



TROPICAL UPDATE



5 PM EDT


Friday, August 30, 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

Friday, August 30, 5 PM ET

	MINIMAL	Low	MODERATE	HIGH	EXTREME
 WINDS					
 STORM SURGE					
 FLOODING					
 TORNADOES					

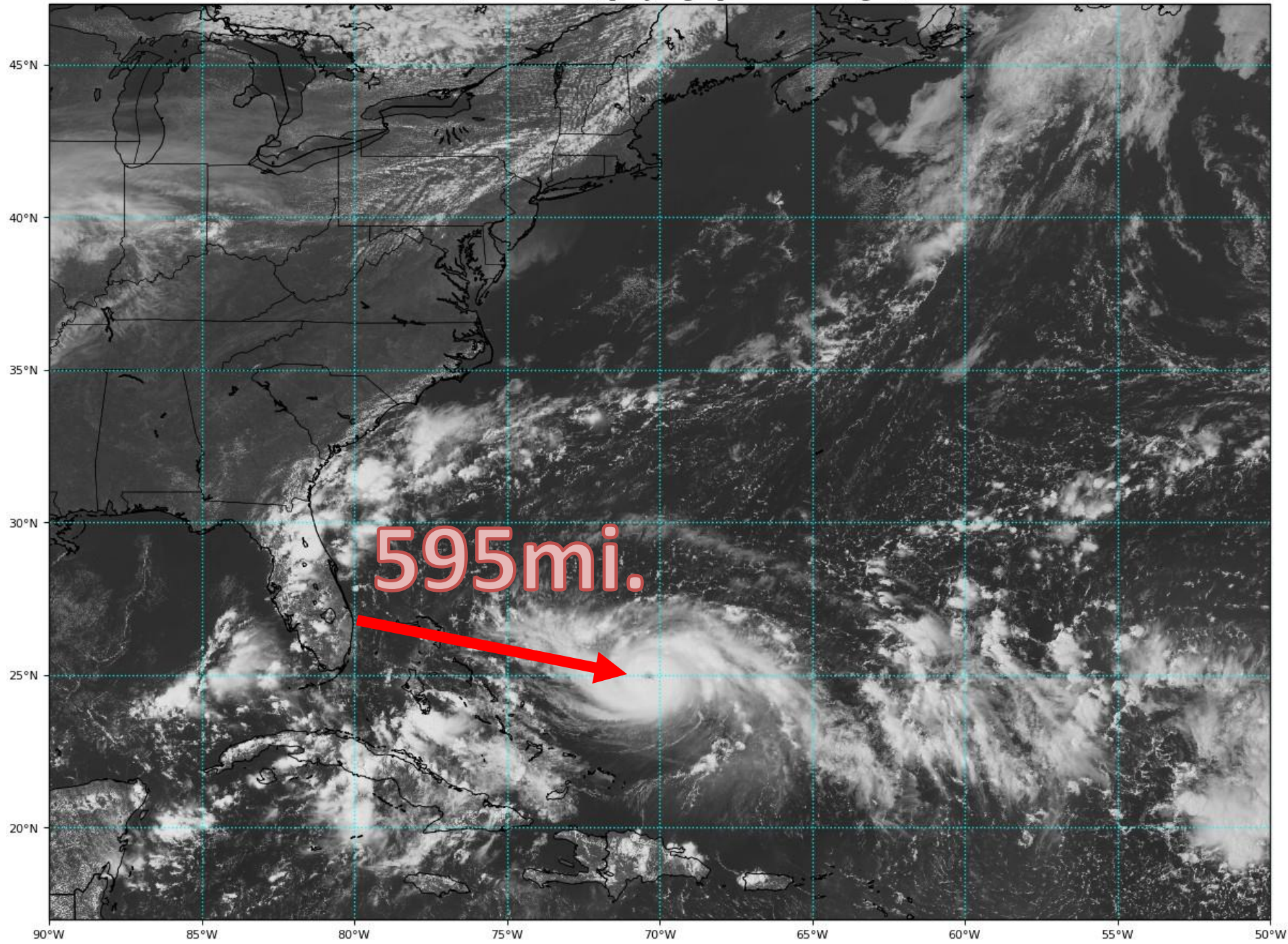
	Low	MODERATE	HIGH
 RIP CURRENTS			

National Hurricane Center Map



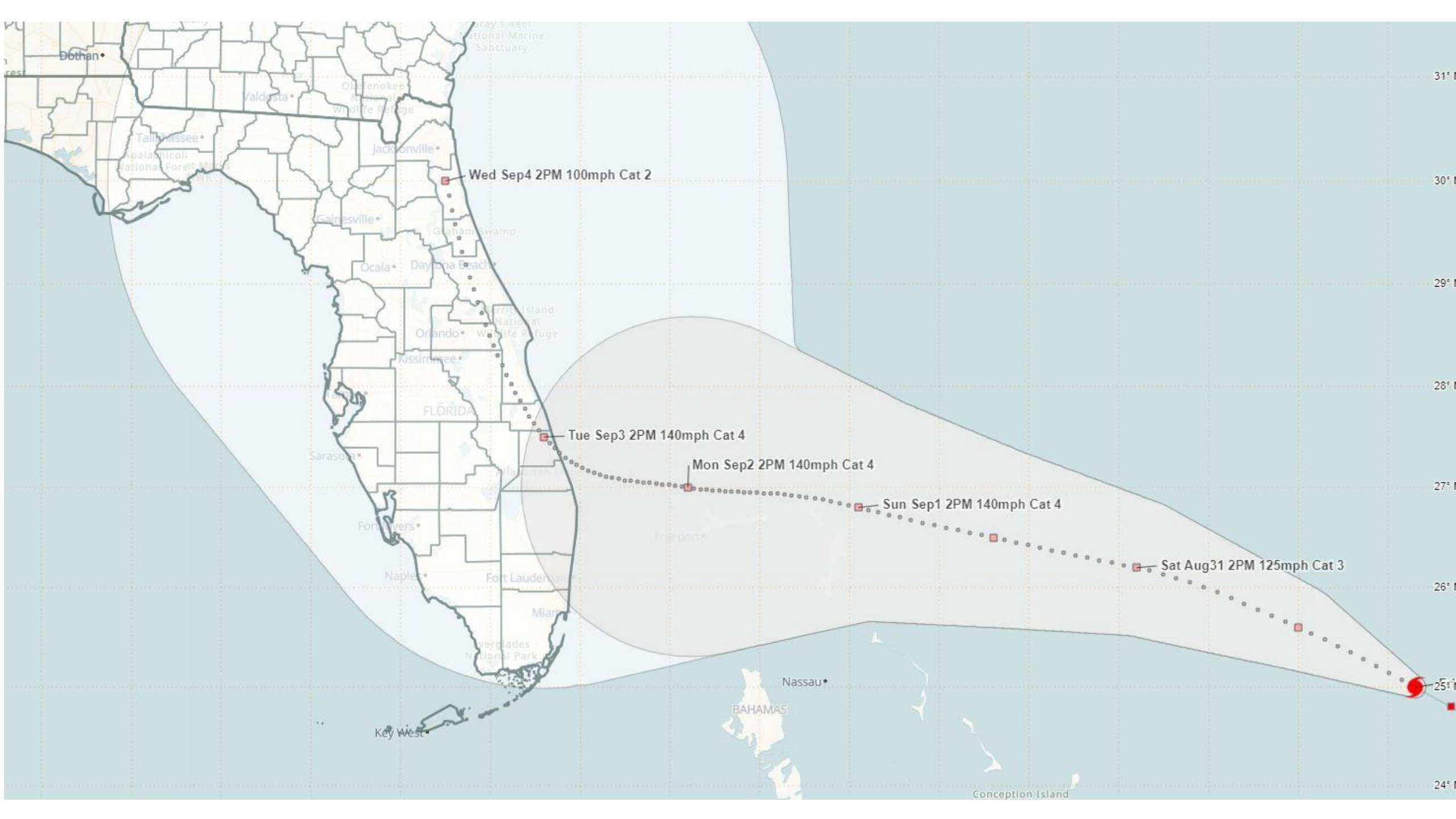
Changes Today:

- Dorian has continued to strengthen today, now a Major Category 3 hurricane with maximum sustained winds of 115 mph.
- Still uncertainty in northward turn over the Florida Peninsula...
- Hurricane/Tropical Storm/Storm Surge Watches are likely to be issued late tonight or early tomorrow morning.

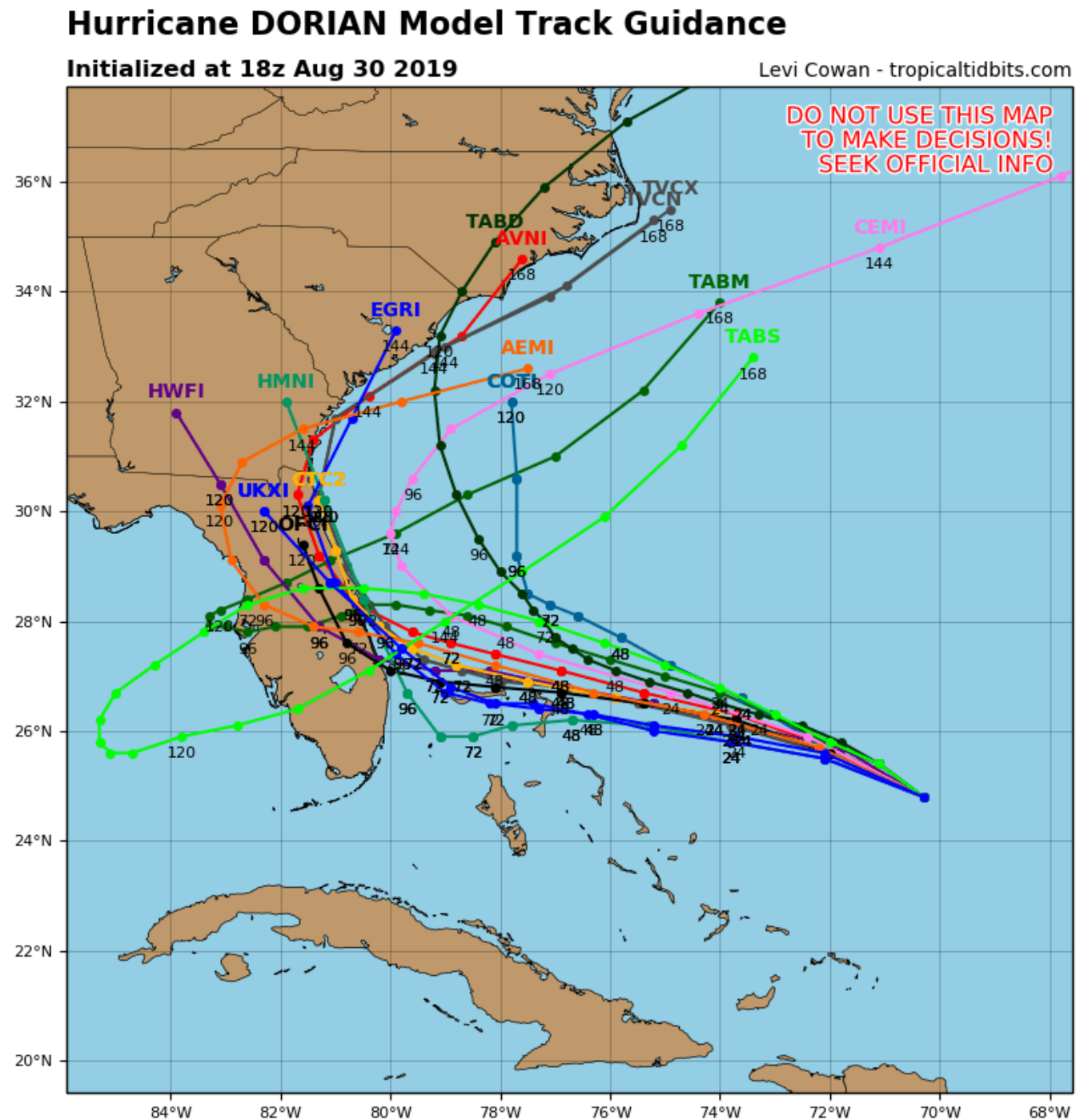


Hurricane Dorian Satellite Image

Dorian now has a well-defined eye and is starting to make a turn toward the west.



- There is still disagreement on when the northward turn will occur near landfall and could change the potential impact to Northeast Florida and/or the Florida West Coast.

