



TROPICAL UPDATE



6:00 PM EDT


Saturday, August 22, 2020


Tropical Storm Laura – Near Hispaniola

Tropical Storm Marco – Near Western Cuba

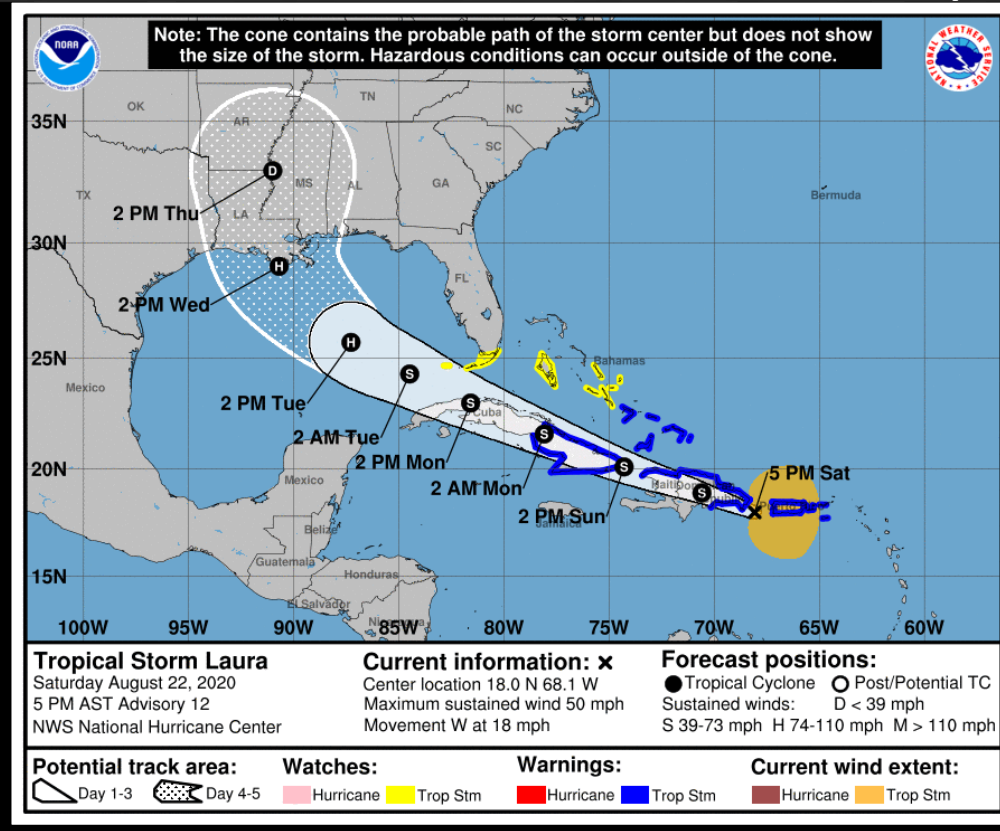
This update is intended for government and emergency response officials, and is provided for informational and situational awareness purposes only. Forecast conditions are subject to change based on a variety of environmental factors. For additional information, or for any life safety concerns with an 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.

Tropical Storm Laura Saturday, August 22

	MINIMAL	Low	MODERATE	HIGH	EXTREME
 WINDS					
 STORM SURGE					
 FLASH FLOODING					
 TORNADOES					

	Low	MODERATE	HIGH
 RIP CURRENTS			

National Hurricane Center Map




Overview/Recent Changes:

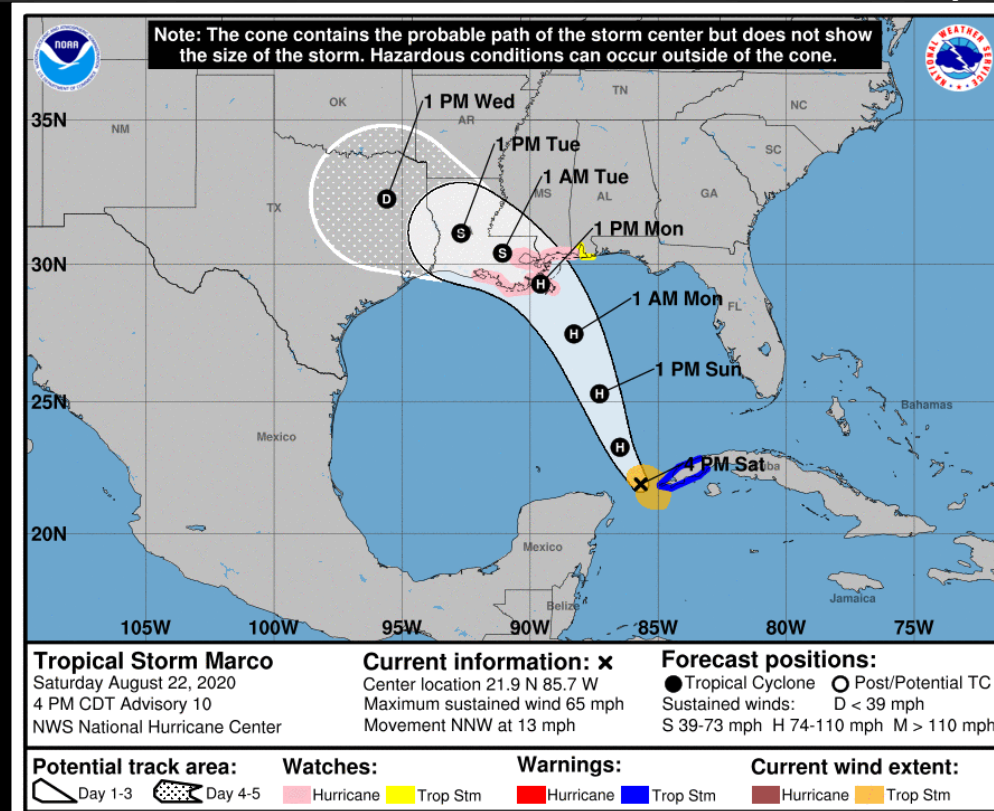
At 5 PM ET, there were not many changes to the track. The most significant change is that a Tropical Storm Watch is now in effect for the Florida Keys and the Dry Tortugas. Threats continue to remain the same for South Florida and the Keys—gusty winds to tropical storm force, locally heavy rainfall, and isolated tornadoes. Storm surge is expected to remain less than 3’.

Tropical Storm Marco Saturday, August 22

	MINIMAL	Low	MODERATE	HIGH	EXTREME
 WINDS					
 STORM SURGE					
 FLASH FLOODING					
 TORNADOES					

	Low	MODERATE	HIGH
 RIP CURRENTS			

National Hurricane Center Map



Overview/Recent Changes: *SIGNIFICANT CHANGES*

The track for Tropical Storm Marco has shifted significantly farther east. While no watches or warnings are currently in effect for Marco in Florida, gusty winds, isolated tornadoes, and heavy rainfall will be possible in the western Panhandle. If more eastward shifts occur, then watches and/or warnings may become necessary.



