



TROPICAL UPDATE



5 PM EDT




Monday, September 2, 2019

Major Hurricane Dorian, Invest 91L (90%), Invest 92L (40%), Invest 93L (70%), & African Wave (40%)

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.

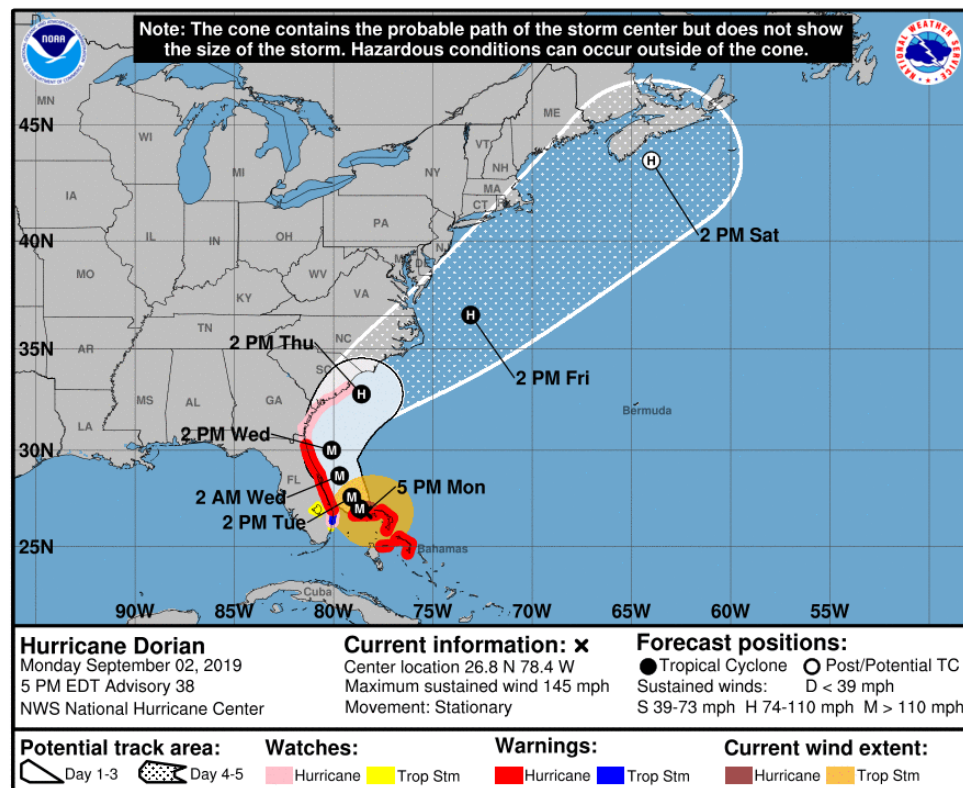
Major Hurricane Dorian

Sunday, September 1, 5 PM ET

	MINIMAL	Low	MODERATE	HIGH	EXTREME
 WINDS					
 STORM SURGE					
 FLOODING					
 TORNADOES					

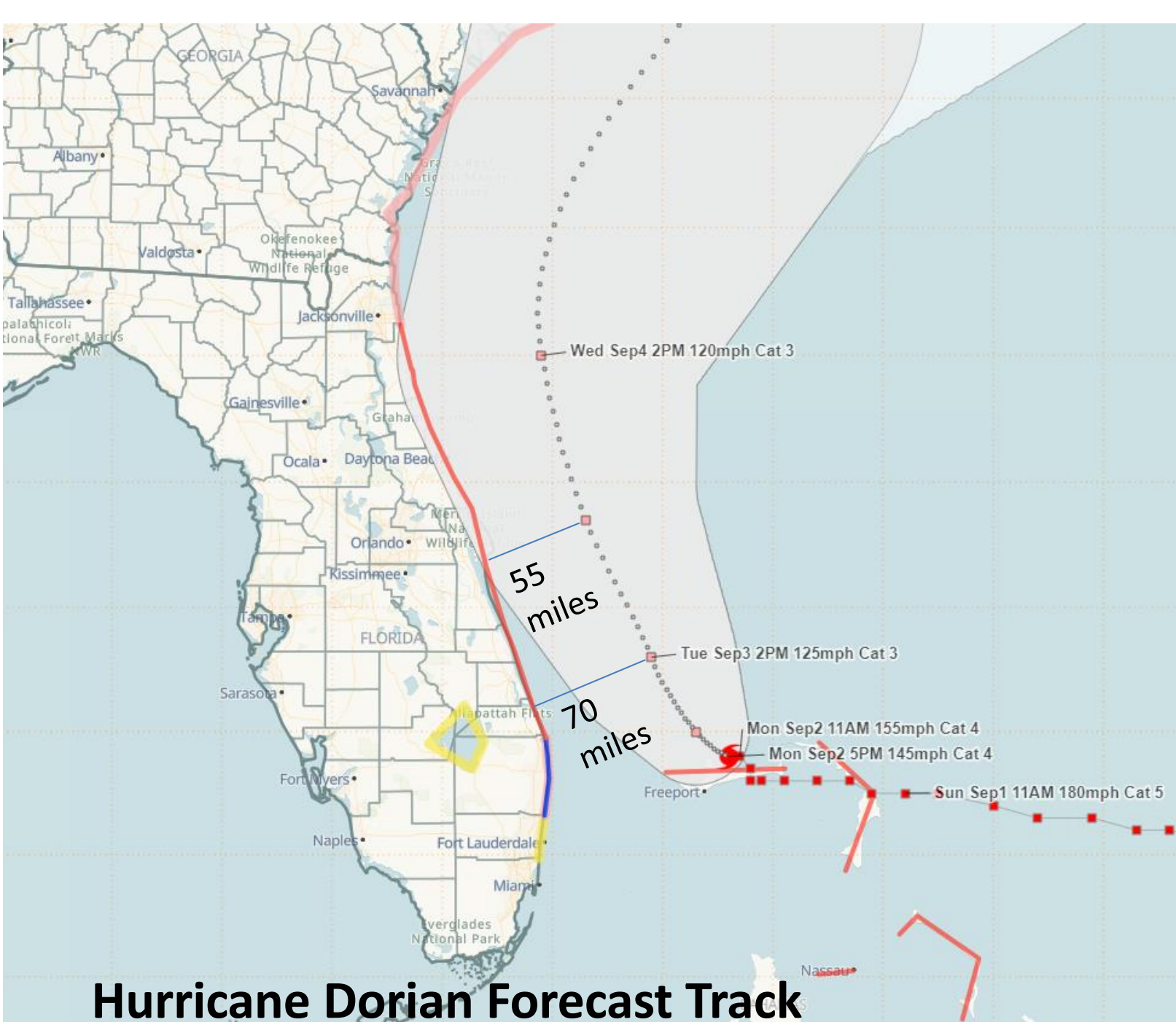
	Low	MODERATE	HIGH
 RIP CURRENTS			

National Hurricane Center Map



Changes This Afternoon:

- Dorian has maximum sustained winds of 145 mph (Category 4), but the wind field is expanding.
- Very little movement has occurred, and Dorian is now stationary.
- Hurricane Warnings now extend up through St. Johns County and a Storm Surge Warning is now in effect from northern Palm Beach County northward to the FL/GA line.

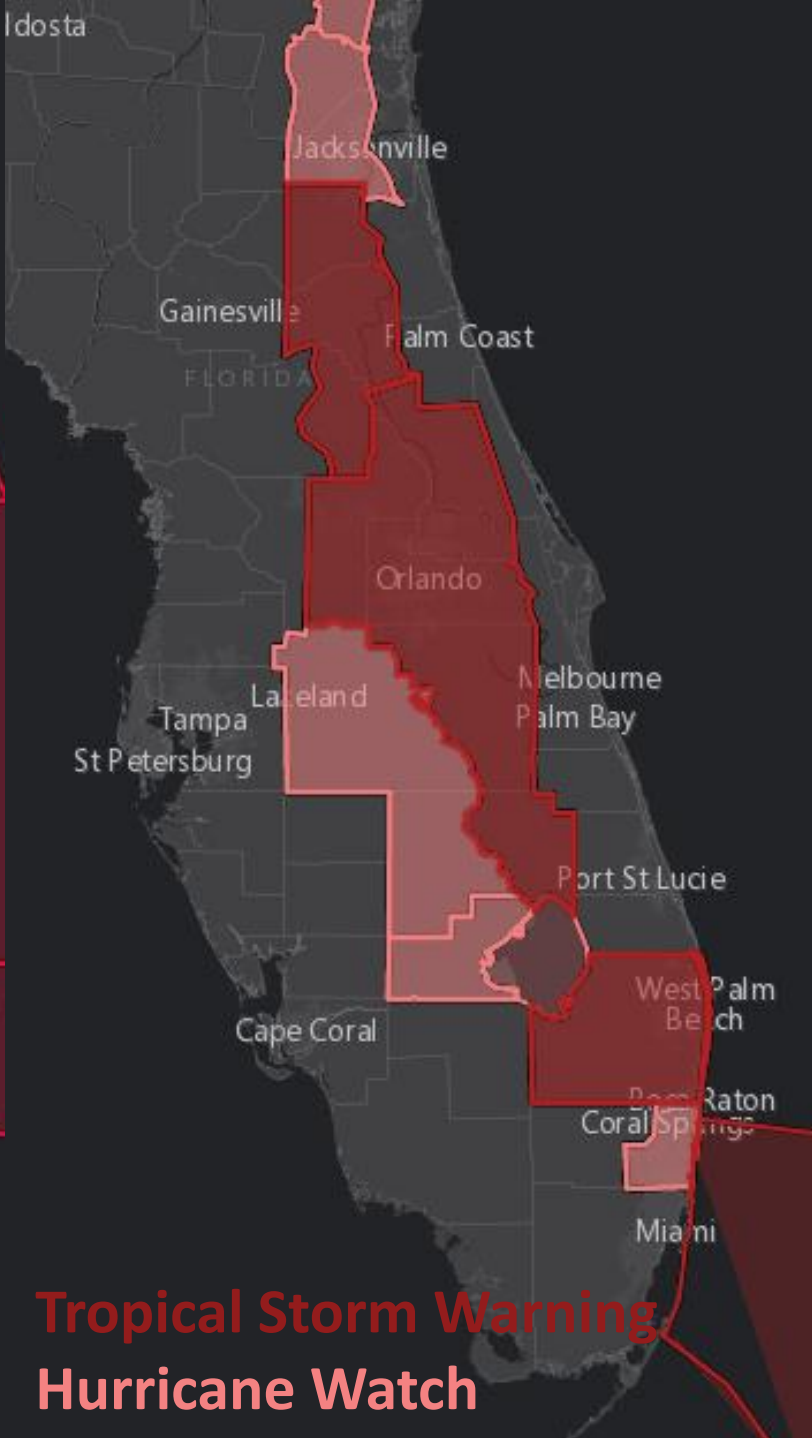


Hurricane Dorian Forecast Track

Hurricane Dorian is located about 105 miles east of West Palm Beach. It has moved very little today, and its current motion remains stationary. Maximum sustained winds are near 145 mph, making this a powerful Category 4 Hurricane.

A very slow west to west-northwest motion will resume tonight with a turn to the northwest late Tuesday. Dorian will begin to pick up some speed during the day Tuesday with a northeastward turn Wednesday night.

