

## Current Watches and Warnings

A **Storm Surge Warning** is in effect for the west coast of Florida from Bonita Beach to the Aucilla River, including Tampa Bay

A **Tropical Storm Warning** is in effect for the Florida Keys from Craig Key westward to the Dry Tortugas; the west coast of Florida from Flamingo northward to Ochlockonee River

A **Hurricane Watch** is in effect from Egmont Key to the Steinhatchee River, Florida

A **Storm Surge Watch** is in effect from west of the Aucilla River to the Ochlockonee River, Florida

A **Tropical Storm Watch** is in effect from the mouth of St. Marys River to South Santee River, South Carolina

## Current Details from the National Hurricane Center (NHC)

**COORDINATES:** 24.9° north, 82.8° west

**LOCATION:** 215 miles (345 kilometers) south of Tampa, Florida

**MOVEMENT:** north-northwest at 10 mph (17 kph)

**WINDS:** 60 mph (95 kph) with gusts to 70 mph (110 kph)

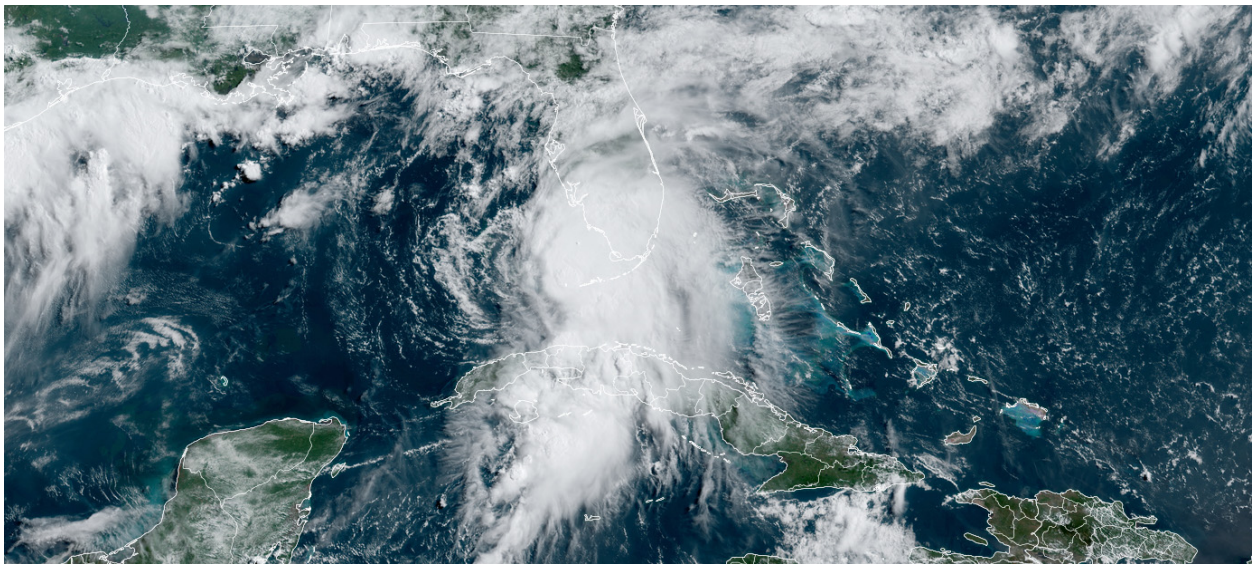
**RADIUS OF TROPICAL STORM-FORCE WINDS:** 70 miles (110 kilometers)

**MINIMUM CENTRAL PRESSURE:** 1007 millibars

**SAFFIR-SIMPSON SCALE RANKING:** Tropical Storm

**24-HOUR LANDFALL POTENTIAL:** High – Big Bend region of Florida (USA)

## Latest Satellite Picture



Source: NOAA / NASA / Colorado State University (RAAMB)

# Discussion

Tropical Storm Elsa, located approximately 215 miles (345 kilometers) south of Tampa, Florida, is currently tracking north-northwest at 10 mph (17 kph). Elsa's overall cloud pattern has not changed much in organization thus far today. There continues to be minimal thunderstorm activity on the western side of the circulation, though bursts of deep convection are located near and east of the estimated center. A slightly-elevated observing site on Sand Key, near Key West Florida, recently reported a peak 1-minute wind of nearly 60 mph (95 kph). This is the justification for the NHC setting the intensity for this advisory at 60 mph (95 kph) – a strong tropical storm. Recent Doppler radar data from Key West radar suggest that the storm could be a little stronger than that, however. The Air Force Hurricane Hunter mission into the storm has been delayed due to bad weather but is rescheduled to investigate Elsa in a few hours. This flight should provide updated information on the intensity of the system.

The storm has been moving a little slower toward the north-northwest. Elsa should move generally northward today and tonight between the western periphery of a ridge of high pressure and an area of low pressure in the northwestern Gulf of Mexico. A gradual turn toward the north-northeast should occur on Wednesday as the system moves along the northwestern periphery of the ridge. After that time, Elsa is expected to accelerate northeastward ahead of an advancing trough over the eastern United States and eastern Canada. This will take the system across the southeastern United States within the next couple of days, near the coast of New England in about 3 days and near or over Atlantic Canada in 4 days. The official NHC forecast remains very close to the model consensus.

