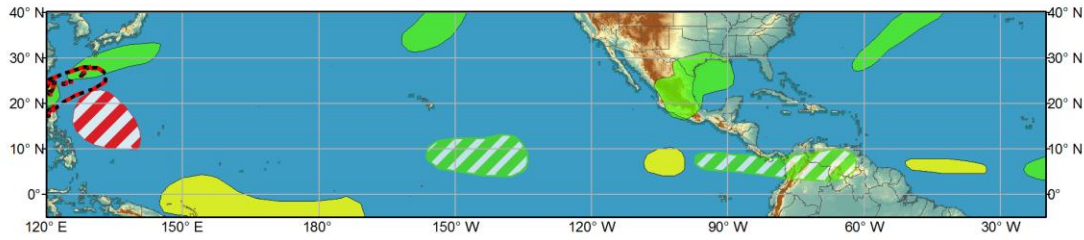




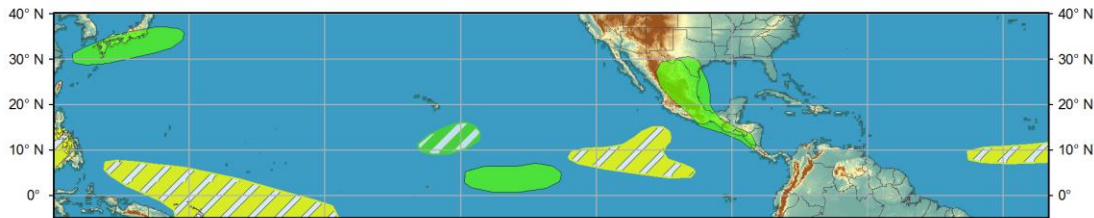
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



Week 1 - Valid: Jun 16 2018 - Jun 19 2018



Week 2 - Valid: Jun 20 2018 - Jun 26 2018



Confidence
High Moderate

Produced: 06/15/2018
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.



The MJO projection on the RMM index remains very weak, while the CPC index based on upper-level velocity potential anomalies continues to show a weak signal propagating over the east-central Pacific. Dynamical model based MJO index forecasts continue to depict a somewhat similar evolution to what was described earlier in the week, with a gradual amplification of the index over the Western Hemisphere or Indian Ocean as destructive interference with other modes wanes and the upper-level divergent signal intercepts the ongoing enhanced convection and remnant tropical cyclone activity over the East Pacific. Although the models generally depict an eastward propagation of the convective signal over the next two weeks, the amplitude of the signal is highly uncertain.

Two ongoing tropical cyclones over the East Pacific are currently being monitored by the National Hurricane Center. Tropical Depression Bud and Tropical Depression Four-E are both forecast to move inland over Mexico over the next couple of days, bringing little wind or storm surge threat, but presenting a potential for widespread heavy rainfall across inland parts of Mexico. A few GFS ensemble members depict tropical cyclogenesis over the western Gulf of Mexico during the next few days, but the potential for formation is too low to include a genesis shape on this outlook. NHC currently maintains a 10 percent chance of tropical cyclone development over the next five days. Elsewhere, there is a

moderate potential for tropical cyclone development over the West Pacific in a region between Guam and the Philippines. Most dynamical model forecasts bring any tropical cyclone northwestward, with southern Japan being the most likely place for impacts to occur should the system develop. No additional tropical cyclone development within the update region is anticipated during Week-2.

Forecasts for enhanced and suppressed precipitation were updated to reflect the latest dynamical model guidance.

The original discussion released on 12 June 2018 follows.

The MJO became less coherent over the past week as expected (at least as monitored by the RMM index), largely due to interference with other tropical modes of variability. There are two competing centers over action where enhanced convection is currently observed: one over Southeast Asia extending eastward to the Northwest Pacific, the other over the East Pacific associated in part with two tropical cyclones (TCs). The latter is expected to become more coincident with the lower-frequency MJO signal as it propagates toward Africa by Week-2, while the suppressed phase of the MJO is expected to cause a drying trend over Southeast Asia over the next two weeks. Dynamical model guidance from the GEFS, CFS, and ECMWF, all suggest the reemergence of a coherent MJO structure with enhanced phase over Africa during Week-2, with differences in details regarding the speed of eastward propagation across the Indian Ocean.

Three TCs formed in the past week: Hurricanes Aletta and Bud over the East Pacific, and Tropical Storm Maliksi over the West Pacific. Hurricane Bud is currently weakening off the coast of Mexico, but is expected to produce a surge of tropical moisture into Mexico and the Southwest CONUS during Week-1. Tropical Storm Maliksi is undergoing extratropical transition over the North Pacific and is playing a role in the development and maintenance of the long wave pattern for the PNA region. During Week-1, there is a moderate risk of TC formation from the northern South China Sea eastward to parts of the East China and Philippine Seas. Any formation here would likely be a tropical depression that rapidly undergoes extratropical transition. There are three additional areas where there is a low risk of tropical cyclogenesis, but where confidence is too low to warrant a hazard depiction: east of the Philippines near 145E, over the East Pacific near 100W, and over the western Caribbean and southwestern Gulf of Mexico.

Areas favoring above- or below-average rainfall during Week-1 are based on dynamical model consensus and expected MJO evolution, along with forecast or ongoing tropical cyclone activity. A broad area favoring below-average rainfall is depicted for the central and eastern Indian Ocean eastward across much of the Maritime Continent, now extending into the Philippines. This is consistent with the dynamical model guidance and the current/forecast state of the MJO. Remnant enhanced convection is favored over parts of Southeast Asia and over the far northwestern tropical Pacific. Above-average rainfall is favored over much of southwestern North America and Central America, which is forecast to continue into Week-2 as the MJO enhanced phase constructively interferes with ongoing convection.

During Week-2, confidence decreases along with overall forecast coverage. Continued eastward MJO propagation is inferred by the northward shifting regions favoring below-average rainfall over the West Pacific and Southeast Asia. The MJO enhanced phase increases odds of above-average rainfall over much of near-equatorial Africa, while the enhanced convection is expected to nose eastward across the equatorial Indian ocean toward the western Maritime Continent.

Forecasts over Africa are made in consultation with CPCs international desk, and can represent local-scale conditions in addition to global-scale variability.