

Current Watches and Warnings

A **Storm Surge Watch** is in effect for the South Shore of Long Island from East Rockaway Inlet to Montauk; North Shore of Long Island from Kings Point to Montauk; Flushing, New York to Sagamore Beach, Massachusetts; Nantucket, Martha's Vineyard, and Block Island

A **Hurricane Watch** is in effect for the South Shore of Long Island from Fire Island Inlet to Montauk; North Shore of Long Island from Port Jefferson Harbor to Montauk; New Haven, Connecticut to Sagamore Beach, Massachusetts; Nantucket, Martha's Vineyard, and Block Island

A **Tropical Storm Watch** is in effect from west of Fire Island Inlet to East Rockaway Inlet, New York; west of Port Jefferson Harbor, New York; west of New Haven, Connecticut

Current Details from the National Hurricane Center (NHC)

COORDINATES: 30.4° north, 73.7° west

LOCATION: 745 miles (1,200 kilometers) south of Montauk, New York

MOVEMENT: northwest at 7 mph (11 kph)

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

RADIUS OF TROPICAL STORM-FORCE WINDS: 90 miles (150 kilometers)

MINIMUM CENTRAL PRESSURE: 996 millibars

SAFFIR-SIMPSON SCALE RANKING: Tropical Storm

24-HOUR LANDFALL POTENTIAL: NONE

Latest Satellite Picture



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

Discussion

Tropical Storm Henri, located approximately 745 miles (1,200 kilometers) south of Montauk, New York, is currently tracking northwest at 7 mph (11 kph). The Air Force Reserve Hurricane Hunters investigated Henri this morning and did not find much change in the storm's intensity or minimum central pressure. Because of the persistent data, the NHC has maintained the initial intensity at 65 mph (100 kph) – a strong tropical storm. The low-level center of Henri is located close to the northwestern edge of the main area of deep convection, and the vortex is still not vertically aligned due to moderately strong vertical wind shear. Although the intensity of Henri has not changed much during the past couple of days, satellite images show an improving cloud pattern with well-established outflow in the eastern semicircle, which could indicate that Henri is poised to strengthen.

There is some uncertainty in the exact position of Henri given the recent aircraft fixes and the tilt of the vortex, but the initial motion appears to be northwestward. A trough currently located over the U.S. Appalachians is expected to cut off tonight, and the combination of that feature and a building ridge of high pressure to the east/northeast of Henri should cause the storm to turn northward tonight and accelerate in that direction on Saturday. Some of the forecast models show a slight bend to the west around the time Henri is forecast to make landfall on Sunday. There remains significant spread in the model guidance in where the center of Henri will come ashore in the U.S. Northeast. The latest GFS (United States) and ECMWF (European) ensemble members span a region from near New York City to Cape Cod for the landfall point. Based on the latest consensus aids and initial position, the official NHC track forecast is nudged to the west of the previous one and shows landfall occurring by late Sunday. After Day 3, Henri is forecast to eject northeastward across the Gulf of Maine.

The ongoing northerly wind shear is expected to decrease later today, and the forecast models show a favorable upper-level wind pattern developing over the storm later today through the weekend. These more conducive atmospheric conditions combined with the warm Gulf Stream waters should allow Henri to strengthen to a hurricane tonight or early Saturday with additional intensification expected into Saturday night. However, once Henri crosses the northern edge of the Gulf Stream, that should end its opportunity for strengthening. Although steady to rapid weakening is forecast while Henri moves over cooler waters south of New England, it will likely still be at or near hurricane intensity when it reaches the coast. Post-tropical transition is forecast to occur in 3 to 4 days. Users are reminded to not focus on the exact forecast of the center of Henri since impacts will extend far from the center.

Key Messages from the National Hurricane Center

1. Dangerous storm surge inundation and hurricane conditions are possible beginning Sunday in portions of Long Island, Connecticut, Rhode Island, and southeastern Massachusetts, where a Storm Surge Watch and Hurricane Watch are in effect. Residents in these areas should follow any advice given by local officials.
2. Heavy rainfall may lead to flash, urban, and small stream flooding, along with the potential for widespread minor and isolated moderate river flooding, over portions of southern New England Sunday into Monday.
3. Swells from Henri will begin to reach much of the east coast of the U.S. and Atlantic Canada by the end of the week and continue through the weekend. These swells could cause life-threatening surf and rip currents.

Additional Information

STORM SURGE: The combination of a dangerous 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:

Watch Hill, RI to Sagamore Beach, MA including Narragansett Bay, Buzzards Bay, Vineyard Sound, Nantucket Sound, and Cape Cod Bay: 3-5 feet