The atmospheric environment across the eastern Gulf of Mexico is currently not ideal for strengthening, with moderate westerly wind shear and some dry mid-level air. However, upper-level features ahead of an advancing trough may result in some intensification of the system during the next 12 to 24 hours. The official NHC forecast continues to show the cyclone nearing hurricane strength while it approaches the Big Bend region of the North Florida Gulf Coast, but this is at the high end of the model guidance.

## Key Messages from the National Hurricane Center

1. Heavy rain will impact Cuba today resulting in significant flooding and mudslides. As Elsa moves near or along the western Florida Peninsula through Wednesday, heavy rainfall may result in isolated flash, urban, and minor river flooding, with considerable flash and urban flooding possible in southwest and western portions of Florida. Mid to late week, heavy rainfall across coastal Georgia, South Carolina, North Carolina, and southeastern Virginia may result in isolated flash and urban flooding, with considerable flash and urban flooding possible across coastal Georgia and the Lowcountry of South Carolina.
2. There is a danger of life-threatening storm surge along portions of the west coast of Florida tonight and Wednesday, and a Storm Surge Warning is in effect for that area.
3. Hurricane conditions are possible tonight and early Wednesday along a portion of the west coast of Florida, where a Hurricane Watch is in effect. Tropical storm conditions are occurring across portions of the Florida Keys and are expected to spread northward along much of the west coast of the state through Wednesday morning, where a Tropical Storm Warning is in effect.
4. A Tropical Storm Watch is in effect for the Georgia coast and portions of the South Carolina coast, where tropical storm conditions are possible late Wednesday and early Thursday.

### Additional Information

**WIND:** Tropical storm conditions will continue over portions of the warning area in the Florida Keys through this evening. Tropical storm conditions are expected to spread northward into west-central Florida and the Florida Big Bend region tonight and early Wednesday, where hurricane conditions are possible. Tropical storm conditions are possible in the watch area in Georgia and South Carolina Wednesday night and early Thursday.

**STORM SURGE:** The combination of a storm surge and the tide will cause normally dry areas near the coast to be flooded by rising waters moving inland from the shoreline. The water could reach the following heights above ground somewhere in the indicated areas if the peak surge occurs at the time of high tide:

Englewood, FL to Aucilla River, including Tampa Bay: 3 to 5 feet  
Bonita Beach, FL to Englewood, FL including Charlotte Harbor: 2 to 4 feet  
Aucilla River to Ochlockonee River: 2 to 4 feet  
Flamingo, FL to Bonita Beach, FL: 1 to 3 feet  
Craig Key, FL to Dry Tortugas: 1 to 2 feet  
Ochlockonee River to Indian Pass: 1 to 2 feet  
Mouth of St. Marys River to South Santee River, SC: 1 to 2 feet

Surge-related flooding depends on the relative timing of the surge and the tidal cycle and can vary greatly over short distances.

**RAINFALL:** Across portions of Cuba through tonight, rainfall of 5 to 10 inches with isolated maximum amounts of 15 inches is expected. This will result in significant flash flooding and mudslides.

Elsa is expected to produce the following rainfall amounts and impacts this week:

Across the Florida Keys into southwest and western portions of the Florida Peninsula: 3 to 5 inches with localized maximum totals up to 8 inches through Wednesday, which may result in considerable flash and urban flooding, along with minor to isolated moderate river flooding

Across the rest of Florida: 2 to 4 inches with localized maximum totals up to 6 inches through Wednesday night, which may result in isolated flash, urban, and minor river flooding

Across portions of southeast Georgia and the Lowcountry of South Carolina, 3 to 5 inches with isolated maximum totals up to 8 inches will be possible, which may result in considerable flash and urban flooding.

