



TROPICAL UPDATE

6 PM EDT

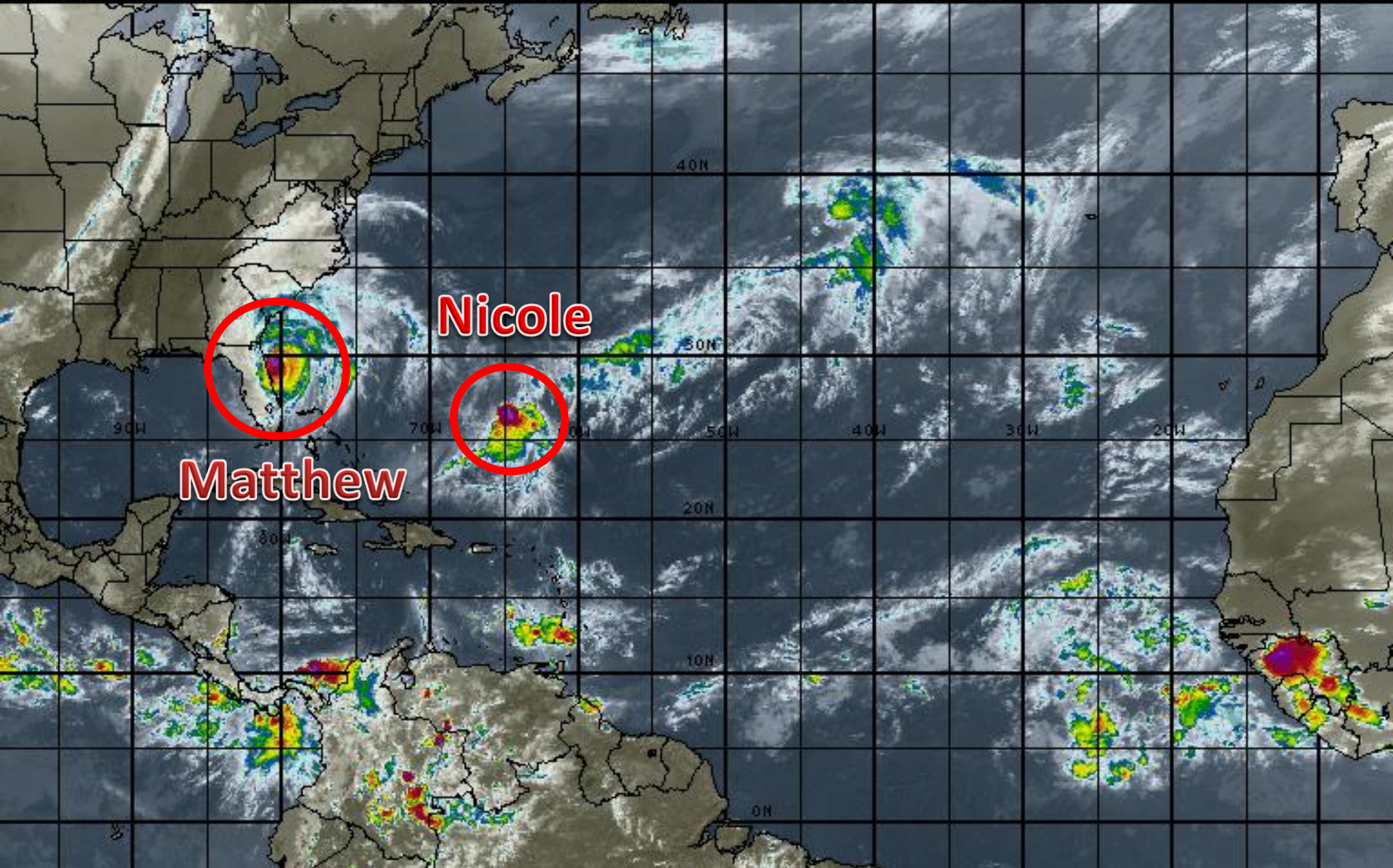
Friday, October 7, 2016

**Hurricane Matthew & Tropical Storm
Nicole**

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 07-OCT-2016 GMT Copyright © 1998-2016 WSI Corporation <http://www.wsi.com>



Hurricane Matthew

5 PM EDT Fri Oct 07 2016

Position 30.2 N 80.7 W

Maximum Winds 110 mph

Gusts 130 mph

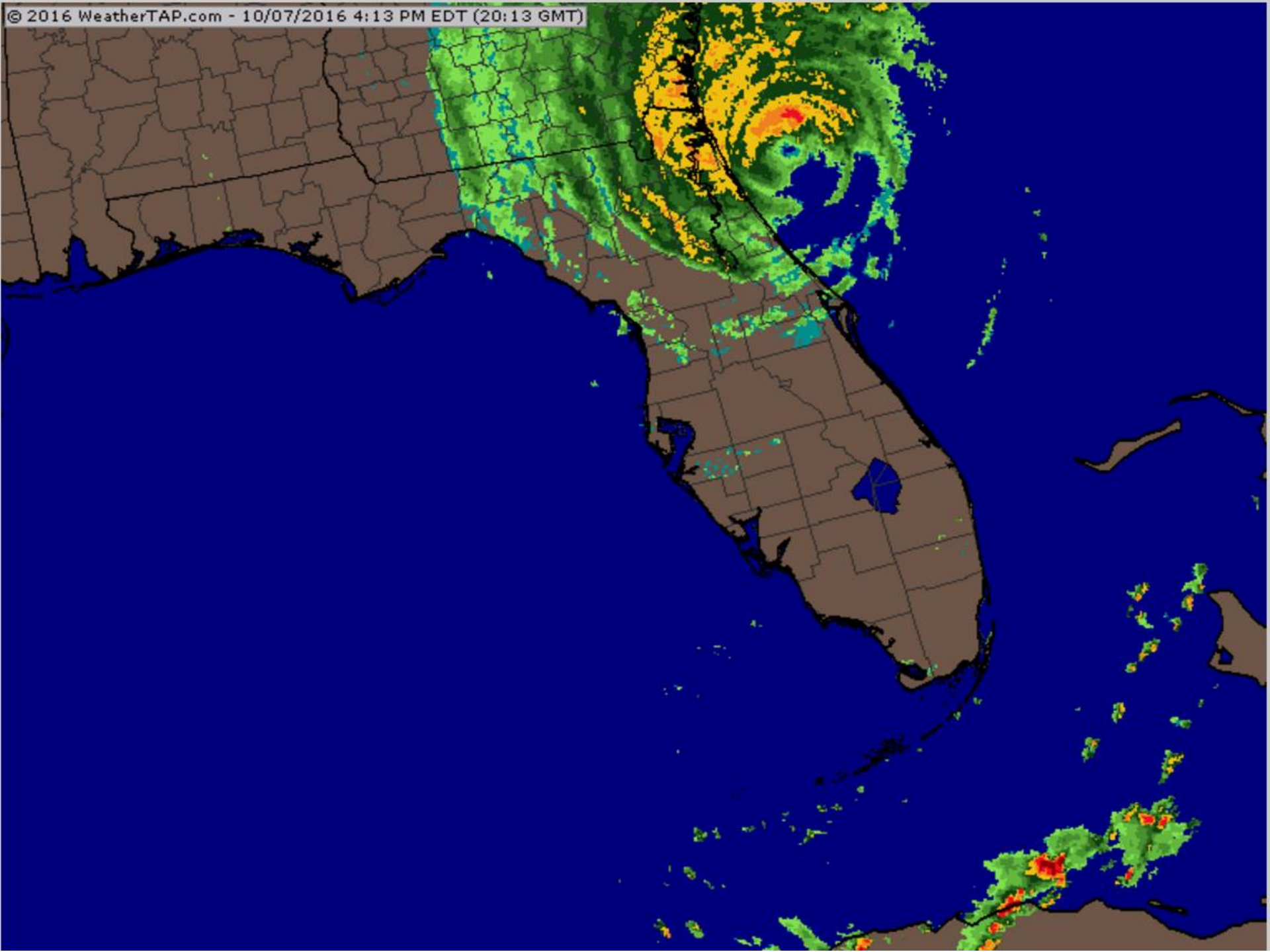
Movement N at 11 mph

Minimum Pressure 948 mb (27.98 inches)

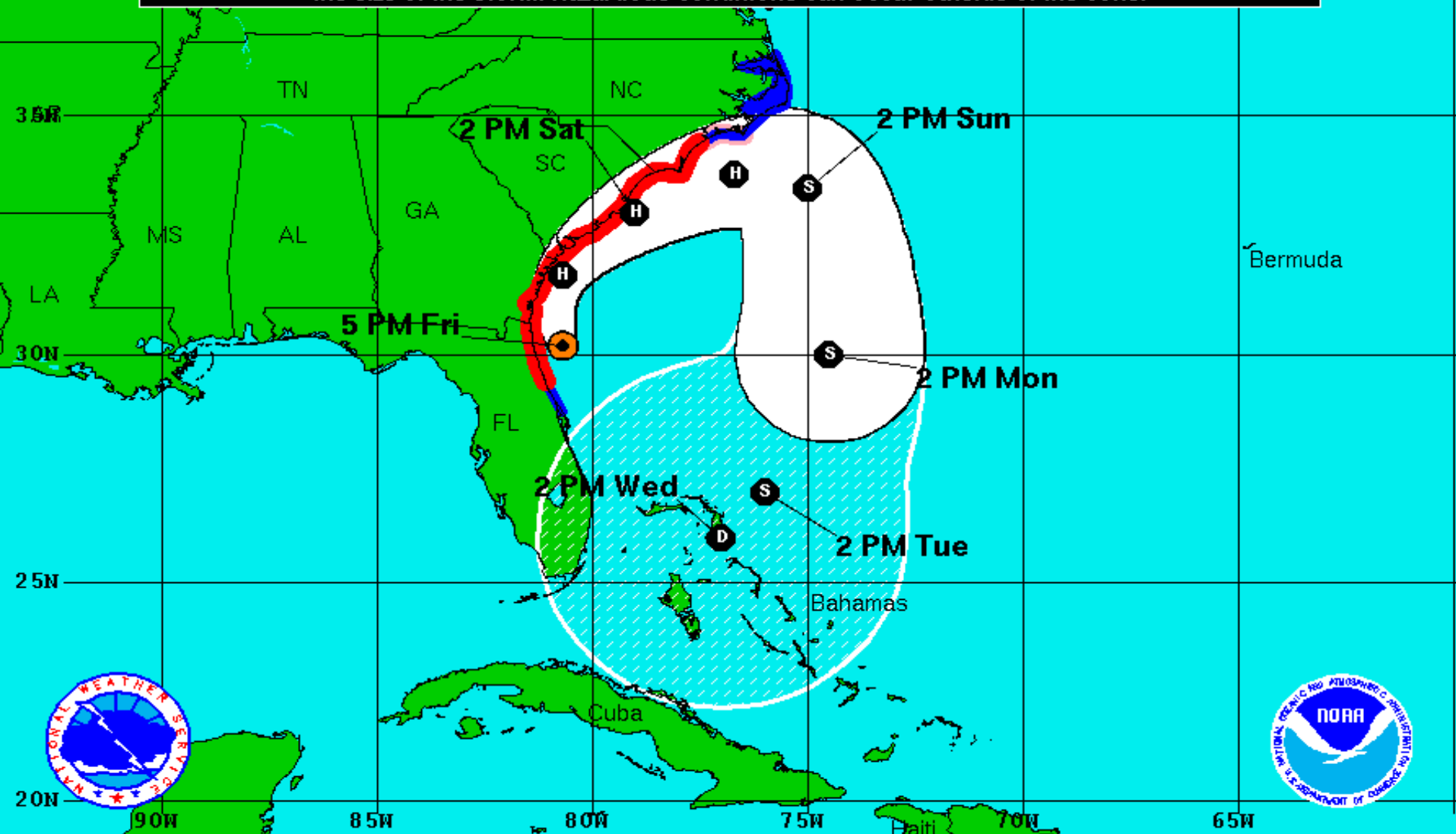
Blue Marble basemap imagery courtesy NASA

Satellite 8:48 PM UTC
4:48 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 Matthew
 Friday October 7, 2016
 5 PM EDT Advisory 39
 NWS National Hurricane Center

Current Information:
 Center Location 30.2 N 80.7 W
 Max Sustained Wind 110 mph
 Movement N at 12 mph

