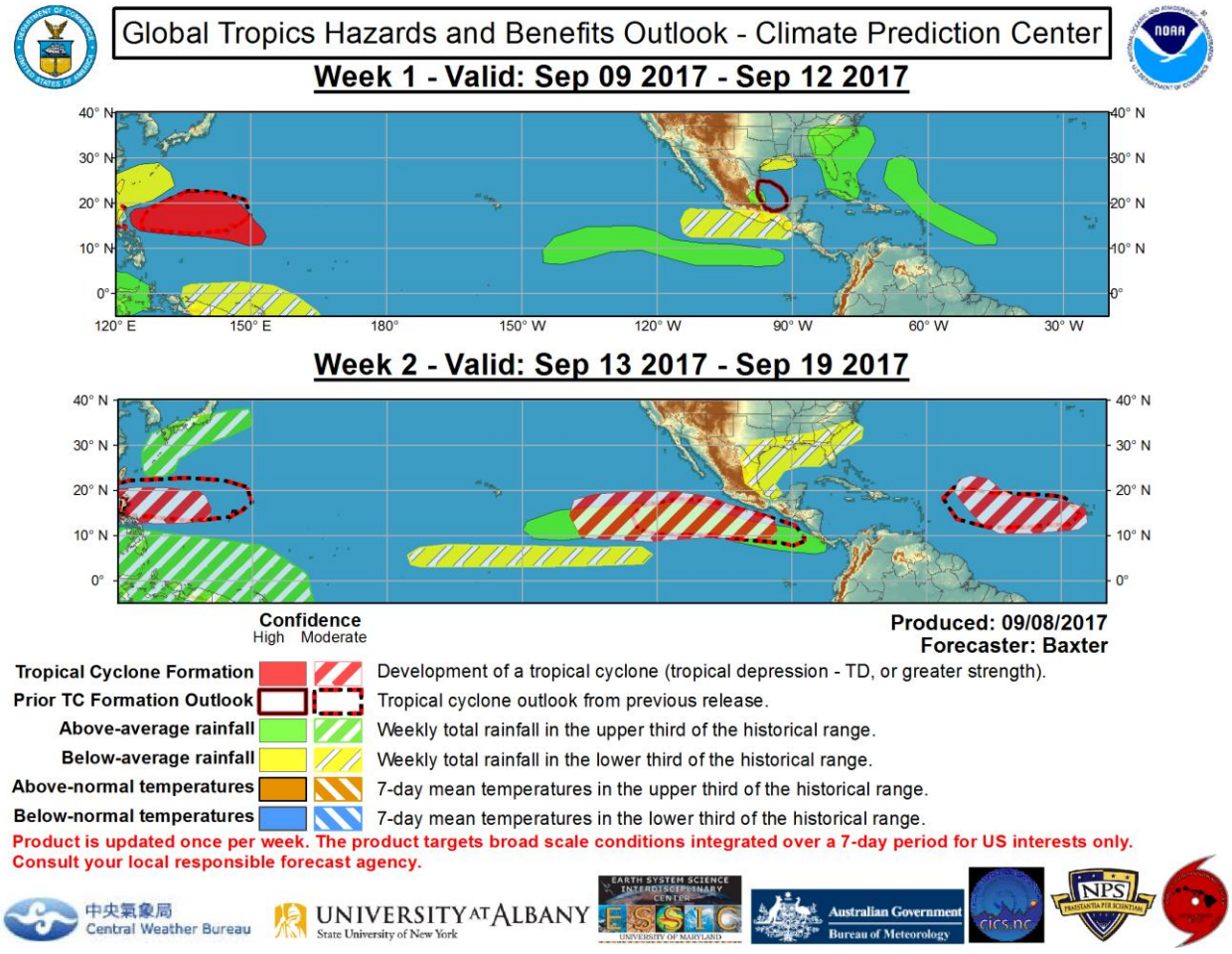


The forecast MJO evolution remains unchanged from the initial discussion, and the overall pattern over upper-level tropical divergence has now transitioned to a notable wave-2 pattern. The MJO, therefore, has no bearing on the changes made in the updated forecast, which focuses on TC genesis and forecast tracks.

