



TROPICAL UPDATE



5:00 PM EDT

Sunday, July 4, 2021

Tropical Storm Elsa

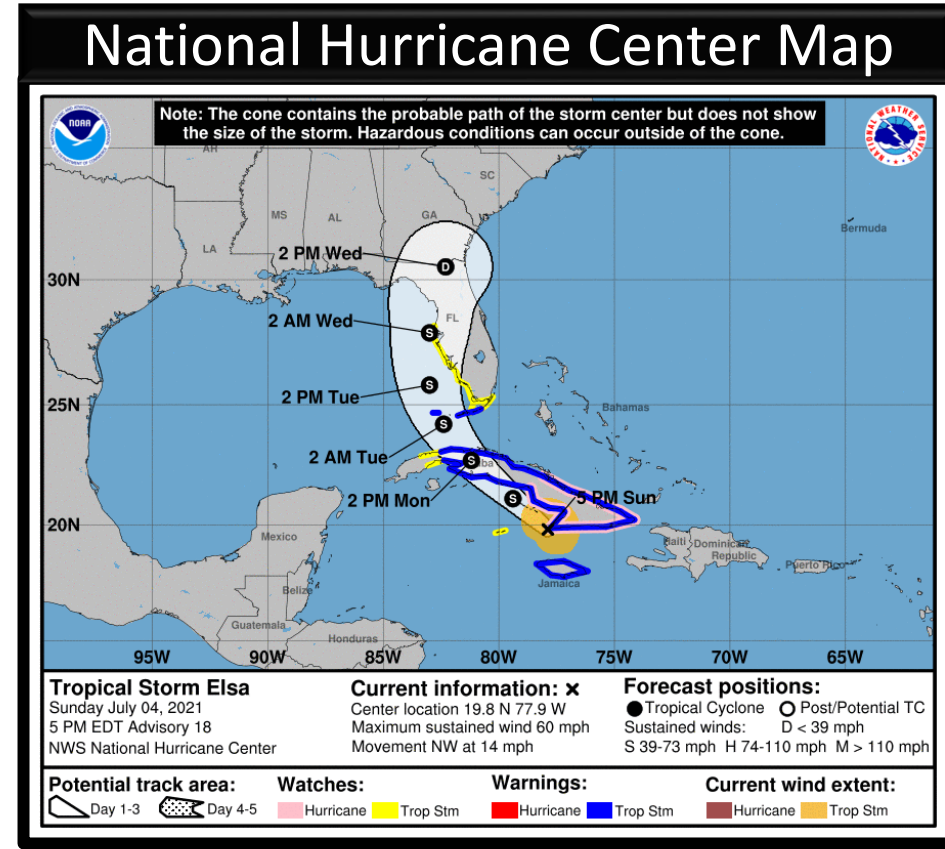
This update is intended for government and emergency response officials, and is provided for informational and situational awareness purposes only. Forecast conditions are subject to change based on a variety of environmental factors. For additional information, or for any life safety concerns with an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

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



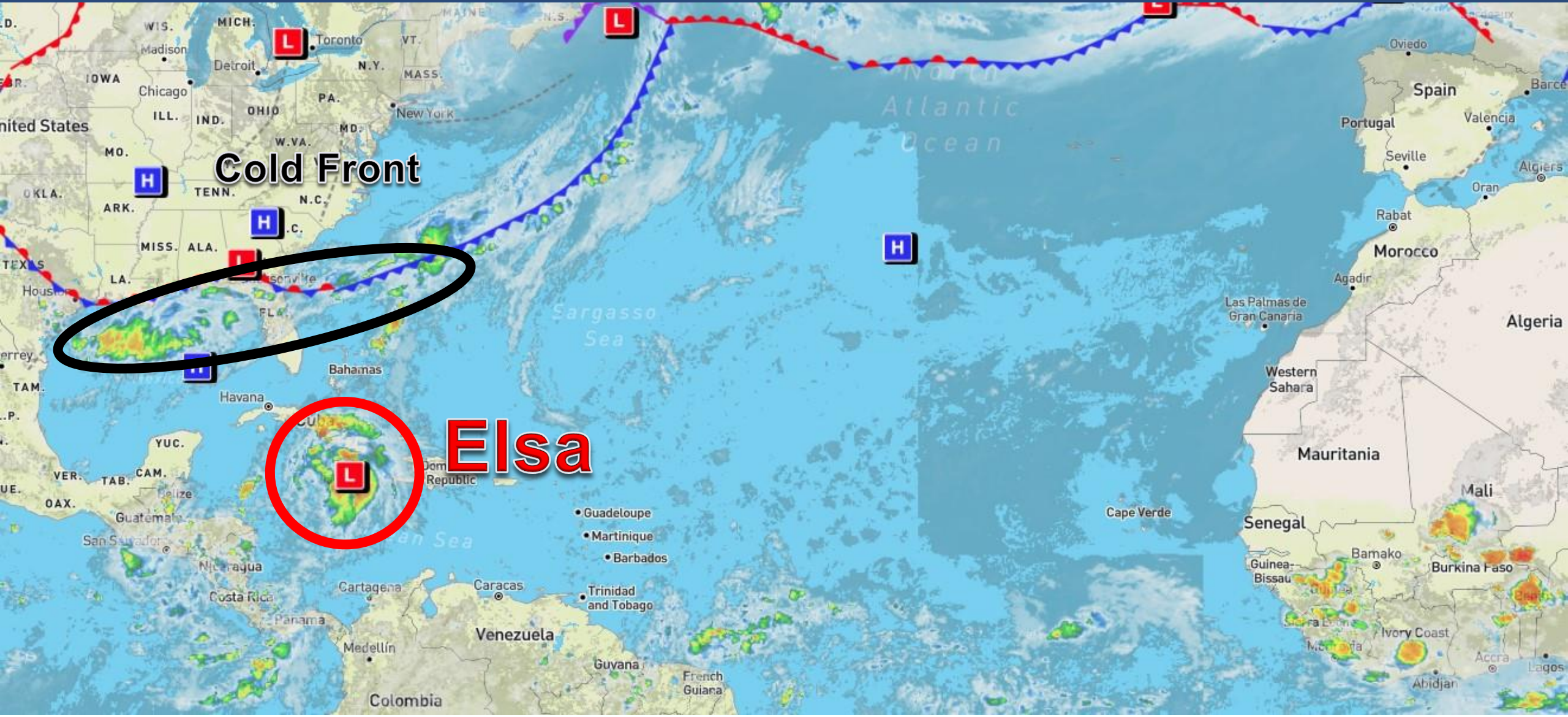
Overview/Recent Changes:

Elsa remains a strong tropical storm as it moves west-northwest between Cuba and Jamaica. The track remains largely unchanged. Additional Tropical Storm Watches have been issued for the West Coast of Florida, including Tampa Bay. Storm Surge Watches have been issued for the West Coast, with forecast surge between 2-4'.



Atlantic Basin Satellite Image

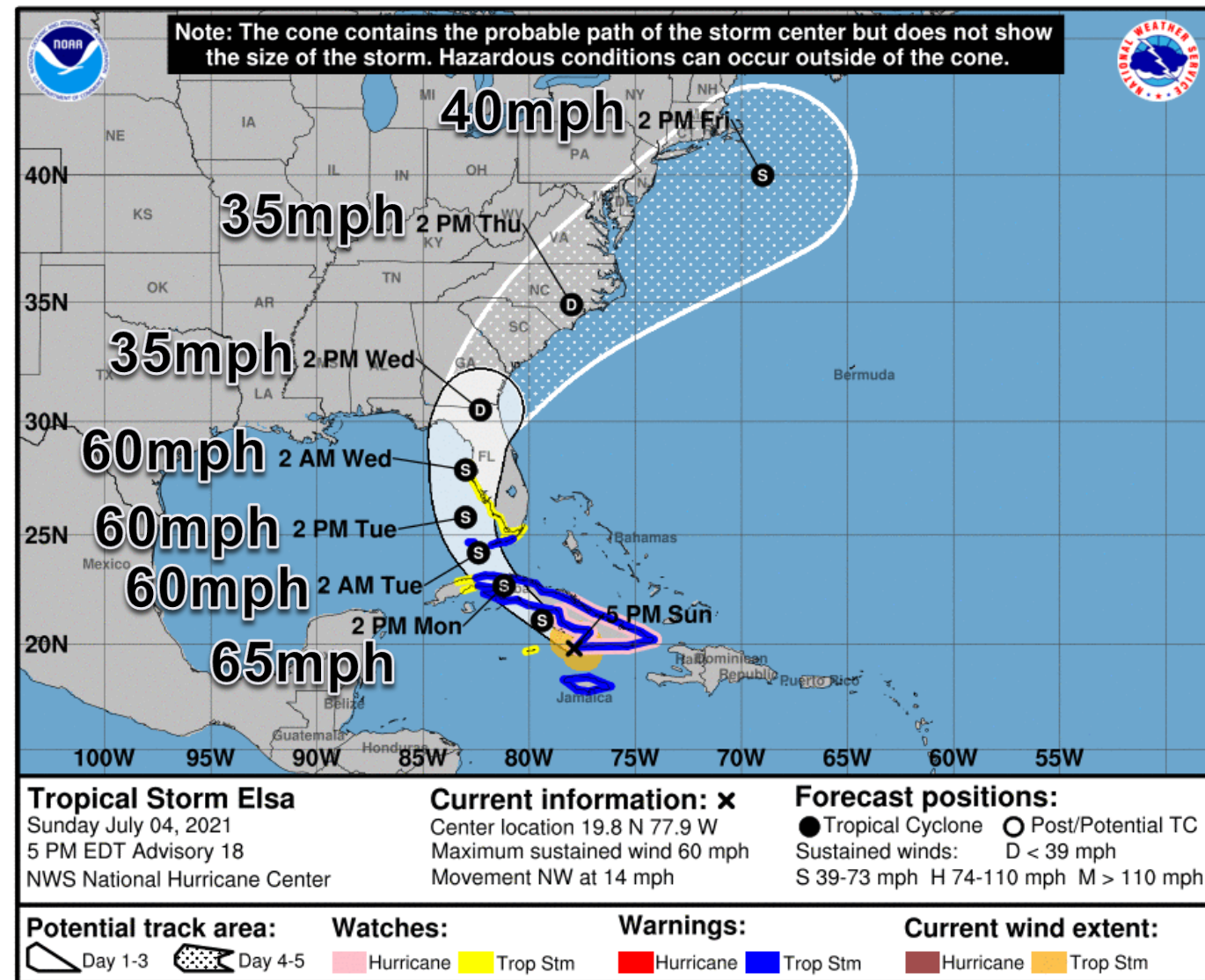
Chance of development: — None — Low — Medium — High





Official Forecast Track – Elsa

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



- The center of Elsa is located near Cabo Cruz, Cuba or about 400 miles southeast of Key West.
- Elsa remains a tropical storm with maximum sustained winds near 60 mph.
- Some slight strengthening is possible before Elsa moves over Cuba on Monday, with weakening thereafter. Little change in strength or some slight re-strengthening is possible after it emerges into the Gulf of Mexico.
- Elsa is moving to the northwest at 14 mph. Elsa will then turn northward and then northeastward on Tuesday and Wednesday
- 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.

