



TROPICAL UPDATE



5 PM EDT





Saturday, August 31, 2019

Major 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.

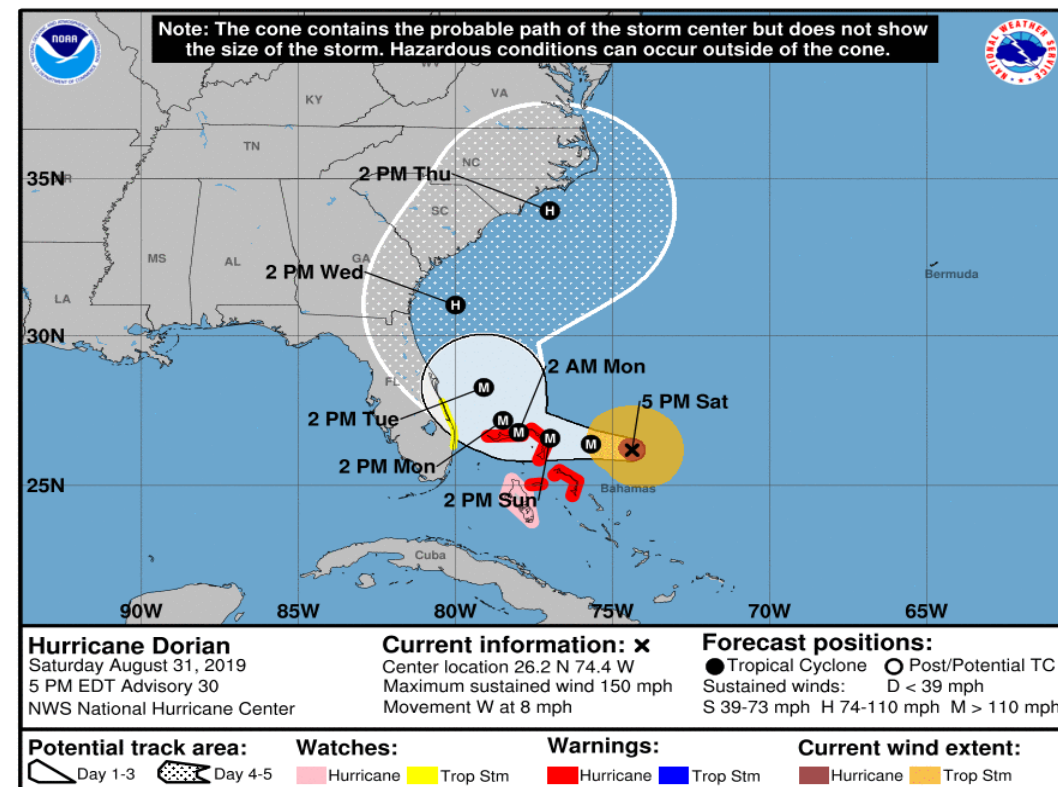
Major Hurricane Dorian

Saturday, August 31, 5 PM ET

	MINIMAL	Low	MODERATE	HIGH	EXTREME
 WINDS					
 STORM SURGE					
 FLOODING					
 TORNADOES					

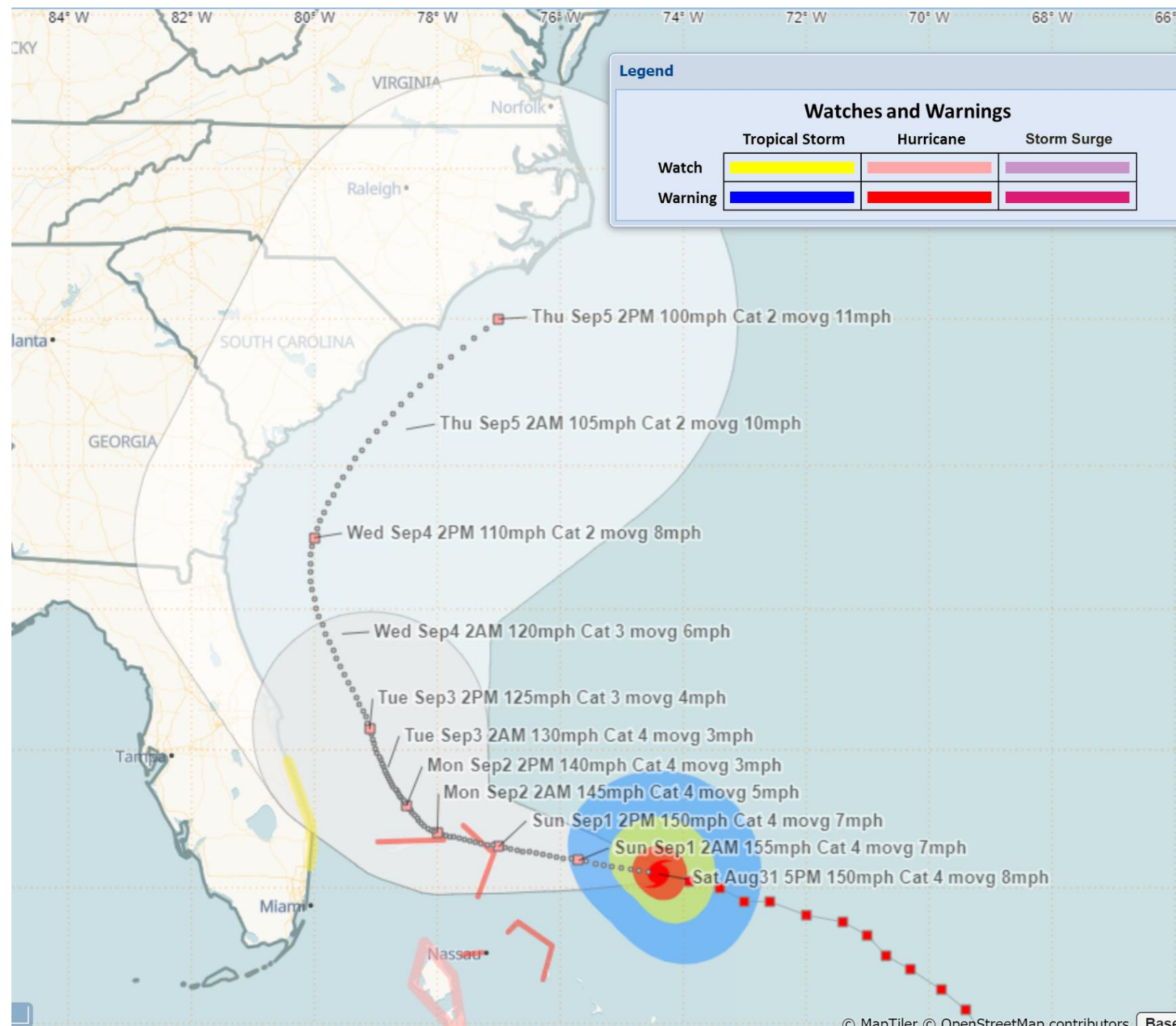
	Low	MODERATE	HIGH
 RIP CURRENTS			

National Hurricane Center Map



Changes Overnight:

- Dorian has continued to strengthen today, now a Major Category 4 hurricane with max sustained winds of 150 mph.
- Still uncertainty in northward turn, and the eastward trend in the forecast models have ceased.
