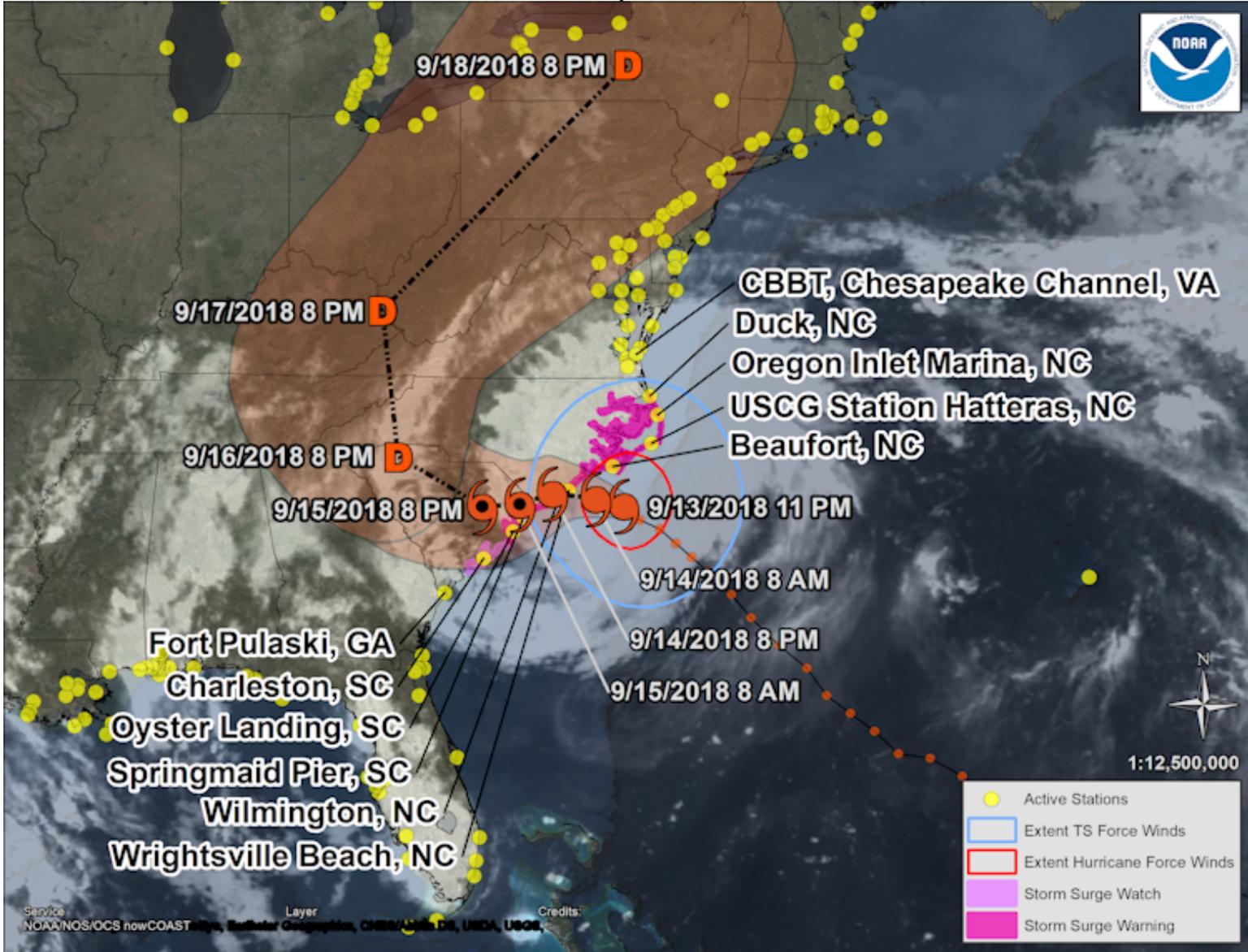




Hurricane Florence QuickLook
 Posted: 00:00 EDT 09/14/2018

NOAA and NOAA Partnership Stations Relative to the Storm



Storm Analysis

As of 09/14/2018 00:00 EDT, Hurricane Florence continues to affect the Southeast and lower Mid-Atlantic, especially along the North Carolina Coastline. The highest water levels are being observed from Wrightsville Beach, NC to the entrance of Chesapeake Bay, where water levels are 1.5 to 3 feet above normal tide levels. Within Pamlico Sound (USCG Station Hatteras and Oregon Inlet Marina) and upper Cape Fear River (Wilmington), water levels are below normal tide levels by up to 1.5 feet due to blowout tides. Water levels at coastal South Carolina and Georgia

stations are at or near normal tide levels.

Winds range from 20 to 40 knots from Virginia to North Carolina, with gusts up to 60 knots being observed at Beaufort, NC. Winds will continue to increase as Florence moves closer to the coast through the night. Barometric pressure continues to drop across the region, with the most rapid drop from Beaufort to Wrightsville Beach, NC.

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: CMF

Select National Hurricane Center Advisory:

Hurricane Florence Advisory Number 59
NWS National Hurricane Center Miami FL AL062018
1100 PM EDT Thu Sep 13 2018

...LIFE-THREATENING STORM SURGE AND HURRICANE-FORCE WINDS OCCURRING ALONG THE NORTH CAROLINA COAST...
...THREAT OF FRESHWATER FLOODING WILL INCREASE OVER THE NEXT SEVERAL DAYS...

WATCHES AND WARNINGS

CHANGES WITH THIS ADVISORY:

The Storm Surge Watch has been discontinued north of Duck North Carolina.

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

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
- * Edisto Beach South Carolina to South Santee River South Carolina

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.

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 24 hours.

A Hurricane Watch means that hurricane conditions are possible within the watch area.

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 PM EDT (0300 UTC), the center of the eye of Hurricane Florence was located by NOAA Doppler radar and an Air Force Reserve Hurricane Hunter aircraft near latitude 34.0 North, longitude 76.8 West. Florence is moving toward the northwest near 6 mph (9 km/h). A turn toward the west-northwest and west at a slow forward speed is expected through Friday, followed by a slow west-southwestward motion Friday night and Saturday. On the forecast track, the center of Florence is expected to move inland across extreme southeastern North Carolina and extreme eastern South Carolina Friday and Saturday. Florence will then recurve across the western Carolinas and the central Appalachian Mountains early next week.

Data from the Hurricane Hunter aircraft, coastal surface observations, and NOAA Doppler radar indicate that maximum sustained winds are near 90 mph (150 km/h) with higher gusts. Little change in strength is expected before Florence moves inland on Friday. More significant weakening is expected over the weekend and into early next week while Florence moves farther inland.

Hurricane-force winds extend outward up to 80 miles (130 km) from the center, and tropical-storm-force winds extend outward up to 195 miles (315 km). A Weatherflow station at Fort Macon, North Carolina recently reported a sustained wind of 77 mph (124 km/h) with a gust to 100 mph (161 km/h).

A storm surge of 10 feet above normal levels was reported by the National Weather Service office in Morehead City, North Carolina, at the Cherry Branch Ferry Terminal on the Neuse River, courtesy of the North Carolina Department of Transportation.

The minimum central pressure reported by the aircraft is 956 mb (28.23 inches).

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...

