## **Current Watches and Warnings**

A Tropical Storm Warning is in effect from Jupiter Inlet, Florida (FL) to Surf City, North Carolina (NC)

A Storm Surge Watch is in effect from Edisto Beach, South Carolina (SC) to Cape Fear, NC

A **Tropical Storm Watch** is in effect from north of Surf City, NC to Duck, NC; Pamlico and Albemarle Sounds

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

COORDINATES: 26.9° north, 79.6° west LOCATION: 120 miles (195 kilometers) south-southeast of Cape Canaveral, Florida MOVEMENT: north-northwest at 8 mph (13 kph) WINDS: 65 mph (100 kph) with gusts to 75 mph (120 kph) RADIUS OF TROPICAL STORM-FORCE WINDS: 115 miles (185 kilometers) MINIMUM CENTRAL PRESSURE: 995 millibars SAFFIR-SIMPSON SCALE RANKING\*: Tropical Storm

24-HOUR LANDFALL POTENTIAL: HIGH (East Coast of Florida)

1<sup>st</sup> LANDFALL LOCATION: Northern Andros Island, Bahamas
1<sup>st</sup> LANDFALL INTENSITY: 80 mph (130 kph) – Category 1
1<sup>st</sup> LANDFALL TIMEFRAME: approximately 11:00 AM local time (15:00 UTC) August 1

## Latest Satellite Picture



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



## Discussion

Tropical Storm Isaías, located approximately 120 miles (195 kilometers) south-southeast of Cape Canaveral, Florida, is currently tracking north-northwest at 8 mph (13 kph). After continuing to show signs of poorer organization on satellite and radar imagery, there has been another recent burst of deep convection located northeast of the center. This has caused Isaías to take a slightly more northward trajectory. The dominant circulation is in the mid-levels, which has also developed within the strongest thunderstorm activity. Radar imagery out of Melbourne, Florida, Doppler has been indicating patches of wind intensity values of nearly 75 mph (120 kph) at 10,000 feet in the atmosphere and located north of the center. Such wind speeds adjusted to the surface equal velocities lower than 70 mph (110 kph). Because of this, the NHC has maintained an initial intensity of 65 mph (100 kph) for this advisory since previous bursts of convection have not shown persistence. Another Air Force Reserve Hurricane Hunter aircraft is scheduled to investigate Isaías later today.

The storm is now moving toward the north-northwest, and this slower motion should continue for the next 24 hours as Isaías moves into a weakness that has developed in the Bermuda High which is draped across north Florida and off the Georgia coast. A turn toward the north is forecast to occur by all of the model guidance by Monday morning, followed by a faster forward motion toward the northeast by Monday afternoon and evening when the cyclone will be influenced by southwesterly steering flow ahead of a strong eastward-moving mid- to upper-level trough. This motion along with an acceleration across the Mid-Atlantic and New England states is expected on days 3 and 4. The models continue to show the most differences in terms of timing, with the U.S. model (GFS) being much faster and the European model (ECMWF) being the slowest. The NHC has taken a blend of the overall consensus in the latest track.

Isaías will remain over warm Gulf Stream waters where sea surface temperatures remain extremely favorable for storm intensification. However, these warm waters are being offset by unfavorable wind shear that has taken its toll on the system during the past few days, though the core has generally managed to hold together. This is an indication that the system has a deep, well-formed vertical circulation. While some slight intensification is possible if the wind shear decreases, the official NHC forecast calls for the intensity to remain steady until landfall occurs in the Carolinas in roughly 36 hours. Some baroclinic interaction (differences in temperature and/or pressure) is likely to help maintain the storm's intensity a bit higher than typically expected for a landfalling system in the next 48-72 hours.

#### Key Messages from the National Hurricane Center

1. Tropical storm conditions will spread northward along the east coast of Florida within the warning area through early Monday and will reach the coasts of Georgia, South Carolina, and southern North Carolina within the warning area Monday and early Tuesday.

2. Dangerous storm surge is possible from Edisto Beach South Carolina to Cape Fear North Carolina where water rises of 2 to 4 feet above ground level are possible along the immediate coastline and adjacent waterways. A Storm Surge Warning may be needed for a portion of this area later today, and residents there should follow advice given by local emergency officials.

