



Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



Week 1 - Valid: Apr 24, 2013 - Apr 30, 2013



Week 2 - Valid: May 01, 2013 - May 07, 2013



Confidence
High Moderate

Tropical Cyclone Formation High Moderate

Above-average rainfall High Moderate

Below-average rainfall High Moderate

Above-normal temperatures High Moderate

Below-normal temperatures High Moderate

Development of a tropical cyclone that eventually reaches tropical storm/cyclone 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.

Produced: 04/23/2013

Forecaster: Baxter

Product is updated once per week. 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 fairly weak over the past several days, as many observational indicators are less coherent than in previous weeks while other subseasonal modes of variability are playing a role in the tropical convection pattern. The velocity potential field is more consistent with MJO activity than other indicators, and suggests a weakly enhanced phase centered between the western Pacific and South America.

There remains a large amount of spread among the dynamical model solutions, though there is some tendency toward a strengthening MJO signal (as assessed by the Wheeler and Hendon index) somewhere in phases 1 through 3 later in Week-2.

The Week-1 outlook is based on where anomalous convection is currently ongoing, dynamical model forecasts, as well as statistical forecasts based on the various sub-seasonal modes, including the weak MJO. Above-average rainfall is favored across parts of the eastern Maritime Continent and western Pacific. This is largely due to remnant MJO-related convection, an atmospheric Kelvin wave currently observed near 140E, and relatively weak atmospheric Rossby wave activity. Much of this area has been

active over the past few days and the numerical guidance supports continued activity into Week-1. Enhanced odds for above-average rainfall is forecast for parts of northern South America, supported by MJO activity and model guidance. Wetter-than-average conditions are also favored across parts of western equatorial Africa due to Kelvin wave activity and consistent with MJO.

Below-average rainfall is favored in Week-1 across parts of the central and eastern Indian Ocean, parts of southeastern South America, and a small portion of central Africa just north of the Equator. The forecast shape over the Indian Ocean is supported by MJO and model guidance; this is likely the highest confidence shape in Week-1. The latter two shapes are generally supported by model guidance.

The Week-2 outlook is based on the evolution of the weak MJO into phases 1 or 2 by the end of the period, modified by model guidance and taking into account uncertainty due to the other subseasonal modes. The weak MJO and uncertain MJO forecast preclude any high confidence areas during Week-2. Above-average rainfall is favored across parts of the central and western Indian Ocean consistent with MJO. This region could be enhanced by Kelvin wave activity as well. Other moderate-confidence regions favoring above-average rainfall are located again across parts of western equatorial Africa and the south-central Pacific. Below-average rainfall is favored across the far eastern Indian Ocean and western Maritime Continent. Based on MJO alone, this area would extend eastward across much of the Maritime Continent. However, uncertainty introduced by the low-frequency state, model guidance, and equatorial Rossby waves, precludes extending this shape eastward.