Cape Fear NC to Cape Lookout NC...7-11 ft, with locally higher amounts in the Neuse, Pamlico, Pungo, and Bay Rivers

Cape Lookout NC to Ocracoke Inlet NC...6-9 ft

South Santee River SC to Cape Fear NC...4-6 ft

Ocracoke Inlet NC to Salvo NC...4-6 ft

Salvo NC to Duck NC...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 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...

Southeastern 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 15 inches. This rainfall will produce life-threatening flash flooding.

WIND: Hurricane conditions are occurring over portions of the coast of North Carolina and are expected to spread across portions of southeastern North Carolina and eastern South Carolina through Friday. Tropical storm conditions are expected to spread inland across the remainder of the warning area through Saturday.

TORNADOES: A few tornadoes are possible in eastern and southeastern 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 AM EDT.

Next complete advisory at 500 AM EDT.

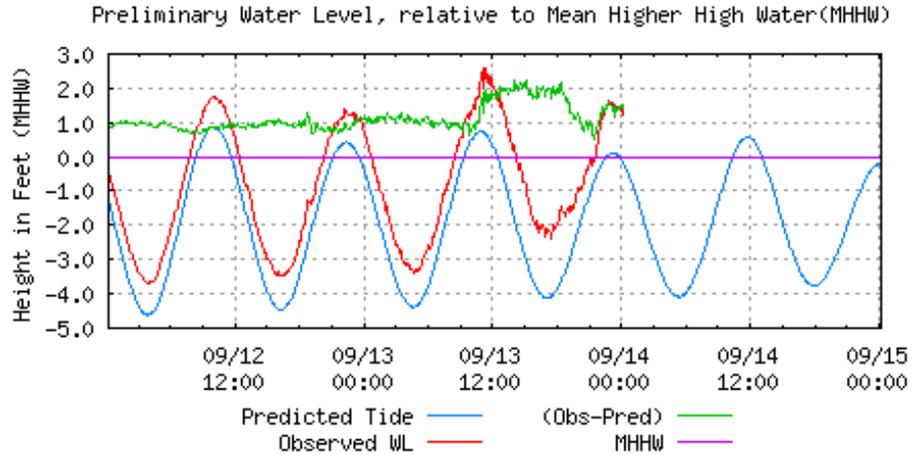
Forecaster Berg

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: [Wrightsville Beach - Water Level](#), [Wrightsville Beach - Winds](#), [Wrightsville Beach - Barometric](#), [Beaufort, Duke Marine Lab - Water Level](#), [Beaufort, Duke Marine Lab - Winds](#), [Beaufort, Duke Marine Lab - Barometric](#),

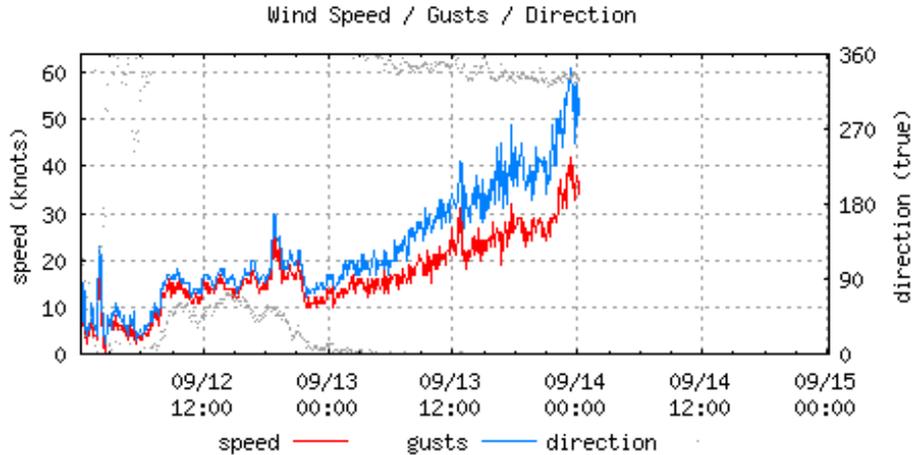
Duck - Water Level, Duck - Winds, Duck - Barometric, CBBT, Chesapeake Channel - Water Level, CBBT, Chesapeake Channel - Winds, CBBT, Chesapeake Channel - Barometric, Wilmington - Water Level, Wilmington - Barometric, USCG Station Hatteras - Water Level, USCG Station Hatteras - Winds, USCG Station Hatteras - Barometric, Oregon Inlet Marina - Water Level, Oregon Inlet Marina - Winds, Oregon Inlet Marina - Barometric, Springmaid Pier - Water Level, Springmaid Pier - 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 8658163 Wrightsville Beach, NC



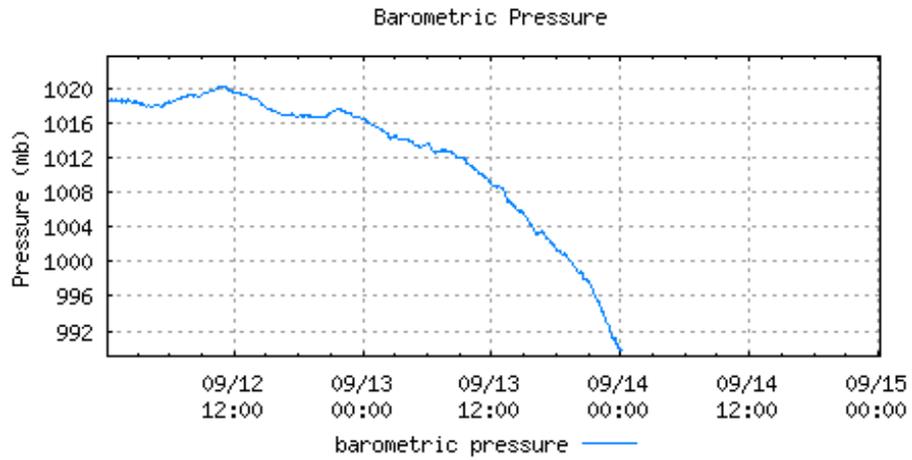
Last Observed Sample: 09/14/2018 00:12 (EDT). Data relative to MHHW
Observed: 1.23 ft. Predicted: -0.19 ft. Residual: 1.42 ft.
Historical Maximum Water Level: Oct 4 2015, 2.97 ft.
Next High Tide: 09/14/2018 11:46 (EDT), 0.58 ft.

