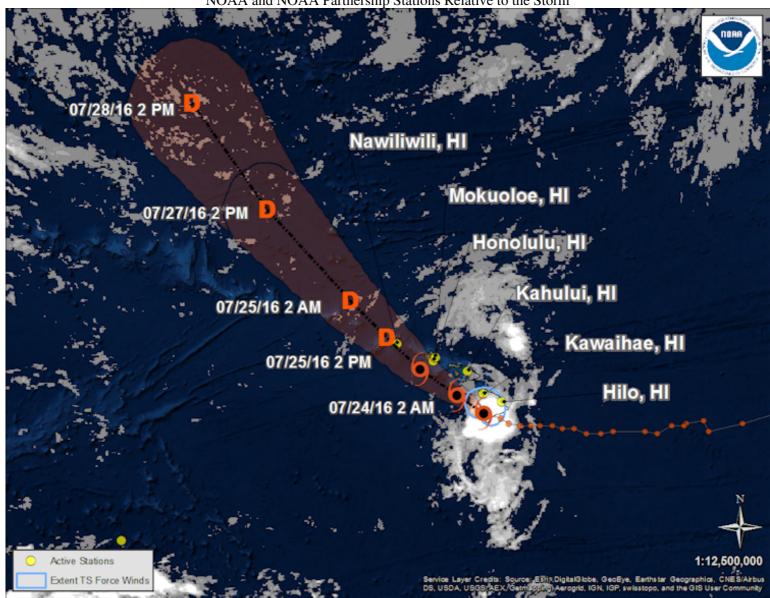




Tropical Storm DARBY QuickLook Posted: 00:00 HST 07/24/2016

NOAA and NOAA Partnership Stations Relative to the Storm



Storm Analysis

As of 07/24/2016 23:00 HST, water levels across the Hawaiian Islands are slightly elevated and range between 0.24 and 0.39 ft above normal tide levels. Wind speeds are decreasing range between 2 and 15 knots with some gusts at 20 knots. Barometric pressure continues to fall 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: LBA

SELECT CENTRAL PACIFIC HURRICANE CENTER ADVISORY INFORMATION:

BULLETIN

TROPICAL STORM DARBY ADVISORY NUMBER 51 NWS CENTRAL PACIFIC HURRICANE CENTER HONOLULU HI EP052016 1100 PM HST SAT JUL 23 2016

...DARBY CONTINUES MOVING SLOWLY WEST-NORTHWESTWARD AWAY FROM THE BIG ISLAND...

SUMMARY OF 1100 PM HST...0900 UTC...INFORMATION

LOCATION...19.5N 156.8W
ABOUT 55 MI...85 KM W OF KAILUA-KONA HAWAII
ABOUT 145 MI...230 KM SSE OF HONOLULU HAWAII
MAXIMUM SUSTAINED WINDS...40 MPH...65 KM/H
PRESENT MOVEMENT...WNW OR 290 DEGREES AT 10 MPH...17 KM/H
MINIMUM CENTRAL PRESSURE...1004 MB...29.65 INCHES

WATCHES AND WARNINGS

CHANGES WITH THIS ADVISORY:

None.

SUMMARY OF WATCHES AND WARNINGS IN EFFECT:

A Tropical Storm Warning is in effect for...

A Tropical Storm Warning means that tropical storm conditions are imminent or already occurring. In this case, tropical storm conditions are occurring over portions of the Big Island, and are expected over Maui County and Oahu later tonight and Sunday.

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

^{*} All islands in the state of Hawaii.

products issued by the National Weather Service office in Honolulu Hawaii.

DISCUSSION AND 48-HOUR OUTLOOK

At 1100 PM HST (0900 UTC), the center of Tropical Storm Darby was located near latitude 19.5 North, longitude 156.8 West. Darby is moving toward the west-northwest near 10 mph (17 km/h). Darby is forecast to make a slight turn toward the northwest later tonight and continue moving west-northwest over the next 48 hours, with little change in forward speed.

Maximum sustained winds are near 40 mph (65 km/h) with higher gusts. Little change in intensity is forecast through Sunday night with slight weakening expected by Monday.

Tropical-storm-force winds extend outward up to 70 miles (110 km) from the center. Sustained winds of 33 mph with gusts to 56 mph were reported at the Oahu Forest NWR RAWS site in the Koolau mountain range earlier this evening.

