



TROPICAL UPDATE



5:00 PM EDT

Saturday, October 3, 2020

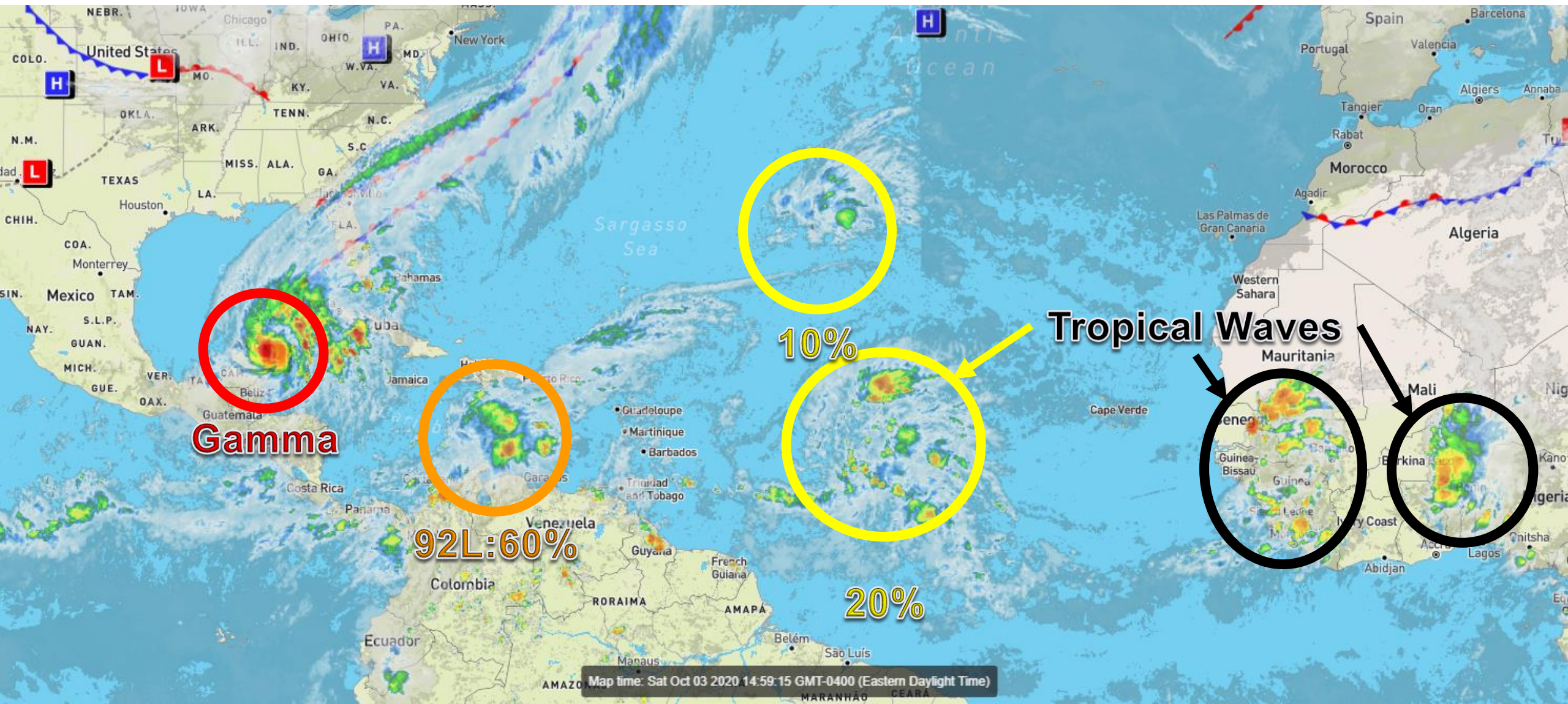
Tropical Storm Gamma, Invest 92L (60%), Central Tropical Atlantic Wave (20%), Central Atlantic Low (10%)

