



TROPICAL UPDATE



4:00 PM EST

Friday, November 6, 2020

Tropical Storm Eta

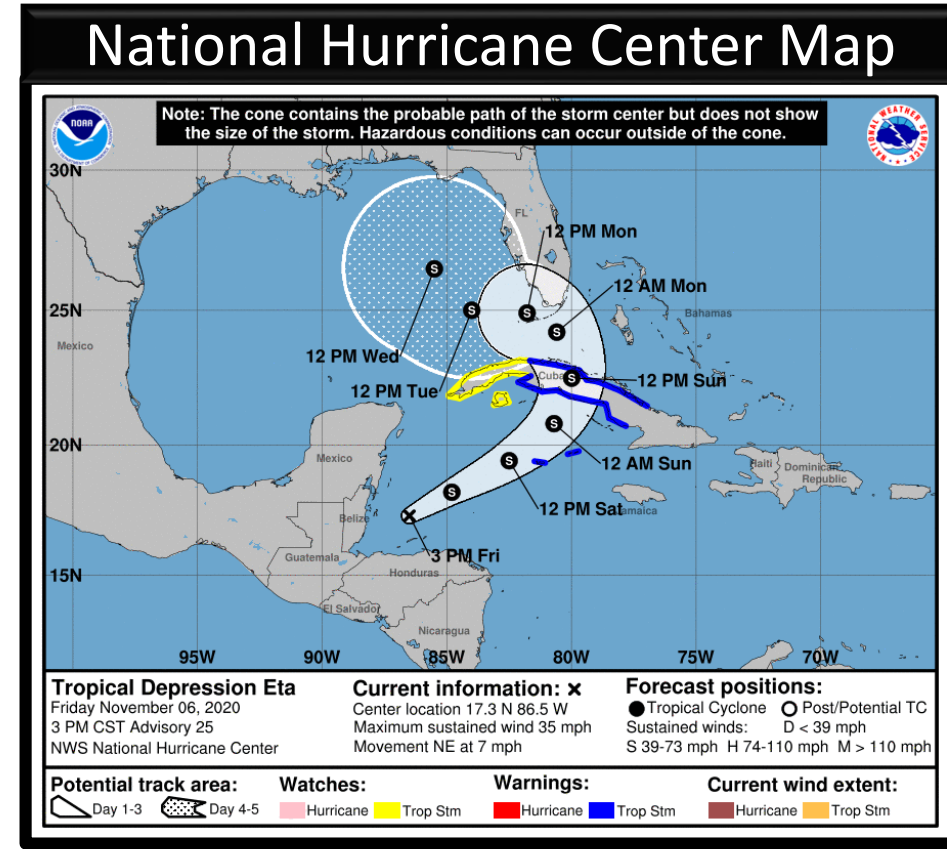
This update is intended for government and emergency response officials, and is provided for informational and situational awareness purposes only. Forecast conditions are subject to change based on a variety of environmental factors. For additional information, or for any life safety concerns with an 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.



Tropical Depression Eta

5 PM ET Friday: Florida Threats & Changes Since Last Packet

	MINIMAL	Low	MODERATE	HIGH	EXTREME
WINDS					
STORM SURGE					
FLASH FLOODING					
TORNADOES					
	Low	MODERATE	HIGH		
RIP CURRENTS					



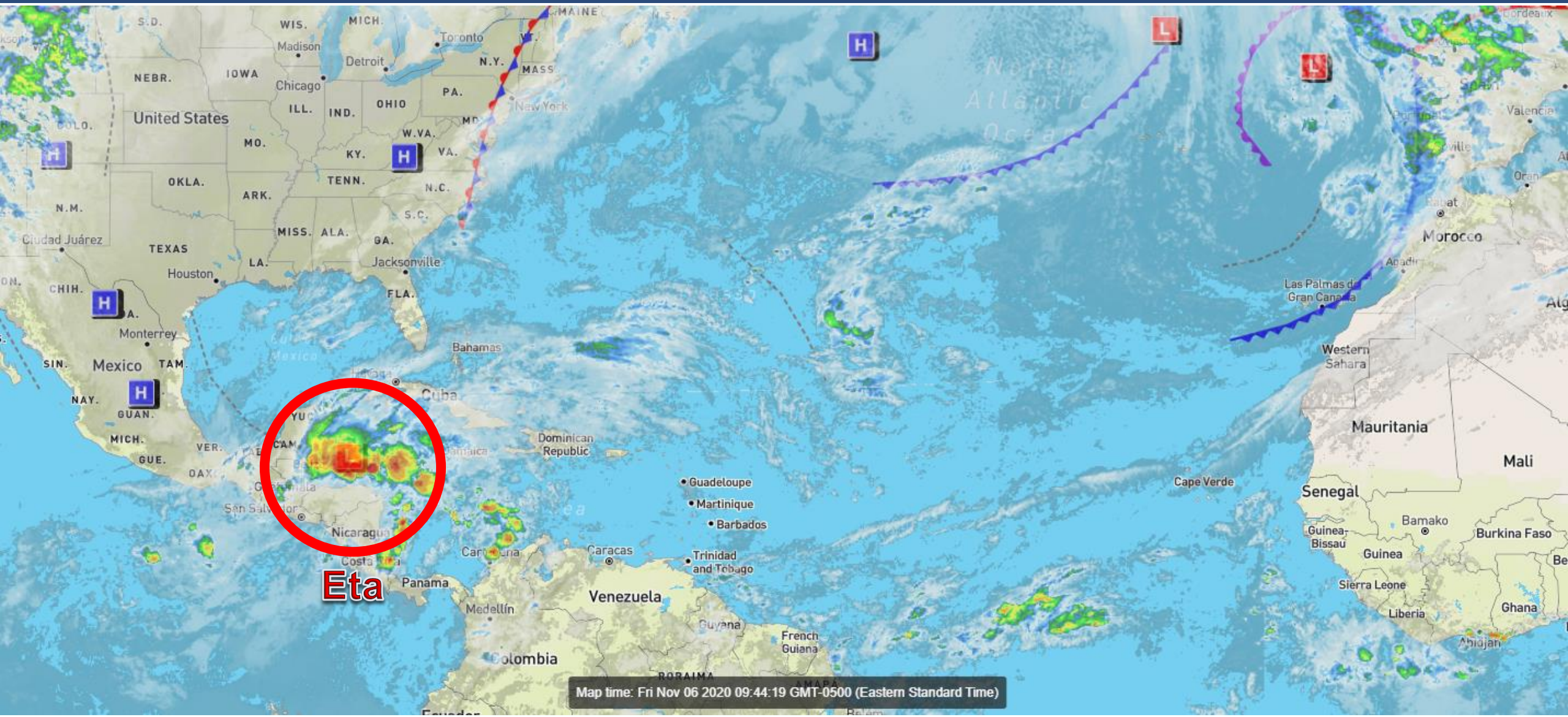
Overview/Recent Changes:

Eta's center has been located farther south by Hurricane Hunters this afternoon. Tropical Storm or Hurricane Watches could be issued later tonight for parts of South Florida and the Keys. 6-10" widespread rainfall totals with locally 15"+ are possible across South Florida and the Keys.



Atlantic Basin Satellite Image

Chance of development: None Low Medium High



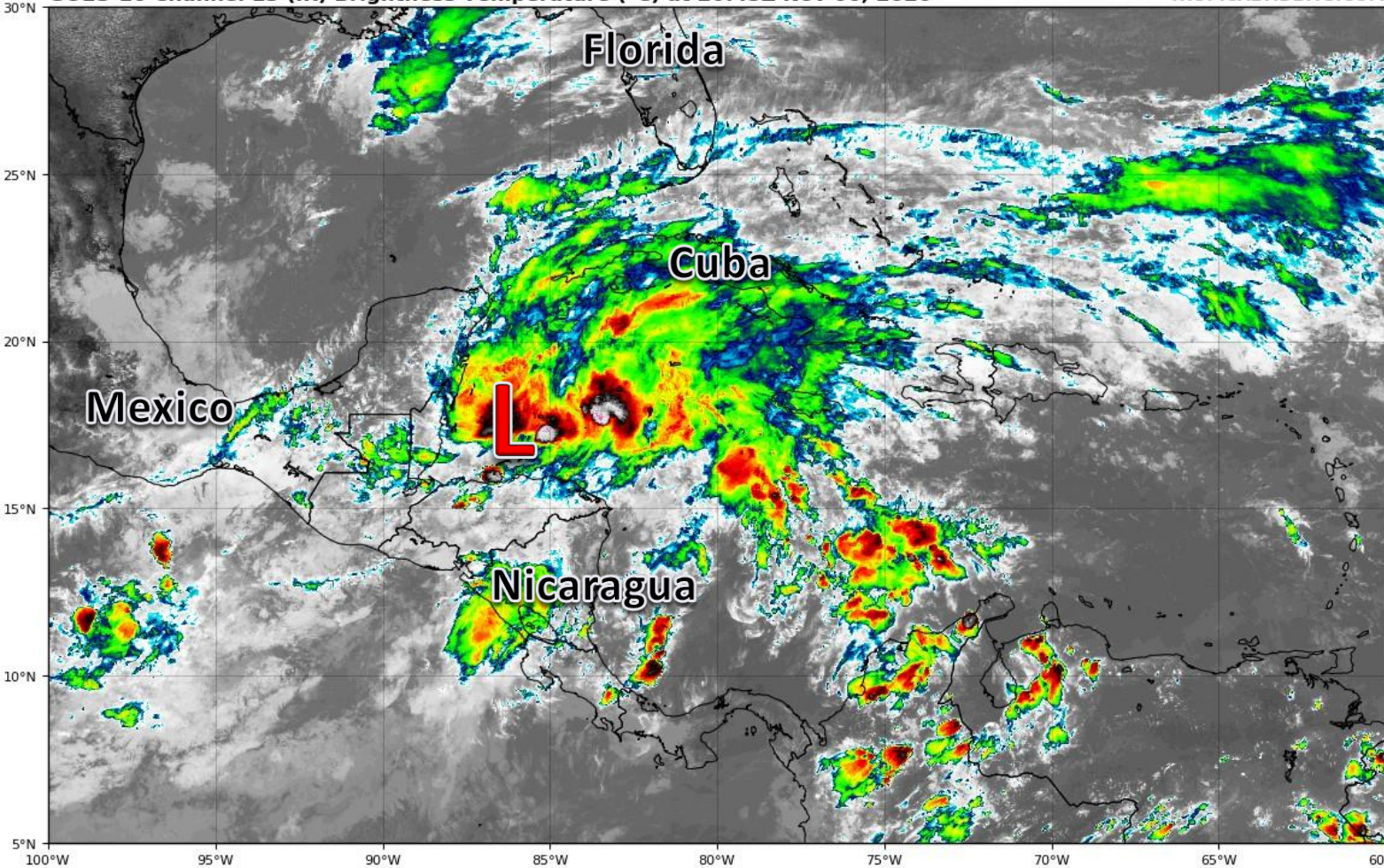


Satellite Imagery

Tropical Depression Eta – Western Caribbean

GOES-16 Channel 13 (IR) Brightness Temperature (°C) at 20:45Z Nov 06, 2020

TROPICALTIDBITS.COM

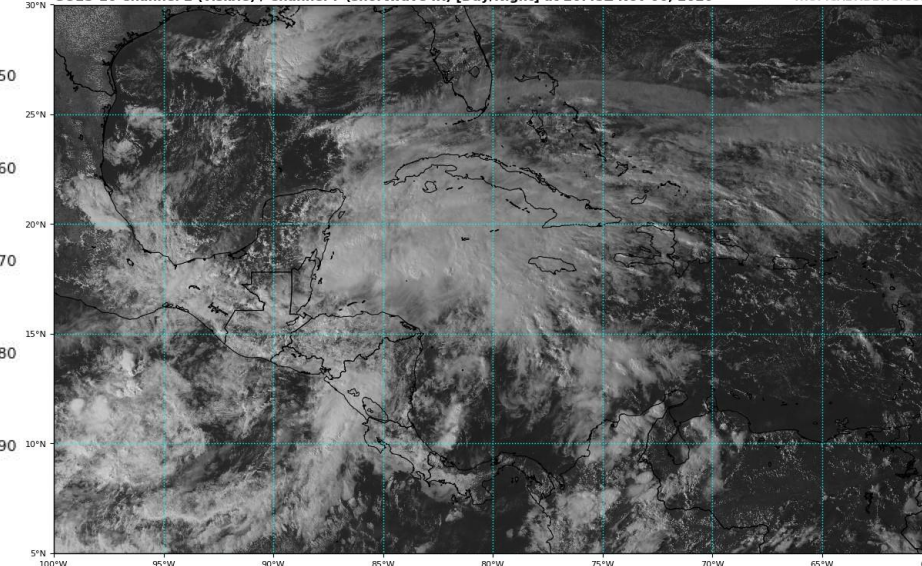


Hurricane Hunters have been investigating TD Eta this afternoon and found the center to be farther south.