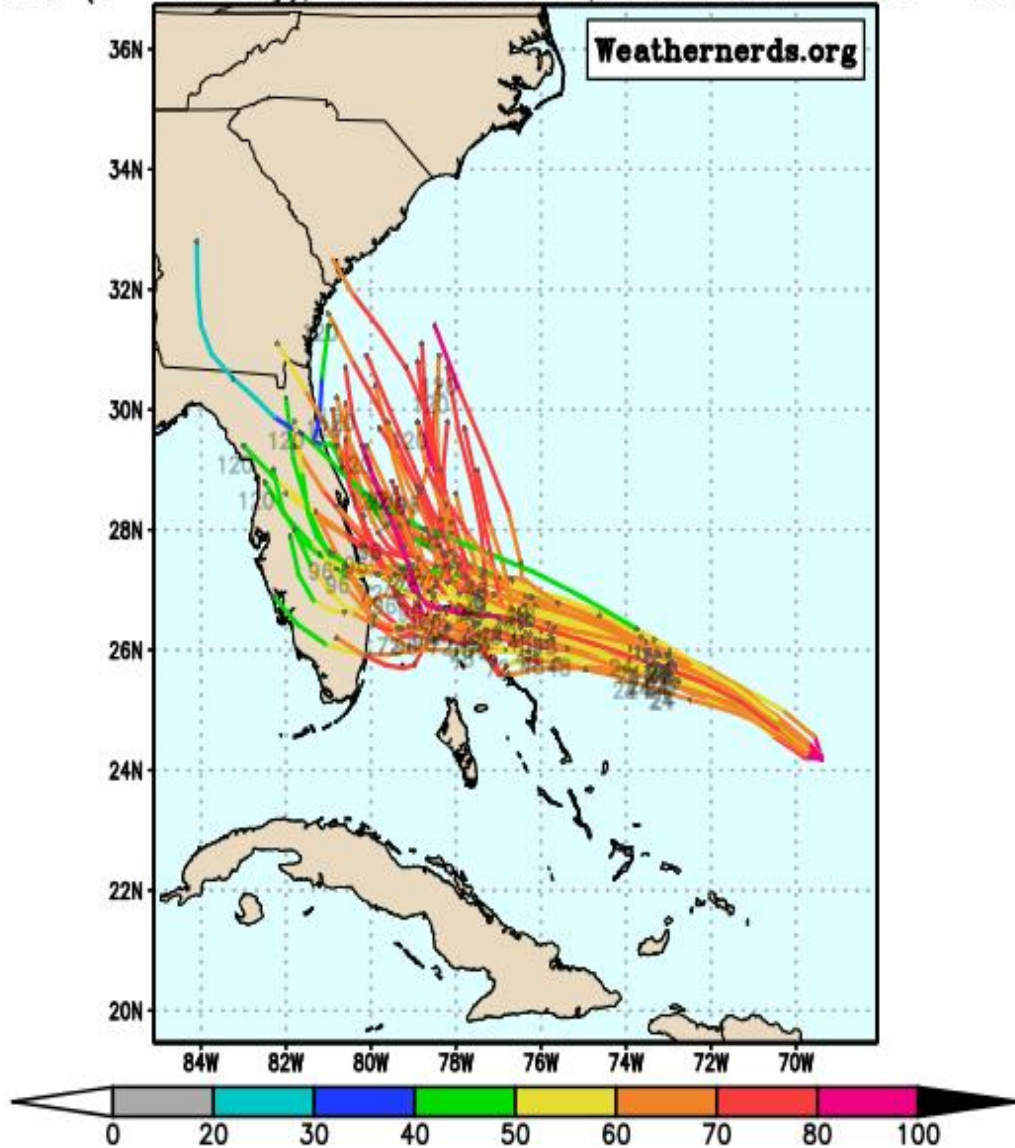


Current Forecast Ensemble Model Guidance

There is still a wide spread in solutions for the track of Dorian as it turns northward.

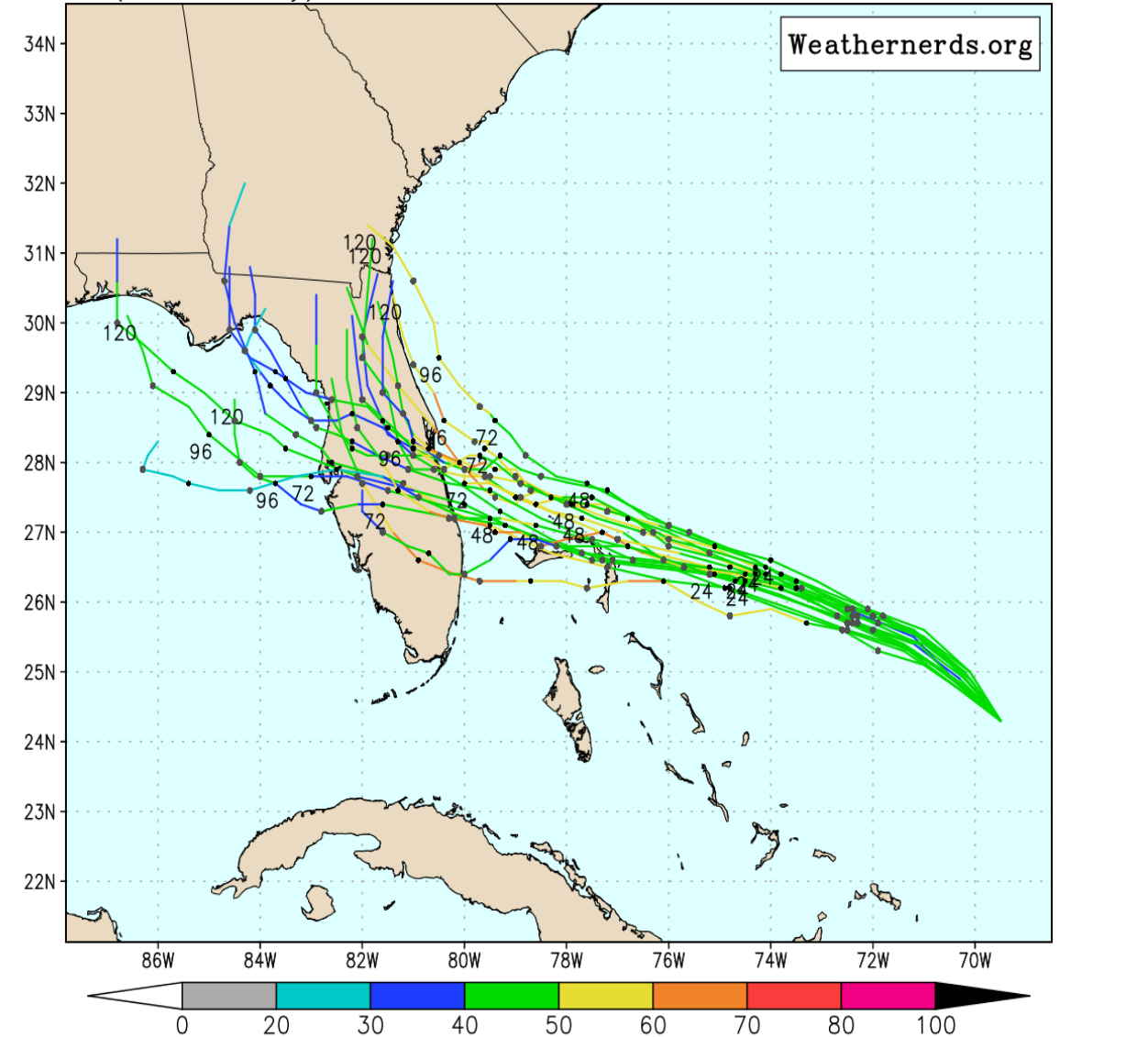
ECMWF Ens. (0–120h only), init: 2019083012, AL05 Dorian

