NOAA and NOAA Partnership Stations Relative to the Storm

Storm Analysis
As of 08/26/2011 00:00 EDT, water levels at stations from the eastern shore of Florida to Georgia are elevated between 0.8 and 1.6 ft above predicted. Stations in the Carolinas and northward are at or near predicted levels. Winds are generally at or below 20 knots, however gusts up to 45 knots have been observed at Lake Worth Pier, FL and Mayport, FL. Barometric pressure continues to fall across the region.

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

Virginia Key, FL: Next predicted high tides are 2.24 ft (0.68 m) at 08/26/2011 07:09 EDT and 2.37 ft (0.72 m) at 08/26/2011 19:45 EDT.

Lake Worth, FL: Next predicted high tides are 2.91 ft (0.89 m) at 08/26/2011 05:58 EDT and 3.12 ft (0.95 m) at 08/26/2011 18:39 EDT.
Trident Pier, FL: Next predicted high tides are 3.37 ft (1.03 m) at 08/26/2011 05:41 EDT and 4.29 ft (1.31 m) at 08/26/2011 18:19 EDT.

Mayport, FL: Next predicted high tides are 4.57 ft (1.39 m) at 08/26/2011 06:38 EDT and 5.39 ft (1.64 m) at 08/26/2011 19:09 EDT.

Fernandina Beach, FL: Next predicted high tides are 5.87 ft (1.79 m) at 08/26/2011 06:51 EDT and 6.99 ft (2.13 m) at 08/26/2011 19:25 EDT.

Fort Pulaski, GA: Next predicted high tides are 6.74 ft (2.05 m) at 08/26/2011 06:06 EDT and 8.04 ft (2.45 m) at 08/26/2011 18:35 EDT.

Springmaid Pier, SC: Next predicted high tides are 4.91 ft (1.50 m) at 08/26/2011 05:27 EDT and 6.02 ft (1.83 m) at 08/26/2011 17:50 EDT.

Wrightsville Beach, NC: Next predicted high tides are 3.75 ft (1.14 m) at 08/26/2011 05:30 EDT and 4.74 ft (1.44 m) at 08/26/2011 17:57 EDT.

USCG Station Hatteras, NC: Next predicted high tides are 0.58 ft (0.18 m) at 08/26/2011 07:03 EDT and 0.55 ft (0.17 m) at 08/26/2011 19:26 EDT.

Duck, NC: Next predicted high tides are 3.16 ft (0.96 m) at 08/26/2011 05:30 EDT and 3.99 ft (1.22 m) at 08/26/2011 17:54 EDT.

Chesapeake Bay Bridge Tunnel, VA: Next predicted high tides are 2.57 ft (0.78 m) at 08/26/2011 06:19 EDT and 3.12 ft (0.95 m) at 08/26/2011 18:47 EDT.

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

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SELECT NATIONAL HURRICANE CENTER ADVISORY INFORMATION:

HURRICANE IRENE ADVISORY NUMBER  23
1100 PM EDT THU AUG 25 2011

...HURRICANE IRENE AIMS ITS FURY TOWARD THE NORTH CAROLINA COAST...

WATCHES AND WARNINGS

SUMMARY OF WATCHES AND WARNINGS IN EFFECT...

A HURRICANE WARNING IS IN EFFECT FOR...
* THE COAST OF NORTH CAROLINA FROM LITTLE RIVER INLET NORTHWARD TO THE VIRGINIA BORDER...INCLUDING THE PAMLICO, ALBEMARLE AND CURRITUCK SOUNDS
A HURRICANE WATCH IS IN EFFECT FOR...
* THE VIRGINIA/NORTH CAROLINA BORDER NORTHWARD TO SANDY HOOK NEW JERSEY...INCLUDING DELAWARE BAY AND CHESAPEAKE BAY SOUTH OF SMITH POINT

