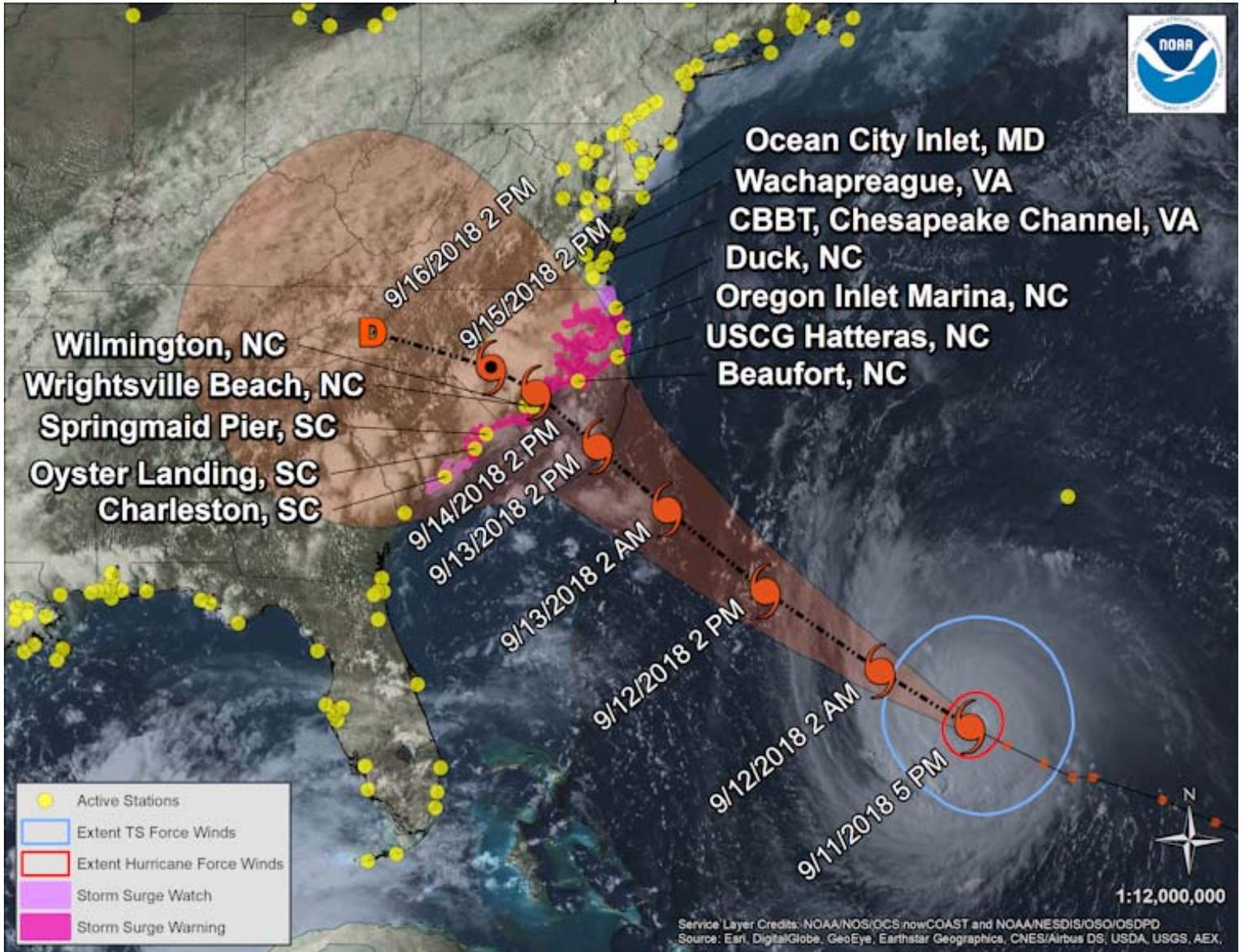




Hurricane Florence QuickLook  
 Posted: 18:00 AST 09/11/2018

NOAA and NOAA Partnership Stations Relative to the Storm



Storm Analysis

As of 09/11/2018 18:00 AST, water levels from Charleston, SC to Ocean City, MD are running anywhere from 0.6 to 1.4 feet above tidal predictions. The already elevated water levels from Duck to Ocean City are a result of the strong easterly flow from the weekend weather system.

Winds are fairly light along the Mid-Atlantic coast this morning. Barometric Pressure is holding steady or even rising gradually in some areas.

Water Level and Meteorological plots available below are updated automatically. A line denoting Mean Higher High Water (MHHW) is displayed to provide an approximate indication of when flooding inundation may occur.

For additional real-time and historical inundation information for select stations affected by this storm, please visit Coastal Inundation Dashboard. For additional data, please see the Center for Operational Oceanographic Products & Services website.

For more information or archived products and reports, please visit the Storm QuickLook Homepage.

Analyst: ADM

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Select National Hurricane Center Advisory Information:

Hurricane Florence Advisory Number 50  
NWS National Hurricane Center Miami FL  
500 PM AST Tue Sep 11 2018

...DANGEROUS FLORENCE EXPECTED TO BRING LIFE-THREATENING STORM SURGE AND RAINFALL TO PORTIONS OF THE CAROLINAS AND MID-ATLANTIC...

#### WATCHES AND WARNINGS

#### CHANGES WITH THIS ADVISORY:

A Storm Surge Warning has been issued from South Santee River, South Carolina, to Duck, North Carolina, and the Albemarle and Pamlico Sounds, including the Neuse and Pamlico Rivers.

A Hurricane Warning has been issued from South Santee River, South Carolina, to Duck, North Carolina, and the Albemarle and Pamlico Sounds.

A Tropical Storm Watch has been issued from north of the North Carolina/Virginia border to Cape Charles Light, Virginia, and for the Chesapeake Bay south of New Point Comfort.

#### SUMMARY OF WATCHES AND WARNINGS IN EFFECT:

A Storm Surge Warning is in effect for...

- \* South Santee River South Carolina to Duck North Carolina
- \* Albemarle and Pamlico Sounds, including the Neuse and Pamlico Rivers

A Storm Surge Watch is in effect for...

- \* Edisto Beach South Carolina to South Santee River South Carolina
- \* North of Duck North Carolina to the North Carolina/Virginia border

A Hurricane Warning is in effect for...

- \* South Santee River South Carolina to Duck North Carolina
- \* Albemarle and Pamlico Sounds

A Hurricane Watch is in effect for...

- \* Edisto Beach South Carolina to South Santee River South Carolina
- \* North of Duck North Carolina to the North Carolina/Virginia border

A Tropical Storm Watch is in effect for...

- \* North of the North Carolina/Virginia border to Cape Charles Light Virginia
- \* Chesapeake Bay south of New Point Comfort

Interests elsewhere in the southeastern and mid-Atlantic states should monitor the progress of Florence. Additional watches and warnings may be required tonight or Wednesday.

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](http://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. A warning is typically issued 36 hours before the anticipated first occurrence of tropical-storm-force winds, conditions that make outside preparations difficult or dangerous. 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 Watch means that tropical storm conditions are possible within the watch area, generally within 48 hours.

For storm information specific to your area, including possible inland watches and warnings, please monitor products issued by your local National Weather Service forecast office.

## DISCUSSION AND OUTLOOK

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At 500 PM AST, the center of the eye of Hurricane Florence was located ABOUT 785 MI ESE OF CAPE FEAR NORTH CAROLINA by satellite . Florence is moving toward the west-northwest near 17 mph. A motion toward the west-northwest and northwest is expected through early Thursday. Florence is expected to slow down considerably by late Thursday into Friday. On the forecast track, the center of Florence will move over the southwestern Atlantic Ocean between Bermuda and the Bahamas through Wednesday, and approach the coast of North Carolina or South Carolina in the hurricane warning area on Thursday and Friday.

