



TROPICAL UPDATE



10:00 AM EST

Tuesday, November 10, 2020

Tropical Storm Eta, Subtropical Storm Theta,
and Caribbean Tropical Wave (70%)

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.



National Hurricane Center Map

Note: The cone contains the probable path of the storm center but does not show the size of the storm. Hazardous conditions can occur outside of the cone.

Tropical Storm Eta
 Tuesday November 10, 2020
 9 AM CST Advisory 41
 NWS National Hurricane Center

Current information: x
 Center location 22.7 N 85.3 W
 Maximum sustained wind 60 mph
 Movement: Stationary

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 (White) Day 4-5 (Dotted)

Watches:
 Hurricane (Pink) Trop Stm (Yellow)

Warnings:
 Hurricane (Red) Trop Stm (Blue)

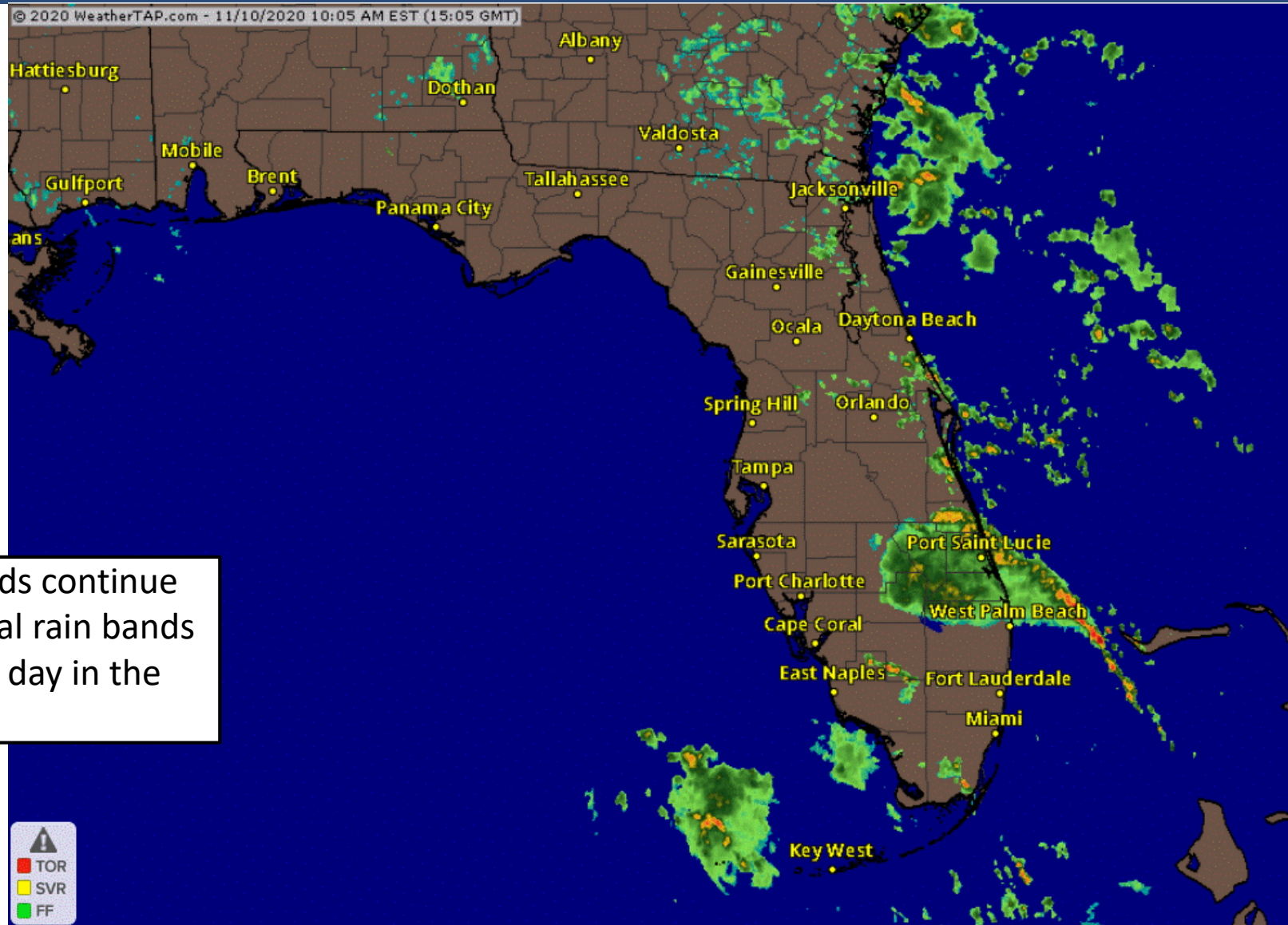
Current wind extent:
 Hurricane (Dark Red) Trop Stm (Orange)

Details on impacts to Florida later this week remain unclear. Rain bands will continue along the West Coast Wednesday/Thursday.



Current Florida Radar

As of 10:00 AM ET

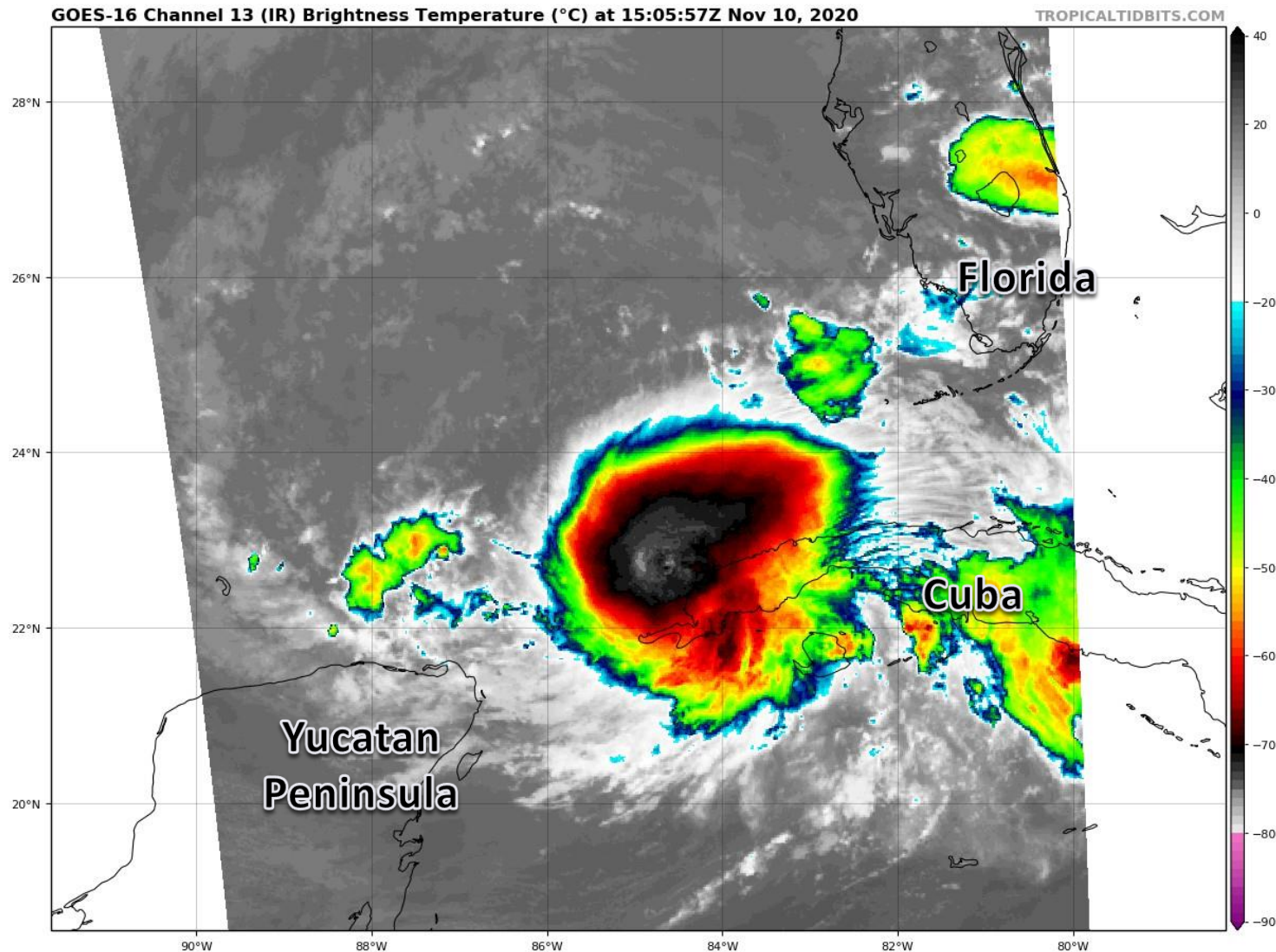


Some of the heavier rain bands continue along the East Coast. Additional rain bands will develop throughout the day in the Peninsula.

