



TROPICAL UPDATE

8 AM EDT

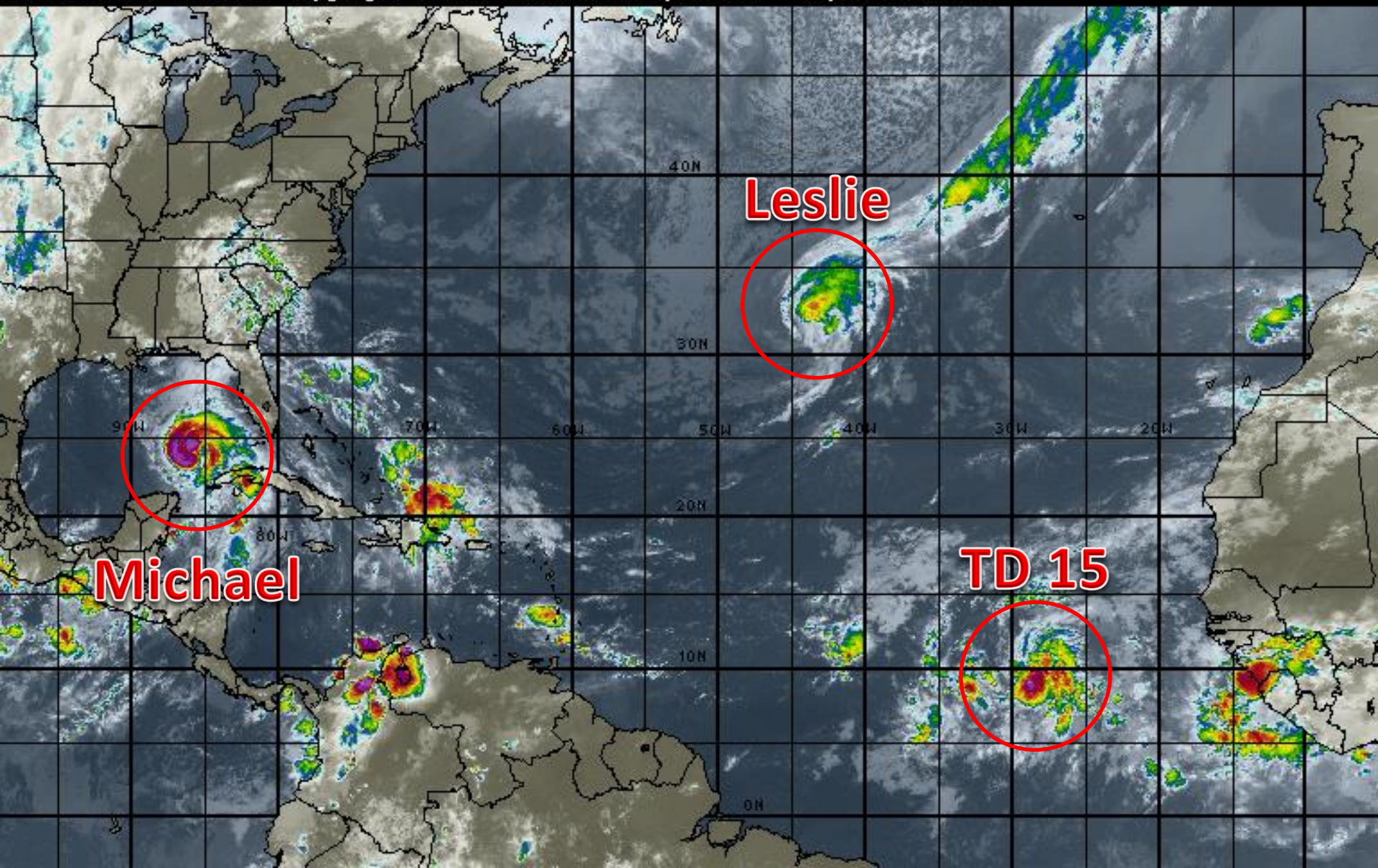
Tuesday, October 9, 2018

Hurricane Michael, Tropical Storm Leslie, Tropical Depression 15

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

09:00 09-OCT-2018 GMT Copyright © 1998-2018 WSI Corporation <http://www.wsi.com>

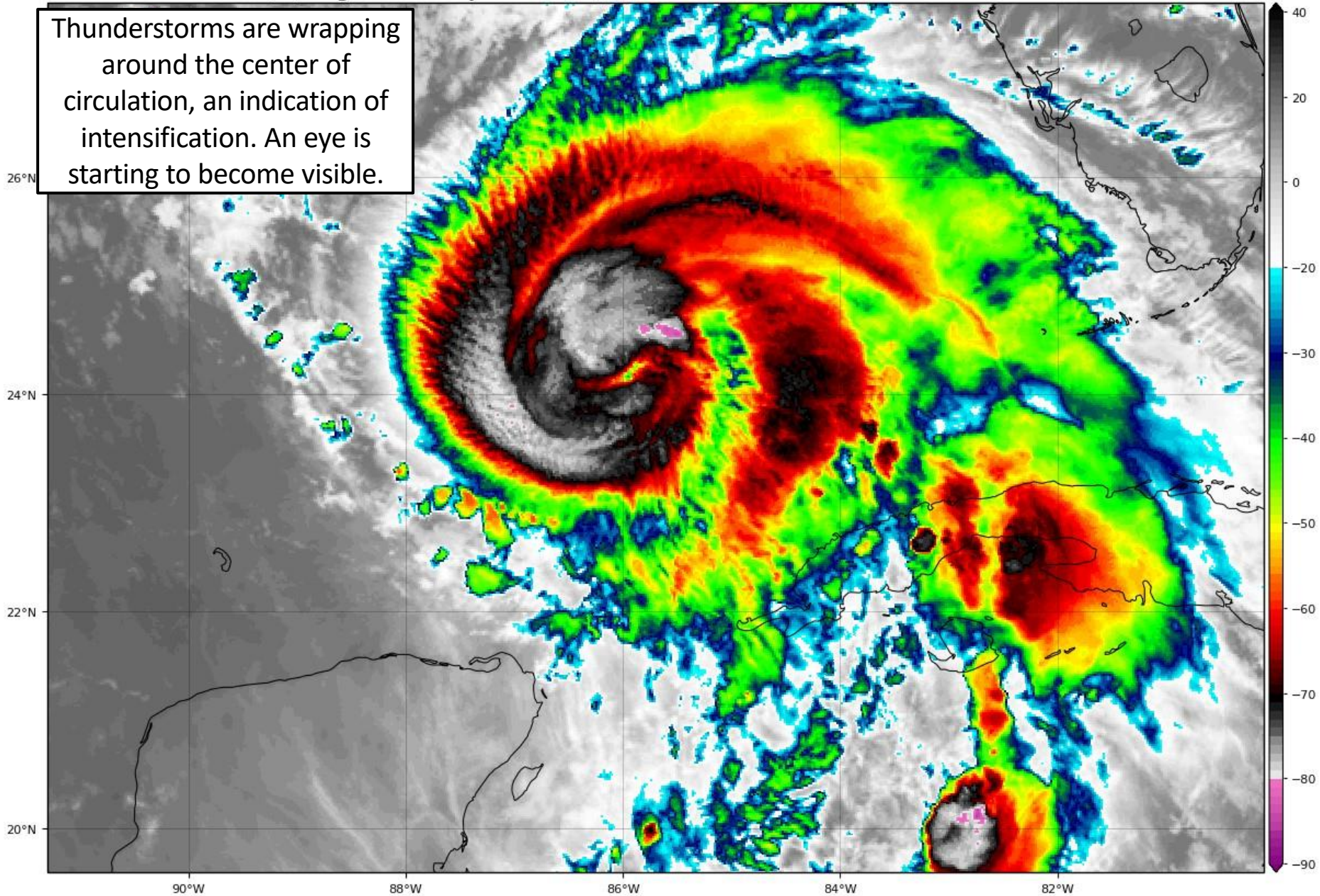


Hurricane Michael Satellite Image

GOES-16 Channel 13 (IR) Brightness Temperature (°C) at 09:08Z Oct 09, 2018

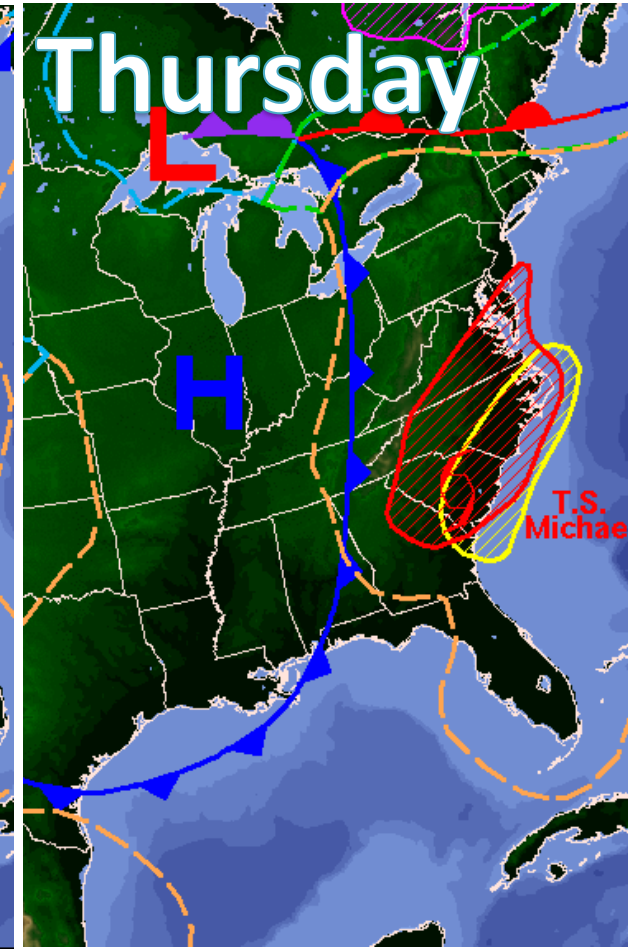
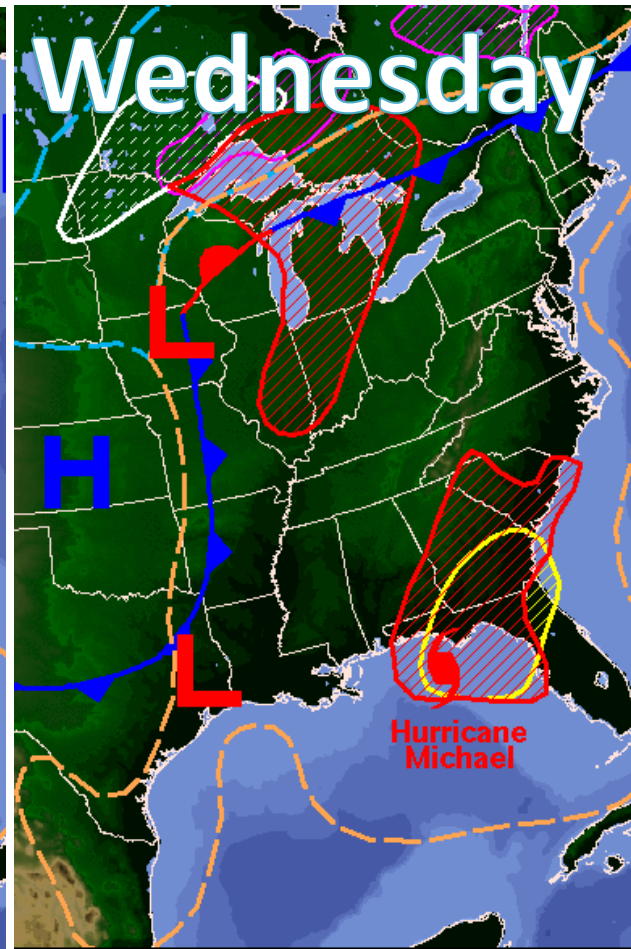
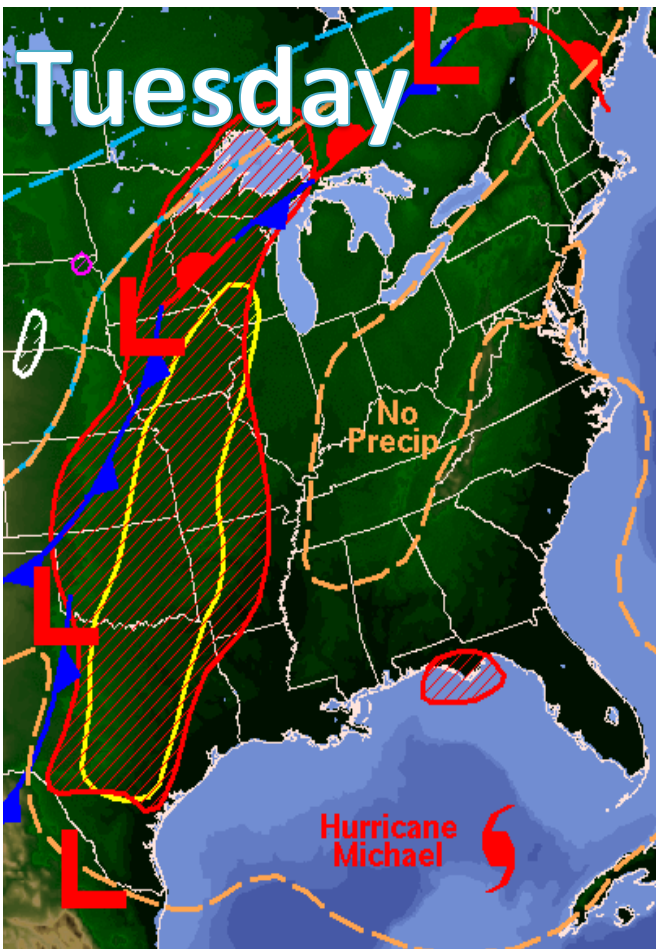
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Thunderstorms are wrapping around the center of circulation, an indication of intensification. An eye is starting to become visible.



