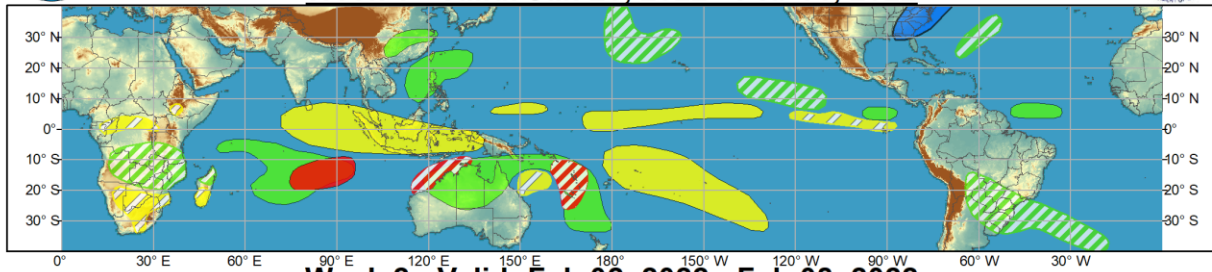




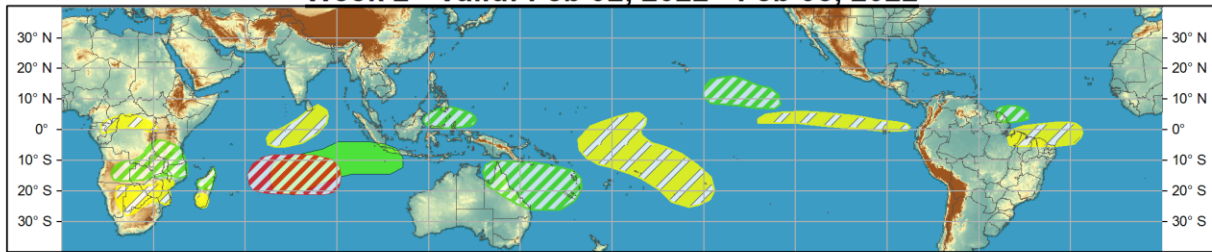
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



Week 1 - Valid: Jan 26, 2022 - Feb 01, 2022



Week 2 - Valid: Feb 02, 2022 - Feb 08, 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: 01/25/2022

Forecaster: Collow



Following an eastward propagating Madden Julian Oscillation (MJO) across the western and central Pacific during December and early January, the RMM-based MJO index has retreated into the unit circle. There is some evidence of a wave-1 asymmetry in the combined upper-level velocity potential anomaly and satellite based infrared fields, with suppressed convection depicted across South America, the southern Atlantic Ocean, Africa, and Eurasia, and enhanced convection over eastern Asia and much of the Pacific, including Australia. However, there is a good deal of noise in the spatial pattern, with several localized extrema indicated across the globe, suggestive of the combined influence of several modes of tropical and extratropical variability. Dynamical models exhibit a large amount of spread regarding the evolution of the MJO during the next two weeks, with the general consensus that the MJO remains weak, with perhaps some amplification of the intraseasonal signal across the Maritime Continent (ECMWF) or Indian Ocean (JMA) by week-2 as the convective envelope begins to retrograde westward, and the low frequency La Nina base state reestablishes itself over the Pacific following a disruption due to the previous MJO event.

The only tropical cyclone (TC) formation in the past week was Tropical Storm Ana over the southwestern Indian Ocean on January 22. This system first impacted Madagascar as a tropical depression and quickly

reorganized over the Mozambique channel, making a second landfall in Mozambique as a moderate strength tropical storm. TC development during the next week is favored over the southern Indian Ocean as well as over the southwestern Pacific, driven by increased Equatorial Rossby Wave activity. The Joint Typhoon Warning Center is currently monitoring a disturbance over the south-central Indian Ocean, which has been given an 80 percent chance of developing into a TC over the next few days as it tracks west-southwestward, corresponding with a high risk area for TC development. Conditions are forecast to remain favorable for TC formation across the southern Indian Ocean into week-2 with the CFS, GEFS, and ECMWF models indicating enhanced convection expanding across the basin, and a broad moderate confidence region is indicated during week-2.

Dynamical models also indicate increased potential for TC development in the vicinity of Vanuatu and New Caledonia where several GEFS and ECMWF ensemble members depict surface low pressure organizing within the South Pacific Convergence Zone and tracking southward. Another disturbance may develop into a TC near the northwestern coast of Australia, but there is some uncertainty within the dynamical model ensembles as to whether this system will develop off the coast or inland over Australia. Both of these areas are highlighted with a moderate confidence for TC development during week-1.

The precipitation outlook is based on dynamical model consensus, anticipated TC tracks, the ongoing response to La Nina, and Rossby wave activity. Above-normal precipitation is favored to continue across much of Australia and the southwestern Pacific given the favorable convective pattern aloft. While drier than normal conditions are likely across the Maritime Continent during week-1, the predicted westward expansion of the convective signal and possible renewed MJO are both indicative of a trend toward near to above average rainfall in week-2. Anomalous mid-level troughing forecast over eastern North America is expected to bring periods of below-normal temperatures to much of the eastern third of the contiguous U.S. in week-1, with moderation favored by week-2. 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.