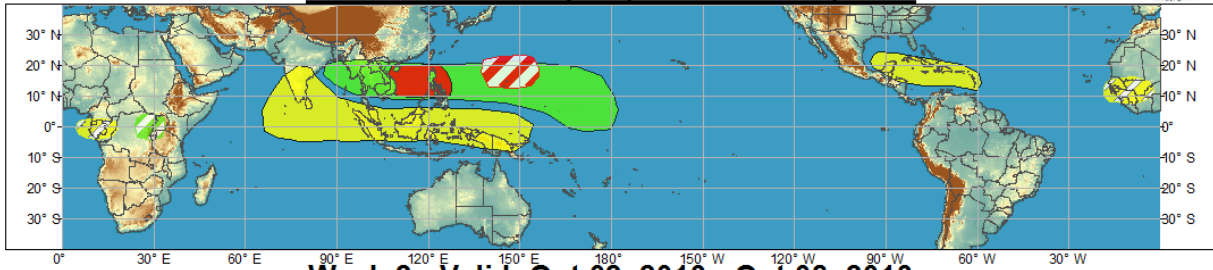




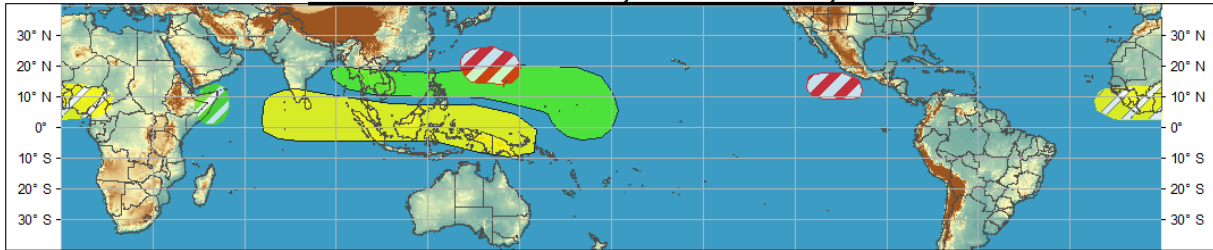
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



Week 1 - Valid: Sep 25, 2013 - Oct 01, 2013



Week 2 - Valid: Oct 02, 2013 - Oct 08, 2013



Produced: 09/24/2013

Forecaster: Baxter

Confidence		
High	Moderate	
		Tropical Cyclone Formation Development of a tropical cyclone that eventually reaches tropical storm/cyclone 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. 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 past week with eastward propagation into the western Pacific. The velocity potential at 200-hPa reveals a coherent wave-1 structure, with large scale upper-level divergence across the eastern Maritime Continent and West Pacific, and upper-level convergence across the eastern Atlantic and Africa. The Wheeler and Hendon MJO index is currently in Phase 6, after slow propagation through Phase 5 during the past week to ten days. The CPC MJO index, which projects velocity potential onto a leading extended EOF pattern, continues to accurately capture the evolution of the current MJO event.

Hurricane Manuel reformed off the West Coast of Mexico in the past week, bringing heavy rains and flooding to parts of Mexico. Deep tropical moisture associated with the storm spread northeastward into the CONUS, increasing rainfall across Texas and points northeast. In the West Pacific, Typhoon Pabuk formed early in the past week and is in the process of recurving east of Japan. A tropical depression formed briefly in the South China Sea before moving inland across Vietnam.

Dynamical model forecasts of the Wheeler and Hendon MJO index are split on the evolution of the MJO over the next two weeks. A combination of the ECMWF and UKMET ensemble forecasts is preferred, which indicates slow propagation toward Phase 7, which agrees with the constructed analog statistical tool and the CFSv2 forecast. Other subseasonal variability remains important against the background MJO, especially along the equator. The suppressed phase of an equatorial Rossby wave moving westward toward the Maritime Continent could constructively interfere with the MJO signal in that region. Atmospheric Kelvin waves could emanate eastward from the main MJO packet of convection into the Western Hemisphere, especially late in Week-1 and during Week-2.

The precipitation outlooks for both Week-1 and Week-2 are based on MJO composites blended with dynamical guidance from the bias-corrected GFS and CFSv2 ensemble. Additionally, with an active MJO and equatorial Rossby wave, statistical guidance that projects those modes onto the OLR field was also utilized. Confidence is high for Week-1 in the forecast precipitation anomaly shapes across the domain, with the exception of smaller-scale effects across parts of Africa.

High confidence carries over into Week-2 for much of the main MJO region from the Indian Ocean to the Date Line. Moderate confidence is indicated across the Western Hemisphere where odds of below-average precipitation are enhanced across parts of Africa due to the ongoing MJO, while enhanced phase of the MJO could trigger Kelvin waves that enhance odds for above-average rainfall across parts of northwestern South America and Central America.

For Week-1, TC formation is favored across parts of the West Pacific basin. High confidence is indicated near the Philippines and across the South China Sea, while moderate confidence is indicated farther northeast for a system later in the week. There is also a low risk for tropical cyclone formation in the Northwest Atlantic near 30N, 65W where an extratropical system is expected to be cutoff from the westerlies. It could transition to a warm-core system and move slowly northward or even northwestward. Such a system is not expected to be particularly strong, but could bring a threat for heavy rain and locally high winds/waves to parts of the East Coast later in Week-1.

For Week-2 there are enhanced odds for TC development across parts of the West Pacific consistent with the expected evolution of the MJO. Additionally, some model guidance suggests development could occur during Week-2 (possibly very late in Week-1) in parts of the East Pacific. This is also consistent with the potential for atmospheric Kelvin waves advancing eastward across the basin during this time.