A TROPICAL STORM WARNING IS IN EFFECT FOR...
* NORTH OF EDISTO BEACH SOUTH CAROLINA TO LITTLE RIVER INLET

A TROPICAL STORM WATCH IS IN EFFECT FOR...
* CHESAPEAKE BAY FROM SMITH POINT NORTHWARD AND THE TIDAL POTOMAC

A HURRICANE WARNING MEANS THAT HURRICANE CONDITIONS ARE EXPECTED SOMEWHERE WITHIN THE WARNING AREA. A WARNING IS TYPICALLY ISSUED 36 HOURS BEFORE THE ANTICIPATED FIRST OCCURRENCE OF TROPICAL-STORM-FORCE WINDS...CONDITIONS THAT MAKE OUTSIDE PREPARATIONS DIFFICULT OR DANGEROUS. PREPARATIONS TO PROTECT LIFE AND PROPERTY SHOULD BE RUSHED TO COMPLETION.

A TROPICAL STORM WARNING MEANS THAT TROPICAL STORM CONDITIONS ARE EXPECTED SOMEWHERE WITHIN THE WARNING AREA WITHIN 36 HOURS.

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 WATCH MEANS THAT TROPICAL STORM CONDITIONS ARE POSSIBLE WITHIN THE WATCH AREA...GENERALLY WITHIN 48 HOURS.

INTERESTS ELSEWHERE IN THE MID-ATLANTIC STATES AND NEW ENGLAND SHOULD MONITOR THE PROGRESS OF IRENE.

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 EDT THE CENTER OF HURRICANE IRENE WAS LOCATED ABOUT 490 MI SSW OF CAPE HATTERAS NORTH CAROLINA. IRENE IS MOVING TOWARD THE NORTH NEAR 14 MPH AND THIS MOTION IS EXPECTED TO CONTINUE DURING THE NEXT 24 HOURS. A GRADUAL TURN TOWARD THE NORTH-NORTHEAST SHOULD BEGIN THEREAFTER. ON THE FORECAST TRACK...IRENE WILL CONTINUE TO MOVE AWAY FROM THE NORTHWESTERN BAHAMAS AND THE CORE OF THE HURRICANE WILL PASS WELL OFFSHORE OF THE EAST COAST OF CENTRAL AND NORTHERN FLORIDA EARLY FRIDAY. THE HURRICANE IS FORECAST TO APPROACH THE COAST OF NORTH CAROLINA ON SATURDAY.

MAXIMUM SUSTAINED WINDS REMAIN NEAR 115 MPH WITH HIGHER GUSTS. IRENE IS A CATEGORY THREE HURRICANE ON THE SAFFIR-SIMPSON HURRICANE WIND SCALE. SOME STRENGTHENING IS POSSIBLE ON FRIDAY.

IRENE IS A LARGE TROPICAL CYCLONE. HURRICANE FORCE WINDS EXTEND OUTWARD UP TO 80 MILES FROM THE CENTER AND TROPICAL STORM FORCE WINDS EXTEND OUTWARD...
UP TO 290 MILES. NOAA BUOY 41010 LOCATED ABOUT 140 MILES EAST OF CAPE CANAVERAL FLORIDA RECENTLY REPORTED A SUSTAINED WIND OF 49 MPH AND A WIND GUST OF 65 MPH.

THE MINIMUM CENTRAL PRESSURE RECENTLY REPORTED BY A NOAA HURRICANE HUNTER AIRCRAFT WAS 942 MB.

HAZARDS AFFECTING LAND
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WIND...HURRICANE AND TROPICAL STORM CONDITIONS ARE SUBSIDING OVER THE NORTHWESTERN BAHAMAS. TROPICAL STORM FORCE WINDS ARE EXPECTED WITHIN THE SOUTHERN PORTION OF THE WARNING AREA ALONG THE UNITED STATES EAST COAST BY LATE FRIDAY. HURRICANE FORCE WINDS ARE EXPECTED TO FIRST REACH THE HURRICANE WARNING AREA BY SATURDAY.

