Storm Analysis

As of 05/27/2012 18:00 EDT, water levels from South Carolina to central Florida are elevated. Water levels from Mayport, FL north to Fort Pulaski, GA are measuring between 2.5 and 3.3 feet above tidal predictions. Water levels along the South Carolina coast from Charleston to Springmaid Pier range between 0.5 and 1.5 feet above tidal predictions. Winds are increasing and range between 15 and 25 knots, with a few gusts over 35 knots recorded at Mayport, FL. Barometric pressure continues to gradually fall from central Florida to Georgia.

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

Mayport (Bar Pilots Dock), FL: Next predicted high tides are 4.6 ft (1.41 m) at 05/28/2012 02:03 EDT and 4.4 ft (1.36 m) at 05/28/2012 14:43 EDT.
Fernandina Beach, FL: Next predicted high tides are 6.0 ft (1.83 m) at 05/28/2012 02:21 EDT and 5.7 ft (1.76 m) at 05/28/2012 14:58 EDT.

Fort Pulaski, GA: Next predicted high tides are 7.0 ft (2.13 m) at 05/28/2012 01:39 EDT and 6.6 ft (2.02 m) at 05/28/2012 14:20 EDT.

Charleston, SC: Next predicted high tides are 5.4 ft (1.64 m) at 05/28/2012 01:16 EDT and 4.9 ft (1.52 m) at 05/28/2012 14:05 EDT.

Oyster Landing (N. Inlet Estuary), SC: Next predicted high tides are 4.7 ft (1.42 m) at 05/28/2012 02:13 EDT and 4.4 ft (1.36 m) at 05/28/2012 14:54 EDT.

Springmaid Pier, SC: Next predicted high tides are 5.0 ft (1.53 m) at 05/28/2012 00:59 EDT and 4.8 ft (1.47 m) at 05/28/2012 13:49 EDT.

Trident Pier, FL: Next predicted high tides are 3.4 ft (1.04 m) at 05/28/2012 01:21 EDT and 3.1 ft (0.96 m) at 05/28/2012 14:02 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: PFF

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SELECT NATIONAL HURRICANE CENTER ADVISORY INFORMATION:

TROPICAL STORM BERYL ADVISORY NUMBER 8

NWS NATIONAL HURRICANE CENTER MIAMI FL  AL022012

500 PM EDT SUN MAY 27 2012

...BERYL TO MAKE LANDFALL TONIGHT...TROPICAL-STORM-FORCE WINDS NEAR THE COAST OF NORTHEASTERN FLORIDA...

WATCHES AND WARNINGS

A TROPICAL STORM WARNING IS IN EFFECT FOR...
* VOLUSIA/BREVARD COUNTY LINE FLORIDA TO EDISTO BEACH SOUTH CAROLINA

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

DISCUSSION AND 48-HOUR OUTLOOK

AT 500 PM EDT THE CENTER OF TROPICAL STORM BERYL WAS LOCATED ABOUT 85 MI ESE OF JACKSONVILLE FLORIDA ABOUT 110 MI SE OF BRUNSWICK GEORGIA. BERYL IS MOVING TOWARD THE WEST NEAR 10 MPH. A WESTWARD MOTION IS EXPECTED TO CONTINUE.
THROUGH LANDFALL. AFTER LANDFALL...BERYL IS EXPECTED TO MOVE SLOWLY WEST-NORTHWESTWARD AND THEN TURN NORTHWARD OVER PORTIONS OF NORTHEASTERN FLORIDA AND SOUTHEASTERN GEORGIA ON MONDAY AND MONDAY NIGHT.

MAXIMUM SUSTAINED WINDS ARE NEAR 65 MPH WITH HIGHER GUSTS. SOME SLIGHT STRENGTHENING IS POSSIBLE BEFORE LANDFALL. STEADY WEAKENING IS FORECAST AFTER LANDFALL AND BERYL IS EXPECTED TO WEAKEN TO A TROPICAL DEPRESSION BY MONDAY NIGHT.

