



TROPICAL UPDATE



5:00 PM EDT

Saturday, July 3, 2021

Tropical Storm Elsa

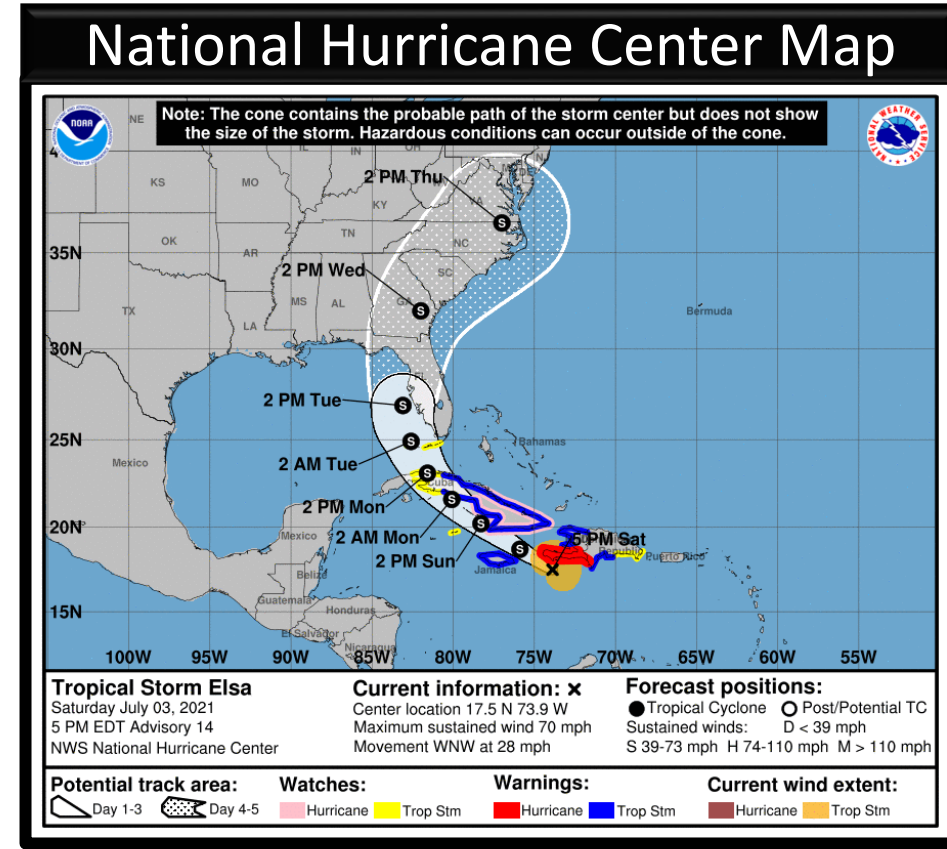
This update is intended for government and emergency response officials, and is provided for informational and situational awareness purposes only. Forecast conditions are subject to change based on a variety of environmental factors. For additional information, or for any life safety concerns with an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

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

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



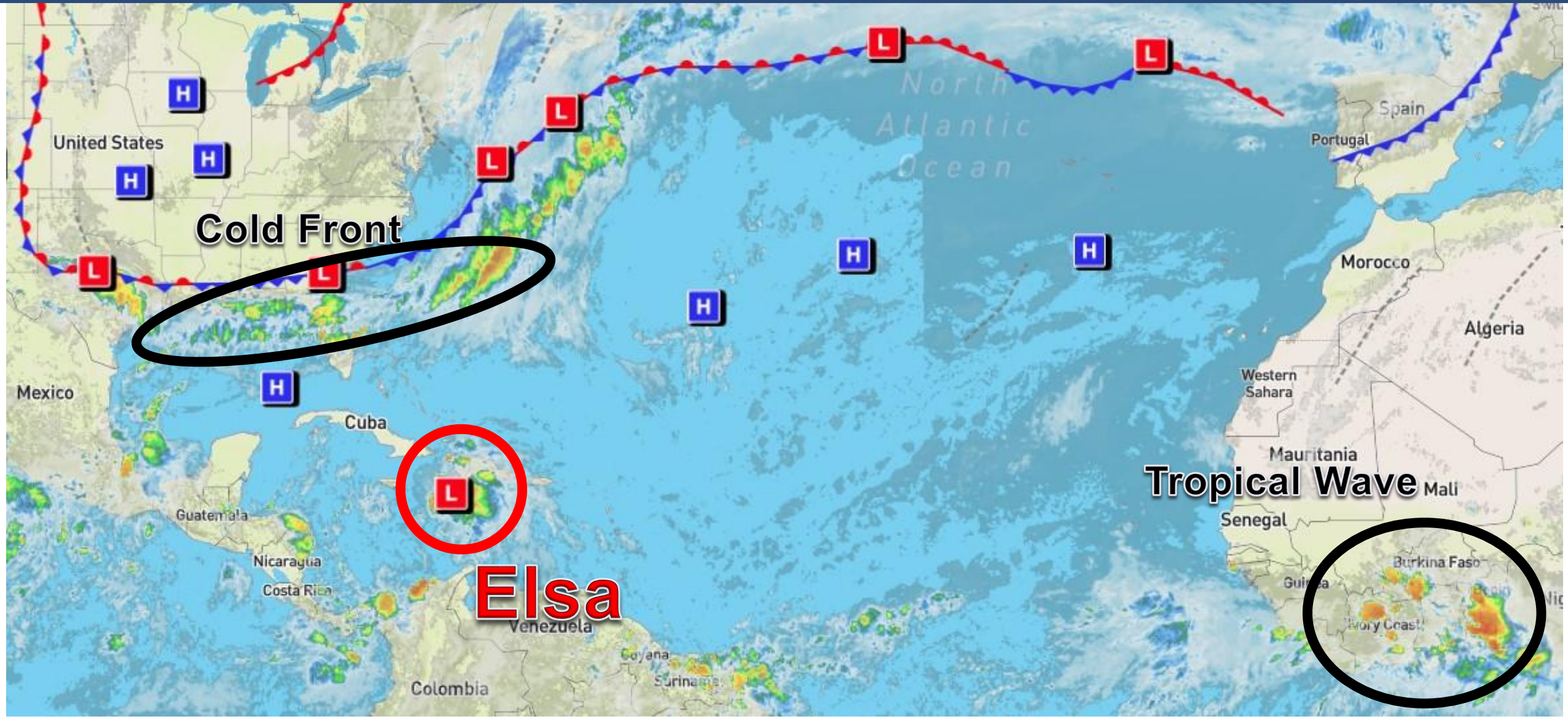
Overview/Recent Changes:

Elsa remains a strong tropical storm as it moves very quickly to the west-northwest. The track remains largely unchanged as the system will move across Cuba and will be near Key West Monday night. Elsa may then spend 24-36 hours over the eastern Gulf of Mexico before moving inland over the Florida Peninsula, and there remains some concern about possible re-intensification. Tropical Storm Watches have been issued for the Lower and Middle Florida Keys and additional watches are likely tonight.



Atlantic Basin Satellite Image

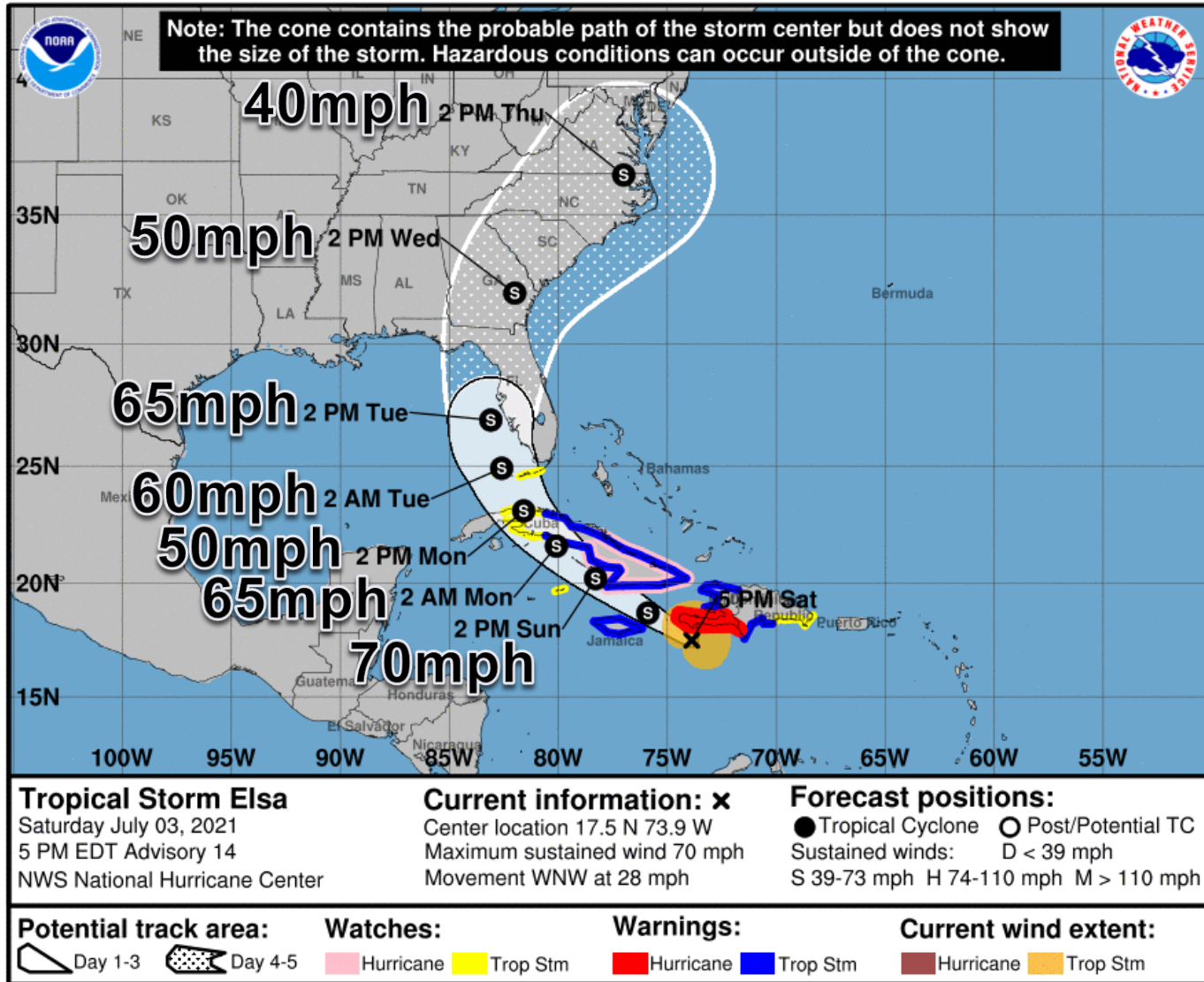
Chance of development: — None — Low — Medium — High





Official Forecast Track – Elsa

From the National Hurricane Center – ([LINK](#))



- The center of Elsa is located about 50 miles south of Port Au Prince, Haiti, or about 725 miles southeast of Miami, FL.
- Elsa is a tropical storm with maximum sustained winds near 70 mph.
- Elsa should maintain its strength tonight as it remains just offshore of Haiti and southeastern Cuba.
- Elsa is still racing toward the west-northwest at 28 mph. A decrease in forward speed is expected tonight, followed by a turn toward the north-northwest Sunday night or Monday.
- Elsa will then turn northward and northeastward on Tuesday near or over the Florida Keys and Peninsula.
- There is a large area that could see a landfall, including the entire West Coast, the Big Bend, and the Keys. When and where the northeast turn occurs will determine landfall.
- There is the possibility of re-strengthening once Elsa moves offshore Cuba and tracks across the eastern Gulf of Mexico.