East Rockaway Inlet, NY to Montauk Point, NY: 2-4 feet

North shore of Long Island: 2-4 feet

Flushing, NY to Watch Hill, RI: 2-4 feet

Cape May, NJ to East Rockaway Inlet, NY: 1-3 feet

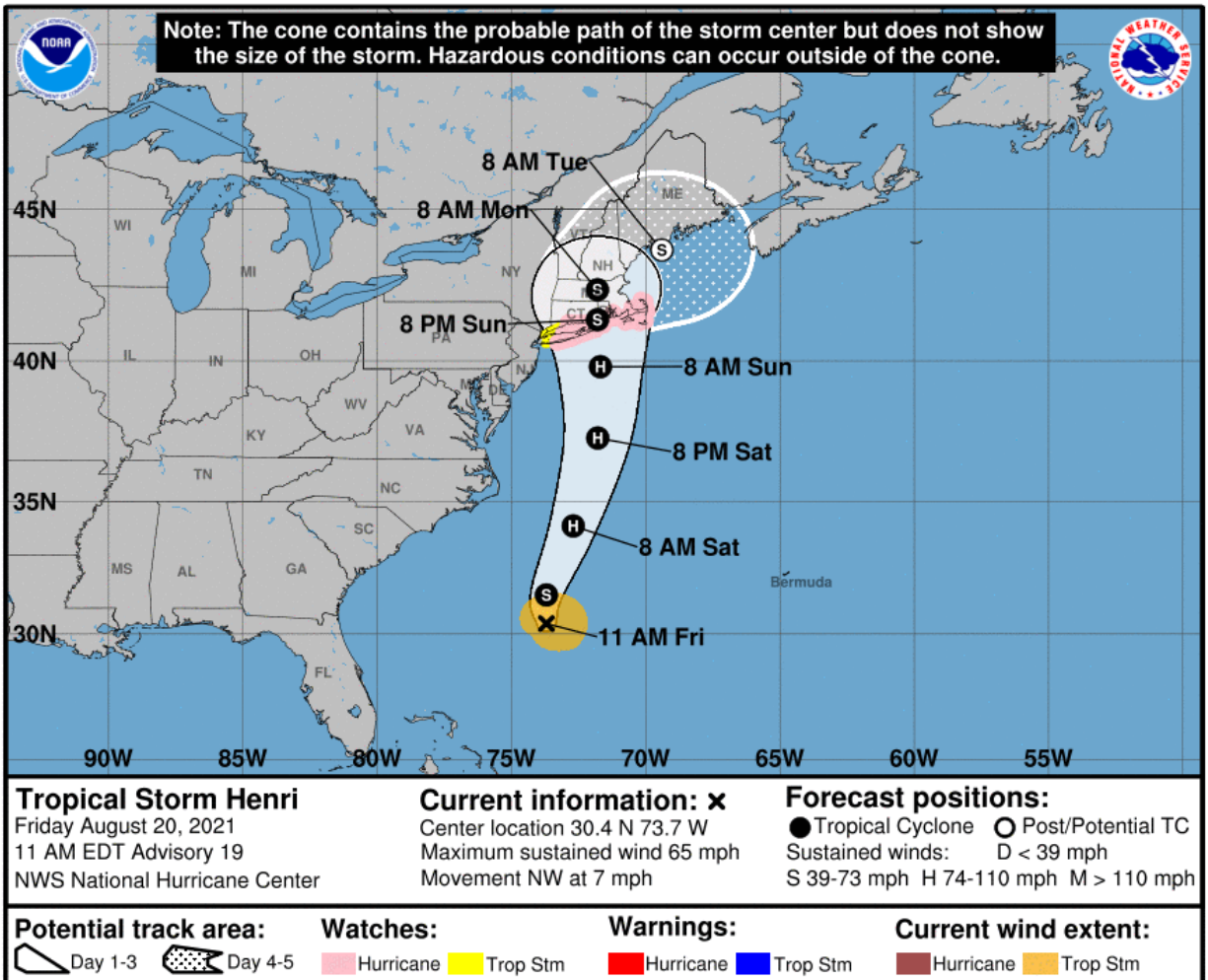
The deepest water will occur along the immediate coast in areas of onshore winds, where the surge will be accompanied by large and dangerous waves. Surge-related flooding depends on the relative timing of the surge and the tidal cycle and can vary greatly over short distances.

WIND: Hurricane conditions are possible within the Hurricane Watch area on Sunday, with tropical storm conditions possible by early Sunday. Tropical storm conditions are possible within the Tropical Storm Watch area on Sunday.

RAINFALL: Henri may produce rainfall amounts of 2 to 5 inches over eastern Long Island and southern New England Sunday into Monday, with isolated maximum totals near 8 inches. Heavy rainfall from Henri will result in flash, urban, and small stream flooding, along with the potential for widespread minor and isolated moderate river flooding.

SURF: Swells generated by Henri should continue to affect Bermuda during the next day or so. Swells are expected to increase across much of the east coast of the U.S. and Atlantic Canada today and into the weekend. These swells could cause life-threatening surf and rip current conditions.

