



TROPICAL UPDATE

5 PM EDT

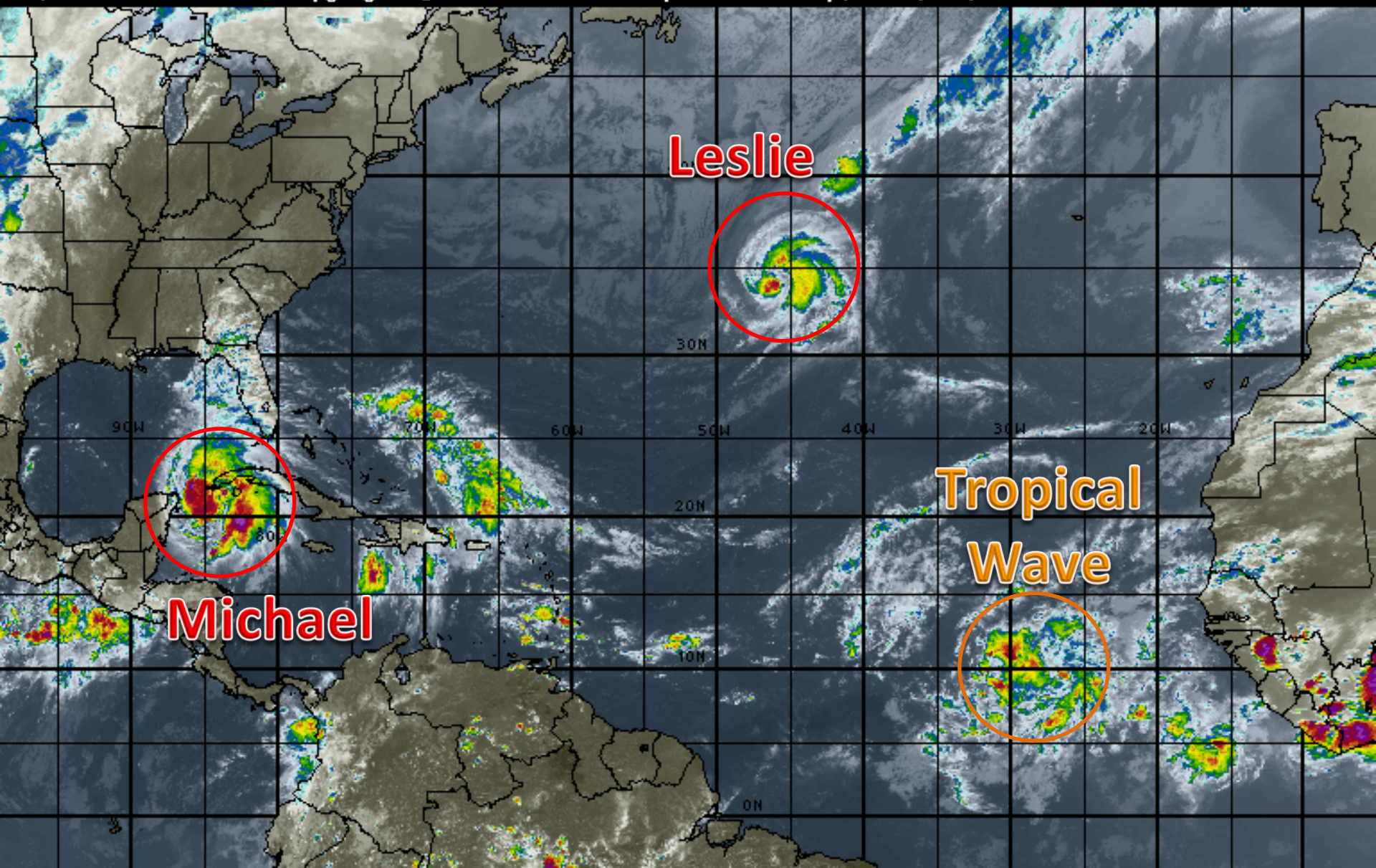
Monday, October 8, 2018

**Hurricane Michael, Tropical Storm Leslie,
& African Tropical Wave (60%)**

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

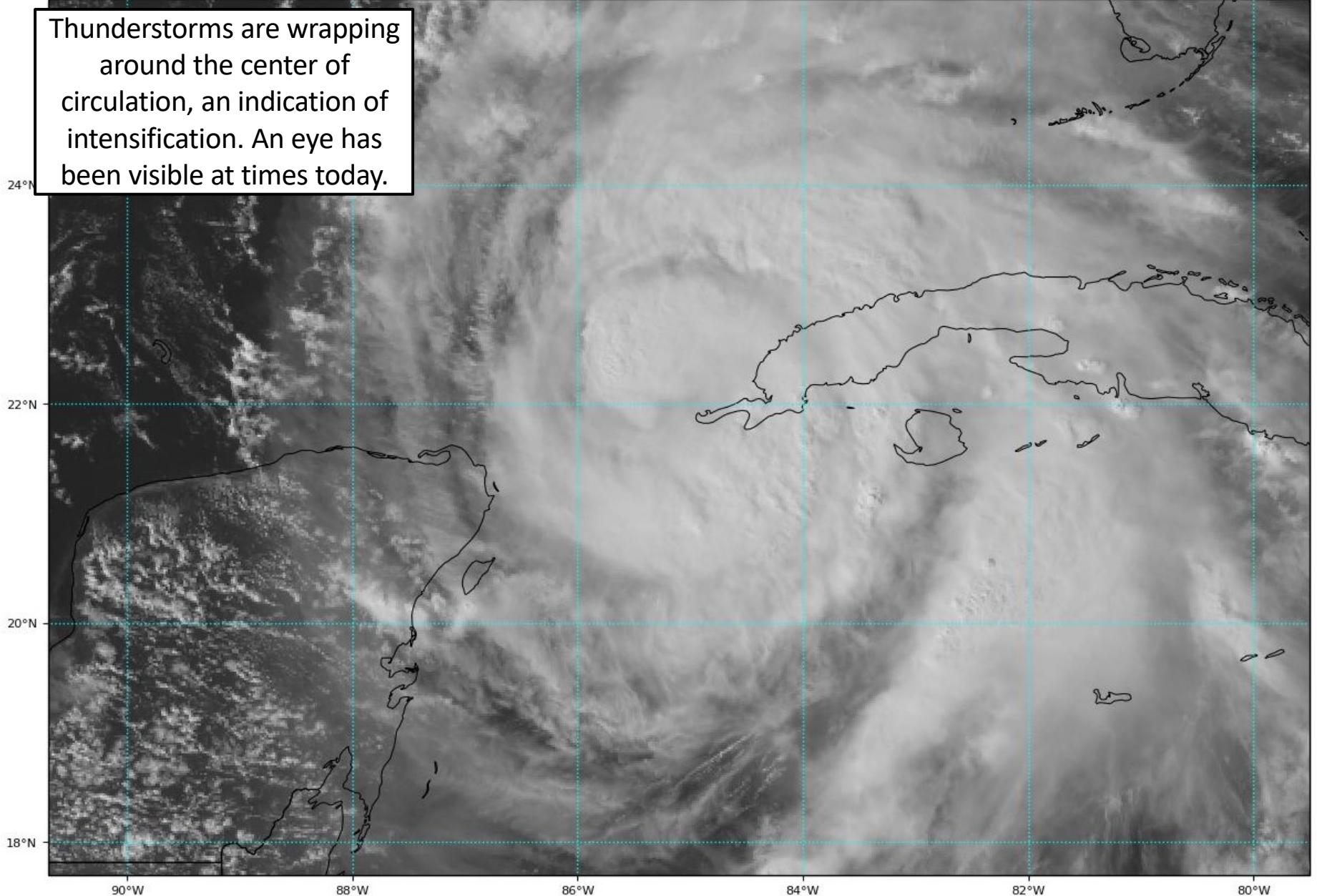


Hurricane Michael Satellite Image

GOES-16 Channel 2 (visible) / Channel 7 (shortwave IR) [Day/Night] at 20:18Z Oct 08, 2018

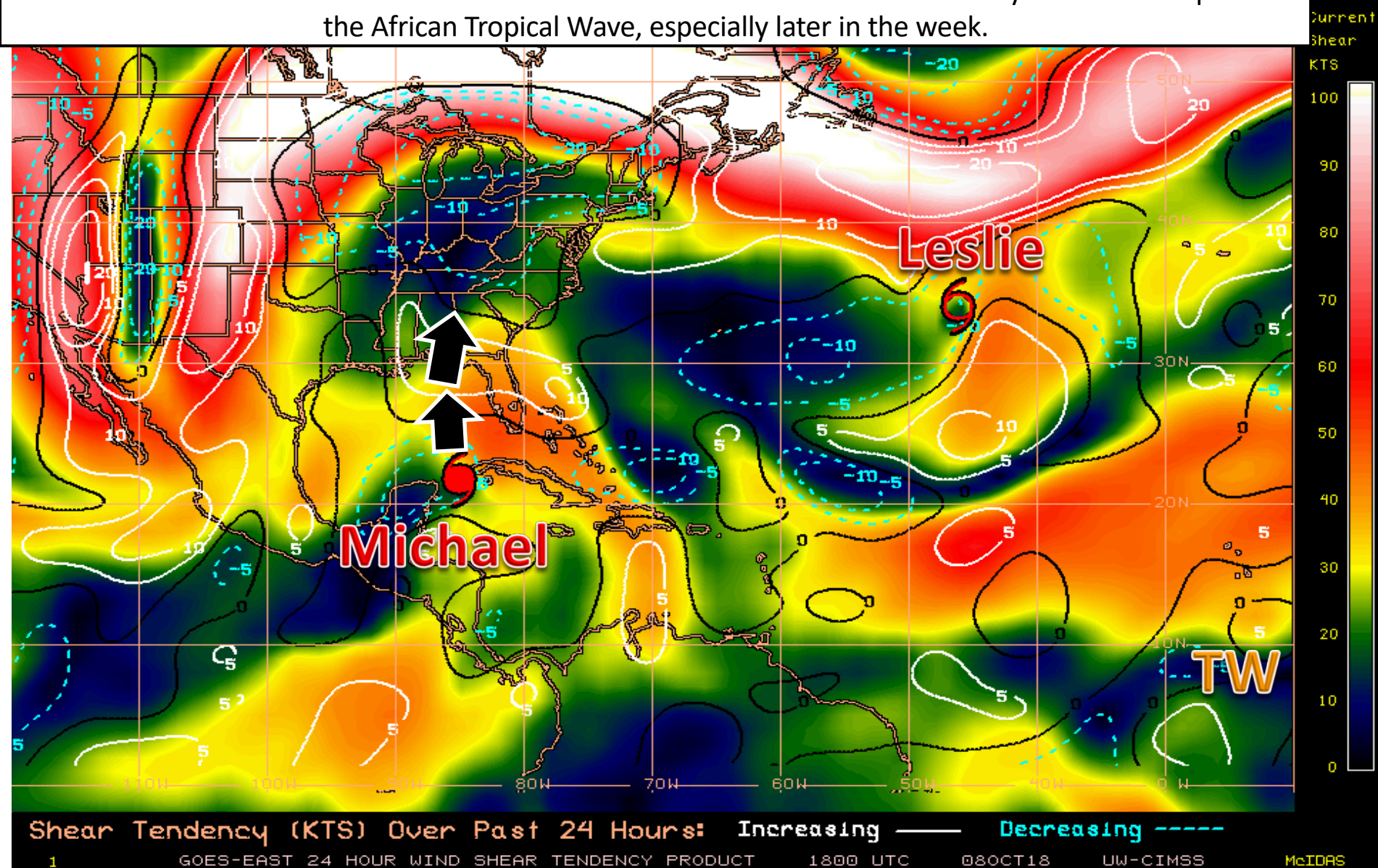
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Thunderstorms are wrapping around the center of circulation, an indication of intensification. An eye has been visible at times today.

