



TROPICAL UPDATE

12 PM EDT

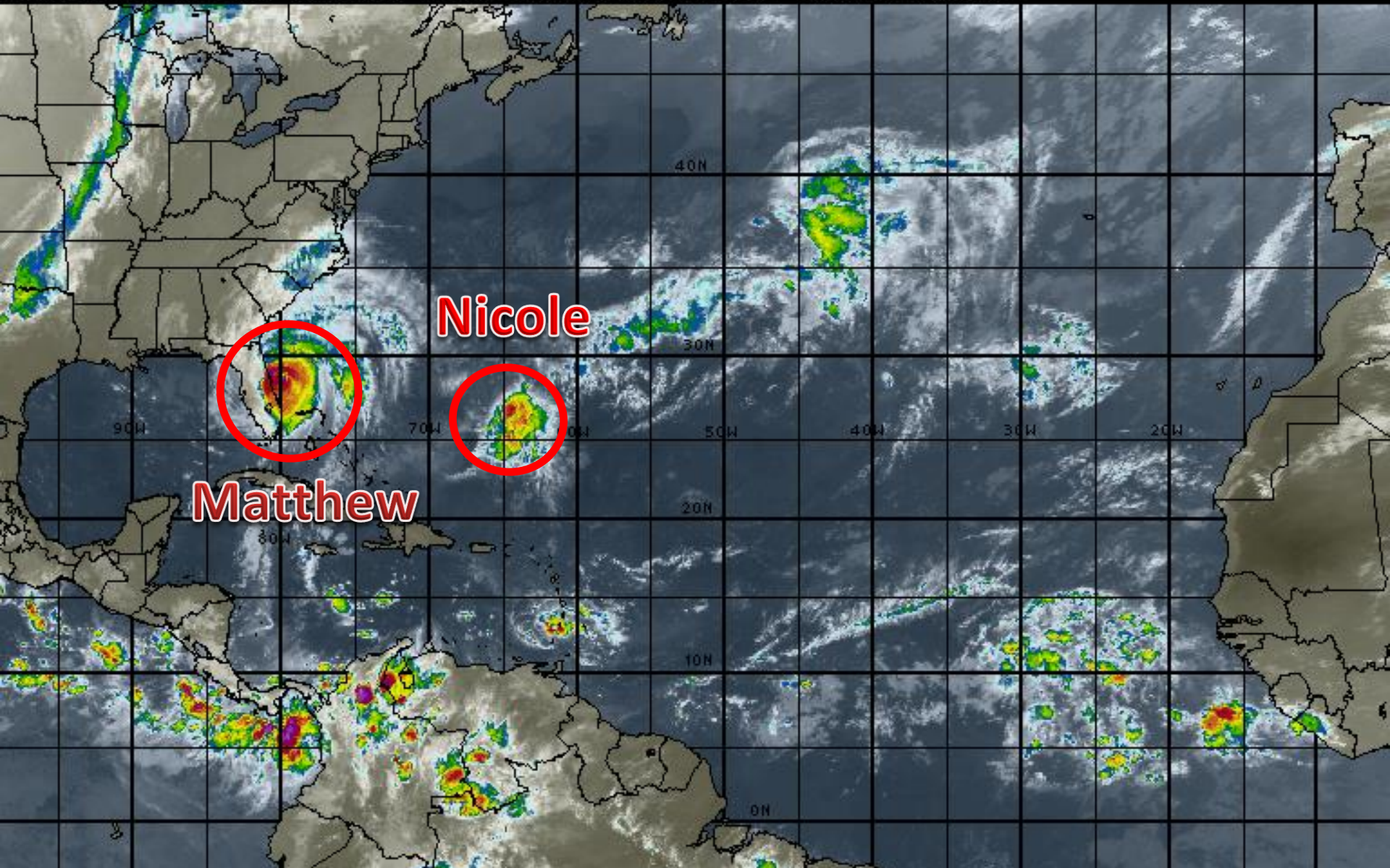
Friday, October 7, 2016

**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

12:00 07-OCT-2016 GMT Copyright © 1998-2016 MSI Corporation <http://www.usi.com>



Hurricane Matthew

8 AM EDT Fri Oct 07 2016

Position 28.9 N 80.3 W

Maximum Winds 120 mph

Gusts 150 mph

Movement NNW at 12 mph

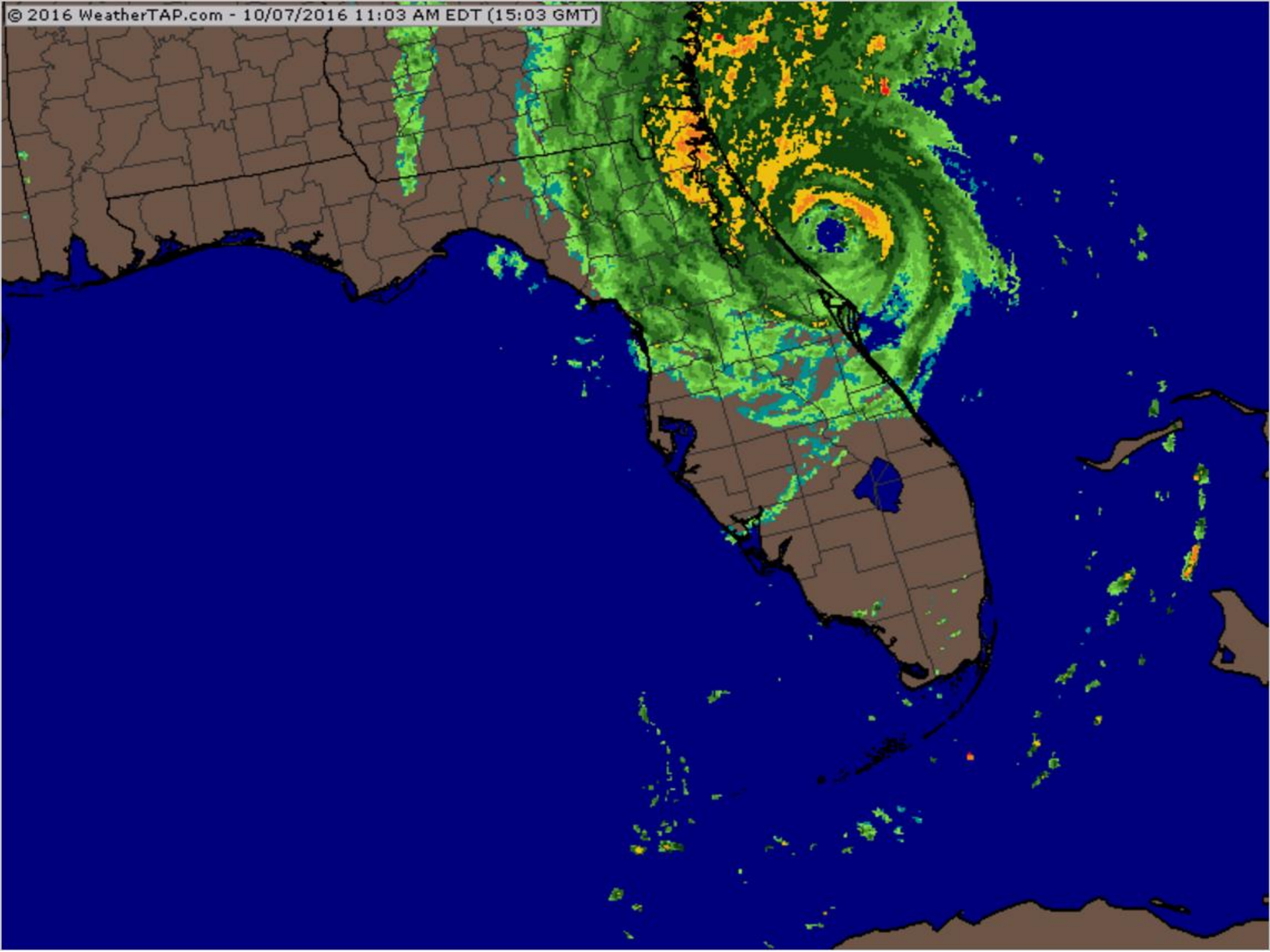
Minimum Pressure 944 mb (27.87 inches)

Blue Marble basemap imagery courtesy NASA

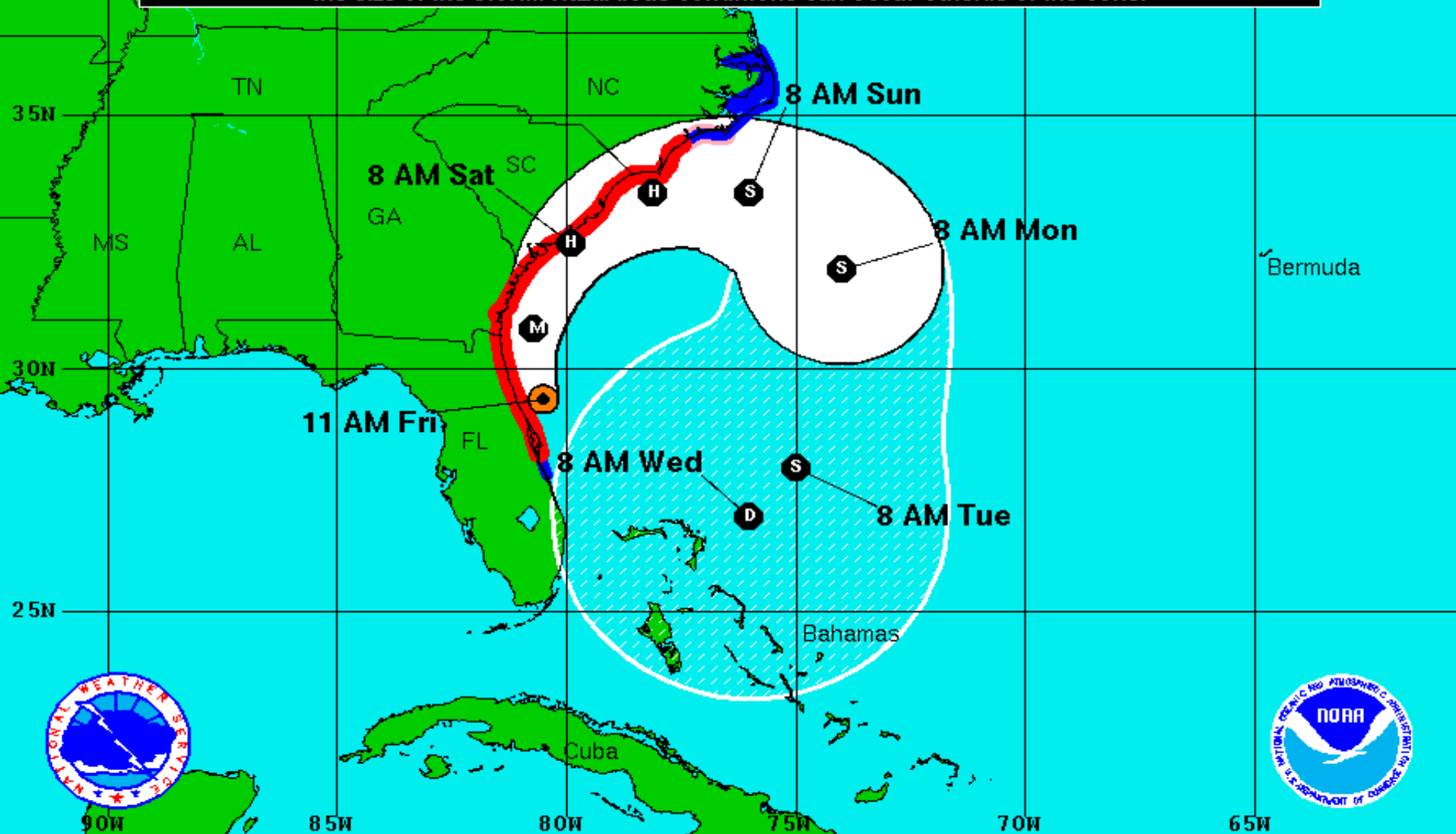
Satellite 2:47 PM UTC

10:47 AM 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
 11 AM EDT Advisory 38
 NWS National Hurricane Center

