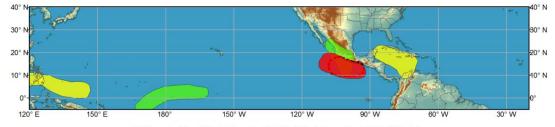


## Global Tropics Hazards and Benefits Outlook - Climate Prediction Center







Week 2 - Valid: Jul 02 2014 - Jul 08 2014





 $\label{eq:continuous} \mbox{Development of a tropical cyclone (tropical depression - TD, or greater strength)}.$ 

Tropical cyclone outlook from previous release.

Weekly total rainfall in the upper third of the historical range.

Weekly total rainfall in the lower third of the historical range.

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.



Above-normal temperatures

Below-average rainfall













The update to the Global Tropical Hazards and Benefits Outlook reflects the latest observations and model forecasts for the tropics. MJO indices (Wheeler-Hendon and CPC) indicate support for anomalous convection over the Central Pacific. Time-Longitude plots of Outgoing Longwave Radiation indicate that this might be other modes of variability (Kelvin Waves) aliased into the MJO spectral band, as well as the evolving ENSO state. The resultant forecast indicates a shift in confidence of tropical cyclone formation over the East Pacific to high from moderate during Week-1, along with an expansion of the likely area of formation. The 5-day tropical weather outlook from the National Hurricane Center indicates a medium chance of formation (40%) in the next 48 hours, with a high chance of formation (80%) though the next 5 days. High confidence in the formation of at least one tropical cyclone over the eastern Pacific continues into Week-2.

Abnormally rainy conditions are likely to expand along the southern coast of Mexico in concert with TC formation. Additionally, the area of above-average rains west of the Date Line along the equator has been removed and a new area introduced south of Hawaii. This new area aligns with the evolving background state and the latest model runs.

The original	forecast	discuss	sion	follows.
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The Wheeler-Hendon RMM and CPC MJO indices both suggest a strengthening MJO signal during the past week, with the CPC Index indicating a slightly more robust signal then the RMM based index. The convectively enhanced phase is propagating over the Western Pacific according to both measures. Convection associated with the seasonal progression of the Meiyu front was noted over eastern china, while below-normal convection was observed over most of the Indian Ocean and Western North Pacific. Upper-level velocity potential anomalies depict a wave-1 structure, which projects strongly onto the MJO. There is considerable spread among dynamical MJO index model forecasts, with some models propagating the signal from the Pacific to the Americas and Africa by the end of Week-2 and others depicting strengthening convection over the Western Pacific, potentially related to the evolving ENSO state.

No tropical cyclones formed during the past week. Dynamical models including the GFS and CFS indicate conditions more favorable for tropical cyclone development over the eastern Pacific basin later in the Week-2 period.

During Week-1, enhanced convection associated with monsoonal flow is favored to continue over parts of Southeast Asia, although some measurements of wind speeds over the Horn of Africa indicate the potential for a relaxation in the South Asian Monsoon. Therefore, below-average rains are likely to continue across India. A consistent piece among the highly varied evolutions of the MJO presented by the models indicates that the suppressed phase of the MJO is likely to be centered over parts of the Maritime Continent. Enhanced rains are likely near the Date Line due to the ENSO state, while above average rains over Central America are likely linked to a Kelvin wave. Very strong vertical shear is likely to continue over the western Atlantic, inhibiting the development of tropical cyclones for anywhere but near the immediate southeast U.S. coast, where a couple of model solutions depict a weak circulation.

Forecast uncertainty increases during Week-2 due to the high spread in model guidance resolving the evolution of subseasonal features. Enhanced convection is favored along the equator between 155E and the Date Line, as well as over the eastern Pacific. A below average monsoon is likely to persist into Week-2 over India and Bangladesh.

Forecasts for enhanced or suppressed rainfall over Africa are provided in conjunction with the CPC International Desk, and are based on regional scale monsoonal features. Enhanced odds of above-average rainfall are forecast over Nigeria, southern Cameroon, Gabon and Congo, as well as southwestern Sudan, northwestern South Sudan, and the eastern CAR, mostly linked to enhanced upper-level divergence already building into the region. An enhanced West African Monsoon circulation is anticipated into Week-2.