- Life-threatening storm surge and devastating hurricane-force winds are still possible along portions of the Florida east coast (Treasure Coast to First Coast) by the early to middle part of next week.

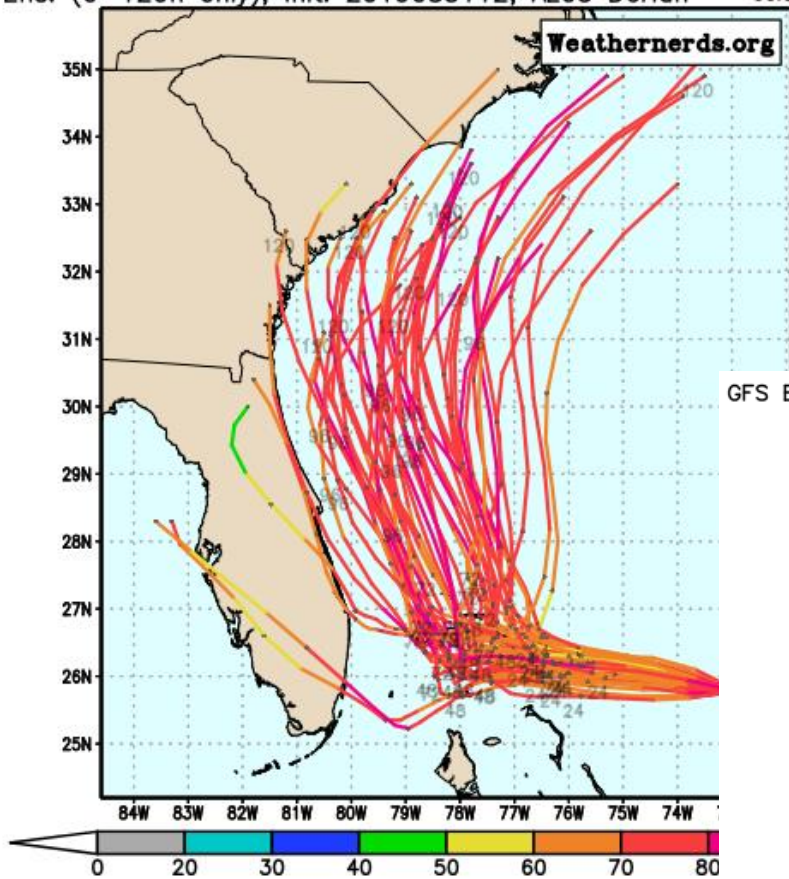


Hurricane Dorian Forecast Track

Hurricane Dorian, located 355 miles east of West Palm Beach, and continues to move west at 8 mph. Maximum sustained winds remain near 150 mph (Category 4).

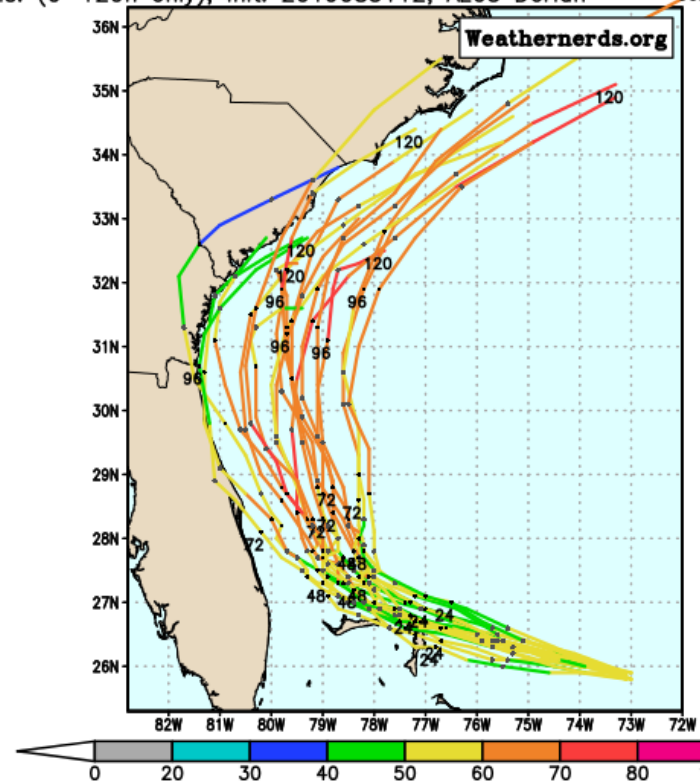
Tropical Storm Watches have just been issued for the Florida East Coast from Deerfield Beach northward to Sebastian Inlet (Palm Beach, Martin, St. Lucie, Indian River Counties).

