



TROPICAL UPDATE



8 AM EDT

Tuesday, September 3, 2019

Major Hurricane Dorian, Potential Tropical Cyclone
#7, Invest 91L (90%), Invest 92L (40%) & African
Wave (60%)

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.

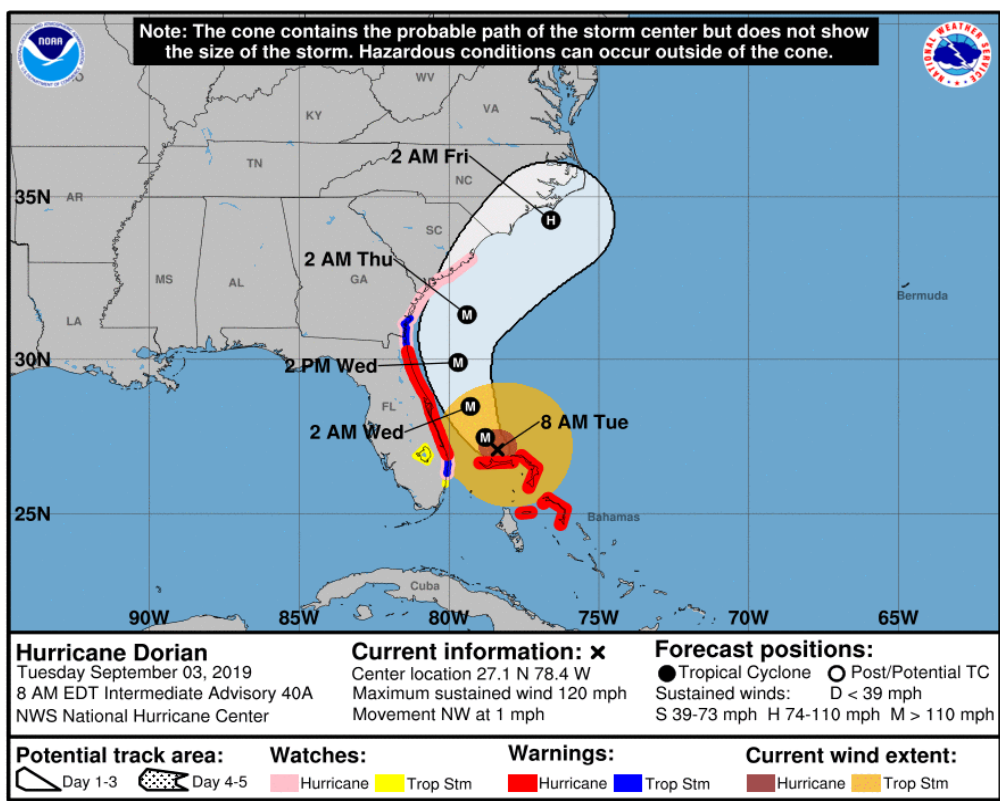
Major Hurricane Dorian

Tuesday, September 3, 8 AM ET

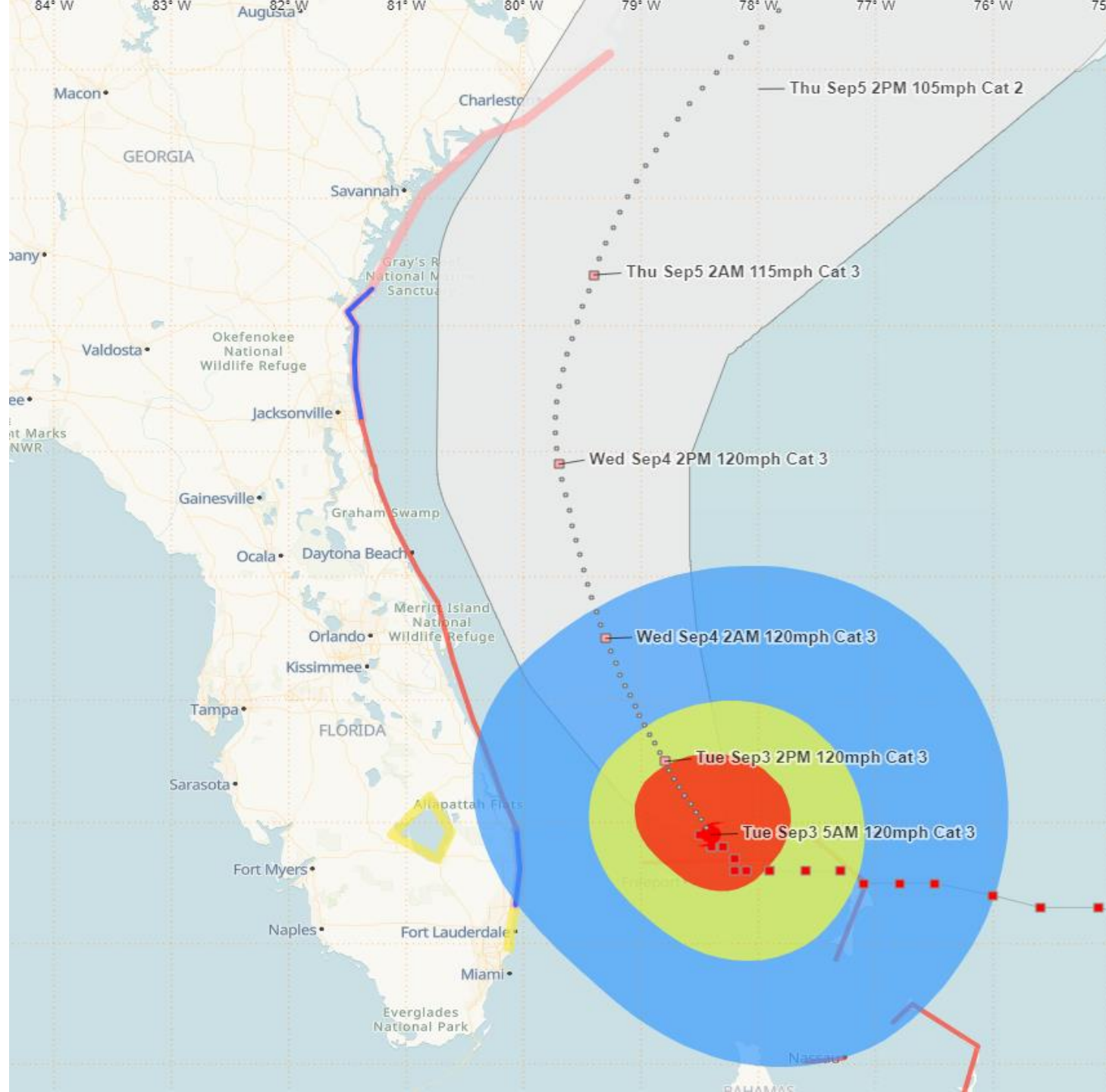
	MINIMAL	Low	MODERATE	HIGH	EXTREME
WINDS					
STORM SURGE					
FLOODING					
TORNADOES					

	Low	MODERATE	HIGH
RIP CURRENTS			

National Hurricane Center Map



- ### Changes Since Yesterday:
- Dorian is now a Category 3 hurricane with maximum sustained winds of 120 mph, but the wind field is expanding.
 - Very little movement occurred overnight and Dorian remains nearly stationary near Grand Bahama Island.
 - Tropical Storm Warnings now in effect for Duval and Nassau Counties. A Storm Surge Warning is now in effect from northern Palm Beach County northward to the FL/GA line.

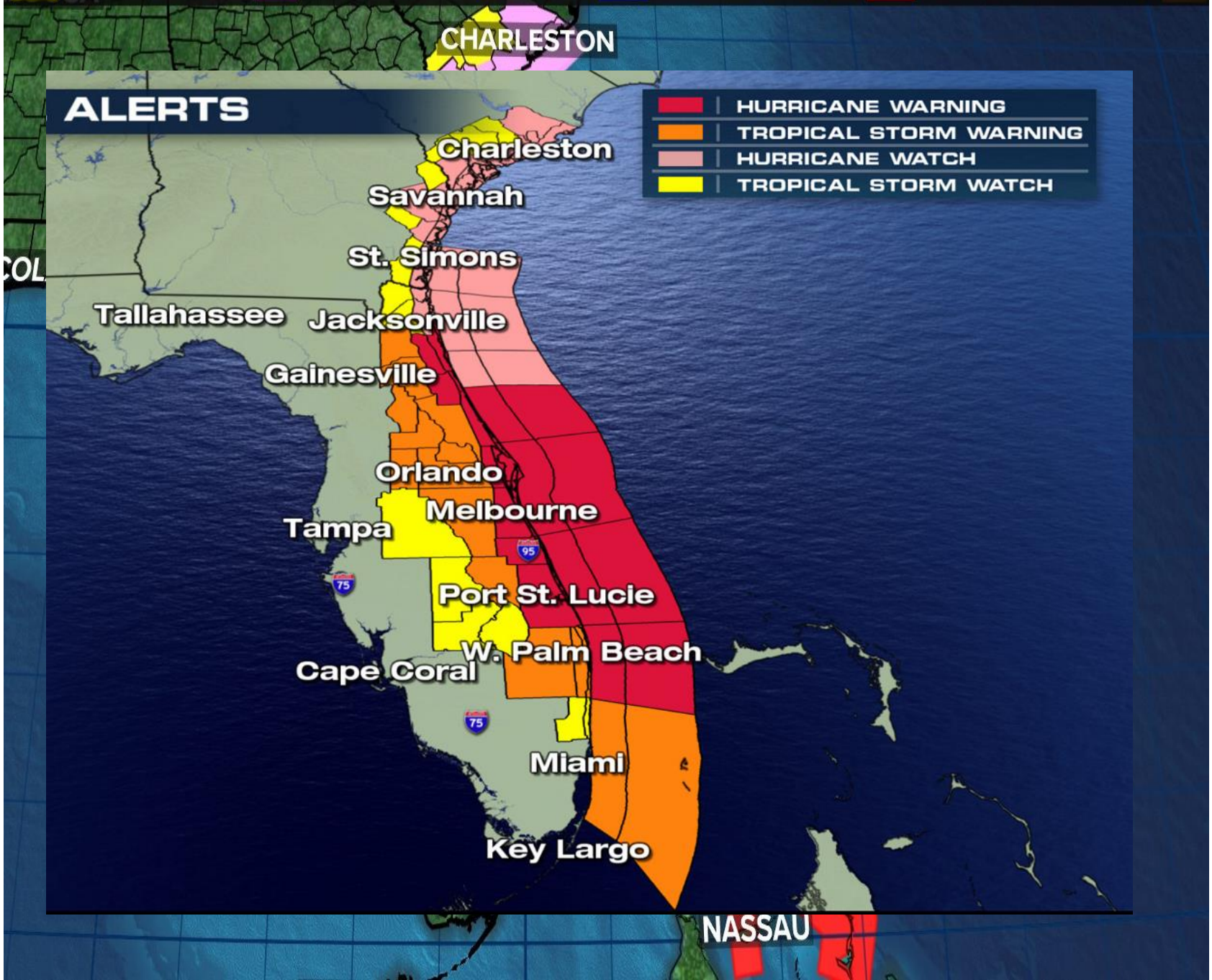


Hurricane Dorian is located about **105 miles east of West Palm Beach**. It has moved very little overnight, but its current motion is northwest 1 mph. Maximum **sustained winds** have decreased to **120 mph**, making Dorian a **Category 3 Hurricane**. Dorian is forecast to remain a major hurricane for the next 2 days.

