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NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION



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Hurricane Dorian Public Advisory

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282
WTNT35 KNHC 021450
TCPAT5

BULLETIN

Hurricane Dorian Advisory Number 37
NWS National Hurricane Center Miami FL AL052019
1100 AM EDT Mon Sep 02 2019

...GRAND BAHAMA ISLAND CONTINUES TO EXPERIENCE CATASTROPHIC WINDS
AND STORM SURGE AS DORIAN INCHES WESTWARD...

SUMMARY OF 1100 AM EDT...1500 UTC...INFORMATION

LOCATION...26.8N 78.3W
ABOUT 30 MI...50 KM NE OF FREEPORT GRAND BAHAMA ISLAND
ABOUT 110 MI...180 KM E OF WEST PALM BEACH FLORIDA
MAXIMUM SUSTAINED WINDS...155 MPH...250 KM/H
PRESENT MOVEMENT...W OR 280 DEGREES AT 1 MPH...2 KM/H
MINIMUM CENTRAL PRESSURE...922 MB...27.23 INCHES

425 miles SSE of
Sullivan's Island

WATCHES AND WARNINGS

CHANGES WITH THIS ADVISORY:

The Storm Surge Warning has been extended northward along the
east coast of Florida to the Flagler/Volusia County Line.

The Storm Surge Watch has been extended northward along the Georgia
coast to the Savannah River.

The Hurricane Warning along the east coast of Florida has been
extended northward to the Flagler/Volusia County Line.

The Hurricane Watch has been extended northward to Altamaha Sound
Georgia.

SUMMARY OF WATCHES AND WARNINGS IN EFFECT:

A Storm Surge Warning is in effect for...
* Lantana to the Flagler/Volusia County Line

A Storm Surge Watch is in effect for...
* North of Deerfield Beach to south of Lantana
* Flagler/Volusia County Line to the Savannah River

A Hurricane Warning is in effect for...
* Grand Bahama and the Abacos Islands in the northwestern Bahamas
* Jupiter Inlet to the Flagler/Volusia County Line

A Hurricane Watch is in effect for...
* North of Deerfield Beach to Jupiter Inlet
* Flagler/Volusia County Line to the Altamaha Sound Georgia

A Tropical Storm Warning is in effect for...
* North of Deerfield Beach to Jupiter Inlet

A Tropical Storm Watch is in effect for...
* North of Golden Beach to Deerfield Beach
* Lake Okeechobee

A Storm Surge Warning means there is a danger of life-threatening
inundation, from rising water moving inland from the coastline,

during the next 36 hours in the indicated locations. For a depiction of areas at risk, please see the National Weather Service Storm Surge Watch/Warning Graphic, available at hurricanes.gov. This is a life-threatening situation. Persons located within these areas should take all necessary actions to protect life and property from rising water and the potential for other dangerous conditions. Promptly follow evacuation and other instructions from local officials.

A Storm Surge Watch means there is a possibility of life-threatening inundation, from rising water moving inland from the coastline, in the indicated locations during the next 48 hours.

A Hurricane Warning means that hurricane conditions are expected somewhere within the warning area. Preparations to protect life and property should be rushed to completion.

A Hurricane Watch means that hurricane conditions are possible within the watch area. A watch is typically issued 48 hours before the anticipated first occurrence of tropical-storm-force winds, conditions that make outside preparations difficult or dangerous.

A Tropical Storm Warning means that tropical storm conditions are expected within the warning area within 36 hours.

A Tropical Storm Watch means that tropical storm conditions are possible within the watch area, generally within 48 hours.

Interests elsewhere along southeast coast of the United States should continue to monitor the progress of Dorian, as additional watches may be required later today.

For storm information specific to your area in the United States, including possible inland watches and warnings, please monitor products issued by your local National Weather Service forecast office. For storm information specific to your area outside of the United States, please monitor products issued by your national meteorological service.

