

The MJO is in RMM Phase 6 and forecast to continue into Phase 7 before decreasing in amplitude around the end of Week-1. Convection in the West Pacific is also enhanced by the intersection of a weak Kelvin wave, equatorial Rossby wave, the MJO, and a warm background state. The MJO forecast in Week-2 is more uncertain, but a weak MJO in RMM Phase 1 could continue to propagate across the Pacific and Western Hemisphere, playing a modest role in the forecast Week-2 precipitation patterns.

There are a few areas of potential tropical cyclone development during both weeks of the forecast period. The highest probabilities of TC development in these regions are around the Week-1/Week-2 cutoff. The first region is in the western Indian Ocean, just northeast of Madagascar. Low pressure, associated with an equatorial Rossby wave, is expected to develop and move south, leading to above normal rainfall along its path. Model guidance suggests that this low will develop into a tropical cyclone. The second area of potential TC development is in the South Pacific, east of the Solomon Islands. The combination of tropical waves mentioned earlier is expected to lead to above normal rainfall in this region during both weeks of the forecast period and tropical cyclone development is possible as vorticity spins up within the bands of enhanced convection.

Elsewhere, there is high confidence of above normal rainfall during Week-1 along the SPCZ and in the northeastern Pacific as an atmospheric river develops off the West Coast of North America. This atmospheric river is forecast to affect the western CONUS and interested parties are encouraged to consult the CPC U.S. Hazards products for more information. Periods of above-normal temperatures are also likely during Week-1 in both western and southeastern Australia. Interested parties are encouraged to consult local weather authorities for more detailed information.

During Week-2, enhanced rainfall is expected to continue along the SPCZ. There is also high confidence in above normal rainfall over the southern Hawaiian Islands and points eastward into the Pacific. There are also areas of below-average rainfall forecast over the Maritime Continent in association with the expected large-scale tropical pattern.

Forecasts over Africa and South America are made both in consultation with the CPC international and therefore can represent local-scale conditions in addition to global-scale variability.