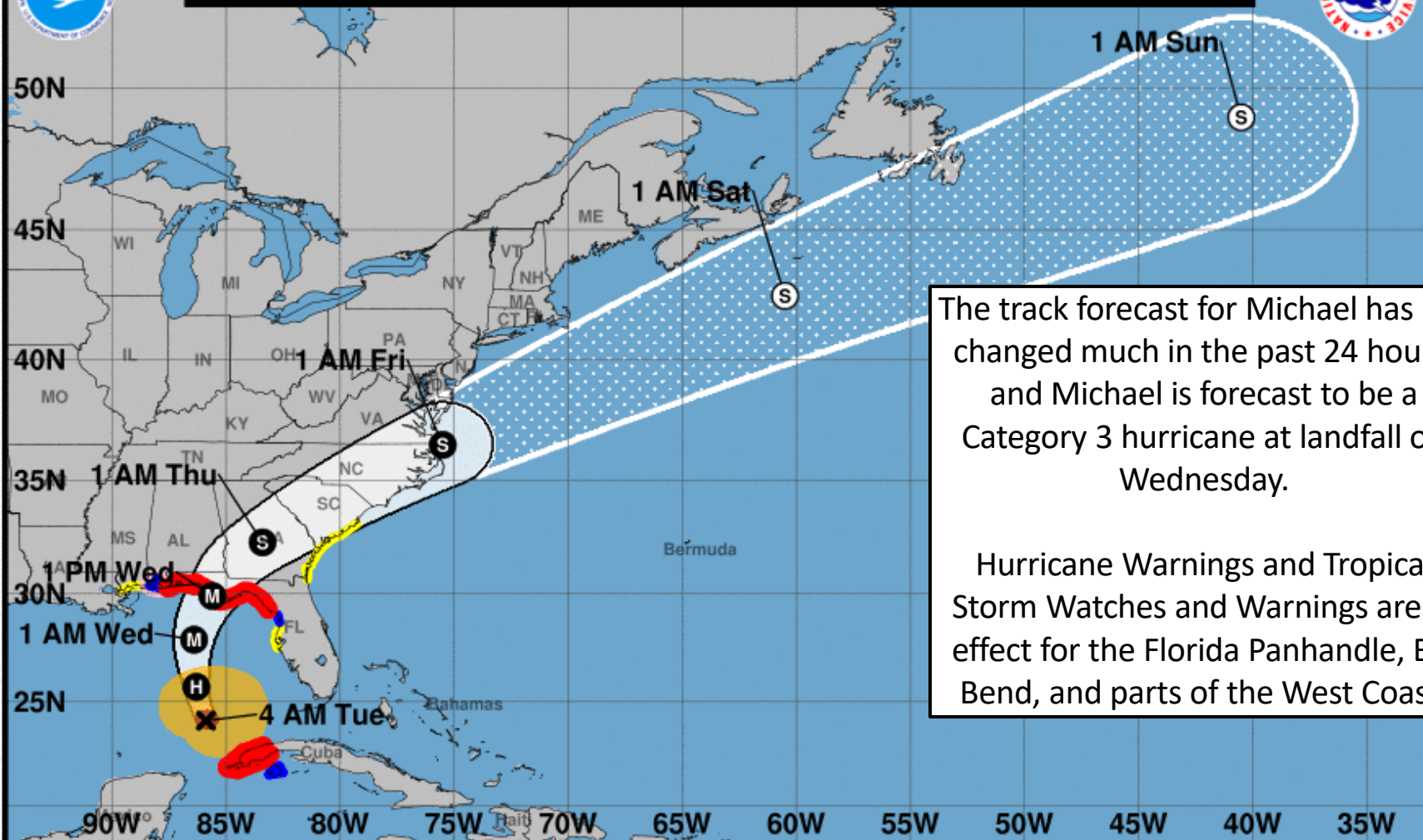
Michael will initially be steered northward between high pressure to the northeast and a cold front to the northwest. A turn to the northeast will occur by Wednesday as Michael is primarily steered by the cold front.

Forecast Weather Maps





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.



The track forecast for Michael has not changed much in the past 24 hours, and Michael is forecast to be a Category 3 hurricane at landfall on Wednesday.

Hurricane Warnings and Tropical Storm Watches and Warnings are in effect for the Florida Panhandle, Big Bend, and parts of the West Coast.

Hurricane Michael

Tuesday October 09, 2018

4 AM CDT Advisory 11

NWS National Hurricane Center

Current information: x

Center location 24.1 N 85.9 W

Maximum sustained wind 90 mph

Movement NNW at 12 mph

Forecast positions:

● Tropical Cyclone ○ Post/Potential TC

Sustained winds: D < 39 mph

S 39-73 mph H 74-110 mph M > 110 mph

Potential track area:

Day 1-3 Day 4-5

Watches:

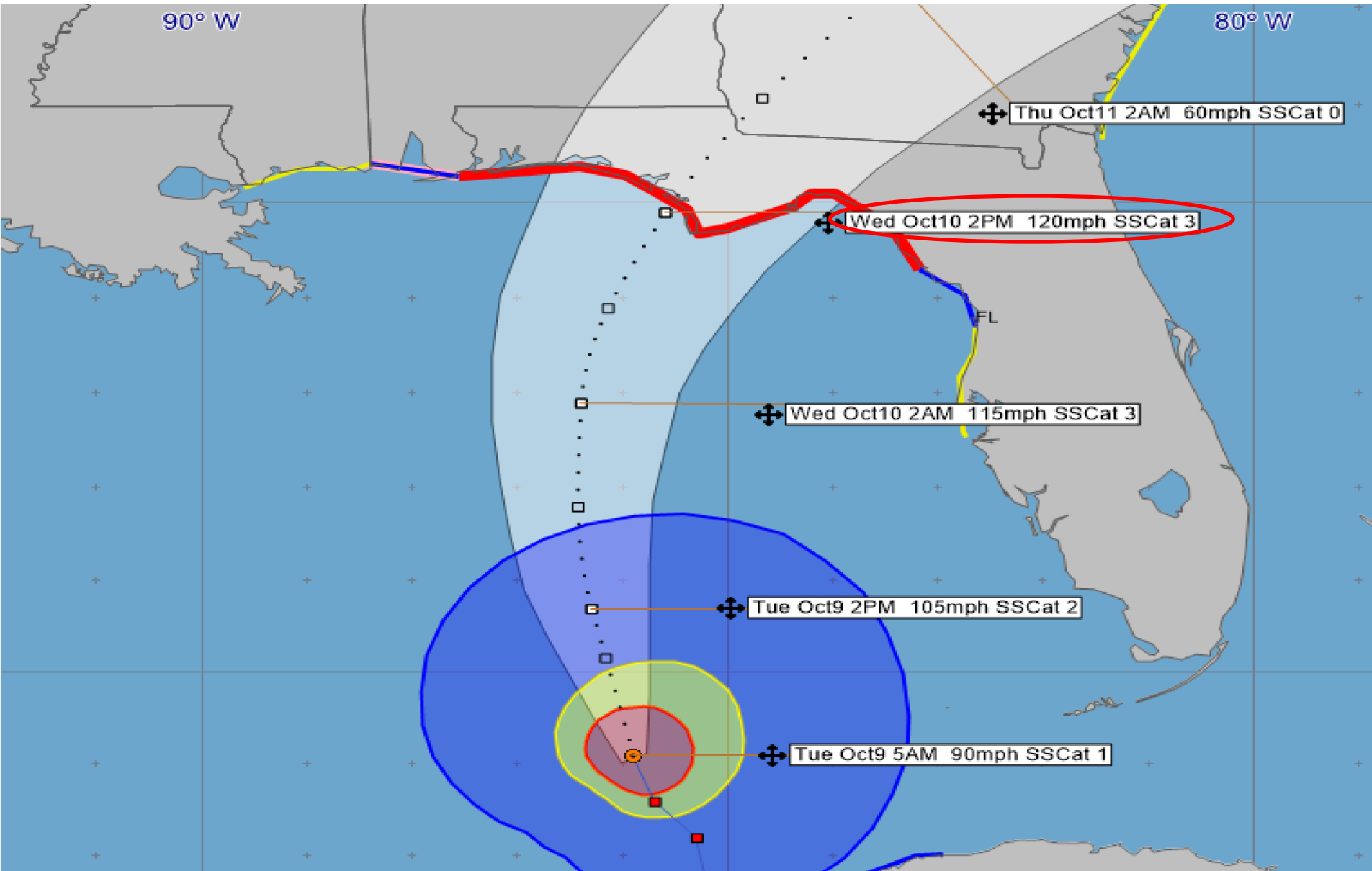
Hurricane Trop Stm

Warnings:

Hurricane Trop Stm

Current wind extent:

Hurricane Trop Stm



Hurricane Michael - Tuesday, October 9, 2018 5 AM EDT Advisory #11

Center Location: 24.1 N 85.9 W Maximum Sustained Winds: 90 mph (Cat 1) Movement: 12 mph NNW

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

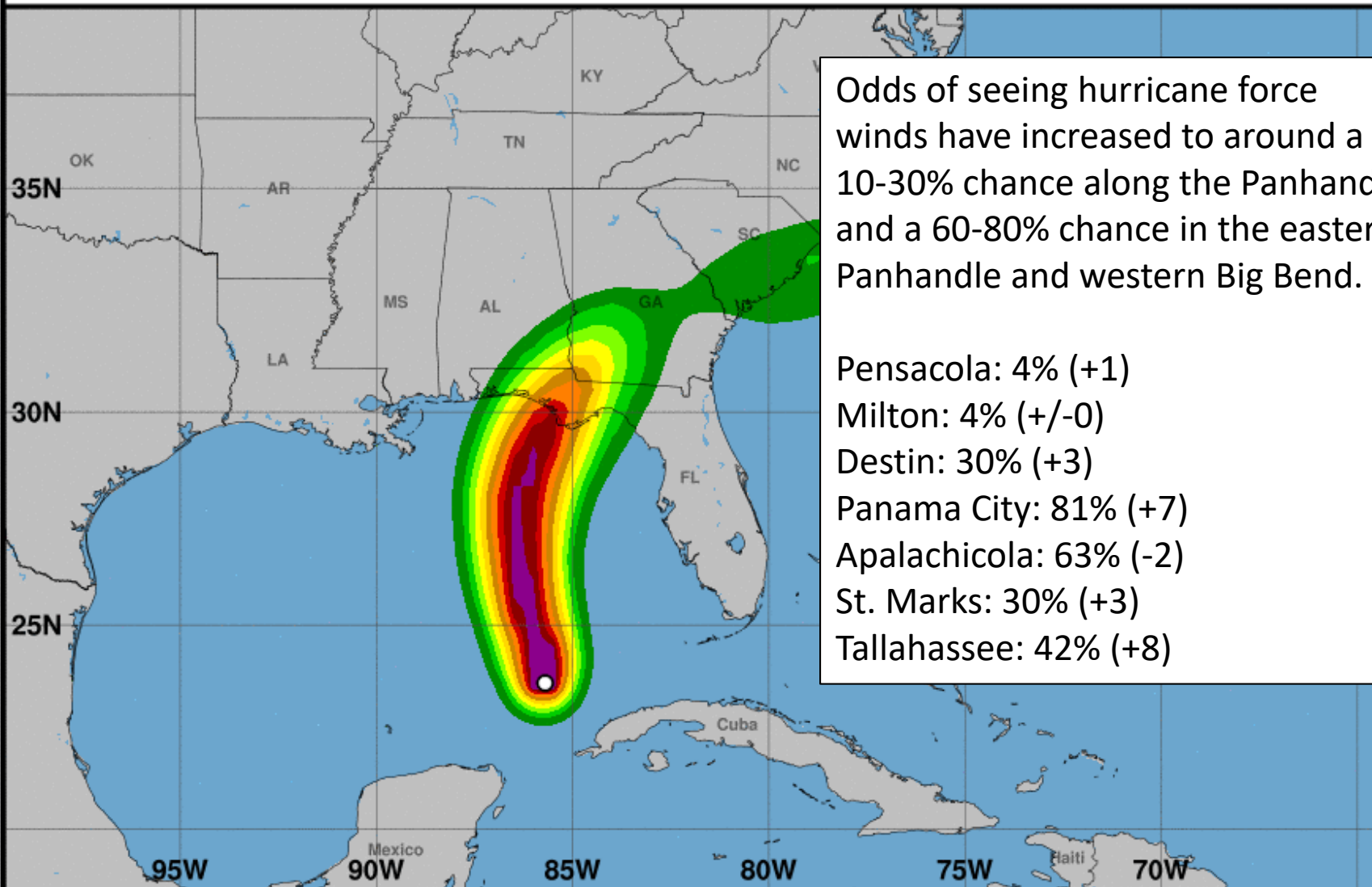
Sustained Wind Speeds: tropical storm >= 34kt/39mph strong tropical storm >= 50kt/58mph hurricane >= 64kt/74mph





Hurricane-Force Wind Speed Probabilities (Preliminary)

For the 120 hours (5.0 days) from 1 AM CDT TUE OCT 09 to 1 AM CDT SUN OCT 14



Odds of seeing hurricane force winds have increased to around a 10-30% chance along the Panhandle and a 60-80% chance in the eastern Panhandle and western Big Bend.

