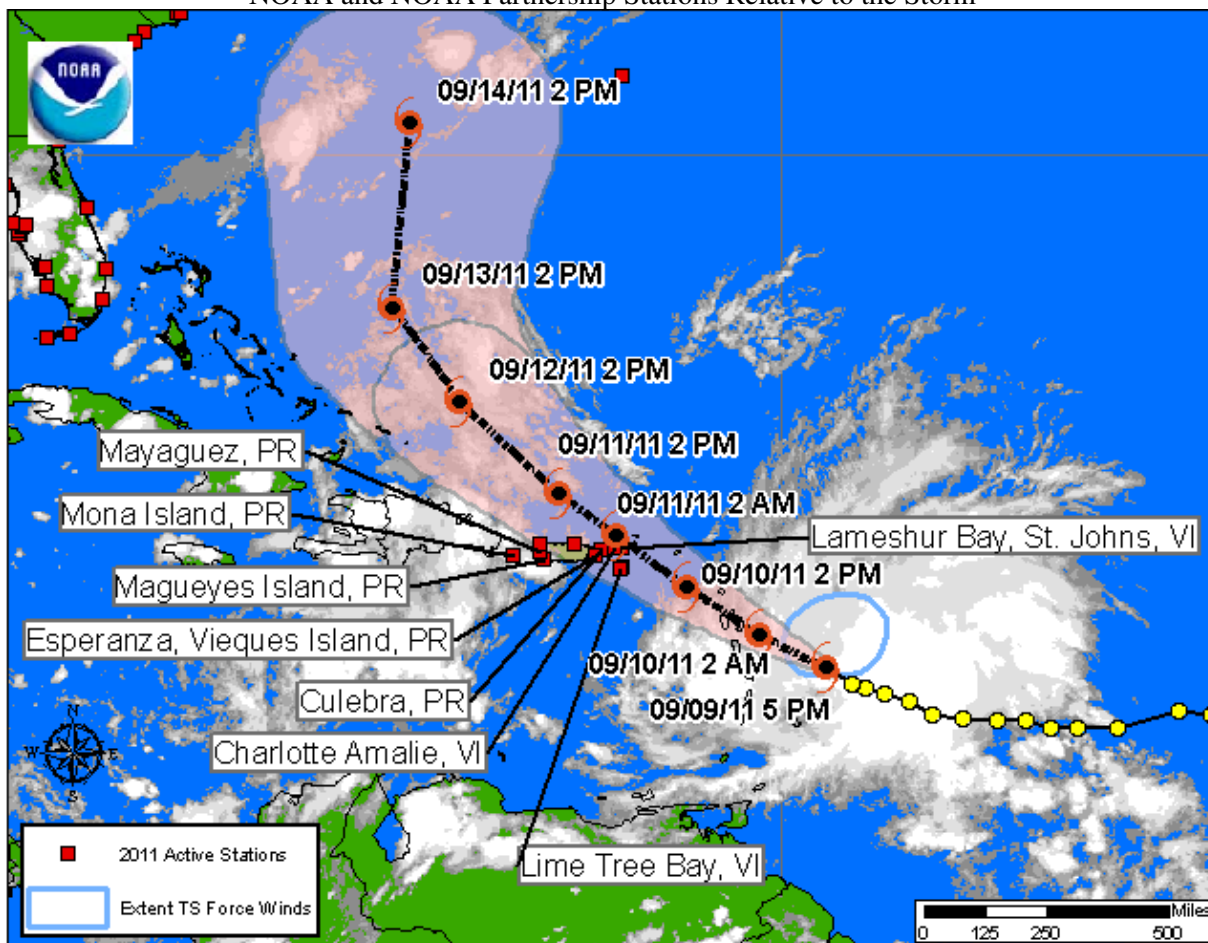




Tropical Storm MARIA QuickLook  
 Posted: 18:00 AST 09/09/2011

NOAA and NOAA Partnership Stations Relative to the Storm



### Storm Analysis

As of 09/09/2011 18:00 AST, water levels in the U.S. Virgin Islands and Puerto Rico are at or near predictions. Winds are steady, with gusts up to 16 knots at Lime Tree Bay. Barometric pressure is steady across the region.

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

Limetree Bay, VI Next predicted high tides are 0.79 ft (0.24 m) at 09/09/2011 21:58 AST and 0.73 ft (0.22 m) at 09/10/2011 21:40 AST.

Lameshur Bay, VI Next predicted high tides are 0.78 ft (0.24 m) at 09/09/2011 21:08 AST and 0.40 ft (0.12 m) at 09/10/2011 07:40 AST.

Tropical Storm MARIA QuickLook, POSTED 18:00 AST 09/09/2011

Charlotte Amalie, VI Next predicted high tides are 0.94 ft (0.29 m) at 09/09/2011 20:45 AST and 0.62 ft (0.19 m) at 09/10/2011 07:29 AST.

Culebra, PR Next predicted high tides are 1.07 ft (0.33 m) at 09/09/2011 19:59 AST and 0.78 ft (0.24 m) at 09/10/2011 07:33 AST.

Esperanza, PR Next predicted high tides are 0.68 ft (0.21 m) at 09/09/2011 20:54 AST and 0.42 ft (0.13 m) at 09/10/2011 05:40 AST.

Magueyes, PR Next predicted high tides are 0.82 ft (0.25 m) at 09/09/2011 21:34 AST and 0.77 ft (0.23 m) at 09/10/2011 21:37 AST.

Mayagues, PR Next predicted high tides are 1.06 ft (0.32 m) at 09/09/2011 20:08 AST and 0.83 ft (0.25 m) at 09/10/2011 08:15 AST.

