

# **TROPICAL UPDATE**

**3 PM EDT**

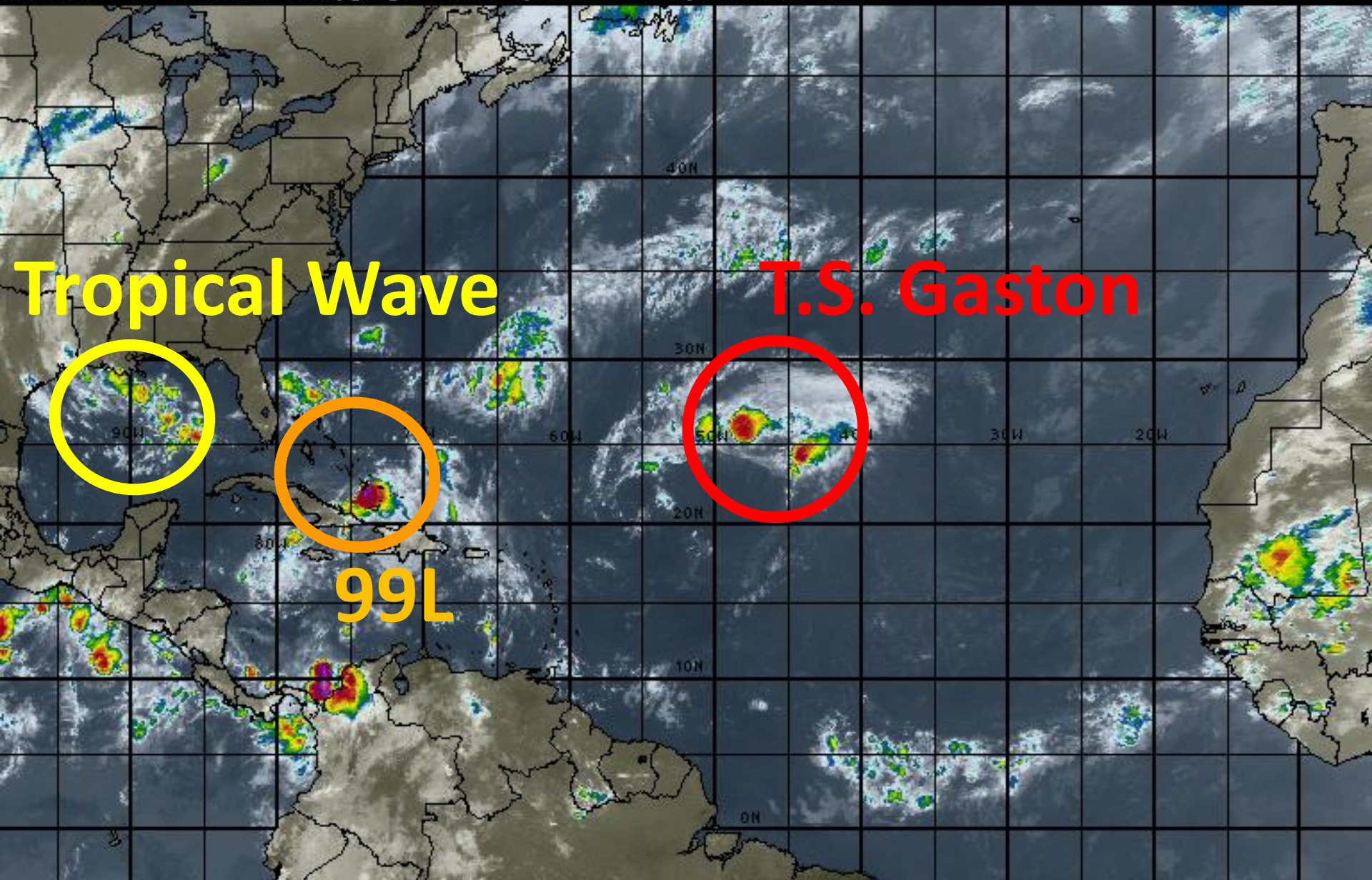
**Friday, August 26, 2016**

**Invest 99L (60%) & Tropical Storm  
Gaston**

**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.nhc.noaa.gov](http://www.nhc.noaa.gov).**

# Atlantic Basin Satellite Image

15:00 26-AUG-2016 GMT ©Copyright WSI Corporation <http://www.wsi.com>







# Two-Day Graphical Tropical Weather Outlook

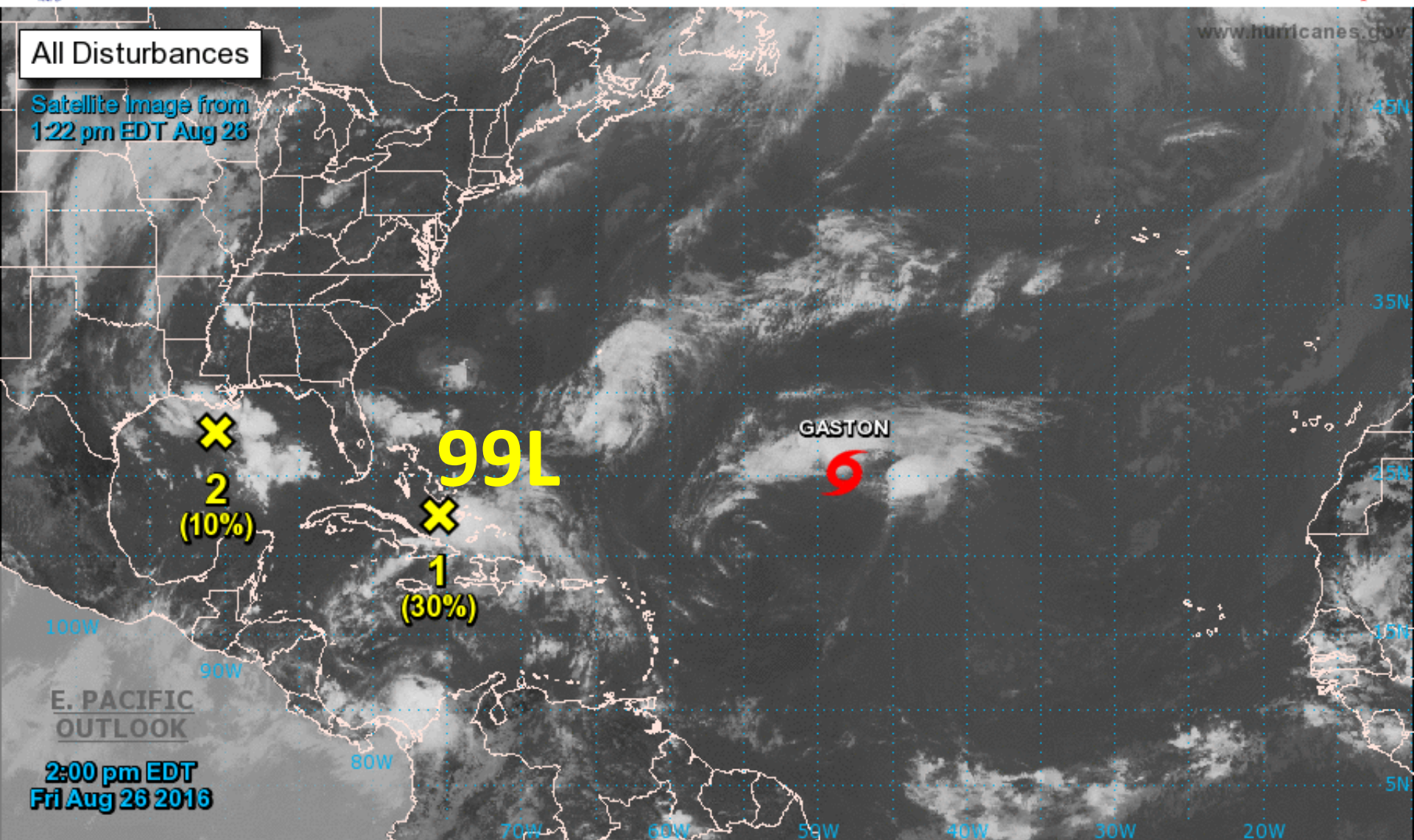
National Hurricane Center Miami, Florida



