



# Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



## Week 1 - Valid: May 25, 2016 - May 31, 2016



## Week 2 - Valid: Jun 01, 2016 - Jun 07, 2016



**Produced: 05/24/2016**  
**Forecaster: D.Harnos**

Confidence		
High	Moderate	
		Tropical Cyclone Formation Development of a tropical cyclone (tropical depression - TD, or greater strength).
		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, 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 MJO continued to be active across the eastern Indian Ocean and Maritime Continent in the past week, with a recent pause and some weakening experienced in recent days. The Maritime Continent region is also active with a Kelvin wave analyzed coincident with the MJO, and an equatorial Rossby wave projected to shift westward across the region early this week. Other Kelvin waves are analyzed across the East Pacific and Central Africa. Key uncertainties for this week fall in regard to whether propagation of the MJO through the Maritime Continent will occur, and if El Nino related impacts will potentially re-emerge should destructive interference from the subseasonal state begin to wane. Dynamical guidance varies widely in regards to handling of the MJO with solutions tending towards a decaying signal during the next two weeks, however, some models propagate the MJO signal across the Pacific while others have a re-emerging signal across the Indian Ocean. Given the aforementioned uncertainty and the time of year, any tropical teleconnection influences on the midlatitudes are expected to be weak.

A number of low-confidence tropical cyclogenesis potential areas exist over the forecast period, despite no hazard being explicitly present on the forecast maps. Dynamical guidance has intermittently hinted at cyclogenesis during week-1 in the South China Sea that is consistent with the MJO presence, however confidence in any development is low at this time. Another area of potential tropical cyclone development exists in week-1 for the Southern Indian Ocean to the northeast of Madagascar associated with a pre-existing disturbance. This disturbance is expected to drift westward over the course of week-1 and remain weak, despite anomalously warm SSTs and ample low-level moisture. Dynamical guidance has suggested potential tropical cyclogenesis north of the Greater Antilles during the middle of week-1, with the disturbance subsequently tracking up the east coast of Florida before moving over the Southeast CONUS. Over the last 24-hours models have trended weaker with this system, with many now merely suggesting an open wave. While SSTs for the region are near 27 Celsius, upper-oceanic heat content may be marginal to support any sustained development. Despite current uncertainty with progression of the MJO during the forecast period, a signal in Phase 5 would support suppressed convection across the Tropical Atlantic. Given the generally unfavorable background state and recent dynamical model trends, no Atlantic tropical cyclogenesis hazard is currently portrayed on the map. East Pacific climatological tropical cyclone activity also increases during the month of June, while observed SSTs here remain anomalously warm off of the equator. Ensemble guidance predicts some weakness in the surface pressure field during week-2 that could subsequently materialize into a tropical cyclone, however no discrete hazard is forecast at this time. Should the MJO continue into Phase 6 the background climatic state would become more favorable for any East Pacific formation.

The precipitation outlook during Week-1 is based on CFS and ECMWF model guidance and expectations for a weakening MJO signal in Phase 5. A strong signal for above-average precipitation during week-1 is favored for: the Western Maritime Continent and Southeast Asia due to the MJO presence, portions of the Southern Indian Ocean associated with the slow-moving cyclone noted in the previous paragraph, and portions of the Central Pacific Ocean to the southeast of the Date Line where persistent anomalously warm SSTs exist. A moderate confidence region of above-normal precipitation in week-1 extends northeast of the Philippines associated with the Meiyu front presence. For the CONUS, a high confidence region of above-average rainfall exists across northeastern Texas associated with a stationary boundary. A moderate confidence region of above-normal precipitation is forecast for the Southeastern U.S., Bahamas, and Greater Antilles for late in week-1 due to the expected presence of the tropical wave noted in the prior paragraph. A moderate confidence area of much above normal temperatures is forecast during week-1 for portions of western interior South America where maximum temperature anomalies may exceed 8 Celsius, yielding observed temperatures greater than 35 Celsius.

The week-2 precipitation outlook favors above-average precipitation across the Philippines and West Pacific associated with the Meiyu front, and parts of the South Indian Ocean, South Pacific, and East Pacific due to the presence of anomalously warm SSTs. Below-average precipitation is favored for the western and central North Indian Ocean and western Maritime Continent in the wake of the MJO.

A moderate confidence area of much above normal temperatures is forecast for Central Brazil where a greater than 20% chance of exceeding the 95th percentile of climatological maximum temperatures is anticipated.

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