Current Information: 
 Center Location 29.4 N 80.5 W
 Max Sustained Wind 120 mph
 Movement NNW 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

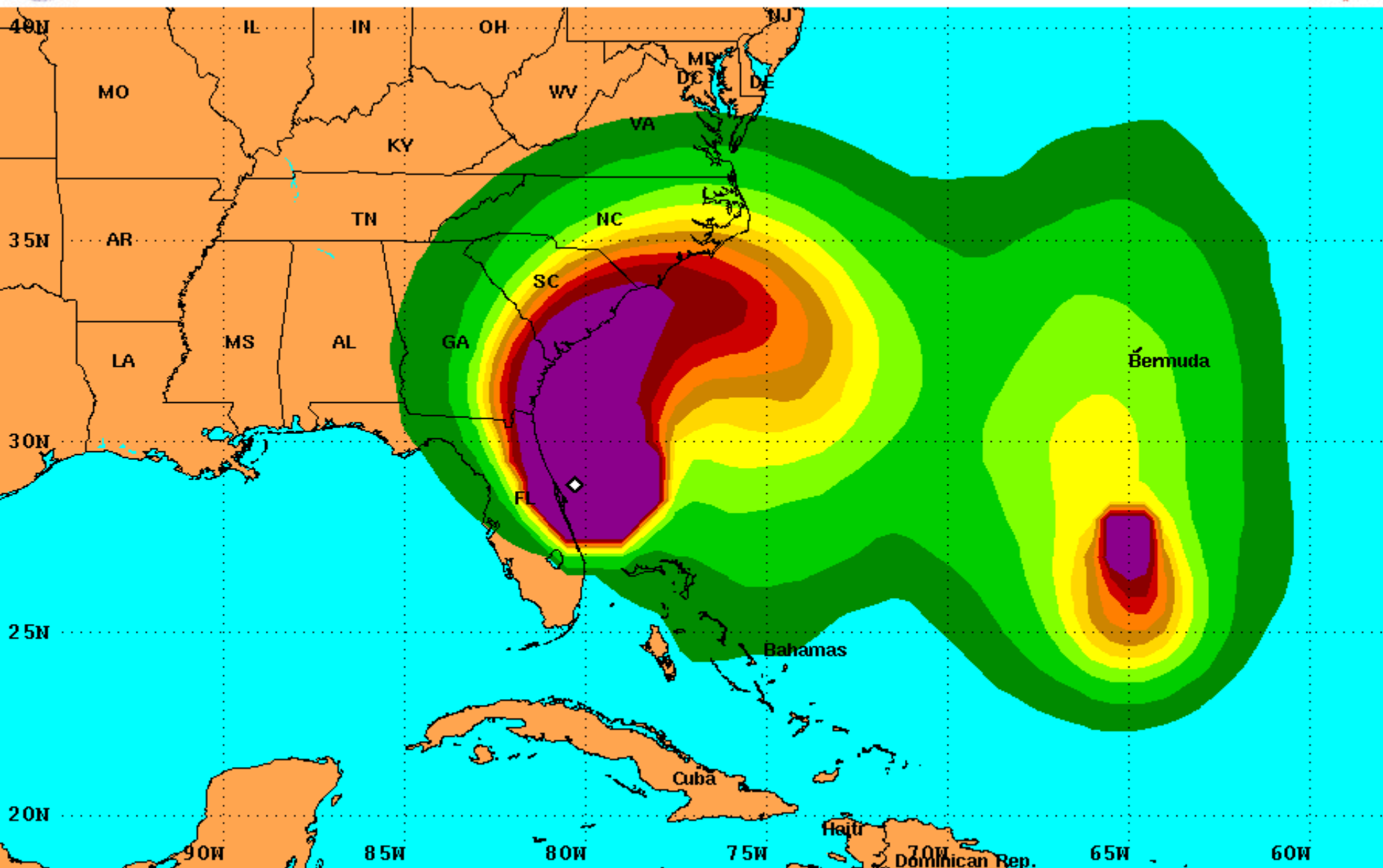
Watches:
 Hurricane  Trop.Storm

Warnings:
 Hurricane  Trop.Storm



Tropical Storm Force Wind Speed Probabilities

For the 120 hours (5 days) from 8 AM EDT Fri Oct 7 to 8 AM EDT Wed Oct 12



Probability of tropical storm force surface winds (1-minute average ≥ 39 mph) from all tropical cyclones

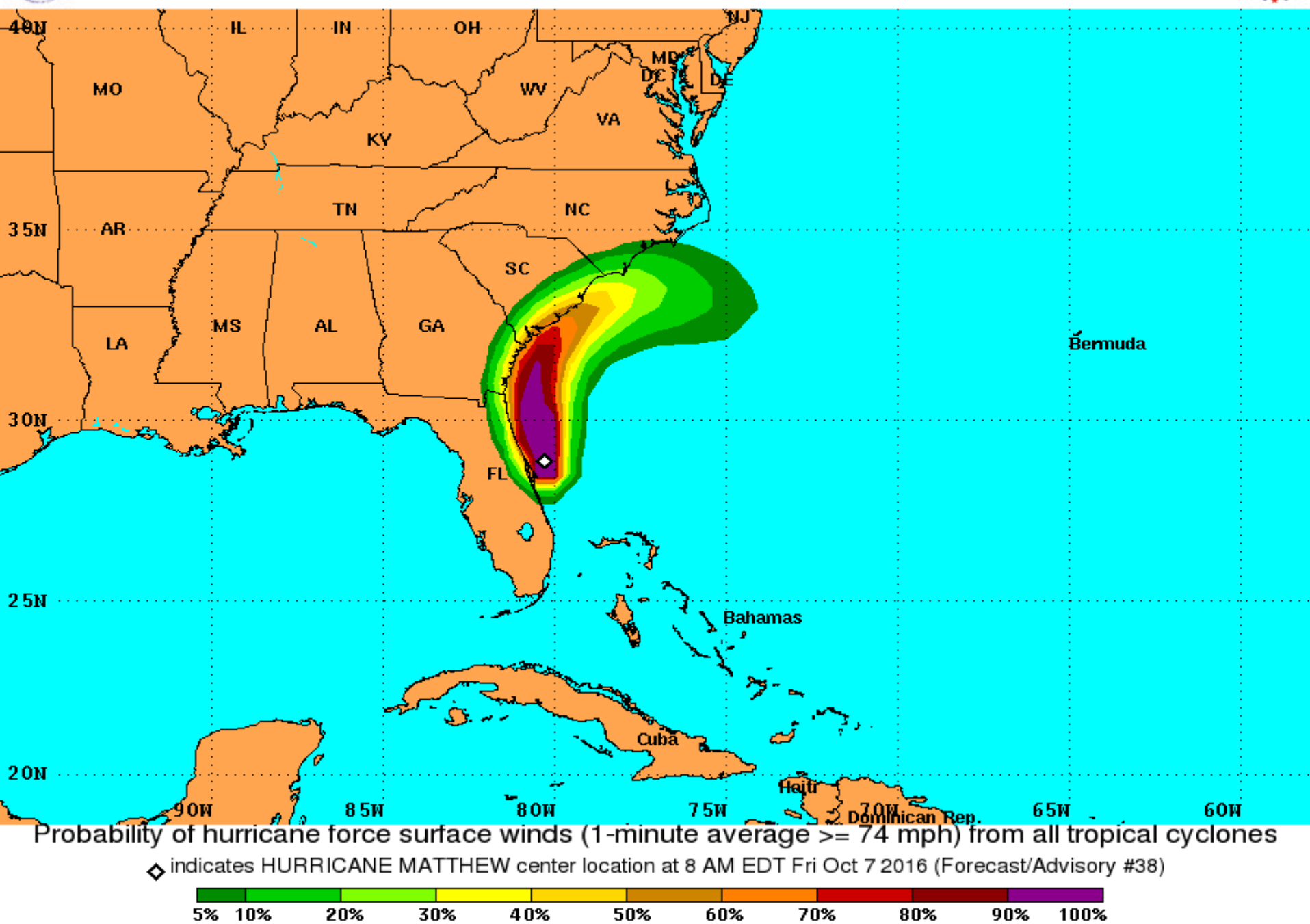
◇ indicates HURRICANE MATTHEW center location at 8 AM EDT Fri Oct 7 2016 (Forecast/Advisory #38)