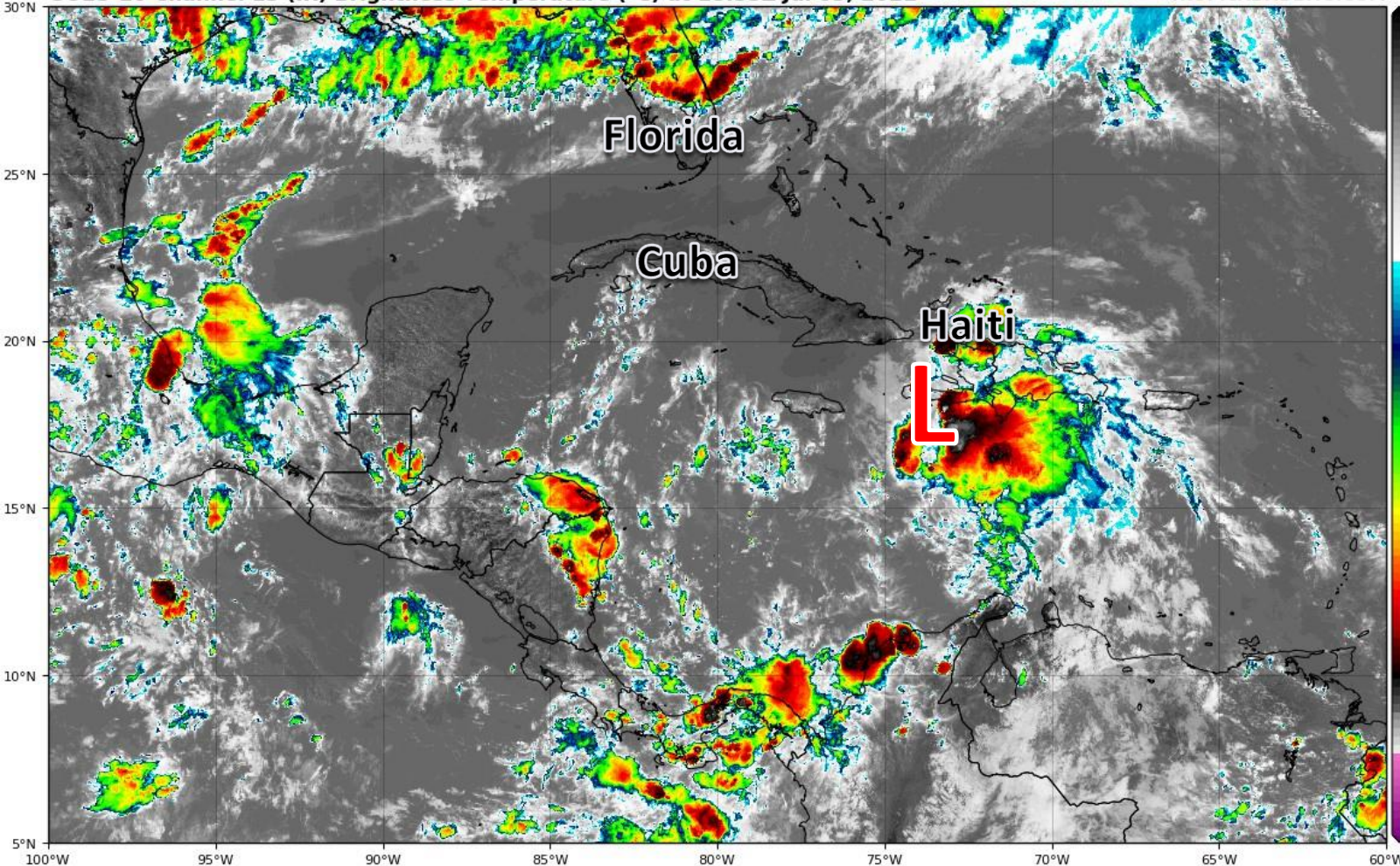


Satellite Imagery

Caribbean Sea – Tropical Storm Elsa

GOES-16 Channel 13 (IR) Brightness Temperature (°C) at 18:55Z Jul 03, 2021

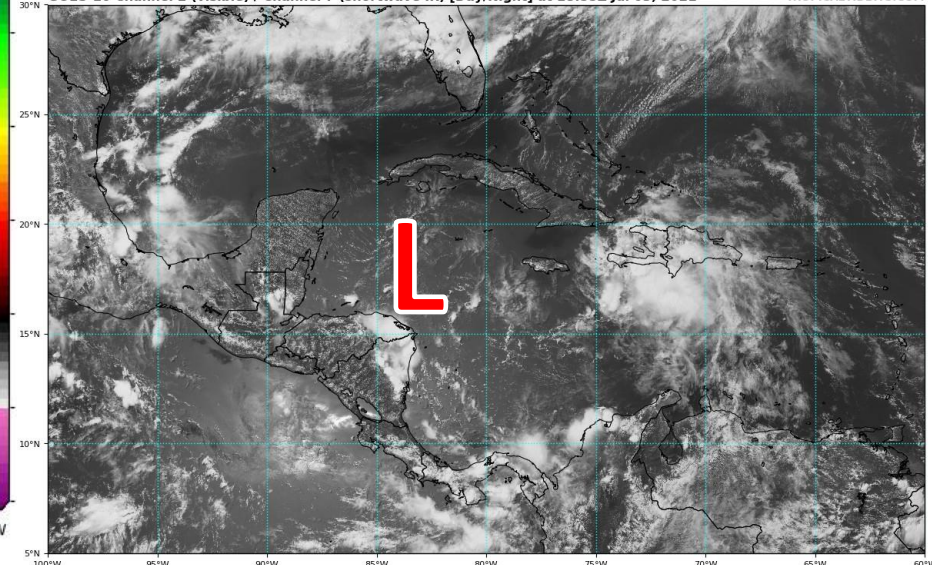
TROPICALTIDBITS.COM



Elsa has been struggling today as it continues to move very fast, outpacing its thunderstorms. It has a chance to become better organized if it slows down and avoids Cuba tomorrow.

GOES-16 Channel 2 (visible) / Channel 7 (shortwave IR) [Day/Night] at 18:55Z Jul 03, 2021

TROPICALTIDBITS.COM





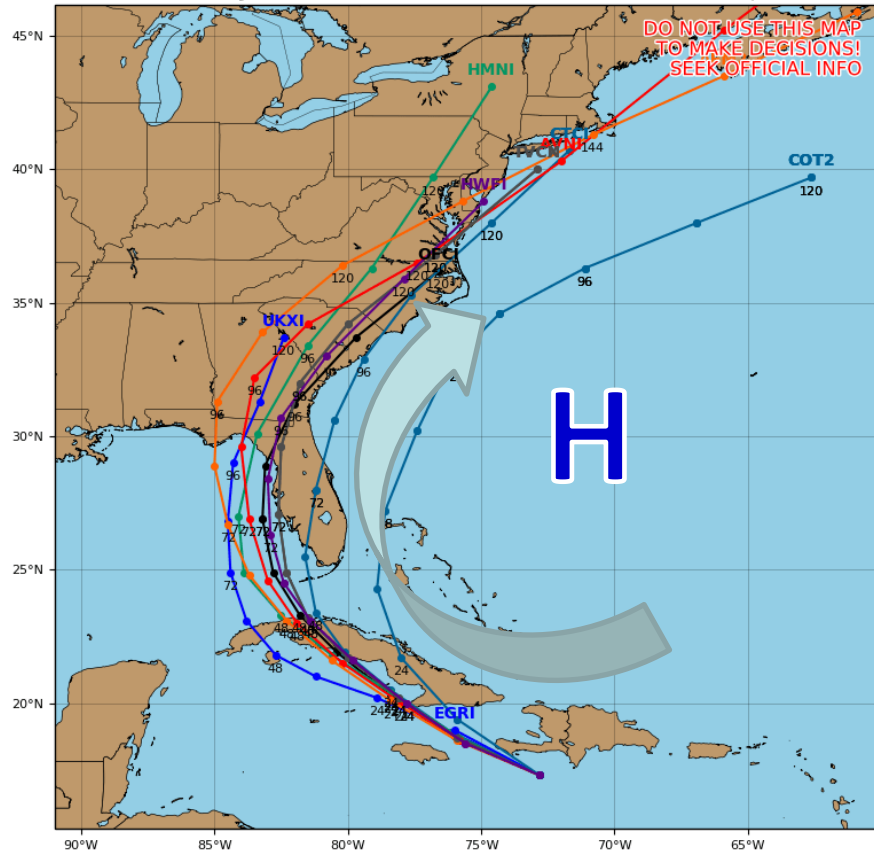
Model Forecasts Next 5 Days

Track & Intensity Models – Tropical Storm Elsa

Tropical Storm ELSA Model Track Guidance

Initialized at 18z Jul 03 2021

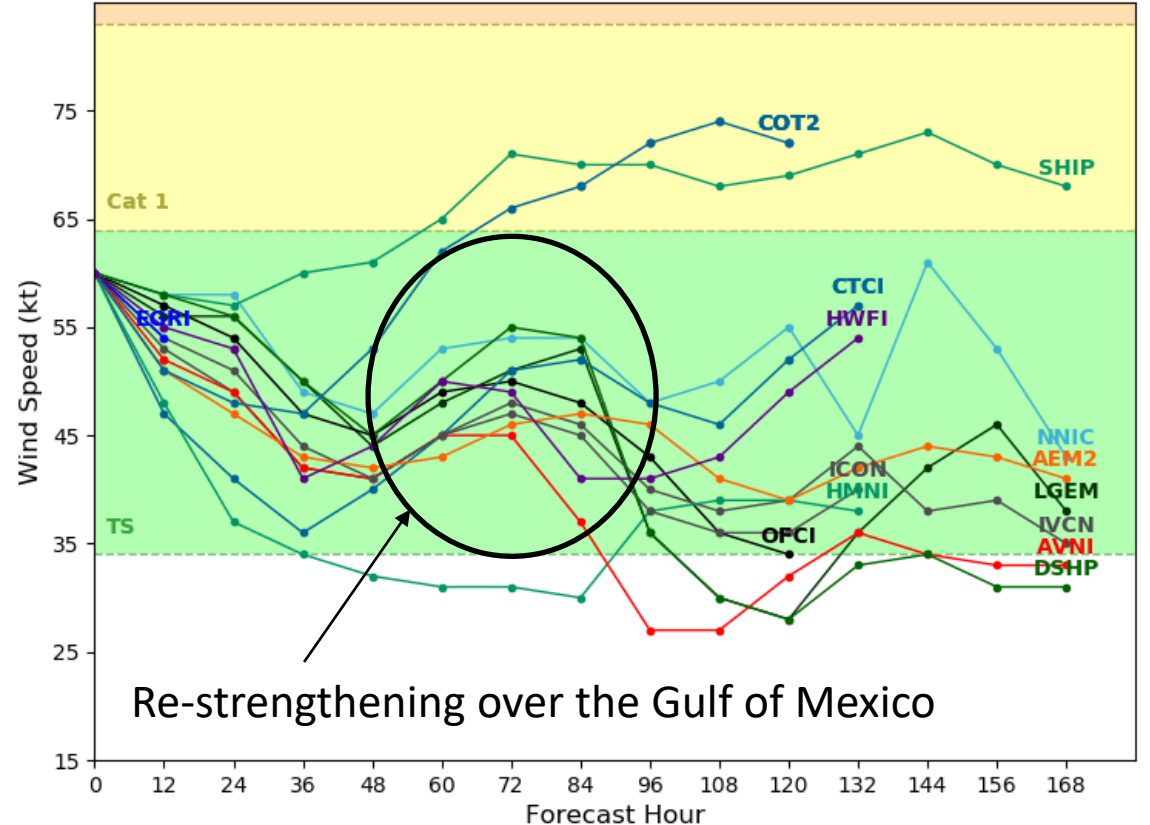
Levi Cowan - tropicaltidbits.com



Tropical Storm ELSA Model Intensity Guidance

Initialized at 18z Jul 03 2021

Levi Cowan - tropicaltidbits.com



The uncertainty in the track and intensity of Elsa has decreased today. Landfall of the system in Florida remains anywhere from the Big Bend all the way into Southwest Florida/Keys. Some re-strengthening is possible once over the Gulf of Mexico as water temperatures are warm and dry air/wind shear minimal.



