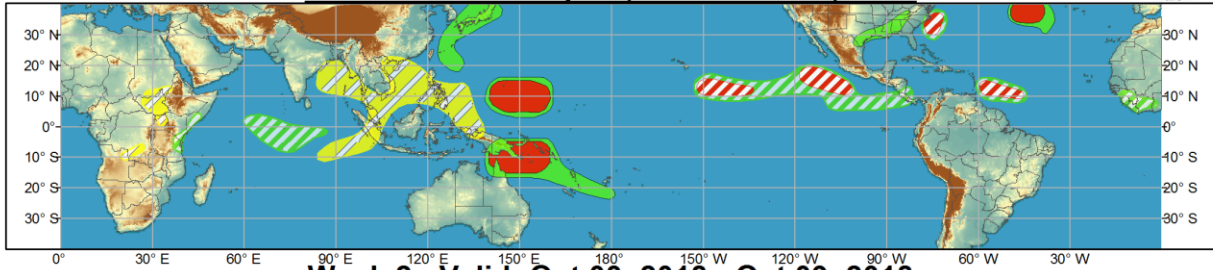




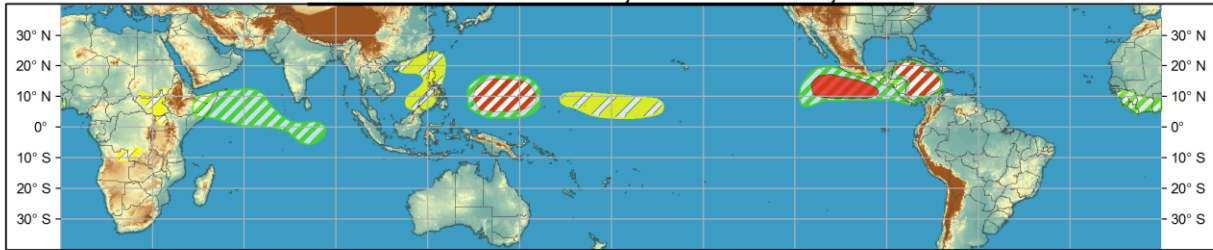
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



Week 1 - Valid: Sep 26, 2018 - Oct 02, 2018



Week 2 - Valid: Oct 03, 2018 - Oct 09, 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: 09/25/2018
Forecaster: Artusa



RMM-based MJO index values indicate the MJO has been weak and incoherent during the past 40 days, with values mostly confined within the unit circle. The very latest observations depict the emergence of an intraseasonal signal in Phase 8 (Western Hemisphere). Though there are variations on this theme, the GEFS, ECMWF, CFS, and JMAN dynamical models generally favor some increase in signal amplitude, as well as eastward propagation of the signal across Phases 8 and 1 (Western Hemisphere and Africa). The CFS predicts the largest amplitude of all these solutions. The CMET (Canadian model) predicts weakening of the intraseasonal signal back into the unit circle with eastward propagation across Phases 8 and 1, though there is very large spread among ensemble members. CPC's Velocity Potential-based MJO index indicates upper-level divergence and associated enhanced convection from about 150E eastward across the Americas to near the Prime Meridian, and upper-level convergence and associated suppressed convection over the Indian Ocean. CFS forecasts that use modal decomposition to separate signals into their various components indicate likely continuation of destructive interference from equatorial Rossby Waves (ERWs). Additional interference is expected from westward-moving tropical cyclones (TCs).

There are a number of areas ripe for TC development during Week-1. According to the Joint Typhoon Warning Center (JTWC), twin TC development is possible in the far western Pacific, straddling the equator, both with high confidence. The predicted coordinates are 5N-15N, 140E-160E and 5S-15S, 140E-160E. In the east-central Pacific, the National Hurricane Center (NHC) and the Central Pacific Hurricane Center (CPHC) are monitoring the potential for TC development between about 10N-15N, and 133W-153W (moderate confidence). Over the far eastern Pacific, TC formation is possible (10N-20N, 102W-118W) with moderate confidence. These last two areas of potential formation may be associated with the budding MJO signal expected over the Western Hemisphere. In the Atlantic basin, three areas of potential TC development are anticipated. One is over the central Atlantic (near Post-Tropical Cyclone Leslie) between 34N-42N, 38W-48W (high confidence). A second area of possible development is off the Southeast U.S. coast (30N-37N, 72W-78W, moderate confidence), and a third area is east of the Windward Islands (9N-15N, 45W-60W). In Week-2, JTWC favors TC development, again in the far western Pacific, between 5N-15N, 135E-155E, with moderate confidence. There is a high risk of TC development in the eastern Pacific between 10N-17N, 93W-115W. Finally, there is a moderate risk of TC formation for the western Caribbean Sea later in Week-2.

Week-1 and Week-2 rainfall forecasts are generally consistent with areas of agreement between the CFS and ECMWF models, areas of expected TC development, and expected MJO impacts. In Week-1, the predicted area of above average rainfall in the vicinity of Japan (high confidence) is related to the forecast track of what is currently Super-typhoon Trami, which currently has maximum sustained winds of about 130 knots. Across the southern United States, from Texas to Tennessee, there is high confidence for above-average rainfall (2-4 inches, locally heavier), related to the approach of several cold fronts. The predicted Week-2 rainfall areas are generally tied to anticipated TC activity, the intraseasonal signal, and a broad area of low pressure predicted over 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.