

HURRICANE IAN

Current Watches and Warnings

A **Hurricane Warning** is in effect for the Cuban provinces of Isla de Juventud, Pinar del Rio, and Artemisa, Bonita Beach to Anclote River, including Tampa Bay, Dry Tortugas

A **Storm Surge Warning** is in effect for Suwanee River southward to Flamingo, Tampa Bay, Dry Tortugas, Marineland to the mouth of the St. Mary's River, St. Johns River

A **Tropical Storm Warning** is in effect for the Cuban provinces of La Habana, Mayabeque, and Matanzas, Suwanee River to the Anclote River, Flamingo to Bonita Beach, Lower and Middle Florida Keys, Boca Raton to Altamaha Sound, Lake Okeechobee

A **Storm Surge Watch** is in effect for the Florida Keys from the Card Sound Bridge westward to Key West, Florida Bay, Aucilla River to Suwanee River, Mouth of St. Mary's River to South Santee River, South of Marineland to the Volusia/Flagler county line

A **Hurricane Watch** is in effect for North of Anclote River to Suwanee River, South of Bonita Beach to Chokoloskee

A **Tropical Storm Watch** is in effect for North of Suwanee River to Indian Pass, North of Altamaha Sound to South Santee River, South of Boca Raton to east of Flamingo, Upper Florida Keys, Florida Bay

Current Details from the National Hurricane Center

COORDINATES: 23.0° north, 83.5° west

LOCATION: 305 miles (490 kilometers) south-southwest of Sarasota, Florida

MOVEMENT: North-northwest at 13 mph (20 kph)

WINDS: 115 mph (185 kph) with gusts to 140 mph (225 kph)

RADIUS OF TROPICAL STORM-FORCE WINDS: 140 miles (225 kilometers)

RADIUS OF HURRICANE-FORCE WINDS: 35 miles (55 kilometers)

MINIMUM CENTRAL PRESSURE: 963 millibars

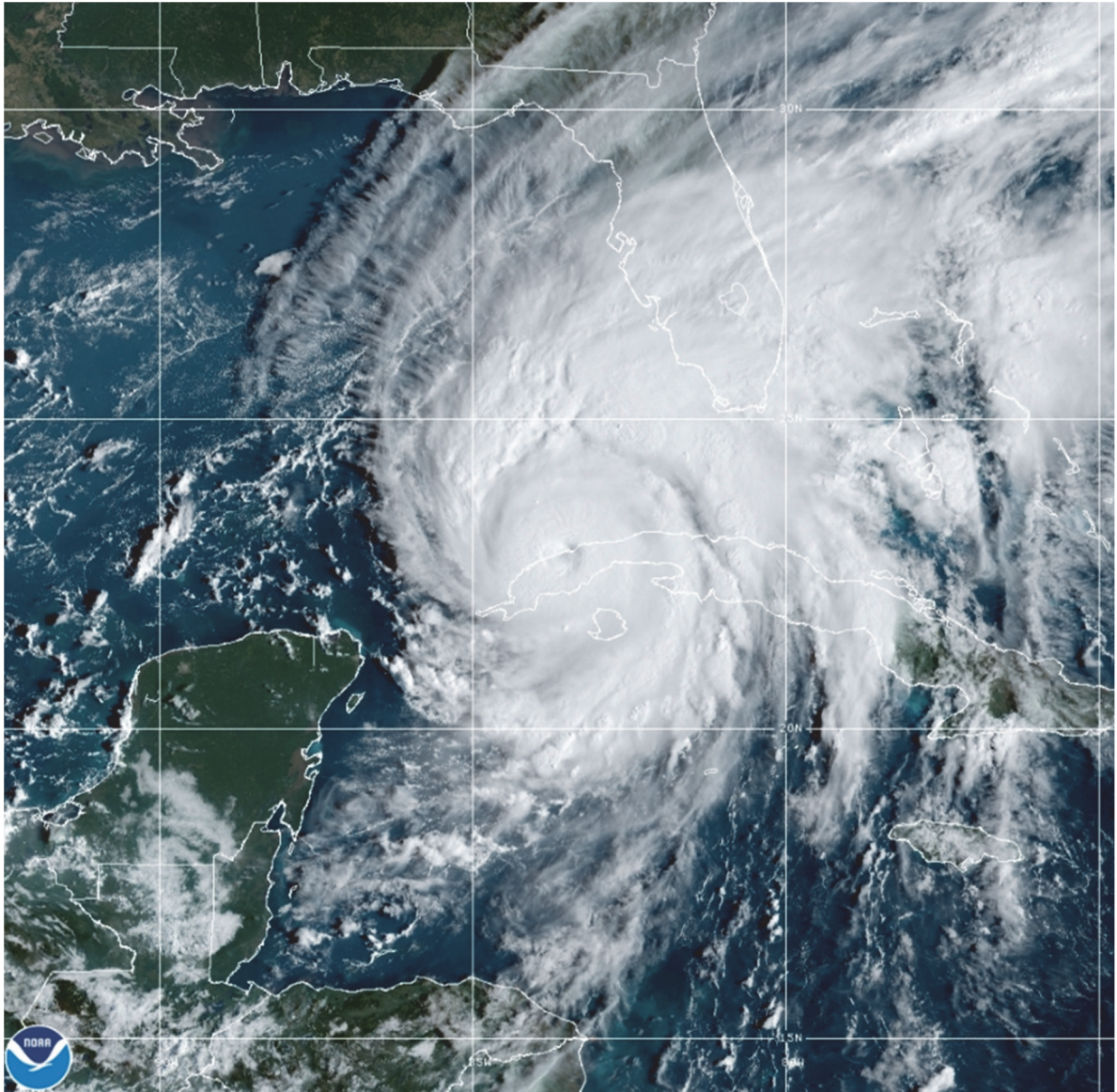
SAFFIR-SIMPSON SCALE RANKING: Category 3