However, parts of East Central Florida are still within the cone of error, meaning a landfall in Florida cannot be ruled out. Hurricane force winds extend 45 miles from the center and tropical storm force winds extend up to 150 miles.



Hurricane Warning in effect for St. Johns, Flagler, coastal Volusia, Brevard, Indian River, St. Lucie, and Martin Counties

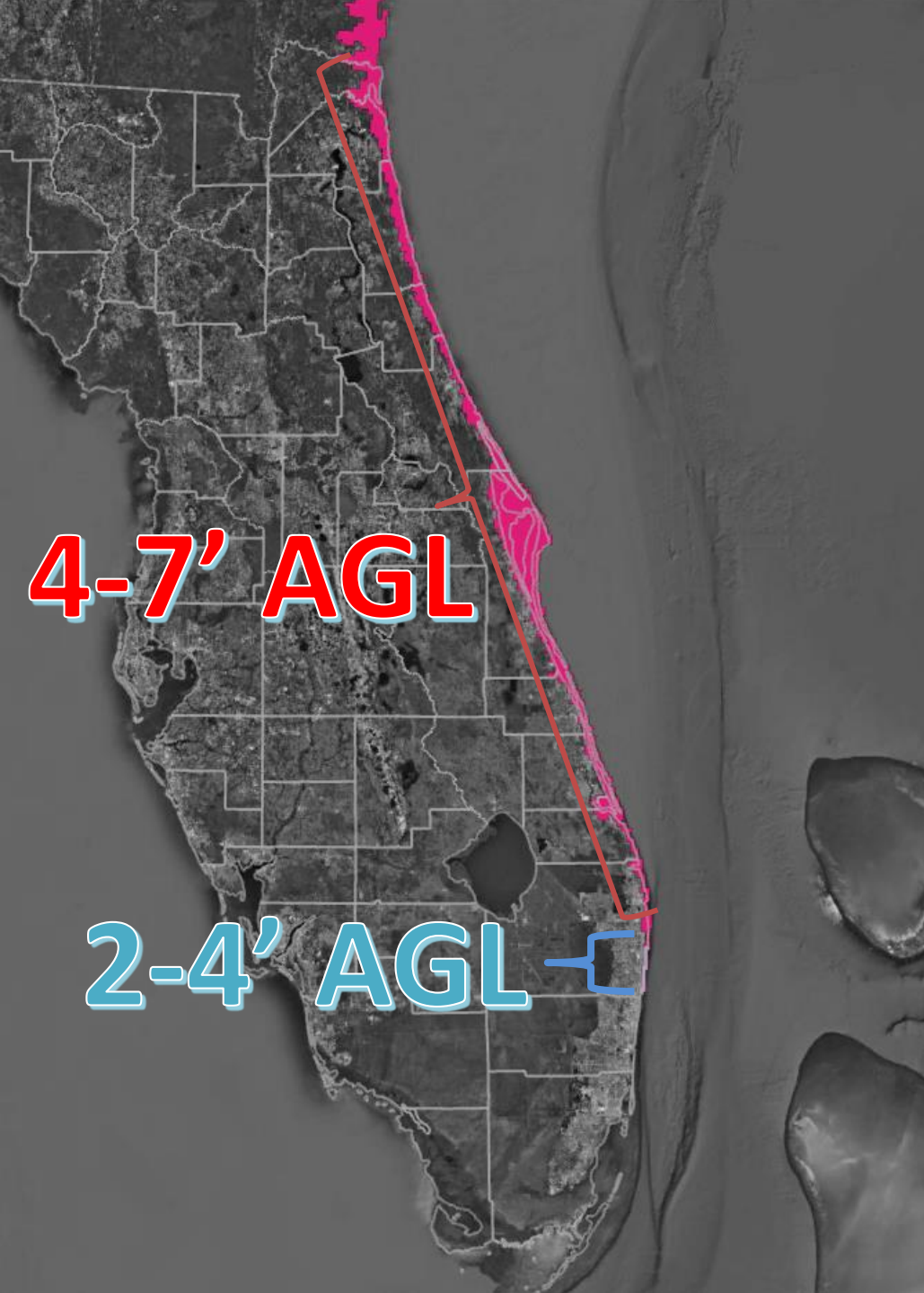
Hurricane Watch for coastal Nassau, coastal Duval, and coastal Palm Beach Counties

Tropical Storm Warning for Clay,
Putnam, eastern Marion, Lake, inland
Volusia, Seminole, Orange, Osceola,
Okeechobee, and Palm Beach Counties

Tropical Storm Watch for inland Nassau, inland Duval, Polk, Highlands, Glades, and coastal Broward Counties

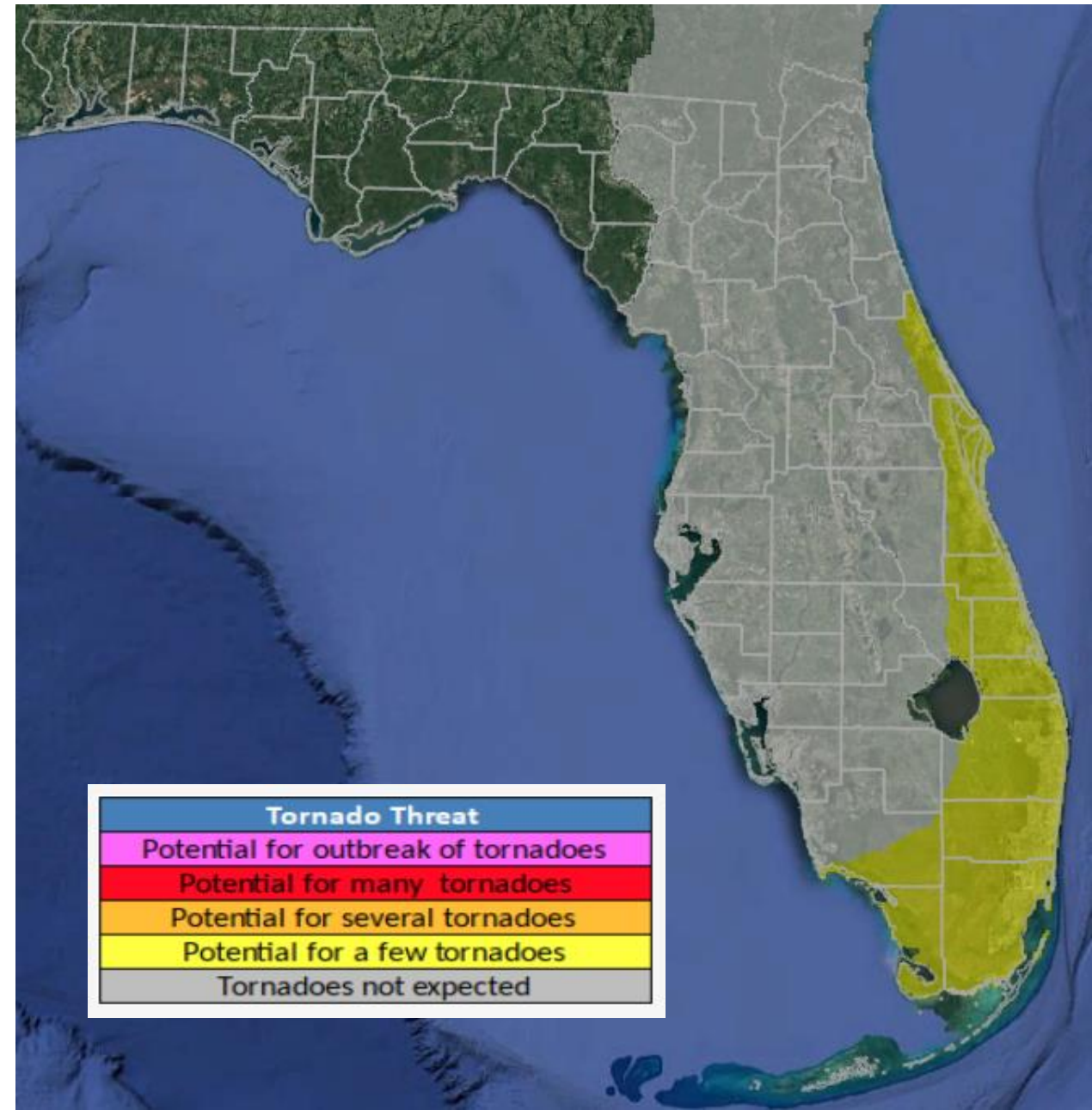
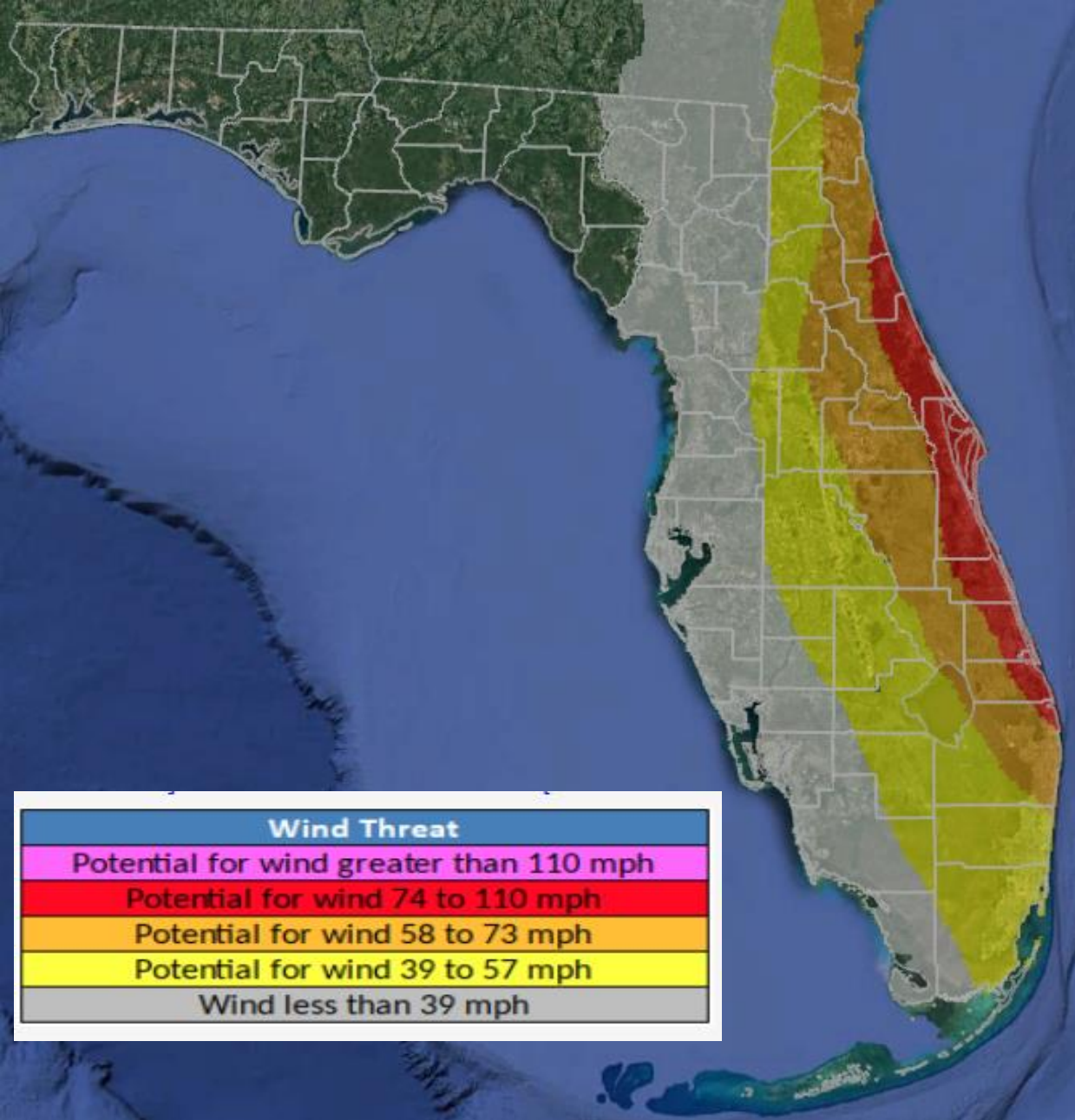
Storm Surge Forecasts Watches/Warnings

