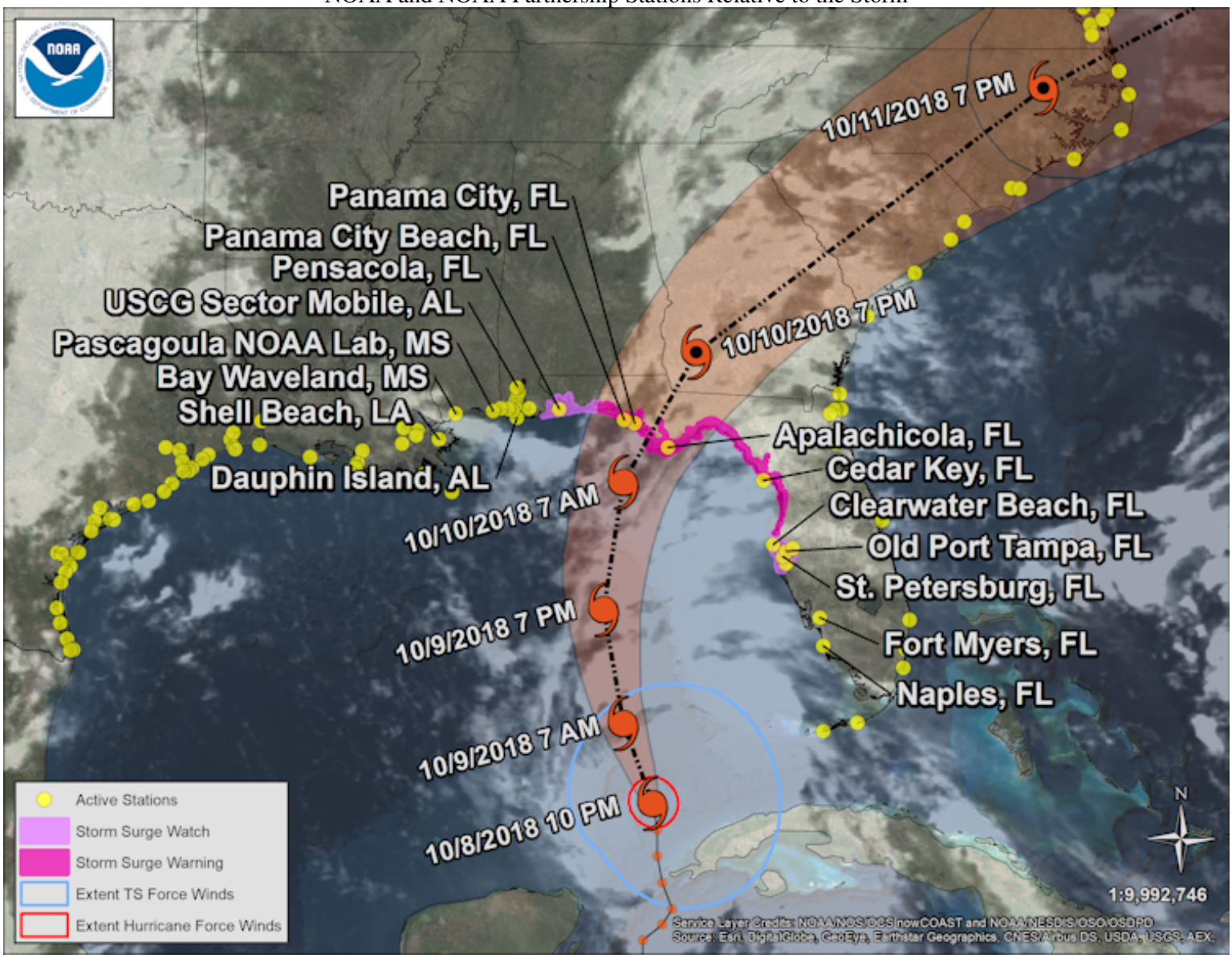
Hurricane Michael QuickLook
Posted: 23:00 CDT 10/08/2018

NOAA and NOAA Partnership Stations Relative to the Storm



Storm Analysis

As of 10/08/2018 23:00 CDT, water levels at stations along the Gulf of Mexico are elevated and continue to rise at several locations. Measured water levels along the Florida panhandle from Cedar Key to Pensacola range from 1 to 2 feet above normal tide levels. Farther south, along the west coast of Florida including locations in and around Tampa Bay, Fort Myers and Naples, water levels are measuring up to a foot above normal tide levels. Water levels from Alabama to southeastern Louisiana, including Mobile Bay are also elevated and range between 1 and 3.5 feet above

tidal predictions with the highest water levels above tide being measured at Bay Waveland, MS. In general, the northern Gulf of Mexico experiences low tidal ranges and the potential exists for significant flooding due to Michael regardless of the phase of the tide.

Winds at several locations from southeast Louisiana to southern Florida range from 10 to 25 knots with slightly higher gusts. The strongest winds are presently being observed from Dauphin Island, AL to Shell Beach, LA. Barometric pressure continues to fall 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: PFF

Select National Hurricane Center Advisory Information:

Hurricane Michael Advisory Number 10
NWS National Hurricane Center Miami FL AL142018
1000 PM CDT Mon Oct 08 2018

...MICHAEL CONTINUES TO STRENGTHEN...
...STORM SURGE AND HURRICANE WARNINGS IN EFFECT FOR THE NORTHEASTERN GULF COAST...

SUMMARY OF 1000 PM CDT...0300 UTC...INFORMATION

LOCATION...23.2N 85.3W
ABOUT 485 MI...780 KM S OF PANAMA CITY FLORIDA
ABOUT 450 MI...725 KM S OF APALACHICOLA FLORIDA
MAXIMUM SUSTAINED WINDS...90 MPH...150 KM/H
PRESENT MOVEMENT...N OR 350 DEGREES AT 12 MPH...19 KM/H
MINIMUM CENTRAL PRESSURE...970 MB...28.65 INCHES

WATCHES AND WARNINGS

CHANGES WITH THIS ADVISORY:

The government of Mexico has discontinued the Tropical Storm Warning for the northeastern Yucatan peninsula and Cozumel.

SUMMARY OF WATCHES AND WARNINGS IN EFFECT:

A Storm Surge Warning is in effect for...
* Okaloosa/Walton County Line Florida to Anclote River Florida

A Storm Surge Watch is in effect for...
* Anclote River Florida to Anna Maria Island Florida, including Tampa Bay
* Alabama/Florida border to Okaloosa/Walton County Line Florida

A Hurricane Warning is in effect for...
* Alabama/Florida border to Suwannee River Florida
* The Cuban province of Pinar del Rio

A Hurricane Watch is in effect for...
* Alabama/Florida border to the Mississippi/Alabama border

A Tropical Storm Warning is in effect for...
* Alabama/Florida border to the Mississippi/Alabama border
* Suwanee River Florida to Chassahowitzka Florida
* The Cuban province of the Isle of Youth

A Tropical Storm Watch is in effect for...
* Chassahowitzka to Anna Maria Island Florida, including Tampa Bay
* Mississippi/Alabama border to the Mouth of the Pearl River

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

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 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.

Interests elsewhere across the southeastern United States should monitor the progress of Michael.

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 the United States, please monitor products issued by your national meteorological service.

DISCUSSION AND OUTLOOK

At 1000 PM CDT (0300 UTC), the center of the eye of Hurricane Michael was located by NOAA and Air Force Reserve reconnaissance aircraft near latitude 23.2 North, longitude 85.3 West. Michael is moving toward the north near 12 mph (19 km/h). A northward to north-northwestward motion at a slightly faster forward speed is expected through Tuesday night, followed by a northeastward motion on Wednesday and Thursday. On the forecast track, the center of Michael will continue to move over the southeastern Gulf of Mexico tonight, then move across the eastern Gulf of Mexico Tuesday and Tuesday night. The center of Michael is expected to move inland over the Florida Panhandle or Florida Big Bend area on Wednesday, and then move northeastward across the southeastern United States Wednesday night and Thursday.

Reports from the two reconnaissance aircraft indicate that maximum sustained winds have increased to near 90 mph (150 km/h) with higher gusts. Steady to rapid strengthening is forecast during the next day or so, and Michael is expected to become a major hurricane by Tuesday night.

Hurricane-force winds extend outward up to 35 miles (55 km) from the center and tropical-storm-force winds extend outward up to 175 miles (280 km).

The minimum central pressure recently measured by the two aircraft was 970 mb (28.65 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 if peak surge occurs at the time of high tide...