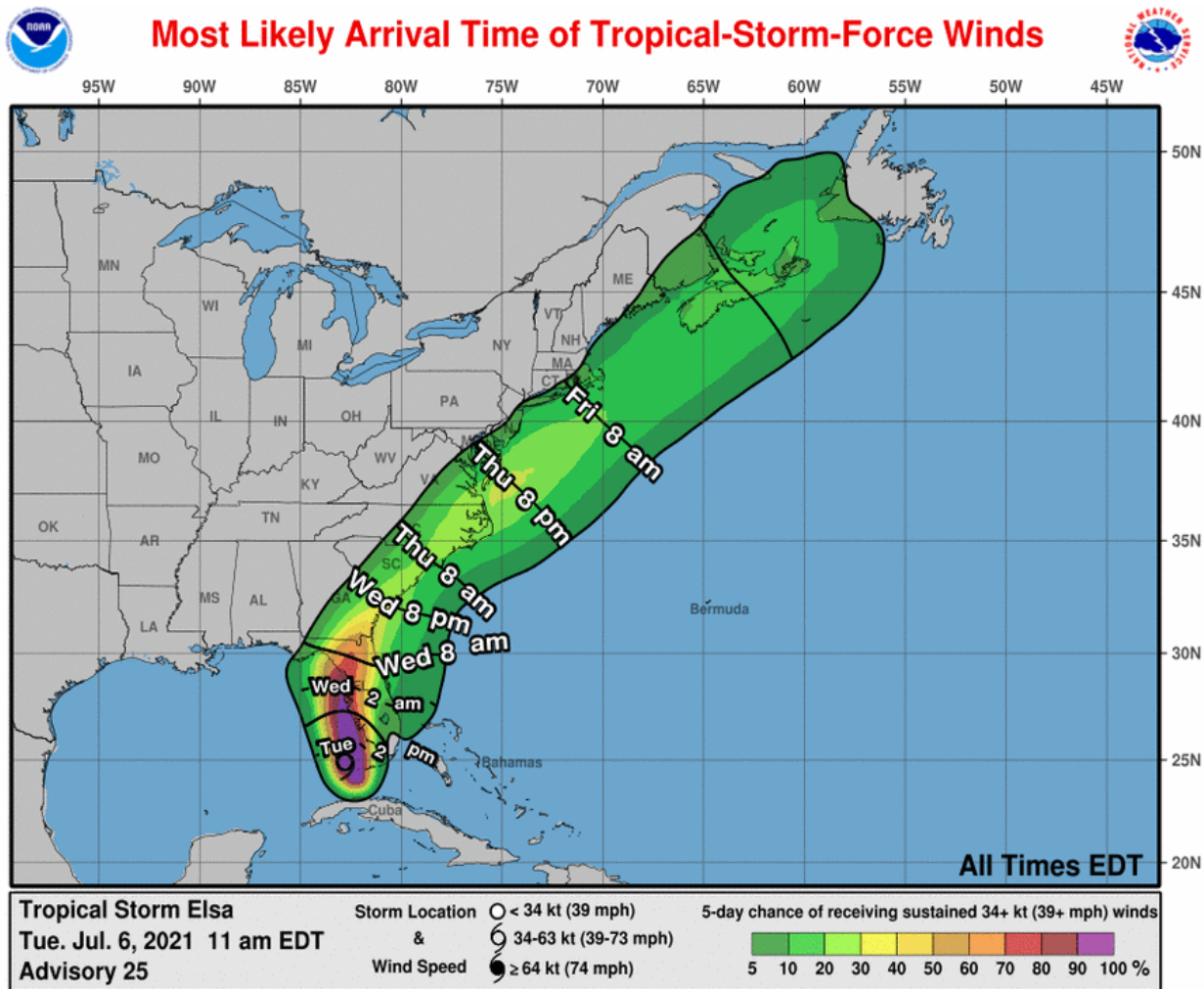
Across coastal portions of North Carolina into southeastern Virginia: 1 to 3 inches with isolated totals up to 5 inches Wednesday night through Thursday night, which could lead to isolated flash and urban flooding

**TORNADOES:** A few tornadoes are possible today through tonight across the Florida Peninsula. The tornado threat will continue on Wednesday across north Florida, southeast Georgia, and the Lowcountry of South Carolina. The tornado threat should shift to the eastern Carolinas and far southeast Virginia on Thursday.

**SURF:** Swells will spread northward across portions of the Florida Keys and the west coast of Florida through early Wednesday. These swells are likely to cause life-threatening surf and rip current conditions.

