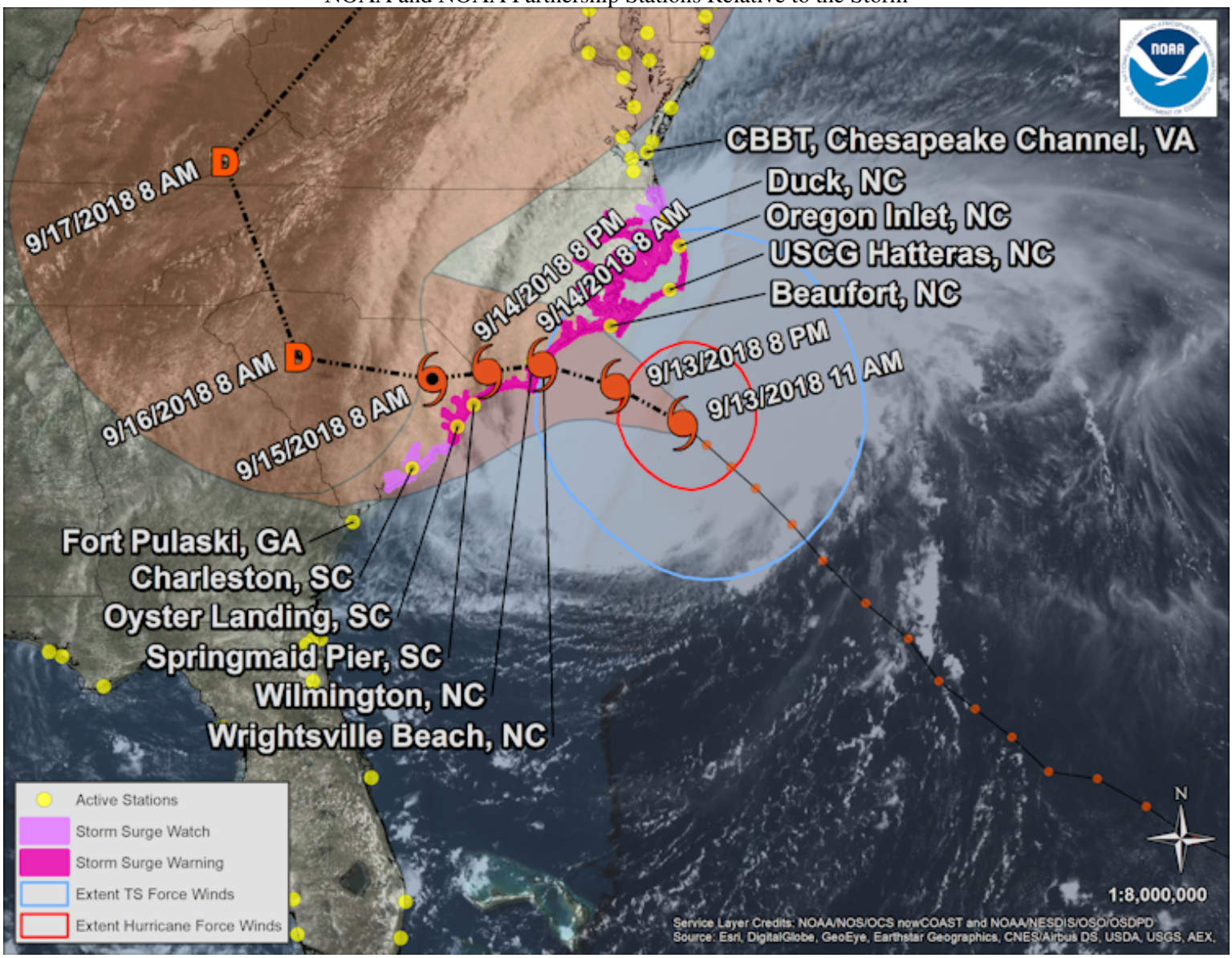
Hurricane Florence QuickLook
Posted: 12:00 EDT 09/13/2018

NOAA and NOAA Partnership Stations Relative to the Storm



Storm Analysis

As of 09/13/2018 12:00 EDT, Hurricane Florence is beginning to affect the coast of North Carolina. From the entrance to the Chesapeake Bay to Wrightsville Beach, NC water levels are running 1 to 2 feet above tide predictions. Further south and up the Cape Fear River, water levels are running up to 1 foot above normal tide levels at this time.

Sustained winds range from 20 to 35 knots with gusts up to 45 knots at most stations around the southeast and lower Mid-Atlantic. These winds will continue to increase this afternoon. Barometric pressure is beginning to drop across the region.

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: CRD

Select National Hurricane Center Advisory:Hurricane Florence Advisory Number 57
NWS National Hurricane Center Miami FL
1100 AM EDT Thu Sep 13 2018

...HEAVY RAINBANDS WITH TROPICAL-STORM-FORCE WINDS SPREADING ACROSS
THE OUTER BANKS AND COASTAL SOUTHEASTERN NORTH CAROLINA...
...LIFE-THREATENING STORM SURGE AND RAINFALL EXPECTED...

SUMMARY OF 1100 AM EDT.....INFORMATION

LOCATION...33.4N 75.5W
ABOUT 145 MI... ESE OF WILMINGTON NORTH CAROLINA
ABOUT 195 MI... E OF MYRTLE BEACH SOUTH CAROLINA
MAXIMUM SUSTAINED WINDS...105 MPH
PRESENT MOVEMENT...NW OR 315 DEGREES AT 10 MPH
MINIMUM CENTRAL PRESSURE...955 MB

WATCHES AND WARNINGS

CHANGES WITH THIS ADVISORY:

None.

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

A Tropical Storm Warning is in effect for...
* North of Duck North Carolina 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.

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

A Hurricane Warning means that hurricane conditions are expected somewhere within the warning area, in this case within the next 12 to 24 hours. Preparations to protect life and property should be nearing 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 somewhere within the warning area.

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

At 1100 AM EDT , data from an Air Force Reserve Unit
Hurricane Hunter aircraft and NOAA Doppler weather radars from indicate that Florence was located near latitude 33.4 North, longitude 75.5 West. Florence is moving toward the northwest near 10 mph . This general motion, accompanied by a further decrease in forward speed, is expected to continue through today. A turn to the west-northwest and west at an even slower forward speed is expected tonight and Friday, and a slow west-southwestward motion is forecast Friday night and Saturday. On the forecast track, the center of Florence will approach the coasts of North and South Carolina later today, then move near or over the coast of southern North Carolina and northeastern South Carolina in the hurricane warning area tonight and Friday. A slow motion across portions of eastern South Carolina is forecast Friday night through Saturday night.

Data from the aircraft and Doppler weather radars indicate that maximum sustained winds have decreased to near 105 mph with higher gusts. Little change in strength is expected before the center reaches the coast, with weakening expected after the center moves inland.

Florence is a large hurricane. Hurricane-force winds extend outward up to 80 miles from the center and tropical-storm-force winds extend outward up to 195 miles. NOAA Buoy 41025, located near Diamond Shoals, North Carolina, recently reported a sustained wind of 54 mph.

The latest minimum central pressure based on data from the aircraft is 955 mb.

