



# **TROPICAL UPDATE**

**5 PM EDT**

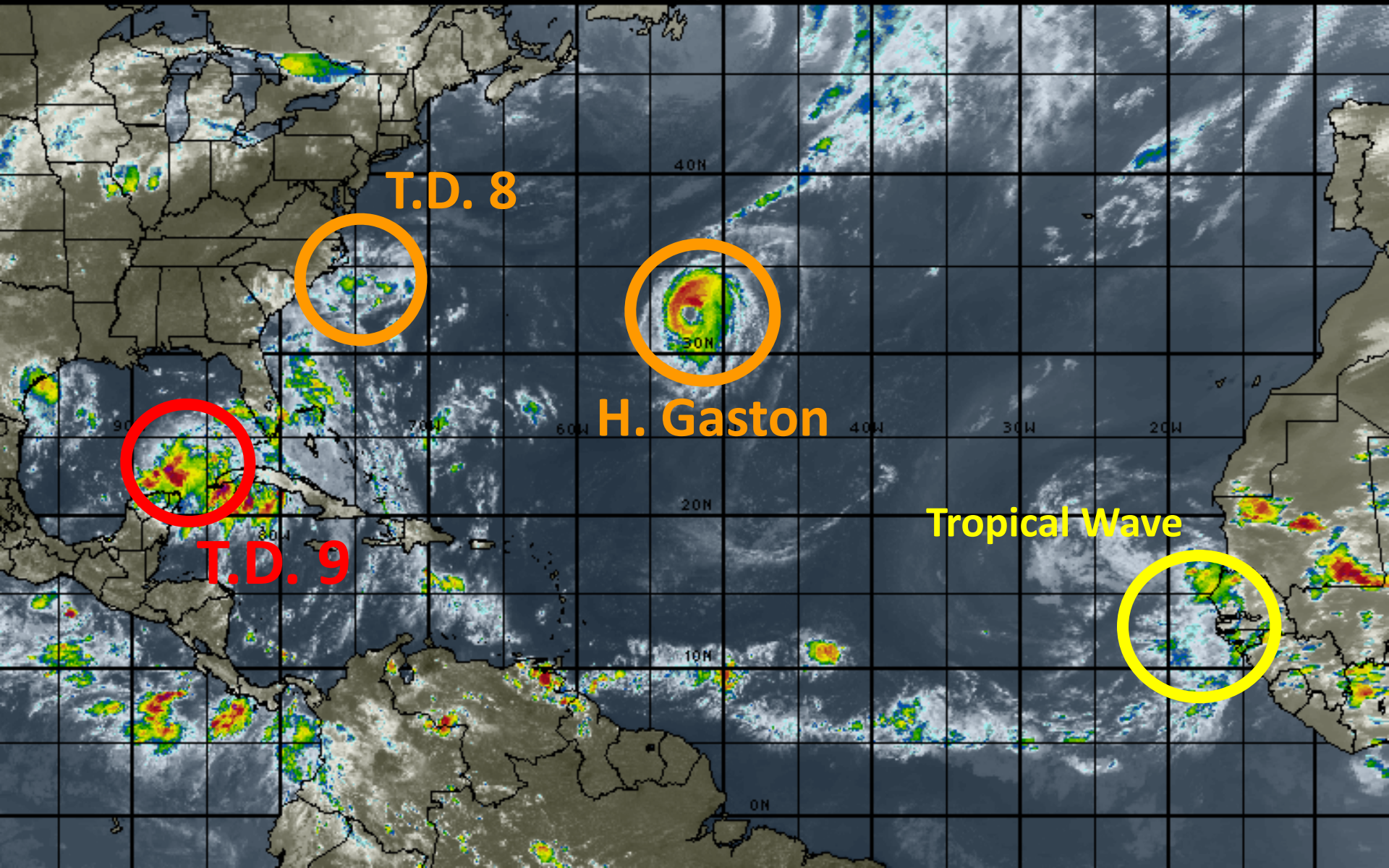
**Tuesday, August 30, 2016**

**Tropical Depression Nine, Tropical  
Depression Eight, & Hurricane 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

18:00 30-AUG-2016 GMT ©Copyright MSI Corporation <http://www.usi.com>





# Tropical Depression Nine

10AM CDT Tue Aug 30 2016

Position 24.0 N 87.2 W

Maximum Winds 35 mph

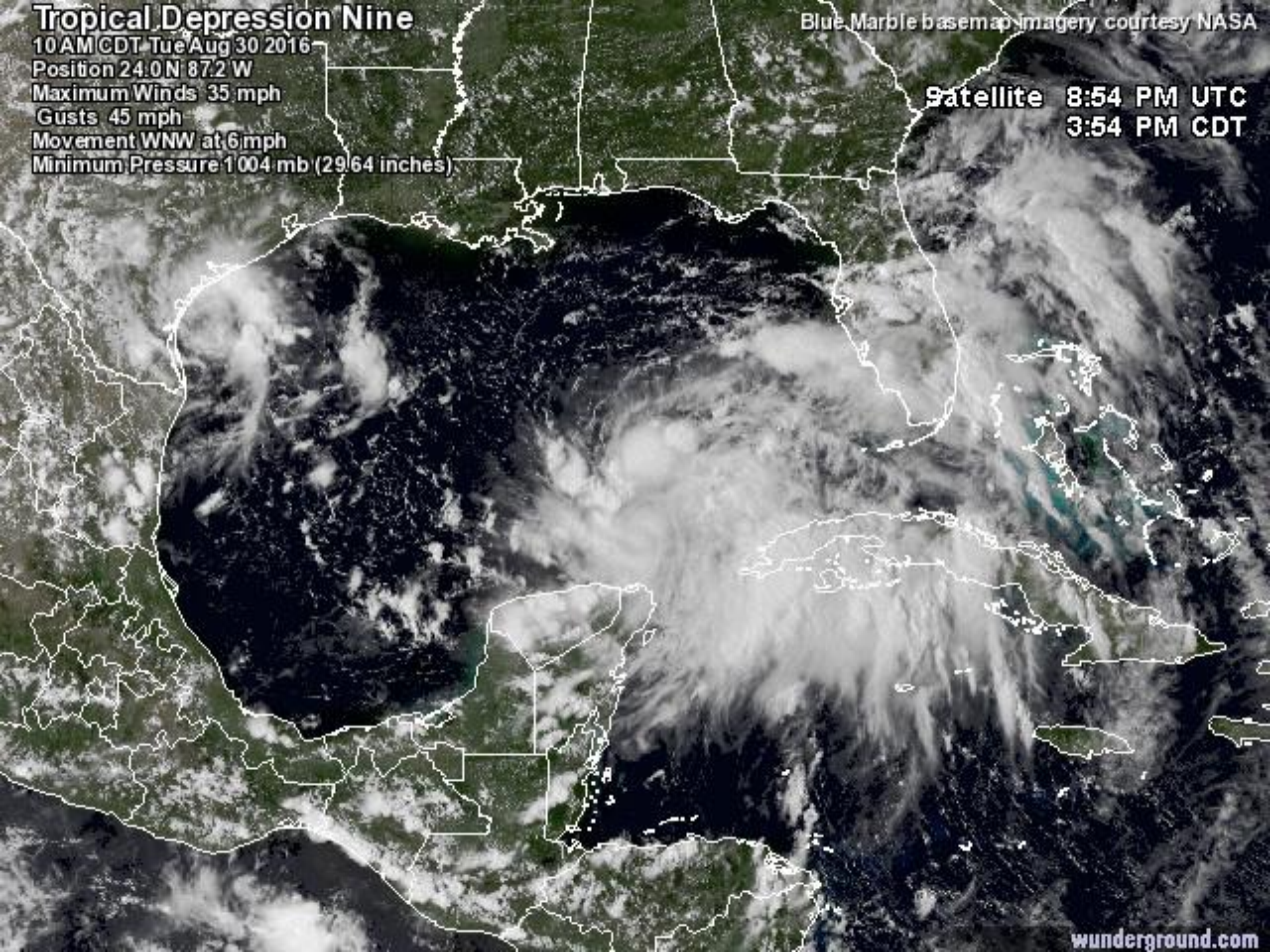
Gusts 45 mph

Movement WNW at 6 mph

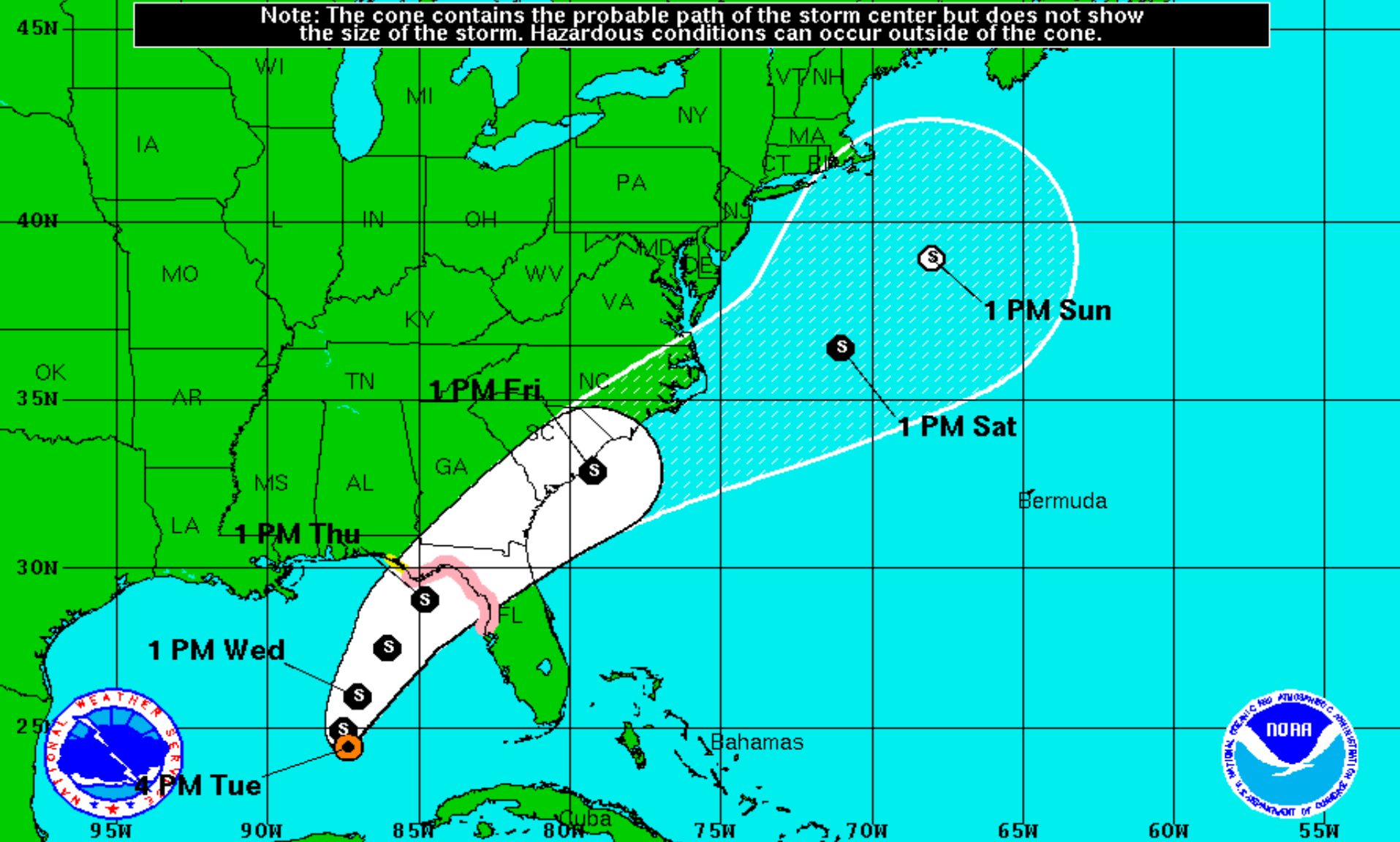
Minimum Pressure 1004 mb (29.64 inches)

Blue Marble basemap imagery courtesy NASA

Satellite 8:54 PM UTC  
3:54 PM CDT



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 Depression Nine

Tuesday August 30, 2016

4 PM CDT Advisory 9

NWS National Hurricane Center

### Current Information:

Center Location 24.4 N 87.3 W

Max Sustained Wind 35 mph

Movement NW at 5 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:

