



TROPICAL UPDATE



5:00 PM EDT

Sunday, October 4, 2020

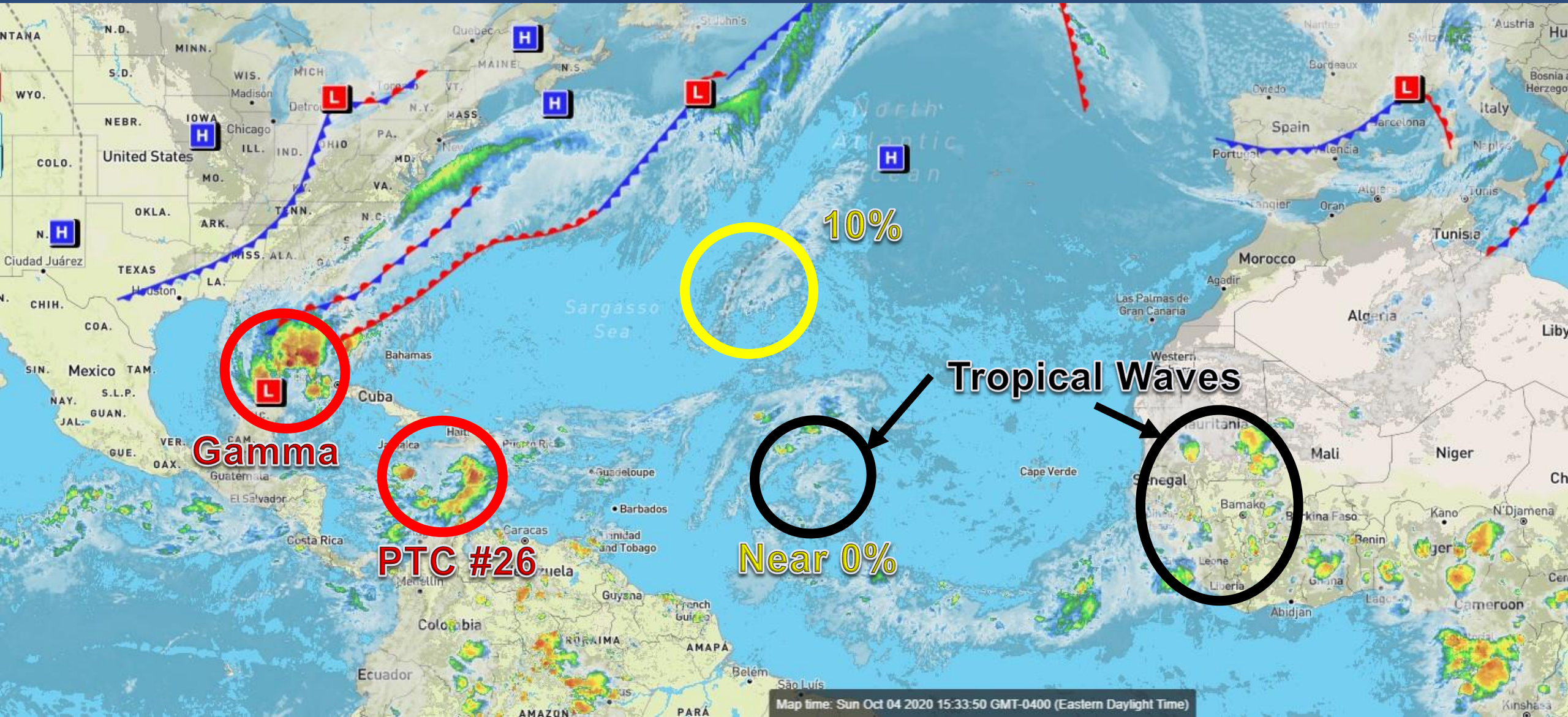
Tropical Storm Gamma, Potential Tropical Cyclone #26,
Central Tropical Atlantic Wave (near 0%), & Central
Atlantic Low (10%)

