



TROPICAL UPDATE



5 PM 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.

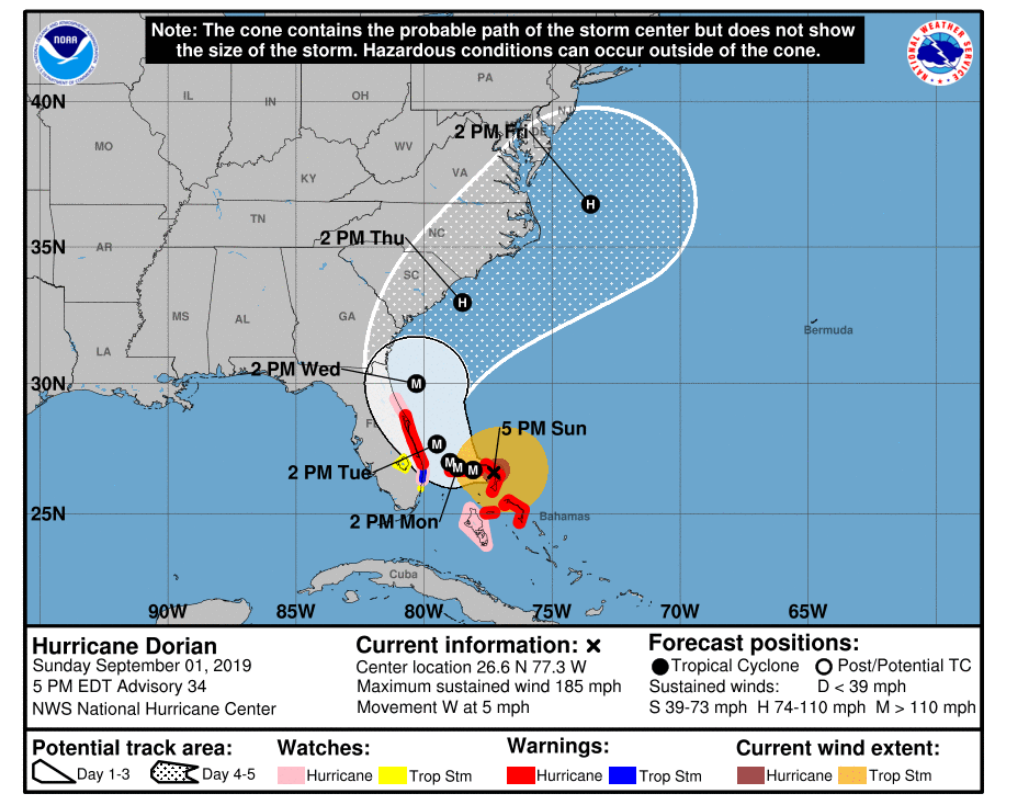
Major Hurricane Dorian

Sunday, September 1, 5 PM ET

	MINIMAL	Low	MODERATE	HIGH	EXTREME
WINDS	Green	Yellow	Orange	Red	Grey
STORM SURGE	Green	Yellow	Orange	Grey	Grey
FLOODING	Green	Yellow	Grey	Grey	Grey
TORNADOES	Green	Grey	Grey	Grey	Grey

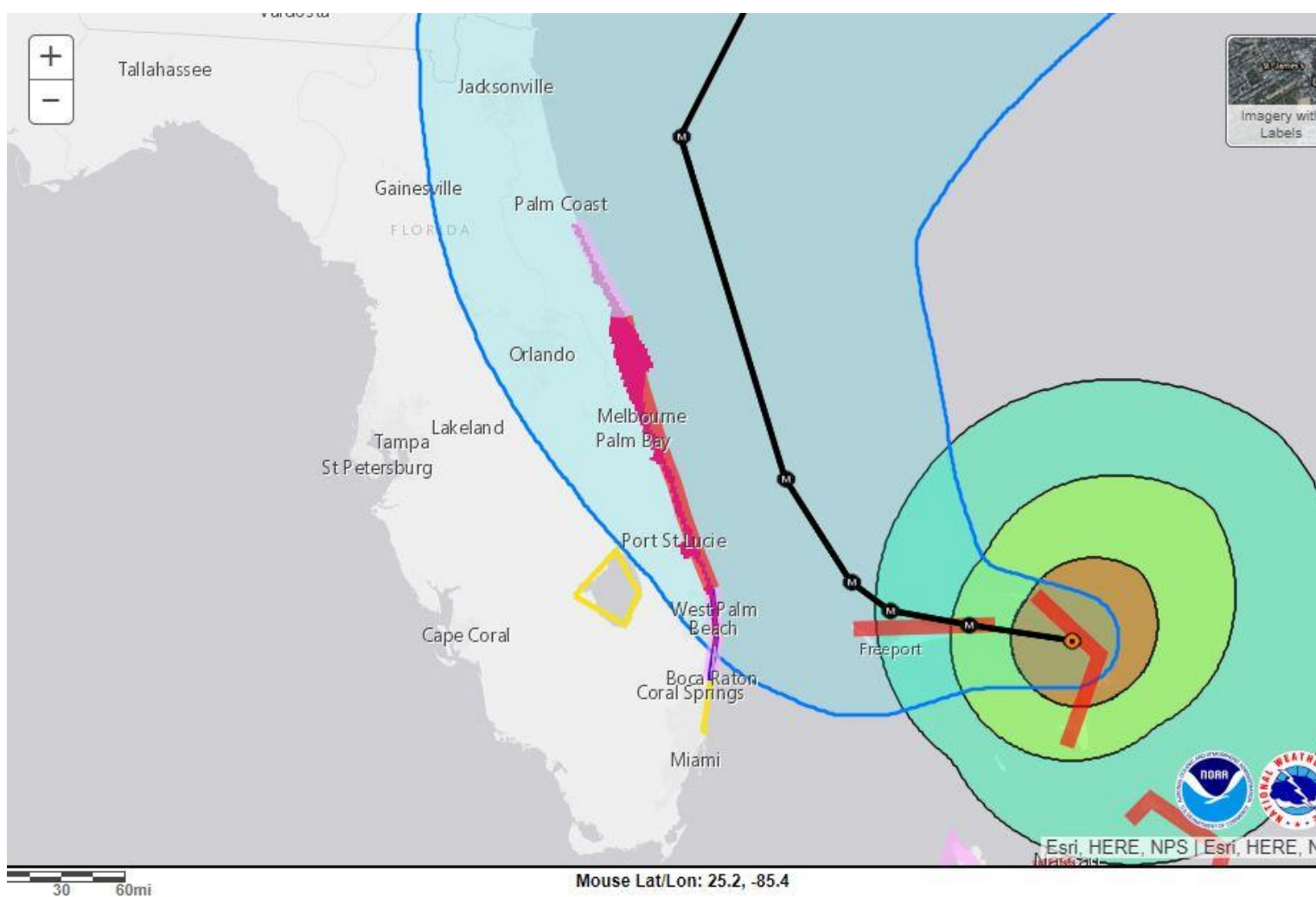
	Low	MODERATE	HIGH
RIP CURRENTS	Yellow	Orange	Red

National Hurricane Center Map



Changes This Afternoon:

- Dorian has continued to strengthen, and is now a Category 5 with max sustained winds of **185 mph**.
- Still uncertainty in northward turn, but no change in the forecast cone with this advisory.
- Hurricane Warnings and Storm Surge Warnings have been issued for the Treasure and Space Coast.



Hurricane Dorian, located 175 miles east of West Palm Beach, has begun to slow down, now moving west at 5 mph. Maximum sustained winds increased to 185 mph (Category 5).

A Hurricane Warning is in effect for Brevard, Indian River, St. Lucie, Martin, and coastal Palm Beach County.

A Hurricane Watch is in effect for Volusia County.

A Tropical Storm Watch is in effect for Polk, Osceola, Highlands, Glades, Okeechobee, and coastal Broward.

