

The Wheeler-Hendon RMM and CPC MJO indices both suggest a strengthening MJO signal during the past week, with the CPC Index indicating a slightly more robust signal then the RMM based index. The convectively enhanced phase is propagating over the Western Pacific according to both measures. Convection associated with the seasonal progression of the Meiyu front was noted over eastern china, while below-normal convection was observed over most of the Indian Ocean and Western North Pacific. Upper-level velocity potential anomalies depict a wave-1 structure, which projects strongly onto the MJO. There is considerable spread among dynamical MJO index model forecasts, with some models propagating the signal from the Pacific to the Americas and Africa by the end of Week-2 and others depicting strengthening convection over the Western Pacific, potentially related to the evolving ENSO state.

No tropical cyclones formed during the past week. Dynamical models including the GFS and CFS indicate conditions more favorable for tropical cyclone development over the eastern Pacific basin later in the Week-2 period.

During Week-1, enhanced convection associated with monsoonal flow is favored to continue over parts of Southeast Asia, although some measurements of wind speeds over the Horn of Africa indicate the potential for a relaxation in the South Asian Monsoon. Therefore, below-average rains are likely to continue across India. A consistent piece among the highly varied evolutions of the MJO presented by the models indicates that the suppressed phase of the MJO is likely to be centered over parts of the Maritime Continent. Enhanced rains are likely near the Date Line due to the ENSO state, while above average rains over Central America are likely linked to a Kelvin wave. Very strong vertical shear is likely to continue over the western Atlantic, inhibiting the development of tropical cyclones for anywhere but near the immediate southeast U.S. coast, where a couple of model solutions depict a weak circulation.

Forecast uncertainty increases during Week-2 due to the high spread in model guidance resolving the evolution of subseasonal features. Enhanced convection is favored along the equator between 155E and the Date Line, as well as over the eastern Pacific. A below average monsoon is likely to persist into Week-2 over India and Bangladesh.

Forecasts for enhanced or suppressed rainfall over Africa are provided in conjunction with the CPC International Desk, and are based on regional scale monsoonal features. Enhanced odds of above-average rainfall are forecast over Nigeria, southern Cameroon, Gabon and Congo, as well as southwestern Sudan, northwestern South Sudan, and the eastern CAR, mostly linked to enhanced upper-level divergence already building into the region. An enhanced West African Monsoon circulation is anticipated into Week-2.