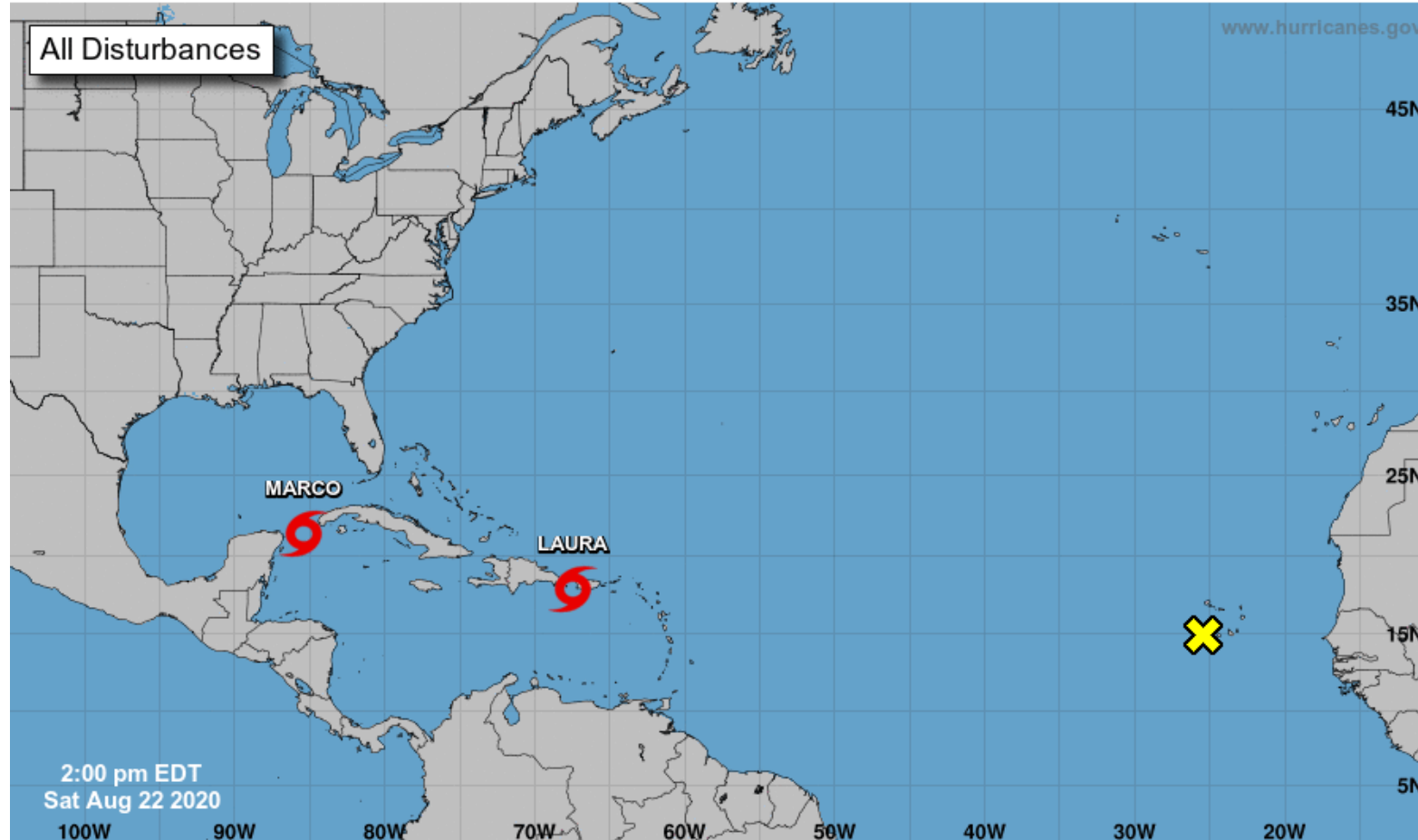
Tropical Weather Outlook

Possible Areas of Development During the Next 5 Days ([LINK](#))



Five-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida



Current Disturbances and Five-Day Cyclone Formation Chance: < 40% 40-60% > 60%

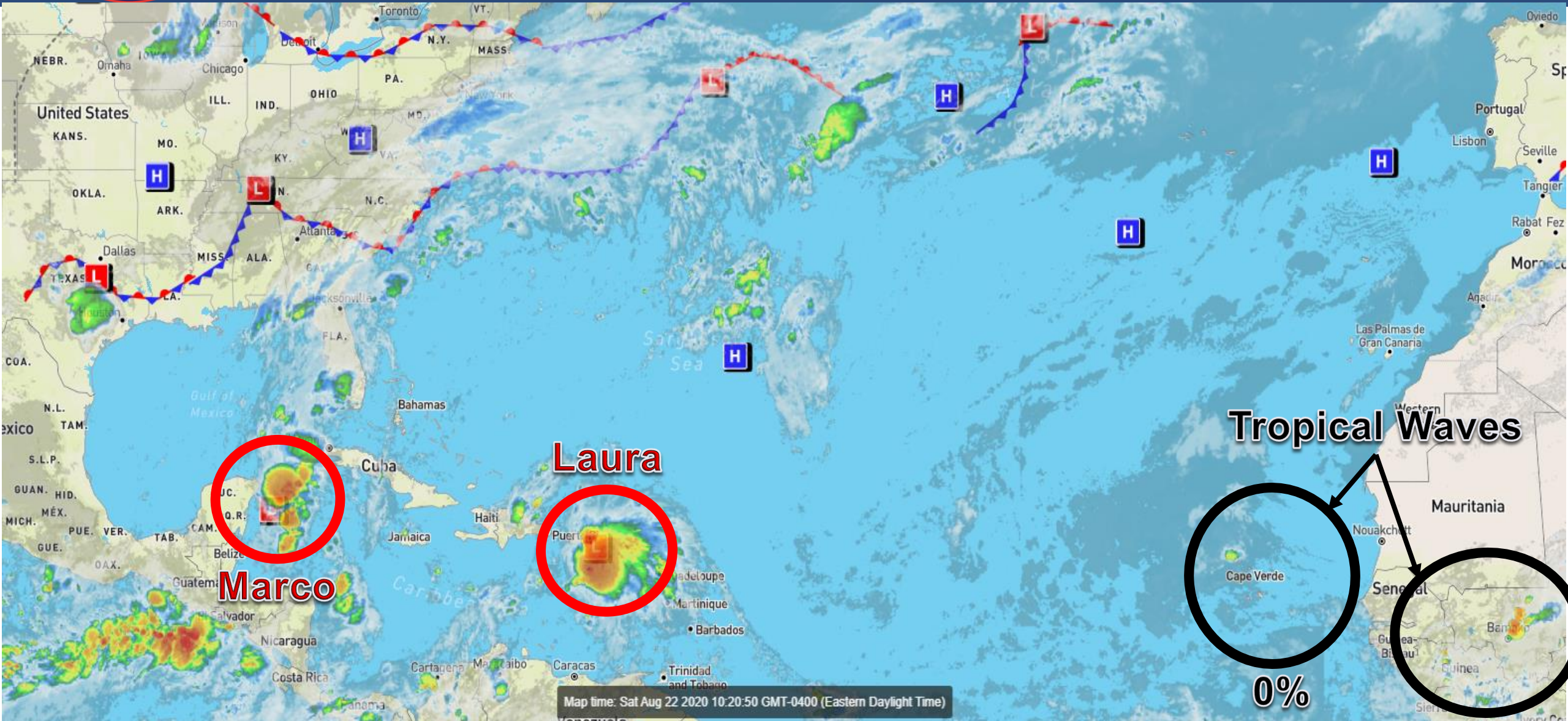
Tropical or Sub-Tropical Cyclone: Depression Storm Hurricane

Post-Tropical Cyclone or Remnants



Atlantic Basin Satellite Image

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





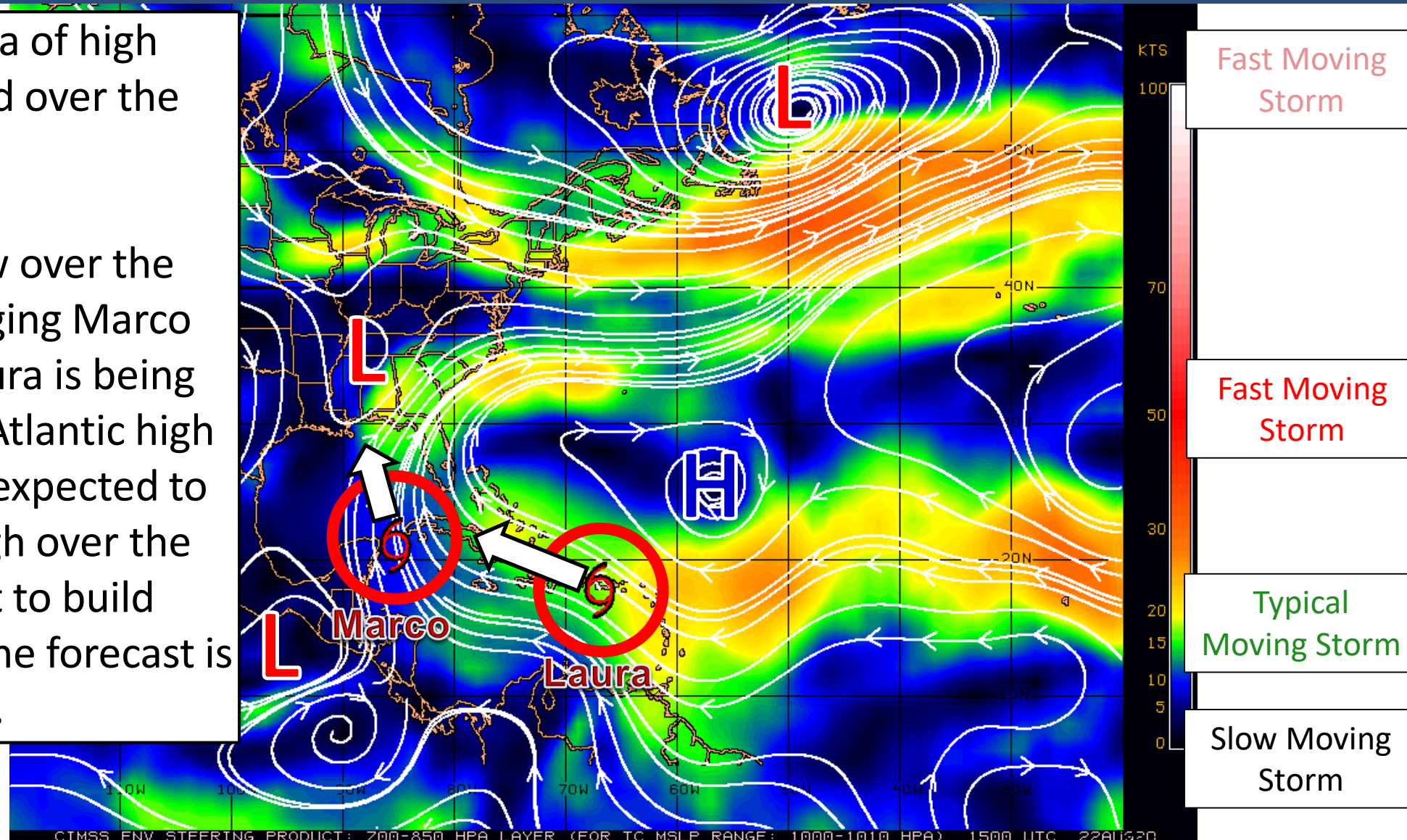
Steering Currents

What is moving the systems?

