



# TROPICAL UPDATE



5:00 PM EDT

Friday, August 21, 2020

Tropical Storm Laura – Near Lesser Antilles

Tropical Depression #14 – Western Caribbean

Tropical Wave Near Africa (30%)

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).



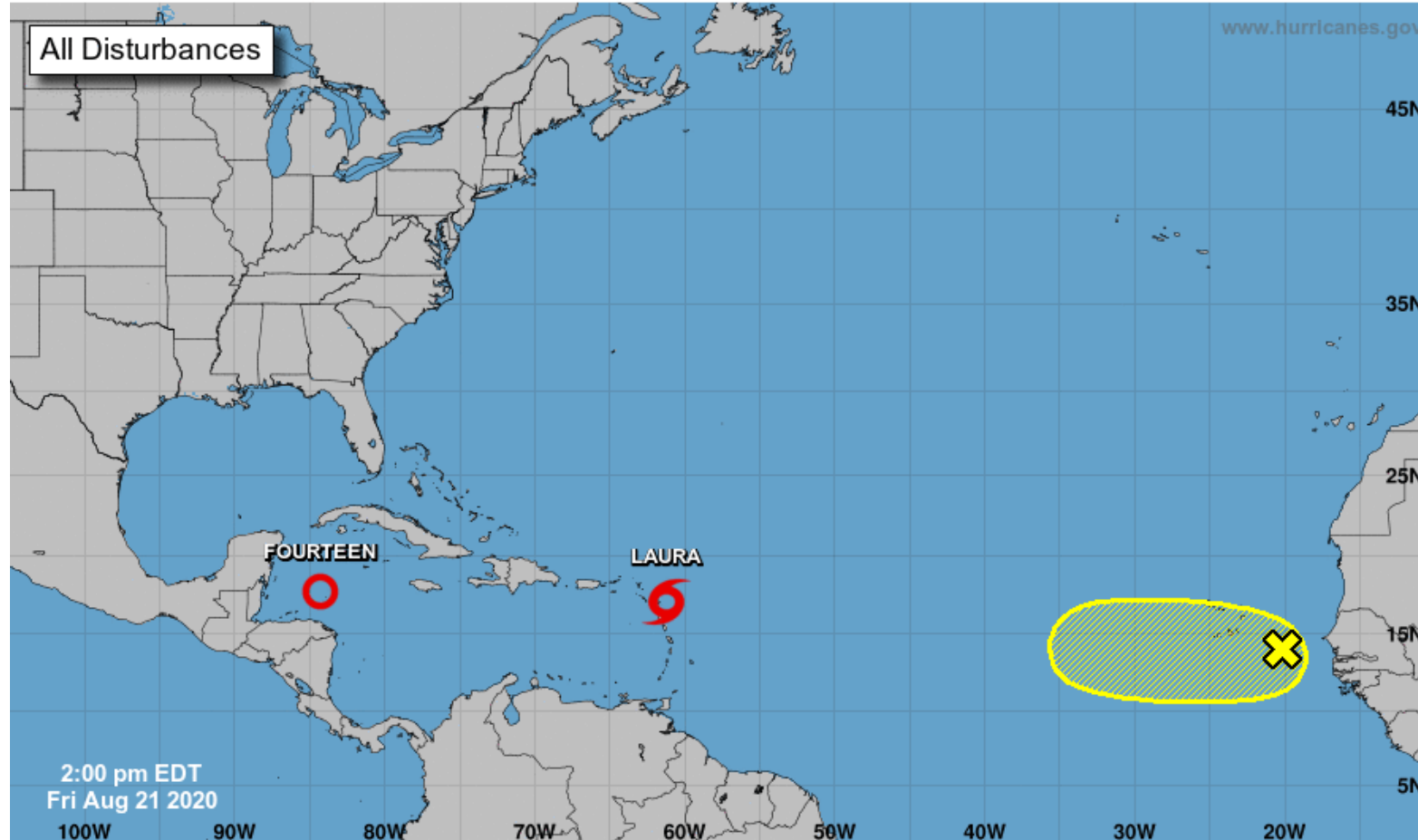
# Tropical Weather Outlook

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

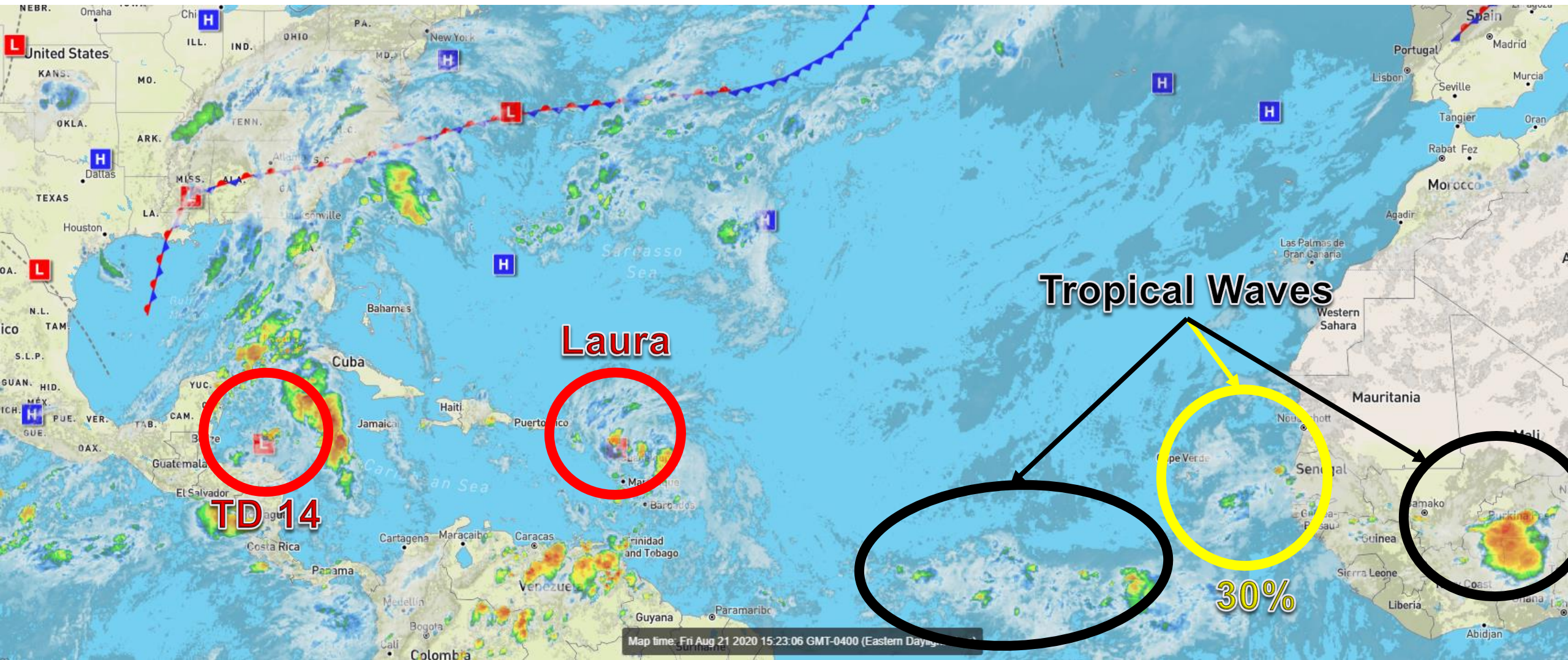
Post-Tropical Cyclone or Remnants





