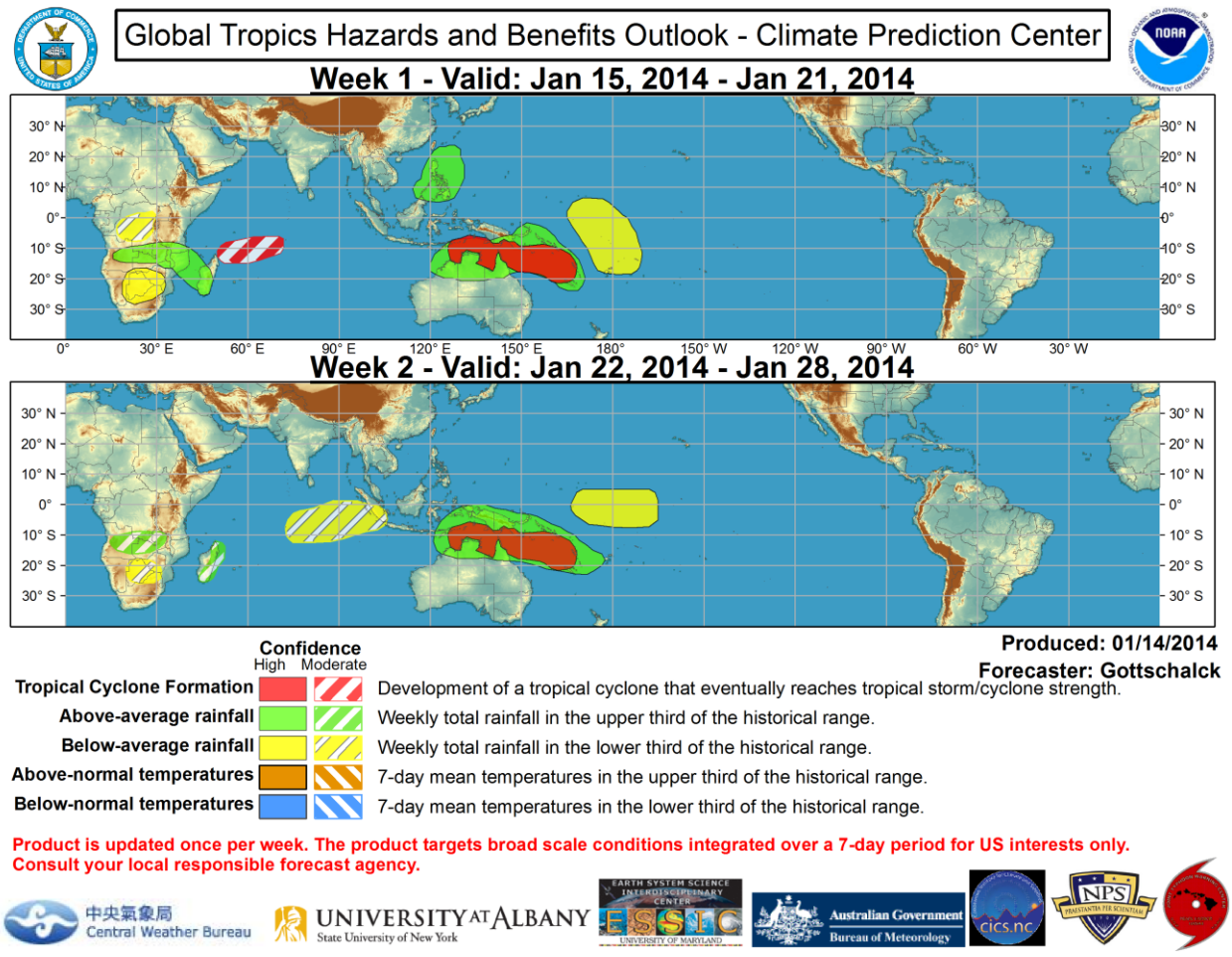

The MJO further weakened during the past week with anomalous convection and winds not consistent with MJO activity. Both velocity potential measures and the RMM index fail to indicate much of a coherent, eastward propagating MJO signal. Atmospheric Kelvin wave (KW) activity continues with the enhanced convective phase of one wave crossing the Pacific basin at the current time with increasing equatorial Rossby wave (ERW) activity across the eastern Pacific. Sea surface temperatures (SSTs) remain above average across the western Pacific and for waters north of Australia.

The main large areas of enhanced convection observed over the past week were located across the northern Maritime continent, western Pacific Ocean north of Papua New Guinea, parts of southeast Africa and areas in the Atlantic Ocean. Very heavy rainfall occurred in areas of the Philippines resulting in landslides and several fatalities. Strong suppressed convection was evident over northwest Australia and northeast Brazil, primarily early in the period and convection has increased markedly in recent days in both regions. Tropical cyclone Colin developed in the southern Indian Ocean during the past week but has had little impact, while Tropical cyclone Ian continued to impact areas of the South Pacific islands, notably Tonga.

There is large spread in RMM model forecasts with the GFS family of solutions the most strongly indicating an increase in MJO amplitude, although eastward propagation of any signal is small. Other model forecasts are less coherent for any increase in MJO amplitude. The GFS forecasts illustrated a similar evolution a few weeks ago that did not materialize so confidence is low in these solutions. We rather favor a more persistent pattern of enhanced convection across portions of the Maritime continent and the western Pacific in proximity to above average SSTs.

Heavy rainfall is likely to persist early in Week-1 period in proximity to the Philippines further causing problems with flooding and landslides. There is a slight chance that the disturbances near the Phillippines could strengthen into a weak tropical cyclone near the Islands and potentially later in the period in the South China Sea but the current threat is low and any cyclone likely will be genberally weak. The greatest hazard is with areas of heavy rainfall, rather than high winds. Enhanced rainfall is favored for northern Australia, the southern Maritime continent and parts of the western Pacific in association with potential tropical cyclone activity, persistence of above-normal SSTs and associated enhanced convection. GFS and CFS model guidance forecasts consistent areas of enhanced rainfall in this area as well as elevated odds for tropical cyclogenesis for waters north of Australia and in the Coral Sea. A tripole of anomalous rainfall is forecast over the southern half of Africa in accordance with model guidance with the highest confidence for wet (dry) areas in proximity to the Mozambique Channel and southern Africa respectively. There remains a low threat for tropical cyclone development in the Mozambique Channel but potentially high vertical wind shear in some areas may prohibit development. model guidance favors tropical storm development for areas across the southwest Indian ocean. Suppressed rainfall is also favored for areas near the Date Line in the central Pacific.

Confidence is generally low during Week-2 and in the absence of clear coherent subseasonal tropical variability. Highlighted areas are due to persistence, in part associated with anomalous SSTs to first order. Suppressed convection is favored for portions of the eastern Indian Ocean and central Pacific with enhanced convection and elevated odds for tropical cyclogenesis continuing for northern Australia, the Maritime continent and the western Pacific, similar in many ways to the Week-1 outlook and generally consistent with CFS model guidance.