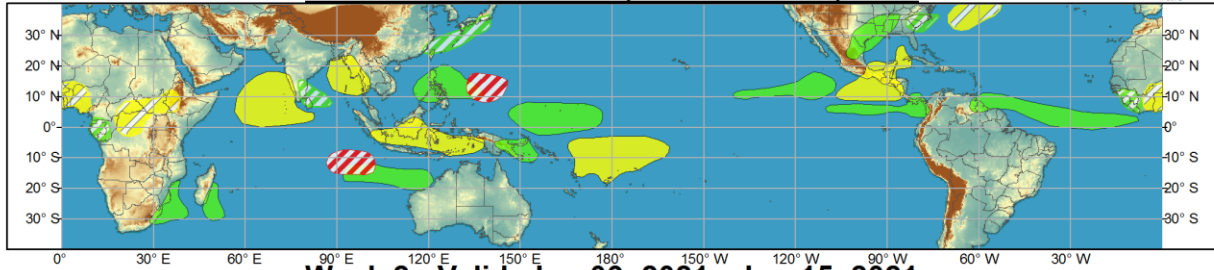




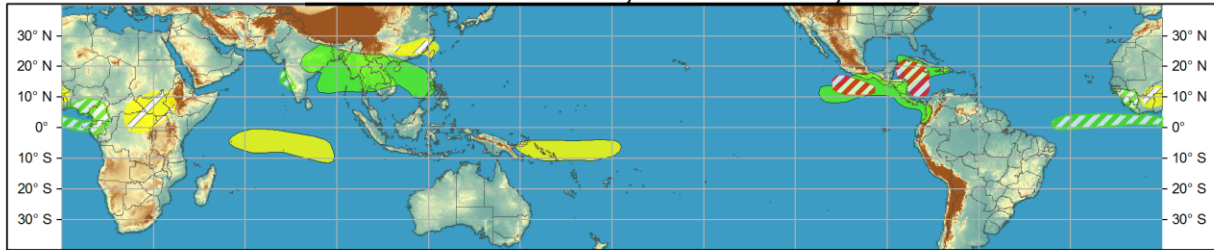
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



Week 1 - Valid: Jun 02, 2021 - Jun 08, 2021



Week 2 - Valid: Jun 09, 2021 - Jun 15, 2021



Confidence
High Moderate

- Tropical Cyclone Formation** ■ ▨ Development of a tropical cyclone (tropical depression - TD, or greater strength).
- 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, except from 6/1 - 11/30 for the region from 120E to 0, 0 to 40N. The product targets broad scale conditions integrated over a 7-day period for US interests only. Consult your local responsible forecast agency.

Produced: 06/01/2021

Forecaster: Allgood



The Madden-Julian Oscillation (MJO) propagated from the Maritime Continent to the Pacific through the end of May. Recent observations show that other modes are interfering with the intraseasonal signal, including West Pacific Rossby wave activity and a strong Kelvin wave now propagating over the Western Hemisphere. The CPC velocity potential-based MJO index shows a weak signal crossing the Pacific, but spatial analyses of upper-level velocity potential anomalies shows a Wave-2 asymmetry, with a weak and zonally narrow enhanced phase over the West Pacific and a robust Kelvin wave response approaching Africa. Dynamical model MJO index forecasts show continued interference from West Pacific Rossby wave activity during the first part of Week-1, followed by a fairly fast eastward propagation of the intraseasonal signal across the Western Hemisphere during Week-2. It is possible that this propagation may be due to strong Kelvin wave activity.

After crossing the East Pacific, the Kelvin wave now approaching Africa contributed to the development of Tropical Storm Bianca, now well south of the Baja California peninsula. Forecasts from the National Hurricane Center (NHC) depict this system taking a generally westward course with gradual weakening over the next several days. Over the West Pacific, Tropical Storm Choi-Wan developed on 30 May, and is currently weakening while moving through the northern Philippines.

Consistent with Rossby wave activity moving from the West Pacific to the Maritime Continent, additional tropical cyclogenesis is favored over the Northwest Pacific. A weak system has a low potential to develop as it approaches the Philippines over the next day or two, while dynamical models favor additional development in the vicinity of Guam later in Week-1. The Joint Typhoon Warning Center (JTWC) is also monitoring a disturbance (Invest 93S) over the southeastern Indian Ocean that has a moderate potential for development during Week-1. During Week-2, the forecast MJO or Kelvin wave activity supports additional tropical cyclogenesis over the East Pacific (moderate confidence). Additionally, dynamical models including the ECMWF favor moderate confidence for potential tropical cyclone development over the western Caribbean Sea.

Favored areas for above- and below-normal precipitation are based largely on a consensus among the CFS, GEFS, and ECMWF dynamical models, with some consideration given to precipitation composites during canonical MJO events. Consistent with MJO activity, enhanced precipitation is favored to lift northward over the Monsoon regions of Southeast Asia during Week-2, while increased convection, including the potential tropical cyclone activity mentioned above, is favored in the vicinity of Central America. For hazardous weather concerns during the upcoming two weeks across the U.S. please refer to your local NWS Forecast Office, the Weather Prediction Center's Medium Range Hazards Forecast, and CPC's Week-2 U.S. Hazards Outlook. 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.