ECMWF Ens. (0-120h only), init: 2019083112, AL05 Dorian color = max wind (kt)



While the majority of the forecast model guidance indicates a northward turn before reaching the Florida Coast, there is still a chance that the core of Dorian may come close enough to the coast to still bring significant impacts to East-Central and Northeast Florida.

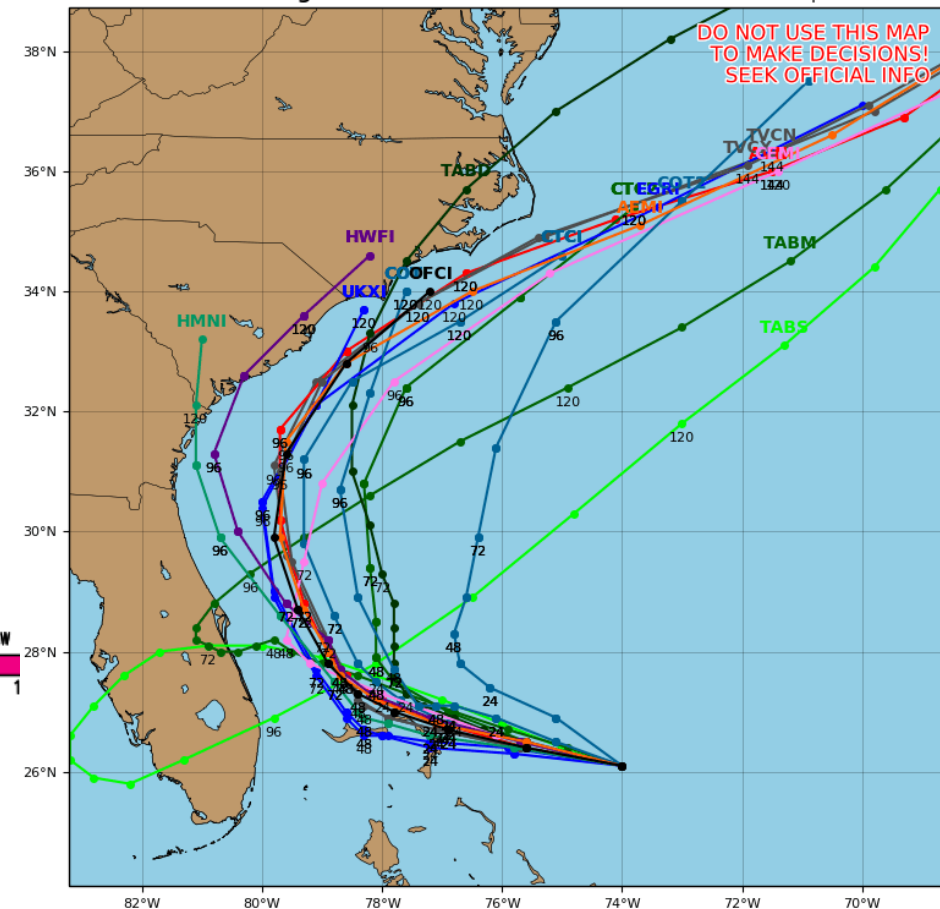
GFS Ens. (0-120h only), init: 2019083112, AL05 Dorian color = max wind (kt)

