



TROPICAL UPDATE



5 PM EDT

Thursday, August 29, 2019

Hurricane Dorian

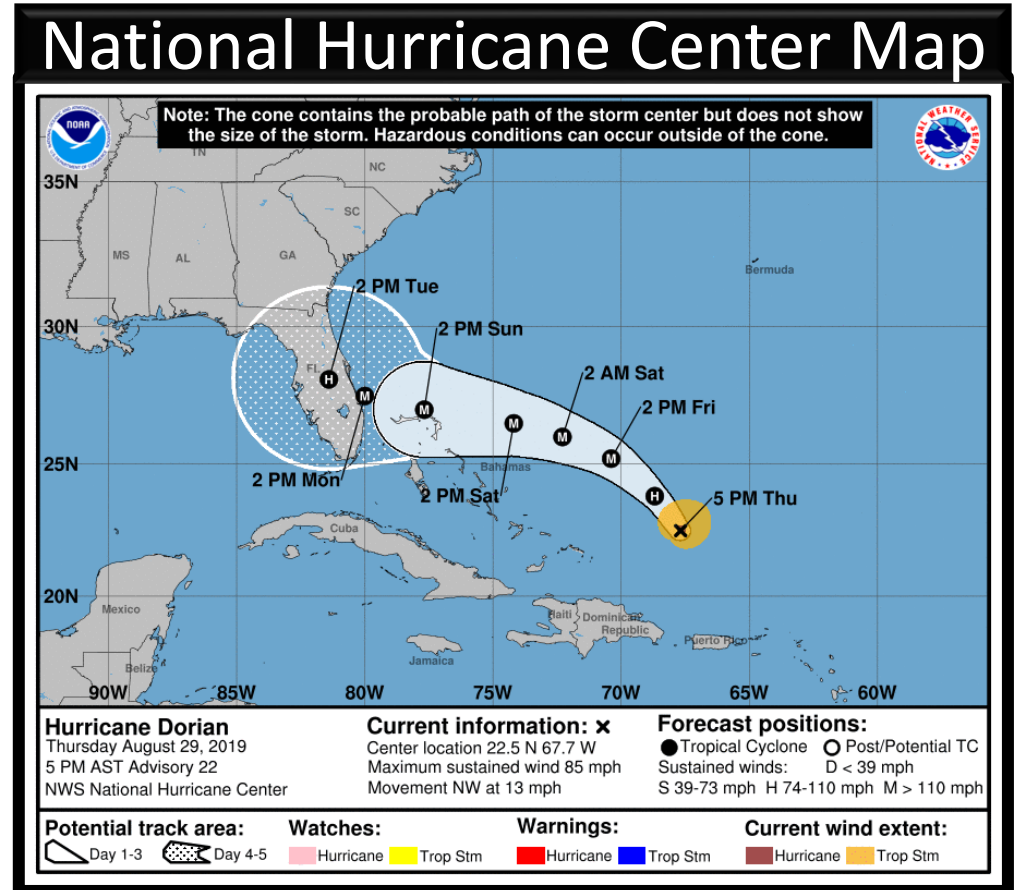
This update is intended for government and emergency response officials, and is provided for informational and situational awareness purposes only. Forecast conditions are subject to change based on a variety of environmental factors. For additional information, or for any life safety concerns with an 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.hurricanes.gov.

Hurricane Dorian

Thursday, August 29, 5 PM ET

	MINIMAL	Low	MODERATE	HIGH	EXTREME
 WINDS					
 STORM SURGE					
 FLASH FLOODING					
 TORNADOES					

	Low	MODERATE	HIGH
 RIP CURRENTS			

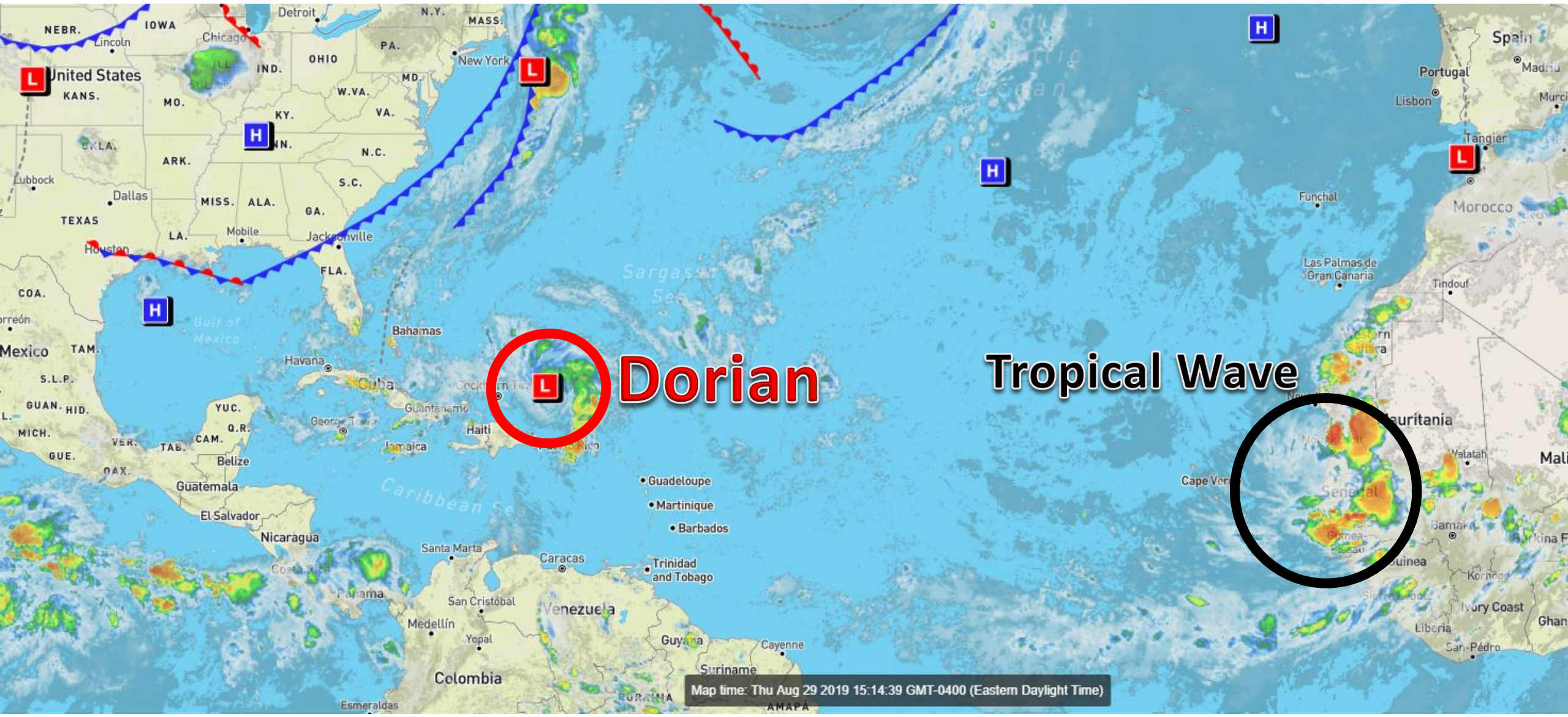


Changes from Earlier Today:

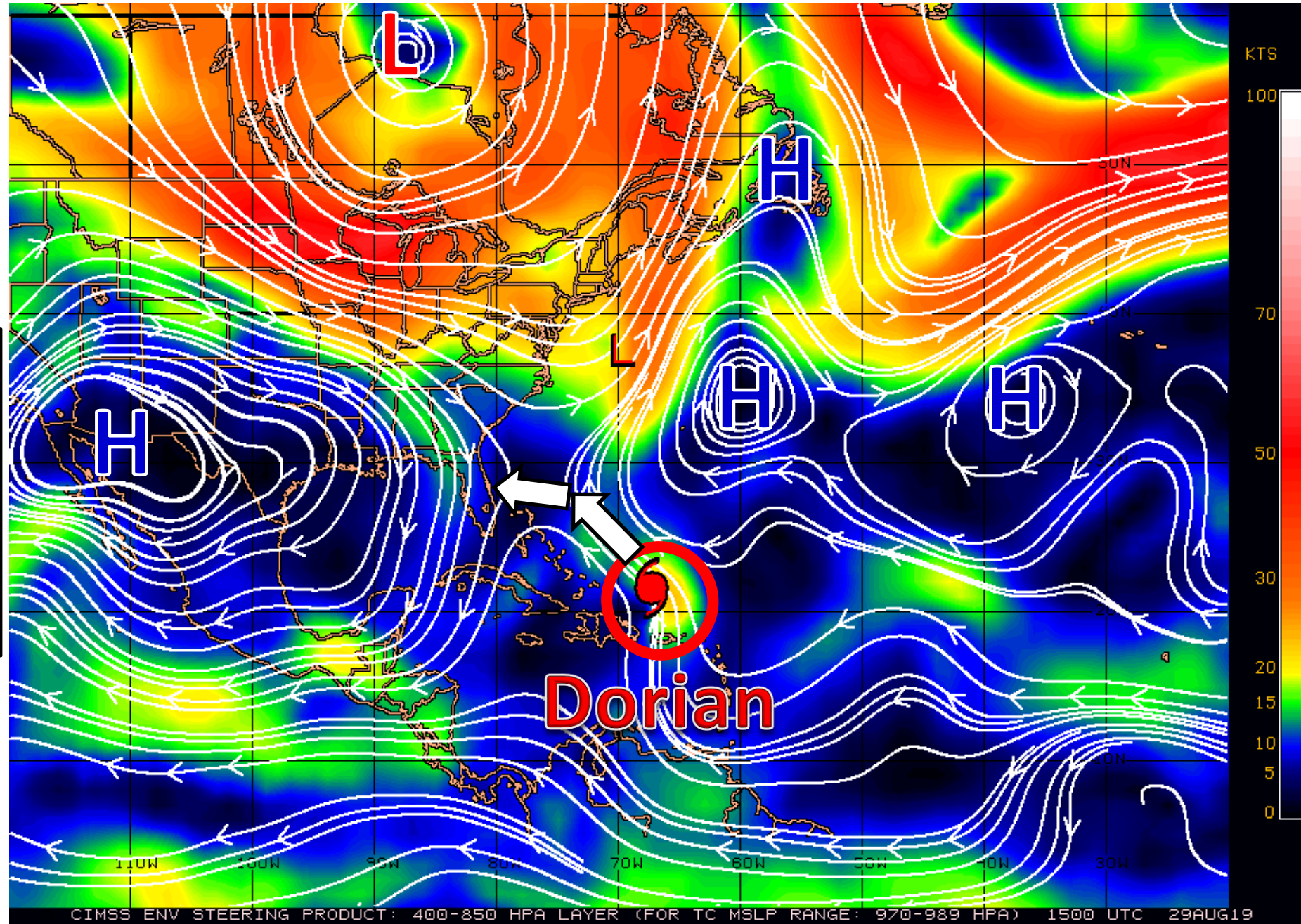
Dorian has remained steady today with sustained winds of 85 mph. The forecast continues to call for Dorian to make landfall somewhere along the East Coast of Florida on Monday as a lower-end Category 4 Hurricane with winds of 130 mph. Also, a slower movement is now forecast near and after landfall, which may result in significant flash flooding and river flooding.