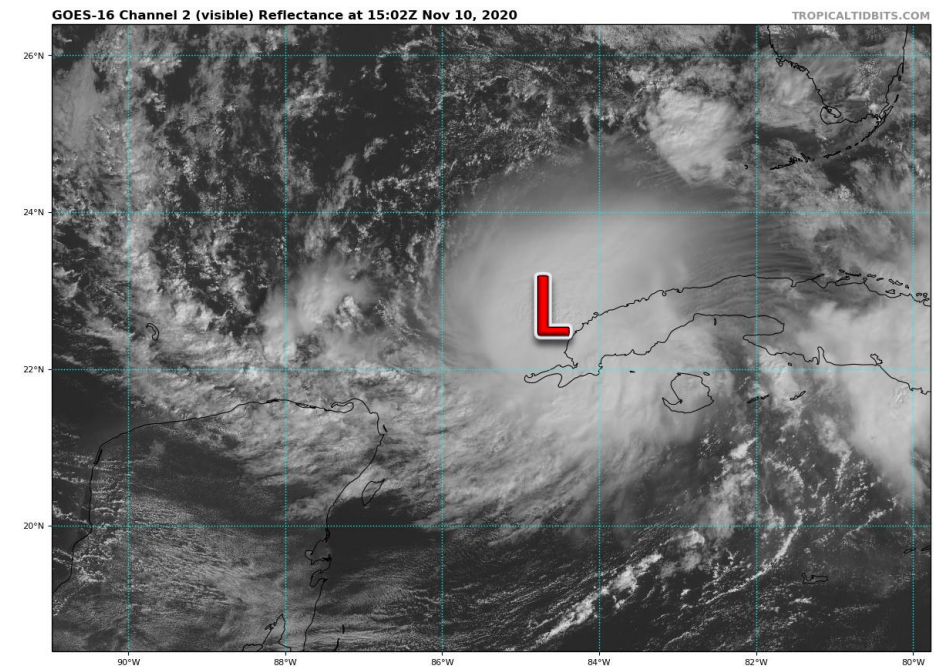


Satellite Imagery

Tropical Storm Eta – Southeastern Gulf of Mexico



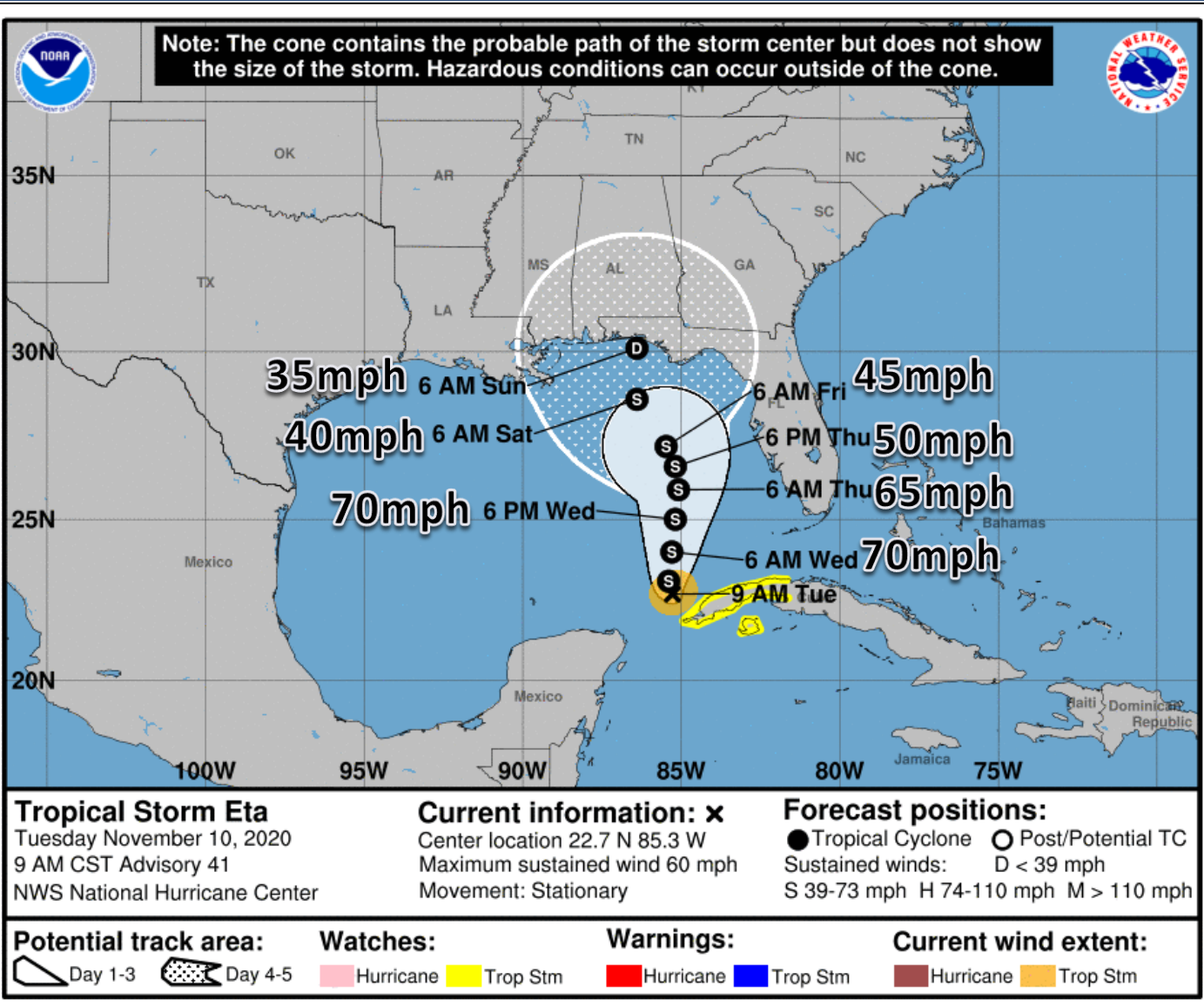
Eta has a small, but persistent area of thunderstorms near the center. Dry air surrounds the system which is preventing significant development.





Official Forecast Track

From the National Hurricane Center – Tropical Storm Eta



- The center of Tropical Storm Eta is about 60 miles northwest of the western tip of Cuba and is currently stationary.
- Maximum sustained winds are near 60 mph, and Eta could still strengthen over the next 24-36 hours to near hurricane strength.
- Eta will gradually move northward, and the official forecast brings Eta slowly north toward the Gulf Coast of Florida this weekend.
- The environment will be hostile across the northern Gulf of Mexico, resulting in rapid weakening by this weekend. In fact, the system may dissipate entirely before it reaches the Panhandle.



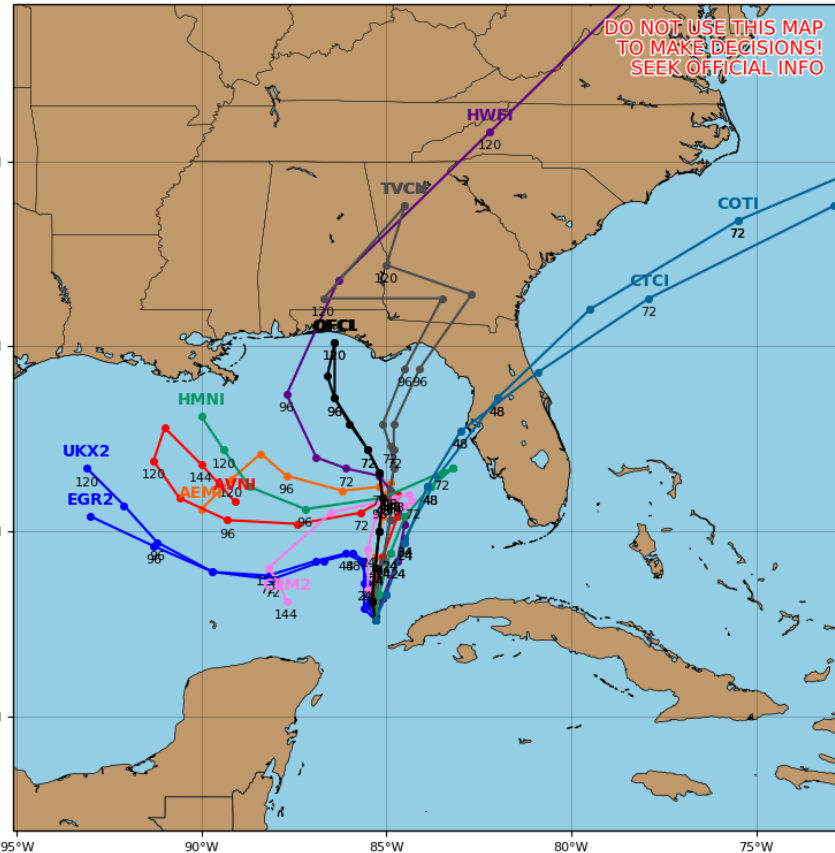
Model Forecast Tracks

Ensembles, Dynamical, and Statistical Models

Tropical Storm ETA Model Track Guidance

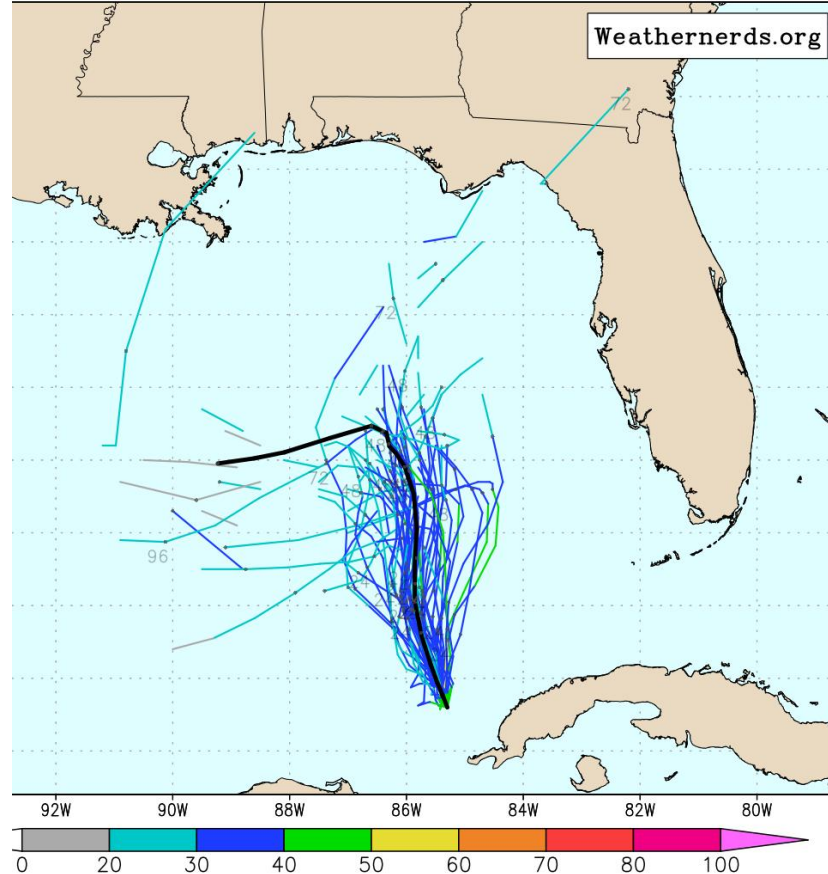
Initialized at 12z Nov 10 2020

Levi Cowan - tropicaltidbits.com

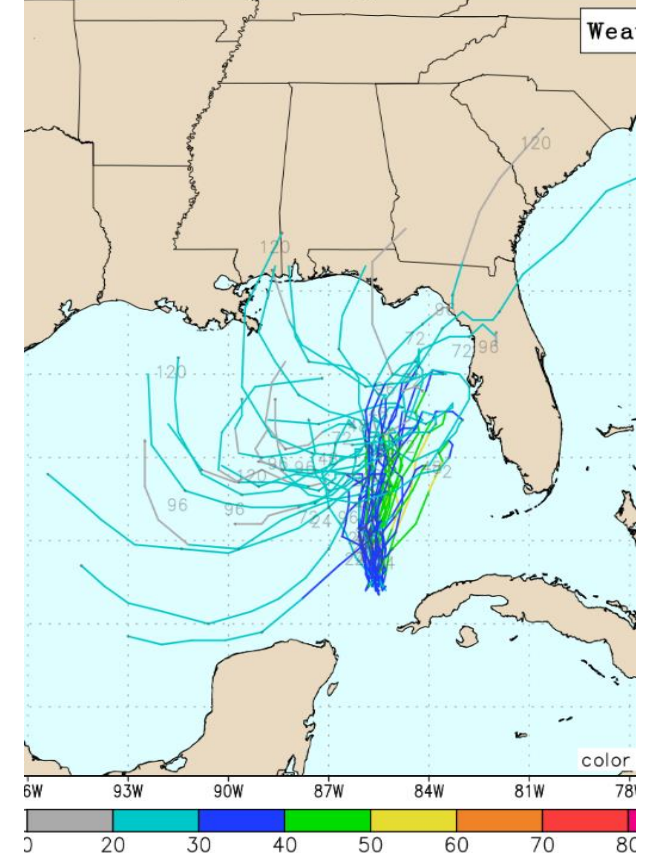


ble, init: 2020111006, AL29 Eta

color = max wi



Ensemble (0-120 h only), init: 2020111006



Models have trended toward a weaker storm and to the west. A landfall along the West Coast is not expected.

