



TROPICAL UPDATE

7 AM EDT

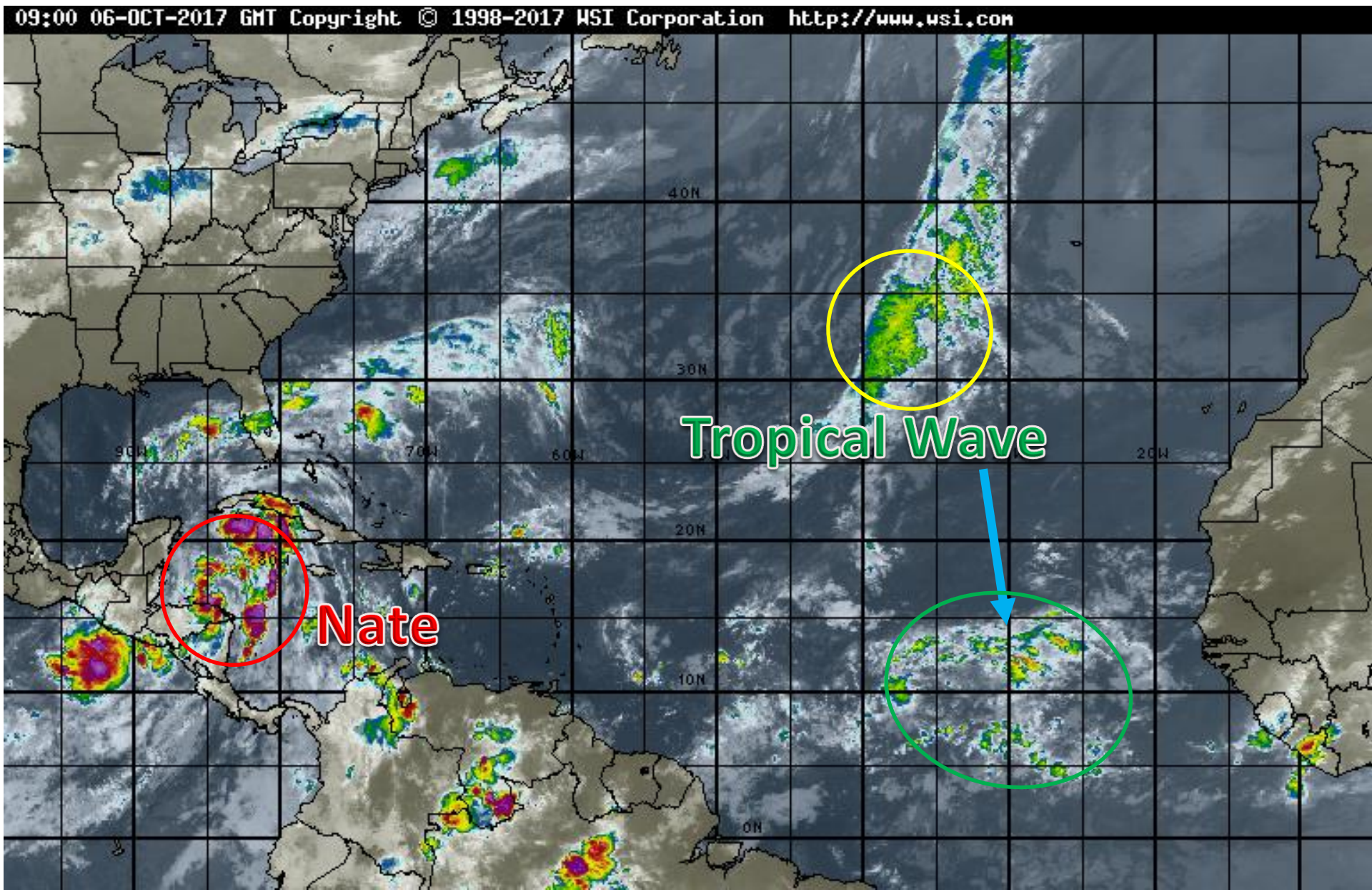
Friday, October 6, 2017

Tropical Storm Nate &

Northeast Atlantic Low (30%)

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





Five-Day Graphical Tropical Weather Outlook

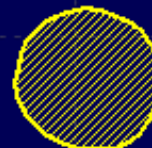
National Hurricane Center Miami, Florida



www.hurricanes.gov

All Disturbances

1



1. An area of low pressure is forecast to form in the next day or two along the southern extent of a frontal boundary, about 900 miles southwest of the Azores. This low could subsequently acquire some subtropical or tropical characteristics while it remains nearly stationary over the northeastern Atlantic Ocean during the next few days.

* Formation chance through 48 hours...low...10 percent.

* Formation chance through 5 days...low...30 percent.

NATE



2:00 am EDT
Fri Oct 6 2017

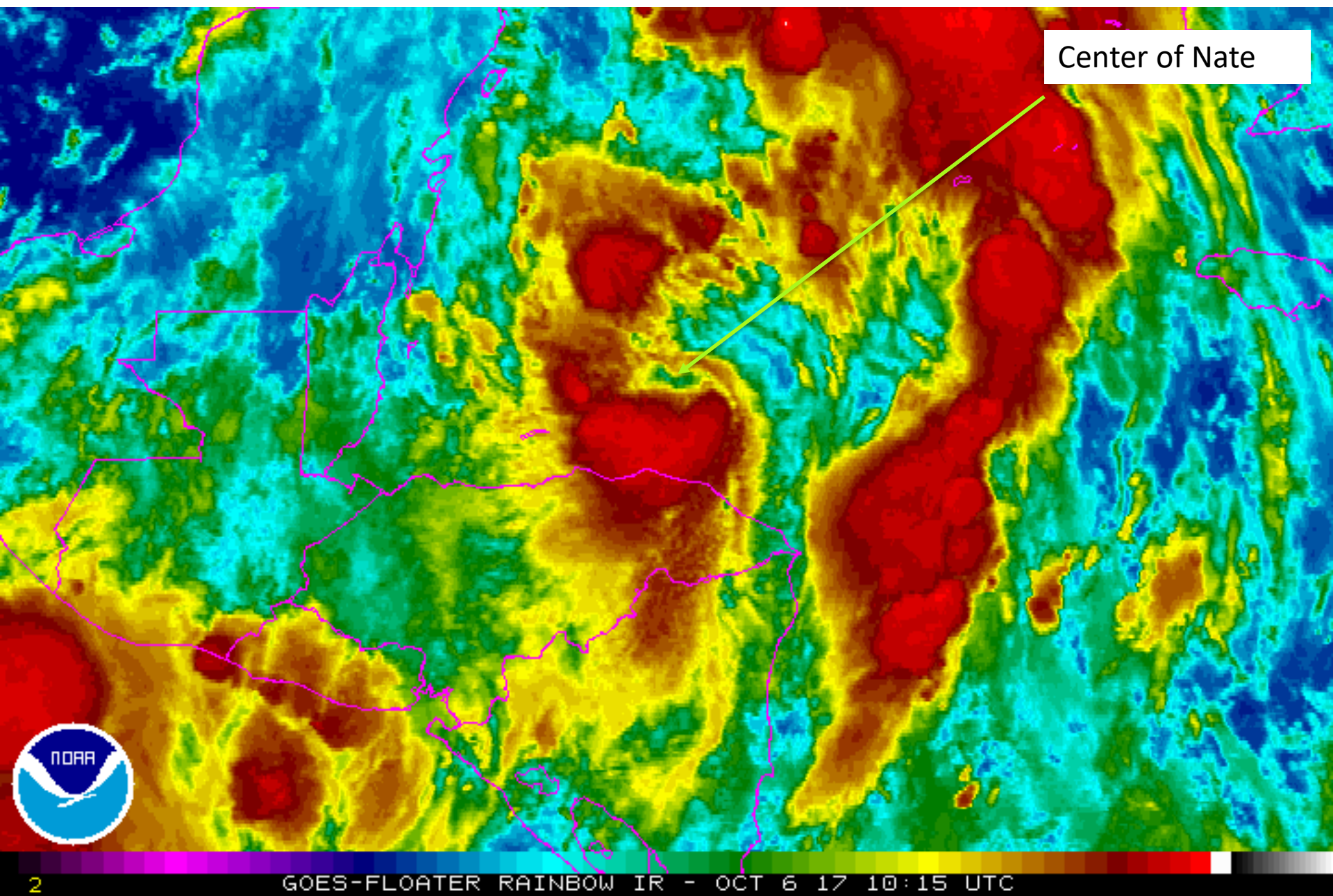
100°W 90°W 80°W 70°W 60°W 50°W 40°W 30°W 20°W