LANDFALL LOCATION: Pinar Del Rio, Cuba

LANDFALL TIMEFRAME: 4:30 AM EDT / 8:30 UTC on September 27

LANDFALL INTENSITY: 125 mph (205 kph); Saffir-Simpson Category 3

Latest Satellite Imagery



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

Discussion

The well-defined eye of Ian emerged off the coast of western Cuba. Earlier reports from the NOAA Hurricane Hunter aircraft indicate that Ian strengthened up through landfall, with an estimated pressure of 947 mb over western Cuba. While the hurricane has filled somewhat due to the passage over Cuba, Air Force Reserve and NOAA Hurricane Hunter data show that it has grown. The initial wind speed is set to 115 mph (185 kph). Ian is moving northward at 13 mph (20 kph). Dropsonde data from the NOAA aircraft indicate a potent upper-level trough is over the western Gulf of Mexico. The strength of this trough, the associated southwesterly flow, and the vertical depth of Ian appear to be the keys to the forecast. There has been a notable trend toward the hurricane remaining more intact up through landfall, meaning Ian is likely to turn to the northeast and not move as slowly as previously anticipated. However, it should be emphasized that this track remains very uncertain, with a typical spread in the steering features leading to big speed and track differences down the line, not to mention the oblique angle of approach to Florida. The latest forecast is adjusted to the southeast for this advisory, showing landfall 6-12 hours faster than before, and we will have to see if the southern trend continues in the afternoon guidance. The rest of the forecast after landfall has been adjusted to the northeast as well, though it is still slower than the consensus guidance at longer range.

The hurricane should remain in a favorable environment for restrengthening over the next day or so while it moves over the warm waters of the southeastern Gulf of Mexico and in light-shear conditions. While the shear should increase by tomorrow, it isn't expected to be enough to significantly weaken the hurricane before landfall. Model guidance is in fairly good agreement on this scenario, and the NHC intensity forecast continues to call for an extremely dangerous hurricane landfall for southwestern Florida.