Maximum sustained winds have increased to near 140 mph with higher gusts. Florence is a category 4 hurricane on the Saffir-Simpson Hurricane Wind Scale. Further strengthening is forecast tonight and Wednesday. While some weakening is expected on Thursday, Florence is forecast to be an extremely dangerous major hurricane through landfall.

Hurricane-force winds extend outward up to 60 miles from the center and tropical-storm-force winds extend outward up to 175 miles.

The estimated minimum central pressure is 945 mb.

#### HAZARDS AFFECTING LAND

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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 has the potential to reach the following heights above ground if peak surge occurs at the time of high tide...

Cape Fear to Cape Lookout, including the Neuse and Pamlico Rivers...9-13 ft  
North Myrtle Beach to Cape Fear...6-9 ft  
Cape Lookout to Ocracoke Inlet...6-9 ft  
South Santee River to North Myrtle Beach...4-6 ft  
Ocracoke Inlet to North Carolina/Virginia Border...4-6 ft  
Edisto Beach to South Santee River...2-4 ft

The deepest water will occur along the immediate coast in areas of onshore winds, where the surge will be accompanied by large and destructive waves. Surge-related flooding depends on the relative timing of the surge and the tidal cycle, 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: Florence is expected to produce total rainfall accumulations of 15 to 25 inches with isolated maximum amounts of 35 inches near the storm's track over portions of the Carolinas and Mid-Atlantic States from late this week into early next week. This rainfall would produce catastrophic flash flooding and significant river flooding.

WIND: Hurricane conditions are expected to reach the coast within the hurricane warning area on Friday. Winds are expected to first reach tropical storm strength on Thursday, making outside preparations difficult or dangerous. Preparations to protect life and property should be rushed to completion.

SURF: Swells generated by Florence are affecting Bermuda and portions of the U.S. East Coast. These swells are likely to cause life-threatening surf and rip current conditions. Please consult products from your local weather office.

#### NEXT ADVISORY

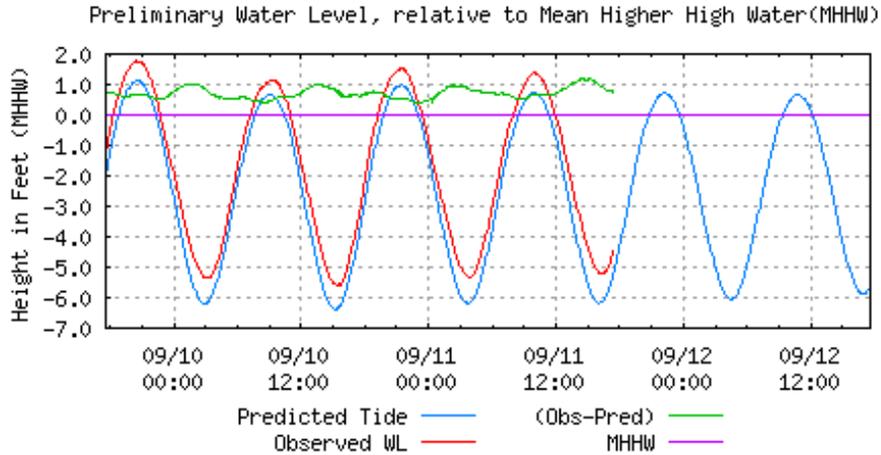
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Next intermediate advisory at 800 PM AST.  
Next complete advisory at 1100 PM AST.

\$\$  
Forecaster Stewart

For the purpose of timely release, data contained within this QuickLook have undergone a "limited" NOS Quality Assurance/Control; however, the data have not yet undergone final verification. All data subject to NOS verification.

Jump to: [Charleston, Cooper River Entrance - Water Level](#), [Charleston, Cooper River Entrance - Winds](#), [Charleston, Cooper River Entrance - Barometric](#), [Oyster Landing \(N Inlet Estuary\) - Water Level](#), [Springmaid Pier - Water Level](#), [Springmaid Pier - Barometric](#), [Wrightsville Beach - Water Level](#), [Wrightsville Beach - Winds](#), [Wrightsville Beach - Barometric](#), [Wilmington - Water Level](#), [Wilmington - Barometric](#), [Beaufort, Duke Marine Lab - Water Level](#), [Beaufort, Duke Marine Lab - Winds](#), [Beaufort, Duke Marine Lab - Barometric](#), [USCG Station Hatteras - Water Level](#), [USCG Station Hatteras - Winds](#), [USCG Station Hatteras - Barometric](#), [Oregon Inlet Marina - Water Level](#), [Oregon Inlet Marina - Winds](#), [Oregon Inlet Marina - Barometric](#), [Duck - Water Level](#), [Duck - Winds](#), [Duck - Barometric](#), [CBBT, Chesapeake Channel - Water Level](#), [CBBT, Chesapeake Channel - Winds](#), [CBBT, Chesapeake Channel - Barometric](#), [Wachapreague - Water Level](#), [Wachapreague - Winds](#), [Ocean City Inlet - Water Level](#), [Ocean City Inlet - Winds](#)

NOAA/NOS/CO-OPS 8665530 Charleston, Cooper River Entrance, SC



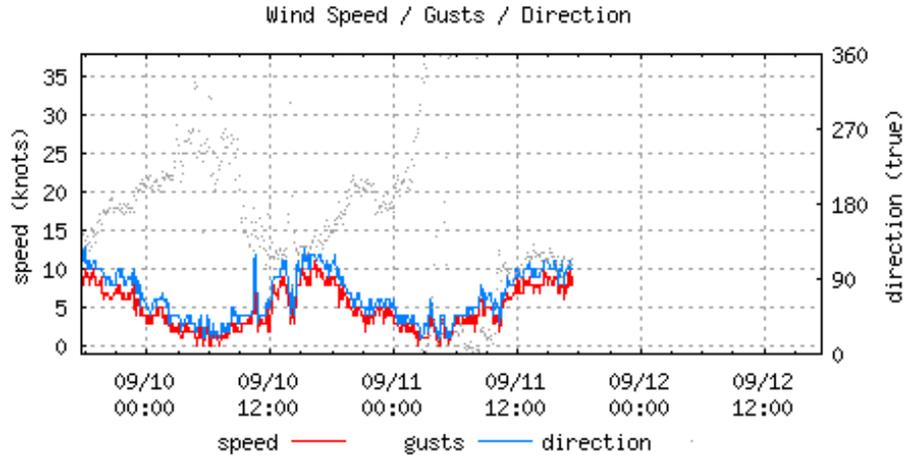
Last Observed Sample: 09/11/2018 17:24 (EDT). Data relative to MHHW

Observed: -4.49 ft. Predicted: -5.25 ft. Residual: 0.76 ft.

Historical Maximum Water Level: Sep 21 1989, 6.76 ft.

Next High Tide: 09/11/2018 22:13 (EDT), 0.71 ft.