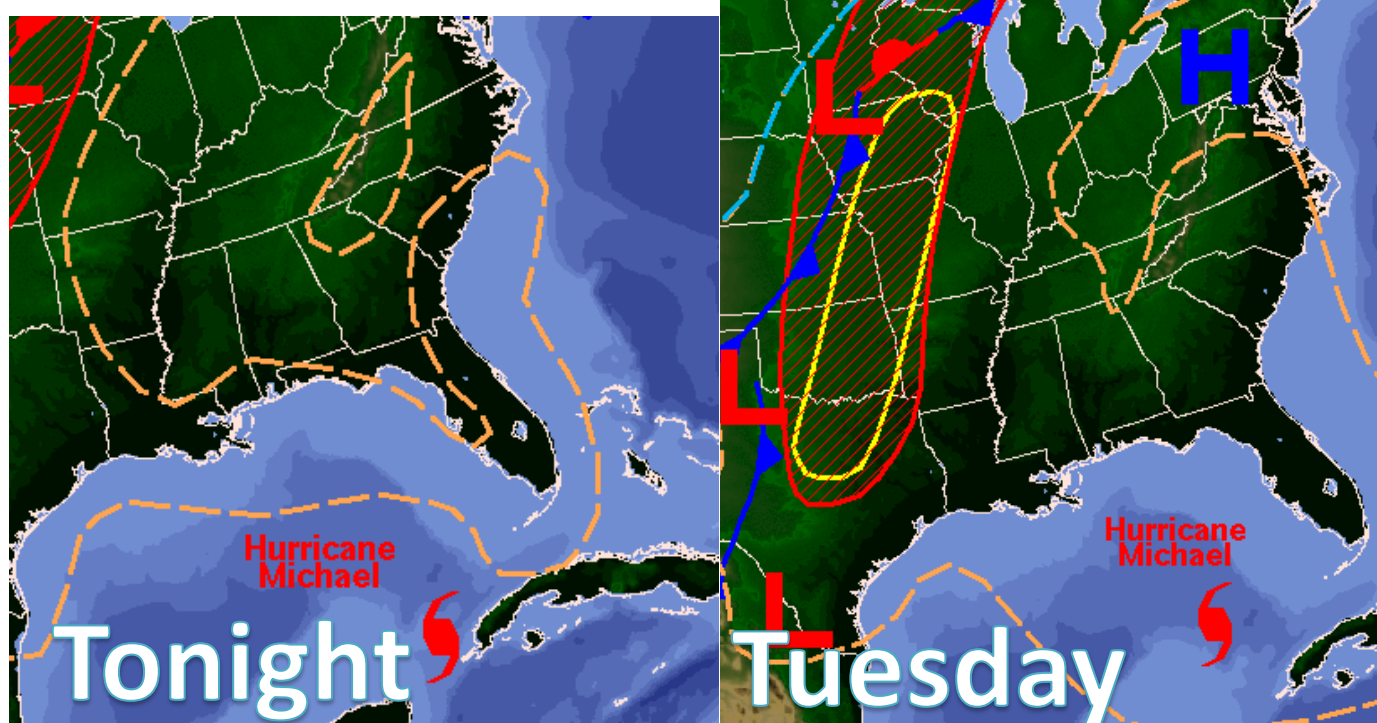


Wind Shear (shaded) and Wind Shear Tendencies (contoured)

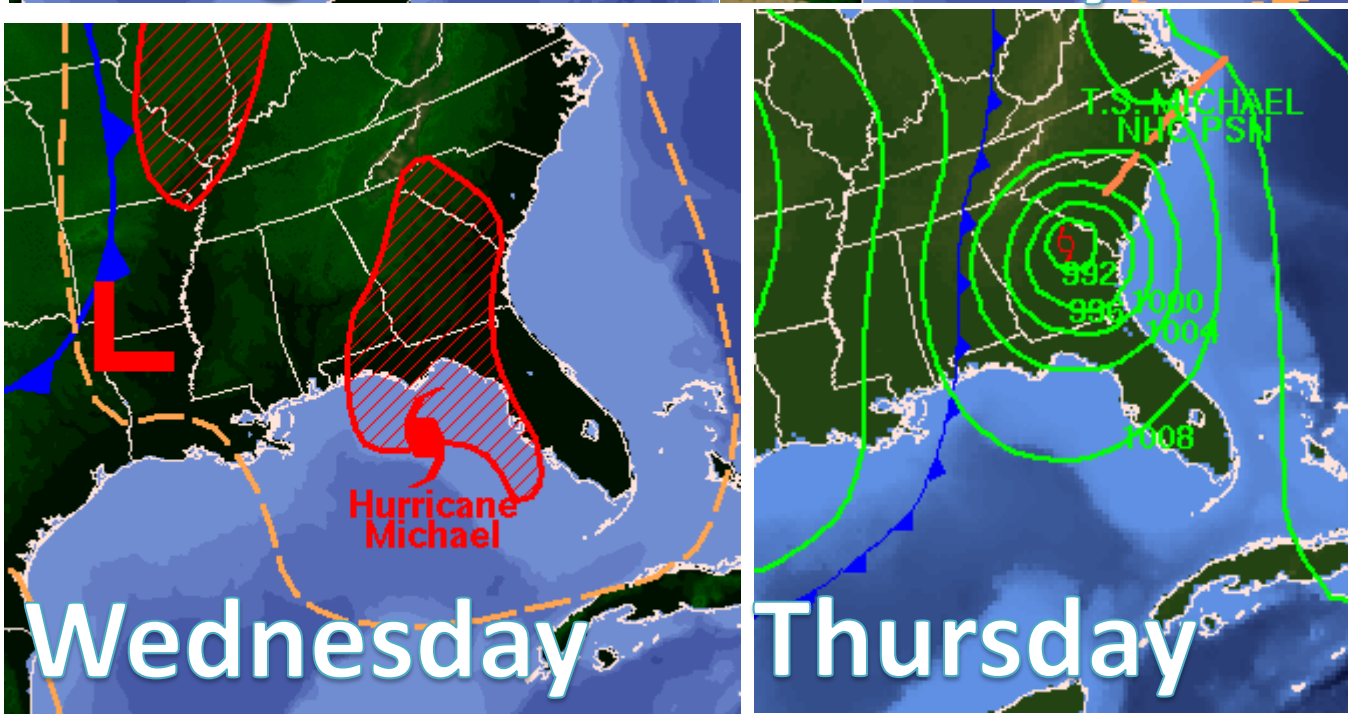
Moderate wind shear exists near Michael but continues to relax which will allow strengthening of Michael as it moves into the Gulf of Mexico. Wind shear in the eastern Atlantic may inhibit development of the African Tropical Wave, especially later in the week.



Forecast Weather Maps



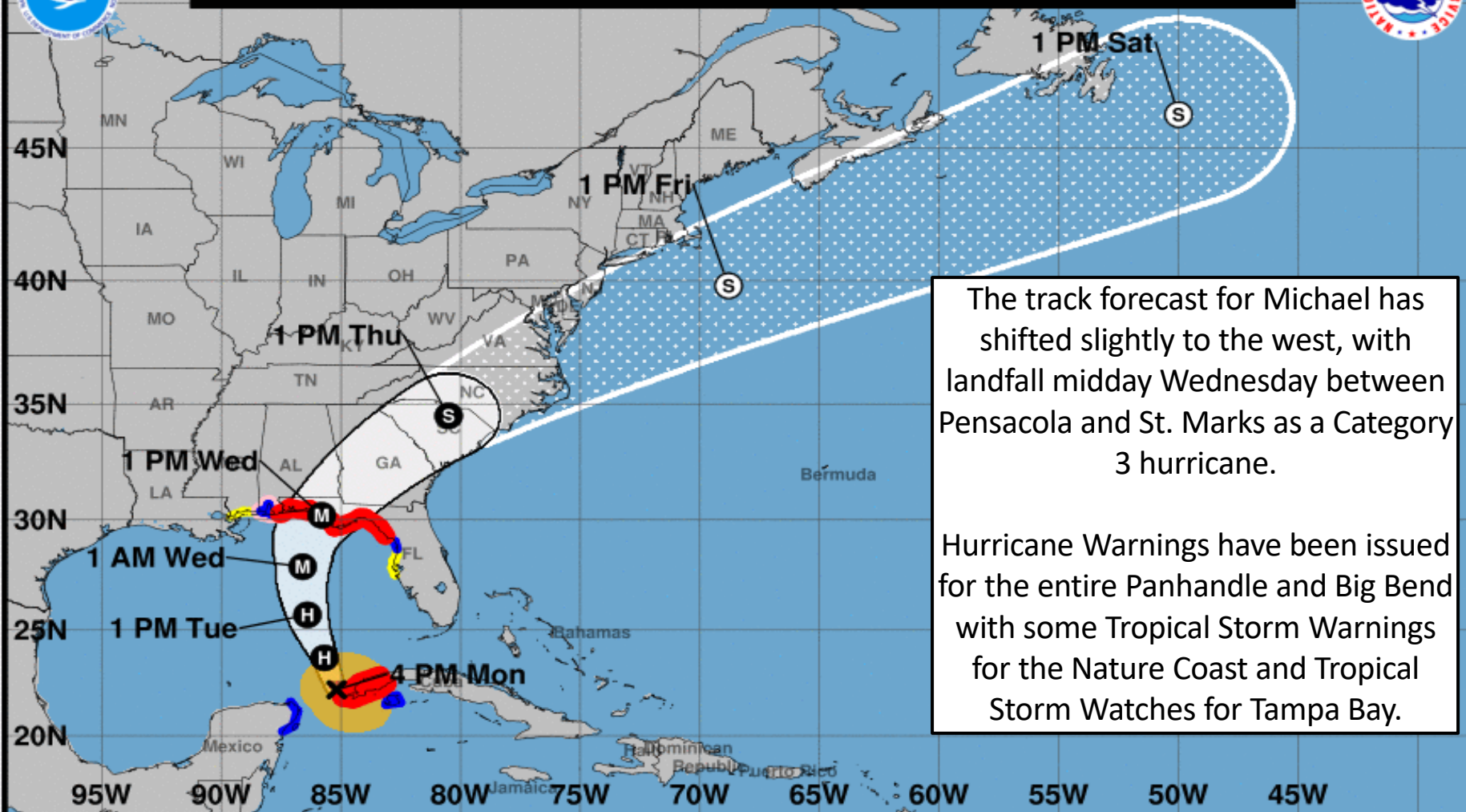
Michael will initially be steered northward between high pressure to the northeast and a cold front to the northwest. A turn to the northeast will occur by Wednesday as Michael is primarily steered by the cold front.



A faster storm will tend to make landfall further west in the Panhandle.



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 shifted slightly to the west, with landfall midday Wednesday between Pensacola and St. Marks as a Category 3 hurricane.

Hurricane Warnings have been issued for the entire Panhandle and Big Bend with some Tropical Storm Warnings for the Nature Coast and Tropical Storm Watches for Tampa Bay.

