



# TROPICAL UPDATE



11:00 AM EDT

Friday, August 21, 2020

Tropical Storm Laura – Near Lesser Antilles

Tropical Depression #14 – Western Caribbean

Tropical Wave Near Africa (40%)

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](http://www.hurricanes.gov).



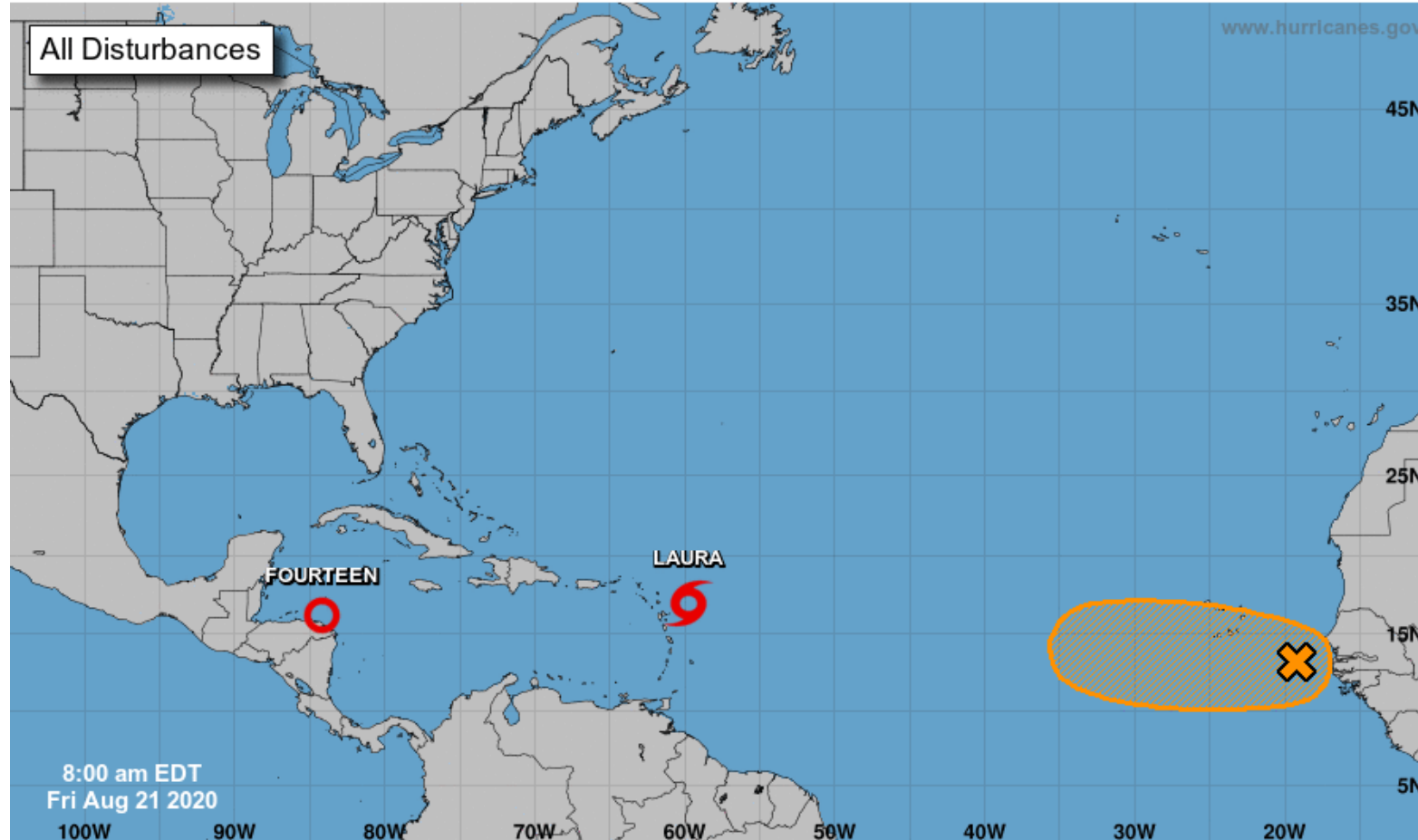
# Tropical Weather Outlook

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



## Five-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida



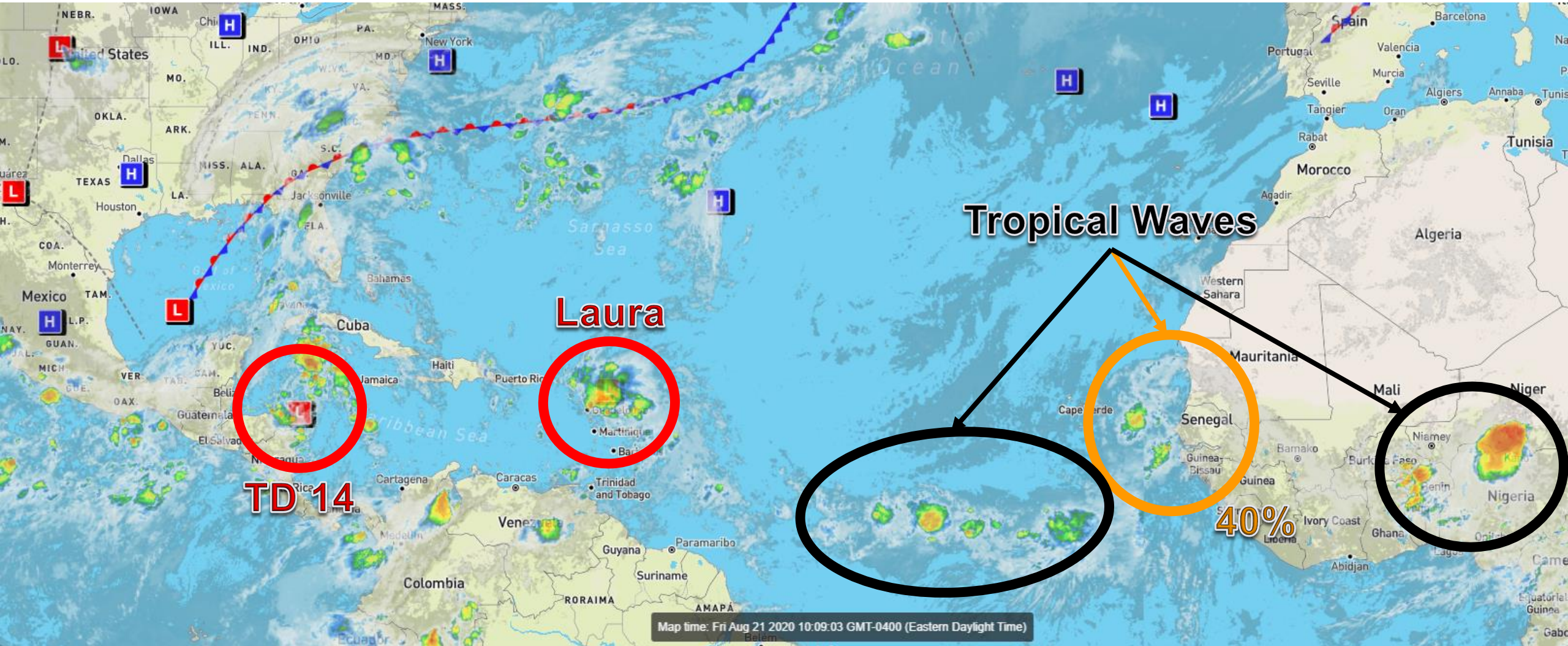
Current Disturbances and Five-Day Cyclone Formation Chance: < 40% 40-60% > 60%  
Tropical or Sub-Tropical Cyclone: Depression Storm Hurricane  
 Post-Tropical Cyclone or Remnants