TROPICAL-STORM-FORCE WINDS EXTEND OUTWARD UP TO 115 MILES FROM THE CENTER. NOAA BUOY 41012 LOCATED ABOUT 50 MILES EAST-NORTHEAST OF ST. AUGUSTINE FLORIDA RECENTLY REPORTED SUSTAINED WINDS OF 45 MPH WITH A GUST TO 58 MPH.

ESTIMATED MINIMUM CENTRAL PRESSURE IS 996 MB...29.41 INCHES.

HAZARDS AFFECTING LAND

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WIND...TROPICAL STORM CONDITIONS ARE VERY NEAR THE COAST OF NORTHEASTERN FLORIDA AND SOUTHEASTERN GEORGIA. THESE CONDITIONS ARE EXPECTED TO SPREAD ACROSS THE COAST DURING THE NEXT FEW HOURS AND CONTINUE THROUGH TONIGHT. GUSTS TO HURRICANE FORCE ARE POSSIBLE OVER PORTIONS OF NORTHEASTERN FLORIDA AND SOUTHEASTERN GEORGIA TONIGHT AND EARLY MONDAY.

STORM SURGE...THE COMBINATION OF A STORM SURGE AND THE TIDE WILL CAUSE NORMALLY DRY AREAS NEAR THE COAST TO BE FLOODED BY RISING WATERS. THE WATER COULD REACH THE FOLLOWING DEPTHS ABOVE GROUND IF THE PEAK SURGE OCCURS AT THE TIME OF HIGH TIDE...

GEORGIA AND NORTHEASTERN FLORIDA...2 TO 4 FT
SOUTHERN SOUTH CAROLINA...1 TO 2 FT

THE DEEPEST WATER WILL OCCUR ALONG THE IMMEDIATE COAST NEAR AND TO THE NORTH OF THE LANDFALL LOCATION...WHERE THE SURGE WILL BE ACCOMPANIED BY LARGE WAVES. SURGE-RELATED FLOODING DEPENDS ON THE RELATIVE TIMING OF THE SURGE AND THE TIDAL CYCLE...AND CAN VARY GREATLY OVER SHORT DISTANCES. FOR INFORMATION SPECIFIC TO YOUR AREA...PLEASE SEE PRODUCTS ISSUED BY YOUR LOCAL NATIONAL WEATHER SERVICE OFFICE.

SURF...DANGEROUS SURF CONDITIONS...INCLUDING RIP CURRENTS...ARE EXPECTED ALONG THE COAST FROM NORTHEASTERN FLORIDA TO NORTH CAROLINA OVER THE REMAINDER OF THE MEMORIAL DAY WEEKEND. PLEASE SEE STATEMENTS ISSUED BY YOUR LOCAL NATIONAL WEATHER SERVICE OFFICE FOR INFORMATION SPECIFIC TO YOUR AREA.

RAINFALL...BERYL IS EXPECTED TO PRODUCE TOTAL RAIN ACCUMULATIONS OF 4 TO 8 INCHES...WITH ISOLATED MAXIMUM AMOUNTS OF 12 INCHES...FROM NORTHERN FLORIDA THROUGH SOUTHEASTERN NORTH CAROLINA.

FORECASTER CANGIALOSI/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: Mayport (Bar Pilots Dock) - Water Level, Mayport (Bar Pilots Dock) - Winds, Mayport (Bar Pilots Dock) - Barometric, Mayport (Bar Pilots Dock) - Air/Water Temp, Fernandina Beach - Water Level, Fernandina Beach - Winds, Fernandina Beach - Barometric, Fort Pulaski - Water Level, Fort Pulaski - Winds, Fort Pulaski - Barometric, Charleston - Water Level, Charleston - Winds, Charleston - Barometric, Oyster Landing (N. Inlet Estuary) - Water Level, Springmaid Pier - Water Level, Springmaid Pier - Winds, Springmaid Pier - Barometric, Trident Pier - Water Level, Trident Pier - Winds, Trident Pier - Barometric.
Mayport (Bar Pilots Dock), FL - Return to List

