



TROPICAL UPDATE



8:00 AM EDT

Tuesday, August 10, 2021

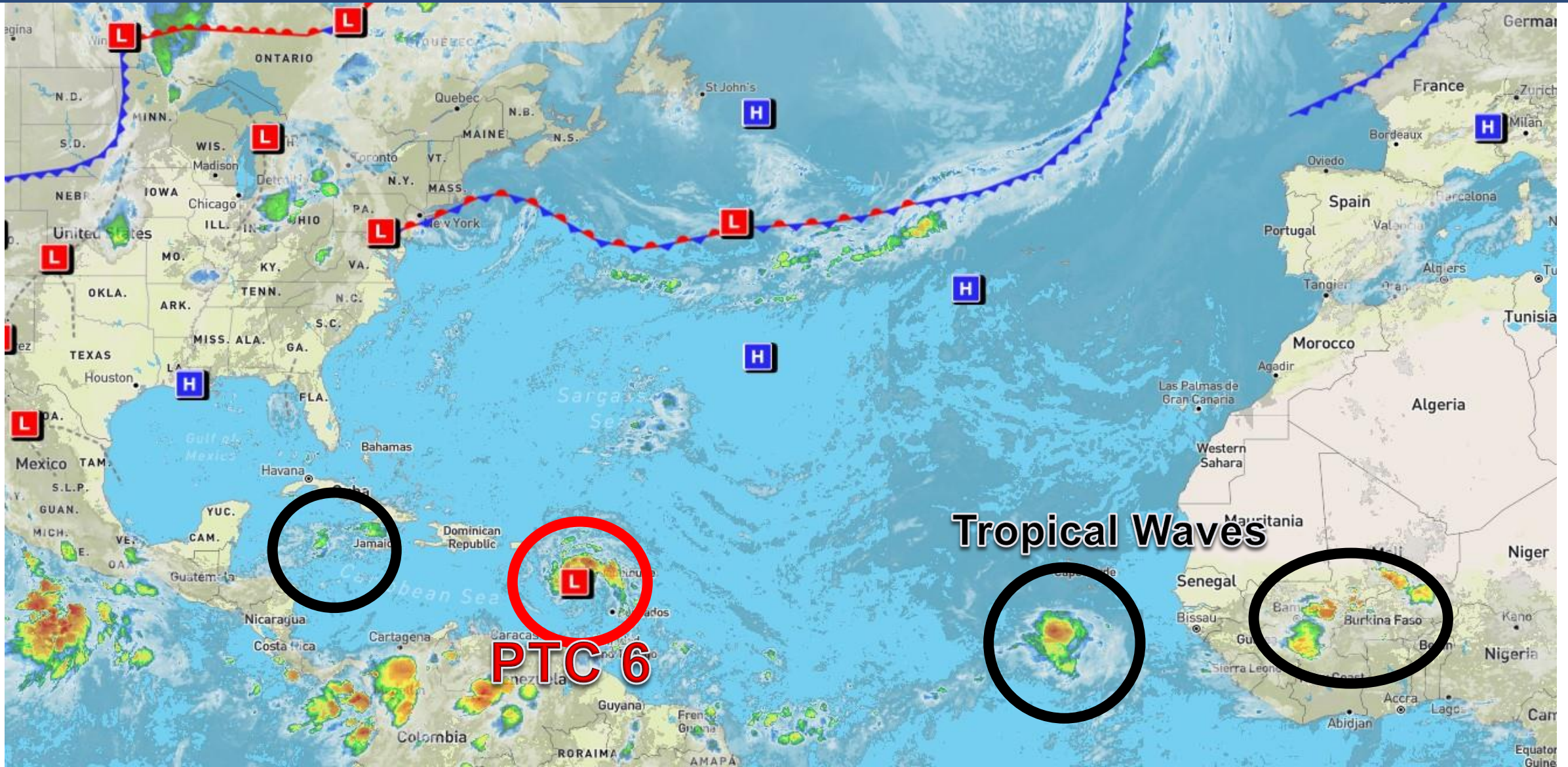
Potential Tropical Cyclone Six

This update is intended for government and emergency response officials, and is provided for informational and situational awareness purposes only. Forecast conditions are subject to change based on a variety of environmental factors. For additional information, or for any life safety concerns with an active weather event please contact your County Emergency Management or Public Safety Office, local National Weather Service forecast office, or visit the National Hurricane Center website at www.hurricanes.gov.



