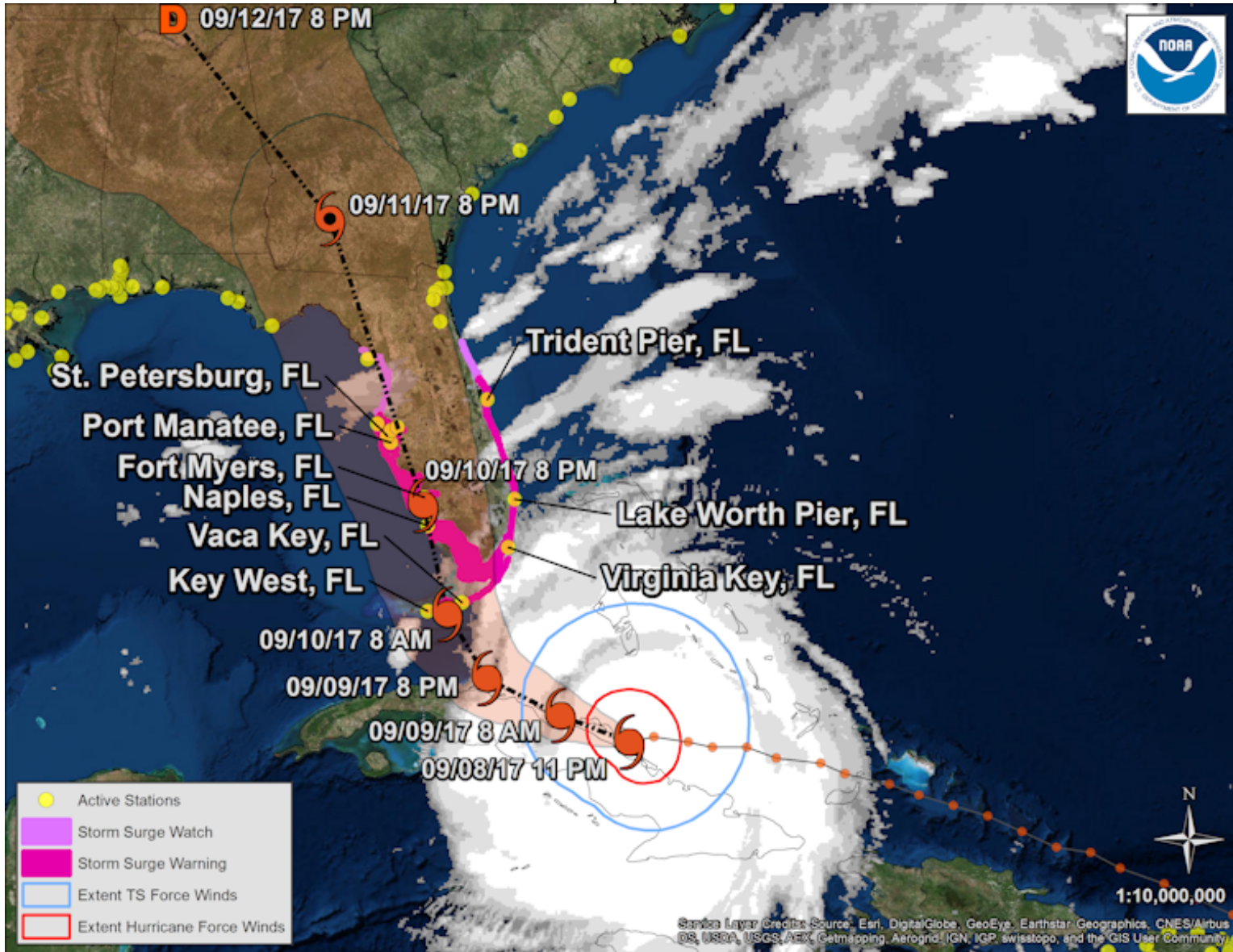


Hurricane IRMA QuickLook Posted: 00:00 EDT 09/09/2017

NOAA and NOAA Partnership Stations Relative to the Storm



Storm Analysis

As of 09/09/2017 00:00 EDT, water levels along the coast of southern Florida, from Trident Pier to St. Petersburg including the Florida Keys are presently within 1 foot of normal tide levels.

Winds from Key West to Lake Worth Pier are beginning to increase and range from 10 to 25 knots with slightly higher gusts. Barometric pressure is slowly falling across southern Florida.

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 data, please see the Center for Operational Oceanographic Products & Services website. For more information or archived products and reports, please see the Storm QuickLook Homepage.

Analyst: PFF

SELECT NATIONAL HURRICANE CENTER ADVISORY INFORMATION:

Hurricane Irma Advisory Number 40

NWS National Hurricane Center Miami FL AL112017

1100 PM EDT Fri Sep 08 2017

...IRMA MAKING LANDFALL ON THE CAMAGUEY ARCHIPELAGO OF CUBA AS A CATEGORY 5 HURRICANE...

...HURRICANE WARNINGS EXTENDED NORTHWARD ALONG THE FLORIDA PENINSULA...

SUMMARY OF 1100 PM EDT...0300 UTC...INFORMATION

LOCATION...22.1N 77.7W

ABOUT 120 MI...190 KM ESE OF CAIBARIEN CUBA

ABOUT 300 MI...485 KM SSE OF MIAMI FLORIDA

MAXIMUM SUSTAINED WINDS...160 MPH...260 KM/H

PRESENT MOVEMENT...W OR 280 DEGREES AT 13 MPH...20 KM/H

MINIMUM CENTRAL PRESSURE...924 MB...27.29 INCHES

WATCHES AND WARNINGS

CHANGES WITH THIS ADVISORY:

The Storm Surge Warning has been extended northward on the east coast of Florida to the Volusia/Brevard County Line and on the west coast of Florida to Anclote River, including Tampa Bay.

The Hurricane Warning has been extended northward on the east coast of Florida to the Volusia/Brevard County Line and on the west coast of Florida to Anclote River.

The Storm Surge Watch has been extended northward on the west coast of Florida to Suwanee River.

The Hurricane Watch has been extended northward on the east coast of Florida to Fernandina Beach and on the west coast of Florida to Indian Pass.

The government of Cuba has upgraded the Hurricane Watch for the province of Matanzas to a Hurricane Warning. A Tropical Storm Warning has been issued for the provinces of La Habana and Ciudad de la Habana. The Hurricane Watch and Tropical Storm Warning for Guantanamo have been discontinued.

