



TROPICAL UPDATE

5 PM EDT

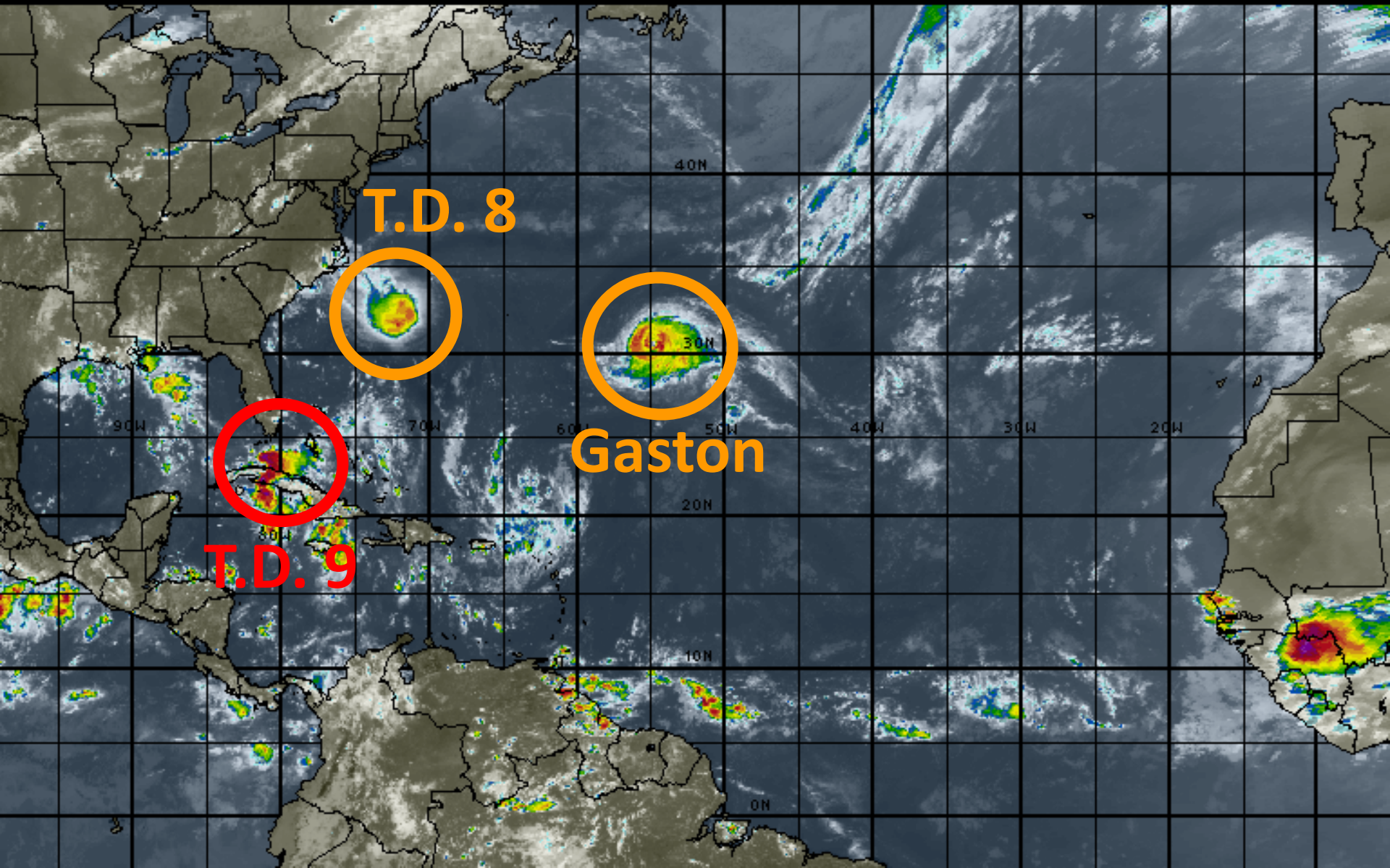
Sunday, August 28, 2016

T.D. #9, T.D. #8, & 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.

Atlantic Basin Satellite Image

18:00 28-AUG-2016 GMT ©Copyright WSI Corporation <http://www.wsi.com>





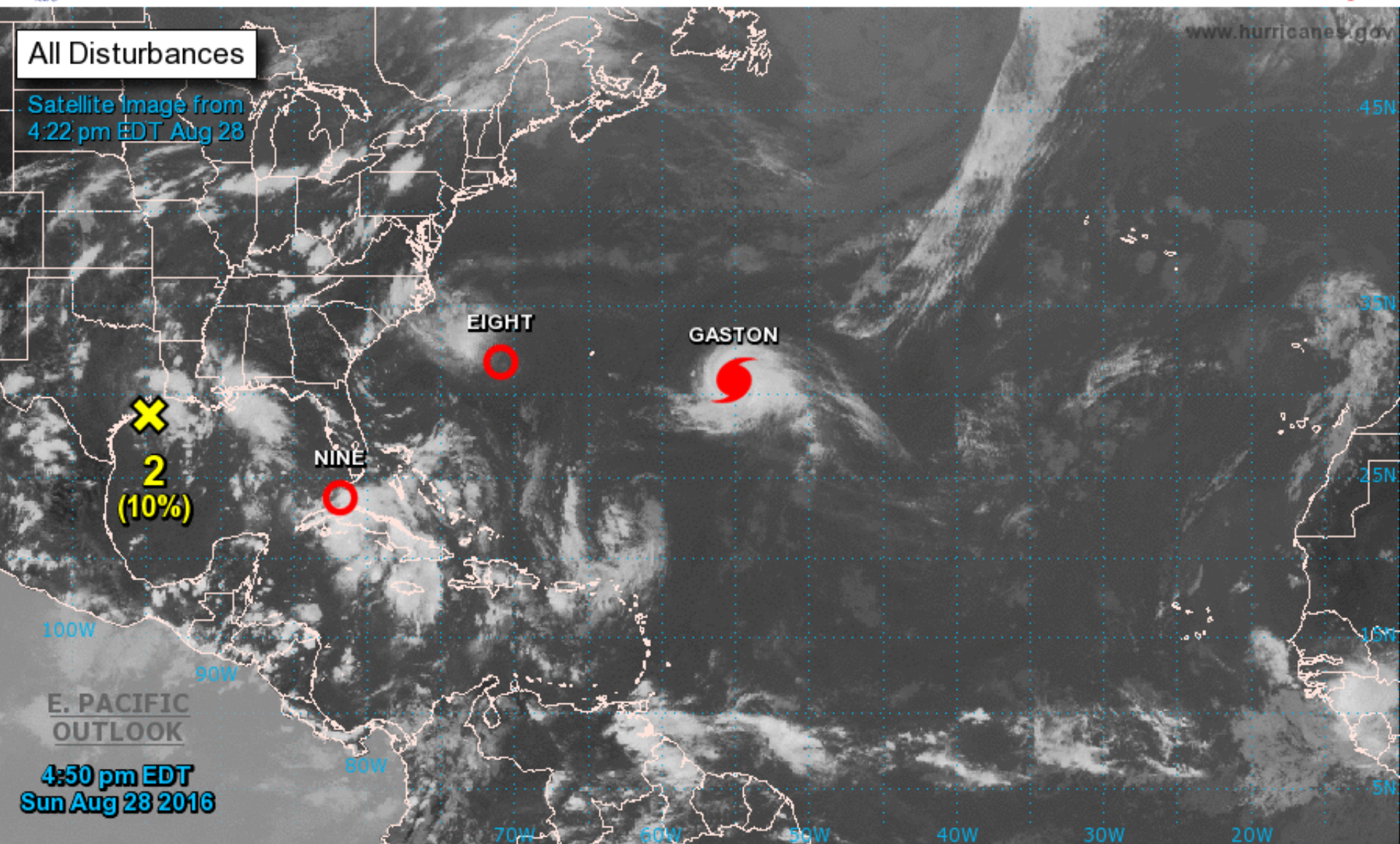
Two-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida



