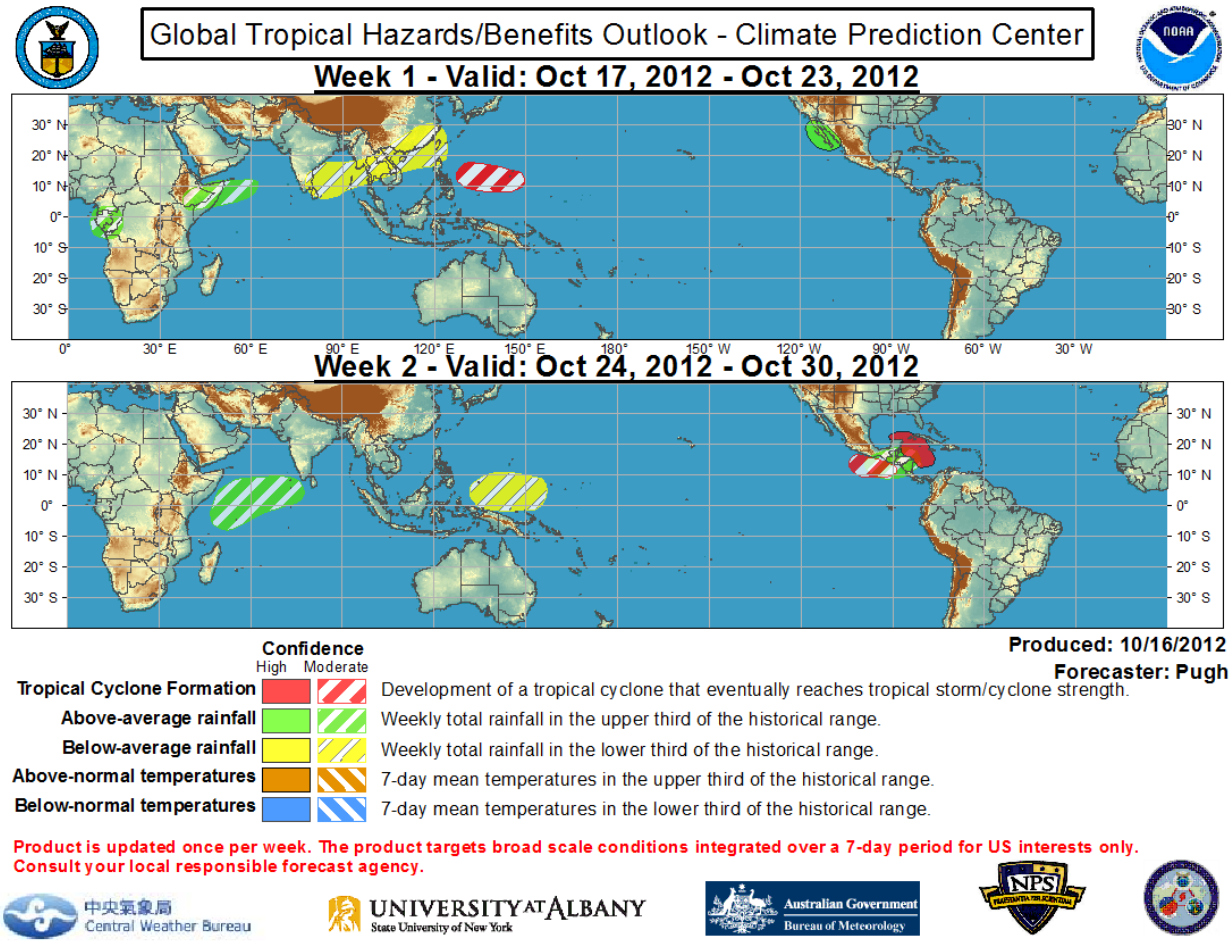

The latest observations indicate that the MJO remained weak during the past week. However, some observations recently indicate a more coherent MJO signal. A large spread exists among dynamical model MJO index forecasts. Some forecasts favor little coherent signal, while other forecasts indicate an increase in amplitude of the MJO index and eastward propagation. Due to the large model spread and poor performance of model forecasts during October, uncertainty is high during the next two weeks.

The west Pacific remained active with powerful Typhoon Prapiroon remaining nearly stationary. Due to its slow movement, Prapiroon weakened to a Tropical Storm on October 16. Tropical Storm Maria developed in the west Pacific on October 14. Both tropical cyclones are forecast to accelerate northeast during the upcoming week and remain offshore of Japan. Meanwhile, three additional tropical cyclones developed in the: Atlantic (Rafael), east Pacific (Paul) and southwest Indian Ocean (Anais).

The outlooks are primarily based on model guidance, MJO composites, and climatology. Moderate confidence for tropical cyclone development exists to the east of the Philippines where an ongoing disturbance is tracking west. Below-average rainfall is favored for parts of Southeast Asia but forecast

confidence is reduced to the potential influence from a tropical cyclone entering this region. Above-average rainfall is favored for western Africa along with parts of Ethiopia, Kenya, and Somalia. Above-average rainfall forecast for the Gulf of California region is associated with the remnants of Hurricane Paul at the beginning of the period. Late in the week-1 period, the chances for tropical cyclone development are forecast to increase across the western Caribbean.

MJO composites, warmer-than-normal SSTs, and climatology favor tropical cyclone development in the western Caribbean during week-2. The GFS model has been very consistent with tropical cyclone development in the western Caribbean early in week-2. Since above-average rainfall is favored across Central America, an increased chance for a late season tropical cyclone in the east Pacific is forecast near the coastline of southern Mexico or Central America. Above-average rainfall is forecast to shift east to the western Indian Ocean during week-2 where SSTs are warmer-than-normal. Suppressed convection is expected to shift east from Southeast Asia to north of New Guinea. Forecast confidence in this area of below-normal rainfall is moderate at best due to uncertainty in the MJO evolution and warmer-than-normal SSTs near the Date Line. The west Pacific is expected to be less active for tropical cyclones during week-2 with no preferred areas noted among forecast tools.