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



Last Observed Sample: 09/14/2018 00:12 (EDT)
Wind Speed: 34 knots Gusts: 51 knots Direction: 331° T

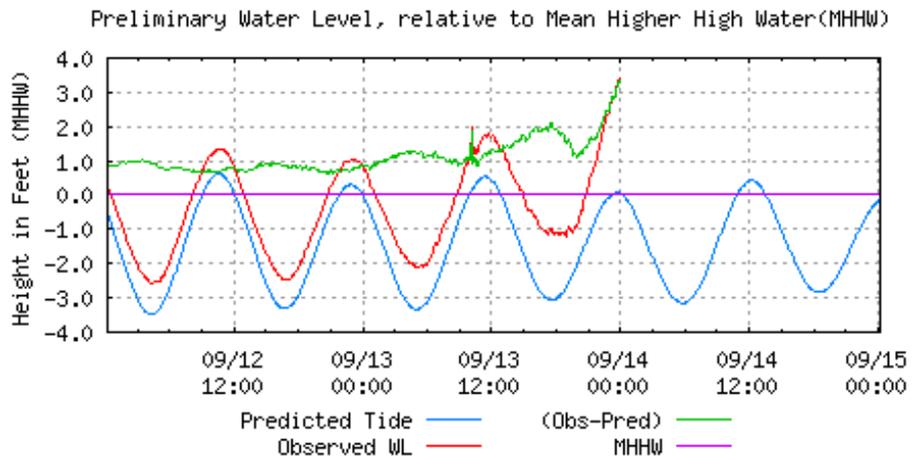
NOAA/NOS/CO-OPS 8658163 Wrightsville Beach, NC



Last Observed Sample: 09/14/2018 00:12 (EDT)

Barometric Pressure: 989.7 mb

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



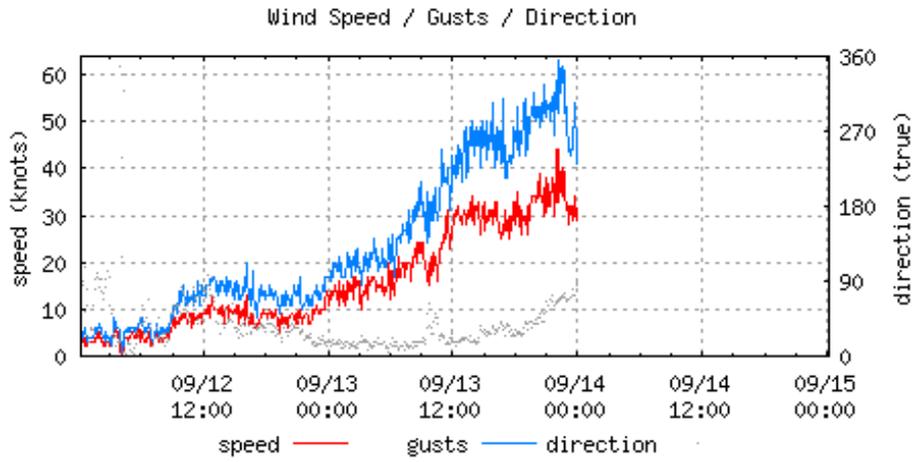
Last Observed Sample: 09/14/2018 00:00 (EDT). Data relative to MHHW

Observed: 3.40 ft. Predicted: 0.05 ft. Residual: 3.35 ft.

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

Next High Tide: 09/14/2018 12:14 (EDT), 0.44 ft.

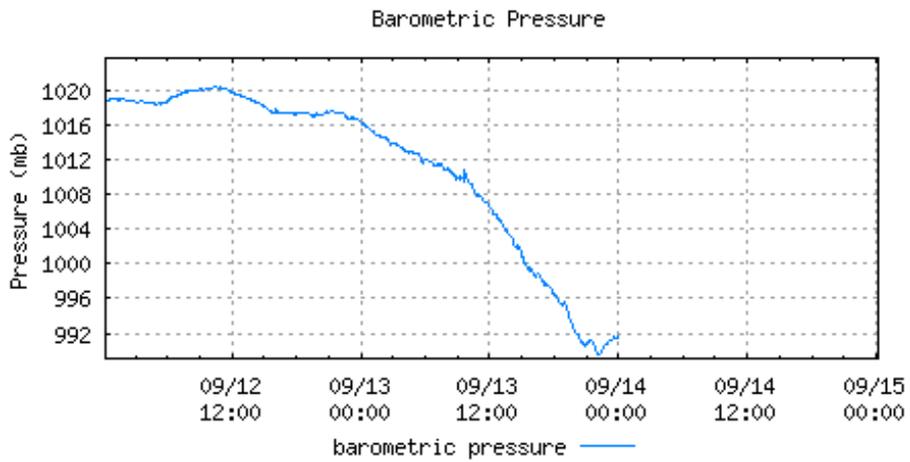
NOAA/NOS/CO-OPS 8656483 Beaufort, Duke Marine Lab, NC



Last Observed Sample: 09/14/2018 00:00 (EDT)

Wind Speed: 29 knots Gusts: 41 knots Direction: 88° T

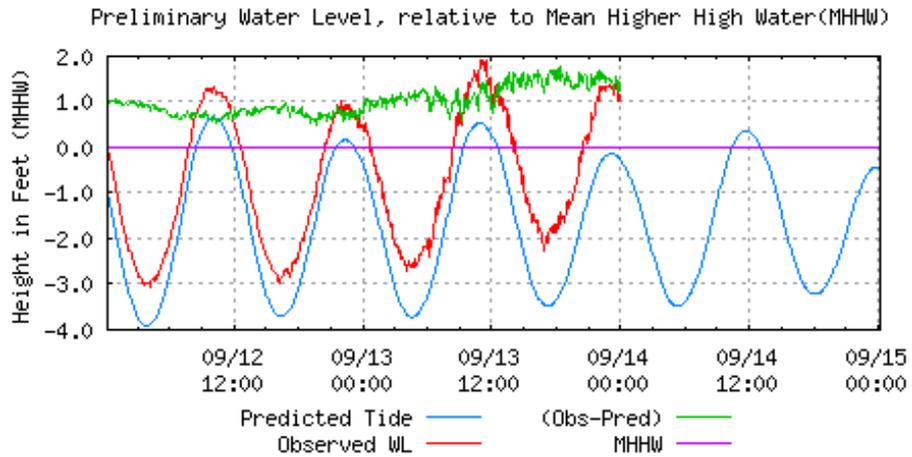
NOAA/NOS/CO-OPS 8656483 Beaufort, Duke Marine Lab, NC



Last Observed Sample: 09/14/2018 00:00 (EDT)