Legend

<ul style="list-style-type: none"> Current Center Location 	<p>Watches / Warnings:</p> <ul style="list-style-type: none"> Tropical Storm Watch Tropical Storm Warning Hurricane Watch Hurricane Warning Storm Surge Watch 	<p>Initial Extent of Winds:</p> <ul style="list-style-type: none"> > 39 mph > 58 mph > 74 mph
<p>Forecast Center Locations:</p> <ul style="list-style-type: none"> Tropical/Subtropical Cyclone Potential/Post-tropical Cyclone <p>Forecast Sustained Winds:</p> <p>M > 110 mph H 74 - 100 mph</p>	<p>Past Track :</p> <ul style="list-style-type: none"> Potential / Post-tropical 	

[Download GIS](#)
[Past Track in](#)

Hurricane Dorian Forecast Track



WEATHER

HURRICANE DORIAN

SUN 5:08 PM

ADVISORY
5:00 PM



T.S. WATCH



HURRICANE WATCH



T.S. WARNING



HURRICANE WARNING

TAMPA

SEBASTIAN INLET

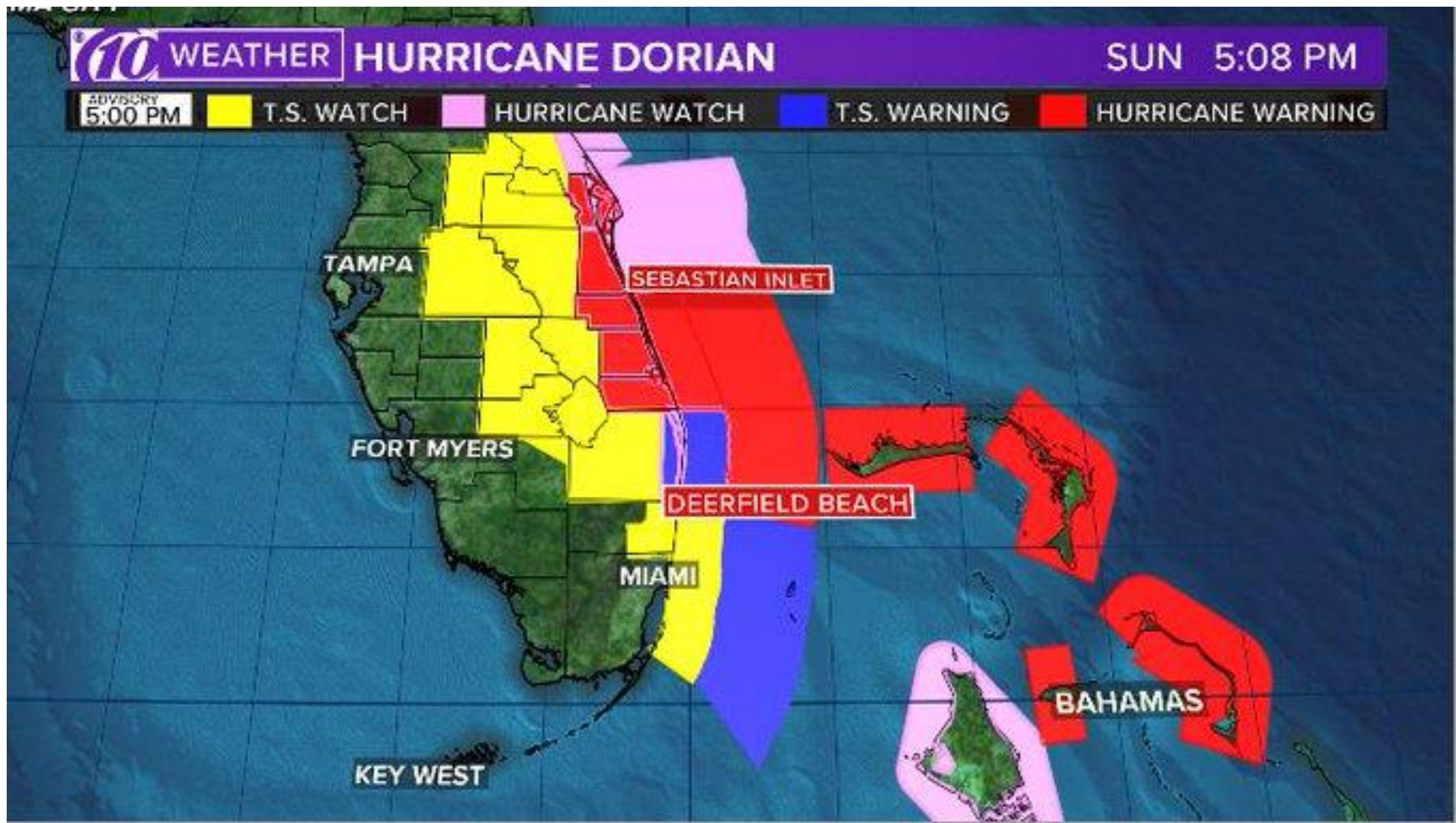
FORT MYERS

DEERFIELD BEACH

MIAMI

BAHAMAS

KEY WEST



Tropical Storm & Hurricanes

Watches Versus Warnings

WATCH

Tropical storm and/or hurricane conditions are **POSSIBLE** in Watch area

Issued up to 48 hours in advance of tropical storm force winds

WARNING

Tropical storm and/or hurricane conditions are **EXPECTED** in Warning area

Issued up to 36 hours in advance of onset of tropical storm force winds

Hurricane preparedness activities become difficult once winds reach tropical storm force. **Watches & Warnings are issued in advance of onset of tropical storm force winds, 39-73mph**

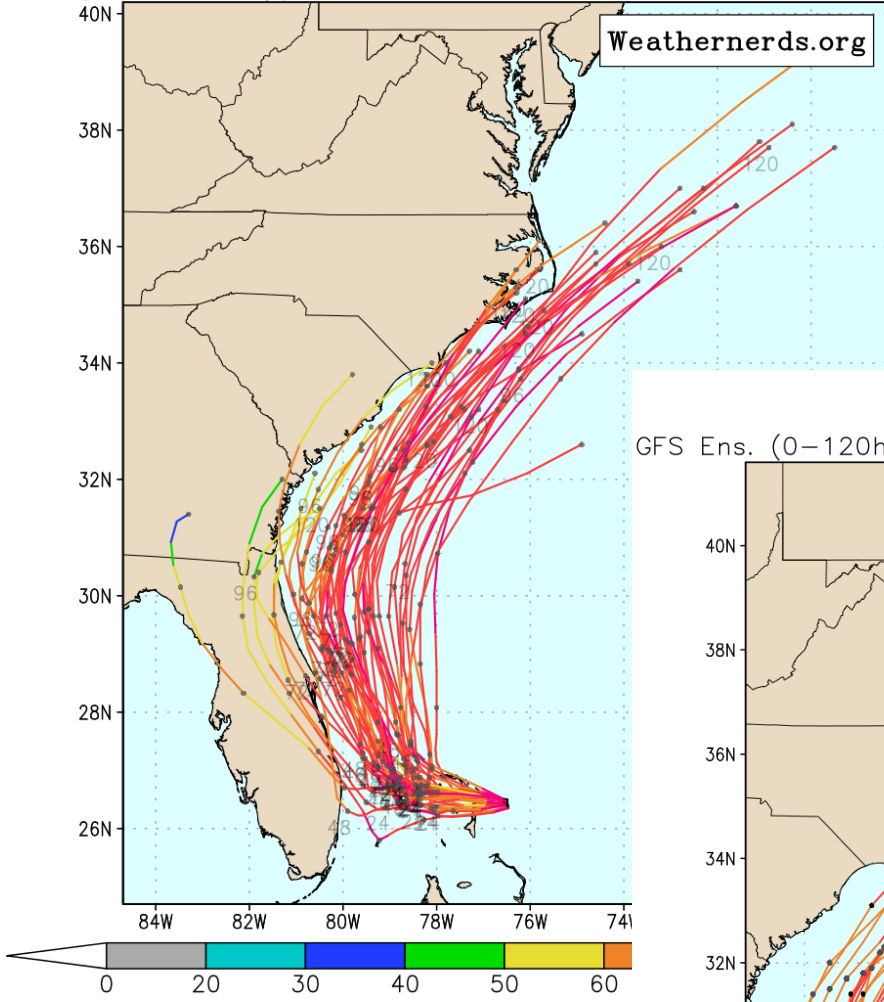


NWSMobile



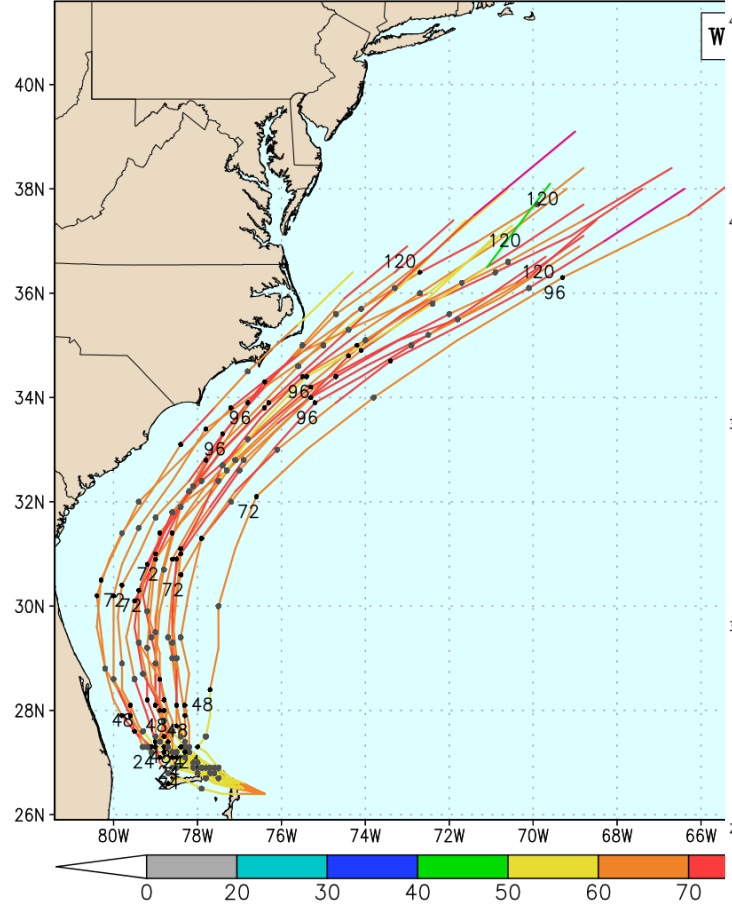
weather.gov/mob

ECMWF Ens. (0-120h only), init: 2019090112, 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.

