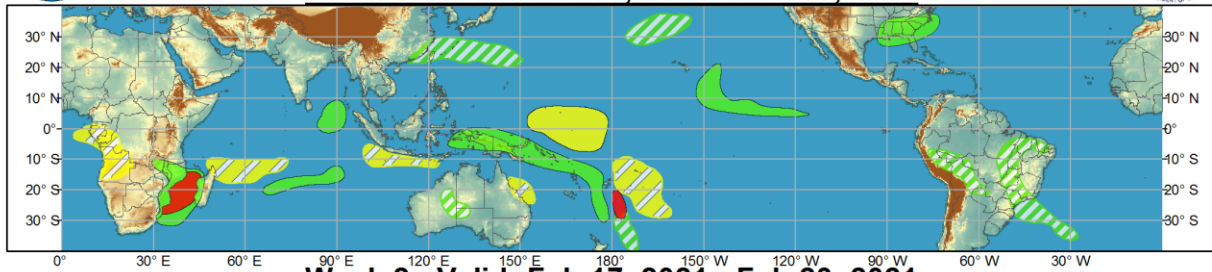




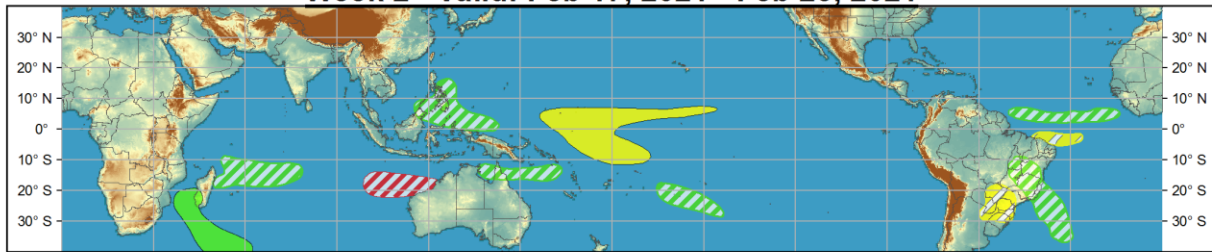
# Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



**Week 1 - Valid: Feb 10, 2021 - Feb 16, 2021**



**Week 2 - Valid: Feb 17, 2021 - Feb 23, 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: 02/09/2021**

**Forecaster: Harnos**



The RMM index supports the presence of an intraseasonal signal that projects onto the Madden-Julian Oscillation over the West Pacific during the past two weeks. This signal is largely confined to the Southern Hemisphere, but also seen somewhat in recent weakening of the suppressed convection tied to La Nina east of the Maritime Continent. The divergent circulation from this heating source in the tropics has forced a wavetrain across the Northern Hemisphere extratropics that likely has some role in the recent cold air outbreak across North America. Model guidance has some spread among ensemble members, but generally supports a weakening and retrogression of the West Pacific intraseasonal mode over the subsequent two weeks, likely due to the presence of equatorial Rossby wave activity. The retrogression of this pattern would suggest more of a La Nina-like teleconnection pattern, and possible waning of the North American Arctic outbreak by late February.

The only tropical cyclone (TC) to develop over the past week was Faraji, over the southern Indian Ocean. Faraji developed near 13S/81E on the 5th of February and subsequently tracked to the south, before an eastward turn and intensification two days later. Faraji rapidly intensified to a strength of 140 knots by the 8th as its eyewall contracted around a pinhole eye, although there are some signs of weakening and a possible eyewall replacement underway today. The Joint Typhoon Warning Center (JTWC) forecasts

Faraji to start to recurve to the west over the next several days, with the residual disturbance possibly approaching Madagascar by Week-2.

JTWC is currently monitoring a disturbance (92P) presently located just south of Fiji and forecasting a high chance of tropical cyclogenesis during the next 24 hours (high confidence for Week-1 TC development). Elsewhere, the CFS, ECMWF, GEFS, and Canadian ensembles all spin up a TC over the Gulf of Mozambique during Week-1, leading to high confidence for TC formation. By Week-2, model guidance hints at the potential for a westward tracking disturbance forming off the Kimberley Coast of Australia (moderate confidence). There is also some hint of a Coral Sea system developing during Week-2, but this area is prone to false alarms, so confidence is insufficient to make it onto the forecast graphic at this time.

Highest confidence for above- or below-normal precipitation during the next two weeks is tied to: TC tracks over the Southern Hemisphere, the low frequency state in the Pacific, anomalously warm sea-surface temperatures over the northern Indian Ocean, frontal activity interacting with the trades east of Hawaii, and subtropical moisture interacting with an Arctic front over the Southeast. Confidence is slightly lower during Week-2 for above-normal rains across the southwestern Indian Ocean tied to the circulation from TC Faraji and over the West Pacific as the intraseasonal pattern retrogrades. Remaining forecasts for above- and below-normal rains are generally a result of consensus among the CFS, GFS, and ECMWF ensemble means with less clear connections to large-scale tropical climate forcings.

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.