As of 09/10/2011 00:00 AST, water levels in the U.S. Virgin Islands and Puerto Rico are at or near predictions. Winds are steady, with gusts up to 20 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:

Lime Tree Bay, VI: Next predicted high tides are 0.7 ft (0.22 m) at 09/10/2011 20:40 AST and 0.7 ft (0.21 m) at 09/11/2011 20:09 AST.

Lameshur Bay, St. John, VI: Next predicted high tides are 0.4 ft (0.12 m) at 09/10/2011 06:40 AST and 0.7 ft (0.22 m) at 09/10/2011 20:33 AST.
Charlotte Amalie, VI: Next predicted high tides are 0.6 ft (0.19 m) at 09/10/2011 06:29 AST and 0.9 ft (0.27 m) at 09/10/2011 20:06 AST.

Culebra, PR: Next predicted high tides are 0.8 ft (0.24 m) at 09/10/2011 06:33 AST and 1.0 ft (0.31 m) at 09/10/2011 19:34 AST.

Esperanza, Vieques Island, PR: Next predicted high tides are 0.4 ft (0.13 m) at 09/10/2011 04:40 AST and 0.6 ft (0.19 m) at 09/10/2011 20:01 AST.

Magueyes Island, PR: Next predicted high tides are 0.8 ft (0.23 m) at 09/10/2011 20:37 AST and 0.6 ft (0.17 m) at 09/11/2011 06:59 AST.

Mayaguez, PR: Next predicted high tides are 0.8 ft (0.25 m) at 09/10/2011 07:15 AST and 1.0 ft (0.32 m) at 09/10/2011 19:52 AST.

Mona Island, PR: Next predicted high tides are 0.4 ft (0.13 m) at 09/10/2011 05:26 AST and 0.6 ft (0.19 m) at 09/10/2011 19:02 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: CMF

SELECT NATIONAL HURRICANE CENTER ADVISORY INFORMATION:

TROPICAL STORM MARIA ADVISORY NUMBER 14
1100 PM AST FRI SEP 09 2011

...HURRICANE HUNTER AIRCRAFT FINDS THAT MARIA REMAINS POORLY ORGANIZED...

WATCHES AND WARNINGS

CHANGES WITH THIS ADVISORY...

NONE

SUMMARY OF WATCHES AND WARNINGS IN EFFECT...

A TROPICAL STORM WARNING IS IN EFFECT FOR...
* U.S. VIRGIN ISLANDS
* PUERTO RICO...INCLUDING VIEQUES AND CULEBRA

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.

DISCUSSION AND 48-HOUR OUTLOOK

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AT 1100 PM AST THE CENTER OF TROPICAL STORM MARIA WAS LOCATED ABOUT 130 MILES NORTH-NORTHWEST OF BARBADOS OR ABOUT 150 MILES ESE OF GUADALOUPE. MARIA IS MOVING TOWARD THE WEST-NORTHWEST NEAR 14 MPH. THIS GENERAL MOTION IS EXPECTED TO CONTINUE TONIGHT...WITH A GRADUAL TURN TOWARD THE NORTHWEST EXPECTED ON SATURDAY. ON THE FORECAST TRACK...THE CENTER OF MARIA WILL MOVE OVER THE LEEWARD ISLANDS SATURDAY...AND BE NEAR THE VIRGIN ISLANDS BY SATURDAY NIGHT.

MAXIMUM SUSTAINED WINDS ARE NEAR 45 MPH WITH HIGHER GUSTS. REPORTS FROM AN AIR FORCE RESERVE HURRICANE HUNTER AIRCRAFT INDICATE THAT THE CIRCULATION OF MARIA REMAINS DISORGANIZED. LITTLE CHANGE IN STRENGTH IS EXPECTED TONIGHT...THEN SLOW STRENGTHENING IS POSSIBLE STARTING ON SATURDAY.

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

ESTIMATED MINIMUM CENTRAL PRESSURE IS 1006 MB.