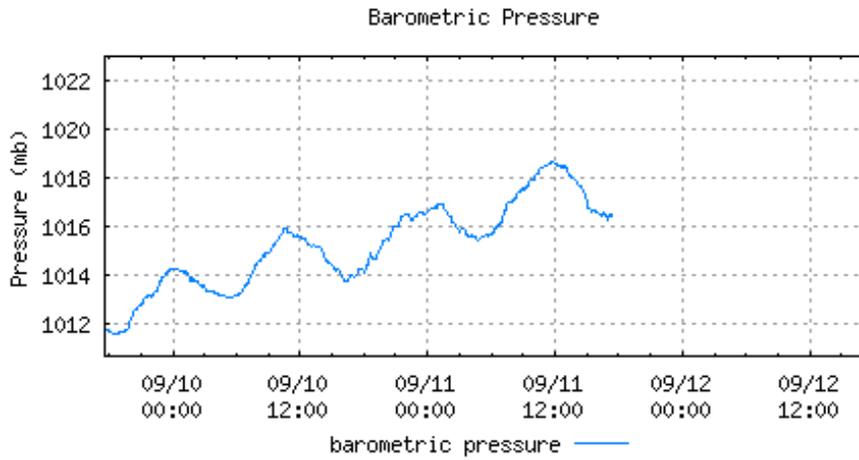
NOAA/NOS/CO-OPS 8665530 Charleston, Cooper River Entrance, SC



Last Observed Sample: 09/11/2018 17:24 (EDT)

Wind Speed: 8 knots Gusts: 10 knots Direction: 114° T

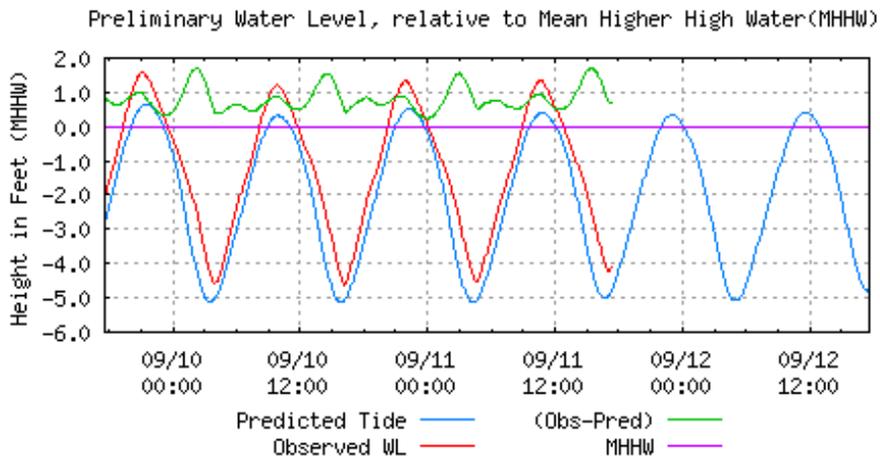
NOAA/NOS/CO-OPS 8665530 Charleston, Cooper River Entrance, SC



Last Observed Sample: 09/11/2018 17:24 (EDT)

Barometric Pressure: 1016.4 mb

NOAA/NOS/CO-OPS 8662245 Oyster Landing (N Inlet Estuary), SC



Last Observed Sample: 09/11/2018 17:24 (EDT). Data relative to MHHW

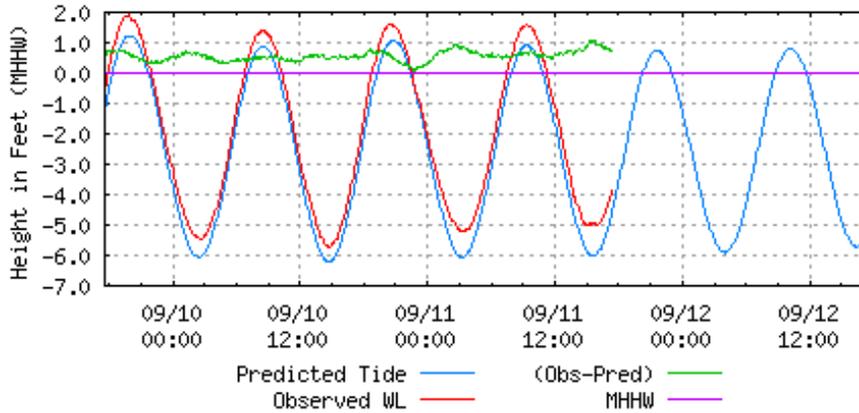
Observed: -3.98 ft. Predicted: -4.74 ft. Residual: 0.76 ft.

Historical Maximum Water Level: Oct 8 2016, 4.64 ft.

Next High Tide: 09/11/2018 23:01 (EDT), 0.33 ft.

NOAA/NOS/CO-OPS 8661070 Springmaid Pier, SC

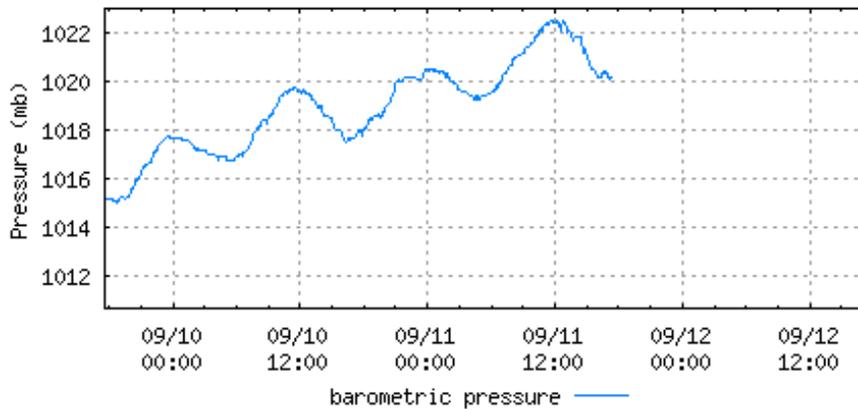
Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Last Observed Sample: 09/11/2018 17:24 (EDT). Data relative to MHHW  
**Observed: -3.86 ft. Predicted: -4.56 ft. Residual: 0.70 ft.**  
 Historical Maximum Water Level: Sep 21 1989, 8.77 ft.  
 Next High Tide: 09/11/2018 21:36 (EDT), 0.75 ft.

NOAA/NOS/CO-OPS 8661070 Springmaid Pier, SC

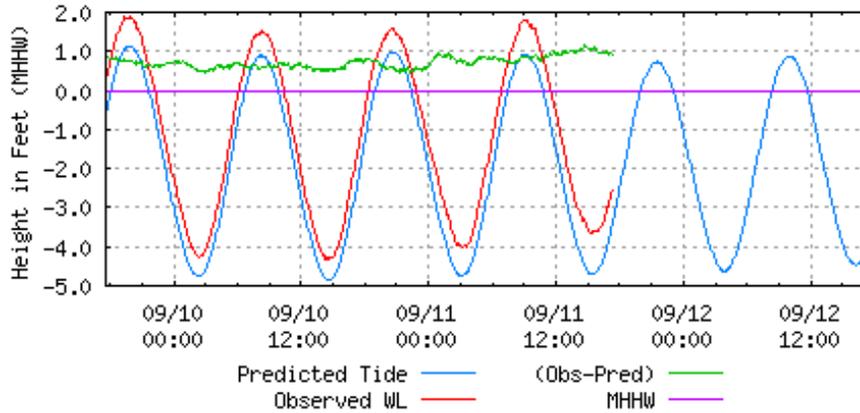
Barometric Pressure



Last Observed Sample: 09/11/2018 17:24 (EDT)  
**Barometric Pressure: 1020.2 mb**

NOAA/NOS/CO-OPS 8658163 Wrightsville Beach, NC

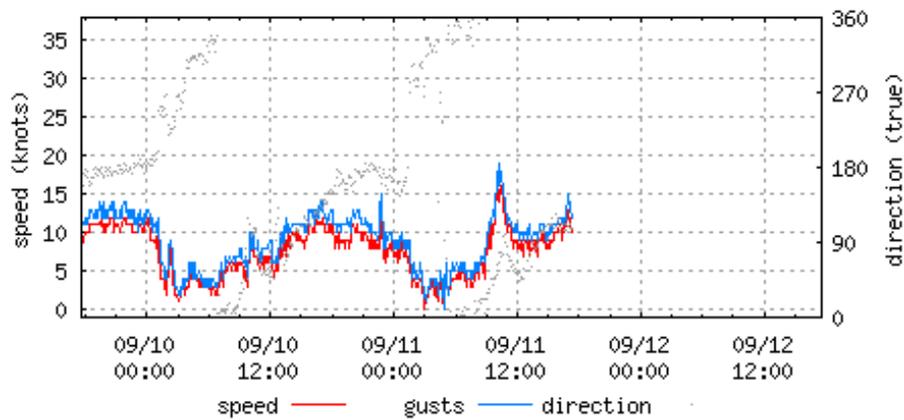
Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Last Observed Sample: 09/11/2018 17:24 (EDT). Data relative to MHHW  
**Observed: -2.43 ft. Predicted: -3.33 ft. Residual: 0.90 ft.**  
Historical Maximum Water Level: Oct 4 2015, 2.97 ft.  
Next High Tide: 09/11/2018 21:30 (EDT), 0.74 ft.