Indian Pass FL to Cedar Key FL...8-12 ft
Cedar Key FL to Crystal River FL...6-8 ft
Okaloosa/Walton County Line FL to Indian Pass FL...6-9 ft
Crystal River FL to Anclote River FL...4-6 ft
Anclote River to Anna Maria Island FL including Tampa Bay...2-4 ft
Alabama/Florida border to Okaloosa/Walton County Line FL...2-4 ft

WIND: Hurricane conditions will continue over portions of the far western Cuban province of Pinar del Rio through this evening. Tropical storm conditions are expected across the remainder of the warning areas in Cuba and the Yucatan Peninsula through tonight.

Hurricane conditions are expected within the hurricane warning area along the U.S. Gulf Coast by Wednesday, with tropical storm conditions expected by Tuesday night or early Wednesday. Tropical storm conditions are expected in the tropical storm warning area by Tuesday night or early Wednesday, and are possible within the tropical storm watch area by that time. Hurricane conditions are possible within the hurricane watch area by Wednesday.

RAINFALL: Michael is expected to produce the following rainfall amounts through Friday...

Western Cuba...4 to 8 inches, with isolated maximum amounts of 12 inches. This rainfall could lead to life-threatening flash floods and mudslides.

Florida Panhandle and Big Bend, southeast Alabama, Georgia and South Carolina... 4 to 8 inches, with isolated maximum amounts of 12 inches. This rainfall could lead to life threatening flash floods.

Florida Peninsula, Florida Keys, North Carolina, portions of the Mid-Atlantic States, and the southern New England coast...2 to 4 inches with isolated maximum amounts of 6 inches. This rainfall could lead to life-threatening flash floods.

Yucatan Peninsula...Additional rainfall less than 1 inch.

SURF: Swells generated by Michael are affecting the south coast of Cuba and the east coast of the Yucatan Peninsula. Swells are expected to begin affecting the coast of the eastern and northern Gulf of Mexico during the next day or so. These swells are likely to cause life-threatening surf and rip current conditions. Please consult products from your local weather office.

NEXT ADVISORY

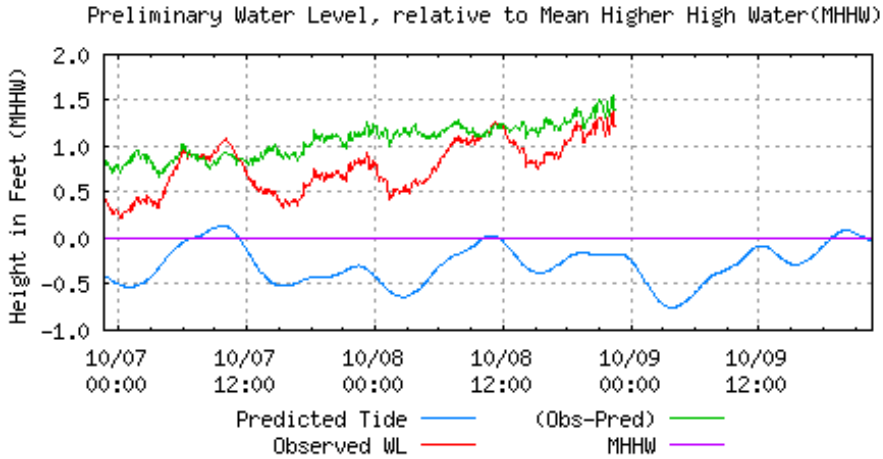
Next intermediate advisory at 100 AM CDT.
Next complete advisory at 400 AM CDT.

$$
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: Panama City Beach - Water Level, Panama City Beach - Winds, Panama City Beach - Barometric, Panama City - Water Level, Panama City - Winds, Panama City - Barometric, Apalachicola - Water Level, Apalachicola - Winds, Cedar Key - Water Level, Cedar Key - Winds, Clearwater Beach - Water Level, Clearwater Beach - Winds, Clearwater Beach - Barometric, Old Port Tampa - Water Level, Old Port Tampa - Winds, St. Petersburg, Tampa Bay - Water Level, St. Petersburg, Tampa Bay - Winds, Fort Myers, Caloosahatchee River - Water Level, Fort Myers, Caloosahatchee River - Winds, Naples, Gulf of Mexico - Water Level, Pensacola - Water Level, Pensacola - Barometric, Dauphin Island - Water Level, Dauphin Island - Winds, Dauphin Island - Barometric, Coast Guard Sector Mobile - Water Level, Coast Guard Sector Mobile - Winds, Pascagoula NOAA Lab - Water Level, Bay Waveland Yacht Club - Water Level, Bay Waveland Yacht Club - Winds, Shell Beach - Water Level, Shell Beach - Winds

NOAA/NOS/CO-OPS 8729210 Panama City Beach, FL



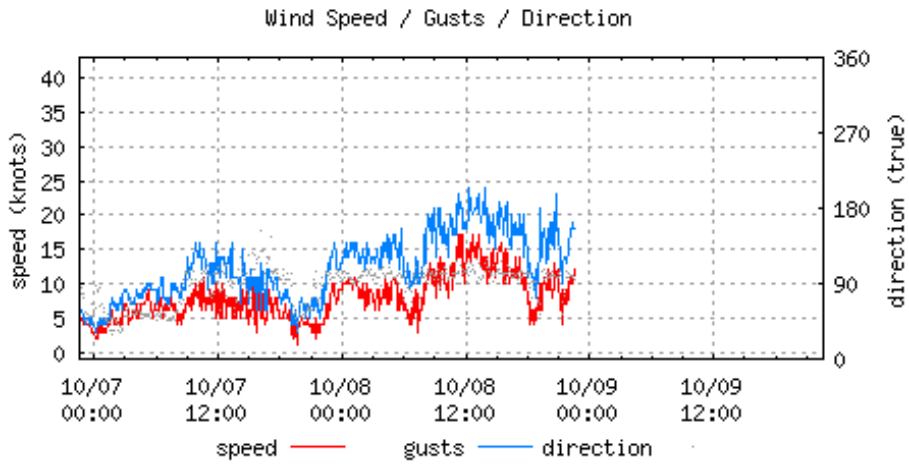
Last Observed Sample: 10/08/2018 22:36 (CDT). Data relative to MHHW

Observed: 1.27 ft. Predicted: -0.18 ft. Residual: 1.45 ft.

Historical Maximum Water Level: Oct 4 1995, 6.84 ft.

Next High Tide: 10/08/2018 22:42 (CDT), -0.17 ft.

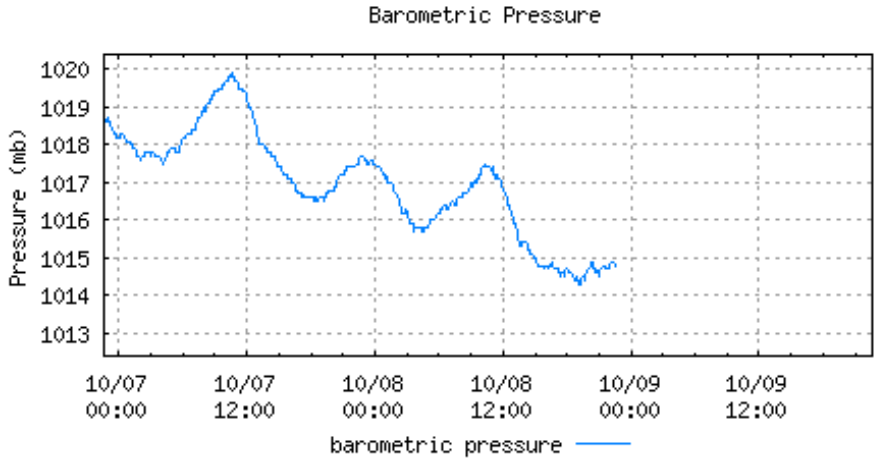
NOAA/NOS/CO-OPS 8729210 Panama City Beach, FL



Last Observed Sample: 10/08/2018 22:36 (CDT)