HAZARDS AFFECTING LAND

WIND...TROPICAL STORM CONDITIONS ARE EXPECTED TO REACH THE LESSER ANTILLES TONIGHT...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...A 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 BEVEN

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.
Tropical Storm MARIA QuickLook, POSTED 00:00 AST 09/10/2011

Lime Tree Bay, VI - Return to List

NOAA/NOS/C0-CPS
Preliminary 6 min. Water Level vs. Predicted Plot
9/9/10 04:11 Lime Tree Bay, VI

Last Observed Sample: 09/09/2011 23:48 (AST)

Relative to MLLW: Observed: 0.93 ft. Predicted: 0.75 ft. Residual: 0.18 ft.
Historical Maximum Water Level: Nov 17 1999, 1.88 ft. above MHHW

Lime Tree Bay, VI - Return to List

NOAA/NOS/C0-CPS
Wind Speed/Gusts/Dir
9/9/40k Lime Tree Bay, VI
from 09/09/2011 23:54 - 09/10/2011 23:54

Last Observed Sample: 09/09/2011 23:48 (AST)

Wind Speed: 11 knots Gusts: 17 knots Direction: 47° T
Lime Tree Bay, VI - Return to List

NOAA/NOS/CO-OPS
Barometric Pressure Plot
9/5/401 Lime Tree Bay, VI
From 09/07/2011 23:54 - 09/10/2011 23:54

Barometric Pressure: 1012.2 mb

Lime Tree Bay, VI - Return to List

NOAA/NOS/CO-OPS
Air/Water Temperature Plot
9/5/401 Lime Tree Bay, VI
From 09/07/2011 23:54 - 09/10/2011 23:54

Water Temperature: 86.3° F Air Temperature: 83.8° F
Tropical Storm MARIA QuickLook, POSTED 00:00 AST 09/10/2011

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

NOAA/NOS/C0-CPS
Preliminary 6 min. Water Level vs. Predicted Plot
9751381 Lameshur Bay, St. John, VI
from 09/07/2011 23:54 - 09/10/2011 23:54

Relative to MLLW: Observed: 0.76 ft. Predicted: 0.48 ft. Residual: 0.28 ft.
Historical Maximum Water Level: Aug 30 2010, 0.9 ft. above MHHW

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

NOAA/NOS/C0-CPS
Barometric Pressure Plot
9751381 Lameshur Bay, St. John, VI
from 09/07/2011 23:54 - 09/10/2011 23:54

Last Observed Sample: 09/09/2011 23:48 (AST)
Barometric Pressure: 1012.9 mb
Lameshur Bay, St. John, VI - Return to List

NOS/CO-OPS
Air/Water Temperature Plot
9751381 Lameshur Bay, St. John, VI
From 09/07/2011 23:54 - 09/10/2011 23:54

Temperature (°F)

Date/Time (AST)

05/08 12:00 09/08 12:00 09/09 12:00 09/09 12:00 09/10 12:00 09/10 12:00 09/11 12:00 09/11 12:00
00:00 00:00

water temp.  ___________  air temp.  ___________

Last Observed Sample: 09/09/2011 23:48 (AST)
Water Temperature: 85.1°F  Air Temperature: 83.1°F

Charlotte Amalie, VI - Return to List

NOS/CO-OPS
Preliminary 6 min. Water Level vs. Predicted Plot
9752639 Charlotte Amalie, VI
From 09/07/2011 23:54 - 09/10/2011 23:54

Height (feet relative to MLLW)

Date/Time (HST)

05/08 12:00 09/08 12:00 09/09 12:00 09/09 12:00 09/10 12:00 09/10 12:00 09/11 12:00 09/11 12:00
00:00 00:00

Predicted WL  blue  (Obs-Pred) green  Observed WL red  MHHW magenta

Last Observed Sample: 09/09/2011 23:48 (AST)
Relative to MLLW: Observed: 0.68 ft. Predicted: 0.68 ft. Residual: 0.00 ft.
Historical Maximum Water Level: Sep 16 1995, 2.93 ft. above MHHW
Tropical Storm MARIA QuickLook, POSTED 00:00 AST 09/10/2011

Charlotte Amalie, VI - Return to List

NOAA/NOS/C0-CPS
Barometric Pressure Plot
9751639 Charlotte Amalie, VI
From 09/07/2011 23:54 - 09/10/2011 23:54

Barometric pressure

Last Observed Sample: 09/09/2011 23:48 (AST)
Barometric Pressure: 1012.2 mb

Charlotte Amalie, VI - Return to List

NOAA/NOS/C0-CPS
Air/Water Temperature Plot
9751639 Charlotte Amalie, VI
From 09/07/2011 23:54 - 09/10/2011 23:54

Water temp.  air temp.