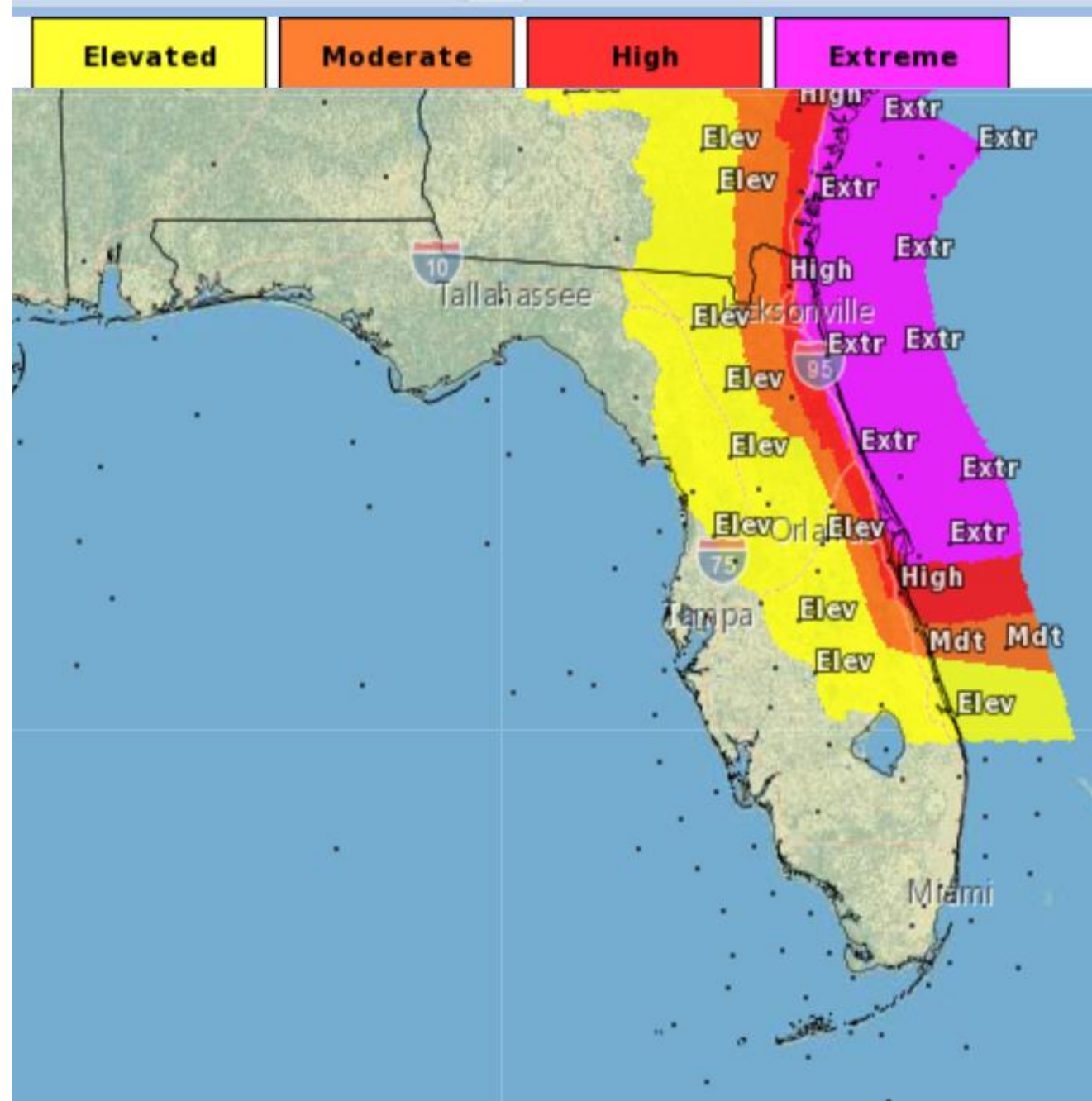


Hurricane Force Wind Speed Probabilities

For the 120 hours (5 days) from 8 AM EDT Fri Oct 7 to 8 AM EDT Wed Oct 12



- **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

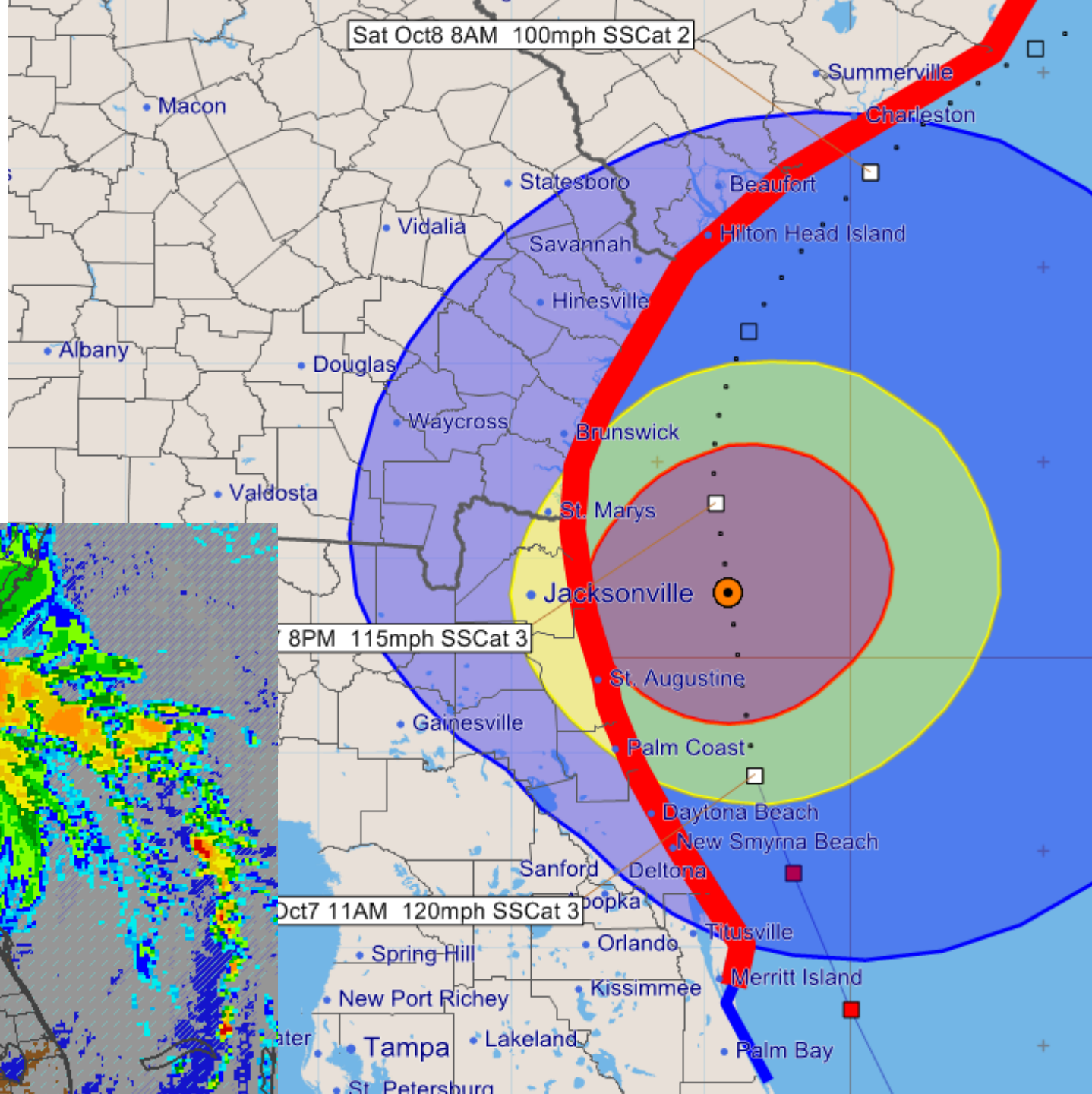
	Onset of 34mph Winds	Onset of 58mph Winds	Onset of Hurricane Winds	End of Hurricane Winds	End of 58mph Winds	End of 34mph Winds	Estimated Peak Wind and Time
FL Osceola	Existing					10/07 15E [04]	47kt (54mph) 10/07 11E
FL Indian River	Existing					10/07 13E [02]	39kt (45mph) 10/07 11E
FL Brevard	Existing	Existing	Existing	10/07 12E [01]	10/07 15E [04]	10/07 19E [08]	68kt (78mph) 10/07 11E
FL Orange	Existing	Existing			10/07 12E [01]	10/07 16E [05]	52kt (60mph) 10/07 11E
FL Seminole	Existing	Existing			10/07 14E [03]	10/07 17E [06]	59kt (68mph) 10/07 11E
FL Lake	Existing	Existing			10/07 13E [02]	10/07 18E [07]	55kt (63mph) 10/07 11E
FL Sumter	Existing					10/07 13E [02]	38kt (44mph) 10/07 11E
FL Marion	Existing					10/07 18E [07]	49kt (56mph) 10/07 11E
FL Volusia	Existing	Existing	Existing	10/07 14E [03]	10/07 18E [07]	10/07 22E [11]	71kt (82mph) 10/07 12E
FL Flagler	Existing	Existing	Existing	10/07 16E [05]	10/07 19E [08]	10/07 23E [12]	71kt (82mph) 10/07 12E
FL Putnam	Existing	Existing			10/07 18E [07]	10/07 22E [11]	57kt (66mph) 10/07 11E
FL Alachua	Existing					10/07 19E [08]	42kt (48mph) 10/07 14E
FL Clay	Existing	10/07 13E			10/07 19E [06]	10/08 00E [13]	56kt (64mph) 10/07 15E
FL Union	Existing					10/07 21E [10]	42kt (48mph) 10/07 16E
FL Bradford	Existing					10/07 22E [11]	44kt (51mph) 10/07 15E
FL St Johns	Existing	Existing	10/07 12E	10/07 15E [03]	10/07 21E [10]	10/08 01E [14]	66kt (76mph) 10/07 13E
FL Nassau	Existing	10/07 15E			10/08 00E [09]	10/08 03E [16]	63kt (72mph) 10/07 20E
FL Duval	Existing	10/07 12E	10/07 16E	10/07 17E [01]	10/07 23E [11]	10/08 03E [16]	64kt (74mph) 10/07 16E
FL Baker	Existing					10/07 23E [12]	44kt (51mph) 10/07 15E
FL Levy	10/07 12E					10/07 13E [01]	34kt (39mph) 10/07 12E
FL Columbia	10/07 13E					10/07 22E [09]	37kt (43mph) 10/07 18E

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

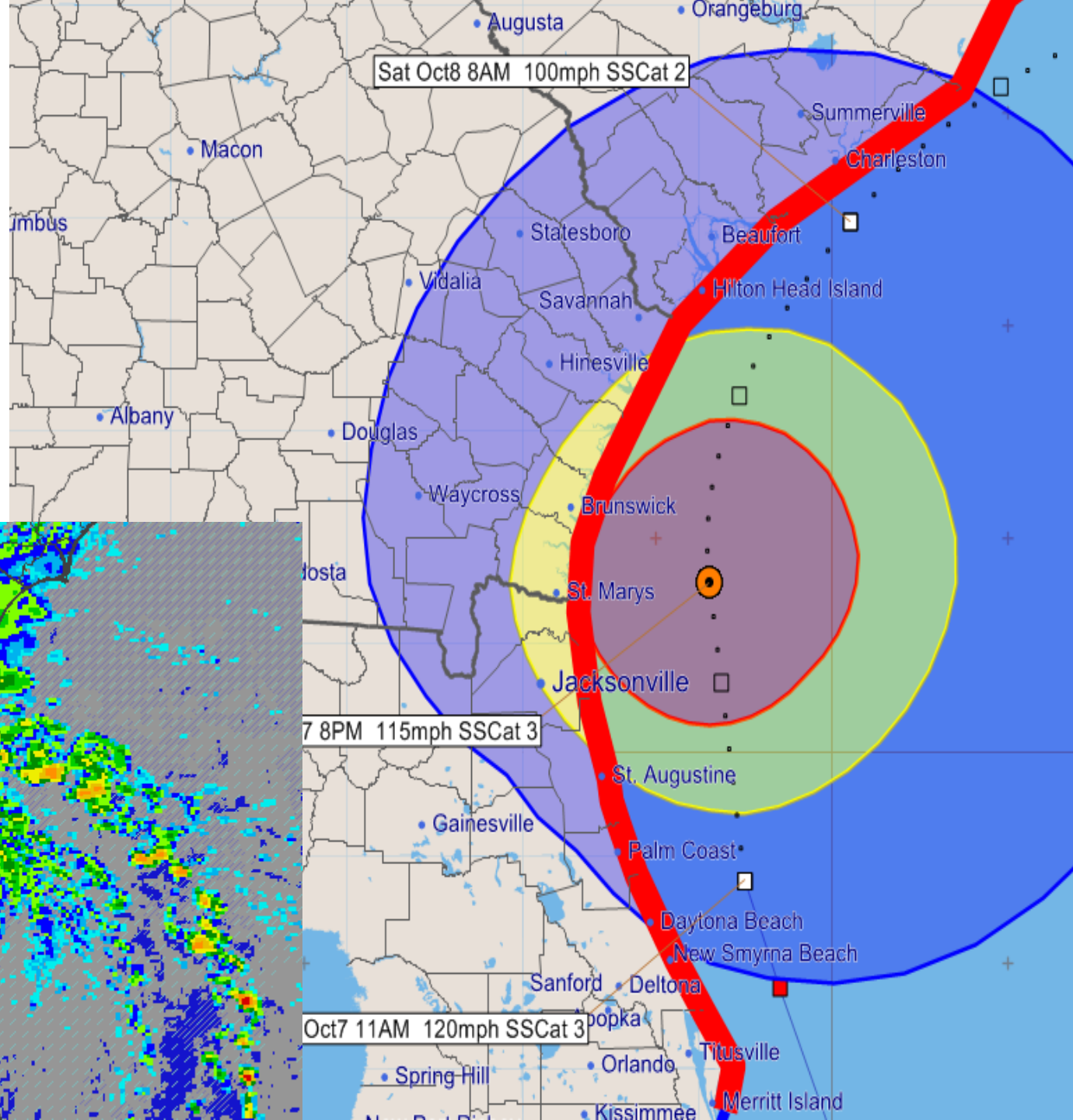
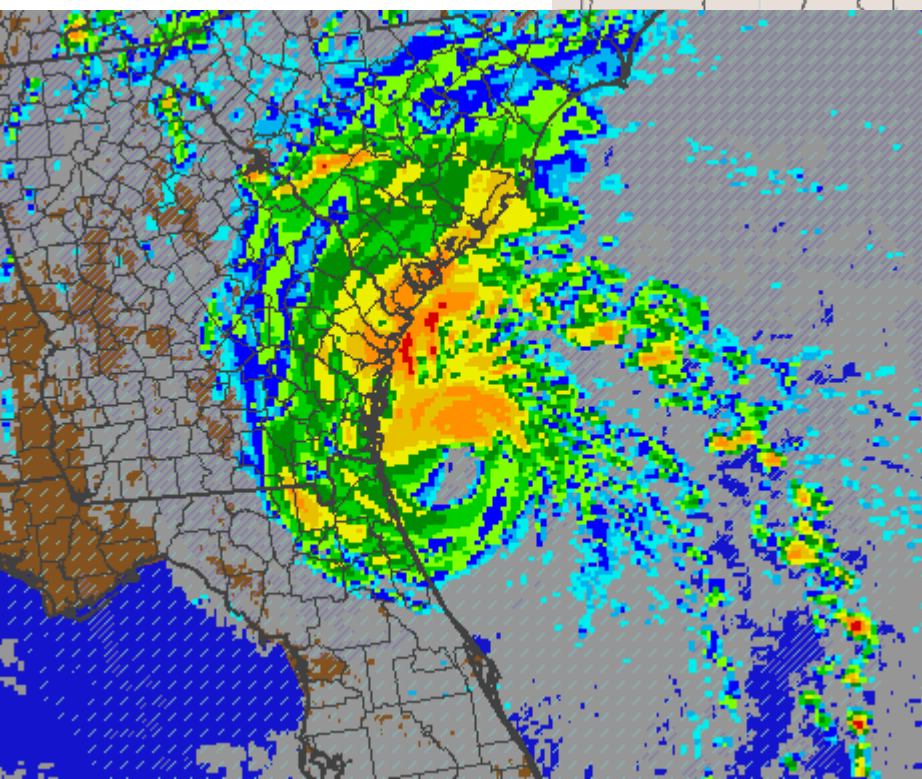
Rows in yellow indicate the county will see winds between 50-63kts (59-74mph)

