



# TROPICAL UPDATE



8:00 AM EDT

Monday, October 5, 2020

Tropical Storm Gamma  
& Tropical Storm Delta

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).





# Atlantic Basin Satellite Image

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







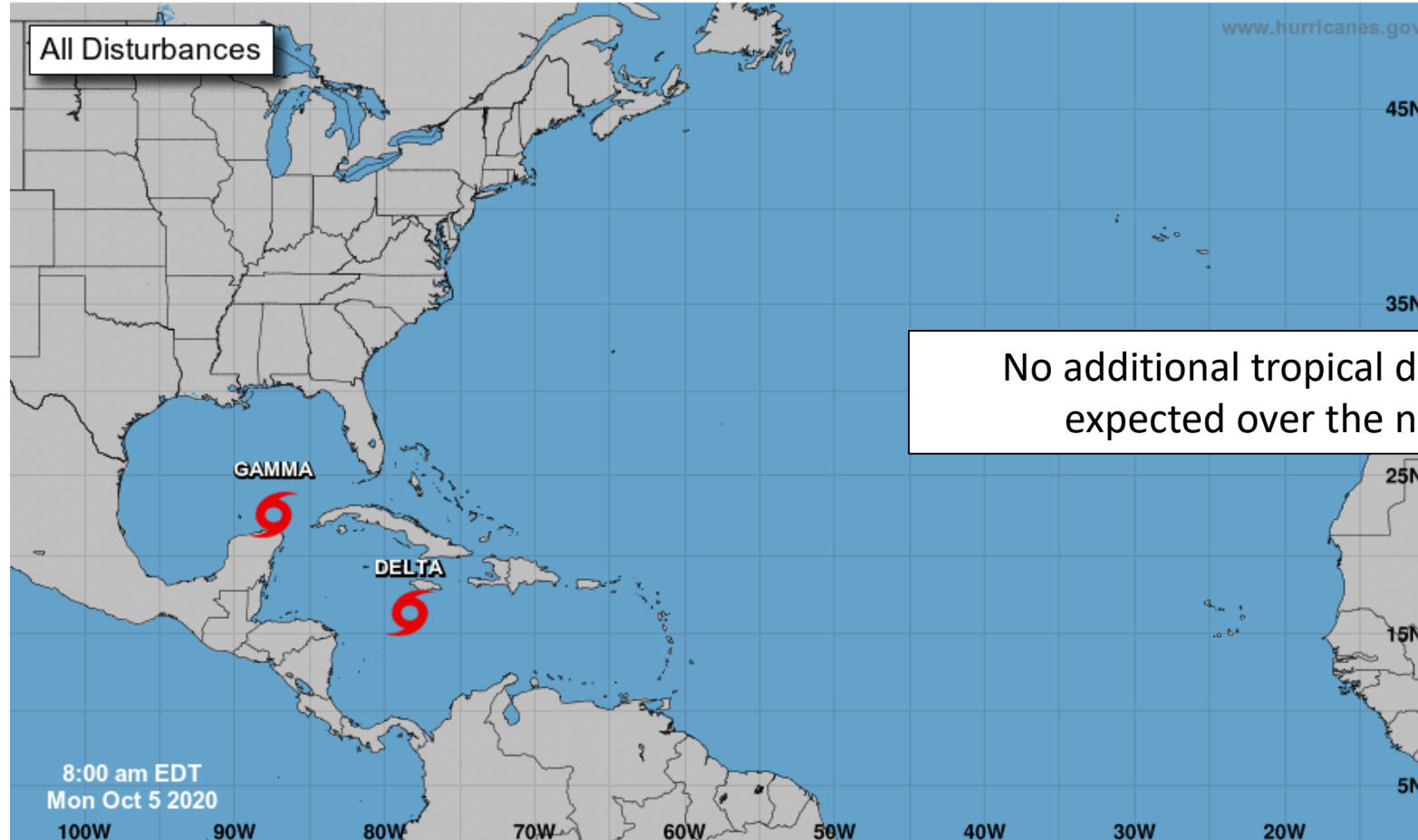
# Tropical Weather Outlook

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





# Steering Currents

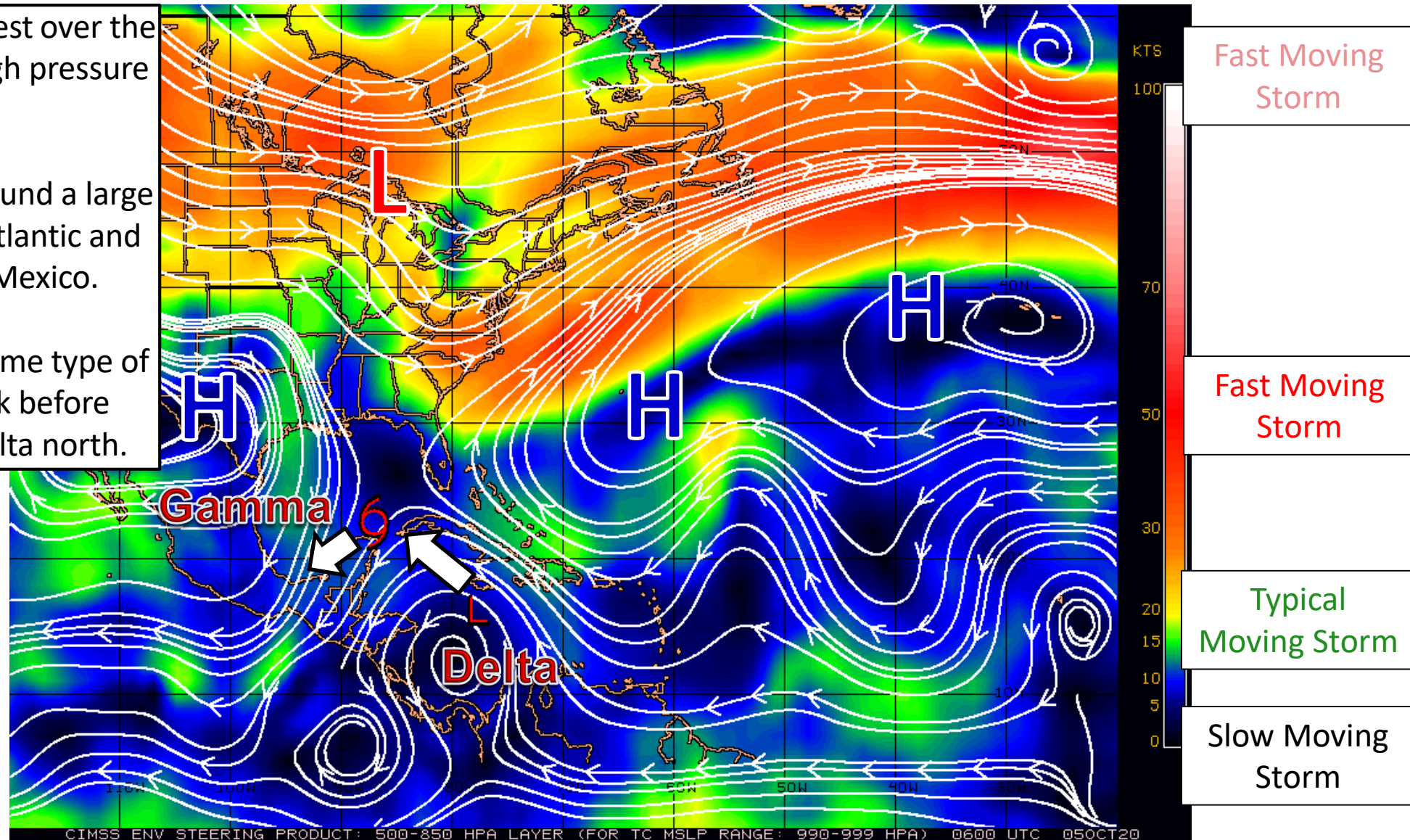
## What is Moving the Systems?

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

Gamma will drift west-southwest over the southern Gulf of Mexico as high pressure builds over Texas.

Delta is tracking northwest around a large area of high pressure in the Atlantic and will move into the Gulf of Mexico.

Gamma and Delta will have some type of interaction later in the week before another cold front moves Delta north.