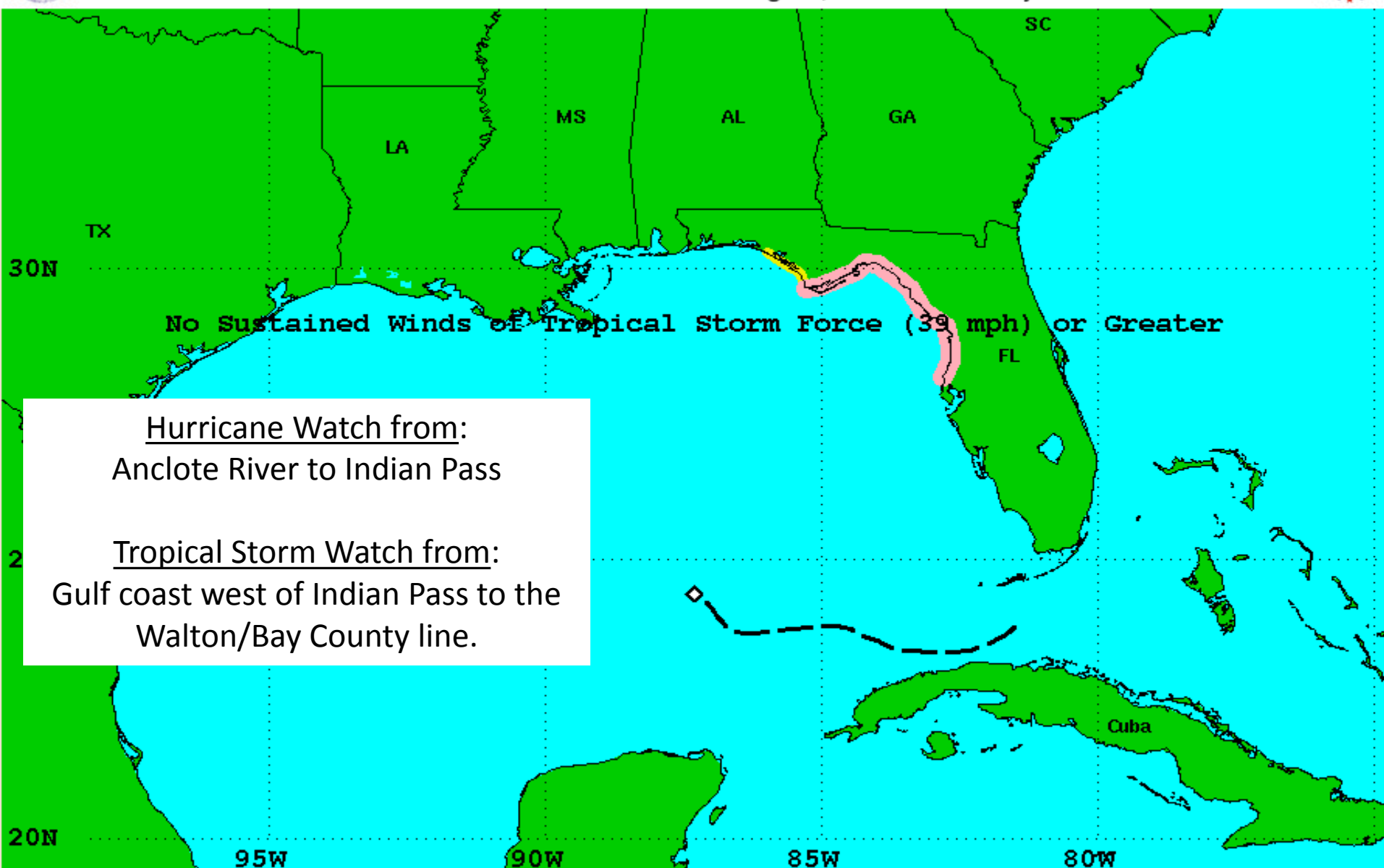
Hurricane Trop.Storm





# Surface Wind Field of Tropical Depression Nine

Sustained Winds as of 400 PM CDT Tue Aug 30, 2016 Advisory Number 9

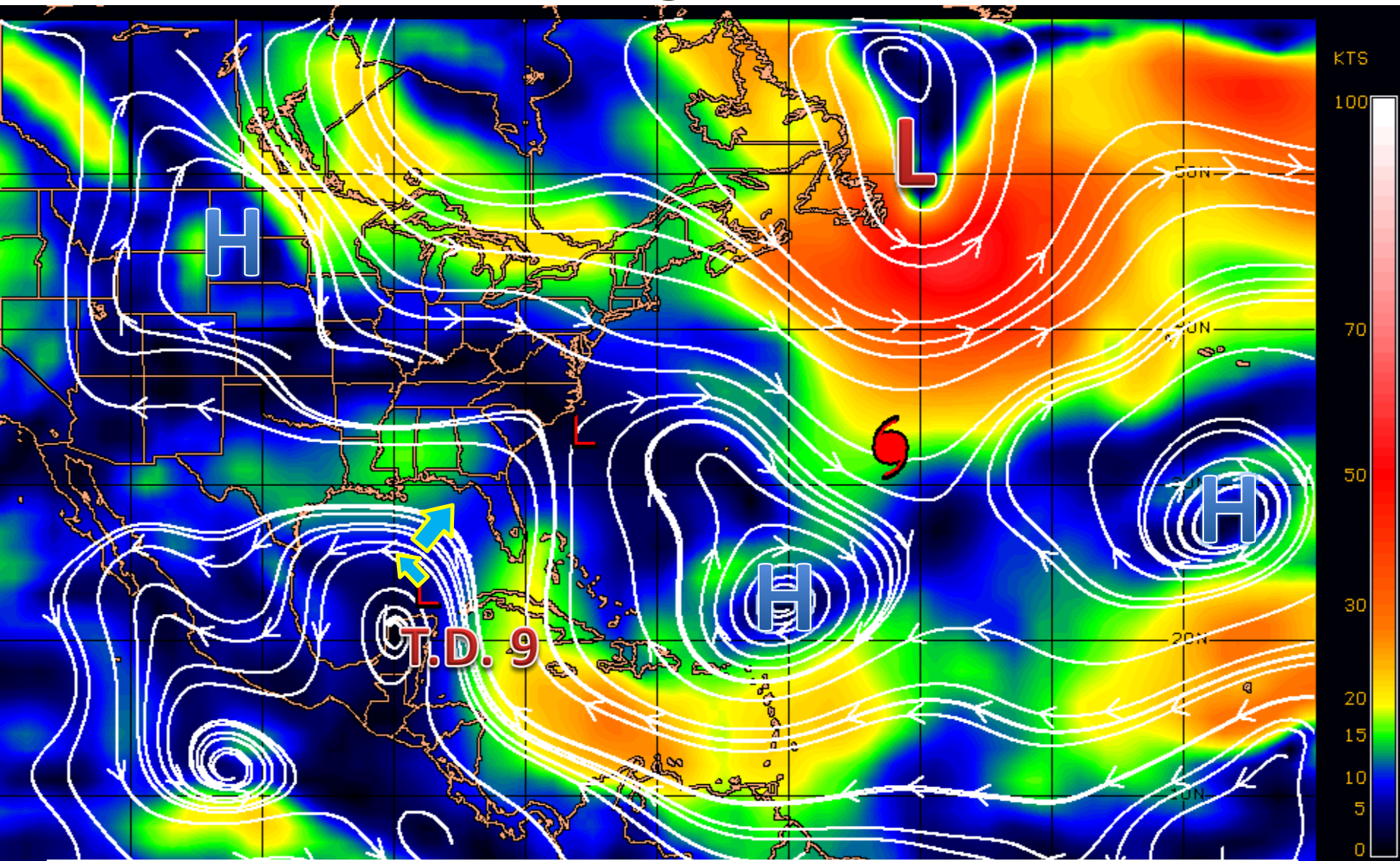


Hurricane Watch from:  
Anclote River to Indian Pass

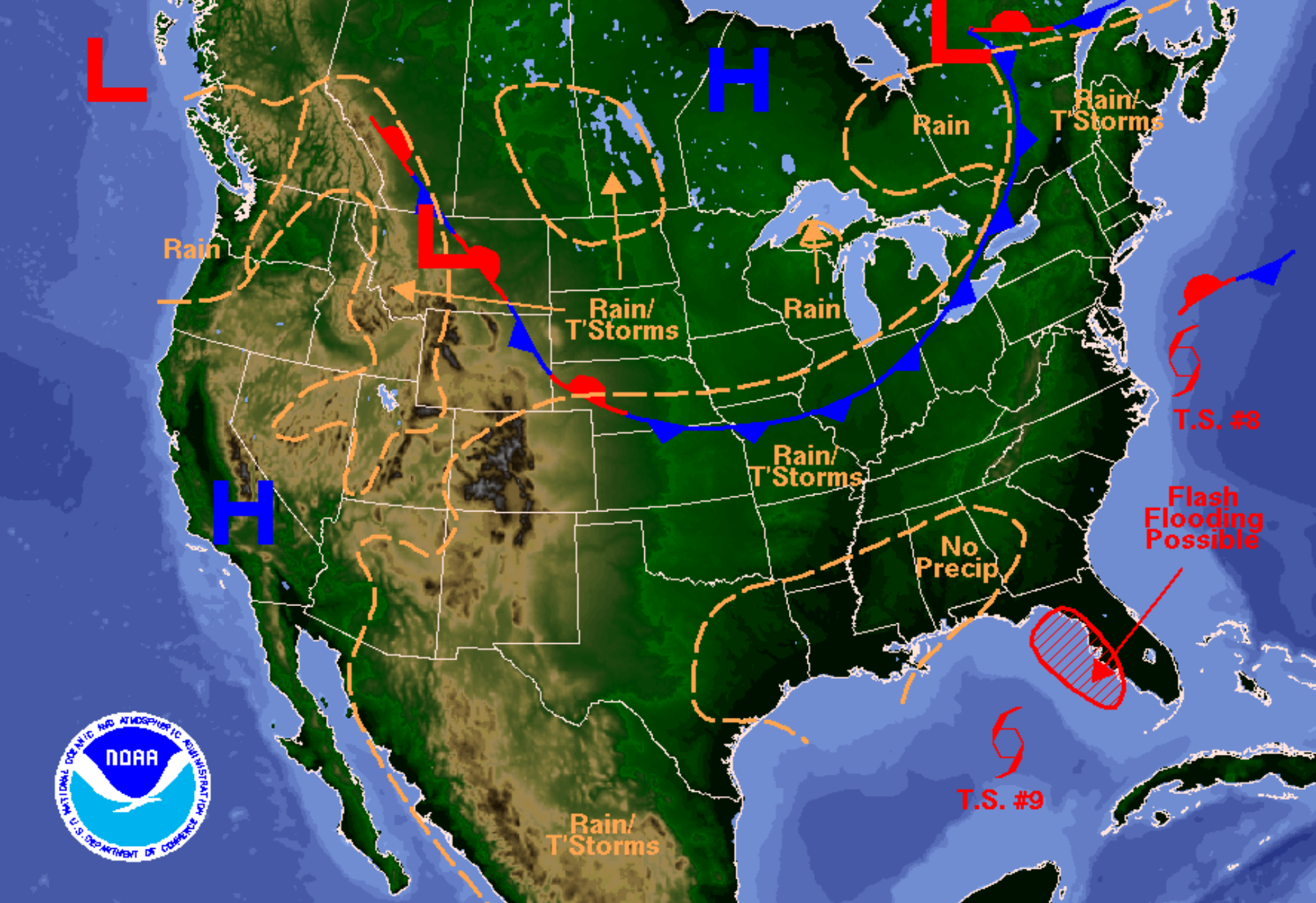
Tropical Storm Watch from:  
Gulf coast west of Indian Pass to the  
Walton/Bay County line.

