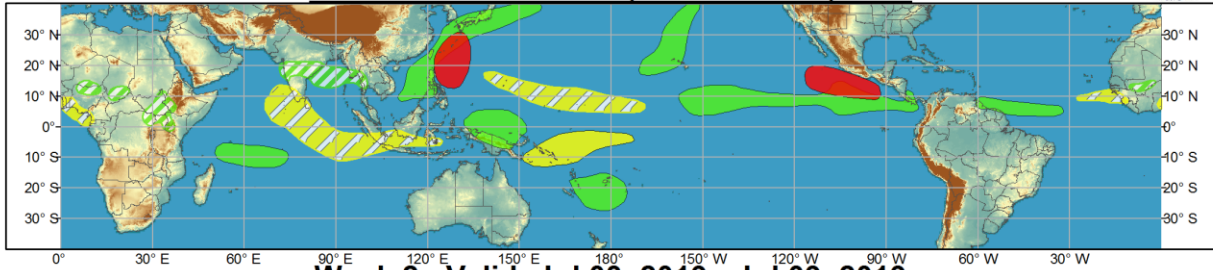




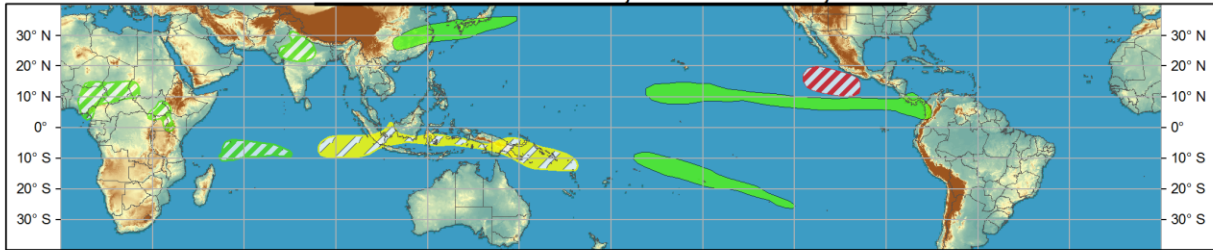
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



Week 1 - Valid: Jun 26, 2019 - Jul 02, 2019



Week 2 - Valid: Jul 03, 2019 - Jul 09, 2019



Produced: 06/25/2019

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 over the past week, with the remnant enhanced phase now over the West Pacific. Based on the abrupt "left turn" in the Wheeler-Hendon diagram of the RMM index, the primary culprit for this weakening seems to be influences from a strong Rossby wave over the central Pacific. The easterly (suppressed) phase of this Rossby wave projects strongly onto time-longitude plots of low-level zonal wind anomalies, and the destructive interference with the MJO enhanced convective envelope reduces the potential for a second widespread westerly wind burst event similar to what occurred in May. Dynamical model MJO index forecasts depict a continuation of weak MJO activity over the next two weeks. Despite the weak MJO presentation in the OLR and low-level wind fields, the signal remains fairly robust in the upper-levels. This suggests that the MJO may continue propagating eastward and the low-level response may become more apparent as the MJO enhanced phase and the Rossby wave suppressed phase diverge. Therefore, the MJO is anticipated to continue playing a role in the evolution of the global tropical convective pattern, but with reduced confidence compared to previous weeks.

No new tropical cyclones formed during the past week, and both the West and East Pacific basins have had suppressed activity during the past month. The Joint Typhoon Warning Center is currently monitoring a disturbance east of the Philippines (94W), and there is a high potential for brief tropical

cyclogenesis before the system becomes entrained in the Meiyu Front near southern Japan. The National Hurricane Center is monitoring a second disturbance south of Mexico (93E), and there is a high potential (70 percent) for tropical cyclone development over the next five days. Later during the Week-1 period or early in Week-2, dynamical models support the potential for a second East Pacific tropical cyclone forming close to the southern coast of Mexico, east of 93E. Neither potential East Pacific tropical cyclone is forecast to track close to the Baja California peninsula, and therefore little impact on the Southwest U.S. monsoon is anticipated. Tropical cyclone development is possible over the central Pacific southeast of Hawaii during Week-2, but the latest GEFS runs have indicated a reduced potential for formation. Elsewhere, there is insufficient confidence to forecast likely regions for additional tropical cyclone development.

Forecasts for above- and below-average precipitation were made using a consensus of dynamical model forecast information, anticipating continued MJO propagation to the East Pacific and Western Hemisphere. The CFS and ECMWF were quite consistent during Week-1, allowing for a fairly detailed depiction of areas favorable for anomalous precipitation. Robust cross-equatorial flow was observed over the west-central Indian Ocean over the past several days, which increases the potential for northward advancement of the delayed South Asian Monsoon. While model forecasts depict above-average precipitation over central India, below-average rainfall is favored to continue across parts of southern India. Suppressed rainfall, partly due to Rossby wave activity, is forecast for Guam and adjacent areas of the Northwest Pacific, while areas of above-normal rainfall are forecast for the Philippines, Taiwan, and Japan, due to interactions between 94W and the Meiyu Front, along the equator near New Guinea due to MJO activity, and across parts of the South Pacific, including American Samoa. Enhanced rainfall is favored for Hawaii's western islands, and enhanced ITCZ precipitation is forecast over the East Pacific and over parts of northern South America.

During Week-2, the ECMWF favors enhanced rainfall over northern India and the southwestern Indian Ocean, while generally suppressed convection is forecast across the Maritime Continent south of the equator. The MJO may contribute to continued active ITCZ regions over the central and eastern Pacific, while enhanced rainfall associated with the Meiyu front is expected to continue across parts of East Asia and Japan.

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