SUMMARY OF WATCHES AND WARNINGS IN EFFECT:

A Storm Surge Warning is in effect for...

- * Volusia/Brevard County Line southward around the Florida peninsula to Anclote River
- * Florida Keys
- * Tampa Bay

A Storm Surge Watch is in effect for...

- * North of the Volusia/Brevard County Line to the Flagler/Volusia County line
- * North of Anclote River to Suwannee River

A Hurricane Warning is in effect for...

- * Volusia/Brevard County Line southward around the Florida peninsula to Anclote River
- * Florida Keys
- * Lake Okeechobee
- * Florida Bay
- * Cuban provinces of Camaguey, Ciego de Avila, Sancti Spiritus, Villa Clara, and Matanzas
- * Central Bahamas and Ragged Island
- * Northwestern Bahamas

A Hurricane Watch is in effect for...

- * North of the Volusia/Brevard County Line to Fernandina Beach
- * North and west of Anclote River to Indian Pass
- * Cuban provinces of Holguin and Las Tunas

A Tropical Storm Warning is in effect for...

- * Cuban provinces of Holguin, Las Tunas, La Habana, and Ciudad de la Habana

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 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. For a depiction of areas at risk, please see the National Weather Service Storm Surge Watch/Warning Graphic, available at hurricanes.gov.

A Hurricane Warning means that hurricane conditions are expected somewhere within the warning area. 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 Warning means that tropical storm conditions are expected somewhere within the warning area.

Interests elsewhere in Cuba, Florida, and the southeastern United States should monitor the progress of Irma.

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 48-HOUR OUTLOOK

At 1100 PM EDT (0300 UTC), the center of Hurricane Irma was located near latitude 22.1 North, longitude 77.7 West. Irma is moving toward the west near 13 mph (20 km/h). A turn toward the northwest is expected by late Saturday. On the forecast track, the center of Irma will move near the north coast of Cuba through Saturday, near the Florida Keys Sunday morning, and then near the southwest coast of Florida Sunday afternoon.

Data from an Air Force Reserve Hurricane Hunter aircraft indicate that maximum sustained winds have increased to near 160 mph (260 km/h) with higher gusts. Irma is once again a category 5 hurricane on the Saffir-Simpson Hurricane Wind Scale. Some fluctuations in intensity are likely during the next day or two, but Irma is expected to remain a powerful hurricane as it approaches Florida.

Hurricane-force winds extend outward up to 70 miles (110 km) from the center, and tropical-storm-force winds extend outward up to 185 miles (295 km).

The estimated minimum central pressure is 924 mb (27.29 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 is expected to reach the following **HEIGHTS ABOVE GROUND** if the peak surge occurs at the time of high tide...

SW Florida from Captiva to Cape Sable...8 to 12 ft
Cape Sable to Boca Raton including the Florida Key...5 to 10 ft
Venice to Captiva...5 to 8 ft
Anclote River to Venice including Tampa Bay...3 to 5 ft
Boca Raton to Flagler/Volusia County line...2 to 4 ft
Anclote River to Suwannee River...3 to 6 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.

The combination of a life-threatening storm surge and large breaking waves will raise water levels **ABOVE NORMAL TIDE LEVELS** by the following amounts within the hurricane warning area near and to the north of the center of Irma. Near the coast, the surge will be accompanied by large and destructive waves.

Ragged Island in the Bahamas...15 to 20 ft
Central and Northwestern Bahamas...3 to 6 ft
Northern coast of Cuba in the warning area...5 to 10 ft

WIND: Hurricane conditions are still occurring over portions of the central Bahamas, as well as Ragged Island. Hurricane conditions are expected to continue within the hurricane warning area along the north coast of Cuba through Saturday. Hurricane conditions are expected in the northwestern Bahamas tonight and Saturday, and in portions of southern and central Florida and the Florida Keys Saturday night and Sunday.

Hurricane and tropical storm conditions are possible within the watch area in central and north Florida by Sunday.

RAINFALL: Irma is expected to produce the following rain accumulations through Tuesday night:

Southern Bahamas and northern Cuba...10 to 15 inches, isolated 20 inches

Southern Cuba...5 to 10 inches, isolated 15 inches

Jamaica...1 to 2 inches

The Florida Keys, much of the Florida peninsula, and southeast

Georgia...8 to 15 inches, isolated 20 inches

The Florida Panhandle...3 to 6 inches, isolated 8 inches

Rest of Eastern Georgia, western South Carolina, and Western North Carolina...4 to 8 inches

Western Georgia, eastern and northern Alabama, and southern Tennessee...2 to 5 inches

In all areas this rainfall may cause life-threatening flash floods and, in some areas, mudslides.

TORNADOES: A few tornadoes are possible from Saturday midday into Sunday across central and south Florida.

SURF: Swells generated by Irma are affecting the southeastern Bahamas, the Turks and Caicos Islands, the northern coast of the Dominican Republic, and should start affecting portions of the southeast coast of the United States tonight. 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.