www.hurricanes.gov

All Disturbances

Satellite Image from  
1:22 pm EDT Aug 26



2:00 pm EDT  
Fri Aug 26 2016

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

Tropical or Sub-Tropical Cyclone: Depression Storm Hurricane

Post-Tropical Cyclone Remnants





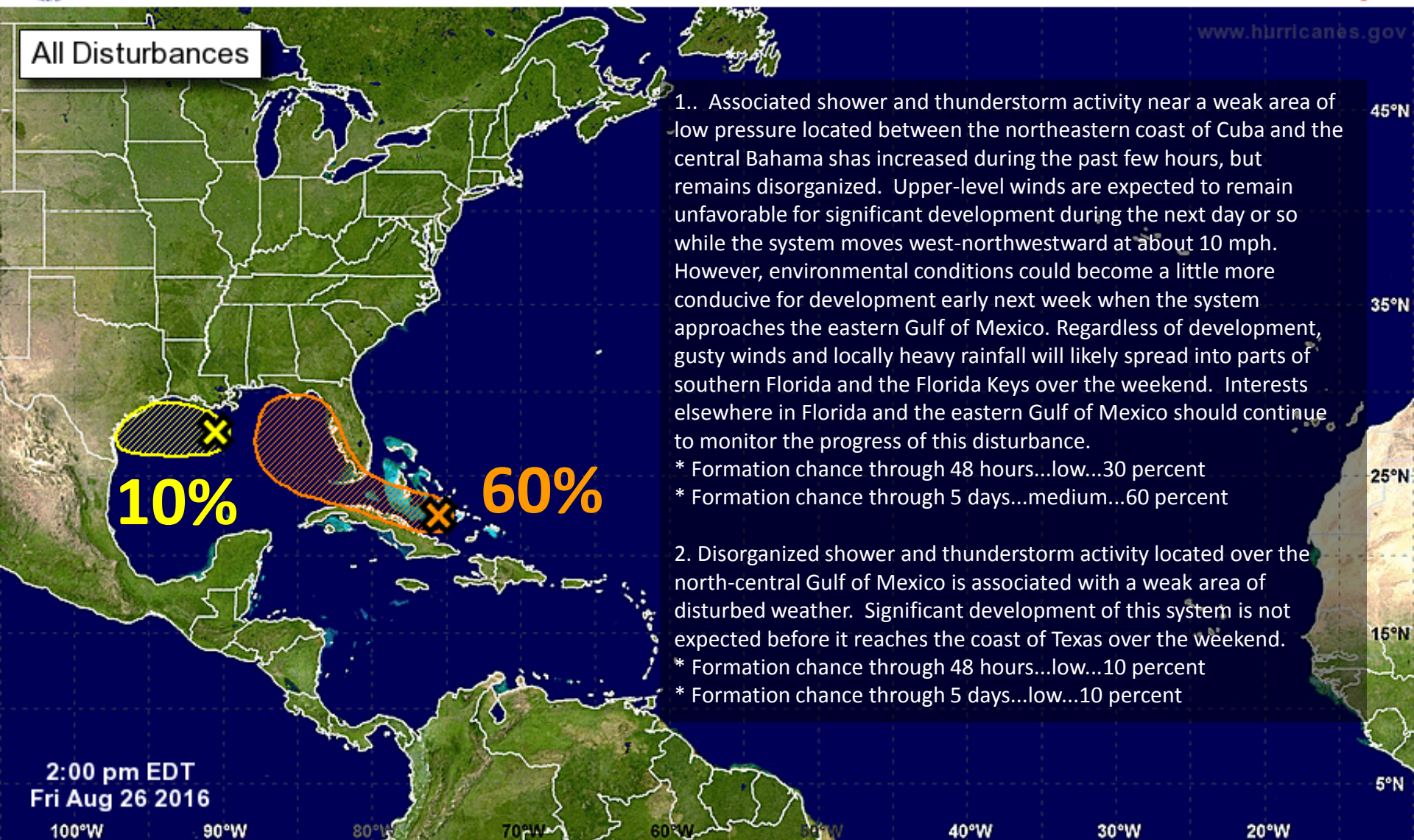
# Five-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida



www.hurricanes.gov

All Disturbances



1.. Associated shower and thunderstorm activity near a weak area of low pressure located between the northeastern coast of Cuba and the central Bahama shas increased during the past few hours, but remains disorganized. Upper-level winds are expected to remain unfavorable for significant development during the next day or so while the system moves west-northwestward at about 10 mph. However, environmental conditions could become a little more conducive for development early next week when the system approaches the eastern Gulf of Mexico. Regardless of development, gusty winds and locally heavy rainfall will likely spread into parts of southern Florida and the Florida Keys over the weekend. Interests elsewhere in Florida and the eastern Gulf of Mexico should continue to monitor the progress of this disturbance.

\* Formation chance through 48 hours...low...30 percent

\* Formation chance through 5 days...medium...60 percent

2. Disorganized shower and thunderstorm activity located over the north-central Gulf of Mexico is associated with a weak area of disturbed weather. Significant development of this system is not expected before it reaches the coast of Texas over the weekend.

\* Formation chance through 48 hours...low...10 percent

\* Formation chance through 5 days...low...10 percent

Tropical Cyclone Formation Potential for the Five-Day Period Ending at 2:00 pm EDT Wed Aug 31 2016

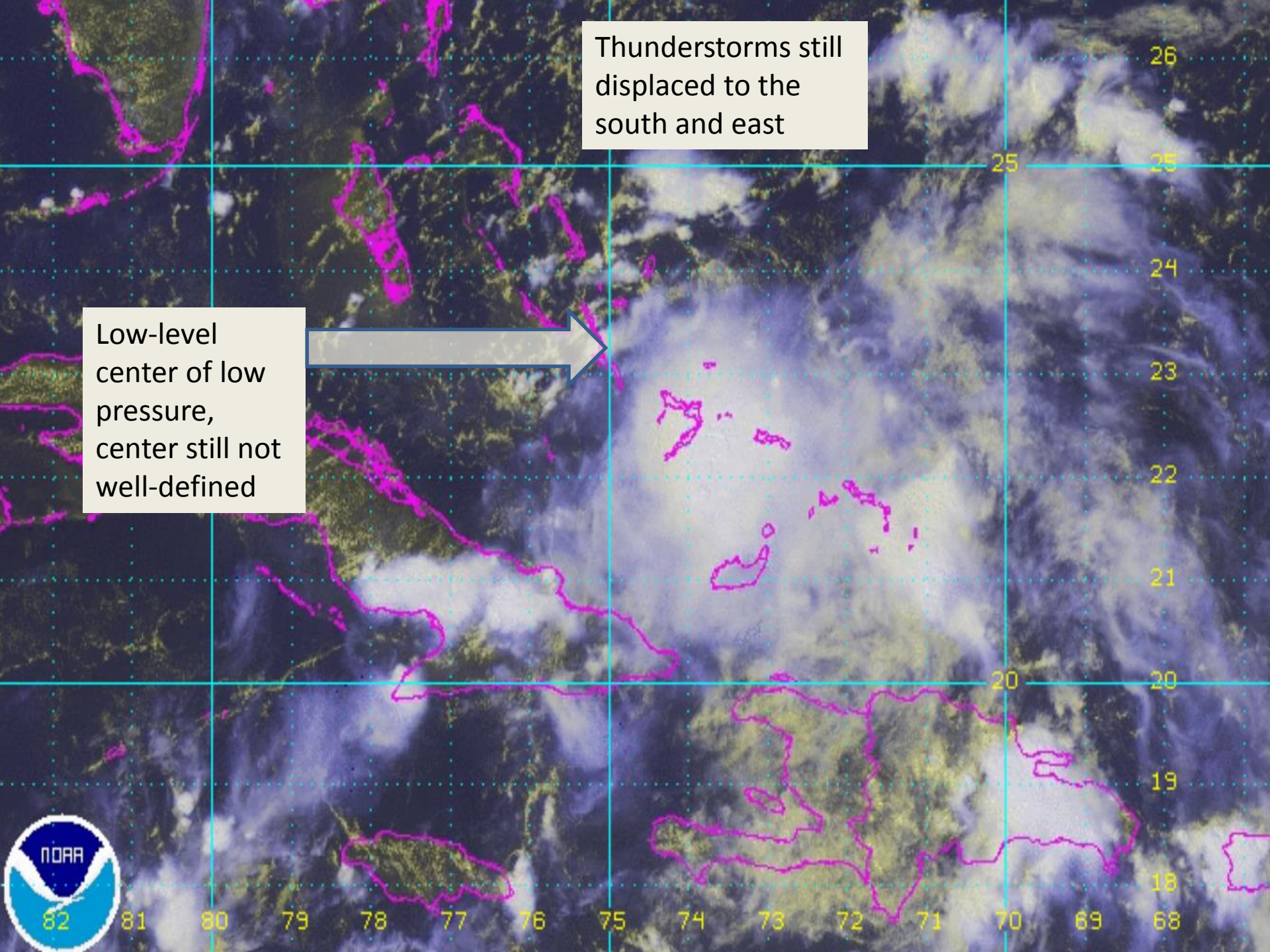
Chance of Cyclone Formation in Five Days:   Low < 40%   Medium 40-60%   High > 60%

X indicates current disturbance location; shading indicates potential formation area.