STORM SURGE...ALONG THE EASTERN COAST OF THE UNITED STATES...AN EXTREMELY DANGEROUS STORM SURGE WILL RAISE WATER LEVELS BY AS MUCH AS 5 TO 10 FEET ABOVE GROUND LEVEL WITHIN THE HURRICANE WARNING AREA INCLUDING THE ALBEMARLE AND PAMLICO SOUNDS. NEAR THE COAST...THE SURGE WILL BE ACCOMPANIED BY LARGE, DESTRUCTIVE AND LIFE-THREATENING WAVES. IRENE ALSO HAS THE POTENTIAL TO PRODUCE SIGNIFICANT STORM SURGE FLOODING WITHIN THE HURRICANE WATCH AREA INCLUDING PORTIONS OF THE CHESAPEAKE BAY, TRIBUTARIES AND THE EASTERN SHORE.

RAINFALL...IRENE IS EXPECTED TO PRODUCE RAINFALL ACCUMULATIONS OF 6 TO 12 INCHES OVER THE NORTHERN BAHAMAS. STORM TOTAL RAINFALL AMOUNTS OF 6 TO 10 INCHES WITH ISOLATED MAXIMUM AMOUNTS OF 15 INCHES ARE EXPECTED OVER PORTIONS OF EASTERN NORTH CAROLINA AND IN THE MID-ATLANTIC STATES ALONG THE PATH OF IRENE.

SURF...SWELLS GENERATED BY IRENE ARE AFFECTING PORTIONS OF THE COAST OF THE SOUTHEASTERN UNITED STATES. THESE SWELLS WILL CAUSE LIFE-THREATENING SURF AND RIP CURRENT CONDITIONS.

FORECASTER AVILA

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.
Virginia Key, FL - Return to List

NOAA/NOS/C0-CPS
Preliminary 6 min. Water Level vs. Predicted Plot
8723214 Virginia Key, FL
from 08/24/2011 00:00 - 08/27/2011 00:00

Last Observed Sample: 08/25/2011 23:54 (EDT)
Relative to MLLW: Observed: 1.39 ft. Predicted: 0.59 ft. Residual: 0.80 ft.
Historical Maximum Water Level: Oct 24 2005, 2.58 ft. above MHHW

Virginia Key, FL - Return to List

NOAA/NOS/C0-CPS
Wind Speed/Gusts/Dir
8723214 Virginia Key, FL
from 08/24/2011 00:00 - 08/27/2011 00:00

Last Observed Sample: 08/25/2011 23:54 (EDT)
Wind Speed: 9 knots Gusts: 12 knots Direction: 275° T
Hurricane IRENE QuickLook, POSTED 00:00 EDT 08/26/2011

Barometric Pressure Plot
8723214 Virginia Key, FL
From 08/24/2011 00:00 - 08/27/2011 00:00

Last Observed Sample: 08/25/2011 23:54 (EDT)
Barometric Pressure: 1005.2 mb

Air/Water Temperature Plot
8723214 Virginia Key, FL
From 08/24/2011 00:00 - 08/27/2011 00:00

Last Observed Sample: 08/25/2011 23:54 (EDT)
Water Temperature: 84.7° F Air Temperature: 80.4° F
Lake Worth Pier, FL - Return to List

NOAA/NOS/C0-CPS
Preliminary 6 min. Water Level vs. Predicted Plot
8722670 Lake Worth Pier, FL
from 08/24/2011 00:00 - 08/27/2011 00:00

Last Observed Sample: 08/25/2011 23:54 (EDT)
Relative to MLLW: Observed: 1.74 ft. Predicted: 0.58 ft. Residual: 1.16 ft.
Historical Maximum Water Level: Nov 23 1984, 1.88 ft. above MHHW

Lake Worth Pier, FL - Return to List

NOAA/NOS/C0-CPS
Wind Speed/Gusts/Dir
8722670 Lake Worth Pier, FL
from 08/24/2011 00:00 - 08/27/2011 00:00

Last Observed Sample: 08/25/2011 23:54 (EDT)
Wind Speed: 11 knots Gusts: 18 knots Direction: 280° T
Trident Pier, FL - Return to List

NOAA/NOS/C0-CPS
Preliminary 6 min. Water Level vs. Predicted Plot
872604 Trident Pier, FL
from 08/24/2011 00:00 - 08/27/2011 00:00

