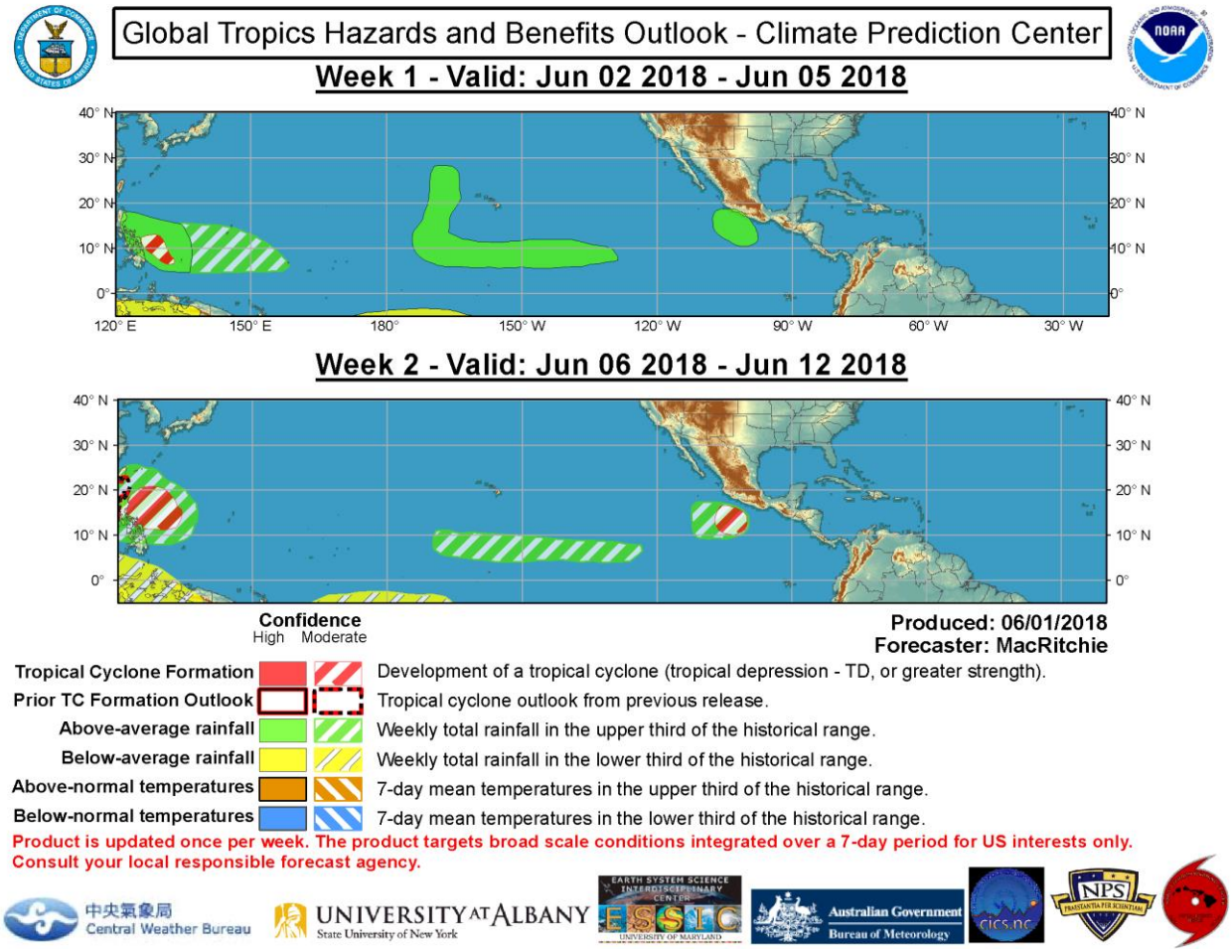

The atmospheric Kelvin wave, currently responsible for enhancing rainfall within the MJO convective envelope over the Indian Ocean, is forecast to propagate over the Eastern Pacific by the end of the Week-1 period. Large-scale convection associated with this wave will provide a conducive environment for tropical cyclogenesis and enhanced rainfall just south of Southern Mexico. The National Hurricane Center has low confidence that a tropical cyclone will form in this region, correspondingly there is high confidence of above-average rainfall in this region during the next five days. Dynamical and statistical model guidance indicate that tropical cyclone formation will occur during the early part of Week-2 over the Eastern Pacific.

Above-average rainfall associated with the MJO and Kelvin wave during Week-1 is still expected over the Western Pacific, both over and east of the Philippines. The forecast region of above-average rainfall shrank from Tuesday's outlook, and there is now less confidence in the eastern part of that region based on the latest model guidance. However, Model guidance now indicates moderate confidence that a tropical cyclone could form within the western half of the area during either Week-1 or Week-2.

The GFS and its ensemble hint that a tropical cyclone might develop just north of the Yucatan Peninsula towards the end of Week-2. Sea surface temperatures are warm enough to support this, but none of our other model guidance agrees. We will continue to monitor the situation for Tuesday's GTH forecast.

---------- Previous discussion follows: ----------

The enhanced phase of the MJO is currently over the eastern Indian Ocean and is forecast to propagate eastward over the Maritime Continent during Week-1. Dynamical guidance is split as to how quickly the MJO will weaken. Some models suggest that the MJO will maintain a strong amplitude as it moves over the Pacific during Week-2 and others suggest that it will weaken before that. The models often have trouble propagating the MJO over the Maritime Continent due to the complex topography interacting with the atmosphere, so this behavior is not uncommon. Regardless of which solution is correct, we expect strong MJO impacts throughout the tropics during Week-1. These impacts will be further enhanced by an atmospheric Kelvin wave that is currently moving through the MJO envelope in the Indian Ocean.

Significant rainfall is expected over eastern India, the Bay of Bengal, and parts of Bangladesh and Myanmar during Week-1. Rainfall that is typically associated with the MJO will be enhanced by an atmospheric Kelvin wave and tropical low pressure forming just southwest of Bangladesh. Model guidance is uncertain about whether this area of low pressure will reach tropical cyclone strength and the Joint Typhoon Warning Center is monitoring its status. Regardless of whether it is classified as a tropical cyclone, we are confident that the region will experience above-average rainfall during the first half of Week-1.

Low pressure in the South China Sea may develop into a tropical cyclone during the end of Week-1 or beginning of Week-2. Significant rainfall in this region, and to its south over the Philippines, will also be enhanced by the active phase of the MJO during the second half of Week-1 and much of Week-2. General tropical instability and anomalously warm SSTs are also forecast to lead to above-average rainfall over the central Pacific centered around 10 degrees N and just west of Hawaii.

Another tropical low is expected to form over the southern Indian Ocean during Week-1 and will likely bring above-average rainfall to parts of Western Australia. Below-average rainfall just north of Australia is expected from the Indian Ocean over most of the Maritime Continent during Weeks 1 and 2 as the enhanced phase of the MJO moves eastward. A high confidence region of below-average rainfall is expected just east of the Solomon Islands associated with the suppressed region of the MJO.

The deterministic GFS suggests that low pressure just south of southern Mexico might develop into a tropical cyclone during the end of the Week-2 period, however the GFS and ECMWF ensembles are much more bearish about the storm. We will monitor the model guidance and provide an update on Friday, June 1.

Forecasts over Africa are made in consultation with CPCs international desk, and can represent local-scale conditions in addition to global-scale variability.