



# TROPICAL UPDATE



9:00 AM EDT

Saturday, July 3, 2021

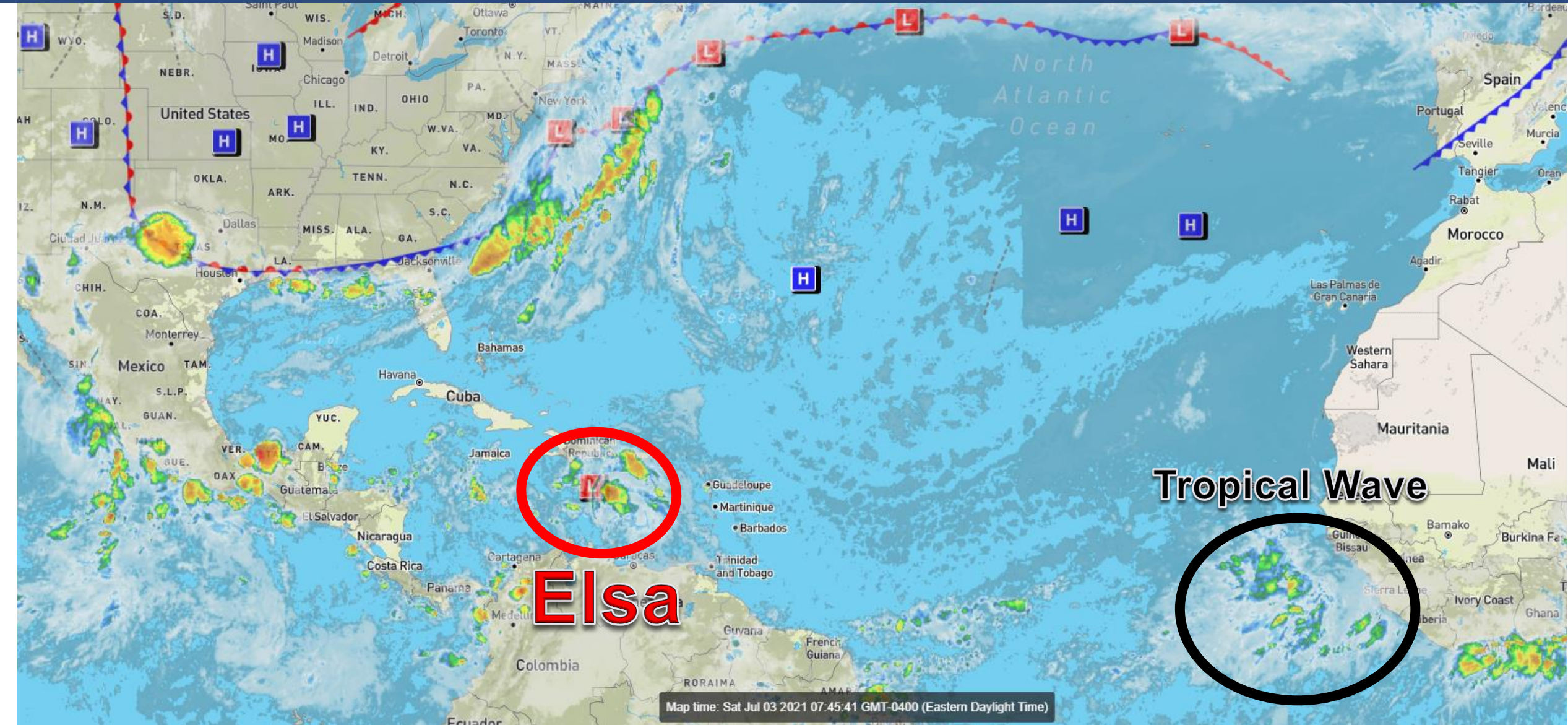
Hurricane Elsa

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](http://www.hurricanes.gov).



# Atlantic Basin Satellite Image

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

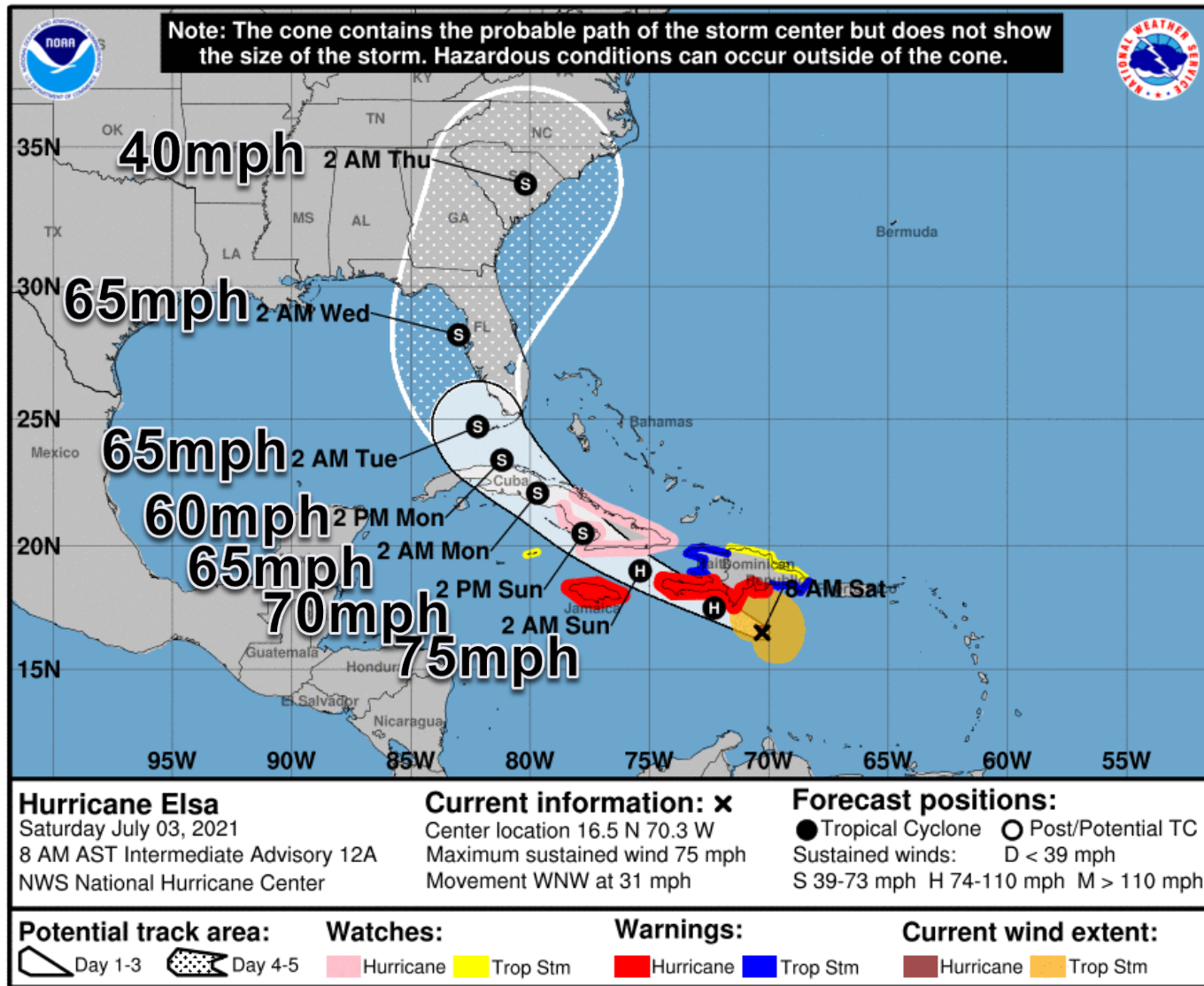






# Official Forecast Track – Hurricane Elsa

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



- The center of Elsa is located about 110 miles southeast of Isla Beata, Dominican Republic, or about 890 miles southeast of Miami, FL.
- Elsa is a category 1 hurricane with maximum sustained winds of 75 mph.
- Elsa could maintain its strength today if it remains south of Haiti and slows down enough to become better organized. Otherwise, a gradual weakening trend may continue.
- Elsa is racing toward the west-northwest at 31 mph. A decrease in forward speed is expected today and tonight, followed by a turn toward the 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.
- If it remains over water longer, there is the possibility of additional strengthening.
- This system should continue to be closely monitored for impacts to Florida, but interests are urged to not focus on the exact forecast points.