The quicker the storm weakens, the more likely it remains offshore and dissipates entirely.

A stronger storm may move a little closer to the West Coast and near the Panhandle this weekend.



Key Messages

From the National Hurricane Center



Key Messages for Tropical Storm Eta

Advisory 41: 9:00 AM CST Tue Nov 10, 2020



1. Heavy rainfall from Eta will continue across western Cuba and South Florida today and tonight. Additional flash and urban flooding, especially across previously inundated areas, will be possible in South Florida. Flash and urban flooding will also be possible for western Cuba.

2. Eta could approach the northeastern or north-central U.S. Gulf Coast later this week as a tropical storm, and possibly bring impacts from rain, wind, and storm surge. Interests in this area should continue to monitor the progress of Eta and updates to the forecast this week.



For more information go to hurricanes.gov



Time of Arrival & Wind Speed Probabilities

MOST LIKELY Time of Arrival of Tropical Storm Force Winds (>39 mph)

Most Likely Arrival Time of Tropical-Storm-Force Winds



City

Chance for
TS Winds

Changes Since
Last Packet

Key West

11%

-9%

Naples

13%

-10%

Ft. Myers

5%

-4%

Tampa

15%

-8%

Tallahassee

8%

-1%

Apalachicola

21%

-3%

Panama City

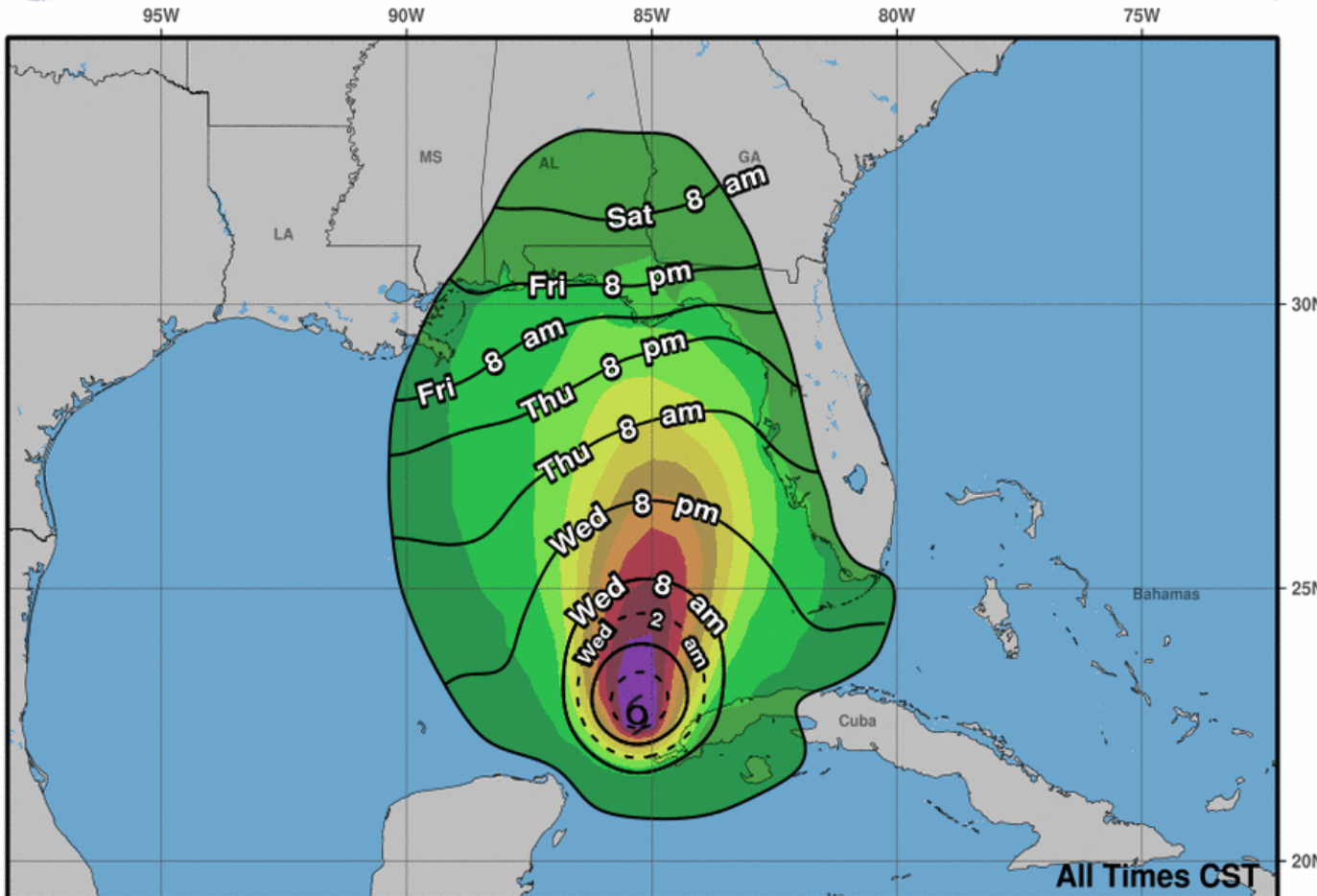
19%

-1%

Pensacola

8%

+2%



In general, the threat of tropical storm force winds has decreased significantly. However, they could still occur along the West Coast Thursday and in the Panhandle/Big Bend on Friday.

Tropical Storm Eta
Tue. Nov. 10, 2020 9 am CST
Advisory 41

Storm Location & Wind Speed
○ < 34 kt (39 mph)
● 34-63 kt (39-73 mph)
● ≥ 64 kt (74 mph)

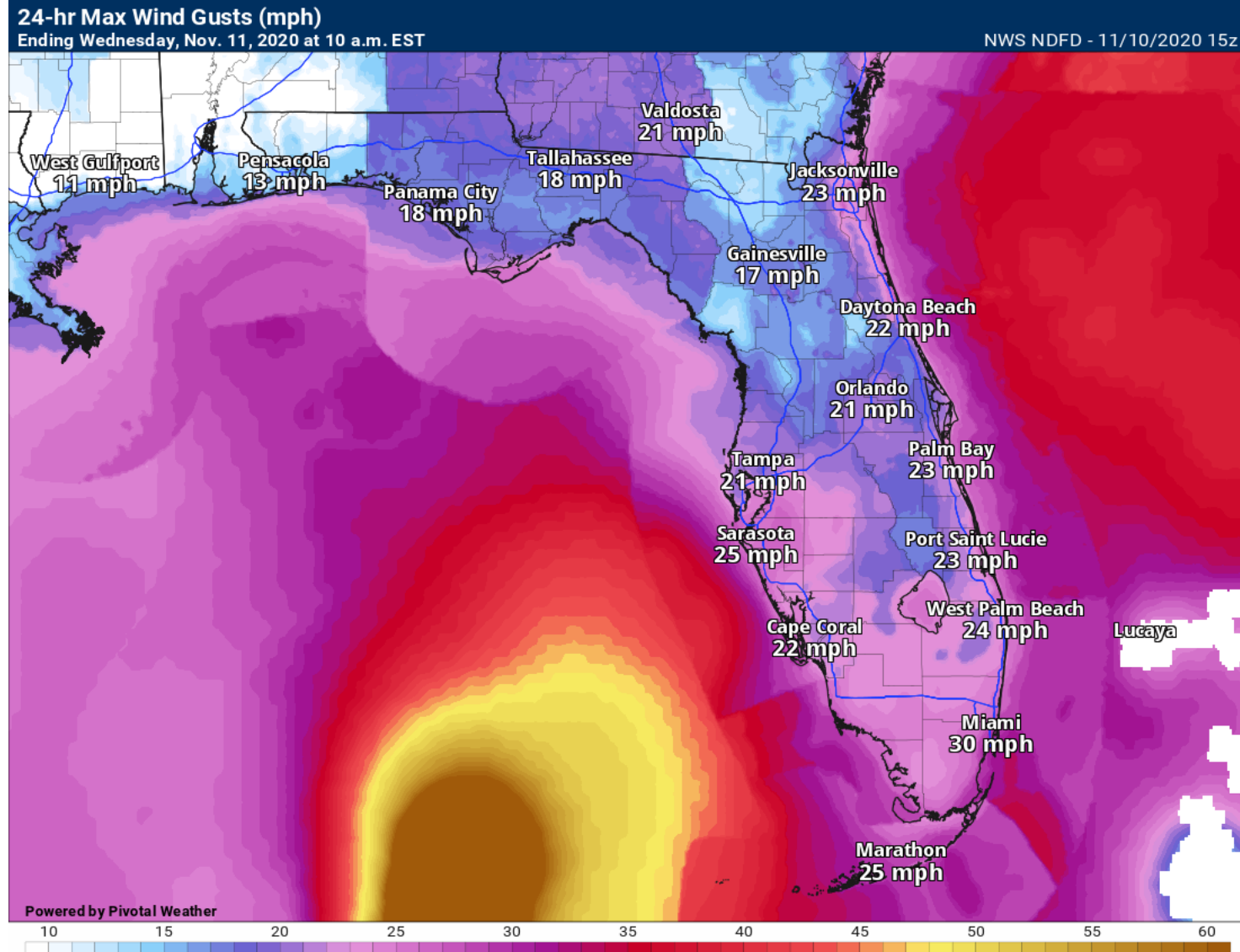
5-day chance of receiving sustained 34+ kt (39+ mph) winds
5 10 20 30 40 50 60 70 80 90 100 %



Maximum Wind Gusts

Next 24 Hours

Gusts of 25-40 mph remain possible across the Peninsula and the Keys. These gusts are mainly in any heavy showers or thunderstorms today, and confined to coastal areas.

