Storm Analysis

As of 09/06/2008 13:30 EDT, water levels are rising north of Wrightville Beach, NC and along the coasts of Virginia and Maryland. Water levels are slightly elevated along the Florida Coast. Water levels are below predicted from Port Pulsaki, GA to Wrightville Beach, NC. Barometric pressure is falling along Virginia and Maryland coasts. Wind gusts are up to 36 knots in Oregon Inlet Marina, NC.

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

Baltimore, MD: Next predicted high tide is 1.80 ft (0.55 m) at 09/07/2008 00:49 EDT.

Solomons Island, VA: Next predicted high tide is 1.5 ft (0.46 m) at 09/06/2008 20:09 EDT.
Yorktown USCG Training Center, VA: Next predicted high tide is 2.50 ft (0.76 m) at 09/06/2008 14:27 EDT.

Chesapeake Bay Bridge Tunnel, VA: Next predicted high tide is 2.80 ft (0.85 m) at 09/06/2008 13:31 EDT.

Wilmington, NC: Next predicted high tide is 4.40 ft (1.34 m) at 09/06/2008 15:25 EDT.

Beaufort, NC: Next predicted high tide is 7.40 ft (2.26 m) at 09/06/2008 14:51 EDT.

Oregon Inlet Marina, NC: Next predicted high tide is 1.10 ft (0.34 m) at 09/06/2008 13:23 EDT.

Wrightville Beach, NC: Next predicted high tide is 4.18 ft (1.27 m) at 09/06/2008 12:48 EDT.

Springmaid Pier, SC: Next predicted high tide is 5.10 ft (1.55 m) at 09/06/2008 13:10 EDT.

Oyster Landing (North Inlet Estuary), SC: Next predicted high tide is 4.90 ft (1.49 m) at 09/06/2008 14:11 EDT.

Fort Pulaski, GA: Next predicted high tide is 6.90 ft (2.10 m) at 09/06/2008 13:42 EDT.

Fernandina Beach, FL: Next predicted high tide is 6.10 ft (1.86 m) at 09/06/2008 14:18 EDT.

For additional data, please see the Center for Operational Oceanographic Products & Services website. For more information or archived products and reports, please see the Storm QuickLook Homepage.

Analyst: KG/ND

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SELECT NATIONAL HURRICANE CENTER ADVISORY INFORMATION:

TROPICAL STORM HANNA ADVISORY NUMBER 39

1100 AM EDT SAT SEP 06 2008

CENTER OF HANNA MOVING INTO SOUTHEASTERN VIRGINIA

AT 11 AM EDT 1500 UTC THE TROPICAL STORM WARNING IS DISCONTINUED FROM SURF CITY NORTH CAROLINA SOUTHWARD. A TROPICAL STORM WARNING IS NOW IN EFFECT FROM NORTH OF SURF CITY NORTH CAROLINA TO MERRIMACK RIVER MASSACHUSETTS INCLUDING PAMLICO AND ALBEMARLE SOUNDS ALL OF CHESAPEAKE BAY THE TIDAL POTOMAC WASHINGTON D.C DELAWARE BAY NEW YORK HARBOR LONG ISLAND SOUND BLOCK ISLAND MARTHA'S VINEYARD AND NANTUCKET. A TROPICAL STORM WARNING MEANS THAT TROPICAL STORM CONDITIONS ARE EXPECTED WITHIN THE WARNING AREA WITHIN THE NEXT 24 HOURS.

FOR STORM INFORMATION SPECIFIC TO YOUR AREA INCLUDING POSSIBLE INLAND WATCHES AND WARNINGS PLEASE MONITOR PRODUCTS ISSUED
BY YOUR LOCAL WEATHER OFFICE.

AT 1100 AM EDT 1500Z THE CENTER OF TROPICAL STORM HANNA WAS LOCATED JUST SOUTHEAST OF EMPORIA VIRGINIA. THIS POSITION IS ALSO ABOUT 65 MILES 105 KM WEST-SOUTHWEST OF NORFOLK VIRGINIA.

