Potential Tropical Cyclone TEN QuickLook
Posted: 18:00 EDT 08/29/2017

NOAA and NOAA Partnership Stations Relative to the Storm

Storm Analysis

**No further QuickLooks will be posted for this potential tropical cyclone unless oceanographic conditions warrant and/or the National Hurricane Center (NHC) issues a new tropical storm or hurricane warning for the U.S. or its territories.**
As of 08/29/2017 1800 EDT, water levels along the East coast from South Carolina to Chesapeake Bay remain elevated at a range between 0.5 and 2.7 feet above normal tide levels. Water levels continue to rise steadily within Pamlico Sound and Chesapeake Bay as the disturbance moves further offshore of North Carolina. Breezy conditions persist along the East Coast with gusts up to 30 knots within Chesapeake Bay. Barometric pressure continues to fall from Pamlico Sound to Chesapeake Bay.

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 real-time and historical inundation information for select stations affected by this storm, please see Coastal Inundation Dashboard.

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: CMF

SELECT NATIONAL HURRICANE CENTER ADVISORY INFORMATION:

Potential Tropical Cyclone Ten Advisory Number 9
NWS National Hurricane Center Miami FL AL102017
500 PM EDT Tue Aug 29 2017

...DISTURBANCE MOVING AWAY FROM THE NORTH CAROLINA COAST...
...THIS IS THE LAST ADVISORY...

SUMMARY OF 500 PM EDT...2100 UTC...INFORMATION

LOCATION...36.0N 74.3W
ABOUT 85 MI...140 KM NE OF CAPE HATTERAS NORTH CAROLINA
MAXIMUM SUSTAINED WINDS...45 MPH...75 KM/H
PRESENT MOVEMENT...NE OR 50 DEGREES AT 24 MPH...39 KM/H
MINIMUM CENTRAL PRESSURE...1003 MB...29.62 INCHES

WATCHES AND WARNINGS

CHANGES WITH THIS ADVISORY:

All tropical storm warnings for the coast of North Carolina have been discontinued.

SUMMARY OF WATCHES AND WARNINGS IN EFFECT:

There are no coastal tropical watches or warnings in effect.

High wind warnings are in effect for coastal portions of northeastern North Carolina, southeastern Virginia, and the eastern shore of Virginia and Maryland through this evening.

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 (2100 UTC), the disturbance was centered off the coast of North Carolina near latitude 36.0 North, longitude 74.3 West. The system is moving toward the northeast near 20 mph (31 km/h), and it is expected to accelerate further toward the northeast and east-northeast during the next couple of days. The disturbance will continue to move away from the North Carolina coast over the western Atlantic Ocean tonight.

Maximum sustained winds are near 45 mph (75 km/h) with higher gusts. The disturbance is forecast to strengthen at sea and become a hurricane-force extratropical low over the northwestern Atlantic Ocean by Wednesday evening. The system is not expected to become a tropical cyclone.

* Formation chance through 48 hours...low...near 0 percent
* Formation chance through 5 days...low...near 0 percent

Tropical-storm-force winds extend outward up to 105 miles (165 km) to the east of the center.

The estimated minimum central pressure is 1003 mb (29.62 inches).

HAZARDS AFFECTING LAND

WIND: Strong winds, with gusts up to 55 mph, are expected across coastal portions of northeastern North Carolina, southeastern Virginia, and the eastern shore of Virginia and Maryland through this evening.

RAINFALL: The system is expected to produce total rain accumulations of 1 to 3 inches from the southeast Virginia coast into the Delmarva through Wednesday. The heavier rains may result in some flooding concerns along coastal areas.

SURF: Swells generated by this disturbance will affect portions of the North Carolina and Virginia coasts during the next day or so, creating dangerous surf and rip current conditions. Please consult products from your local weather office.

NEXT ADVISORY

This is the last public advisory issued by the National Hurricane Center on this system. Additional information on this system can be found in High Seas Forecasts issued by the National Weather Service, under AWIPS header NFDHSFAT1, WMO header FZNT01 KWBC, and available on the Web at http://www.opc.ncep.noaa.gov/shtml/NFDHSFAT1.shtml.

Forecaster Berg

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.
Level, Wilmington - Barometric, Wrightsville Beach - Water Level, Wrightsville Beach - Winds, Wrightsville Beach - Barometric, Springmaid Pier - Water Level, Springmaid Pier - Barometric
Last Observed Sample: 08/29/2017 17:36 (EDT). Data relative to MHHW

- Next High Tide: 08/30/2017 04:00 (EDT), -0.15 ft.