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

Tropical or Sub-Tropical Cyclone: ○ Depression 🌀 Storm 🌀 Hurricane

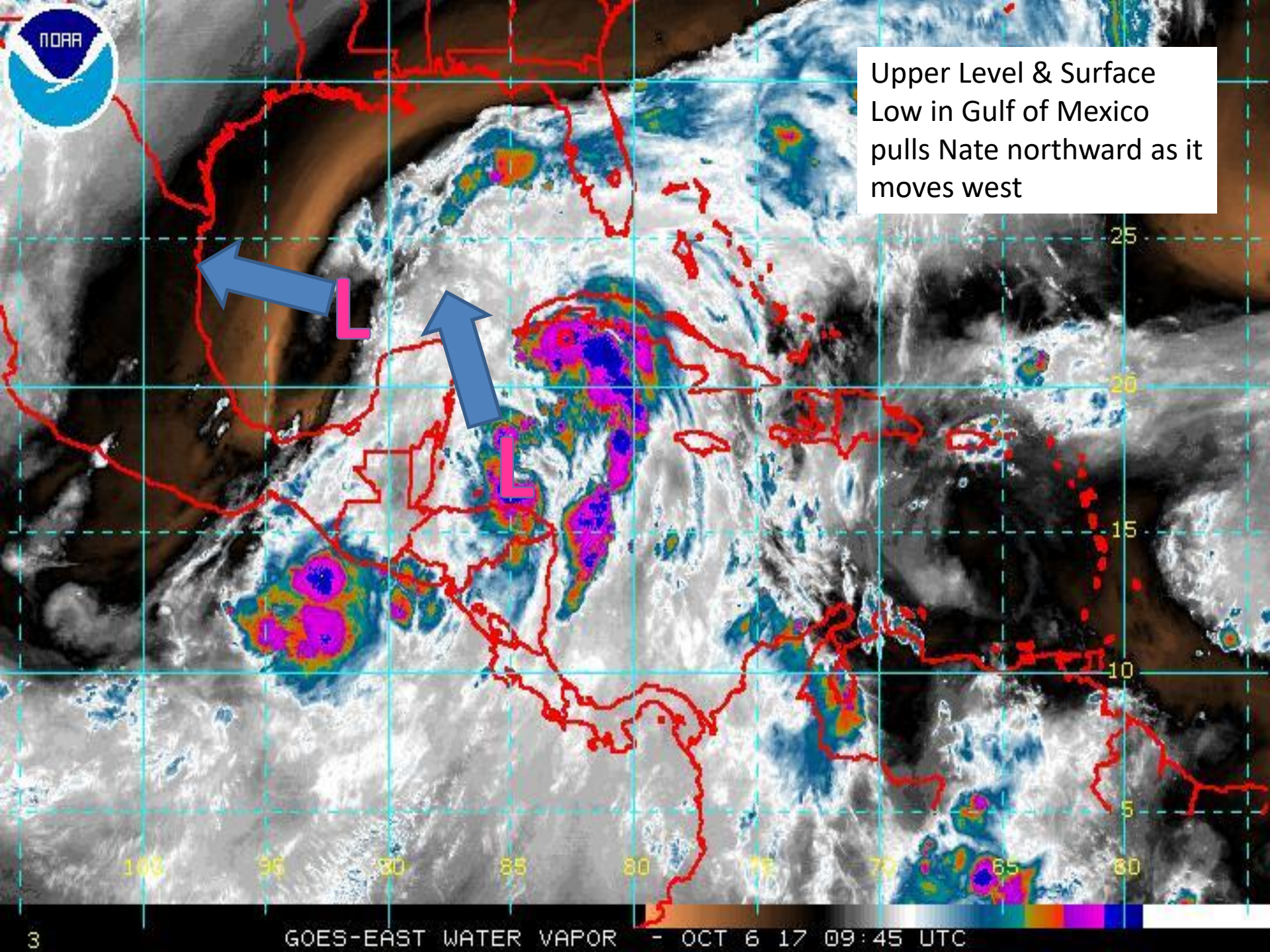
⊗ Post-Tropical Cyclone ✖ Remnants

Nate Satellite



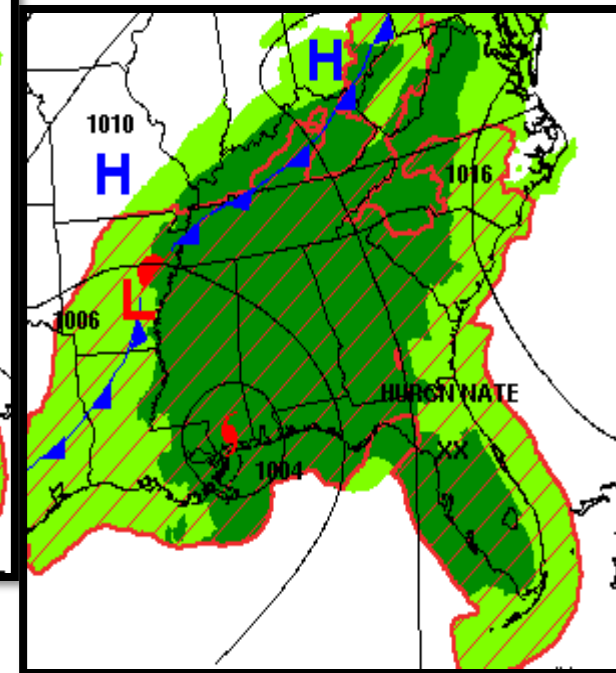
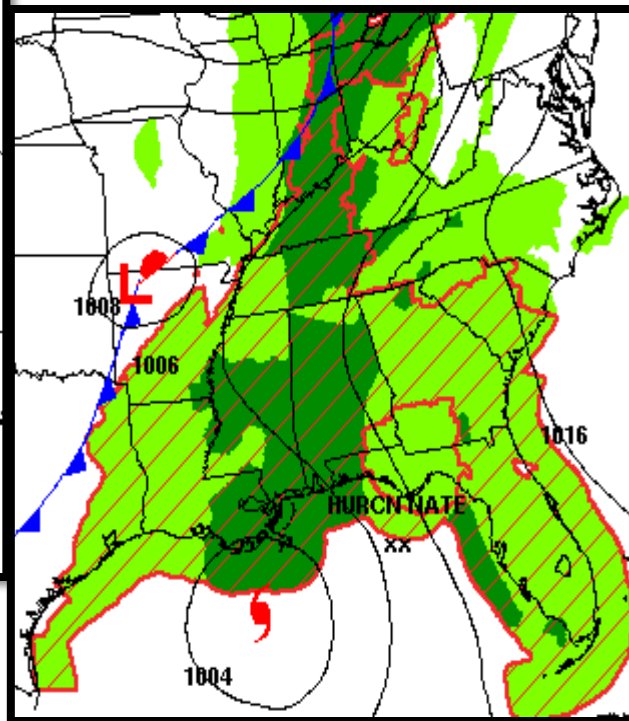
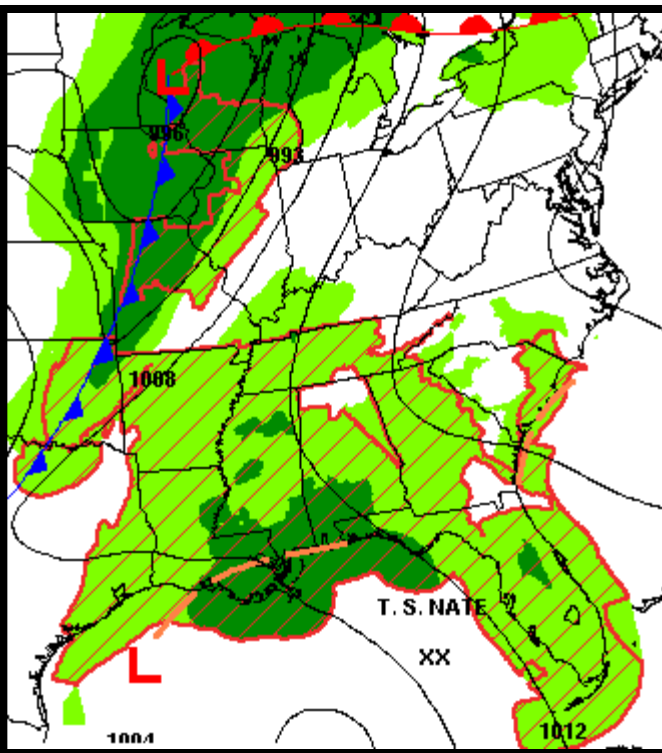


Upper Level & Surface
Low in Gulf of Mexico
pulls Nate northward as it
moves west



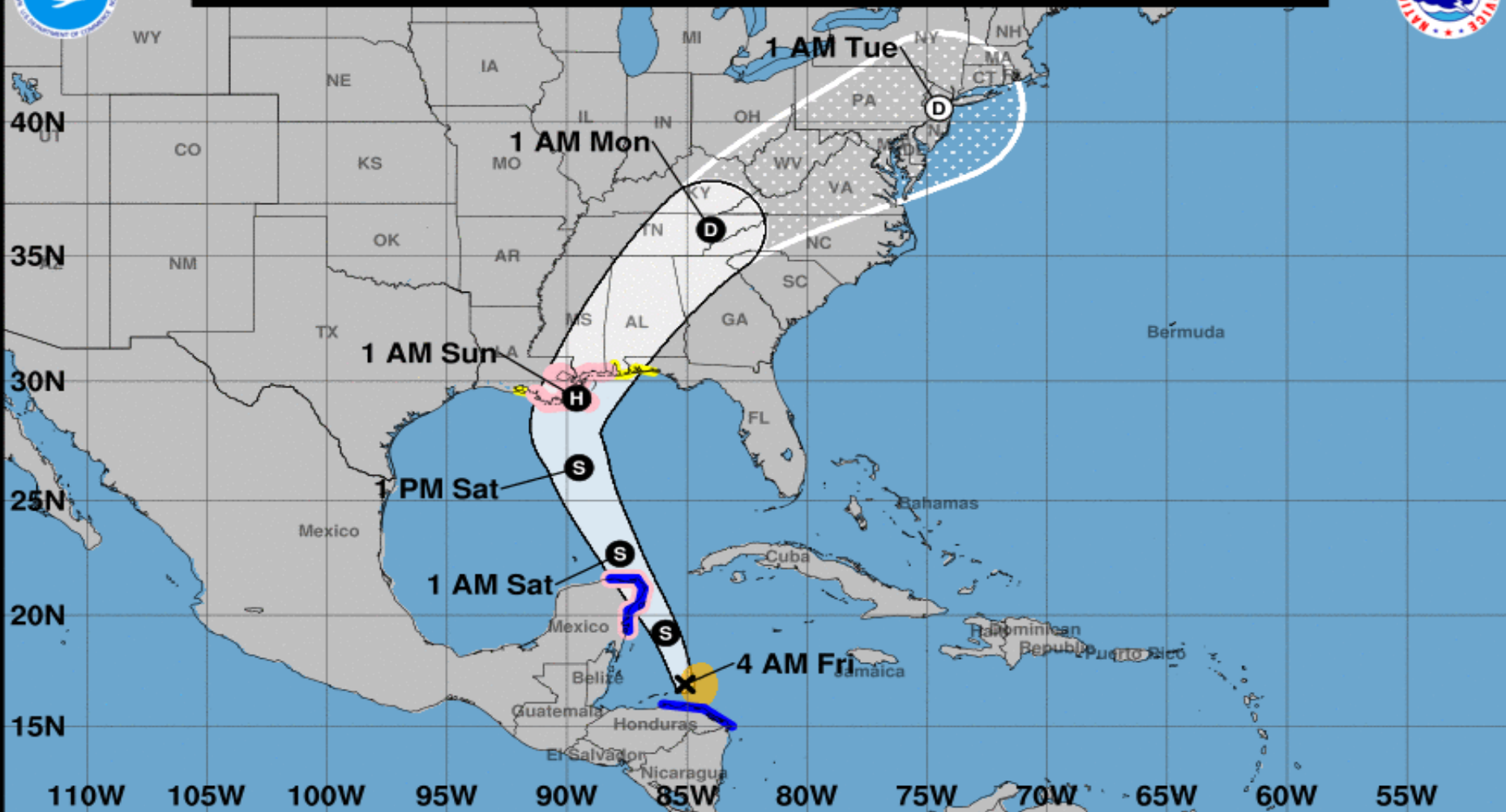
Forecast Weather Map – Saturday (left), Saturday night (center) and Sunday (right)

Nate is forecast to move in between high pressure off the New England coast and a cold front moving into the Ohio/Mississippi Valleys. The non-tropical low pressure system in the western Gulf will pull Nate north towards Louisiana before the front induces a northeast turn.