A large, strong area of high pressure is centered over the Atlantic.

The upper level low over the Southeast US is tugging Marco northward while Laura is being steered by the large Atlantic high pressure. The low is expected to weaken, and the high over the Atlantic is forecast to build westward. However, the forecast is uncertain.

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



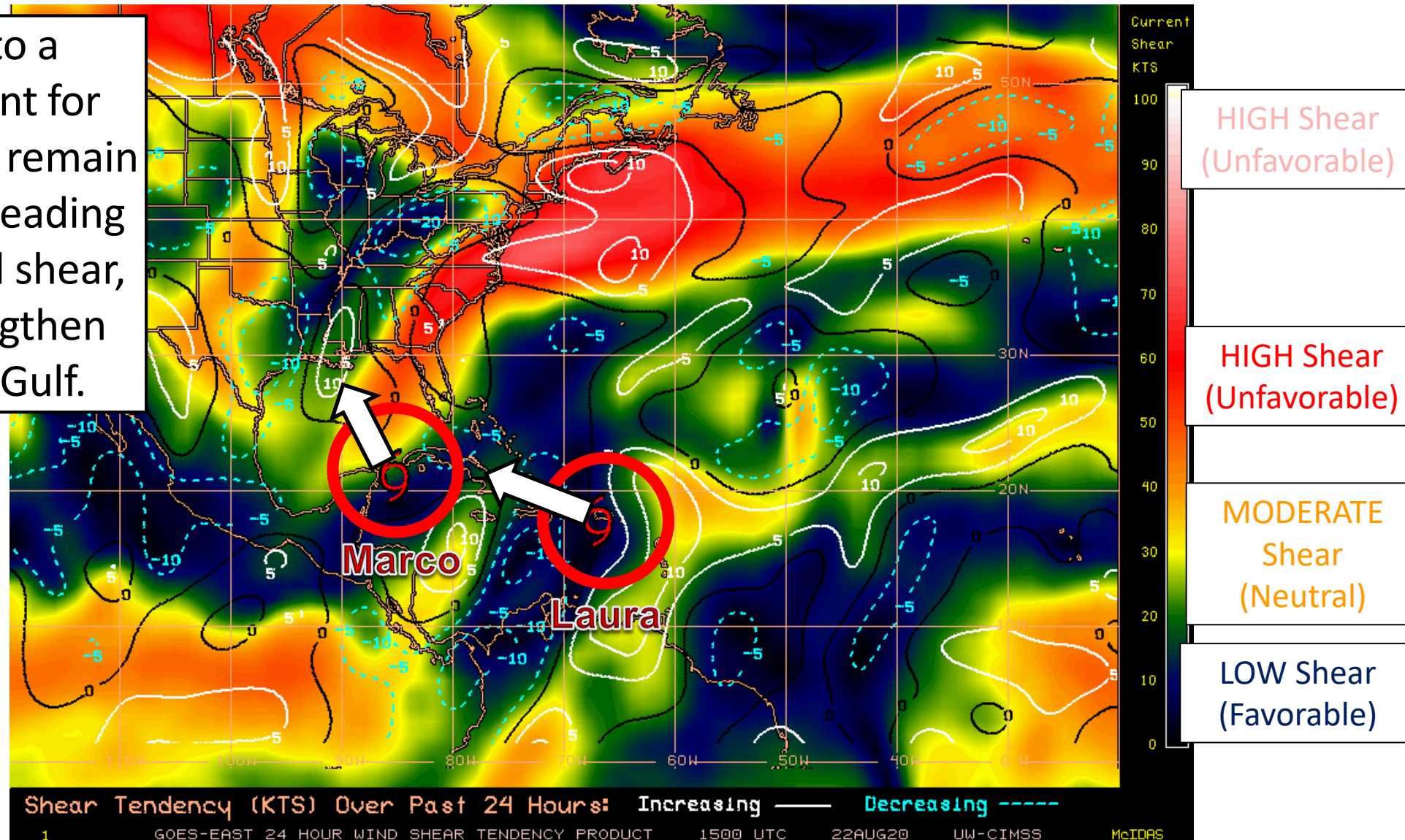


Wind Shear

Is the environment favorable for the systems?

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).

Laura is moving into a favorable environment for intensification, if it can remain over water. Marco is heading into some higher wind shear, but it still could strengthen before entering the Gulf.



