



TROPICAL UPDATE



5:00 PM EDT

Tuesday, August 10, 2021

Potential Tropical Cyclone Six

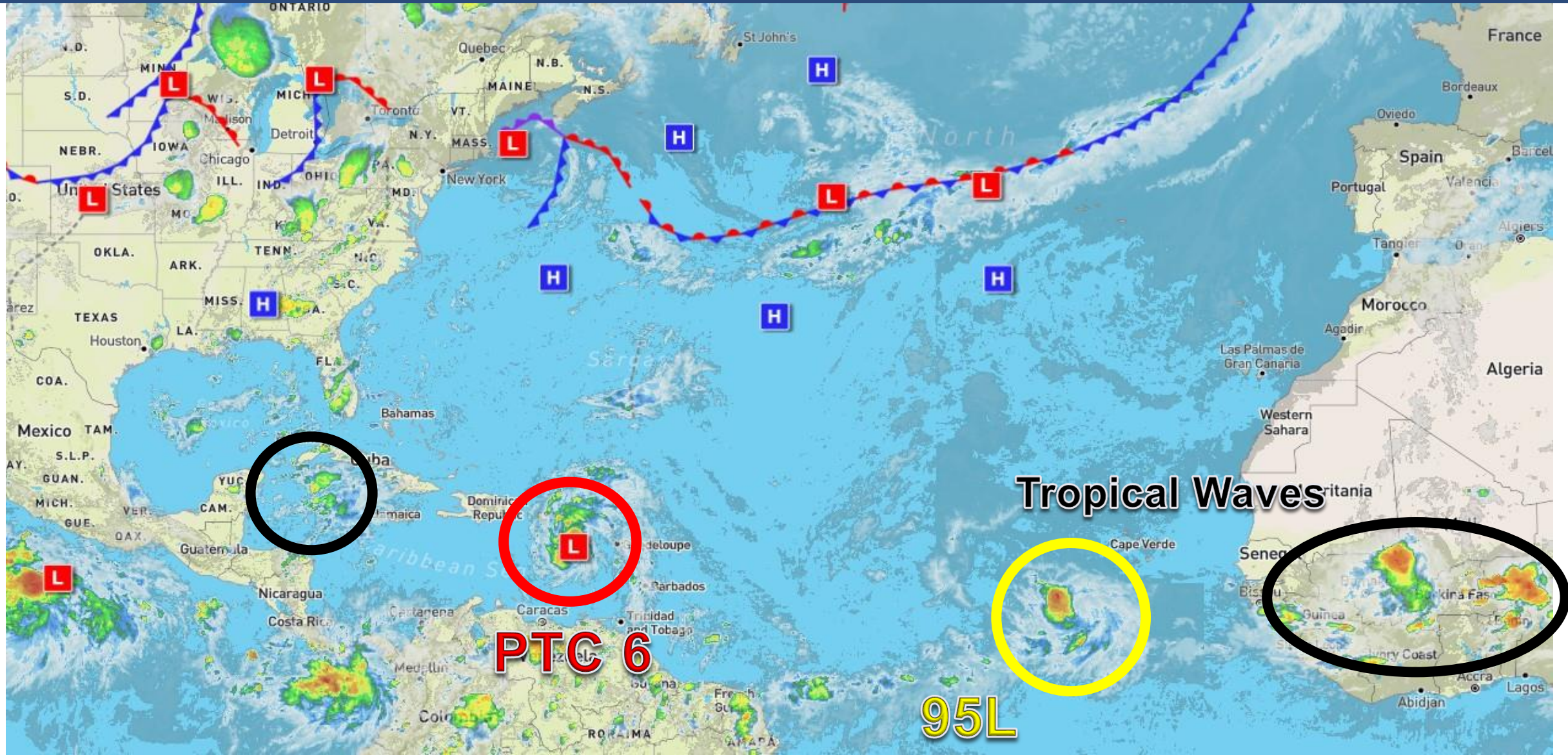
& Invest 95L – Cabo Verde Islands (20%)