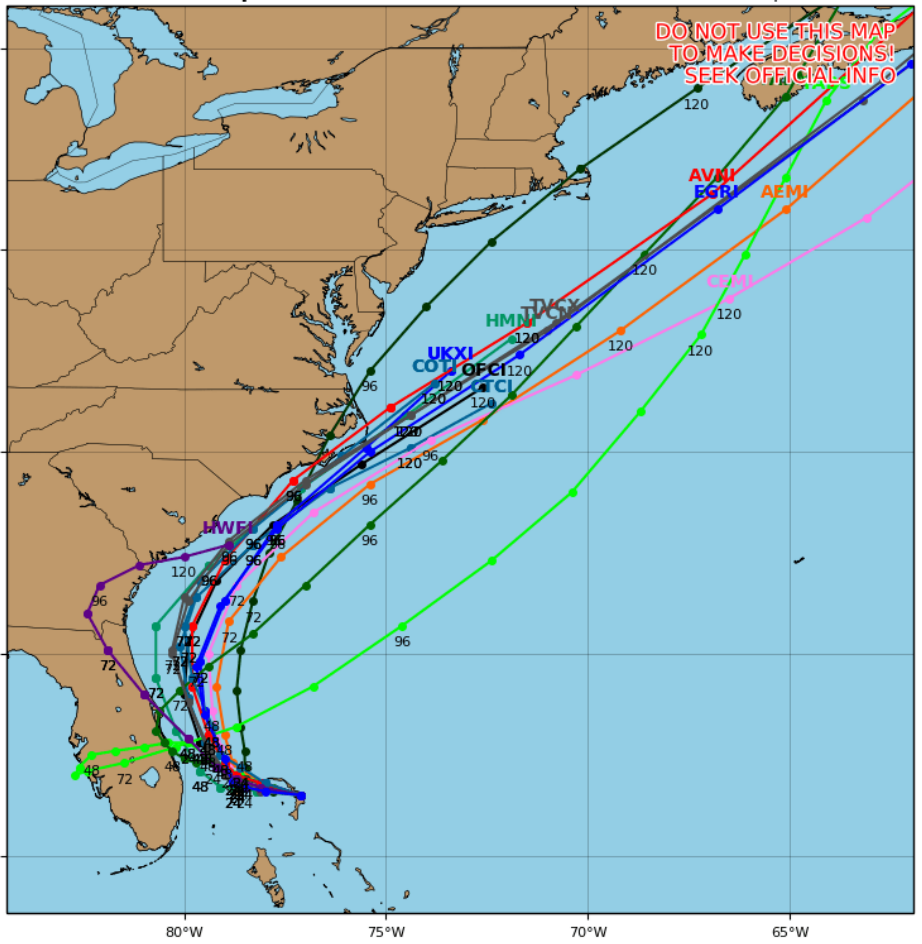
GFS Ens. (0-120h only), init: 2019090112, AL05 Dorian

