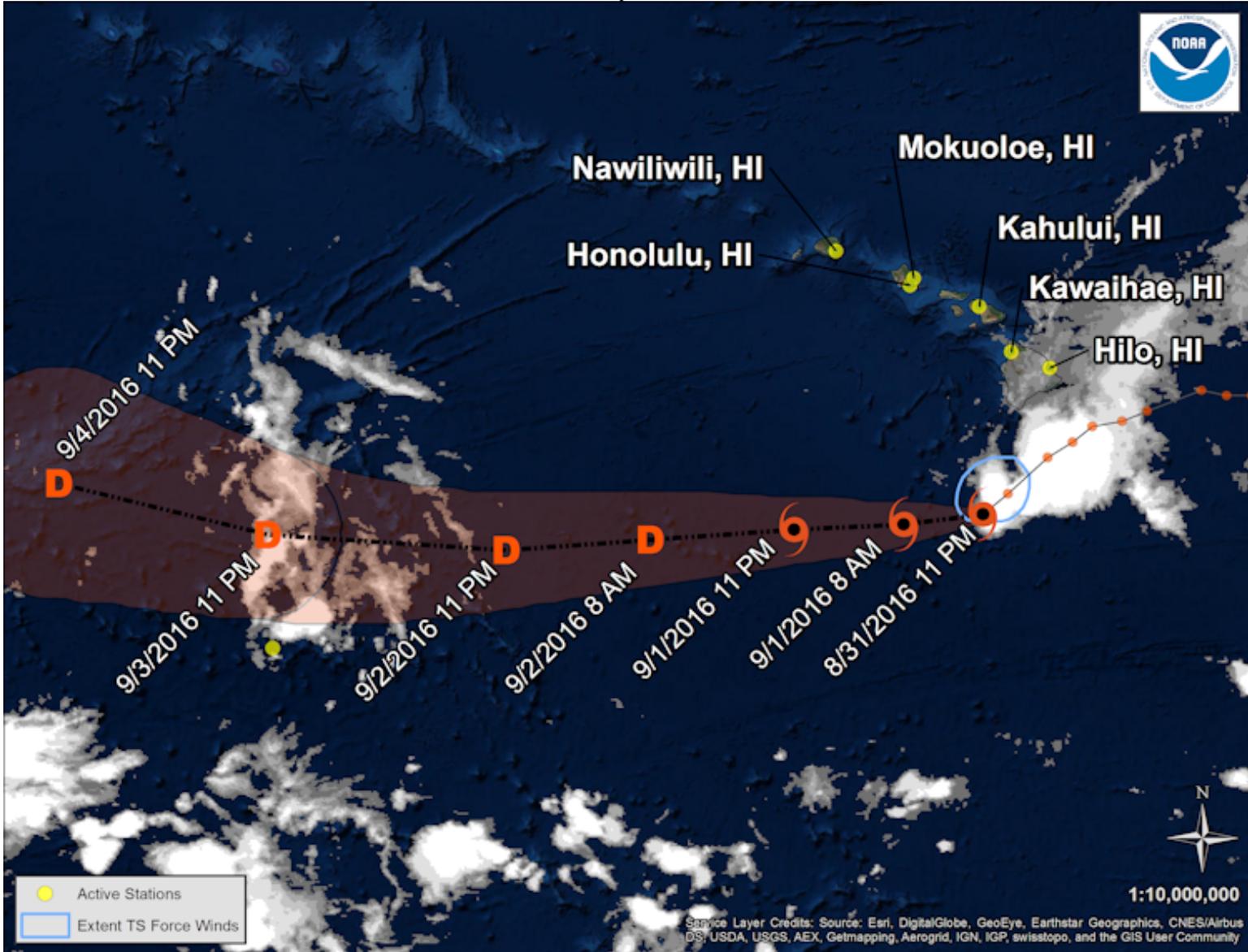




Tropical Storm MADELINE QuickLook
Posted: 00:00 HST 09/01/2016

NOAA and NOAA Partnership Stations Relative to the Storm



Storm Analysis

As of 9/01/2016 00:00 HST, water levels across the Hawaiian Islands are slightly elevated and range between 0.3 and 0.7 feet above normal tide levels. Madeline is weakening and passing just south of the Island of Hawaii. Winds are generally 10 to 20 knots with gusts up to 25 knots. Barometric pressure is starting to rise back to normal across the Hawaiian 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: KLO

SELECT CENTRAL PACIFIC HURRICANE CENTER ADVISORY INFORMATION:

BULLETIN

TROPICAL STORM MADELINE ADVISORY NUMBER 24

NWS CENTRAL PACIFIC HURRICANE CENTER HONOLULU HI EP142016

1100 PM HST WED AUG 31 2016

...WEAKENING MADELINE PASSING WELL SOUTH OF THE BIG ISLAND...