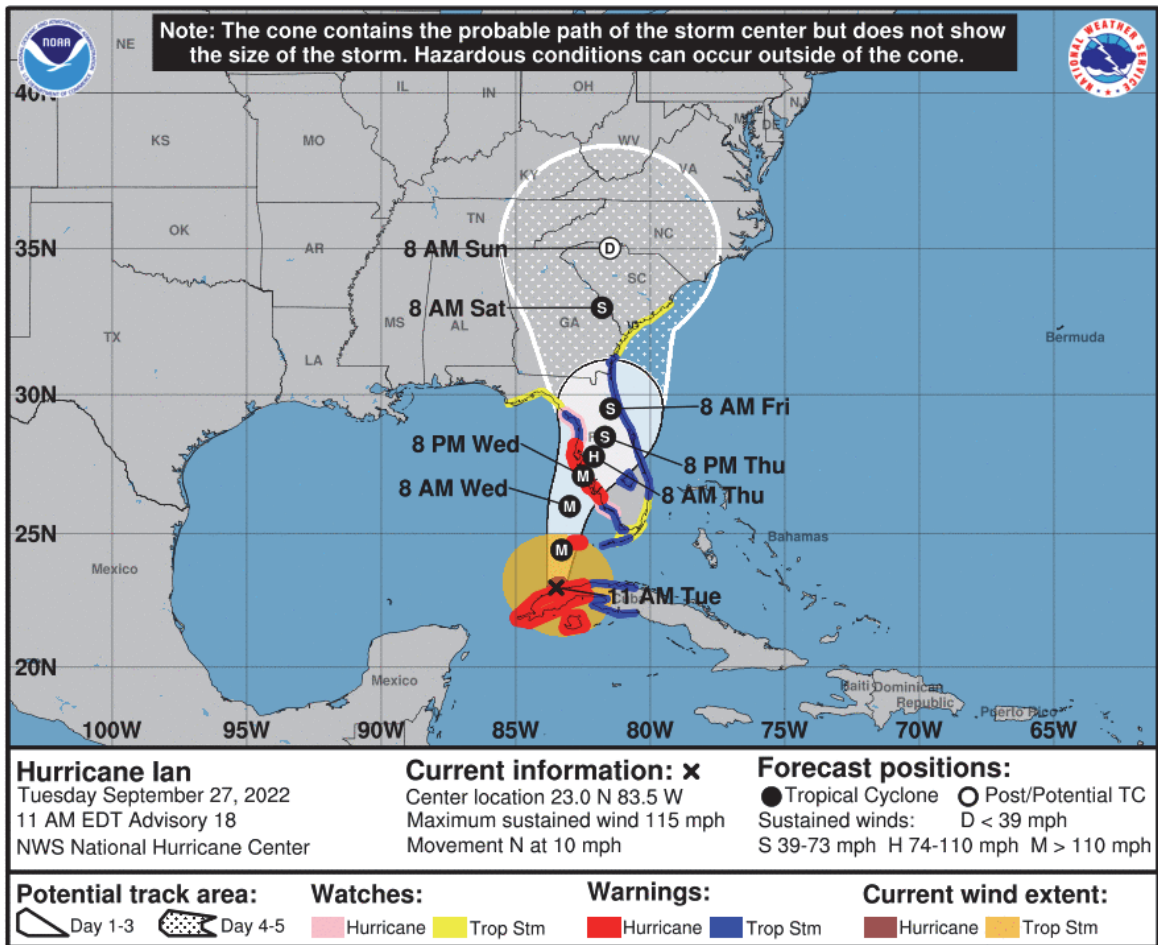
The new forecast necessitates a Hurricane Watch for portions of extreme southwestern Florida, and a Tropical Storm Watch for the rest of southeastern Florida that wasn't previously under a watch. Users are reminded to not focus on the exact track as some additional adjustments to the track are possible. Significant wind, storm surge, and rainfall hazards will extend far from the center.

Key Messages from the National Hurricane Center

1. Life-threatening storm surge, hurricane-force winds, flash floods and possible mudslides are expected to continue in portions of western Cuba today. Devastating wind damage is expected near the core of Ian.
2. Life-threatening storm surge looks increasingly likely along much of the Florida west coast where a storm surge warning is in effect, with the highest risk from Fort Myers to the Tampa Bay region. Residents in these areas should listen to advice given by local officials and follow evacuation orders if made for your area.
3. Hurricane-force winds are expected in the hurricane warning area in southwest and west-central Florida beginning Wednesday morning with tropical storm conditions expected by this evening. Residents should rush all preparations to completion today.

4. Heavy rainfall will increase across the Florida Keys and south Florida today, spreading into central and northern Florida tonight and Wednesday, into the Southeast U.S. by Thursday and Friday, likely causing flash, urban, and small stream flooding. Considerable flooding is expected across central Florida into southern Georgia and coastal South Carolina, with widespread, prolonged moderate to major river flooding expected across central Florida.

