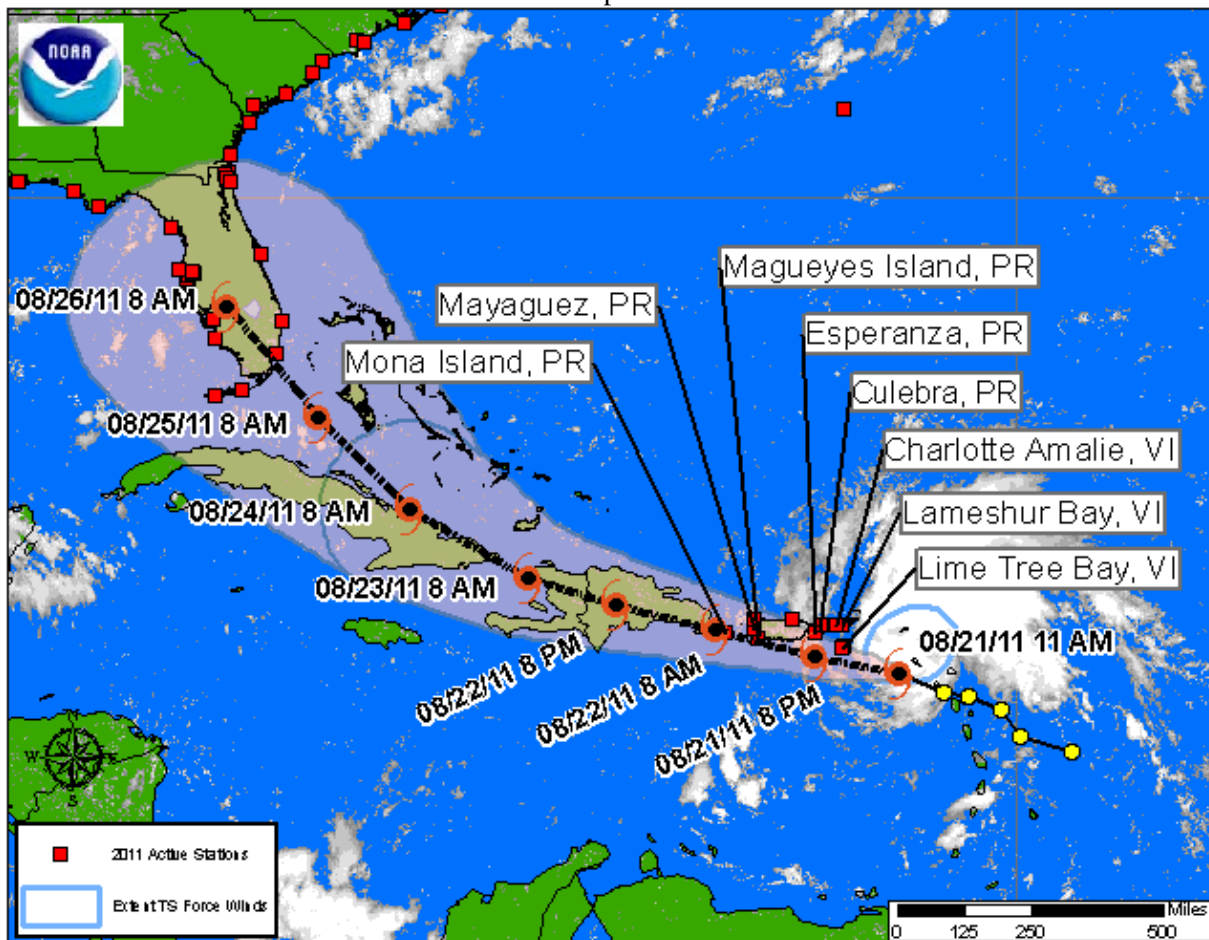


Tropical Storm IRENE QuickLook, POSTED 12:00 AST 08/21/2011



Tropical Storm IRENE QuickLook
Posted: 12:00 AST 08/21/2011

NOAA and NOAA Partnership Stations Relative to the Storm



Storm Analysis

As of 08/21/2011 12:00 AST, water levels in the U.S. Virgin Islands and Puerto Rico are slightly elevated (0.1-0.4 feet) above predicted, with Mayaguez, PR showing the most at 0.6 feet above predicted. Winds are gradually increasing in the region, with gusts up to 23 knots at Lime Tree Bay, VI. Barometric pressure is falling across the region.

Water Level and Meteorological plots available below are updated automatically. Water level predictions relative to Mean Lower Low Water are:

Lime Tree Bay, VI Next predicted high tides are 0.76 ft (0.23 m) at 08/21/2011 19:55 AST and 0.82 ft (0.25 m) at 08/22/2011 20:20 AST.

Lameshur Bay, St. John, VI: Next predicted high tides are 0.7 ft (0.22 m) at 08/21/2011 16:49 AST and 0.8 ft (0.24 m) at 08/22/2011 17:48 AST.

Tropical Storm IRENE QuickLook, POSTED 12:00 AST 08/21/2011

Charlotte Amalie, VI Next predicted high tides are 0.81 ft (0.25 m) at 08/21/2011 17:25 AST and 0.87 ft (0.27 m) at 08/22/2011 18:18 AST.

Culebra, PR: Next predicted high tides are 1.0 ft (0.29 m) at 08/21/2011 15:06 AST and 0.7 ft (0.20 m) at 08/22/2011 01:19 AST.

Esperanza, Vieques Island, PR: Next predicted high tides are 0.6 ft (0.19 m) at 08/21/2011 17:27 AST and 0.7 ft (0.21 m) at 08/22/2011 18:12 AST.

Maguëyes Island, PR: Next predicted high tides are 0.8 ft (0.23 m) at 08/21/2011 18:48 AST and 0.8 ft (0.25 m) at 08/22/2011 19:14 AST.

Mayaguez, PR: Next predicted high tides are 0.8 ft (0.24 m) at 08/21/2011 14:26 AST and 0.5 ft (0.17 m) at 08/22/2011 01:59 AST.

Mona Island, PR Next predicted high tides are 0.80 ft (0.24 m) at 08/21/2011 20:40 AST and 0.85 ft (0.26 m) at 08/22/2011 21:23 AST.

For additional data, please see the [Center for Operational Oceanographic Products & Services](#) website. For information on Highest Astronomical Tide (HAT), NAVD88 and other datums, please see [Tidal Datums](#). For more information or archived products and reports, please see the [Storm QuickLook](#) Homepage.

