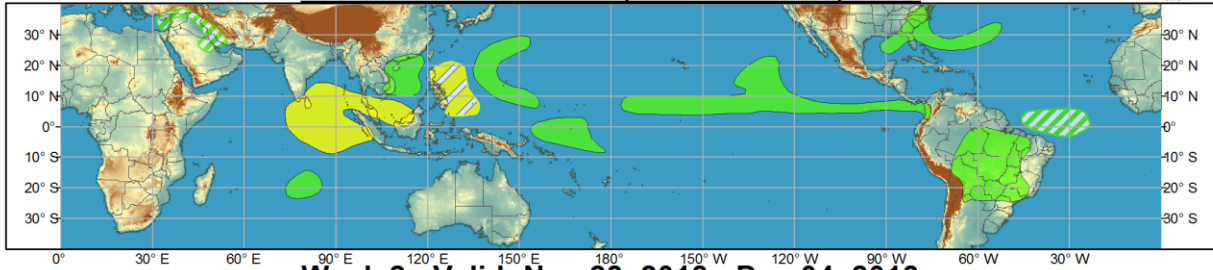




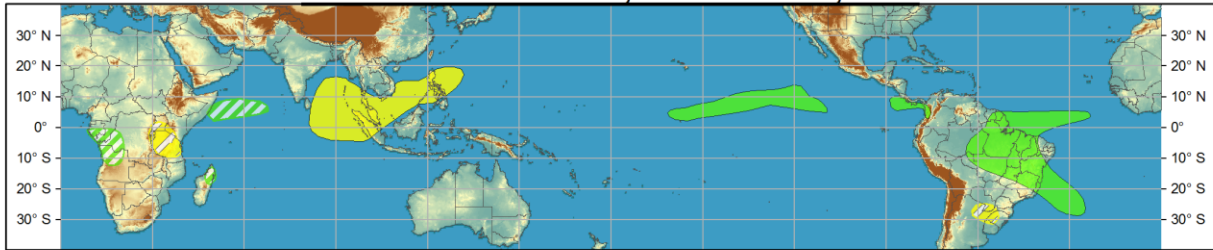
# Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



## Week 1 - Valid: Nov 21, 2018 - Nov 27, 2018



## Week 2 - Valid: Nov 28, 2018 - Dec 04, 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: 11/20/2018

Forecaster: Allgood

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.



Analyses of recent observations across the global tropics and the RMM-based and CPC velocity potential based MJO indices show a continued active

intraseasonal signal with the enhanced phase over the Maritime Continent. The MJO propagation slowed during the past week, however, and the amplitude of the RMM index diminished. This is likely due to interactions between the MJO and an unusually strong equatorial Rossby wave (ERW) over the West Pacific. Destructive interference with the low frequency state that continues to transition towards El Nino conditions, favoring suppressed convection over the Maritime Continent also played a role. Dynamical model MJO index forecasts do not show this interruption of the signal lasting for very long. The bias corrected GEFS depicts a re-enhancement of the MJO over the West Pacific during Week-1, with eastward propagation to the Western Hemisphere during Week-2. The ECMWF is similar, albeit with reduced amplitude and increased propagation speed. Many ECMWF ensemble members show the MJO enhanced convective signal returning to the western Indian Ocean by the end of Week-2, which is on the fast end of the spectrum, but similar to the previous MJO event. Statistical guidance similarly depicts robust MJO activity, with a more canonical phase speed. Based on a general consensus of these forecasts, the MJO is anticipated to be active during the next two weeks, with a Pacific event during Week-1 transitioning to a Western Hemisphere event during Week-2. As the MJO emerges over the

Pacific, it will begin constructively interfering with the low frequency signal, which may result in widespread convection along the Pacific ITCZ.

A pair of tropical depressions are currently bringing impacts to parts of Asia. Tropical Depression 32W (Toraji) is currently over the Gulf of Thailand, and is forecast to gradually weaken as it emerges over the Bay of Bengal, where conditions will become increasingly unfavorable as the suppressed phase of the MJO overspreads the Indian Ocean. Further east, Tropical Depression 33W is currently approaching the central Philippines, and is forecast to move into the South China Sea over the next few days and affect Vietnam during the middle or latter part of Week-1. The Joint Typhoon Warning Center does not anticipate substantial intensification, making heavy rainfall and flooding the primary hazards associated with this system. Tropical Depression Bouchra dissipated over the south-central Indian Ocean, and a disturbance near Sri Lanka is expected to move slowly towards the Arabian Sea over the next week, with a low chance for tropical cyclogenesis. In association with the strong ERW over the West Pacific, a low-latitude tropical depression (34W - Man-Yi) recently formed near 5N/155E. This tropical cyclone is forecast to move generally northwestward while intensifying, and may bring substantial impacts to Guam before recurving well east of the Philippines. No additional tropical cyclogenesis is anticipated during the outlook period, although some dynamical model forecasts indicate a potential for late season development over the far East Pacific.

Precipitation forecasts are based on a consensus between the CFS and ECMWF ensembles, MJO composites for Pacific and Western Hemisphere events, forecasted TC tracks, and the impacts from other modes of coherent tropical variability including the low frequency state and the West Pacific ERW. During Week-1, enhanced convection associated with tropical cyclone activity is favored over Vietnam and the adjacent South China Sea, as well as the West Pacific near Guam, with a region of suppressed convection due to subsidence in between these regions near the Philippines. Continued enhanced convection associated with the ERW is favored east of New Guinea, while suppressed convection associated with the MJO is forecast across the eastern Indian Ocean and western Maritime Continent. Constructive interference between the base state and the MJO favors widespread enhanced convection across the tropical North Pacific, reaching all the way to western South America. Additionally, enhanced convection is favored across much of western and central Brazil. A developing midlatitude storm along the east coast of the CONUS is forecast to draw in substantial tropical moisture, resulting in heavy precipitation along the Atlantic seaboard.

During Week-2, suppressed (enhanced) convection is favored over parts of the Maritime Continent (east-central Pacific, central and northeastern Brazil, and the tropical Atlantic) in association with the MJO and the low frequency state. The potential for continued westward propagation of the ERW introduces some uncertainty across the central Maritime Continent, where the MJO and low frequency state would both favor suppressed convection.