color = max wind (kt)



GFS Ens. (0–120h only), init: 2019083012, AL05 Dorian

color = max wind (kt)





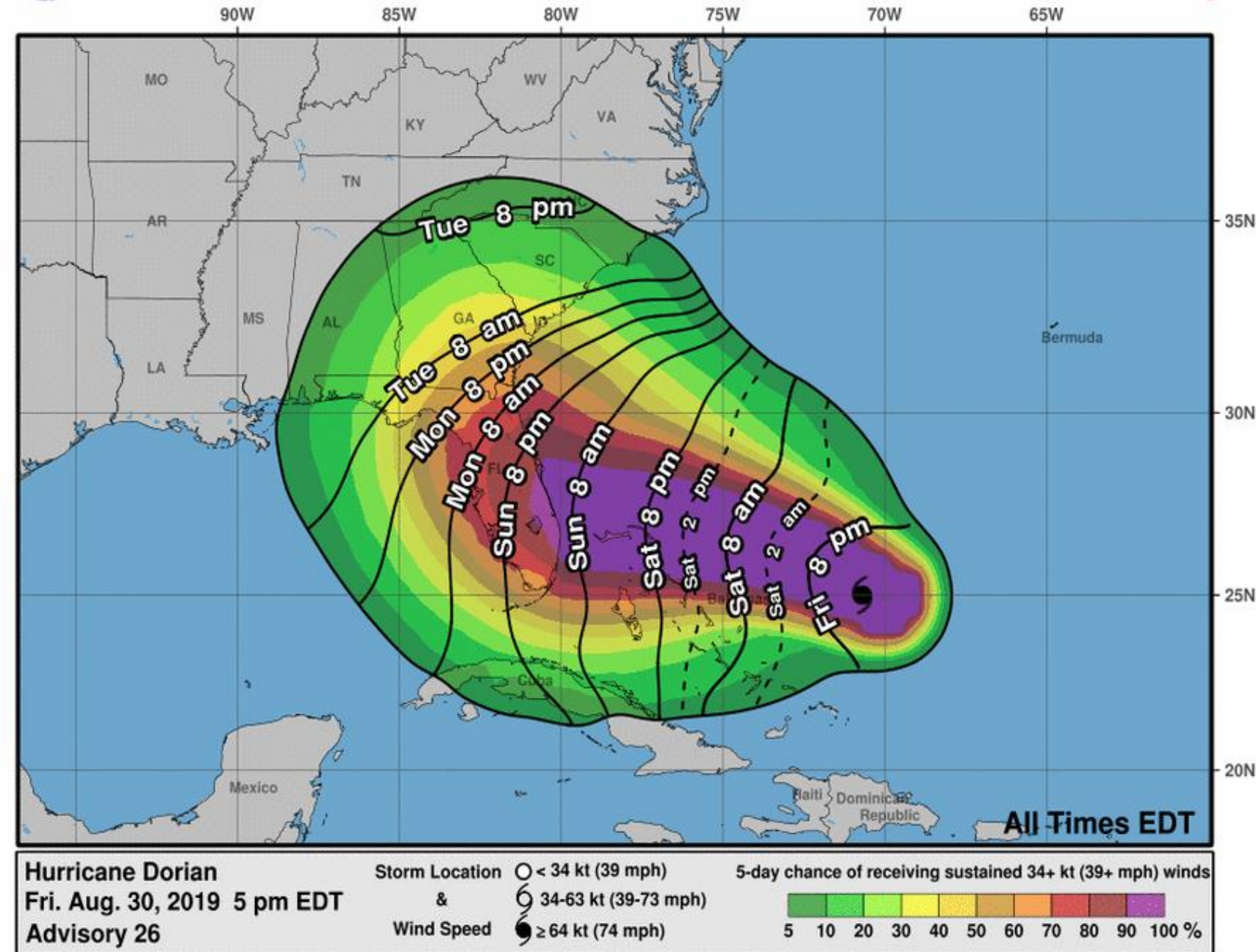
Earliest Reasonable Arrival Time of Tropical-Storm-Force Winds