Mona Island, PR Next predicted high tides are 0.71 ft (0.22 m) at 09/09/2011 23:33 AST and 0.44 ft (0.13 m) at 09/10/2011 06:26 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:DW

-----  
SELECT NATIONAL HURRICANE CENTER ADVISORY INFORMATION:

TROPICAL STORM MARIA ADVISORY NUMBER 13  
500 PM AST FRI SEP 09 2011

...RAIN BANDS FROM MARIA MOVING ACROSS THE LESSER ANTILLES...

SUMMARY

-----  
MARIA IS LOCATED ABOUT 125 MI NNE OF BARBADOS... ABOUT 215 MI ESE OF  
GUADELOUPE... MOVING NW AT 16MPH. MAXIMUM SUSTAINED WINDS ARE 45 MPH WITH A  
MINIMUM CENTRAL PRESSURE OF ... 1004 MB...29.65 INCHES

WATCHES AND WARNINGS

-----  
CHANGES WITH THIS ADVISORY...

NONE

SUMMARY OF WATCHES AND WARNINGS IN EFFECT...

A TROPICAL STORM WARNING IS IN EFFECT FOR...

- \* GUADELOUPE
- \* ST. MAARTIN...SABA...AND ST. EUSTATIUS
- \* ANTIGUA...ANGUILLA...BARBUDA... MONTSERRAT...NEVIS...SAINT KITTS AND THE BRITISH VIRGIN ISLANDS
- \* DOMINICA
- \* ST BARTHELEMY...ST MARTEEN...AND MARTINIQUE
- \* U.S. VIRGIN ISLANDS
- \* PUERTO RICO...INCLUDING VIEQUES AND CULEBRA

INTERESTS ELSEWHERE IN THE LESSER ANTILLES...THE DOMINICAN REPUBLIC...THE TURKS AND CAICOS ISLANDS...AND THE SOUTHEASTERN BAHAMAS SHOULD MONITOR THE PROGRESS OF MARIA.

FOR STORM INFORMATION SPECIFIC TO YOUR AREA...PLEASE MONITOR PRODUCTS ISSUED BY YOUR NATIONAL METEOROLOGICAL SERVICE.

#### DISCUSSION AND 48-HOUR OUTLOOK

-----  
AT 500 PM AST...2100 UTC...THE CENTER OF TROPICAL STORM MARIA WAS LOCATED NEAR LATITUDE 14.8 NORTH...LONGITUDE 58.6 WEST. MARIA IS MOVING TOWARD THE NORTHWEST NEAR 16 MPH...26 KM/H...AND THIS MOTION IS EXPECTED TO CONTINUE DURING THE NEXT DAY OR SO. ON THE FORECAST TRACK...THE CENTER OF MARIA WILL MOVE OVER THE LEEWARD ISLANDS TONIGHT AND SATURDAY...AND BE NEAR THE VIRGIN ISLANDS BY SATURDAY NIGHT.

MAXIMUM SUSTAINED WINDS ARE NEAR 45 MPH...75 KM/H...WITH HIGHER GUSTS. GRADUAL STRENGTHENING IS FORECAST DURING THE NEXT 48 HOURS.

TROPICAL STORM FORCE WINDS EXTEND OUTWARD UP TO 175 MILES...280 KM...MAINLY TO THE NORTHEAST OF THE CENTER.

ESTIMATED MINIMUM CENTRAL PRESSURE IS 1004 MB...29.65 INCHES.

#### HAZARDS AFFECTING LAND

-----  
WIND...TROPICAL STORM CONDITIONS ARE EXPECTED TO REACH THE LESSER ANTILLES THIS EVENING...THEN SPREAD NORTHWESTWARD OVER THE VIRGIN ISLANDS AND PUERTO RICO ON SATURDAY AND SATURDAY NIGHT.

RAINFALL...MARIA IS EXPECTED TO PRODUCE TOTAL RAIN ACCUMULATIONS OF 4 TO 8 INCHES WITH ISOLATED MAXIMUM AMOUNTS OF 10 INCHES OVER THE CENTRAL TO NORTHERN LESSER ANTILLES...THE VIRGIN ISLANDS...AND PUERTO RICO.

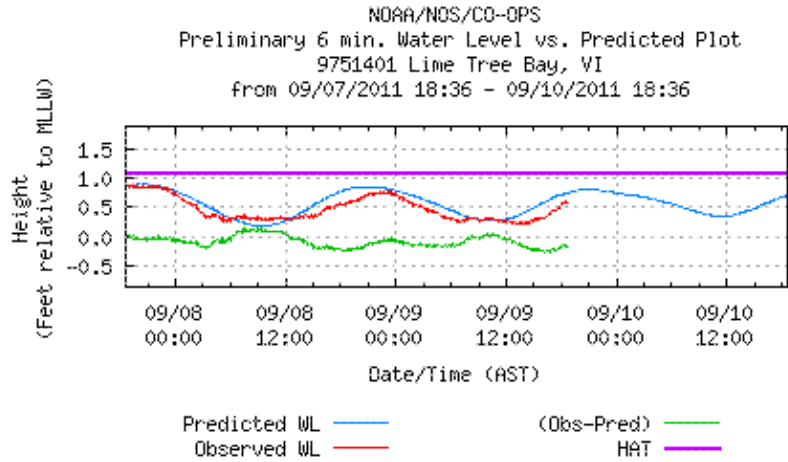
STORM SURGE...STORM SURGE WILL RAISE WATER LEVELS BY AS MUCH AS 1 TO 2 FEET ABOVE NORMAL TIDE LEVELS ALONG THE IMMEDIATE COAST WITHIN THE WARNING AREA. NEAR THE COAST...THE SURGE WILL BE ACCOMPANIED BY LARGE AND DANGEROUS WAVES.