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

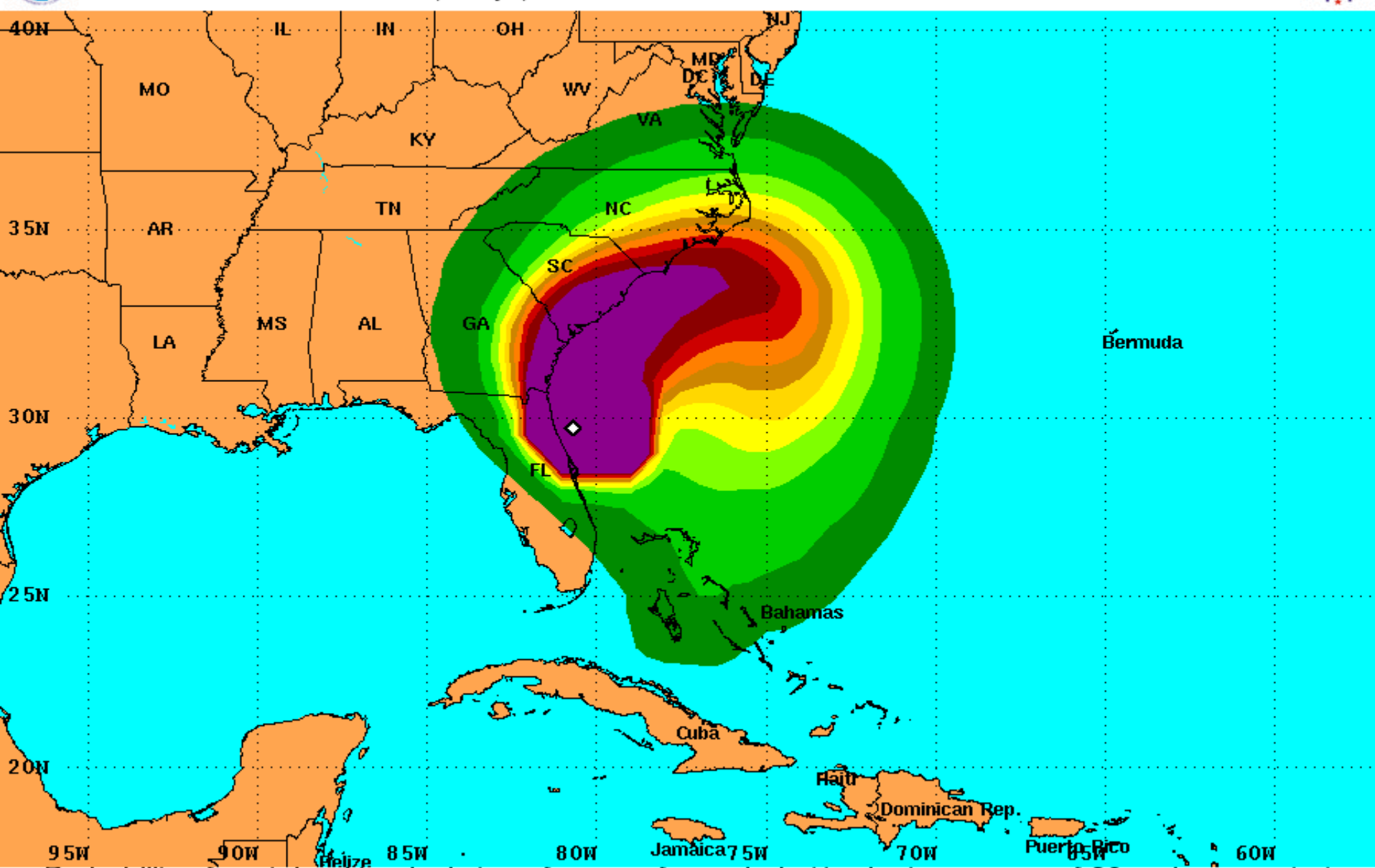
Potential Track Area:
 Day 1-3 Day 4-5

Watches:
 Hurricane Trop.Storm

Warnings:
 Hurricane Trop.Storm

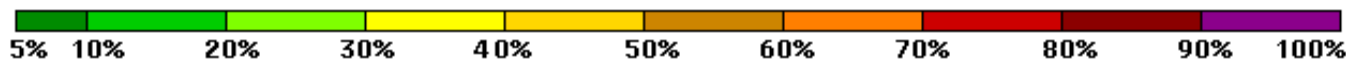


PRELIMINARY (SINGLE STORM) Tropical Storm Force Wind Speed Probabilities For the 120 hours (5 days) from 2 PM EDT Fri Oct 7 to 2 PM EDT Wed Oct 12



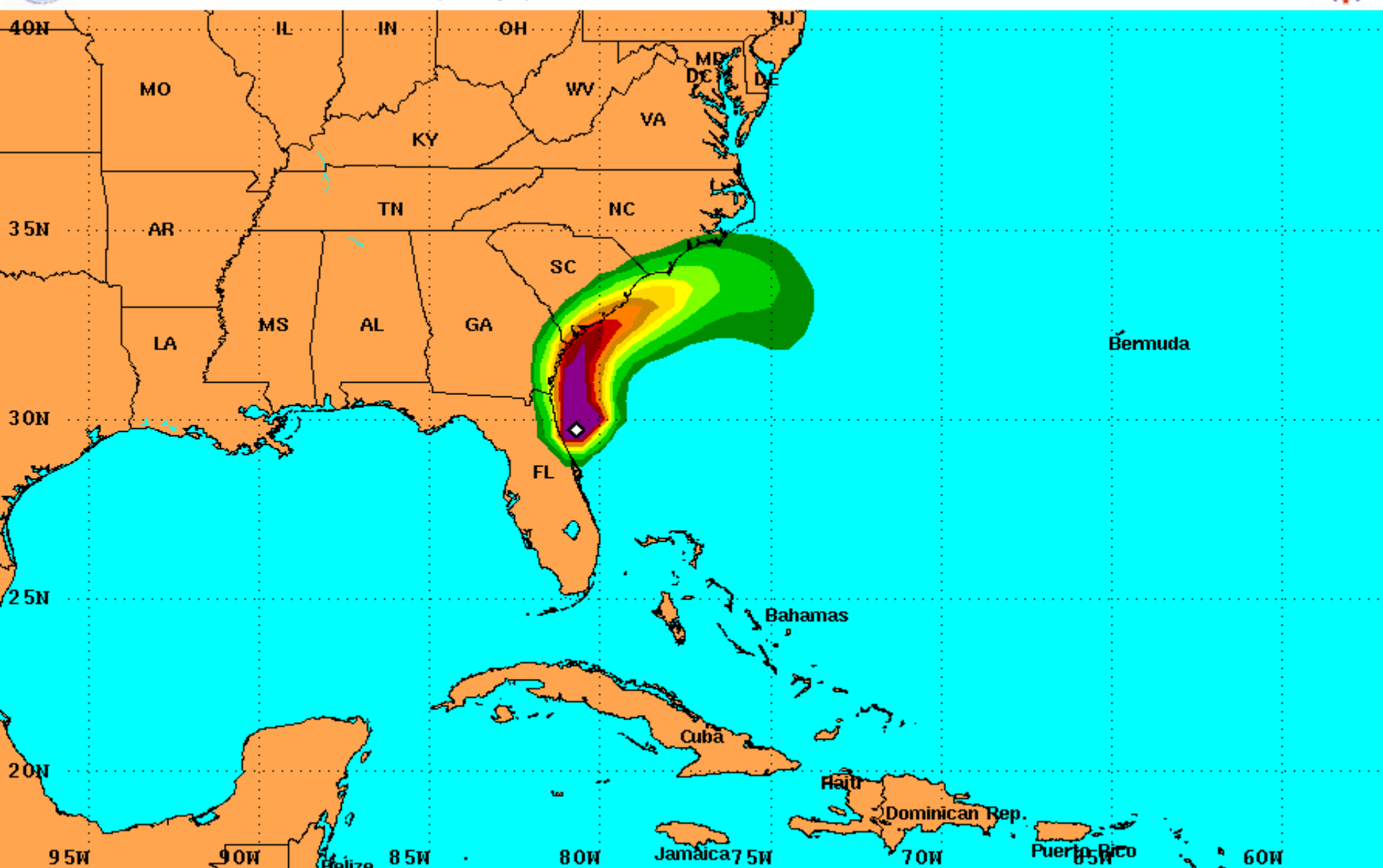
Probability of sustained tropical storm force surface winds (1-minute average of 39 mph or greater)

◇ indicates HURRICANE MATTHEW center location at 2 PM EDT Fri Oct 7 2016 (Forecast/Advisory #39)



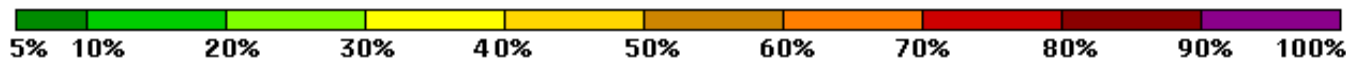


PRELIMINARY (SINGLE STORM) Hurricane Force Wind Speed Probabilities For the 120 hours (5 days) from 2 PM EDT Fri Oct 7 to 2 PM EDT Wed Oct 12

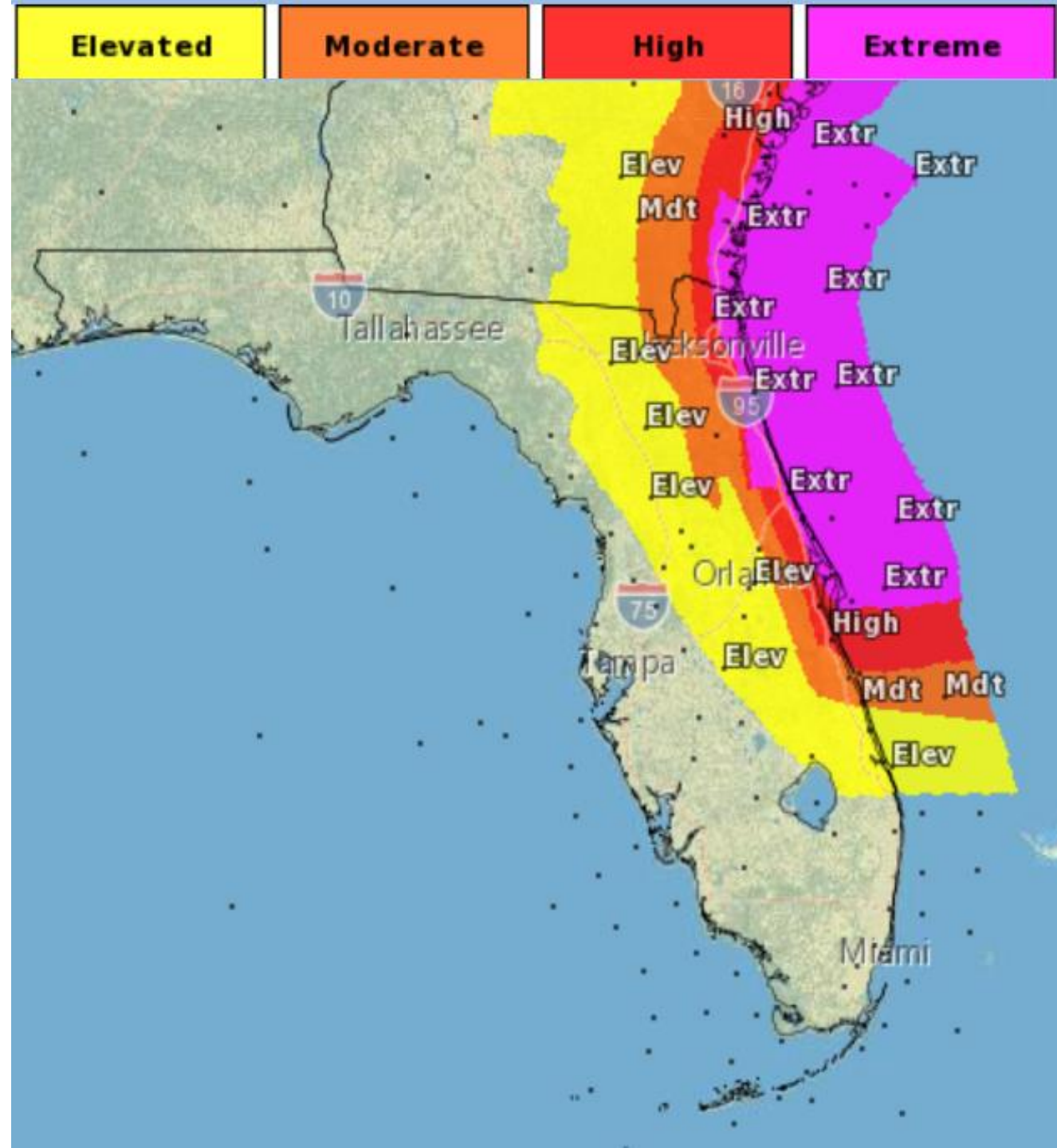


Probability of sustained hurricane force surface winds (1-minute average of 74 mph or greater)

◇ indicates HURRICANE MATTHEW center location at 2 PM EDT Fri Oct 7 2016 (Forecast/Advisory #39)



- **Elevated** - The potential for winds 39 mph - 58 mph.
- **Moderate** - the potential for winds 58 mph - 74 mph.
- **High** - potential for winds 74 mph - 111 mph.
- **Extreme** - the potential for winds greater than 111 mph.