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

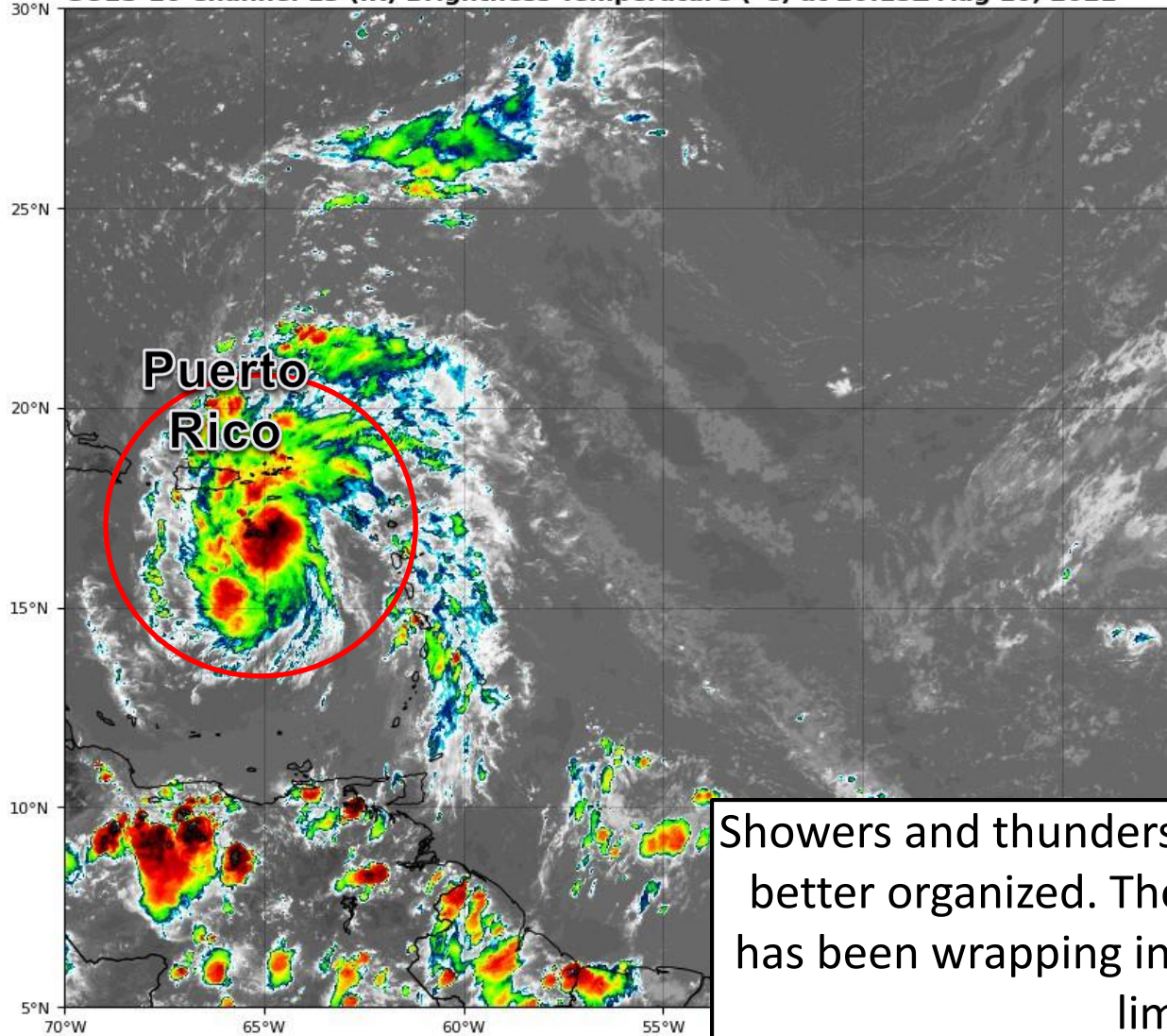




Satellite Imagery

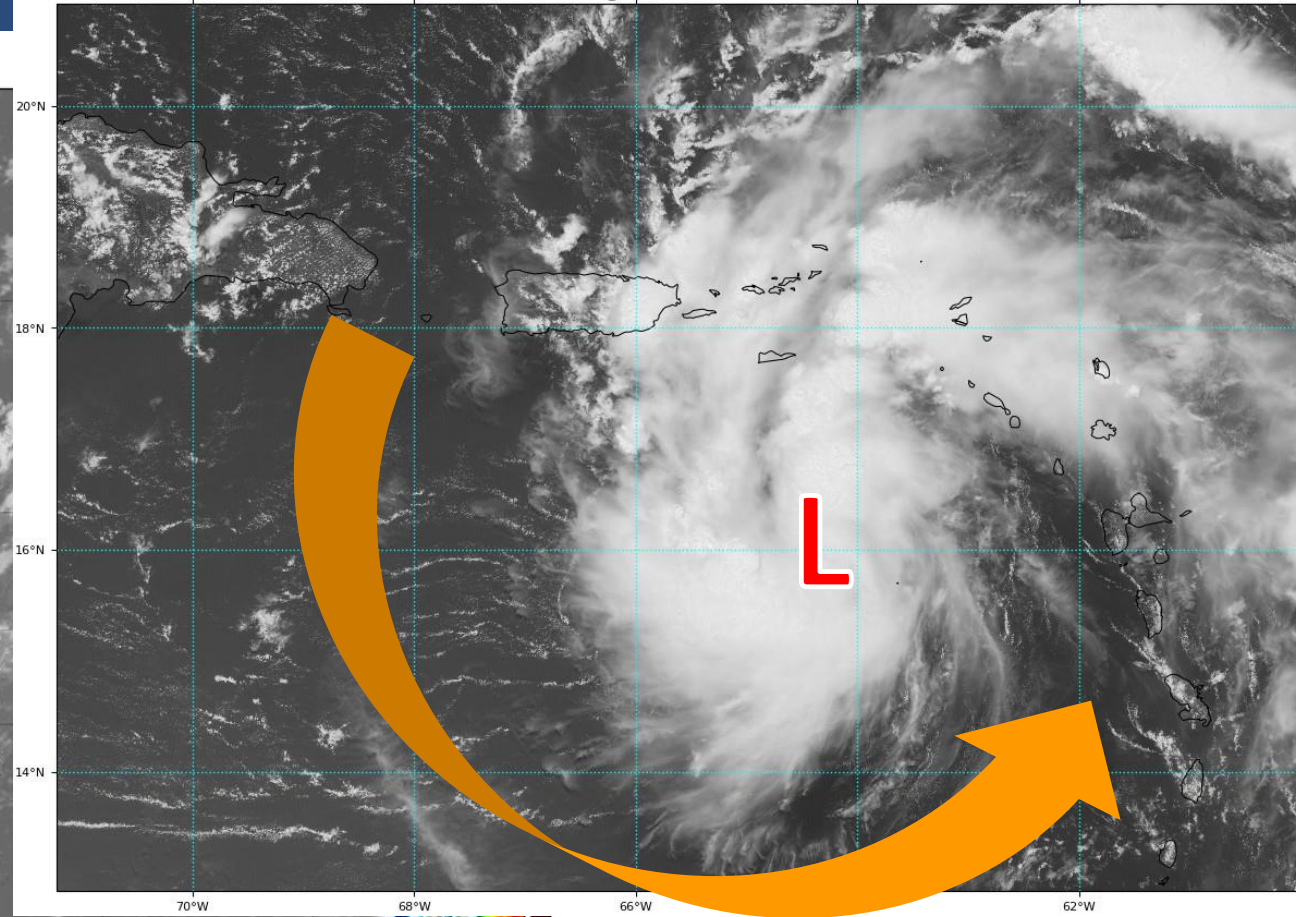
Central Atlantic – PTC Six

GOES-16 Channel 13 (IR) Brightness Temperature (°C) at 20:15Z Aug 10, 2021



GOES-16 Channel 2 (visible) Reflectance at 17:05Z Aug 10, 2021

TROPICALTIDBITS.COM

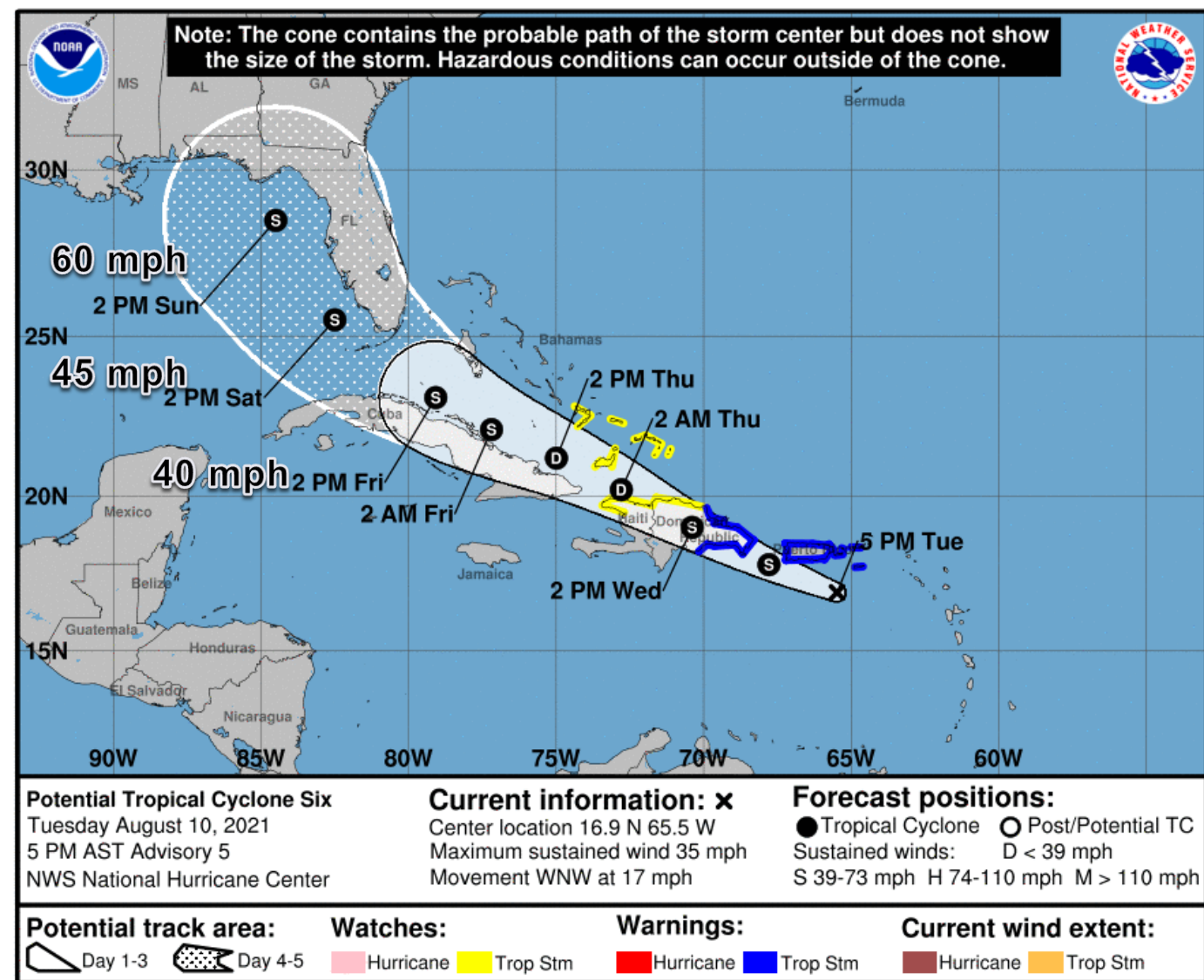


Showers and thunderstorms have been persistent today, and are gradually getting better organized. The system is very close to having a closed circulation. Dry air has been wrapping into the system (orange arrow) and has been the main factor limiting development/strengthening today.



