

TROPICAL UPDATE



Tropical Storm Isaias, Tropical Depression #10 & Central Atlantic Tropical Wave (60%)

This update is intended for government and emergency response officials, and is provided for informational and situational awareness purposes only. Forecast conditions are subject to change based on a variety of environmental factors. For additional information, or for any life safety concerns with an active weather event please contact your County Emergency Management or Public Safety Office, local National Weather Service forecast office, or visit the National Hurricane Center website at www.hurricanes.gov.



Tropical Weather Outlook

Possible Areas of Development During the Next 5 Days (LINK)

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Tropical Storm Isaias Saturday, August 1



Overview/Recent Changes:

Isaias has weakened slightly, and is now a tropical storm (70 mph) and moving to the northwest at 10 mph (slowing down). Isaias could regain hurricane intensity tonight over the Gulf Stream. Hurricane Watches/Warnings, Tropical Storm Watches/Warnings, and Storm Surge Watches remain in effect.



Satellite Imagery

Southwest Atlantic – Tropical Storm Isaias



Current Florida Radar

As of 4:35 PM ET / 3:35 PM CT

The outer rain bands from Isaias are moving into Southeast Florida producing wind gusts around 35-55 mph. They will increase in frequency and intensity through tonight. Waterspouts are possible.

)20 WeatherTAP.com - 08/01/2020 4:35 PM EDT (20:35) **Center of** Isaias

Official Forecast Track

From the National Hurricane Center – Tropical Storm Isaias



- The center of Hurricane Isaias is about 115 miles southeast of Fort Lauderdale, moving to the NW at 10 mph.
- Isaias is disorganized, and maximum sustained winds have decreased to near 70 mph
- Isaias could regain hurricane intensity over the Gulf
 Stream tonight before impacting Florida
- The system will parallel the Florida East Coast Saturday night through Monday afternoon, either just offshore or just inland.
- Hurricane Watches/Warnings, Tropical Storm Watches/Warnings, and Storm Surge Watches remain in effect for parts of the state.

Time of Arrival & Wind Speed Probabilities

MOST LIKELY Time of Arrival of Tropical Storm Force Winds (>39 mph)



Key West: 4% (+1) Miami: 21% (+9) Naples: 7% (+1) Ft. Lauderdale: 71% (+19) West Palm Beach: 90% (+17) Ft. Pierce: 82% (+6) Daytona Beach: 41% (+4) Orlando: 30% (+6) Tampa: 9% (+1) Jacksonville: 17% (+2)

The most likely chance of tropical storm force winds starting will be now through tonight in Southeast Florida, and after midnight in East Central Florida.



Damaging Wind Threat Overview

Hurricane Isaias

The greatest wind threat is along the immediate coast (Space & Treasure Coast) of the Peninsula, mainly along and east of I-95.

Higher gusts to 75 mph may be possible Saturday night and Sunday as Isaias makes its closest approach.

https://www.weather.gov/srh/tropical?office=mfl Click on "Threats and Impacts" Tab

	Wind Threat
P	otential for wind greater than 110 mph
	Potential for wind 74 to 110 mph
	Potential for wind 58 to 73 mph
	Potential for wind 39 to 57 mph
	Wind less than 39 mph





Wind Watches and Warnings

In Effect Until Further Notice

Tropical Storm Warnings are in effect for: Clay, Putnam, St. Johns, Flagler, inland Volusia, Seminole, Orange, Osceola, Okeechobee, Inland Palm Beach, Broward, coastal/metro Miami-Dade (Tropical Storm conditions LIKELY)

Tropical Storm Watches are in effect for: Duval, Nassau (Tropical Storm conditions POSSIBLE)





Wind Watches and Warnings

In Effect Until Further Notice

Hurricane Warnings are in effect for: coastal Volusia, Brevard, Indian River, Martin, St. Lucie, coastal/metro Palm Beach. (hurricane conditions LIKELY)



Tropical Storm & Hurricanes Watches Versus Warnings





Tropical storm and/or hurricane conditions are **POSSIBLE** in Watch area

Issued up to 48 hours in advance of tropical storm force winds

Tropical storm and/or hurricane conditions are **EXPECTED** in Warning area

Issued up to 36 hours in advance of onset of tropical storm force winds

Hurricane preparedness activities become difficult once winds reach tropical storm force. Watches & Warnings are issued in advance of onset of tropical storm force winds, 39-73mph





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Hurricane Wind Speed Probabilities

Probabilities of Sustained Hurricane Force Winds (>74 mph)



5-10% along the Treasure & Space Coast of seeing sustained hurricane force winds.

Higher chance of seeing gusts to near hurricane force.