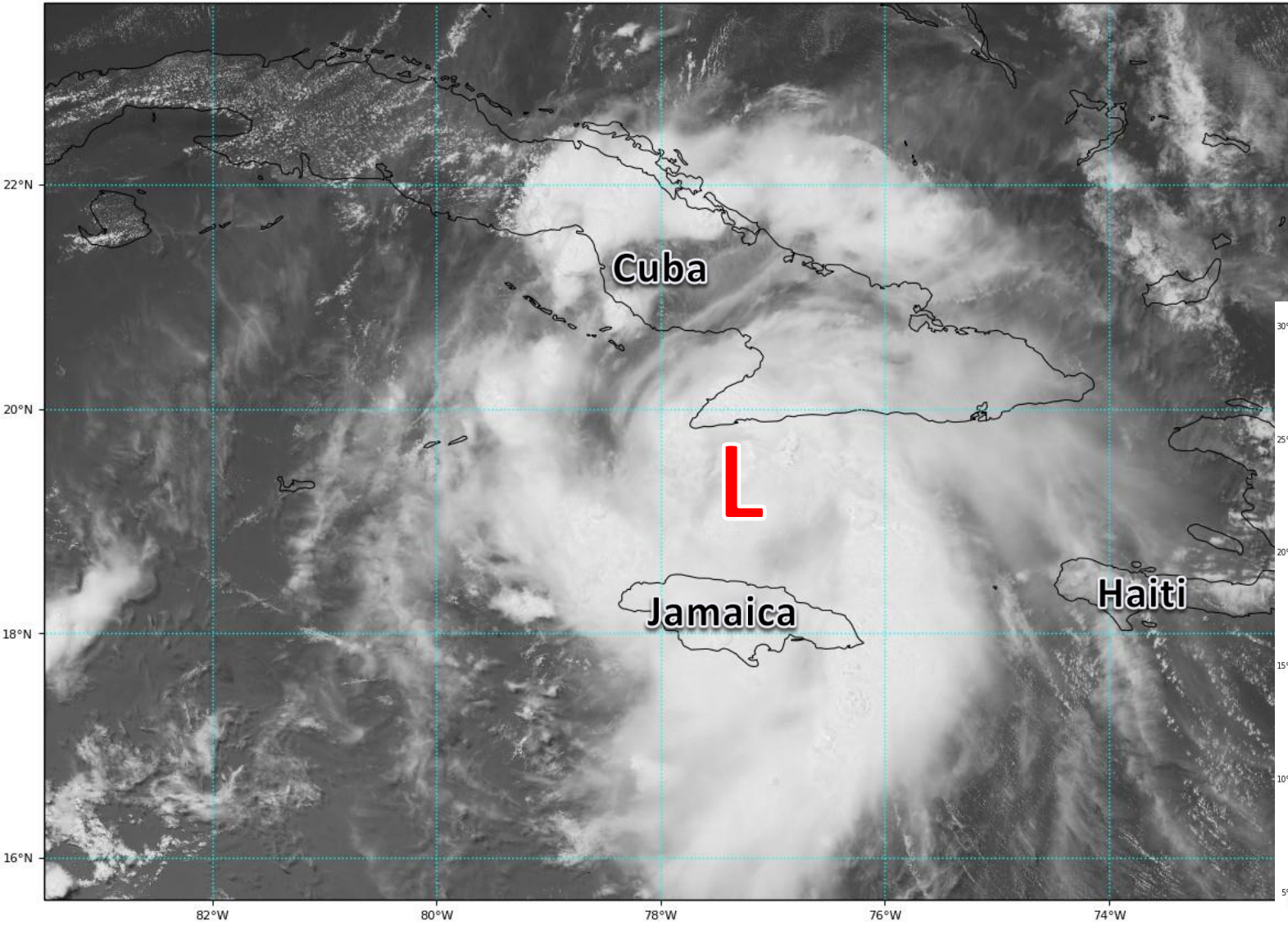


Satellite Imagery

Caribbean Sea – Tropical Storm Elsa

GOES-16 Channel 2 (visible) Reflectance at 18:17Z Jul 04, 2021

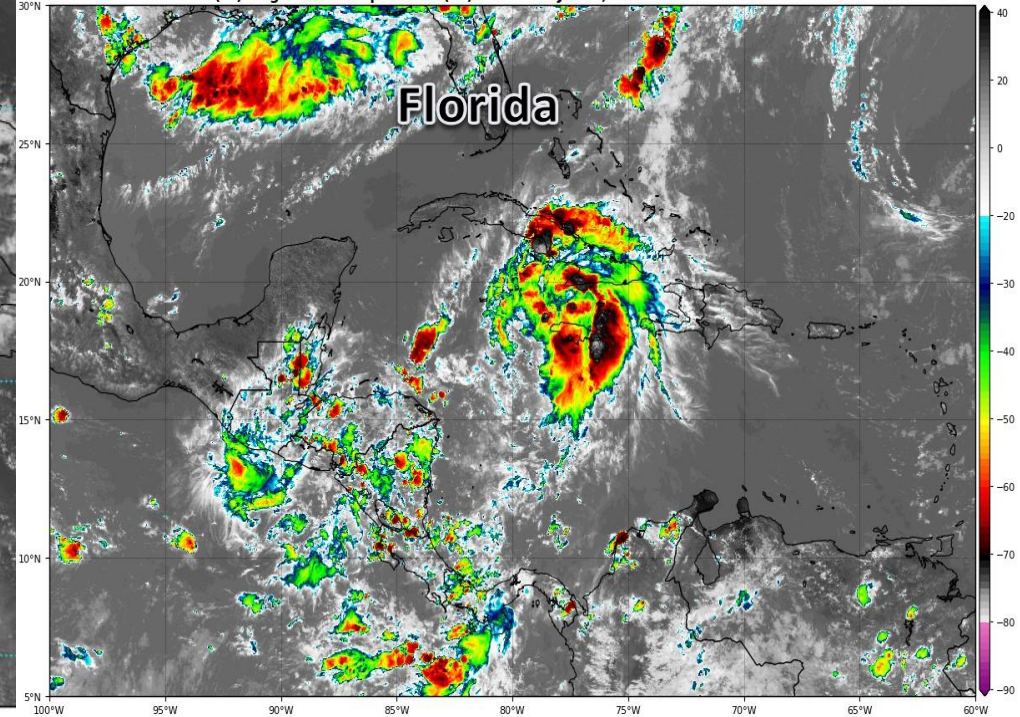
TROPICALTIDBITS.COM



Elsa has been trying to reorganize today, but the nearby large mountains of Jamaica and eastern Cuba continue to disrupt the system. The system remains disorganized.

GOES-16 Channel 13 (IR) Brightness Temperature (°C) at 18:55Z Jul 04, 2021

TROPICALTIDBITS.COM





Damaging Wind Threat Overview

Tropical Storm Elsa

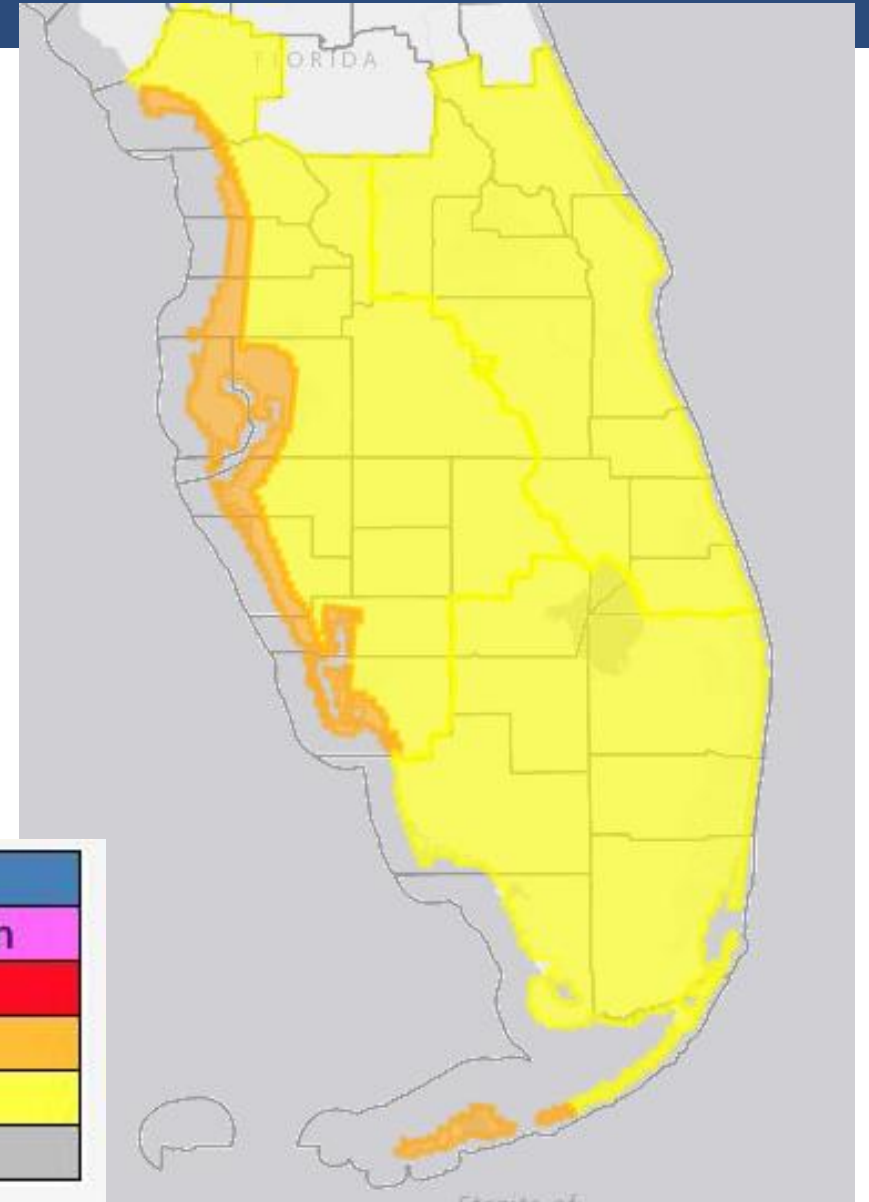
The greatest wind threat is along the immediate West Coast of Florida (west of I-75 and north of Naples) and across the Lower and Middle Florida Keys.

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

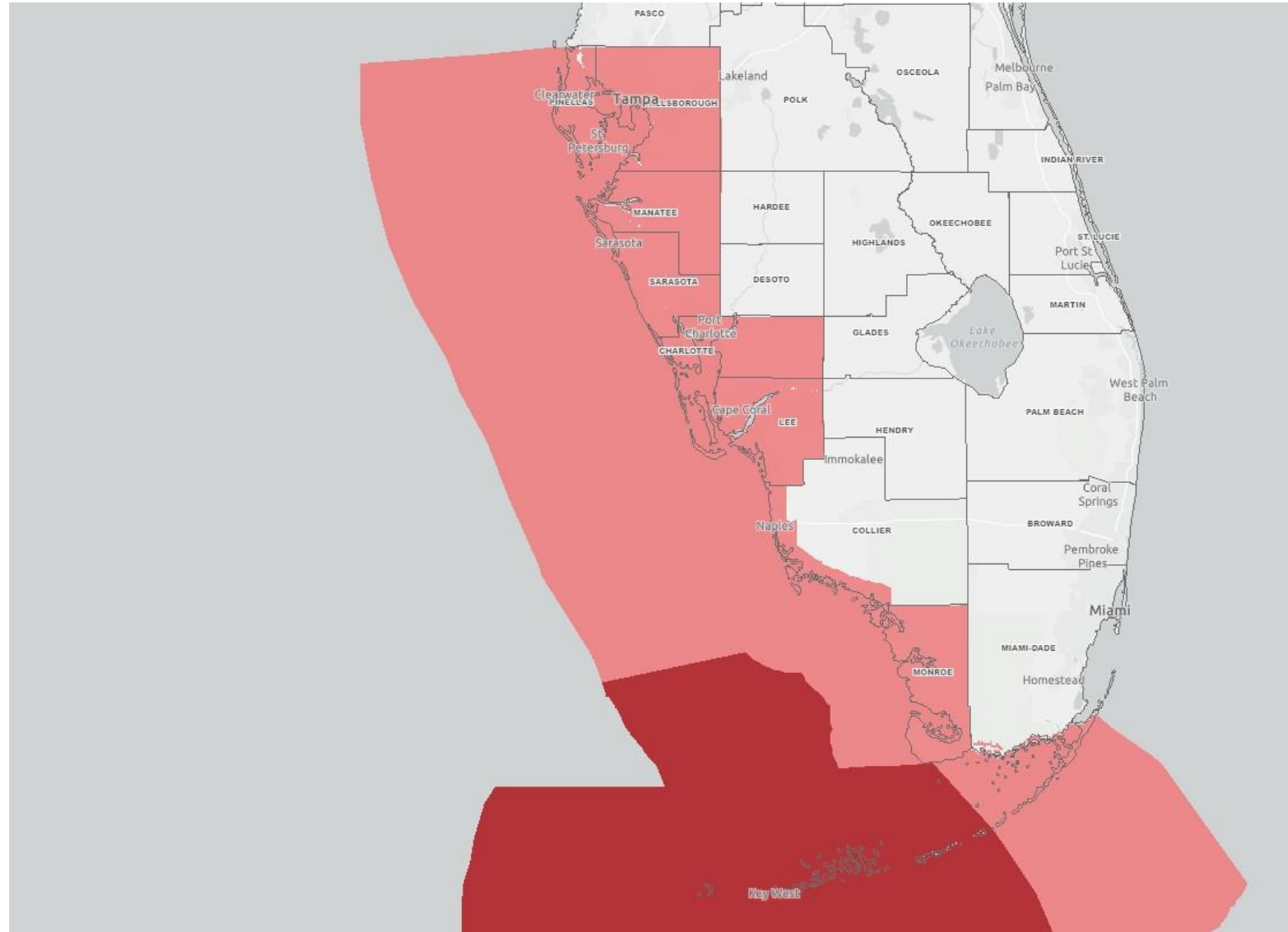
In Effect Until Further Notice

Tropical Storm Warnings:

Middle and Lower Keys (Craig Key to Key West & Dry Tortugas)

Tropical Storm Watches:

Upper Keys (Craig Key to Ocean Reef), Mainland Monroe, Coastal Collier, and now Lee, Charlotte, Sarasota, Manatee, Hillsborough, and Pinellas.



