

Current Watches and Warnings

A **Tropical Storm Warning** is in effect for the Cuban provinces of Ciego de Avila, Sancti Spiritus, Cienfuegos, Matanzas, Villa Clara, Mayabeque, Havana, and Artemisa; the Florida Keys from Craig Key westward to the Dry Tortugas; west coast of Florida from Flamingo northward to Suwannee River

A **Storm Surge Watch** is in effect for the west coast of Florida from Bonita Beach to the Ochlockonee River

A **Tropical Storm Watch** is in effect for the Florida Keys from east of Craig Key to Ocean Reef; Florida Bay; north of the Suwannee River to Indian Pass, Florida

Current Details from the National Hurricane Center (NHC)

COORDINATES: 21.5° north, 81.2° west

LOCATION: 20 miles (35 kilometers) east-southeast of Cayo Largo, Cuba

MOVEMENT: northwest at 14 mph (22 kph)

WINDS: 65 mph (100 kph) with gusts to 75 mph (120 kph)

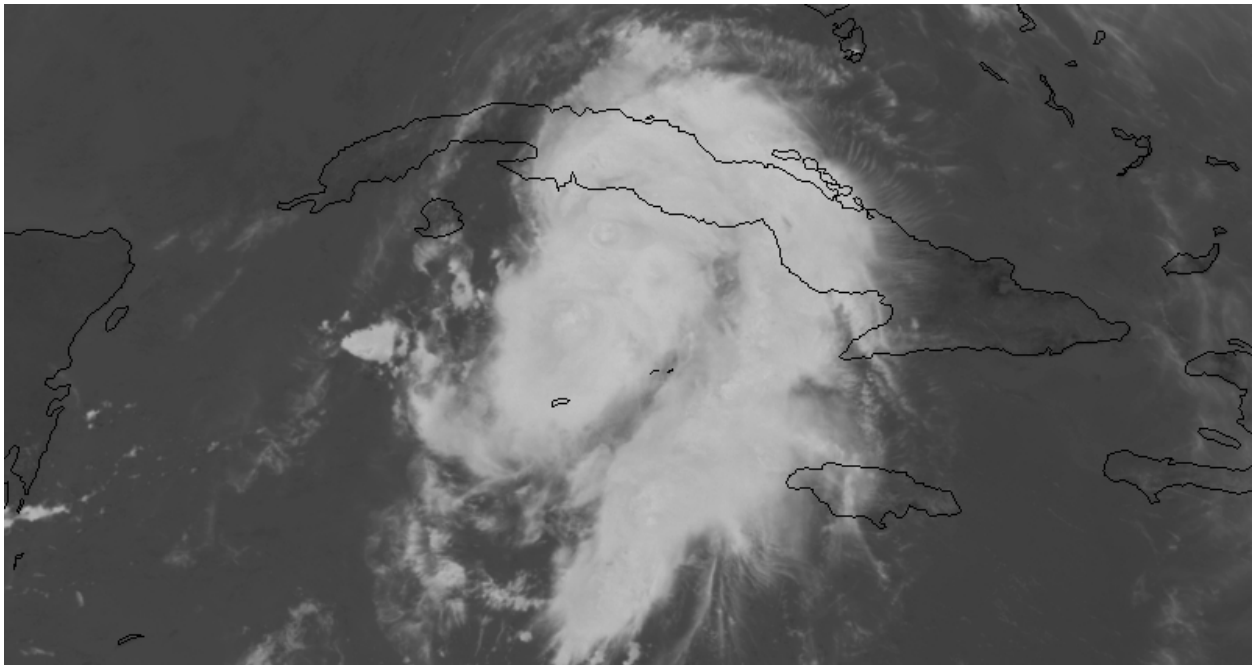
RADIUS OF TROPICAL STORM-FORCE WINDS: 70 miles (110 kilometers)

MINIMUM CENTRAL PRESSURE: 1006 millibars

SAFFIR-SIMPSON SCALE RANKING: Tropical Storm

24-HOUR LANDFALL POTENTIAL: HIGH (Cuba & Florida Keys)

Latest Satellite Picture



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

Discussion

Tropical Storm Elsa, located approximately 20 miles (35 kilometers) east-southeast of Cayo Largo, Cuba, is currently tracking northwest at 14 mph (22 kph). A NOAA Hurricane Hunter aircraft has been investigating Elsa this morning as the storm continues to approach the south coast of Cuba. Surface-adjusted winds measured by the aircraft support the NHC maintaining wind speeds of 65 mph (100 kph) for this advisory. This keeps Elsa as a strong tropical storm. Further readings from the aircraft suggest a minimum central pressure of 1006 millibars, which suggests that there has not been any notable intensification in recent hours. Doppler radar shows that the core structure of the Elsa continues to show an eastward tilt with height, which is the primary reason why strengthening is not occurring. Satellite imagery shows notable convective banding features over the eastern portion of the circulation, with the center located near the western edge of the main cloud mass.

Elsa continues its northwestward track, and during the next two to three days, the storm should move between a ridge of high pressure located in the southwest North Atlantic Ocean and a mid-level area of low pressure in the northern Gulf of Mexico. In the latter part of the forecast period, Elsa is forecast to accelerate northeastward into the mid-latitude westerlies off the U.S. East Coast and back into the Atlantic, where it should lose its tropical characteristics in the vicinity of Nova Scotia, Canada.