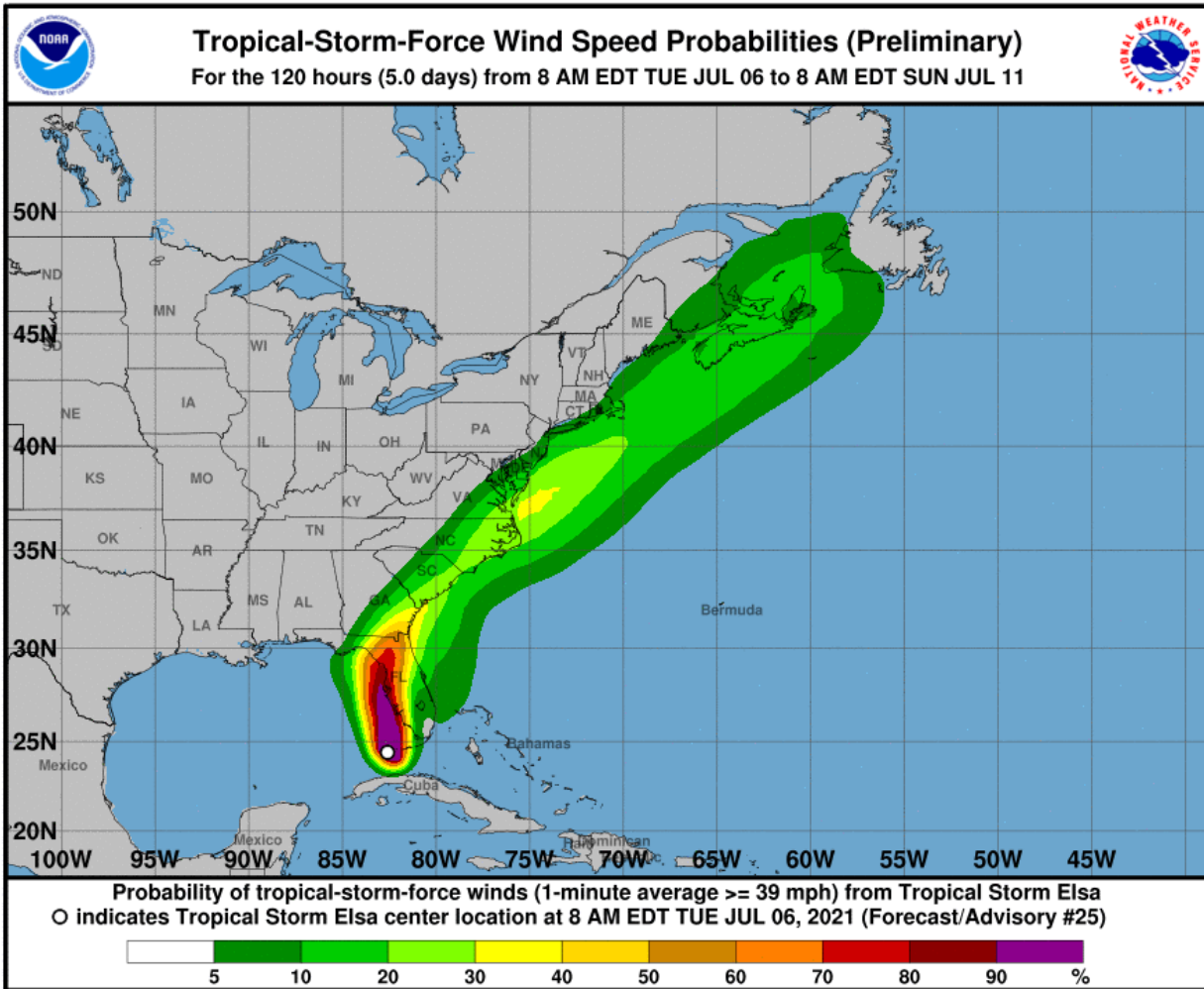


# Most Likely Arrival Time of Tropical Storm-Force Winds

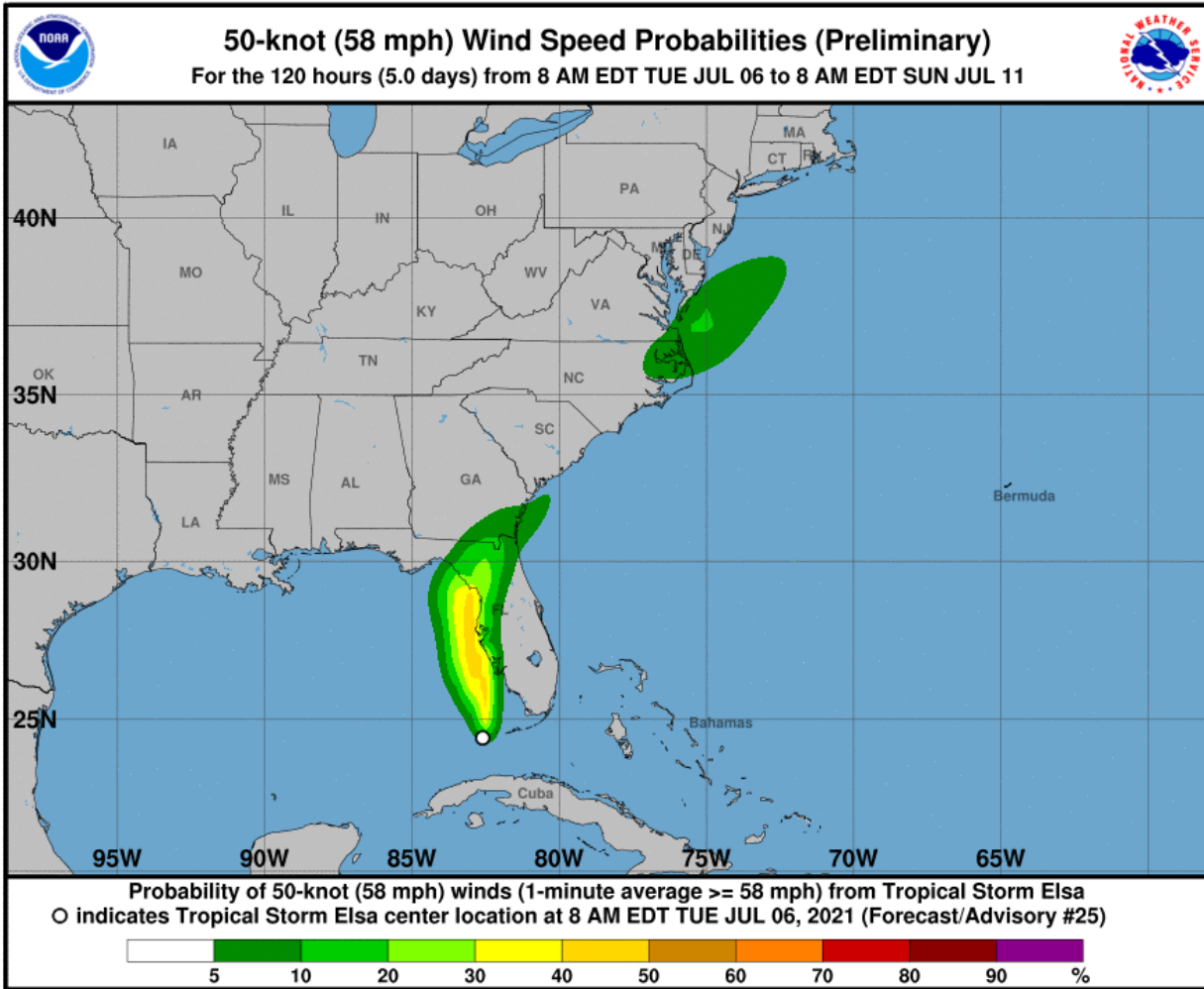


