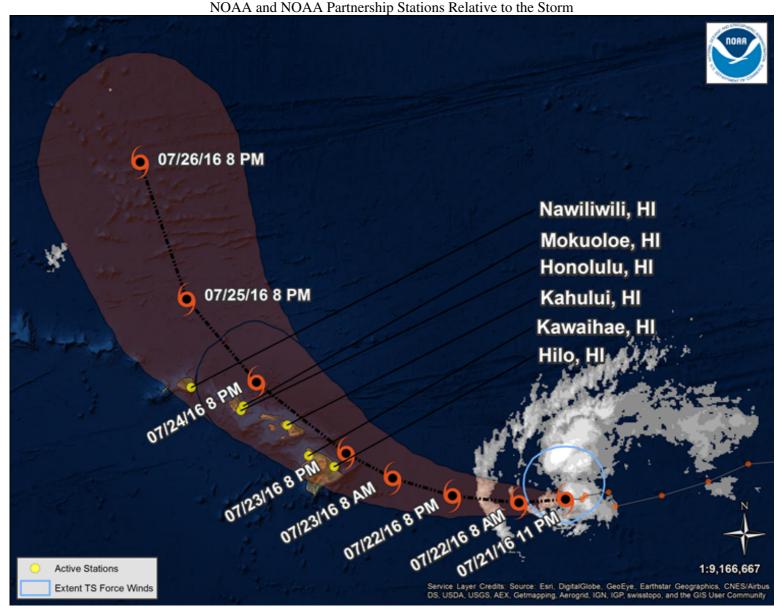




Posted: 00:00 HST 07/22/2016



Storm Analysis

As 07/22/2016 00:00 HST, water levels across the Hawaiian Islands are close to predictions and are at or barely above normal tide levels. Winds are steady 5 to 15 knots, with gusts to 20 knots. Barometric pressure is gradually falling across the region.

Water Level and Meteorological plots available below are updated automatically. A line denoting <u>Mean Higher High Water</u> (MHHW) is displayed to provide an approximate indication of when flooding inundation may occur.

For additional data, please see the <u>Center for Operational Oceanographic Products & Services</u> website. For more information or archived products and reports, please see the <u>Storm QuickLook</u> Homepage.

Analyst: ADM

SELECT CENTRAL PACIFIC HURRICANE CENTERADVISORY INFORMATION:

TROPICAL STORM DARBY ADVISORY NUMBER 43 NWS CENTRAL PACIFIC HURRICANE CENTER HONOLULU HI 1100 PM HST THU JUL 21 2016

...DARBY CONTINUES MOVING WESTWARD TOWARD HAWAII...

WATCHES AND WARNINGS

CHANGES WITH THIS ADVISORY:

A Tropical Storm warning is now in effect for...

* Hawaii County

SUMMARY OF WATCHES AND WARNINGS IN EFFECT:

A Tropical Storm warning is in effect for...

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

Kahoolawe

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 may be required for additional islands later tonight or Friday.

DISCUSSION AND 48-HOUR OUTLOOK

At 1100 PM HST, the center of Tropical Storm Darby was located ABOUT 460 MI E OF HILO HAWAII ABOUT 660 MI ESE OF HONOLULU HAWAII. Darby is moving toward the west near 10 mph and this motion is expected to become northwesterly at about the same speed through Saturday evening.

Maximum sustained winds are near 65 mph with higher gusts. Little change in strength is forecast through Saturday evening.

Tropical-storm-force winds extend outward up to 105 miles from the center.

The estimated minimum central pressure is 997 mb.

HAZARDS AFFECTING LAND

WIND: Tropical-storm-force winds are expected over the Big Island and possible over portions of Maui county on Saturday.

SURF: Swells generated by Darby are expected to impact the Hawaiian Islands over the next couple of days, possibly becoming damaging along some coastlines Friday and Saturday.

RAINFALL: Heavy rains associated with Darby are expected to reach the Big Island and portions of Maui county late Friday, potentially impacting the remainder of the state Saturday. These rains could cause life-threatening flash floods as well as rock and mud slides.