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

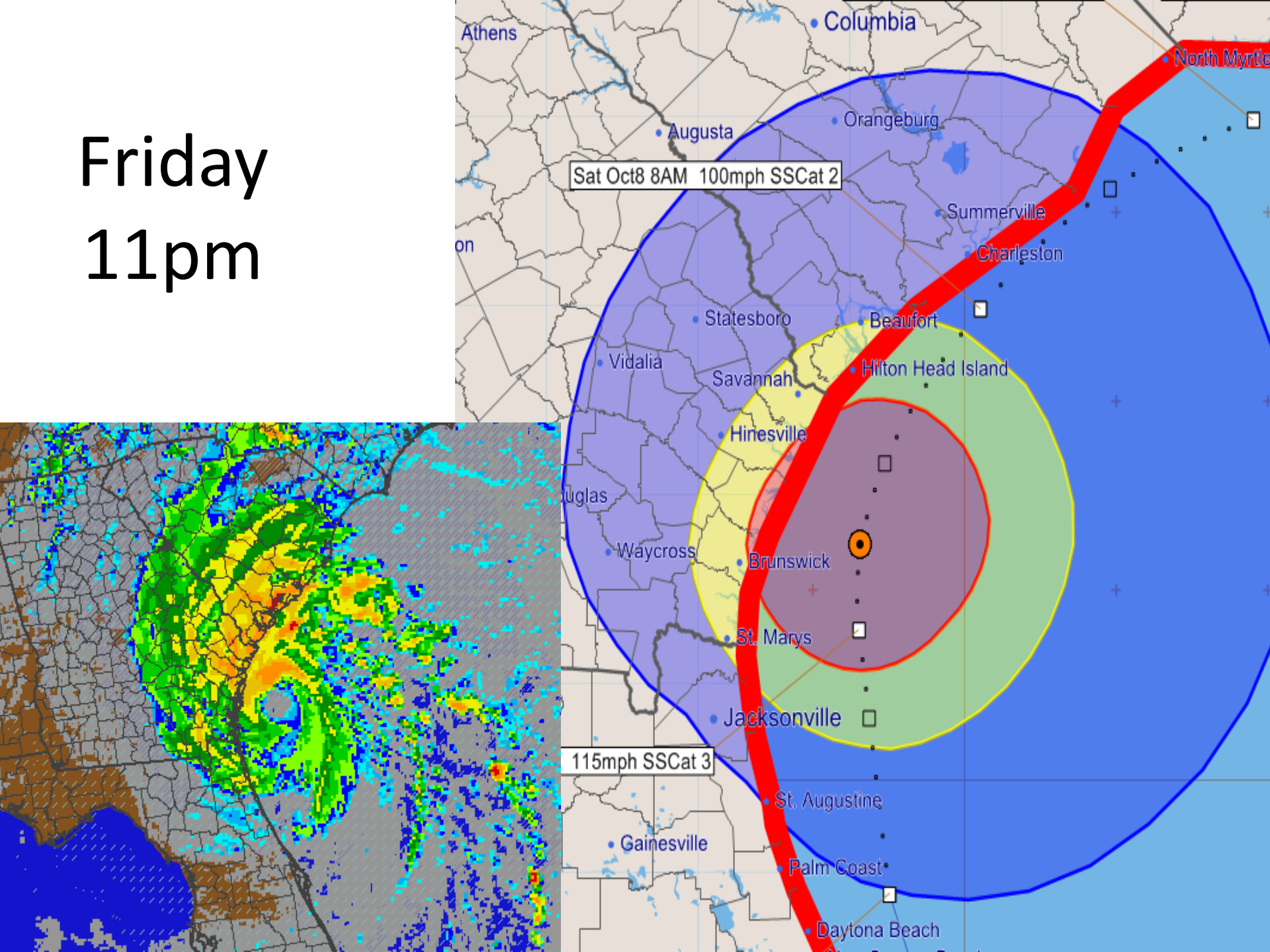
Friday
5pm



Friday
8pm





Friday
11pm



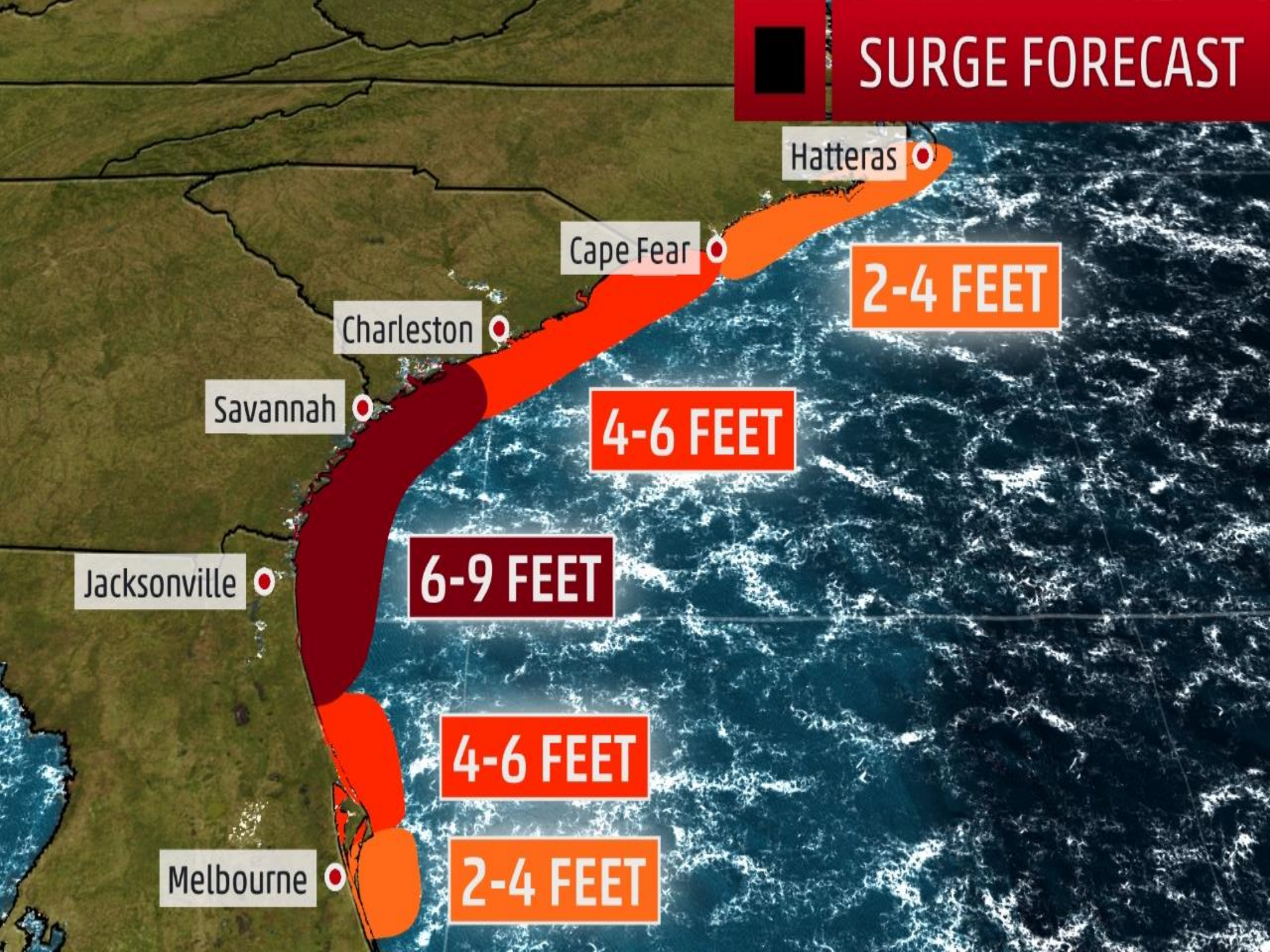
Prototype Storm Surge Watches/Warnings



0 15 30mi

 Prototype Storm Surge Warning
 Prototype Storm Surge Watch

SURGE FORECAST



Hatteras

Cape Fear

Charleston

Savannah

Jacksonville

Melbourne

2-4 FEET

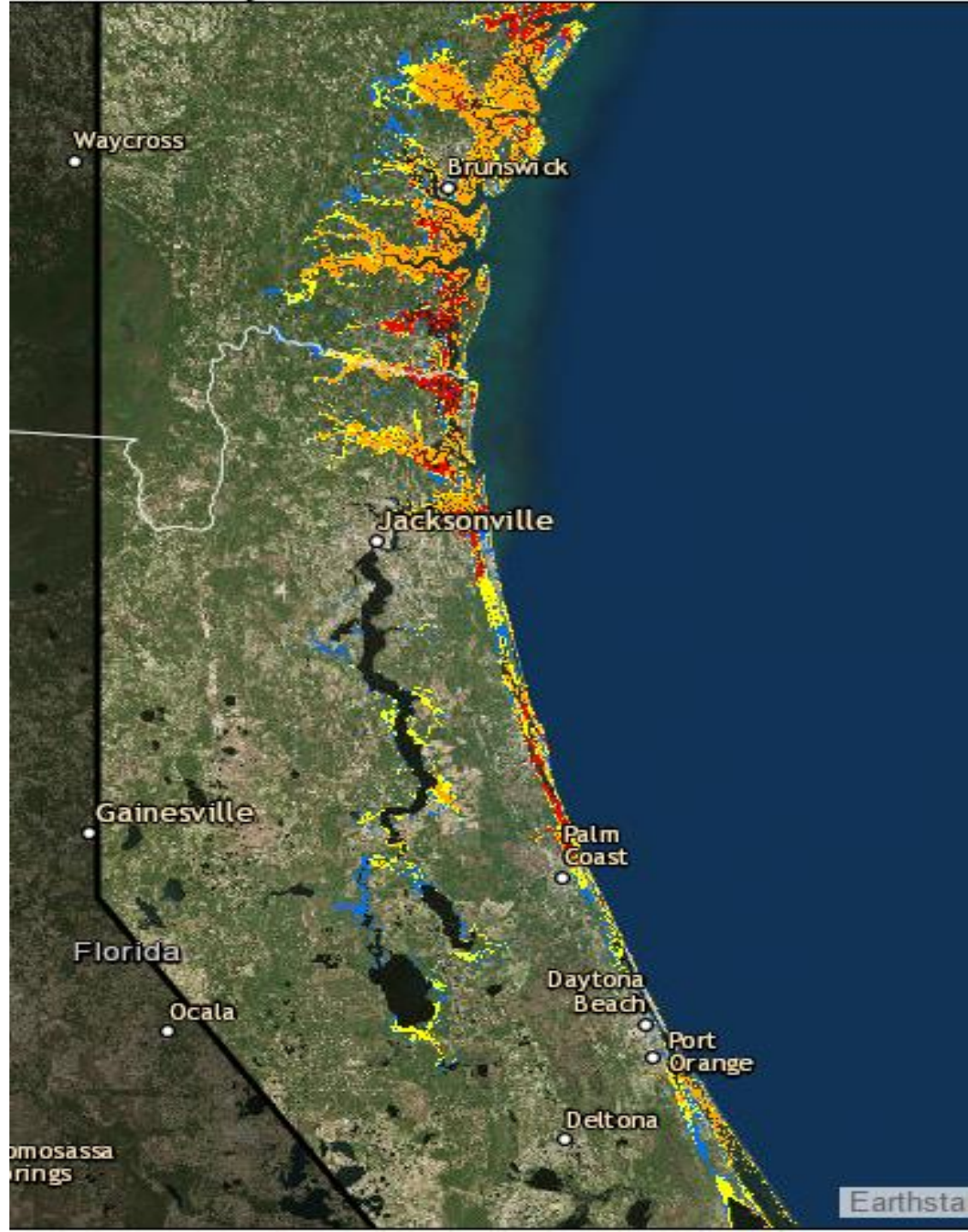
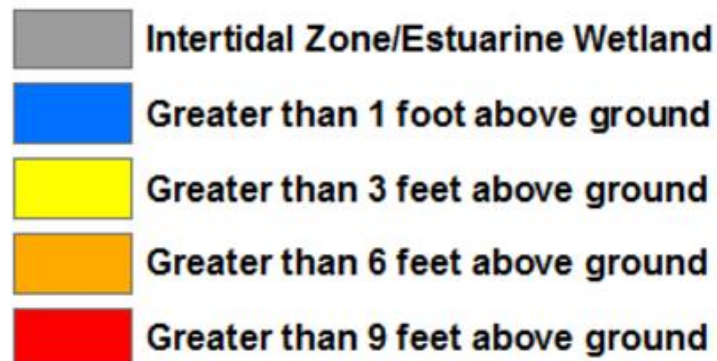
4-6 FEET

