



TROPICAL UPDATE



8 AM EDT

Sunday, September 1, 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.

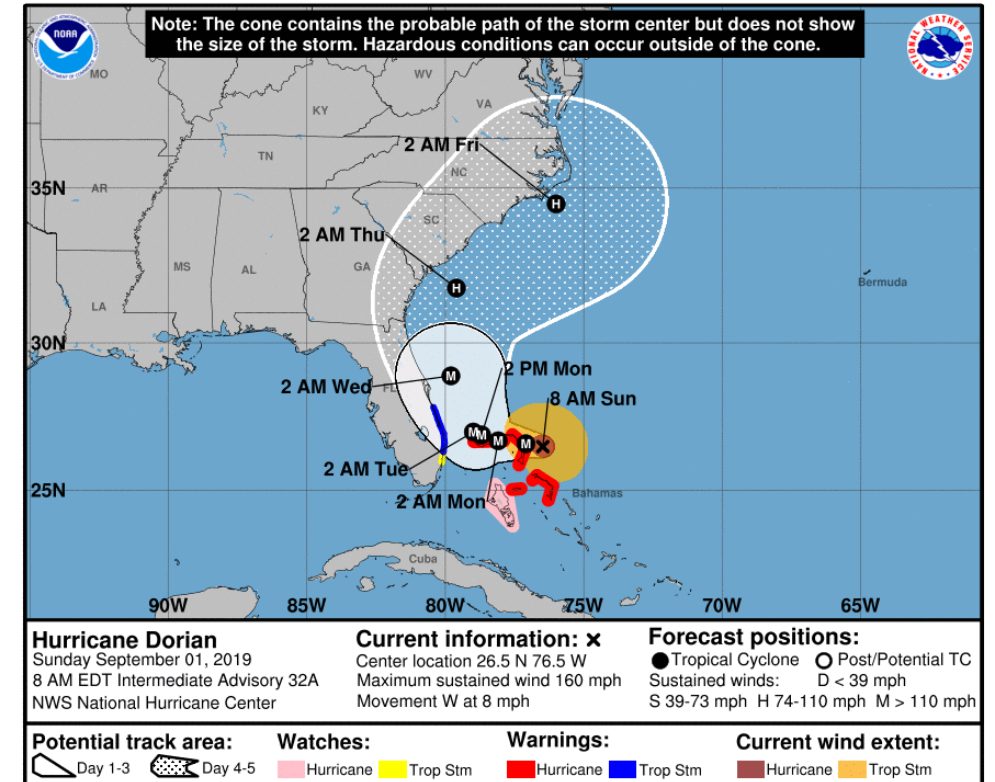
Major Hurricane Dorian

Sunday, September 1, 8AM ET

	MINIMAL	Low	MODERATE	HIGH	EXTREME
 WINDS					
 STORM SURGE					
 FLOODING					
 TORNADOES					

	Low	MODERATE	HIGH
 RIP CURRENTS			

National Hurricane Center Map



Changes Overnight:

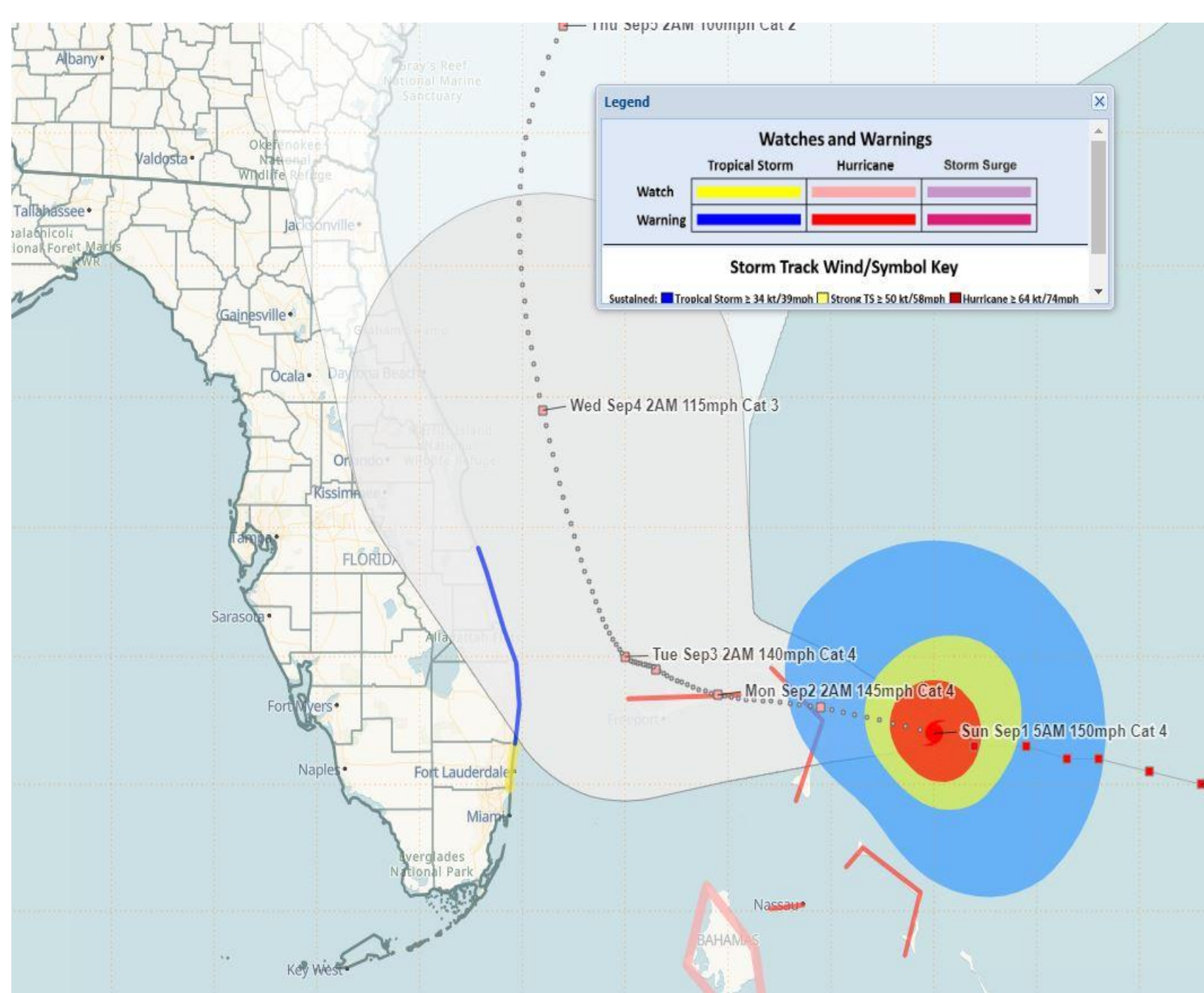
- Dorian has continued to strengthen, and is now a Category 5 with max sustained winds of 160 mph.
- Still uncertainty in northward turn, but confidence growing in Dorian making the turn east of Florida
- Tropical Storm Warnings for the Treasure Coast with a Tropical Storm Watch for Broward.