While in the eastern Gulf of Mexico, the official NHC track forecast has been slightly shifted westward toward the model consensus aids, though the GFS track lies a little east of the latest NHC track.

Some slight weakening is likely while Elsa crosses west-central Cuba today. Any re-strengthening over the Gulf of Mexico is likely to be limited by moderate westerly wind shear associated with a broad upper-level trough located over the Gulf of Mexico. It is worth noting that the NHC intensity forecast is higher than most of the model consensus.

Key Messages from the National Hurricane Center

1. Heavy rain will impact the Cayman Islands and Cuba today resulting in significant flooding and mudslides over Cuba. As Elsa approaches the Florida Keys, the Florida Peninsula, and coastal Georgia through Wednesday, heavy rainfall may result in isolated flash, urban, and minor river flooding. Mid to late week, heavy rains across coastal South Carolina and North Carolina may result in isolated flash and urban flooding.
2. Tropical storm conditions and a dangerous storm surge are expected to continue across portions of central and western Cuba today.
3. Tropical storm conditions are expected in portions of the Florida Keys and along the Florida west coast tonight through Tuesday night, where a Tropical Storm Warning is in effect. A Tropical Storm Watch and a Storm Surge Watch are in effect for portions of the west coast of Florida and the Florida Big Bend.
4. There is a risk of tropical storm conditions and storm surge impacts along the coasts of Georgia and the Carolinas Wednesday and Thursday.

Additional Information

WIND: Tropical storm conditions are expected in portions of central and western Cuba today. Tropical storm conditions are expected in the warning area in the Florida Keys tonight and along the Florida west coast beginning Tuesday. Tropical storm conditions are possible in the upper Florida Keys by tonight. Tropical storm conditions are possible in the Florida Big Bend area beginning Tuesday night.

STORM SURGE: A storm surge will raise water levels above normal tide levels by as much as the following amounts in areas of onshore flow within the tropical storm watch and warning areas...

Southern coast of Cuba: 2 to 4 feet

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:

Bonita Beach, FL to Ochlockonee River, including Tampa Bay: 2 to 4 feet

Flamingo, FL to Bonita Beach, FL: 1 to 3 feet

Ocean Reef, FL to Dry Tortugas, including Florida Bay: 1 to 2 feet

Ochlockonee River to Indian Pass: 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 today, rainfall of 5 to 10 inches with isolated maximum amounts of 15 inches is expected. This will result in significant flash flooding and mudslides. Across the Cayman Islands today, rainfall of 3 to 5 inches is expected. This rain may lead to scattered flash flooding.

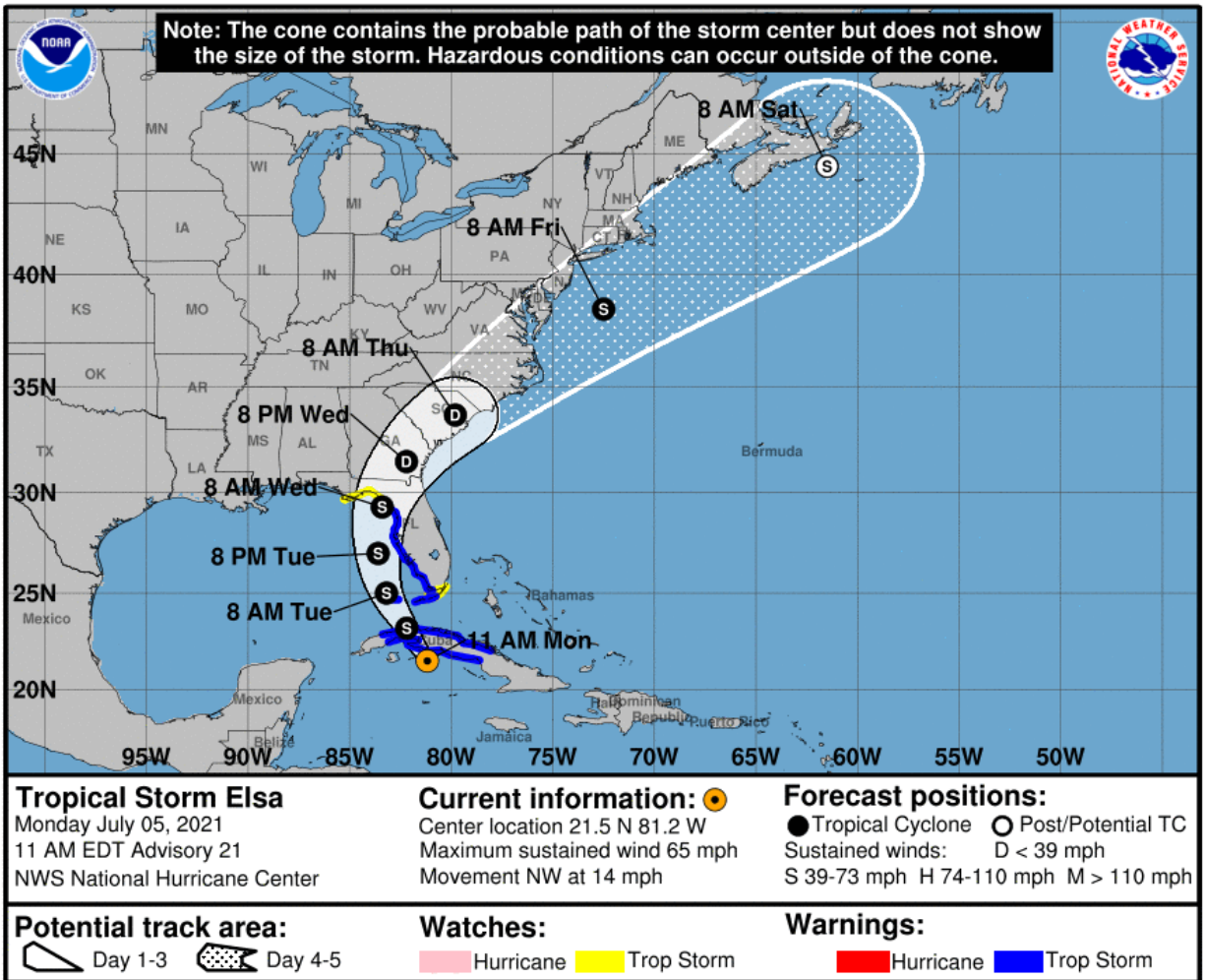
Rainfall from Elsa will impact portions of the Florida Keys, the Florida Peninsula and the coastal Southeast this week. Amounts of 2 to 4 inches with localized maximum amounts up to 6 inches are expected across Florida and coastal Georgia through Wednesday, which may result in isolated flash, urban, and minor river flooding.