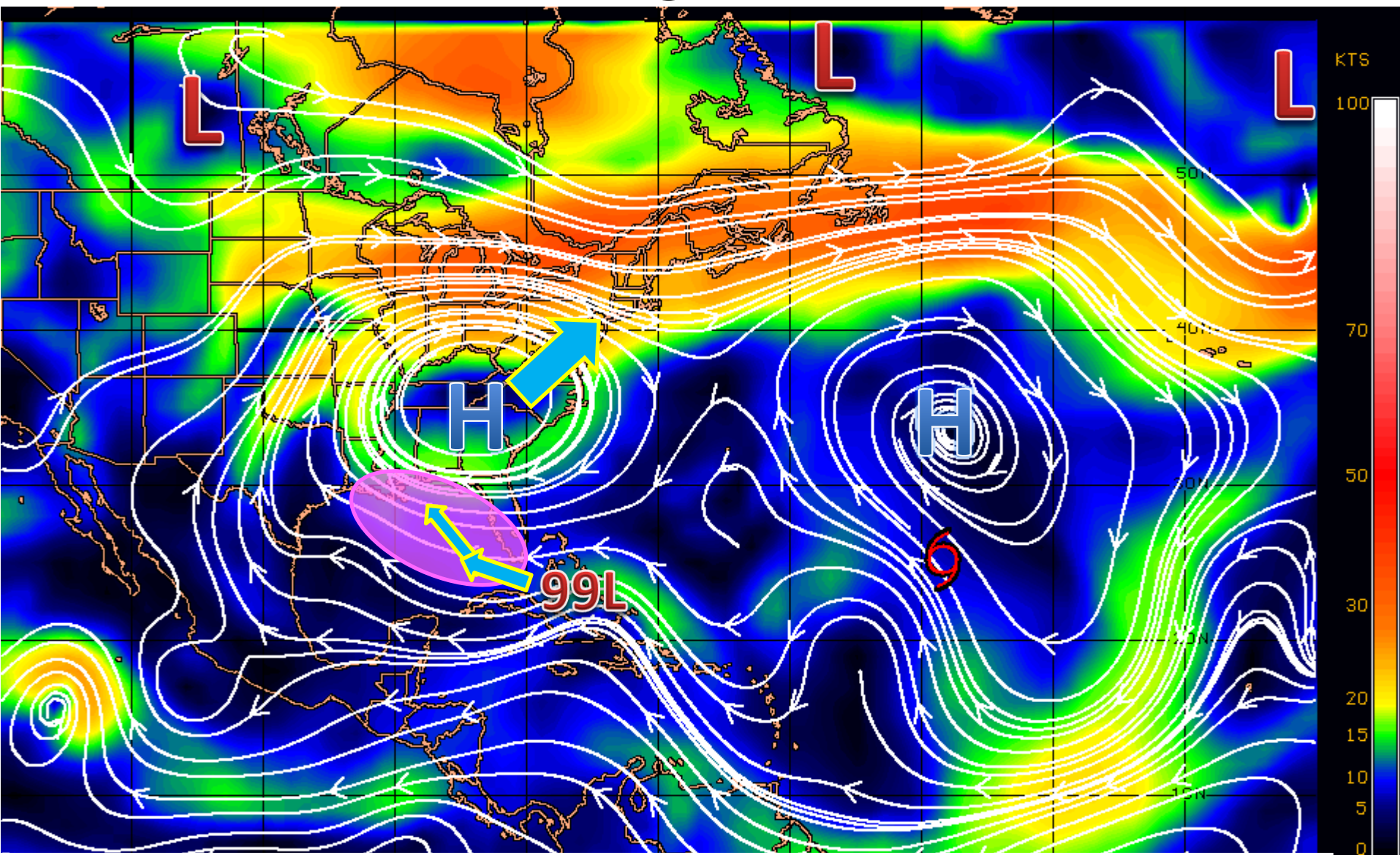
Thunderstorms still  
displaced to the  
south and east

Low-level  
center of low  
pressure,  
center still not  
well-defined



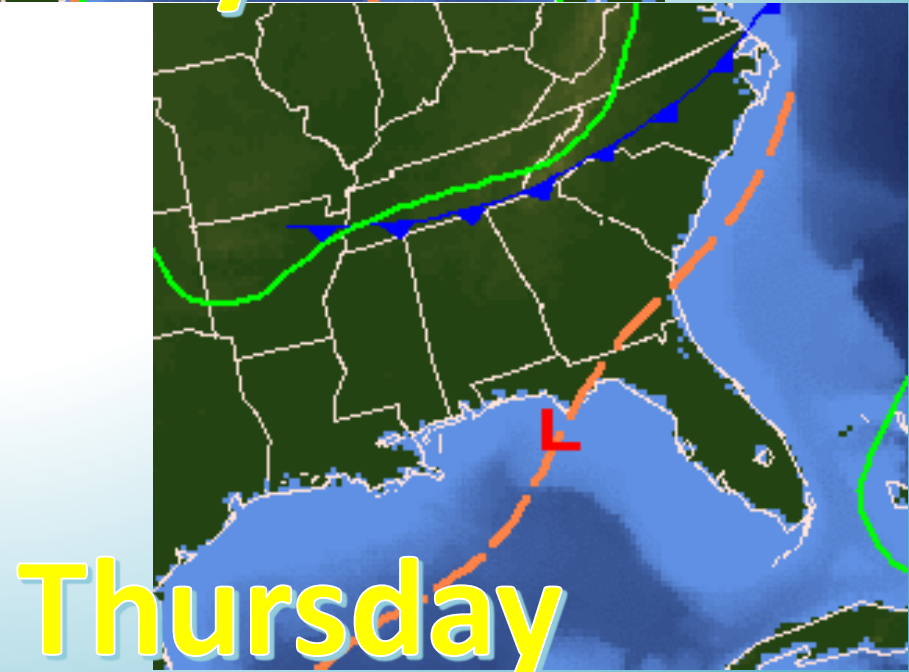
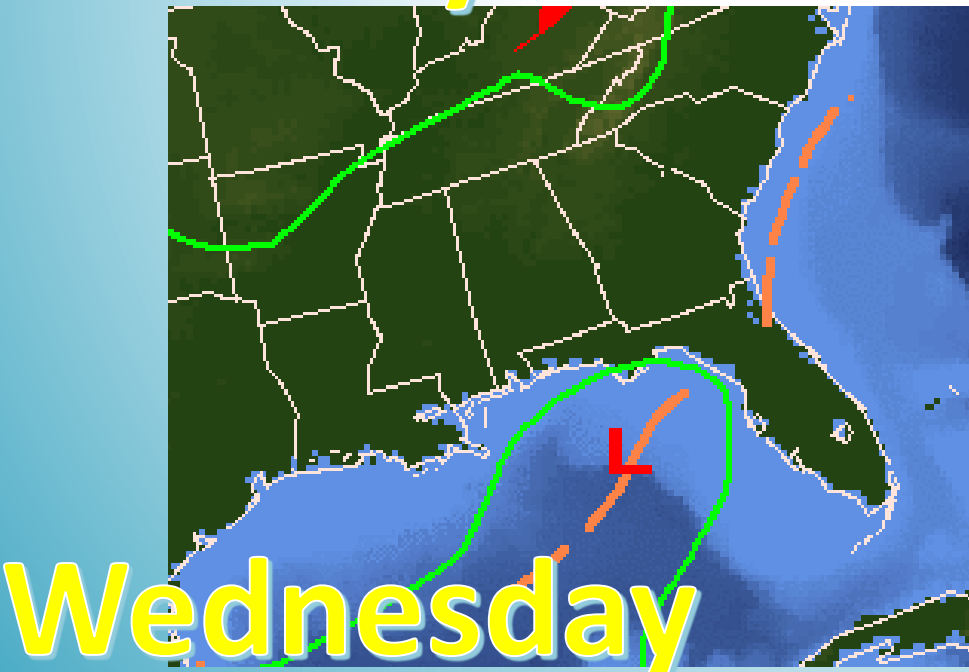
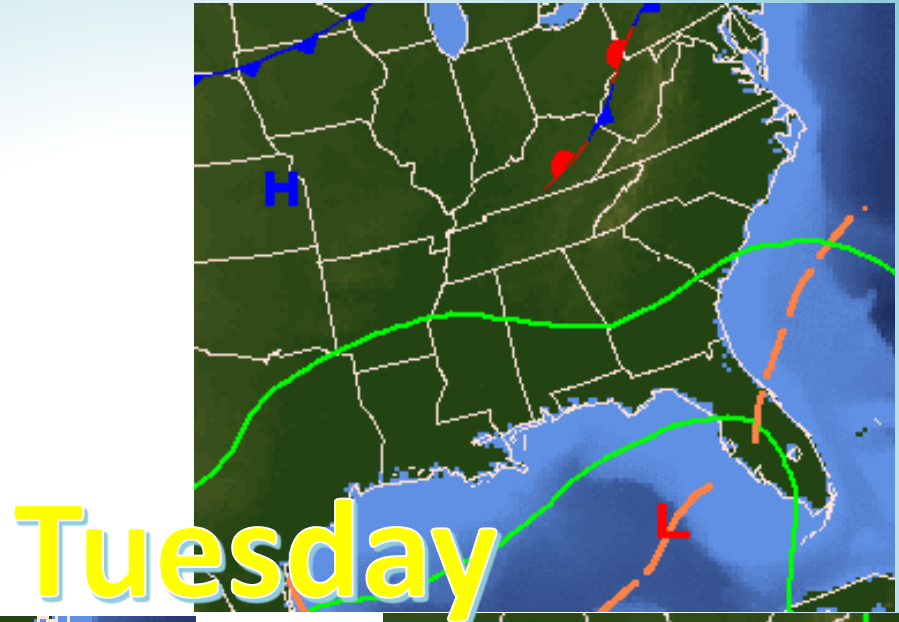
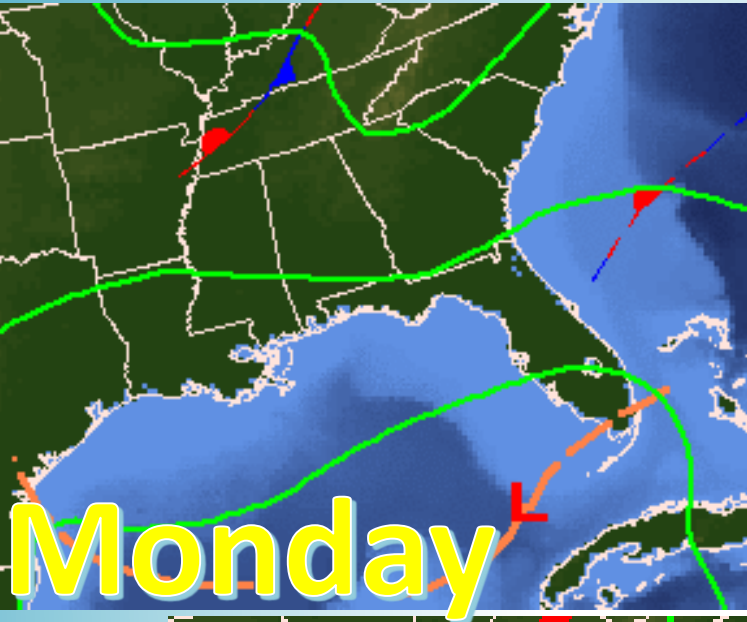


# Steering Currents



99L is likely to continue moving west-northwest around high pressure located over the southeastern U.S. This high will shift gradually to the northeast over the next few days and will establish a southeasterly wind pattern over and around Florida which will allow 99L to move more northwest and eventually north once it enters the Gulf of Mexico.