Last Observed Sample: 08/25/2011 23:54 (EDT)
Relative to MLLW: Observed: 1.88 ft. Predicted: 0.66 ft. Residual: 1.22 ft.
Historical Maximum Water Level: Sep 26 2004, 4.01 ft. above MHHW

Trident Pier, FL - Return to List

NOAA/NOS/C0-CPS
Wind Speed/Gusts/Dir
872604 Trident Pier, FL
from 08/24/2011 00:00 - 08/27/2011 00:00

Last Observed Sample: 08/25/2011 23:54 (EDT)
Wind Speed: 9 knots Gusts: 15 knots Direction: 342° T
Trident Pier, FL - Return to List

NOAA/NOS/C0-CPS
Air/Water Temperature Plot
8721604 Trident Pier, FL
FROM 08/24/2011 00:00 - 08/27/2011 00:00

Temperature (°F)

06:00 08:00 10:00 12:00 14:00 16:00 18:00 20:00 22:00 00:00

Date/Time (EDT)

Last Observed Sample: 08/25/2011 23:54 (EDT)
Water Temperature: 84.0° F Air Temperature: 80.8° F

Mayport (Bar Pilots Dock), FL - Return to List

NOAA/NOS/C0-CPS
Preliminary 6 min. Water Level vs. Predicted Plot
8720218 Mayport (Bar Pilots Dock), FL
FROM 08/24/2011 00:00 - 08/27/2011 00:00

Height (feet relative to MLLW)

00:00 06:00 12:00 18:00 00:00

Date/Time (EDT)

Last Observed Sample: 08/25/2011 23:48 (EDT)
Relative to MLLW: Observed: 1.98 ft. Predicted: 0.78 ft. Residual: 1.20 ft.
Historical Maximum Water Level: Sep 27 2004, 2.47 ft. above MHHW
Hurricane IRENE QuickLook, POSTED 00:00 EDT 08/26/2011

Mayport (Bar Pilots Dock), FL - Return to List

NOAA/NOS/C0-CPS
Wind Speed/Gusts/Dir
3720218 Mayport (Bar Pilots Dock), FL
From 08/24/2011 00:00 - 08/27/2011 00:00

Last Observed Sample: 08/25/2011 23:54 (EDT)
Wind Speed: 17 knots Gusts: 22 knots Direction: 54° T

Mayport (Bar Pilots Dock), FL - Return to List

NOAA/NOS/C0-CPS
Barometric Pressure Plot
3720218 Mayport (Bar Pilots Dock), FL
From 08/24/2011 00:00 - 08/27/2011 00:00

Last Observed Sample: 08/25/2011 23:54 (EDT)
Barometric Pressure: 1010.8 mb
Mayport (Bar Pilots Dock), FL - Return to List

NOAA/NOS/C0-CPS
Air/Water Temperature Plot
8720218 Mayport (Bar Pilots Dock), FL
From 08/24/2011 00:00 - 08/27/2011 00:00

Last Observed Sample: 08/25/2011 23:54 (EDT)
Water Temperature: 84.0° F Air Temperature: 82.8° F

Fernandina Beach, FL - Return to List

NOAA/NOS/C0-CPS
Preliminary 6 min. Water Level vs. Predicted Plot
87300030 Fernandina Beach, FL
From 08/24/2011 00:00 - 08/27/2011 00:00

Last Observed Sample: 08/25/2011 23:54 (EDT)
Relative to MLLW: Observed: 2.45 ft. Predicted: 0.89 ft. Residual: 1.56 ft.
Historical Maximum Water Level: Oct 2 1898, 6.94 ft. above MHHW
Fernandina Beach, FL - Return to List

NOAA/NOS/C0-CPS
Wind Speed/Gusts/Dir
8720030 Fernandina Beach, FL
From 08/24/2011 00:00 - 08/27/2011 00:00

Last Observed Sample: 08/25/2011 23:54 (EDT)
Wind Speed: 7 knots Gusts: 12 knots Direction: 39° T