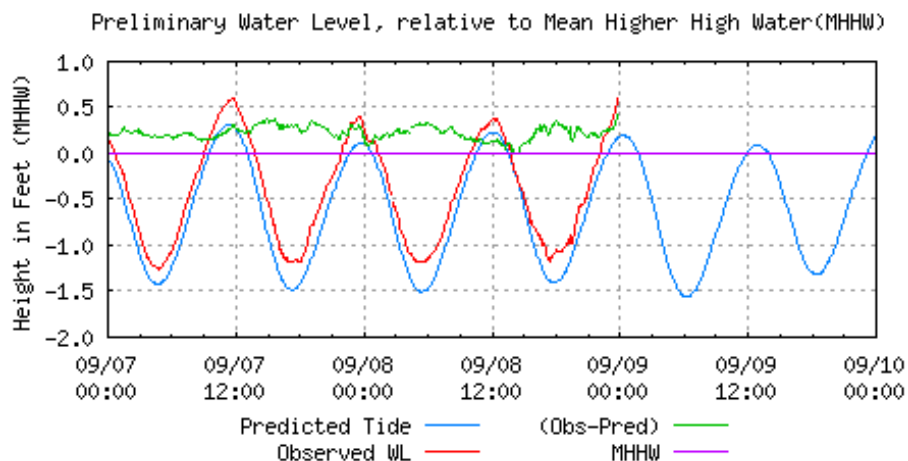
\$\$

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: [Key West - Water Level](#), [Key West - Winds](#), [Key West - Barometric](#), [Vaca Key, Florida Bay - Water Level](#), [Vaca Key, Florida Bay - Winds](#), [Vaca Key, Florida Bay - Barometric](#), [Virginia Key, Biscayne Bay - Water Level](#), [Virginia Key, Biscayne Bay - Winds](#), [Virginia Key, Biscayne Bay - Barometric](#), [Lake Worth Pier, Atlantic Ocean - Water Level](#), [Lake Worth Pier, Atlantic Ocean - Winds](#), [Trident Pier, Port Canaveral - Water Level](#), [Trident Pier, Port Canaveral - Winds](#), [Naples, Gulf of Mexico - Water Level](#), [Naples, Gulf of Mexico - Winds](#), [Naples, Gulf of Mexico - Barometric](#), [Fort Myers, Caloosahatchee River - Water Level](#), [Fort Myers, Caloosahatchee River - Winds](#), [Fort Myers, Caloosahatchee River - Barometric](#), [Port Manatee - Water Level](#), [St Petersburg, Tampa Bay - Water Level](#), [St Petersburg, Tampa Bay - Winds](#)

NOAA/NOS/CO-OPS 8724580 Key West, FL



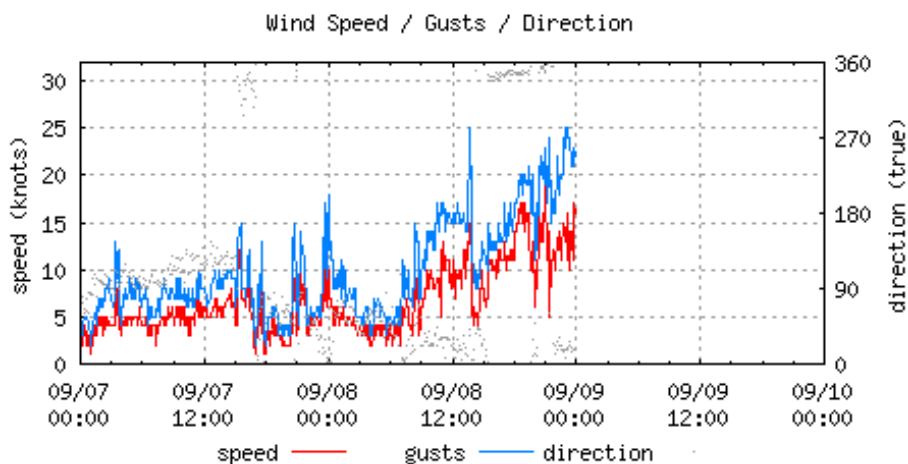
Last Observed Sample: 09/09/2017 00:00 (EDT). Data relative to MHHW

Observed: 0.59 ft. Predicted: 0.17 ft. Residual: 0.42 ft.

Historical Maximum Water Level: Oct 24 2005, 3.14 ft.

Next High Tide: 09/09/2017 00:18 (EDT), 0.19 ft.

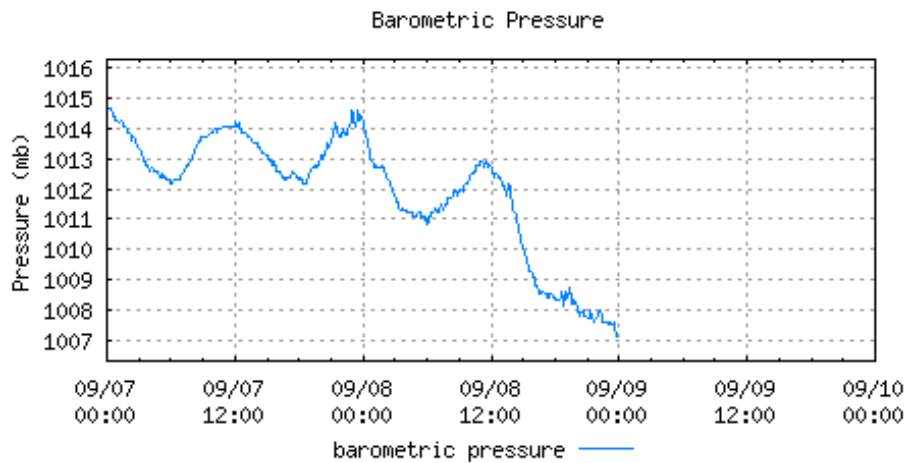
NOAA/NOS/CO-OPS 8724580 Key West, FL



Last Observed Sample: 09/09/2017 00:00 (EDT)

Wind Speed: 16 knots Gusts: 23 knots Direction: 18° T

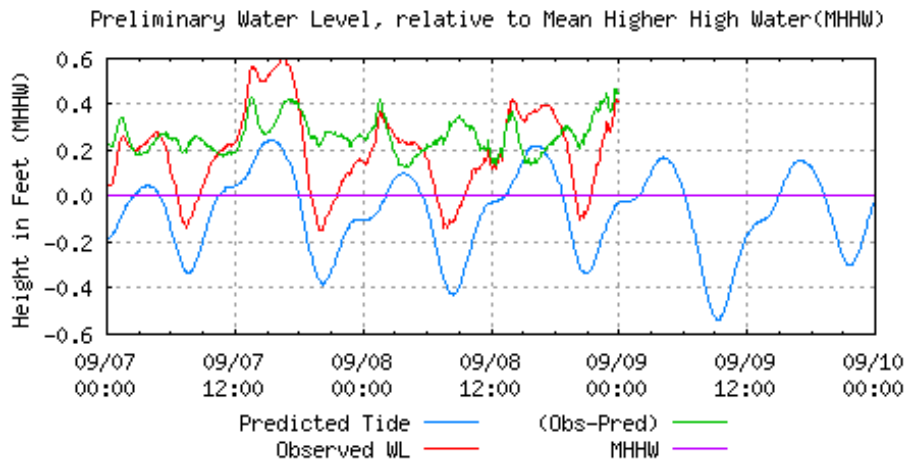
NOAA/NOS/CO-OPS 8724580 Key West, FL



Last Observed Sample: 09/09/2017 00:00 (EDT)

