Storm Analysis
As of 9/01/2016 17:00 CDT, water levels continue to rise along the Gulf Coast from Mississippi to southwest Florida. Water levels range between 2.25 and 3.50 feet above tidal predictions from Apalachicola to Tampa Bay, FL with the highest non-tidal residuals observed at Cedar Key. Water levels south of Tampa Bay to Naples, FL and from Panama City westward to Bay Waveland, MS range between 1 and 2 feet above tidal predictions. Water levels along the southeast coast range between 0.3 and 0.4 feet above tidal predictions. At this time, the peak observed water level
based on preliminary measurements has been 3.55 feet above Mean Higher High Water at Cedar Key, FL.

Winds from Apalachicola to Tampa Bay are increasing and range from 15-25 knots with a few gusts up to 35-40 kts. Barometric pressure is falling across the region.

Water Level and Meteorological plots available below are updated automatically. A line denoting Mean Higher High Water (MHHW) is displayed to provide an approximate indication of when flooding inundation may occur.

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: PFF

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SELECT NATIONAL HURRICANE CENTER ADVISORY INFORMATION:

HURRICANE HERMINE ADVISORY NUMBER 18
NWS NATIONAL HURRICANE CENTER MIAMI FL
400 PM CDT THU SEP 01 2016

...HURRICANE HERMINE HEADED FOR THE NORTHEAST GULF COAST...
...LIFE-THREATENING SURGE AND FLOODING RAINS EXPECTED...

SUMMARY OF 400 PM CDT...2100 UTC...INFORMATION

LOCATION...28.5N 85.0W
ABOUT 85 MI...135 KM S OF APALACHICOLA FLORIDA
ABOUT 120 MI...195 KM WSW OF CEDAR KEY FLORIDA
MAXIMUM SUSTAINED WINDS...75 MPH...120 KM/H
PRESENT MOVEMENT...NNE OR 30 DEGREES AT 14 MPH...22 KM/H
MINIMUM CENTRAL PRESSURE...988 MB...29.18 INCHES

WATCHES AND WARNINGS

CHANGES WITH THIS ADVISORY:

The Tropical Storm Warning has been extended northward along the United States Atlantic coast north of Surf City to Duck, North Carolina, including the Pamlico and Albemarle Sounds.

A Tropical Storm Watch has been issued north of Duck to Sandy Hook, New Jersey, including the Chesapeake Bay from Smith Point southward, and the southern Delaware Bay.

SUMMARY OF WATCHES AND WARNINGS IN EFFECT:

A Hurricane Warning is in effect for...
  * Suwannee River to Mexico Beach

A Hurricane Watch is in effect for...
  * Anclote River to Suwannee River
* West of Mexico Beach to the Walton/Bay County line

A Tropical Storm Warning is in effect for...
* Englewood to Suwannee River
* West of Mexico Beach to the Walton/Bay County line
* Flagler/Volusia County line to Duck
* Pamlico and Albemarle Sounds

A Tropical Storm Watch is in effect for...
* North of Duck to Sandy Hook
* Chesapeake Bay from Smith Point southward
* Southern Delaware Bay

Interests elsewhere along the United States northeast coast should monitor the progress of this system.

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
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At 400 PM CDT (2100 UTC), the center of Hurricane Hermine was located near latitude 28.5 North, longitude 85.0 West. Hermine is moving toward the north-northeast near 14 mph (22 km/h), and this motion with a slight increase in forward speed is expected during the next day or so. On the forecast track, the center of Hermine will be near the Florida coast in the hurricane warning area tonight or early Friday.

Maximum sustained winds are near 75 mph (120 km/h) with higher gusts. Some slight additional strengthening is forecast before landfall. Weakening will begin after Hermine crosses the coast.

Hurricane-force winds extend outward up to 45 miles (75 km) from the center and tropical-storm-force winds extend outward up to 185 miles (295 km).

The minimum central pressure reported by an Air Force Hurricane Hunter aircraft is 988 mb (29.18 inches).

HAZARDS AFFECTING LAND
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WIND: Hurricane conditions are expected to reach the coast within the warning area beginning tonight. Winds are already near tropical storm strength in portions of the warning area, making outside preparations difficult or dangerous. Preparations to protect life and property should be rushed to completion. Tropical storm conditions are expected to begin within the warning area along the Atlantic coast on Friday, and spread northward through the weekend.

STORM SURGE: The combination of a dangerous storm surge and the tide will cause normally dry areas near the coast to be flooded by rising waters moving inland from the shoreline. There is a danger of life-threatening inundation within the next 12 to 24 hours along the Gulf coast of Florida from Indian Pass to Longboat Key. For a depiction of areas at risk, please see the Prototype National Weather Service Storm Surge Watch/Warning Graphic. Persons located within these areas should take all necessary actions to protect life and property from rising water. Promptly follow any instructions, including evacuation orders, from local officials.