Hurricane Michael
Monday October 08, 2018
4 PM CDT Advisory 9
NWS National Hurricane Center

Current information: x
Center location 22.2 N 85.2 W
Maximum sustained wind 80 mph
Movement N at 9 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

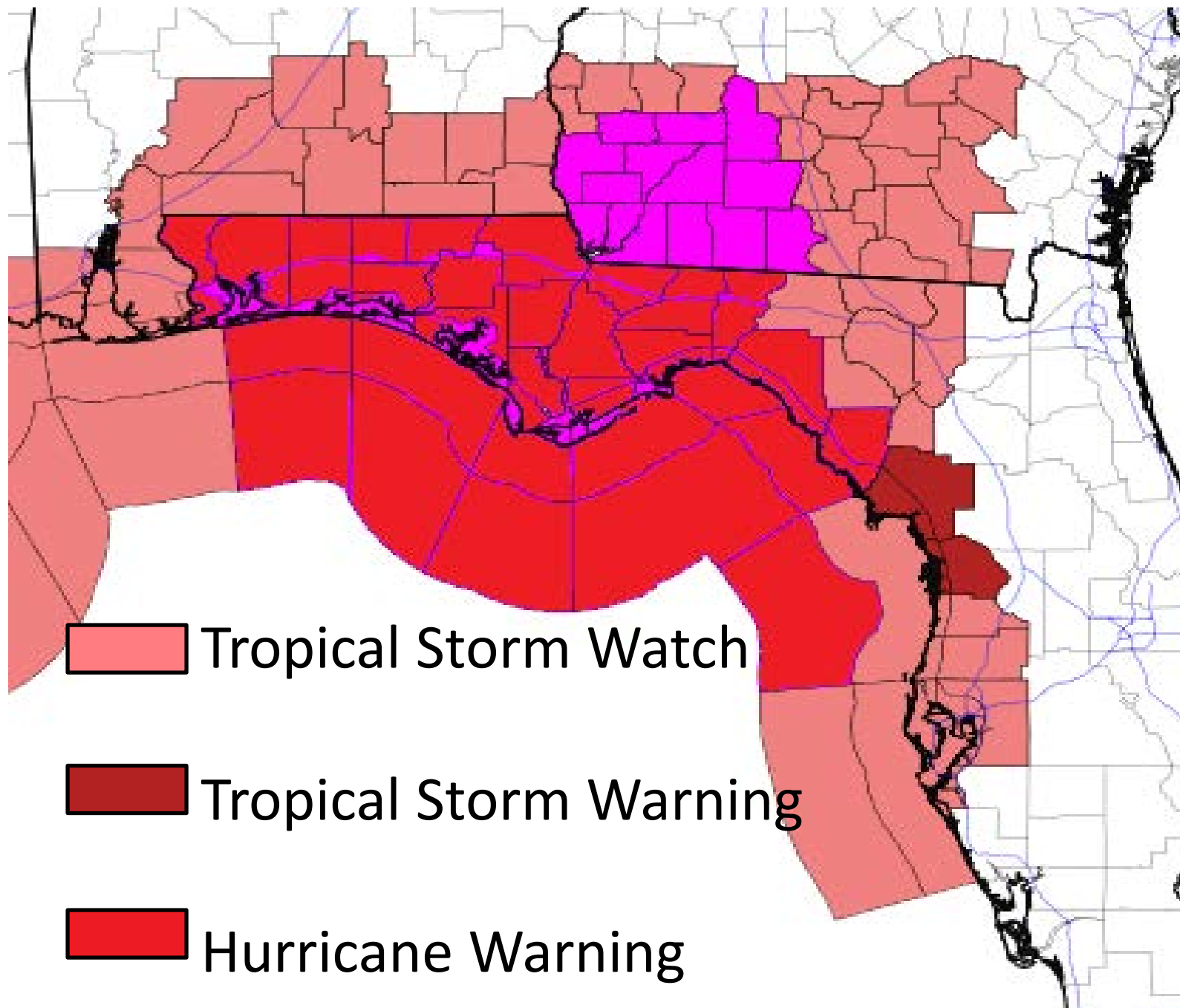
Warnings:

Hurricane Trop Stm

Current wind extent:

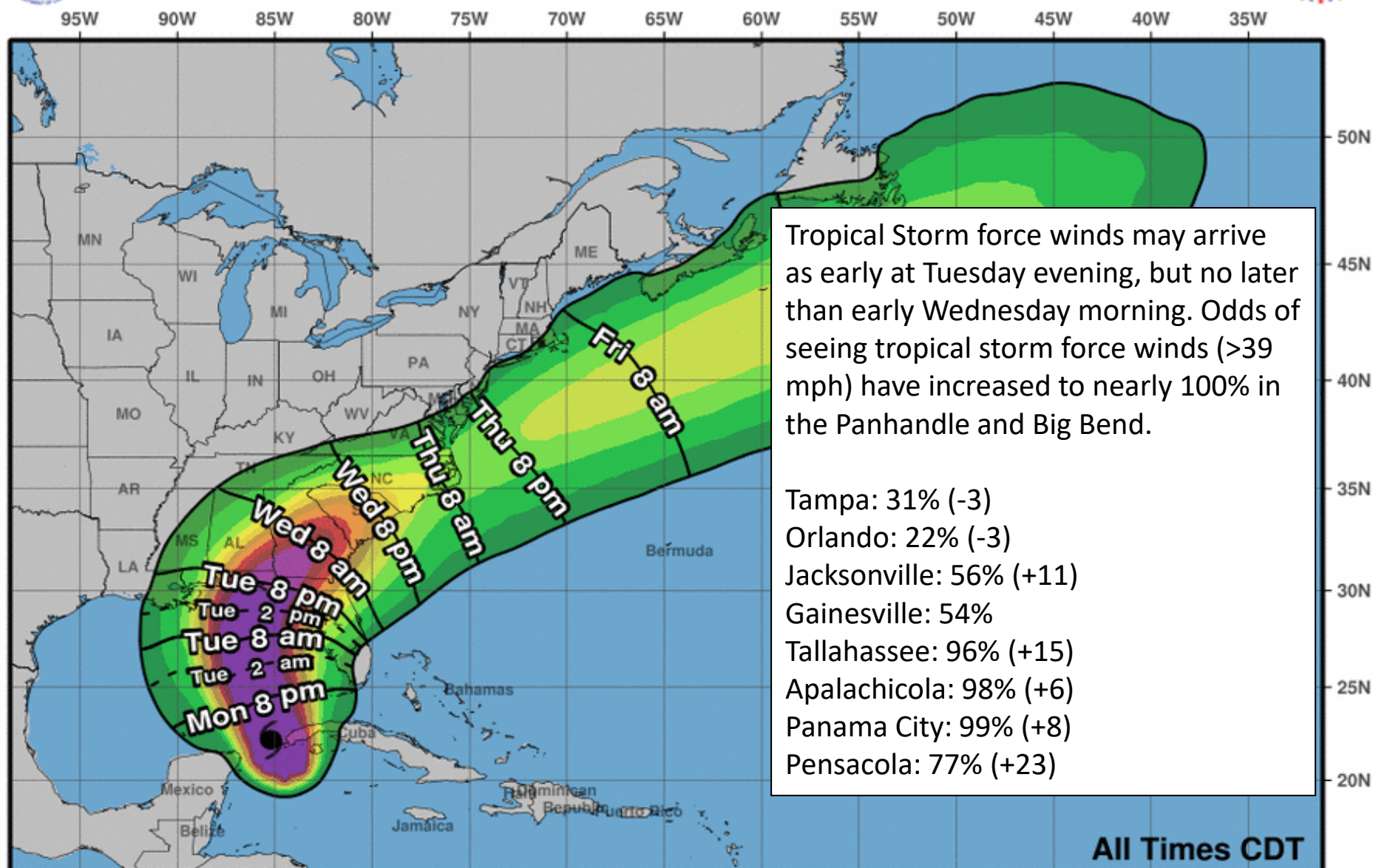
Hurricane Trop Stm

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





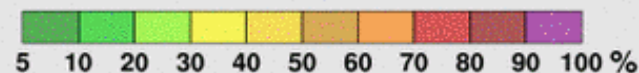
Earliest Reasonable Arrival Time of Tropical-Storm-Force Winds



Hurricane Michael
Mon. Oct. 8, 2018 4 pm CDT
Advisory 9

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

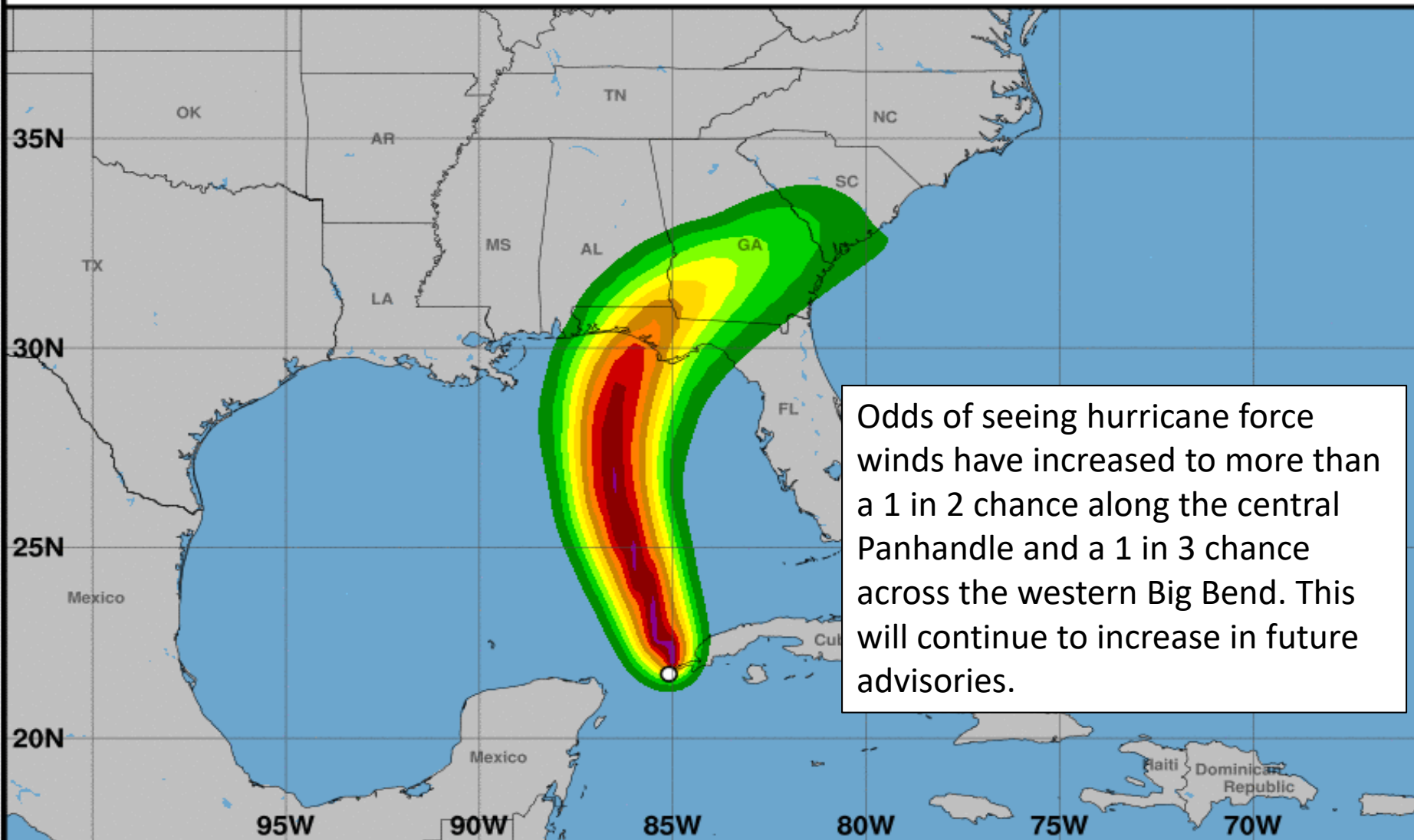
5-day chance of receiving sustained 34+ kt (39+ mph) winds





Hurricane-Force Wind Speed Probabilities (Preliminary)