6-9 FEET

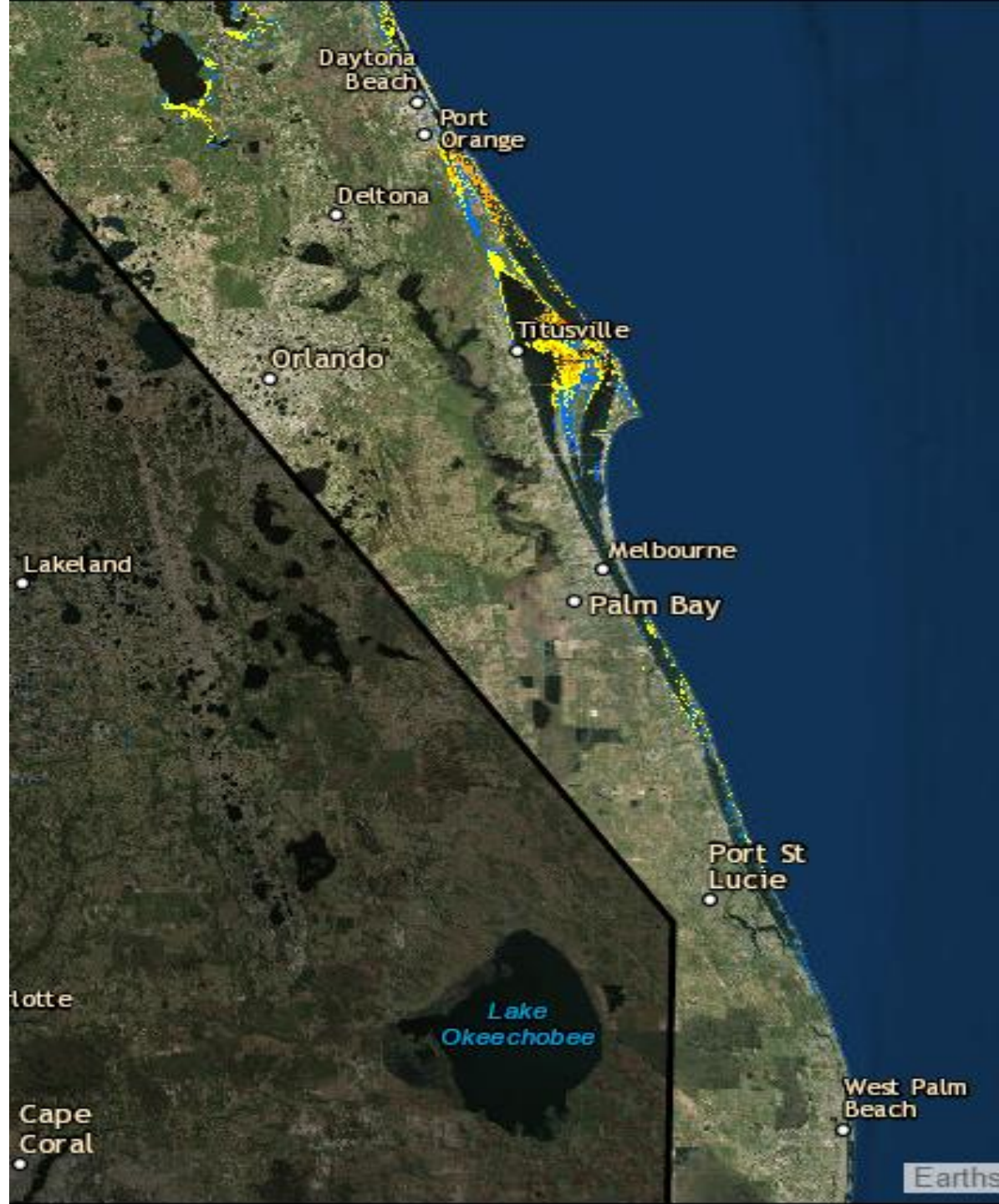
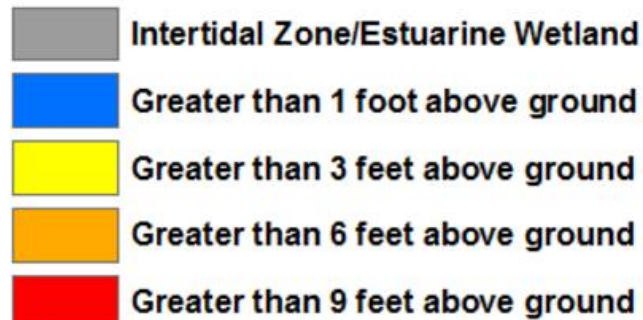
4-6 FEET