Official Forecast Track

From the National Hurricane Center



- Potential Tropical Cyclone Six is located about 100 miles south of Puerto Rico, or about 1,100 miles southeast of Miami, Florida.
- Six currently has maximum sustained winds around 35 mph, and some strengthening is forecast over the next 24 hours before the system interacts with land.
- Development into Tropical Storm Fred is still expected today or tonight.
- Six will move over 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.
- The track has shifted slightly to the west, with greater confidence the system tracks into the eastern Gulf of Mexico and re-strengthens.

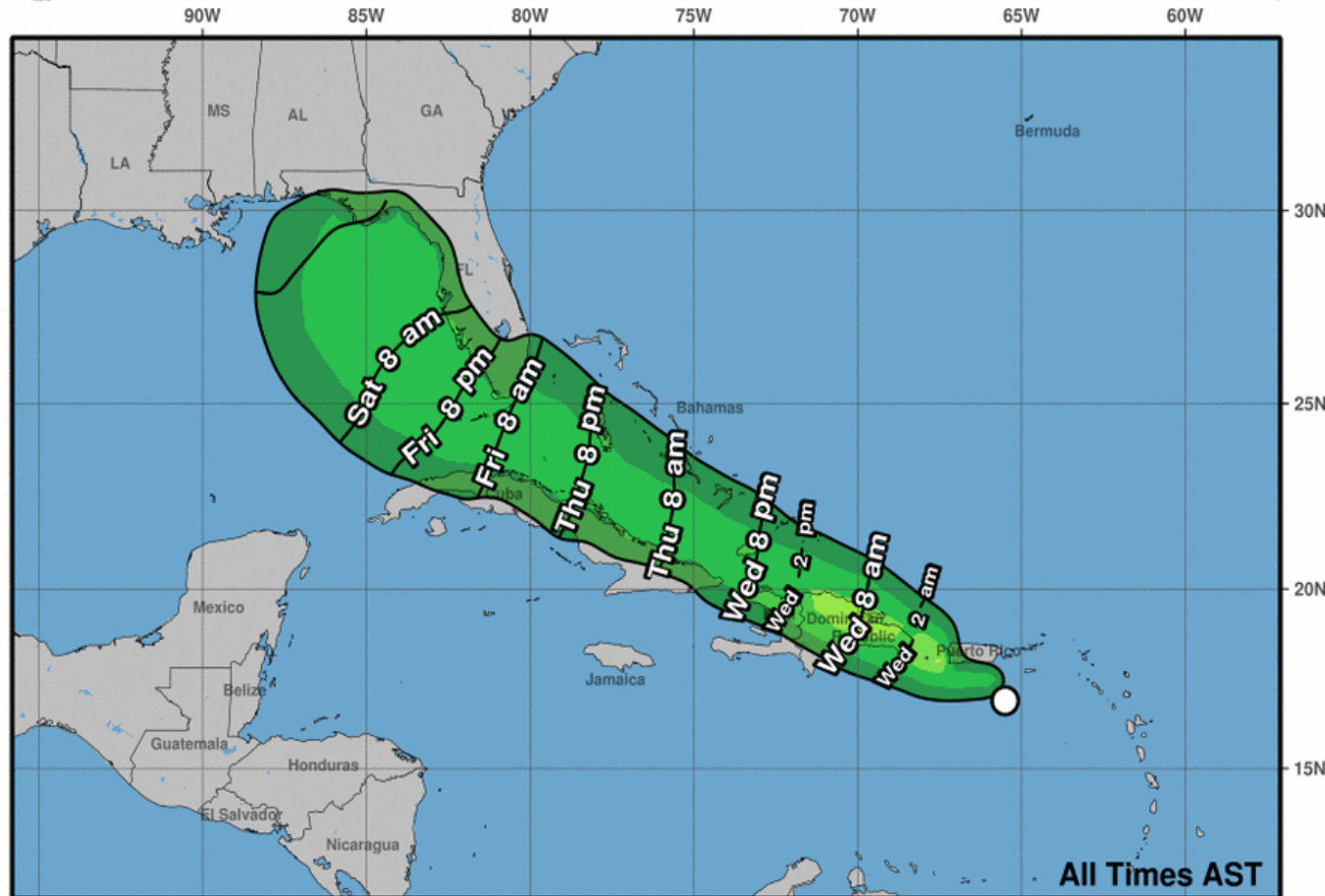


Time of Arrival & Wind Speed Probabilities

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



Earliest Reasonable Arrival Time of Tropical-Storm-Force Winds



Potential Tropical Cyclone Six
Tue. Aug. 10, 2021 5 pm AST
Advisory 5

Storm Location & Wind Speed
○ < 34 kt (39 mph)
● 34-63 kt (39-73 mph)
● ≥ 64 kt (74 mph)

5-day chance of receiving sustained 34+ kt (39+ mph) winds
5 10 20 30 40 50 60 70 80 90 100 %

City

**Chance for
TS Winds**

**Changes Since
Last Packet**

West Palm Beach

7%

-1%

Miami

6%

-4%

Key West

13%

-1%

Naples

14%

-1%

Ft. Myers

7%

+/-0%

Tampa

11%

+/-0%

Cedar Key

11%

+/-0%

Tallahassee

6%

+/-0%

Apalachicola

11%

+3%

Panama City

10%

+/-0%

There is a 1 in 10 chance of tropical storm force winds at this time for the Florida Keys and along coastal areas of Southeast Florida and the Florida Gulf Coast.

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.