# National Hurricane Center: Wind Speed Probabilities

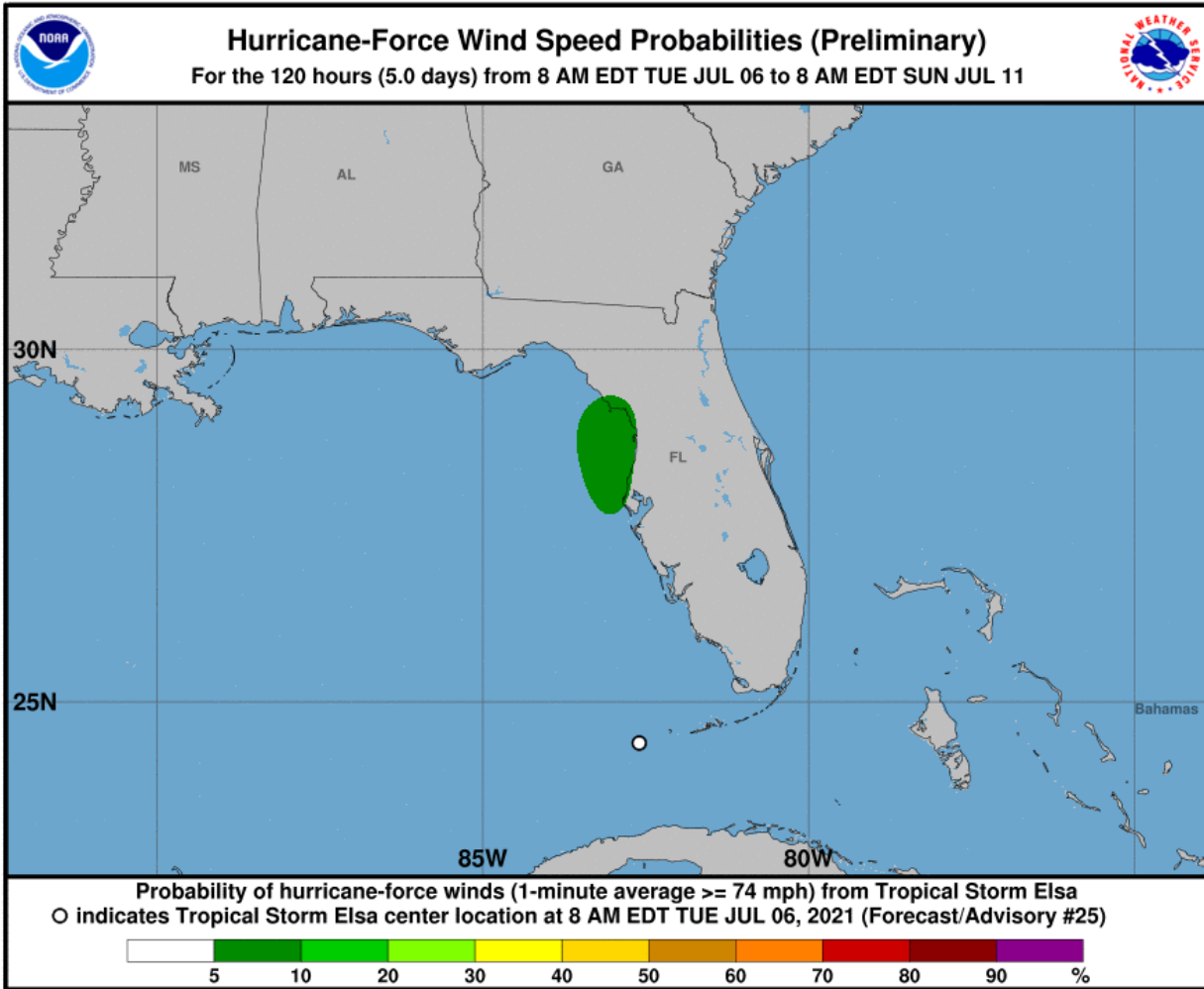
## Tropical Storm-Force Wind Probabilities ( $\geq 40$ mph (65 kph))