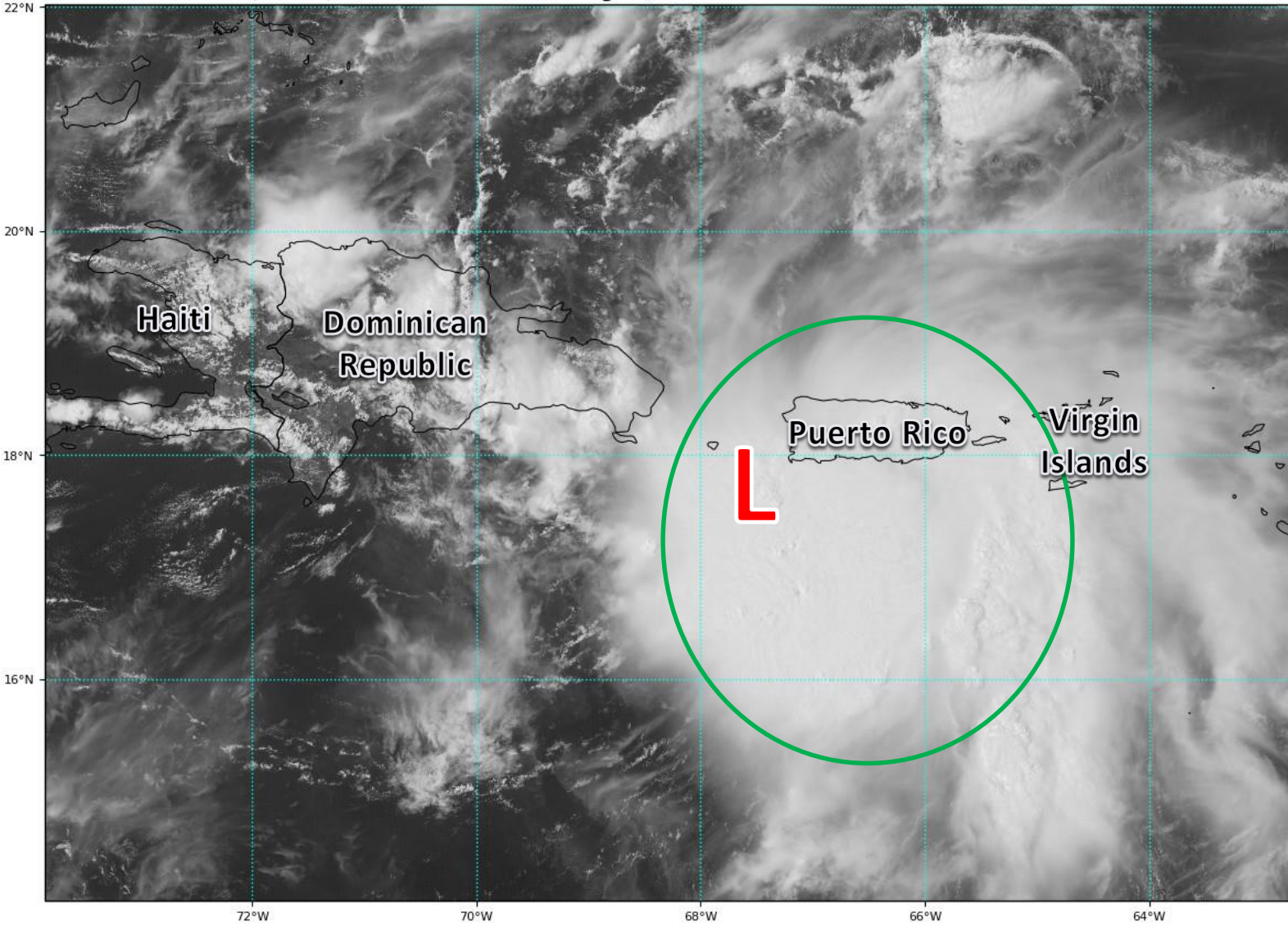


Satellite Imagery

Near Puerto Rico– Tropical Storm Laura

GOES-16 Channel 2 (visible) Reflectance at 18:35Z Aug 22, 2020

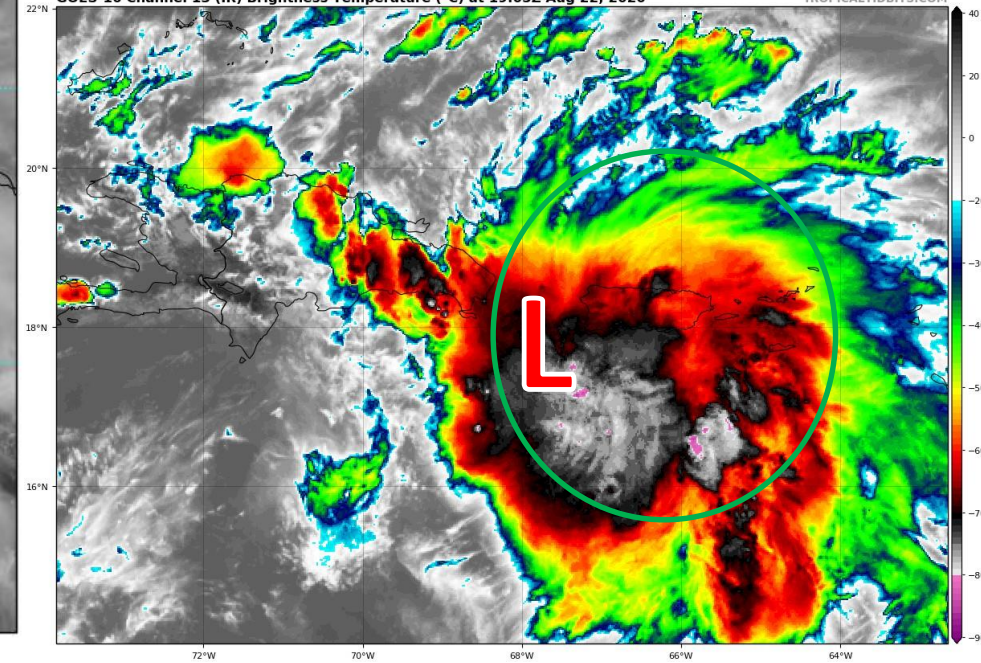
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Tropical Storm Laura has become better organized and has strengthened somewhat today. Thunderstorms are becoming more collocated with the center. However, Laura is on a path toward and over Hispaniola.

GOES-16 Channel 13 (IR) Brightness Temperature (°C) at 19:05Z Aug 22, 2020

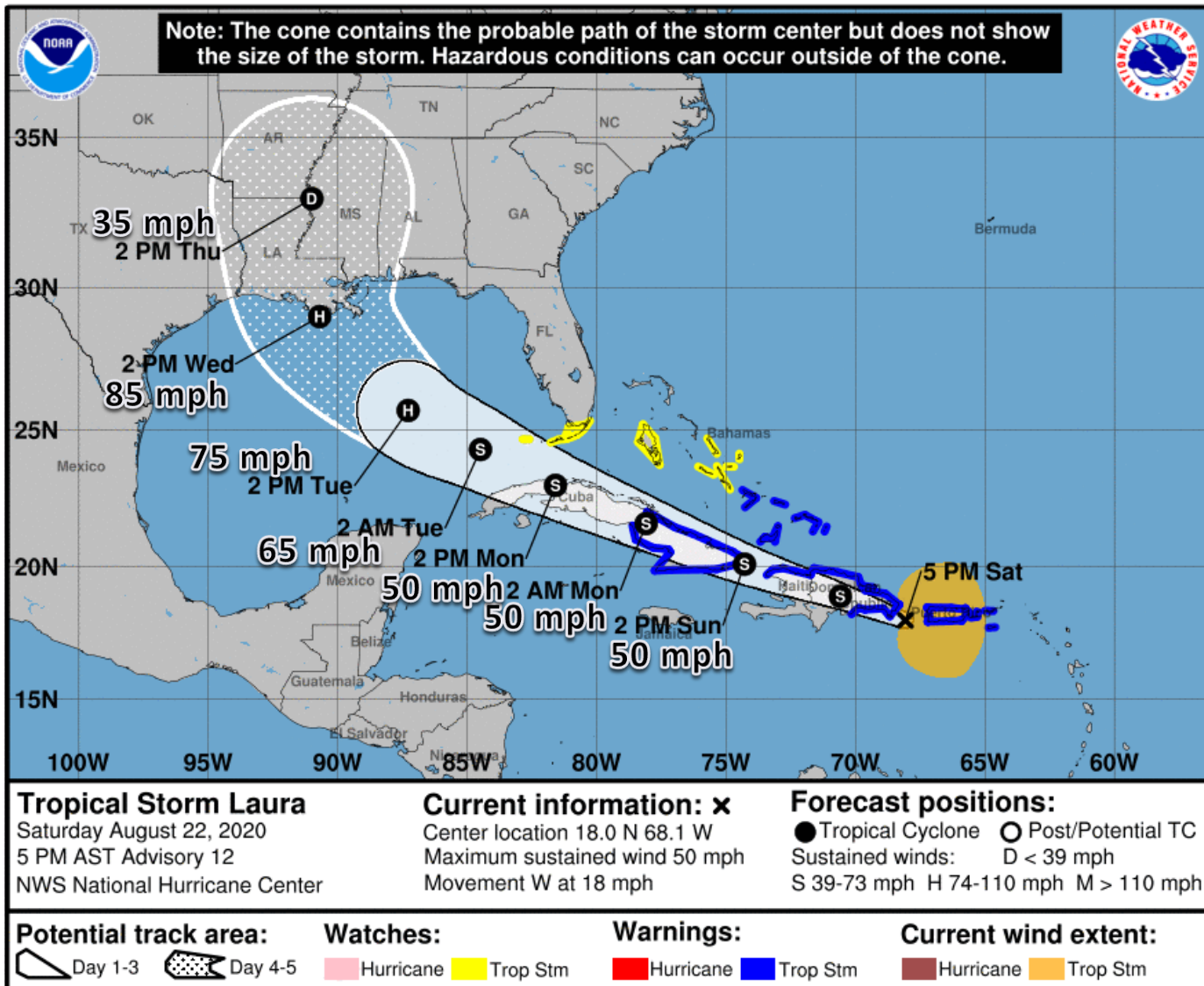
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Official Forecast Track

From the National Hurricane Center – Tropical Storm Laura



- The center of Tropical Storm Laura is located about 100 miles west of Ponce, Puerto Rico.
- Maximum sustained winds have increased to near 50 mph. Laura's strength should remain nearly steady as it passes near or over Hispaniola and Cuba.
- Laura is moving toward the west at 18 mph, and a west-northwestward motion should continue for the next few days.
- Laura will likely make its closest approach to the lower Florida Keys on Monday. A Tropical Storm Watch is now in effect for the Keys.
- Possible land interaction and center reformations cause more uncertainty for Laura's future over the next 2-3 days.
- Once in the Gulf of Mexico, there is uncertainty regarding where Laura will track and how much Marco could influence that track. Changes to the track are possible.



Damaging Wind Threat Overview

Tropical Storm Laura

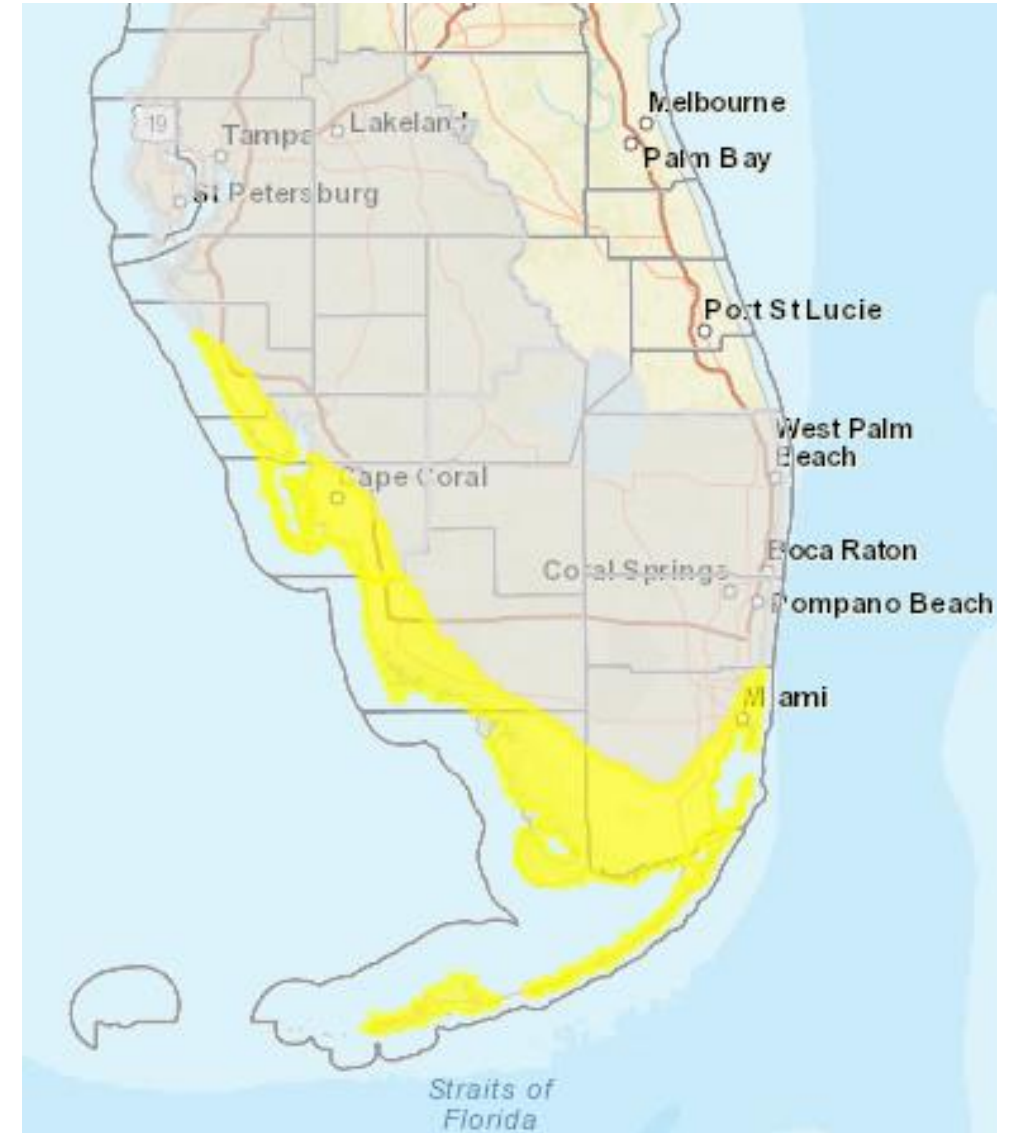
The greatest wind threat is across the Florida Keys, slightly higher near the lower Florida Keys and Key West.