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 Nate

Friday October 06, 2017

4 AM CDT Advisory 8

NWS National Hurricane Center

Current information: x

Center location 16.9 N 85.1 W

Maximum sustained wind 45 mph

Movement NNW 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

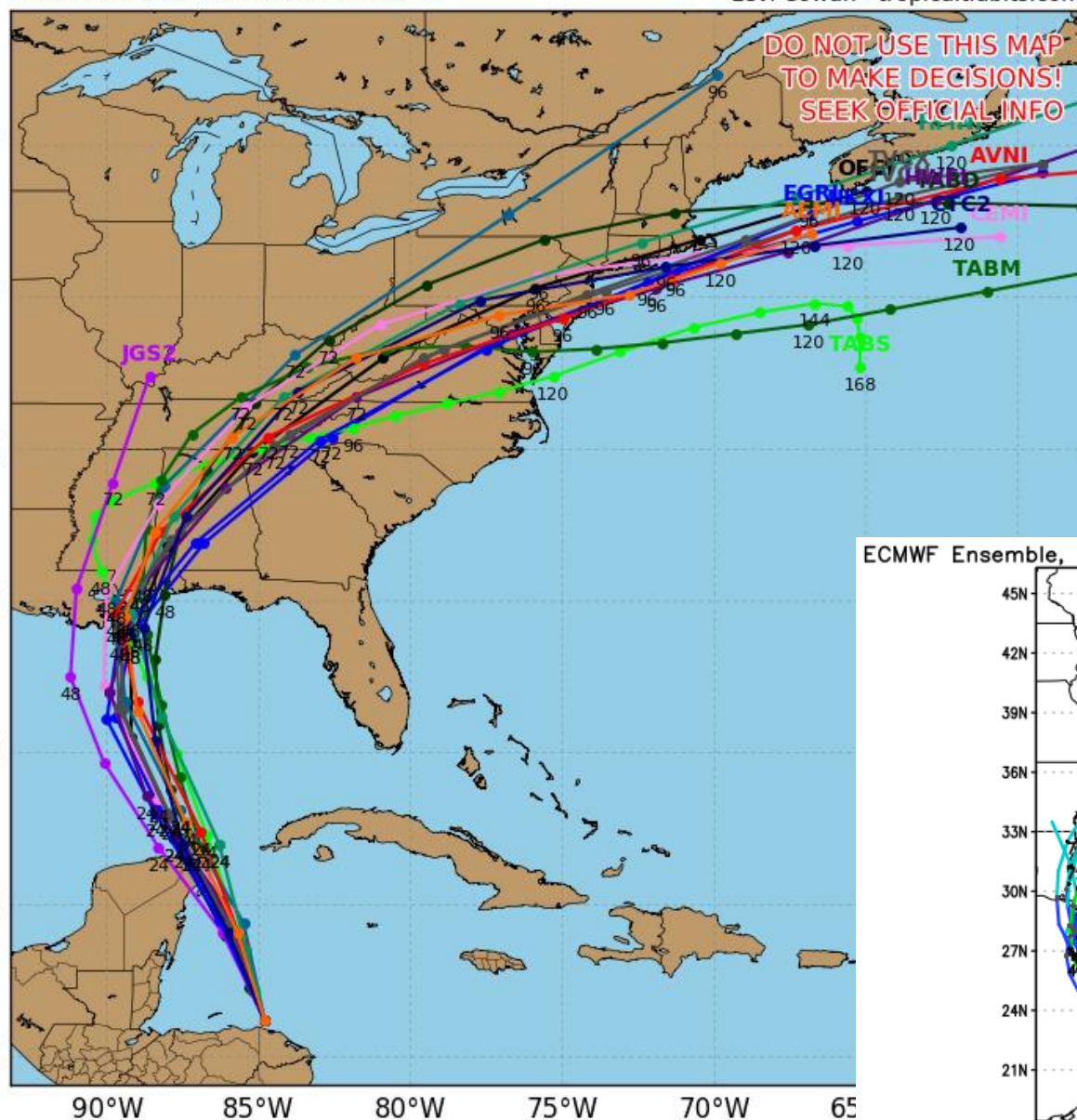
Current wind extent:

Hurricane Trop Stm

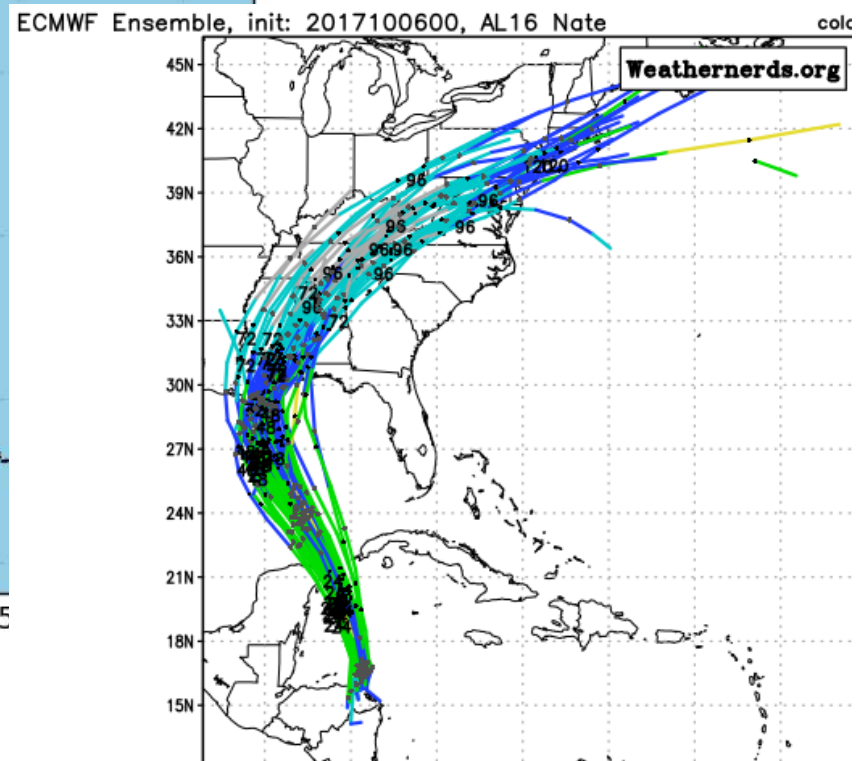
Tropical Storm NATE Model Track Guidance

Initialized at 06z Oct 06 2017

Levi Cowan - tropicaltidbits.com



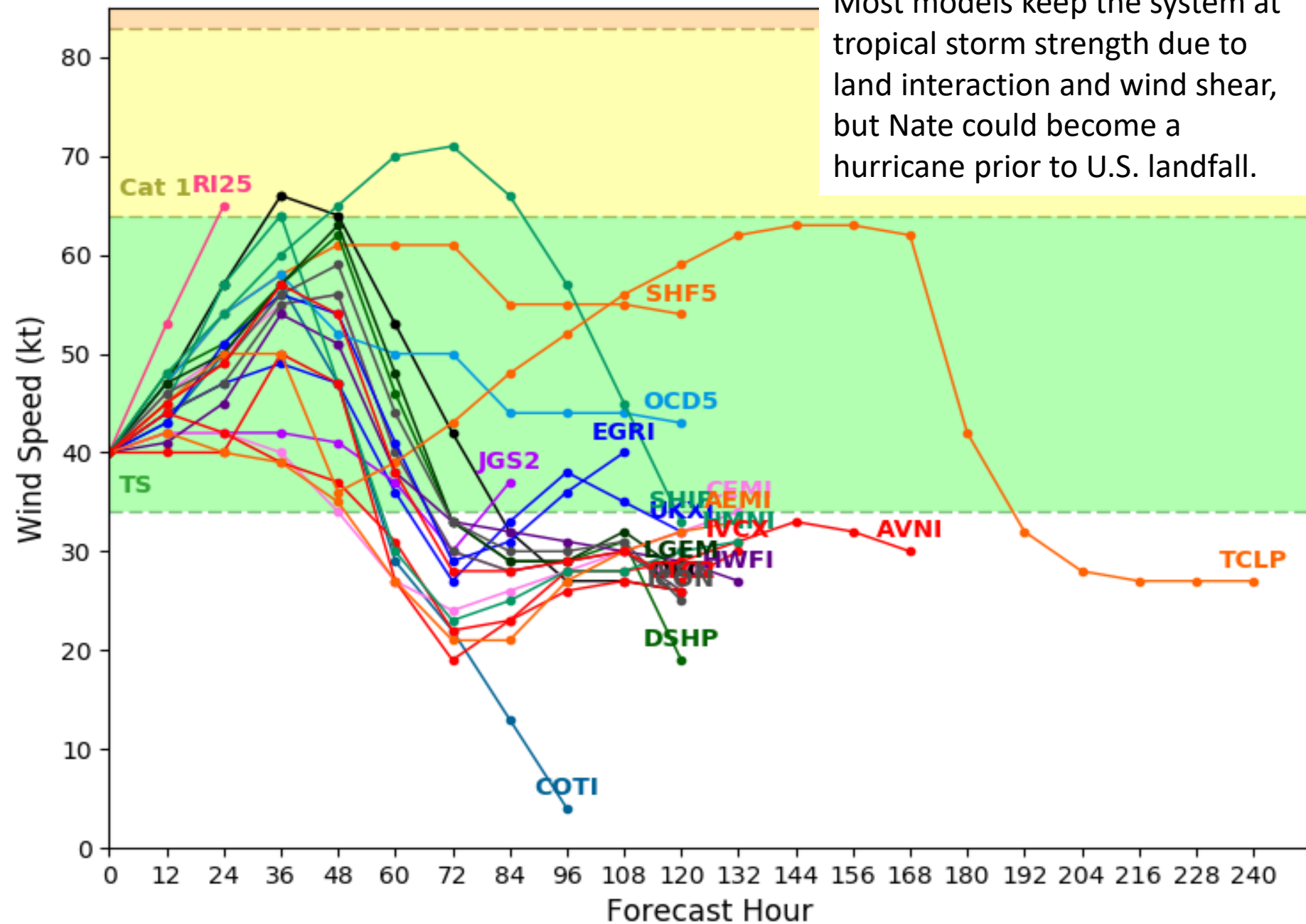
Model guidance shifted slightly to the east overnight, but remain in good agreement. The range of possibilities is between Pensacola, FL and Morgan City, Louisiana.

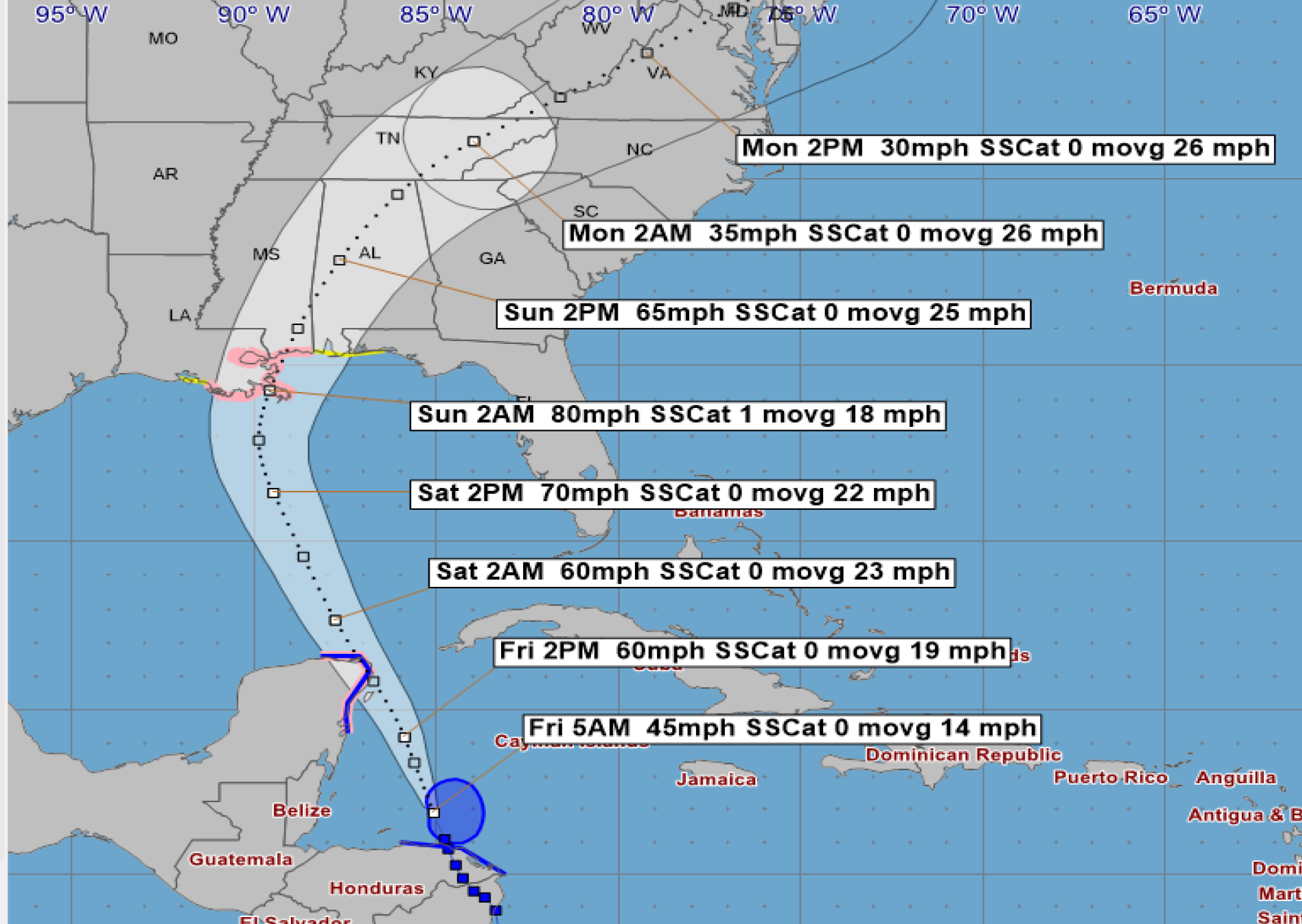


Tropical Storm NATE Model Intensity Guidance

Initialized at 06z Oct 06 2017

Most models keep the system at tropical storm strength due to land interaction and wind shear, but Nate could become a hurricane prior to U.S. landfall.