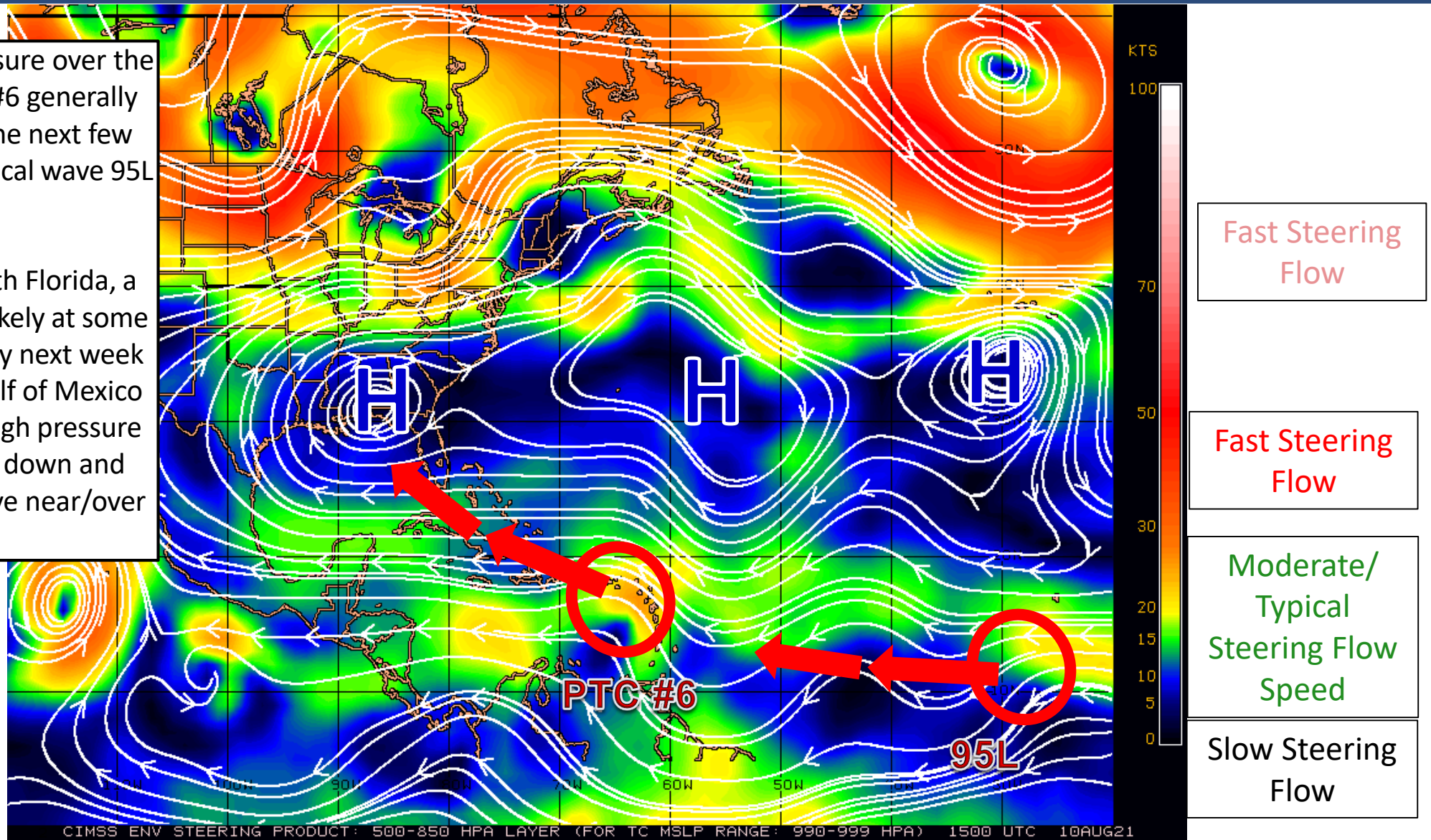
Steering Currents

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, and the other tropical wave 95L westward.

Once PTC 6 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 and allow the system to move near/over the state.



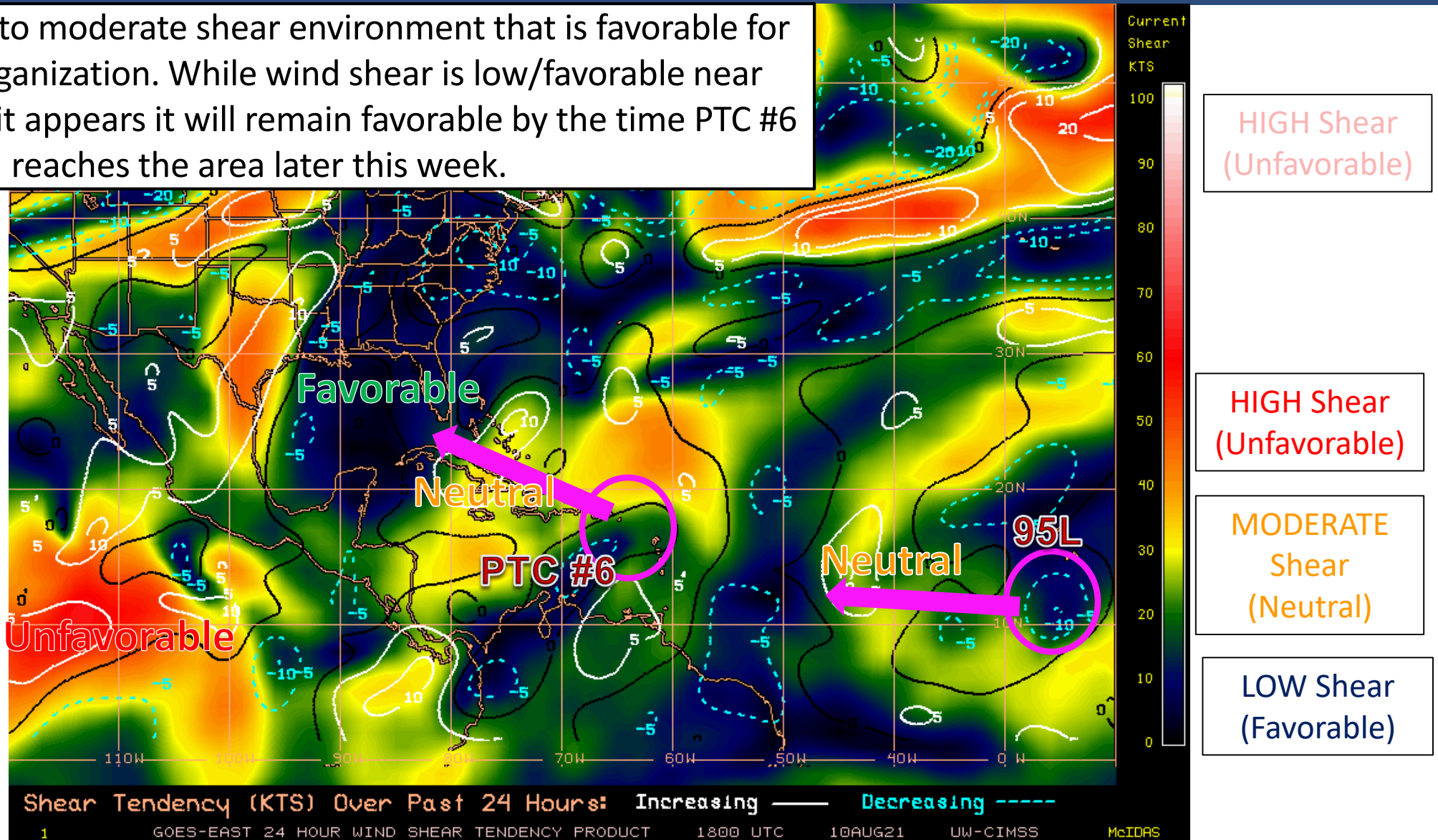


Wind Shear

Is the environment favorable for the system?

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 appears it will remain favorable by the time PTC #6 reaches the area later this week.

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).





Dry Air & Saharan Dust

Is the environment favorable for the system?