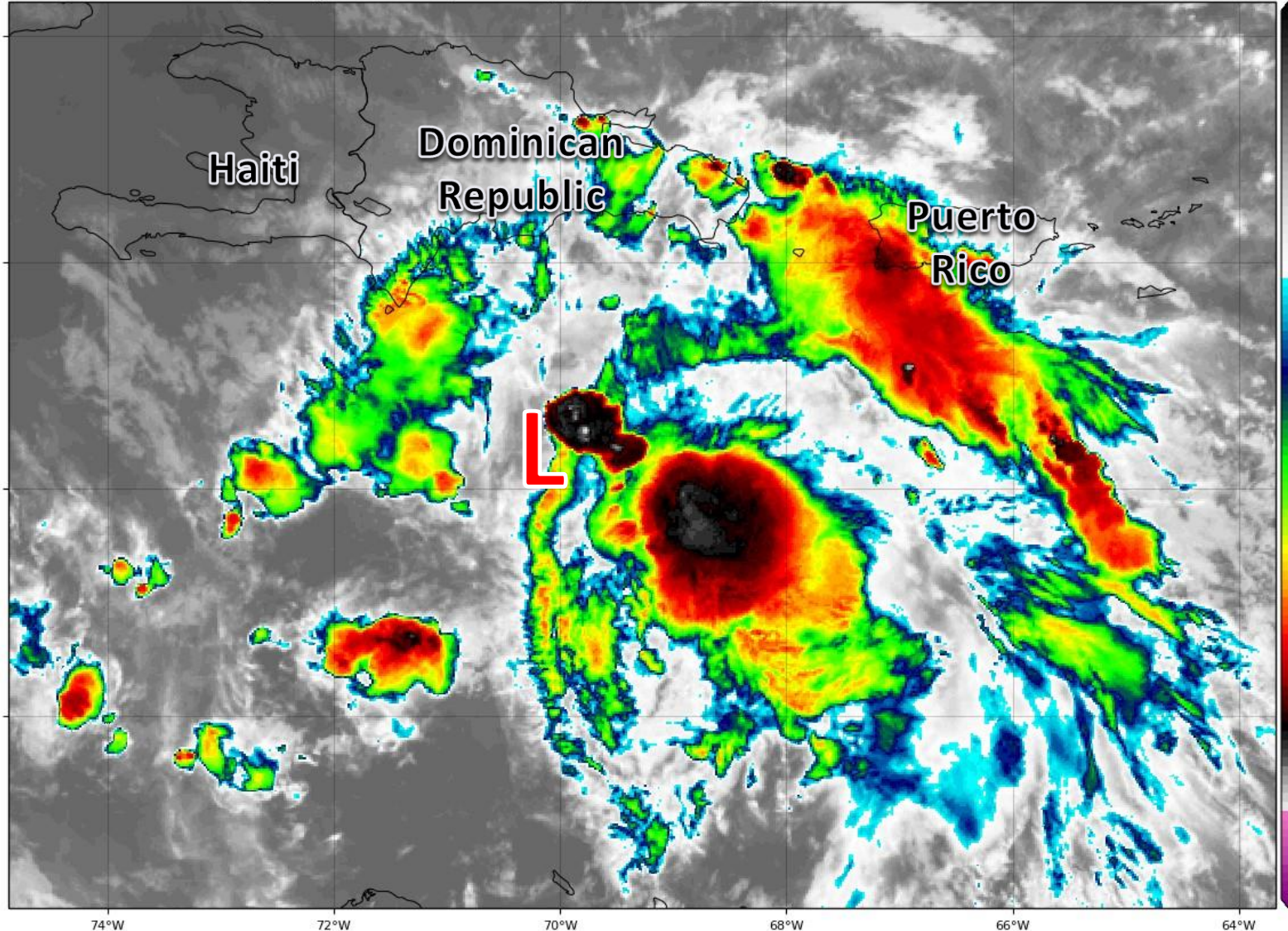


# Satellite Imagery

## Central Caribbean Sea – Hurricane Elsa

GOES-16 Channel 13 (IR) Brightness Temperature (°C) at 11:45Z Jul 03, 2021

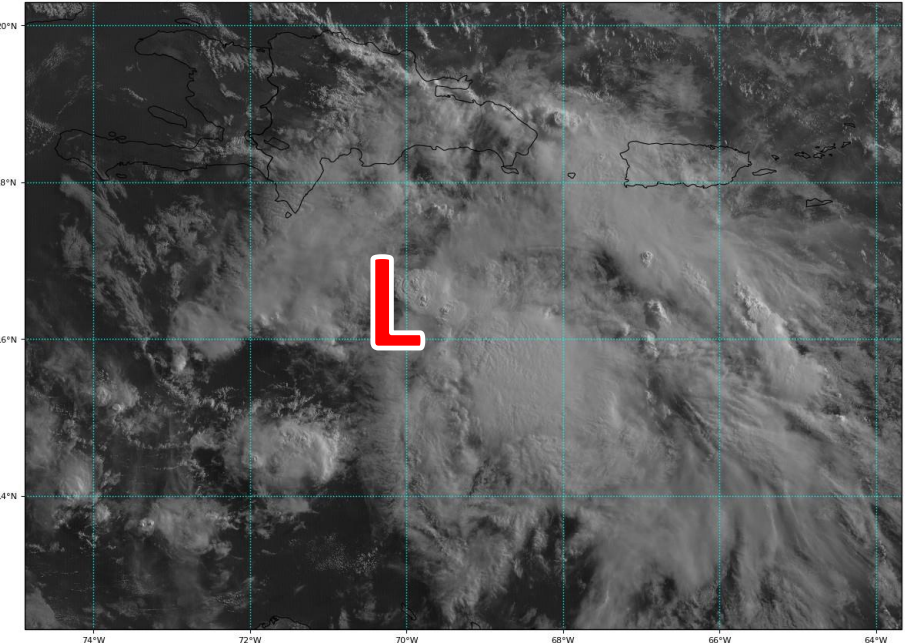
TROPICALTIDBITS.COM



Elsa has been struggling as it continues moving fast, outpacing its thunderstorms. It has a chance to become better organized if it slows down and avoids land.