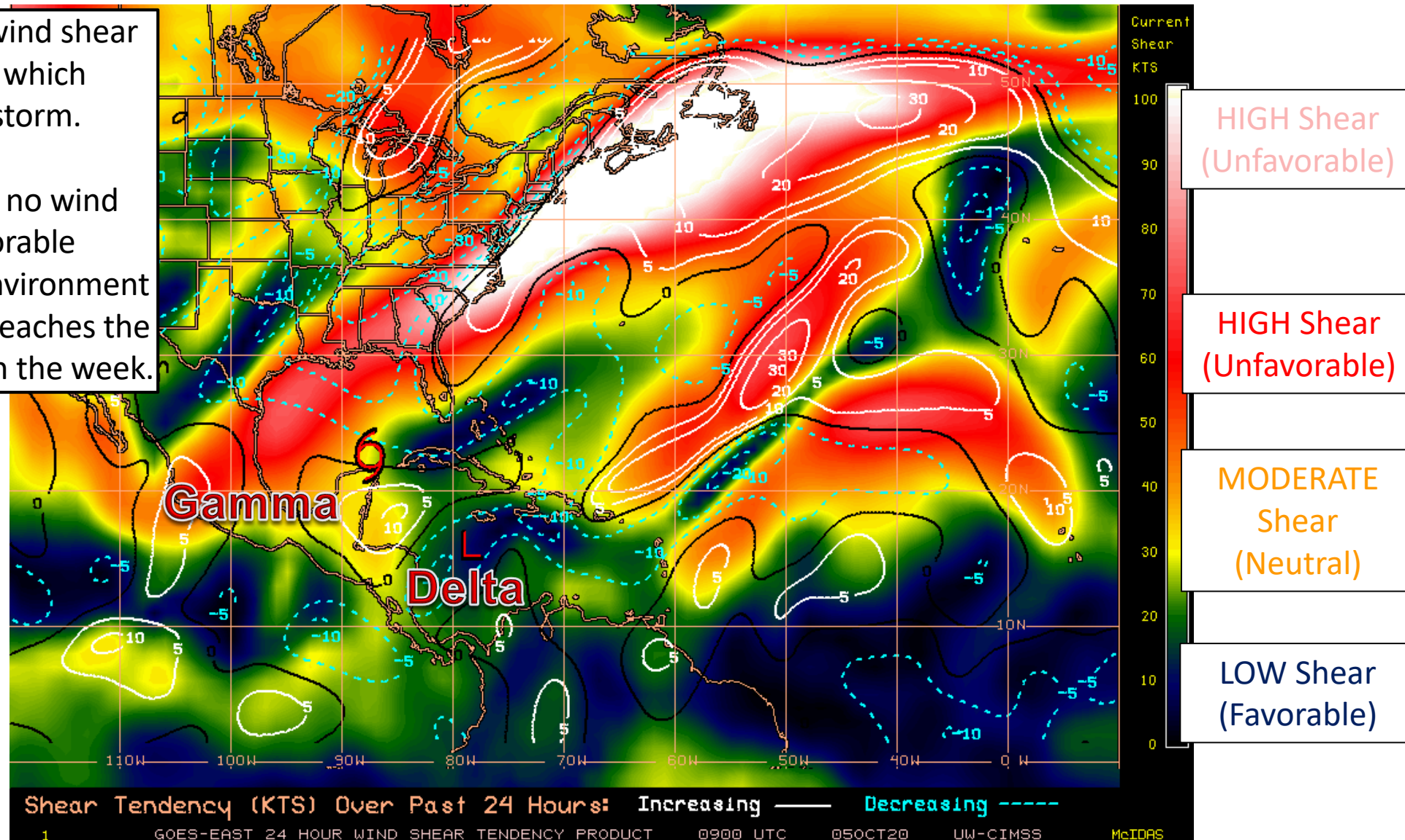
# Wind Shear

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).

Gamma is experiencing high wind shear across the Gulf of Mexico, which continues to weaken the storm.

Delta is experiencing little to no wind shear and is in a very favorable environment. This favorable environment will continue until the system reaches the northern Gulf of Mexico later in the week.



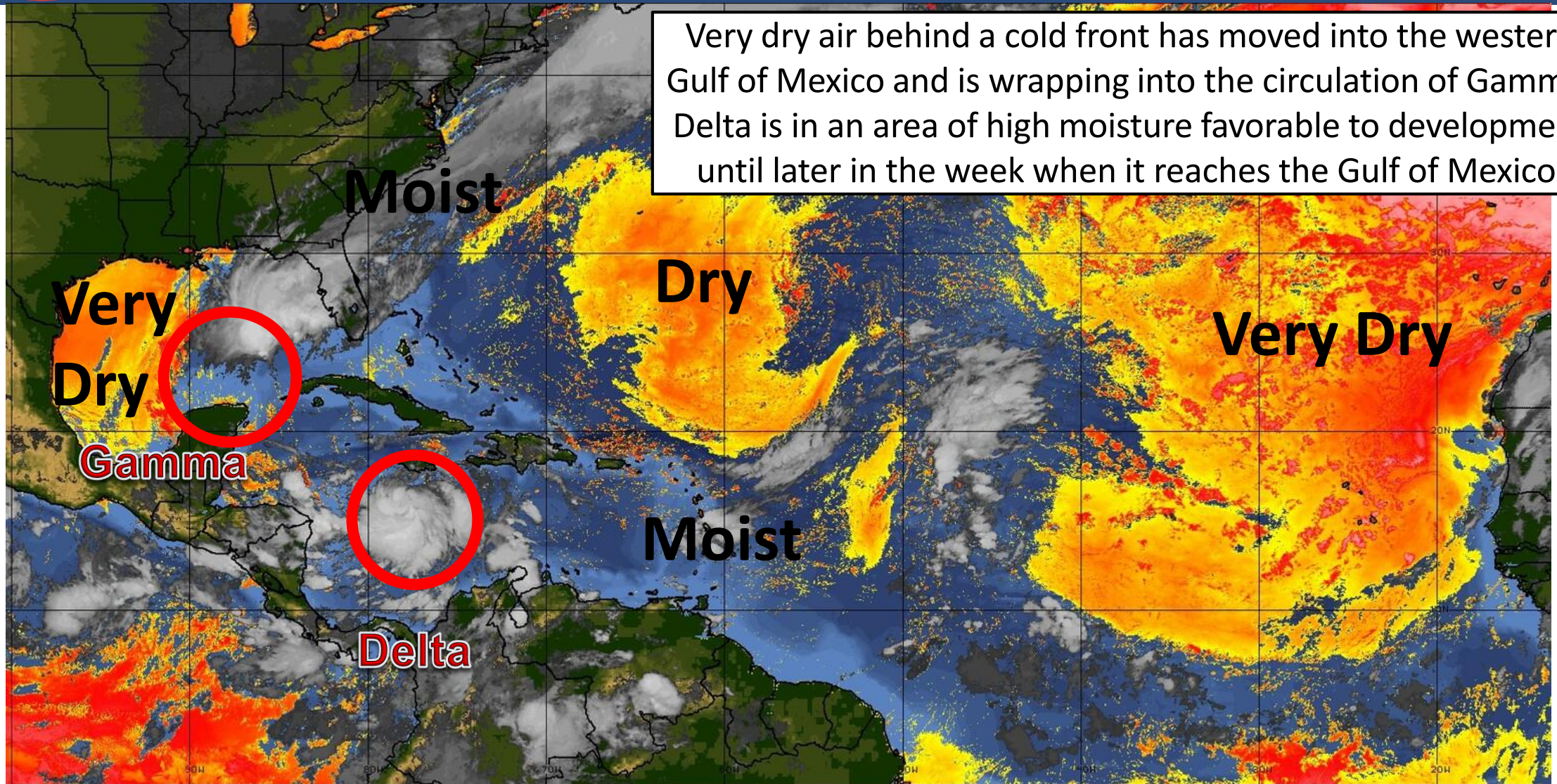




# Dry Air & Saharan Dust

Is the environment favorable for the systems?

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



Very dry air behind a cold front has moved into the western Gulf of Mexico and is wrapping into the circulation of Gamma. Delta is in an area of high moisture favorable to development until later in the week when it reaches the Gulf of Mexico.