# Atlantic Basin Satellite Image

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







# Steering Currents

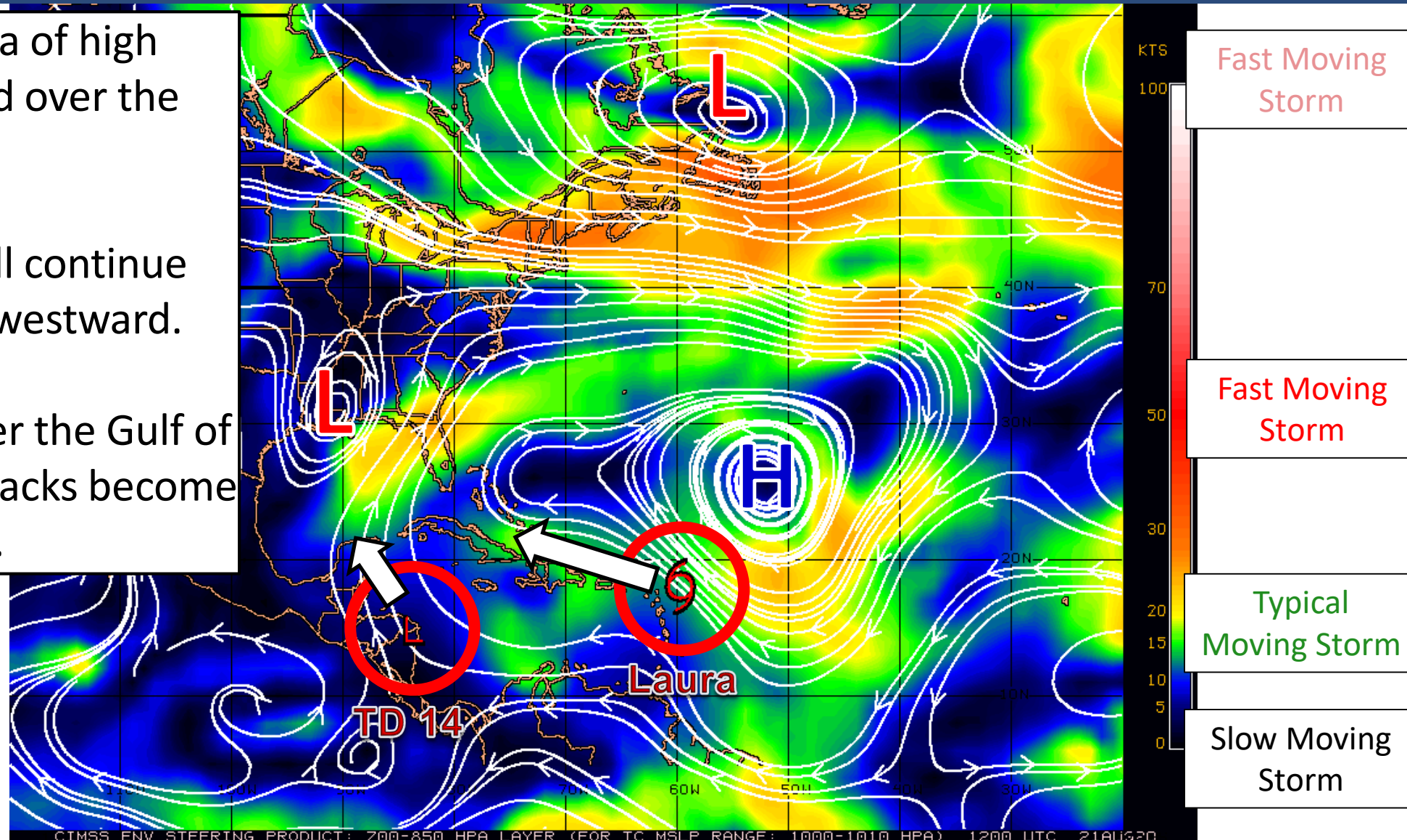
What is moving the systems?

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

The two systems will continue moving west-northwestward.

Once the systems enter the Gulf of Mexico, the forecast tracks become uncertain.



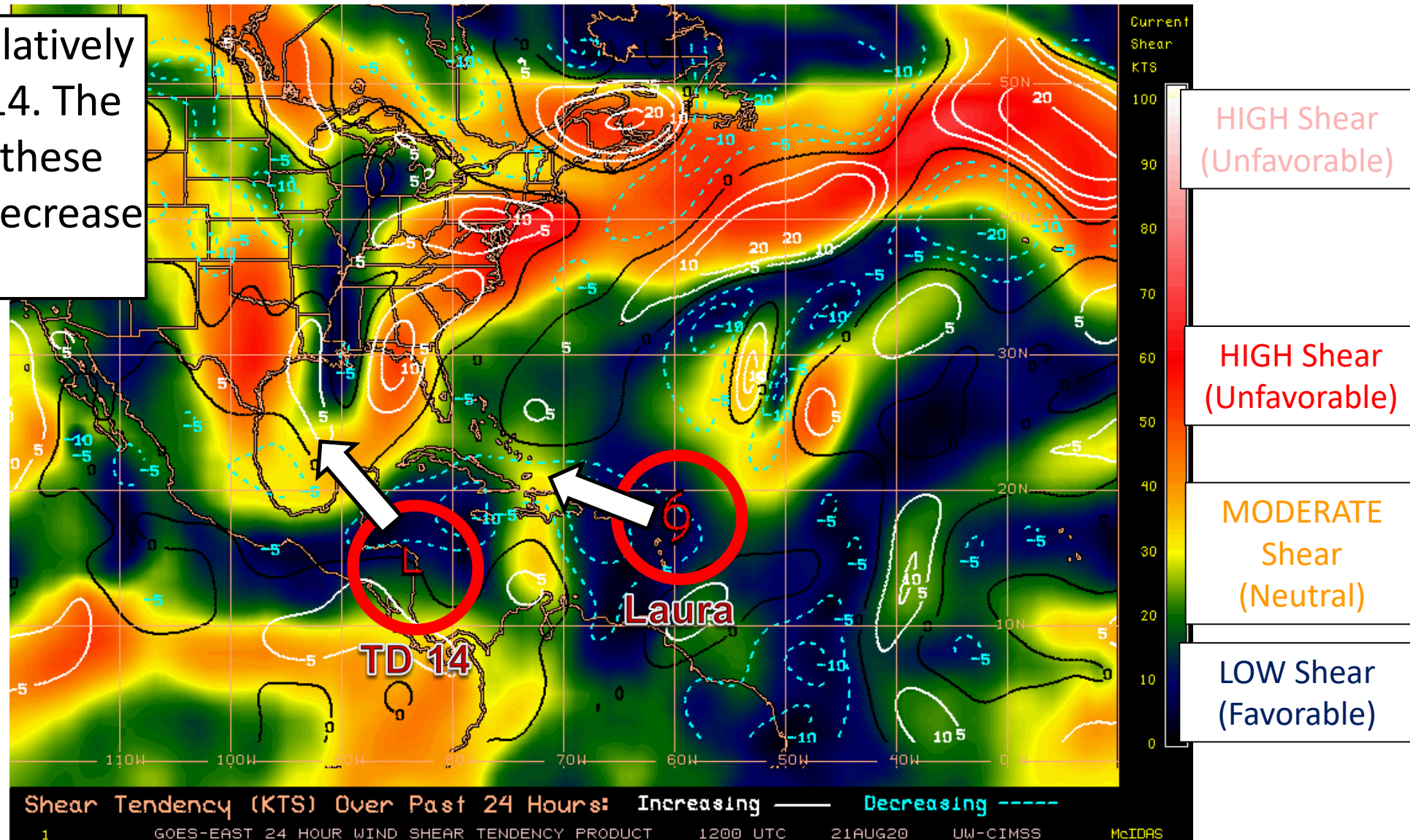


# Wind Shear

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).

Wind shear remains relatively light near Laura & TD 14. The wind shear ahead of these systems is forecast to decrease somewhat.