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



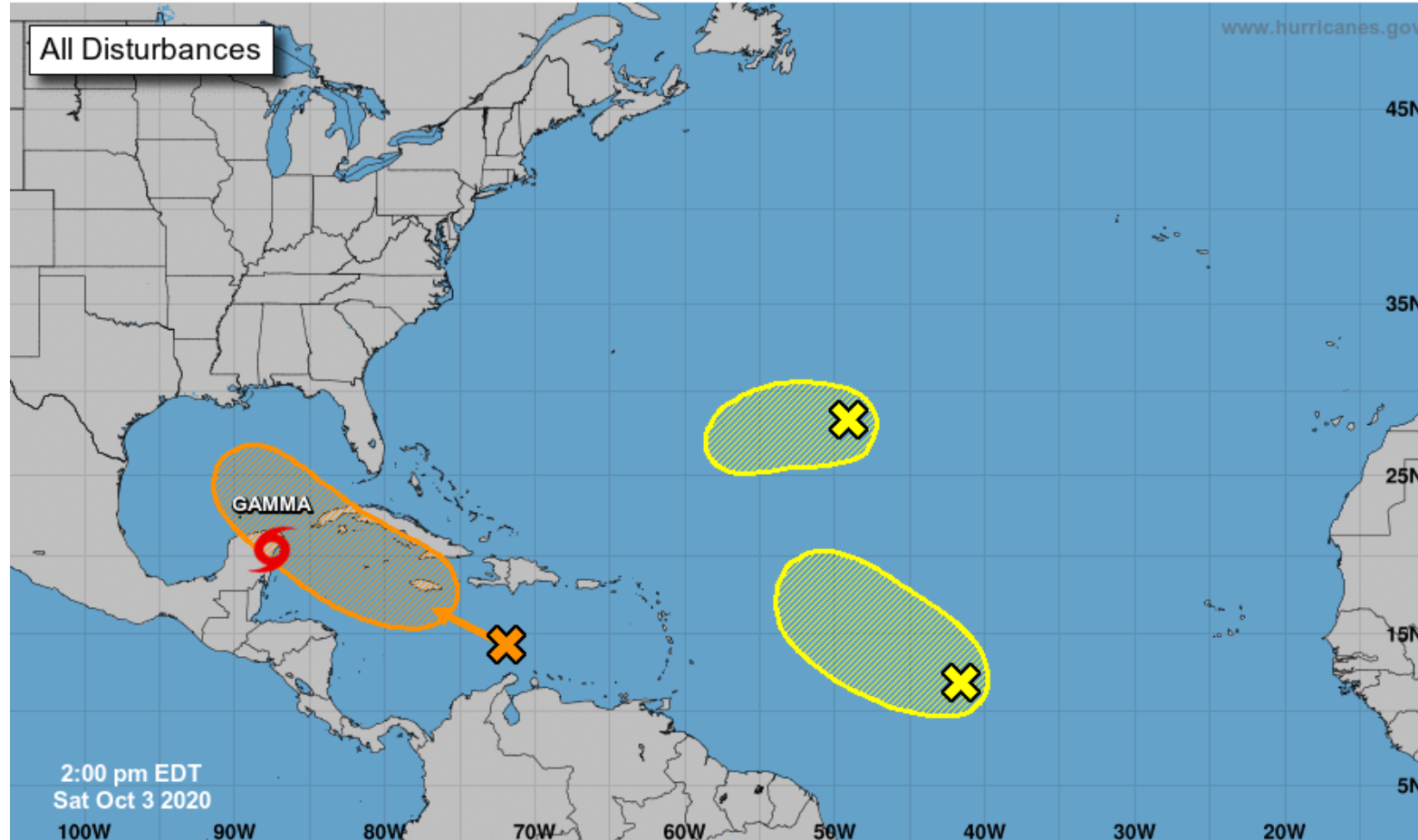


Tropical Weather Outlook

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

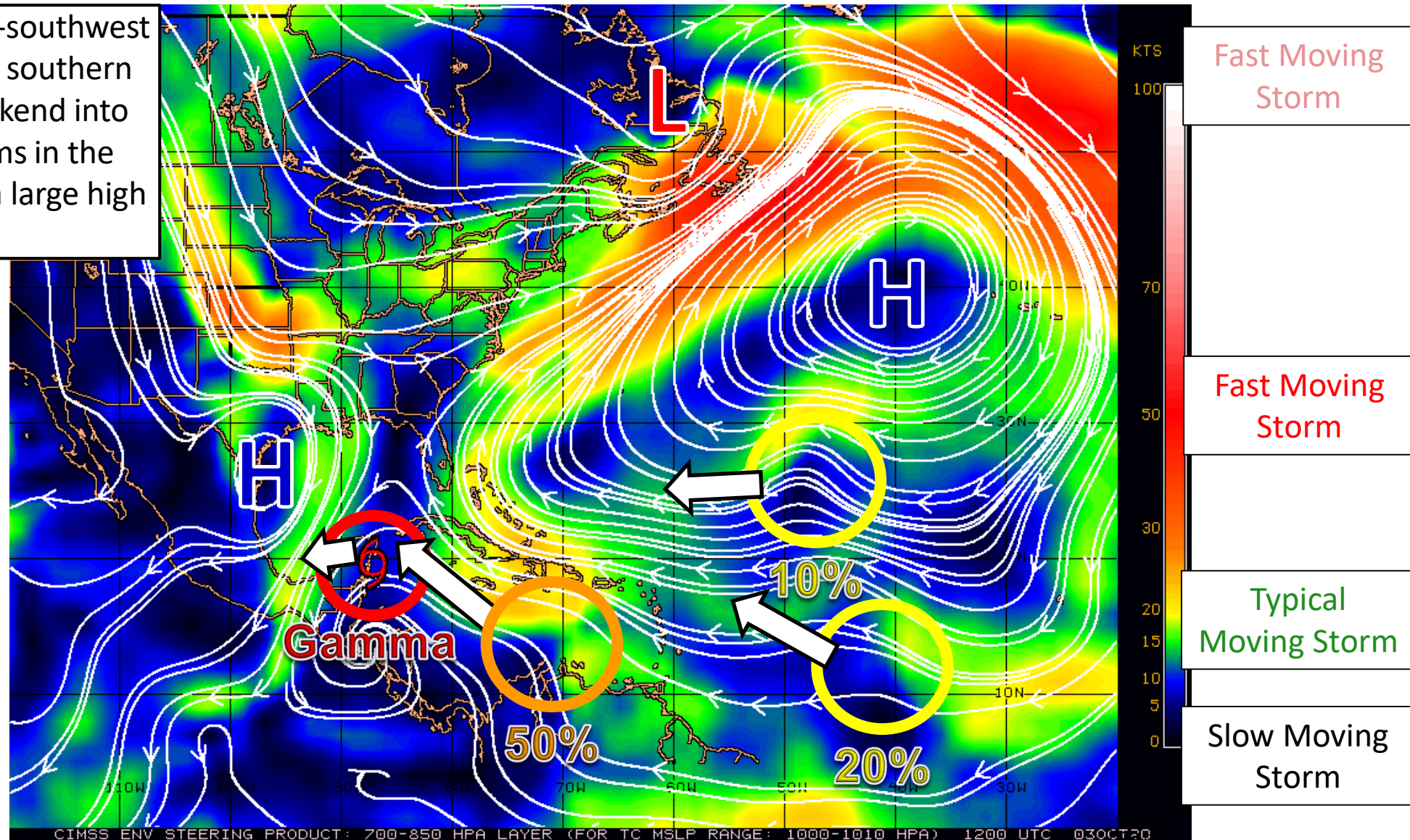


Steering Currents

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 turn west or west-southwest over the northern Yucatan or southern Gulf of Mexico later this weekend into next week. The other systems in the Atlantic are being steered by a large high pressure system



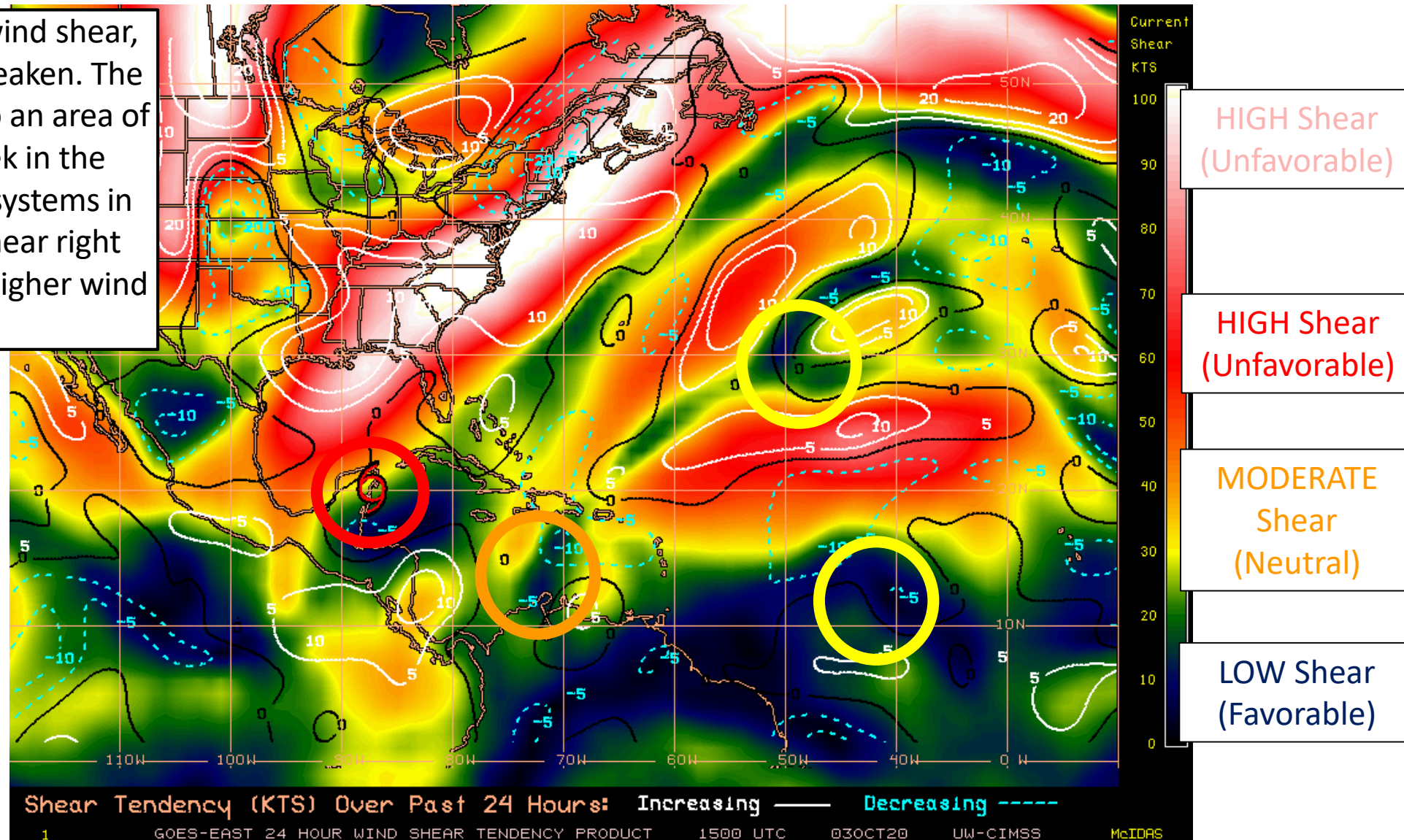


Wind Shear

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, which will cause Gamma to weaken. The Caribbean Wave is moving into an area of lighter shear early next week in the western Caribbean. The two systems in the Atlantic are under low shear right now, but will soon move into higher wind shear.





Official Forecast Track

From the National Hurricane Center – Tropical Storm Gamma



- The center of Tropical Storm Gamma is located about 35 miles north-northwest of Tulum, Mexico.
- Maximum sustained winds are near 65 mph. Gamma will weaken until it moves back over water Sunday. Restrengthening is forecast as it moves over the southwestern Gulf of Mexico.
- Gamma is moving northwest at 8 mph. A slower north-northwest motion is expected tonight and Sunday, followed by a sharp turn toward the west or west-southwest Sunday night into Monday.
- Gamma will then slowly moves southwestward over the southwest Gulf of Bay of Campeche through the middle of next week.