It is too early to determine the wind threat to Northwest Florida due to Laura.

<https://www.weather.gov/srh/tropical?office=mfl>

Click on "Threats and Impacts" Tab

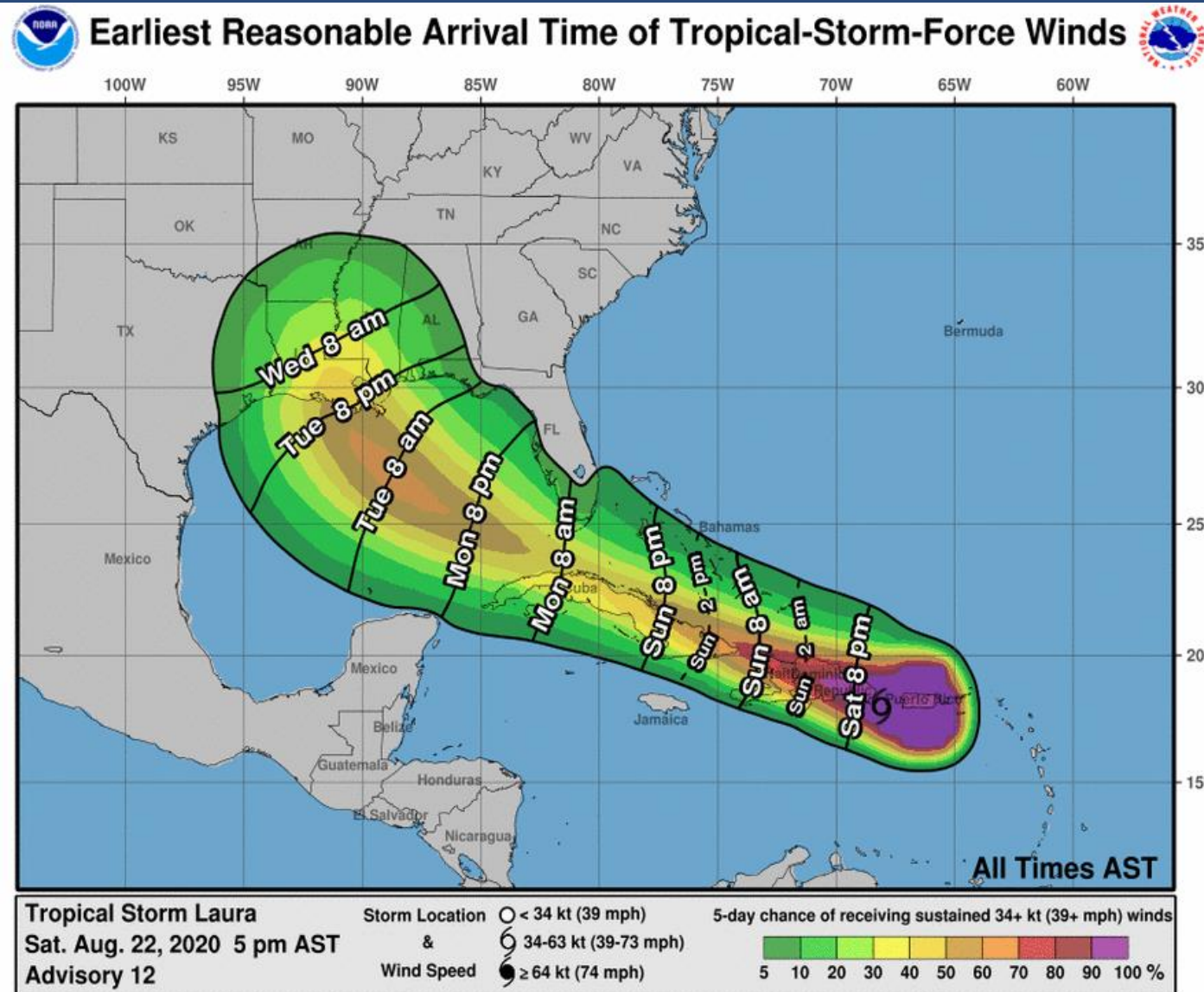
Wind Threat
Potential for wind greater than 110 mph
Potential for wind 74 to 110 mph
Potential for wind 58 to 73 mph
Potential for wind 39 to 57 mph
Wind less than 39 mph





TS Laura: Time of Arrival & Wind Speed Probabilities

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



- Key West: 40% (-5)
- Marathon: 29% (-5)
- Miami: 5% (-2)
- Fort Lauderdale: 10% (-3)
- West Palm Beach: 8% (-2)
- Fort Pierce: 6% (-1)
- Naples: 18% (-5)
- Fort Myers: 6% (-1)
- Tampa: 11% (-2)
- Cedar Key: 8% (-1)
- Apalachicola: 13% (+/-0)
- Panama City: 15% (+1)
- Destin: 11% (+3)
- Pensacola: 15% (+3)

Tropical storm force winds may begin on Monday in the Florida Keys and far South Florida. If tropical storm force winds occur in the Panhandle, it may be as early as Tuesday morning, but most likely Tuesday night.

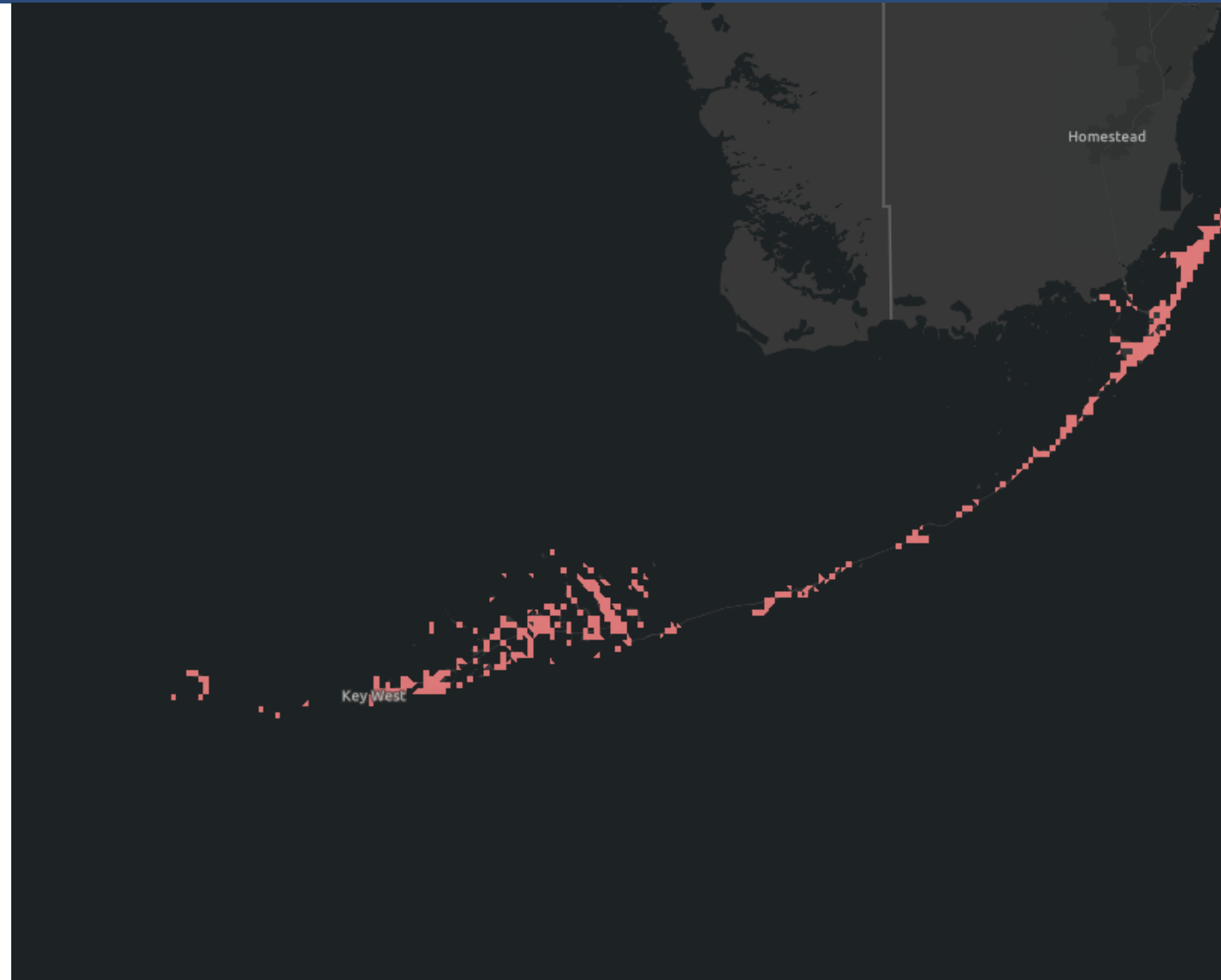
Chances for Tropical Storm Force winds have largely remained steady.



