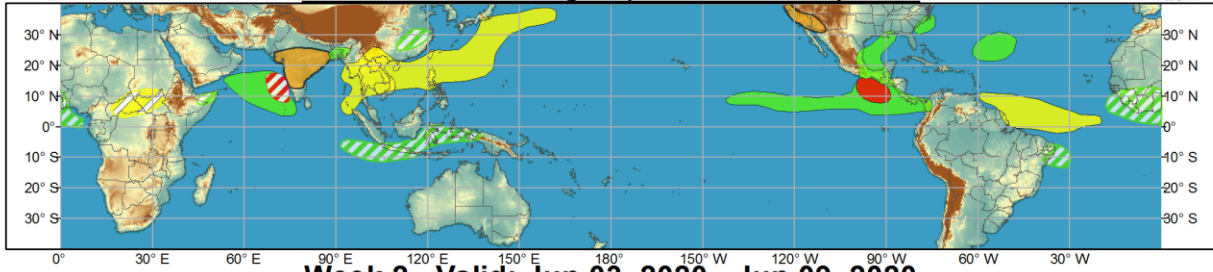




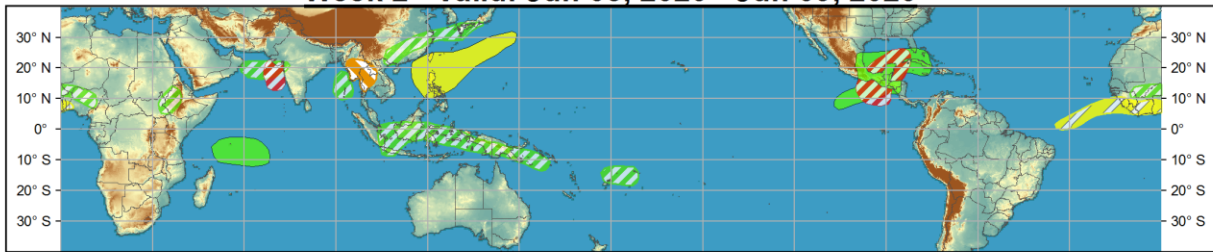
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



Week 1 - Valid: May 27, 2020 - Jun 02, 2020



Week 2 - Valid: Jun 03, 2020 - Jun 09, 2020



Produced: 05/26/2020

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.



While an active intraseasonal signal is still present in the CPC velocity potential based MJO index as well as the RMM-based MJO index, the overall pattern has become increasingly incoherent over the past several days. The amplitude of the enhanced convective envelope in particular has decreased as a Kelvin wave propagated across the Pacific, well ahead of the rest of the signal. Despite the regime of enhanced trade winds across much of the Pacific basin, the Kelvin wave appears to be convectively coupled with the North Pacific ITCZ, and a zonally narrow band of anomalous westerlies is present south of Mexico. Dynamical model MJO index forecasts track this Kelvin wave better than any other coherent feature, with most model forecasts showing the signal returning to the Indian Ocean towards the end of Week-2 or weakening. Based on these recent observations and forecasts, a canonical MJO evolution from the Maritime Continent to the Pacific is not anticipated, but the Kelvin wave is likely to influence the tropical convective pattern, particularly across the Western Hemisphere.

Cyclone Amphan made landfall over West Bengal on 20 May at Category-2 intensity on the Saffir-Simpson scale, causing considerable damage across northeastern India and Bangladesh. This single tropical cyclone generated more than double the climatological accumulated cyclone energy (ACE) observed over the North Indian Ocean basin during the entire Spring season. On 21 May, Tropical Storm

Mangga formed over the South Indian Ocean. Following extratropical transition and merging with a cold front, the remnants of TS Mangga generated widespread wind damage across Western Australia.

During Week-1, as the Kelvin wave crosses the East Pacific and with upper-level high pressure already in place, conditions will become increasingly favorable for tropical cyclone formation over the East Pacific basin. The NHC is monitoring an area just south of Mexico and Guatemala, and forecasts a 70-percent chance of a tropical depression forming in this region over the next 5 days. More GEFS ensemble members depict tropical cyclone activity at days 5-8 than days 1-4; therefore, there is high confidence for tropical cyclogenesis in this region during the Week-1 period. As the Kelvin wave progresses eastward, the favorable area is anticipated to expand to include the Gulf of Mexico and western Caribbean. Numerous GEFS ensemble members depict the formation of a tropical cyclone in this region, with a clustering of tracks bringing the potential cyclone towards the Florida peninsula, the northern Gulf Coast, or as far east as central Cuba and the Bahamas. There is a high degree of uncertainty regarding this forecast, and interests in the southeastern US, Mexico, and the western Caribbean should monitor the latest forecasts. A moderate potential for tropical cyclone formation is forecast for the Week-2 period extending from the East Pacific south of Mexico to the Bay of Campeche, southeastern Gulf of Mexico, and the far northwestern Caribbean. Elsewhere, dynamical models show a moderate potential for a disturbance west of India to become a tropical cyclone as it moves slowly northward across the Arabian Sea. Several GEFS ensemble members depict a second tropical cyclone formation near Oman; however, confidence is too low at this time to include a second Arabian Sea formation hazard on the outlook.

Given the increasingly incoherent presentation of the intraseasonal signal, the forecasts for above- and below- normal precipitation are based on a consensus of bias-corrected CFS and ECMWF guidance, and potential tropical cyclone activity discussed above. Suppressed rainfall is favored across southeast Asia, the northwestern Pacific basin, and the equatorial central Atlantic during Week-1, while the central Maritime Continent and the East Pacific and western Atlantic basins are favored to be active. A disturbance near the US Southeast coastline may bring heavy rainfall to the Carolinas early in the period. A heat wave is ongoing across much of India, and is favored to continue early in the Week-1 period. Excessive heat is also likely across the US Southwest.

During Week-2, suppressed rainfall is favored to continue over the northwestern Pacific region, while a moderate potential for enhanced rainfall shifts eastward across the Maritime Continent and the South Pacific, including American Samoa. An area of enhanced rainfall is possible over the western Indian Ocean north of Madagascar as the Kelvin wave returns to the Indian Ocean. While excessive heat is favored to diminish over India, a period of hot weather is possible across parts of Southeast Asia.

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