Hurricane Dorian Forecast Track

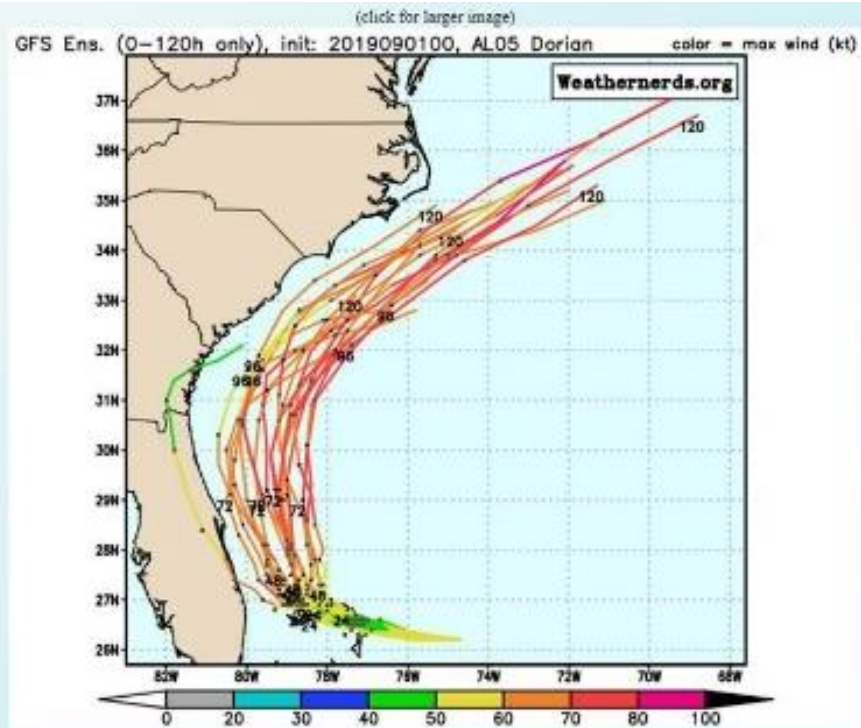
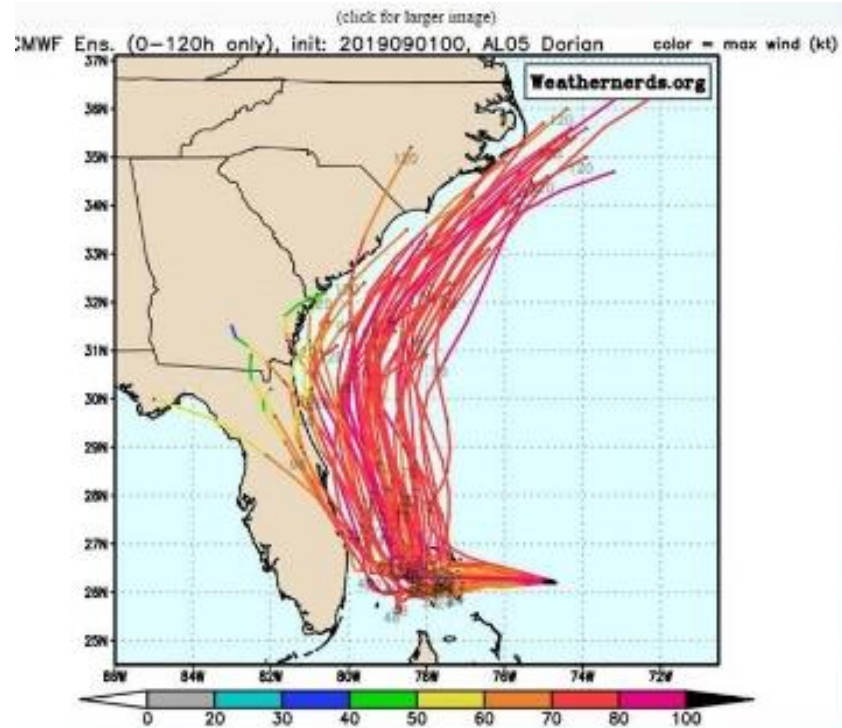
Hurricane Dorian, located 225 miles east of West Palm Beach, continues to move west at 8 mph. Maximum sustained winds increased to 160 mph (Category 5).

Tropical Storm Warnings are in effect for the Florida East Coast from Deerfield Beach northward to Sebastian Inlet (Palm Beach, Martin, St. Lucie, Indian River Counties).

A Tropical Storm Watch is in effect for Broward County.