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



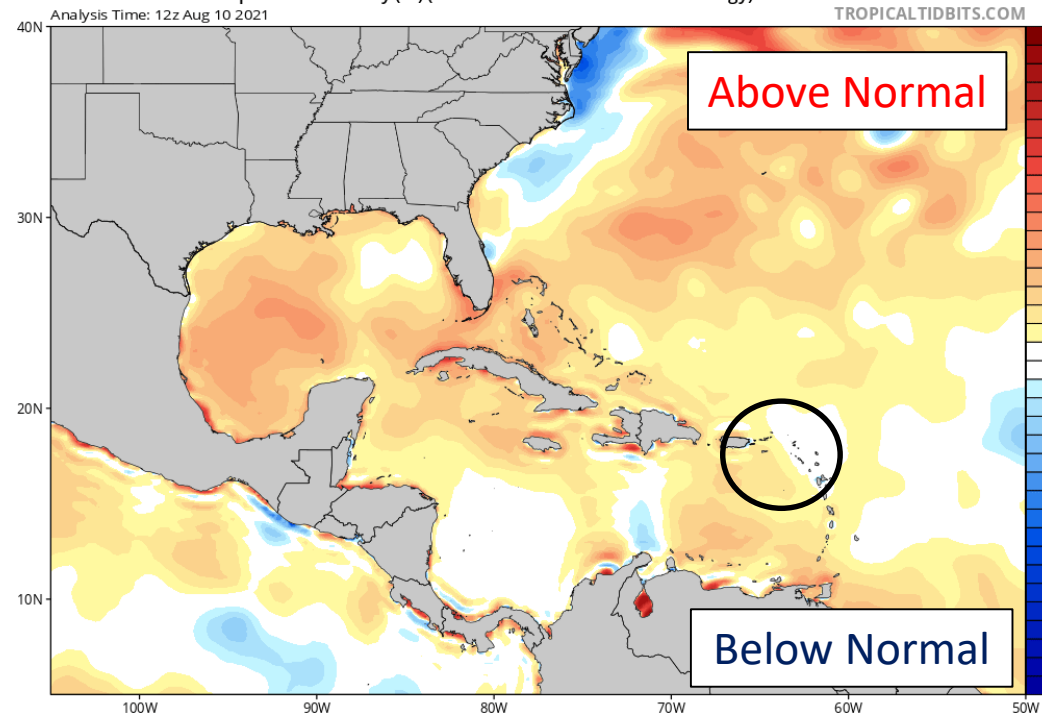


Sea Surface Temperatures & Anomalies

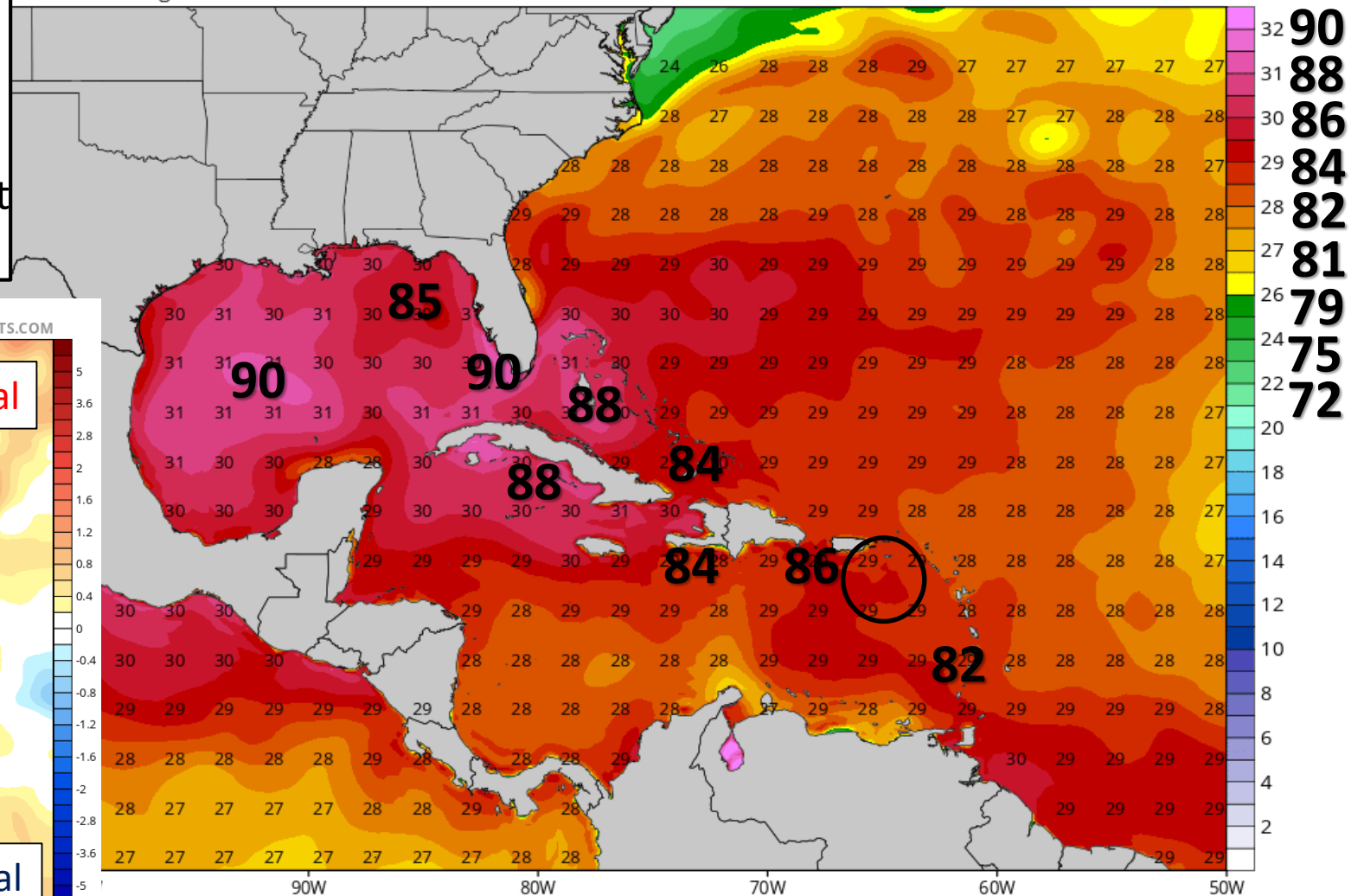
Is the ocean favorable for the system?

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.

CDAS Sea Surface Temperature Anomaly (°C) (based on CFSR 1981-2010 Climatology)
Analysis Time: 12z Aug 10 2021



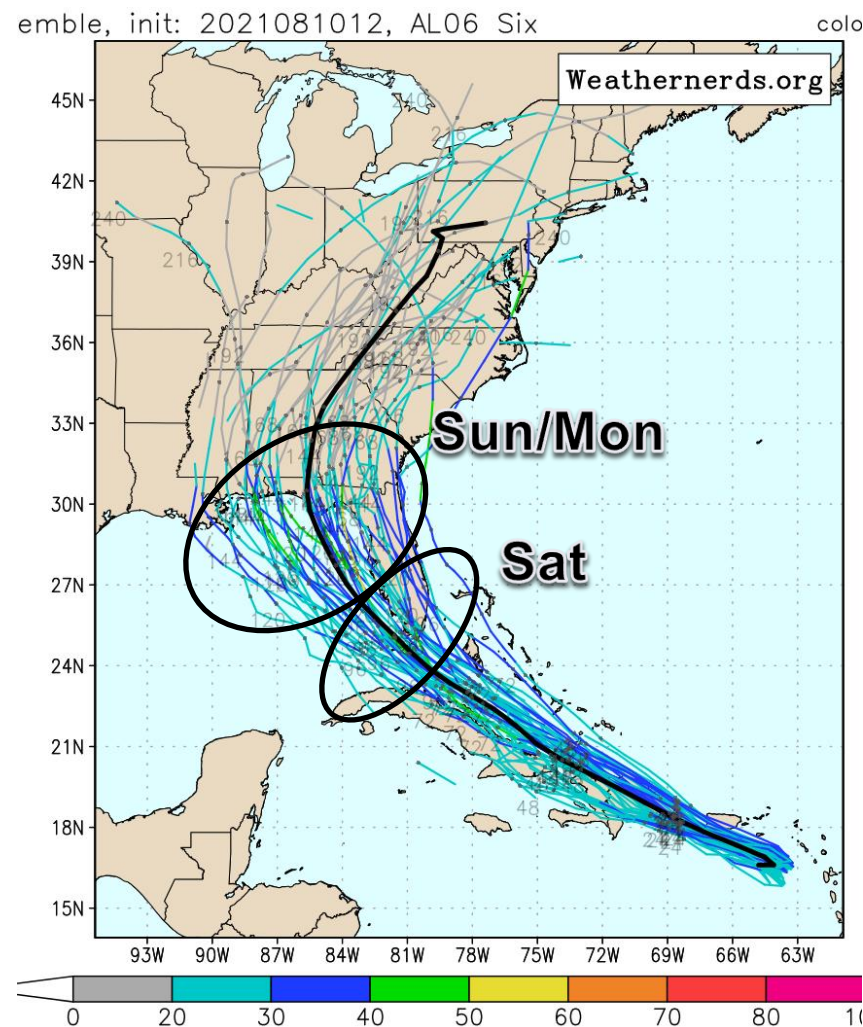
CDAS Sea Surface Temperature (°C)
Analysis Time: 12z Aug 10 2021