Damaging Wind Threat Overview

Tropical Storm Elsa

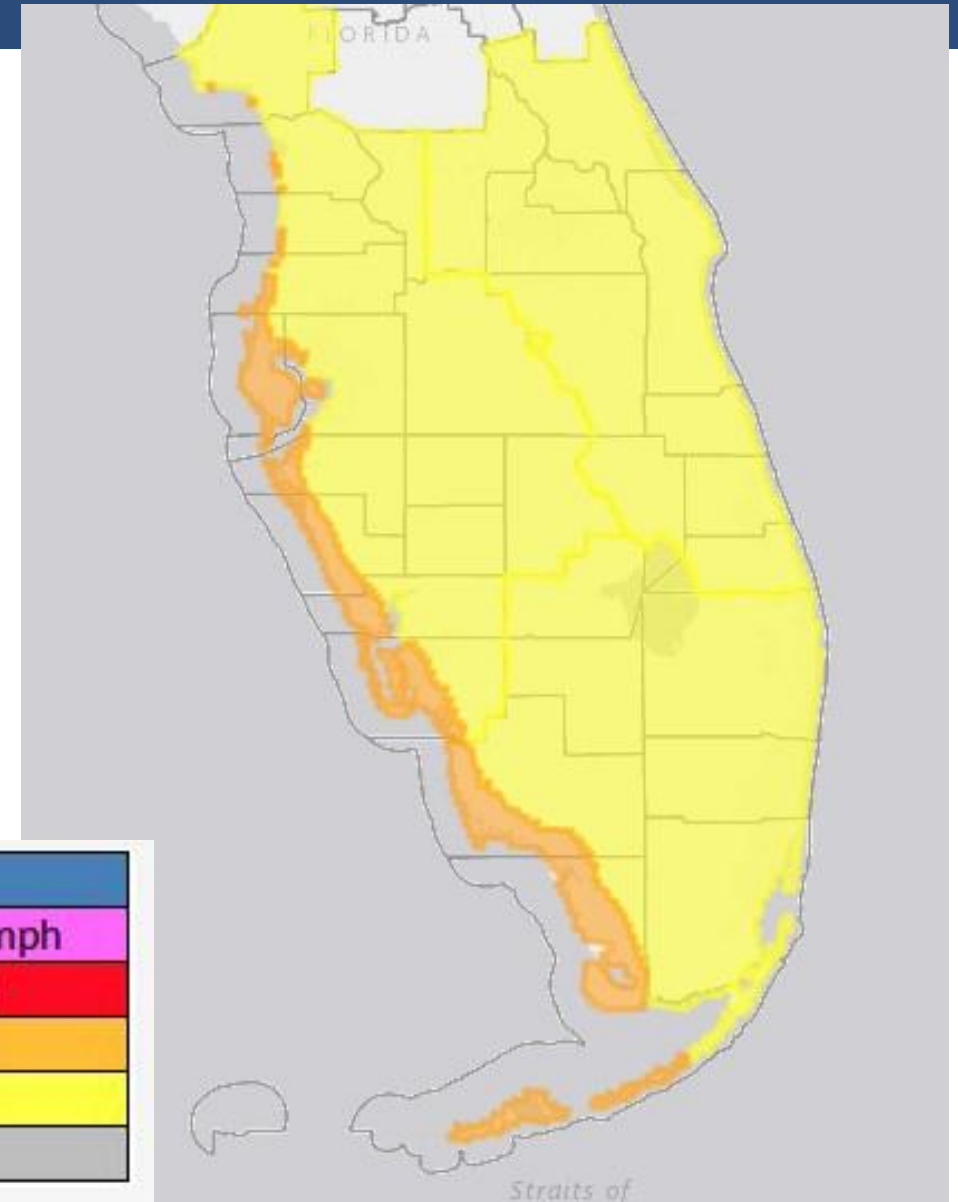
The greatest wind threat is along the immediate West Coast of Florida (west of I-75) and across the Lower and Middle Florida Keys.

Still, tropical storm force winds remain possible across any part of Central and South Florida Monday-Tuesday.

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

Click on "Threats and Impacts" Tab

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



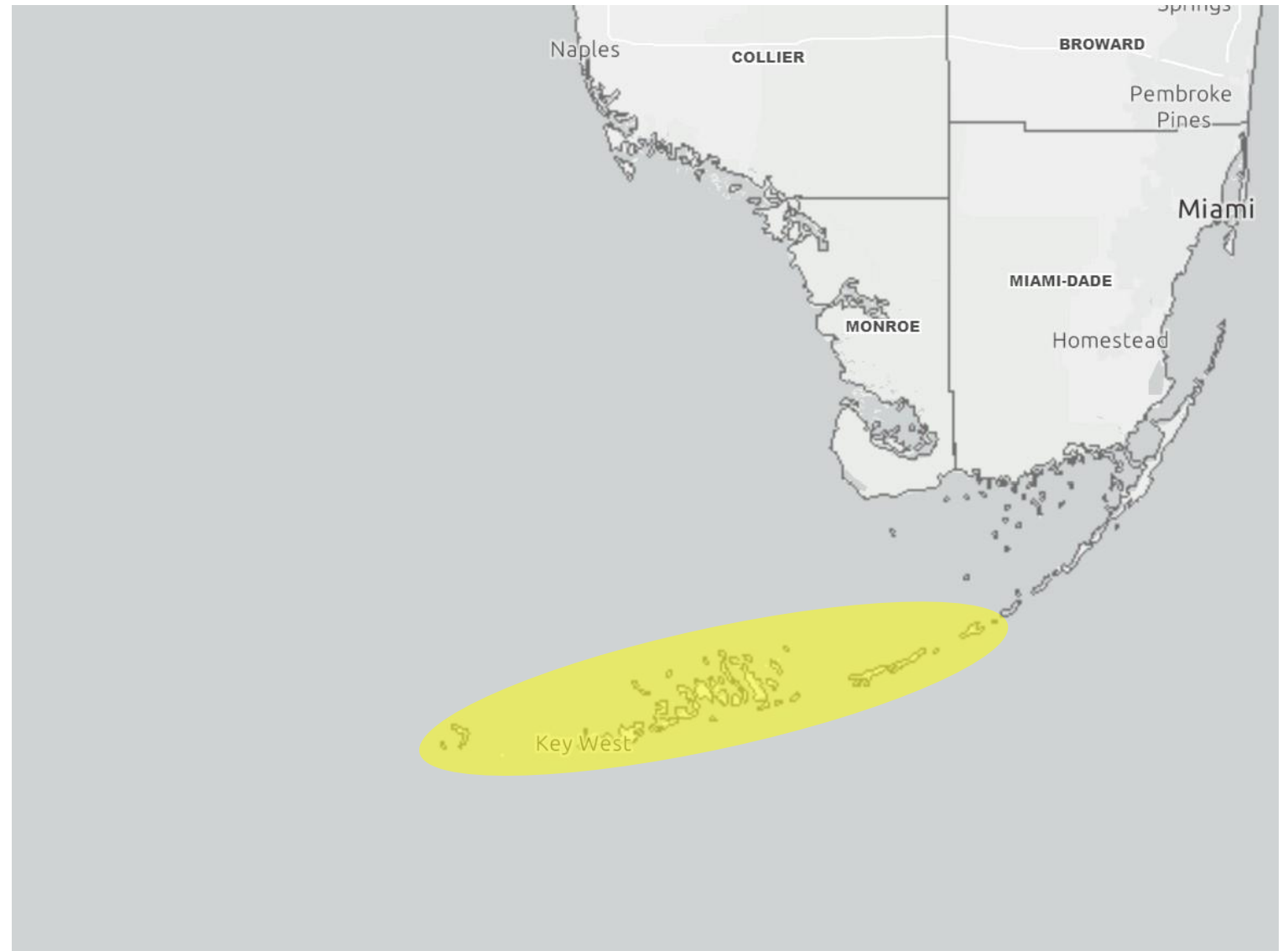


Wind Watches and Warnings

In Effect Until Further Notice

Tropical Storm Watches have been issued for the Lower and Middle Keys (Monroe County), from Dry Tortugas to Craig Key.

Additional Tropical Storm Watches may be issued tonight for parts of the West Coast.



Tropical Storm & Hurricanes

Watches Versus Warnings

WATCH

Tropical storm and/or hurricane conditions are **POSSIBLE** in Watch area

Issued up to 48 hours in advance of tropical storm force winds

WARNING

Tropical storm and/or hurricane conditions are **EXPECTED** in Warning area

Issued up to 36 hours in advance of onset of tropical storm force winds

Hurricane preparedness activities become difficult once winds reach tropical storm force. **Watches & Warnings are issued in advance of onset of tropical storm force winds, 39-73mph**