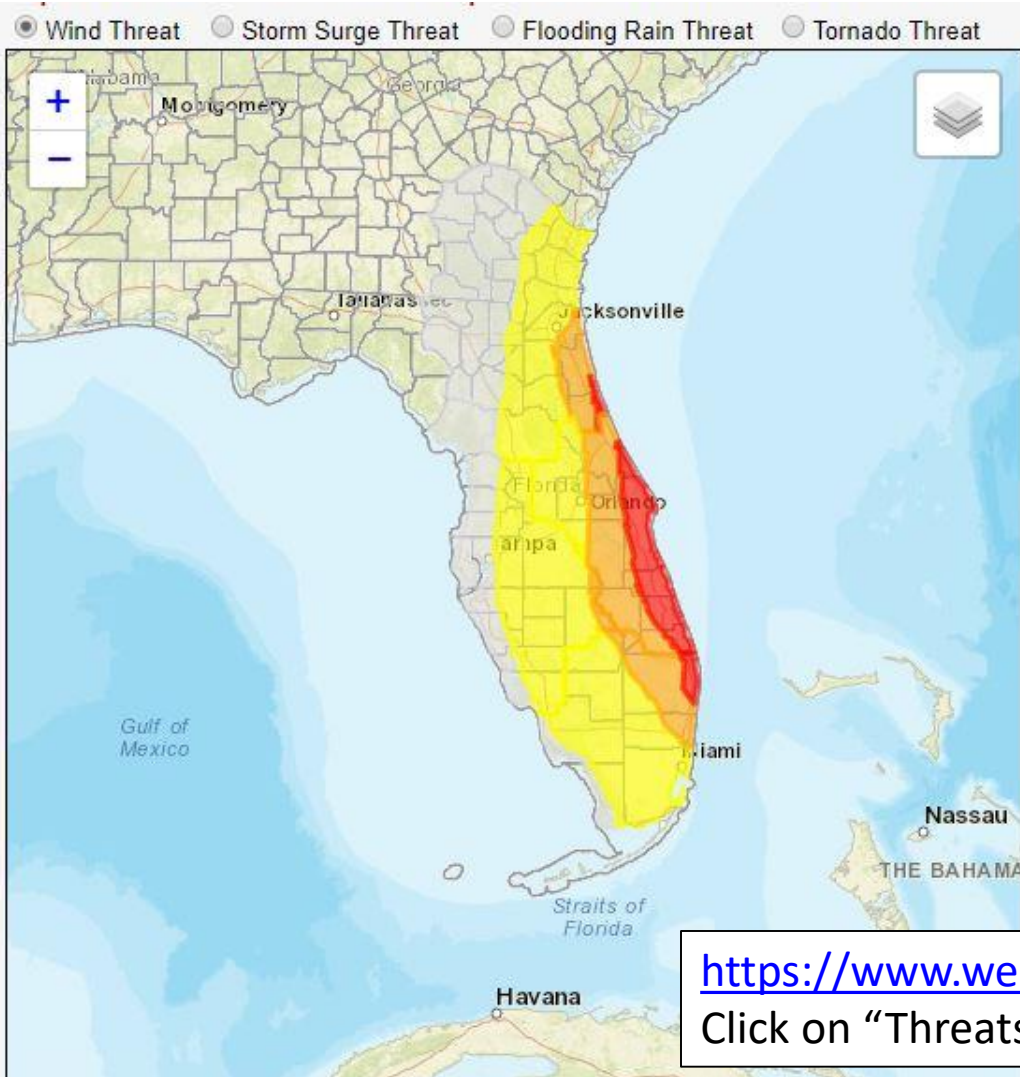


Hurricane DORIAN Model Track Guidance

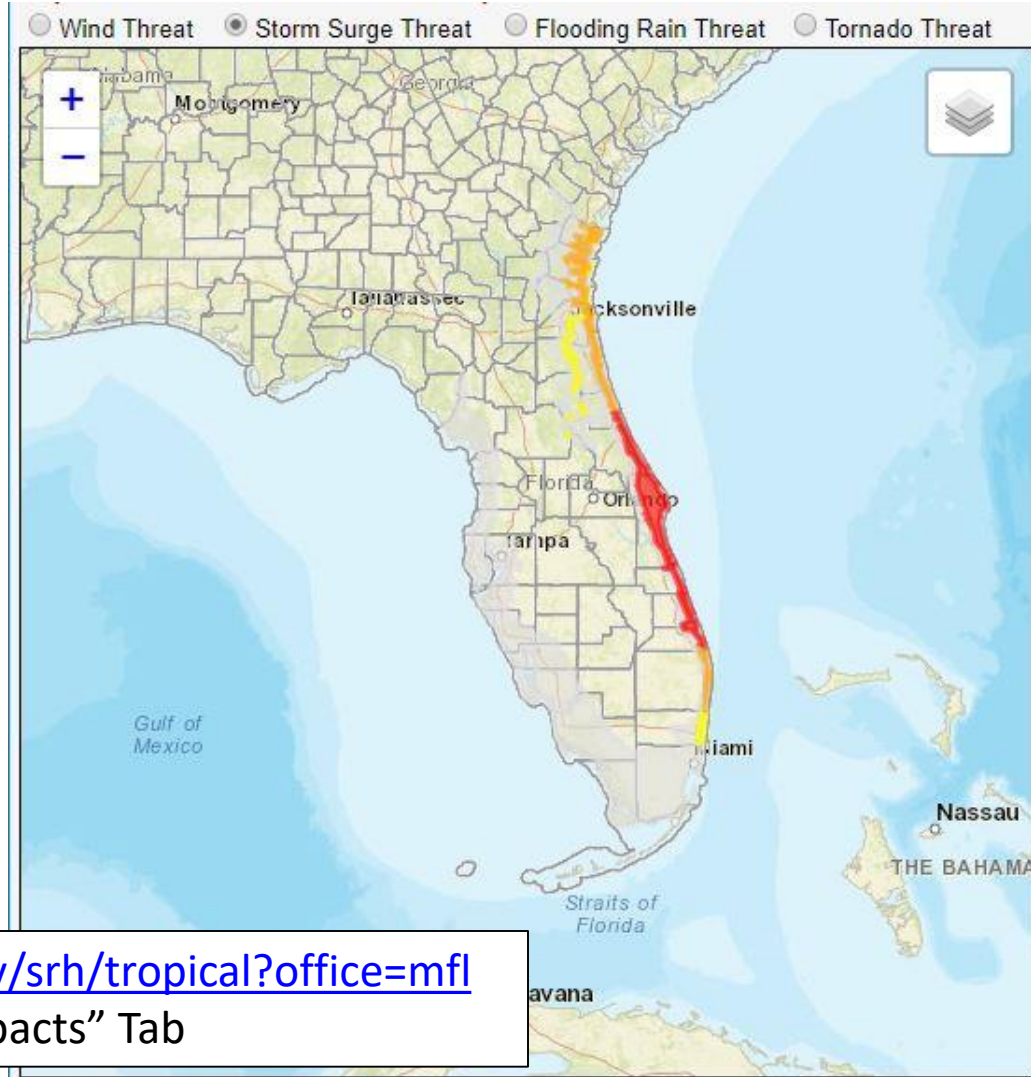
Initialized at 18z Sep 01 2019

Levi Cowan - tropicaltidbits.com

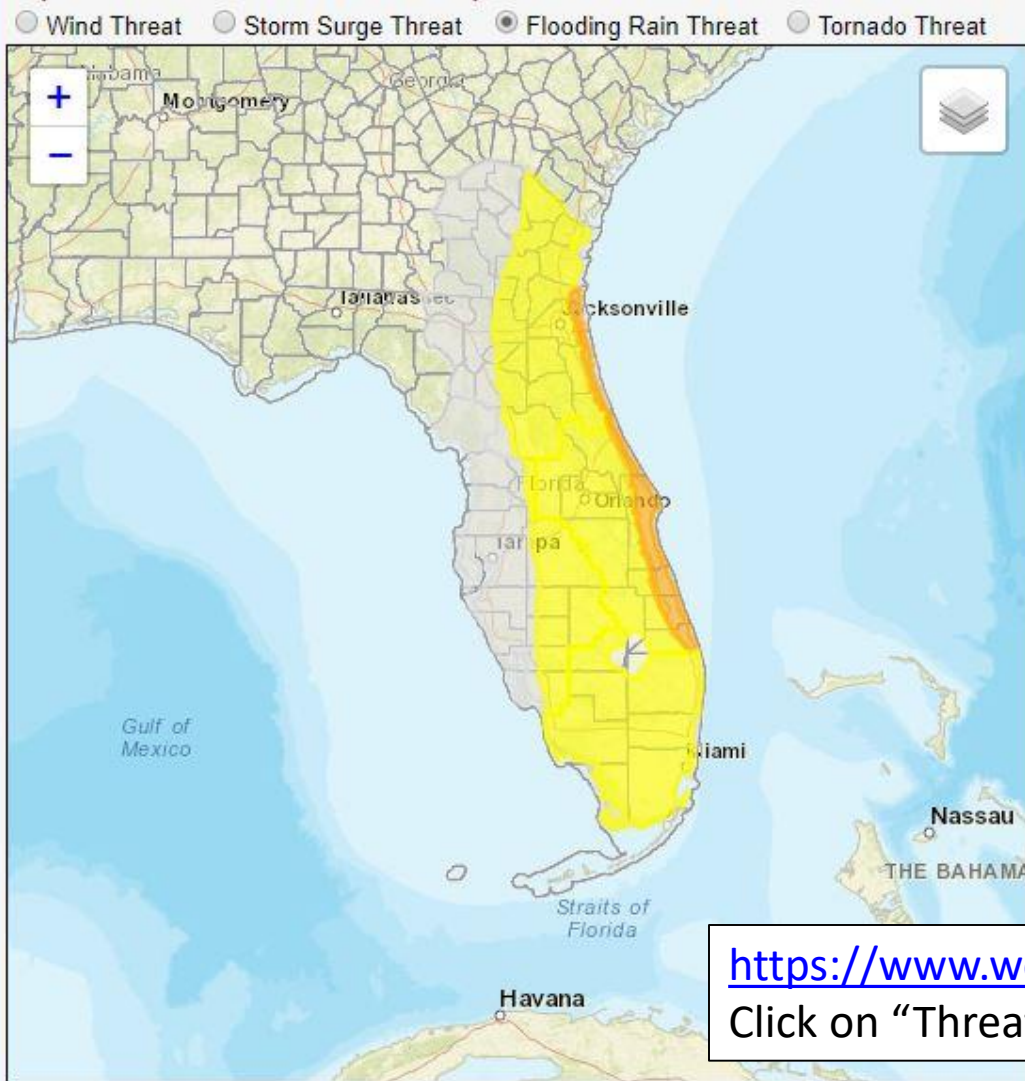




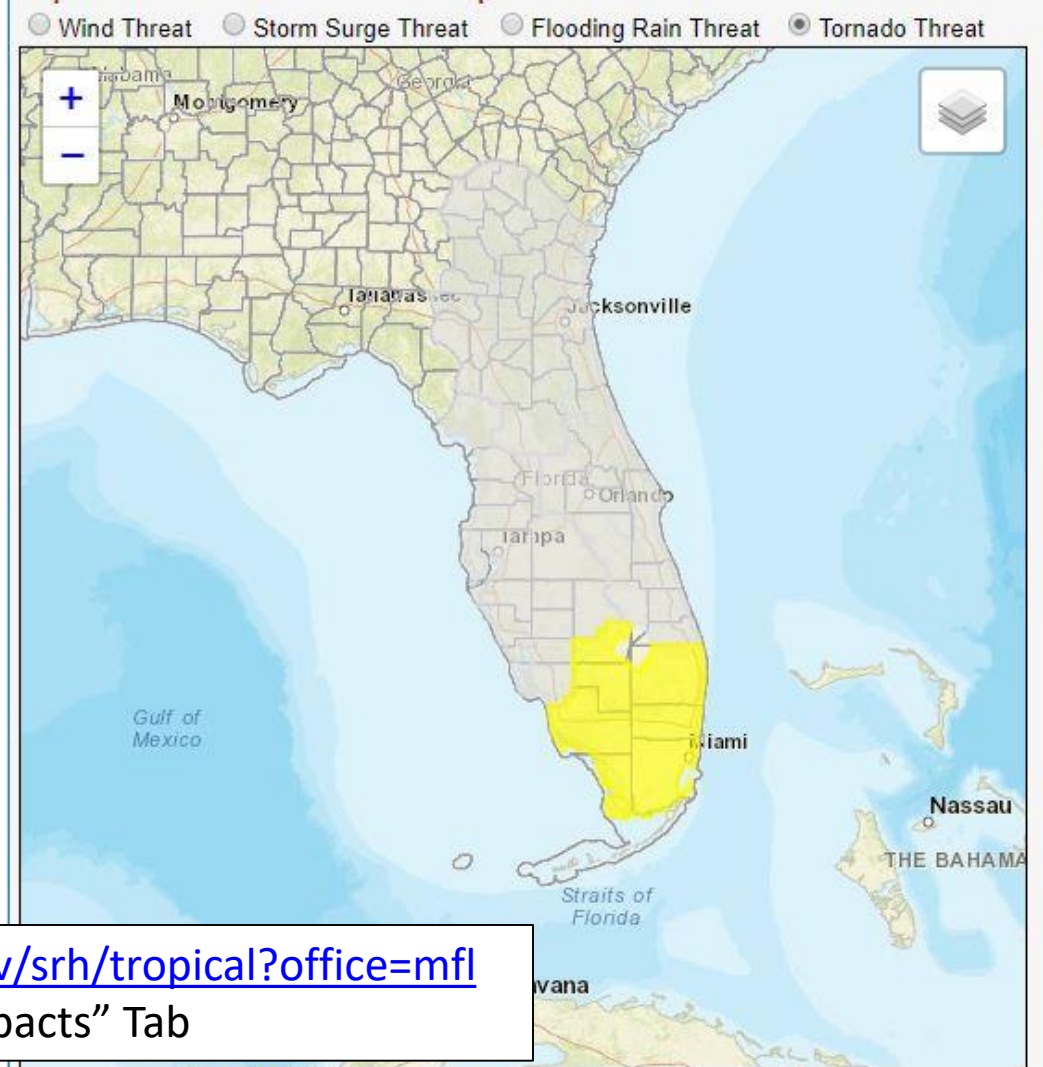
Wind Threat
Potential for wind greater than 110 mph
Potential for wind 74 to 110 mph
Potential for wind 58 to 73 mph
Potential for wind 39 to 57 mph
Wind less than 39 mph



