



Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



Week 1 - Valid: Mar 25, 2015 - Mar 31, 2015



Week 2 - Valid: Apr 01, 2015 - Apr 07, 2015



Produced: 03/24/2015
Forecaster: Rosencrans

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.



CORRECTION - Sent at 1732 ET.

Corrects Confidence for Tropical Cyclone formation shape in Southern Indian Ocean. Change to High from Moderate.

Original discussion follows.

Both of the RMM based and the CPC velocity potential indices continue a robust MJO signal. The area of enhanced convection indicated by both measures is over the Americas. Spatial plots of upper-level velocity potential show enhanced divergence waning over the Central Pacific and increasing over Africa, with convergence increasing over the West Pacific. Little to no convection is evident over the Indian Ocean and the western North Pacific. Westerly wind anomalies are evident in the low levels from the Date Line to the the East Pacific, while easterly anomalies are present from Africa to the Maritime Continent. The recent, high amplitude MJO signal is likely to fade in the coming days, although that may

take up to 2 weeks. OLR measurements indicate the influence of an Equatorial Rossby Wave (ERW) near the Date Line, a Kelvin Wave (KW) over the Americas, and the low frequency state, all of which are likely to influence the pattern of convection during the next 2 weeks.

Dynamical model forecasts of the MJO indicate continued propagation and some weakening during Week-1, with some models almost completely damping the signal by Week-2. Statistical models are in agreement with this, except for the Constructed Analog method, which indicates a strong signal through the end of Week-2. That scenario is less likely given the upper-level pattern. During the next 2 weeks, the MJO is likely to become less influential than the low frequency state.

Tropical Storm Reuben developed over the South Pacific on March 21, and was relatively short lived. Tropical Cyclone Nathan moved from the South Pacific to the South Indian Ocean, crossing over portions of northern Australia. Tropical Cyclone Nathan is expected to weaken during the next 24-48 hours. During the next 2 weeks, tropical cyclone formation odds are increased over the South Pacific, east of the Date Line, and across the western North Pacific from about 130E to 160E. Late in Week-1 and into Week-2, the KW over the Americas could slightly enhance odds of tropical cyclone formation over the central South Indian Ocean.

During Week-1, model guidance, MJO composites, and the low frequency state favor above average rains over the equatorial Central Pacific, with extensions into the South Pacific along the SPCZ and into the western North Pacific along 10N. Model output and MJO composites also favor some increased precipitation over portions of Central America and western South America, although those signals are transient and weaker. Below average rains are supported by models, MJO composites, and the background state over the Maritime Continent.

By Week-2, the MJO signal is likely to be much weaker than it is now, with the background state supporting enhanced (suppressed) convection near the Date Line (Maritime Continent and Australia). Above average rains are likely over the central Indian Ocean as the KW and any remaining MJO signal are likely to transit the area during that time, although the uncertainty there is high because of the destructive interference from the low frequency state.

For both weeks, shapes depicted over Africa are a result of coordination with CPC's Africa Desk, and account for model guidance and the state of the MJO.