FORECASTER BROWN

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.

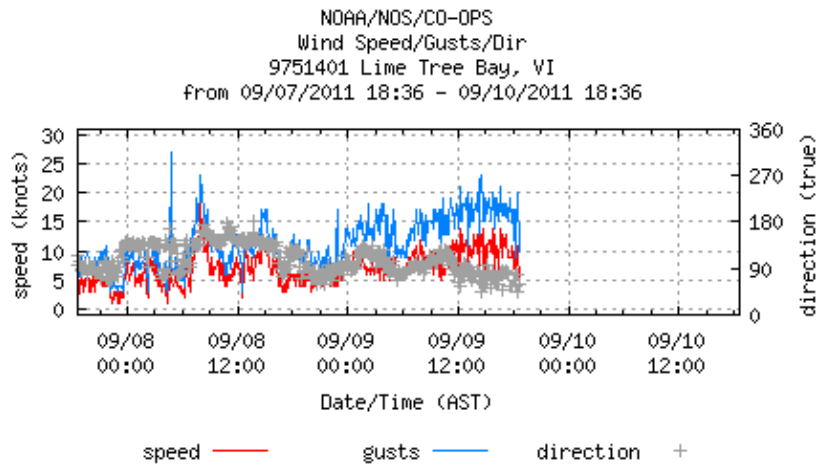
Jump to: [Lime Tree Bay - Water Level](#), [Lime Tree Bay - Winds](#), [Lime Tree Bay - Barometric](#), [Lime Tree Bay - Air/Water Temp](#), [Lameshur Bay, St. John - Water Level](#), [Lameshur Bay, St. John - Barometric](#), [Lameshur Bay, St. John - Air/Water Temp](#), [Charlotte Amalie - Water Level](#), [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: 09/09/2011 18:36 (AST)  
 Relative to MLLW: **Observed: 0.57 ft. Predicted: 0.74 ft. Residual: -0.17 ft.**  
 Historical Maximum Water Level: Nov 17 1999, 1.88 ft. above MHHW

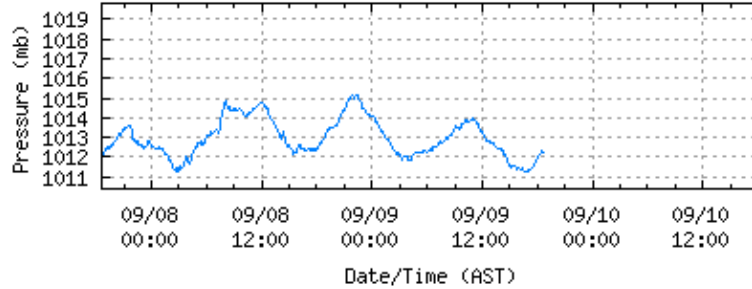
Lime Tree Bay, VI - Return to List



Last Observed Sample: 09/09/2011 18:36 (AST)  
**Wind Speed: 4 knots Gusts: 10 knots Direction: 61° T**

Lime Tree Bay, VI - Return to List

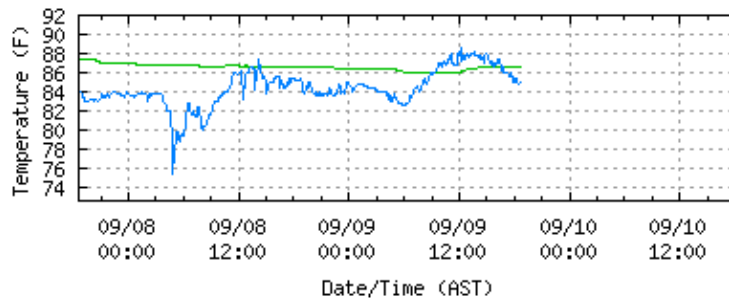
NOAA/NOS/CO-OPS  
Barometric Pressure Plot  
9751401 Lime Tree Bay, VI  
from 09/07/2011 18:36 - 09/10/2011 18:36



Last Observed Sample: 09/09/2011 18:36 (AST)  
Barometric Pressure: 1012.2 mb

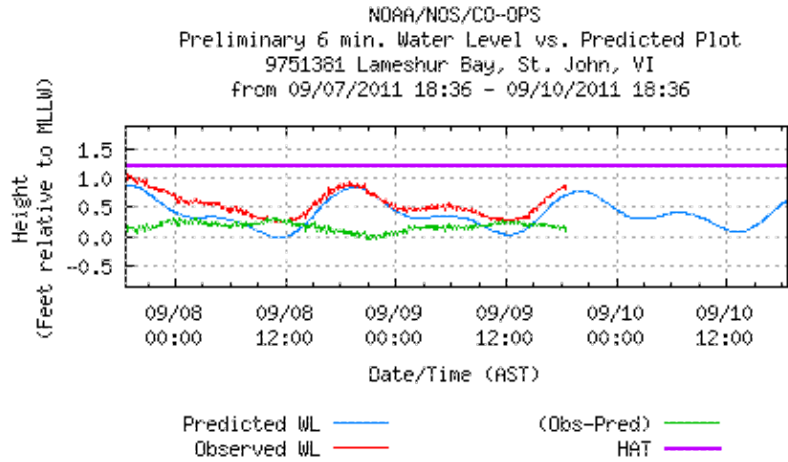
Lime Tree Bay, VI - Return to List

NOAA/NOS/CO-OPS  
Air/Water Temperature Plot  
9751401 Lime Tree Bay, VI  
from 09/07/2011 18:36 - 09/10/2011 18:36