For the 120 hours (5.0 days) from 1 PM CDT MON OCT 08 to 1 PM CDT SAT OCT 13

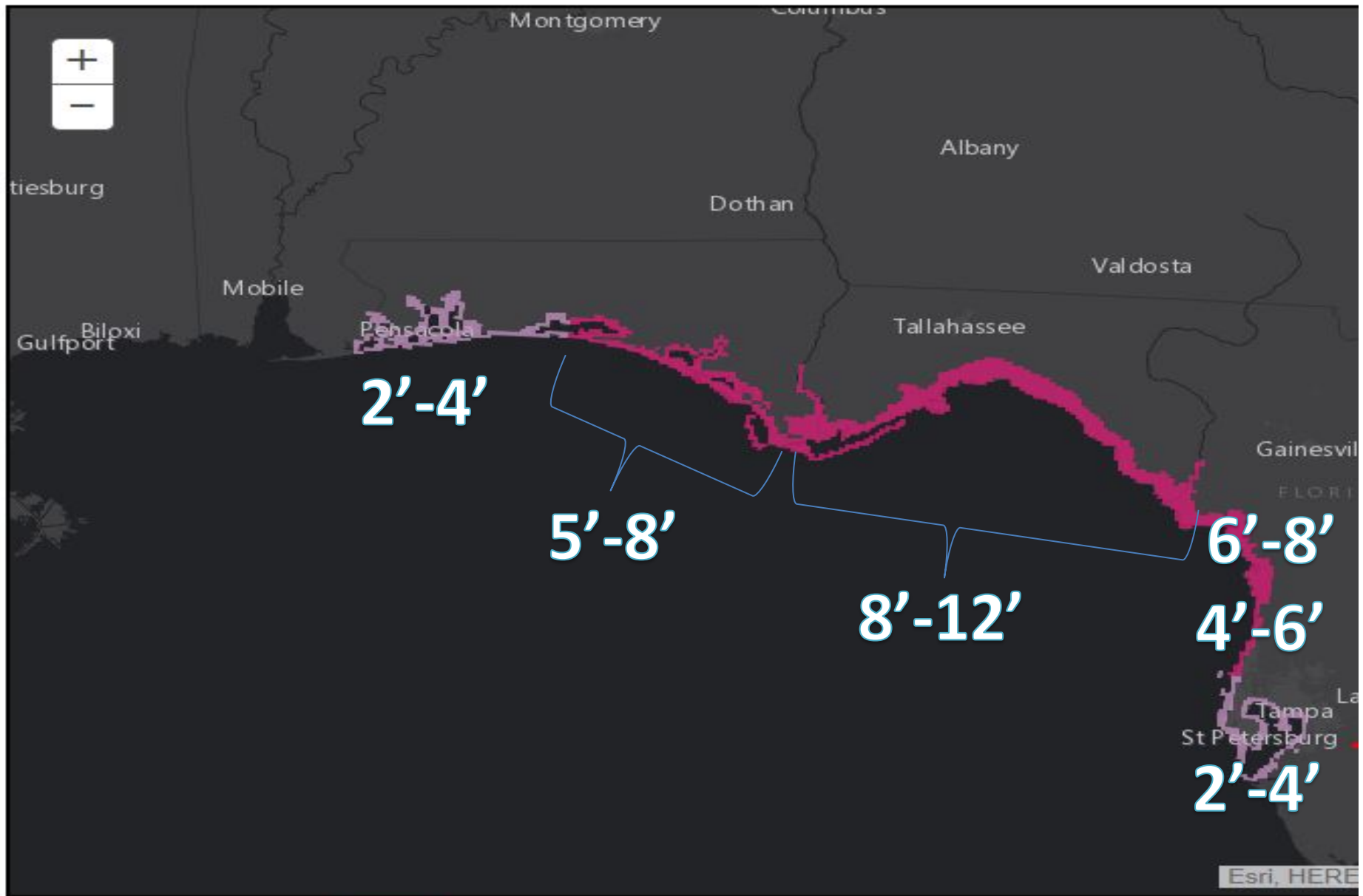


Odds of seeing hurricane force winds have increased to more than a 1 in 2 chance along the central Panhandle and a 1 in 3 chance across the western Big Bend. This will continue to increase in future advisories.



Probability of hurricane-force winds (1-minute average ≥ 74 mph) from Hurricane Michael
○ indicates Hurricane Michael center location at 1 PM CDT MON OCT 08, 2018 (Forecast/Advisory #9)