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





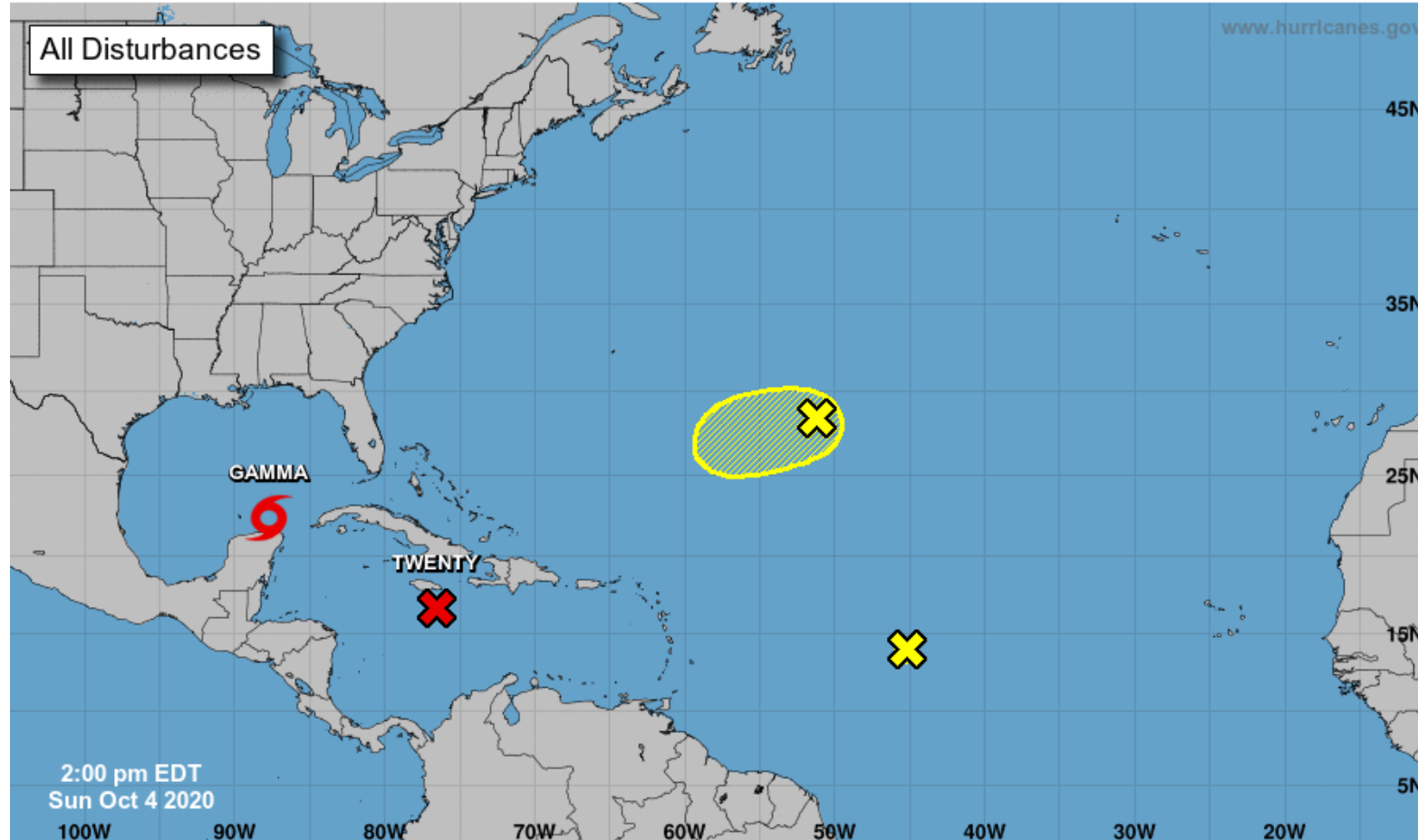
Tropical Weather Outlook

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



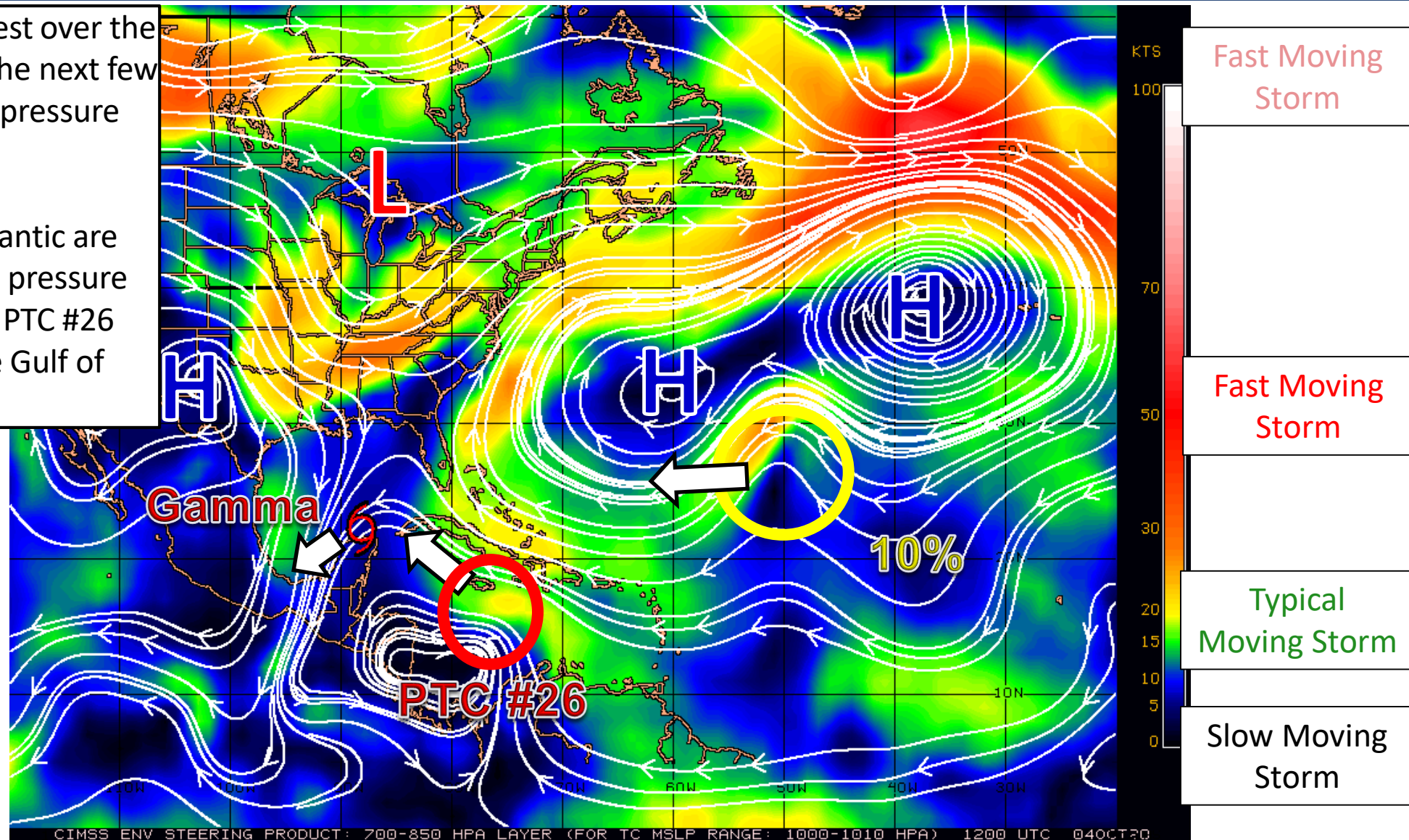
Steering Currents

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 over the next few days as it weakens and high pressure builds over Texas.

The other systems in the Atlantic are being steered by a large high pressure system near Bermuda, with PTC #26 tracking northwest into the Gulf of Mexico.





Wind Shear

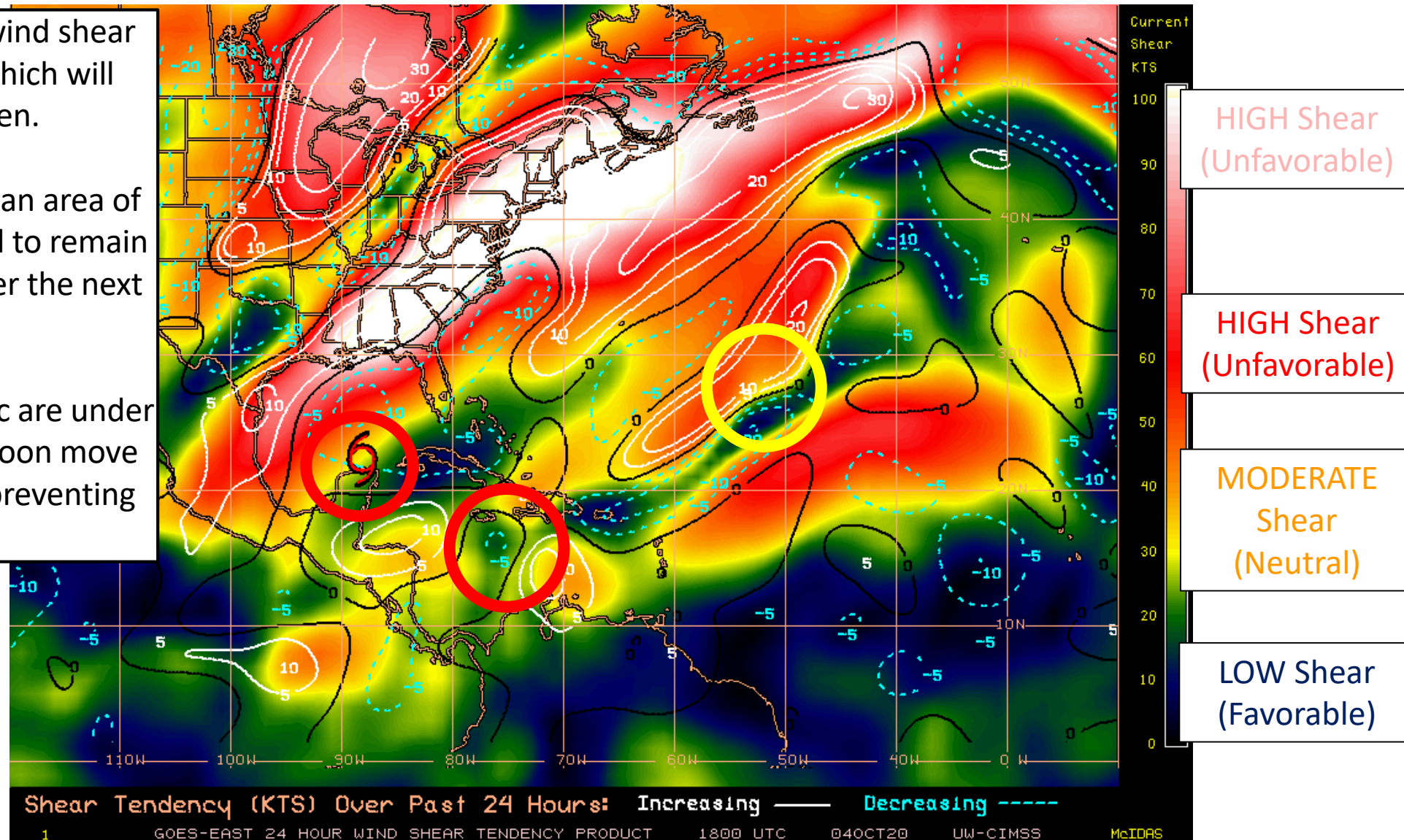
Is the environment favorable for the systems?

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 approaching high wind shear across the Gulf of Mexico, which will cause Gamma to weaken.

PTC #26 in the Caribbean is in an area of lighter shear, and it is expected to remain favorable for development over the next few days.

The other system in the Atlantic are under low shear right now, but will soon move into higher wind shear likely preventing development.

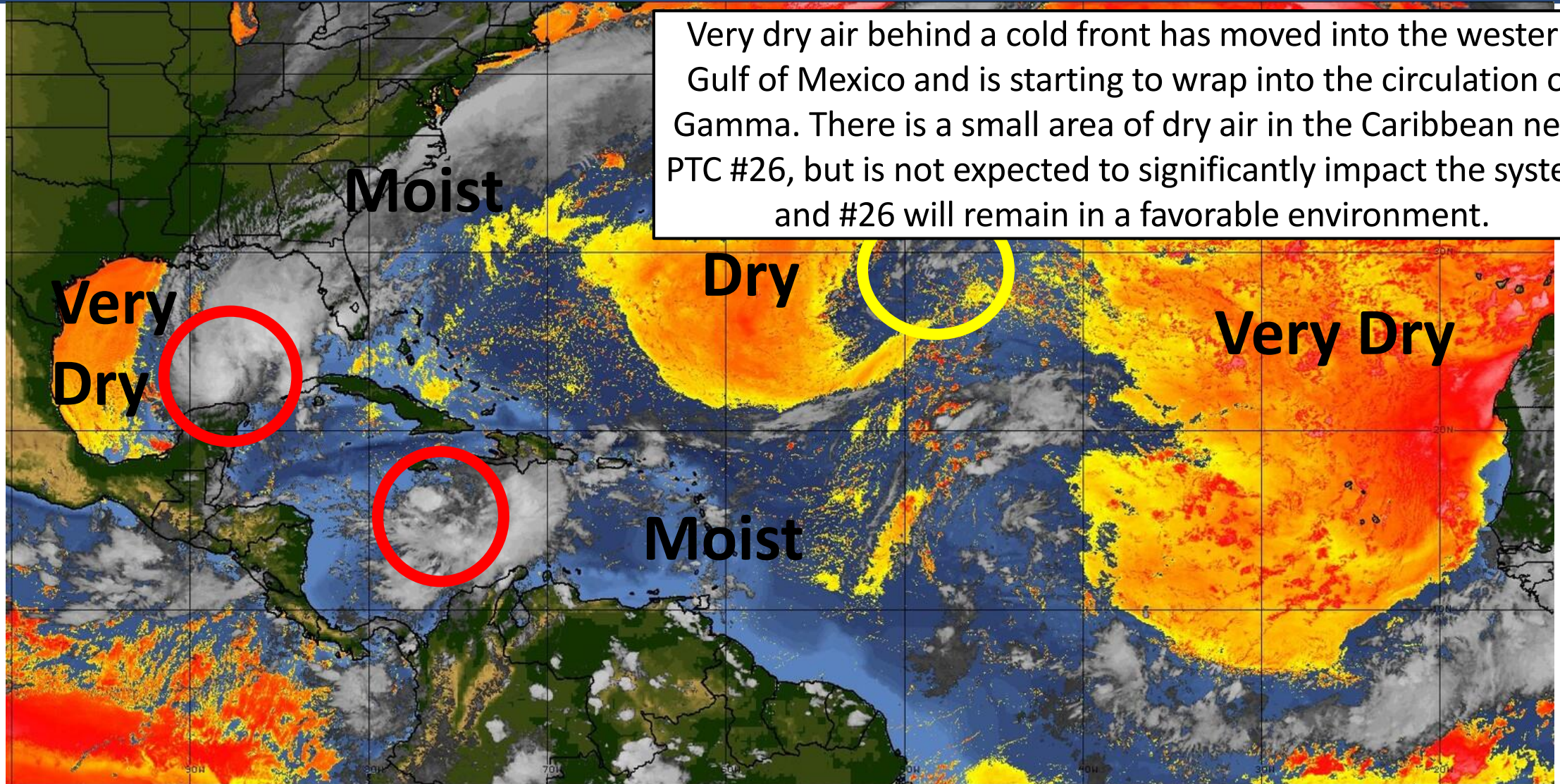




Dry Air & Saharan Dust

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 starting to wrap into the circulation of Gamma. There is a small area of dry air in the Caribbean near PTC #26, but is not expected to significantly impact the system and #26 will remain in a favorable environment.