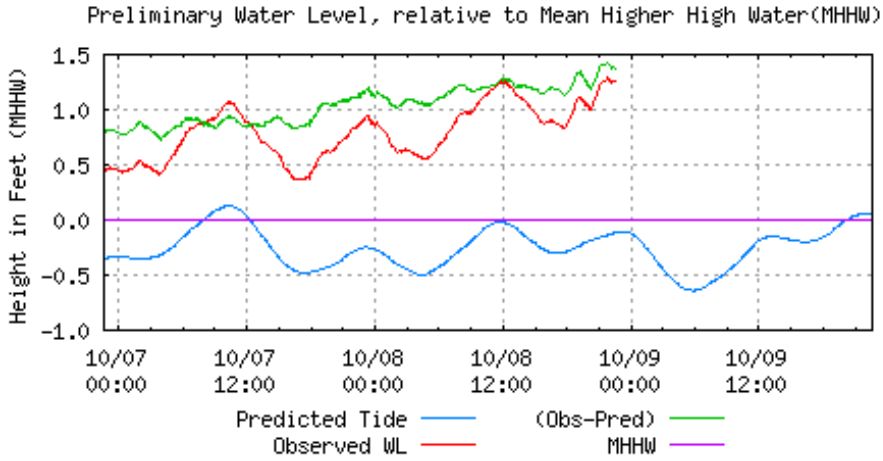
Wind Speed: 12 knots Gusts: 20 knots Direction: 100° T

NOAA/NOS/CO-OPS 8729210 Panama City Beach, FL



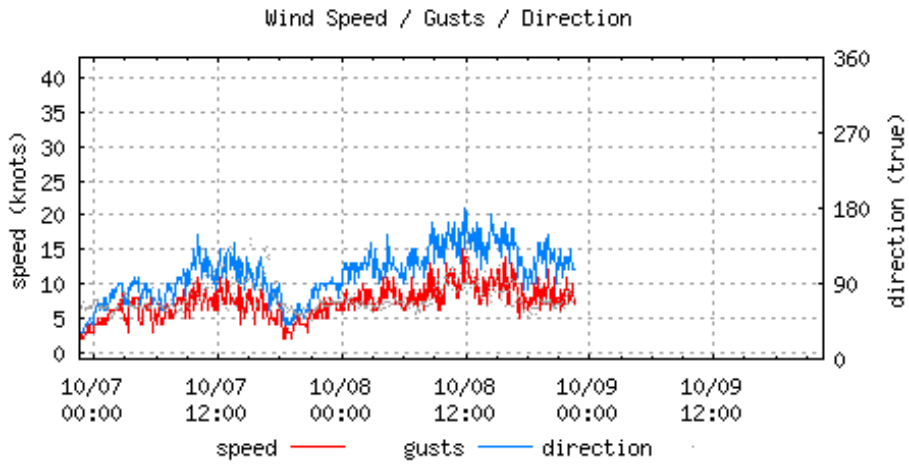
Last Observed Sample: 10/08/2018 22:36 (CDT)
Barometric Pressure: 1014.8 mb

NOAA/NOS/CO-OPS 8729108 Panama City, FL



Last Observed Sample: 10/08/2018 22:36 (CDT). Data relative to MHHW
Observed: 1.26 ft. Predicted: -0.11 ft. Residual: 1.37 ft.
Historical Maximum Water Level: Oct 4 1995, 5.72 ft.
Next High Tide: 10/08/2018 23:11 (CDT), -0.10 ft.

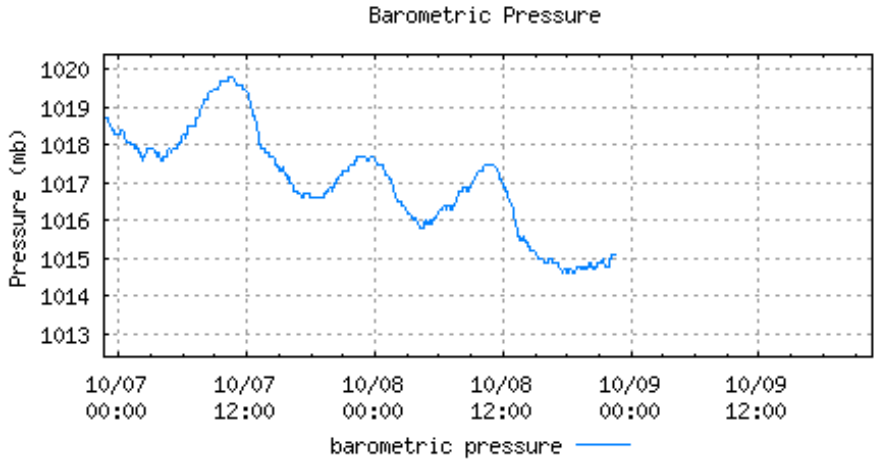
NOAA/NOS/CO-OPS 8729108 Panama City, FL



Last Observed Sample: 10/08/2018 22:36 (CDT)

Wind Speed: 7 knots Gusts: 11 knots Direction: 73° T

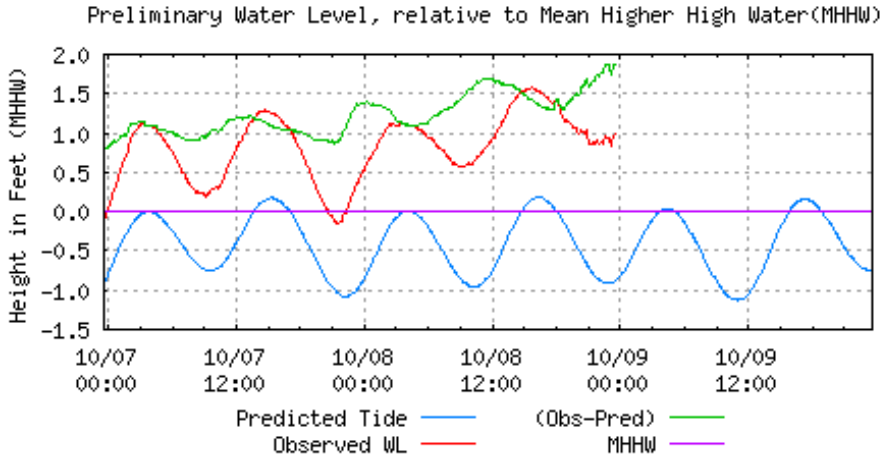
NOAA/NOS/CO-OPS 8729108 Panama City, FL



Last Observed Sample: 10/08/2018 22:36 (CDT)

Barometric Pressure: 1015.1 mb

NOAA/NOS/CO-OPS 8728690 Apalachicola, FL



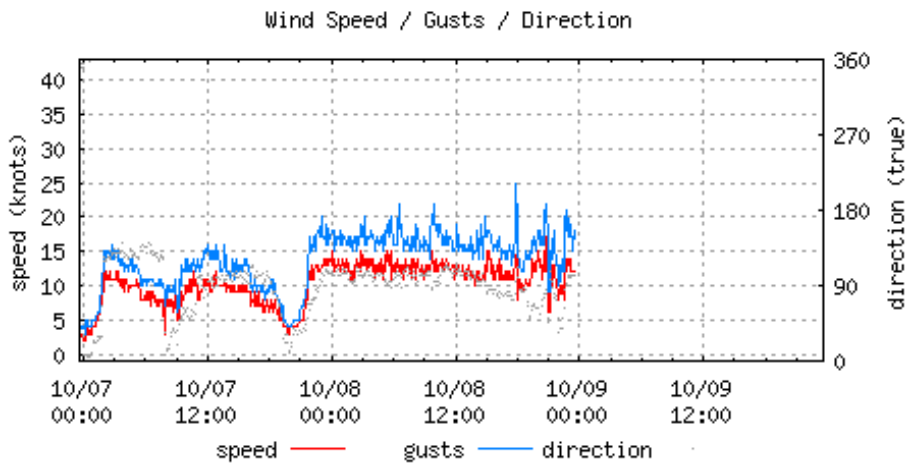
Last Observed Sample: 10/08/2018 23:36 (EDT). Data relative to MHHW

Observed: 1.00 ft. Predicted: -0.87 ft. Residual: 1.87 ft.

Historical Maximum Water Level: Jul 10 2005, 6.43 ft.

Next High Tide: 10/09/2018 04:22 (EDT), 0.04 ft.

