



TROPICAL UPDATE

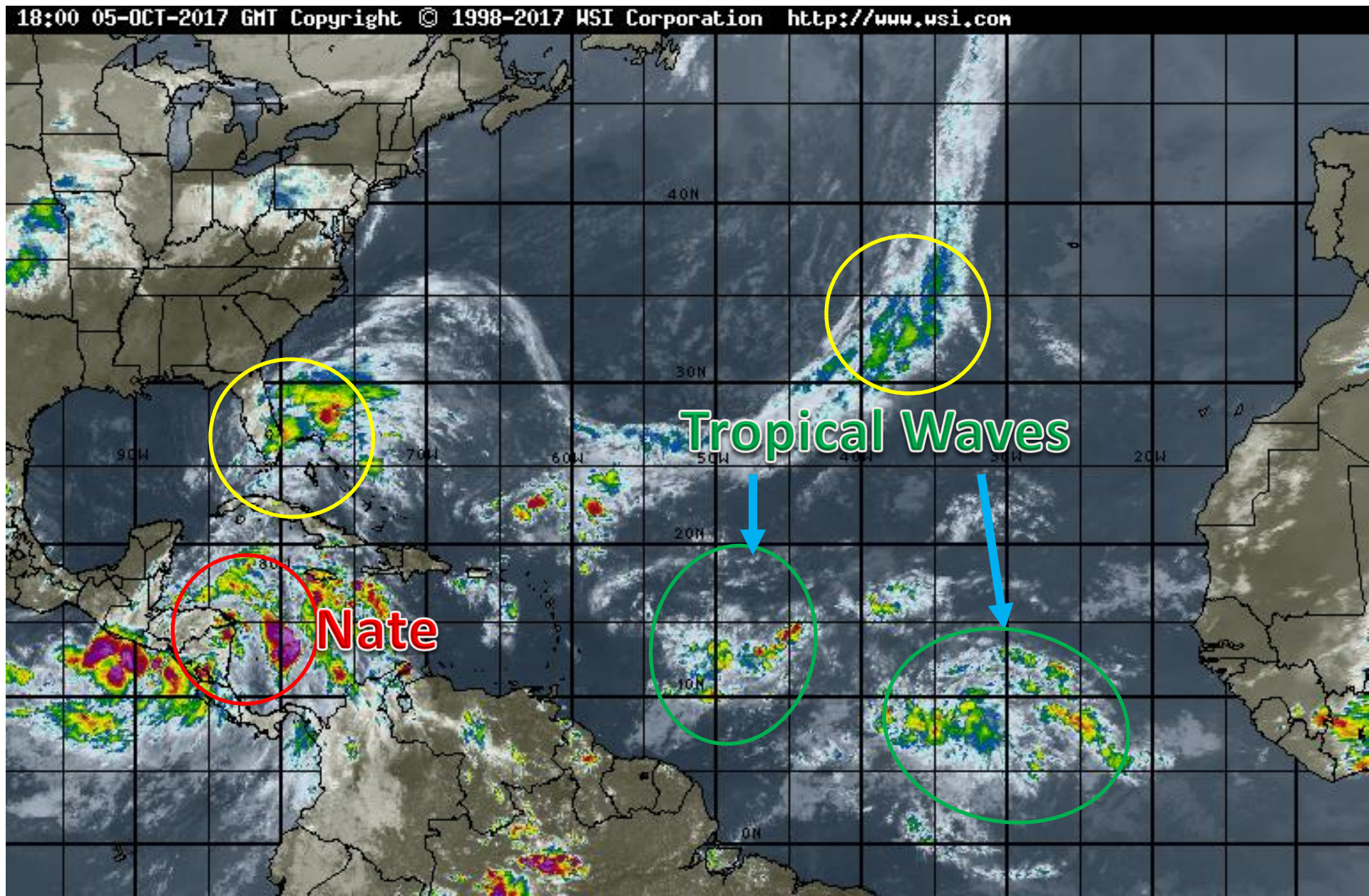
5 PM EDT

Thursday, October 5, 2017

**Tropical Storm Nate, Florida Low (near 0%) &
Northeast Atlantic Low (20%)**

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

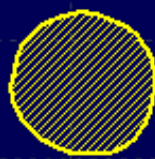
1



NATE



2



- 1. * Formation chance through 48 hours...low...near 0 percent.
- * Formation chance through 5 days...low...near 0 percent.
- 2. * Formation chance through 48 hours...low...near 0 percent.
- * Formation chance through 5 days...low...20 percent.

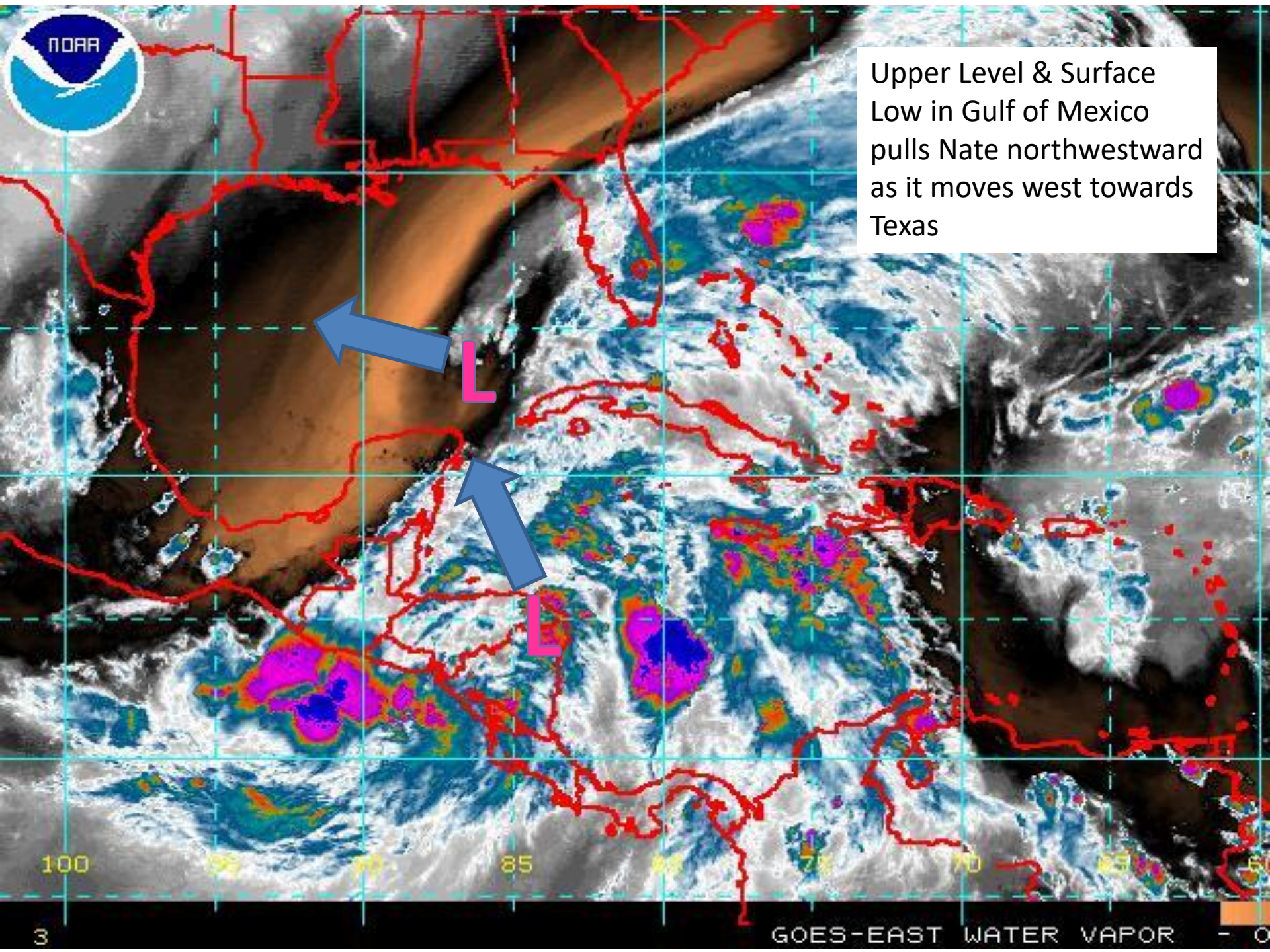
2:00 pm EDT
Thu Oct 5 2017

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



Upper Level & Surface
Low in Gulf of Mexico
pulls Nate northwestward
as it moves west towards
Texas