Storm Surge Threat
Potential for storm surge flooding greater than 9 ft above ground
Potential for storm surge flooding greater than 6 ft above ground
Potential for storm surge flooding greater than 3 ft above ground
Potential for storm surge flooding greater than 1 ft above ground
Little to no storm surge flooding

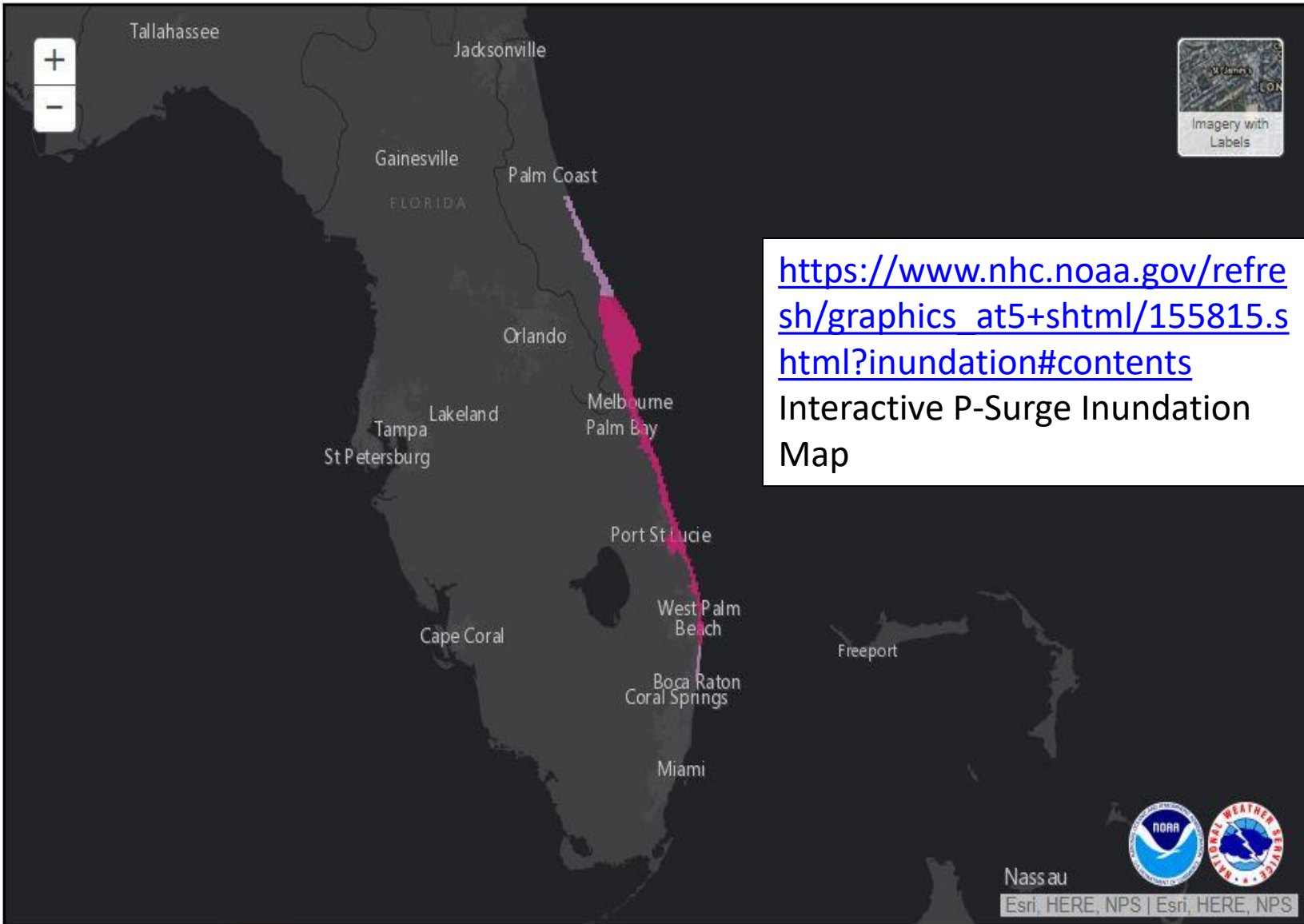


Flooding Rain Threat
Potential for extreme flooding rain
Potential for major flooding rain
Potential for moderate flooding rain
Potential for localized flooding rain
Little to no potential for flooding rain



Tornado Threat
Potential for outbreak of tornadoes
Potential for many tornadoes
Potential for several tornadoes
Potential for a few tornadoes
Tornadoes not expected

<https://www.weather.gov/srh/tropical?office=mfl>
 Click on "Threats and Impacts" Tab



Hurricane Dorian Forecast Track

A Storm Surge Warning is in effect for Brevard, Indian River, St. Lucie, Martin, and Palm Beach County.

A Storm Surge Watch is in effect for Volusia County.

Possible surge values:

Volusia/Brevard County Line to Jupiter Inlet FL...4 to 7 ft

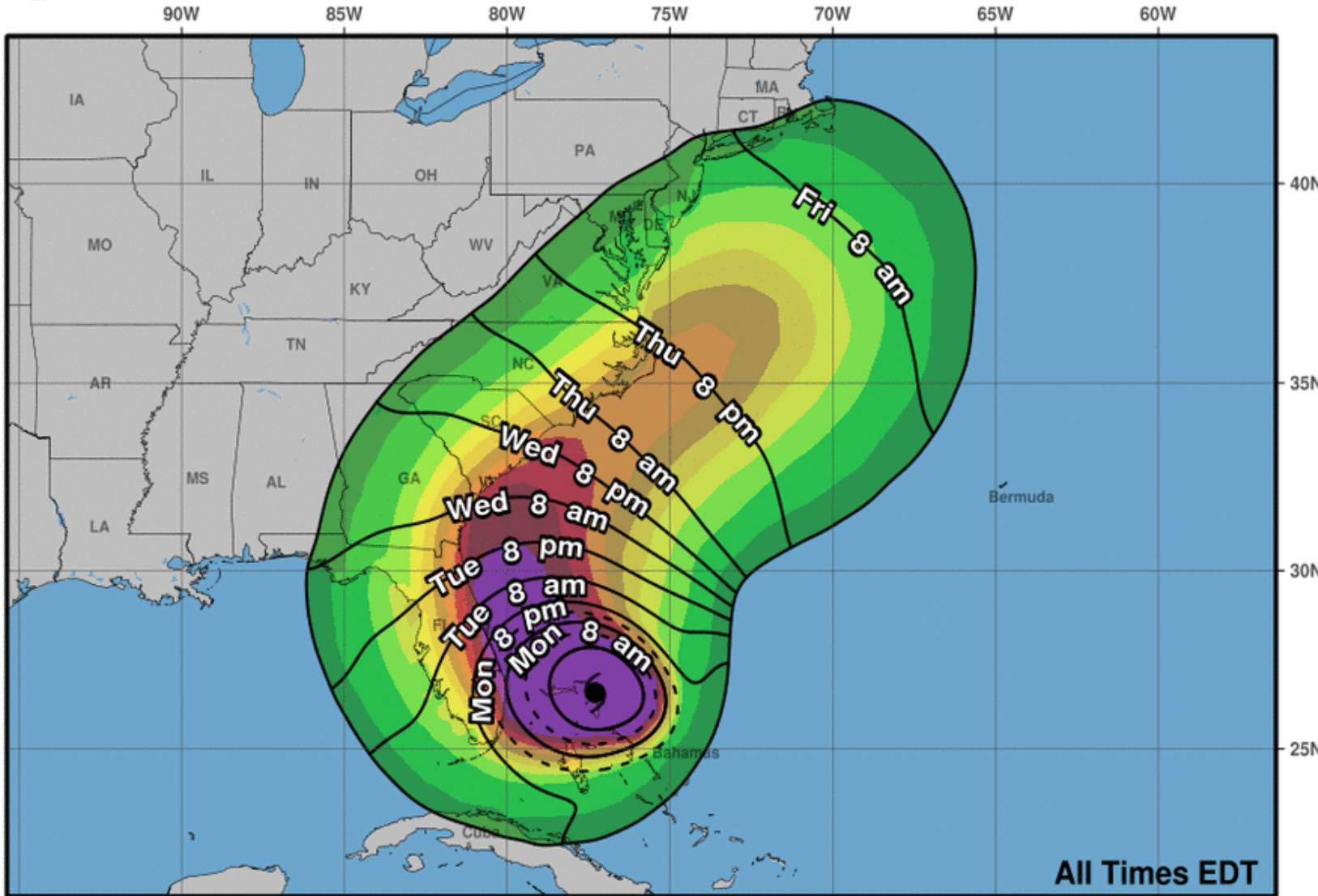
North of Deerfield Beach to Jupiter Inlet FL...2 to 4 ft