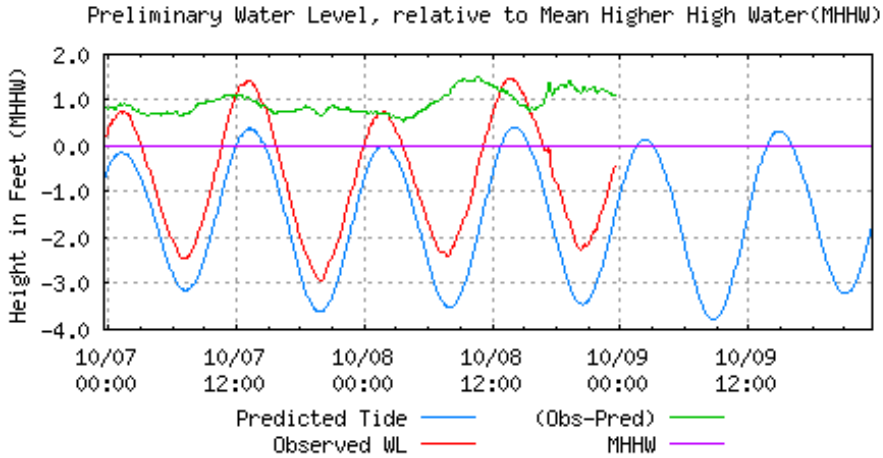
NOAA/NOS/CO-OPS 8728690 Apalachicola, FL



Last Observed Sample: 10/08/2018 23:36 (EDT)

Wind Speed: 15 knots Gusts: 18 knots Direction: 103° T

NOAA/NOS/CO-OPS 8727520 Cedar Key, FL



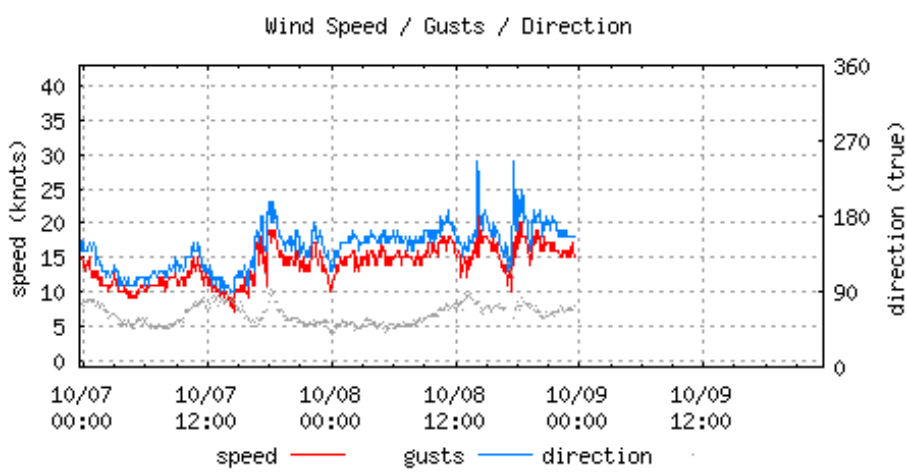
Last Observed Sample: 10/08/2018 23:36 (EDT). Data relative to MHHW

Observed: -0.34 ft. Predicted: -1.42 ft. Residual: 1.08 ft.

Historical Maximum Water Level: Sep 2 2016, 5.98 ft.

Next High Tide: 10/09/2018 02:18 (EDT), 0.14 ft.

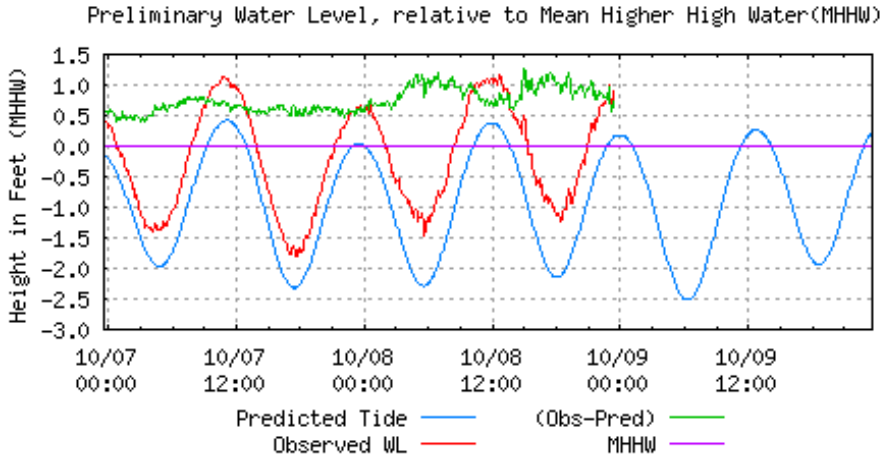
NOAA/NOS/CO-OPS 8727520 Cedar Key, FL



Last Observed Sample: 10/08/2018 23:36 (EDT)

Wind Speed: 14 knots Gusts: 17 knots Direction: 74° T

NOAA/NOS/CO-OPS 8726724 Clearwater Beach, FL



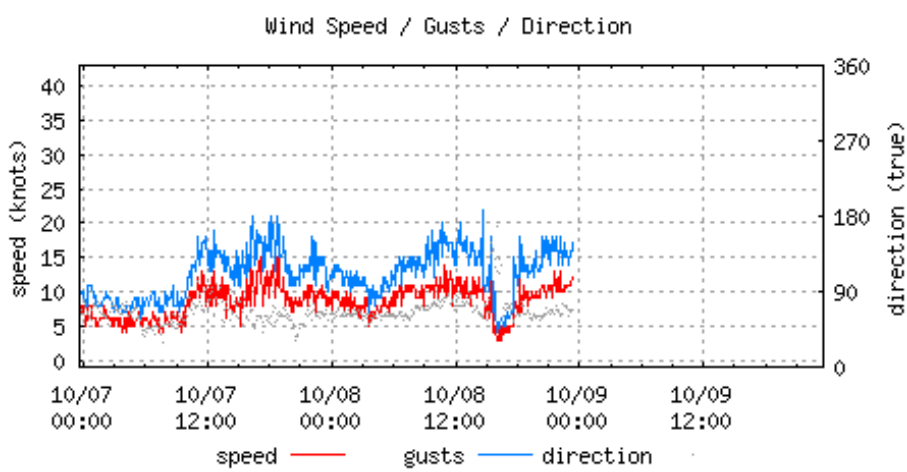
Last Observed Sample: 10/08/2018 23:30 (EDT). Data relative to MHHW

Observed: 0.80 ft. Predicted: 0.16 ft. Residual: 0.64 ft.

Historical Maximum Water Level: Mar 13 1993, 4.00 ft.

Next High Tide: 10/08/2018 23:55 (EDT), 0.18 ft.

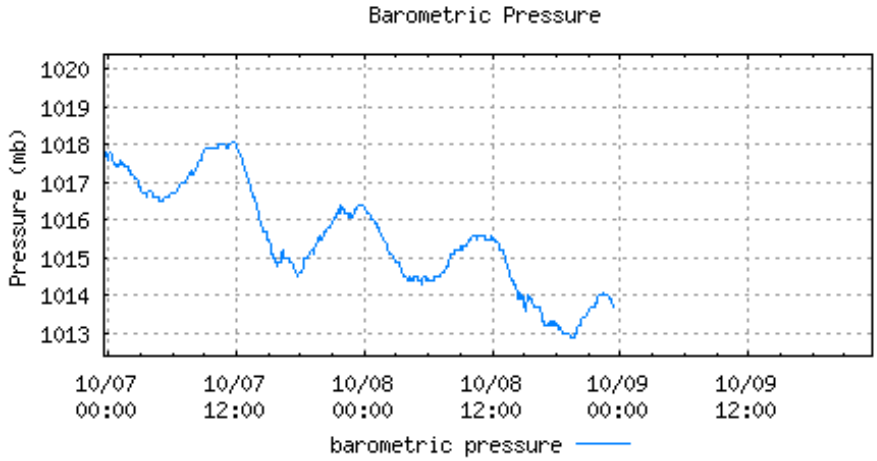
NOAA/NOS/CO-OPS 8726724 Clearwater Beach, FL



Last Observed Sample: 10/08/2018 23:30 (EDT)

Wind Speed: 12 knots Gusts: 19 knots Direction: 66° T

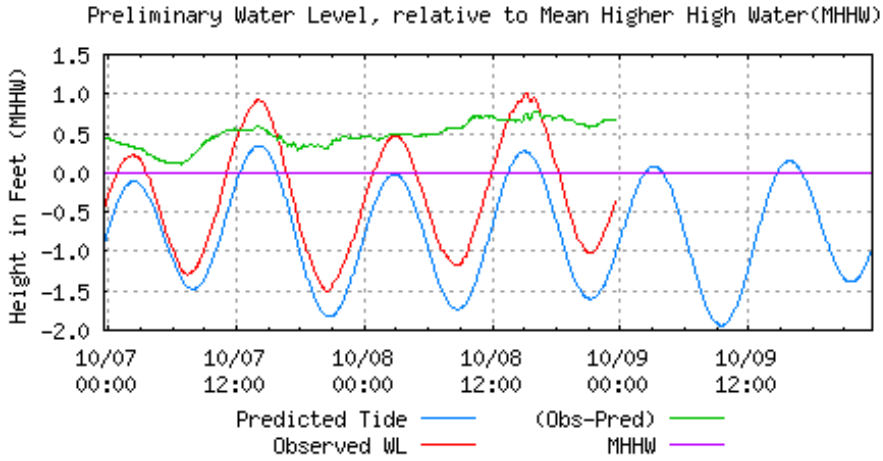
NOAA/NOS/CO-OPS 8726724 Clearwater Beach, FL



