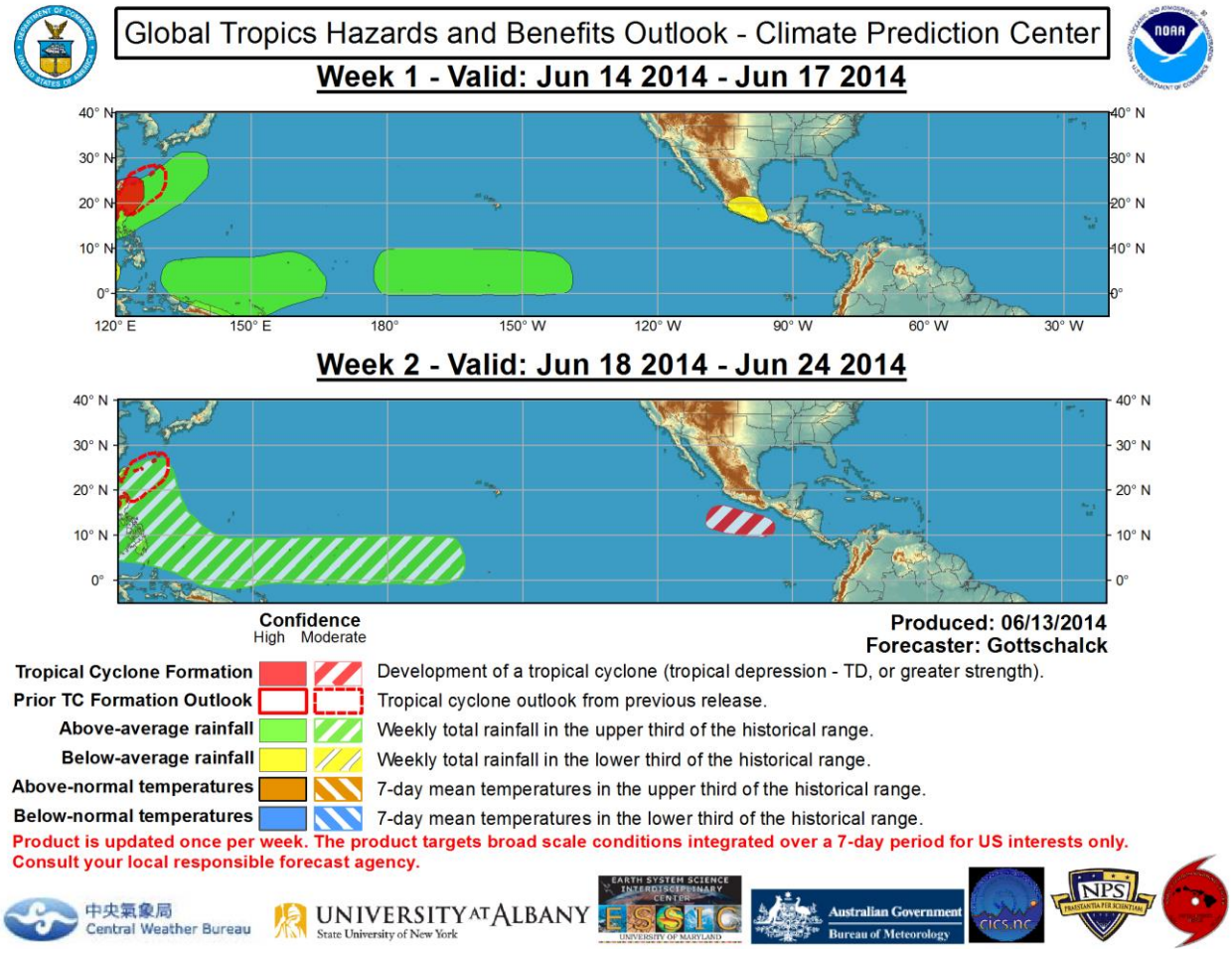

The updated outlook has some changes from that released earlier in the week. Starting in the western Pacific, the marginal threat for tropical development in the Meiyu Front region continues, but over a smaller region during the remainder of the previous Week-1 outlook. JTWC continues to monitor this region. It was removed during Week-2 as support for the area is less and decreased from the first portion of the updated outlook (Days 1-4). There is some evidence of an equatorial Rossby wave moving westward in the far western Pacific and model guidance appears to have adjusted some to this feature. Precipitation areas in the outlook for both below-median and above-median precipitation were modified accordingly for both periods. The two areas for above-median precipitation in the previous outlook were combined in the update for Days 5-11 (previous Week-2 outlook).