NWSMobile



weather.gov/mob

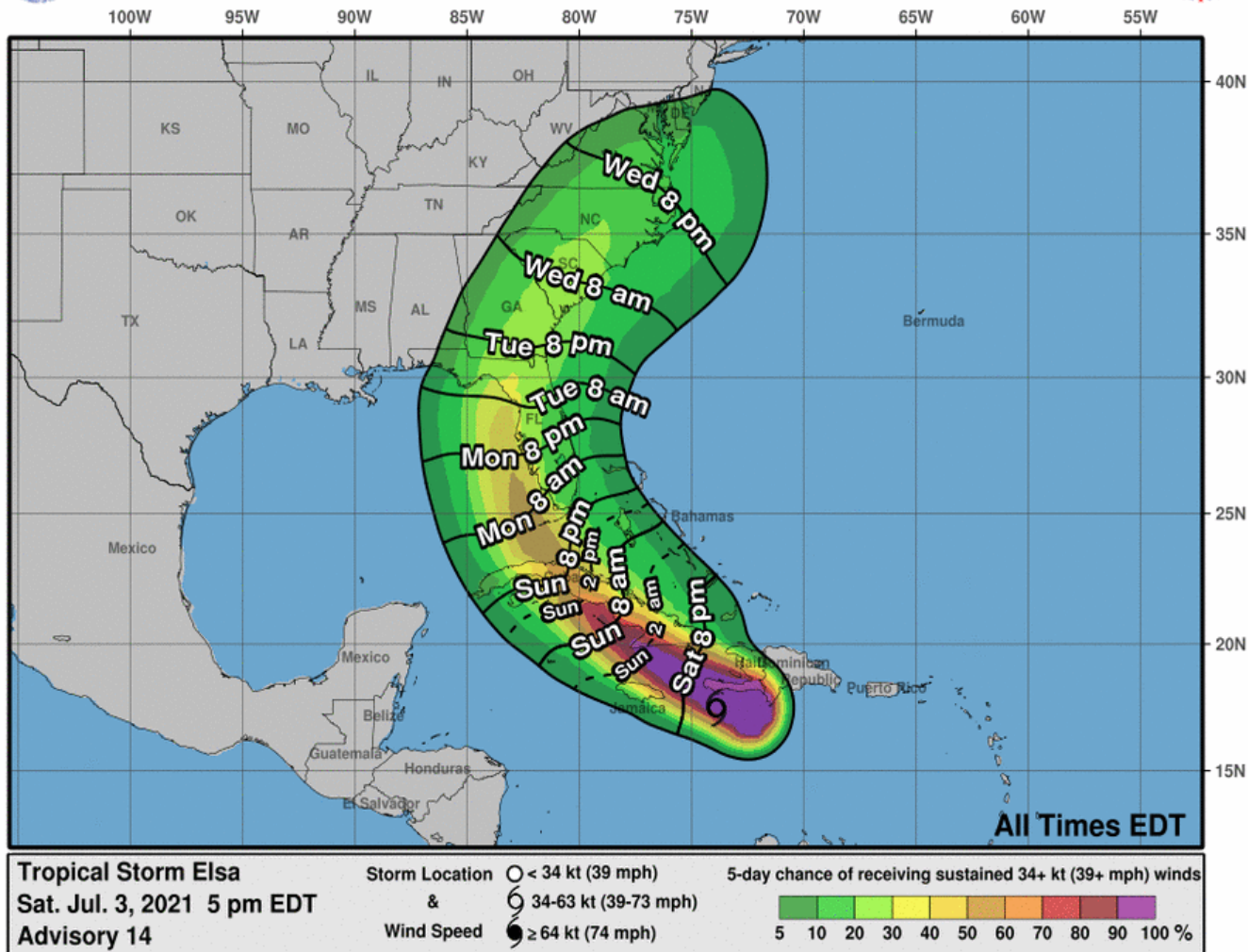


Time of Arrival & Wind Speed Probabilities

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



Earliest Reasonable Arrival Time of Tropical-Storm-Force Winds



City	Chance for TS Winds	Changes Since Last Packet
Key West	54%	+4%
Marathon	45%	-3%
Naples	40%	+1%
Miami	12%	-5%
West Palm Beach	16%	-4%
Ft. Myers	21%	+/-0%
Tampa	37%	+3%
Orlando	17%	-1%
Apalachicola	20%	+1%
Tallahassee	20%	+1%
Jacksonville	20%	+/-0%

Tropical storm force winds could begin **as early as** early Monday morning south of Lake Okeechobee, then from Lake Okeechobee to Gainesville on Monday, and Northeast Florida on Tuesday. On the current forecast track, the **most likely** timeframe for tropical storm force winds is Monday afternoon and Monday night south of Lake Okeechobee and Tuesday and Tuesday night north of Lake Okeechobee.

The odds of hurricane force winds are less than 5% in the Florida Keys and along the West Coast.



Key Messages

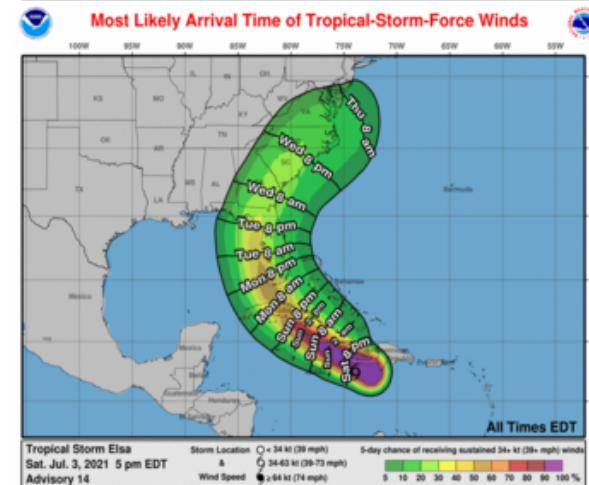
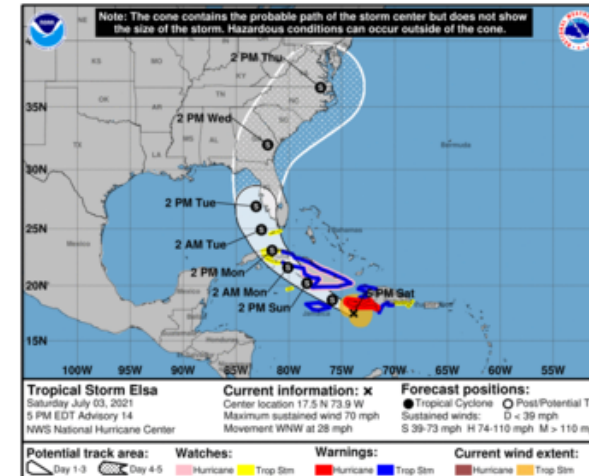
From the National Hurricane Center



Key Messages for Tropical Storm Elsa Advisory 14: 5:00 PM EDT Sat Jul 03, 2021



1. A hurricane warning remains in effect for portions of Haiti, where near-hurricane conditions and dangerous storm surge are expected through this evening.
2. Widespread heavy rain will move across southern Hispaniola and Jamaica tonight into Sunday where isolated to scattered flash flooding and mudslides will be possible. Heavy rain will then impact the Cayman Islands and Cuba Sunday into Monday resulting in significant flooding and mudslides over Cuba. As Elsa approaches the Florida Keys and Florida Peninsula early next week, isolated flash flooding and minor river flooding will be possible.
3. Tropical storm conditions and dangerous storm surge are expected with hurricane conditions possible in portions of eastern Cuba beginning early Sunday, with tropical storm conditions possible in central and western Cuba Sunday night and Monday.
4. There is an increasing risk of tropical storm conditions, storm surge, and rainfall impacts beginning Monday in the Florida Keys and the southern Florida Peninsula, and a Tropical Storm Watch is now in effect for portions of the Florida Keys. This risk will spread northward along the Florida Peninsula through Wednesday and reach the coasts of Georgia and the Carolinas Wednesday and Thursday, however uncertainty in the forecast remains larger than usual due to Elsa's potential interaction with the islands of Hispaniola and Cuba. Interests elsewhere in Florida and along the southeast U.S. coast should monitor Elsa's progress and updates to the forecast.

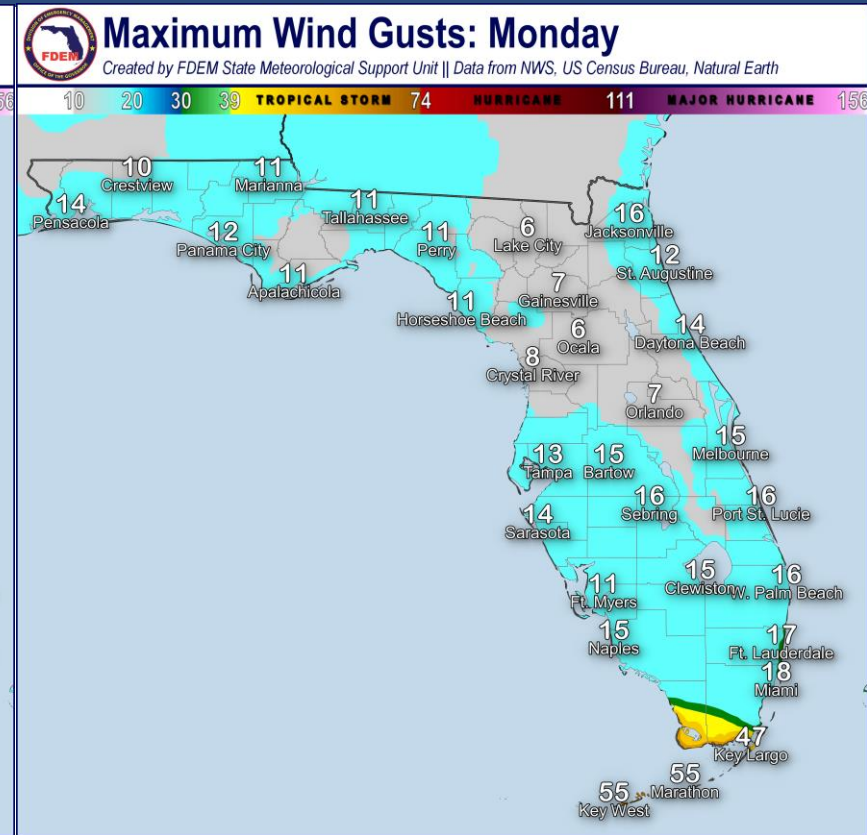
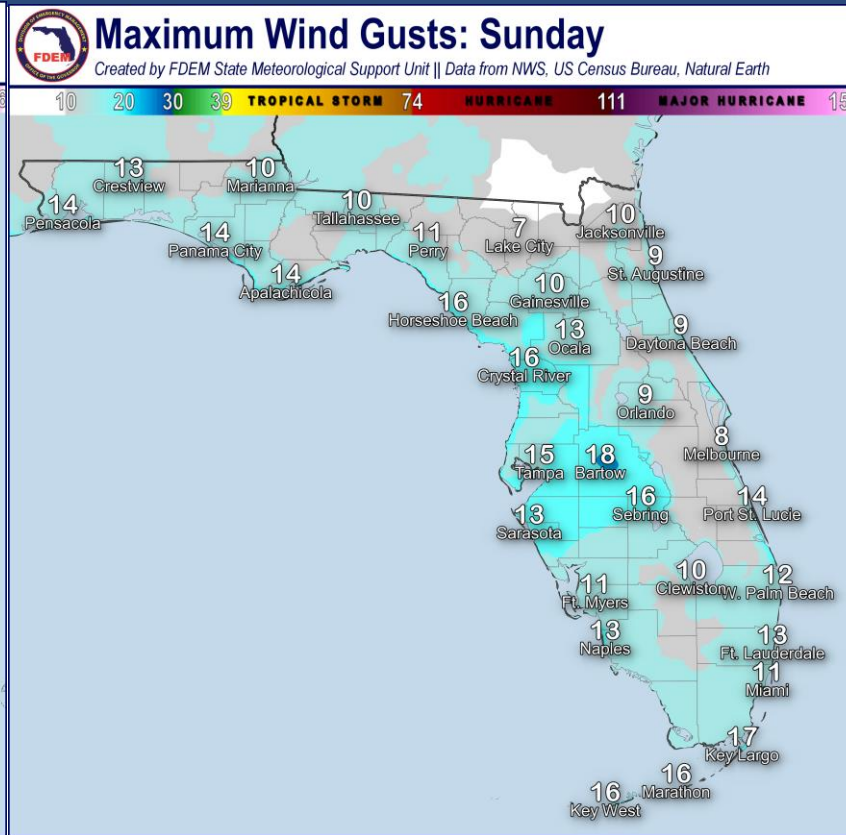
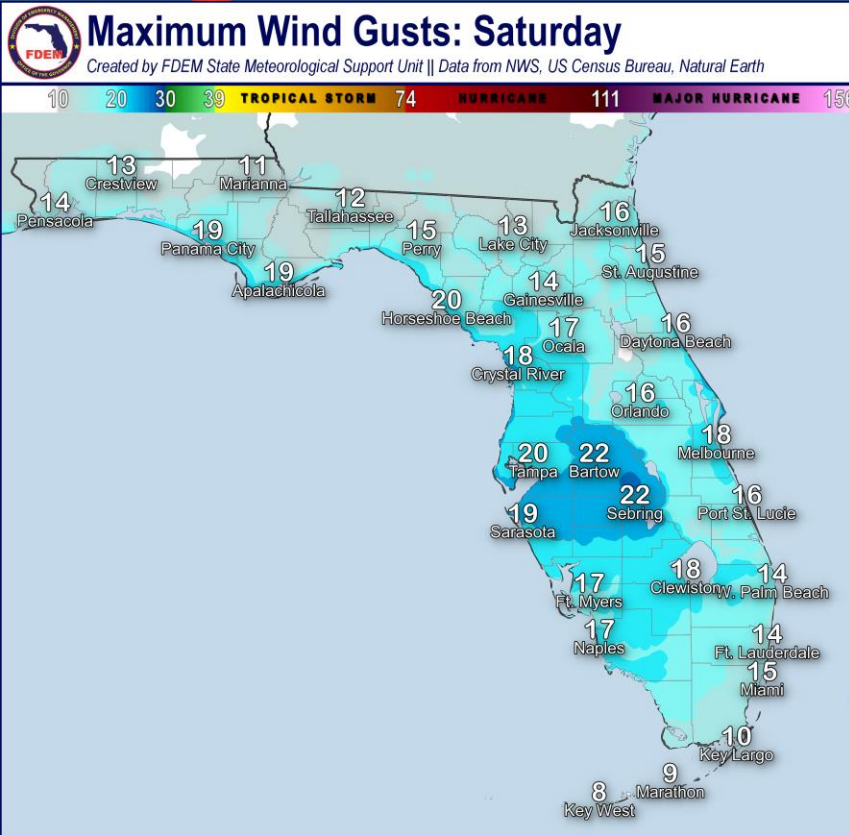