All Disturbances

Satellite Image from
4:22 pm EDT Aug 28



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

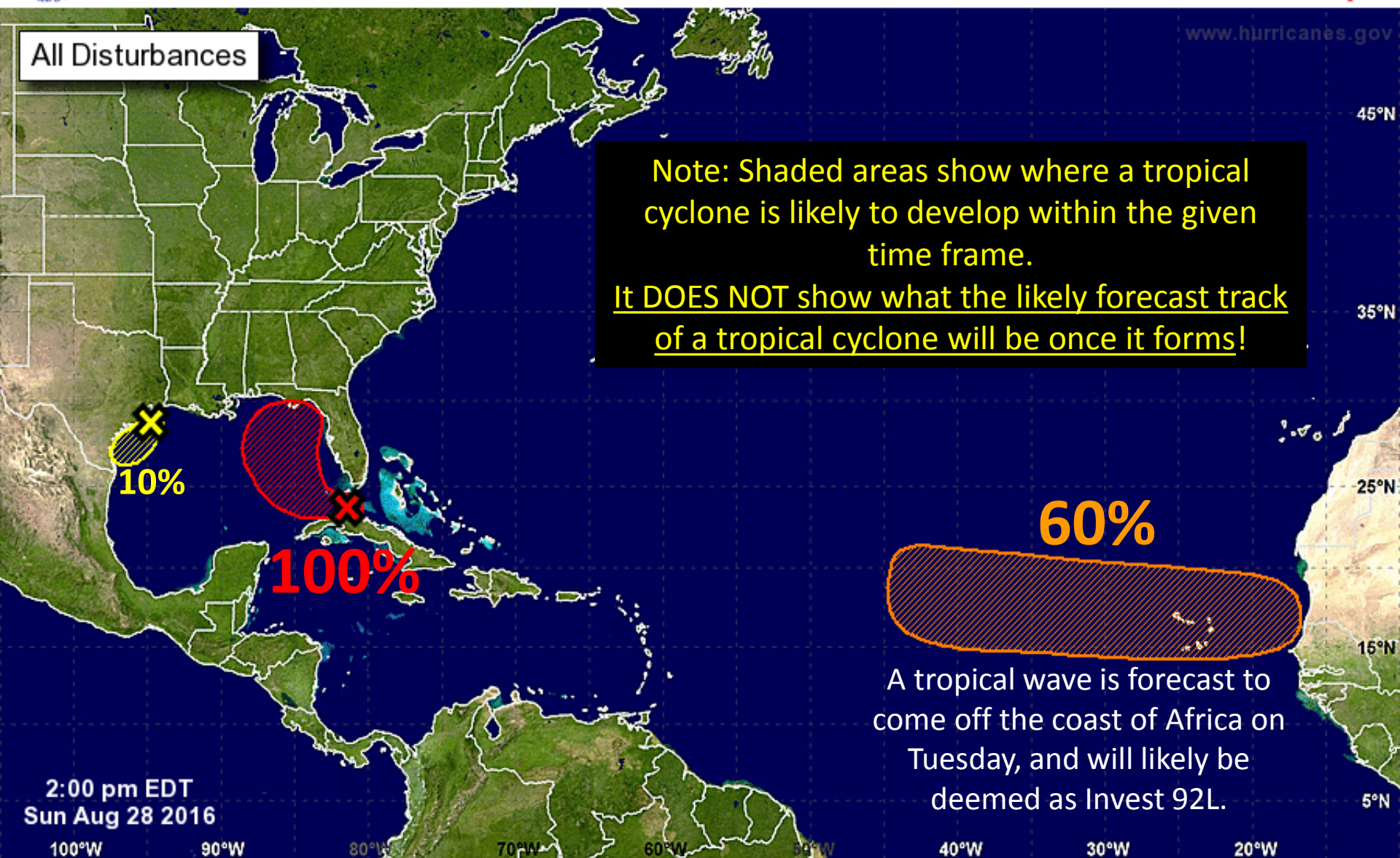


www.hurricanes.gov

All Disturbances

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!



2:00 pm EDT
Sun Aug 28 2016

A tropical wave is forecast to come off the coast of Africa on Tuesday, and will likely be deemed as Invest 92L.

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

2PM Sun Aug 28 2016

Position 23.7° 81.9°W

Maximum Winds 35 mph

Movement W at 10 mph

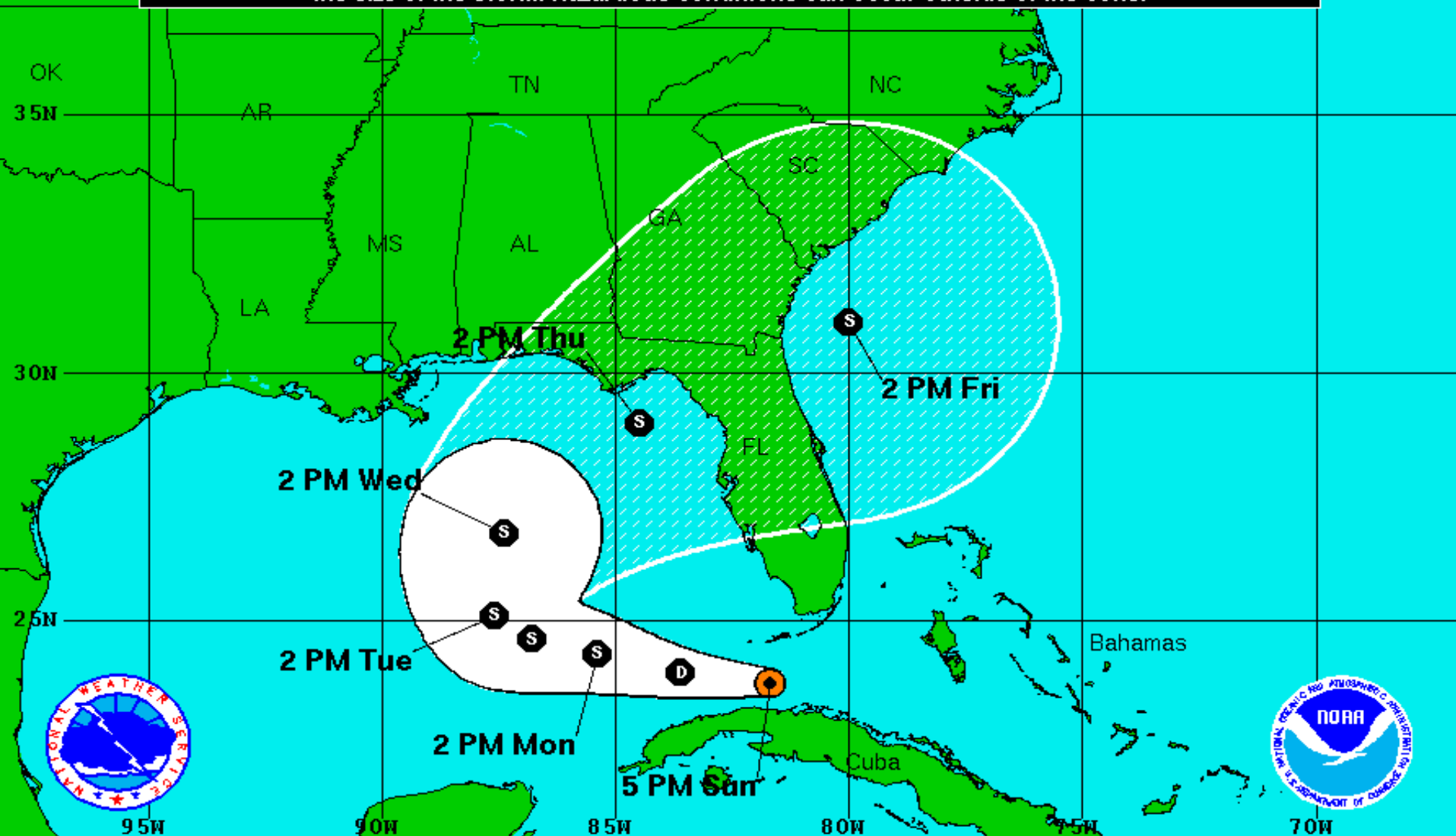
Blue Marble basemap imagery courtesy NASA

Satellite 8:31 PM UTC
8:31 PM GMT



Showers and thunderstorms have become better organized this afternoon. The red “X” shows where the center of T.D. 9. Wind shear has appeared to lessen slightly over the past few hours, allowing thunderstorms to develop around the center.

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

Sunday August 28, 2016

5 PM EDT Advisory 1

NWS National Hurricane Center

Current Information:

Center Location 23.7 N 81.7 W

Max Sustained Wind 35 mph

Movement W at 9 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

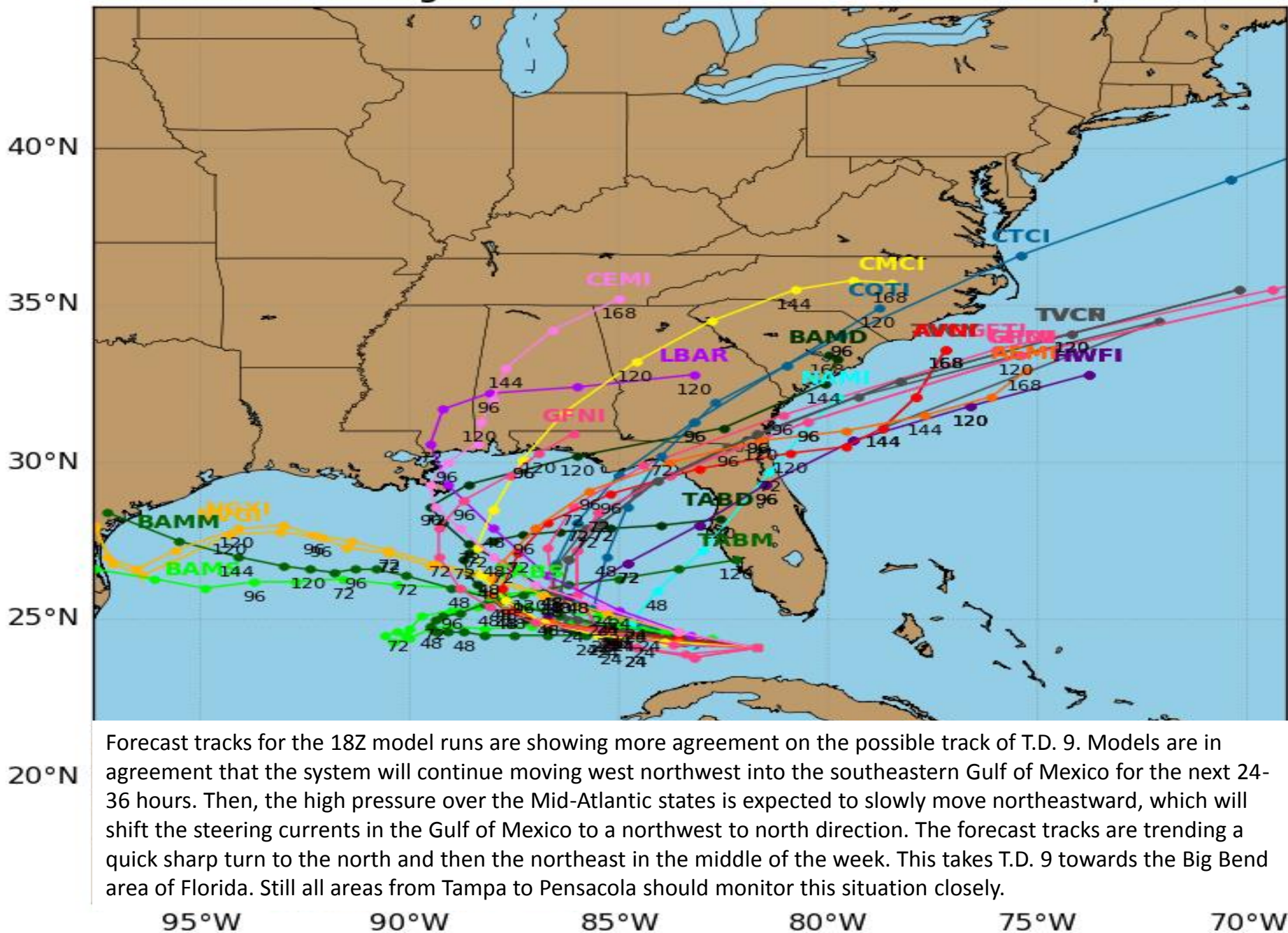
Warnings:

Hurricane Trop.Storm

Tropical Depression 9 Model Track Guidance

Initialized at 18z Aug 28 2016

Levi Cowan - tropicaltidbits.com

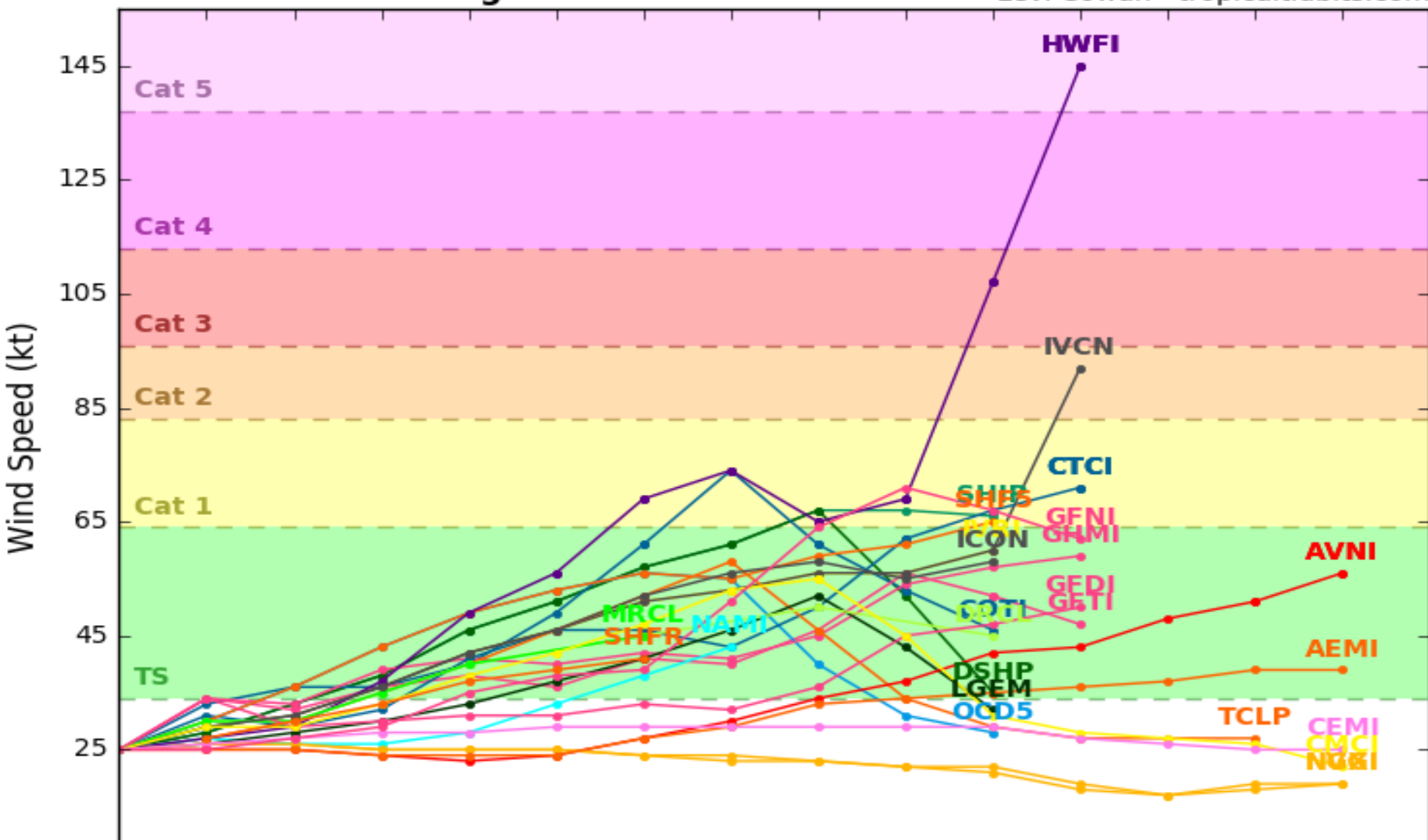


Tropical Depression 9

Model Intensity Guidance

Initialized at 18z Aug 28 2016

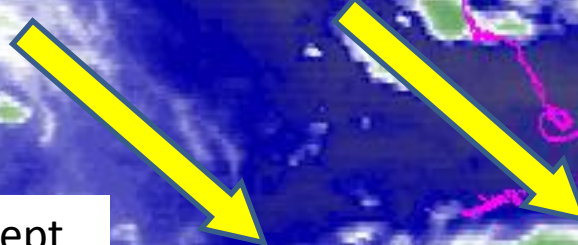
Levi Cowan - tropicaltidbits.com



Most models are now in agreement that T.D. 9 will at least become a tropical storm, but not strengthen into a hurricane. The possibility still remains, however, that the system does not develop, or that it does indeed strengthen into a hurricane. So much uncertainty in models is due to the lack of an organized system. **Note:** Statistical models (SHF5, SHIP, DSHP, LGEM) 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.

