Hurricane IRMA QuickLook
Posted: 12:00 AST 09/05/2017

NOAA and NOAA Partnership Stations Relative to the Storm

Storm Analysis
As of 09/05/2017 12:00 AST, water levels at Barbuda and across Puerto Rico and the U.S. Virgin Islands are generally measuring a half of foot above normal tide levels. Winds remain on the lighter side at this hour and highest winds speeds are only topping 10 - 15 knots as of mid-day. Barometric pressure is gradually 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: CRD

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SELECT NATIONAL HURRICANE CENTER ADVISORY INFORMATION:

Hurricane Irma Advisory Number 26
NWS National Hurricane Center Miami FL
1100 AM AST Tue Sep 05 2017

...POTENTIALLY CATASTROPHIC CATEGORY 5 HURRICANE IRMA HEADING TOWARD THE LEEWARD ISLANDS...
...PREPARATIONS SHOULD BE RUSHED TO COMPLETION IN THE HURRICANE WARNING AREA...

SUMMARY OF 1100 AM AST....INFORMATION
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LOCATION...16.8N 58.4W
ABOUT 225 MI...365 KM E OF ANTIGUA
ABOUT 230 MI...370 KM ESE OF BARBUDA
MAXIMUM SUSTAINED WINDS...180 MPH
PRESENT MOVEMENT...W OR 270 DEGREES AT 14 MPH
MINIMUM CENTRAL PRESSURE...931 MB

WATCHES AND WARNINGS
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CHANGES WITH THIS ADVISORY:

The government of the Bahamas has issued a Hurricane Watch for the Turks and Caicos Islands and the southeastern Bahamas, including the Acklins, Crooked Island, Long Cay, the Inaguas, Mayaguana, and the Ragged Islands.

A Hurricane Watch has been issued for the north coast of Haiti from the border of the Dominican Republic westward to Le Mole St. Nicholas. A Tropical Storm Watch has been issued from south of Le Mole St. Nicholas to Port-Au-Prince.

SUMMARY OF WATCHES AND WARNINGS IN EFFECT:

A Hurricane Warning is in effect for...
* Antigua, Barbuda, Anguilla, Montserrat, St. Kitts, and Nevis
* Saba, St. Eustatius, and Sint Maarten
* Saint Martin and Saint Barthelemy
* British Virgin Islands
* U.S. Virgin Islands
* Puerto Rico, Vieques, and Culebra

A Hurricane Watch is in effect for...
* Guadeloupe
* Dominican Republic from Cabo Engano to the northern border with Haiti
* Haiti from the northern border with the Dominican Republic to Le Mole St. Nicholas
* Turks and Caicos Islands
* Southeastern Bahamas

A Tropical Storm Warning is in effect for...
* Guadeloupe
* Dominica

A Tropical Storm Watch is in effect for...
* Dominican Republic from south of Cabo Engao to Isla Saona
* Haiti from south of Le Mole St. Nicholas to Port-Au-Prince

A Hurricane Warning means that hurricane conditions are expected somewhere within the warning area. A warning is typically issued 36 hours before the anticipated first occurrence of tropical-storm- force winds, conditions that make outside preparations difficult or dangerous. In this case, for some of easternmost islands, the hurricane conditions are expected within the next 12 to 24 hours. Preparations to protect life and property should be rushed to completion.

A Tropical Storm Warning means that tropical storm conditions are expected somewhere within the warning area in this case within 36 hours.

A Tropical Storm Watch means that tropical storm conditions are possible within the watch area, generally within 48 hours.

Interests elsewhere in the Dominican Republic and Haiti, as well as Cuba, the central and northwestern Bahamas, and Florida should monitor the progress of Irma.

For storm information specific to your area in the United States, including possible inland watches and warnings, please monitor products issued by your local National Weather Service forecast office. For storm information specific to your area outside the United States, please monitor products issued by your national meteorological service.

DISCUSSION AND 48-HOUR OUTLOOK

At 1100 AM AST, the eye of Hurricane Irma was located near latitude 16.8 North, longitude 58.4 West. Irma is moving toward the west near 14 mph, and this general motion is expected to continue today, followed by a turn toward the west-northwest tonight. On the forecast track, the extremely dangerous core of Irma is forecast to move over portions of the northern Leeward Islands tonight and early Wednesday.

Reports from an Air Force Hurricane Hunter aircraft indicate that the maximum sustained winds are near 180 mph with higher gusts. Irma is an extremely dangerous category 5 hurricane on the
Saffir-Simpson Hurricane Wind Scale. Some fluctuations in intensity are likely during the next day or two, but Irma is forecast to remain a powerful category 4 or 5 hurricane during the next couple of days.