Barometric Pressure: 1007.2 mb

NOAA/NOS/CO-OPS 8723970 Vaca Key, Florida Bay, FL



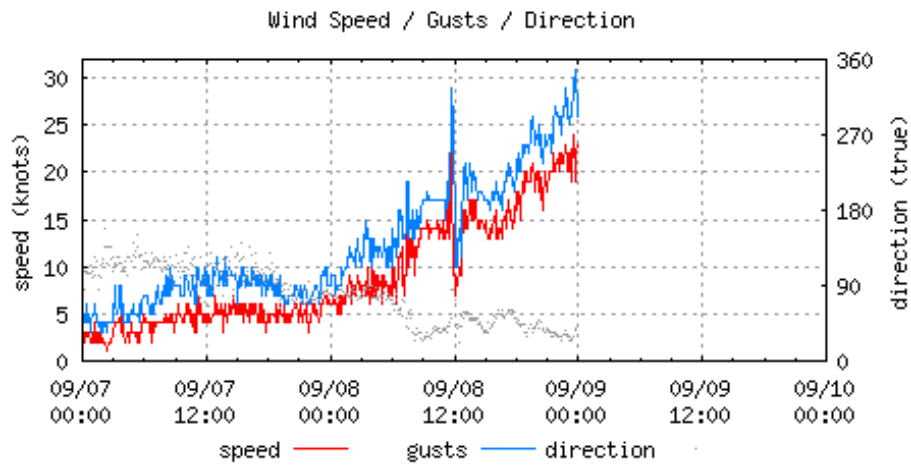
Last Observed Sample: 09/08/2017 23:54 (EDT). Data relative to MHHW

Observed: 0.42 ft. Predicted: -0.03 ft. Residual: 0.45 ft.

Historical Maximum Water Level: Oct 24 2005, 5.80 ft.

Next High Tide: 09/09/2017 04:10 (EDT), 0.17 ft.

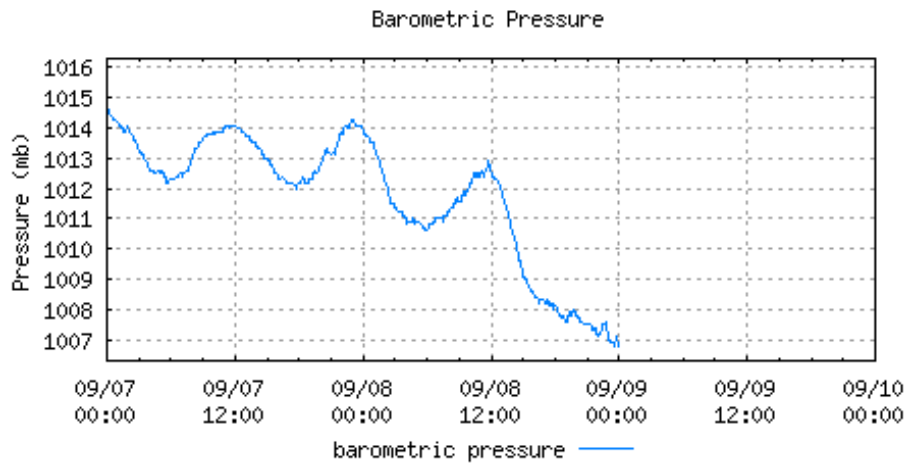
NOAA/NOS/CO-OPS 8723970 Vaca Key, Florida Bay, FL



Last Observed Sample: 09/08/2017 23:54 (EDT)

Wind Speed: 23 knots Gusts: 26 knots Direction: 31° T

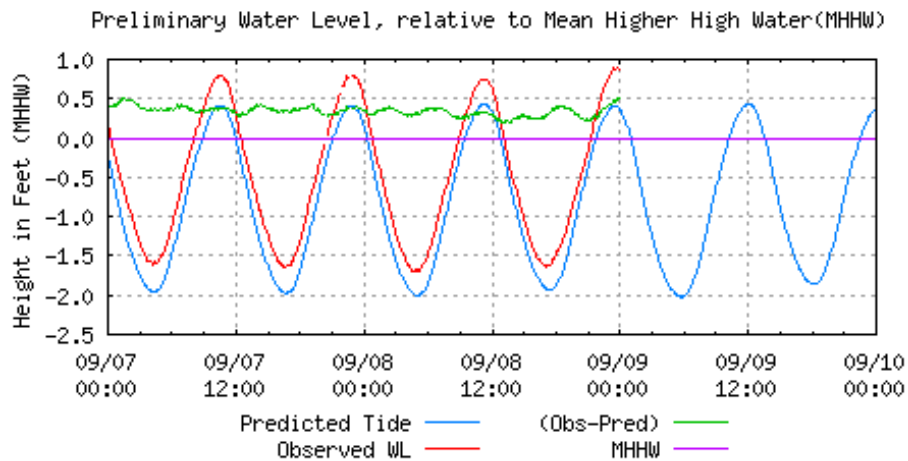
NOAA/NOS/CO-OPS 8723970 Vaca Key, Florida Bay, FL



Last Observed Sample: 09/08/2017 23:54 (EDT)

Barometric Pressure: 1006.8 mb

NOAA/NOS/CO-OPS 8723214 Virginia Key, Biscayne Bay, FL



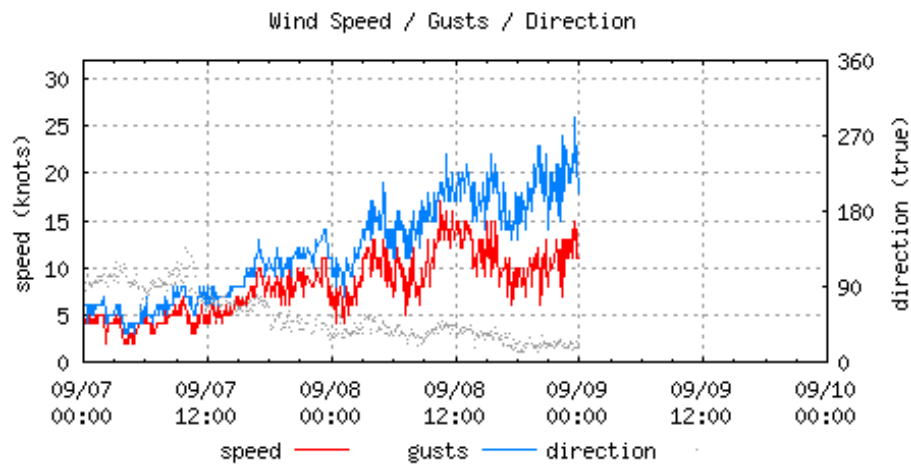
Last Observed Sample: 09/08/2017 23:54 (EDT). Data relative to MHHW

Observed: 0.88 ft. Predicted: 0.37 ft. Residual: 0.51 ft.