HAZARDS AFFECTING LAND

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 NC to Cape Lookout NC, including the Neuse, Pamlico, Pungo, and Bay Rivers...9-13 ft
North Myrtle Beach SC to Cape Fear NC...6-9 ft
Cape Lookout NC to Ocracoke Inlet NC...6-9 ft
South Santee River SC to North Myrtle Beach SC...4-6 ft
Ocracoke Inlet NC to Salvo NC...4-6 ft
Salvo NC to North Carolina/Virginia Border...2-4 ft
Edisto Beach SC to South Santee River SC...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 heavy and excessive rainfall in the following areas...

Coastal North Carolina into far northeastern South Carolina...20 to 30 inches, isolated 40 inches. This rainfall will produce catastrophic flash flooding and prolonged significant river flooding.

Remainder of South Carolina and North Carolina into southwest Virginia...6 to 12 inches, isolated 24 inches.

WIND: Hurricane conditions are expected to reach the coast within the hurricane warning area this evening or early Friday. Tropical storm conditions are already moving onshore within the warning area.

TORNADOES: A few tornadoes are possible in eastern North Carolina through Friday.

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

NEXT ADVISORY

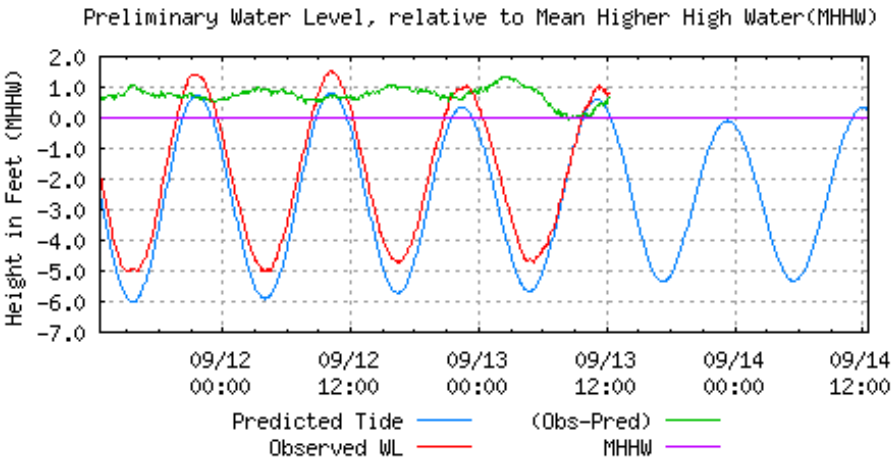
Next intermediate advisory at 200 PM EDT.
Next complete advisory at 500 PM EDT.

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.

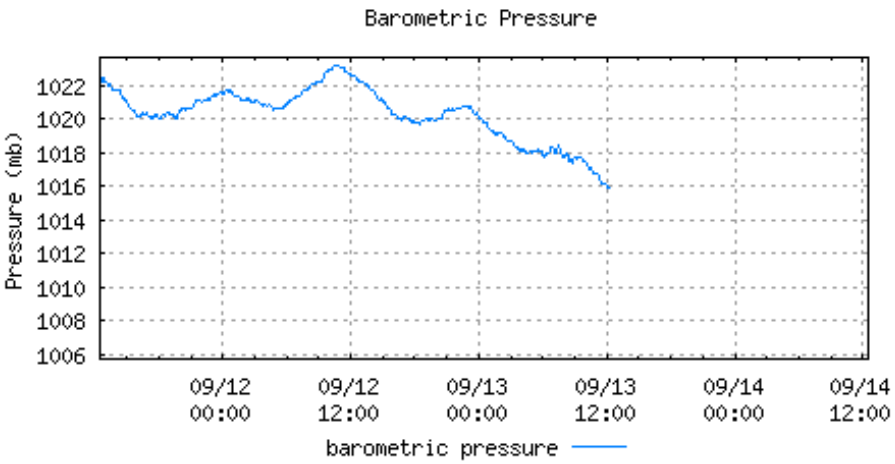
Jump to: Springmaid Pier - Water Level, Springmaid Pier - Barometric, Wrightsville Beach - Water Level, Wrightsville Beach - Winds, Wrightsville Beach - Barometric, Wilmington - Water Level, Wilmington - Barometric, Beaufort, Duke Marine Lab - Water Level, Beaufort, Duke Marine Lab - Winds, Beaufort, 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, Oyster Landing (N Inlet Estuary) - Water Level, Charleston, Cooper River Entrance - Water Level, Charleston, Cooper River Entrance - Winds, Charleston, Cooper River Entrance - Barometric, Fort Pulaski - Water Level, Fort Pulaski - Winds, Fort Pulaski - Barometric

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



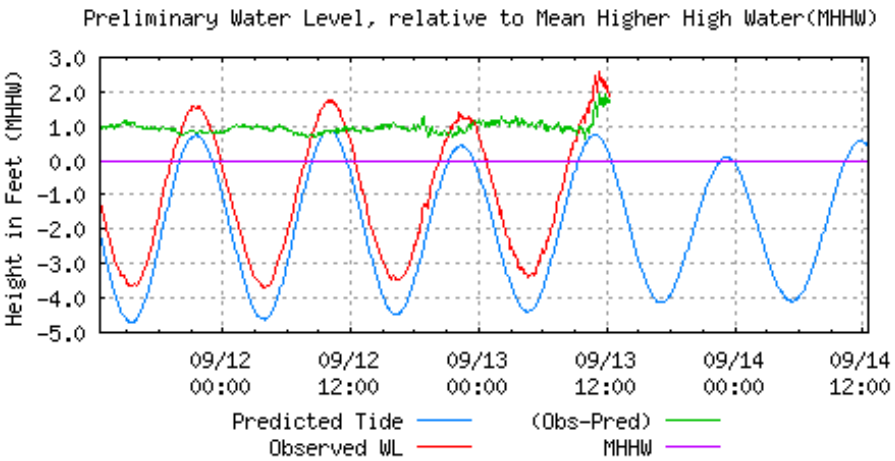
Last Observed Sample: 09/13/2018 12:12 (EDT). Data relative to MHHW
Observed: 0.79 ft. Predicted: 0.13 ft. Residual: 0.66 ft.
Historical Maximum Water Level: Sep 21 1989, 8.77 ft.
Next High Tide: 09/13/2018 23:17 (EDT), -0.10 ft.