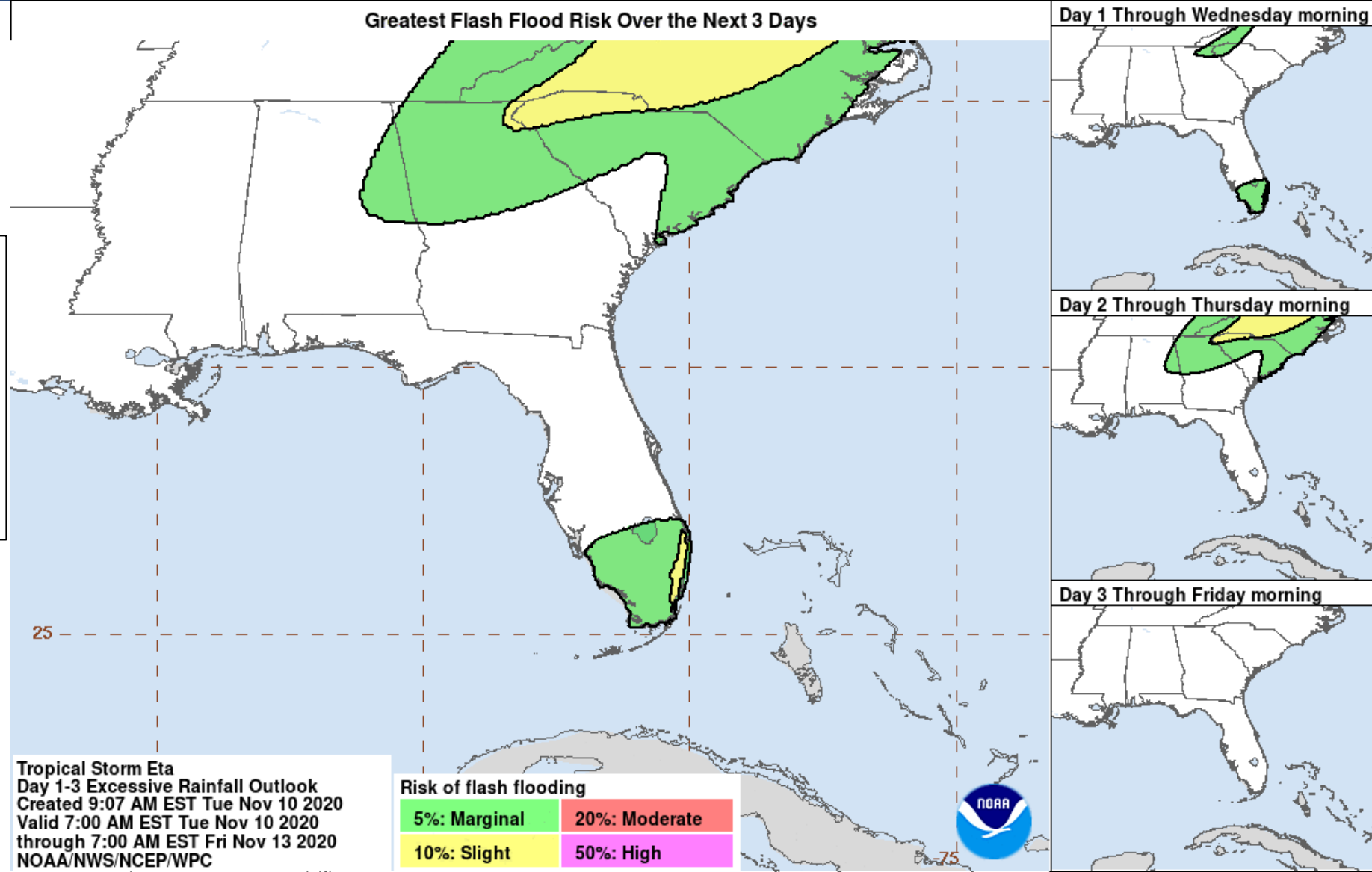




Flash Flood Outlook

3-Day Event Summary

Additional flash flooding is possible across Southeast Florida today- with some heavy rainfall in Southwest Florida possible this afternoon as well.



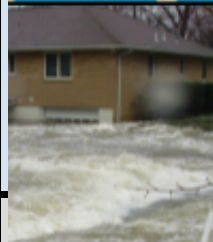




Flash Flood Risk Categories

Understanding the Weather Prediction Center Risk Scale

Understanding WPC Excessive Rainfall Risk Categories

No Area/Label	MARGINAL (MRGL)	SLIGHT (SLGT)	MODERATE (MDT)	HIGH (HIGH)
Flash floods are generally not expected.	Isolated flash floods possible	Scattered flash floods possible	Numerous flash floods likely	Widespread flash floods expected
Localized and primarily affecting places that can experience rapid runoff with heavy rainfall.	Mainly localized. Most vulnerable are urban areas, roads, small streams and washes. Isolated significant flash floods possible.	Numerous flash flooding events with significant events possible. Many streams may flood, potentially affecting larger rivers.	Severe, widespread flash flooding. Areas that don't normally experience flash flooding, could. Lives and property in greater danger.	
www.wpc.ncep.noaa.gov @NWSWPC				
Flash flooding near me?	Flash Flooding			
	NO Flash Flooding			
 WEATHER PREDICTION CENTER		Risk of rainfall exceeding flash flood guidance within 25 miles of a point to the right of a line HIGH: > 50% MDT: 20%-50%		 SLGT: 10%-20% MRGL: 5%-10%



Flood Watches

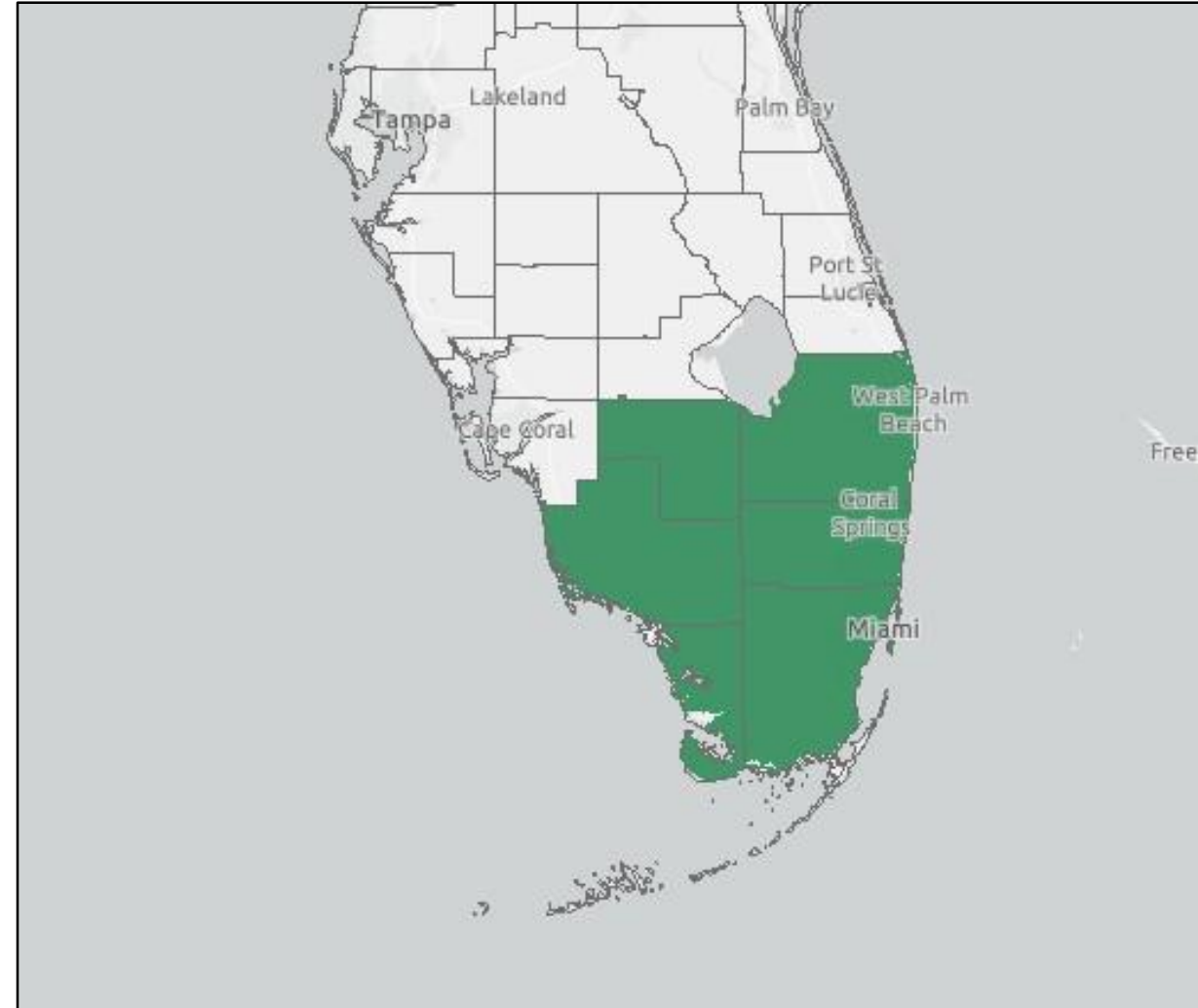
Links: [NWS Miami](#)

Until Wednesday Evening:

Coastal/Metro Miami-Dade, Broward, and Palm Beach

Until This Evening:

Mainland Monroe, Collier, Hendry, and Inland Miami-Dade, Broward, and Palm Beach.





