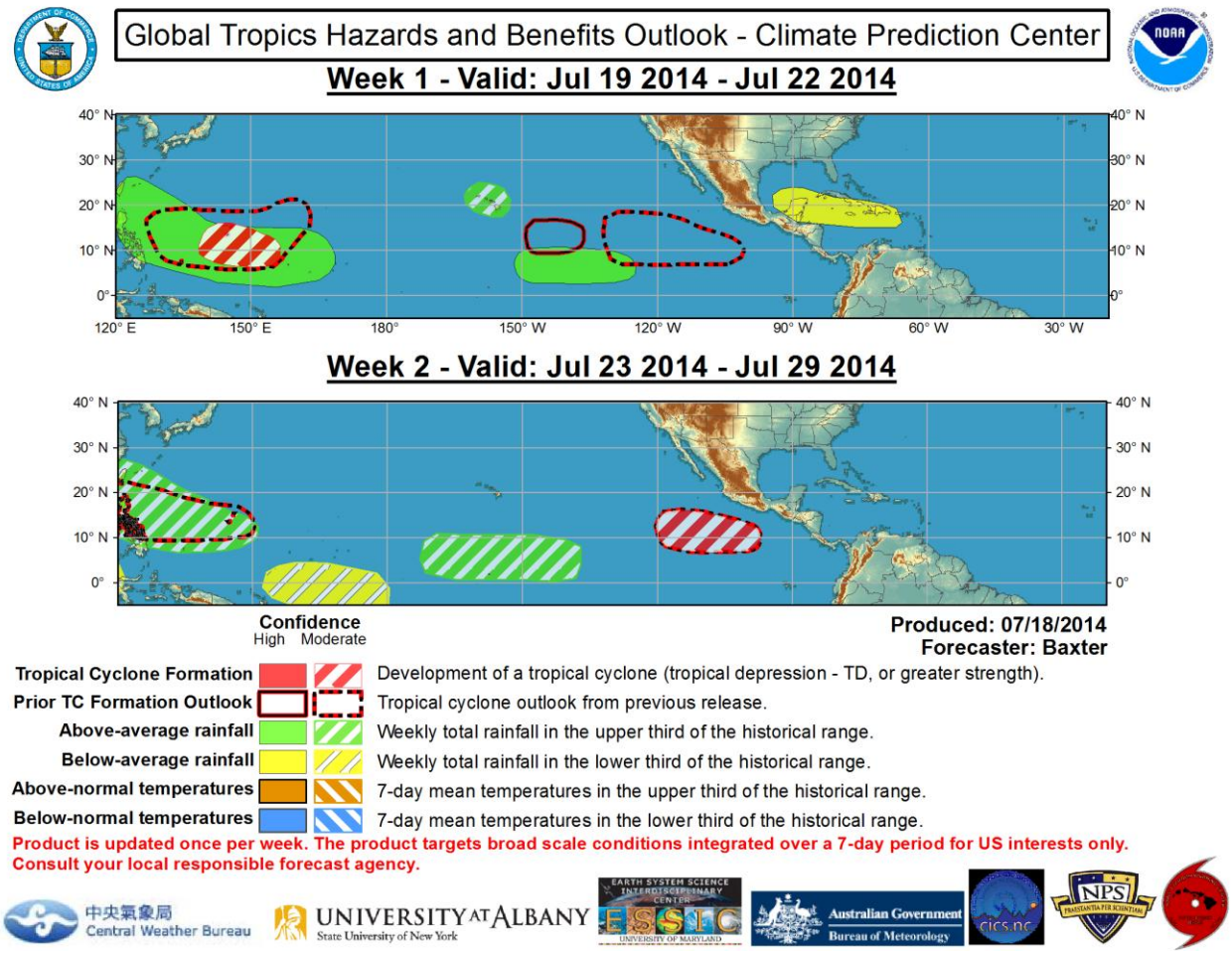

Tropical Storm Matmo developed east of the Philippines, as forecast, and is currently expected to move northwestward toward Taiwan. Another tropical storm is favored to develop over the West Pacific basin (near 10N, 150E) during the remainder of Week-1 and track northwestward as well. Tropical Storm Wali formed over the East Pacific basin (within the jurisdiction of the Central Pacific Hurricane Center). No further development over the eastern Pacific is expected during the next several days.