Analyst:KG

SELECT NATIONAL HURRICANE CENTER ADVISORY INFORMATION:

TROPICAL STORM IRENE ADVISORY NUMBER 4

1100 AM AST SUN AUG 21 2011

...IRENE EXPECTED TO STRENGTHEN AND PASS NEAR PUERTO RICO TONIGHT...

SUMMARY OF 1100 AM AST INFORMATION

LOCATION...

ABOUT 235 MI ESE OF PONCE PUERTO RICO

MAXIMUM SUSTAINED WINDS...50 MPH

PRESENT MOVEMENT...WNW OR 285 DEGREES AT 20 MPH MINIMUM CENTRAL

PRESSURE...1005 MB.

WATCHES AND WARNINGS

CHANGES IN WATCHES AND WARNINGS WITH THIS ADVISORY...

THE TROPICAL STORM WARNING FOR PUERTO RICO...VIEQUES...AND CULEBRA IS CHANGED TO A HURRICANE WARNING.

A HURRICANE WATCH HAS BEEN ISSUED FOR THE U.S. VIRGIN ISLANDS.

THE GOVERNMENT OF THE DOMINICAN REPUBLIC HAS CHANGED THE TROPICAL STORM WARNING TO A HURRICANE WARNING FOR THE NORTH COAST OF THE DOMINICAN REPUBLIC FROM CABO ENGANO TO CABO FRANCES VIEJO.

THE TROPICAL STORM WATCH FOR HAITI IS CHANGED TO A TROPICAL STORM WARNING.

THE GOVERNMENT OF THE BAHAMAS HAS ISSUED A TROPICAL STORM WATCH FOR THE SOUTHEASTERN BAHAMAS AND THE TURKS AND CAICOS ISLANDS.

SUMMARY OF WATCHES AND WARNINGS IN EFFECT...

A HURRICANE WARNING IS IN EFFECT FOR...

- * PUERTO RICO...VIEQUES...AND CULEBRA
- * THE DOMINICAN REPUBLIC FROM THE SOUTHERN BORDER WITH HAITI TO CABO FRANCES VIEJO ON THE NORTH COAST

A HURRICANE WATCH IS IN EFFECT FOR...

- * U.S. VIRGIN ISLANDS

A TROPICAL STORM WARNING IS IN EFFECT FOR...

- * U.S. VIRGIN ISLANDS
- * SABA...ST. EUSTATIUS...ST. MAARTEN...ST. MARTIN...AND ST. BARTHELEMY
- * ANTIGUA...BARBUDA...ST. KITTS...NEVIS...ANGUILLA...MONTSERRAT
- * BRITISH VIRGIN ISLANDS
- * NORTHERN COAST OF THE DOMINICAN REPUBLIC FROM THE HAITI BORDER EASTWARD TO CABO FRANCES VIEJO
- * HAITI

A TROPICAL STORM WATCH IS IN EFFECT FOR...

- * SOUTHEASTERN BAHAMAS AND THE TURKS AND CAICOS ISLANDS

FOR STORM INFORMATION SPECIFIC TO YOUR AREA IN THE UNITED STATES...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 AM AST THE CENTER OF TROPICAL STORM IRENE WAS LOCATED NEAR LATITUDE 17.0 NORTH...LONGITUDE 63.2 WEST. IRENE IS MOVING TOWARD THE WEST-NORTHWEST NEAR 20 MPH AND THIS MOTION IS EXPECTED TO CONTINUE FOR THE NEXT COUPLE OF DAYS WITH A GRADUAL DECREASE IN FORWARD SPEED. ON THE FORECAST TRACK...IRENE WILL PASS NEAR PUERTO RICO TONIGHT OR EARLY MONDAY AND APPROACH THE DOMINICAN REPUBLIC ON MONDAY.

MAXIMUM SUSTAINED WINDS ARE NEAR 50 MPH WITH HIGHER GUSTS. SOME STRENGTHENING IS FORECAST DURING THE NEXT DAY OR

SO...AND IRENE COULD BECOME A HURRICANE ON MONDAY.

TROPICAL-STORM-FORCE WINDS EXTEND OUTWARD UP TO 150 MILES MAINLY TO THE NORTH OF THE CENTER.

AN AIR FORCE HURRICANE HUNTER AIRCRAFT REPORTED A MINIMUM CENTRAL PRESSURE OF 1007 MB.

HAZARDS AFFECTING LAND

WIND...TROPICAL STORM CONDITIONS ARE EXPECTED IN THE LEEWARD ISLANDS TODAY. TROPICAL STORM CONDITIONS ARE EXPECTED TO BEGIN THIS AFTERNOON IN THE VIRGIN ISLANDS AND PUERTO RICO...AND IN THE DOMINICAN REPUBLIC EARLY MONDAY. HURRICANE CONDITIONS ARE EXPECTED OVER PUERTO RICO...VIEQUES...AND CULEBRA TONIGHT...AND OVER THE DOMINICAN REPUBLIC ON MONDAY.

RAINFALL...IRENE IS EXPECTED TO PRODUCE TOTAL RAINFALL ACCUMULATIONS OF 4 TO 7 INCHES IN THE LEEWARD ISLANDS...PUERTO RICO AND THE VIRGIN ISLANDS...WITH ISOLATED MAXIMUM AMOUNTS OF UP TO 10 INCHES. TOTAL RAINFALL ACCUMULATIONS OF 6 TO 10 INCHES ARE POSSIBLE ACROSS THE DOMINICAN REPUBLIC AND HAITI...WITH ISOLATED MAXIMUM AMOUNTS OF 20 INCHES POSSIBLE. THESE RAINS COULD CAUSE LIFE-THREATENING FLASH FLOODS AND MUD SLIDES IN AREAS OF STEEP TERRAIN.

STORM SURGE...A STORM SURGE WILL RAISE WATER LEVELS BY AS MUCH AS 3 TO 5 FEET ABOVE NORMAL TIDE LEVELS ALONG THE COAST OF THE DOMINICAN REPUBLIC IN THE HURRICANE WARNING AREA. A STORM SURGE OF 1 TO 3 FEET ABOVE NORMAL TIDE LEVELS IS EXPECTED ALONG THE COAST OF PUERTO RICO... AS WELL AS IN THE TROPICAL STORM WARNING AREA. NEAR THE COAST... THE SURGE WILL BE ACCOMPANIED BY LARGE AND DANGEROUS WAVES.