# Atlantic Basin Satellite Image

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







# Steering Currents

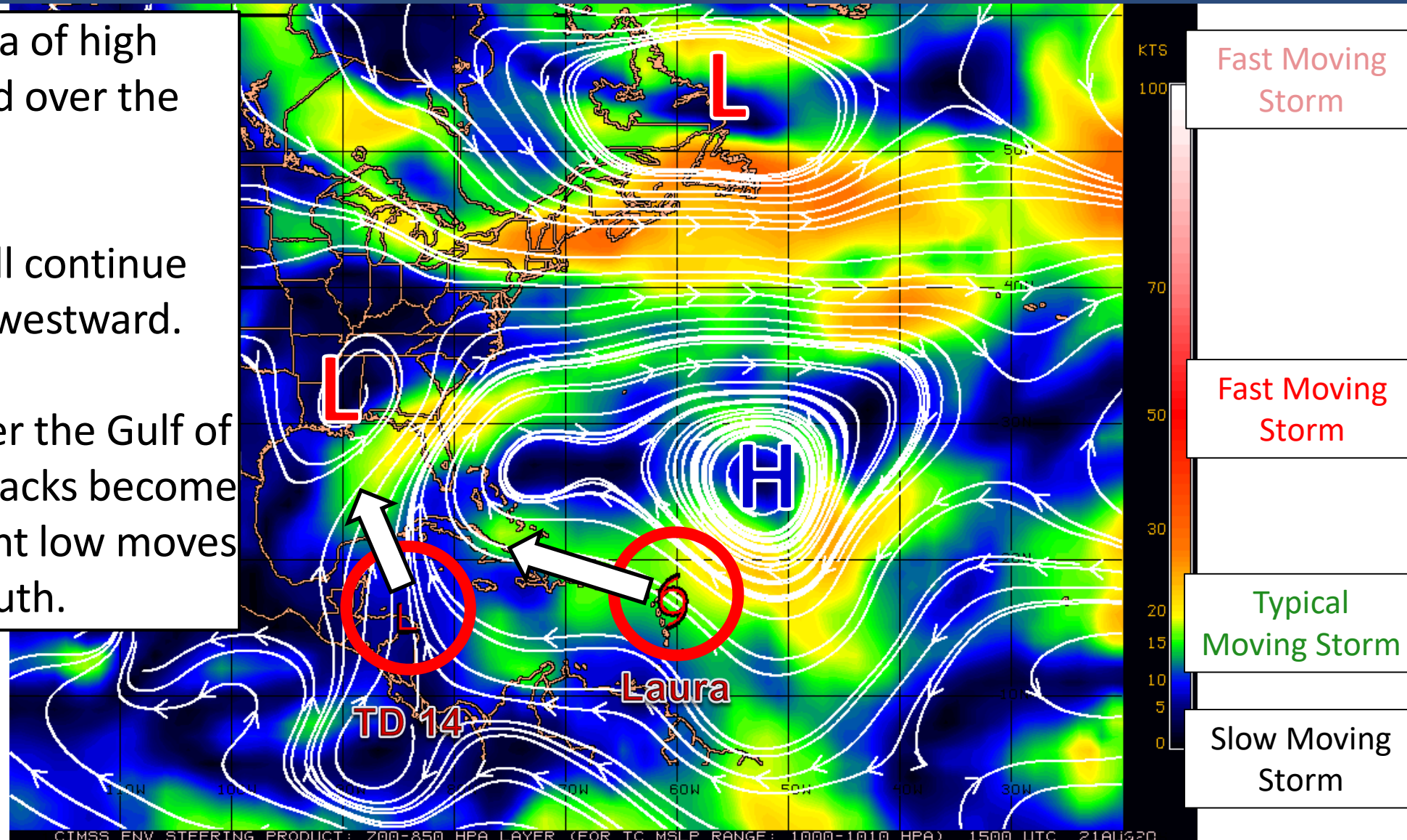
What is moving the systems?

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 as the current low moves out of the South.



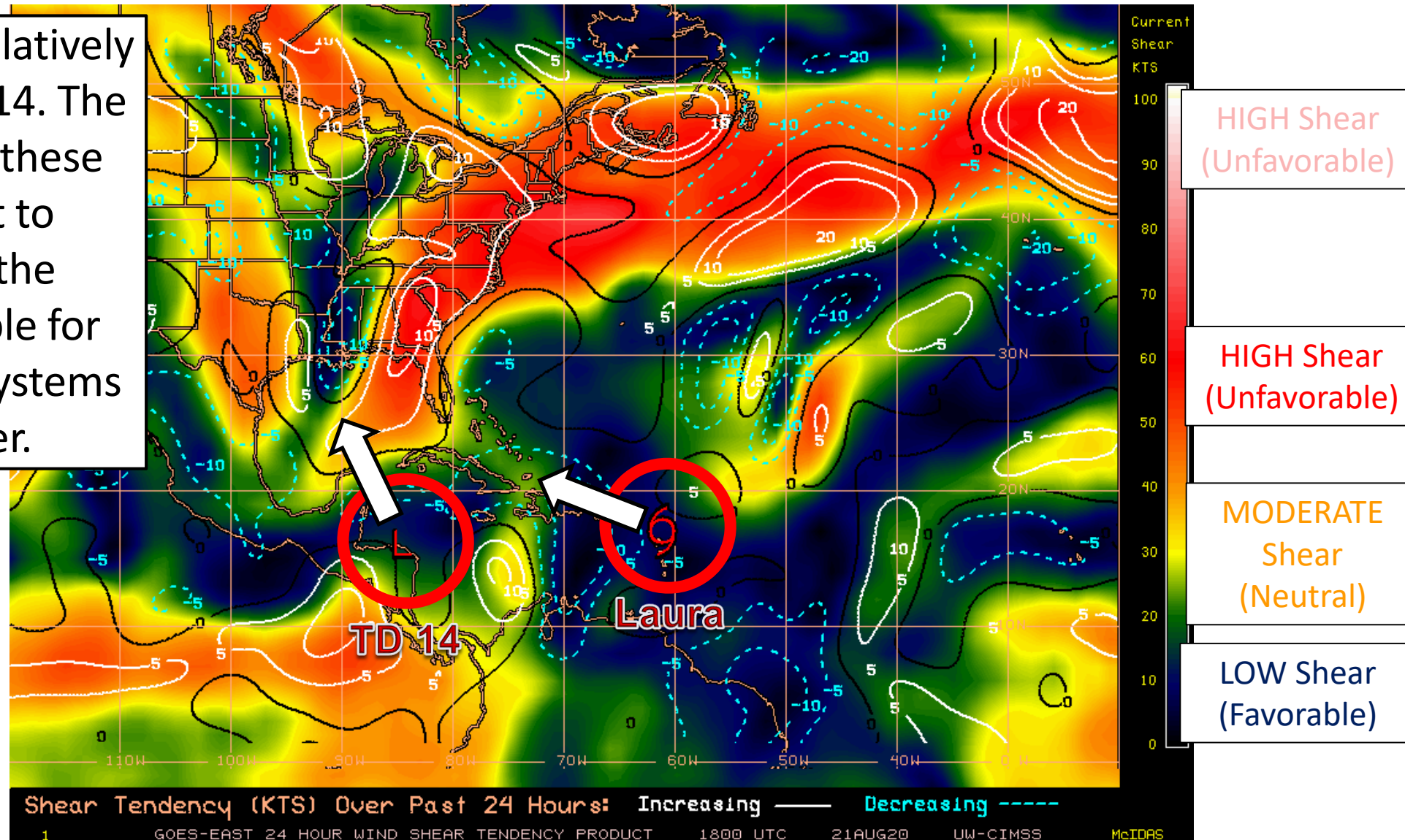


# Wind Shear

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, making the environment favorable for intensification if the systems remain over water.