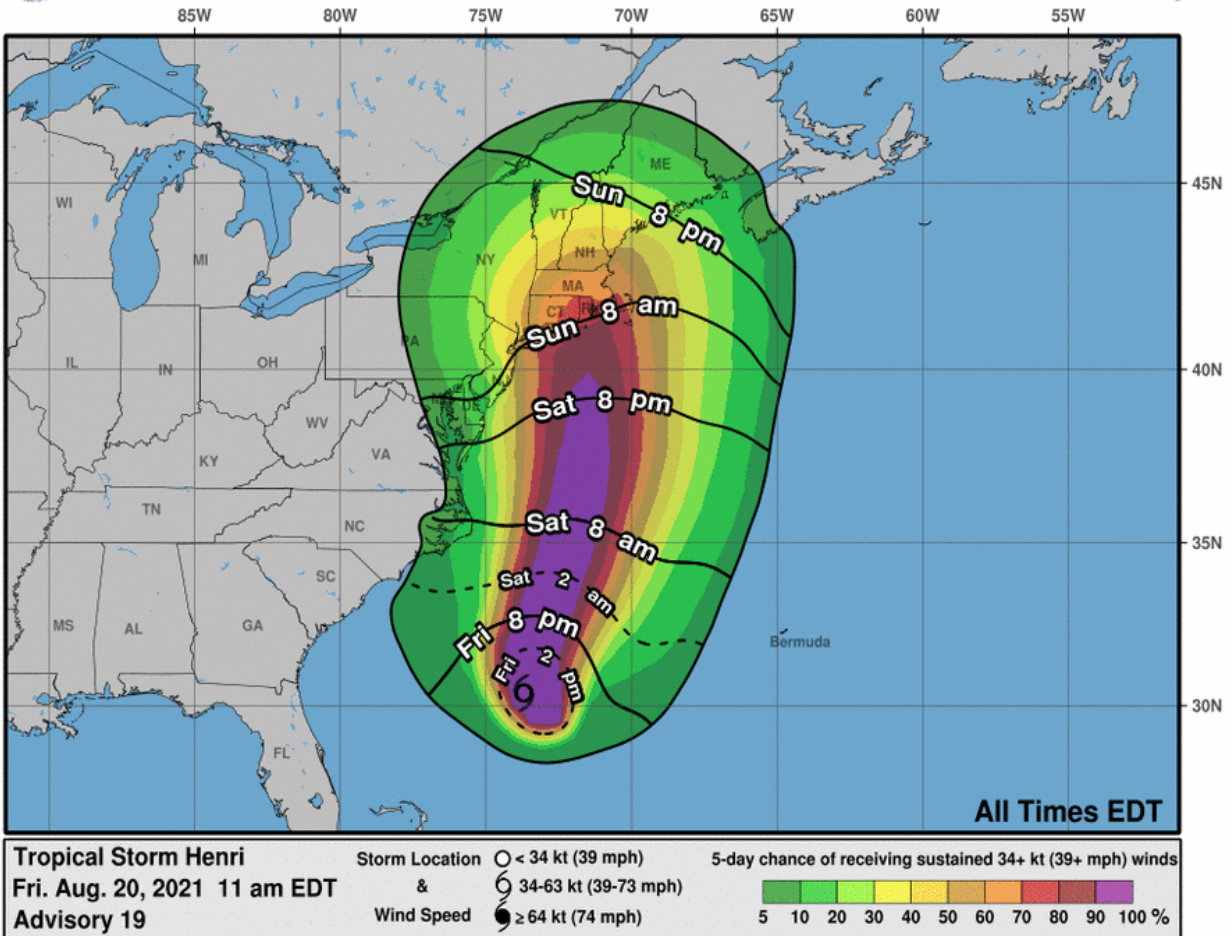
National Hurricane Center (NHC) Forecast