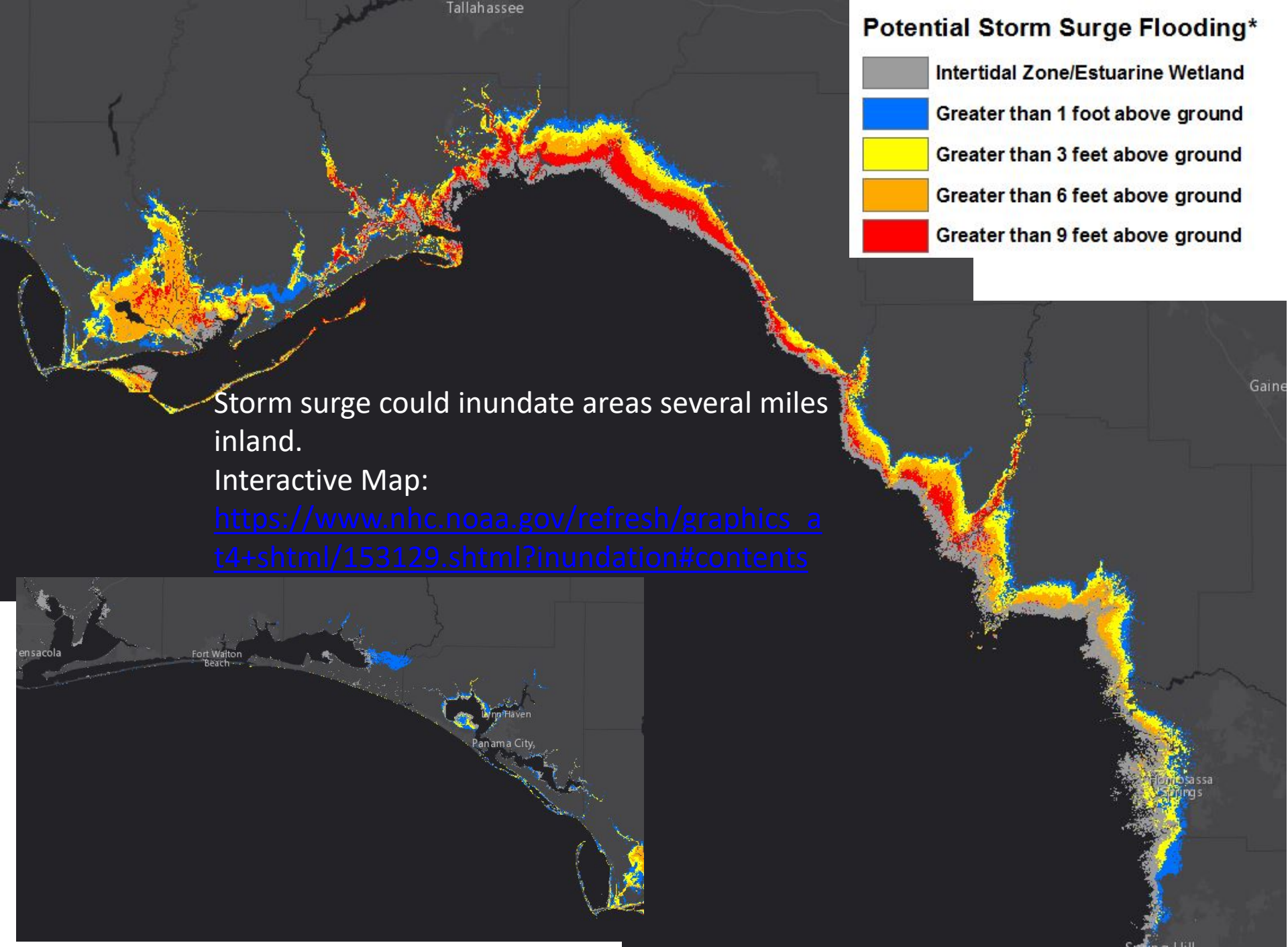


Hurricane Michael
Advisory 009 Issued: 4:00 PM CDT Mon Oct 8



0 30 60mi

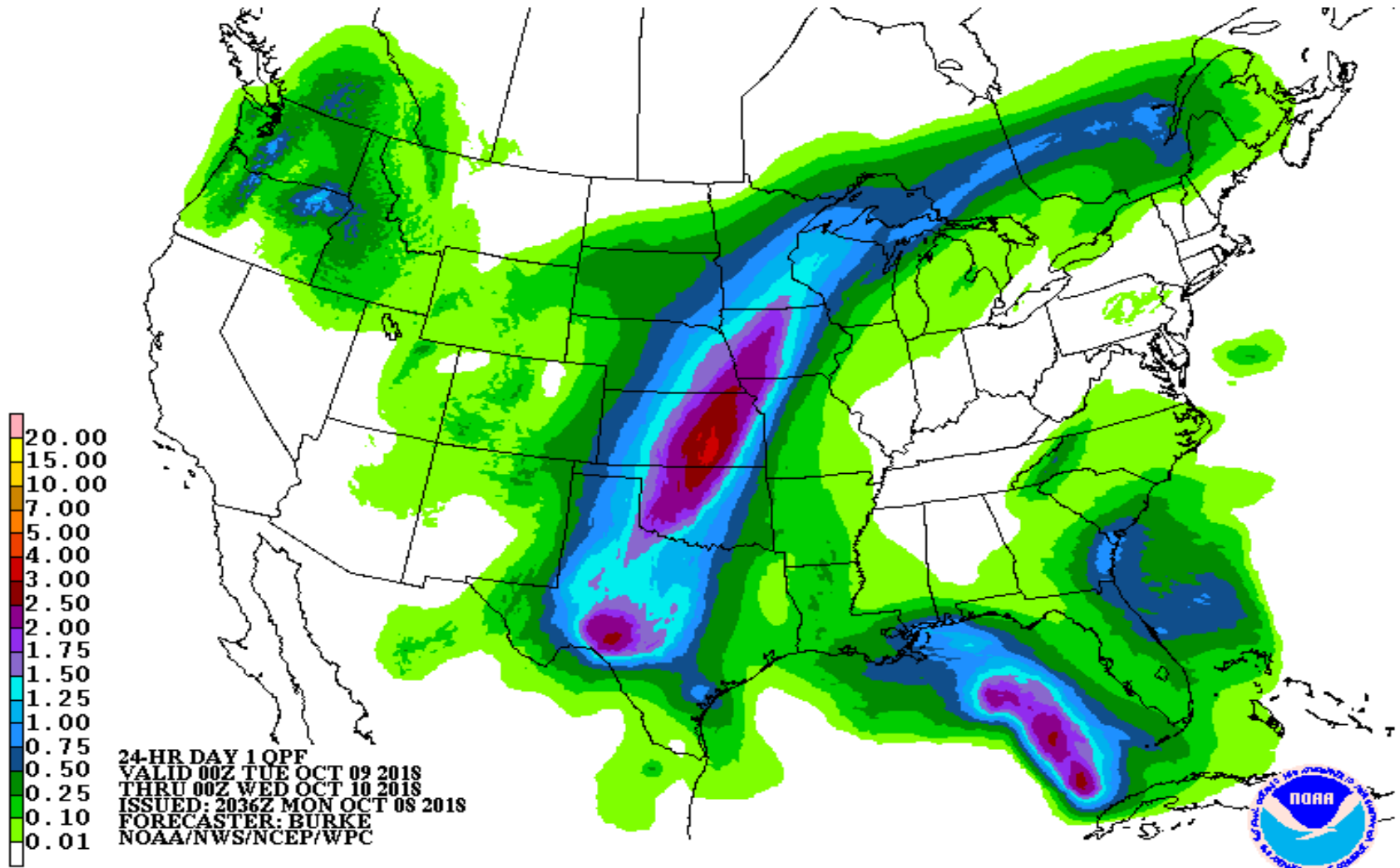
 Storm Surge Warning
 Storm Surge Watch



Forecast Cumulative Rain Totals – Next 24 Hours

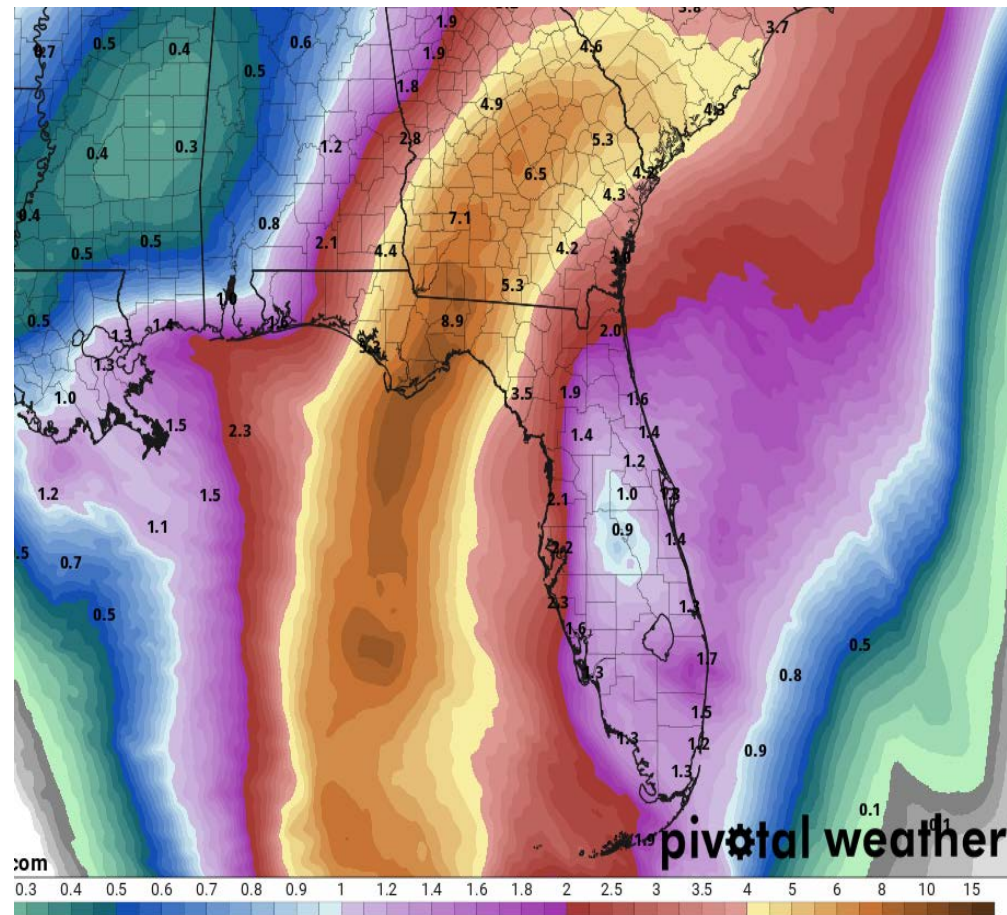
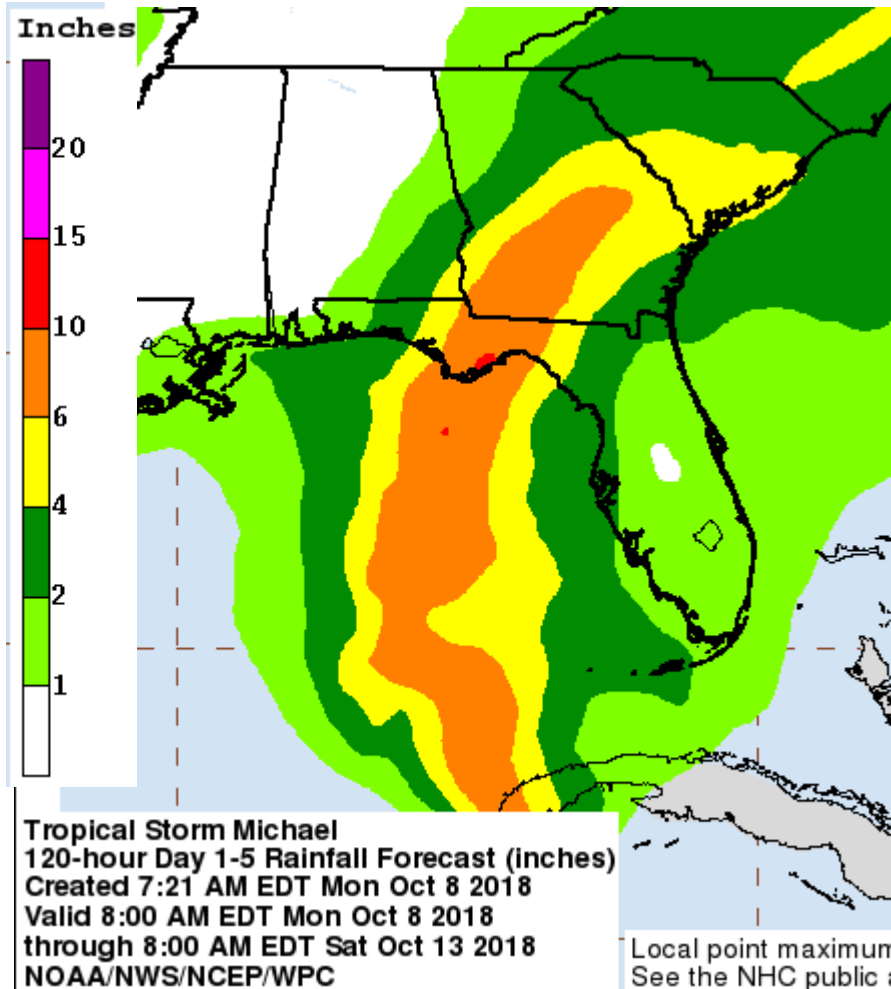
Rain bands from Hurricane Michael will continue to impact the Florida Keys tonight.

Localized rainfall amounts of 1-2" will be possible along with an increased threat of waterspouts. Winds will be breezy, out of the east at 20-30 mph gusting to 45 mph in squalls.