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



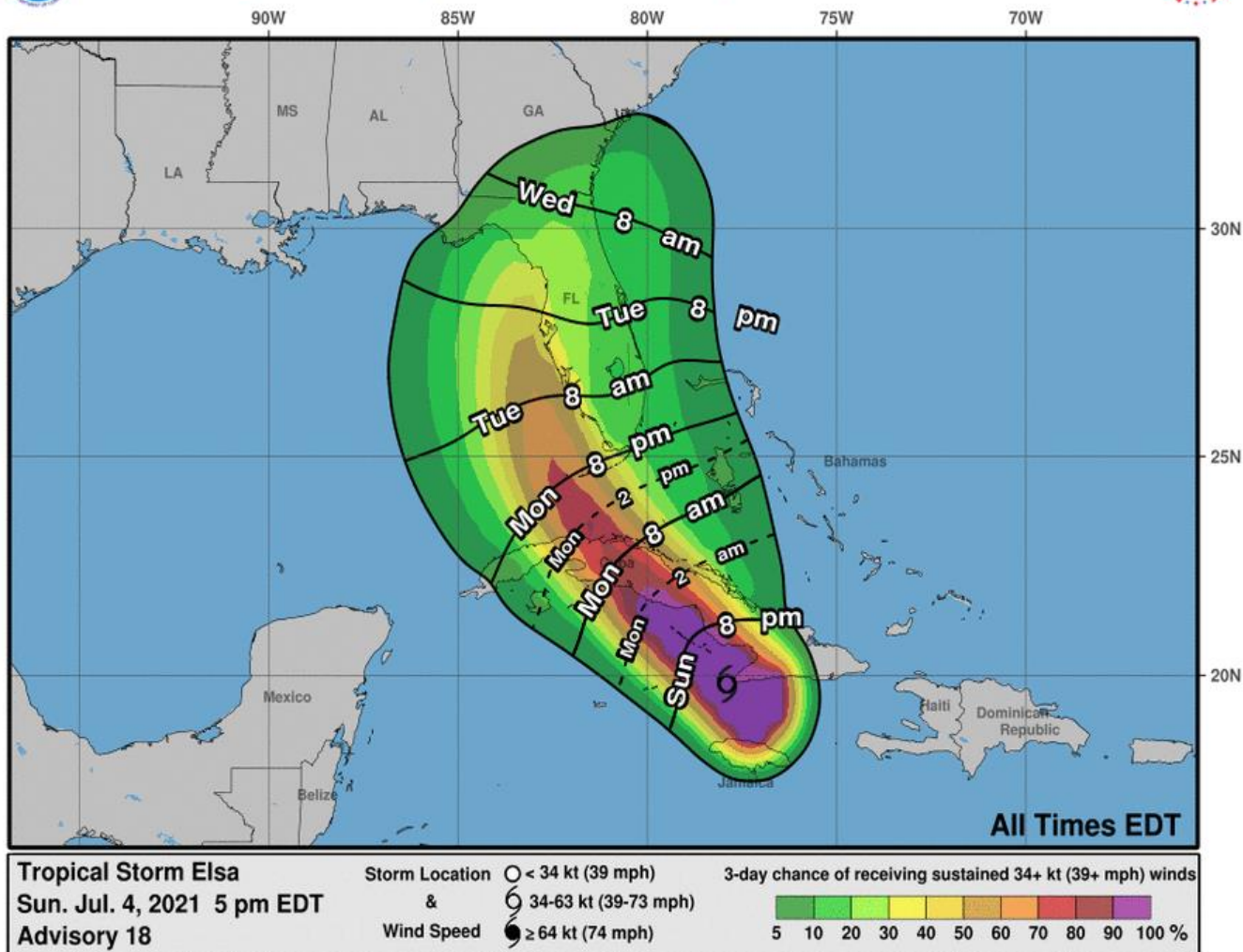
weather.gov/mob



Time of Arrival & Wind Speed Probabilities

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

0-3 Day Most Likely Arrival Time of Tropical-Storm-Force Winds



City	Chance for TS Winds	Changes Since Last Packet
Key West	67%	+3%
Marathon	49%	-4%
Naples	45%	+3%
Miami	11%	-3%
West Palm Beach	16%	-1%
Ft. Myers	27%	+2%
Tampa	41%	+3%
Orlando	18%	-2%
Apalachicola	10%	-2%
Tallahassee	9%	-5%
Gainesville	21%	+2%
Jacksonville	17%	-7%

Tropical storm force winds are **most likely** to begin Monday night south of Lake Okeechobee, Tuesday day between I-4 and Lake Okeechobee, Tuesday night north of I-4, and Wednesday morning in Northeast Florida.

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



Key Messages

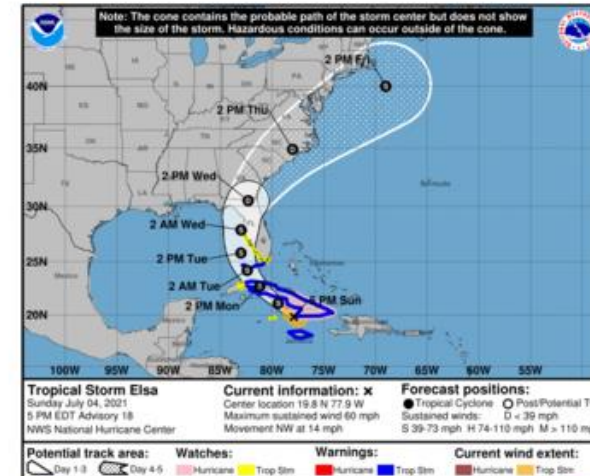
From the National Hurricane Center



Key Messages for Tropical Storm Elsa Advisory 18: 5:00 PM EDT Sun Jul 04, 2021



1. Widespread heavy rain will continue to affect portions of Jamaica tonight where isolated to scattered flash flooding and mudslides will be possible. Heavy rain will then impact the Cayman Islands and Cuba through Monday resulting in significant flooding and mudslides over Cuba. As Elsa approaches the Florida Keys, Florida Peninsula, and coastal Georgia Monday through Wednesday, heavy rainfall may result in isolated flash, urban, and minor river flooding.
2. Tropical storm conditions and a dangerous storm surge are expected with hurricane conditions possible in portions of eastern Cuba tonight. Tropical storm conditions are expected in portions of central and western Cuba tonight and Monday, and will spread into portions of the Florida Keys by late Monday.
3. Tropical Storm and Surge Surge Watches are in effect for portions of the west coast of the Florida peninsula where tropical storm conditions and a dangerous storm surge are possible beginning as early as Monday night and continuing into Tuesday.
4. There is a risk of tropical storm conditions, storm surge, and rainfall impacts along the remainder of the Florida Peninsula Tuesday night through Wednesday and the coasts of Georgia and the Carolinas Wednesday and Thursday.

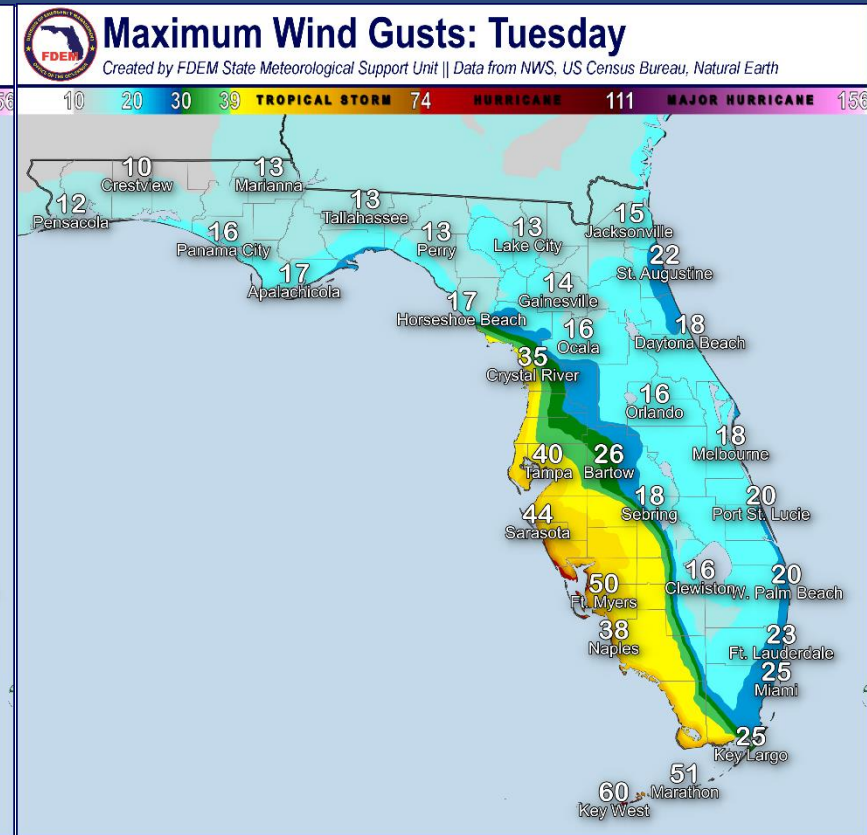
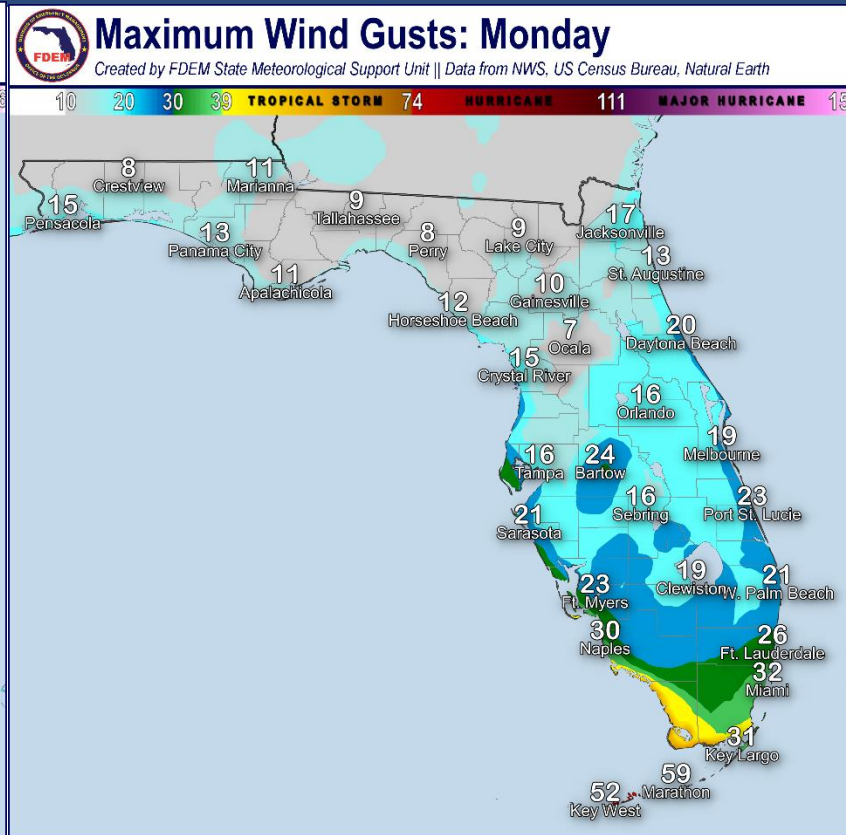
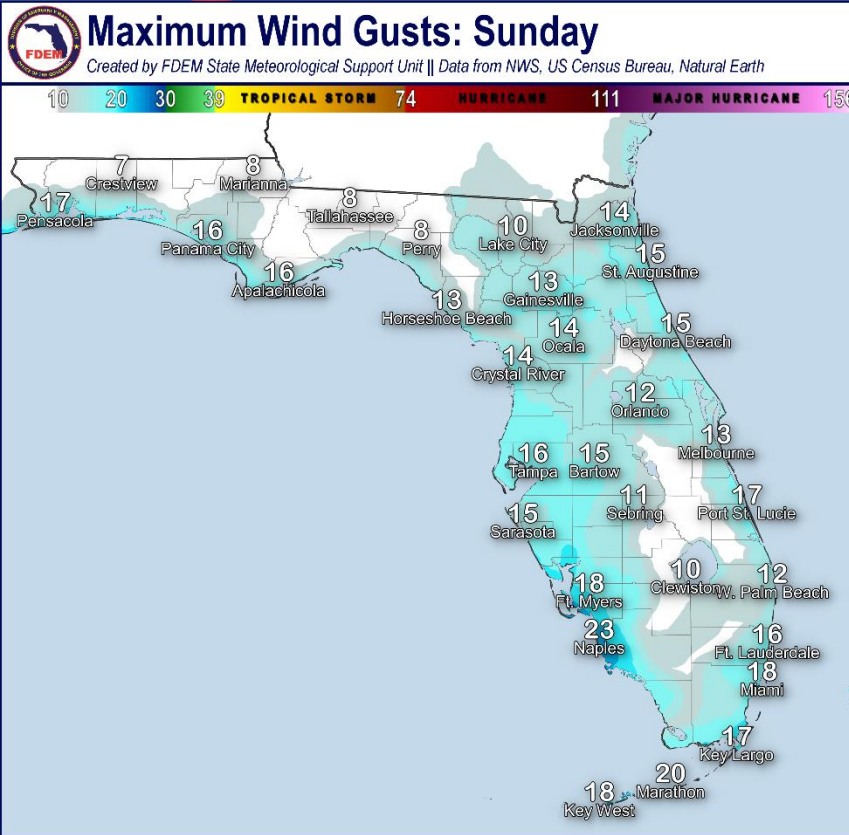