The water could reach the following heights above ground if the peak surge occurs at the time of high tide...
Destin to Indian Pass...1 to 3 feet
Indian Pass to Ochlockonee River...4 to 7 feet
Ochlockonee River to Yankeetown...6 to 9 feet
Yankeetown to Aripeka...4 to 7 feet
Aripeka to Longboat Key...including Tampa Bay...2 to 4 feet
Longboat Key to Bonita Beach...1 to 3 feet
Florida-Georgia line to Tidewater of Virginia...1 to 3 feet

The Prototype National Weather Service Storm Surge Watch/Warning Graphic is a depiction of areas that would qualify for inclusion under a storm surge watch or warning currently under development by the National Weather Service and planned for operational use in 2017. This prototype graphic is available at www.hurricanes.gov/graphics_at4.shtml?wsurge

RAINFALL: Hermine is expected to produce storm total rainfall accumulations of 5 to 10 inches over portions of northwest Florida and southern Georgia through Friday, with possible isolated maximum amounts of 15 inches. On Friday and Saturday, Hermine is expected to produce totals of 4 to 8 inches with isolated maximum amounts of 10 inches possible across portions of eastern Georgia, South Carolina, and eastern North Carolina through Saturday. These rains may cause life-threatening floods and flash floods.

TORNADOES: A few tornadoes are possible through tonight across north Florida and southeast Georgia. The tornado risk will continue across the eastern Carolinas from Friday morning into Friday night.

NEXT ADVISORY
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Next intermediate advisory at 800 PM EDT.
Next complete advisory at 1100 PM EDT.

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.

Jump to: Apalachicola - Water Level, Apalachicola - Winds, Cedar Key - Water Level, Cedar Key - Winds, Cedar Key - Barometric, Clearwater Beach - Water Level, Clearwater Beach - Winds, Clearwater Beach - Barometric, St Petersburg, Tampa Bay - Water Level, St Petersburg, Tampa Bay - Winds, St Petersburg, Tampa Bay - Barometric, Old Port Tampa - Water Level, Old Port Tampa - Winds, Fort Myers - Water Level, Fort Myers - Winds, Naples - Water Level, Naples - Barometric, Panama City Beach - Water Level, Panama City Beach - Winds, Pensacola - Water Level, Pensacola - Winds, Pensacola - Barometric, Dauphin Island - Water Level, Dauphin Island - Winds, Bay Waveland Yacht Club - Water Level, Bay Waveland Yacht Club - Winds, Fernandina Beach - Water Level, Fernandina Beach - Winds, Fort Pulaski - Water Level, Fort Pulaski - Winds, Charleston - Water Level, Charleston - Winds
Last Observed Sample: 09/01/2016 17:42 (EDT). Data relative to MHHW

Observed: 2.63 ft. Predicted: 0.09 ft. Residual: 2.54 ft.

Historical Maximum Water Level: Jul 10 2005, 6.43 ft.

Next High Tide: 09/02/2016 05:35 (EDT), 0.00 ft.

Last Observed Sample: 09/01/2016 17:42 (EDT)

Wind Speed: 25 knots Gusts: 35 knots Direction: 78° T
NOAA/NOS/CO-OPS 8727520 Cedar Key, FL

Last Observed Sample: 09/01/2016 17:42 (EDT). Data relative to MHHW

Observed: 2.08 ft. Predicted: -1.31 ft. Residual: 3.39 ft.


Next High Tide: 09/02/2016 03:07 (EDT), -0.03 ft.

NOAA/NOS/CO-OPS 8727520 Cedar Key, FL

Wind Speed / Gusts / Direction

Last Observed Sample: 09/01/2016 17:42 (EDT)

Wind Speed: 26 knots Gusts: 30 knots Direction: 108° T
NOAA/NOS/CO-OPS 8727520 Cedar Key, FL
Barometric Pressure

NOAA/NOS/CO-OPS 8726724 Clearwater Beach, FL
Preliminary Water Level, relative to Mean Higher High Water (MHHW)

Last Observed Sample: 09/01/2016 17:42 (EDT)
Barometric Pressure: 1007.3 mb

Last Observed Sample: 09/01/2016 17:36 (EDT). Data relative to MHHW
Historical Maximum Water Level: Mar 13 1993, 4.00 ft.
Next High Tide: 09/02/2016 00:49 (EDT), -0.21 ft.
NOAA/NOS/CO-OPS 8726724 Clearwater Beach, FL

Wind Speed / Gusts / Direction

Last Observed Sample: 09/01/2016 17:36 (EDT)
Wind Speed: 16 knots Gusts: 24 knots Direction: 161° T

Barometric Pressure

Last Observed Sample: 09/01/2016 17:36 (EDT)
Barometric Pressure: 1007.3 mb
Last Observed Sample: 09/01/2016 17:36 (EDT). Data relative to MHHW

Observed: 2.09 ft. Predicted: -0.47 ft. Residual: 2.56 ft.
Historical Maximum Water Level: Aug 31 1985, 4.00 ft.
Next High Tide: 09/02/2016 03:29 (EDT), -0.26 ft.