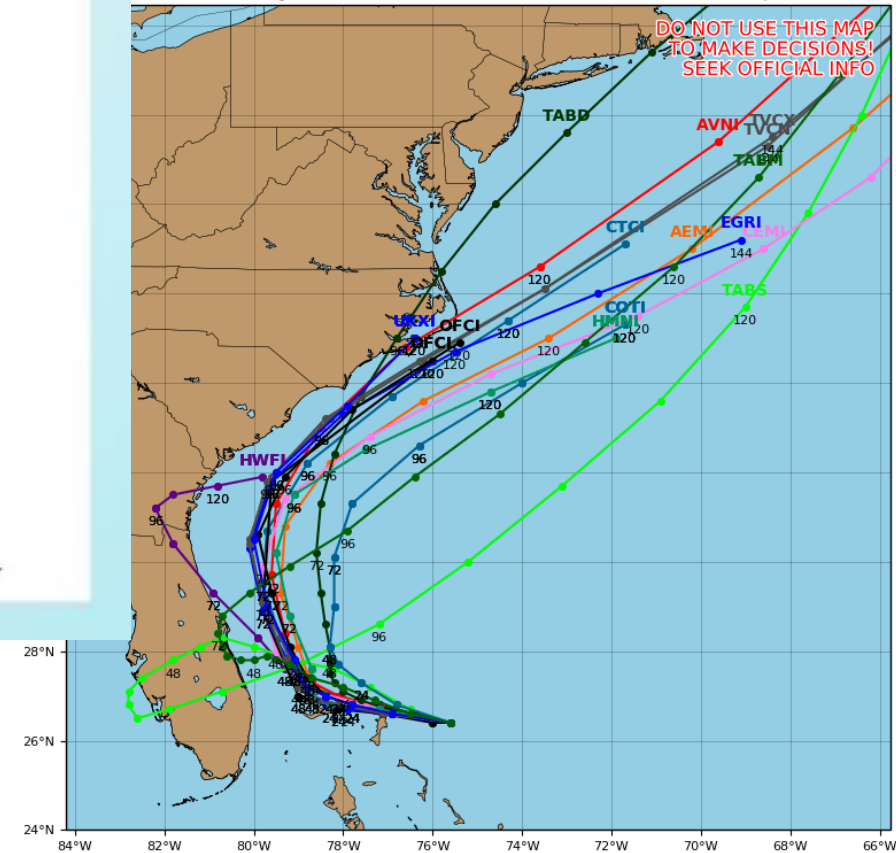
While the majority of the forecast model guidance indicates a northward turn before reaching the Florida Coast, there is still a chance that the core of Dorian may come close enough to the coast to still bring significant impacts to East-Central and Northeast Florida.