Atlantic Basin Satellite Image

Chance of development: — None — Low — Medium — High

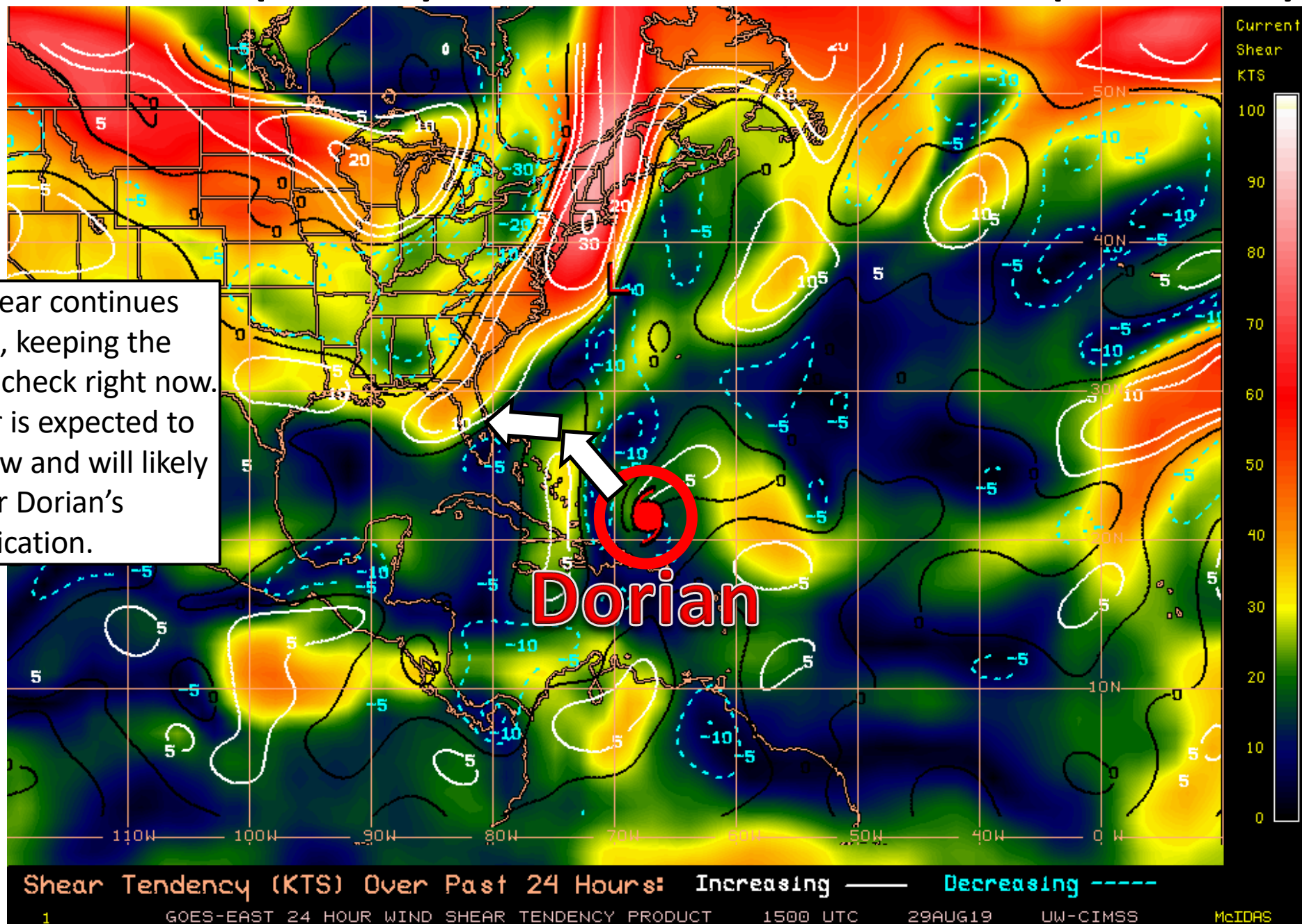


Steering Currents



Hurricane Dorian continues to move northwestward around the southwestern edge of a large high pressure over the Atlantic. However, this high pressure is forecast to expand westward, which will shove Dorian westward as well.

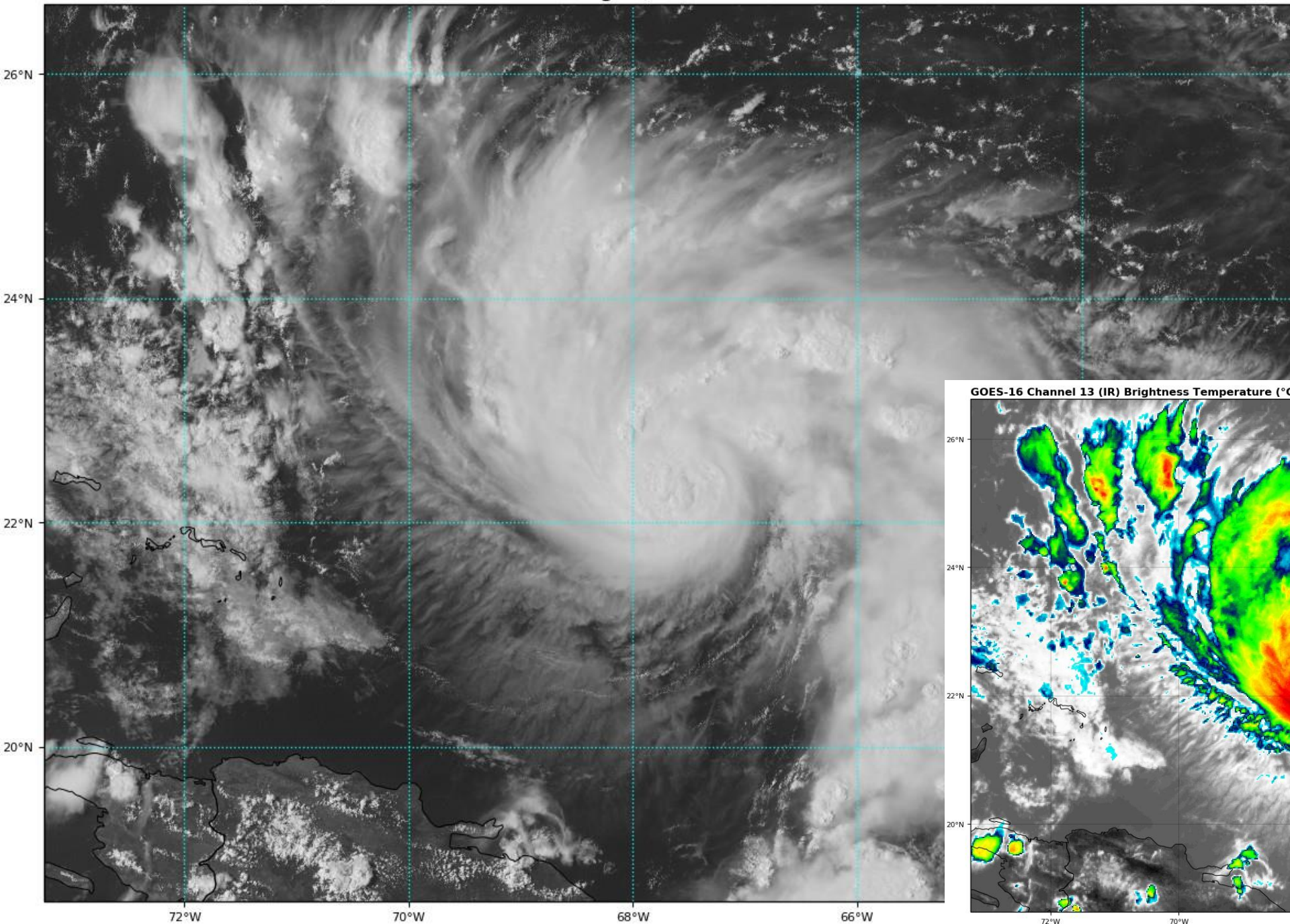
Wind Shear (shaded) and Wind Shear Tendencies (contoured)



Some wind shear continues across Dorian, keeping the intensification in check right now. However, shear is expected to remain rather low and will likely not hinder Dorian's intensification.