- Storm Surge Warning
 - Nassau, Duval, St. Johns, Flagler, Volusia, Brevard, Indian River, St. Lucie, Martin, northern Palm Beach Counties
- Storm Surge Watch
 - Southern Palm Beach County



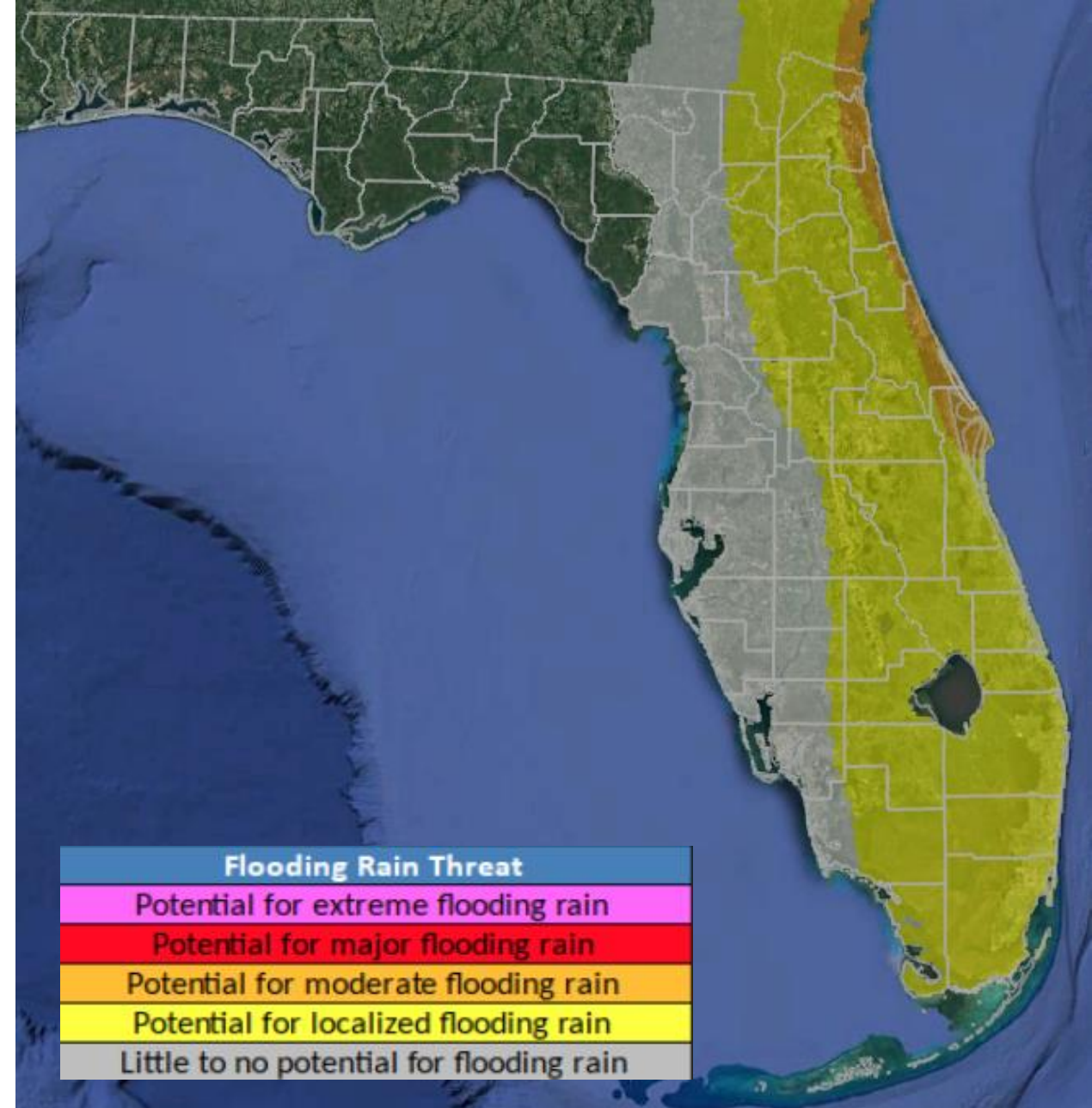
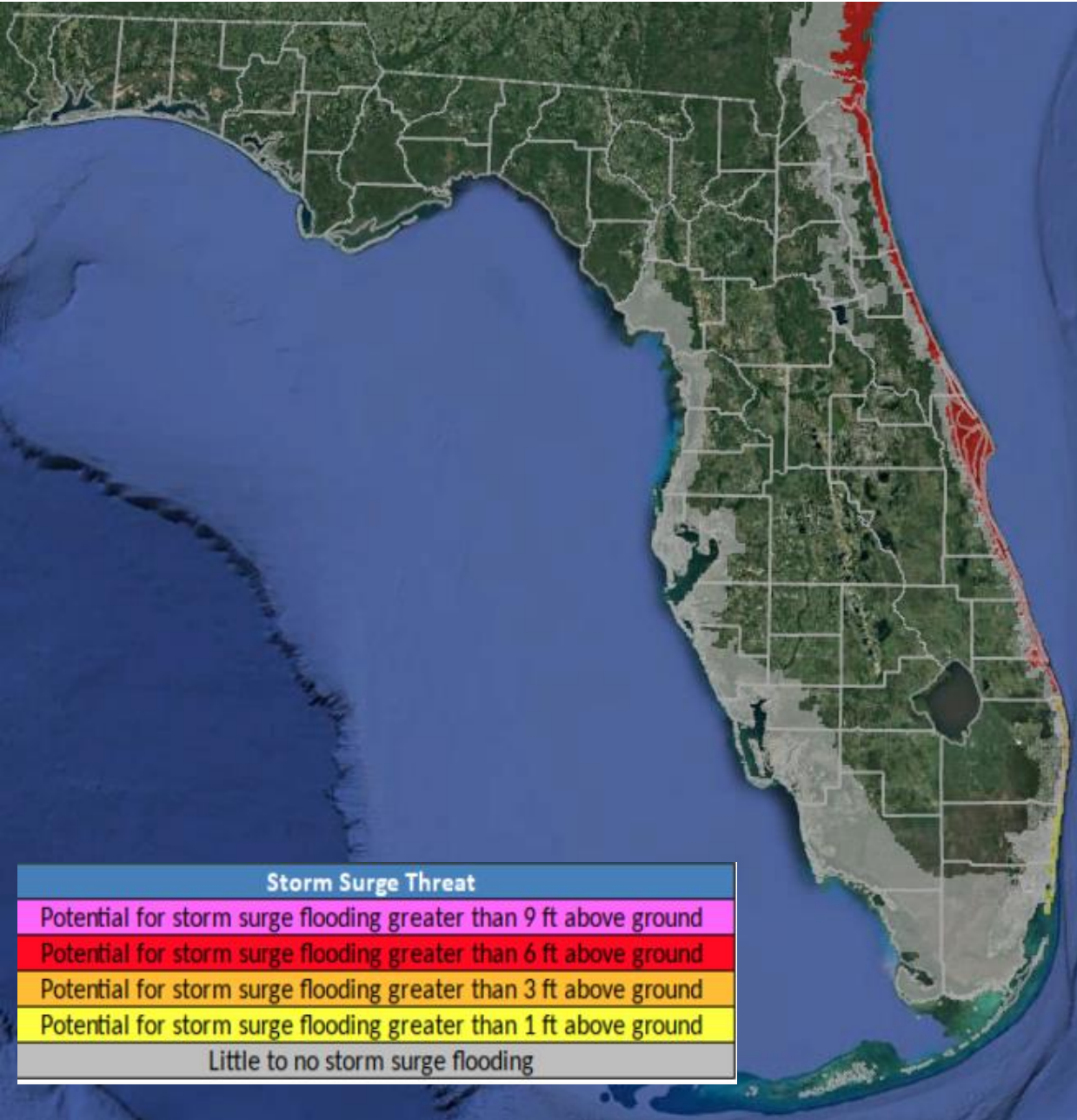
https://www.nhc.noaa.gov/refresh/graphics_at5+shtml/155815.shtml?inundation#contents

Interactive P-Surge Inundation Map



<https://www.weather.gov/srh/tropical?office=mfl>

Click on "Threats and Impacts" Tab



<https://www.weather.gov/srh/tropical?office=mfl>

Click on "Threats and Impacts" Tab



Key Messages for Hurricane Dorian

Advisory 38: 5:00 PM EDT Mon Sep 02, 2019

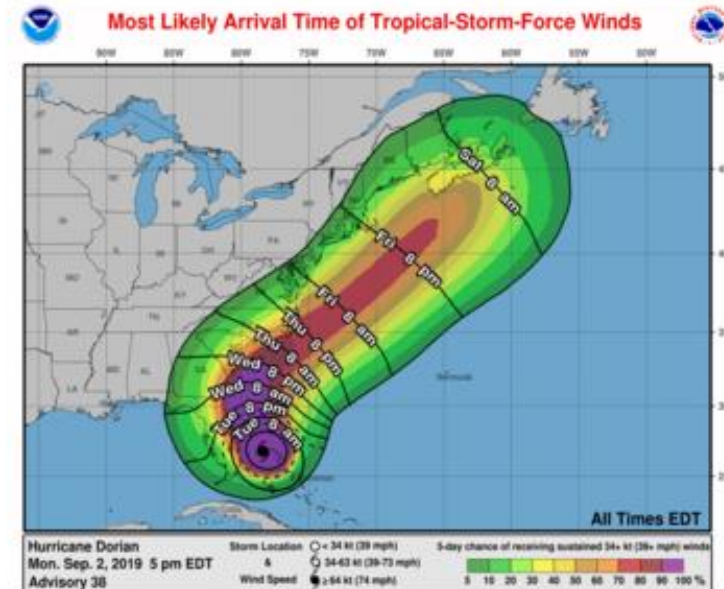


1. Devastating winds and storm surge will continue to affect Grand Bahama Island through tonight. Everyone there should remain in shelter and not venture into the eye.

2. Life-threatening storm surge and dangerous hurricane-force winds are expected along portions of the Florida east coast and the coasts of Georgia and South Carolina, regardless of the exact track of Dorian's center. Water levels could begin to rise well in advance of the arrival of strong winds. Residents in these areas should follow advice given by local emergency officials.

3. The risk of life-threatening storm surge and hurricane-force winds continues to increase along the coast North Carolina. Residents in these areas should follow 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 Friday.