A slow north-northwestward motion will continue this morning. A faster forward motion is expected later today. A turn to the north is forecast by Wednesday evening, followed by a turn to the north-northeast Thursday morning. On this track, the core of Hurricane Dorian will continue to pound Grand Bahama Island today. The hurricane will then parallel the Florida east coast late today through Wednesday evening, very near the Georgia and South Carolina coasts Wednesday night and Thursday, and near or over the North Carolina coast late Thursday.

Hurricane force winds extend 45 miles from the center and **tropical storm force winds extend up to 160 miles.**

T.S. WATCH HURRICANE WATCH T.S. WARNING HURRICANE WARNING

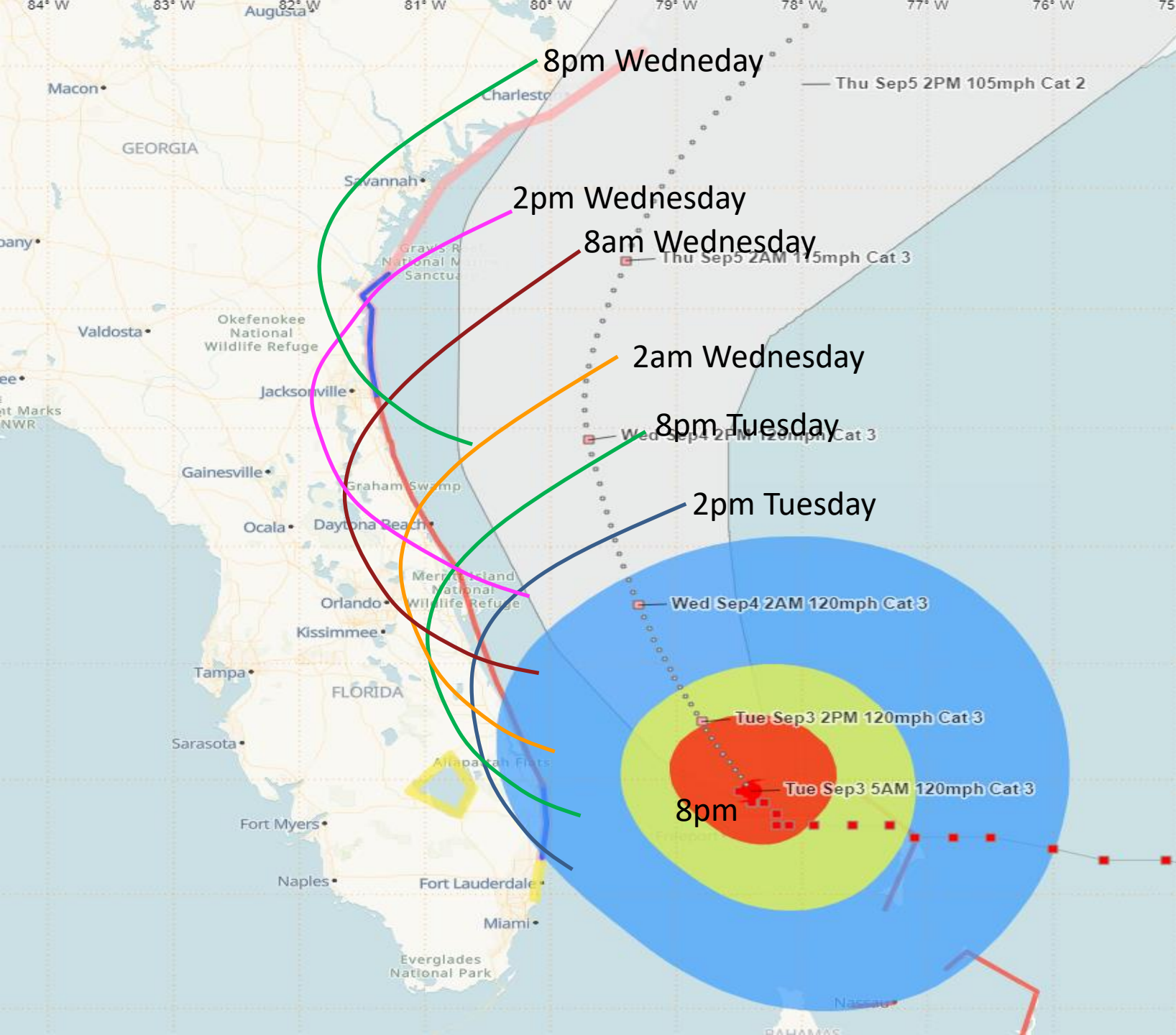


Hurricane Warning in effect for St. Johns, Flagler, coastal Volusia, Brevard, Indian River, St. Lucie, and Martin Counties

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

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

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

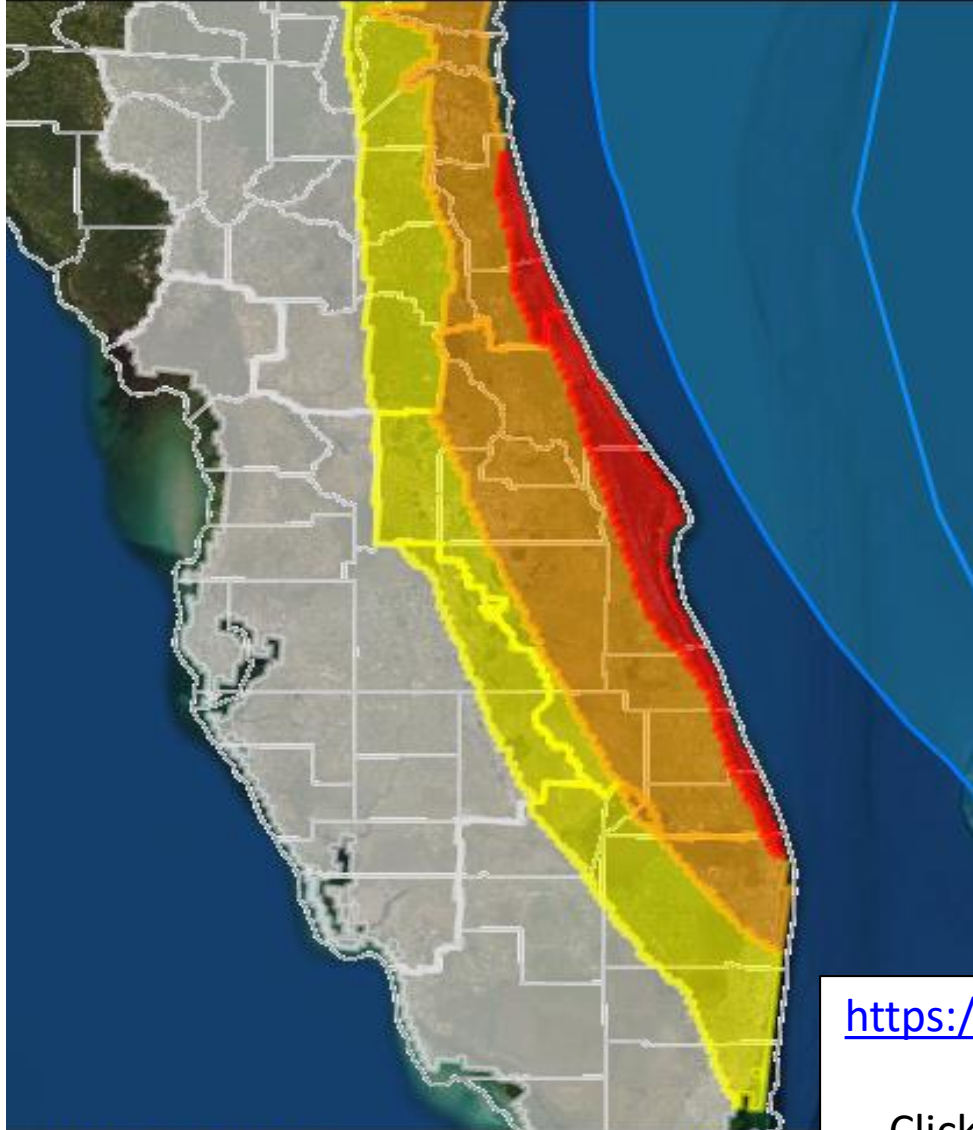


Wind Timing Estimates

Note: Assumes a perfect forecast. Winds will come in intermittent bands.

Winds will slowly expand northward along the Treasure Coast today and then expand into the Space Coast tonight through sunrise Wednesday.

Conditions should improve for the Treasure Coast by sunrise Wednesday, with winds exiting the state by midnight Wednesday night

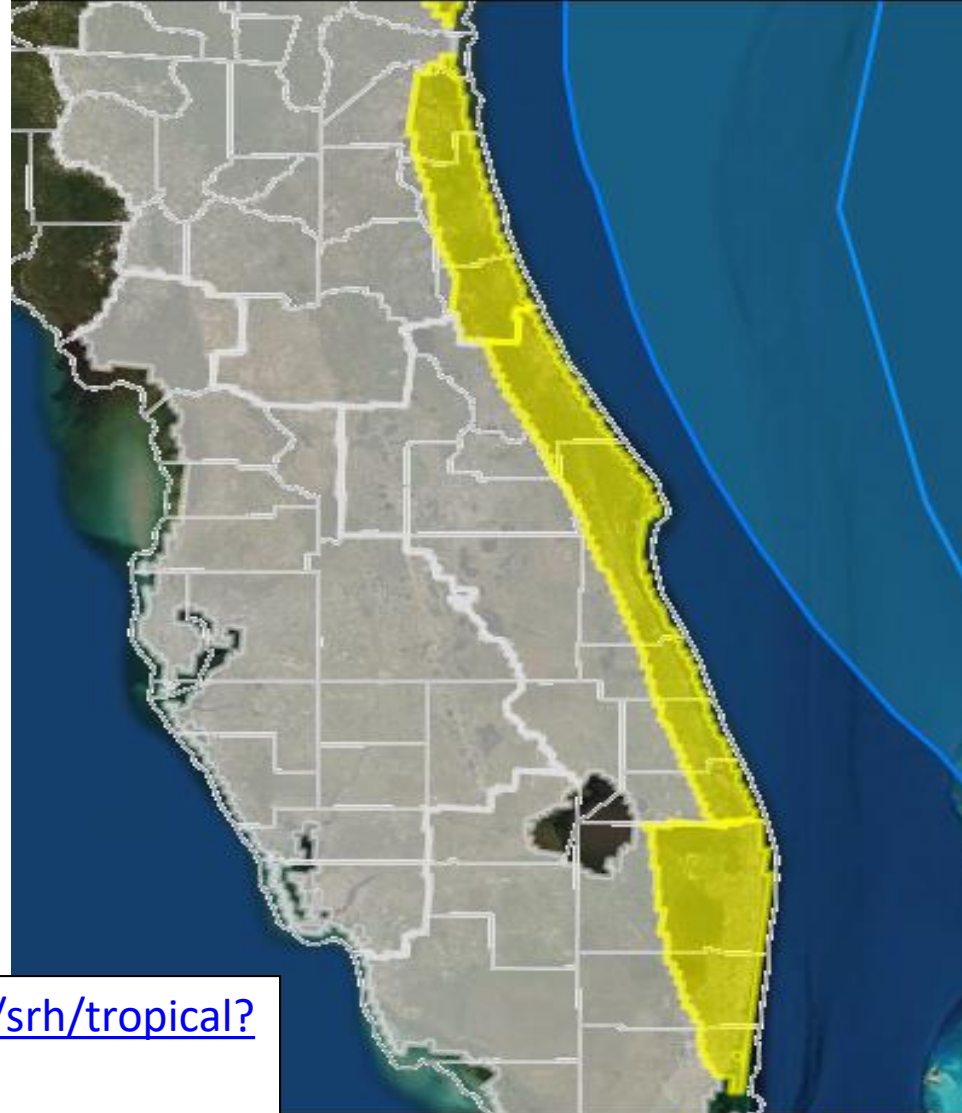


[Download KML]