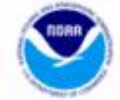


Hurricane DORIAN Model Track Guidance

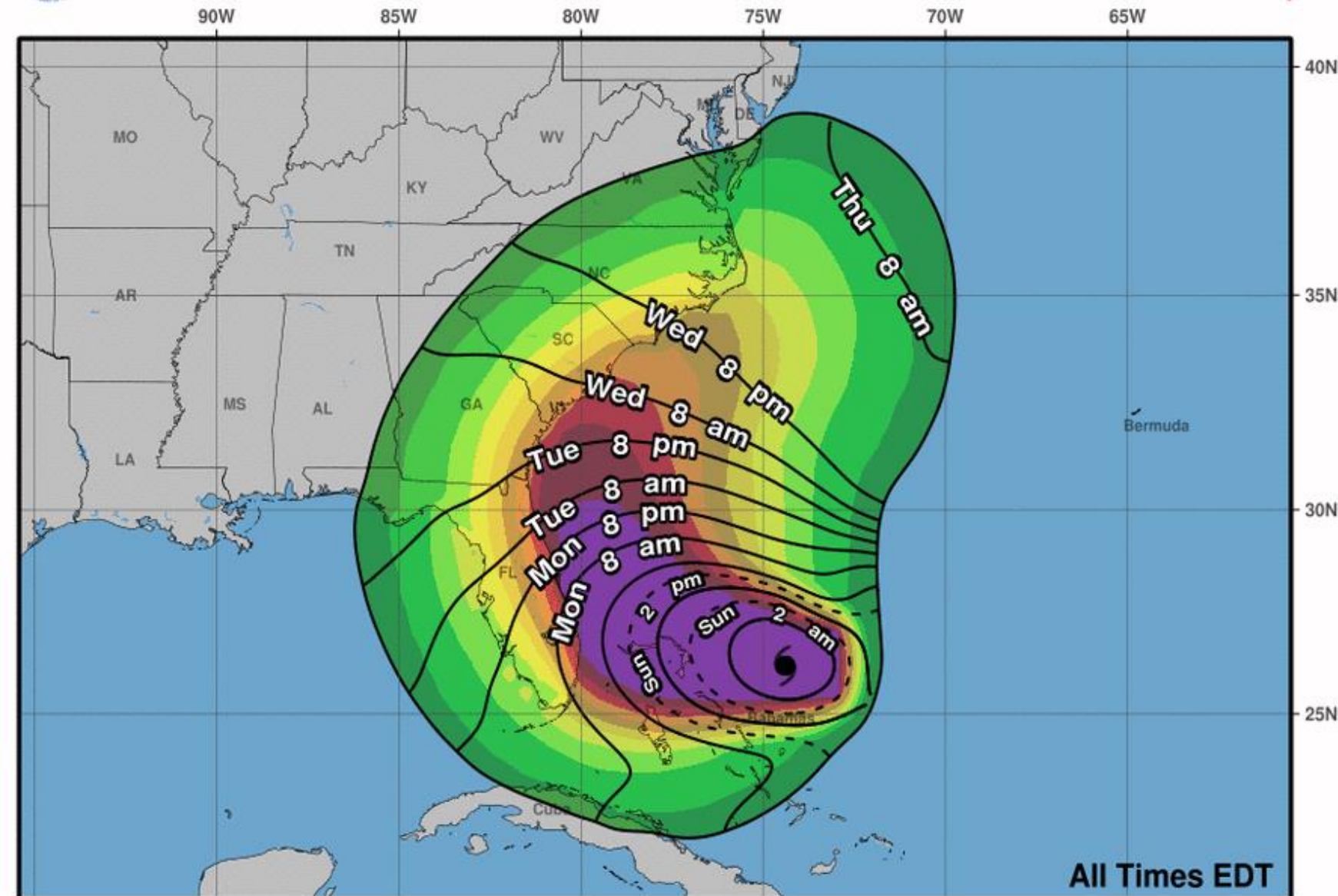
Initialized at 18z Aug 31 2019

Levi Cowan - tropicaltidbits.com





Most Likely Arrival Time of Tropical-Storm-Force Winds



Chance of TROPICAL STORM FORCE WINDS (>39 mph):

Jacksonville: 60%
Daytona Beach: 73%
Orlando: 65%
Cocoa Beach: 91%
Ft. Pierce: 94%
West Palm Beach: 91%
Ft. Lauderdale: 80%
Miami: 43%
Naples: 24%
Tampa: 33%
Tallahassee: 14%

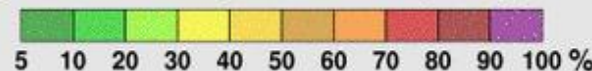
TS wind could arrive along the Palm Beaches/Treasure Coast Monday morning then spread northward Monday night and Tuesday.

Hurricane Dorian
Sat. Aug. 31, 2019 5 pm EDT
Advisory 30

Storm Location & Wind Speed

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

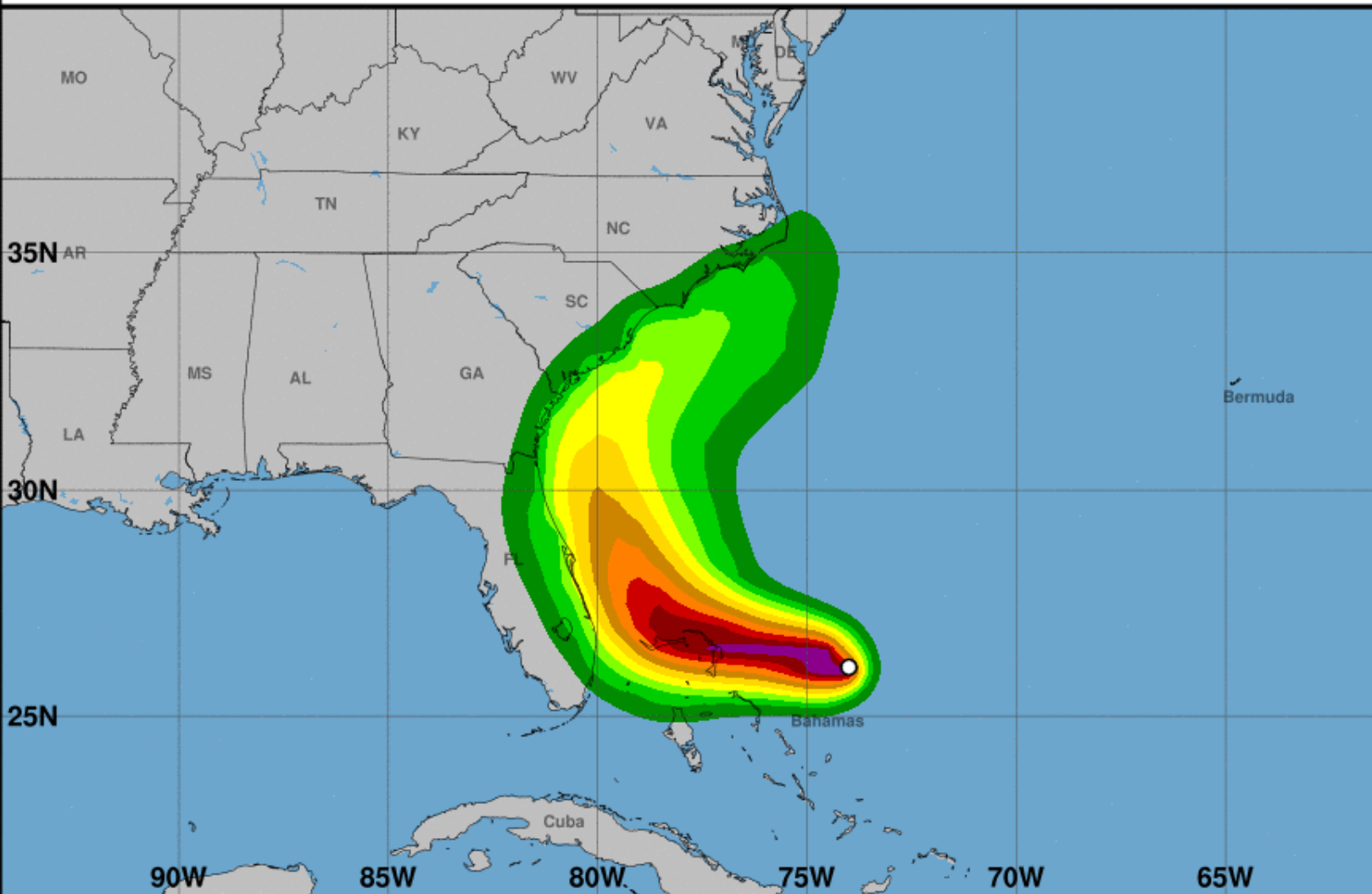
5-day chance of receiving sustained 34+ kt (39+ mph) winds





