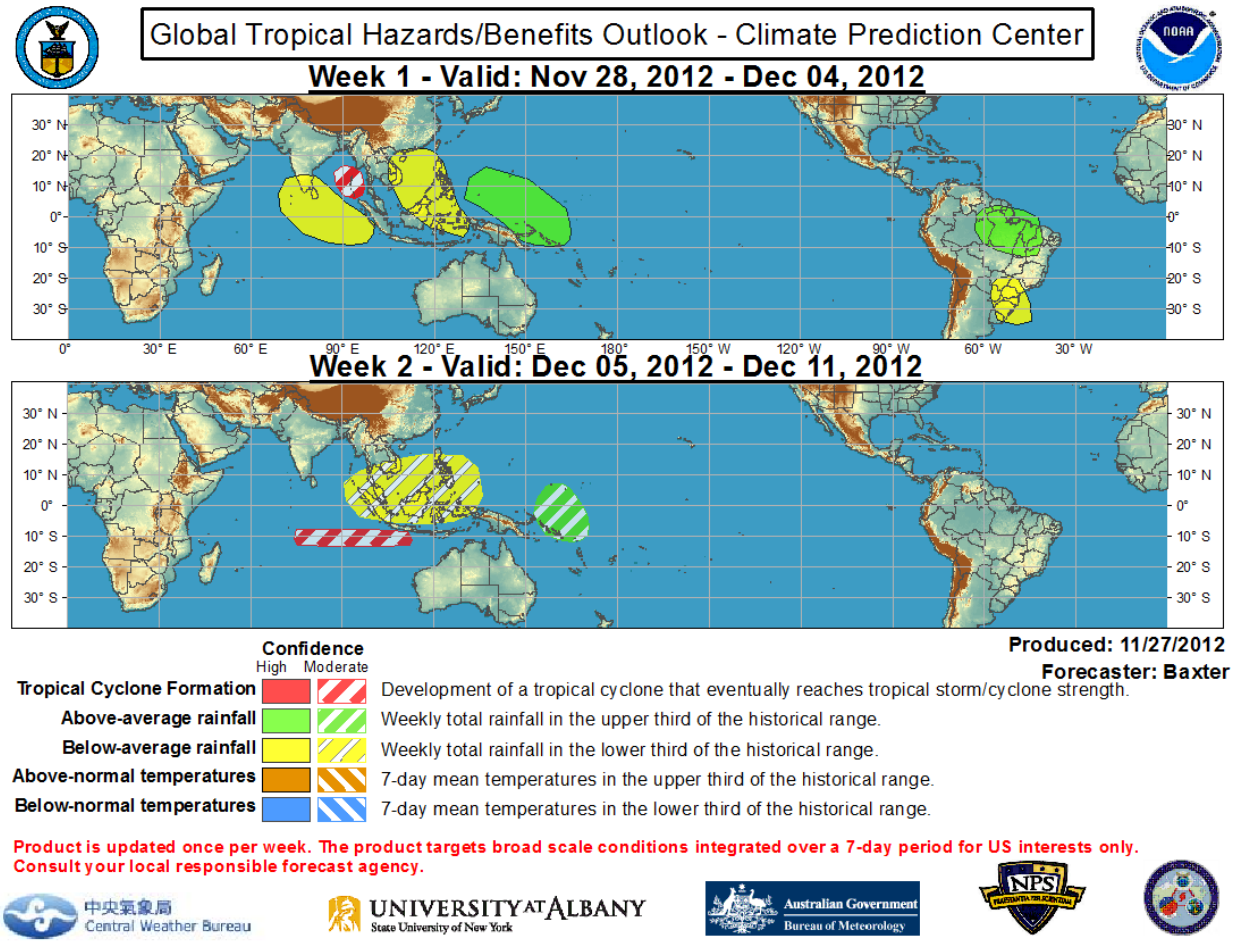

The MJO has remained weak during the past several days as many of observational signals continue to be largely incoherent. The enhanced phase of any MJO signal is likely over the West Pacific. The MJO is forecast by statistical and dynamical models to remain week over the next two weeks, though some GFS, UKMET, and ECMWF ensemble members suggest the MJO index may emerge in phases 8, 1, or 2 during Week-2, but this remains highly uncertain. The most robust subseasonal signal in the Tropics is associated with an equatorial Rossby wave, whose anomalous convection is centered around 150-160E. This is co-located with the formation of Tropical Storm Bopha which is expected to track west-northwest over the coming days, strengthening to Typhoon status.

The Week-1 forecast is based on a very weak MJO signal, the strong equatorial Rossby wave, dynamical model forecasts, and statical forecasts of the evolution of subseasonal tropical modes. The above average precipitation in the West Pacific is associated with the aforementioned Rossby wave and Tropical Storm Bopha, which is forecast to recurve before reaching the Philippines. Drying over parts of the eastern Indian Ocean and the South China Sea is supported by a very weak MJO signal (Indian Ocean), the equatorial Rossby wave and compensating subsidence from the typhoon (South China Sea), and dynamical model forecasts (both). Recently there has been convection over the Bay of Bengal and

the Andaman Sea, and there is a moderate chance of tropical cyclone formation in that region during Week-1. The north-south dipole of enhanced/suppressed anomalous precipitation over South America is supported by excellent model agreement between the GFS and CFS.

The Week-2 forecast becomes more uncertain than normal due to few coherent signals. Dry conditions are favored across the Maritime continent due to fair agreement between the GFS and CFS, and is supported by strengthening of the MJO signal. Large uncertainty exists as to the fate of the equatorial Rossby wave. Should it propagate westward maintaining its amplitude, it would result in above average precipiation for parts of the Maritime Continent. That seems unlikey at this time given the tropical cyclone and model forecasts. A moderate confidence area for greater-than-aversge precipitation is included across the West Pacific due to model forecasts and is further supported by above normal sea surface temperatures and, less importantly, any renewed MJO activity. A moderate risk for tropical cyclone formation exists in the southern Indian Ocean on the north side of a robust sub-tropical high. Dynamical tools support a moderate risk earlier and farther west, while statistical tools suggest later development farther east. The elongated area on the map represents a compromise between the two. Timing is very uncertain and it would not be surprising if any development occurred late during Week-1.

Given the weak MJO, it is difficult to make any reliable statement regarding the extratropical impact of intraseasonal tropical variability at this time. The strong diabatic heating associated with the equatorial Rossby wave/tropical cyclone could well have extratropical impacts, although they are not clear at this time. More importantly, the eventual recurvature of Bopha will likely have important ramifications for the longwave pattern downstream over North America.