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



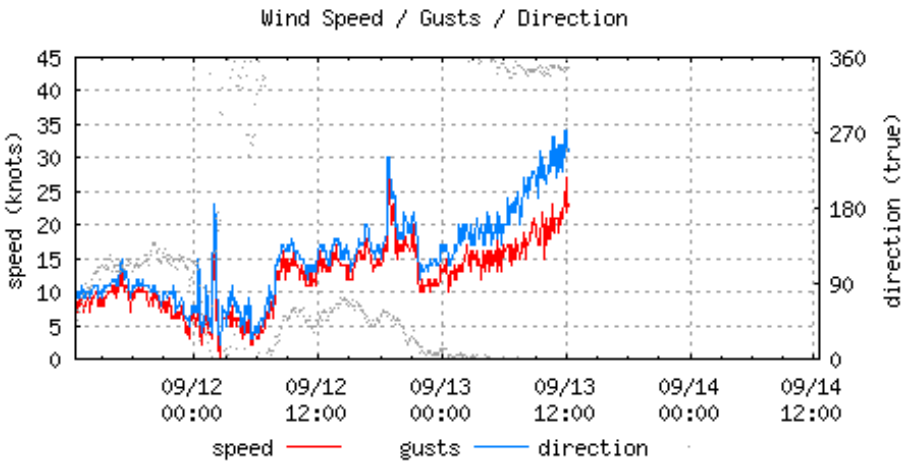
Last Observed Sample: 09/13/2018 12:12 (EDT)
Barometric Pressure: 1015.9 mb

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



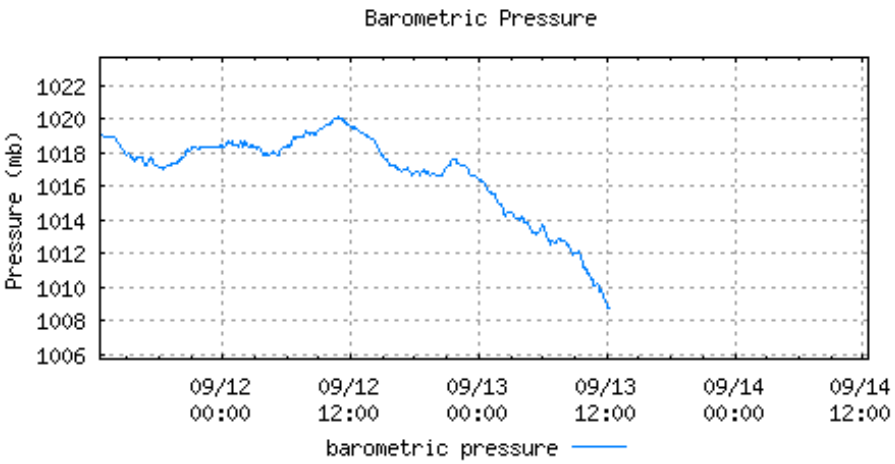
Last Observed Sample: 09/13/2018 12:12 (EDT). Data relative to MHHW
Observed: 1.86 ft. Predicted: 0.18 ft. Residual: 1.68 ft.
Historical Maximum Water Level: Oct 4 2015, 2.97 ft.
Next High Tide: 09/13/2018 23:13 (EDT), 0.10 ft.

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



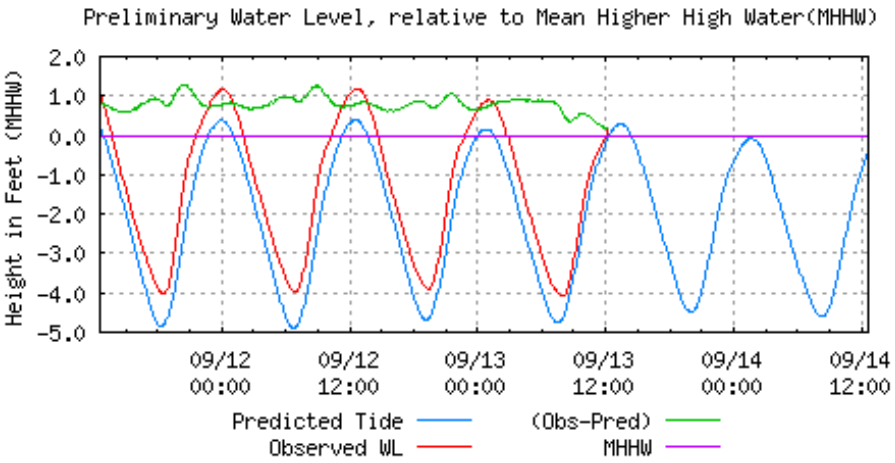
Last Observed Sample: 09/13/2018 12:12 (EDT)
Wind Speed: 23 knots Gusts: 31 knots Direction: 349° T

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



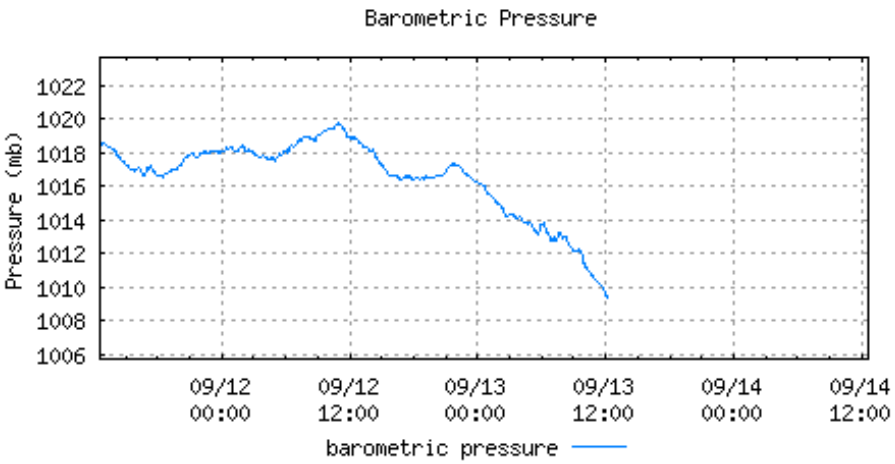
Last Observed Sample: 09/13/2018 12:12 (EDT)
Barometric Pressure: 1008.8 mb

NOAA/NOS/CO-OPS 8658120 Wilmington, NC



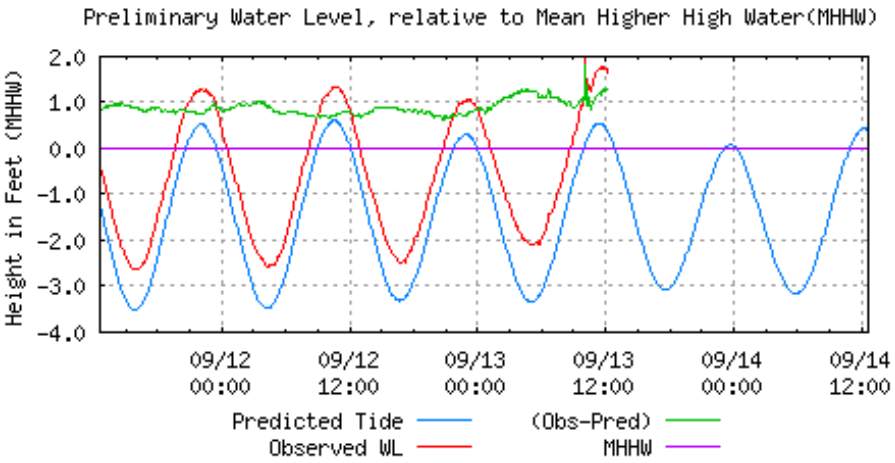
Last Observed Sample: 09/13/2018 12:12 (EDT). Data relative to MHHW
Observed: 0.11 ft. Predicted: -0.08 ft. Residual: 0.19 ft.
Historical Maximum Water Level: Oct 8 2016, 3.48 ft.
Next High Tide: 09/13/2018 13:24 (EDT), 0.29 ft.

