Storm Analysis
As of 9/02/2016 06:00 EDT, water levels remain elevated along the Gulf Coast from Florida to Mississippi. However, water level residuals (observed minus tide predictions) are beginning to decrease following landfall of Hermine. At Cedar Key, FL, water levels are still measuring over 4 feet above tide predictions, while areas south from Tampa Bay to Fort Myers have water levels measuring 2-3 feet above normal tide levels. West of landfall, from Apalachicola, FL to Dauphin Island, AL, water levels remain 1.5 to 2.0 feet above tidal predictions. Along the
southeast U.S. coast, water levels are rising within the St. Johns River at the I-295 Bridge, but observed water levels are no more than 1 foot above tide predictions from St. Johns River, FL to Springmaid Pier, SC.

Overall, the peak observed water level during Hermine based on preliminary observations was 6.10 feet above Mean Higher High Water at Cedar Key, FL, which if verified would be a record water level for the station.

Winds from Cedar Key to Tampa Bay, FL range from 15 to 30 knots with some gusts over 45 knots. Winds are increasing at Fernandina Beach, FL and Fort Pulaski, GA and now range between 15 and 25 kts with higher gusts. Barometric pressure is beginning to rise along the Gulf Coast.

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:TROPICAL STORM HERMINE
ADVISORY NUMBER 20
NWS NATIONAL HURRICANE CENTER MIAMI FL
500 AM EDT FRI SEP 02 2016

...HERMINE WEAKENING WHILE MOVING FARTHER INLAND...
...LIFE-THREATENING SURGE AND FLOODING RAINS CONTINUE...

SUMMARY OF 500 AM EDT...0900 UTC...INFORMATION
----------------------------------------------
LOCATION...30.8N 83.6W
ABOUT 50 MI...80 KM NE OF TALLAHASSEE FLORIDA
ABOUT 20 MI...30 KM W OF VALDOSTA GEORGIA
MAXIMUM SUSTAINED WINDS...70 MPH...110 KM/H
PRESENT MOVEMENT...NNE OR 25 DEGREES AT 14 MPH...22 KM/H
MINIMUM CENTRAL PRESSURE...988 MB...29.18 INCHES

WATCHES AND WARNINGS
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CHANGES WITH THIS ADVISORY:

The Hurricane Warning and the Hurricane Watch have been discontinued. The Tropical Storm Warning has been discontinued west of Indian Pass.

SUMMARY OF WATCHES AND WARNINGS IN EFFECT:

A Tropical Storm Warning is in effect for...
* Englewood to Indian Pass
* Flagler/Volusia County line to Duck
* Pamlico and Albemarle Sounds

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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 500 AM EDT (0900 UTC), the center of Tropical Storm Hermine was located inland near latitude 30.8 North, longitude 83.6 West. Hermine is moving toward the north-northeast near 14 mph (22 km/h) and this motion is expected to continue today and Saturday. On the forecast track, the center of Hermine should continue to move farther inland across southeastern Georgia today and into the Carolinas tonight and Saturday.

Maximum sustained winds have decreased to near 70 mph (110 km/h) with higher gusts. Additional weakening is forecast while Hermine moves farther inland.

Tropical-storm-force winds extend outward up to 175 miles (280 km) from the center. Valdosta, Georgia recently reported a wind gust of 53 mph (85 km/h).

The estimated minimum central pressure is 988 mb (29.18 inches).

HAZARDS AFFECTING LAND
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WIND: Tropical storm conditions are expected to begin within the warning area along the Atlantic coast later today, and spread northward through the weekend. Wind in the tropical storm warning area along the Gulf coast of Florida should gradually diminish today.

STORM SURGE: The combination of a dangerous storm surge and the tide will continue to 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...
RAINFALL: Hermine is expected to produce storm total rainfall accumulations of 5 to 10 inches over the southeastern United States from northwest Florida through southern and eastern Georgia into South Carolina and eastern North Carolina, with possible isolated maximum amounts of 15 inches. These rains may cause life-threatening floods and flash floods. Heavy rain could reach the coastal Mid-Atlantic states from Virginia to New Jersey beginning early Saturday.

TORNADOES: A few tornadoes are possible this morning across northern Florida and southern Georgia. The tornado risk will spread across the eastern Carolinas later today.

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

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.