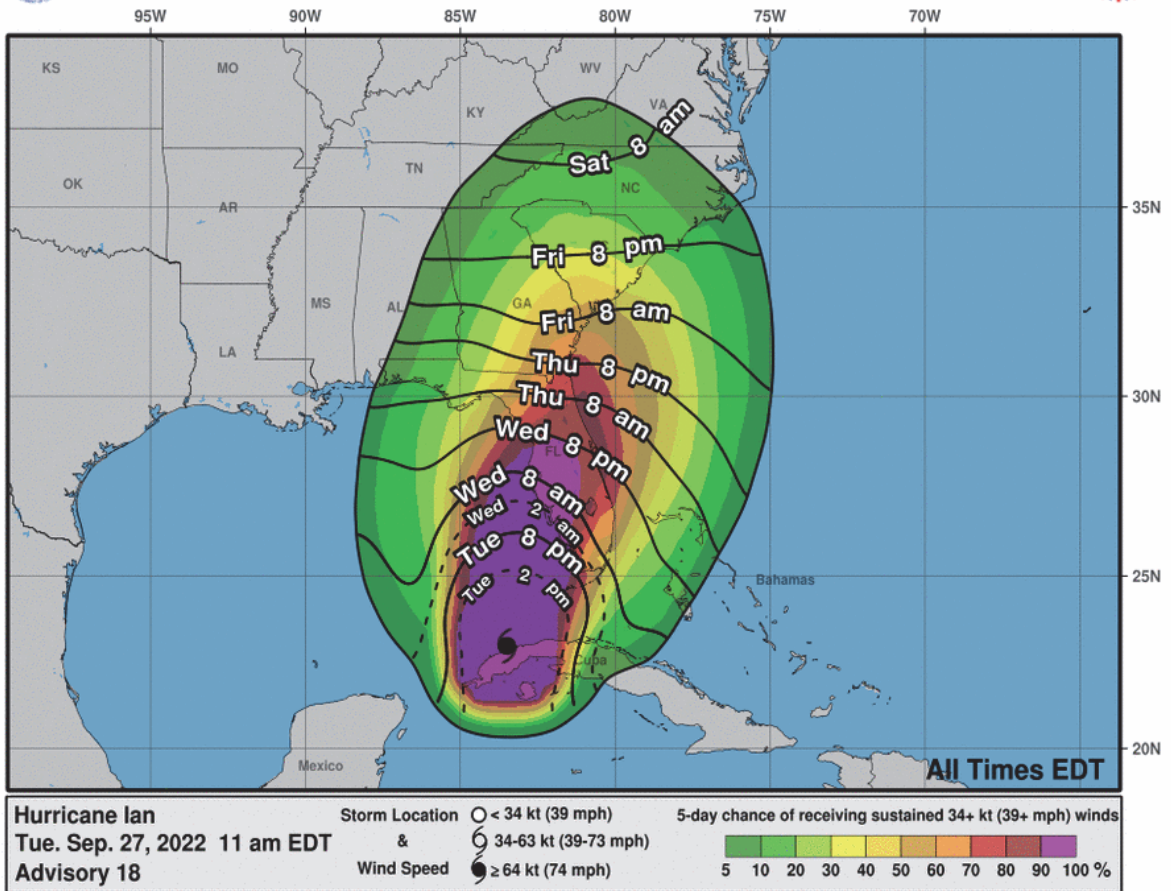
National Hurricane Center Forecast



Most Likely Arrival Time of Tropical Storm-Force Winds

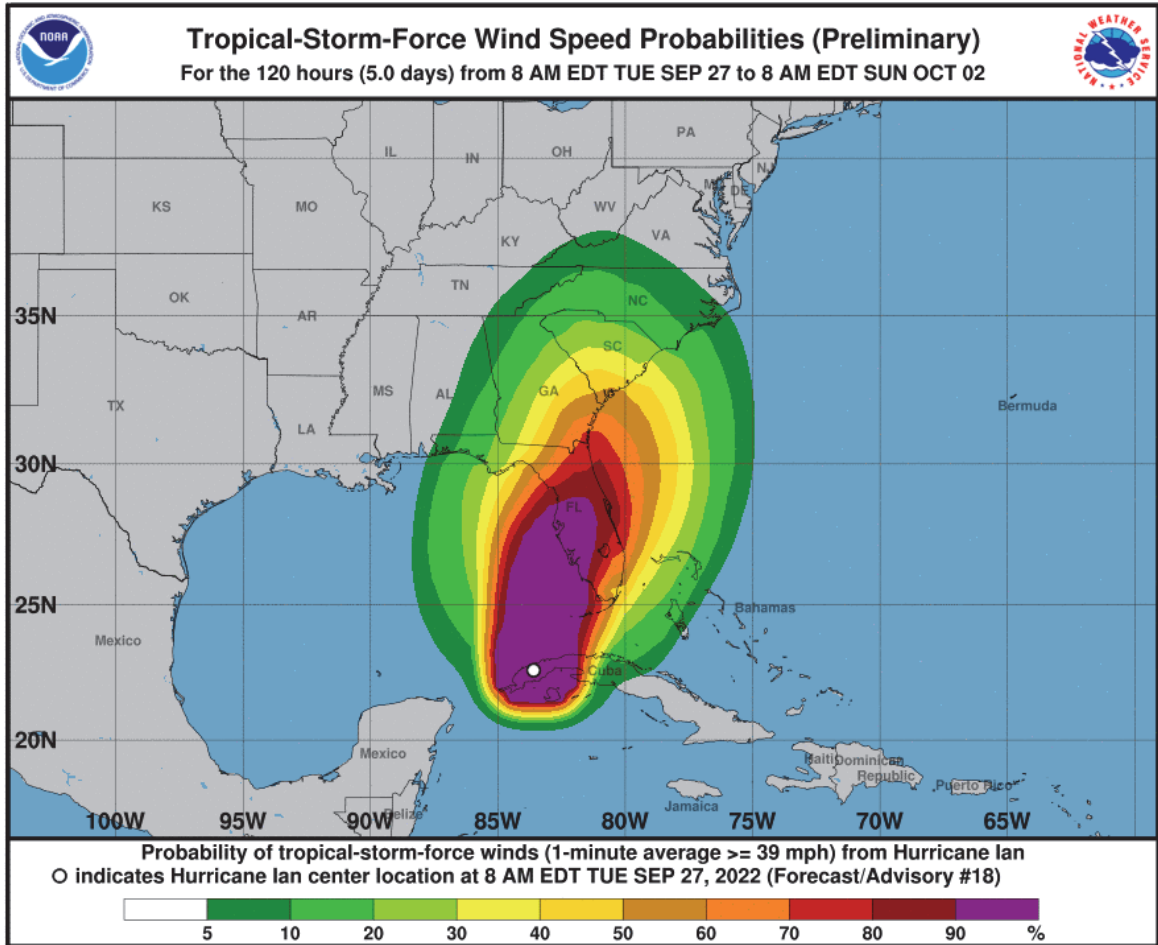


