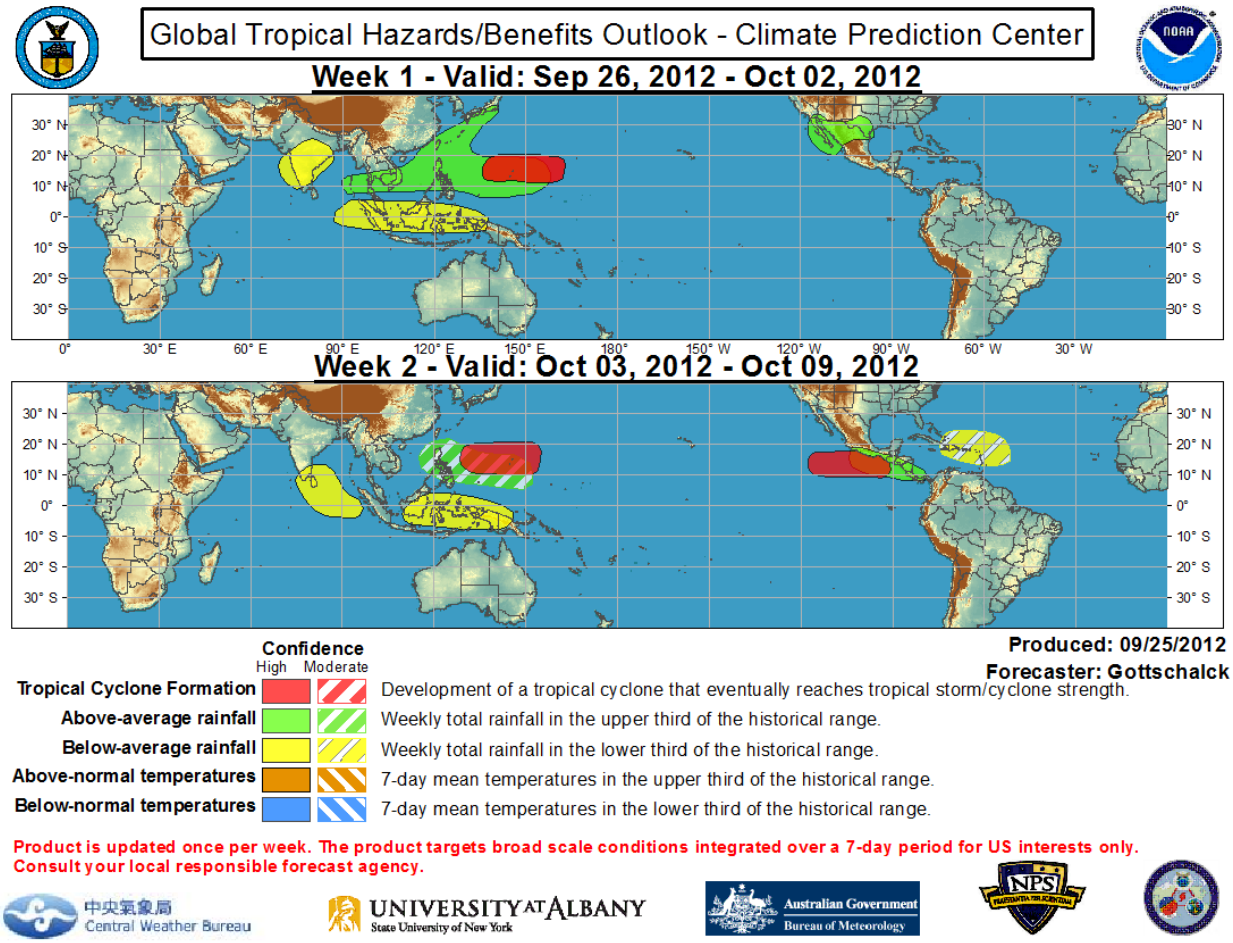

The latest observations indicate that the MJO continued to weaken as many indicators are now less coherent as compared to the last couple of weeks. The enhanced phase remained over the western Pacific. The majority of dynamical model MJO index forecasts, however, indicate a larger amplitude MJO signal emerging across the western Pacific during the upcoming two week period. Model spread and uncertainty remain somewhat high, similar to last week. Based on the latest observations, the MJO is forecast to remain weak in the short-term, but there is some potential for a more organized signal to develop across the western Pacific by the beginning of Week-2. The coverage and strength of atmospheric Kelvin and equatorial Rossby waves are marginal at the current time.

Three tropical cyclones developed during the past week and these all will play roles in either the tropical and/or extratropical atmosphere during the next 10 days. Super typhoon Jelawat and tropical storm Ewiniar both formed east of the Phillippines. At the current time (9/25 18 UTC), these storms are forecast to track north and then east and remain east of the Philippines, Taiwan and Japan. However, there remains considerable uncertaity in the eventual tracks of these systems and interests in Japan should especially monitor Super typhoon Jelawat. In the least, some areas of heavy rainfall seem likely

for parts of Japan this week. Across the eastern Pacific, Hurricane Miriam developed southeast of Baja California and has tracked northwestward.

In the short-term, the moisture and dynamics of Hurricane Miriam across the western Pacific are likely to play at least some role across northern Mexico, extreme southern areas of the Southwest and eventually the southern Plains and Texas. Above median rainfall is favored from Baja California east to parts of Texas and this rainfall should aid drought conditions in some of these areas. Above median rainfall is favored from parts of Southeast Asia across the Phillippines into the western Pacific. This is supported by model forecast guidance and MJO composites, even if the strength of the MJO remains uncertain. An area of heavy rainfall is also expected to extend to and along the Japan eastern coastline associated with tropical cyclone activity. Drier-than-average conditions are most likely for parts of India and the Maritime continent and are associated with model guidance, cooler than normal SST's in some areas and MJO composites. Tropical cyclogenesis remains favored for areas east of the Philippines centered at 150E, 15N.

During Week-2, the anomalous rainfall areas across the eastern Hemisphere are similar and are supported by forecast MJO phase 7 by several MJO index operational forecast models. Model guidance is also consistent with a somewhat persistent pattern of anomalous rainfall. Tropical cyclogenesis remains favored in the western Pacific, although the are ais slightly shifted westward as compared to Week-1. Model guidance and Phase 7 MJO composites favor enhanced (suppressed) rainfall for the eastern Pacific (western Atlantic) during Week-2 as well as an elevated threat for tropical development across the eastern Pacific. The confidence for the suppressed rainfall area is only moderate.

An additional impact to the U.S. from the Tropics is the impact the recurving tropical cyclones from the western Pacific will have on the downstream mid-latitude flow across the Pacific and North America. Currently, spaghetti charts from model guidance during the 6-10 day period show large model spread as the energy and moisture associated with these tropical cyclones interacts with the background flow. Confidence in Week-2 U.S. temperature and precipitation forecasts are generally low.