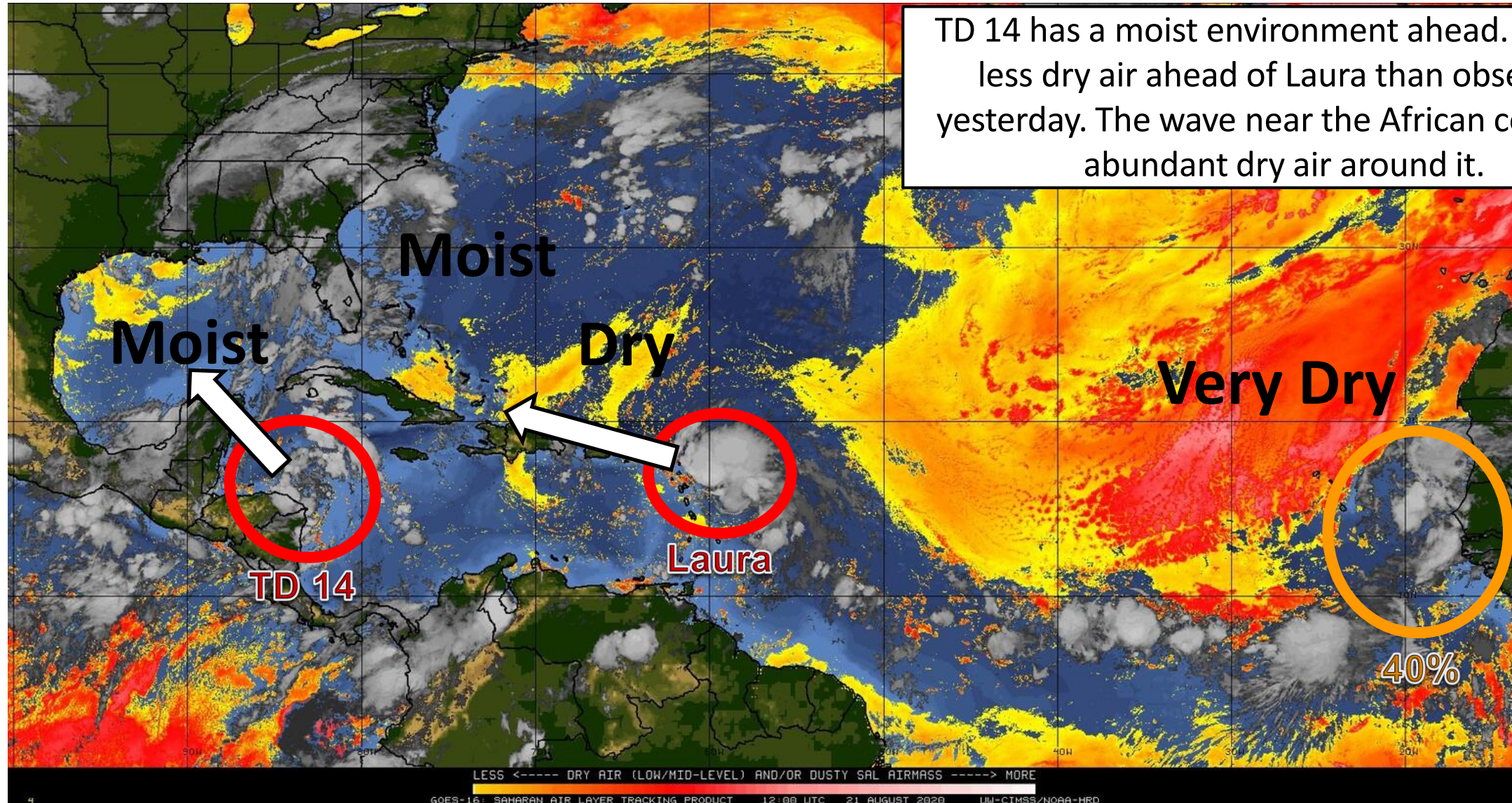




# Dry Air & Saharan Dust

Is the environment favorable for the systems?

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







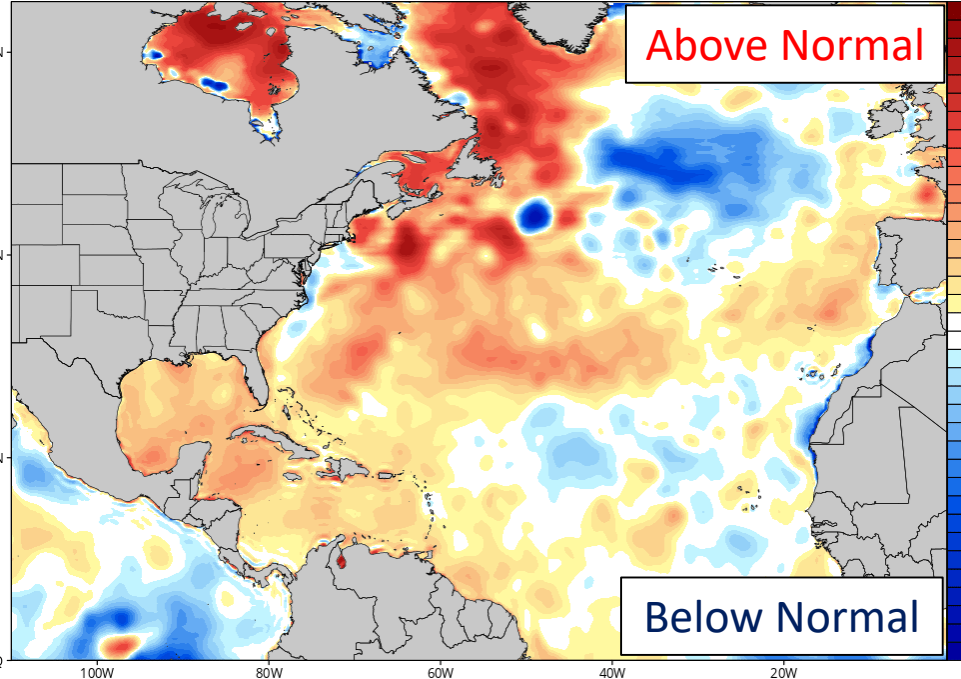
# Sea Surface Temperatures & Anomalies

Is the ocean favorable for the systems?

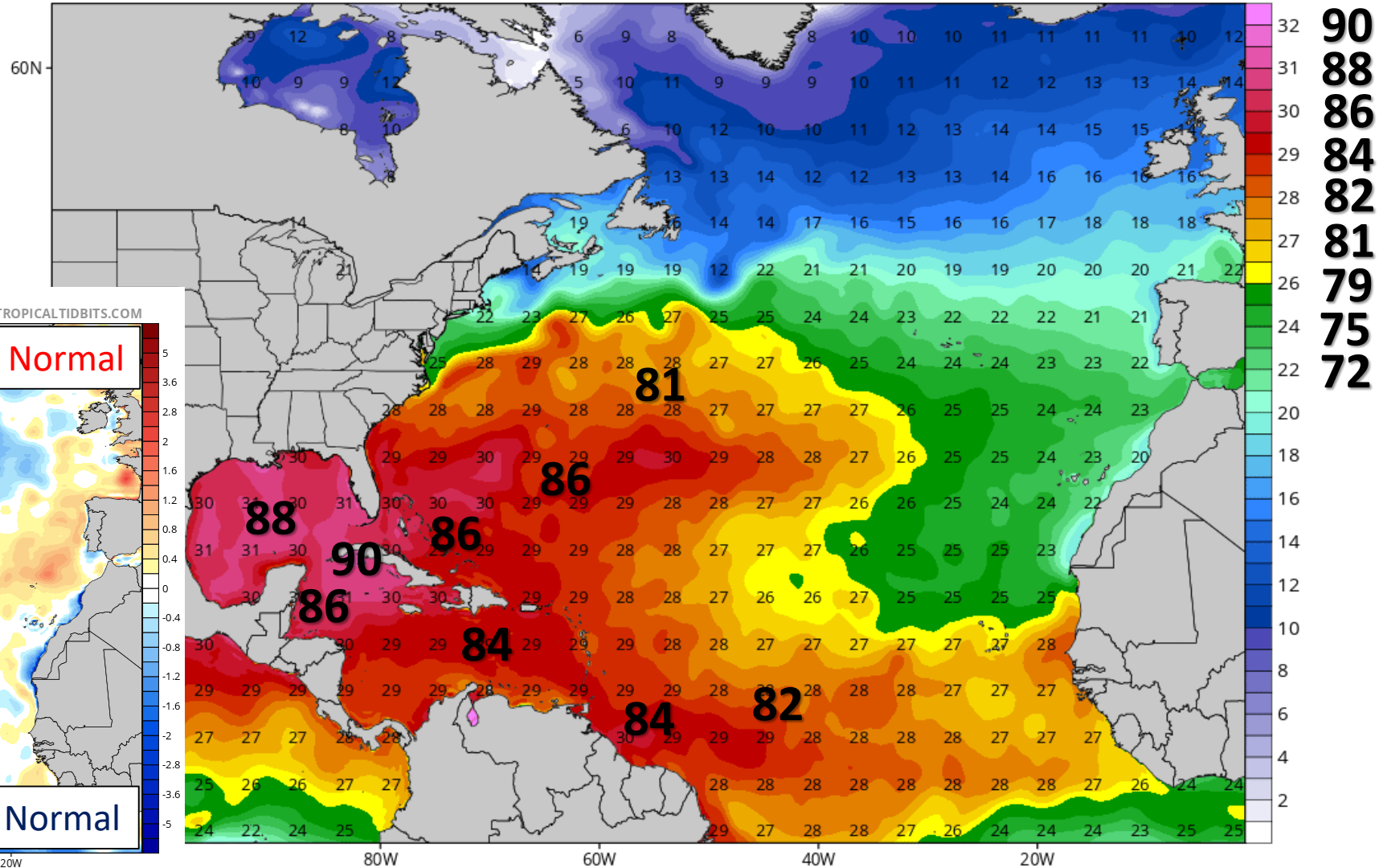
Water temperatures will warm the further west the tropical waves move.

Water temperatures are above normal across much of the Atlantic, Caribbean, and Gulf of Mexico, supporting tropical development.