Atlantic Basin Satellite Image

Chance of development: — None — Low — Medium — High

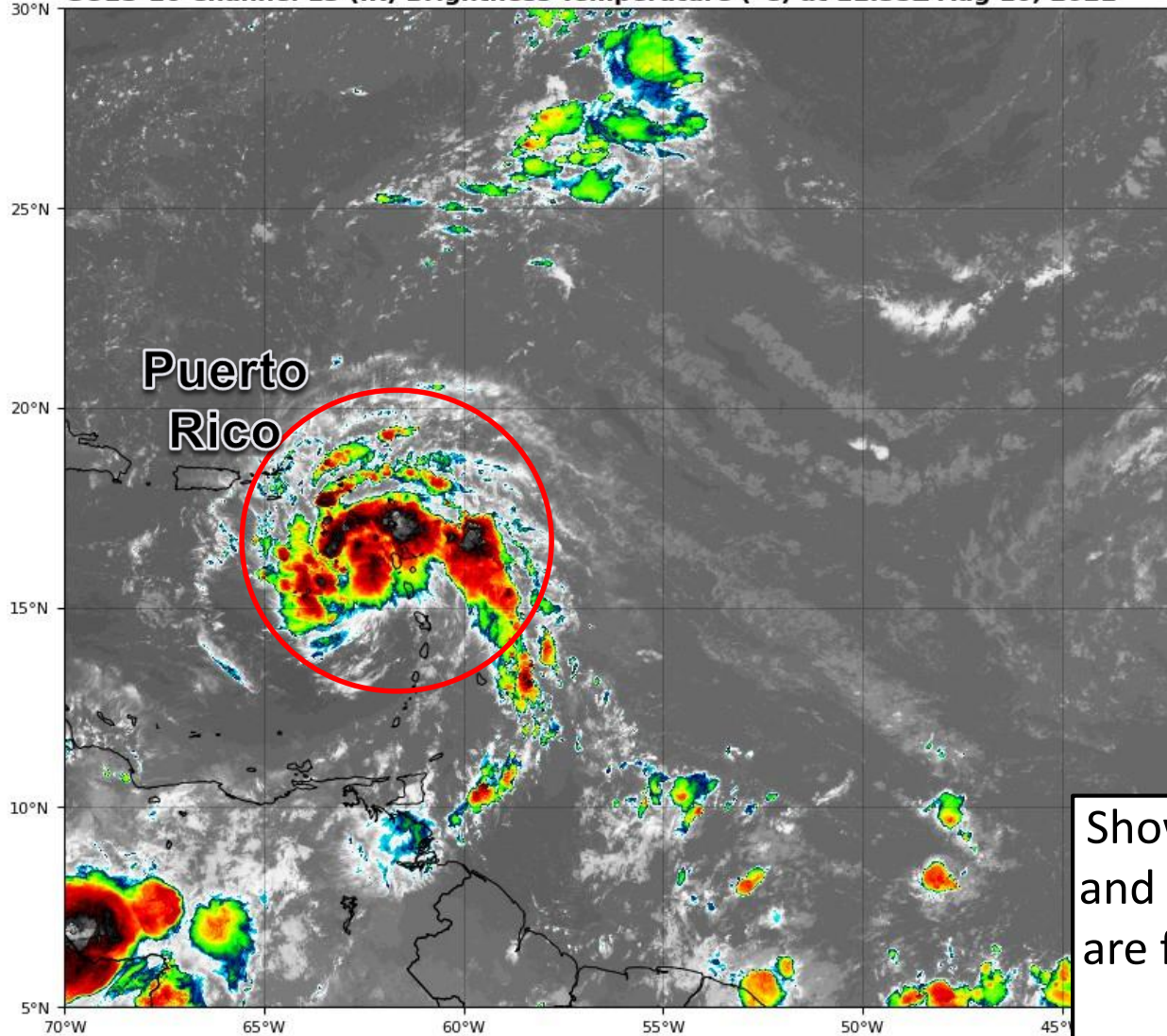




Satellite Imagery

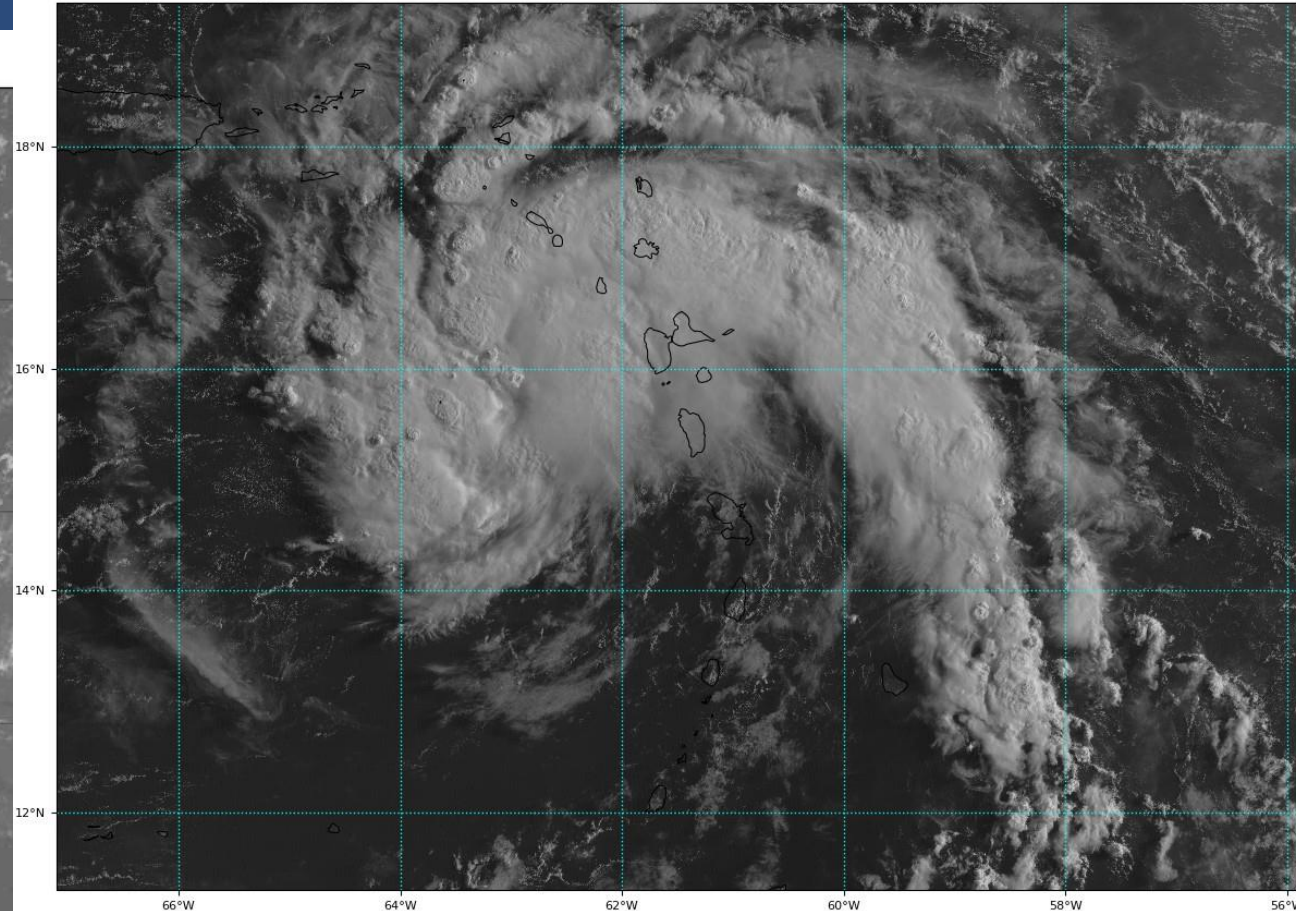
Central Atlantic – PTC Six

GOES-16 Channel 13 (IR) Brightness Temperature (°C) at 11:35Z Aug 10, 2021



GOES-16 Channel 2 (visible) Reflectance at 11:35Z Aug 10, 2021

TROPICALTIDBITS.COM

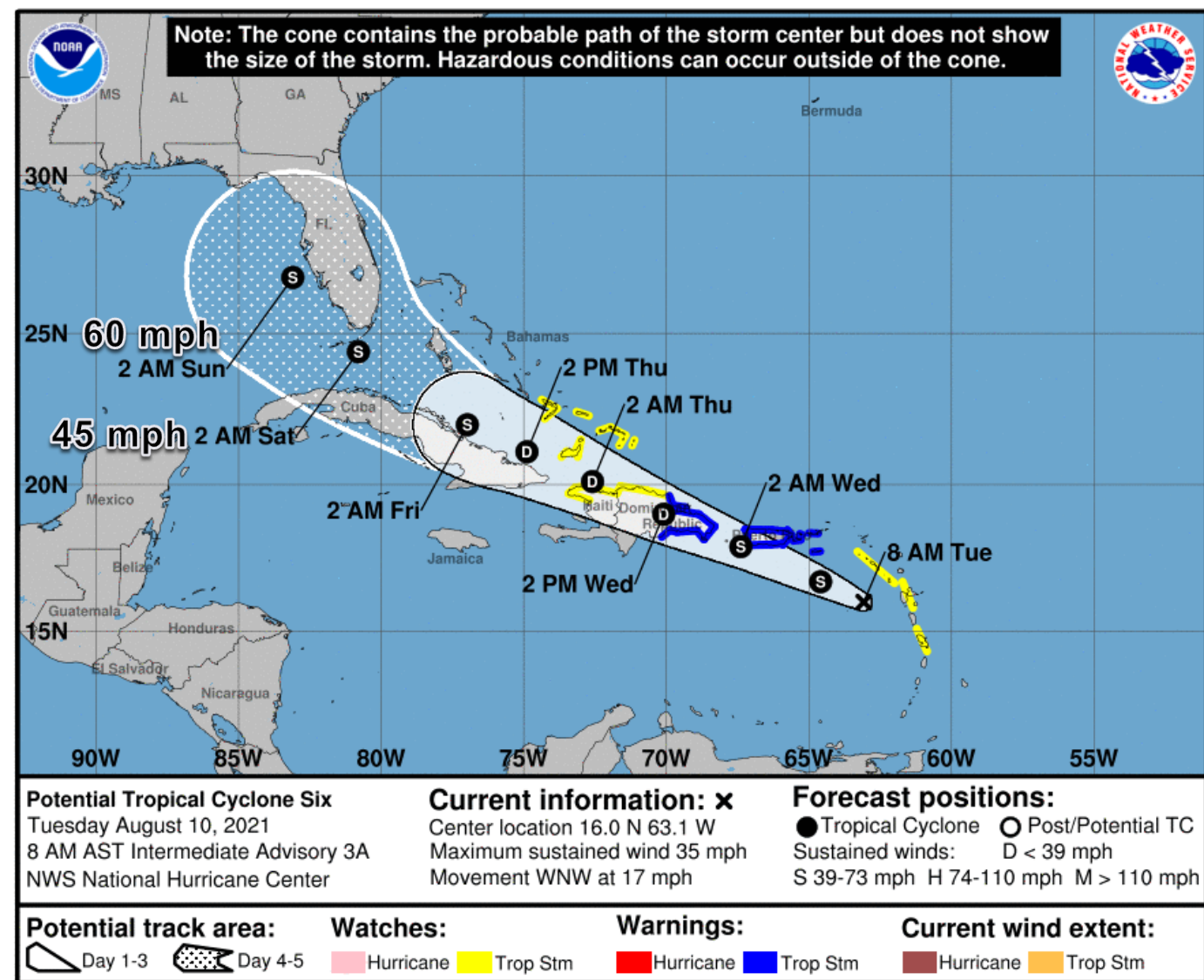


Showers and thunderstorms have been persistent overnight, and are gradually getting better organized. Hurricane hunters are flying to the system this morning to determine if a closed circulation has formed.



Official Forecast Track

From the National Hurricane Center

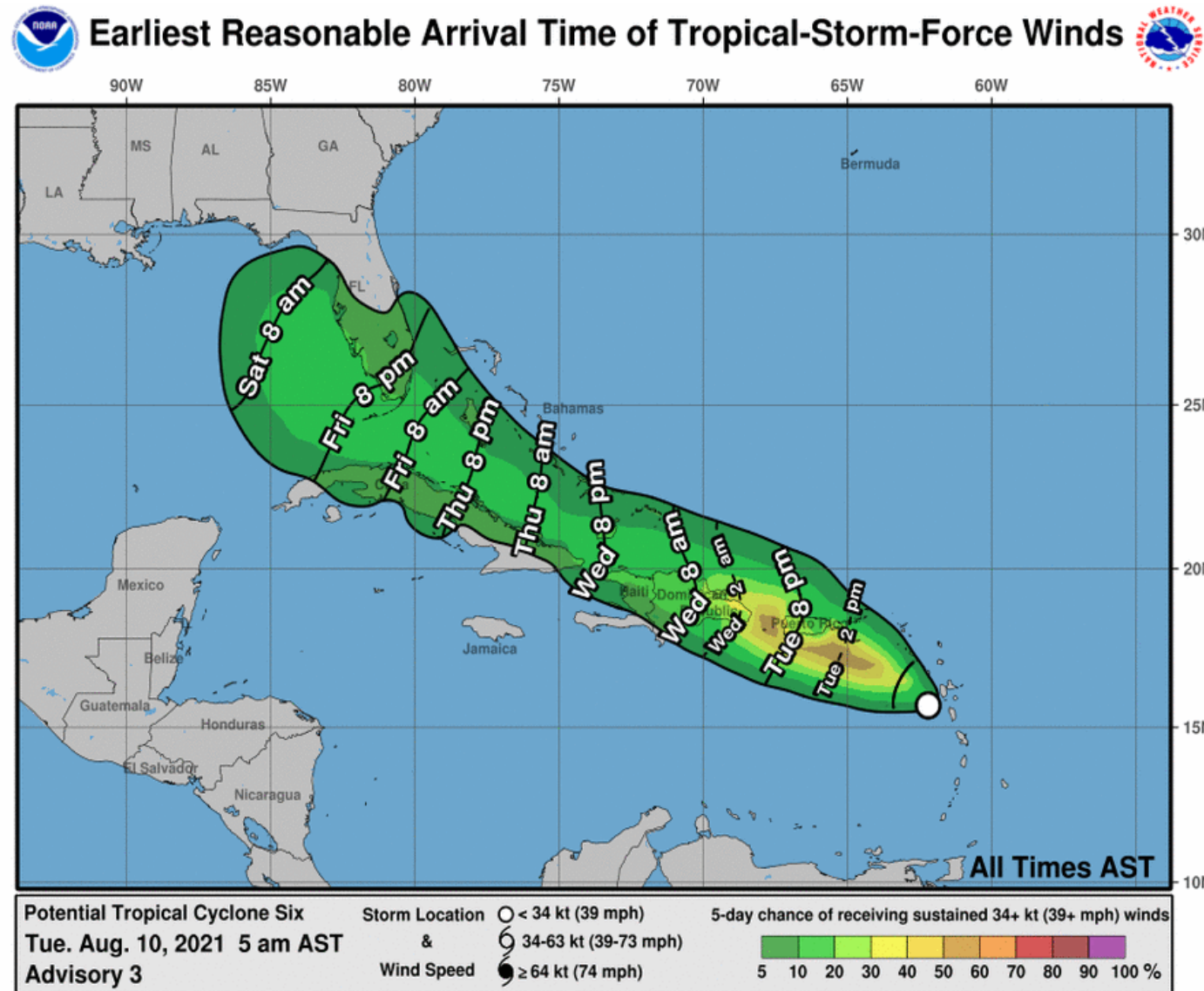


- Potential Tropical Cyclone Six is located about 250 miles southeast of Puerto Rico, or about 1,250 miles southeast of Miami, Florida.
- Six currently has maximum sustained winds around 35 mph, and some strengthening is forecast over the next 36 hours before the system interacts with land.
- Development into Tropical Storm Fred is expected today.
- Six will move over or near the mountainous terrain of Puerto Rico, Hispaniola, and/or Cuba. This makes the longer range intensity forecast uncertain, but significant strengthening is not forecast by NHC at this time.
- Six is moving west-northwest at 17 mph, and this general motion will continue over the next few days. This weekend, a northward turn is anticipated.
- Six will be in the vicinity of South Florida on Friday night/Saturday.



Time of Arrival & Wind Speed Probabilities

EARLIEST REASONABLE Time of Arrival of Tropical Storm Force Winds (>39 mph)



City	Chance for TS Winds	Changes Since Last Packet
Key West	14%	+2%
Marathon	15%	+2%
Naples	15%	+6%
Miami	10%	+2%
West Palm Beach	8%	+2%
Tampa	10%	+5%
Apalachicola	8%	+6%

There is a 1 in 10 chance of tropical storm force winds at this time for the Florida Keys and along coastal South and West Central Florida. Odds have increased slightly.

The earliest reasonable arrival time of tropical storm force winds in South Florida is Friday morning. They are most likely to begin Friday night or early Saturday morning.