Most Likely Arrival Time of Tropical-Storm-Force Winds

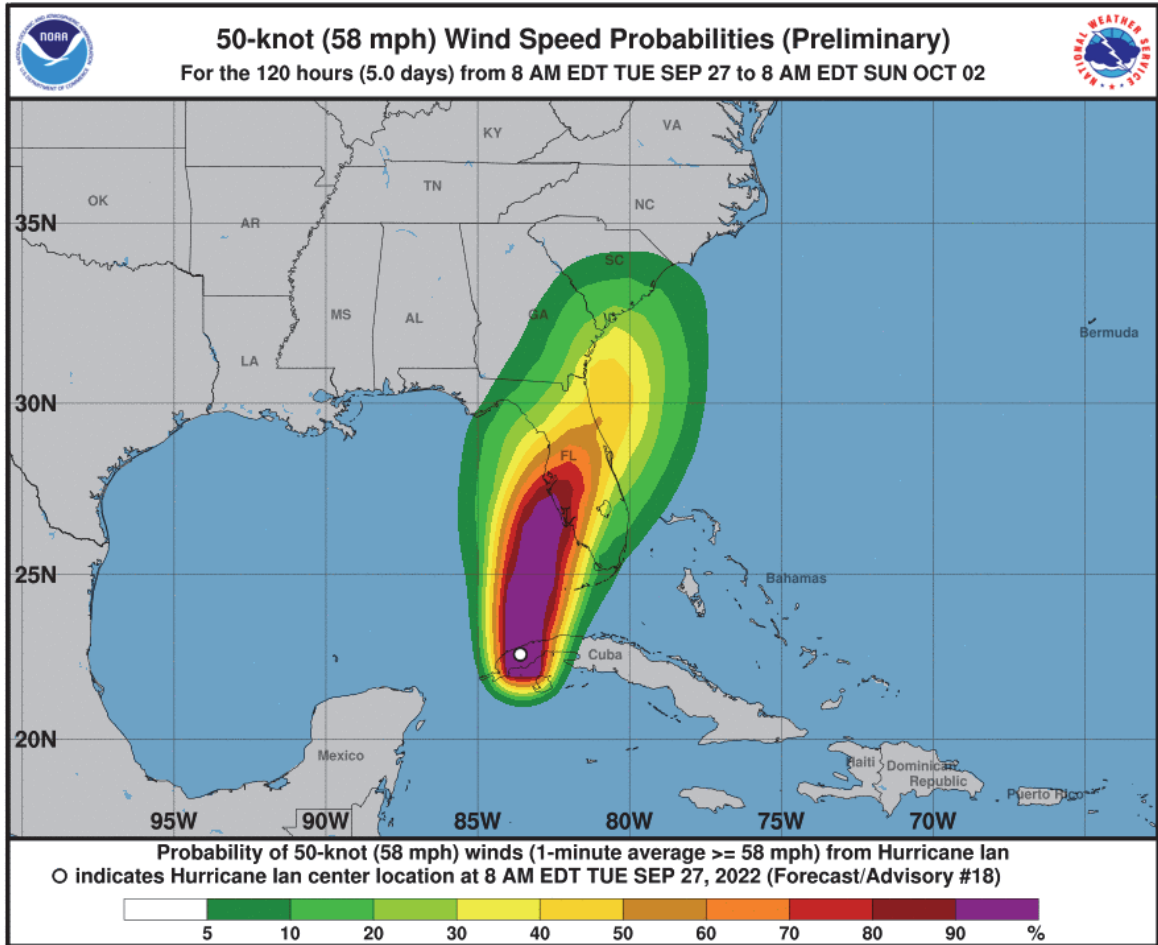


National Hurricane Center: Wind Speed Probabilities