Coastal portions of South Carolina and North Carolina are expected to receive 1 to 3 inches of rain, with local maximum amounts up to 5 inches Wednesday into Thursday, which could lead to isolated flash and urban flooding.

TORNADOES: A few tornadoes are possible across south Florida tonight and across the Florida Peninsula on Tuesday.

SURF: Swells generated by Elsa will spread westward along the southern coast of Cuba today. Swells will increase near the Florida Keys and south Florida later today and spread northward along the west coast of Florida tonight through Tuesday night.

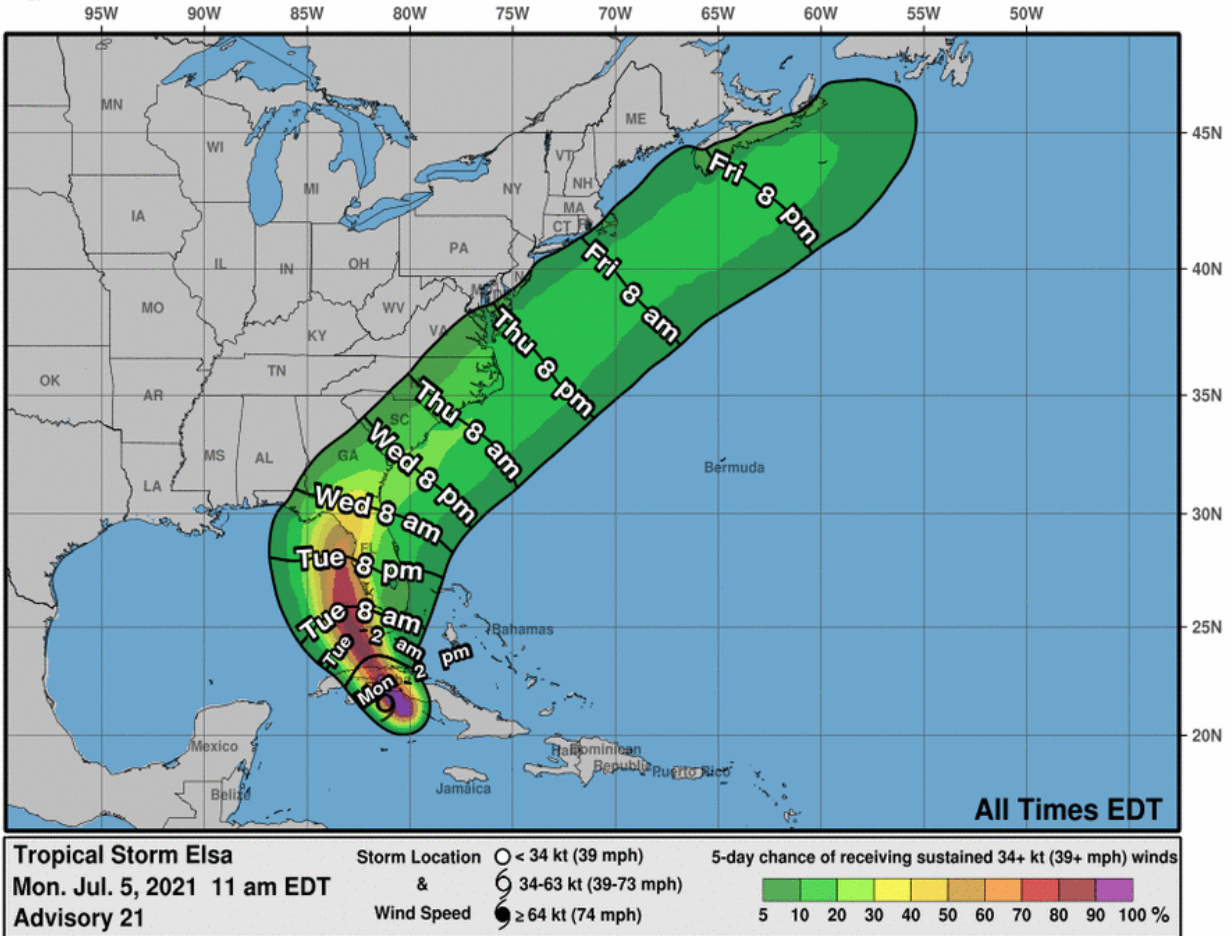
National Hurricane Center (NHC) Forecast