For more information go to hurricanes.gov



Max Wind Gusts Next 3 Days

Higher Gusts Possible in Thunderstorms



Winds will increase on Monday in far southern Florida and the Keys and across the western Florida Peninsula through Tuesday as Elsa approaches and moves into the state.

Storm Surge Warning

There is a **danger of life-threatening inundation** from rising water moving inland from the shoreline generally **within 36 hours**.

Promptly follow evacuation and other instructions from local officials.

Storm Surge Watch

There is a **possibility of life-threatening inundation** from rising water moving inland from the shoreline generally **within 48 hours**.

Promptly follow evacuation and other instructions from local officials.





Storm Surge/Coastal Flooding

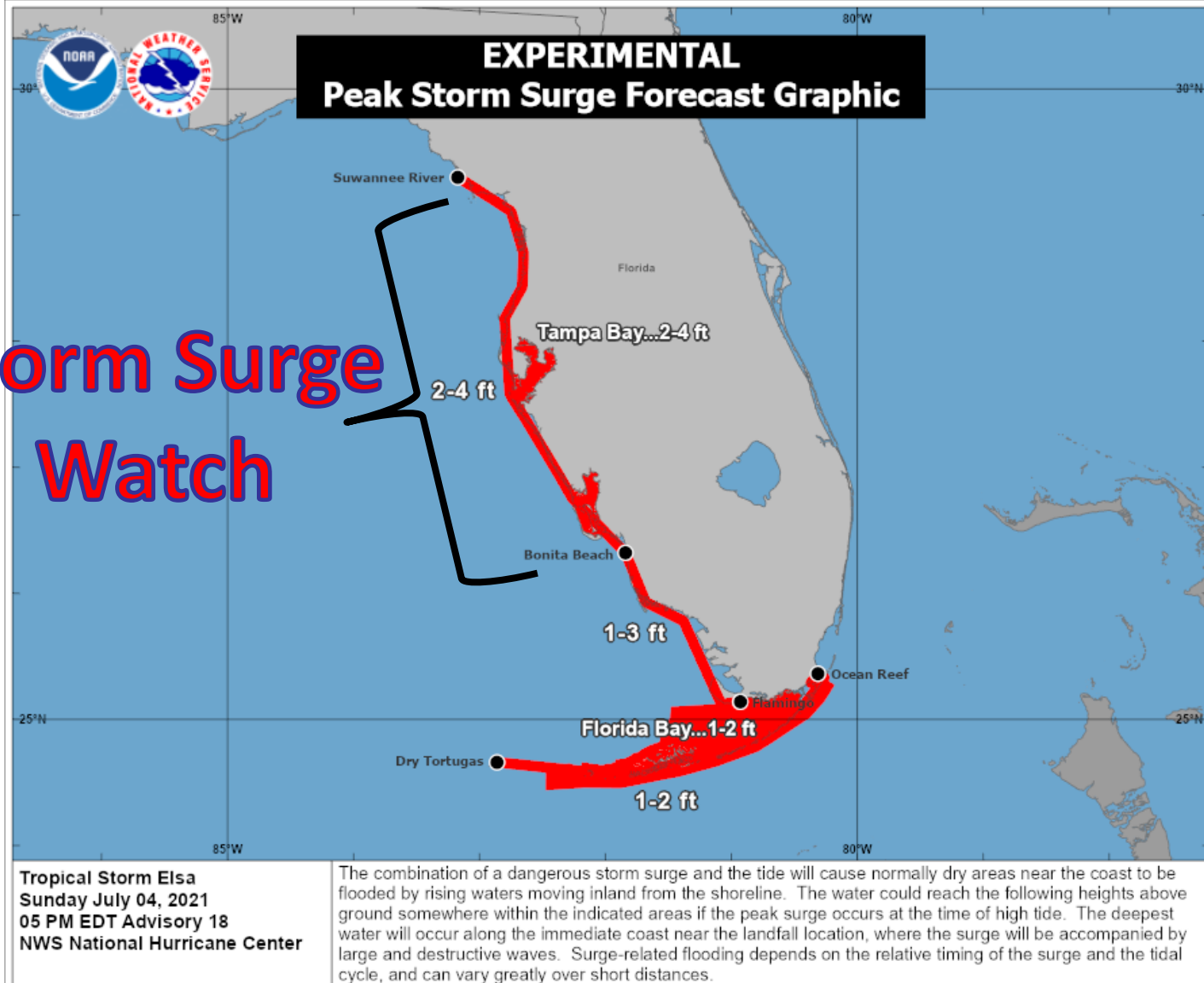
Tropical Storm Elsa

The official forecast calls for 1-3 feet of storm surge along Collier and Mainland Monroe Counties with 1-2 feet in Florida Bay and the Florida Keys.

Higher surge values of 2-4' are forecast for the West Coast of Florida, including Tampa Bay, where Storm Surge Watches are in effect.

A Storm Surge Watch has been issued for the West Coast of Florida, from Bonita Beach to the Suwannee River, which includes coastal portions of the Lee, Charlotte, Sarasota, Manatee, Hillsborough, Pinellas, Pasco, Hernando, Citrus, and Levy County.

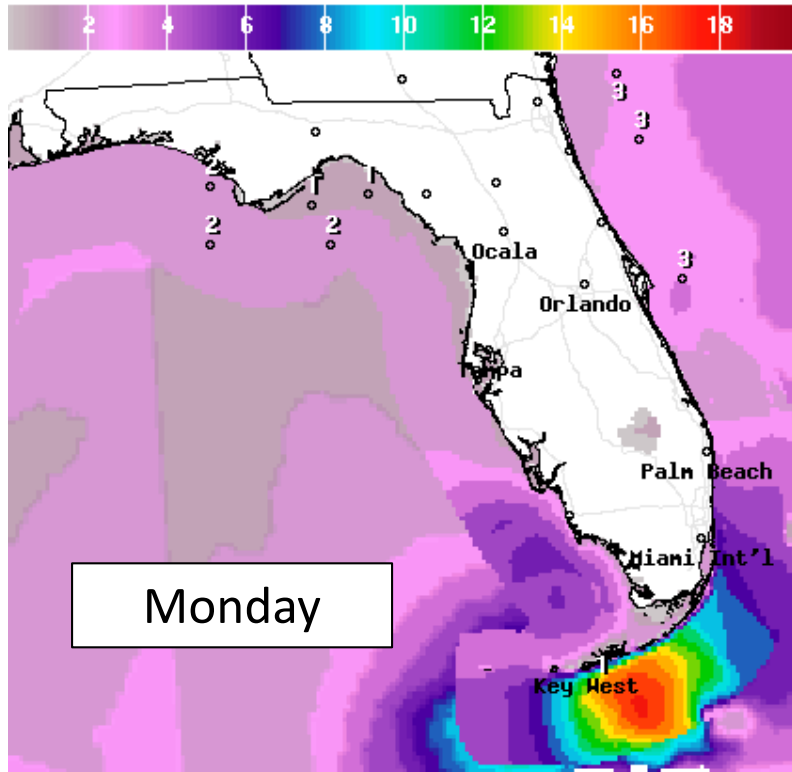
Storm Surge Watch





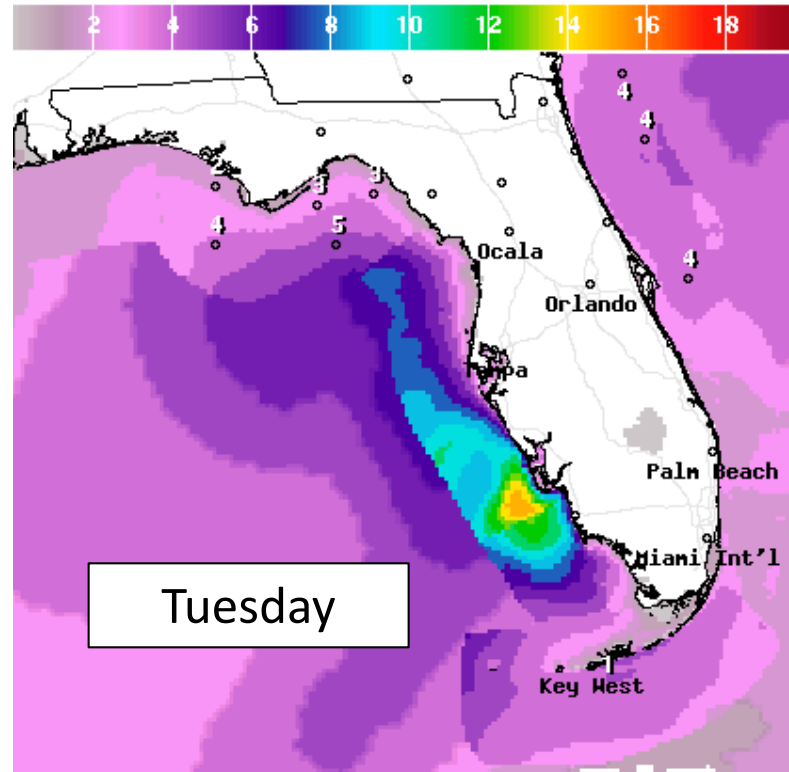
Forecast Wave Heights

Monday through Wednesday



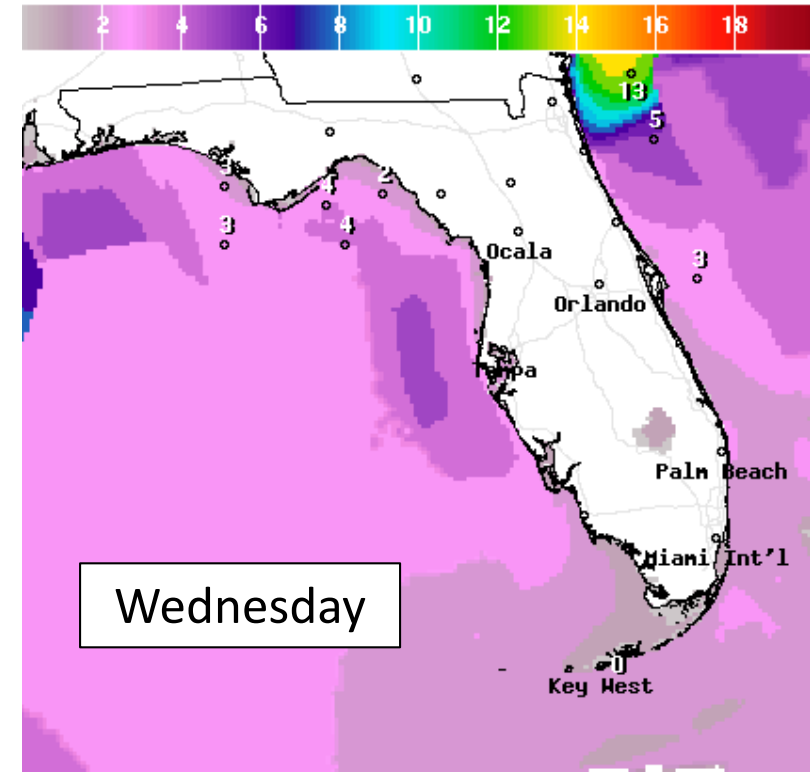
Monday

Wave Height(ft) Ending Mon Jul 05 2021 8PM EDT
(Tue Jul 06 2021 00Z)
National Digital Forecast Database
11z issuance Graphic created-Jul 04 7:22AM EDT