Onset of Tropical and Hurricane Force Winds by Timing

Onset of
34mph
Winds

Onset of
58mph
Winds

Onset of
Hurricane
Winds

End of
Hurricane
Winds

End of
58mph
Winds

End of
34mph
Winds

Estimated
Peak Wind
and Time

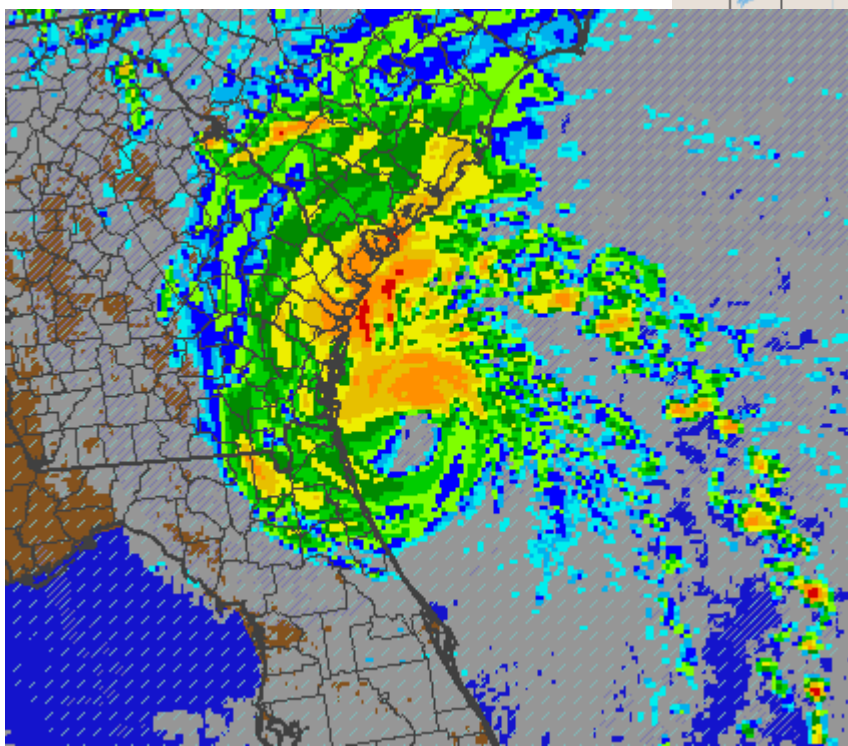
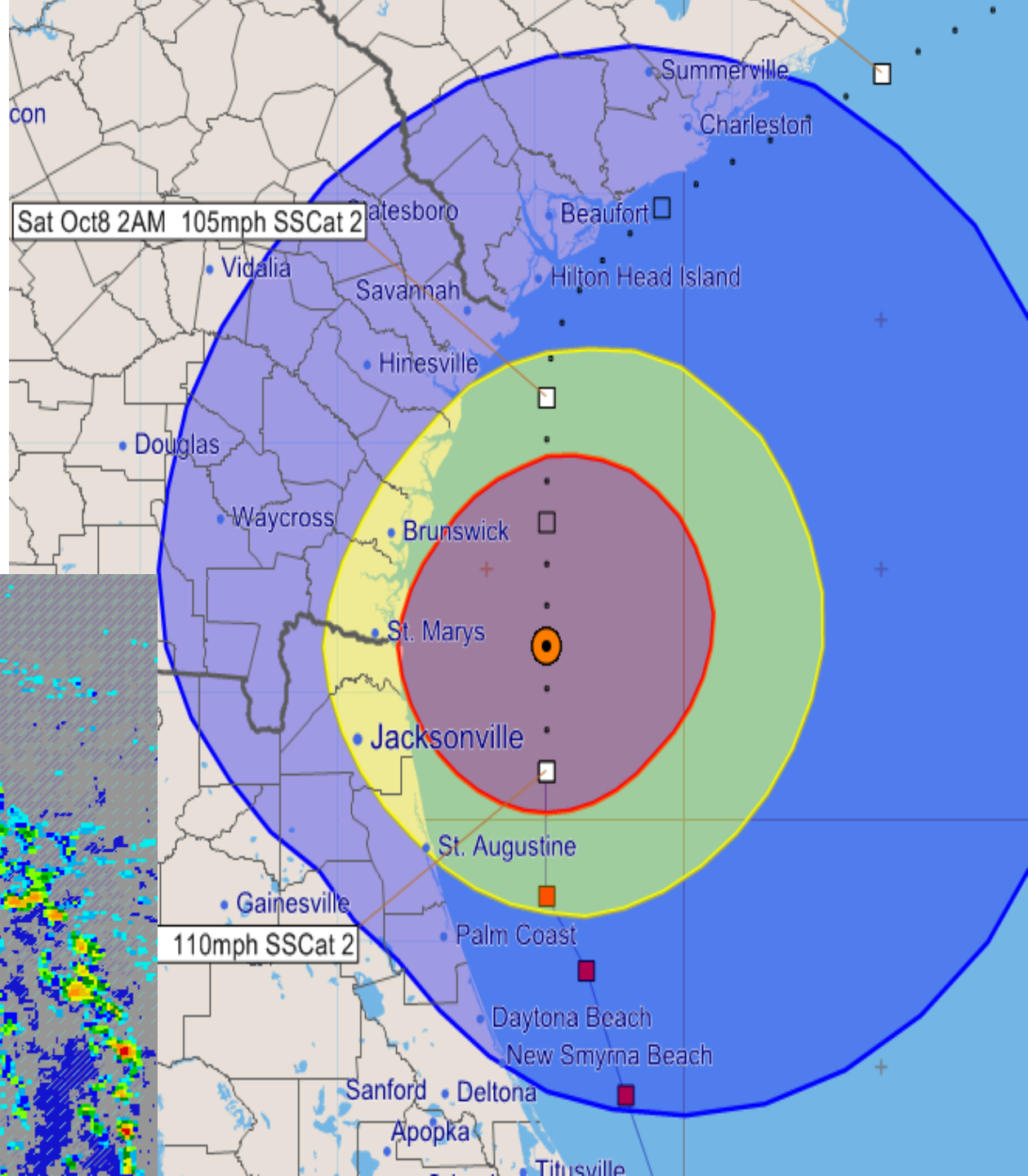
Location	34kt(39mph)	50kt(58mph)	64kt(74mph)	64ktEND(dur)	50ktEND(dur)	34ktEND(dur)	Peak Wind
FL Brevard	Existing					10/07 20E [03]	43kt (49mph) 10/07 17E
FL Seminole	Existing					10/07 19E [02]	40kt (46mph) 10/07 17E
FL Lake	Existing					10/07 19E [02]	40kt (46mph) 10/07 17E
FL Marion	Existing					10/07 19E [02]	42kt (48mph) 10/07 17E
FL Volusia	Existing	Existing			10/07 19E [02]	10/07 23E [06]	56kt (64mph) 10/07 17E
FL Flagler	Existing	Existing			10/07 20E [03]	10/07 23E [06]	62kt (71mph) 10/07 17E
FL Putnam	Existing	Existing			10/07 19E [02]	10/07 23E [06]	57kt (66mph) 10/07 17E
FL Alachua	Existing					10/07 20E [03]	41kt (47mph) 10/07 17E
FL Union	Existing					10/07 21E [04]	44kt (51mph) 10/07 17E
FL Bradford	Existing					10/07 22E [05]	46kt (53mph) 10/07 17E
FL Clay	Existing	Existing			10/07 20E [03]	10/08 00E [07]	59kt (68mph) 10/07 17E
FL St Johns	Existing	Existing	Existing	10/07 19E [02]	10/07 22E [05]	10/08 02E [09]	68kt (78mph) 10/07 17E
FL Duval	Existing	Existing	Existing	10/07 19E [02]	10/08 00E [07]	10/08 03E [10]	67kt (77mph) 10/07 17E
FL Nassau	Existing	Existing			10/08 01E [08]	10/08 04E [11]	63kt (72mph) 10/07 19E
FL Baker	Existing					10/08 00E [07]	46kt (53mph) 10/07 17E
FL Columbia	Existing					10/07 23E [06]	38kt (44mph) 10/07 17E
FL Hamilton	Existing					10/07 20E [03]	35kt (40mph) 10/07 17E

Rows in blue indicate the county will only see winds below 50kts (58mph)

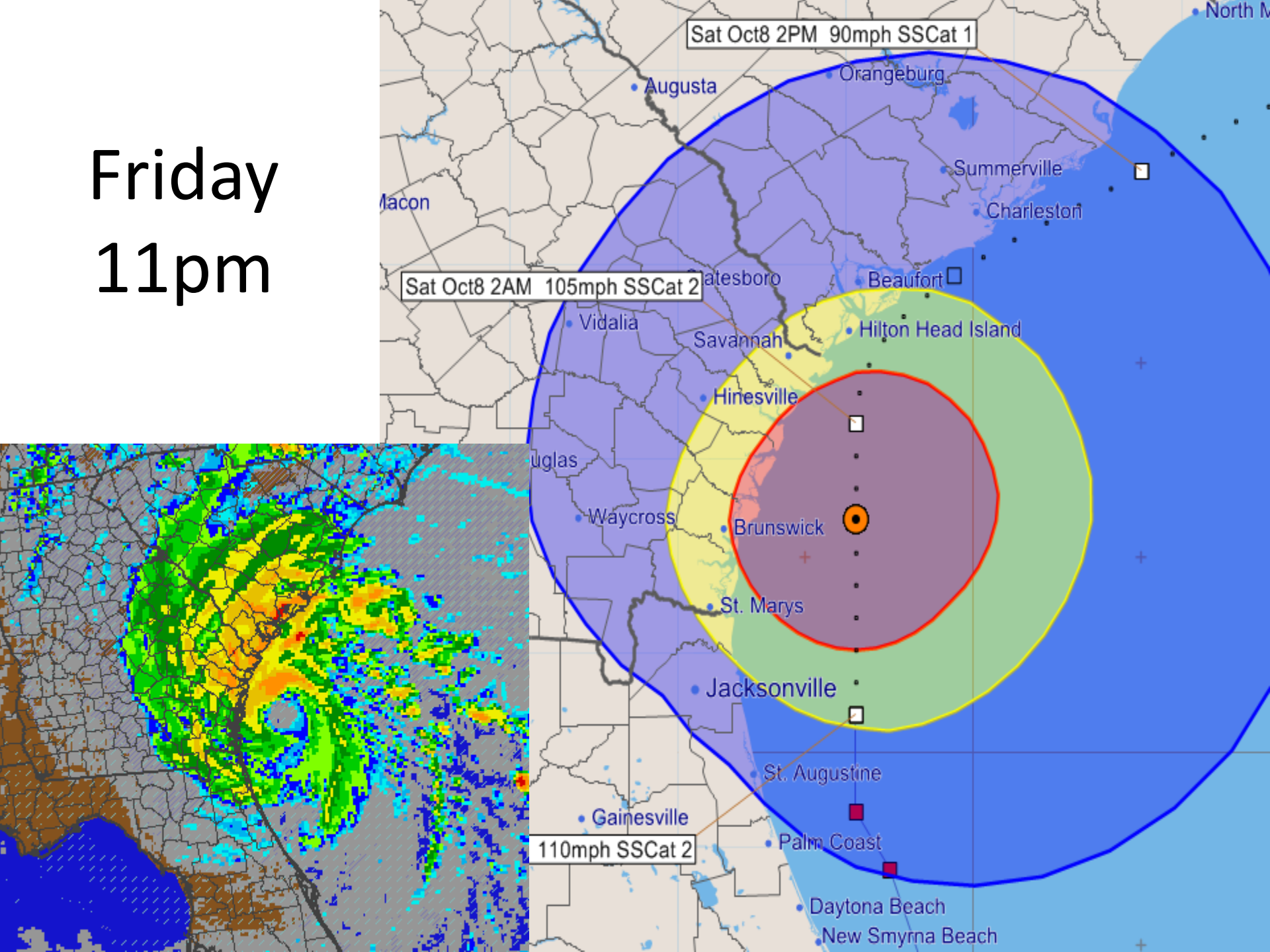
Rows in yellow indicate the county will see winds between 50-63kts (59-74mph)

Rows in red indicate the county will see hurricane force winds >64kts (>74mph)