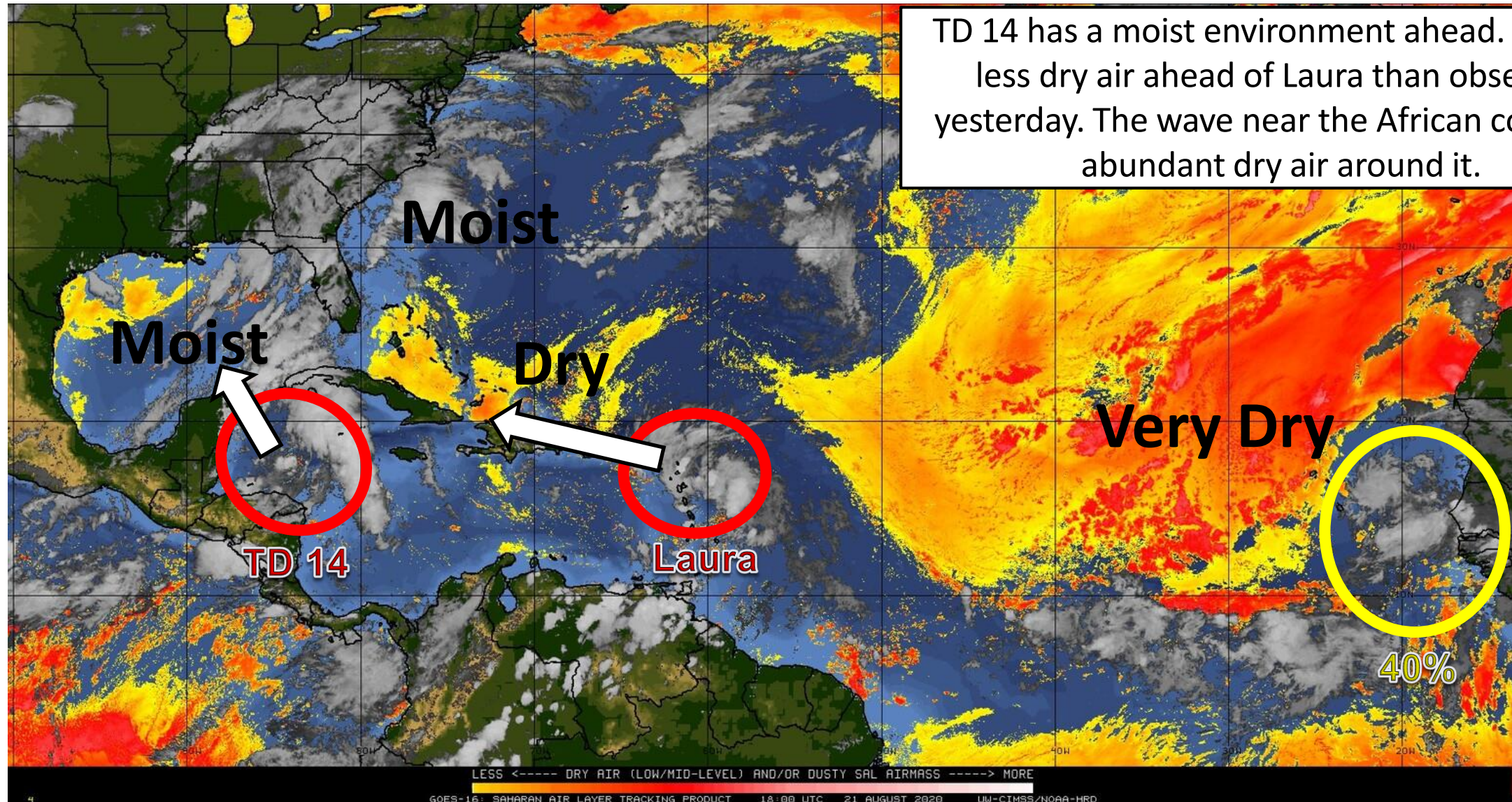




# Dry Air & Saharan Dust

Is the environment favorable for the systems?

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







# Sea Surface Temperatures & Anomalies

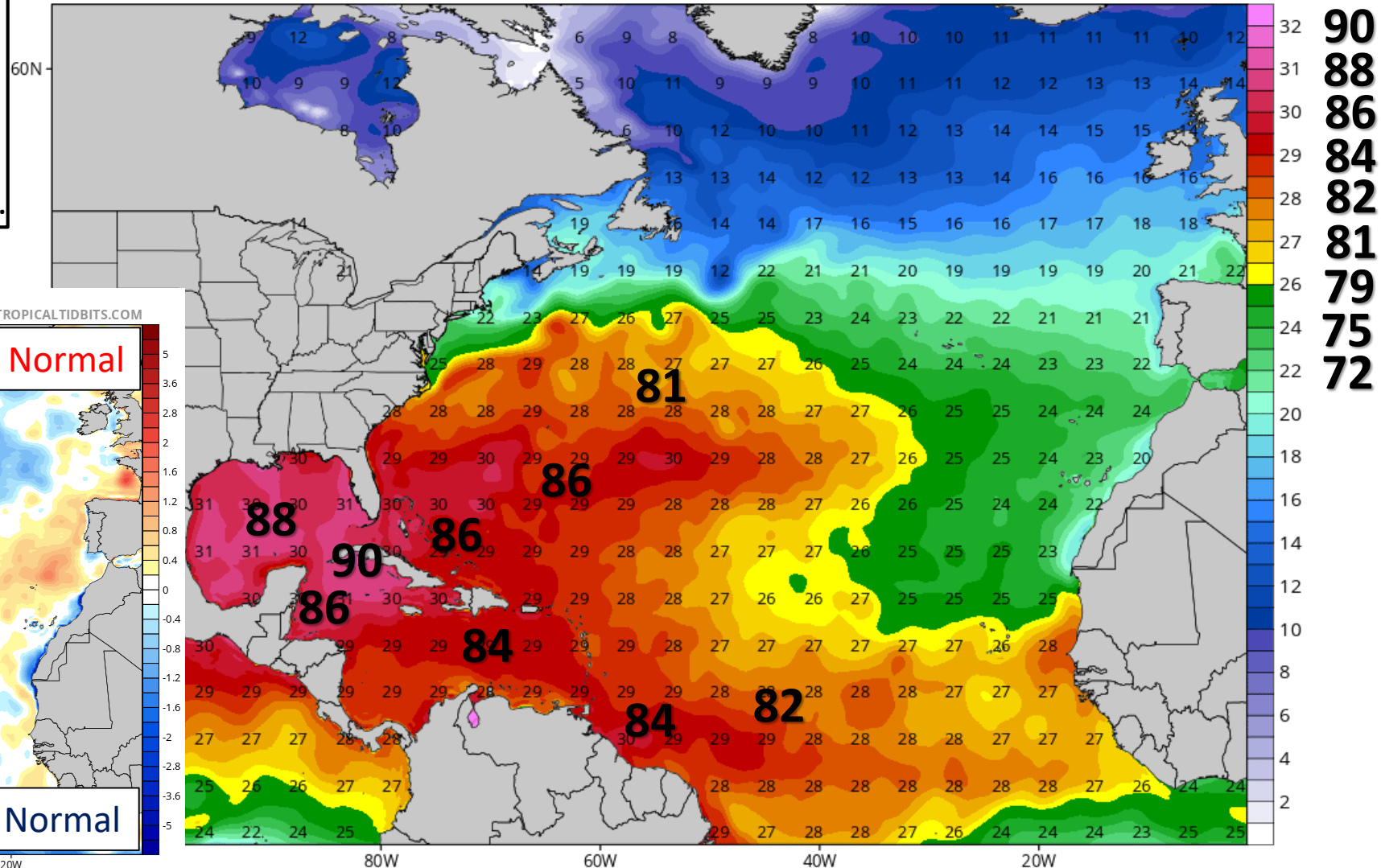
Is the ocean favorable for the systems?

Water temperatures will warm the further west the systems move and are warmest in the Gulf of Mexico.

Water temperatures are generally above normal, supporting tropical development.