Fernandina Beach, FL - Return to List

NOAA/NOS/C0-CPS
Barometric Pressure Plot
8720030 Fernandina Beach, FL
From 08/24/2011 00:00 - 08/27/2011 00:00

Last Observed Sample: 08/25/2011 23:54 (EDT)
Barometric Pressure: 1008.4 mb
Fernandina Beach, FL - Return to List

NOAA/NOS/C0-CPS
Air/Water Temperature Plot
5720030 Fernandina Beach, FL
From 08/24/2011 00:00 - 08/27/2011 00:00

Last Observed Sample: 08/25/2011 23:54 (EDT)
Water Temperature: 85.6° F Air Temperature: 83.7° F

Fort Pulaski, GA - Return to List

NOAA/NOS/C0-CPS
Preliminary 6 min. Water Level vs. Predicted Plot
8570870 Fort Pulaski, GA
From 08/24/2011 00:00 - 08/27/2011 00:00

Relative to MLLW: Observed: 2.20 ft. Predicted: 0.97 ft. Residual: 1.23 ft.
Historical Maximum Water Level: Oct 15 1947, 3.4 ft. above MHHW
Fort Pulaski, GA - Return to List

NOAA/NOS/C0-CPS
Wind Speed/Gusts/Dir
85708/0 Fort Pulaski, GA
From 08/24/2011 00:00 - 08/27/2011 00:00

Last Observed Sample: 08/25/2011 23:48 (EDT)
Wind Speed: 16 knots Gusts: 20 knots Direction: 53° T

Fort Pulaski, GA - Return to List

NOAA/NOS/C0-CPS
Barometric Pressure Plot
85708/0 Fort Pulaski, GA
From 08/24/2011 00:00 - 08/27/2011 00:00

Last Observed Sample: 08/25/2011 23:48 (EDT)
Barometric Pressure: 1011.4 mb
Fort Pulaski, GA - Return to List

NOAA/NOS/C0-CPS
Air/Water Temperature Plot
8670870 Fort Pulaski, GA
From 08/24/2011 00:00 - 08/27/2011 00:00

Last Observed Sample: 08/25/2011 23:48 (EDT)
Water Temperature: 86.0° F  Air Temperature: 83.3° F

Springmaid Pier, SC - Return to List

NOAA/NOS/C0-CPS
Preliminary 6 min. Water Level vs. Predicted Plot
8851070 Springmaid Pier, SC
From 08/24/2011 00:00 - 08/27/2011 00:00

Last Observed Sample: 08/25/2011 23:48 (EDT)
Relative to MLLW: Observed: 1.20 ft.  Predicted: 0.82 ft.  Residual: 0.38 ft.
Historical Maximum Water Level: Jan 1 1987, 3.65 ft. above MHHW
Springmaid Pier, SC - Return to List

NOAA/NOS/CO-OPS
Wind Speed/Gusts/Dir
8661070 Springmaid Pier, SC
From 08/24/2011 00:00 - 08/27/2011 00:00

Wind Speed: 13 knots Gusts: 14 knots Direction: 77° T

Springmaid Pier, SC - Return to List

NOAA/NOS/CO-OPS
Barometric Pressure Plot
8661070 Springmaid Pier, SC
From 08/24/2011 00:00 - 08/27/2011 00:00

Barometric Pressure: 1013.0 mb
Wrightsville Beach, NC - Return to List

NOAA/NOS/C0-CPS
Preliminary 6 min. Water Level vs. Predicted Plot
8858163 Wrightsville Beach, NC
from 08/24/2011 00:00 - 08/27/2011 00:00

Last Observed Sample: 08/25/2011 23:48 (EDT)
Relative to MLLW: Observed: 0.72 ft. Predicted: 0.54 ft. Residual: 0.18 ft.
Historical Maximum Water Level: Sep 25 2008, 2.81 ft. above MHHW

Wrightsville Beach, NC - Return to List

NOAA/NOS/C0-CPS
Wind Speed/Gusts/Dir
8858163 Wrightsville Beach, NC
from 08/24/2011 00:00 - 08/27/2011 00:00