NEXT ADVISORY

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

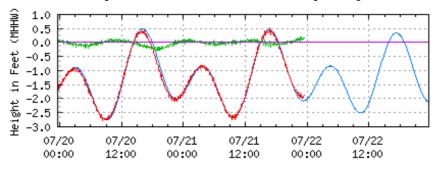
\$\$

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.

Jump to: Hilo, Hilo Bay, Kuhio Bay - Water Level, Hilo, Hilo Bay, Kuhio Bay - Winds, Hilo, Hilo Bay, Kuhio Bay - Barometric, Kawaihae - Water Level, Kawaihae - Winds, Kawaihae - Barometric, Kahului, Kahului Harbor - Water Level, Kahului, Kahului Harbor - Winds, Kahului, Kahului Harbor - Barometric, Mokuoloe - Water Level, Mokuoloe - Winds, Honolulu - Water Level, Honolulu - Winds, Nawiliwili - Water Level, Nawiliwili - Winds

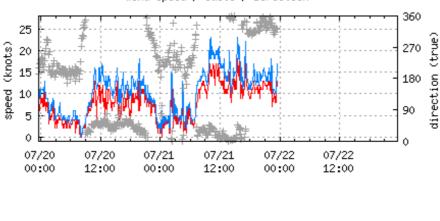
NOAA/NOS/CO-OPS <u>1617760 Hilo, Hilo Bay, Kuhio Bay, HI</u> Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Predicted Tide —— (Obs-Pred) —— Observed WL —— MHHW ——

Last Observed Sample: 07/21/2016 23:24 (HST). Data relative to MHHW Observed: -1.89 ft. Predicted: -2.07 ft. Residual: 0.18 ft. Historical Maximum Water Level: Jan 20 1981, 1.37 ft. Next High Tide: 07/22/2016 04:32 (HST), -0.83 ft.

NOAA/NOS/CO-OPS 1617760 Hilo, Hilo Bay, Kuhio Bay, HI Wind Speed / Gusts / Direction



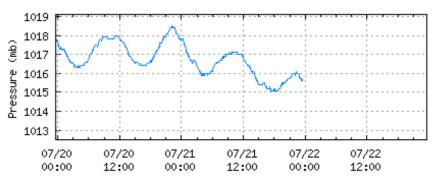
Last Observed Sample: 07/21/2016 23:24 (HST) Wind Speed: 13 knots Gusts: 17 knots Direction: 322° T

gusts

direction

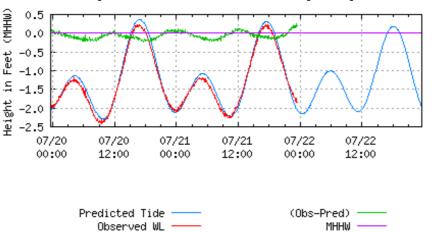
speed

NOAA/NOS/CO-OPS <u>1617760 Hilo, Hilo Bay, Kuhio Bay, HI</u> Barometric Pressure



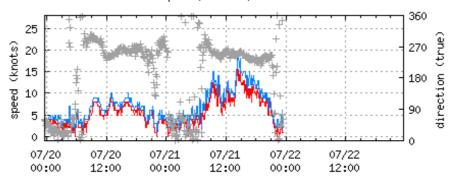
barometric pressure ——
Last Observed Sample: 07/21/2016 23:24 (HST)
Barometric Pressure: 1015.6 mb

NOAA/NOS/CO-OPS 1617433 Kawaihae, HI Preliminary Water Level, relative to Mean Higher High Water(MHHW)



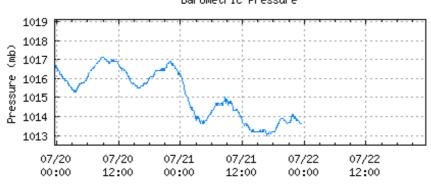
Last Observed Sample: 07/21/2016 23:24 (HST). Data relative to MHHW Observed: -1.84 ft. Predicted: -2.04 ft. Residual: 0.20 ft. Historical Maximum Water Level: Dec 13 2008, 1.22 ft. Next High Tide: 07/22/2016 05:52 (HST), -1.01 ft.