LESS <---- DRY AIR (LOW/MID-LEVEL) AND/OR DUSTY SAL AIRMASS ----> MORE



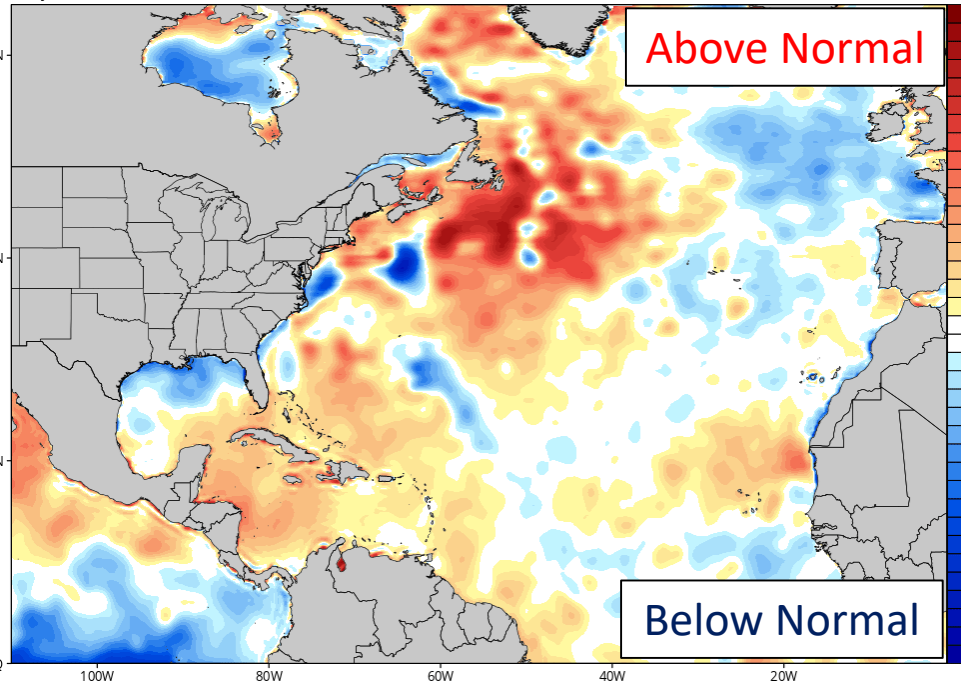


# Sea Surface Temperatures & Anomalies

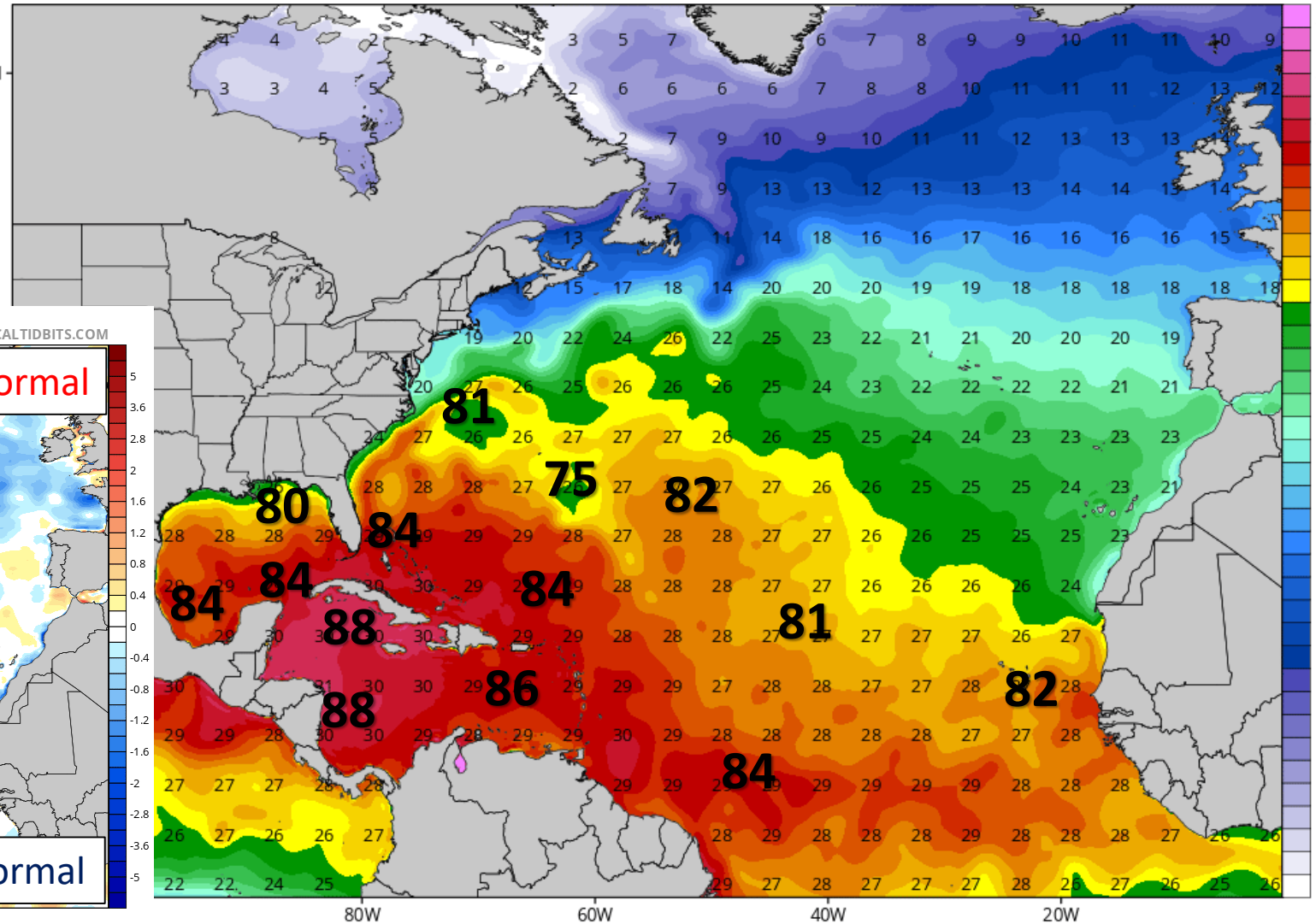
Is the ocean favorable for the system?

Water temperatures are supportive for tropical development across the entire Caribbean, with very warm, deep water. The recent stretch of storms and cold fronts has cooled waters in the northern Gulf of Mexico, but they remain warm enough to support a hurricane.

CDAS Sea Surface Temperature Anomaly (°C) (based on CFSR 1981-2010 Climatology)  
Analysis Time: 00z Oct 05 2020



CDAS Sea Surface Temperature (°C)  
Analysis Time: 00z Oct 05 2020



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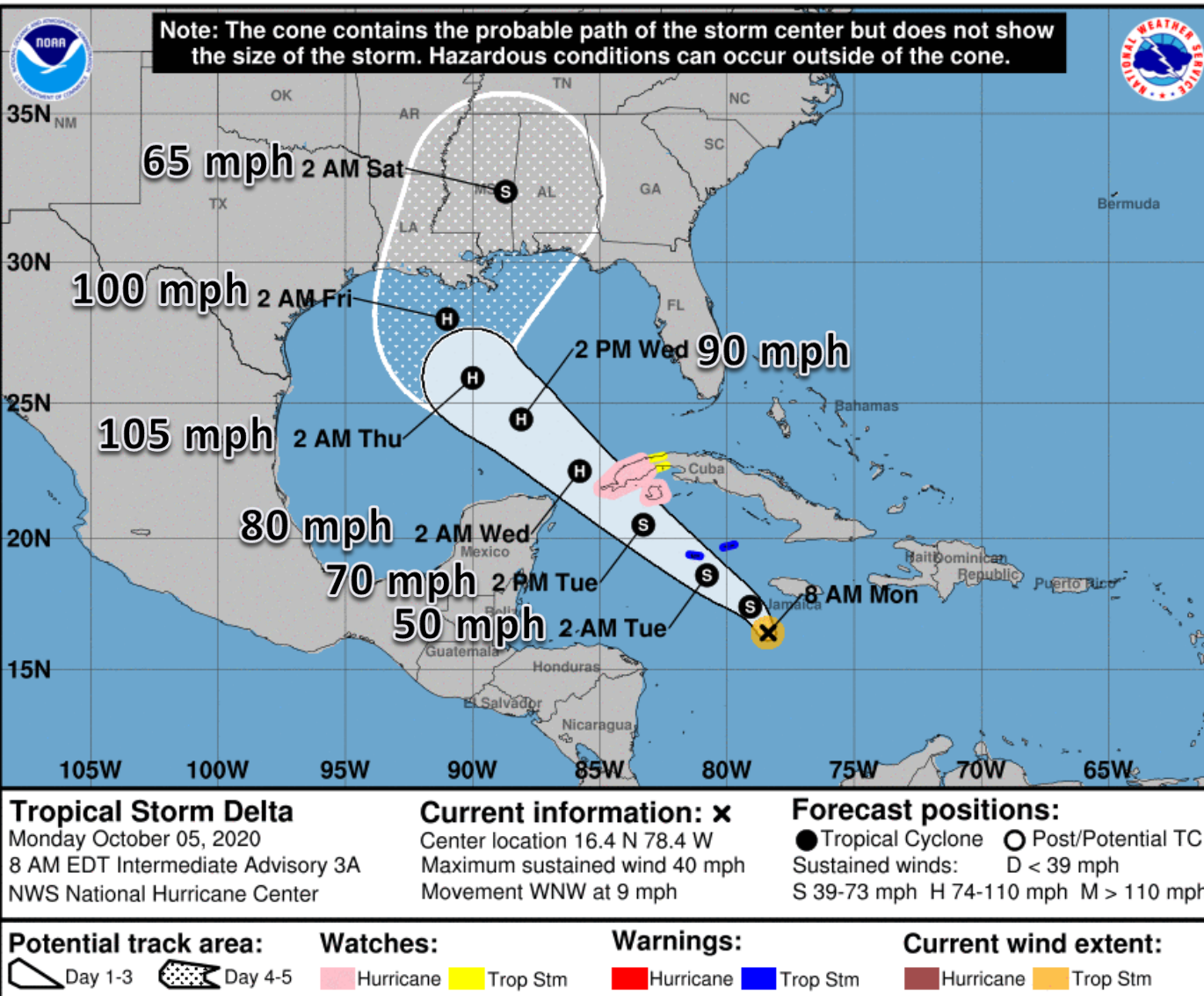
°F  
90  
88  
86  
84  
82  
81  
79  
75  
72





# Official Forecast Track

## From the National Hurricane Center – Tropical Storm Delta



- The disturbance near Jamaica continued to organize overnight. As of 8 AM ET, the system is now Tropical Storm Delta.
- The center of Delta is located about 100 miles south of Jamaica, and moving to the west-northwest at 9 mph.
- Delta will continue to strengthen (possibly rapidly at times) and is forecast to be a Category 2 Hurricane as it moves across the Gulf of Mexico.
- Later this week, the system will approach the northern Gulf Coast after it has a complicated interaction with Tropical Storm Gamma.