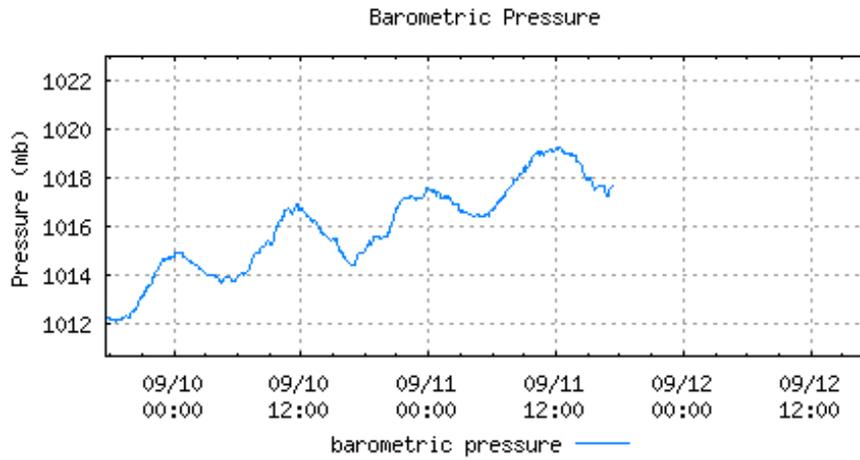
NOAA/NOS/CO-OPS 8658163 Wrightsville Beach, NC

Wind Speed / Gusts / Direction



Last Observed Sample: 09/11/2018 17:24 (EDT)  
**Wind Speed: 11 knots Gusts: 13 knots Direction: 111° T**

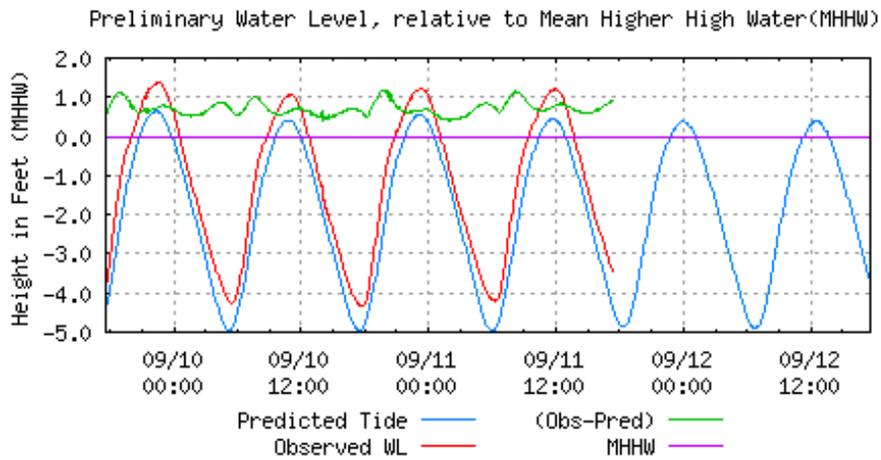
NOAA/NOS/CO-OPS 8658163 Wrightsville Beach, NC



Last Observed Sample: 09/11/2018 17:24 (EDT)

Barometric Pressure: 1017.6 mb

NOAA/NOS/CO-OPS 8658120 Wilmington, NC



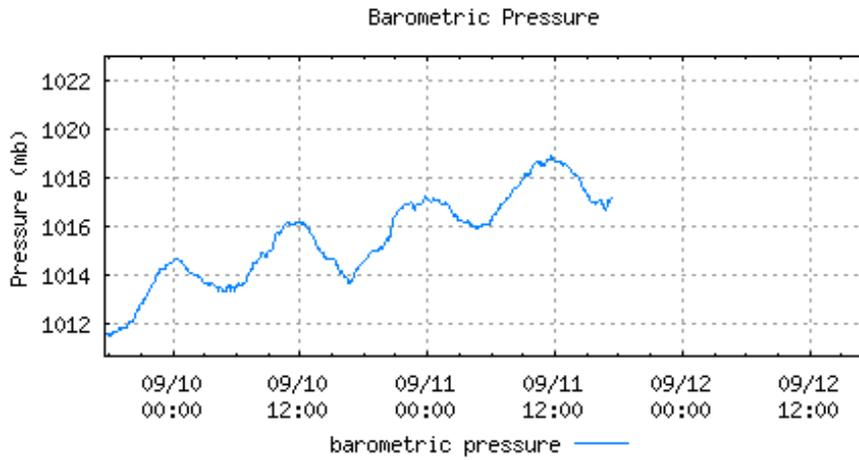
Last Observed Sample: 09/11/2018 17:24 (EDT). Data relative to MHHW

Observed: -3.52 ft. Predicted: -4.42 ft. Residual: 0.90 ft.

Historical Maximum Water Level: Oct 8 2016, 3.48 ft.

Next High Tide: 09/11/2018 23:58 (EDT), 0.38 ft.

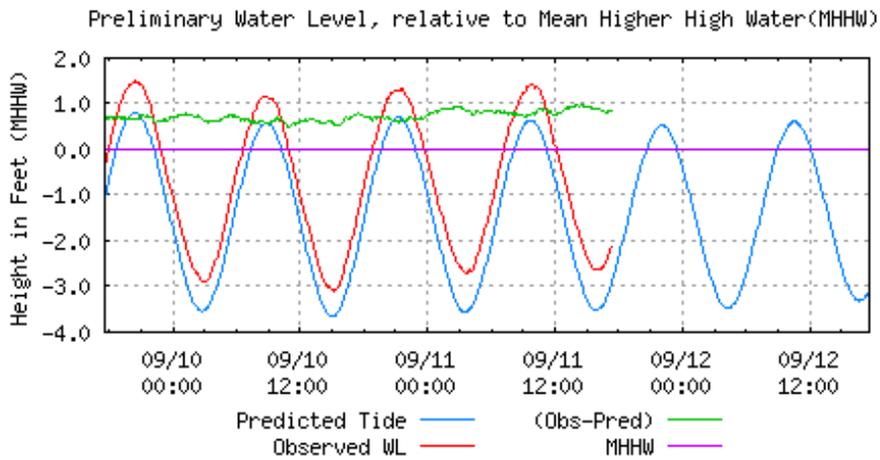
NOAA/NOS/CO-OPS 8658120 Wilmington, NC



Last Observed Sample: 09/11/2018 17:24 (EDT)

Barometric Pressure: 1017.1 mb

NOAA/NOS/CO-OPS 8656483 Beaufort, Duke Marine Lab, NC



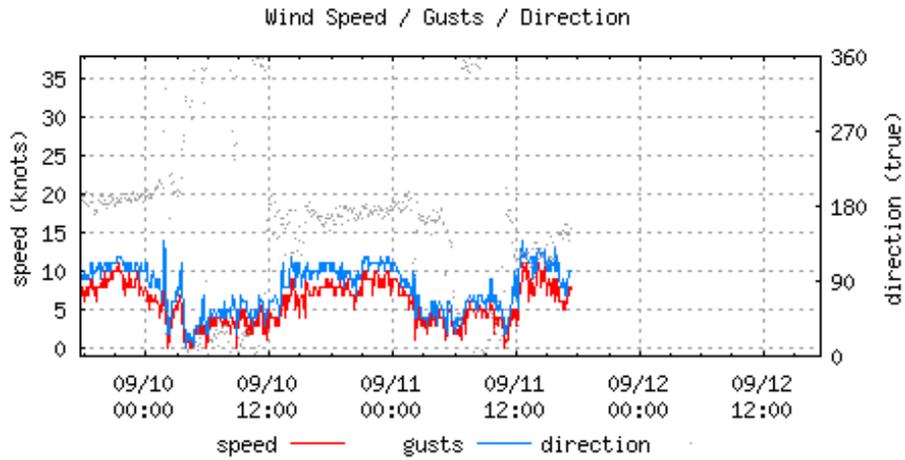
Last Observed Sample: 09/11/2018 17:24 (EDT). Data relative to MHHW

Observed: -2.01 ft. Predicted: -2.90 ft. Residual: 0.89 ft.