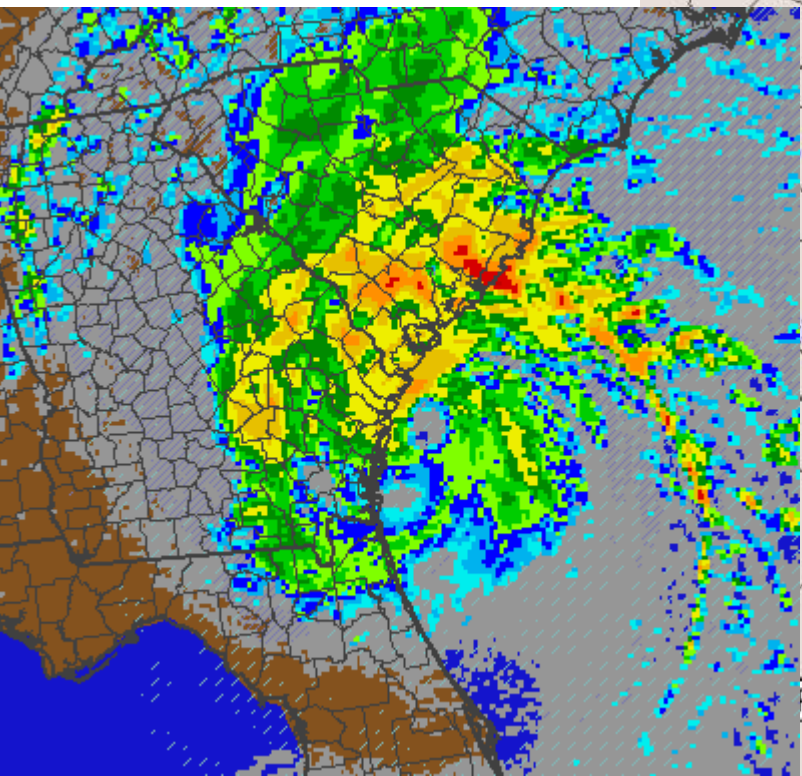
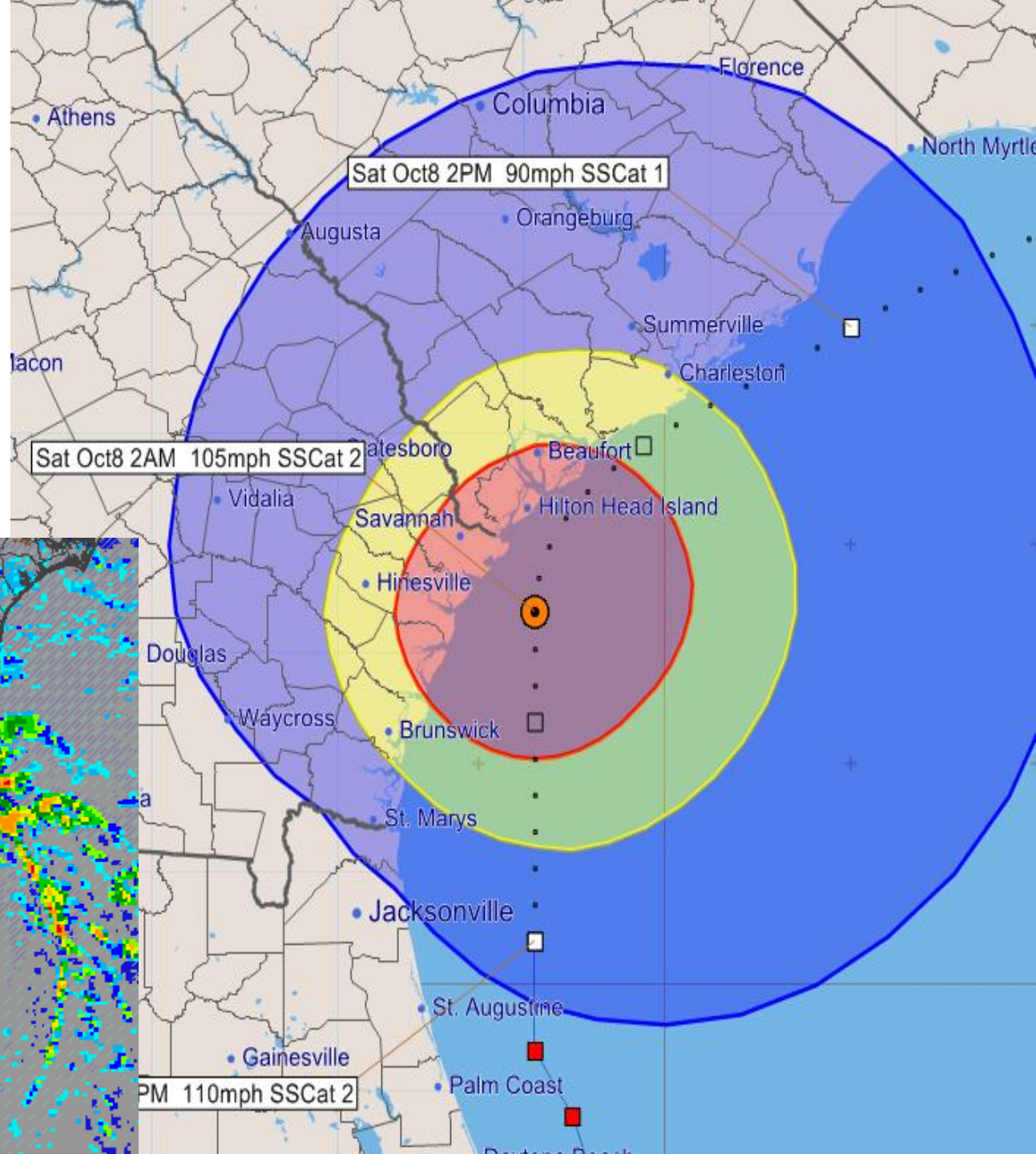
Friday
8pm



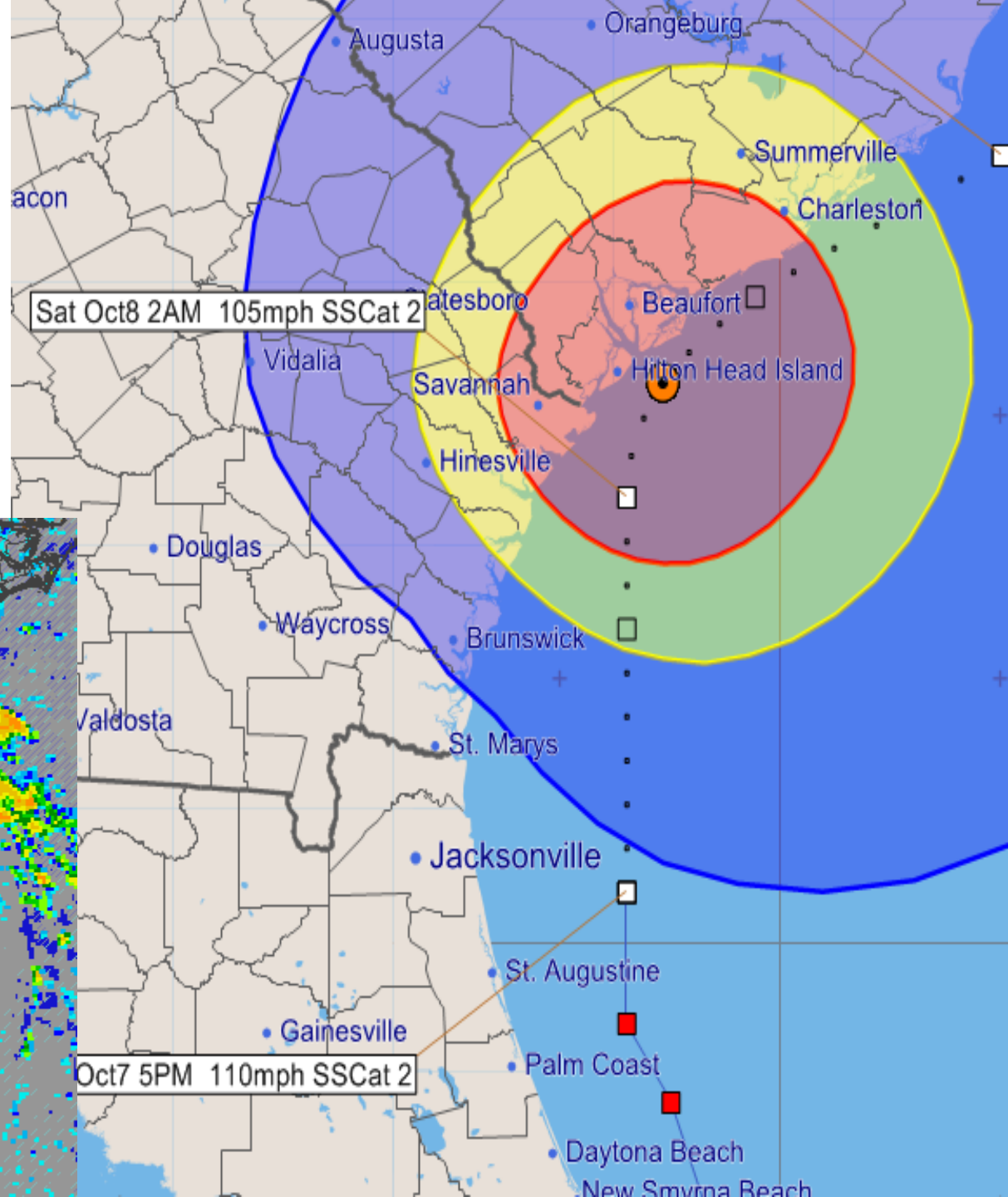
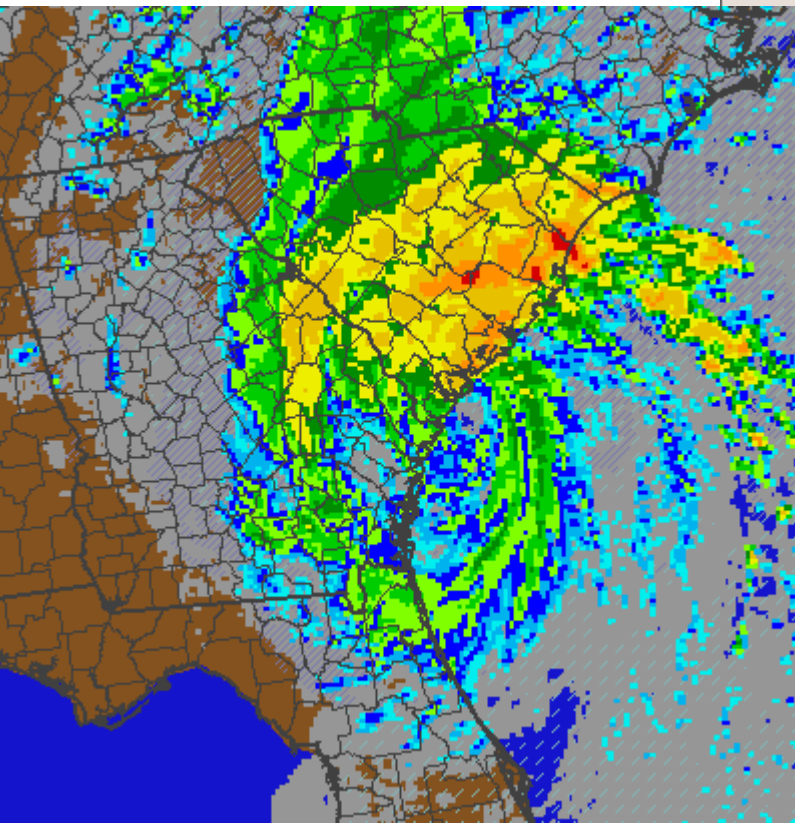
Friday
11pm



