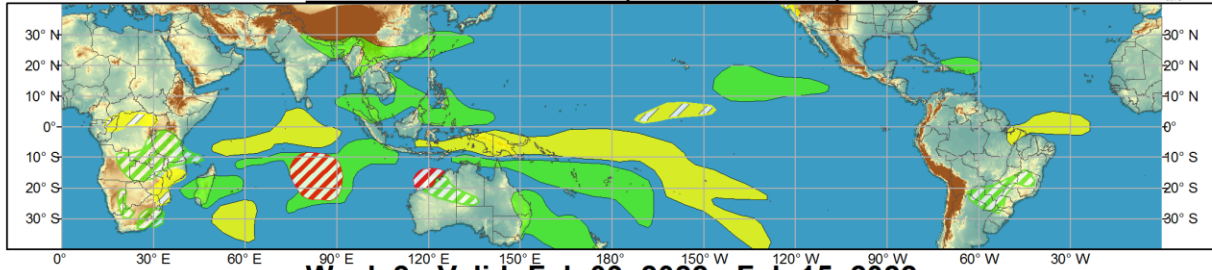




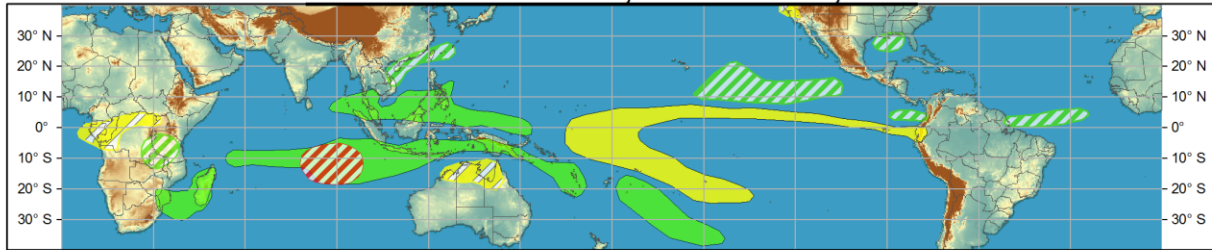
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center













Week 1 - Valid: Feb 02, 2022 - Feb 08, 2022



Week 2 - Valid: Feb 09, 2022 - Feb 15, 2022



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: 02/01/2022

Forecaster: Allgood



The Madden-Julian Oscillation (MJO) signal remains weak from the perspective of the RMM-based index, and the anomalous upper-level velocity potential pattern is chaotic and reflective of equatorial Rossby wave (ERW) activity. There are some indications of a large-scale eastward propagating enhanced convective envelope that has moved from Africa to the Indian Ocean since mid-January; however, this signal is currently masked by remarkably strong ERW activity over the Indian Ocean. Over the Pacific, weak westerly anomalies over the east-central Pacific reflect a continued disruption of the atmospheric response to La Nina conditions, though trade winds have become increasingly enhanced near and west of the Date Line, which may be due in part to the emerging intraseasonal signal. Dynamical model MJO index forecasts are fairly consistent and show a rapid increase in amplitude over the Indian Ocean, which may reflect the emergence of the MJO signal from ongoing ERW disruption. By Week-2, many GEFS and ECMWF ensembles depict a "hairpin turn" of the RMM index, favoring a resumption of eastward propagation across the Maritime Continent. This sharply turning feature is frequently indicative of strong ERW activity modulating the MJO signal. In contrast, a growing number of alternate ensemble members show a slower evolving and higher amplitude signal over the Indian Ocean, which may be a response to Indian Ocean tropical cyclone activity. Based on these recent observations and dynamical model forecasts, the MJO is favored to become increasingly active over the next two weeks,

and will likely play a role in tropical cyclone development, the orientation of the monsoon trough over the Maritime Continent, and potentially the downstream midlatitude pattern.

Two tropical cyclones developed during the past week. Tropical Cyclone (TC) Batsirai formed over the southwestern Indian Ocean on 27 January, strengthening rapidly to Category 2 intensity on the Saffir-Simpson scale before undergoing several fluctuations in strength. The latest forecast from the Joint Typhoon Warning Center (JTWC) depicts TC Batsirai moving generally towards the west southwest while strengthening steadily. On this course, the tropical cyclone would pass near or north of Mauritius and Le Reunion Islands, with a potential landfall over Madagascar. Interests in the southwestern Indian Ocean should monitor the progress of this storm and forecasts issued by local authorities. Elsewhere, Tropical Storm 09P formed on 1 February over the Coral Sea, east of Queensland, Australia. The latest JTWC forecast brings this system east or southeast, passing between the islands of Vanuatu and New Caledonia and remaining well south of Fiji. The intensity forecast shows only modest strengthening, with TC 09P maintaining tropical storm status through the next five days.

Dynamical model forecasts indicate a potential for additional tropical cyclone activity across the Southern Hemisphere during the upcoming two weeks. During Week-1, forecasts from the GEFS, ECMWF, and CFS ensemble systems show potential tropical cyclone development over the south-central Indian Ocean, east of the current position of TC Batsirai. Additionally, brief tropical cyclone development is possible adjacent to Australia's Kimberley Coast before a disturbance moves inland over Western Australia. During Week-2, the area of favorability over the Indian Ocean shifts eastward closer to the Cocos Islands. Additional tropical cyclone development is also possible over the Coral Sea or in the vicinity of Fiji and American Samoa during the period, but confidence is too low to reflect specific formation hazard areas on this outlook.

Forecasts for enhanced and suppressed precipitation are based on dynamical model consensus, tropical cyclone forecast tracks, ongoing La Nina conditions, and a potential developing MJO event that propagates from the Indian Ocean to the Maritime Continent over the next two weeks. Widespread heavy rainfall is possible over parts of Madagascar, southeastern Asia, and Australia during Week-1. During Week-2, the MJO favors enhanced convective rainfall across the Maritime Continent, with dynamical models depicting weaker anomalies right along the Equator. For hazardous weather conditions during the next 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 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.