2-4 FEET

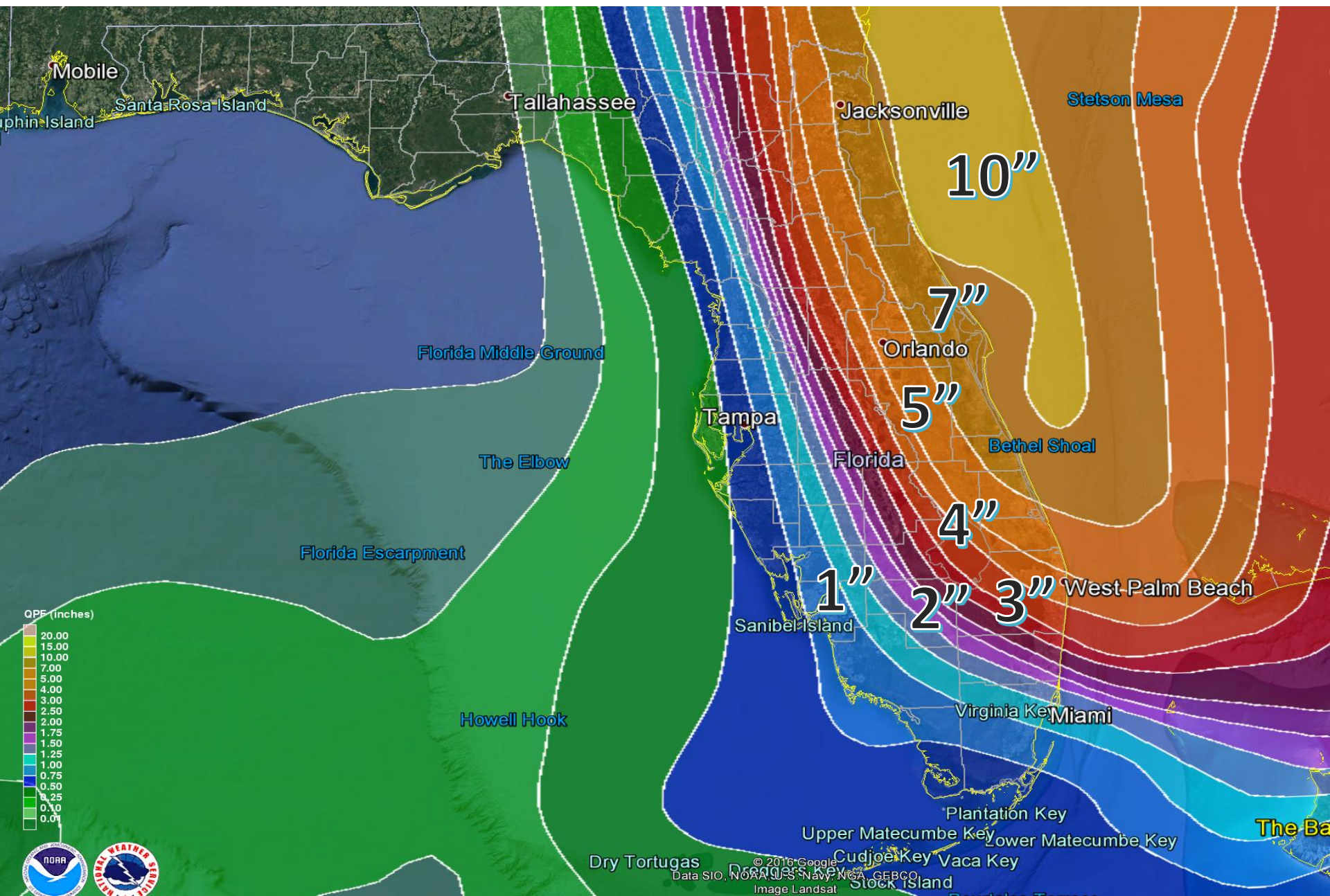
Potential Storm Surge Flooding*



Potential Storm Surge Flooding*

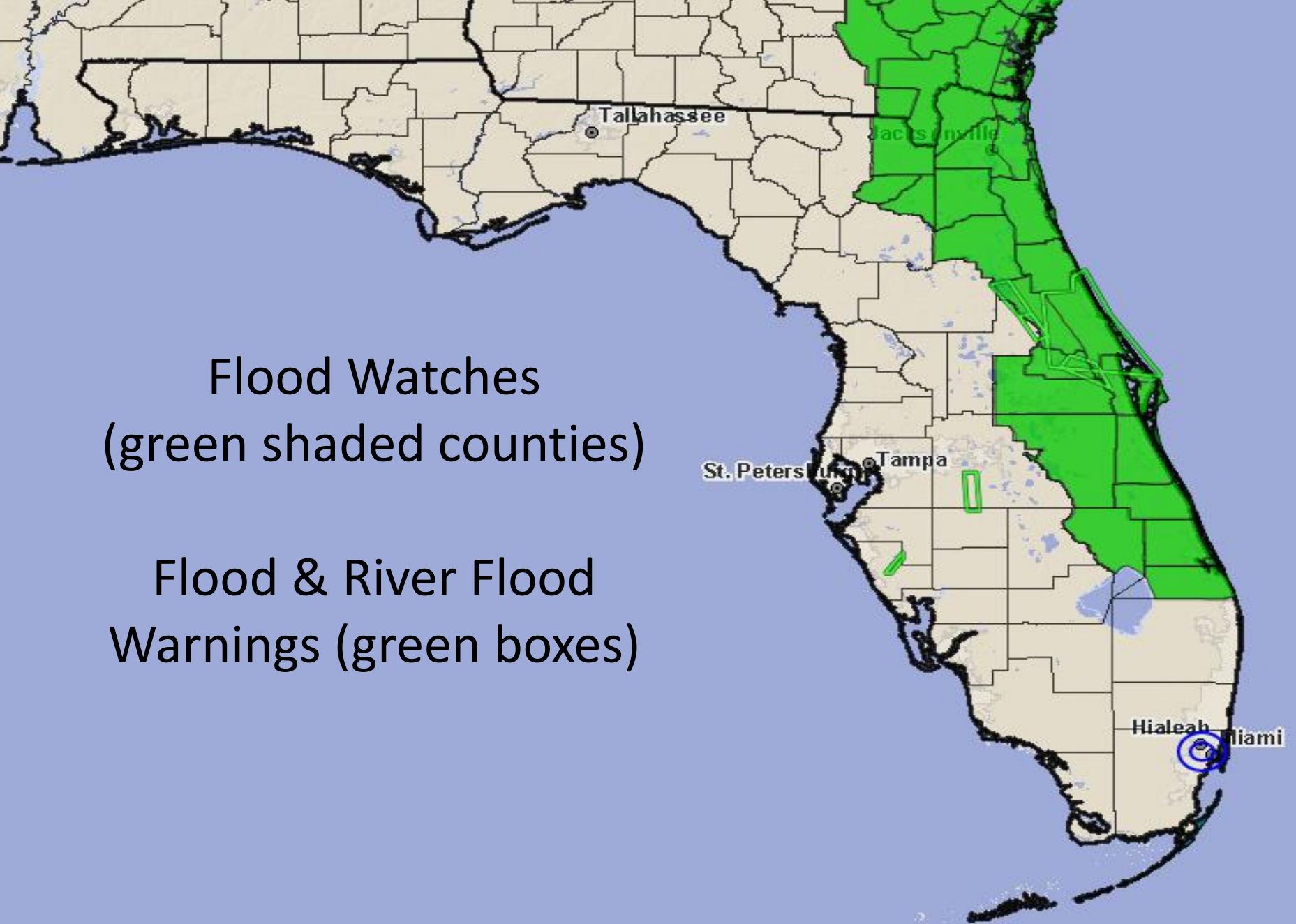


Next 5 Day Forecast Rainfall

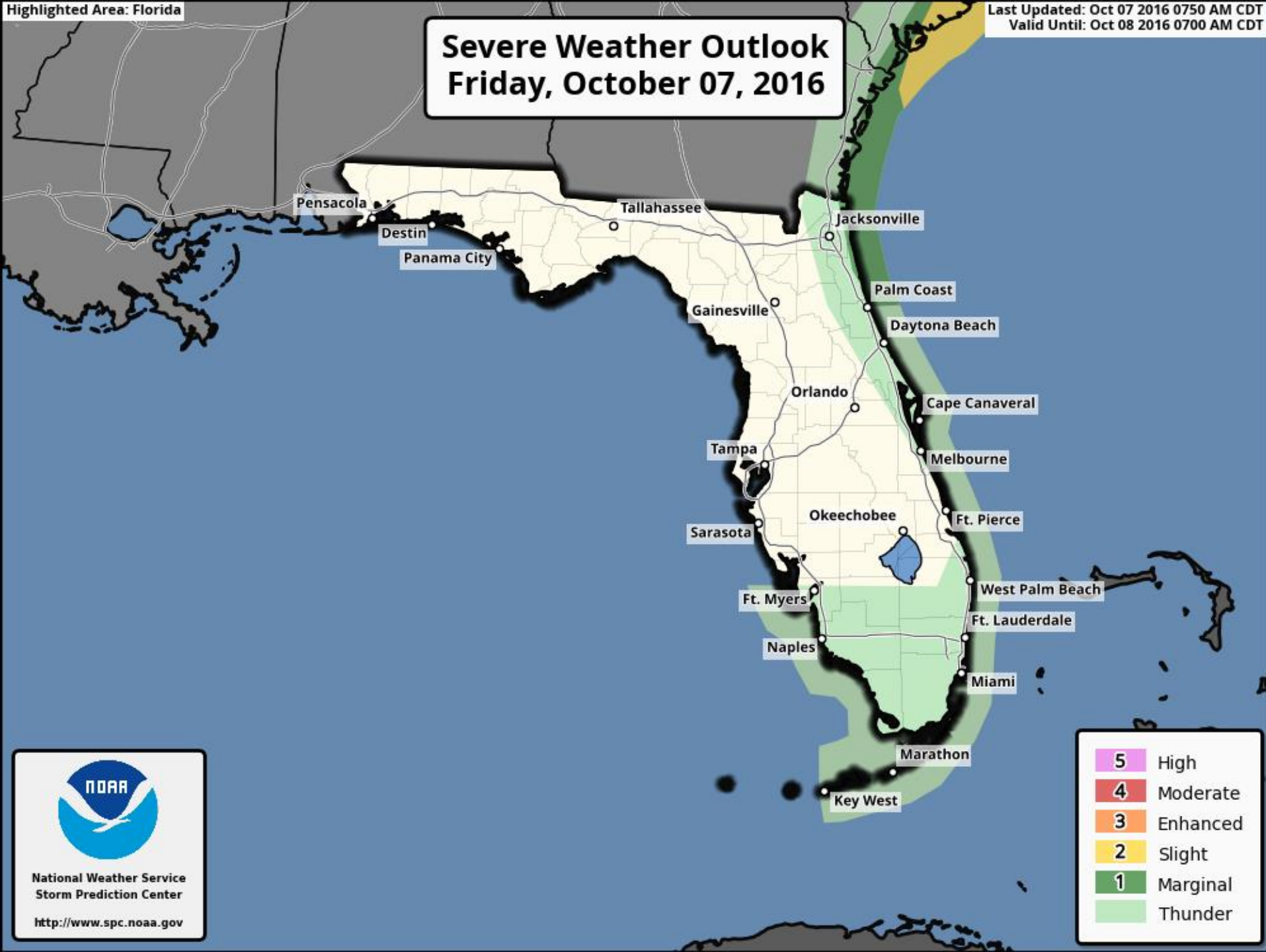


Flood Watches
(green shaded counties)

Flood & River Flood
Warnings (green boxes)



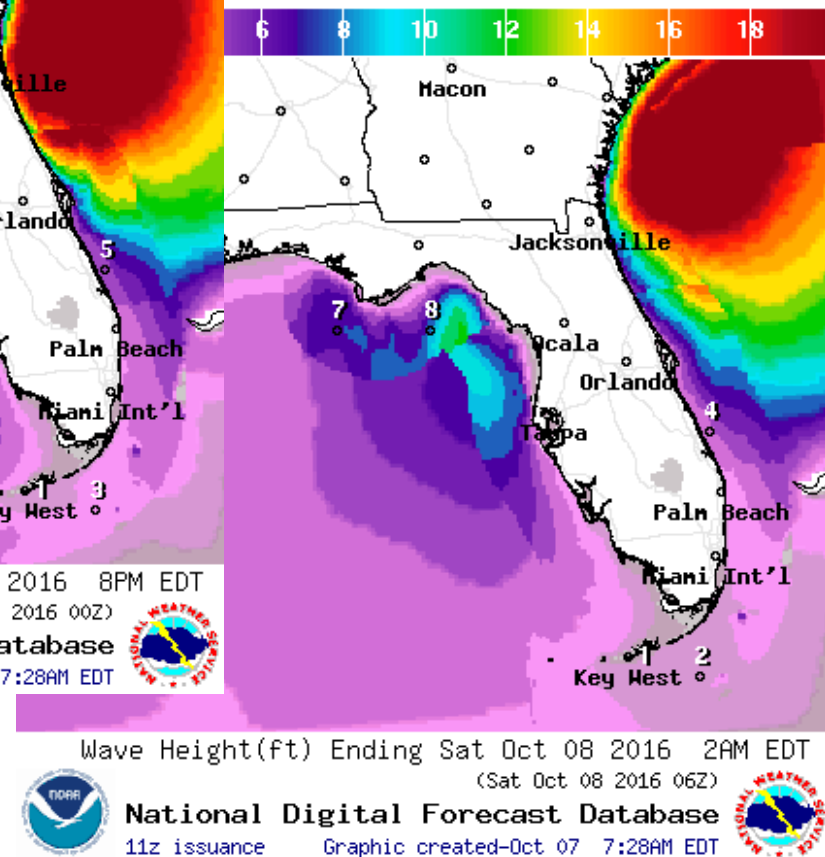
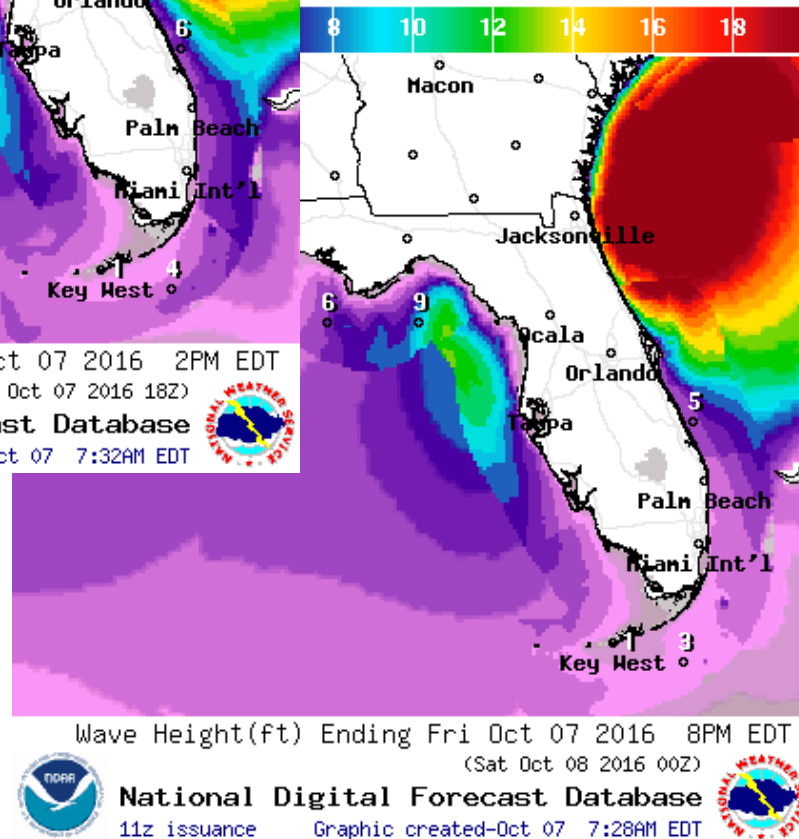
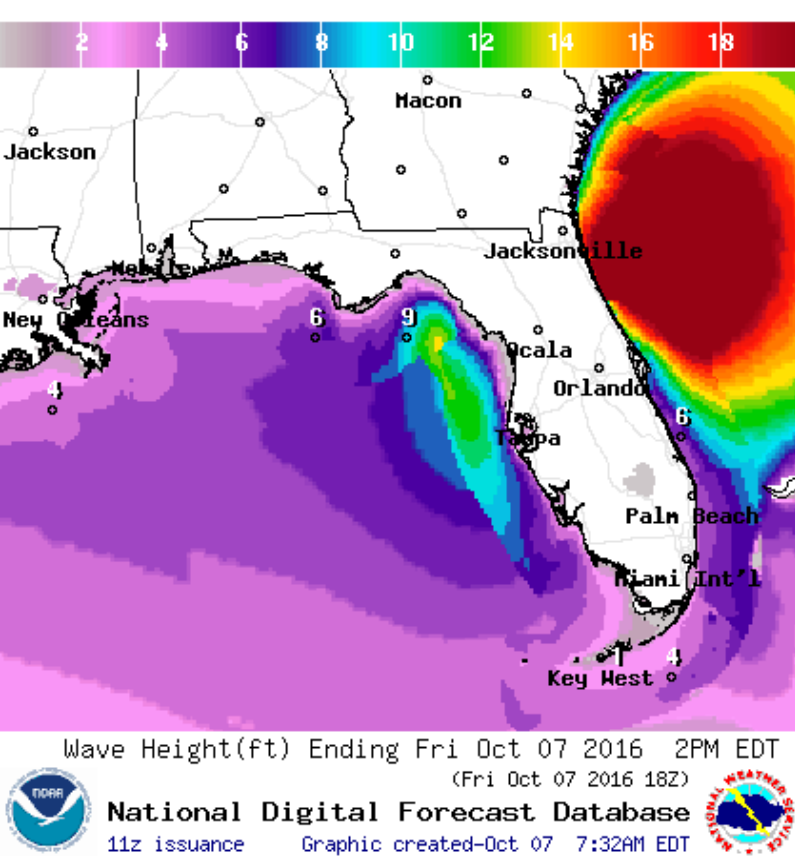
Severe Weather Outlook Friday, October 07, 2016