Hurricane-force winds extend outward up to 60 miles from the center and tropical-storm-force winds extend outward up to 160 miles.

The latest minimum central pressure reported by reconnaissance aircraft is 931 mb.

HAZARDS AFFECTING LAND
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STORM SURGE: The combination of a life-threatening storm surge and large breaking waves will raise water levels by as much as 7 to 11 feet above normal tide levels along the coasts of the extreme northern Leeward Islands within the hurricane warning area near and to the north of the center of Irma. Near the coast, the surge will be accompanied by large and destructive waves.

The combination of a life-threatening storm surge and the tide will cause normally dry areas near the coast to be flooded by rising waters moving inland from the shoreline. The water is expected to reach the following heights above ground if the peak surge occurs at the time of high tide...

- British and U.S. Virgin Islands except St. Croix...7 to 11 ft
- Northern coast of Puerto Rico...3 to 5 ft
- Southern coast of Puerto Rico and St. Croix...1 to 2 ft

The deepest water will occur along the immediate coast in areas of onshore winds, where the surge will be accompanied by large and destructive 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 forecast office.

WIND: Hurricane conditions are expected within the hurricane warning area in the Leeward Islands by tonight, with tropical storm conditions beginning later today. Tropical storm conditions are expected within the tropical storm warning area where hurricane conditions are also possible. Hurricane conditions are expected to begin within the hurricane warning area in the British and U.S. Virgin Islands and Puerto Rico on Wednesday, with tropical storm conditions beginning tonight.

Hurricane and tropical storm conditions are possible within the watch area in the Dominican Republic, Haiti, the Turks and Caicos, and the southeastern Bahamas by early Thursday.

RAINFALL: Irma is expected to produce total rain accumulations of 8 to 12 inches with isolated maximum amounts of 18 inches across the northern Leeward Islands. Irma is expected to produce total rain accumulations of 4 to 10 inches with isolated maximum amounts of 15 inches across northeast Puerto Rico and the British and U.S. Virgin Islands, and amounts of 2 to 4 inches over southwest Puerto Rico, the southern Leeward Islands, and Saint Croix. This rainfall may cause life-threatening flash floods and mudslides.

SURF: Swells generated by Irma will affect the northern Leeward Islands, Puerto Rico, and the U.S. and British Virgin Islands during the next several days. These swells are likely to cause life-threatening surf and rip current conditions. Please consult products from your local weather office.

NEXT ADVISORY
Next intermediate advisory at 200 PM AST.
Next complete advisory at 500 PM AST.

Forecaster 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.

Last Observed Sample: 09/05/2017 12:00 (AST). Data relative to MHHW
Observed: -0.09 ft. Predicted: -0.55 ft. Residual: 0.46 ft.
Historical Maximum Water Level: Aug 23 2012, 1.05 ft.
Next High Tide: 09/05/2017 18:21 (AST), 0.06 ft.

Wind Speed: 13 knots Gusts: 17 knots Direction: 16° T
NOAA/NOS/CO-OPS 9761115 Barbuda

Barometric Pressure

Last Observed Sample: 09/05/2017 12:00 (AST)
Barometric Pressure: 1009.0 mb

NOAA/NOS/CO-OPS 9751364 Christiansted Harbor, St Croix, VI

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

Last Observed Sample: 09/05/2017 12:00 (AST). Data relative to MHHW
Observed: -0.25 ft. Predicted: -0.46 ft. Residual: 0.21 ft.
Next High Tide: 09/05/2017 20:32 (AST), 0.16 ft.
Wind Speed / Gusts / Direction

Last Observed Sample: 09/05/2017 12:00 (AST)
Wind Speed: 8 knots Gusts: 11 knots Direction: 42° T

Barometric Pressure

Last Observed Sample: 09/05/2017 12:00 (AST)
Barometric Pressure: 1012.4 mb
NOAA/NOS/CO-OPS 9751381 Lameshur Bay, St John, VI

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

Last Observed Sample: 09/05/2017 12:06 (AST). Data relative to MHHW
Observed: -0.05 ft. Predicted: -0.50 ft. Residual: 0.45 ft.
Historical Maximum Water Level: Aug 30 2010, 0.89 ft.
Next High Tide: 09/05/2017 20:58 (AST), 0.16 ft.