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



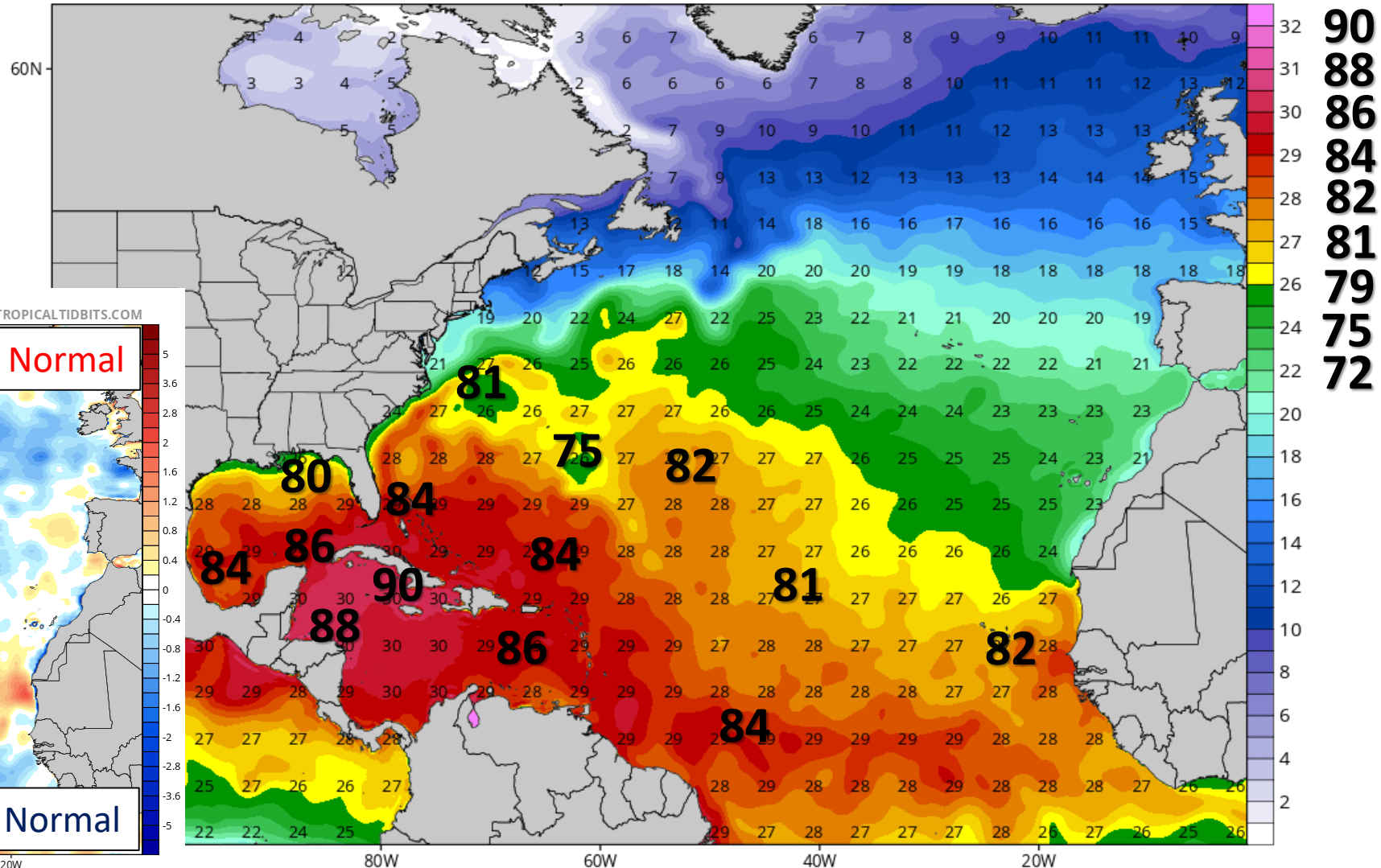
Sea Surface Temperatures & Anomalies

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.

CDAS Sea Surface Temperature (°C)

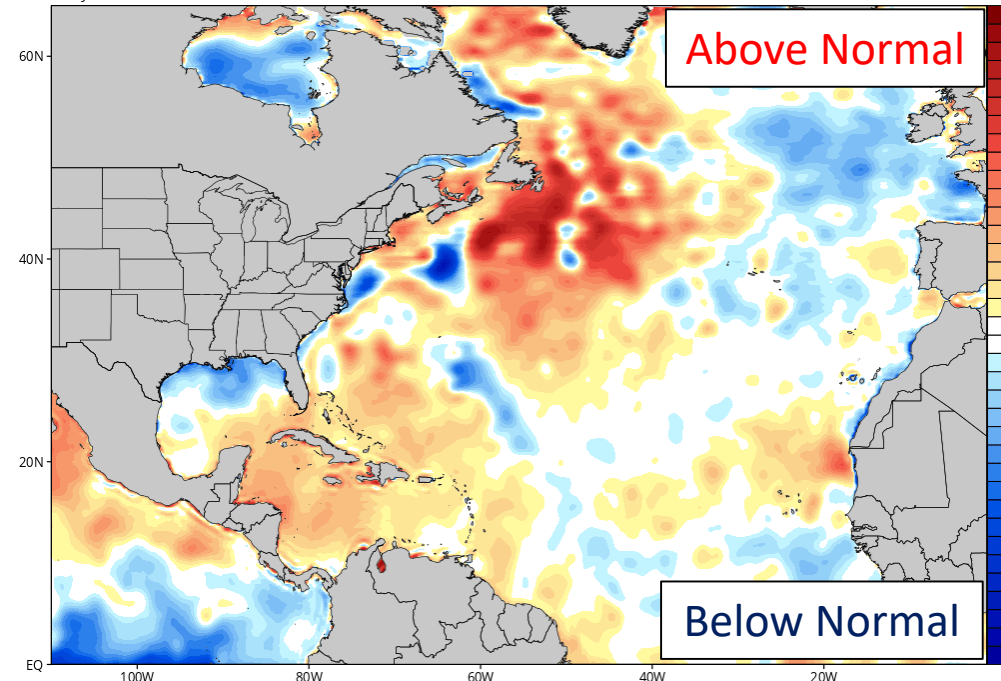
Analysis Time: 12z Oct 04 2020



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

Analysis Time: 12z Oct 04 2020

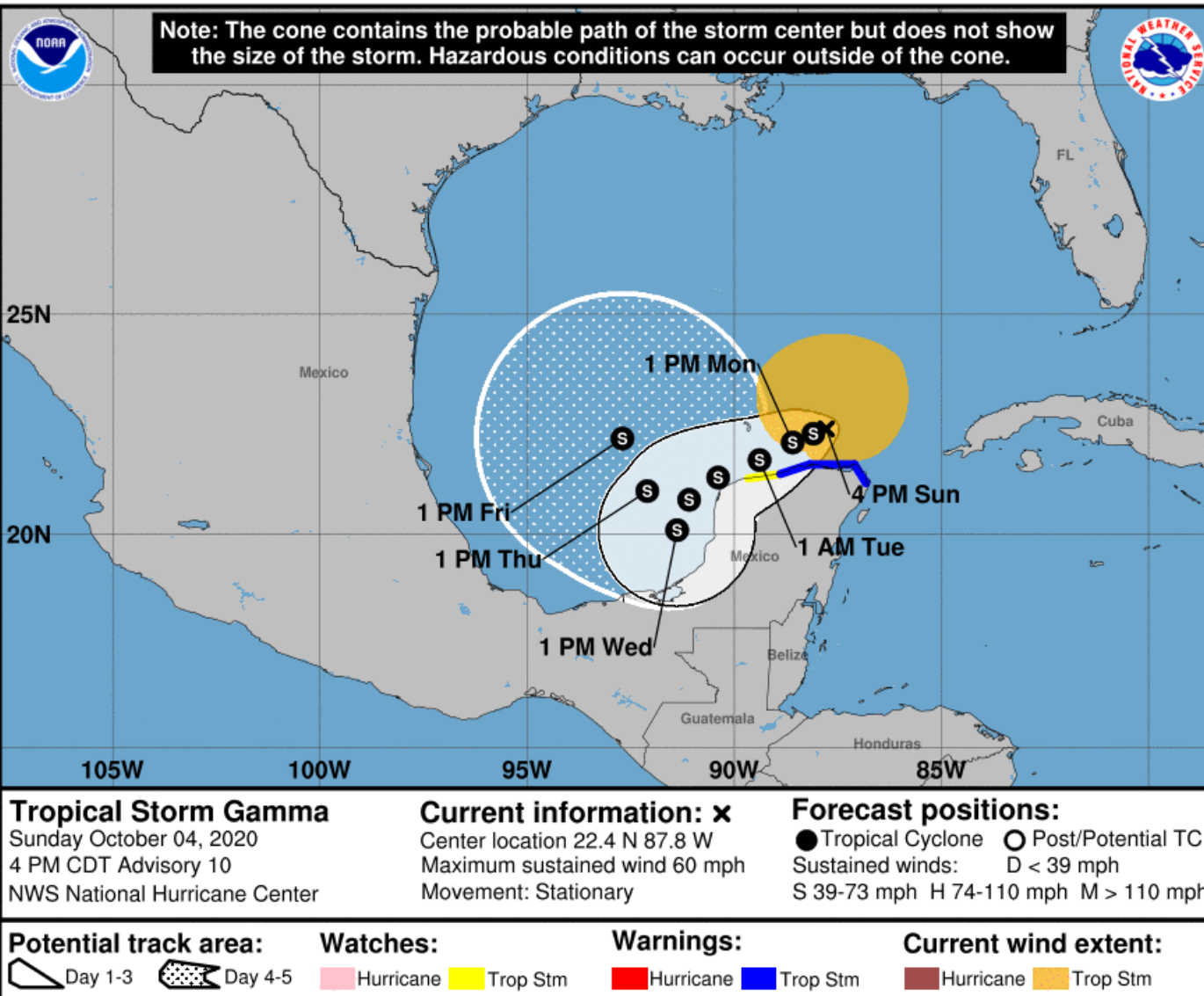
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Official Forecast Track

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 60 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 stationary. A gradual turn to the west and then southwest is expected over the next 24 hours.
- Gamma will then slowly move southwestward over the Bay of Campeche through the middle of the week before a turn back north becomes possible on Thursday or Friday.