GOES-16 Channel 2 (visible) Reflectance at 11:45Z Jul 03, 2021

TROPICALTIDBITS.COM

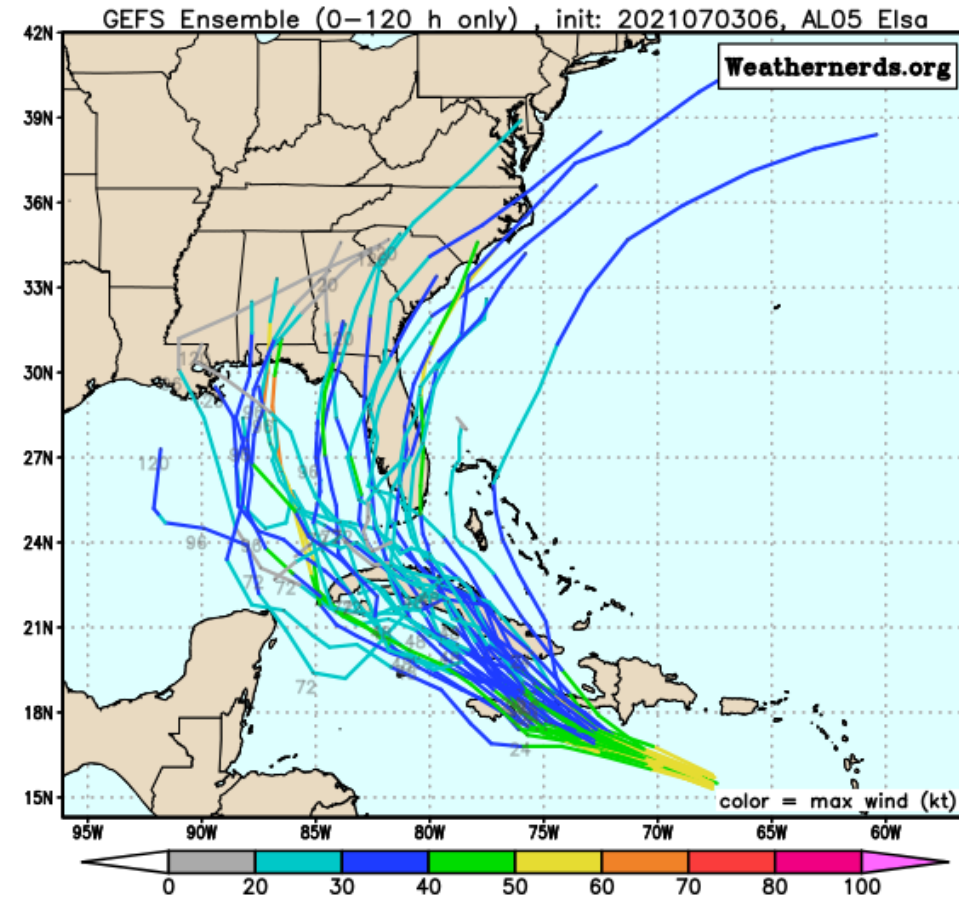
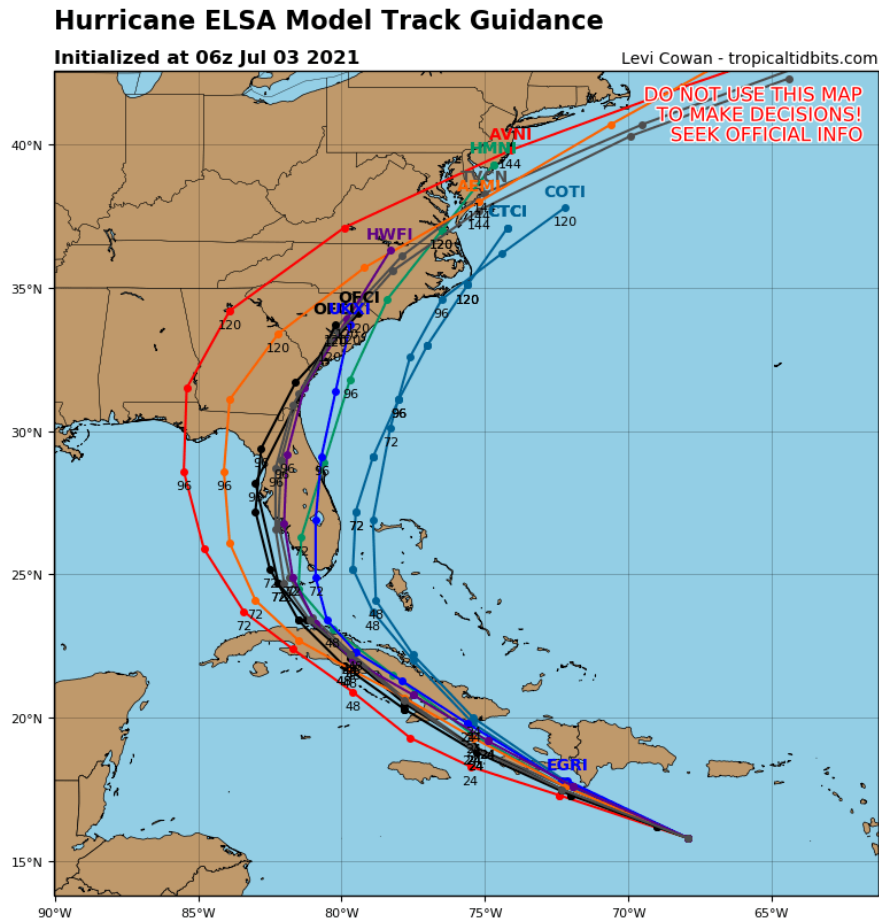






# Model Forecast Tracks Next 5 Days

## Ensemble and Dynamical Models – Hurricane Elsa



The uncertainty spread in the models has decreased somewhat. The general agreement is that Elsa may spend more time over Cuba and emerge into the eastern Gulf of Mexico. Landfall of the system in Florida remains anywhere from the Big Bend all the way into Southwest Florida, which greatly depends on timing of the northeastward turn.



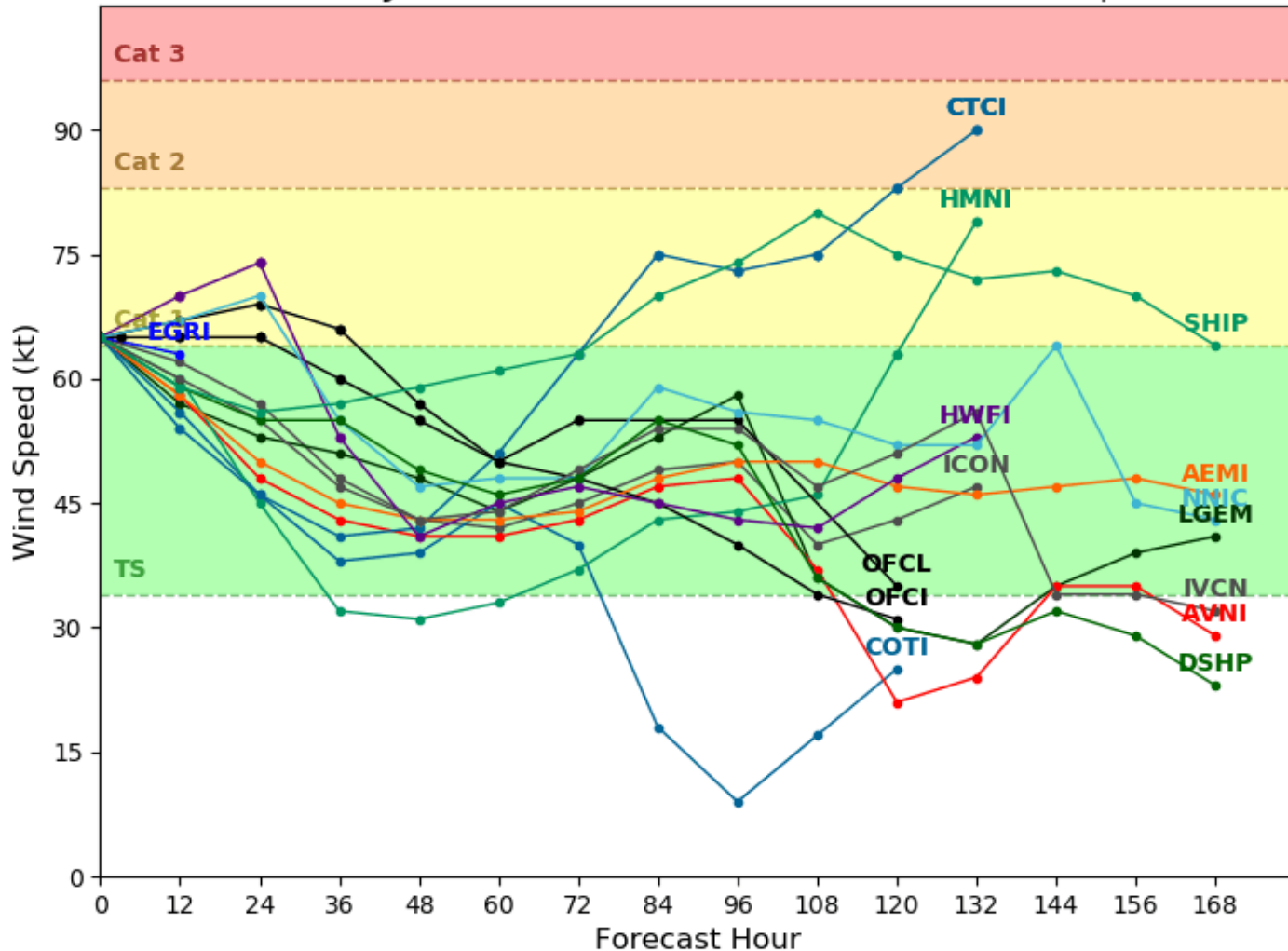
# Model Forecast Intensity

## Dynamical and Statistical Models – Hurricane Elsa

### Hurricane ELSA Model Intensity Guidance

Initialized at 06z Jul 03 2021

Levi Cowan - tropicaltidbits.com



Most models now show Elsa gradually weakening over the next 2 days as it interacts with land, then remaining a tropical storm for the remainder of its life.