3. Heavy rainfall from Isaías will continue to result in potentially life-threatening flash flooding in the Northwest Bahamas through tonight. Flash and urban flooding, some of which may be significant in the coastal Carolinas and Virginia, is expected through midweek along and near the path of Isaías along the U.S. East Coast. Widespread minor to isolated moderate river flooding is possible across portions of the Carolinas and Mid-Atlantic.

4. A Tropical Storm Watch is in effect for portions of the North Carolina coast, where tropical storm conditions are possible on Tuesday. Additional watches and warnings will likely be issued later today as Isaías is expected to move northward near or over the Mid-Atlantic and northeast coasts Tuesday and Wednesday.

#### 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:

Edisto Beach, SC to Cape Fear, NC: 2-4 feet Jupiter Inlet, FL to Edisto Beach, SC: 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 waves. Surge-related flooding depends on the relative timing of the surge and the tidal cycle, and can vary greatly over short distances.

WIND: Tropical storm conditions will continue over portions of the Northwestern Bahamas for the next few hours.

Tropical storm conditions are expected to spread northward along the coast of Florida within the warning area through tonight. These conditions will spread northward along the coasts of Georgia, South Carolina, and North Carolina within the warning area on Monday and Tuesday.

Tropical storm conditions are possible in the watch area in North Carolina on Tuesday.

RAINFALL: The following rainfall accumulations are expected along and near the track of Isaías:

Northwest Bahamas: 4 to 8 inches, with isolated maximum totals of 12 inches Eastern Florida: 2 to 4 inches, with isolated maximum totals of 6 inches Northeast Florida and coastal Georgia: 1 to 3 inches Carolinas and the Mid-Atlantic: 3 to 5 inches, with isolated maximum totals of 7 inches Southeast New York and much of New England: 2 to 4 inches, with isolated maximum totals of 6 inches

Heavy rainfall from Isaías will continue to result in potentially life-threatening flash flooding in the Northwest Bahamas through tonight. Flash and urban flooding, some of which may be significant in the coastal Carolinas and Virginia, is expected through midweek along and near the path of Isaías across the East Coast of the United States. Widespread minor to isolated moderate river flooding is possible across portions of the Carolinas and Mid-Atlantic.

SURF: Swells generated by Isaías are affecting portions of the Bahamas and the southeast coast of the United States and will spread northward along the U.S. east coast during the next few days. These swells are likely to cause life-threatening surf and rip current conditions.

TORNADOES: The potential for a couple tornadoes will begin along coastal South Carolina during the late afternoon and evening on Monday, spreading across eastern North Carolina on Monday night.

## National Hurricane Center (NHC) Forecast





### 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 Forecast





#### Weather Prediction Center: Rainfall Forecast



### 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 <u>www.nhc.noaa.gov</u>

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

WIND SPEED			BASINS AND MONITORING BUREAU						
KTS1	MPH <sup>1</sup>	KPH <sup>1</sup>	NE Pacific, Atlantic	NW Pacific	NW Pacific	SW Pacific	Australi a	SW Indian	North Indian
			National Hurricane Center (NHC)	Joint Typhoon Warning Center (JTWC)	Japan Meteorological Agency (JMA)	Fiji Meteorologica I Service (FMS)	Bureau Of Meteorology (BOM)	Meteo-France (MF)	India Meteorologica I Department (IMD)
30	35	55	Tropical Depressio n	Tropical Depressio n	Tropical Depression	Tropical Depression	Tropical Low	Tropical Depressio n	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	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						
90	105	170				Cat. 4 Severe Tropical Cyclone	Cat. 4 Severe Tropical Cyclone	Intense Tropical Cyclone	
95	110	175							
100	115	185	Cat. 3 Major Hurricane						
105	120	195							
110	125	205				Cat. 5 Severe Tropical Cyclone	Cat. 5 Severe Tropical Cyclone		
115	130	210							
120	140	220	Cat. 4 Major Hurricane Cat. 5 Major Hurricane					Very Intense Tropical Cyclone	Super Cyclonic Storm
125	145	230							
130	150	240		Super Typhoon					
135	155	250							
140	160	260							
>140	>160	>260							

# \*Tropical Cyclone Intensity Classifications for Global Basins

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