Watches:	Warnings:	Sustained Winds:	Position:
 Hurricane Watch	 Hurricane Warning	 Hurricane Force	 Center as of 400 PM CDT
 Tropical Storm Watch	 Tropical Storm Warning	 Tropical Storm Force	 Past Track

# Steering Currents

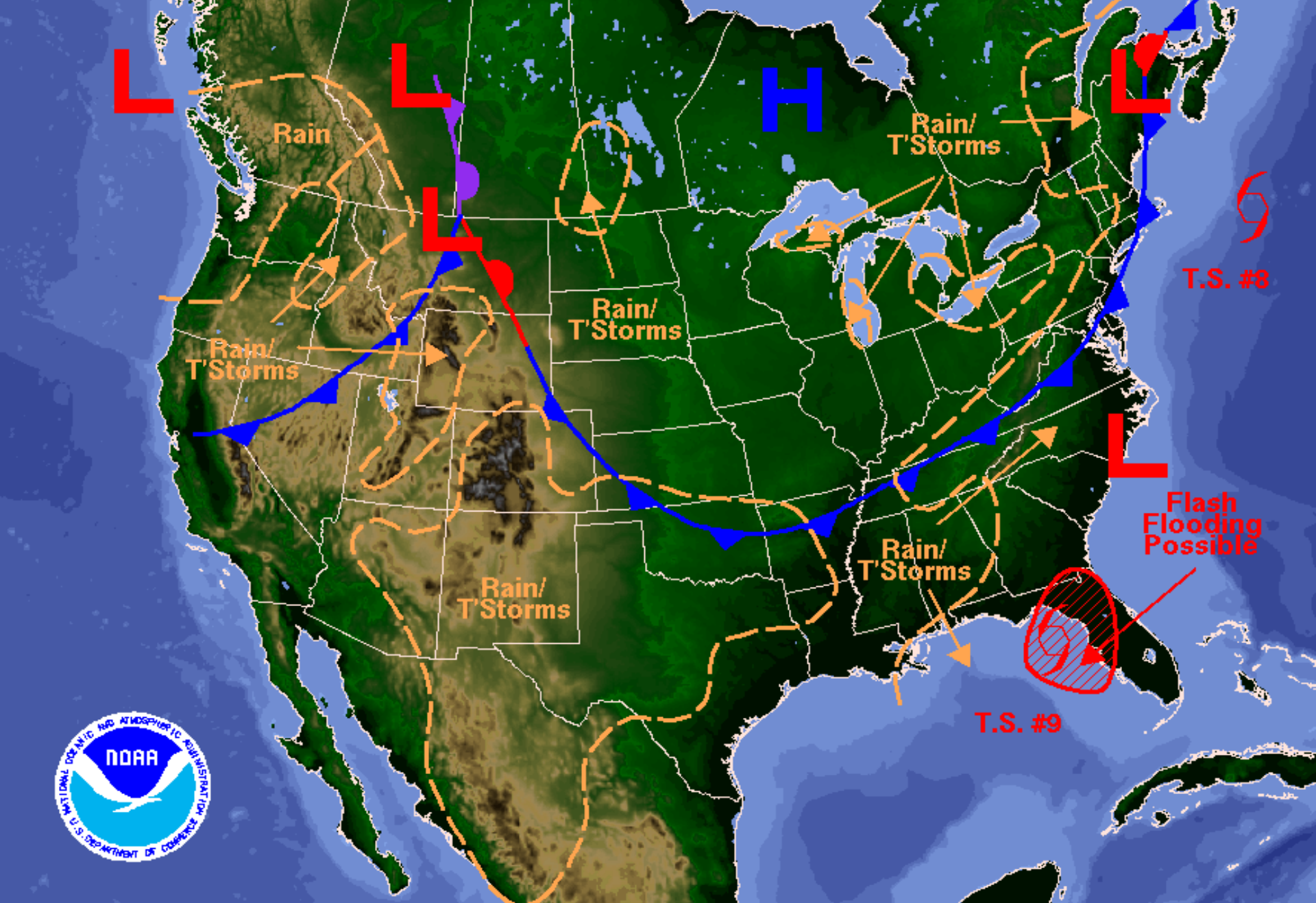


TD 9 likely to continue drifting west today before moving north, then northeast on Wednesday as the area of high pressure over the eastern U.S. weakens and shifts to the northeast, and a frontal system moves towards the eastern seaboard.



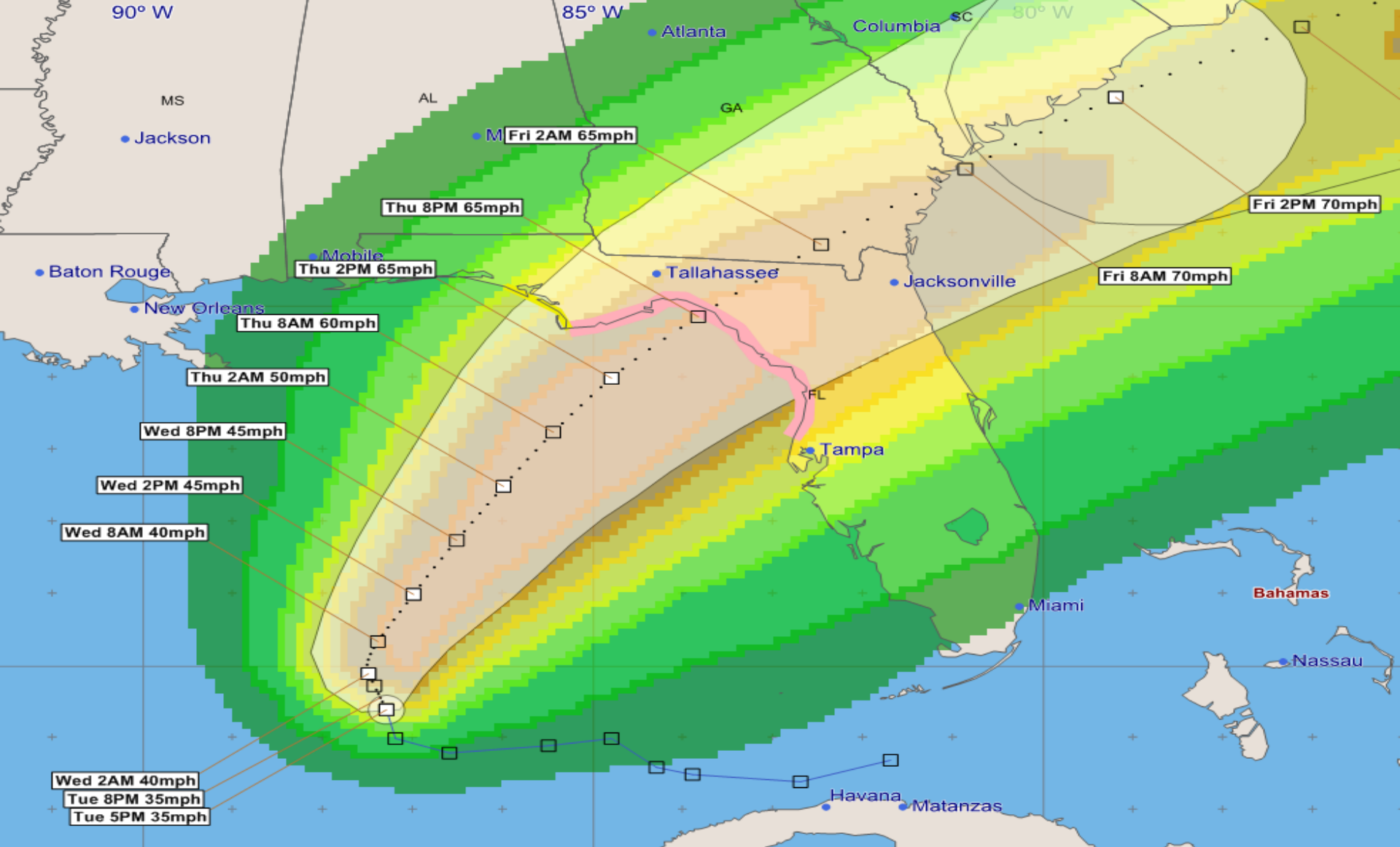
Weather Forecast for Wed, Aug 31, 2016, issued 4:51 AM EDT Tue, Aug 30, 2016  
DOC/NOAA/NWS/NCEP/Weather Prediction Center  
Prepared by McCreynolds based on WPC, SPC and NHC forecasts





Weather Forecast for Thu, Sep 01, 2016, issued 4:55 AM EDT Tue, Aug 30, 2016  
DOC/NOAA/NWS/NCEP/Weather Prediction Center  
Prepared by McCreynolds based on WPC, SPC and NHC forecasts





# **Tropical Depression Nine - Tuesday, August 30, 2016 5 PM EDT Advisory #9**

Center Location: 24.4 N 87.3 W Maximum Sustained Winds: 35 mph Movement: 5 mph NW

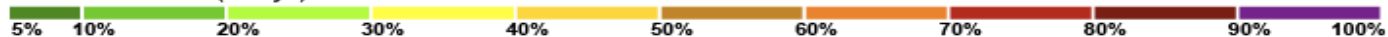
□ forecast positions
Potential Track Area: day 1-3 day 4-5
Surface Wind Field: at current location

Watches: hurricane tropical storm

Warnings: hurricane tropical storm

Sustained Wind Speeds: tropical storm  $\geq 34\text{kt}/39\text{mph}$  strong tropical storm  $\geq 50\text{kt}/58\text{mph}$  hurricane  $\geq 64\text{kt}/74\text{mph}$

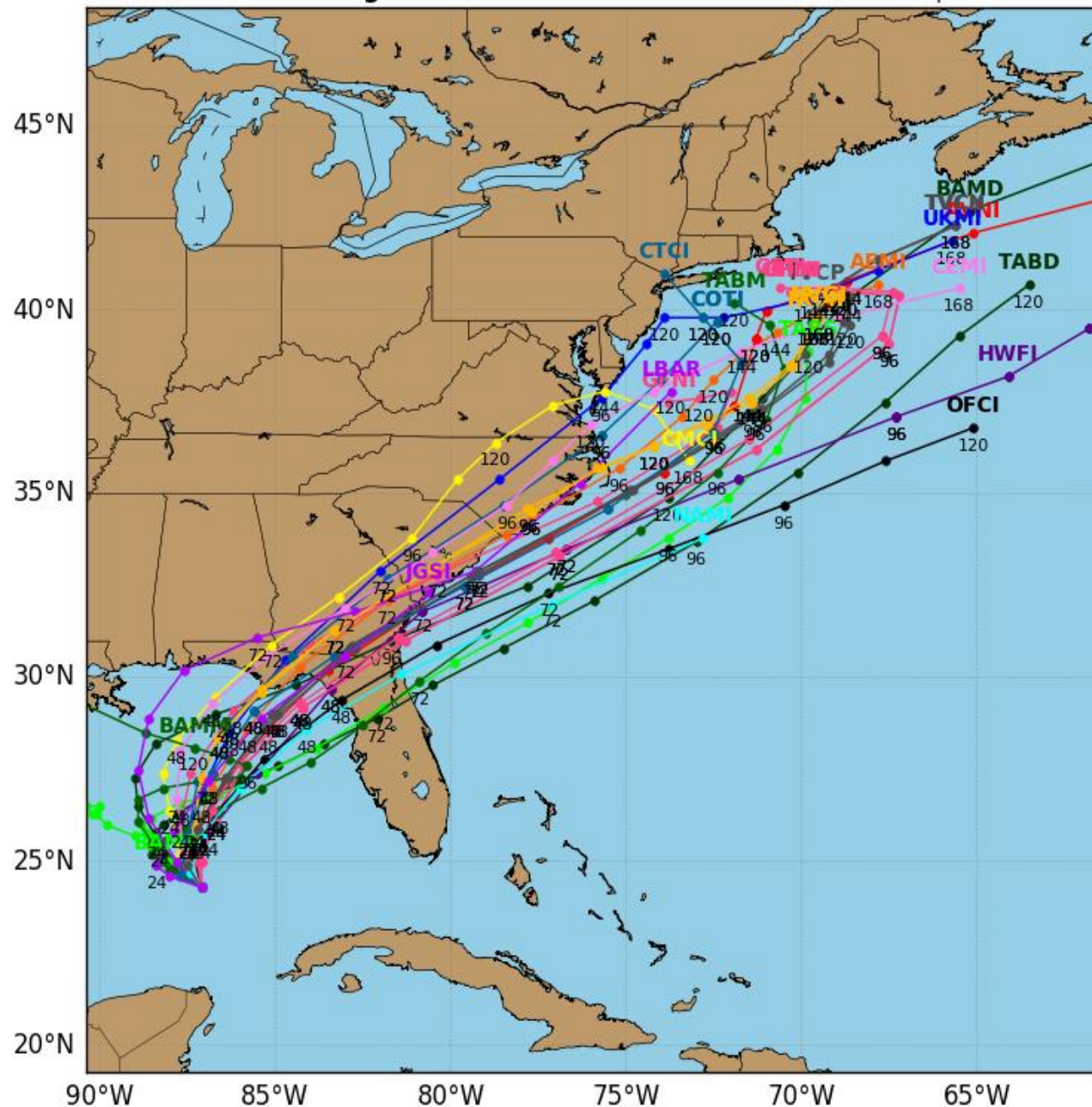
Probability of tropical storm force surface winds (1-minute average  $\geq 34\text{kt}/39\text{mph}$ ) from all tropical cyclones for the 120 hours (5 days) from 2PM EDT Tue 8/30/2016 to 2PM EDT Sun 9/4/2016



# Tropical Depression 09L Model Track Guidance

Initialized at 18z Aug 30 2016

Levi Cowan - tropicaltidbits.com



Forecast tracks continue to come into better agreement on the possible track of Tropical Depression 9. Still, a wide range of possibilities exist from the Nature Coast north through Pensacola, with most models bringing the storm into the Big Bend and Nature Coast region. The models have been trending westward over the past few runs, and now it seems that the system will make landfall in or around Apalachee Bay.