Wind Watches and Warnings

In Effect Until Further Notice

Tropical Storm Warnings are in for all the Florida Keys.





TS Laura Key Messages

From the National Hurricane Center



Key Messages for Tropical Storm Laura

Advisory 11: 11:00 AM AST Sat Aug 22, 2020



1. Tropical storm conditions are expected across portions of the the Virgin Islands and Puerto Rico today. Tropical storm conditions are also expected along the northern coasts of the Dominican Republic and Haiti, and the Turks and Caicos and southeastern Bahamas Saturday into Sunday. Heavy rainfall is likely across these areas and could cause mudslides and flash and urban flooding through Sunday, with widespread river flooding possible in Puerto Rico.

2. Tropical storm conditions are possible over portions of the central Bahamas Sunday night, as well as portions of eastern and central Cuba Sunday and Sunday night.

3. The details of the long-range track and intensity forecasts remain more uncertain than usual since Laura is forecast to move near or over portions of the Greater Antilles through Monday. However, Laura is forecast to strengthen over the Gulf of Mexico and could bring storm surge, rainfall, and wind impacts to the northern U.S. Gulf Coast by the middle of next week. Interests there should monitor the progress of Laura and updates to the forecast during the next few days.



For more information go to hurricanes.gov

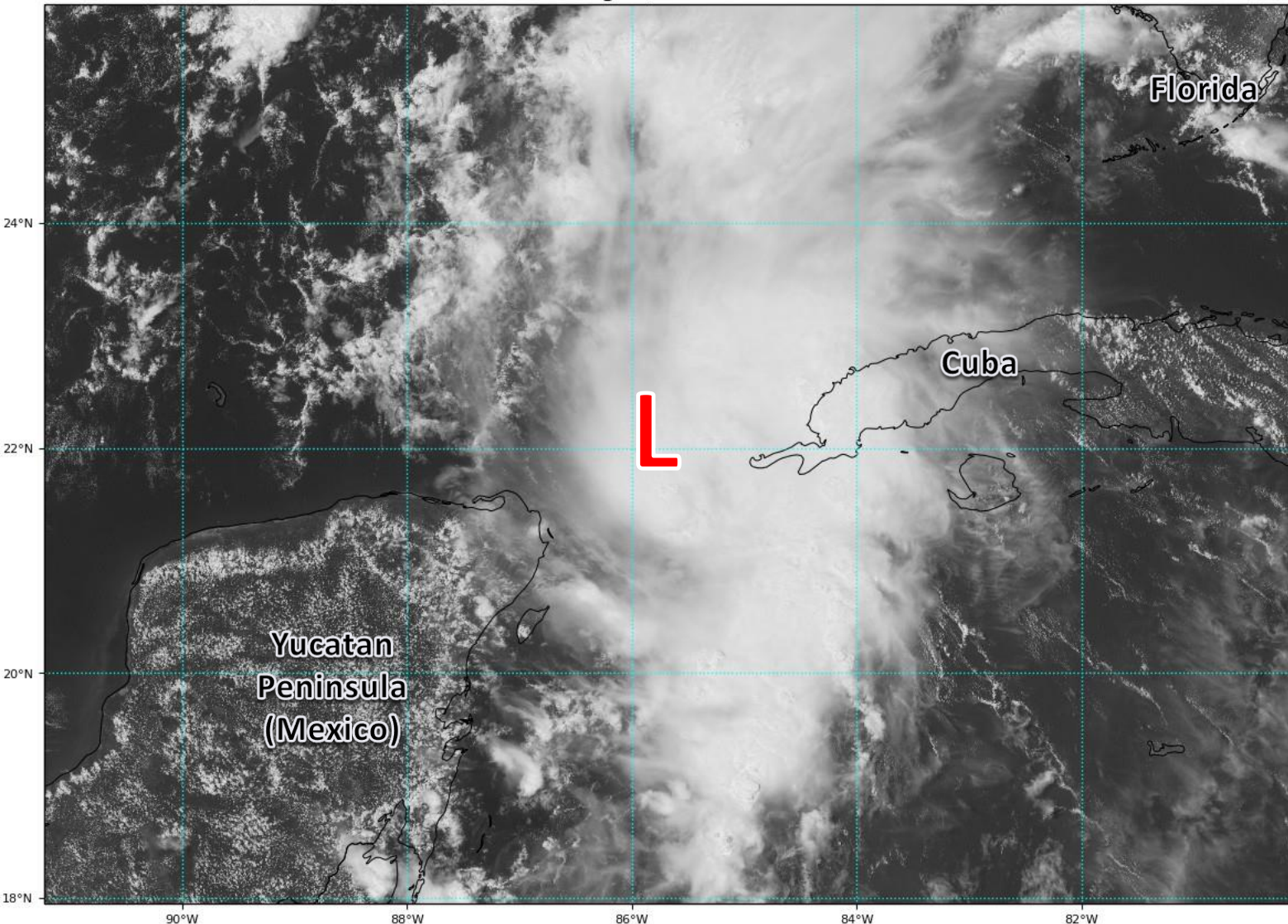


Satellite Imagery

Near Yucatan Peninsula & Cuba – Tropical Storm Marco

GOES-16 Channel 2 (visible) Reflectance at 19:07Z Aug 22, 2020

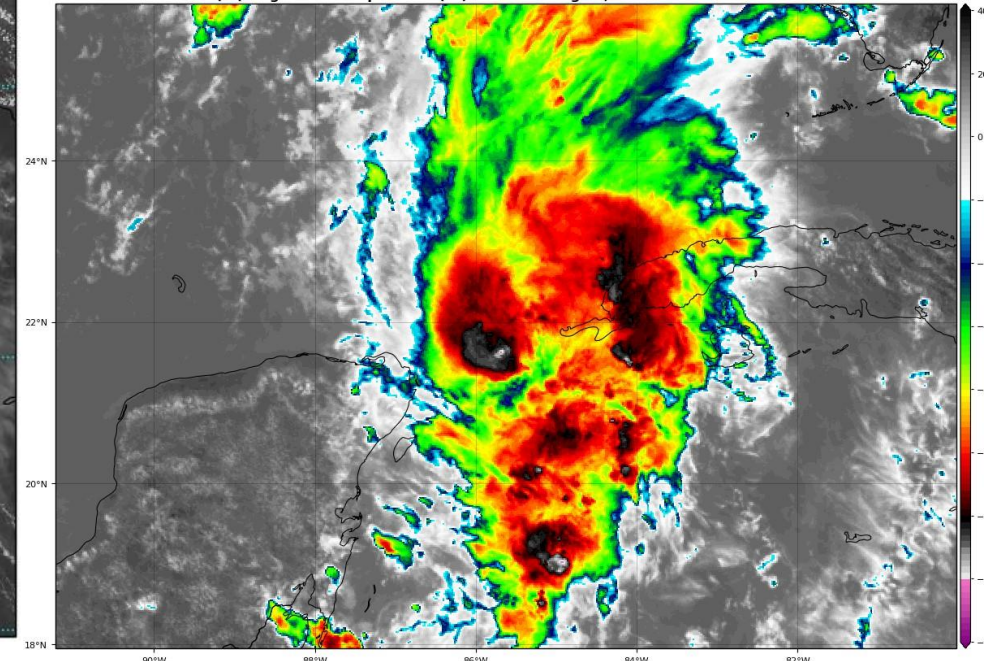
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Tropical Storm Marco has made it through the Yucatan Channel with a small, but well defined center. Additional intensification is possible as it moves into the Gulf of Mexico.