HANNA IS MOVING TOWARD THE NORTH-NORTHEAST NEAR 24 MPH. A TURN TOWARD THE NORTHEAST WITH AN INCREASE IN FORWARD SPEED IS EXPECTED DURING THE NEXT 12 TO 24 HOURS. ON THE FORECAST TRACK THE CENTER OF HANNA WILL MOVE THROUGH THE EASTERN MID-ATLANTIC STATES TODAY NEAR OR OVER SOUTHERN NEW ENGLAND TONIGHT AND SUNDAY AND NEAR THE CANADIAN MARITIMES SUNDAY NIGHT.

MAXIMUM SUSTAINED WINDS ARE NEAR 50 MPH WITH HIGHER GUSTS. LITTLE CHANGE IN STRENGTH IS FORECAST DURING THE NEXT COUPLE OF DAYS. HOWEVER HANNA IS FORECAST TO LOSE TROPICAL CHARACTERISTICS ON SUNDAY.

TROPICAL STORM FORCE WINDS EXTEND OUTWARD UP TO 200 MILES 325 KM FROM THE CENTER. EDENTON NORTH CAROLINA RECENTLY REPORTED A WIND GUST OF 45 MPH.

ESTIMATED MINIMUM CENTRAL PRESSURE IS 988 MB.

STORM SURGE FLOODING OF 1 TO 3 FEET ABOVE NORMAL TIDE LEVELS WITH LOCALLY HIGHER LEVELS IN BAYS AND ACCOMPANIED LARGE AND DANGEROUS BATTERING WAVES IS EXPECTED IN THE WARNING AREA. COASTAL STORM SURGE FLOODING ALONG THE ATLANTIC COASTS OF SOUTH CAROLINA AND NORTH CAROLINA INCLUDING THE PAMLICO AND ABLEMARLE SOUNDS SHOULD GRADUALLY SUBSIDE TODAY.

HANNA IS EXPECTED TO PRODUCE RAINFALL ACCUMULATIONS OF 4 TO 6 INCHES FROM CENTRAL NORTH CAROLINA NORTHEASTWARD THROUGH EASTERN PORTIONS OF THE MID-ATLANTIC STATES SOUTHERN NEW YORK AND INTO SOUTHERN NEW ENGLAND WITH ISOLATED MAXIMUM AMOUNTS OF 10 INCHES POSSIBLE. THESE RAINFALL AMOUNTS COULD PRODUCE FLASH FLOODING ACROSS THESE REGIONS.

ISOLATED TORNADOES ARE POSSIBLE TODAY OVER EASTERN NORTH CAROLINA EASTERN VIRGINIA SOUTHERN MARYLAND DELAWARE SOUTHERN NEW JERSEY AND SOUTHEASTERN NEW YORK TODAY.

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 HANNA QuickLook, POSTED 13:30 EDT 09/06/2008

Water Level, Wrightsville Beach - Air/Water Temp, Wrightsville Beach - Winds, Wrightsville Beach - Barometric, Wilmington - Water Level, Beaufort - Water Level, Oregon Inlet Marina - Water Level, Oregon Inlet Marina - Air/Water Temp, Oregon Inlet Marina - Winds, Oregon Inlet Marina - Barometric, Chesapeake Bay Bridge Tunnel - Water Level, Chesapeake Bay Bridge Tunnel - Air/Water Temp, Chesapeake Bay Bridge Tunnel - Winds, Chesapeake Bay Bridge Tunnel - Barometric, Yorktown USCG Training Center - Water Level, Yorktown USCG Training Center - Air/Water Temp, Yorktown USCG Training Center - Winds, Yorktown USCG Training Center - Barometric, Solomons Island - Water Level, Solomons Island - Air/Water Temp, Solomons Island - Winds, Solomons Island - Barometric, Baltimore - Water Level, Baltimore - Air/Water Temp, Baltimore - Winds, Baltimore - Barometric,
Tropical Storm HANNA QuickLook, POSTED 13:30 EDT 09/06/2008

Fernandina Beach, FL - Station Map

Relative to MLLW: Observed: 6.05 ft. Predicted: 5.90 ft. Residual: 0.15 ft.

