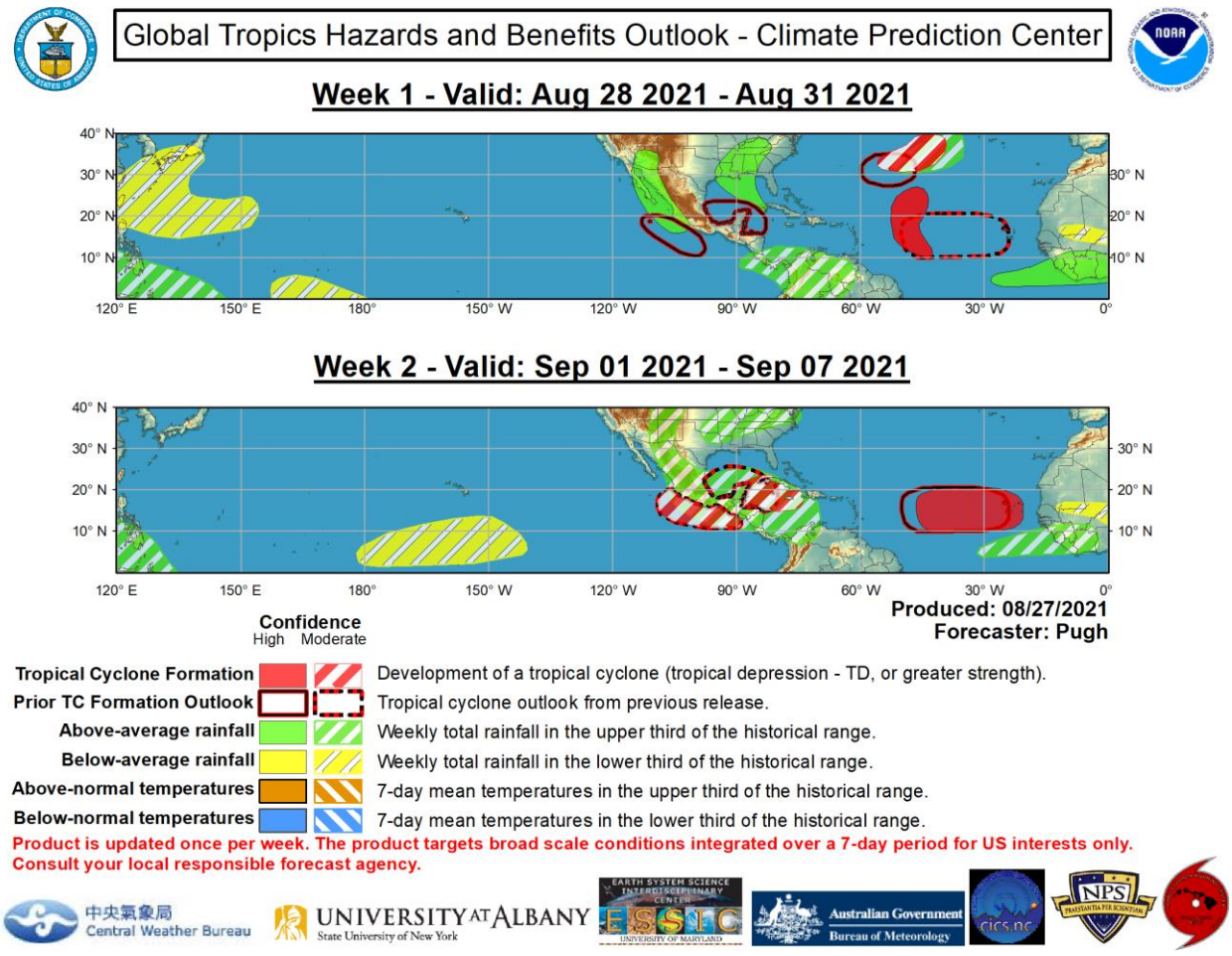

Since the GTH outlook was released on August 24, Hurricane Ida developed in the Caribbean Sea while Tropical Storm Nora formed in the East Pacific. Decreasing wind shear and warm sea surface temperatures are expected to result in steady to rapid strengthening of Ida as it tracks northwest over the Gulf of Mexico. Hurricane Ida is forecast to make landfall along the Louisiana coast on Aug 29, with hurricane-force winds, dangerous storm surge, and flooding rainfall along the Louisiana, Mississippi, and Alabama coasts. As the remnant low of Ida tracks inland, flooding rainfall is expected to overspread the Lower Mississippi Valley and Tennessee Valley early next week and potentially the Central to Southern Appalachians and Mid-Atlantic by the middle part of next week. Tropical Storm Nora is forecast to strengthen to a hurricane while tracking near the southwestern coast of Mexico and then northward to the Baja Peninsula, Gulf of California, or northwestern coast of Mexico. Heavy rainfall may trigger flash flooding and mudslides across the Mexican states of Oaxaca, Guerrero, Michoacan, Colima, and Jalisco. Increasing chances for a northward surge of enhanced moisture from the Gulf of California exist next week which would lead to a flash flooding risk across the southwestern United States. Please refer to the National Hurricane Center for the latest updates and forecasts on Ida and Nora.