Hurricane DORIAN Model Track Guidance

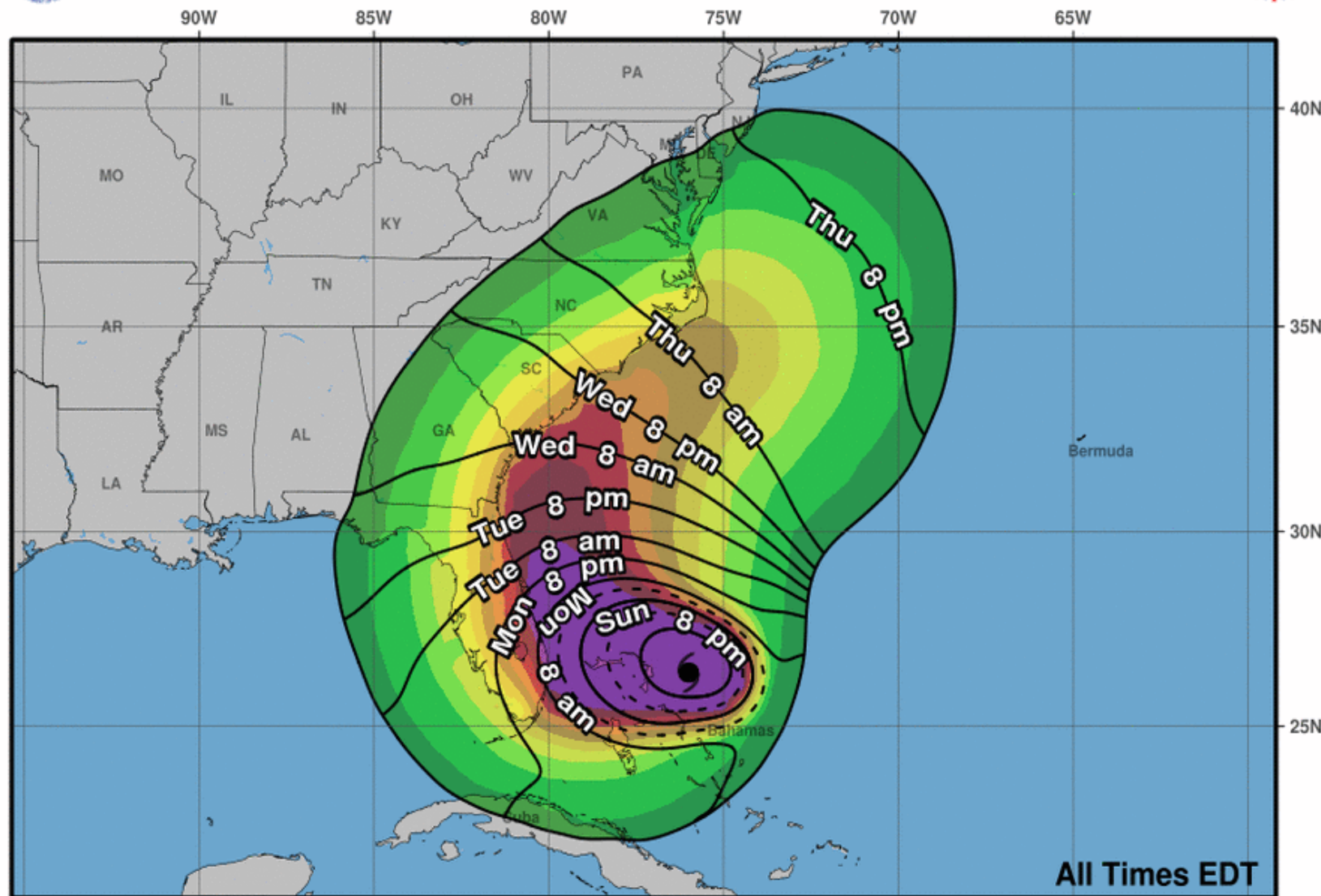
Updated at 06z Sep 01 2019

Levi Cowan - tropicaltidbits.com





Most Likely Arrival Time of Tropical-Storm-Force Winds



Hurricane Dorian
Sun. Sep. 1, 2019 5 am EDT
Advisory 32

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 %

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

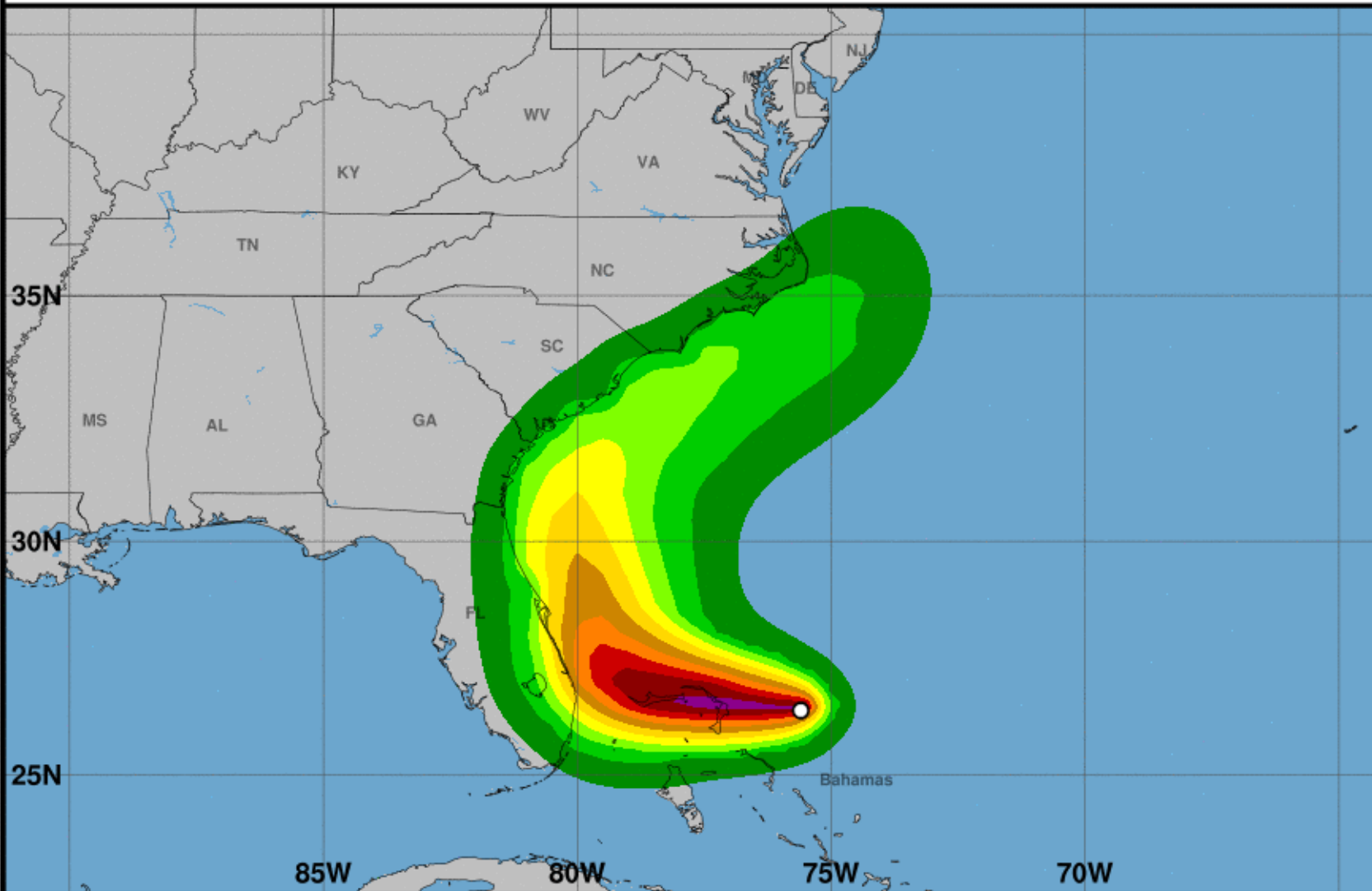
Jacksonville: 55%
Daytona Beach: 74%
Orlando: 69%
Cocoa Beach: 95%
Ft. Pierce: 98%
West Palm Beach: 98%
Ft. Lauderdale: 92%
Miami: 58%
Naples: 31%
Tampa: 33%
Tallahassee: 13%

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



Hurricane-Force Wind Speed Probabilities

For the 120 hours (5.00 days) from 2 AM EDT SUN SEP 01 to 2 AM EDT FRI SEP 06



Chance of HURRICANE FORCE WINDS
(>74 mph):

Jacksonville: 5%
Orlando: 12%
Cocoa Beach: 41%
Ft. Pierce: 53%
West Palm Beach: 47%
Ft. Lauderdale: 24%
Miami: 7%

Probability of hurricane-force winds (1-minute average ≥ 74 mph) from all tropical cyclones
O indicates Hurricane Dorian center location at 2 AM EDT SUN SEP 01, 2019 (Forecast/Advisory #32)