Hurricane-Force Wind Speed Probabilities (Preliminary)

For the 120 hours (5.0 days) from 2 PM EDT SAT AUG 31 to 2 PM EDT THU SEP 05



Probability of hurricane-force winds (1-minute average ≥ 74 mph) from Hurricane Dorian
○ indicates Hurricane Dorian center location at 2 PM EDT SAT AUG 31, 2019 (Forecast/Advisory #30)



Chance of HURRICANE FORCE WINDS
(>74 mph):

Jacksonville: 8%
Orlando: 10%
Cocoa Beach: 34%
Ft. Pierce: 35%
West Palm Beach: 26%
Ft. Lauderdale: 12%
Miami: 3%



Key Messages for Hurricane Dorian

Advisory 30: 5:00 PM EDT Sat Aug 31, 2019



1. A prolonged period of life-threatening storm surge, devastating hurricane-force winds, and heavy rains capable of life-threatening flash floods are expected on the Abaco Islands and Grand Bahama Sunday through Monday, and a hurricane warning is in effect for these areas.

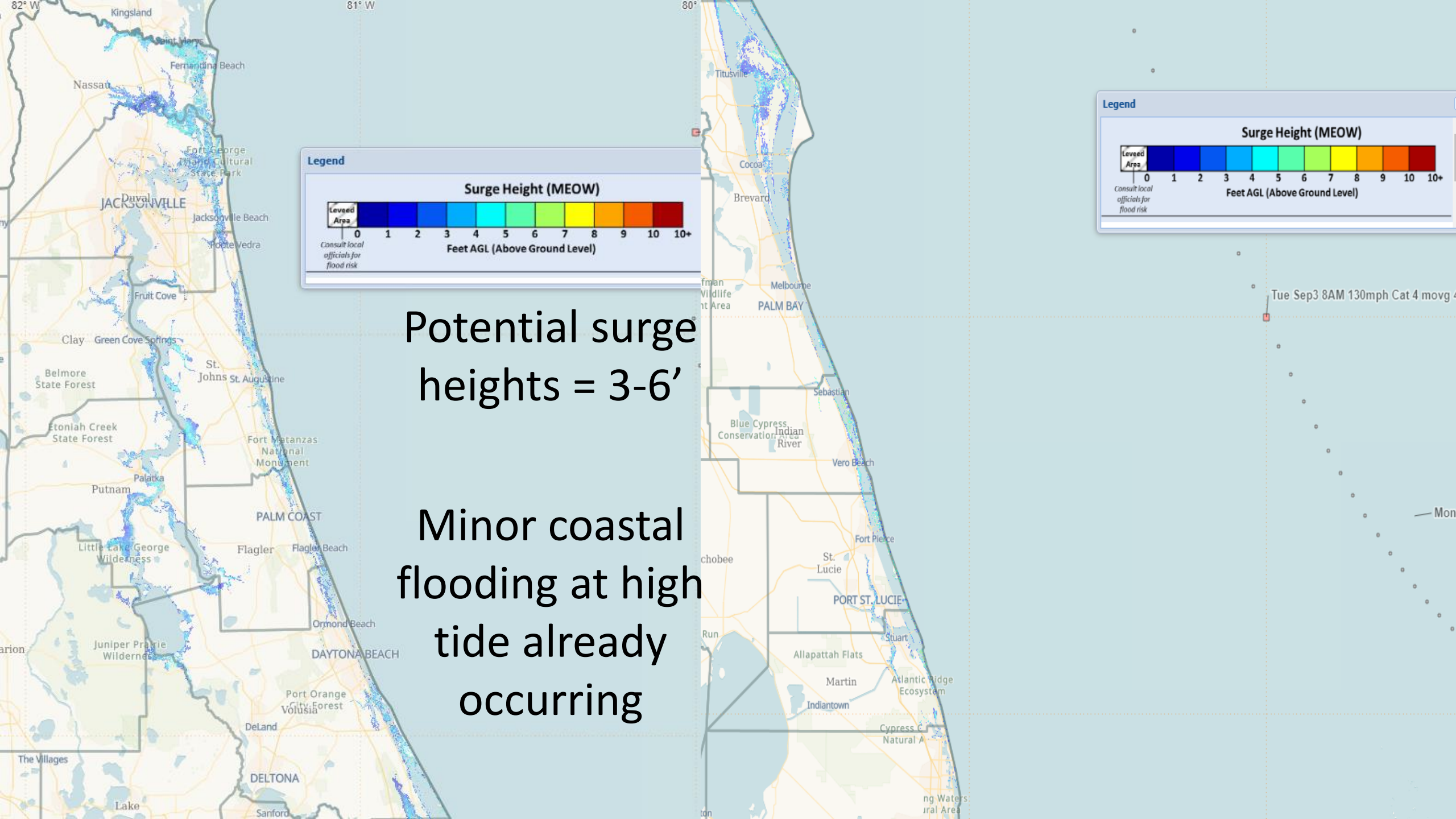
2. A tropical storm watch is in effect for a portion of the Florida east coast. Since Dorian is forecast to slow down and turn northward as it approaches the coast, life-threatening storm surge and dangerous hurricane-force winds are still possible along portions of the Florida east coast by the early to middle part of next week. 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. There is an increasing risk of strong winds and dangerous storm surge along the coasts of Georgia, South Carolina, and North Carolina during the middle of next week. Residents in these areas should continue to monitor the progress of Dorian.

4. Heavy rains, capable of life-threatening flash floods, are possible over coastal sections of the southeastern United States from Sunday through much of next week.