# Forecast Weather Maps

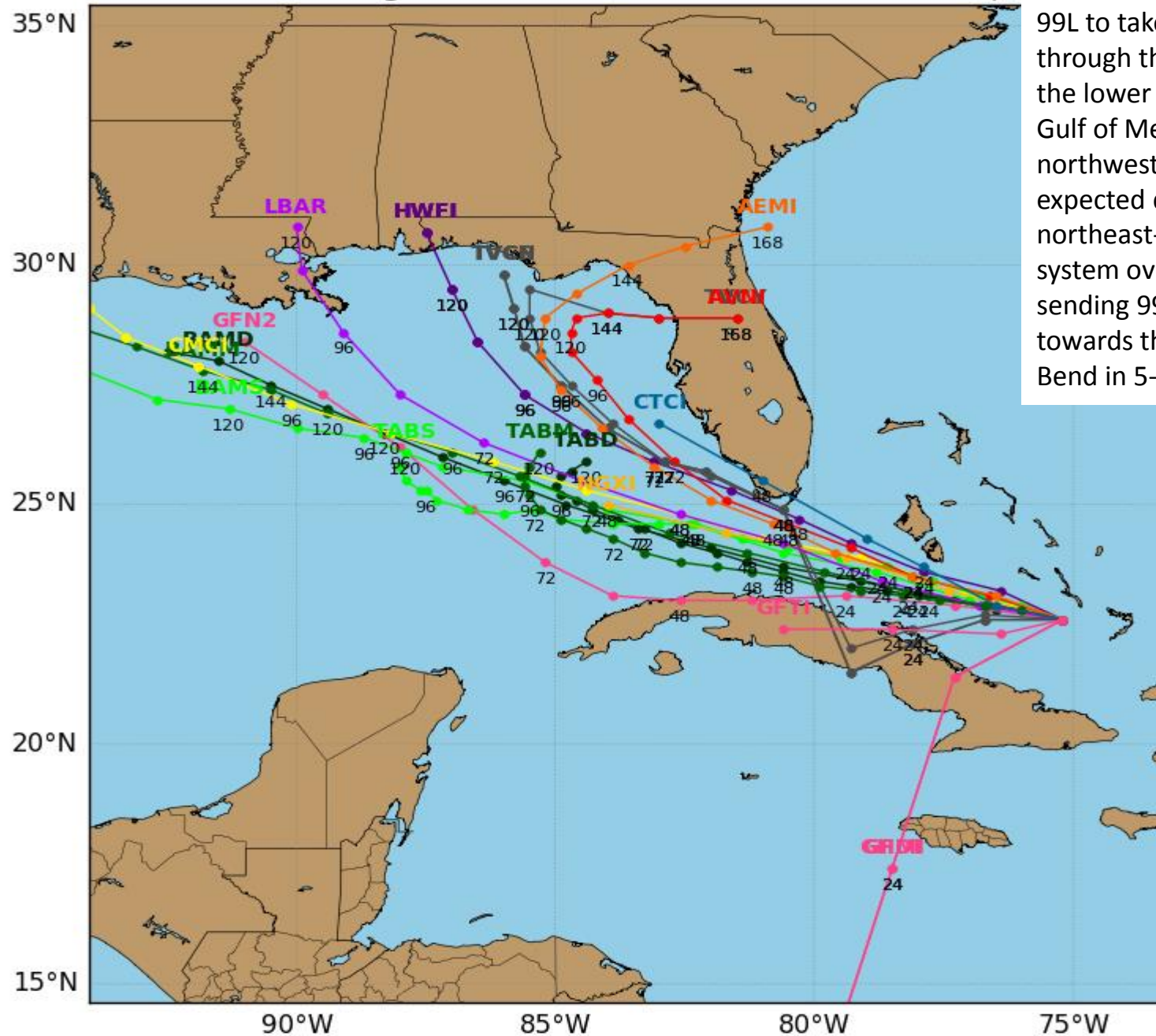




# Invest 99L Model Track Guidance

Initialized at 18z Aug 26 2016

Levi Cowan - tropic



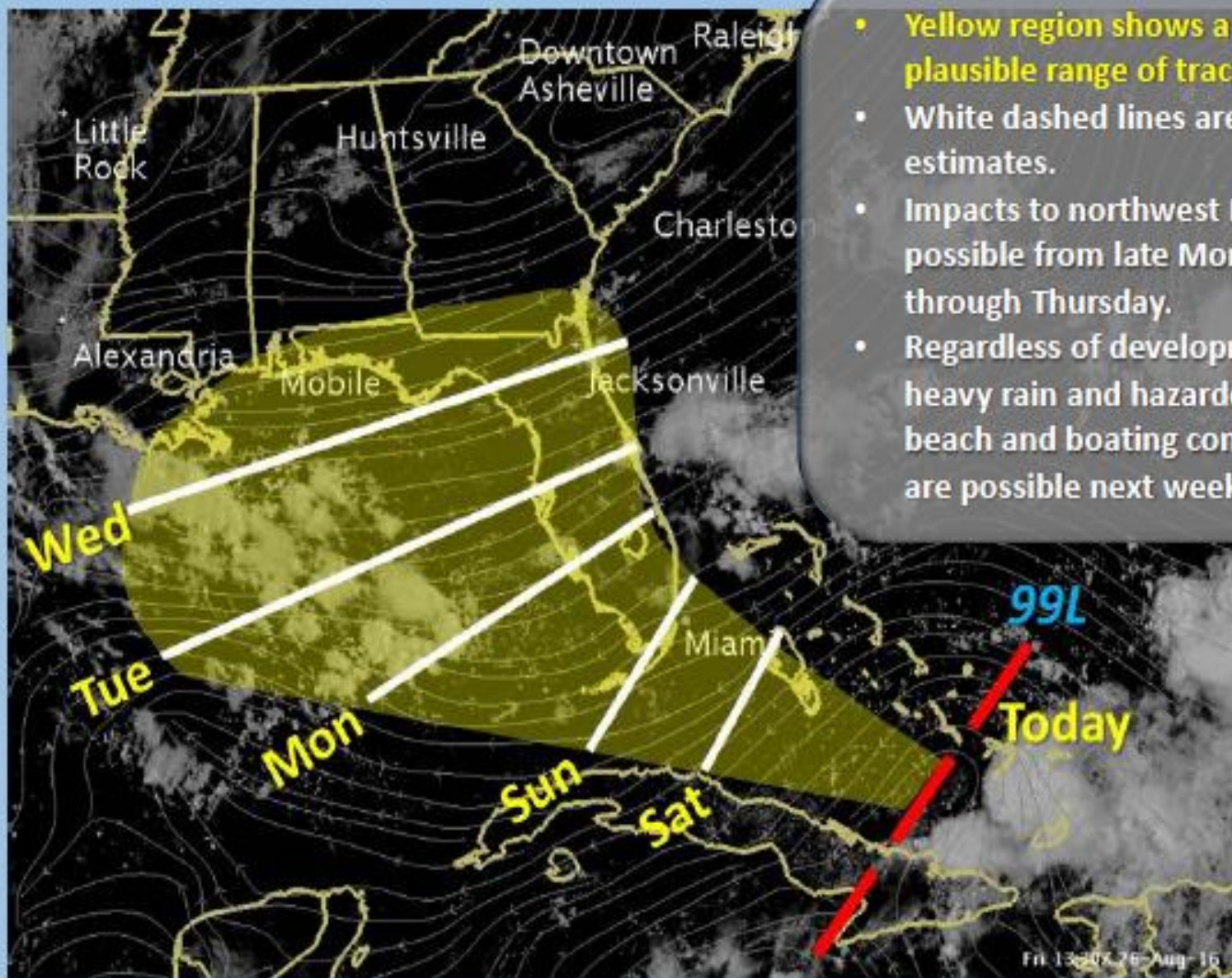
Forecast tracks are generally consistent from this morning, showing 99L to take a west-northwest track through the Florida Straits or through the lower Florida Keys and into the Gulf of Mexico Sunday or Monday. A northwest to north turn is then expected due to a weakening and northeast-moving high pressure system over the Mid-Atlantic states, sending 99L on a track potentially towards the Florida Panhandle or Big Bend in 5-6 days.