T.D. 9 Water Vapor Image

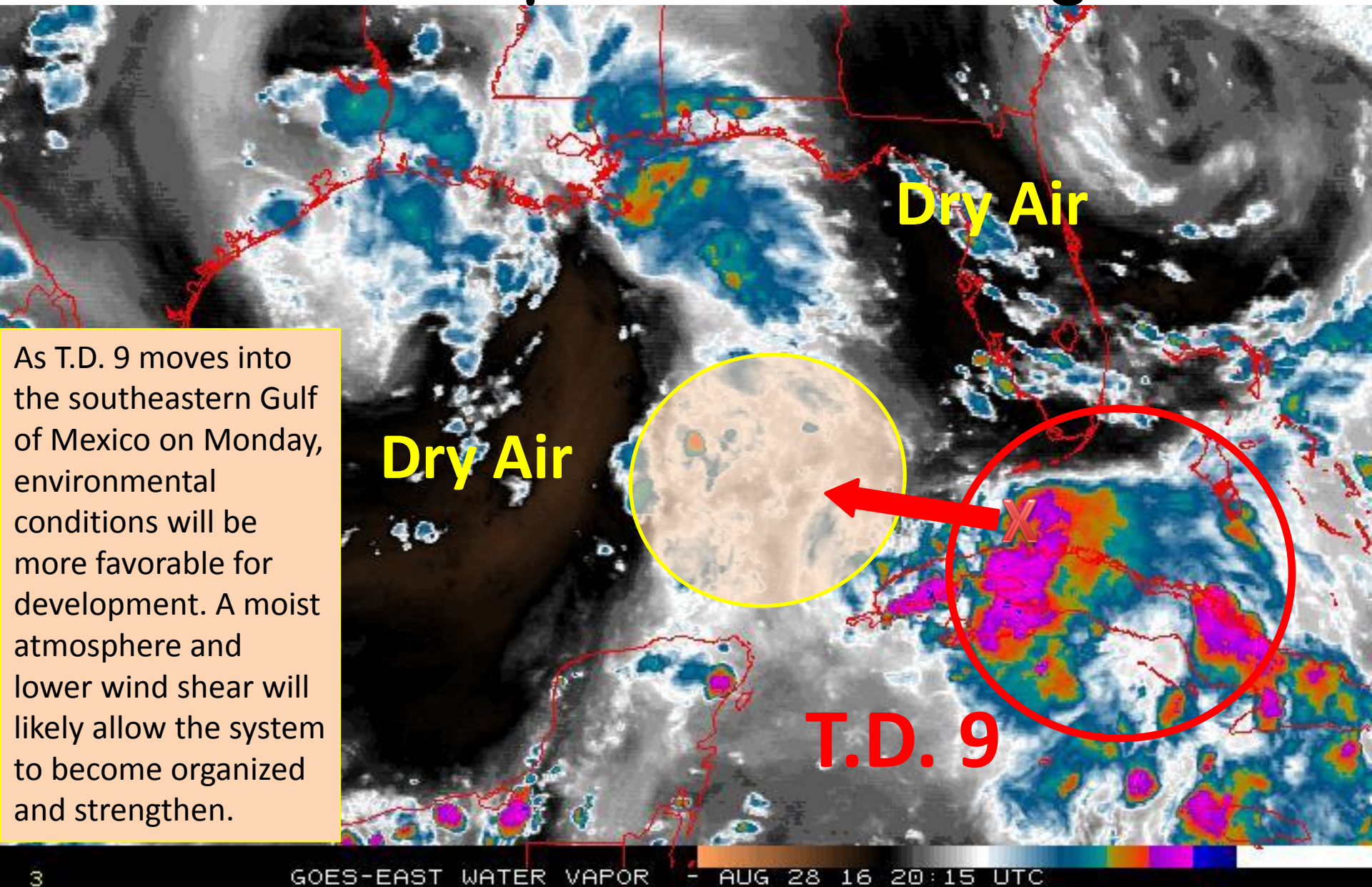
**Strong
Wind
Shear**



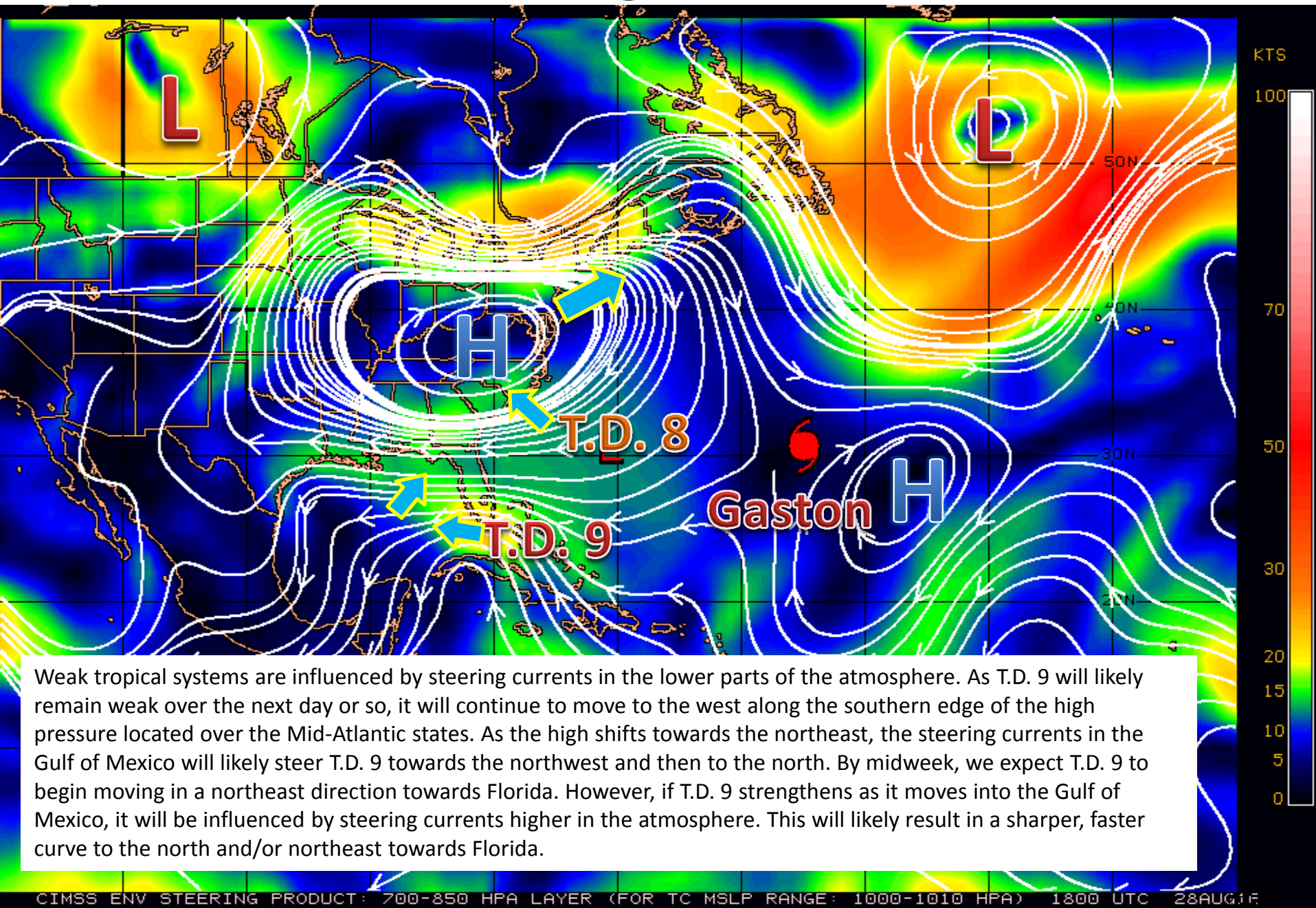
Strong wind shear has kept significant development of T.D. 9 in check today. Heading into tomorrow, we expect wind shear to lessen, which will allow the system to become better organized.