Historical Maximum Water Level: Sep 19 1955, 3.39 ft.

Next High Tide: 09/11/2018 22:04 (EDT), 0.52 ft.

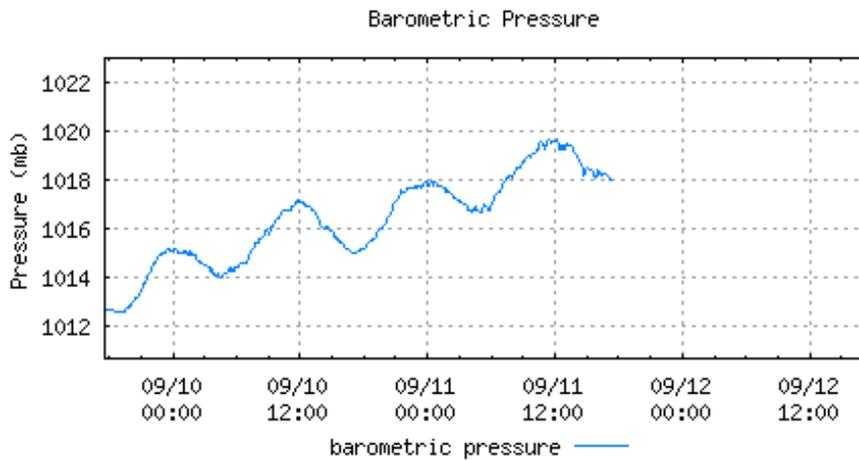
NOAA/NOS/CO-OPS 8656483 Beaufort, Duke Marine Lab, NC



Last Observed Sample: 09/11/2018 17:24 (EDT)

Wind Speed: 8 knots Gusts: 9 knots Direction: 148° T

NOAA/NOS/CO-OPS 8656483 Beaufort, Duke Marine Lab, NC

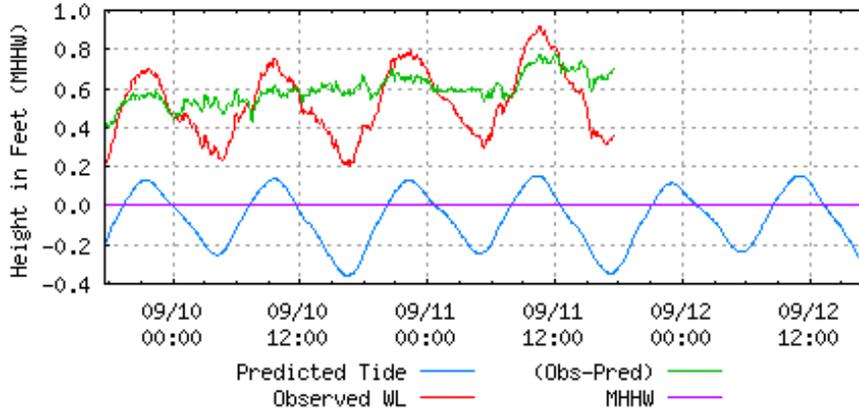


Last Observed Sample: 09/11/2018 17:24 (EDT)

Barometric Pressure: 1018.0 mb

NOAA/NOS/CO-OPS 8654467 USCG Station Hatteras, NC

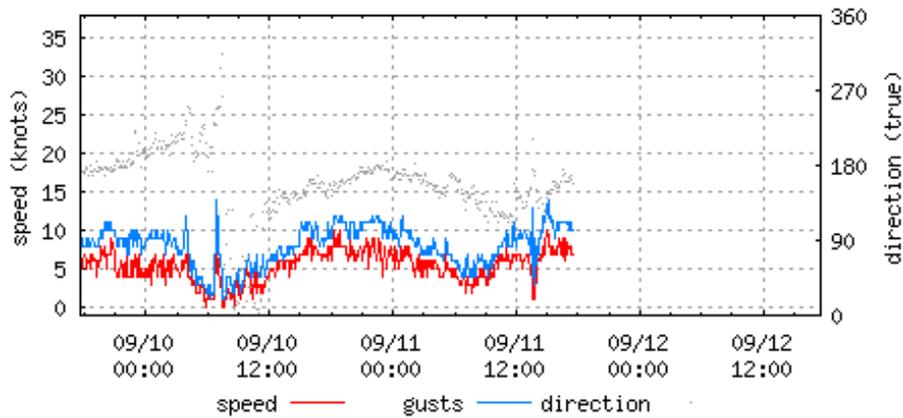
Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Last Observed Sample: 09/11/2018 17:30 (EDT). Data relative to MHHW  
**Observed: 0.36 ft. Predicted: -0.34 ft. Residual: 0.70 ft.**  
Historical Maximum Water Level: Oct 9 2016, 5.76 ft.  
Next High Tide: 09/11/2018 23:00 (EDT), 0.11 ft.

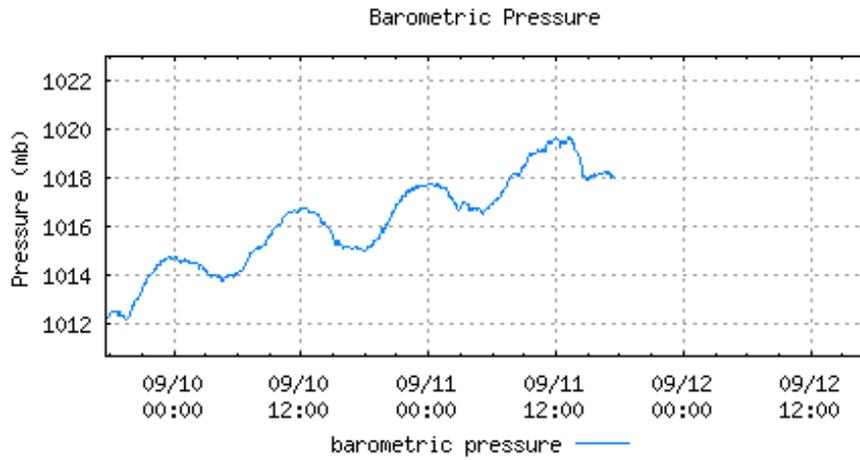
NOAA/NOS/CO-OPS 8654467 USCG Station Hatteras, NC

Wind Speed / Gusts / Direction



Last Observed Sample: 09/11/2018 17:30 (EDT)  
**Wind Speed: 7 knots Gusts: 10 knots Direction: 158° T**