Eta is a very broad system and most of the storms are displaced to the north and east of its center. This structure isn't expected to change much on its approach to Florida.

GOES-16 Channel 2 (visible) / Channel 7 (shortwave IR) [Day/Night] at 20:45Z Nov 06, 2020

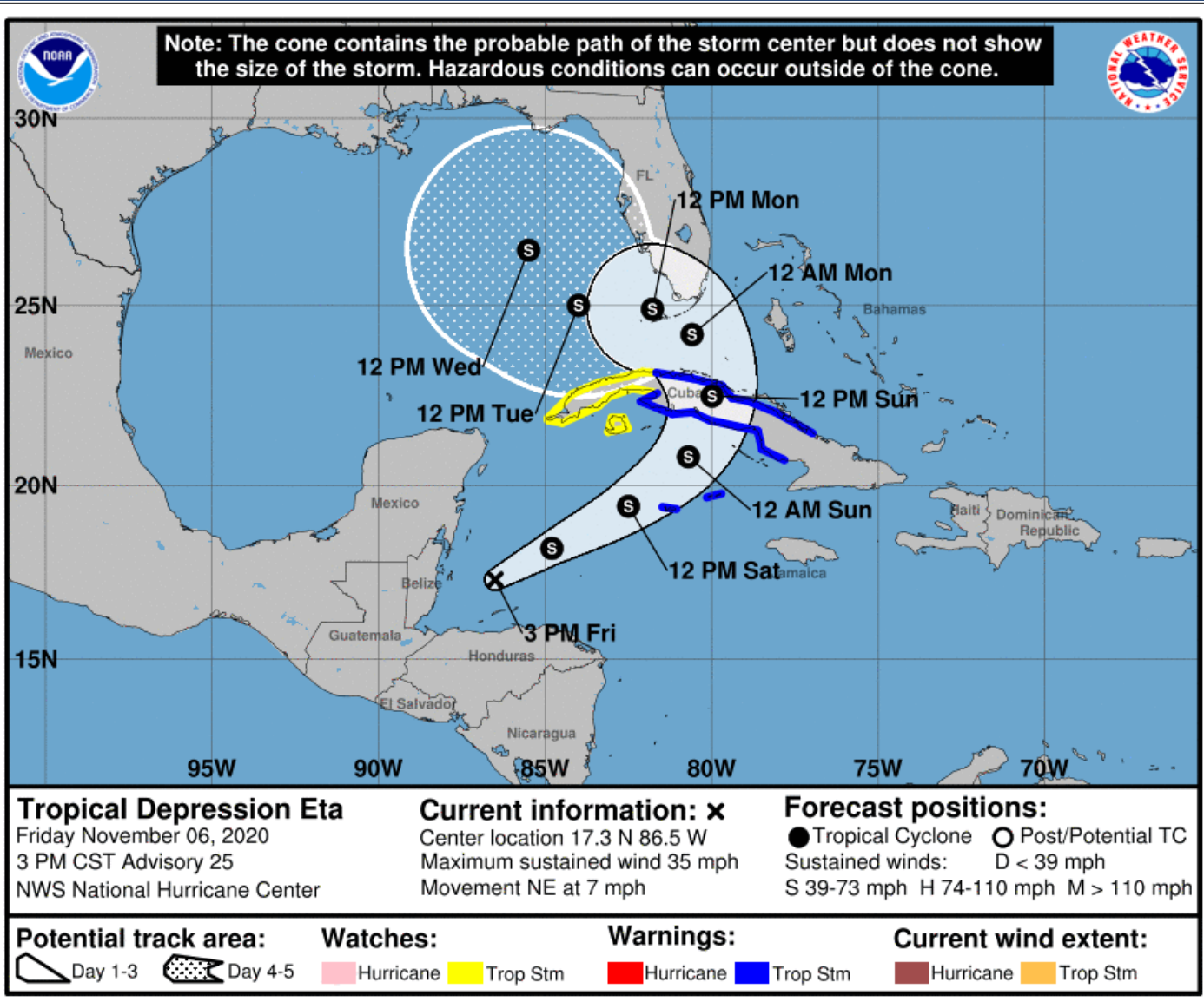
TROPICALTIDBITS.COM





Official Forecast Track

From the National Hurricane Center – Tropical Depression Eta



- The center of Eta is located about 115 miles east of Belize City, Belize, moving northeast at 7 mph.
- Maximum sustained winds are near 35 mph, and Eta is forecast to become a tropical storm tonight.
- Eta will be near Cuba Saturday night and Sunday, then be near or over South Florida and the Keys Sunday night or Monday.
- Tropical Storm or Hurricane Watches could be issued later tonight for parts of South Florida and the Keys.
- Once the storm is near or over South Florida and the Keys, Eta may turn more westward into the eastern Gulf of Mexico.
- The forecast is still somewhat uncertain as Eta remains a disorganized system.
- It's important to not focus too much on the cone as impacts will extend well outside of the cone.



Key Messages

From the National Hurricane Center



Key Messages for Tropical Depression Eta

Advisory 25: 3:00 PM CST Fri Nov 06, 2020



1. Heavy rainfall is diminishing across portions of Central America, although the threat of life-threatening flooding may continue, along with landslides in areas of higher terrain. Heavy rainfall from Eta will move into the Cayman islands and portions of Cuba, resulting in significant, life-threatening flash flooding and river flooding. Flash flooding and urban flooding is also possible for Jamaica and southeast Mexico.

2. Tropical storm conditions are expected this weekend in portions of the Cayman Islands and Cuba, where a Tropical Storm Warning is in effect.

3. There is an increasing risk of impacts from wind and flash and urban flooding due to heavy rainfall in portions of southern Florida, the Florida Keys, and portions of the Bahamas this weekend and early next week. Tropical Storm or Hurricane Watches will likely be issued for a portion of this area tonight.

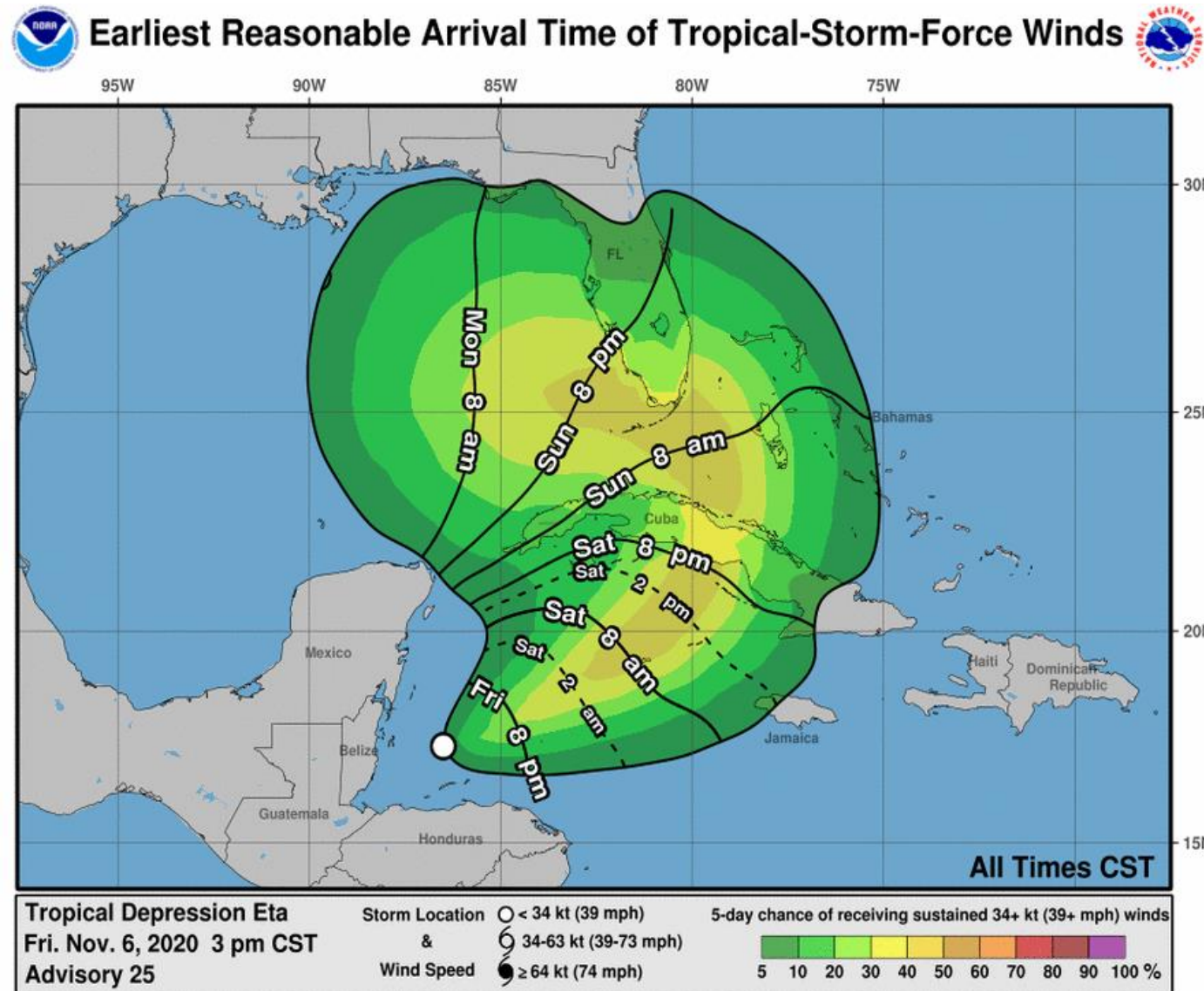


For more information go to hurricanes.gov



Time of Arrival & Wind Speed Probabilities

EARLIEST REASONABLE Time of Arrival of Tropical Storm Force Winds (>39 mph)



Key West: 41% (+7)

Marathon: 45% (+5)

Miami: 26% (-3)

Ft. Lauderdale: 36% (-3)

West Palm Beach: 27% (-5)

Naples: 40% (+2)

Ft. Myers: 20% (-2)

Tampa: 20% (-2)

Orlando: 9% (-2)

Apalachicola: 11% (+/-0)

Panama City: 10% (+/-0)

The numbers in parenthesis show the change in probability since the last briefing packet.

Tropical Storm conditions could start as early as Sunday afternoon in the Keys and South Florida, but is more likely to begin late Sunday Night. If the tropical storm conditions were to occur along the West Coast or coastal Big Bend, they would begin Monday or Monday night.