For more information go to hurricanes.gov



Max Wind Gusts Next 3 Days

Outside of Any Thunderstorms



Winds will increase on Monday in far southern Florida and the Keys as Elsa approaches.



Storm Surge Threat Overview

Tropical Storm Elsa

The greatest storm surge threat is expected along the West Coast of the Peninsula. Storm surge/inundation values greater than 3 feet above ground level are possible.

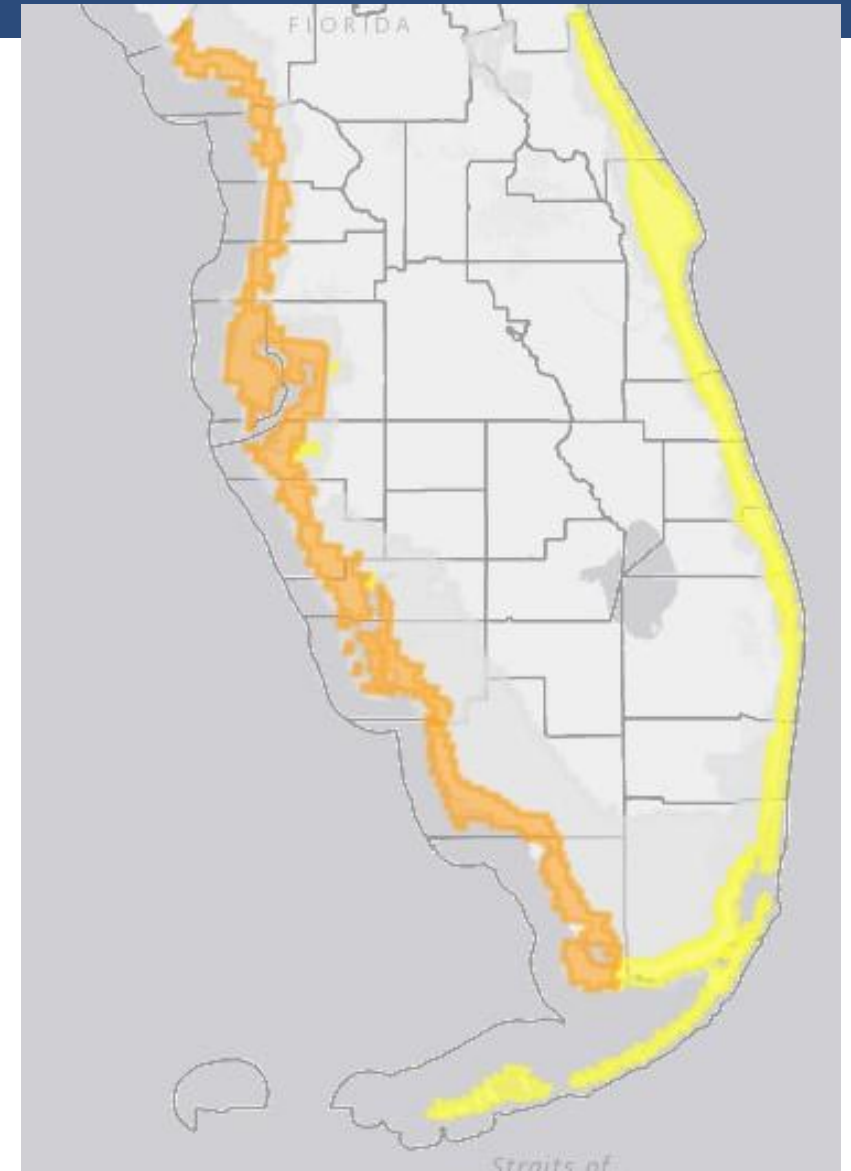
Storm surge/coastal flooding will be minimal (1-2 feet) across the Florida Keys and East Coast.

The storm surge threat is yet to be determined for the West Coast/Big Bend so please stay tuned for details.

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

Click on “Threats and Impacts” Tab

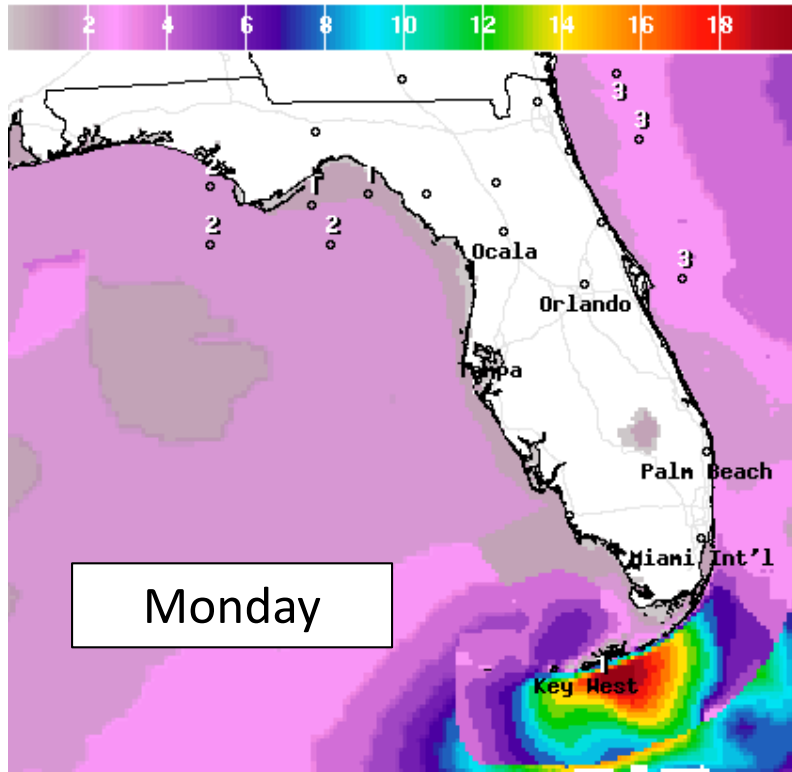
Storm Surge Threat
Potential for storm surge flooding greater than 9 ft above ground
Potential for storm surge flooding greater than 6 ft above ground
Potential for storm surge flooding greater than 3 ft above ground
Potential for storm surge flooding greater than 1 ft above ground
Little to no storm surge flooding





Forecast Wave Heights

Monday through Wednesday



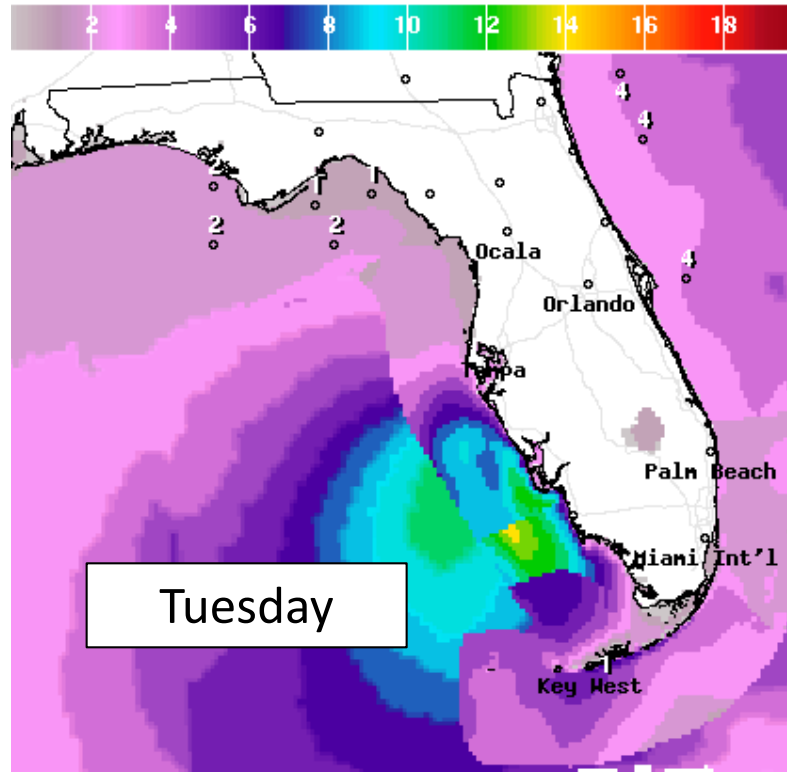
Wave Height(ft) Ending Mon Jul 05 2021 8PM EDT
(Tue Jul 06 2021 00Z)