A tropical wave, between the Cabo Verde Islands and Lesser Antilles, is likely to become a tropical depression within the next 48 hours before turning northward. A broad area of pressure is located well east of Bermuda in the Central Atlantic. Moderate confidence for tropical cyclone (TC) development is posted with this system as conditions are only marginally favorable for strengthening.

An atmospheric Kelvin wave (KW) is forecast to continue propagating east over the Atlantic basin and provide a favorable large-scale environment for TC development during the first week of September. Based on the latest model solutions, forecast confidence is highest for at least one TC to form over the Main Development Region of the Atlantic with moderate confidence across the Caribbean Sea. In the wake of Nora in the East Pacific, moderate confidence for TC development is maintained for Sep 1-7 but recent model guidance has backed off slightly.

The updated favored areas of above and below average rainfall are based primarily on predicted tropical cyclone tracks within the next week. The Madden-Julian Oscillation (MJO) is likely to remain incoherent through the first week of September, but recent model solutions are beginning to depict a renewed MJO over the Indian Ocean by mid-September.

-------- Previous discussion released on August 24, 2021 follows --------

Following a robust Madden-Julian Oscillation (MJO) during July and early August, it recently weakened due to interference from other modes of tropical variability. Dynamical models are in good agreement that the MJO remains weak through early September. An atmospheric Kelvin wave (KW) is forecast to propagate eastward over the Western Hemisphere, likely maintaining a favorable environment for tropical cyclone (TC) development across the East Pacific and Atlantic basins during at least the next two weeks. The favored areas of above and below average rainfall are based largely on predicted TC tracks along with dynamical model output.

Tropical Storm Henri made landfall along the coast of Rhode Island on Aug 22. Heavy rainfall (7 to 9 inches) was observed in and around the New York City area with flooding occurring across northern and central New Jersey. The National Hurricane Center (NHC) is currently monitoring three areas for TC development across the Atlantic basin. A broad area of low pressure is forecast to develop over the southwest Caribbean Sea and high confidence exists for this system to become a TC during week-1 as it

tracks northwest into the southwest Gulf of Mexico. This predicted TC could threaten the Texas Gulf Coast by early next week. A broad trough of low pressure is currently located 900 miles east-northeast of the northern Leeward Islands and environmental conditions for development are likely to improve later this week as this system tracks northwest to the central Atlantic. Based on the passage of a KW and model guidance, another TC could form over the western Caribbean Sea or southwest Gulf of Mexico (week-2) while moderate to high confidence exists for at least one TC to develop over the Main Development Region (MDR) during the next two weeks. The higher confidence for week-2 across the MDR is partly related to climatology as the peak of the Atlantic tropical season nears.

On August 19, Hurricane Grace made landfall near Tulum, Mexico along the eastern Yucatan Peninsula. Grace then rapidly strengthened to become a Category-3 hurricane as it tracked west across the Bay of Campeche. Major Hurricane Grace (maximum sustained winds of 125 mph) moved inland into eastern Mexico on Aug 21. Hurricane Linda tracked into the Central Pacific last week and became post-tropical as it moved over cooler waters. Tropical Storm Marty developed across the East Pacific on Aug 23 and is forecast to track west along 20N and weaken during the next 72 hours. A broad area of low pressure is located 200 miles offshore of Guatemala and southern Mexico and this system is likely to become a TC later in week-1. Since this TC is expected to track northwest just to the west of the Baja Peninsula, a northward surge of moisture from the Gulf of California into the southwestern United States is becoming more likely by early next week. Environmental conditions are expected to remain favorable for additional TC development (moderate confidence) across the East Pacific through at least the early part of week-2.

Please refer to the National Hurricane Center for the latest updates and forecasts. For hazardous weather concerns during the upcoming two weeks across the U.S. please refer to your local NWS Forecast Office, the Weather Prediction Center's Medium Range Hazards Forecast, and CPC's Week-2 U.S. Hazards Outlook. Forecasts over Africa are made in consultation with the International Desk at CPC and can represent local-scale conditions in addition to global-scale variability.