Still plenty of uncertainty though with its interaction with land and how long it stays in the Gulf of Mexico after emerging from Cuba.

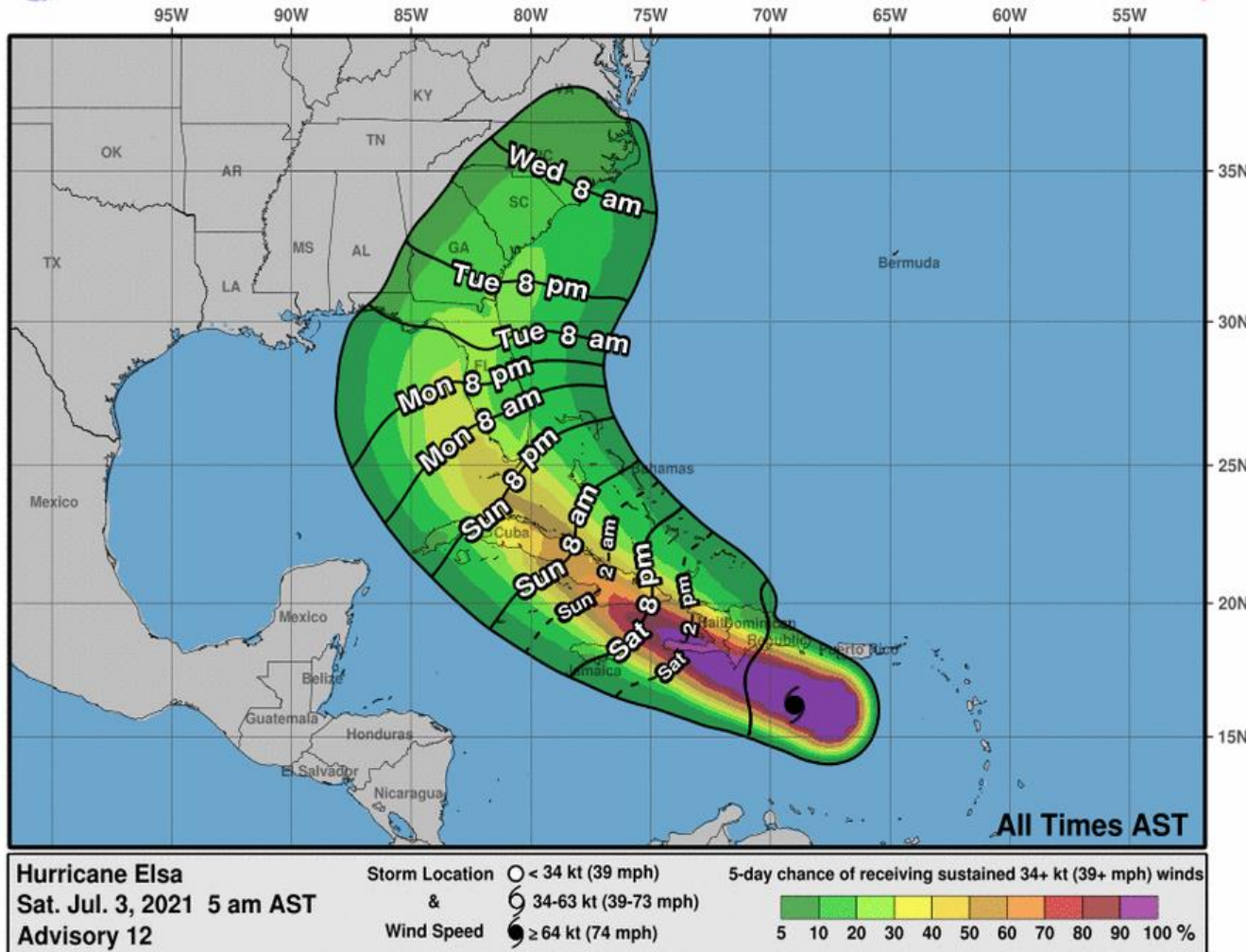


# Time of Arrival & Wind Speed Probabilities

**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	50%	+2%
Marathon	49%	+5%
Naples	39%	+1%
Miami	17%	-1%
Ft. Lauderdale	23%	-1%
West Palm Beach	20%	+/-0%
Ft. Myers	21%	-1%
Tampa	34%	+2%
Orlando	18%	-1%
Apalachicola	19%	+2%
Jacksonville	20%	+1%

Tropical storm force winds could begin **as early as** Sunday night 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 and Monday night south of Lake Okeechobee and Tuesday and Tuesday night north of Lake Okeechobee. Given the uncertainty in the forward speed, the “Earliest Reasonable Time of Arrival” graphic should be used for planning into the holiday weekend.





# Key Messages

From the National Hurricane Center



## Key Messages for Hurricane Elsa Advisory 12: 5:00 AM AST Sat Jul 03, 2021



1. Hurricane conditions and dangerous storm surge are expected within the Hurricane Warning areas in Haiti and the Dominican Republic later today and in Jamaica beginning Sunday.

2. Widespread heavy rain will move across southern Hispaniola and Jamaica today 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 with mudslides in Cuba. As Elsa approaches the Florida Keys and southern Florida early next week, isolated flash flooding and minor river flooding will be possible.

3. Hurricane conditions and dangerous storm surge are possible in portions of eastern Cuba beginning early Sunday where a Hurricane Watch is in effect. There is an increasing risk of wind, storm surge, and rainfall impacts elsewhere in Cuba Sunday and Monday.

4. There is an increasing risk of storm surge, wind, and rainfall impacts beginning Monday in the Florida Keys and spreading northward along the Florida Peninsula through Tuesday. However, the forecast uncertainty remains larger than usual due to Elsa's potential interaction with the islands of Hispaniola and Cuba this weekend. Interests throughout Florida should monitor Elsa's progress and updates to the forecast.