Tropical Storm Nate - Friday, October 6, 2017 5 AM EDT Advisory #8

Center Location: 16.9 N 85.1 W Maximum Sustained Winds: 45 mph Movement: 14 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 \geq 34kt/39mph
 strong tropical storm \geq 50kt/58mph
 hurricane \geq 64kt/74mph

TROPICAL ALERTS

HURRICANE
WARNING

TROPICAL STORM
WARNING

HURRICANE
WATCH

TROPICAL STORM
WATCH

Conditions Likely

Conditions Possible

Amite City

Mobile

Biloxi

Pensacola

Abbeville

New
Orleans

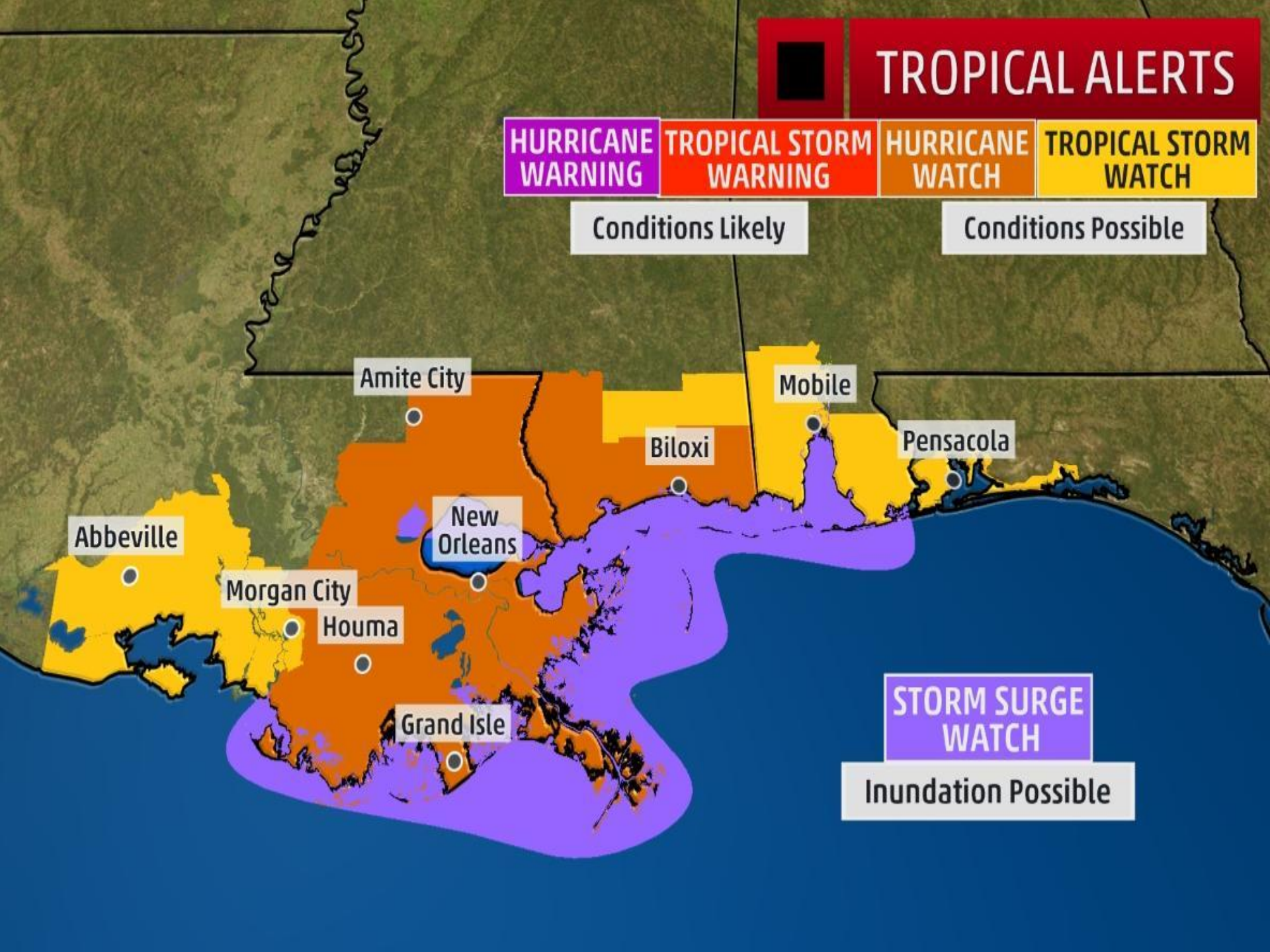
Morgan City

Houma

Grand Isle

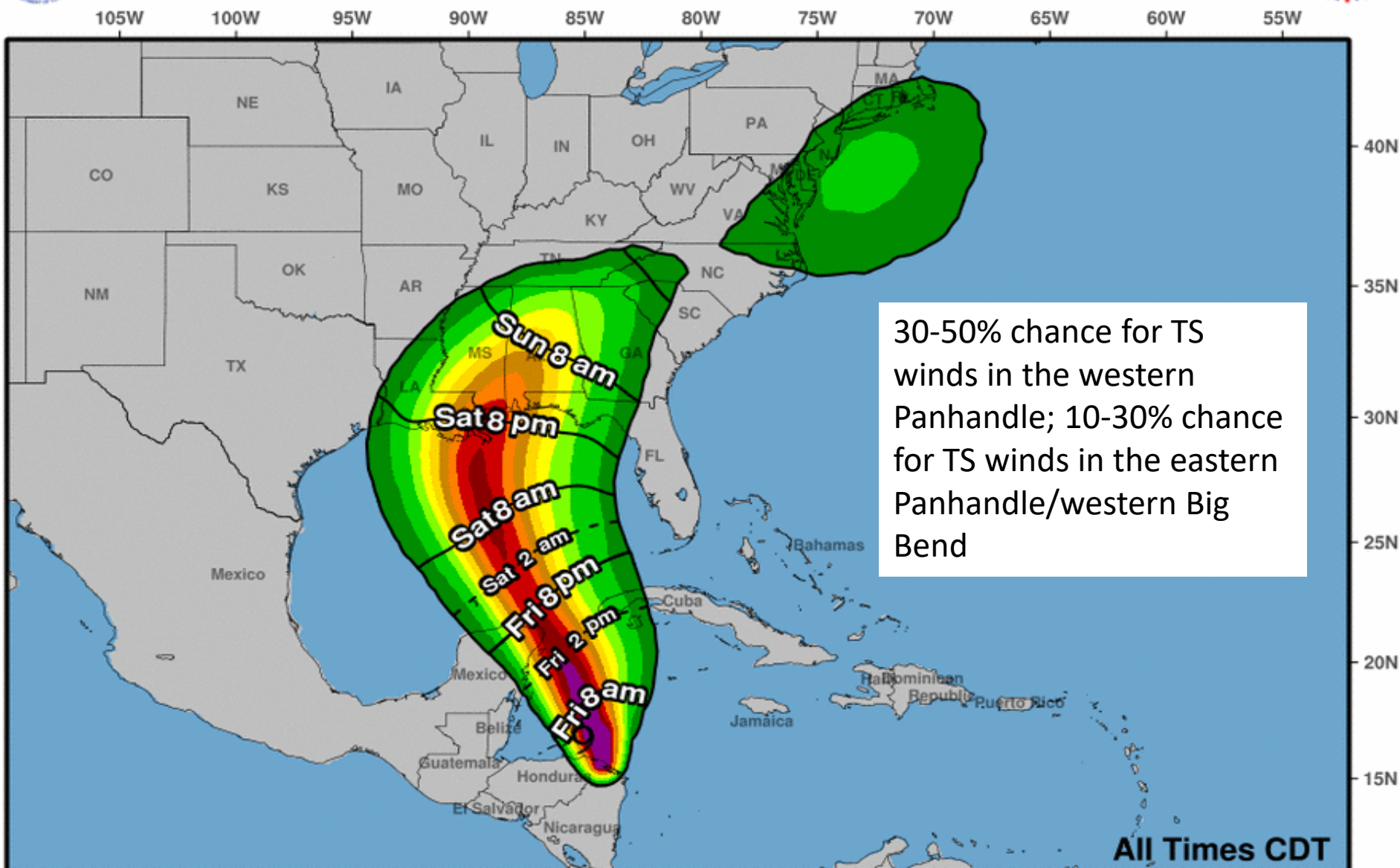
STORM SURGE
WATCH

Inundation Possible



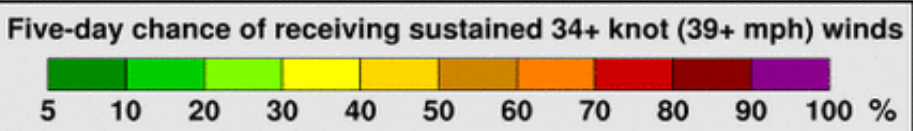


Most Likely Arrival Time of Tropical-Storm-Force Winds



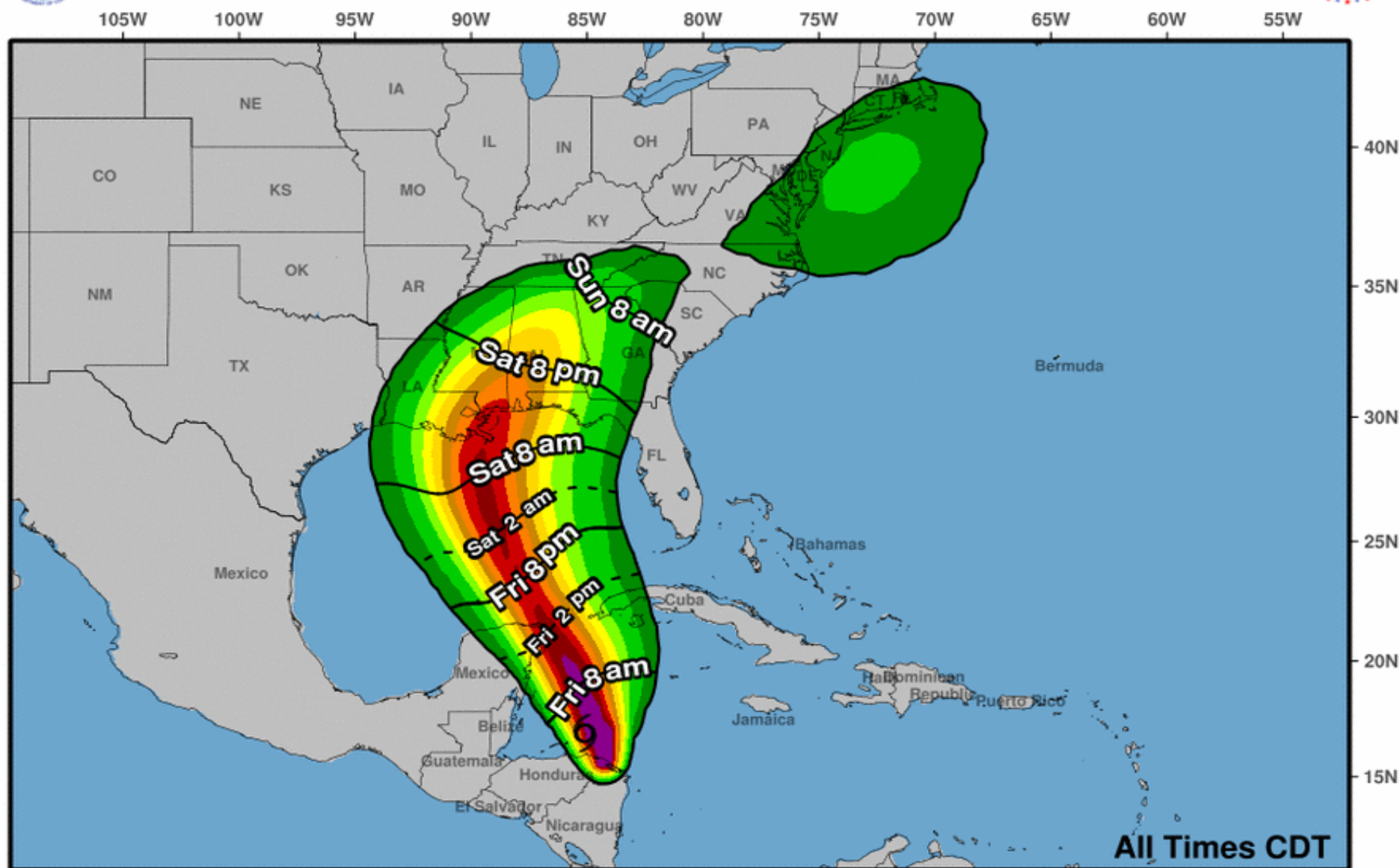
Tropical Storm Nate
Fri. Oct. 6, 2017 4 am CDT
Advisory 8