NOAA/NOS/CO-OPS 8658120 Wilmington, NC



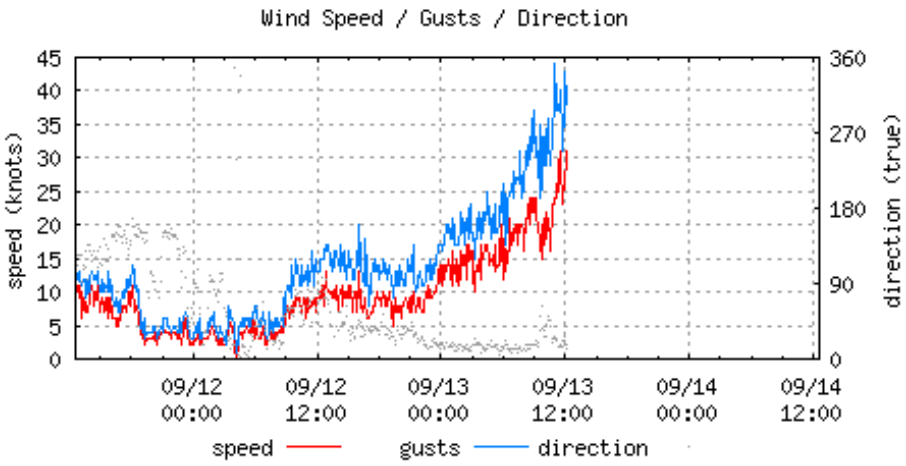
Last Observed Sample: 09/13/2018 12:12 (EDT)
Barometric Pressure: 1009.3 mb

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



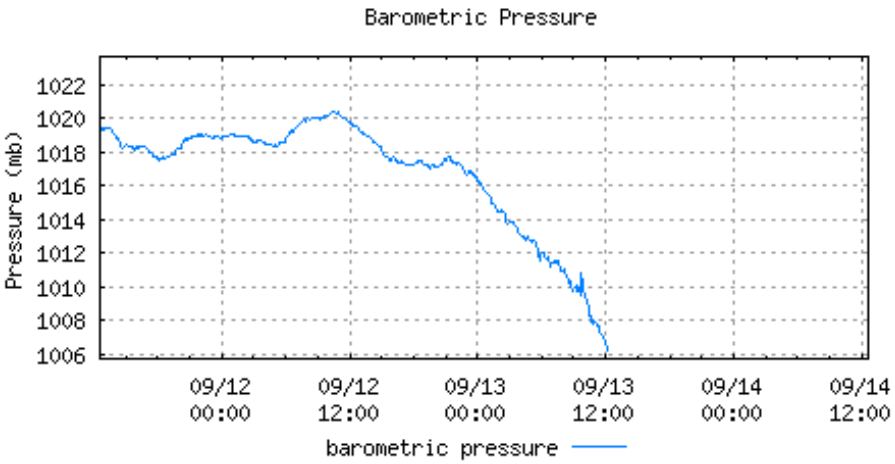
Last Observed Sample: 09/13/2018 12:12 (EDT). Data relative to MHHW
Observed: 1.64 ft. Predicted: 0.37 ft. Residual: 1.27 ft.
Historical Maximum Water Level: Sep 19 1955, 3.39 ft.
Next High Tide: 09/13/2018 23:42 (EDT), 0.08 ft.

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



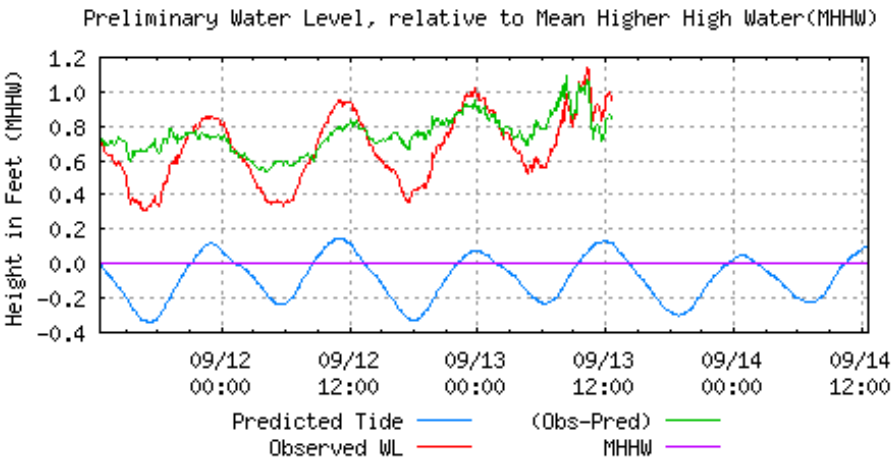
Last Observed Sample: 09/13/2018 12:12 (EDT)
Wind Speed: 31 knots Gusts: 38 knots Direction: 13° T

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



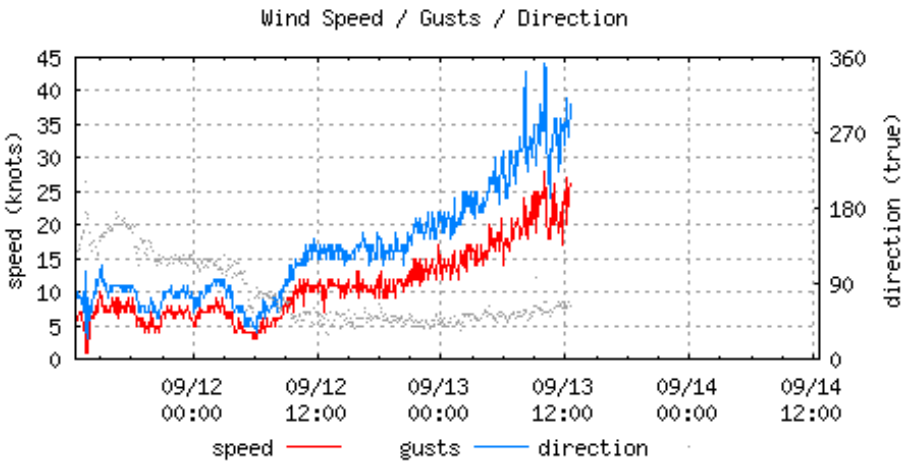
Last Observed Sample: 09/13/2018 12:12 (EDT)
Barometric Pressure: 1006.2 mb

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



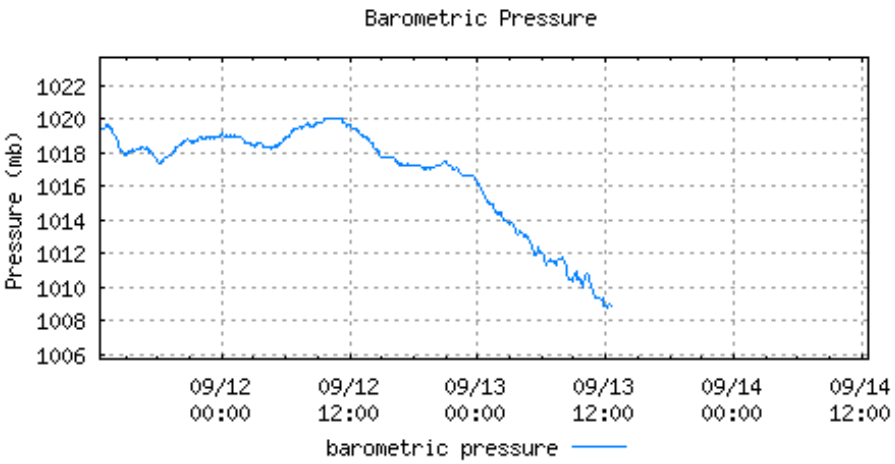
Last Observed Sample: 09/13/2018 12:30 (EDT). Data relative to MHHW
Observed: 0.96 ft. Predicted: 0.12 ft. Residual: 0.84 ft.
Historical Maximum Water Level: Oct 9 2016, 5.76 ft.
Next High Tide: 09/14/2018 00:47 (EDT), 0.05 ft.

