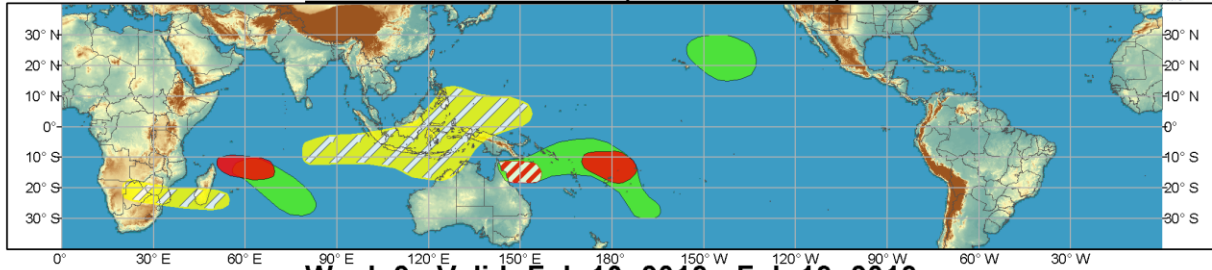




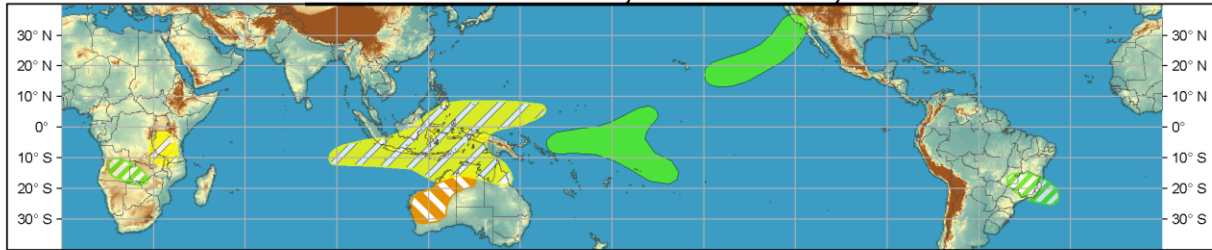
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



Week 1 - Valid: Feb 06, 2019 - Feb 12, 2019



Week 2 - Valid: Feb 13, 2019 - Feb 19, 2019



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. |

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.

Produced: 02/05/2019

Forecaster: Pugh



The MJO remains active during early February with its enhanced phase centered over the Pacific Ocean. According to the RMM index, the eastward propagation stalled in Phase 7 which is due to the interaction of the MJO with a strong Rossby wave. Enhanced convection developed recently near the Date Line as a result of the constructive interference between the MJO and Rossby wave. During the past 7 days (January 28 to February 3), OLR anomalies indicate broad-scale enhanced (suppressed) convection over northeast Australia along with the western and central equatorial Pacific (Indian Ocean).

Dynamical model forecasts are in good agreement that eastward propagation of the MJO resumes with enhanced convection progressing east over the Western Hemisphere during the next two weeks. The ECMWF model remains the fastest with this progression with many of its ensemble members depicting the MJO reaching Phase 1 late in Week-2. The precipitation outlook during the next two weeks is based on MJO composites for phases 7/8/1, precipitation forecasts from the CFS, ECMWF, and GFS models, and influence from predicted tropical cyclones. Based on these factors, above-average rainfall is likely across parts of the South Indian Ocean, the Coral Sea region, and parts of the South Pacific during Week-1. Above-average rainfall is forecast to persist across the South Pacific through Week-2, while below-

average rainfall expands across the Maritime Continent and northern Australia. This favored area of below-average rainfall for Week-2 includes excessively wet areas of northern Queensland. Suppressed convection has persisted across parts of southern Brazil where 30-day precipitation deficits exceed 150 mm. As the enhanced phase of the MJO shifts east across the Western Hemisphere, much needed rainfall is forecast to develop across southern Brazil by mid-February. Above-average temperatures are most likely during Week-2 across parts of Western Australia and the Northern Territory as the suppressed phase of the MJO shifts east.

Tropical cyclone 12S developed on February 5 at 15.6S/64.5E in the southwest Indian Ocean. This tropical cyclone (TC) is forecast to strengthen as it tracks southeast across the southern Indian Ocean. The GFS and ECMWF models indicate a second TC forming just to the northeast of Madagascar at the beginning of Week-1. Model guidance remains consistent that at least one and perhaps two TCs will track poleward across the southwest Indian Ocean during the next week. Moderate confidence exists for TC development across the South Pacific and Coral Sea region (near Queensland) which is consistent with MJO evolution. Although confidence is too low to forecast additional TC development during Week-2, the South Pacific and near the Kimberley Coast of Australia are two areas to monitor.

An amplified upper-level trough extending south from the middle latitudes is likely to result in above average rainfall to the east of the Hawaiian Islands during Week-1. Anomalous moisture, associated with this area of enhanced convection is forecast to spread northeast to southern California by early Week-2. The predicted evolution of the MJO would favor below-average temperatures across the eastern CONUS later in February. Although Week-2 model guidance generally maintains near to above normal temperatures across this region, the CFS and ECMWF models indicate an expansion of below normal temperatures from the central to the eastern U.S. during Week-3.

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