As of 08/21/2011 18:00 AST, water levels in the U.S. Virgin Islands and Puerto Rico are slightly elevated (0.11-0.62 feet) above predicted, with Lime Tree Bay, VI showing the most at 0.62 feet above predicted. Winds are gradually increasing in the region, with gusts up to 33 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 0.8 ft (0.24 m) at 08/22/2011 17:48 AST and 0.83 ft (0.25 m) at 08/23/2011 18:52 AST.
Charlotte Amalie, VI: Next predicted high tides are 0.87 ft (0.27 m) at 08/22/2011 18:18 AST and 0.924 ft (0.29 m) at 08/23/2011 19:02 AST.

Culebra, PR: Next predicted high tides are 0.7 ft (0.20 m) at 08/22/2011 01:19 AST and 1.02 ft (0.31 m) at 08/22/2011 17:03 AST.

Esperanza, Vieques Island, PR: Next predicted high tides are 0.63 ft (0.19 m) at 08/21/2011 18:27 AST and 0.7 ft (0.21 m) at 08/22/2011 19:12 AST.

Magueyes 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 0.5 ft (0.17 m) at 08/22/2011 01:59 AST and 0.81 ft (0.25 m) at 08/22/2011 16:31 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: MPM

SELECT NATIONAL HURRICANE CENTER ADVISORY INFORMATION:

TROPICAL STORM IRENE ADVISORY NUMBER 5

500 PM AST SUN AUG 21 2011

...CENTER OF IRENE NEAR ST. CROIX...

ABOUT 25 MIE OF ST. CROIX, ABOUT 120 MI ESE OF SAN JUAN PUERTO RICO at LATITUDE 17.7 NORTH...LONGITUDE 64.4 WEST

WATCHES AND WARNINGS

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SUMMARY OF WATCHES AND WARNINGS IN EFFECT...

A HURRICANE WARNING IS IN EFFECT FOR...
* PUERTO RICO...VIEQUES...AND CULEBRA
* THE ENTIRE COASTLINE OF THE DOMINICAN REPUBLIC
A HURRICANE WATCH IS IN EFFECT FOR...
* U.S. VIRGIN ISLANDS

A TROPICAL STORM WARNING IS IN EFFECT FOR...
* U.S. VIRGIN ISLANDS

DISCUSSION AND 48-HOUR OUTLOOK
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AT 500 PM AST...2100 UTC...THE CENTER OF TROPICAL STORM IRENE WAS LOCATED NEAR ABOUT 25 MILE OF ST. CROIX, ABOUT 120 MILES ESE OF SAN JUAN PUERTO RICO at LATITUDE 17.7 NORTH...LONGITUDE 64.4 WEST. IRENE IS MOVING TOWARD THE WEST-NORTHWEST NEAR 17 MPH AND THIS MOTION IS EXPECTED TO CONTINUE FOR THE NEXT COUPLE OF DAYS WITH A FURTHER SLOWING IN FORWARD SPEED. ON THE FORECAST TRACK THE CENTER OF IRENE WILL BE MOVING NEAR OR OVER PUERTO RICO TONIGHT AND NEAR OR OVER THE DOMINICAN REPUBLIC ON MONDAY.

MAXIMUM SUSTAINED WINDS ARE NEAR 50 MPH WITH HIGHER GUSTS. STRENGTHENING IS FORECAST AND IRENE IS EXPECTED TO BE NEAR HURRICANE INTENSITY ON MONDAY. WEAKENING IS LIKELY LATER ON MONDAY AS THE CENTER MOVES NEAR OR OVER THE DOMINICAN REPUBLIC.

TROPICAL STORM FORCE WINDS EXTEND OUTWARD UP TO 150 MILES FROM THE CENTER.

ESTIMATED MINIMUM CENTRAL PRESSURE IS 999 MB...29.50 INCHES.

HAZARDS AFFECTING LAND
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WIND...TROPICAL STORM CONDITIONS ARE EXPECTED IN THE VIRGIN ISLANDS AND PUERTO RICO INCLUDING CULEBRA AND VIEQUES THIS EVENING...AND IN THE DOMINICAN REPUBLIC EARLY MONDAY. HURRICANE CONDITIONS ARE EXPECTED OVER PUERTO RICO INCLUDING VIEQUES AND CULEBRA TONIGHT...AND OVER THE DOMINICAN REPUBLIC ON MONDAY. THE HIGHEST WINDS ARE LIKELY TO OCCUR OVER AREAS OF ELEVATED 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.

