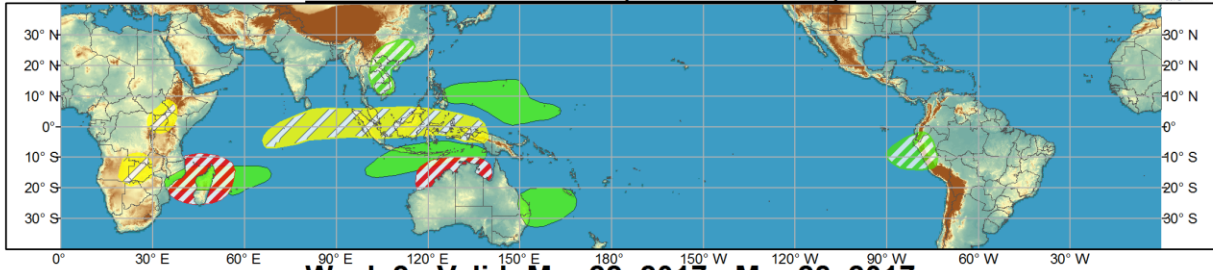




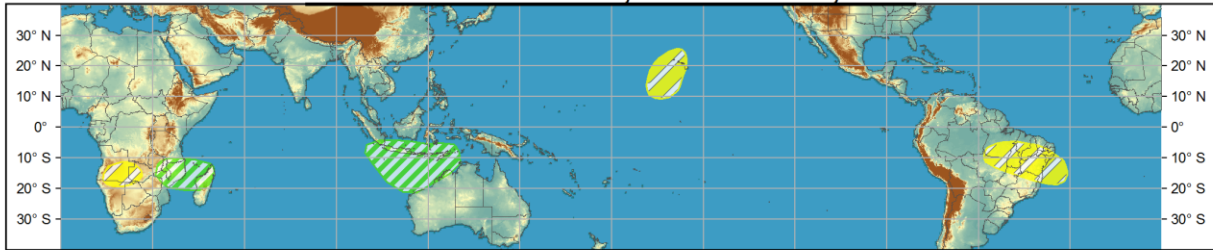
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



Week 1 - Valid: Mar 15, 2017 - Mar 21, 2017



Week 2 - Valid: Mar 22, 2017 - Mar 28, 2017



Produced: 03/14/2017

Forecaster: Allgood

- | 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.



The MJO weakened during the past week, with the RMM-based index receding inside the unit circle, and the CPC velocity potential based index depicting a weaker and less progressive signal. The spatial pattern of upper-level velocity potential anomalies continues to exhibit a somewhat coherent pattern with a dipole of anomalous divergence (convergence) over the Maritime Continent and far western Pacific (Western Hemisphere and the western Indian Ocean), but the zonal width of the enhanced phase appears limited with respect to canonical MJO signals. Multiple westward moving features are evident on OLR time-longitude plots, suggesting that Rossby Wave activity is destructively interfering with the intraseasonal signal. It is likely that the remnant low-frequency signal favoring suppressed convection over the central Pacific is also destructively interfering with the MJO.

Most dynamical model forecast guidance depicts a weak MJO signal over the next two weeks. The bias-corrected GEFS is an outlier, suggesting a weak intraseasonal signal redeveloping over the Indian Ocean during Week-2. A lack of sufficient upper-level ventilation necessary for widespread organized convection, however, makes a fast return of the MJO to the Indian Ocean unlikely. Therefore, the MJO is not anticipated to play a substantial role in the evolution of the global tropical subseasonal pattern during the outlook period.

Tropical Storm Eleven formed briefly over the south-central Indian Ocean on 8 March, attaining maximum sustained winds of 40kt before dissipating on 10 March. Elsewhere, no tropical cyclones formed during the past week. During Week-1 of this outlook period, there is moderate potential for tropical cyclogenesis north of Australia as a disturbance moves from the vicinity of the Gulf of Carpentaria towards the Kimberley Coast. Additionally, there is a low to moderate potential for tropical cyclone development in the vicinity of Madagascar, with several GFS ensemble members depicting tropical cyclone formation over the Mozambique Channel early in the period, and several runs showing development east of Madagascar later in the Week-1 period. There is also some support for tropical cyclone development over the southeastern Indian Ocean during late Week-1, but the potential is too low to include a shape on the outlook at this time. During Week-2, areas of disturbed weather are possible over the southwestern Pacific, but any cyclone development is anticipated to be extratropical in nature.

Due to the absence of a robust MJO signal, forecasts for enhanced or suppressed rainfall in this outlook are based primarily on dynamical model consensus. During Week-1, suppressed convection is favored along the equator from the central Indian Ocean to the central Maritime Continent. Enhanced convection is favored to the north and south of this area, primarily across the northwestern Pacific (including the eastern Philippines and Guam), and the southern Maritime Continent. Enhanced convection is also favored across the southwestern Indian Ocean (including Le Reunion), Madagascar, and coastal Mozambique. A low frequency signal partly related to above-average SSTs over the far eastern Pacific may allow enhanced rainfall to persist over coastal Peru and Ecuador.

There is little dynamical model consensus during Week-2, and the ECMWF and CFS both depict a low amplitude pattern, so forecast coverage and confidence are both reduced for Week-2. Enhanced convection is forecast to persist across the southeastern Indian Ocean, southwestern Maritime Continent, and along the northern coast of Western Australia. There is moderate confidence for suppressed rainfall in the vicinity of Hawaii, particularly the western islands, as well as parts of northeastern Brazil.

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