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



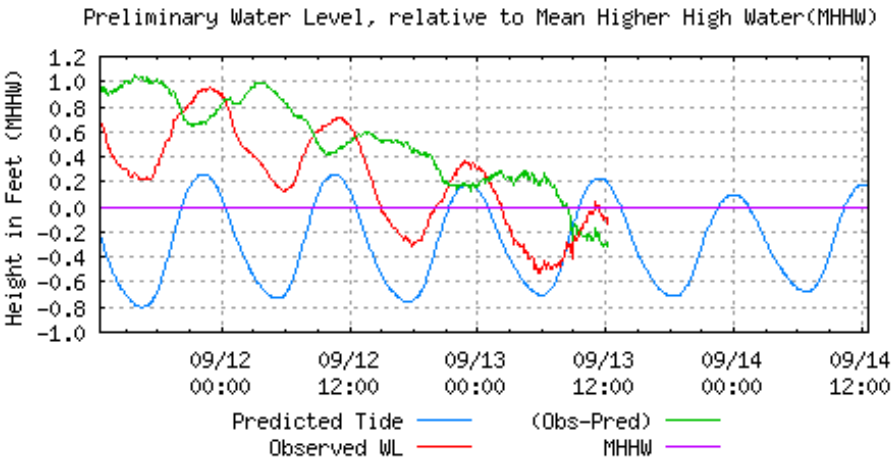
Last Observed Sample: 09/13/2018 12:30 (EDT)
Wind Speed: 26 knots Gusts: 38 knots Direction: 63° T

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



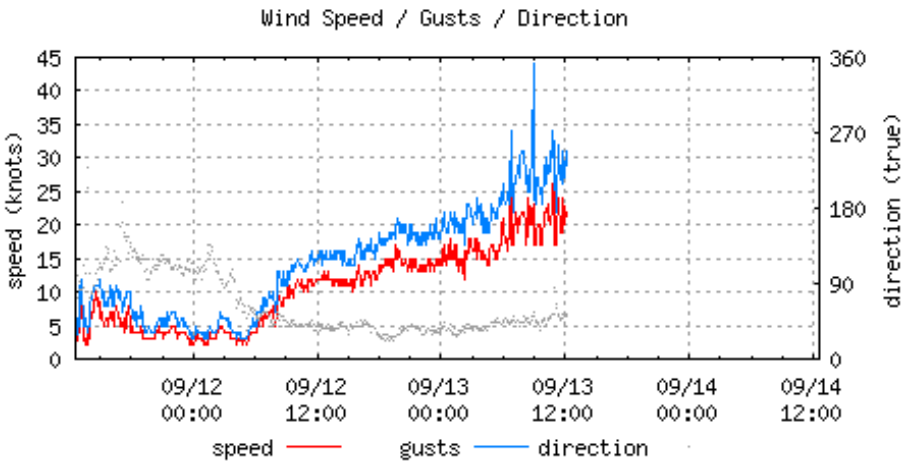
Last Observed Sample: 09/13/2018 12:30 (EDT)
Barometric Pressure: 1008.9 mb

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



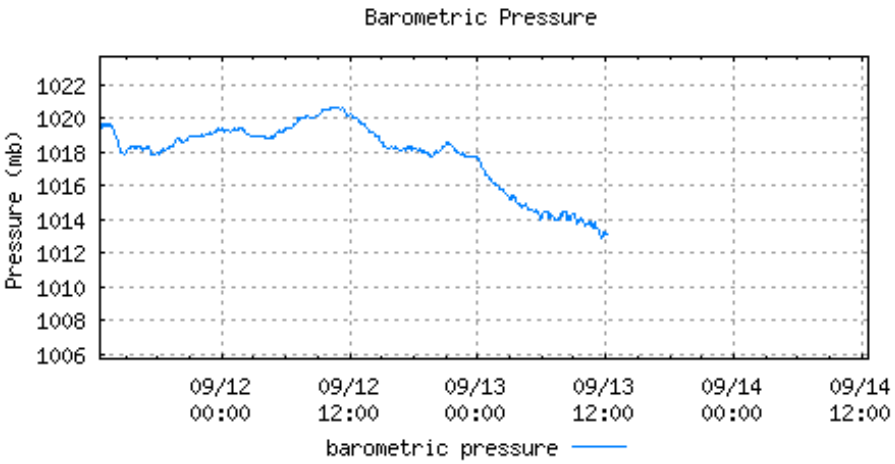
Last Observed Sample: 09/13/2018 12:24 (EDT). Data relative to MHHW
Observed: -0.12 ft. Predicted: 0.17 ft. Residual: -0.29 ft.
Historical Maximum Water Level: Aug 28 2011, 6.31 ft.
Next High Tide: 09/14/2018 00:00 (EDT), 0.10 ft.

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



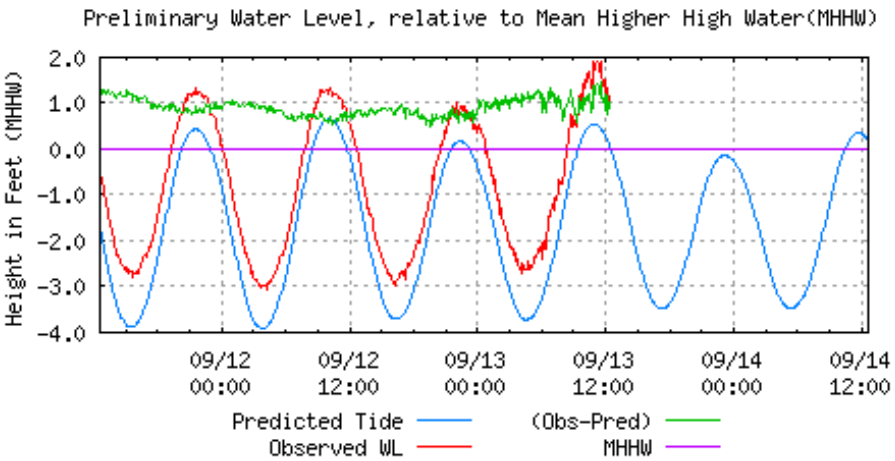
Last Observed Sample: 09/13/2018 12:24 (EDT)
Wind Speed: 23 knots Gusts: 30 knots Direction: 53° T