GOES-16 Channel 13 (IR) Brightness Temperature (°C) at 19:12Z Aug 22, 2020

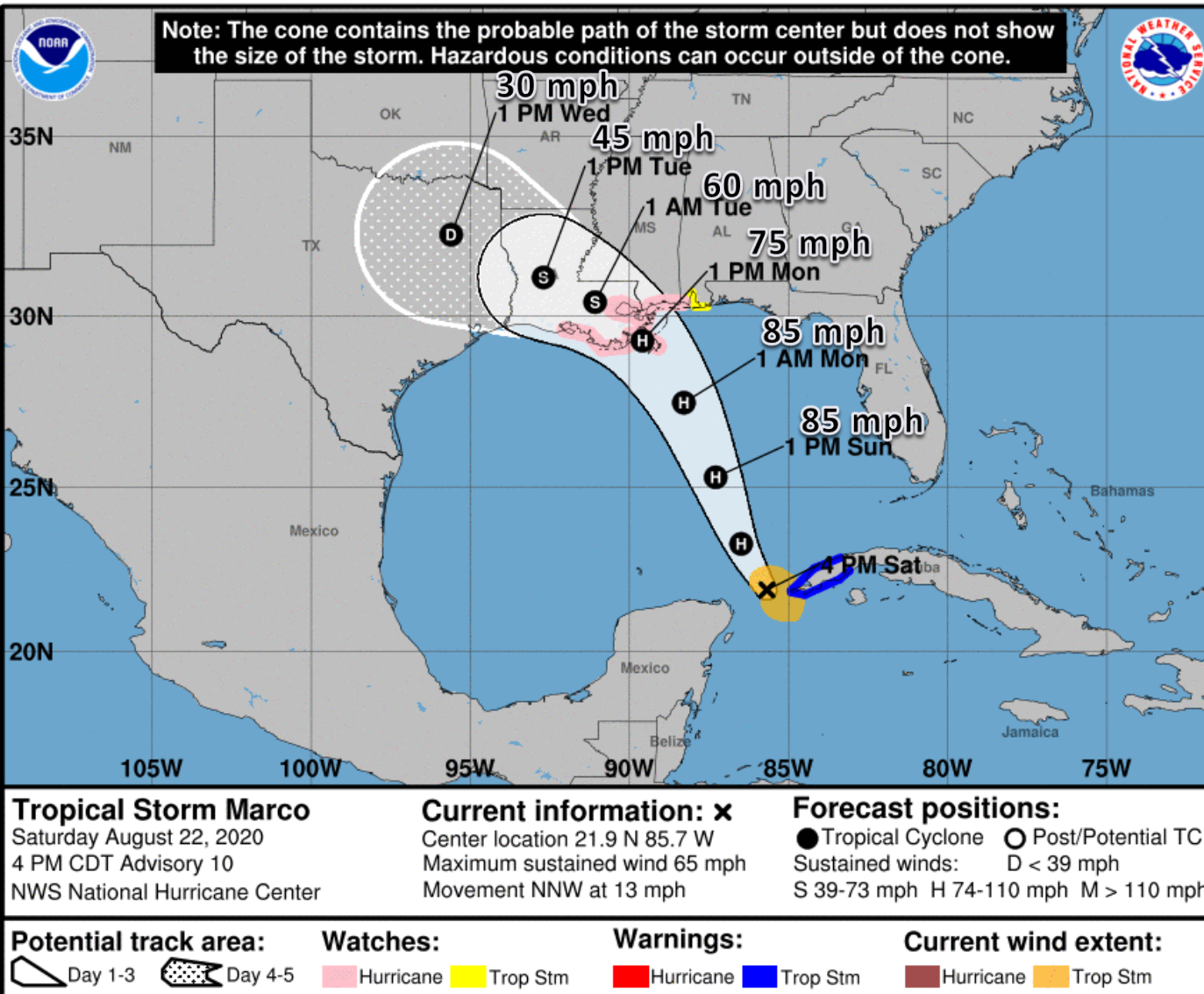
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Official Forecast Track

From the National Hurricane Center – Tropical Storm Marco



- The center of Marco is located about 50 miles west of the western tip of Cuba.
- Maximum sustained winds are near 65 mph, and Marco is forecast to become a hurricane tonight. Some additional strengthening is possible on Sunday, followed by slow weakening near the northern Gulf Coast.
- Marco is moving toward the NNW at 13 mph. A turn toward the northwest is expected on Monday as it makes landfall.
- Landfall along the along the Louisiana or Mississippi coast is now expected.
- There remains abundant uncertainty in the forecast. More shifts in track are possible.
- If farther eastward shifts occur, then some watches and/or warnings may be needed for the Florida Panhandle.

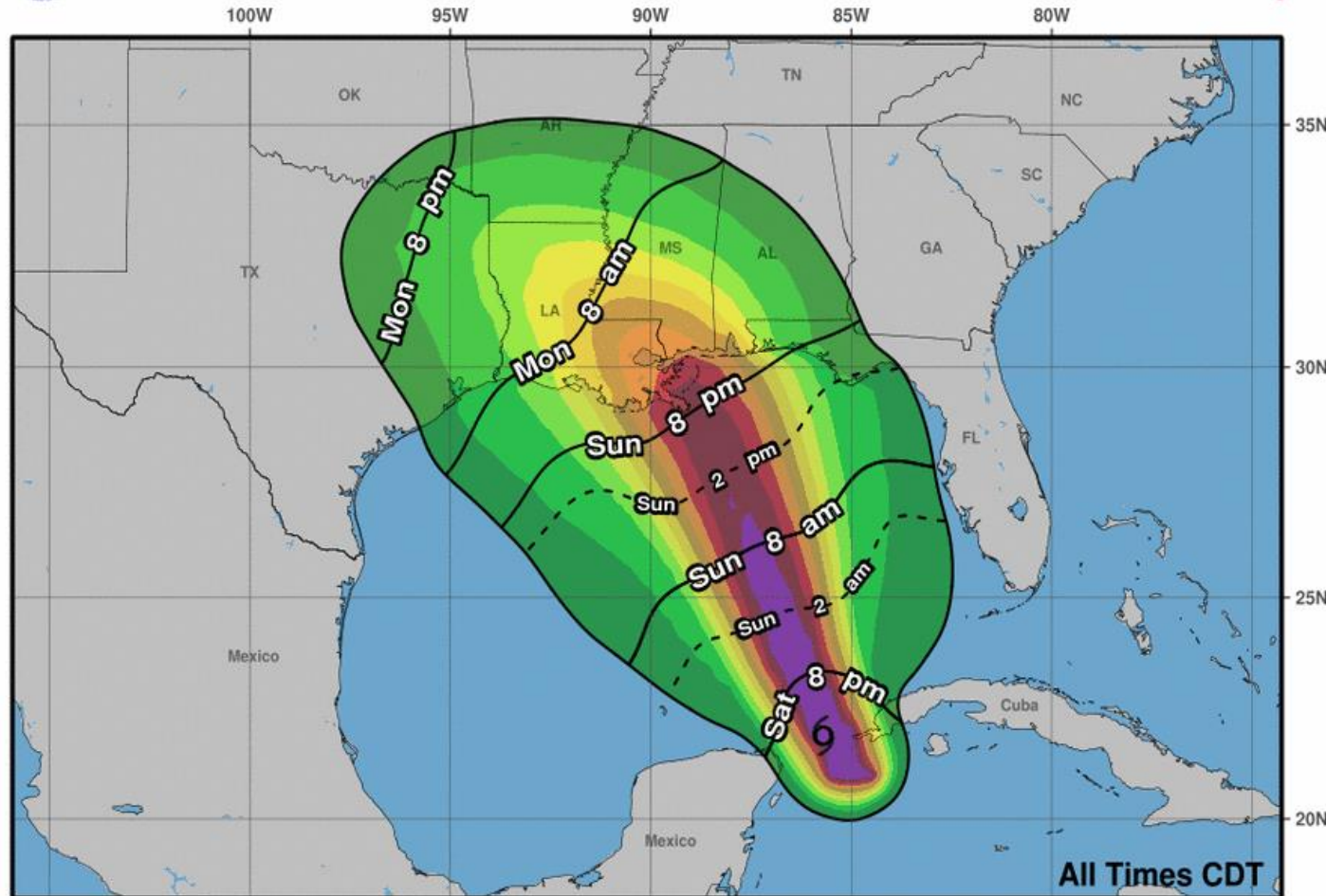


TS Marco: Time of Arrival & Wind Speed Probabilities

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



Earliest Reasonable Arrival Time of Tropical-Storm-Force Winds



Tropical Storm Marco
Sat. Aug. 22, 2020 4 pm CDT
Advisory 10

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

Pensacola: 25% (+20)

Destin: 14% (+11)

Panama City: 17% (+11)

Apalachicola: 13% (+9)

Tallahassee: 4% (+4)

Chances for tropical storm force winds from Tropical Storm Marco have increased significantly across the western Panhandle. This is prone to increases or decreases as the track of Marco remains uncertain.



TS Marco Key Messages

From the National Hurricane Center



Key Messages for Tropical Storm Marco

Advisory 10: 4:00 PM CDT Sat Aug 22, 2020



1. Tropical storm conditions will continue over portions of extreme western Cuba through this evening. Heavy rainfall is also expected in the eastern portions of the Mexican states of Quintana Roo and Yucatan, and across far western Cuba, which could result in flash flooding.