For more information go to hurricanes.gov



Potential surge heights = 3-6'

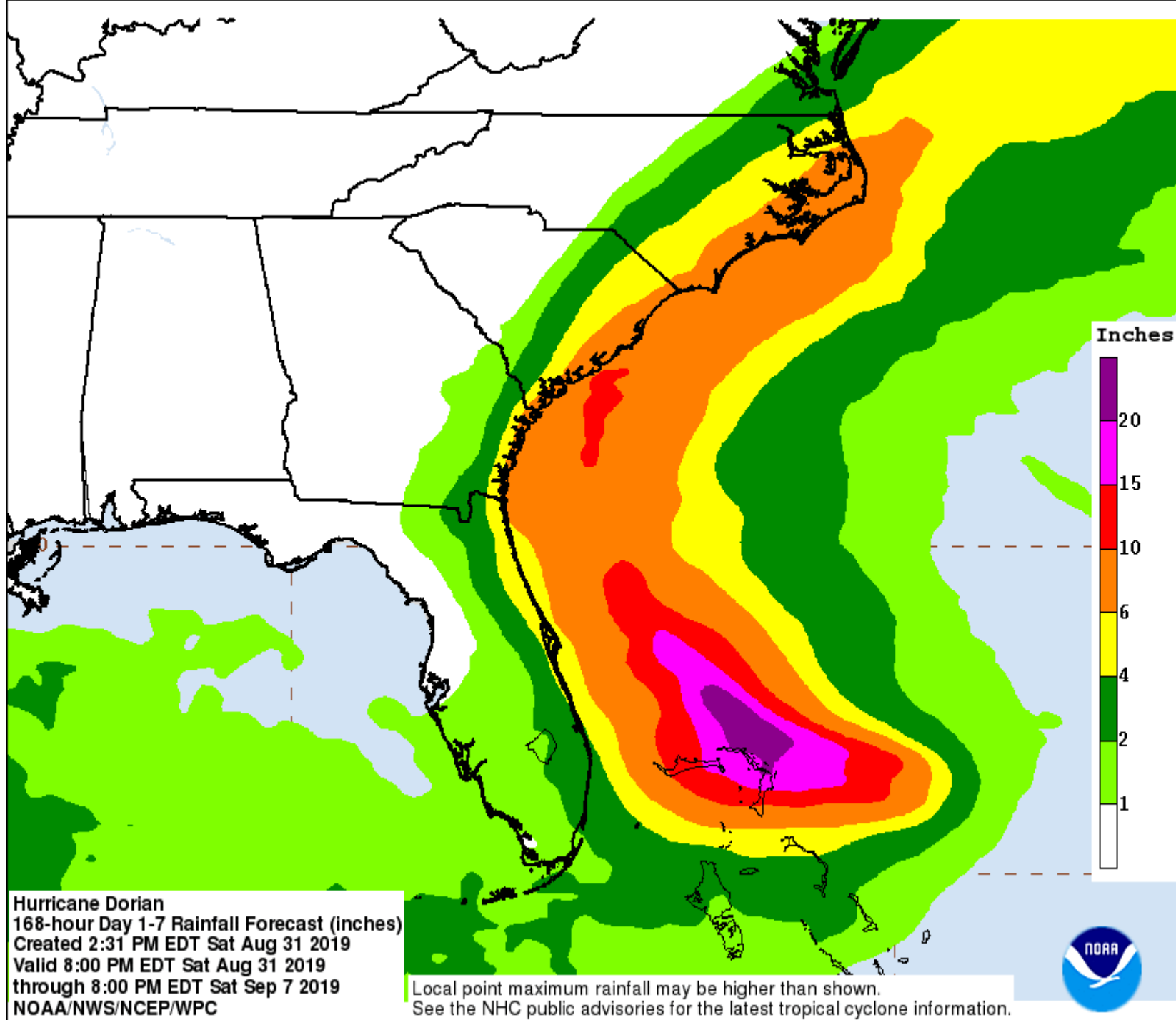
Minor coastal flooding at high tide already occurring

Rainfall Forecast Next 7 Days

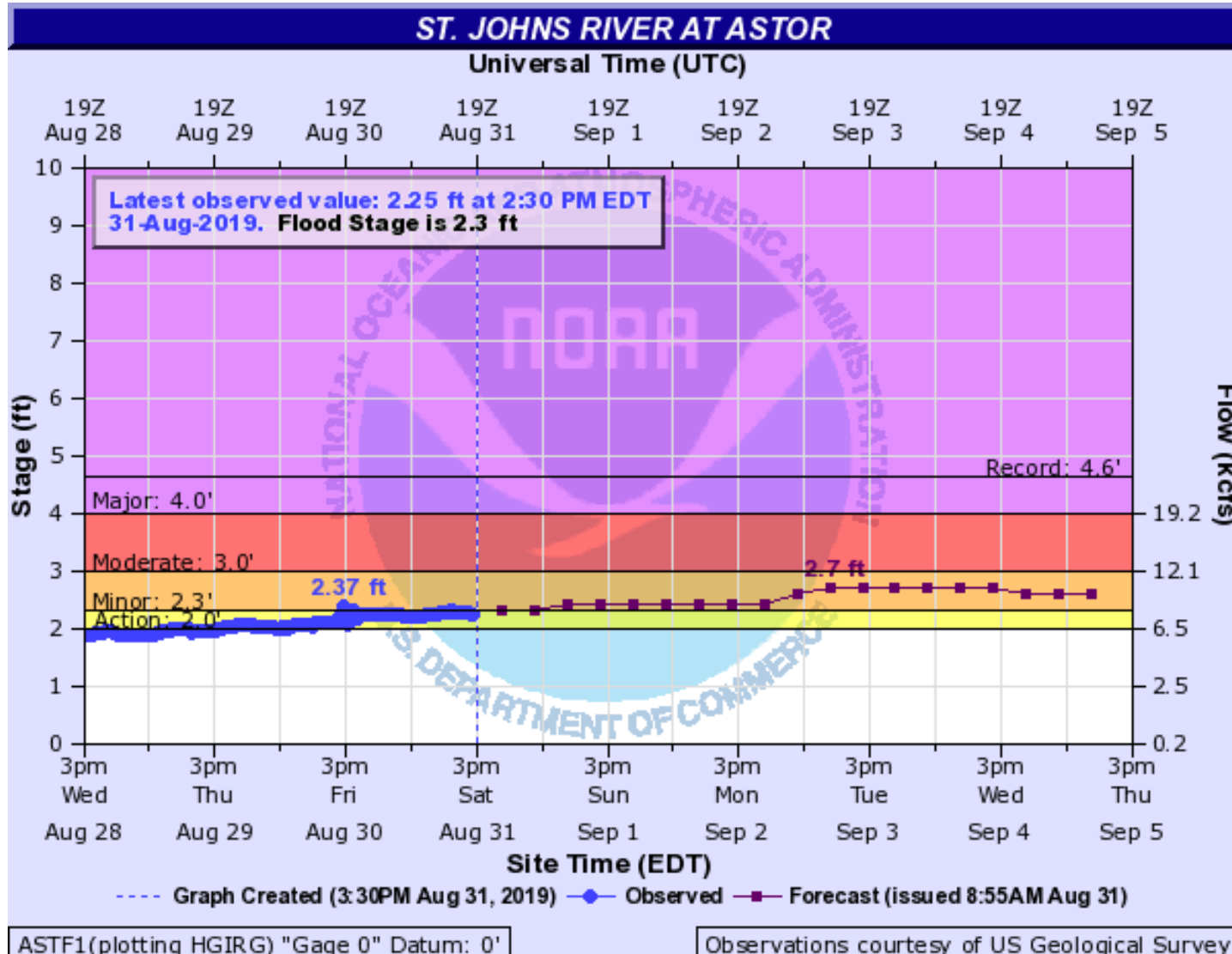
Dorian is now forecast to bring 3-6" of rain to the Florida East Coast through the next 2-5 days.