# Wind Probabilities ( $\geq 60$ mph (95 kph))

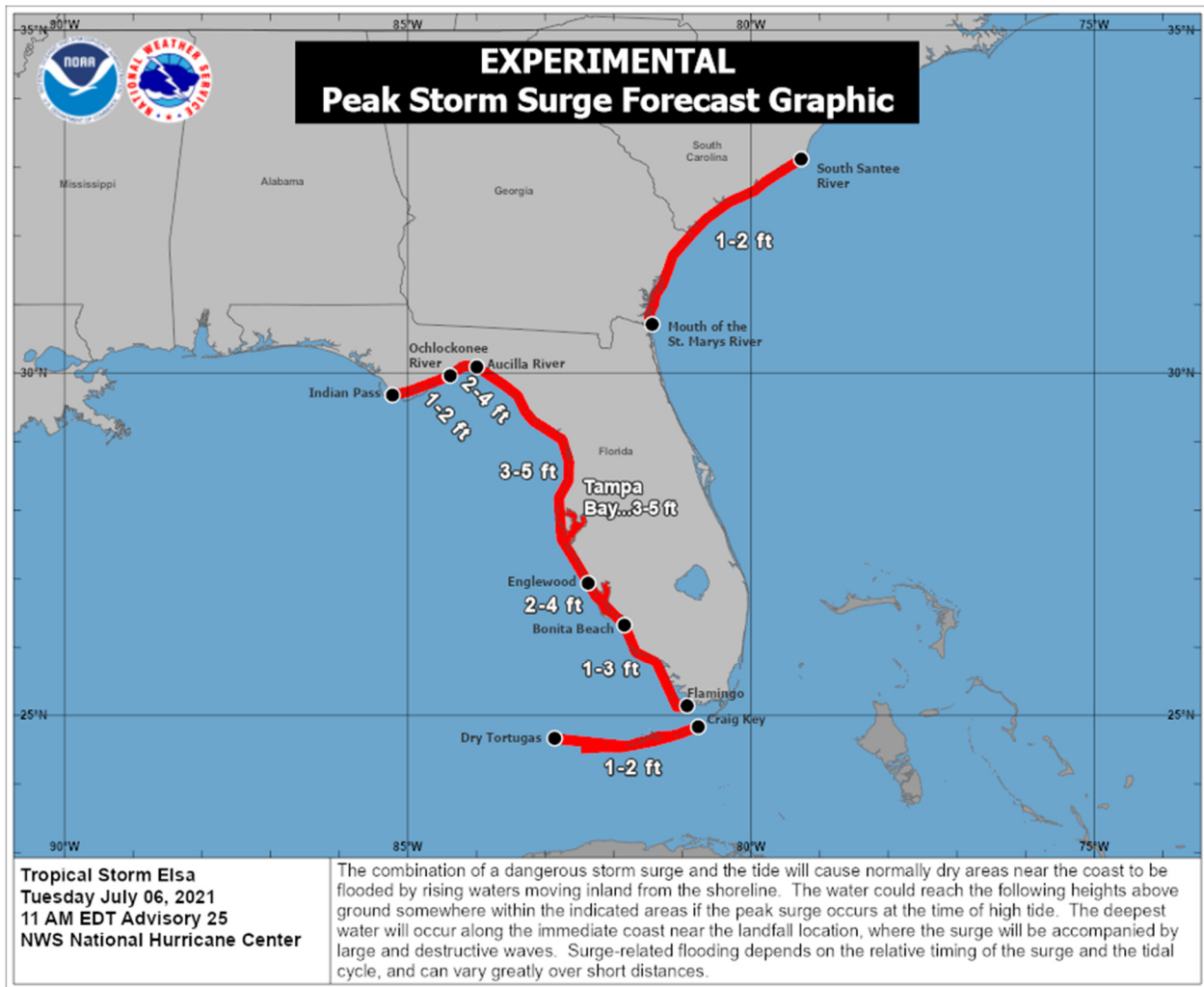


# Hurricane-Force Wind Probabilities ( $\geq 75$ mph (120 kph))

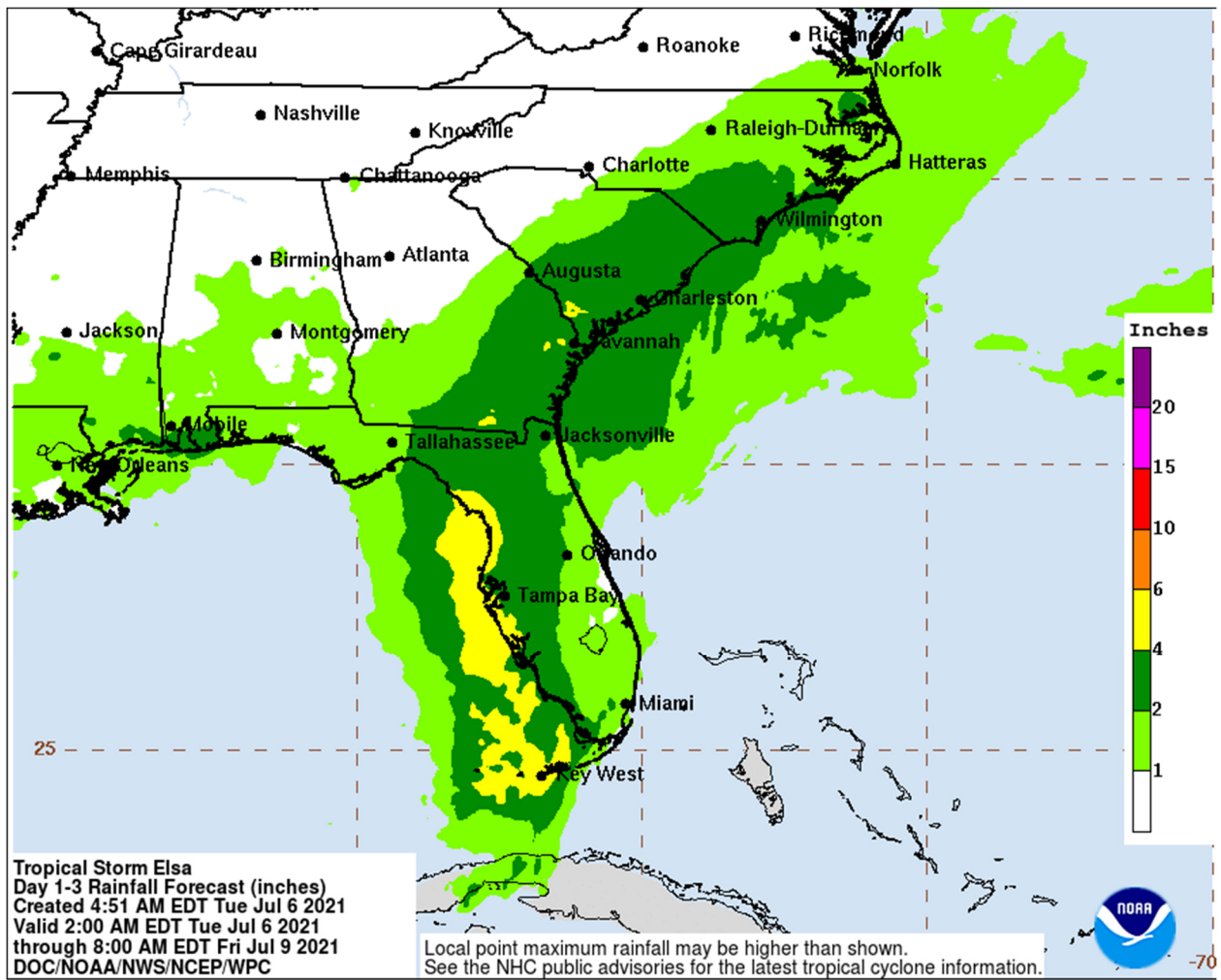




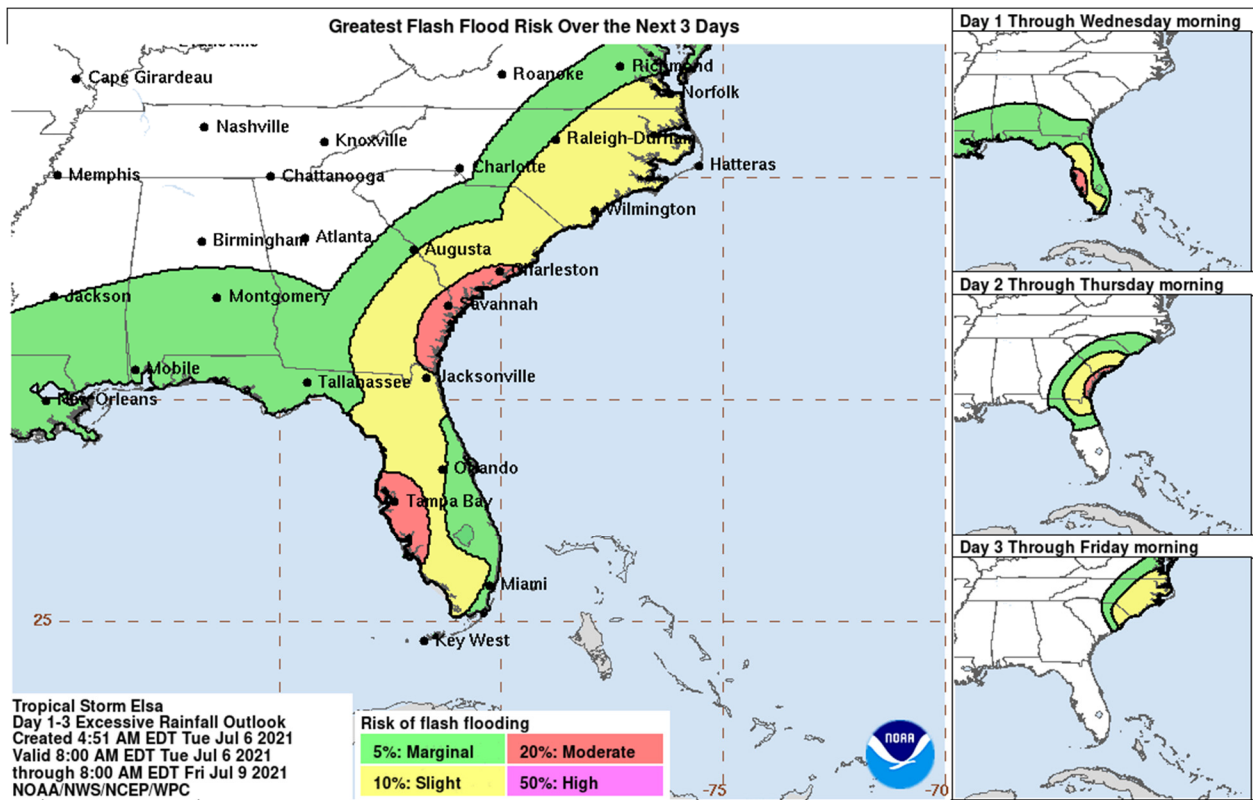
# NHC: Storm Surge Inundation Graphic



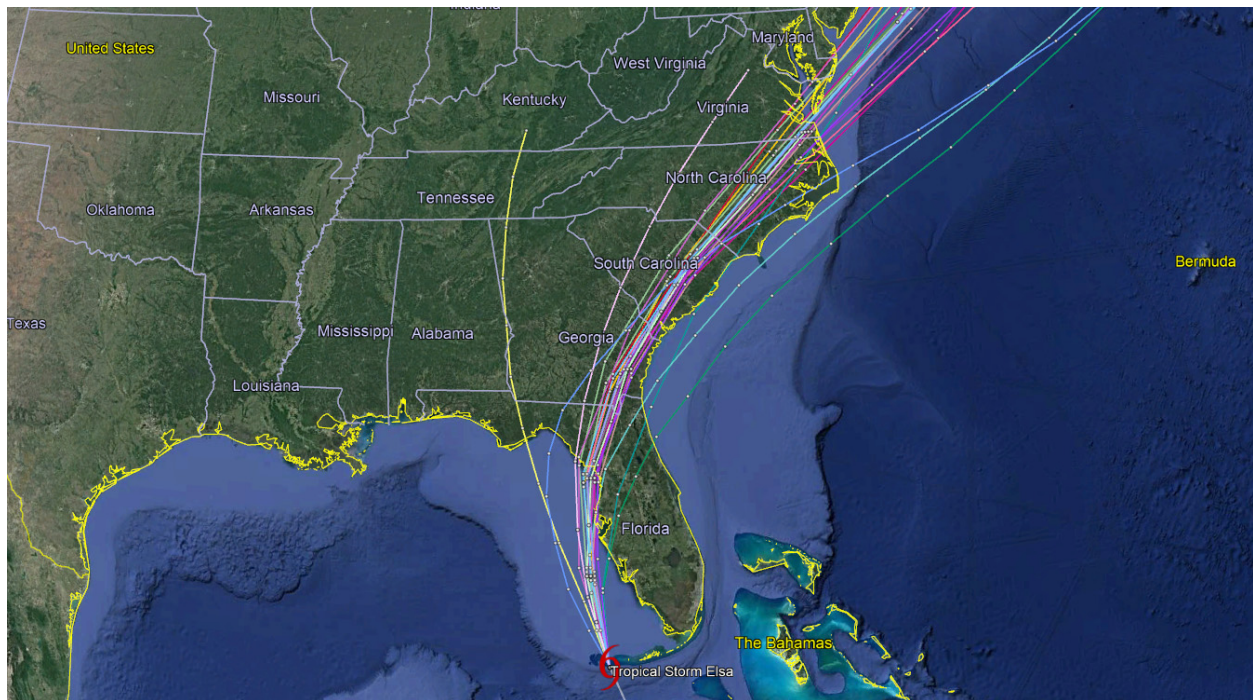
# Weather Prediction Center: Rainfall Potential



# Weather Prediction Center: Flash Flood Potential



## Current 'Spaghetti' Model Output Data



Source: NHC

## Additional Information and Update Schedule

Wind intensity forecasts and forecast track information can be found via the National Hurricane Center at [www.nhc.noaa.gov](http://www.nhc.noaa.gov)