CDAS Sea Surface Temperature (°C)

Analysis Time: 12z Aug 21 2020



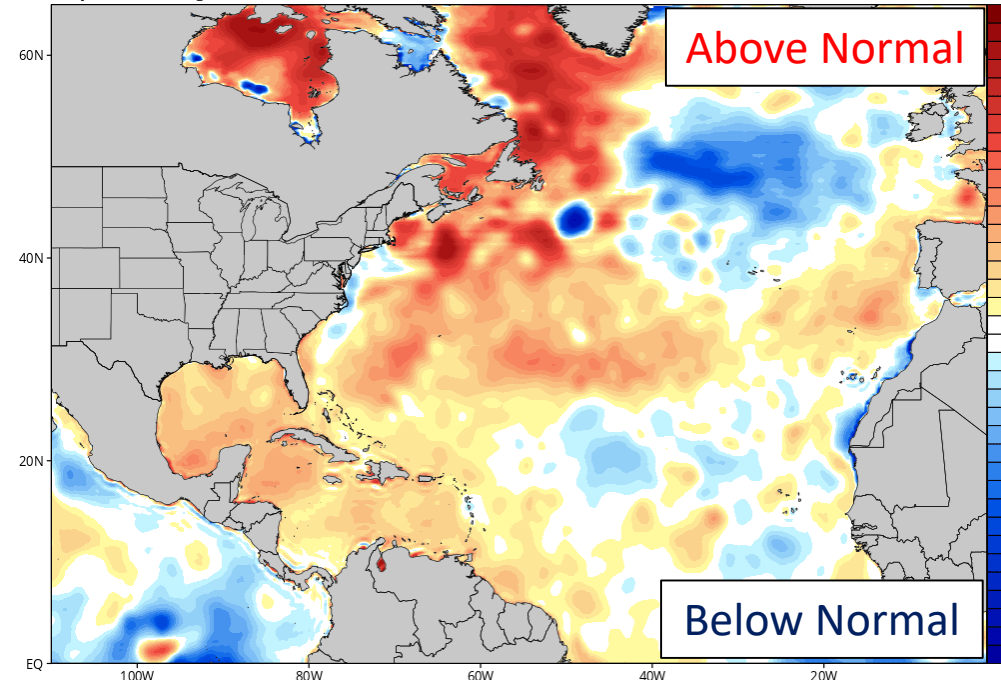
CDAS Sea Surface Temperature Anomaly (°C) (based on CFSR 1981-2010 Climatology)

Analysis Time: 12z Aug 21 2020

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Above Normal

Below Normal





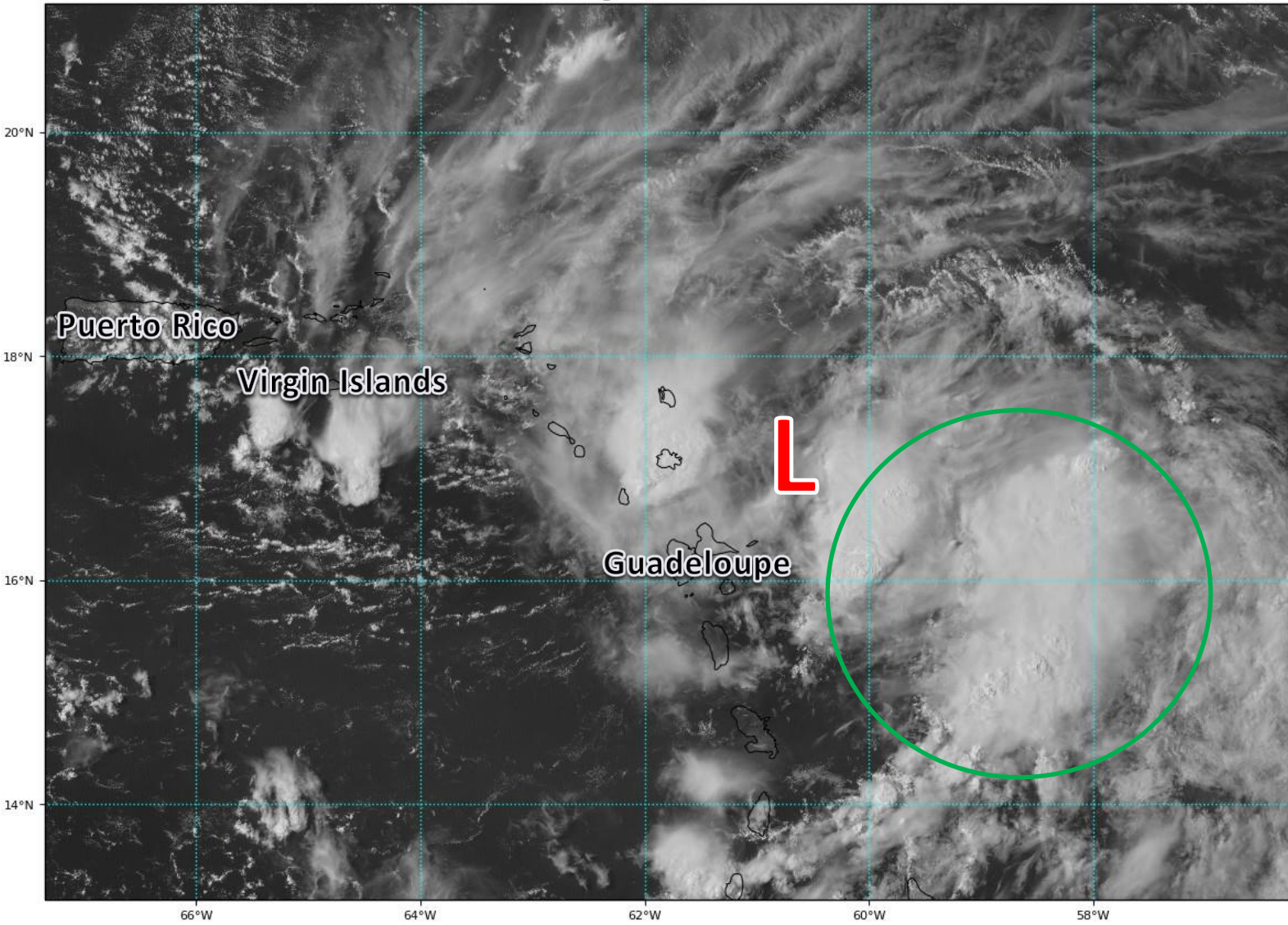


# Satellite Imagery

## Near Lesser Antilles – Tropical Storm Laura

GOES-16 Channel 2 (visible) Reflectance at 19:25Z Aug 21, 2020

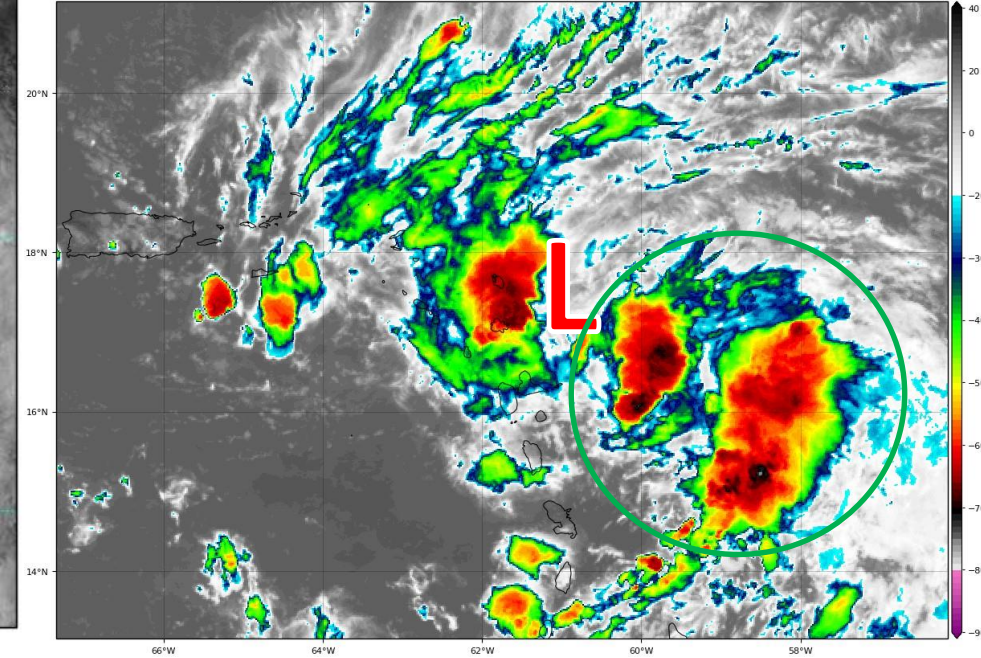
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Tropical Storm Laura remains a disorganized tropical storm this afternoon. Thunderstorms have been pulsing and have not consistently stayed near the center. The most intense thunderstorms have been to the southeast of the center.