Flood Threat Overview

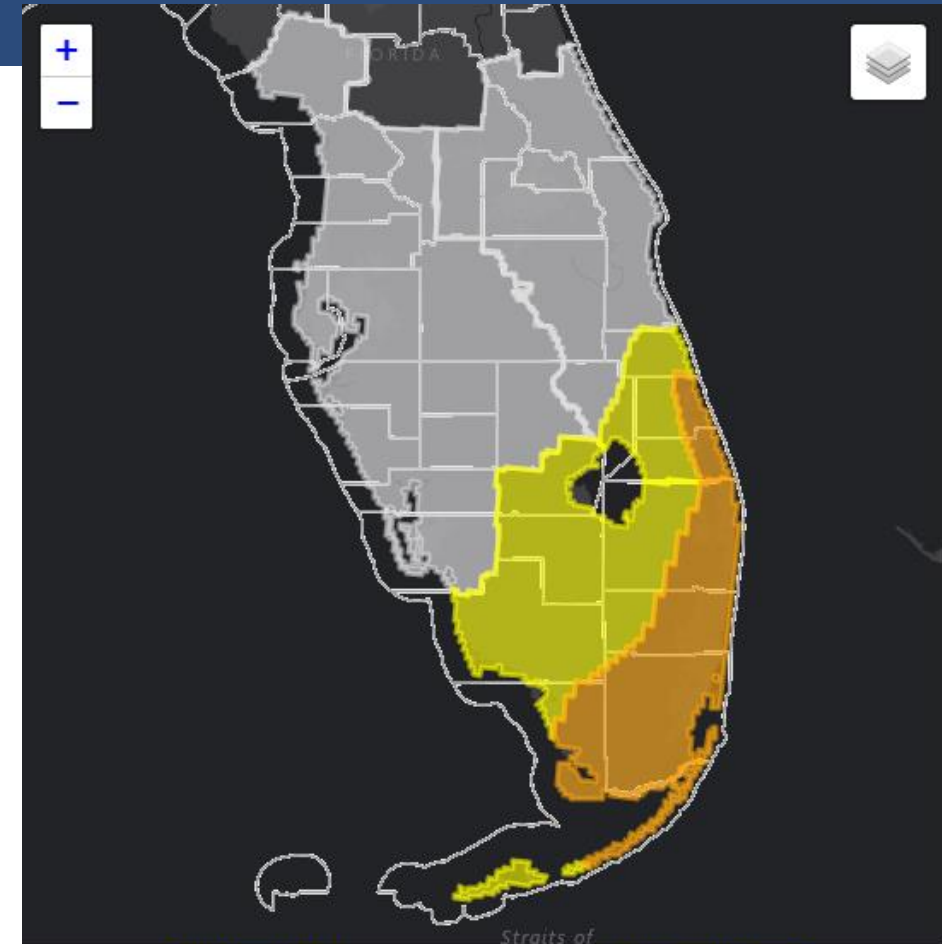
Tropical Depression Eta

The flood threat is greatest across Southeast Florida and the Treasure Coast, but flooding cannot be ruled out in the rest of South Florida.

Flood Watches are in effect for coastal Palm Beach, Broward, and Miami-Dade Counties.

[https://www.weather.gov/srh/tropical?
office=mfl](https://www.weather.gov/srh/tropical?office=mfl)

Click on “Threats and Impacts” Tab



[Download KML]

[Download Image]

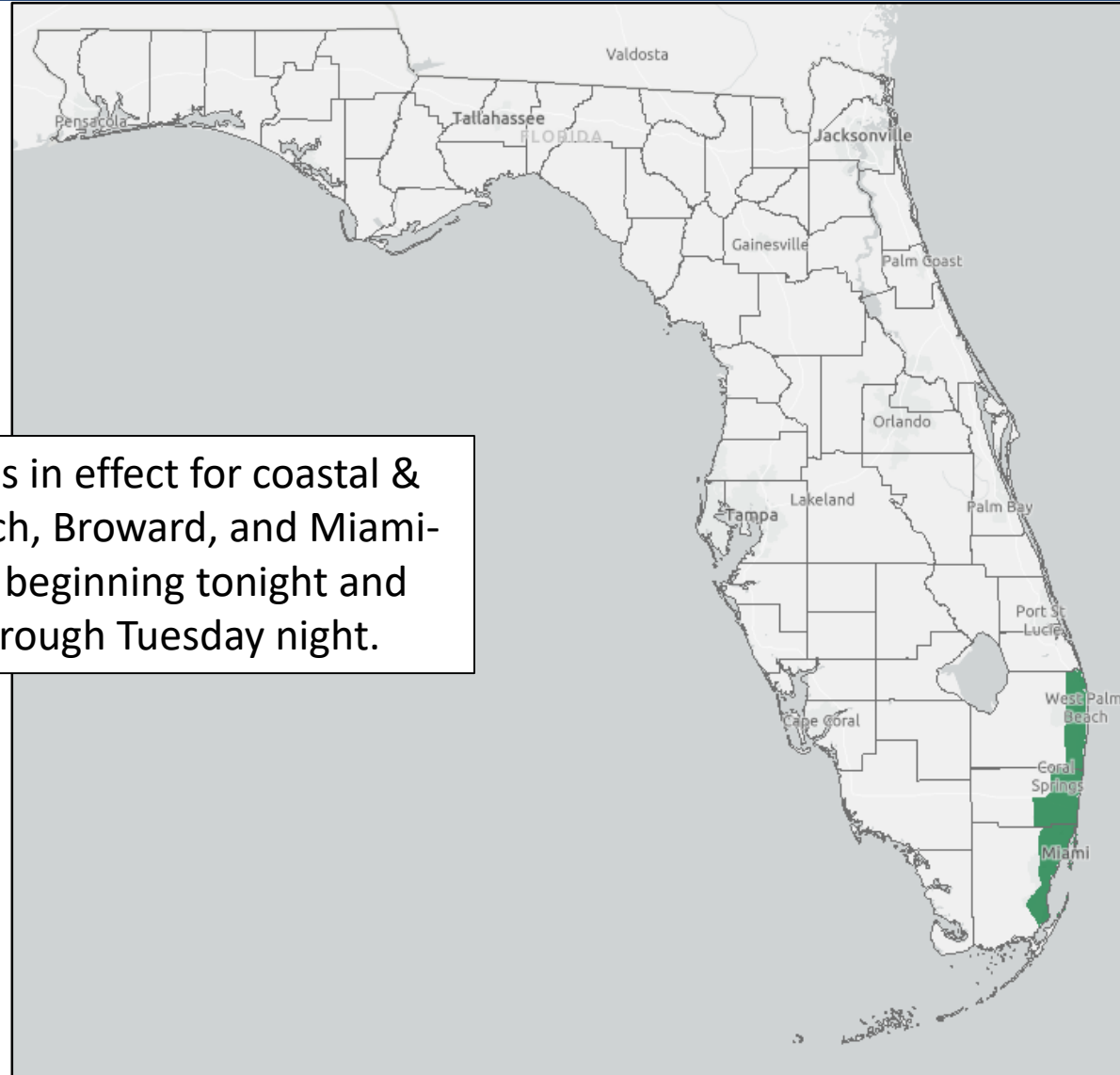
Flooding Rain Threat	
Potential for extreme flooding rain	
Potential for major flooding rain	
Potential for moderate flooding rain	
Potential for localized flooding rain	
Little to no potential for flooding rain	



Flood Watches

Links: [NWS Miami](#)

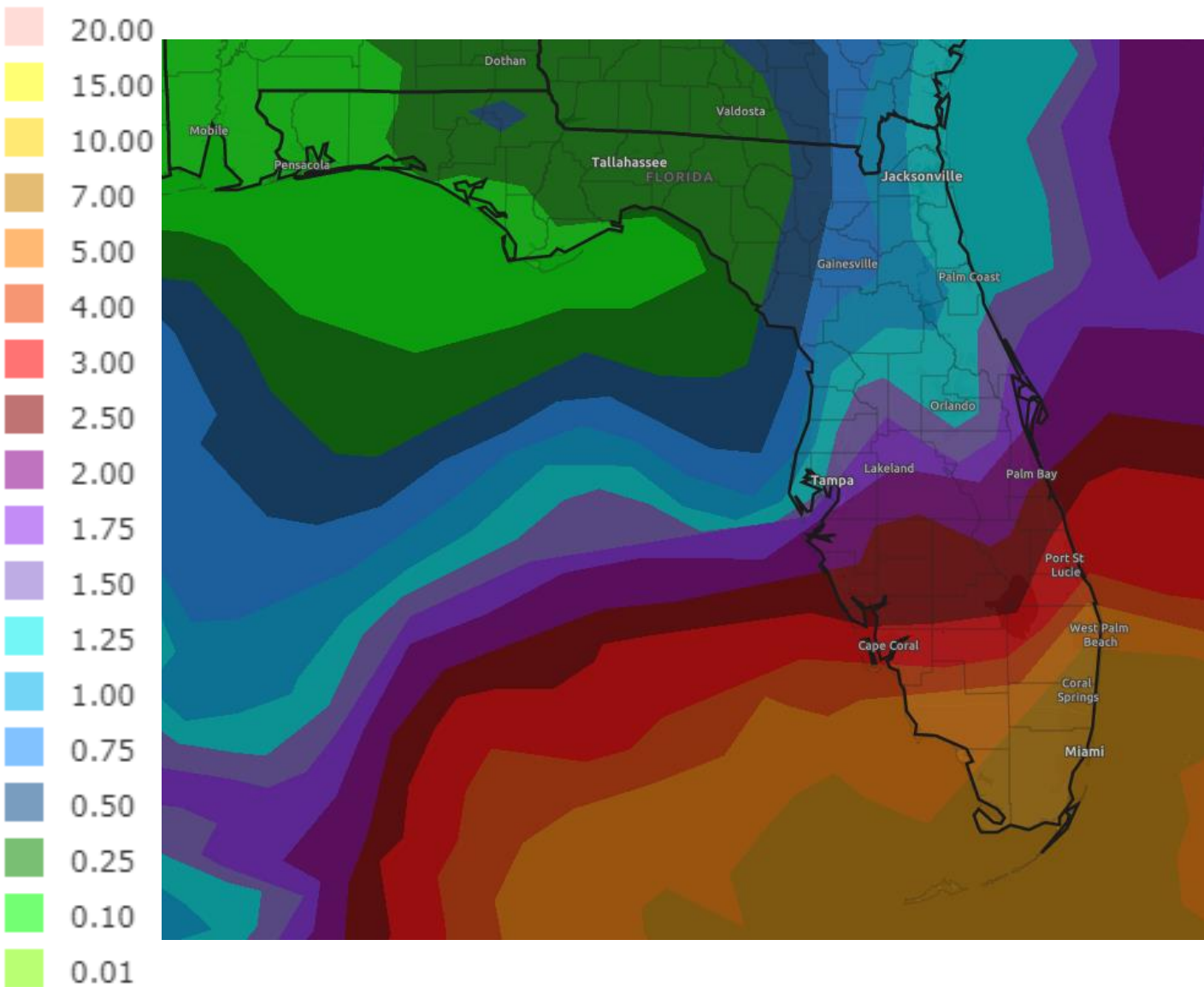
A Flood Watch is in effect for coastal & metro Palm Beach, Broward, and Miami-Dade Counties beginning tonight and continuing through Tuesday night.





Rainfall Totals Next 7 Days

Ending 7 PM ET Friday



As Eta approaches this weekend into early next week, additional heavy rainfall is likely across South Florida and the Keys, gradually spreading northward into next week.

There remains considerable uncertainty in the exact placement of the heavy rainfall. However, it appears that much of Eta's rainfall could be to the east of its center.

