

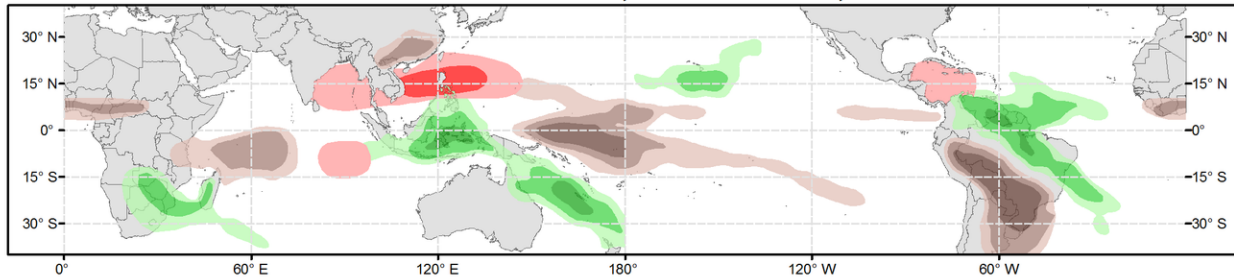


Global Tropics Hazards Outlook

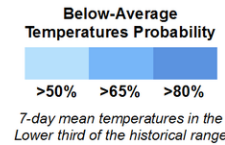
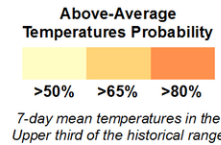
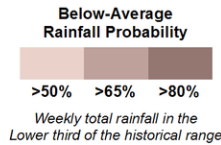
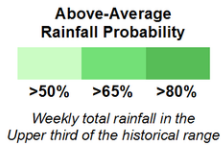
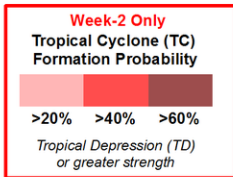
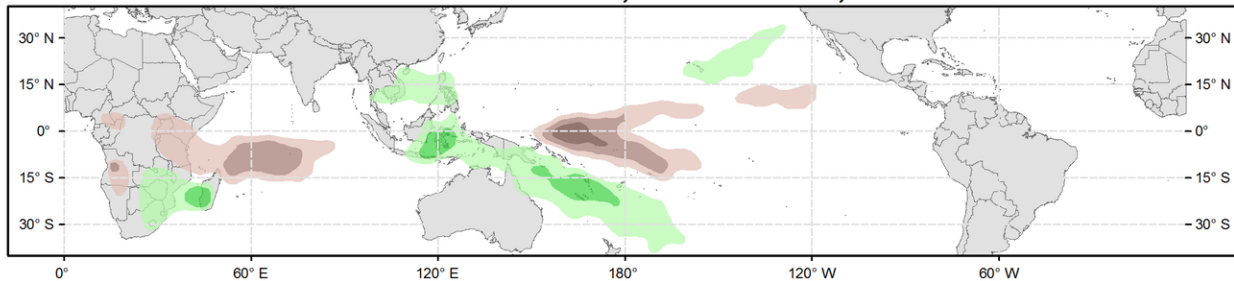
Climate Prediction Center



Week 2 - Valid: Nov 02, 2022 - Nov 08, 2022



Week 3 - Valid: Nov 09, 2022 - Nov 15, 2022



Issued: 10/25/2022
Forecaster: Allgood

This product is updated once per week and targets broad scale conditions integrated over a 7-day period for US interests only. Consult your local responsible forecast agency.

Following a period of active Madden-Julian Oscillation (MJO) activity that crossed the Indian Ocean and Maritime Continent during early October, the intraseasonal signal became less apparent through late October. The RMM-based MJO index exhibits a fairly high amplitude signal over the West Pacific (Phase-6), albeit without an established eastward propagation, while the CPC velocity potential based MJO index is weak, reflecting an incoherent upper-level pattern. Destructive interference with the ongoing La Niña across the Equatorial Pacific is likely the culprit for the breakdown in the MJO signal, as it has been for the past several months. Unlike previous events, however, the intraseasonal signal this time has contributed to widespread convection across the Northwest Pacific that is moving slowly poleward. This convective feature aliases well into RMM Phase-6 precipitation composites, and may be contributing to the high amplitude of the RMM-based MJO index.

Dynamical model MJO index forecasts are fairly consistent, depicting a potential for a brief retrogression of the signal tied to Rossby wave activity over the Maritime Continent, and then fairly rapid eastward propagation, with the index shifted notably towards the West Pacific, suggesting at least a temporary weakening of the La Niña base state over the next several weeks as Kelvin waves traverse the globe. Dynamical model forecasts do not depict a breakdown of the enhanced trade wind regime over the Pacific, though pronounced envelopes of low-level westerly wind anomalies are possible both north and south of the Equator. Since these westerly wind events are not centered on the Equator, it is unlikely that this activity will substantially weaken the cold ENSO event; however, it is possible that a weak downwelling oceanic Kelvin wave may be initiated heading into the Boreal winter season.

Two tropical cyclones (TCs) formed during the past week. Hurricane Roslyn

formed over the East Pacific on 20 October, strengthening to Category-3 intensity on the Saffir-Simpson scale with sustained winds of 115kt prior to landfall in the Nayarit state along Mexico's southern coast. Hurricane Roslyn brought widespread winds, flooding, and surge impacts to a region recently impacted by Hurricane Orlene. Tropical Storm Sitrang formed over the northern Bay of Bengal on 23 October before moving inland over Bangladesh and generating widespread flooding.

Following a brief break in TC formations, the West Pacific is favored to become active again, with the Joint Typhoon Warning Center currently monitoring Invest 93W east of the Philippines. With a continuation of enhanced convection across the Northwest Pacific favored, the potential for tropical cyclogenesis will continue into the Week-2 period, with dynamical models showing potential formations across either the South China Sea or east of the Philippines. There is also a potential for disturbances emerging over the Bay of Bengal to develop into a TC during Week-2. Additionally, Rossby wave activity favors a potential for westerly wind bursts over the eastern Indian Ocean, which may provide an opportunity for TC development over the southern Indian Ocean. Across the Atlantic basin, the TC climatology decreases rapidly in early November; however, any remnant MJO signal that crosses over the Western Hemisphere during Week-2 may provide a favorable environment for TC development over the western Caribbean Sea, and this potential is highlighted by both the GEFS and ECMWF ensemble systems.

The precipitation outlook for Weeks 2-3 is based on a consensus of GEFS, ECMWF, and CFS ensemble model guidance, and the expectation that the atmospheric response to ongoing La Niña conditions will remain the dominant driver of global tropical convective anomalies despite any destructive interference from remnant MJO or Kelvin wave activity. Therefore, a dipole of enhanced (suppressed) convection across the Maritime Continent (central Pacific) is the most prominent feature. Suppressed convection is favored for the western Indian Ocean during both Week-2 and Week-3, and a dipole of suppressed (enhanced) rainfall across southern Brazil, northern Argentina, Paraguay, and Uruguay (northern South America to the tropical Atlantic) is favored for Week-2. Below-average temperatures are favored across eastern Australia and much of South America during early Week-2, but freezing temperatures in agriculturally vulnerable locations is not anticipated.

For hazardous weather conditions in your area during the coming two-week period, please refer to your local NWS office, the Medium Range Hazards Forecast produced by the Weather Prediction Center, and the CPC Week-2 Hazards Outlook. Forecasts made over Africa are made in coordination with the International Desk at CPC.