DISCUSSION AND OUTLOOK

At 1100 AM EDT (1500 UTC), the eye of Hurricane Dorian was located near latitude 26.8 North, longitude 78.3 West. Dorian is moving very slowly toward the west near 1 mph (2 km/h). A slow westward to west-northwestward motion is forecast during the next day or so, followed by a gradual turn toward the northwest and north. On this track, the core of extremely dangerous Hurricane Dorian will continue to pound Grand Bahama Island through much of today and tonight. The hurricane will then move dangerously close to the Florida east coast late tonight through Wednesday evening and then move dangerously close to the Georgia and South Carolina coasts on Wednesday night and Thursday.

Maximum sustained winds are near 155 mph (250 km/h) with higher gusts. Dorian is an extremely dangerous category 4 hurricane on the Saffir-Simpson Hurricane Wind Scale. Although gradual weakening is forecast, Dorian is expected to remain a powerful hurricane during the next couple of days.

Hurricane-force winds extend outward up to 45 miles (75 km) from the center and tropical-storm-force winds extend outward up to 140 miles (220 km).

The estimated minimum central pressure is 922 mb (27.23 inches).

HAZARDS AFFECTING LAND

WIND: Catastrophic hurricane conditions continue on Grand Bahama Island. Do not venture out into the eye, as winds will suddenly increase after the eye passes.

Hurricane conditions are expected within the Hurricane Warning area in Florida by late tonight or Tuesday. Hurricane conditions are possible in the Hurricane Watch area on Wednesday.

Tropical storm conditions are expected within the Tropical Storm warning area today and Tuesday, and are possible in the Tropical Storm watch area by tonight.

STORM SURGE: A life-threatening storm surge will raise water levels

*Wed. night
Thurs morning
at South Carolina
coast*

by as much as 18 to 23 feet above normal tide levels in areas of onshore winds on Grand Bahama Island. Near the coast, the surge will be accompanied by large and destructive waves. Water levels should very slowly subside on the Abaco Islands during the day.

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...

Lantana to the Savannah River...4 to 7 ft
North of Deerfield Beach to Lantana...2 to 4 ft

Water levels could begin rise well in advance of the arrival of strong winds. The surge will be accompanied by large and destructive waves. Surge-related flooding depends on the how close the center of Dorian comes to the coast, and can vary greatly over short distances. For information specific to your area, please see products issued by your local National Weather Service forecast office.

RAINFALL: Dorian is expected to produce the following rainfall totals through late this week:

Northwestern Bahamas...12 to 24 inches, isolated 30 inches.
Central Bahamas...Additional 1 to 3 inches, isolated storm totals of 6 inches.
Coastal Carolinas...5 to 10 inches, isolated 15 inches.
Atlantic Coast from the Florida peninsula through Georgia...4 to 8 inches, isolated 10 inches.

This rainfall may cause life-threatening flash floods.

SURF: Large swells are affecting east-facing shores of the Bahamas and the Florida east coast, and will spread northward along the southeastern United States coast during the next few days. These swells are likely to cause life-threatening surf and rip current conditions. Please consult products from your local weather office.

TORNADOES: Isolated tornadoes are possible this afternoon into tonight along the immediate coast of east-central Florida.

NEXT ADVISORY

Next intermediate advisory at 200 PM EDT.
Next complete advisory at 500 PM EDT.

\$\$
Forecaster Brown

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[Watches and Warnings](#)
[Marine Safety](#)
[Ready.gov Hurricanes | en Español](#)
[Weather-Ready Nation](#)
[Emergency Management Offices](#)

RESEARCH AND DEVELOPMENT

[NOAA Hurricane Research Division](#)
[Joint Hurricane Testbed](#)
[Hurricane Forecast Improvement Program](#)

OTHER RESOURCES

[Q & A with NHC](#)
[NHC/AOML Library Branch](#)
[NOAA: Hurricane FAQs](#)
[National Hurricane Operations Plan](#)
[WX4NHC Amateur Radio](#)

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[Canadian Hurricane Centre](#)
[Joint Typhoon Warning Center](#)
[Other Tropical Cyclone Centers](#)
[WMO Severe Weather Info Centre](#)



US Dept of Commerce
National Oceanic and Atmospheric Administration
National Hurricane Center
11691 SW 17th Street
Miami, FL, 33165
nhcwebmaster@noaa.gov

Central Pacific Hurricane Center
2525 Correa Rd
Suite 250
Honolulu, HI 96822
W-HFO.webmaster@noaa.gov