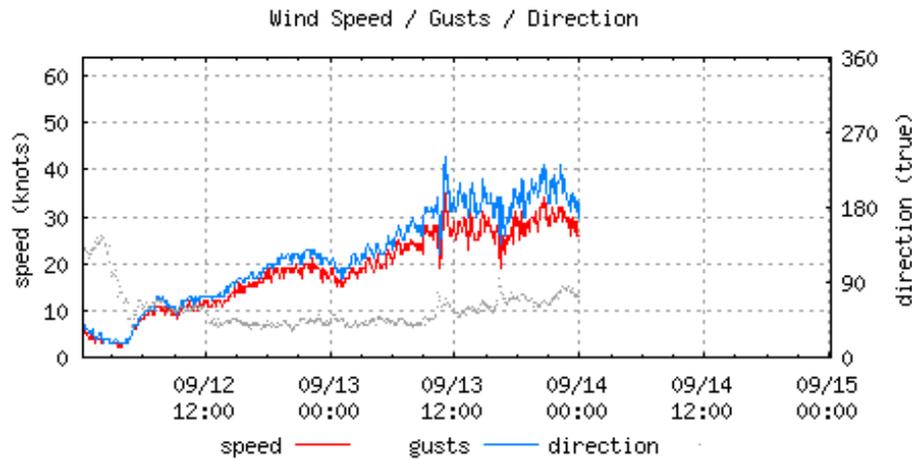
Barometric Pressure: 991.6 mb

NOAA/NOS/CO-OPS 8651370 Duck, NC



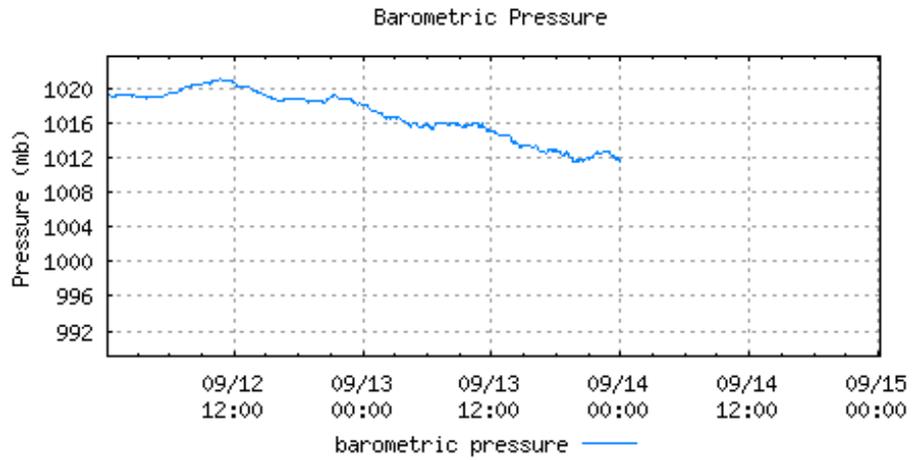
Last Observed Sample: 09/14/2018 00:06 (EDT). Data relative to MHHW
Observed: 1.07 ft. Predicted: -0.31 ft. Residual: 1.38 ft.
 Historical Maximum Water Level: Sep 18 2003, 4.13 ft.
 Next High Tide: 09/14/2018 11:42 (EDT), 0.36 ft.

NOAA/NOS/CO-OPS 8651370 Duck, NC



Last Observed Sample: 09/14/2018 00:06 (EDT)
Wind Speed: 29 knots Gusts: 35 knots Direction: 80° T

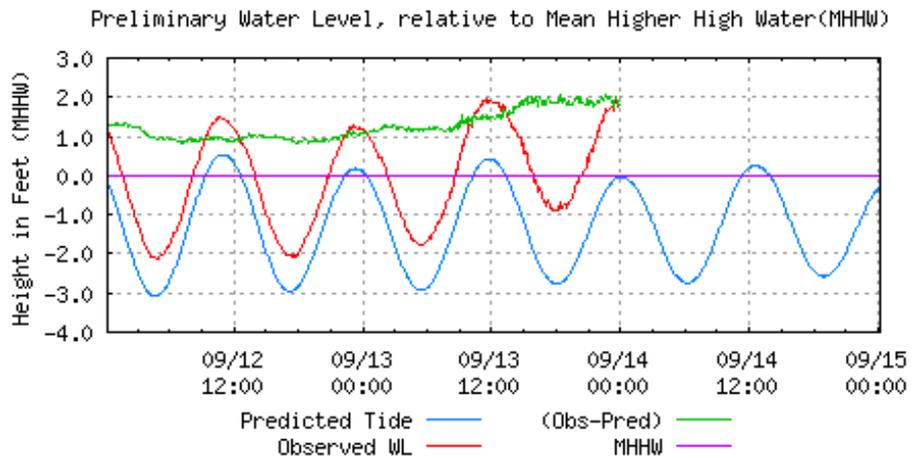
NOAA/NOS/CO-OPS 8651370 Duck, NC



Last Observed Sample: 09/14/2018 00:06 (EDT)

Barometric Pressure: 1011.7 mb

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



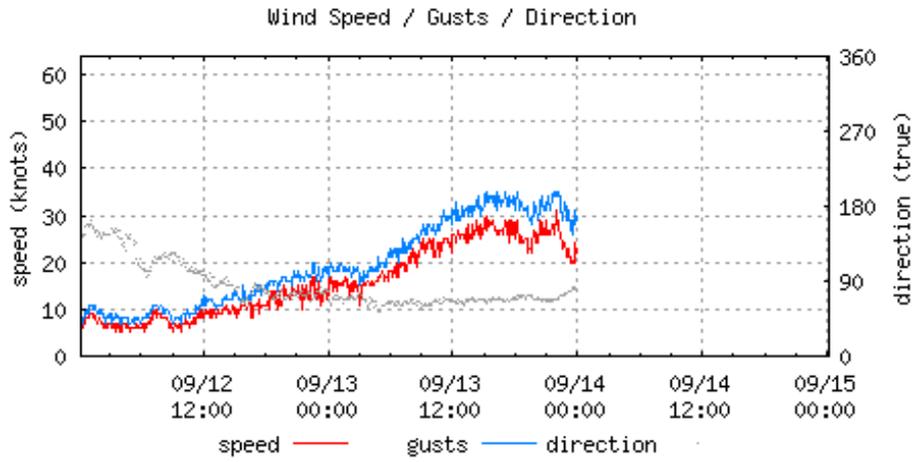
Last Observed Sample: 09/14/2018 00:00 (EDT). Data relative to MHHW

Observed: 1.85 ft. Predicted: -0.03 ft. Residual: 1.88 ft.

Historical Maximum Water Level: n/a

Next High Tide: 09/14/2018 00:04 (EDT), -0.03 ft.

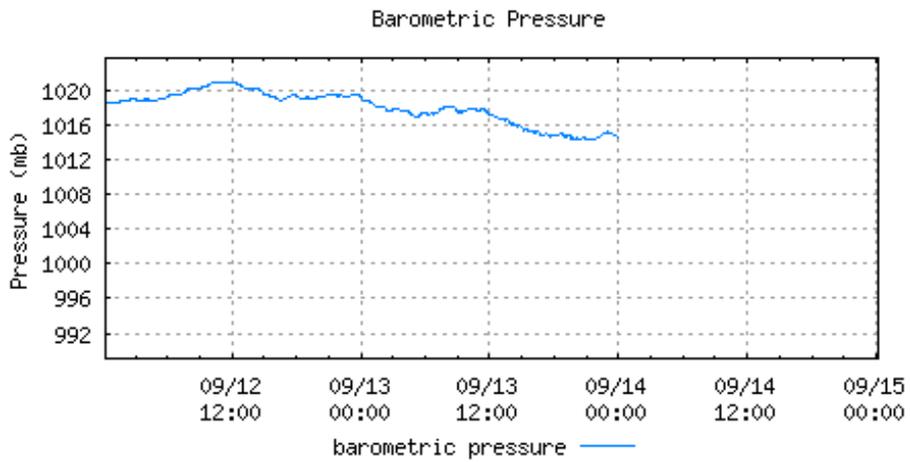
NOAA/NOS/CO-OPS 8638901 CBBT, Chesapeake Channel, VA



Last Observed Sample: 09/14/2018 00:00 (EDT)

