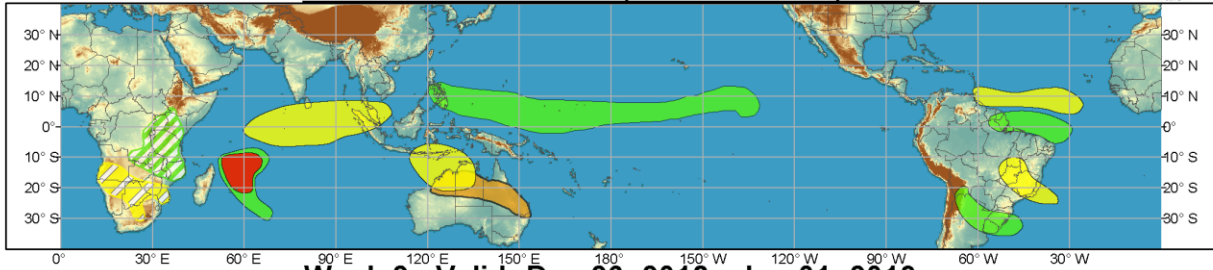




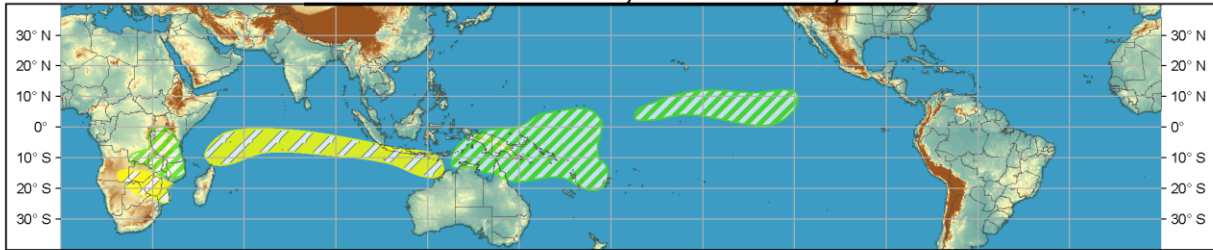
# Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



## Week 1 - Valid: Dec 19, 2018 - Dec 25, 2018



## Week 2 - Valid: Dec 26, 2018 - Jan 01, 2019



	<b>Confidence</b>		<b>Produced: 12/18/2018</b>
	High Moderate		<b>Forecaster: MacRitchie</b>
<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 Madden Julian Oscillation is in RMM Phase 4 and model guidance suggests that it will propagate through Phases 5 and 6 during the next two weeks, although some ensemble members forecast it to stall for a couple of days before continuing east. There are also some ensemble members that weaken the MJO considerably as it passes over the Western Pacific. Sea surface temperatures in the equatorial Pacific remain warmer than average and the CPC ENSO update from December 13 forecasts a 90% chance of El Nino formation during the Boreal Winter.

Today's forecast is based primarily on model guidance and historical MJO Phase 5-6 precipitation patterns. There is high confidence of below-average rainfall over the equatorial Indian Ocean and southern Maritime Continent during Week-1 in conjunction with the expected MJO progression. The Pacific ITCZ is expected to nudge north during Week-1 leading to high confidence of above-average rainfall over parts of the Central Pacific between 0 and 10N. An active pattern over South America will also lead to anomalously dry (wet) conditions over Southeastern Brazil (northern Argentina, southern Brazil, and Uruguay) during Week-1. Some model guidance suggests that more than 8 inches of rain are possible throughout parts of Argentina.

Model guidance and Australia's Bureau of Meteorology forecast above-normal temperatures during the first few days of Week-1 over much of Northern Australia. These conditions are not typical of an MJO in Phase 4, but appear to be synoptically driven.

There is an equatorial Rossby wave over the western Indian Ocean and its southern gyre is forecast to form into a tropical cyclone during the next 24-48 hours. The Joint Typhoon Warning Center is monitoring this potential storm as Invest 92S and will provide updates over the next few days.

The Week-2 precipitation forecast is driven almost entirely by the MJO. Despite the fact that some models are forecasting the MJO to weaken as it moves over the Western Pacific, the CFS and ECMWF precipitation forecasts are in good agreement that conditions over the tropics will be typical of an MJO in RMM Phase 6. There is moderate confidence of below-average rainfall in the equatorial Indian Ocean as well as above-average rainfall over the Solomon and Coral Seas and central North Pacific associated with continued northward displacement of the ITCZ.

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