Most Likely Arrival Time of Tropical Storm-Force Winds

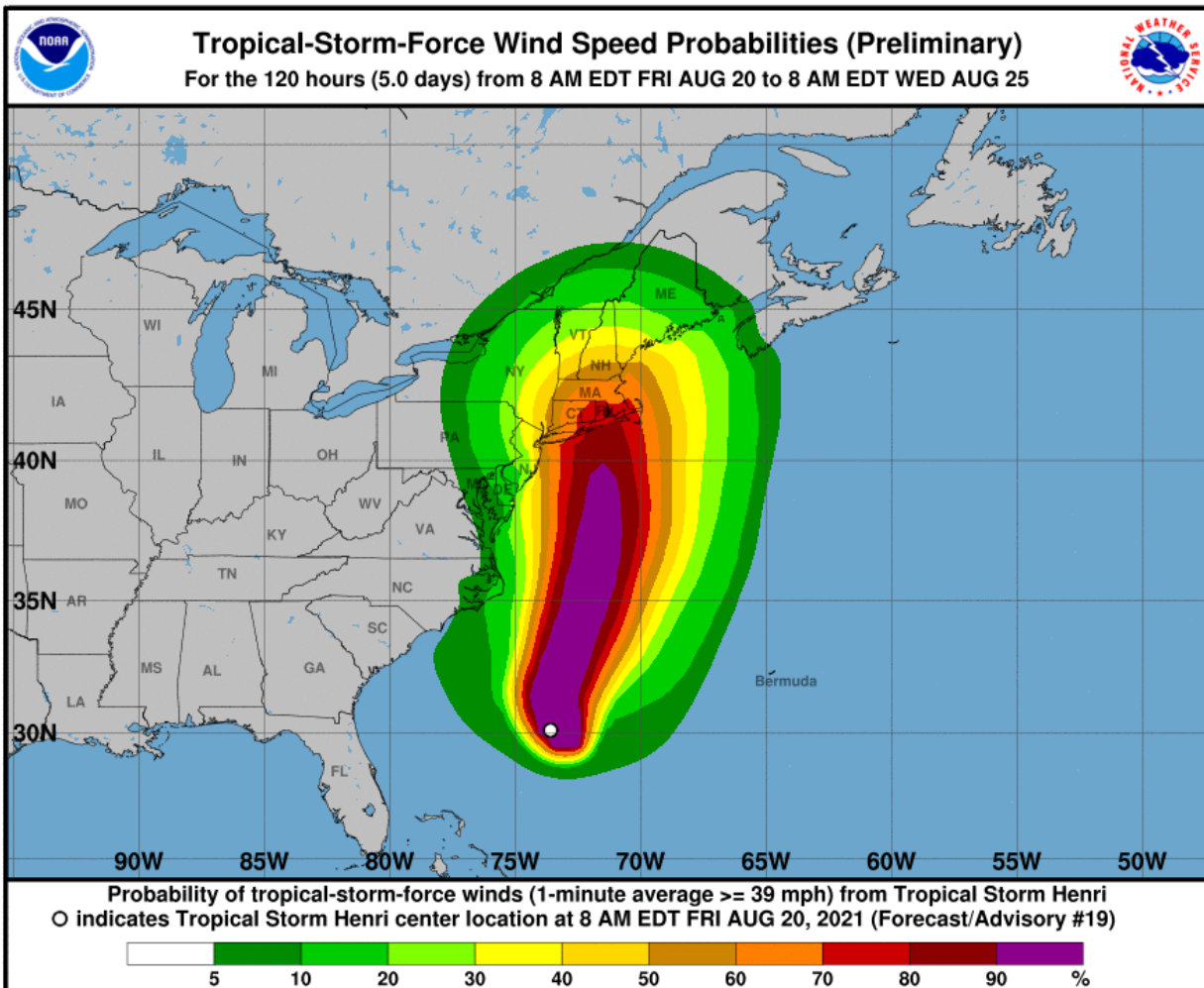


Most Likely Arrival Time of Tropical-Storm-Force Winds

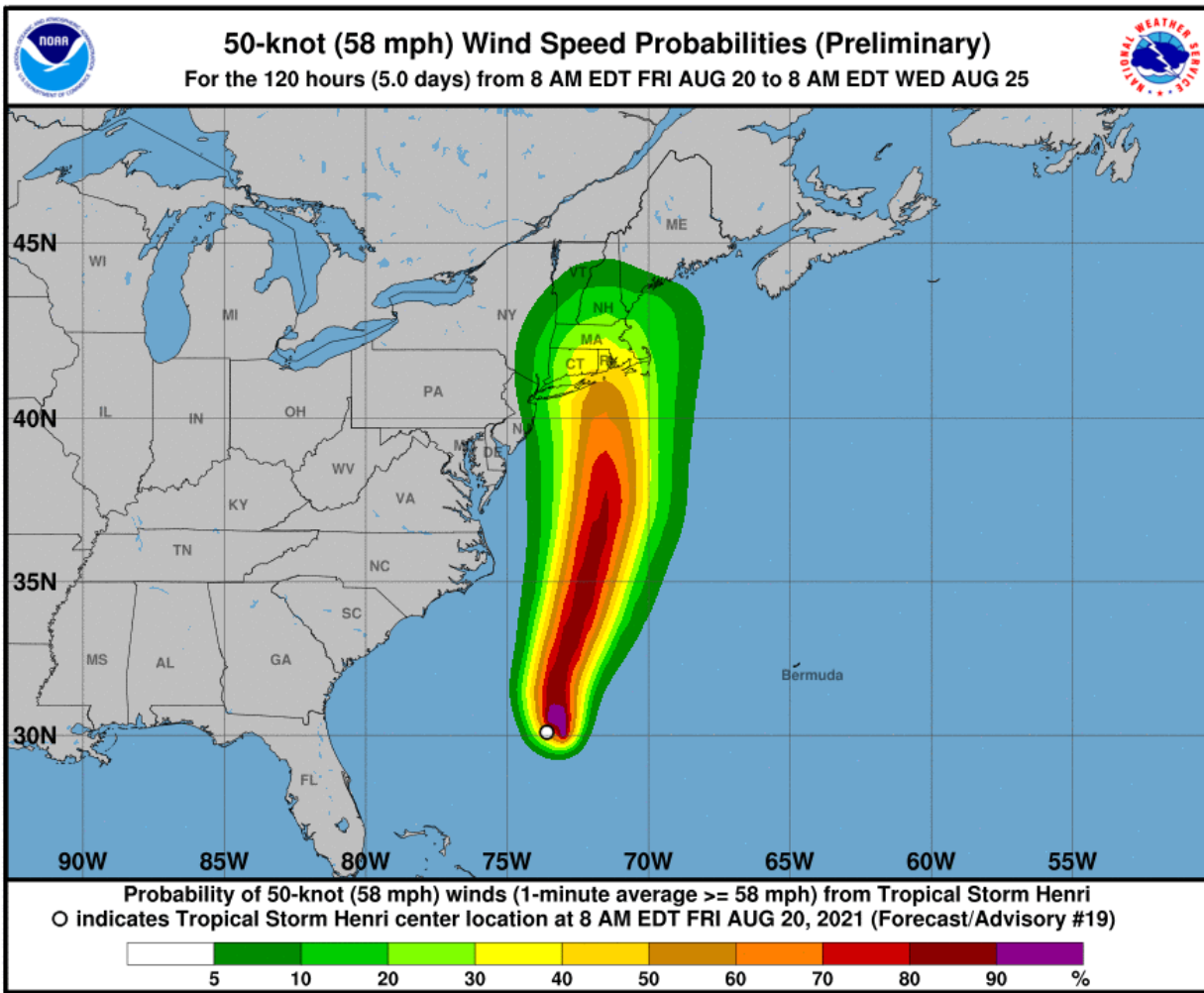