National Weather Service
Storm Prediction Center

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

Forecast Wave Heights



HURRICANE MATTHEW

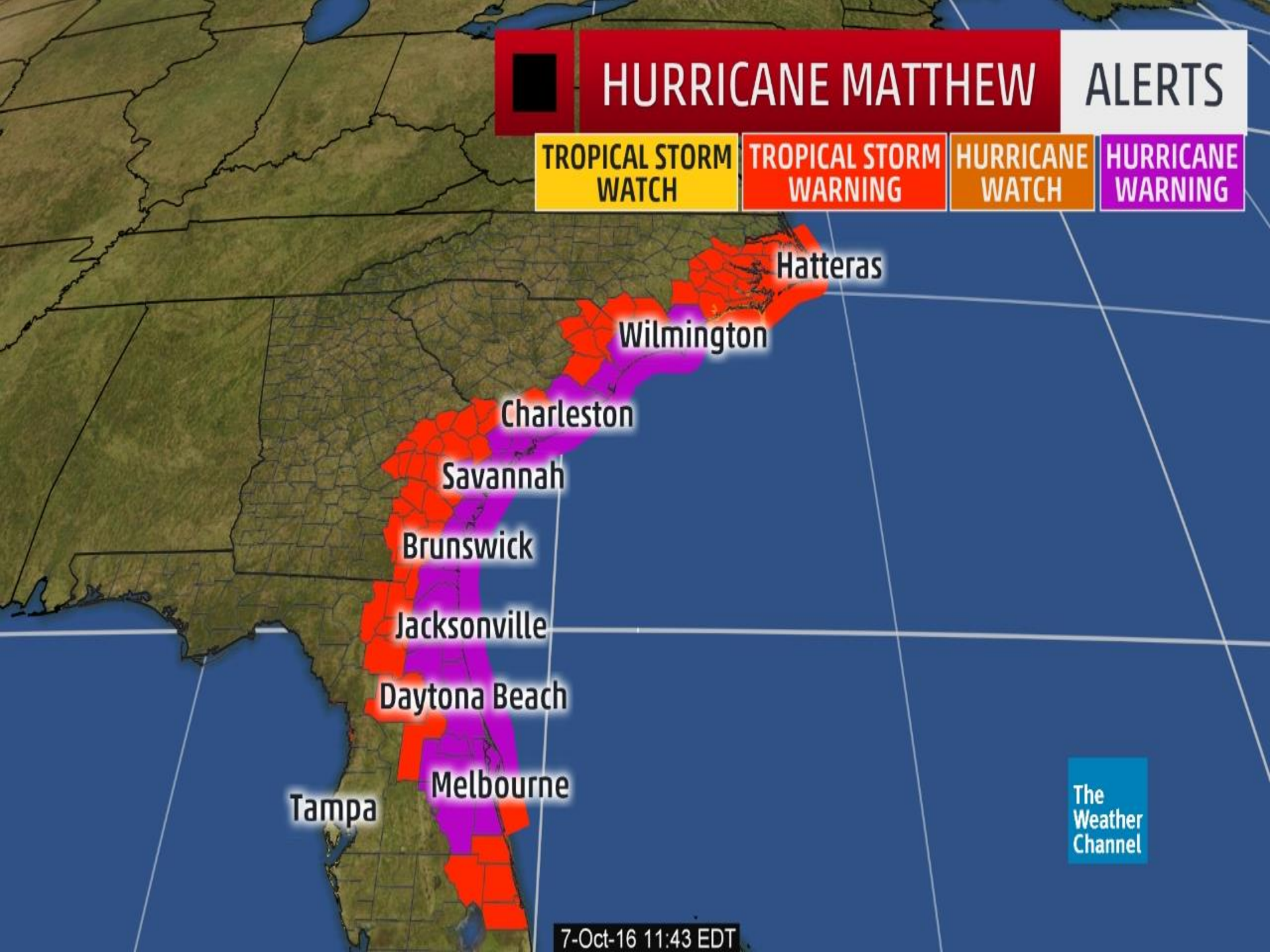
ALERTS

TROPICAL STORM
WATCH

TROPICAL STORM
WARNING

HURRICANE
WATCH

HURRICANE
WARNING

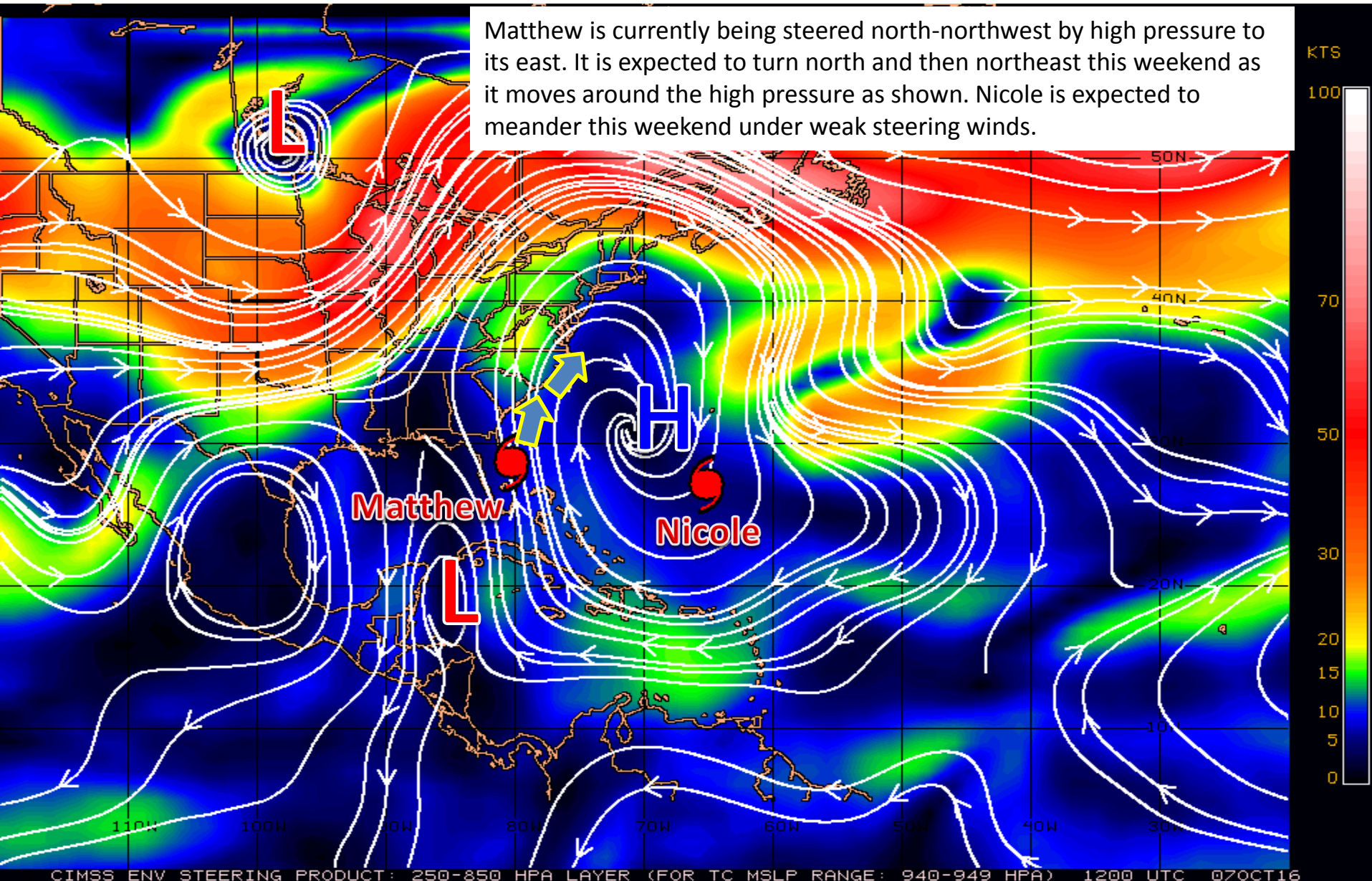


The
Weather
Channel

7-Oct-16 11:43 EDT

Steering Currents

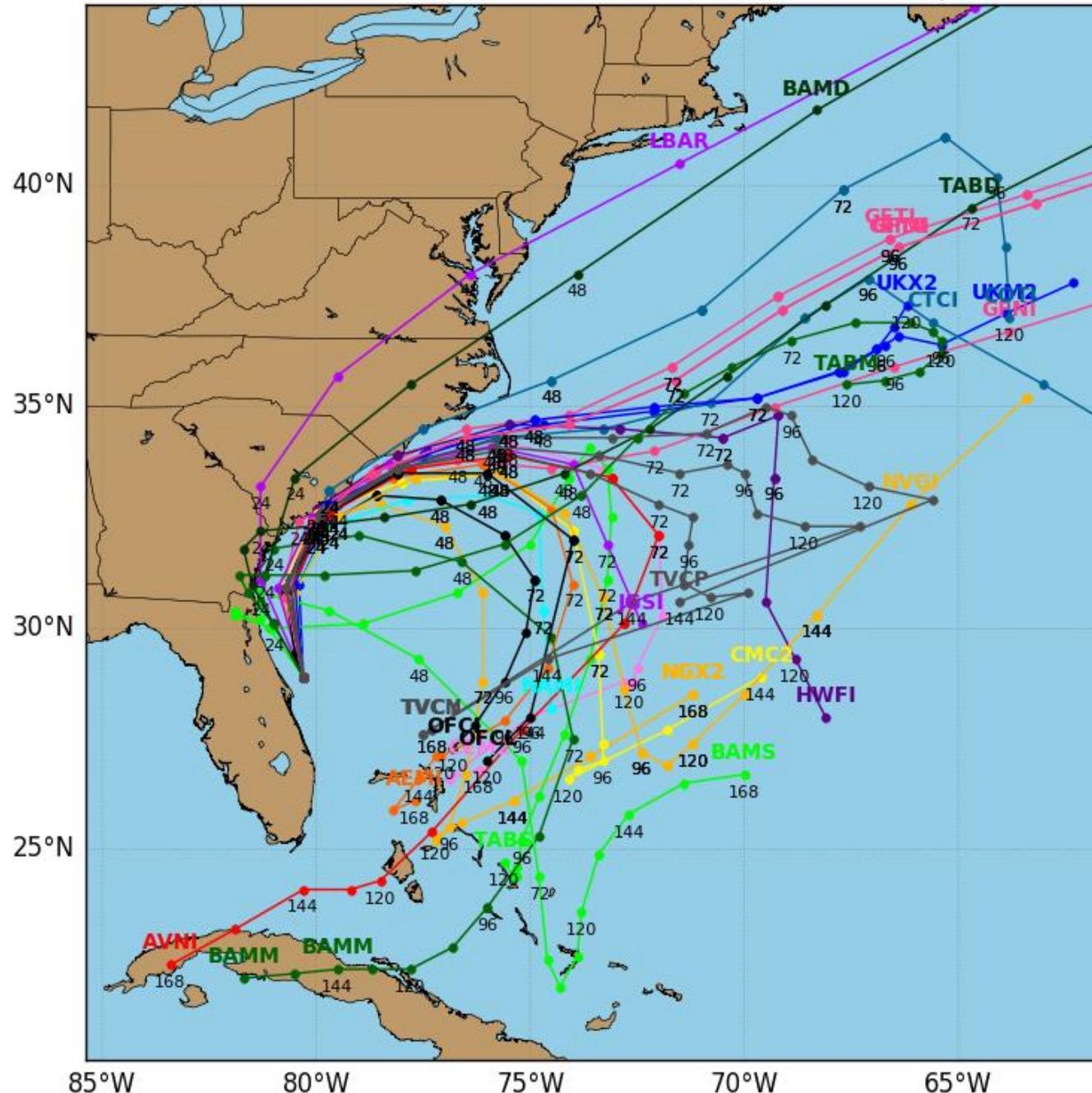
Matthew is currently being steered north-northwest by high pressure to its east. It is expected to turn north and then northeast this weekend as it moves around the high pressure as shown. Nicole is expected to meander this weekend under weak steering winds.



