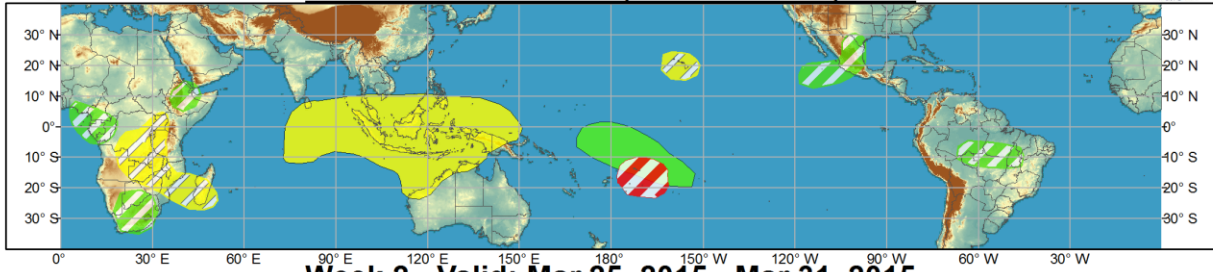




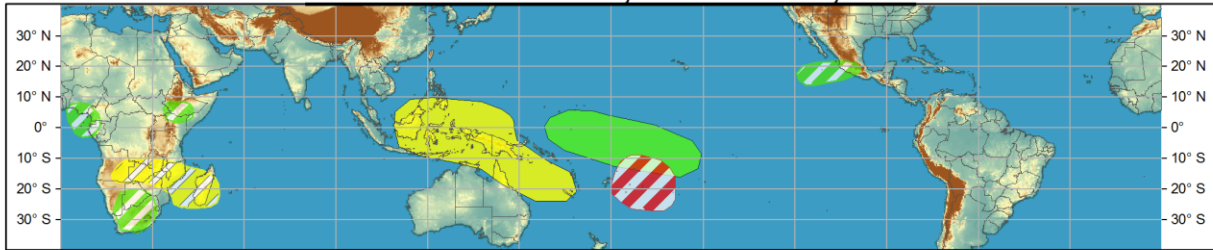
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



Week 1 - Valid: Mar 18, 2015 - Mar 24, 2015



Week 2 - Valid: Mar 25, 2015 - Mar 31, 2015



Produced: 03/17/2015

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 amplitudes of both the RMM and CPC velocity potential based MJO indices are currently in excess of three standard deviations. This reflects the current spatial plots of upper-level velocity potential anomalies which exhibit a robust Wave-1 structure, with large negative (positive) anomalies centered over the Western (Eastern) Hemisphere. Strongly enhanced convection is currently ongoing over the South Pacific, while nearly the entire Indian Ocean is cloud-free. Nearer the surface, strong westerly anomalies have been observed just west of the Date Line over the past five to ten days. This high-amplitude signal is likely due to constructive interference among three modes of variability: the MJO, an equatorial Rossby wave, and the low-frequency ENSO state.

Dynamical model MJO index forecasts are in fairly good agreement that the large-scale signal will decrease dramatically over the next two weeks, while slowly propagating eastward. Statistical tools predictably favor robust, eastward-propagating MJO activity during the upcoming two week period. Based on recent observations and consensus of the model guidance, the MJO is anticipated to play some role in the evolution of the global tropical convective pattern during the next two weeks, but the emerging low-frequency state is likely to grow more important relative to the MJO.

Tropical Cyclone Nathan developed just northeast of Australia, and is forecast to make landfall north of Cairns within the next 48 hours, possibly as a Category 1 storm on the Saffir-Simpson scale, weakening rapidly thereafter. Over the South Indian Ocean, Cyclone Olwyn formed and made landfall over northwestern Australia with sustained winds in excess of 65 knots. In the North Pacific, Tropical Storm Bavi formed and has since weakened to a tropical depression. That system is forecast to weaken to a remnant low and not pose any serious hazards to land. Tropical cyclone formation is most likely over the South Pacific during the next two weeks, where the background state is active and anomalous wind shear seems somewhat favorable. Confidence is only moderate, however, given a lack of strong model support, especially during Week-2. Chances for tropical cyclogenesis over the South Indian Ocean are forecast to increase over the next week to 10 days, though background conditions seem to be less favorable resulting in low confidence and no depiction on the map.

During Week-1, enhanced convection associated with the MJO and the background state is favored over the South Pacific and parts of the Western Hemisphere, including Brazil and Mexico. Suppressed convection is favored over an expansive region extending from the central Indian Ocean to the Maritime Continent and parts of northern Australia. This is consistent with MJO evolution and the background ENSO state. Model guidance suggests that drier-than-average conditions are more likely over Hawaii during Week-1.

During Week-2, the low-frequency state is expected to play a larger role compared to the MJO. Therefore, much of the anomalous dipole in convection across the Maritime Continent and Pacific remains largely unchanged from Week-1. Convective signals over the Western Hemisphere weaken as the MJO signal shifts eastward. This also introduces more uncertainty over the Indian Ocean.

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.