Wind Speed: 21 knots Gusts: 28 knots Direction: 176° T
NOAA/NOS/CO-OPS 8726520 St Petersburg, Tampa Bay, FL
Barometric Pressure

Last Observed Sample: 09/01/2016 17:36 (EDT)
Barometric Pressure: 1008.1 mb

NOAA/NOS/CO-OPS 8726607 Old Port Tampa, FL
Preliminary Water Level, relative to Mean Higher High Water(MHHW)

Last Observed Sample: 09/01/2016 17:42 (EDT). Data relative to MHHW
Observed: 2.24 ft. Predicted: -0.22 ft. Residual: 2.46 ft.
Historical Maximum Water Level: Oct 8 1996, 3.60 ft.
Next High Tide: 09/02/2016 04:11 (EDT), -0.12 ft.
NOAA/NOS/CO-OPS 8726607 Old Port Tampa, FL

Wind Speed / Gusts / Direction

- Last Observed Sample: 09/01/2016 17:42 (EDT)
- Wind Speed: 19 knots
- Gusts: 25 knots
- Direction: 166° T

NOAA/NOS/CO-OPS 8725520 Fort Myers, FL

Preliminary Water Level, relative to Mean Higher High Water (MHHW)

- Last Observed Sample: n/a. Data relative to MHHW
- Observed: n/a
- Predicted: n/a
- Residual: n/a

Historical Maximum Water Level: n/a
Next High Tide: 09/02/2016 09:13 (UTC), -0.08 ft.
NOAA/NOS/CO-OPS 8725520 Fort Myers, FL

Wind Speed / Gusts / Direction

Last Observed Sample: n/a
Wind Speed: 0 knots Gusts: 0 knots Direction: n/a° T

NOAA/NOS/CO-OPS 8725110 Naples, FL

Preliminary Water Level, relative to Mean Higher High Water (MHHW)

Last Observed Sample: 09/01/2016 17:42 (EDT). Data relative to MHHW
Observed: -0.09 ft. Predicted: -1.96 ft. Residual: 1.87 ft.
Historical Maximum Water Level: Dec 21 1972, 3.11 ft.
Next High Tide: 09/02/2016 01:22 (EDT), -0.07 ft.
NOAA/NOS/CO-OPS 8725110 Naples, FL

Barometric Pressure

Last Observed Sample: 09/01/2016 17:42 (EDT)
Barometric Pressure: 1012.0 mb

NOAA/NOS/CO-OPS 8729210 Panama City Beach, FL

Preliminary Water Level, relative to Mean Higher High Water (MHHW)

Last Observed Sample: 09/01/2016 16:36 (CDT). Data relative to MHHW
Observed: 0.76 ft. Predicted: -0.62 ft. Residual: 1.38 ft.
Historical Maximum Water Level: Oct 4 1995, 6.84 ft.
Next High Tide: 09/02/2016 00:24 (CDT), -0.40 ft.
NOAA/NOS/CO-Ops 8729210 Panama City Beach, FL

Last Observed Sample: 09/01/2016 16:36 (CDT)

Wind Speed: 11 knots Gusts: 20 knots Direction: 63° T

NOAA/NOS/CO-Ops 8729840 Pensacola, FL

Last Observed Sample: 09/01/2016 16:36 (CDT). Data relative to MHHW

Observed: 1.25 ft. Predicted: -0.32 ft. Residual: 1.57 ft.

Historical Maximum Water Level: Sep 18 1926, 7.41 ft.

Next High Tide: 09/02/2016 12:46 (CDT), -0.02 ft.
NOAA/NOS/CO-OPS 8729840 Pensacola, FL

Wind Speed / Gusts / Direction

Last Observed Sample: 09/01/2016 16:36 (CDT)
Wind Speed: 4 knots Gusts: 10 knots Direction: 39° T

Barometric Pressure

Last Observed Sample: 09/01/2016 16:36 (CDT)
Barometric Pressure: 1006.9 mb
Last Observed Sample: 09/01/2016 16:36 (CDT). Data relative to MHHW

- Observed: 1.19 ft. Predicted: -0.35 ft. Residual: 1.54 ft.
- Historical Maximum Water Level: Sep 16 2004, 5.94 ft.
- Next High Tide: 09/02/2016 11:58 (CDT), -0.11 ft.