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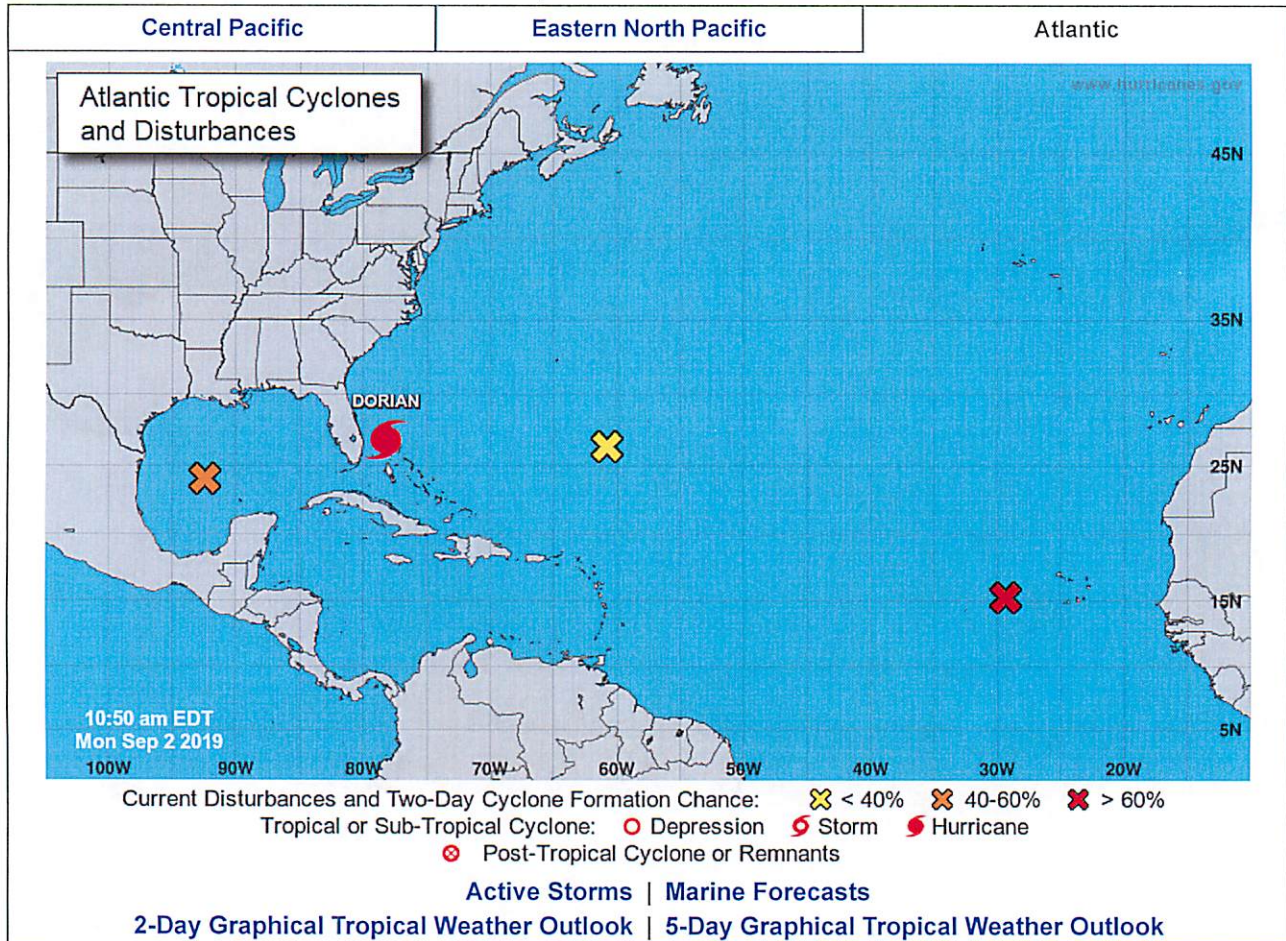
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Last update Mon, 2 Sep 2019 15:28:55 UTC