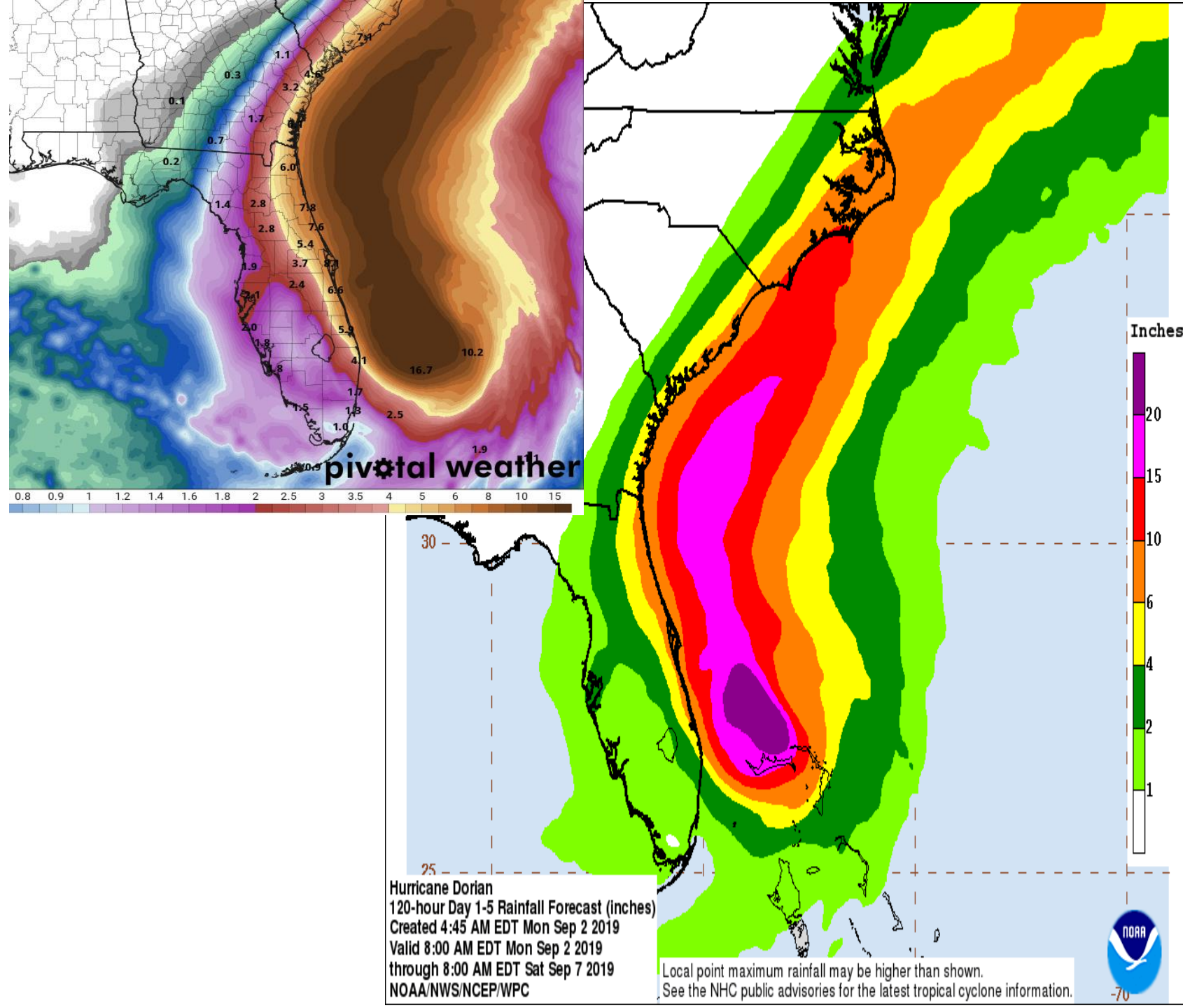
For more information go to hurricanes.gov

Rainfall Forecast Next 5 Days

Dorian is forecast to bring 4-8" of rain to the Florida East Coast through the next 5 days.

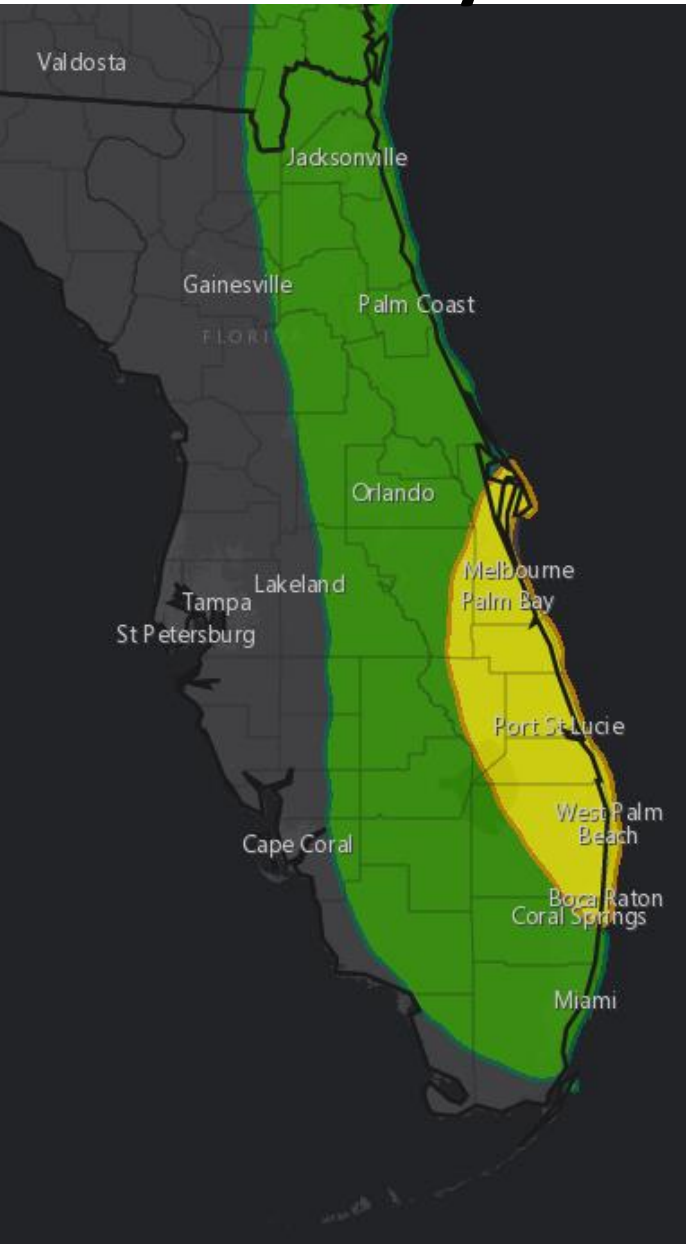
Given the recent stretch of wet weather, these rainfall amounts could still create urban and minor river flooding along the East Coast.