Historical Maximum Water Level: Oct 24 2005, 2.58 ft.

Next High Tide: 09/09/2017 12:01 (EDT), 0.43 ft.

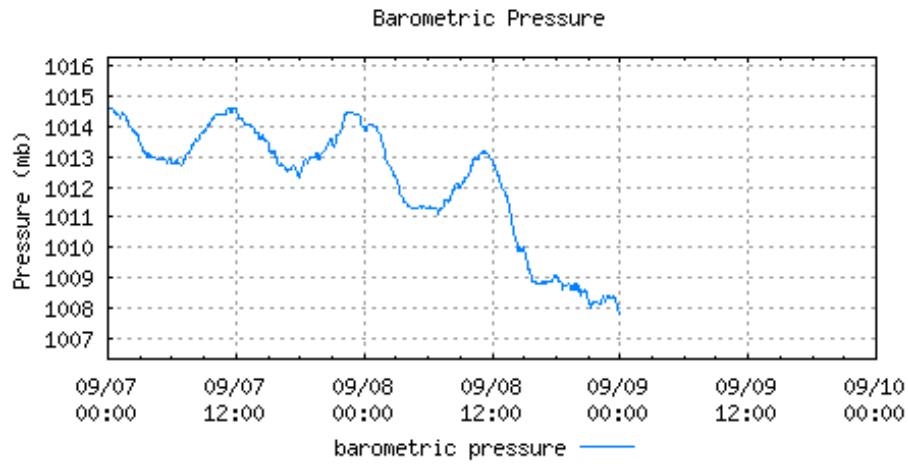
NOAA/NOS/CO-OPS 8723214 Virginia Key, Biscayne Bay, FL



Last Observed Sample: 09/08/2017 23:54 (EDT)

Wind Speed: 11 knots Gusts: 18 knots Direction: 23° T

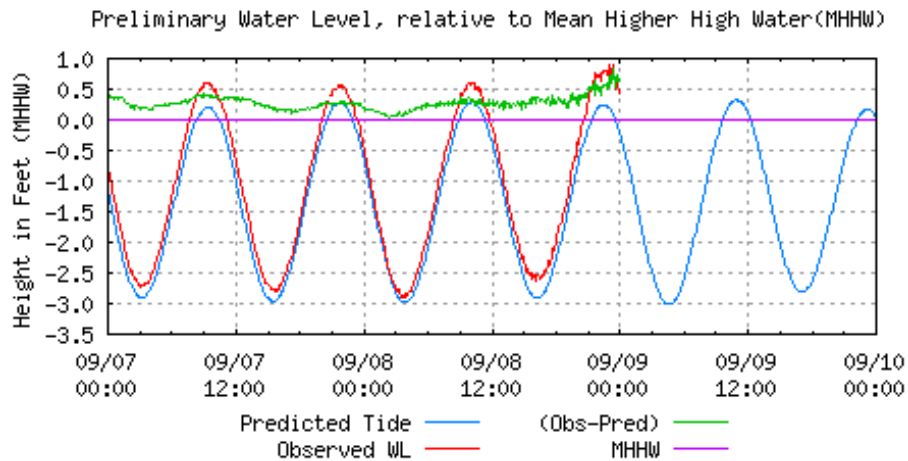
NOAA/NOS/CO-OPS 8723214 Virginia Key, Biscayne Bay, FL



Last Observed Sample: 09/08/2017 23:54 (EDT)

Barometric Pressure: 1007.8 mb

NOAA/NOS/CO-OPS 8722670 Lake Worth Pier, Atlantic Ocean, FL



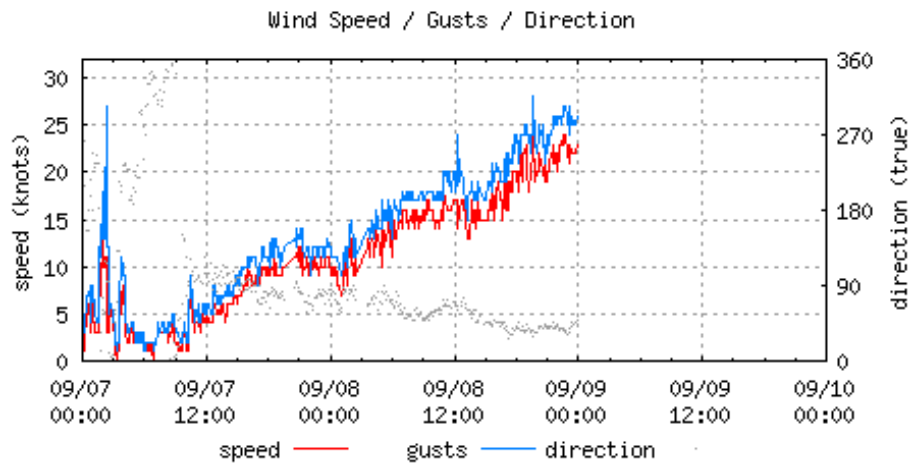
Last Observed Sample: 09/08/2017 23:54 (EDT). Data relative to MHHW

Observed: 0.45 ft. Predicted: -0.17 ft. Residual: 0.62 ft.

Historical Maximum Water Level: Oct 28 2012, 2.00 ft.

Next High Tide: 09/09/2017 10:54 (EDT), 0.33 ft.

