



# Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



## Week 1 - Valid: Apr 20, 2016 - Apr 26, 2016



## Week 2 - Valid: Apr 27, 2016 - May 03, 2016



Produced: 04/19/2016

Forecaster: Rosencrans

- |                                   |                              |  |
|-----------------------------------|------------------------------|--|
| <b>Confidence</b>                 |                              |  |
| High                              | Red with diagonal stripes    |  |
| Moderate                          | Red with horizontal stripes  |  |
| <b>Tropical Cyclone Formation</b> | Red with diagonal stripes    | Development of a tropical cyclone (tropical depression - TD, or greater strength). |
| <b>Above-average rainfall</b>     | Green with diagonal stripes  | Weekly total rainfall in the upper third of the historical range.                  |
| <b>Below-average rainfall</b>     | Yellow with diagonal stripes | Weekly total rainfall in the lower third of the historical range.                  |
| <b>Above-normal temperatures</b>  | Orange with diagonal stripes | 7-day mean temperatures in the upper third of the historical range.                |
| <b>Below-normal temperatures</b>  | Blue with diagonal stripes   | 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 patterns evident in wind anomalies, outgoing longwave radiation, and velocity potential are incoherent with robust MJO activity. Some signatures of Kelvin waves and Equatorial Rossby waves are evident, although those signals are conflicting near the Date Line. The impacts of the background ENSO are waning as the warm event continues to decrease in amplitude.

Dynamical model forecasts of MJO activity indicate a weak signal during the next week. After the first week, there is some divergence on where any signal could emerge, with the GFS indicating a signal over the central Pacific and the European Center model showing no signal. Other modeling systems indicate no signal or a signal emerging over the eastern Indian Ocean. The models are likely aliasing in other modes of variability on to the MJO band for those later times.

Tropical cyclone Fantala continued to churn over the South Indian Ocean, with the latest intensity estimates indicating winds of 105 knots, with gusts to 130kts. No new tropical cyclones formed during the past week. During the next week, tropical cyclone formation odds are enhanced over the south-central Indian Ocean and over the South Pacific. The threat for tropical cyclone formation remains

enhanced during Week-2, from the Gulf of Carpentaria to the Coral Sea, then over the South Pacific near American Samoa.

During Week-1, a Kelvin wave is forecast to enhance convection over the South Pacific. There is also some evidence, in OLR observations, that a Kelvin Wave will move over the Indian Ocean from the west, and an Equatorial Rossby Wave (ERW) from the east. Mid-latitude influences, and the ERW, are likely to support suppressed convection over the eastern Indian Ocean and portions of the West Pacific. As of the forecast issuance, no large-scale signals indicate enhanced rainfall for Ecuador. Mid-latitude influences are likely to support above average rains over eastern Argentina.

Continued lack of a broader MJO or ENSO signal into Week-2 results in elevated (relative to the past few months) uncertainty. The Kelvin wave likely to move across the Indian Ocean in Week-1 becomes the potential triggering mechanism for tropical cyclogenesis just north of Australia, and a potential contributor to a South Pacific tropical cyclone in Week-2. Enhanced precipitation is favored in both of those regions. Below average precipitation is favored over portions of Southeast Asia and the West Pacific. Some models are indicating the potential for above average rains in the higher terrain of Ecuador and Colombia during Week-2.

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