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



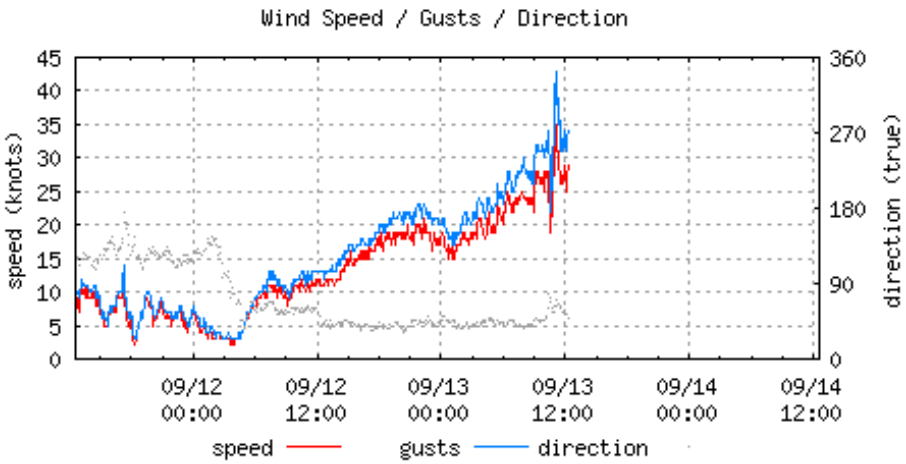
Last Observed Sample: 09/13/2018 12:24 (EDT)
Barometric Pressure: 1012.4 mb

NOAA/NOS/CO-OPS 8651370 Duck, NC



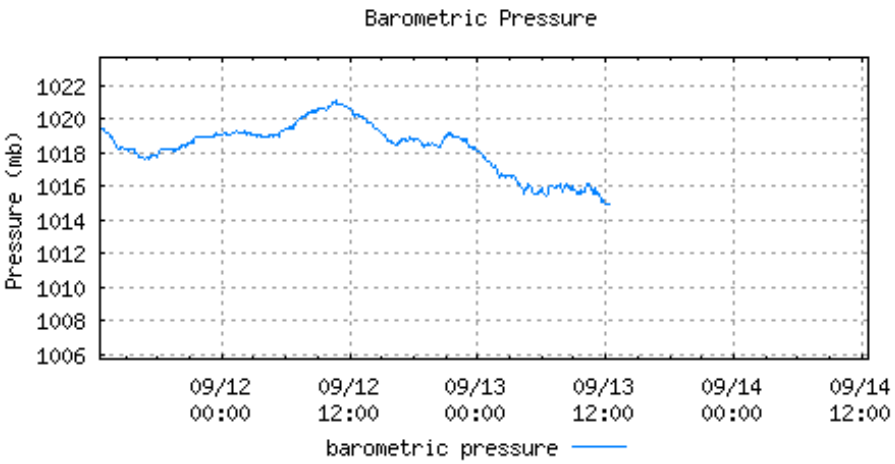
Last Observed Sample: 09/13/2018 12:18 (EDT). Data relative to MHHW
Observed: 0.99 ft. Predicted: 0.11 ft. Residual: 0.88 ft.
Historical Maximum Water Level: Sep 18 2003, 4.13 ft.
Next High Tide: 09/13/2018 23:08 (EDT), -0.13 ft.

NOAA/NOS/CO-OPS 8651370 Duck, NC



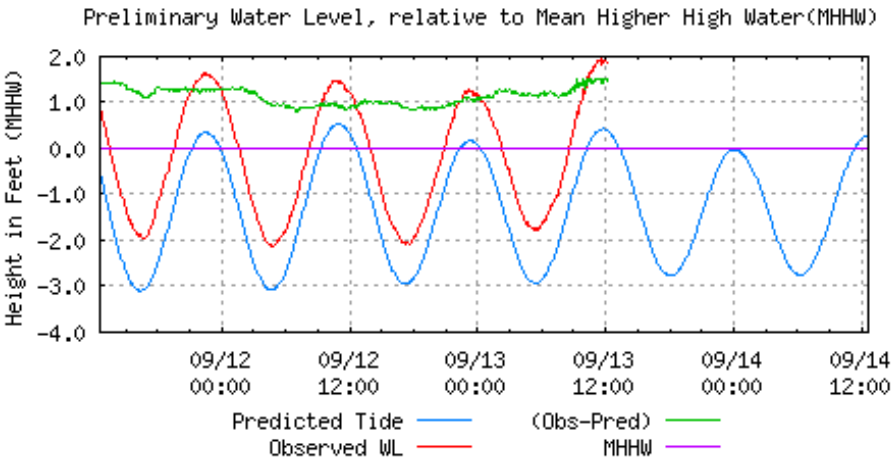
Last Observed Sample: 09/13/2018 12:18 (EDT)
Wind Speed: 29 knots Gusts: 34 knots Direction: 49° T

NOAA/NOS/CO-OPS 8651370 Duck, NC



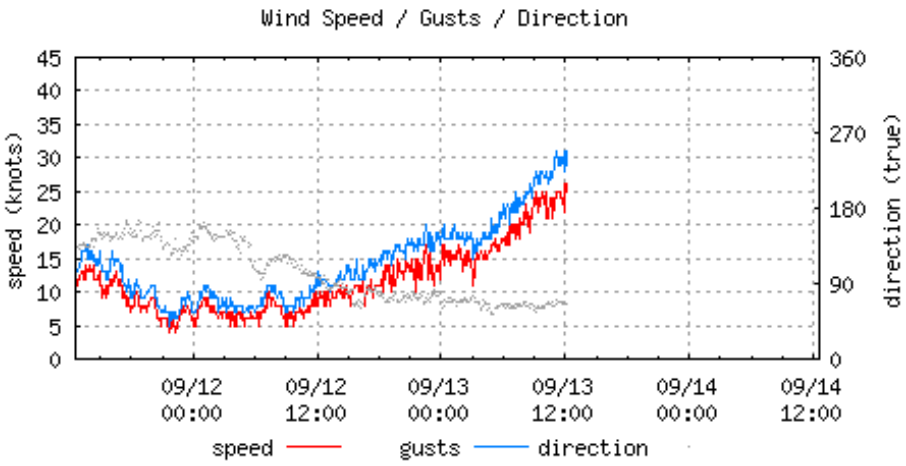
Last Observed Sample: 09/13/2018 12:18 (EDT)
Barometric Pressure: 1014.9 mb

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



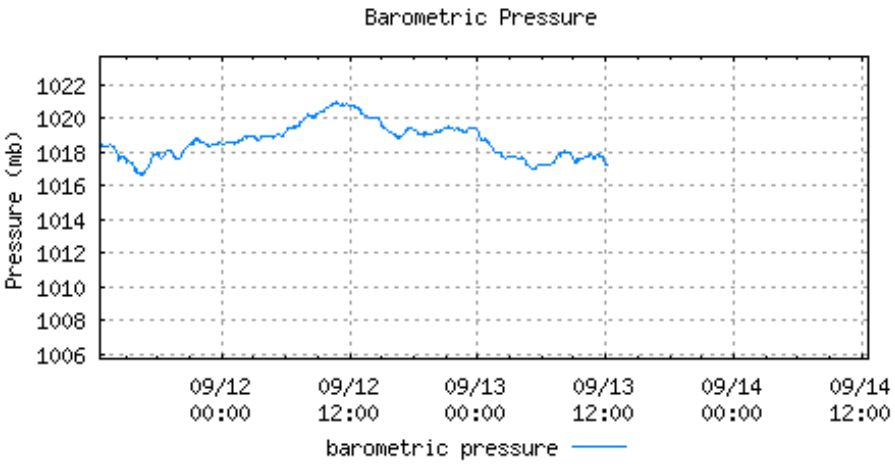
Last Observed Sample: 09/13/2018 12:24 (EDT). Data relative to MHHW
Observed: 1.87 ft. Predicted: 0.35 ft. Residual: 1.52 ft.
Historical Maximum Water Level: n/a
Next High Tide: 09/14/2018 00:04 (EDT), -0.03 ft.