Jump to: 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, Apalachicola - Water Level, Apalachicola - Winds, Panama City Beach - Water Level, Panama City Beach - Winds, Pensacola - Water Level, Pensacola - Winds, Pensacola - Barometric, Dauphin Island - Water Level, Dauphin Island - Winds, I-295 Bridge, St Johns River - Water Level, I-295 Bridge, St Johns River - Winds, Fernandina Beach - Water Level, Fernandina Beach - Winds, Fort Pulaski - Water Level, Fort Pulaski - Winds, Charleston - Water Level, Charleston - Winds, Springmaid Pier - Water Level, Springmaid Pier - Winds
NOAA/NOS/CO-OPS 8727520 Cedar Key, FL

Last Observed Sample: 09/02/2016 06:00 (EDT). Data relative to MHHW

- Observed: 2.70 ft.
- Predicted: -1.32 ft.
- Residual: 4.02 ft.

Next High Tide: 09/02/2016 15:06 (EDT), 0.38 ft.

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Last Observed Sample: 09/02/2016 06:00 (EDT)

Wind Speed: 30 knots  Gusts: 39 knots  Direction: 227° T
NOAA/NOS/CO-OPS 8727520 Cedar Key, FL

Barometric Pressure

Barometric Pressure: 1007.3 mb

NOAA/NOS/CO-OPS 8726724 Clearwater Beach, FL

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

Last Observed Sample: 09/02/2016 05:48 (EDT). Data relative to MHHW

Observed: 0.63 ft. Predicted: -1.85 ft. Residual: 2.48 ft.

Historical Maximum Water Level: Mar 13 1993, 4.00 ft.

Next High Tide: 09/02/2016 12:48 (EDT), 0.31 ft.
Last Observed Sample: 09/02/2016 05:48 (EDT)
Wind Speed: 25 knots Gusts: 33 knots Direction: 231° T

Barometric Pressure: 1010.7 mb
Last Observed Sample: 09/02/2016 05:54 (EDT). Data relative to MHHW

- Observed: 1.88 ft. Predicted: -0.68 ft. Residual: 2.56 ft.
- Historical Maximum Water Level: Aug 31 1985, 4.00 ft.
- Next High Tide: 09/02/2016 15:19 (EDT), 0.20 ft.

Last Observed Sample: 09/02/2016 05:54 (EDT)

- Wind Speed: 17 knots
- Gusts: 21 knots
- Direction: 218° T
NOAA/NOS/CO-OPS 8726520 St Petersburg, Tampa Bay, FL

Barometric Pressure

NOAA/NOS/CO-OPS 8726607 Old Port Tampa, FL

Last Observed Sample: 09/02/2016 05:54 (EDT)

Barometric Pressure: 1011.0 mb

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

Last Observed Sample: 09/02/2016 05:54 (EDT). Data relative to MHHW

Observed: 2.31 ft. Predicted: -0.41 ft. Residual: 2.72 ft.

Historical Maximum Water Level: Oct 8 1996, 3.60 ft.

Next High Tide: 09/02/2016 15:54 (EDT), 0.32 ft.
NOAA/NOS/CO-OPS 8726607 Old Port Tampa, FL

Wind Speed / Gusts / Direction

Last Observed Sample: 09/02/2016 05:54 (EDT)
Wind Speed: 21 knots Gusts: 27 knots Direction: 211° T

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

Last Observed Sample: 09/02/2016 06:00 (EDT). Data relative to MHHW
Observed: 1.89 ft. Predicted: -0.12 ft. Residual: 2.01 ft.
Historical Maximum Water Level: Nov 23 1988, 3.41 ft.
Next High Tide: 09/02/2016 17:07 (EDT), 0.17 ft.
NOAA/NOS/CO-OPS 8725520 Fort Myers, FL

Last Observed Sample: 09/02/2016 06:00 (EDT)
Wind Speed: 7 knots  Gusts: 12 knots  Direction: 189° T

NOAA/NOS/CO-OPS 8728690 Apalachicola, FL

Last Observed Sample: 09/02/2016 06:00 (EDT)

Data relative to MHHW
Observed: 1.78 ft.  Predicted: -0.01 ft.  Residual: 1.79 ft.