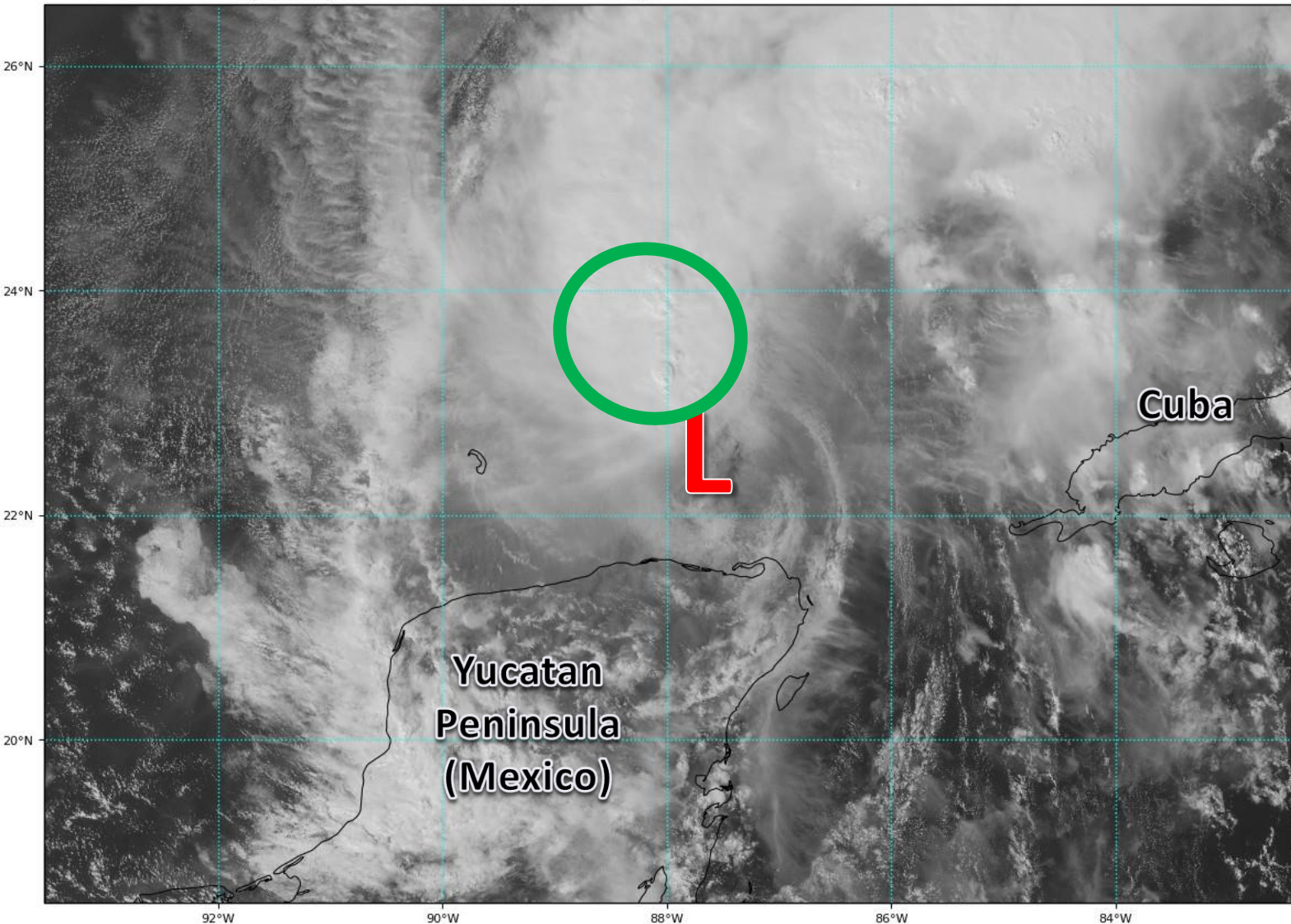


Satellite Imagery

Tropical Storm Gamma

GOES-16 Channel 2 (visible) Reflectance at 19:42Z Oct 04, 2020

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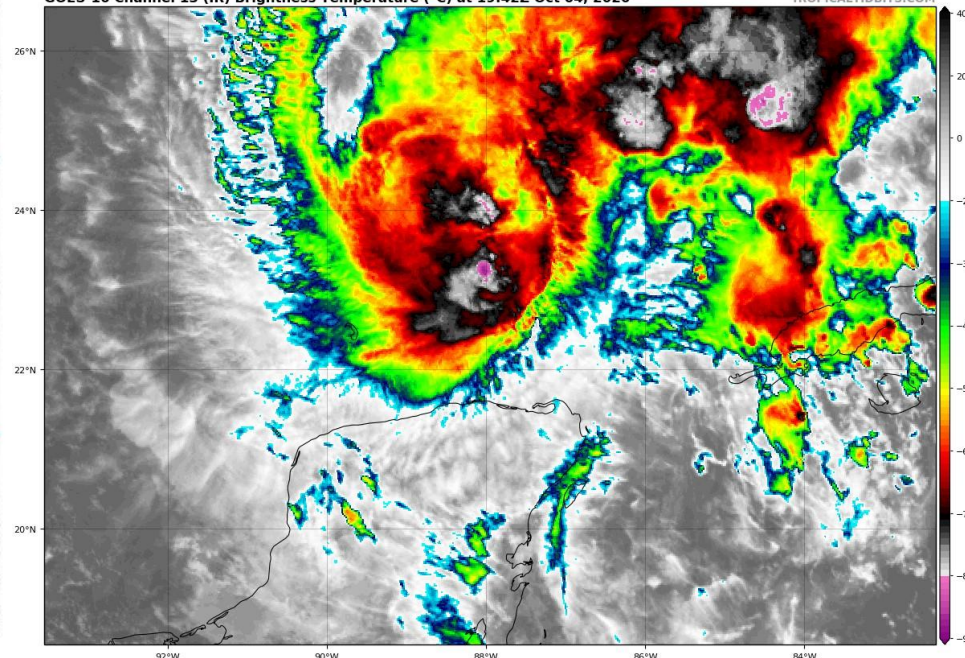


Gamma has weakened over the southern Gulf of Mexico today as dry air and wind shear have increased near the system.

Thunderstorms on the southern half of the storm have eroded with only one area of storms left to the north of the center (green circle).

GOES-16 Channel 13 (IR) Brightness Temperature (°C) at 19:42Z Oct 04, 2020

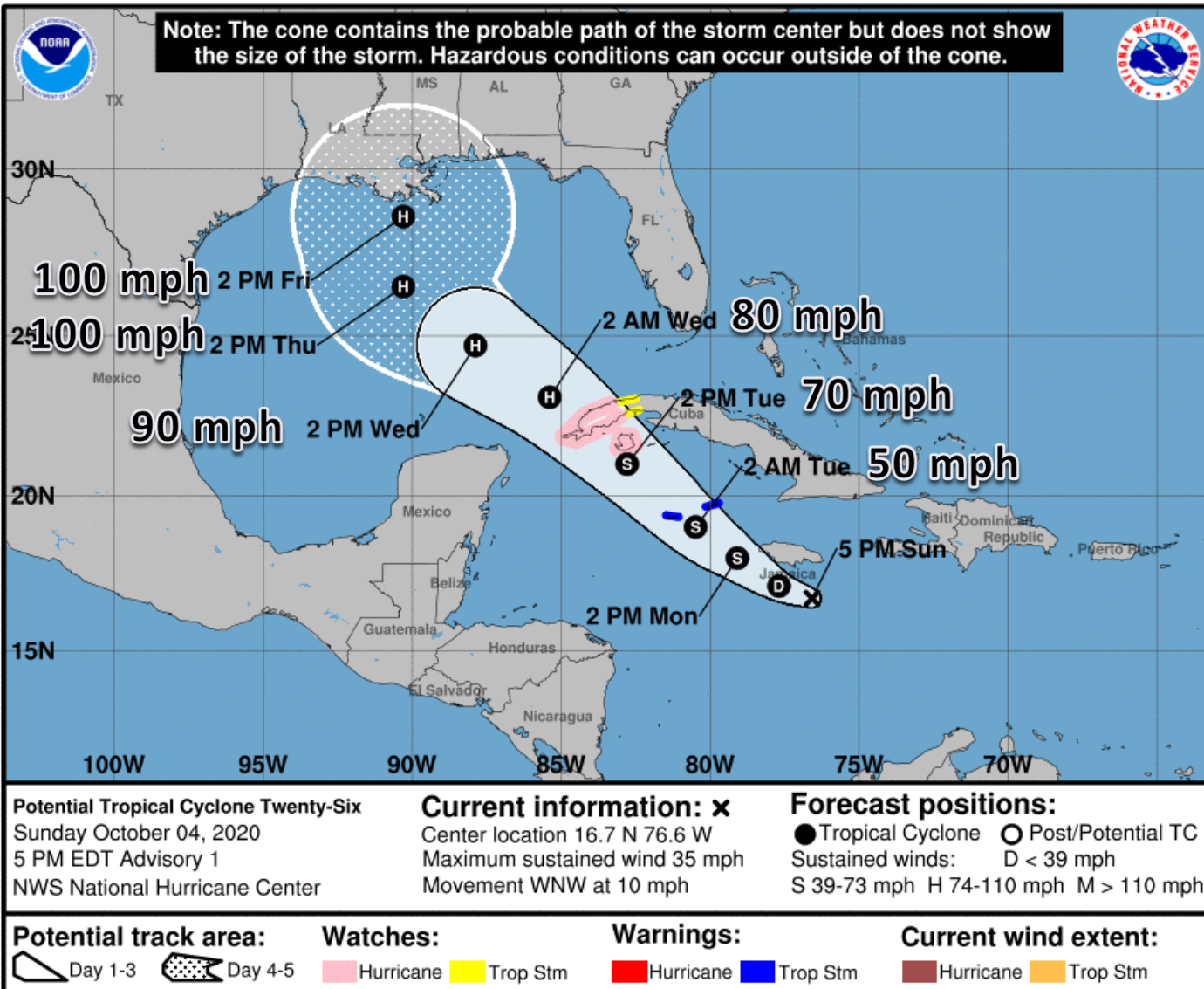
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Official Forecast Track