National Digital Forecast Database

18z issuance

Graphic created-Jul 03 2:45PM EDT



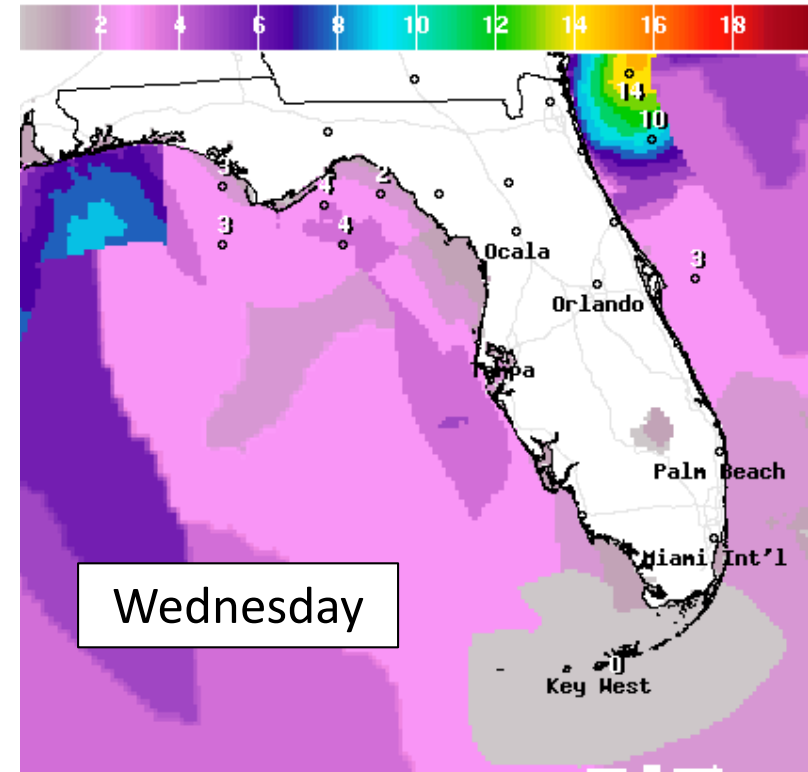
Wave Height(ft) Ending Tue Jul 06 2021 2PM EDT
(Tue Jul 06 2021 18Z)



National Digital Forecast Database

18z issuance

Graphic created-Jul 03 2:45PM EDT



Wave Height(ft) Ending Wed Jul 07 2021 2PM EDT
(Wed Jul 07 2021 18Z)



National Digital Forecast Database

18z issuance

Graphic created-Jul 03 2:45PM EDT

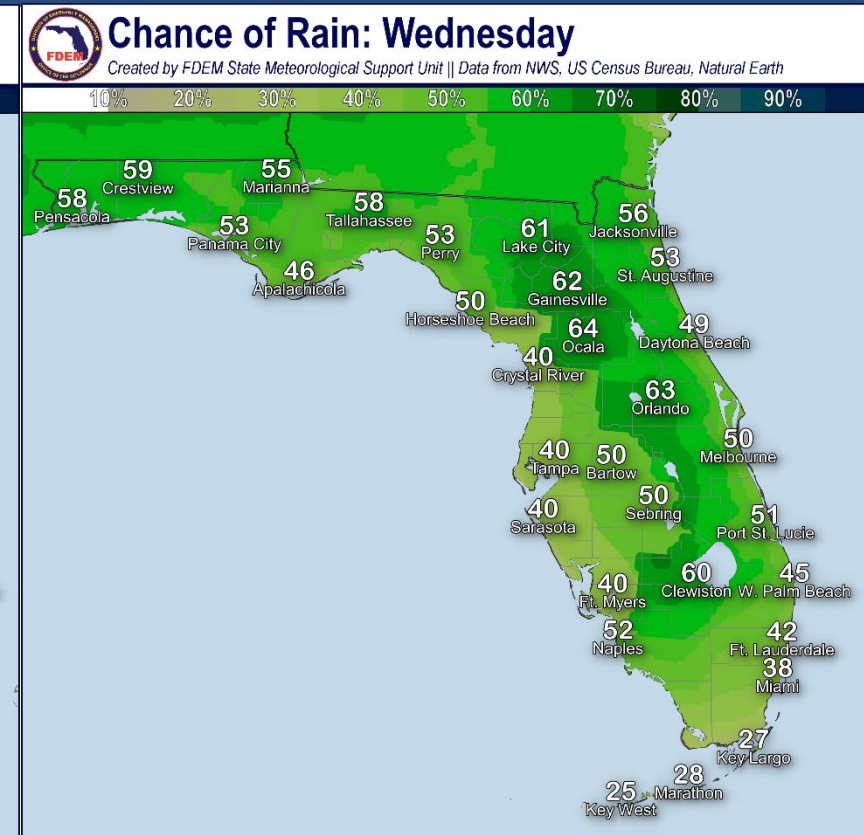
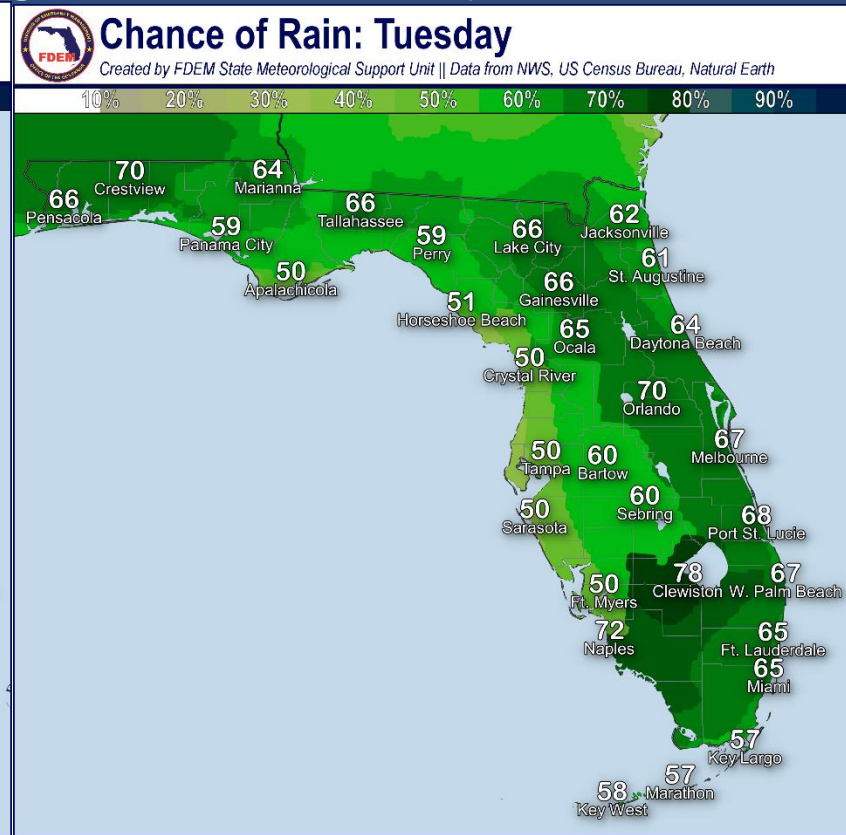
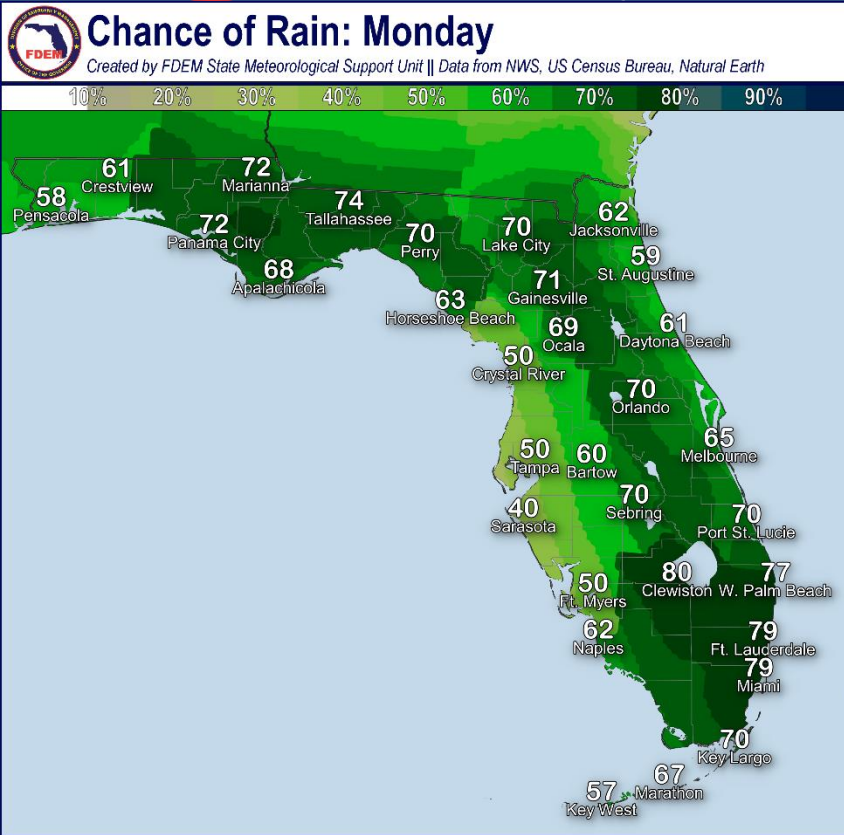


Surf will build next week along many Florida beaches as Elsa moves near and over the state. This will result in dangerous rip currents at nearly all Florida beaches. Minor to moderate beach erosion cannot be ruled out along parts of the West Coast.



Forecast Rain Chances

Monday through Wednesday – Tropical Storm Elsa



Rain chances will increase across the state on Monday, but particularly in South Florida. Some decrease in rain chances is possible by Wednesday as Elsa departs the state.



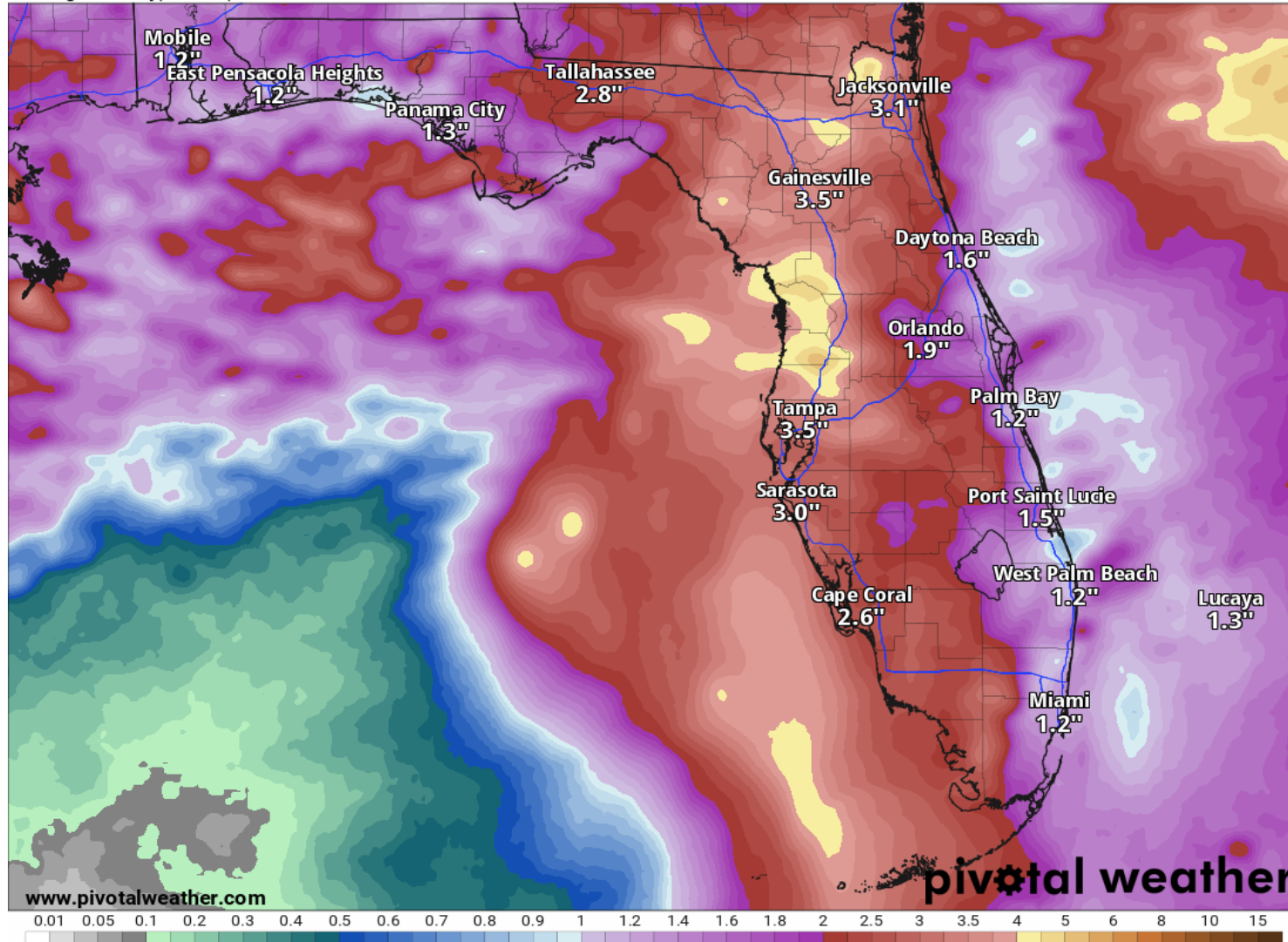
Rainfall Totals Next 7 Days

Ending 8 AM ET Saturday (7/10/21)