2. Marco is expected to approach the central Gulf Coast as a hurricane on Monday. Hurricane conditions, life-threatening storm surge, and heavy rainfall are possible along portions of the Gulf Coast beginning on Monday, and Hurricane and Storm Surge watches have been issued. Interests in these areas should follow any advice given by local government officials.

3. Tropical Storm Laura could bring additional storm surge, rainfall, and wind impacts to portions of the U.S. Gulf Coast by the middle of next week. This could result in a prolonged period of hazardous weather for areas that could be affected by Marco. Interests there should monitor the progress of Marco and Laura and updates to the forecast during the next few days.

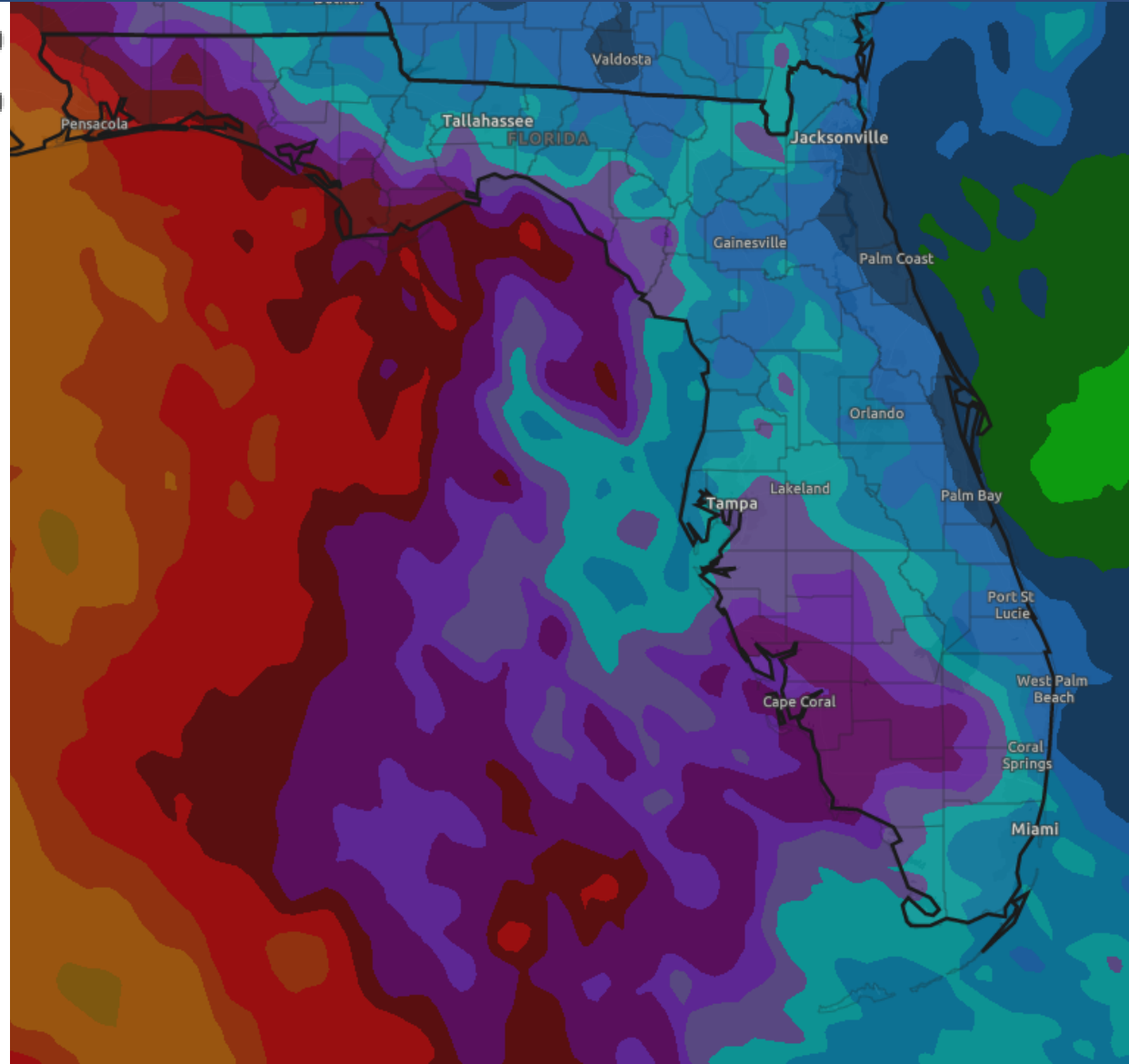
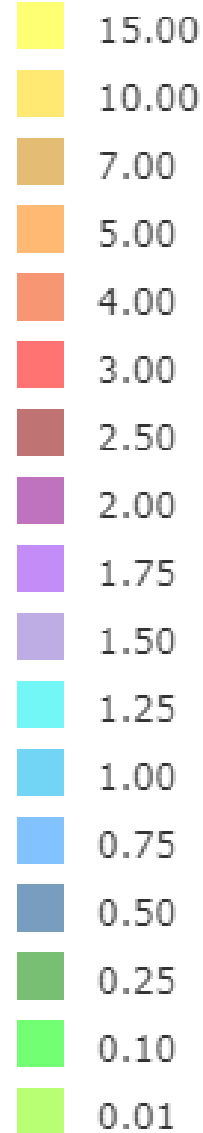


For more information go to hurricanes.gov



Forecast Rainfall Totals Next 7 Days

- A widespread 2-4" expected across the state this week, with the highest totals in the Panhandle and Big Bend
- Locally 6" especially along in the western Panhandle.
- Storms will be very efficient rainfall producers, and could produce 2-4" of rain within an hour.
- There is an isolated flash flood threat each day across much of the state.
- The flash flood threat may increase next week in the Panhandle.
- The highest rainfall totals could shift or change, depending on the track and intensity of Laura and Marco.





Overall Summary

Tropical Storm Laura – Near Puerto Rico

- Tropical Storm Laura is located about 100 miles west of Ponce, Puerto Rico, moving west at 18 mph.
- Maximum sustained winds are near 50 mph. Laura is forecast to remain nearly steady in intensity over the next couple days as it moves over or near Hispaniola and Cuba.
- The center of Laura will likely pass south of the Florida Keys on Monday, then approach the central US Gulf Coast on Wednesday.
- The forecast track and intensity are more uncertain in the Gulf of Mexico due to possible interaction with Tropical Storm Marco and land interaction in the Caribbean, but a hurricane is currently forecast in the Gulf of Mexico.

Tropical Storm Marco – Between Yucatan Peninsula and Cuba

- ***SIGNIFICANT CHANGES IN THE LATEST ADVISORY***
- The center of Tropical Storm Marco is located about 50 miles west of the western tip of Cuba, moving north-northwest at 13 mph.
- Maximum sustained winds are near 65 mph. Further strengthening is forecast, and Marco should become a hurricane tonight.
- Marco has consistently been to the right of the official NHC forecast as it has moved more northerly than forecast. A turn toward the northwest is expected by Tuesday near landfall, but there remains much uncertainty.
- There is uncertainty also regarding how Marco and Laura interact and/or influence each other's tracks and intensities.
- New Tropical Storm, Hurricane, and Storm Surge Watches are in effect for parts of the Gulf Coast. None for Florida currently.



Florida Summary

Florida Outlook:

- **Tropical Storm Laura:**
 - A Tropical Storm Watch is now in effect for the Florida Keys.
 - Tropical storm force winds could begin on Monday in the Florida Keys and in the Florida Panhandle late Tuesday into Wednesday.
 - Storm surge in the Keys will likely remain 2' or less. If combined with heavy rainfall, then some flooding may occur. It's too early to determine what the storm surge from Laura will be in the Panhandle or Big Bend.
 - Isolated tornadoes are possible in any outer bands across South Florida and the Keys late Sunday into Monday. Isolated tornadoes will be possible in the Panhandle due to outer bands from Laura on Tuesday and Wednesday.
 - Locally heavy rainfall may lead to isolated flash flooding.
 - Dangerous rip currents and high surf are expected at all beaches from Laura and Marco. Minor beach erosion is possible.
- **Tropical Storm Marco:**
 - Significant changes have occurred, leading to changes to impacts to the Florida Panhandle.
 - While no watches or warnings are in effect for Florida from Marco, tropical storm force winds are still possible beginning late Sunday night or early Monday morning in the Panhandle.
 - Storm surge of 1-3' is expected currently, which should result in only minor coastal flooding.
 - Isolated tornadoes are possible in any other bands across the Florida Panhandle and Big Bend late Sunday into Monday.
 - Locally heavy rainfall may lead to isolated flash flooding, especially where outer bands train over the same areas.
 - Dangerous rip currents and high surf are expected at all beaches from Laura and Marco. Minor beach erosion is possible.
- The forecast is very prone to changes across the state due to the uncertainties from both Marco and Laura. Stay tuned to the latest forecasts. Exact details remain unclear and will likely change over the next day or so.

The next briefing packet will be issued on Sunday morning. 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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