Storm Location & Wind Speed (knots)
○ <34 ◐ 34-63 ● ≥64





Earliest Reasonable Arrival Time of Tropical-Storm-Force Winds



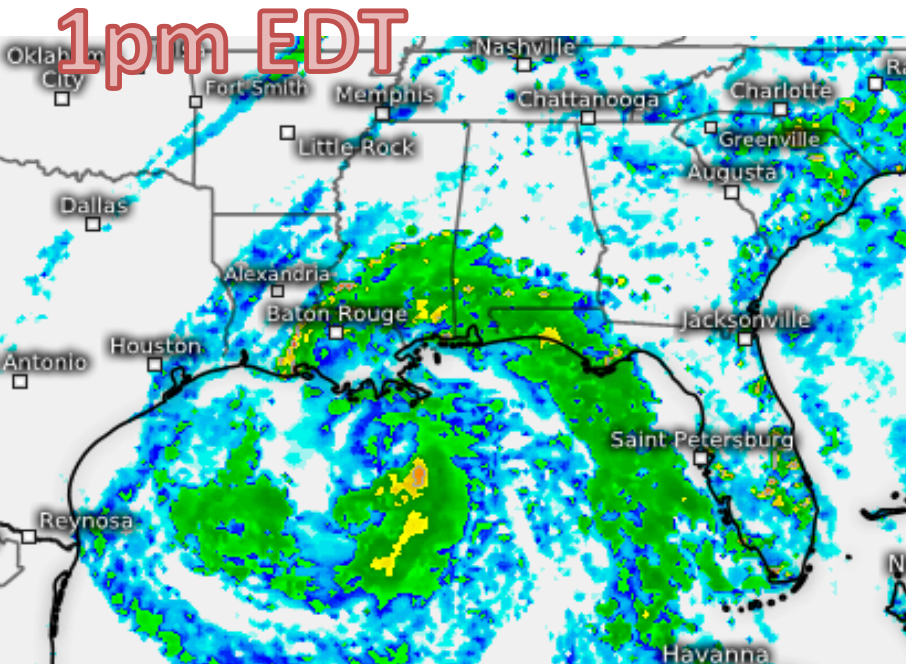
Tropical Storm Nate
Fri. Oct. 6, 2017 4 am CDT
Advisory 8

**Storm Location &
Wind Speed (knots)**
○ <34 ◐ 34-63 ● ≥64

Five-day chance of receiving sustained 34+ knot (39+ mph) winds

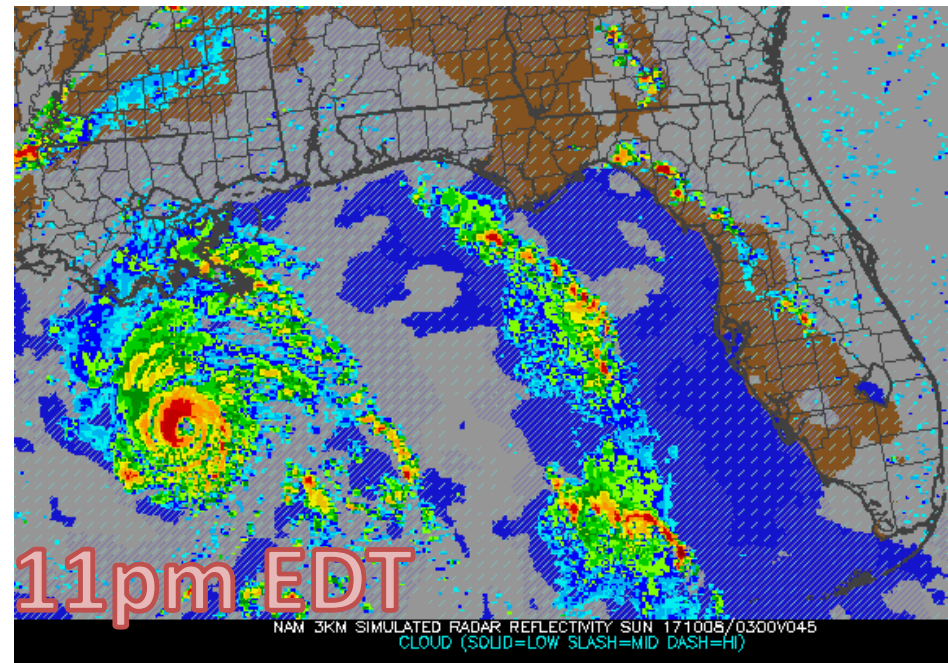
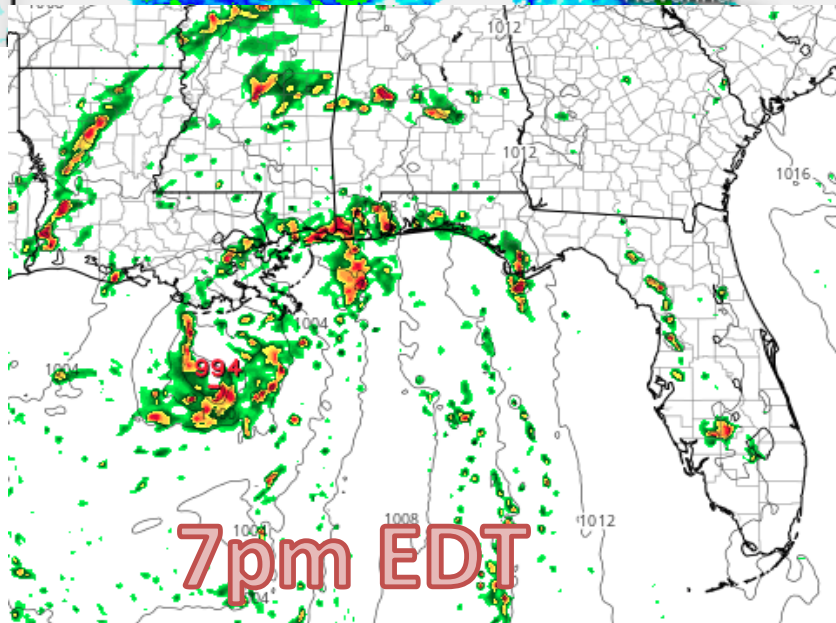


Future Radar – Saturday



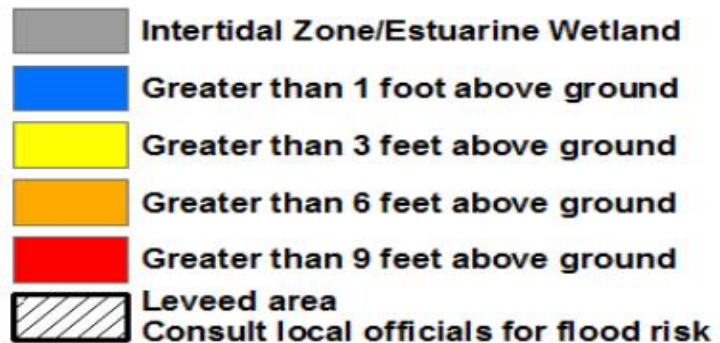
Outer rain bands from Nate could reach Florida as early as Saturday afternoon or evening, depending on the forward speed of the storm. Other models have the outer bands reaching Florida Saturday night.

Note: These are model simulations and subject to change.





Potential Storm Surge Flooding*



Map Layer Options:

Inundation Layer
Only

Inundation with
Intertidal Layer

Map Opacity Slider

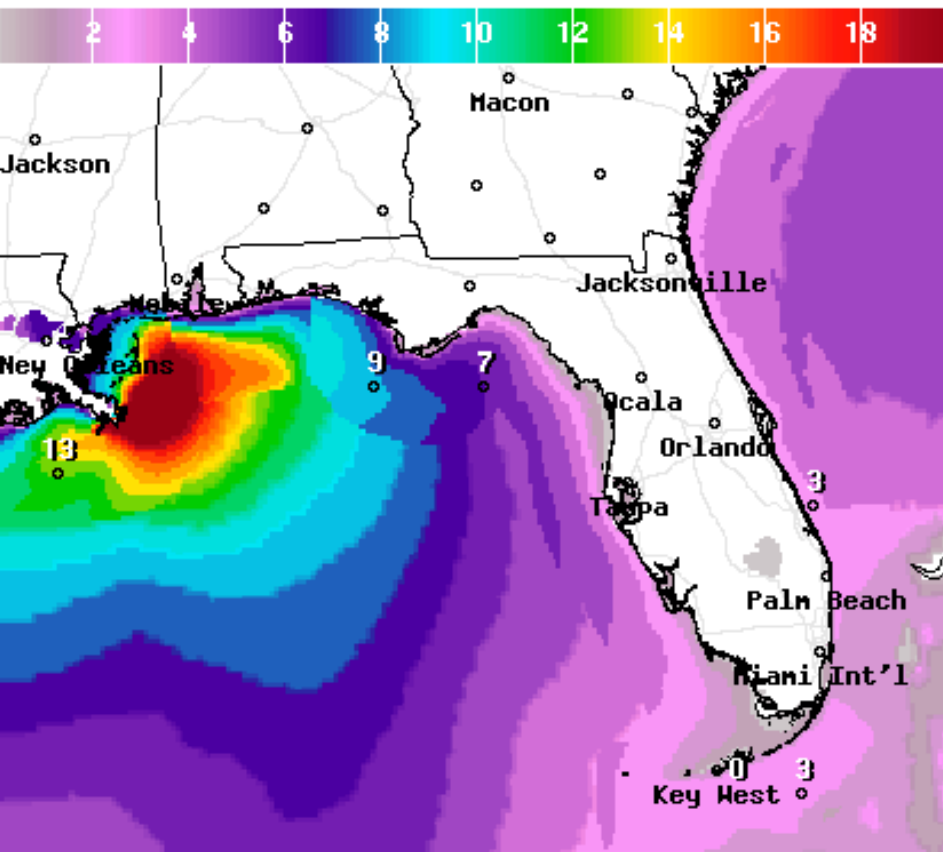
Download GIS data
(Instructions)