From the National Hurricane Center – PTC #26



- A tropical wave near Jamaica continues to organize and is forecast to become a tropical depression or tropical storm within the next 24 hours.
- With the close proximity to land, the National Hurricane Center has begun advisories on Potential Tropical Cyclone Twenty-Six.
- The developing center of PTC #26 is located about 90 miles south of Jamaica, and moving to the west-northwest at about 10 mph.
- PTC #26 will strengthen into **Tropical Storm Delta** on Monday and continue strengthening as it moves into the Gulf of Mexico mid-week.
- Later this week, the system will approach the northern Gulf Coast after it has a complicated interaction with Tropical Storm Gamma.

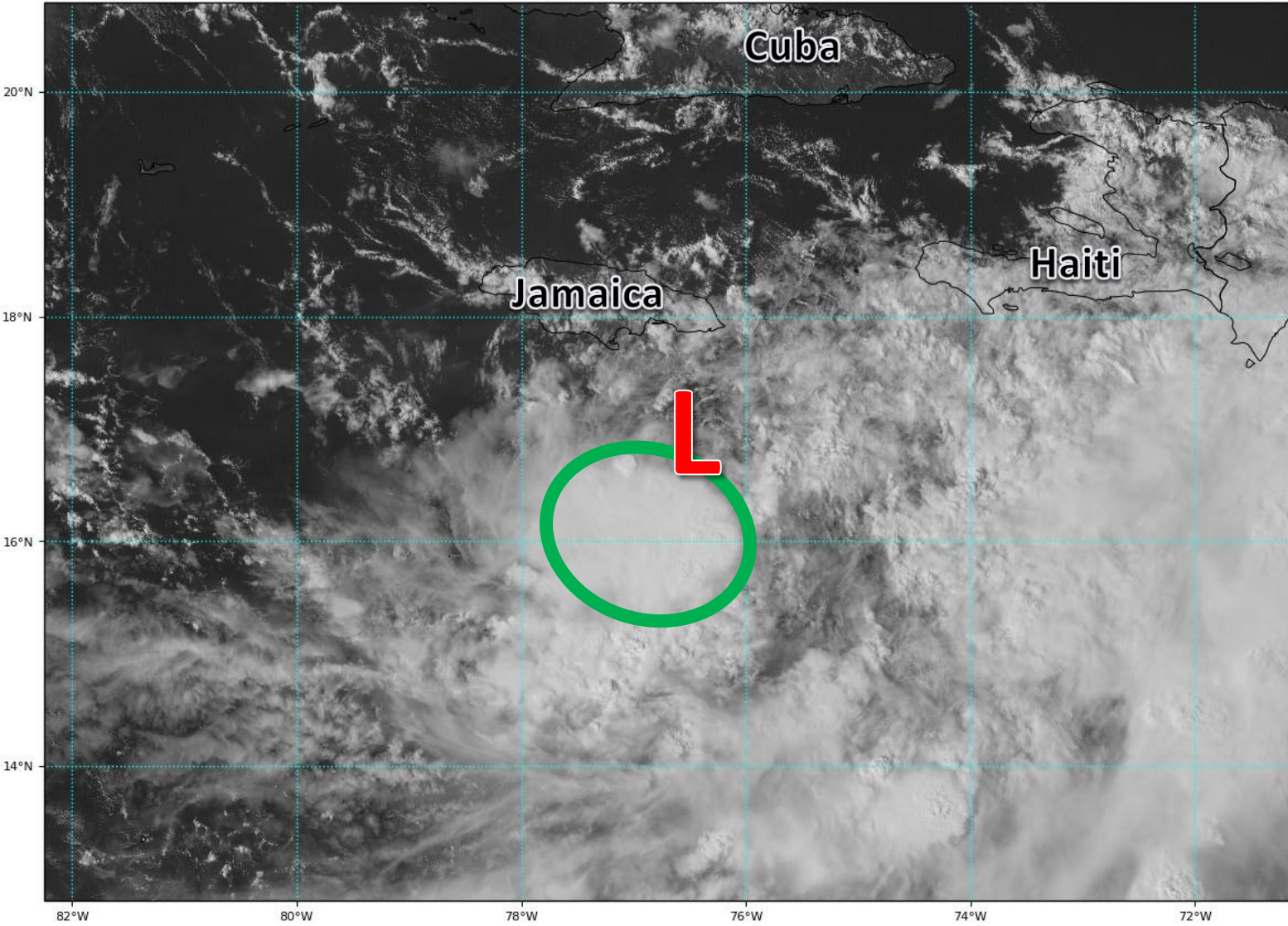


Satellite Imagery

Potential Tropical Cyclone Twenty Six – Central Caribbean

GOES-16 Channel 2 (visible) Reflectance at 19:35Z Oct 04, 2020

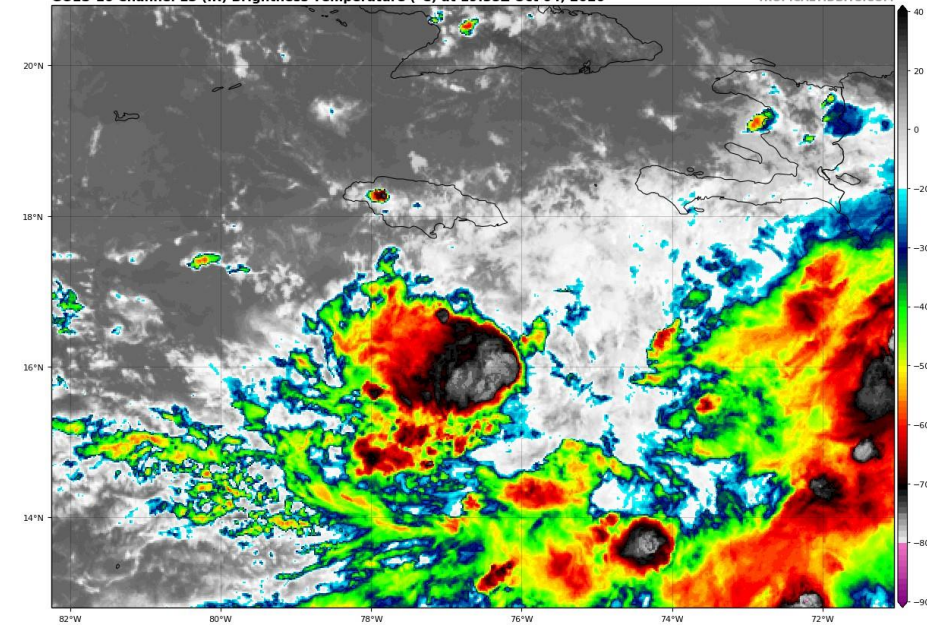
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The tropical wave in the Caribbean has gradually organized today. A small area of low pressure has developed with some showers and thunderstorms near and to the south of the center. *Only a slight increase in the amount of showers and thunderstorms near the center will result in a tropical depression forming.*

GOES-16 Channel 13 (IR) Brightness Temperature (°C) at 19:35Z Oct 04, 2020

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Key Messages

From the National Hurricane Center



Key Messages for Potential Tropical Cyclone Twenty-Six

Advisory 1: 5:00 PM EDT Sun Oct 04, 2020



1. Tropical storm conditions are expected in the Cayman Islands beginning late Monday, 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 Hispaniola, Jamaica, the Cayman Islands, and western Cuba during the next few days and could lead to life-threatening flash floods 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.