- **NHC issuing advisories for the Atlantic on Hurricane Dorian**
- **NHC issuing advisories for the Eastern Pacific on TS Juliette**
- Key Messages regarding Dorian
- Local information on Dorian: [Miami, FL](#) , [Melbourne, FL](#) , [Jacksonville, FL](#) , [Tampa Bay Area, FL](#)
- Audio podcasts regarding Dorian now available
- 4 hurricanes in 6 weeks? It happened to one state in 2004. Lessons learned then are valuable reminders today
- Video: What You Should...and Should Not...Do with the NHC Forecast Cone ([download available here](#))



Atlantic - Caribbean Sea - Gulf of Mexico

Tropical Weather Outlook (en Español*)

800 AM EDT Mon Sep 2 2019

Tropical Weather Discussion

747 AM EDT Mon Sep 2 2019

● Hurricane Dorian

[Buoys](#) | [Grids](#) | [Storm Archive](#)

...GRAND BAHAMA ISLAND CONTINUES TO EXPERIENCE CATASTROPHIC WINDS AND STORM SURGE AS DORIAN
INCHES WESTWARD...

11:00 AM EDT Mon Sep 2

Location: 26.8°N 78.3°W

Moving: W at 1 mph

Min pressure: 922 mb

Max sustained: 155 mph

**Public
Advisory
#37**

1100 AM EDT

**NWS Local
Products**

1122 AM EDT

**Aviso
Público*
#37**

1100 AM AST

**US Watch/
Warning**

1108 AM EDT

**Forecast
Advisory
#37**

1500 UTC

**Forecast
Discussion
#37**

1100 AM EDT

**Pronóstico
Discusión***

not
available

**Wind Speed
Probabilities
#37**

1500 UTC

000
 FON15 KNHC 021450
 PMSATS
 HURRICANE DORIAN WIND SPEED PROBABILITIES NUMBER 37
 NWS NATIONAL HURRICANE CENTER MIAMI FL AL052019
 1500 UTC MON SEP 02 2019
 AT 1500Z THE CENTER OF HURRICANE DORIAN WAS LOCATED NEAR LATITUDE
 26.8 NORTH...LONGITUDE 78.3 WEST WITH MAXIMUM SUSTAINED WINDS NEAR
 135 KTS...155 MPH...250 KM/H.
 Z INDICATES COORDINATED UNIVERSAL TIME (GREENWICH)
 ATLANTIC STANDARD TIME (AST)...SUBTRACT 4 HOURS FROM Z TIME
 EASTERN DAYLIGHT TIME (EDT)...SUBTRACT 4 HOURS FROM Z TIME
 CENTRAL DAYLIGHT TIME (CDT)...SUBTRACT 5 HOURS FROM Z TIME
 WIND SPEED PROBABILITY TABLE FOR SPECIFIC LOCATIONS
 CHANCES OF SUSTAINED (1-MINUTE AVERAGE) WIND SPEEDS OF AT LEAST
 ...34 KT (39 MPH... 63 KM/H)..
 ...50 KT (58 MPH... 93 KM/H)..
 ...64 KT (74 MPH...119 KM/H)..
 FOR LOCATIONS AND TIME PERIODS DURING THE NEXT 5 DAYS
 PROBABILITIES FOR LOCATIONS ARE GIVEN AS OP(CP) WHERE
 OP IS THE PROBABILITY OF THE EVENT BEGINNING DURING
 AN INDIVIDUAL TIME PERIOD (ONSET PROBABILITY)
 (CP) IS THE PROBABILITY OF THE EVENT OCCURRING BETWEEN
 12Z MON AND THE FORECAST HOUR (CUMULATIVE PROBABILITY)
 PROBABILITIES ARE GIVEN IN PERCENT
 X INDICATES PROBABILITIES LESS THAN 1 PERCENT
 THE 5-DAY CUMULATIVE PROBABILITY IS AT LEAST 3 PERCENT.
 THE 5-DAY CUMULATIVE PROBABILITY IS AT LEAST 1 PERCENT.
 64-KT CUMULATIVE PROBABILITY IS AT LEAST 1 PERCENT.

