



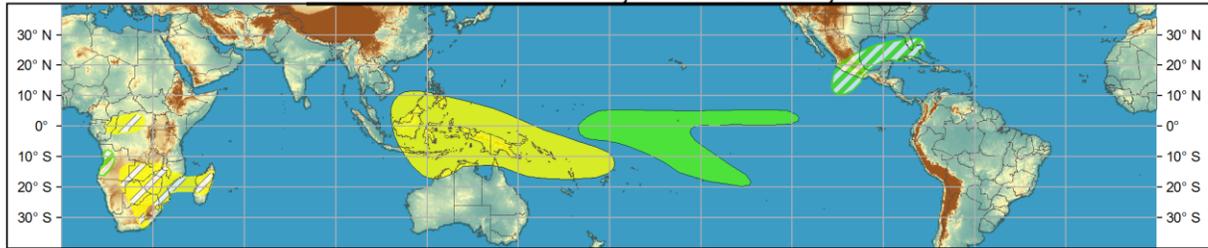
# Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



**Week 1 - Valid: Dec 30, 2015 - Jan 05, 2016**



**Week 2 - Valid: Jan 06, 2016 - Jan 12, 2016**



**Produced: 12/29/2015**  
**Forecaster: Allgood**

Confidence		
High	Moderate	
		<b>Tropical Cyclone Formation</b> Development of a tropical cyclone (tropical depression - TD, or greater strength).
		<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, 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 MJO remained robust and coherent during the past week, with strong projections on both the Wheeler-Hendon RMM based and CPC velocity potential based indices. The enhanced phase of the MJO propagated rapidly across the Maritime Continent, as destructive interference with the El Niño background state limited the convective response. The upper-level velocity potential anomalies associated with the MJO remained quite robust, however, as the enhanced phase propagated across the Maritime Continent. The enhanced phase of the MJO is currently over the west-central Pacific, and is beginning to constructively interfere with the ENSO signal, resulting in widespread enhanced convection near the Date Line. Dynamical model forecasts of the RMM based MJO index all support continued eastward propagation of the intraseasonal signal over the Pacific during Week-1. During Week-2, the GFS slows the eastward propagation and increases the amplitude of the index over the central Pacific, possible due in part to tropical cyclone formation. The ECMWF depicts continued MJO propagation across the Western Hemisphere.

No new tropical cyclones developed during the past week, as an area of low pressure favored for potential development in the Gulf of Carpentaria remained over northern Australia. During Week-1, consistent with the robust MJO event, tropical cyclogenesis is favored both north and south of the

equator near the Date Line. There is stronger track clustering among the dynamical model ensemble member forecasts for the WNP disturbance, so a high probability for formation is indicated on this outlook. If a tropical cyclone does form, model guidance supports a west to west-northwest track, with potential impacts for the Marshall Islands, Micronesia, and Guam. A disturbance currently between 160 and 170W and 10 and 20S has a moderate potential for development over the next several days.

The precipitation outlook during the next two weeks is based on MJO composites for Phases 6 and 7, along with continued influence from the strong El Nino event. During Week-1, enhanced (suppressed) convection is favored east of New Guinea, across the equatorial central and east-central Pacific, and along the SPCZ (eastern Indian Ocean, Maritime Continent, and northeastern Brazil). Due to constructive interference between the MJO and ENSO, precipitation anomalies across the central Pacific may be higher than they have been for the past several months. Enhanced rainfall is also anticipated across southeastern Texas, the northern Gulf of Mexico, and the central Gulf Coast of the US. During Week-2, the envelope of suppressed convection across the Maritime Continent is forecast to shift eastward, overspreading the equatorial West Pacific. Enhanced precipitation is favored to continue across the central and east central Pacific, with an active southern stream favoring enhanced rainfall across central Mexico, the Gulf of Mexico, and Florida.

Precipitation forecasts across Africa and Madagascar were produced in coordination with CPC's International Desk, and reflect regional scale weather and climate features.