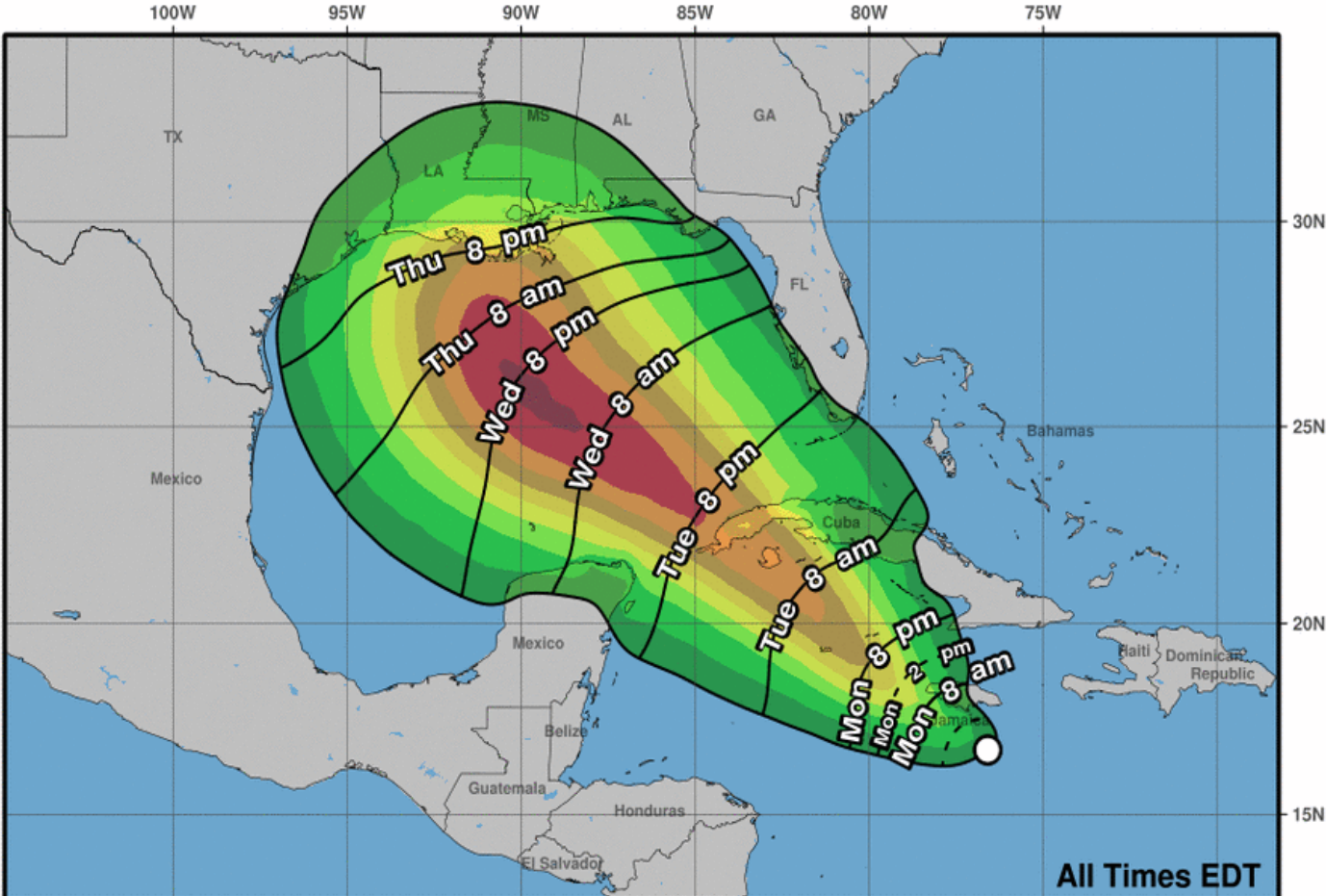
For more information go to hurricanes.gov



Time of Arrival & Wind Speed Probabilities

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

Most Likely Arrival Time of Tropical-Storm-Force Winds



Marathon: 13%
Key West: 19%
Naples: 12%
Tampa: 7%
Tallahassee: 4%
Apalachicola: 13%
Panama City: 16%
Pensacola: 14%
Pensacola NAS: 24%

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 Wednesday night along the coast.

Potential Tropical Cyclone Twenty-Six
Sun. Oct. 4, 2020 5 pm EDT
Advisory 1

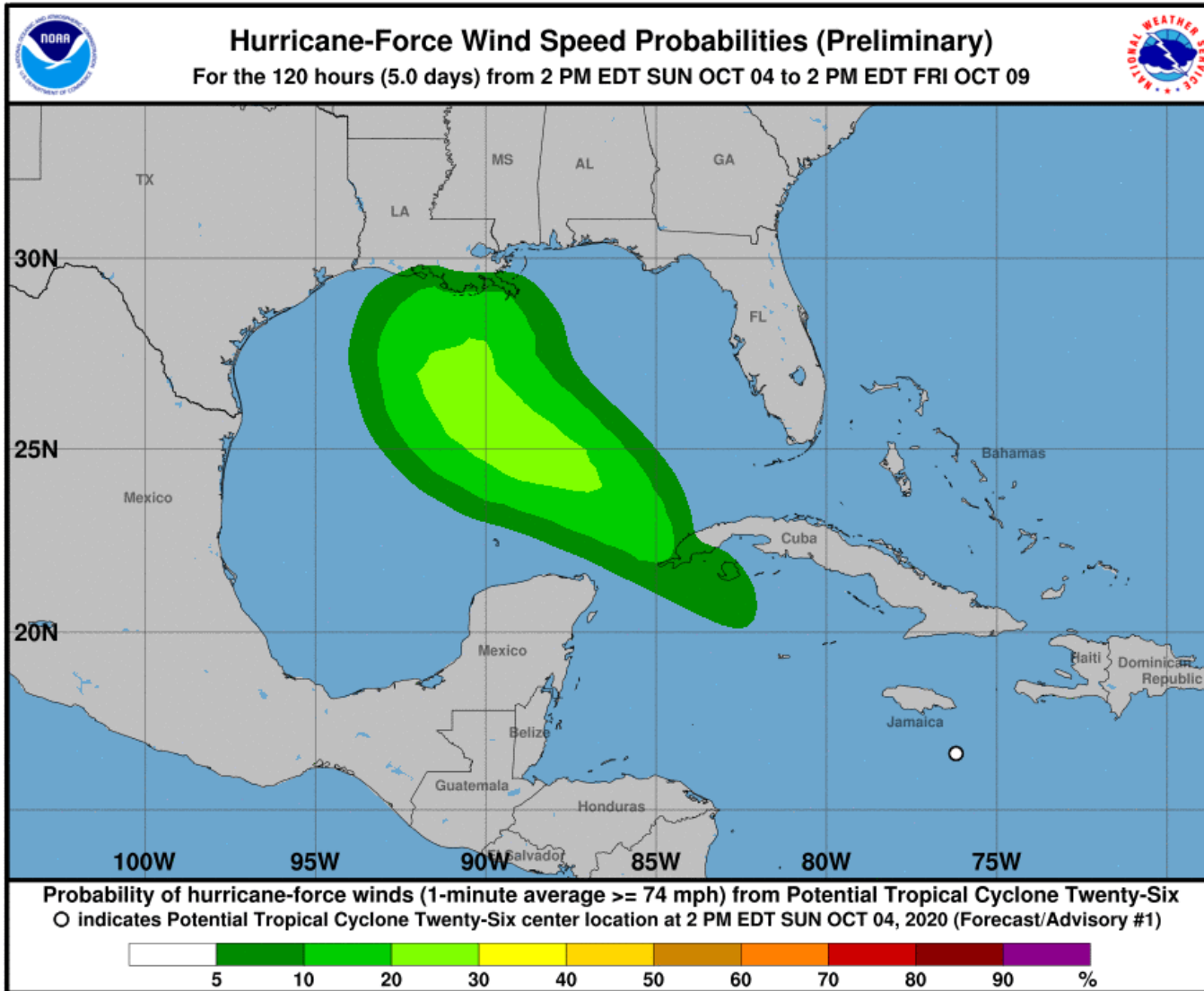
Storm Location & Wind Speed
○ < 34 kt (39 mph)
○ 34-63 kt (39-73 mph)
● ≥ 64 kt (74 mph)

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



Hurricane Wind Speed Probabilities

Probabilities of Sustained Hurricane Force Winds (>74 mph)



