

The MJO remained incoherent over the past week and this is depicted by both the RMM index and the CPC velocity potential index. The subseasonal coherent tropical varibility continues to be dominated by atmospheric Kelvin wave (KW) activity, the strongest of which currently has its enhanced phase crossing the Americas with the suppressed phase located over the Pacific basin. The pattern overall remains highly influenced by the low frequency El Nino state.

Enhanced convection was observed during the past week across most of the Pacific basin primarily along and north of the equator with suppressed convection evident across the Maritime continent (MC). Moisture from this enhanced Pacific convection interacted with the extratropical circulation in the northern hemisphere and resulted in enhanced precipitation across the southern continental U.S. resulting in flooding rains in some areas. Low-level westerly wind anomalies over the western equatorial Pacific remain strong. Tropical cyclone Dolphin severely impacted Guam and reached super typhoon status during the past week and is currently forecast to recurve into the westerlies over the next day or two and its remnants may impact Alaska during the upcoming week.

Dynamical model forecasts of the RMM index indicate a continued weak MJO signal over the next two weeks as does most statistical forecast tools. The official outlook is based on a combination of El Nino conditions, atmospheric KW activity during Week-1 and model guidance from the GFS, CFS and ECMWF.

Early in the period, strong southerly flow is likely to produce above median precipitation across northern Mexico into the continental U.S. Also during Week-1, the robust atmospheric KW crossing the Americas is likely to enhance convection over portions of west Africa. Model guidance also provides supportive evidence for this area as well. The suppressed phase of this KW may temper convection across some portions of the Pacific basin. Enhanced convection is highlighted, therefore, where model depicts the strongest signal amongst modeling systems. Drier than average conditions are favored for the Caribbean consistent with El Nino and model guidance from the ECMWF and CFS. The Meiyu front is expected to remain enhanced during both Week-1 and Week-2. Consistent with the El Nino base state and model guidance, suppressed convection is forecast for the MC into the far western Pacific for both Week-1 and Week-2. Suppressed convection is forecast to continue for Week-2 over the Caribbean and Americas, consistent with El Nino and model guidance.

Tropical cyclone activity is likely to be limited overall globally during the period but there is some potentiual for tropical development in the eastern Pacific basin late Week-1 into early Week-2 so a moderate confidence area is highlighted. GFS and ECMWF indicate this potential and this is also consistent with the timing of an additional KW in the area.

Depicted area of suppressed rainfall over Africa are produced in collaboration with CPC's Africa Desk.