The estimated minimum central pressure is 1004 mb (29.65 inches).

HAZARDS AFFECTING LAND

WIND: Tropical storm force winds are occurring over portions of the Big Island, and are expected to occur over portions of Maui County later tonight and Sunday, over Oahu Sunday and Sunday night, and over Kauai County Sunday night and Monday.

SURF: Swells generated by Darby are expected to impact the Hawaiian Islands over the next day or so, with swells diminishing thereafter.

RAINFALL: Storm total rainfall of 8 to 12 inches, with possible isolated maximum amounts of 15 inches. These rains could produce life-threatening flash floods and landslides.

NEXT ADVISORY

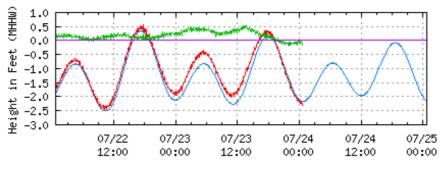
Next intermediate advisory at 200 AM HST. Next complete advisory at 500 AM HST.

Forecaster Houston/Jelsema

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: <u>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 - Barometric, Mokuoloe - Water Level, Mokuoloe - Winds, Mokuoloe - Barometric, Honolulu - Water Level, Honolulu - Winds, Honolulu - Barometric, Nawiliwili - Water Level, Nawiliwili - Water Level, Nawiliwili - Barometric</u>

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

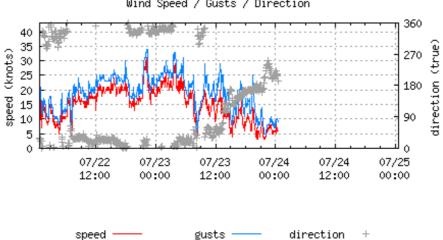


Predicted Tide (Obs-Pred) (Obs-Pred) MHHW

Last Observed Sample: 07/24/2016 00:30 (HST). Data relative to MHHW Observed: -2.32 ft. Predicted: -2.17 ft. Residual: -0.15 ft. Historical Maximum Water Level: Jan 20 1981, 1.37 ft.

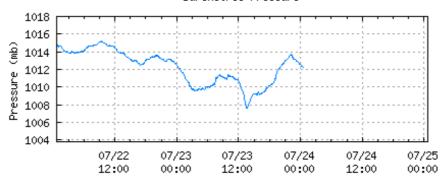
Next High Tide: 07/24/2016 06:27 (HST), -0.80 ft.

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



Last Observed Sample: 07/24/2016 00:30 (HST) Wind Speed: 6 knots Gusts: 9 knots Direction: 194° T

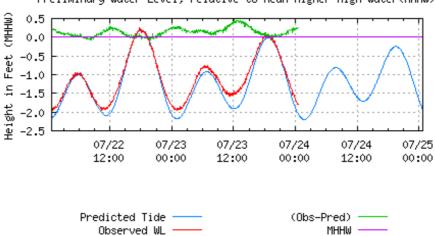
NOAA/NOS/CO-OPS <u>1617760 Hilo, Hilo Bay, Kuhio Bay, HI</u> Barometric Pressure



barometric pressure —— Last Observed Sample: 07/24/2016 00:30 (HST)

Barometric Pressure: 1012.2 mb

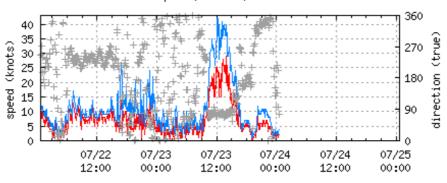
NOAA/NOS/CO-OPS <u>1617433 Kawaihae</u>, <u>HI</u> Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Last Observed Sample: 07/24/2016 00:30 (HST). Data relative to MHHW Observed: -1.80 ft. Predicted: -2.05 ft. Residual: 0.25 ft. Historical Maximum Water Level: Dec 13 2008, 1.22 ft.

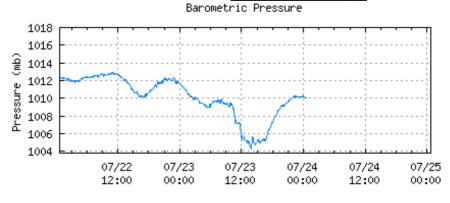
listorical Maximum Water Level: Dec 13 2008, 1.22 ft. Next High Tide: 07/24/2016 07:49 (HST), -0.82 ft.