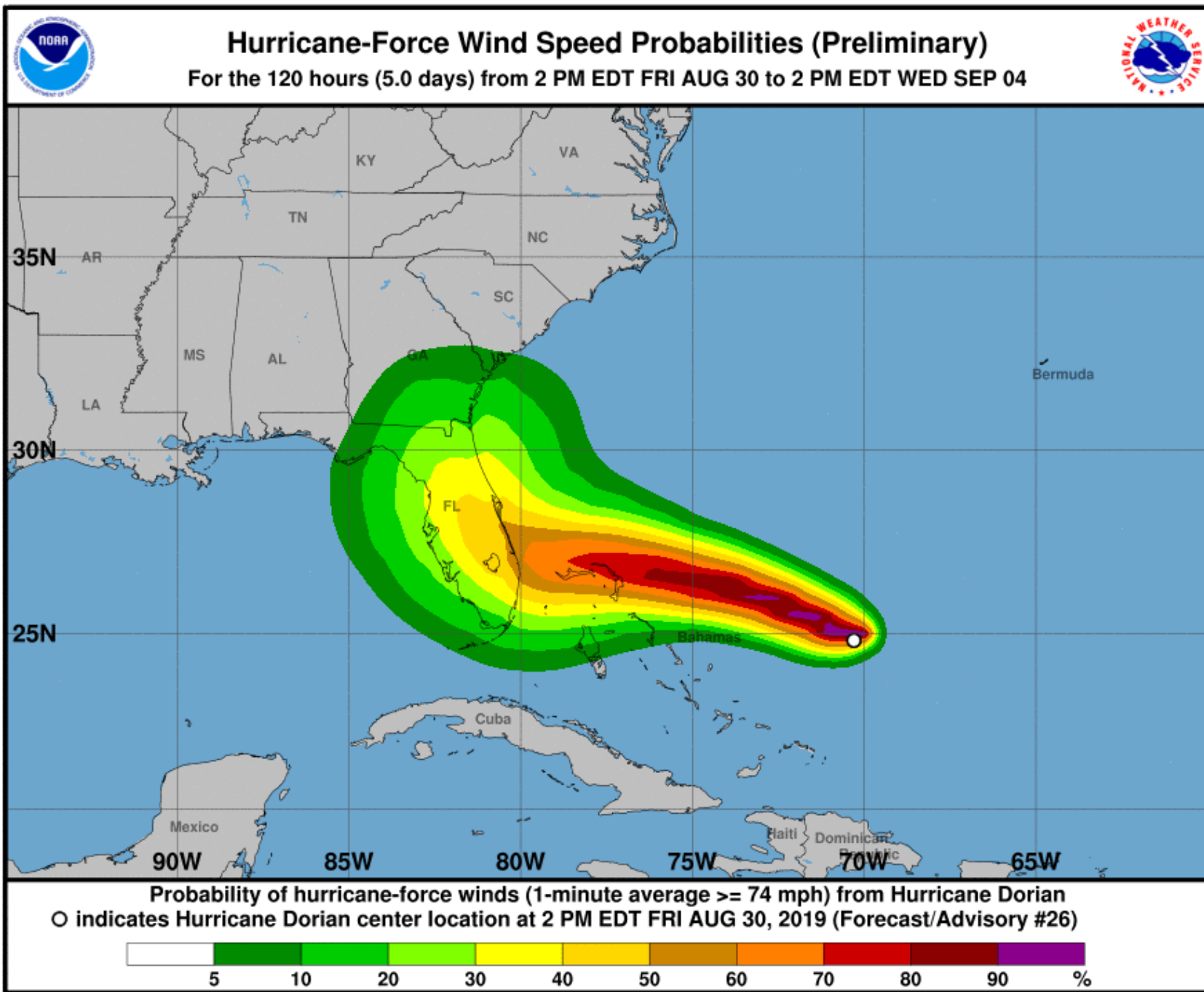


There are no tropical watches or warnings for Florida, but could be issued as early as tonight.

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

- Jacksonville: 70%
- Daytona Beach: 82%
- Orlando: 87%
- Cocoa Beach: 95%
- West Palm Beach: 97%
- Ft. Lauderdale: 93%
- Miami: 80%
- Naples: 71%
- Marathon: 54%
- Key West: 41%
- Tampa: 78%
- Tallahassee: 46%
- Panama City: 31%
- Pensacola: 11%





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

Jacksonville: 22%
Orlando: 44%
Cocoa Beach: 48%
West Palm Beach: 55%
Ft. Lauderdale: 43%
Miami: 29%
Naples: 21%
Marathon: 9%
Key West: 5%
Tampa: 30%
Tallahassee: 9%
Panama City: 4%

Chances have held steady or decreased slightly for Miami and the Florida Keys.



Key Messages for Hurricane Dorian

Advisory 26: 5:00 PM EDT Fri Aug 30, 2019