NOAA/NOS/CO-OPS <u>1617433 Kawaihae, HI</u> Wind Speed / Gusts / Direction



speed — gusts — direction + Last Observed Sample: 07/21/2016 23:24 (HST) Wind Speed: 1 knots Gusts: 2 knots Direction: 62° T

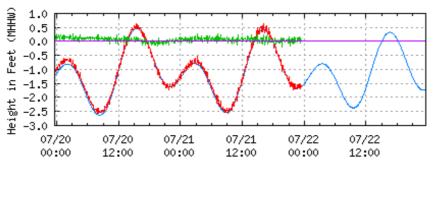
NOAA/NOS/CO-OPS <u>1617433 Kawaihae, HI</u> Barometric Pressure



barometric pressure ----

Last Observed Sample: 07/21/2016 23:24 (HST)
Barometric Pressure: 1013.6 mb

NOAA/NOS/CO-OPS 1615680 Kahului, Kahului Harbor, HI Preliminary Water Level, relative to Mean Higher High Water(MHHW)

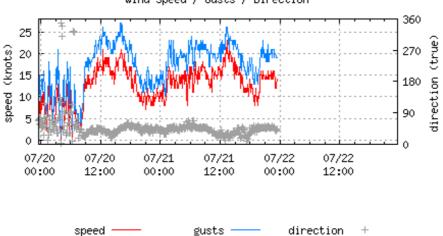


Predicted Tide (Obs-Pred) — Observed WL MHHW —

Last Observed Sample: 07/21/2016 23:24 (HST). Data relative to MHHW Observed: -1.58 ft. Predicted: -1.62 ft. Residual: 0.04 ft. Historical Maximum Water Level: Dec 20 1968, 1.23 ft.

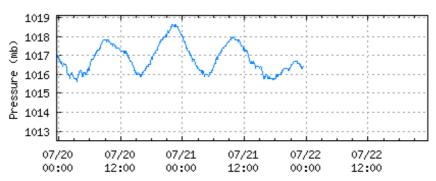
Next High Tide: 07/22/2016 03:31 (HST), -0.79 ft.

NOAA/NOS/CO-OPS 1615680 Kahului, Kahului Harbor, HI Wind Speed / Gusts / Direction



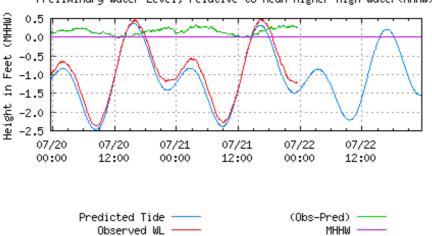
Last Observed Sample: 07/21/2016 23:24 (HST) Wind Speed: 14 knots Gusts: 19 knots Direction: 43° T

NOAA/NOS/CO-OPS 1615680 Kahului, Kahului Harbor, HI Barometric Pressure



barometric pressure ——
Last Observed Sample: 07/21/2016 23:24 (HST)
Barometric Pressure: 1016.4 mb

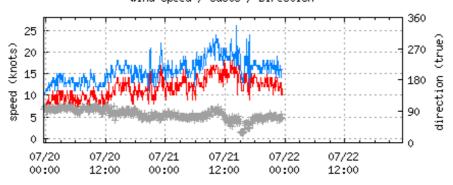
NOAA/NOS/CO-OPS 1612480 Mokuoloe, HI Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Last Observed Sample: 07/21/2016 23:24 (HST). Data relative to MHHW Observed: -1.21 ft. Predicted: -1.46 ft. Residual: 0.25 ft. Historical Maximum Water Level: Jan 8 1974, 1.46 ft.

Next High Tide: 07/22/2016 03:29 (HST), -0.85 ft.