Last Observed Sample: 10/08/2018 23:30 (EDT)

Barometric Pressure: 1013.7 mb

NOAA/NOS/CO-OPS 8726607 Old Port Tampa, FL



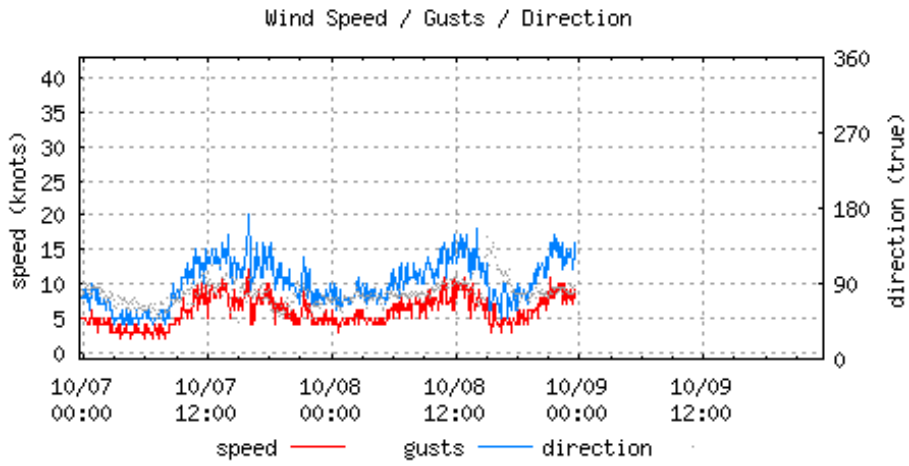
Last Observed Sample: 10/08/2018 23:36 (EDT). Data relative to MHHW

Observed: -0.36 ft. Predicted: -1.02 ft. Residual: 0.66 ft.

Historical Maximum Water Level: Oct 8 1996, 3.60 ft.

Next High Tide: 10/09/2018 03:09 (EDT), 0.08 ft.

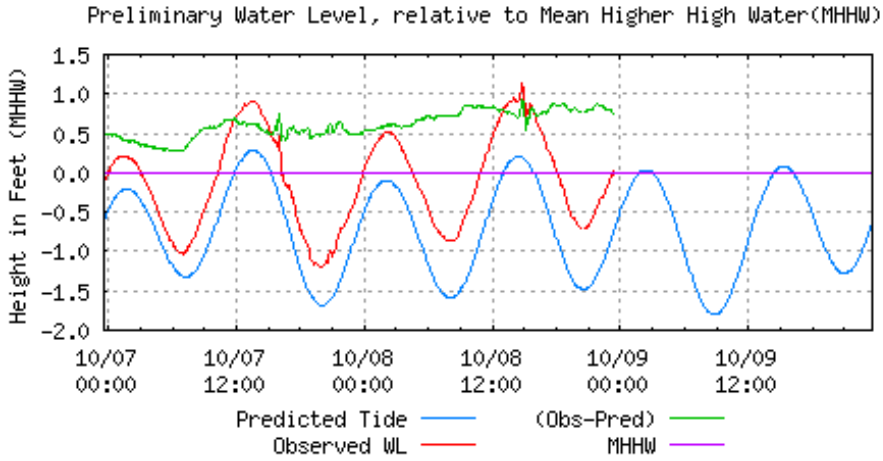
NOAA/NOS/CO-OPS 8726607 Old Port Tampa, FL



Last Observed Sample: 10/08/2018 23:36 (EDT)

Wind Speed: 8 knots Gusts: 16 knots Direction: 80° T

NOAA/NOS/CO-OPS 8726520 St. Petersburg, Tampa Bay, FL



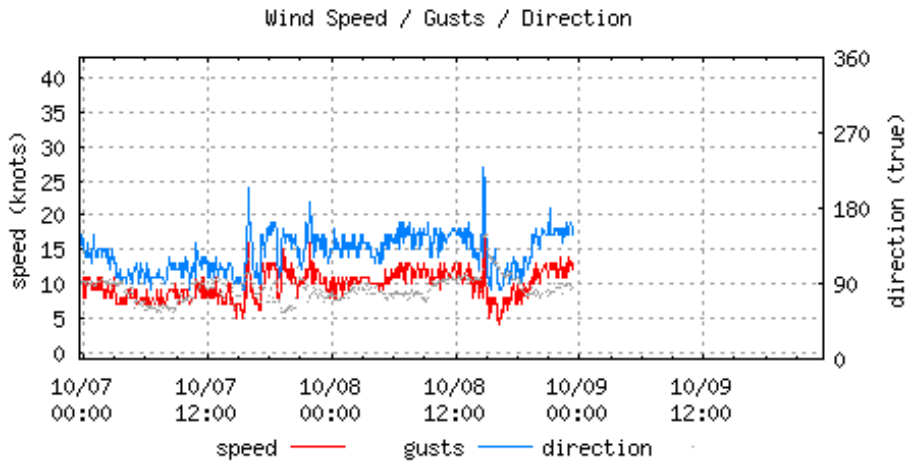
Last Observed Sample: 10/08/2018 23:30 (EDT). Data relative to MHHW

Observed: 0.05 ft. Predicted: -0.70 ft. Residual: 0.75 ft.

Historical Maximum Water Level: Aug 31 1985, 4.00 ft.

Next High Tide: 10/09/2018 02:25 (EDT), 0.04 ft.

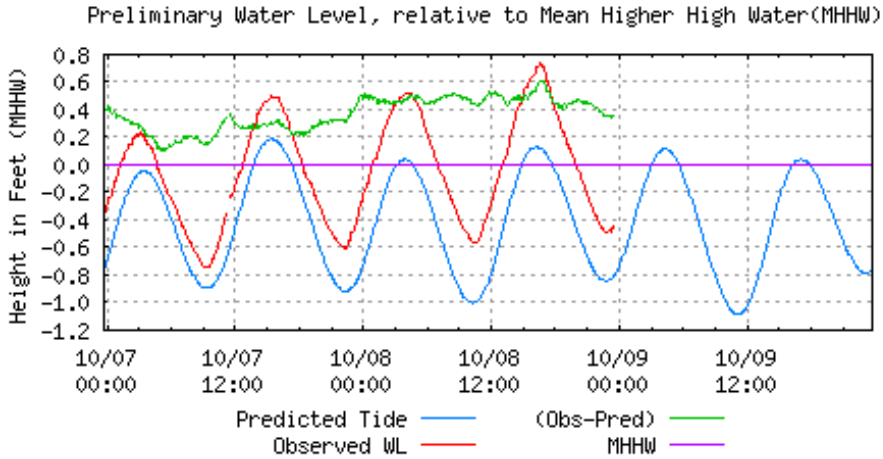
NOAA/NOS/CO-OPS 8726520 St. Petersburg, Tampa Bay, FL



Last Observed Sample: 10/08/2018 23:30 (EDT)

Wind Speed: 14 knots Gusts: 19 knots Direction: 90° T

NOAA/NOS/CO-OPS 8725520 Fort Myers, Caloosahatchee River, FL



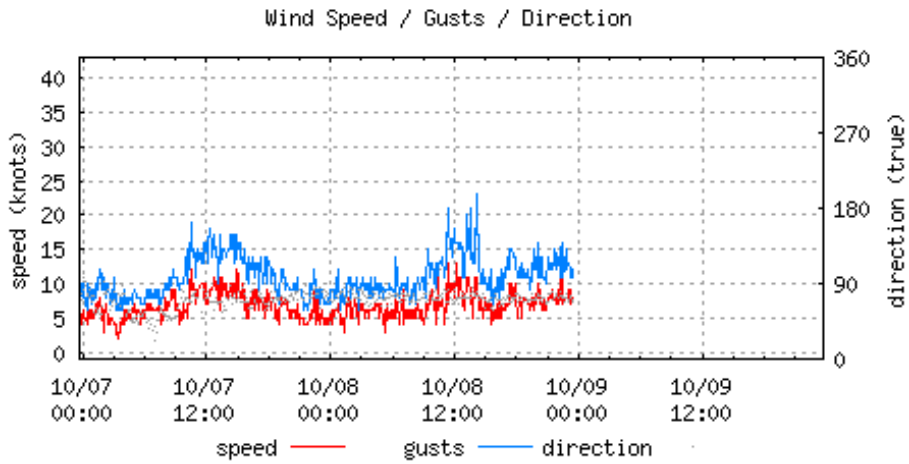
Last Observed Sample: 10/08/2018 23:36 (EDT). Data relative to MHHW

Observed: -0.43 ft. Predicted: -0.80 ft. Residual: 0.37 ft.