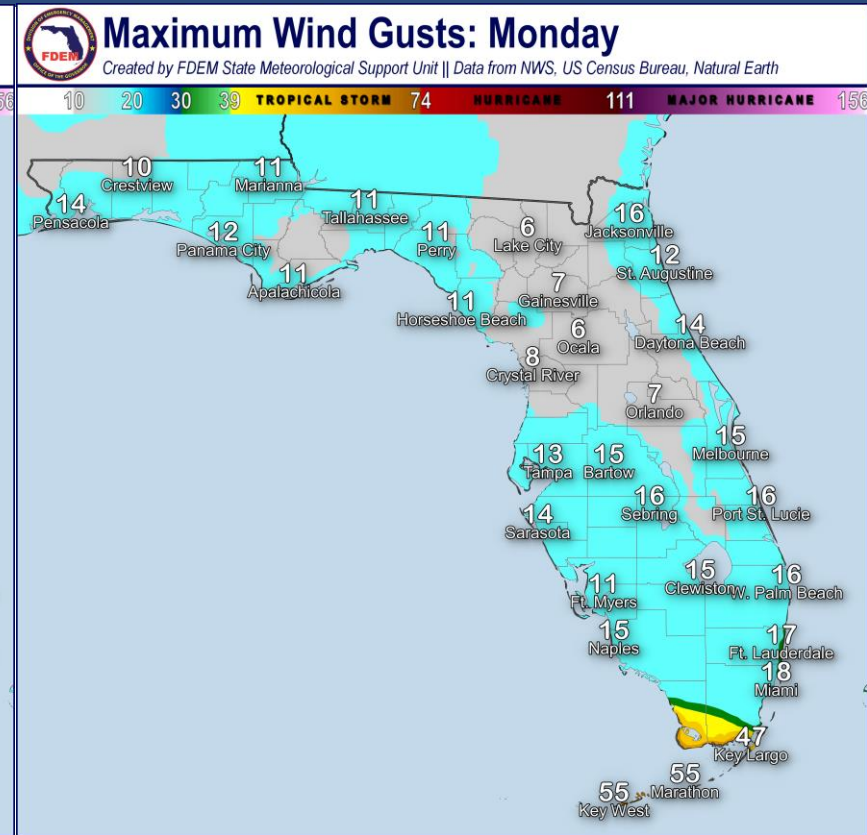
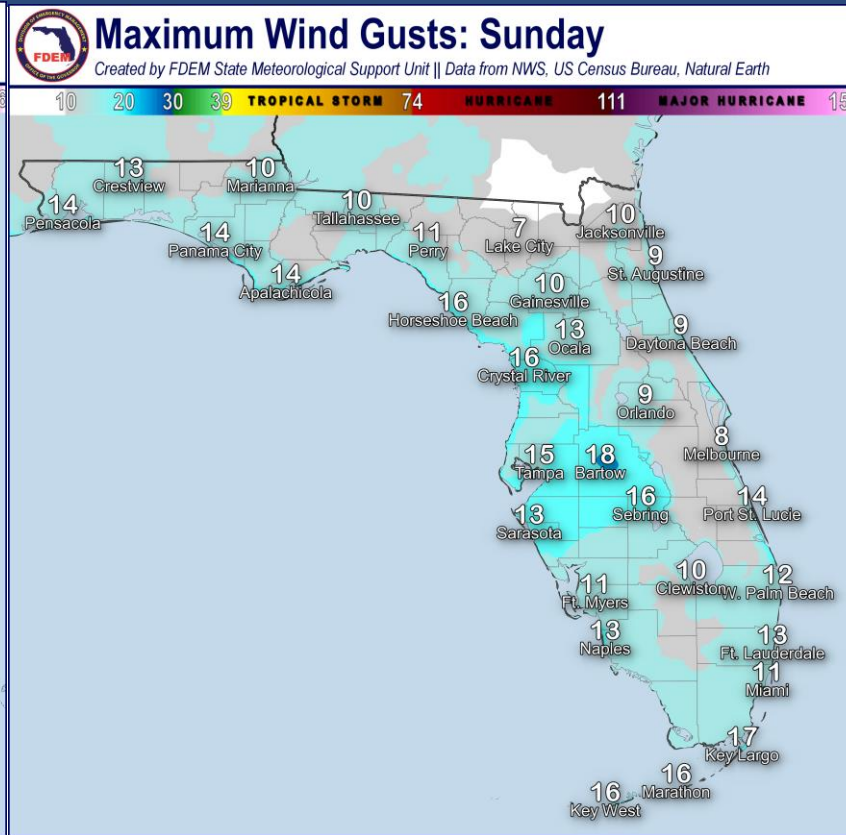
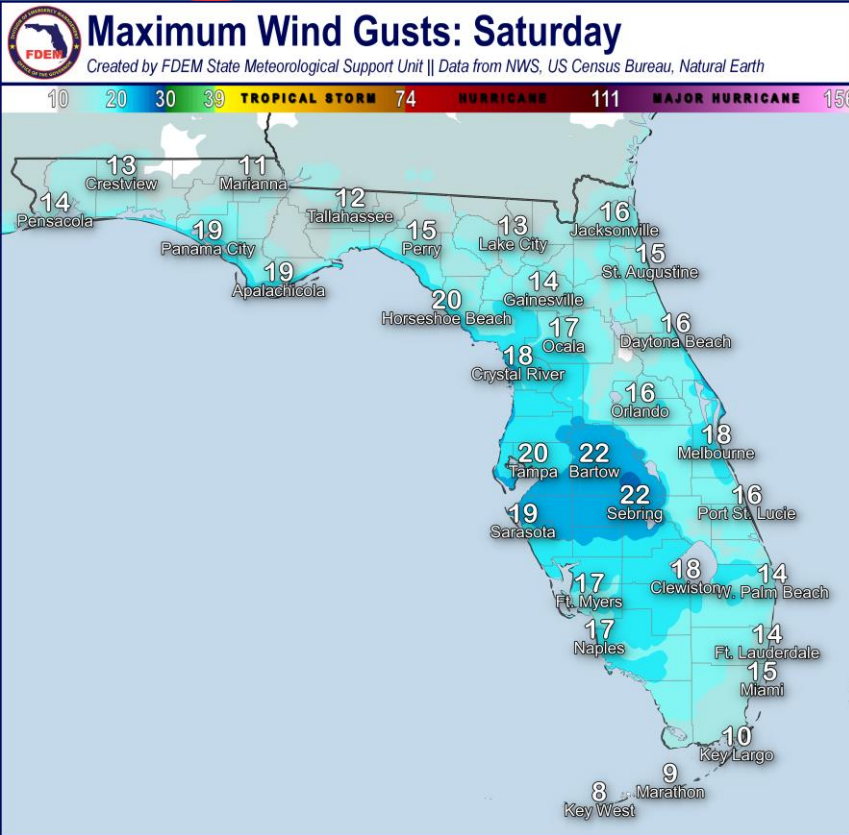
For more information go to [hurricanes.gov](https://hurricanes.gov)





# Max Wind Gusts Next 3 Days

\*\*\*Does Not Account for Thunderstorms\*\*\*

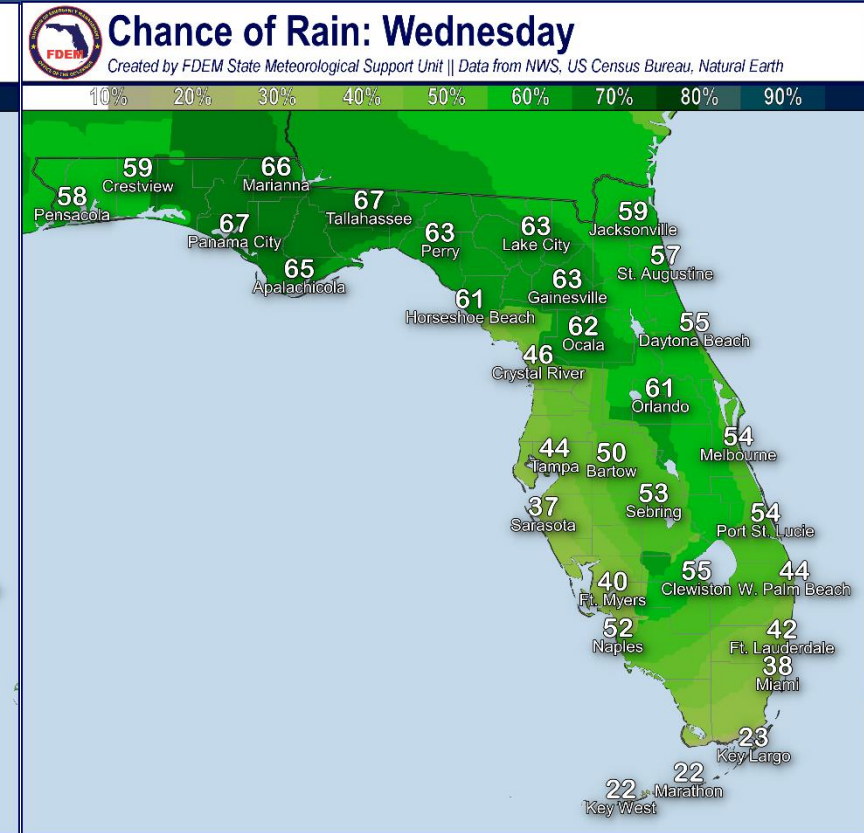
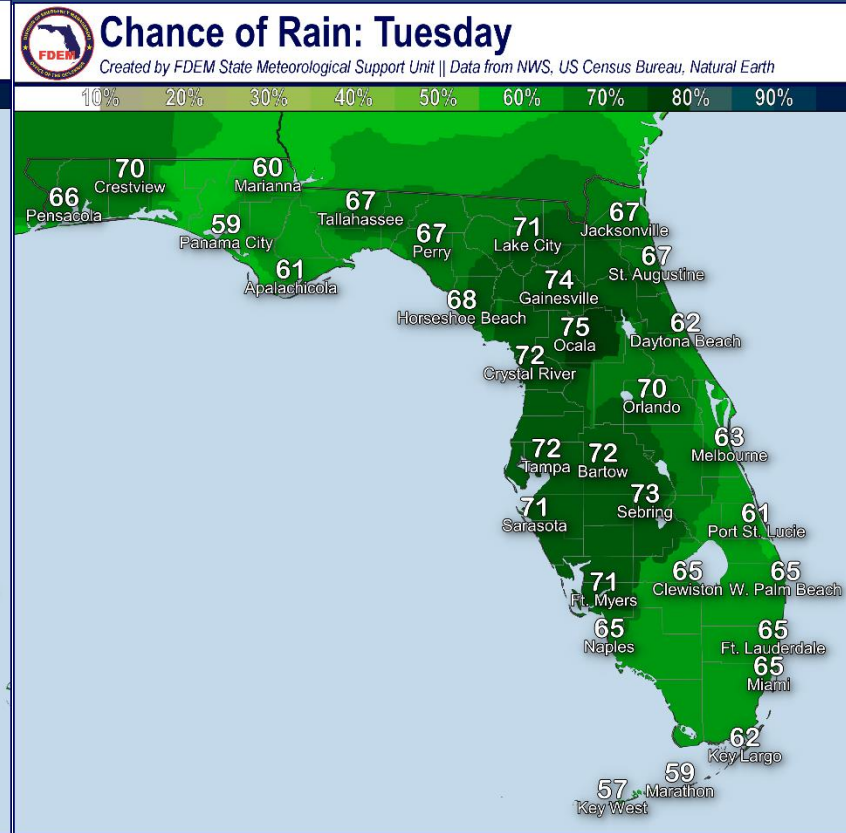
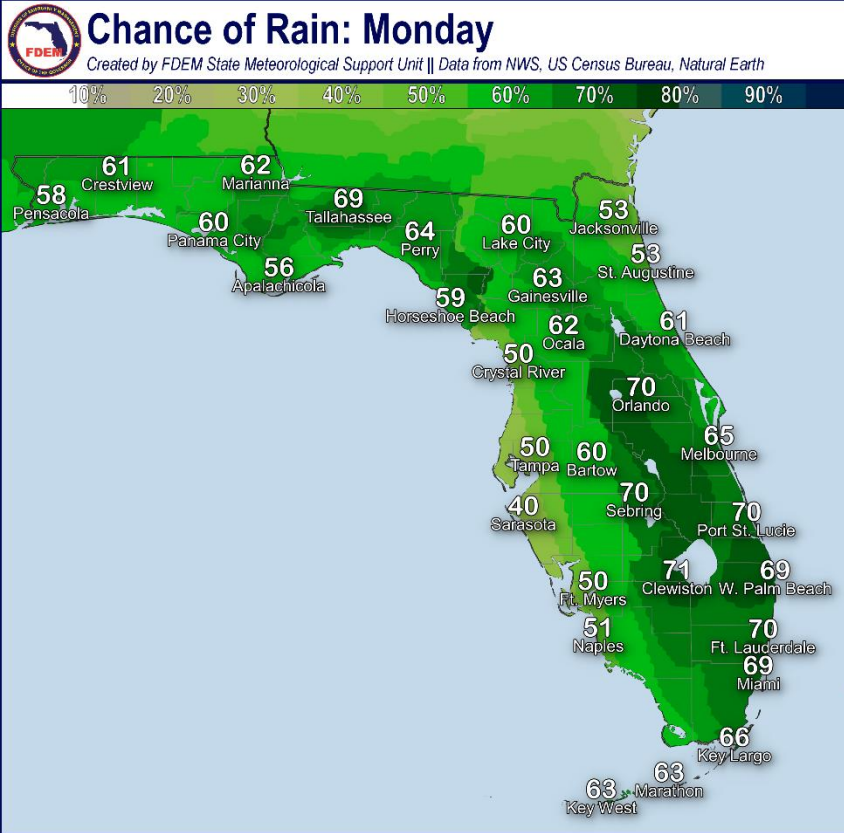


