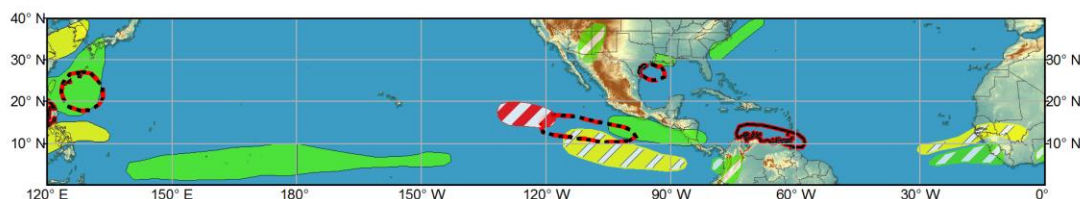




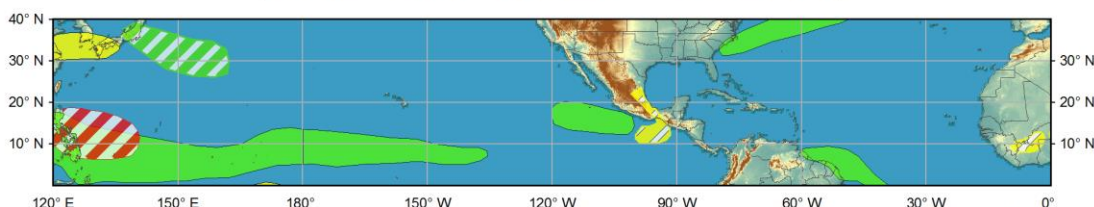
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



Week 1 - Valid: Jul 02 2022 - Jul 05 2022



Week 2 - Valid: Jul 06 2022 - Jul 12 2022



Confidence
High Moderate

Produced: 07/01/2022
Forecaster: Allgood

Tropical Cyclone Formation [Red box with diagonal lines] Development of a tropical cyclone (tropical depression - TD, or greater strength).

Prior TC Formation Outlook [Red dashed box] Tropical cyclone outlook from previous release.

Above-average rainfall [Green box with diagonal lines] Weekly total rainfall in the upper third of the historical range.

Below-average rainfall [Yellow box with diagonal lines] Weekly total rainfall in the lower third of the historical range.

Above-normal temperatures [Orange box with diagonal lines] 7-day mean temperatures in the upper third of the historical range.

Below-normal temperatures [Blue box with diagonal lines] 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.



Over the past several days, the global tropical convective pattern has become increasingly consistent with Madden Julian Oscillation (MJO) activity, and this signal is reflected on both the RMM-based and CPC velocity potential based MJO indices. Dynamical model forecasts show the MJO enhanced convective envelope propagating across the Maritime Continent over the next two weeks, which would potentially decrease favorability for tropical cyclogenesis over both the East Pacific and Atlantic basins. Tropical Storm Bonnie developed at an unusually low latitude over the western Caribbean, and the National Hurricane Center forecasts this system to cross Central America near the border of Nicaragua and Costa Rica, bringing widespread heavy rainfall, and then potentially strengthen to hurricane intensity over the East Pacific south of Mexico. Should the circulation survive passage over Central America, the tropical cyclone would retain the name Bonnie over the East Pacific. Elsewhere, a tropical disturbance moved ashore over southeastern Texas, ending its potential for development, but it is producing heavy rainfall along portions of the western Gulf Coast. Over the West Pacific, two tropical cyclones formed in the vicinity of the hazard areas indicated on the initial GTH release: Tropical Storm Chaba over the South China Sea, and Tropical Storm Aere northeast of the Philippines. Tropical Storm Chaba is forecast to move northward towards the southern coast of China, bringing copious rainfall, while Tropical Storm Aere is anticipated to remain weak but bring some impacts to Japan.

The National Hurricane Center continues to indicate a moderate potential for tropical cyclogenesis in association with a trough well southwest of the Baja California Peninsula, but confidence has decreased somewhat due to diminishing convection. No additional tropical cyclone development is favored for the East Pacific or Atlantic basins through the end of the outlook period, though there is a low potential for slow cyclogenesis just off the South Atlantic U.S. coast. Over the West Pacific, an active monsoonal trough extending over the West Pacific may provide an impetus for tropical cyclone development near or east of the Philippines during days 5-11.

Forecasts for above- and below-average rainfall were updated to reflect the latest model guidance. The original discussion released on 28 June follows.

The MJO remains weak with the continuation of a wave-1 pattern that has shown very little movement since it began in early June. Both the RMM index and the 200-hPa velocity potential anomaly field depict a nearly stationary pattern with anomalous upper-level divergence (convergence) over Africa and the Indian Ocean (Pacific Ocean). Looking ahead, RMM forecasts from the GEFS, ECMWF, and JMA models are depicting a resumption of MJO activity with the main convective envelope propagating eastward out of the Indian Ocean and into the Maritime Continent over the next two weeks. This would have a dampening effect on tropical cyclone (TC) formation over the East Pacific and Atlantic basins, where TC activity is currently high.

Tropical Depression (TD) Celia continues a west-northwesterly track after forming nearly two weeks ago on June 16 a couple hundred miles south of El Salvador in the eastern Pacific. After initially approaching the coast of El Salvador, it moved west, then west-northwest, traveling parallel to the Mexico coast. Celia attained Tropical Storm (TS) status on June 21 and maintained TS strength until June 28, when it was downgraded back to a TD. Celia is forecast to continue weakening as it continues to track away from land. For the latest updates on Celia please refer to the National Hurricane Center. Elsewhere, another area of disturbed weather south of Mexico (10N-100W) has the moderate potential (40-50% chance) to develop into a TC in the coming days as it moves slowly westward. In the tropical Atlantic, an area of organized convection near the Lesser Antilles (10N-57W) is strengthening with high confidence (70-90%) of TC formation in the next five days as it tracks westward into the Caribbean Sea. An area of enhanced convection in the northeast Gulf of Mexico is also currently being monitored for possible development with moderate confidence (40% in 5 day period) of TC development. In the western Pacific there are two areas of interest. The first is in the South China Sea (Invest 97W) with a high confidence (70% in 5 day

period) of TC formation, and the second is east of the Philippines (Invest 98W), which carries a moderate confidence (40% in 5 days) of TC formation.

The precipitation outlook for the next two weeks is based on anticipated TC tracks, ongoing La Nina conditions, and consensus of GEFS, CFS, and ECMWF ensemble mean solutions. Suppressed precipitation remains favored over the western equatorial Pacific from 160W westward to the eastern Maritime Continent, consistent with La Nina conditions. During the week-1 period enhanced rainfall is forecast for the north Australian coast westward to eastern Java, the northern Indian Ocean, a broad swath from the South China Sea eastward into the western Pacific where TC formation is favored, and in the tropical Atlantic. Above normal precipitation is also favored for both weeks in the western and central Pacific roughly along 10N. For both weeks below-normal precipitation is forecast in the eastern Pacific south of Mexico.

For hazardous weather conditions in your area during the coming two-week period, please refer to your local NWS office, the Medium Range Hazards Forecast produced by the Weather Prediction Center, and the CPC Week-2 Hazards Outlook. Forecasts made over Africa are made in coordination with the International Desk at CPC.