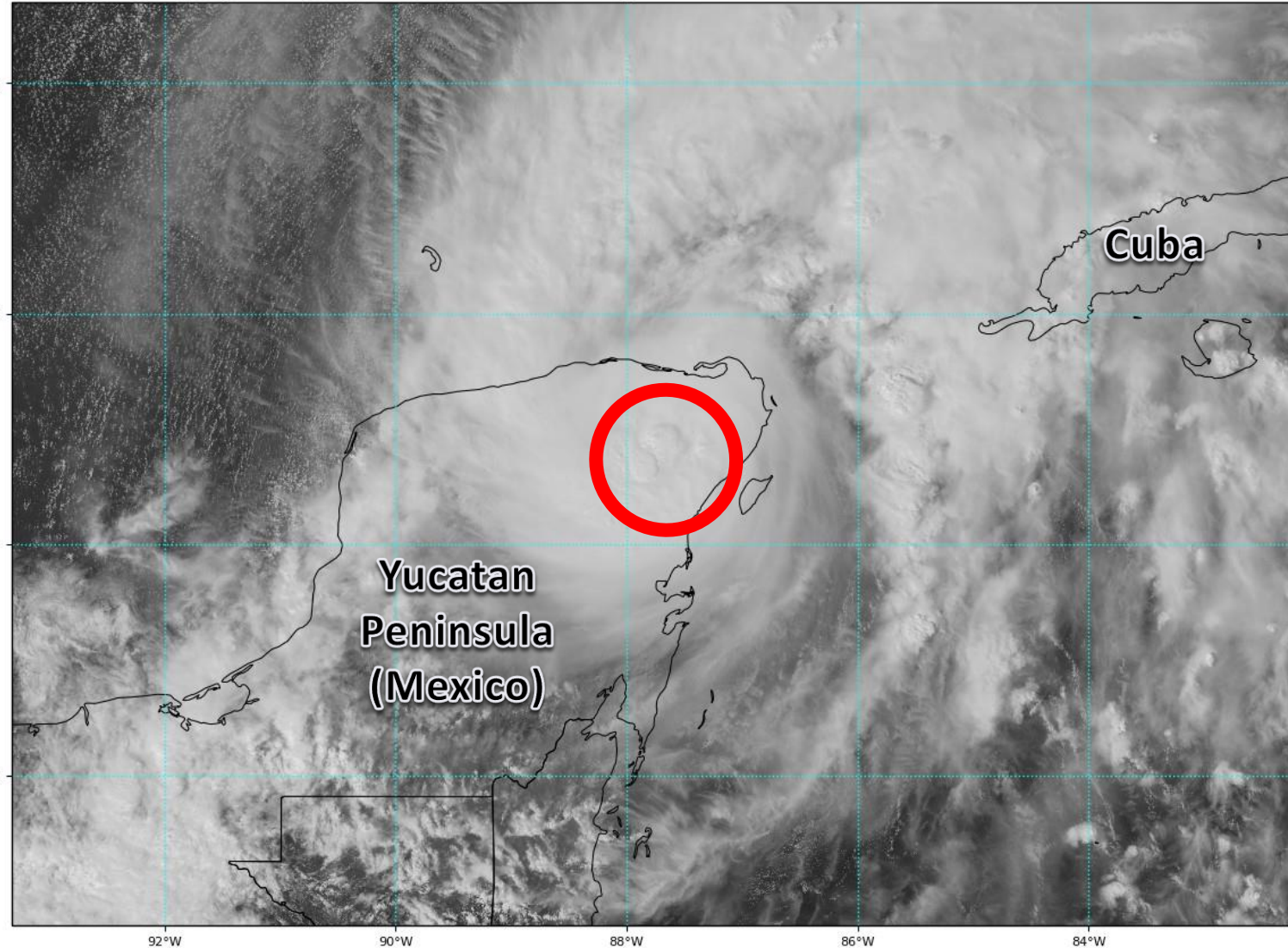


Satellite Imagery

Tropical Storm Gamma

GOES-16 Channel 2 (visible) Reflectance at 19:57Z Oct 03, 2020

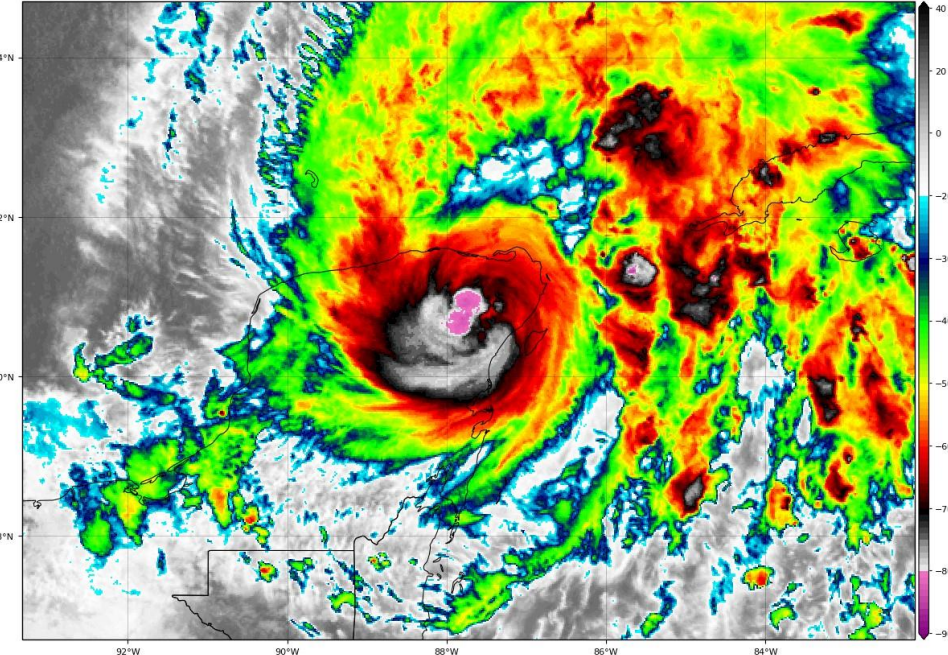
TROPICALTIDBITS.COM



Gamma made landfall near Tulum, Mexico around mid-day today as a strong tropical storm. It continues to move northwestward over the northern Yucatan Peninsula as a well-organized tropical storm.

GOES-16 Channel 13 (IR) Brightness Temperature (°C) at 20:07Z Oct 03, 2020

TROPICALTIDBITS.COM





Tropical Weather Outlook

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



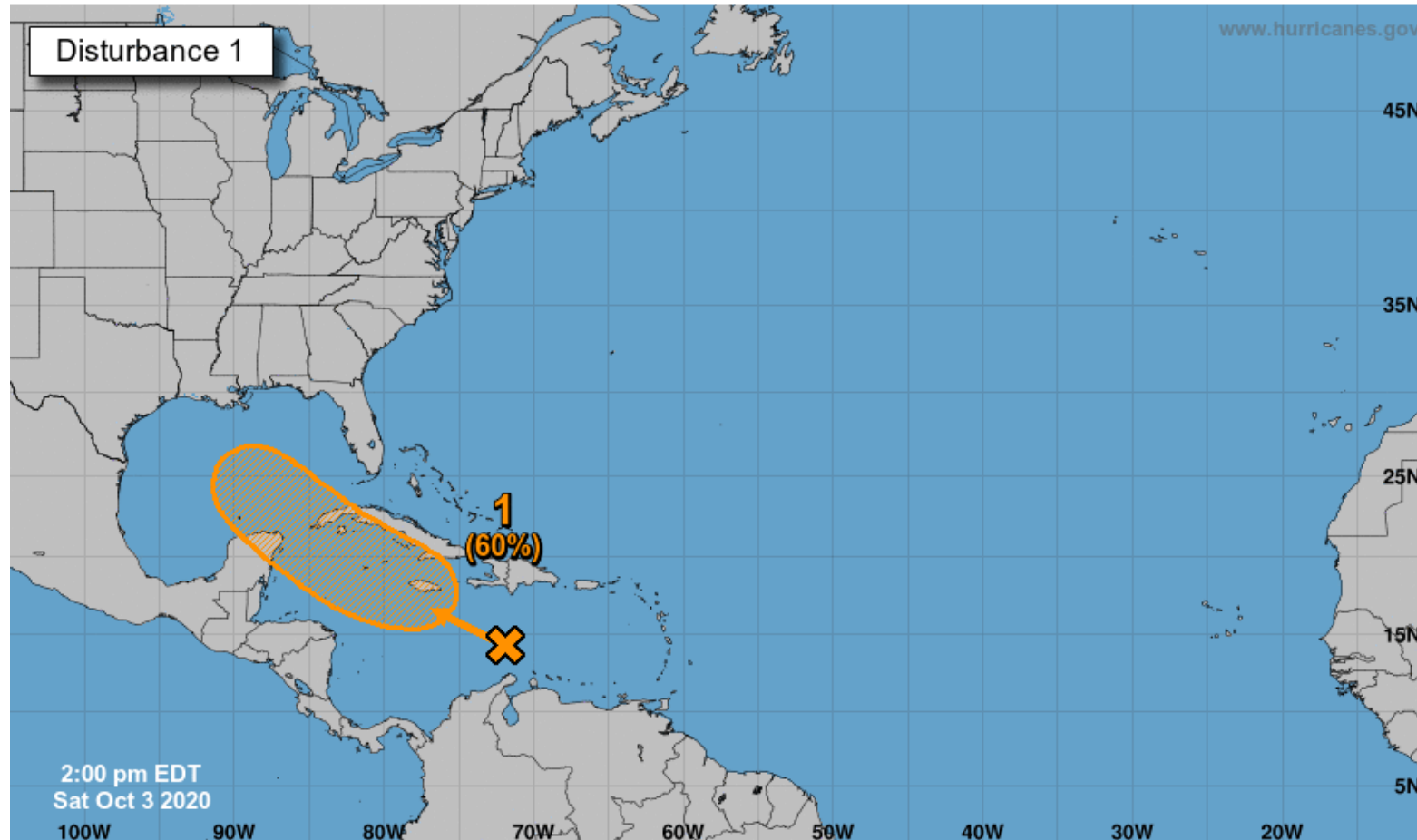
Five-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida



www.hurricanes.gov

Disturbance 1



Shower and thunderstorm activity has become more consolidated since yesterday near a tropical wave located over the central Caribbean Sea.