Wind Speed: 22 knots Gusts: 29 knots Direction: 76° T

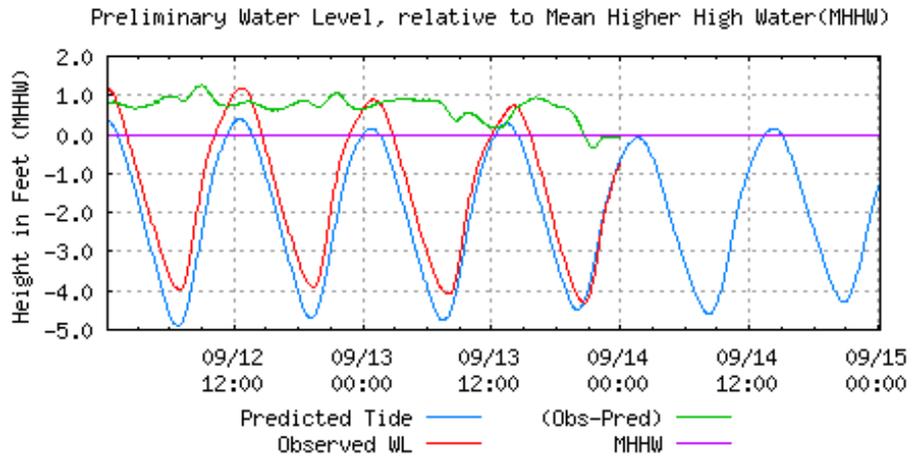
NOAA/NOS/CO-OPS 8638901 CBBT, Chesapeake Channel, VA



Last Observed Sample: 09/14/2018 00:00 (EDT)

Barometric Pressure: 1014.3 mb

NOAA/NOS/CO-OPS 8658120 Wilmington, NC



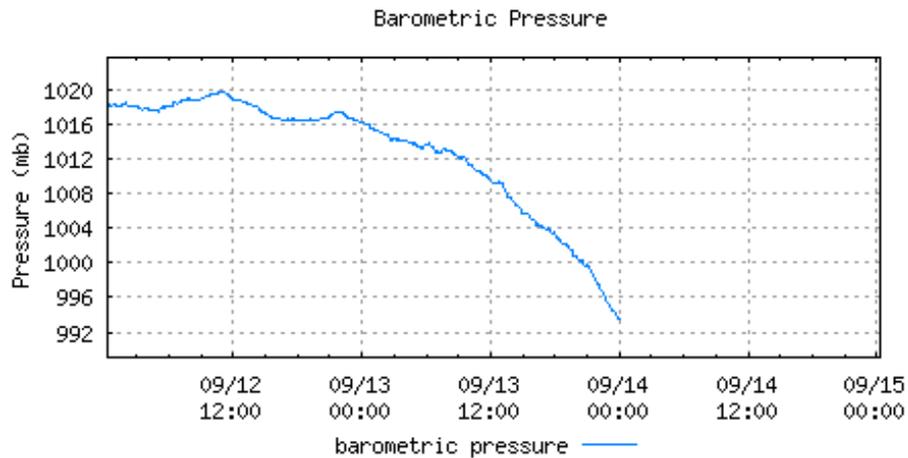
Last Observed Sample: 09/14/2018 00:00 (EDT). Data relative to MHHW

Observed: -0.75 ft. Predicted: -0.65 ft. Residual: -0.10 ft.

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

Next High Tide: 09/14/2018 01:38 (EDT), -0.08 ft.

NOAA/NOS/CO-OPS 8658120 Wilmington, NC

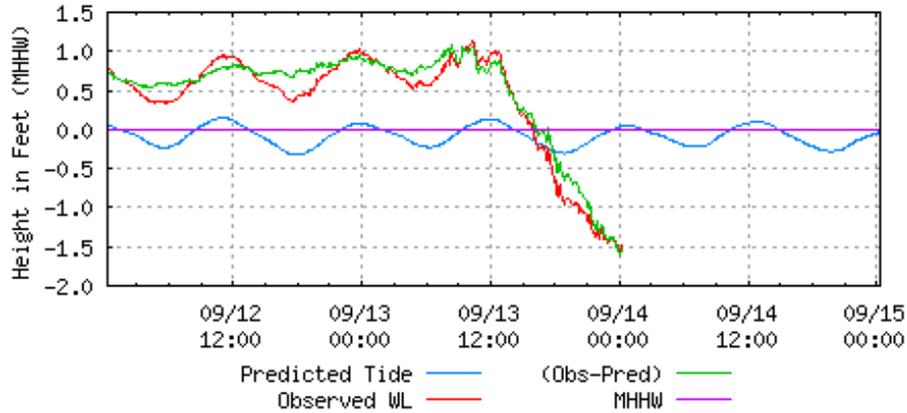


Last Observed Sample: 09/14/2018 00:00 (EDT)

Barometric Pressure: 993.6 mb

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

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



Last Observed Sample: 09/14/2018 00:12 (EDT). Data relative to MHHW

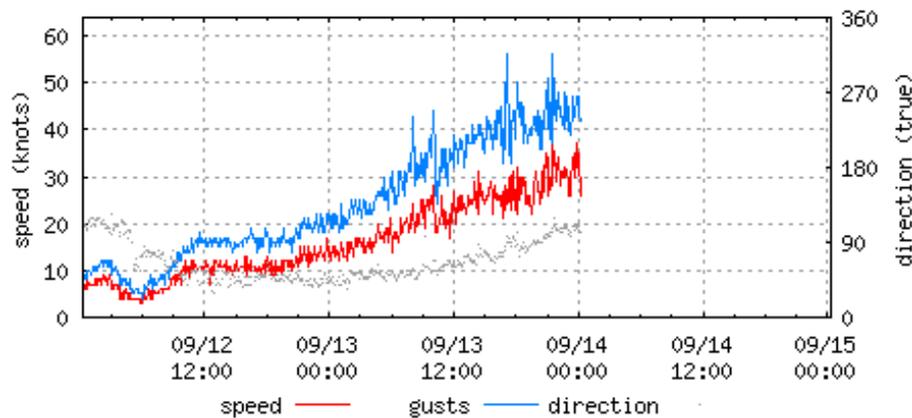
Observed: -1.49 ft. Predicted: 0.04 ft. Residual: -1.53 ft.

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

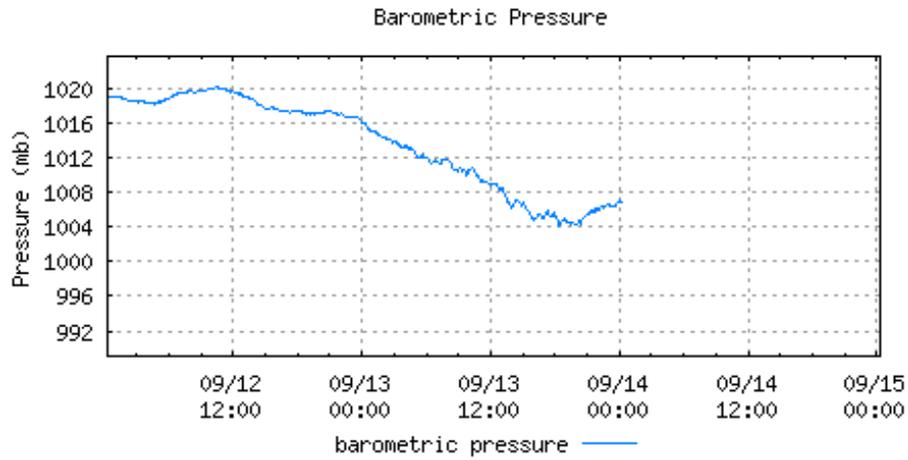
Wind Speed / Gusts / Direction



Last Observed Sample: 09/14/2018 00:12 (EDT)