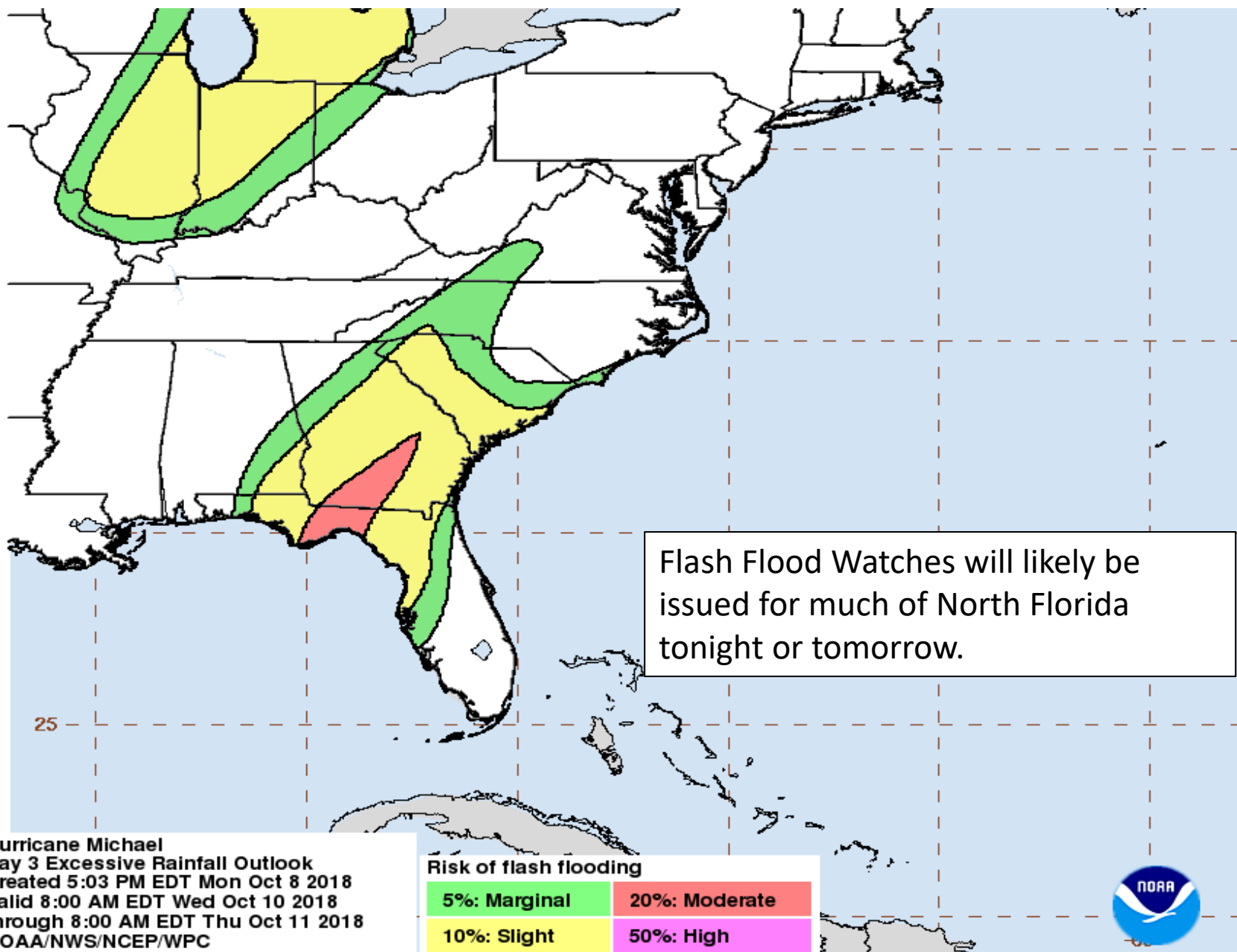


Forecast Cumulative Rain Totals – Next 5 Days

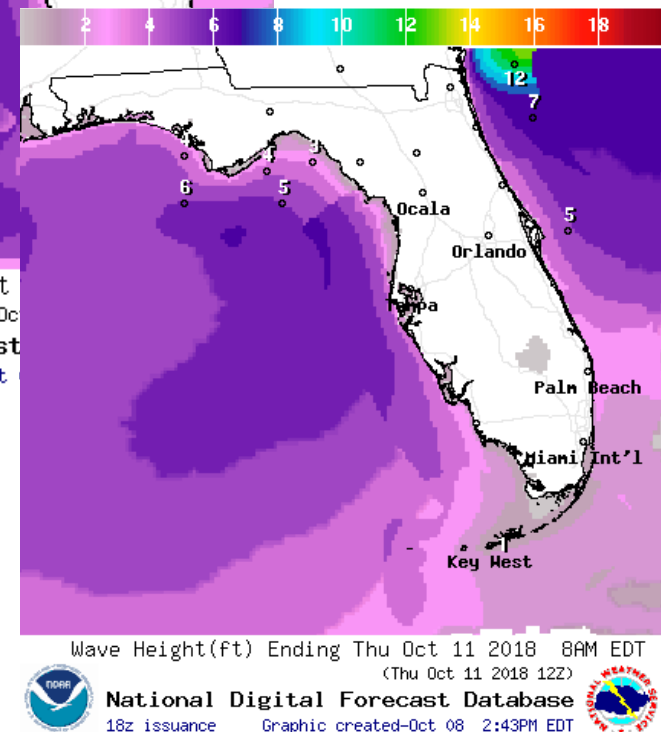
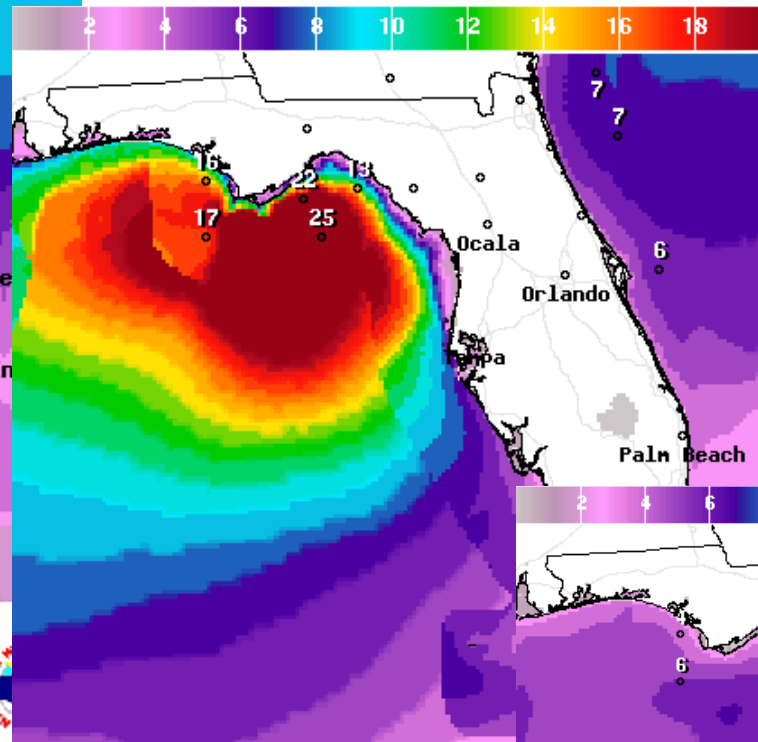
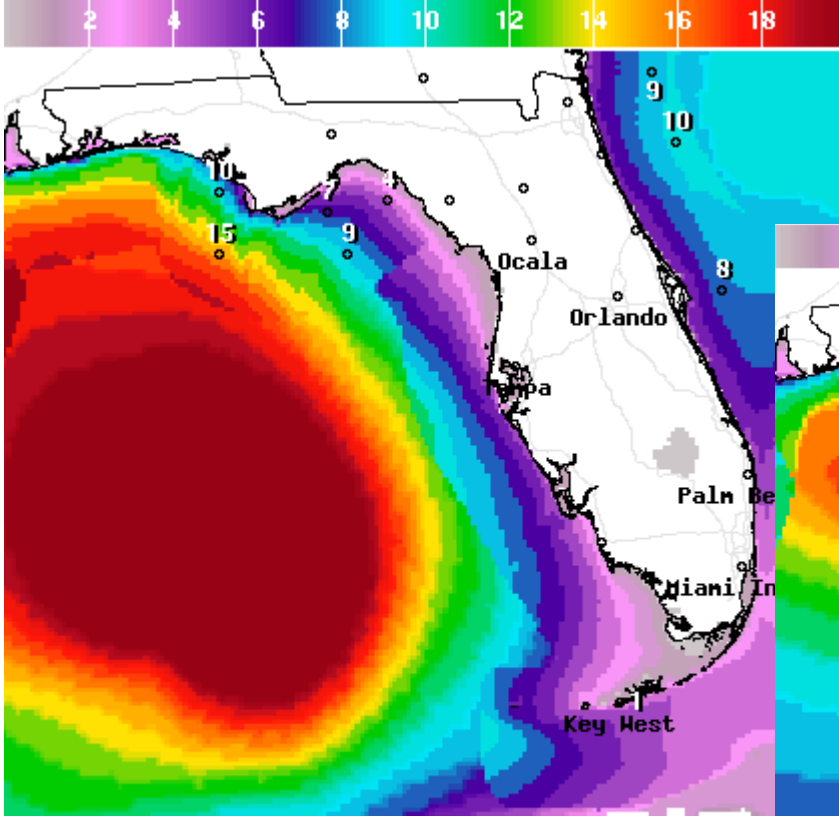
Actual rain totals will be dependent on the strength and track of Michael and this graphic does not account for isolated higher totals. However, a general 4-8" can be expected across the Panhandle and Big Bend Tuesday night-Thursday morning. Localized totals of 8-12+" possible.



Flash Flood Threat

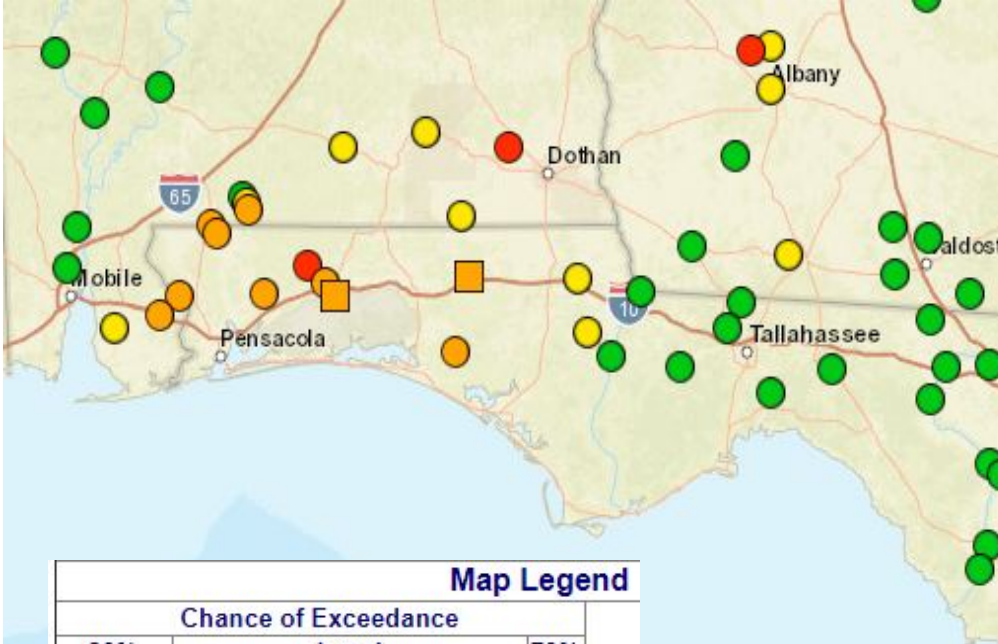


Forecast Wave Heights



Ocean swells are increasing the rip current threat along the Panhandle coast and West Coast.

Wave heights along the Panhandle and Big Bend may peak at 10-20' at the beach and much higher offshore. Significant beach erosion likely.