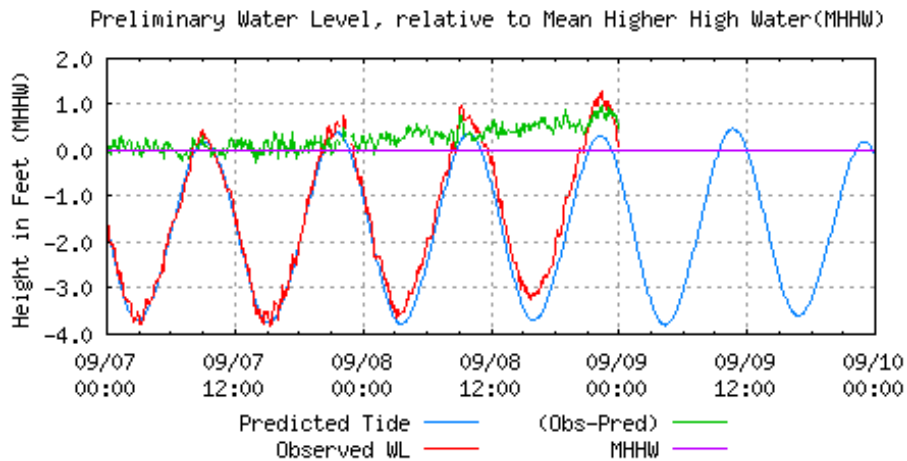
NOAA/NOS/CO-OPS 8722670 Lake Worth Pier, Atlantic Ocean, FL



Last Observed Sample: 09/08/2017 23:54 (EDT)

Wind Speed: 23 knots Gusts: 26 knots Direction: 48° T

NOAA/NOS/CO-OPS 8721604 Trident Pier, Port Canaveral, FL



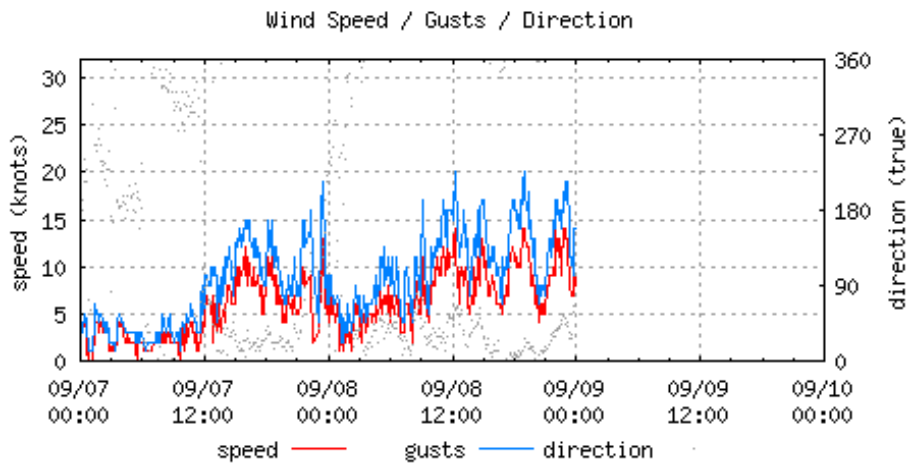
Last Observed Sample: 09/08/2017 23:54 (EDT). Data relative to MHHW

Observed: 0.08 ft. Predicted: -0.42 ft. Residual: 0.50 ft.

Historical Maximum Water Level: Sep 26 2004, 4.01 ft.

Next High Tide: 09/09/2017 10:39 (EDT), 0.47 ft.

NOAA/NOS/CO-OPS 8721604 Trident Pier, Port Canaveral, FL

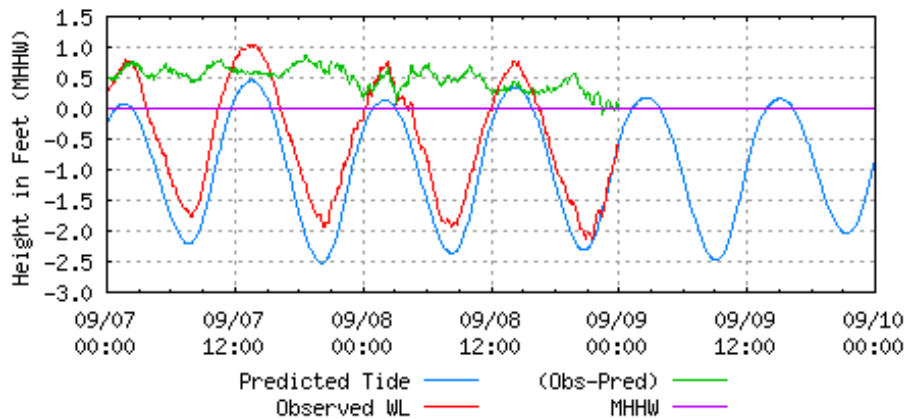


Last Observed Sample: 09/08/2017 23:54 (EDT)

Wind Speed: 8 knots Gusts: 14 knots Direction: 66° T

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

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



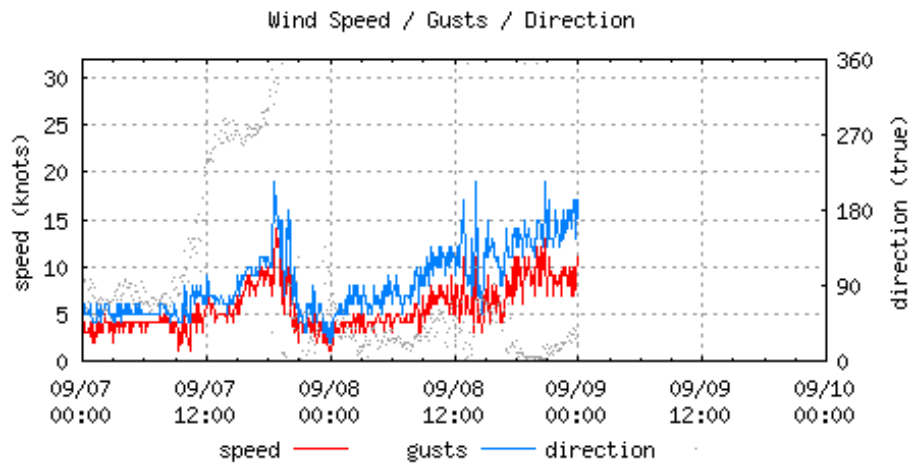
Last Observed Sample: 09/08/2017 23:54 (EDT). Data relative to MHHW

Observed: -0.60 ft. Predicted: -0.63 ft. Residual: 0.03 ft.

Historical Maximum Water Level: Dec 21 1972, 3.11 ft.

Next High Tide: 09/09/2017 02:31 (EDT), 0.17 ft.