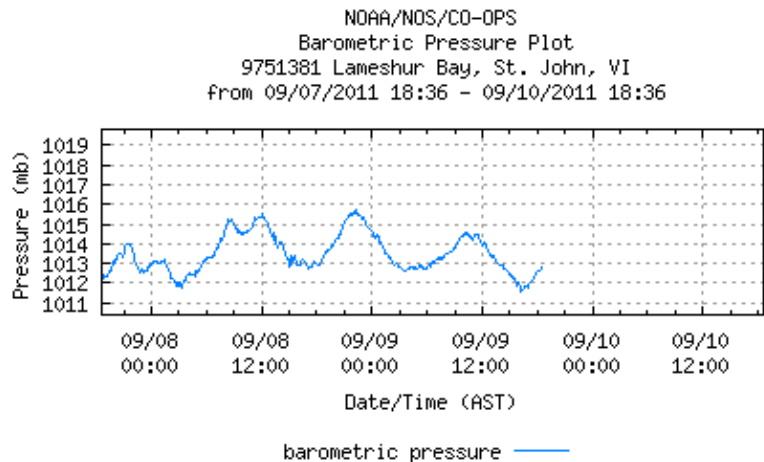
Last Observed Sample: 09/09/2011 18:36 (AST)  
Water Temperature: 86.5° F Air Temperature: 84.9° F

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



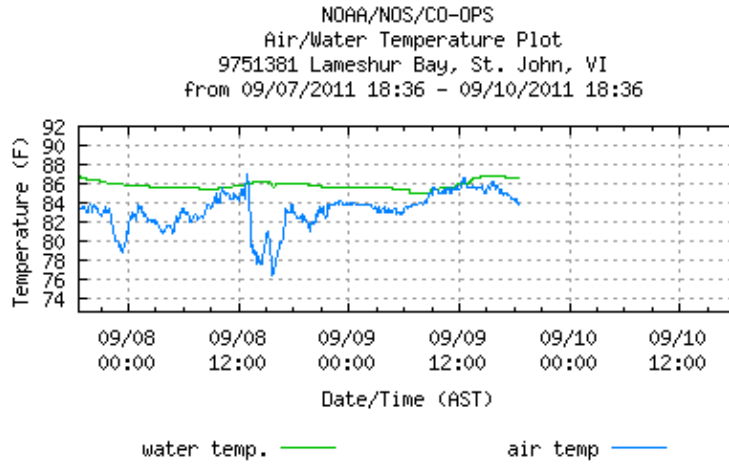
Last Observed Sample: 09/09/2011 18:30 (AST)  
Relative to MLLW: **Observed: 0.81 ft. Predicted: 0.71 ft. Residual: 0.10 ft.**  
Historical Maximum Water Level: Aug 30 2010, 0.9 ft. above MHHW

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



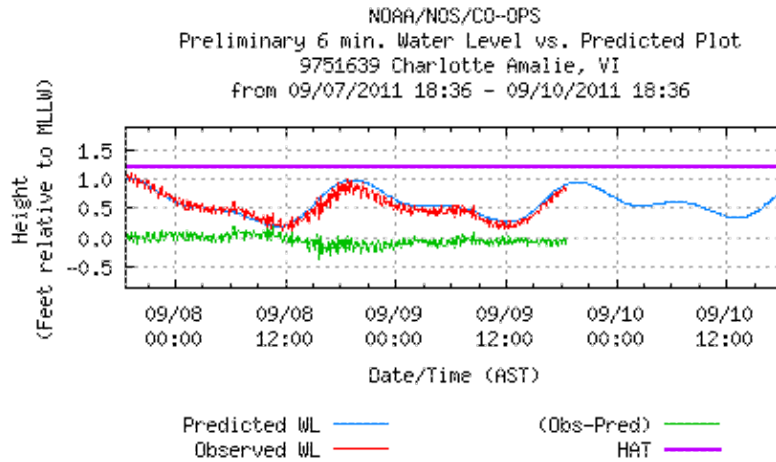
Last Observed Sample: 09/09/2011 18:30 (AST)  
**Barometric Pressure: 1012.8 mb**

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



Last Observed Sample: 09/09/2011 18:30 (AST)  
Water Temperature: 86.5° F Air Temperature: 84.0° F

Charlotte Amalie, VI - Return to List

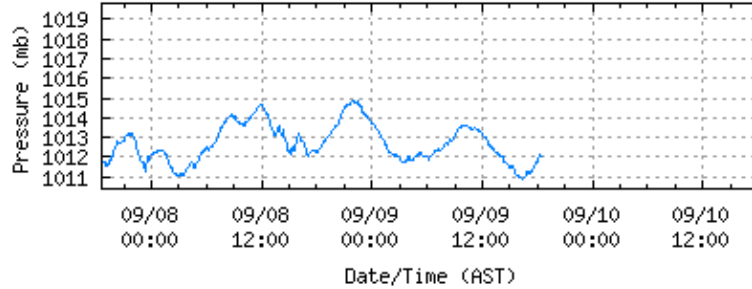


Last Observed Sample: 09/09/2011 18:30 (AST)  
Relative to MLLW: Observed: 0.80 ft. Predicted: 0.90 ft. Residual: -0.10 ft.  
Historical Maximum Water Level: Sep 16 1995, 2.93 ft. above MHHW