Near the Americas, model guidance between the GFS and ECMWF remains quite large and this impacts not only potential tropical development threats, but also favored areas of precipitation. The ECMWF solution favors closer to average precipitation across South America, Central America and southern Mexico and no tropical cyclone in the Northwest Caribbean Sea. These conditions have verified better in

recent weeks then that currently forecast by the GFS of overall drier conditions and persistent tropical cyclogenesis. The update removes favored areas of below-median precipitation in both periods except for southern Mexico during Days 1-4 and adds a tropical cyclone area for Day in the eastern Pacific basin at moderate confidence for Days 5-11 at based on the ECMWF model guidance and potential Kelvin wave activity traversing the Pacific Ocean.

Previous discussion from 6/10 is below.

The MJO has remained generally incoherent since about the middle of May and this week both the CPC MJO index based on velocity potential and the RMM index show virtually no projection onto the MJO. Moreover, OLR anomalies offer little coherent signals outside of atmospheric Kelvin wave (KW) activity and potentially a developing equatorial Rossby wave in the eastern Pacific. The enhanced phase of a KW crossing the eastern Pacific appears to be the most clearly detectable at the current time and may have contributed to the recent development of Tropical Storm Cristina off the coast of Mexico. Tropical cyclone 2A also developed in the Arabian Sea.

Suppressed convection was evident across areas of northern South America and the Philippines while enhanced convection was apparent over the west-central Pacific, Arabian Sea, Gulf of Guinea region of Africa and central Mexico. In fact, last week Tropical Storm Boris produced very heavy rainfall, flooding and mudslides across portions of coastal central Mexico.

There is large spread in the dynamical model RMM forecasts of the MJO with several, including the GFS and ECMWF family of solutions, indicating a transient increase in amplitude during Week-1 followed by a decrease in amplitude. Some models, primarily the UK Met Office solution shows somewhat more progressive behavior. Given the inability for robust MJO activity to organize across the eastern hemisphere and shift coherently eastward in recent weeks, the official outlook calls for a continuation of weak or incoherent MJO activity over the next two weeks.

The primary subseasonal driver appears to be the development of a very strong monsoonal flow across southern Asia from the Arabian Sea to Southeast Asia to the Meiyu front in the western Pacific. Model

guidance during Week-1 is in general agreement for enhanced rainfall in a narrow band from the Arabian Sea to the western Pacific with a compensating area of suppressed convection to the south from the equatorial central Indian Ocean to the southern Philippines. Depending on the eventual track and strength of TC 2A, potentially heavy rainfal, high seas and strong winds may impact the coastline of Oman later this week. Also, tropical development is possible in a generally small region from just west of the northern Philippines northeastward to east of Taiwan during both Week-1 and Week-2. Any system may be subtropical in nature and likely short-lived.

Suppressed convection is favored by model guidance and in some areas by developing El Nino conditions across parts of northern South America, southern Central America, the Caribbean Sea and southern Mexico during Week-1 and parts of southern Mexico and Central America during Week-2. The focus of enhanced convection in the Eastern Hemisphere is forecast to stretch from Indochina across the northern half of the Philippines into the western Pacific east of Taiwan. Developing El Nino conditions favors enhanced rainfall across the west-central Pacific along and just north of the equator during the entire period, albeit with moderate confidence. The GFS solutions continue to indicate a tropical system developing late in Week-1 in the northwest Caribbean and moving northward into the Gulf of Mexico during Week-2. The GFS has had signatures similar to this that have not materialized over the past couple of weeks and the ECMWF has a much less clear depiction of this feature at the current time so this area is not highlighted. This will be re-evaluated for the Friday update release on 6/13.