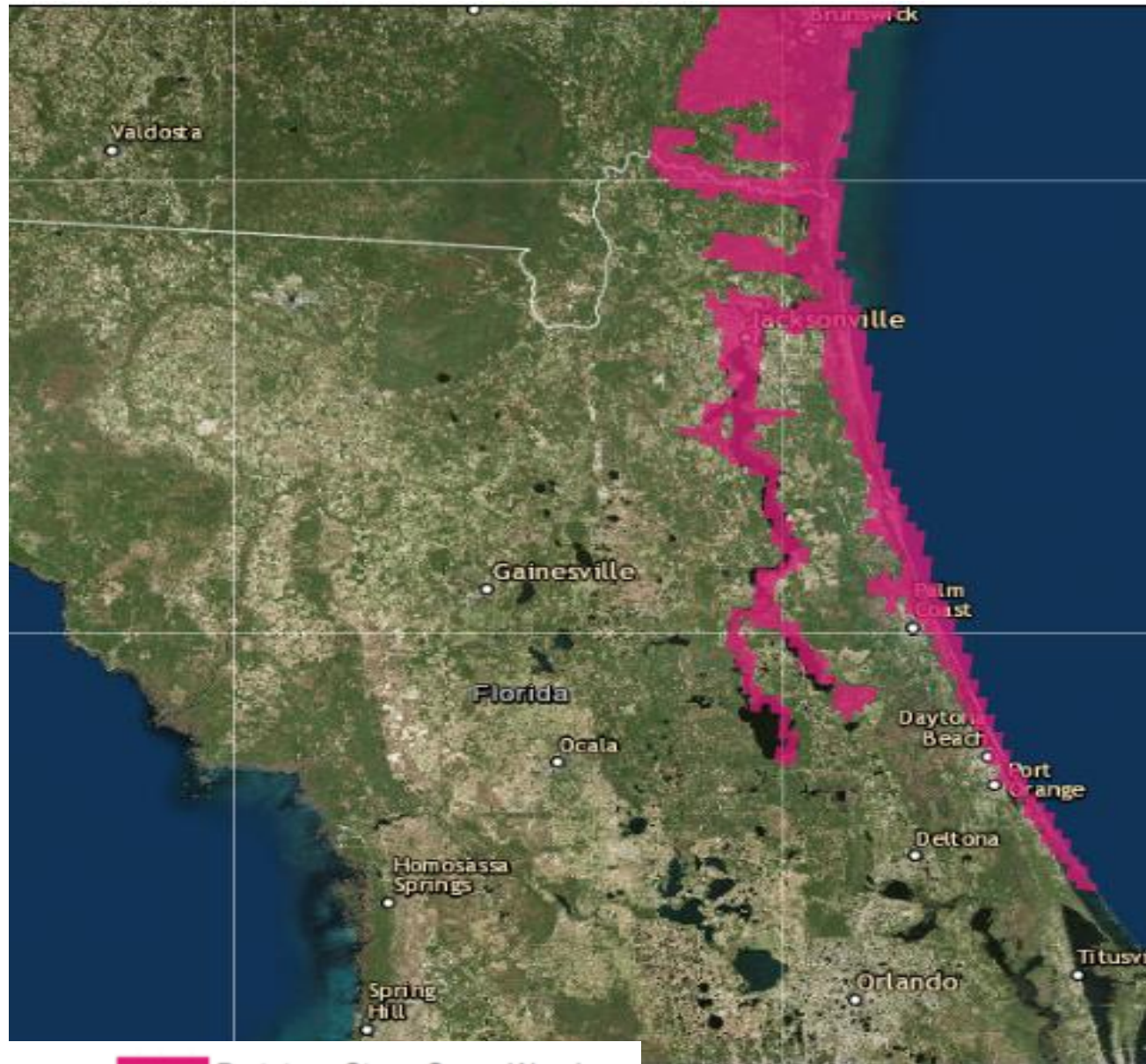
Saturday
2am



Saturday
5am



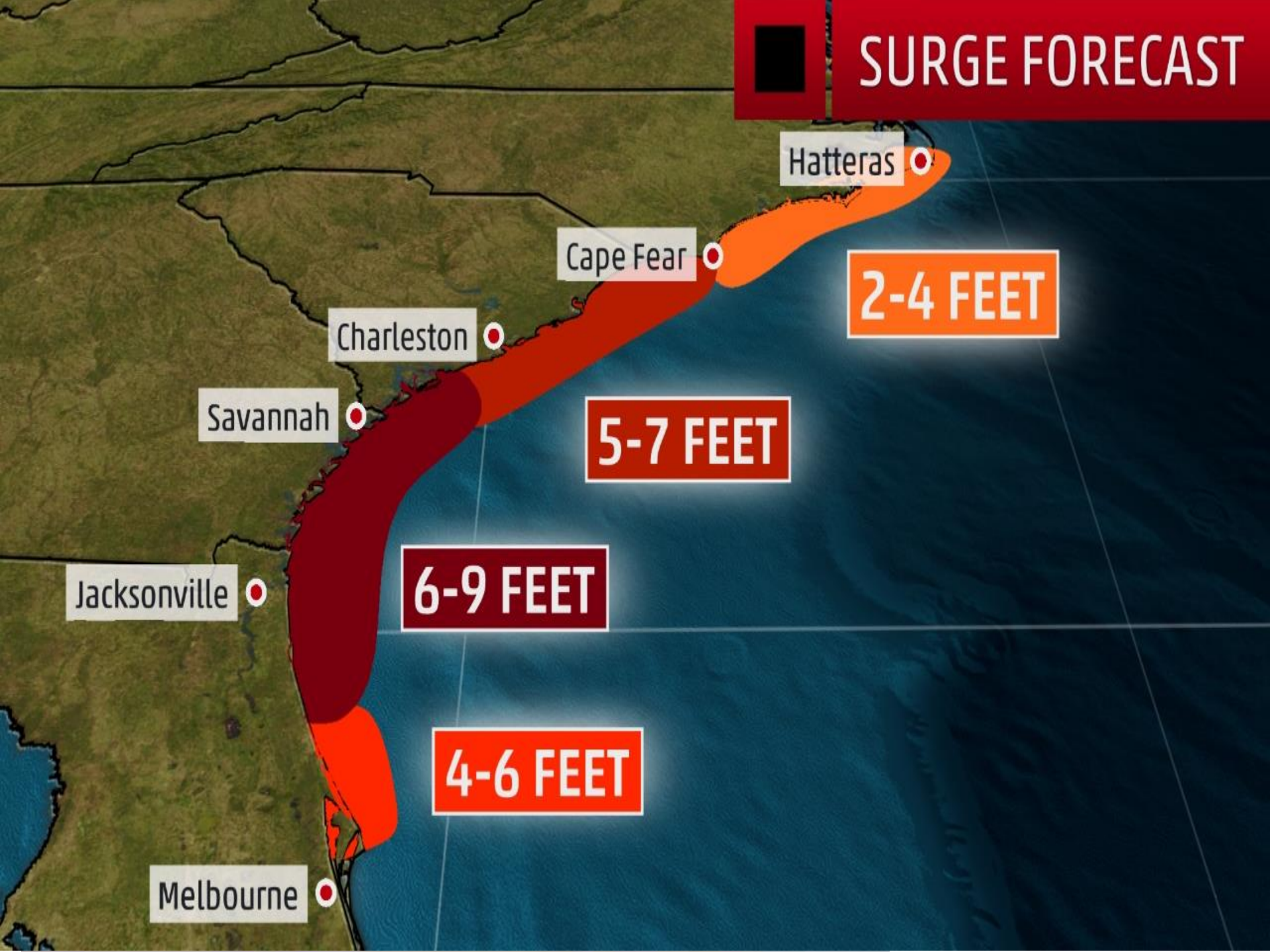
Prototype Storm Surge Watches/Warnings



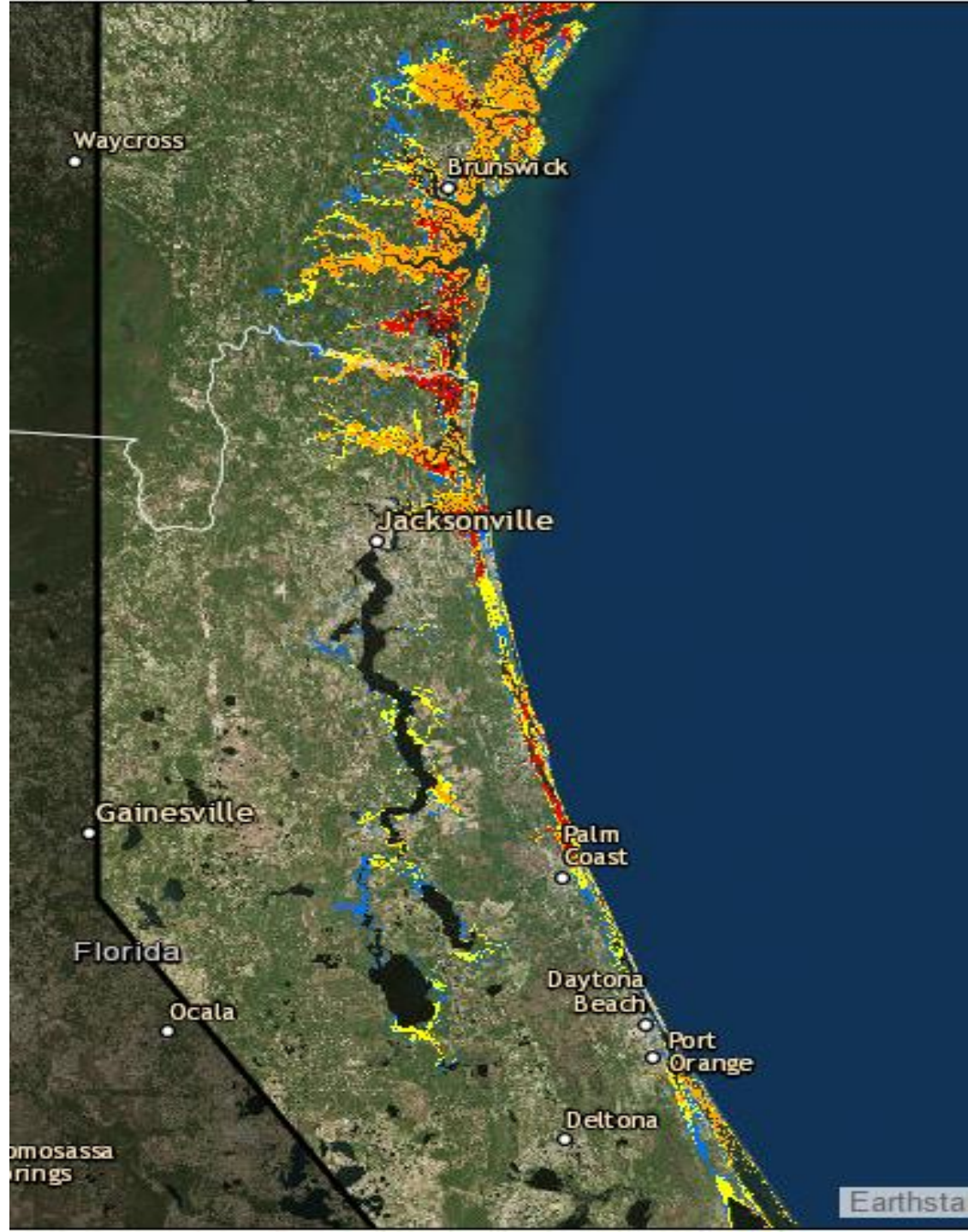
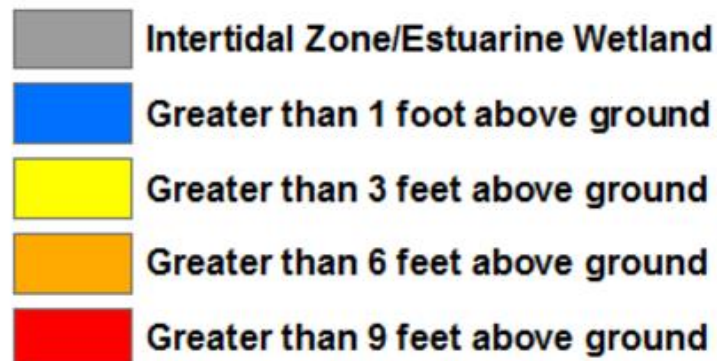
0 15 30mi

Prototype Storm Surge Warning
Prototype Storm Surge Watch

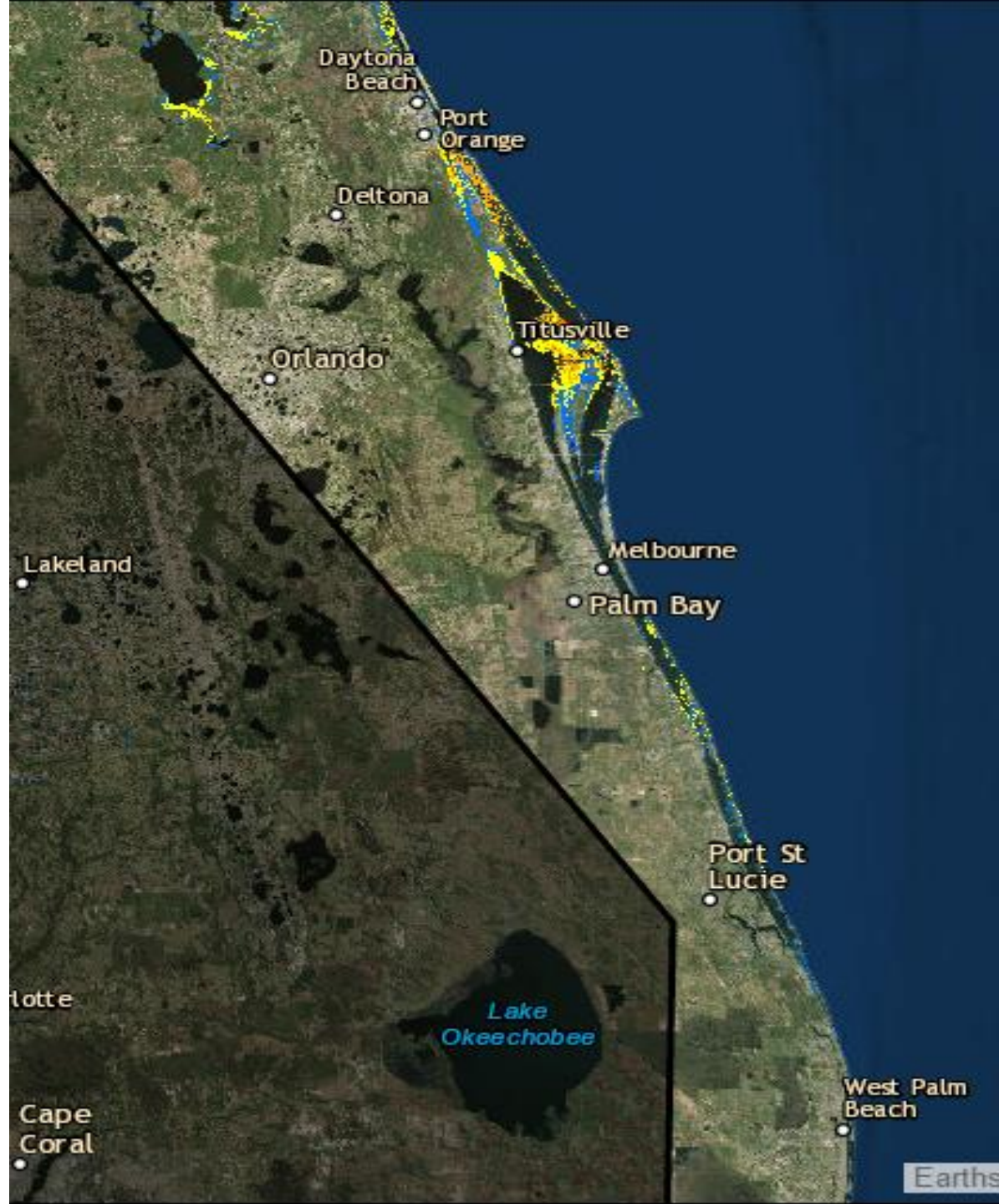
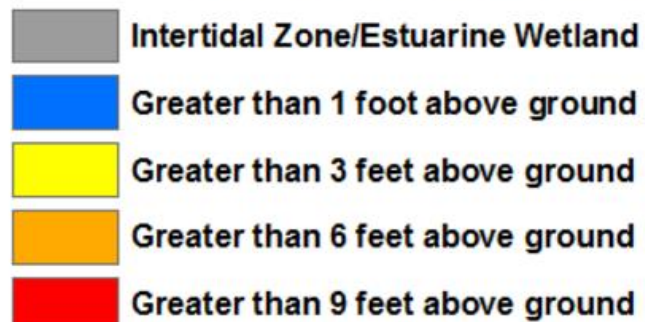
SURGE FORECAST