GOES-16 Channel 13 (IR) Brightness Temperature (°C) at 19:25Z Aug 21, 2020

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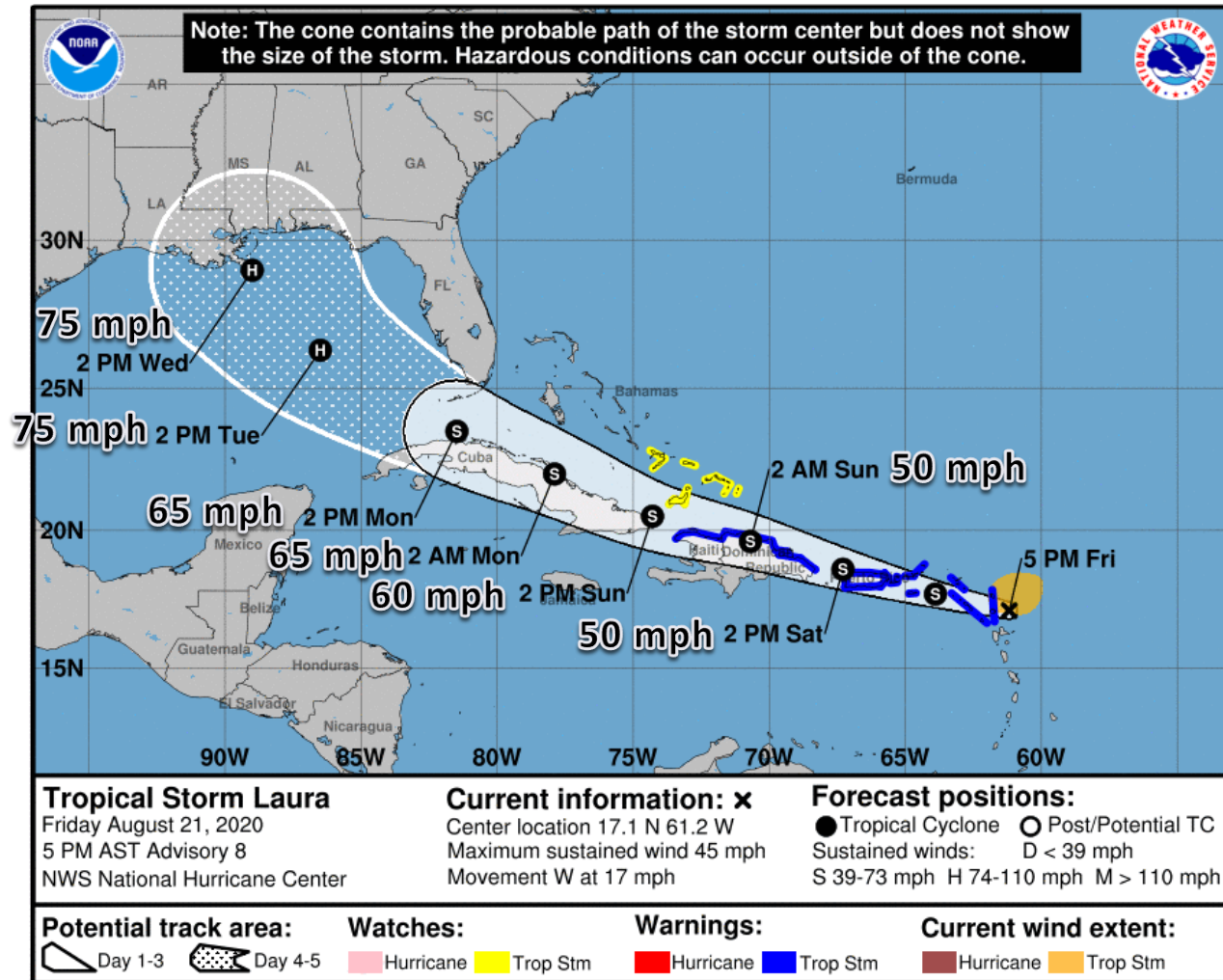






# Official Forecast Track

## From the National Hurricane Center – Tropical Storm Laura

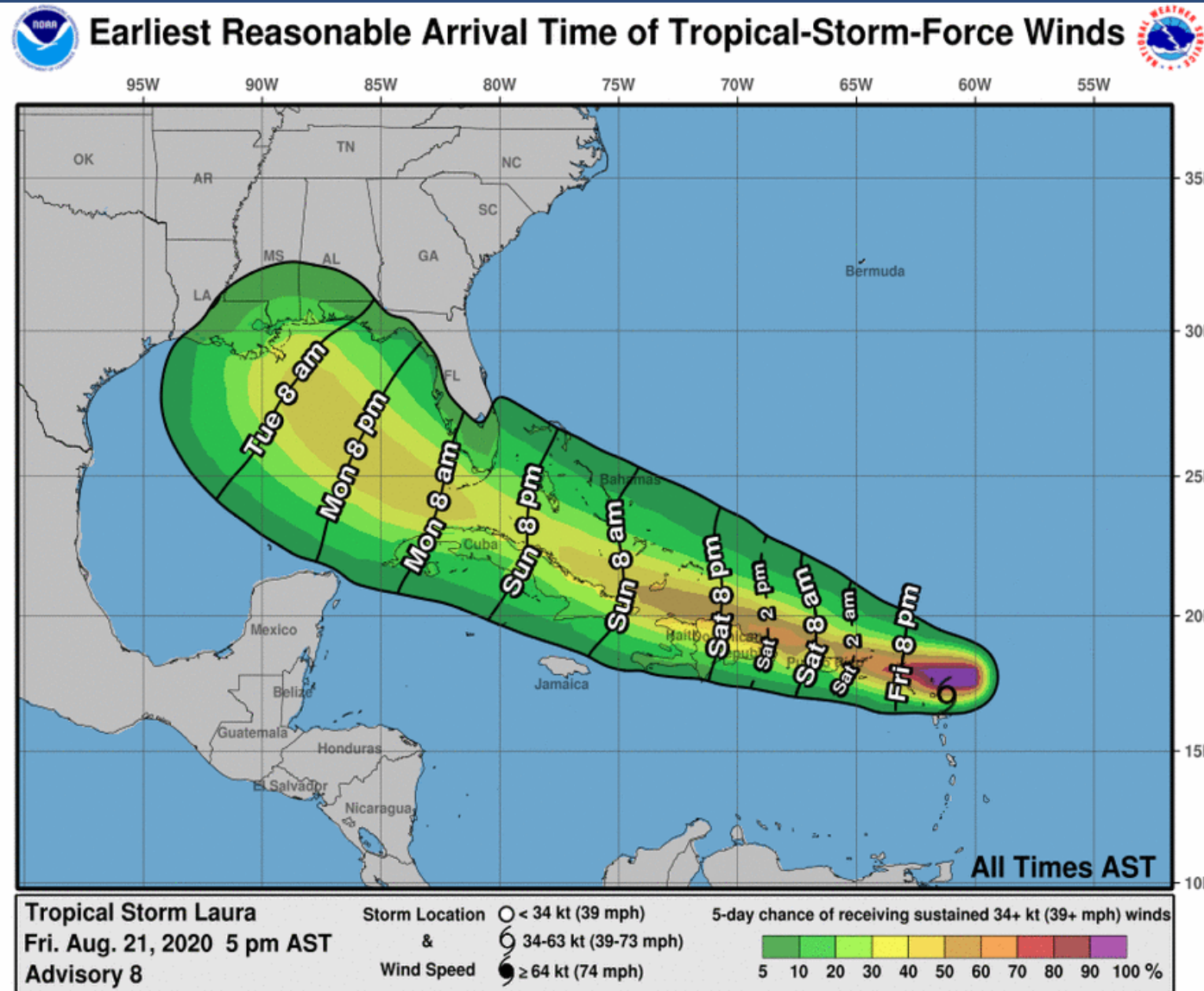


- The center of Tropical Storm Laura is located about 40 miles east of the northern Leeward Islands, or about 1,400 miles southeast of Key West, FL.
- Maximum sustained winds remain near 45 mph. Only gradual strengthening is forecast due to land interaction. More intensification is possible in the Gulf of Mexico, and Laura could become a hurricane early next week.
- Laura is moving toward the west at 17 mph, and a general west-northwest motion at a forward speed is expected.
- Laura will likely come close to the lower Florida Keys on Monday, and could impact the Panhandle 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