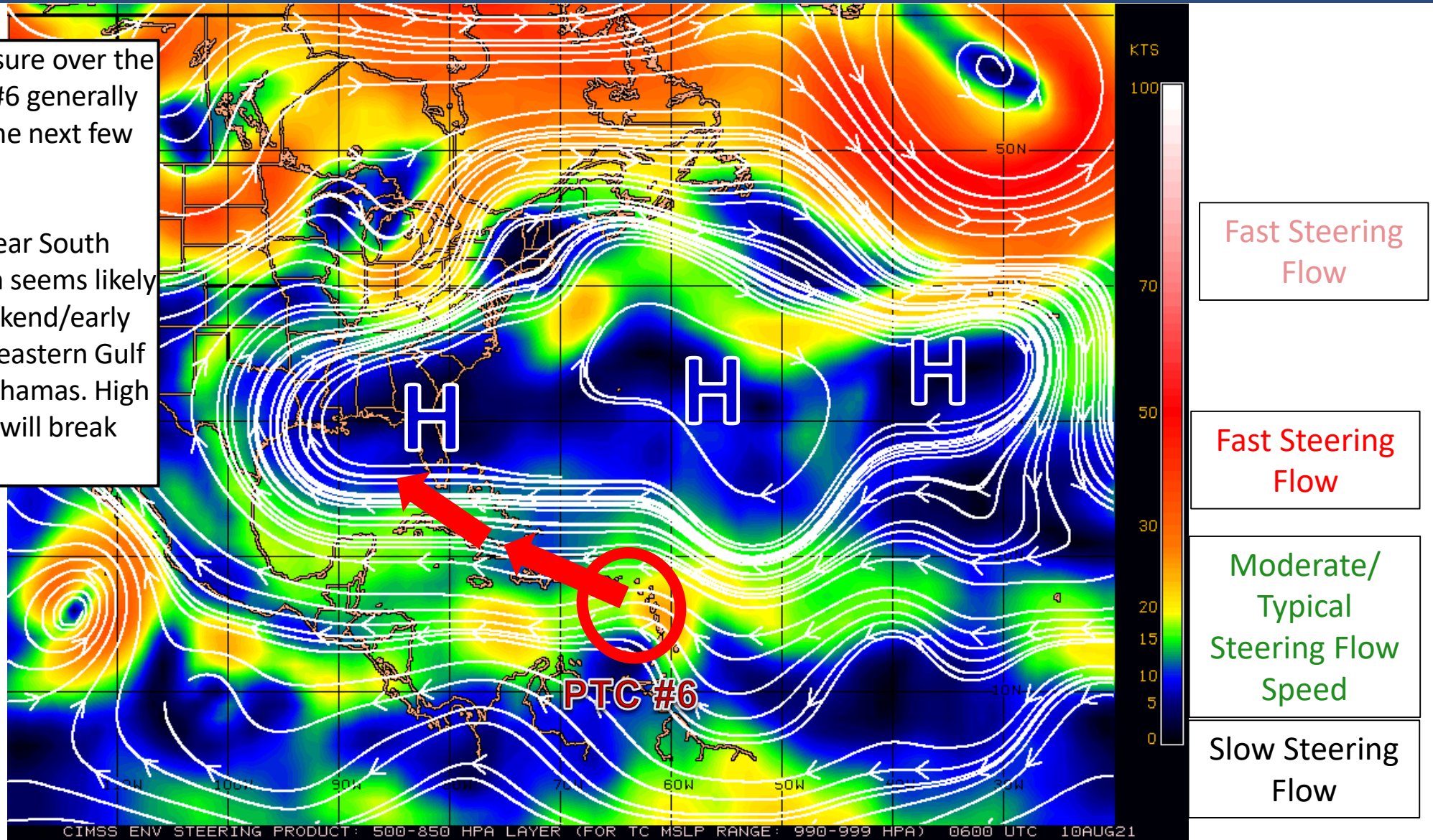
Steering Currents

What is Moving the System?

Color denotes the movement speed through the atmosphere and thin white lines denote direction. Tightly clustered white lines represent faster movement as well.

A large area of high pressure over the Atlantic will move PTC #6 generally west-northwest over the next few days.

Once the system is near South Florida, a northward turn seems likely at some point this weekend/early next week either in the eastern Gulf of Mexico or western Bahamas. High pressure over Florida will break down.



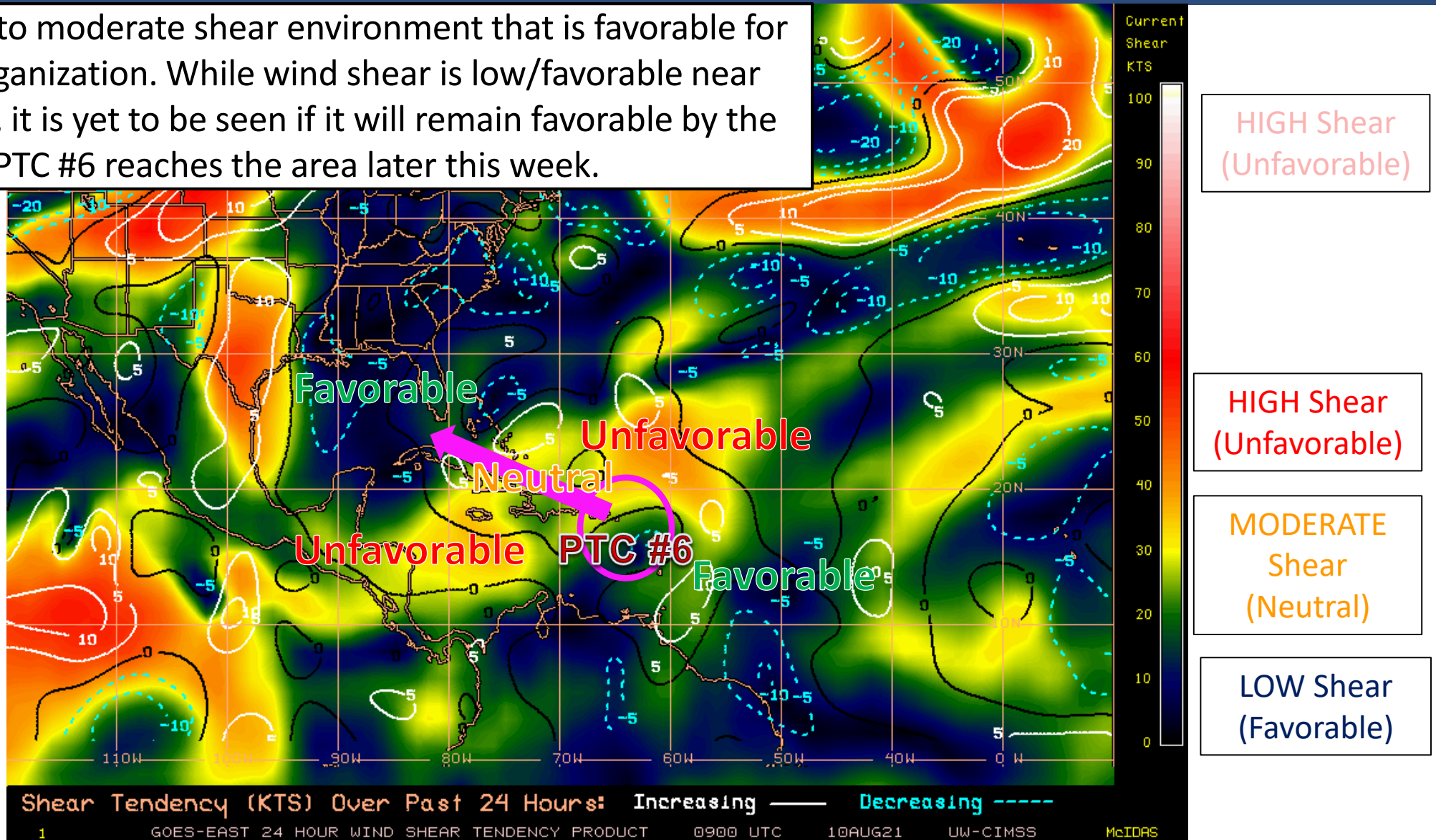


Wind Shear

Is the environment favorable for the system?