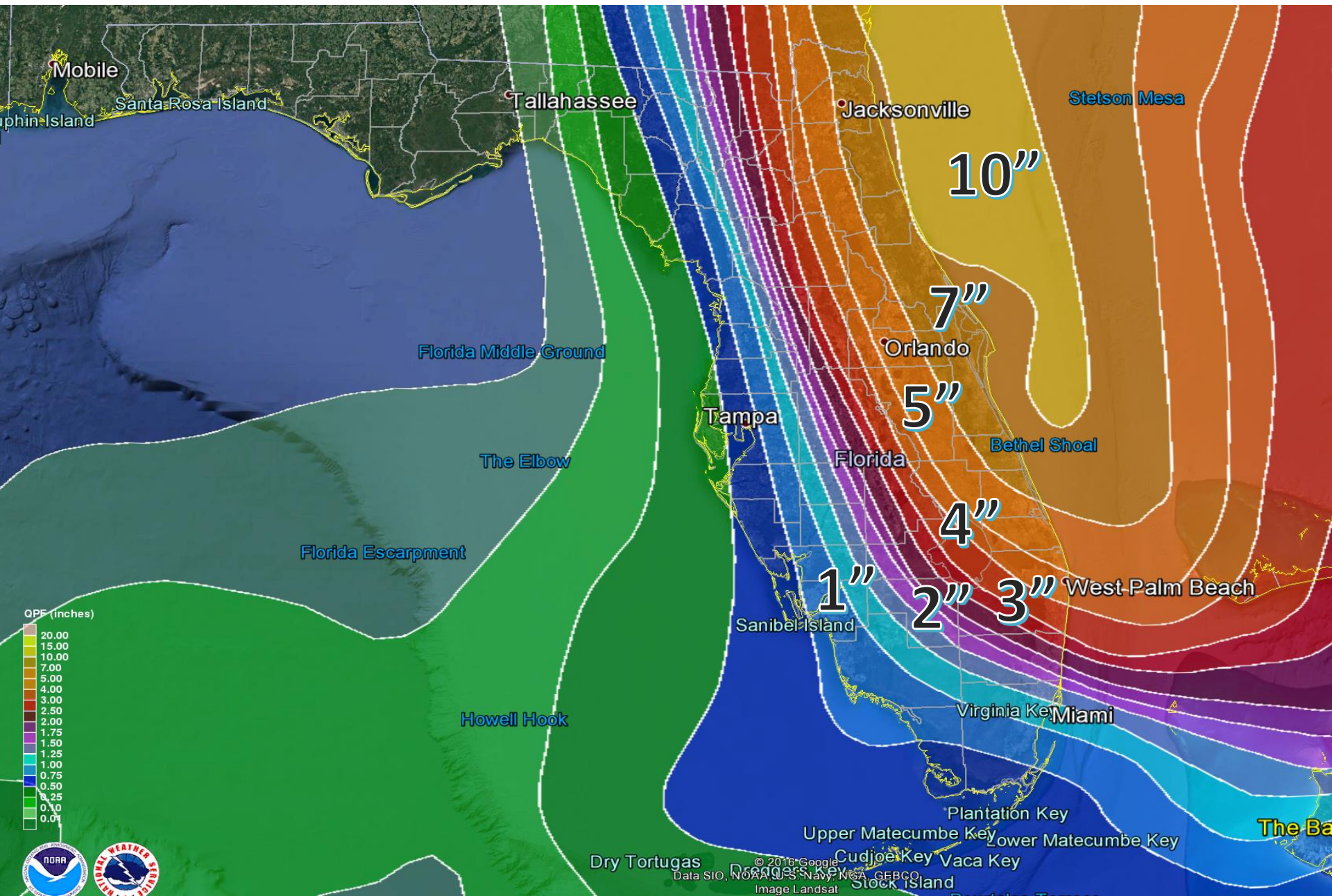
Potential Storm Surge Flooding*

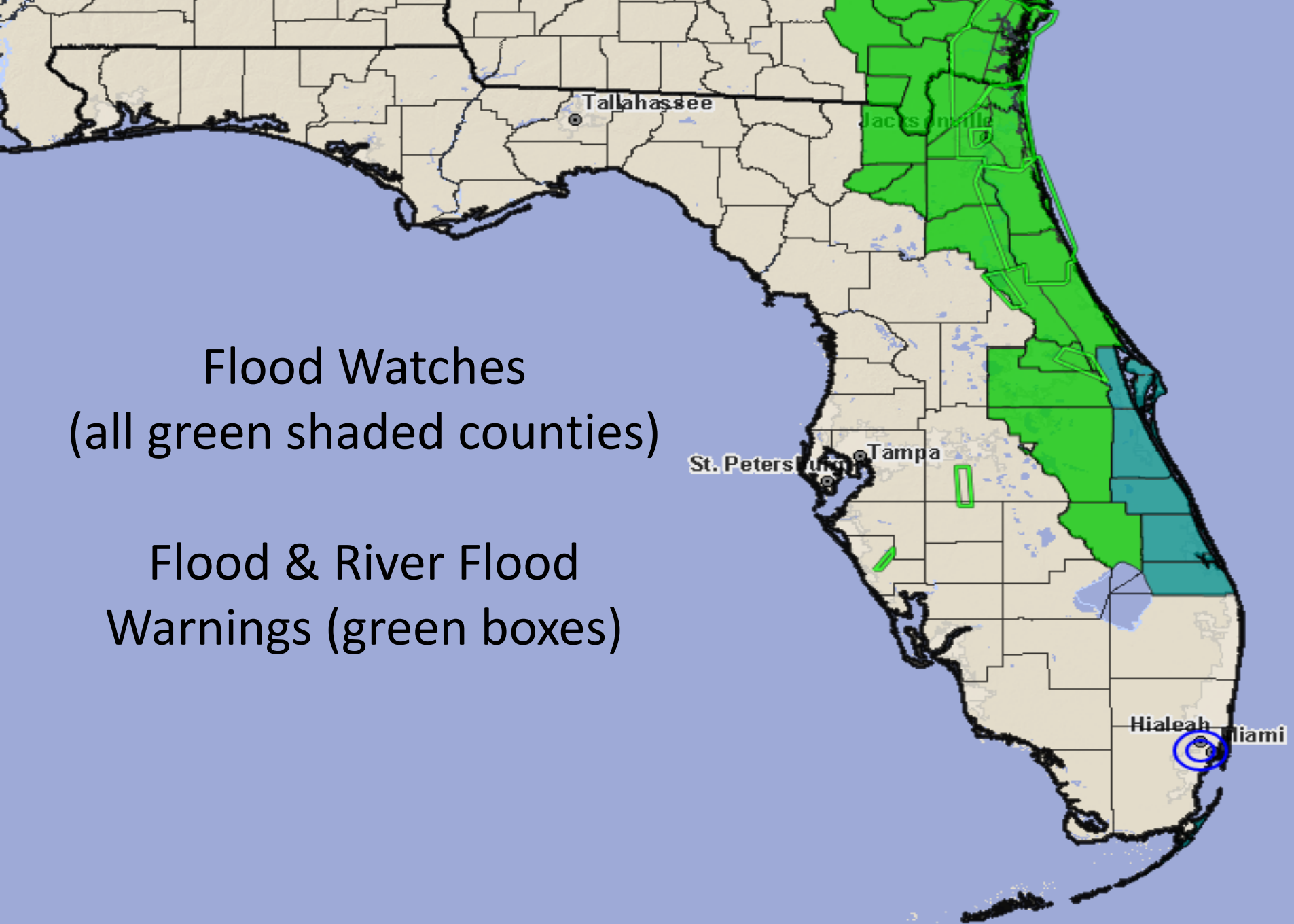


Potential Storm Surge Flooding*

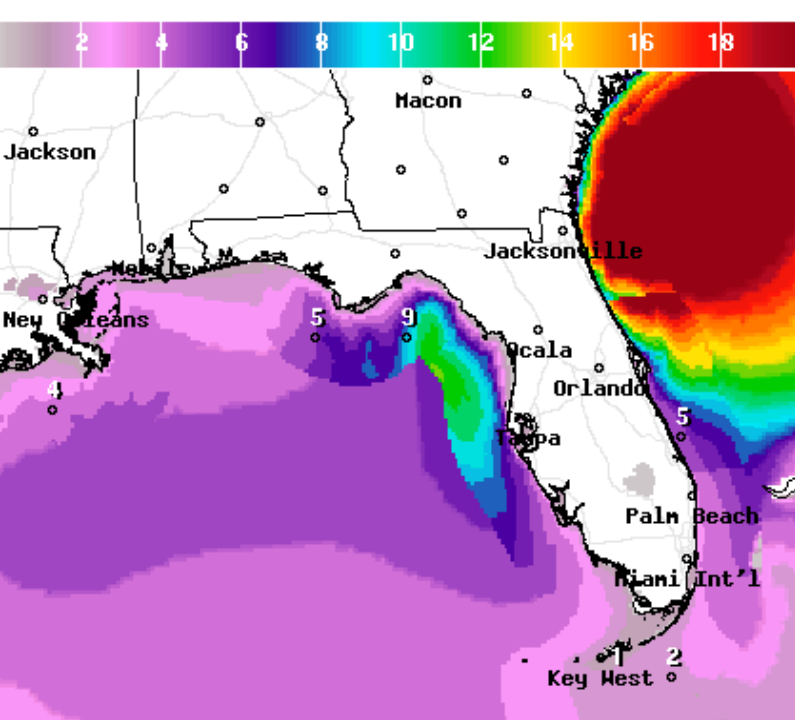


Next 5 Day Forecast Rainfall

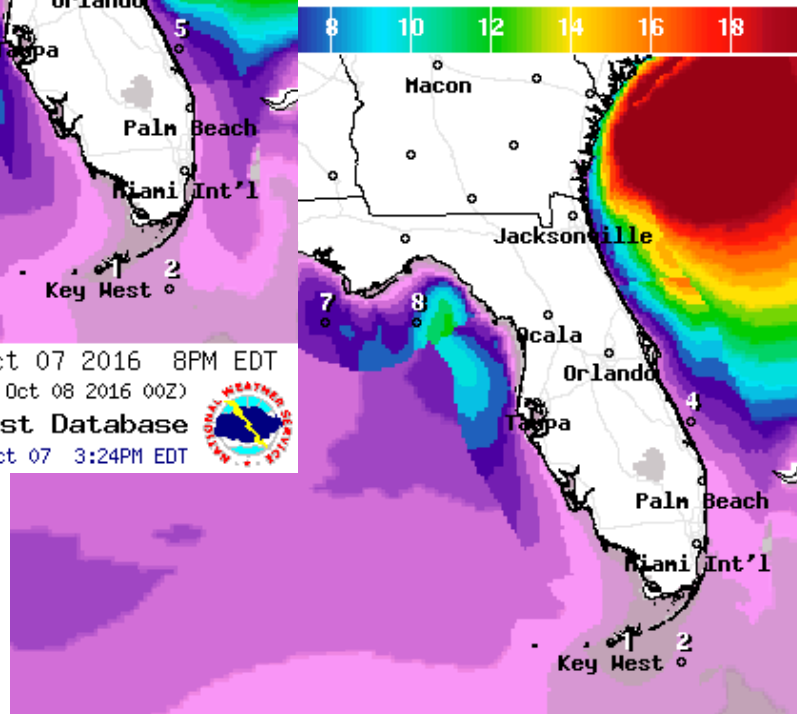




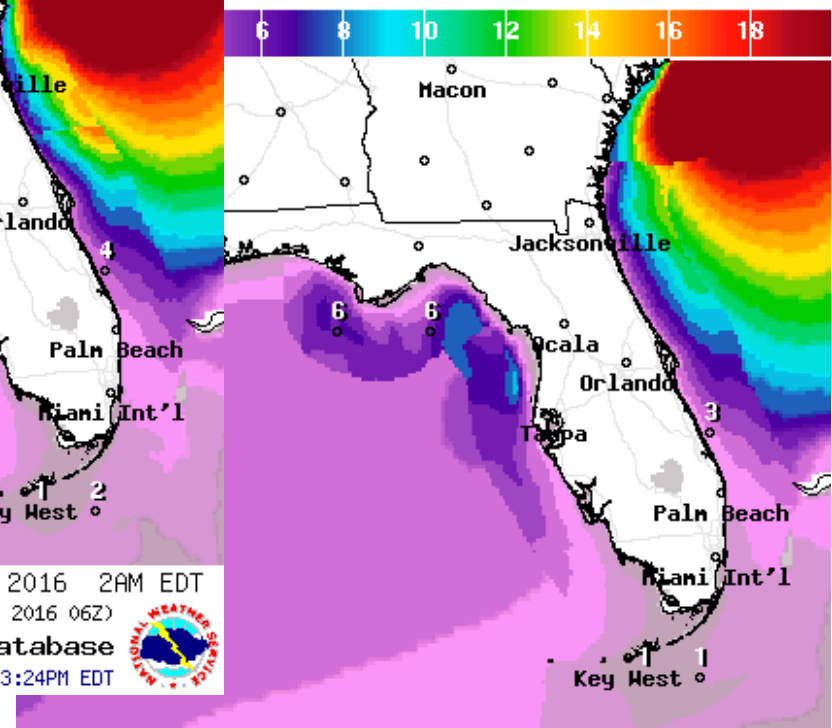
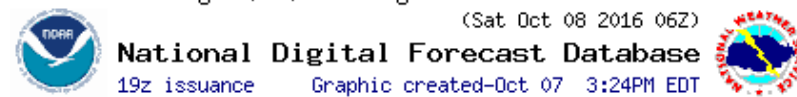
Forecast Wave Heights



Wave Height(ft) Ending Fri Oct 07 2016 8PM EDT
(Sat Oct 08 2016 00Z)



Wave Height(ft) Ending Sat Oct 08 2016 2AM EDT
(Sat Oct 08 2016 06Z)



Wave Height(ft) Ending Sat Oct 08 2016 8AM EDT
(Sat Oct 08 2016 12Z)





HURRICANE MATTHEW

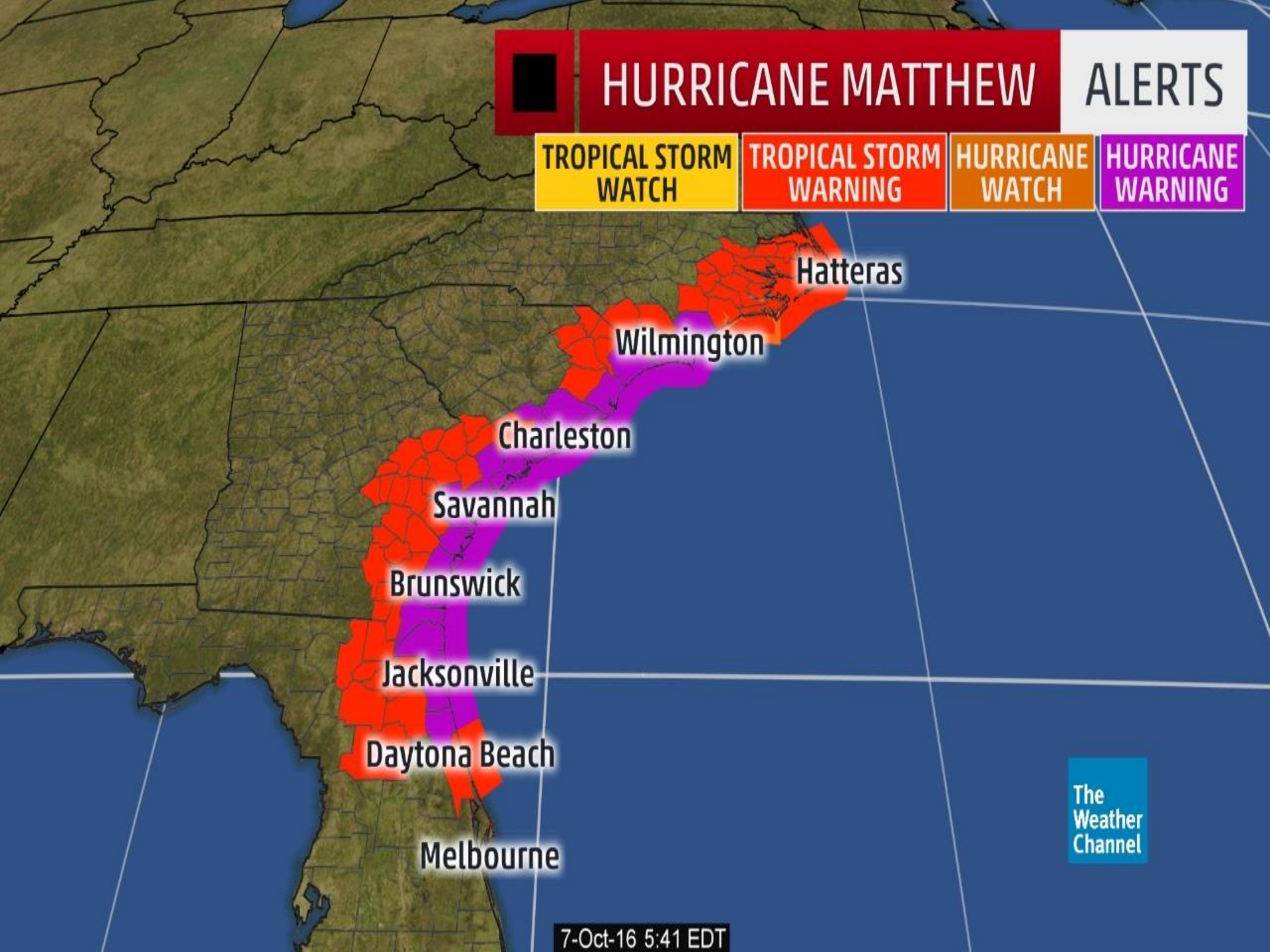
ALERTS

TROPICAL STORM
WATCH