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

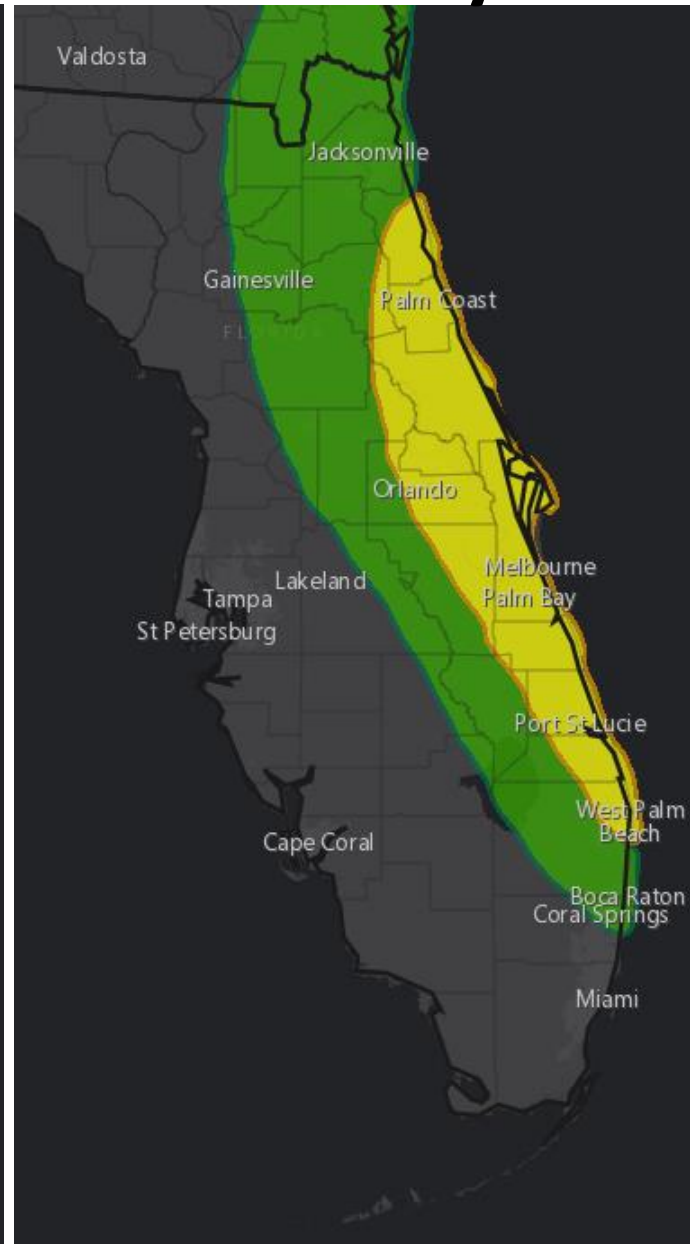


Flash Flood Outlooks

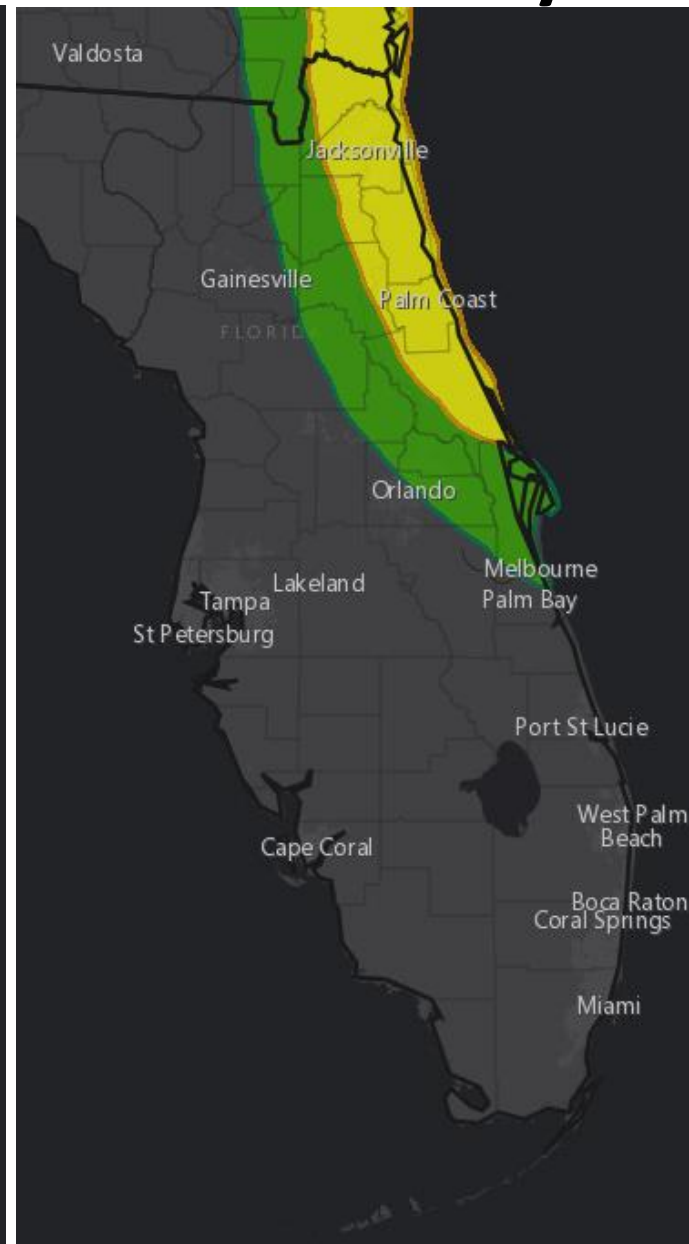
Monday



Tuesday



Wednesday



**MARGINAL
(MRGL)**

**Isolated flash
floods possible**

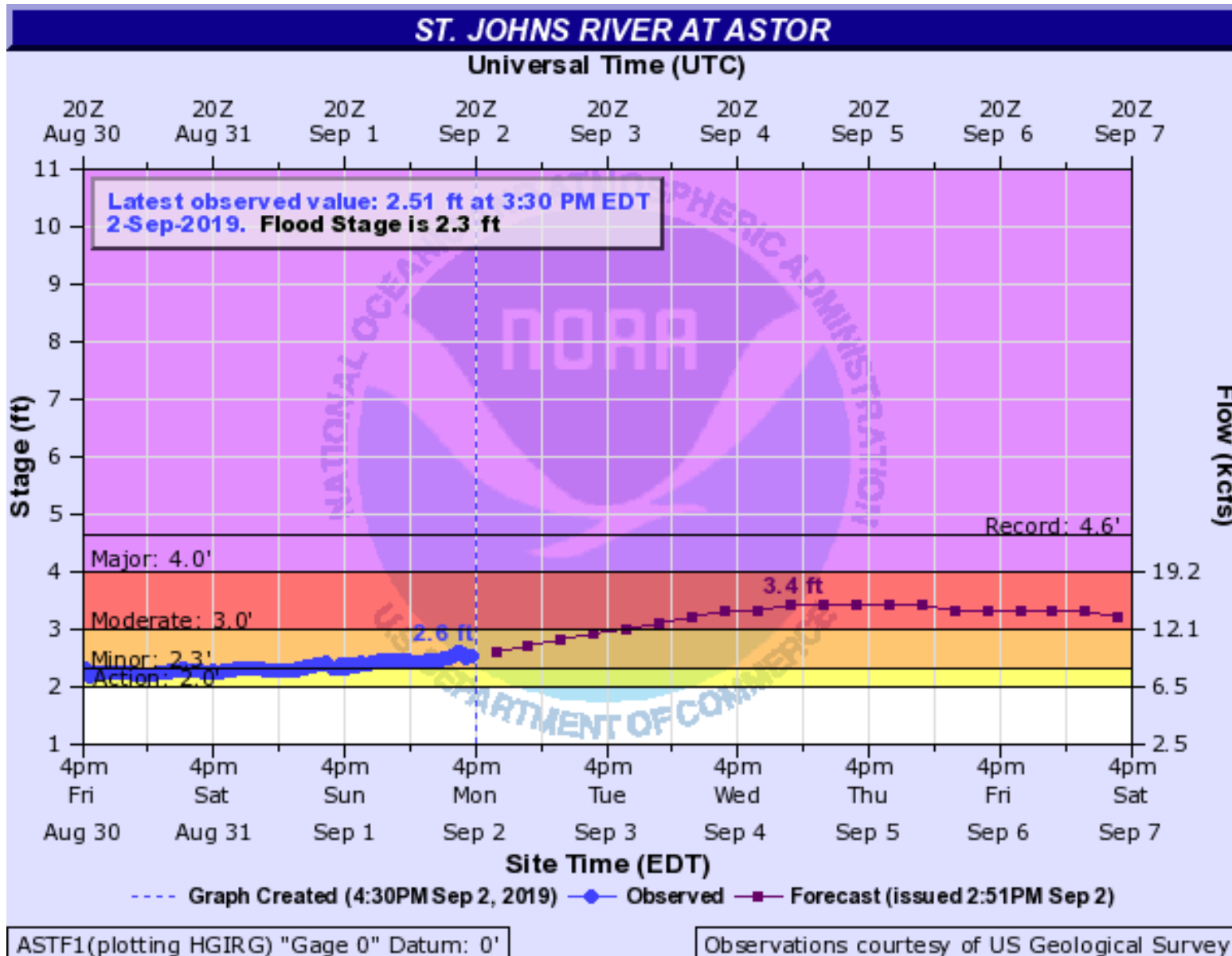
Localized and
primarily affecting
places that can
experience rapid
runoff with heavy
rainfall.

**SLIGHT
(SLGT)**

**Scattered flash
floods possible**

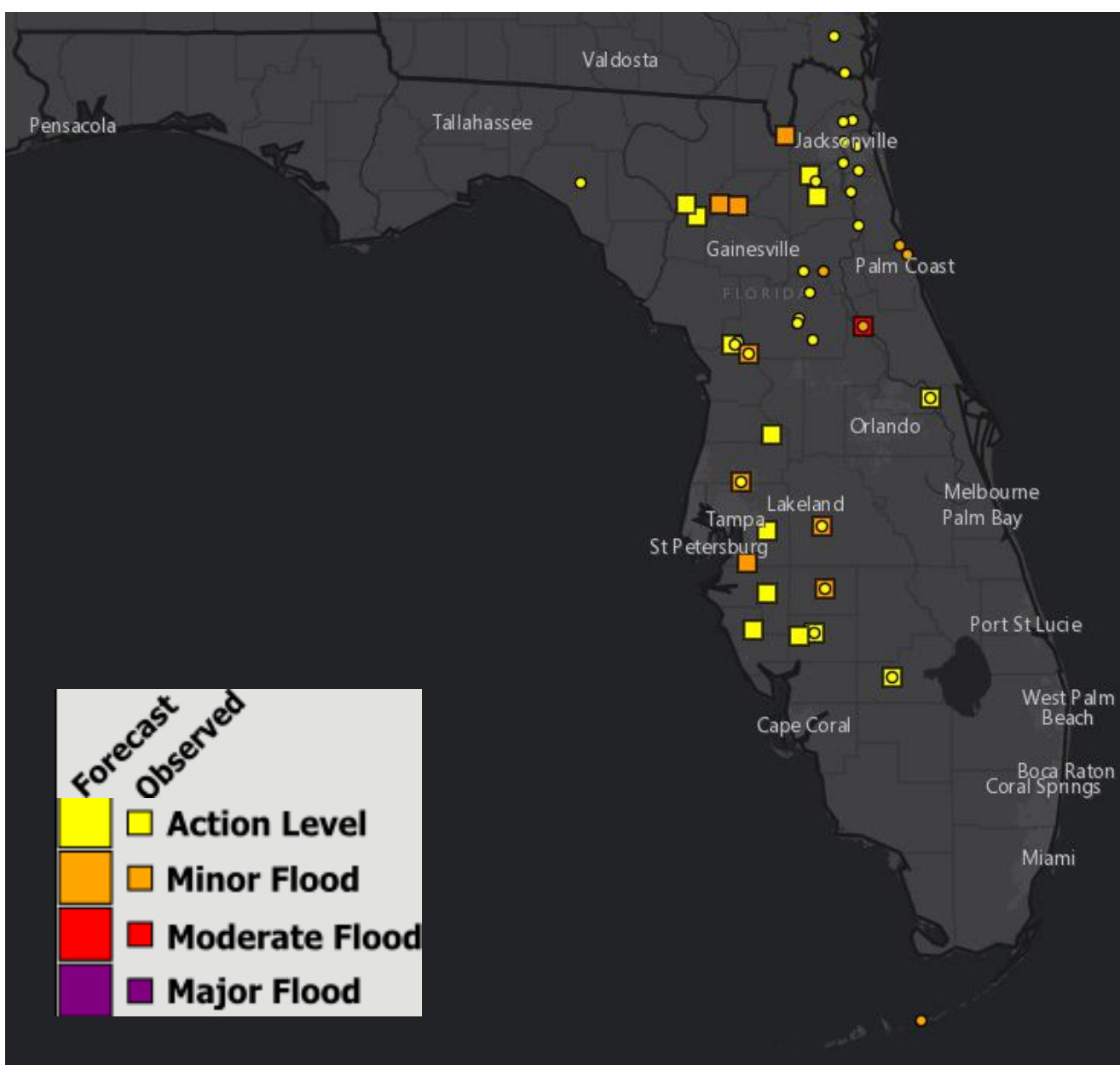
Mainly localized. Most
vulnerable are urban
areas, roads, small
streams and washes.
Isolated significant
flash floods possible.