Environmental conditions are expected to become more conducive for development, and a tropical depression could form next week while the system moves westward or west-northwestward at about 15 mph across the central and western Caribbean Sea and then into the Gulf of Mexico.

This system should be monitored. Heavy rainfall could be possible in South Florida and the Keys next week.

***Formation chance through 48 hrs...low...30%**

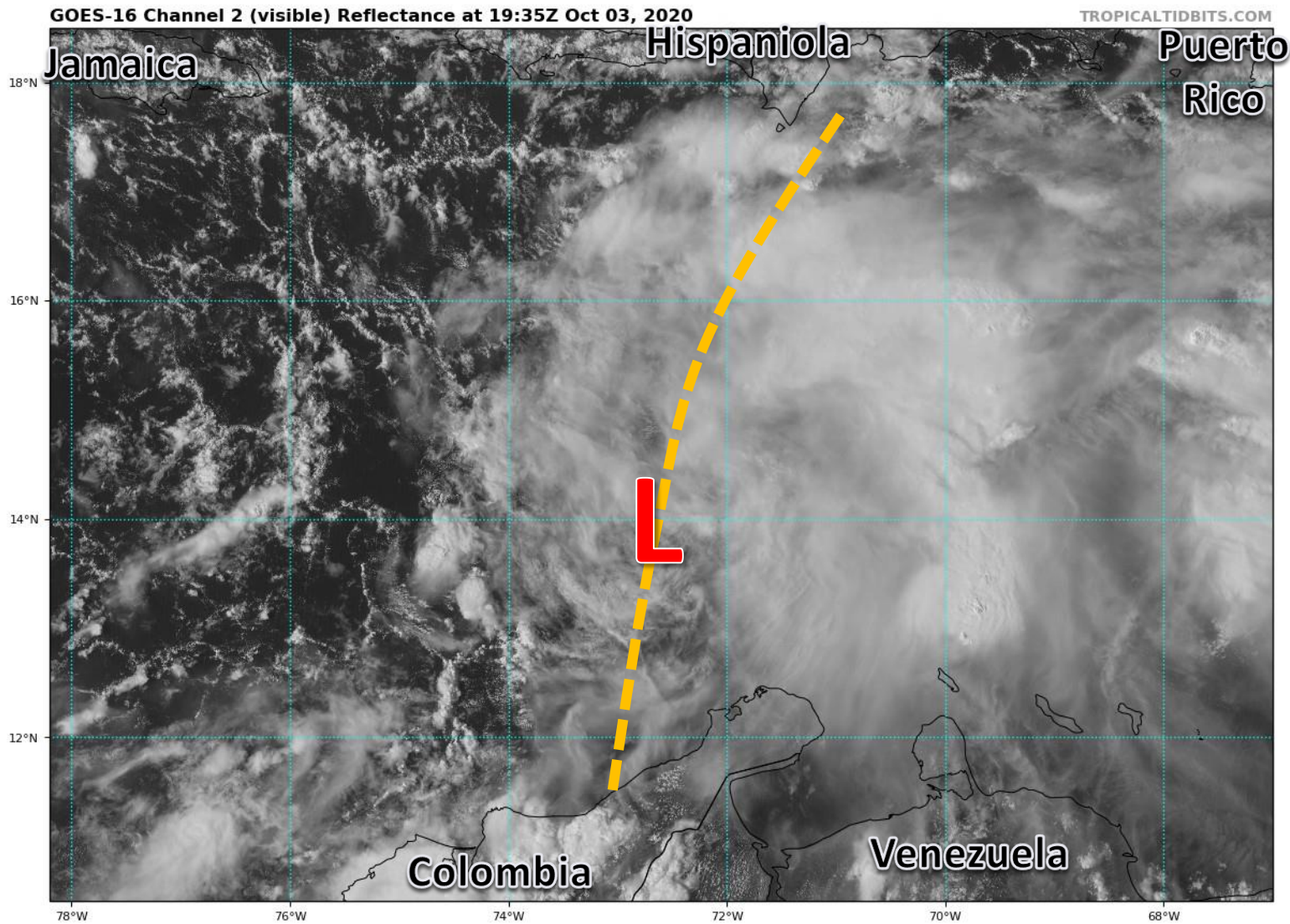
***Formation chance through 5 days...medium...60%**

