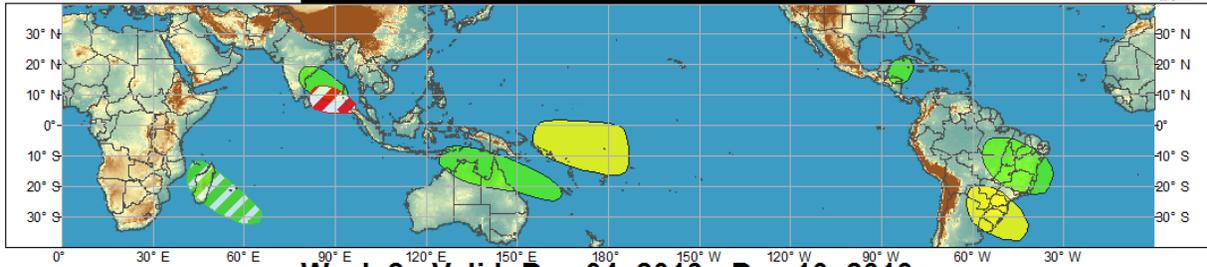




Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



Week 1 - Valid: Nov 27, 2013 - Dec 03, 2013



Week 2 - Valid: Dec 04, 2013 - Dec 10, 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: 11/26/2013

Forecaster: Allgood

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 incoherent during the previous week. The CPC 200-hPa velocity potential based MJO index has exhibited no signal for the previous 10 overlapping pentad periods, and the MJO amplitude represented on the RMM index has remained weak since November 7. Continued equatorial Rossby wave activity forced by extratropical intrusions into the tropics is evident over both the eastern and western Pacific in the low-level equatorial zonal wind anomalies. Rapid eastward propagation of negative upper-level velocity potential anomalies suggests the presence of atmospheric Kelvin waves over the Western Hemisphere and the central Pacific. Influence from these modes of coherent tropical subseasonal variability is currently dominating the anomalous convection and circulation patterns, with little MJO influence evident.

Dynamical model guidance has come into better agreement indicating the development of a more coherent MJO pattern during the Week-2 period, with enhanced convection along the equatorial Indian Ocean, and suppressed convection across the western Pacific. A recent pattern of suppressed convection over the Indian Ocean along with above normal sea surface temperatures suggest that conditions may be supportive for the development of enhanced convection, with the existing Kelvin Wave over the central Pacific possibly serving as a trigger as it enters the western Indian Ocean. The

ongoing presence of enhanced convection over the Maritime Continent and parts of the western Pacific would present a conflicting influence, however, and so considerable uncertainty remains in the forecast. The statistical models suggest only a weak MJO signal based on the existing convection over the Maritime Continent and Australia.

Cyclone Lehar developed just west of southern Thailand on 23 November, and strengthened to Category-1 strength as measured by the Saffir-Simpson scale of tropical cyclone intensity. The Joint Typhoon Warning Center forecasts additional strengthening before landfall over Andhra Pradesh in India. Tropical Storm Alessia formed just north of Western Australia on 22 November and made landfall briefly before dissipating over Northern Territory. A new disturbance entering the Bay of Bengal has some potential for tropical cyclone development during the late Week-1 or early Week-2 period as it moves slowly westward. The remnants of Alessia may also redevelop into a tropical cyclone if the system stalls over the Gulf of Carpentaria during the Week-1 period. Some GFS ensemble members indicate the possibility for a disturbance well east of the Philippines to develop into a tropical cyclone before recurving over open waters, but the probability of this late season development is low.

The precipitation outlook for Week-1 is based largely on recent observations and consensus from dynamical model guidance. Enhanced rainfall due to Cyclone Lehar is forecast for the Bay of Bengal and eastern India, and enhanced convection, including influence from the remnants of Tropical Storm Alessia, is forecast for northern Australia eastward into the western South Pacific. Suppressed convection is favored over the equatorial West Pacific and areas to the south from approximately 155-E to 175-W. Enhanced precipitation associated with a stalled frontal boundary is anticipated over the northwestern Caribbean during Week-1, while enhanced precipitation is forecast for northeastern Brazil. There is considerable forecast uncertainty during the Week-2 period, although enhanced precipitation due to tropical cyclone activity is favored for the Bay of Bengal. Dynamical models are in agreement supporting a continuation of suppressed convection over the western South Pacific, which would also be supported by a developing MJO with the enhanced phase over the Indian Ocean.