Forecast Wind Gusts

Tonight & Sunday



These wind gusts may increase or decrease, depending on the track and intensity of the storm.

Regardless, at least tropical storm force wind gusts are expected from Southeast Florida to the Space Coast tonight through Sunday.



Forecast Wind Gusts

Sunday Night & Monday



These wind gusts may increase or decrease, depending on the track and intensity of the storm.

Regardless, at least tropical storm force wind gusts will remain possible from the Space Coast northward Sunday night and Monday.



Storm Surge Threat Overview

Hurricane Isaias

Only minor coastal flooding is expected in Southeast Florida and along the St. Johns River in northeast Florida, as storm surge of 1-2' is forecast.

Across East-Central and Northeast Florida, from Martin to St. Johns County, 2-4' of storm surge is possible.

Storm surge watches are in effect for the areas in orange. Minor to isolated moderate coastal flooding is expected, with pockets of significant beach erosion.

Storm Surge Threat Potential for storm surge flooding greater than 9 ft above ground Potential for storm surge flooding greater than 6 ft above ground Potential for storm surge flooding greater than 3 ft above ground Potential for storm surge flooding greater than 1 ft above ground Little to no storm surge flooding

https://www.weather.gov/srh/tropical? office=mfl Click on "Threats and Impacts" Tab





Surge Watches and Warnings In Effect Until Further Notice



<u>Coastal Flood</u> <u>Statement:</u> coastal Broward, coastal Miami-Dade (~1' water rise)







Storm Surge Watch

https://www.nhc.noaa.gov/re fresh/graphics_at4+shtml/09 5158.shtml?inundation#conte nts Interactive Inundation Map

https://www.nhc.noaa.gov/re fresh/graphics_at4+shtml/09 5158.shtml?wsurge#contents Interactive Watch/Warning Map



Storm Surge Warning

Storm Surge Watch

There is a danger of life-threatening inundation from rising water moving inland from the shoreline generally within 36 hours.

Promptly follow evacuation and other instructions from local officials.

There is a **possibility of lifethreatening inundation** from rising water moving inland from the shoreline generally **within 48 hours**.

Promptly follow evacuation and other instructions from local officials.



Storm Surge/Coastal Flooding

This Weekend

Onshore winds associated with Isaias will result in some minor coastal flooding along the Gulf Coast along with high surf. 2-4' of storm surge is expected along much of the East Coast of Florida with 1-3' in far Northeast Florida and Southeast Florida.





Forecast Wave Heights

This Weekend



High surf of 8-12 feet is expected along East Coast beaches this weekend. This will result in dangerous rip currents. Minor to pockets of significant beach erosion is expected.



Rip Current Outlook



Rough surf and high water levels will keep the rip current risk high at Atlantic beaches through the weekend.





Flash Flood Outlooks

From the Weather Prediction Center





Rain Chances Next 3 Days



Rain bands will continue to spread northward over the Peninsula as Isaias

parallels the East Coast.



Forecast Rainfall Totals Next 5 Days

- About 2-4" of rain are possible along the East Coast, 1-2" inland
- Localized totals double these amounts will be possible (6-8").
- Isolated flash flooding possible, especially in the urban areas along the I-95 corridor.
 Street flooding will also be possible, especially if heavy rain coincides with high tide and storm surge.
- The storm is much drier on the western side, so a track inland would be needed to increase the flash flood threat.





Streamflow Anomaly – Soil Moisture

KB Drought Index – Full Report from the Florida Forest Service



Streamflows are near to below normal across the entire Peninsula, but soils remain quite saturated. If heavier rainfall occurs, then flash flooding will be a concern.

Most rivers are able to handle 3-5" of rainfall, but flooding concerns may rise if heavier rainfall occurs.

normal streamflow for this time of year.

Flash Flood Guidance

How Much Rain is Needed to Create Flash Flooding?



Key Messages

From the National Hurricane Center



Key Messages for Tropical Storm Isaias Advisory 19: 5:00 PM EDT Sat Aug 01, 2020

1. Hurricane conditions and dangerous storm surge will continue in portions of the northwest Bahamas tonight.

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2. Hurricane conditions are expected along portions of the Florida east coast on Sunday with tropical storm conditions expected to begin tonight. Preparations to protect life and property should be rushed to completion.

3. Dangerous storm surge is possible along the Florida east coast from Jupiter Inlet to Ponte Vedra Beach where water rises of 2 to 4 feet above ground level are possible along the immediate coastline and adjacent waterways. Residents there should follow advice given by local emergency officials.

4. Isaias will produce heavy rains and potentially life-threatening flash flooding in the Bahamas, and flash and urban flooding, especially in low-lying and poorly drained areas, along the East Coast of the United States. Minor river flooding and isolated moderate river flooding is possible across portions of the Carolinas and Virginia early next week.