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



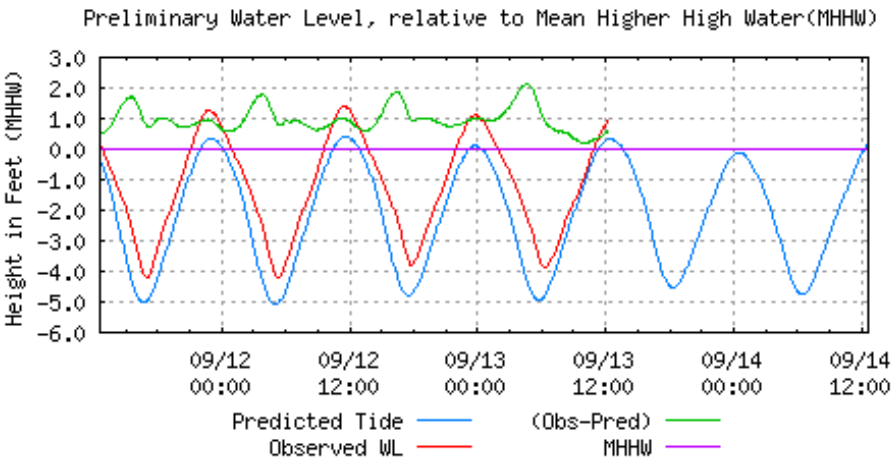
Last Observed Sample: 09/13/2018 12:24 (EDT)
Wind Speed: 27 knots Gusts: 29 knots Direction: 64° T

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



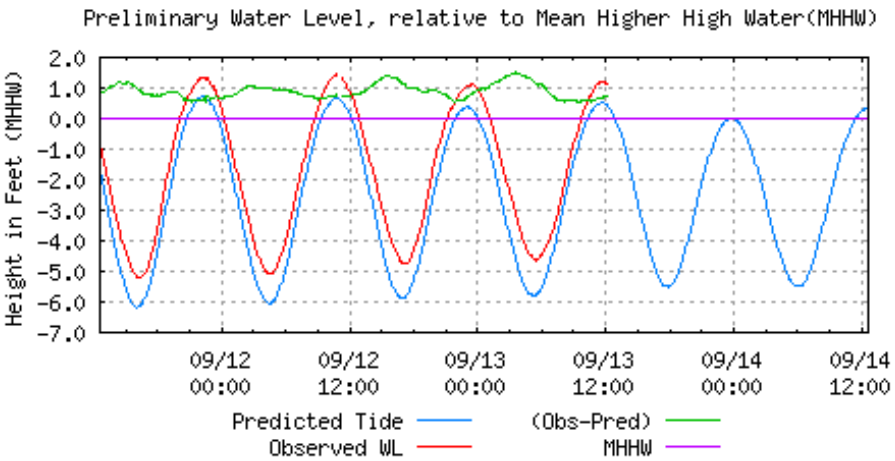
Last Observed Sample: 09/13/2018 12:24 (EDT)
Barometric Pressure: 1017.0 mb

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



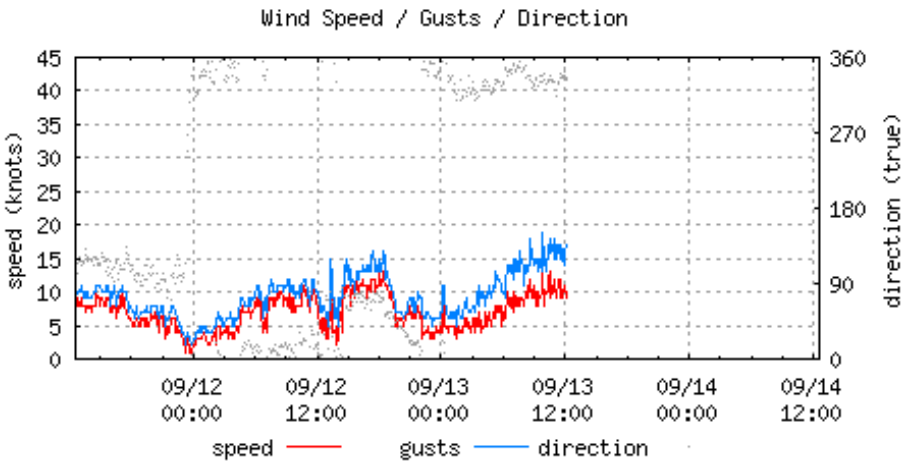
Last Observed Sample: 09/13/2018 12:12 (EDT). Data relative to MHHW
Observed: 0.92 ft. Predicted: 0.32 ft. Residual: 0.60 ft.
Historical Maximum Water Level: Oct 8 2016, 4.64 ft.
Next High Tide: 09/13/2018 12:24 (EDT), 0.34 ft.

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



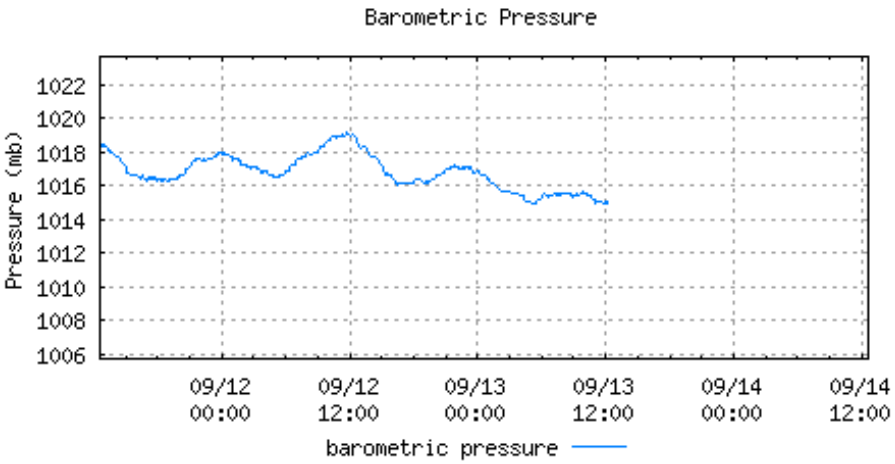
Last Observed Sample: 09/13/2018 12:12 (EDT). Data relative to MHHW
Observed: 1.16 ft. Predicted: 0.41 ft. Residual: 0.75 ft.
Historical Maximum Water Level: Sep 21 1989, 6.76 ft.
Next High Tide: 09/13/2018 23:47 (EDT), 0.01 ft.