Looking Ahead: Water Vapor Satellite Image

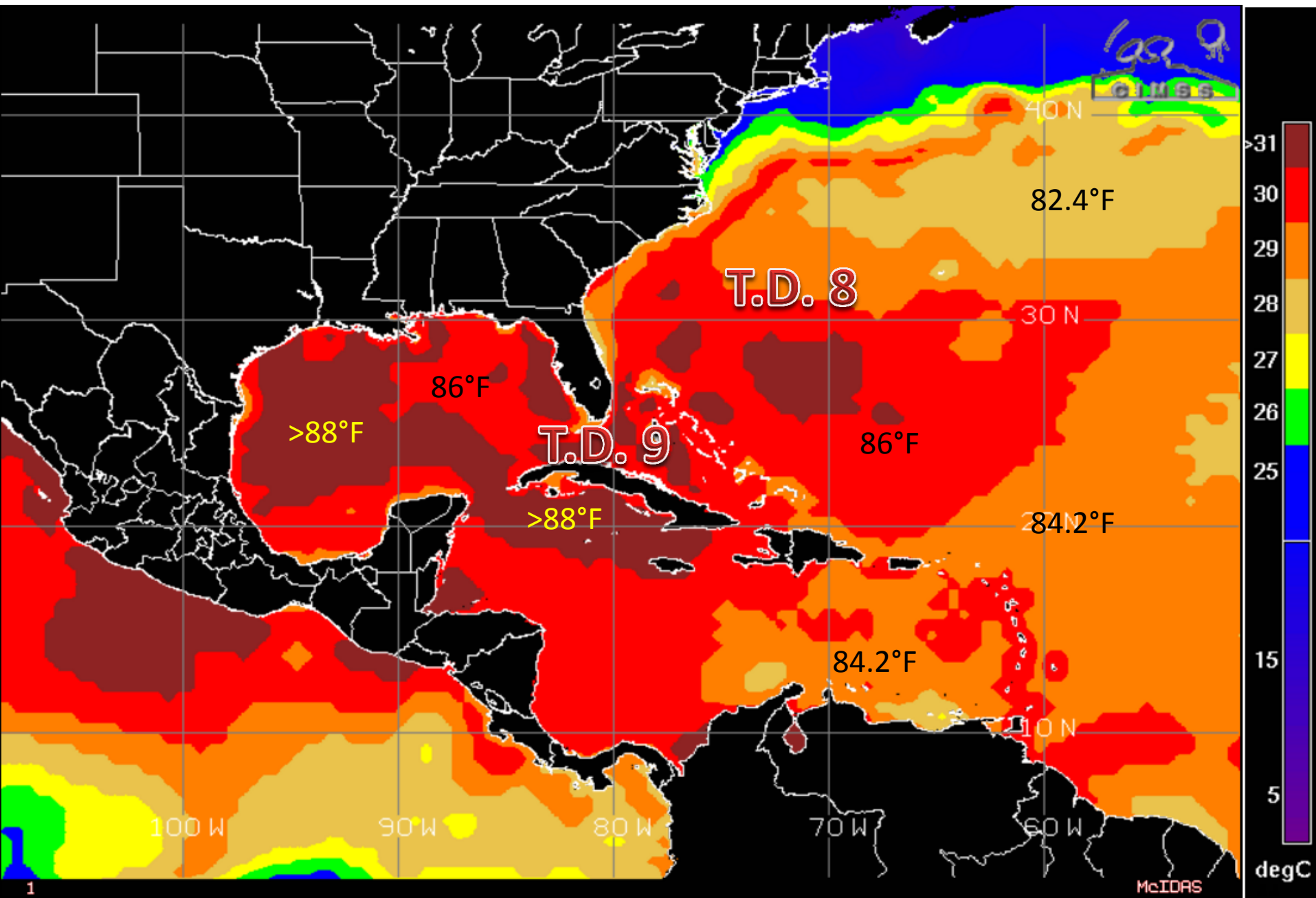


Steering Currents

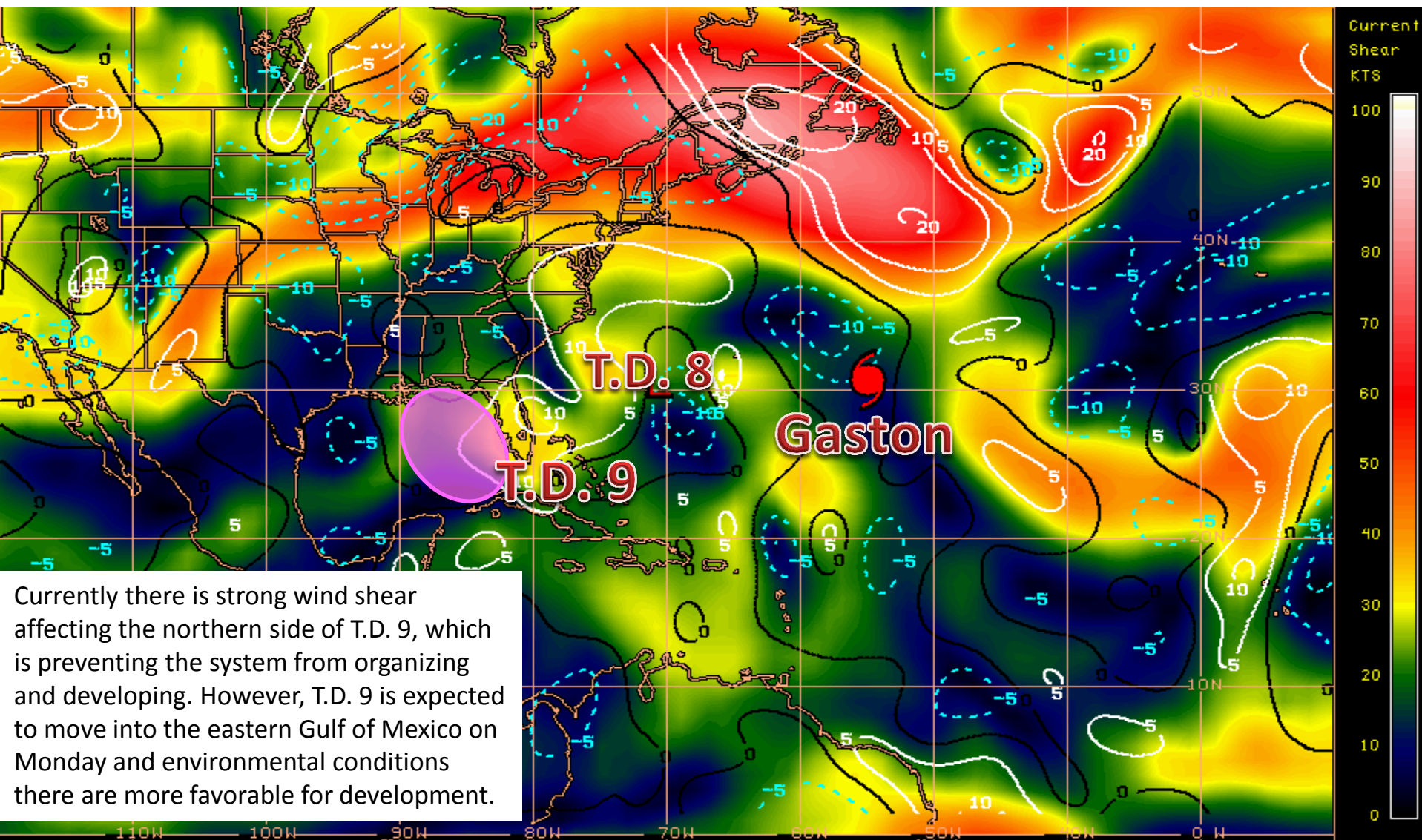


Weak tropical systems are influenced by steering currents in the lower parts of the atmosphere. As T.D. 9 will likely remain weak over the next day or so, it will continue to move to the west along the southern edge of the high pressure located over the Mid-Atlantic states. As the high shifts towards the northeast, the steering currents in the Gulf of Mexico will likely steer T.D. 9 towards the northwest and then to the north. By midweek, we expect T.D. 9 to begin moving in a northeast direction towards Florida. However, if T.D. 9 strengthens as it moves into the Gulf of Mexico, it will be influenced by steering currents higher in the atmosphere. This will likely result in a sharper, faster curve to the north and/or northeast towards Florida.

Sea Surface Temperatures Near 99L



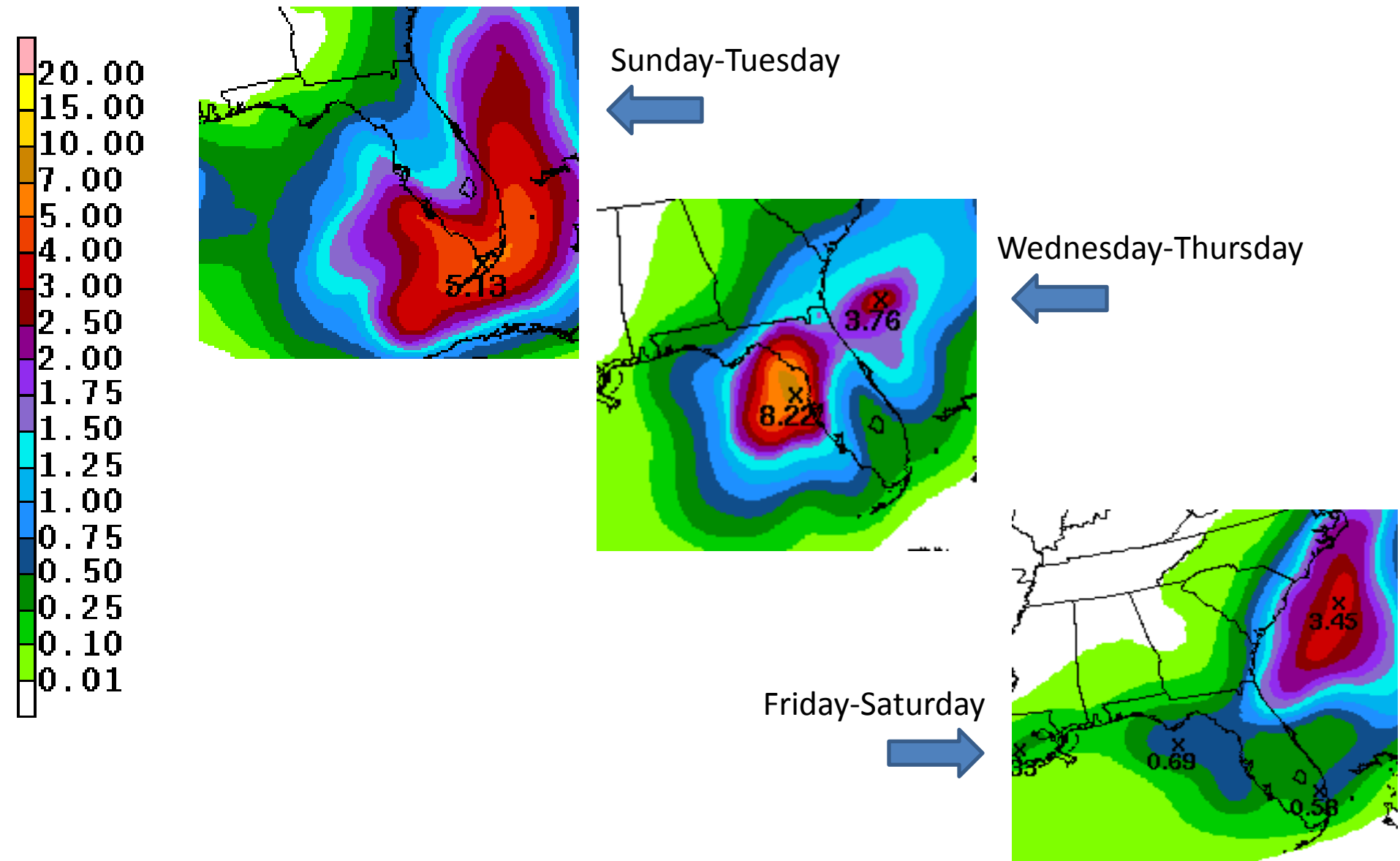
Current Wind Shear (shaded) and Shear Tendency (contours)