Key Messages for Hurricane Dorian

Advisory 32: 5:00 AM EDT Sun Sep 01, 2019



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

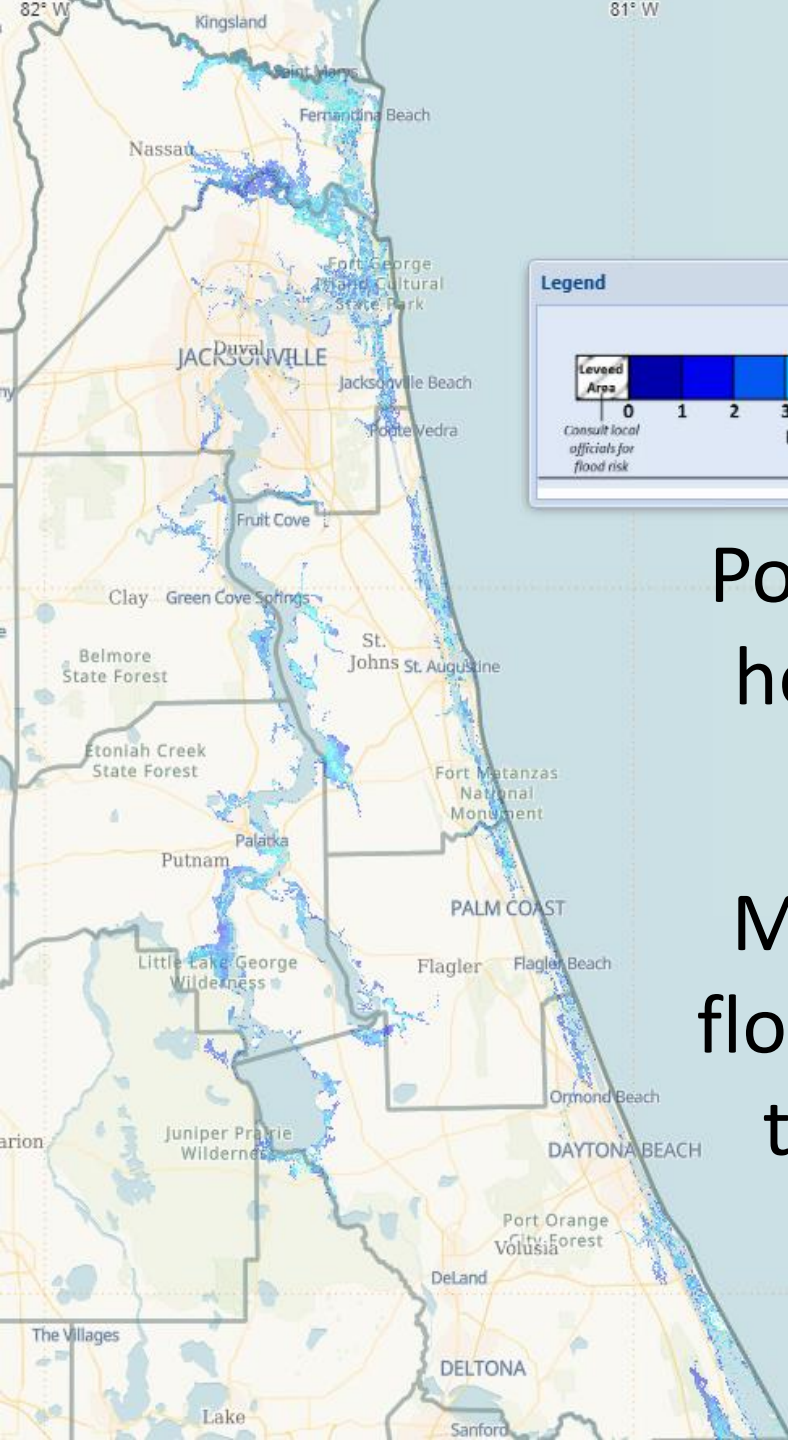
2. A tropical storm warning is now in effect for a portion of the Florida east coast. Since Dorian is forecast to slow down and turn northward as it approaches the coast, life-threatening storm surge and dangerous hurricane-force winds are still possible along portions of the Florida east coast by the middle part of this 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 later this week. Residents in these areas should continue to monitor the progress of Dorian.

4. Heavy rains, capable of producing life-threatening flash floods, are possible over coastal sections of the southeast and lower mid-Atlantic regions of the United States through late this week.

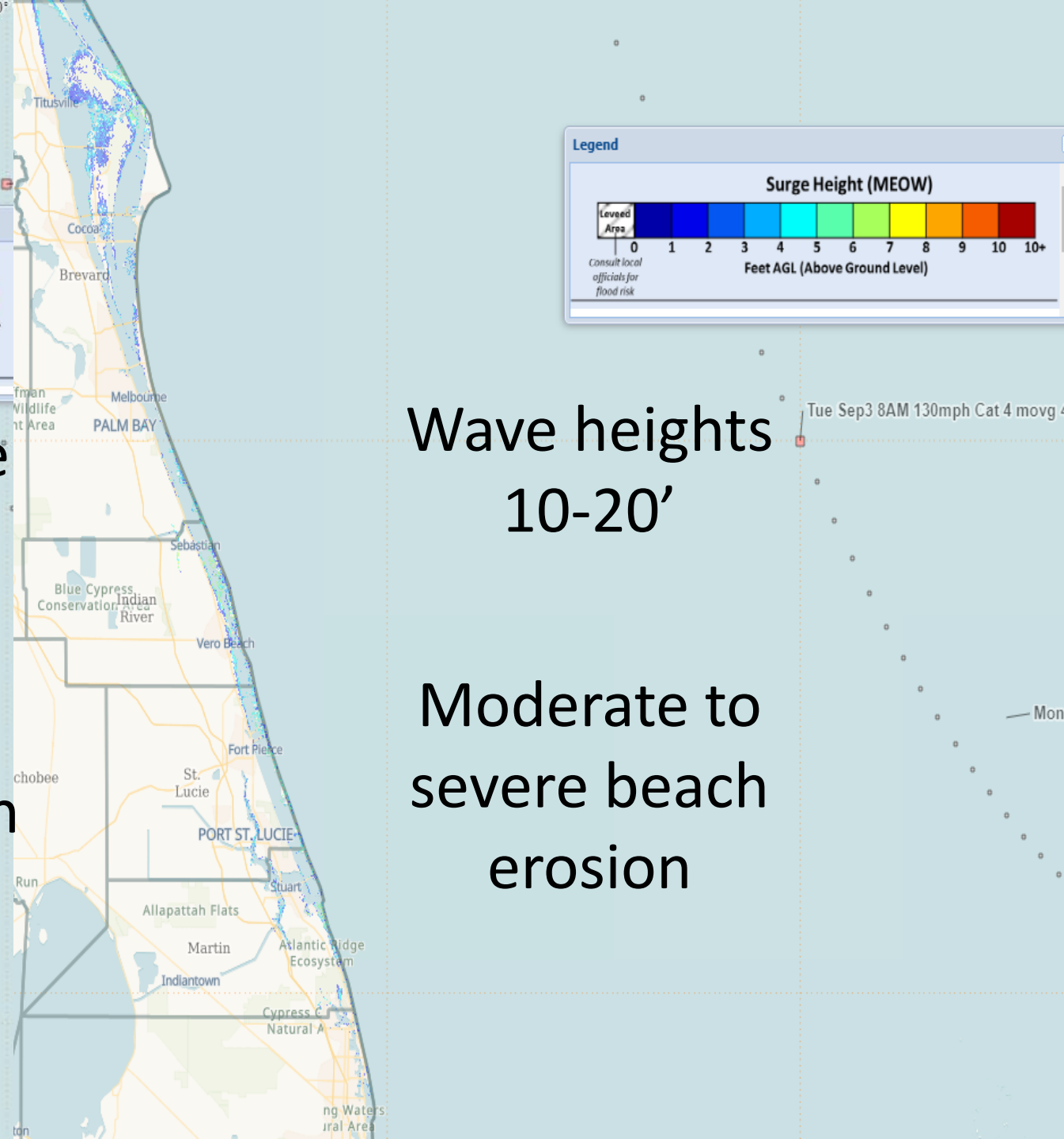


For more information go to hurricanes.gov



Potential surge heights = 3-5'