There is still great uncertainty in regards to the timing of landfall, which could be as early as 48 hours or as late as 72 hours from now. (Forecast landfall is Thursday afternoon).



Levi Cowan - [tropicaltidbits.com](http://tropicaltidbits.com)

## Cat 2

## Cat 1

SHIP

## NOTES

**GFM**



SHF5

NAMI



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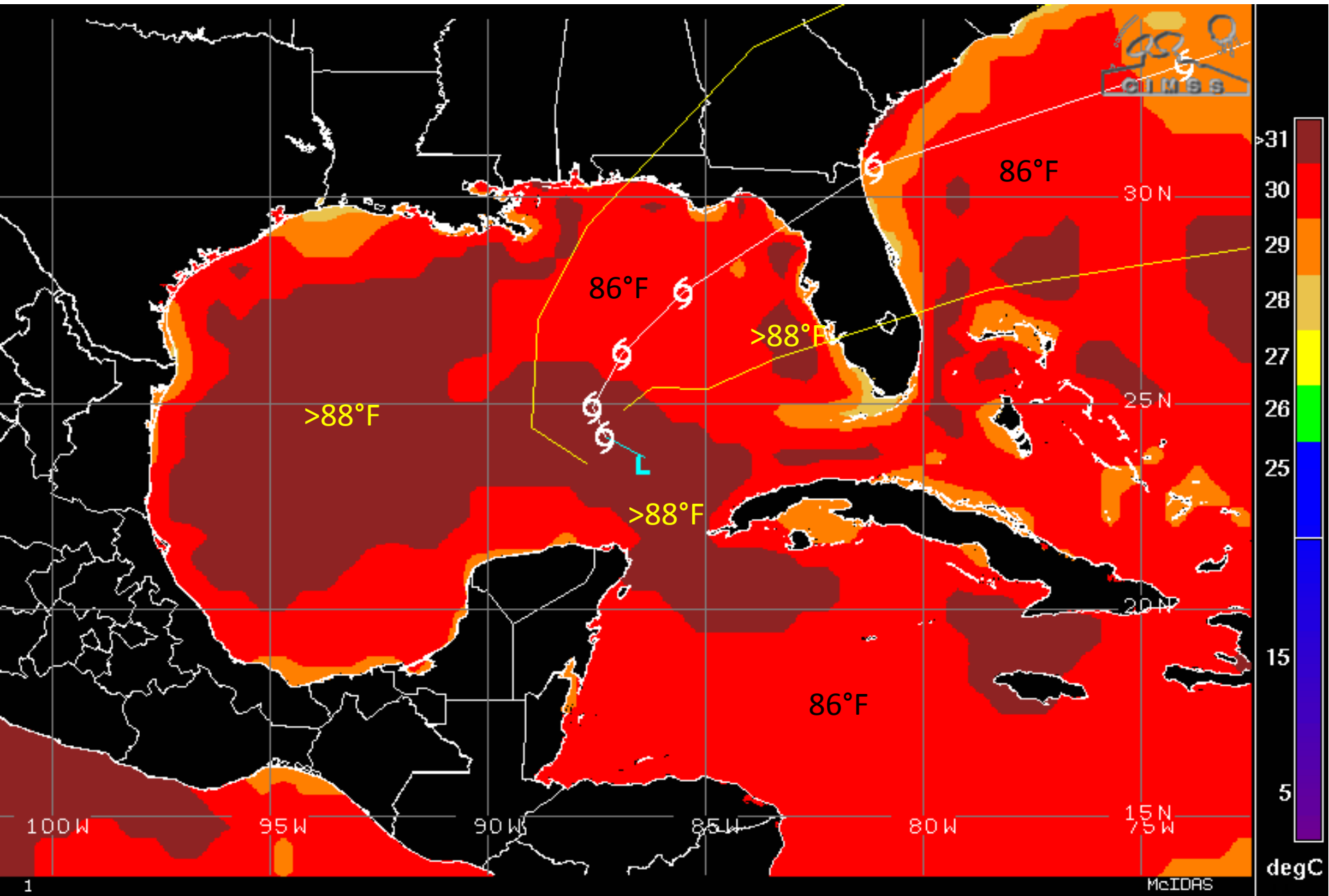
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# Anticipated Florida Landfall

Wind Speed (kt)

Forecast Hour

# Sea Surface Temperatures near T.D. 9





# TD 9 Water Vapor Satellite Image

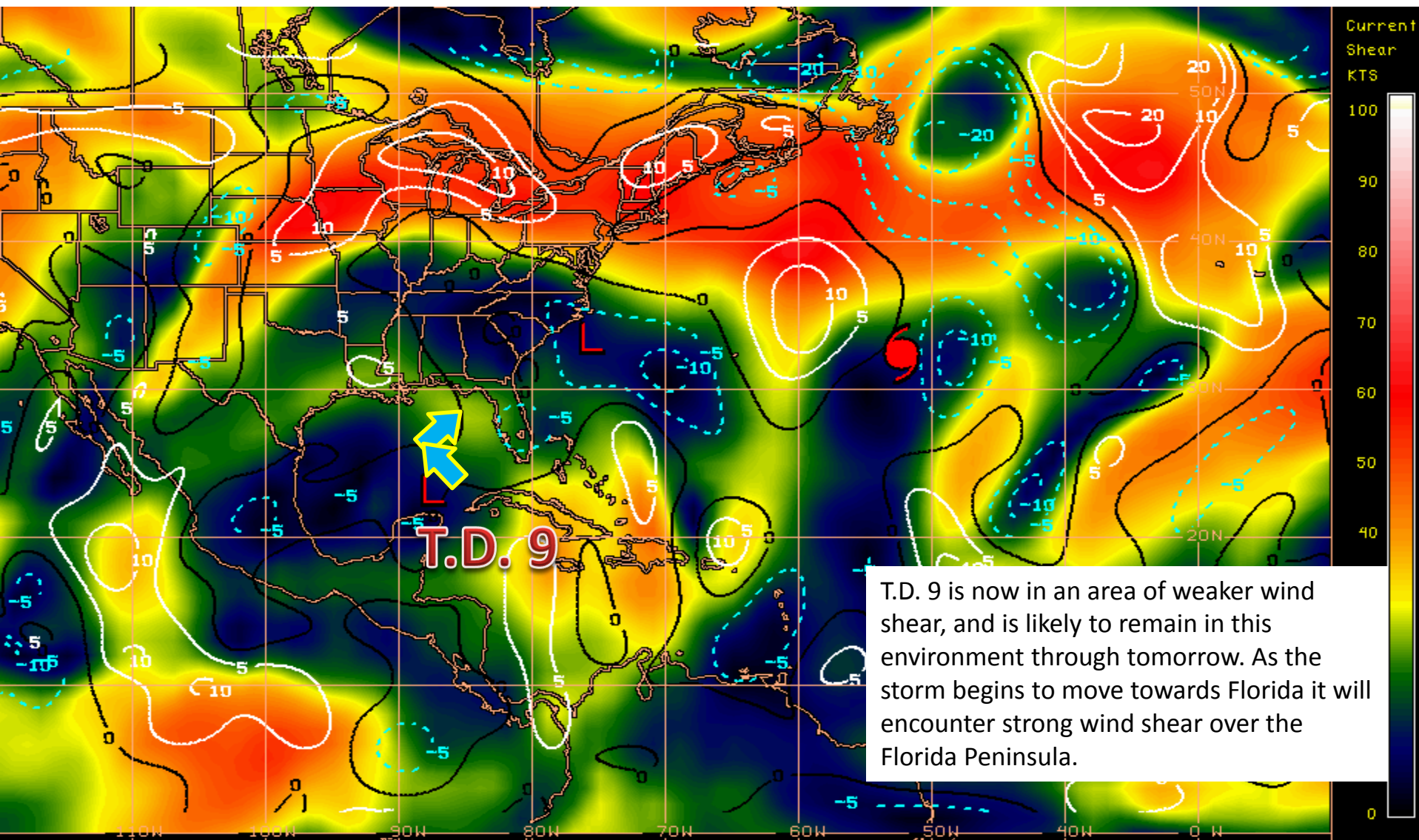
Dry air has moved into the path of TD 9, but it does not seem to be interfering with the Depression's main circulation. Environmental conditions are favorable for additional strengthening for the next 24-48 hours.

**Dry Air**





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

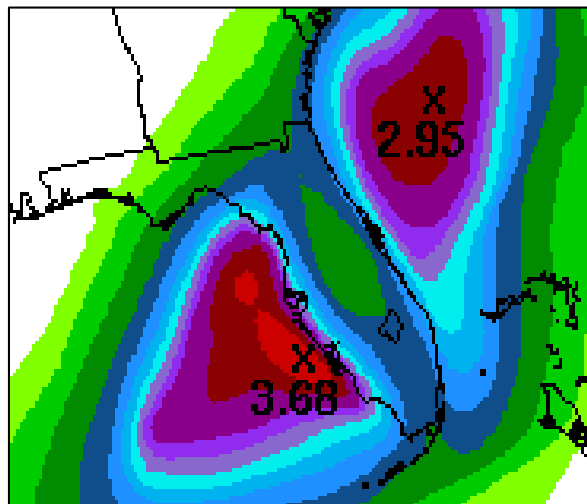


Shear Tendency (KTS) Over Past 24 Hours: Increasing ——— Decreasing - - - - -

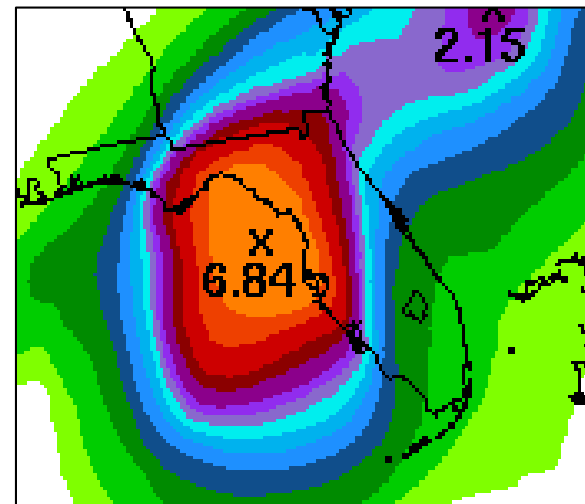


# Current Rainfall Forecast

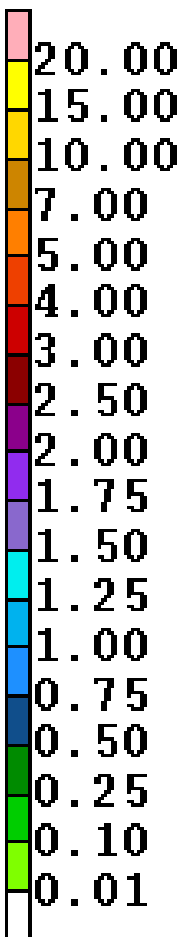
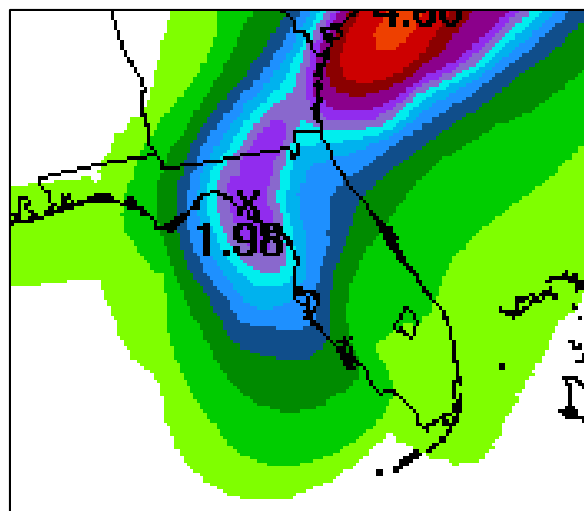
Wednesday

