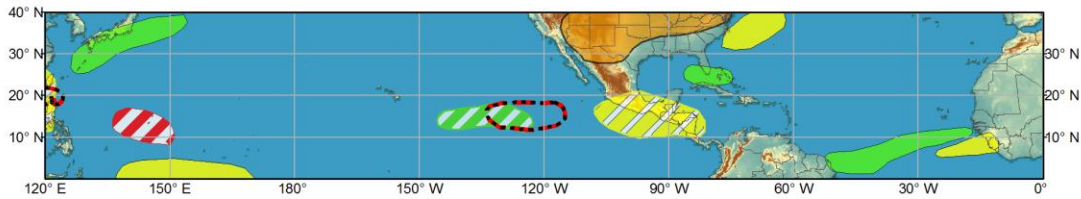




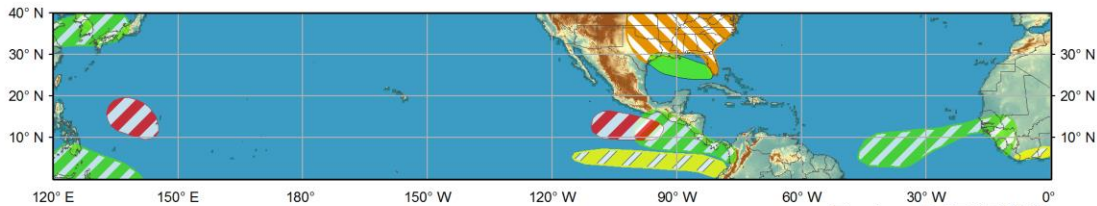
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



Week 1 - Valid: Jul 18 2020 - Jul 21 2020



Week 2 - Valid: Jul 22 2020 - Jul 28 2020



Confidence
High Moderate

Produced: 07/17/2020
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.



After showing some signs of organization, the MJO signal began to weaken as forecasted earlier in the week. Dynamical models remain quite divergent, with the GEFS showing a weak signal re-emerging over the West Pacific, consistent with Kelvin wave activity, while the ECMWF generally shows a more canonical MJO-type evolution. Given the increasingly incoherent state of the large-scale pattern, the MJO is not anticipated to play a substantial role during the remainder of the forecast period.

No new tropical cyclones developed this week so far. Recent satellite imagery shows an area of disturbed weather in the vicinity of Guam, and multiple GEFS ensemble members depict a tropical cyclone formation. Therefore, an area of moderate confidence for tropical cyclogenesis was added to the outlook near Guam during Days 1-4, shifting slightly northwestward by Days 5-11. Confidence in this region is on the low side of moderate. While confidence of formation has decreased with the East Pacific disturbance near 120W, dynamical models indicate a potential for new tropical cyclone development south of Mexico during Days 5-11. Further east, an open trough is anticipated to bring locally heavy rainfall to southern Florida during Days 1-4. During Days 5-11 this area of disturbed weather is anticipated to move across the Gulf of Mexico and approach Louisiana and Texas. The operational GFS develops a weak tropical cyclone in association with this disturbance, but most other guidance

maintains an open trough. Therefore, no hazard is included on the map, but this region will continue to be monitored.

The original forecast discussion released on 14 July 2020 follows.

The MJO has become better organized with some eastward propagation of the intraseasonal signal during the past week. Upper-level velocity potential anomalies currently show a better defined pattern, with a broad envelope of enhanced divergence (convergence) aloft extending from the eastern Atlantic to the Indian Ocean (western Pacific to the eastern Pacific). Notably, much of the deep convection is located along the eastern periphery of the enhanced envelope which is likely associated with Rossby wave activity over Southeast Asia and the Indian subcontinent. Objective filtering of the recent OLR and velocity potential fields also depict Kelvin wave activity over the northern Indian Ocean. Despite the better organized pattern as of late, most dynamical models favor a rapid weakening of the intraseasonal signal during the next several days, with diverging solutions in the ensemble means for the remainder of the outlook period. Some model ensemble members suggest some reemergence during week-2, but large disparities exist relative to the phase location and timing. As a result, there is reduced confidence in the predicted state of the MJO and its associated impacts on the tropics.

There were two named tropical cyclones (TCs) that formed during the past week. In the Atlantic, tropical storm Fay formed near the coast of North Carolina on 7/9. Once over the Gulf Stream, Fay tracked northward along the eastern seaboard, bringing locally heavy rainfall, damages to infrastructure, and floods over parts of the Southeast, mid-Atlantic and Northeast. Yesterday, tropical depression six-E formed in the eastern Pacific. The National Hurricane Center (NHC) forecasts six-E to track westward and gradually dissipate over open waters as it encounters cooler waters and a high shear environment during the next few days.

In the western Pacific, the Joint Typhoon Warning Center (JTWC) is monitoring a disturbance over the northern Philippines (99W). There is agreement in the models for development during early week-1 and a TC shape is posted in the outlook. If formation is realized, the disturbance is likely to quickly dissipate as it is expected to encounter a high shear environment and become absorbed in the Meiyu front. Further east, models have been signaling another potential formation area near Guam (135-155E), however, there is little to no support in TC tools and no TC area is posted. Following the formation of tropical depression six-E in the eastern Pacific, both GFS and ECMWF deterministic guidance continue to

show the potential for another TC form near 120-125W late in week-1. Although support in the TC tools has been mixed, a moderate confidence area for TC formation has been added to the outlook. Across the Atlantic, there has been good run-to-run continuity with an easterly wave propagating out West Africa late in week-1 with an area of strengthening low pressure in the Main Development Region. While this is expected to enhance rainfall in the region, there continues to be low probability for TC development at this time. These areas will continue to be monitored and any necessary adjustments will be included in the update on Friday.

The precipitation outlook during the next two weeks is based on dynamical model consensus from the CFS and ECWMF models. Above-average rainfall is favored over parts of the western Indian Ocean and the Maritime Continent with below-average rainfall expected across parts of Southeast Asia during weeks 1 and 2. Above-average temperatures remain likely over much of the CONUS associated with anomalous mid-level ridging.

Forecasts over Africa are made in consultation with the International Desk at CPC, and can represent local-scale conditions in addition to global-scale variability.