Given the recent stretch of wet weather, these rainfall amounts could still create urban and minor river flooding along the East Coast.

If more rainfall (closer to 5-10") were to occur, moderate to potentially major flooding could occur.

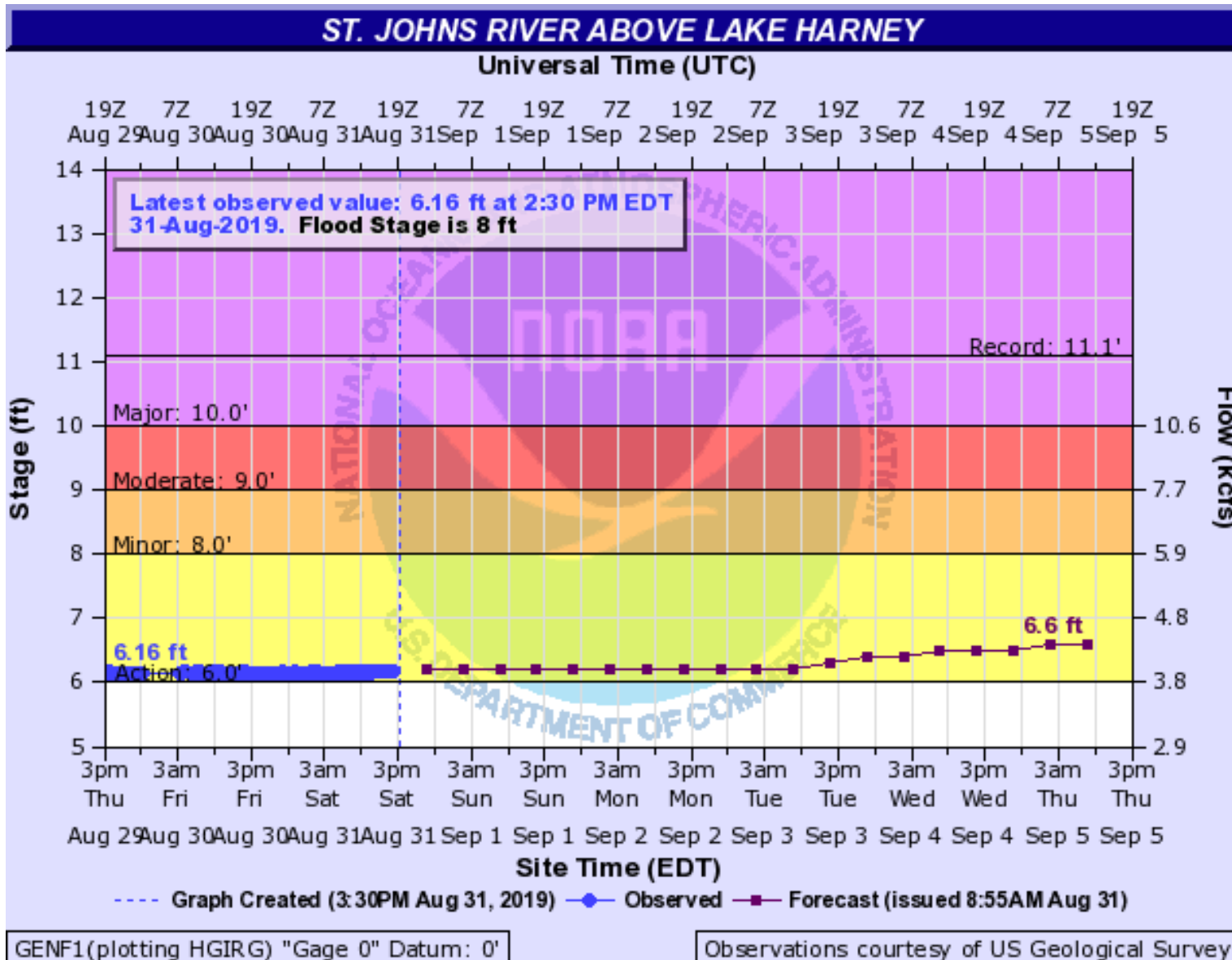


River Forecasts



- If 2-5" of rain were to occur, minor flooding would be expected on the St. Johns River at Astor. If 7-10" of rain occurs, moderate to potentially major flooding could occur.