GOES-16 Channel 2 (visible) Reflectance at 19:17Z Aug 29, 2019

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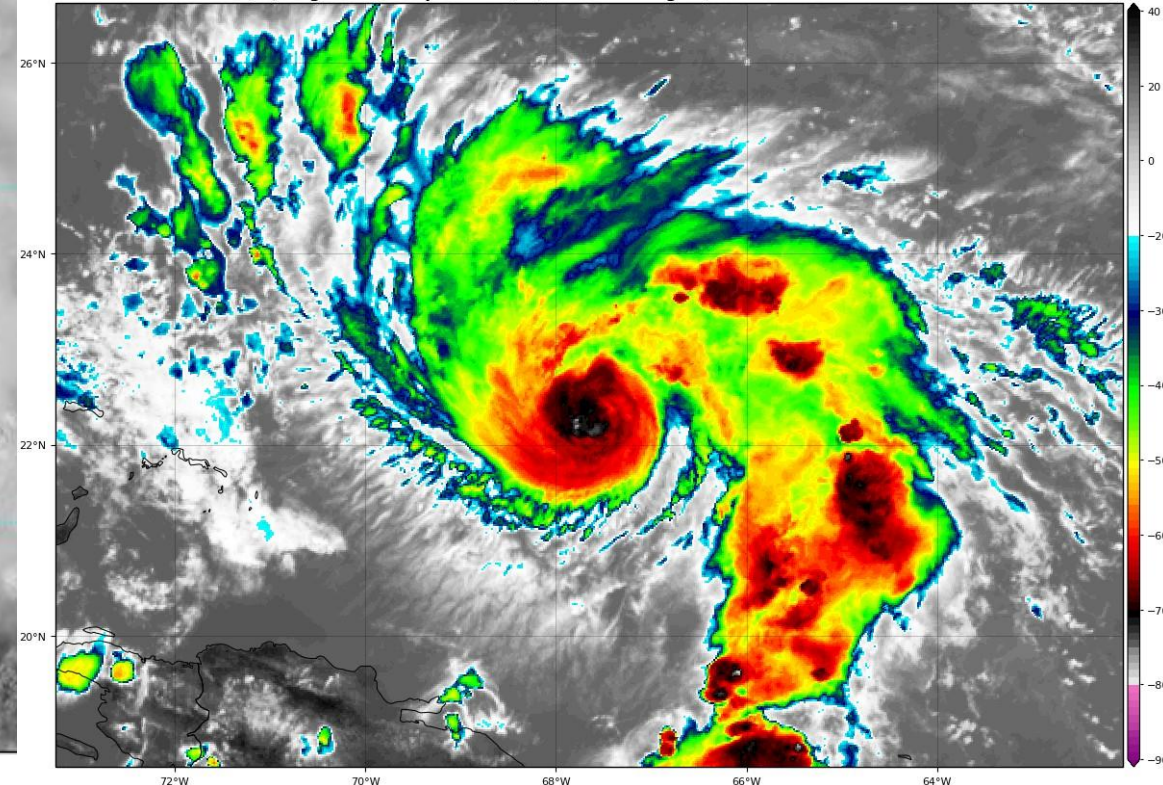


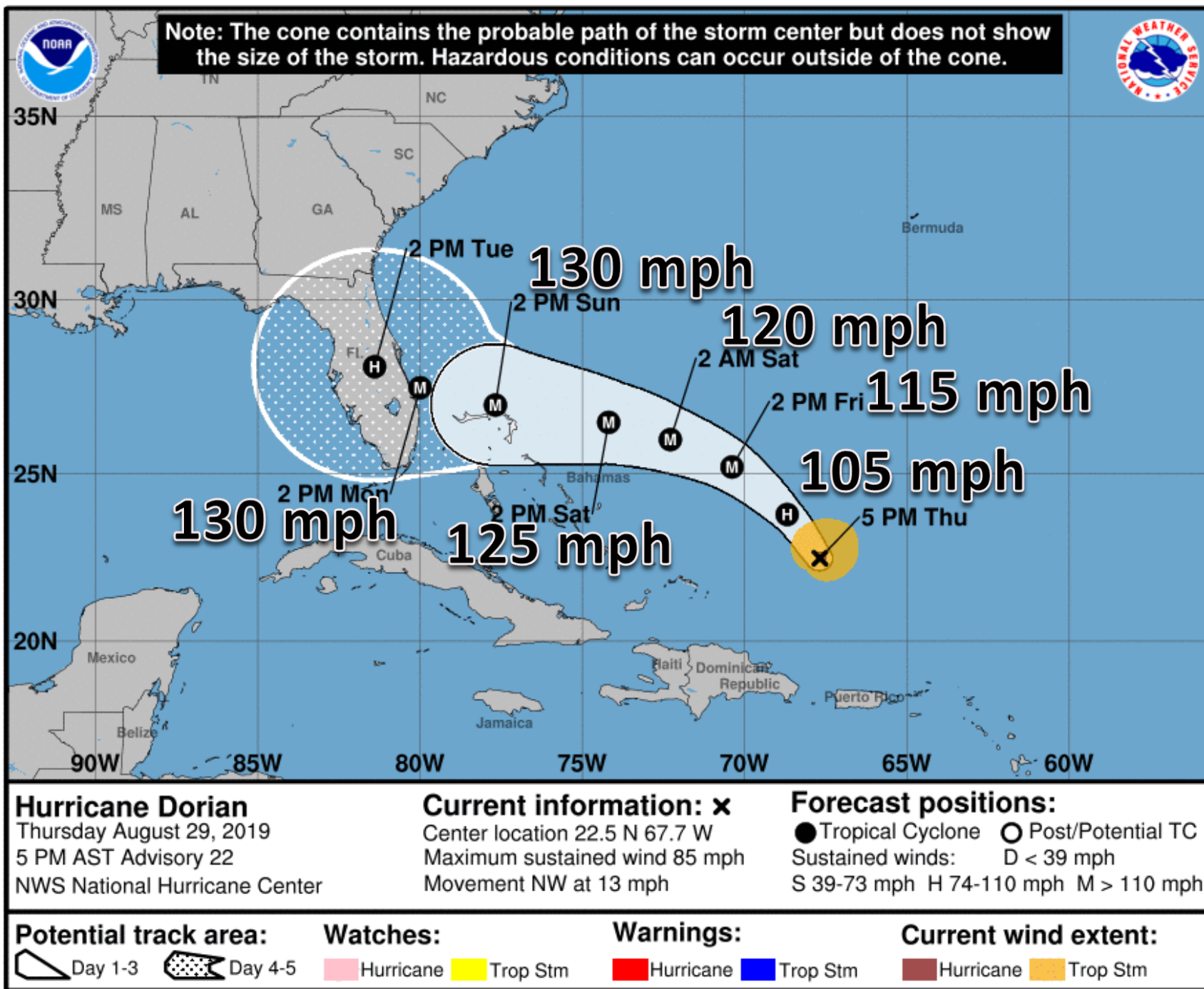
Hurricane Dorian Satellite Image

Dorian currently has a double eyewall, but is in the process of consolidating these eyewalls and organizing.

GOES-16 Channel 13 (IR) Brightness Temperature (°C) at 19:22Z Aug 29, 2019

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Hurricane Dorian Forecast Track

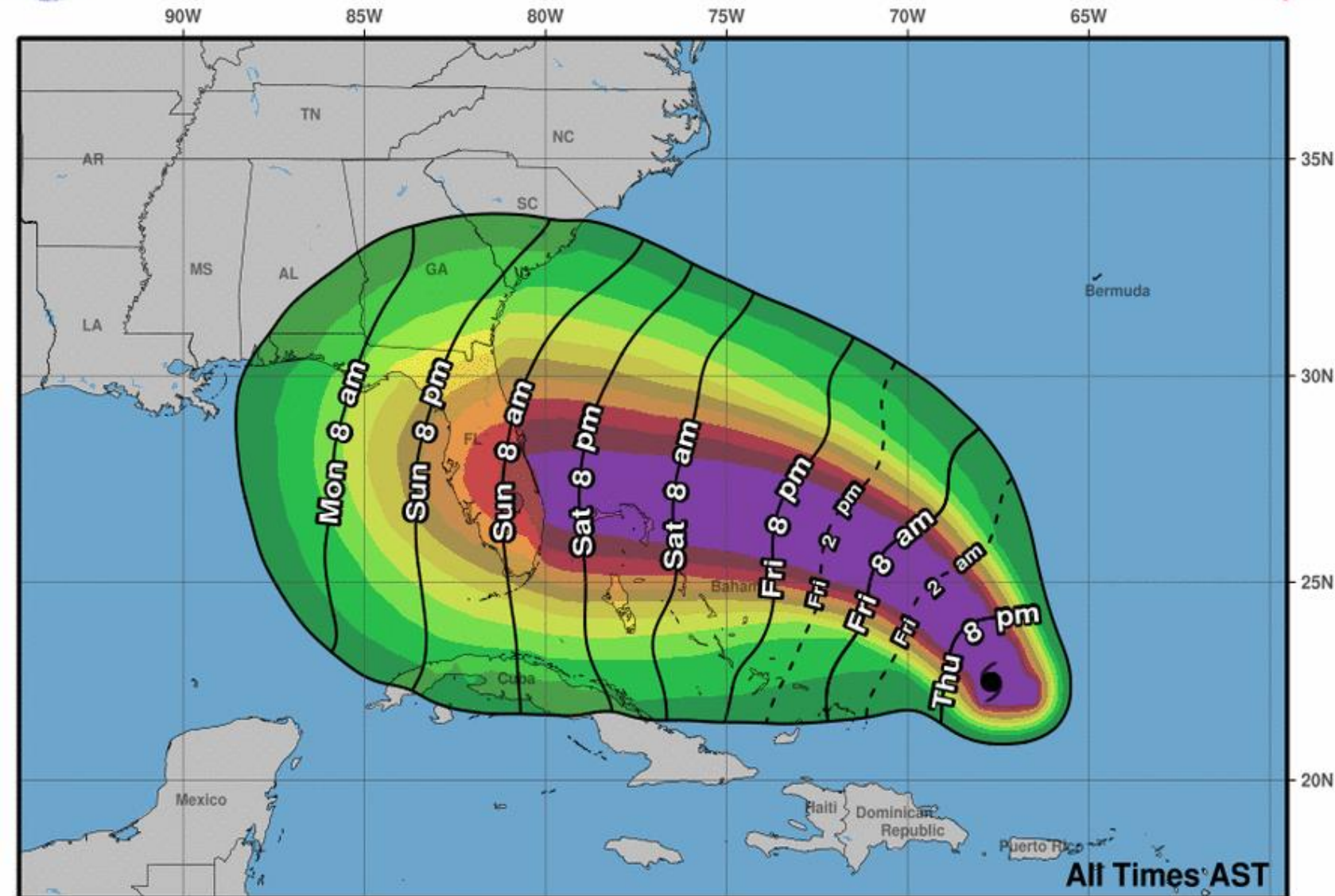
Hurricane Dorian, located 330 miles east of the southeastern Bahamas, continues to move northwest at 13 mph. Maximum sustained winds remain near 85 mph (Category 1).