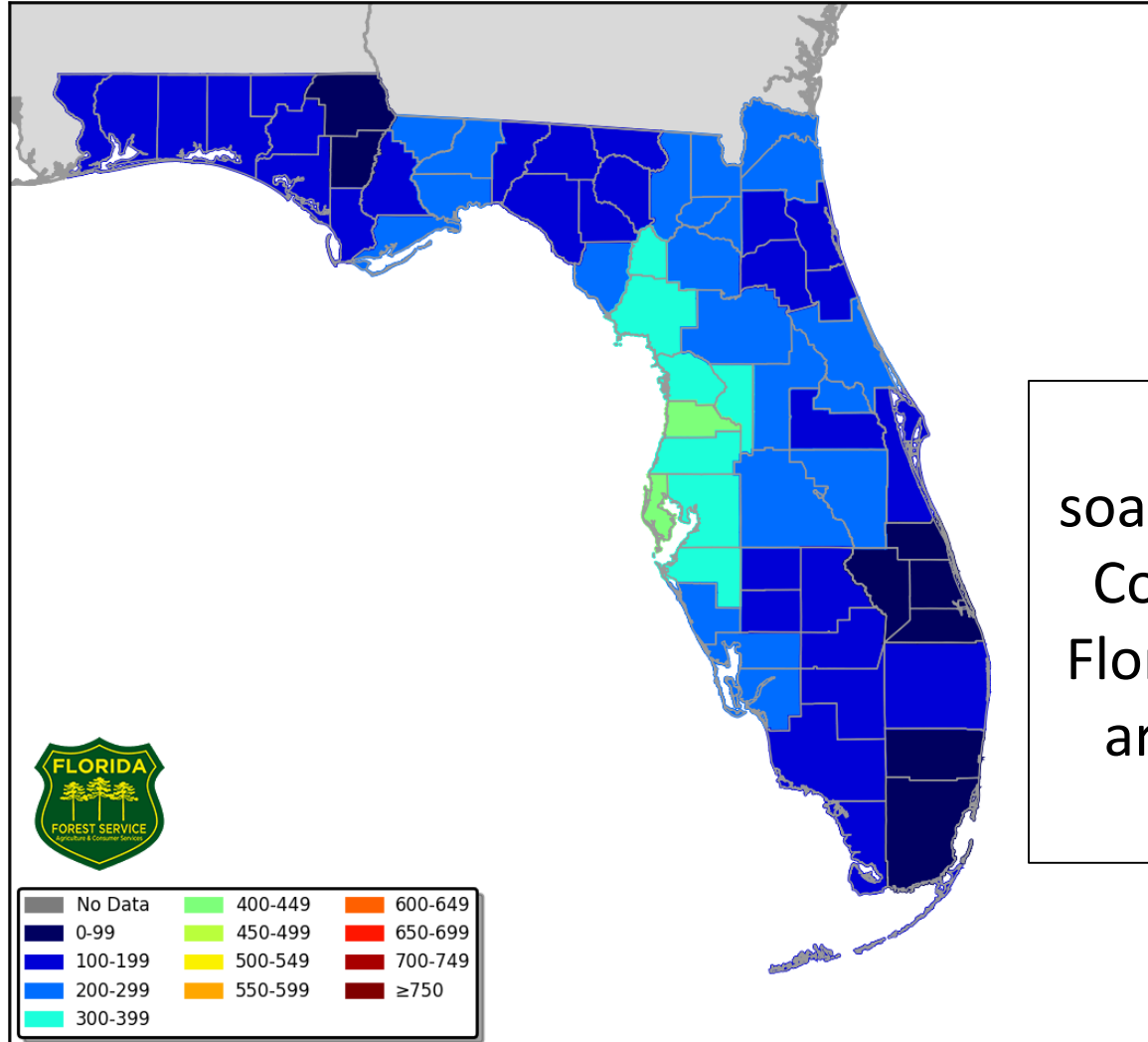
Combining rainfall from Eta and the stalled front, a widespread 6-10" of rain is possible across South Florida through early next week. Localized areas in South Florida and the Keys could see 15"+ of rain.



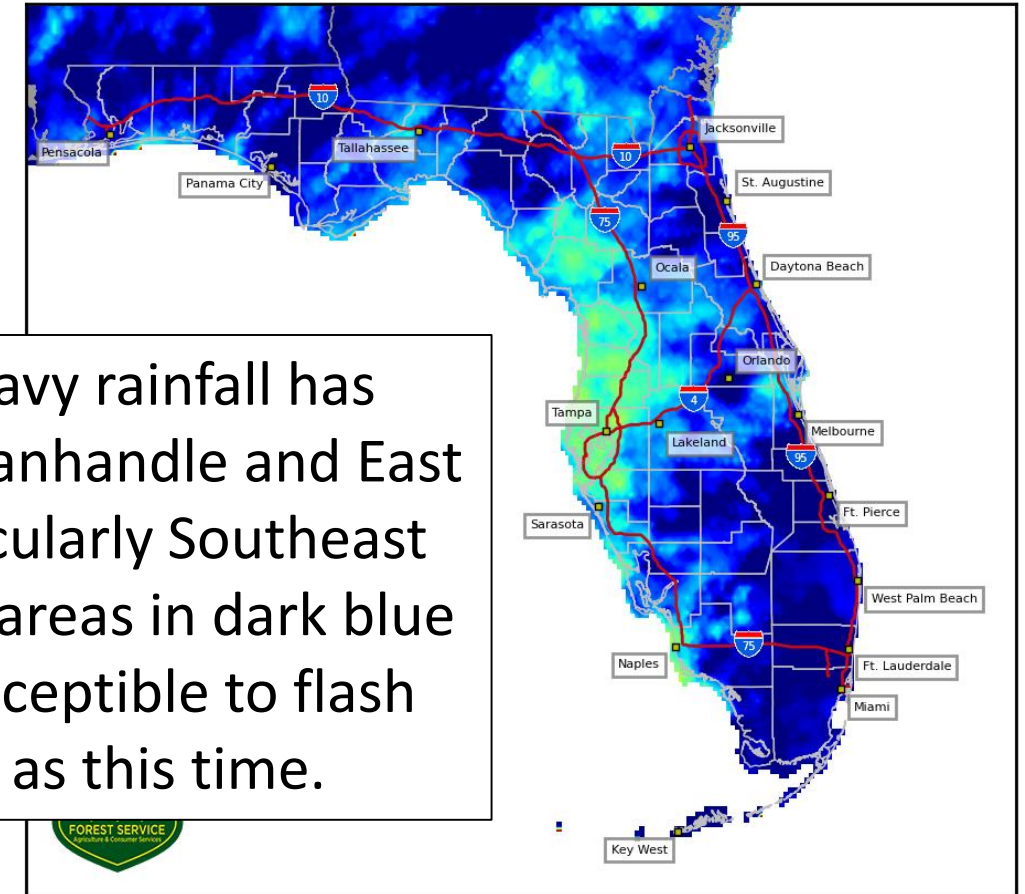
Drought Index – Soil Moisture

[KBDI – Full Report from the FFS](#)

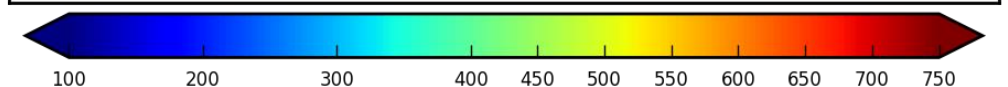
Keetch Byram Drought Index (KBDI)
County Averages for November 05, 2020



4 km Resolution KBDI
Statewide
November 05, 2020



Recent heavy rainfall has soaked The Panhandle and East Coast (particularly Southeast Florida). The areas in dark blue are very susceptible to flash flooding as this time.



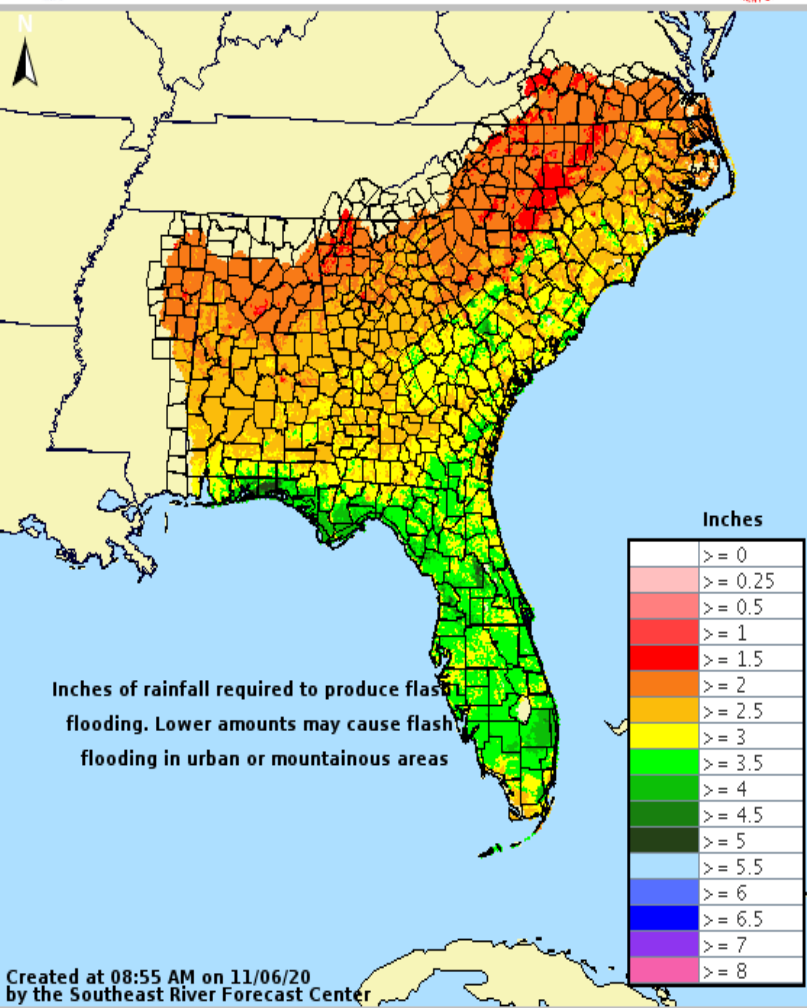



Flash Flood Guidance

How Much Rain is Needed to Create Flash Flooding?