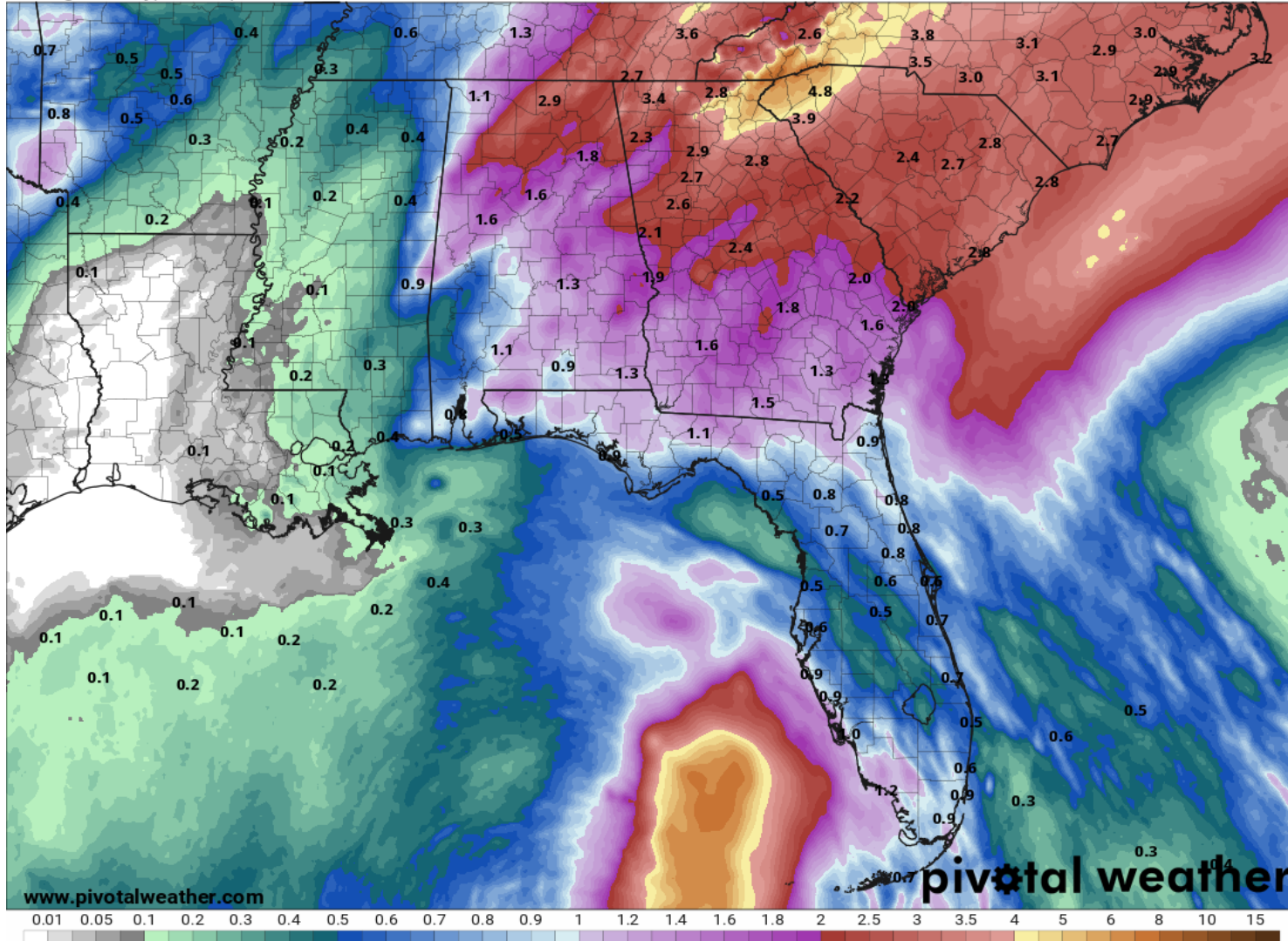
Rainfall Totals Next 7 Days

Ending 7 AM ET Tuesday

7-Day Precipitation (in)

Ending Tuesday, Nov. 17, 2020 at 7 a.m. EST

Init: Tue 2020-11-10 12z WPC



Rainfall totals will generally be around 1-2" across the Peninsula today.

1-2" are possible along the West Coast Wednesday and Thursday.

1-2" are forecast in North Florida on Thursday.

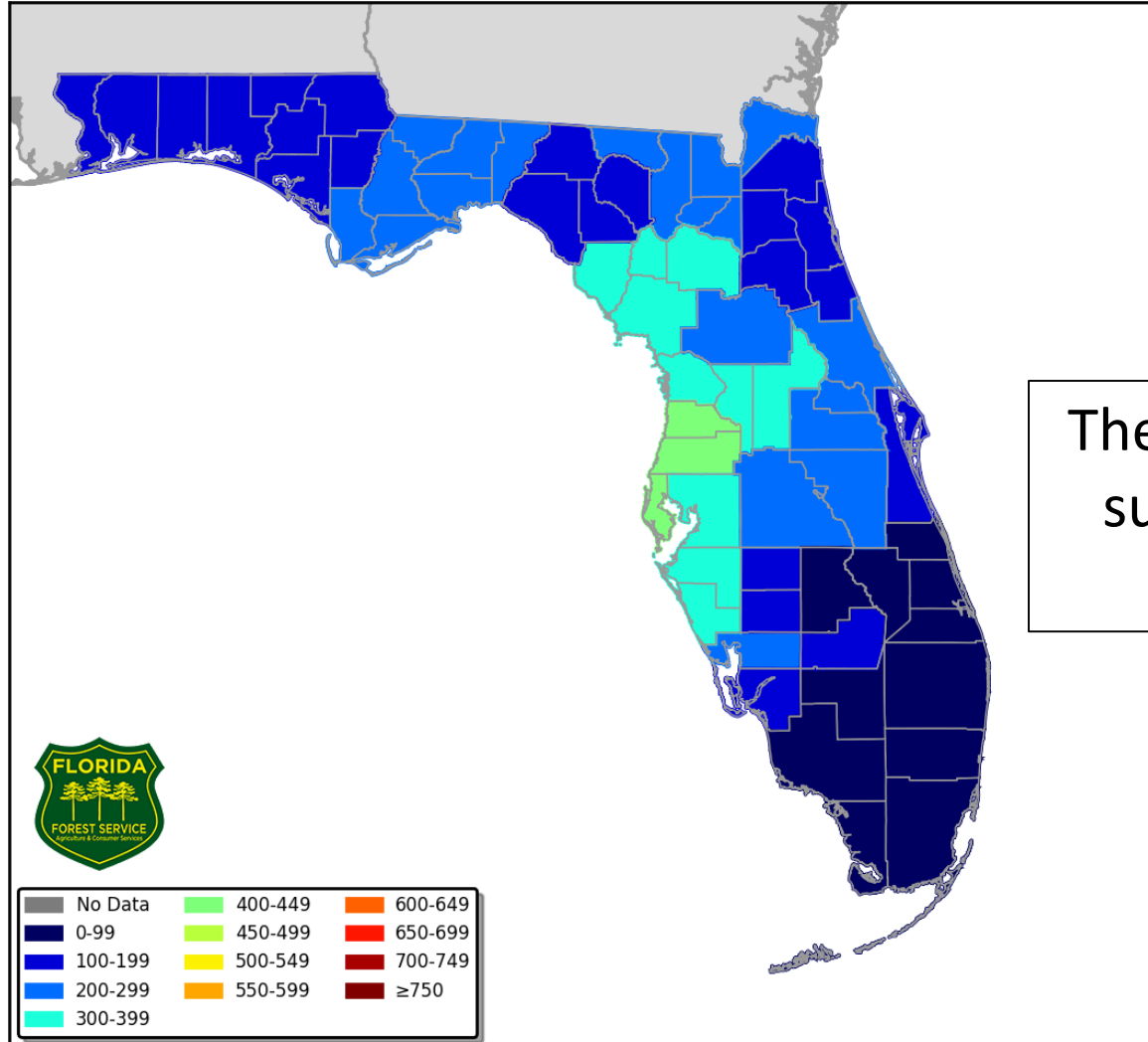
Locally higher totals could result in minor flooding statewide!



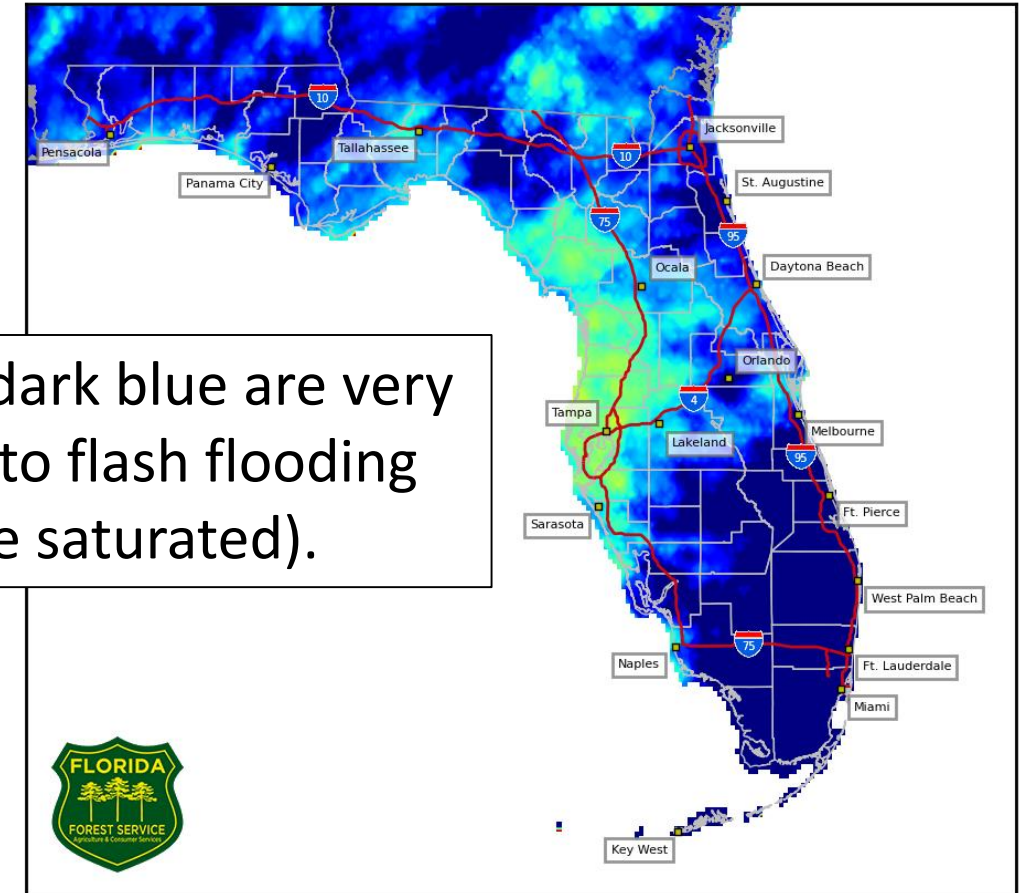
Drought Index – Soil Moisture

[KBDI – Full Report from the FFS](#)

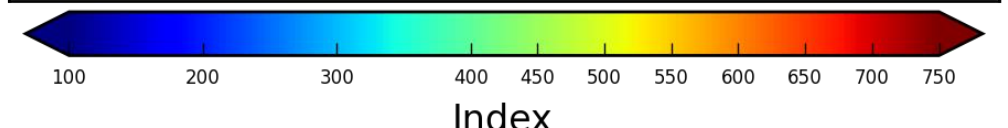
Keetch Byram Drought Index (KBDI)
County Averages for November 09, 2020



4 km Resolution KBDI
Statewide
November 09, 2020



The areas in dark blue are very susceptible to flash flooding (soils are saturated).