# Invest 99L: The Forecast Possibilities

National Weather Service, Tallahassee, FL



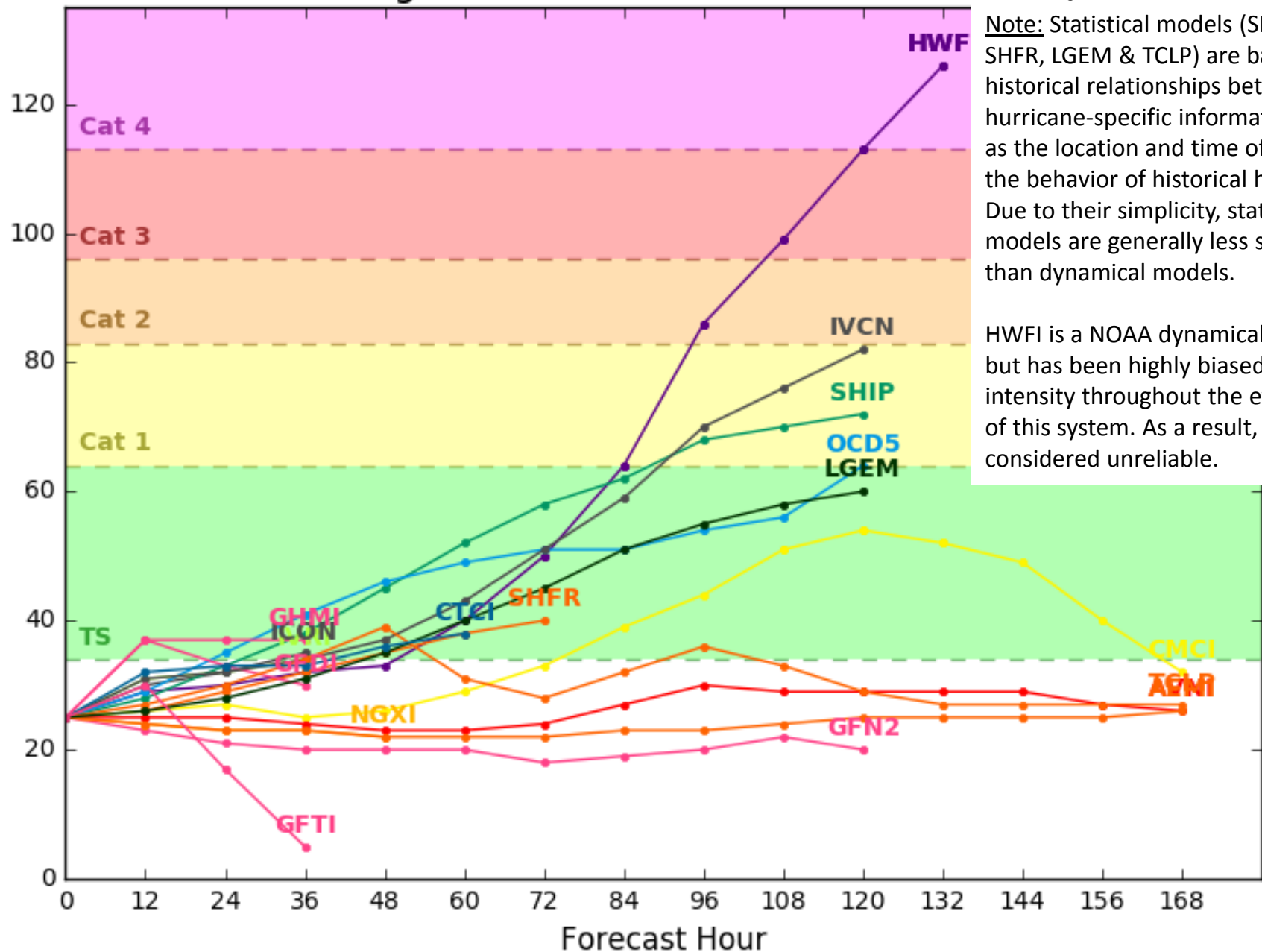
- Yellow region shows a plausible range of tracks.
- White dashed lines are timing estimates.
- Impacts to northwest FL possible from late Monday through Thursday.
- Regardless of development, heavy rain and hazardous beach and boating conditions are possible next week.

# Invest 99L Model Intensity Guidance

Initialized at 18z Aug 26 2016

Levi Cowan - tropicaltidbits.com

Wind Speed (kt)

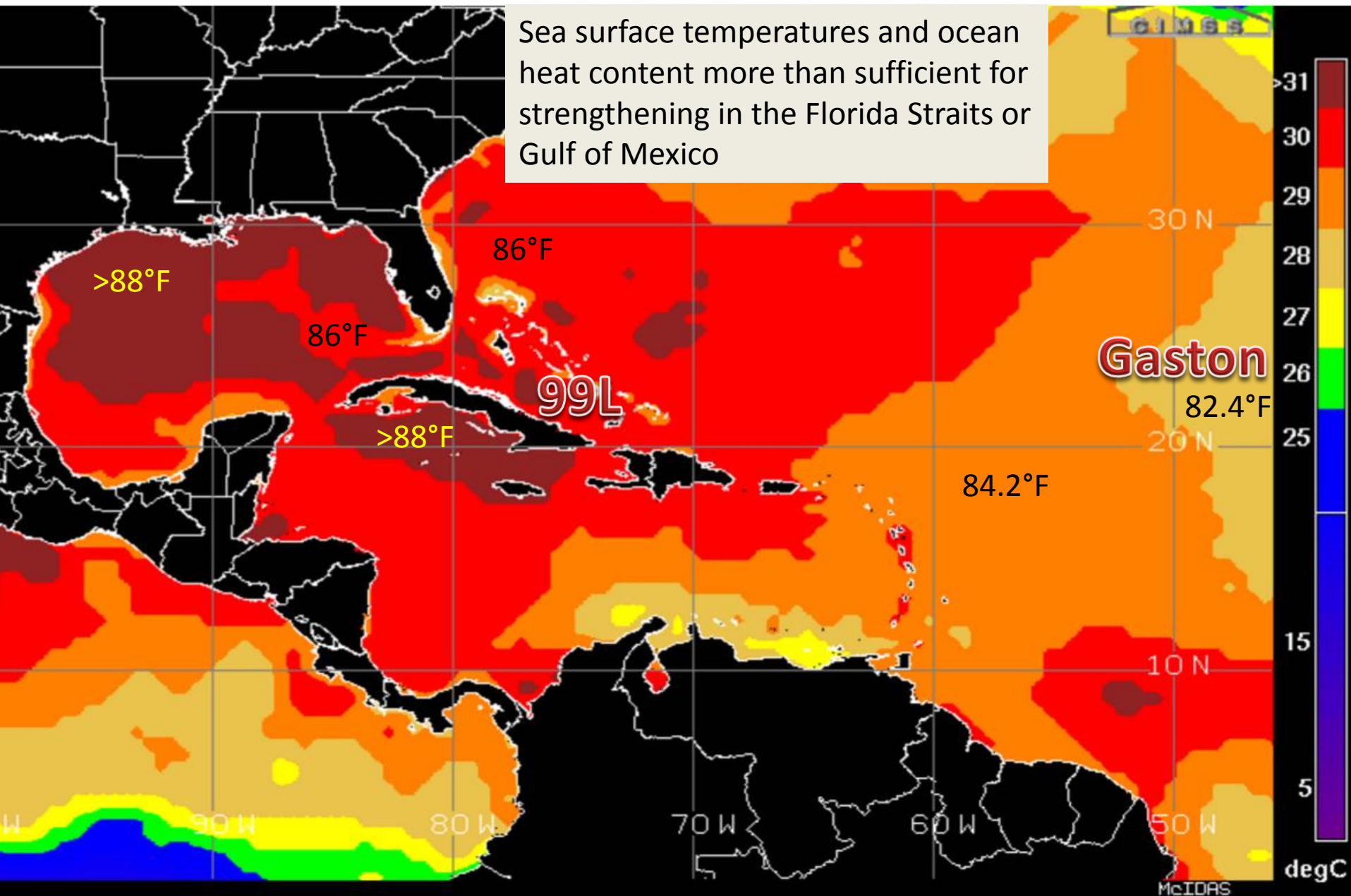


Note: Statistical models (SHF5, SHIP, SHFR, LGEM & TCLP) are based on historical relationships between hurricane-specific information, such as the location and time of year, and the behavior of historical hurricanes. Due to their simplicity, statistical models are generally less skillful than dynamical models.