Hurricane Katia formed over the southwestern Gulf of Mexico, and is forecast to make landfall over eastern Mexico this evening before rapidly dissipating. Hurricane Jose has strengthened to a Category 4 hurricane over the Atlantic, and is forecast to recurve well east of North America over the coming days. However, it is forecast to threaten the northern Leeward Islands, including Barbuda and Antigua, which were recently impacted by Hurricane Irma. Additionally, some ensemble solutions resume a westward track with Jose following the recurvature; this needs to be monitored over the coming days. Hurricane Irma is forecast to make landfall over South Florida Sunday morning, and continue northwestward up the Florida Peninsula.

The Joint Typhoon Warning Center has issued a formation alert for a tropical disturbance over the West Pacific, which leads to increased confidence for TC formation relative to the original outlook. There is a moderate risk of formation over parts of the West Pacific that continues into the updated Week-2 period.

During Week-2, TC formation is still possible over both the Atlantic and East Pacific basins. Confidence remains moderate, and early indications are that any TC in the Atlantic will take a northwestward path.

Areas favoring above- or below-average rainfall are updated to reflect the latest forecast TC tracks, as well as the consensus between the ECMWF, CFS, and GEFS ensembles.

The original discussion, issued on September 5, follows below:

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The MJO signal, after showing some signs of organization, has again become weak and less coherent. The RMM index is within the unit circle, indicating weak MJO activity, while the CPC velocity potential index places the enhanced phase over the Maritime Continent and far western Pacific. The latter can be used to track a longer-lived upper-level MJO circulation footprint as far back as July. Analyzing the 200-hPa zonal wind fields alone places the enhanced MJO phase over the West Pacific. The OLR and low-level wind fields have been noisy, making attributing observed tropical rainfall anomalies to MJO activity difficult. The dynamical model guidance is in fairly good agreement on weak MJO activity persisting over the next week, with the GEFS focusing on an enhanced convective signal over the Western Hemisphere and Africa during Week-2. The ECMWF maintains a weak RMM signal throughout the period. The expectation is that the MJO will not play a major role in the precipitation outlook over the next two weeks, but could modulate tropical cyclone activity especially over the Western Hemisphere. Additionally, the latest coupled dynamical model guidance has trended toward an enhanced Walker Circulation developing during the course of the month and persisting through autumn.

Over the past week, Tropical Storm Lidia formed on 31 August over the East Pacific and tracked along the west coast of Baja California before dissipating. Tropical Storm Mawar formed on 31 August over the South China Sea and made landfall over Southeast China. Tropical Depression Nineteen formed just northeast of the Philippines on 4 September but quickly dissipated. The Atlantic Basin has remained active with Hurricane Irma, now a Category 5 system, forming on 30 August over the Main Development Region (MDR). Tropical Storm Jose developed over the MDR on 5 September.

Two regions are highlighted for potential TC development during Week-1. An area of disturbed weather currently has a 70% chance of development over the next 5 days. Any system here is expected to dissipate by the weekend and may interact with Hurricane Irma. A moderate risk of TC formation is indicated over parts of Northwest Pacific; any formation here would be late in Week-1. During Week-2 development is possible in all three of the major basins, not surprising given the time of year. Environmental conditions are forecast to be more favorable for formation in both the East Pacific and over the Atlantic MDR, consistent with the evolution of the MJO velocity potential signal. The Week-1 shape over the West Pacific continues into Week-2 with some westward expansion.

The precipitation outlook for Week-1 is informed by forecast tracks of Hurricane Irma and Tropical Storm Jose over the Atlantic basin. Below-average precipitation is likely over recently flooded portions of the central and western Gulf Coast. Forecast shapes over the Eastern Hemisphere are informed by model consensus among the GEFS, CFS, and ECMWF. Over the East Pacific, below-average rainfall is consistent with reduced tropical cyclone activity over the MDR and southward displaced ITCZ.

During Week-2 moderate confidence forecast shapes are produced based on the consensus between the ECMWF and GEFS calibrated precipitation guidance. The dipole between enhanced convection over the Maritime Continent and suppressed convection over the central Pacific does appear consistent with the forecast low-frequency state depicted in the latest coupled dynamical guidance on subseasonal to seasonal time scales.

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