100

95

90

85

80

75

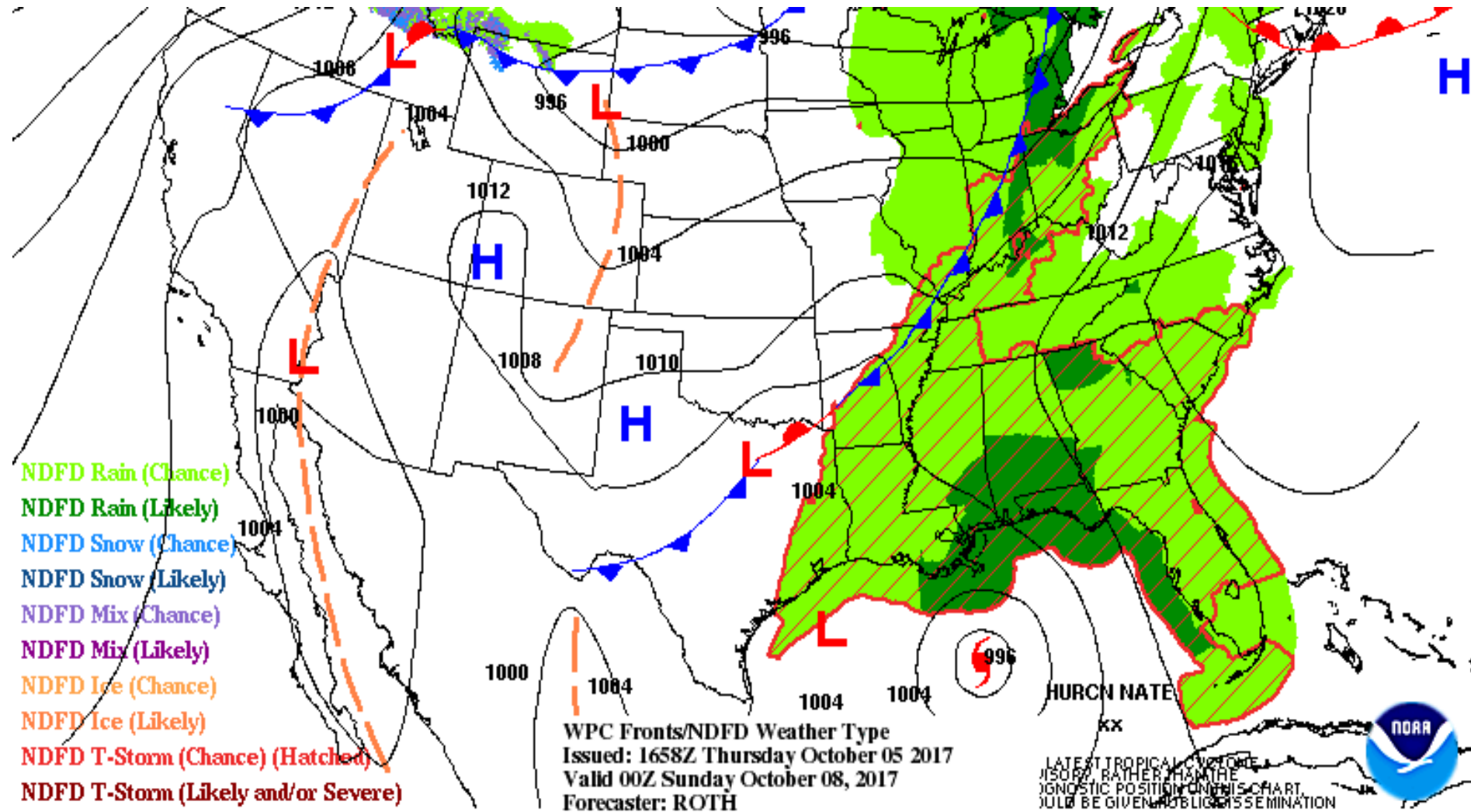
70

65

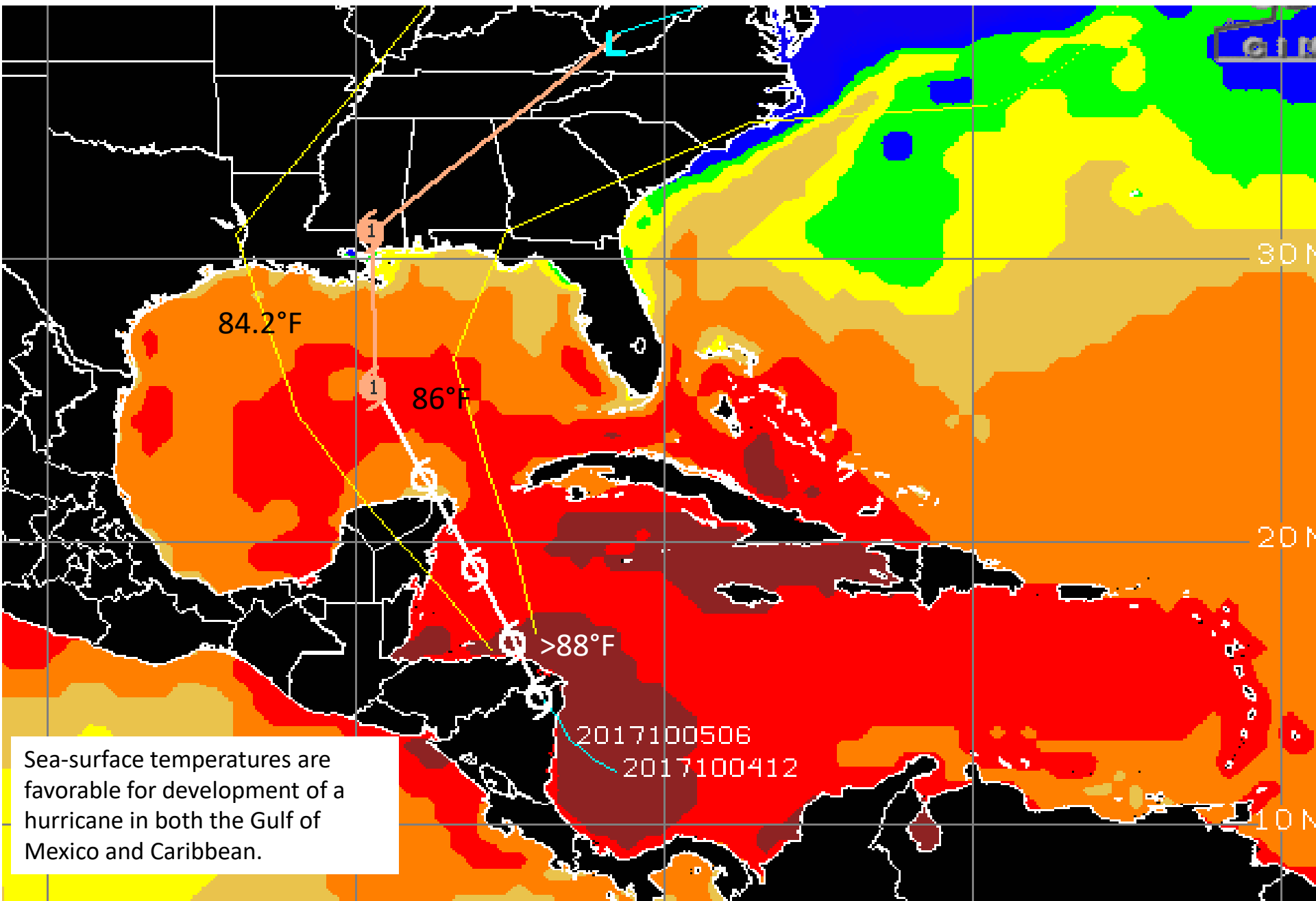
60

Forecast Weather Map – Saturday night

Nate is forecast to move in between high pressure building into eastern Florida and a cold front moving into the Ohio/Mississippi Valleys. Non-tropical low pressure near Texas currently near the FL Keys) could also “tug” Nate towards Louisiana.