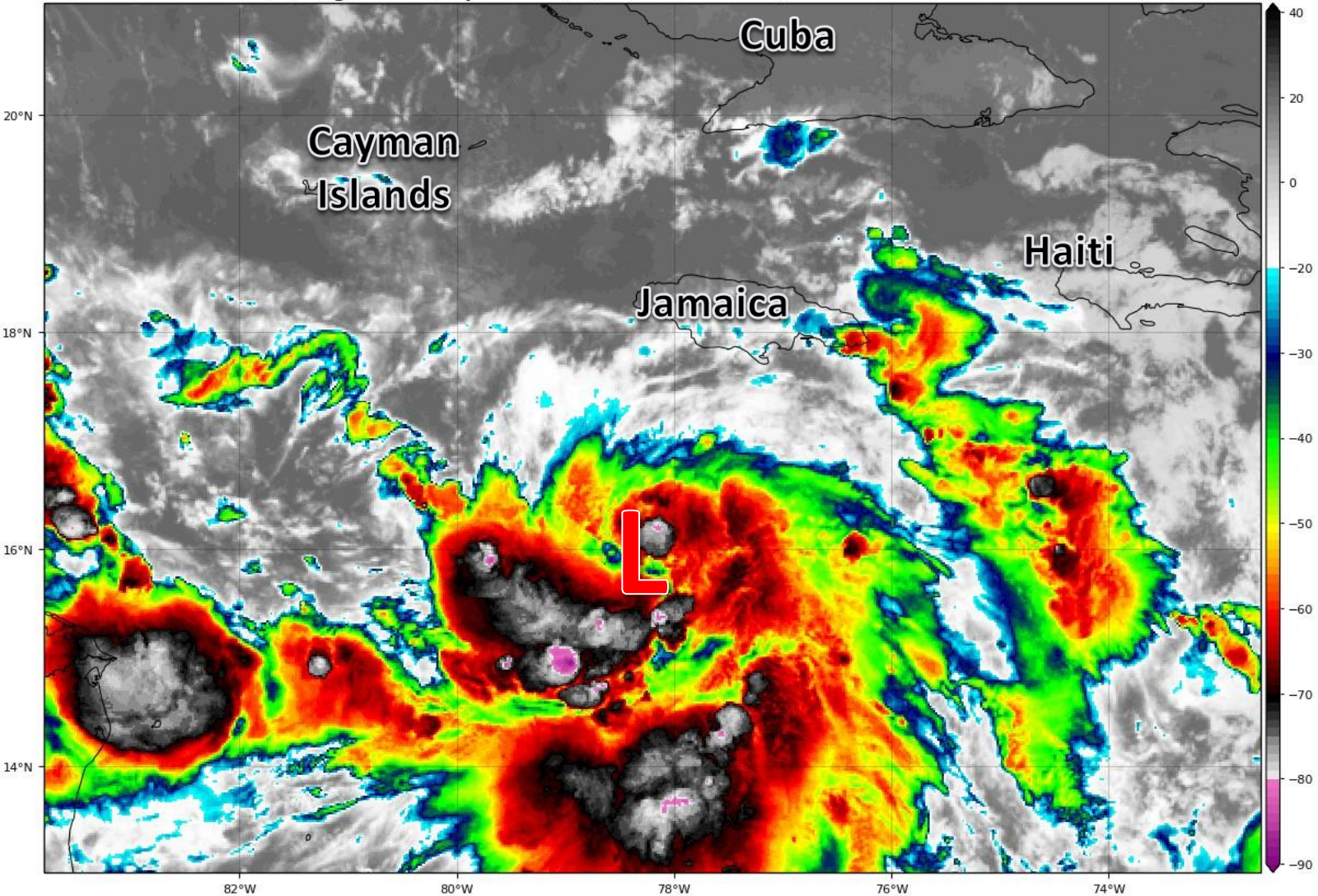


# Satellite Imagery

## Tropical Storm Delta – Central Caribbean

GOES-16 Channel 13 (IR) Brightness Temperature (°C) at 11:05Z Oct 05, 2020

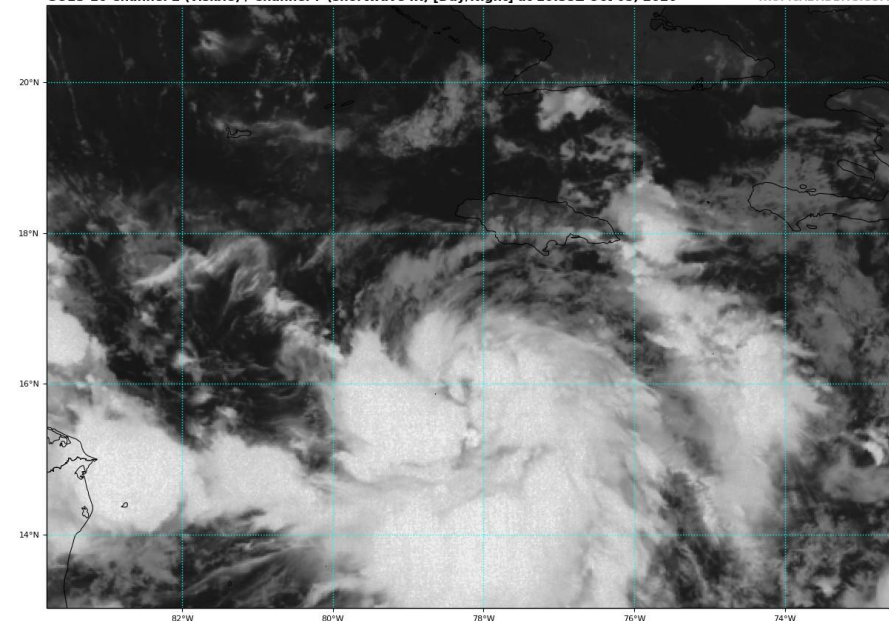
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The system continues to organize and is attempting to wrap thunderstorms around the center. It is recovering after some northerly wind shear yesterday, and is likely to strengthen significantly over the next 24 hours.

GOES-16 Channel 2 (visible) / Channel 7 (shortwave IR) [Day/Night] at 10:35Z Oct 05, 2020

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# Key Messages

## From the National Hurricane Center – Tropical Storm Delta



### Key Messages for Tropical Depression Twenty-Six

Advisory 3: 5:00 AM EDT Mon Oct 05, 2020



1. Tropical storm conditions are expected in the Cayman Islands beginning late today, and a Tropical Storm Warning is in effect.
2. Dangerous storm surge and hurricane conditions are possible in portions of western Cuba and the Isle of Youth by Tuesday afternoon, and a Hurricane Watch is in effect.
3. Heavy rainfall will affect portions of Jamaica, the Cayman Islands, and western Cuba during the next few days. This rainfall could lead to significant flash flooding and mudslides.
4. The system is forecast to approach the northern Gulf Coast late this week as a hurricane. While there is large uncertainty in the track and intensity forecasts at these time ranges, there is a risk of dangerous storm surge, wind, and rainfall hazards along the coast from Louisiana to the western Florida Panhandle. Residents in these areas should monitor the progress of the system and check for updates to the forecast during the week.