NOAA/NOS/CO-OPS 8654467 USCG Station Hatteras, NC

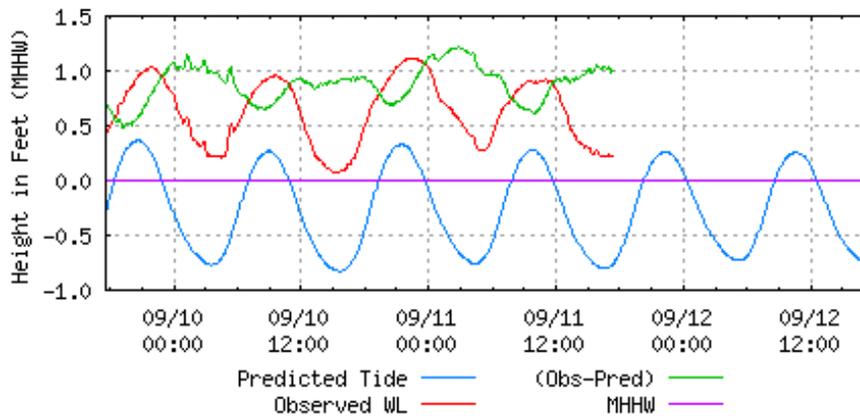


Last Observed Sample: 09/11/2018 17:30 (EDT)

Barometric Pressure: 1018.0 mb

NOAA/NOS/CO-OPS 8652587 Oregon Inlet Marina, NC

Preliminary Water Level, relative to Mean Higher High Water (MHHW)



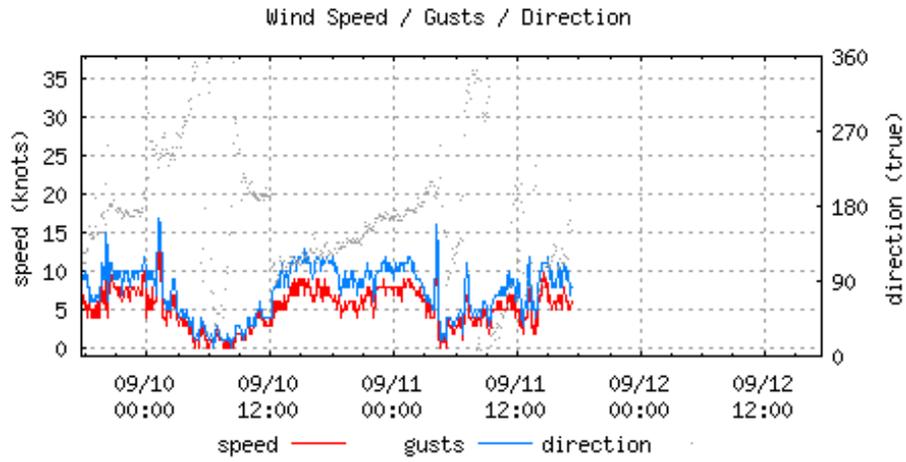
Last Observed Sample: 09/11/2018 17:18 (EDT). Data relative to MHHW

Observed: 0.23 ft. Predicted: -0.77 ft. Residual: 1.00 ft.

Historical Maximum Water Level: Aug 28 2011, 6.31 ft.

Next High Tide: 09/11/2018 22:17 (EDT), 0.26 ft.

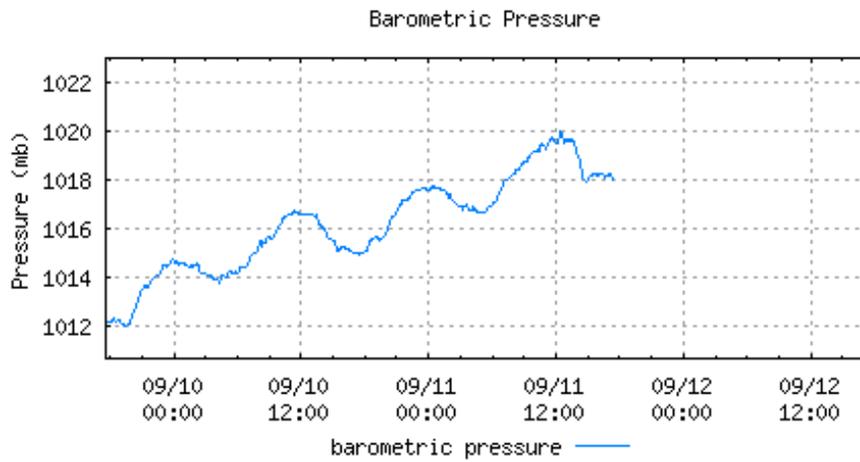
NOAA/NOS/CO-OPS 8652587 Oregon Inlet Marina, NC



Last Observed Sample: n/a

Wind Speed: 0 knots Gusts: 0 knots Direction: n/a° T

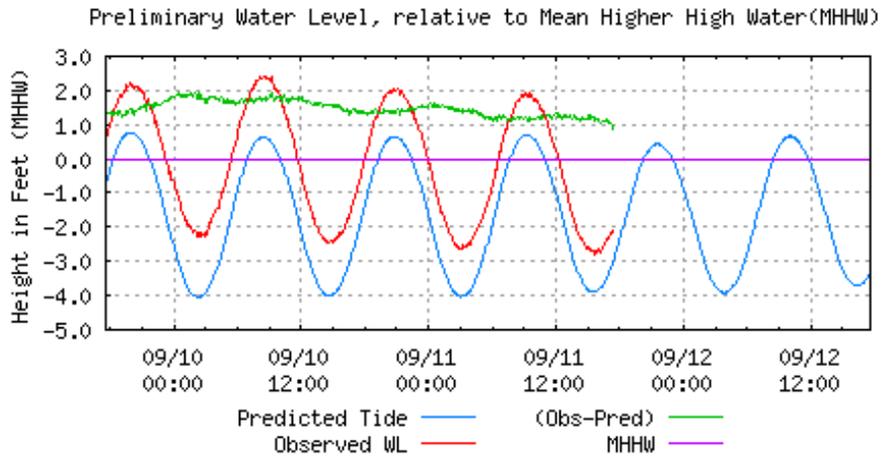
NOAA/NOS/CO-OPS 8652587 Oregon Inlet Marina, NC