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



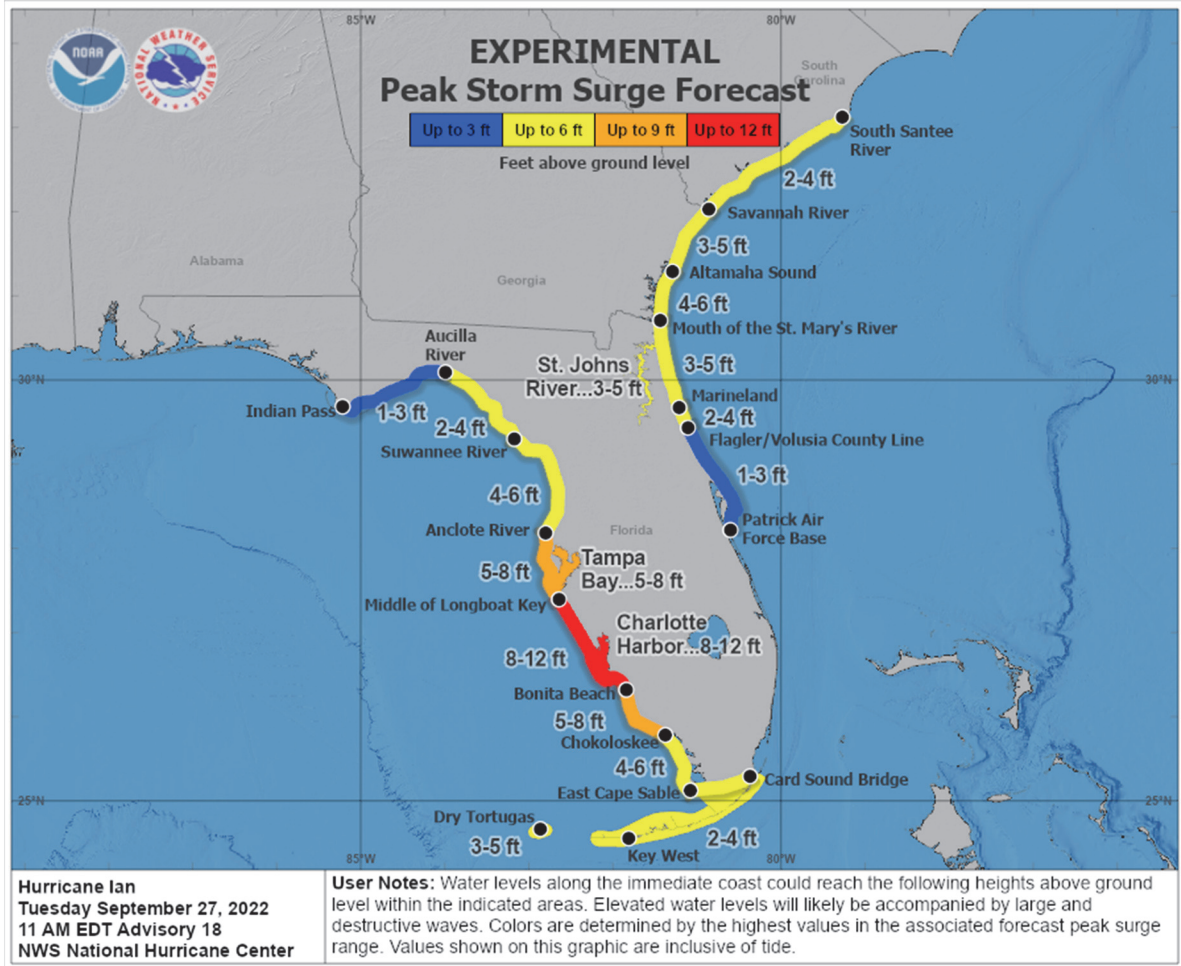
Wind Probabilities (≥ 60 mph (95 kph))