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

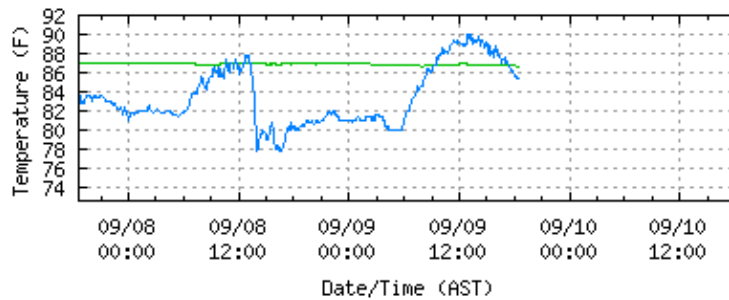
NOAA/NOS/CO-OPS  
Barometric Pressure Plot  
9751639 Charlotte Amalie, VI  
from 09/07/2011 18:36 - 09/10/2011 18:36



barometric pressure —  
Last Observed Sample: 09/09/2011 18:30 (AST)  
Barometric Pressure: 1012.0 mb

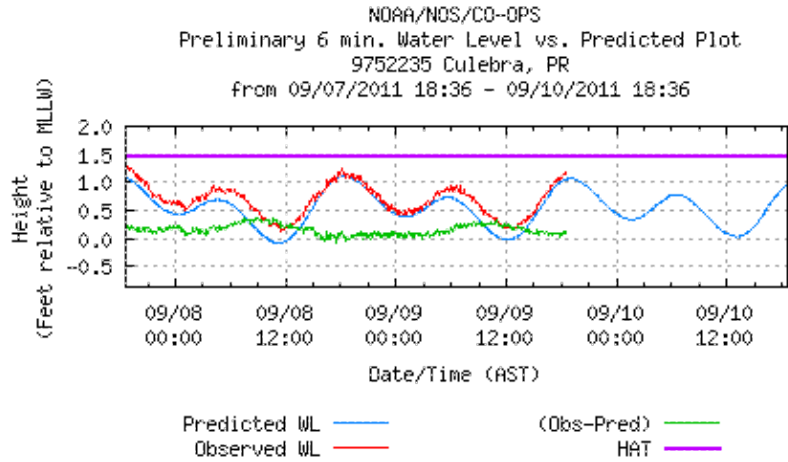
[Charlotte Amalie, VI - Return to List](#)

NOAA/NOS/CO-OPS  
Air/Water Temperature Plot  
9751639 Charlotte Amalie, VI  
from 09/07/2011 18:36 - 09/10/2011 18:36



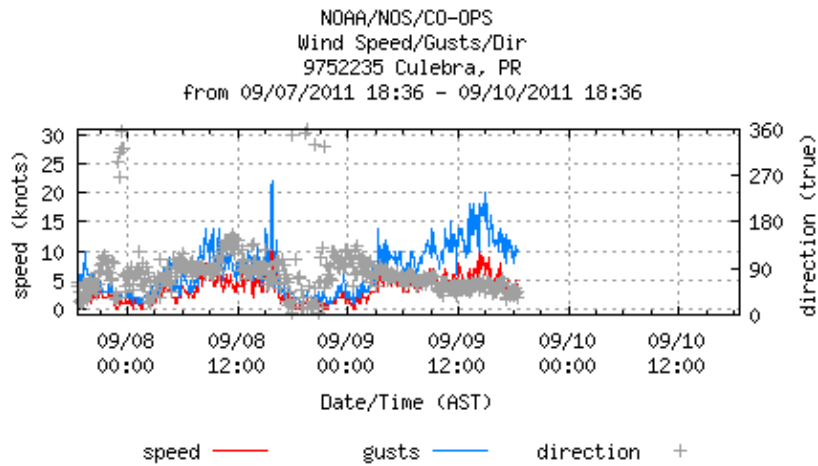
water temp. — air temp —  
Last Observed Sample: 09/09/2011 18:30 (AST)  
Water Temperature: 86.5° F Air Temperature: 85.3° F

Culebra, PR - Return to List



Last Observed Sample: 09/09/2011 18:30 (AST)  
 Relative to MLLW: **Observed: 1.15 ft. Predicted: 1.06 ft. Residual: 0.09 ft.**  
 Historical Maximum Water Level: Nov 6 2006, 0.85 ft. above MHHW

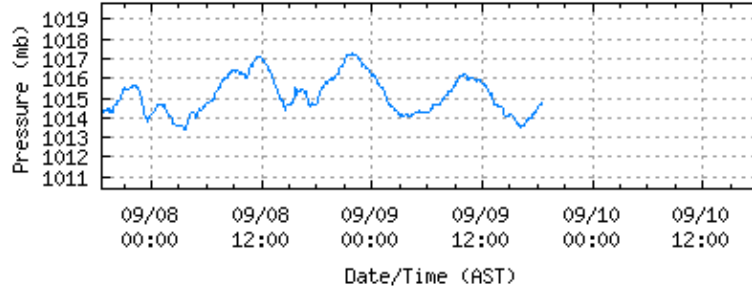
Culebra, PR - Return to List



Last Observed Sample: 09/09/2011 18:30 (AST)  
**Wind Speed: 3 knots Gusts: 10 knots Direction: 33° T**

Culebra, PR - Return to List

NOAA/NOS/CO-OPS  
Barometric Pressure Plot  
9752235 Culebra, PR  
from 09/07/2011 18:36 - 09/10/2011 18:36



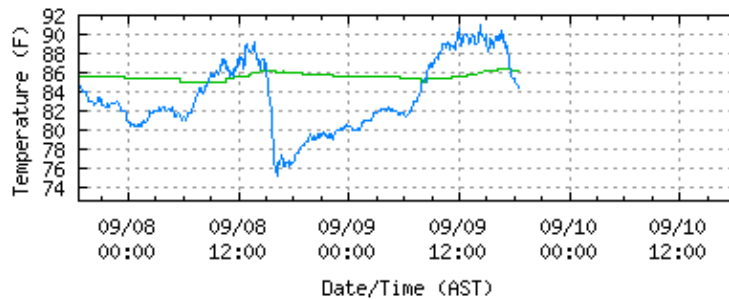
barometric pressure —

Last Observed Sample: 09/09/2011 18:30 (AST)