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



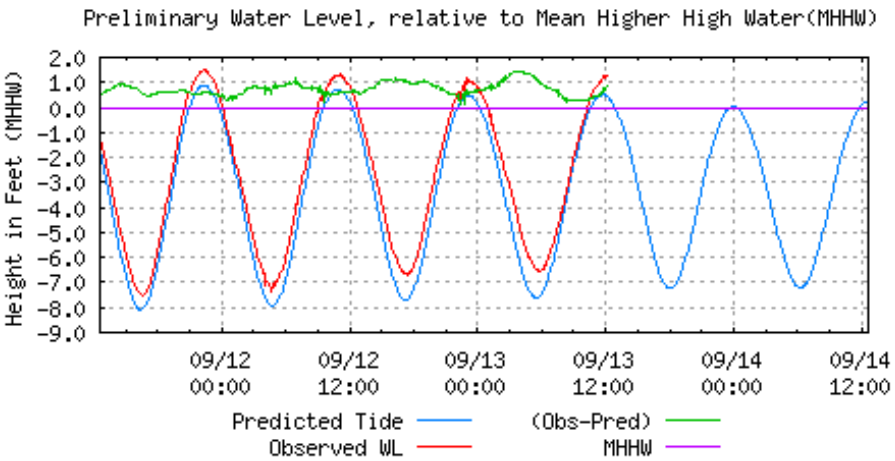
Last Observed Sample: 09/13/2018 12:12 (EDT)
Wind Speed: 10 knots Gusts: 17 knots Direction: 335° T

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



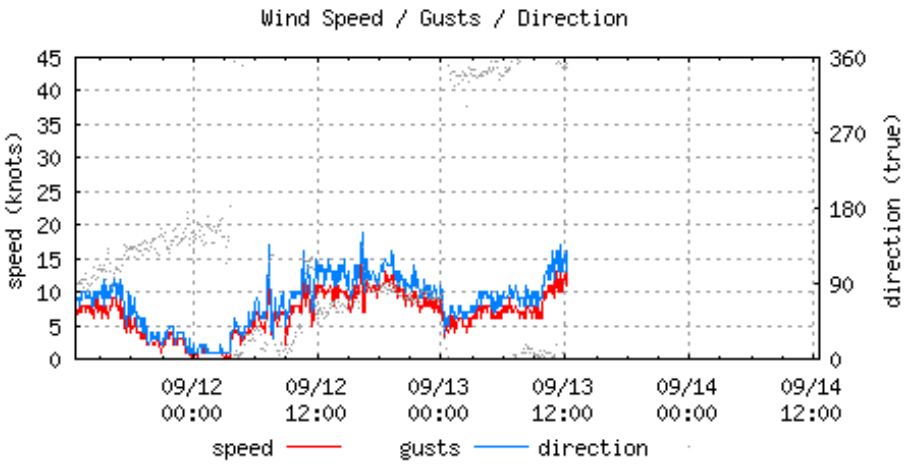
Last Observed Sample: 09/13/2018 12:12 (EDT)
Barometric Pressure: 1015.1 mb

NOAA/NOS/CO-OPS 8670870 Fort Pulaski, GA



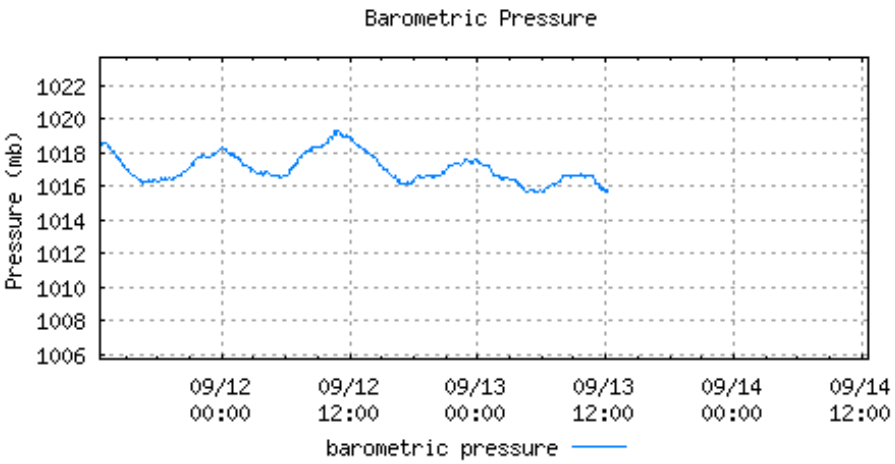
Last Observed Sample: 09/13/2018 12:12 (EDT). Data relative to MHHW
Observed: 1.26 ft. Predicted: 0.42 ft. Residual: 0.84 ft.
Historical Maximum Water Level: Oct 8 2016, 4.94 ft.
Next High Tide: 09/13/2018 23:57 (EDT), 0.02 ft.

NOAA/NOS/CO-OPS 8670870 Fort Pulaski, GA



Last Observed Sample: 09/13/2018 12:12 (EDT)
Wind Speed: 11 knots Gusts: 13 knots Direction: 352° T

NOAA/NOS/CO-OPS 8670870 Fort Pulaski, GA



Last Observed Sample: 09/13/2018 12:12 (EDT)

Barometric Pressure: 1015.8 mb

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
8661070	Springmaid Pier, SC	09/13/2018 12:12 (EDT)	0.79 ft	0.13 ft	0.66 ft	1.06 ft
8658163	Wrightsville Beach, NC	09/13/2018 12:12 (EDT)	1.86 ft	0.18 ft	1.68 ft	2.61 ft
8658120	Wilmington, NC	09/13/2018 12:12 (EDT)	0.11 ft	-0.08 ft	0.19 ft	1.19 ft
8656483	Beaufort, Duke Marine Lab, NC	09/13/2018 12:12 (EDT)	1.64 ft	0.37 ft	1.27 ft	1.96 ft
8654467	USCG Station Hatteras, NC	09/13/2018 12:30 (EDT)	0.96 ft	0.12 ft	0.84 ft	1.14 ft
8652587	Oregon Inlet Marina, NC	09/13/2018 12:24 (EDT)	-0.12 ft	0.17 ft	-0.29 ft	0.59 ft
8651370	Duck, NC	09/13/2018 12:18 (EDT)	0.99 ft	0.11 ft	0.88 ft	1.93 ft
8638901	CBBT, Chesapeake Channel, VA	09/13/2018 12:24 (EDT)	1.87 ft	0.35 ft	1.52 ft	1.95 ft
8662245	Oyster Landing (N Inlet Estuary), SC	09/13/2018 12:12 (EDT)	0.92 ft	0.32 ft	0.60 ft	1.15 ft
8665530	Charleston, Cooper River Entrance, SC	09/13/2018 12:12 (EDT)	1.16 ft	0.41 ft	0.75 ft	1.21 ft
8670870	Fort Pulaski, GA	09/13/2018 12:12 (EDT)	1.26 ft	0.42 ft	0.84 ft	1.28 ft

Center for Operational Oceanographic Products & Services (CO-OPS) | National Ocean Service (NOS)
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