**NEXT CAT ALERT:** Wednesday morning after 10:00 AM Central Time (15:00 UTC).

# Tropical Cyclone Intensity Classifications for Global Basins

WIND SPEED			BASINS AND MONITORING BUREAU						
KT	MPH	KPH	NE Pacific, Atlantic	NW Pacific	NW Pacific	SW Pacific	Australia	SW Indian	North Indian
			National Hurricane Center (NHC)	Joint Typhoon Warning Center (JTWC)	Japan Meteorological Agency (JMA)	Fiji Meteorological Service (FMS)	Bureau of Meteorology (BOM)	Meteo-France (MF)	India Meteorological Department (IMD)
30	35	55	Tropical Depression	Tropical Depression	Tropical Depression	Tropical Depression	Tropical Low	Tropical Depression	Deep Depression
35	40	65	Tropical Storm	Tropical Storm	Tropical Storm	Cat. 1 Tropical Cyclone	Cat. 1 Tropical Cyclone	Moderate Tropical Storm	Cyclonic Storm
40	45	75							
45	50	85							
50	60	95							
55	65	100							
60	70	110	Cat. 1 Hurricane	Typhoon	Typhoon	Cat. 3 Severe Tropical Cyclone	Cat. 3 Severe Tropical Cyclone	Tropical Cyclone	Very Severe Cyclonic Storm
65	75	120							
70	80	130							
75	85	140							
85	100	160				Cat. 2 Hurricane			
90	105	170							
95	110	175							
100	115	185				Cat. 3 Major Hurricane			
105	120	195							
110	125	205							
115	130	210							
120	140	220	Cat. 4 Major Hurricane	Super Typhoon					
125	145	230							
130	150	240							
135	155	250							
140	160	260	Cat. 5 Major Hurricane						
>140	>160	>260							
						Cat. 5 Severe Tropical Cyclone	Cat. 5 Severe Tropical Cyclone	Very Intense Tropical Cyclone	Super Cyclonic Storm

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