Barometric Pressure: 1014.7 mb

Culebra, PR - Return to List

NOAA/NOS/CO-OPS  
Air/Water Temperature Plot  
9752235 Culebra, PR  
from 09/07/2011 18:36 - 09/10/2011 18:36

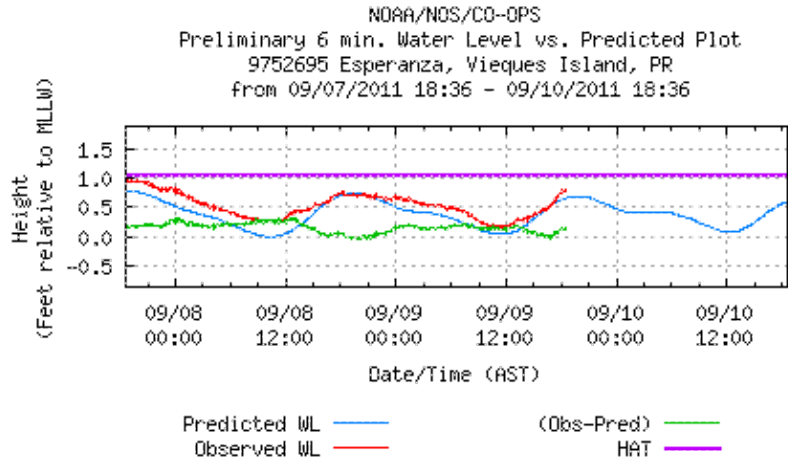


water temp. — air temp —

Last Observed Sample: 09/09/2011 18:30 (AST)

Water Temperature: 86.2° F Air Temperature: 84.4° F

Esperanza, Vieques Island, PR - Return to List

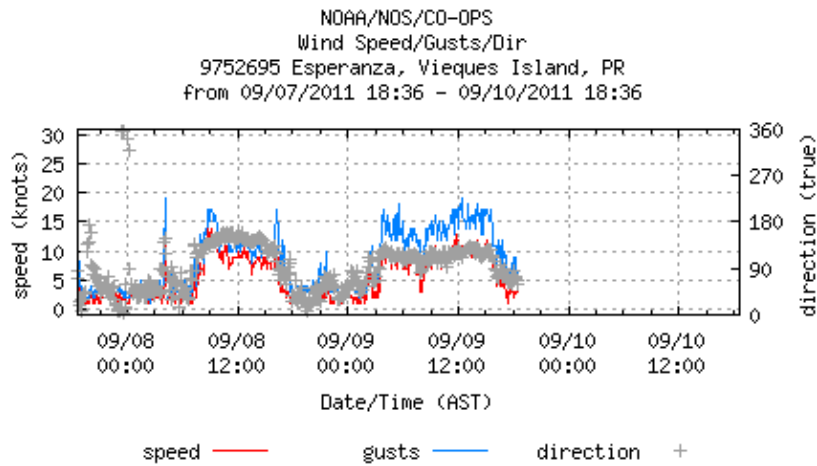


Last Observed Sample: 09/09/2011 18:30 (AST)

Relative to MLLW: **Observed: 0.77 ft.** **Predicted: 0.65 ft.** **Residual: 0.12 ft.**

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

Esperanza, Vieques Island, PR - Return to List

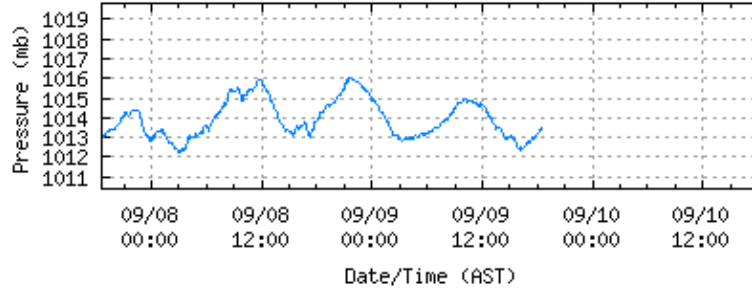


Last Observed Sample: 09/09/2011 18:30 (AST)

**Wind Speed: 3 knots** **Gusts: 6 knots** **Direction: 61° T**

Esperanza, Vieques Island, PR - Return to List

NOAA/NOS/CO-OPS  
Barometric Pressure Plot  
9752695 Esperanza, Vieques Island, PR  
from 09/07/2011 18:36 - 09/10/2011 18:36



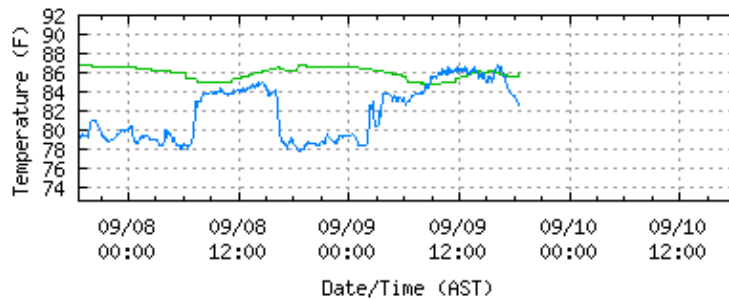
barometric pressure —

Last Observed Sample: 09/09/2011 18:30 (AST)

Barometric Pressure: 1013.4 mb

Esperanza, Vieques Island, PR - Return to List

NOAA/NOS/CO-OPS  
Air/Water Temperature Plot  
9752695 Esperanza, Vieques Island, PR  
from 09/07/2011 18:36 - 09/10/2011 18:36