Model Forecasts

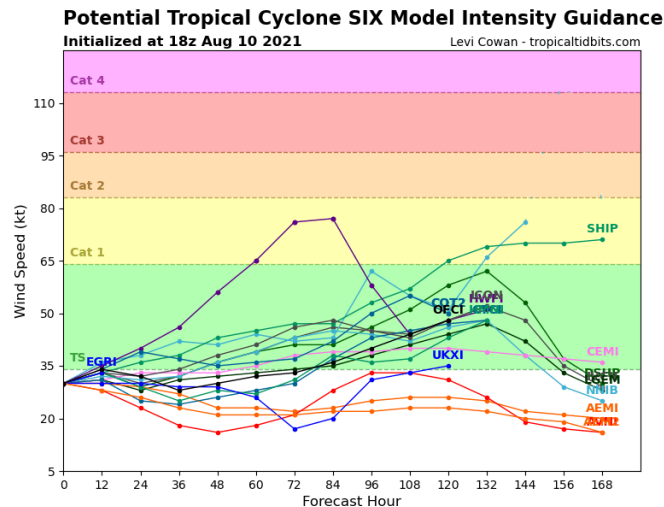
Ensembles, Dynamical, and Statistical Models



PTC #6 will be in the vicinity of South Florida/Florida Straits Fri. night/Sat. and North Florida Sun./Mon.

Land interaction, dry air, and some wind shear will likely limit significant development between now and Thursday.

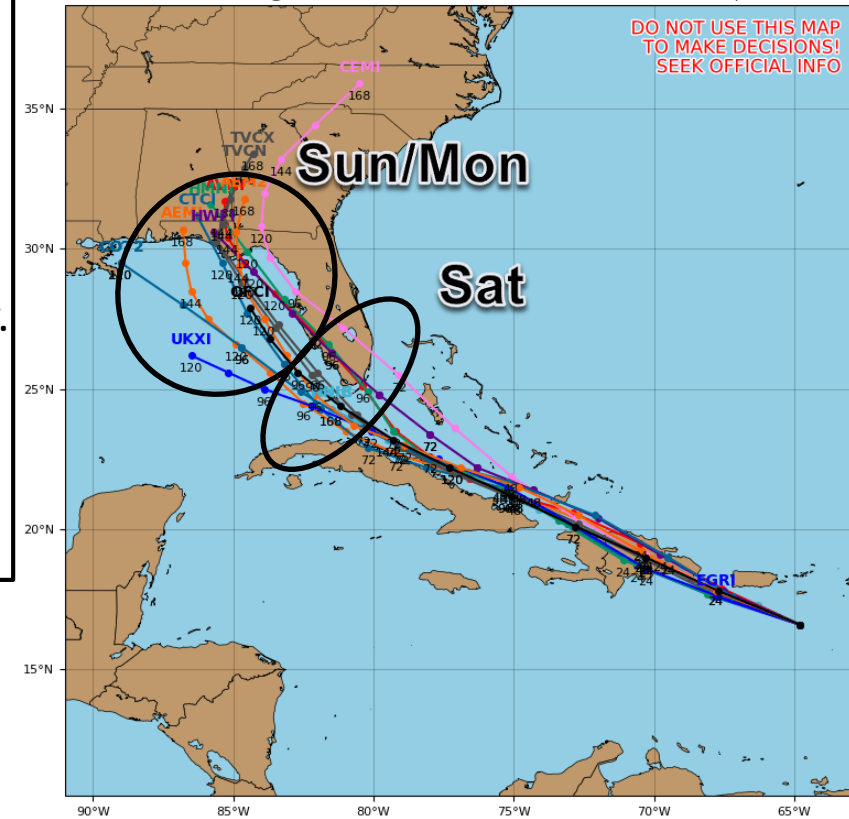
Strengthening is then possible as the system is near Florida or particularly in the Gulf of Mexico this weekend.



Potential Tropical Cyclone SIX Model Track Guidance

Initialized at 18z Aug 10 2021

Levi Cowan - tropicaltidbits.com



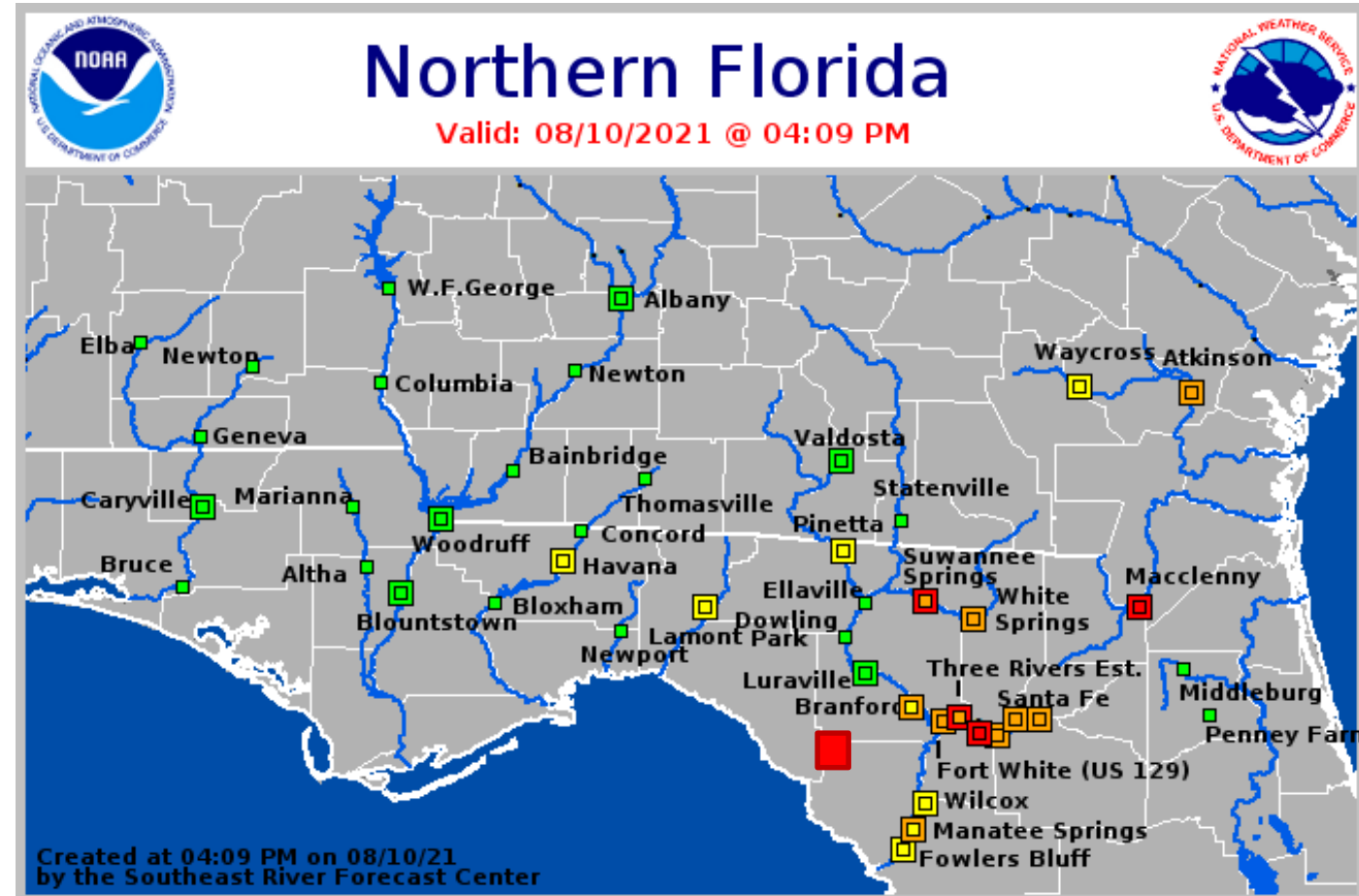
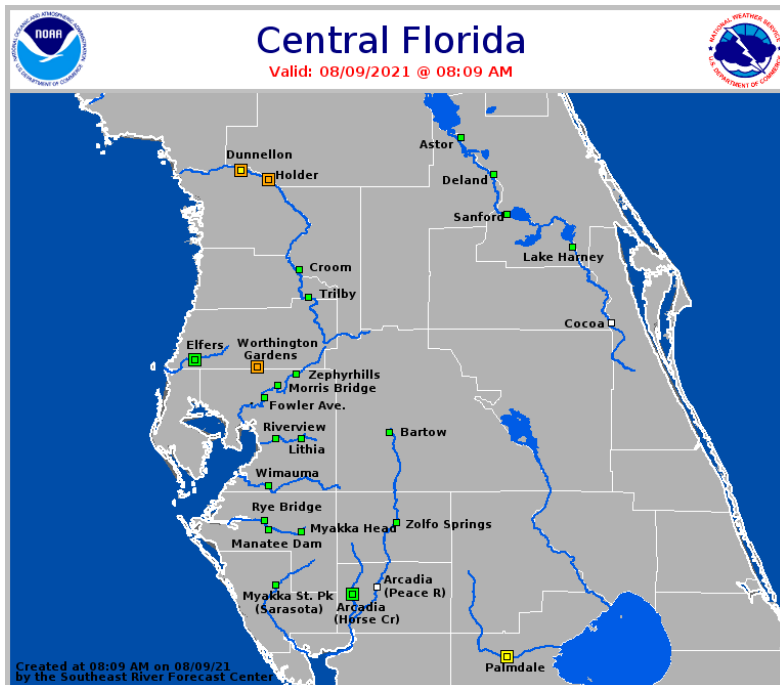