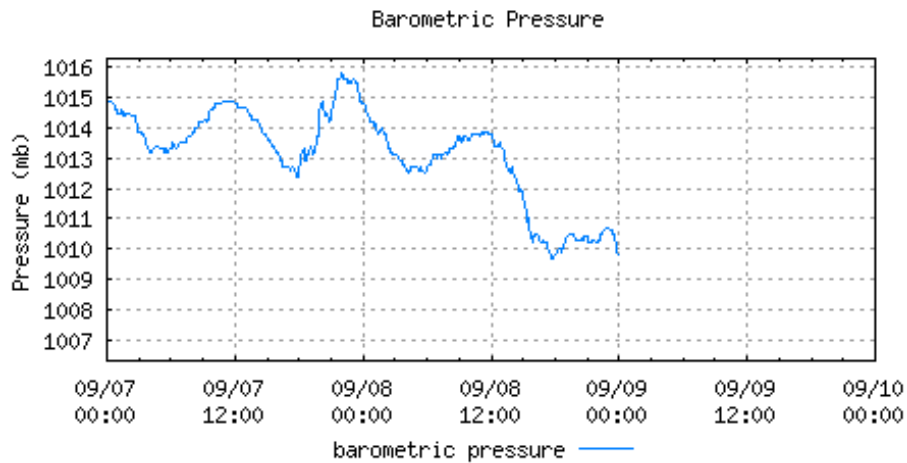
NOAA/NOS/CO-OPS 8725110 Naples, Gulf of Mexico, FL



Last Observed Sample: 09/08/2017 23:54 (EDT)

Wind Speed: 11 knots Gusts: 17 knots Direction: 21° T

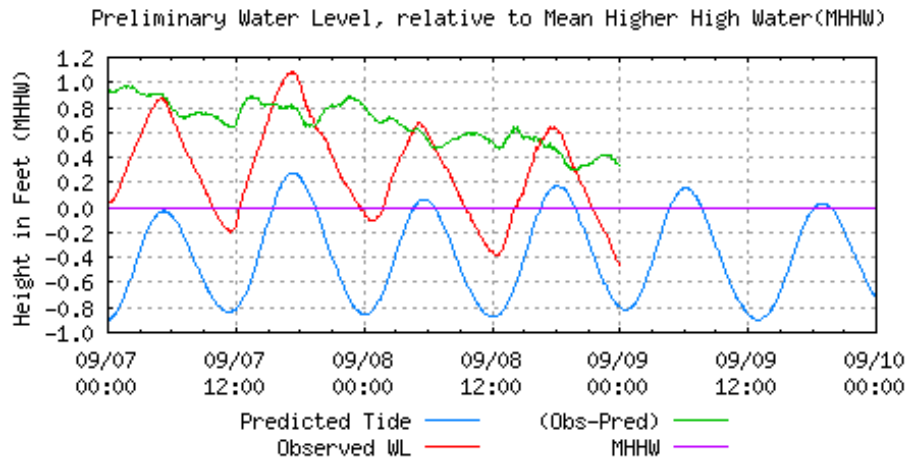
NOAA/NOS/CO-OPS 8725110 Naples, Gulf of Mexico, FL



Last Observed Sample: 09/08/2017 23:54 (EDT)

Barometric Pressure: 1009.8 mb

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



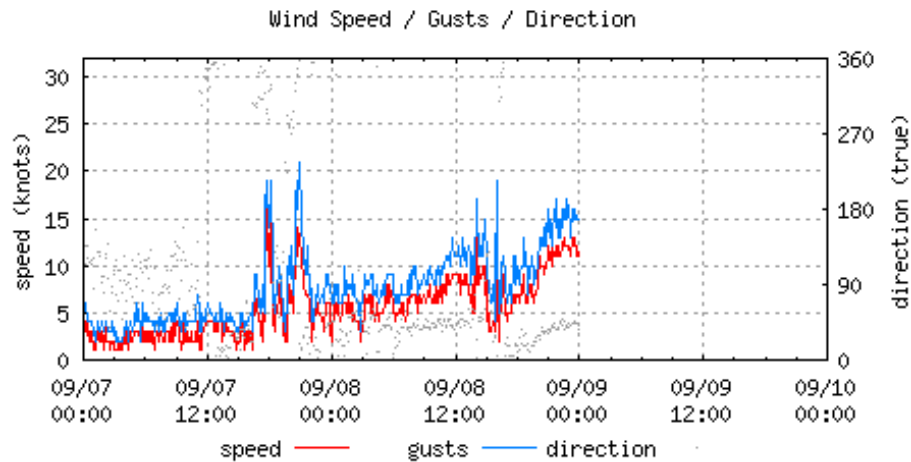
Last Observed Sample: 09/08/2017 23:54 (EDT). Data relative to MHHW

Observed: -0.46 ft. Predicted: -0.80 ft. Residual: 0.34 ft.

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

Next High Tide: 09/09/2017 06:07 (EDT), 0.16 ft.

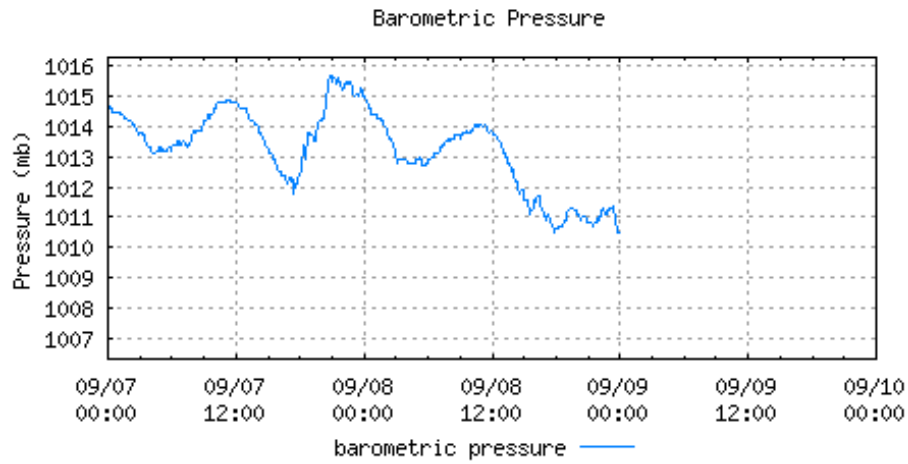
NOAA/NOS/CO-OPS 8725520 Fort Myers, Caloosahatchee River, FL



Last Observed Sample: 09/08/2017 23:54 (EDT)