Tuesday

Wave Height(ft) Ending Tue Jul 06 2021 8PM EDT
(Wed Jul 07 2021 00Z)
National Digital Forecast Database
11z issuance Graphic created-Jul 04 7:23AM EDT



Wednesday

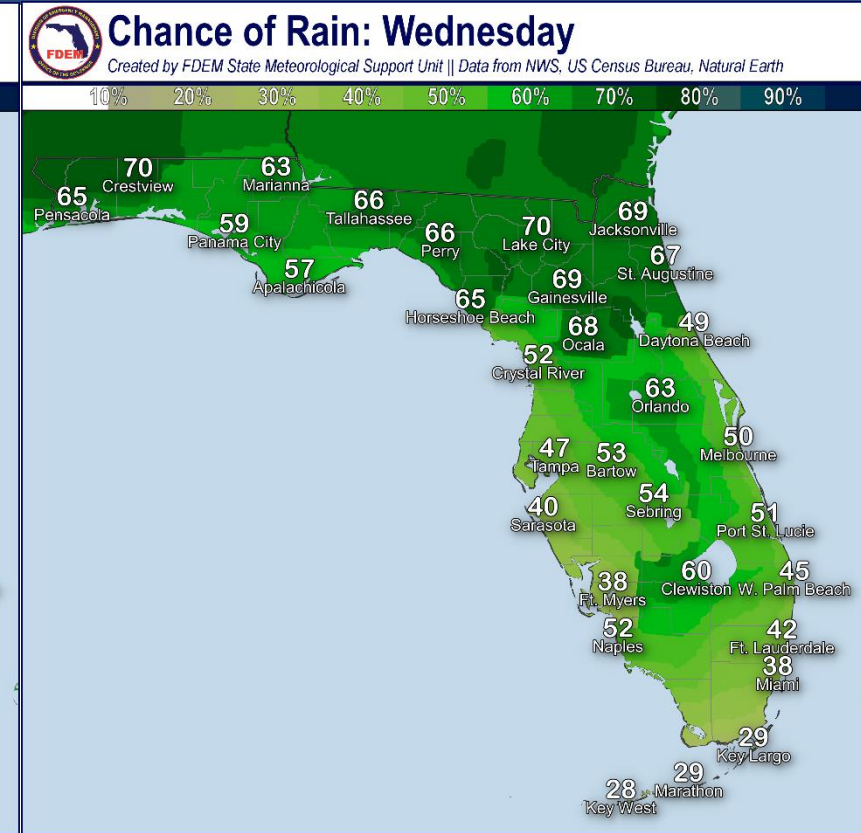
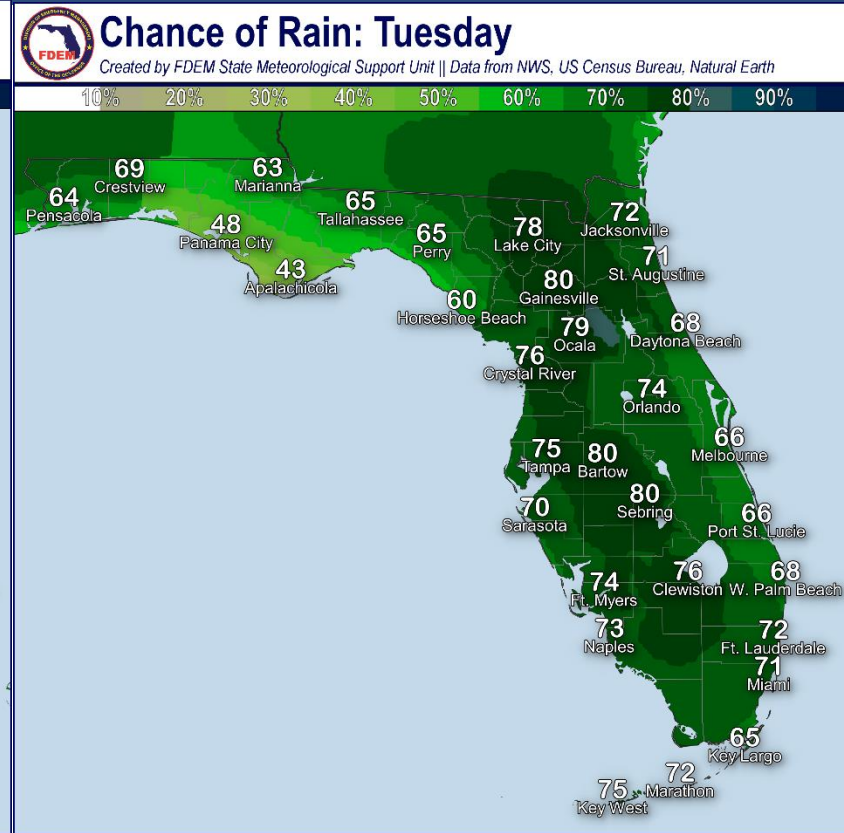
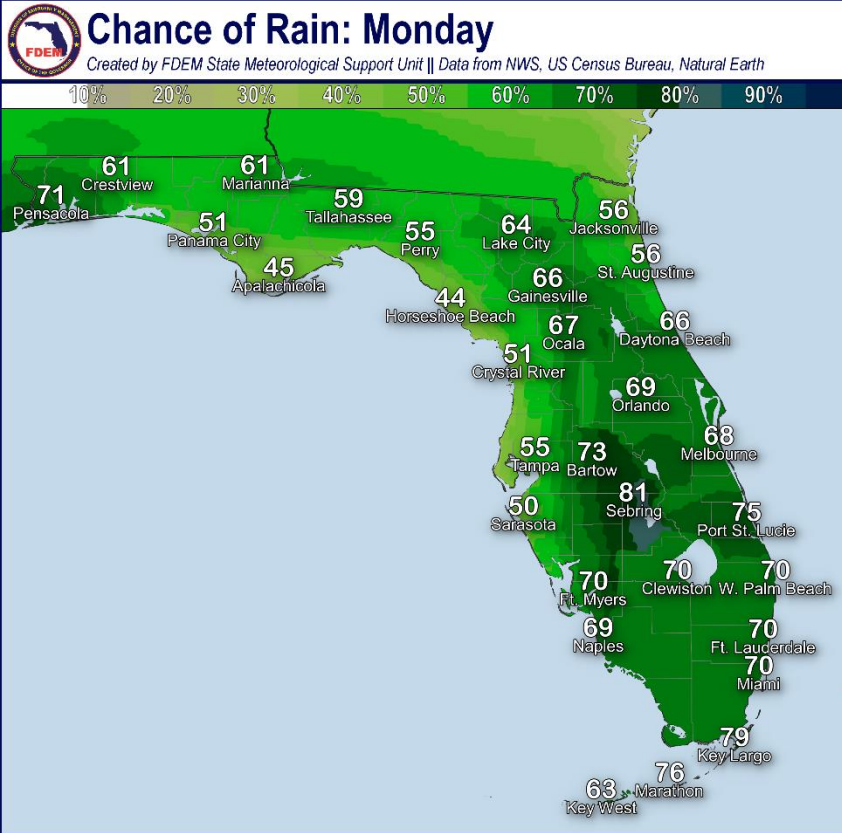
Wave Height(ft) Ending Wed Jul 07 2021 2PM EDT
(Wed Jul 07 2021 18Z)
National Digital Forecast Database
07z issuance Graphic created-Jul 04 3:30AM EDT

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. High rain chances will overspread much of the state as Elsa moves northward. Some decrease in rain chances is possible by Wednesday as Elsa departs the state, but will remain high across North Florida.



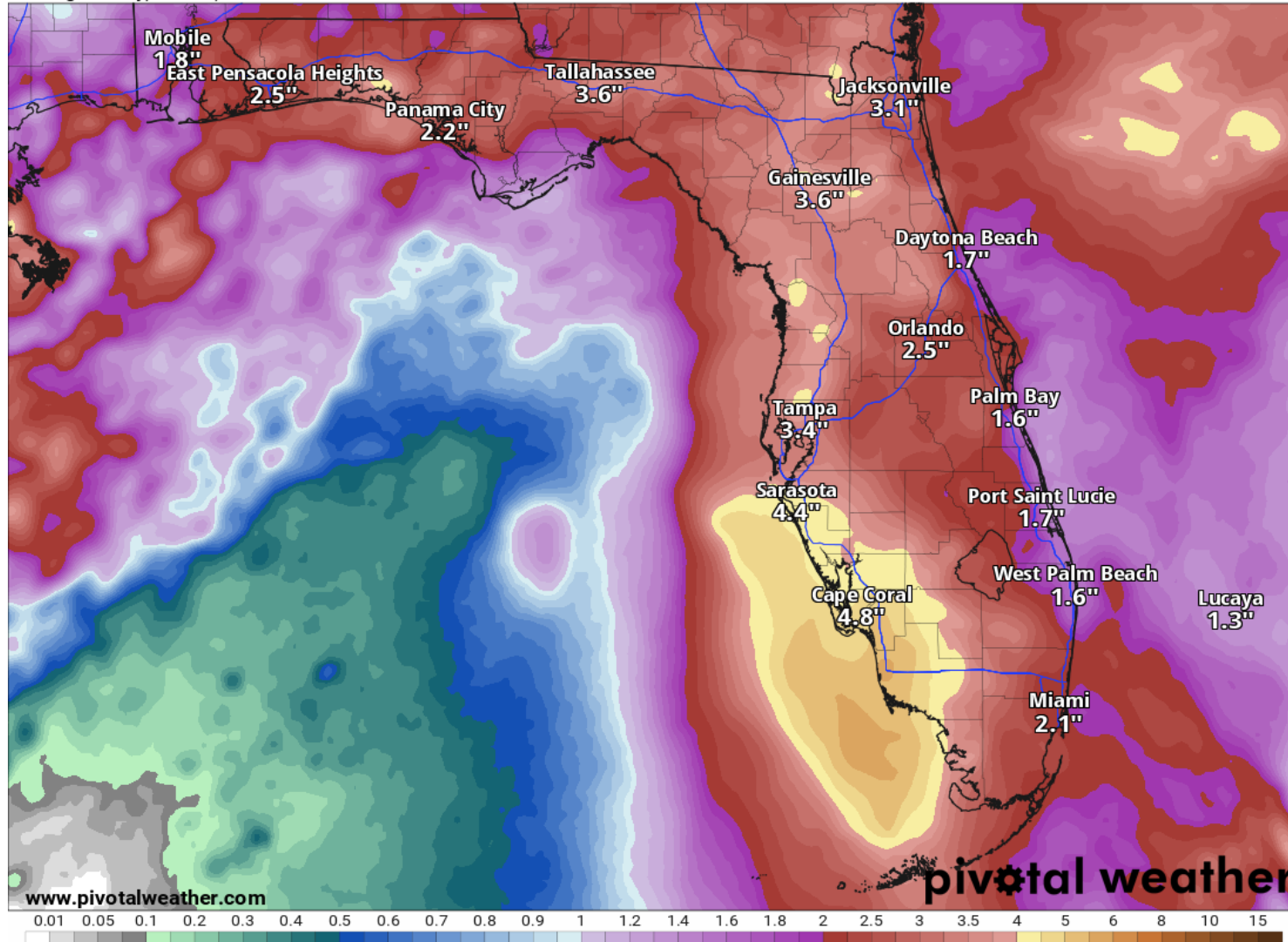
Rainfall Totals Next 7 Days

Ending 8 AM ET Sunday (7/11/21)

7-Day Precipitation (in)

Ending Sunday, Jul. 11, 2021 at 8 a.m. EDT

Init: Sun 2021-07-04 12z WPC



Through the next 7 days, rainfall totals of 3-5" are expected across much of the state, with localized totals of 6-8" possible along the West Coast. 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.