St. Johns River at Astor – Moderate Flooding



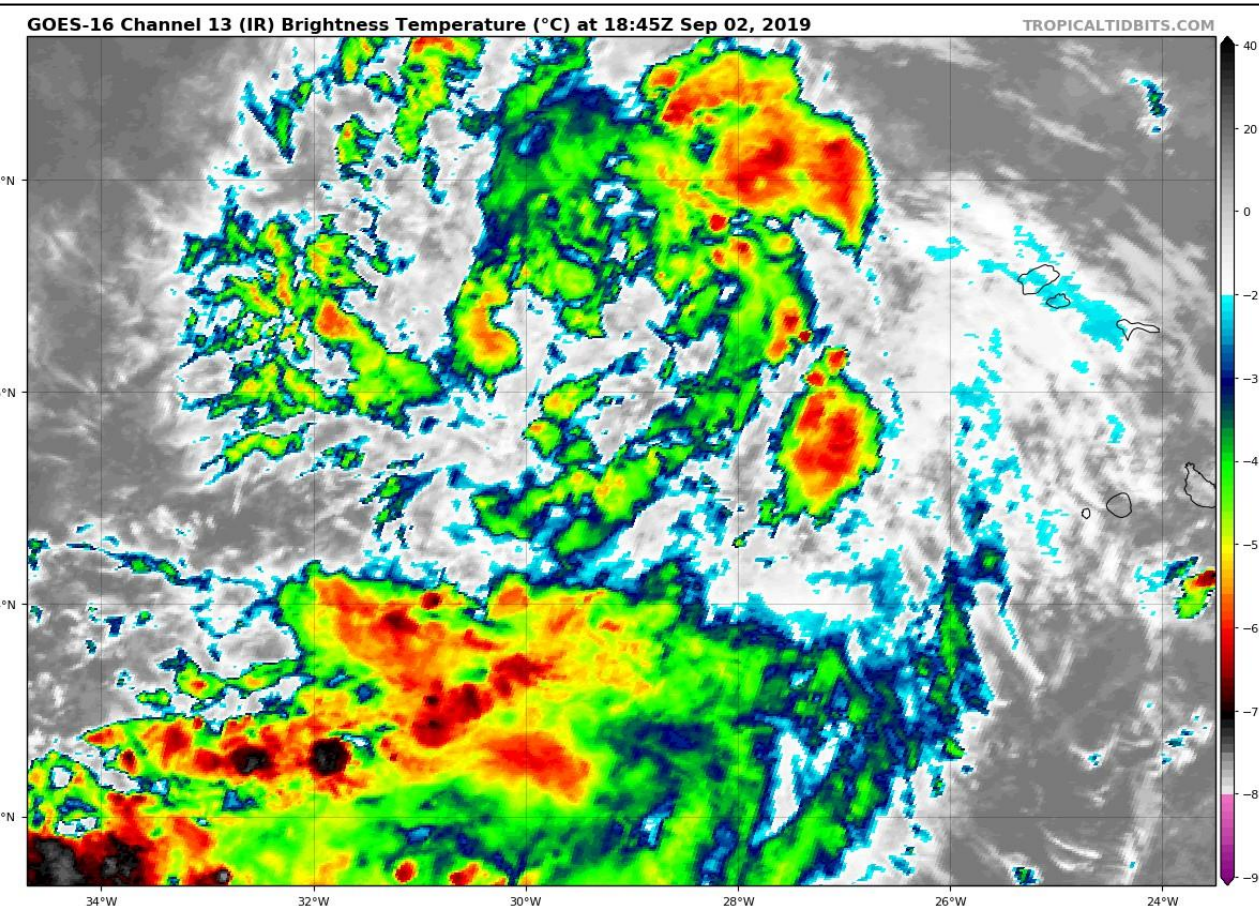
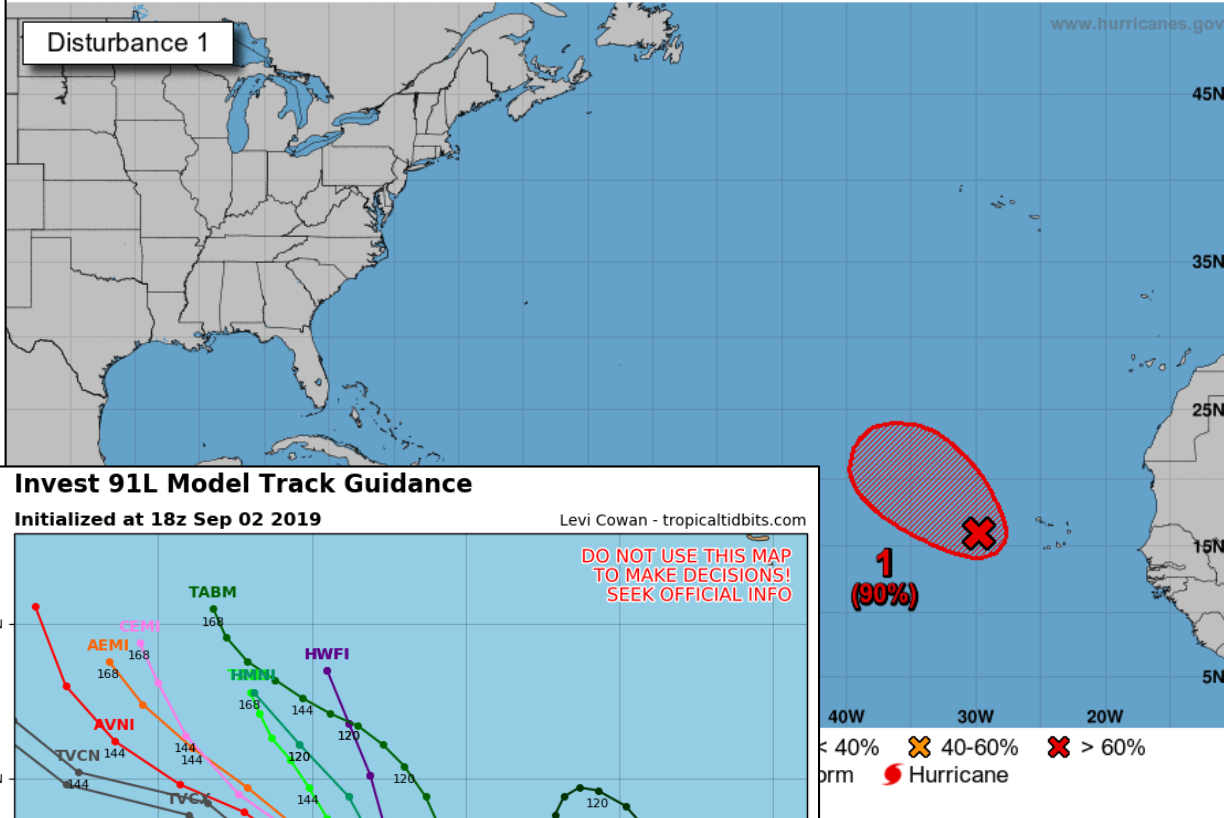
- **3.5 feet:** Many yards and streets along the river, and with canals flooded, water enters the first floor of low lying homes. Flooding to docks and yards at condominiums on Juno Trail and docks at Astor Bridge Marina. Roads flooded in South Moon Fish Camp and starting to move over the sea wall at Blair's Jungle Den.
- **3 feet:** Moderate flooding, with water covering yards and further encroaching on many low lying homes near the river. Flooding of many yards and low lying roads near the river.
- **2.8 feet:** Docks and boat ramps covered at South Moon Fish Camp and approaching sea wall at Blair's Jungle Den.
- **2.3 feet:** Minor flooding of low lying streets and yards north of Fox Road on Lake County side of Astor, and from River Road northward on Volusia side of river. Water begins to cover docks at South Moon Fish Camp.
- **2 feet:** Water begins to move into yards and cover boat ramps in low lying areas along the river.

River Observations/Forecasts Across the Peninsula



Rivers Currently in or Forecast to Reach Minor Flood Stage:

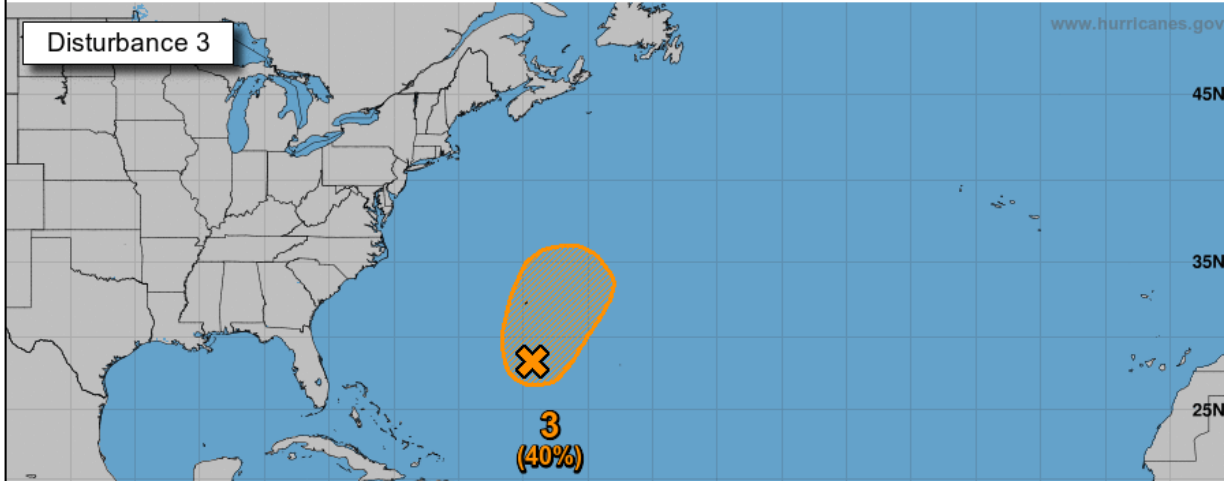
- [St. Marys River at Macclenny](#)
- [Santa Fe River at Worthington Springs](#)
- [Santa Fe River at O'Leno State Park](#)
- [Santa Fe River near Fort White](#)
- [Withlacoochee River at Holder](#)
- [Cypress Creak at Worthington Gardens](#)
- [Little Manatee River at Wimauma](#)
- [Peace River at Bartow](#)
- [Peace River at Zolfo Springs](#)
- [Peace River at Arcadia](#)
- [St. Johns River above Lake Harney](#)
- [Ocklawaha River at Rodman Dam](#)



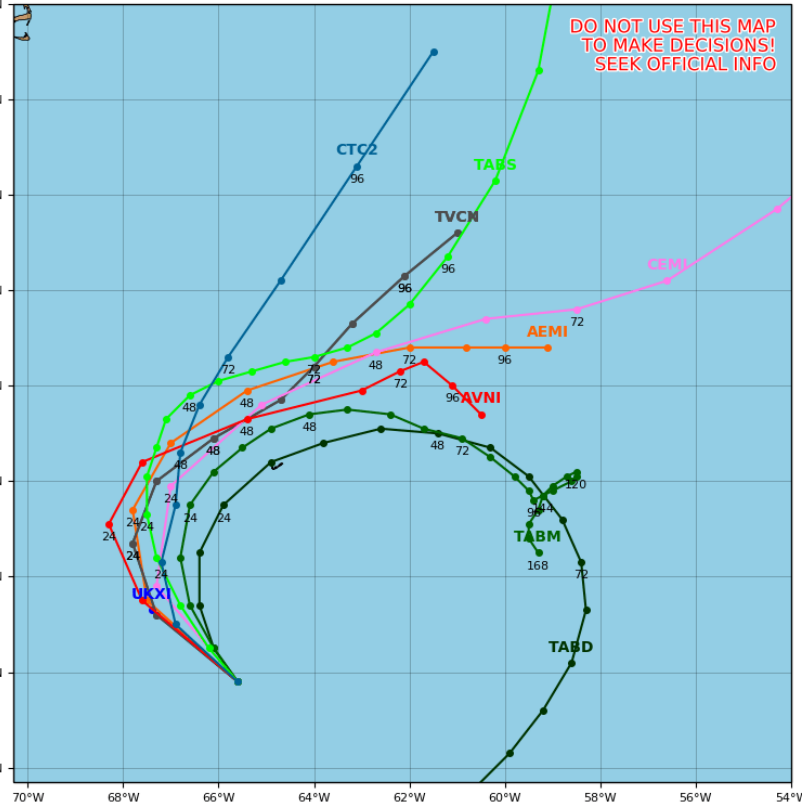
Invest 91L: Recent satellite-derived wind data indicate that an elongated area of low pressure located a few hundred miles west of the Cabo Verde Islands has become better defined since yesterday. Although this system is currently producing limited showers and thunderstorms, a tropical depression is expected to form during the next day or so while the system moves generally northwestward across the eastern tropical Atlantic Ocean.