[Download Image]

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

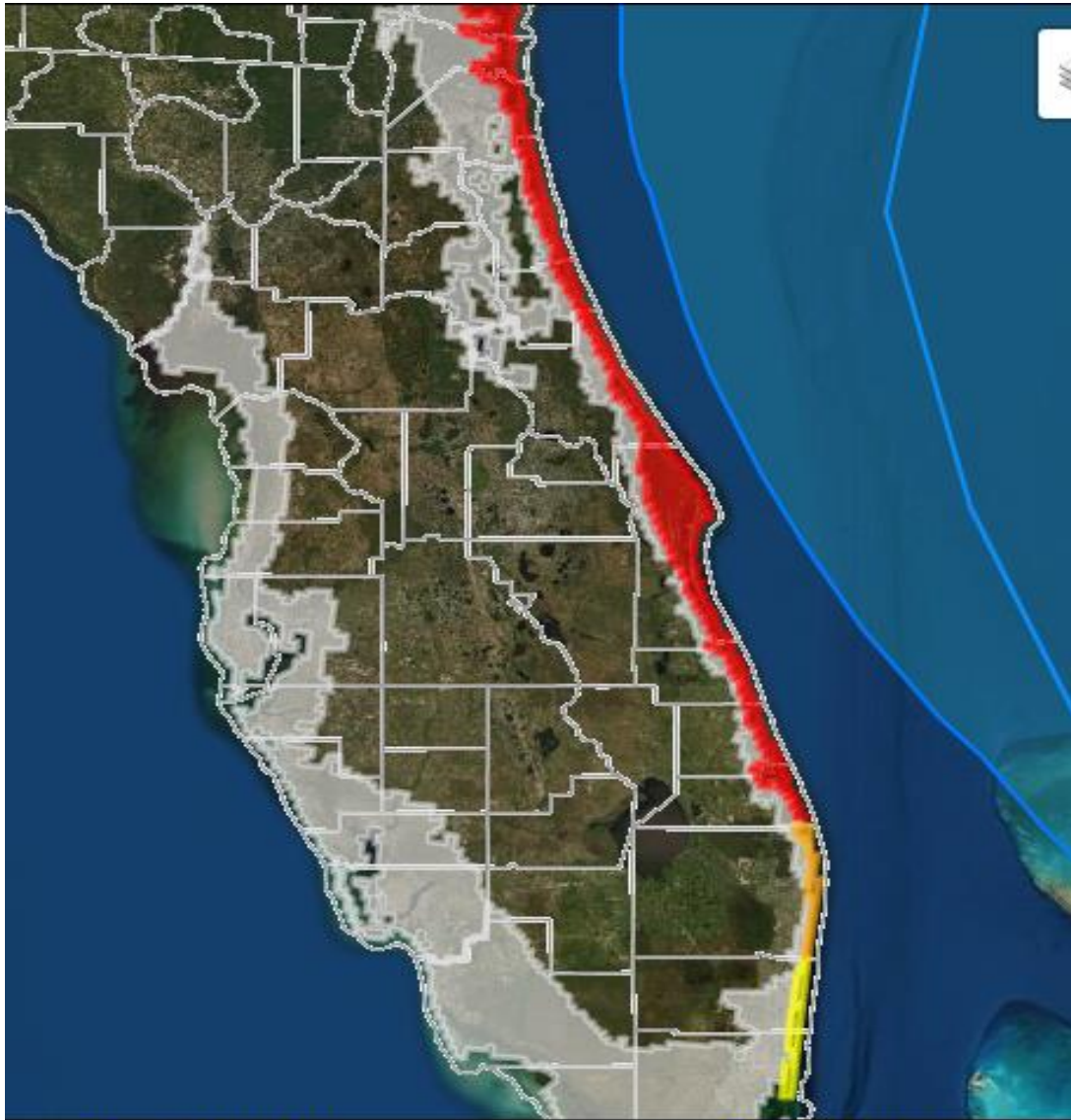
Click on "Threats and Impacts" Tab



[Download Image]

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

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



[\[Download KML\]](#)

[\[Download Image\]](#)

Storm Surge Threat

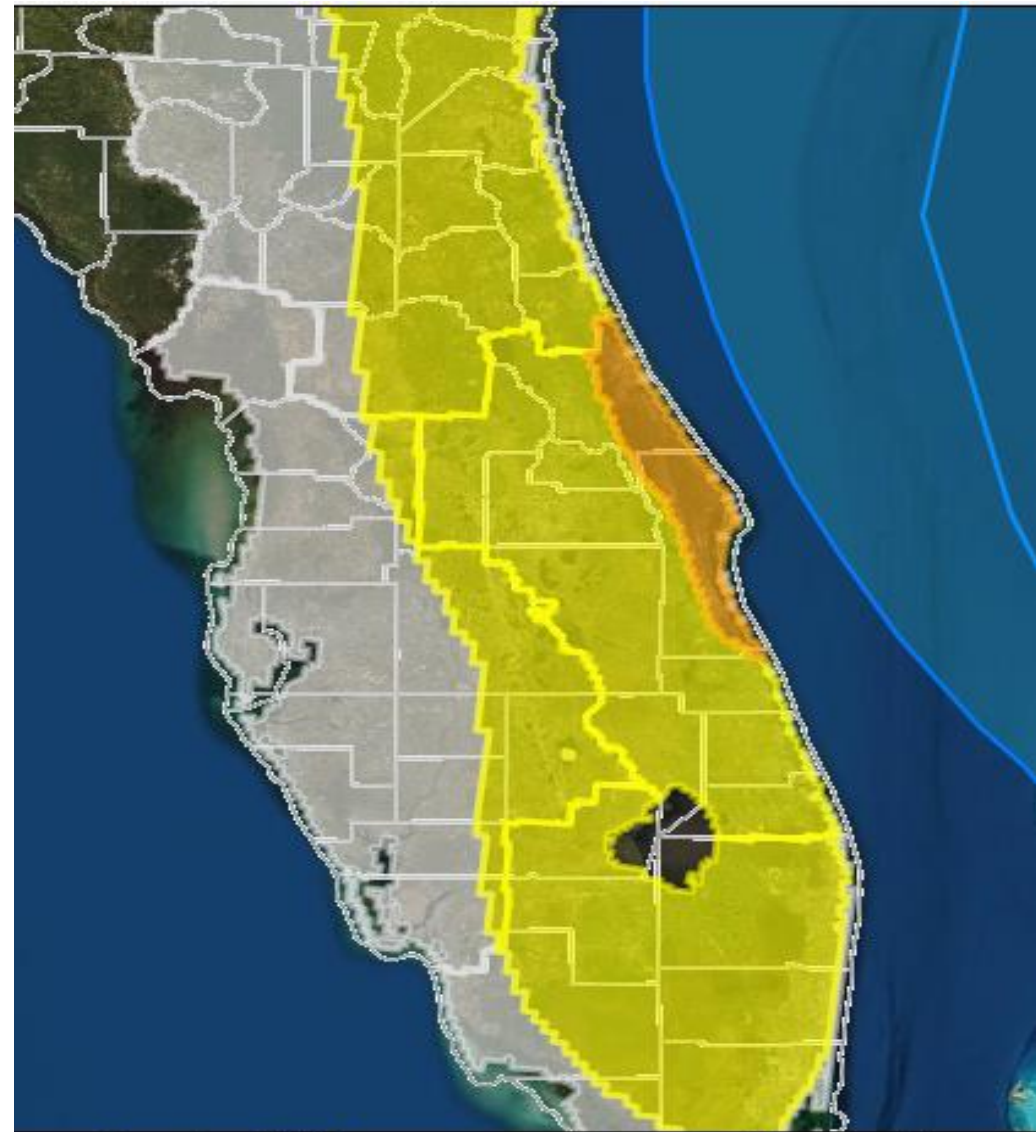
Potential for storm surge flooding greater than 9 ft above ground

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



[\[Download KML\]](#)

[\[Download Image\]](#)

