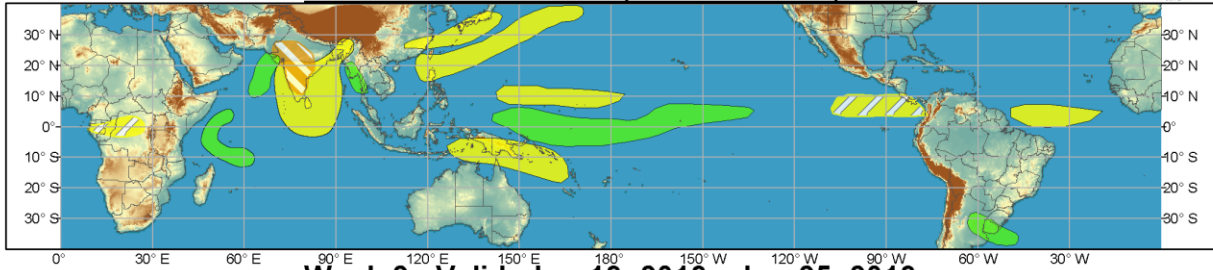




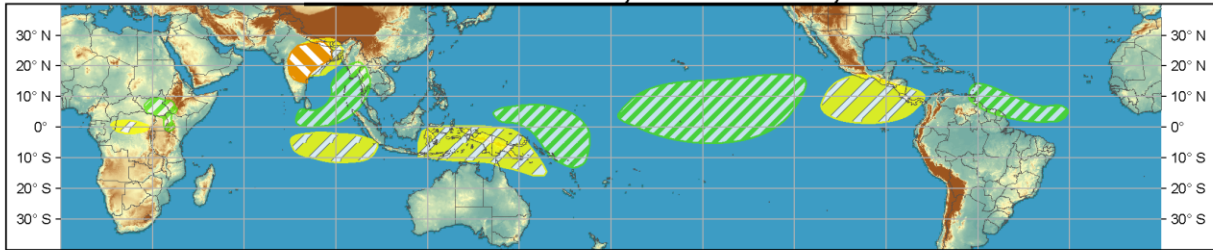
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



Week 1 - Valid: Jun 12, 2019 - Jun 18, 2019



Week 2 - Valid: Jun 19, 2019 - Jun 25, 2019



Confidence		Produced: 06/11/2019
	High Moderate	Forecaster: MacRitchie
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 has moved slowly during the past week and is still over the eastern Indian Ocean. Model guidance is in good agreement that the MJO will speed up and strengthen over the next few days and make its way across the Maritime Continent by the end of the Week-2 period. The anomalous convection over the Indian Ocean is currently enhanced by a superposition of the MJO, Kelvin, and equatorial Rossby waves; but this is expected to weaken as the higher frequency waves move out of the region. The MJO during the next couple of weeks is expected to be dominated by its upper-level circulation; the models predict that the MJO will project more strongly on the 200-hPa zonal wind field than the OLR field.

The location and strength of the MJO are likely to play an important role in the development of the monsoon over India during the next several weeks. Anomalously warm waters in the Arabian Sea have led to anomalous easterlies over the Indian Ocean and a significantly delayed monsoon onset. The CFS forecasts anomalous dryness to continue over India through Week-1 and most of Week-2, which suggests that the monsoon onset will be delayed further. Late in Week-2, and into Week-3, the CFS builds anomalous moisture over southern India. If correct, this would jibe with the MJO forecast since the MJO-scale dry signal over India should diminish as the MJO propagates over the Pacific.

Tropical cyclone Vayu is located off the west coast of India and forecast to move northward, hugging the Indian coast by the end of Week-1. Models suggest that the rain field around this cyclone will be narrow and not likely to produce significant rainfall over a large area. Elsewhere, no tropical cyclones are forecast to form during the next two weeks and below normal rainfall is forecast over the eastern Pacific during both Weeks 1 and 2.

The main features of the Week-1 forecast are enhanced rainfall west of India related to TC Vayu's track. Above normal temperatures and below normal rainfall are expected over much of India as the monsoon continues to be delayed. Above normal precipitation is expected over mostly over southern Myanmar as well. Elsewhere, below normal precipitation is expected over parts of the northwestern Pacific and Papua New Guinea and the northern Solomon Islands. Above normal rainfall is forecast across the equator in-line with above normal SSTs related to El Nino.

During Week-2 the area of below normal rainfall over India should shift northward as the monsoon slowly works its way northward in the wake of the MJO. Also related to the MJO, below normal rainfall is expected to continue over the southern Maritime Continent and above normal rainfall is expected over the central Pacific.

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