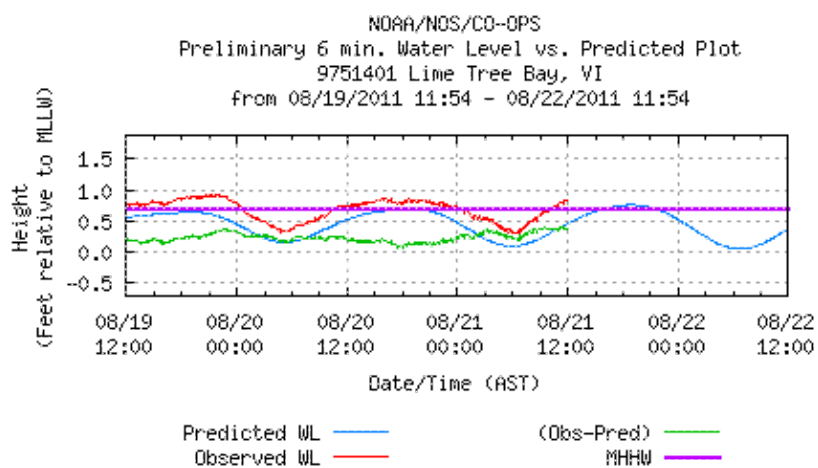
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FORECASTER PASCH

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: [Lime Tree Bay - Water Level](#), [Lime Tree Bay - Winds](#), [Lime Tree Bay - Barometric](#), [Lime Tree Bay - Air/Water Temp](#), [Lameshur Bay, St. John - Water Level](#), [Lameshur Bay, St. John - Barometric](#), [Lameshur Bay, St. John - Air/Water Temp](#), [Charlotte Amalie - Water Level](#), [Charlotte Amalie - Barometric](#), [Charlotte Amalie - Air/Water Temp](#), [Culebra - Water Level](#), [Culebra - Winds](#), [Culebra - Barometric](#), [Culebra - Air/Water Temp](#), [Esperanza, Vieques Island - Water Level](#), [Esperanza, Vieques Island - Winds](#), [Esperanza, Vieques Island - Barometric](#), [Esperanza, Vieques Island - Air/Water Temp](#), [Magueyes Island - Water Level](#), [Magueyes Island - Winds](#), [Magueyes Island - Barometric](#), [Magueyes Island - Air/Water Temp](#), [Mayaguez - Water Level](#), [Mayaguez - Winds](#), [Mayaguez - Barometric](#), [Mayaguez - Air/Water Temp](#), [Mona Island - Water Level](#),

Lime Tree Bay, VI - Return to List

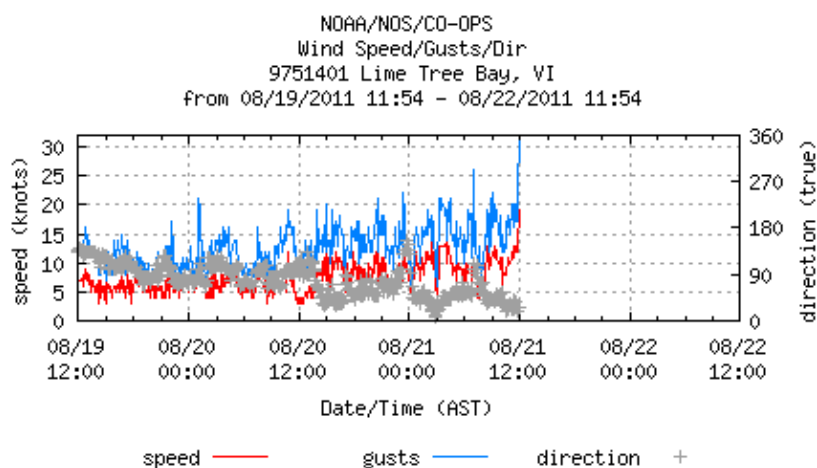


Last Observed Sample: 08/21/2011 11:54 (AST)

Relative to MLLW: **Observed: 0.83 ft.** **Predicted: 0.46 ft.** **Residual: 0.37 ft.**

Historical Maximum Water Level: Nov 17 1999, 1.88 ft. above MHHW

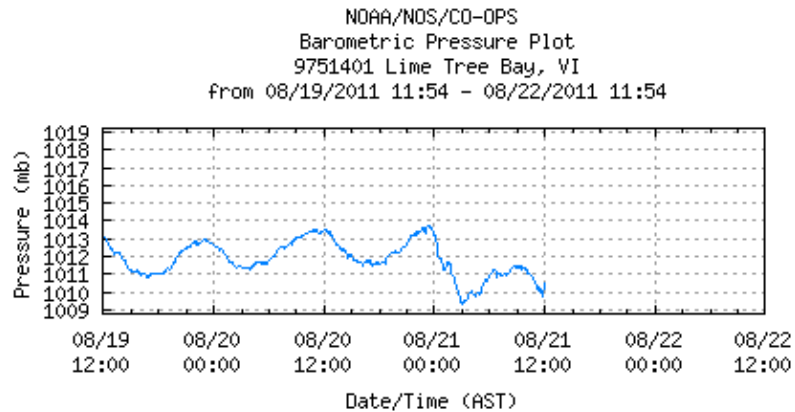
Lime Tree Bay, VI - Return to List



Last Observed Sample: 08/21/2011 11:54 (AST)

Wind Speed: 19 knots **Gusts: 31 knots** **Direction: 27° T**

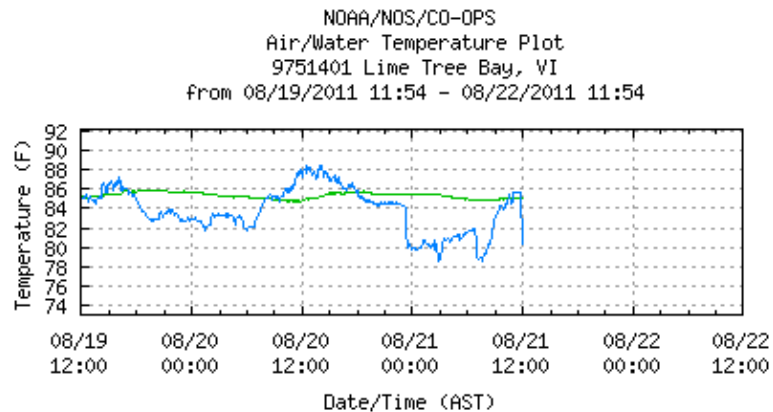
[Lime Tree Bay, VI - Return to List](#)