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.

Last Observed Sample: 08/21/2011 17:24 (AST)
Relative to MLLW: Observed: 1.32 ft. Predicted: 0.74 ft. Residual: 0.58 ft.
Historical Maximum Water Level: Nov 17 1999, 1.88 ft. above MHHW

Wind Speed: 16 knots Gusts: 27 knots Direction: 332° T
Barometric Pressure: 1000.0 mb

Water Temperature: 84.7° F Air Temperature: 79.5° F
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 08/19/2011 17:30 - 08/22/2011 17:30

Last Observed Sample: 08/21/2011 17:24 (AST)
Relative to MLLW: Observed: 1.22 ft. Predicted: 0.69 ft. Residual: 0.53 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 08/19/2011 17:30 - 08/22/2011 17:30

Last Observed Sample: 08/21/2011 17:24 (AST)
Barometric Pressure: 1004.8 mb
Lameshur Bay, St. John, VI - Return to List

NOAA/NOS/C0-CPS
9751381 Lameshur Bay, St. John, VI
From 08/19/2011 17:30 - 08/22/2011 17:30

Water Temperature: 84.2° F
Air Temperature: 78.1° F

Charlotte Amalie, VI - Return to List

NOAA/NOS/C0-CPS
Preliminary 6 min. Water Level vs. Predicted Plot
9751539 Charlotte Amalie, VI
From 08/19/2011 17:30 - 08/22/2011 17:30

Relative to MLLW: Observed: 1.12 ft. Predicted: 0.79 ft. Residual: 0.33 ft.
Historical Maximum Water Level: Sep 16 1995, 2.93 ft. above MHHW

Tropical Storm IRENE QuickLook, POSTED 18:00 AST 08/21/2011
Tropical Storm IRENE QuickLook, POSTED 18:00 AST 08/21/2011

Charlotte Amalie, VI - Return to List

NOAA/NOS/C0-CPS
Barometric Pressure Plot
9751639 Charlotte Amalie, VI
From 08/19/2011 17:30 - 08/22/2011 17:30

Barometric pressure

Last Observed Sample: 08/21/2011 17:24 (AST)
Barometric Pressure: 1004.5 mb

Charlotte Amalie, VI - Return to List

NOAA/NOS/C0-CPS
Air/Water Temperature Plot
9751639 Charlotte Amalie, VI
From 08/19/2011 17:30 - 08/22/2011 17:30

Water temp.  air temp

Last Observed Sample: 08/21/2011 17:24 (AST)
Water Temperature: 85.5° F Air Temperature: 78.3° F
Culebra, PR - Return to List

NOAA/NOS/C0-CPS
Preliminary 6 min. Water Level vs. Predicted Plot
9752235 Culebra, PR
from 08/19/2011 17:30 - 08/22/2011 17:30

Height relative to MLLW

Last Observed Sample: 08/21/2011 17:30 (AST)
Relative to MLLW: Observed: 1.31 ft. Predicted: 0.83 ft. Residual: 0.48 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 08/19/2011 17:30 - 08/22/2011 17:30

Wind Speed: 8 knots Gusts: 30 knots Direction: 33° T
Culebra, PR - Return to List

NOAA/NOS/C0-CPS
Barometric Pressure Plot
9752235 Culebra, PR
from 08/19/2011 17:30 - 08/22/2011 17:30

Barometric Pressure: 1007.3 mb

Culebra, PR - Return to List

NOAA/NOS/C0-CPS
Air/Water Temperature Plot
9752235 Culebra, PR
from 08/19/2011 17:30 - 08/22/2011 17:30

Water Temperature: 84.2° F  Air Temperature: 79.5° F
Tropical Storm IRENE QuickLook, POSTED 18:00 AST 08/21/2011

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 08/19/2011 17:30 - 08/22/2011 17:30

Relative to MLLW: Observed: 1.14 ft. Predicted: 0.63 ft. Residual: 0.51 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 08/19/2011 17:30 - 08/22/2011 17:30

Wind Speed: 5 knots Gusts: 15 knots Direction: 46° T
Esperanza, Vieques Island, PR - Return to List

NOAA/NOS/C0-CPS
Barometric Pressure Plot
9752695 Esperanza, Vieques Island, PR
From 08/19/2011 17:30 - 08/22/2011 17:30