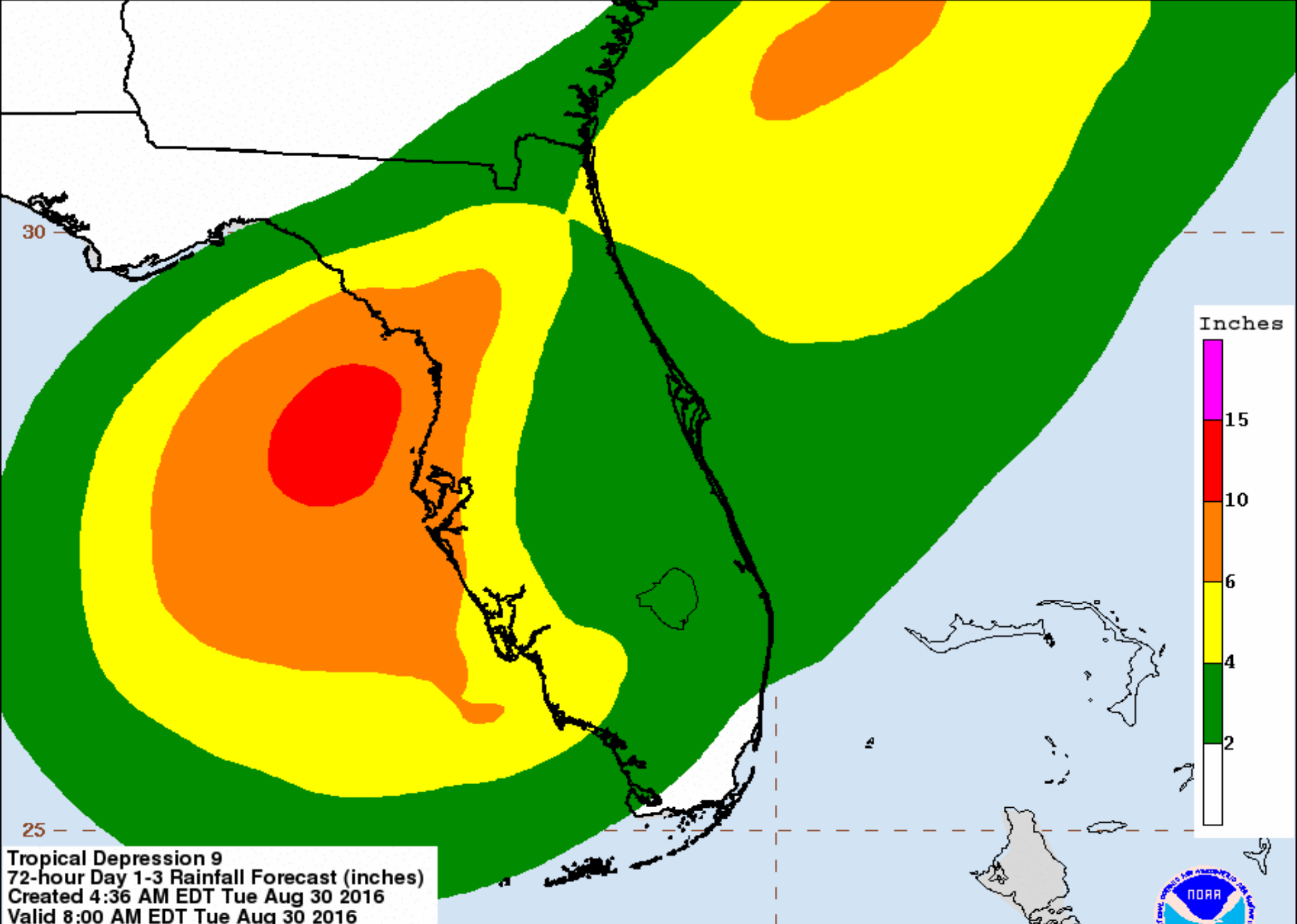


Thursday



Friday





Inches

15

10

6

4

2

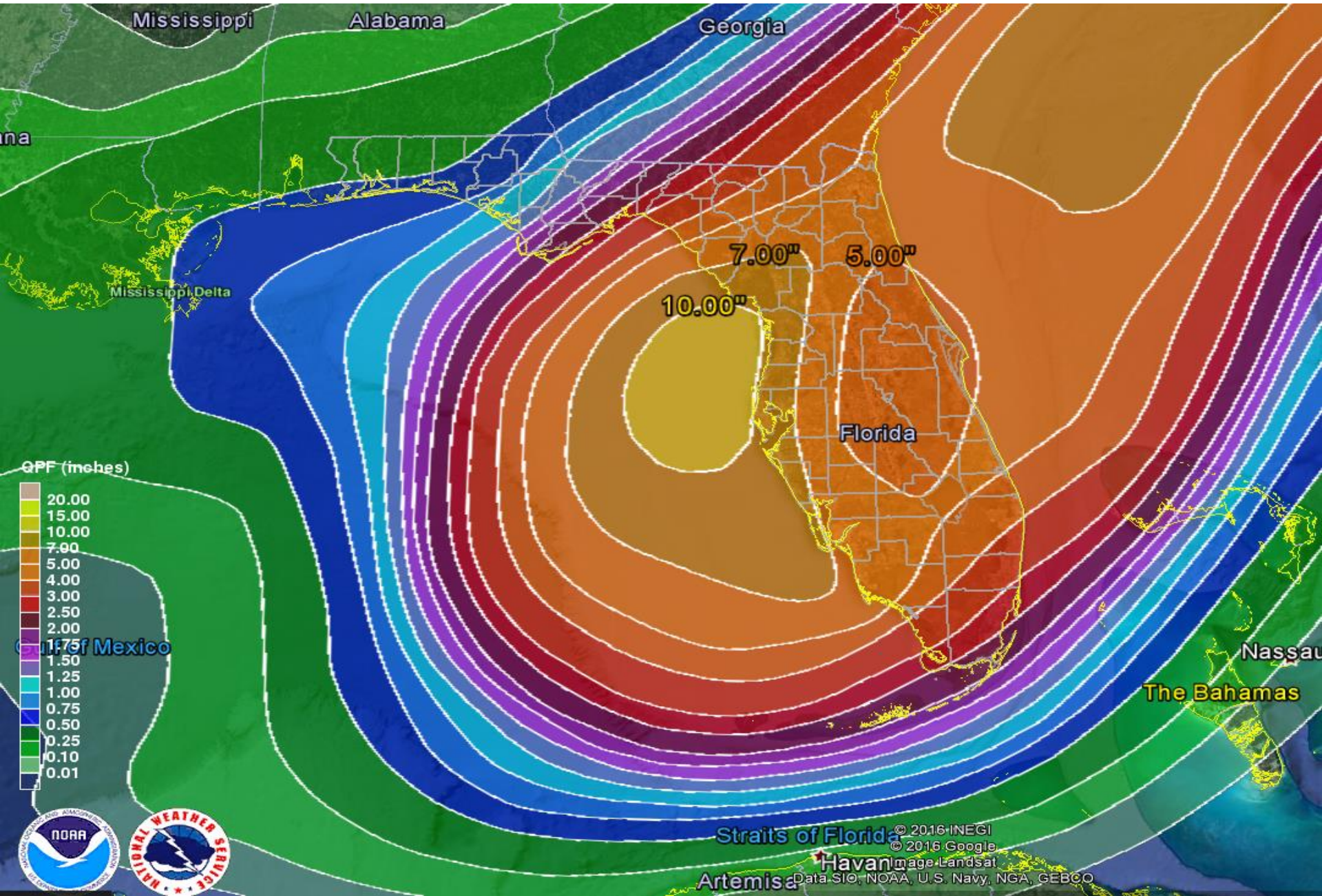
**Tropical Depression 9**  
**72-hour Day 1-3 Rainfall Forecast (inches)**  
Created 4:36 AM EDT Tue Aug 30 2016  
Valid 8:00 AM EDT Tue Aug 30 2016  
through 8:00 AM EDT Fri Sep 2 2016  
NOAA/NWS/NCEP/WPC

Local point maximum rainfall may be higher than shown.  
See the NHC public advisories for the latest tropical cyclone information.





# Forecast Rainfall For Next 7 Days



## Tropical Storm Wind Probabilities (34Kt):

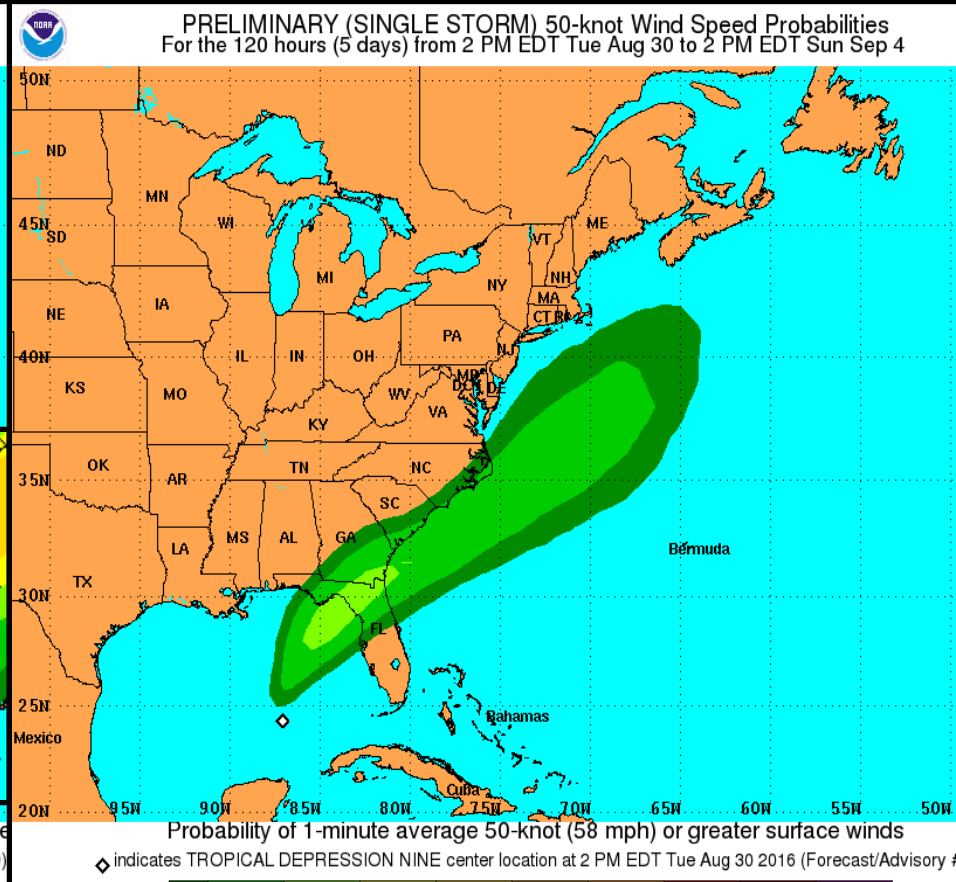
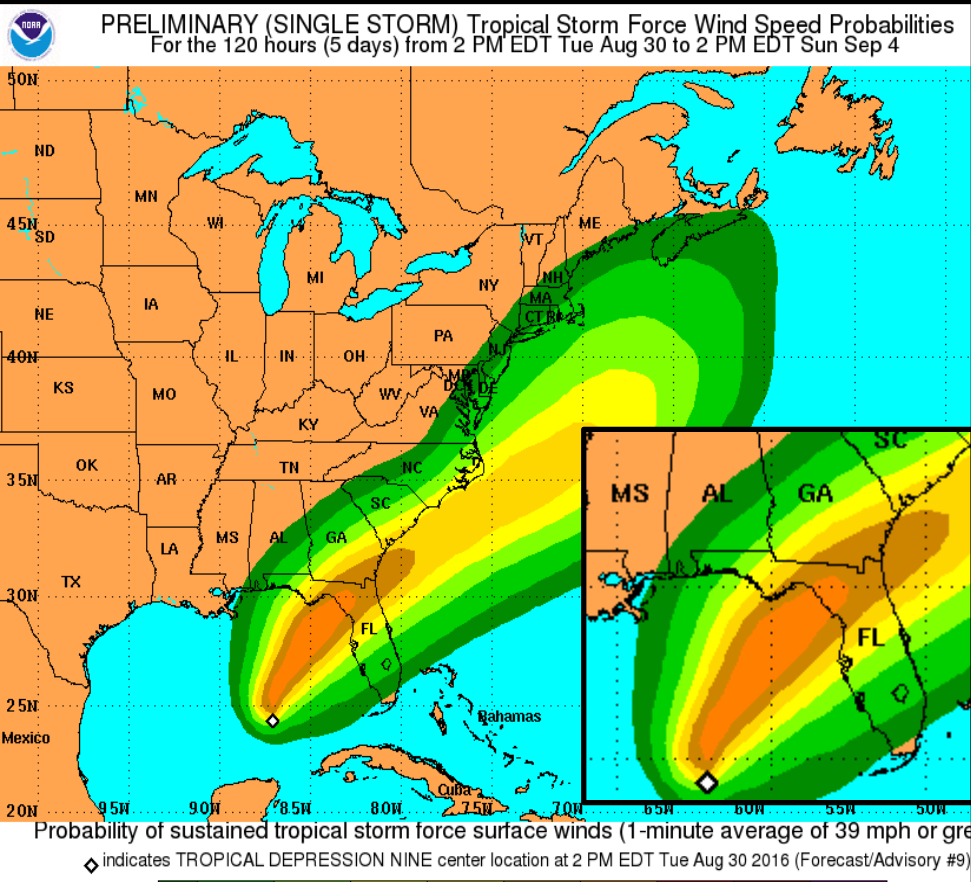
Panama City	39%
Apalachicola	51%
Tallahassee	45%
Cedar Key	52%
Tampa	33%
Ft. Myers	14%
Jacksonville	52%
Gainesville	57%

