Storm Analysis

As of 8/31/2016 23:00 CDT, water level residuals are slowly rising along the Gulf Coast from Mississippi to Naples, FL and range between 1.2 and 2.4 feet above normal tide levels. Both Cedar Key and Clearwater Beach, FL are measuring water levels over 2 feet above tidal predictions. Winds generally remain between 5 and 15 knots with some gusts over 25 knots at times over the past 6 hours. Barometric pressure is fairly steady 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: BULLETIN

TROPICAL STORM HERMINE ADVISORY NUMBER 14
NWS NATIONAL HURRICANE CENTER MIAMI FL

1000 PM CDT WED AUG 31 2016

...HERMINE CONTINUES TO STRENGTHEN OVER THE EASTERN GULF OF MEXICO...
...HURRICANE WARNING ISSUED FOR PORTION OF NORTHWESTERN FLORIDA...

SUMMARY OF 1000 PM CDT...0300 UTC...INFORMATION
-----------------------------------------------
LOCATION...25.8N 87.0W
ABOUT 295 MI...475 KM SSW OF APALACHICOLA FLORIDA
ABOUT 315 MI...510 KM WSW OF TAMPA FLORIDA
MAXIMUM SUSTAINED WINDS...60 MPH...95 KM/H
PRESENT MOVEMENT...NNE OR 25 DEGREES AT 10 MPH...17 KM/H
MINIMUM CENTRAL PRESSURE...998 MB...29.47 INCHES

WATCHES AND WARNINGS
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CHANGES WITH THIS ADVISORY:

A Hurricane Warning has been issued from the Suwannee River westward to Mexico Beach Florida. The Tropical Storm Watch has been extended from Altamaha Sound Georgia northward to the South Santee River South Carolina.

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 Destin

A Tropical Storm Warning is in effect for...
* Anclote River to Suwannee River
* West of Mexico Beach to Destin

A Tropical Storm Watch is in effect for...
* Marineland Florida to South Santee River
Interests along the United States east coast elsewhere in the Carolinas 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

At 1000 PM CDT (0300 UTC), the center of Tropical Storm Hermine was located near latitude 25.8 North, longitude 87.0 West. Hermine is moving toward the north-northeast near 10 mph (17 km/h) and this motion with an increase in forward speed is expected to continue through Thursday. On the forecast track, the center will be near the coast in the warning area Thursday night.

Recent reports from NOAA and Air Force Reserve Hurricane Hunter aircraft indicate that maximum sustained winds have increased to near 60 mph (95 km/h) with higher gusts. Additional strengthening is forecast during the next 24 to 36 hours, and Hermine is expected to be a hurricane by the time landfall occurs.

Tropical-storm-force winds extend outward up to 125 miles (205 km) from the center.

The minimum central pressure reported by an Air Force Reserve Hurricane Hunter aircraft is 998 mb (29.47 inches).

HAZARDS AFFECTING LAND

WIND: Hurricane conditions are expected to reach the coast within the warning area beginning Thursday night. Winds are expected to first reach tropical storm strength by Thursday afternoon, making outside preparations difficult or dangerous. Preparations to protect life and property should be rushed to completion. Tropical storm conditions are possible in the tropical storm watch area by Friday.

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 36 hours along the Gulf coast of Florida from Aripeka to Indian Pass. 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 Chassahowitzka...4 to 7 feet
Chassahowitzka to Aripeka...2 to 4 feet
Aripeka to Bonita Beach...including Tampa Bay...1 to 3 feet
Florida-Georgia line to Cape Fear...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 amounts of 5 to 10 inches over portions of northwest Florida through Friday, with isolated maximum amounts of 20 inches possible. Rainfall totals of 4 to 8 inches are expected across portions of the southeastern United States from southeast Georgia, central to eastern South Carolina and eastern North Carolina, with local amounts of 10 inches possible through Saturday. These rains may cause life-threatening flooding and flash flooding.
TORNADOES: A tornado or two is possible overnight near the central Florida coast. The tornado risk will increase through Thursday and spread into north Florida and southeast Georgia.

NEXT ADVISORY
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Next intermediate advisory at 100 AM CDT.
Next complete advisory at 400 AM CDT.