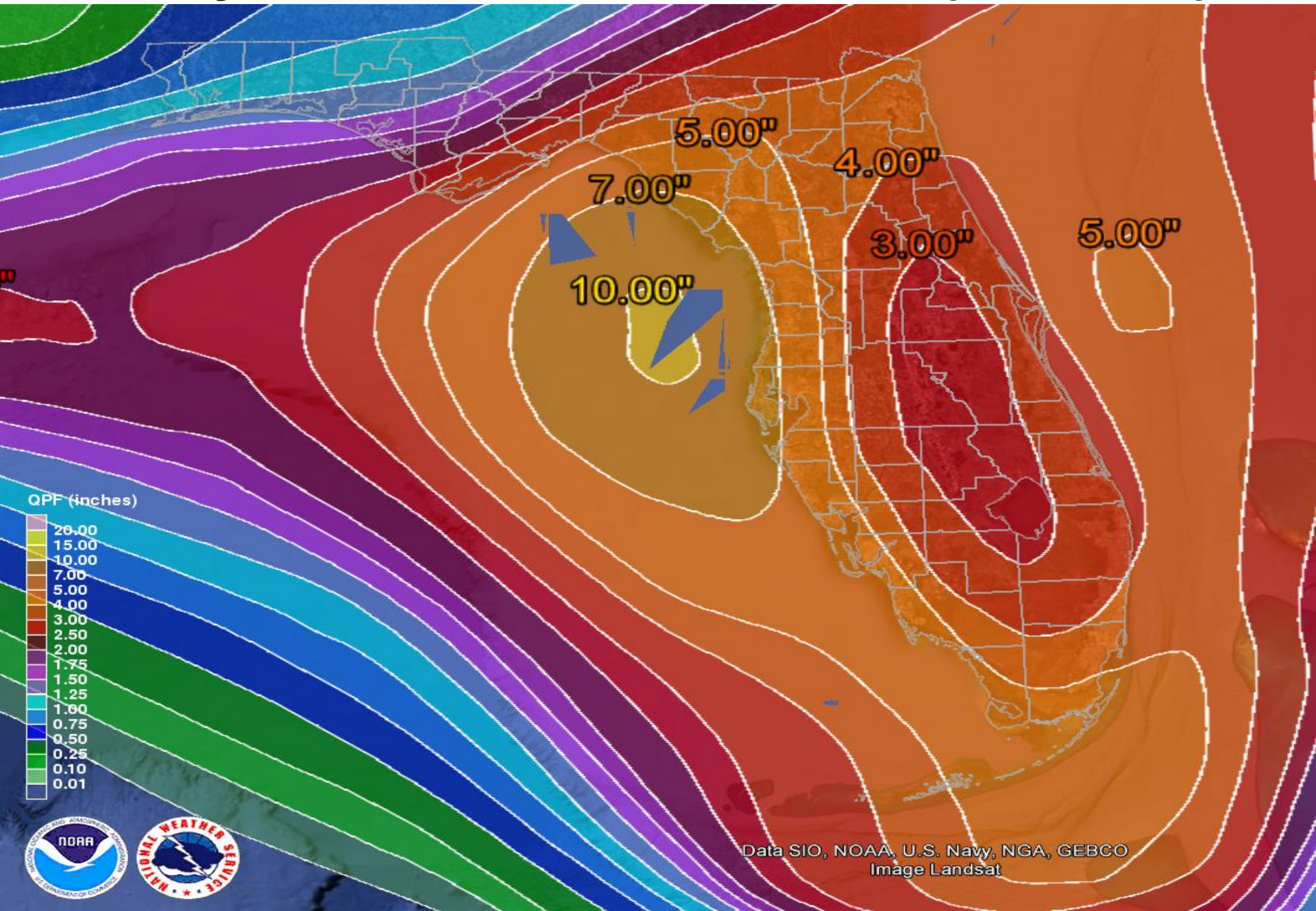
Currently there is strong wind shear affecting the northern side of T.D. 9, which is preventing the system from organizing and developing. However, T.D. 9 is expected to move into the eastern Gulf of Mexico on Monday and environmental conditions there are more favorable for development.

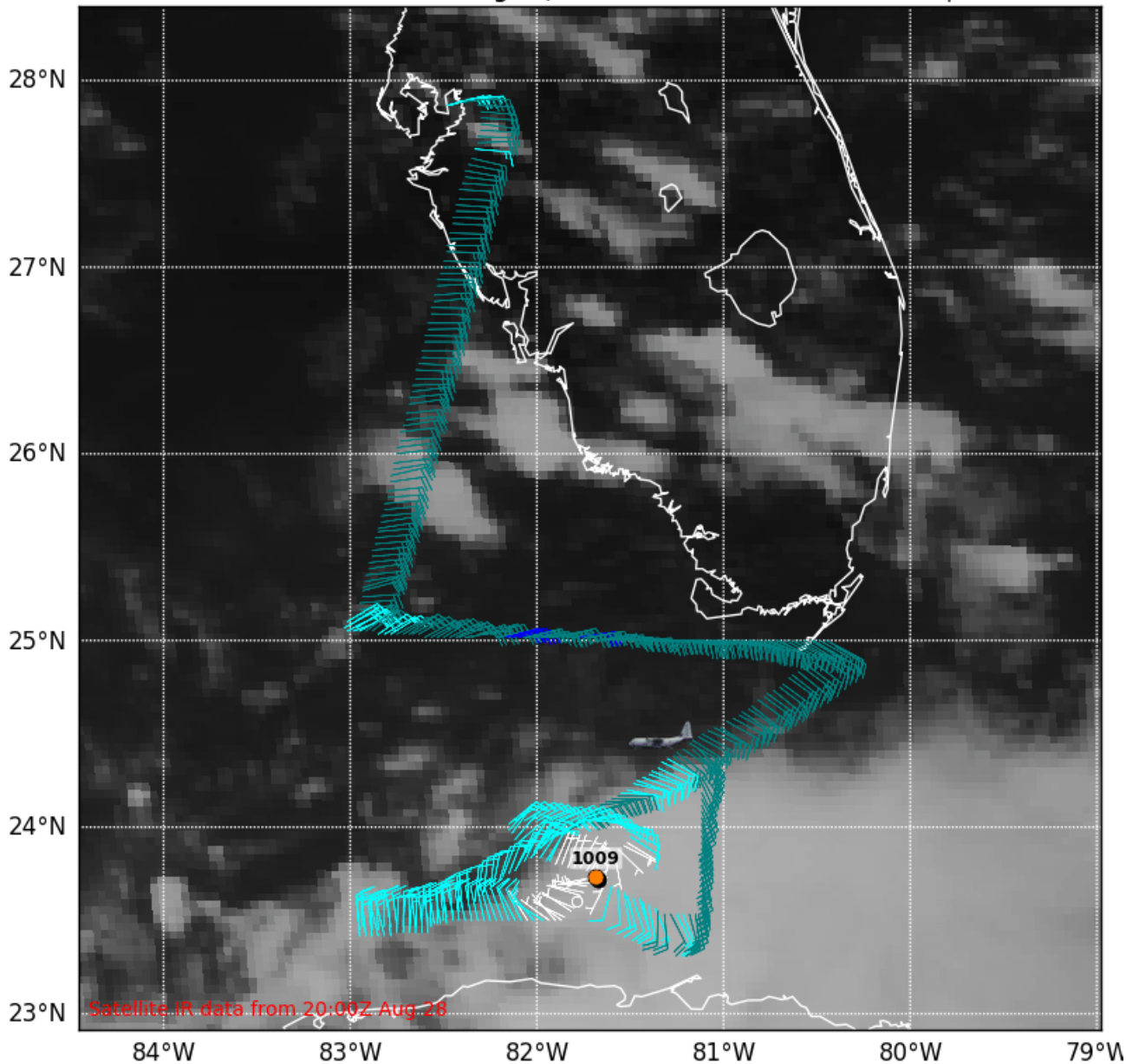
Shear Tendency (KTS) Over Past 24 Hours: Increasing ——— Decreasing - - - - -

Current Rainfall Forecast

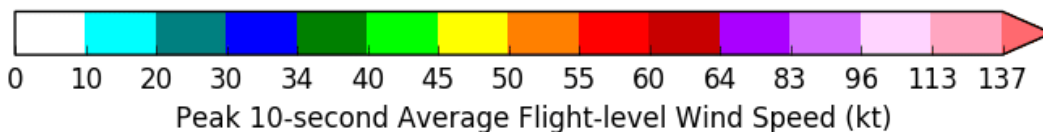


7-Day Forecast Rainfall Total (Sun-Sat)





The current NOAA Hurricane Hunter Reconnaissance flight found a closed surface circulation located south of the lower Florida Keys. Winds are very weak around the center, and the lowest pressure recorded was 1009mb. Stronger winds of 25-30 knots (29-34mph) were located in thunderstorms east of the low pressure center.