## Tropical Storm Wind Probabilities (50Kt):

Panama City	11%
Apalachicola	18%
Tallahassee	15%
Cedar Key	17%
Tampa	6%
Ft. Myers	0%
Jacksonville	18%
Gainesville	17%

## Hurricane Wind Probabilities (64Kt):

Panama City	3%
Apalachicola	4%
Tallahassee	3%
Cedar Key	4%
Tampa	0%
Ft. Myers	0%
Jacksonville	4%
Gainesville	4%





# Prototype Storm Surge Watch/Warning Graphic\*

Tropical Depression NINE

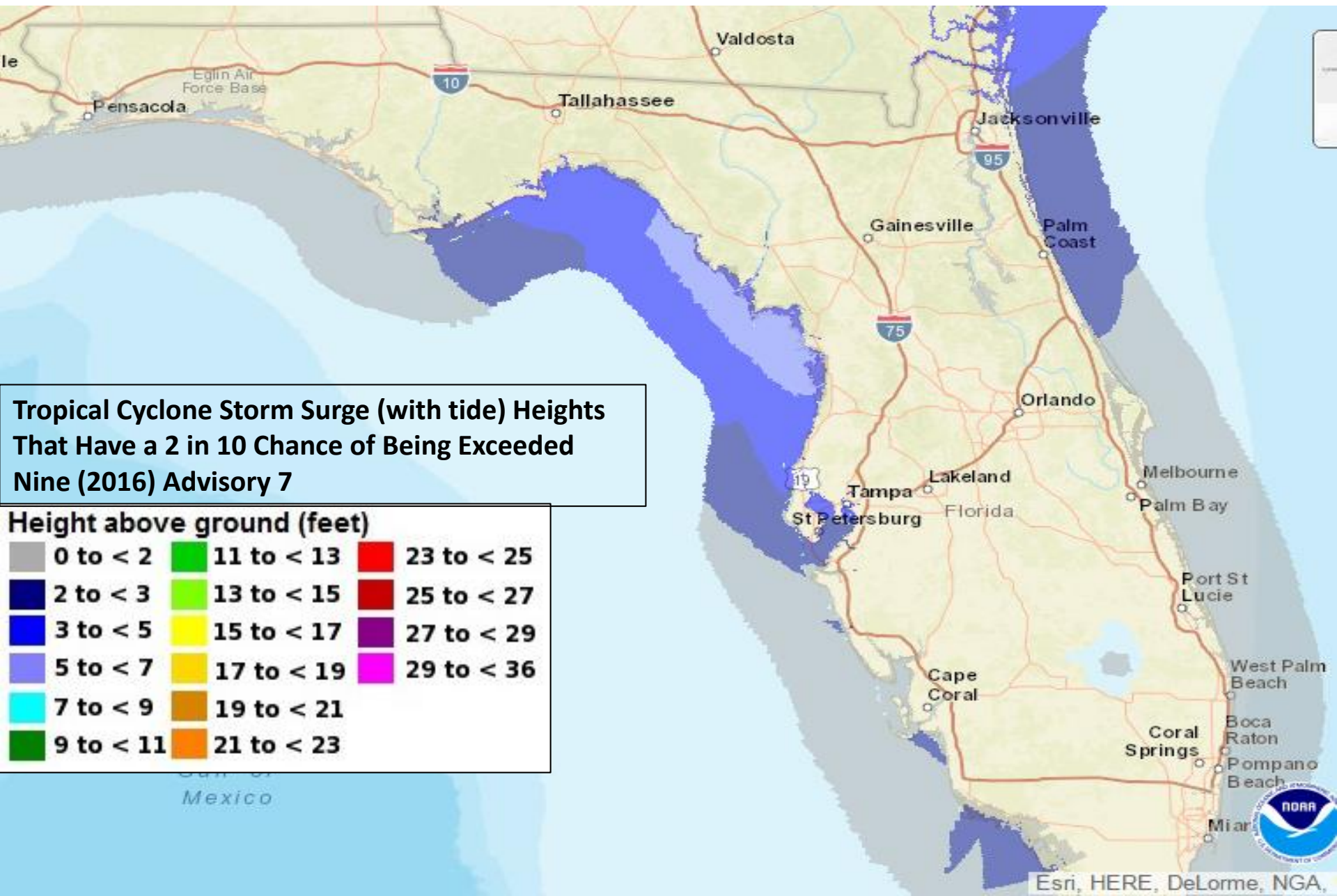
Advisory 9 Issued: 4:00 PM CDT Tue Aug 30



0 15 30mi

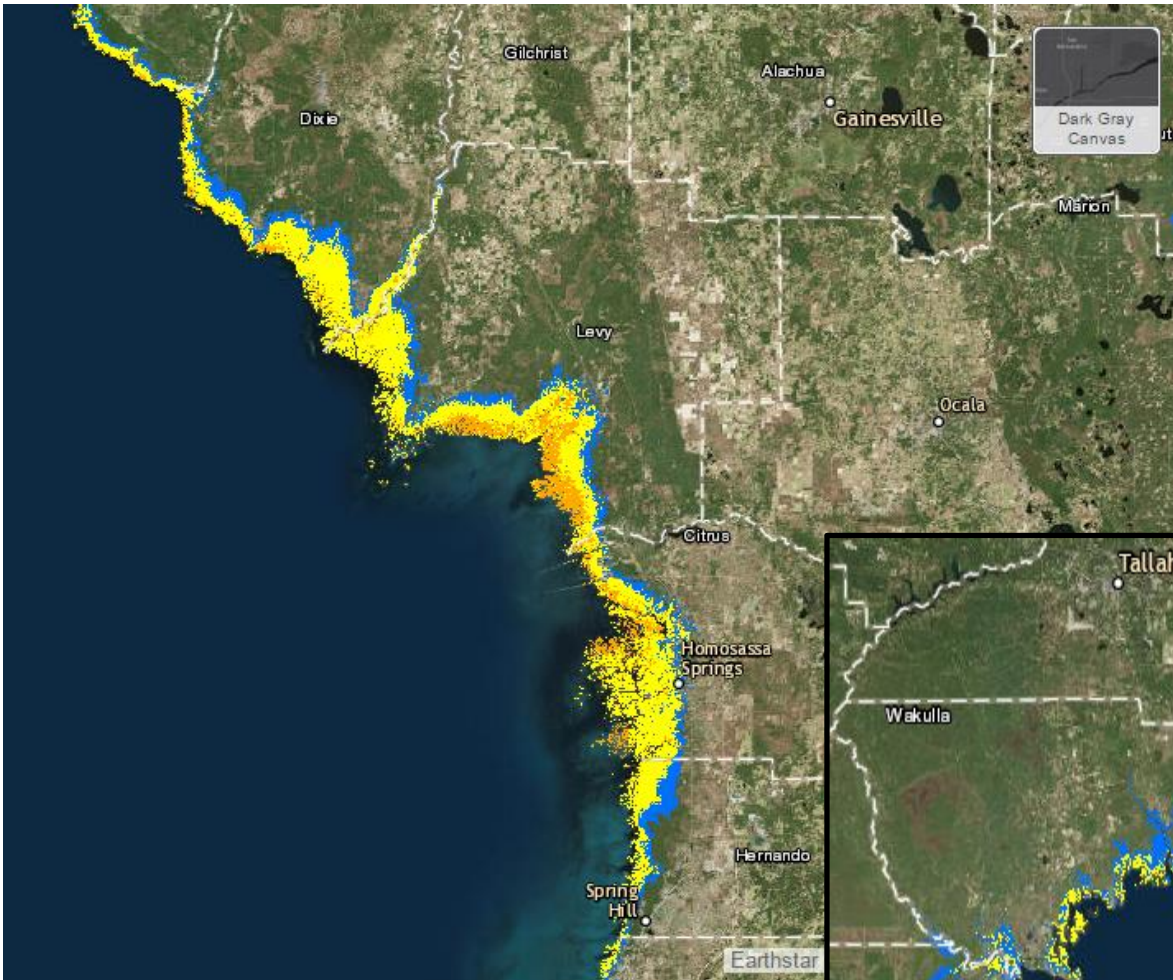
Prototype Storm Surge Warning  
Prototype Storm Surge Watch

# 20% Storm Surge Exceedance

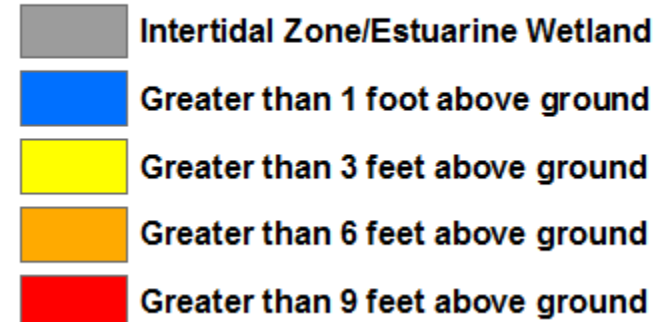




# Potential Storm Surge



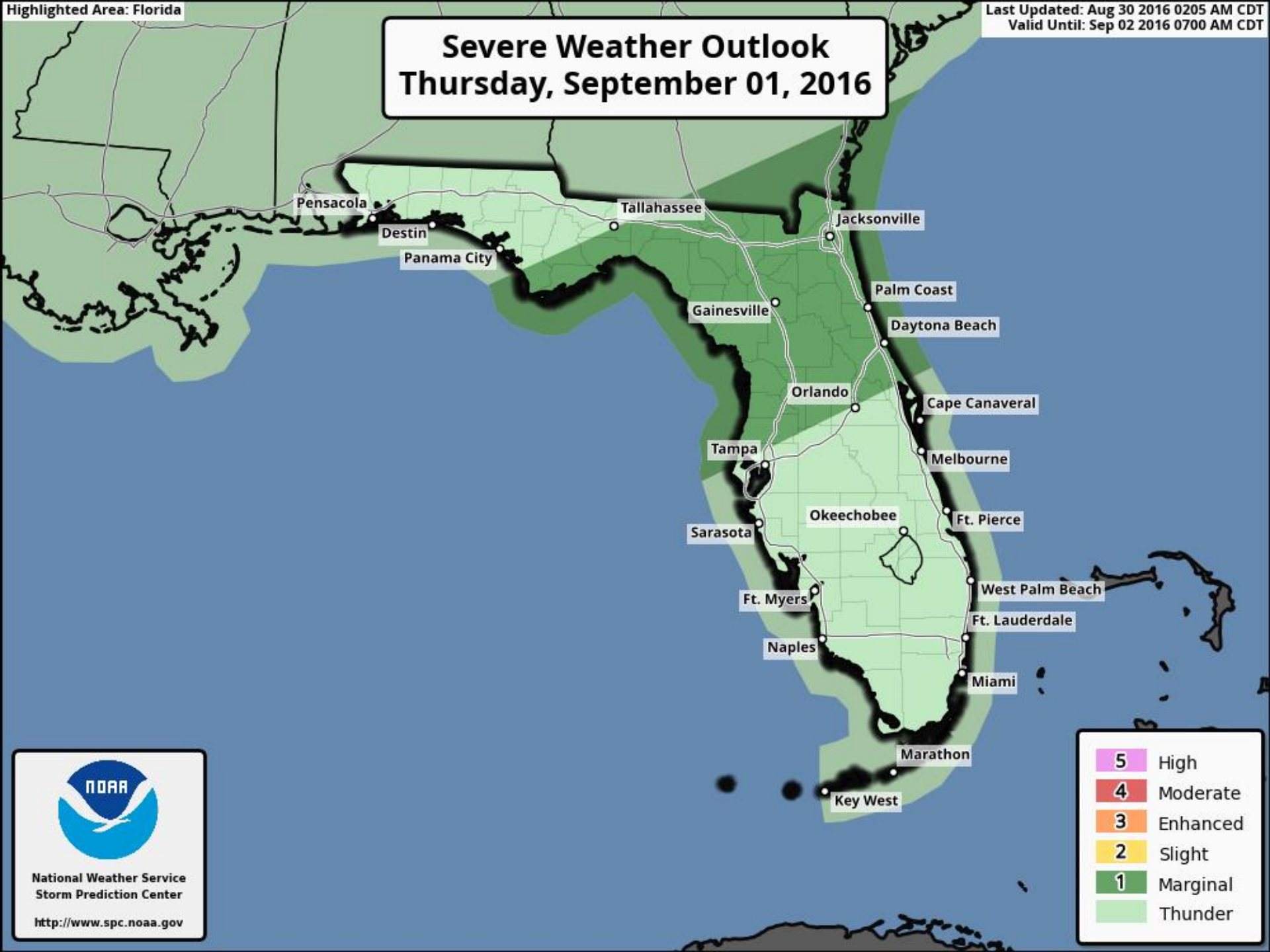
## Potential Storm Surge Flooding\*



\*Displayed flooding values indicate the water height that has about a 1-in-10 (10%) chance of being exceeded.