Historical Maximum Water Level: 10/02/1898, 6.94 ft. above MHHW

Wind Speed: 6 knots Gusts: 8 knots Direction: 312° T
Fernandina Beach, FL - Station Map

Last Observed Sample: 09/06/2008 13:24 (EDT)
Barometric Pressure: 1013.5 mb

Fort Pulaski, GA - Station Map

Last Observed Sample: 09/06/2008 13:24 (EDT)
Relative to MLLW: Observed: 7.01 ft. Predicted: 6.90 ft. Residual: 0.11 ft.
Historical Maximum Water Level: 10/15/1947, 3.4 ft. above MHHW
Fort Pulaski, GA - Station Map

NOAA/NOS/C0-OPS
Air/Water Temperature Plot
9670579 Fort Pulaski, GA
from 09/04/2008 13:42 - 09/07/2008 13:42

Last Observed Sample: 09/06/2008 13:24 (EDT)
Water Temperature: 81.9° F Air Temperature: 85.6° F

Fort Pulaski, GA - Station Map

NOAA/NOS/C0-OPS
Wind Speed/Gusts/Dir
9670579 Fort Pulaski, GA
from 09/04/2008 13:42 - 09/07/2008 13:42

Last Observed Sample: 09/06/2008 13:24 (EDT)
Wind Speed: 8 knots Gusts: 10 knots Direction: 281° T
Fort Pulaski, GA - Station Map

NOAA/NOS/C0-OPS
Barometric Pressure Plot
9670079 Fort Pulaski, GA
from 09/04/2008 13:42 - 09/07/2008 13:42

barometric pressure

Last Observed Sample: 09/06/2008 13:24 (EDT)
Barometric Pressure: 1012.7 mb

Springmaid Pier, SC - Station Map

NOAA/NOS/C0-OPS
Preliminary 6 min. Water Level vs. Predicted Plot
0661870 Springmaid Pier, SC
from 09/04/2008 13:36 - 09/07/2008 13:36

Predicted HL  (Obs-Pred)  MHHW
Observed HL  MHHW

Last Observed Sample: 09/06/2008 13:24 (EDT)
Historical Maximum Water Level: 01/01/1987, 3.65 ft. above MHHW
Springmaid Pier, SC - Station Map

NOAA/NOS/C0-OPS
Air/Water Temperature Plot
from 09/04/2008 13:36 - 09/07/2008 13:36

Last Observed Sample: 09/06/2008 13:24 (EDT)
Water Temperature: 85.1° F Air Temperature: 84.0° F

Springmaid Pier, SC - Station Map

NOAA/NOS/C0-OPS
Wind Speed/Gusts/Dir
from 09/04/2008 13:36 - 09/07/2008 13:36

Last Observed Sample: 09/06/2008 13:24 (EDT)
Wind Speed: 8 knots Gusts: 11 knots Direction: 242° T
Springmaid Pier, SC - Station Map

Barometric Pressure Plot
9651070 Springmaid Pier, SC
from 09/04/2008 13:35 - 09/07/2008 13:36

Last Observed Sample: 09/06/2008 13:24 (EDT)
Barometric Pressure: 1010.4 mb

Wrightsville Beach, NC - Station Map

Preliminary 6 min. Water Level vs. Predicted Plot
9658152 Wrightsville Beach, NC
from 09/04/2008 13:35 - 09/07/2008 13:36