W Th F

CHARLESTON SC	34	X	X	X	2	(2)	6	(8)	52	(60)	12	(72)	X	(72)
CHARLESTON SC	50	X	X	X	X	(X)	1	(1)	24	(25)	9	(34)	1	(35)
CHARLESTON SC	64	X	X	X	X	(X)	X	(X)	6	(6)	6	(12)	X	(12)



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U.S. Watch/Warning Local Products



Wind Speed
Probabilities



Arrival Time
of Winds



Wind
History



Warnings/Cone
Interactive Map



Warnings/Cone
Static Images



Warnings and
Surface Wind



Key
Messages



Storm Surge
Inundation



Storm Surge
Watch/Warning

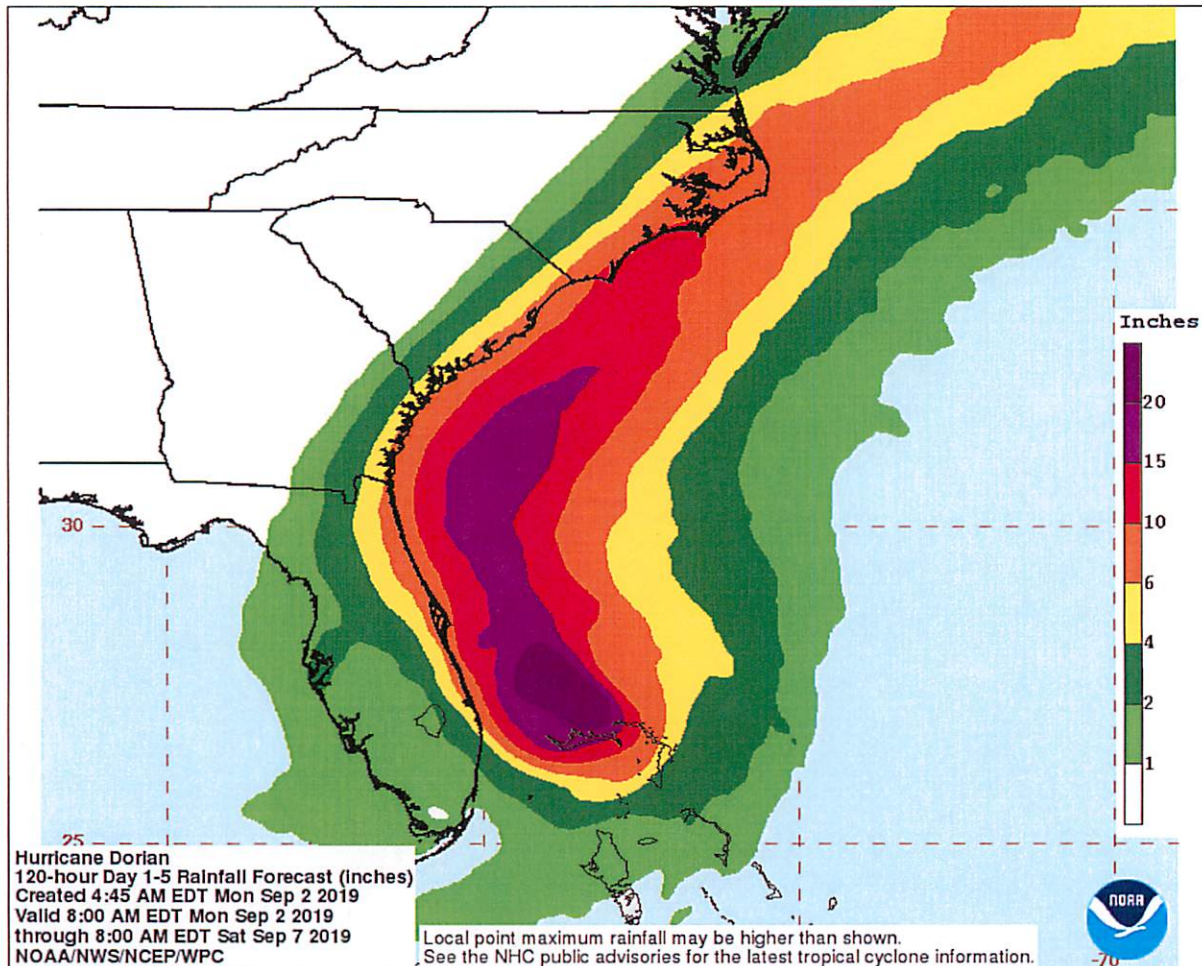


U.S. Rainfall
Potential



Flash Flooding
Potential

U.S. Rainfall QPF (from WPC)