Conditions are favorable for continued intensification over the next several days. Rapid intensification also remains a possibility.

Dorian is forecast to become a major hurricane tomorrow. Dorian is forecast to be at **MAJOR HURRICANE** strength as it approaches Florida on Monday.



Earliest Reasonable Arrival Time of Tropical-Storm-Force Winds



There are no tropical watches or warnings for Florida, but could be issued as early as Friday.

Chances of TROPICAL STORM FORCE WINDS (>39 mph) continue to increase:

Jacksonville: 40%

Orlando: 76%

Cocoa Beach: 89%

West Palm Beach: 92%

Ft. Lauderdale: 86%

Miami: 65%

Naples: 59%

Marathon: 42%

Key West: 35%

Tallahassee: 25%

Panama City: 24%

Pensacola: 7%

Chances in Marathon and Jacksonville are similar!

Hurricane Dorian
Thu. Aug. 29, 2019 5 pm AST
Advisory 22

Storm Location &
Wind Speed

○ < 34 kt (39 mph)
○ 34-63 kt (39-73 mph)
● ≥ 64 kt (74 mph)

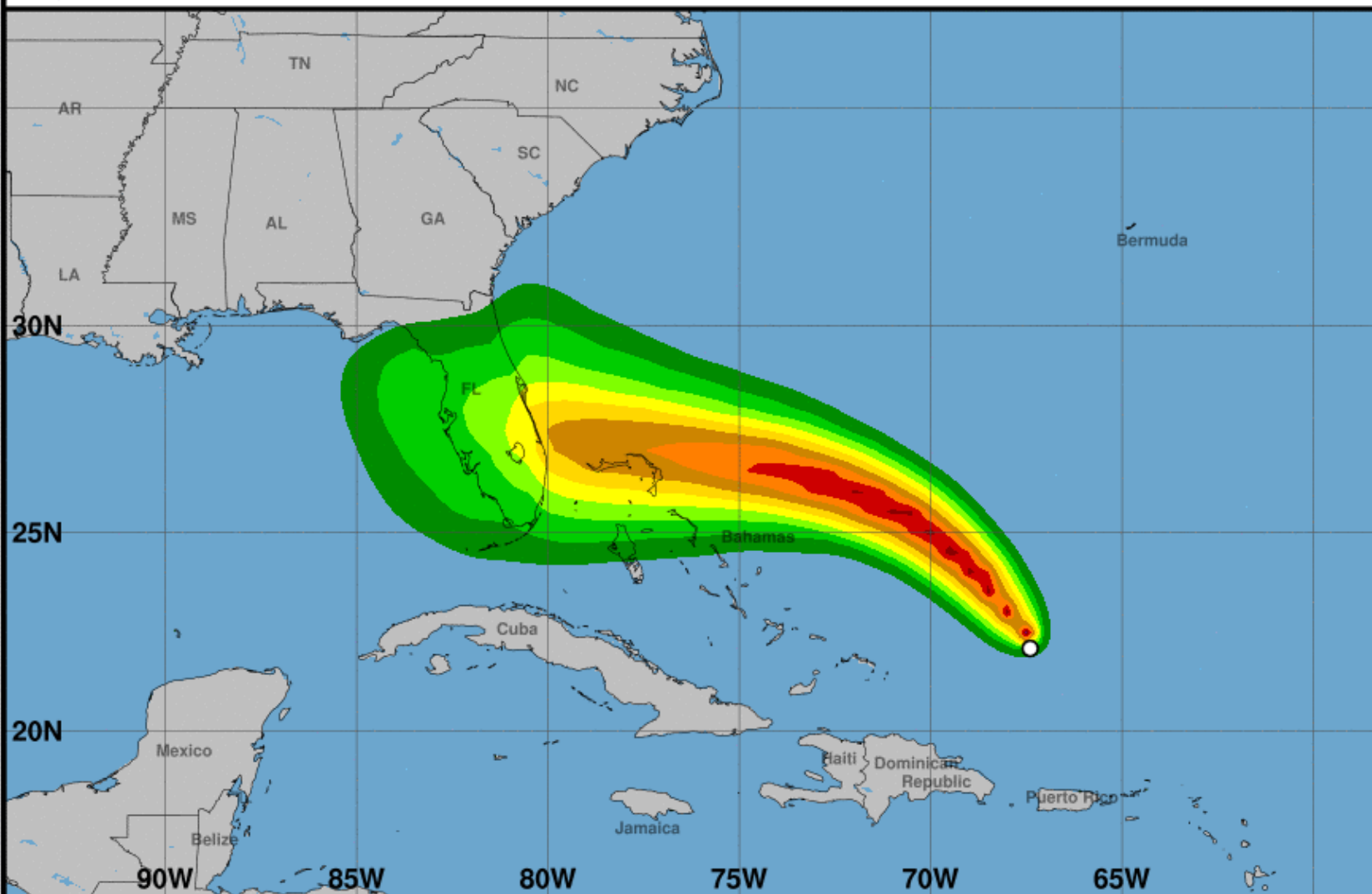
5-day chance of receiving sustained 34+ kt (39+ mph) winds

5 10 20 30 40 50 60 70 80 90 100 %



Hurricane-Force Wind Speed Probabilities (Preliminary)

For the 120 hours (5.0 days) from 2 PM AST THU AUG 29 to 2 PM AST TUE SEP 03



Probability of hurricane-force winds (1-minute average ≥ 74 mph) from Hurricane Dorian

○ indicates Hurricane Dorian center location at 2 PM AST THU AUG 29, 2019 (Forecast/Advisory #22)



There are no tropical watches or warnings for Florida, but could be issued as early as Friday.

Chances of HURRICANE FORCE WINDS (>74 mph) continue to increase for parts of the East Coast:

Jacksonville: 4%

Orlando: 23%

Cocoa Beach: 37%

West Palm Beach: 42%

Ft. Lauderdale: 30%

Miami: 19%

Naples: 12%

Marathon: 7%

Key West: 5%

Tallahassee: 2%

Panama City: 3%



Key Messages for Hurricane Dorian

Advisory 22: 5:00 PM AST Thu Aug 29, 2019



1. The risk of life-threatening storm surge and hurricane-force winds this weekend continues to increase in the northwestern Bahamas, and hurricane watches could be issued there tonight or Friday. Residents should have their hurricane plan in place and listen to advice given by local emergency officials.