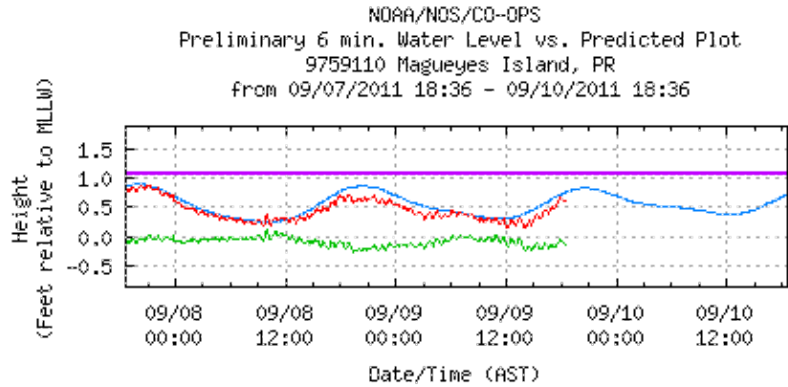


water temp. — air temp. —

Last Observed Sample: 09/09/2011 18:30 (AST)

Water Temperature: 86.0° F Air Temperature: 82.6° F

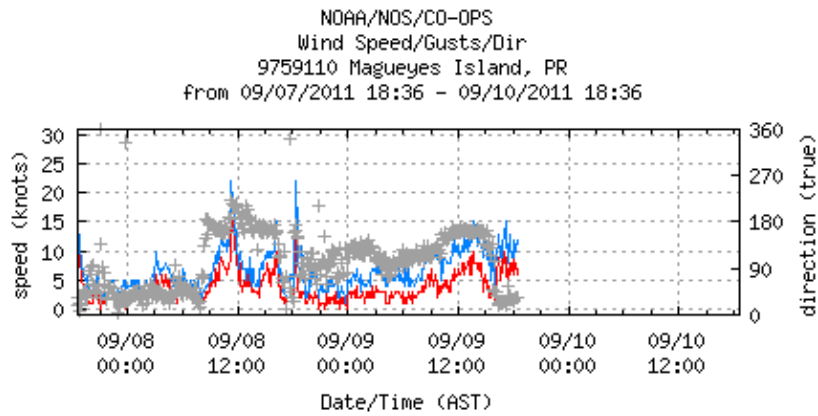
Magueyes Island, PR - Return to List



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

Last Observed Sample: 09/09/2011 18:24 (AST)  
Relative to MLLW: **Observed: 0.61 ft.** **Predicted: 0.75 ft.** **Residual: -0.14 ft.**  
Historical Maximum Water Level: Sep 22 1998, 1.6 ft. above MHHW

Magueyes Island, PR - Return to List

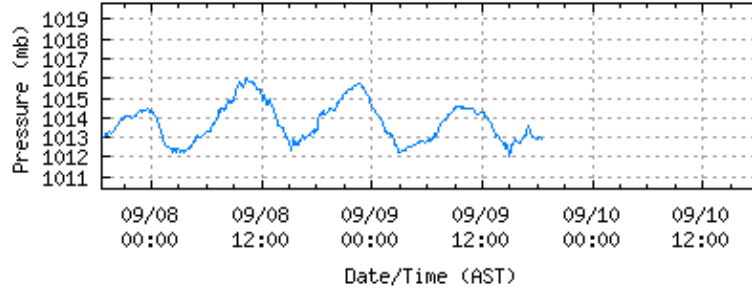


speed — gusts — direction +

Last Observed Sample: 09/09/2011 18:24 (AST)  
**Wind Speed: 6 knots** **Gusts: 12 knots** **Direction: 32° T**

Magueyes Island, PR - Return to List

NOAA/NOS/CO-OPS  
Barometric Pressure Plot  
9759110 Magueyes Island, PR  
from 09/07/2011 18:36 - 09/10/2011 18:36



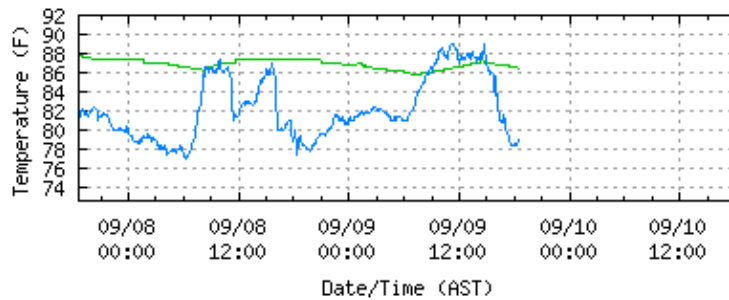
barometric pressure —

Last Observed Sample: 09/09/2011 18:24 (AST)

Barometric Pressure: 1012.9 mb

Magueyes Island, PR - Return to List

NOAA/NOS/CO-OPS  
Air/Water Temperature Plot  
9759110 Magueyes Island, PR  
from 09/07/2011 18:36 - 09/10/2011 18:36

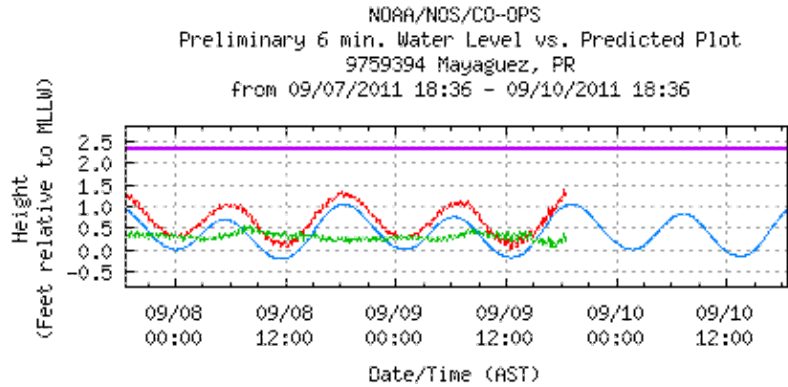


water temp. — air temp —

Last Observed Sample: 09/09/2011 18:24 (AST)