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Forecaster Stewart

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, Old Port Tampa - Barometric, Fort Myers - Water Level, Fort Myers - Winds, Fort Myers - Barometric, Naples - Water Level, Naples - Barometric, Panama City Beach - Water Level, Panama City Beach - Winds, Pensacola - Water Level, Pensacola - Winds, Dauphin Island - Water Level, Dauphin Island - Winds, Pascagoula NOAA Lab - Water Level
**NOAA/NOS/CO-OPS 8728690 Apalachicola, FL**

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

Last Observed Sample: 08/31/2016 23:48 (EDT). Data relative to MHHW

- Observed: 0.53 ft.
- Predicted: -1.21 ft.
- Residual: 1.74 ft.

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

Next High Tide: 09/01/2016 05:20 (EDT), -0.02 ft.

**NOAA/NOS/CO-OPS 8728690 Apalachicola, FL**

**Wind Speed / Gusts / Direction**

Last Observed Sample: 08/31/2016 23:48 (EDT)

- Wind Speed: 8 knots
- Gusts: 10 knots
- Direction: 181° T
Last Observed Sample: 08/31/2016 23:48 (EDT). Data relative to MHHW

Observed: 0.22 ft. Predicted: -1.67 ft. Residual: 1.89 ft.


Next High Tide: 09/01/2016 02:40 (EDT), -0.10 ft.

Wind Speed: 16 knots  Gusts: 18 knots  Direction: 141° T
NOAA/NOS/CO-OPS 8727520 Cedar Key, FL

Barometric Pressure

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<thead>
<tr>
<th>Pressure (mb)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1016</td>
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<tr>
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<td>1014</td>
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<tr>
<td>1013</td>
</tr>
<tr>
<td>1012</td>
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<td>1011</td>
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</table>

Last Observed Sample: 08/31/2016 23:48 (EDT)
Barometric Pressure: 1013.3 mb

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

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

<table>
<thead>
<tr>
<th>Height in Feet (MHHW)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.5</td>
</tr>
<tr>
<td>1.0</td>
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<tr>
<td>1.5</td>
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<tr>
<td>2.0</td>
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<tr>
<td>2.5</td>
</tr>
</tbody>
</table>

Last Observed Sample: 08/31/2016 23:42 (EDT). Data relative to MHHW
Observed: 0.90 ft  Predicted: -0.37 ft  Residual: 1.27 ft.
Historical Maximum Water Level: Mar 13 1993, 4.00 ft.
Next High Tide: 09/01/2016 00:29 (EDT), -0.31 ft.
Last Observed Sample: 08/31/2016 23:42 (EDT)

Wind Speed: 10 knots  
Gusts: 13 knots  
Direction: 131° T

Barometric Pressure: 1013.5 mb
Last Observed Sample: 08/31/2016 23:48 (EDT). Data relative to MHHW

- Observed: 0.08 ft. Predicted: -1.15 ft. Residual: 1.23 ft.
- Historical Maximum Water Level: Aug 31 1985, 4.00 ft.
- Next High Tide: 09/01/2016 03:12 (EDT), -0.34 ft.

Last Observed Sample: 08/31/2016 23:48 (EDT)

- Wind Speed: 16 knots
- Gusts: 20 knots
- Direction: 167° T
NOAA/NOS/CO-OPS 8726520 St Petersburg, Tampa Bay, FL

Barometric Pressure

[Graph showing barometric pressure fluctuations]

Barometric Pressure: 1013.6 mb

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

Last Observed Sample: 08/31/2016 23:48 (EDT)

Data relative to MHHW

Observed: -0.31 ft. Predicted: -1.49 ft. Residual: 1.18 ft.

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

Next High Tide: 09/01/2016 03:50 (EDT), -0.18 ft.
NOAA/NOS/CO-OPS 8726607 Old Port Tampa, FL

Wind Speed / Gusts / Direction

- Last Observed Sample: 08/31/2016 23:42 (EDT)
- Wind Speed: 12 knots
- Gusts: 17 knots
- Direction: 140° T

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

Barometric Pressure

- Last Observed Sample: 08/31/2016 23:42 (EDT)
- Barometric Pressure: 1014.5 mb
NOAA/NOS/CO-OPS 8725520 Fort Myers, FL

Last Observed Sample: 08/31/2016 23:42 (EDT). Data relative to MHHW
Observed: 0.54 ft. Predicted: -0.97 ft. Residual: 1.51 ft.
Historical Maximum Water Level: Nov 23 1988, 3.41 ft.
Next High Tide: 09/01/2016 04:51 (EDT), -0.11 ft.