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



Key West:	40% (-1)
Marathon:	38% (-1)
Miami:	12% (-1)
Fort Lauderdale:	19% (-0)
West Palm Beach:	14% (-1)
Fort Pierce:	10% (-1)
Orlando:	3% (-3)
Naples:	27% (-4)
Fort Myers:	12% (-3)
Tampa:	16% (-5)
Cedar Key:	12% (-7)
Apalachicola:	19% (-9)
Tallahassee:	5% (-6)
Panama City:	21% (-8)
Destin:	12% (-5)
Pensacola:	15% (-2)

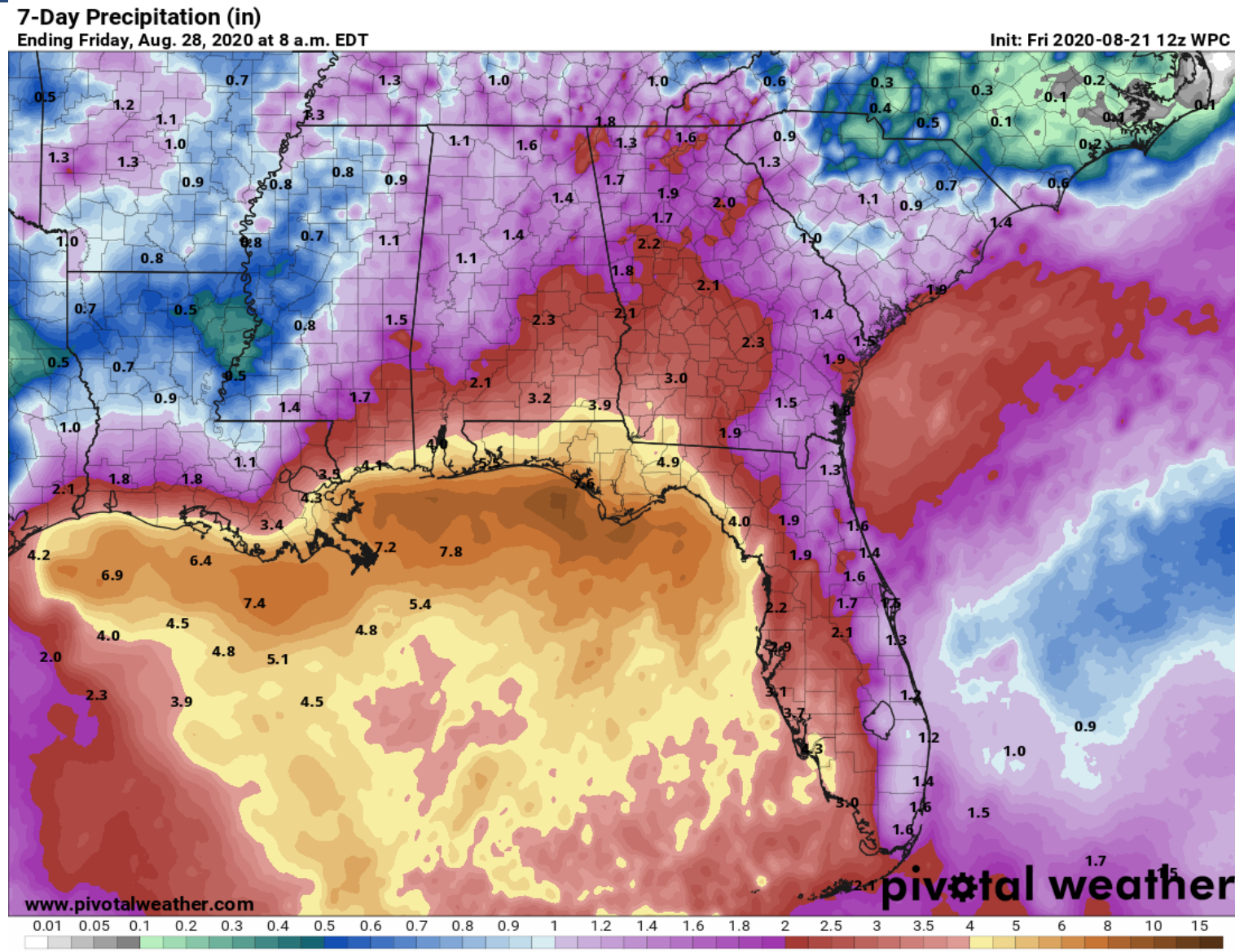
Tropical storm force winds may begin as early as Sunday night in South Florida and the Keys, but will most likely start Monday morning. Tropical storm force winds will be possible Monday night into Tuesday across West Central Florida and the Panhandle and Big Bend.





# Forecast Rainfall Totals Next 7 Days

- A widespread 2-5" 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 may increase next week in the Panhandle.
- The highest rainfall totals could shift or change, depending on the track and intensity of Laura.





# Key Messages

From the National Hurricane Center



## Key Messages for TROPICAL STORM LAURA

Advisory 8: : ,



1. TROPICAL STORM CONDITIONS ARE EXPECTED ACROSS PORTIONS OF THE NORTHERN LEEWARD ISLANDS, THE VIRGIN ISLANDS, AND PUERTO RICO TODAY THROUGH SATURDAY, TROPICAL STORM CONDITIONS ARE ALSO EXPECTED ALONG THE NORTHERN COASTS OF THE DOMINICAN REPUBLIC AND HAITI FROM SATURDAY INTO SUNDAY. HEAVY RAINFALL IS LIKELY ACROSS THESE AREAS BEGINNING TODAY AND COULD CAUSE MUDSLIDES AND FLASH AND URBAN FLOODING THROUGH SUNDAY.

2. TROPICAL STORM CONDITIONS ARE POSSIBLE OVER PORTIONS OF THE SOUTHEASTERN BAHAMAS AND THE TURKS AND CAICOS ISLANDS ON SUNDAY.

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 NORTHERN 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)