5. Tropical storm watches and warnings are in effect for portions of the United States East Coast from northeast Florida to South Carolina. Additional watches and warnings will likely be issued tonight and Sunday as Isaias is expected to move northward near or over the southeast and mid-Atlantic coasts early next week.



For more information go to hurricanes.gov

Official Forecast Track

From the National Hurricane Center – Tropical Depression #10



- The center of Tropical Depression #10 is located about 225 miles north of the Cabo Verde Islands, moving northwest at 13 mph.
- Maximum sustained winds are around 30 mph.
- The system is moving over colder water and is expected to dissipate by tonight.

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Tropical Weather Outlook

Possible Area of Development During the Next 5 Days (LINK)





Showers and thunderstorms have increased today in association with a westward-moving tropical wave, located about 500 miles east of the northern Leeward Islands. Environmental conditions are forecast to become more conducive for development in a day or two, and a tropical depression could form early next week. This system is forecast to turn northwestward than northward over the western Atlantic, passing north of the Leeward Islands through the middle of next week.

This system does not pose a threat to Florida over the next week at least.

The next name on the list is Josephine.

*Formation chance through 48 hrs...low...20% *Formation chance through 5 days...medium...60%



Satellite Imagery Central Atlantic – Tropical Wave (60%)



Model Forecast Tracks

Ensembles Models

The next tropical wave will track northwest around an area of high pressure, and be located between Bermuda and Florida during the middle of next week.





Overall Summary

Tropical Storm Isaias

- Isaias is disorganized this morning, with the center located about 115 miles southeast of Fort Lauderdale, moving northwest at 10 mph.
- Maximum sustained winds have decreased to near 70 mph. Isaias may become a hurricane again overnight over the Gulf Stream, but gradual weakening is forecast thereafter.
- Tropical storm winds extend out 105 miles from the center..
- A north to northeast motion is expected early next week with the system paralleling the East Coast of the United States as it continues to weaken.

Tropical Depression #10

- TD #10 has moved over colder water north of the Cabo Verde Islands in the eastern Atlantic and is forecast to dissipate tonight
- This system poses no threat to Florida.

Central Atlantic Tropical Wave

- A tropical wave northeast of the Lesser Antilles is producing some shower activity as it moves northwest.
- Some slow development of this system is possible early next week while it turns north over the western Atlantic.
- This system is not forecast to be a direct threat to Florida, but may prolong the rip current risk into next week and should be monitored.
- This system has a 20% (low) chance of formation over the next 48 hours, and a 60% (medium) chance in days 3-5.



Overall Summary

Florida Outlook:

- Isaias poses a direct threat to Florida this weekend. Outer rain bands are already impacting Southeast Florida.
- Storm Surge Watch: St. Johns, Flagler, Brevard, Indian River, St. Lucie, Martin
- **Coastal Flood Advisory:** Clay, Putnam, Duval, coastal Nassau, coastal Palm Beach
- Coastal Flood Statement: coastal Broward, coastal Miami-Dade
- Hurricane Warning: coastal Volusia, Brevard, Indian River, St. Lucie, Martin, coastal/metro Palm Beach
- Tropical Storm Warning: Clay, Putnam, St. Johns, Flagler, inland Volusia, Seminole, Orange, Osceola, Okeechobee, inland Palm Beach, Broward, coastal/metro Miami-Dade
- Tropical Storm Watch: Duval, Nassau
- Wind gusts from 40-65 mph are generally forecast in the tropical storm warning area, with gusts to 70 mph possible.
- In the Hurricane Warning area, gusts 75-85 mph are generally forecast.
- Heavy rainfall of 3-4" with localized totals possibly double that will be possible across the East Coast. If Isaias makes landfall in Florida, rainfall totals will be higher as most of the heavy rain is to the east of the center.
- Isolated flash flooding is possible in the urban area of the I-95 corridor.
- Streamflows in the Peninsula are running near to below normal, and it will take more than 3-5" of rain to cause flooding issues along the rivers in the Peninsula.
- Isolated tornadoes may be possible, especially if the center moves over the state.
- 2-4' of storm surge is expected from Ponte Vedra Beach to Jupiter Inlet, and 1-3' of storm surge is expected from Jupiter Inlet to North Miami Beach and in the St. Johns River. This will generally cause minor to isolated moderate coastal flooding.
- Elevated surf, dangerous rip currents, and beach erosion will be likely at all Atlantic beaches this weekend.

The next briefing packet will be issued early Sunday morning with the 5 AM ET advisory. For the latest information on the tropics, please visit the National Hurricane Center website at <u>www.hurricanes.gov</u>.



TROPICAL UPDATE



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