Water Temperature: 86.4° F Air Temperature: 79.0° F

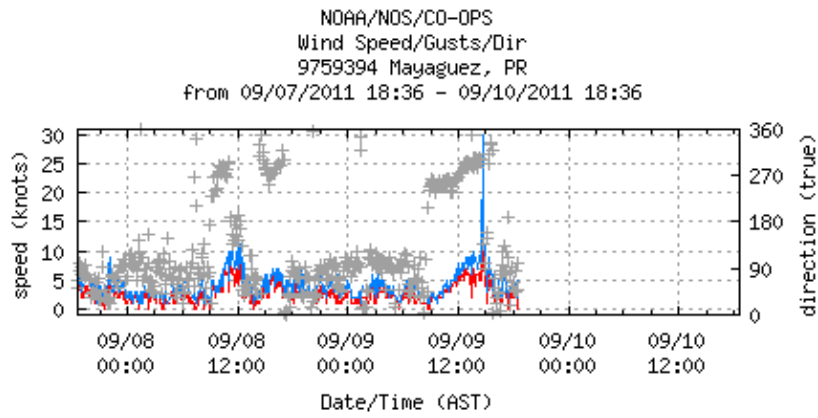
Mayaguez, PR - Return to List



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

Last Observed Sample: 09/09/2011 18:30 (AST)  
 Relative to MLLW: **Observed: 1.25 ft. Predicted: 1.03 ft. Residual: 0.22 ft.**  
 Historical Maximum Water Level: , 0 ft. above MHHW

Mayaguez, PR - Return to List



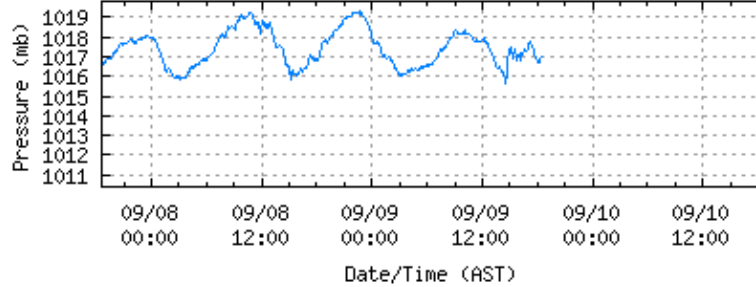
speed — gusts — direction +

Last Observed Sample: 09/09/2011 18:30 (AST)  
**Wind Speed: 0 knots Gusts: 2 knots Direction: 48° T**



Mayaguez, PR - Return to List

NOAA/NOS/CO-OPS  
Barometric Pressure Plot  
9759394 Mayaguez, PR  
from 09/07/2011 18:36 - 09/10/2011 18:36



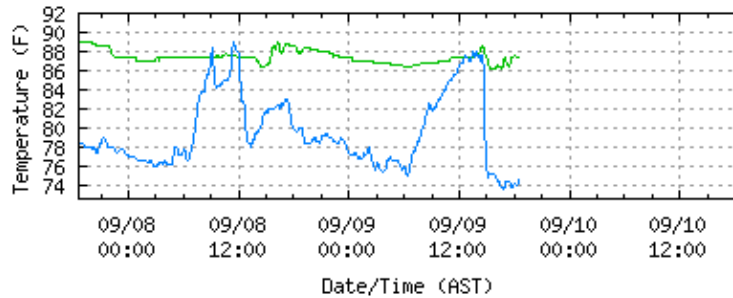
barometric pressure —

Last Observed Sample: 09/09/2011 18:30 (AST)

Barometric Pressure: 1017.0 mb

Mayaguez, PR - Return to List

NOAA/NOS/CO-OPS  
Air/Water Temperature Plot  
9759394 Mayaguez, PR  
from 09/07/2011 18:36 - 09/10/2011 18:36

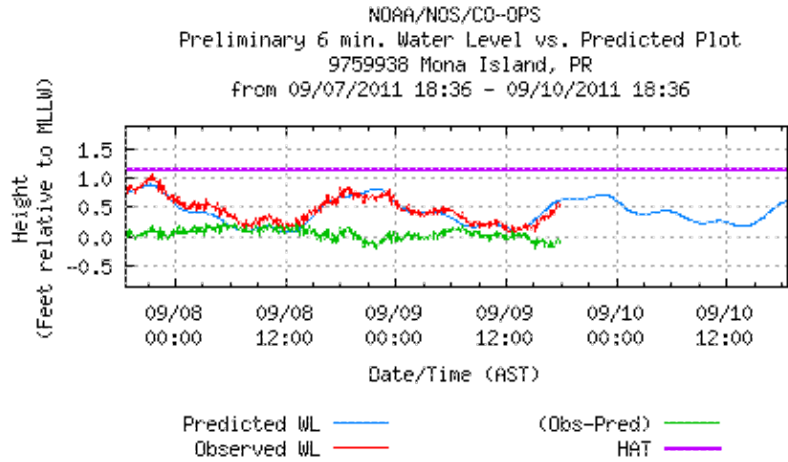


water temp. — air temp —

Last Observed Sample: 09/09/2011 18:30 (AST)

Water Temperature: 87.4° F Air Temperature: 74.5° F

Mona Island, PR - Return to List



Last Observed Sample: 09/09/2011 17:54 (AST)

Relative to MLLW: **Observed: 0.54 ft.** **Predicted: 0.62 ft.** **Residual: -0.08 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