During Week-2, ensemble tools support development in the East Pacific, so no change in the previous shape is required. Indications are weaker for development east of the Philippines in Week-2 compared to a few days ago, so that shape is truncated over the West Pacific, where only a low risk of TC formation is forecast.

There is some enhanced risk for above-average rainfall over the Hawaiian Islands due to Tropical Storm Wali, whether intact or a remnant low-pressure system, and an upper-level trough during the remainder of Week-1. Little change in other above- or below-average rainfall shapes is necessary with this update;

only some confidence adjustments where necessary in Week-1, and subtle changes were made to reflect the latest model guidance.

The previous discussion follows below:

Recent 200-hPa velocity potential anomalies depict a coherent wave-1 structure throughout the global tropics. Despite this apparent reorganization, the MJO is generally weak, with other variability, both higher and lower frequency, playing an important role in the observed pattern. The RMM index reveals a weak Phase-6 projection currently, though the velocity potential-based CPC index contains a very strong projection over the western Pacific. The time-longitude CPC index diagram reveals this tendency toward an amplified signal over the Pacific over the past several months, likely due to the developing warm ENSO base state. Other modes of variability that are currently important include a robust equatorial Rossby wave (ERW) over the eastern Indian Ocean, beginning to impact the Indian subcontinent, and multiple atmospheric Kelvin waves moving eastward across the Maritime Continent and central Pacific.

Dynamical model MJO index forecasts are generally in good agreement, suggesting fairly weak MJO activity over the next two weeks. The ECMWF and UKMET forecasts key in on the weak eastward-propagating MJO and the developing low-frequency state, while the GFS ensemble forecast is more heavily influenced by the westward moving signals, attempting to develop an enhanced phase projection over the western IO and Africa by the end of Week-2. Given the lack of coherent MJO-related convection during the past several months over the IO, this solution is not preferred.

Typhoon Rammasun formed over the West Pacific on 12 July and is currently impacting the Philippines. Rammasun is currently forecast to track westward across the South China Sea toward southeast China and northern Vietnam over the next several days. During the upcoming week, tropical cyclogenesis is favored over a broad region of the northwestern Pacific where two tropical disturbances are being monitored. Confidence here is only moderate. There are two areas depicted during Week-1 in the East Pacific, one associated with a specific disturbance that is likely to develop during the next several days, the other a broader region where conditions could be favorable due to the passage of a Kelvin wave. Development is favored during Week-2 in the East Pacific where the base state and some model guidance support enhanced odds for TC development. In the western Pacific, a fairly large area between 10N and 20N could be favorable during Week-2 with dynamical guidance suggesting below-normal wind shear.

Enhanced convection is favored during Week-1 across an expansive region stretching from northern India eastward to the West Pacific. This is due to a combination of weak MJO activity and a strong ERW, as well as enhanced monsoonal circulation. Especially noteworthy here is the enhanced rainfall forecast for parts of western India, where conditions have been quite dry thus far this season. Enhanced convection is anticipated across parts of the east-central Pacific where the base state and weak MJO are favorable. Large-scale suppressed convection is favored over the Caribbean Sea, equatorial Africa, and Indian Ocean, well-supported by dynamical tools.

During Week-2, enhanced convection is forecast across parts of the South China Sea, the Philippines, western Pacific and east-central Pacific, based on the expected evolution of subseasonal variability as well as the low-frequency state. Suppressed convection is anticipated over parts of equatorial Africa, the central and eastern IO, and Maritime Continent. In the wake of enhanced phases of an ERW, Kelvin waves, and MJO activity, below-normal rainfall is favored over parts of the western Pacific along and south of the equator.

Forecasts of enhanced or suppressed convection across some parts of Africa are based on regional scale anomaly features and were produced based on collaboration with the CPC Africa Desk.