Current & Forecast River Flooding

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



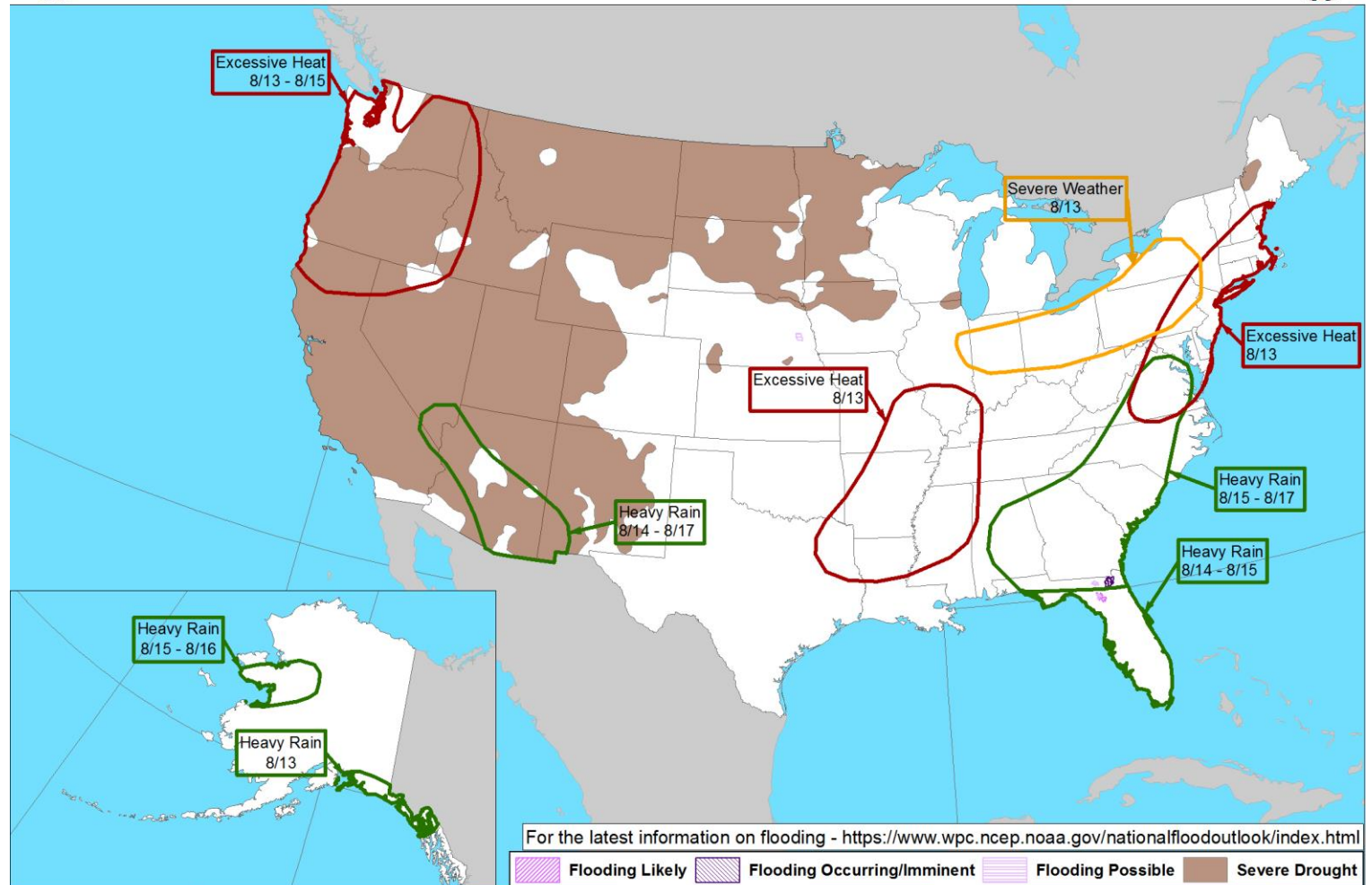
Day 3-7 U.S. Hazards Outlook
Valid: 08/13/2021-08/17/2021



Heavy rainfall will be possible across the state this weekend, and continue across North Florida into 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: 08/10/2021 3PM EDT