Last Observed Sample: 09/06/2008 13:24 (EDT)
Relative to MLLW: Observed: 3.50 ft. Predicted: 4.10 ft. Residual: -0.60 ft.
Historical Maximum Water Level: n/a
Wrightsville Beach, NC - Station Map

NOAA/NOS/C0-OPS
Air/Water Temperature Plot
9652152 Wrightsville Beach, NC
from 09/04/2008 13:36 - 09/07/2008 13:36

- Last Observed Sample: 09/06/2008 13:24 (EDT)
- Water Temperature: 83.7°F Air Temperature: 83.3°F

Wrightsville Beach, NC - Station Map

NOAA/NOS/C0-OPS
Wind Speed/Gusts/Dir
9658183 Wrightsville Beach, NC
from 09/04/2008 13:36 - 09/07/2008 13:36

- Last Observed Sample: 09/06/2008 13:24 (EDT)
- Wind Speed: 15 knots Gusts: 20 knots Direction: 261° T

Tropical Storm HANNA QuickLook, POSTED 13:30 EDT 09/06/2008
**Wrightsville Beach, NC - Station Map**

**Barometric Pressure Plot**
9659152 Wrightsville Beach, NC from 09/04/2008 13:36 - 09/07/2008 13:36

Barometric pressure

Last Observed Sample: 09/06/2008 13:24 (EDT)
Barometric Pressure: 1008.6 mb

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**Wilmington, NC - Station Map**

**Preliminary 6 min. Water Level vs. Predicted Plot**
9659160 Wilmington, NC from 09/04/2008 13:36 - 09/07/2008 13:36


Historical Maximum Water Level: 10/15/1954, 3.47 ft. above MHHW
Tropical Storm HANNA QuickLook, POSTED 13:30 EDT 09/06/2008

**Beaufort, NC - Station Map**  
Return to List

NOAA/NOS/C0-DPS  
Preliminary 6 min. Water Level vs. Predicted Plot  
9656483 Beaufort, NC  
from 09/04/2008 13:42 - 09/07/2008 13:42

Last Observed Sample: 09/06/2008 13:24 (EDT)
Relative to MLLW: Observed: 3.85 ft. Predicted: 3.38 ft. Residual: 0.47 ft.
Historical Maximum Water Level: 09/16/1999, 2.74 ft. above MHHW

**Oregon Inlet Marina, NC - Station Map**  
Return to List

NOAA/NOS/C0-DPS  
Preliminary 6 min. Water Level vs. Predicted Plot  
9652567 Oregon Inlet Marina, NC  
from 09/04/2008 13:36 - 09/07/2008 13:36

Last Observed Sample: 09/06/2008 13:24 (EDT)
Historical Maximum Water Level: 09/16/1999, 4.49 ft. above MHHW
Oregon Inlet Marina, NC - Station Map

Water Temperature: 81.3° F Air Temperature: 81.0° F

Wind Speed: 33 knots Gusts: 47 knots Direction: 200° T
**Oregon Inlet Marina, NC - Station Map**

Barometric Pressure Plot
9652557 Oregon Inlet Marina, NC
from 09/04/2008 13:36 - 09/07/2008 13:36

Last Observed Sample: 09/06/2008 13:24 (EDT)
Barometric Pressure: 1004.8 mb

**Chesapeake Bay Bridge Tunnel, VA - Station Map**

Preliminary 6 min. Water Level vs. Predicted Plot
8638623 Chesapeake Bay Bridge Tunnel, VA
from 09/04/2008 13:42 - 09/07/2008 13:42

Last Observed Sample: 09/06/2008 13:24 (EDT)
Relative to MLLW: Observed: 2.64 ft. Predicted: 2.82 ft. Residual: -0.18 ft.
Historical Maximum Water Level: 02/05/1998, 3.68 ft. above MHHW
Chesapeake Bay Bridge Tunnel, VA - Station Map