7-Day Precipitation (in)

Ending Saturday, Jul. 10, 2021 at 8 a.m. EDT

Init: Sat 2021-07-03 12z WPC



Through the next 7 days, rainfall totals of 3-5" are expected across much of the West Coast and Northeast Florida with localized totals of 6+" possible. Rainfall totals will be less along the East Coast- from 1-3". However, these rainfall totals are highly dependent on the eventual track of Elsa.

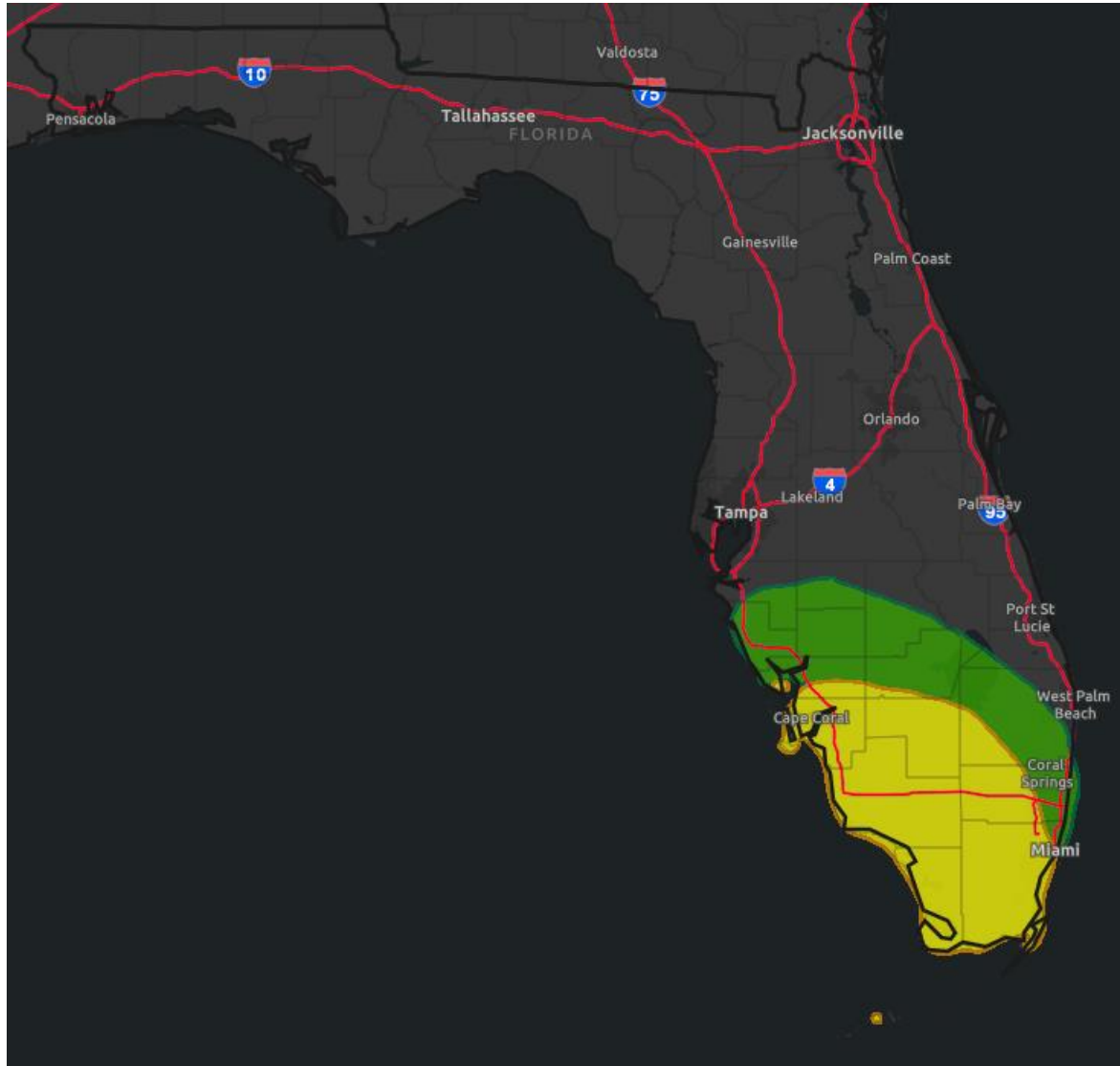
More info from NWS Miami:

<https://nwschat.weather.gov/p.php?pid=202107031930-KMFL-FGUS72-ESFMFL>



Flash Flood Outlook for Monday

From the Weather Prediction Center ([LINK](#))



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
@NWSWPC	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.
Flash flooding near me?	Flash Flooding	Flash Flooding	Flash Flooding	Flash Flooding
NO Flash Flooding	NO Flash Flooding	NO Flash Flooding	NO 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%

SLGT: 10%-20%

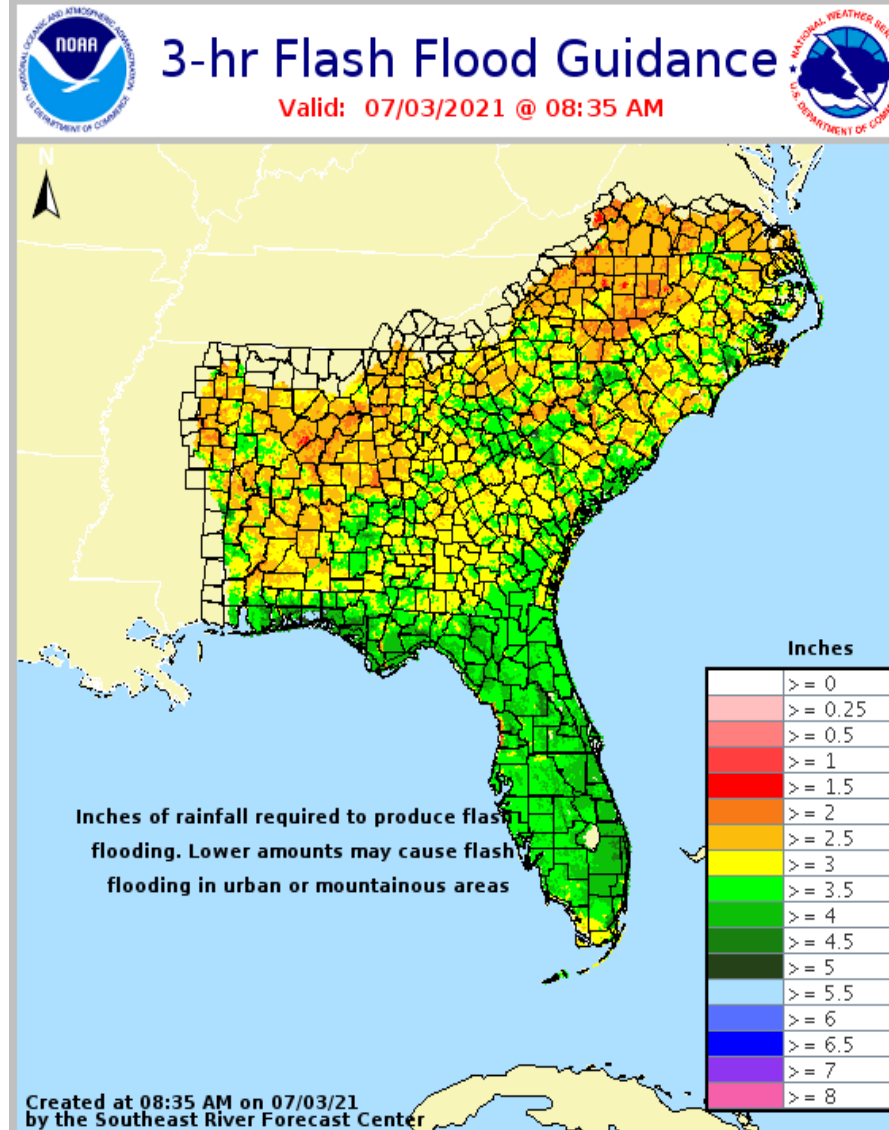
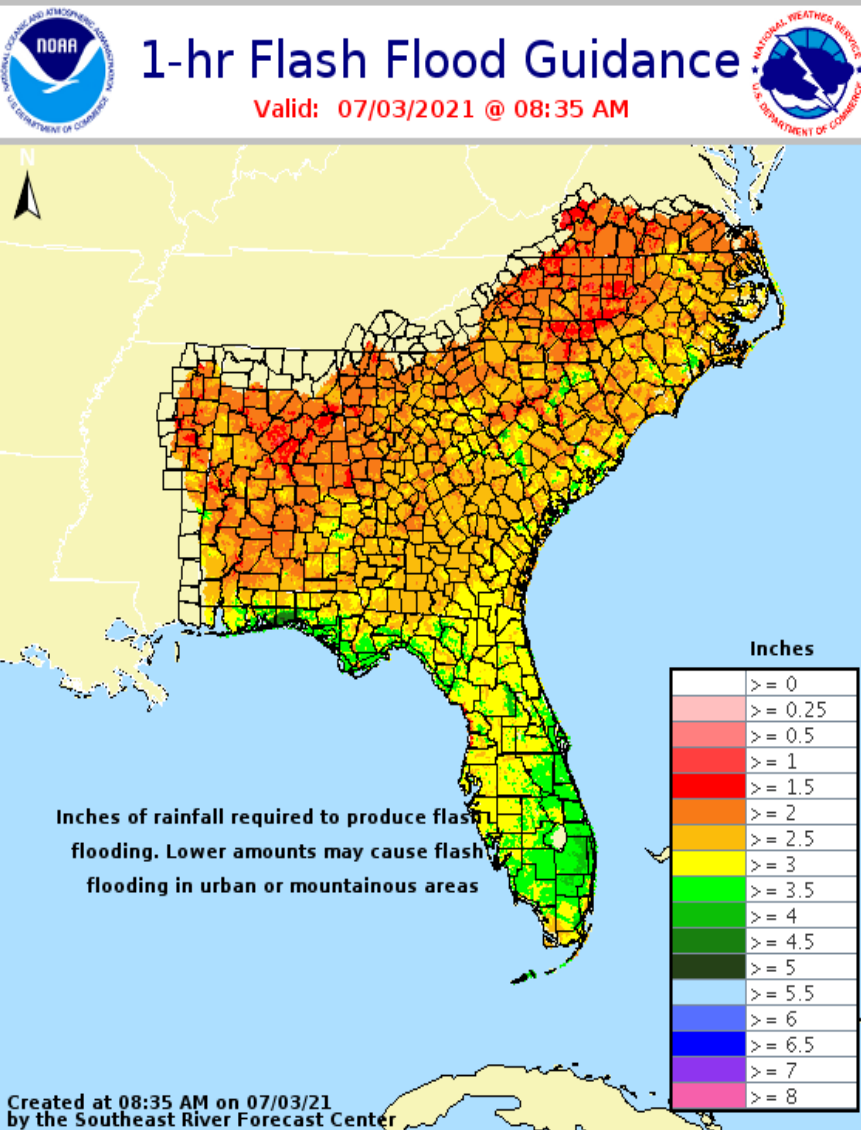
MDT: 20%-50%

MRGL: 5%-10%



Flash Flood Guidance

How Much Rain is Needed to Create Flash Flooding?