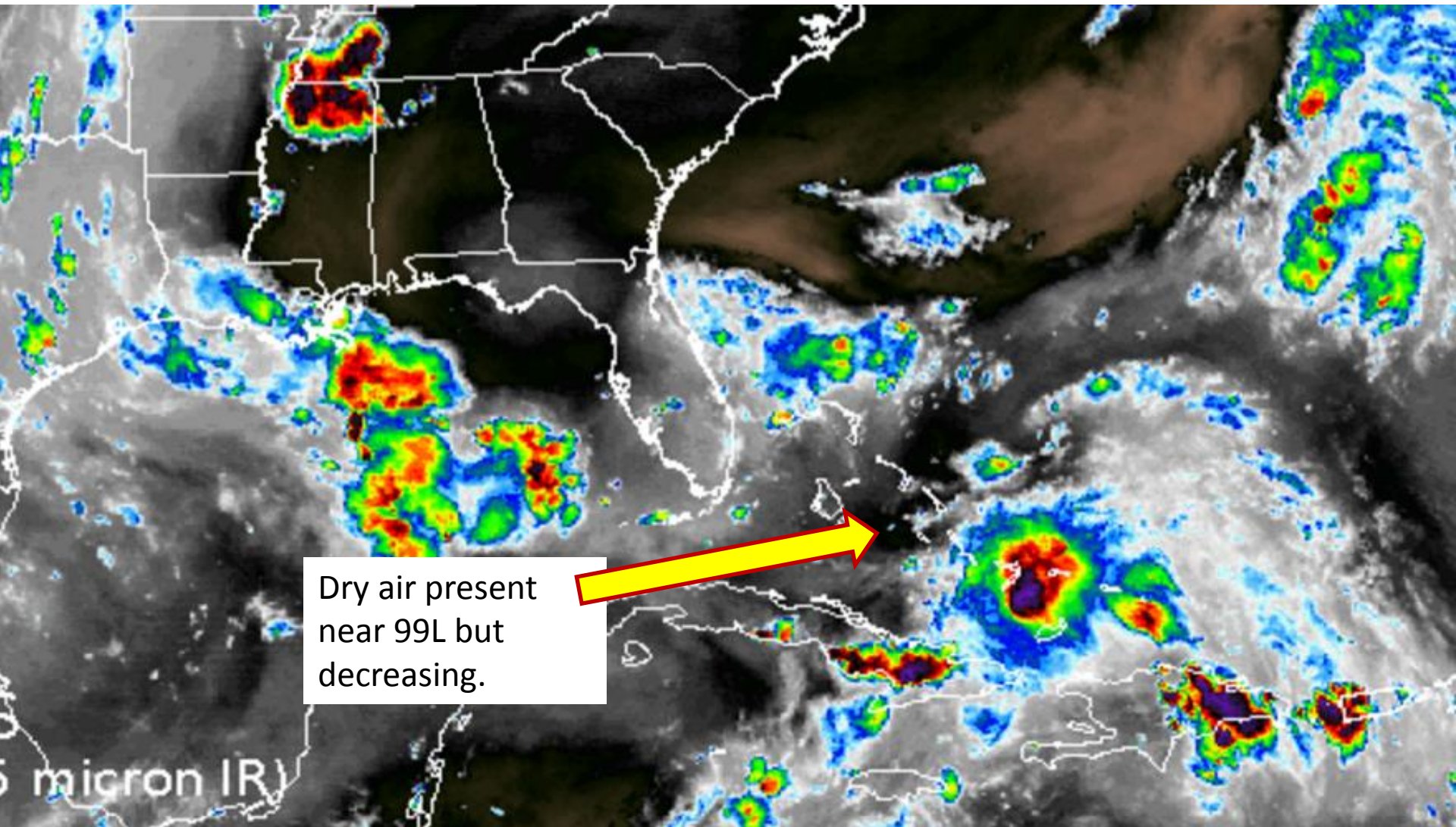
HWFI is a NOAA dynamical model, but has been highly biased on intensity throughout the evolution of this system. As a result, it is considered unreliable.



# Sea Surface Temperatures Near 99L



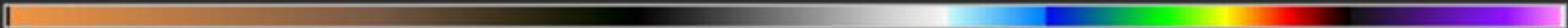
# Invest 99L Water Vapor Image



Dry air present  
near 99L but  
decreasing.

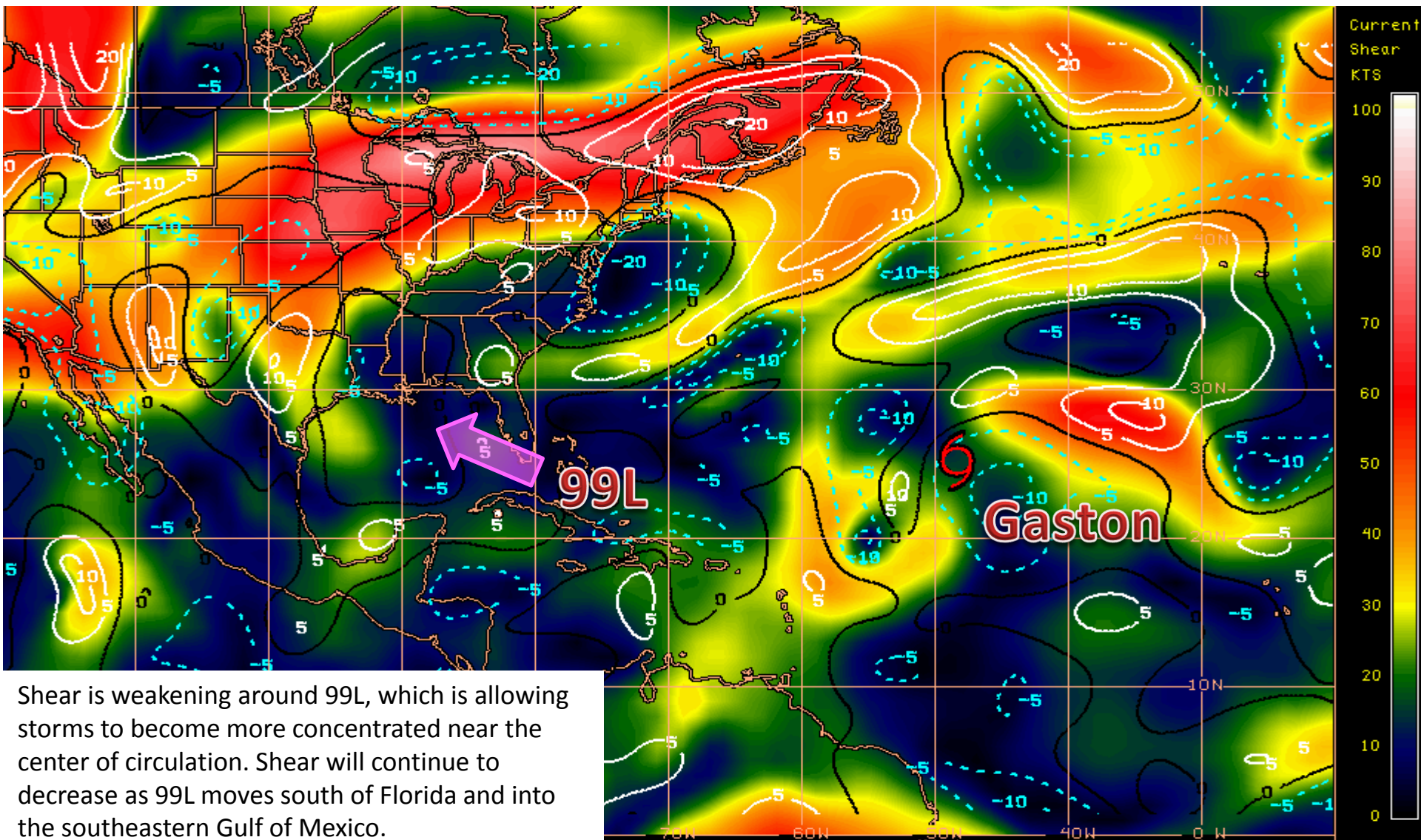
Dry

Saturated





# Current Wind Shear (shaded) and Shear Tendency (contours)



Shear Tendency (KTS) Over Past 24 Hours: Increasing — Decreasing ----

GOES-EAST 24 HOUR WIND SHEAR TENDENCY PRODUCT

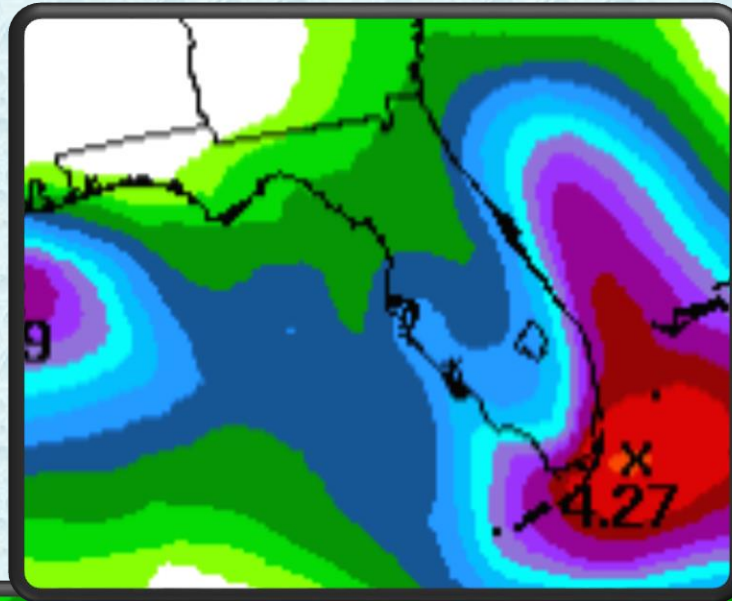
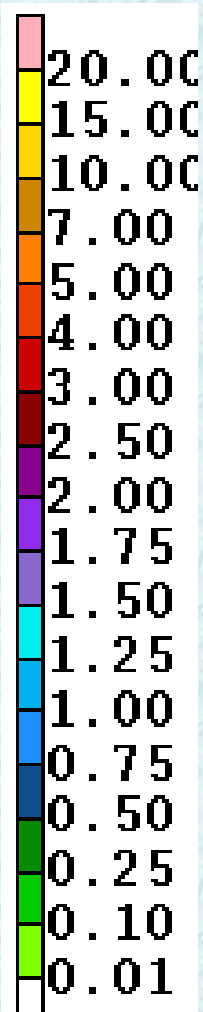
1500 UTC