Minor coastal flooding at high tide already occurring



Wave heights 10-20'

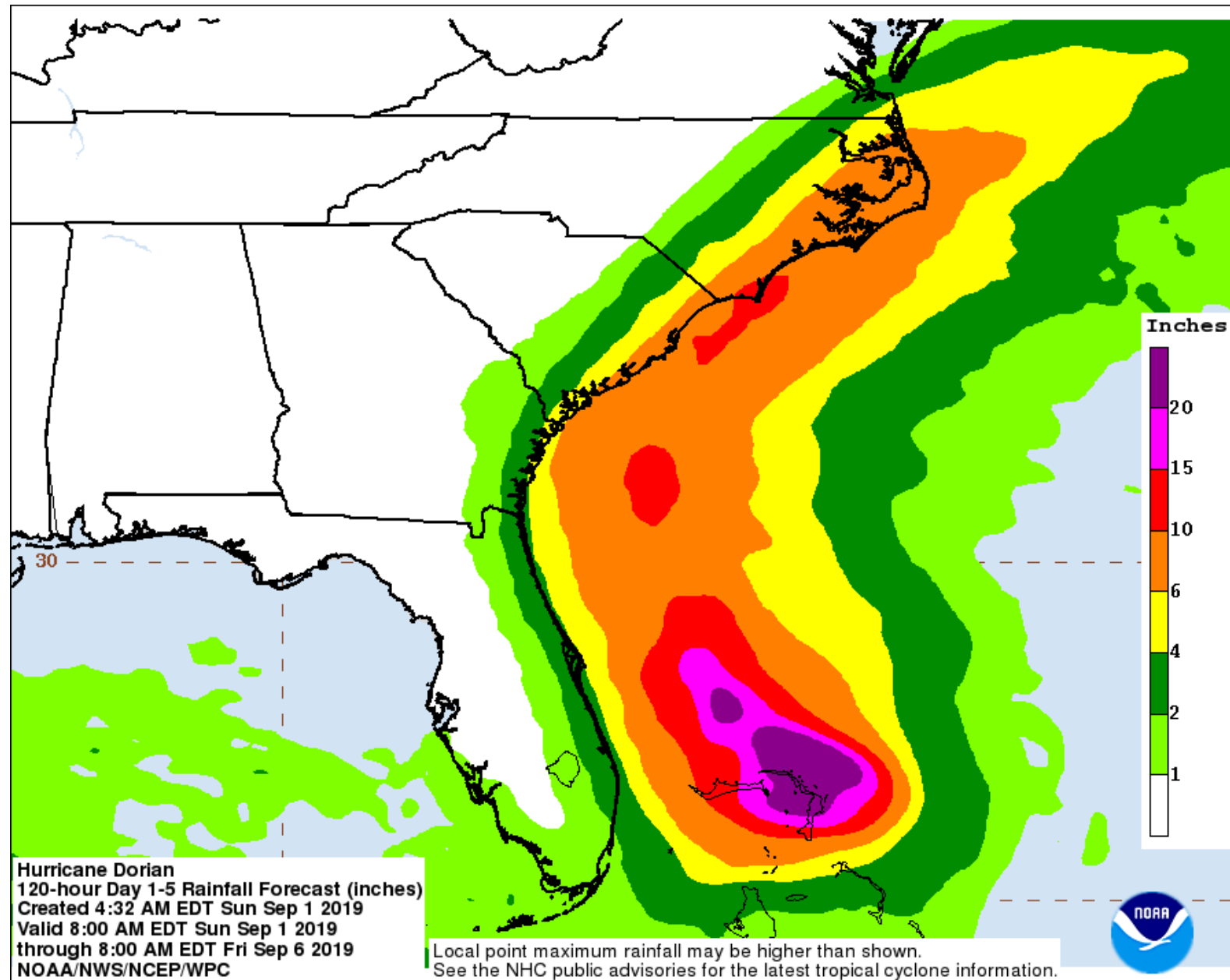
Moderate to severe beach erosion

Rainfall Forecast Next 7 Days

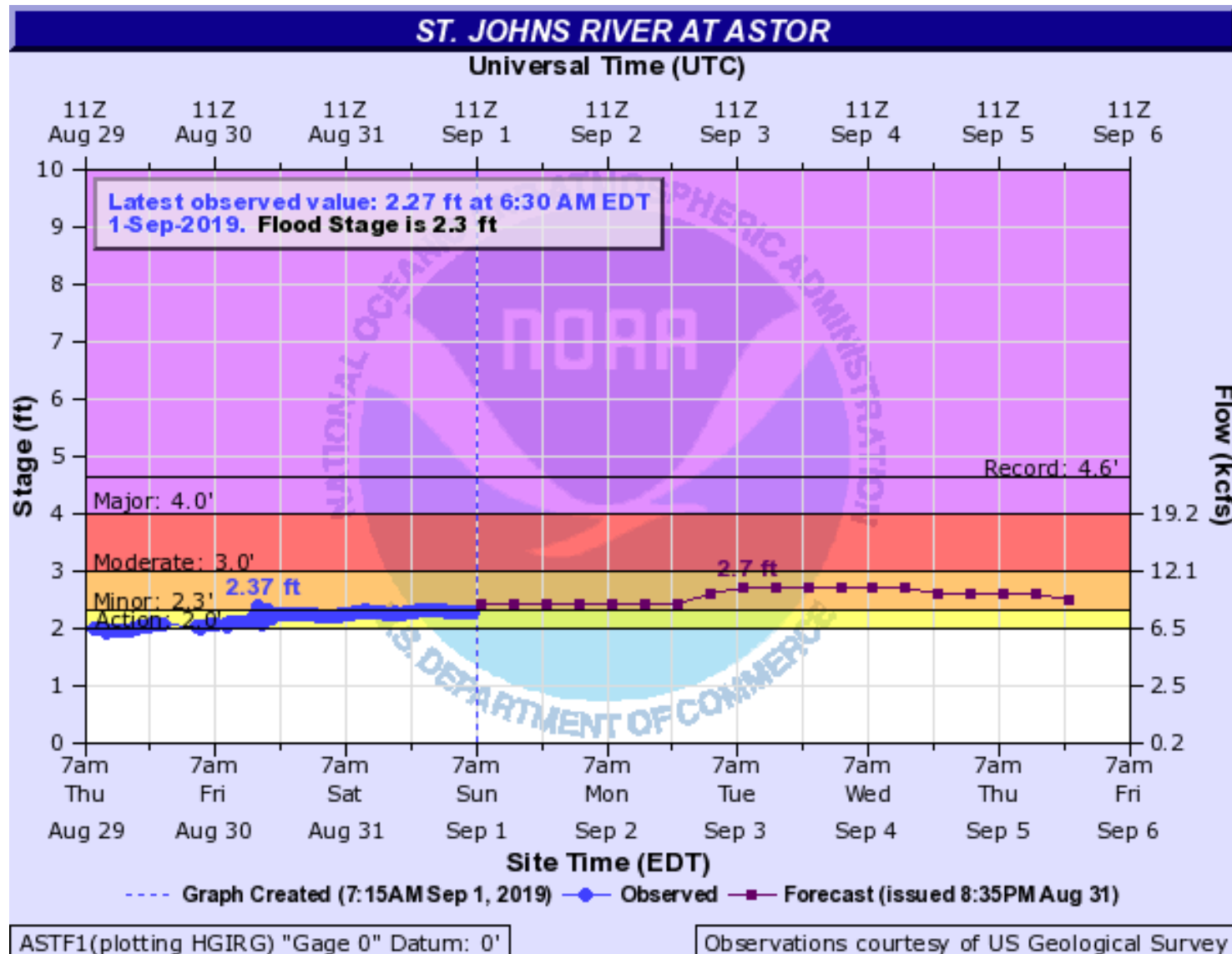