Flooding Rain Threat

Potential for extreme flooding rain

Potential for major flooding rain

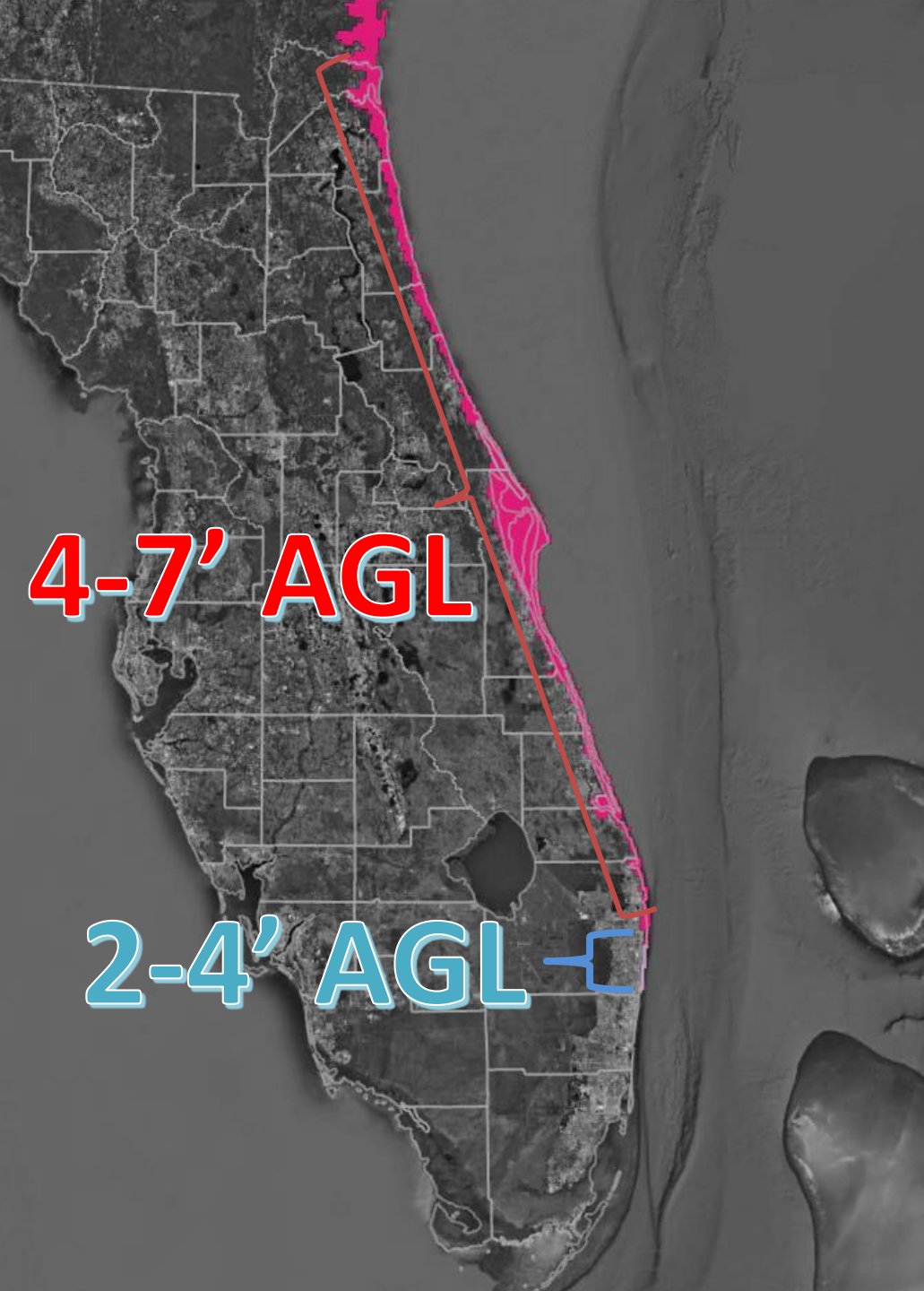
Potential for moderate flooding rain

Potential for localized flooding rain

Little to no potential for flooding rain

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

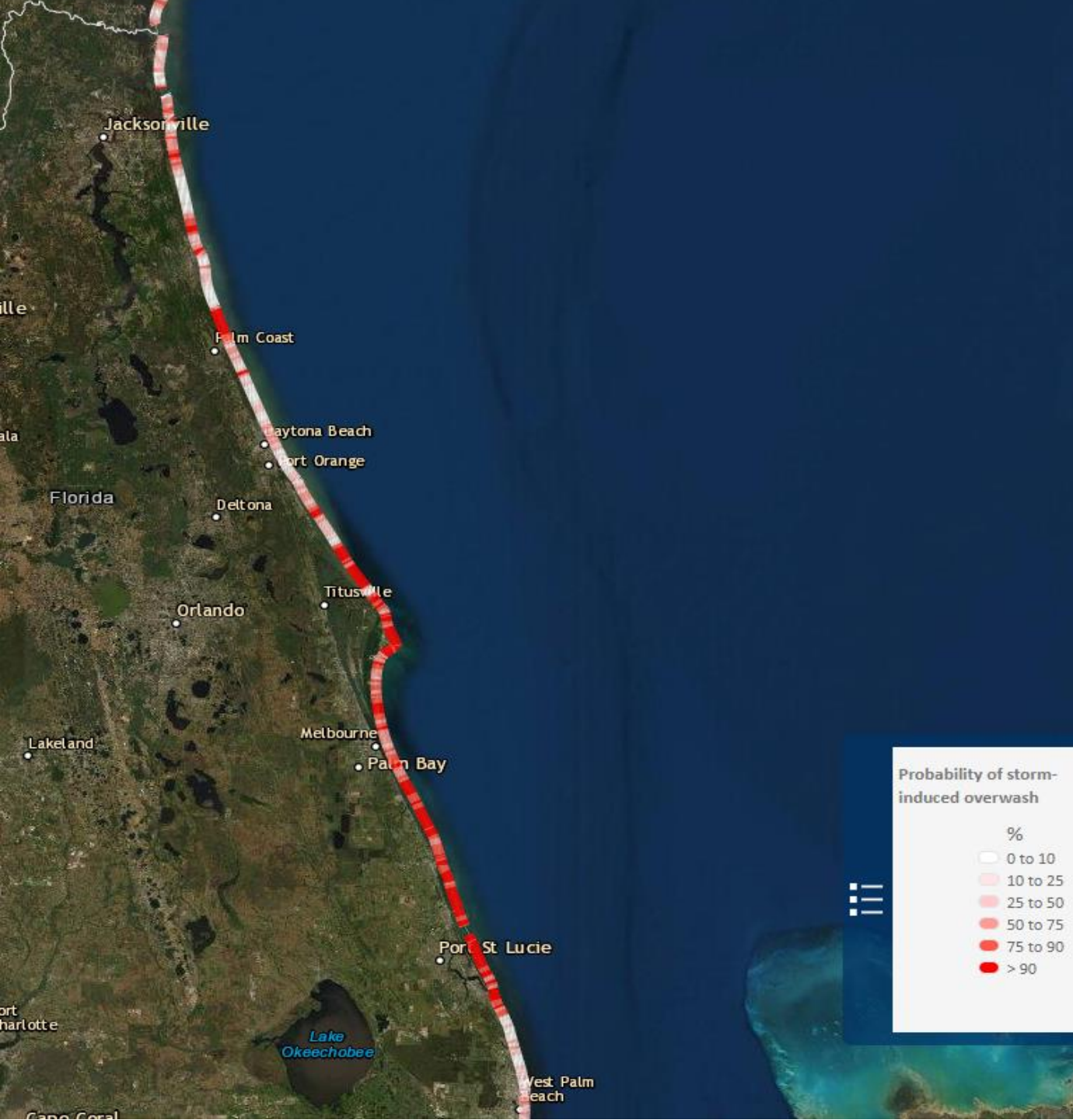


https://www.nhc.noaa.gov/refresh/graphics_at5+shtml/155815.shtml?inundation#contents

Interactive P-Surge Inundation Map

USGS Modeling

- Probability of overwash, or the likelihood that wave runup and storm surge will overtop the dune crest, during Hurricane Dorian



Rainfall Forecast Next 5 Days

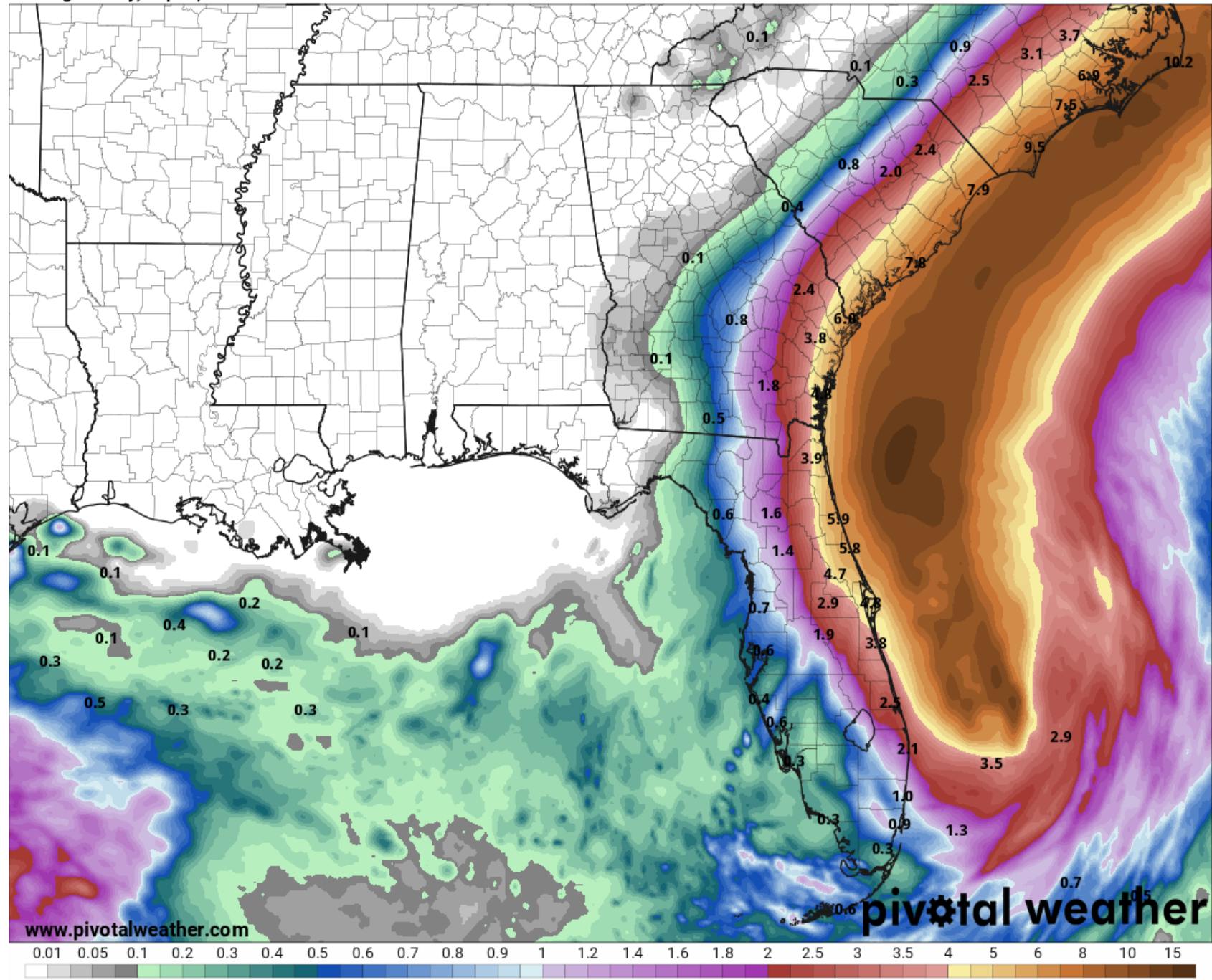
Dorian is forecast to bring 2-6" of rain to the Florida East Coast through the next 5 days.

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.

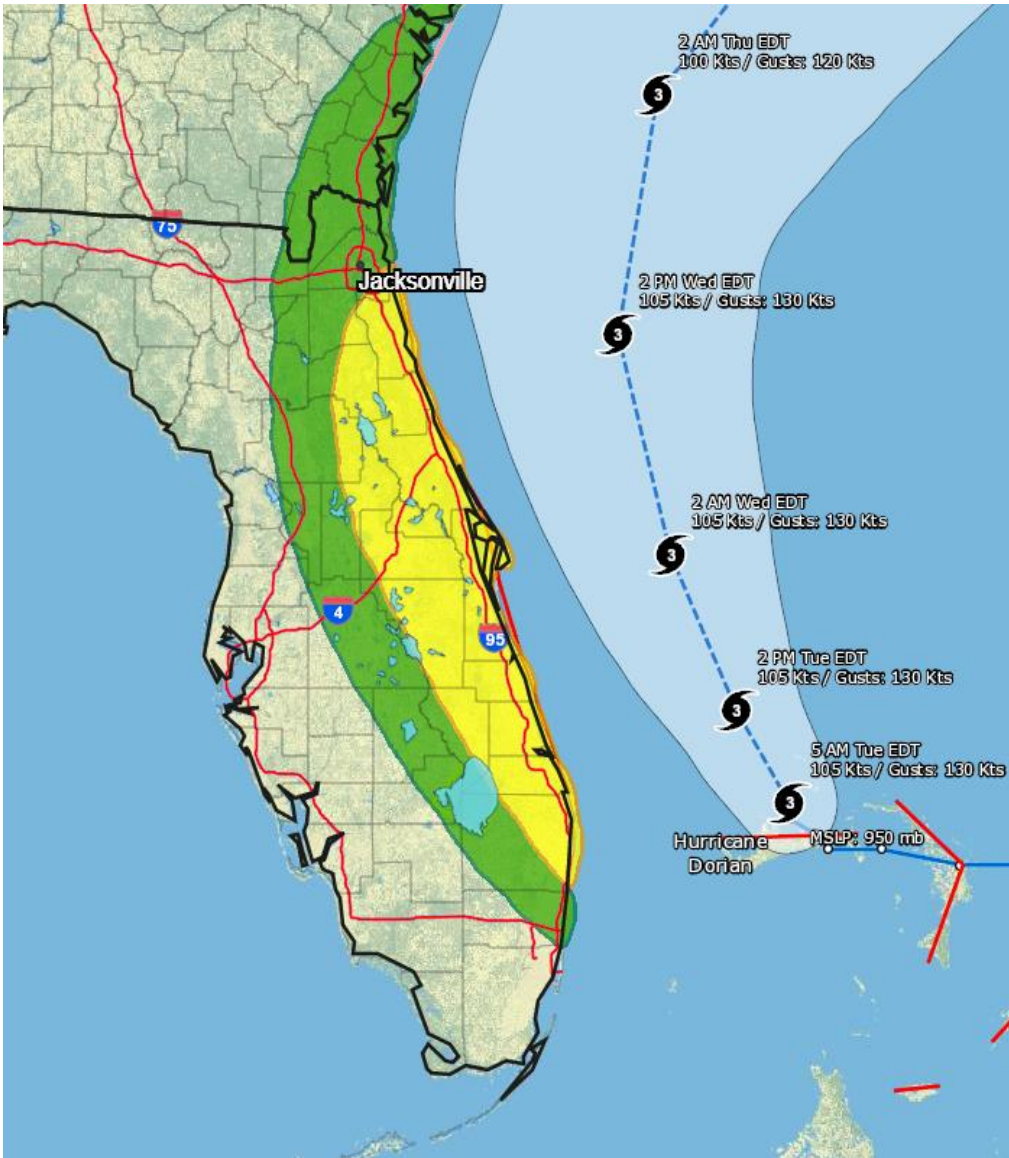
120-Hour Precipitation (in)
Ending Sunday, Sep. 8, 2019 at 8 a.m. EDT