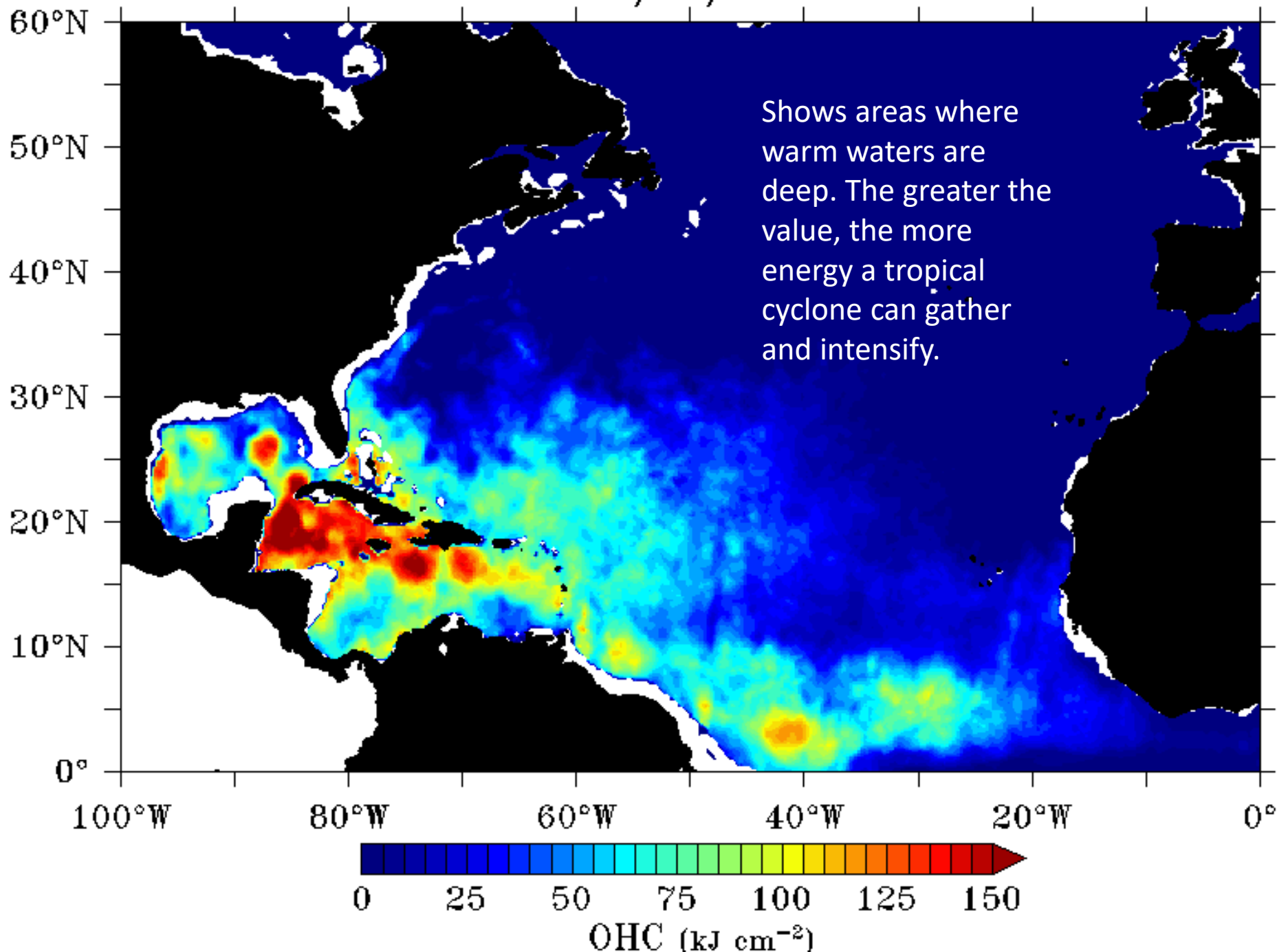


Sea Surface Temperatures

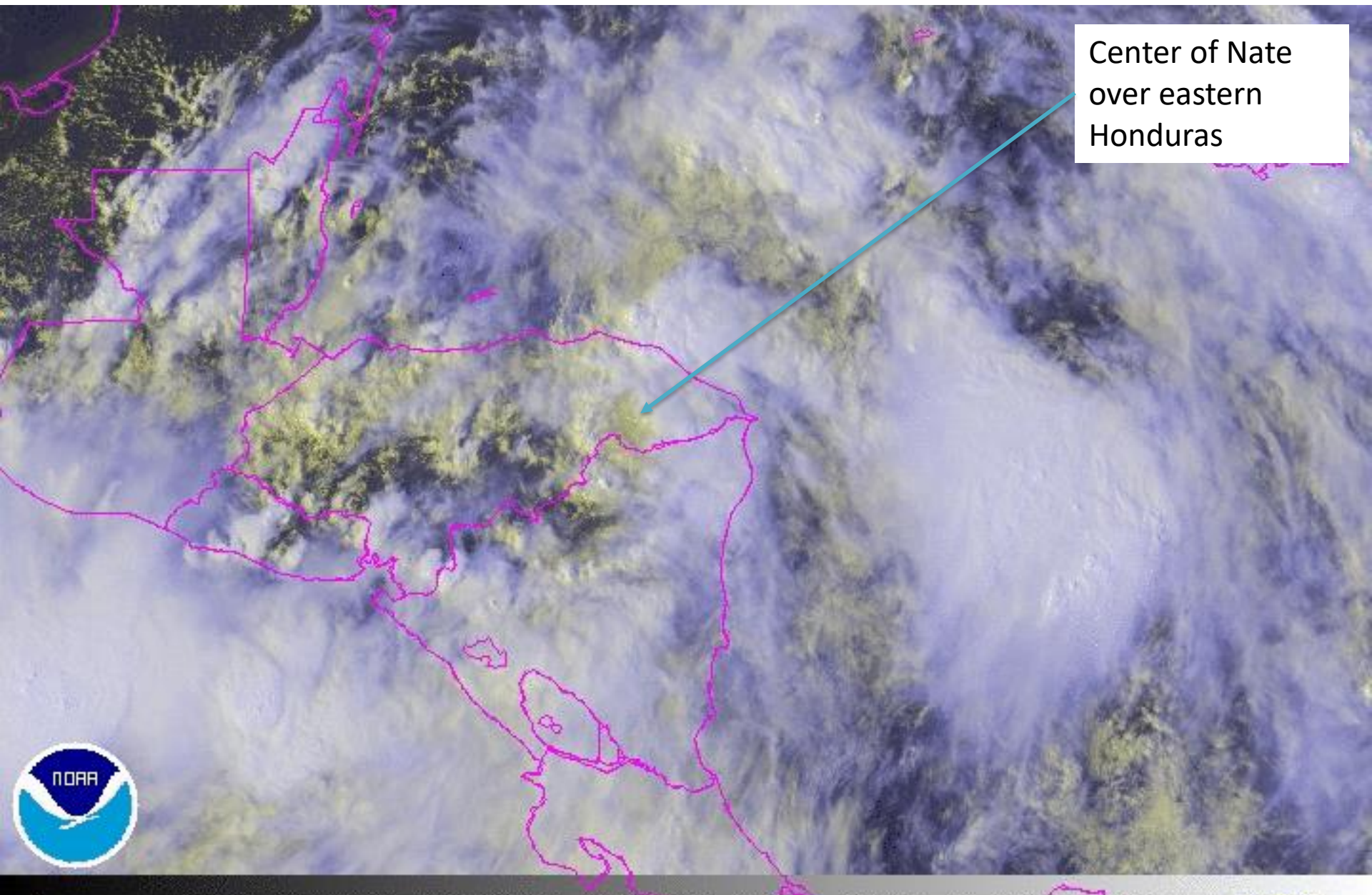


Sea-surface temperatures are favorable for development of a hurricane in both the Gulf of Mexico and Caribbean.

Ocean Heat Content: 10/05/2017 Geo-PolarBlended



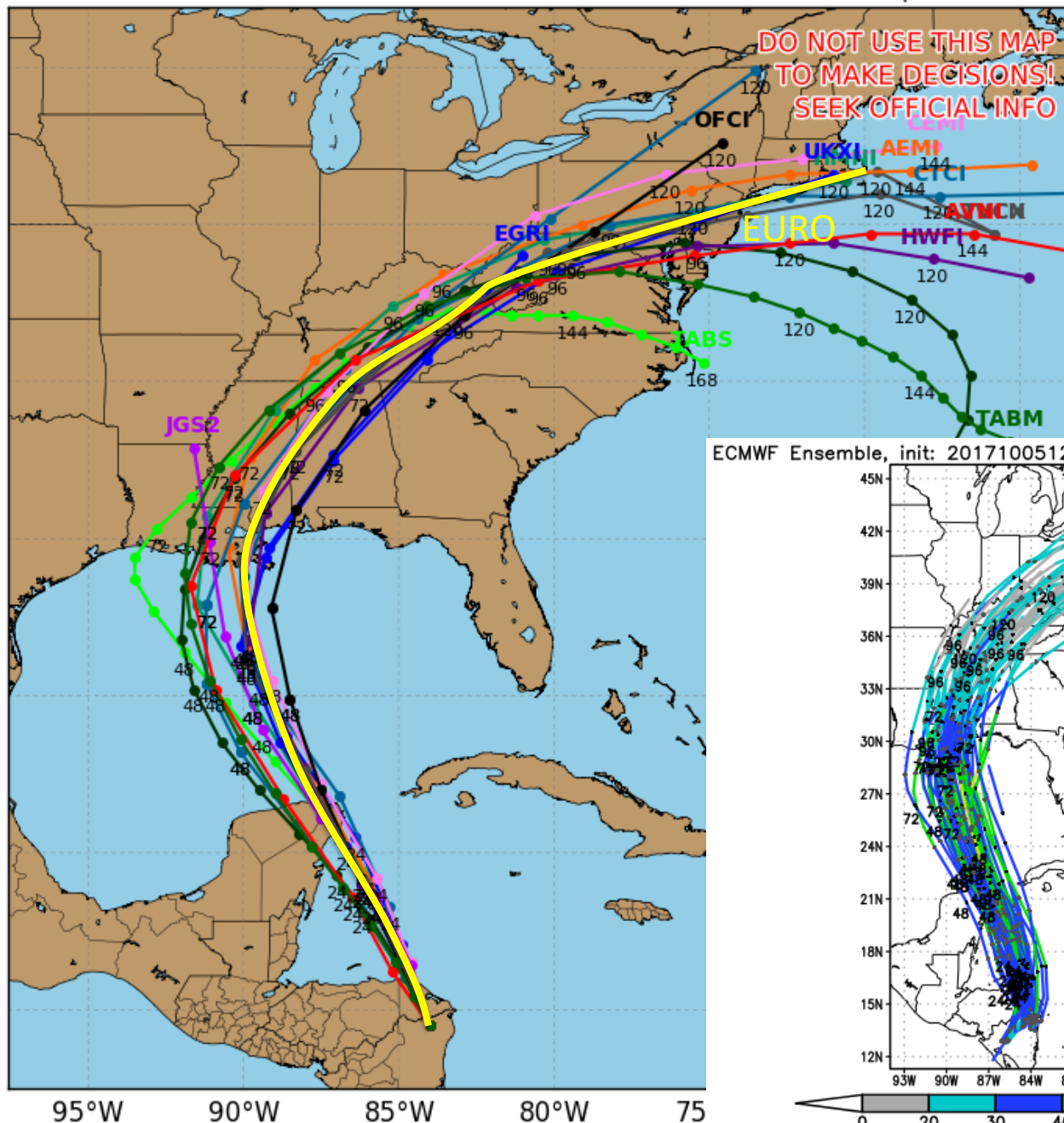
Nate Satellite



del Track Guidance

Initialized at 18z Oct 05 2017

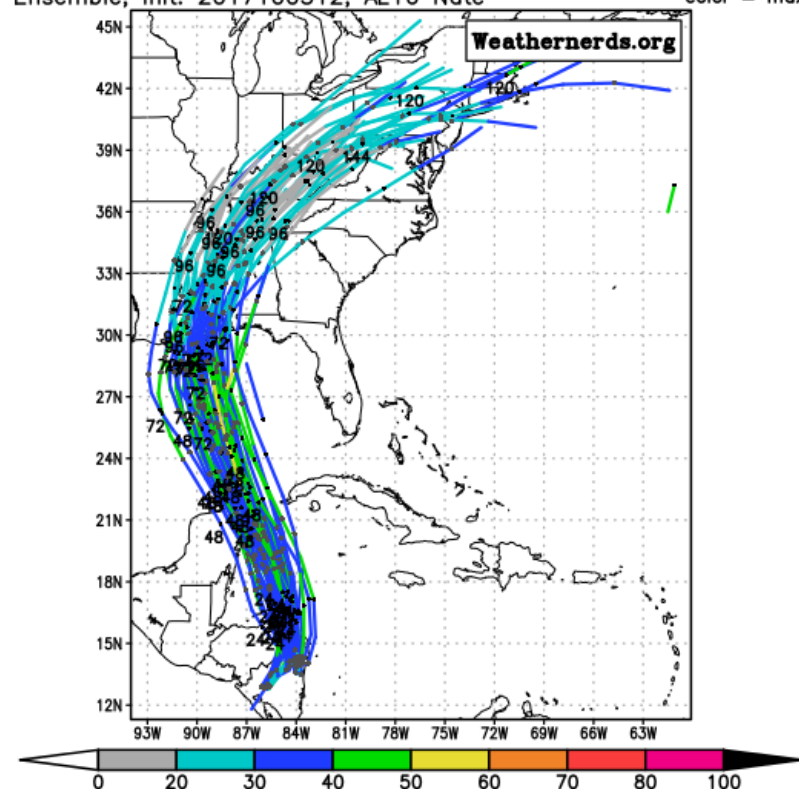
Levi Cowan - tropicaltidbits.com



Model guidance continues to shift slightly to the west today and remain in good agreement, but the range of possibilities is between Destin, FL and Lake Charles, Louisiana.