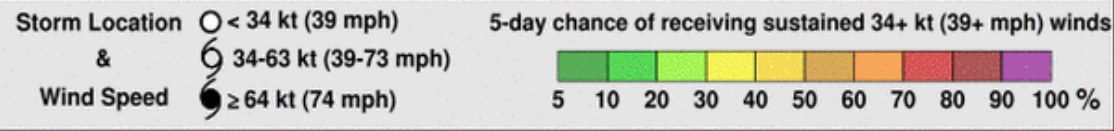
Storm Surge Warning
Storm Surge Watch



Most Likely Arrival Time of Tropical-Storm-Force Winds



Hurricane Dorian
Sun. Sep. 1, 2019 5 pm EDT
Advisory 34



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

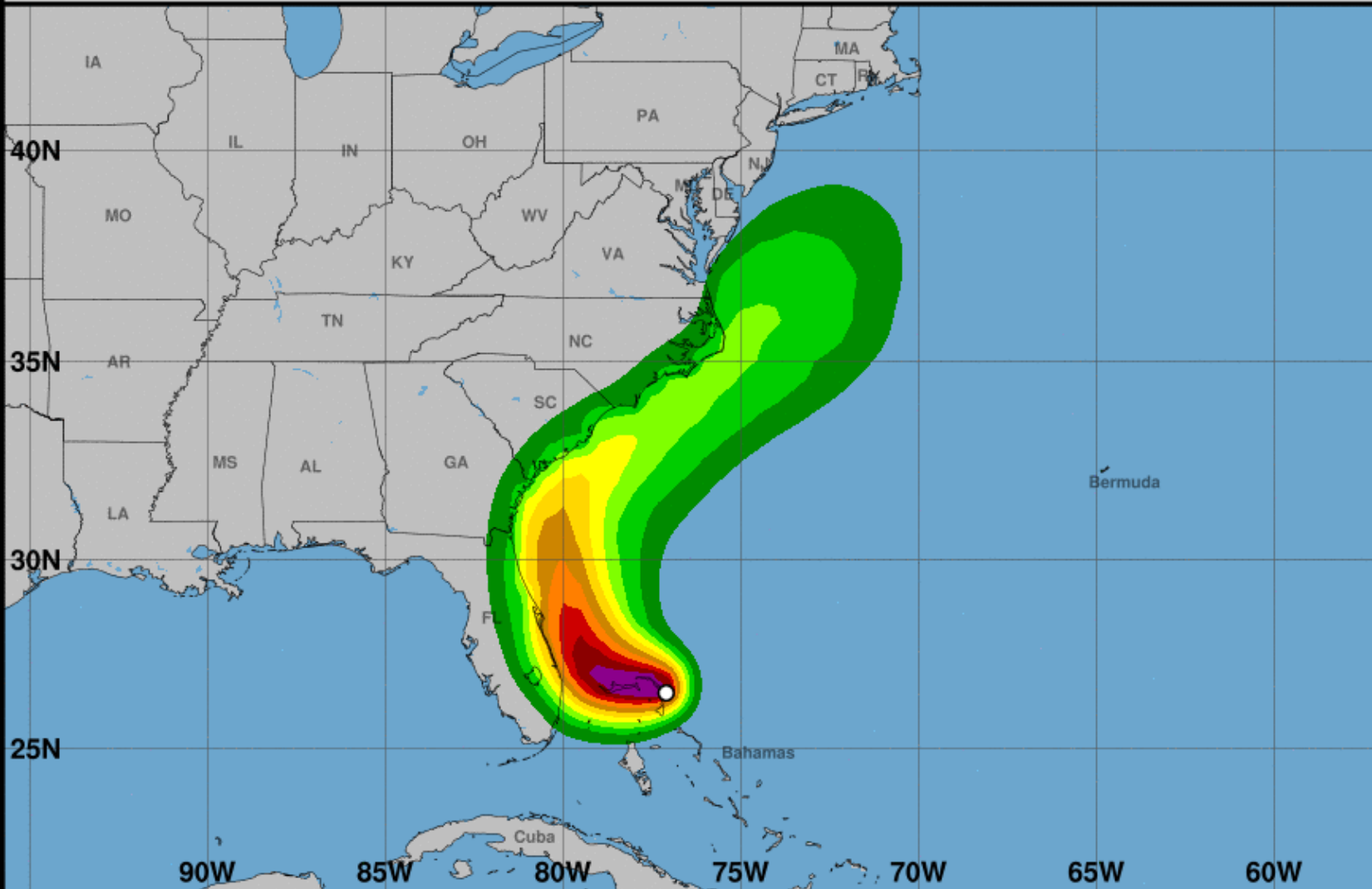
- Jacksonville: 68%**
- Daytona Beach: 84%**
- Orlando: 75%**
- Cocoa Beach: 98%**
- Ft. Pierce: 99%**
- West Palm Beach: 99%**
- Ft. Lauderdale: 93%**
- Miami: 56%**
- Marathon: 22%**
- Naples: 26%**
- Tampa: 34%**
- Tallahassee: 15%**

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



Hurricane-Force Wind Speed Probabilities (Preliminary)

For the 120 hours (5.0 days) from 2 PM EDT SUN SEP 01 to 2 PM EDT FRI SEP 06



Probability of hurricane-force winds (1-minute average ≥ 74 mph) from Hurricane Dorian
 ○ indicates Hurricane Dorian center location at 2 PM EDT SUN SEP 01, 2019 (Forecast/Advisory #34)



Chance of HURRICANE FORCE WINDS (>74 mph):

Jacksonville: 8%

Orlando: 15%

Cocoa Beach: 53%

Ft. Pierce: 57%

West Palm Beach: 42%

Ft. Lauderdale: 16%

Miami: 4%

The most likely chance of hurricane force winds will be Monday night and Tuesday along the Treasure and Space Coast



Key Messages for Hurricane Dorian

Advisory 34: 5:00 PM EDT Sun Sep 01, 2019

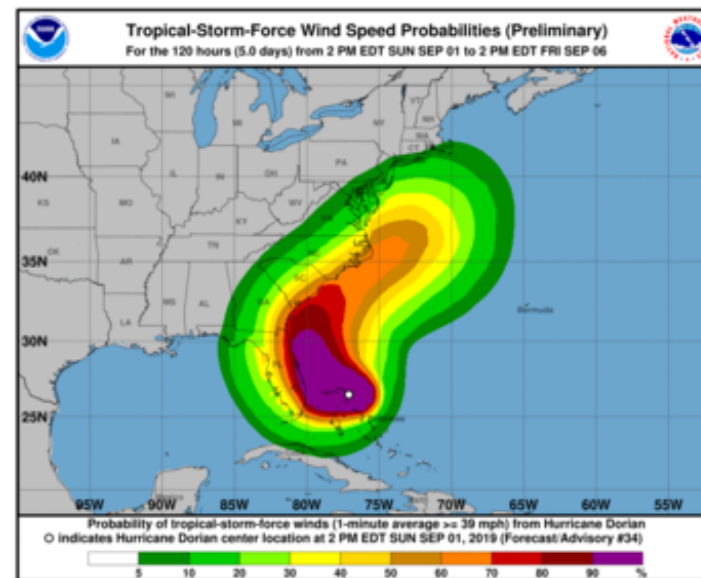


1. A prolonged period of catastrophic winds and storm surge will affect the Abaco Islands and Grand Bahama Island tonight. Everyone there should take immediate shelter and not venture into the eye.

2. Life-threatening storm surge and dangerous hurricane-force winds are expected along portions of the Florida east coast through mid-week, and storm surge and hurricane warnings are in effect. Only a slight deviation to the left of the official forecast would bring the core of Dorian near or over the Florida east coast. Residents should listen to advice given by local emergency officials.

3. There is an increasing likelihood of strong winds and dangerous storm surge along the coasts of Georgia, South Carolina, North Carolina later this week. Residents in these areas should continue to monitor the progress of Dorian and listen to advice given by local emergency officials.