National Hurricane Center: Wind Speed Probabilities

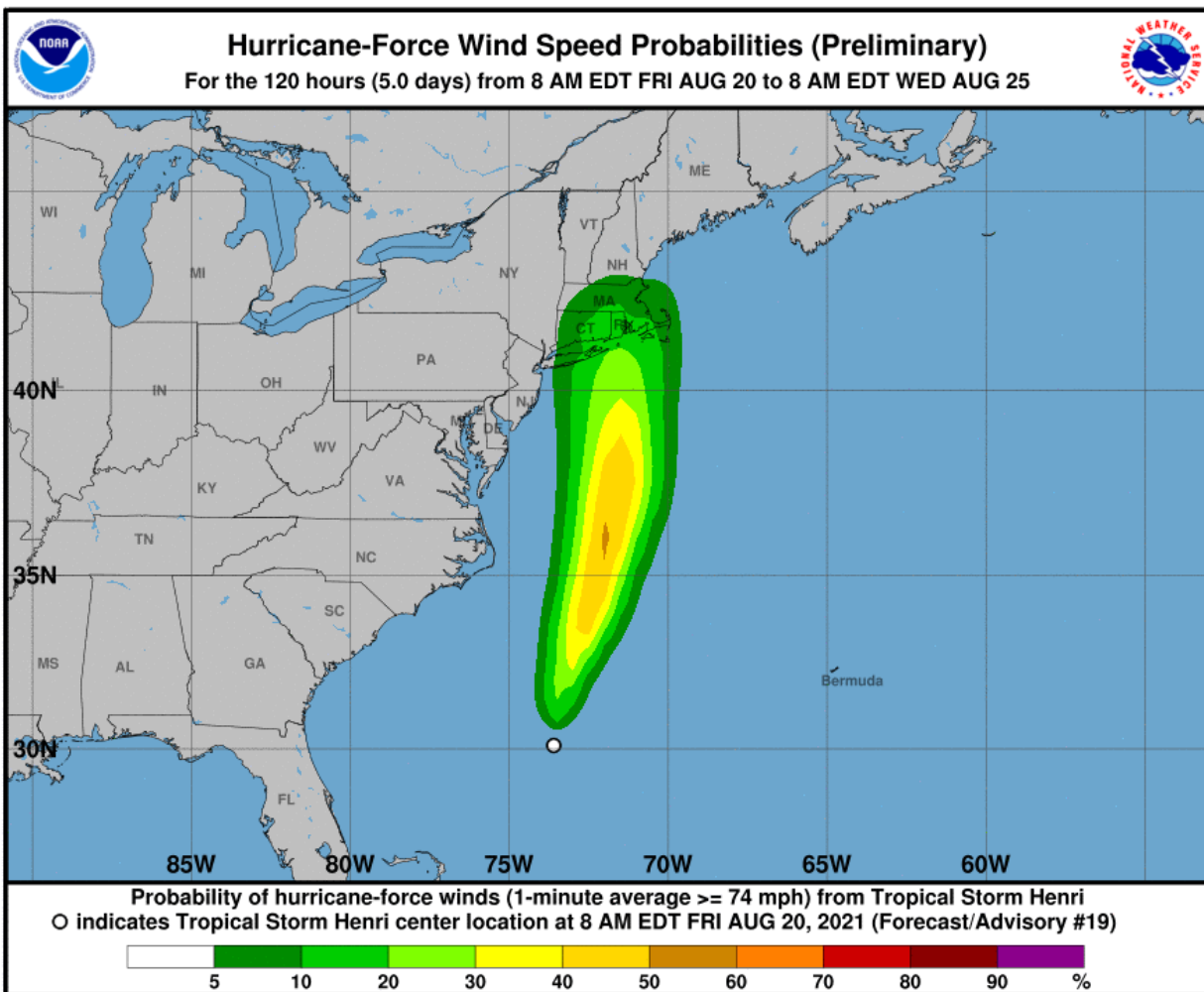
Tropical Storm-Force Wind Probabilities (≥ 40 mph (65 kph))