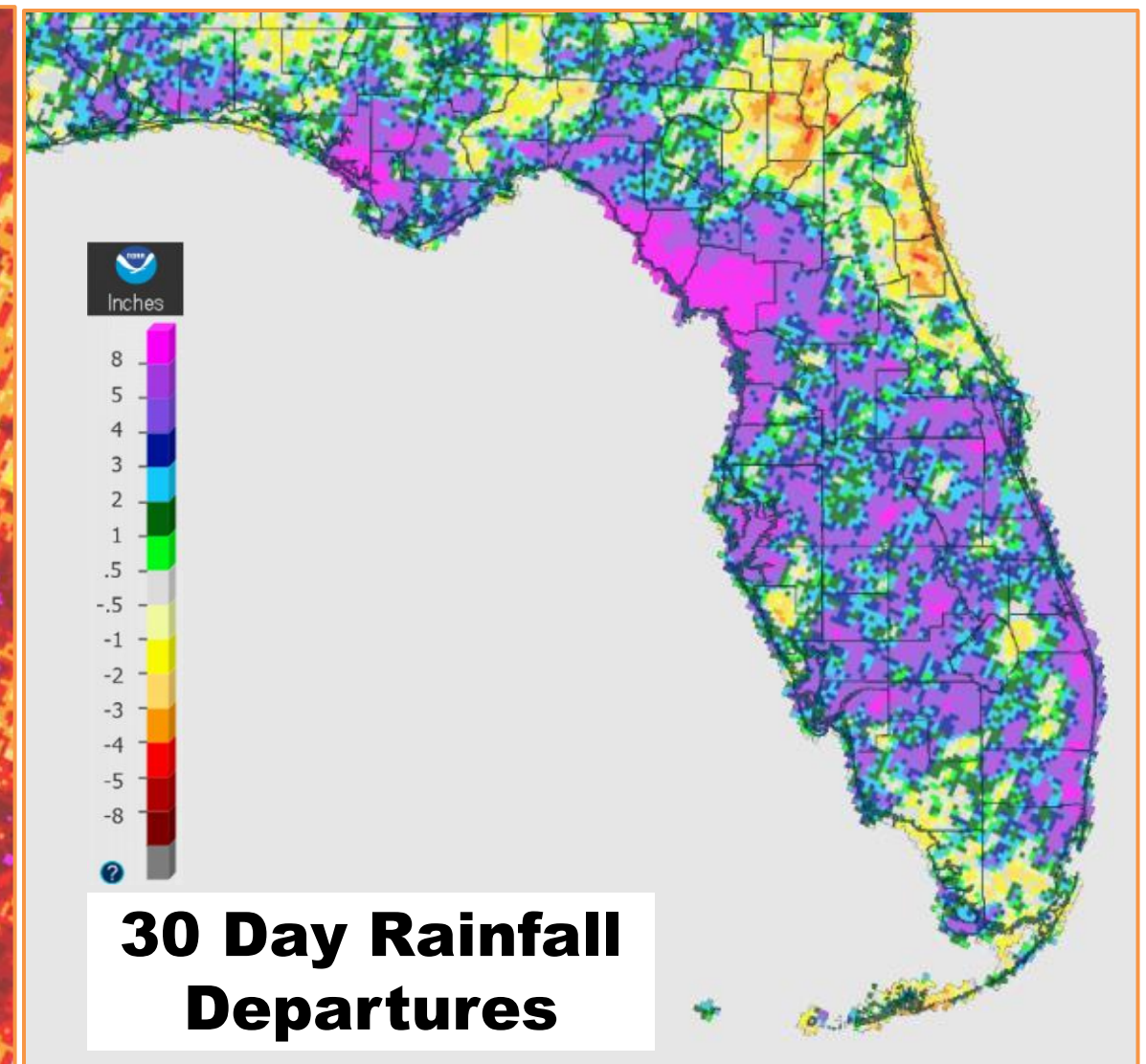
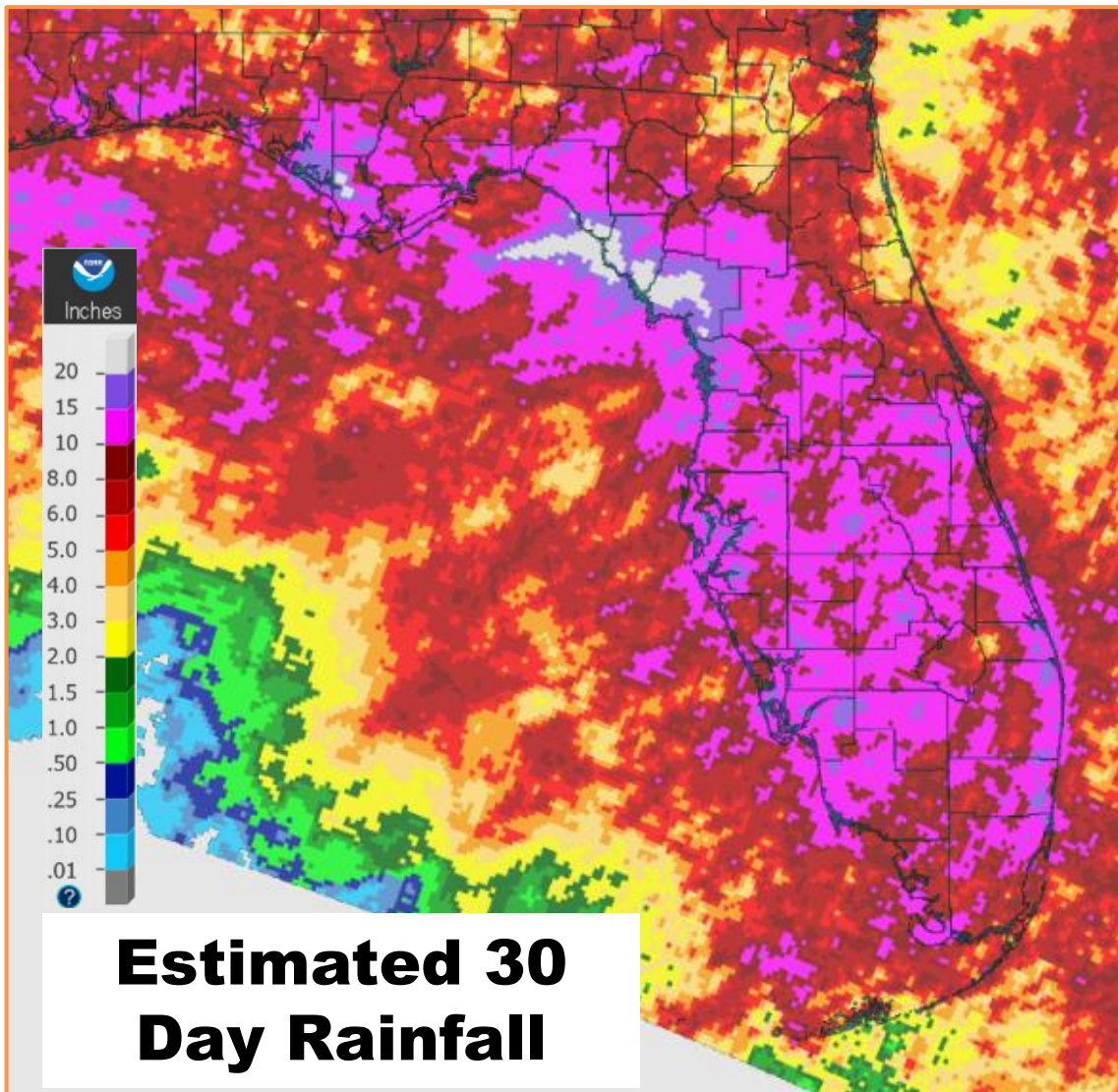
2. There is an increasing likelihood of life-threatening storm surge along portions of the Florida east coast late this weekend or early next week, although it is too soon to determine where the highest storm surge will occur. Residents should have their hurricane plan in place, know if they are in a hurricane evacuation zone, and listen to advice given by local emergency officials.

3. The risk of devastating hurricane-force winds along the Florida east coast and peninsula late this weekend and early next week continues to increase, although it is too soon to determine where the strongest winds will occur.

4. Regardless of the exact track of Dorian, heavy rains are expected to occur over portions of the Bahamas, Florida, and elsewhere in the southeastern United States this weekend and into the middle of next week.



For more information go to hurricanes.gov

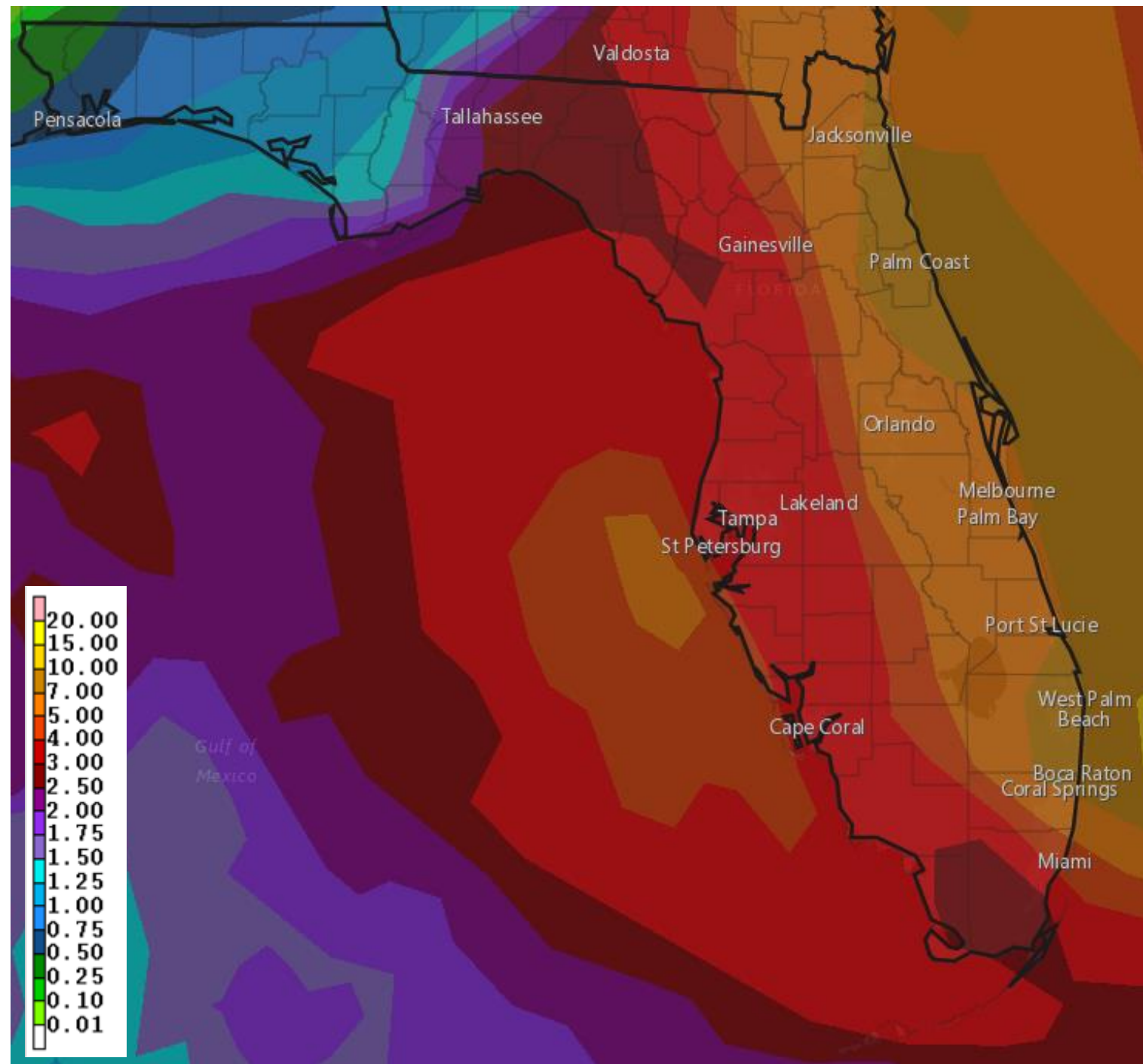


Rainfall over the last 30 days has been very abundant across the Peninsula with most areas seeing 10-15 inches of rain. Localized areas in the Peninsula have seen 15-20"+, which is about 4-8"+ above average. This is also about 150-300% of normal rainfall. Rainfall in the Panhandle is about 1-3" below average for the last 30 days.