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Last Observed Sample: 08/29/2017 17:36 (EDT)

- Wind Speed: 15 knots
- Gusts: 18 knots
- Direction: 300° T
NOAA/NOS/CO-OPS 8654467 USCG Station Hatteras, NC

Barometric Pressure

Last Observed Sample: 08/29/2017 17:36 (EDT)
Barometric Pressure: 1006.8 mb

NOAA/NOS/CO-OPS 8652587 Oregon Inlet Marina, NC

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

Last Observed Sample: 08/29/2017 17:36 (EDT). Data relative to MHHW
Observed: 0.70 ft. Predicted: -0.37 ft. Residual: 1.07 ft.
Historical Maximum Water Level: Aug 28 2011, 6.32 ft.
Next High Tide: 08/30/2017 03:19 (EDT), -0.19 ft.
Last Observed Sample: 08/29/2017 17:36 (EDT)

Wind Speed: 10 knots  Gusts: 15 knots  Direction: 309° T

Barometric Pressure: 1006.3 mb
Last Observed Sample: 08/29/2017 17:42 (EDT). Data relative to MHHW

- Observed: -0.10 ft.
- Predicted: -1.67 ft.
- Residual: 1.57 ft.

Historical Maximum Water Level: Sep 18 2003, 4.13 ft.
Next High Tide: 08/30/2017 02:16 (EDT), -0.98 ft.

Last Observed Sample: 08/29/2017 17:42 (EDT)

Wind Speed: 11 knots
Gusts: 13 knots
Direction: 330° T
NOAA/NOS/CO-OPS 8651370 Duck, NC

Last Observed Sample: 08/29/2017 17:42 (EDT)
Barometric Pressure: 1006.1 mb

NOAA/NOS/CO-OPS 8638863 Chesapeake Bay Bridge Tunnel, VA

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

Last Observed Sample: 08/29/2017 17:42 (EDT). Data relative to MHHW
Observed: 1.61 ft. Predicted: -0.89 ft. Residual: 2.50 ft.
Historical Maximum Water Level: Nov 12 2009, 4.66 ft.
Next High Tide: 08/30/2017 03:10 (EDT), -0.68 ft.
Last Observed Sample: 08/29/2017 17:42 (EDT)
Wind Speed: 34 knots Gusts: 39 knots Direction: 6° T

Last Observed Sample: 08/29/2017 17:42 (EDT)
Barometric Pressure: 1009.0 mb
Last Observed Sample: 08/29/2017 17:42 (EDT). Data relative to MHHW

Observed: 2.26 ft. Predicted: -0.54 ft. Residual: 2.80 ft.

Historical Maximum Water Level: Aug 23 1933, 5.26 ft.

Next High Tide: 08/30/2017 04:05 (EDT), -0.59 ft.

Last Observed Sample: 08/29/2017 17:42 (EDT)

Barometric Pressure: 1010.3 mb
Last Observed Sample: 08/29/2017 17:36 (EDT). Data relative to MHHW

- Observed: 1.29 ft. Predicted: -0.68 ft. Residual: 1.97 ft.
- Next High Tide: 08/30/2017 03:45 (EDT), -0.64 ft.

Wind Speed: 17 knots
Gusts: 25 knots
Direction: 17° T
Last Observed Sample: 08/29/2017 17:42 (EDT). Data relative to MHHW
Observed: 0.96 ft. Predicted: -0.36 ft. Residual: 1.32 ft.
Historical Maximum Water Level: Sep 1 2006, 4.14 ft.
Next High Tide: 08/29/2017 20:38 (EDT), 0.03 ft.

Last Observed Sample: 08/29/2017 17:42 (EDT)
Wind Speed: 14 knots Gusts: 23 knots Direction: 54° T
NOAA/NOS/CO-OPS 8635750 Lewisetta, VA

Barometric Pressure

Last Observed Sample: 08/29/2017 17:42 (EDT)
Barometric Pressure: 1013.2 mb

NOAA/NOS/CO-OPS 8636580 Windmill Point, VA

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

Last Observed Sample: 08/29/2017 17:42 (EDT). Data relative to MHHW
Observed: 1.63 ft. Predicted: 0.11 ft. Residual: 1.52 ft.
Historical Maximum Water Level: Sep 1 2006, 3.74 ft.
Next High Tide: 08/29/2017 17:44 (EDT), 0.11 ft.
NOAA/NOS/CO-OPS 8631044 Wachapreague, VA

Last Observed Sample: 08/29/2017 17:42 (EDT). Data relative to MHHW
Observed: 0.63 ft. Predicted: -1.45 ft. Residual: 2.08 ft.
Next High Tide: 08/30/2017 03:16 (EDT), -0.77 ft.