CDAS Sea Surface Temperature Anomaly (°C) (based on CFSR 1981-2010 Climatology)  
Analysis Time: 06z Aug 21 2020



CDAS Sea Surface Temperature (°C)  
Analysis Time: 06z Aug 21 2020



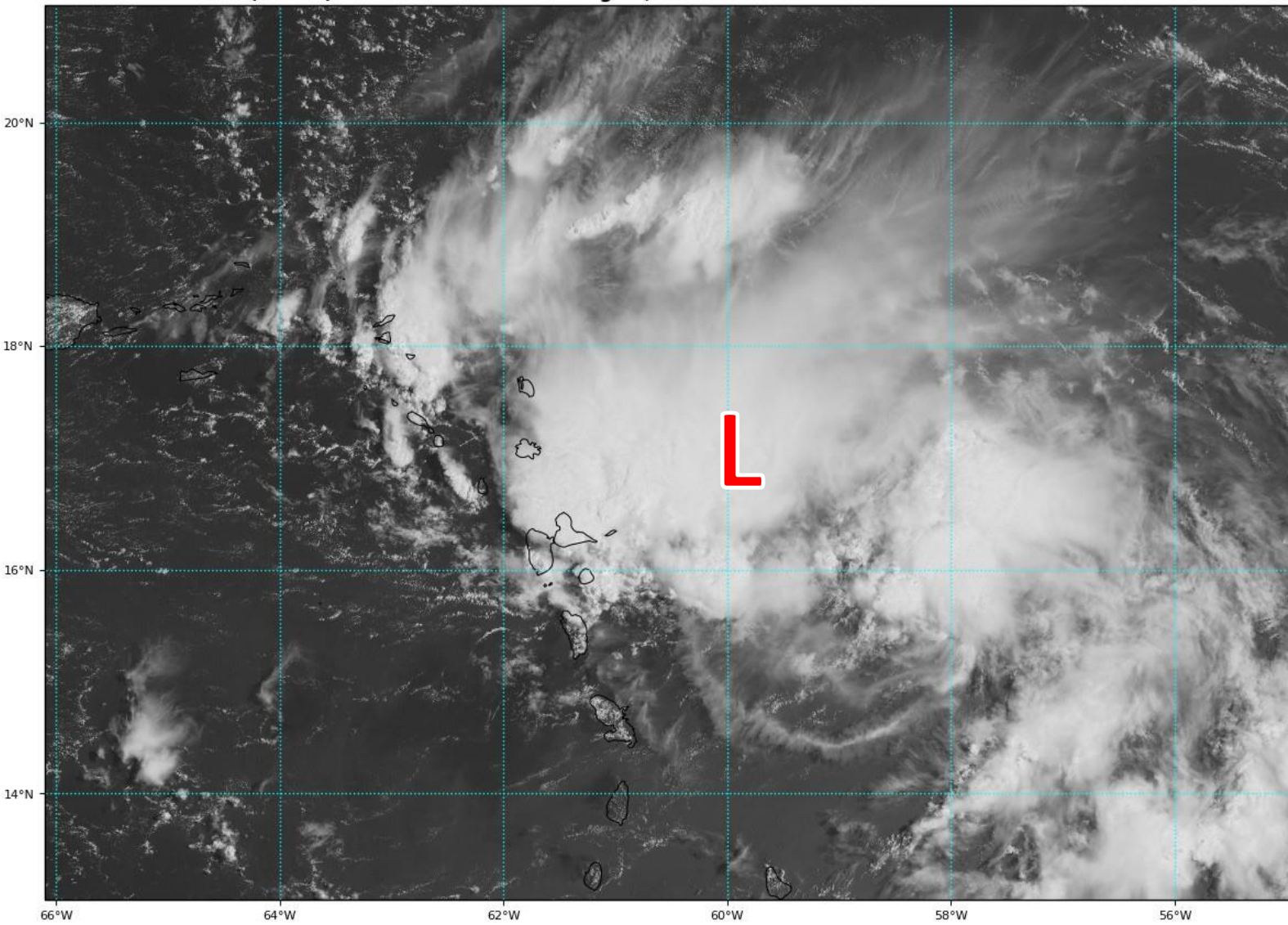


# Satellite Imagery

## Central Atlantic – Tropical Storm Laura

GOES-16 Channel 2 (visible) Reflectance at 13:55Z Aug 21, 2020

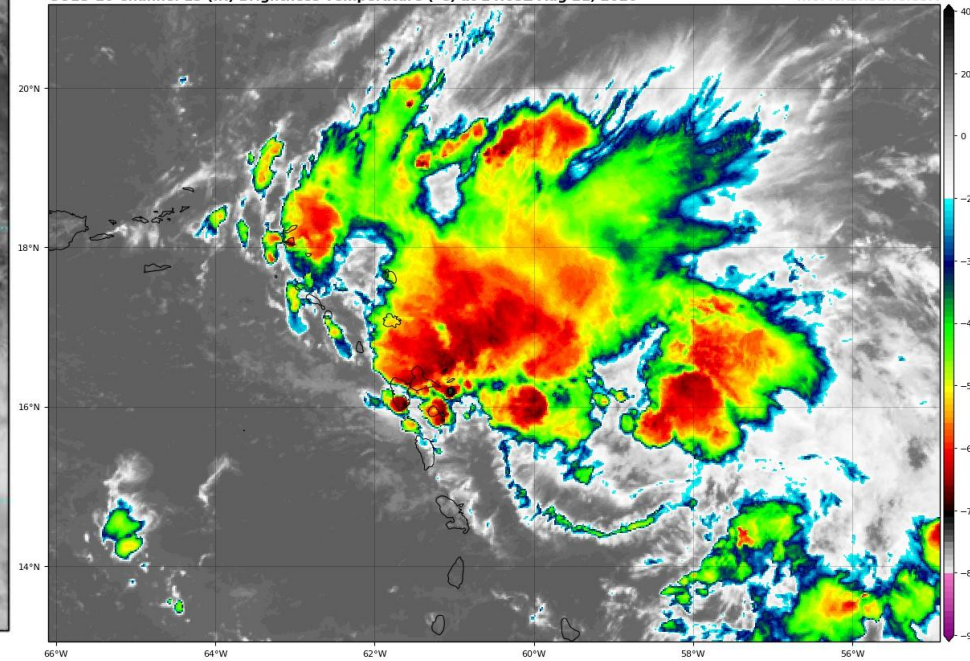
TROPICALTIDBITS.COM



NOAA Hurricane Hunters found winds that supported upgrading TD #13 to Tropical Storm Laura, the 12<sup>th</sup> named storm of the 2020 Atlantic Hurricane Season.