Historical Maximum Water Level: Nov 23 1988, 3.41 ft.

Next High Tide: 10/09/2018 04:16 (EDT), 0.11 ft.

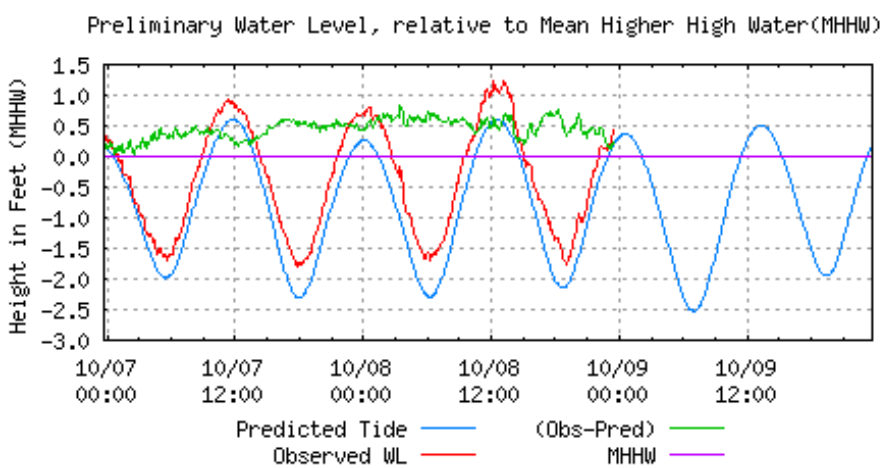
NOAA/NOS/CO-OPS 8725520 Fort Myers, Caloosahatchee River, FL



Last Observed Sample: 10/08/2018 23:36 (EDT)

Wind Speed: 8 knots Gusts: 13 knots Direction: 73° T

NOAA/NOS/CO-OPS 8725110 Naples, Gulf of Mexico, FL



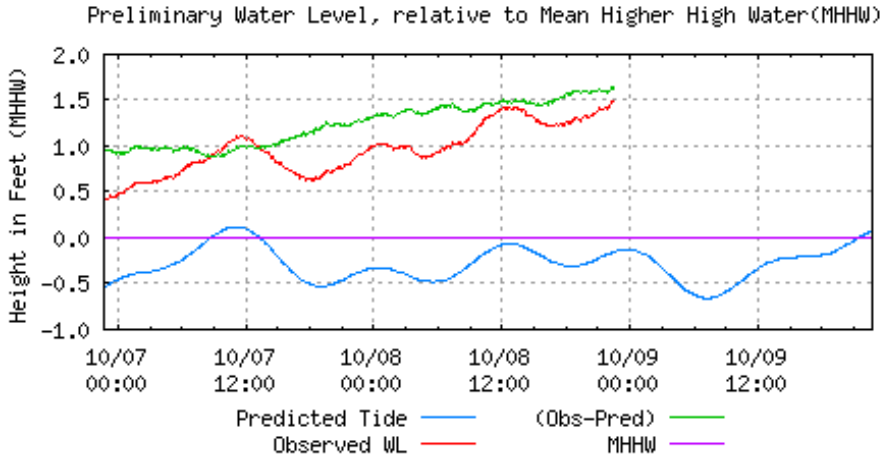
Last Observed Sample: 10/08/2018 23:30 (EDT). Data relative to MHHW

Observed: 0.43 ft. Predicted: 0.20 ft. Residual: 0.23 ft.

Historical Maximum Water Level: Sep 10 2017, 4.02 ft.

Next High Tide: 10/09/2018 00:34 (EDT), 0.36 ft.

NOAA/NOS/CO-OPS 8729840 Pensacola, FL



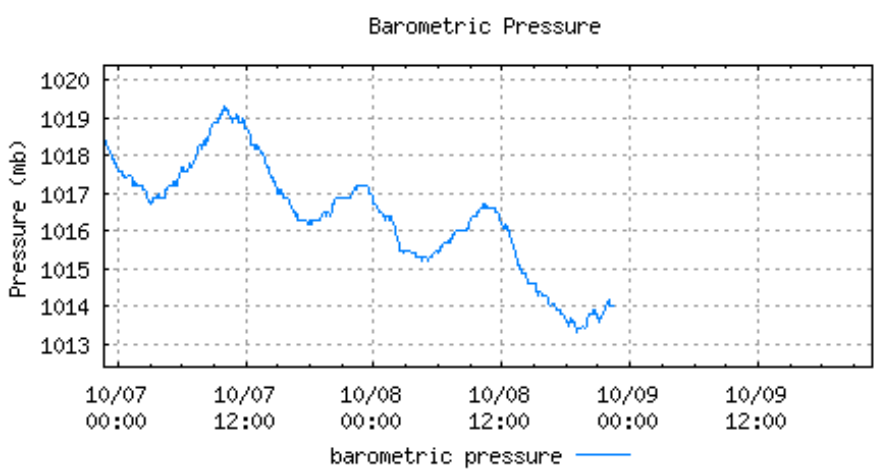
Last Observed Sample: 10/08/2018 22:30 (CDT). Data relative to MHHW

Observed: 1.48 ft. Predicted: -0.15 ft. Residual: 1.63 ft.

Historical Maximum Water Level: Sep 16 2004, 9.54 ft.

Next High Tide: 10/08/2018 23:44 (CDT), -0.12 ft.

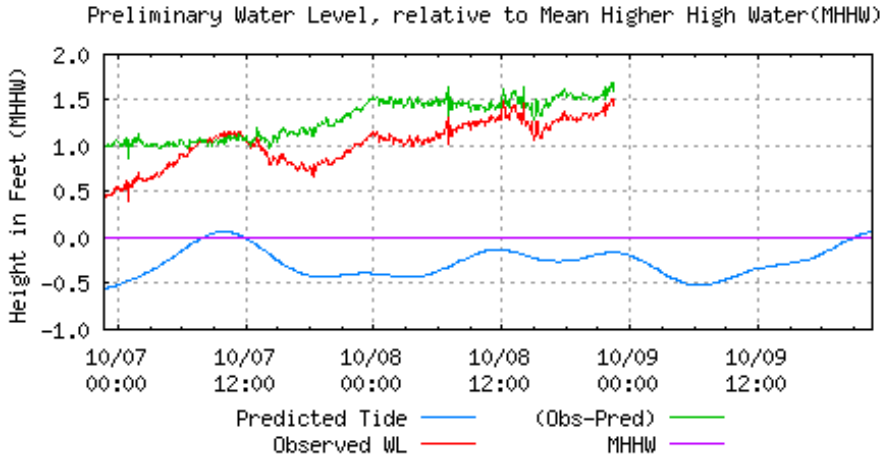
NOAA/NOS/CO-OPS 8729840 Pensacola, FL



Last Observed Sample: 10/08/2018 22:30 (CDT)

Barometric Pressure: 1014.0 mb

NOAA/NOS/CO-OPS 8735180 Dauphin Island, AL



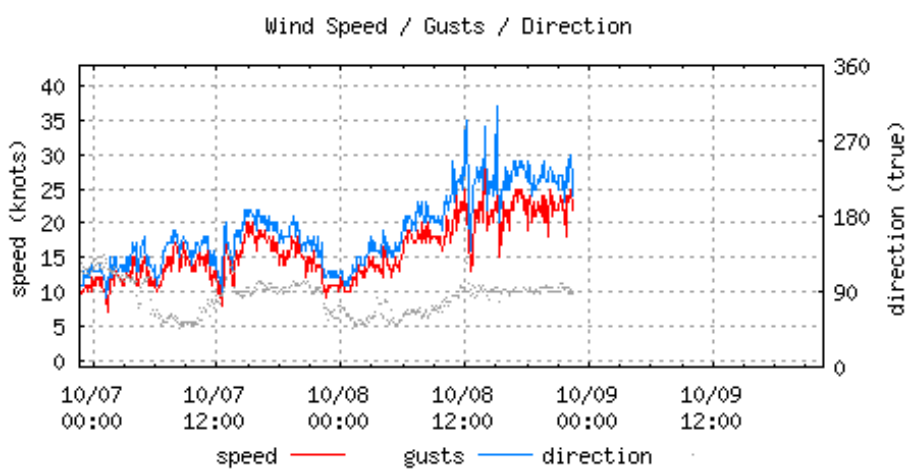
Last Observed Sample: 10/08/2018 22:30 (CDT). Data relative to MHHW

Observed: 1.52 ft. Predicted: -0.16 ft. Residual: 1.68 ft.