River Forecasts



- If 2-4" of rain were to occur, minor flooding would be expected on the St. Johns River at Lake Harney. If 4-7" of rain occurs, minor to moderate flooding could occur.



Five-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida



All Disturbances

1. A tropical wave located 100 miles east of the Cabo Verde Islands is producing widespread cloudiness and showers. Environmental conditions are forecast to be conducive for development of this disturbance during the next few days and a tropical depression could form next week while the system moves across the eastern tropical Atlantic Ocean.

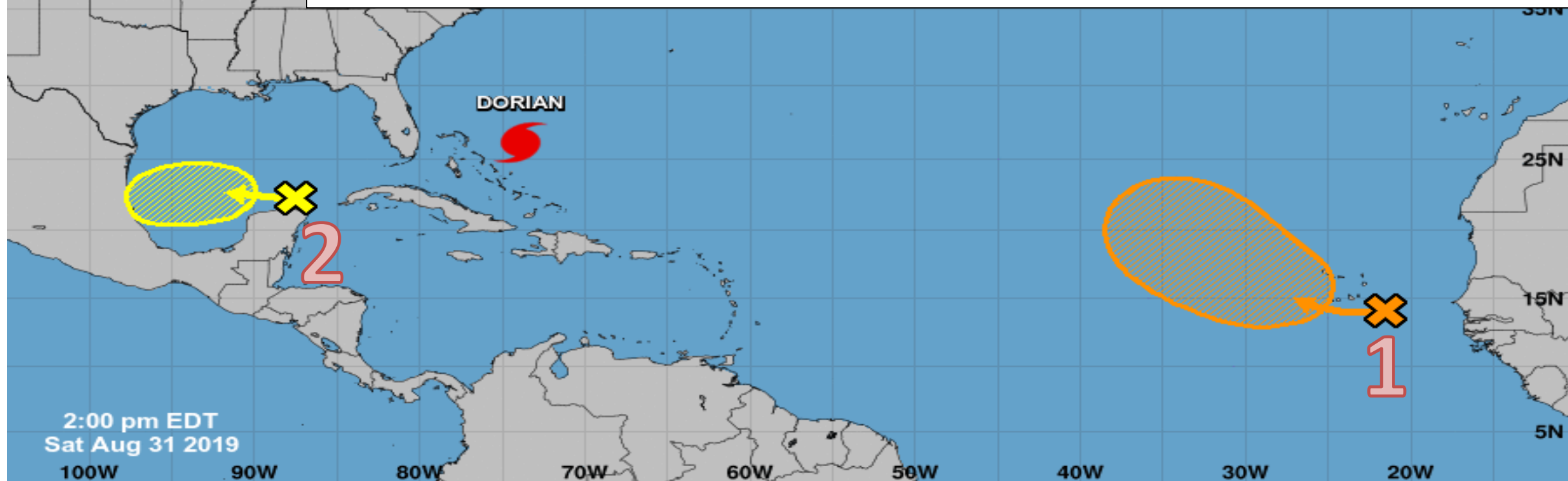
* Formation chance through 48 hours...**low**...20 percent.

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

2. A broad area of low pressure located over the southeastern Gulf of Mexico is producing limited shower and thunderstorm activity. Some gradual development of this system is possible during the next few days while it moves slowly westward across the southwestern Gulf of Mexico.

* Formation chance through 48 hours...**low**...20 percent.

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

Major Hurricane Dorian

- At 5 PM ET Saturday, Hurricane Dorian was located 355 miles east of West Palm Beach, and moving to the west at 8 mph.
- Maximum sustained winds have increased to 150 mph, which is a Category 4 Major Hurricane. Dorian is forecast to maintain Category 3 or 4 strength through Tuesday.
- Dorian will continue a westward path through Sunday before slowing down and turning more northwest late Sunday or early Monday, but how far west Dorian gets before the turn remains uncertain and could bring the core of Hurricane Dorian closer to Florida. Once the northward turn is completed, a faster forward motion should resume.
- Dorian's slow movement and it nears and parallels Florida will influence the duration of impacts.
- Dorian could also expand in size as it moves toward the Florida Peninsula, which could increase the area of possible wind impacts.
- Dorian is forecast to also parallel the Georgia and South Carolina coasts
- Elsewhere, a tropical wave has moved off the west coast of Africa. Some development if this wave is possible next week and the National Hurricane Center is predicting a 60% (medium) chance of becoming a tropical depression within the next 5 days.
- A broad area of low pressure has developed in the Gulf of Mexico. Some slow development is possible as it moves towards the west. The National Hurricane Center is predicting a 30% (low) chance of becoming a tropical depression with the next 5 days.

Florida Outlook:

- The Treasure and Space Coast are in the 3-day forecast cone, with portions of Central Florida and Northeast Florida remaining in the 5-day forecast cone.
- A **Tropical Storm Watch** is now in effect from Deerfield Beach to Sebastian Inlet, meaning tropical storm force winds are possible within the next 48 hours.
- Additional watches could be expanded northward later tonight or tomorrow.
- Damaging winds, flash flooding, river flooding, storm surge, and isolated tornadoes are all still possible with Dorian, but the severity of the impacts will be dependent on the future track of the storm.
- Tropical storm force winds could arrive for Treasure Coast areas as early as Monday morning and will spread northward during the day on Monday and continue through Tuesday.
- Rainfall amounts of 3-6" is expected along the East Coast, with locally higher amounts. This may cause minor flooding issues along with post-landfall river/creek flooding.
- The rip current risk will be dangerously high for the holiday weekend at all Atlantic beaches, along with dangerous, battering large waves causing moderate to severe erosion.
- Neither system being monitored for development poses a threat to Florida.

The next tropics packet will be issued Sunday 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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