Last Observed Sample: 08/25/2011 23:48 (EDT)
Wind Speed: 14 knots Gusts: 16 knots Direction: 117° T
Wrightsville Beach, NC - Return to List

Barometric Pressure Plot
8558163 Wrightsville Beach, NC
From 08/24/2011 00:00 - 08/27/2011 00:00

Barometric Pressure: 1013.1 mb

USCG Station Hatteras, NC - Return to List

Preliminary 6 min. Water Level vs. Predicted Plot
0654467 USCG Station Hatteras, NC
From 08/24/2011 00:00 - 08/27/2011 00:00

Relative to MLLW: Observed: 0.22 ft. Predicted: 0.29 ft. Residual: -0.07 ft.
Historical Maximum Water Level: 0 ft. above MHHW
USCG Station Hatteras, NC - Return to List

NOAA/NOS/C0-CPS
Wind Speed/Gusts/Dir
0654457 USCG Station Hatteras, NC
From 08/24/2011 00:00 - 08/27/2011 00:00

Wind Speed: 5 knots Gusts: 8 knots Direction: 142° T

USCG Station Hatteras, NC - Return to List

NOAA/NOS/C0-CPS
Barometric Pressure Plot
0654457 USCG Station Hatteras, NC
From 08/24/2011 00:00 - 08/27/2011 00:00

Barometric Pressure: 1015.0 mb
Hurricane IRENE QuickLook, POSTED 00:00 EDT 08/26/2011

Duck, NC - Return to List

NOAA/NOS/C0-CPS
Preliminary 6 min. Water Level vs. Predicted Plot
88551370 Duck, NC
from 08/24/2011 00:00 - 08/27/2011 00:00

Last Observed Sample: 08/25/2011 23:54 (EDT)
Relative to MLLW: Observed: 0.05 ft. Predicted: 0.46 ft. Residual: -0.41 ft.
Historical Maximum Water Level: Aug 30 1999, 3.23 ft. above MHHW

Duck, NC - Return to List

NOAA/NOS/C0-CPS
Wind Speed/Gusts/Dir
88551370 Duck, NC
from 08/24/2011 00:00 - 08/27/2011 00:00

Last Observed Sample: 08/25/2011 23:54 (EDT)
Wind Speed: 7 knots Gusts: 8 knots Direction: 147° T
Duck, NC - Return to List

NOAA/NOS/C0-CPS
Barometric Pressure Plot
8851370 Duck, NC
From 08/24/2011 00:00 - 08/27/2011 00:00

Barometric Pressure: 1013.9 mb

Chesapeake Bay Bridge Tunnel, VA - Return to List

NOAA/NOS/C0-CPS
Preliminary 6 min. Water Level vs. Predicted Plot
6639663 Chesapeake Bay Bridge Tunnel, VA
From 08/24/2011 00:00 - 08/27/2011 00:00

Relative to MLLW: Observed: 0.24 ft. Predicted: 0.45 ft. Residual: -0.21 ft.
Historical Maximum Water Level: Feb 5 1998, 3.68 ft. above MHHW
Hurricane IRENE QuickLook, POSTED 00:00 EDT 08/26/2011

Chesapeake Bay Bridge Tunnel, VA - Return to List

NOAA/NOS/C0-CPS
Wind Speed/Gusts/Dir
8638863 Chesapeake Bay Bridge Tunnel, VA
From 08/24/2011 00:00 - 08/27/2011 00:00

Last Observed Sample: 08/25/2011 23:48 (EDT)
Wind Speed: 11 knots Gusts: 16 knots Direction: 163° T

Chesapeake Bay Bridge Tunnel, VA - Return to List

NOAA/NOS/C0-CPS
Barometric Pressure Plot
8638863 Chesapeake Bay Bridge Tunnel, VA
From 08/24/2011 00:00 - 08/27/2011 00:00

Last Observed Sample: 08/25/2011 23:48 (EDT)
Barometric Pressure: 1014.6 mb