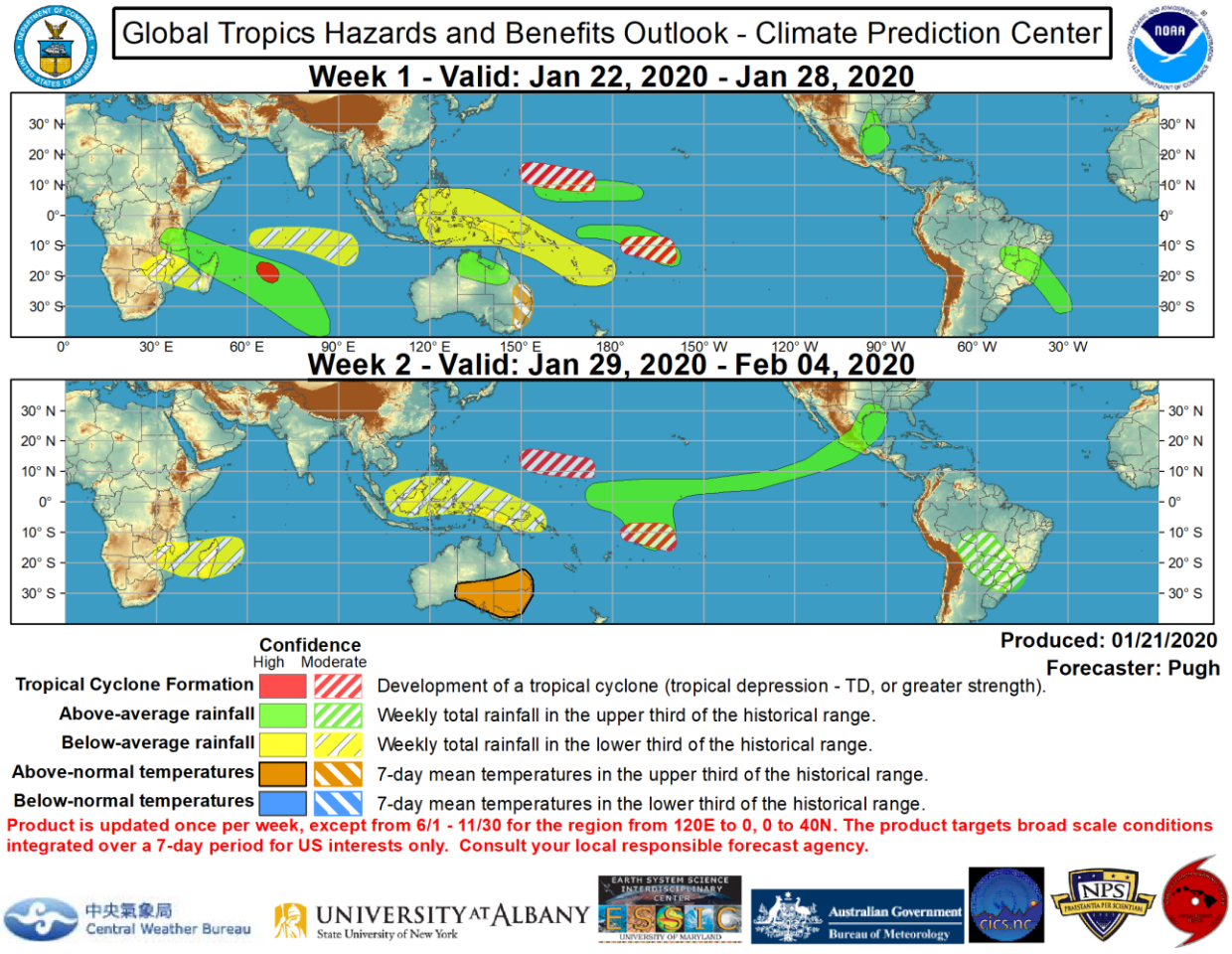

The Madden-Julian Oscillation (MJO) propagated eastward from the Maritime Continent to the Pacific Ocean during mid-January with enhanced (suppressed) convection over the central Pacific (Maritime Continent). However, the coherent Wave-1 spatial pattern in the 200-hPa Velocity Potential anomaly field recently evolved into a Wave-2 pattern as other modes of variability began to exert their influence. Constructive interference between a Kelvin and Rossby wave is resulting in a secondary area of enhanced convection across Africa and the western Indian Ocean. Dynamical model solutions are in good agreement that the amplitude of the MJO RMM index decreases during Week-1. A more stationary pattern of anomalous convection is forecast to develop during Week-2 with enhanced (suppressed) convection remaining across the equatorial Pacific (Maritime Continent). Therefore, the MJO is expected to provide less influence on global tropical rainfall by Week-2.

The MJO likely contributed to the development of a couple of tropical cyclones (TCs) during early to mid-January. Tropical Claudia tracked near the Kimberley Coast of Australia on January 12 and 13 before dissipating as it continued its westward track. Tropical Cyclone Tino tracked near Vanua Levu of the Fiji Islands on January 17 and 18. The current state of the MJO along with predicted enhanced convection during the next two weeks elevates chances of TC development in the South Pacific and West Pacific.

Moderate confidence for TC formation covers Weeks 1 and 2 in the same spatial extent given uncertainty on when development occurs. A tropical cyclone is likely to form within the next 24 hours across the South Indian Ocean, to the east of Madagascar, with a subsequent track poleward.

The precipitation outlook during the next two weeks is based largely on the model consensus among the CFS, ECMWF, and GFS models. During Week-1, the predicted tropical cyclone in the Southwest Indian Ocean along with the ongoing constructive interference between a Kelvin and Rossby wave is likely to result in above-average rainfall across eastern Tanzania, northern Mozambique, northern Madagascar, and parts of the southwest Indian Ocean. Below-average rainfall is expected to the south of this wet area. Below-average rainfall is likely across the eastern half of the Maritime Continent during Week-1, in part due to the suppressed phase of the MJO. To the south of the dry area, the Northern Terriorty and parts of Queensland are likely to receive above-average rainfall. The deterministic GFS model indicates local amounts exceeding 200 mm within the Week-1 wet area across the Northern Territory and Queensland. Above-average rainfall is likely at the Date Line which may help to initiate one or two tropical cyclones north and south of the equator. Above-average rainfall is also likely across parts of Brazil and from the western Gulf of Mexico north to the south-central United States during Week-1. Both of these wet areas are due to the mid-latitude circulation pattern interacting with enhanced subtropical moisture.

During Week-2, below-average rainfall is expected to persist for much of the Maritime Continent while above-average rainfall remains centered near the Date Line. This area of enhanced convection is forecast to extend east into the subtropics of the east Pacific and North America. Above-average rainfall is expected to shift into Bolivia and Paraguay by Week-2. Forecast confidence is lowest across the western Indian Ocean and Africa due to conflicting signals and modes of subseasonal variability. In general, a drying trend is expected from Week-1 to Week-2 across Mozambique and Madagascar. Forecasts over Africa are made in consultation with CPCs international desk, and can represent local-scale conditions in addition to global-scale variability.

Following a break from excessive heat in Australia, the GFS and CFS models indicate a return of much above-average temperatures during the next two weeks. By Week-2, much above-average temperatures are forecast to expand and include much of South Australia, Victoria, New South Wales, and southern Queensland. The 0Z ECMWF reforecast tool indicates that daily maximum temperatures have near a 60 percent chance of exceeding the 85th percentile of the climatological distribution in these areas at the end of January into the beginning of February.