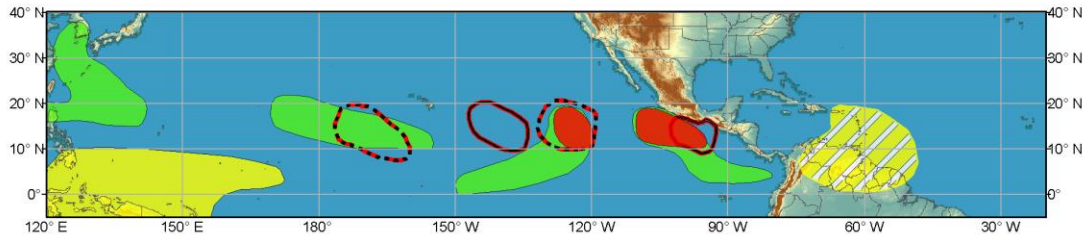




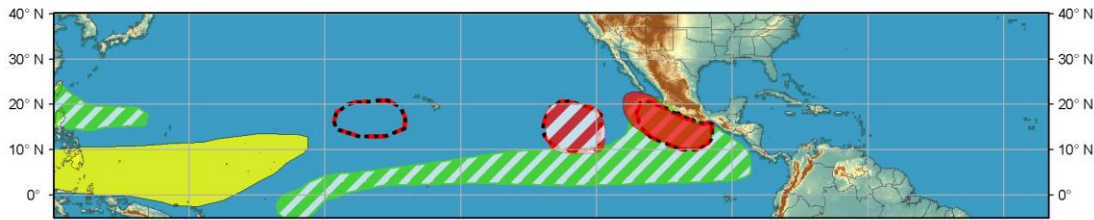
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



Week 1 - Valid: Jul 11 2015 - Jul 14 2015



Week 2 - Valid: Jul 15 2015 - Jul 21 2015



Confidence
High Moderate

Produced: 07/10/2015
Forecaster: Allgood

- Tropical Cyclone Formation** Development of a tropical cyclone (tropical depression - TD, or greater strength).
- Prior TC Formation Outlook** Tropical cyclone outlook from previous release.
- 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.



During the past several days, the MJO remained active, with the enhanced convective phase propagating over the eastern Pacific and Western Hemisphere. The amplitude of the RMM index decreased slightly, but remained highly amplified in Phase-7. A very robust and highly amplified Wave-1 asymmetry continued in the upper level velocity potential field, which is reflected by a robust MJO signal in the CPC index.

Three tropical cyclones developed over the central Pacific. Tropical Storm Ela developed near 15N and 140W and quickly weakened while moving northwestward well east of Hawaii. A pair of tropical depressions, One-C and Two-C, developed southwest and south of Hawaii, respectively. These storms are forecast to move generally westward over the next several days, with only modest intensification.

During the remainder of the Week-1 period, there is high confidence for additional tropical cyclogenesis over the eastern Pacific. The NHC is currently monitoring two disturbances, one south of Mexico, and the other west of 120E. During Week-2, the MJO and El Nino favor additional tropical cyclone formation over the eastern Pacific.

Forecasts for above and below average rainfall were adjusted in this update to reflect the latest tropical cyclone track guidance and dynamical model consensus.

The original discussion released on 7 July 2015 follows.

The MJO remained active with a very high amplitude. The amplitude, on July 6th, was the highest July value on record at CPC, based on data going back to 1981. The enhanced convective phase is currently located over the Central Pacific, with both the CPC velocity potential index and the Wheeler-Hendon RMM based index indicating the same general geographic region for enhanced activity and eastward propagation. Propagation has slowed and the amplitude decreased slightly from 5 July to 7 July. Upper-level anomalies of velocity potential and zonal winds indicate a wave-1 structure. The MJO is forecast to constructively interfere with the ongoing El Nino, and Kelvin waves are likely to radiate eastward from the main centers of convection over the Central and East Pacific.

Most dynamical model forecasts of the MJO indicate significant weakening during the next two weeks, although some of that signal might remain stronger than indicated, for two reasons. The current, extreme amplitude is influenced by the three tropical cyclones over the western North Pacific, and because the MJO is moving into a region where the seasonal bias corrections are strongest in their removal of seasonal anomalies. The collocation of the MJO and El Nino signal could result in a slight over correction, removing part of the MJO signal in addition to the seasonal cycle. Statistical models are slightly more bullish on a continued high amplitude event, with eastward propagation to the Americas and Africa. The overall assessment from the team is that the MJO is likely to weaken, with the El Nino base state emerging as more dominant, and some weak eastward propagation of Kelvin wave activity is likely across the Americas and Africa.

Two tropical cyclones developed during the past week. Tropical storm Linfa developed just east of the Philippines, while Typhoon (Cat 4) Nangka developed near 172E. During the next two weeks, tropical cyclone activity over the West Pacific is likely to subside, while activity east of the Date Line is likely to increase dramatically. There is a 90% chance of formation about 1300 miles southeast of Hilo during the next 48 hours. Late in Week-1, tropical cyclone formation odds are slightly increased, relative to climatology, to the southwest of Hawaii and near 100W, from 10-15N. Some models are also favoring

tropical cyclone formation near 15N/125W. During Week-2, the east Pacific is likely to remain active from about 140W to the coast of Mexico, with some residual formation odds southwest of Hawaii. Should Week-1 be more active, Week-2 will likely be less active than the current outlook depicts.

During Week-1, tropical cyclone forecasts support enhanced rains over the South China Sea and much of the western North Pacific, north of 10N. Dynamical models, the MJO, and the ENSO background state favor below average rains over the Maritime Continent, Northern South America, and much of India. Above average rains are favored from about 170W to Central America.

A monsoon break is likely to extend into Week-2 for much of South Asia, while some area from Southeast China to the Philippines are likely to experience above average rainfall. The seasonal cycle and MJO favor above average rains from 150W to Central America, and below average rains from the central Maritime Continent to near the Date Line.

Forecasts for enhanced or suppressed rainfall across Africa are provided in collaboration with CPC's Africa Desk and are based on regional scale anomaly features.