$\begin{array}{c} NOAA/NOS/CO\text{-}OPS \ \underline{1617433} \ Kawaihae, HI \\ \text{Wind Speed / Gusts / Direction} \end{array}$



speed — gusts — direction + Last Observed Sample: 07/24/2016 00:30 (HST)
Wind Speed: 2 knots Gusts: 4 knots Direction: 75° T

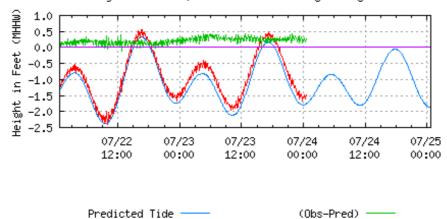
NOAA/NOS/CO-OPS 1617433 Kawaihae, HI



barometric pressure ----

Last Observed Sample: 07/24/2016 00:30 (HST)
Barometric Pressure: 1010.0 mb

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



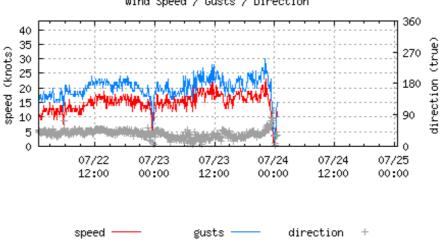
Last Observed Sample: 07/24/2016 00:30 (HST). Data relative to MHHW Observed: -1.49 ft. Predicted: -1.77 ft. Residual: 0.28 ft.

MHHW

Observed WL

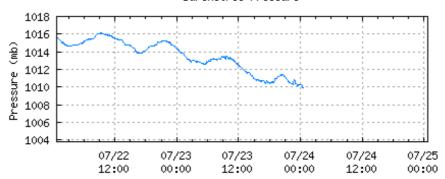
Historical Maximum Water Level: Dec 20 1968, 1.23 ft. Next High Tide: 07/24/2016 05:23 (HST), -0.84 ft.

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



Last Observed Sample: 07/24/2016 00:30 (HST) Wind Speed: 12 knots Gusts: 15 knots Direction: 31° T

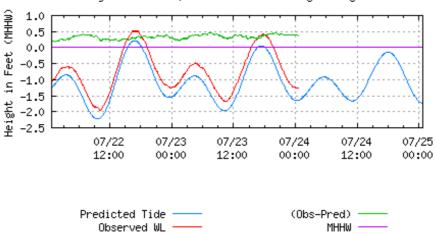
NOAA/NOS/CO-OPS 1615680 Kahului, Kahului Harbor, HI Barometric Pressure



barometric pressure —— Last Observed Sample: 07/24/2016 00:30 (HST)

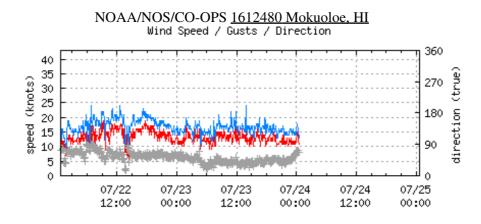
Barometric Pressure: 1009.9 mb

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



Last Observed Sample: 07/24/2016 00:30 (HST). Data relative to MHHW Observed: -1.27 ft. Predicted: -1.64 ft. Residual: 0.37 ft.

Historical Maximum Water Level: Jan 8 1974, 1.46 ft. Next High Tide: 07/24/2016 05:35 (HST), -0.92 ft.



speed — gusts — direction + Last Observed Sample: 07/24/2016 00:30 (HST)
Wind Speed: 11 knots Gusts: 13 knots Direction: 67° T

NOAA/NOS/CO-OPS 1612480 Mokuoloe, HI Barometric Pressure 1018 1016 Pressure (mb) 1014 1012 1010 1008 1006 1004 07/22 07/23 07/23 07/24 07/24 07/25 12:00 00:00 12:00 00:00 12:00 00:00

