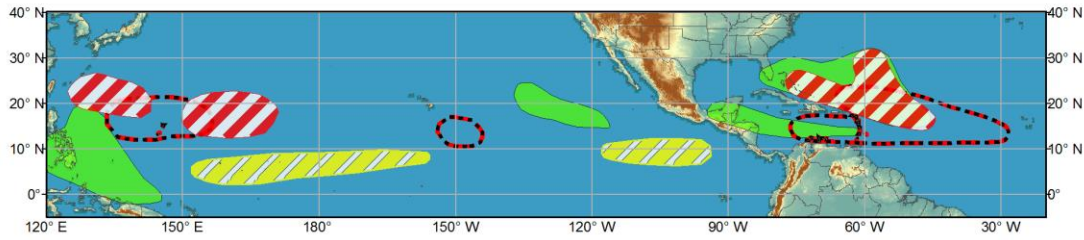




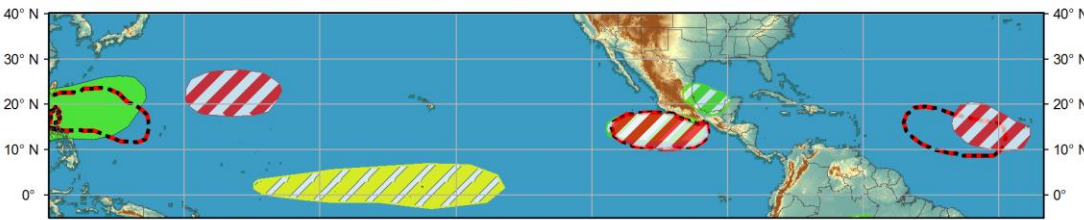
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



Week 1 - Valid: Aug 19 2017 - Aug 22 2017



Week 2 - Valid: Aug 23 2017 - Aug 29 2017



Confidence
High Moderate

Produced: 08/18/2017
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 has completely broken down, with the velocity potential anomalies indicating a wavenumber 3 pattern, and both the Wheeler-Hendon and CPC Velocity Potential indices near zero amplitude. A Kelvin wave is moving across the eastern Pacific with another Kelvin wave in some analyses over the Maritime Continent. Some statistical tools and some dynamic models indicate an increasing signal in the MJO band over the Indian Ocean, with a signal moving eastward through Week-2.

Tropical Depression 13 formed over the eastern Pacific and Tropical Storm Harvey formed over the main development region of the Atlantic Basin since the last release on August 15. Through the remainder of Week-1, Tropical Storm Harvey is forecast to move across the Caribbean, while TD13 is likely to move out to sea. New tropical cyclone formations are likely over the Atlantic in the next 5 days, with 40-60 percent odds. Later, during days 5-11, tropical cyclone formation odds are again enhanced over the central Atlantic, well away from major land masses. The western Pacific is likely to be relatively suppressed for tropical cyclone development during days 5-11 period, with only a moderate chance of a tropical cyclone forming. A suppressed period would be consistent with an MJO band signal over the Indian Ocean. Over the eastern Pacific, a short lull in tropical cyclone activity, in the wake of TD13 is likely, with a potential return to an active period later in Week-2.

Enhanced tropical moisture is likely to impact Florida early next week. Some models also indicate moisture associated with Tropical Storm Harvey making its way across the Bay of Campeche and into Mexico, with potential impacts to Southern Texas, though uncertainty about that is high, as it well into next week.

----- Previous discussion, from Aug 15, below -----

The MJO remained weak during the past 7 days. Analysis of patterns in outgoing longwave radiation plots indicates that two modes of variability, Equatorial Rossby Waves (ERW) and Kelvin Waves (KW), are major intraseasonal contributors to the patterns of tropical convection. Some methods of analysis are indicating the MJO building over the Indian Ocean, but that's likely an aliasing of the ERW. Going forward, most dynamical models indicate little to no MJO signal during the next 2 weeks, though the Canadian Ensemble and the GEFS do indicate a little strengthening over the Atlantic/African sector. All of the models do indicate eastward movement, across Africa toward the Indian Ocean, of whatever strength signal the respective model maintains. The predicted, generally weak MJO amplitudes suggest it will have limited influence.

During the past week, Hurricane Gert formed over the Atlantic, while Hurricane Franklin moved onshore in Mexico. Over the East Pacific, Tropical Storm Jova formed and dissipated with 2 days. The western Pacific remained active with Typhoon Banyan developing on 11 Aug. In the next week, the Atlantic Basin is likely to remain active with weak MJO support, a couple of robust African Easterly Waves, and the potential for a weak KW to enhance convection. This leads to multiple potential formations, with a secondary peak later in Week-1. Additionally, the Central Pacific Hurricane Center has a 50% chance of tropical cyclone formation indicated for the next 5 days. Over the West Pacific, formation odds are enhanced along 17N from about 135E to 160E. During Week-2, the central Pacific signal wanes, while the East Pacific becomes more favored, and the main development region of the Atlantic is likely to remain active. Tropical cyclone formation odds in the West Pacific wane from Week-1, and shift northwest to near Taiwan and extend into the South China Sea.

Given the lack of a robust MJO signal, forecasts for enhanced or suppressed tropical rainfall are based largely on dynamical model consensus and the likely progression of the ERW, KW, and weak MJO signal.

Convection is likely to continue over southern India and portions of the Southeast Asia and the Maritime Continent, while some drying moves in along the equator near Sumatra. Some below average SSTs and dynamical model guidance favor below normal convection near the Date Line, which continues into Week-2. A cold front is likely to settle over southern Brazil.

During Week-2, model guidance has a large amount of uncertainty, and the largest signals are over the South China Sea and the Eastern Pacific. An amplified pattern is likely to remain over South America. The area of above average rains over southern India is likely to move northward, with some drying moving northward over central India. The ECMWF is more bullish on a developing MJO signal over the Indian Ocean in Week-2, while GEFS solutions depict drying near Sumatra and weak signals over the central Indian Ocean. They both agree on weak signals for wetness near the Maldives.

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