



# NATIONAL HURRICANE CENTER

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

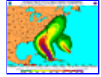


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## Hurricane MATTHEW

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Wind Speed Probabilities



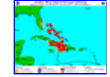
Wind History



Warnings/Cone Interactive Map



Warnings/Cone Static Images



Warnings and Surface Wind



Storm Surge Inundation

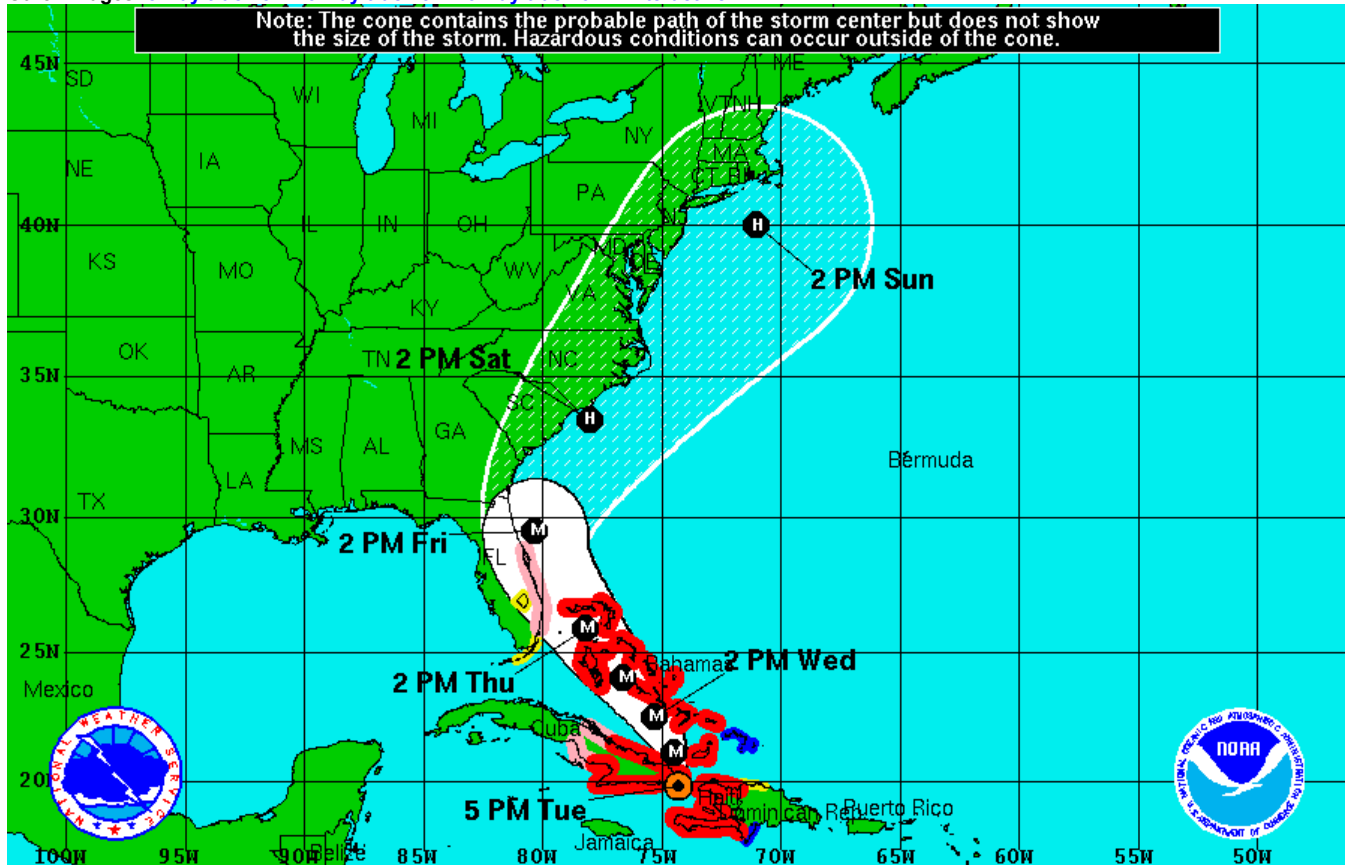


Prototype Storm Surge Watch/Warning

### Coastal Watches/Warnings and 5-Day Forecast Cone for Storm Center

[Download GIS data](#)

Other images: [5-Day track on](#) – [3-Day track on](#) – [3-Day track off](#) – [Interactive](#)



<b>Hurricane Matthew</b> Tuesday October 4, 2016 5 PM EDT Advisory 27 NWS National Hurricane Center	<b>Current Information:</b> Center Location 19.8 N 74.3 W Max Sustained Wind 140 mph Movement N at 9 mph	<b>Forecast Positions:</b> Tropical Cyclone  Post-Tropical Sustained Winds: D < 39 mph S 39-73 mph H 74-110 mph M > 110mph
<b>Potential Track Area:</b> Day 1-3  Day 4-5	<b>Watches:</b> Hurricane  Trop. Storm	<b>Warnings:</b> Hurricane  Trop. Storm

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

**Note:** If a storm is expected to dissipate within 5 days, its track will be shorter

## 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, when selected, 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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## Quick Links and Additional Resources

### TROPICAL CYCLONE FORECASTS

[Tropical Cyclone Advisories](#)  
[Tropical Weather Outlook](#)  
[Audio/Podcasts](#)  
[About Advisories](#)

### MARINE FORECASTS

[Offshore Waters Forecasts](#)  
[Gridded Forecasts](#)  
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### SOCIAL MEDIA

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[NHC Blog: "Inside the Eye"](#)

### HURRICANE PREPAREDNESS

[Preparedness Guide \(PDF\)](#)  
[Hurricane Hazards](#)  
[Watches and Warnings](#)  
[Marine Safety](#)  
[Ready.gov Hurricanes](#)  
[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](#)

### NWS FORECAST OFFICES

[Weather Prediction Center](#)  
[Storm Prediction Center](#)  
[Ocean Prediction Center](#)  
[Local Forecast Offices](#)  
[Central Pacific Hurricane Center](#)

### WORLDWIDE TROPICAL CYCLONE CENTERS

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



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