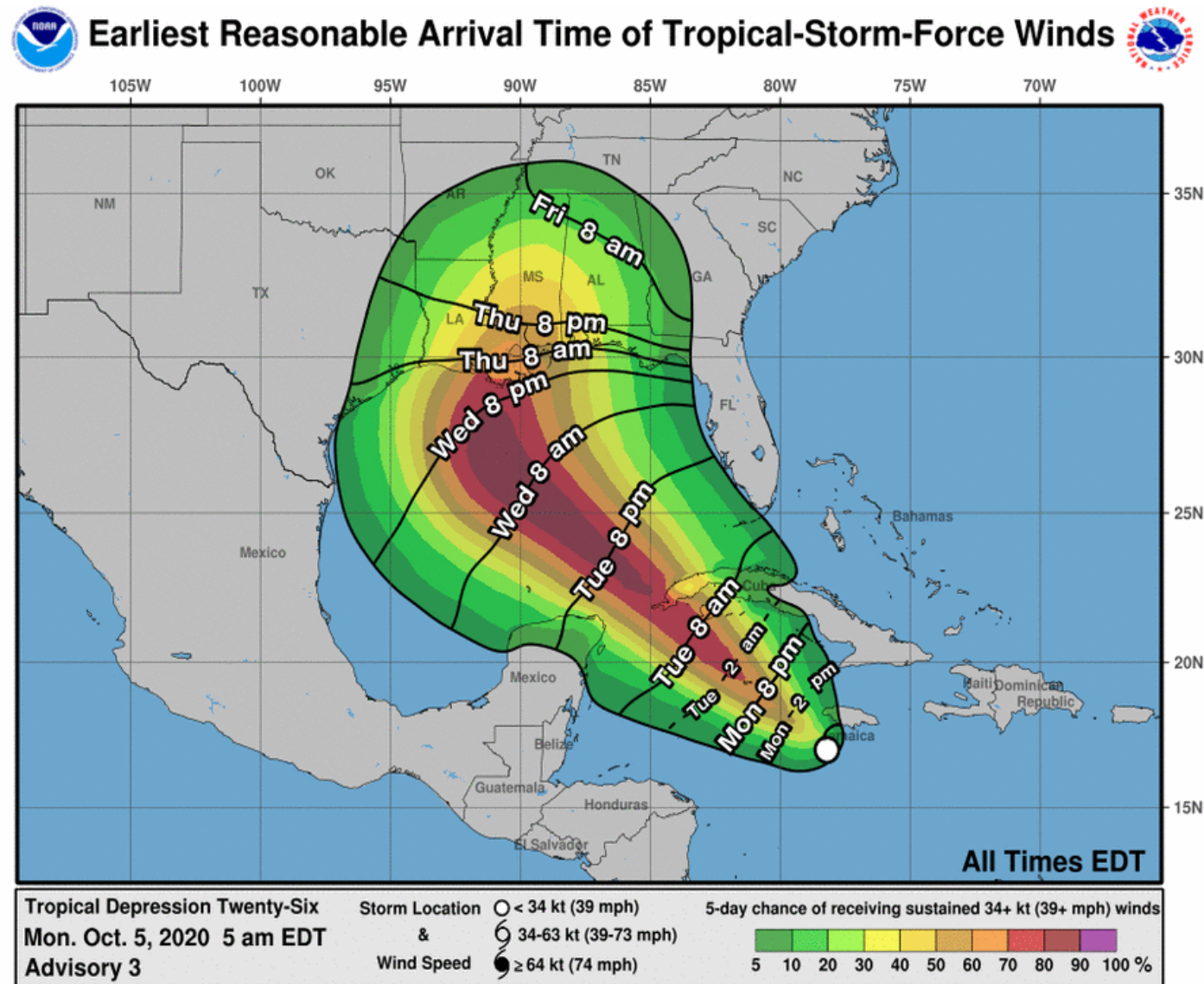
For more information go to [hurricanes.gov](https://hurricanes.gov)





# Time of Arrival & Wind Speed Probabilities

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



**Marathon: 8% (-5)**  
**Key West: 14% (-5)**  
**Naples: 6% (-6)**  
**Tampa: 4% (-3)**  
**Tallahassee: 12% (+8)**  
**Apalachicola: 19% (+6)**  
**Panama City: 25% (+9)**  
**Destin: 28% (+12)**  
**Pensacola: 34% (+20)**  
**Pensacola NAS: 41% (+17)**

The most likely chance of tropical storm force winds in the Florida Keys will be Tuesday afternoon through Wednesday morning.

In the Panhandle, winds are most likely to start Thursday night or Friday morning, but could start as early as Thursday morning along the coast.





# Hurricane Wind Speed Probabilities

Probabilities of Sustained Hurricane Force Winds (>74 mph)



**Apalachicola 1% (+1)**

**Panama City: 2% (+2)**

**Destin: 2% (+2)**

**Pensacola: 3% (+3)**

**Pensacola NAS: 5% (+3)**

The current odds of hurricane force winds in Florida are very low (near or less than 5%).

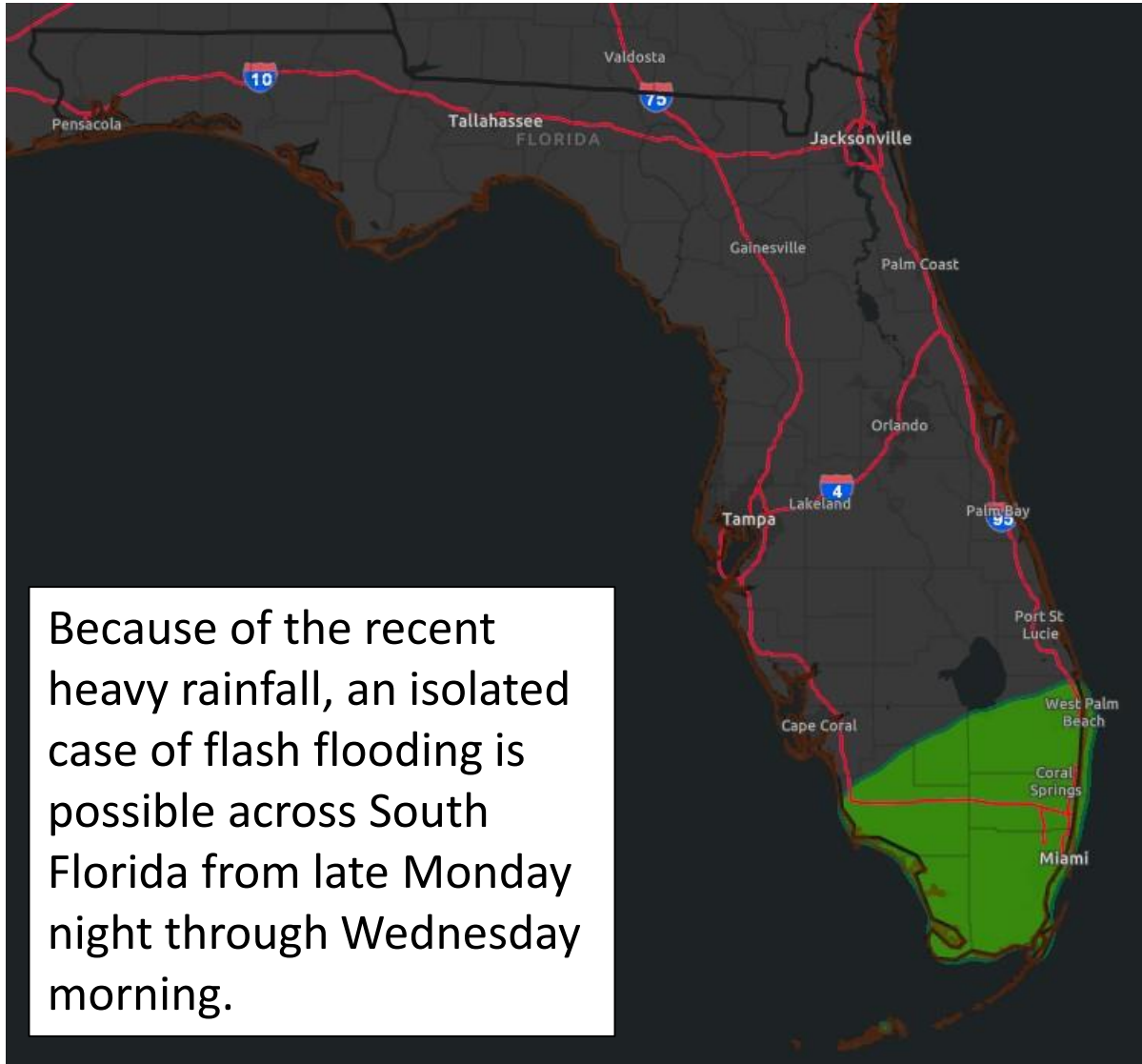
However, it is early in the forecast and the trends in these numbers should be monitored.





# Flash Flood Outlook for Tuesday

From the Weather Prediction Center ([LINK](#))



Because of the recent heavy rainfall, an isolated case of flash flooding is possible across South Florida from late Monday night through Wednesday morning.

- The heavy rain threat returns to South Florida and the Keys on Tuesday as moisture associated with Delta moves into the region.