Hurricane MATTHEW Model Track Guidance

Initialized at 12z Oct 07 2016

Levi Cowan - tropica tidbits.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 will need to be watched closely over the next few days.

Tropical Storm Nicole

11 AM EDT Fri Oct 07 2016

Position 27.5 N 65.3 W

Maximum Winds 70 mph

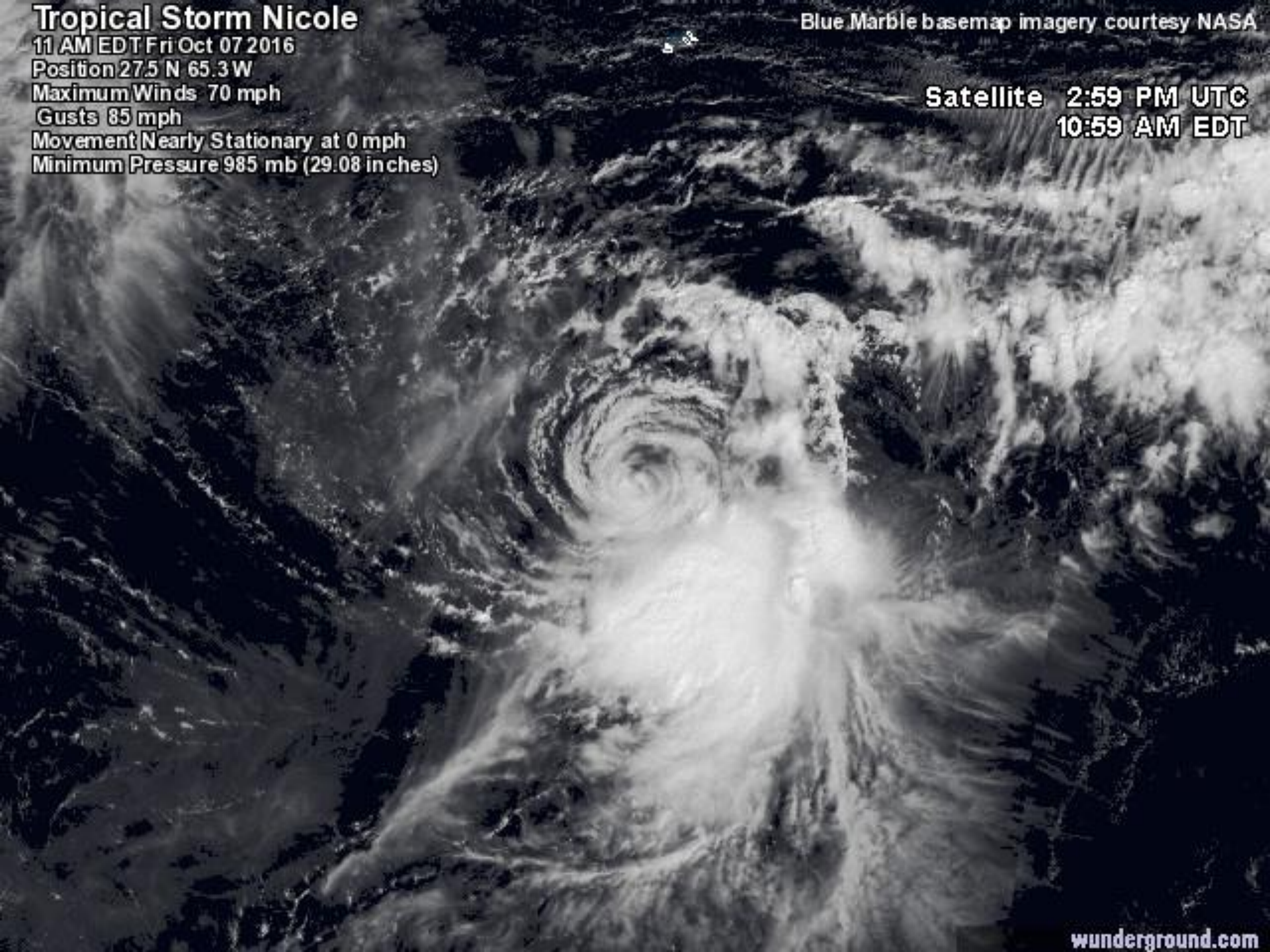
Gusts 85 mph

Movement Nearly Stationary at 0 mph

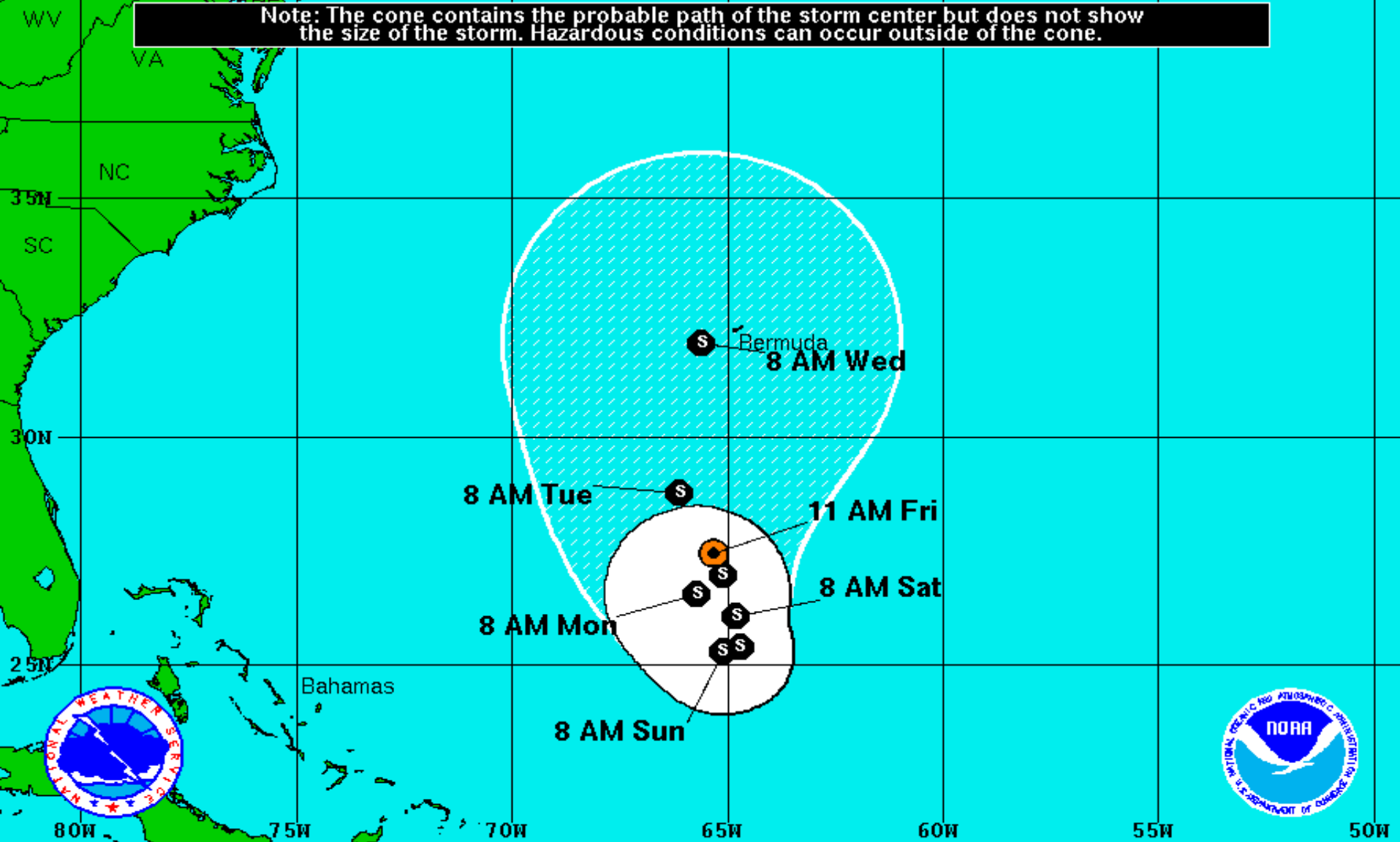
Minimum Pressure 985 mb (29.08 inches)

Blue Marble basemap imagery courtesy NASA


Satellite 2:59 PM UTC
10:59 AM 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
 11 AM EDT Advisory 14
 NWS National Hurricane Center

Current Information: 
 Center Location 27.5 N 65.3 W
 Max Sustained Wind 70 mph
 Movement Stationary

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.

8:00 am 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 8:00 am 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 12pm EDT, Hurricane Matthew is located about 30 miles east-northeast of Daytona Beach, or about 90 miles southeast of Jacksonville.
- Maximum sustained winds are currently 120 mph with higher gusts, making Matthew a Category 3 hurricane on the Saffir-Simpson scale.
- Matthew is moving toward the north-northwest at 12 mph, and this general motion is expected to continue today. A turn toward the north is expected tonight or 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. Only a small deviation to the left in Matthew's track could bring the core of a major hurricane onshore somewhere along the Northeast Florida coast today.
- Matthew remains a large storm, with tropical storm force winds extending 185 miles from the center, and hurricane force winds extending 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.
- Nicole has now weakened to a tropical storm. At 11am EDT, Tropical Storm Nicole was located about 335 miles south of Bermuda. Additional weakening is expected over the next couple of days.
- Nicole is stationary, but it is expected to begin moving slowly south or south-southeast later today and continue the motion on Saturday.

Florida Outlook:

- A **Hurricane Warning** is in effect for Volusia, northern Brevard, Orange, Seminole, Osceola, Nassau, Duval, St. Johns, Flagler, Putnam, and Clay counties.
- A **Tropical Storm Warning** is in effect for southern Brevard, Lake, Marion, Alachua, Bradford, Union, Columbia, and Baker counties.
- A **Flood Watch** is in effect for Baker, Bradford, Union, Nassau, Duval, St. Johns, Flagler, Clay, Putnam, Volusia, Brevard, Indian River, Martin, Okeechobee, Orange, Osceola, Seminole, St. Lucie, and Palm Beach Counties.
- Regardless of track, Matthew is a very large storm and will generate tropical storm force winds and rough seas along the northern East Coast of Florida today, along with minor coastal flooding, beach erosion, and dangerous rip currents.
- Hurricane and tropical storm conditions are currently affecting Volusia and Flagler counties, and will continue to spread northward in the warning areas today.
- The current forecast calls for 8 to 12 inches of rain along the east coast of Florida with isolated totals of 15 inches possible.
- 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 also still possible from Cocoa Beach north to Flagler Beach.
- 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 24-36 hours along the Florida east coast from Brevard to Nassau County.
- An isolated tornado or two is possible along the Northeast Florida coast today.
- Hurricane Nicole does not pose a threat to Florida.

Another briefing packet will be issued on Friday at noon. 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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