Inundation Layer Only

Inundation with Intertidal Layer

Forecast Wave Heights

Sunday



Wave Height(ft) Ending Sun Oct 08 2017 8 AM EDT

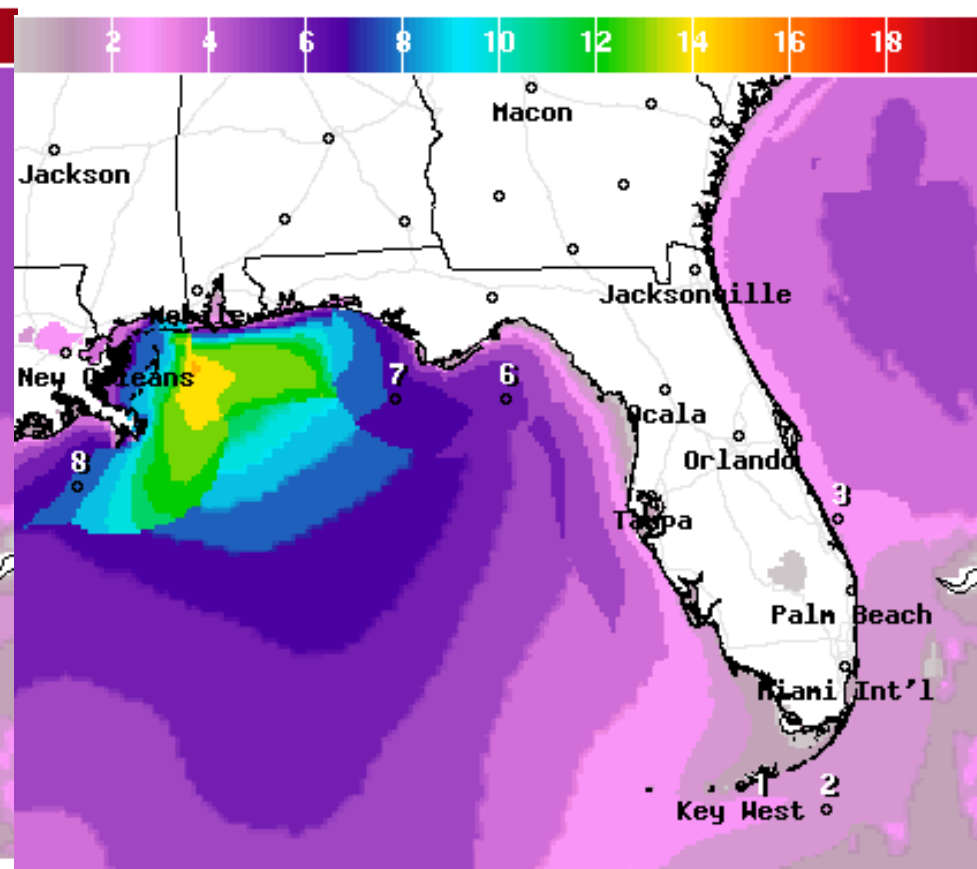
(Sun Oct 08 2017 12Z)



National Digital Forecast Database

10z issuance

Graphic created-Oct 06 6:46AM EDT



Wave Height(ft) Ending Sun Oct 08 2017 2 PM EDT

(Sun Oct 08 2017 18Z)



National Digital Forecast Database

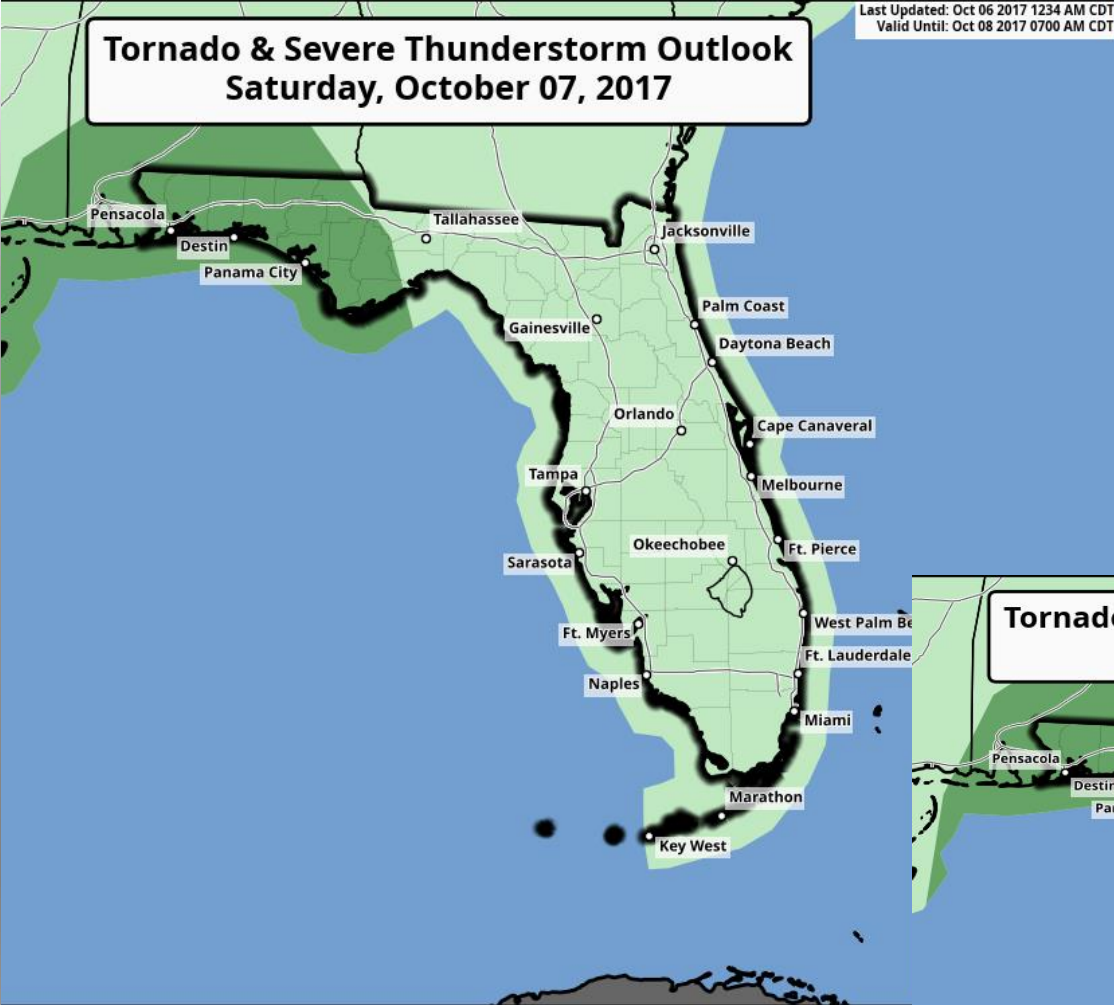
10z issuance

Graphic created-Oct 06 6:46AM EDT



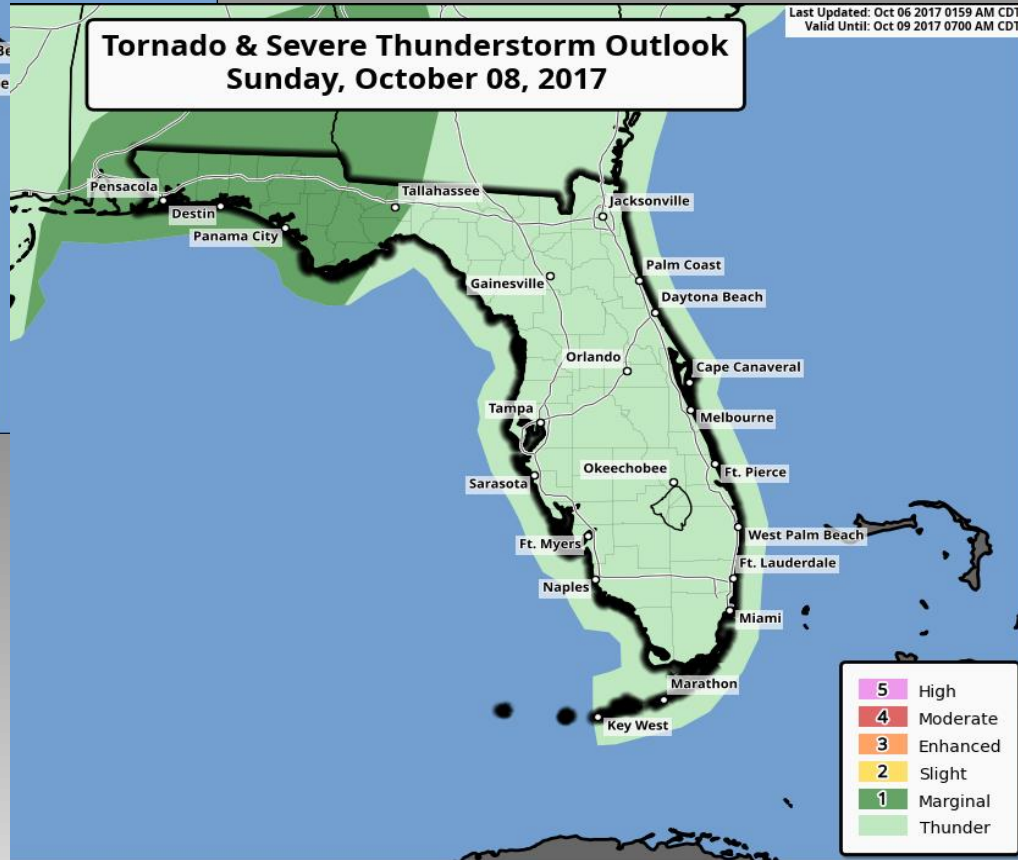
Last Updated: Oct 06 2017 1234 AM CDT
Valid Until: Oct 08 2017 0700 AM CDT