Init: Tue 2019-09-03 12z WPC

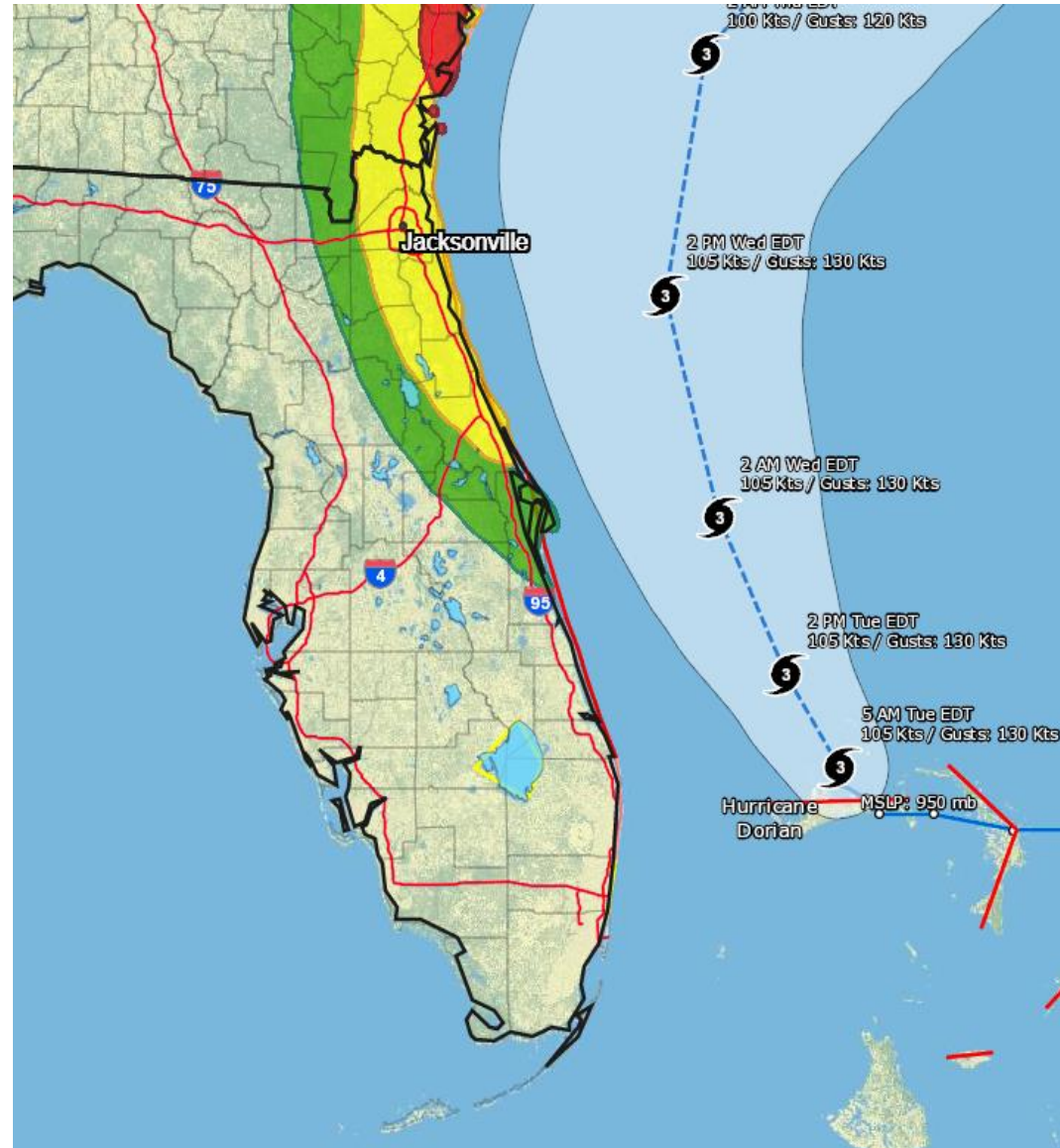


Flash Flood Outlooks

Tuesday



Wednesday



**MARGINAL
(MRGL)**

**Isolated flash
floods possible**

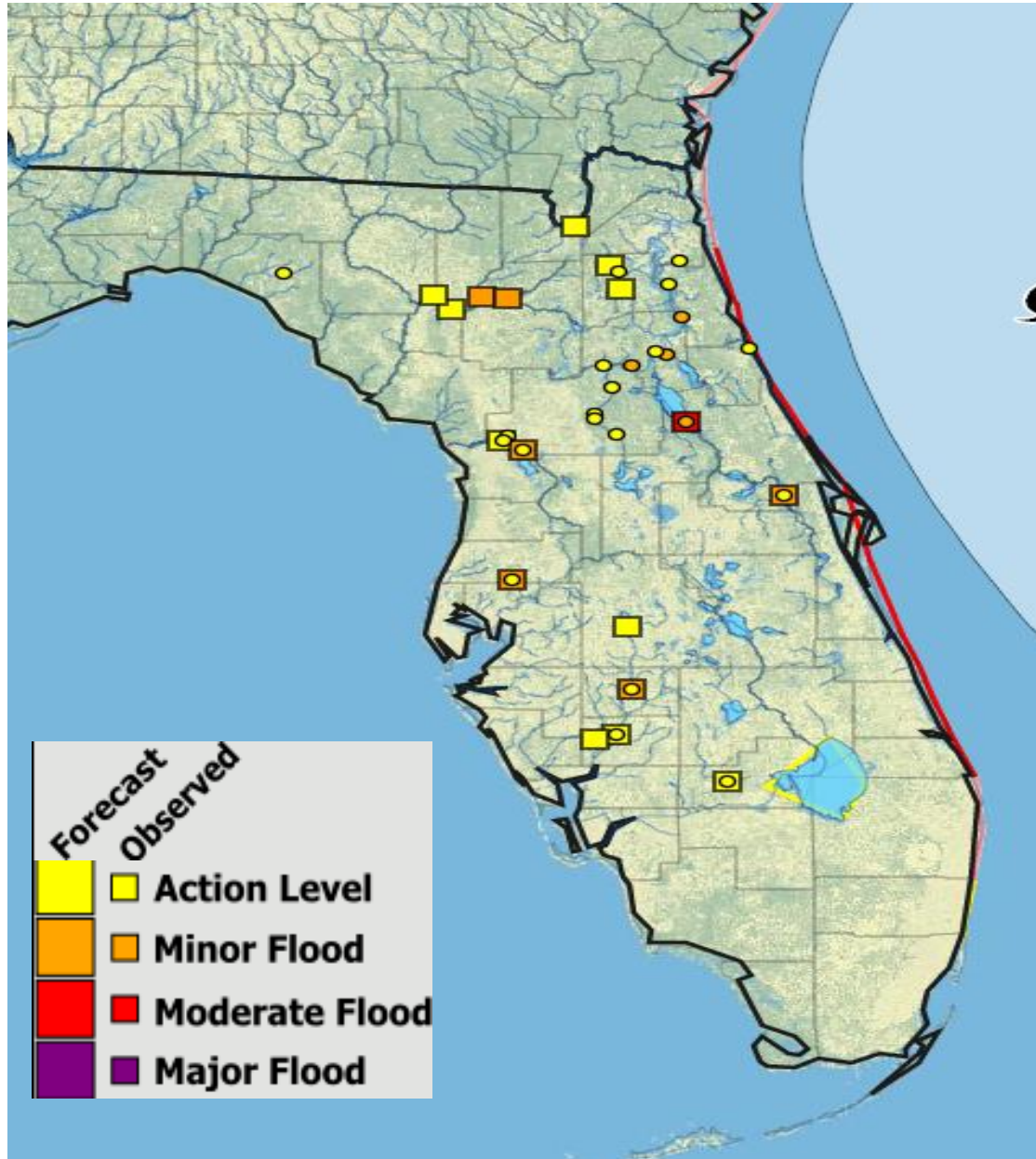
Localized and
primarily affecting
places that can
experience rapid
runoff with heavy
rainfall.

**SLIGHT
(SLGT)**

**Scattered flash
floods possible**

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

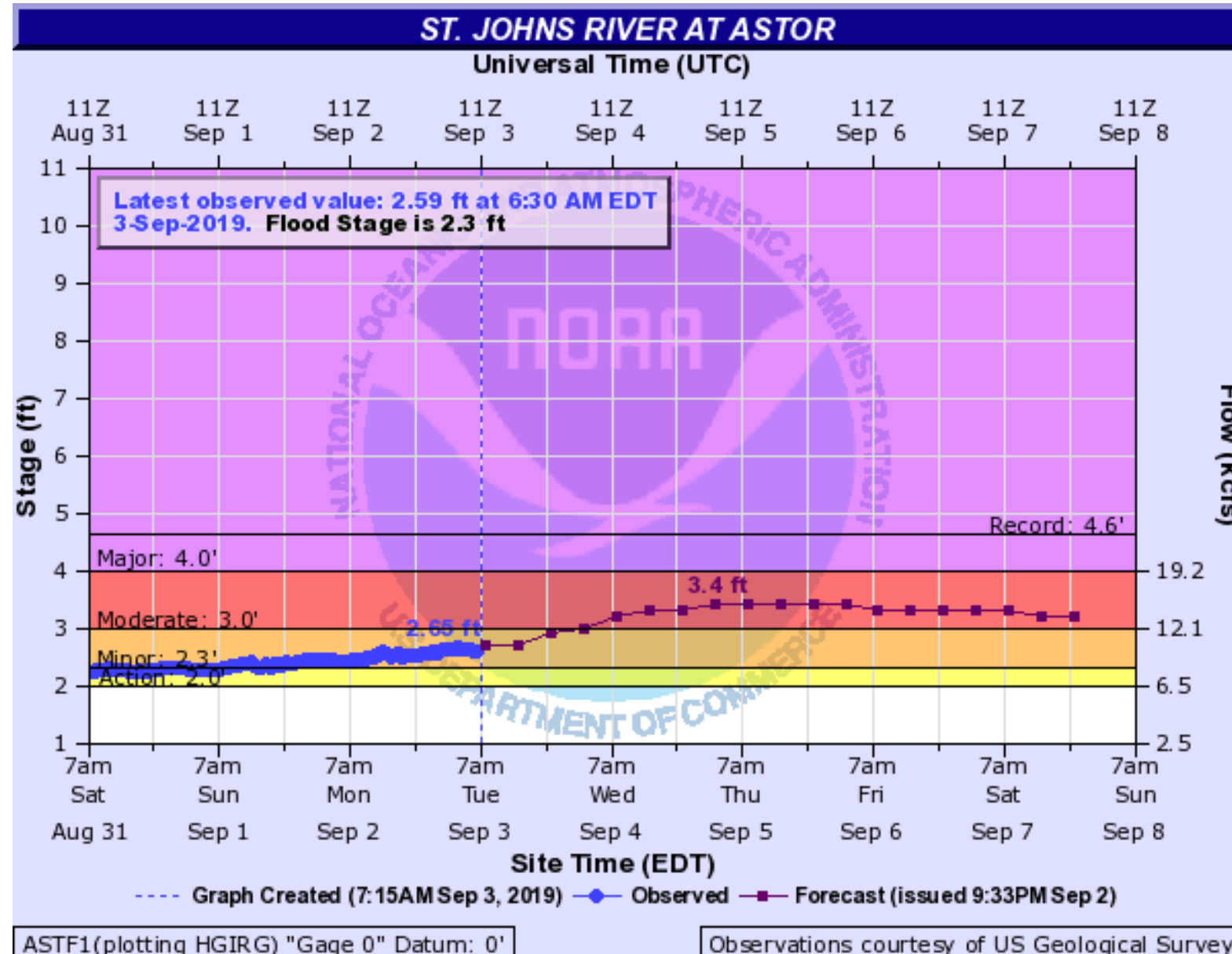
River Observations/Forecasts Across the Peninsula