Dorian is now forecast to bring 2-4" of rain to the Florida East Coast through the next 2-5 days.

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.

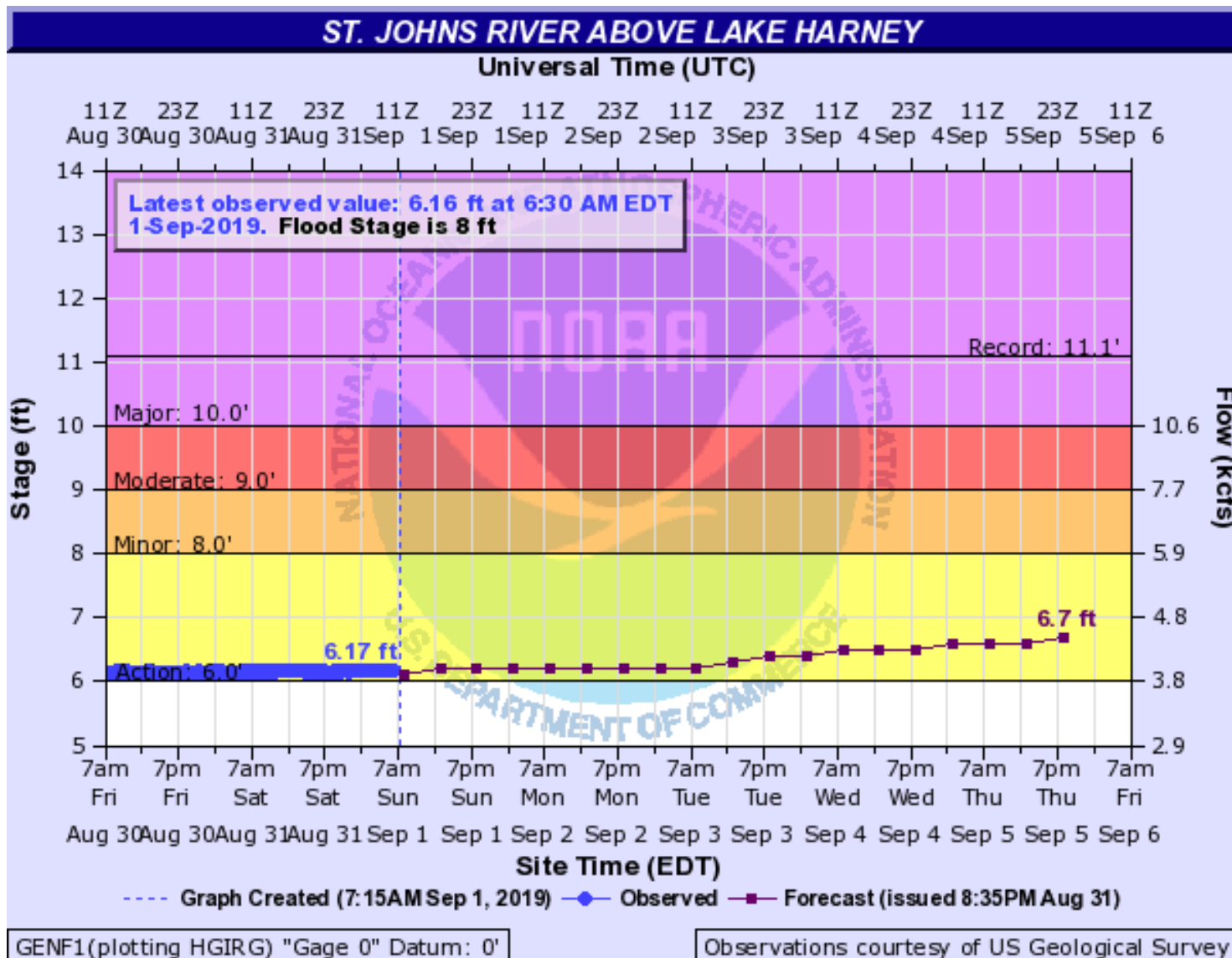


River Forecasts



- 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.