Wind Speed: 26 knots Gusts: 42 knots Direction: 102° T

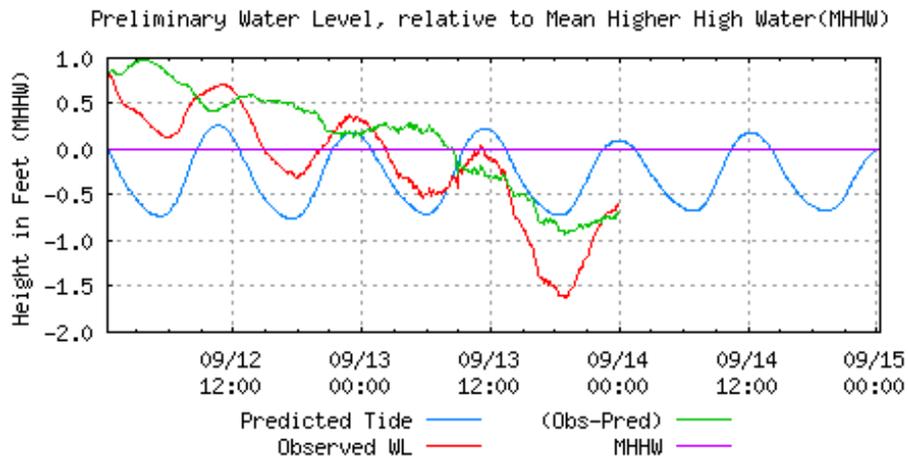
NOAA/NOS/CO-OPS 8654467 USCG Station Hatteras, NC



Last Observed Sample: 09/14/2018 00:12 (EDT)

Barometric Pressure: 1006.9 mb

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



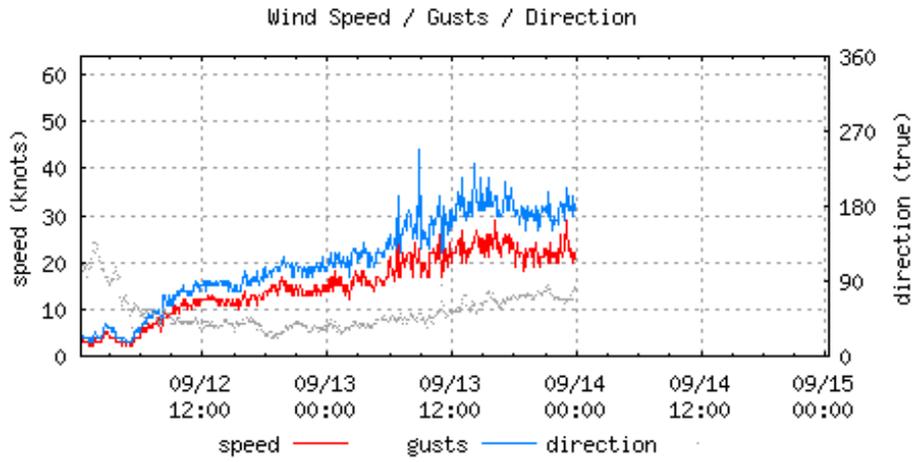
Last Observed Sample: 09/14/2018 00:00 (EDT). Data relative to MHHW

Observed: -0.59 ft. Predicted: 0.10 ft. Residual: -0.69 ft.

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

Next High Tide: 09/14/2018 00:00 (EDT), 0.10 ft.

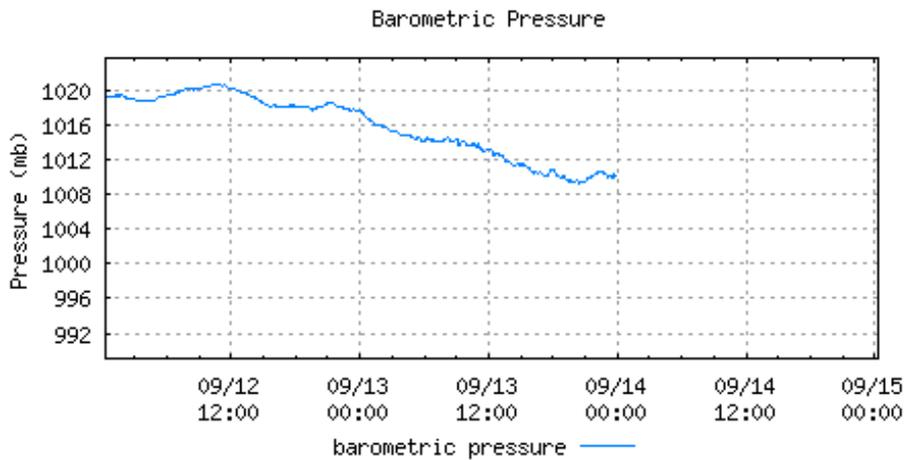
NOAA/NOS/CO-OPS 8652587 Oregon Inlet Marina, NC



Last Observed Sample: 09/14/2018 00:00 (EDT)

Wind Speed: 19 knots Gusts: 28 knots Direction: 79° T

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

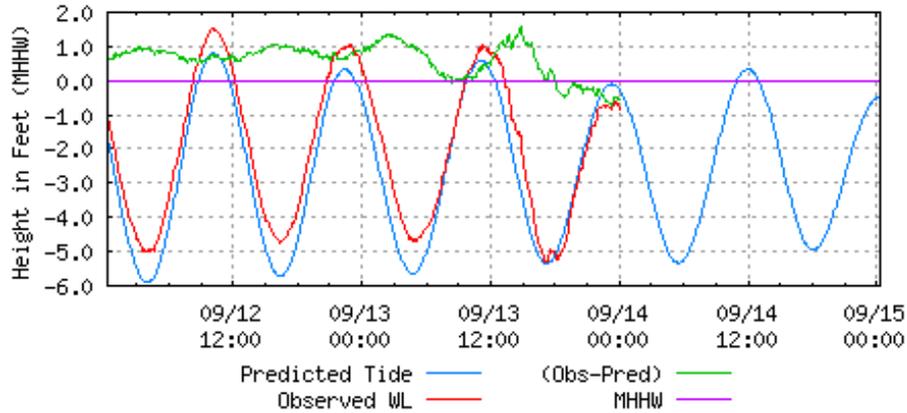


Last Observed Sample: 09/14/2018 00:00 (EDT)

Barometric Pressure: 1010.2 mb

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

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



Last Observed Sample: 09/14/2018 00:00 (EDT). Data relative to MHHW

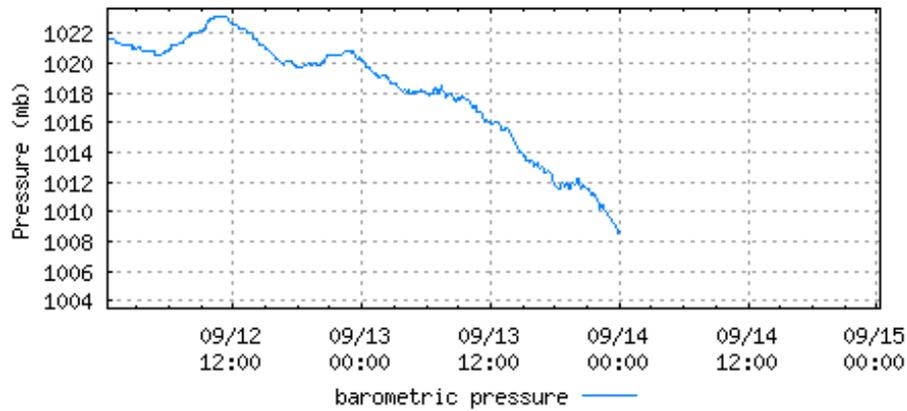
Observed: -0.83 ft. Predicted: -0.27 ft. Residual: -0.56 ft.