Official Rainfall Forecast Next 7 Days

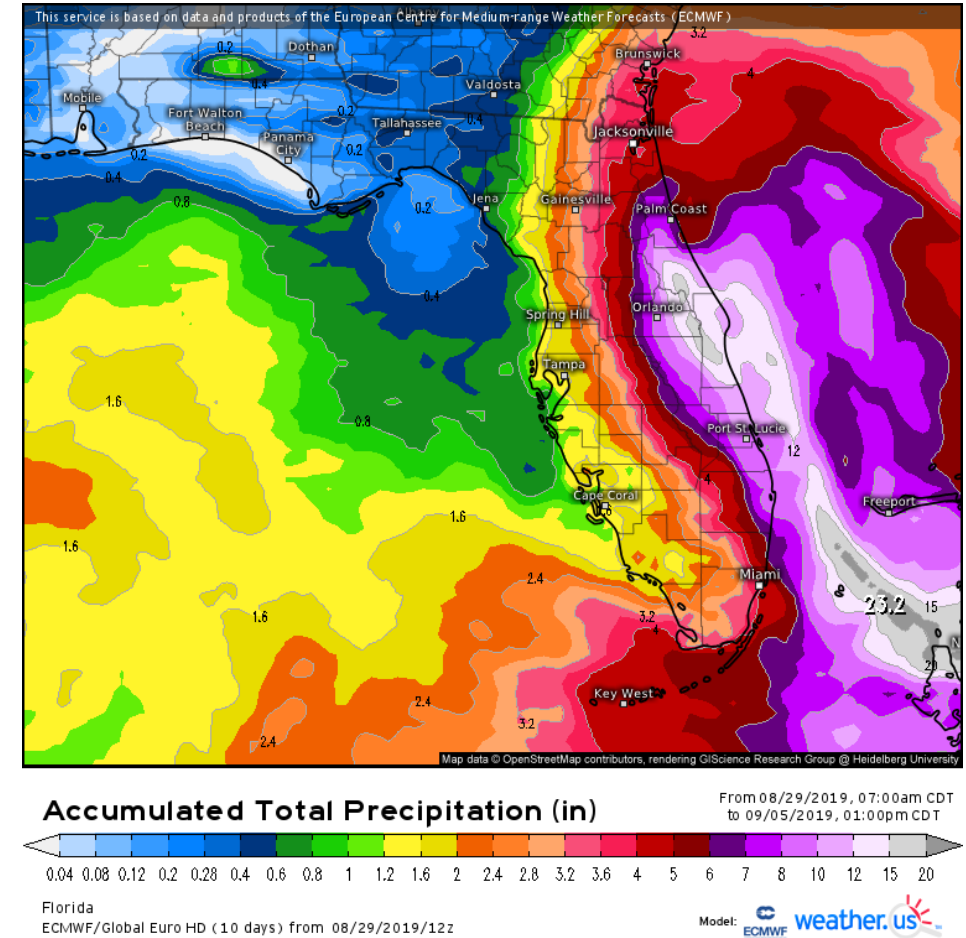
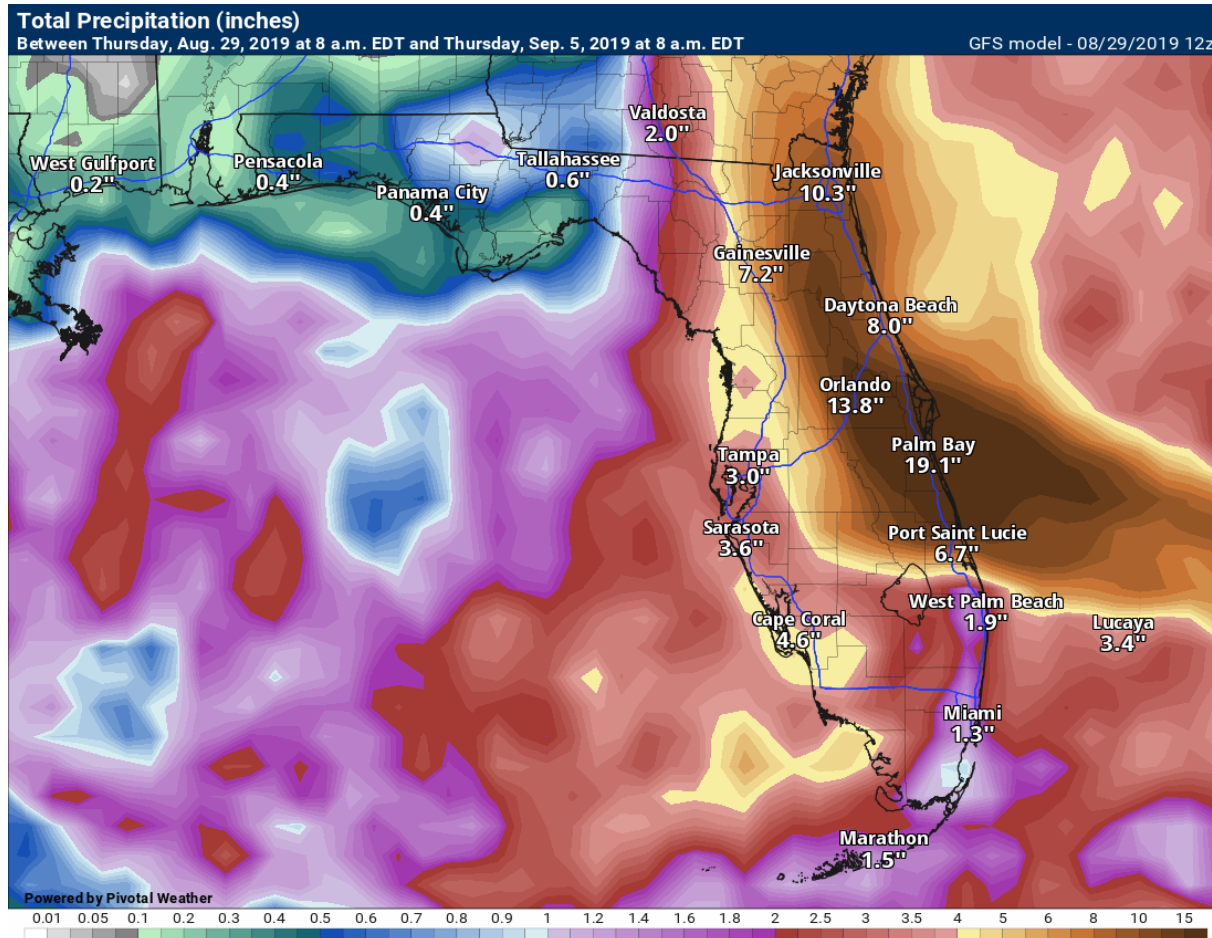
Given the recent stretch of wet weather, these rainfall amounts could create significant flash flooding and river flooding across the Peninsula.

*These rainfall forecasts are track-dependent and will likely change with subsequent forecasts. **Wherever Dorian tracks, the heaviest rainfall totals will follow the track.** However, a widespread 6-12" of rain is expected across much of the state. Locally higher totals are possible, but it is too early to give specifics on rainfall totals.*



Model Rainfall Forecasts Next 7 Days

*****GUIDANCE ONLY***** *Not an exact forecast. Rainfall totals will vary both in place and amount.*



Very heavy rainfall is possible across much of the Peninsula. **Rainfall totals of 6-12" are possible** across much of the Peninsula with locally higher totals upwards of 16-20"+, very dependent on the track of Dorian.