$\begin{array}{c} NOAA/NOS/CO\text{-}OPS \ \underline{1612480 \ Mokuoloe, HI} \\ \text{Wind Speed / Gusts / Direction} \end{array}$



speed — gusts — direction + Last Observed Sample: 07/21/2016 23:24 (HST)
Wind Speed: 10 knots Gusts: 16 knots Direction: 70° T

NOAA/NOS/CO-OPS 1612340 Honolulu, HI Preliminary Water Level, relative to Mean Higher High Water(MHHW) 0.0 -0.5-1.0 -1.5 -2.0 -2.5 07/20 07/20 07/21 07/21 07/22 07/22 00:00 12:00 00:00 12:00 00:00 12:00

Height in Feet (MHHW)

Predicted Tide —— (Obs-Pred) —— Observed WL —— MHHW ——

Last Observed Sample: 07/21/2016 23:24 (HST). Data relative to MHHW Observed: -1.55 ft. Predicted: -1.72 ft. Residual: 0.17 ft. Historical Maximum Water Level: Feb 14 1967, 1.49 ft. Next High Tide: 07/22/2016 05:49 (HST), -0.91 ft.

NOAA/NOS/CO-OPS 1612340 Honolulu, HI Wind Speed / Gusts / Direction 360 25 direction (true) speed (knots) 270 20 15 180 10 5 Ó 07/22 07/20 07/22 07/20 07/21 07/21

speed — gusts — direction + Last Observed Sample: 07/21/2016 23:24 (HST) Wind Speed: 7 knots Gusts: 14 knots Direction: 52° T

12:00

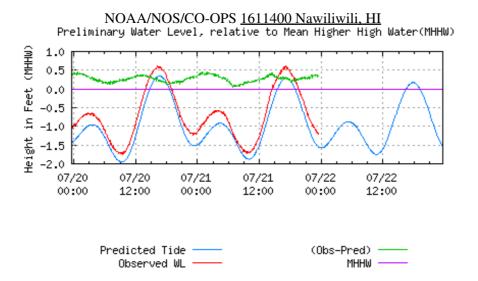
00:00

12:00

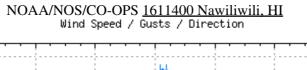
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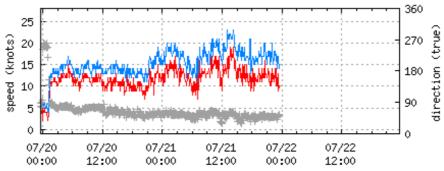
12:00

00:00



Last Observed Sample: 07/21/2016 23:24 (HST). Data relative to MHHW Observed: -1.20 ft. Predicted: -1.54 ft. Residual: 0.34 ft. Historical Maximum Water Level: Sep 11 1992, 3.15 ft. Next High Tide: 07/22/2016 05:16 (HST), -0.88 ft.





speed gusts — Last Observed Sample: 07/21/2016 23:24 (HST)

Wind Speed: 10 knots Gusts: 14 knots Direction: 57° T

Latest Water Level Observations on MHHW

Station ID	Station Name	Date/Time	Observed Water Level	Predicted Tide	Residual Water Level	24 Hour Maximum Storm Tide
1617760	Hilo, Hilo Bay, Kuhio Bay, HI	07/21/2016 23:24 (HST)	-1.89 ft	-2.07 ft	0.18 ft	0.51 ft
1617433	Kawaihae, HI	07/21/2016 23:24 (HST)	-1.84 ft	-2.04 ft	0.20 ft	0.23 ft
1615680	Kahului, Kahului Harbor, HI	07/21/2016 23:24 (HST)	-1.58 ft	-1.62 ft	0.04 ft	0.65 ft
1612480	Mokuoloe, HI	07/21/2016 23:24 (HST)	-1.21 ft	-1.46 ft	0.25 ft	0.49 ft
1612340	Honolulu, HI	07/21/2016 23:24 (HST)	-1.55 ft	-1.72 ft	0.17 ft	0.49 ft
1611400	Nawiliwili, HI	07/21/2016 23:24 (HST)	-1.20 ft	-1.54 ft	0.34 ft	0.61 ft

Center for Operational Oceanographic Products & Services (CO-OPS) | National Ocean Service (NOS) National Oceanic and Atmospheric Administration | U.S. Department of Commerce