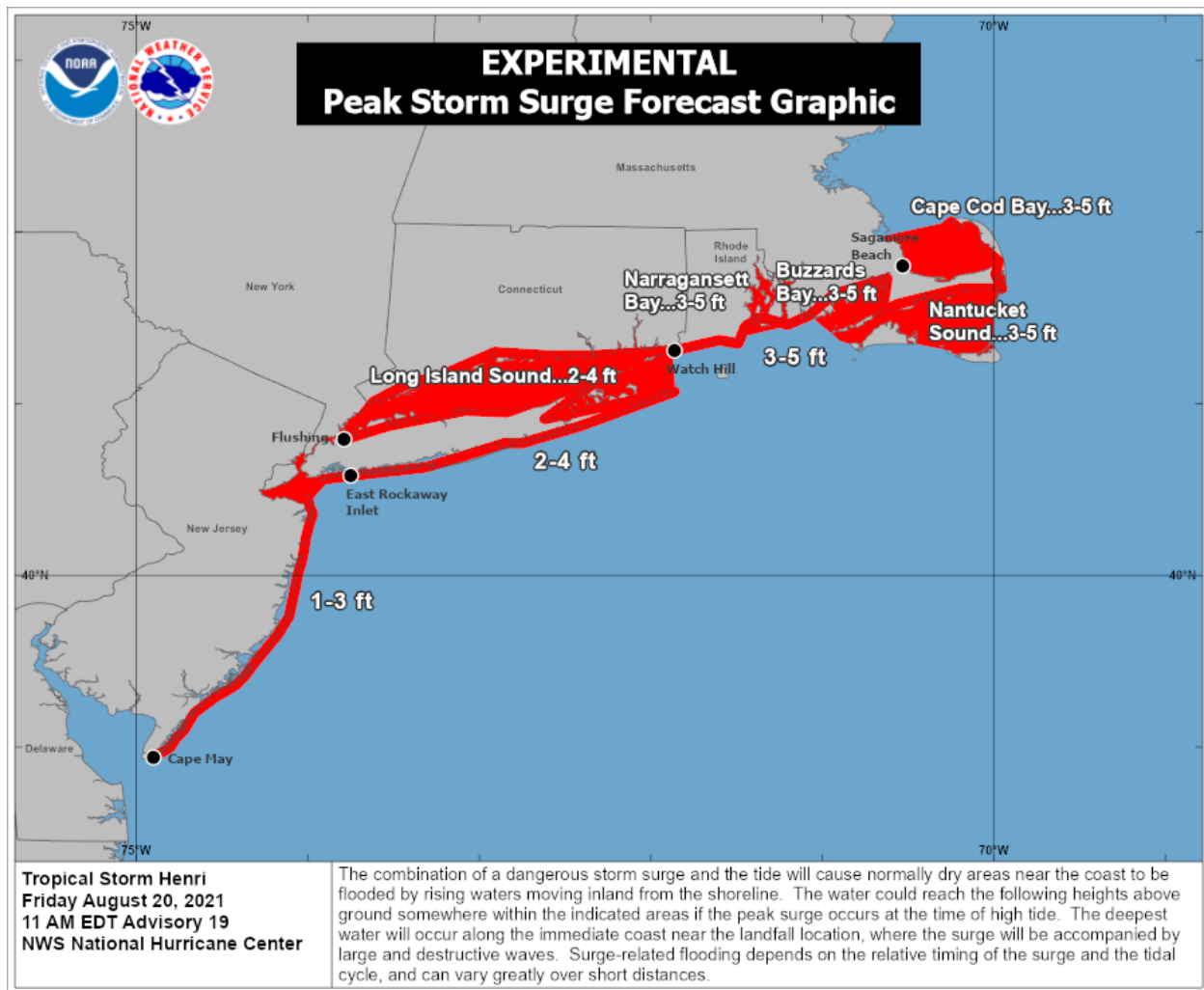
Wind Probabilities (≥ 60 mph (95 kph))