NOAA/NOS/CO-OPS 9751401 Lime Tree Bay, St. Croix, VI

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

Last Observed Sample: 09/05/2017 12:00 (AST). Data relative to MHHW
Observed: -0.23 ft. Predicted: -0.43 ft. Residual: 0.20 ft.
Historical Maximum Water Level: Nov 17 1999, 1.88 ft.
Next High Tide: 09/05/2017 21:26 (AST), 0.11 ft.
NOAA/NOS/CO-OPS 9751401 Lime Tree Bay, St. Croix, VI

Wind Speed / Gusts / Direction

Last Observed Sample: 09/05/2017 12:00 (AST)
Wind Speed: 8 knots  Gusts: 15 knots  Direction: 45° T

NOAA/NOS/CO-OPS 9751401 Lime Tree Bay, St. Croix, VI

Barometric Pressure

Last Observed Sample: 09/05/2017 12:00 (AST)
Barometric Pressure: 1013.3 mb
NOAA/NOS/CO-OPS 9751639 Charlotte Amalie, VI

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

Last Observed Sample: 09/05/2017 12:00 (AST). Data relative to MHHW
- Observed: -0.07 ft. Predicted: -0.46 ft. Residual: 0.39 ft.
- Historical Maximum Water Level: Sep 16 1995, 2.93 ft.
- Next High Tide: 09/05/2017 20:58 (AST), 0.19 ft.

NOAA/NOS/CO-OPS 9751639 Charlotte Amalie, VI

Wind Speed / Gusts / Direction

Last Observed Sample: 09/05/2017 12:00 (AST)
- Wind Speed: 6 knots Gusts: 10 knots Direction: 50° T
NOAA/NOS/CO-OPS 9752235 Culebra, PR

Last Observed Sample: 09/05/2017 12:00 (AST). Data relative to MHHW
Observation: -0.35 ft. Predicted: -0.76 ft. Residual: 0.41 ft.
Historical Maximum Water Level: Nov 6 2006, 0.84 ft.
Next High Tide: 09/05/2017 20:32 (AST), 0.15 ft.

NOAA/NOS/CO-OPS 9752619 Isabel Segunda, Vieques Island, PR

Last Observed Sample: 09/05/2017 12:06 (AST). Data relative to MHHW
Observation: -0.48 ft. Predicted: -0.89 ft. Residual: 0.41 ft.
Historical Maximum Water Level: n/a
Next High Tide: 09/05/2017 20:38 (AST), 0.09 ft.
NOAA/NOS/CO-OPS 9752619 Isabel Segunda, Vieques Island, PR

Last Observed Sample: 09/05/2017 12:06 (AST)
Wind Speed: 7 knots  Gusts: 11 knots  Direction: 64° T

NOAA/NOS/CO-OPS 9752695 Esperanza, Vieques Island, PR

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

Last Observed Sample: 09/05/2017 12:06 (AST). Data relative to MHHW
Observed: -0.17 ft.  Predicted: -0.47 ft.  Residual: 0.30 ft.
Historical Maximum Water Level: Aug 22 2011, 0.99 ft.
Next High Tide: 09/05/2017 20:41 (AST), 0.15 ft.
NOAA/NOS/CO-OPS 9752695 Esperanza, Vieques Island, PR

Wind Speed / Gusts / Direction

Last Observed Sample: 09/05/2017 12:06 (AST)
Wind Speed: 4 knots Gusts: 9 knots Direction: 53° T

NOAA/NOS/CO-OPS 9753216 Fajardo, PR

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

Last Observed Sample: 09/05/2017 12:06 (AST). Data relative to MHHW
Observed: -0.71 ft. Predicted: -1.12 ft. Residual: 0.41 ft.
Historical Maximum Water Level: Aug 30 2010, 0.84 ft.
Next High Tide: 09/05/2017 20:27 (AST), 0.08 ft.
NOAA/NOS/CO-OPS 9753216 Fajardo, PR

Wind Speed / Gusts / Direction

Last Observed Sample: 09/05/2017 12:06 (AST)
Wind Speed: 8 knots Gusts: 10 knots Direction: 32° T

NOAA/NOS/CO-OPS 9754228 Yabucoa Harbor, PR

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

Last Observed Sample: 09/05/2017 12:06 (AST). Data relative to MHHW
Observed: -0.27 ft. Predicted: -0.42 ft. Residual: 0.15 ft.
Historical Maximum Water Level: n/a
Next High Tide: 09/05/2017 21:17 (AST), 0.12 ft.
NOAA/NOS/CO-OPS 9754228 Yabucoa Harbor, PR

