



# Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



## Week 1 - Valid: Nov 26, 2014 - Dec 02, 2014



## Week 2 - Valid: Dec 03, 2014 - Dec 09, 2014



Produced: 11/25/2014

Forecaster: Rosencrans

Confidence		
High	Moderate	
		Development of a tropical cyclone (tropical depression - TD, or greater strength).
		Weekly total rainfall in the upper third of the historical range.
		Weekly total rainfall in the lower third of the historical range.
		7-day mean temperatures in the upper third of the historical range.
		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.



A coherent MJO signal was evident during the previous week. The RMM index and the CPC Velocity Potential based index both indicate a strong signal, over the Indian Ocean, with eastward propagation. There are some statistical indicators that depict this signal as a confluence of other modes of variability, which many times leads to and compliment a robust MJO signal. The upper-level velocity potential spatial map depicts as Wave-2 structure, with the second area of enhanced convection likely related to a transient Kelvin wave. The low-level wind field projects strongly onto Phase 3 of the Wheeler-Hendon EOFs, with westerly anomalies from the Date Line to Africa and easterly anomalies from the Indian Ocean to the Western Pacific. The upper-level wind anomaly structure is complimentary.

Dynamical model forecasts indicate a continued propagation of a robust MJO signal across the Maritime Continent and into the Western Pacific. The transition across the Maritime Continent is an period of heightened uncertainty because of know lower skill in the models and the destructive interference with the background ENSO state. Statistical models based on wavenumber filtering are not latching onto the signal yet, but decomposing the signal into other modes. Based on recent observations and dynamical model forecasts, the MJO is likely to play a significant role in the pattern of tropical convection during the next 2 weeks.

Tropical Storm Adjali moved southward over the Southern Indian Ocean during the first day of the previous week. No other tropical cyclone activity was noted during the past week. During Week-1, the MJO and other modes of variability are likely to contribute to tropical cyclone formation over the South Indian Ocean and the Western North Pacific. A weaker signal, indicating potential for development near the southern tip of India, is present in some dynamical models, but confidence is low in any circulation reaching 35kts. During Week-2, the potential for tropical cyclone formation across the globe is too uncertain, so no areas are highlighted. The only signals during Week-2 are near the Philippines, but those appear to be tracks from a late Week-1 formation.

Above average rains are likely over the Indian Ocean and eastern equatorial Africa during Week-1, related to the MJO and a Kelvin wave. a Kelvin wave moving across the eastern Pacific is likely to enhance precipitation there, while frontal activity that interacts with tropical moisture supports above average rains from the Yucatan to the Florida, and across southern Brazil. Below average rains are likely across the Maritime continent, although confidence in that is lower than for the enhanced convection over the Indian Ocean.

During Week-2, the eastward movement of the MJO is likely to enhance rains over the western Pacific, near the Philippines and from Papua New Guinea to the Southwest Pacific, while below average convection moves into the Indian Ocean. Below average rains are also likely to overspread southern Brazil as the connection to tropical moisture is not likely to last.

Forecasts for enhanced or suppressed precipitation over Africa are based on regional scale considerations and were produced in coordination with CPC's Africa Desk.