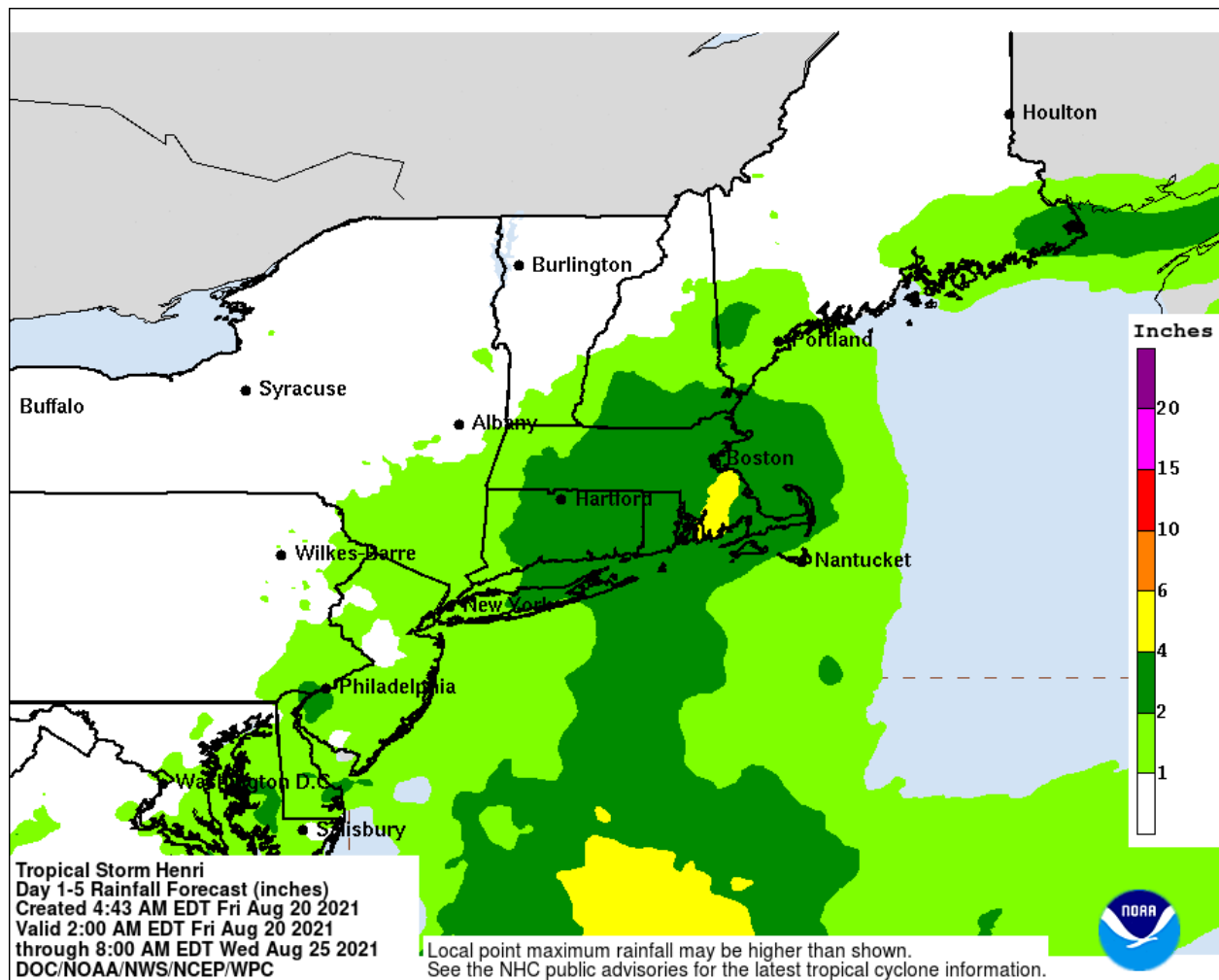
Hurricane-Force Wind Probabilities (≥ 75 mph (120 kph))