NOAA/NOS/CO-OPS 8631044 Wachapreague, VA

Wind Speed / Gusts / Direction

Last Observed Sample: 08/29/2017 17:42 (EDT)
Wind Speed: 9 knots Gusts: 15 knots Direction: 9° T
NOAA/NOS/CO-OPS 8631044 Wachapreague, VA

Barometric Pressure

Barometric Pressure: 1010.3 mb

Last Observed Sample: 08/29/2017 17:42 (EDT)

NOAA/NOS/CO-OPS 8656483 Beaufort, NC

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

Last Observed Sample: 08/29/2017 17:36 (EDT). Data relative to MHHW

Observed: -0.53 ft. Predicted: -1.28 ft. Residual: 0.75 ft.

Historical Maximum Water Level: Sep 14 2005, 3.01 ft.

Next High Tide: 08/30/2017 02:39 (EDT), -0.62 ft.
Wind Speed / Gusts / Direction

Last Observed Sample: 08/29/2017 17:36 (EDT)
Wind Speed: 12 knots Gusts: 17 knots Direction: 329° T

Barometric Pressure

Last Observed Sample: 08/29/2017 17:36 (EDT)
Barometric Pressure: 1008.4 mb
Last Observed Sample: 08/29/2017 17:36 (EDT). Data relative to MHHW

Observed: 0.15 ft. Predicted: -0.62 ft. Residual: 0.77 ft.
Historical Maximum Water Level: Oct 8 2016, 3.48 ft.
Next High Tide: 08/30/2017 04:49 (EDT), -0.75 ft.

Last Observed Sample: 08/29/2017 17:36 (EDT)
Barometric Pressure: 1011.5 mb
Last Observed Sample: 08/29/2017 17:42 (EDT). Data relative to MHHW

**Observed:** -1.35 ft.  **Predicted:** -2.02 ft.  **Residual:** 0.67 ft.

**Historical Maximum Water Level:** Sep 25 2008, 2.81 ft.

**Next High Tide:** 08/30/2017 02:12 (EDT), -0.86 ft.

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**Wind Speed / Gusts / Direction**

Last Observed Sample: 08/29/2017 17:42 (EDT)

**Wind Speed:** 17 knots  **Gusts:** 22 knots  **Direction:** 335° T
NOAA/NOS/CO-OPS 8658163 Wrightsville Beach, NC

Last Observed Sample: 08/29/2017 17:42 (EDT)
Barometric Pressure: 1010.6 mb

NOAA/NOS/CO-OPS 8661070 Springmaid Pier, SC

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

Last Observed Sample: 08/29/2017 17:36 (EDT). Data relative to MHHW
Historical Maximum Water Level: Jan 1 1987, 3.65 ft.
Next High Tide: 08/30/2017 02:28 (EDT), -1.21 ft.
NOAA/NOS/CO-OPS 8661070 Springmaid Pier, SC

Barometric Pressure

Last Observed Sample: 08/29/2017 17:36 (EDT)
Barometric Pressure: 1012.0 mb
<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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</thead>
<tbody>
<tr>
<td>8654467</td>
<td>USCG Station Hatteras, NC</td>
<td>08/29/2017 17:36 (EDT)</td>
<td>1.17 ft</td>
<td>-0.23 ft</td>
<td>1.40 ft</td>
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<td>8652587</td>
<td>Oregon Inlet Marina, NC</td>
<td>08/29/2017 17:36 (EDT)</td>
<td>0.70 ft</td>
<td>-0.37 ft</td>
<td>1.07 ft</td>
<td>0.89 ft</td>
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<td>8651370</td>
<td>Duck, NC</td>
<td>08/29/2017 17:42 (EDT)</td>
<td>-0.10 ft</td>
<td>-1.67 ft</td>
<td>1.57 ft</td>
<td>1.17 ft</td>
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<td>Chesapeake Bay Bridge Tunnel, VA</td>
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<td>1.61 ft</td>
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<td>08/29/2017 17:36 (EDT)</td>
<td>-2.19 ft</td>
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<td>0.42 ft</td>
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Center for Operational Oceanographic Products & Services (CO-OPS) | National Ocean Service (NOS)
National Oceanic and Atmospheric Administration | U.S. Department of Commerce