1. Life-threatening storm surge and devastating hurricane-force winds are likely in portions of the northwestern Bahamas, where a hurricane warning is in effect. Residents should execute their hurricane plan and listen to advice given by local emergency officials.

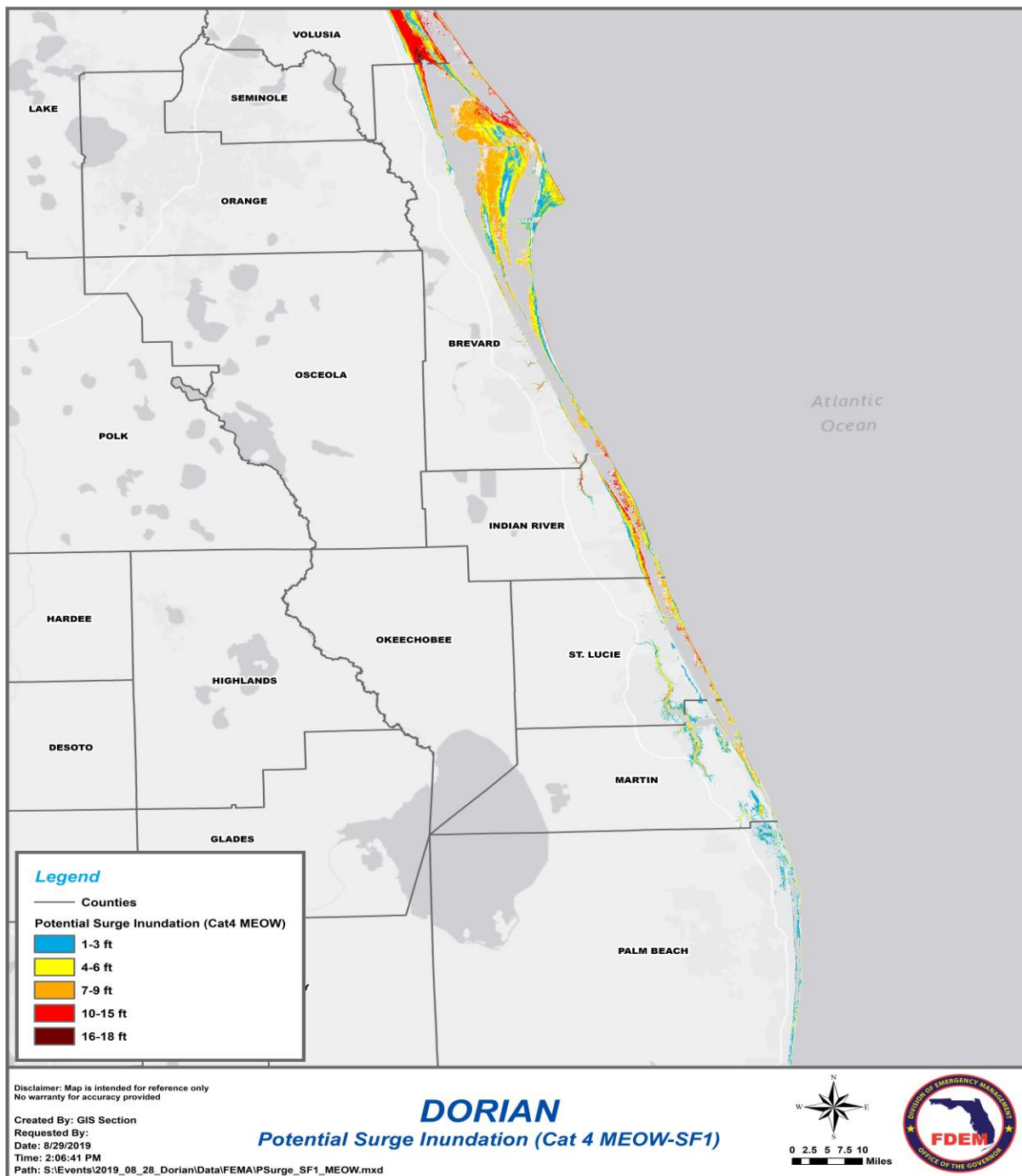
2. Life-threatening storm surge and devastating hurricane-force winds are likely along portions of the Florida east coast by early next week, but since Dorian is forecast to slow down and turn northward near the coast, it is too soon to determine when or where the highest surge and winds will occur. 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. A prolonged period of storm surge, high winds and rainfall is possible in portions of Florida into next week, including the possibility of hurricane-force winds over inland portions of the Florida peninsula.