***Formation chance through 48 hours...high...80 percent.**

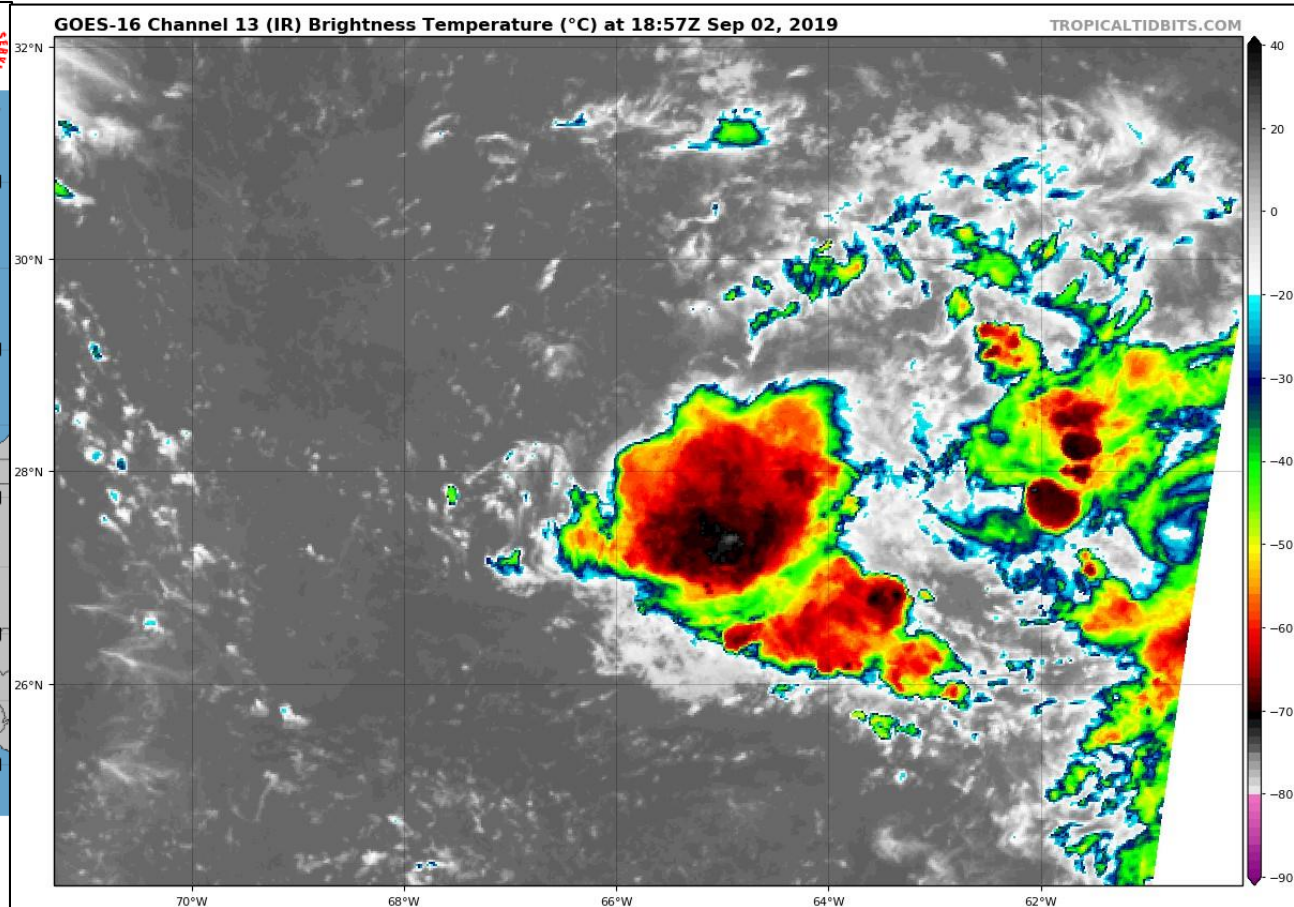
***Formation chance through 5 days...high...90 percent.**



Invest 92L Model Track Guidance
 Initialized at 18z Sep 02 2019

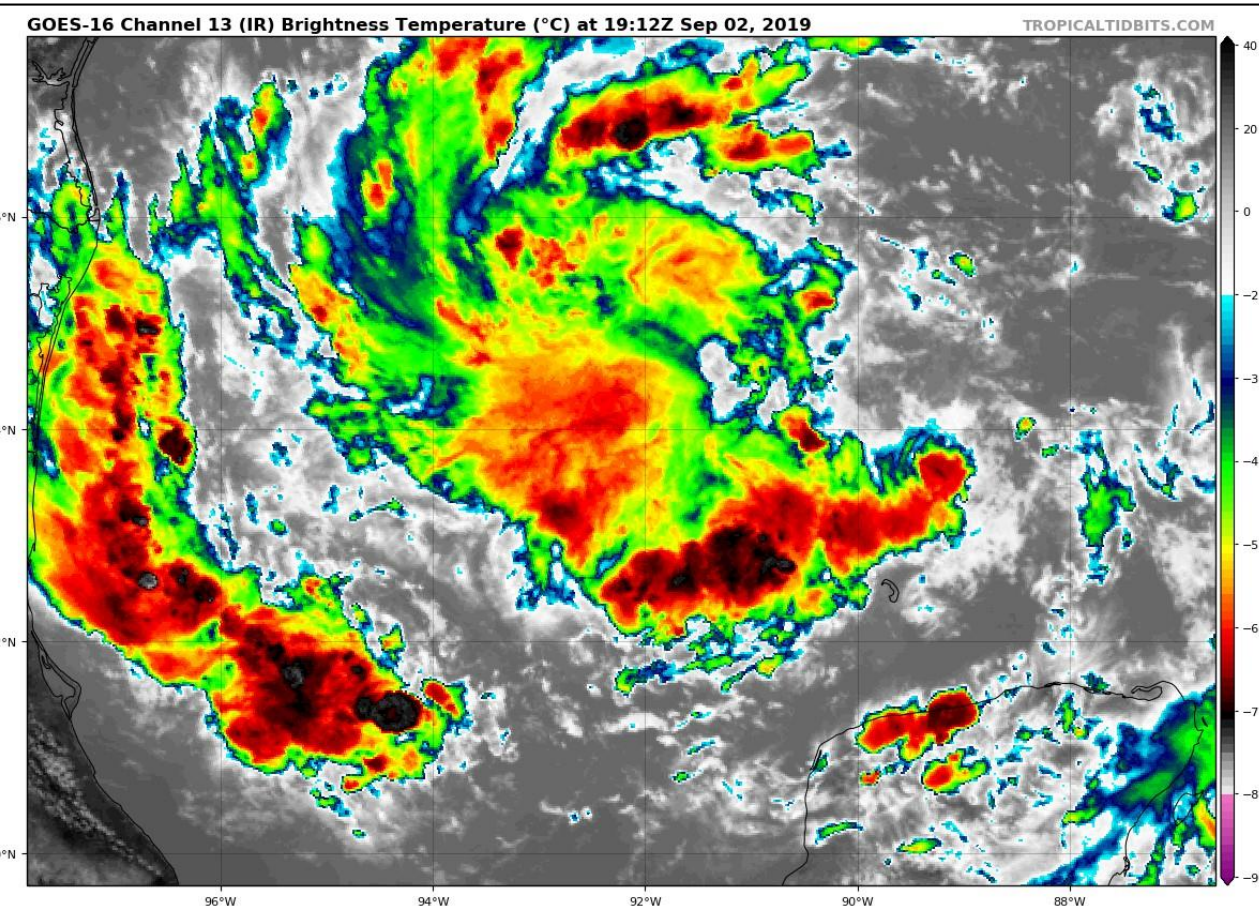
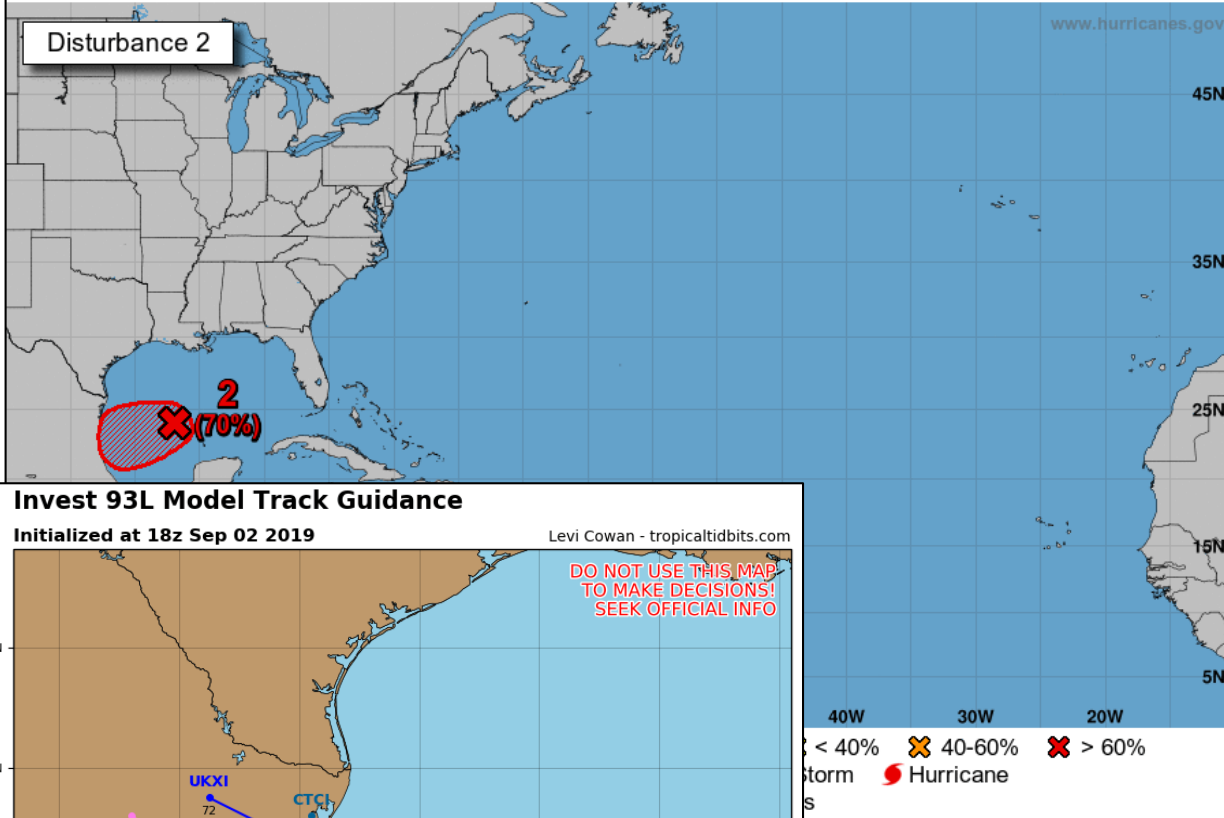


< 40% X 40-60% X > 60%
 storm Hurricane



Invest 92L: A trough of low pressure is located several hundred miles south-southeast of Bermuda. This system is producing persistent shower and thunderstorm activity but does not have a well-defined surface center. Some gradual disturbance is possible during the next few days and a tropical depression could form while it moves slowly northward. Interests in Bermuda should monitor the progress of this disturbance.

- *Formation chance through 48 hours...low...30 percent.
- *Formation chance through 5 days...medium...40 percent.



Invest 93L: Showers and thunderstorms associated with an area of low pressure located over the south-central Gulf of Mexico have become more concentrated since last night. Recent visible satellite imagery indicates that the surface circulation associated with the low has also become better defined. Environmental conditions appear conducive for additional development, and a tropical depression is likely to form during the next two or three days while the low moves slowly westward or west-southwestward toward the coast of Mexico. Interests along the northeast coast of Mexico should monitor the progress of this system.