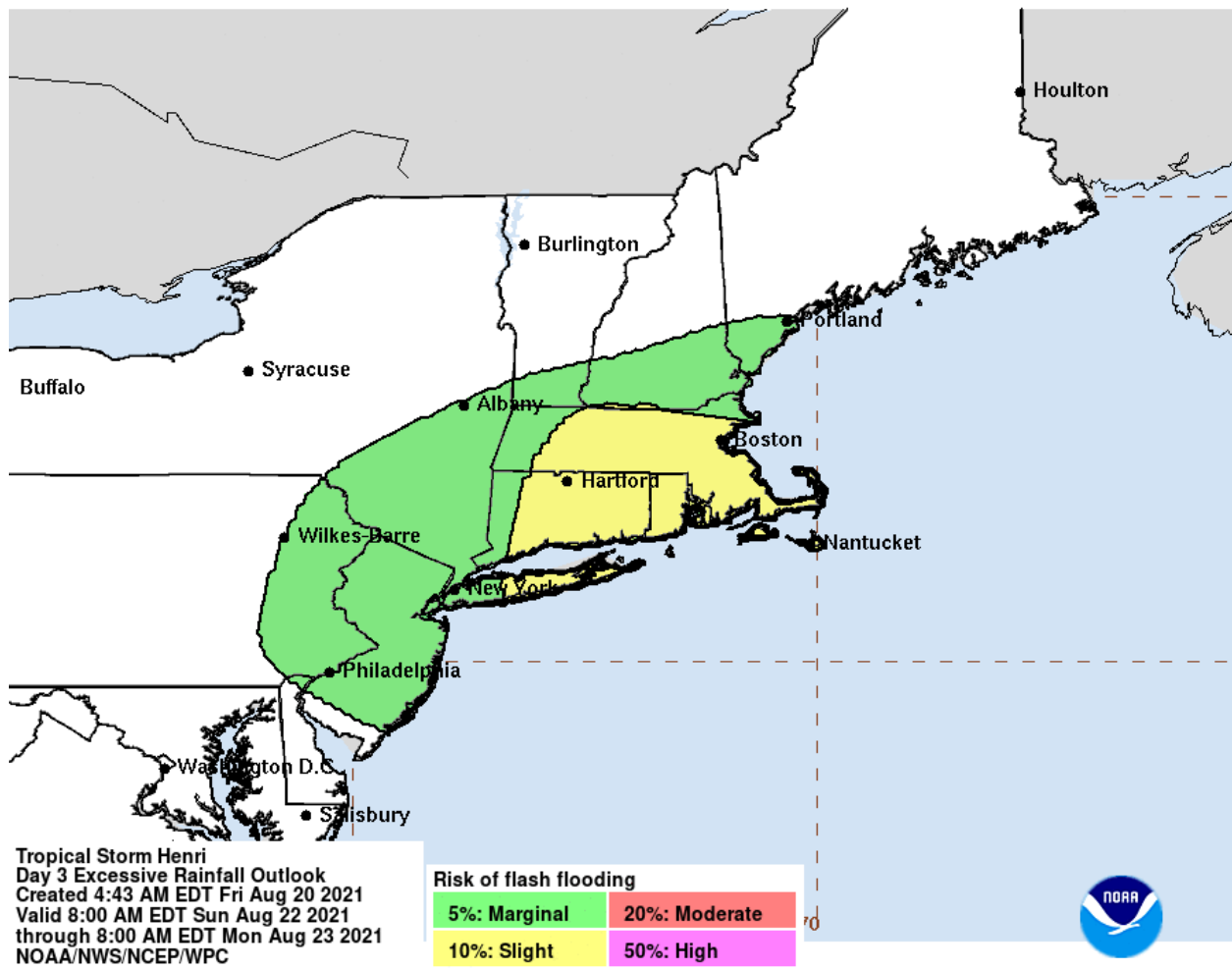
NHC: Storm Surge Inundation Graphic



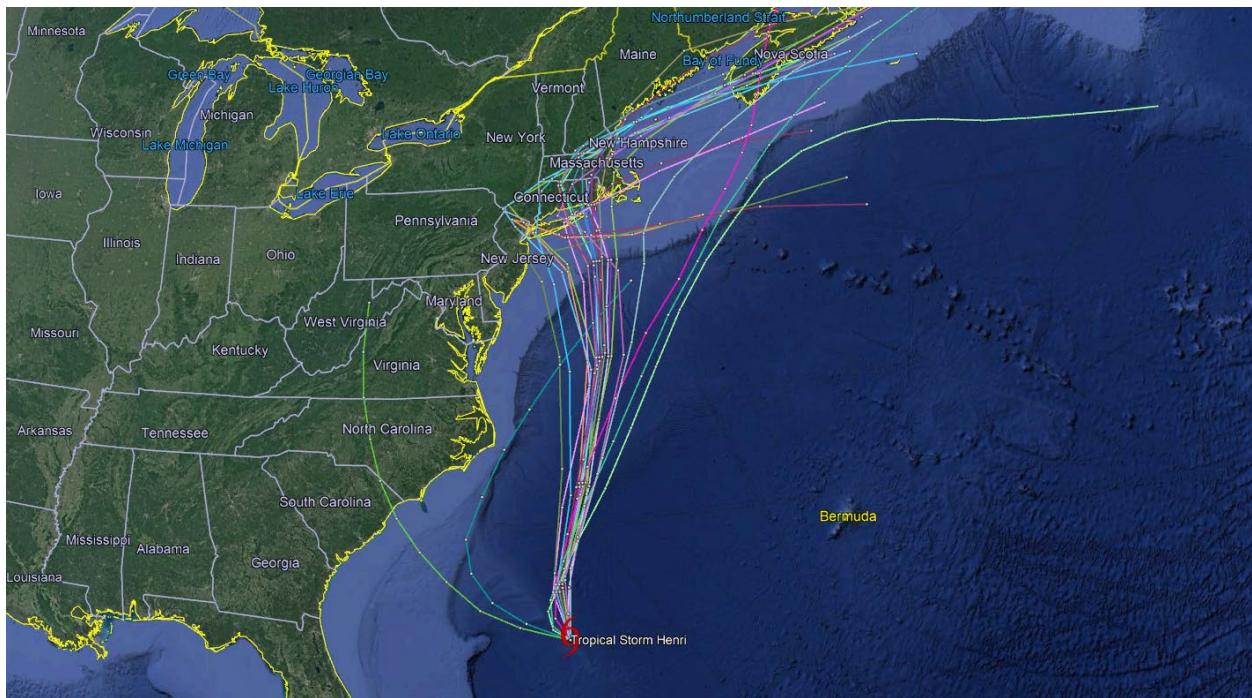
Weather Prediction Center: Rainfall Potential



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: Saturday morning after 11:00 AM Eastern 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			Severe Tropical Storm	Cat. 2 Tropical Cyclone	Cat. 2 Tropical Cyclone	Severe Tropical Storm	Severe Cyclonic Storm		
50	60	95									
55	65	100									
60	70	110									
65	75	120	Cat. 1 Hurricane	Typhoon	Typhoon	Cat. 3 Severe Tropical Cyclone	Cat. 3 Severe Tropical Cyclone	Tropical Cyclone	Very Severe Cyclonic Storm		
70	80	130									
75	85	140									
80	90	150									
85	100	160	Cat. 2 Hurricane			Cat. 4 Severe Tropical Cyclone	Cat. 4 Severe Tropical Cyclone	Intense Tropical Cyclone			
90	105	170									
95	110	175									
100	115	185	Cat. 3 Major Hurricane			Cat. 5 Severe Tropical Cyclone	Cat. 5 Severe Tropical Cyclone			Very Intense Tropical Cyclone	Super Cyclonic Storm
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									

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