Rivers Currently in or Forecast to Reach Minor Flood Stage:

- [Santa Fe River at Worthington Springs](#)
- [Santa Fe River at O'Leno State Park](#)
- [Santa Fe River near Fort White](#)
- [Santa Fe River at Three Rivers Estates](#)
- [Withlacoochee River at Holder](#)
- [Cypress Creak at Worthington Gardens](#)
- [Peace River at Zolfo Springs](#)
- [St. Johns River above Lake Harney](#)
- [St. Johns River at Astor](#)
- [St. Johns River at Racy Point](#)
- [Ocklawaha River at Rodman Dam](#)
- [Dunns Creek near Satsuma](#)

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.



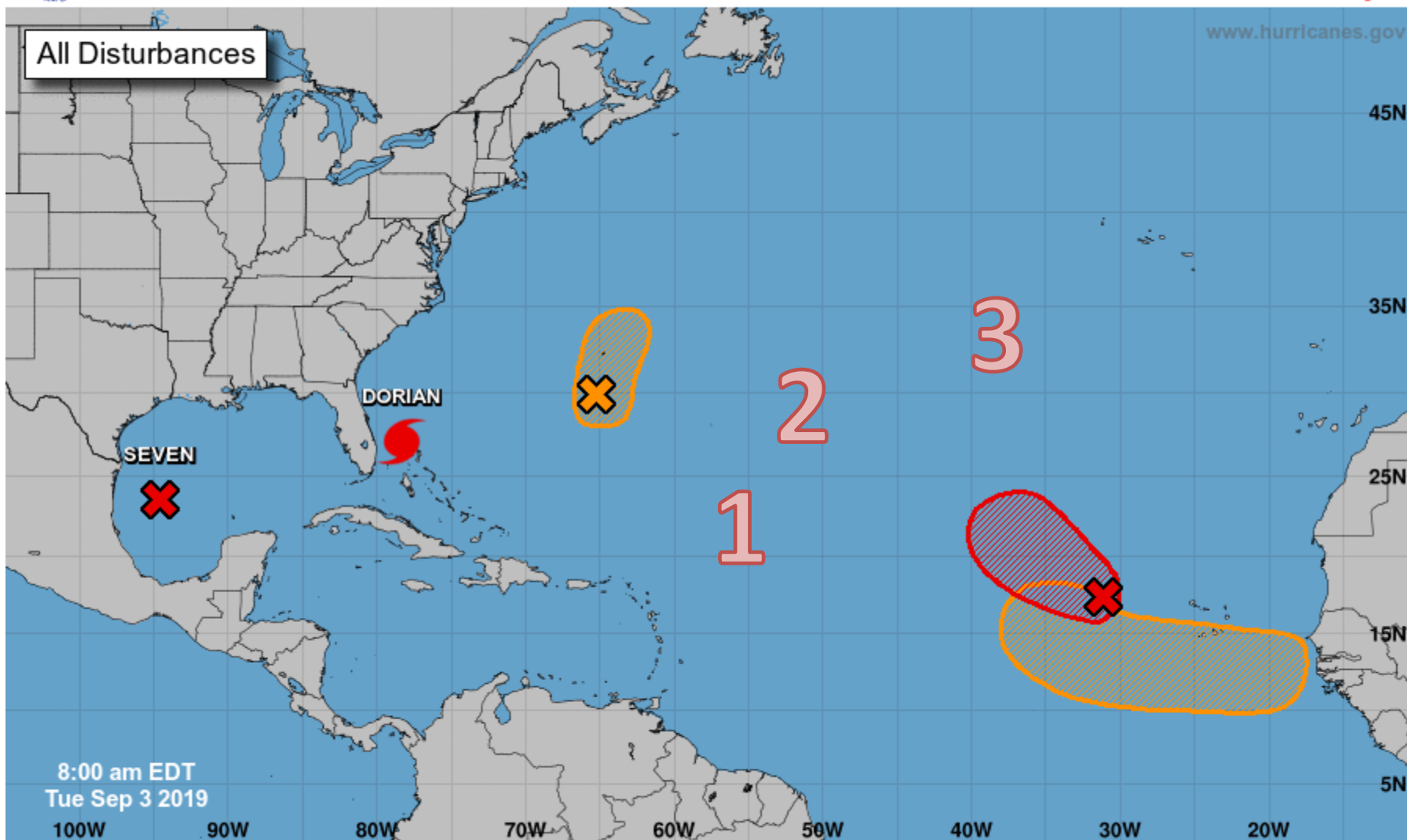
Five-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida



www.hurricanes.gov

All Disturbances

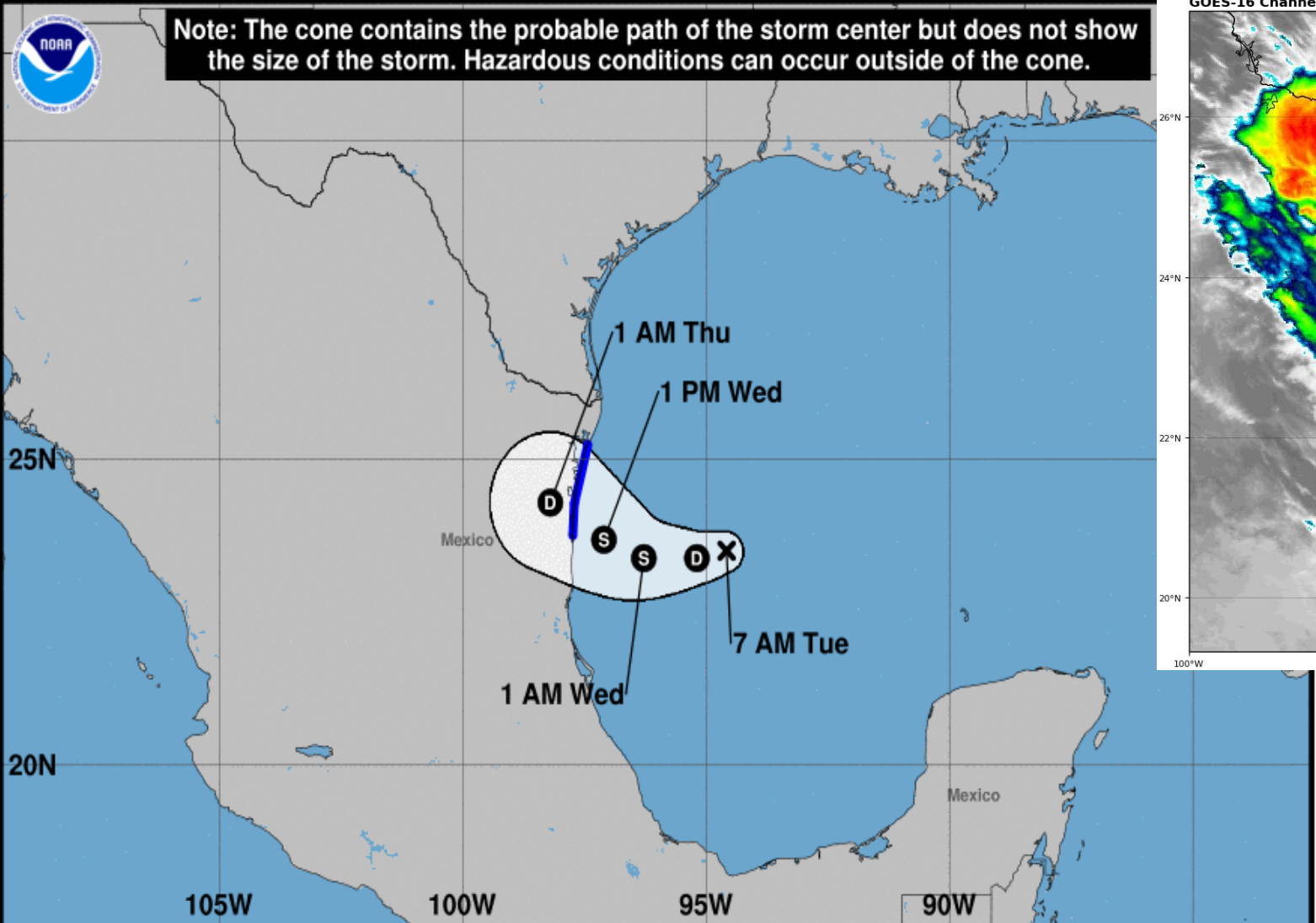


8:00 am EDT
Tue Sep 3 2019

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

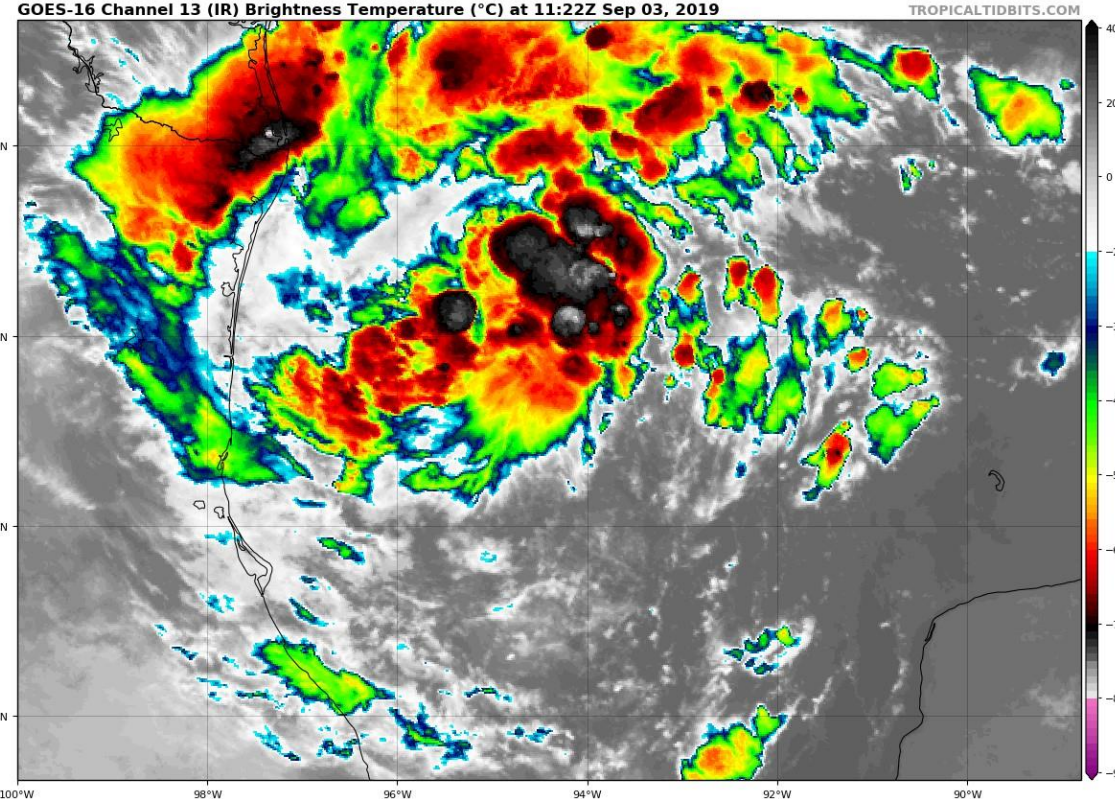


Potential Tropical Cyclone Seven
 Tuesday September 03, 2019
 7 AM CDT Intermediate Advisory 1A
 NWS National Hurricane Center