Most Likely Arrival Time of Tropical Storm-Force Winds

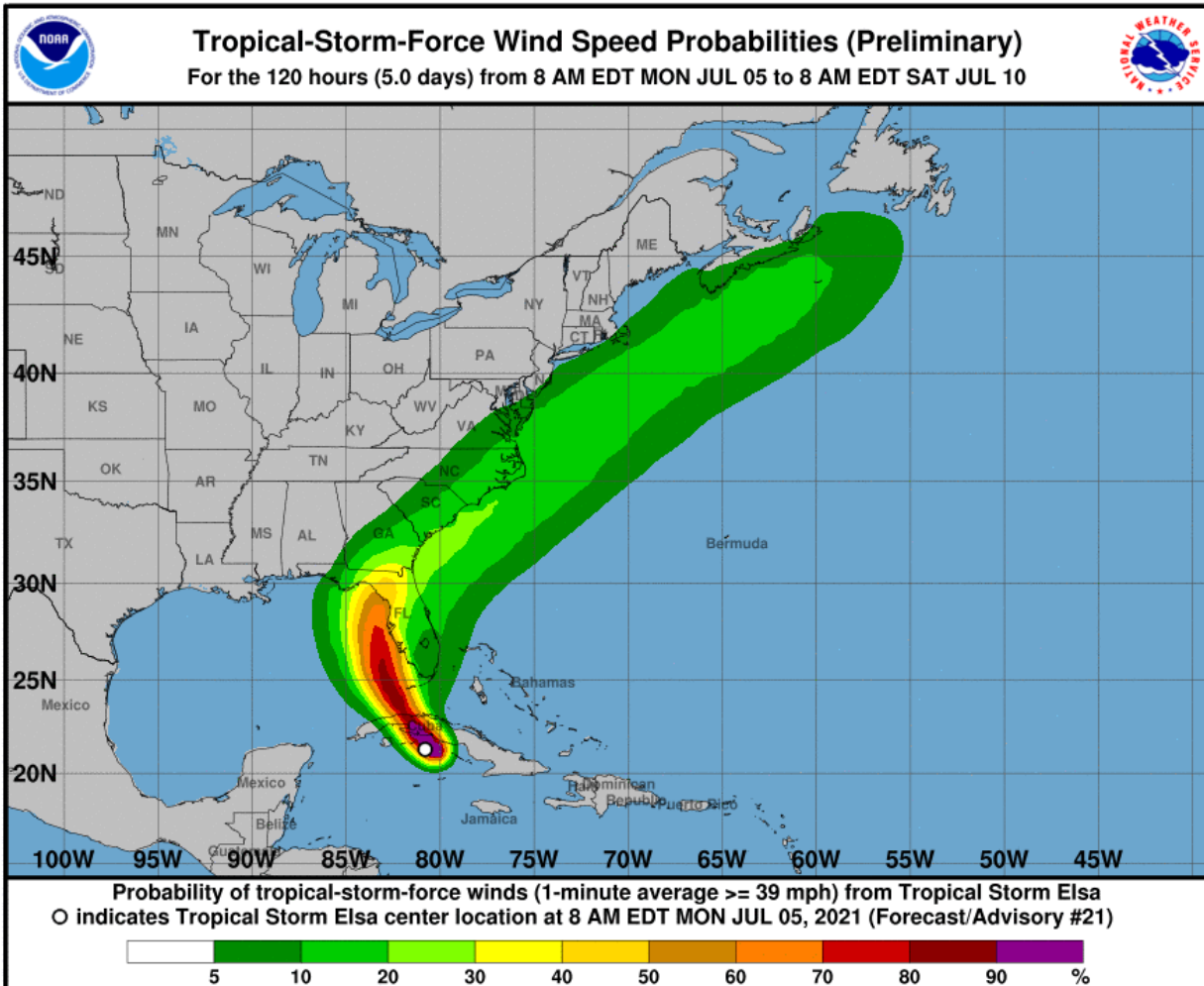


Most Likely Arrival Time of Tropical-Storm-Force Winds

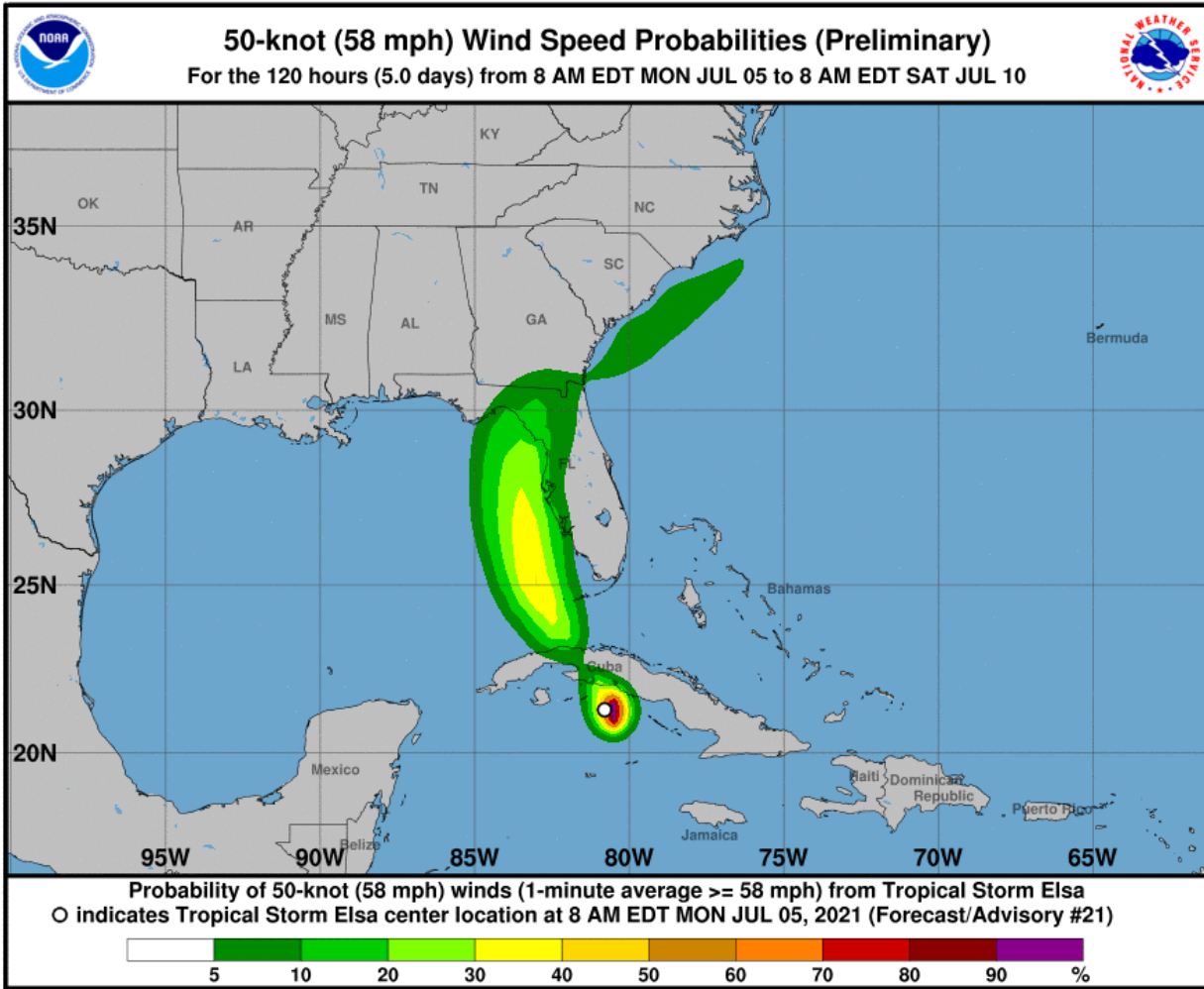