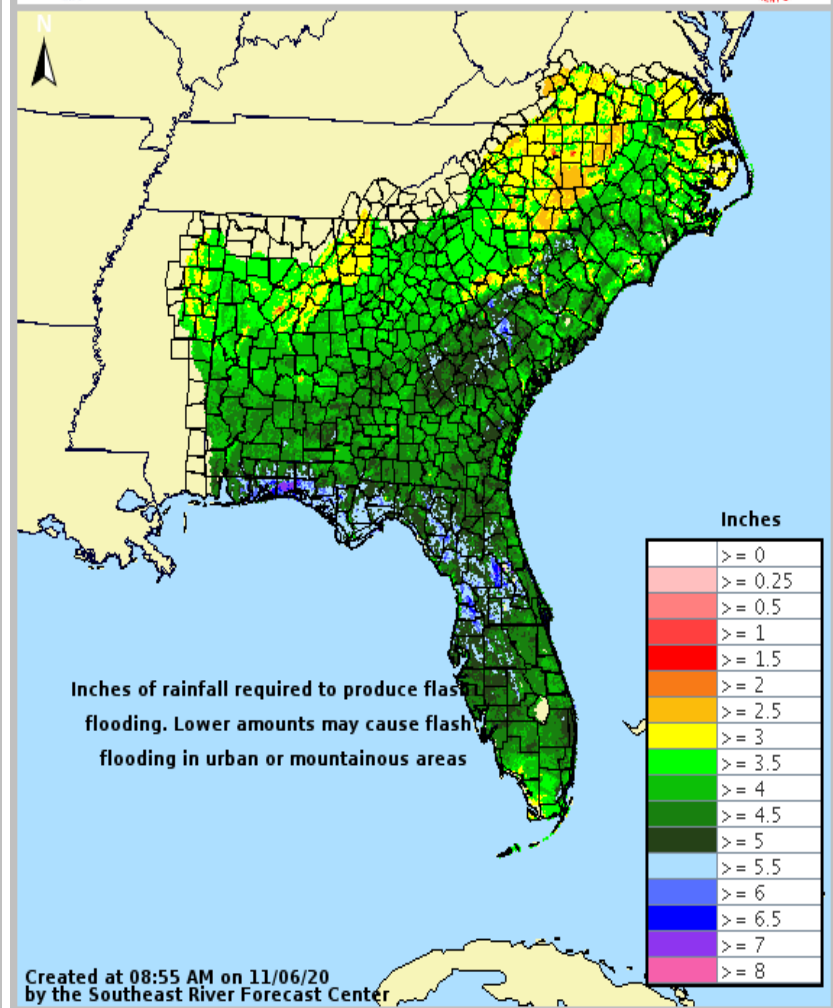
**1-hr Flash Flood Guidance**

Valid: 11/06/2020 @ 08:55 AM



**6-hr Flash Flood Guidance**

Valid: 11/06/2020 @ 08:55 AM



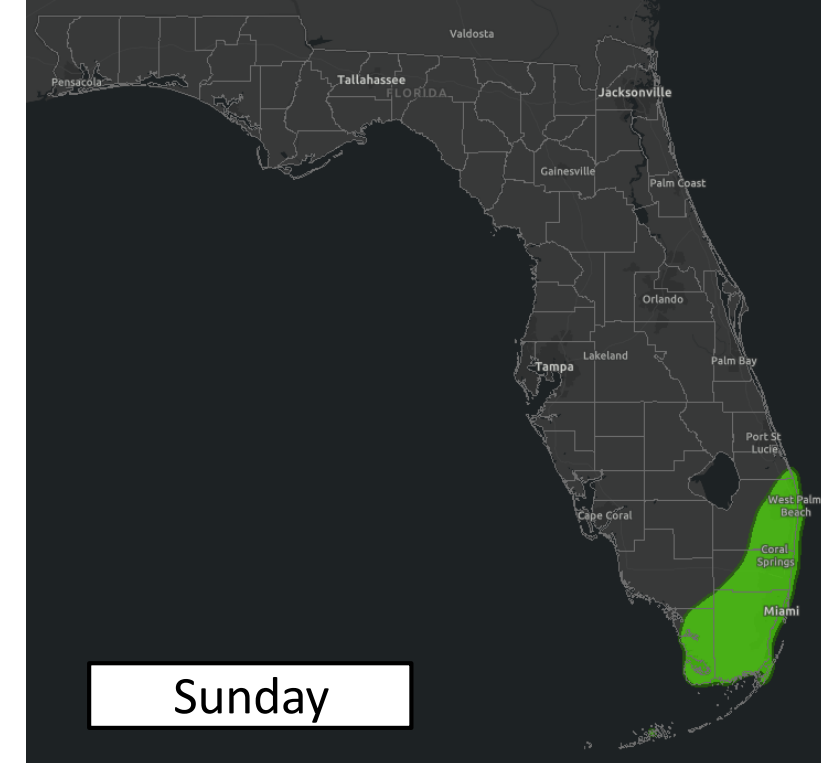
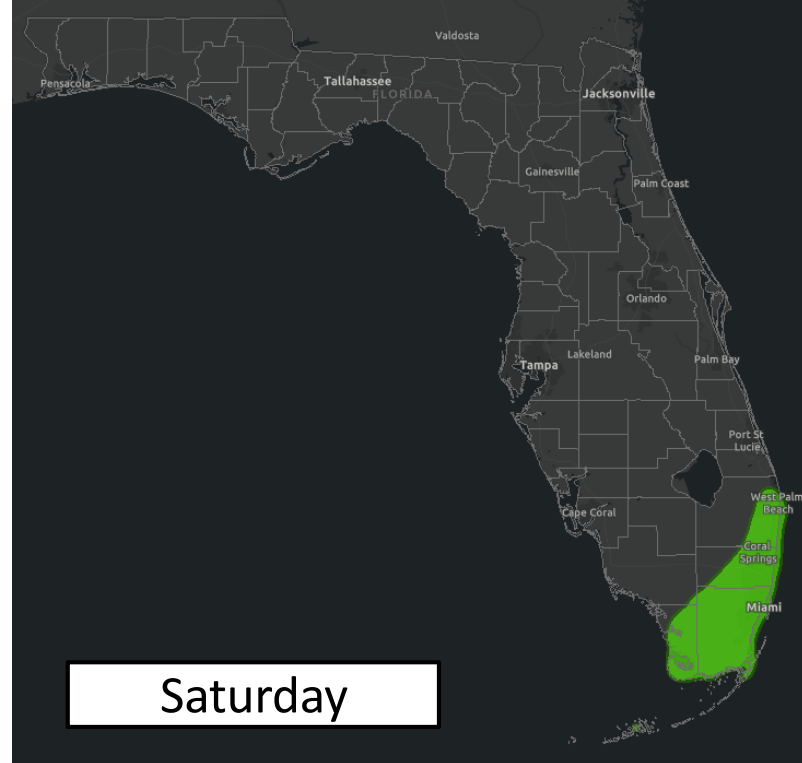
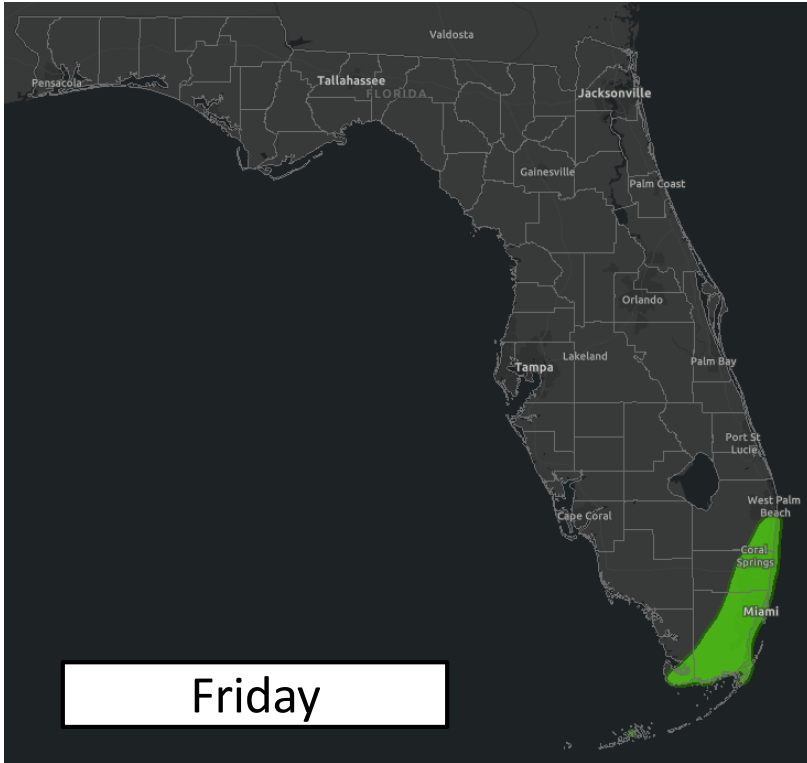
South Florida remains very wet from rainfall over the last several months. This area remains very prone to flooding.

It will take about 2-4" of rain within 1 hour or 3-5" of rain within 6 hours to cause flash flooding in these areas.



Flash Flood Outlooks

From the Weather Prediction Center



Risk of rainfall exceeding flash flood guidance within 25 miles of a point to the right of a line

HIGH: > 50%

SLGT: 10%-20%

MDT: 20%-50%

MRGL: 5%-10%



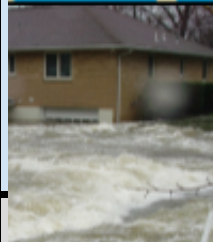
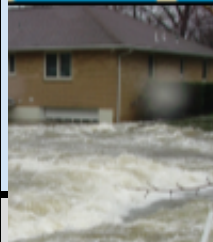
Training showers and thunderstorms could produce at least some flash flood potential across Southeast Florida over the next few days.



Flash Flood Risk Categories

Understanding the Weather Prediction Center Risk Scale

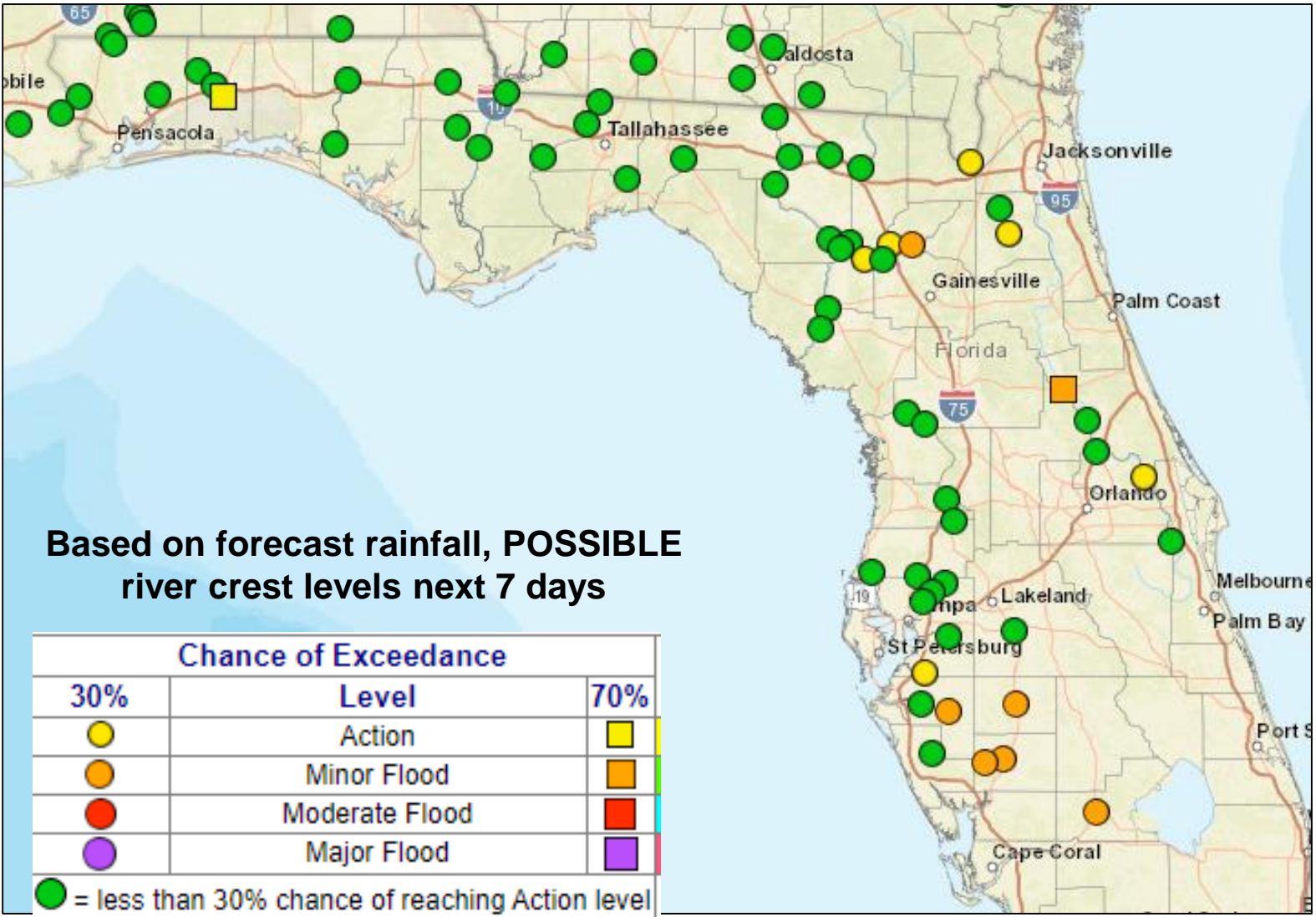
Understanding WPC Excessive Rainfall Risk Categories

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



Possible River Flooding

Chance of River Flooding Based on Range of Forecasted Rainfall



Some minor flooding is possible along some North and Central Florida rivers if heavier rainfall materializes. Myakka and Peace Rivers as well the Horse and Fisheating Creeks have about a 1 in 3 chance of reaching minor flood. The St. Johns River at Astor remains in minor flood through the next 5 days.

