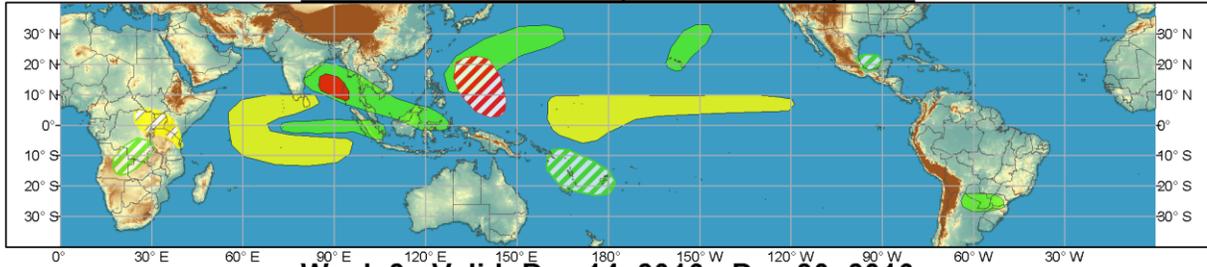




Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



Week 1 - Valid: Dec 07, 2016 - Dec 13, 2016



Week 2 - Valid: Dec 14, 2016 - Dec 20, 2016



Produced: 12/06/2016
Forecaster: Baxter

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.

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 RMM-based MJO index remained weak over the past several days. The amplitude of the CPC velocity potential based MJO index has weakened as well. The pattern of tropical convection is complicated by a westward moving tropical wave over the eastern Indian Ocean, as well as Kelvin wave activity. The remnant MJO signal is likely over the Maritime Continent. Dynamical model MJO index forecasts generally depict a weak signal over the next two weeks, with some differences between the GEFS and ECMWF solutions. The GEFS develops a higher amplitude subseasonal convective signal over the eastern Indian Ocean later in Week-1 when a Kelvin wave currently entering the Eastern Hemisphere comes into phase with forecast tropical cyclone activity over the Bay of Bengal and the low-frequency signal. The ECMWF ensemble system, however, depicts a weak signal that slowly propagates the enhanced convective envelope to the West Pacific by the end of Week-2. The ECMWF solution is slightly favored, but the difference is relatively minimal in terms of areas favoring above- or below-average rainfall given the low amplitude pattern in either case.

Tropical Storm Nada formed on 29 November over the Bay of Bengal and dissipated before landfall. During Week-1, there is a high potential for new tropical cyclogenesis over the Bay of Bengal at the start of the period. Tropical cyclone formation is also possible over the West Pacific at an unusually low

latitude and, if a storm forms, a northward track is likely. The GEFS and ECMWF are not in good agreement here, with the former consistently forecasting TC development over the coming days. During Week-2, tropical cyclogenesis is possible over the South China Sea and northwest of Australia. Both of these areas are indicated by the GEFS with some support from the ECMWF.

Forecasts for areas of enhanced or suppressed precipitation were based primarily on dynamical model guidance and the low-frequency base state. Enhanced convection is likely from the Bay of Bengal southeastward across the western Maritime Continent, as well as over parts of the equatorial Indian Ocean and South Pacific. La Nina conditions support suppressed rainfall across much of the tropical central Pacific, while model guidance indicates below-average rainfall across much of the Indian Ocean just north and south of the equator. Areas of enhanced rainfall are favored across Hawaii and over the West Pacific. There is also an enhanced risk of MCS activity over parts of subtropical South America.

During Week-2, suppressed (enhanced) rainfall is anticipated over the central Indian Ocean and central Pacific (far eastern Indian Ocean, the Maritime Continent, and West Pacific), reflecting the low-frequency state modulated by a weak, eastward-propagating MJO signal.

Forecast shapes over Africa are made in consultation with the International Desk at CPC, and often reflect more regional scale variability in addition to large-scale climate factors.