## Understanding WPC Excessive Rainfall Risk Categories

No Area/Label	MARGINAL (MRGL)	SLIGHT (SLGT)	MODERATE (MDT)	HIGH (HIGH)
Flash floods are generally not expected. <a href="http://www.wpc.ncep.noaa.gov">@NWSWPC</a>	Isolated flash floods possible  Localized and primarily affecting places that can experience rapid runoff with heavy rainfall.	Scattered flash floods possible  Mainly localized. Most vulnerable are urban areas, roads, small streams and washes. Isolated significant flash floods possible.	Numerous flash floods likely  Numerous flash flooding events with significant events possible. Many streams may flood, potentially affecting larger rivers.	Widespread flash floods expected  Severe, widespread flash flooding. Areas that don't normally experience flash flooding, could. Lives and property in greater danger.
Flash flooding near me?	Flash Flooding	Flash Flooding	Flash Flooding	Flash Flooding
Flash flooding near me?	Flash Flooding	Flash Flooding	Flash Flooding	Flash Flooding
Flash flooding near me?	Flash Flooding	Flash Flooding	Flash Flooding	Flash Flooding
Flash flooding near me?	Flash Flooding	Flash Flooding	Flash Flooding	Flash Flooding

Risk of rainfall exceeding flash flood guidance within 25 miles of a point to the right of a line

**HIGH: > 50%**

**SLGT: 10%-20%**

**MDT: 20%-50%**

**MRGL: 5%-10%**





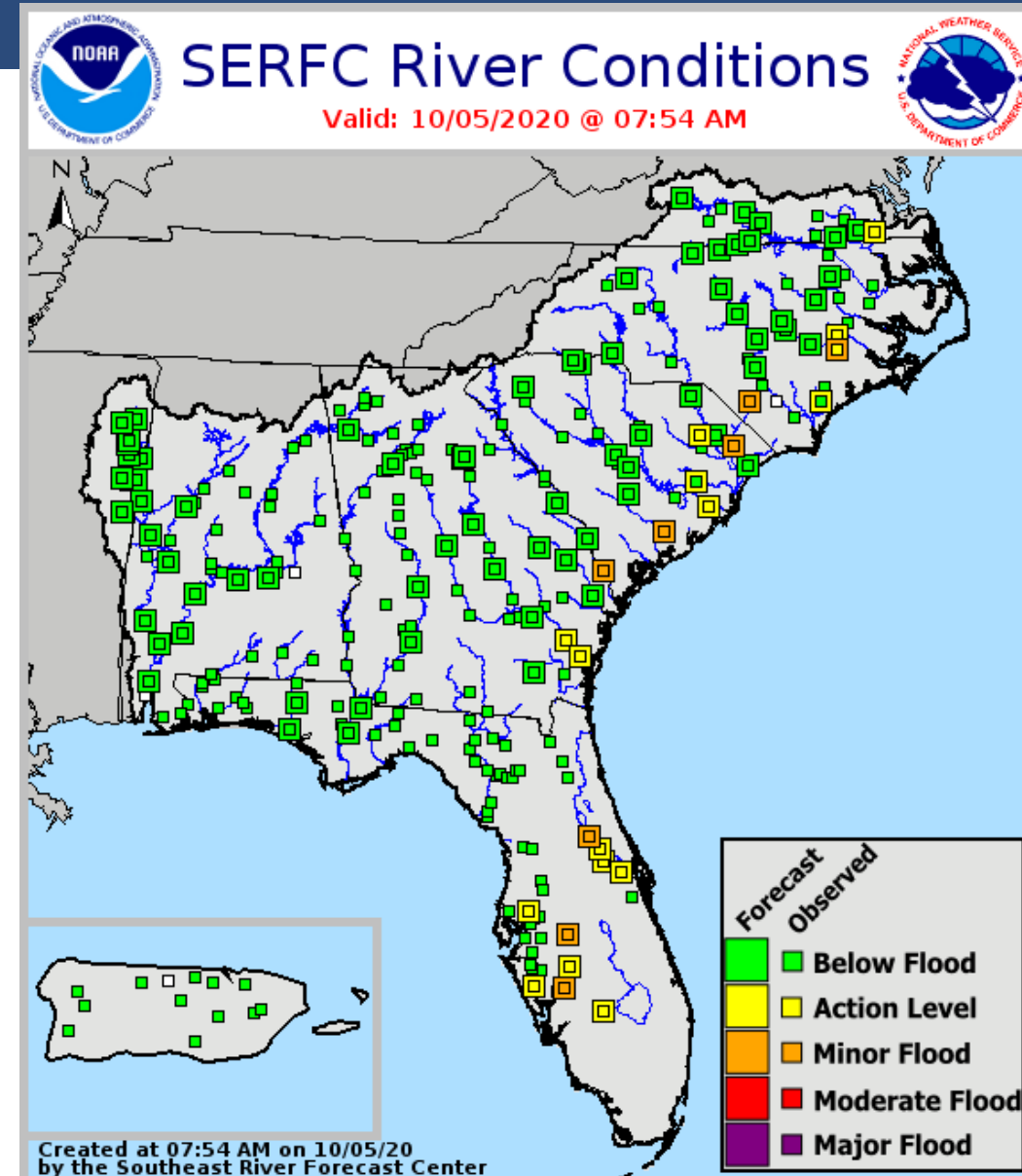
# Current & Forecast River Flooding

## Southeast River Forecast Center

### Rivers Currently in or Forecast to Reach Flood Stage:

- [St. Johns River at Astor](#) – Minor
- [Peace River at Bartow](#)- Minor
- [Peace River at Arcadia](#)- Minor
- Minor coastal flooding at high tide in Northeast Florida
- Additional river flooding is not forecast in the Peninsula from forecast rainfall totals

More details on river levels available at the [Southeast River Forecast Center website](#).







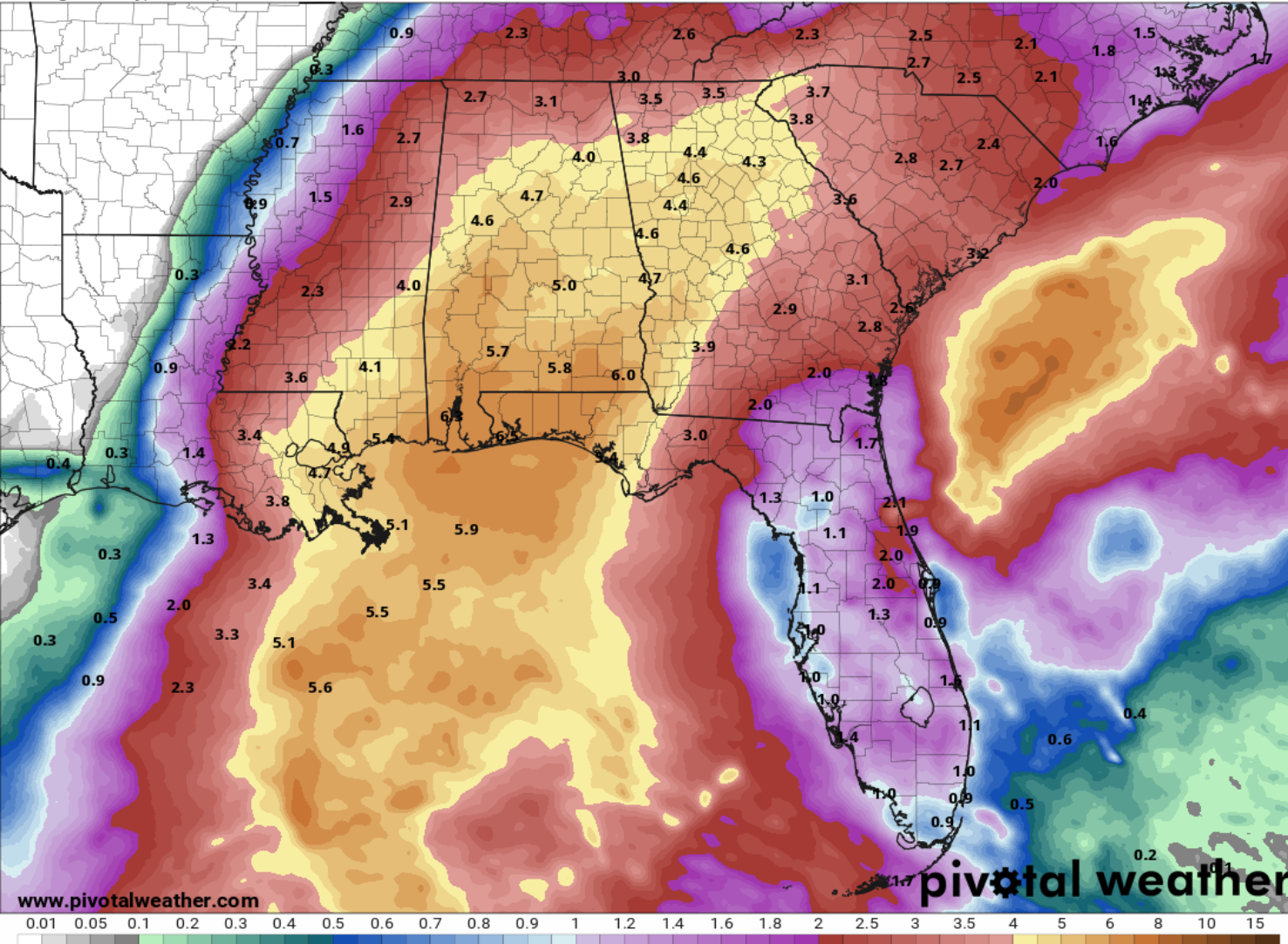
# Rainfall Totals Next 7 Days

**\*Will Change Based on Track Shifts – FIRST GUESS for Planning Purposes – Heaviest Rain East of Landfall\***

7-Day Precipitation (in)

Ending Monday, Oct. 12, 2020 at 8 a.m. EDT

Init: Mon 2020-10-05 12z WPC



- Little to no rainfall across the Panhandle and western Big Bend through mid-week
- Locally heavy rainfall in the Peninsula each afternoon
- An additional round of heavy rainfall is possible in South Florida and the Keys Tuesday/Wednesday related to Delta (1-3").
- A heavy rainfall event is possible Thursday-Saturday in the Florida Panhandle as Delta makes landfall (4-6"+).