Pensacola NAS: 2%

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

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



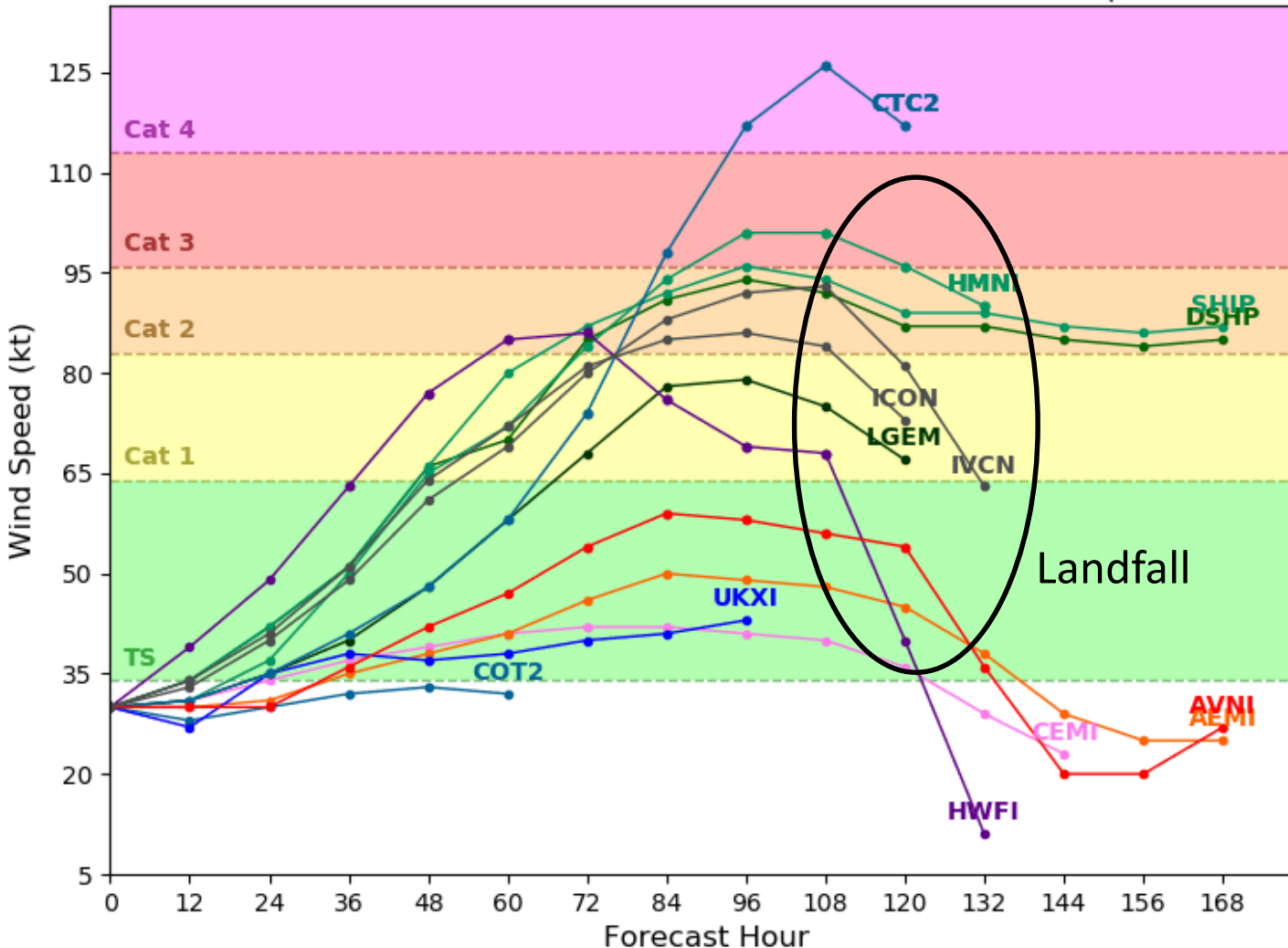
Model Forecast Intensity

Dynamical and Statistical Models

Invest 92L Model Intensity Guidance

Initialized at 18z Oct 04 2020

Levi Cowan - tropicaltidbits.com

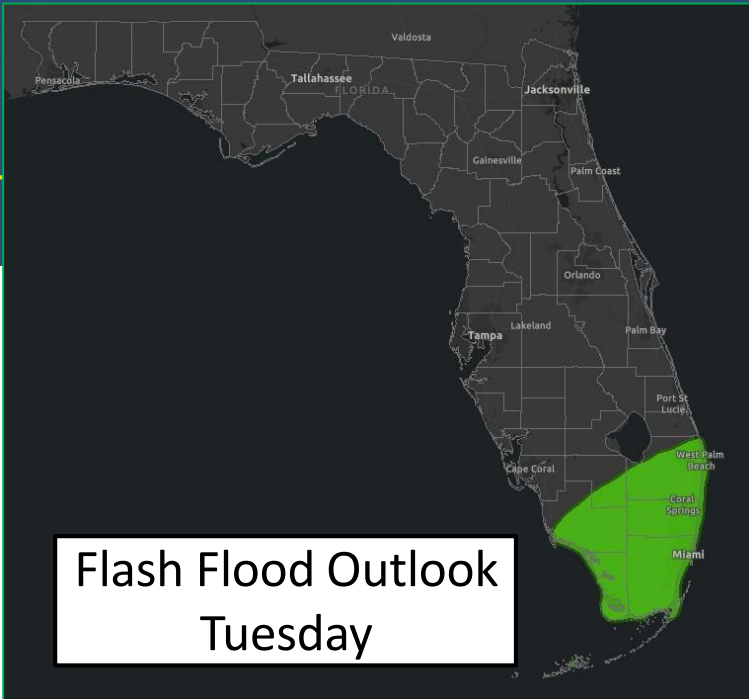
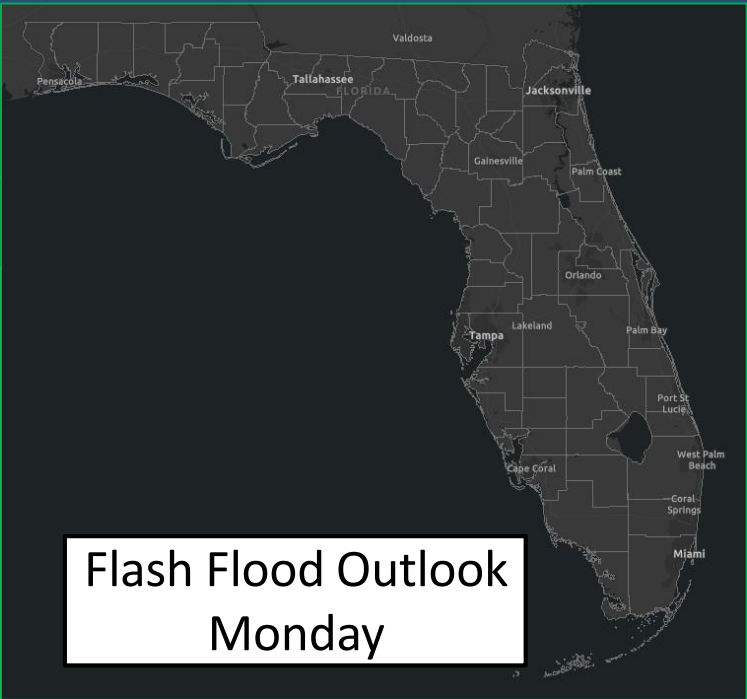
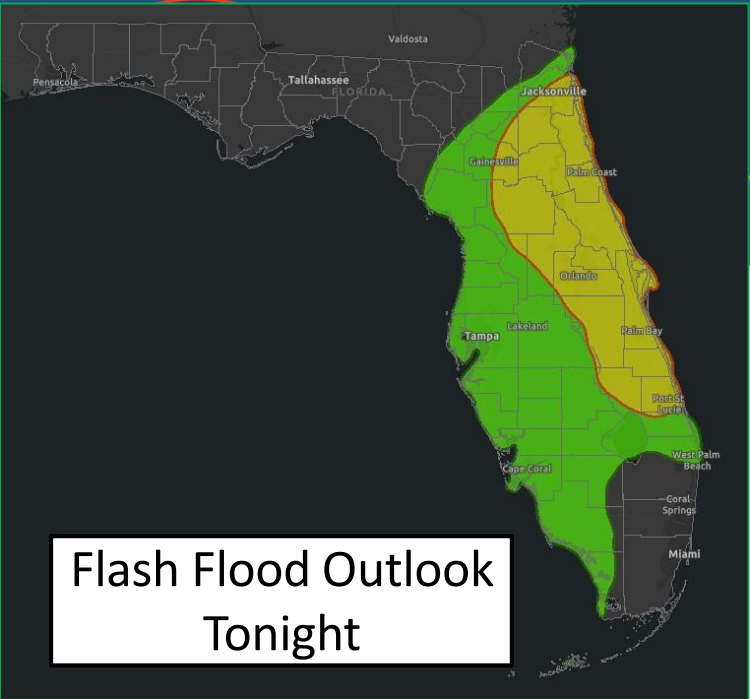


Twenty-Six is likely to PEAK in intensity mid-week in the southern Gulf of Mexico before holding steady or gradually weakening as it approaches the northern Gulf Coast.

A period of rapid intensification while it is in the Caribbean or southern Gulf of Mexico is possible, but seems unlikely in the northern Gulf of Mexico at this time.

Wind shear and cooler ocean waters will both work together to weaken the system later in the week as it nears landfall.

Still, a strong hurricane at landfall is plausible.



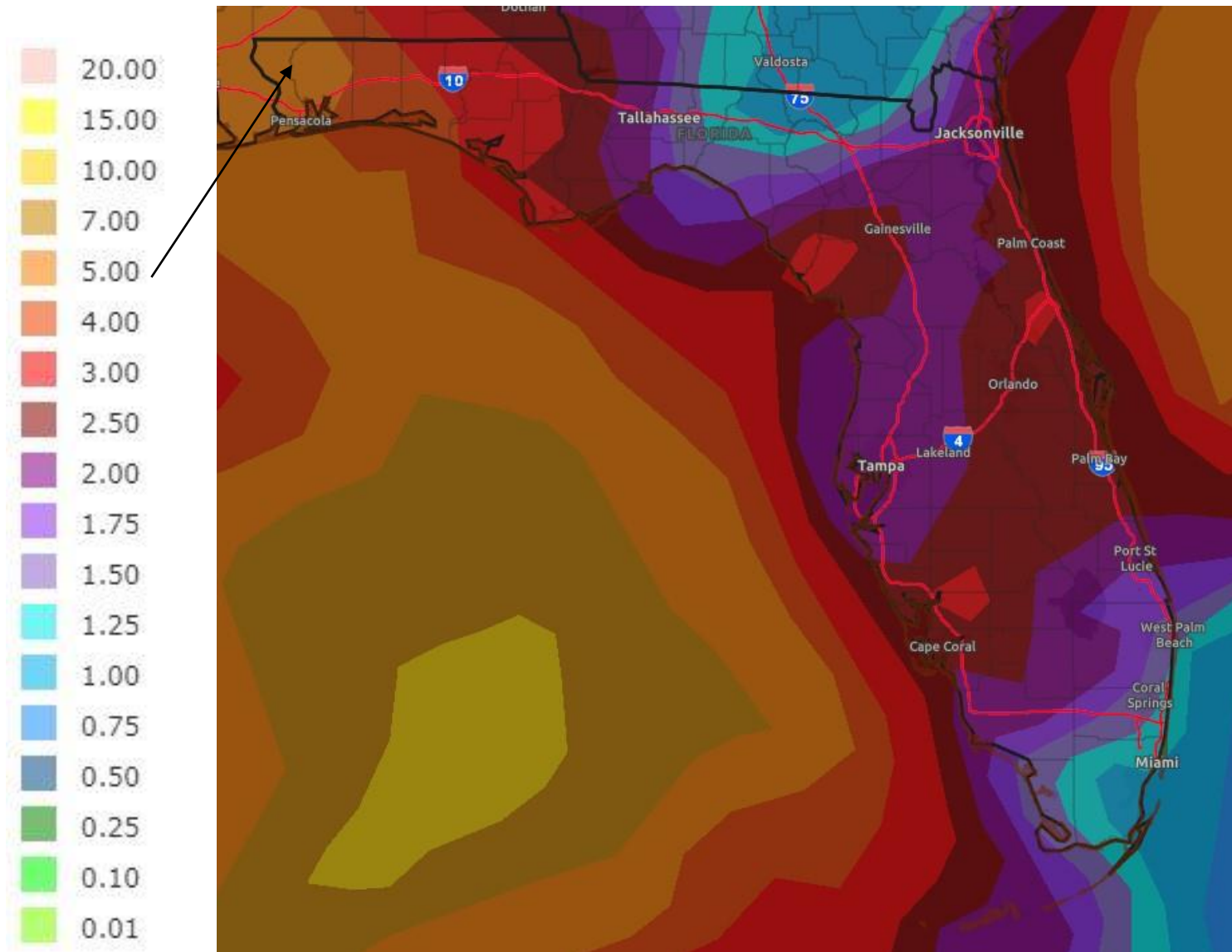
Understanding WPC Excessive Rainfall Risk Categories