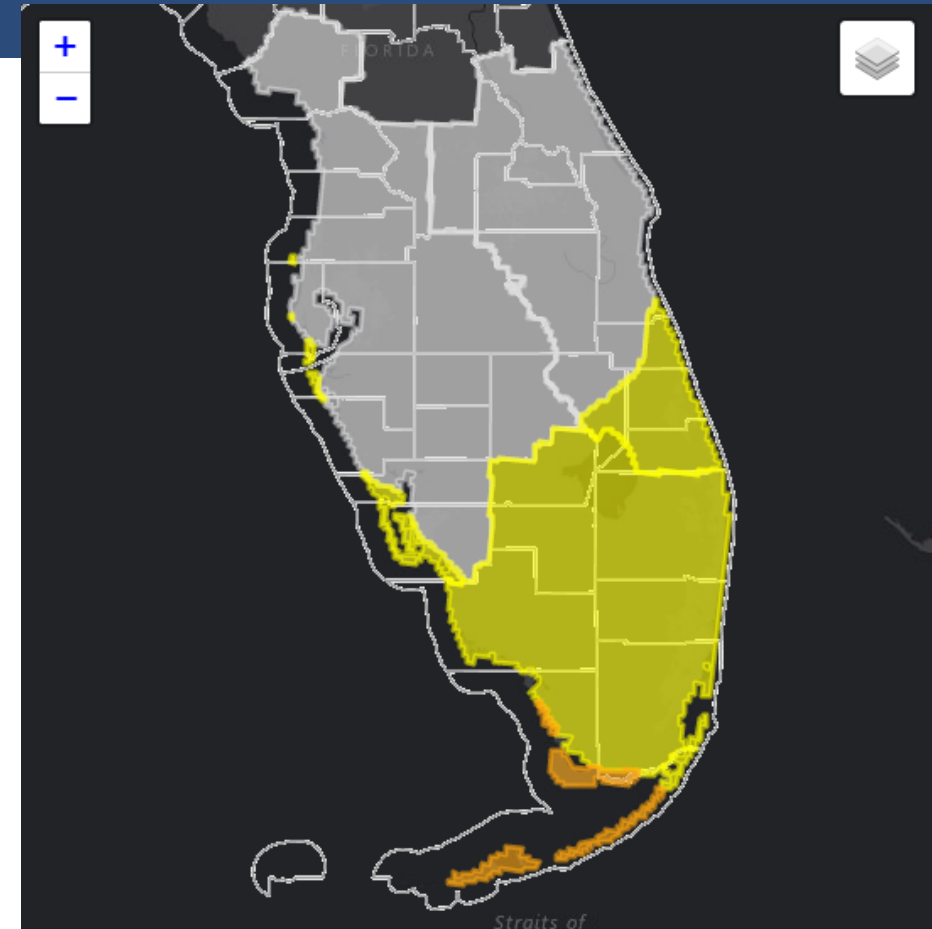


Damaging Wind Threat Overview

Tropical Depression Eta

The greatest wind threat is across the Florida Keys and the extreme southern tip of the Peninsula. Sustained winds of 50-60 mph are possible in these areas with gusts of 65-75 mph possible.

Across mainland South Florida and possibly the West Coast early next week, sustained winds of 35-50 mph with gusts up to 60 mph are possible.



[Download KML]

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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

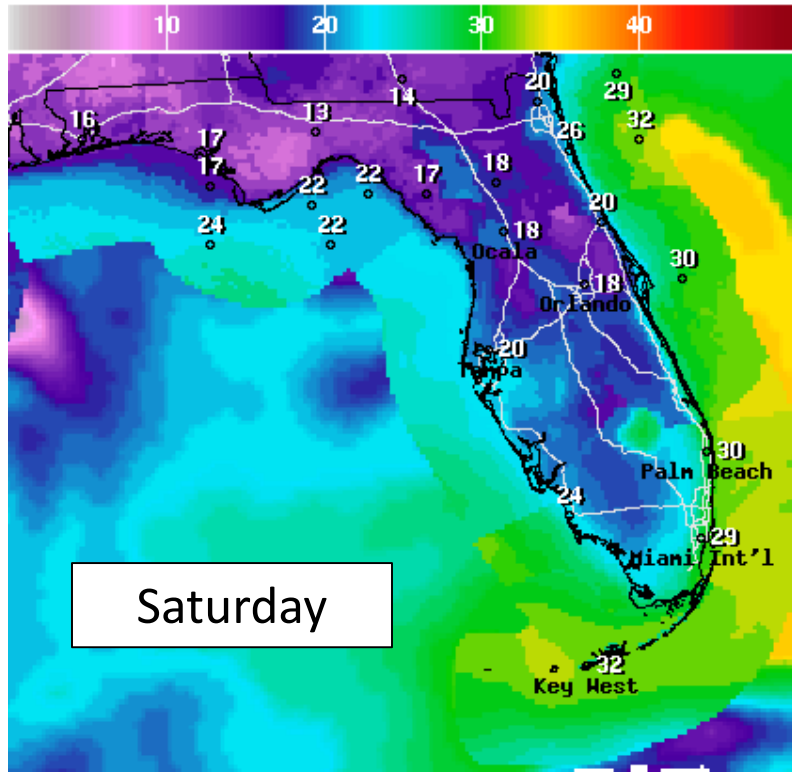
[https://www.weather.gov/srh/tropical?
office=mfl](https://www.weather.gov/srh/tropical?office=mfl)

Click on “Threats and Impacts” Tab



Forecast Wind Gusts

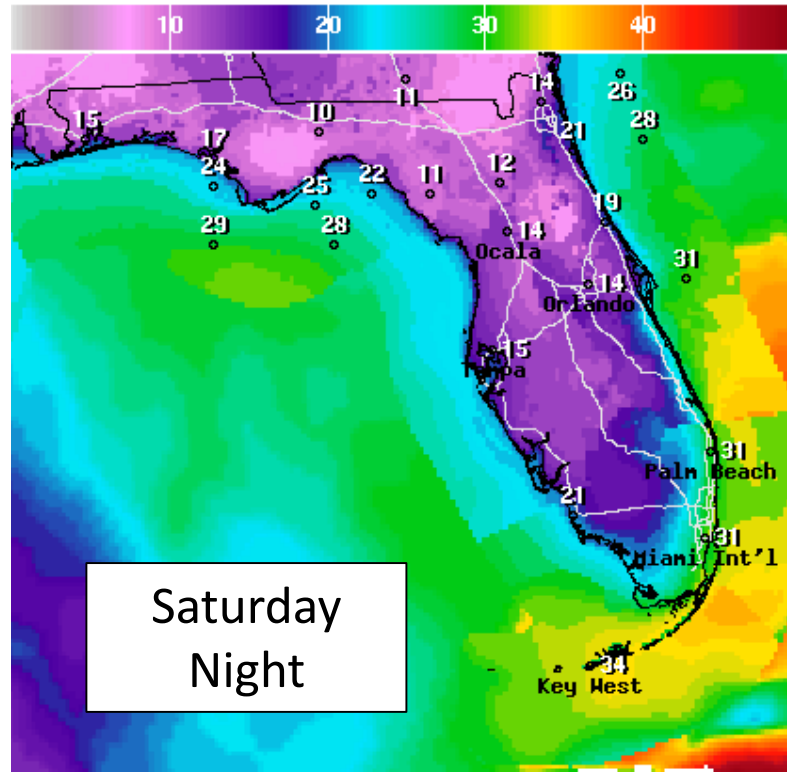
Through this Weekend



Wind Gust(Kts) Sat Nov 07 2020 4PM EST
(Sat Nov 07 2020 21Z)



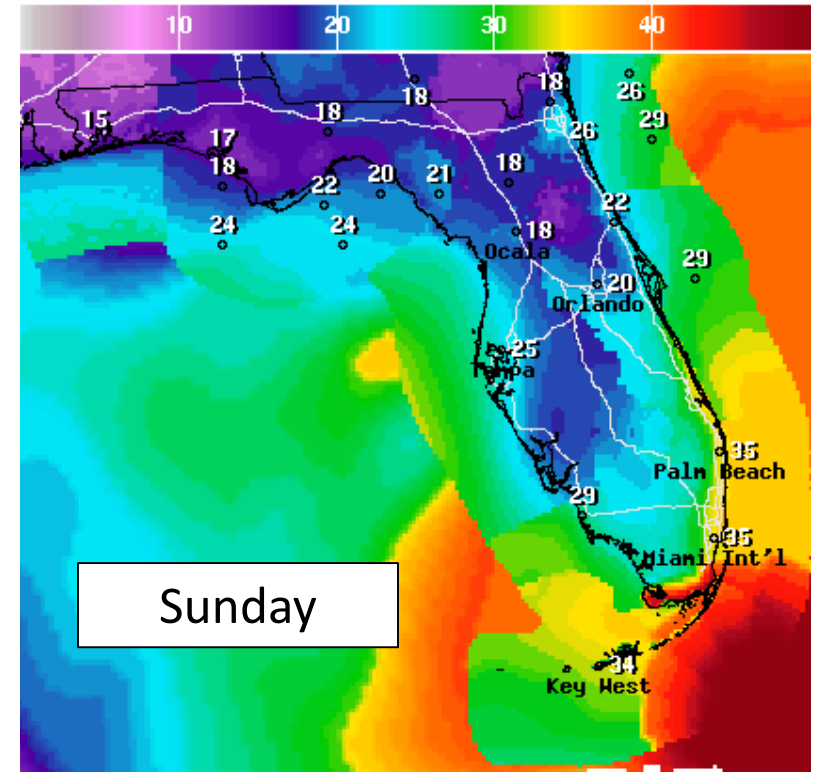
National Digital Forecast Database
19z issuance Graphic created-Nov 06 2:50PM EST



Wind Gust(Kts) Sun Nov 08 2020 4AM EST
(Sun Nov 08 2020 09Z)



National Digital Forecast Database
19z issuance Graphic created-Nov 06 2:51PM EST



Wind Gust(Kts) Sun Nov 08 2020 4PM EST
(Sun Nov 08 2020 21Z)



National Digital Forecast Database
19z issuance Graphic created-Nov 06 2:51PM EST



Winds will increase through Saturday and Saturday night with tropical storm conditions becoming possible very late Saturday night, but especially on Sunday.