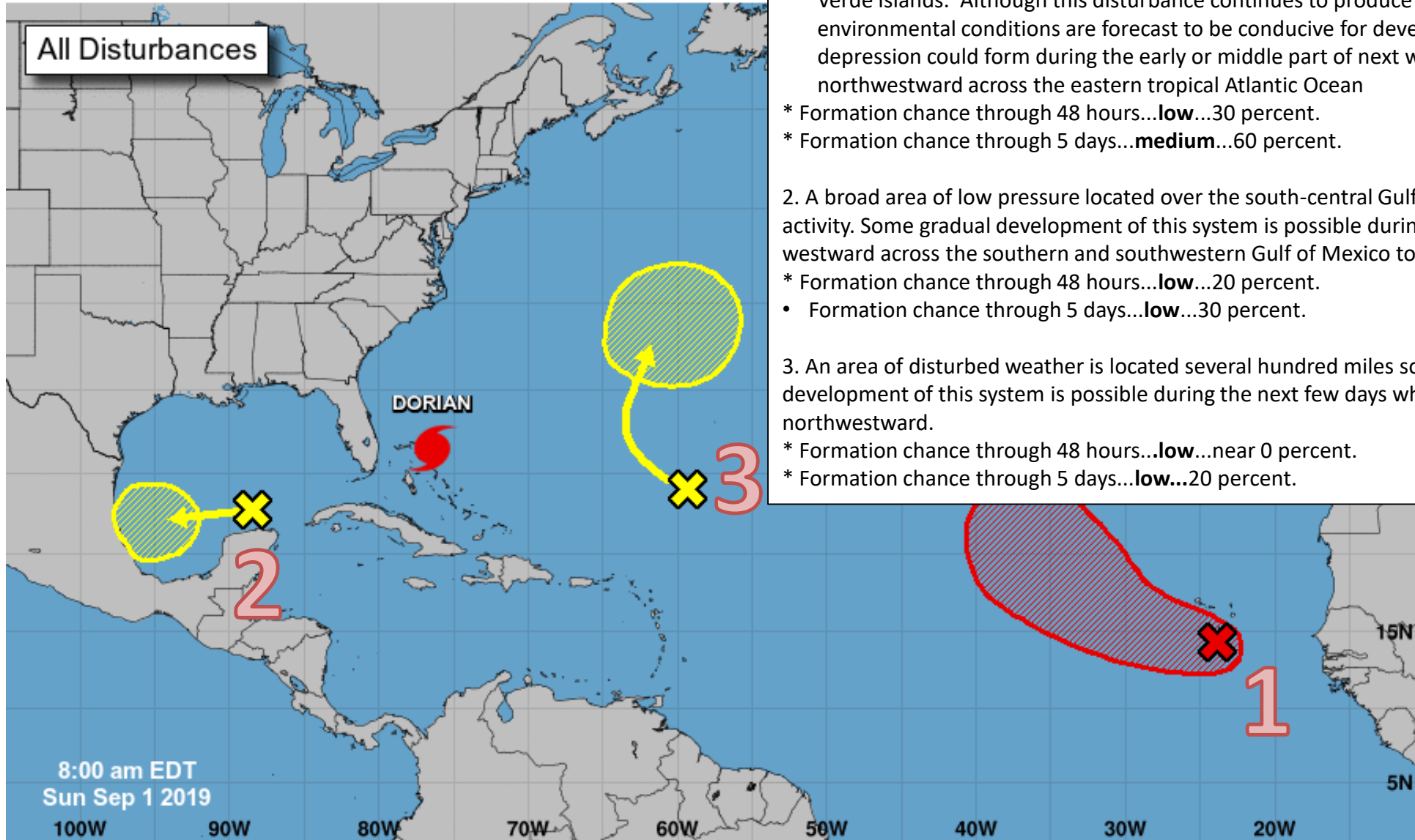


Five-Day Graphical Tropical Weather Outlook

National Hurricane Center



All Disturbances



1. A tropical wave accompanied by a broad low pressure area is located about 150 miles south the Cabo Verde Islands. Although this disturbance continues to produce disorganized thunderstorms, environmental conditions are forecast to be conducive for development of this disturbance, and a tropical depression could form during the early or middle part of next week while the system moves northwestward across the eastern tropical Atlantic Ocean
 - * Formation chance through 48 hours...**low**...30 percent.
 - * Formation chance through 5 days...**medium**...60 percent.
2. A broad area of low pressure located over the south-central Gulf of Mexico is producing limited shower activity. Some gradual development of this system is possible during the next few days while it moves slowly westward across the southern and southwestern Gulf of Mexico toward the coast of Mexico.
 - * Formation chance through 48 hours...**low**...20 percent.
 - Formation chance through 5 days...**low**...30 percent.
3. An area of disturbed weather is located several hundred miles south-southeast of Bermuda. Some gradual development of this system is possible during the next few days while it moves slowly northward or north-northwestward.
 - * Formation chance through 48 hours...**low**...near 0 percent.
 - * Formation chance through 5 days...**low**...20 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 8 AM ET Saturday, Hurricane Dorian was located 225 miles east of West Palm Beach, and moving to the west at 8 mph.
- Hurricane hunters have found that maximum sustained winds increased to 160 mph, which is a Category 5 Major Hurricane. Dorian is forecast to maintain Category 4 or 5 strength through Monday.
- Dorian will continue a westward path through today 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 as 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.
- An area of disturbed weather is located several hundred miles south-southeast of Bermuda. Some gradual development of this system is possible during the next few days while it moves slowly northward or north-northwestward. It has a 20% (low) chance of development during the next 5 days.

Florida Outlook:

- The Treasure and Space Coast are in the 3-day forecast cone, with portions of Northeast Florida remaining in the 5-day forecast cone.
- A **Tropical Storm Warning** is now in effect for coastal Palm Beach, Martin, St. Lucie, and Indian River Counties, meaning tropical storm force winds are expected within the next 36 hours.
- A **Tropical Storm Watch** is in effect for inland Palm Beach and coastal Broward County.
- Additional watches could be expanded northward later today for the Space Coast.
- Damaging winds, storm surge, river flooding, 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 2-4" are 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 evening. 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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