26AUG16

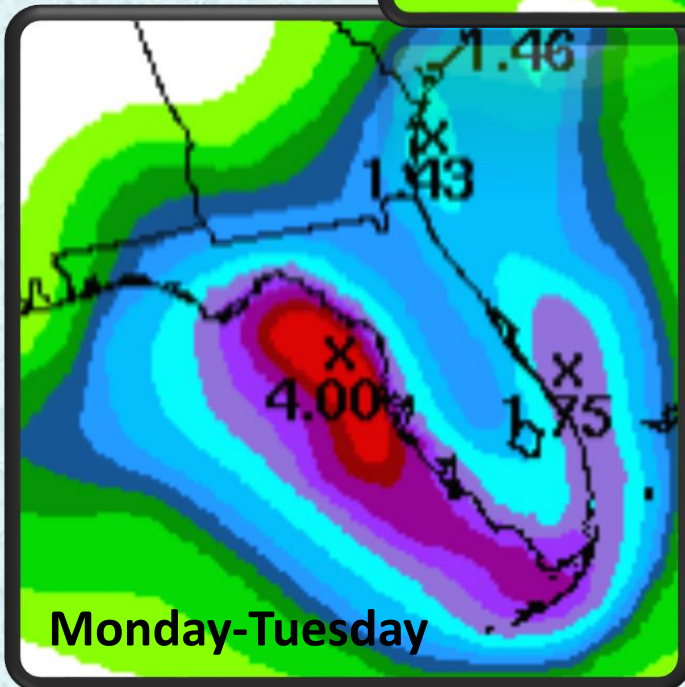
UW-CIMSS

McIDAS

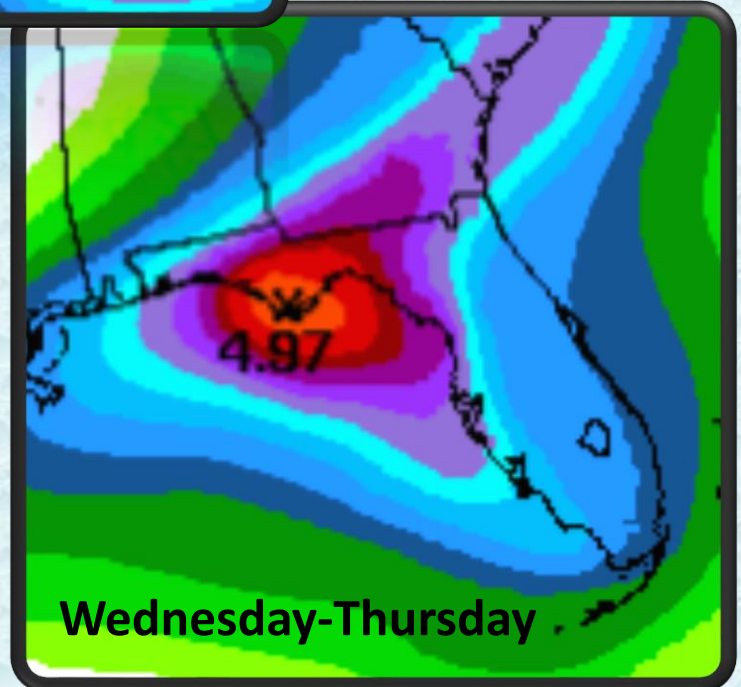
# ***Current Rainfall Forecast***



**Friday-Sunday**



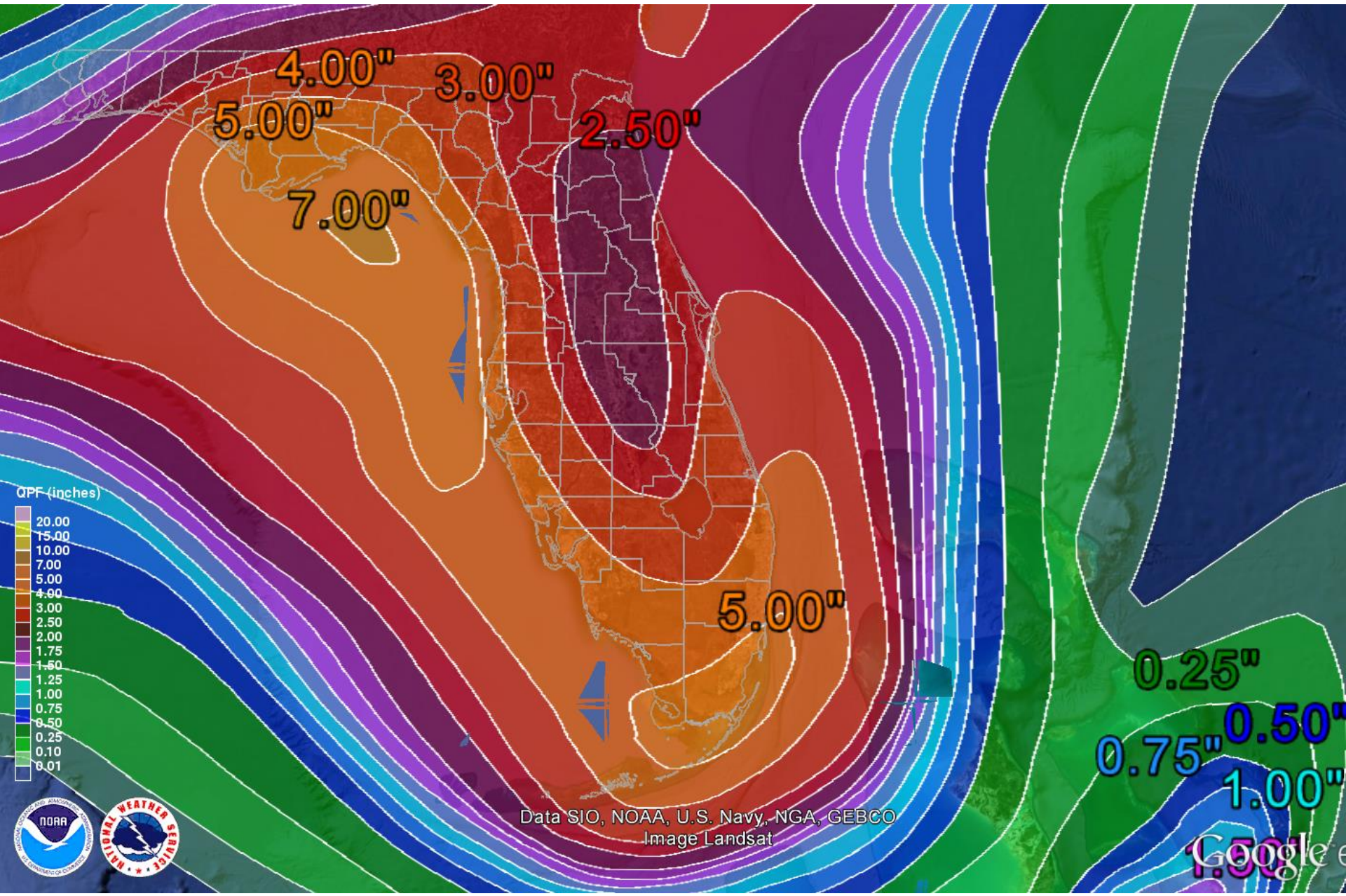
**Monday-Tuesday**



**Wednesday-Thursday**



# Forecast Rainfall Total – Next 7 Days





# Tropical Storm Gaston

11 AM EDT Fri Aug 26/2016

Position 25.2 N 48.3 W

Maximum Winds 65 mph

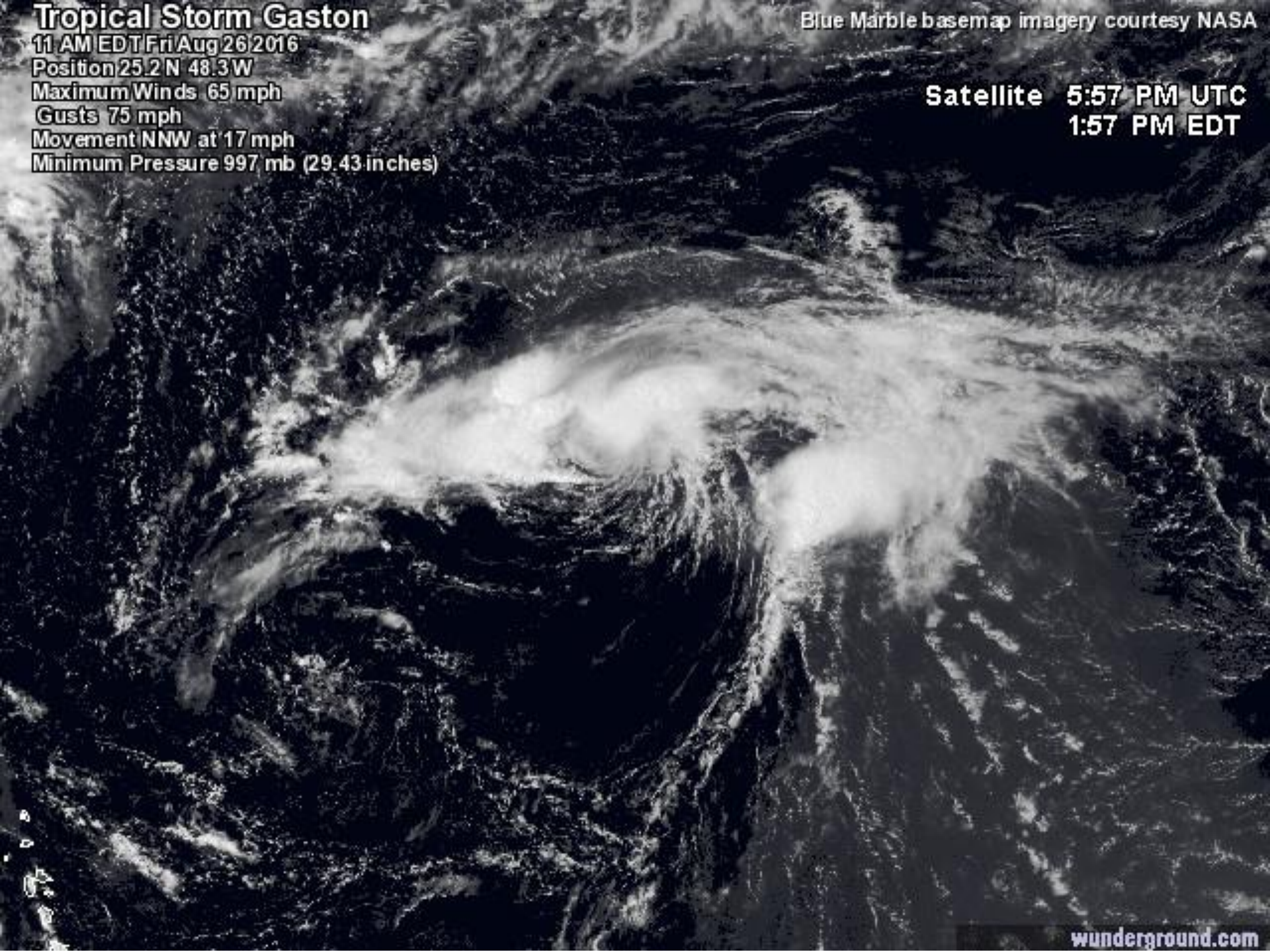
Gusts 75 mph

Movement NNW at 17 mph

Minimum Pressure 997 mb (29.43 inches)

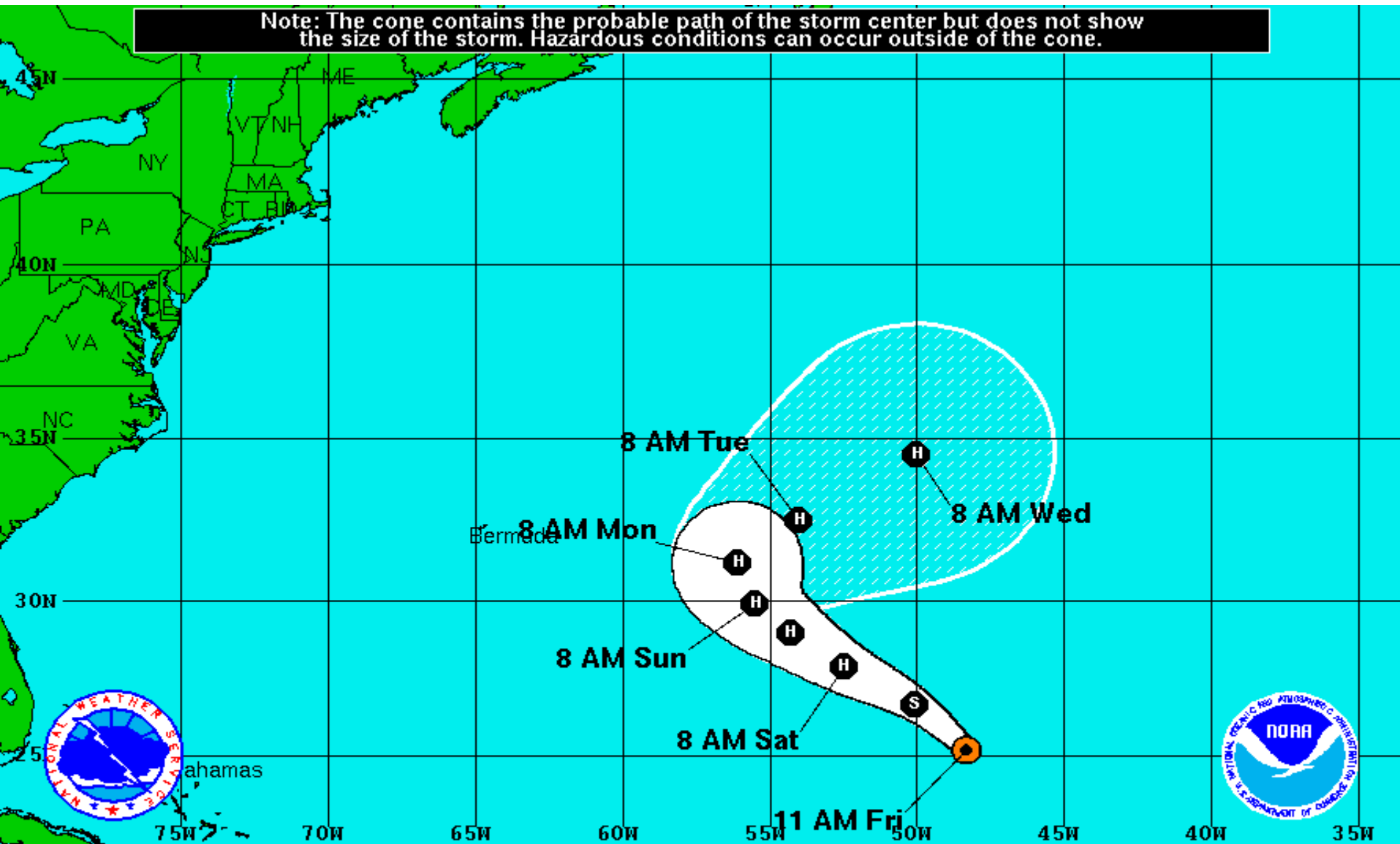
Blue Marble basemap imagery courtesy NASA

Satellite 5:57 PM UTC  
1:57 PM EDT








Note: The cone contains the probable path of the storm center but does not show the size of the storm. Hazardous conditions can occur outside of the cone.



**Tropical Storm Gaston**  
 Friday August 26, 2016  
 11 AM EDT Advisory 16  
 NWS National Hurricane Center

**Current Information:**   
 Center Location 25.2 N 48.3 W  
 Max Sustained Wind 65 mph  
 Movement NNW at 17 mph

**Forecast Positions:**  
 Tropical Cyclone  Post-Tropical  
 Sustained Winds: D < 39 mph  
 S 39-73 mph H 74-110 mph M > 110mph

**Potential Track Area:**  
 Day 1-3  Day 4-5

**Watches:**  
 Hurricane  Trop.Storm

**Warnings:**  
 Hurricane  Trop.Storm

## Summary:

- An area of low pressure associated with a tropical wave located between the central Bahamas and eastern Cuba, designated as Invest Area 99L, remains disorganized with showers and thunderstorms displaced to the southeast of the apparent center of low pressure.
- However, dry air and wind shear over the low is beginning to decrease, and atmospheric conditions in the Florida Straits and southeastern Gulf of Mexico are more favorable for development.
- As a result, the system has a 30% (low) chance of development within 48 hours, and a 60% (medium) chance of development through the next two to five days.
- Computer track models coming into better agreement but still lack consistency, which is common with weak and developing systems.
- Most models now show 99L on a west-northwest track through the Florida Straits or through the Florida Keys and into the Gulf of Mexico Sunday or Monday. A turn to the northwest and north is then expected due to a weakening and northeast-moving high pressure system over the Mid-Atlantic states, sending 99L on a track paralleling the western Peninsula and potentially towards the Florida Panhandle or Big Bend in 5-6 days.
