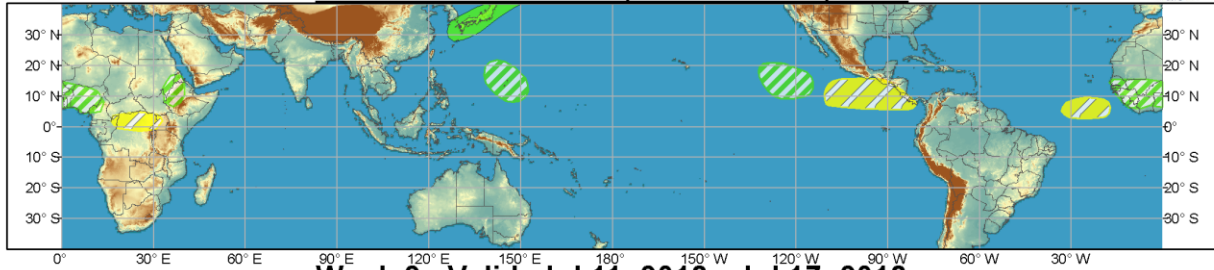




Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



Week 1 - Valid: Jul 04, 2018 - Jul 10, 2018



Week 2 - Valid: Jul 11, 2018 - Jul 17, 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: 07/03/2018

Forecaster: Artusa



There is a weak MJO signal apparent in both the RMM-based and CPC velocity potential-based indices, with the enhanced (suppressed) phase over Africa and the Indian Ocean (Pacific). The presence of an intraseasonal signal is more apparent in the wind field than the convective anomalies. During the past 1-2 weeks, westward moving modes of variability, such as tropical cyclones (TCs) and equatorial Rossby waves (ERWs), have interfered with eastward moving modes such as the MJO and Kelvin waves. At present, Kelvin waves are over the west-central Pacific and near 60W over the Atlantic. Uncertainty is high among the dynamical model RMM-index forecasts. The GEFS predicts a weak subseasonal signal, well within the unit circle during Week-1, with possible strengthening of the signal during Week-2 as it emerges over the eastern Indian Ocean/western Maritime Continent region and then propagates across phase 4 and into phase 5. The CFSv2 predicts a weak signal that remains within the western half of the unit circle (phases 1, 8 and 7) during the two-week forecast period. The Canadian and ECMF RMM-based index forecasts, like the GEFS, depicts a weak intraseasonal signal within the unit circle during Week-1; with an emerging, amplifying signal somewhere between phases 3 (Canadian) and 5 (ECMF) during Week-2, with subsequent eastward propagation. Based on these index projections, there appears to be a reasonable consensus for a gradually intensifying subseasonal signal that emerges from the unit circle in the general vicinity of the Maritime Continent region.

TC activity recently ramped up over the Northern Hemisphere. Category-1 Typhoon Prapiroon (also known as Florita) moved over the southern Japanese islands of Okinawa, and is approaching the Sea of Japan. The Joint Typhoon Warning Center (JTWC) based in Pearl Harbor predicts Typhoon Prapiroon will gradually curve more to the northeast as it moves across the Sea of Japan and Hokkaido and weakens. A tropical depression (10W) formed in just the past 24 hours over the western North Pacific about 200 nautical miles south-southeast of Guam. This system is predicted by JTWC to track northwestward across the Marianas, with a slight shift to the north possible after departing the island chain. 10W is forecast to steadily intensify, with maximum sustained winds possibly reaching 100 knots near 22N/140E by 8 July. Over the East Pacific basin in late June, Tropical Storm Emilia formed from a tropical wave that crossed over Costa Rica. It reached its peak intensity of 60 mph approximately 600 miles southwest of Manzanillo, Mexico. Tropical Storm Emilia eventually succumbed to strong vertical wind shear on 2 July. The next system to develop, Hurricane Fabio, is currently (8am PDT, 3 July) about 650 miles southwest of the southern tip of Baja California. Peak sustained winds are near 105 mph, and additional strengthening is possible today. For Week-2, JTWC is indicating potential tropical cyclogenesis in the western North Pacific, slightly to the east of where TD 10W formed. Another area that needs to be watched is the East Pacific later in the Week-2 period, as the Kelvin wave currently over the west-central Pacific reaches that area.

In the absence of robust MJO-related convective anomalies in recent observations, the forecasts for enhanced or suppressed rainfall rely primarily on a consensus of dynamical model forecasts and anticipated TC activity. Early in Week-1, Typhoon Prapiroon is expected to bring above-average rainfall to Japan as it passes nearby. Tropical Depression 10W is forecast to bring above-average rainfall to the Mariana Islands and elsewhere along its projected northwesterly track. Over the East Pacific, Hurricane Fabio is expected to be accompanied by heavy rain as it tracks towards the northwest. Two areas of below-average rainfall are indicated by the CFS and ECMWF precipitation forecasts for Week-1; the far eastern portions of both the tropical East Pacific and tropical eastern Atlantic. During Week-2, the best chances for above-average rainfall associated with the intraseasonal signal lie within a broad region encompassing the Bay of Bengal, Maritime Continent, and far western Pacific. This general area is where the RMM-based index forecasts predicted the potential emergence of an amplifying MJO signal during Week-2, and these forecast areas are also common to both CFS and ECMWF precipitation predictions. Above-average rainfall is also anticipated in the American Southwest and adjacent portions of northwestern Mexico, associated with the early stages of the summer monsoon. Precipitation forecasts also favor an area of below-average rainfall over the eastern tropical Pacific.

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