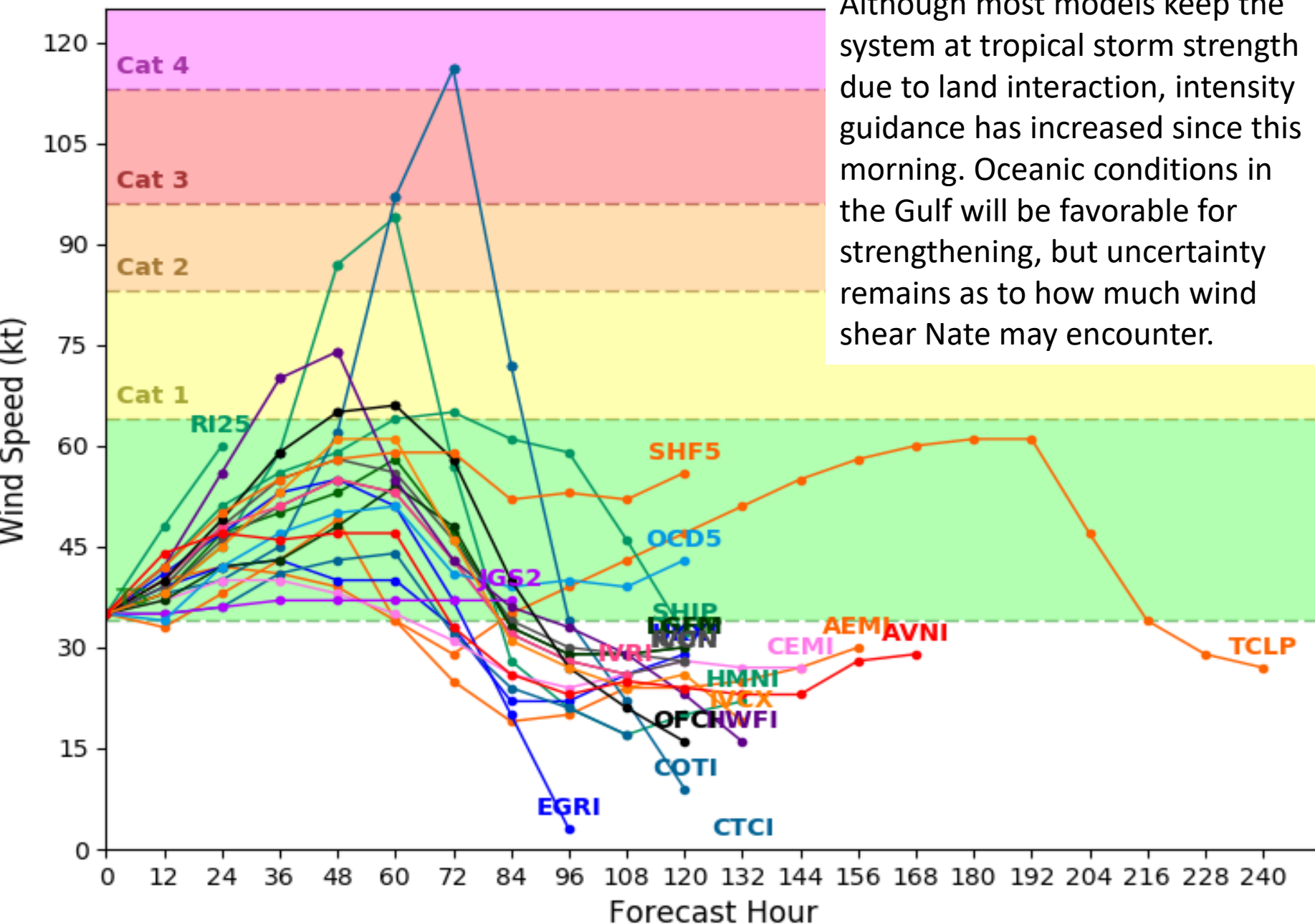
ECMWF Ensemble, init: 2017100512, AL16 Nate

color = max wind (kt)



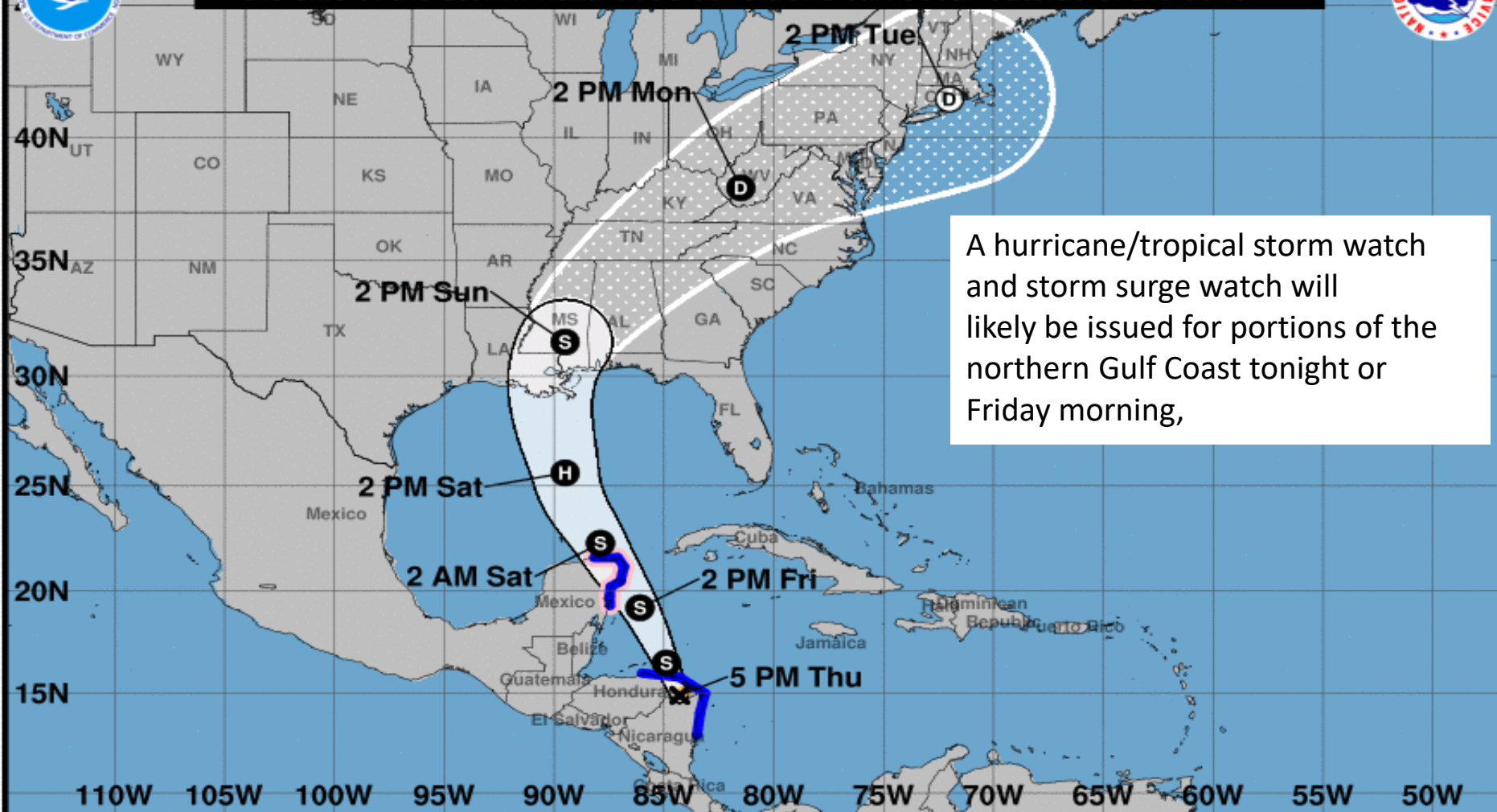
Tropical Storm NATE Model Intensity Guidance

Initialized at 18z Oct 05 2017





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.



