

The MJO remains largely incoherent with the large-scale velocity potential anomaly field exhibiting a wave-2 pattern. Changes to the forecast involve fairly major changes in the Atlantic, where model guidance currently suggests a low to moderate risk of TC formation over parts of the western Caribbean and Bay of Campeche. Elsewhere in the Atlantic, odds for TC formation are generally diminished with respect to the initial outlook. There is a decidedly low risk of cyclogenesis over the main development region (MDR) during the remainder of Week-1, though there are elevated odds for above-average rainfall in that region. In Week-2, odds for TC formation remain elevated in the far eastern Pacific near the coast of Mexico. Model guidance currently suggests that any TC formation in the Atlantic would be fairly far north, though the probability of formation appears to be low enough to warrant removal of the moderate risk in that region.

The precipitation shapes have been updated to reflect the latest model guidance and some new information regarding any coherent subseasonal modes of variability.

The original forecast discussion follows:

The MJO remained weak as the atmospheric circulation is not exhibiting a pattern coherent with a strong MJO. The CPC Velocity Potential Index and the Wheeler-Hendon RMM Index both indicate a slightly stronger signal than last week, although the atmosphere, at all levels, does not appear to be fully aligned with a stronger MJO. There is evidence of a slow, eastward propagation in the upper-level wind field, but at speeds slower than the MJO. Other coherent modes of subseasonal convective variability, including pronounced Rossby Wave activity, are interfering with any MJO signal. Below-average convection was recorded over the western Pacific, while above-average precipitation was observed over the central Indian Ocean and the East Pacific.

Forecasts for the MJO have a moderate amount of spread, with the GFS indicating the predominance of westward moving features, while the ECMWF, UKEMT, and other models, indicate eastward propagation of a weak signal over the Indian Ocean. Based on recent observations, the weakly enhanced convection over the Indian Ocean seems more plausible, so the forecast is largely based on that set of solutions. The MJO is not expected to play a large role in the upcoming circulation pattern.

Tropical Storm Cristobal formed near the Bahamas, and Tropical Depression Karina and Hurricane Marie continue to spin over the eastern Pacific. During the next 5 days, Tropical Storm Cristobal is forecast to intensify to hurricane strength and propagate rapidly north, then northeast, passing just west of Bermuda. Hurricane Marie is likely to move northwest, then northward during the next 5 days, with longer range predictions indicating a path toward the California coast, although in a much weakened, barely identifiable state.

Over the Atlantic, a tropical wave about 900 miles east of the Lesser Antilles is moving west, and has a 20% chance of development during the next 5 days. Beyond that, the chances of development are above average for the area near the Greater Antilles. A strong easterly wave is forecast to move off the west coast of Africa later in Week-1, increasing the threat of tropical cyclone formation over the Central Atlantic. That threat continues into Week-2, with support from dynamical models and some statistical tools based on MJO phase. No tropical cyclone development is forecast for the East Pacific during Week-1, with formation odds increased for the area east of 110W during Week-2.

During Week-1, suppressed convection is likely over the western North Pacific and portions of South Asia as the entire Asian Monsoon circulation continues to be weak. Some enhanced convection is likely

across the Maritime Continent. Above-average rains are likely over the East Pacific and Atlantic, associated with tropical cyclones and a slightly enhanced ITCZ southeast of Hawaii.

Suppressed convection is likely to continue over the western North Pacific during Week-2. Enhanced rains are likely over the eastern Pacific, between 120W and 90W, as well as over the Maritime Continent, with the most likely area of enhanced rainfall along the equator.