Current information: x
 Center location 23.5 N 94.6 W
 Maximum sustained wind 35 mph
 Movement W at 7 mph

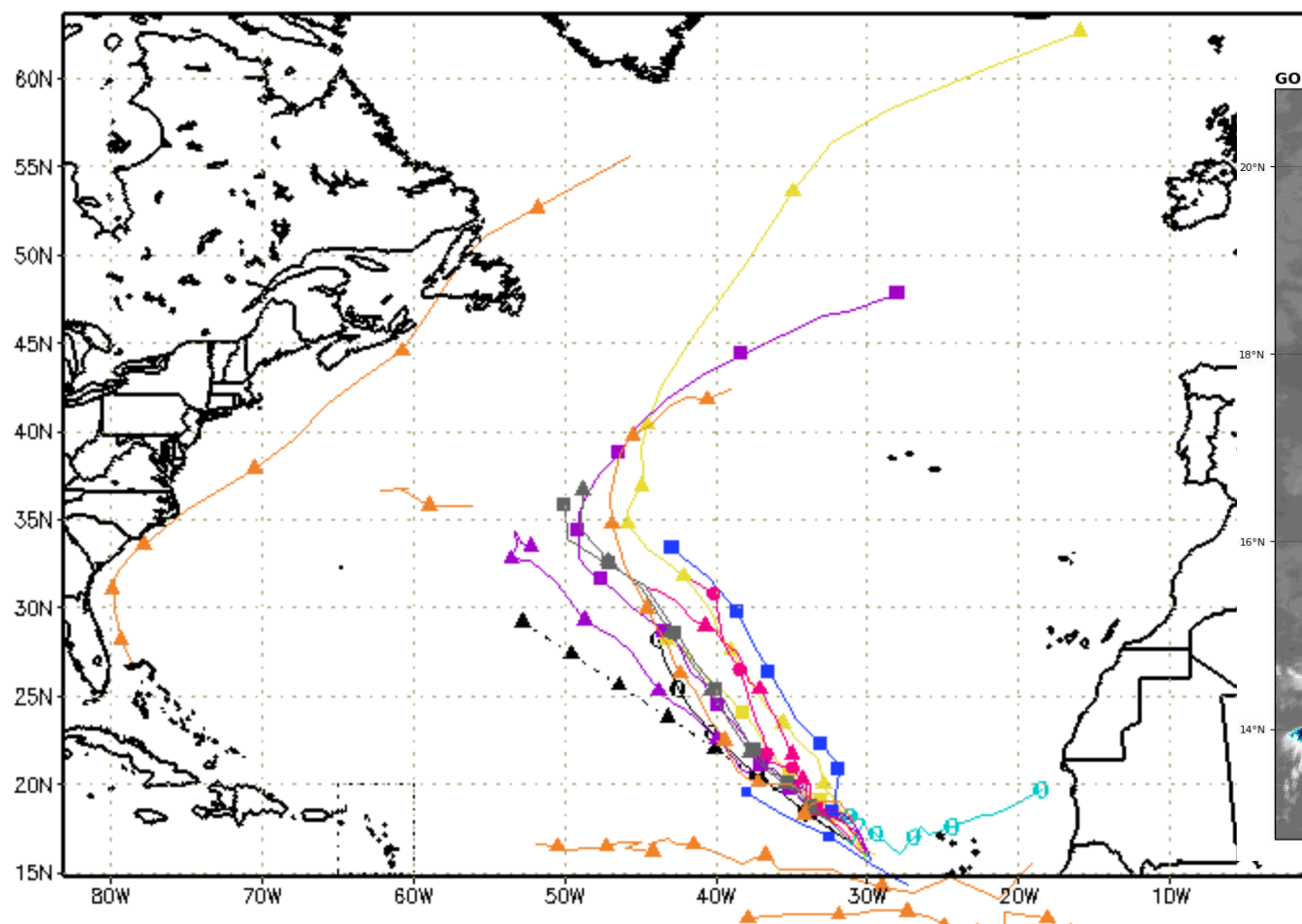
Forecast positions:
 ● Tropical Cyclone ○ Post/Potential TC
 Sustained winds: D < 39 mph
 S 39-73 mph H 74-110 mph M > 110 mph

Potential track area: Day 1-3 (solid line), Day 4-5 (dotted line)
Watches: Hurricane (pink), Trop Stm (yellow)
Warnings: Hurricane (red), Trop Stm (blue)
Current wind extent: Hurricane (brown), Trop Stm (orange)

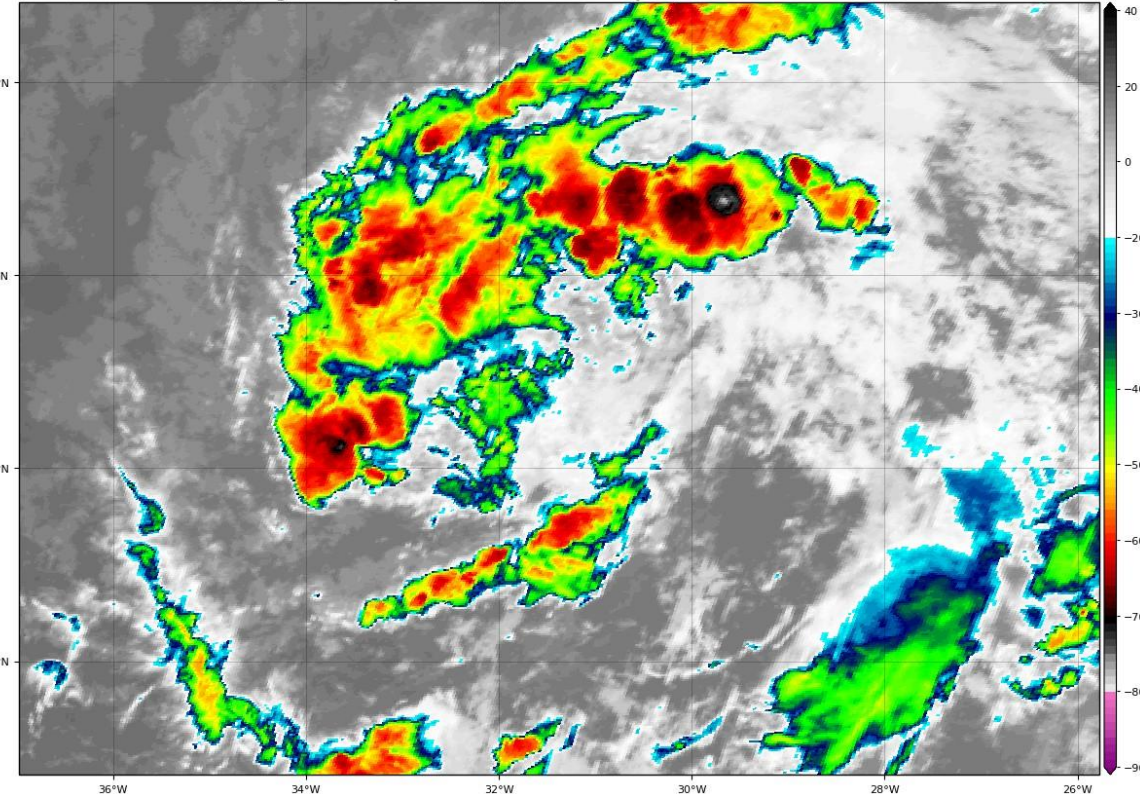


- PTC #7 could become a depression today and a tropical storm just before landfall in Mexico on Wednesday.

--▲-- XTRP 03/0600Z --●-- CLP5 03/0600Z ▲ HMON 03/0000Z ▲ AVNO 03/0000Z ▲ EECF 03/0000Z
 --■-- TVCN 03/0600Z --□-- CLP6 03/0600Z ● HWRF 03/0000Z ● AEMN 03/0000Z ● EEMN 03/0000Z
 --▲-- TVCX 03/0600Z --□-- CLP7 03/0600Z ▲ UKM 03/0000Z ▲ APxx 03/0000Z ▲ EExx 03/0000Z
 ● NHC Not Avail ● COTC 03/0000Z ▲ CMC 03/0000Z ▲ GEMN 03/0000Z



GOES-16 Channel 13 (IR) Brightness Temperature (°C) at 11:15Z Sep 03, 2019



storm_91
 sfwmd.gov
 weather@sfwmd.gov
 03-Sep 07:36EDT

NHC Advisories and County Emergency Management Statements supersede this product.
 This graphic should complement, not replace, NHC discussions.
 If anything on this graphic causes confusion, ignore the entire product.
 For full info, see <http://my.sfwmd.gov/sfwmd/common/images/weather/plots.html>