GOES-16 Channel 13 (IR) Brightness Temperature (°C) at 14:05Z Aug 21, 2020

TROPICALTIDBITS.COM

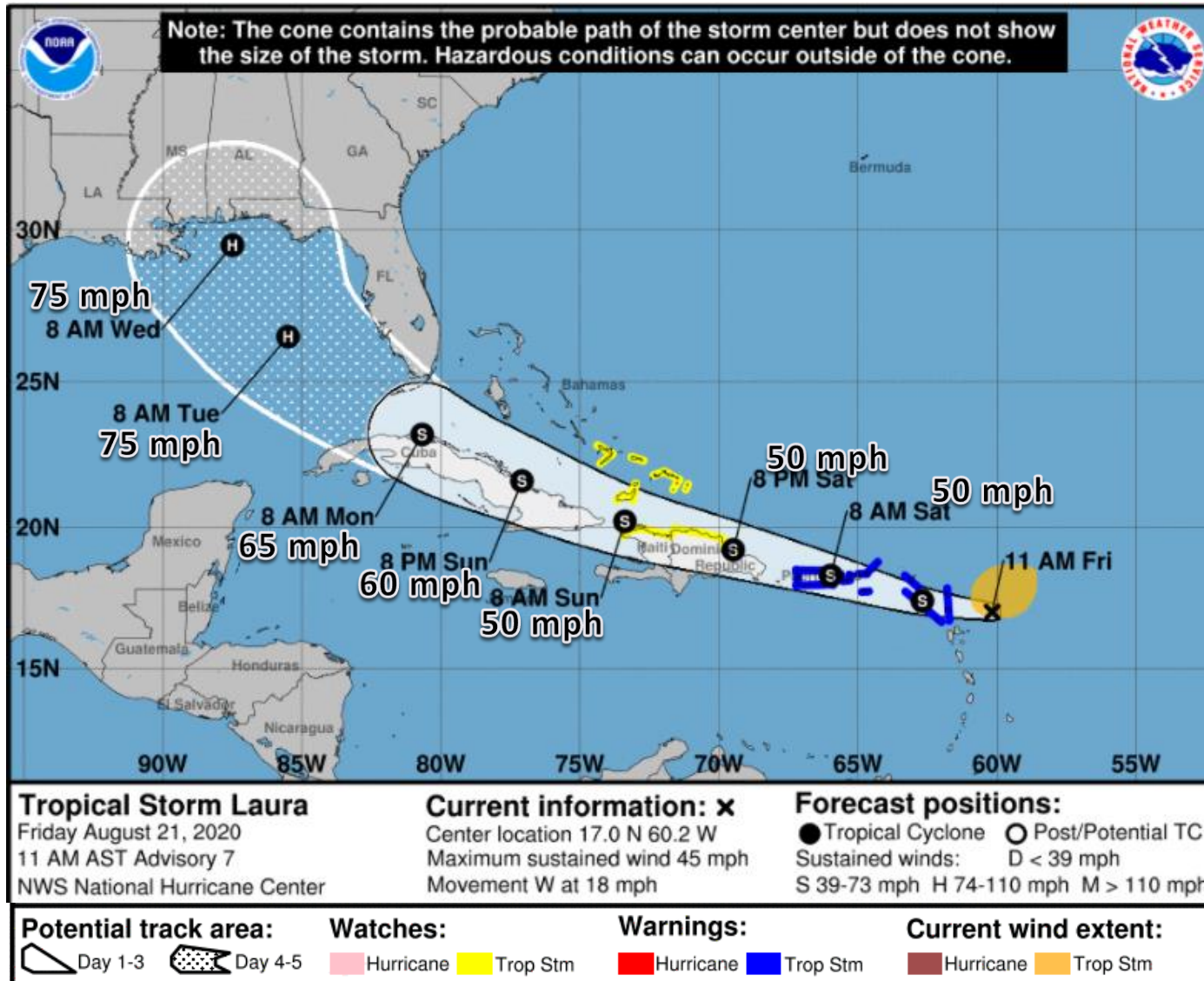






# Official Forecast Track

## From the National Hurricane Center – Tropical Storm Laura

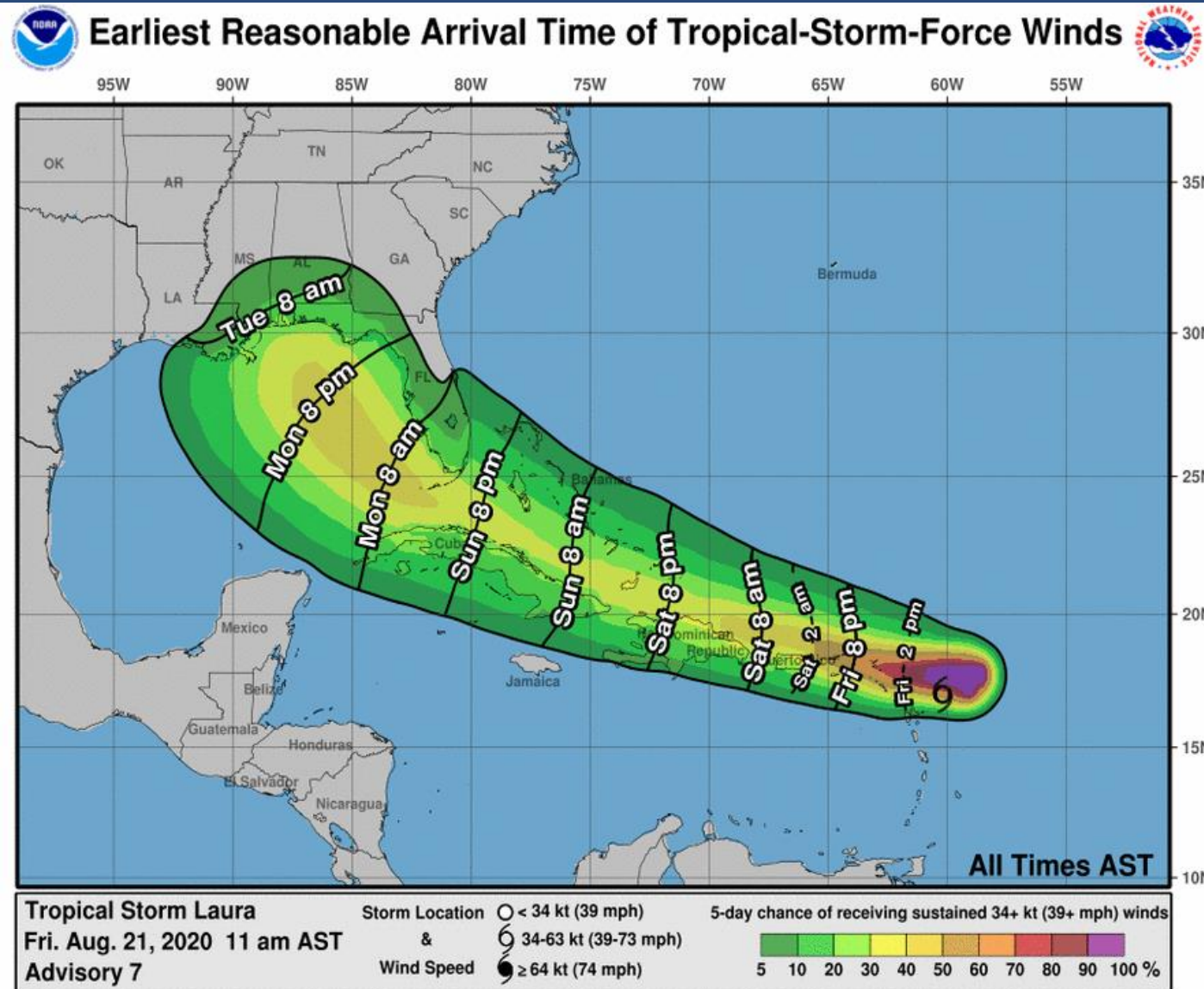


- The center of Tropical Storm Laura is located about 210 miles east-southeast of the northern Leeward Islands.
- Maximum sustained winds remain near 45 mph. Only gradual strengthening is forecast. More intensification is possible in the Gulf of Mexico, and Laura could become a hurricane early next week.
- Laura is moving toward the west at 18 mph, and a general west-northwest motion at a forward speed is expected.
- Laura will likely come close to the Florida Keys on Monday, and could impact the Panhandle or Big Bend on Wednesday.
- There still remains uncertainty in the forecast intensity due to potential land interaction.
- Conditions appear favorable for further development in the Gulf of Mexico. However, if the system gets too close to Tropical Depression 14, changes to track and intensity are possible in the Gulf of Mexico.



# Time of Arrival & Wind Speed Probabilities

## MOST LIKELY Time of Arrival of Tropical Storm Force Winds (>39 mph)



Key West:	41% (+3)
Marathon:	39% (-3)
Miami:	13% (-7)
Fort Lauderdale:	19% (-12)
West Palm Beach:	15% (-9)
Fort Pierce:	11% (-7)
Orlando:	6% (-5)
Naples:	31% (-8)
Fort Myers:	15% (-8)
Tampa:	21% (-10)
Cedar Key:	19% (-7)
Apalachicola:	28% (-5)
Tallahassee:	11% (-3)
Panama City:	29% (-2)
Destin:	17% (-3)
Pensacola:	17% (-1)

Tropical storm force winds may begin as early as Sunday night in South Florida and the Keys, but will most likely start Monday morning. Tropical storm force winds will be possible Monday night into Tuesday across West Central Florida and the Panhandle and Big Bend.





# Key Messages

From the National Hurricane Center



## Key Messages for Tropical Storm Laura

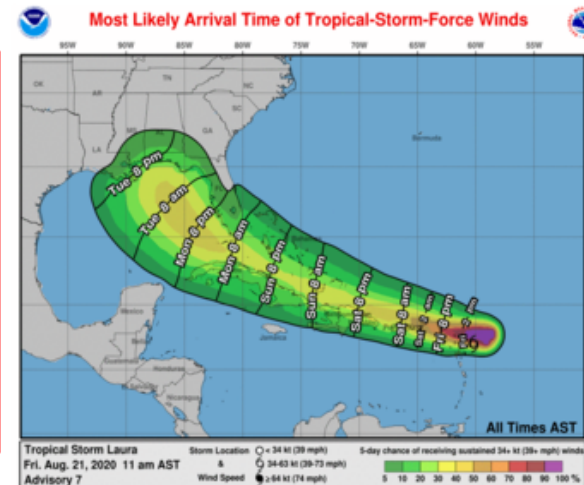
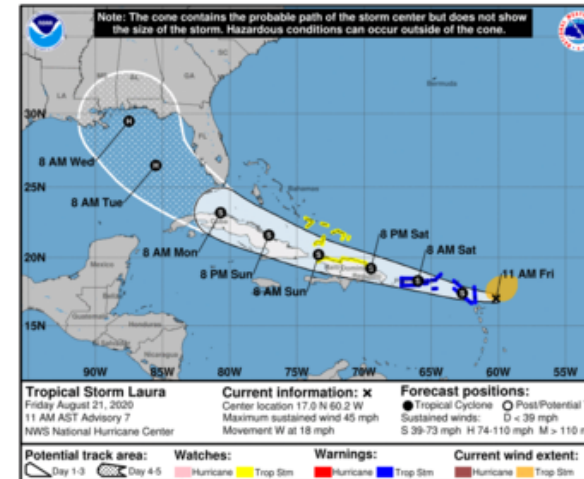
Advisory 7: 11:00 AM AST Fri Aug 21, 2020



1. Tropical storm conditions are expected across portions of the northern Leeward Islands, the Virgin Islands, and Puerto Rico today through Saturday, and Tropical Storm Warnings are in effect. Heavy rainfall is likely across this area beginning today and could cause mudslides and flash and urban flooding through Sunday.

2. Tropical storm conditions are possible along the northern coasts of the Dominican Republic and Haiti, the southeastern Bahamas, and the Turks and Caicos islands Saturday and Sunday, and Tropical Storm Watches are in effect.

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 could bring storm surge, rainfall, and wind impacts to portions of Cuba, the Bahamas, and Florida early next week and the northeast U.S. Gulf Coast by the middle of next week. Interests there should monitor the progress of Laura and updates to the forecast over the next few days.