Last Observed Sample: 08/21/2011 11:54 (AST)

Barometric Pressure: 1010.5 mb

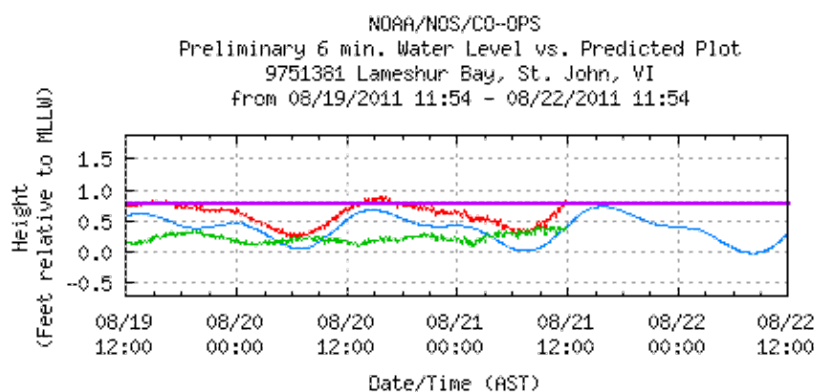
[Lime Tree Bay, VI - Return to List](#)



Last Observed Sample: 08/21/2011 11:54 (AST)

Water Temperature: 85.0° F Air Temperature: 80.3° F

[Lameshur Bay, St. John, VI - Return to List](#)

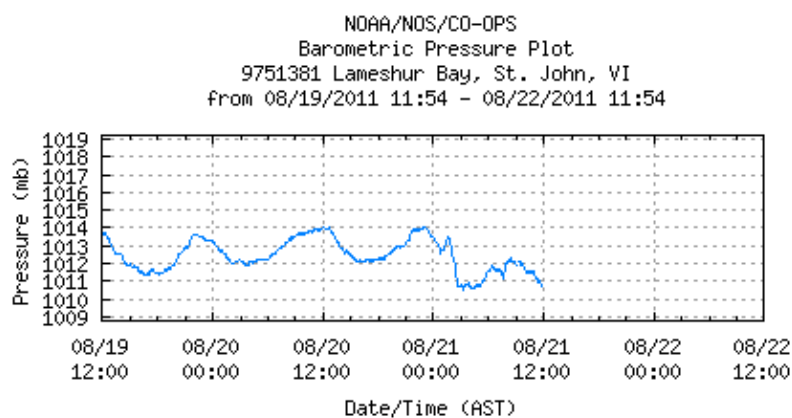


Last Observed Sample: 08/21/2011 11:48 (AST)

Relative to MLLW: **Observed: 0.83 ft.** **Predicted: 0.41 ft.** **Residual: 0.42 ft.**

Historical Maximum Water Level: Aug 30 2010, 0.9 ft. above MHHW

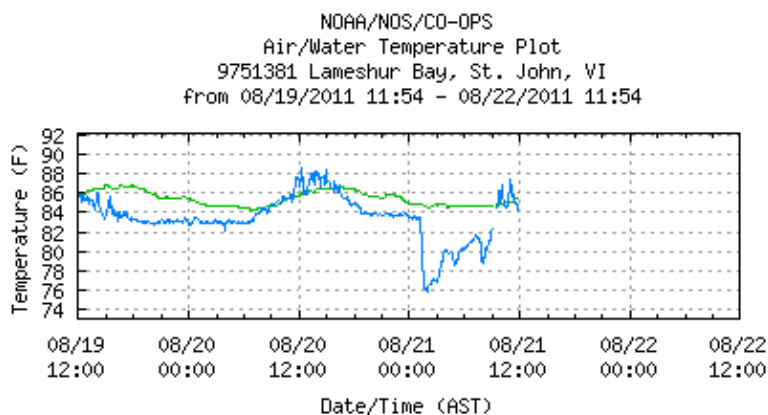
[Lameshur Bay, St. John, VI - Return to List](#)



Last Observed Sample: 08/21/2011 11:48 (AST)

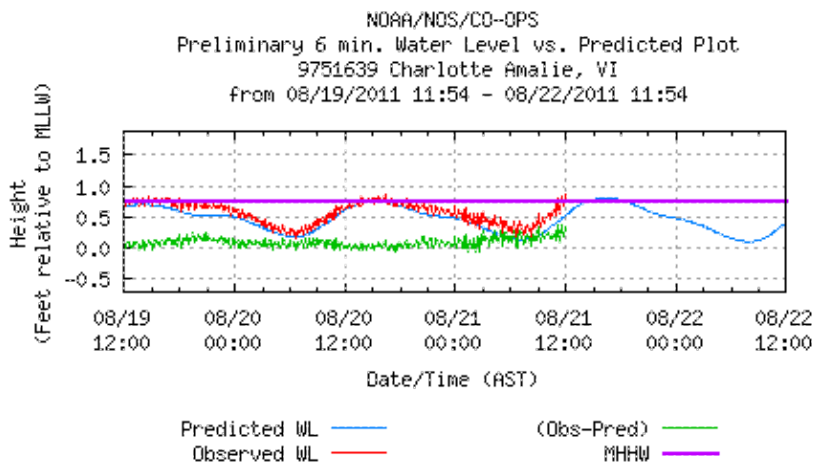
Barometric Pressure: 1010.7 mb

Lameshur Bay, St. John, VI - Return to List



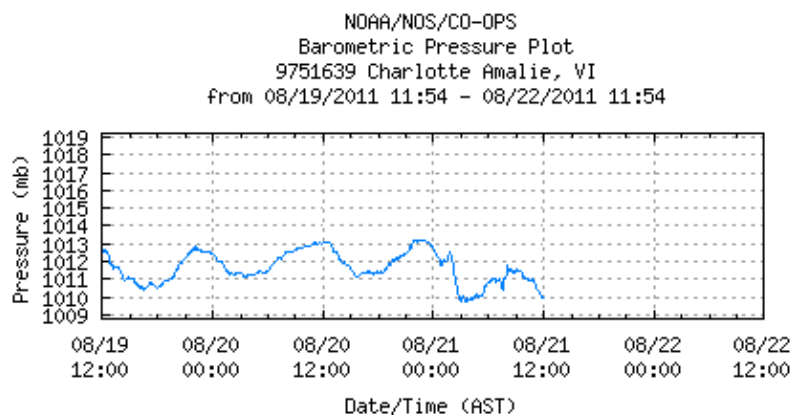
Last Observed Sample: 08/21/2011 11:48 (AST)
Water Temperature: 85.5° F Air Temperature: 84.2° F