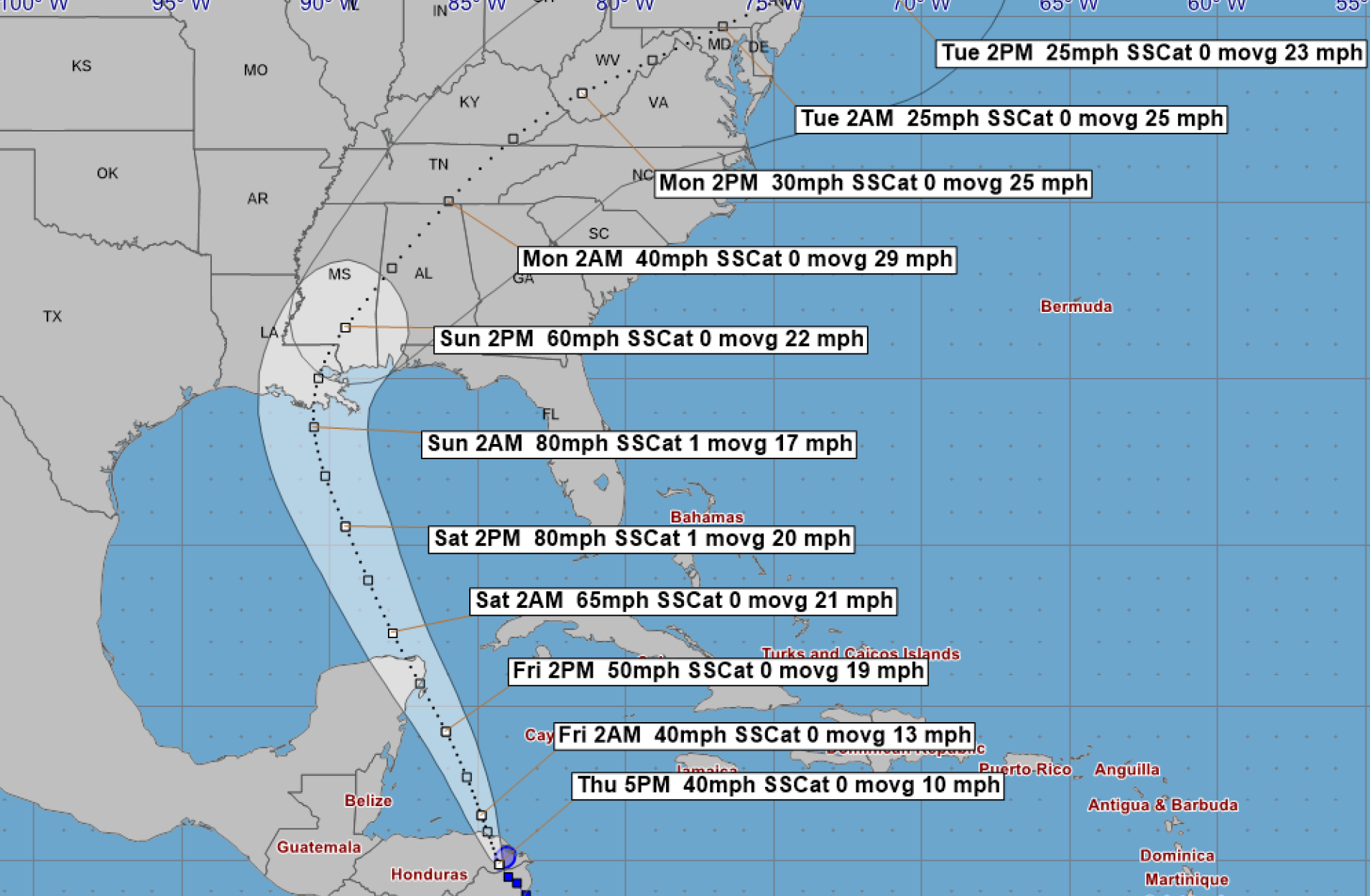
A hurricane/tropical storm watch and storm surge watch will likely be issued for portions of the northern Gulf Coast tonight or Friday morning,

Tropical Storm Nate
Thursday October 05, 2017
5 PM EDT Advisory 6
NWS National Hurricane Center

Current information: x
Center location 14.9 N 84.3 W
Maximum sustained wind 40 mph
Movement NNW at 10 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:	Watches:	Warnings:	Current wind extent:
Day 1-3 Day 4-5	Hurricane Trop Stm	Hurricane Trop Stm	Hurricane Trop Stm



Tropical Storm Nate - Thursday, October 5, 2017 5 PM EDT Advisory #6

Center Location: 14.9 N 84.3 W Maximum Sustained Winds: 40 mph Movement: 10 mph NNW

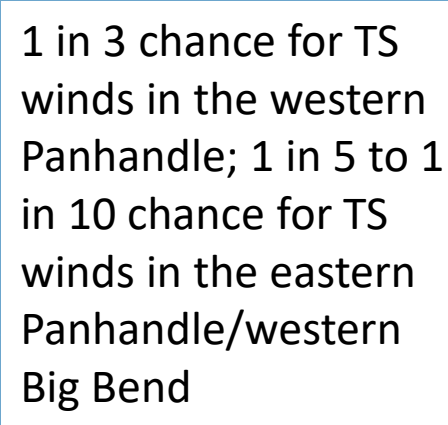
☐ forecast positions
 Potential Track Area: day 1-3 day 4-5
 Surface Wind Field: at current location

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



110W	105W	100W	95W	90W	85W	80W	75W	70W	65W	60W	55W	50W
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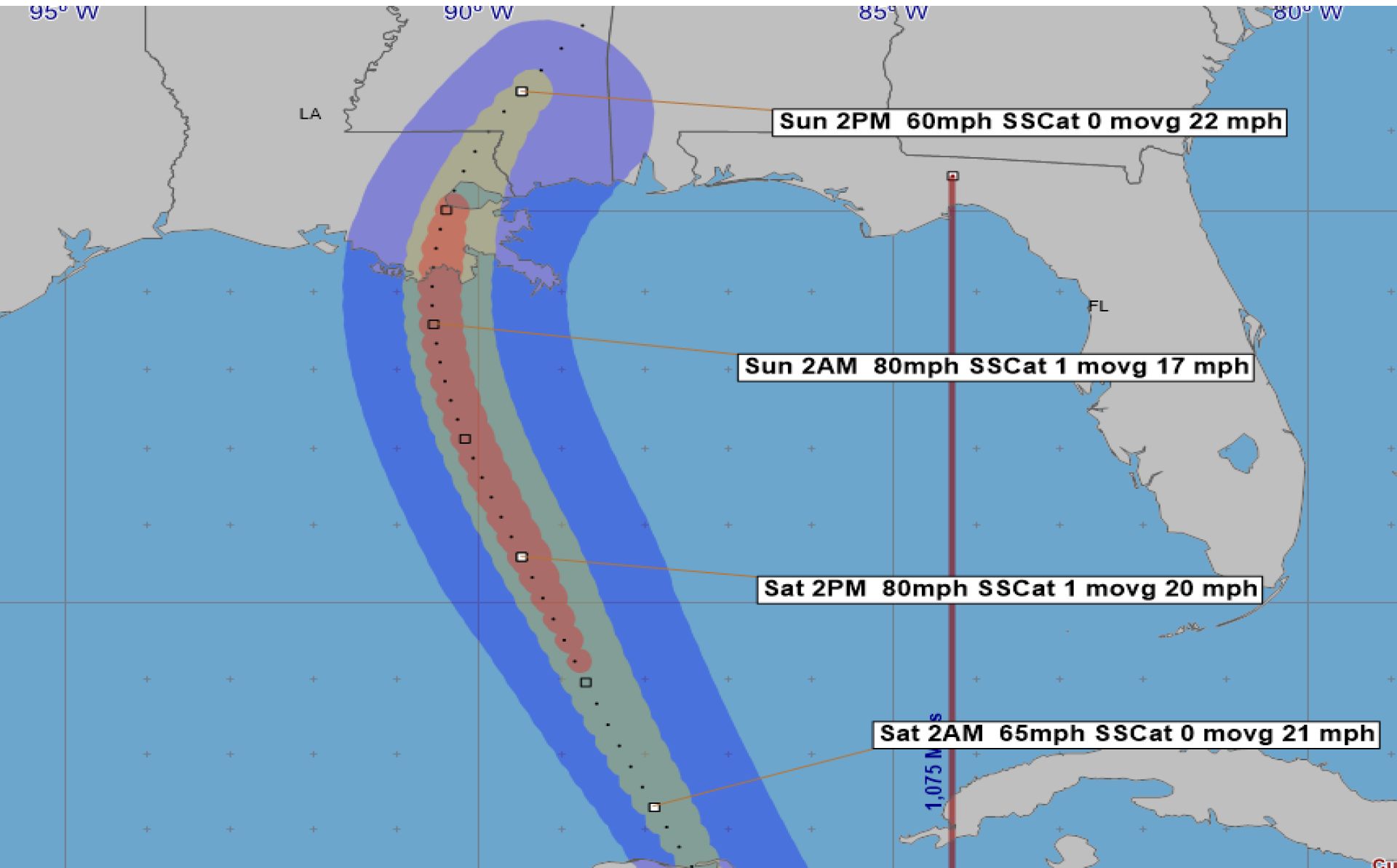




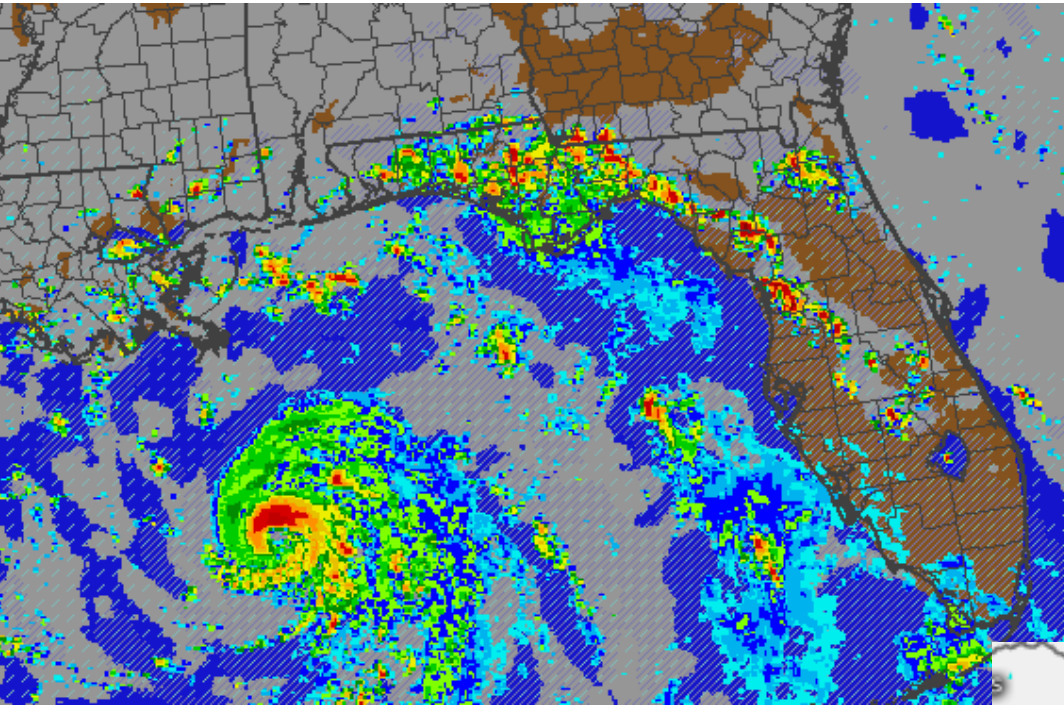
Storm Location &
Wind Speed (knots)
○ <34 ○ 34-63 ● ≥64

Forecast Wind Swath

This assumes a perfect forecast and is only through the next 72 hours, but Nate is forecast to be a rather small storm. Rain bands with winds tropical storm force gusts will extend beyond the blue line.