For more information go to [hurricanes.gov](https://hurricanes.gov)



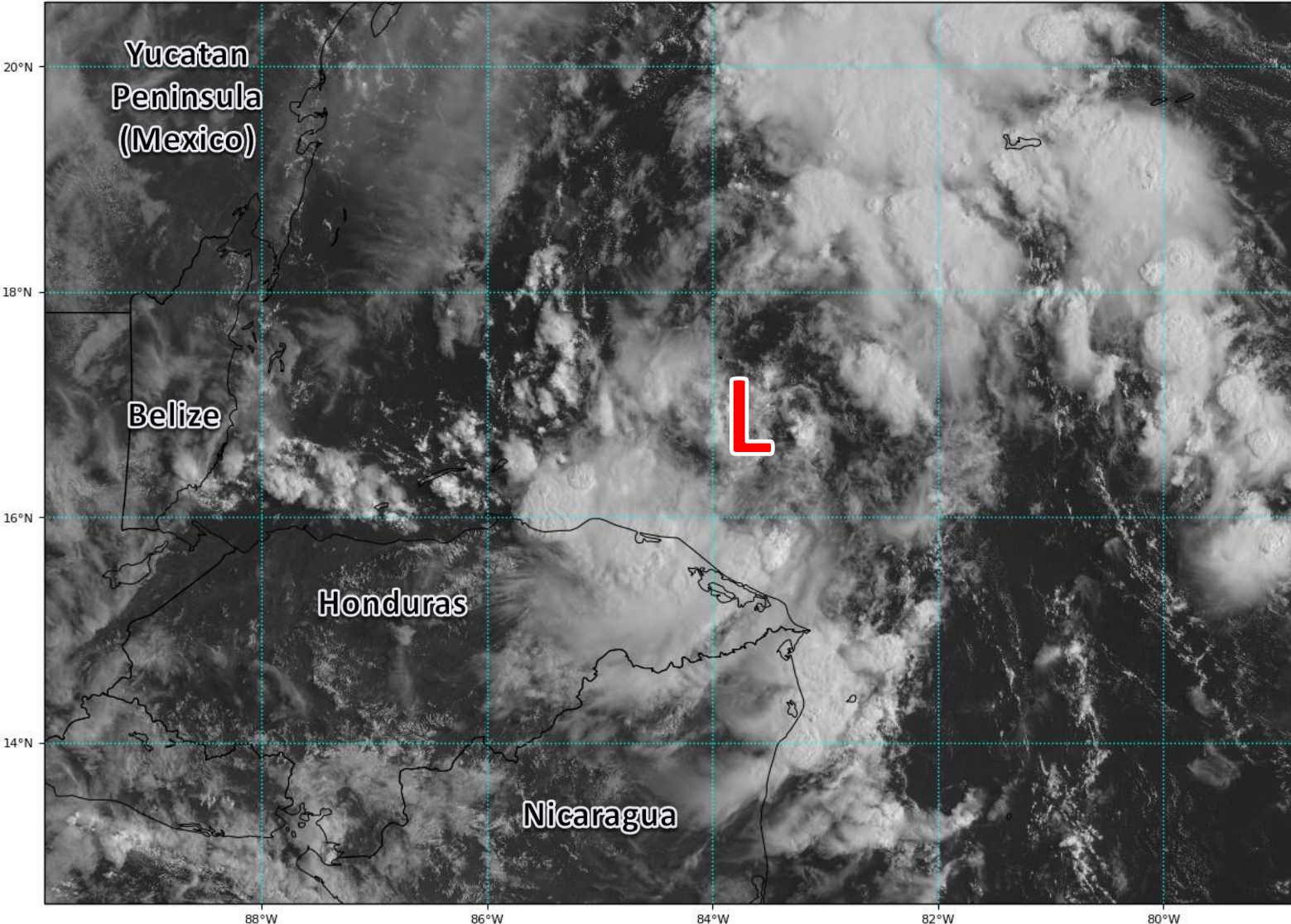


# Satellite Imagery

## Central Caribbean – Tropical Depression #14

GOES-16 Channel 2 (visible) Reflectance at 14:05Z Aug 21, 2020

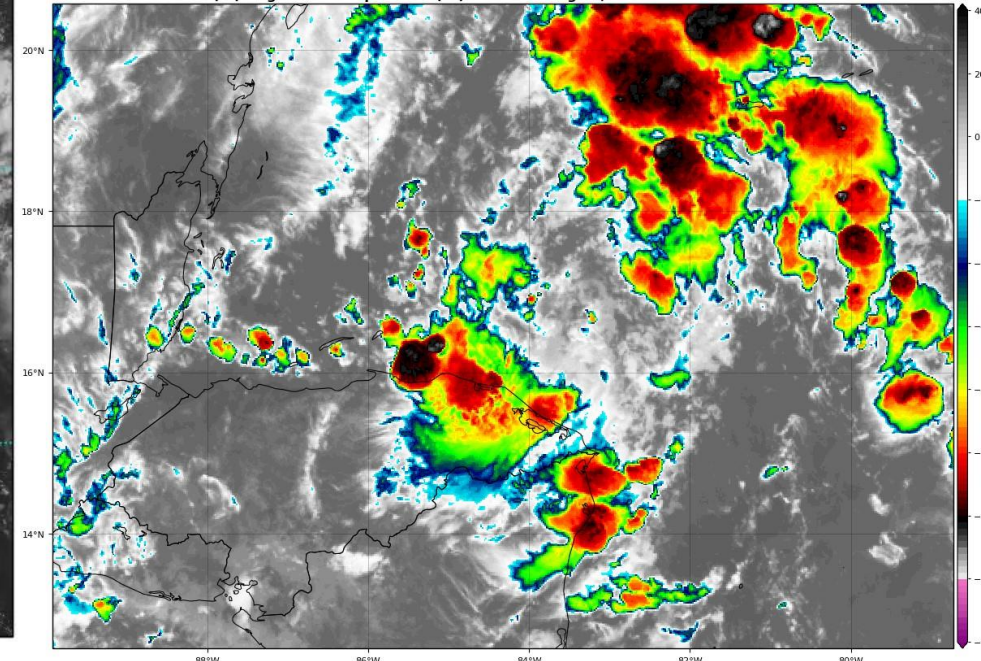
TROPICALTIDBITS.COM



Tropical Depression #14 is still struggling somewhat with its organization as thunderstorms remain displaced from the center. Conditions appear favorable for further organization and intensification.