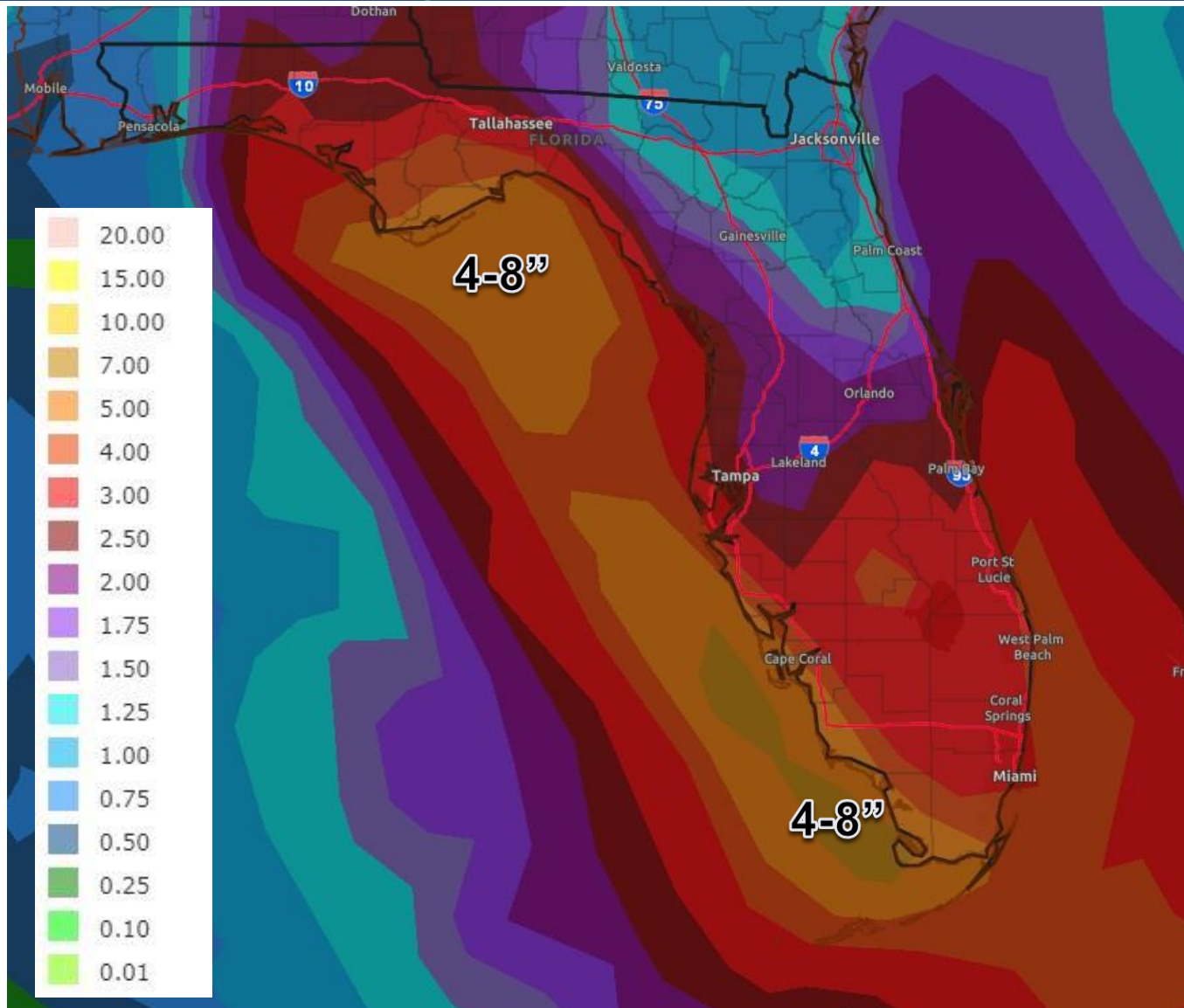
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www.wpc.ncep.noaa.gov



Rainfall Totals Next 7 Days

Ending 8 PM ET Tuesday



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 totals based on the current NHC forecast. ***



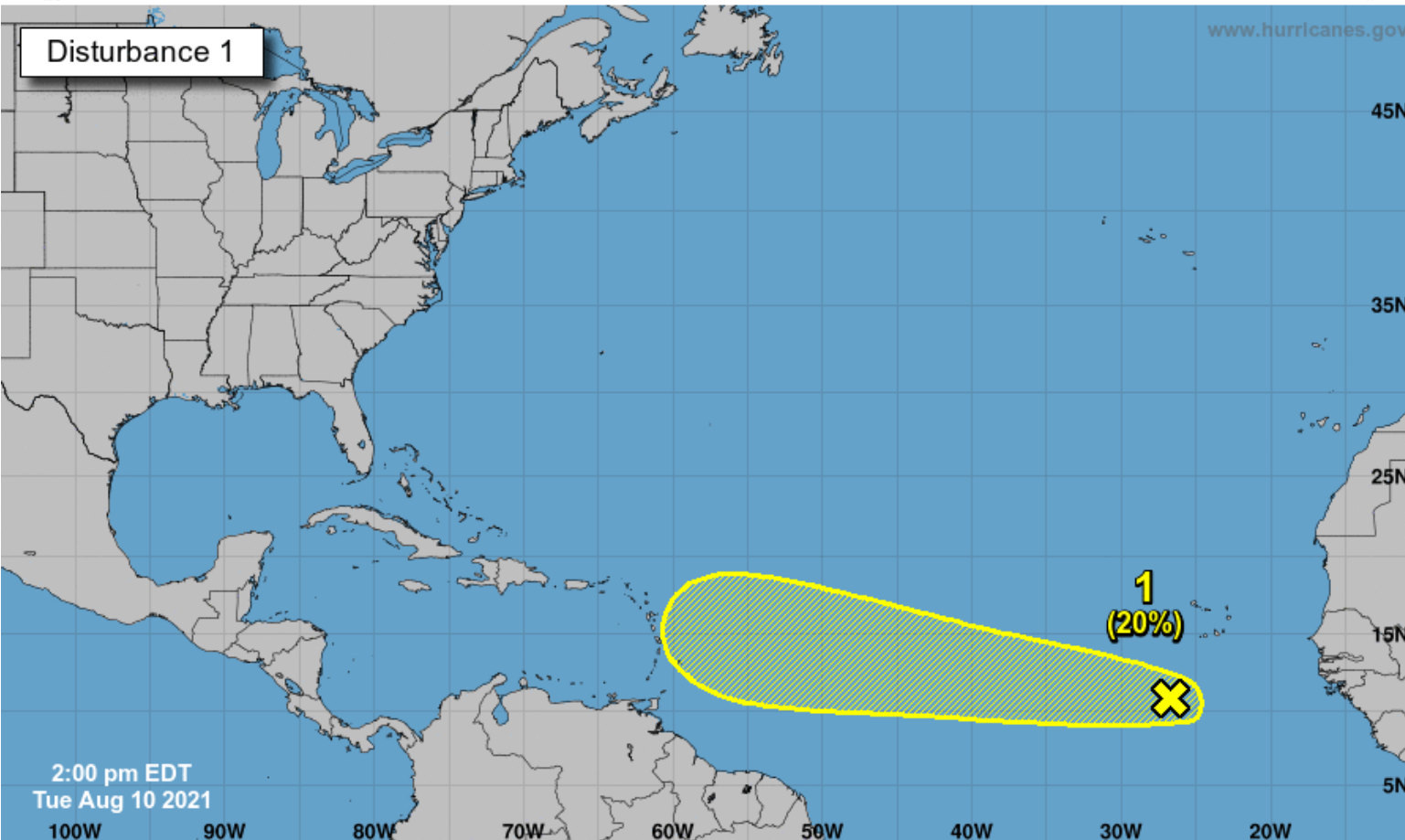
Tropical Weather Outlook

Possible Areas of Development During the Next 5 Days ([LINK](#)) – Invest 95L



Five-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida



A concentrated area of showers and thunderstorms located a few hundred miles southwest of the Cabo Verde Islands is associated with a tropical wave. Some gradual development of this system is possible over the next several days while it moves westward across the tropical Atlantic at 15 to 20 mph.

***Formation chance through 48 hours...low...10%**

***Formation chance through 5 days...low...20%**

Current Disturbances and Five-Day Cyclone Formation Chance: < 40% 40-60% > 60%
Tropical or Sub-Tropical Cyclone: Depression Storm Hurricane
 Post-Tropical Cyclone or Remnants



Overall Summary

Potential Tropical Cyclone Six (Formerly Invest 94L)

- Potential Tropical Cyclone Six is located about 100 miles south of Puerto Rico, or about 1,100 miles southeast of Miami, Florida.
- Six currently has maximum sustained winds around 35 mph, and some strengthening is forecast over the next 24 hours before the system interacts with land. Development into Tropical Storm Fred is still expected today or tonight.
- Six will move over 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.
- The track has shifted slightly to the west, with greater confidence the system tracks into the eastern Gulf of Mexico and re-strengthens.

Invest 95L

- A concentrated area of showers and thunderstorms located a few hundred miles southwest of the Cabo Verde Islands is associated with a tropical wave. Some gradual development of this system is possible over the next several days.
- NHC has the odds of development 10% over the next 48 hours and 20% over the next 5 days.

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 state 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 tomorrow morning with the 8am 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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