Historical Maximum Water Level: Sep 21 1989, 8.77 ft.

Next High Tide: 09/14/2018 11:59 (EDT), 0.33 ft.

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

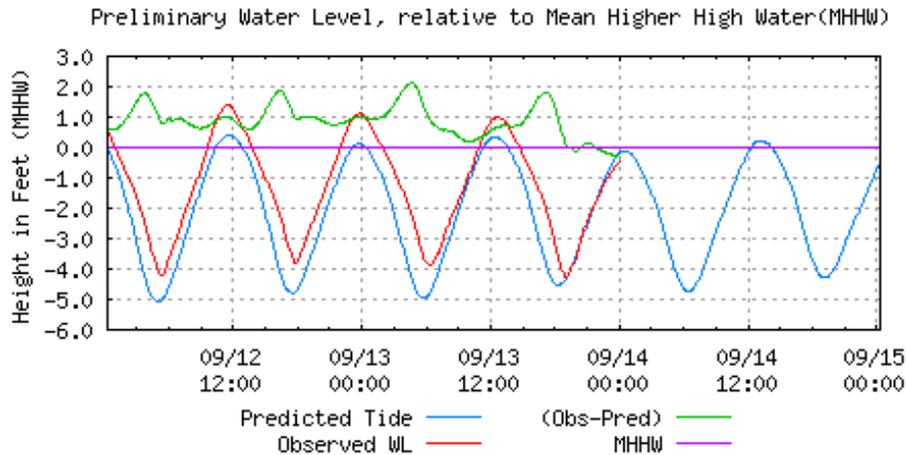
Barometric Pressure



Last Observed Sample: 09/14/2018 00:00 (EDT)

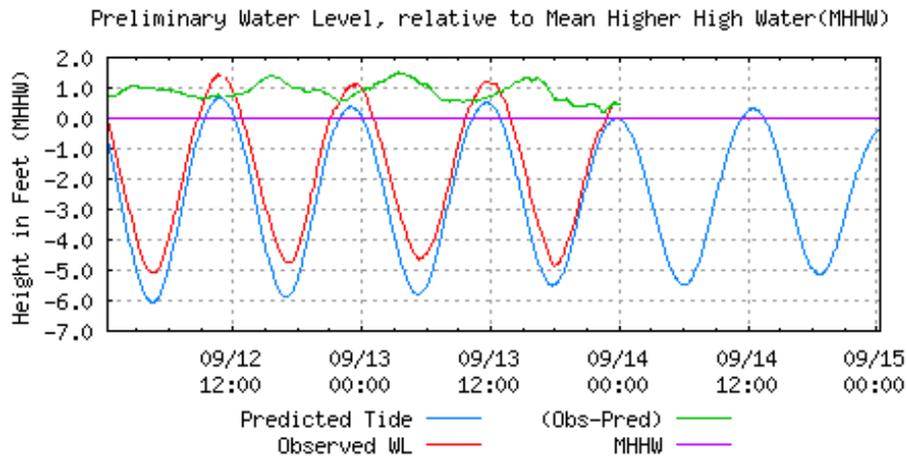
Barometric Pressure: 1008.7 mb

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



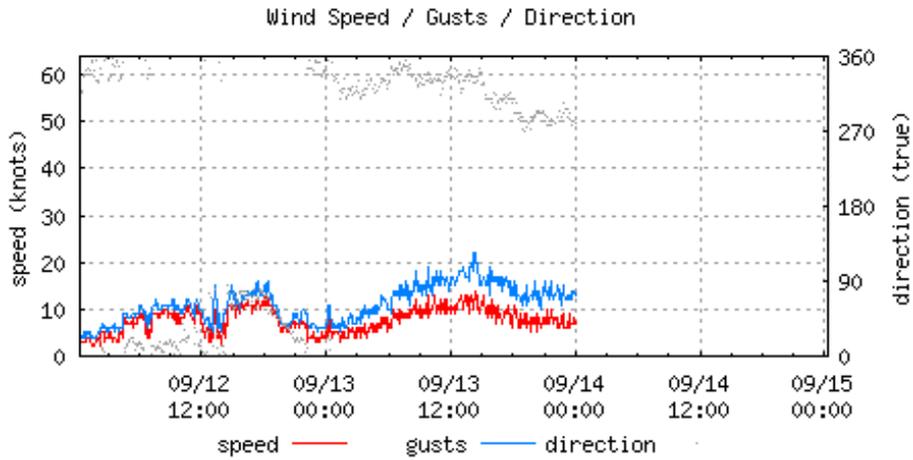
Last Observed Sample: 09/14/2018 00:00 (EDT). Data relative to MHHW
Observed: -0.50 ft. Predicted: -0.19 ft. Residual: -0.31 ft.
 Historical Maximum Water Level: Oct 8 2016, 4.64 ft.
 Next High Tide: 09/14/2018 00:29 (EDT), -0.11 ft.

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



Last Observed Sample: 09/14/2018 00:00 (EDT). Data relative to MHHW
Observed: 0.46 ft. Predicted: -0.00 ft. Residual: 0.46 ft.
 Historical Maximum Water Level: Sep 21 1989, 6.76 ft.
 Next High Tide: 09/14/2018 12:28 (EDT), 0.31 ft.

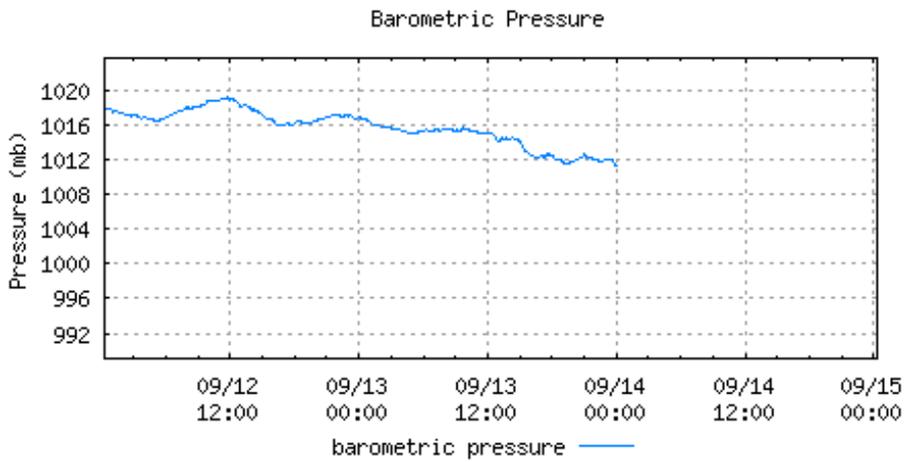
NOAA/NOS/CO-OPS 8665530 Charleston, Cooper River Entrance, SC