***Formation chance through 48 hours...medium...60 percent.**

***Formation chance through 5 days...high...70 percent.**



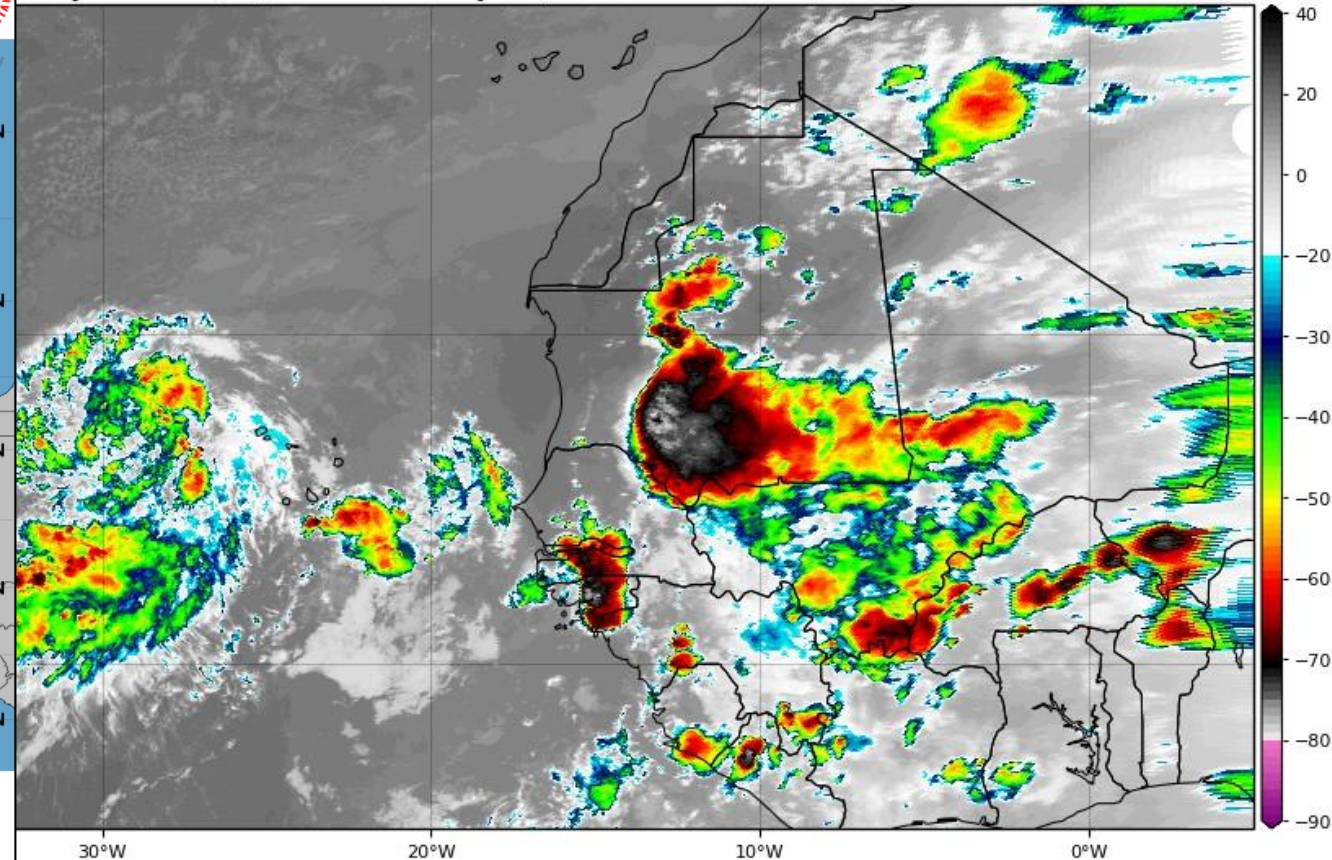
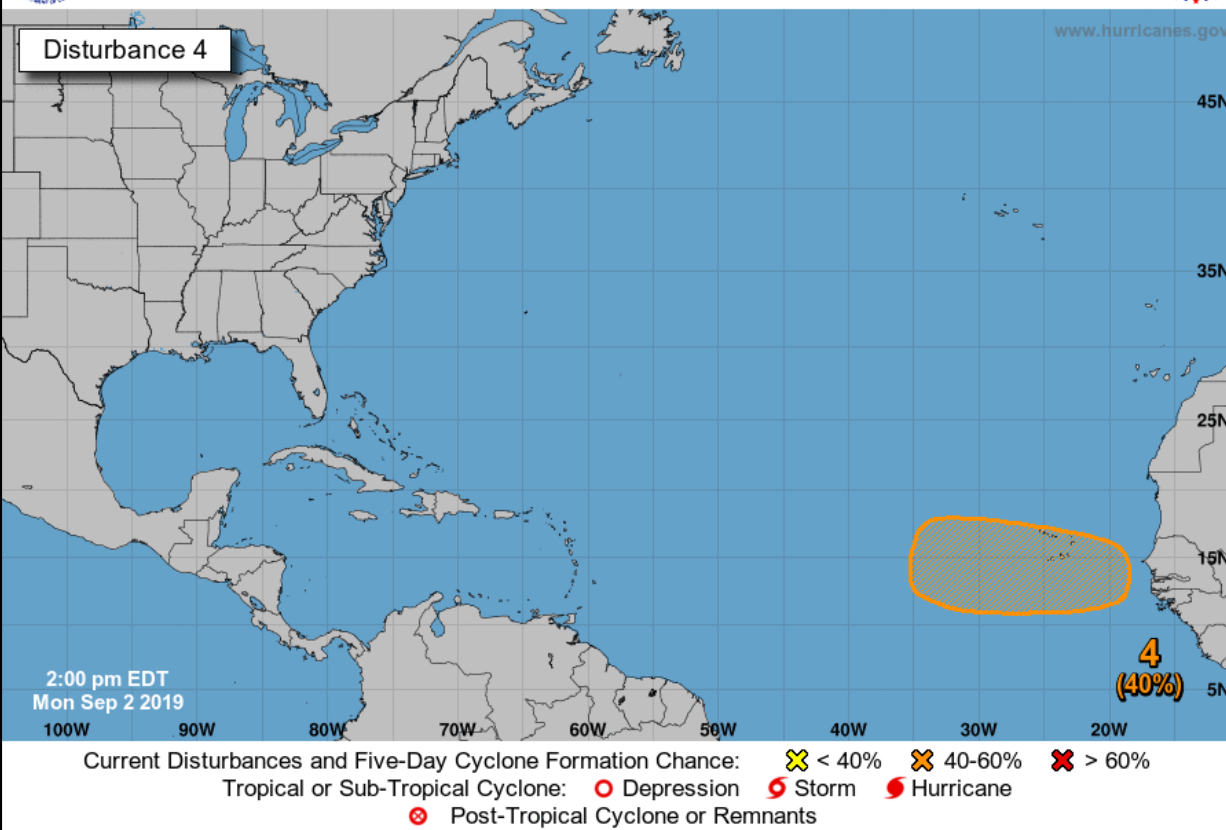
Five-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida



temperature (°C) at 19:05Z Sep 02, 2019

TROPICALTIDBITS.COM



West African Wave: A tropical wave is forecast to emerge over the far eastern tropical Atlantic between Africa and the Cabo Verde Islands in a few days. Environmental conditions are forecast to be conducive for development, and a tropical depression could form late this week or over the weekend while the system moves westward to west-northwestward.

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

***Formation chance through 5 days...medium...40 percent.**

Summary

Major Hurricane Dorian

- At 5 PM ET Monday, Hurricane Dorian was located 105 miles east of West Palm Beach, and it currently is not moving.
 - Hurricane hunters have found that maximum sustained winds are near 145 mph, which is a Category 4 Major Hurricane. Dorian is forecast to maintain Category 3 or 4 intensity through Wednesday.
 - Dorian will continue wobbling near Grand Bahama Island into this evening with a very slow northwestward movement later tonight. Once the turn occurs, an increase in forward motion is expected as it nears or parallels the Florida East Coast.
 - Dorian's slow movement as it nears and parallels Florida will influence the duration of impacts.
 - Dorian's wind field may continue to expand, increasing the area that could be affected by tropical storm or hurricane force winds.
 - Dorian is forecast to also parallel the Georgia and South Carolina coasts mid to late this week.
-
- **Invest 91L:** A tropical wave west of the Cabo Verde Islands could develop as it moves northwestward over the open waters of the eastern tropical Atlantic. It has a 90% (high) chance of becoming a tropical depression during the next 5 days.
 - **Invest 92L:** An area of low pressure south-southwest of Bermuda could develop as it slowly moves northward than northeastward near Bermuda. It has a 40% (medium) chance of becoming a tropical depression during the next 5 days.
 - **Invest 93L:** An area of low pressure in the southwestern Gulf of Mexico could become a tropical depression as it moves slowly westward or west-southwestward over toward northeastern Mexico. It has a 70% (high) chance of formation during the 5 days.
 - **African Wave:** A tropical wave over western Africa will emerge into the Atlantic later this week. Once it does so, the National Hurricane Center gives it a 40% (medium) chance of development.

Florida Outlook:

- Parts of east central and northeast Florida remain in the 3-day forecast cone.
- A **Hurricane Warning** is in effect for St. Johns, Flagler, coastal Volusia, Brevard, Indian River, St. Lucie, and Martin Counties
- A **Storm Surge Warning** is in effect for Nassau, Duval, St. Johns, Flagler, Volusia, Brevard, Indian River, St. Lucie, Martin, and northern Palm Beach Counties
- A **Tropical Storm Warning** is in effect for Clay, Putnam, eastern Marion, Lake, inland Volusia, Seminole, Orange, Osceola, Okeechobee, and Palm Beach Counties
- A **Hurricane Watch** is in effect for coastal Nassau, coastal Duval, and coastal Palm Beach Counties
- A **Storm Surge Watch** is in effect for southern Palm Beach County.
- A **Tropical Storm Watch** is in effect for inland Nassau, inland Duval, Polk, Highlands, Glades, and inland Broward Counties
- Damaging winds, storm surge, flash flooding, and isolated tornadoes are all possible with Dorian, but the severity of the impacts will be dependent on how close to the coast the storm tracks.
- Tropical storm force gusts are already occurring in Southeast Florida in some of the squalls. Sustained tropical storm force winds could begin tonight in Southeast Florida, spreading up the East Coast through tonight and Tuesday. Hurricane force winds will be possible along parts of east central Florida on Tuesday into Wednesday.
- Storm Surge values north of Jupiter Inlet are forecast to be 4-7', with 2-4' south of Jupiter Inlet.
- Rainfall amounts of 4-8" are expected along the East Coast, with locally higher amounts of 10". This may cause minor flooding issues along with post-landfall river/creek flooding.
- Minor river flooding is ongoing or forecast along parts of the Santa Fe River, St. Marys River, Withlacoochee River, Cypress Creek, Little Manatee River, Peace River, and the St. Johns River. However, moderate flooding may occur at the St. Johns River at Astor.
- 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. Additionally, rip current risks will increase along the West Coast as Dorian moves northward.
- None of the 4 systems being monitored for development poses a threat to Florida.

The next tropics packet will be issued Tuesday 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:

Cameron Young, Assistant State Meteorologist

Cameron.Young@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>