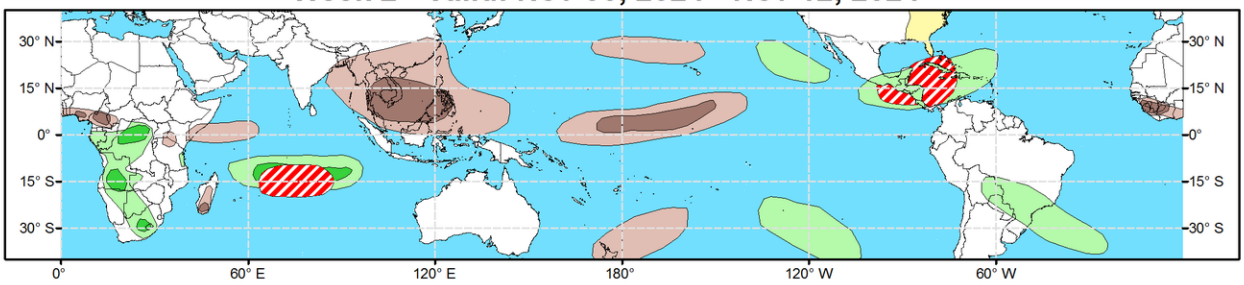
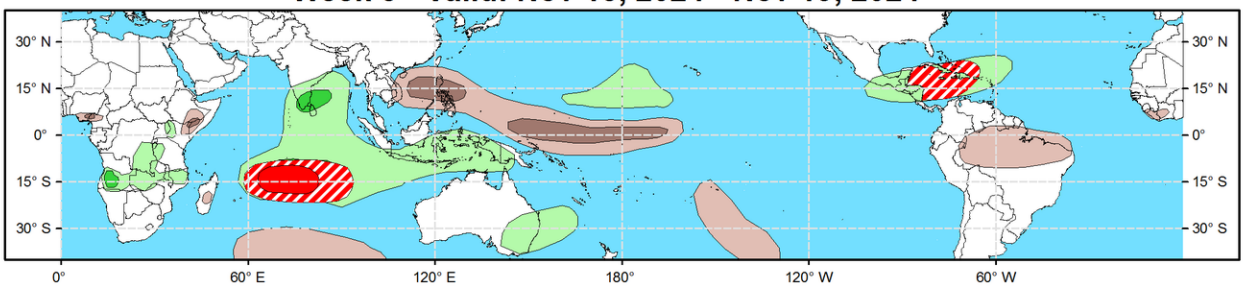
Global Tropics Hazards Outlook

Climate Prediction Center

Week 2 - Valid: Nov 06, 2024 - Nov 12, 2024



Week 3 - Valid: Nov 13, 2024 - Nov 19, 2024



Tropical Cyclone (TC) Formation Probability
>20% >40% >60%
Tropical Depression (TD) or greater strength

Above-Average Rainfall Probability
>50% >65% >80%
Weekly total rainfall in the Upper third of the historical range

Below-Average Rainfall Probability
>50% >65% >80%
Weekly total rainfall in the Lower third of the historical range

Above-Average Temperatures Probability
>50% >65% >80%
7-day max temperatures in the Upper third of the historical range

Below-Average Temperatures Probability
>50% >65% >80%
7-day min temperatures in the Lower third of the historical range

Issued: 10/29/2024
Forecaster: Barandiaran

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.

A robust MJO continues to propagate eastward through the global tropics, with the enhanced convective envelope currently over the western and central Pacific Ocean. Dynamical models are in good agreement on the MJO continuing to propagate eastward into the western Hemisphere during early November. This predicted MJO evolution would enhance the potential for tropical cyclone (TC) development over the Eastern Pacific and Caribbean Sea during the week 1-2 period. The continued shift towards La Nina conditions has been notably slow in recent months, though enhanced trade winds over the equatorial Pacific may increase upwelling via Ekman transport and push down upper-ocean heat content east of the Date Line.

Two TCs formed over the last week, both in the Eastern Hemisphere. On October 22 TC Dana formed in the Bay of Bengal. It quickly intensified to a category 1 storm on the Saffir-Simpson (SS) scale and made landfall on October 24 over the northeastern coast of India, causing widespread impacts to the Indian states of Odisha and West Bengal, as well as in Bangladesh. On October 24 TC Kong-rey formed west of Guam and began tracking westward, gradually increasing in strength. Kong-rey is currently a SS category 4 storm several hundred miles east of Luzon, Philippines and is moving northwest in the general direction of Taiwan, which may be affected by this storm in the next 48-60 hours. For the latest information on Kong-rey please refer to the Joint Typhoon Warning Center (JTWC) and your local meteorological agencies.

In the Atlantic Basin, the Caribbean Sea is climatologically the most favored region for any development as we get into November, and while climatological chances of TC development decline quickly as the weeks progress, the season is not over yet and there remains some potential for TC activity looking ahead. Model ensembles depict the MJO moving into and across the western Hemisphere in

the coming weeks, bringing with it enhanced upper-level divergence and an increased potential for TC genesis. Many members from both the GEFS and ECMWF spin up surface lows over the Caribbean sea late in week-1 and into week-2, with a preference for the former. However, MJO forcing which lingers into week-3 will continue to foster a favorable environment for TCs; therefore a slight chance (20-40%) of TC genesis is posted for the Caribbean Sea and adjacent waters for both weeks 2 and 3. Stronger MJO forcing during week-2 also slightly favors TC genesis for portions of the East Pacific. Meanwhile, strong anomalous upper-level convergence over the Maritime Continent and Western Pacific would tend to suppress TC genesis and no areas are highlighted in the basin. However, the MJO is favored to continue its circumnavigation of the globe, moving over Africa and the Indian Ocean later in the forecast period and bringing increasing chances for TC formation in the southwest Indian Ocean. A slight risk of TC genesis is posted for week-2 and a moderate risk (40-60%) for week-3.

The precipitation outlook for weeks 2 and 3 is based on potential TC activity, the anticipated state of ENSO and the MJO, and informed by GEFS, CFS, Canadian, and ECMWF ensemble mean solutions. Above-normal temperatures are indicated for portions of the eastern U.S. during week-2. 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.