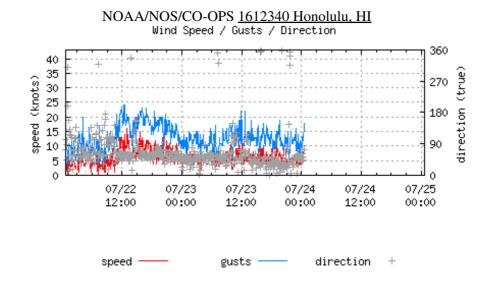
Last Observed Sample: 07/24/2016 00:30 (HST)
Barometric Pressure: 1012.7 mb

barometric pressure

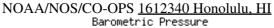
NOAA/NOS/CO-OPS 1612340 Honolulu, HI Preliminary Water Level, relative to Mean Higher High Water(MHHW) Height in Feet (MHHW) 0.5 0.0 -0.5 -1.0 -2.0 07/22 07/23 07/23 07/24 07/24 07/25 00:00 00:00 12:00 00:00 12:00 12:00

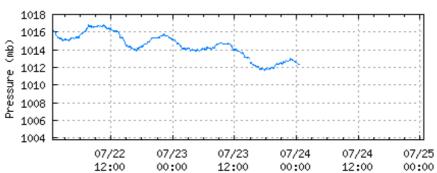
Predicted Tide _____ (Obs-Pred) _____ MHHW ____ Last Observed Sample: 07/24/2016 00:30 (HST). Data relative to MHHW Observed: -1.43 ft. Predicted: -1.73 ft. Residual: 0.30 ft.

Historical Maximum Water Level: Feb 14 1967, 1.49 ft. Next High Tide: 07/24/2016 07:55 (HST), -0.71 ft.



Last Observed Sample: 07/24/2016 00:30 (HST) Wind Speed: 10 knots Gusts: 18 knots Direction: 74° T



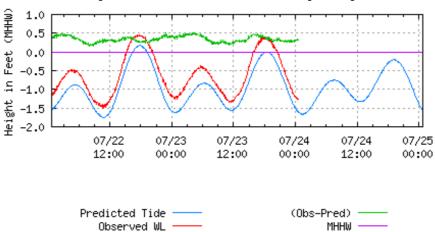


barometric pressure ——

Last Observed Sample: 07/24/2016 00:30 (HST)

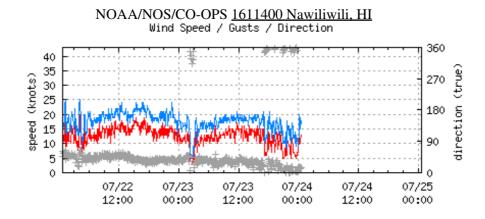
Barometric Pressure: 1012.3 mb

NOAA/NOS/CO-OPS <u>1611400 Nawiliwili, HI</u> Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Last Observed Sample: 07/24/2016 00:30 (HST). Data relative to MHHW Observed: -1.27 ft. Predicted: -1.60 ft. Residual: 0.33 ft.

Historical Maximum Water Level: Sep 11 1992, 3.15 ft. Next High Tide: 07/24/2016 07:30 (HST), -0.75 ft.



direction speed gusts -Last Observed Sample: 07/24/2016 00:30 (HST)

Wind Speed: 13 knots Gusts: 18 knots Direction: 15° T

NOAA/NOS/CO-OPS 1611400 Nawiliwili, HI Barometric Pressure 1018 1016 Pressure (mb) 1014 1012 1010 1008 1006 1004 07/22 07/23 07/23 07/24 07/24 07/25 12:00 00:00 12:00 00:00 12:00 00:00

Last Observed Sample: 07/24/2016 00:30 (HST) Barometric Pressure: 1014.1 mb

barometric pressure

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	07/24/2016 00:30 (HST)	-2.32 ft	-2.17 ft	-0.15 ft	0.36 ft
1617433	Kawaihae, HI	07/24/2016 00:30 (HST)	-1.80 ft	-2.05 ft	0.25 ft	0.08 ft
1615680	Kahului, Kahului Harbor, HI	07/24/2016 00:30 (HST)	-1.49 ft	-1.77 ft	0.28 ft	0.49 ft
1612480	Mokuoloe, HI	07/24/2016 00:30 (HST)	-1.27 ft	-1.64 ft	0.37 ft	0.42 ft
1612340	Honolulu, HI	07/24/2016 00:30 (HST)	-1.43 ft	-1.73 ft	0.30 ft	0.31 ft
1611400	Nawiliwili, HI	07/24/2016 00:30 (HST)	-1.27 ft	-1.60 ft	0.33 ft	0.41 ft

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