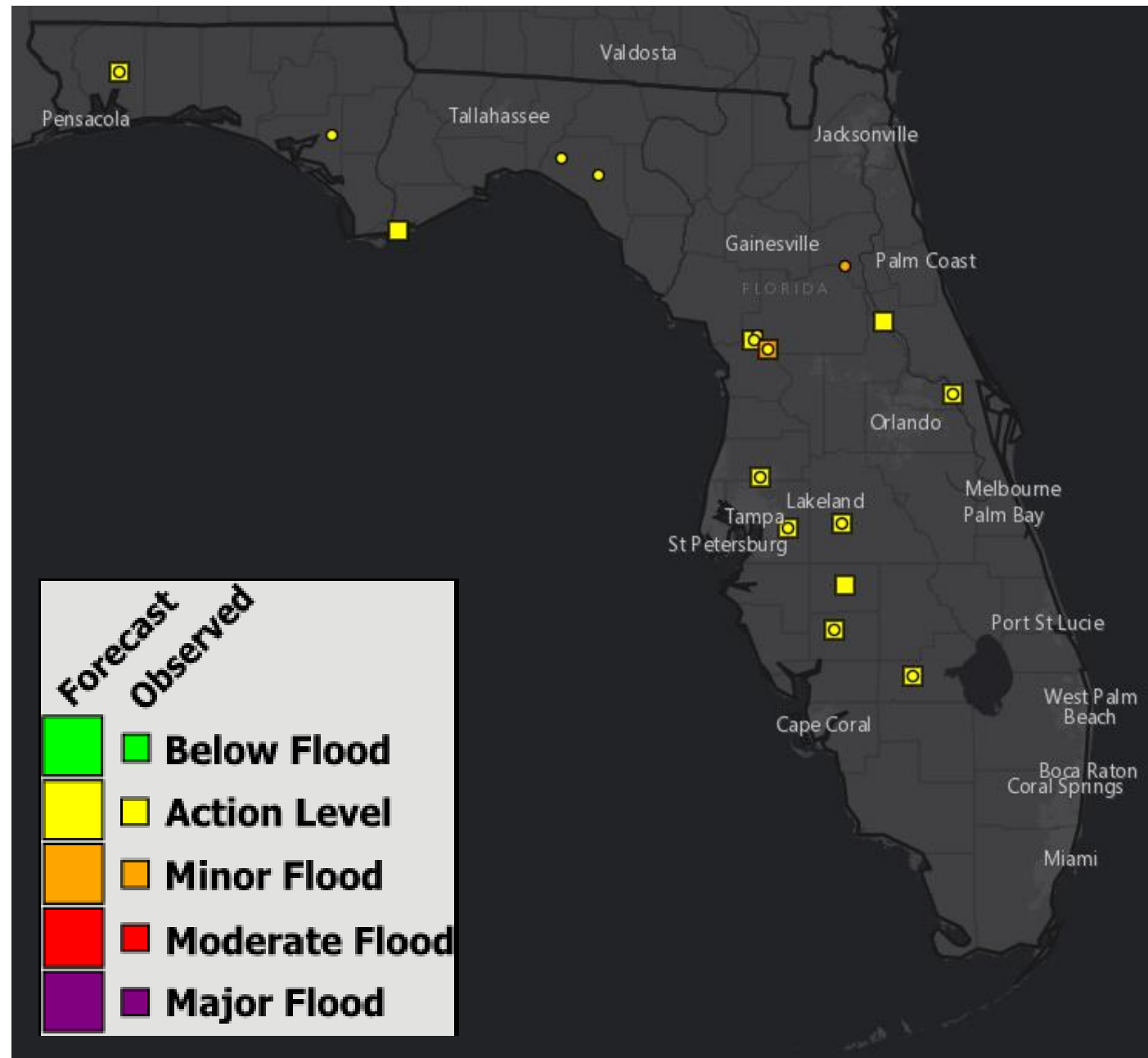
Current and Forecast River Conditions

Many rivers have fallen below flood stage after the last heavy rainfall event. The only river in minor flood stage right now is the Ocklawaha River at Rodman Dam. A River Flood Warning is in effect for the Withlacoochee River at Holder.

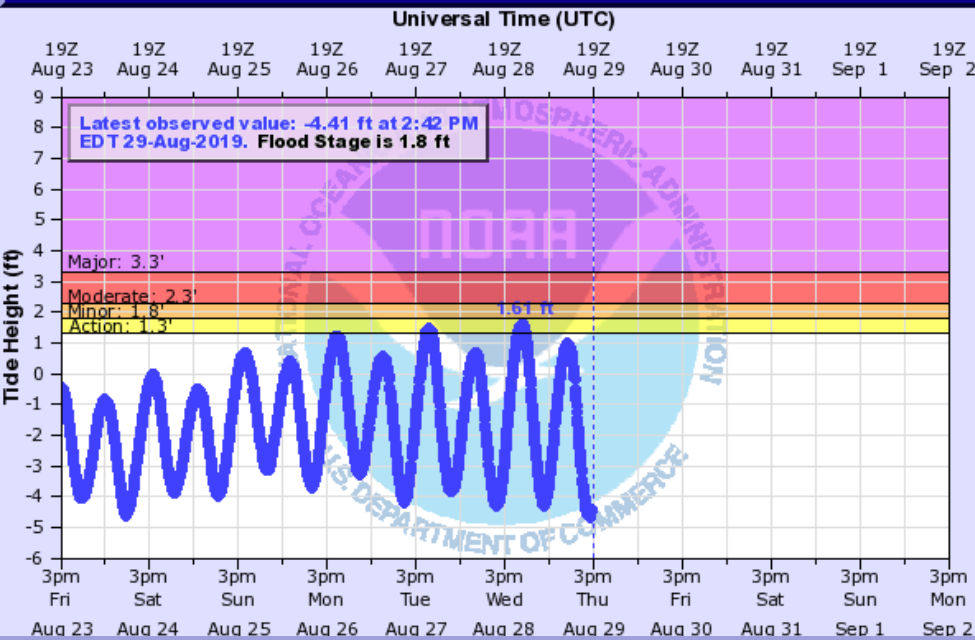
However, this only accounts for the next 48 hours of rainfall.

From the Southeast River Forecast Center:

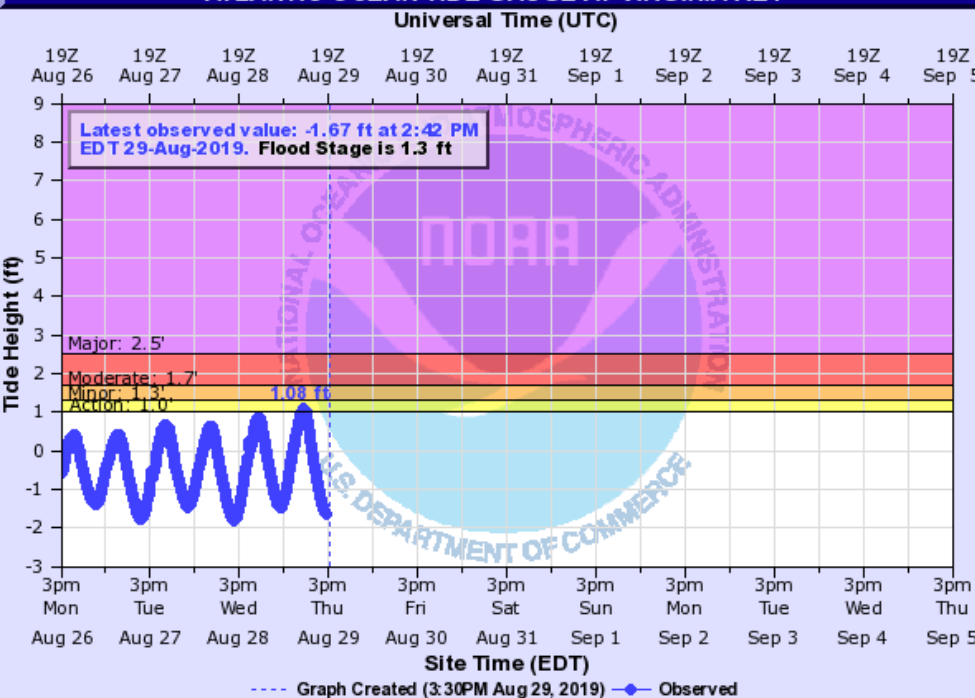
“Moderate and major river flooding is possible over much of Florida. Many rivers in Florida and in the southeast coastal plains could flood for days and weeks even after Dorian has moved out of the area.”



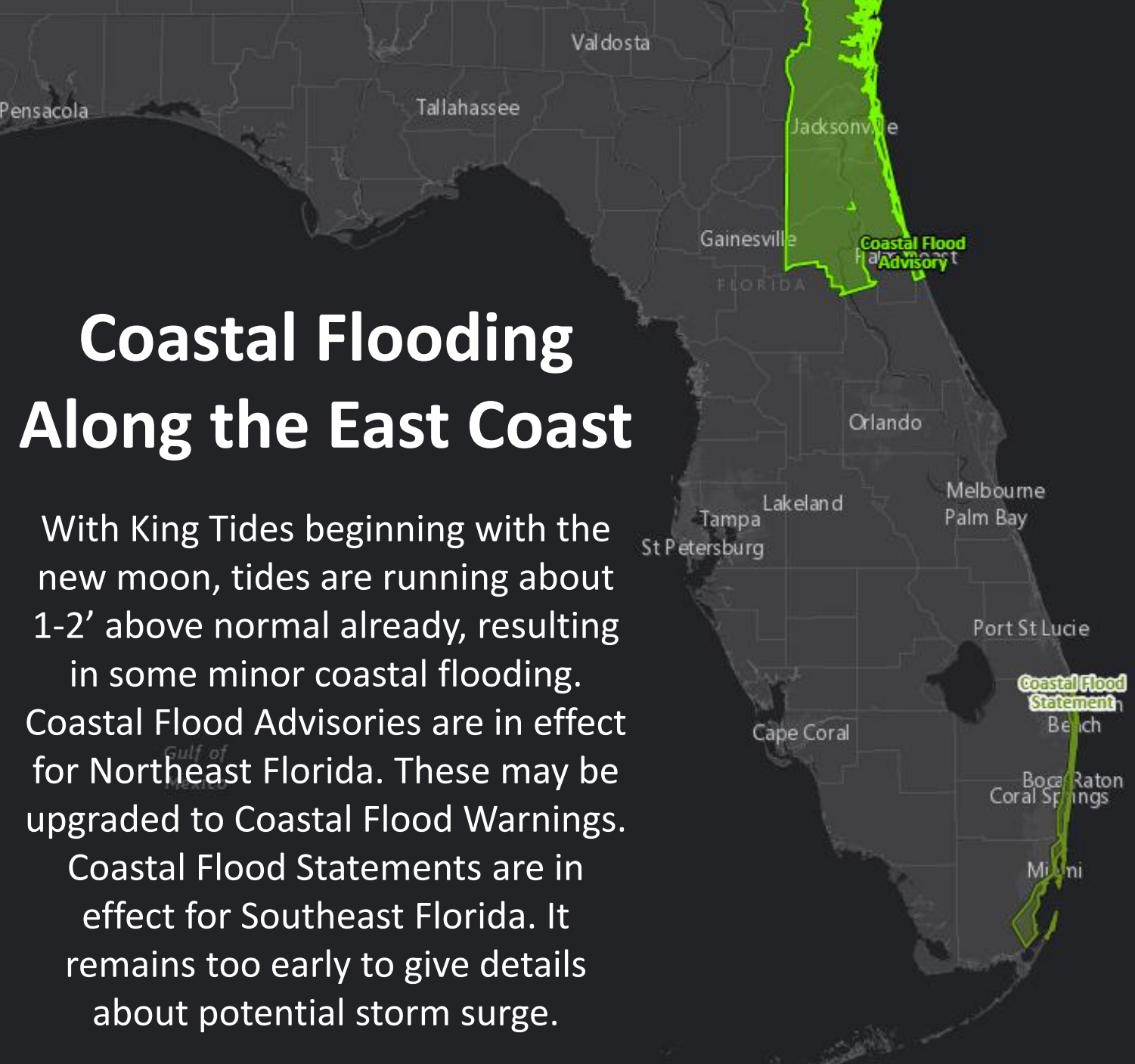
ST. JOHNS RIVER AT MAYPORT (IN MHHW)



