



Global Tropical Hazards/Benefits Outlook - Climate Prediction Center



Week 1 - Valid: Sep 21, 2011 - Sep 27, 2011



Week 2 - Valid: Sep 28, 2011 - Oct 04, 2011



Produced: 09/20/2011

Confidence	
High	Moderate
Tropical Cyclone Formation	■ Development of a tropical cyclone that eventually reaches tropical storm 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.**



中央氣象局
Central Weather Bureau



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Australian Government
Bureau of Meteorology



Observations during the past week continue to indicate a very weak MJO. Two separate atmospheric Kelvin waves, however, are having impacts across the global tropics. The enhanced convective phases of these two waves are currently moving into the Atlantic and western Pacific Ocean basins respectively. These two Kelvin waves excited convection across the eastern Pacific and also the western Pacific during the past week. The Asian monsoon circulation remains quite robust and enhanced convection was observed across much of southern Asia stretching to the western Pacific where conditions were quite wet. Tropical cyclone Sonca also developed in this area during the period. Drier-than-average conditions were observed across the Gulf of Mexico and portions of the southern U.S. and Mexico.

The MJO is showing signs of strengthening. Satellite observations already indicate an eastward shift in convection than seen in previous weeks and the MJO index model forecasts are in good agreement for a signal to increase and propagate eastward from the eastern Indian Ocean Phase to the western Pacific by the end of the two week period. There is fast propagation early in the period and the signal may in part be related to the second of the abovementioned Kelvin waves. The amplitude of the MJO index forecasts is small indicating generally weak to moderate activity. The atmospheric Kelvin waves described above may also play a role as we move toward Week 2 as they may approach Africa and the

Indian Ocean if they maintain their amplitude and current propagation speed, which is highly uncertain at this time.

For Week-1, enhanced convection is forecast from the Bay of Bengal well into the western Pacific associated with the MJO, the second Kelvin wave (early in the period) and supported by model forecast guidance from several operational models. Consequently, high confidence is indicated for this area. Numerical forecast guidance supports potential tropical development in the South China Sea and the western Pacific. A disturbance near the coast of Mexico is likely to experience favorable conditions early in the Week-1 period, so tropical development is favored southwest of Mexico. An atmospheric Kelvin wave favors potential development in the eastern Atlantic as easterly waves continue to exit central Africa where rainfall has been above average in many areas. Early in the period very heavy rain and windy conditions are expected across central and northern Japan associated with tropical cyclone Roke. Enhanced rainfall is also favored for the Gulf of Guinea region of Africa due to the atmospheric Kelvin wave and model guidance.

Late during Week-1 and during Week-2, MJO evolution would suggest increasing chances for drier-than-average conditions entering the regions across southern Asia and the eastern equatorial Indian Ocean. Enhanced convection remains favored across much of the western pacific along with the potential for tropical cyclone development, both primarily associated with the MJO. The MJO phase would tend to lower the chances for tropical development across the eastern Pacific and Atlantic basins during Week-2.