Wind Speed: 11 knots Gusts: 15 knots Direction: 37° T

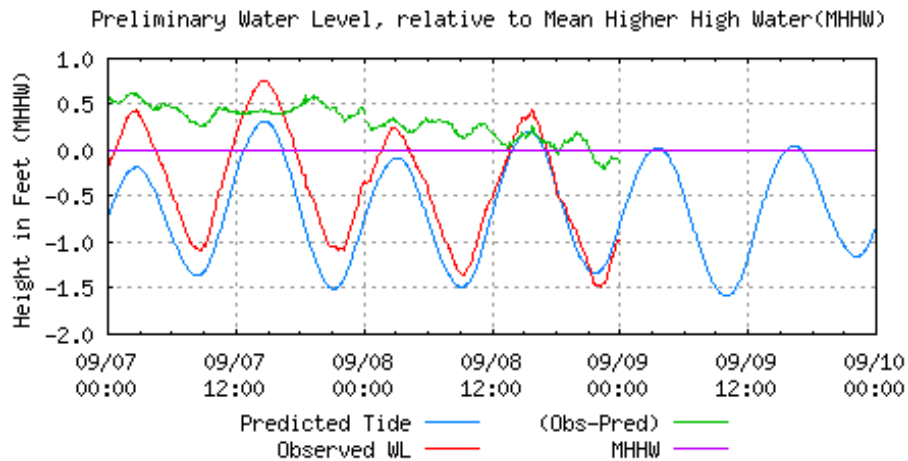
NOAA/NOS/CO-OPS 8725520 Fort Myers, Caloosahatchee River, FL



Last Observed Sample: 09/08/2017 23:54 (EDT)

Barometric Pressure: 1010.5 mb

NOAA/NOS/CO-OPS 8726384 Port Manatee, FL



Last Observed Sample: 09/08/2017 23:54 (EDT). Data relative to MHHW

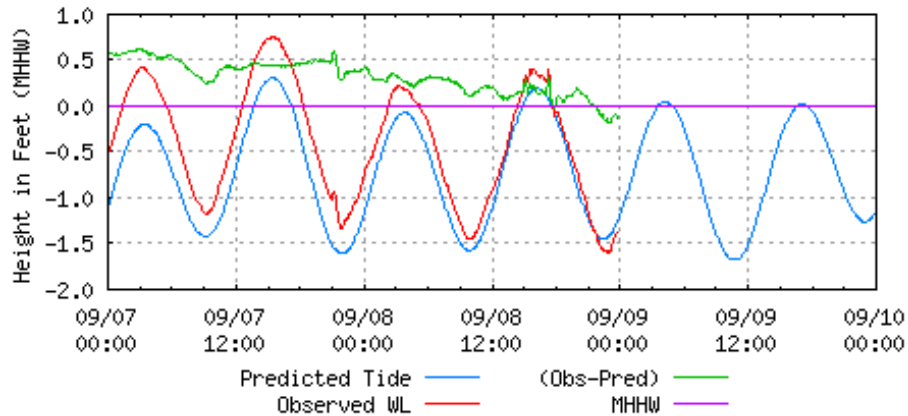
Observed: -0.97 ft. Predicted: -0.84 ft. Residual: -0.13 ft.

Historical Maximum Water Level: Sep 6 2004, 2.29 ft.

Next High Tide: 09/09/2017 03:32 (EDT), 0.03 ft.

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

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



Last Observed Sample: 09/08/2017 23:48 (EDT). Data relative to MHHW

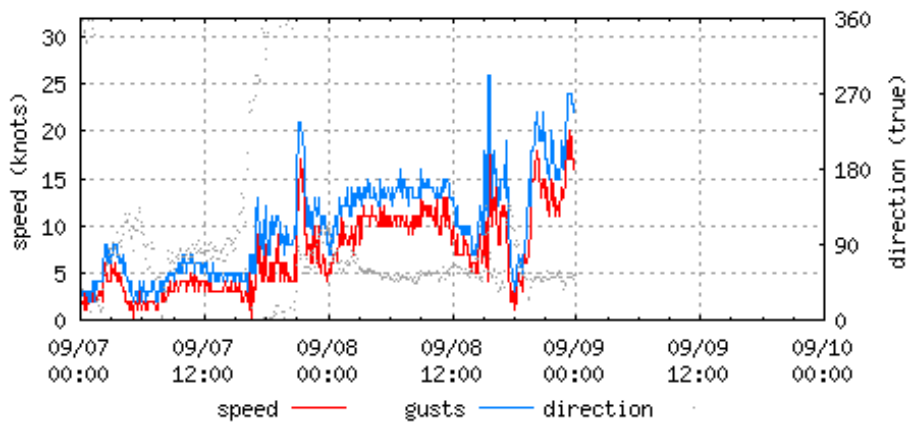
Observed: -1.38 ft. Predicted: -1.25 ft. Residual: -0.13 ft.

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

Next High Tide: 09/09/2017 04:14 (EDT), 0.05 ft.

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

Wind Speed / Gusts / Direction



Last Observed Sample: 09/08/2017 23:48 (EDT)

Wind Speed: 16 knots Gusts: 22 knots Direction: 48° 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
8724580	Key West, FL	09/09/2017 00:00 (EDT)	0.59 ft	0.17 ft	0.42 ft	0.59 ft
8723970	Vaca Key, Florida Bay, FL	09/08/2017 23:54 (EDT)	0.42 ft	-0.03 ft	0.45 ft	0.43 ft
8723214	Virginia Key, Biscayne Bay, FL	09/08/2017 23:54 (EDT)	0.88 ft	0.37 ft	0.51 ft	0.89 ft
8722670	Lake Worth Pier, Atlantic Ocean, FL	09/08/2017 23:54 (EDT)	0.45 ft	-0.17 ft	0.62 ft	0.92 ft
8721604	Trident Pier, Port Canaveral, FL	09/08/2017 23:54 (EDT)	0.08 ft	-0.42 ft	0.50 ft	1.30 ft
8725110	Naples, Gulf of Mexico, FL	09/08/2017 23:54 (EDT)	-0.60 ft	-0.63 ft	0.03 ft	0.78 ft
8725520	Fort Myers, Caloosahatchee River, FL	09/08/2017 23:54 (EDT)	-0.46 ft	-0.80 ft	0.34 ft	0.67 ft
8726384	Port Manatee, FL	09/08/2017 23:54 (EDT)	-0.97 ft	-0.84 ft	-0.13 ft	0.46 ft
8726520	St Petersburg, Tampa Bay, FL	09/08/2017 23:48 (EDT)	-1.38 ft	-1.25 ft	-0.13 ft	0.40 ft

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