NOAA/NOS/C0-OPS

Air/Water Temperature Plot
9638662 Chesapeake Bay Bridge Tunnel, VA
from 09/04/2008 13:42 - 09/07/2008 13:42

Last Observed Sample: 09/06/2008 13:24 (EDT)
Water Temperature: 79.0° F Air Temperature: 76.3° F

Chesapeake Bay Bridge Tunnel, VA - Station Map

NOAA/NOS/C0-OPS

Wind Speed/Gusts/Dir
9638662 Chesapeake Bay Bridge Tunnel, VA
from 09/04/2008 13:42 - 09/07/2008 13:42

Last Observed Sample: 09/06/2008 13:24 (EDT)
Wind Speed: 32 knots Gusts: 46 knots Direction: 180° T

Tropical Storm HANNA QuickLook, POSTED 13:30 EDT 09/06/2008
Tropical Storm HANNA QuickLook, POSTED 13:30 EDT 09/06/2008

**Chesapeake Bay Bridge Tunnel, VA - Station Map**

- Last Observed Sample: 09/06/2008 13:24 (EDT)
- Barometric Pressure: 996.3 mb

**Yorktown USCG Training Center, VA - Station Map**

- Last Observed Sample: 09/06/2008 13:30 (EDT)
- Relative to MLLW: Observed: 3.01 ft. Predicted: 2.42 ft. Residual: 0.59 ft.
- Historical Maximum Water Level: n/a
Tropical Storm HANNA QuickLook, POSTED 13:30 EDT 09/06/2008

Yorktown USCG Training Center, VA - Station Map

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**Temperature Plot**

Last Observed Sample: 09/06/2008 13:30 (EDT)

Water Temperature: 79.2° F
Air Temperature: 75.2° F

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**Wind Speed and Gusts Plot**

Last Observed Sample: 09/06/2008 13:30 (EDT)

Wind Speed: 16 knots
Gusts: 20 knots
Direction: 198° T
Yorktown USCG Training Center, VA - Station Map

Barometric Pressure Plot
NOAA/NOS/C0-OPS
0627695 Yorktown USCG Training Center, VA from 09/04/2008 13:42 - 09/07/2008 13:42

Last Observed Sample: 09/06/2008 13:30 (EDT)
Barometric Pressure: 994.4 mb

Solomons Island, MD - Station Map

Preliminary 6 min. Water Level vs. Predicted Plot
NOAA/NOS/C0-OPS
0577350 Solomons Island, MD from 09/04/2008 13:36 - 09/07/2008 13:36

Last Observed Sample: 09/06/2008 13:24 (EDT)
Relative to MLLW: Observed: 2.35 ft. Predicted: 0.45 ft. Residual: 1.90 ft.
Historical Maximum Water Level: 08/13/1955, 2.8 ft. above MHHW
Solomons Island, MD - Station Map

Barometric Pressure Plot
NOAA/NOS/C0-OPS
557720 Solomons Island, MD
from 09/04/2008 13:36 - 09/07/2008 13:36

Barometric Pressure: 998.0 mb

Last Observed Sample: 09/06/2008 13:24 (EDT)

Baltimore, MD - Station Map

Preliminary 6 min. Water Level vs. Predicted Plot
5574600 Baltimore, MD
from 09/04/2008 13:42 - 09/07/2008 13:42

Relative to MLLW: Observed: 2.10 ft. Predicted: 1.02 ft. Residual: 1.08 ft.

Historical Maximum Water Level: 08/23/1933, 6.04 ft. above MHHW
Tropical Storm HANNA QuickLook, POSTED 13:30 EDT 09/06/2008

Baltimore, MD - Station Map

Last Observed Sample: 09/06/2008 13:30 (EDT)
Water Temperature: 79.5° F Air Temperature: 74.0° F

Wind Speed: 17 knots Gusts: 23 knots Direction: 102° T
Barometric Pressure: 1002.0 mb

Last Observed Sample: 09/06/2008 13:30 (EDT)