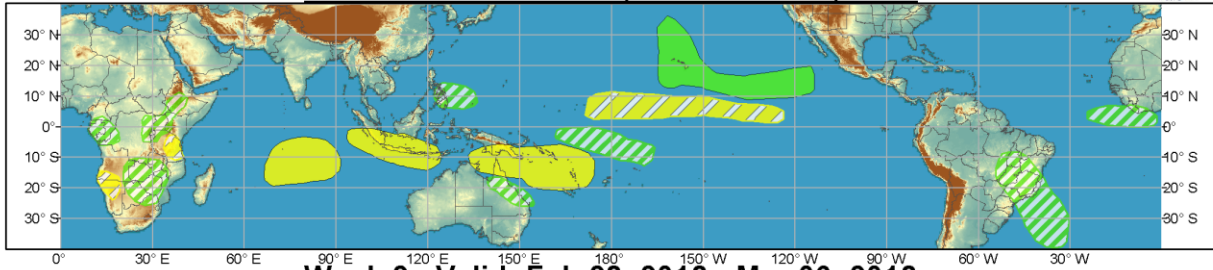




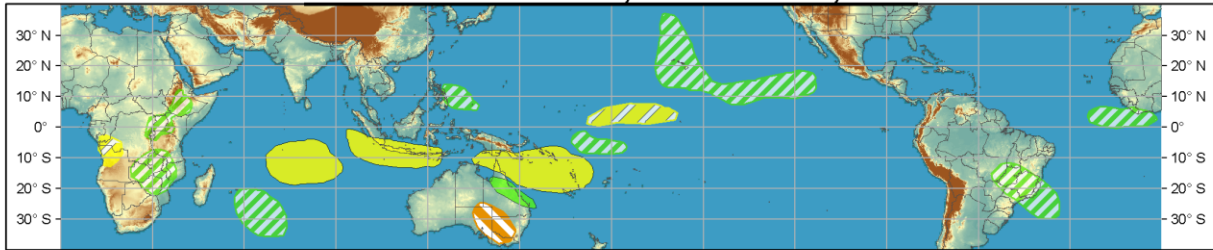
# Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



## Week 1 - Valid: Feb 21, 2018 - Feb 27, 2018



## Week 2 - Valid: Feb 28, 2018 - Mar 06, 2018



**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.

Produced: 02/20/2018

Forecaster: Finan

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.



Conditions in the tropics have continued to be influenced by the Madden Julian Oscillation (MJO) during the past week, though the footprint has weakened in comparison to previous weeks. Movement in the MJO signal has stalled since last week, remaining mostly in Phase 7, until progressing into Phase 8 in the past few days. Model guidance is in good agreement that the MJO will move through Phase 8 into Phase 1 during Week-1, possibly weakening further. Forecasts for the MJO signal moving into Week-2 are more uncertain; some models move the signal more quickly through Phase 2 and into Phase 3 during the period. All models do forecast a more significant weakening to the MJO signal in Week-2. La Nina remains active in the central and east Pacific, destructively interfering with the MJO convective envelope as it moves through the Pacific. Forecasts indicate that La Nina is likely to remain active through the winter, most likely transitioning to ENSO-neutral conditions during the spring and early summer.

Moving into the next two weeks, outlooks for tropical cyclone (TC) formation in the western Pacific and Indian Ocean are forecast to be quiet currently. There is a possibility for a TC formation in the Southwest Pacific in Week-1, though confidence remains low at the time, so it is not included on the map. Models

also point to possible formation near the Philippines in the western Pacific for Week-2, though uncertainty in the strength of the system leaves confidence low.

Precipitation patterns for Week-1 loosely follow patterns for Phase 8 and Phase 1 MJO impacts; however, with the weakening signal, impacts are not forecast to be significant as the past few weeks. There are high confidence areas of below-average rainfall over the Maritime Continent and eastern Indian Ocean likely due to suppressed convection. The exception is the Coral Sea coast, for which model guidance indicates above-average rainfall. Above-average rainfall is expected for the eastern Pacific, near Hawaii, as well as near the Date Line. These patterns are typical of a Phase 8 MJO, as the convective envelope moves over the central Pacific. The central and eastern equatorial Pacific is forecast to receive below-average rainfall, consistent with impacts expected from the La Nina base state. Above-average precipitation is also forecast for Brazil and parts of the tropical Atlantic. Both model guidance and MJO impacts support this pattern.

Week-2 continues many of the patterns seen in Week-1 as the MJO is forecast to move through Phase 1 into Phase 2 for the latter part of the period. The MJO is also expected to have a dramatic weakening during Week-2, so much of the confidence in the forecast is reduced. Regions of high confidence are supported by dynamical model guidance as well as typical MJO patterns. Below-average rainfall is likely to remain over the Maritime Continent, with possible shifts eastward. Above-average rainfall is still forecast for northeast Australia, as well as the Philippines, for which model guidance shows possible TC formation. Model guidance forecasts above-normal temperatures in southeastern Australia, with anomalies up to 16 degrees C. Below-average rainfall is still forecast for the central Pacific, but the extension into the eastern Pacific has been reduced, due to the interaction with the convective portion of the MJO and the low frequency base state. Above-average rainfall is forecast to continue over Brazil and parts of the Atlantic, as well as the southwestern Indian Ocean. This is likely due to the expected re-emergence of the MJO signal in the Indian Ocean toward the end of Week-2.