National Hurricane Center: Wind Speed Probabilities

Tropical Storm-Force Wind Probabilities (≥ 40 mph (65 kph))



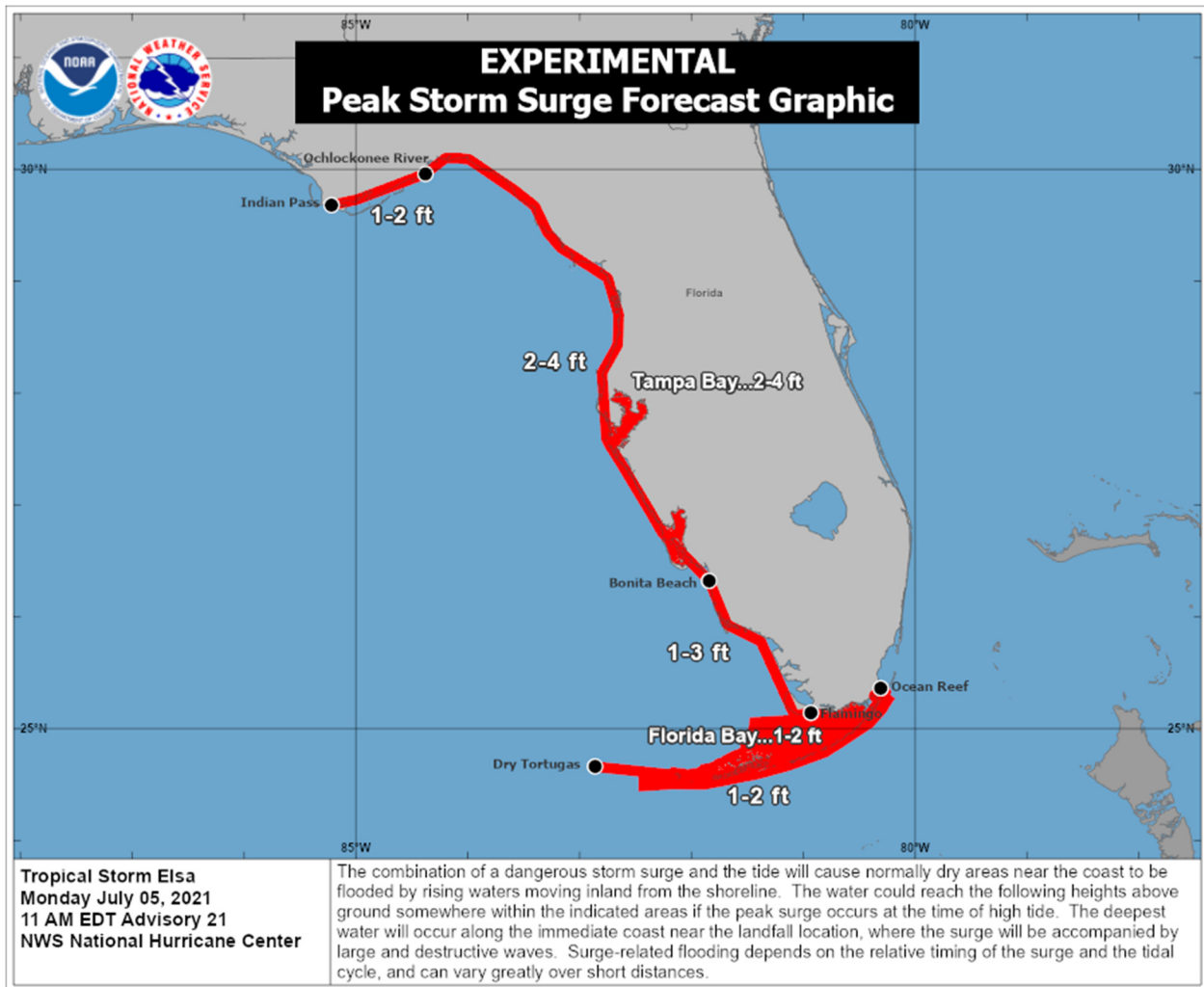
Wind Probabilities (≥ 60 mph (95 kph))



