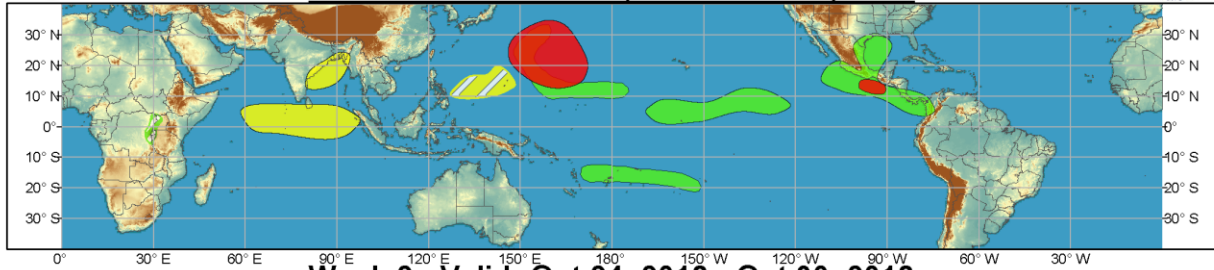




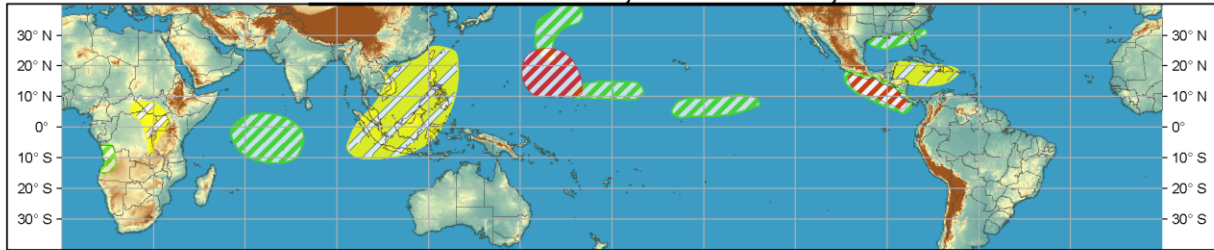
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



Week 1 - Valid: Oct 17, 2018 - Oct 23, 2018



Week 2 - Valid: Oct 24, 2018 - Oct 30, 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.

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: 10/16/2018

Forecaster: MacRitchie



The subseasonal and low-frequency states of the equatorial Pacific are especially interesting this week. The MJO is allegedly in Phase 2, but has weakened substantially over the past few days. Dynamical guidance is in good agreement that it will continue to weaken over the next few days and then re-emerge in Phases 8/1 by the middle of Week-2. However, these forecasts are complicated by the developing El Nino in the Pacific.

El Nino development is usually characterized by convection shifting east of the Warm Pool, leading to positive OLR anomalies over the Maritime Continent/Warm Pool region. Anomalous low-level westerlies are also common in this area during an El Nino as the trade winds weaken (and sometimes reverse sign). The anomalous OLR and low-level winds are spatially and temporally similar to an MJO signal, which can project on to the RMM index. Even if an MJO manages to form under these conditions, the eastward shift in convection and warm SSTs that accompany an El Nino often makes it difficult for the MJO to remain convectively coupled as it passes the Maritime Continent. These similarities are likely to partially explain the models' inability to propagate the MJO through its full cycle. Since it's especially difficult to both evaluate the current state of the MJO and forecast the MJO into Week-2, it has taken a background role in this week's forecast.

There is a high risk of tropical cyclone formation in the West Pacific between 150-170E as multiple lows rotate clockwise around a fairly stationary high pressure system in the area. Both the GFS and ECMWF models suggest that at least one of these lows will develop into a TC in that region during both Week-1 and Week-2. Above-average rainfall is expected to along those tracks during both forecast weeks.

The Eastern Pacific remains active as well with high confidence of a tropical cyclone forming during Week-1 and a moderate confidence of formation during Week-2, especially towards the end of the period. Instability in this region, and in the Gulf of Mexico, is expected to lead to significant rainfall during the forecast periods as well.

The evolution of El Nino, as well as the potential for MJO development during Week-2, favor below-average rainfall over the Maritime Continent and above-average rainfall in the western Indian Ocean.

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