Storm Surge Threat Overview

Tropical Depression Eta

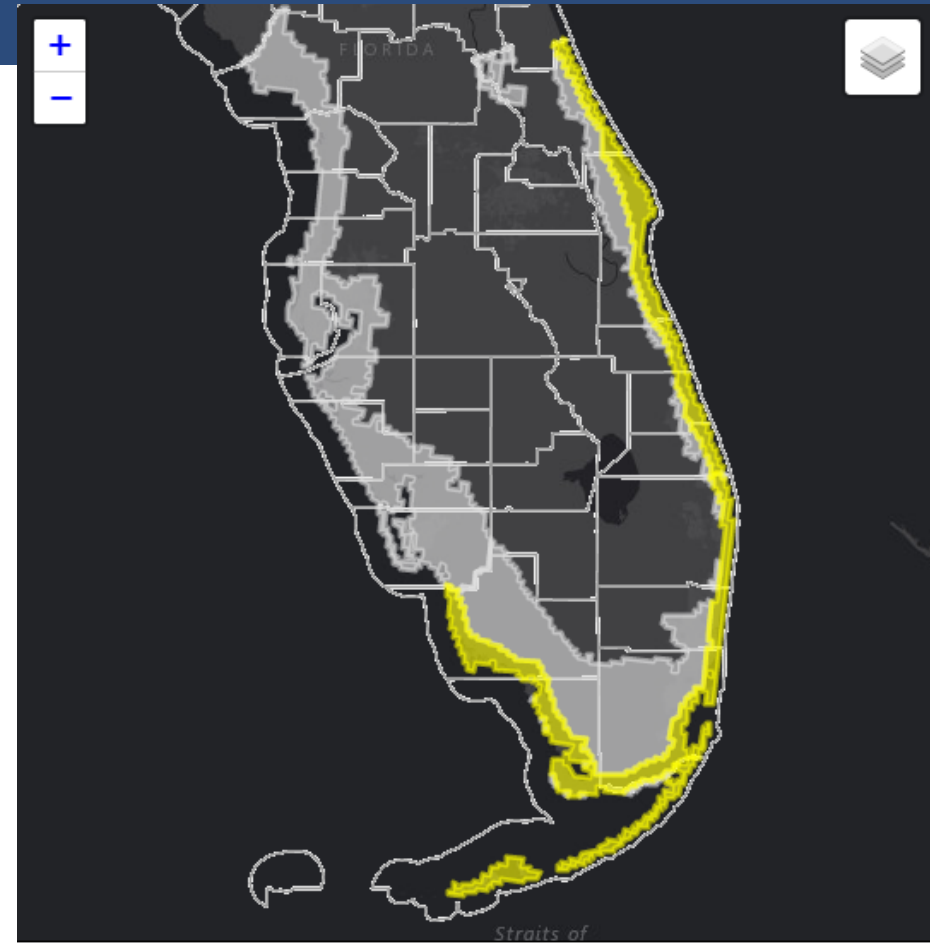
The greatest storm surge threat will be across South Florida and the Keys, though the risk could increase farther north depending on the track.

Current forecasts call for 1-3 feet of storm surge possible along the East Coast, through the Florida Keys, and across parts of Southwest Florida.

Tides are already running about 1' above normal in the Keys, which has resulted in some nuisance to minor flooding.

[https://www.weather.gov/srh/tropical?
office=mfl](https://www.weather.gov/srh/tropical?office=mfl)

Click on “Threats and Impacts” Tab



[\[Download KML\]](#)

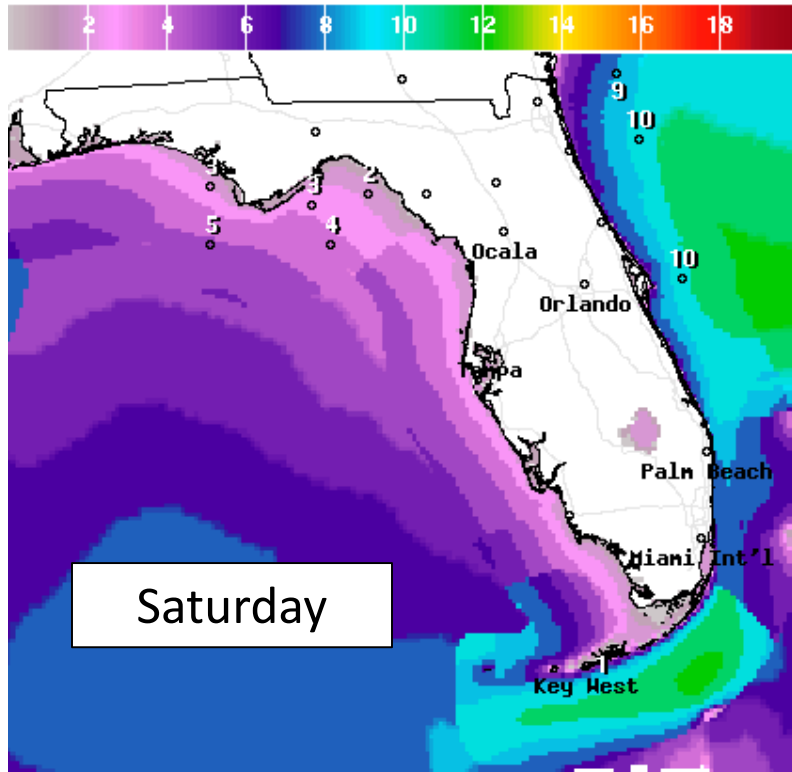
[\[Download Image\]](#)

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



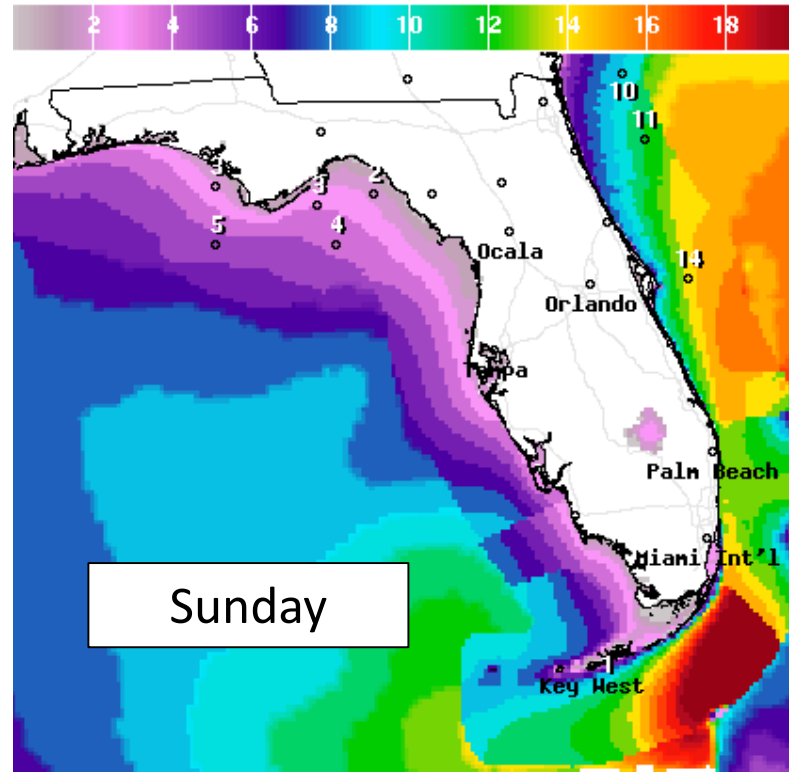
Forecast Wave Heights

Through this Weekend



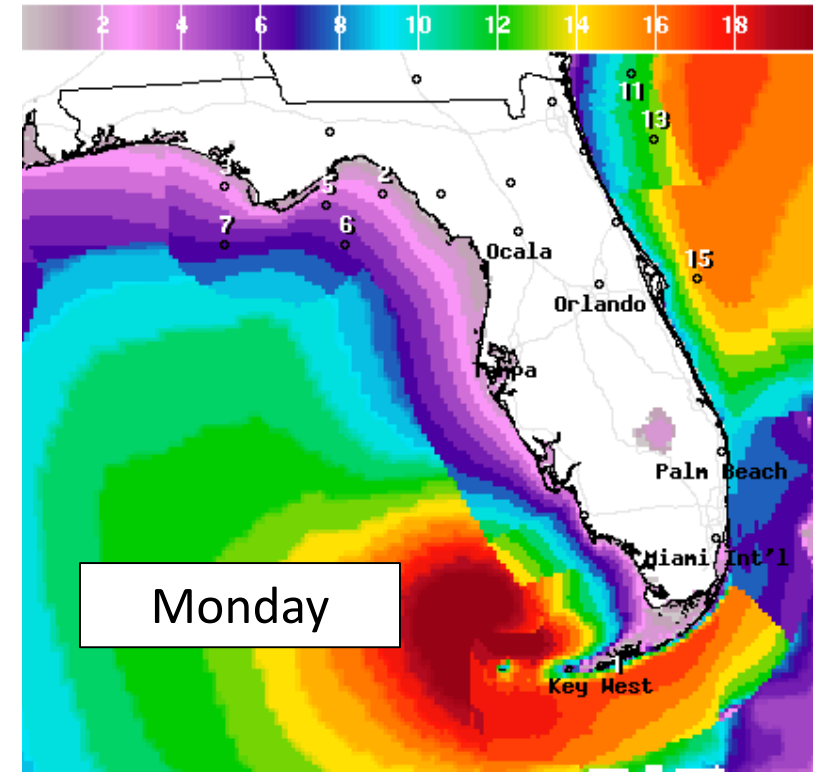
Saturday

Wave Height(ft) Ending Sat Nov 07 2020 7PM EST
(Sun Nov 08 2020 00Z)
National Digital Forecast Database
19z issuance Graphic created-Nov 06 2:28PM EST



Sunday

Wave Height(ft) Ending Sun Nov 08 2020 7PM EST
(Mon Nov 09 2020 00Z)
National Digital Forecast Database
19z issuance Graphic created-Nov 06 2:29PM EST



Monday

Wave Height(ft) Ending Mon Nov 09 2020 7PM EST
(Tue Nov 10 2020 00Z)
National Digital Forecast Database
19z issuance Graphic created-Nov 06 2:29PM EST

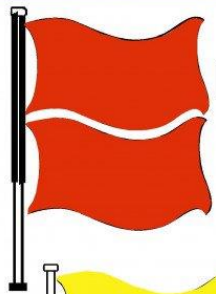
High surf of 7-15 feet will be possible along the East Coast, especially Sunday and Monday. Waves will begin to build in the Gulf later this weekend into next week.



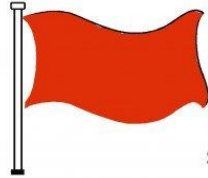
Rip Current Outlook

Today

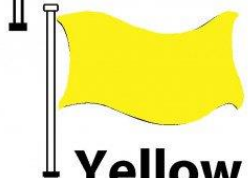
BEACH FLAG WARNING SYSTEM



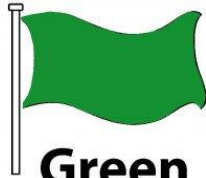
Double Red
Water Closed to
Public Use



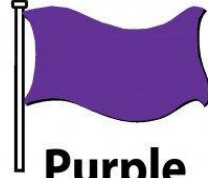
Red
High Hazard
(rough conditions,
such as strong surf
and or currents)



Yellow
Medium Hazard
(light surf and or
currents)