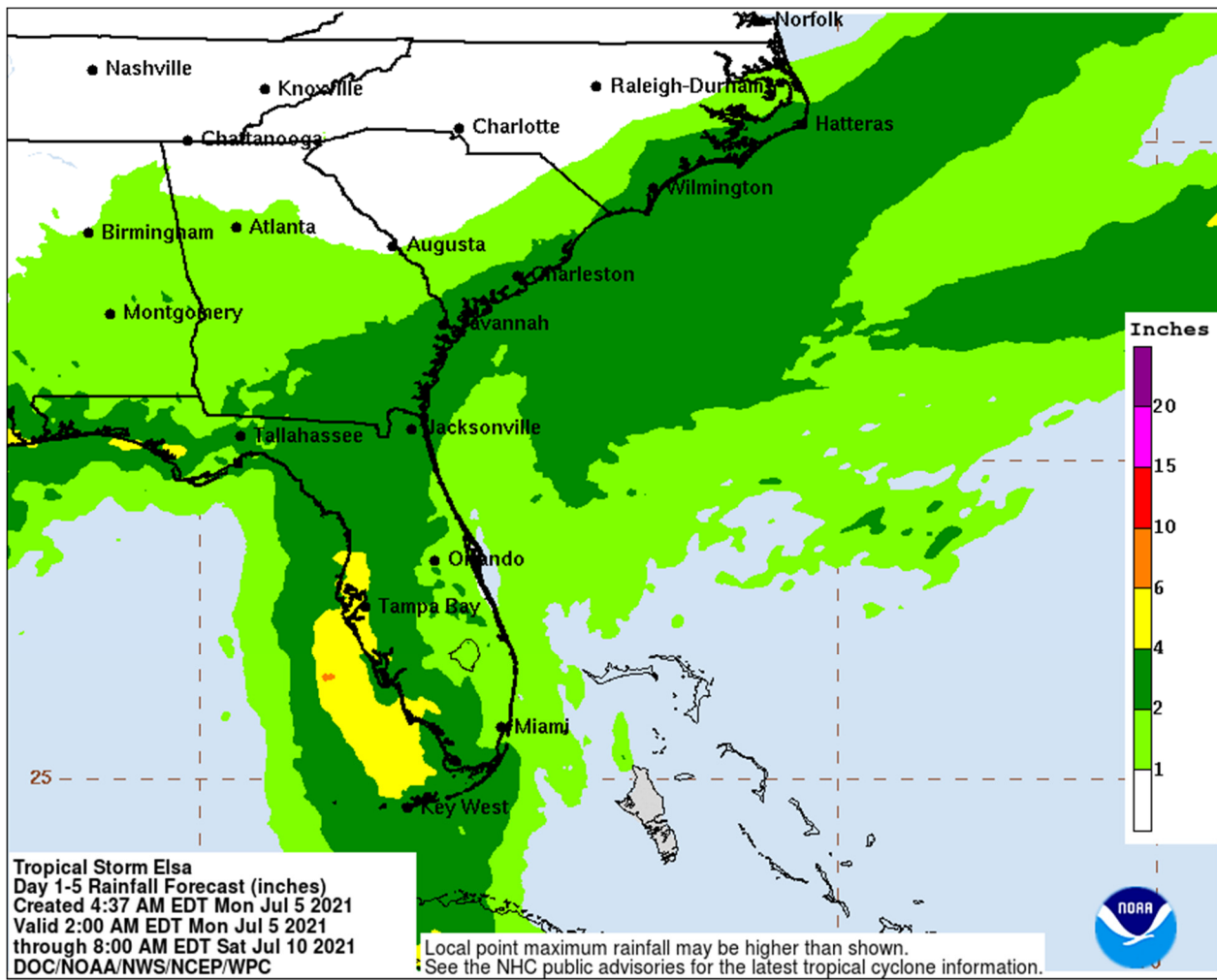
Hurricane-Force Wind Probabilities (≥ 75 mph (120 kph))