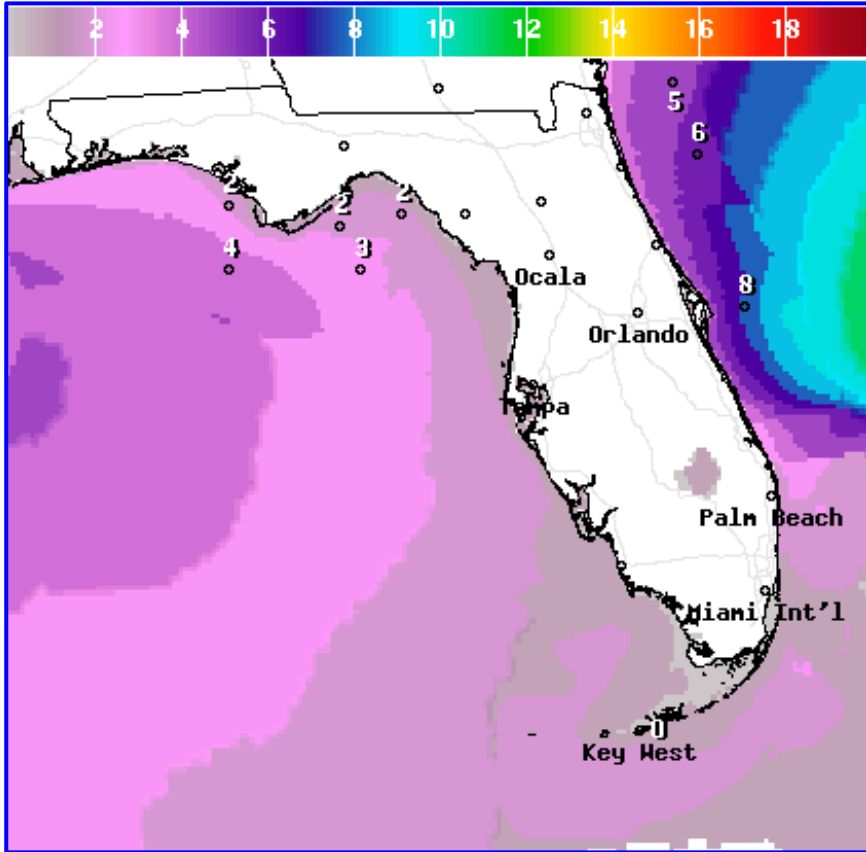
ATLANTIC OCEAN TIDE GAUGE AT VIRGINIA KEY



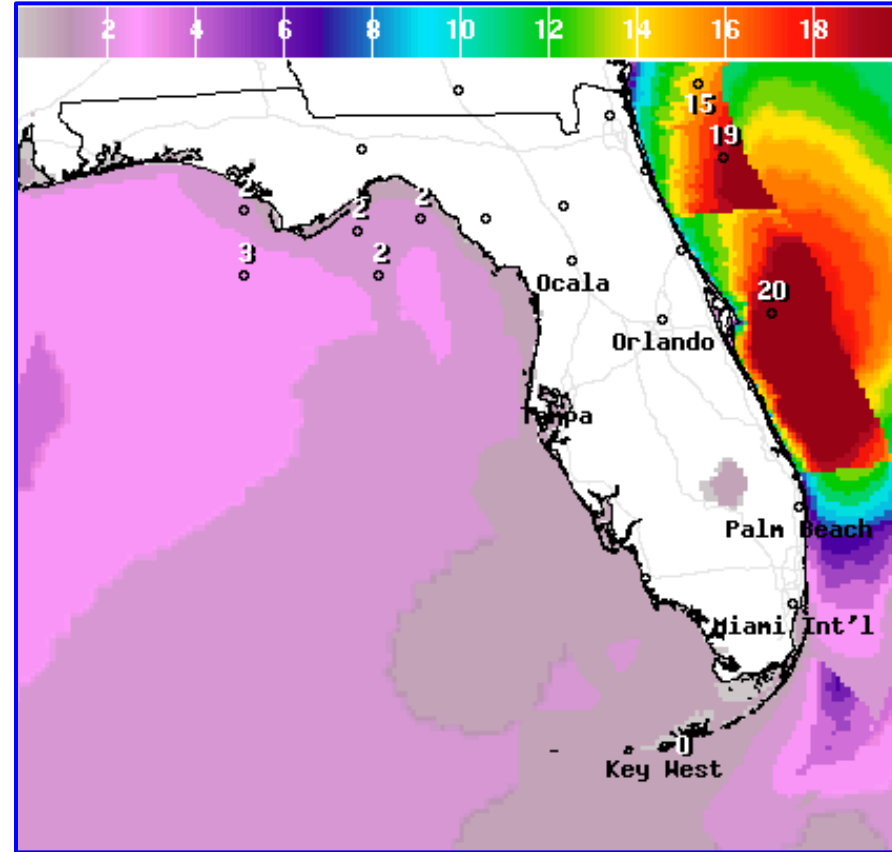
VAKF1(plotting HMIRG) "Gage 0" Datum: n/a



Forecast Wave Heights This Weekend



Saturday



Sunday

Dangerous rip currents are expected at all East Coast beaches this weekend into early next week. With the high breaking waves, beach erosion is likely to occur along many East Coast beaches.

Summary

Hurricane Dorian

- As of the 5 PM ET advisory, Hurricane Dorian was located 330 miles east of the southeastern Bahamas, and moving to the northwest at 13 mph. Maximum sustained winds remain near 85 mph, which is a Category 1 Hurricane.
- Dorian will continue moving northwestward over the 18-24 hours before turning more west-northwestward or westward Friday and over the weekend.
- ***Conditions are favorable for continued organization and strengthening over the next few days. Rapid intensification is within the realm of possibility.***
- Dorian is forecast to be an extremely dangerous MAJOR HURRICANE (lower-end Category 4) as it approaches Florida on Monday.
- The exact track is unknown after Day 4. However, a slower movement is expected near and after landfall as it moves near and over Florida. A slower movement will increase the heavy rainfall and flash flood/river flood threat.
- Dorian could also expand in size as it moves toward the Florida Peninsula, which could increase the area of possible wind impacts.
- Hurricane Hunters will continue to investigate the system regularly over the next few days.
- There are no areas being monitored for new tropical development over the next 5 days.

Florida Outlook:

- Hurricane Dorian's future slow speed continues to delay the forecast onset of tropical storm conditions into Sunday.
- The entire Florida Peninsula, Northeast Florida, and the Big Bend remain in the 5-day forecast cone.
- There are no tropical watches or warnings in effect, but tropical storm or hurricane watches could be issued as early as Friday.
- Dorian is forecast to be a Major Hurricane (lower-end Category 4) as it approaches Florida on Sunday through Tuesday (Northeast Florida, Central Florida, and/or South Florida).
- Early next week, Dorian could slow down and make a sharp turn to the north. However, where that turn occurs remains uncertain.
- The rip current risk will be dangerously high for the holiday weekend at all Florida beaches.
- Minor coastal flooding from the ongoing King Tides is possible along the Florida East Coast with tides running 1-2' above normal. Coastal Flood Advisories are in effect for Northeast Florida and Coastal Flood Statements for Southeast Florida.
- **Damaging winds, flash flooding, river flooding, storm surge, and isolated tornadoes are all possible later this weekend in the Florida Peninsula. However, it is still too early to give specifics on these threats.**
- **The threat for significant river and flash flooding is increasing across the Peninsula, regardless of the strength of Dorian.**
- **Confidence has increased in the intensity forecast through this weekend, but the track is uncertain early next week.**
- **All locations in Florida should continue to monitor Dorian for possible impacts over the Labor Day Weekend.**

The next tropics packet will be issued Friday morning. For the latest information on the tropics, please visit the National Hurricane Center website at www.hurricanes.gov. For the latest flood updates, see the latest products from your local National Weather Service, the [Southeast River Forecast Center](#), and the [Weather Prediction Center](#).



TROPICAL UPDATE



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Florida Division of Emergency Management

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