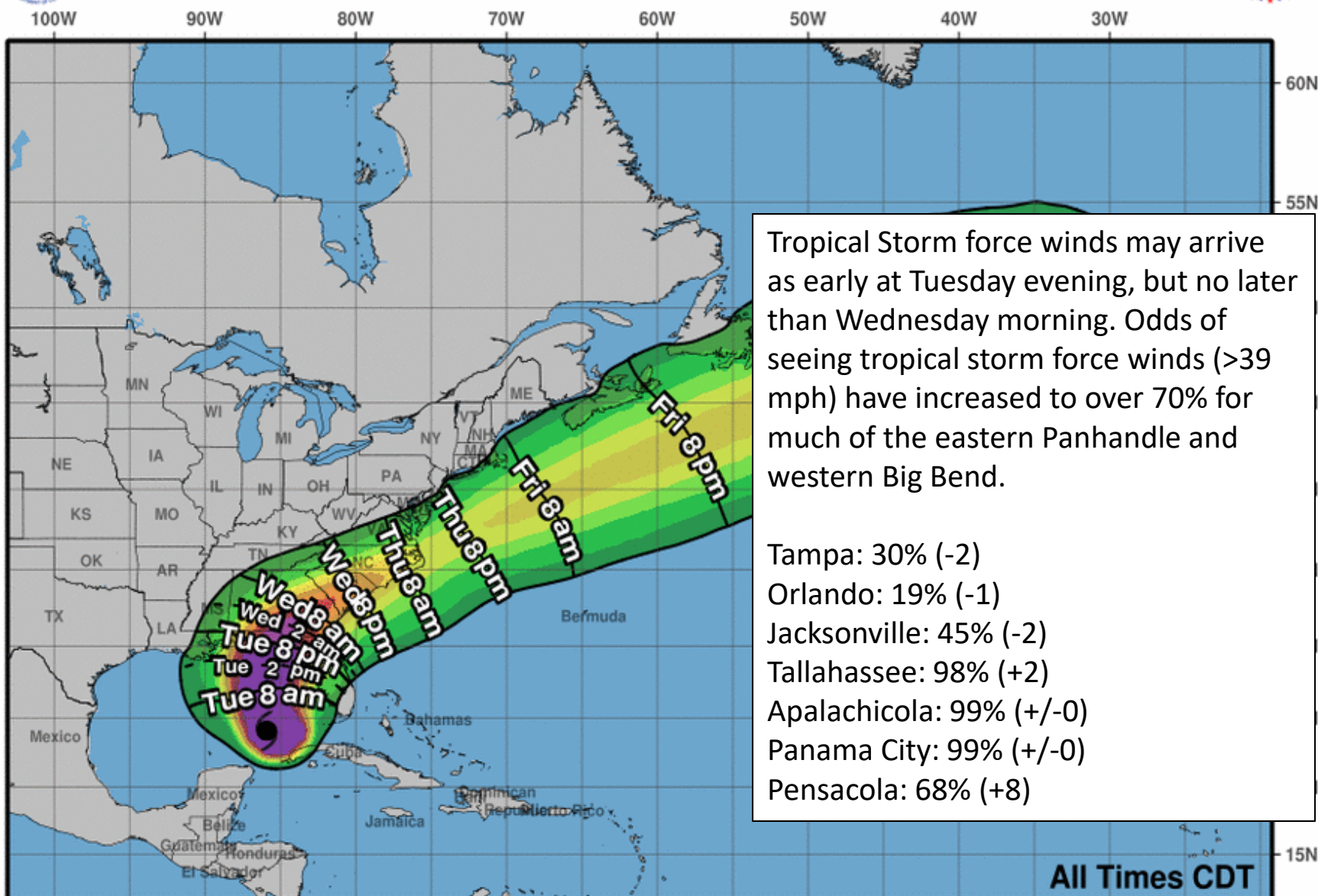
Pensacola: 4% (+1)
Milton: 4% (+/-0)
Destin: 30% (+3)
Panama City: 81% (+7)
Apalachicola: 63% (-2)
St. Marks: 30% (+3)
Tallahassee: 42% (+8)

Probability of hurricane-force winds (1-minute average ≥ 74 mph) from Hurricane Michael
○ indicates Hurricane Michael center location at 1 AM CDT TUE OCT 09, 2018 (Forecast/Advisory #11)





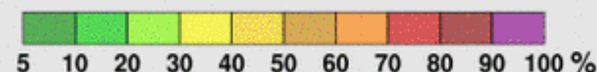
Earliest Reasonable Arrival Time of Tropical-Storm-Force Winds



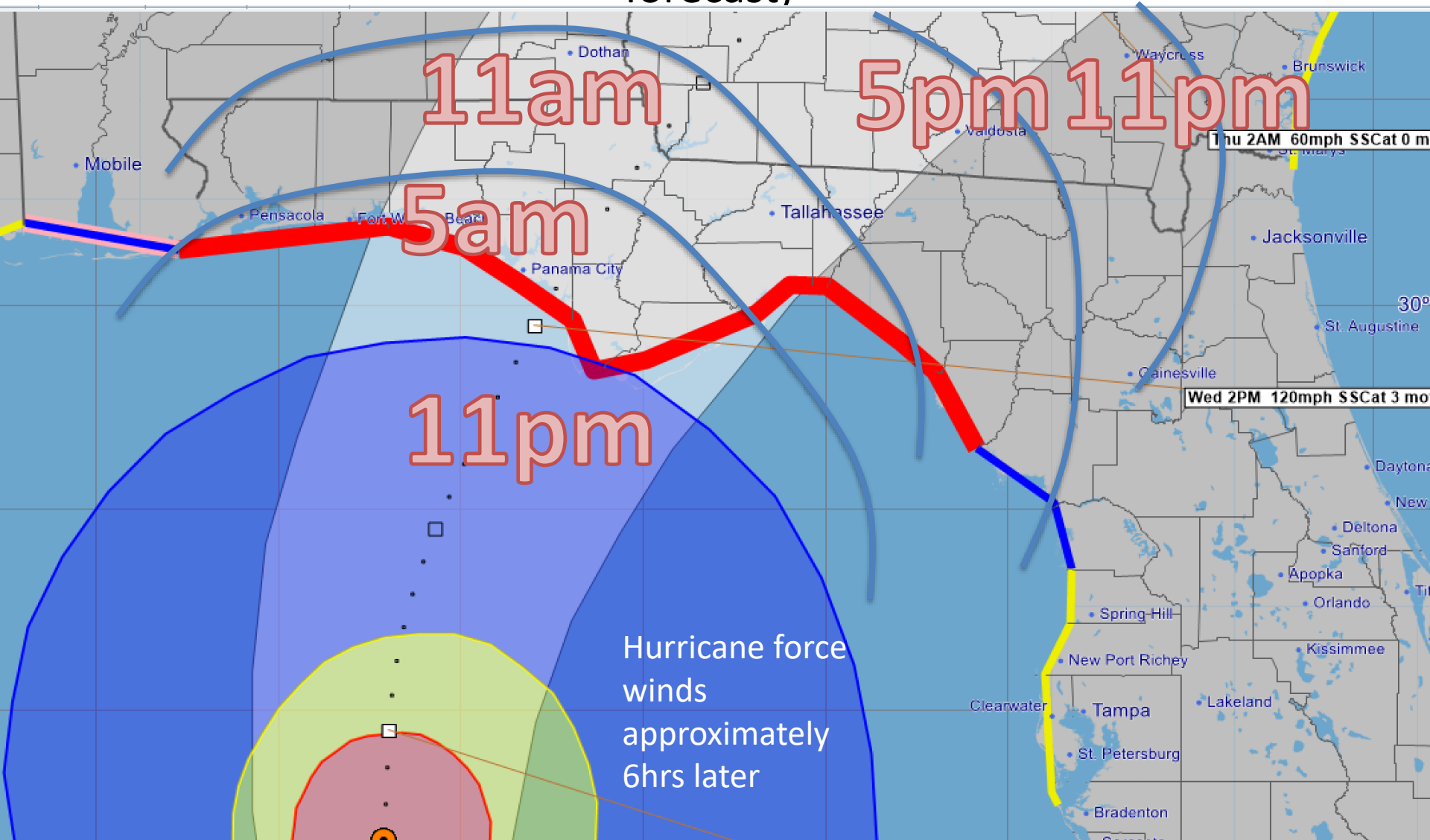
Hurricane Michael
Tue. Oct. 9, 2018 4 am CDT
Advisory 11

Storm Location ○ < 34 kt (39 mph)
& ○ 34-63 kt (39-73 mph)
Wind Speed ● ≥ 64 kt (74 mph)

5-day chance of receiving sustained 34+ kt (39+ mph) winds



Hurrevac Timing of onset of TS winds – Wednesday (assumes a perfect forecast)

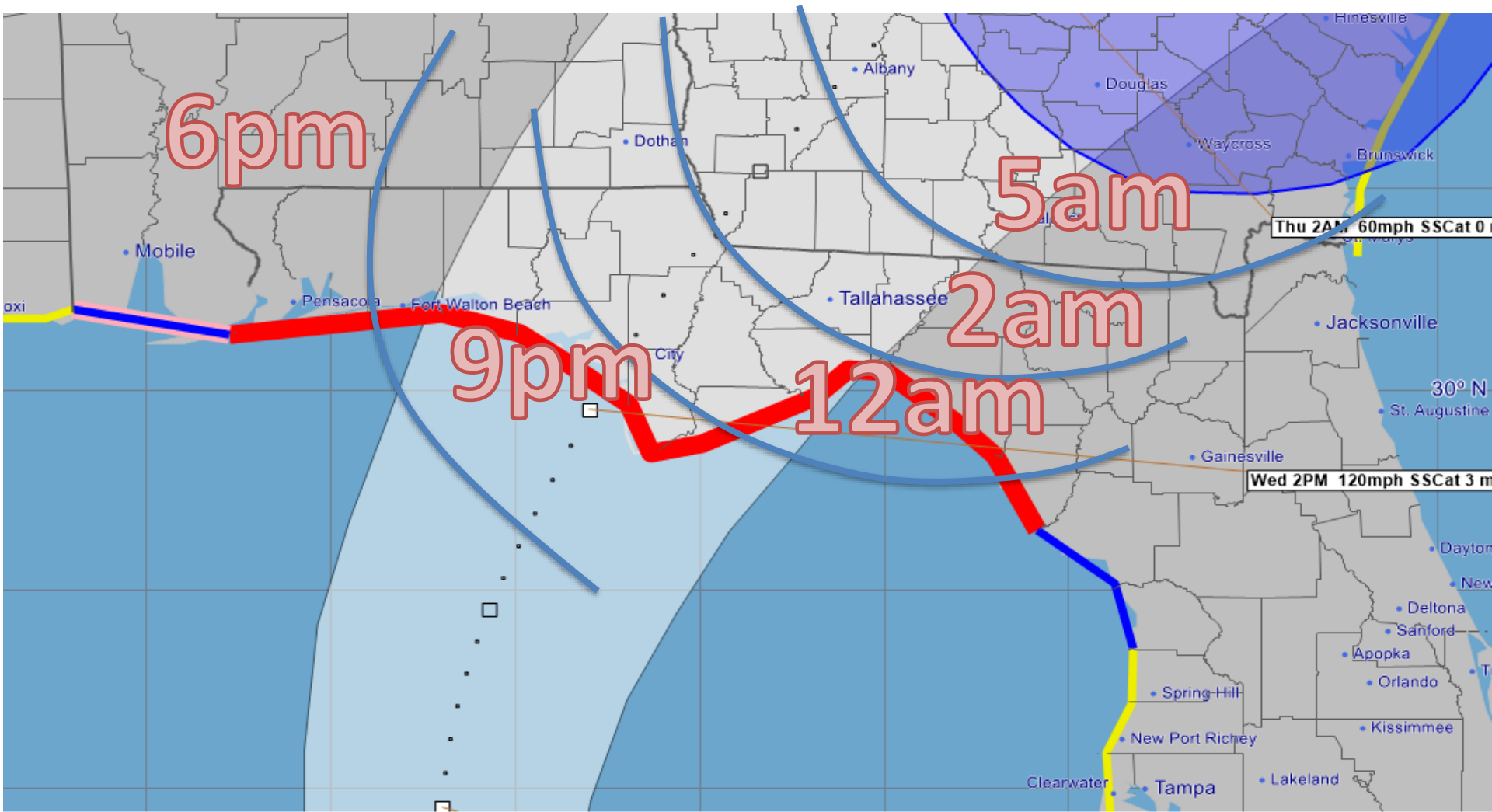


Hurricane Michael - Tuesday, October 9, 2018 11 PM EDT (Fcst Hr 18) Advisory #11
● Center Location: 27.4 N 86.4 W Maximum Sustained Winds: 110 mph (Cat 2) Movement: 13 mph N

□ 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

Hurrevac Timing of onset of TS winds – Wednesday (assumes a perfect forecast) (all times eastern)



Hurricane Michael - Thursday, October 11, 2018 5 AM EDT (Fest Hr 48) Advisory #11

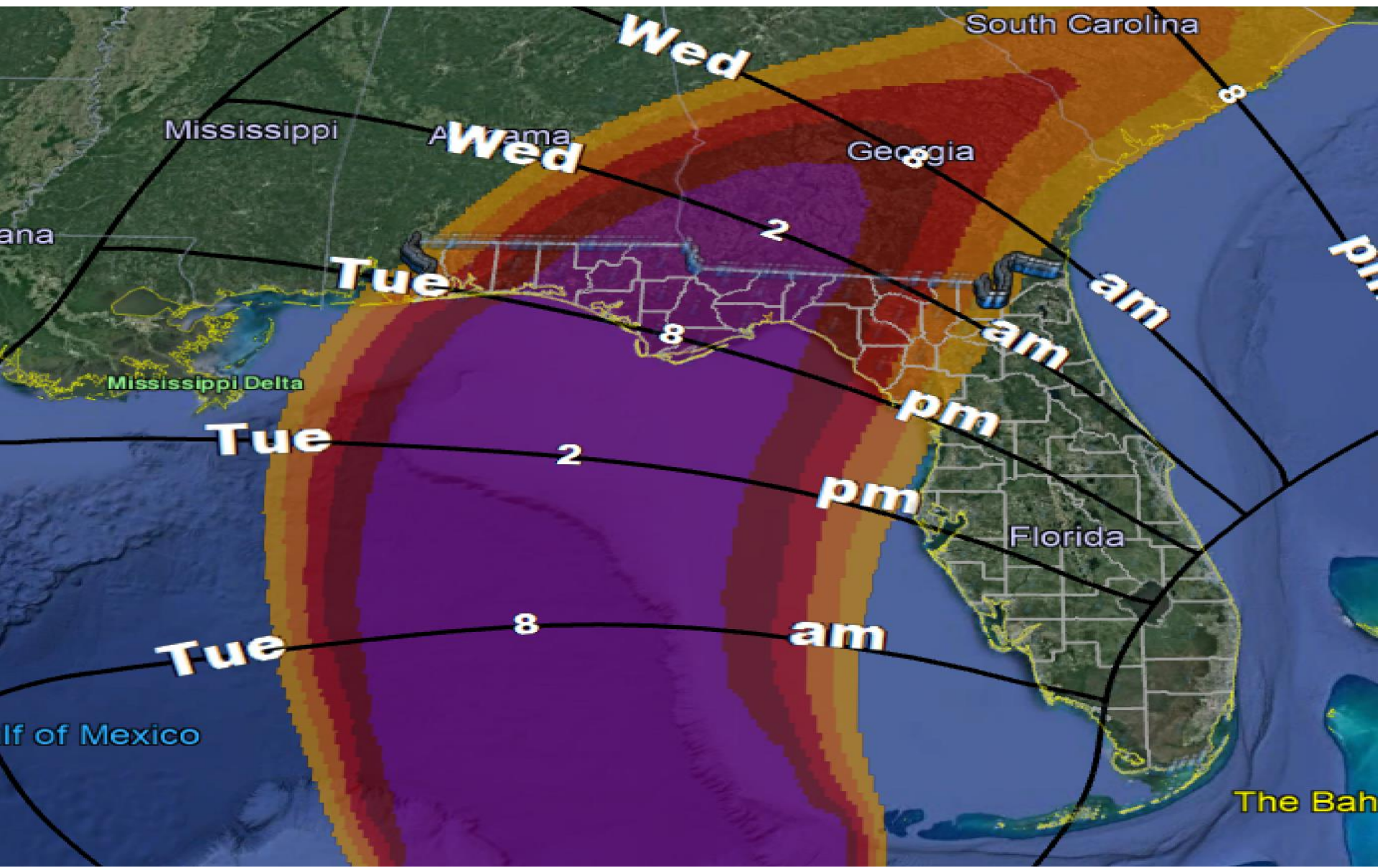
Center Location: 32.9 N 82.7 W Maximum Sustained Winds: 60 mph Movement: 19 mph NE