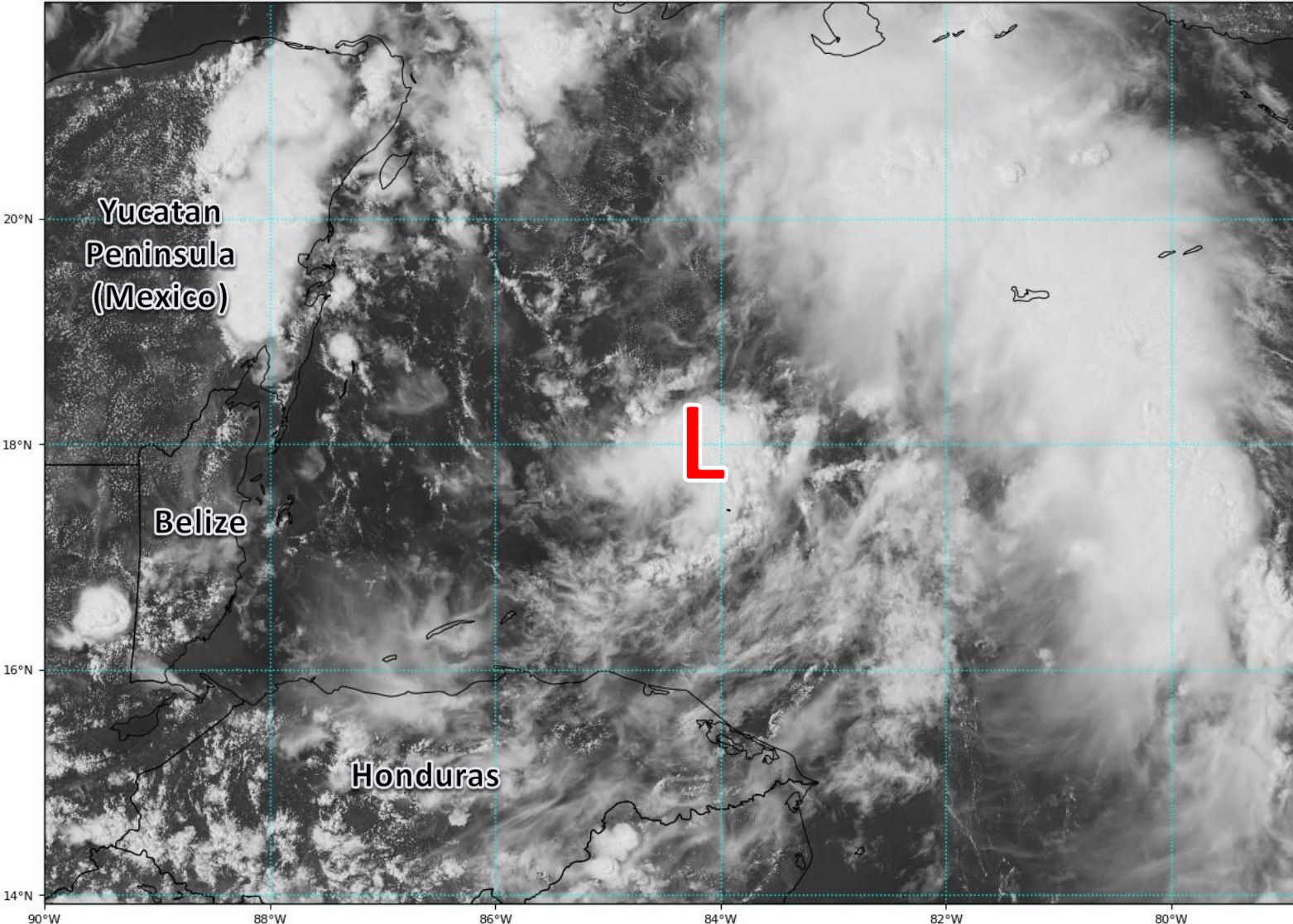


# Satellite Imagery

## Western Caribbean – Tropical Depression #14

GOES-16 Channel 2 (visible) Reflectance at 19:35Z Aug 21, 2020

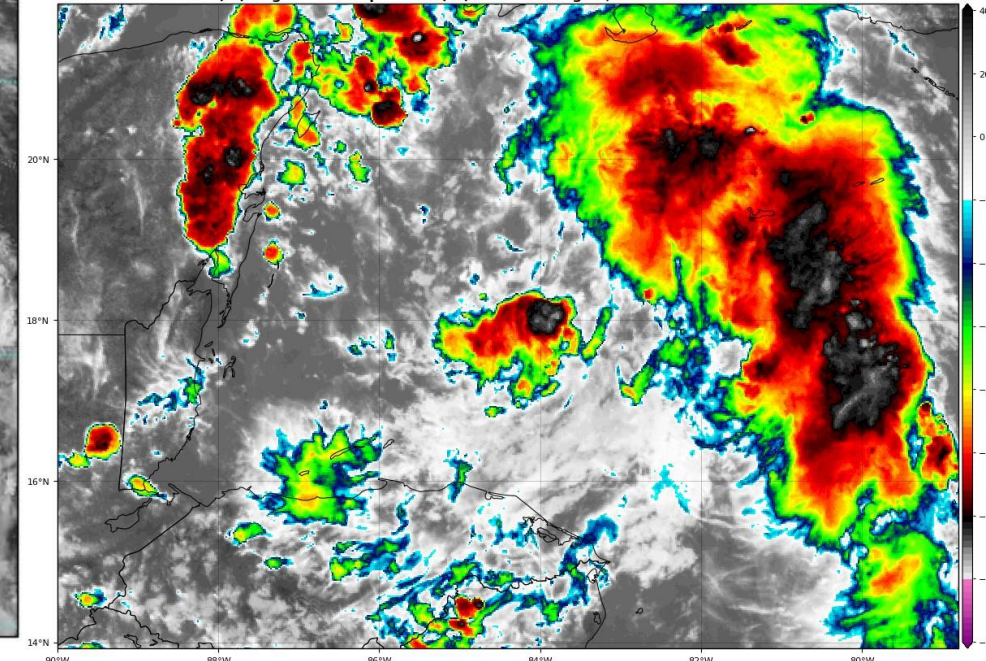
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Tropical Depression #14 has been producing disorganized showers and thunderstorms most of today, but has recently developed storms near its center. Hurricane Hunters are enroute to determine if the system has strengthened.

GOES-16 Channel 13 (IR) Brightness Temperature (°C) at 19:25Z Aug 21, 2020

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# Official Forecast Track

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



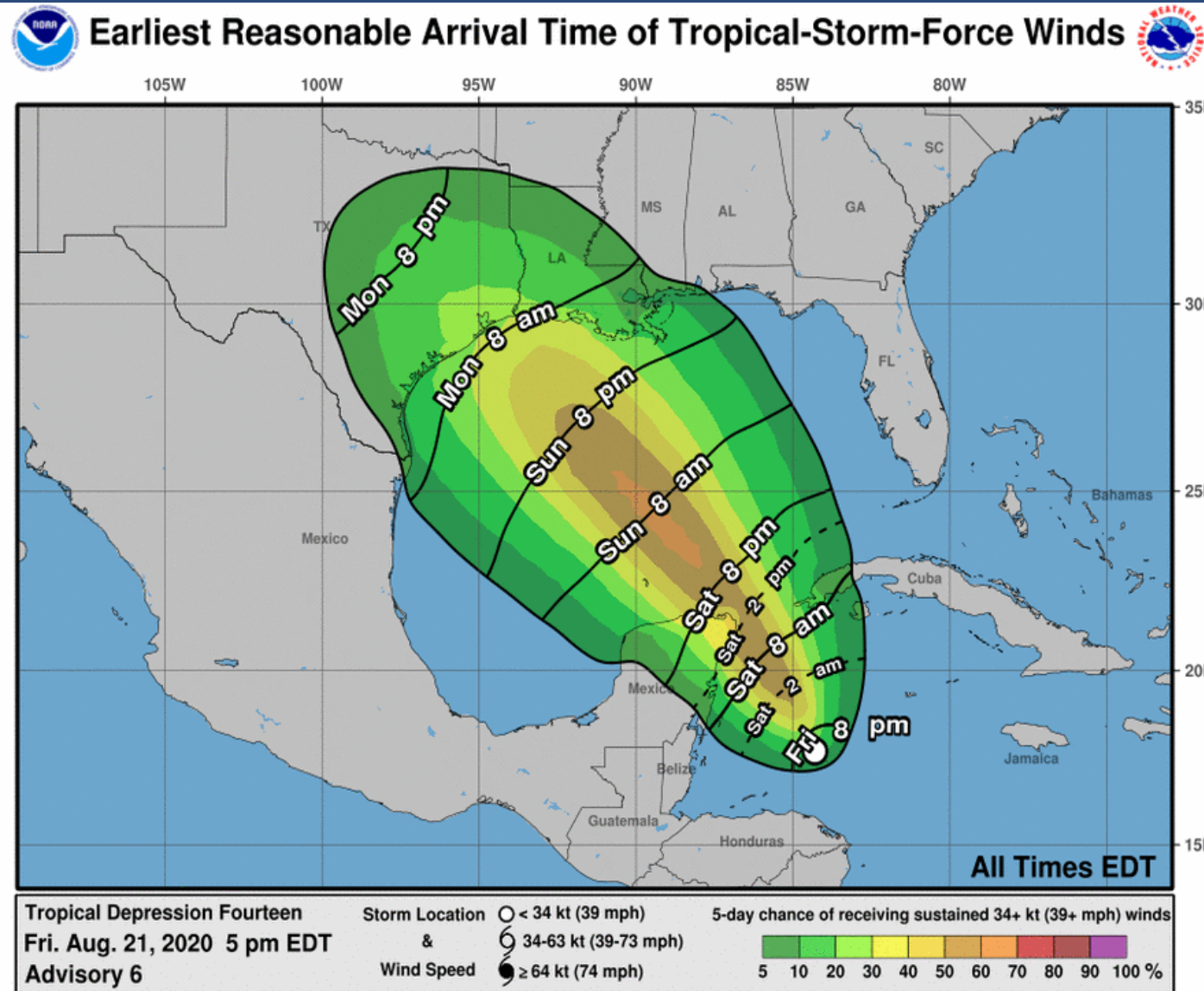
- The center of TD 14 is located about 255 miles southeast of Cozumel, Mexico
- Maximum sustained winds are at 35 mph, and strengthening is forecast as the systems moves towards the western Gulf over the next 3 days.
- TD 14 is moving to the northwest at 13 mph. This general motion with a slower forward speed is expected over the next 5 days, for the entire life of the system.
- TD 14 will move into the Gulf of Mexico on Sunday. Landfall could occur along the Texas or Louisiana coast on Tuesday.
- However, changes to track and intensity are possible in the Gulf of Mexico depending on Tropical Storm Laura and how strong the system is able to get over the next 72 hours before the environment becomes more unfavorable.