TROPICAL STORM
WARNING

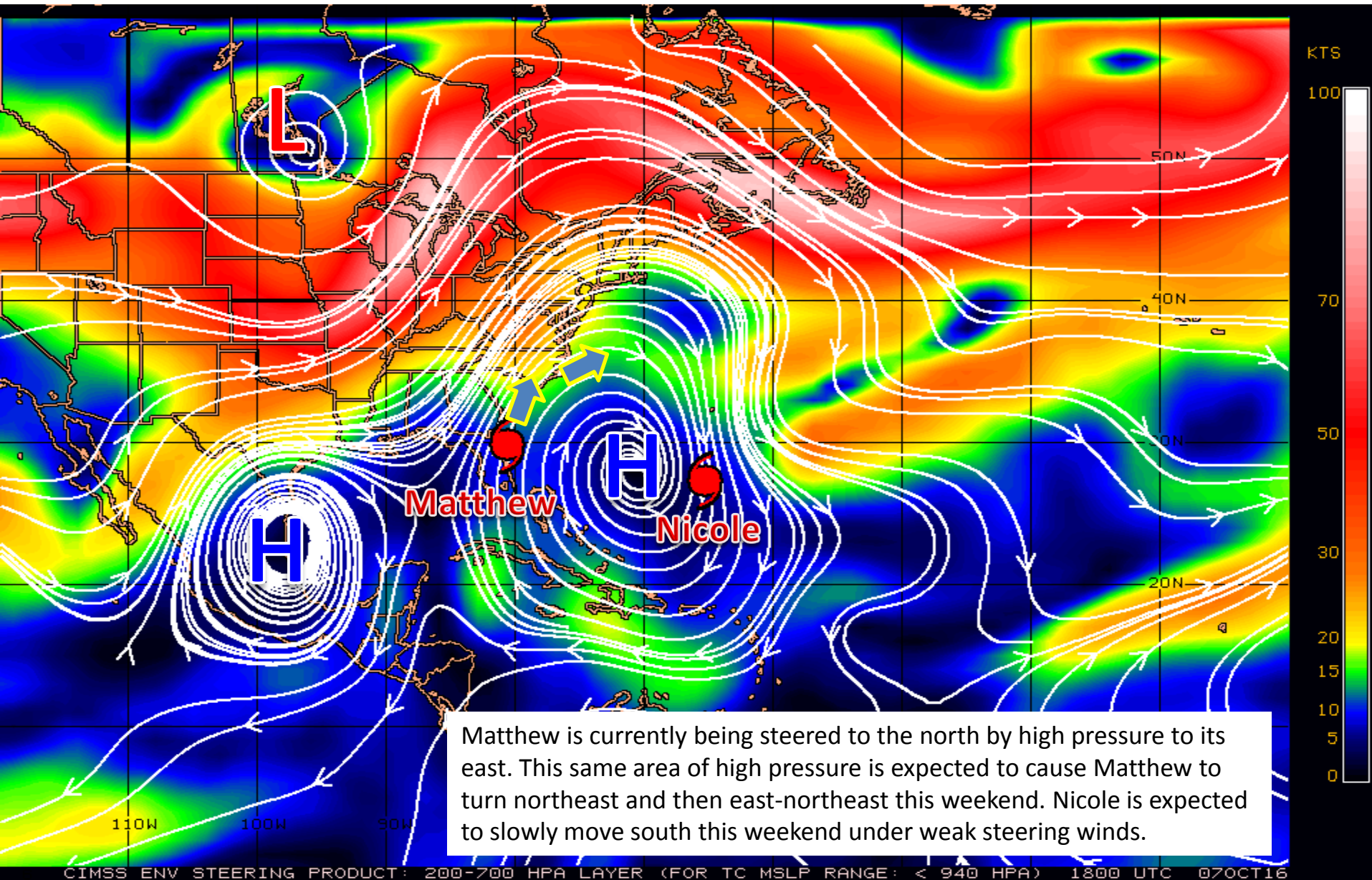
HURRICANE
WATCH

HURRICANE
WARNING



7-Oct-16 5:41 EDT

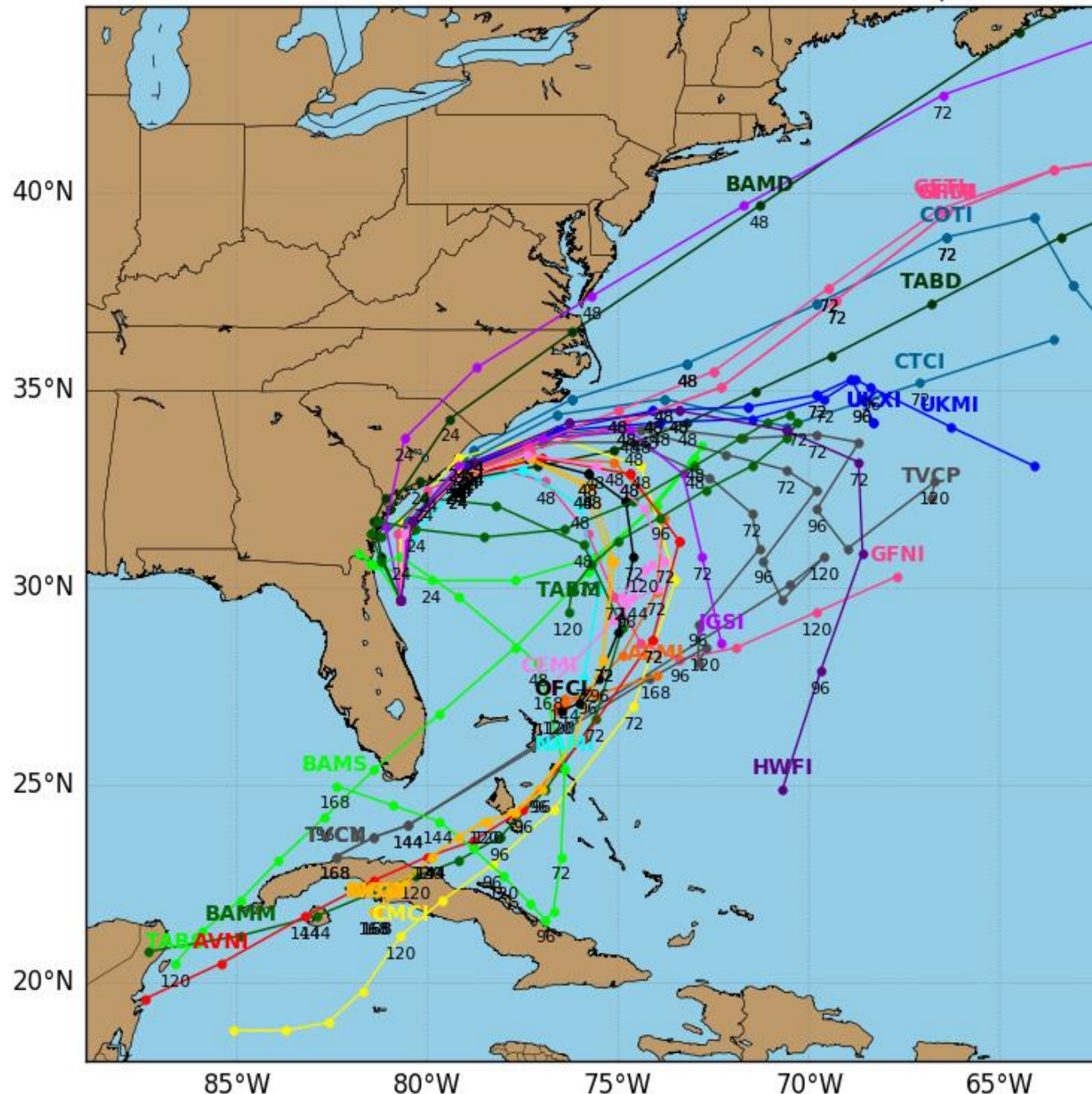
Steering Currents



Hurricane MATTHEW Model Track Guidance

Initialized at 18z Oct 07 2016

Levi Cowan - tropica1t1db1ts.com



Models are in good agreement on Matthew's track over the next 24 to 48 hours, taking it near or over the Northeast Florida coast and continuing along the Georgia and Carolina coasts. Beyond 48 hours, however, tracks range from a continued northeasterly track into the Atlantic to southerly turns at varying times and locations. Matthew's track needs to be watched closely over the next few days.