Charlotte Amalie, VI - Return to List



Last Observed Sample: 08/21/2011 11:54 (AST)
Relative to MLLW: Observed: 0.86 ft. Predicted: 0.53 ft. Residual: 0.33 ft.
Historical Maximum Water Level: Sep 16 1995, 2.93 ft. above MHHW

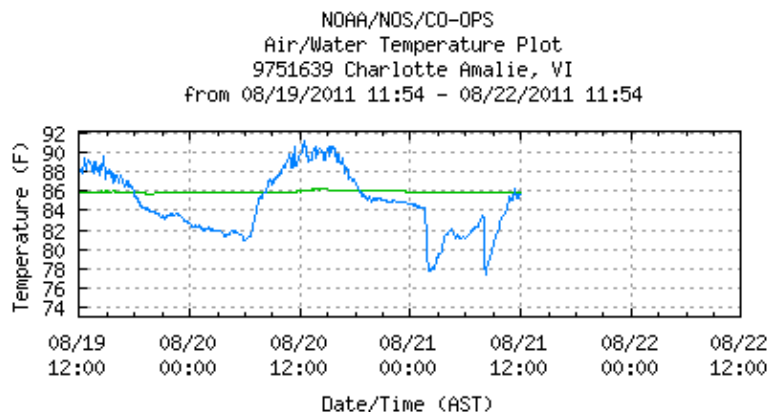
[Charlotte Amalie, VI - Return to List](#)



Last Observed Sample: 08/21/2011 11:54 (AST)

Barometric Pressure: 1010.0 mb

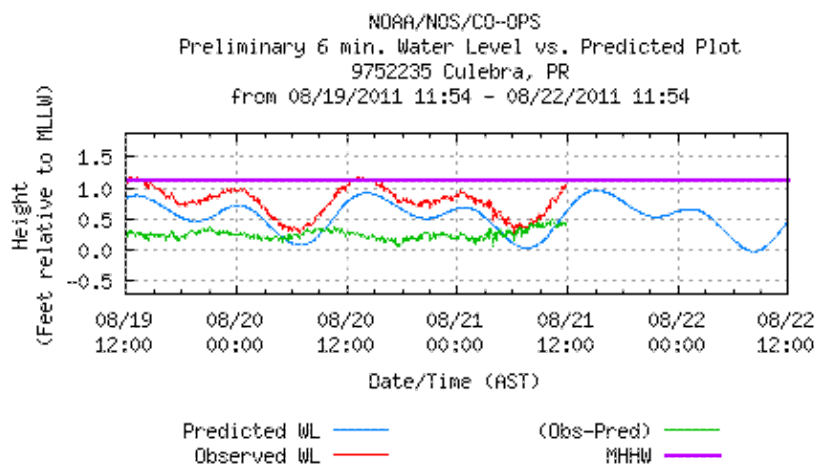
[Charlotte Amalie, VI - Return to List](#)



Last Observed Sample: 08/21/2011 11:54 (AST)

Water Temperature: 85.8° F Air Temperature: 85.6° F

[Culebra, PR - Return to List](#)

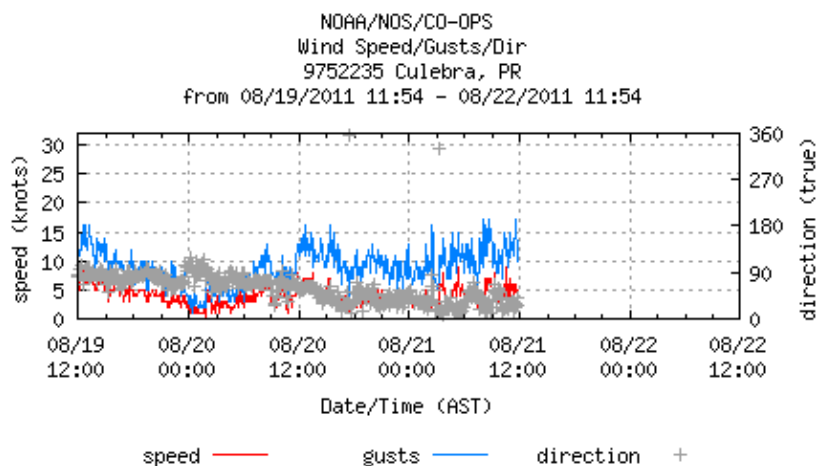


Last Observed Sample: 08/21/2011 11:48 (AST)

Relative to MLLW: **Observed: 1.03 ft.** **Predicted: 0.62 ft.** **Residual: 0.41 ft.**

Historical Maximum Water Level: Nov 6 2006, 0.85 ft. above MHHW

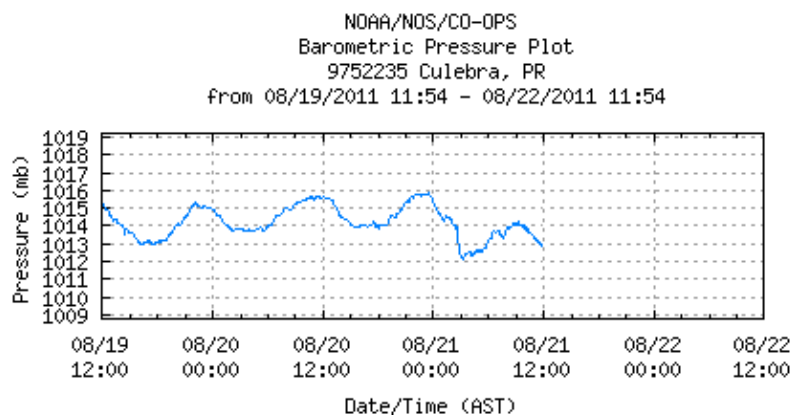
[Culebra, PR - Return to List](#)



Last Observed Sample: 08/21/2011 11:48 (AST)

