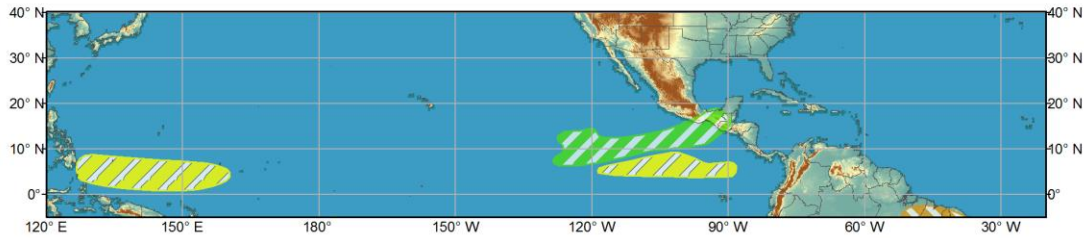




Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



Week 1 - Valid: Jun 11 2016 - Jun 14 2016



Week 2 - Valid: Jun 15 2016 - Jun 21 2016



Confidence
High Moderate

Produced: 06/10/2016
Forecaster: Artusa

- 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.



After the recent uptick in tropical activity across the eastern Pacific, the Gulf of Mexico, and the Southeast Coast of the United States, conditions have settled down across the tropics. Several models predict the development of relatively weak low pressure centers and associated areas of convection across the western Atlantic and eastern Pacific basins, but only one of these systems is expected to develop into a tropical cyclone, during the Week-2 period. In addition to expected favorable MJO support, the European model shows good continuity in recent model runs for the potential formation of a tropical cyclone over the eastern Pacific, well south of Baja California. A moderate confidence area is therefore depicted. Other areas include the central tropical Pacific (between 140W-160W), where the Central Weather Bureau (CWB) in Taiwan forecasts the presence of a weak disturbance during Week-1, and the Southeast U.S. Coast, where the GFS model predicts the possibility of a subtropical system forming during Week-2. However, confidence is considered too low at this time to warrant the delineation of tropical hazard areas on the map associated with these last two disturbances.

----- The original forecast discussion (released June 7) follows -----

The MJO signal remained weak over the past 7-days as observed by the RMM index. The CPC velocity potential MJO index maintained coherent propagation of a fairly weak enhanced convective signal eastward across the Western Hemisphere. Ongoing convection, and associated anomalous upper-level divergence, over the far eastern Indian Ocean and Southwest Pacific are complicating an otherwise coherent wave-1 structure. GEFS and UKMET 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, while the European model predicts the signal may reach as far east as the Maritime Continent. Given the time of year, any tropical teleconnection influences on the mid-latitudes are expected to be weak.

Tropical Storm Colin formed during the past week near the Yucatan Channel before impacting Florida and the Carolinas with heavy rain. In the East Pacific, Tropical Depression 1-E formed on June 6th, several hundred miles southeast of Acapulco, Mexico. This system is predicted to move slowly towards the east-northeast, bringing heavy rains, tropical-storm-force wind gusts, and life-threatening flash floods and mud slides to the Gulf of Tehuantepec region. During Week-1, there is a low chance (30 percent) of another tropical cyclone developing in the East Pacific, though the area of suspected development is well out to sea (about 10N/125W).

The precipitation outlook during Week-1 is based on CFS and ECMWF model guidance and expectations for a weak MJO signal in Phases 7/8 early, strengthening in Phases 2/3 during Week-2, and seasonal precipitation composites. Above-average precipitation during Week-1 is favored for parts of the western Indian Ocean, Burma, the South Pacific from near Tuvalu to French Polynesia and from 5S-20S, the far eastern Pacific (5N-20N, 90W-130W), and the South Atlantic (20S-30S, 15W-40W). All areas of above-average rainfall are of moderate confidence. Below-average rainfall is favored over parts of the tropical North Indian Ocean, the far western equatorial Pacific, and the far eastern equatorial Pacific. All areas of below-average rainfall are considered to be of moderate confidence.

Moderate confidence areas of above normal temperatures are forecast during Week-1 for parts of north-central Australia, eastern Brazil, northern and central India, and much of Pakistan. With the recent reversal of low-level wind anomalies from westerly to easterly across the Indian subcontinent, it appears that the Indian Monsoon will be somewhat delayed. Pre-monsoon temperatures of +40C to +50C are anticipated for at least another week. A moderate confidence area of much below normal temperatures is forecast during Week-1 for a region encompassing southern Brazil, Paraguay, Uruguay, and adjacent parts of both Bolivia and Argentina.

The Week-2 precipitation outlook begins to take into account the potential for an intensifying MJO signal over the Indian Ocean. Though seasonal precipitation composites favor the introduction of widespread above-average rainfall in this area, there is little consensus between ECMWF and CFS dynamical model guidance. In addition, there is the added problem of a transitioning low-frequency base state as the recent El Nino gives way to a Neutral, and potentially cold, event. Moderate confidence areas of above-average rainfall are forecast for the vicinity of Indonesia, and from near Tuvalu to French Polynesia and the Pitcairn Islands in the South Pacific, between about 5S-25S.

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