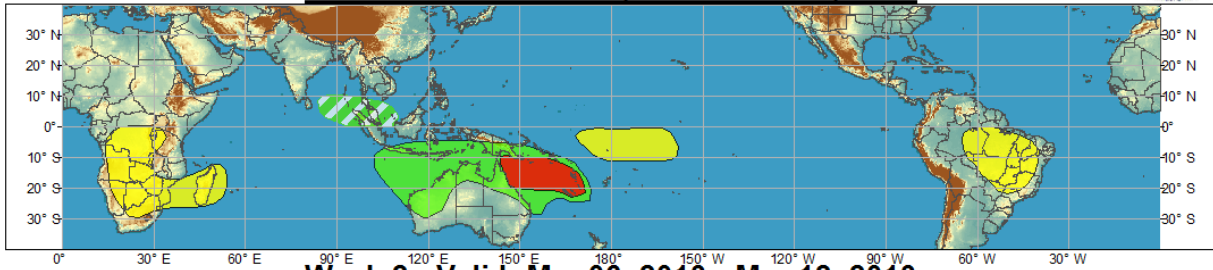




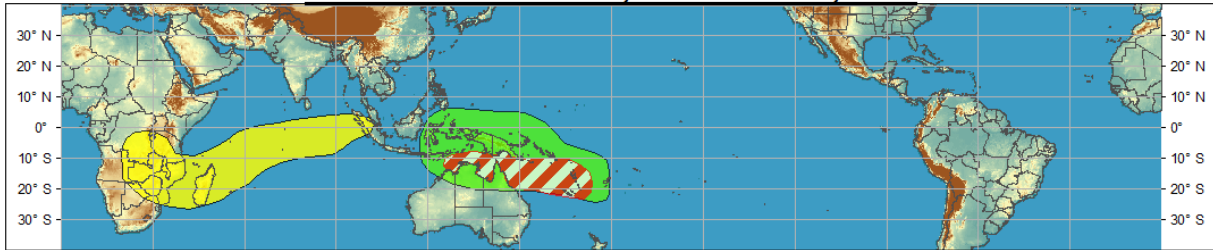
Global Tropical Hazards/Benefits Outlook - Climate Prediction Center



Week 1 - Valid: Feb 27, 2013 - Mar 05, 2013



Week 2 - Valid: Mar 06, 2013 - Mar 12, 2013



Confidence
High Moderate

- Tropical Cyclone Formation** ■ /
- Above-average rainfall** ■ /
- Below-average rainfall** ■ /
- Above-normal temperatures** ■ /
- Below-normal temperatures** ■ /

- / 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: 02/26/2013

Forecaster: Gottschalck

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 active over the past week with the enhanced convective phase centered across the Maritime continent (MC) during the past week. In addition to the MJO, atmospheric Kelvin wave activity (KW) and the enhanced phase of an equatorial Rossby wave (ERW) combined to produce very strong enhanced convection over a broad scale over the eastern Indian Ocean (IO) and the MC. Suppressed convection remained for an area over the south central Pacific. Above-median rainfall and flooding was observed over portions of the Hawaiian Islands during the past week. Cyclone Haruna reached category 3 strength and resulted in heavy rainfall, damaging winds and flooding across southern Madagascar last week. In addition to Haruna, Tropical storm 18S and Cyclone Rusty developed during the past week in the eastern IO, consistent with the MJO shifting eastward with time to the MC.

There is some spread in the dynamical model forecasts for the predicted evolution of the RMM index. Some models persist the signal over the eastern MC/western Pacific (phases 5/6) while others show some eastward propagation in the western Pacific (phases 6/7). Statistical forecasts are more in line with the latter, however, the westward moving ERW supports a more slow eastward evolution of large-scale convection as a whole over the period. Based on recent observations and consideration of both empirical and dynamical model MJO forecasts, the MJO is forecast to remain active during the next two

weeks with eastward propagation of the enhanced convective phase to the western Pacific (by all measures) during the period.

The outlook is primarily based on impacts associated with the MJO and the other types of subseasonal tropical variability, namely the aforementioned ERW. The forecasts are adjusted by model guidance where deemed helpful especially during Week-1. For Week-1, above median rainfall is favored for parts of the eastern IO, primarily north and south of the equator, the southern MC, northern Australia and some areas northeast of Australia in the southwest Pacific. The movement of Cyclone Rusty potentially southward favors elevated chances of above-median rainfall for portions of northwest Australia along with high winds. The interference of the enhanced convective phase of the ERW and the suppressed phase of the MJO favors highly variable convection across the remainder of the IO. The MJO supports elevated odds for below-median rainfall for portions of south-central Africa, Madagascar, the central Pacific south of the equator and northeast Brazil during Week-1. Model guidance also supports all the areas mentioned above. The MJO and current areas of disturbed weather favor tropical cyclogenesis for waters northeast of Australia.

During Week-2, suppressed convection is forecast to shift eastward and elevated odds of below-median rainfall are shown for a region stretching from southeast Africa, across the southern IO to just west of Sumatra, consistent with the MJO. Above-median rainfall shown in Week-1 is forecast to shift eastward and organize across the eastern MC and southwest Pacific to near the Date Line. Tropical cyclogenesis remains favored for waters north and northeast of Australia.

The observed circulation stretching from the deep Tropics across the North Pacific has been consistent with the evolution of the MJO, but the teleconnection breaks down across most of North America. Forecasts for strong high latitude blocking and negative values of the AO and NAO index in the extended range favor opposite impacts across much of the central and eastern U.S. as compared to the typical MJO forced response (i.e. elevated chances for above normal temperatures in the east and above-median precipitation in parts of the Midwest). The higher latitude short-term climate variability appears to be the strongest player for temperature and precipitation impacts across the U.S. over the next 2-3 weeks.