Storm Analysis

As 07/23/2016 00:00 HST, water levels across the Hawaiian Islands are close to or slightly above predictions with levels up to 0.6 ft above normal tide levels. Winds are gradually increasing with the latest observed gusts between 15 and 30 knots. Barometric continues to fall across the area as Darby approaches.
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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TROPICAL STORM DARBY ADVISORY NUMBER 47
NWS CENTRAL PACIFIC HURRICANE CENTER HONOLULU HI
1100 PM HST FRI JUL 22 2016

...DARBY EXPECTED TO REACH THE BIG ISLAND SATURDAY...

SUMMARY OF 1100 PM HST INFORMATION

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LOCATION...18.8N 153.0W
ABOUT 150 MI... ESE OF HILO HAWAII
ABOUT 360 MI... ESE OF HONOLULU HAWAII
MAXIMUM SUSTAINED WINDS...60 MPH
PRESENT MOVEMENT...W OR 280 DEGREES AT 10 MPH
MINIMUM CENTRAL PRESSURE...1000 MB

WATCHES AND WARNINGS

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CHANGES WITH THIS ADVISORY:

None.

SUMMARY OF WATCHES AND WARNINGS IN EFFECT:

A Tropical Storm Warning is in effect for...
* Hawaii County
* Maui County, including the islands of Maui, Molokai, Lanai and Kahoolawe

A Tropical Storm Watch is in effect for...
* Oahu

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

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

Interests elsewhere in the Hawaiian Islands should monitor the progress of Darby. Watches and warnings may be required for additional islands later tonight or Saturday.
For storm information specific to your area, please monitor products issued by the National Weather Service office in Honolulu Hawaii.

DISCUSSION AND 48-HOUR OUTLOOK

At 1100 PM HST, the center of Tropical Storm Darby was located near latitude 18.8 North, longitude 153.0 West. Darby is moving toward the west near 10 mph. Darby's forward motion is expected to slow slightly Saturday followed by a turn toward the northwest Saturday night. On the forecast track, the center of Darby is forecast to pass over the Big Island on Saturday, and Maui on Saturday night.

Maximum sustained winds are near 60 mph with higher gusts. Some weakening is forecast during the next 48 hours.

Tropical-storm-force winds extend outward up to 125 miles from the center.

The estimated minimum central pressure is 1000 mb (29.53 inches).

HAZARDS AFFECTING LAND

WIND: Tropical storm force winds are expected over the Big Island starting late tonight, and over portions of Maui County on Saturday. Tropical storm force winds are possible over Oahu Saturday night or Sunday.

SURF: Swells generated by Darby are expected to impact the Hawaiian Islands over the next couple of days.

RAINFALL: Storm total rainfall of 10 to 15 inches with locally higher amounts...could cause life-threatening flash floods as well as landslides.

NEXT ADVISORY

Next intermediate advisory at 200 AM HST. Next complete advisory at 500 AM HST.

Forecaster Powell

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: 07/23/2016 00:00 (HST). Data relative to MHHW

- Observed: -1.82 ft.
- Predicted: -2.12 ft.
- Residual: 0.30 ft.

Historical Maximum Water Level: Jan 20 1981, 1.37 ft.
Next High Tide: 07/23/2016 05:25 (HST), -0.82 ft.

Wind Speed: 18 knots  Gusts: 21 knots  Direction: 332° T
NOAA/NOS/CO-OPS 1617760 Hilo, Hilo Bay, Kuhio Bay, HI
Barometric Pressure

Barometric Pressure: 1012.5 mb

NOAA/NOS/CO-OPS 1617433 Kawaihae, HI
Last Observed Sample: 07/23/2016 00:00 (HST)
Data relative to MHHW
Observed: -1.84 ft. Predicted: -2.07 ft. Residual: 0.23 ft.
Historical Maximum Water Level: Dec 13 2008, 1.22 ft.
Next High Tide: 07/23/2016 06:47 (HST), -0.92 ft.
NOAA/NOS/CO-OPS 1617433 Kawaihae, HI

Wind Speed / Gusts / Direction

Wind Speed: 6 knots  Gusts: 9 knots  Direction: 320° T

Barometric Pressure

Barometric Pressure: 1011.6 mb
Last Observed Sample: 07/23/2016 00:00 (HST). Data relative to MHHW

Observed: -1.56 ft.  Predicted: -1.68 ft.  Residual: 0.12 ft.