Areal Flood Watch for the Eastern Panhandle from NWS Tallahassee:

<https://forecast.weather.gov/wwama/p/wwatxtget.php?cwa=tae&wwa=flood%20watch>

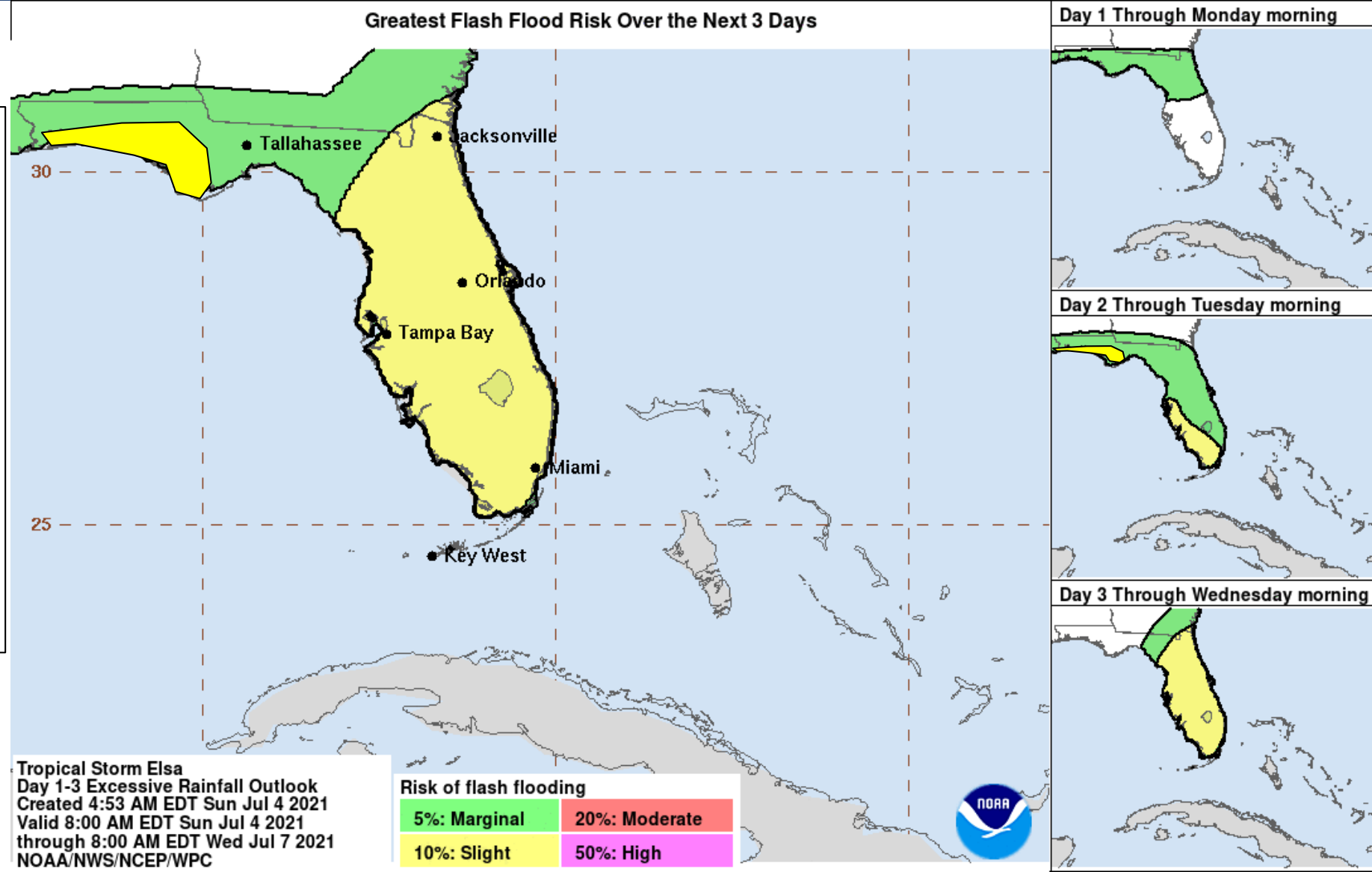


Flash Flood Outlook

3-Day Event Summary

Recent heavy rainfall across the Peninsula combined with the heavy rain potential from Elsa will result in an increased risk of flash flooding on Monday and Tuesday.

The flash flood risk in North Florida through Tuesday morning is associated with a stalled front.



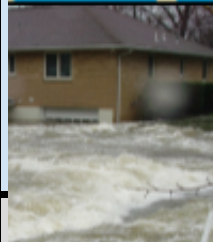
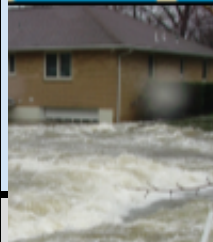




Flash Flood Risk Categories

Understanding the Weather Prediction Center Risk Scale

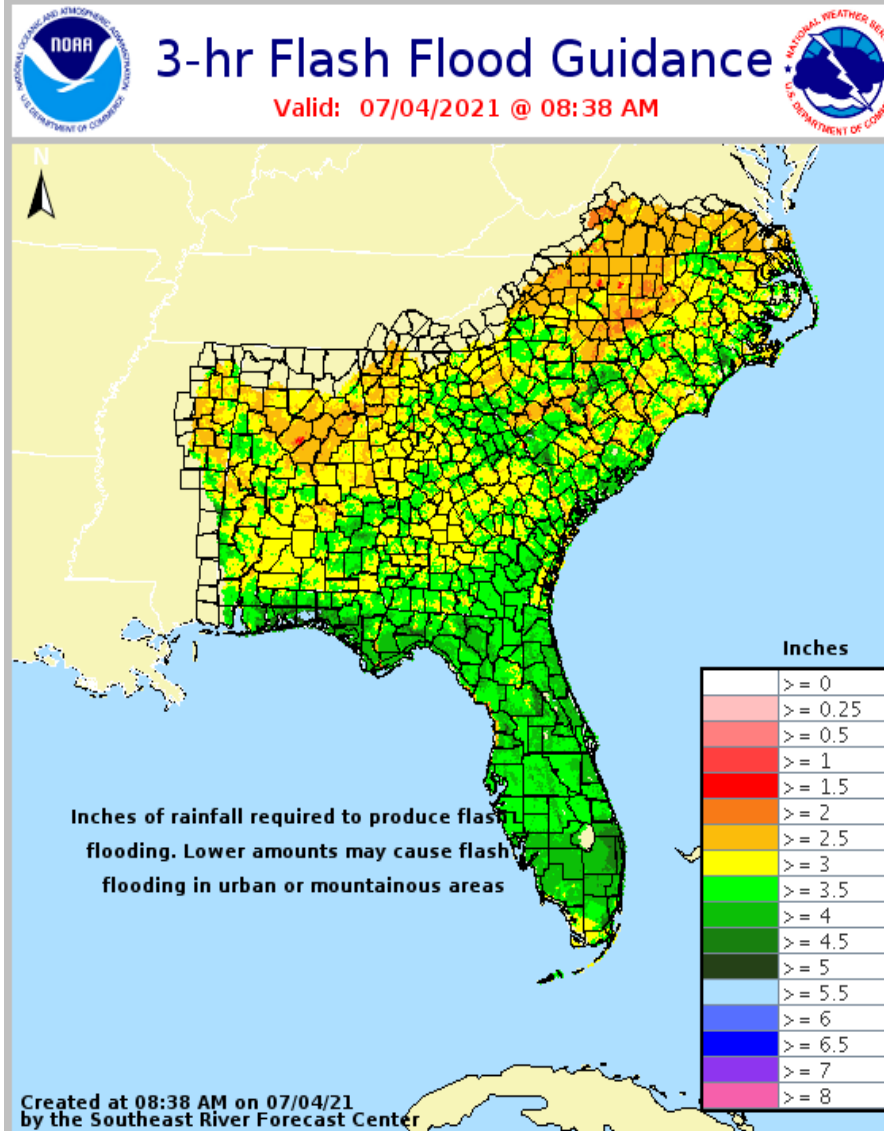
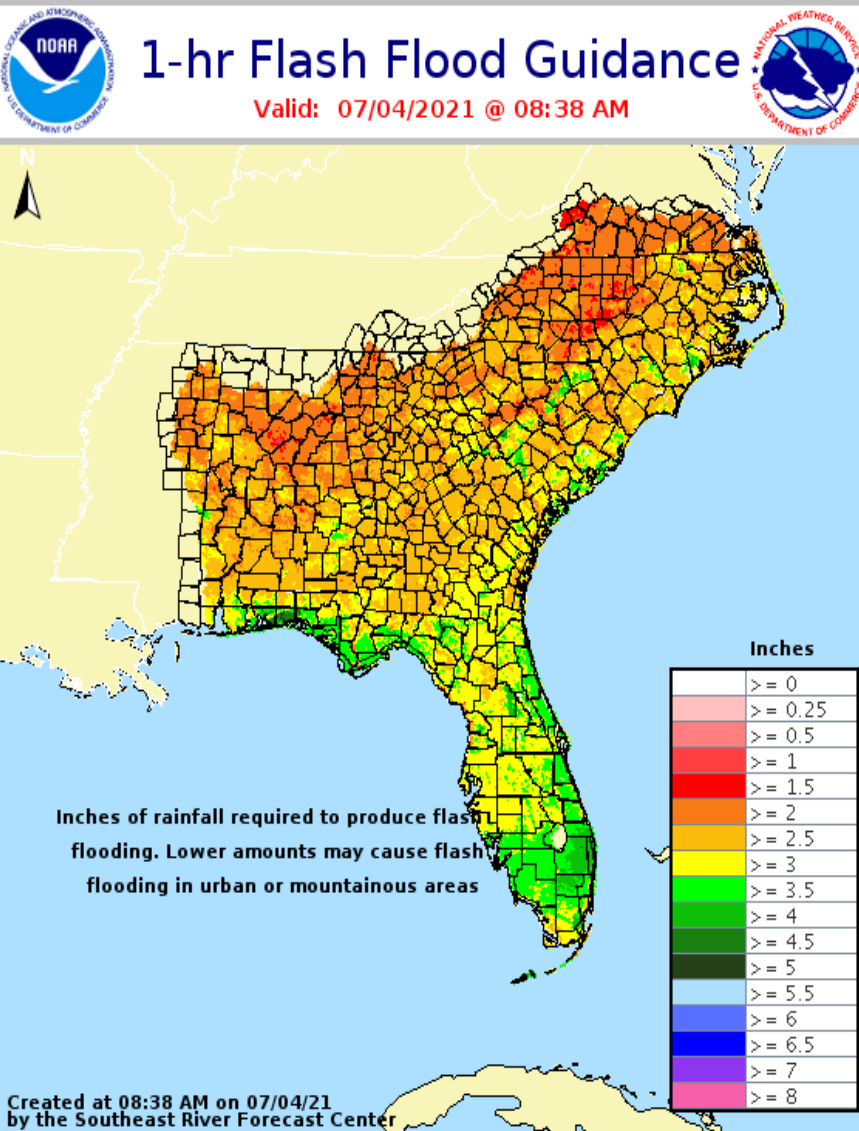
Understanding WPC Excessive Rainfall Risk Categories

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
www.wpc.ncep.noaa.gov @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 NO Flash Flooding				
  WEATHER PREDICTION CENTER		 <div>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%</div> 			



Flash Flood Guidance

How Much Rain is Needed to Create Flash Flooding?