GOES-16 Channel 13 (IR) Brightness Temperature (°C) at 14:05Z Aug 21, 2020

TROPICALTIDBITS.COM

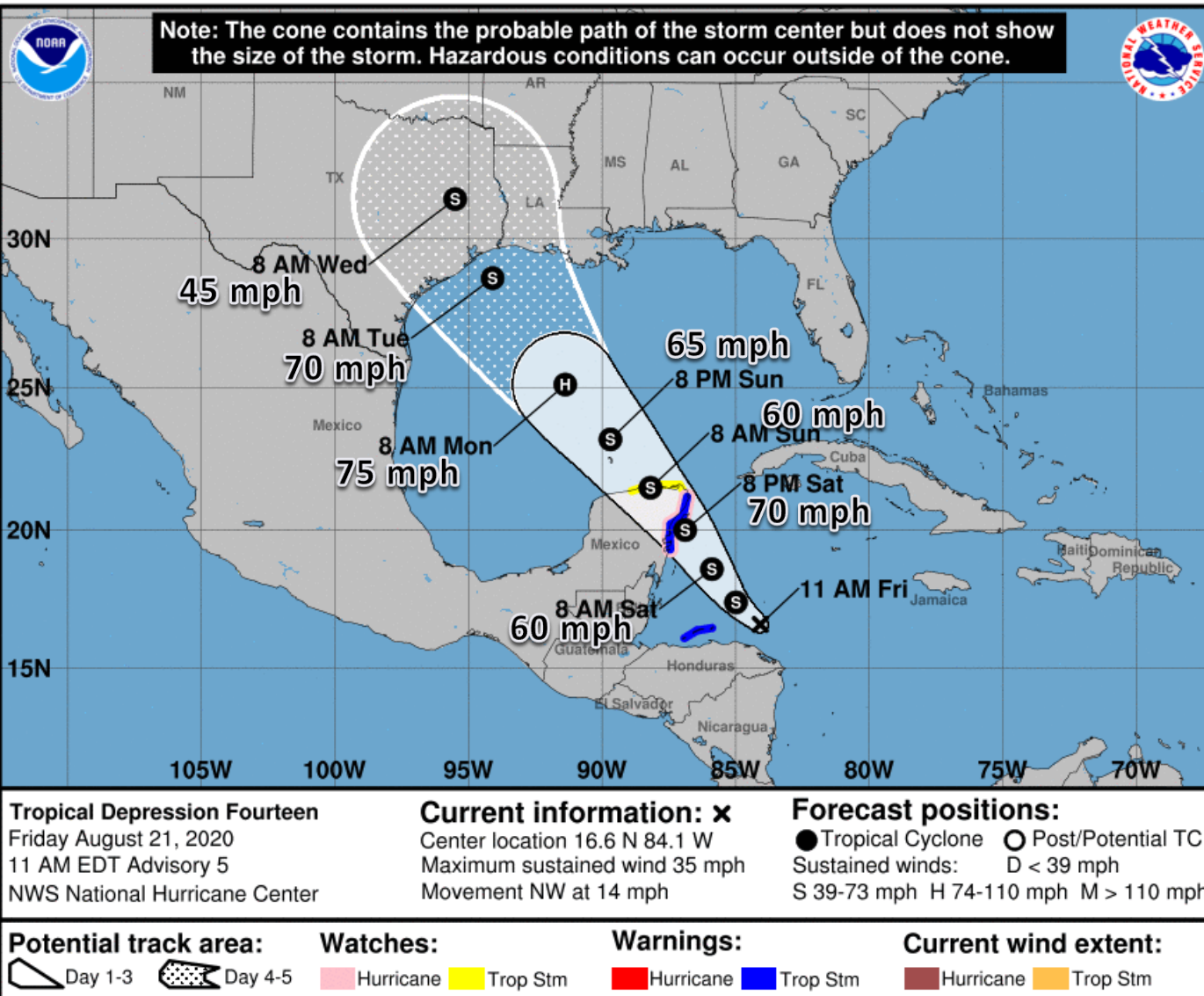






# Official Forecast Track

## From the National Hurricane Center – Tropical Depression #14

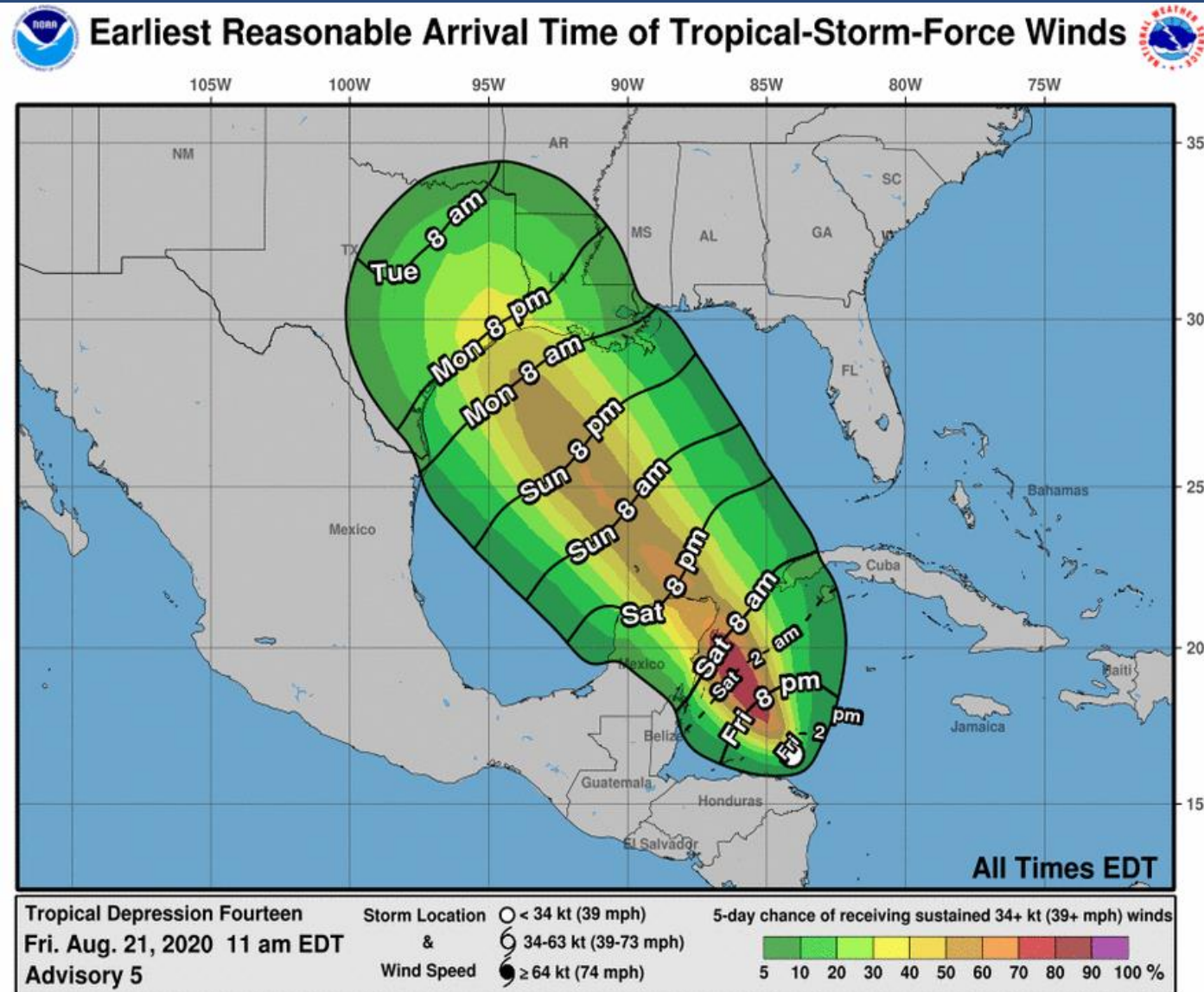


- The center of TD 14 is located about 165 miles east of Isla Roatan, Honduras
- Maximum sustained winds are at 35 mph, and strengthening is forecast until landfall in the Yucatan Peninsula.
- TD 14 has slowed down and is moving to the northwest at 14 mph. This general motion with a slower forward speed is expected over the next couple of days.
- TD 14 will make landfall on the Yucatan Peninsula on Saturday and move into the Gulf of Mexico on Sunday. Landfall could occur along the Texas or Louisiana coast on Tuesday.
- However, if the system gets too close to Tropical Storm Laura, changes to track and intensity are possible in the Gulf of Mexico.



# Time of Arrival & Wind Speed Probabilities

**MOST LIKELY** Time of Arrival of Tropical Storm Force Winds (>39 mph)



Tropical storm force winds could begin along the northwestern and central US Gulf Coast as early as Monday morning, but will more likely begin Monday evening.





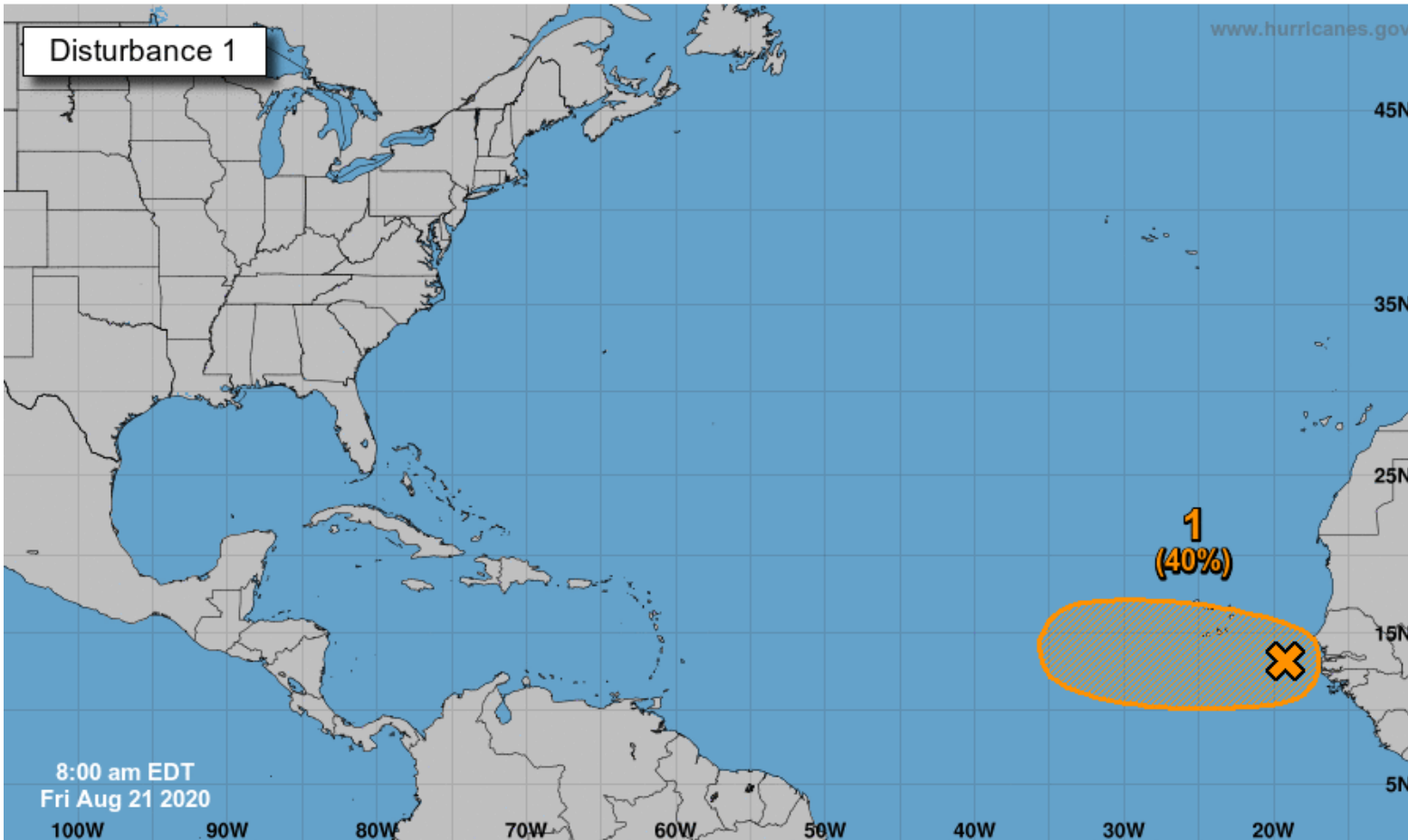
# Tropical Weather Outlook

Possible Area 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:   
 Tropical or Sub-Tropical Cyclone: ○ Depression ⚡ Storm 🌀 Hurricane   
 ⓧ Post-Tropical Cyclone or Remnants

A tropical wave located just off of the west coast of Africa is producing a large area of disorganized showers and thunderstorms

This wave is expected to move farther offshore over the far eastern tropical Atlantic today. Conditions are expected to be conducive for some development over the next few days, and the system could become a tropical depression before conditions become less favorable for development early next week.