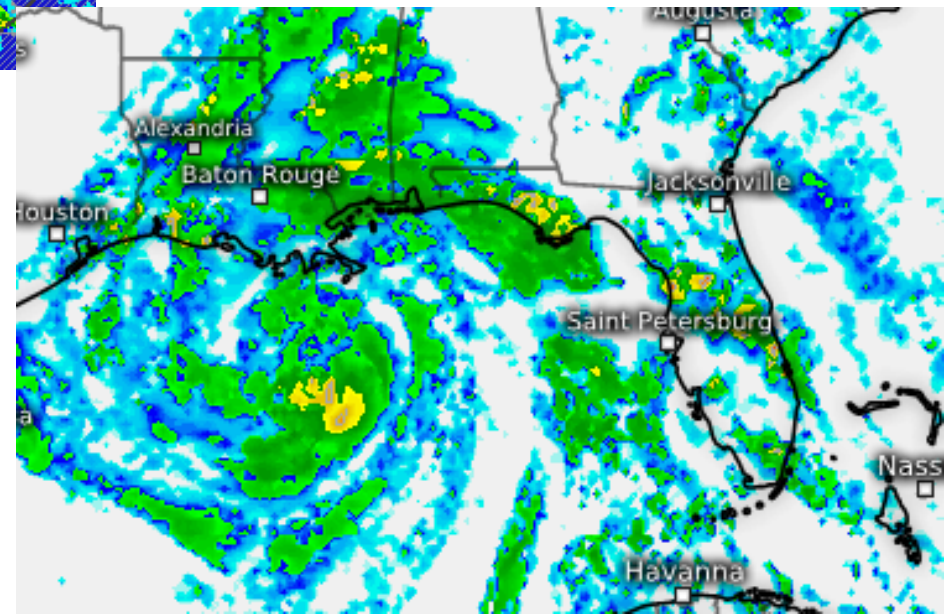


Future Radar – Saturday 5pm

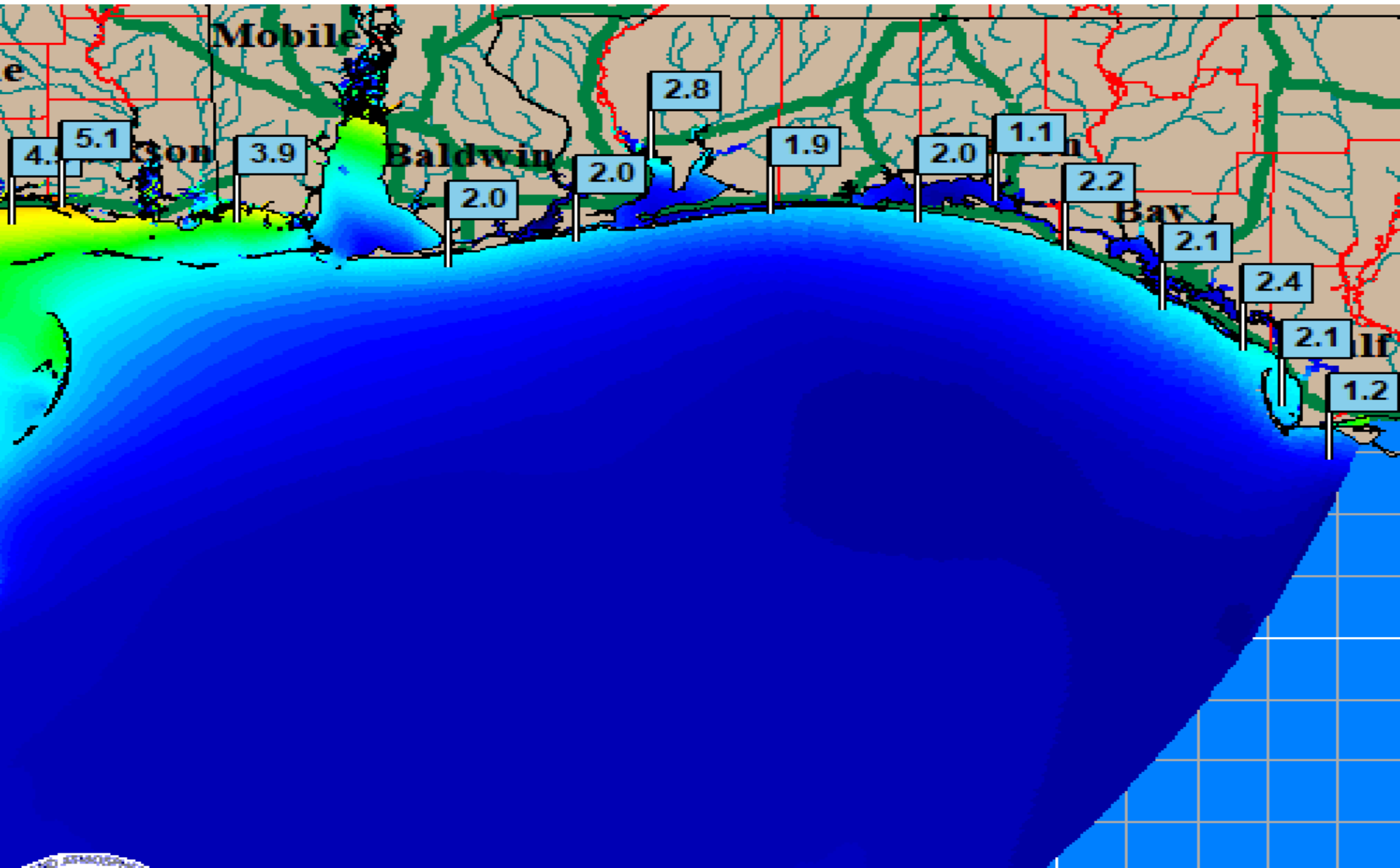


Outer rain bands from Nate could reach Florida Saturday evening.

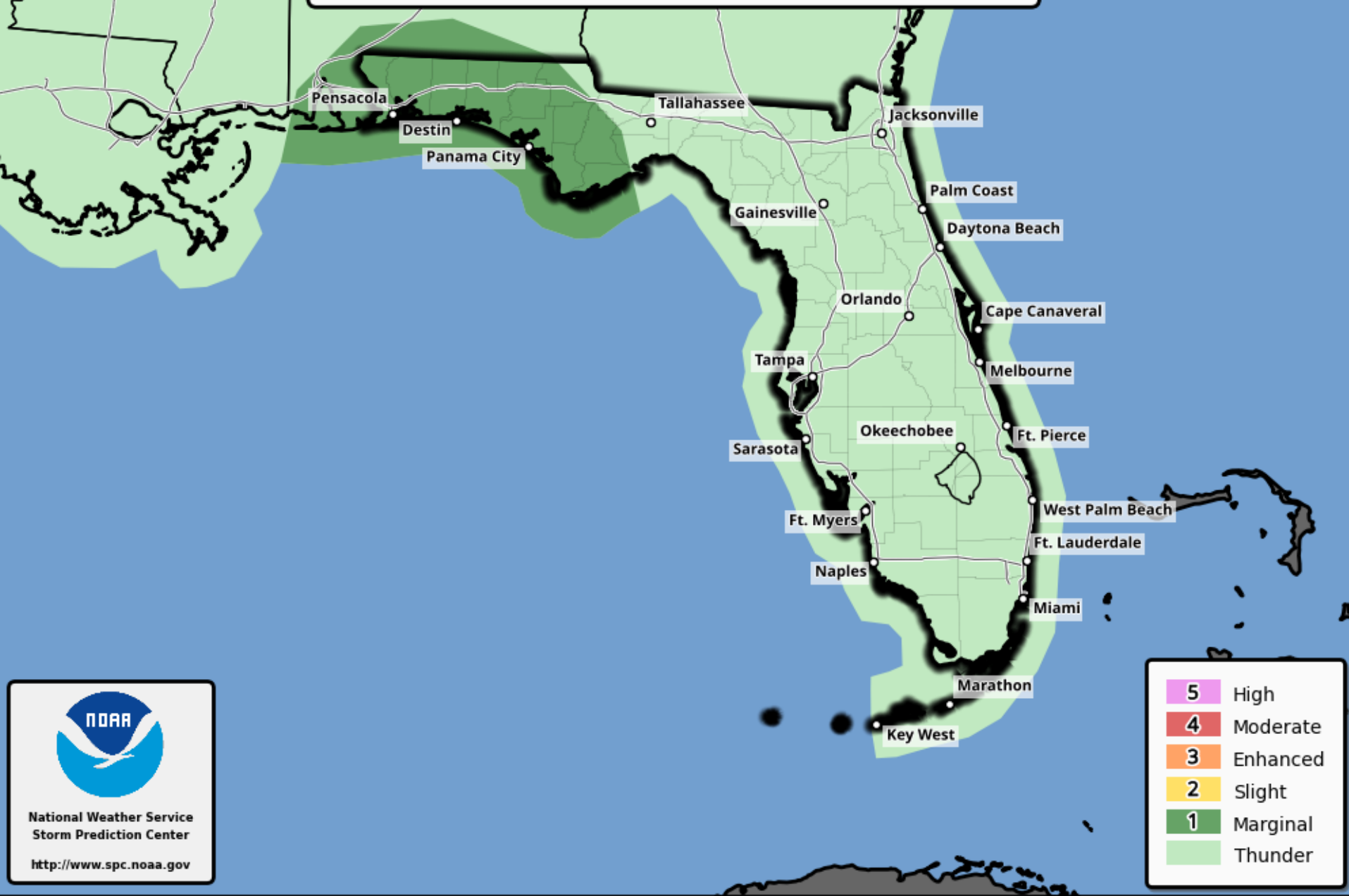
Note: These are models simulations and subject to change.