Color denotes the amount of wind shear and the lines denote how it have changed over the last 24 hours (dotted lines show decreasing shear and solid lines show increasing).

PTC #6 is in a low to moderate shear environment that is favorable for slow/gradual organization. While wind shear is low/favorable near Florida right now, it is yet to be seen if it will remain favorable by the time PTC #6 reaches the area later this week.

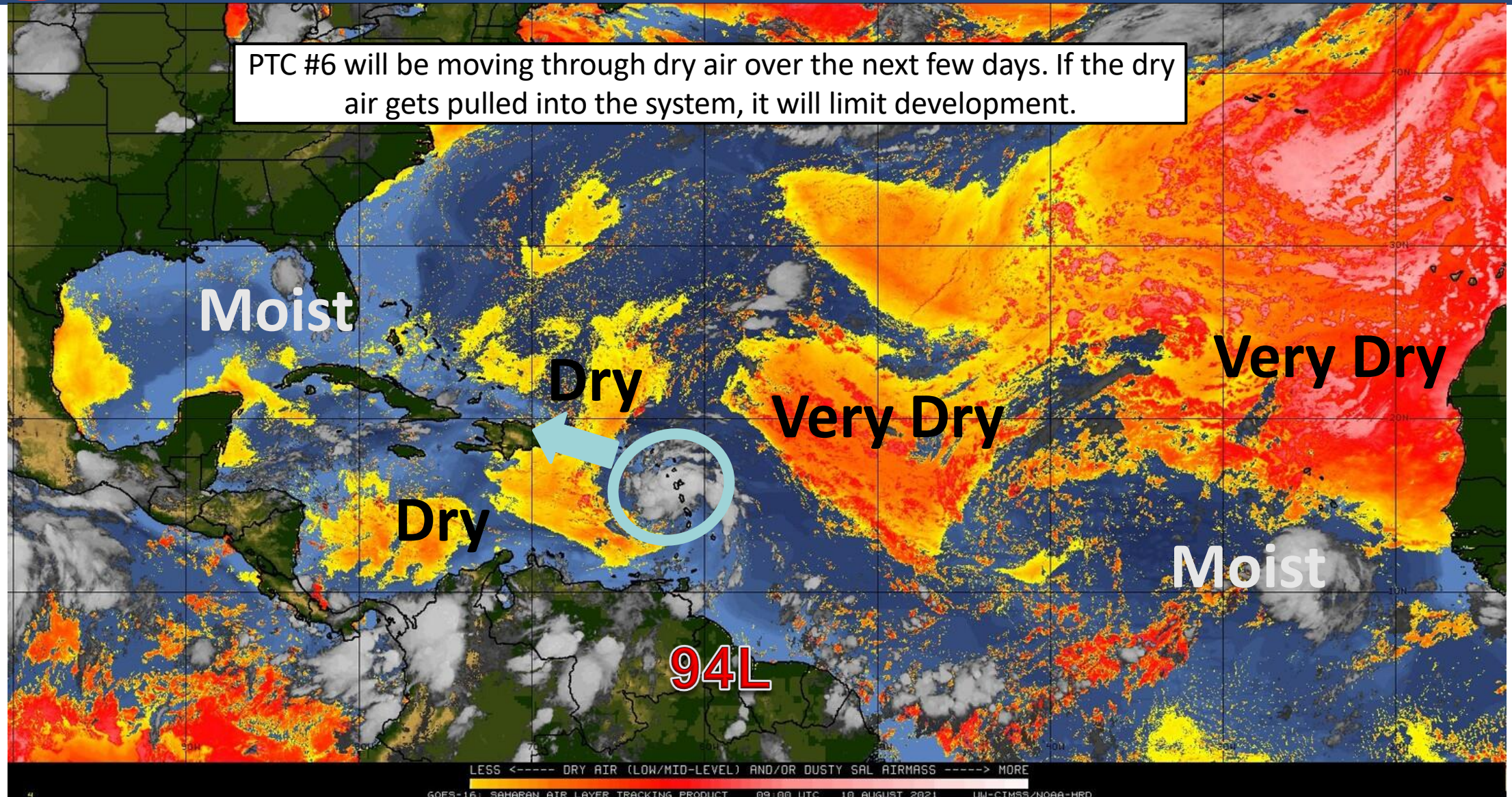




Dry Air & Saharan Dust

Is the environment favorable for the system?

Color denotes concentration of Saharan Dust or dry, stable air.