Winds will increase on Monday in far southern Florida and the Keys on Monday as Elsa approaches. *Tropical Storm Watches may be issued later today for parts of South Florida and the Keys.*



# Forecast Rain Chances

## Monday through Wednesday – Hurricane Elsa



Rain chances will increase across South and Central Florida on Monday, then across much of the state on Tuesday. Some decrease in rain chances is possible by Wednesday as Elsa departs the state.





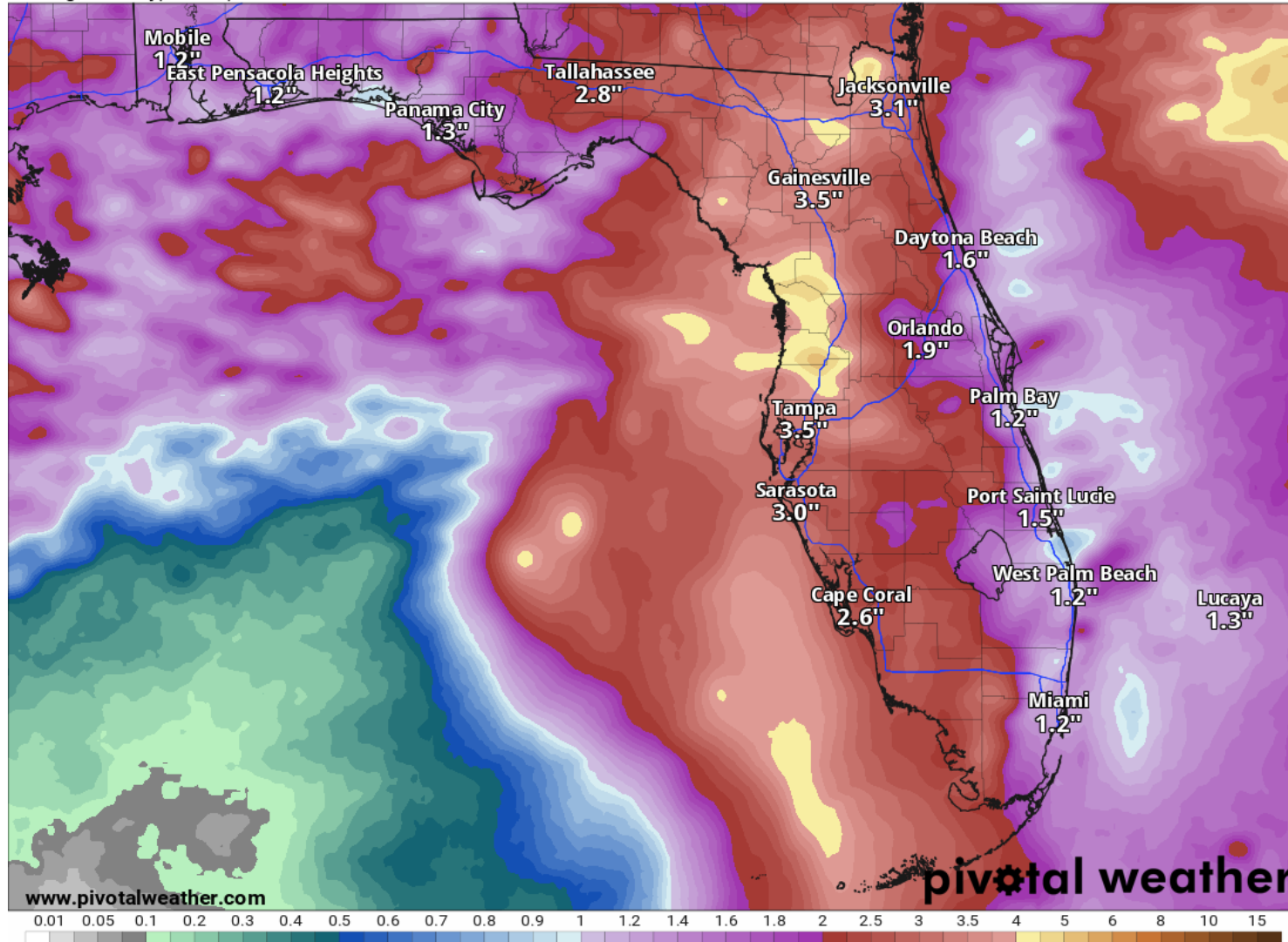
# Rainfall Totals Next 7 Days

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 2-4" are expected across much of the Peninsula and Big Bend with localized totals of 4-6" possible. These rainfall totals are highly dependent on the eventual track of Elsa.