Last Observed Sample: n/a

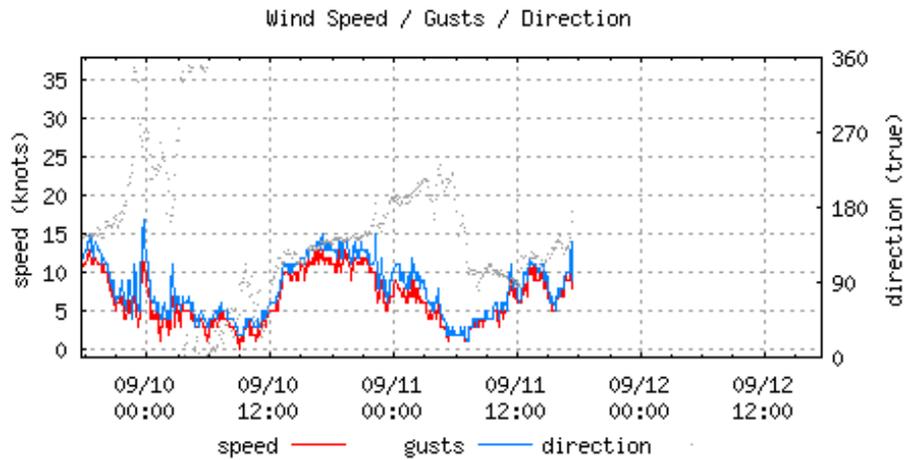
Barometric Pressure: 0.0 mb

NOAA/NOS/CO-OPS 8651370 Duck, NC



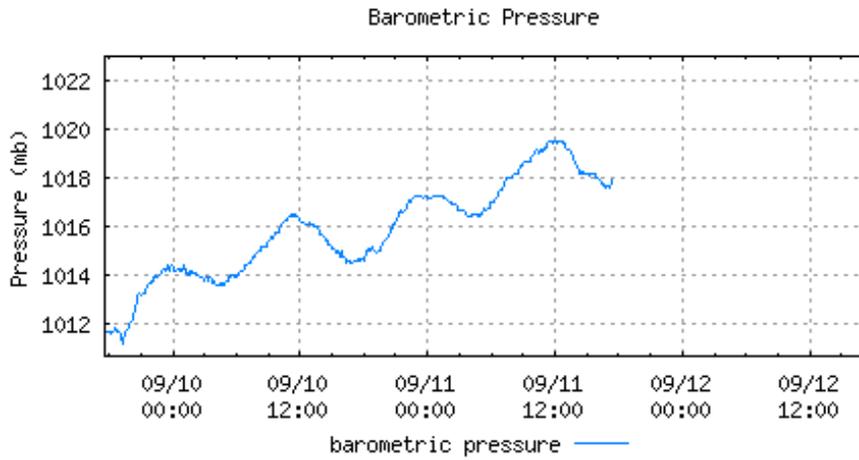
Last Observed Sample: 09/11/2018 17:24 (EDT). Data relative to MHHW  
**Observed: -2.13 ft. Predicted: -3.00 ft. Residual: 0.87 ft.**  
 Historical Maximum Water Level: Sep 18 2003, 4.13 ft.  
 Next High Tide: 09/11/2018 21:34 (EDT), 0.44 ft.

NOAA/NOS/CO-OPS 8651370 Duck, NC



Last Observed Sample: 09/11/2018 17:24 (EDT)  
**Wind Speed: 8 knots Gusts: 9 knots Direction: 164° T**

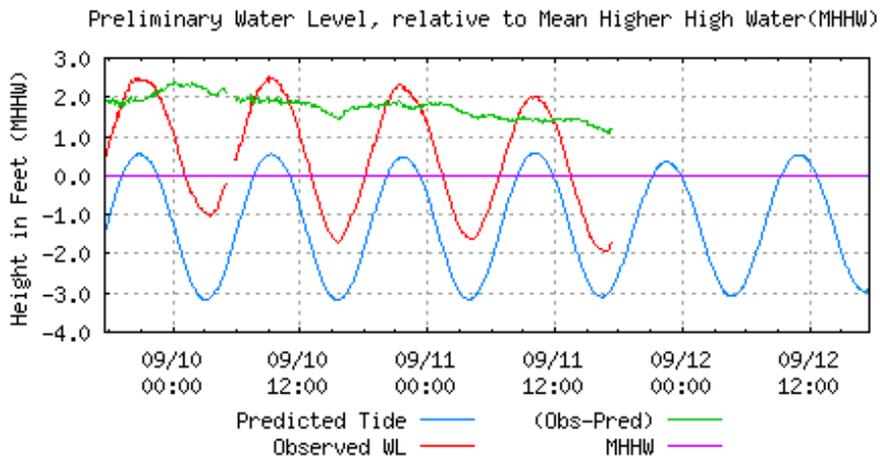
NOAA/NOS/CO-OPS 8651370 Duck, NC



Last Observed Sample: 09/11/2018 17:24 (EDT)

Barometric Pressure: 1017.9 mb

NOAA/NOS/CO-OPS 8638901 CBBT, Chesapeake Channel, VA



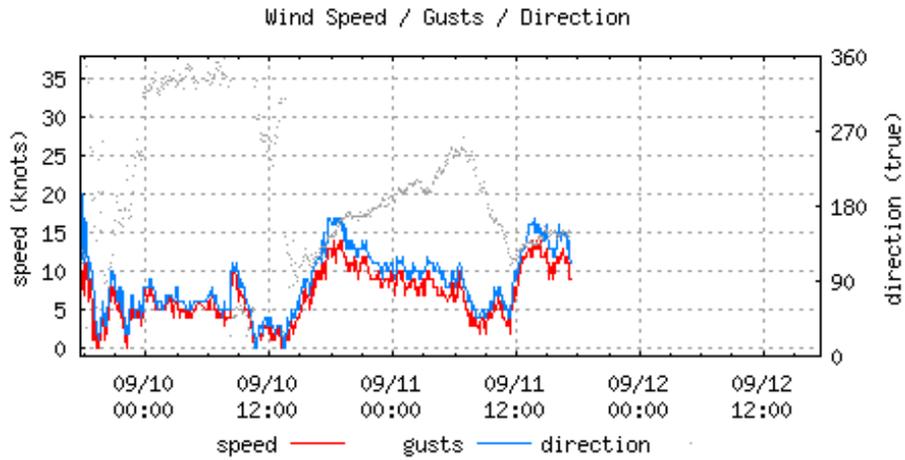
Last Observed Sample: 09/11/2018 17:24 (EDT). Data relative to MHHW

Observed: -1.69 ft. Predicted: -2.85 ft. Residual: 1.16 ft.

Historical Maximum Water Level: n/a

Next High Tide: 09/11/2018 22:30 (EDT), 0.34 ft.

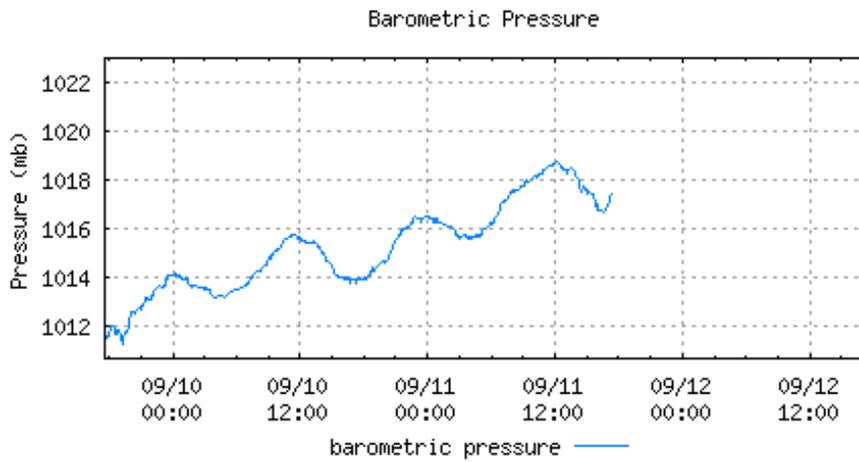
NOAA/NOS/CO-OPS 8638901 CBBT, Chesapeake Channel, VA



Last Observed Sample: 09/11/2018 17:24 (EDT)

Wind Speed: 10 knots Gusts: 11 knots Direction: 155° T

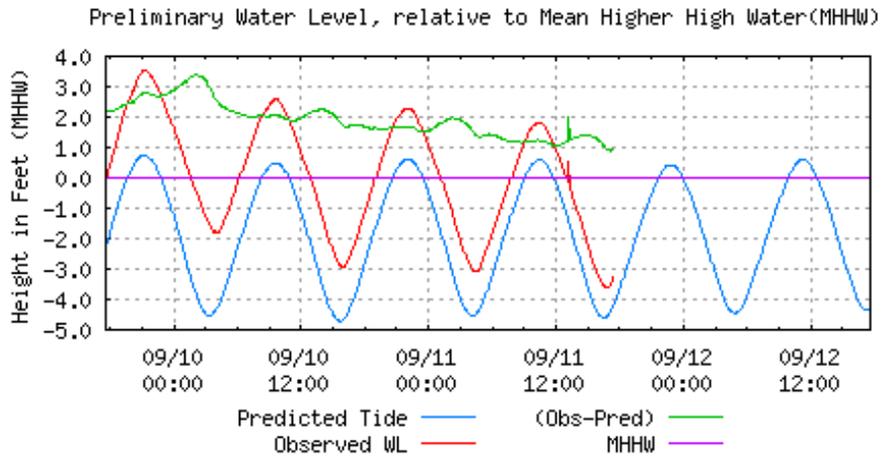
NOAA/NOS/CO-OPS 8638901 CBBT, Chesapeake Channel, VA