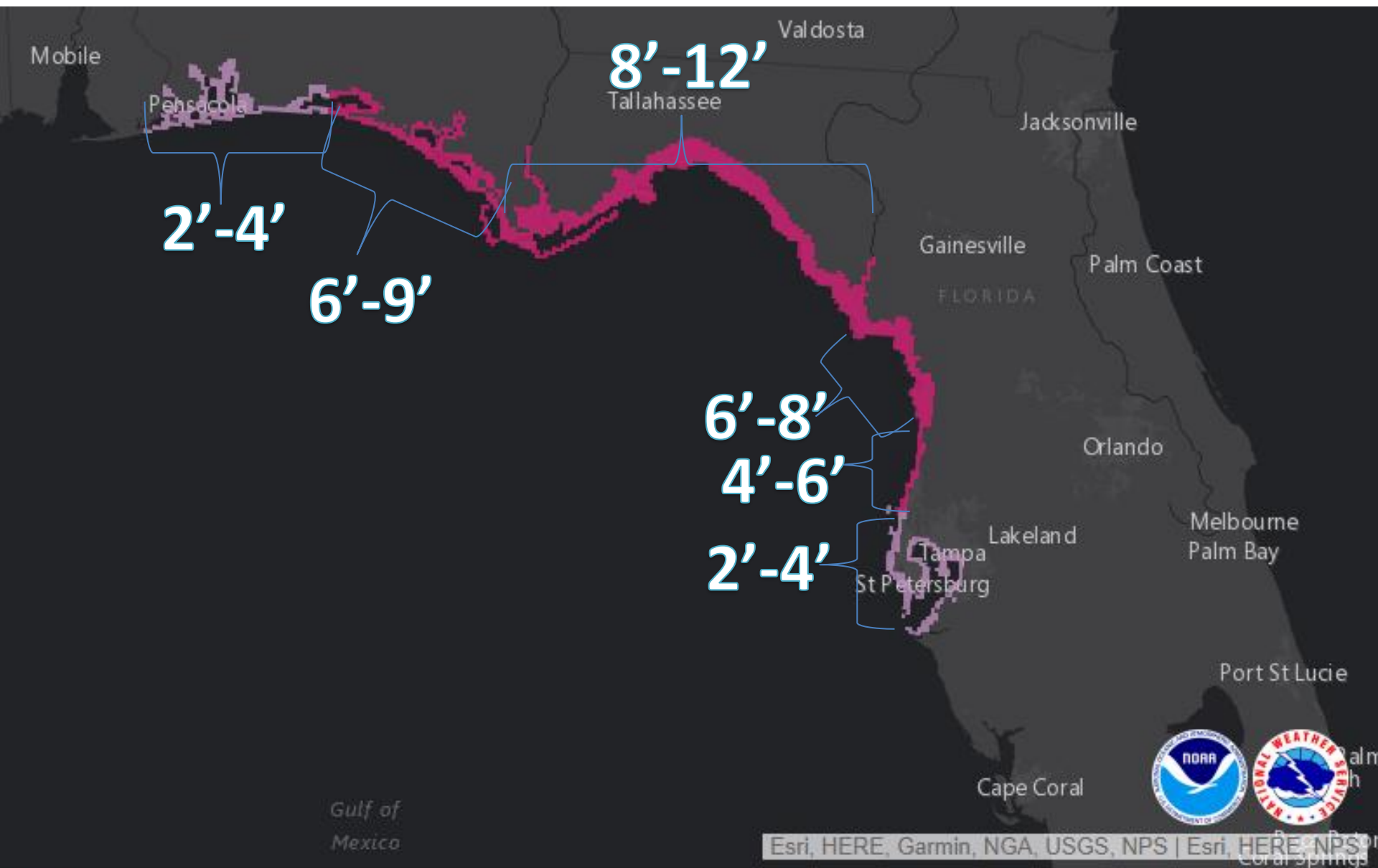
forecast positions Potential Track Area: day 1-3 day 4-5 Surface Wind Field: at current location

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 $\geq 64\text{kt}/74\text{mph}$

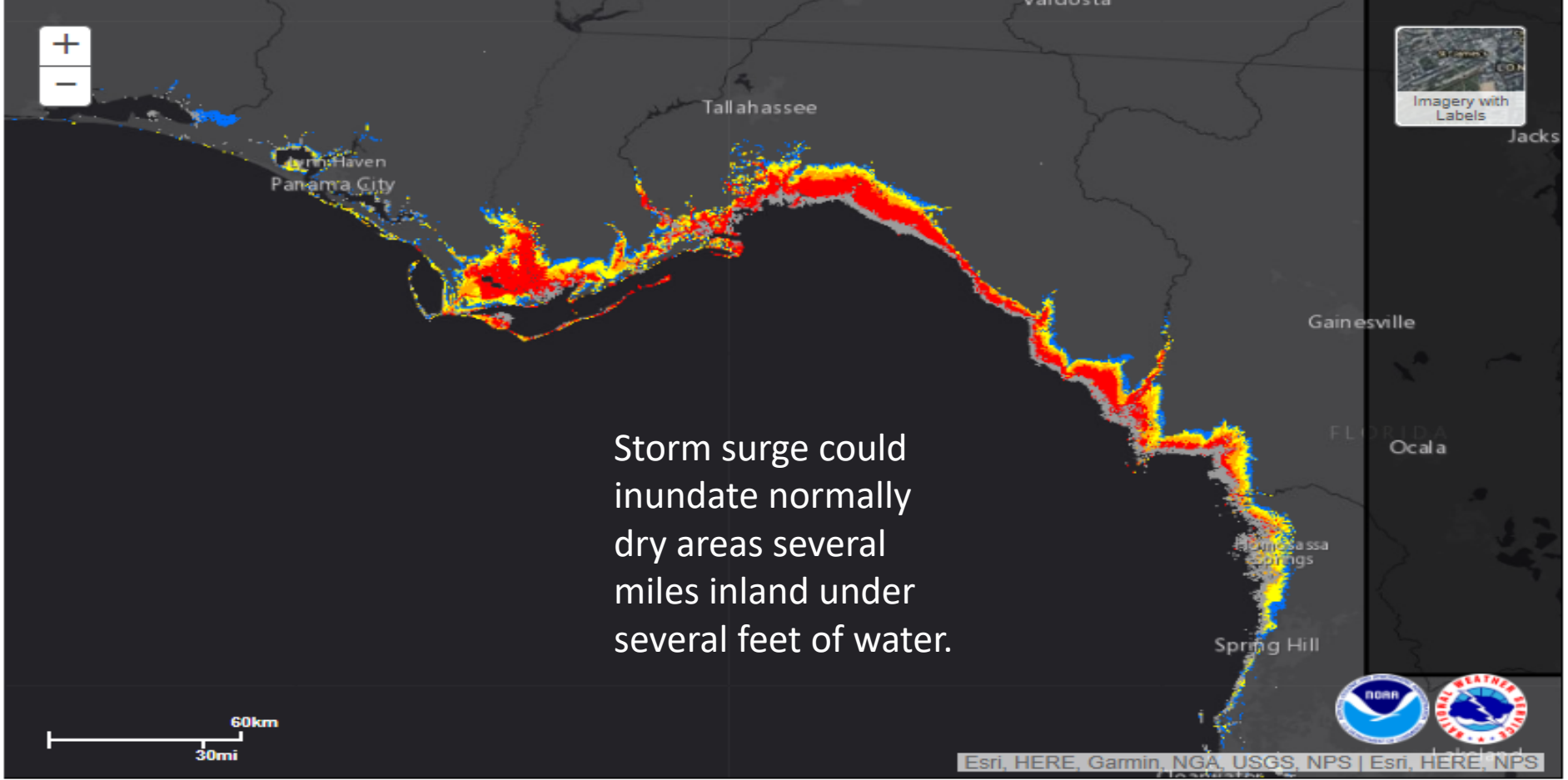
Earliest Reasonable Timing of onset of TS Winds (shading is areas with >50% chance of TS winds)





Esri, HERE, Garmin, NGA, USGS, NPS | Esri, HERE, NPS

- Storm Surge Warning
- Storm Surge Watch



Potential Storm Surge Flooding*

- Intertidal Zone/Estuarine Wetland
- Greater than 1 foot above ground
- Greater than 3 feet above ground
- Greater than 6 feet above ground
- Greater than 9 feet above ground
- Leveed area
Consult local officials for flood risk

Map Layer Options:

Inundation Layer OnlyInundation with Intertidal Layer

Map Opacity Slider

Download GIS data
(Instructions)

Inundation Layer Only

Inundation with Intertidal Layer

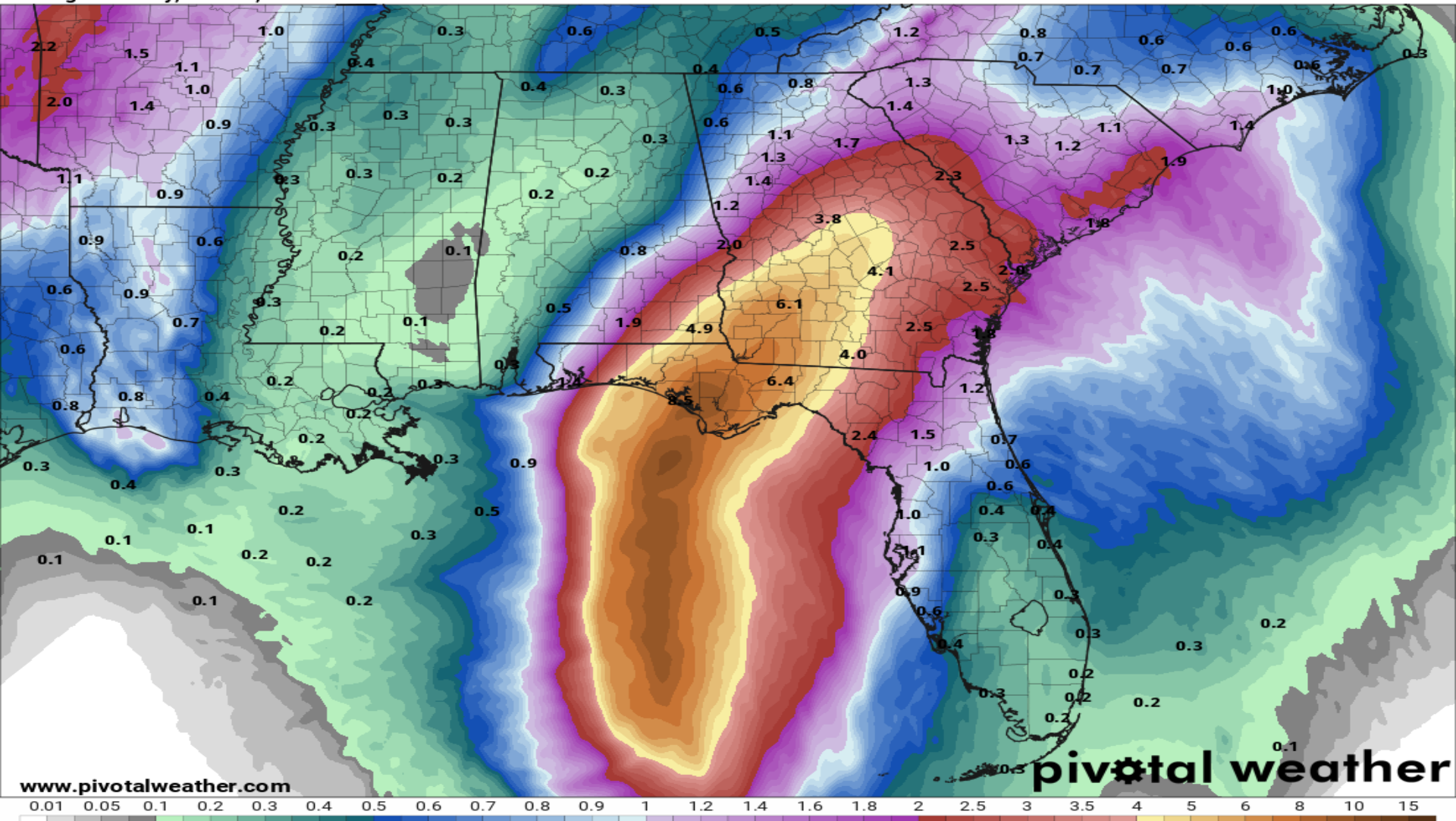
Forecast Cumulative Rain Totals – Next 48 Hours

Rain bands will begin impacting parts of the Panhandle, Big Bend, and West Coast today. Rain totals will be maximized east of where Michael tracks. A Flash Flood Watch is in effect for portions of the Big Bend and eastern Panhandle where 4-8" of rain is expected with isolated totals of 10-12" possible.