Wind Speed: 15 knots
Gusts: 16 knots
Direction: 40° T
Last Observed Sample: 09/01/2016 16:36 (CDT). Data relative to MHHW

Observed: 1.43 ft. Predicted: -0.24 ft. Residual: 1.67 ft.
Historical Maximum Water Level: Sep 1 2008, 9.16 ft.
Next High Tide: 09/02/2016 04:42 (CDT), -0.39 ft.

Wind Speed: 9 knots Gusts: 10 knots Direction: 174° T
Last Observed Sample: 09/01/2016 17:42 (EDT). Data relative to MHHW

- Last Observed Sample: 09/01/2016 17:42 (EDT)
- Wind Speed: 6 knots
- Gusts: 10 knots
- Direction: 122° T

Historical Maximum Water Level: Oct 2 1898, 6.94 ft.

Next High Tide: 09/01/2016 21:53 (EDT), 0.42 ft.
Last Observed Sample: 09/01/2016 17:36 (EDT). Data relative to MHHW

Observed: -3.76 ft. Predicted: -4.19 ft. Residual: 0.43 ft.


Next High Tide: 09/01/2016 21:00 (EDT), 0.49 ft.

Last Observed Sample: 09/01/2016 17:36 (EDT)

Wind Speed: 4 knots  Gusts: 6 knots  Direction: 178° T
Last Observed Sample: 09/01/2016 17:42 (EDT). Data relative to MHHW
Historical Maximum Water Level: Sep 21 1989, 6.76 ft.
Next High Tide: 09/01/2016 20:54 (EDT), 0.41 ft.

Last Observed Sample: 09/01/2016 17:42 (EDT)
Wind Speed: 9 knots Gusts: 14 knots Direction: 232° T
## Latest Water Level Observations on MHHW

<table>
<thead>
<tr>
<th>Station ID</th>
<th>Station Name</th>
<th>Date/Time</th>
<th>Observed Water Level</th>
<th>Predicted Tide</th>
<th>Residual Water Level</th>
<th>24 Hour Maximum Storm Tide</th>
</tr>
</thead>
<tbody>
<tr>
<td>8728690</td>
<td>Apalachicola, FL</td>
<td>09/01/2016 17:42 (EDT)</td>
<td>2.63 ft</td>
<td>0.09 ft</td>
<td>2.54 ft</td>
<td>2.67 ft</td>
</tr>
<tr>
<td>8727520</td>
<td>Cedar Key, FL</td>
<td>09/01/2016 17:42 (EDT)</td>
<td>2.08 ft</td>
<td>-1.31 ft</td>
<td>3.39 ft</td>
<td>3.55 ft</td>
</tr>
<tr>
<td>8726724</td>
<td>Clearwater Beach, FL</td>
<td>09/01/2016 17:36 (EDT)</td>
<td>1.09 ft</td>
<td>-2.10 ft</td>
<td>3.19 ft</td>
<td>2.81 ft</td>
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<tr>
<td>8726520</td>
<td>St Petersburg, Tampa Bay, FL</td>
<td>09/01/2016 17:36 (EDT)</td>
<td>2.09 ft</td>
<td>-0.47 ft</td>
<td>2.56 ft</td>
<td>2.38 ft</td>
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<tr>
<td>8726607</td>
<td>Old Port Tampa, FL</td>
<td>09/01/2016 17:42 (EDT)</td>
<td>2.24 ft</td>
<td>-0.22 ft</td>
<td>2.46 ft</td>
<td>2.46 ft</td>
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<tr>
<td>8725520</td>
<td>Fort Myers, FL</td>
<td>09/01/2016 17:42 (EDT)</td>
<td>2.04 ft</td>
<td>0.14 ft</td>
<td>1.90 ft</td>
<td>2.05 ft</td>
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<td>-0.09 ft</td>
<td>-1.96 ft</td>
<td>1.87 ft</td>
<td>1.69 ft</td>
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<td>Panama City Beach, FL</td>
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<td>-0.62 ft</td>
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<td>1.67 ft</td>
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<td>8729840</td>
<td>Pensacola, FL</td>
<td>09/01/2016 16:36 (CDT)</td>
<td>1.25 ft</td>
<td>-0.32 ft</td>
<td>1.57 ft</td>
<td>1.68 ft</td>
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<td>1.19 ft</td>
<td>-0.35 ft</td>
<td>1.54 ft</td>
<td>1.56 ft</td>
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<td>Bay Waveland Yacht Club, MS</td>
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<td>1.67 ft</td>
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<td>Fort Pulaski, GA</td>
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<td>-4.19 ft</td>
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<td>1.32 ft</td>
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<td>8665530</td>
<td>Charleston, SC</td>
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<td>-2.13 ft</td>
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<td>0.34 ft</td>
<td>1.14 ft</td>
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