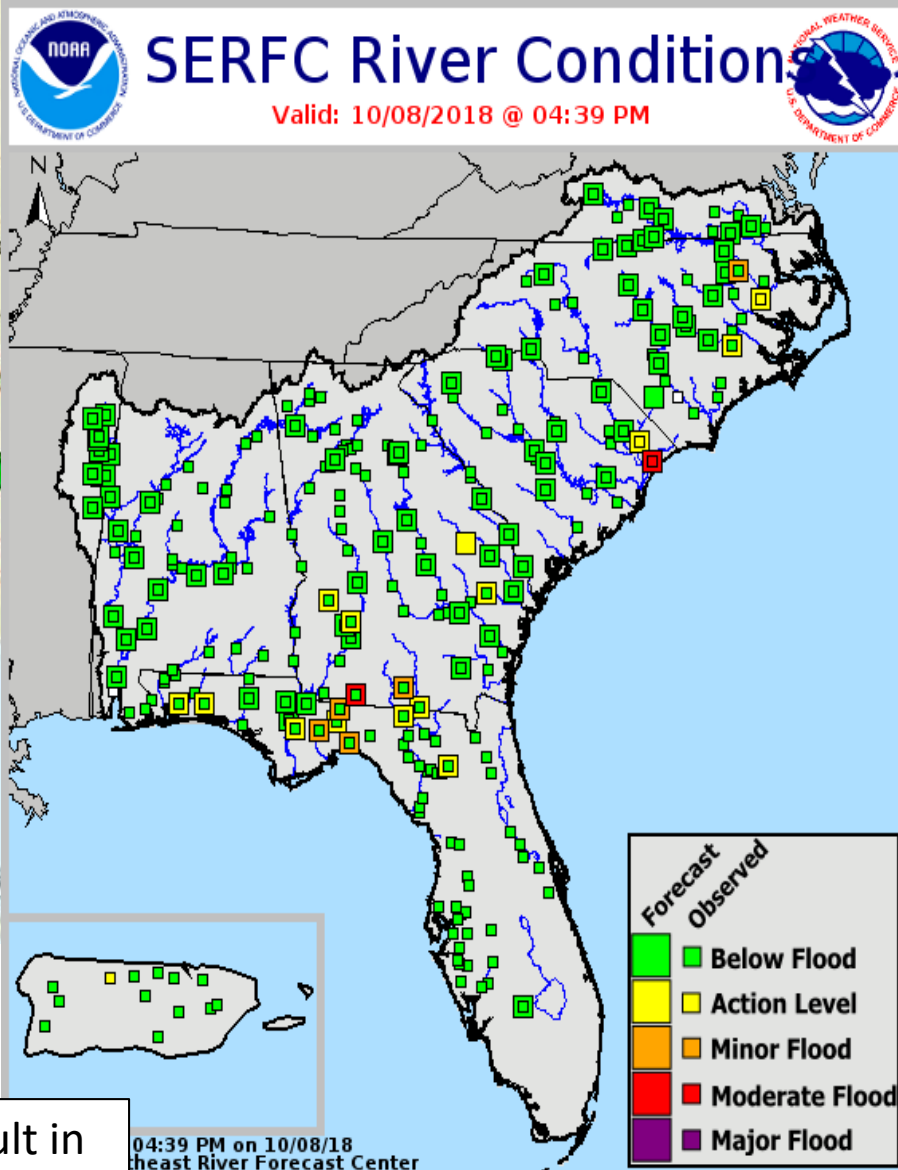


Map Legend

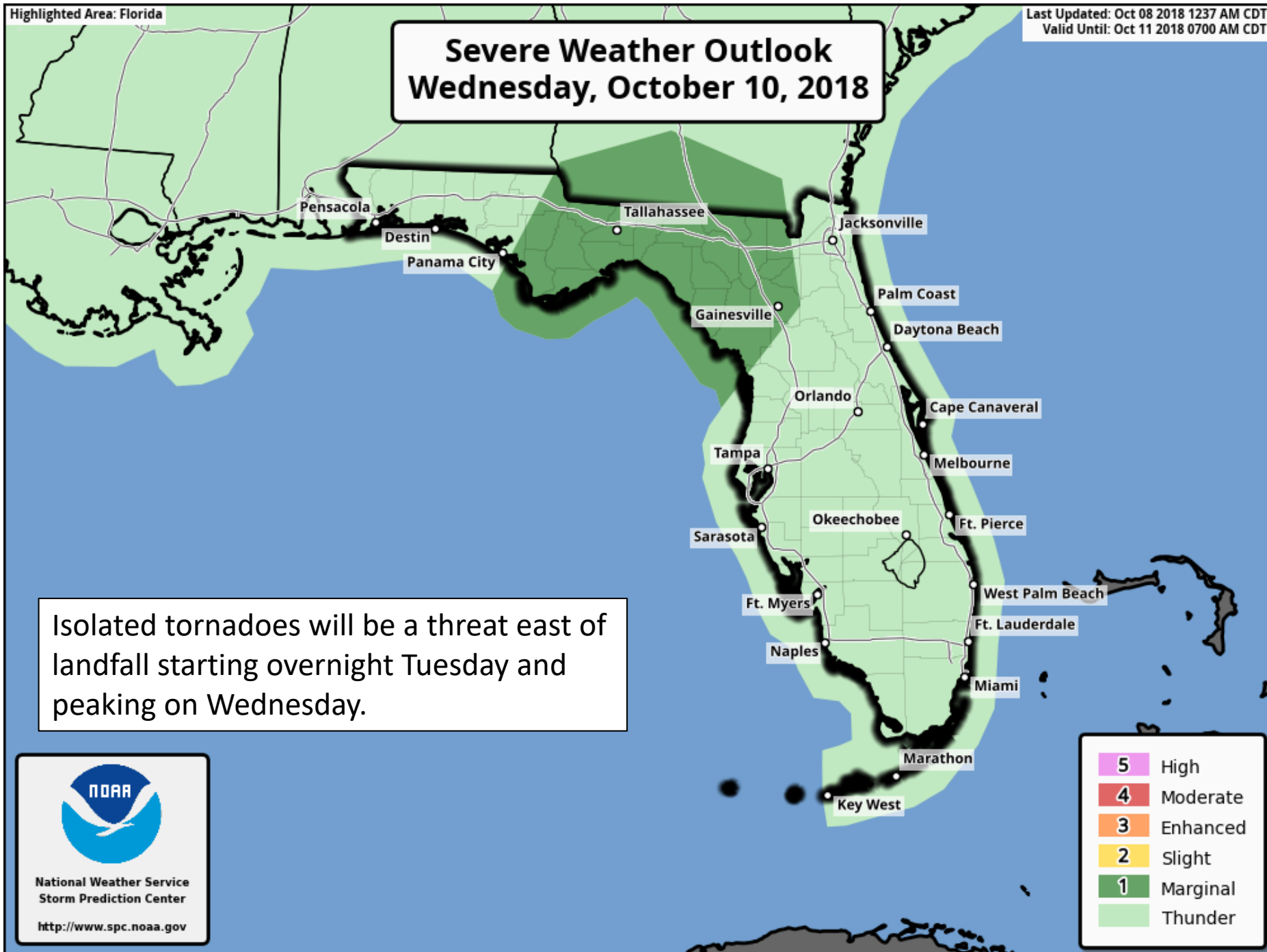
Chance of Exceedance			
30%	Level	70%	
	Action		Minor Flood
	Minor Flood		Moderate Flood
	Moderate Flood		Major Flood
	Major Flood		
= less than 30% chance of reaching Action level			
= no critical levels defined for this point			

Possible River Flooding

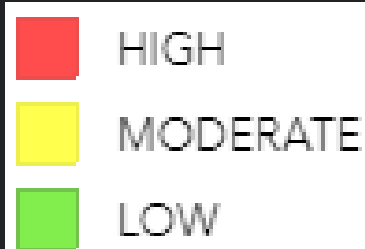
In general, rainfall totals less than 4-6" won't result in river flooding. Totals greater than that pose the threat of sending rivers into minor flood stage in the days after Michael passes. More details on river flooding will come into view over the next 24-36 hours.



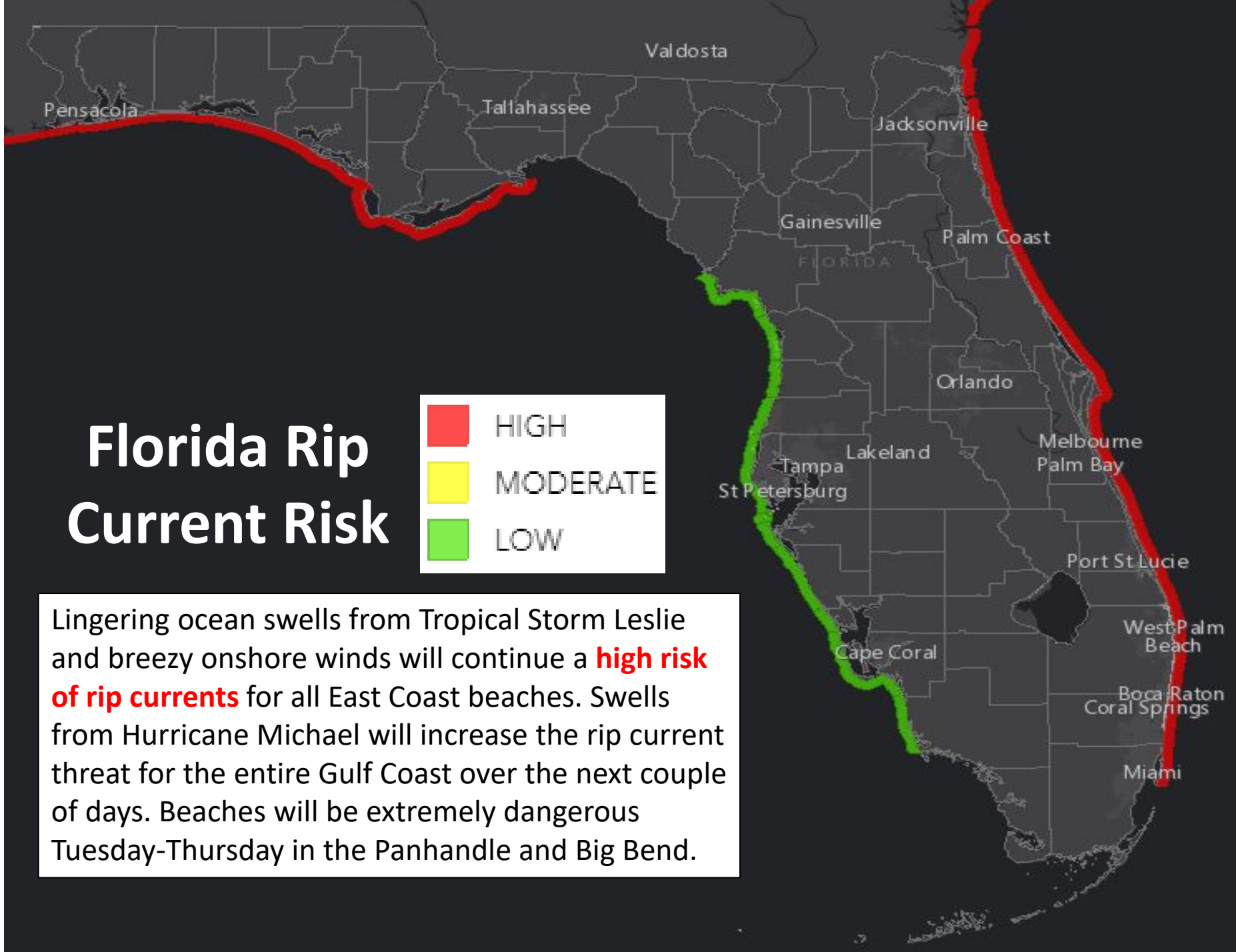
Severe Weather Outlook Wednesday, October 10, 2018



Florida Rip Current Risk



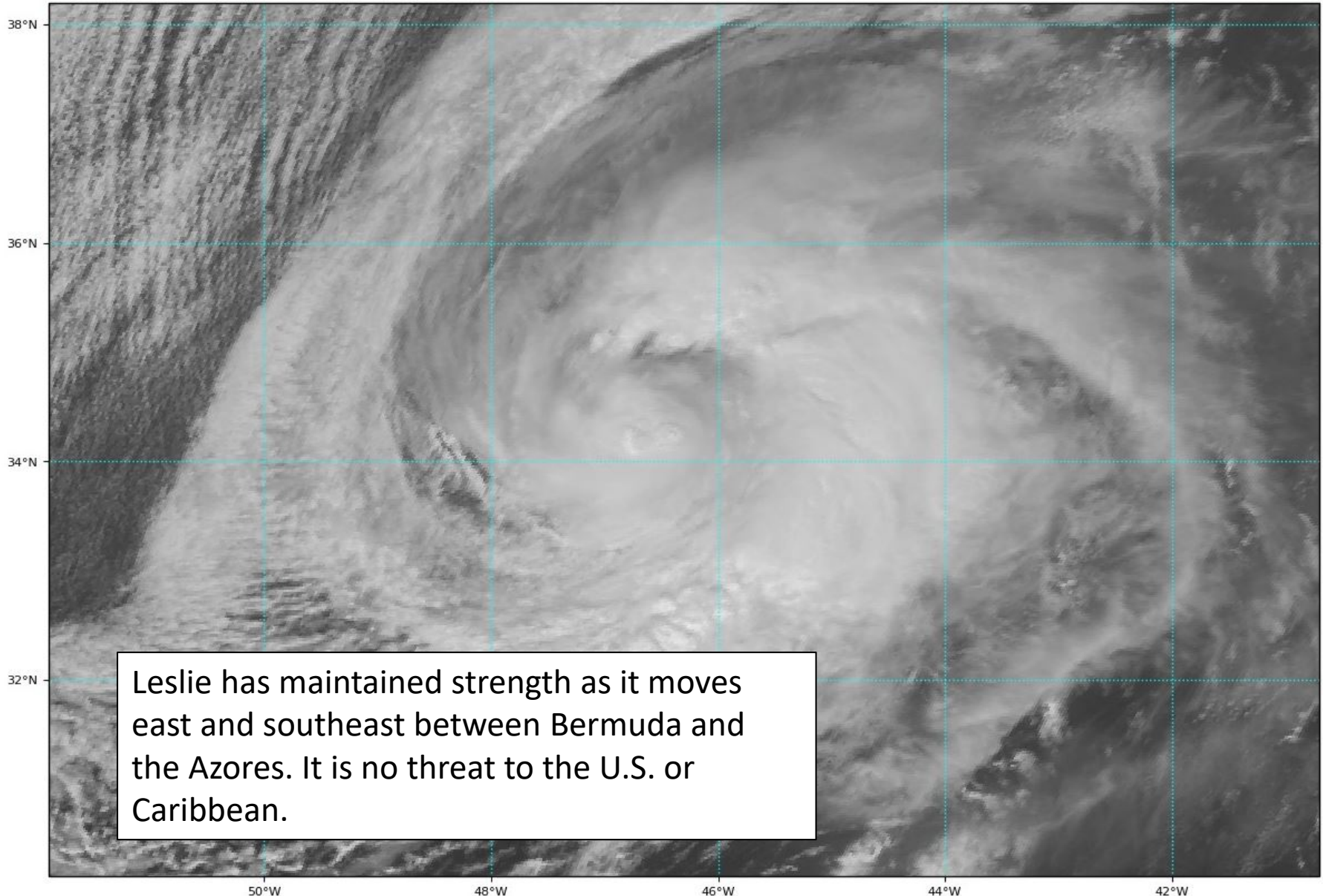
Lingering ocean swells from Tropical Storm Leslie and breezy onshore winds will continue a **high risk of rip currents** for all East Coast beaches. Swells from Hurricane Michael will increase the rip current threat for the entire Gulf Coast over the next couple of days. Beaches will be extremely dangerous Tuesday-Thursday in the Panhandle and Big Bend.