SLOSH Maximum Water Level Estimates for Cat 1 hurricane moving NNE @ 15mph



Tornado & Severe Thunderstorm Outlook Saturday, October 07, 2017

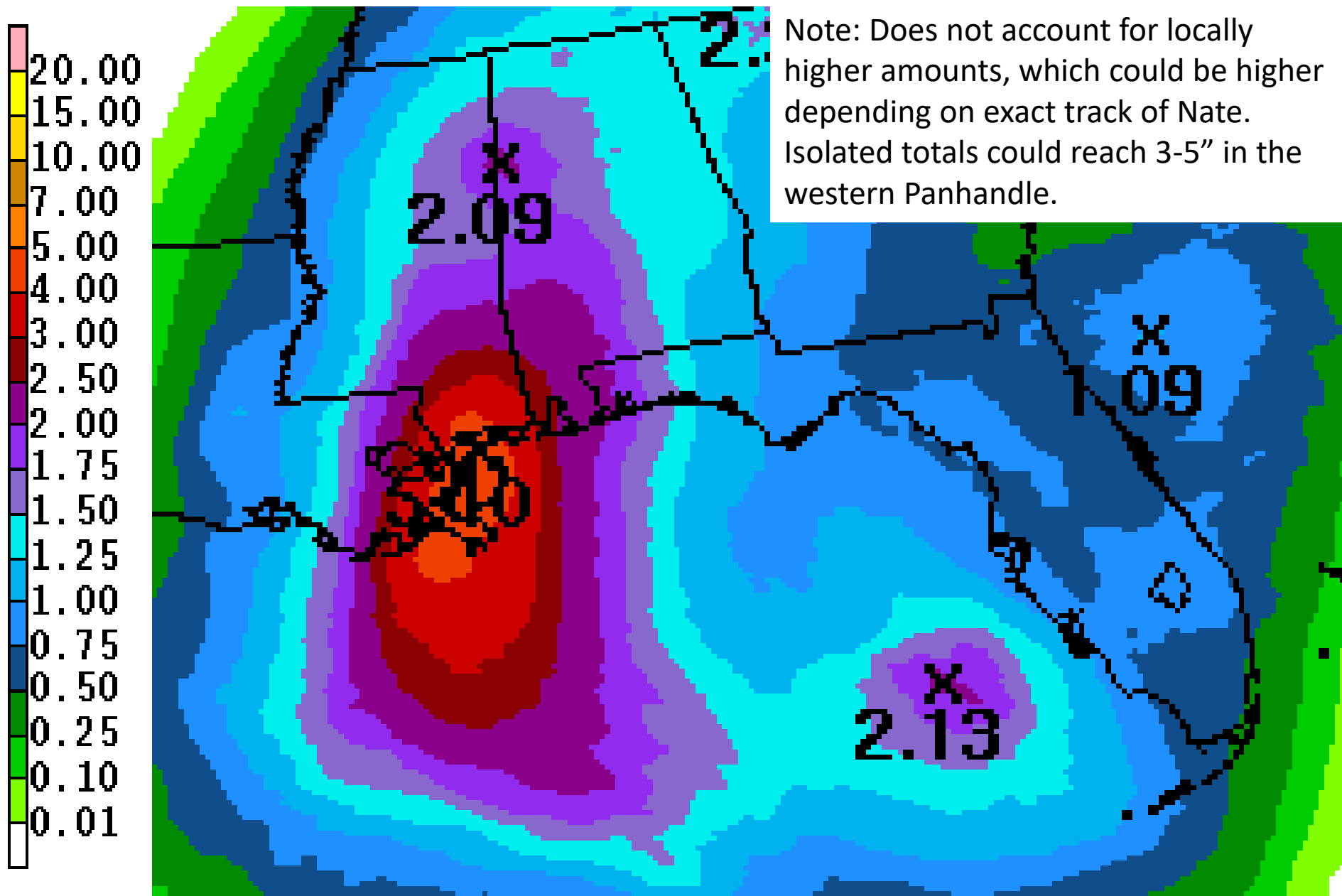


National Weather Service
Storm Prediction Center

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

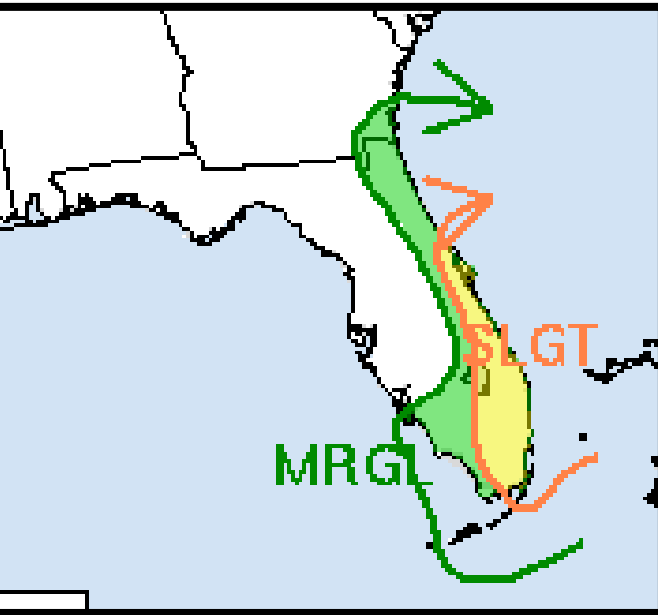
5	High
4	Moderate
3	Enhanced
2	Slight
1	Marginal
	Thunder

Forecast Total Rainfall – Next 3 Days



Flash Flood Threat

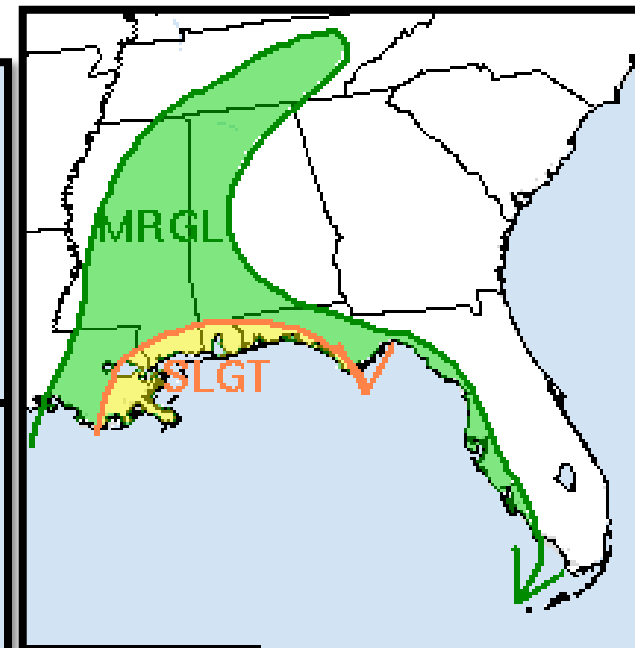
Today



Tomorrow



Saturday



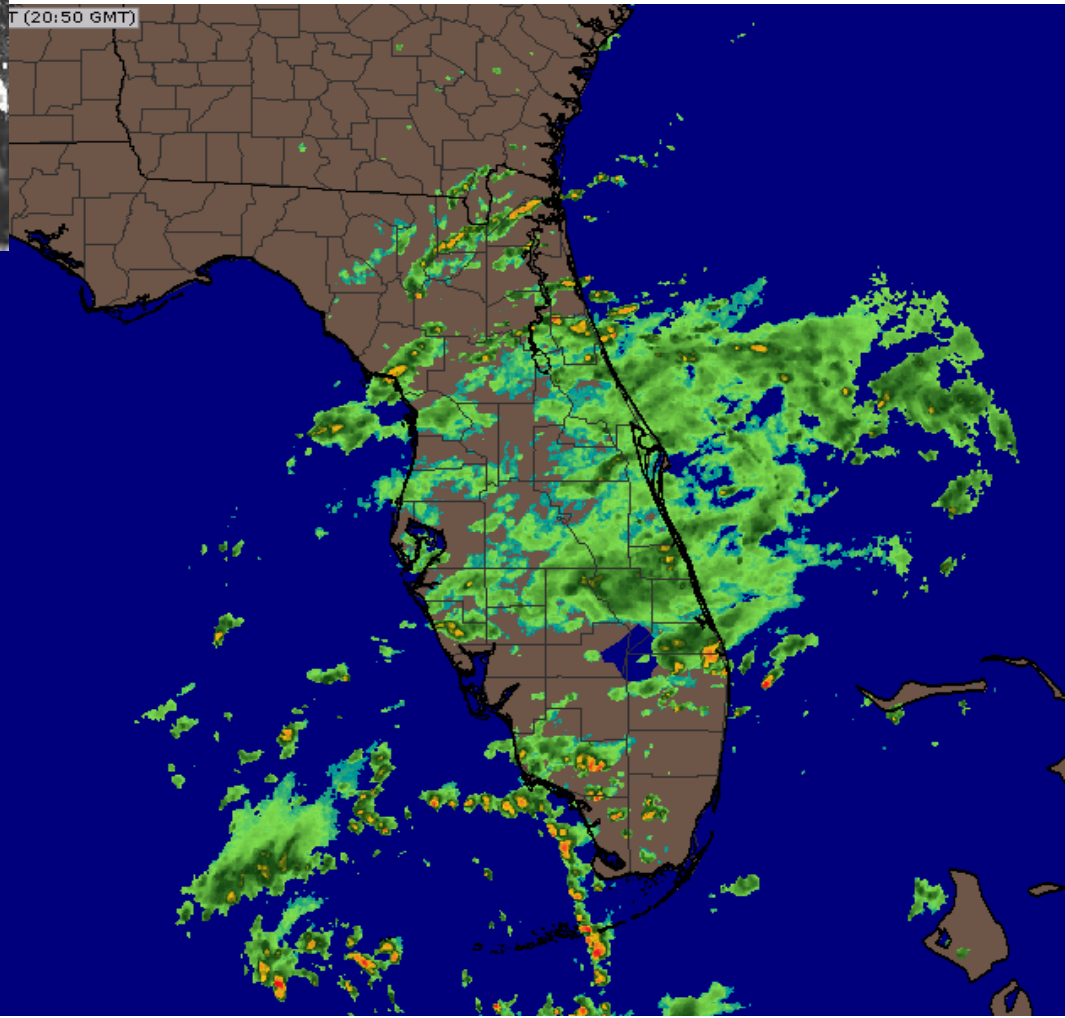
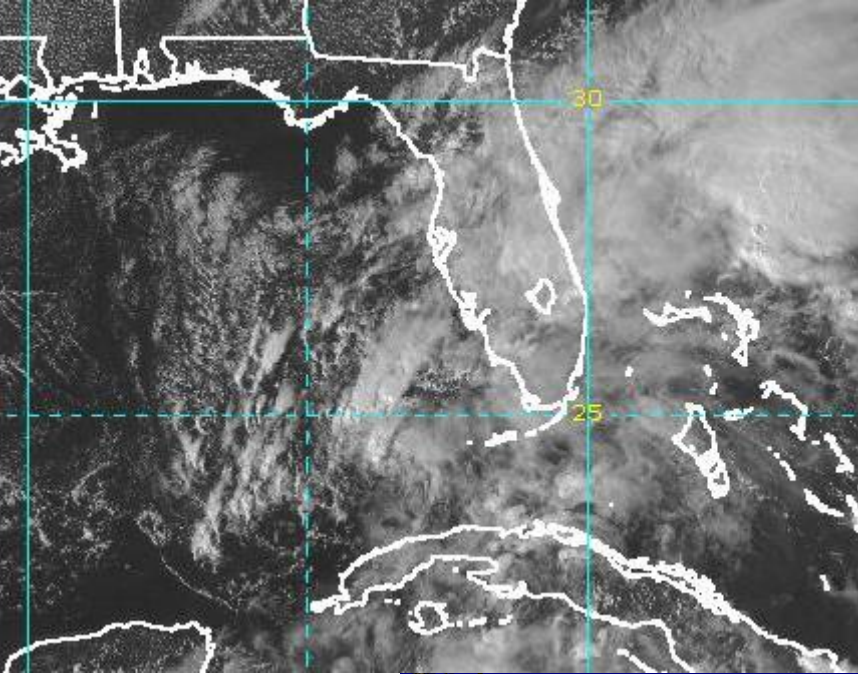
Risk of rainfall exceeding flash flood guidance
to the right of a line