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



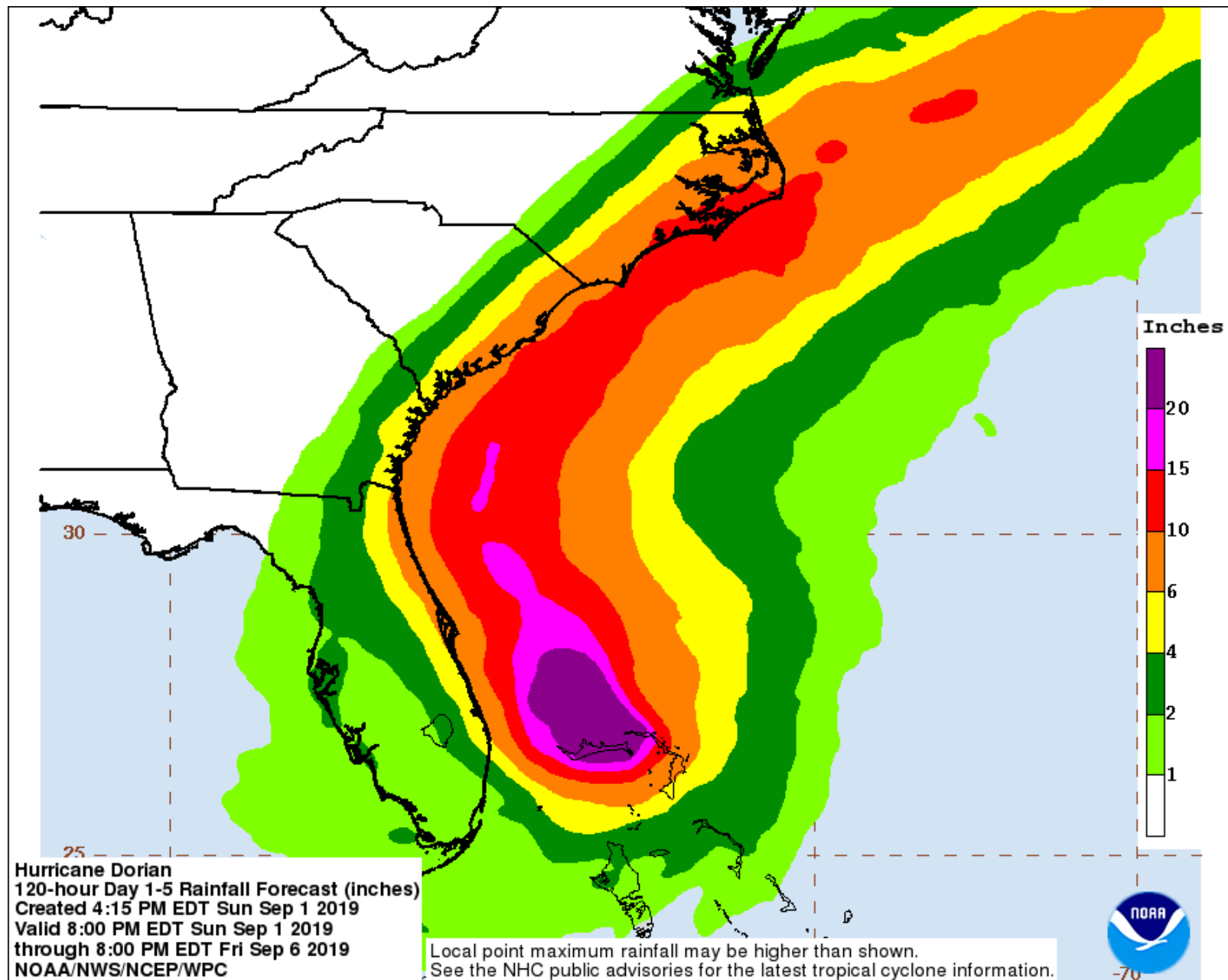
For more information go to hurricanes.gov

Rainfall Forecast Next 5 Days

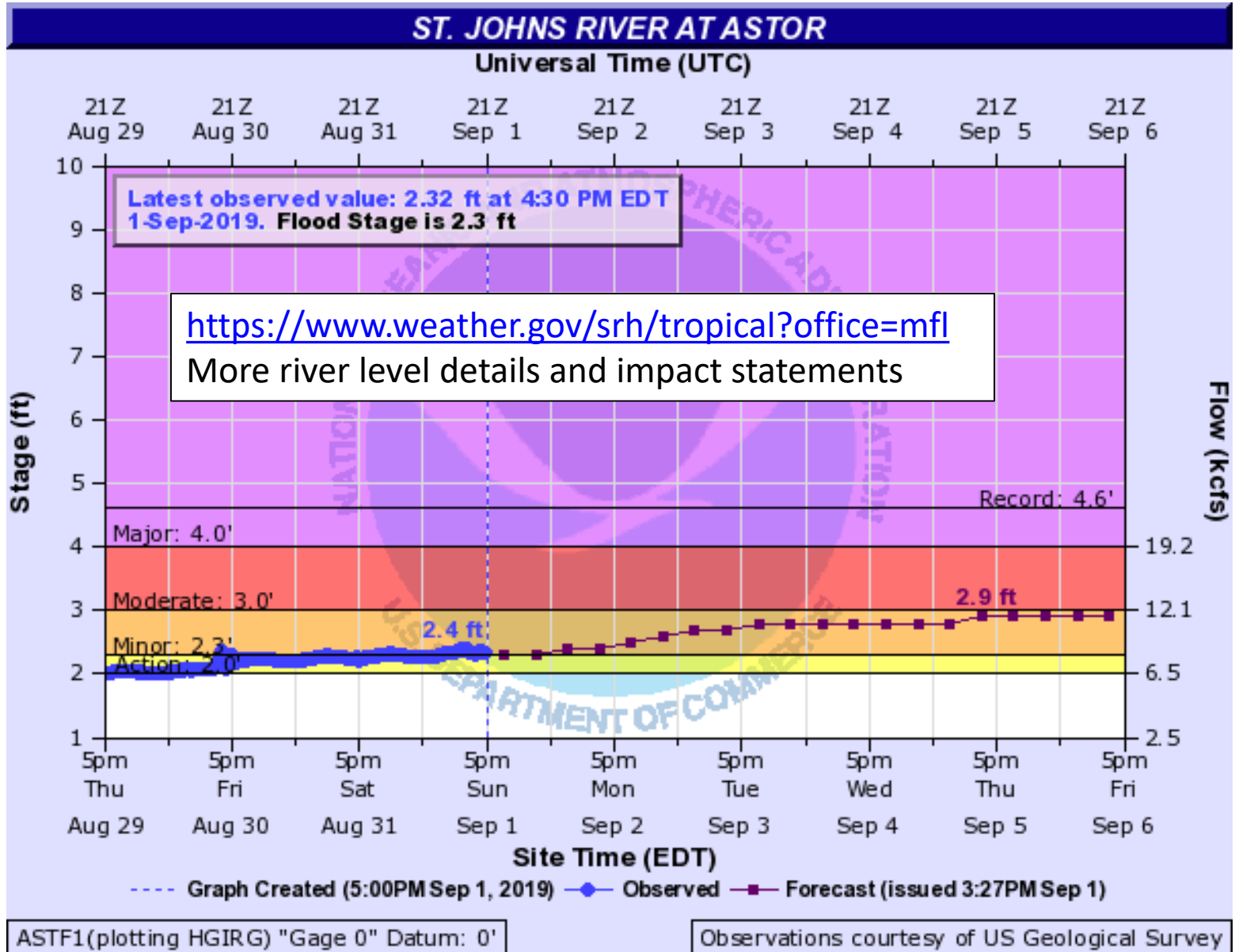
Dorian is now forecast to bring 3-6" of rain to the Florida East Coast through the next 1-3 days.

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

The highest rainfall totals will be near the coast, and likely in Northeast Florida.



River Forecasts



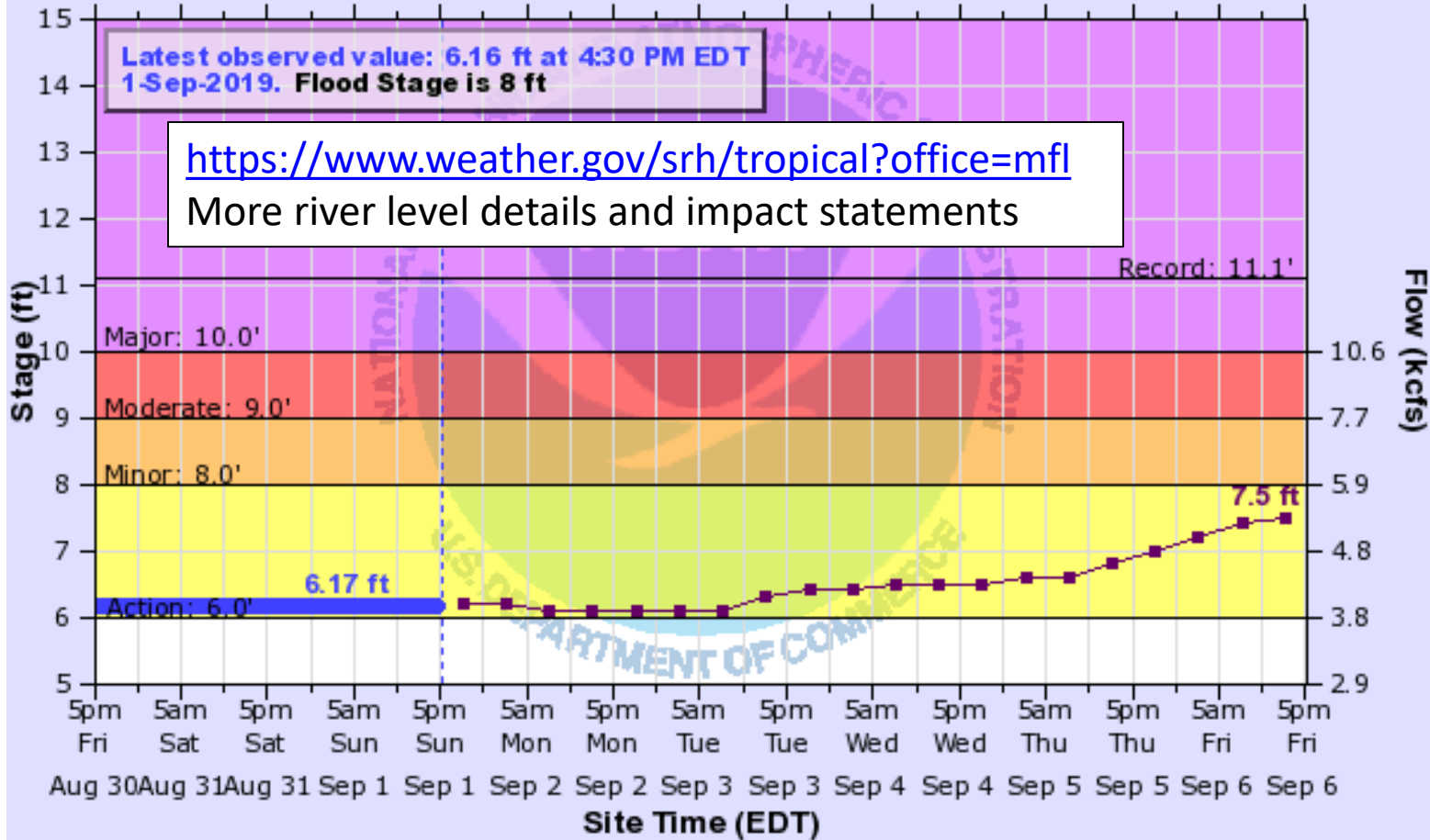
- If 2-5" of rain were to occur, minor flooding would be expected on the St. Johns River at Astor. If 7-10" of rain occurs, moderate to potentially major flooding could occur.