Historical Maximum Water Level: Sep 12 1979, 7.96 ft.

Next High Tide: 10/09/2018 22:48 (CDT), 0.05 ft.

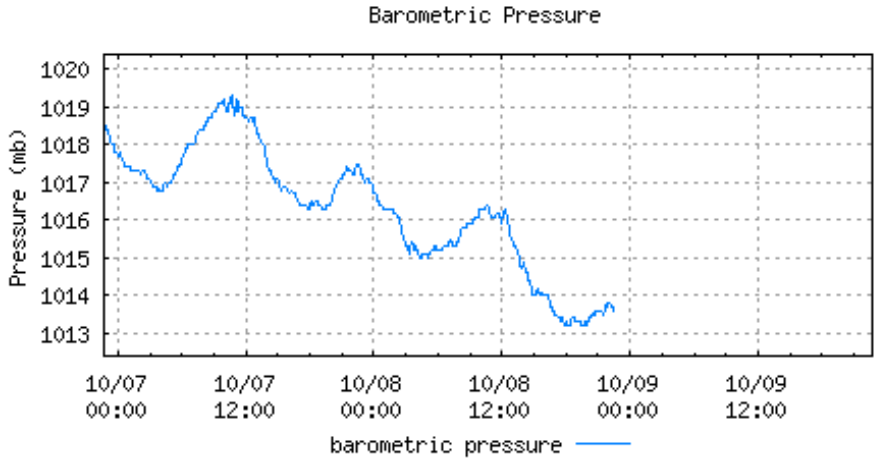
NOAA/NOS/CO-OPS 8735180 Dauphin Island, AL



Last Observed Sample: 10/08/2018 22:30 (CDT)

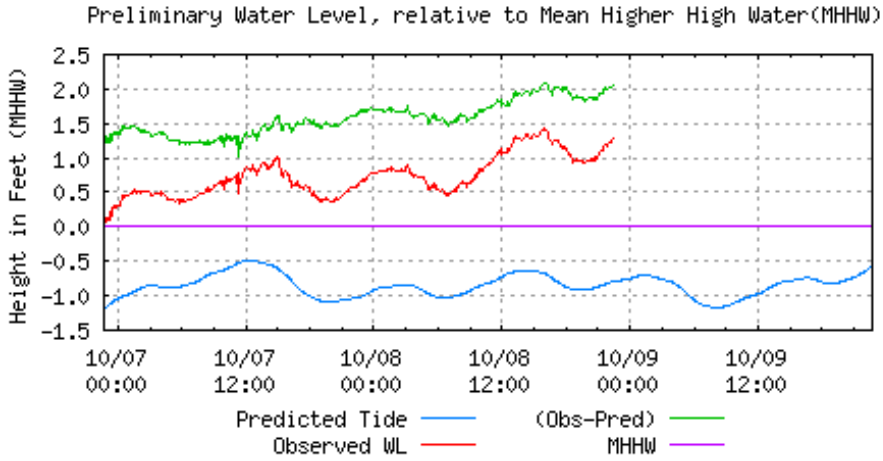
Wind Speed: 22 knots Gusts: 24 knots Direction: 88° T

NOAA/NOS/CO-OPS 8735180 Dauphin Island, AL



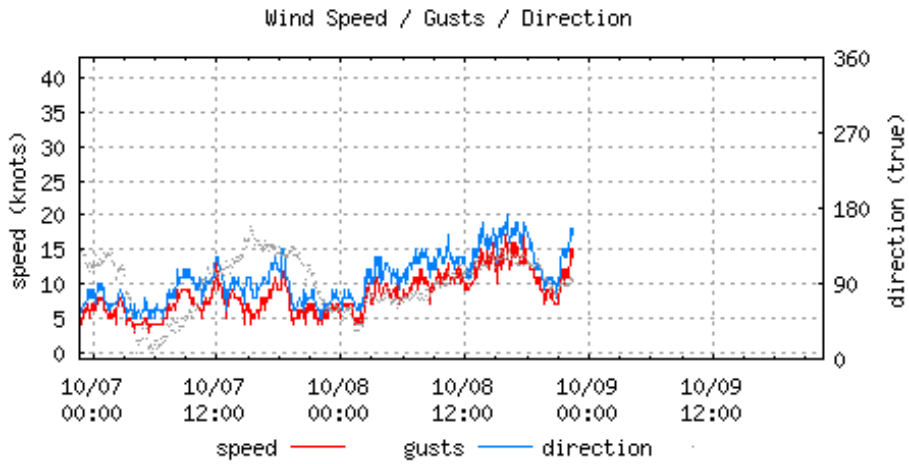
Last Observed Sample: 10/08/2018 22:30 (CDT)
Barometric Pressure: 1013.7 mb

NOAA/NOS/CO-OPS 8736897 Coast Guard Sector Mobile, AL



Last Observed Sample: 10/08/2018 22:30 (CDT). Data relative to MHHW
Observed: 1.27 ft. Predicted: -0.79 ft. Residual: 2.06 ft.
Historical Maximum Water Level: Oct 8 2017, 5.38 ft.
Next High Tide: 10/09/2018 01:23 (CDT), -0.70 ft.

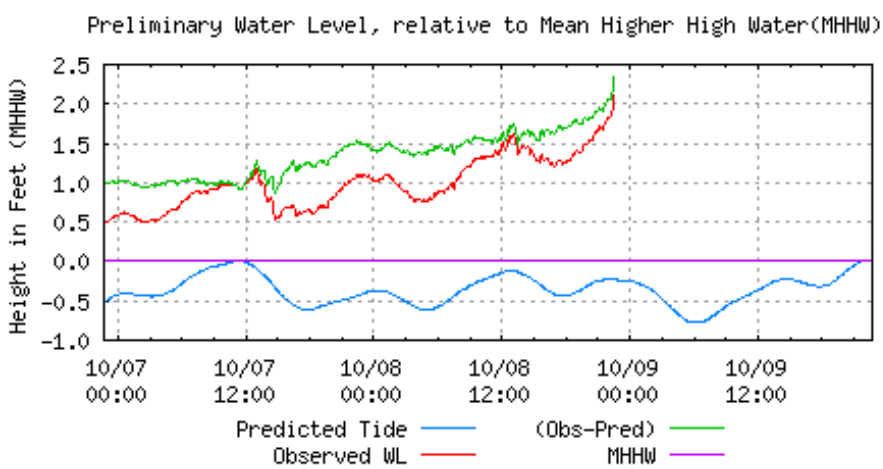
NOAA/NOS/CO-OPS 8736897 Coast Guard Sector Mobile, AL



Last Observed Sample: 10/08/2018 22:30 (CDT)

Wind Speed: 15 knots Gusts: 18 knots Direction: 92° T

NOAA/NOS/CO-OPS 8741533 Pascagoula NOAA Lab, MS



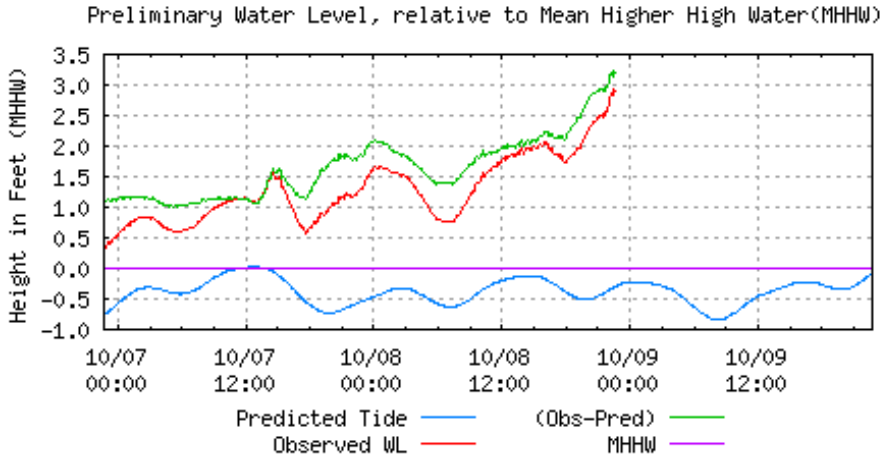
Last Observed Sample: 10/08/2018 22:30 (CDT). Data relative to MHHW

Observed: 2.12 ft. Predicted: -0.23 ft. Residual: 2.35 ft.