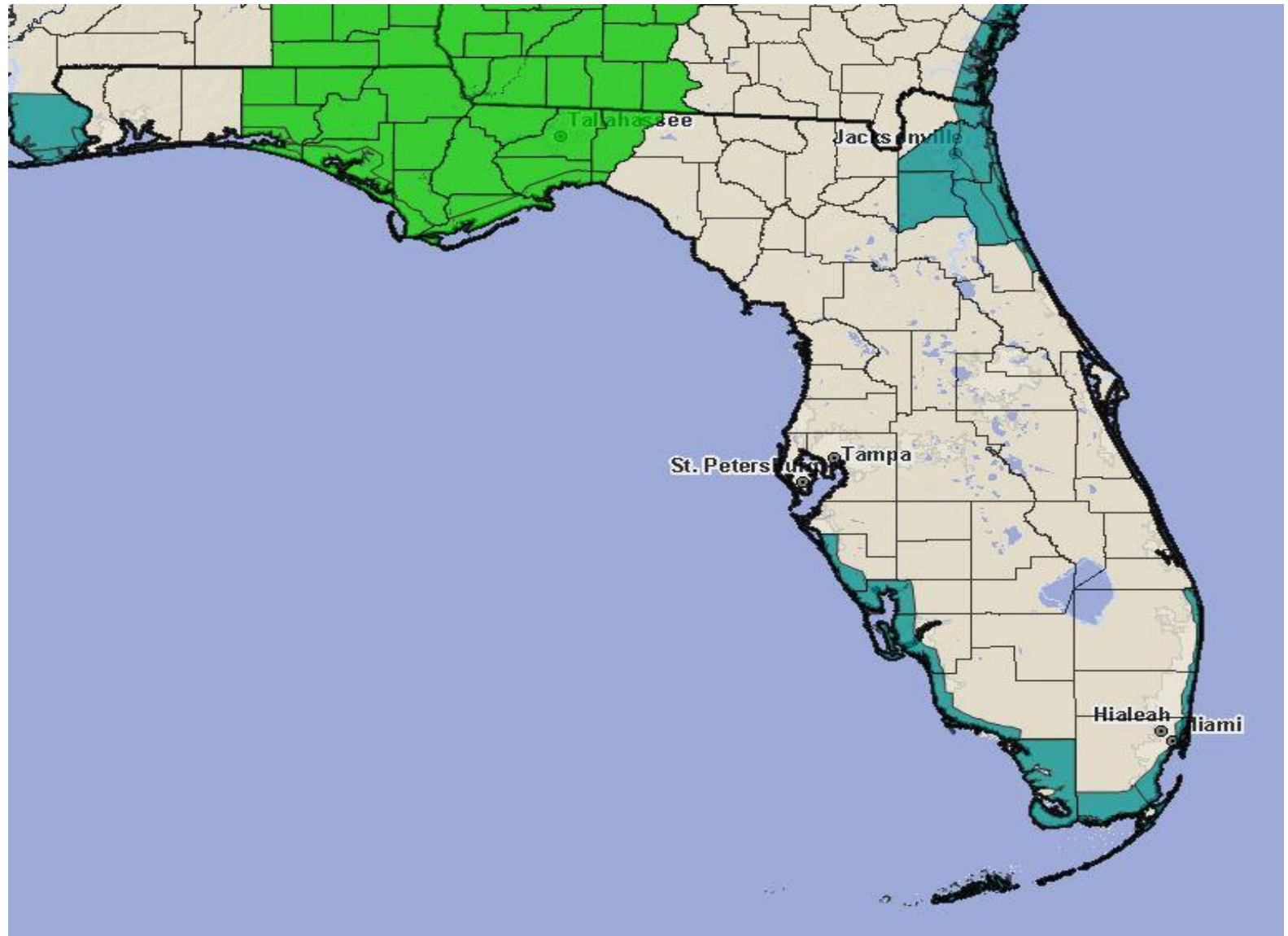
48-Hour Precipitation (in)

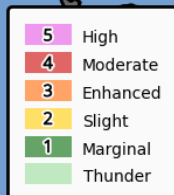
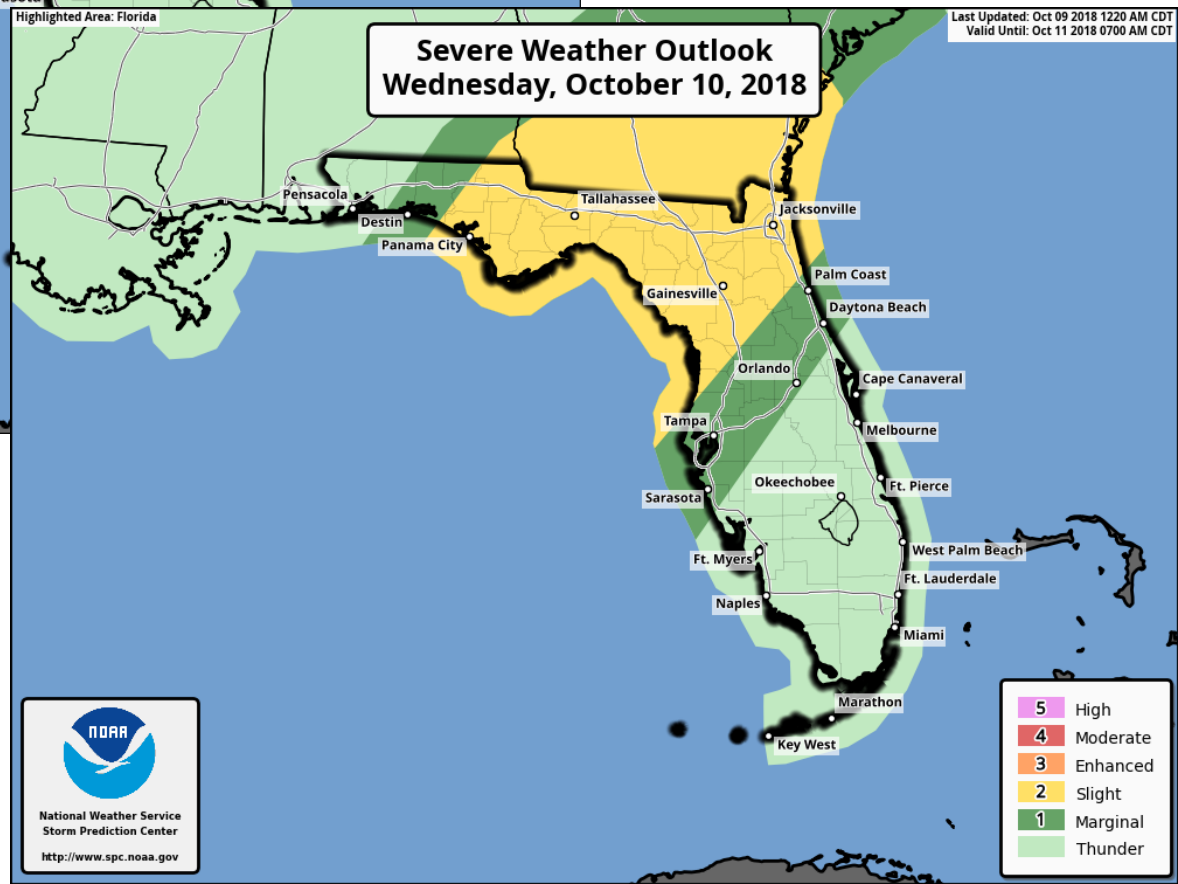
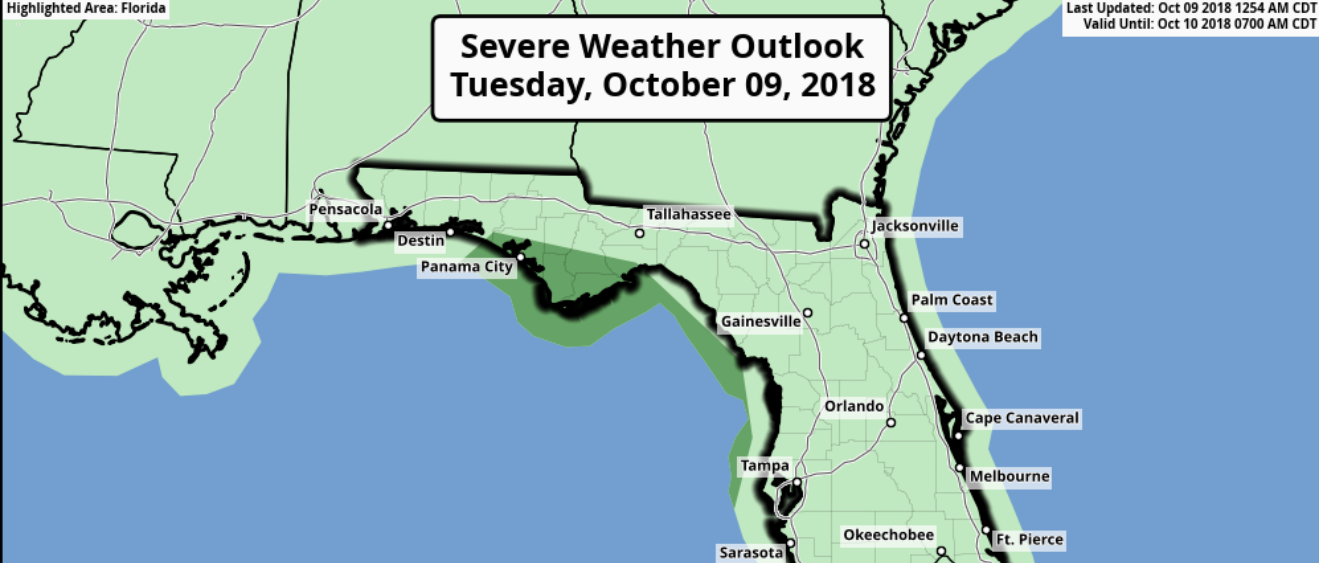
Ending Thursday, Oct. 11, 2018 at 8 a.m. EDT

Init: Tue 2018-10-09 12z WPC

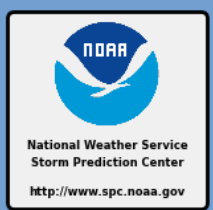
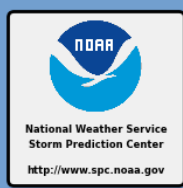


Flash Flood Watch in effect (light green)

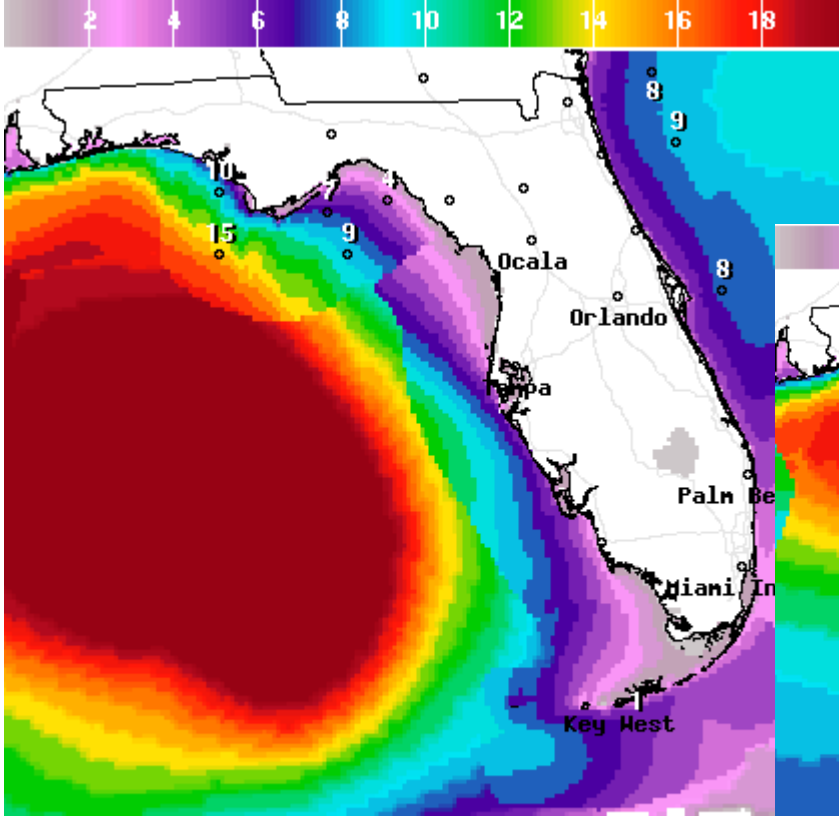




The risk for isolated tornadoes will increase as outer bands move onshore, especially to the northeast of the center of Michael.



Forecast Wave Heights

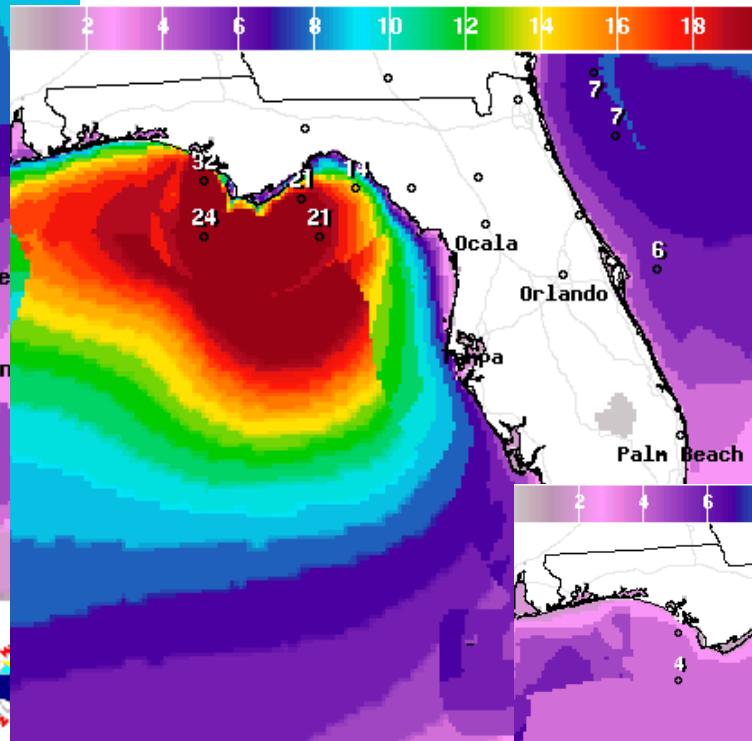


Wave Height(ft) Ending Tue Oct 09 2018 8PM

(Wed Oct 10 2018 00Z)

