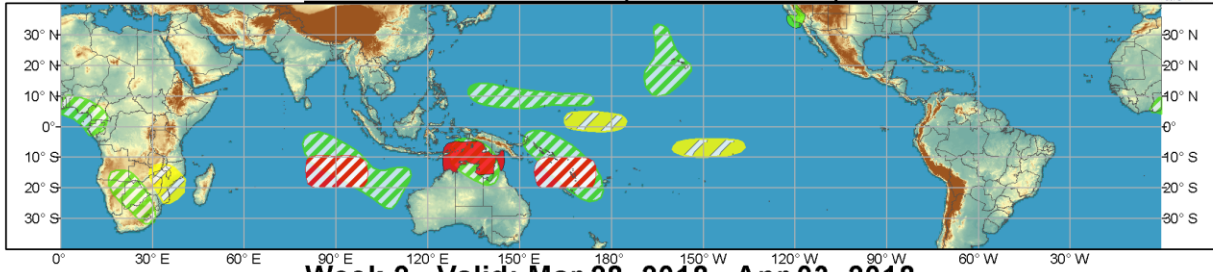




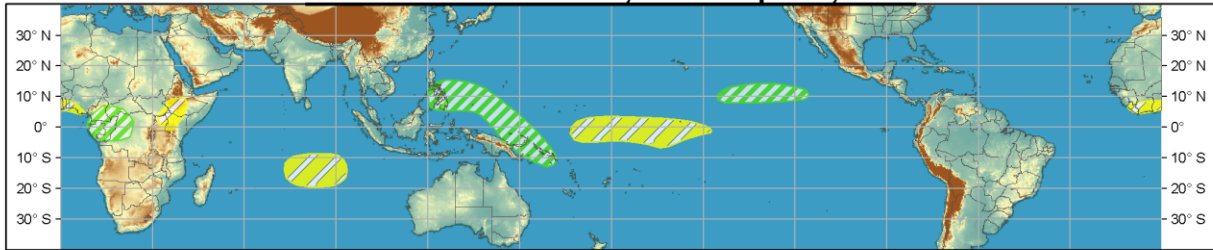
# Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



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



## Week 2 - Valid: Mar 28, 2018 - Apr 03, 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: 03/20/2018

Forecaster: Artusa

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.



The MJO signal was weak during the past 7 days, and was destructively interfering with a westward-moving Equatorial Rossby Wave (ERW). The latest observation places the center of the enhanced convection inside the unit circle in RMM phase space. With regard to predicted phase, dynamical model guidance shows a wide array of possible solutions, emphasizing much uncertainty. The NCEP GEFS model predicts the most likely area for the MJO signal over the next two weeks will be over the vicinity of the Maritime Continent, though several ensemble members favor the emergence of a weak subseasonal signal outside the unit circle in phase 6 (Western Pacific). The ECMWF solution predicts a very weak signal over the eastern Indian Ocean and Maritime Continent region (phases 3 to 5) during Week-1, followed by increasing spread among ensemble members, with many coming out of the unit circle over the Western Pacific and the Western Hemisphere (phases 7,8). The CFS model indicates a weak intraseasonal signal during Week-1, which then amplifies significantly in the Western Pacific (phase 7), and propagates eastward into phase 8 (Western Hemisphere) during Week-2. The Constructed Analog statistical tool anticipates a slowly progressive, weakening MJO signal across the Indian Ocean and Maritime Continent during the two-week forecast period. In general, the subseasonal signal is expected to have a limited impact in phases 5 and 6 (eastern Maritime Continent/Western Pacific) during Week-1, and phases 6 and 7 (Western Pacific) during Week-2.

There were two tropical cyclones (TCs) in progress at the time of this writing. TC 14S (Eliakim), now a tropical storm near Madagascar, is forecast to track slowly southeastward out over the open waters of the South Indian Ocean. The second system, TC 15S (Marcus) is currently a strong cyclone off the Kimberley Coast of western Australia, with maximum sustained winds of 110 knots. The Joint Typhoon Warning Center (JTWC) predicts Marcus will continue to head west before recurving southward well off the West Coast of Australia during the next 5 days. For the upcoming Week-1 forecast period, three TC's are expected to develop, all in the Southern Hemisphere. One region of potential TC development is the South Indian Ocean (10S-20S/80E-100E, moderate confidence); a second is over the Gulf of Carpentaria and Arafura Sea just north of Australia (5S-15S/125E-145E, high confidence); and the third region is over the Coral Sea northeast of Australia (10S-20S/155E-175E, moderate confidence). Another area of potential TC development, though only with low confidence, is about 15 degrees northeast of Papua New Guinea. This area is also being monitored with the Taiwan Typhoon Tracker tool, with most scenarios recurving any potential TC northeast of the Philippines.

Rainfall forecasts for Weeks 1 and 2 are based primarily on consensus areas between ECMWF, GFS, and CFS model precipitation, anticipated locations of TCs, and the most likely location of the subseasonal signal as noted earlier. During Week-1, a mid-level trough digging southeastward towards the Hawaiian archipelago is forecast to bring a moderate risk of heavy rainfall to the Islands. Elsewhere, an expected southwesterly subtropical flow is likely to bring heavy rain (3-7 inches) to central and southern portions of California, with the Sierras anticipated to receive 24-48 inches of new snow above about 8000 feet in elevation. During Week-2, the various model precipitation forecasts agree only on a few areas for anomalous precipitation, with the primary MJO-related signal for above-average rainfall confined to the Maritime Continent/Western Pacific region. Areas where below-average rainfall are anticipated include the central South Indian Ocean (in the wake of the forecast TC during Week-1), and along the Equator from about 165E to 145W (low frequency La Nina dry signal).

Forecasts over Africa are made in consultation with the CPC international desk and can represent local scale conditions in addition to global scale variability.