Storm Analysis

As of 07/23/2016 12:00 HST, water levels across the Hawaiian Islands are slightly elevated and range between 0.2 and 0.5 ft above normal tide levels. Winds are slowly increasing and range between 10 and 20 knots with some gusts over 30 knots. Barometric pressure continues to gradually fall across the islands.
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 CENTRAL PACIFIC HURRICANE CENTER ADVISORY INFORMATION:TROPICAL STORM DARBY ADVISORY NUMBER 49
NWS CENTRAL PACIFIC HURRICANE CENTER HONOLULU HI EP052016
1100 AM HST SAT JUL 23 2016

...DARBY BRINGING HEAVY RAIN AND GUSTY WINDS TO THE BIG ISLAND...

WATCHES AND WARNINGS
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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
* Oahu

A Tropical Storm Watch is in effect for...
* Kauai County, including the islands of Kauai and Niihau

A Tropical Storm Warning means that tropical storm conditions are expected within the warning area within 36 hours. In this case, tropical storm conditions are imminent over the Big Island.

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

Interests in the eastern portion of the Papahanaumokuakea Marine National Monument should monitor the progress of Darby.

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
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At 1100 AM HST (2100 UTC), the center of Tropical Storm Darby was located near latitude 18.9 North, longitude 154.8 West or ABOUT 60 MI...95 KM SSE OF HILO HAWAII and ABOUT 260 MI...420 KM SE OF HONOLULU HAWAII. Darby is moving toward the west near 10 mph (17 km/h). A gradual turn toward the northwest is expected Sunday and Monday, with little change in forward speed. On the forecast track, the center of Darby is forecast to pass over the Big Island today, and south of Maui County early Sunday. The center of Darby is expected to pass close to Oahu and Kauai County late Sunday and Monday.

Maximum sustained winds are near 45 mph (75 km/h) with higher gusts. Some weakening is forecast during the next
Tropical-storm-force winds extend outward up to 105 miles (165 km) from the center. A wind gust to 54 mph was measured in Hawaii Volcanoes National Park earlier this morning.

The estimated minimum central pressure is 1002 mb (29.59 inches).

HAZARDS AFFECTING LAND
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WIND: Tropical storm force winds are expected over the Big Island today, over portions of Maui County tonight and over Oahu Sunday. Tropical storm force winds are possible over Kauai Monday.

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 possible isolated maximum amounts of 20 inches. These rains could produce life-threatening flash floods and landslides.

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

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Forecaster Birchard

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 12:12 (HST). Data relative to MHHW

Observed: -1.70 ft. Predicted: -2.13 ft. Residual: 0.43 ft.
Historical Maximum Water Level: Jan 20 1981, 1.37 ft.
Next High Tide: 07/23/2016 17:55 (HST), 0.16 ft.

Last Observed Sample: 07/23/2016 12:12 (HST)

Wind Speed: 14 knots Gusts: 20 knots Direction: 56° T
NOAA/NOS/CO-OPS 1617760 Hilo, Hilo Bay, Kuhio Bay, HI

Last Observed Sample: 07/23/2016 12:12 (HST)
Barometric Pressure: 1010.5 mb

NOAA/NOS/CO-OPS 1617433 Kawaihae, HI

Last Observed Sample: 07/23/2016 12:12 (HST). Data relative to MHHW
Observed: -1.53 ft. Predicted: -1.91 ft. Residual: 0.38 ft.
Historical Maximum Water Level: Dec 13 2008, 1.22 ft.
Next High Tide: 07/23/2016 18:46 (HST), -0.01 ft.
NOAA/NOS/CO-OPS 1617433 Kawaihae, HI

Wind Speed / Gusts / Direction

Last Observed Sample: 07/23/2016 12:12 (HST)

Wind Speed: 22 knots Gusts: 42 knots Direction: 81° T

Barometric Pressure

Last Observed Sample: 07/23/2016 12:12 (HST)
Barometric Pressure: 1005.6 mb
Last Observed Sample: 07/23/2016 12:12 (HST). Data relative to MHHW

Observed: -1.41 ft. Predicted: -1.71 ft. Residual: 0.30 ft.
Historical Maximum Water Level: Dec 20 1968, 1.23 ft.
Next High Tide: 07/23/2016 17:11 (HST), 0.16 ft.