Hurricane Gaston

5 PM EDT Sun Aug 28 2016

Position 30.8 N 55.1 W

Maximum Winds 115 mph

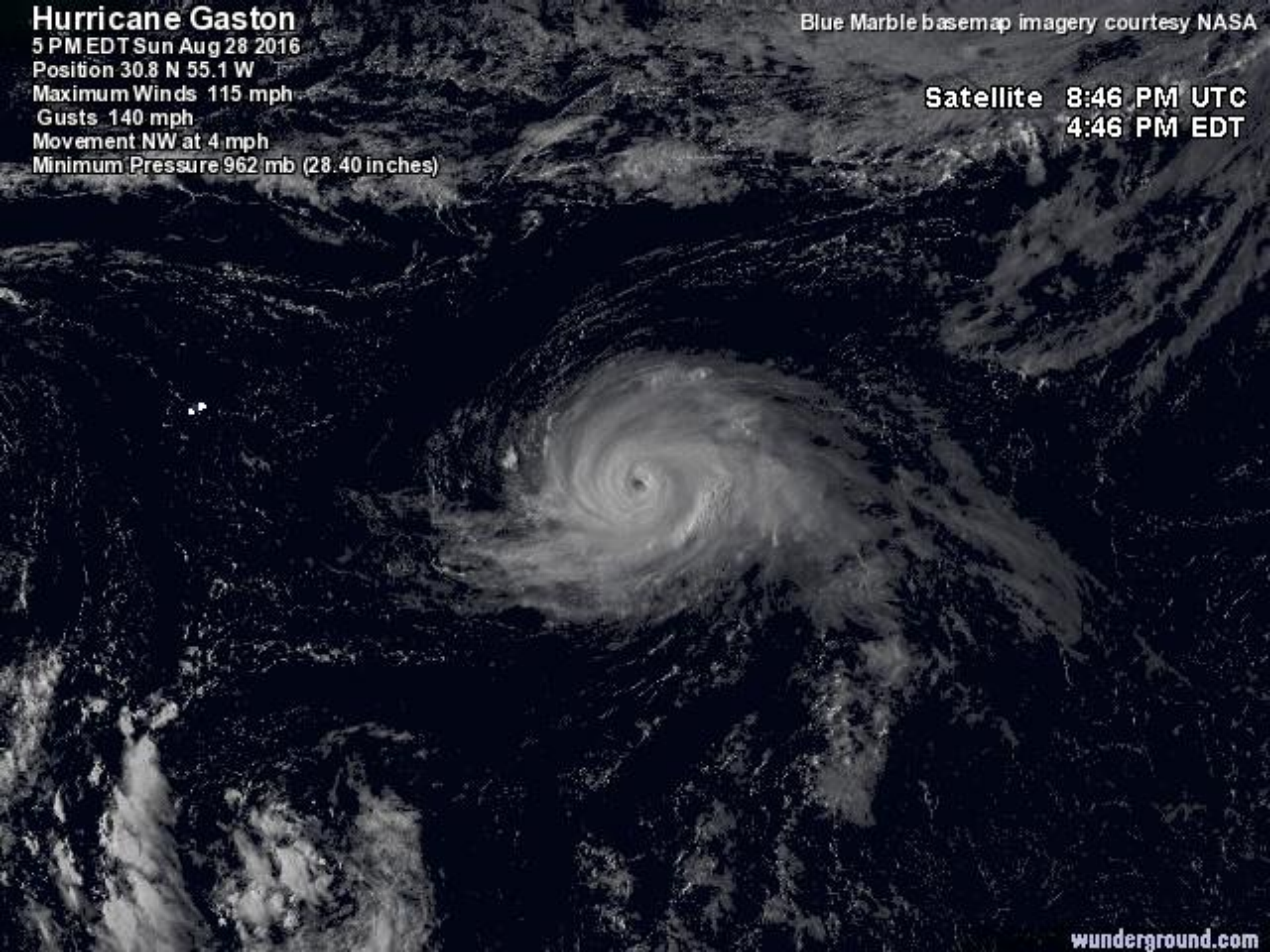
Gusts 140 mph

Movement NW at 4 mph

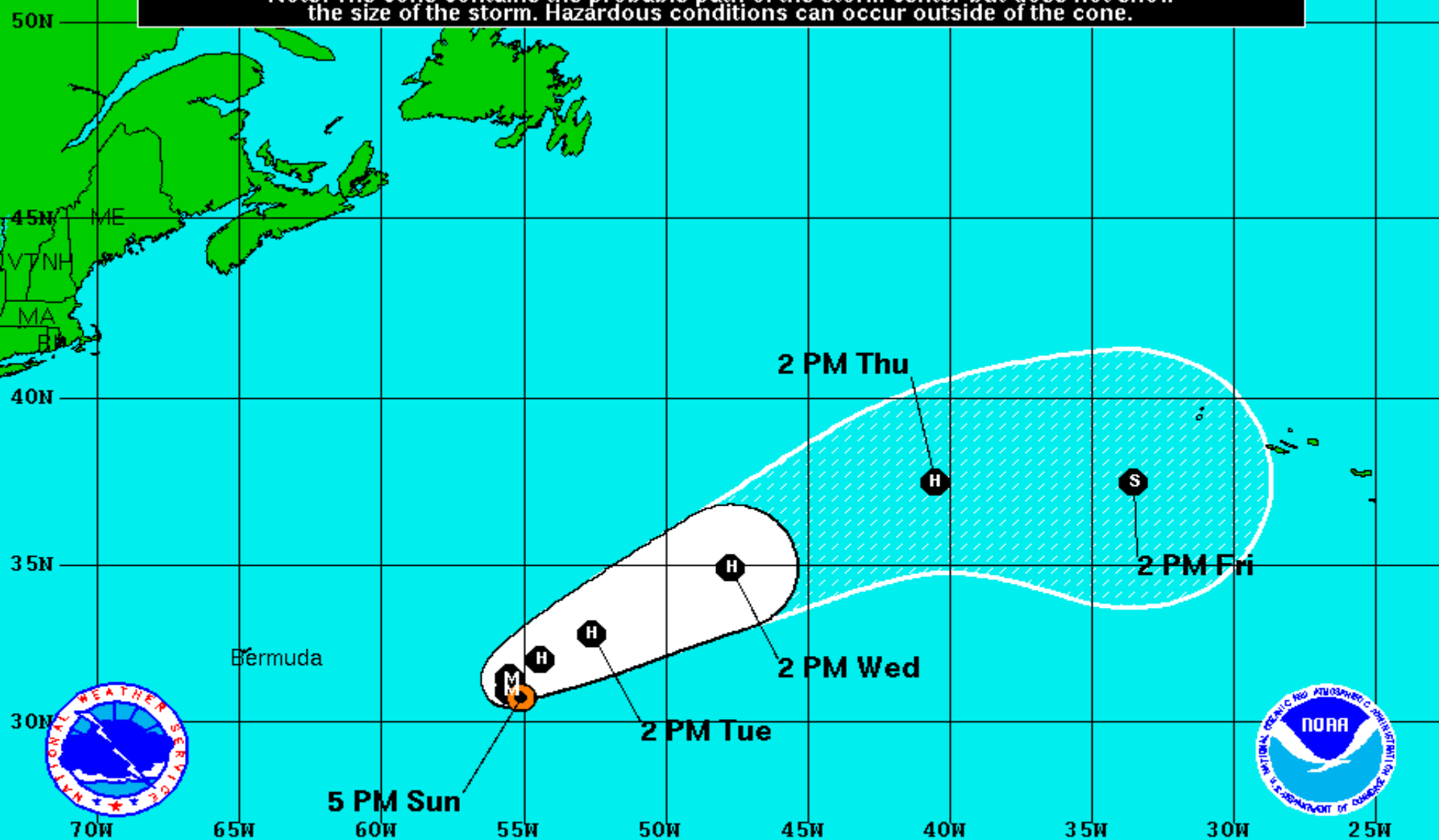
Minimum Pressure 962 mb (28.40 inches)

Blue Marble basemap imagery courtesy NASA

Satellite 8:46 PM UTC
4:46 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.



Hurricane Gaston

Sunday August 28, 2016

5 PM EDT Advisory 25

NWS National Hurricane Center

Current Information:

Center Location 30.8 N 55.1 W
Max Sustained Wind 115 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