Last Observed Sample: 09/09/2011 23:48 (AST)
Water Temperature: 86.5° F Air Temperature: 84.1° F
Tropical Storm MARIA QuickLook, POSTED 00:00 AST 09/10/2011

Culebra, PR - Return to List

NOAA/NOS/C0-CPS
Preliminary 6 min. Water Level vs. Predicted Plot
9752235 Culebra, PR
from 09/07/2011 23:54 - 09/10/2011 23:54

Last Observed Sample: 09/09/2011 23:48 (AST)
Relative to MLLW: Observed: 0.76 ft. Predicted: 0.47 ft. Residual: 0.29 ft.
Historical Maximum Water Level: Nov 6 2006, 0.85 ft. above MHHW

Culebra, PR - Return to List

NOAA/NOS/C0-CPS
Wind Speed/Gusts/Dir
9752235 Culebra, PR
from 09/07/2011 23:54 - 09/10/2011 23:54

Last Observed Sample: 09/09/2011 23:48 (AST)
Wind Speed: 3 knots Gusts: 10 knots Direction: 43° T
Tropical Storm MARIA QuickLook, POSTED 00:00 AST 09/10/2011

Culebra, PR - Return to List

NOAA/NOS/C0-CPS
Barometric Pressure Plot
9752235 Culebra, PR
from 09/07/2011 23:54 - 09/10/2011 23:54

<table>
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<th>Date/Time (AST)</th>
<th>Pressure (mb)</th>
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<td>1017</td>
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<tr>
<td>09/11 12:00</td>
<td>1018</td>
</tr>
</tbody>
</table>

Last Observed Sample: 09/09/2011 23:48 (AST)
Barometric Pressure: 1014.8 mb

Culebra, PR - Return to List

NOAA/NOS/C0-CPS
Air/Water Temperature Plot
9752235 Culebra, PR
from 09/07/2011 23:54 - 09/10/2011 23:54

<table>
<thead>
<tr>
<th>Date/Time (AST)</th>
<th>Temperature (°F)</th>
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<td>09/11 00:00</td>
<td>82</td>
</tr>
<tr>
<td>09/11 12:00</td>
<td>80</td>
</tr>
</tbody>
</table>

Last Observed Sample: 09/09/2011 23:48 (AST)
Water Temperature: 85.3° F Air Temperature: 83.1° F
Esperanza, Vieques Island, PR - Return to List

NOAA/NOS/C0-CPS
Preliminary 6 min. Water Level vs. Predicted Plot
9752695 Esperanza, Vieques Island, PR
From 09/07/2011 23:54 - 09/10/2011 23:54

Last Observed Sample: 09/09/2011 23:48 (AST)
Relative to MLLW: Observed: 0.89 ft. Predicted: 0.49 ft. Residual: 0.40 ft.
Historical Maximum Water Level: Aug 30 2010, 0.84 ft. above MHHW

Esperanza, Vieques Island, PR - Return to List

NOAA/NOS/C0-CPS
Wind Speed/Gusts/Dir
9752695 Esperanza, Vieques Island, PR
From 09/07/2011 23:54 - 09/10/2011 23:54

Last Observed Sample: 09/09/2011 23:48 (AST)
Wind Speed: 3 knots  Gusts: 7 knots  Direction: 65° T
Barometric Pressure Plot

Last Observed Sample: 09/09/2011 23:48 (AST)
Barometric Pressure: 1013.6 mb

Air/Water Temperature Plot

Last Observed Sample: 09/09/2011 23:48 (AST)
Water Temperature: 86.0° F Air Temperature: 81.0° F
Magueyes Island, PR - Return to List

NOAA/NOS/C0-CPS
Preliminary 6 min. Water Level vs. Predicted Plot
9759110 Magueyes Island, PR
from 09/07/2011 23:54 - 09/10/2011 23:54