Flash Flood Guidance

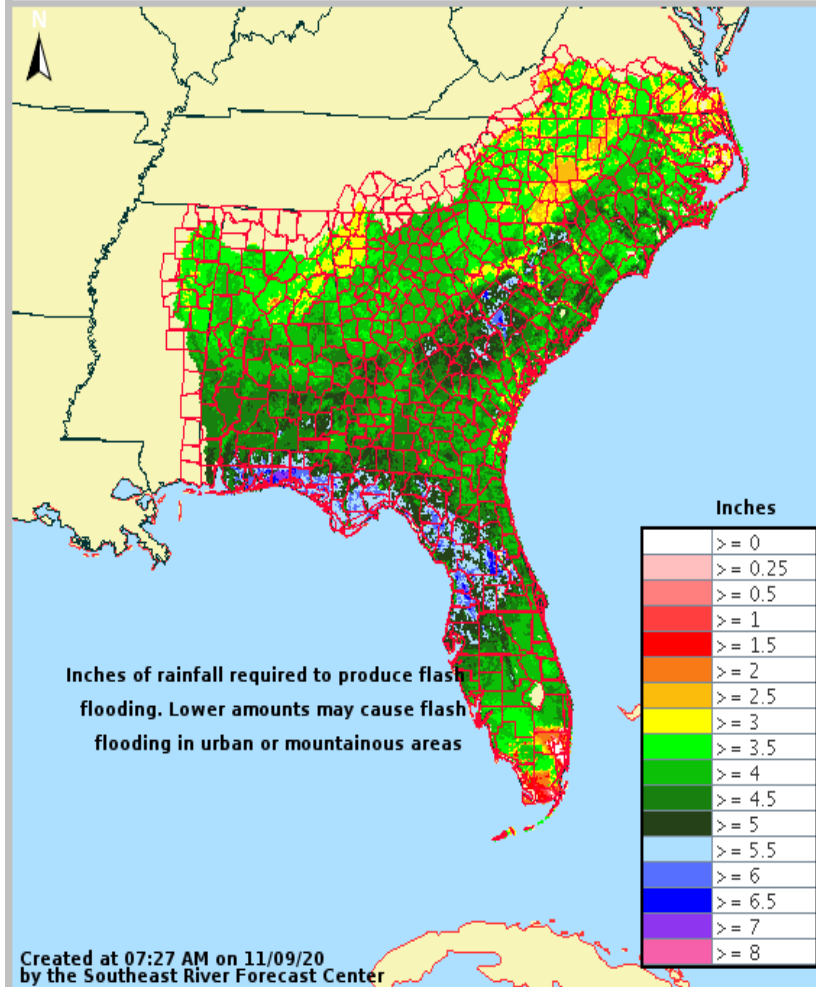
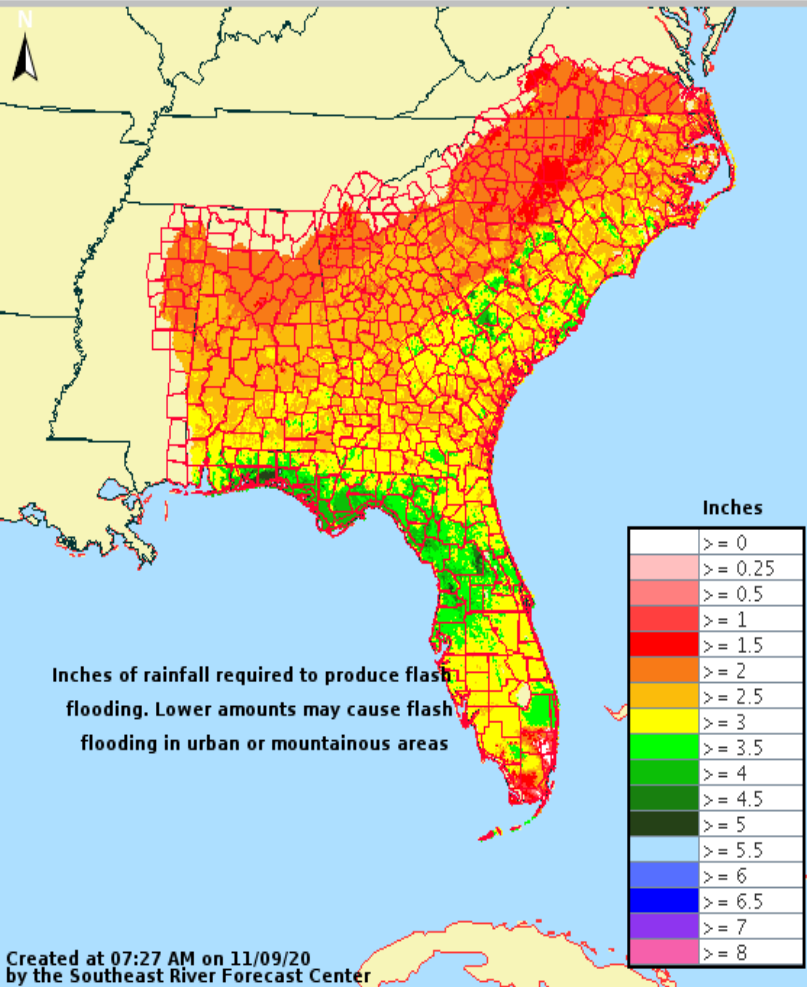
How Much Rain is Needed to Create Flash Flooding?



South Florida remains very wet from rainfall over the last several months. This area remains very prone to flooding.

It will only take about 1-2" of rain in an hour in parts of Broward, Miami-Dade, and Monroe Counties to create flash flooding.

Elsewhere in South Florida, it will take about 3" of rain in 1 hour or 4-5" in 6 hours to cause flash flooding.



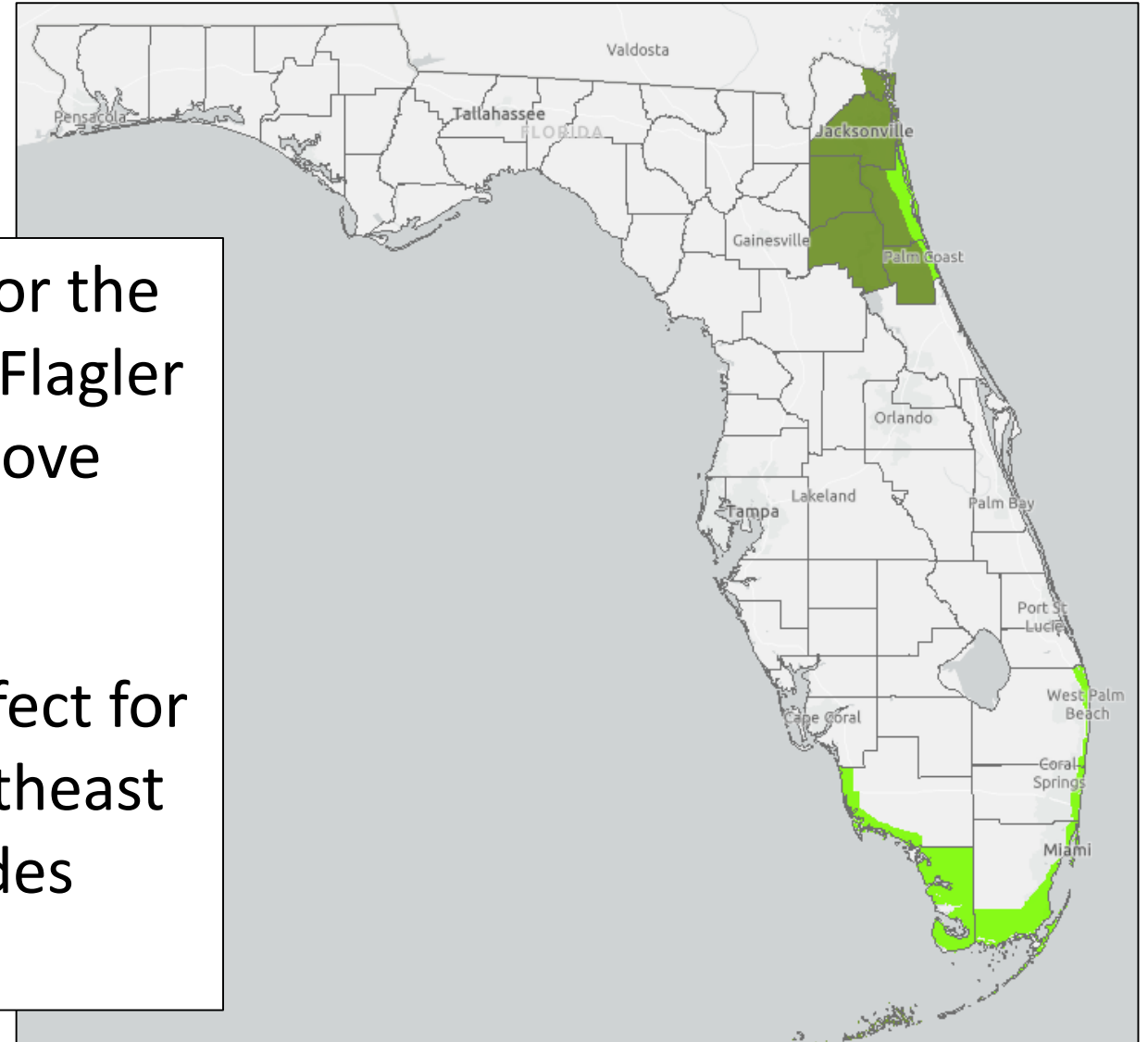


Coastal Flood Alerts

Tropical Storm Eta

Coastal Flood Advisories are in effect for the Upper Keys, South Florida, and coastal Flagler and St. Johns Counties. Tides of 1-2' above normal expected.

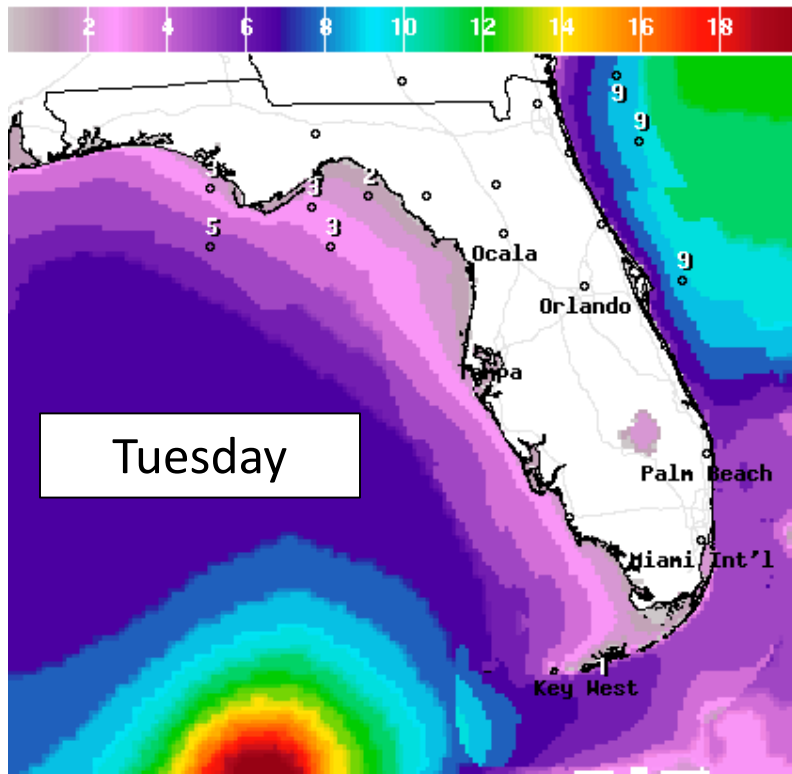
Coastal Flood Statements remain in effect for the remaining Keys and the rest of Northeast Florida including the St. Johns River. Tides around 1' above normal possible.