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

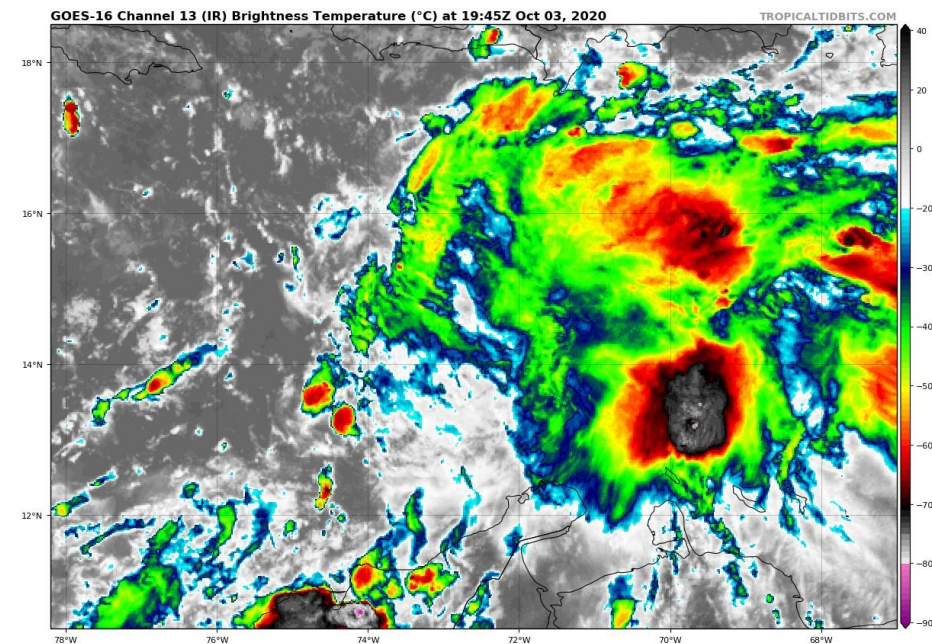


Satellite Imagery

Invest 92L



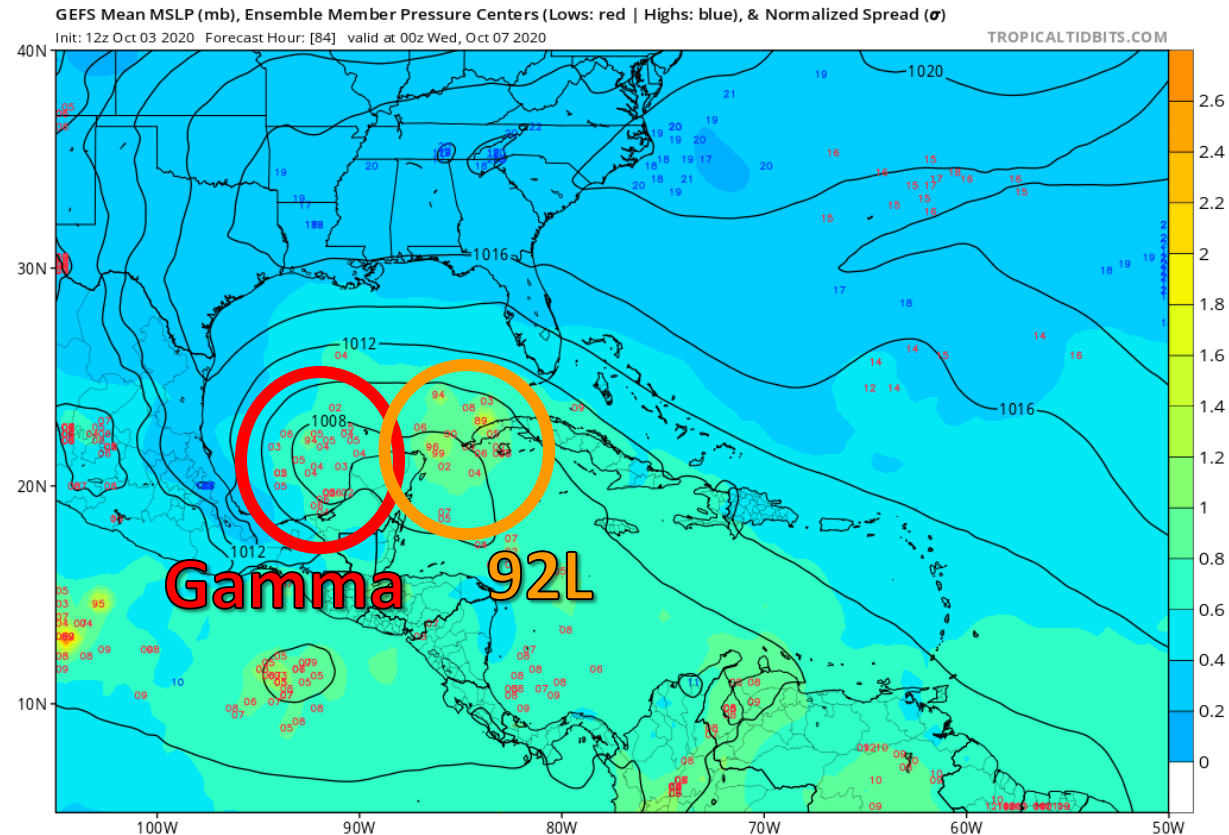
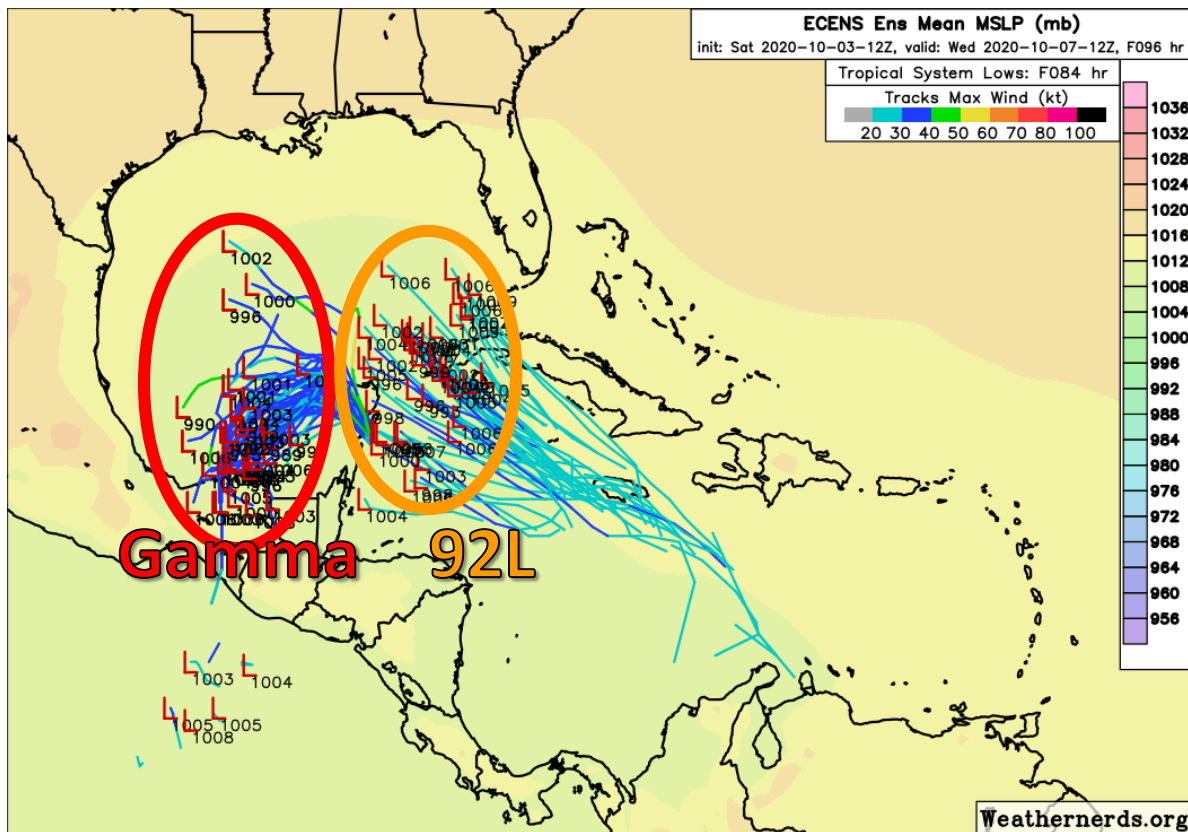
The tropical wave in the Caribbean remains disorganized due to strong wind shear. A weak area of low pressure may have formed along the wave axis (orange line). Conditions are currently not favorable for development, but could become more favorable early next week as it moves west-northwestward.



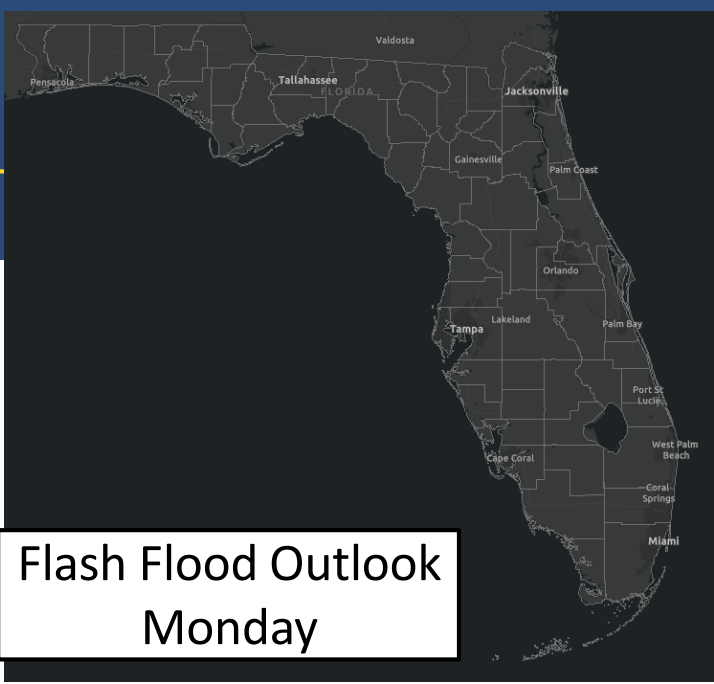
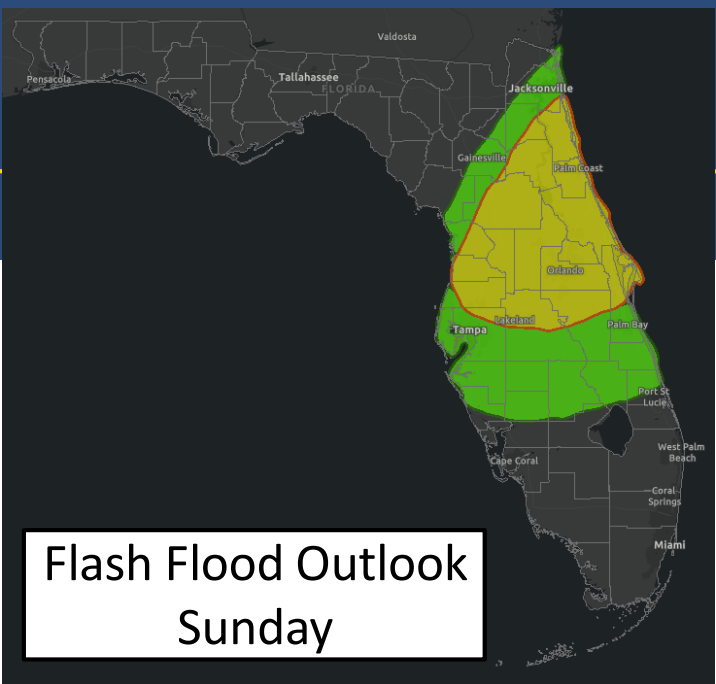
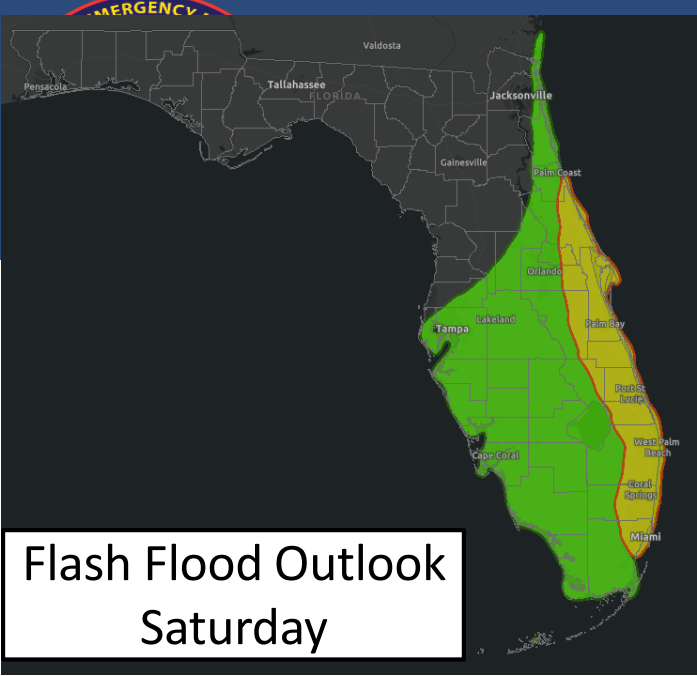