Last Observed Sample: 09/09/2011 23:42 (AST)
Relative to MLLW: Observed: 0.76 ft. Predicted: 0.70 ft. Residual: 0.06 ft.
Historical Maximum Water Level: Sep 22 1998, 1.6 ft. above MHHW

Magueyes Island, PR - Return to List

NOAA/NOS/C0-CPS
Wind Speed/Gusts/Dir
9759110 Magueyes Island, PR
from 09/07/2011 23:54 - 09/10/2011 23:54

Last Observed Sample: 09/09/2011 23:42 (AST)
Wind Speed: 1 knots Gusts: 2 knots Direction: 68° T
Magueyes Island, PR - Return to List

NOAA/NOS/C0-CPS
Barometric Pressure Plot
9759110 Magueyes Island, PR
From 09/07/2011 23:54 - 09/10/2011 23:54

Last Observed Sample: 09/09/2011 23:42 (AST)
Barometric Pressure: 1014.0 mb

Magueyes Island, PR - Return to List

NOAA/NOS/C0-CPS
Air/Water Temperature Plot
9759110 Magueyes Island, PR
From 09/07/2011 23:54 - 09/10/2011 23:54

Last Observed Sample: 09/09/2011 23:42 (AST)
Water Temperature: 86.0° F Air Temperature: 77.7° F
Mayaguez, PR - Return to List

Mayaguez, PR - Return to List

(NOAA/NOS/C0-CPS)
Preliminary 6 min. Water Level vs. Predicted Plot
S759394 Mayaguez, PR
From 09/07/2011 23:54 - 09/10/2011 23:54

Height relative to MLLW

Date/Time (AST)

09/08 09/08 09/08 09/08 09/09 09/09 09/09 09/09 09/10 09/10 09/10 09/10 09/11 09/11
00:00 12:00 00:00 12:00 00:00 12:00 00:00 12:00 00:00 12:00 00:00 12:00 00:00 12:00 00:00

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

Last Observed Sample: 09/09/2011 23:48 (AST)
Relative to MLLW: Observed: 0.61 ft. Predicted: 0.19 ft. Residual: 0.42 ft.
Historical Maximum Water Level: 0 ft. above MHHW

Mayaguez, PR - Return to List

(NOAA/NOS/C0-CPS)
Wind Speed/Gusts/Dir
S759394 Mayaguez, PR
From 09/07/2011 23:54 - 09/10/2011 23:54

speed  gusts  direction +

Date/Time (AST)

05/08 09/08 09/08 09/08 09/09 09/09 09/09 09/09 09/10 09/10 09/10 09/10 09/11 09/11
00:00 12:00 00:00 12:00 00:00 12:00 00:00 12:00 00:00 12:00 00:00 12:00 00:00 12:00 00:00

Wind Speed: 0 knots Gusts: 1 knots Direction: 112° T

Tropical Storm MARIA QuickLook, POSTED 00:00 AST 09/10/2011
Tropical Storm MARIA QuickLook, POSTED 00:00 AST 09/10/2011

Mayaguez, PR - Return to List

NOAA/NOS/C0-CPS
Barometric Pressure Plot
5759394 Mayaguez, PR
from 09/07/2011 23:54 - 09/10/2011 23:54

Last Observed Sample: 09/09/2011 23:48 (AST)
Barometric Pressure: 1017.9 mb

Mayaguez, PR - Return to List

NOAA/NOS/C0-CPS
Air/Water Temperature Plot
5759394 Mayaguez, PR
from 09/07/2011 23:54 - 09/10/2011 23:54

Last Observed Sample: 09/09/2011 23:48 (AST)
Water Temperature: 86.7° F  Air Temperature: 76.6° F
Mona Island, PR - Return to List

Preliminary 6 min. Water Level vs. Predicted Plot
9759938 Mona Island, PR
from 09/07/2011 23:54 - 09/10/2011 23:54

Relative to MLLW: Observed: 0.77 ft. Predicted: 0.70 ft. Residual: 0.07 ft.

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

Last Observed Sample: 09/09/2011 22:54 (AST)

Relative to MLLW: Observed: 0.77 ft. Predicted: 0.70 ft. Residual: 0.07 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