National Digital Forecast Database

07z issuance Graphic created-Oct 09 3:47AM EDT

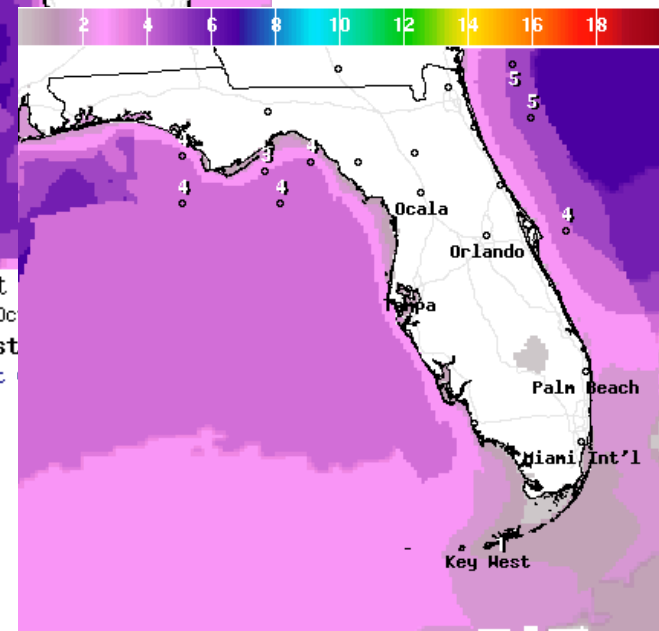


Wave Height(ft) Ending Wed Oct

(Wed Oct

National Digital Forecast

07z issuance Graphic created-Oct



Wave Height(ft) Ending Thu Oct 11 2018 8PM EDT

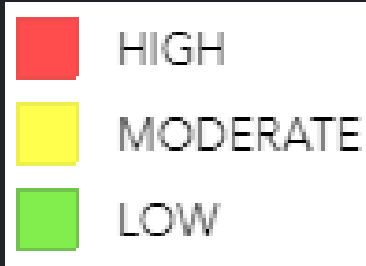
(Fri Oct 12 2018 00Z)

National Digital Forecast Database

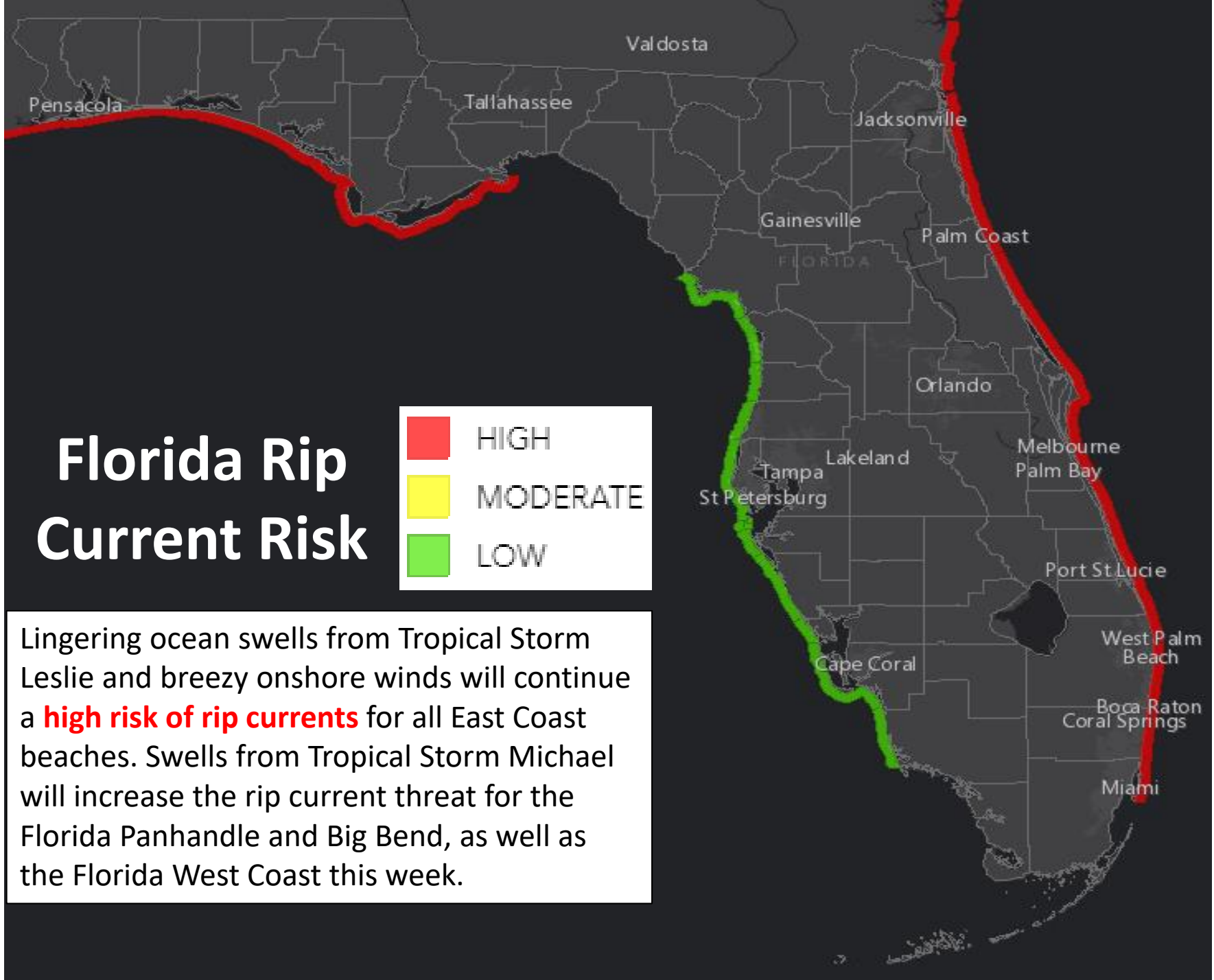
07z issuance Graphic created-Oct 09 3:48AM EDT

Ocean swells will increase the rip current threat along the Panhandle coast and West Coast. Wave heights along the Panhandle and Big Bend may peak at 15-25' at the beach and much higher offshore. Beach erosion likely.

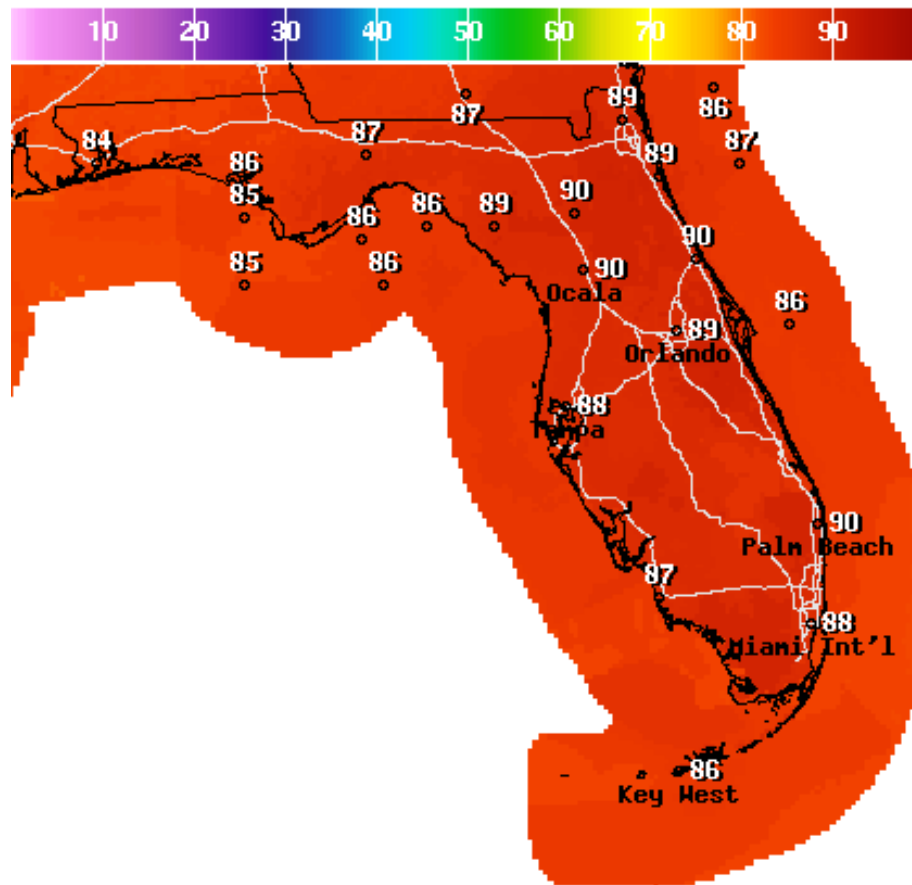
Florida Rip Current Risk



Lingering ocean swells from Tropical Storm Leslie and breezy onshore winds will continue a **high risk of rip currents** for all East Coast beaches. Swells from Tropical Storm Michael will increase the rip current threat for the Florida Panhandle and Big Bend, as well as the Florida West Coast this week.



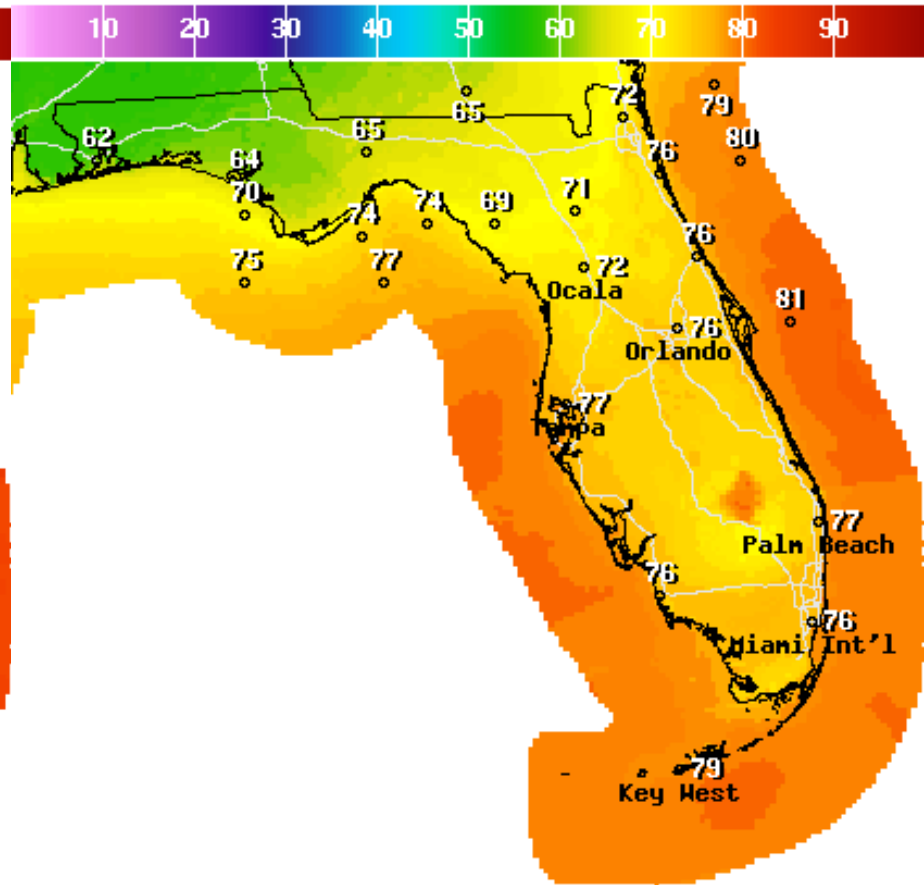
Forecast - Thursday



High Temperature(F) Ending Thu Oct 11 2018 8PM EDT
(Fri Oct 12 2018 00Z)



National Digital Forecast Database
10z issuance Graphic created-Oct 09 6:47AM EDT



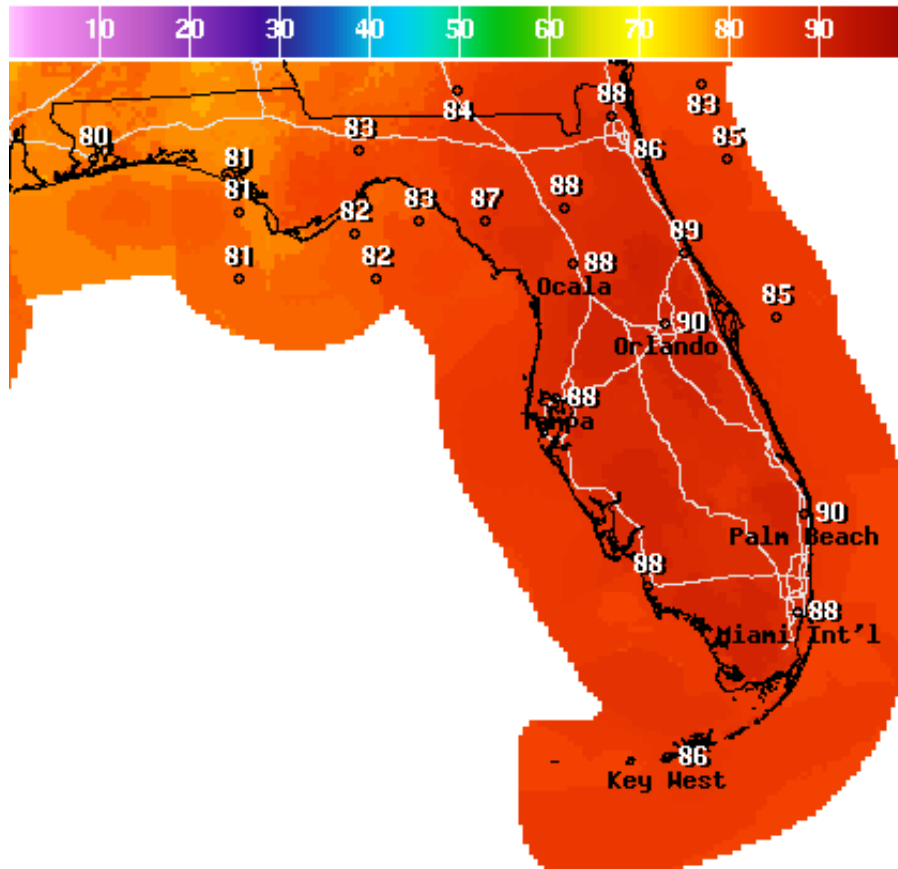
Low Temperature(F) Ending Fri Oct 12 2018 8AM EDT
(Fri Oct 12 2018 12Z)



National Digital Forecast Database
06z issuance Graphic created-Oct 09 2:35AM EDT



