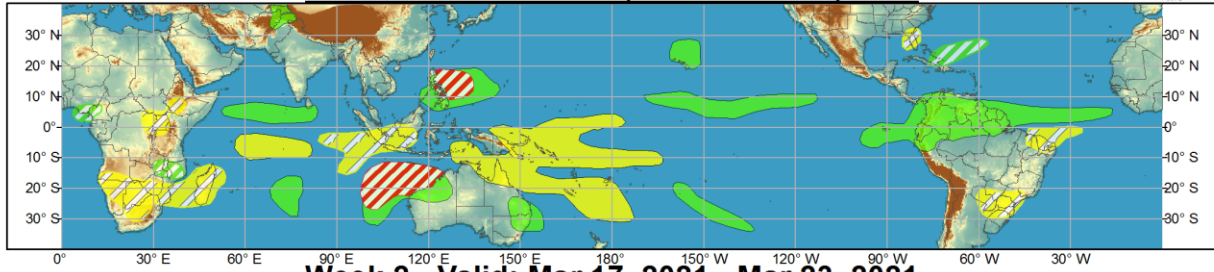




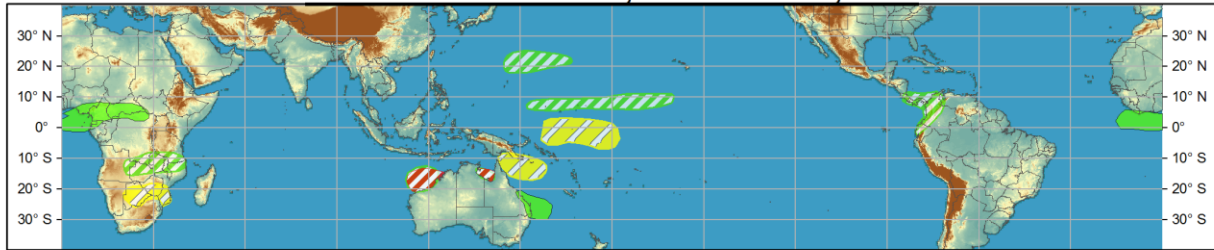
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



Week 1 - Valid: Mar 10, 2021 - Mar 16, 2021



Week 2 - Valid: Mar 17, 2021 - Mar 23, 2021



	Confidence		Produced: 03/09/2021
	High Moderate		Forecaster: Allgood
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.



The MJO remains active, with the enhanced phase currently propagating across the Pacific. Due to destructive interference with the ongoing La Nina base state and equatorial Rossby wave activity over the West Pacific, the presentation of this intraseasonal signal on the RMM-based MJO index is weak. The MJO signal appears most robust in the upper-levels, and thus the CPC 200-hPa velocity potential anomaly based MJO index exhibits a higher amplitude; however, the signal has begun to weaken even in the upper-levels due to a lack of significant convection across the equatorial Pacific. Dynamical model MJO index forecasts generally show an amplification of the MJO signal as it reaches the East Pacific and the Western Hemisphere, which is intuitive given both the relaxing of the destructive interference as the enhanced phase exits the Pacific, and the notable SST warming of the East Pacific Nino 1 and 2 regions close to the western coast of South America. Beyond this short range amplification, the dynamical model solutions diverge considerably, with many ensemble members of both the GEFS and ECMWF weakening the signal, while other ensemble members depict continued robust MJO or Kelvin wave activity crossing the Indian Ocean. Therefore, the MJO is favored to increasingly impact the global tropical circulation during Week-1, but its influence becomes highly uncertain during Week-2.

As predicted in last week's outlook, two tropical cyclones developed over the South Indian Ocean during the past week. Cyclone Habana formed over the south-central Indian Ocean and strengthened to major hurricane intensity (125kt peak sustained winds) as it tracked generally eastward over the open ocean. Over the past few days, the cyclone has turned southward and westward, and forecasts from the JTWC show the system regaining major hurricane intensity as it tracks westward just south of its prior track. Ultimately the cyclone is forecast to recurve to the south well east of Mauritius and La Reunion. Tropical Storm Iman formed to the west of Cyclone Habana's location, and is currently weakening as it recurves southward. During Week-1, additional tropical cyclogenesis is possible over the eastern portion of the Indian Ocean basin, with two regions exhibiting a moderate potential for development. Formation northwest of Australia in the vicinity of 100-110E is possible, with dynamical model track forecasts bringing this potential system generally southward, with a potential for impacts to Western Australia. A second formation is possible during late Week-1 or Week-2 closer to the Kimberley Coast or the Gulf of Carpentaria. Elsewhere, a disturbance east of the Philippines has a moderate potential for formation before moving westward across the archipelago.

Precipitation forecasts are based on dynamical model consensus, with an anticipated strengthening of the MJO signal over the Western Hemisphere. More widespread suppressed rainfall is favored for the West Pacific due to a resurging La Nina response and the suppressed phase of a Rossby wave. In contrast, the MJO favors widespread rainfall across northern South America, with a potential for flooding and flood-related impacts across the higher elevations of northwestern South America. Additional heavy rainfall is also favored for Hawaii, which may exacerbate ongoing flooding across parts of Maui. Strong ridging over the eastern CONUS favors dry conditions across parts of the Southeast, which may promote expanding drought conditions across parts of southern Georgia or the Florida peninsula. During Week-2, the coverage of dynamical model consensus drops considerably. Additional heavy rainfall is possible across northwestern South America, while a remnant MJO circulation may promote above-average rainfall across parts of equatorial Africa. Dynamical models also favor heavy rainfall across southeastern Queensland.

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.