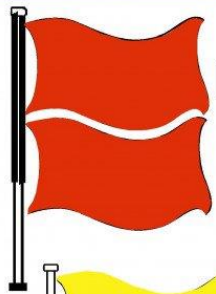




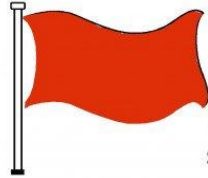
# Rip Current Outlook

Today

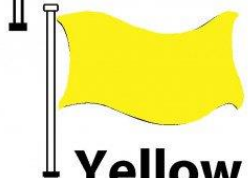
## BEACH FLAG WARNING SYSTEM



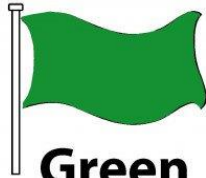
**Double Red**  
Water Closed to  
Public Use



**Red**  
High Hazard  
(rough conditions,  
such as strong surf  
and or currents)



**Yellow**  
Medium Hazard  
(light surf and or  
currents)

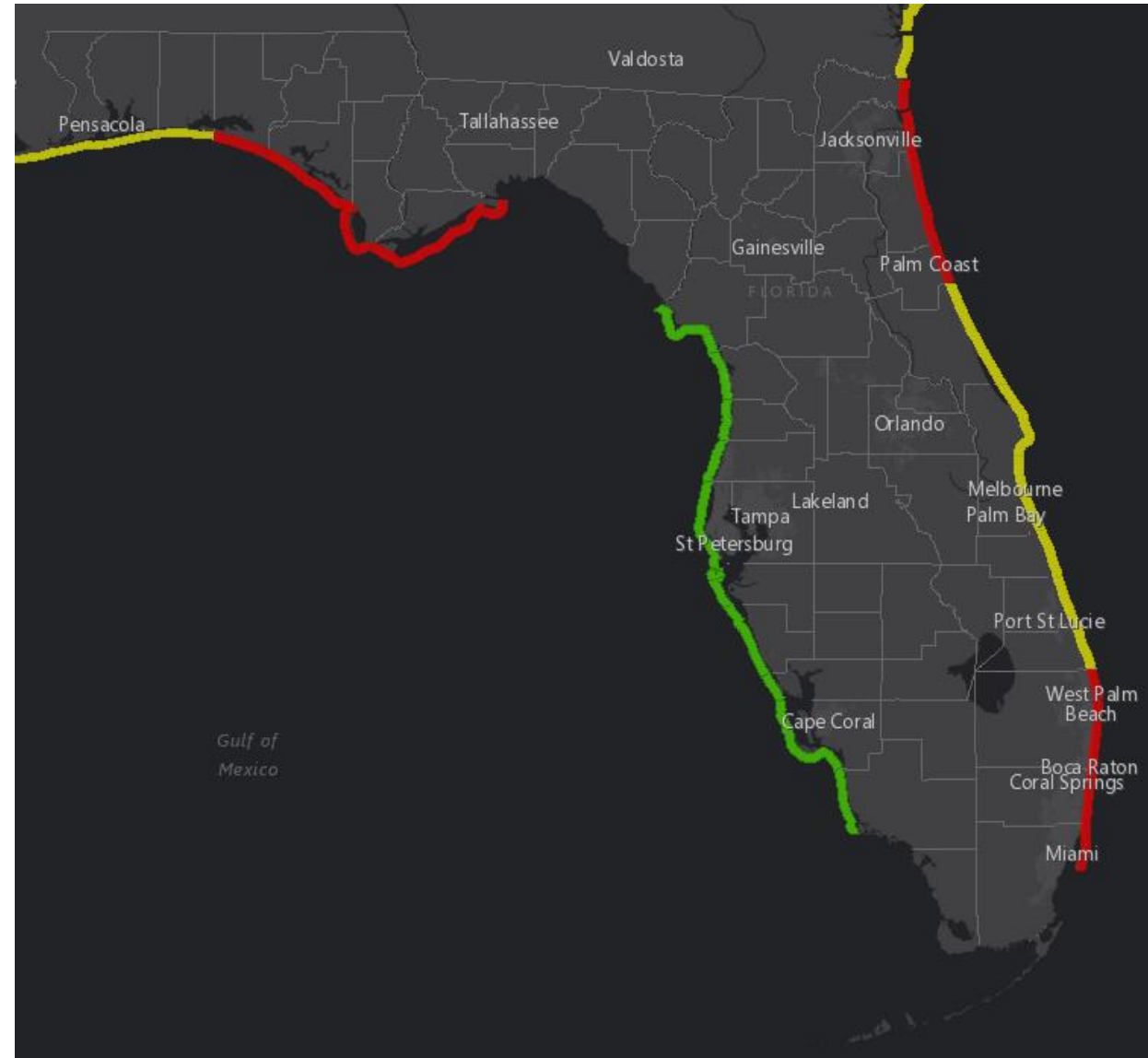


**Green**  
Low Hazard  
(calm conditions)



**Purple**  
Marine Pest  
(jellyfish, stingrays  
& dangerous fish)

Swells from Gamma along the Gulf Coast and breezy northeast winds along the East Coast will elevate the rip current risk today.

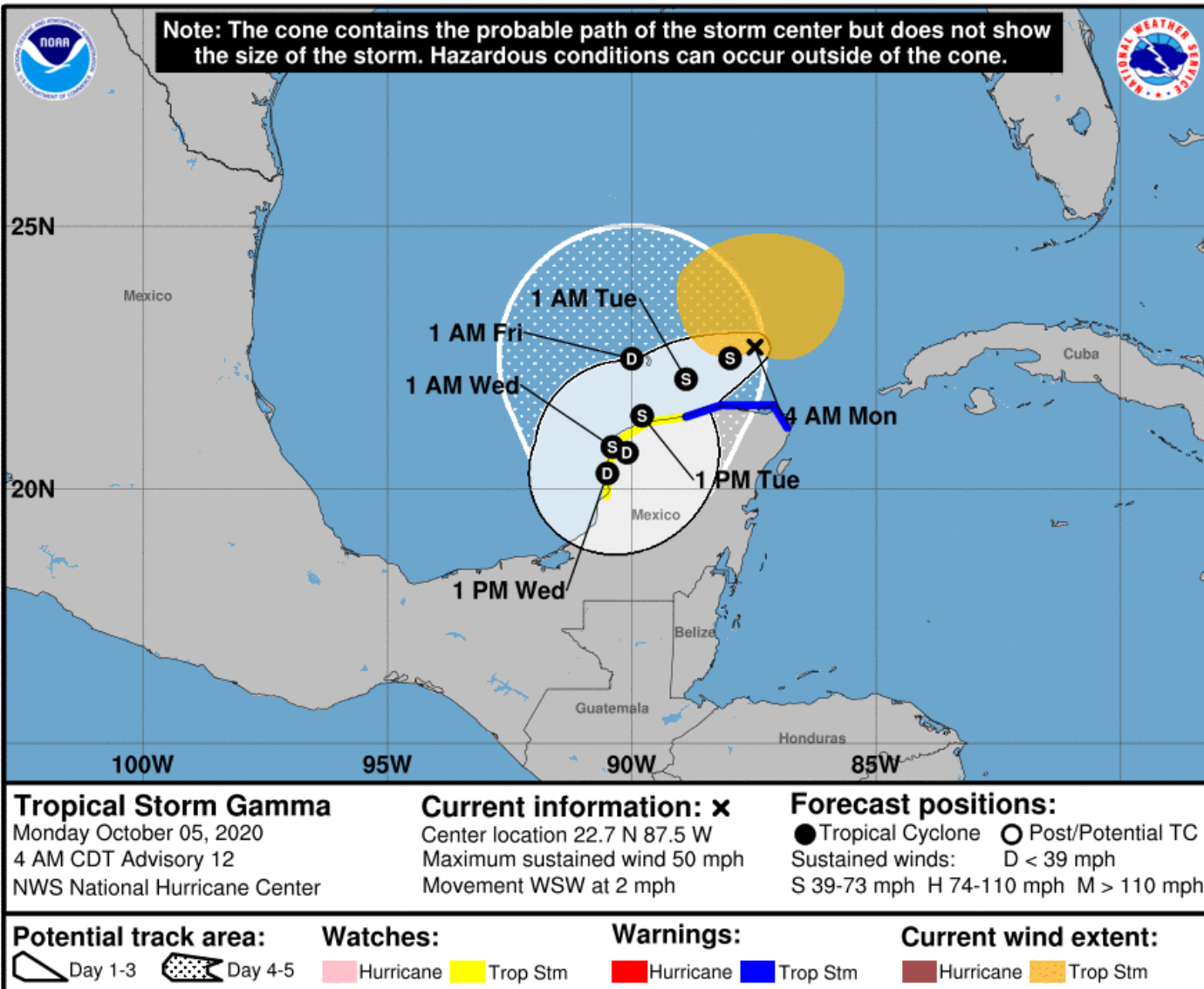






# Official Forecast Track

## From the National Hurricane Center – Tropical Storm Gamma



- The center of Tropical Storm Gamma is located about 50 miles north of the Yucatan Peninsula, or about 450 miles southwest of Key West, FL.
- Maximum sustained winds are near 45 mph, but weakening is ongoing.
- Increasing wind shear and dry air will prevent significant changes in strength over the next few days as it drifts to the southwest.
- Gamma is slowly moving to the west-southwest at 2 mph. A gradual increase in forward speed is expected over the next 24 hours.
- Gamma may be absorbed into the circulation of Delta later this week as it weakens to a depression and drifts back north.