This system is forecast to move west-northwestward at 15-20 mph across the eastern tropical Atlantic.

**This system does not need to be monitored for impacts at this time.**

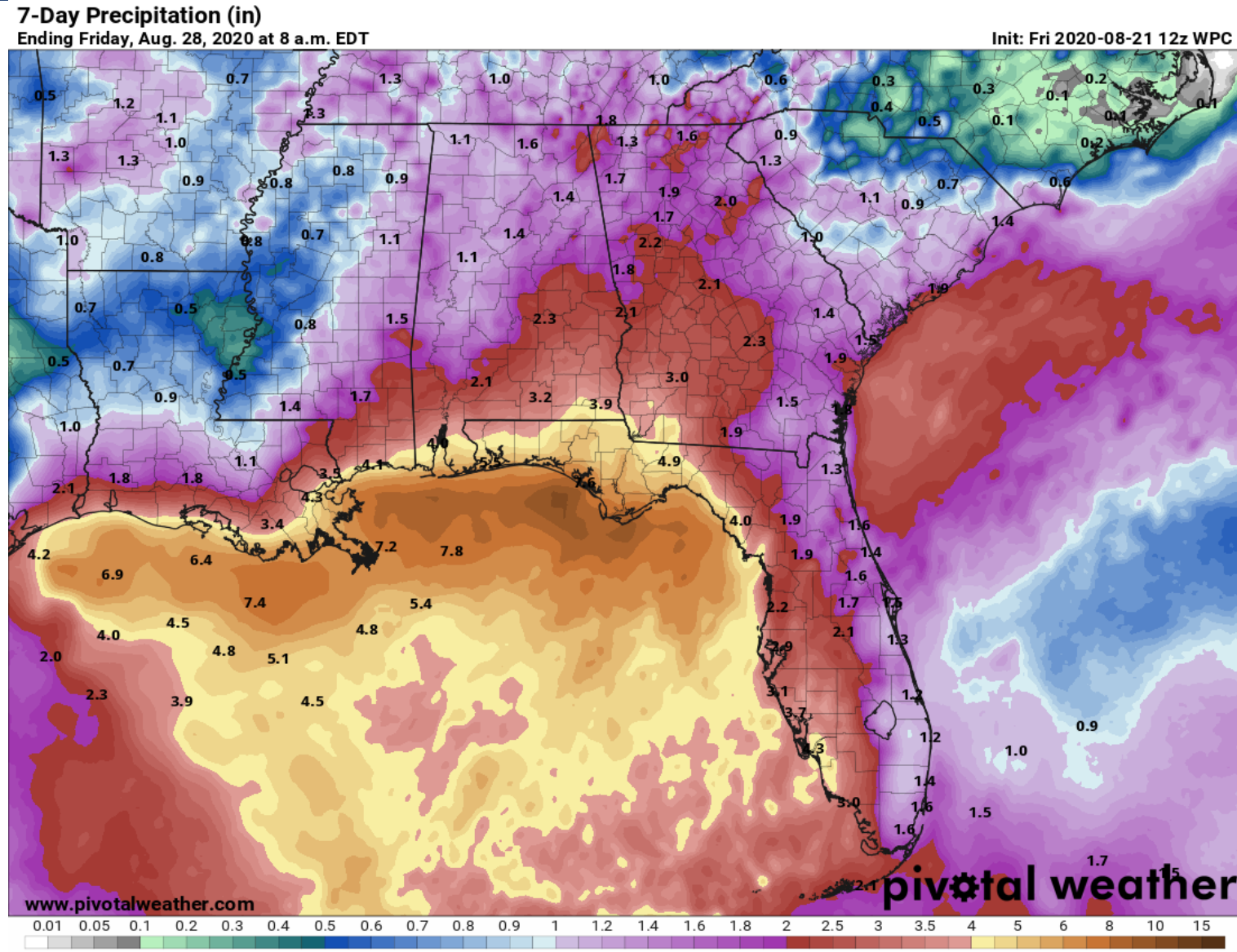
**\*Formation chance through 48 hrs...low...20%**

**\*Formation chance through 5 days...medium...40%**



# Forecast Rainfall Totals Next 7 Days

- A widespread 3-7" expected across the state this week, with the highest totals in the Panhandle and Big Bend.
- Locally 7-10" especially along the Gulf Coast
- 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 will increase next week in the Panhandle.
- The highest rainfall totals could shift or change, depending on the track and intensity of Laura.







# Overall Summary

## **Tropical Storm Laura – Near the Lesser Antilles**

- Tropical Storm Laura is located about 210 miles east-southeast of the northern Leeward Islands, moving W at 18 mph.
- Maximum sustained winds are near 45 mph. Only gradual strengthening is forecast over the next 24 hours.
- The center of Laura will likely pass near or over the Florida Keys on Sunday, then near the Panhandle or Big Bend on Wednesday.
- The forecast intensity is uncertain before it reaches Florida due to possible land interaction with Hispaniola and Cuba.
- The forecast track and intensity are more uncertain in the Gulf of Mexico due to possible interaction with Tropical Depression #14.

## **Tropical Depression #14 – Western Caribbean**

- The center of TD 14 is located about 165 miles east of Isla Roatan, Honduras, moving northwest at 14 mph.
- Maximum sustained winds are near 35 mph, and this system is expected to become a tropical storm later today and possibly near hurricane strength on Saturday.
- TD 14 will likely make landfall on the Yucatan Peninsula on Saturday, emerge into the Gulf of Mexico on Sunday, then make landfall in Texas or Louisiana on Tuesday.
- The forecast track and intensity are uncertain as it approaches the northwest Gulf of Mexico due to possible interaction with Tropical Storm Laura

## **Tropical Wave near the Coast of Africa**

- A tropical wave moving off the coast of Africa may gradually develop later this week. The National Hurricane Center gives the system a 20% (low) chance of development over the next 48 hours and a 40% (medium) chance of development over the next 5 days.



# Florida Summary

## Florida Outlook:

- Tropical Storm Laura poses a direct threat to Florida.
- Tropical storm force winds are likely to begin by Monday morning in South Florida and the Florida Keys, but may begin as early as Sunday night.
- Tropical storm force winds will likely begin on Tuesday in the Panhandle and Big Bend, but could begin as early as early Tuesday morning.
- Heavy rainfall is also expected. A widespread 3-7" of rainfall is expected over the next 7 days statewide, especially in the Panhandle and Big Bend, with localized totals of 7-10" possible.
- Isolated tornadoes will be possible in some of the outer bands across South Florida and the Keys Sunday and Monday, then in North Florida late Monday into Tuesday.
- Dangerous rip currents are expected along some Atlantic beaches late this weekend into early next week and along the Gulf Coast early next week (in conjunction with swells from TD #14).
- The forecast across North Florida remains uncertain with regards to exact impacts due to any possible interactions between TS Laura & TD 14 as this could have implications on intensity and track.
- No impacts are expected from the wave over Africa at this time.
- Unrelated to the tropical systems, a stalled cold front will bring high rain chances to the state over the next couple days. A localized flash flood and severe weather threat exists each afternoon.

The next briefing packet will be issued this afternoon with the 5 PM advisory. For the latest information on the tropics, please visit the National Hurricane Center website at [www.hurricanes.gov](http://www.hurricanes.gov).





# TROPICAL UPDATE



Created by:

Cameron Young, Assistant State Meteorologist

[Cameron.Young@em.myflorida.com](mailto:Cameron.Young@em.myflorida.com)

State Meteorological Support Unit

Florida Division of Emergency Management

Users wishing to subscribe (approval pending) to this distribution list, register at:

[https://public.govdelivery.com/accounts/FLDEM/subscriber/new?topic\\_id=SERT\\_Met\\_Tropics](https://public.govdelivery.com/accounts/FLDEM/subscriber/new?topic_id=SERT_Met_Tropics).

Other reports available for subscription are available at:

<https://public.govdelivery.com/accounts/FLDEM/subscriber/new?preferences=true>