# Time of Arrival & Wind Speed Probabilities

**EARLIEST REASONABLE** 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 night.



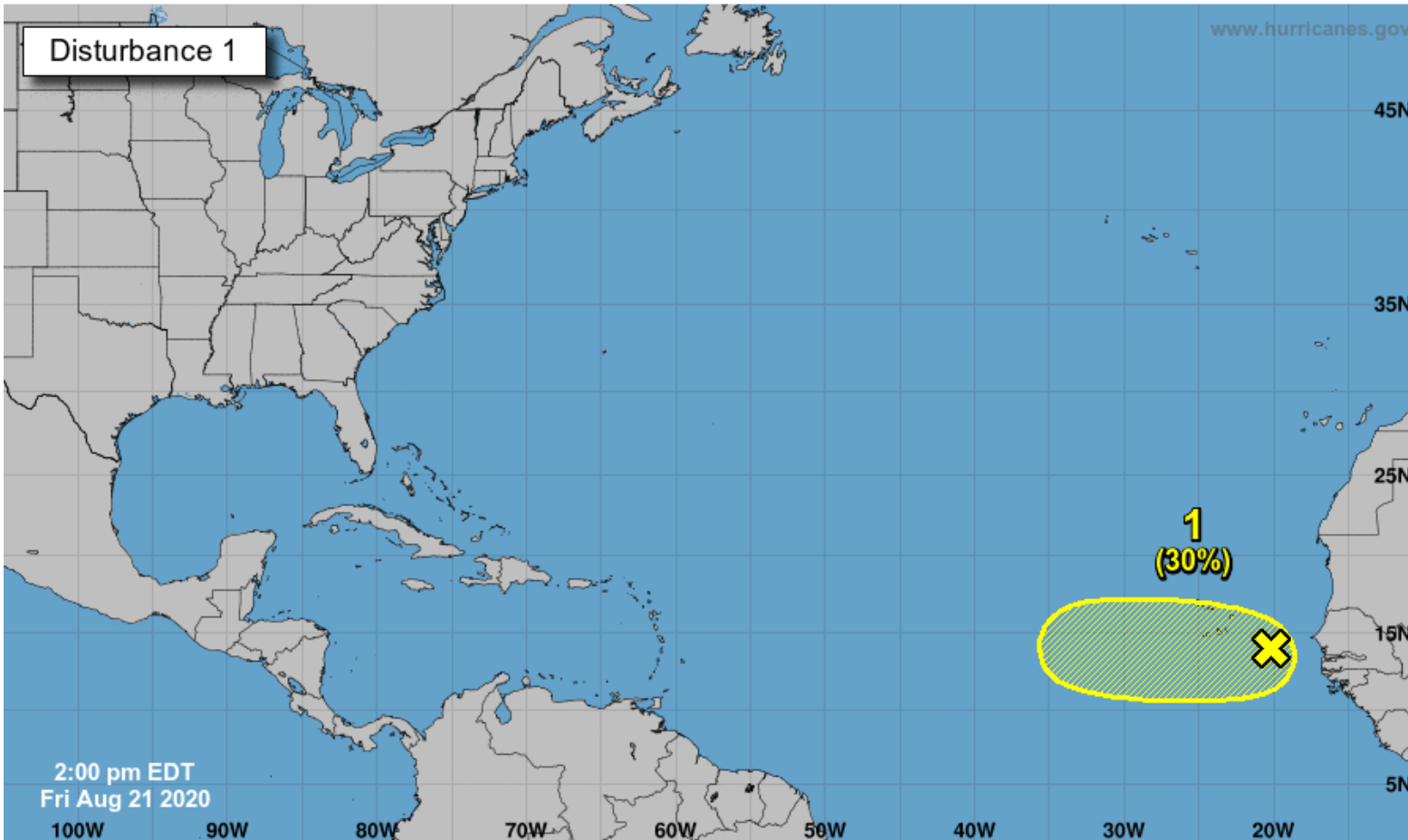
# Tropical Weather Outlook

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:   
    < 40%    40-60%    > 60%   
    Depression    Storm    Hurricane   
    Post-Tropical Cyclone or Remnants

An area of disorganized cloudiness and showers located between the west coast of Africa and the Cabo Verde Islands is associated with a broad area of low pressure and tropical wave.

This disturbance is expected to move westward at 15 to 20 mph across the Cabo Verde Islands during the next 24 hours. Conditions are forecast to be only marginally conducive for some development over the next couple of days.

After that time, environmental conditions are expected to become less favorable for development.

**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...low...30%**





# Overall Summary

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

- Tropical Storm Laura is located near Antigua, or about 1,400 miles southeast of Key West, FL, moving W at 17 mph.
- Maximum sustained winds are near 45 mph. Only gradual strengthening is forecast over the next few days due to land interaction.
- The center of Laura will likely pass over or south of the Florida Keys on Monday, then near the Panhandle on Wednesday.
- The forecast track and intensity are more uncertain in the Gulf of Mexico due to possible interaction with Tropical Depression #14, but a hurricane is currently forecast in the Gulf of Mexico.

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

- The center of TD 14 is located about 255 miles of Cozumel, Mexico, moving northwest at 13 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 near 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 and intensity changes.

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

- A tropical wave moving off the coast of Africa may gradually develop this weekend, but the chances for development have decreased.
- The National Hurricane Center gives the system a 20% (low) chance of development over the next 48 hours and a 30% (low) chance of development over the next 5 days.



# Florida Summary

## Florida Outlook:

- Tropical Storm Laura poses a direct threat to Florida next week.
- Tropical storm force winds are likely to begin by Monday morning in far South Florida and the Florida Keys, but may begin as early as Sunday night.
- Tropical storm force winds may begin on Tuesday in the Panhandle, but could begin as early as Tuesday morning.
- Heavy rainfall expected across the state, even before Laura nears the state. A widespread 2-5" of rainfall is expected over the next 7 days statewide, especially in the Panhandle and along the Gulf Coast, 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, as the track continues to shift and Laura may move over Hispaniola and Cuba. In addition there may be possible interactions between TS Laura & TD 14.
- 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 early Monday morning after the 5 AM 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)

Michael Spagnolo, Deputy State Meteorologist

[Michael.Spagnolo@em.myflorida.com](mailto:Michael.Spagnolo@em.myflorida.com)

State Meteorological Support Unit

Florida Division of Emergency Management

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