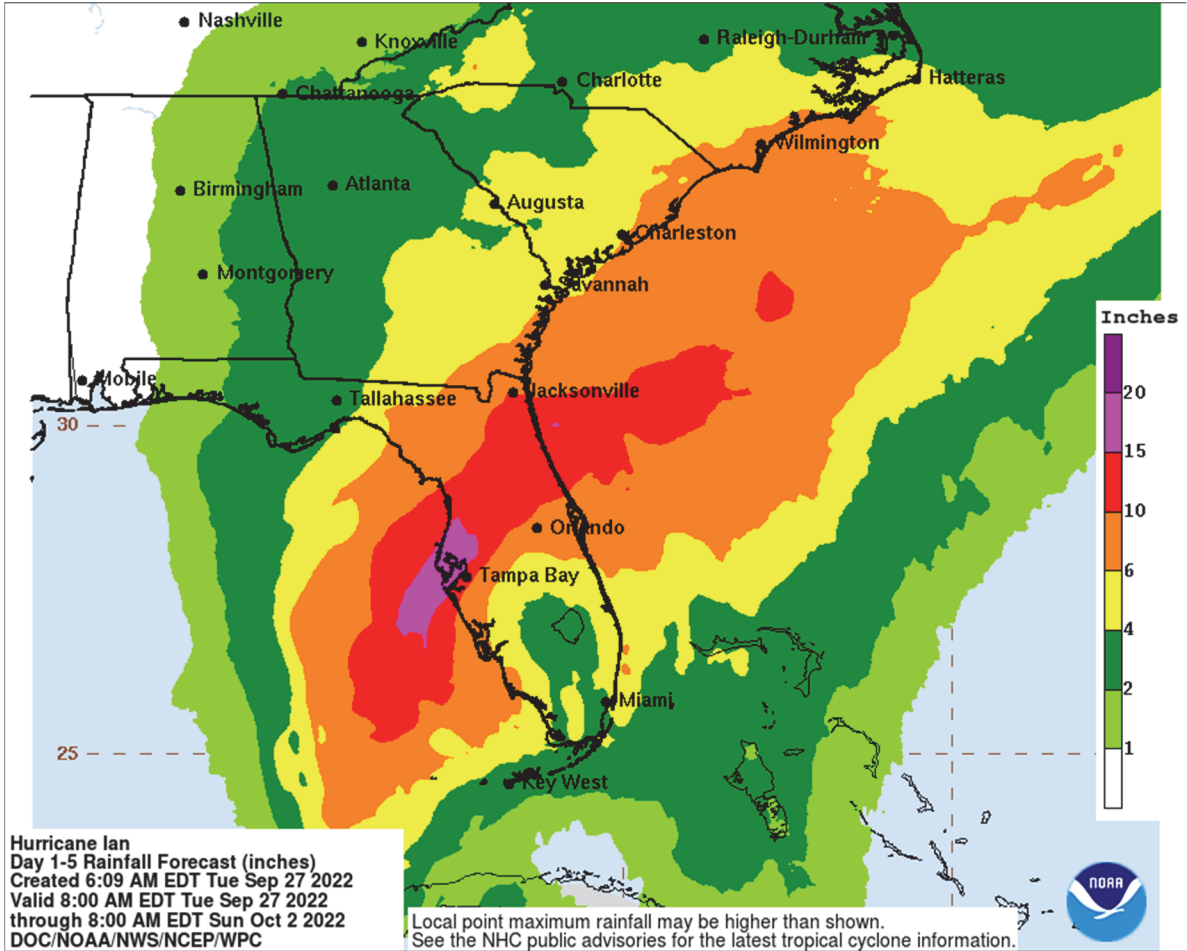
Hurricane-Force Wind Probabilities (≥ 75 mph (120 kph))



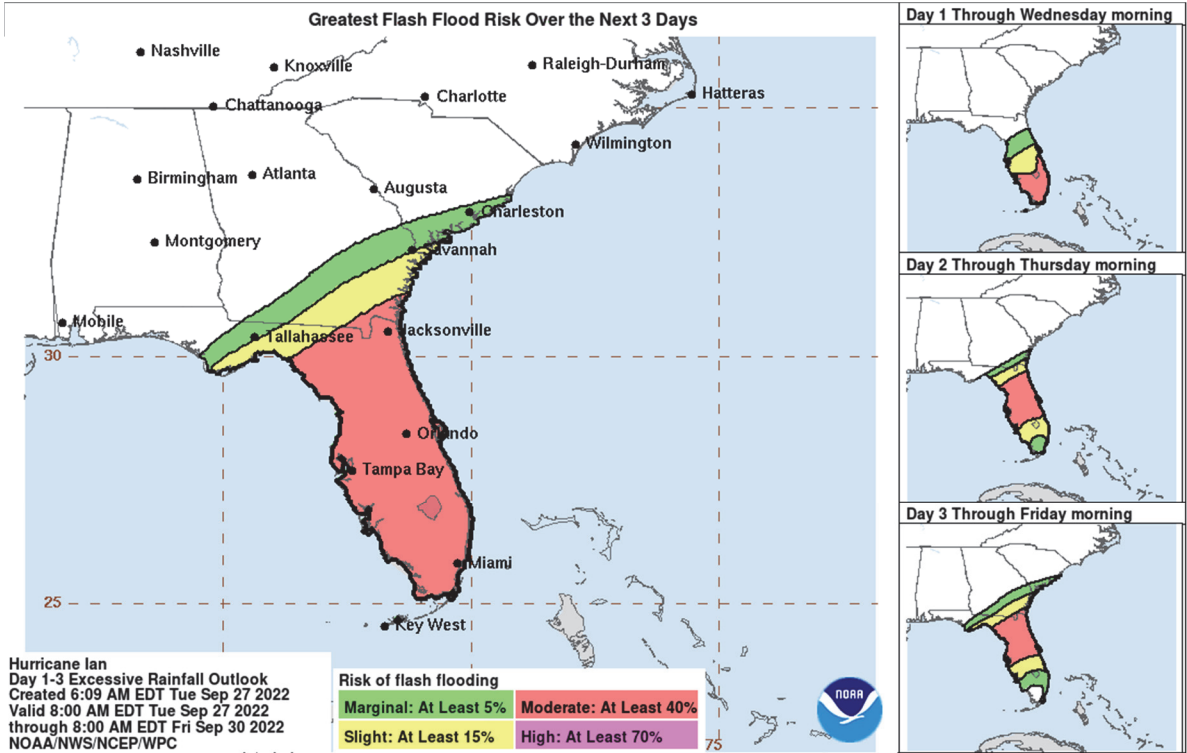
National Hurricane Center: Storm Surge Inundation Graphic