Model Forecast Positions

Ensemble Models – Tuesday Evening (10/6)



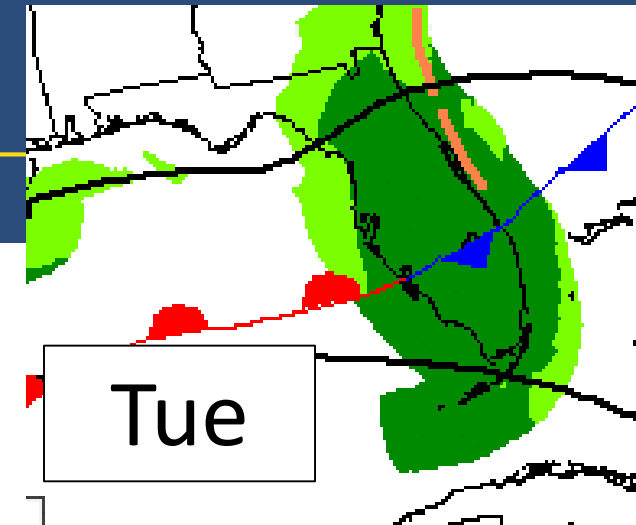
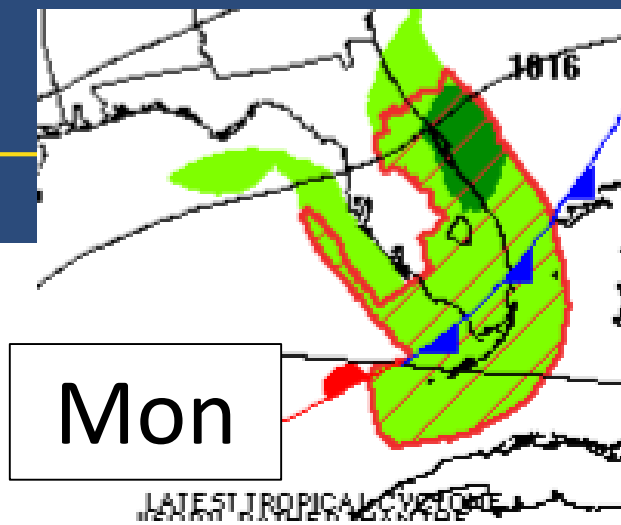
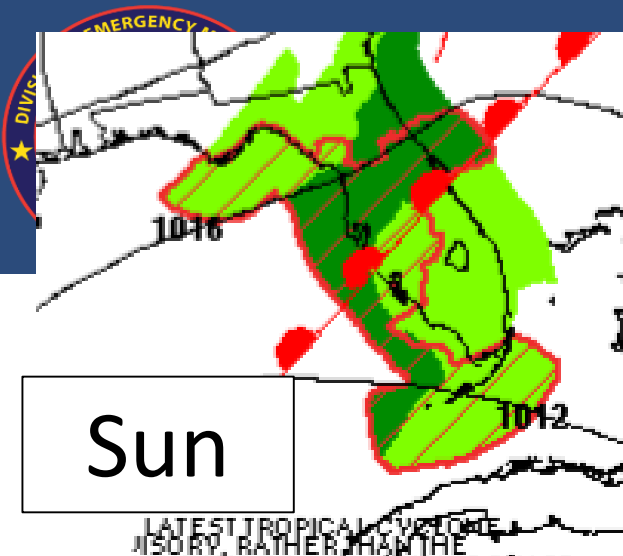
While Gamma is forecast to move into the western Gulf of Mexico and the Bay of Campeche, there remains much uncertainty in how Gamma will influence 92L's future track and intensity. If 92L develops faster, it will likely be on the northeastern side of the guidance. However, a slow development will likely result in 92L begin on the southwestern side of the models. While it looks likely 92L gets into the Gulf of Mexico during the middle of part of the week, it remains uncertain where it will go thereafter. Regardless, 92L may bring additional moisture and possibly some heavy rainfall to the Keys and South Florida during mid-week.



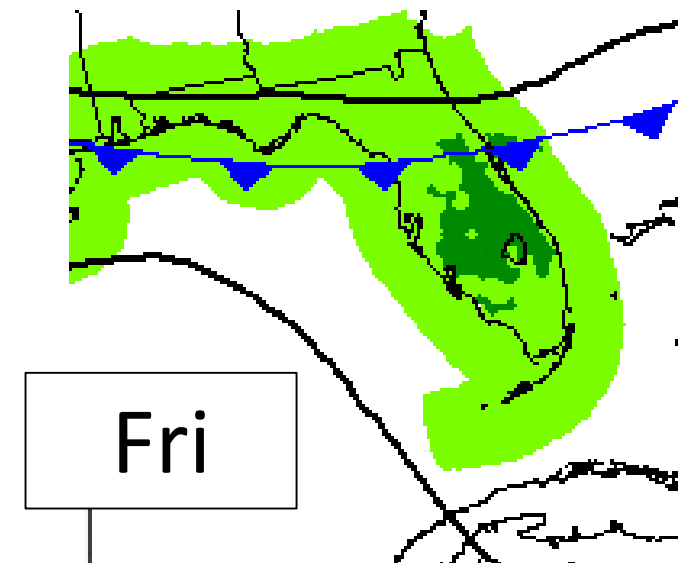
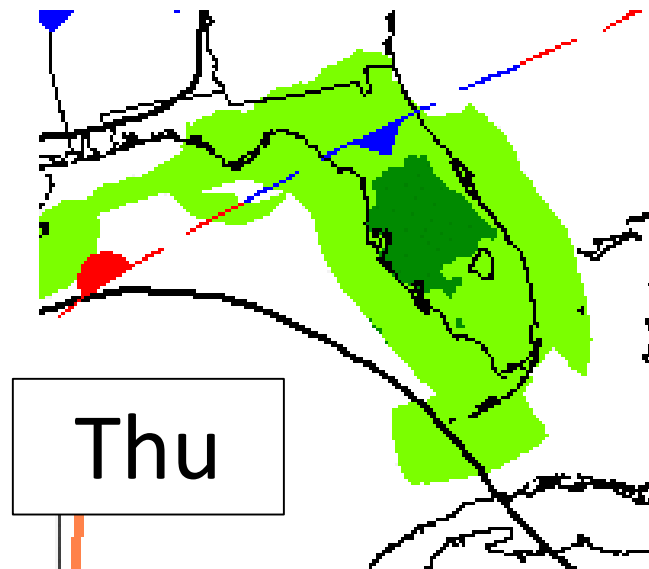
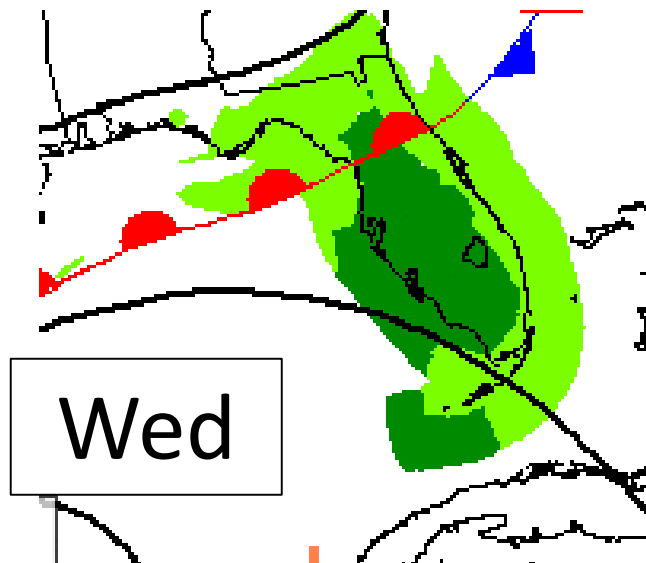
Understanding WPC Excessive Rainfall Risk Categories