Wind Speed / Gusts / Direction

- Last Observed Sample: 09/05/2017 12:06 (AST)
- Wind Speed: 2 knots
- Gusts: 5 knots
- Direction: 19° T

NOAA/NOS/CO-OPS 9755371 San Juan, La Puntilla, San Juan Bay, PR

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

- Last Observed Sample: 09/05/2017 12:00 (AST). Data relative to MHHW
- Observed: -0.71 ft. Predicted: -1.02 ft. Residual: 0.31 ft.
- Historical Maximum Water Level: Sep 18 1989, 2.77 ft.
- Next High Tide: 09/05/2017 20:45 (AST), 0.17 ft.
Wind Speed / Gusts / Direction

Last Observed Sample: 09/05/2017 12:00 (AST)
Wind Speed: 8 knots  Gusts: 13 knots  Direction: 104° T

Barometric Pressure

Last Observed Sample: 09/05/2017 12:00 (AST)
Barometric Pressure: 1013.9 mb
Last Observed Sample: 09/05/2017 12:12 (AST). Data relative to MHHW

Observed: -0.93 ft  Predicted: -1.36 ft  Residual: 0.43 ft.

Historical Maximum Water Level: Oct 8 2010, 0.90 ft.
Next High Tide: 09/05/2017 20:14 (AST), 0.10 ft.

Last Observed Sample: 09/05/2017 12:12 (AST)

Wind Speed: 12 knots  Gusts: 16 knots  Direction: 42° T
Last Observed Sample: 09/05/2017 12:00 (AST). Data relative to MHHW

- Observed: -0.08 ft.  Predicted: -0.35 ft.  Residual: 0.27 ft.
- Historical Maximum Water Level: Sep 22 1998, 1.60 ft.
- Next High Tide: 09/05/2017 21:30 (AST), 0.17 ft.

Last Observed Sample: 09/05/2017 12:00 (AST)

- Wind Speed: 9 knots  Gusts: 11 knots  Direction: 222° T
Last Observed Sample: 09/05/2017 12:00 (AST). Data relative to MHWW
Observed: -0.58 ft. Predicted: -0.90 ft. Residual: 0.32 ft.
Historical Maximum Water Level: n/a
Next High Tide: 09/05/2017 20:27 (AST), 0.15 ft.

Wind Speed: 6 knots Gusts: 12 knots Direction: 70° T
Last Observed Sample: 09/05/2017 12:06 (AST). Data relative to MHHW

- Observed: -0.08 ft.
- Predicted: -0.53 ft.
- Residual: 0.45 ft.

Historical Maximum Water Level: Dec 23 2010, 1.24 ft.
Next High Tide: 09/05/2017 20:39 (AST), 0.09 ft.

Barometric Pressure: 1013.4 mb
## 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>9761115</td>
<td>Barbuda</td>
<td>09/05/2017 12:00 (AST)</td>
<td>-0.09 ft</td>
<td>-0.55 ft</td>
<td>0.46 ft</td>
<td>0.56 ft</td>
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<tr>
<td>9751364</td>
<td>Christiansted Harbor, St Croix, VI</td>
<td>09/05/2017 12:00 (AST)</td>
<td>-0.25 ft</td>
<td>-0.46 ft</td>
<td>0.21 ft</td>
<td>0.33 ft</td>
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<tr>
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<td>Lameshur Bay, St John, VI</td>
<td>09/05/2017 12:06 (AST)</td>
<td>-0.05 ft</td>
<td>-0.50 ft</td>
<td>0.45 ft</td>
<td>0.53 ft</td>
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<tr>
<td>9751401</td>
<td>Lime Tree Bay, St. Croix, VI</td>
<td>09/05/2017 12:00 (AST)</td>
<td>-0.23 ft</td>
<td>-0.43 ft</td>
<td>0.20 ft</td>
<td>0.29 ft</td>
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<tr>
<td>9751639</td>
<td>Charlotte Amalie, VI</td>
<td>09/05/2017 12:00 (AST)</td>
<td>-0.07 ft</td>
<td>-0.46 ft</td>
<td>0.39 ft</td>
<td>0.57 ft</td>
</tr>
<tr>
<td>9752235</td>
<td>Culebra, PR</td>
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<td>-0.76 ft</td>
<td>0.41 ft</td>
<td>0.52 ft</td>
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<td>-0.48 ft</td>
<td>-0.89 ft</td>
<td>0.41 ft</td>
<td>0.48 ft</td>
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<td>9755371</td>
<td>San Juan, La Puntilla, San Juan Bay, PR</td>
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