# Severe Weather Outlook Thursday, September 01, 2016



Pensacola

Destin

Panama City

Tallahassee

Jacksonville

Palm Coast

Daytona Beach

Gainesville

Orlando

Cape Canaveral

Tampa

Melbourne

Sarasota

Okeechobee

Ft. Pierce

Ft. Myers

West Palm Beach

Ft. Lauderdale

Naples

Miami

Marathon

Key West



National Weather Service  
Storm Prediction Center

<http://www.spc.noaa.gov>

5	High
4	Moderate
3	Enhanced
2	Slight
1	Marginal
	Thunder



# Hurricane Gaston

5 PM EDT Tue Aug 30 2016

Position 32.6 N 51.9 W

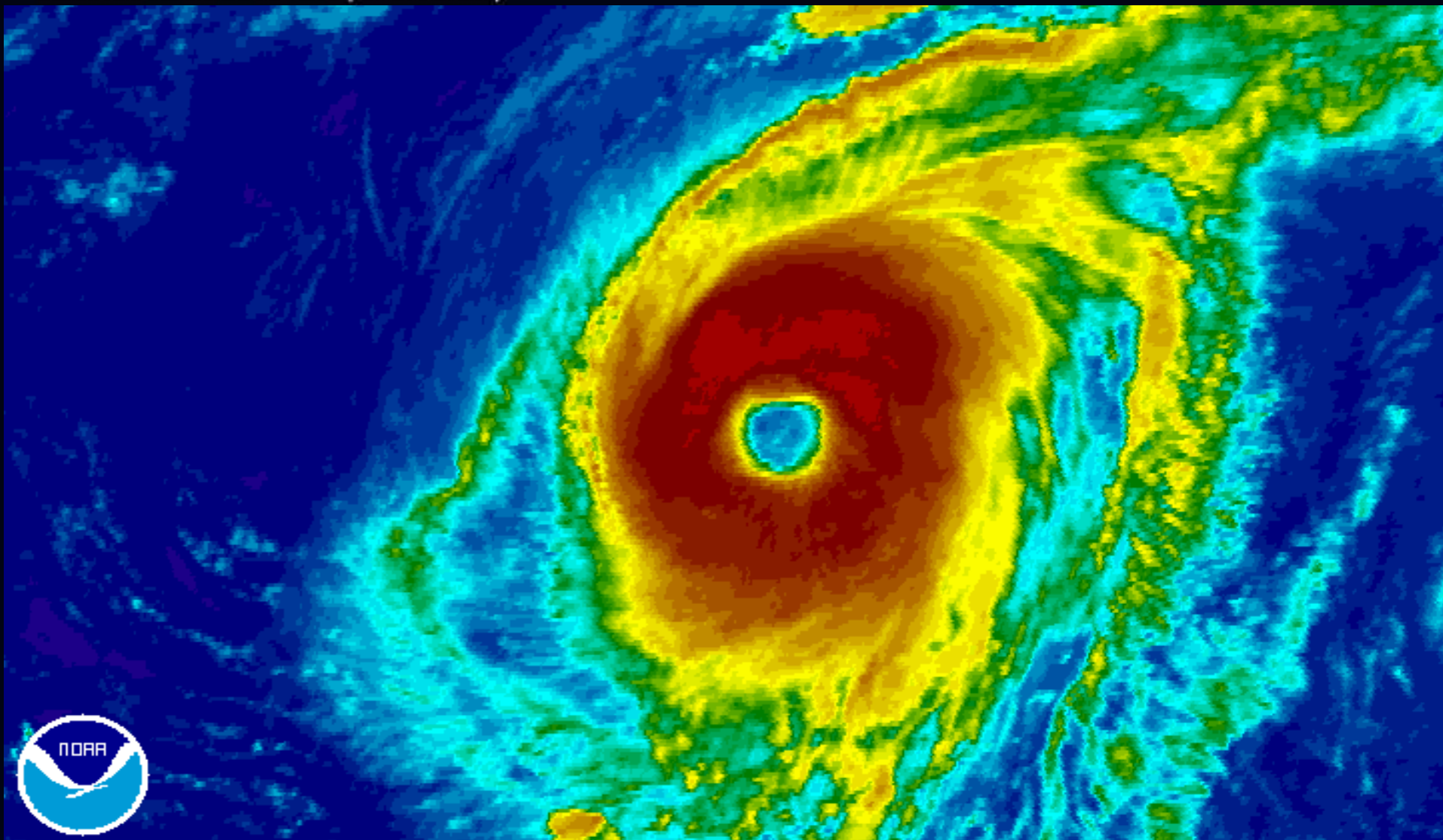
Maximum Winds 110 mph

Gusts 130 mph

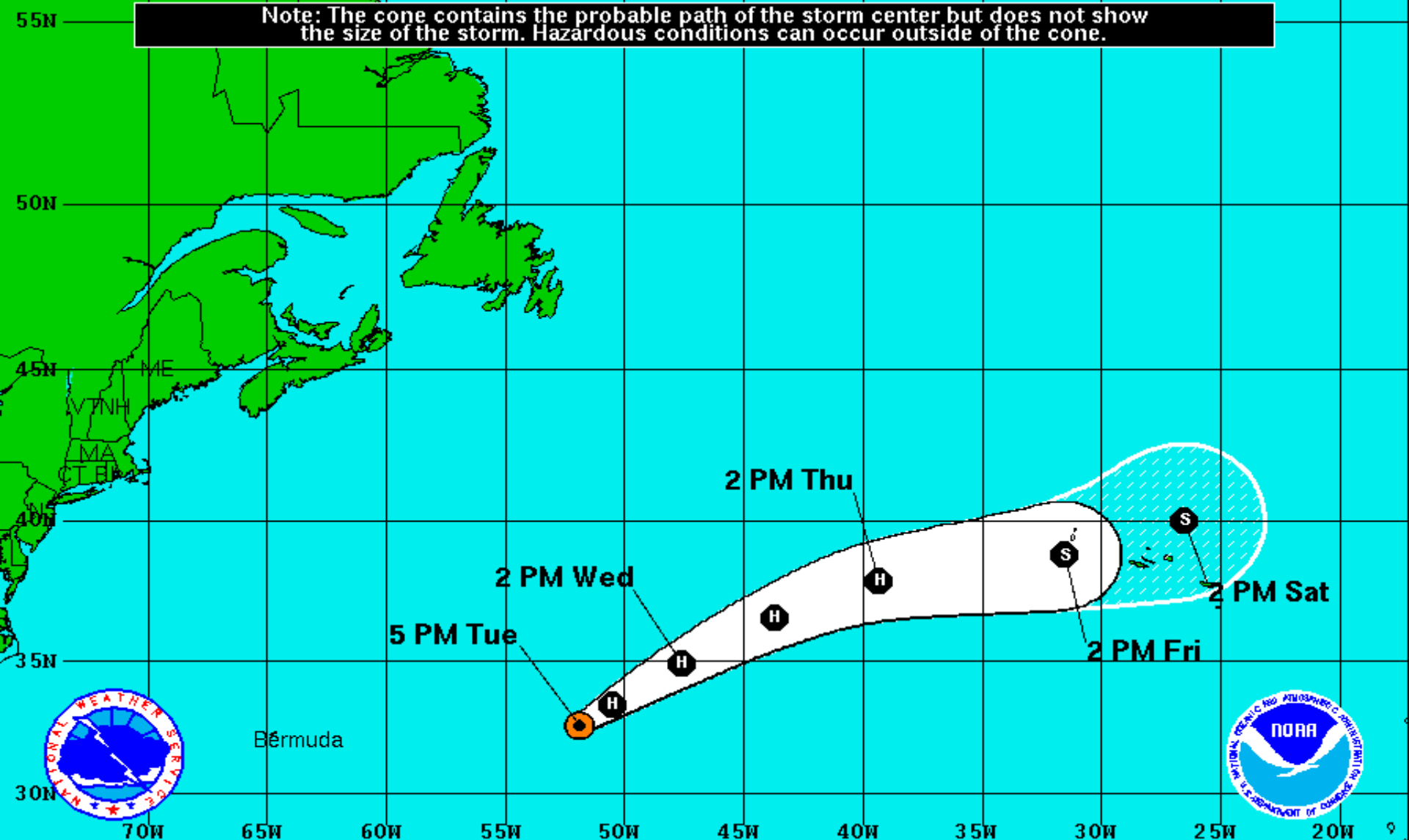
Movement ENE at 10 mph

Minimum Pressure 964 mb (28.46 inches)


Blue Marble basemap imagery courtesy NASA













**Hurricane Gaston**  
 Tuesday August 30, 2016  
 5 PM EDT Advisory 33  
 NWS National Hurricane Center

**Current Information:**   
 Center Location 32.6 N 51.9 W  
 Max Sustained Wind 110 mph  
 Movement ENE at 10 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

