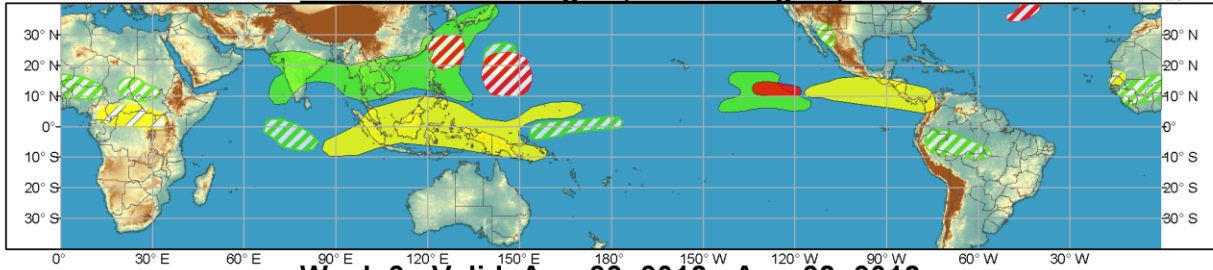




Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



Week 1 - Valid: Aug 15, 2018 - Aug 21, 2018



Week 2 - Valid: Aug 22, 2018 - Aug 28, 2018



Confidence
High Moderate

- Tropical Cyclone Formation** Development of a tropical cyclone (tropical depression - TD, or greater strength).
- 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.

Produced: 08/14/2018

Forecaster: Baxter

Product is updated once per week, except from 6/1 - 11/30 for the region from 120E to 0, 0 to 40N. The product targets broad scale conditions integrated over a 7-day period for US interests only. Consult your local responsible forecast agency.



The large-scale global tropical pattern remains fairly stationary this week, reflecting conditions similar to an intraseasonal event centered over the Pacific. Widespread convection continues across East and Southeast Asia and across the Pacific, and any propagation has been more northward than eastward. The RMM-based MJO index has been somewhat erratic, but has remained outside of the unit circle over the past two weeks in Phases 6 or 7. The CPC velocity potential based MJO index also indicates an enhanced (suppressed) convective phase over the Pacific (Africa and Indian Ocean), which is similar to the position of the MJO during mid-July. Analyses of low-level zonal wind anomalies reflect a persistent regime of weakened trade winds across the equatorial Pacific, part of which is due to tropical cyclone activity, but may also indicate a shifting atmospheric base state towards El Nino conditions. Additionally, a robust, convectively coupled Kelvin wave is currently crossing the eastern Pacific. Dynamical model MJO index forecasts generally depict a weakening MJO signal during Week-1 as convection shifts toward parts of the Indian Ocean for a brief time (due in part to an equatorial Rossby wave) and the aforementioned Kelvin wave tracks back in to the eastern Hemisphere. By Week-2, most dynamical models agree that an eastward-moving enhanced subseasonal signal is likely near the Maritime Continent.

The West Pacific basin has been extremely active during the past week. Hurricane Hector, now a weakening tropical storm, crossed the Date Line and is now in the West Pacific. All other tropical cyclones in the East Pacific have dissipated over the past week. Tropical Storms Leepi and Bebinca developed over the West Pacific and South China Sea, respectively. During Week-1 tropical cyclogenesis is most likely over the East Pacific, where NHC indicates a 90% chance of development over the next five days. Over the West Pacific, two areas are currently being monitored for development: one in the vicinity of Guam, the other northeast of Taiwan. Over the North Atlantic, NHC indicates a 40% chance of subtropical storm development near 35-40N and 40-50W. During Week-2, the only area with notably enhanced odds of tropical cyclogenesis is near and east of Guam, where the low-frequency state remains very favorable.

The forecasts for above- and below-average rainfall were based primarily on a consensus between the CFS, GEFS, and ECMWF, as well as official guidance from the NHC and JTWC where precipitation is due to existing tropical cyclones. During Week-1, wet weather is favored to continue across parts of Southeast Asia, the South China Sea, the northern Philippines, and over much of Japan, while near- to below-average rainfall is anticipated across parts of the equatorial Maritime Continent. Areas of enhanced rainfall due to tropical cyclones and an enhanced ITCZ are forecast across parts of the central and eastern Pacific. Below-average rainfall is favored along Mexico's southern coast, Central America, and the far eastern Pacific due to subsidence in the wake of forecast tropical cyclogenesis and the atmospheric Kelvin wave.

During Week-2, uncertainty increases as expected, with some model divergence and an unclear picture of subseasonal variability. Above-average rainfall is more likely over parts of the eastern Indian Ocean extending northeastward toward Taiwan and the Philippines, and enhanced convection also becomes more prominent over the eastern Maritime Continent and parts of the Pacific. This is due to both the forecast evolution of the subseasonal variability (uncertain as it is) as well as the developing low-frequency state. Models are in fairly good agreement on continued below(above)-average rainfall over parts of the East Pacific, Central America, and northern South America (western Brazil).

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