Tornado & Severe Thunderstorm Outlook Saturday, October 07, 2017



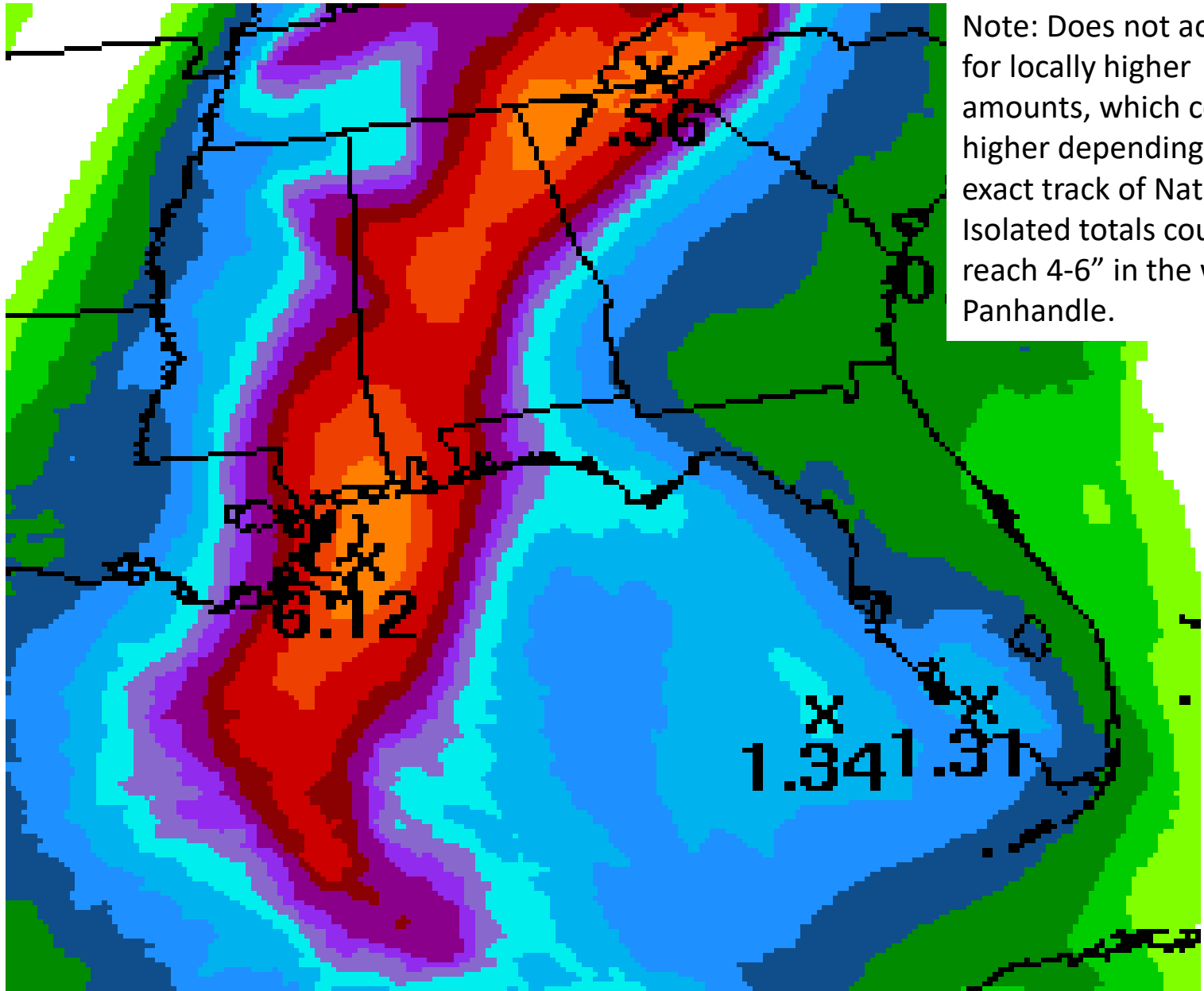
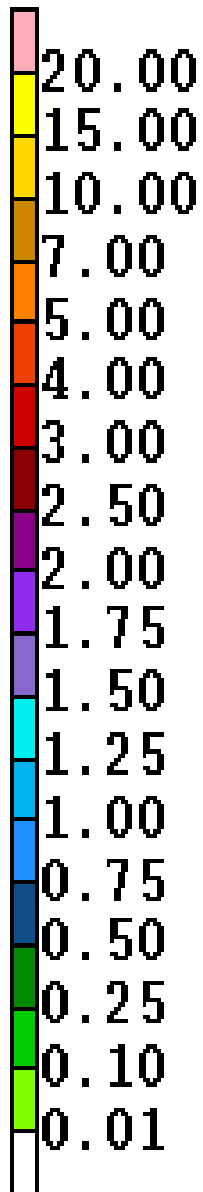
Last Updated: Oct 06 2017 0159 AM CDT
Valid Until: Oct 09 2017 0700 AM CDT

Tornado & Severe Thunderstorm Outlook Sunday, October 08, 2017



- 5 High
- 4 Moderate
- 3 Enhanced
- 2 Slight
- 1 Marginal
- Thunder

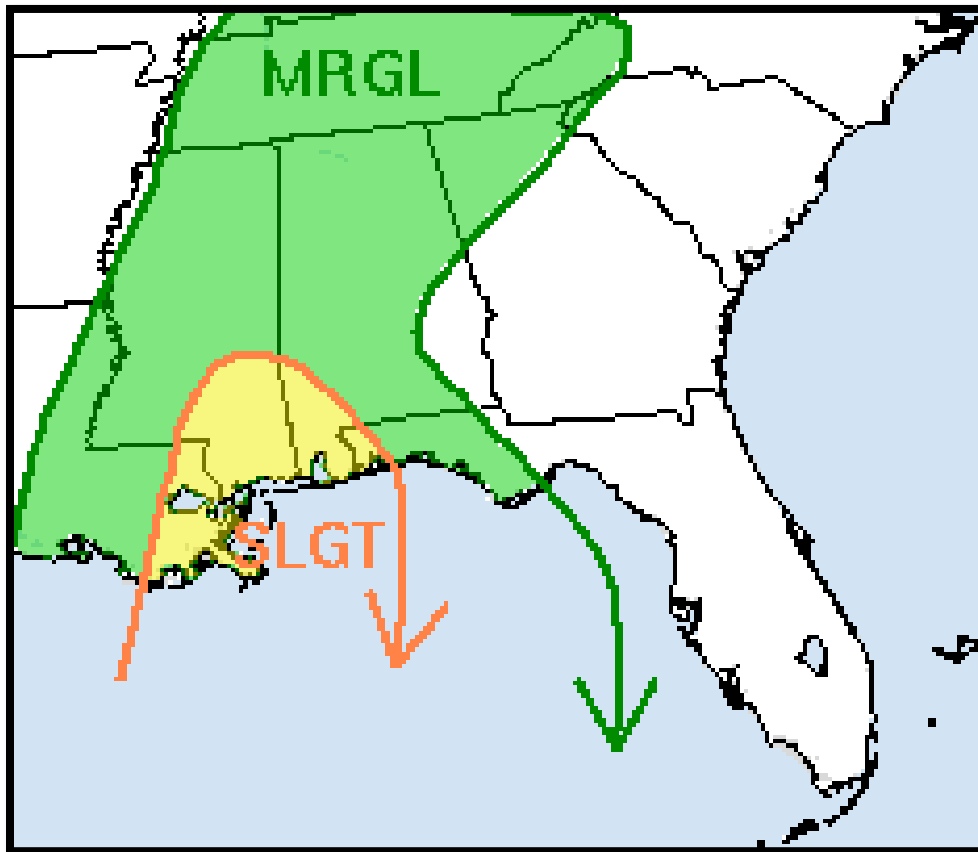
Forecast Total Rainfall – Next 3 Days



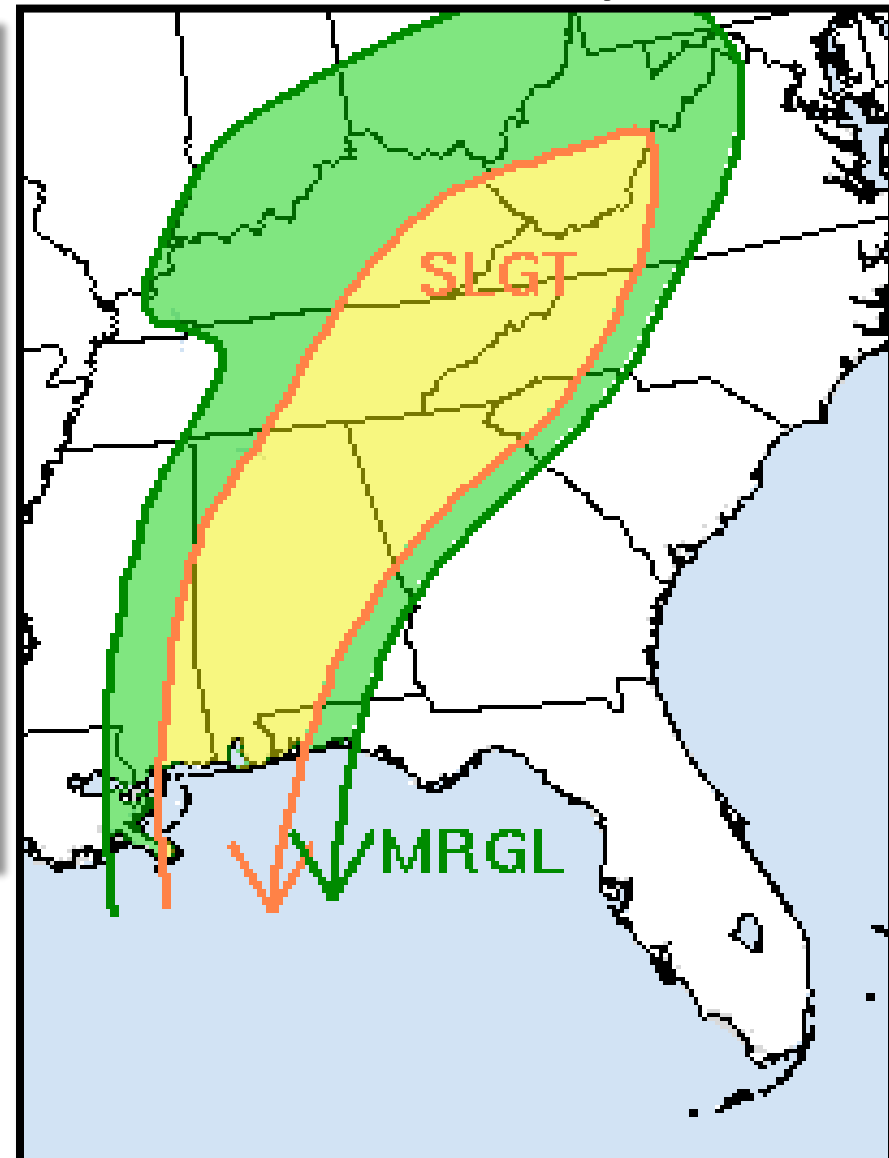
Note: Does not account for locally higher amounts, which could be higher depending on exact track of Nate. Isolated totals could reach 4-6" in the western Panhandle.

Flash Flood Threat

Saturday



Sunday



Risk of rainfall exceeding flash flood guidance to the right of a line

HIGH: > 15%	SLGT: 5%-10%
MDT: 10%-15%	MRGL: 2%-5%

Predominant Daytime Weather - Friday

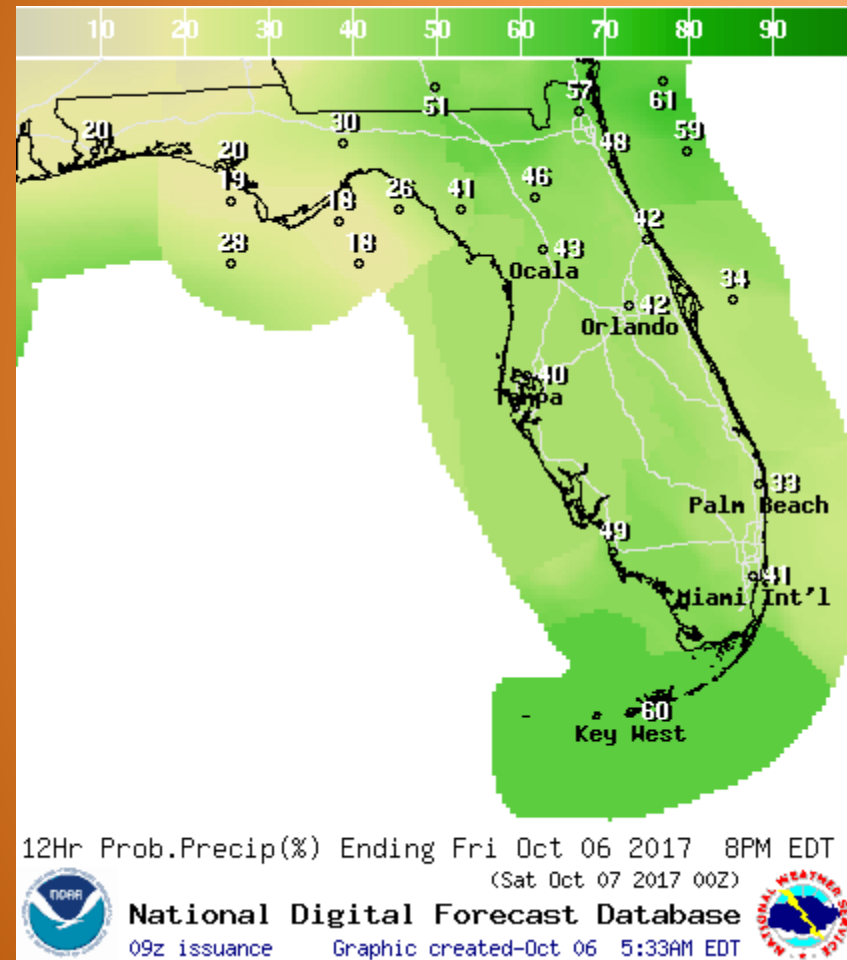
Sky: Mostly Cloudy statewide

E/SE wind 5-10mph, gusts 15 mph

Rain: 40-60% Peninsula/Keys,
20-30% Panhandle

High Temperatures:
Mid- Upper 80s

Hazards:
Occasional Lightning
Brief Heavy Downpours
Coastal Flooding



Predominant Nighttime Weather

Sky: Mostly Cloudy

ESE wind 5-10 mph, gusts to 15mph

Rain: 20-40% Coast, 50% Keys

Low Temperatures:

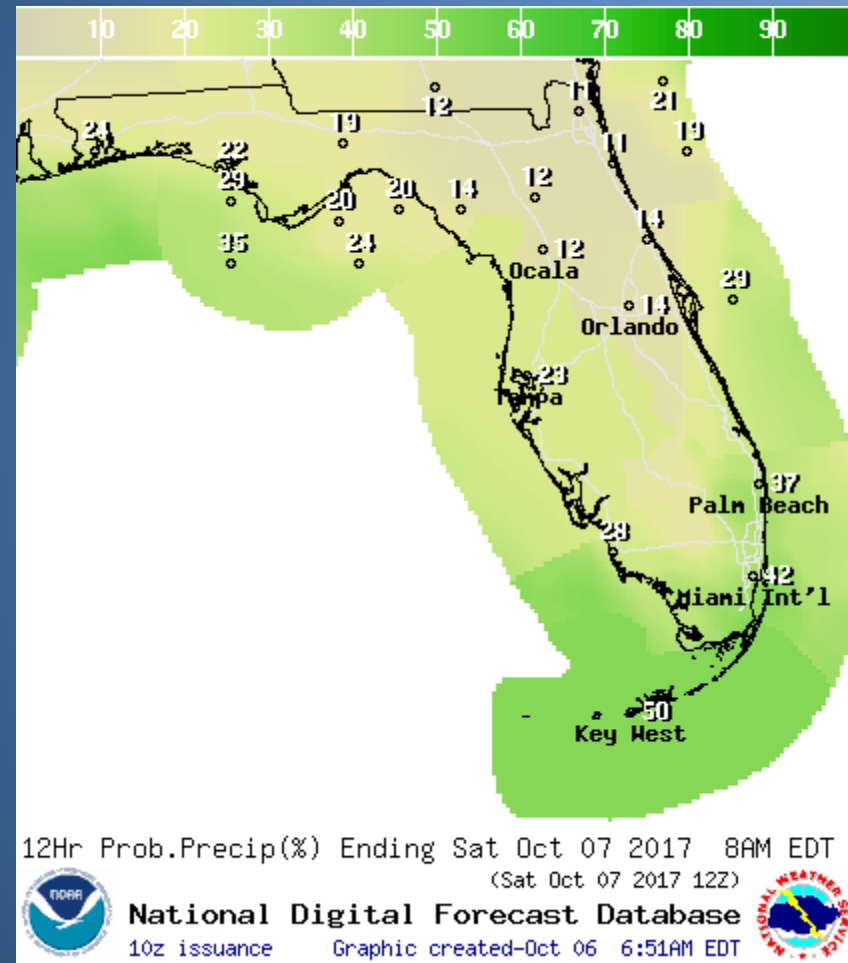
Mid-Upper 70s (North/Central FL)

Upper 70s-Low 80s (South FL)

Hazards:

Occasional Lightning

Coastal Flooding



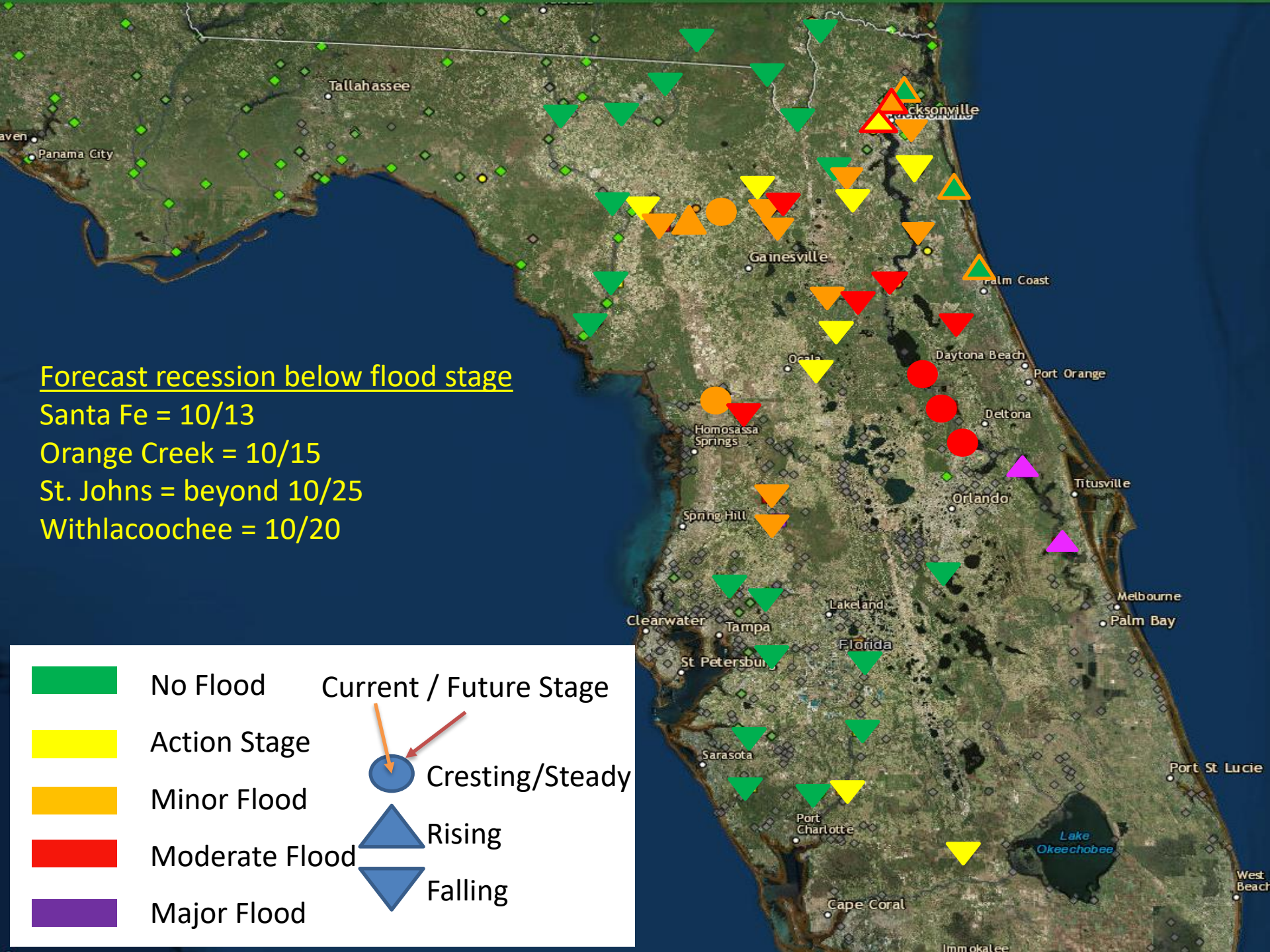
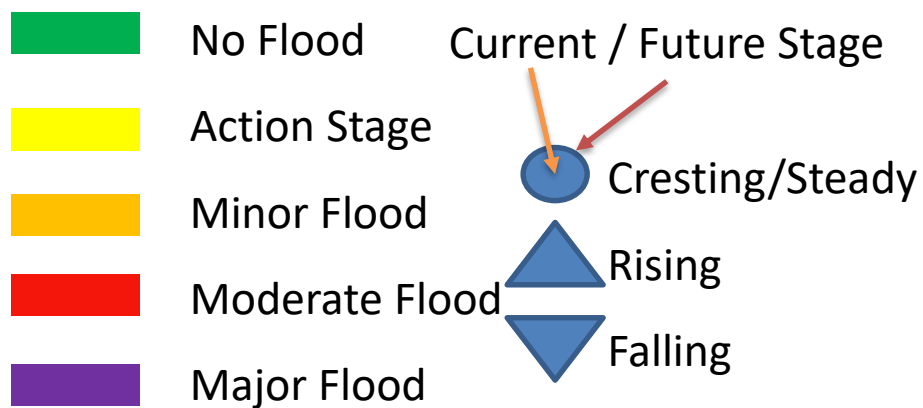
Forecast recession below flood stage

Santa Fe = 10/13

Orange Creek = 10/15

St. Johns = beyond 10/25

Withlacoochee = 10/20



Summary:

- At 5 AM EDT Friday, Tropical Storm Nate was located over the northwestern Caribbean Sea, or about 895 miles south of Apalachicola, Florida.
- Nate is now moving north-northwest near 14mph, and this motion is expected to continue during the next couple of days with a further increase in forward speed.
- The center of Nate is forecast to emerge into the southern Gulf of Mexico early Saturday morning and make landfall along the U.S. Gulf Coast early Sunday morning.
- Maximum sustained winds are currently near 45mph and Nate is expected to gradually strengthen, becoming a hurricane in the Gulf of Mexico before landfall.
- Computer models are in good agreement on track and confidence is high on a landfall between New Orleans and Pensacola, but models are in some disagreement on strength.
- Elsewhere, an area of low pressure is forecast to form over the northeastern Atlantic and could acquire some subtropical or tropical characteristics early next week while it remains nearly stationary.

Florida Outlook:

- The western Florida Panhandle is now within the 3 day cone of error, and the chances for tropical storm force winds have increase to 30-50% for much the western Florida Panhandle and 10-30% for the eastern Panhandle and Big Bend, which could arrive in gusts in the outer bands of Nate as early as Saturday afternoon.
- A **Tropical Storm Watch** has been issued for Escambia, Santa Rosa and Okaloosa Counties.
- There are no storm surge watches for Florida as surge values are expected to be below 2.5'. However, breaking waves of 6-10' could cause minor coastal flooding and erosion.
- Rainfall amounts of 1-3" (with isolated amounts up to 4-6" possible) is forecast for portions of the Florida Panhandle on Saturday and Sunday.
- Isolated tornadoes will also be possible Saturday and Sunday in the Panhandle.
- Breezy winds and increasing ocean swells will continue a high risk of rip currents along the entire Panhandle coast through this weekend.
- Breezy east winds combined with the lunar "King Tide" will continue to produce minor coastal flooding during high tide along the Florida East Coast. A **Coastal Flood Advisory** is in effect from Miami-Dade to Volusia County, with a **Coastal Flood Warning** in effect for the St. Johns River and tributaries through Saturday.

Another briefing packet will be issued Friday afternoon. For more information, visit the NHC website at www.hurricanes.gov.



TROPICAL UPDATE

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State Meteorological Support Unit

Florida Division of Emergency Management

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