HIGH: > 15% **SLGT: 5%-10%**

MDT: 10%-15% **MRGL: 2%-5%**

Flood Watches are in effect for
Brevard, Indian River, St. Lucie, Martin,
Palm Beach, Broward and Miami-Dade
Counties.

State Radar and Satellite as of 4:30pm EDT Thursday



Predominant Nighttime Weather

Sky: Partly Cloudy

ENE wind 5-10 mph inland, 10-20mph at the coast. Gusts to 25mph

Rain: 30-70% Peninsula/Keys

Low Temperatures:

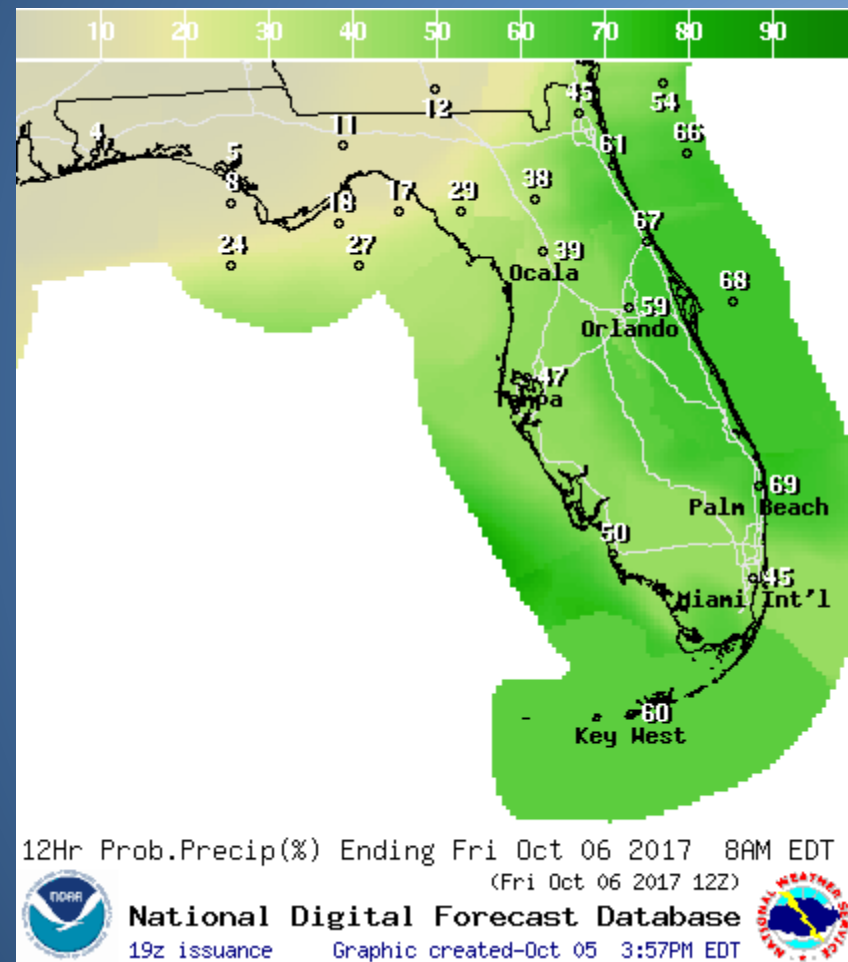
Low-Mid 70s (North/Central FL)

Upper 70s (South FL)

Hazards:

Occasional Lightning

Brief Heavy Downpours



Predominant Daytime Weather - Friday

Sky: Mostly Cloudy statewide

E/SE wind 5-15mph, gusts 20 mph

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

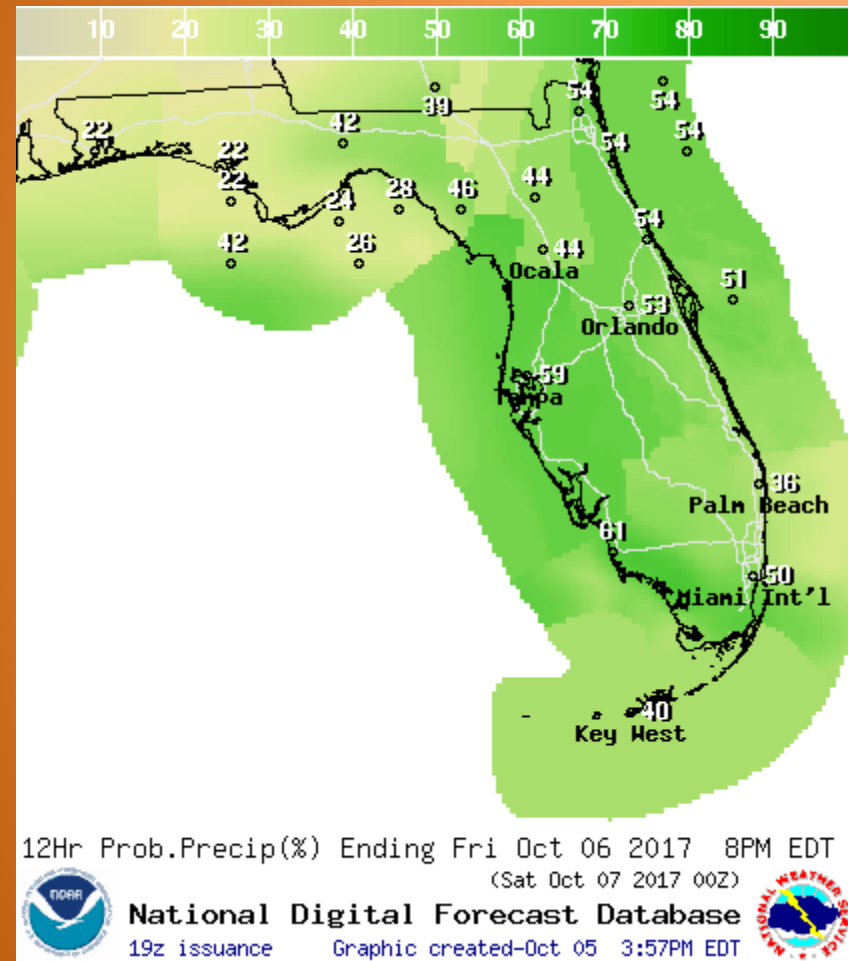
High Temperatures:
Mid- Upper 80s

Hazards:

Breezy Winds

Occasional Lightning

Brief Heavy Downpours



Summary:

- At 5 PM EDT Thursday, Tropical Storm Nate was located over eastern Honduras, or about 1,075 miles south of Tallahassee, Florida.
- Nate is moving north-northwest near 10mph, 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 over the northwestern Caribbean Sea tonight, move near or over the northeastern part of the Yucatan Peninsula late Friday and into the Gulf of Mexico on Saturday.
- Landfall along the U.S. Gulf Coast is expected on Sunday.
- Maximum sustained winds are currently near 40mph, but Nate is expected to gradually strengthen as it moves back over the water, and become a hurricane in the Gulf of Mexico.
- Elsewhere, a non-tropical low pressure disturbance located over the Florida Straits will continue to increase rain chances across South Florida through Friday as it moves west.
- In addition, 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:

- Florida (with the exception of northwestern Escambia County) is now outside of the 3 day cone of error, but the chances for tropical storm force winds are still around 20-30% for much of the Florida Panhandle, which could arrive in gusts in the outer band of Nate Saturday evening or Sunday morning.
- There are currently no wind or surge watches for Florida, but could be issued late tonight or early Friday.
- Rainfall amounts of 1-3" (with isolated amounts up to 5" 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" could have the potential to produce high waves and minor coastal flooding during high tide. Any locally heavy rainfall during times of high tide could exacerbate coastal flooding issues.
- 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.

Another briefing packet will be issued Friday morning. 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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