Historical Maximum Water Level: Oct 8 2017, 6.20 ft.

Next High Tide: 10/09/2018 14:40 (CDT), -0.22 ft.

NOAA/NOS/CO-OPS 8747437 Bay Waveland Yacht Club, MS



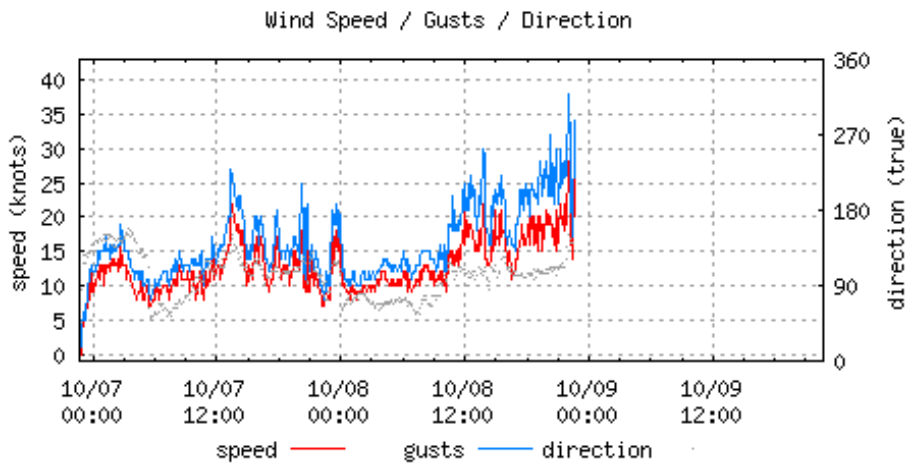
Last Observed Sample: 10/08/2018 22:36 (CDT). Data relative to MHHW

Observed: 2.91 ft. Predicted: -0.30 ft. Residual: 3.21 ft.

Historical Maximum Water Level: Sep 1 2008, 9.10 ft.

Next High Tide: 10/09/2018 00:24 (CDT), -0.23 ft.

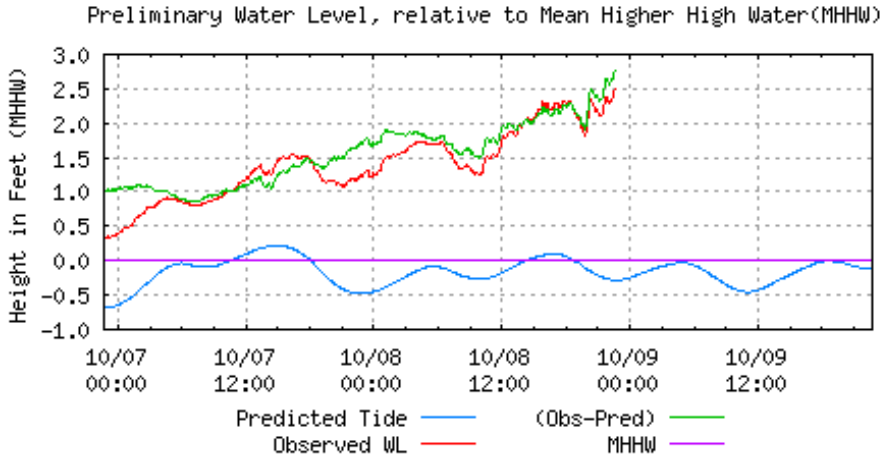
NOAA/NOS/CO-OPS 8747437 Bay Waveland Yacht Club, MS



Last Observed Sample: 10/08/2018 22:36 (CDT)

Wind Speed: 26 knots Gusts: 34 knots Direction: 132° T

NOAA/NOS/CO-OPS 8761305 Shell Beach, LA



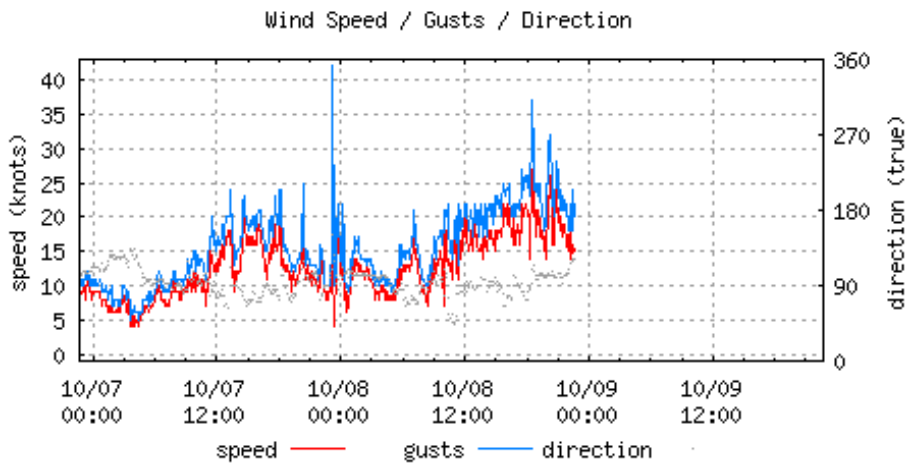
Last Observed Sample: 10/08/2018 22:36 (CDT). Data relative to MHHW

Observed: 2.49 ft. Predicted: -0.28 ft. Residual: 2.77 ft.

Historical Maximum Water Level: Aug 29 2012, 9.37 ft.

Next High Tide: 10/09/2018 04:51 (CDT), -0.04 ft.

NOAA/NOS/CO-OPS 8761305 Shell Beach, LA



Last Observed Sample: 10/08/2018 22:36 (CDT)

Wind Speed: 15 knots Gusts: 20 knots Direction: 121° 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
8729210	Panama City Beach, FL	10/08/2018 22:36 (CDT)	1.27 ft	-0.18 ft	1.45 ft	1.37 ft
8729108	Panama City, FL	10/08/2018 22:36 (CDT)	1.26 ft	-0.11 ft	1.37 ft	1.29 ft
8728690	Apalachicola, FL	10/08/2018 23:36 (EDT)	1.00 ft	-0.87 ft	1.87 ft	1.58 ft
8727520	Cedar Key, FL	10/08/2018 23:36 (EDT)	-0.34 ft	-1.42 ft	1.08 ft	1.48 ft
8726724	Clearwater Beach, FL	10/08/2018 23:30 (EDT)	0.80 ft	0.16 ft	0.64 ft	1.15 ft
8726607	Old Port Tampa, FL	10/08/2018 23:36 (EDT)	-0.36 ft	-1.02 ft	0.66 ft	1.01 ft
8726520	St. Petersburg, Tampa Bay, FL	10/08/2018 23:30 (EDT)	0.05 ft	-0.70 ft	0.75 ft	1.13 ft
8725520	Fort Myers, Caloosahatchee River, FL	10/08/2018 23:36 (EDT)	-0.43 ft	-0.80 ft	0.37 ft	0.73 ft
8725110	Naples, Gulf of Mexico, FL	10/08/2018 23:30 (EDT)	0.43 ft	0.20 ft	0.23 ft	1.22 ft
8729840	Pensacola, FL	10/08/2018 22:30 (CDT)	1.48 ft	-0.15 ft	1.63 ft	1.49 ft
8735180	Dauphin Island, AL	10/08/2018 22:30 (CDT)	1.52 ft	-0.16 ft	1.68 ft	1.52 ft
8736897	Coast Guard Sector Mobile, AL	10/08/2018 22:30 (CDT)	1.27 ft	-0.79 ft	2.06 ft	1.42 ft
8741533	Pascagoula NOAA Lab, MS	10/08/2018 22:30 (CDT)	2.12 ft	-0.23 ft	2.35 ft	2.12 ft
8747437	Bay Waveland Yacht Club, MS	10/08/2018 22:36 (CDT)	2.91 ft	-0.30 ft	3.21 ft	2.92 ft
8761305	Shell Beach, LA	10/08/2018 22:36 (CDT)	2.49 ft	-0.28 ft	2.77 ft	2.49 ft

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