Historical Maximum Water Level: Dec 20 1968, 1.23 ft.

Next High Tide: 07/23/2016 04:22 (HST), -0.81 ft.

Last Observed Sample: 07/23/2016 00:00 (HST)

Wind Speed: 15 knots  Gusts: 18 knots  Direction: 27° T
NOAA/NOS/CO-OPS 1615680 Kahului, Kahului Harbor, HI

Barometric Pressure: 1014.3 mb

NOAA/NOS/CO-OPS 1612480 Mokuoloe, HI

Last Observed Sample: 07/23/2016 00:00 (HST). Data relative to MHHW

Observed: -1.24 ft. Predicted: -1.54 ft. Residual: 0.30 ft.

Historical Maximum Water Level: Jan 8, 1974, 1.46 ft.

Next High Tide: 07/23/2016 04:25 (HST), -0.89 ft.
NOAA/NOS/CO-OPS 1612480 Mokuoloe, HI

Wind Speed / Gusts / Direction

Last Observed Sample: 07/23/2016 00:00 (HST)
Wind Speed: 13 knots Gusts: 15 knots Direction: 59° T

NOAA/NOS/CO-OPS 1612340 Honolulu, HI

Last Observed Sample: 07/23/2016 00:00 (HST). Data relative to MHHW
Observed: -1.45 ft. Predicted: -1.74 ft. Residual: 0.29 ft.
Historical Maximum Water Level: Feb 14 1967, 1.49 ft.
Next High Tide: 07/23/2016 06:48 (HST), -0.83 ft.
NOAA/NOS/CO-OPS 1612340 Honolulu, HI

Wind Speed / Gusts / Direction

Last Observed Sample: 07/23/2016 00:00 (HST)
Wind Speed: 6 knots Gusts: 12 knots Direction: 24° T

NOAA/NOS/CO-OPS 1611400 Nawiliwili, HI

Last Observed Sample: 07/23/2016 00:00 (HST)
Data relative to MHHW
Observed: -1.16 ft. Predicted: -1.58 ft. Residual: 0.42 ft.
Historical Maximum Water Level: Sep 11 1992, 3.15 ft.
Next High Tide: 07/23/2016 06:17 (HST), -0.83 ft.
NOAA/NOS/CO-OPS 1611400 Nawiliwili, HI

Wind Speed / Gusts / Direction

Last Observed Sample: 07/23/2016 00:00 (HST)

Wind Speed: 15 knots  Gusts: 21 knots  Direction: 40° 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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</thead>
<tbody>
<tr>
<td>1617760</td>
<td>Hilo, Hilo Bay, Kuhio Bay, HI</td>
<td>07/23/2016 00:00 (HST)</td>
<td>-1.82 ft</td>
<td>-2.12 ft</td>
<td>0.30 ft</td>
<td>0.55 ft</td>
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<tr>
<td>1617433</td>
<td>Kawaihae, HI</td>
<td>07/23/2016 00:00 (HST)</td>
<td>-1.84 ft</td>
<td>-2.07 ft</td>
<td>0.23 ft</td>
<td>0.25 ft</td>
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<tr>
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<td>Kahului, Kahului Harbor, HI</td>
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<td>-1.56 ft</td>
<td>-1.68 ft</td>
<td>0.12 ft</td>
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<tr>
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<td>07/23/2016 00:00 (HST)</td>
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<td>1612340</td>
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<td>07/23/2016 00:00 (HST)</td>
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