Last Observed Sample: 05/27/2012 17:48 (EDT)
Relative to MLLW: Observed: 3.90 ft. Predicted: 1.36 ft. Residual: 2.54 ft.
Historical Maximum Water Level: Sep 27 2004, 2.47 ft. above MHHW

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

Last Observed Sample: 05/27/2012 17:54 (EDT)
Wind Speed: 18 knots Gusts: 27 knots Direction: 1° T
Tropical Storm BERYL QuickLook, POSTED 18:00 EDT 05/27/2012

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

NOAA/NOS/C0-CPS
Barometric Pressure Plot
3720218 Mayport (Bar Pilots Dock), FL
From 05/25/2012 18:00 - 05/28/2012 18:00

Barometric Pressure: 1009.2 mb

Last Observed Sample: 05/27/2012 17:54 (EDT)

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

NOAA/NOS/C0-CPS
Air/Water Temperature Plot
3720218 Mayport (Bar Pilots Dock), FL
From 05/25/2012 18:00 - 05/28/2012 18:00

Water Temperature: 80.6° F  Air Temperature: 76.6° F
Fernandina Beach, FL - Return to List

NOAA/NOS/C0-CPS
Preliminary 6 min. Water Level vs. Predicted Plot
8720030 Fernandina Beach, FL
from 05/25/2012 18:00 - 05/28/2012 18:00

Last Observed Sample: 05/27/2012 17:54 (EDT)
Historical Maximum Water Level: Oct 2 1898, 6.94 ft. above MHHW

Tropical Storm BERYL QuickLook, POSTED 18:00 EDT 05/27/2012

Fernandina Beach, FL - Return to List

NOAA/NOS/C0-CPS
Wind Speed/Gusts/Dir
8720030 Fernandina Beach, FL
from 05/25/2012 18:00 - 05/28/2012 18:00

Last Observed Sample: 05/27/2012 17:54 (EDT)
Wind Speed: 17 knots Gusts: 26 knots Direction: 17° T
Fernandina Beach, FL - Return to List

NOAA/NOS/C0-CPS
Barometric Pressure Plot
8720030 Fernandina Beach, FL
From 05/25/2012 18:00 - 05/28/2012 18:00

Barometric pressure

Last Observed Sample: 05/27/2012 17:54 (EDT)
Barometric Pressure: 1007.6 mb

Fort Pulaski, GA - Return to List

NOAA/NOS/C0-CPS
Preliminary 5 min. Water Level vs. Predicted Plot
8570670 Fort Pulaski, GA
From 05/25/2012 18:00 - 05/28/2012 18:00

Predicted Tide
Observed WL
HAT

Last Observed Sample: 05/27/2012 17:48 (EDT)
Relative to MLLW: Observed: 4.94 ft. Predicted: 2.06 ft. Residual: 2.88 ft.
Historical Maximum Water Level: Oct 15 1947, 3.4 ft. above MHHW
Tropical Storm BERYL QuickLook, POSTED 18:00 EDT 05/27/2012

Fort Pulaski, GA - Return to List

NOAA/NOS/C0-CPS
Wind Speed/Gusts/Dir
8570870 Fort Pulaski, GA
From 05/25/2012 18:00 - 05/28/2012 18:00

Wind Speed: 24 knots Gusts: 31 knots Direction: 40° T

Fort Pulaski, GA - Return to List

NOAA/NOS/C0-CPS
Barometric Pressure Plot
8570870 Fort Pulaski, GA
From 05/25/2012 16:00 - 05/28/2012 18:00

Barometric Pressure: 1012.5 mb
Charleston, SC - Return to List

NOAA/NOS/C0-CPS
Preliminary 6 min. Water Level vs. Predicted Plot
8665530 Charleston, SC
from 05/25/2012 18:00 - 05/28/2012 18:00