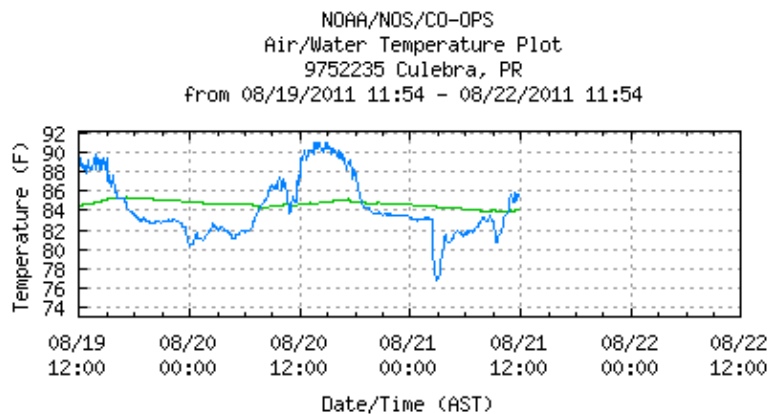
Wind Speed: 4 knots **Gusts: 12 knots** **Direction: 41° T**

[Culebra, PR - Return to List](#)



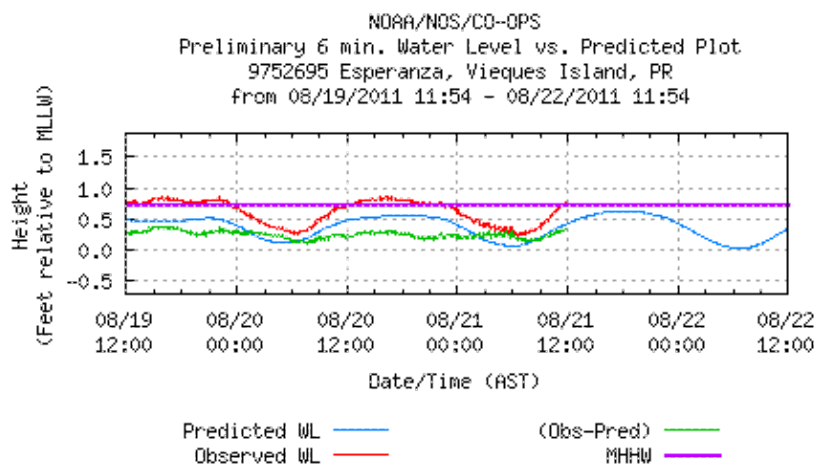
barometric pressure —
Last Observed Sample: 08/21/2011 11:48 (AST)
Barometric Pressure: 1013.0 mb

[Culebra, PR - Return to List](#)



water temp. — air temp —
Last Observed Sample: 08/21/2011 11:48 (AST)
Water Temperature: 84.0° F Air Temperature: 85.5° F

Esperanza, Vieques Island, PR - Return to List

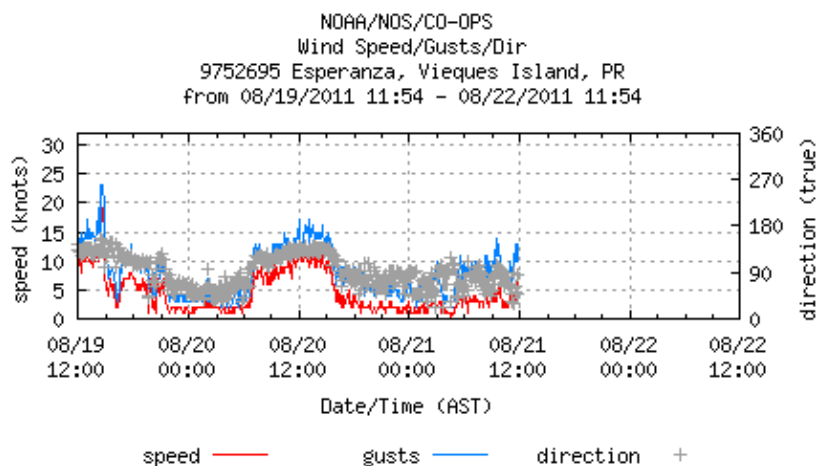


Last Observed Sample: 08/21/2011 11:48 (AST)

Relative to MLLW: **Observed: 0.77 ft.** **Predicted: 0.42 ft.** **Residual: 0.35 ft.**

Historical Maximum Water Level: Aug 30 2010, 0.84 ft. above MHHW

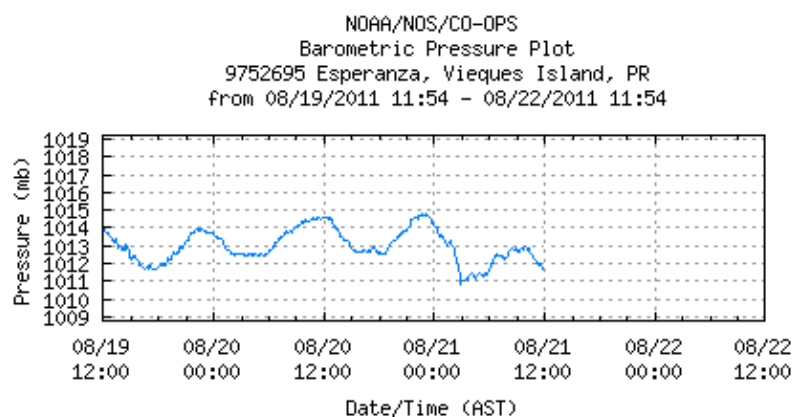
Esperanza, Vieques Island, PR - Return to List



Last Observed Sample: 08/21/2011 11:48 (AST)

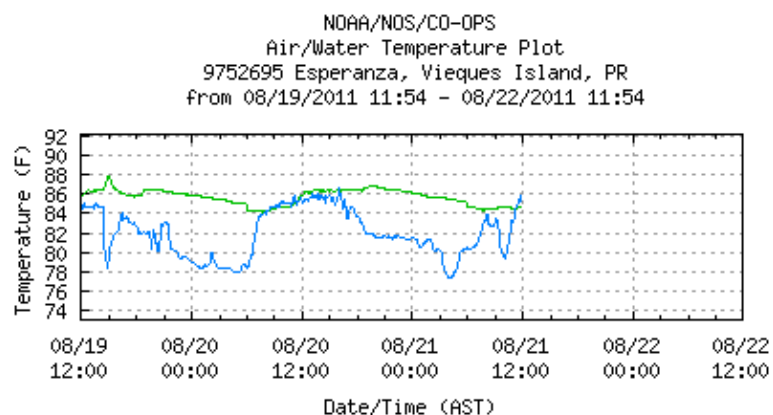
Wind Speed: 4 knots **Gusts: 10 knots** **Direction: 84° T**