- **It is important not to focus on any specific model, but the trends and consistency of the models.**
- Also, there is still disagreement in the models regarding the possible intensity of 99L. A track closer to the Florida Peninsula would keep it weaker while a more westward track towards the central Gulf of Mexico could allow for more strengthening.
- We will continue to monitor the progress of this system for the possibility of tropical development and will have a better idea of where this system is headed and how strong it might be once it passes through the Florida Straits in 48-72 hours.
- The next name on the 2016 Atlantic Storm name list is Hermine (pronounced Er-meen).



- Elsewhere, Tropical Storm Gaston continues to move quickly northwest with maximum sustained winds near 65 mph.
- A slower forward movement is expected over the weekend, with a turn to the north and northeast early next week. Gaston is expected to again become a hurricane over the weekend.
- A small area of disorganized thunderstorms in the west-central Gulf of Mexico only has a 10% chance of development before moving inland over Texas this weekend.

### **Florida Outlook:**

- Regardless of development, it does appear that portions of South Florida and the Keys will have an increasing threat of heavy rainfall and rip currents this weekend. Gusty winds and isolated waterspouts cannot be ruled out, but are not considered a high risk at this time.
- Any impacts to the Florida Gulf Coast are contingent on the eventual track and strength of 99L.
- Any specific impacts are considered to be low confidence at this time but heavy rainfall and gusty winds will be possible Monday-Thursday of next week, which could cause flooding concerns given the saturated soil conditions.
- Models continue to struggle in forecasting both the possible track and intensity of this system so intense monitoring is recommended.
- Gaston does not pose a threat to Florida or the U.S.

Another briefing packet will be issued Saturday morning. For more information on this system, please visit the NHC website at [www.nhc.noaa.gov](http://www.nhc.noaa.gov)



# TROPICAL UPDATE

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State Meteorological Support Unit  
Florida Division of Emergency  
Management

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