[Click Here for a Printer Friendly Graphic](#)












About this product:

This graphic is created by the [NWS/NCEP Weather Prediction Center \(WPC\)](#) and shows rainfall potential for the United States when a tropical cyclone threatens land. The graphic is displayed as a Quantitative Precipitation Forecast (QPF), which shows rainfall totals for a specified time period, based on forecaster discretion. For more rainfall information, visit the [Specialized WPC Precipitation Forecasts](#). For WPC QPFs in KML Format, [Click Here](#).

HURRICANE DORIAN

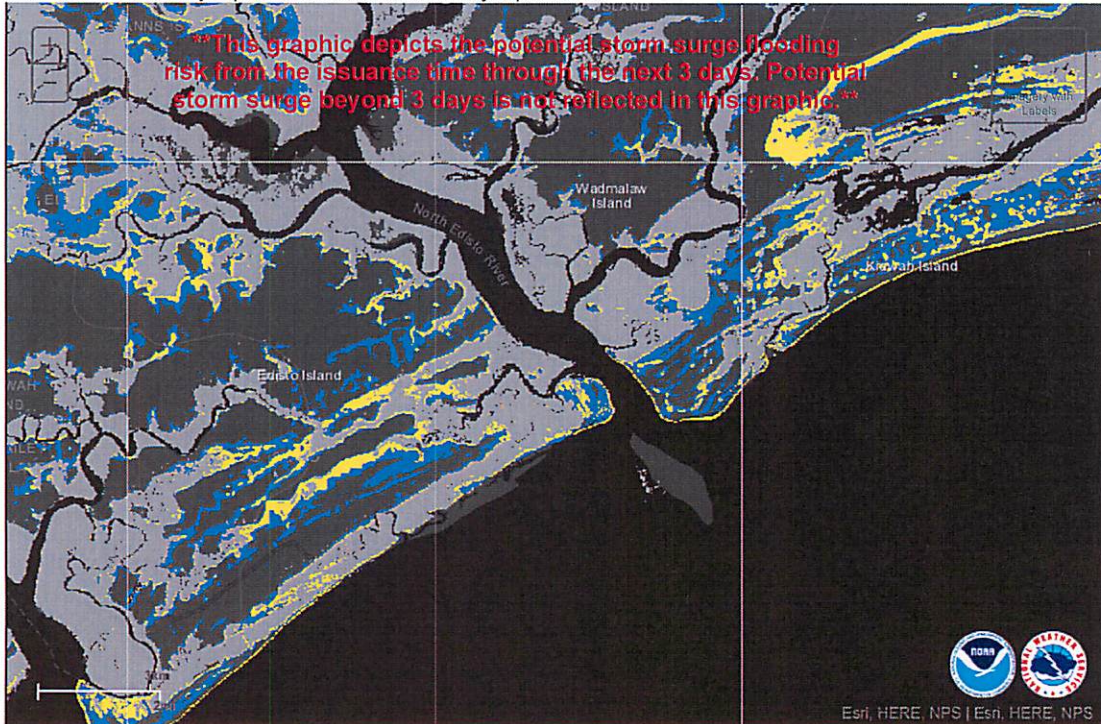
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U.S. Watch/Warning Local Products






 Wind Speed Probabilities	 Arrival Time of Winds	 Wind History	 Warnings/Cone Interactive Map	 Warnings/Cone Static Images	 Warnings and Surface Wind
 Key Messages	 Storm Surge Inundation	 Storm Surge Watch/Warning	 U.S. Rainfall Potential	 Flash Flooding Potential	

Potential Storm Surge Flooding Map (Inundation)

NHC Potential Storm Surge Flooding Map
Hurricane DORIAN (2019) Advisory 36
From 05 AM EDT Monday September 02 to 08 AM EDT Friday September 06



Potential Storm Surge Flooding*

-  Intertidal Zone/Estuarine Wetland
-  Greater than 1 foot above ground
-  Greater than 3 feet above ground
-  Greater than 6 feet above ground
-  Greater than 9 feet above ground

Map Layer Options:

☐ Inundation Layer Only ☒ Inundation with Intertidal Layer

Map Opacity Slider

[Download GIS data](#)
(Instructions)

[Inundation Layer Only](#)

[Inundation with Intertidal Layer](#)

*Displayed flooding values indicate the water height that has about a 1-in-10 (10%) chance of being exceeded.