Forecast Wave Heights

Through Early Week



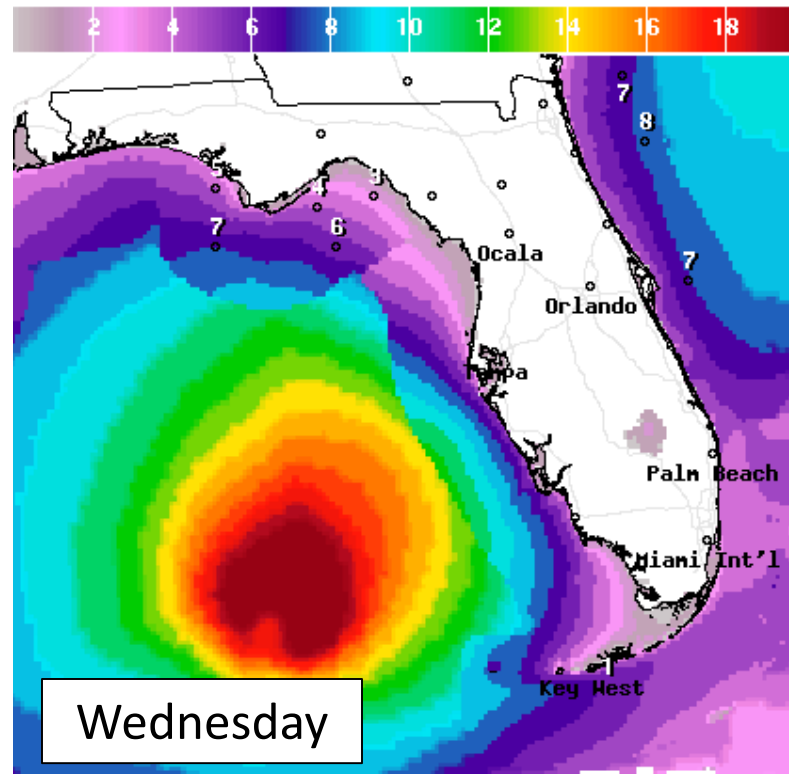
Wave Height(ft) Ending Tue Nov 10 2020 7PM EST
(Wed Nov 11 2020 00Z)



National Digital Forecast Database

15z issuance

Graphic created-Nov 10 10:20AM EST



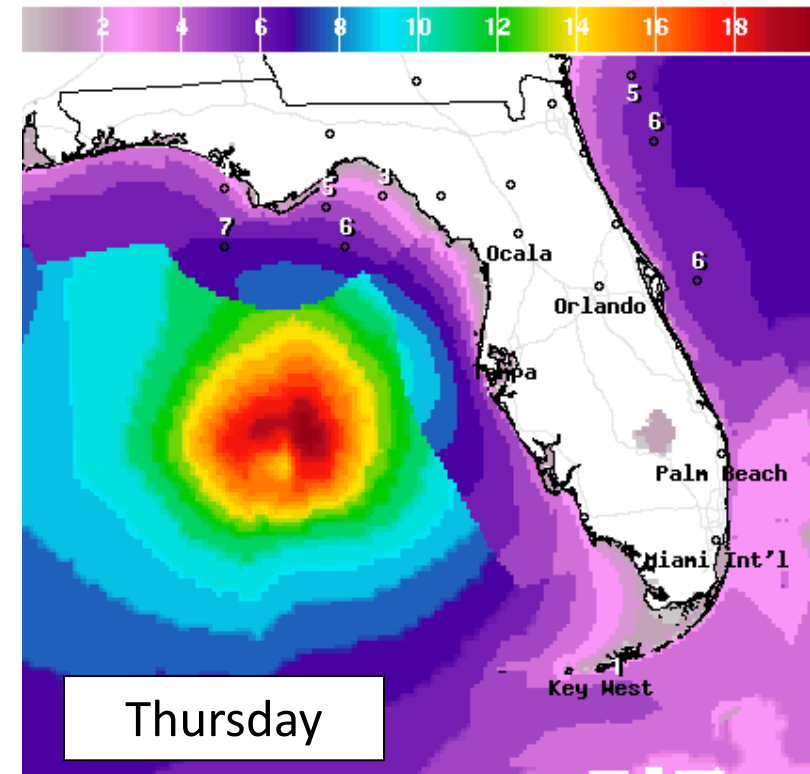
Wave Height(ft) Ending Wed Nov 11 2020 7PM EST
(Thu Nov 12 2020 00Z)



National Digital Forecast Database

15z issuance

Graphic created-Nov 10 10:21AM EST



Wave Height(ft) Ending Thu Nov 12 2020 7PM EST
(Fri Nov 13 2020 00Z)



National Digital Forecast Database

15z issuance

Graphic created-Nov 10 10:22AM EST



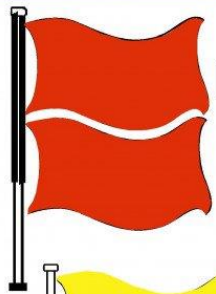
High surf of 4-8' will continue along the East Coast Tuesday and Wednesday. Waves will build across Gulf Coast beaches through this week as Eta moves northward (up to 4-8'). Significant beach erosion and dune overwash are possible over the next few days in a few locations.



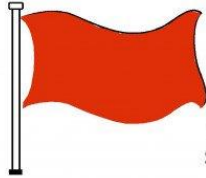
Rip Current Outlook

Today

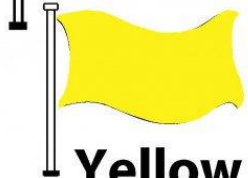
BEACH FLAG WARNING SYSTEM



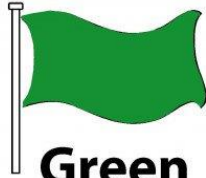
Double Red
Water Closed to
Public Use



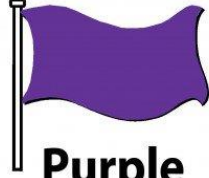
Red
High Hazard
(rough conditions,
such as strong surf
and or currents)



Yellow
Medium Hazard
(light surf and or
currents)

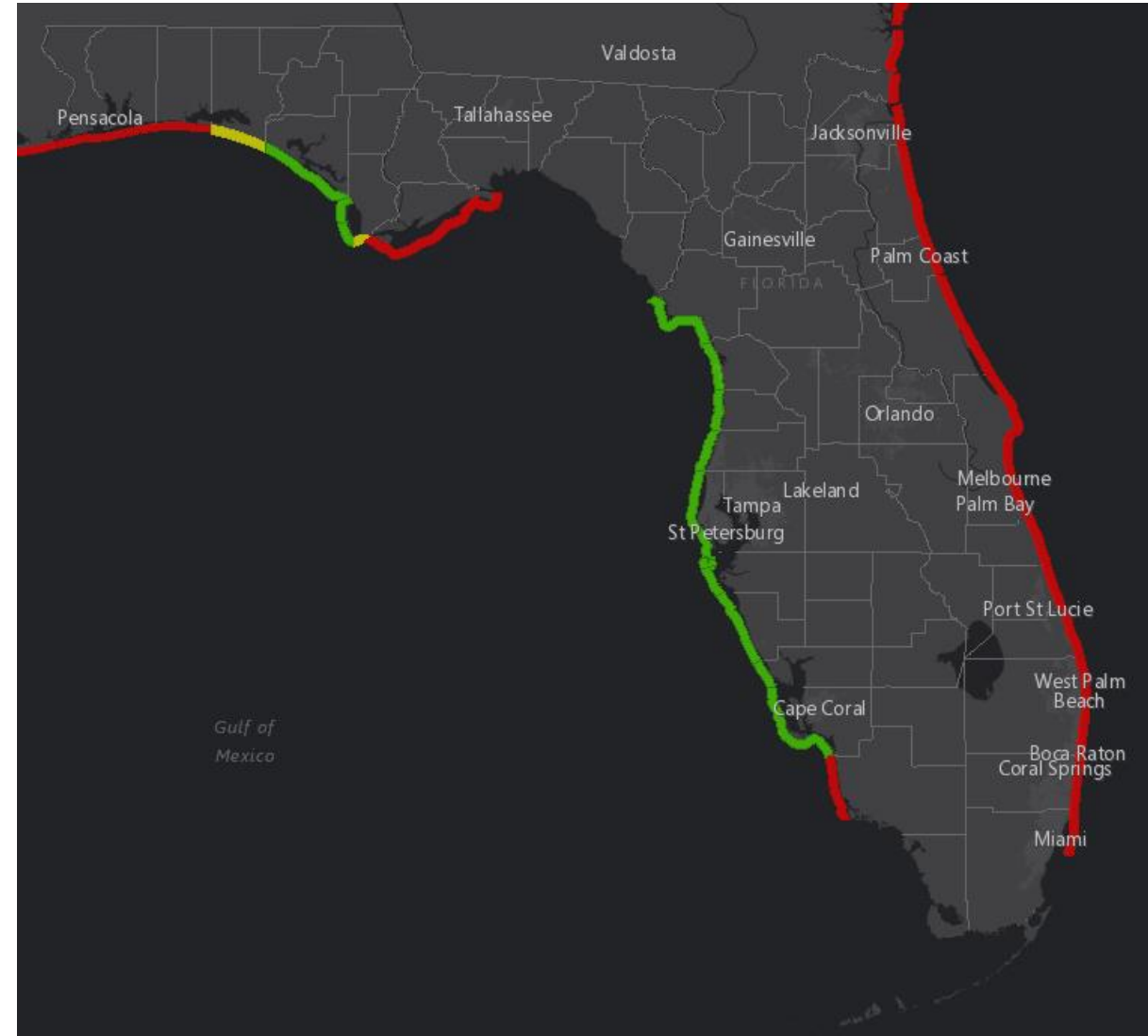


Green
Low Hazard
(calm conditions)



Purple
Marine Pest
(jellyfish, stingrays
& dangerous fish)