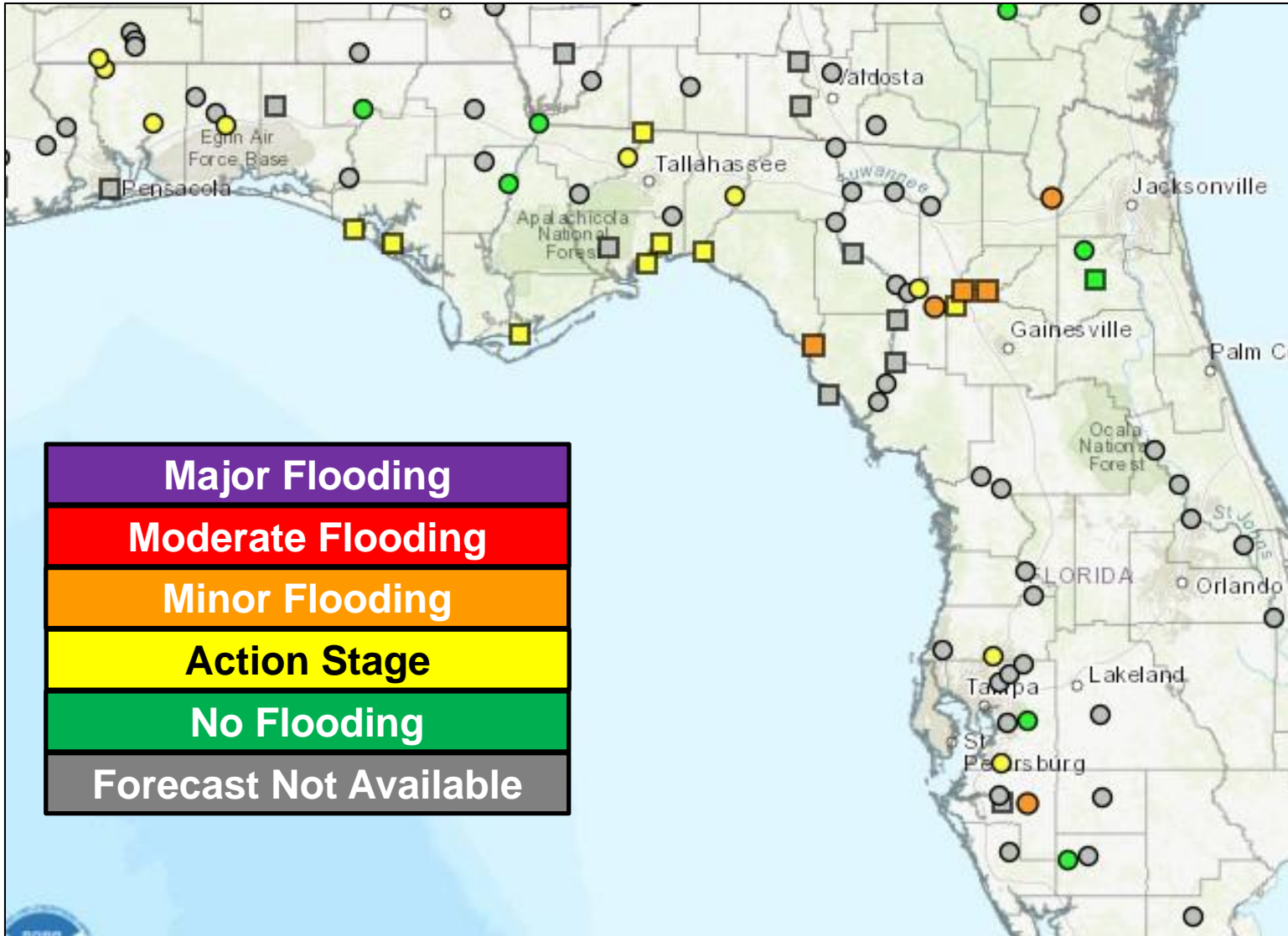


3-4" of rain in 3 hours will be enough to cause flash flooding across most of the state.



Forecast River Flooding

Forecast River Levels Based on Rainfall Next 48 Hours



Based on current forecasts, the Manatee River at Myakka Head and the St. Marys River near Macclenny may reach minor flood stage. Additionally, the Santa Fe River will likely remain in minor flood stage over the next few days.

Several other rivers across the state are forecast to rise into Action Stage.

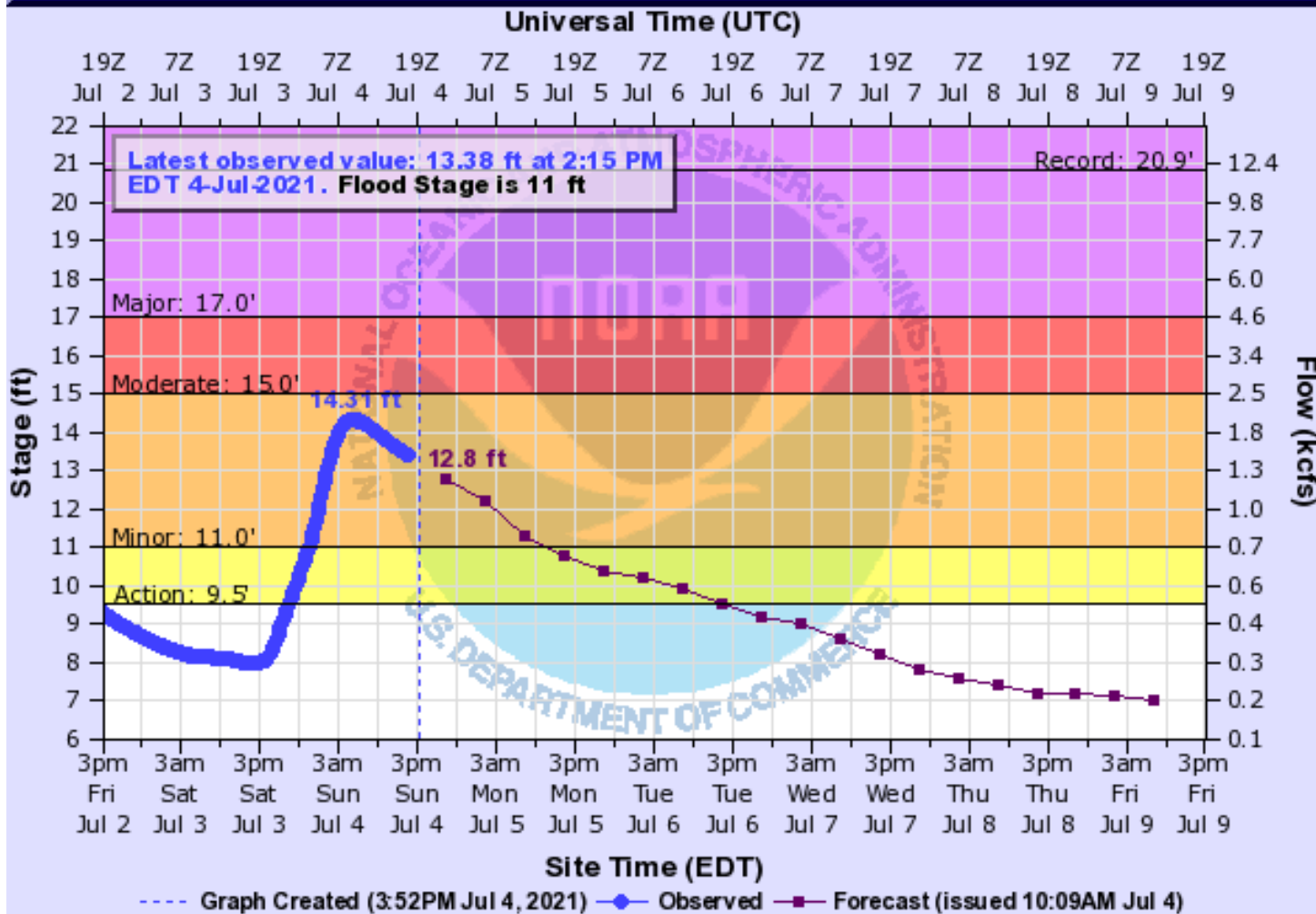
Note that the river levels will depend greatly on where the heaviest rainfall sets up. Smaller, flashier creeks not shown here could see quick rises in heavy rain bands.



Manatee River at Myakka Head

[Hydrograph Link](#)

MANATEE RIVER (FL) NEAR MYAKKA HEAD AT SR 64



MKHF1(plotting HGIRG) "Gage 0" Datum: 40.93'

Observations courtesy of US Geological Survey

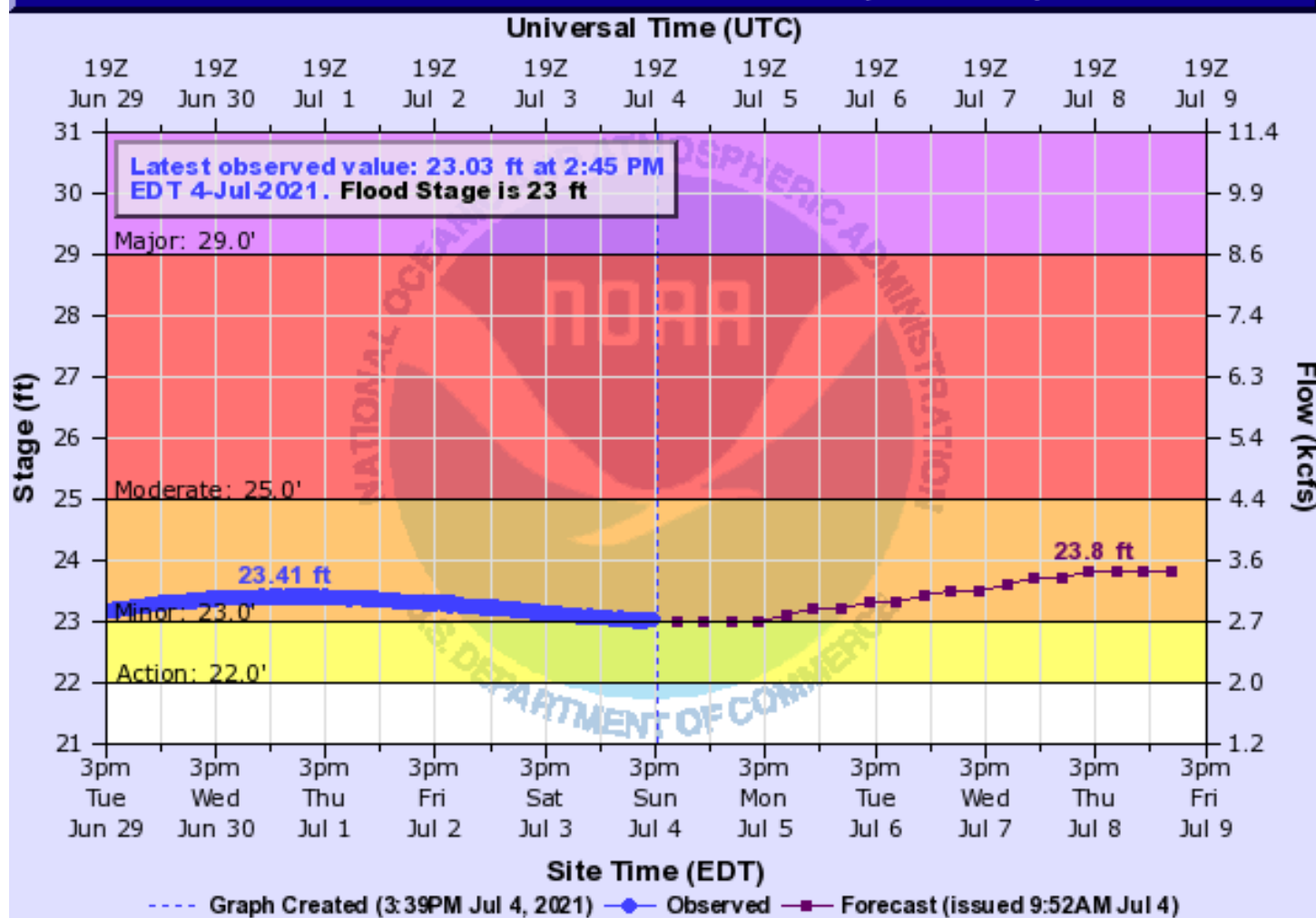
- 22 Water reaches the roadbed level of the State Road 64 bridge.
- 15 Low sections of State Road 64 start to flood.
- 11 Private road and bridge 1 mile downstream flood. Agricultural, rural Kibler area begins to flood.