River Forecasts

ST. JOHNS RIVER ABOVE LAKE HARNEY

Universal Time (UTC)

21Z 9Z 21Z 9Z 21Z 9Z 21Z 9Z 21Z 9Z 21Z 9Z 21Z 9Z 21Z
 Aug 30 Aug 31 Aug 31 Sep 1 Sep 1 Sep 2 Sep 2 Sep 3 Sep 3 Sep 4 Sep 4 Sep 5 Sep 5 Sep 6



Latest observed value: 6.16 ft at 4:30 PM EDT
 1-Sep-2019. Flood Stage is 8 ft

<https://www.weather.gov/srh/tropical?office=mfl>
 More river level details and impact statements

- 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.

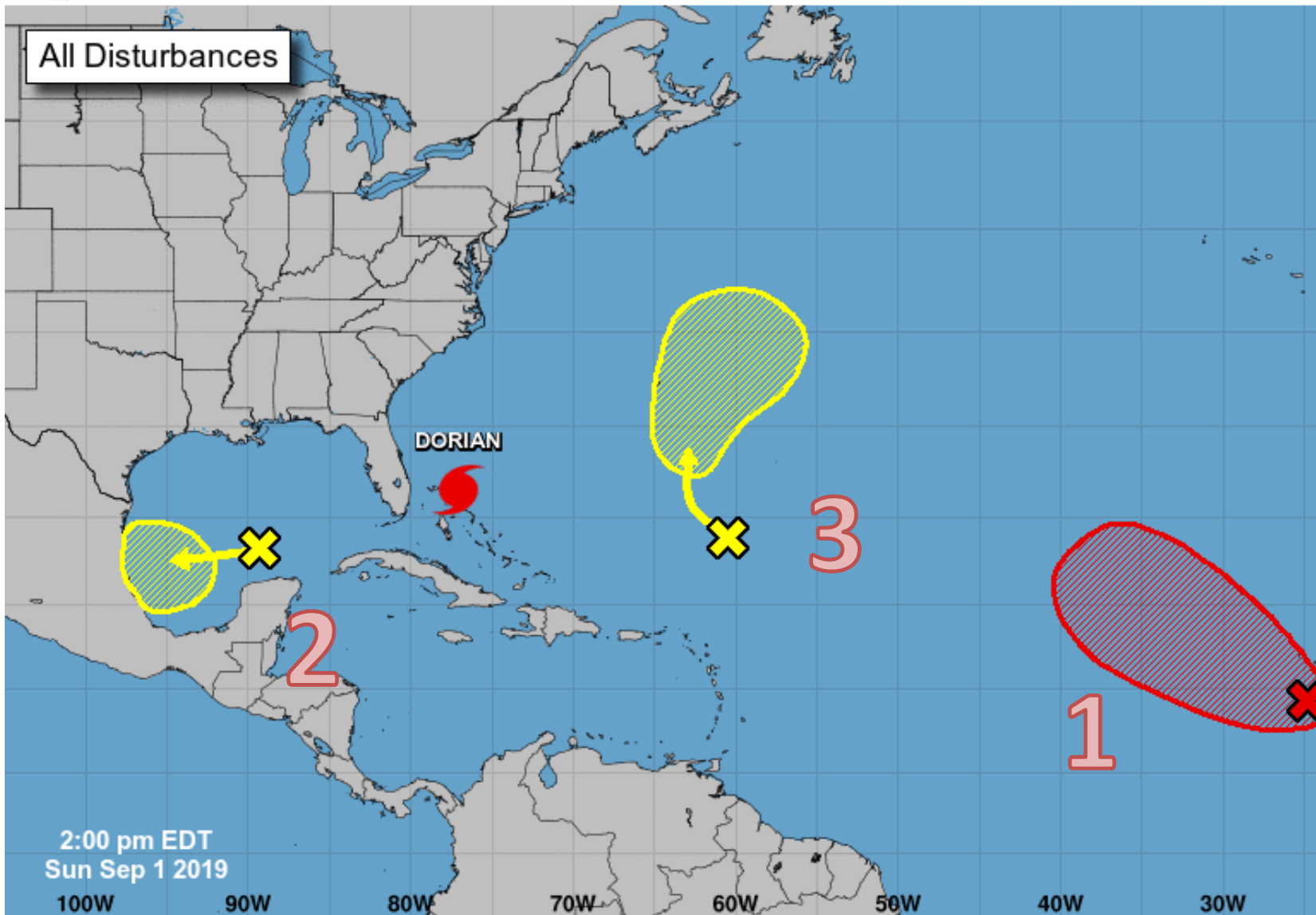


Five-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida



All Disturbances



1. A broad area of low pressure centered near the Cabo Verde Islands is producing a large area of showers and thunderstorms. This system is showing signs of becoming better organized, and environmental conditions appear conducive for additional development during the next several days. A tropical depression is likely to form by the middle of the week while the system moves generally northwestward across the eastern tropical Atlantic Ocean.
 * Formation chance through 48 hours...**medium**...60 percent.
 * Formation chance through 5 days...**high**...70 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. A trough of low pressure is located several hundred miles south-southeast of Bermuda. Although the associated shower and thunderstorm activity is showing some signs of organization, the system does not currently have a closed surface circulation. Some gradual development of this disturbance is possible during the next few days while it moves slowly northward or north-northwestward.
 * Formation chance through 48 hours...**low**...near 10 percent.
 * Formation chance through 5 days...**low**...30 percent.

2:00 pm EDT
Sun Sep 1 2019

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

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 Sunday, Hurricane Dorian was located 175 miles east of West Palm Beach, and moving to the west at 5 mph.
- Hurricane hunters have found that maximum sustained winds increased to 185 mph, which is a Category 5 Major Hurricane. Dorian is forecast to maintain Category 4 or 5 strength through Tuesday.
- Dorian will continue a westward path through today before slowing down and turning more northward on 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 70% (high) chance of becoming a tropical depression within the next 5 days.
- A broad area of low pressure has developed in the southwestern Gulf of Mexico. Some slow development is possible as it moves towards the west into Mexico. 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 30% (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 **Hurricane Warning** is now in effect for Palm Beach, Martin, St. Lucie, Indian River, and Brevard Counties.
- A **Storm Surge Warning** is in effect for Palm Beach, Martin, St. Lucie, Indian River, and Brevard Counties.
- A **Hurricane Watch** is now in effect for Volusia County.
- A **Storm Surge Watch** is now in effect for Volusia County.
- A **Tropical Storm Watch** is in effect for Broward, Glades, Highlands, Okeechobee, Polk, and Osceola Counties.
- Additional watches could be expanded northward towards Northeast Florida tonight or tomorrow.
- Damaging winds, storm surge, flash flooding, and isolated tornadoes are all still possible with Dorian, but the severity of the impacts will be dependent on how close to the coast the storm tracks.
- Tropical storm force winds could arrive for Treasure Coast areas as early as late tonight and will spread northward during the day on Monday and continue through Tuesday.
- Storm Surge values north of Jupiter Inlet are forecast to be 4-7', with 2-4' south of Jupiter Inlet.
- Rainfall amounts of 3-6" are expected along the East Coast, with locally higher amounts of 9". This may cause minor flooding issues along with post-landfall river/creek flooding.
- Minor river flooding is ongoing from recent rainfall at the Peace River at Bartow, St. Johns River at Astor, and the Withlacoochee River at Holder.
- The rip current risk will be dangerously high for the holiday weekend at all Atlantic beaches, along with battering, large waves causing moderate to severe erosion.

- None of the 3 systems being monitored for development poses a threat to Florida.

The next tropics packet will be issued Monday 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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State Meteorological Support Unit

Florida Division of Emergency Management

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