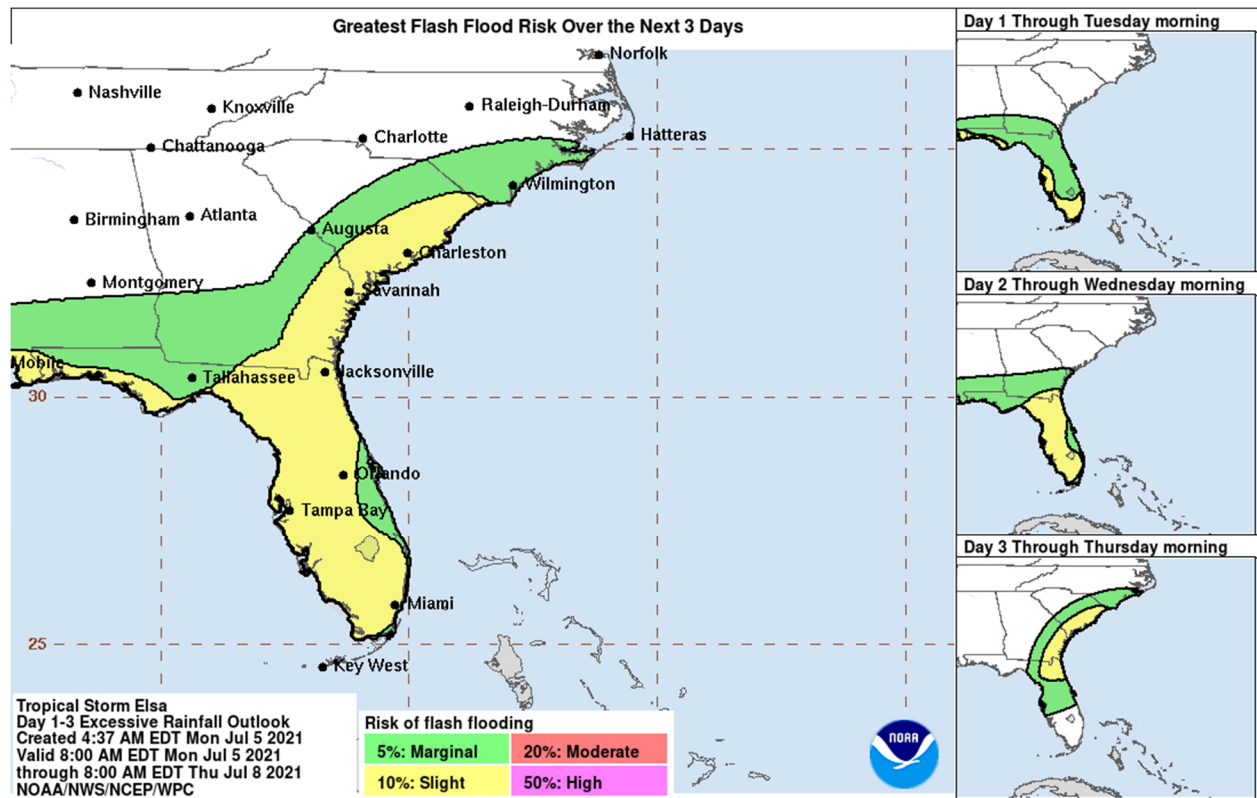
NHC: Storm Surge Inundation Graphic



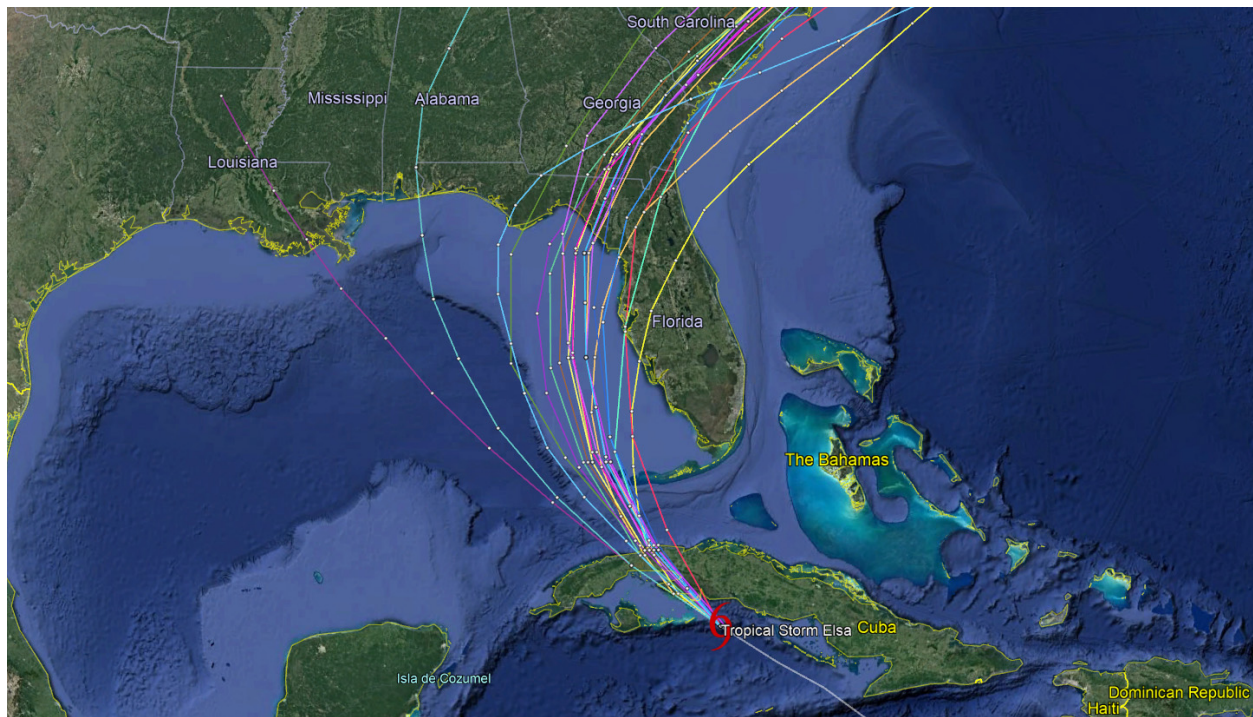
Weather Prediction Center: Rainfall Potential



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

NEXT CAT ALERT: Tuesday 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	Tropical Storm	Tropical Storm	Severe Tropical Storm	Cat. 2 Tropical Cyclone	Cat. 2 Tropical Cyclone	Severe Tropical Storm	Severe Cyclonic Storm		
65	75	120									
70	80	130	Cat. 1 Hurricane	Typhoon	Typhoon	Cat. 3 Severe Tropical Cyclone	Cat. 3 Severe Tropical Cyclone	Tropical Cyclone	Very Severe Cyclonic Storm		
75	85	140									
80	90	150									
85	100	160	Cat. 2 Hurricane		Typhoon	Cat. 4 Severe Tropical Cyclone	Cat. 4 Severe Tropical Cyclone	Intense Tropical Cyclone			
90	105	170									
95	110	175	Cat. 3 Major Hurricane		Typhoon	Typhoon	Cat. 5 Severe Tropical Cyclone	Cat. 5 Severe Tropical Cyclone		Very Intense Tropical Cyclone	
100	115	185									
105	120	195									
110	125	205	Cat. 4 Major Hurricane		Super Typhoon	Super Typhoon	Cat. 5 Severe Tropical Cyclone	Cat. 5 Severe Tropical Cyclone		Very Intense Tropical Cyclone	Super Cyclonic Storm
115	130	210									
120	140	220									
125	145	230	Cat. 5 Major Hurricane	Super Typhoon	Super Typhoon	Cat. 5 Severe Tropical Cyclone	Cat. 5 Severe Tropical Cyclone	Very Intense Tropical Cyclone	Super Cyclonic Storm		
130	150	240									
135	155	250	Cat. 5 Major Hurricane	Super Typhoon	Super Typhoon	Cat. 5 Severe Tropical Cyclone	Cat. 5 Severe Tropical Cyclone	Very Intense Tropical Cyclone	Super Cyclonic Storm		
140	160	260									
>140	>160	>260	Cat. 5 Major Hurricane	Super Typhoon	Super Typhoon	Cat. 5 Severe Tropical Cyclone	Cat. 5 Severe Tropical Cyclone	Very Intense Tropical Cyclone	Super Cyclonic Storm		

About Aon

Aon plc (NYSE:AON) is a leading global professional services firm providing a broad range of risk, retirement and health solutions. Our 50,000 colleagues in 120 countries empower results for clients by using proprietary data and analytics to deliver insights that reduce volatility and improve performance.