Tropical Storm Leslie Satellite Image

GOES-16 Channel 2 (visible) / Channel 7 (shortwave IR) [Day/Night] at 16:35Z Oct 08, 2018

TROPICALTIDBITS.COM



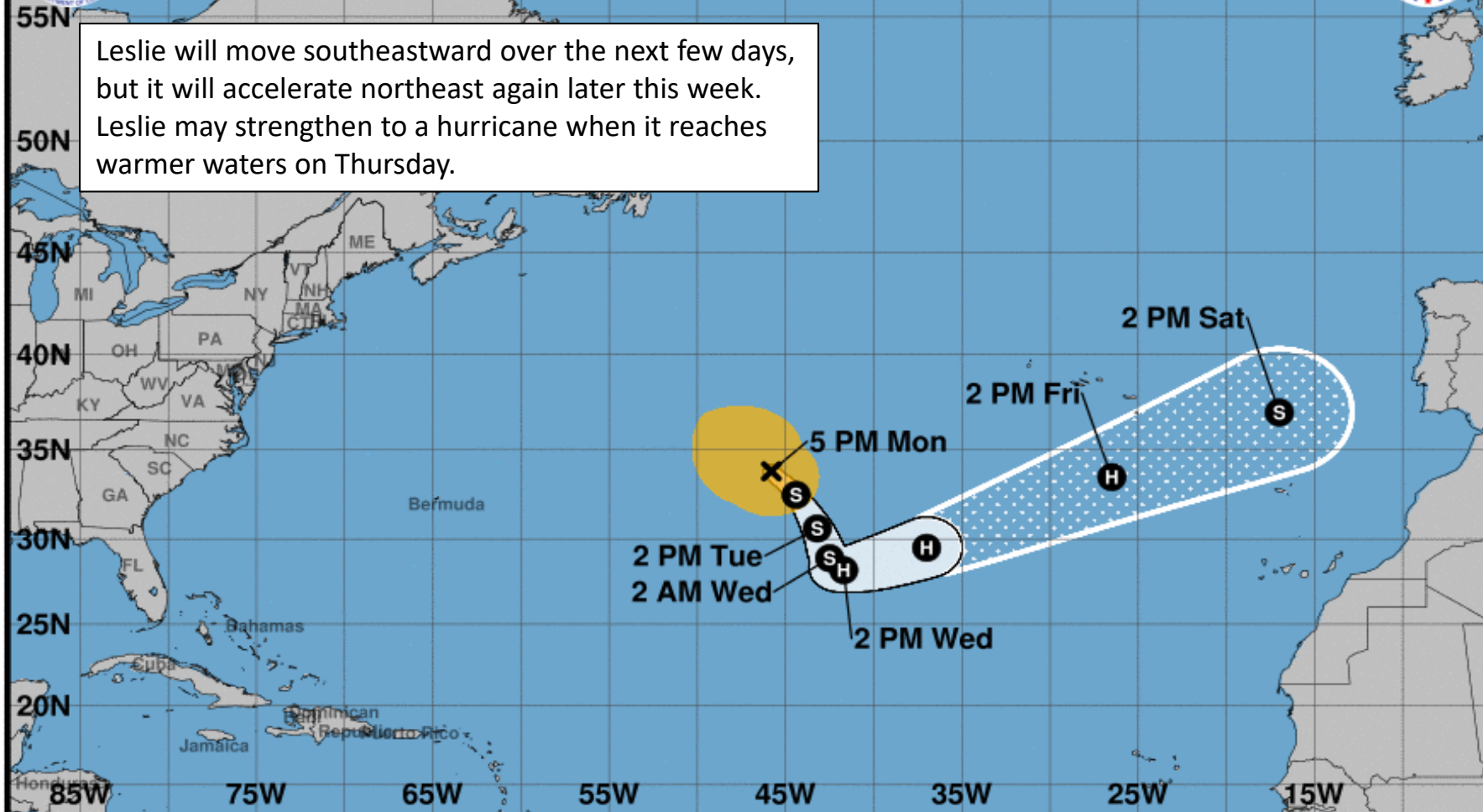
Leslie has maintained strength as it moves east and southeast between Bermuda and the Azores. It is no threat to the U.S. or Caribbean.



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 PM AST Advisory 50

NWS National Hurricane Center

Current information: x

Center location 33.8 N 45.8 W

Maximum sustained wind 60 mph

Movement SE at 14 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



Five-Day Graphical Tropical Weather Outlook

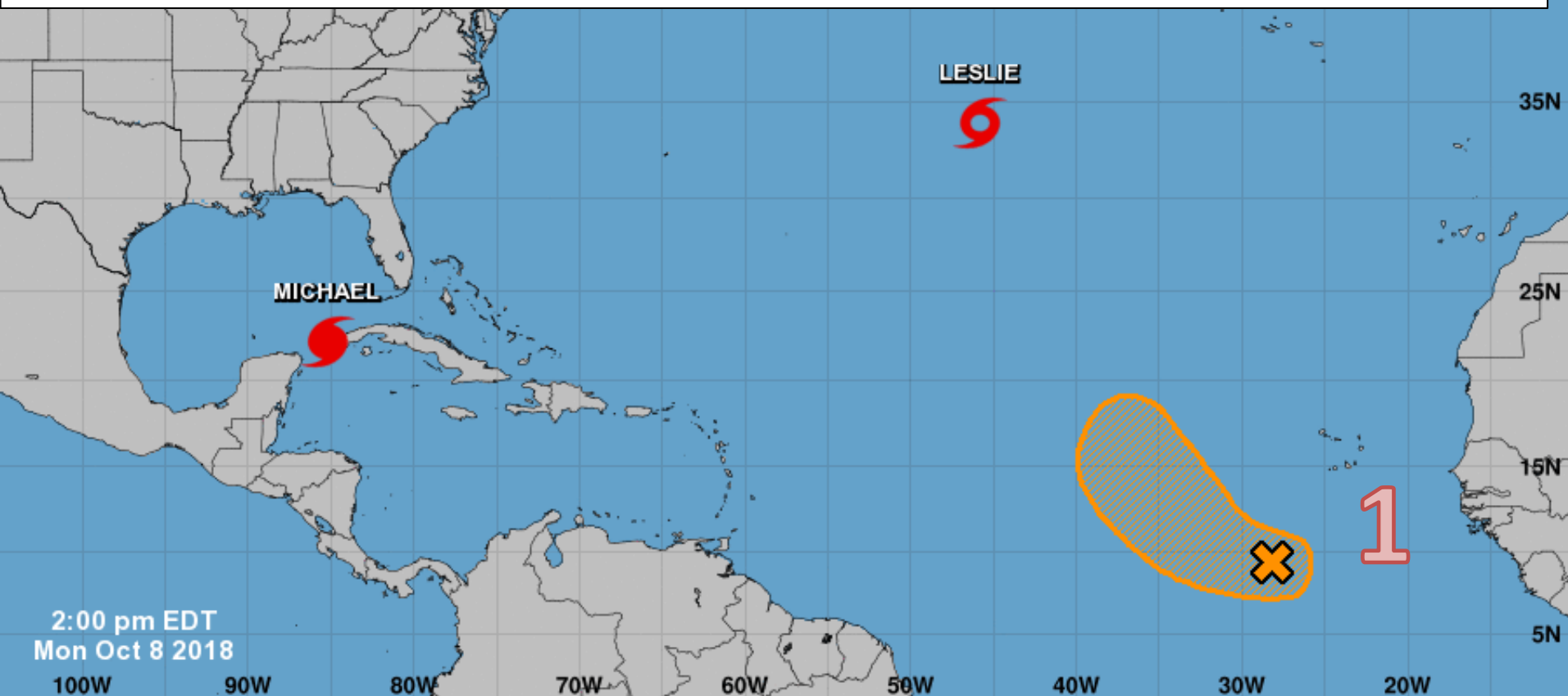
National Hurricane Center Miami, Florida



1. Showers and thunderstorms associated with a tropical wave located several hundred miles southwest of the Cabo Verde Islands continue to show signs of organization. However, recent satellite data indicate that the system currently lacks a well-defined surface circulation. Environmental conditions are expected to be conducive for development during the next few days, and a tropical depression could form while the system moves generally west-northwestward. By late this week, strong upper-level winds are expected to limit further development of the disturbance.

* Formation chance through 48 hours...medium...50 percent.

* Formation chance through 5 days...medium...60 percent.



Current Disturbances and Five-Day Cyclone Formation Chance: < 40% 40-60% > 60%

Tropical or Sub-Tropical Cyclone: Depression Storm Hurricane

Post-Tropical Cyclone or Remnants

Summary

Tropical Storm Leslie:

- At 5 PM EDT Monday, Tropical Storm Leslie was located about 1000 miles west of Azores.
- Maximum sustained winds have increased to near 60 mph, and small fluctuations in intensity are expected over the next couple of days before strengthening is expected back to a hurricane later this week.
- Leslie is moving southeast at 14 mph. Leslie will continue southeast and accelerate through the end of the week in the open waters of the north-central Atlantic before a turn Northeast toward the Azores and Portugal.

African Tropical Wave

- A tropical wave several hundred miles south of the Cabo Verde Islands has become slightly better organized today. A tropical depression may form during the next few days as it moves west-northwestward and the northwest.
- This system poses no threat to land over the next 5-7 days and is currently forecast to remain over the open Atlantic where it will eventually dissipate.
- The National Hurricane Center gives this system a 50% (medium) chance of development over the next 48 hours and a 60% (medium) over the next 5 days.

Tropical Storm Michael

- At 11 AM EDT Monday, Michael was upgraded to a Category 1 hurricane thanks to data from hurricane hunter aircraft.
- As of 5 PM EDT Monday, Hurricane Michael was located about 30 miles northwest of the western tip of Cuba, or about 520 miles south of Apalachicola, Florida.
- Maximum sustained winds have increased to 80 mph making Michael a category 1 on the Saffir-Simpson wind scale.
- Michael is expected to continue strengthening up until landfall. Landfall is currently forecast as a Category 3 hurricane with maximum sustained winds of 115-120 mph.
- Hurricane Michael is moving to the north at 9 mph. Michael will continue to accelerate northward over the next 24 hours before making a turn towards the north-northeast or northeast as it makes landfall.
- Landfall is expected in the Panhandle or Big Bend midday 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.
- The track forecast sped up slightly today which resulted in a small shift to the west.
- Hurricane hunters will be investigating the system later this evening and again tomorrow morning.

Florida Outlook:

- Much of the Florida Panhandle and Big Bend remain within the cone of error for landfall potential- the forecast cone covers from Pensacola to St. Marks.
- An increase in water levels and rip current risks from Michael are already present and wave heights will continue to increase through Wednesday.
- Tropical storm conditions may arrive in the Panhandle as soon as Tuesday evening but no later than Wednesday morning. Hurricane conditions could arrive in the Panhandle Wednesday morning.
- **Tropical Storm Warnings** are in effect for Madison, Lafayette, inland Taylor, Inland Dixie, Levy, and Citrus. **Hurricane Warnings** are in effect for 16 Panhandle and Big Bend counties between Pensacola and Monticello. Coastal Taylor and Dixie County are also under a Hurricane Warning.
- **Tropical Storm Watches** are in effect for Hernando, Pasco, Pinellas, Hillsborough, and Coastal Manatee, along with Hamilton, Colombia, Suwannee, and Gilchrist.
- 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 Watches** have been issued between Navarre (Okaloosa County) and Anna Maria Island (Manatee County) for possible surge inundation of 2-4' for the Tampa Bay region and western Panhandle, 5-8' for the eastern Panhandle coast, and 8-12' for Apalachee Bay, 6-8' for northern Nature Coast, 4-6' and southern Nature Coast. Even if Michael makes landfall further west towards Panama City or Destin, storm surge values could still reach 6'-9' in Apalachee Bay.
- 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. Post-storm river flooding is expected, but is dependent on where the highest rainfall totals occur.
- Isolated tornadoes will be possible Tuesday-Thursday, but risk and where will depend on eventual track and intensity of the system (northeast quadrant relative to forward motion).
- Ocean swells from Tropical Storm Leslie and breezy onshore winds from high pressure to the north of Florida will continue producing a moderate to high risk of rip currents along all Atlantic beaches.
- It is too early to tell if the African tropical wave will impact Florida or the Caribbean.

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



TROPICAL UPDATE

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State Meteorological Support Unit

Florida Division of Emergency Management

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