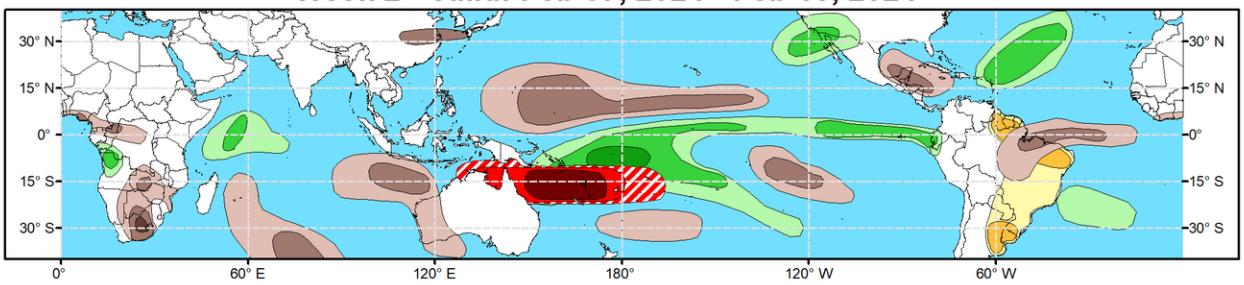
Global Tropics Hazards Outlook

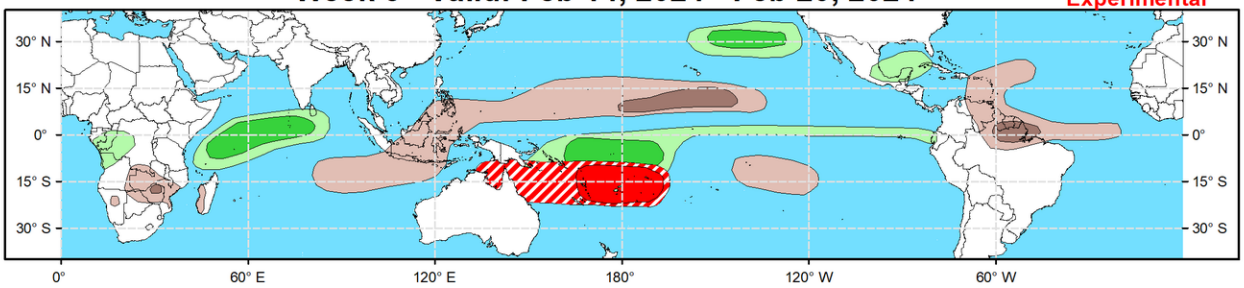
Climate Prediction Center

Week 2 - Valid: Feb 07, 2024 - Feb 13, 2024



Week 3 - Valid: Feb 14, 2024 - Feb 20, 2024

** Experimental **



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: 01/30/2024

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 strong MJO event continues as the RMM-index moved into phase 7 (Western Pacific). Dynamical model solutions diverge more this week, but still generally portray a weakening signal in the near future as the MJO is favored to encounter competing interference with other modes of tropical variability. Enhanced convection associated with MJO activity and a westerly wind burst (WWB) is expected to provide favorable conditions for Tropical Cyclone (TC) development over the South Pacific Ocean throughout the coming forecast period. Strong subtropical westerly flow over the North Pacific is forecast both near the surface and aloft, potentially leading to an atmospheric river event to affect the West Coast of the U.S. during the week-2 period.

No new TCs formed in the last week.

There is more model spread in the near-term relative to last weekâ€™s forecast, but the general picture favors the MJO entering a period of increased constructive interference with the atmospheric response to El Nino forcing, during which model solutions favor the RMM index remaining in phase 7. Forecast velocity potential anomalies indicate a more progressive picture, with enhanced divergence moving out of the Coral Sea by week-3. Models also depict with much higher agreement the emergence of a strong WWB over the Western Pacific, favored to last into week-3. Such a wind burst would ease wind shear and favor TC development over the South Pacific. TC genesis probabilities are enhanced throughout the South Pacific and much of the Australian region for the entire forecast period. During week-2 probabilities of TC genesis exceed 60% for much of the Coral Sea and Vanuatu region, with moderate chances (>40%) extending westward to the Gulf of Carpentaria. A similar area is highlighted for the week-3 period, with lower probabilities overall; a moderate chance of TC genesis is posted for Vanuatu and eastward to American Samoa, while a slight

chance (>20%) extends westward to the Gulf of Carpentaria.

The precipitation outlook for weeks 2 and 3 is based on potential TC activity, the anticipated state of the MJO, and a skill-weighted consensus of GEFS, CFS, Canadian, and ECMWF ensemble mean solutions. Above-normal precipitation continues for the Equatorial Eastern Pacific for both weeks, a response to the El Nino conditions, while suppressed precipitation is favored to the north of the El Nino-enhanced precipitation. Continued below-normal precipitation is indicated for the lower Amazon Basin for both weeks, and above-normal temperatures are likely for much of eastern South America during week-2. Above-normal precipitation becomes more likely over the western Indian Ocean as the next MJO cycle begins late in the forecast period. Atmospheric river conditions are likely along the West Coast of the U.S. resulting in above-normal precipitation for the region 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.