Last Observed Sample: 09/11/2018 17:24 (EDT)

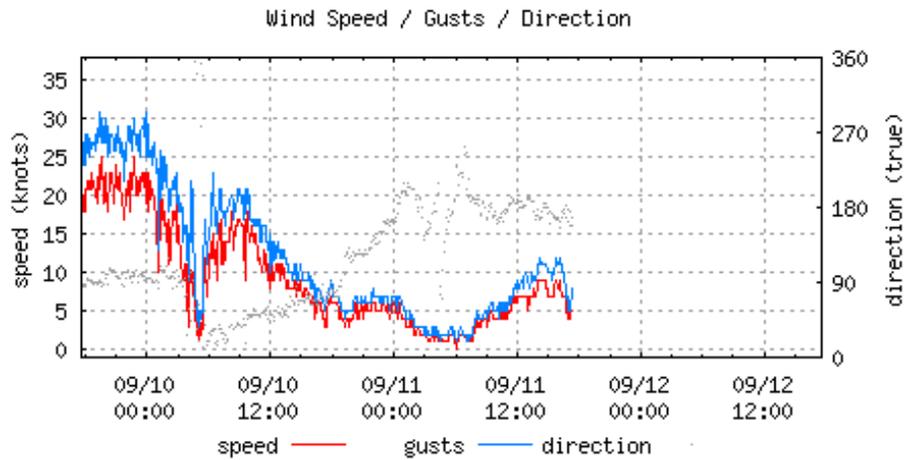
Barometric Pressure: 1017.5 mb

NOAA/NOS/CO-OPS 8631044 Wachapreague, VA



Last Observed Sample: 09/11/2018 17:24 (EDT). Data relative to MHHW  
**Observed: -3.29 ft. Predicted: -4.22 ft. Residual: 0.93 ft.**  
 Historical Maximum Water Level: Feb 5 1998, 4.41 ft.  
 Next High Tide: 09/11/2018 22:49 (EDT), 0.43 ft.

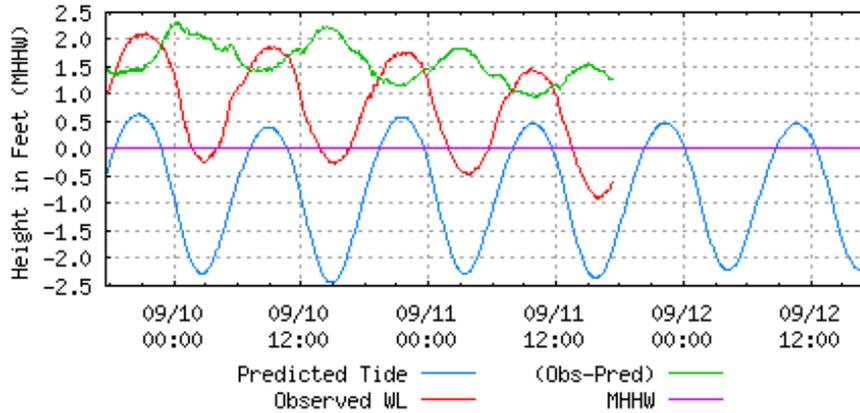
NOAA/NOS/CO-OPS 8631044 Wachapreague, VA



Last Observed Sample: 09/11/2018 17:24 (EDT)  
**Wind Speed: 5 knots Gusts: 8 knots Direction: 157° T**

NOAA/NOS/CO-OPS 8570283 Ocean City Inlet, MD

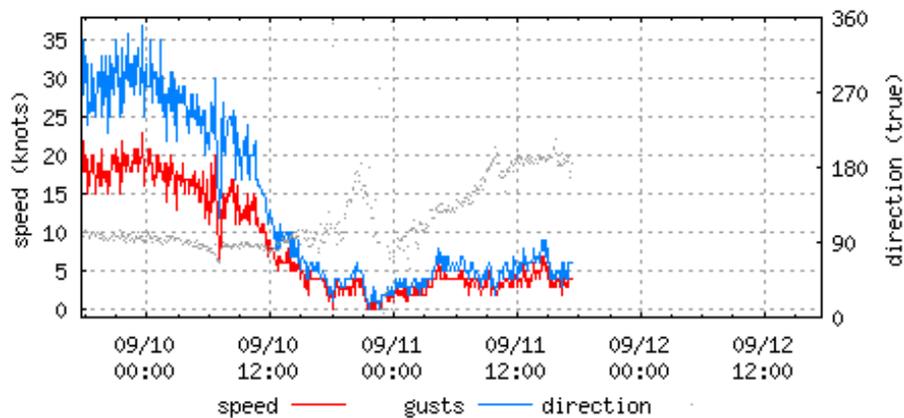
Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Last Observed Sample: 09/11/2018 17:24 (EDT). Data relative to MHHW  
**Observed: -0.56 ft. Predicted: -1.81 ft. Residual: 1.25 ft.**  
 Historical Maximum Water Level: Feb 5 1998, 3.61 ft.  
 Next High Tide: 09/11/2018 22:16 (EDT), 0.47 ft.

NOAA/NOS/CO-OPS 8570283 Ocean City Inlet, MD

Wind Speed / Gusts / Direction



Last Observed Sample: 09/11/2018 17:24 (EDT)  
**Wind Speed: 4 knots Gusts: 6 knots Direction: 184° T**

Latest Water Level Observations on MHHW

Station ID	Station Name	Date/Time	Observed Water Level	Predicted Tide	Residual Water Level	24 Hour Maximum Storm Tide
8665530	Charleston, Cooper River Entrance, SC	09/11/2018 17:24 (EDT)	-4.49 ft	-5.25 ft	0.76 ft	1.53 ft
8662245	Oyster Landing (N Inlet Estuary), SC	09/11/2018 17:24 (EDT)	-3.98 ft	-4.74 ft	0.76 ft	1.35 ft
8661070	Springmaid Pier, SC	09/11/2018 17:24 (EDT)	-3.86 ft	-4.56 ft	0.70 ft	1.62 ft
8658163	Wrightsville Beach, NC	09/11/2018 17:24 (EDT)	-2.43 ft	-3.33 ft	0.90 ft	1.80 ft
8658120	Wilmington, NC	09/11/2018 17:24 (EDT)	-3.52 ft	-4.42 ft	0.90 ft	1.21 ft
8656483	Beaufort, Duke Marine Lab, NC	09/11/2018 17:24 (EDT)	-2.01 ft	-2.90 ft	0.89 ft	1.40 ft
8654467	USCG Station Hatteras, NC	09/11/2018 17:36 (EDT)	0.36 ft	-0.33 ft	0.69 ft	0.92 ft
8652587	Oregon Inlet Marina, NC	09/11/2018 17:24 (EDT)	0.22 ft	-0.76 ft	0.98 ft	1.12 ft
8651370	Duck, NC	09/11/2018 17:24 (EDT)	-2.13 ft	-3.00 ft	0.87 ft	2.05 ft
8638901	CBBT, Chesapeake Channel, VA	09/11/2018 17:24 (EDT)	-1.69 ft	-2.85 ft	1.16 ft	2.34 ft
8631044	Wachapreague, VA	09/11/2018 17:24 (EDT)	-3.29 ft	-4.22 ft	0.93 ft	2.30 ft
8570283	Ocean City Inlet, MD	09/11/2018 17:24 (EDT)	-0.56 ft	-1.81 ft	1.25 ft	1.77 ft

Center for Operational Oceanographic Products & Services (CO-OPS) | National Ocean Service (NOS)  
 National Oceanic and Atmospheric Administration | U.S. Department of Commerce