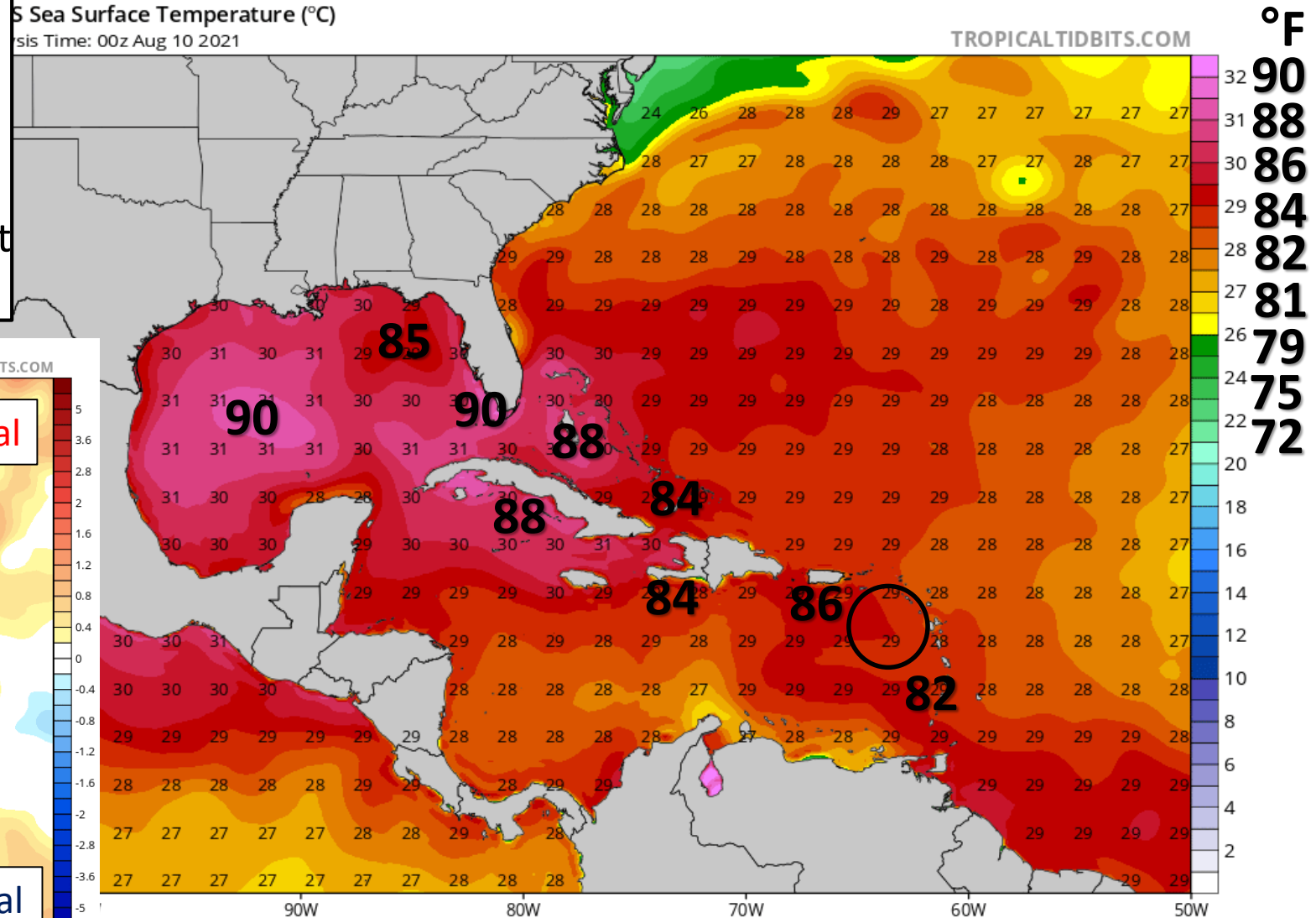
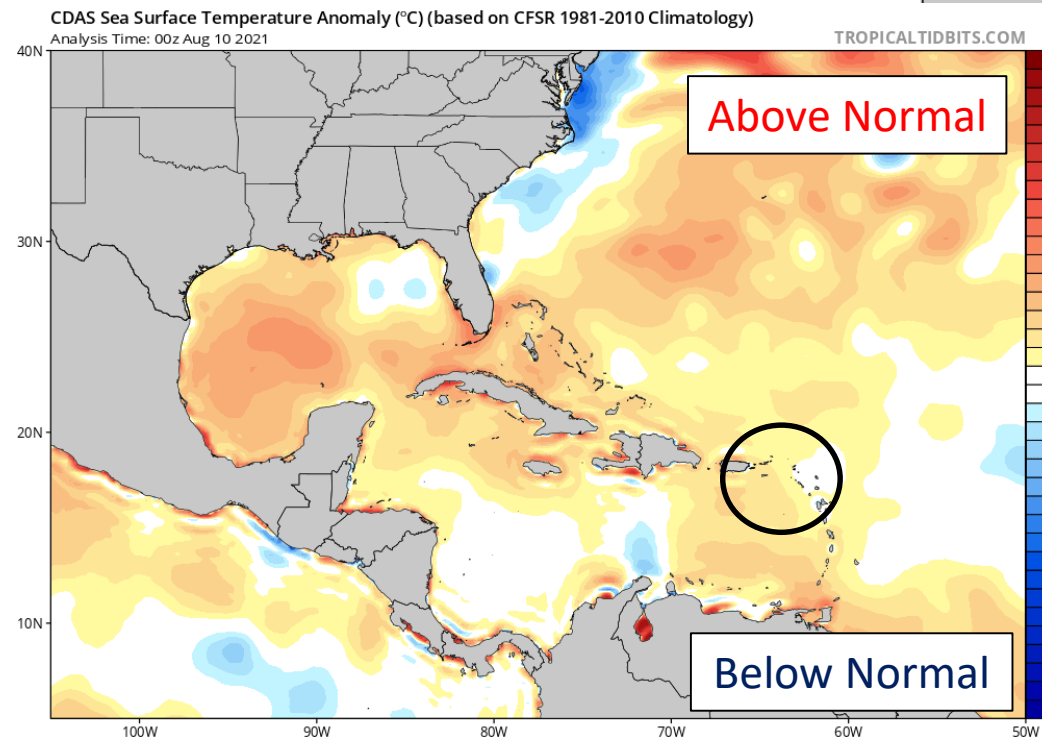




Sea Surface Temperatures & Anomalies

Is the ocean favorable for the system?

Water temperatures across much of the Caribbean, southwest Atlantic, and Gulf of Mexico are above normal and will support tropical development. Water temperatures will become more favorable for development as PTC #6 moves northwest.





Key Messages

From the National Hurricane Center



Key Messages for Potential Tropical Cyclone Six

Advisory 3: 5:00 AM AST Tue Aug 10, 2021



1. The system is forecast to become a tropical storm as it moves over the northeastern Caribbean Sea today. Tropical storm conditions are expected in portions of the U.S. Virgin Islands and Puerto Rico beginning this afternoon, and in the Dominican Republic by Wednesday. Tropical storm conditions are possible in northern Haiti and the southeastern Bahamas by late Wednesday.

2. Heavy rainfall could lead to flash, urban, and small stream flooding and potential mudslides across the U.S. Virgin Islands and Puerto Rico. The greatest threat for flooding impacts will be across the eastern and southeastern portions of Puerto Rico.

3. There is a risk of wind and rainfall impacts elsewhere in portions of Hispaniola, the Bahamas, and Cuba later this week, although the forecast is more uncertain than usual since the system is still in its formative stage. Interests in these areas should monitor the system's progress and updates to the forecast.

4. Interests in the remainder of the Bahamas and Florida should monitor updates to the forecast for this system, but it is too soon to determine what if any impacts could occur there by late this week or this weekend given the uncertainty in the long-range forecast.