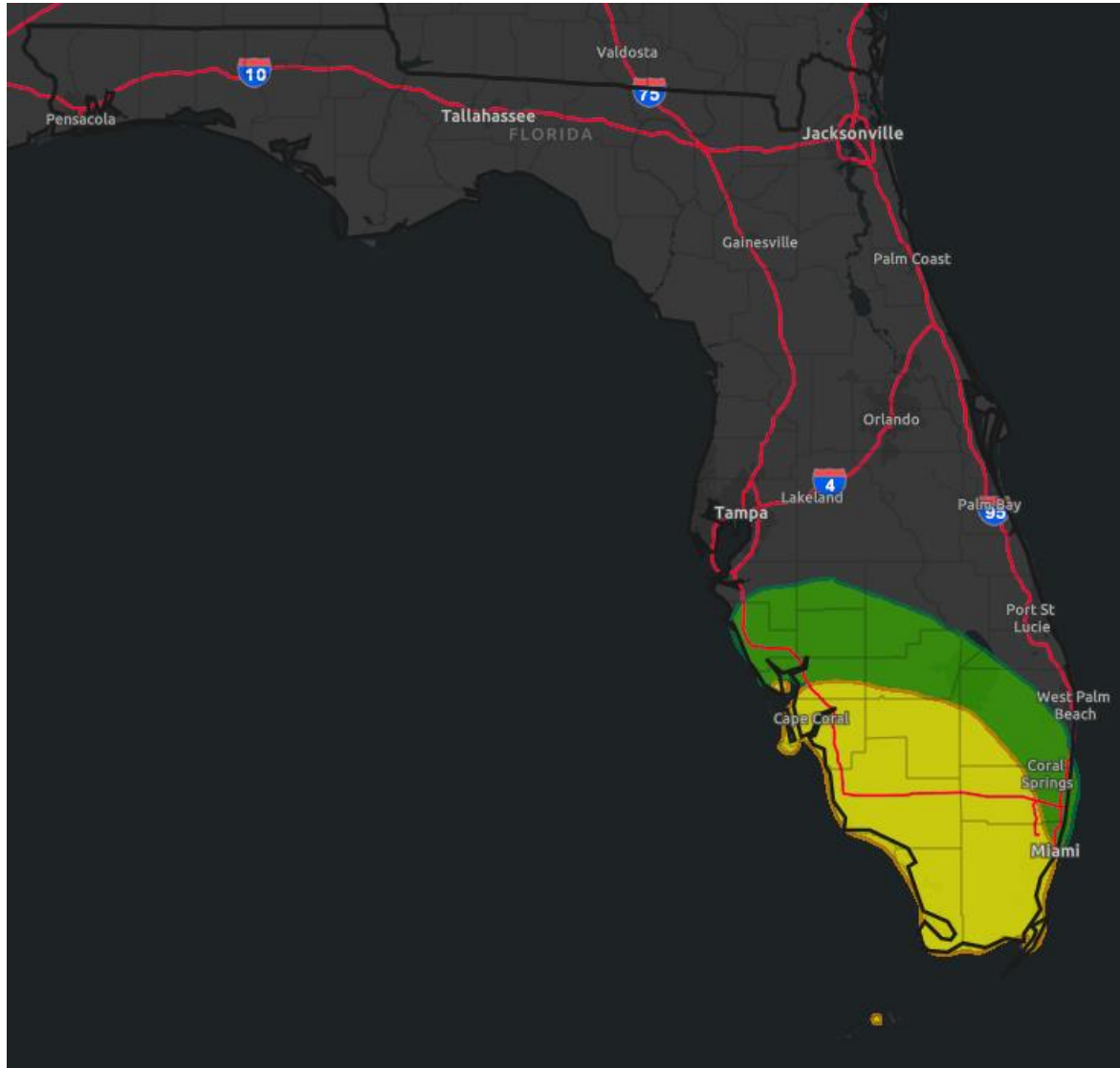
More info from NWS Miami:

<https://nwschat.weather.gov/p.php?pid=202107021919-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
<a href="http://www.wpc.ncep.noaa.gov">@NWSWPC</a>	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%**