Tropical Storm Nicole

5 PM EDT Fri Oct 07 2016

Position 27.0 N 65.2 W

Maximum Winds 65 mph

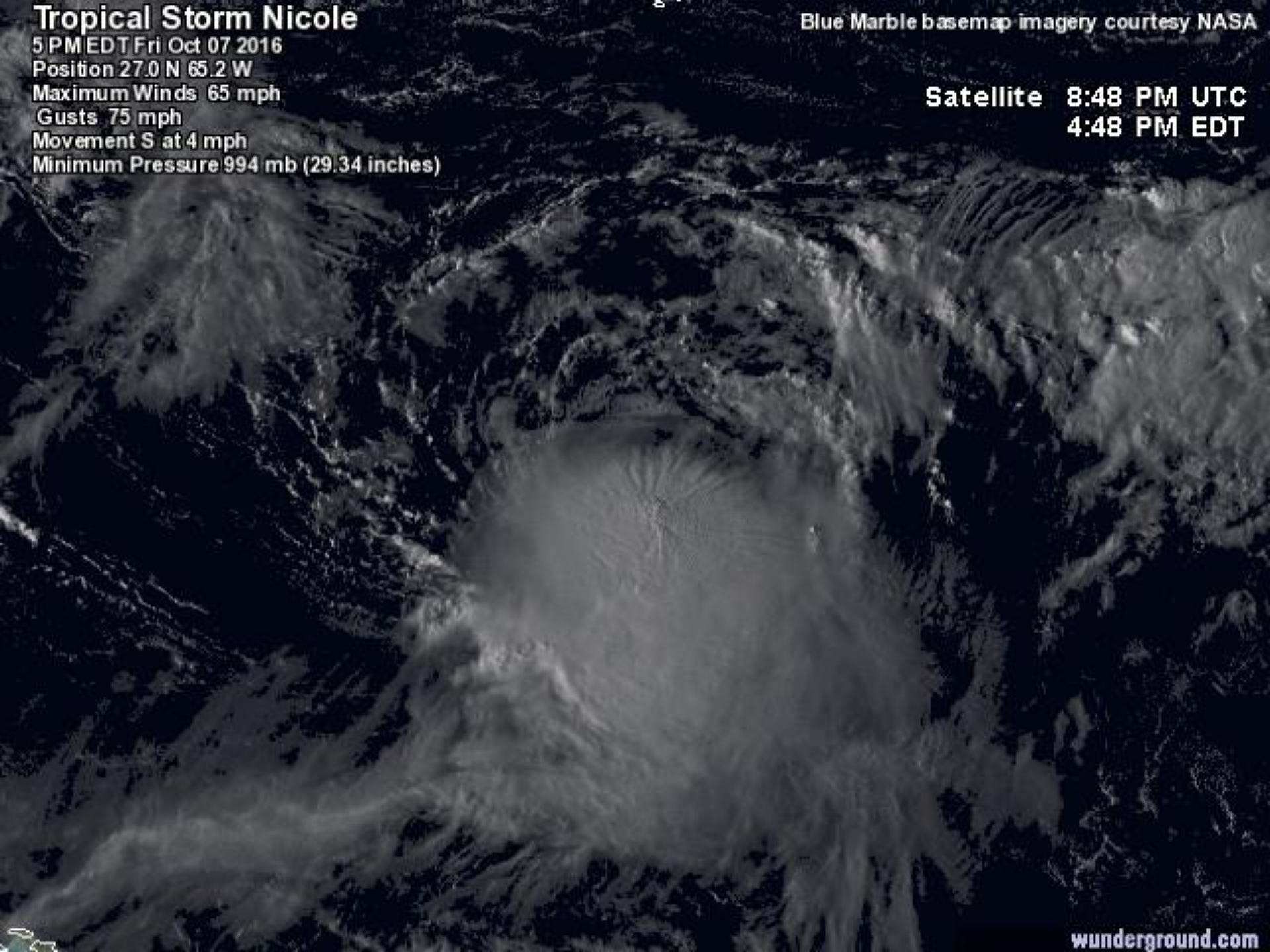
Gusts 75 mph

Movement S at 4 mph

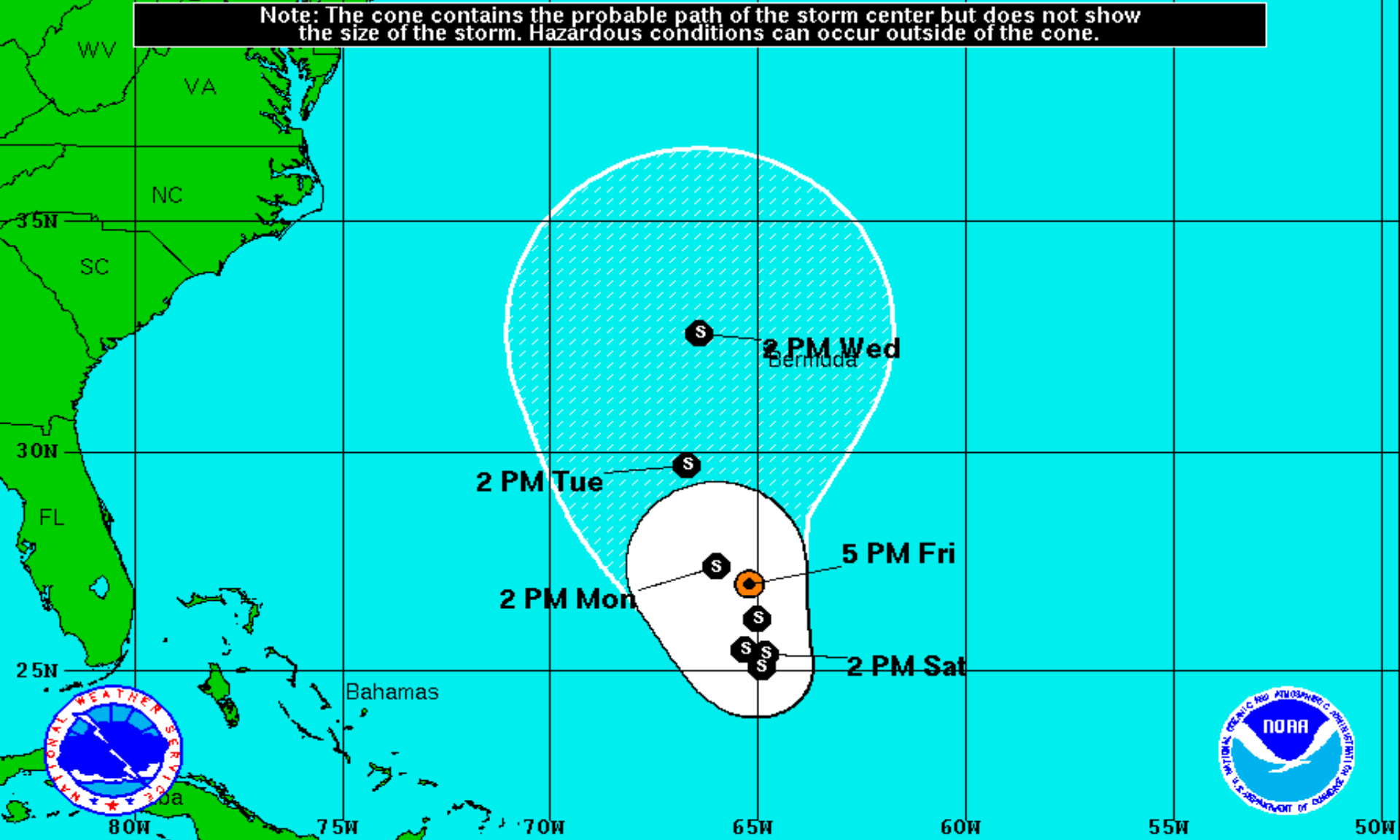
Minimum Pressure 994 mb (29.34 inches)

Blue Marble basemap imagery courtesy NASA


Satellite 8:48 PM UTC
4:48 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 Nicole
 Friday October 7, 2016
 5 PM EDT Advisory 15
 NWS National Hurricane Center

Current Information: 
 Center Location 27.0 N 65.2 W
 Max Sustained Wind 65 mph
 Movement S 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



Five-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida



www.hurricanes.gov

No Disturbances

No new tropical cyclones are expected during the next five days.

2:00 pm EDT
Fri Oct 7 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 Wed Oct 12 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 Summary:

- At 6pm EDT, Hurricane Matthew is located about 40 miles east of Jacksonville Beach, or about 50 miles east-southeast of Fernandina Beach.
- Maximum sustained winds are currently 110 mph with higher gusts, making Matthew a Category 2 hurricane on the Saffir-Simpson scale.
- Matthew is moving toward the north at 12 mph, and this general motion is expected to continue tonight. A turn toward the north-northeast and then to the northeast is expected on Saturday. On the forecast track, the center of Matthew will be moving near or over the coasts of Northeast Florida and Georgia through tonight.
- However, it is important not to focus on the center line of the forecast cone. It is a dangerous storm even as it remains offshore and is no longer a Category 3 major hurricane.
- Matthew remains a large storm, with tropical storm force winds extending outward up to 185 miles from the center, and hurricane force winds extending up to 60 miles from the center.
- There is uncertainty in the forecast track for Matthew beyond 48 hours. The official forecast calls for Matthew to turn southeast and then southwest, bringing Matthew back toward the Bahamas toward the middle of next week, but only as a tropical storm or depression.
- Model track guidance favors this scenario, but there is little agreement on when the turn to the southeast occurs and some models forecast Matthew to continue northeast into the Atlantic.
- At 5pm EDT, Tropical Storm Nicole was located about 365 miles south of Bermuda. Nicole is moving south at 5 mph, and this motion with a decrease in forward speed is expected through early Sunday.
- Maximum sustained winds have decreased to 65 mph in this advisory. Additional weakening is expected over the next couple of days.
- No new tropical cyclone development is expected in the Atlantic over the next five days.

Florida Outlook:

- A **Hurricane Warning** remains in effect for Nassau, Duval, St. Johns, and Flagler counties.
- A **Tropical Storm Warning** remains in effect for Volusia, Marion, Alachua, Putnam, Clay, Bradford, Union, Columbia, and Baker counties.
- A **Flood Watch** remains in effect for Baker, Bradford, Union, Nassau, Duval, St. Johns, Flagler, Clay, Putnam, Volusia, Brevard, Indian River, Martin, Okeechobee, Orange, Osceola, Seminole, and St. Lucie counties through this evening.
- Matthew will continue to generate tropical storm to hurricane force winds and rough seas along the Northeast Florida coast over the next few hours, along with heavy rainfall, coastal flooding, beach erosion, and dangerous rip currents.
- Hurricane and tropical storm conditions are expected to continue in the respective warning areas through tonight.
- The current forecast calls for 8 to 12 inches of rain along the east coast of Florida with isolated totals of 15 inches possible in association with Matthew.
- Storm surge values of 6 to 9 feet are possible from Flagler Beach north through Nassau County, including the St. Johns River. Storm surge values of 4 to 6 feet are still possible from the Volusia/Brevard county line north to Flagler Beach, although storm surge in these areas should begin to gradually recede tonight.
- 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 danger of life-threatening inundation during the next 24 hours along the Florida east coast from Volusia County to Nassau County.
- An isolated tornado or two remains possible along the extreme Northeast Florida coast as Matthew passes by tonight.
- Nicole does not pose a threat to Florida.

Another briefing packet will be issued Saturday 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

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