4. Heavy rains, capable of life-threatening flash floods, are expected over portions of the Bahamas and coastal sections of the southeastern United States this weekend through much of next week.



For more information go to hurricanes.gov



- Potential surge heights using the Blended MEOWs
- Miami/Palm Beaches= 2-6'
- Treasure Coast = 7-11'
- Space Coast = 5-10'
- Northeast FL = 4-8'
- Minor coastal flooding at high tide already occurring

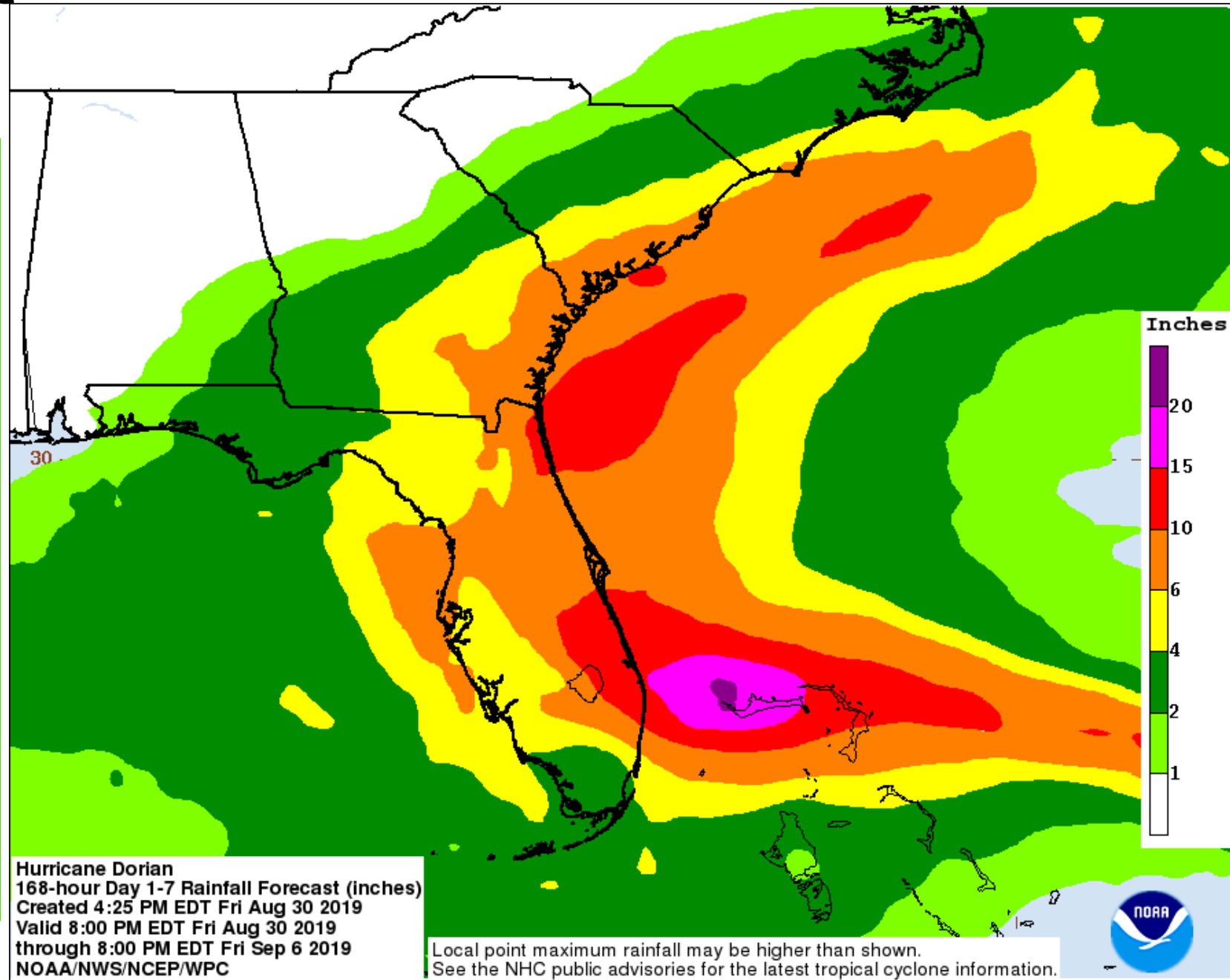
Rainfall Forecast Next 7 Days

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

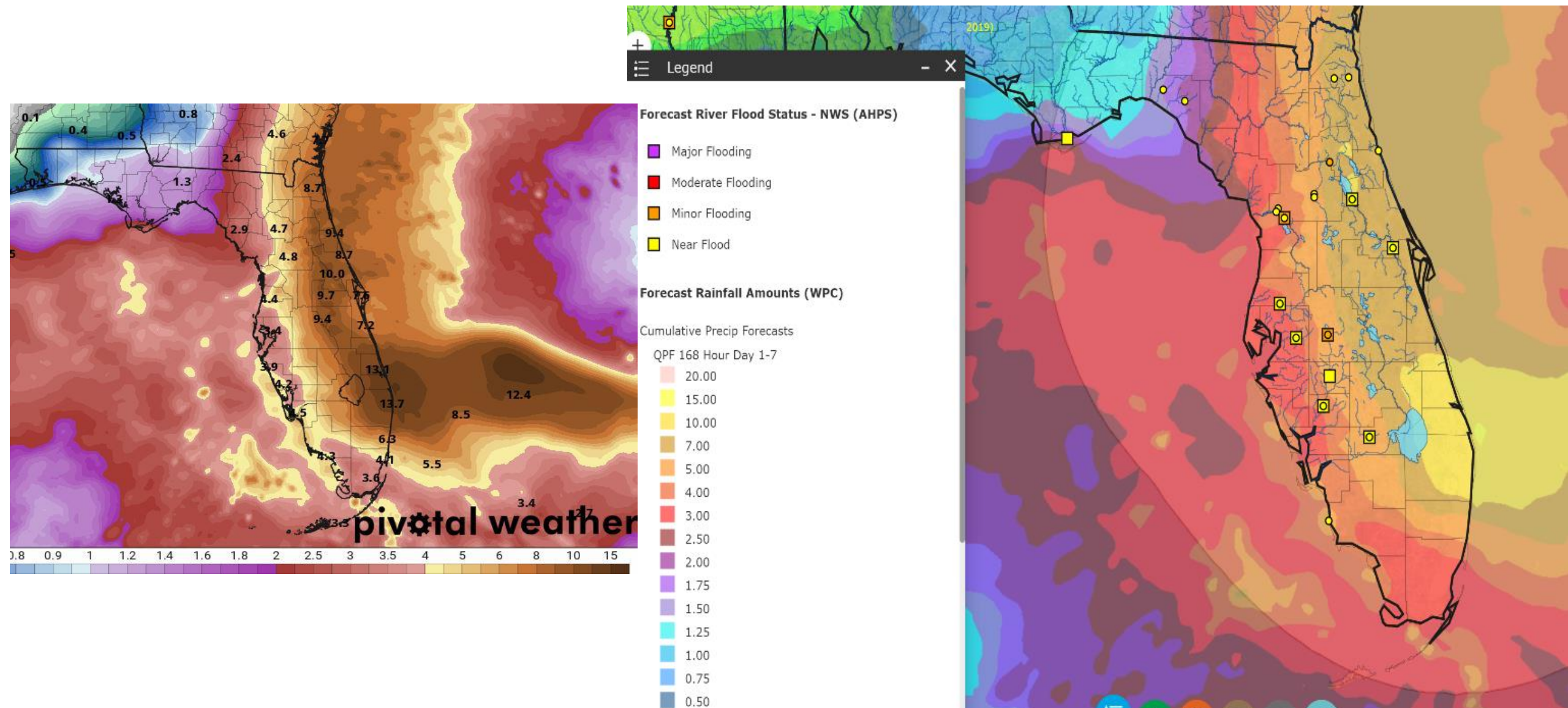
These rainfall forecasts are track-dependent and will likely change with subsequent forecasts.

Wherever Dorian tracks, the heaviest rainfall totals will follow the eastern side of the track.

However, a widespread 6-10" of rain is expected across much of the eastern and central Peninsula, with higher totals of 15-20" possible.