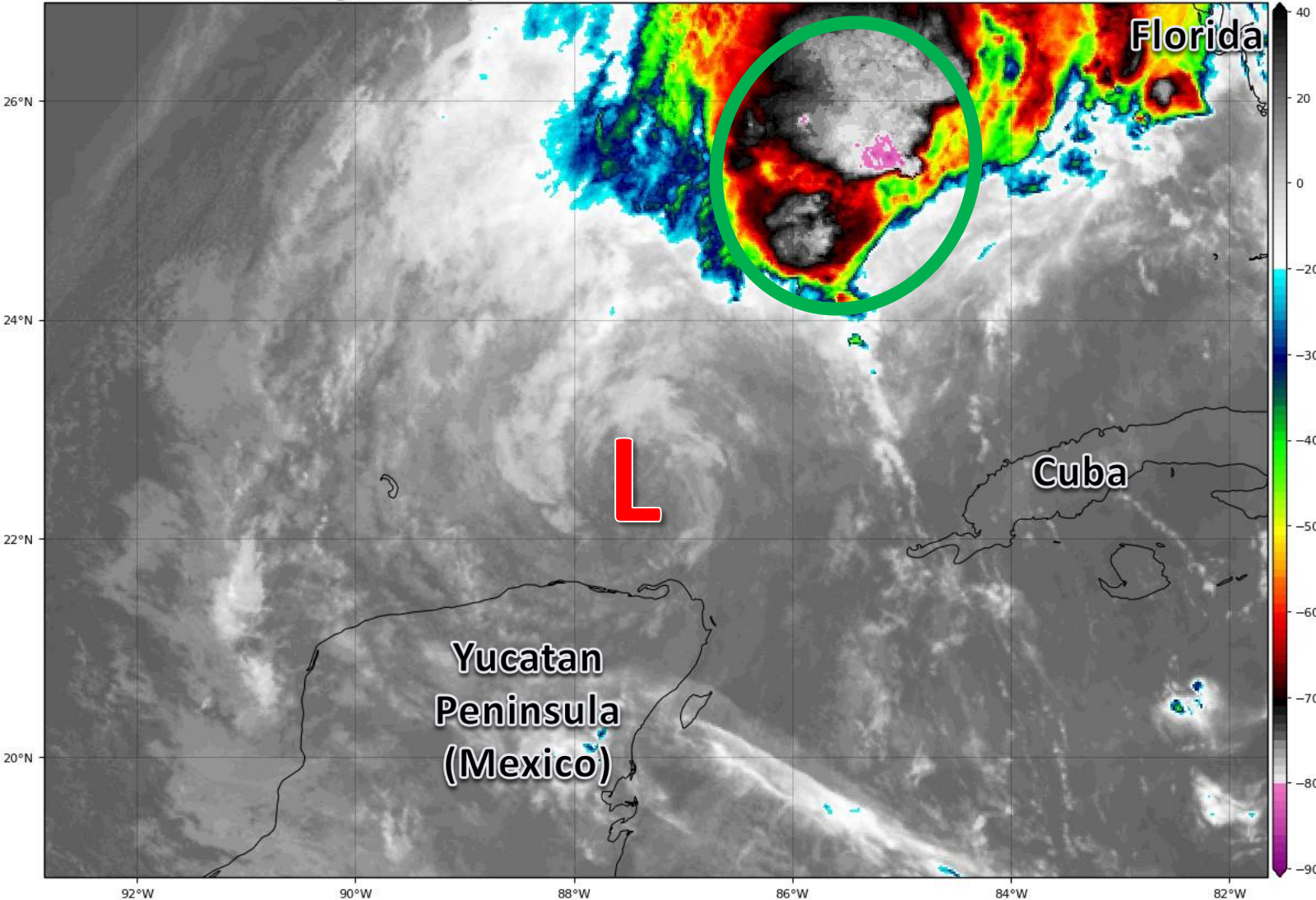


# Satellite Imagery

## Tropical Storm Gamma

GOES-16 Channel 13 (IR) Brightness Temperature (°C) at 11:42Z Oct 05, 2020

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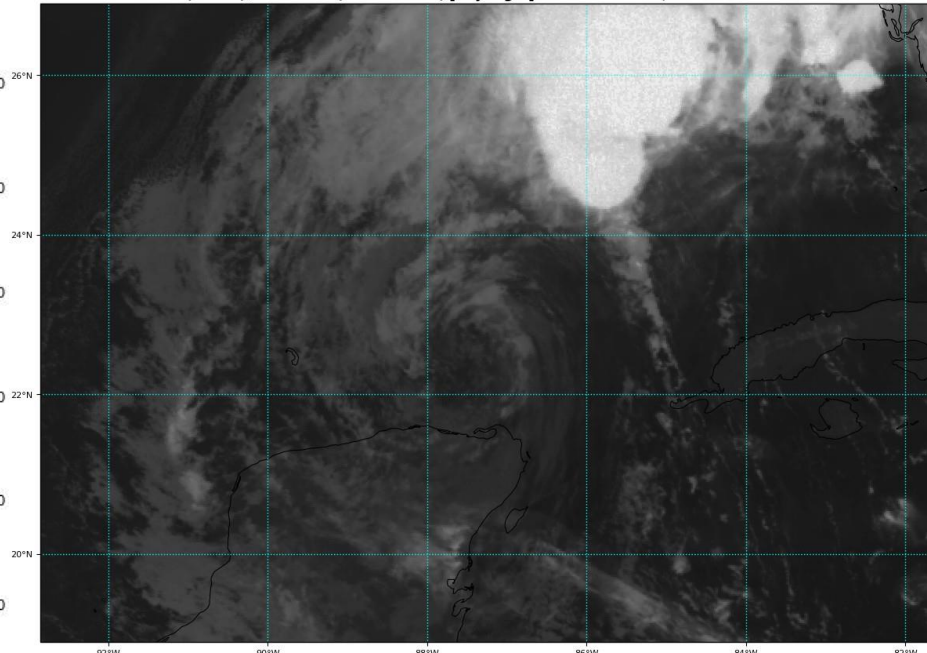


Gamma has weakened over the southern Gulf of Mexico today as dry air and wind shear continue to increase over the system.

Thunderstorms near the center have eroded with only one area of storms left well to the northeast of the center (green circle).

GOES-16 Channel 2 (visible) / Channel 7 (shortwave IR) [Day/Night] at 11:17Z Oct 05, 2020

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# Overall Summary

## **Tropical Storm Gamma**

- Gamma is slowly moving southwest, just off the northern coast of the Yucatan Peninsula.
- It continues to weaken in the face of hostile wind shear and dry air.
- Maximum sustained winds are near 45 mph, and additional weakening is expected.
- The weakened system will drift southwest into the Bay of Campeche, or back inland over the Yucatan Peninsula over the next few days.
- Later in the week, it may turn back northward as it interacts with Delta. It is possible it gets absorbed into the circulation as Gamma is forecast to be very weak by that point.

## **Tropical Storm Delta (Formerly Potential Tropical Cyclone Twenty-Six)**

- The disturbance near Jamaica continued to organize overnight. As of 8 AM ET, the system is now Tropical Storm Delta.
- The center of Delta is located about 100 miles south of Jamaica, and moving to the west-northwest at 9 mph.
- Delta will continue to strengthen (possibly rapidly at times) and is forecast to be a Category 2 Hurricane as it moves across the Gulf of Mexico.
- Later this week, the system will approach the northern Gulf Coast after it has a complicated interaction with Tropical Storm Gamma and then a cold front.

## **Central Atlantic Low**

- The disorganized area of low pressure over the central Atlantic has moved into hostile conditions and development is no longer anticipated.





# Florida Outlook

## Florida Outlook:

- **Tropical Storm Delta poses a direct threat to the Florida Panhandle and should be monitored closely.**
- The Florida Panhandle is in the 5-day forecast cone for where the center of the storm could be.
- Changes in the track forecast are possible over the next couple of days as Delta interacts with Gamma and then interacts with a cold front and turns Northeast.
- Moisture from the system could make its way into South Florida and the Keys on Tuesday. This could bring another round of heavy rainfall and flash flooding.
- Direct impacts to the Florida Panhandle are possible- including storm surge, damaging wind, and heavy rainfall. However, it is too early to determine the extent of these impacts.
  
- Tropical Storm Gamma will not have direct impacts to the state through the end of the week, if at all. It may be absorbed into Tropical Storm Delta over the Gulf of Mexico mid-week.

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





# TROPICAL UPDATE



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State Meteorological Support Unit

Florida Division of Emergency Management

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