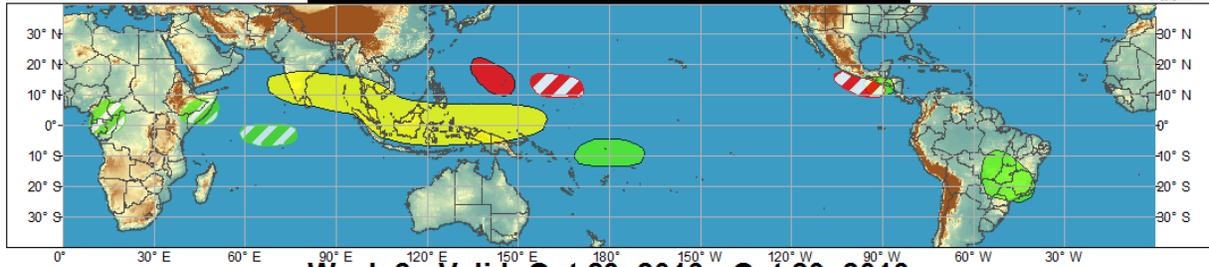




Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



Week 1 - Valid: Oct 16, 2013 - Oct 22, 2013



Week 2 - Valid: Oct 23, 2013 - Oct 29, 2013



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.

Produced: 10/15/2013

Forecaster: Pugh

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 enhanced phase of the MJO began to shift slowly east recently, entering the Western Hemisphere. Enhanced convection (inferred from negative OLR anomalies) observed over Southeast Asia and the West Pacific Ocean was mostly associated with tropical cyclone activity. Suppressed convection (positive OLR anomalies) was noted across the Indian Ocean which is consistent with the current state of the MJO. The 200-hPa velocity potential maps indicate a wave-1 structure along the equator, although anomalies are smaller than a few days ago.

Tropical Cyclone Phailin developed in the Bay of Bengal on October 9 and rapidly intensified to a cyclone with sustained winds of 140 knots (equivalent to a Category 5 hurricane on the Saffir-Simpson hurricane wind scale) over the warm waters of the Bay of Bengal. Phailin weakened slightly before making landfall on October 12 near Gopalpur, India. Meanwhile, four tropical cyclones developed in the West and East Pacific. Tropical Storm Nari formed on October 9 east of the Philippines and strengthened to a Typhoon before crossing Luzon on October 11. Nari continued a westward track and made a second landfall on October 14 near Hue, Vietnam. Typhoon Wipha developed on October 11 in the west Pacific at 14N/142W and tracked north towards Japan. Short-lived and weak Tropical Storm Priscilla formed in the

East Pacific on October 14. Tropical Storm Octave, also in the East Pacific, developed on October 13 and tracked across the Baja and Gulf of California as a weakened Tropical Depression on October 15.

Most dynamical model forecasts depict a continued eastward propagation with the enhanced phase crossing the Western Hemisphere. The preferred ECMWF model indicates the enhanced phase of the MJO entering the Indian Ocean late in Week-2. Statistical models such as the Constructed Analog also indicate eastward propagation. Based on current observations and model guidance, a continued propagation of a weak to moderate MJO is anticipated during the next two weeks.

The precipitation outlook for Week-1 is based on current satellite imagery, MJO precipitation composites, and guidance from the CFS and GFS models. During Week-1, enhanced rainfall is favored across parts of the Americas, Africa, southwestern Indian Ocean, and South Pacific. A broad area of suppressed rainfall is favored from southern India east to the Maritime Continent. A tropical cyclone is likely to develop across the West Pacific near 15N/145W early in Week-1. Another tropical cyclone may form east of this region, but confidence is lower. The GEFS tool indicates increased chances for tropical cyclone development in the far eastern Pacific late in Week-1 or early in Week-2 which is consistent with the expected MJO evolution.

An eastward shift of anomalous convection across the global tropics is expected during Week-2. The precipitation outlook for Week-2 is based primarily on MJO precipitation composites and guidance from the CFS model. Moderate confidence for below-average rainfall is forecast for the eastern Maritime Continent, while above-average rainfall is expected to expand across the Indian Ocean. Above-average rainfall is expected to persist for southern Mexico, Central America, and parts of South America.

During the next week to ten days, a highly amplified longwave pattern is forecast to develop across the mid-latitudes of the north Pacific and North America. The recurvature of typhoons across the northwest Pacific is likely contributing to this amplification.