[Esperanza, Vieques Island, PR - Return to List](#)



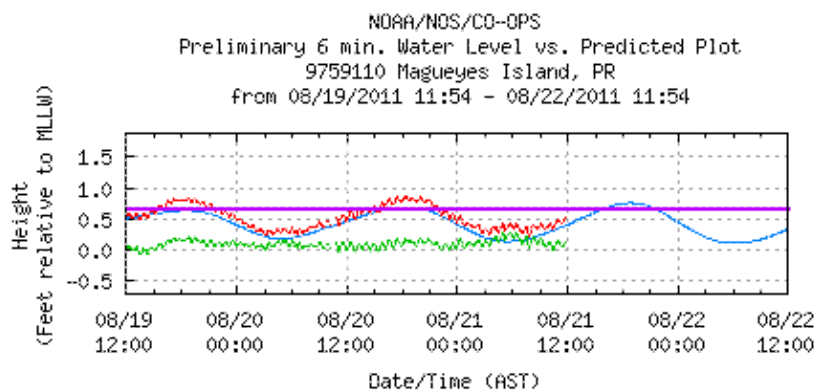
Last Observed Sample: 08/21/2011 11:48 (AST)
Barometric Pressure: 1011.7 mb

[Esperanza, Vieques Island, PR - Return to List](#)



Last Observed Sample: 08/21/2011 11:48 (AST)
Water Temperature: 84.7° F Air Temperature: 85.8° F

Magueyes Island, PR - Return to List

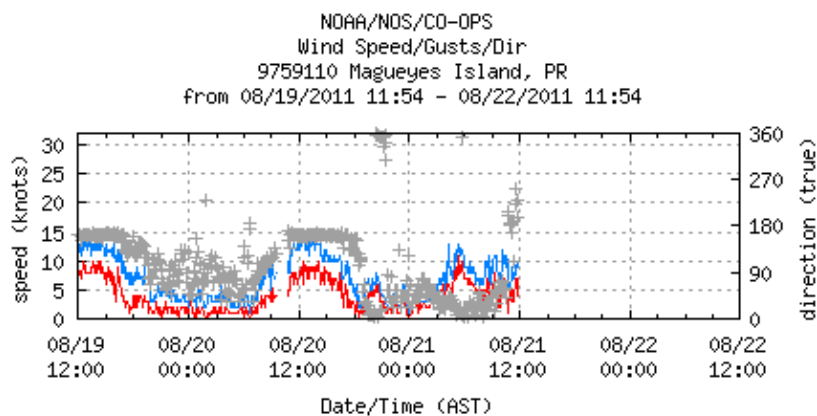


Last Observed Sample: 08/21/2011 11:48 (AST)

Relative to MLLW: **Observed: 0.53 ft.** **Predicted: 0.40 ft.** **Residual: 0.13 ft.**

Historical Maximum Water Level: Sep 22 1998, 1.6 ft. above MHHW

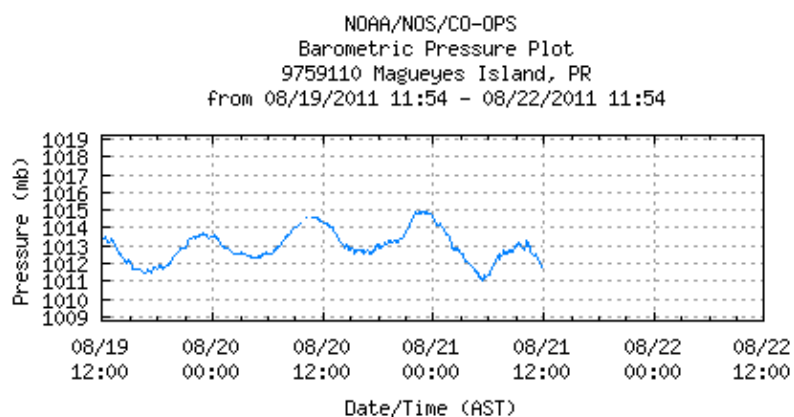
Magueyes Island, PR - Return to List



Last Observed Sample: 08/21/2011 11:48 (AST)

Wind Speed: 7 knots **Gusts: 9 knots** **Direction: 197° T**

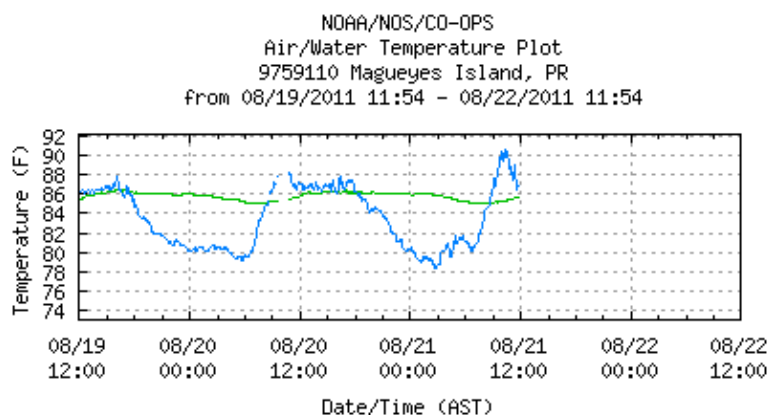
Magueyes Island, PR - Return to List



Last Observed Sample: 08/21/2011 11:48 (AST)

Barometric Pressure: 1011.8 mb

Magueyes Island, PR - Return to List

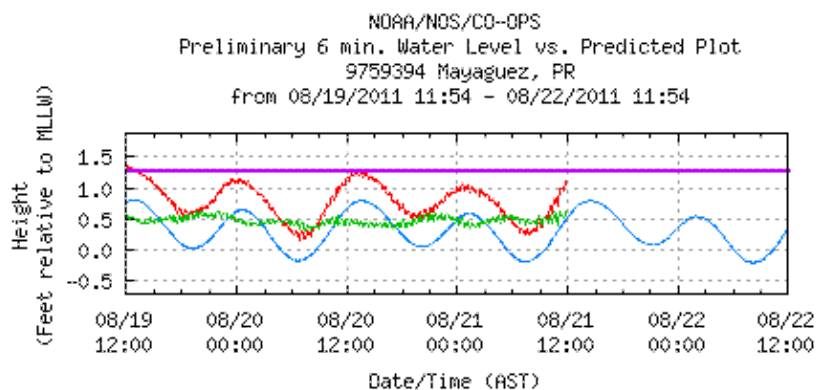


Last Observed Sample: 08/21/2011 11:48 (AST)