Last Observed Sample: 05/27/2012 17:54 (EDT)
Historical Maximum Water Level: Sep 21, 1989, 6.76 ft. above MHHW

Charleston, SC - Return to List

NOAA/NOS/C0-CPS
Wind Speed/Gusts/Dir
8665530 Charleston, SC
from 05/25/2012 18:00 - 05/28/2012 18:00

Last Observed Sample: 05/27/2012 17:54 (EDT)
Wind Speed: 19 knots Gusts: 24 knots Direction: 54° T
Tropical Storm BERYL QuickLook, POSTED 18:00 EDT 05/27/2012

Charleston, SC - Return to List

NOAA/NOS/C0-CPS
Barometric Pressure Plot
8665530 Charleston, SC
FROM 05/25/2012 18:00 - 05/28/2012 18:00

![Barometric Pressure Plot](chart)

Last Observed Sample: 05/27/2012 17:54 (EDT)
Barometric Pressure: 1014.6 mb

Oyster Landing (N. Inlet Estuary), SC - Return to List

NOAA/NOS/C0-CPS
Preliminary 6 min. Water Level vs. Predicted Plot
8662245 Oyster Landing (N. Inlet Estuary), SC
FROM 05/25/2012 18:00 - 05/28/2012 18:00

![Water Level vs. Predicted Plot](chart)

Last Observed Sample: 05/27/2012 18:00 (EDT)
Historical Maximum Water Level: Aug 26 2011, 2.4 ft. above MHHW
Springmaid Pier, SC - Return to List

NOAA/NOS/C0-CPS
Preliminary 6 min. Water Level vs. Predicted Plot
8661070 Springmaid Pier, SC
from 05/25/2012 18:00 - 05/25/2012 18:00

Relative to MLLW: Observed: 1.31 ft. Predicted: 0.88 ft. Residual: 0.43 ft.

Historical Maximum Water Level: Jan 1 1987, 3.65 ft. above MHHW

Springmaid Pier, SC - Return to List

NOAA/NOS/C0-CPS
Wind Speed/Gusts/Dir
8661070 Springmaid Pier, SC
from 05/25/2012 18:00 - 05/28/2012 18:00

Wind Speed: 15 knots  Gusts: 17 knots  Direction: 48° T
Springmaid Pier, SC - Return to List

NOAA/NOS/C0-CPS
Barometric Pressure Plot
8661070 Springmaid Pier, SC
From 05/25/2012 18:00 - 05/28/2012 18:00

Barometric Pressure: 1017.4 mb

Trident Pier, FL - Return to List

NOAA/NOS/C0-CPS
Preliminary 6 min. Water Level vs. Predicted Plot
8721604 Trident Pier, FL
From 05/25/2012 18:00 - 05/28/2012 18:00

Relative to MLLW: Observed: 1.94 ft. Predicted: 0.61 ft. Residual: 1.33 ft.
Historical Maximum Water Level: Sep 26 2004, 4.01 ft. above MHHW
Tropical Storm BERYL QuickLook, POSTED 18:00 EDT 05/27/2012

Trident Pier, FL - Return to List

NOAA/NOS/C0-CPS
Wind Speed/Gusts/Dir
8721604 Trident Pier, FL
From 05/25/2012 18:00 - 05/28/2012 18:00

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<th>Date/Time (EDT)</th>
<th>Speed (knots)</th>
<th>Gusts (knots)</th>
<th>Direction (°)</th>
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<tr>
<td>05/28  12:00</td>
<td>40</td>
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</tbody>
</table>

**Wind Speed:** 14 knots  **Gusts:** 17 knots  **Direction:** 211° T

Trident Pier, FL - Return to List

NOAA/NOS/C0-CPS
Barometric Pressure Plot
8721604 Trident Pier, FL
From 05/25/2012 18:00 - 05/28/2012 18:00

<table>
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<th>Date/Time (EDT)</th>
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**Barometric Pressure:** 1009.4 mb