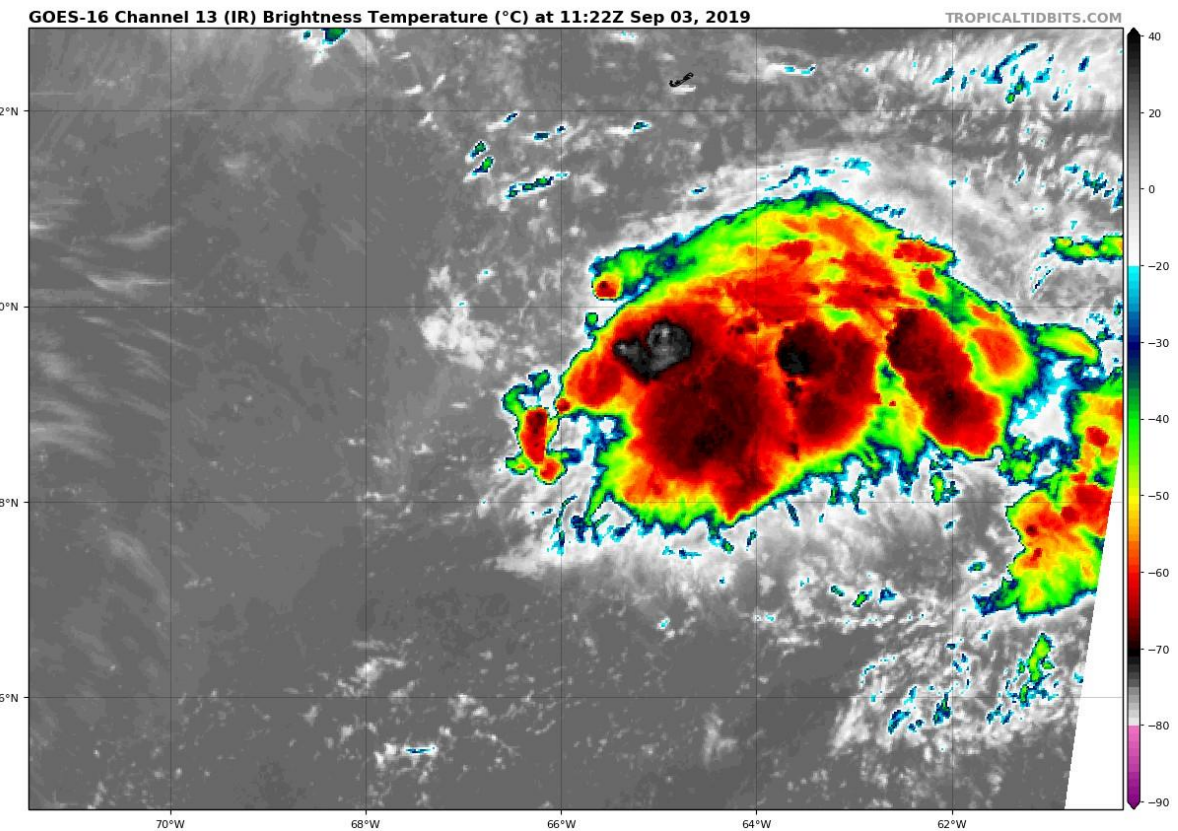
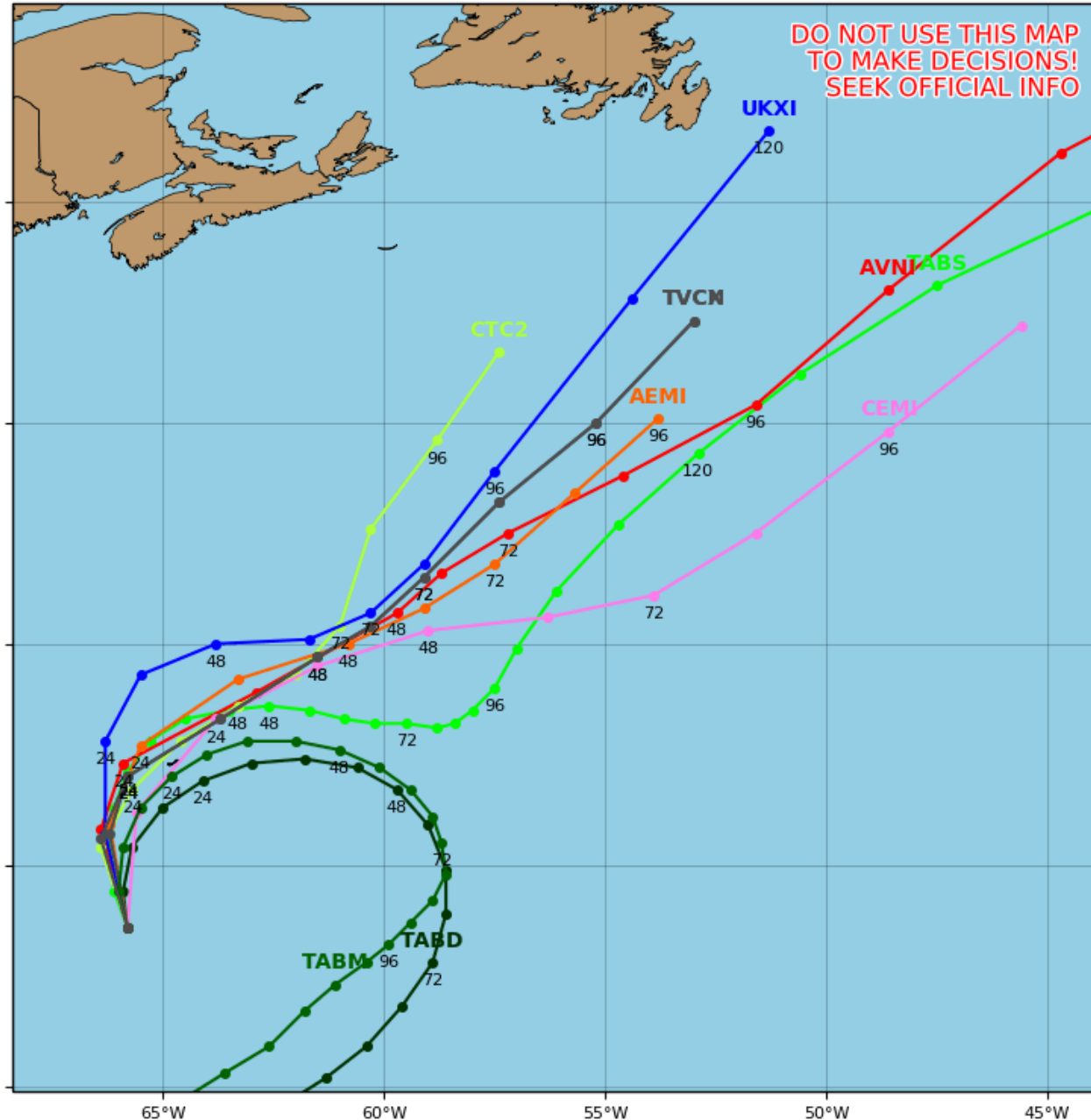


Invest 91L is expected to become a tropical depression later today and could become a tropical storm tomorrow while moving northwest in the eastern Atlantic.

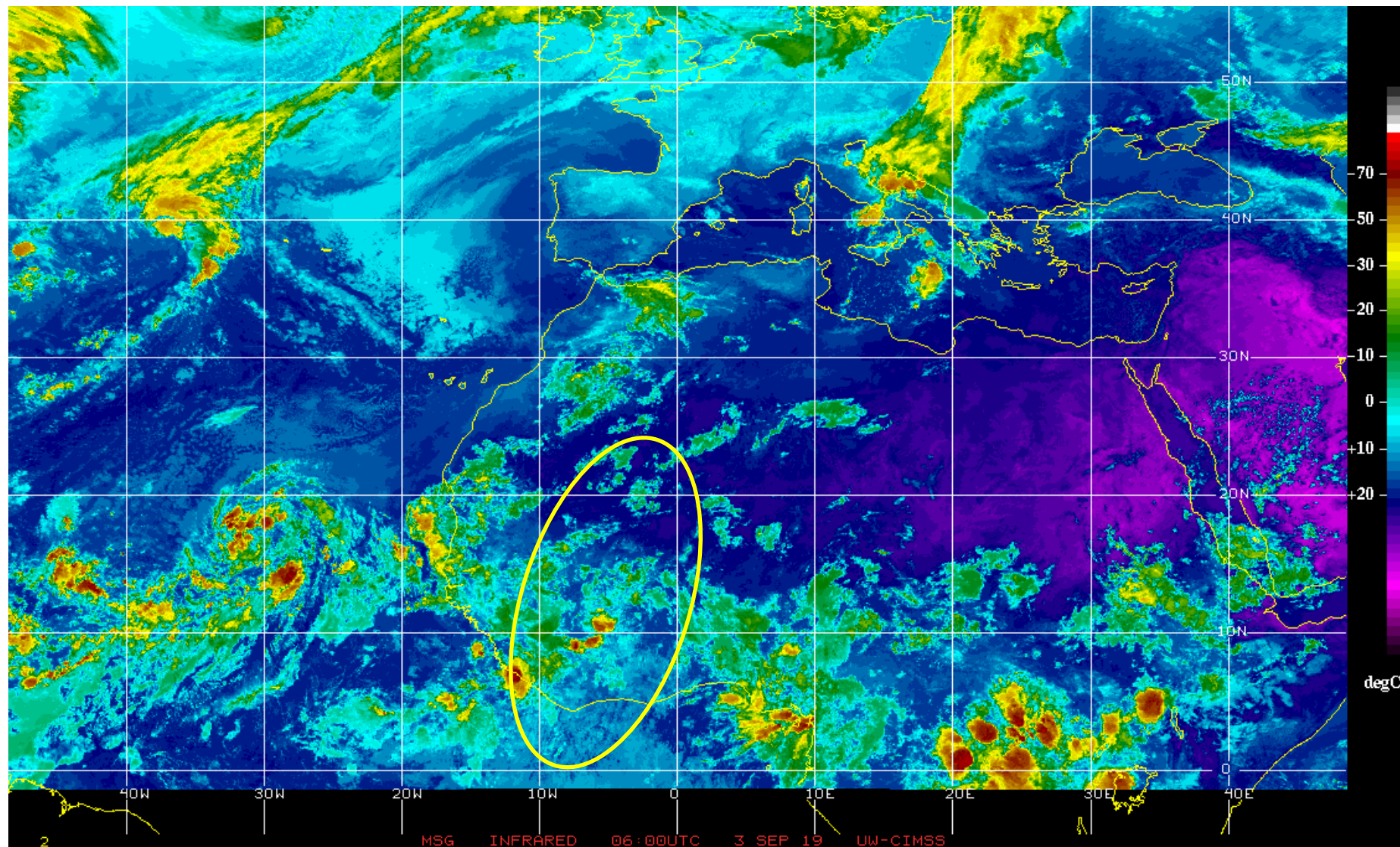
Invest 92L Model Track Guidance

Initialized at 06z Sep 03 2019

Levi Cowan - tropicaltidbits.com



Invest 92L is still rather disorganized. There is still a small window of opportunity for development within the next 48 hours before conditions become unfavorable and a frontal system moves it quickly northeast.



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. Models indicate a good potential for development late this week or this weekend. A general westward movement across the eastern and central Atlantic is expected for next week.

Summary

Major Hurricane Dorian

- At 8 AM ET Tuesday, Hurricane Dorian was still located 105 miles east of West Palm Beach, and now drifting northwest at 1mph.
- Hurricane hunters have found that maximum sustained winds are near 120 mph, which is a Category 3 Major Hurricane. Dorian is forecast to maintain Category 3 intensity through Wednesday.
- Dorian will begin a slightly faster north-northwest movement today, and a further increase in forward motion is expected later today as it parallels the Florida East Coast.
- Dorian's wind field is expanding and tropical storm conditions are expected to continue through Wednesday night, with hurricane force gusts possible later today.
- Dorian is forecast to also parallel the Georgia and South Carolina coasts on Thursday.
- **Invest 91L**: A tropical wave near the Cabo Verde Islands is expected to develop today as it moves northwestward over the open waters of the eastern tropical Atlantic. It has a 90% (high) chance of becoming a tropical storm during the next 5 days.
- **Invest 92L**: An area of low pressure south of Bermuda could develop as it slowly moves northward near Bermuda. It has a 40% (medium) chance of becoming a tropical depression during the next 2 days.
- **PTC #7 (formerly Invest 93L)**: An area of low pressure in the southwestern Gulf of Mexico could become a tropical depression today as it moves slowly westward toward northeastern Mexico. It has a 100% (high) chance of formation during the 2 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 60% (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 inland Nassau, inland Duval, 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 Polk, Highlands, Glades, and coastal 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 feeder bands. These will continue spreading up the East Coast through tonight and Wednesday. Hurricane force gusts will be possible along parts of east central Florida tonight into Wednesday.
- Storm Surge values north of Jupiter Inlet are forecast to be 4-7', with 2-4' south of Jupiter Inlet.
- In addition, large battering waves in excess of 10-15' are already causing erosion and coastal flooding during high tide. This will continue through Wednesday.
- Rainfall amounts of 2-6" are expected along the East Coast. 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, Withlacoochee River, Cypress Creek, Peace River, and the St. Johns River. However, moderate flooding may occur at the St. Johns River at Astor.

- None of the 4 systems being monitored for development currently poses a threat to Florida. The next names on the 2019 Atlantic storm name list are Erin, Fernand, Gabrielle and Humberto.

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

Florida Division of Emergency Management

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