# Tropical Depression Eight

5 PM EDT Tue Aug 30 2016

Position 34.4 N 75.1 W

Maximum Winds 35 mph

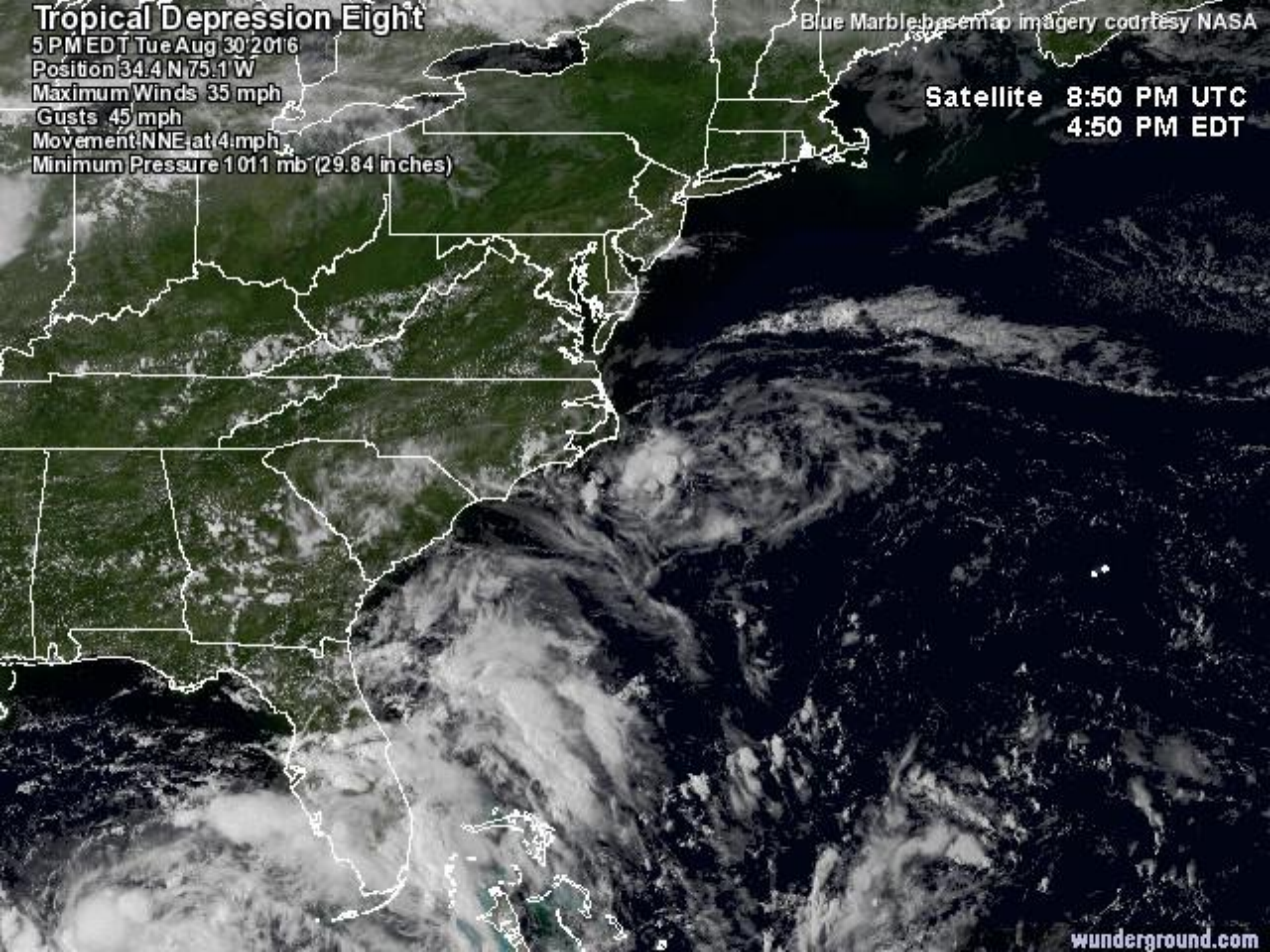
Gusts 45 mph

Movement NNE at 4 mph

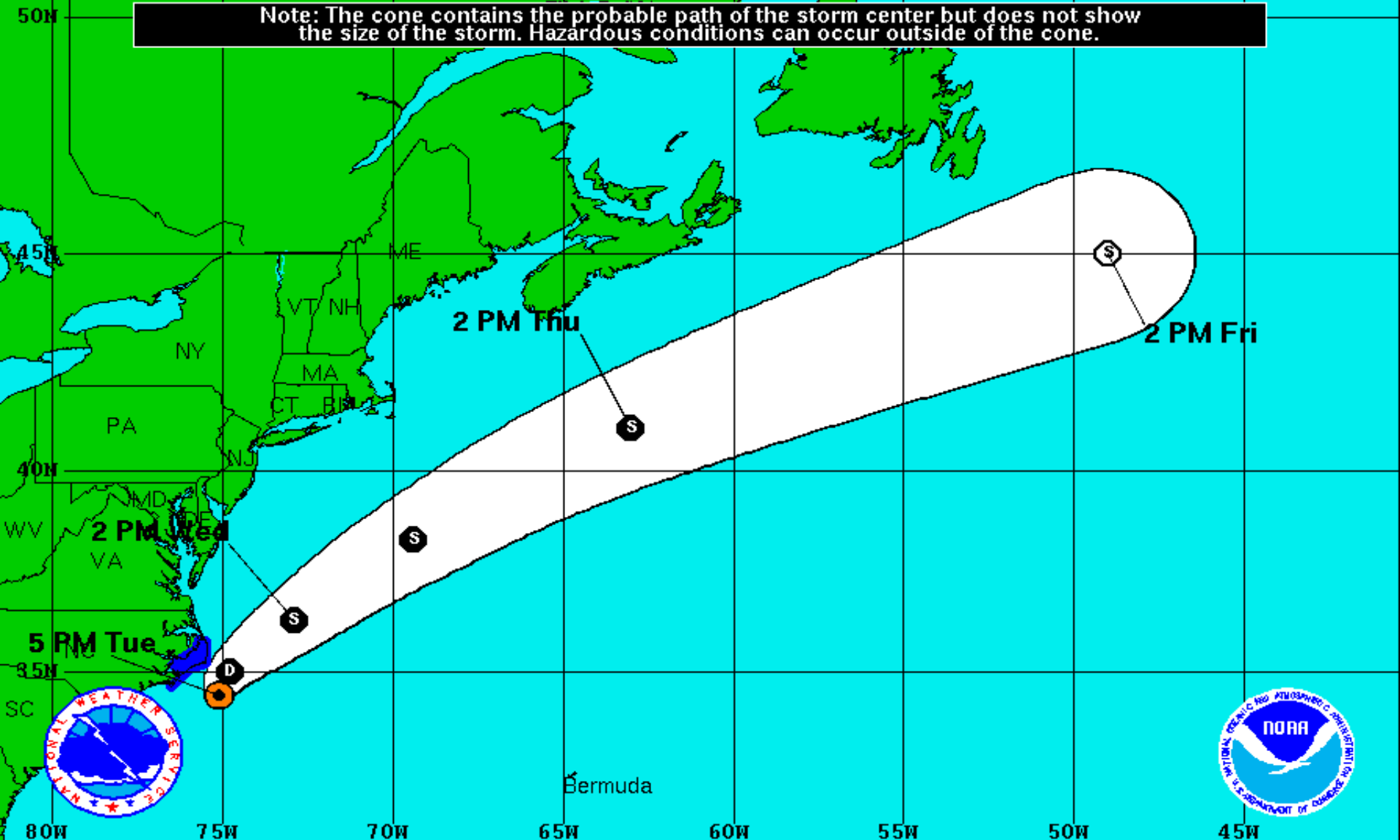
Minimum Pressure 1011 mb (29.84 inches)

Blue Marble basemap imagery courtesy NASA

Satellite 8:50 PM UTC  
4:50 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 Depression Eight

Tuesday August 30, 2016

5 PM EDT Advisory 10

NWS National Hurricane Center

## Current Information:

Center Location 34.4 N 75.1 W

Max Sustained Wind 35 mph

Movement NNE at 5 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





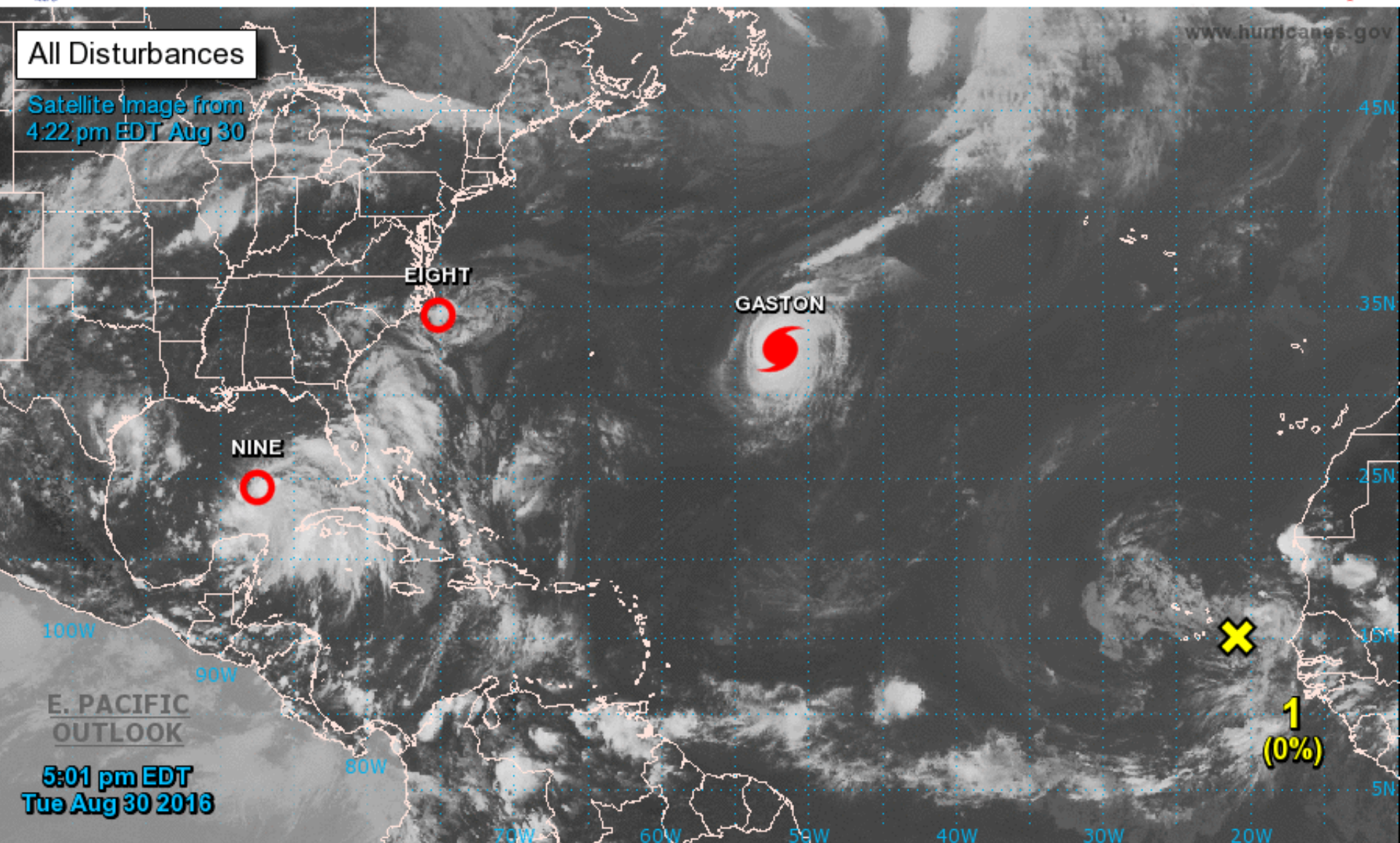
# Two-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida



All Disturbances

Satellite Image from  
4:22 pm EDT Aug 30



5:01 pm EDT  
Tue Aug 30 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



All Disturbances

Note: Shaded areas show where a tropical cyclone is likely to develop within the given time frame.

It DOES NOT show what the likely forecast track of a tropical cyclone will be once it forms!

A weak area of low pressure, associated with a tropical wave, is located over the far eastern Atlantic near the Cabo Verde Islands. Environmental conditions are expected to become a little more favorable for some gradual development of this system late this week while it moves westward at 15 to 20 mph over the tropical Atlantic.

\* Formation chance through 48 hours...low...near 0 percent

\* Formation chance through 5 days...medium...40 percent

10%

40%

2:00 pm EDT  
Tue Aug 30 2016

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

Tropical Cyclone Formation Potential for the Five-Day Period Ending at 2:00 pm EDT Sun Sep 4 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.

### **Tropical Depression 9:**

- The center of Tropical Depression 9 is located 345 miles west of Key West. The Depression is moving northwest near 5 mph.
- A turn toward the north-northwest is expected tonight, followed by a turn toward the north-northeast on Wednesday. On the forecast track, the center will approach the coast in the Hurricane Watch area on Thursday.
- Some strengthening is forecast during the next 48 hours, and the depression is expected to become a tropical storm tonight or early Wednesday. The next name on the Atlantic storm list is Hermine.
- Possible impacts may be felt from Tampa to Panama City. The main impacts would be flash flooding from heavy rain, coastal flooding from storm surge, damaging sustained tropical storm force or hurricane force winds, and isolated tornadoes.
- The heaviest precipitation will be on Wednesday and Thursday along the Gulf Coast from Naples north through Tampa and the Nature Coast.

### **Elsewhere:**

- Hurricane Gaston has maximum sustained winds of 110 mph and is located 750 miles east of Bermuda.
- Gaston is moving toward the east-northeast near 10 mph (17 km/h), and this general motion with an increase in forward speed is expected during the next couple of days.
- Tropical Depression 8 is located 60 miles south southeast of Cape Hatteras, NC with maximum sustained winds at 35 mph.
- The depression is moving north northeast near 5 mph, this general motion is expected tonight with a turn toward the northeast forecast on Wednesday. On the forecast track, the center of the depression will be near the Outer Banks of North Carolina this evening and overnight.



## **Florida Outlook:**

- The combination of a dangerous storm surge and the tide will cause normally dry areas near the coast to be flooded by rising waters moving inland from the shoreline. There is a possibility of life-threatening inundation within the next 48 hours along the Gulf coast of Florida from Aripeka to Indian Pass. Persons located within these areas should be prepared to take all necessary actions to protect life and property from rising water. Promptly follow any instructions from local officials.
- The water could reach the following heights above ground if the peak surge occurs at the time of high tide... Indian Pass to Aripeka...2 to 4 feet... and Aripeka to Bonita Beach...1 to 2 feet.
- The depression is expected to produce additional rain accumulations of 3 to 5 inches over western Cuba through Wednesday, with maximum storm total amounts up to 20 inches. These rains could cause life-threatening flash floods and mud slides. Storm total rainfall amounts of 5 to 10 inches are possible over much of the Florida peninsula through Friday morning, with isolated maximum amounts of 15 inches possible. This rainfall may cause flooding and flash flooding.
- Strong life threatening rip currents are likely along all east coast beaches for the next few days. Rip currents will likely spread to the Gulf Coast as the storm approaches and ocean swells increase.
- Impacts will likely begin affecting Florida Wednesday night and last through Friday.
- Hurricane watches have been issued from Anclote River to Indian Pass.
- Tropical storm watches have been issued from the Gulf coast west of Indian Pass to the Walton/Bay County line.
- Hurricane Gaston and Tropical Depression 8 do not pose a threat to Florida.

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



# TROPICAL UPDATE

Created by:

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State Meteorological Support Unit

Florida Division of Emergency  
Management