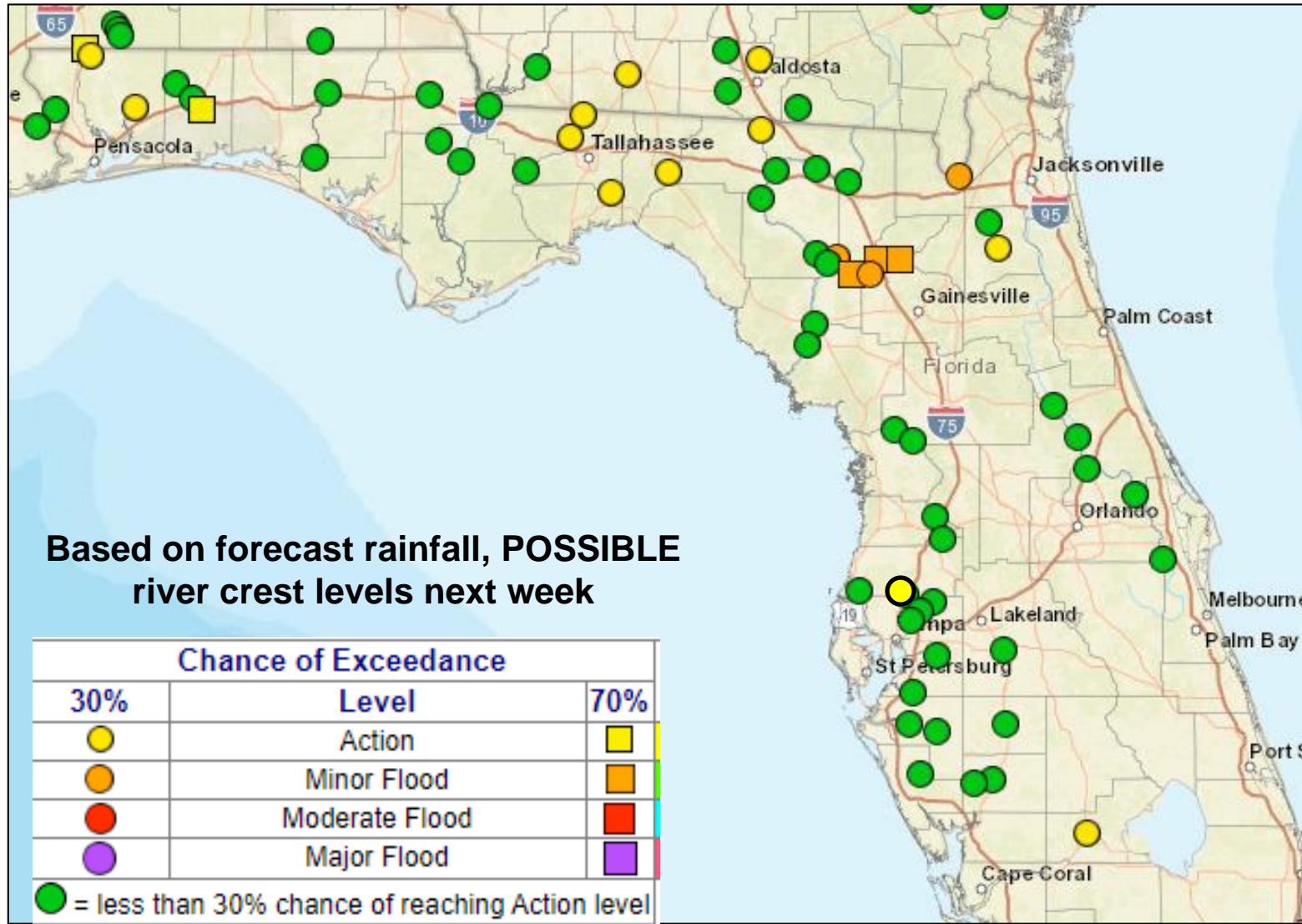


3-4" of rain in 3 hours will be enough to cause flash flooding across most of the state.



Possible River Flooding

Chance of River Flooding Based on Range of Forecasted Rainfall



Based on current forecasts, while rises on rivers are possible, they will likely remain below flood stage.

The exception is the Santa Fe River, which is already in minor flood stage. Additionally, the St. Marys River will reach minor flood stage early next week.



Tornado Threat Overview

Tropical Storm Elsa

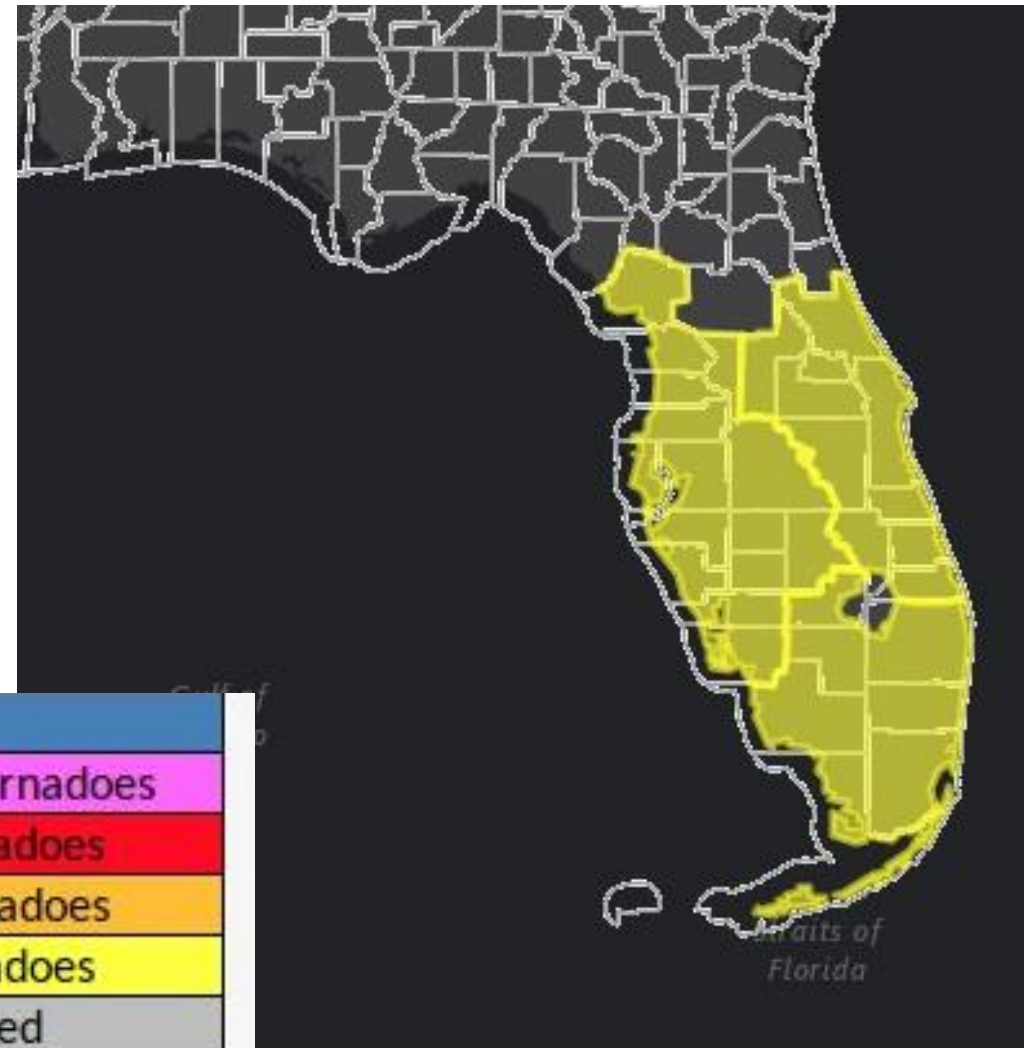
A few tornadoes will be possible in the outer bands of Elsa starting late in the day on Sunday across South Florida, with the threat spreading north on Monday and Tuesday.

A tornado threat may continue into North Florida Tuesday and Wednesday depending on the exact track and intensity.

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

Click on “Threats and Impacts” Tab

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





Overall Summary

Tropical Storm Elsa

- The center of Elsa is located about 50 miles south of Port Au Prince, Haiti, or about 725 miles southeast of Miami, FL.
- Elsa is a tropical storm with maximum sustained winds near 70 mph. Elsa should maintain its strength tonight as it remains just offshore of Haiti.
- Elsa is still racing toward the west-northwest at 28 mph. A decrease in forward speed is expected tonight, followed by a turn toward the north-northwest Sunday night or Monday. Elsa will then turn northward and northeastward on Tuesday near or over the Florida Keys and Peninsula.
- There is the possibility of re-strengthening once Elsa moves offshore Cuba and tracks across the eastern Gulf of Mexico.

Florida Outlook:

- The entire Florida Keys, Florida Peninsula, Big Bend, Northeast Florida, and eastern Florida Panhandle are included in the day 5 forecast error cone, but no impacts to Florida are expected through Sunday afternoon.
- There remains uncertainty in the track and intensity forecast. This system should continue to be closely monitored for impacts to Florida starting late Sunday or Monday, but people are urged to not focus on the exact forecast points as impacts will extend well outside of the forecast cone.
- **Tropical Storm Watches** have been issued for the Lower and Middle Florida Keys- from Dry Tortugas to Craig Key.
- Tropical storm force winds from 40-70 mph are possible starting in about 48 hours.
- Storm surge values of less than 3' are expected across the Keys and Southeast Florida, but may be higher than 3' along the West Coast of Florida.
- Additional tropical storm watches are likely to be issued further north along the West Coast of Florida tonight and Sunday.
- A widespread 2-4" of rain is possible across the Big Bend, Peninsula, and Keys over the next 7 days with localized totals of 4-6". This could result in some urban or flash flooding early next week due to wet/saturated soils. Flood Watches may be needed.
- Dangerous rip currents are expected next week along many Florida beaches. Minor to moderate beach erosion is also possible along West Coast beaches.
- There is a threat of isolated tornadoes beginning Monday in South Florida, spreading up the Peninsula through Tuesday. However, details remain uncertain.

The next briefing packet will be issued Sunday morning. For the latest information on the tropics, please visit the National Hurricane Center website at www.hurricanes.gov.



TROPICAL UPDATE



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State Meteorological Support Unit

Florida Division of Emergency Management

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