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U.S. Watch/Warning Local Products



Wind Speed
Probabilities



Arrival Time
of Winds



Wind
History



Warnings/Cone
Interactive Map



Warnings/Cone
Static Images



Warnings and
Surface Wind



Key
Messages



Storm Surge
Inundation



Storm Surge
Watch/Warning



U.S. Rainfall
Potential



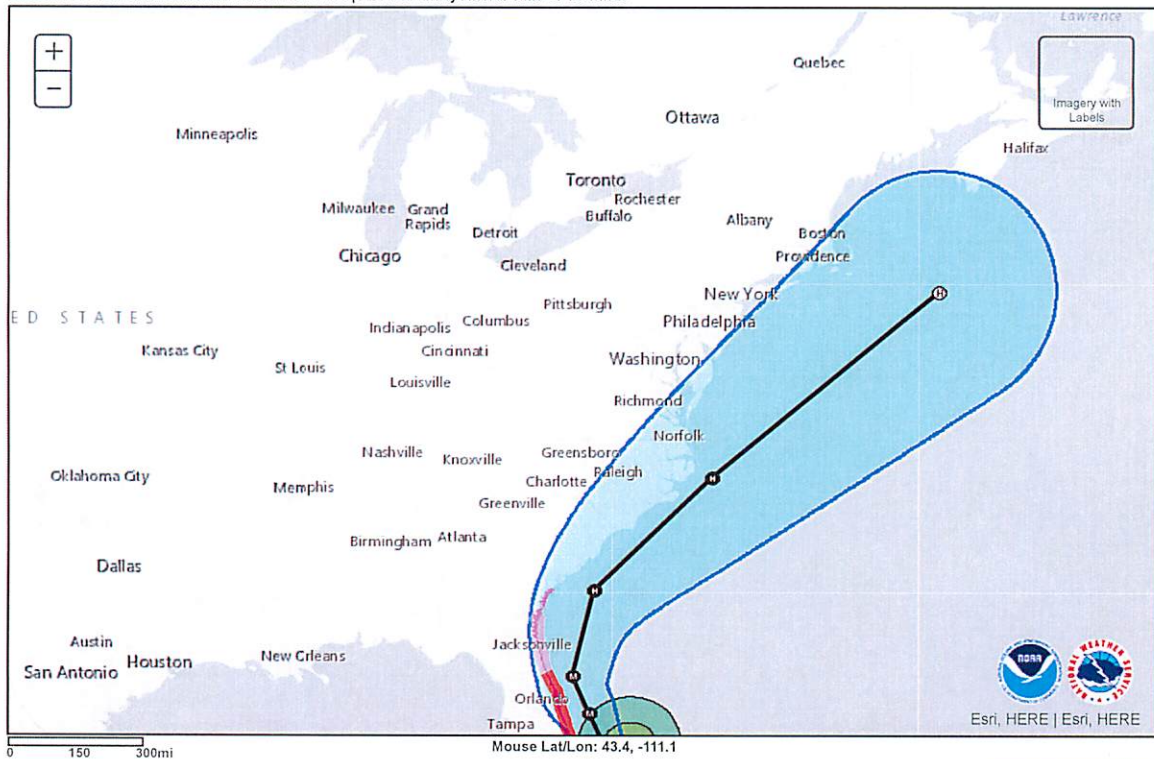
Flash Flooding
Potential

Interactive Map

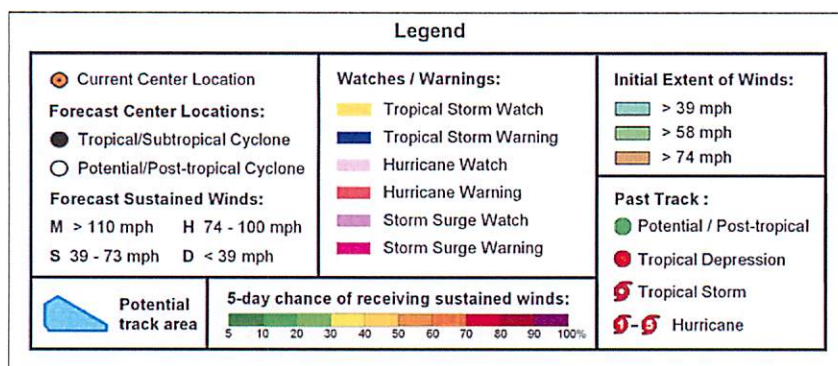
Interactive Forecast Graphics and Coastal Watches/Warnings
 Hurricane Dorian Advisory #037
 11:00 am EDT Mon Sep 02, 2019

Select Advisory:

- ☒ Track |
 ☒ Cone |
 ☒ Wind Watches/Warnings |
 ☒ Storm Surge Watches/Warnings |
 ☒ Initial Wind Radii
☐ 34kt WSP |
 ☐ 50kt WSP |
 ☐ 64kt WSP |
 ☐ Past Track |
 ☒ Auto-Zoom (on cone load)
☐ Earliest Reasonable Arrival Time of TS Winds |
 ☐ Most Likely Arrival Time of TS winds



[Download GIS Data](#)
[Past Track in KMZ](#)



About this product:

This graphic shows an approximate representation of coastal areas under a hurricane warning (red), hurricane watch (pink), tropical storm warning (blue) and tropical storm watch (yellow). The orange circle indicates the current position of the center of the tropical cyclone. The black line and dots show the National Hurricane Center (NHC) forecast track of the center at the times indicated. The dot indicating the forecast center location will be black if the cyclone is forecast to be tropical and will be white with a black outline if the cyclone is forecast to be extratropical. If only an L is displayed, then the system is forecast to be a remnant low. The letter inside the dot indicates the NHC's forecast intensity for that time:

D: Tropical Depression – wind speed less than 39 MPH
 S: Tropical Storm – wind speed between 39 MPH and 73 MPH
 H: Hurricane – wind speed between 74 MPH and 110 MPH
 M: Major Hurricane – wind speed greater than 110 MPH

