



# Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



## Week 1 - Valid: Sep 14, 2016 - Sep 20, 2016



## Week 2 - Valid: Sep 21, 2016 - Sep 27, 2016



Produced: 09/13/2016

Forecaster: Artusa

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.



The MJO remained weak over the past 7-days, with the RMM-based index remaining very near the origin while the velocity potential-based index supported broad, weak ascent from the eastern Atlantic to the Maritime Continent region, and corresponding subsidence from the west-central Pacific to the central Atlantic. A weak intraseasonal signal over the western Pacific during the last few weeks has shown little eastward propagation. This signal appears to be tied to the influence of the monsoon trough and embedded tropical cyclone (TC) activity in this region. Dynamical model MJO Index forecasts for the next two weeks predict the emergence of an MJO signal of weak to moderate amplitude over the vicinity of the eastern Indian Ocean, the Maritime Continent, and western Pacific. Some of these forecasts depict significant zonal propagation of this signal, while others depict modest eastward progression.

The global tropics have been active this past week with respect to TC activity, and they are forecast to remain fairly active during the next two weeks. During Week-1, there is a high likelihood of TC development across the northwestern portion of the western Pacific basin, related to the proximity of the monsoon trough and expected increase in amplitude of the MJO signal in this region. The National Hurricane Center anticipates a medium chance (40%) of TC development over the far eastern Pacific

within the next 5 days. Ocean surface temperatures are forecast to be warm enough to initiate and support convection. There is a medium chance (50%) of TC development over the eastern and central low-latitude Atlantic during the same period.

During Week-1, moderate likelihood areas of above-average rainfall are forecast from near Taiwan east-northeastward across southern Japan and continuing well out over the North Pacific, and from central Australia southeastward to the central Tasman Sea. The first area of predicted above-average rainfall is associated with TC activity, while the second area is associated with mid-latitude frontal activity. There is a moderate likelihood of below-average rainfall across the equatorial region of the Indian Ocean. This is generally the area where the ECMWF and CFS rainfall forecasts are in agreement.

For Week-2, moderate probabilities of enhanced rainfall are given for the vicinity of Malaysia and western Indonesia, and for the low latitude eastern Pacific. The first area of anticipated enhanced rainfall is based on an expected, strengthening MJO signal, and has support from both the CFS and ECMWF rainfall predictions. The second area is related to potential TC activity. Moderate probabilities of deficit rainfall are given from far southern India generally eastward across parts of Southeast Asia to the Philippines, and from near Papua New Guinea southeastward across Vanuatu, Fiji, Tonga, and American Samoa in the South Pacific. Moderate probabilities of deficit rainfall are also indicated just north of the equator in the east-central and eastern Pacific. These regions of predicted below-average rainfall are based on locations of subsidence, and are in agreement with both the CFS and ECMWF models.

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