No Area/Label	MARGINAL (MRGL)	SLIGHT (SLGT)	MODERATE (MDT)	HIGH (HIGH)
Flash floods are generally not expected.	Isolated flash floods possible	Scattered flash floods possible	Numerous flash floods likely	Widespread flash floods expected
	Localized and primarily affecting places that can experience rapid runoff with heavy rainfall.	Mainly localized. Most vulnerable are urban areas, roads, small streams and washes. Isolated significant flash floods possible.	Numerous flash flooding events with significant events possible. Many streams may flood, potentially affecting larger rivers.	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
	NO Flash Flooding	Flash Flooding	Flash Flooding	Flash Flooding
 WEATHER PREDICTION CENTER				

- Heavy rainfall is possible across the Peninsula today, particularly along the East Coast this afternoon and evening. Moisture from Gamma and a stalled front are combining to create high rain chances.
- The heavy rain threat returns to South Florida and the Keys on Tuesday as moisture associated with PTC #26 moves into the region.



Rainfall Totals Next 7 Days



- Little to no rainfall across the Panhandle and western Big Bend through mid-week
- Heavy rainfall is expected in the Peninsula over the next 24 hours
- An additional round of heavy rainfall is possible in South Florida and the Keys Tuesday/Wednesday related to PTC #26.
- A heavy rainfall event related to Potential Tropical Cyclone #26 is possible later this week in the Florida Panhandle.



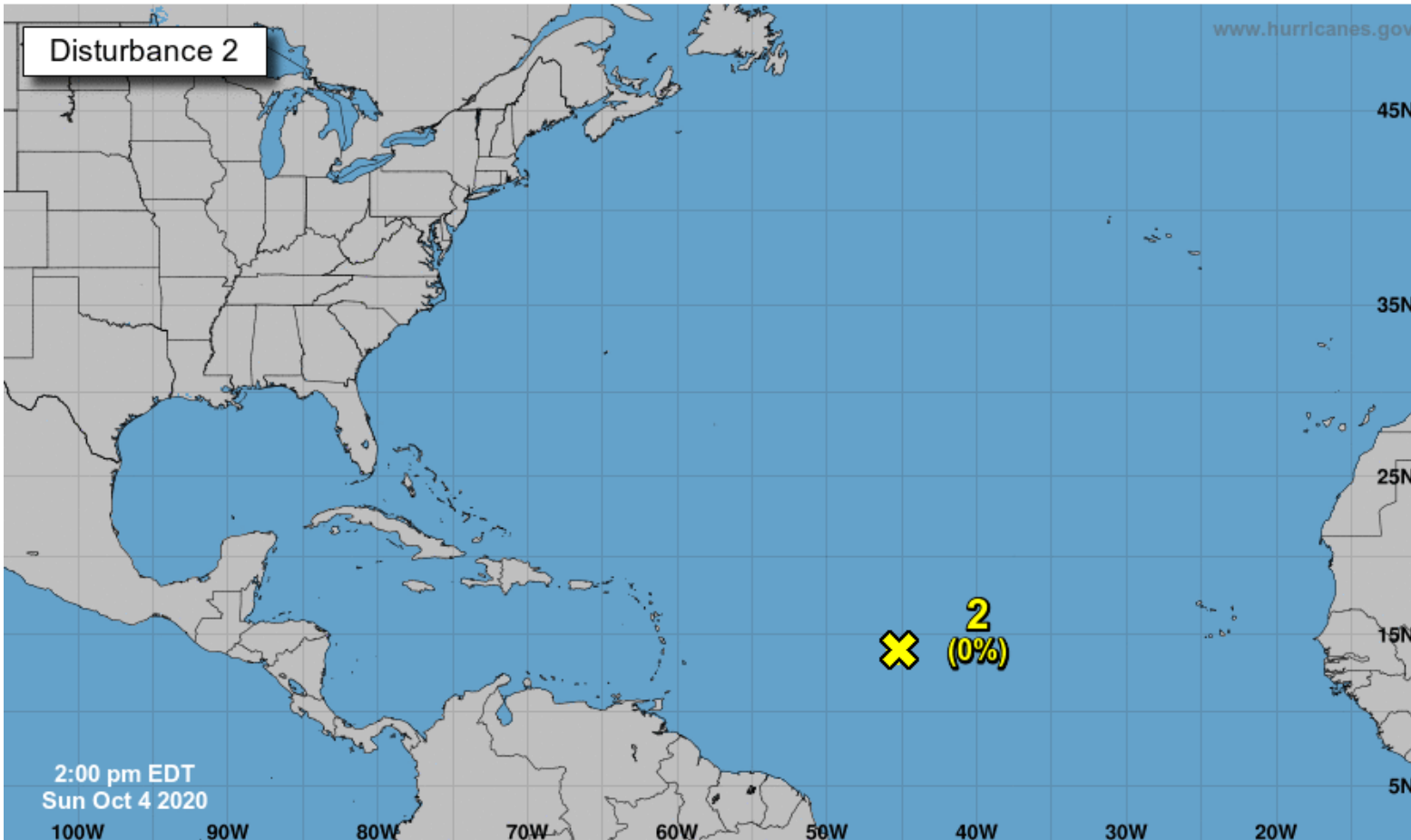
Tropical Weather Outlook

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



Five-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida



Showers and thunderstorms associated with a tropical wave over the central tropical Atlantic have become limited today.

The system is moving into an area of strong upper-level winds and development of this system is not anticipated.

This system does not need to be monitored for Florida impacts.

***Formation chance through 48 hrs...low...near 0%**

***Formation chance through 5 days...low...near 0%**

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



Tropical Weather Outlook

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



Five-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida



www.hurricanes.gov

Disturbance 3

3
(10%)

2:00 pm EDT
Sun Oct 4 2020

Current Disturbances and Five-Day Cyclone Formation Chance:
Tropical or Sub-Tropical Cyclone: ○ Depression ○ Storm ○ Hurricane
○ Post-Tropical Cyclone or Remnants

✕ < 40% ✕ 40-60% ✕ > 60%

An area of disorganized showers and thunderstorms over the central Atlantic about 1000 miles east-southeast of Bermuda is associated with a surface trough of low pressure.

This system is expected to move toward the west-southwest at around 10 mph, and some slow development is possible during the next couple of days before it encounters strong upper-level winds.

This system does not need to be monitored for Florida impacts.

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

*Formation chance through 5 days...low...10%



Overall Summary

Tropical Storm Gamma

- Gamma is now stationary just off the northern coast of the Yucatan Peninsula, with the center about 50 miles offshore.
- Maximum sustained winds are near 60 mph, but weakening is ongoing. Gamma will continue to weaken over the next few days due to hostile wind shear and dry air.
- The weakened system will drift southwest into the Bay of Campeche, or back inland over the Yucatan Peninsula over the next few days.

Potential Tropical Cyclone Twenty-Six (Formerly Invest 92L)

- A tropical wave near Jamaica continues to organize and is forecast to become a tropical depression or tropical storm within the next 24 hours.
- With the close proximity to land, the National Hurricane Center has begun advisories on Potential Tropical Cyclone Twenty Six.
- The developing center of PTC #26 is located about 90 miles south of Jamaica, and moving to the west-northwest at about 10 mph.
- PTC #26 will strengthen into Tropical Storm Delta on Monday and continue strengthening as it moves into the Gulf of Mexico mid-week.
- The current forecast has a Category 2 hurricane approaching the northern Gulf Coast on Friday.

Central Tropical Atlantic Wave

- Upper-level winds have become hostile and development of this system is not anticipated.

Central Atlantic Low

- A disorganized area of low pressure over the central Atlantic has another day or so to develop before it also encounters hostile conditions.
- This system has a 10% (low) chance of formation.



Florida Outlook

Florida Outlook:

- **Tropical Storm Gamma will not have direct impacts to the state.**
- A stalled cold front and the nearby tropical moisture from Gamma will result in high rain chances through this evening.
- Flood Watches are in effect for East Central Florida until late tonight. An additional 1-2" of rainfall is forecast today with locally higher amounts of 4-6".
- Swells from Gamma are impacting the Gulf Coast beaches, resulting in dangerous rip currents.
- **Potential Tropical Cyclone Twenty-Six should be monitored closely.**
- The western 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 #26 interacts with Gamma.
- Moisture from the system could make its way into South Florida and the Keys starting 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.
- **The other two systems in the Atlantic do not pose a threat to Florida.**

The next briefing packet will be issued Monday 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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