Last Observed Sample: 08/21/2011 17:30 (AST)
Barometric Pressure: 1006.8 mb

Esperanza, Vieques Island, PR - Return to List

NOAA/NOS/C0-CPS
Air/Water Temperature Plot
9752695 Esperanza, Vieques Island, PR
From 08/19/2011 17:30 - 08/22/2011 17:30

Last Observed Sample: 08/21/2011 17:30 (AST)
Water Temperature: 85.8° F Air Temperature: 78.6° F
Magueyes Island, PR - Return to List

NOAA/NOS/C0-CPS
Preliminary 6 min. Water Level vs. Predicted Plot
9759110 Magueyes Island, PR
from 08/19/2011 17:30 - 08/22/2011 17:30

Last Observed Sample: 08/21/2011 17:24 (AST)
Relative to MLLW: Observed: 0.83 ft. Predicted: 0.73 ft. Residual: 0.10 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 08/19/2011 17:30 - 08/22/2011 17:30

Last Observed Sample: 08/21/2011 17:24 (AST)
Wind Speed: 8 knots Gusts: 13 knots Direction: 4° T
Magueyes Island, PR - Return to List

NOAA/NOS/C0-CPS
Barometric Pressure Plot
9759110 Magueyes Island, PR
From 08/19/2011 17:30 - 08/22/2011 17:30

Barometric Pressure: 1010.1 mb

Magueyes Island, PR - Return to List

NOAA/NOS/C0-CPS
Air/Water Temperature Plot
9759110 Magueyes Island, PR
From 08/19/2011 17:30 - 08/22/2011 17:30

Water Temperature: 86.5°F Air Temperature: 80.6°F
Mayaguez, PR - Return to List

Preliminary 6 min. Water Level vs. Predicted Plot
5759394 Mayaguez, PR
from 08/19/2011 17:30 - 08/22/2011 17:30

<table>
<thead>
<tr>
<th>Date/Time (AST)</th>
<th>Height (feet relative to MLLW)</th>
</tr>
</thead>
<tbody>
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<td>0.1 ft</td>
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<tr>
<td>08/20 12:00</td>
<td>0.2 ft</td>
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<tr>
<td>08/21 12:00</td>
<td>-0.3 ft</td>
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<tr>
<td>08/21 12:00</td>
<td>0.4 ft</td>
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<tr>
<td>08/22 12:00</td>
<td>0.5 ft</td>
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<tr>
<td>08/22 12:00</td>
<td>0.6 ft</td>
</tr>
<tr>
<td>08/22 12:00</td>
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<tr>
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<td>1.0 ft</td>
</tr>
<tr>
<td>08/22 12:00</td>
<td>1.1 ft</td>
</tr>
</tbody>
</table>

Relative to MLLW: Observed: 0.97 ft. Predicted: 0.51 ft. Residual: 0.46 ft.
Historical Maximum Water Level: 0 ft. above MHHW

Mayaguez, PR - Return to List

Wind Speed/Gusts/Dir
5759394 Mayaguez, PR
from 08/19/2011 17:30 - 08/22/2011 17:30

<table>
<thead>
<tr>
<th>Date/Time (AST)</th>
<th>Wind Speed (knots)</th>
<th>Gusts (knots)</th>
<th>Direction (°T)</th>
</tr>
</thead>
<tbody>
<tr>
<td>08/20 12:00</td>
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<td>10</td>
<td>87° T</td>
</tr>
<tr>
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<tr>
<td>08/22 12:00</td>
<td>5</td>
<td>10</td>
<td>87° T</td>
</tr>
</tbody>
</table>

Last Observed Sample: 08/21/2011 17:30 (AST)
Wind Speed: 5 knots  Gusts: 10 knots  Direction: 87° T
Tropical Storm IRENE QuickLook, POSTED 18:00 AST 08/21/2011

Mayaguez, PR - Return to List

NOAA/NOS/C0-CPS
Barometric Pressure Plot
S759394 Mayaguez, PR
From 08/19/2011 17:30 - 08/22/2011 17:30

Barometric Pressure: 1014.3 mb

Mayaguez, PR - Return to List

NOAA/NOS/C0-CPS
Air/Water Temperature Plot
S759394 Mayaguez, PR
From 08/19/2011 17:30 - 08/22/2011 17:30

Water Temperature: 85.8° F Air Temperature: 79.7° F
Mona Island, PR - Return to List

Last Observed Sample: 08/21/2011 16:54 (AST)

Relative to MLLW: Observed: 0.95 ft. Predicted: 0.64 ft. Residual: 0.31 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