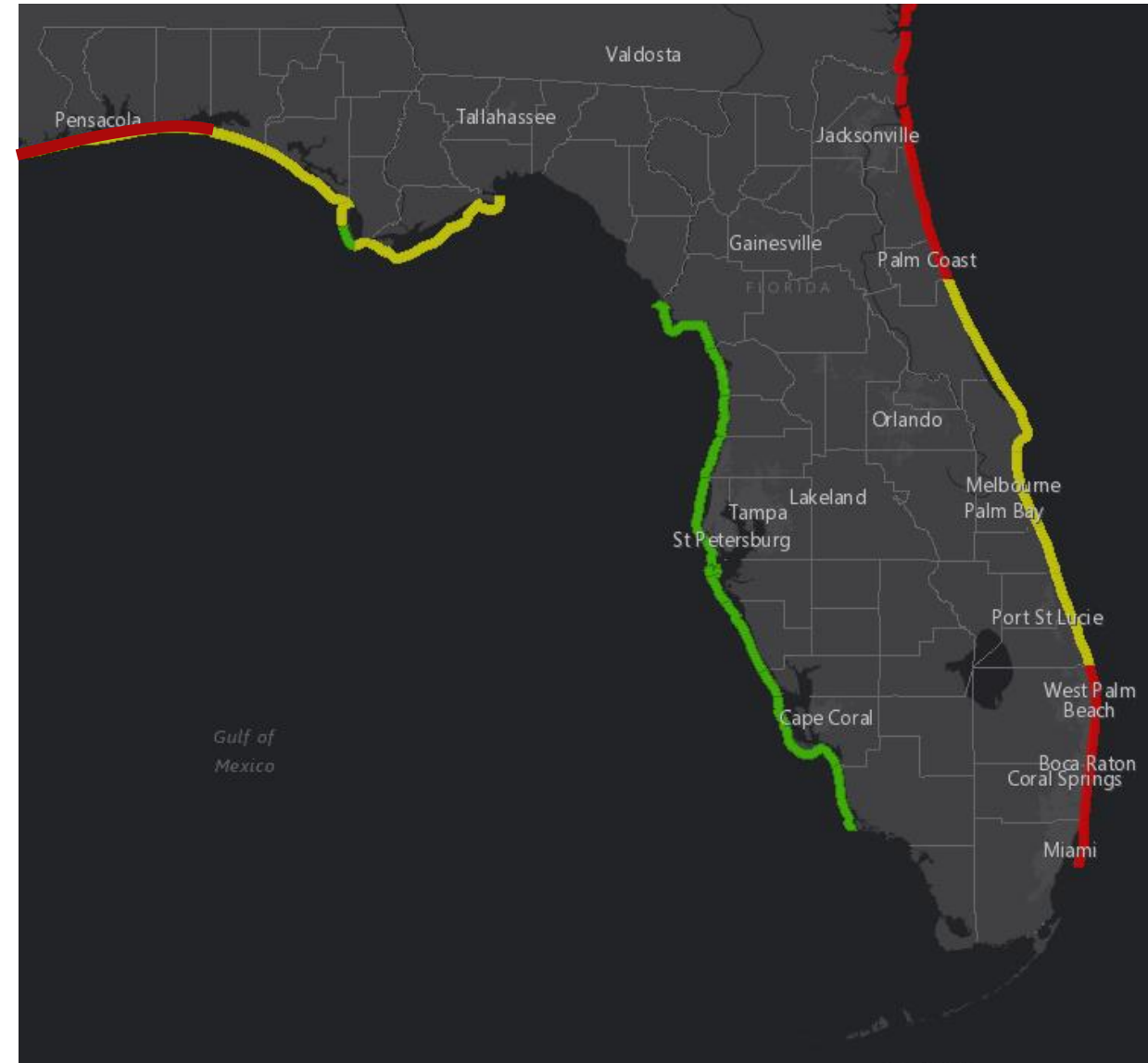


Green
Low Hazard
(calm conditions)



Purple
Marine Pest
(jellyfish, stingrays
& dangerous fish)

Dangerous rip currents continue due to strong easterly winds and rough surf.





Tornado Threat Overview

Tropical Depression Eta

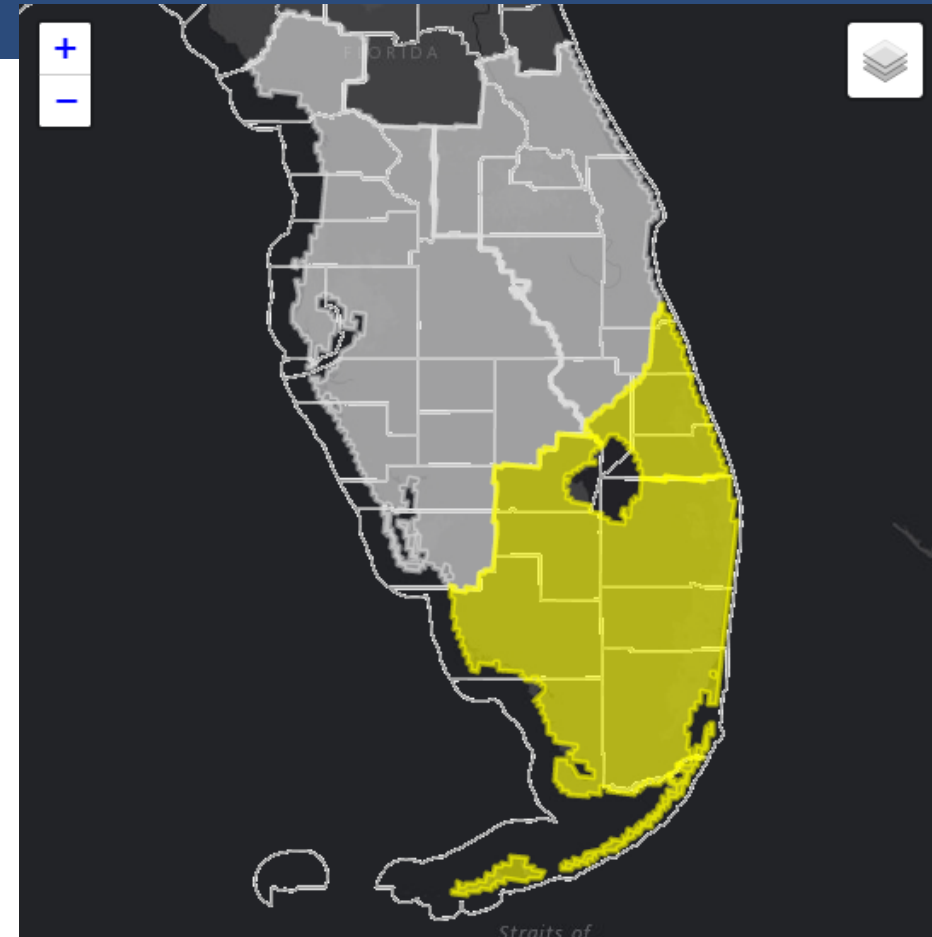
The greatest tornado threat is across South Florida and the Florida Keys, mainly Sunday, Monday, and possibly Tuesday.

Isolated tornadoes are possible in the outer rain band of Tropical Depression Eta.

Tornado Watch is in effect for coastal Escambia, Santa Rosa, and Okaloosa County.

[https://www.weather.gov/srh/tropical?
office=mfl](https://www.weather.gov/srh/tropical?office=mfl)

Click on “Threats and Impacts” Tab



[\[Download KML\]](#)

[\[Download Image\]](#)

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



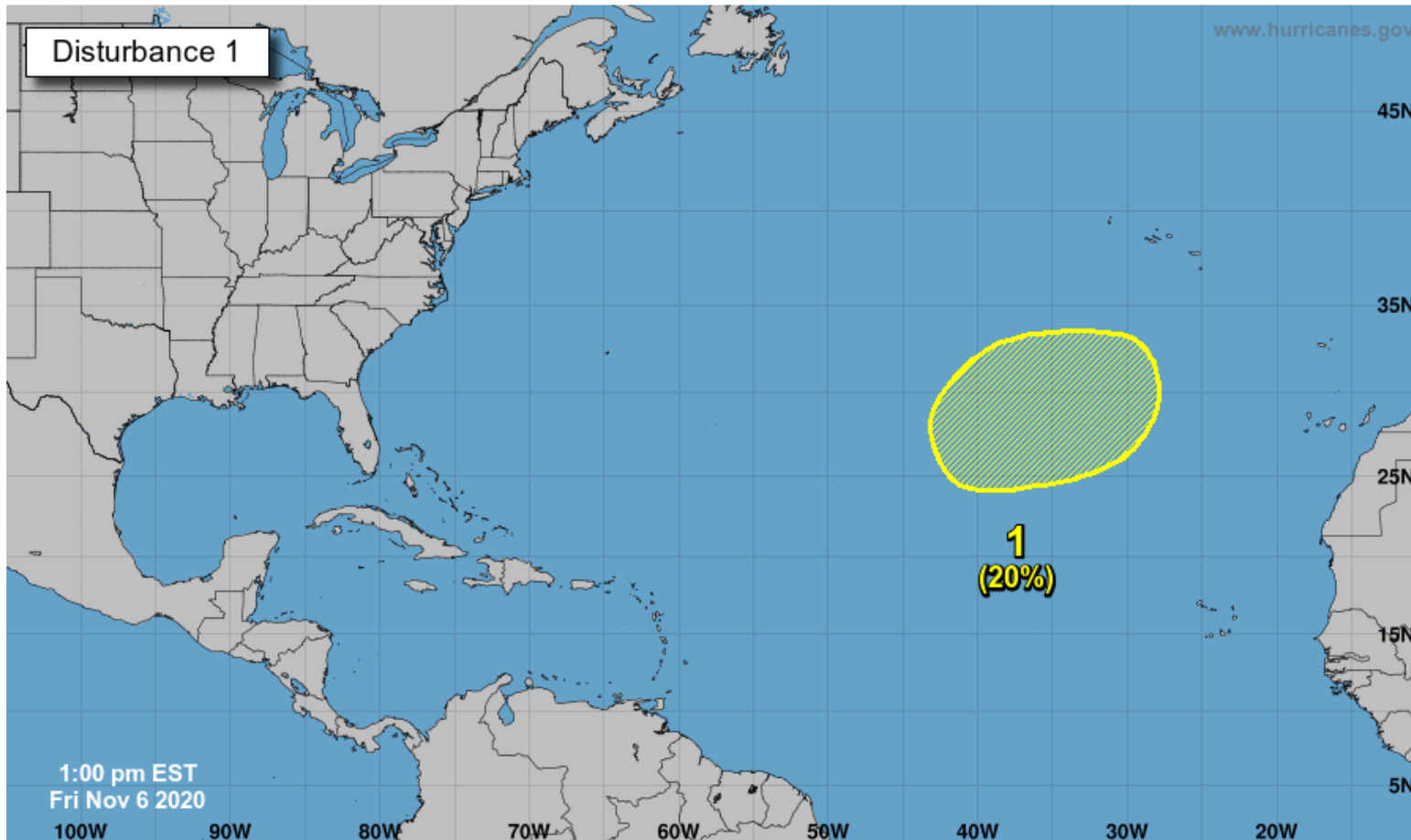
Tropical Weather Outlook

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



Five-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida



A broad non-tropical low pressure system could form several hundred miles southwest of the Azores early next week.

The system could gradually obtain some subtropical characteristics thereafter as it moves slowly northeastward over the northeastern Atlantic Ocean.

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

***Formation chance through 5 days...low...20%.**

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 Depression Eta

- The center of Eta is located about 115 miles east of Belize City, moving northeast at 7 mph.
- Maximum sustained winds are near 35 mph, and Eta should re-gain tropical storm intensity tonight.
- Eta will be near Cuba on Saturday night or Sunday, then be near or over South Florida and the Keys Sunday night into Monday.
- Once the storm is near the Florida Straits, Eta may move westward into the eastern Gulf of Mexico.
- Eta will begin turning more toward the northwest on Tuesday.
- The forecast remains somewhat uncertain. Disorganized systems tend to be difficult to forecast due to possible erratic movements and center reformations.
- The forecast in the Gulf of Mexico remains highly uncertain, but areas farther north in the state should continue to monitor.



Florida Outlook

Florida Outlook:

- **It is important to NOT focus on the exact track of Eta. Impacts will extend well beyond the cone away from the center.**
- Heavy rainfall and flash flooding will be the primary threat from Eta across South Florida and the Keys.
- 7-day rainfall totals could approach a widespread 6-10" with localized totals of 15"+ in South Florida and the Keys. Northward to the I-4 corridor, rainfall totals of 2-4" with localized totals over 6" are possible.
- Tropical-storm-force winds could begin as early as Sunday afternoon in the Keys and South Florida, but will likely begin late Sunday night.
- Tropical Storm or Hurricane Watches could be issued or tonight for parts of South Florida and the Keys.
- Isolated tornadoes will also be possible in any of the outer bands, possibly beginning as early as Saturday night into Sunday across South Florida and the Keys.
- 1-3' of storm surge is possible across South Florida and the Keys. The surge threat farther north remains unknown.
- Beach erosion and dangerous rip currents from very high surf are expected along the East Coast.
- This system could impact other parts of the state farther north. However, details there become highly uncertain.

The next tropics packet will be issued Saturday morning with the 10AM ET Advisory. For the latest information on the tropics, please visit the National Hurricane Center website at www.hurricanes.gov.



TROPICAL UPDATE



Created by:

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State Meteorological Support Unit

Florida Division of Emergency Management

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