For more information go to hurricanes.gov

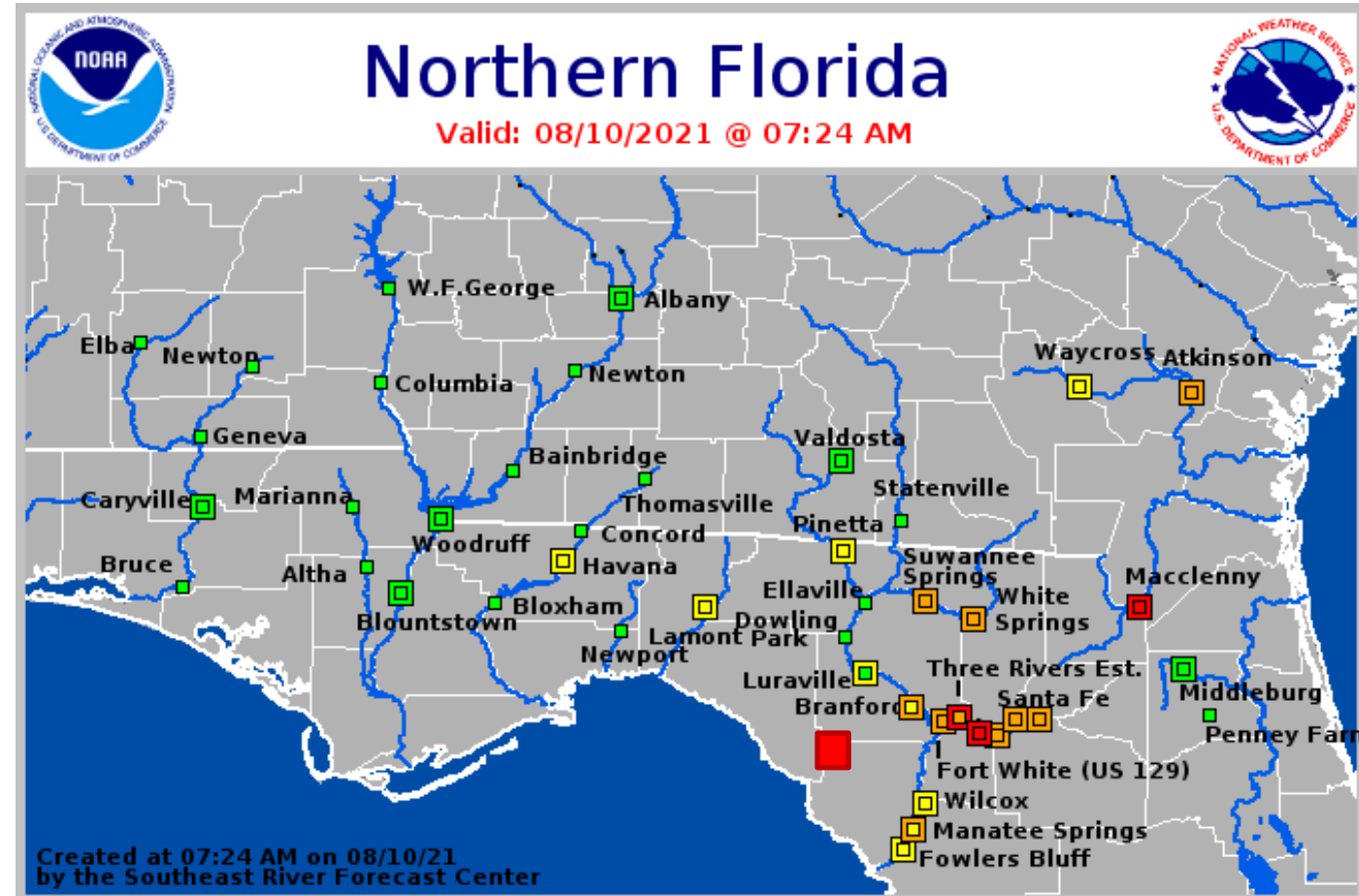
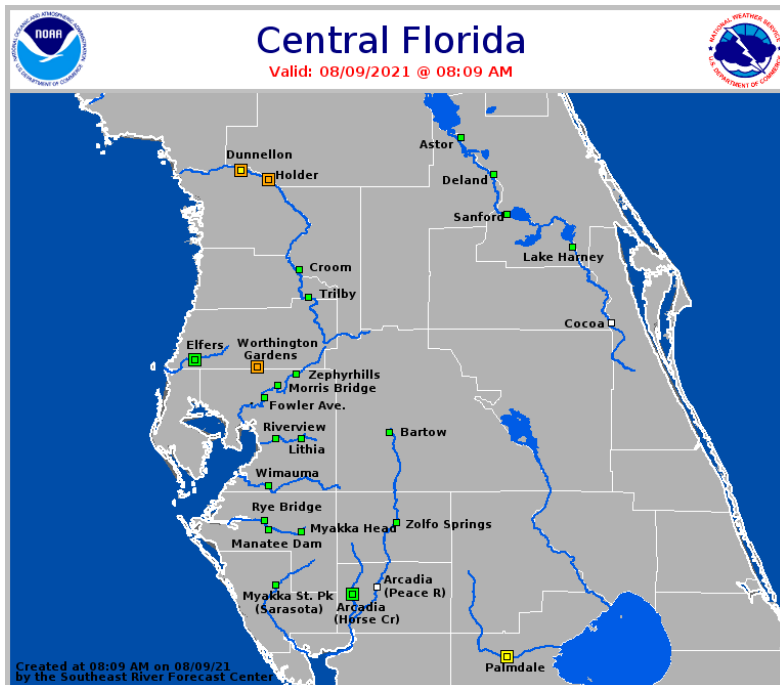


Current & Forecast River Flooding

North Florida – Southeast River Forecast Center

Extensive river flooding will continue across Northeast Florida this week.

More details on river levels available at the [Southeast River Forecast Center website](https://www.srfc.noaa.gov/).





Long-Range Flood Outlook

Next 7 Days – Ending Monday, August 16



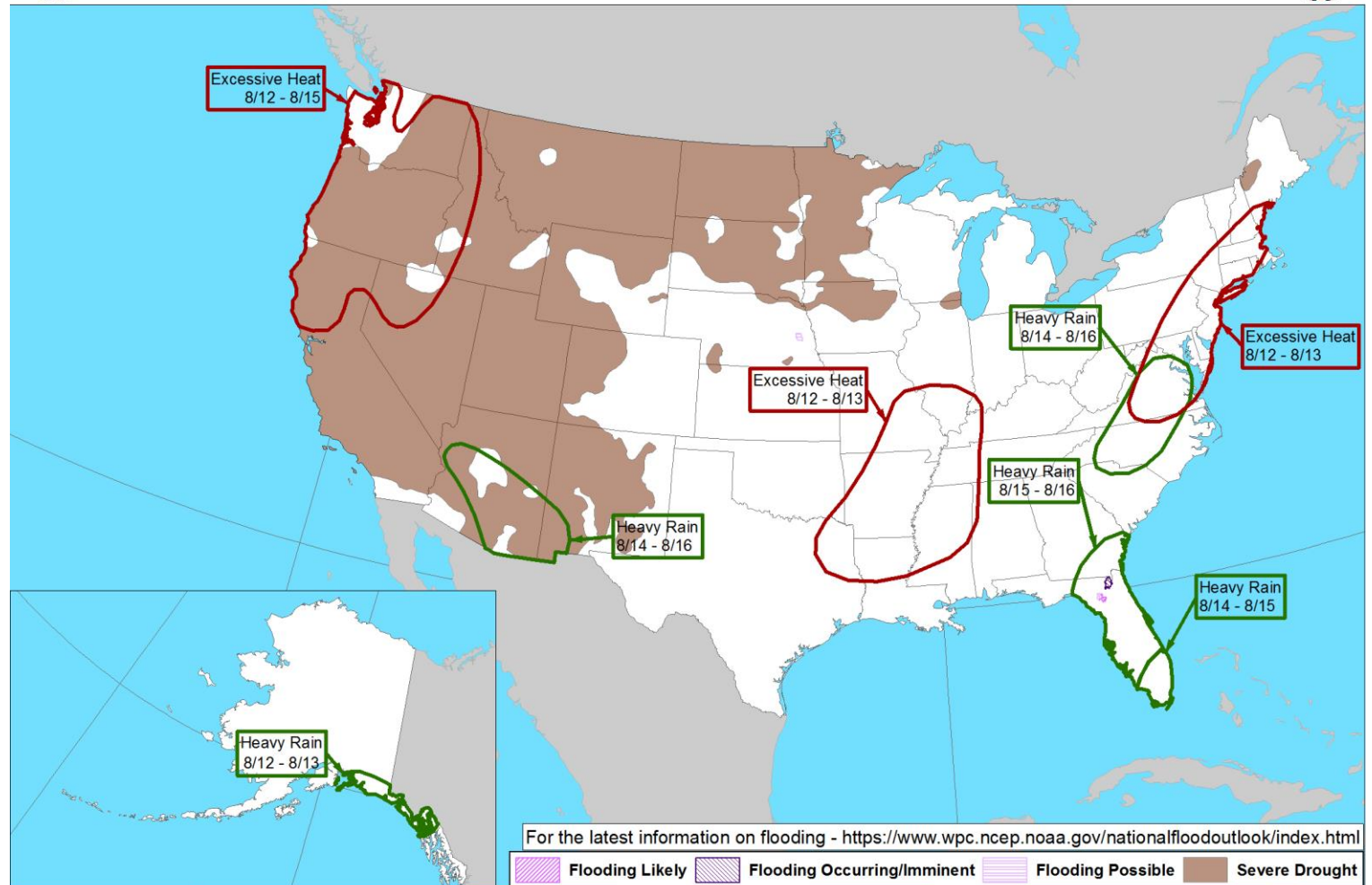
Day 3-7 U.S. Hazards Outlook
Valid: 08/12/2021-08/16/2021



Heavy rainfall will be possible across South Florida later this week and Central and Northeast Florida this weekend/early next week.

