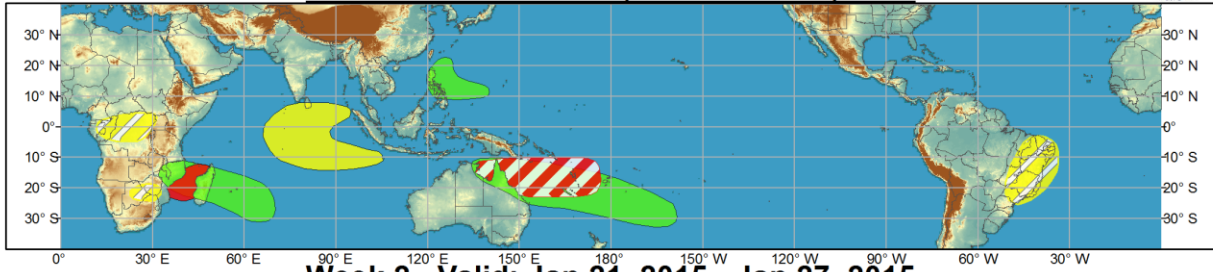




Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



Week 1 - Valid: Jan 14, 2015 - Jan 20, 2015



Week 2 - Valid: Jan 21, 2015 - Jan 27, 2015



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.

Produced: 01/13/2015
Forecaster: Pugh



The MJO remained active this past week with its enhanced convective phase centered over the West Pacific. Dynamical and statistical models generally indicate a continued MJO signal propagating into the Western Hemisphere, but a decrease in amplitude of the MJO signal is noted among these prognostic tools, especially the ECMWF model.

Enhanced convection was observed across the eastern Maritime Continent, West Pacific, much of Australia, and the southwest Indian Ocean during the past week, while suppressed convection prevailed across the remainder of the Indian Ocean. Suppressed convection persisted across northeast Brazil and along the equatorial Pacific near the Date Line. Tropical Cyclone Bansi developed east of Madagascar on January 11 and rapidly strengthened. A surface low is expected to cross the Mozambique Channel and become a tropical cyclone early in Week-1. Forecasted above-average rainfall extending from Mozambique into the southwest Indian Ocean is associated with these tropical cyclones. Meanwhile, a Tropical Depression developed on January 13 southwest of Guam and is forecast to track west towards the Philippines during Week-1 while producing above-average rainfall. During Week-1, tropical cyclone development is favored across the Gulf of Carpentaria and Coral Sea regions due to ongoing convection, above-normal SSTs, and climatology. Although not depicted on the map for Week-1, tropical cyclone

development potential is elevated along the Kimberley coast of northwest Australia due to climatology. During Week-2, weaker signals for tropical cyclone development preclude designation of any shapes on the map.

The outlooks during the next two weeks were based primarily on MJO precipitation composites due to the ongoing robust MJO signal. Current satellite imagery and recent OLR anomalies were also used as guidance for the Week-1 shapes. The MJO is expected to enhance (suppress) rainfall across parts of the Pacific (Indian) Ocean during Week-1. An Equatorial Rossby Wave (ERW) is expected to destructively interfere with the suppressed phase of the MJO. Therefore, below-average rainfall is not forecast for the far eastern Indian Ocean and western Maritime Continent. Meanwhile, the suppressed phase of the ERW is expected to temper the convection across the equatorial West Pacific.

Although model guidance indicates a decrease in the amplitude of the MJO signal during Week-2, above-average rainfall is expected to persist across parts of the Pacific Ocean with below-average rainfall shifting from the Indian Ocean to the Maritime Continent. Forecast confidence is moderate due to the smaller amplitude of the MJO signal that is forecast by the dynamical models.

Precipitation forecast shapes over Africa for both weeks are made through coordination with CPC's Africa Desk, and are generally supported by MJO precipitation composites.