Historical Maximum Water Level: Jul 10 2005, 6.43 ft.
Next High Tide: 09/02/2016 17:08 (EDT), 0.16 ft.
NOAA/NOS/CO-OPS 8728690 Apalachicola, FL

Last Observed Sample: 09/02/2016 06:00 (EDT)
Wind Speed: 6 knots Gusts: 10 knots Direction: 288° T

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

Last Observed Sample: 09/02/2016 05:00 (CDT). Data relative to MHHW
Observed: 1.28 ft. Predicted: -0.46 ft. Residual: 1.74 ft.
Historical Maximum Water Level: Oct 4 1995, 6.84 ft.
Next High Tide: 09/02/2016 11:46 (CDT), 0.03 ft.
NOAA/NOS/CO-OPS 8729210 Panama City Beach, FL

Wind Speed / Gusts / Direction

Last Observed Sample: 09/02/2016 05:00 (CDT)
Wind Speed: 14 knots Gusts: 16 knots Direction: 303° T

NOAA/NOS/CO-OPS 8729840 Pensacola, FL

Last Observed Sample: 09/02/2016 04:54 (CDT)
Data relative to MHHW
Observed: 1.29 ft. Predicted: 0.42 ft. Residual: 1.71 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: 09/02/2016 04:54 (CDT)
Wind Speed: 4 knots Gusts: 6 knots Direction: 293° T

Barometric Pressure

Last Observed Sample: 09/02/2016 04:54 (CDT)
Barometric Pressure: 1009.3 mb
Last Observed Sample: 09/02/2016 04:54 (CDT). Data relative to MHHW

Observed: 1.30 ft. Predicted: -0.49 ft. Residual: 1.79 ft.

Historical Maximum Water Level: Sep 16 2004, 5.94 ft.

Next High Tide: 09/02/2016 11:58 (CDT), -0.11 ft.

Last Observed Sample: 09/02/2016 04:54 (CDT)  
Wind Speed: 7 knots  Gusts: 7 knots  Direction: 307° T
Last Observed Sample: 09/02/2016 06:00 (EDT). Data relative to MHHW

Observed: 0.45 ft. Predicted: -0.53 ft. Residual: 0.98 ft.

Historical Maximum Water Level: Sep 27 2004, 3.46 ft.

Next High Tide: 09/02/2016 12:57 (EDT), 0.31 ft.

Last Observed Sample: 09/02/2016 06:00 (EDT)

Wind Speed: 24 knots Gusts: 32 knots Direction: 182° T
Last Observed Sample: 09/02/2016 06:00 (EDT). Data relative to MHHW

- Observed: -4.17 ft. Predicted: -4.60 ft. Residual: 0.43 ft.
- Historical Maximum Water Level: Oct 2 1898, 6.94 ft.
- Next High Tide: 09/02/2016 10:17 (EDT), 0.01 ft.

Last Observed Sample: 09/02/2016 06:00 (EDT)

Wind Speed: 18 knots Gusts: 27 knots Direction: 152° T
Last Observed Sample: 09/02/2016 05:54 (EDT). Data relative to MHHW

- Next High Tide: 09/02/2016 09:27 (EDT), 0.00 ft.

Last Observed Sample: 09/02/2016 05:54 (EDT)

- Wind Speed: 19 knots
- Gusts: 25 knots
- Direction: 111° T
Last Observed Sample: 09/02/2016 06:00 (EDT). Data relative to MHHW

Observed: -2.54 ft. Predicted: -2.87 ft. Residual: 0.33 ft.

Historical Maximum Water Level: Sep 21 1989, 6.76 ft.

Next High Tide: 09/02/2016 09:22 (EDT), 0.01 ft.
NOAA/NOS/CO-OPS 8661070 Springmaid Pier, SC

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

Last Observed Sample: 09/02/2016 06:00 (EDT). Data relative to MHHW

Observed: -2.43 ft. Predicted: -2.49 ft. Residual: 0.06 ft.
Historical Maximum Water Level: Jan 1 1987, 3.65 ft.
Next High Tide: 09/02/2016 08:52 (EDT), 0.07 ft.

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Wind Speed / Gusts / Direction

Last Observed Sample: 09/02/2016 06:00 (EDT)

Wind Speed: 4 knots Gusts: 6 knots Direction: 3° T
<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>
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<tbody>
<tr>
<td>8727520</td>
<td>Cedar Key, FL</td>
<td>09/02/2016 06:00 (EDT)</td>
<td>2.70 ft</td>
<td>-1.32 ft</td>
<td>4.02 ft</td>
<td>6.10 ft</td>
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<td>0.63 ft</td>
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