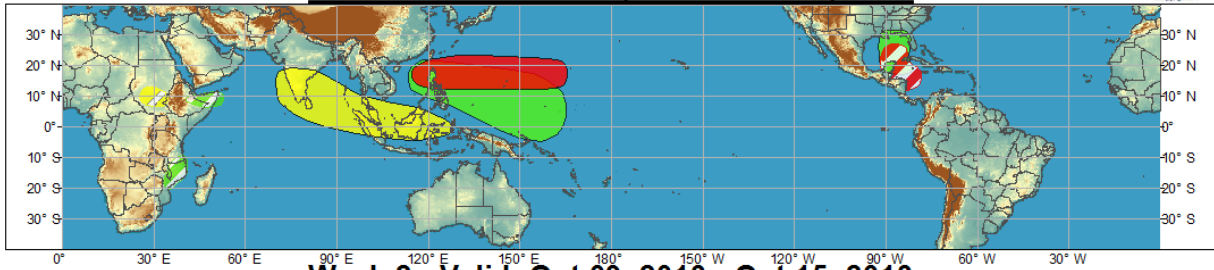




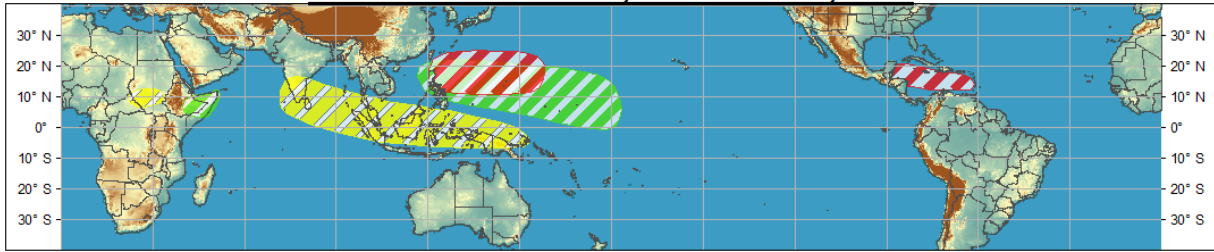
# Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



## Week 1 - Valid: Oct 02, 2013 - Oct 08, 2013



## Week 2 - Valid: Oct 09, 2013 - Oct 15, 2013



Produced: 10/01/2013

Forecaster: Allgood

Confidence		
High	Moderate	
		<b>Tropical Cyclone Formation</b> Development of a tropical cyclone that eventually reaches tropical storm/cyclone strength.
		<b>Above-average rainfall</b> Weekly total rainfall in the upper third of the historical range.
		<b>Below-average rainfall</b> Weekly total rainfall in the lower third of the historical range.
		<b>Above-normal temperatures</b> 7-day mean temperatures in the upper third of the historical range.
		<b>Below-normal temperatures</b> 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.



The MJO remained active during the previous week, with propagation across the western Pacific Ocean. Positive OLR anomalies associated with enhanced precipitation were observed across the South China Sea and much of the western Pacific, while suppressed convection was evident over much of the northern Indian Ocean, South Asia, and the western Maritime Continent. Suppressed convection was also observed over the Caribbean Sea and Gulf of Mexico. The 200-hPa velocity potential anomalies continue to exhibit a coherent Wave-1 structure, with areas of large scale anomalous ascent centered over the Pacific Ocean. The Wheeler-Hendon MJO Index currently has amplitude near phases 5 and 6, with day-to-day eastward propagation of the index slowed by robust tropical cyclone activity over the western Pacific. The CPC MJO Index, which is based on the 200-hPa velocity potential anomalies, depicts a clearer eastward propagation of the signal.

Typhoon Wutip formed in the South China Sea on 26 September and made landfall over Vietnam with 90-kt sustained winds. On 30 September, Tropical Storm Sepat developed south of Japan, and recently turned northward in the process of recurving east of Japan. Also on 30 September, Tropical Storm Fitow developed east of the Philippines, and is currently forecast to strengthen into a typhoon as it moves west-northwestward. As the main MJO convective envelope has propagated eastward over the Pacific,

the continued tropical cyclone activity over the far western Pacific has exerted some destructive interference on the MJO signal, which is evident in the Wheeler-Hendon MJO Index and on Hovmoller plots of OLR anomalies. On 29 September, Tropical Storm Jerry formed in the north-central Atlantic, far from land.

Dynamical model forecasts of MJO evolution depicted on the Wheeler-Hendon Index depict a range of solutions, with the GFS weakening the signal, and the UKMet model continuing a robust eastward propagation. The ECMWF also depicts a continued eastward propagation of the MJO signal, albeit more slowly than the UKMet. Statistical models such as the Constructed Analog also favor additional eastward propagation. Based on current observations and several dynamical models, continued propagation of the MJO is anticipated during the upcoming two week period, with an evolution through phases 6 and 7 possible.

The precipitation outlooks are based on MJO composites and input from both the GFS and CFS models. Enhanced rainfall is favored over the western Pacific during Week-1, extending from the Philippines southeastward towards the equator, north of the Solomon Islands. Suppressed activity is anticipated across South Asia, the eastern Indian Ocean, and the western Maritime Continent. During Week-2, enhanced rainfall is forecast to spread eastward towards the equatorial Date Line, with suppressed convection overspreading the remainder of the Maritime Continent.

Continued tropical cyclogenesis is favored across the western Pacific basin, with decreasing confidence during the Week-2 period. A tropical disturbance in the western Caribbean Sea may develop slowly as it moves northwestward into the eastern Gulf of Mexico. Regardless of development, the system has the potential to produce widespread heavy rainfall over Cuba, parts of Mexico, and the Gulf Coast of the United States during the upcoming week. Several runs of the GEFS ensemble forecast indicate the possibility of additional cyclogenesis in the Caribbean during the Week-2 period. As the MJO propagates across the Pacific, atmospheric Kelvin Waves are sometimes generated and can enhance chances for tropical cyclone formation over the eastern Pacific; however, little Kelvin Wave activity has been observed and current atmospheric conditions are not conducive for development over the eastern Pacific.