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

Last Observed Sample: 08/31/2016 23:42 (EDT)
Wind Speed: 3 knots Gusts: 5 knots Direction: 143° T
NOAA/NOS/CO-OPS 8725520 Fort Myers, FL

Last Observed Sample: 08/31/2016 23:42 (EDT)
Barometric Pressure: 1013.8 mb

This data type is not currently available from this station.

Last Observed Sample: 08/31/2016 23:42 (EDT). Data relative to MHHW

- Observed: 0.09 ft. Predicted: -0.35 ft. Residual: 0.44 ft.
- Next High Tide: 09/01/2016 00:56 (EDT), -0.14 ft.
NOAA/NOS/CO-OPS 8725110 Naples, FL
Barometric Pressure

Last Observed Sample: 08/31/2016 23:42 (EDT)
Barometric Pressure: 1014.2 mb

NOAA/NOS/CO-OPS 8729210 Panama City Beach, FL
Preliminary Water Level, relative to Mean Higher High Water (MHHW)

Last Observed Sample: 08/31/2016 22:48 (CDT). Data relative to MHHW
Observed: 0.90 ft. Predicted: -0.53 ft. Residual: 1.43 ft.
Historical Maximum Water Level: Oct 4 1995, 6.84 ft.
Next High Tide: 09/01/2016 00:01 (CDT) -0.47 ft.
NOAA/NOS/CO-OPS 8729210 Panama City Beach, FL

Wind Speed / Gusts / Direction

Wind Speed: 6 knots  Gusts: 7 knots  Direction: 90° T

NOAA/NOS/CO-OPS 8729840 Pensacola, FL

Last Observed Sample: 08/31/2016 22:42 (CDT)

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

Predicted Tide  Observed WL  (Obs-Pred)  MHHW

Last Observed Sample: 08/31/2016 22:42 (CDT). Data relative to MHHW

Observed: 0.66 ft.  Predicted: -0.75 ft.  Residual: 1.41 ft.

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

Next High Tide: 09/01/2016 11:58 (CDT), 0.13 ft.
NOAA/NOS/CO-OPS 8729840 Pensacola, FL

Wind Speed / Gusts / Direction

- Last Observed Sample: 08/31/2016 22:42 (CDT)
- Wind Speed: 4 knots
- Gusts: 5 knots
- Direction: 153° T

NOAA/NOS/CO-OPS 8735180 Dauphin Island, AL

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

- Last Observed Sample: 08/31/2016 22:42 (CDT)
- Data relative to MHHW
- Observed: 0.69 ft.
- Predicted: -0.73 ft.
- Residual: 1.42 ft.
- Historical Maximum Water Level: Sep 16 2004, 5.94 ft.
- Next High Tide: 09/01/2016 11:12 (CDT), 0.04 ft.
NOAA/NOS/CO-OPS 8735180 Dauphin Island, AL

Last Observed Sample: 08/31/2016 22:42 (CDT)
Wind Speed: 9 knots
Gusts: 9 knots
Direction: 75° T

NOAA/NOS/CO-OPS 8741533 Pascagoula NOAA Lab, MS

Last Observed Sample: 08/31/2016 22:48 (CDT)
Wind Speed: 9 knots
Gusts: 9 knots
Direction: 75° T

Last Observed Sample: 08/31/2016 22:48 (CDT). Data relative to MHHW
Observed: 0.59 ft.
Predicted: -0.71 ft.
Residual: 1.30 ft.
Historical Maximum Water Level: Sep 1 2008, 4.90 ft.
Next High Tide: 09/01/2016 10:31 (CDT), 0.06 ft.
<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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<tr>
<td>8728690</td>
<td>Apalachicola, FL</td>
<td>08/31/2016 23:48 (EDT)</td>
<td>0.53 ft</td>
<td>-1.21 ft</td>
<td>1.74 ft</td>
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<td>8727520</td>
<td>Cedar Key, FL</td>
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<td>0.22 ft</td>
<td>-1.67 ft</td>
<td>1.89 ft</td>
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<td>8726724</td>
<td>Clearwater Beach, FL</td>
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<td>0.90 ft</td>
<td>-0.37 ft</td>
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<td>2.09 ft</td>
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<td>8726520</td>
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<td>0.59 ft</td>
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