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	NO Flash Flooding	NO Flash Flooding	NO Flash Flooding
 WEATHER PREDICTION CENTER				

- Some flash flooding will be possible over the weekend from a stalled front that slowly lifts northward this weekend.
- A low-end flash flood threat may continue into next week across the Treasure Coast and Southeast Florida where very heavy rain has fallen over the past few days.



Fronts Won't Budge from Florida, Continued High Rain Chances Possible





Flood Watch in Effect

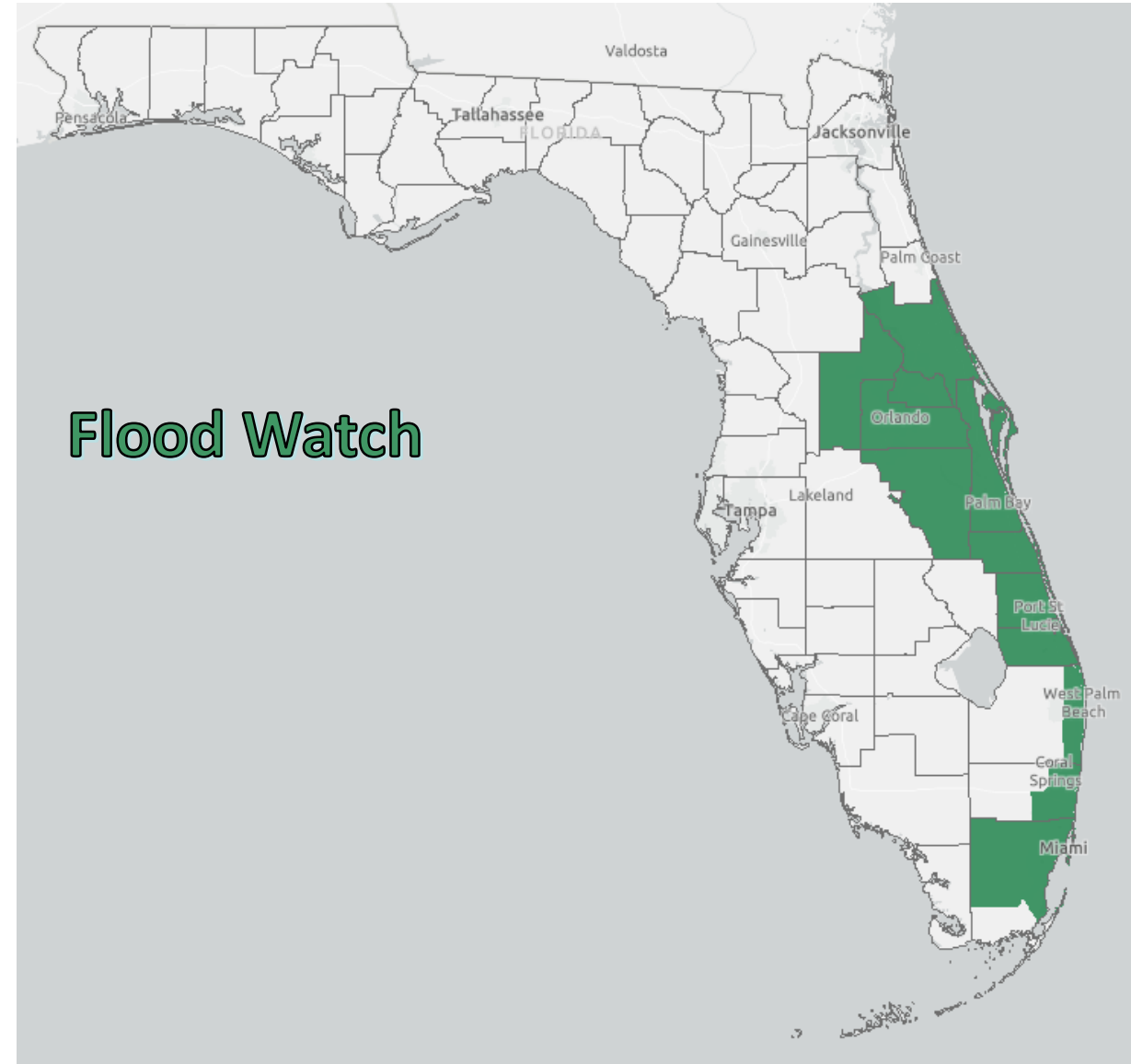
Counties: All of Region 5, coastal/metro Palm Beach, coastal/metro Broward, coastal/metro/inland Miami-Dade

Through early Monday morning for Region 5
Through Sunday evening for Palm Beach, Broward, and Miami-Dade Counties

An additional 2-4" of rain is expected with localized totals of 6-8" possible.

Click the links below for more information:

[NWS Melbourne](#) | [NWS Miami](#)