Post-Storm High/Low Temperature Forecast - Friday

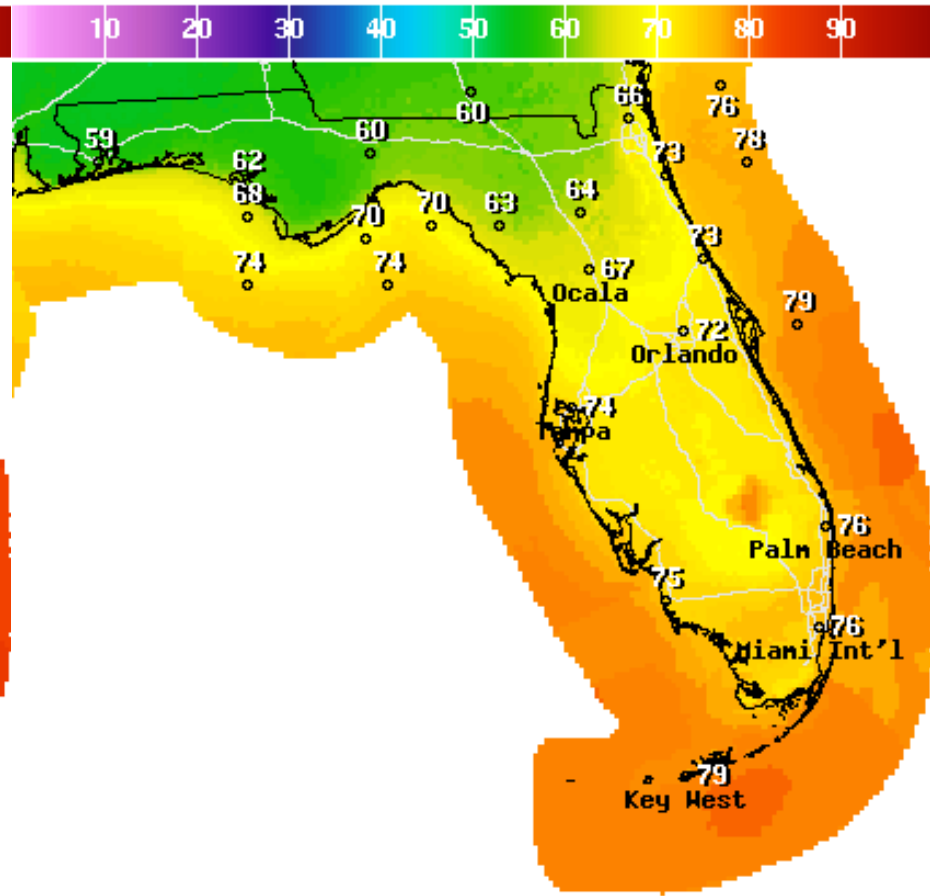


High Temperature(F) Ending Fri Oct 12 2018 8PM EDT
(Sat Oct 13 2018 00Z)



National Digital Forecast Database

06z issuance Graphic created-Oct 09 2:47AM EDT



Low Temperature(F) Ending Sat Oct 13 2018 8AM EDT
(Sat Oct 13 2018 12Z)

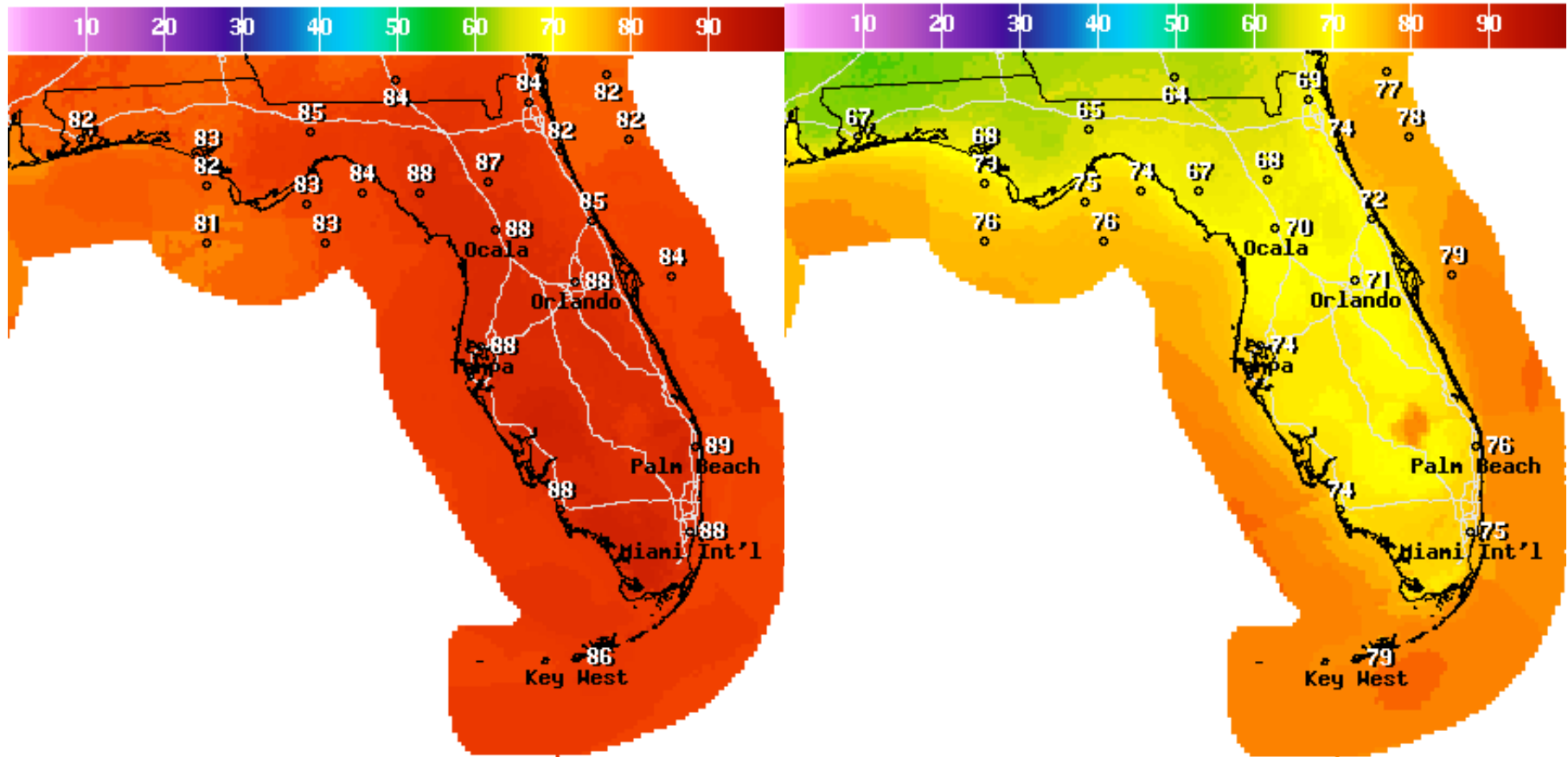


National Digital Forecast Database

06z issuance Graphic created-Oct 09 2:35AM EDT



Post-Storm High/Low Temperature Forecast - Saturday



High Temperature(F) Ending Sat Oct 13 2018 8PM EDT
(Sun Oct 14 2018 00Z)



National Digital Forecast Database

06z issuance

Graphic created-Oct 09 2:47AM EDT



Low Temperature(F) Ending Sun Oct 14 2018 8AM EDT
(Sun Oct 14 2018 12Z)



National Digital Forecast Database

06z issuance

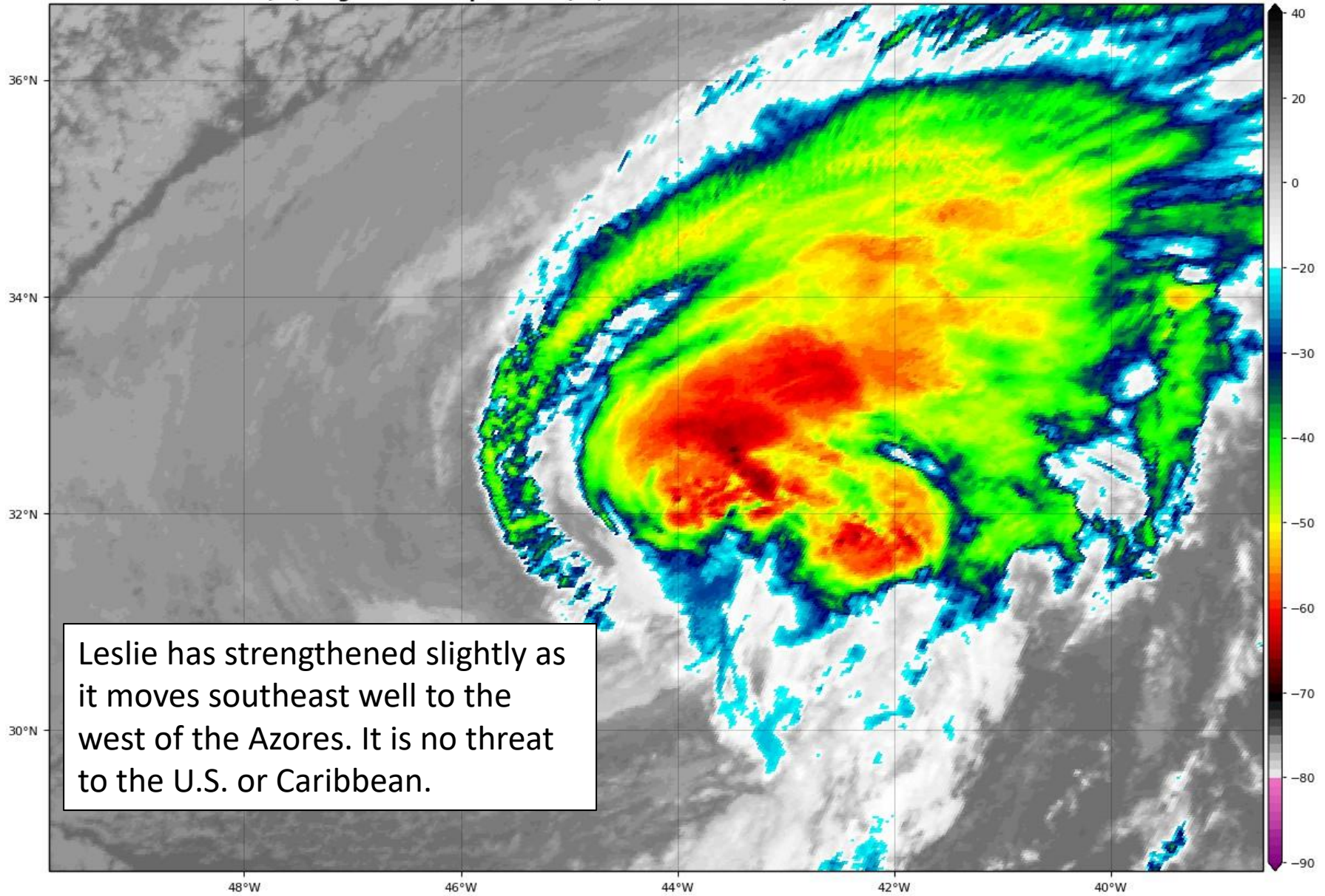
Graphic created-Oct 09 2:35AM EDT



Tropical Storm Leslie Satellite Image

GOES-16 Channel 13 (IR) Brightness Temperature (°C) at 09:05Z Oct 09, 2018

TROPICALTIDBITS.COM

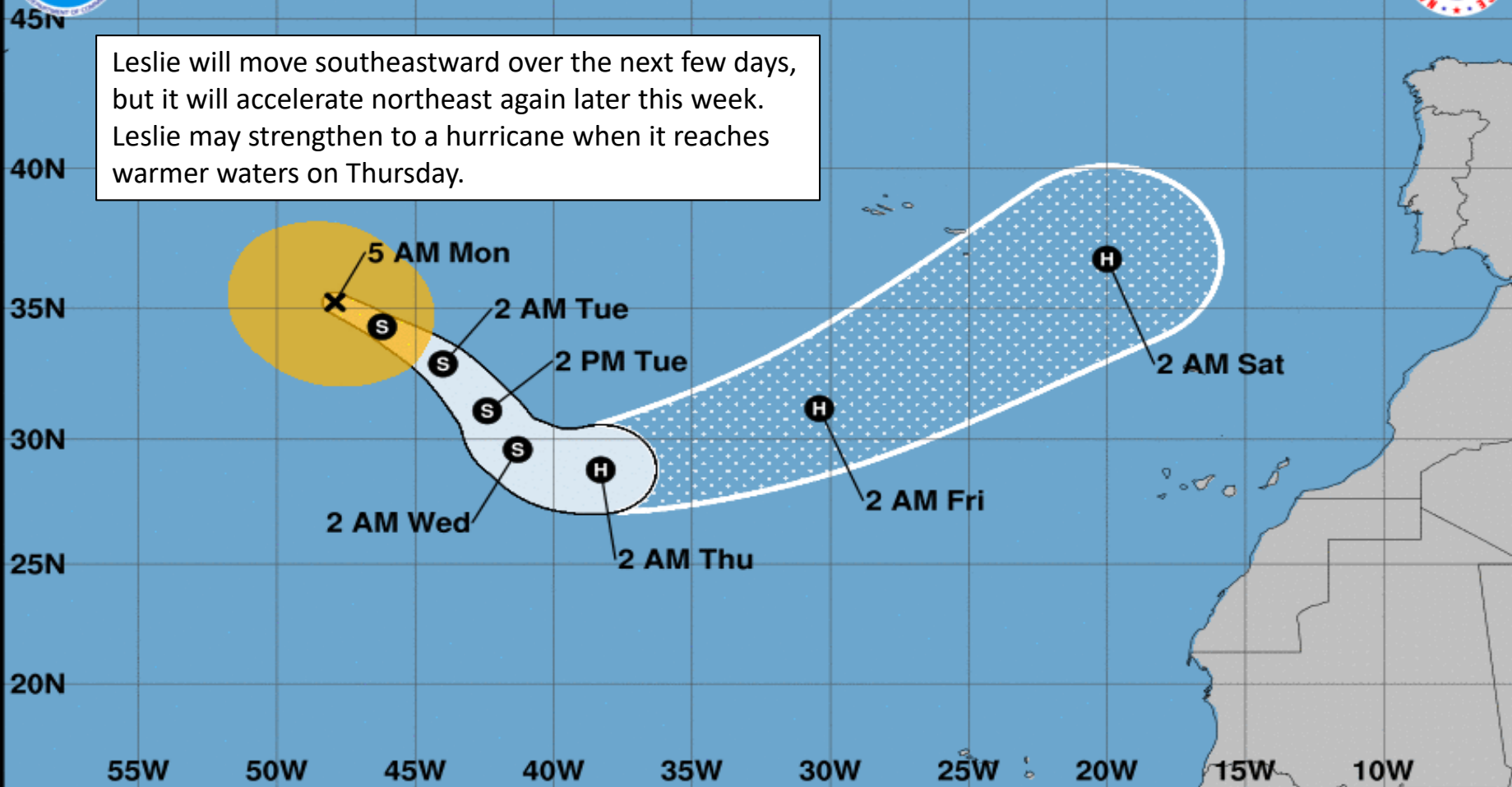




Note: The cone contains the probable path of the storm center but does not show the size of the storm. Hazardous conditions can occur outside of the cone.