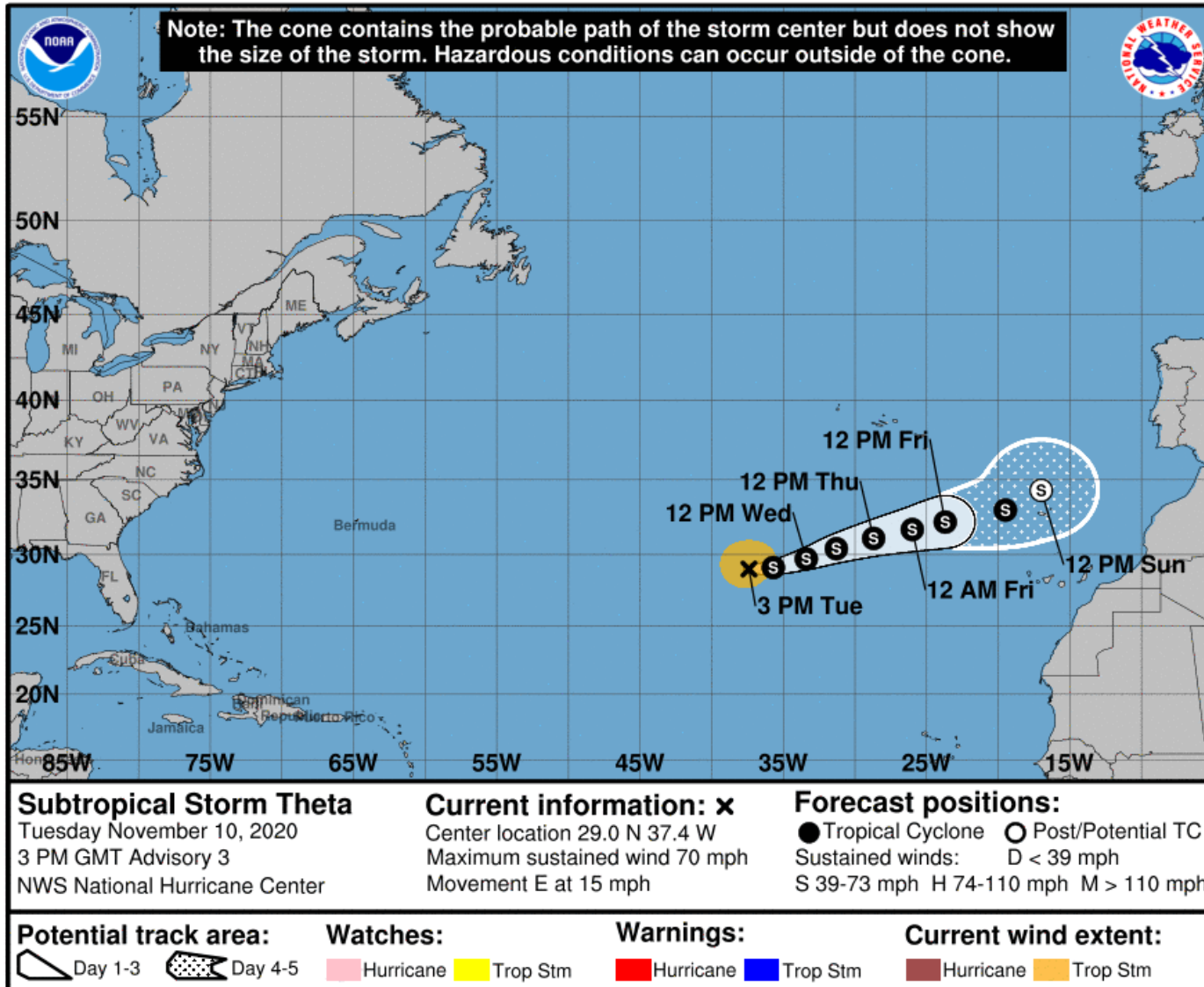
Dangerous rip currents continue due to breezy winds and rough surf statewide.





Forecast Track

Subtropical Storm Theta



The non-tropical area of low pressure over the Central Atlantic has acquired tropical characteristics. The National Hurricane Center has begun advisories on Subtropical Storm Theta.

Theta is the 29th named storm of the season, beating the record set in 2005 of the most named storms in a single year.

This system poses no threat to Florida, as it will continue eastward towards Portugal and Northwest Africa.



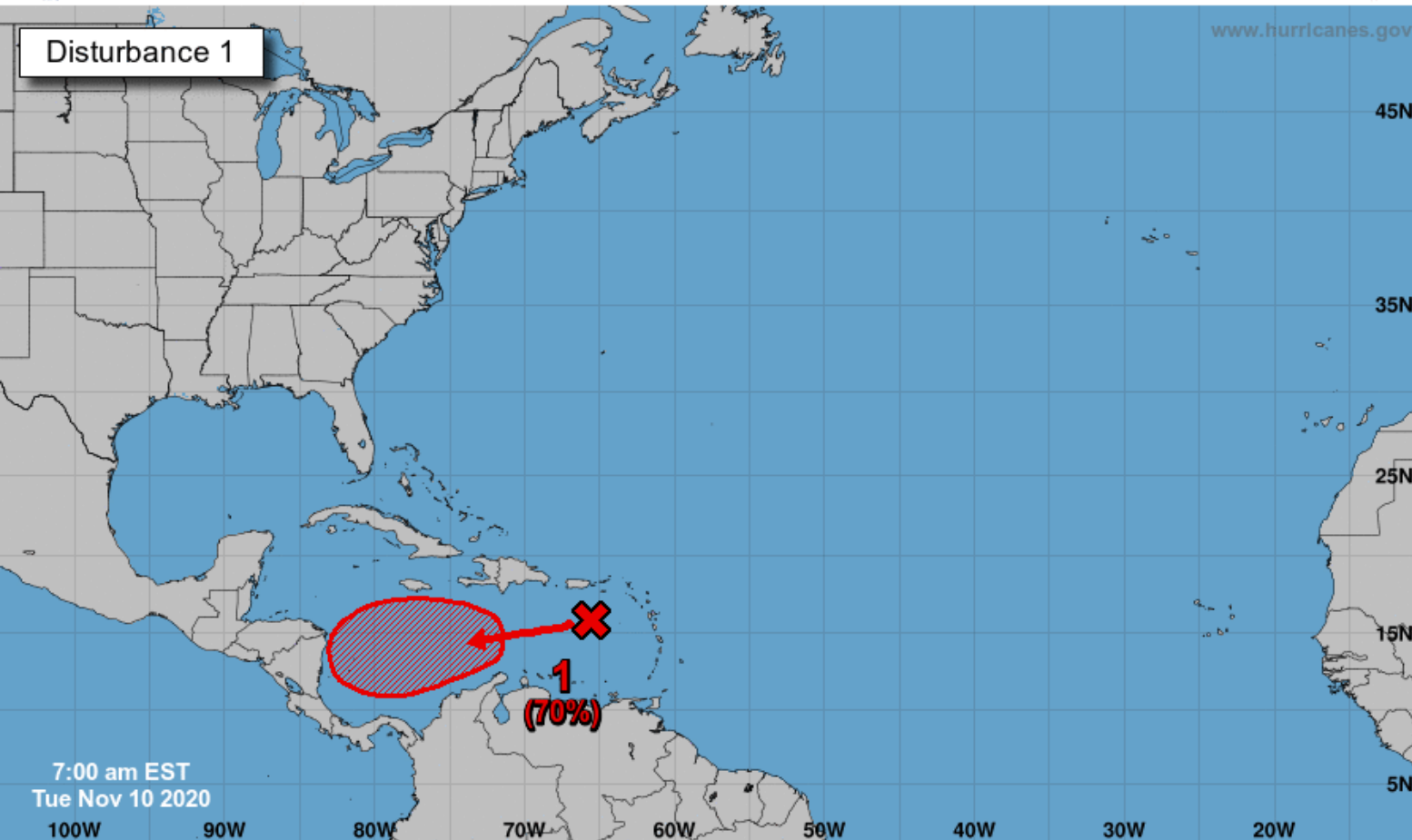
Tropical Weather Outlook

Possible Areas of Development During the Next 5 Days ([LINK](#))



Five-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida



A tropical wave located over the eastern Caribbean Sea is producing disorganized showers and thunderstorms.

The wave is expected to move westward into more conducive environmental conditions over the next several days, and a tropical depression is likely to form late this week or this weekend when the wave reaches the central or western Caribbean Sea.

This system is not expected to bring impacts to Florida over the next 7 days, if at all.

***Formation chance through 48 hrs...low...near 0%.**

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

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



Overall Summary

Tropical Storm Eta

- The center of Tropical Storm Eta is about 60 miles northwest of the western tip of Cuba and is currently stationary.
- Maximum sustained winds are near 60 mph, and Eta could still strengthen over the next 24-36 hours to near hurricane strength.
- Eta will gradually move northward, and the official forecast brings Eta slowly north toward the Gulf Coast of Florida this weekend.
- The environment will be hostile across the northern Gulf of Mexico, resulting in rapid weakening by this weekend. In fact, the system may dissipate entirely before it reaches the Panhandle.

Subtropical Storm Theta (formerly Invest 97L)

- The non-tropical area of low pressure over the Central Atlantic has acquired tropical characteristics. The National Hurricane Center has begun advisories on Subtropical Storm Theta.
- Theta is the 29th named storm of the season, beating the record set in 2005 of the most named storms in a single year.
- This system poses no threat to Florida, as it will continue eastward towards Portugal and Northwest Africa.

Caribbean Wave

- A tropical wave located over the eastern Caribbean Sea is producing disorganized showers and thunderstorms.
- The wave is expected to move westward into more conducive environmental conditions over the next several days, and a tropical depression is likely to form late this week or this weekend when the wave reaches the central/western Caribbean Sea.
- This system has a 0% (low) chance of formation during the next 48 hours but a 70% (high) chance during the next 5 days.
- This system is not expected to bring impacts to Florida over the next 7 days, if at all.



Florida Outlook

Florida Outlook:

- Tropical moisture remains in place across the Peninsula and heavy showers and thunderstorms will continue today.
- **Flood Watches** are in effect for all of South Florida (until this evening), and continuing until Wednesday evening for the coastal and metro areas of Miami-Dade, Broward, and Palm Beach.
- An additional 1-3" is forecast across the state over the next few days.
- Gusts to tropical-storm-force are still possible in the heavier rain bands today: 30-45 mph.
- **Coastal Flood Advisories & Statements:** Northeast, Southeast and Southwest Florida including the Florida Keys.
- Tides remain 1-2' above normal in these areas and minor flooding at high tide remains possible into tonight.
- Beach erosion and dangerous rip currents from high surf are expected at nearly all Florida beaches over the next few days.
- Eta will make its closest approach to the West Coast Wednesday Night and Thursday, with the system rapidly weakening as it nears the Panhandle and Big Bend this weekend.

The next tropics packet will be issued this afternoon with the 4 PM ET advisory. For the latest information on the tropics, please visit the National Hurricane Center website at www.hurricanes.gov.



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>