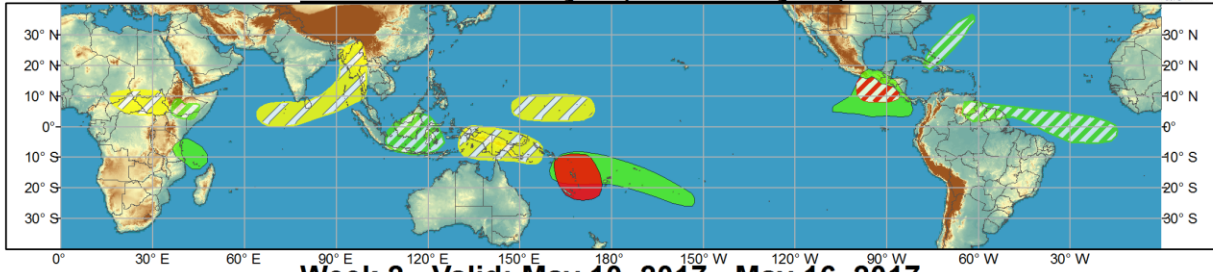




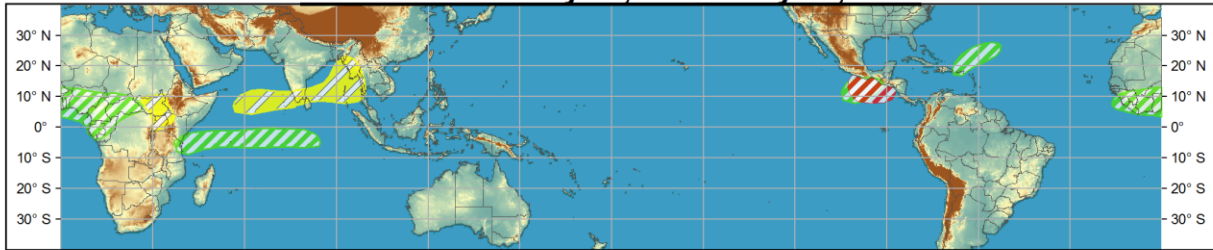
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



Week 1 - Valid: May 03, 2017 - May 09, 2017



Week 2 - Valid: May 10, 2017 - May 16, 2017



	Confidence		Produced: 05/02/2017
	High Moderate		Forecaster: Allgood
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.



During the past week, the amplitude of both the RMM-based and CPC velocity potential-based MJO indices increased, suggesting a developing coherent intraseasonal signal with the enhanced phase currently over the East Pacific. Eastward propagation of lower-level westerly (upper-level easterly) zonal wind anomalies is evident on recent Hovmoller diagrams. This wind-driven signal appears to be the dominant contributor to the amplitude of the RMM-based MJO index, as recent analyses of OLR anomalies do not reflect a substantial subseasonal convective signal at this time. Other modes continue to influence the pattern, including Rossby wave activity over the Maritime Continent and West Pacific, and a robust Kelvin wave currently traversing the Western Hemisphere.

Dynamical model RMM-based MJO index forecasts are mixed, with the GFS ensembles generally depicting a weakening signal over the next two weeks with little eastward propagation, and the ECMWF suggesting a coherent MJO event propagating from the Western Hemisphere to the Indian Ocean by Week-2. Despite the coherent MJO signal suggested by the ECMWF, the corresponding ECMWF-based precipitation outlooks do not show widespread organized convective anomalies consistent with canonical MJO events. This suggests that the evolution of any intraseasonal signal may be driven more by extratropical features influencing the tropical wind field rather than a robust atmospheric response

to tropical convection. Given the complexity of the incipient pattern and the divergent MJO index forecasts, there is considerable uncertainty regarding the degree of influence from the MJO on the tropical convective pattern, particularly during Week-2.

No new tropical cyclones developed during the past week. During Week-1, enhanced upper-level divergence over the East Pacific coupled with a region of enhanced convection due either to the potentially developing MJO event or a robust Kelvin Wave that recently crossed the Pacific may promote the development of a pre-season tropical cyclone over the far East Pacific. This development, should it occur and attain tropical storm intensity, would be the earliest forming East Pacific named tropical cyclone on record. The earliest formation currently on record is Hurricane Alma, which developed on 12 May 1990. Dynamical models indicate that development is most likely to occur either during late Week-1 or early Week-2, so a moderate confidence shape is included in both periods on this outlook. Elsewhere, there is a high potential for tropical cyclone development over the next several days in association with convection along a region of enhanced low-level convergence near the Solomon Islands.

Given the fairly disorganized OLR pattern at the start of the forecast period despite the amplifying MJO signal, the forecasts for enhanced and suppressed convection in this outlook rely heavily on consensus among the dynamical models. A tripole of suppressed convection over the northeastern Indian Ocean, enhanced convection over the west-central Maritime Continent, and suppressed convection over the eastern Maritime Continent is due to influence from ongoing Rossby wave activity. Additionally, the intraseasonal signal may contribute to enhanced convection extending from northern South America across the equatorial Atlantic. During Week-2, confidence and coverage are reduced. Any potential MJO signal may contribute to enhanced convection across parts of Africa, and near or south of the equator across the western and central Indian Ocean. Dynamical models favor continued suppressed convection across much of the northern Indian Ocean and parts of South and Southeast Asia.

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