Leslie will move southeastward over the next few days, but it will accelerate northeast again later this week. Leslie may strengthen to a hurricane when it reaches warmer waters on Thursday.



Tropical Storm Leslie

Monday October 08, 2018

5 AM AST Advisory 48

NWS National Hurricane Center

Current information: x

Center location 35.2 N 47.9 W

Maximum sustained wind 50 mph

Movement ESE at 13 mph

Forecast positions:

● Tropical Cyclone ○ Post/Potential TC

Sustained winds: D < 39 mph

S 39-73 mph H 74-110 mph M > 110 mph

Potential track area:

Day 1-3 Day 4-5

Watches:

Hurricane Trop Stm

Warnings:

Hurricane Trop Stm

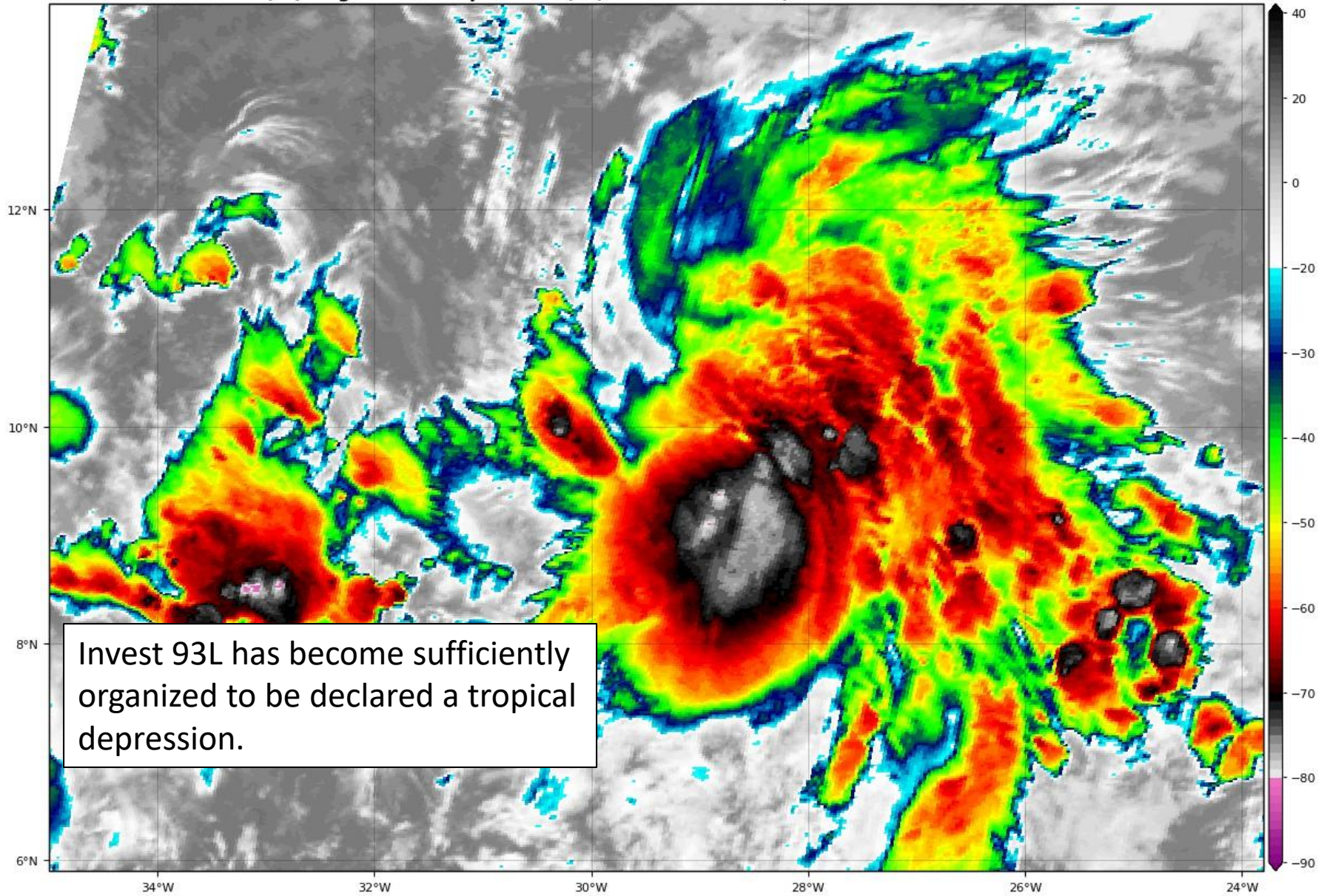
Current wind extent:

Hurricane Trop Stm

Tropical Depression 15 Satellite Image

GOES-16 Channel 13 (IR) Brightness Temperature (°C) at 09:35Z Oct 09, 2018

TROPICALTIDBITS.COM

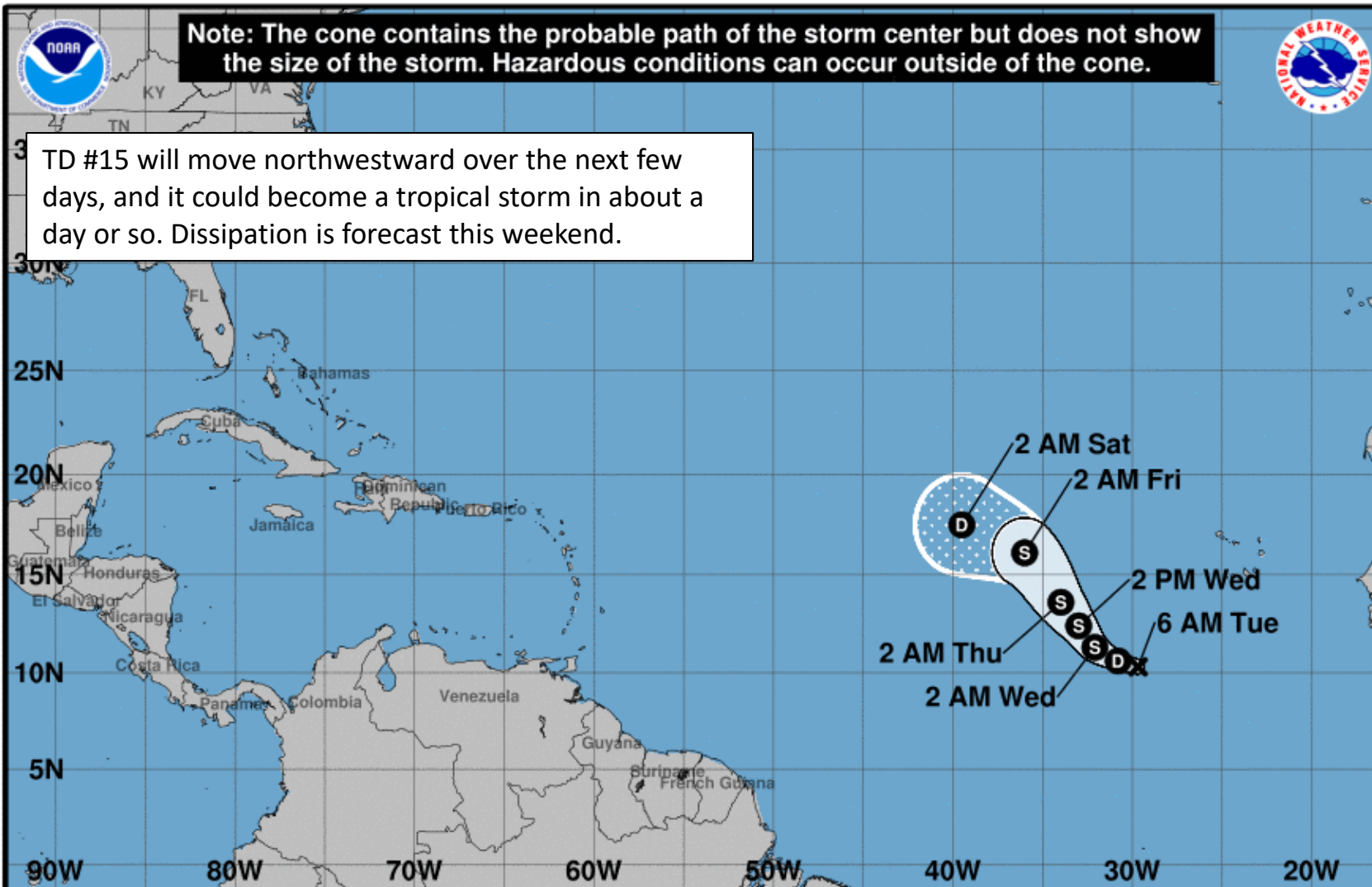




Note: The cone contains the probable path of the storm center but does not show the size of the storm. Hazardous conditions can occur outside of the cone.



TD #15 will move northwestward over the next few days, and it could become a tropical storm in about a day or so. Dissipation is forecast this weekend.



Tropical Depression Fifteen
Tuesday October 09, 2018
6 AM AST Advisory 1
NWS National Hurricane Center

Current information: x
Center location 10.3 N 29.7 W
Maximum sustained wind 35 mph
Movement WNW at 12 mph

Forecast positions:
● Tropical Cyclone ○ Post/Potential TC
Sustained winds: D < 39 mph
S 39-73 mph H 74-110 mph M > 110 mph

Potential track area:

Day 1-3 Day 4-5

Watches:

Hurricane Trop Stm

Warnings:

Hurricane Trop Stm

Current wind extent:

Hurricane Trop Stm

Summary

Tropical Storm Leslie:

- At 5 AM EDT Tuesday, Tropical Storm Leslie was located about 1,035 miles west-southwest of the Azores.
- Maximum sustained winds are near 65 mph, and some strengthening is forecast over the next couple of days. Leslie could become a hurricane later this week.
- Leslie is moving south-southeast at 13 mph. Leslie will continue southeastward over the next day or so before turning toward the east-northwest toward Portugal.

Tropical Depression #15

- Invest 93L has become sufficiently organized to become a tropical depression.
- At 6 AM EDT Tuesday, Tropical Depression #15 was located about 475 miles southwest of the southernmost Cabo Verde Islands.
- Maximum sustained winds are near 35 mph, and some strengthening is forecast over the next couple days. Weakening is forecast thereafter, and TD 15 is forecast to dissipate.
- This system poses no threat to land over the next 5 days and is currently forecast to remain over the open Atlantic.

Tropical Storm Michael

- As of 5 AM EDT Tuesday, Hurricane Michael was located about 390 miles south of Apalachicola, FL, or about 420 miles south of Panama City, FL.
- Maximum sustained winds are near 90 mph, a Category 1 on the Saffir-Simpson Hurricane Wind Scale.
- Additional strengthening is expected today, and Michael is expected to become a major hurricane later today or tonight.
- Michael is expected to make landfall in the Florida Panhandle or Big Bend as a major hurricane on Wednesday.
- Michael is moving north-northwest at 12 mph, and will continue to accelerate northward over the next 48 hours before making a turn towards the north-northeast or northeast as it makes landfall.
- Landfall is expected in the Panhandle or Big Bend sometime on Wednesday, and there remains some discrepancy in forward speed. A faster storm will make landfall on the western side of the forecast cone, where a slower storm will make more of a northeast turn into the Big Bend.
- Hurricane hunters will continue investigating Michael through the day.

Florida Outlook:

- The eastern Florida Panhandle and western Big Bend remain within the cone of error for landfall potential.
- An increase in water levels from Michael are already present and wave heights will continue to increase through Thursday morning.
- Tropical storm conditions may arrive in the Panhandle as soon as tonight but no later than late Wednesday morning. If the track shifts eastward or expands in size, the Florida West Coast could experience tropical storm force winds tonight or early tomorrow morning. Hurricane conditions should arrive in the Panhandle Wednesday afternoon or evening.
- **Tropical Storm Wind Watches** are in effect for 5 counties along the Florida West Coast and 4 counties in the Suwannee Valley, with a **Tropical Storm Warning** in effect for 6 counties in the eastern Big Bend and Nature Coast.
- **Hurricane Warnings** are in effect for 18 Panhandle and Big Bend counties, including coastal portions of Taylor and Dixie.
- Storm surge will be one of the greatest impacts from this storm and may affect a large portion of the Florida Gulf Coast. **Storm Surge Warnings** have been issued between the Walton/Okaloosa border eastward to the Pasco/Pinellas County line for possible surge inundation of 6-9' for the eastern Panhandle coast and Nature Coast, and 8-12' for Apalachee Bay. Storm Surge Watches remain in effect for the western Panhandle and Tampa Bay region for possible surge values of 2-4'.
- Widespread rainfall totals of 4-8" with locally higher amounts of 8-10+" can be expected across the Panhandle and Big Bend, with most of it occurring on Wednesday.
- Isolated tornadoes will be possible tonight and Wednesday across North Florida and even northern portions of Central Florida.
- Ocean swells from Tropical Storm Leslie and breezy onshore winds from high pressure to the north of Florida will continue producing high risk of rip currents along all Atlantic beaches.
- Tropical Depression #15 is not expected to affect Florida.

Another briefing packet will be issued later this afternoon. For the latest information on the tropics, please visit the National Hurricane Center website at www.hurricanes.gov.



TROPICAL UPDATE

Created by:

Amy Godsey, Chief State Meteorologist

Amy.Godsey@em.myflorida.com

Cameron Young, Assistant State Meteorologist

Cameron.Young@em.myflorida.com

State Meteorological Support Unit

Florida Division of Emergency Management

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