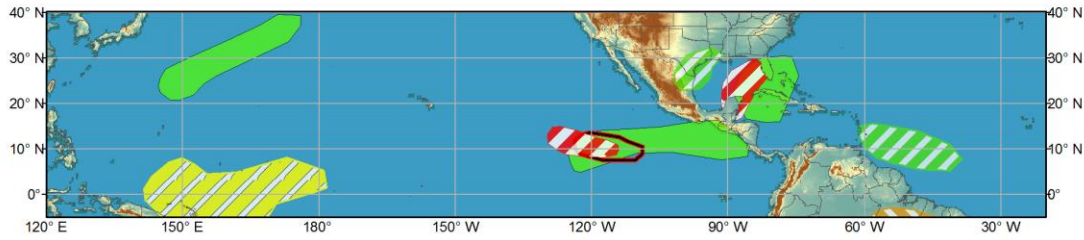




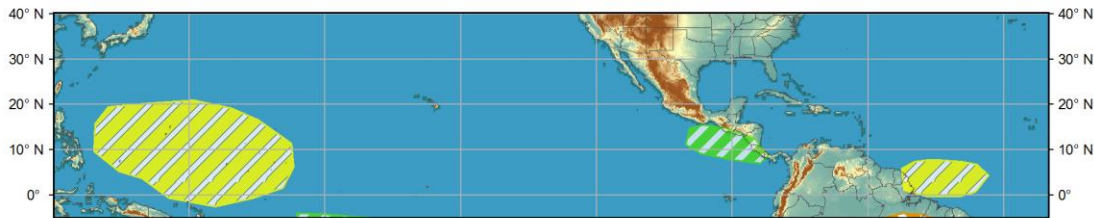
# Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



**Week 1 - Valid: Jun 04 2016 - Jun 07 2016**



**Week 2 - Valid: Jun 08 2016 - Jun 14 2016**



Confidence  
High Moderate

Produced: 06/03/2016  
Forecaster: Baxter

- Tropical Cyclone Formation** Development of a tropical cyclone (tropical depression - TD, or greater strength).
  - Prior TC Formation Outlook** Tropical cyclone outlook from previous release.
  - 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. The product targets broad scale conditions integrated over a 7-day period for US interests only. Consult your local responsible forecast agency.**



Within the past few days, the MJO continued to propagate eastward across the Western Hemisphere, as observed by the large-scale velocity potential signal. However, the RMM index still depicts a weak signal, most likely due to remnant convection over the eastern Indian Ocean and the removal of the recent 120-day mean, which includes a large ENSO contribution. Dynamical model forecasts continue to suggest the development of a robust MJO signal over the Indian Ocean later in the Week-2 period.

There are two significant changes on the late week update relative to the original outlook issued on Tuesday. Tropical cyclone (TC) formation in the East Pacific is less likely now than earlier in the week, with only a moderate risk of formation indicated at this time. Additionally, large-scale upper-level divergence over the Americas increases the odds of TC formation over the far western Caribbean or Gulf of Mexico this weekend or early next week. The system is expected to track northeastward along a frontal boundary, likely impacting the Florida Peninsula early next week.

Regions favoring above- or below-average rainfall were updated to reflect the latest numerical model guidance.

The previous discussion, issued May 31, follows.

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The MJO signal weakened over the past week as observed by the RMM index. The CPC velocity potential MJO index maintained coherent propagation of a fairly weak enhanced convective signal eastward to the Western Hemisphere. Ongoing convection, and associated anomalous upper-level divergence, over the eastern Indian Ocean and Southeast Asia are complicating an otherwise coherent wave-1 structure. Dynamical model forecasts of the RMM index suggest that the weak signal over the Pacific and Western Hemisphere is likely to give way to an enhanced signal over the Indian Ocean during Week-2. Given the time of year, any tropical teleconnection influences on the midlatitudes are expected to be weak.

Tropical Storm Bonnie formed during the past week over the northwest tropical Atlantic before impacting the Carolinas with heavy rain. During Week-1, conditions are favorable for the potential development of the first tropical cyclone (TC) of the season over the East Pacific. As the enhanced MJO phase shifts eastward, conditions could become more favorable in the Caribbean and western Atlantic for TC development in Week-2 and Week-3. However, confidence is too low to depict a shape in Week-2 at this time. Conditions could be marginally favorable for TC development over the East Pacific during Week-2, though confidence is low based on the latest model guidance. The GEFS continues to indicate the potential for TC formation west of the Indian subcontinent later in Week-1, but other model guidance does not concur. This area bears watching over the next several days.

The precipitation outlook during Week-1 is based on CFS and ECMWF model guidance and expectations for a weak MJO signal in Phases 6/7 early, strengthening in Phases 1/2 during Week-2. A strong signal for above-average precipitation during Week-1 is favored for parts of the Americas, consistent with the background MJO signal, and supported by model guidance. Below-average rainfall is favored over parts of the West Pacific and equatorial Indian Ocean, where large-scale subsidence is more likely. A region of above-normal precipitation in Week-1 extends northeast of the Philippines associated with the Meiyu front presence. Moderate confidence regions favoring above-average rainfall are depicted across parts of the southern Indian Ocean and South Pacific, based largely on model guidance and consistent with warmer-than-normal SSTs. A moderate confidence area of much above normal temperatures is forecast during Week-1 for parts of northwestern Australia and east-central South America.

The Week-2 precipitation outlook takes into account the potential for an intensifying MJO signal over the Indian Ocean. Relative to Week-1, some drying is suggested over the Western Hemisphere as the enhanced MJO phase propagates eastward. A moderate confidence region favoring below-average rainfall is depicted across a large swath of the West Pacific and parts of the Maritime Continent. A moderate confidence area of much above-normal temperatures is again forecast for parts of northwestern Australia and east-central South America. Significantly below-normal temperatures are possible across southeastern South America, where minimum temperatures could be less than 40 F and in the lowest 10% of the climatological distribution. This region is consistent with the forecast circulation and frontal weather depicted by the ECMWF and GEFS ensemble means.

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