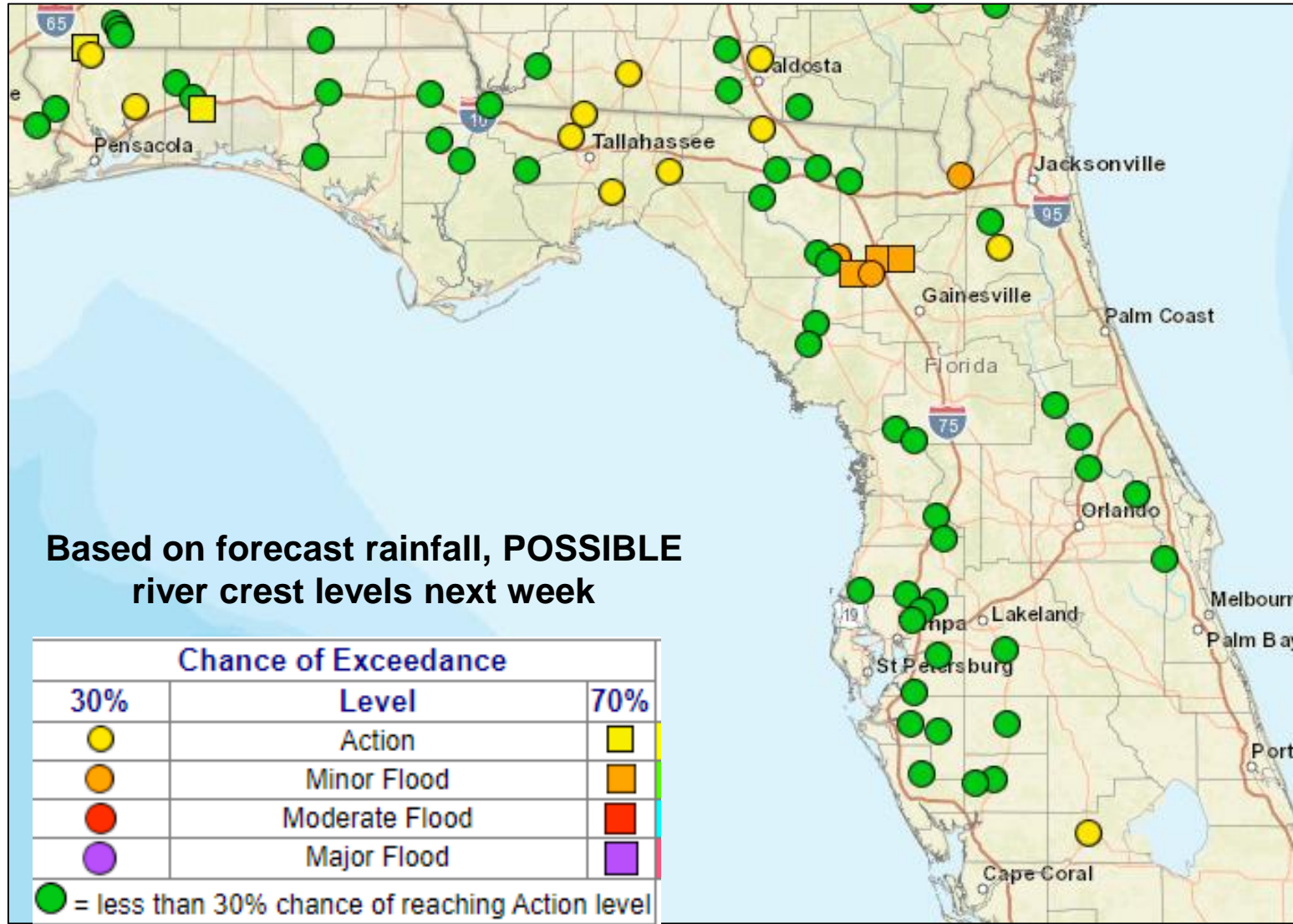
**MRGL: 5%-10%**





# Possible River Flooding

## Chance of River Flooding Based on Range of Forecasted Rainfall



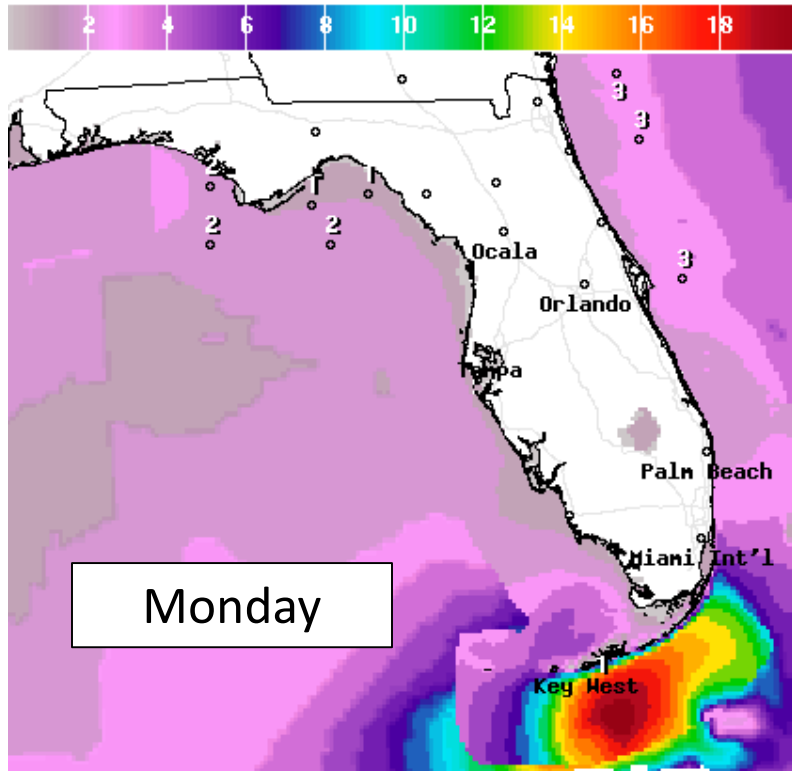
Based on current forecasts, while rises on rivers are possible, they will likely remain below flood stage.

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



# Forecast Wave Heights

Monday through Wednesday

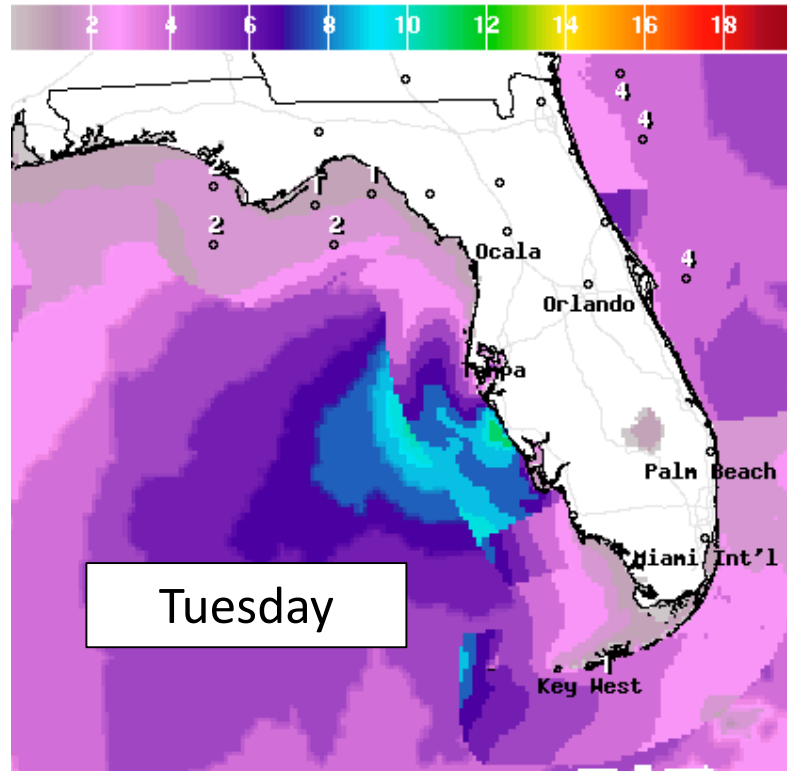


Wave Height(ft) Ending Mon Jul 05 2021 8PM EDT  
(Tue Jul 06 2021 00Z)



National Digital Forecast Database

11z issuance Graphic created-Jul 03 7:22AM EDT

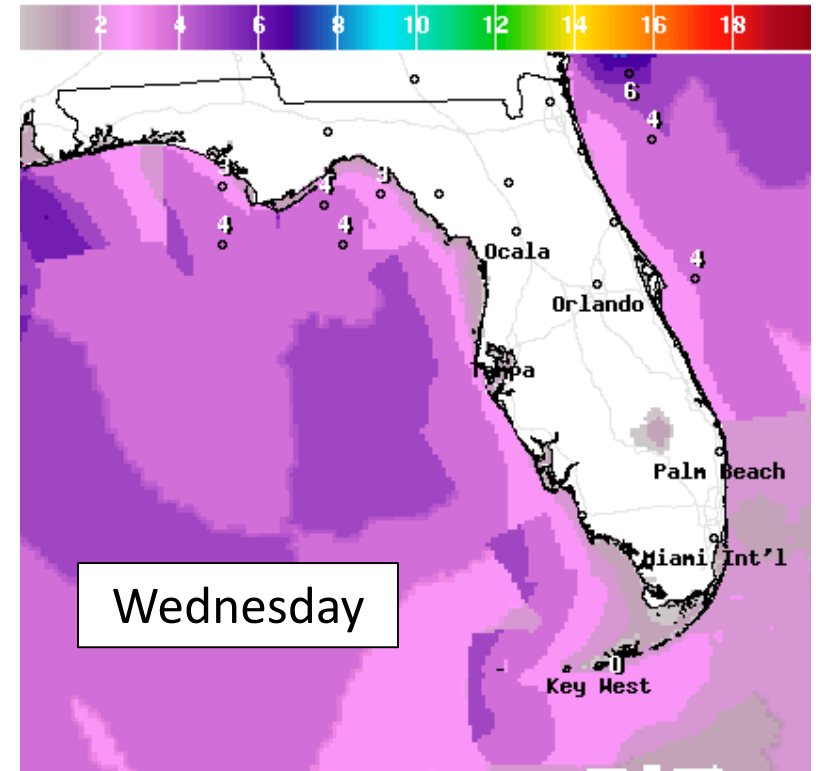


Wave Height(ft) Ending Tue Jul 06 2021 8PM EDT  
(Wed Jul 07 2021 00Z)



National Digital Forecast Database

07z issuance Graphic created-Jul 03 3:30AM EDT



Wave Height(ft) Ending Wed Jul 07 2021 8PM EDT  
(Thu Jul 08 2021 00Z)



National Digital Forecast Database

07z issuance Graphic created-Jul 03 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 beach erosion cannot be ruled out along parts of the West Coast. Storm surge is also possible along the West Coast and possibly Big Bend, but details are unclear.





# Overall Summary

## Hurricane Elsa

- The center of Elsa is located about 110 miles southeast of Isla Beata, Dominican Republic or about 890 miles southeast of Miami.
- Elsa is moving quickly to the west-northwest at 31 mph, and a decrease in forward speed is expected today and tonight. Elsa will then turn northwestward tonight into Sunday followed by a northward or northeastward motion early next week as it passes near or over Florida.
- Maximum sustained winds are near 75 mph (Category 1).
- Elsa is forecast to maintain its strength today until it interacts with Cuba on Sunday. However, Elsa remains disorganized and a gradual weakening trend may begin if it remains disorganized. Weakening is forecast as it passes over Cuba into the Florida Straits. Then, some slight restrengthening is possible if Elsa remains over water in the Gulf of Mexico for a longer period of time.
- Based on the current forecast, a strong tropical storm or minimal hurricane cannot be ruled out near the Florida West Coast.

## Florida Outlook:

- The entire Florida Peninsula, Florida Keys 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 SIGNIFICANT 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.
- There are currently no hurricane-related watches or warnings for Florida, but based on current trends, watches could be issued for portions of South Florida sometime today.
- Tropical storm force winds are possible in the Keys and South Florida on Monday, but the extent and intensity of winds is yet to be determined.
- 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 beach erosion is also possible along West Coast beaches.
- There is a threat of storm surge along the Keys and West Coast, but the extent and level of storm surge is still unclear.
- 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 this afternoon. For the latest information on the tropics, please visit the National Hurricane Center website at

[www.hurricanes.gov](http://www.hurricanes.gov).



# TROPICAL UPDATE



Created by:

Cameron Young, Assistant State Meteorologist

[Cameron.Young@em.myflorida.com](mailto:Cameron.Young@em.myflorida.com)

State Meteorological Support Unit

Florida Division of Emergency Management

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