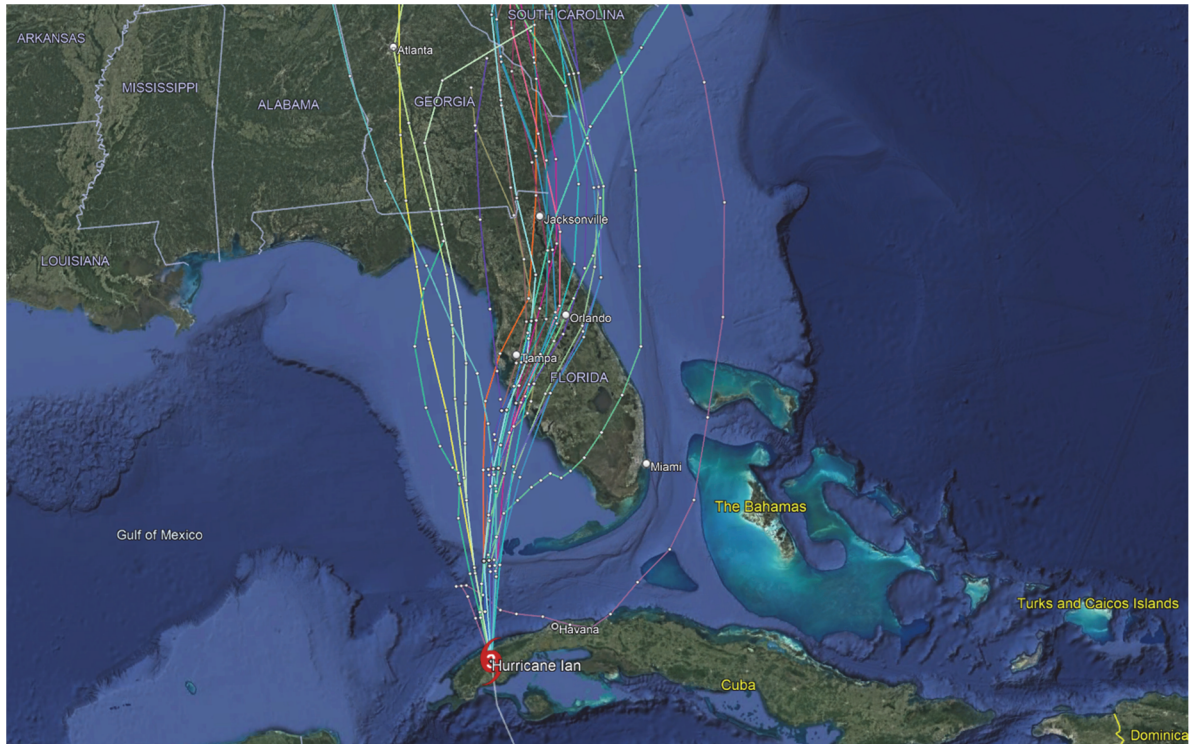
Weather Prediction Center: Rainfall Potential



Weather Prediction Center: Flash Flood Potential



Current 'Spaghetti' Model Output Data



Source: NOAA

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, September 27 after 21:00 UTC

Appendix: 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			Severe Tropical Storm	Cat. 2 Tropical Cyclone	Cat. 2 Tropical Cyclone	Severe Tropical Storm		Severe Cyclonic Storm
55	65	100								
60	70	110								
65	75	120	Cat. 1 Hurricane	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		Typhoon	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		Super Typhoon	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	Cat. 5 Severe Tropical Cyclone	Cat. 5 Severe Tropical Cyclone		Very Intense Tropical Cyclone	Super Cyclonic Storm
125	145	230								
130	150	240								
135	155	250	Cat. 5 Major Hurricane	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								

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