Rivers across Northeast Florida are saturated and this region will be the most susceptible to additional flooding this weekend.

It is too early to determine exact rainfall totals.



Weather Prediction Center

Made: 08/09/2021 3PM EDT

Follow us:

www.wpc.ncep.noaa.gov



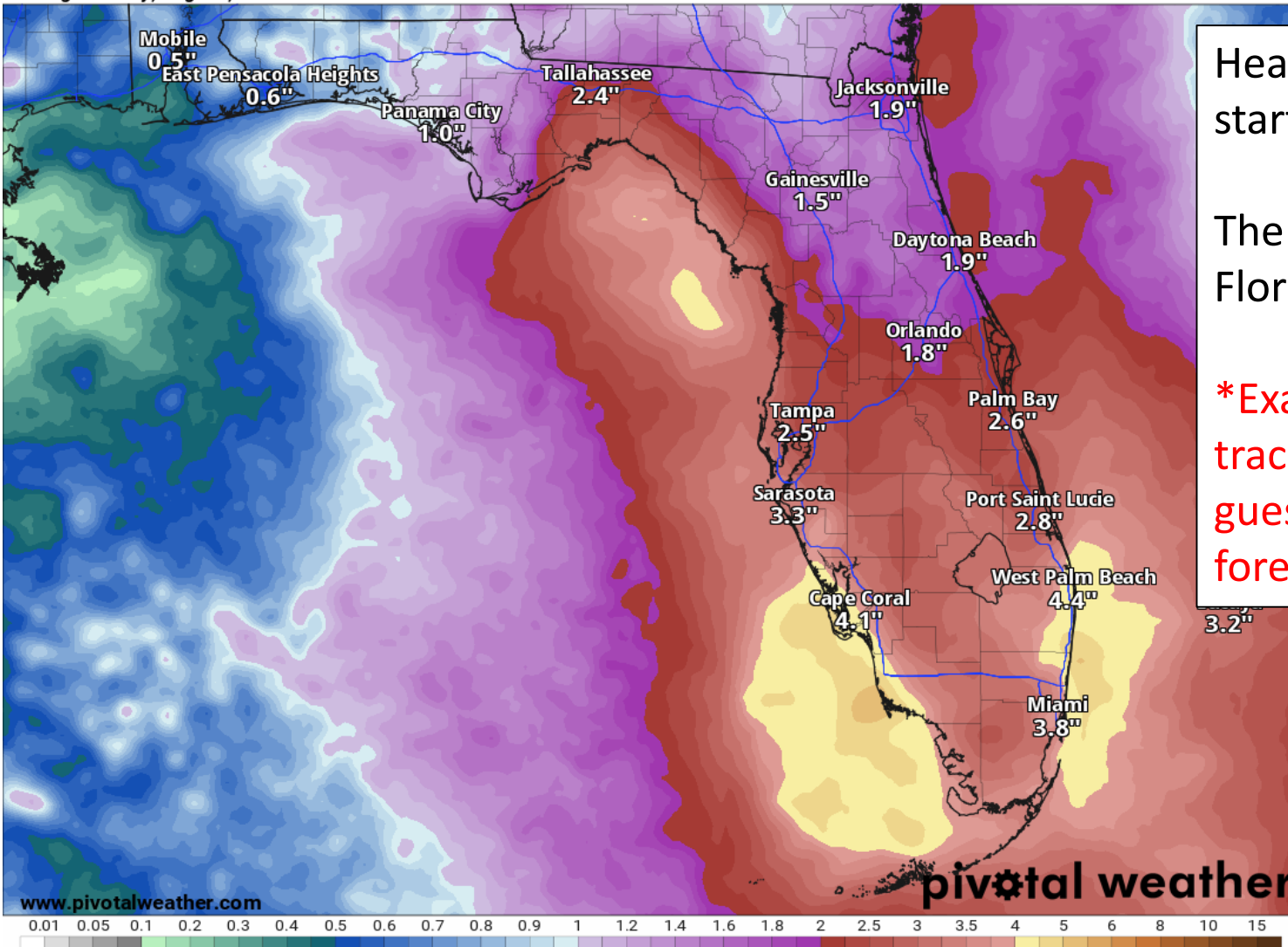
Rainfall Totals Next 7 Days

Ending 8 AM ET Tuesday

7-Day Precipitation (in)

Ending Tuesday, Aug. 17, 2021 at 8 a.m. EDT

Init: Tue 2021-08-10 12z WPC



Heavy rainfall will be possible across the Peninsula starting on Friday and continuing into the weekend.

The heavy rain threat may then move into North Florida early next week.

***Exact rainfall totals WILL CHANGE as the forecast track and intensity is fine tuned. These are first guess, low-end totals based on the current NHC forecast. ***



Overall Summary

Potential Tropical Cyclone Six (Formerly Invest 94L)

- The system continued to gradually organize overnight. Hurricane hunters are enroute to determine if Tropical Storm Fred has developed.
- PTC #6 currently has maximum sustained winds of around 35 mph and is moving to the west-northwest at 17 mph.
- The system is approximately 250 miles southeast of Puerto Rico or 1,250 miles southeast of Miami, Florida.
- A little strengthening is forecast over the next 24-36 hours as it continues west-northwest, before land interaction, increasing wind shear, and some dry air will work together to weaken the system.
- Six will remerge over the far southwestern Atlantic late in the week where some gradually strengthening may resume.
- It may move into the eastern Gulf of Mexico this weekend and will need to continue to be monitored.

Florida Outlook:

- PTC #6 should be monitored, as it will bring increased rain chances to South Florida starting on Friday and other regions of the state this weekend and into early next week.
- The entire Florida Peninsula is in the 5-day forecast cone for where the center of the storm is most likely to travel.
- **It is too early to determine any other impacts to the state!!**
- Some wind and surge impacts are possible, particularly if the system remains north of the islands and gets into the Gulf of Mexico.
- Widespread minor to moderate river flooding will continue this week in Northeast Florida. Heavy rainfall may continue or worsen flooding.

Another briefing packet will be issued this afternoon with the 5pm advisory. For the latest information on the tropics, please visit the National Hurricane Center website at www.hurricanes.gov.



TROPICAL UPDATE



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State Meteorological Support Unit

Florida Division of Emergency Management

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