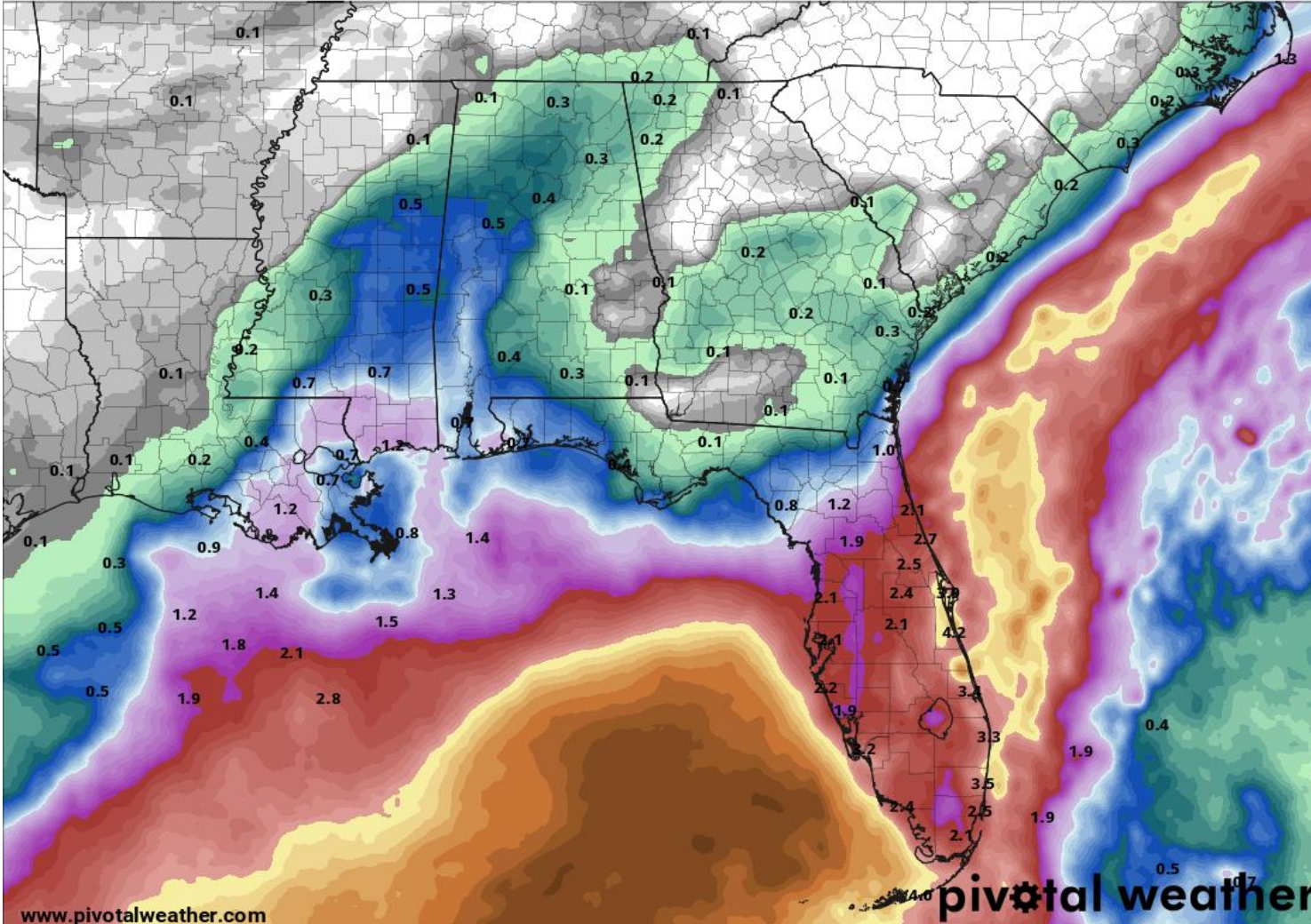


Rainfall Totals Next 7 Days

7-Day Precipitation (in)

Ending Saturday, Oct. 10, 2020 at 8 a.m. EDT

Init: Sat 2020-10-03 12z WPC



- Little to no rainfall across the Panhandle and western Big Bend over the next week.
- Heavy rainfall is expected in the Peninsula from this weekend into early next week.
- A widespread 2-5" expected, locally 6-10"+.
- About 1" or less is expected in the eastern Big Bend and Northeast Florida



Tropical Weather Outlook

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



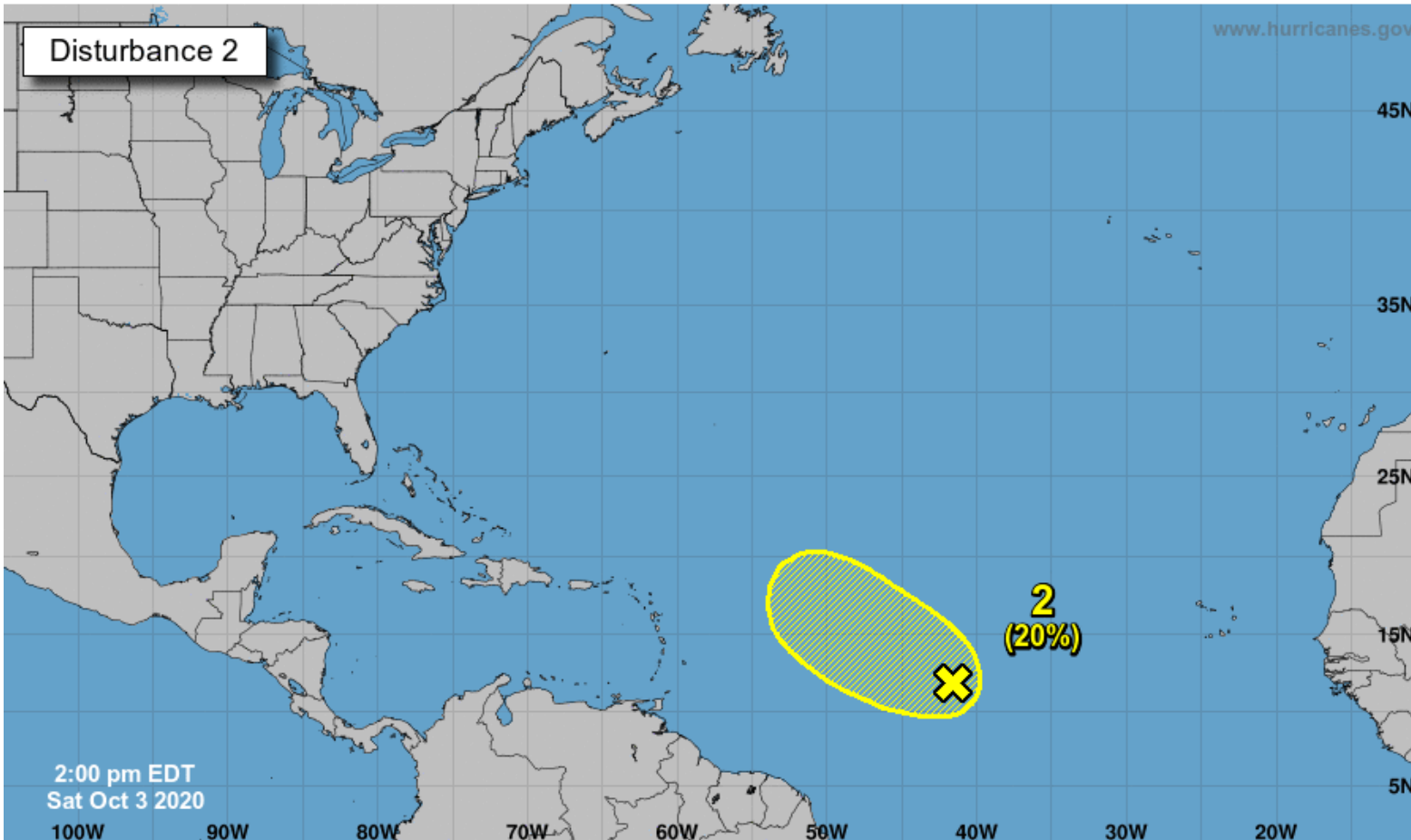
Five-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida



www.hurricanes.gov

Disturbance 2



2:00 pm EDT
Sat Oct 3 2020

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

A tropical wave located over the central tropical Atlantic is producing disorganized showers and thunderstorms.

This system is expected to move toward the west-northwest or northwest at 10 to 15 mph, and some 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...20%**

***Formation chance through 5 days...low...20%**



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
Sat Oct 3 2020

100W 90W 80W 70W 60W 50W 40W 30W 20W

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

Tropical or Sub-Tropical Cyclone: ○ Depression ○ Storm ○ Hurricane

⊗ Post-Tropical Cyclone or Remnants

An area of disorganized showers and thunderstorms over the central Atlantic more than 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 too 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 made landfall around mid-day on the Yucatan Peninsula and is now inland over the northern Yucatan.
- The center of Tropical Storm Gamma is located about 35 miles north-northwest of Tulum, Mexico, moving northwest at 8 mph.
- Maximum sustained winds are near 65 mph. Gamma will weaken as long as it remains over land. Restrengthening is forecast once it emerges into the Gulf on Sunday.
- Gamma will then turn west or southwest early next week over the western Gulf of Mexico.

Invest 92L (Caribbean Sea)

- A tropical wave over the Caribbean Sea will quickly move west-northwestward over the next few days.
- Conditions are forecast to become favorable for development early next week over the western Caribbean Sea or southern Gulf of Mexico.
- This system has a 30% (low) chance of formation during the next 48 hours, but a 60% (medium) chance during days 3-5 early next week.
- If this system develops faster than currently forecast, then the system could be closer to Cuba early next week. If it takes longer to develop, it could be closer to the Yucatan. Much uncertainty remains beyond this point.

Central Tropical Atlantic Wave

- A tropical wave about midway between the Lesser Antilles and the Cabo Verde Islands has a couple days to develop before conditions become unfavorable.
- This system has a 20% (low) chance of formation.

Central Atlantic Low

- A disorganized area of low pressure over the central Atlantic has a couple days to develop before it also encounter 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 create a several day stretch of high rain chances across the Florida Peninsula.
- Flood Watches are in effect across East Central and Southeast Florida. An additional 2-4" of rainfall with locally 6-8"+ is expected through the weekend into next week.
- The heavy rainfall and flood threat will spread northward into Central Florida today and Northeast Florida tonight into Sunday.
- Swells from Gamma could impact the Gulf Coast beaches this week, resulting in dangerous rip currents.
- **Invest 92L should be monitored.**
- While it's too early to determine if this wave will have direct impacts, moisture from the wave could make its way into South Florida and the Keys during the middle of next week. This could result in increased potential for heavy rainfall and flash flooding.
- Regardless, it's likely that 92L will move into the Gulf of Mexico next week, but its forecast beyond then remains highly uncertain due to possible influences from cold fronts and Tropical Storm Gamma.
- **The other two systems in the Atlantic do not pose a threat to Florida.**

The next briefing packet will be issued 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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