NHC tropical cyclone forecast tracks can be in error. This forecast uncertainty is conveyed by the track forecast "cone", the solid white and stippled white areas in the graphic. The solid white area depicts the track forecast uncertainty for days 1-3 of the forecast, while the stippled area depicts the uncertainty on days 4-5. Historical data indicate that the entire 5-day path of the center of the tropical cyclone will remain within the cone about 60-70% of the time. To form the cone, a set of imaginary circles are placed along the forecast track at the 12, 24, 36, 48, 72, 96, and 120 h positions, where the size of each circle is set so that it encloses 67% of the previous five years official forecast errors. The cone is then formed by smoothly connecting the area swept out by the set of circles.

It is also important to realize that a tropical cyclone is not a point. Their effects can span many hundreds of miles from the center. The area experiencing hurricane force (one-minute average wind speeds of at least 74 mph) and tropical storm force (one-minute average wind speeds of 39-73 mph) winds can extend well beyond the white areas shown enclosing the most likely track area of the center. The distribution of hurricane and tropical storm force winds in this tropical cyclone can be seen in the Wind History graphic linked above.

Considering the combined forecast uncertainties in track, intensity, and size, the chances that any particular location will experience winds of 34 kt (tropical storm force), 50 kt, or 64 kt (hurricane force) from this tropical cyclone are presented in tabular form for selected locations and forecast positions. This information is also presented in graphical form for the 34 kt, 50 kt, and 64 kt thresholds.

Note: A detailed definition of the NHC track forecast cone is also available.

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 Other Tropical Cyclone Centers
 WMO Severe Weather Info Centre



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 National Oceanic and Atmospheric Administration
 National Hurricane Center
 11691 SW 17th Street
 Miami, FL, 33165
 nhcwebmaster@noaa.gov

Central Pacific Hurricane Center
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