Rainfall Forecast Next 7 Days

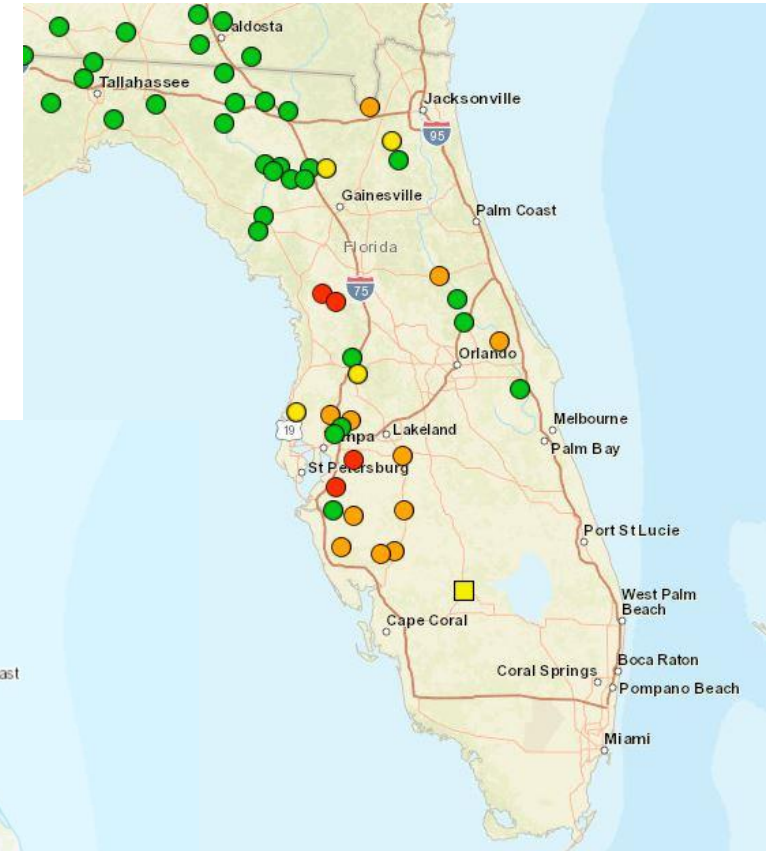
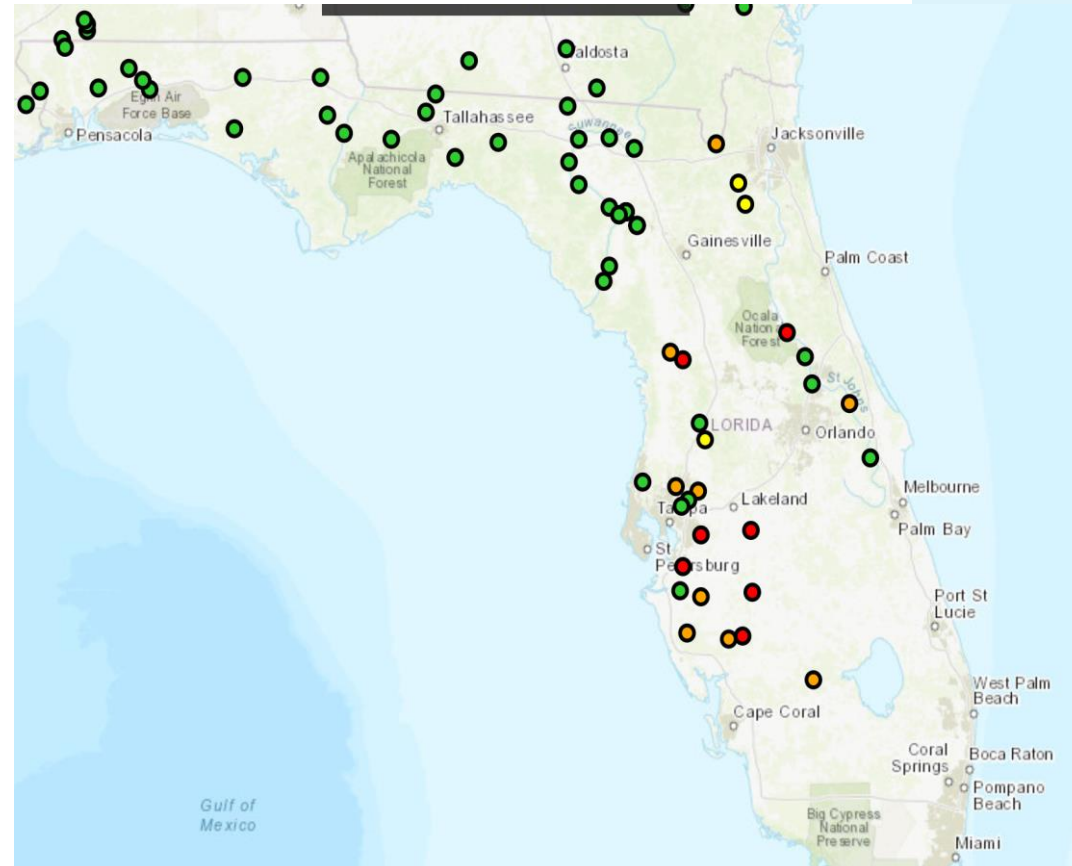


Current and Forecast River Conditions

Many rivers are elevated and additional rainfall will raise water levels over the next week. Large potential for moderate to major flooding, especially in West Central Florida and along the St. Johns and Santa Fe River basins.

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.”

NOTE: Not current
river stages –
potential FUTURE
river stages



Chance of Exceedance		
30%	Level	70%
	Action	
	Minor Flood	
	Moderate Flood	
	Major Flood	
= less than 30% chance of reaching Action level		
= no critical levels defined for this point		



Five-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida



www.hurricanes.gov

All Disturbances

1. A tropical wave is located about 300 miles east-southeast of the Cabo Verde Islands. Some development of this system is possible early next week over the eastern and central tropical Atlantic as it moves west-northwestward at 10 to 15 mph.

* Formation chance through 48 hours...low...near 0 percent.

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

DORIAN



2:00 pm EDT
Fri Aug 30 2019

100W

90W

80W

70W

60W

50W

40W

30W

20W

5N

15N

25N

35N

45N

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

- As of the 5 PM ET advisory, Hurricane Dorian was located 595 miles east of West Palm Beach, and moving to the west-northwest at 9 mph.
- Maximum sustained winds have increased to 115 mph, which is a Category 3 Major Hurricane. Additional strengthening is expected, and Dorian is expected to become a Category 4 tomorrow or Sunday as it approaches the Florida Coast.
- Dorian will continue a westward turn tonight and into this weekend. A northward turn is expected Monday or Tuesday near or just after landfall, but when that northward turn occurs is still uncertain.
- Dorian is expected to slow its forward movement near and after landfall. 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.
- Elsewhere, a tropical wave is emerging off the west coast of Africa. Some development if this wave is possible next week and the National Hurricane Center is predicting a 30% chance of becoming a tropical depression within the next 5 days.

Florida Outlook:

- The entire Florida Peninsula and the Florida Big Bend remain in the 5-day forecast cone, with the Treasure Coast in the 3-day forecast cone.
- There are no watches or warnings in effect related to Dorian, but tropical storm, hurricane, and surge watches could be issued as early as tonight.
- **Damaging winds, flash flooding, river flooding, storm surge, and isolated tornadoes are all possible with Dorian.**
- There is a threat for significant river and flash flooding across the Peninsula where flooding impacts could last several days to weeks.
- Tropical storm force winds could arrive as early as Sunday morning, but will likely arrive Sunday night along the Florida East Coast and into the remainder of the Peninsula on Monday.
- Due to the slow movement of Dorian, widespread rainfall of 6-12" are expected across a majority of the Peninsula, with higher totals of 15-20" possible along the East Coast. This will cause both immediate flash flooding issues along with post-landfall river/creek flooding.
- Minor coastal flooding from the ongoing King Tides will continue along the Florida East Coast with tides running 1-2' above normal.
- The rip current risk will be dangerously high for the holiday weekend at all Florida beaches.

The next tropics packet will be issued early Saturday 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



Created by:

Michael Spagnolo, Deputy State Meteorologist

Michael.Spagnolo@em.myflorida.com

State Meteorological Support Unit

Florida Division of Emergency Management

Users wishing to subscribe (approval pending) to this distribution list, register at:

https://public.govdelivery.com/accounts/FLDEM/subscriber/new?topic_id=SERT_Met_Tropics.

Other reports available for subscription are available at:

<https://public.govdelivery.com/accounts/FLDEM/subscriber/new?preferences=true>