Santa Fe River near Fort White

[Hydrograph Link](#)

SANTA FE RIVER NEAR FORT WHITE (IN NAVD88)



FWHF1(plotting HGIRG) "Gage 0" Datum: 0'

Observations courtesy of US Geological Survey

- 29 Major damage and disruption to the community is expected. Roads will be cut off and many homes will be surrounded by water. Boat wash damage to homes will be severe.
- 25 Damage to homes at low elevation as well as basement areas underneath homes on stilts is likely.
- 23.25 Florida Fish and Wildlife Commission begins enforcement of a no wake zone on the Santa Fe River from the centerline of the US 27 Bridge downstream to one-half mile upstream from the State Road 47 Bridge.
- 23 Minor damage to dwellings is possible due to boat wash.

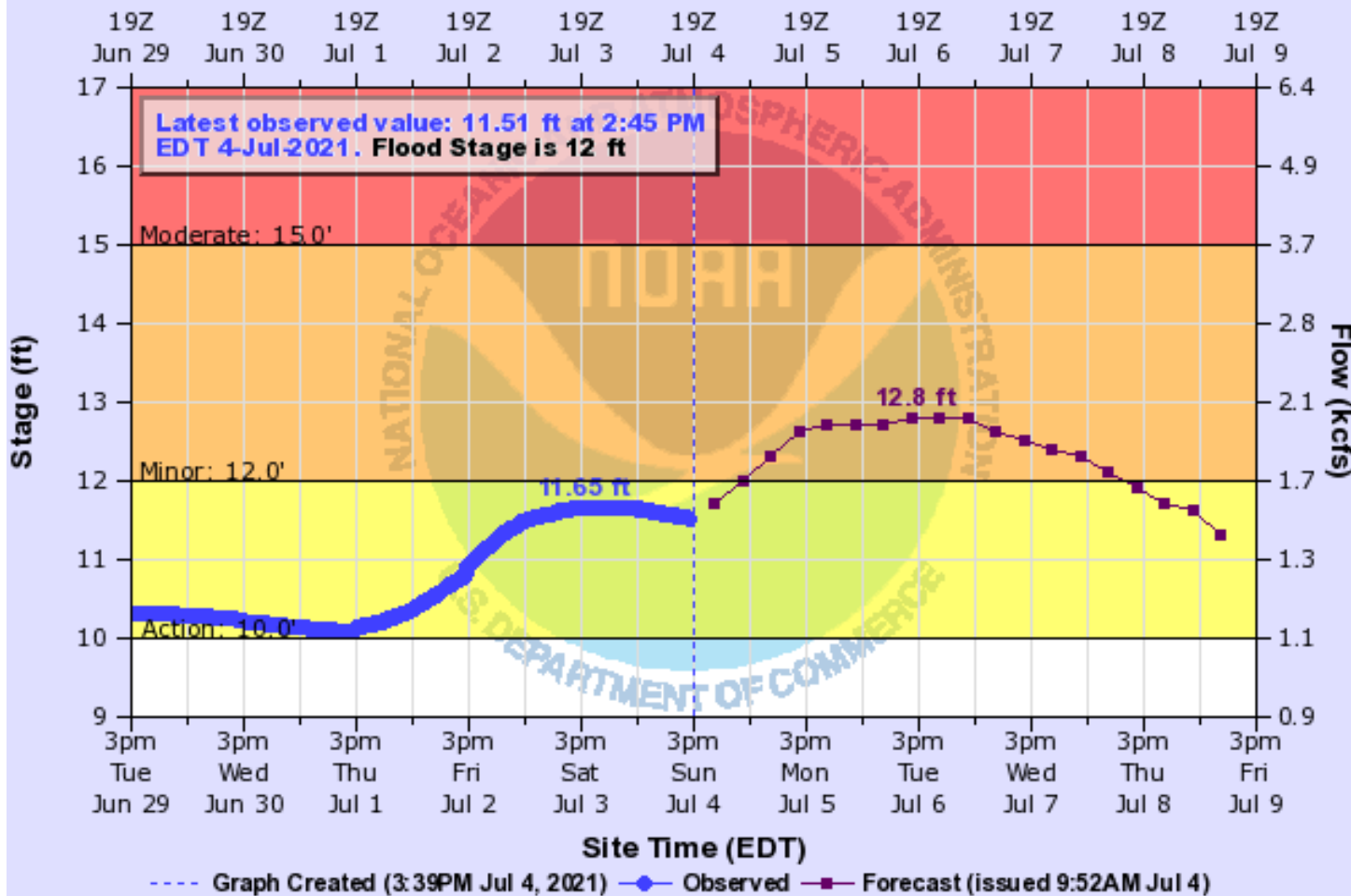


St. Marys River near Macclenny

[Hydrograph Link](#)

ST. MARYS RIVER NEAR MACCLENNY

Universal Time (UTC)



- 16 Access roads on both sides of the river in Florida and Georgia are flooded, including the entire low lying stretch of St. Mary's River Bluff Road on the Georgia side which cuts off 40 to 50 homes. On the Florida side, the lower end of St. Mary's Cove Road past the public boat ramp becomes flooded and cuts off access to 20 to 30 homes. The Stokes Road Bridge over the river is generally closed due to high water.
- 15 Flooding begins to impact the lower end of Steel Bridge Road on the Florida side and cuts off access to the river gage as well as access to several homes.
- 14 Flooding of bottomlands along the river and some lower access roads including the lower half of St. Mary's River Bluff Road which cuts off 15 to 20 homes on the Georgia side.
- 12 Minor flooding of low lying areas and timber lands including some properties along St. Mary's River Bluff Road and the Cypress Landing Resort on the Georgia side.



Severe Weather Outlook Monday

From the Storm Prediction Center

5 - High

Widespread severe storms expected

4 - Moderate

Widespread severe storms likely

3 - Enhanced

Numerous severe storms possible

2 - Slight

Scattered severe storms possible

1 - Marginal

Isolated severe storms possible

Thunderstorms

No severe storms expected

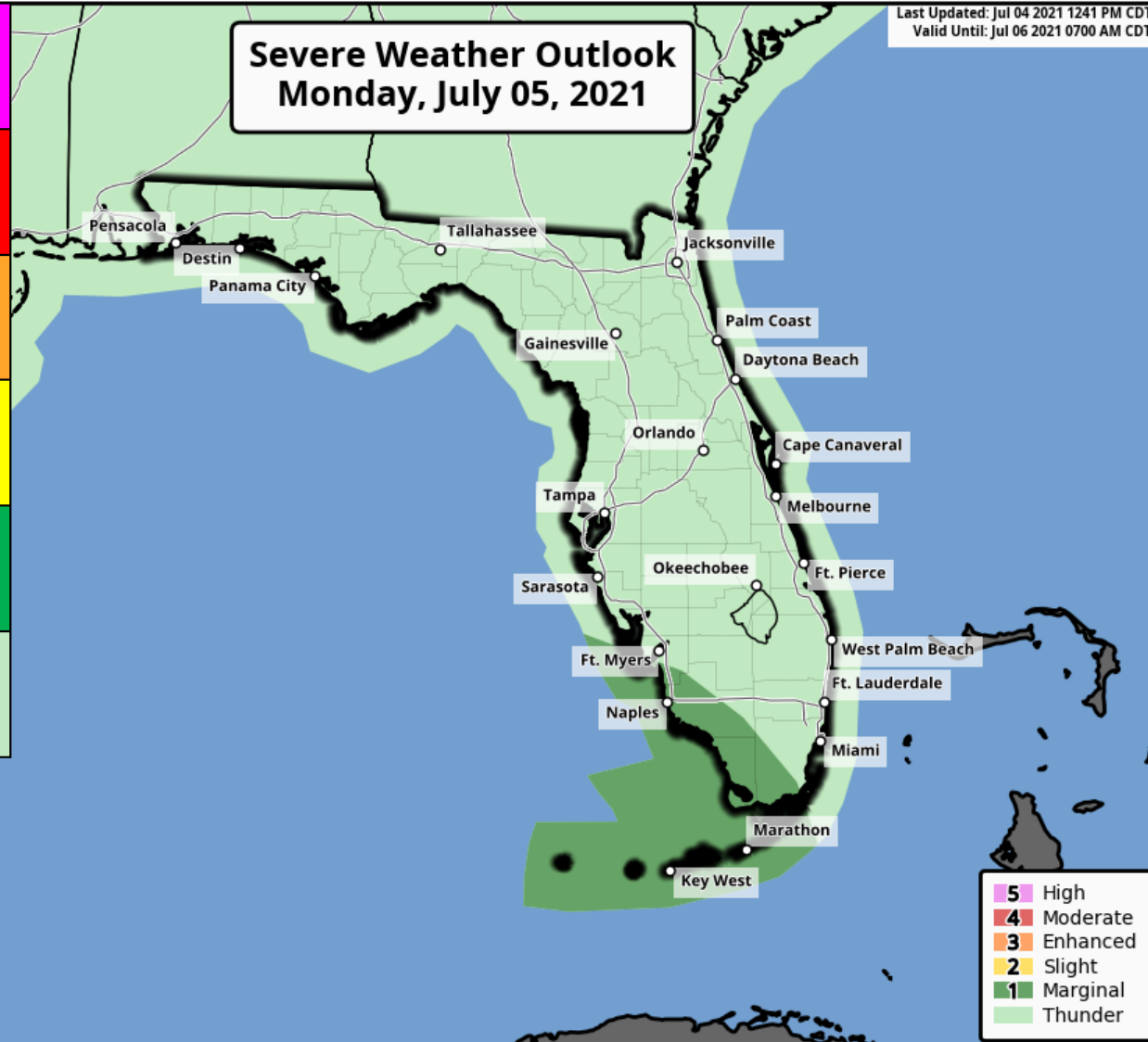


National Weather Service
Storm Prediction Center

<http://www.spc.noaa.gov>

Severe Weather Outlook Monday, July 05, 2021

Last Updated: Jul 04 2021 1241 PM CDT
Valid Until: Jul 06 2021 0700 AM CDT



As the outer bands from Elsa move into South Florida and the Florida Keys on Monday, isolated tornadoes are possible. There is a **Marginal Risk** (level 1 of 5) of Severe Weather.

The isolated tornado threat will spread northward on Tuesday and Wednesday. Additional outlooks from the Storm Prediction Center will likely be issued.

THUNDERSTORMS
(no label)

No severe*
thunderstorms
expected

Lightning/flooding
threats exist with all
thunderstorms

1 - MARGINAL
(MRGL)

Isolated severe
thunderstorms
possible

Limited in duration
and/or coverage
and/or intensity



Overall Summary

Tropical Storm Elsa

- The center of Elsa is located near Cabo Cruz, Cuba or about 400 miles southeast of Key West.
- Elsa remains a tropical storm with maximum sustained winds near 60 mph.
- Some slight strengthening is possible before Elsa moves over Cuba on Monday, with weakening thereafter. Little change in strength or some slight re-strengthening is possible after it emerges into the Gulf of Mexico.
- Elsa is moving to the northwest at 14 mph. Elsa will then turn northward and then northeastward on Tuesday and Wednesday.

Florida Outlook:

- Do not focus on the exact forecast points as impacts will extend well outside of the forecast cone.
- **Tropical Storm Warnings:** Lower and Middle Keys (Dry Tortugas to Craig Key)
- **Tropical Storm Watches:** Upper Keys (Craig Key to Ocean Reef), Mainland Monroe, Coastal Collier, Charlotte, Hillsborough, Lee, Manatee, Pinellas, & Sarasota
- Tropical storm force winds from 40-70 mph are possible starting in about 36 hours Tuesday/Tuesday night in the Tampa Bay area.
- **Storm Surge Watches:** Bonita Beach to the Anclote River, or the coastal areas of Charlotte, Citrus, Hernando, Hillsborough, Lee, Levy, Manatee, Pasco, Pinellas, and Sarasota County.
- Storm Surge values of 2-4' are forecast in the watch area. Storm surge values of less than 3' are expected across the Keys and along the East Coast.
- A widespread 3-5" of rain is possible across the Big Bend, Peninsula, and Keys over the next 7 days with localized totals of 6-8". This could result in some urban or flash flooding early next week due to wet/saturated soils as well as some minor river flooding. Flood Watches may be needed.
- Saturated soils will make trees more susceptible to falling in strong winds.
- 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 Monday morning with the 8 AM ET advisory. 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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