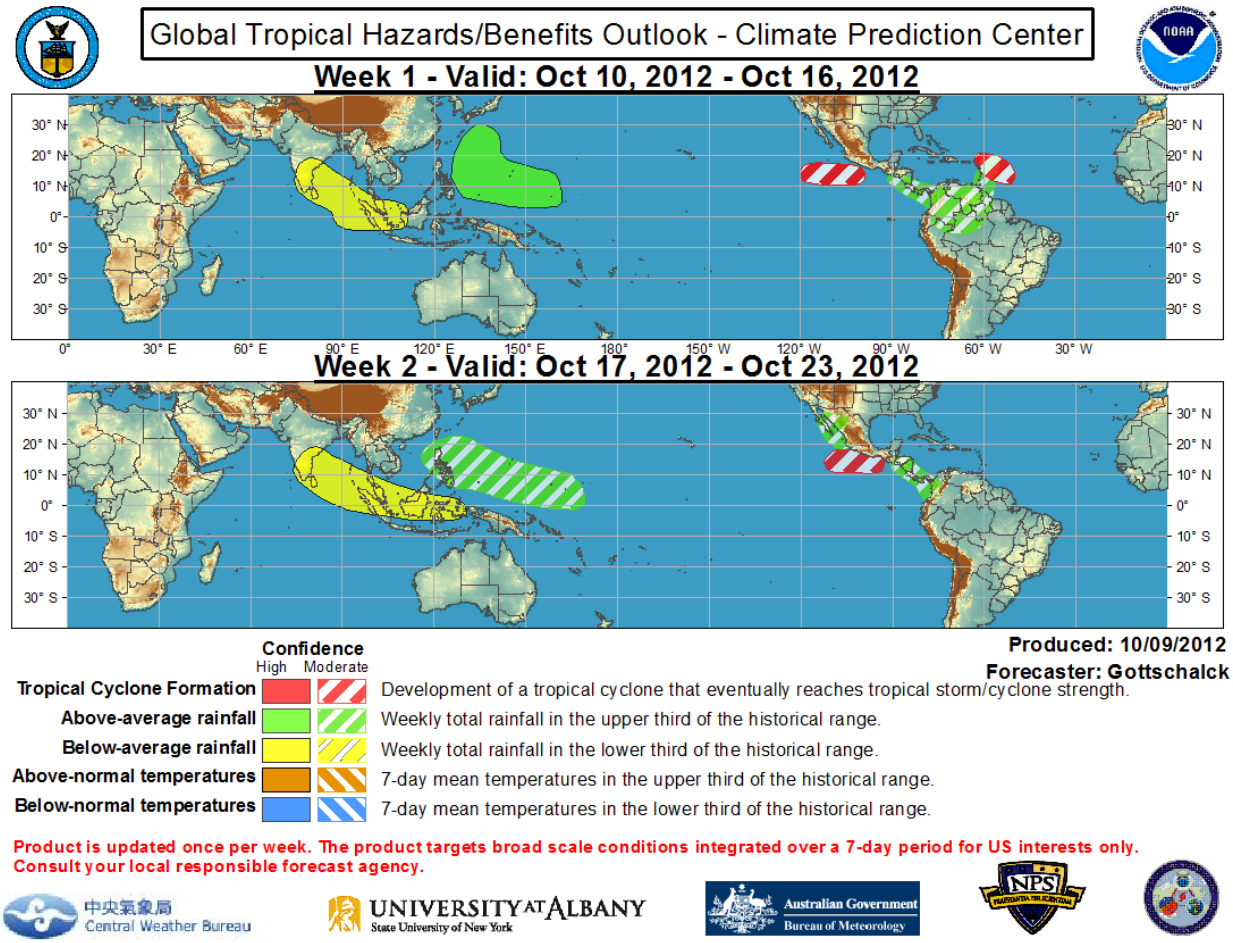

The latest observations indicate that the MJO remains weak. Although considerable enhanced convection continues across the western Pacific, there has been little evidence to date of this convection shifting eastward coherently on the MJO time scale, as indicated by a few different measures. The majority of dynamical model MJO index forecasts indicate a continuation of a weak signal during Week-1 with some agreement for a stronger signal in the index to emerge during Week-2 across the western Hemisphere. An atmospheric Kelvin wave is shifting eastward across the Pacific and this is consistent with a weak quick moving signal from Phase 6 to Phases 8/1 by Week-2 as indicated by several forecast models. It may be that the increase in amplitude is a combination of this Kelvin wave and other subseasonal tropical variability initiating more broad scale convection that persists through the period in this area. Model forecasts of the MJO index have been relatively poor after Week-1 in recent weeks. Based on this the MJO is forecast to remain generally weak through most of the outlook period and at this time not expected to contribute substantially to anomalous tropical convection during the next 1-2 weeks.

Three tropical cyclones developed during the past week, Olivia in the eastern Pacifc, Oscar in the central Atlantic and typhoon Prapiroon in the western Pacific. The former two were short-lived systems that

had little impact. Typhoon Prapiroon is considerably stronger, but is also likely to not impact any land areas at the current time.

The outlooks are primarily based on model guidance along with empirical forecast tools that target some of the primary forms of subseasonal tropical variability. Above-average rainfall continues to be favored for the western Pacific, although this area is farther east away from the Philippines than the last few weeks and confidence is somewhat lower for Week-2. Below-average rainfall is favored for southern India and the eastern Indian Ocean and during Week-2, the western Maritime continent where below-normal SSTs likely will continue to decrease convection. There appears that there may be a break in tropical cyclone activity in the western Pacific and so no areas are highlighted in this region during the outlook period.

Across the western Hemisphere, above-average rainfall is favored for areas across the eastern Pacific, Central America and northern South America. A tropical wave crossing the Atlantic expands this area to east of Puerto Rico near the Windward Islands. Tropical cyclogenesis is favored across the southwest Atlantic with this easterly wave. Model guidance and the crossing of an atmospheric Kelvin wave increases chances for tropical development in the western areas of the east Pacific Basin during Week-1. This threat continues during Week-2, but shifted slightly east of its earlier Week-1 position. Some model guidance favors moisture from enhanced convection and potential tropical cyclone activity may enter Baja California and northwest Mexico during Week-2, but there is considerable spread in model guidance at the current time for this potential eventuality.