© Aon plc 2021. All rights reserved.

The information contained herein and the statements expressed are of a general nature and are not intended to address the circumstances of any particular individual or entity. Although we endeavor to provide accurate and timely information and use sources we consider reliable, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act on such information without appropriate professional advice after a thorough examination of the particular situation.

Copyright © by Impact Forecasting®

No claim to original government works. The text and graphics of this publication are provided for informational purposes only. While Impact Forecasting® has tried to provide accurate and timely information, inadvertent technical inaccuracies and typographical errors may exist, and Impact Forecasting® does not warrant that the information is accurate, complete or current. The data presented at this site is intended to convey only general information on current natural perils and must not be used to make life-or-death decisions or decisions relating to the protection of property, as the data may not be accurate. Please listen to official information sources for current storm information. This data has no official status and should not be used for emergency response decision-making under any circumstances.

Cat Alerts use publicly available data from the internet and other sources. Impact Forecasting® summarizes this publicly available information for the convenience of those individuals who have contacted Impact Forecasting® and expressed an interest in natural catastrophes of various types. To find out more about Impact Forecasting or to sign up for the Cat Reports, visit Impact Forecasting's webpage at impactforecasting.com.

Copyright © by Aon plc. All rights reserved. No part of this document may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise. Impact Forecasting® is a wholly owned subsidiary of Aon plc.