

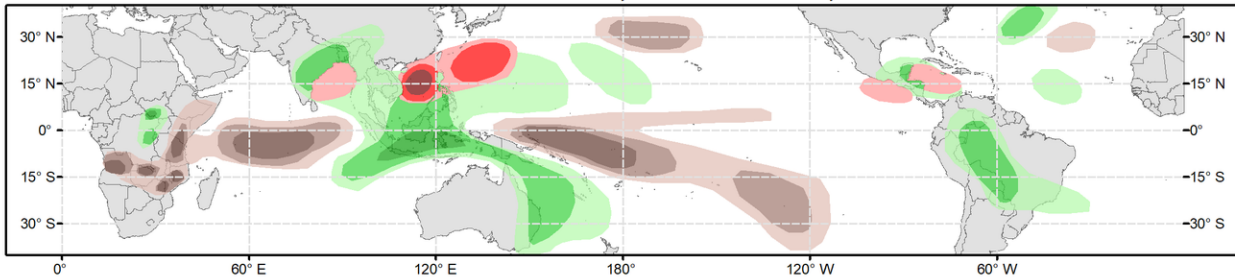


Global Tropics Hazards Outlook

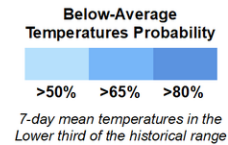
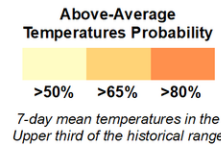
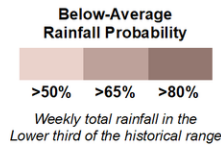
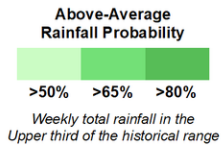
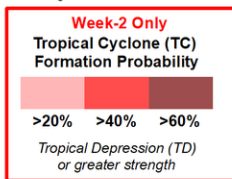
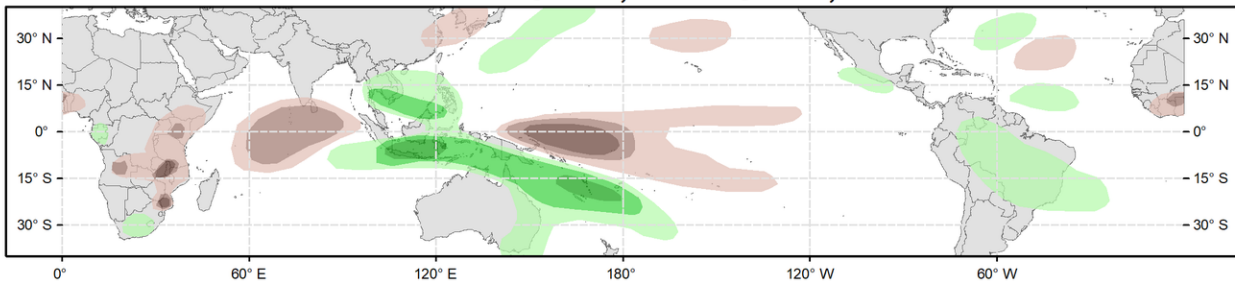
Climate Prediction Center



Week 2 - Valid: Oct 12, 2022 - Oct 18, 2022



Week 3 - Valid: Oct 19, 2022 - Oct 25, 2022



Issued: 10/04/2022
Forecaster: Collow

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.

The Madden Julian Oscillation (MJO) has been inactive for much of September, with the RMM-based index remaining within the unit circle. However, dynamical model guidance, particularly the GEFs and ECMWF ensembles, depict an amplifying MJO signal emerging across the Maritime Continent and propagating eastward into the western Pacific over the next 2 weeks. While there is a coherent MJO signal in the JMA, its amplitude is weaker compared to the GEFs and ECMWF, and lies closer to the edge of the unit circle. As has been the case for much of the year, there is uncertainty as to whether or not the intraseasonal signal will be able to continue its eastward propagation across the Pacific due to interference with the ongoing La Niña, with the ensemble means from the GEFs and ECMWF showing a weakening MJO once it reaches phase 7. However, some individual ensemble members indicate continued eastward propagation into phase 8 by the end of October.

The tropics have remained active during the past week across the Northern Hemisphere. Over the Atlantic Basin, Hurricane Ian made landfall across southwest Florida on 9/28 as a category-4 storm resulting in significant damage over the region. The storm made a second landfall over South Carolina as a category-1 hurricane on 9/30. A short-lived tropical depression (Eleven) developed over the open waters of the eastern Atlantic on 9/28. Across the East Pacific, Hurricane Orlene formed on 9/29, and peaked as a category-4 storm, before weakening and making landfall along the west coast of Mexico as a category-1 system. Tropical Storm Paine developed on 10/3 and is no threat to land. Typhoon Roke developed on 9/28 over the Western North Pacific Basin, and recurved northeastward, remaining well south of Japan.

Over the next 2 weeks, tropical cyclone (TC) activity is forecast to increase across the Western North Pacific and Bay of Bengal, tied to the renewed MJO

signal. A 60 percent chance for TC development is indicated across the South China Sea consistent with the GEFs and ECMWF ensembles, with a 40 percent chance of formation highlighted over the open West Pacific, east-northeast of the Philippines, due to climatology and recent TC formations in this region. TC formation is also possible over the Bay of Bengal (20 percent chance). Across the Atlantic, Invest 91L, located to the west of the Windward Islands, is being monitored by the National Hurricane Center for possible TC development. While this system may ultimately form prior to the start of week-2, the favorable conditions over the region, along with increasing climatological influence, support a 20 percent chance of TC development across the Caribbean during week-2. Increased TC development chances may also extend into the East Pacific Basin, where a 20 percent chance of TC formation is highlighted during week-2. There are some indications that the Caribbean system may cross Central America during this period, and develop over the East Pacific (if it does not develop earlier over the Caribbean), or an entirely separate system may develop over the basin.

The precipitation outlook for the next two weeks is based on anticipated TC tracks, ongoing La Niña conditions, MJO composites, and consensus of GEFs, CFS, and ECMWF ensemble mean solutions. Enhanced rainfall is forecast across the Maritime Continent, West Pacific, and also extending across eastern Australia and the south-central Pacific during weeks 2 and 3, tied to the MJO becoming active over these regions. Below-normal precipitation is forecast over the Indian Ocean (suppressed convection on the backside of the MJO), along with the equatorial central Pacific (La Niña). Above normal rainfall is forecast across the Caribbean and South America during week-2, becoming more focused across South America by week-3.

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.