Tropical Depression 8

8 AM Sun Aug 28 2016

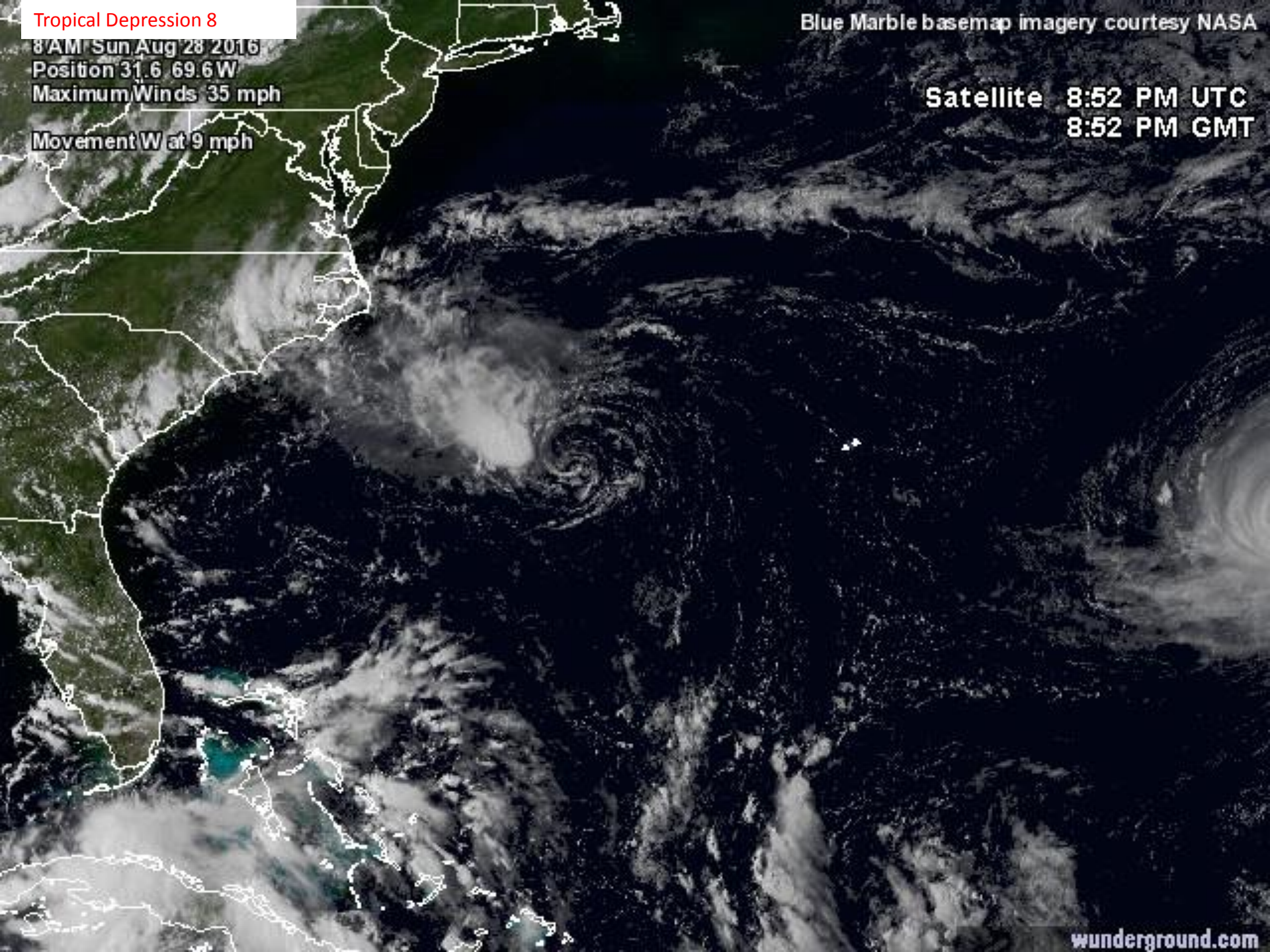
Position 31.6 69.6 W

Maximum Winds 35 mph

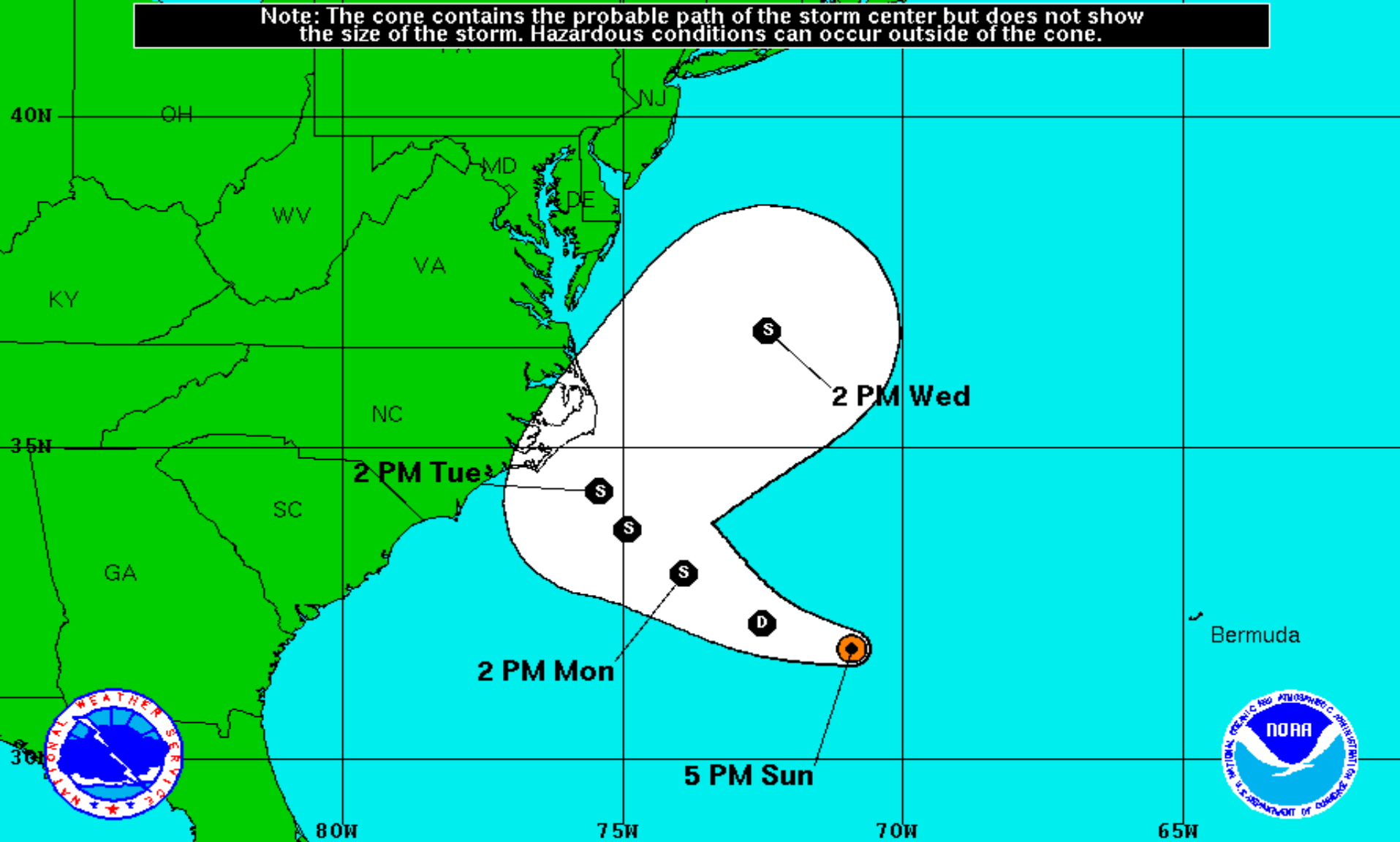
Movement W at 9 mph

Blue Marble basemap imagery courtesy NASA

Satellite 8:52 PM UTC
8:52 PM GMT



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

Sunday August 28, 2016

5 PM EDT Advisory 2

NWS National Hurricane Center

Current Information:

Center Location 31.8 N 70.9 W

Max Sustained Wind 35 mph

Movement W at 9 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 9:

- At 5PM EDT, the center of Tropical Depression 9 was located by a NOAA Hurricane Hunter aircraft south of the lower Florida Keys.
- The Depression is moving west near 9mph, and this motion is expected to continue through tonight.
- On the forecast track, the depression will be moving away from the Florida Keys into the Gulf of Mexico overnight. A turn toward the west-northwest and a decrease in forward speed are expected on Monday followed by a turn toward the northwest on Tuesday.
- Computer models are in agreement that T.D. 9 will at some point will sharply curve towards the north then northeast on Wednesday and Thursday taking the storm towards the Big Bend region of Florida. Still, possible impacts may be felt from Fort Meyers to Pensacola.
- Also, most models now agree that T.D. 9 will strengthen into a tropical storm over the next 48 hours.
- The next two names on the Atlantic storm list are Hermine and Ian.

Hurricane Gaston:

- Hurricane Gaston has maximum sustained winds of 115 mph and is located in the Central Atlantic.
- Computer models are in good agreement that Gaston will continue moving towards the northwest today, then turn towards the north and northeast tomorrow.
- Gaston poses no threat to the U.S. or Florida.

Tropical Depression 8:

- Tropical Depression 8 is located 405 miles southeast of Cape Hatteras, NC with maximum sustained winds at 35 mph.
- The depression is moving west at 9 mph, and a west-northwest motion is expected to continue today and tonight, followed by a turn towards the northwest on Monday.
- The center of the cyclone is expected to pass offshore of the Outer Banks of North Carolina on Tuesday.
- Some strengthening is possible in the next couple of days, and the depression could become a tropical storm on Monday. The next two names on the Atlantic storm list are Hermine and Ian.

Florida Outlook:

- The depression is expected to produce total rain accumulations of 1 to 4 inches over the southern half of the Florida peninsula and the Florida Keys through Wednesday.
- Isolated maximum amounts of 6 inches are possible over coastal areas of southern Florida and the Keys. This rainfall may cause flooding and flash flooding.
- Gusts to tropical storm force are possible in a few squalls in the lower Florida Keys through tonight.
- Strong life threatening rip currents are likely along all east coast beaches for the next few days.
- At this time it is too early to tell what specific impacts 99L will have along the Florida Gulf Coast, although strong rip currents and other coastal hazards are possible throughout the upcoming week.
- Impacts will likely begin affecting Florida Wednesday night and last through Friday.
- As of now there are no tropical watches or warnings issued for Florida.
- Hurricane Gaston and Tropical Depression 8 do not pose a threat to Florida.

Another briefing packet will be issued on Monday morning. For more information on this system, please visit the NHC website at www.nhc.noaa.gov



TROPICAL UPDATE

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State Meteorological Support Unit

Florida Division of Emergency
Management