Last Observed Sample: 07/23/2016 12:12 (HST)
Wind Speed: 17 knots Guts: 23 knots Direction: 30° T
NOAA/NOS/CO-OPS 1615680 Kahului, Kahului Harbor, HI
Last Observed Sample: 07/23/2016 12:12 (HST)
Barometric Pressure: 1012.4 mb

NOAA/NOS/CO-OPS 1612480 Mokuoloe, HI
Last Observed Sample: 07/23/2016 12:12 (HST). Data relative to MHHW
Observed: -1.26 ft. Predicted: -1.64 ft. Residual: 0.38 ft.
Historical Maximum Water Level: Jan 8 1974, 1.46 ft.
Next High Tide: 07/23/2016 17:22 (HST), 0.05 ft.
NOAA/NOS/CO-OPS 1612480 Mokuoloe, HI

Wind Speed / Gusts / Direction

- Wind Speed: 16 knots
- Gusts: 17 knots
- Direction: 31° T

Last Observed Sample: 07/23/2016 12:12 (HST)

Barometric Pressure

- Barometric Pressure: 1014.5 mb

Last Observed Sample: 07/23/2016 12:12 (HST)
Last Observed Sample: 07/23/2016 12:12 (HST). Data relative to MHHW
Historical Maximum Water Level: Feb 14 1967, 1.49 ft.
Next High Tide: 07/23/2016 18:46 (HST), 0.06 ft.

Last Observed Sample: 07/23/2016 12:12 (HST)
Wind Speed: 5 knots Gusts: 9 knots Direction: 73° T
NOAA/NOS/CO-OPS 1612340 Honolulu, HI

Barometric Pressure:

Last Observed Sample: 07/23/2016 12:12 (HST)
Barometric Pressure: 1014.1 mb

NOAA/NOS/CO-OPS 1611400 Nawiliwili, HI

Last Observed Sample: 07/23/2016 12:12 (HST)
Data relative to MHHW
Observed: -1.28 ft. Predicted: -1.52 ft. Residual: 0.24 ft.
Historical Maximum Water Level: Sep 11 1992, 3.15 ft.
Next High Tide: 07/23/2016 18:27 (HST), -0.00 ft.
Last Observed Sample: 07/23/2016 12:12 (HST)
Wind Speed: 15 knots
Gusts: 20 knots
Direction: 43° T

Barometric Pressure: 1015.6 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>1617760</td>
<td>Hilo, Hilo Bay, Kuhio Bay, HI</td>
<td>07/23/2016 12:12 (HST)</td>
<td>-1.70 ft</td>
<td>-2.13 ft</td>
<td>0.43 ft</td>
<td>0.55 ft</td>
</tr>
<tr>
<td>1617433</td>
<td>Kawaihae, HI</td>
<td>07/23/2016 12:12 (HST)</td>
<td>-1.53 ft</td>
<td>-1.91 ft</td>
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<td>Kahului, Kahului Harbor, HI</td>
<td>07/23/2016 12:12 (HST)</td>
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<td>07/23/2016 12:12 (HST)</td>
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<td>0.52 ft</td>
</tr>
<tr>
<td>1612340</td>
<td>Honolulu, HI</td>
<td>07/23/2016 12:12 (HST)</td>
<td>-1.37 ft</td>
<td>-1.62 ft</td>
<td>0.25 ft</td>
<td>0.36 ft</td>
</tr>
<tr>
<td>1611400</td>
<td>Nawiliwili, HI</td>
<td>07/23/2016 12:12 (HST)</td>
<td>-1.28 ft</td>
<td>-1.52 ft</td>
<td>0.24 ft</td>
<td>0.45 ft</td>
</tr>
</tbody>
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