Water Temperature: 85.6° F Air Temperature: 86.9° F

Tropical Storm IRENE QuickLook, POSTED 12:00 AST 08/21/2011

Mayaguez, PR - Return to List



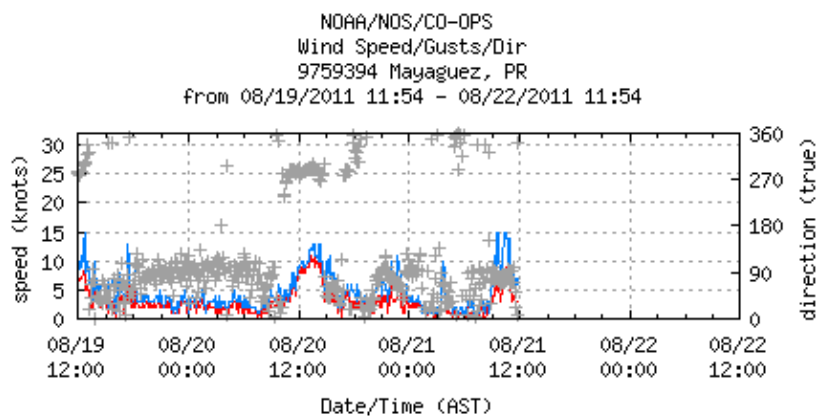
Predicted WL — (Obs-Pred) —
Observed WL — MHHW —

Last Observed Sample: 08/21/2011 11:48 (AST)

Relative to MLLW: **Observed: 1.12 ft.** **Predicted: 0.50 ft.** **Residual: 0.62 ft.**

Historical Maximum Water Level: , 0 ft. above MHHW

Mayaguez, PR - Return to List

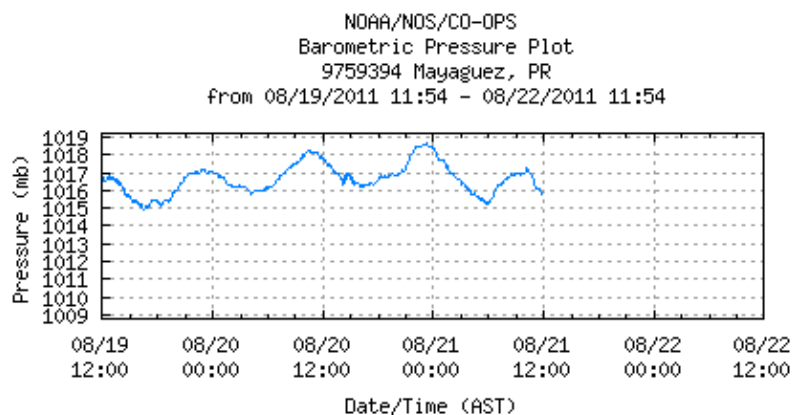


speed — gusts — direction +

Last Observed Sample: 08/21/2011 11:48 (AST)

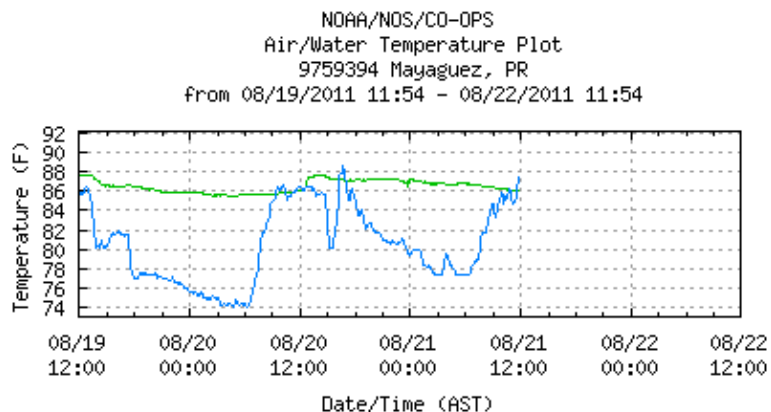
Wind Speed: 3 knots **Gusts: 6 knots** **Direction: 6° T**

[Mayaguez, PR - Return to List](#)



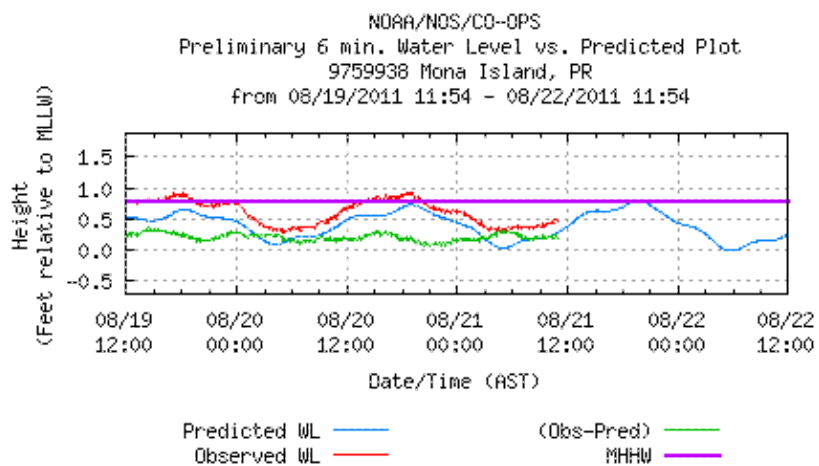
Last Observed Sample: 08/21/2011 11:48 (AST)
Barometric Pressure: 1015.8 mb

[Mayaguez, PR - Return to List](#)



Last Observed Sample: 08/21/2011 11:48 (AST)
Water Temperature: 86.0° F Air Temperature: 87.4° F

[Mona Island, PR - Return to List](#)



Last Observed Sample: 08/21/2011 10:54 (AST)

Relative to MLLW: **Observed: 0.48 ft.** **Predicted: 0.29 ft.** **Residual: 0.19 ft.**

Historical Maximum Water Level: Dec 23 2010, 1.26 ft. above MHHW

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