Last Observed Sample: 09/14/2018 00:00 (EDT)

Wind Speed: 7 knots Gusts: 13 knots Direction: 279° T

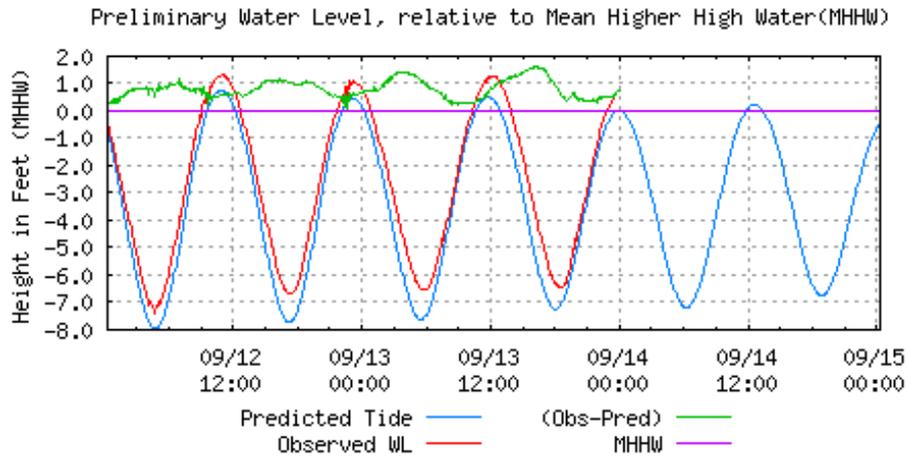
NOAA/NOS/CO-OPS 8665530 Charleston, Cooper River Entrance, SC



Last Observed Sample: 09/14/2018 00:00 (EDT)

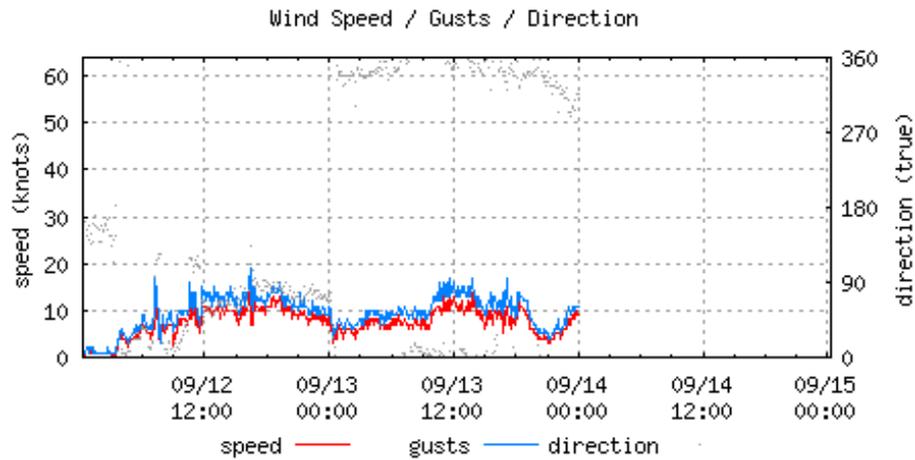
Barometric Pressure: 1011.4 mb

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



Last Observed Sample: 09/14/2018 00:00 (EDT). Data relative to MHHW
Observed: 0.77 ft. Predicted: 0.03 ft. Residual: 0.74 ft.
Historical Maximum Water Level: Oct 8 2016, 4.94 ft.
Next High Tide: 09/14/2018 12:36 (EDT), 0.24 ft.

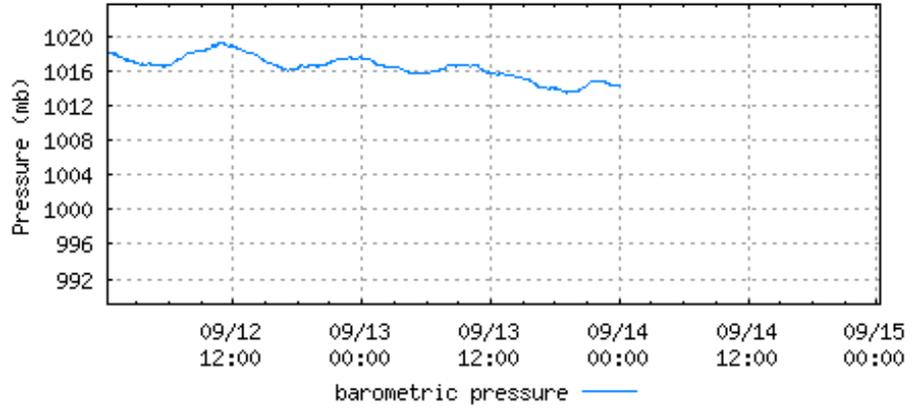
NOAA/NOS/CO-OPS 8670870 Fort Pulaski, GA



Last Observed Sample: 09/14/2018 00:00 (EDT)
Wind Speed: 9 knots Gusts: 11 knots Direction: 315° T

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

Barometric Pressure



Last Observed Sample: 09/14/2018 00:00 (EDT)

Barometric Pressure: 1014.3 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 |
|-------------------|--|---------------------------|-------------------------------------|---------------------------|-------------------------------------|---|
| 8658163 | Wrightsville Beach, NC | 09/14/2018 00:12 (EDT) | 1.23 ft | -0.19 ft | 1.42 ft | 2.61 ft |
| 8656483 | Beaufort, Duke Marine Lab, NC | 09/14/2018 00:00 (EDT) | 3.40 ft | 0.05 ft | 3.35 ft | 3.40 ft |
| 8651370 | Duck, NC | 09/14/2018 00:06 (EDT) | 1.07 ft | -0.31 ft | 1.38 ft | 1.93 ft |
| 8638901 | CBBT, Chesapeake Channel, VA | 09/14/2018 00:00 (EDT) | 1.85 ft | -0.03 ft | 1.88 ft | 1.95 ft |
| 8658120 | Wilmington, NC | 09/14/2018 00:00 (EDT) | -0.75 ft | -0.65 ft | -0.10 ft | 0.89 ft |
| 8654467 | USCG Station Hatteras, NC | 09/14/2018 00:12 (EDT) | -1.49 ft | 0.04 ft | -1.53 ft | 1.14 ft |
| 8652587 | Oregon Inlet Marina, NC | 09/14/2018 00:00 (EDT) | -0.59 ft | 0.10 ft | -0.69 ft | 0.32 ft |
| 8661070 | Springmaid Pier, SC | 09/14/2018 00:00 (EDT) | -0.83 ft | -0.27 ft | -0.56 ft | 1.05 ft |
| 8662245 | Oyster Landing (N Inlet Estuary), SC | 09/14/2018 00:00 (EDT) | -0.50 ft | -0.19 ft | -0.31 ft | 1.08 ft |
| 8665530 | Charleston, Cooper River Entrance, SC | 09/14/2018 00:00 (EDT) | 0.46 ft | -0.00 ft | 0.46 ft | 1.21 ft |
| 8670870 | Fort Pulaski, GA | 09/14/2018 00:00 (EDT) | 0.77 ft | 0.03 ft | 0.74 ft | 1.28 ft |

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