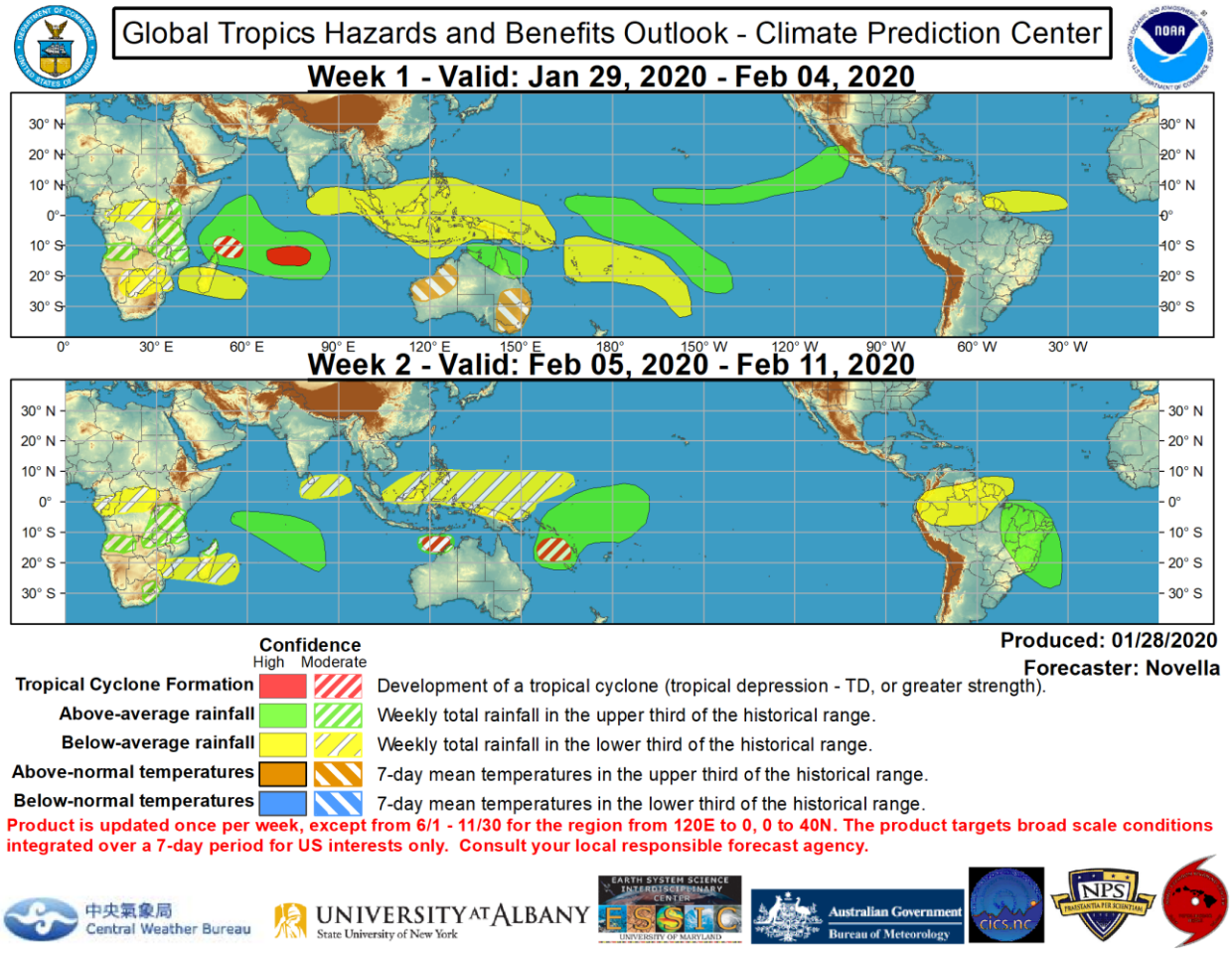

Following a robust MJO event observed throughout most of January, the RMM index indicates that the MJO has rapidly weakened in amplitude over Phase 7 during the last week. Analysis of upper-level velocity potential anomalies suggests the MJO has also become less organized with weaker enhanced convection over parts of the Western Hemisphere, and suppressed convection becoming more stationary over the Maritime continent since mid-January. The increase in subsidence and lower-level divergence over the Maritime Continent is supported by trends in the observed OLR and zonal wind anomaly fields that is likely associated with low-frequency variability. Dynamical model forecasts of the RMM index suggest an increase in amplitude into Phase 5 or 6 during early week-1, however, this increase is brief and is likely tied to a Kelvin wave traversing eastern Asia, as many GEFS and ECMWF ensemble members fall within the unit circle prior to the beginning of Week-2. By late week-2, there is fair agreement in the RMM forecasts with a reemerging MJO over the eastern Indian Ocean and Maritime Continent (Phases 3 or 4). This scenario is also supported by constructed analog forecasts which depict the enhancement of convection over the Maritime Continent at this lead time. Thus, it is likely global tropical precipitation will be driven by other modes of variability into early February with the possibility of a MJO beginning to develop and become more organized later in the Week-2 period.

Four short-lived and weak tropical cyclones (TC) formed during the past week. In the South Pacific basin, TC Twelve (1/25-1/26) peaked at 35 kts before rapidly weakening to east of Tonga. In the South Indian basin, TC's Nine (1/22-1/23) and TC Esami (1/25-1/26) also peaked at 35 kts, with TC Diane (1/25-1/27) having reached peak intensity at 55 kts as all formed to the east of Madagascar. For Week-1, model guidance and tools suggest the greatest potential for TC activity to continue across the Southern Indian Ocean basin. There is high confidence of TC formation over the south central Indian Ocean associated with above-average sea surface temperatures (SST), moderate environmental shear, and run to run agreement between models deepening a closed low in the region. Further west, there is moderate confidence of TC formation to the northeast of Madagascar where SST's are also above-average, however some recent model solutions have been inconsistent in the development of a well-defined low level circulation in the region. For Week-2, the focus of tropical cyclogenesis is expected to shift east where there is a moderate confidence of TC formation off the Kimberley Coast of Australia associated with a Rossby wave shifting west from the Gulf of Carpentaria. To the west of Vanuatu in the South Pacific, there is also a moderate confidence of TC formation Week-2 which is supported by the latest GFS, GEFS, and NAVGEM solutions.

Forecasts for suppressed and enhanced tropical precipitation are based on a consensus of dynamical model guidance and anticipated TC tracks. In the Eastern Hemisphere, enhanced precipitation is favored over the western Indian Ocean, with suppressed precipitation expected to continue over many parts of the eastern Indian Ocean and Maritime Continent during Week-1. Enhanced precipitation over the western Indian Ocean and suppressed precipitation over the Maritime Continent is favored to persist into Week-2, however, in consideration of the MJO possibly reemerging into Phases 3 or 4 later in outlook period, forecast confidence is lowered to moderate in the outlook. Over Australia, there is moderate confidence for much above normal temperatures during Week-1 mainly across the southeastern and western portions of the country where models show daytime maximum temperatures exceeding 40 degrees C in the regions. In the Western Hemisphere, enhanced precipitation is forecast across the central and eastern equatorial Pacific and into parts of Mexico. There is good model agreement favoring suppressed precipitation across the equatorial Atlantic and parts of northern South America during Week-1, with enhanced rainfall forecast over eastern Brazil during Week-2.

Forecasts over Africa are made in consultation with CPC's international desk, and can represent local-scale conditions in addition to global-scale variability.