WATCHES AND WARNINGS

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 Warning means that tropical storm conditions are expected somewhere within the watch area, in this case over the next 6 to 12 hours. Preparations to protect life and property should be complete.

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 (0900 UTC), the center of Tropical Storm Madeline was located near 16.9N 156.4W. Madeline is moving toward the west near 14 mph. This motion is expected to continue for the next couple of days, with some increase in forward speed expected on Friday.

Maximum sustained winds are near 50 mph with higher gusts. Steady weakening is forecast during the next 48 hours, and Madeline is expected to weaken to a Tropical Depression by Friday.

Tropical-storm-force winds extend outward up to 90 miles from the center.

The estimated minimum central pressure is 1003 mb.

HAZARDS AFFECTING LAND

WIND: Tropical storm conditions are expected to continue over Hawaii County and portions of Maui County tonight. Winds will be strongest over mountains and where winds blow downslope from higher terrain.

SURF: Large swells generated by Madeline will peak in Hawaiian waters overnight, and could be damaging along east facing shores of Hawaii County, especially in the Puna and Kau Districts.

RAIN: Madeline is expected to produce total rain accumulations of 5 to 10 inches, with isolated maximum amounts near 15 inches, across Hawaii County, especially over windward areas and the Kau District. Total rainfall accumulations of 1 to 3 inches, with isolated maximum amounts up to 4 inches, can be expected in the islands of Maui County, mainly over windward terrain. This rainfall may lead to dangerous flash floods and mudslides.

NEXT ADVISORY

Next intermediate advisory at 200 AM HST.

Next complete advisory at 500 AM HST.

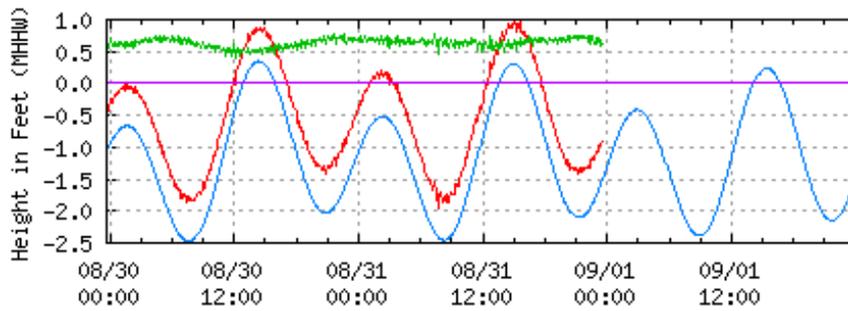
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Forecaster Birchard

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.

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](#), [Mokuoloe - Barometric](#), [Honolulu - Water Level](#), [Honolulu - Winds](#), [Honolulu - Barometric](#), [Nawiliwili - Water Level](#), [Nawiliwili - Winds](#), [Nawiliwili - Barometric](#)

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



Predicted Tide ——— blue ———
 Observed WL ——— red ———
 (Obs-Pred) ——— green ———
 MHHW ——— purple ———

Last Observed Sample: 08/31/2016 23:30 (HST). Data relative to MHHW

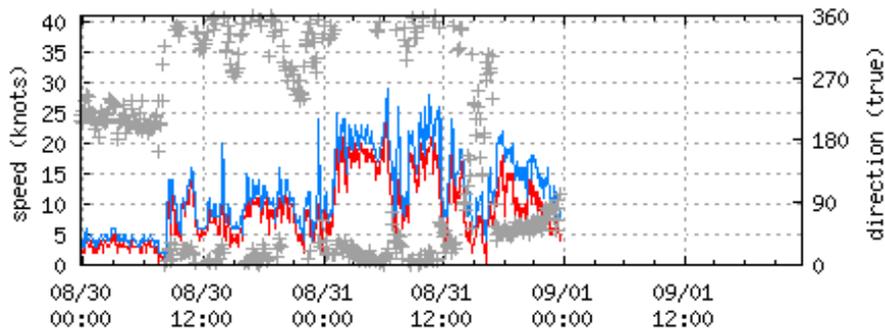
Observed: -0.91 ft. Predicted: -1.53 ft. Residual: 0.62 ft.

Historical Maximum Water Level: Jan 20 1981, 1.37 ft.

Next High Tide: 09/01/2016 02:56 (HST), -0.41 ft.

NOAA/NOS/CO-OPS 1617760 Hilo, Hilo Bay, Kuhio Bay, HI

Wind Speed / Gusts / Direction

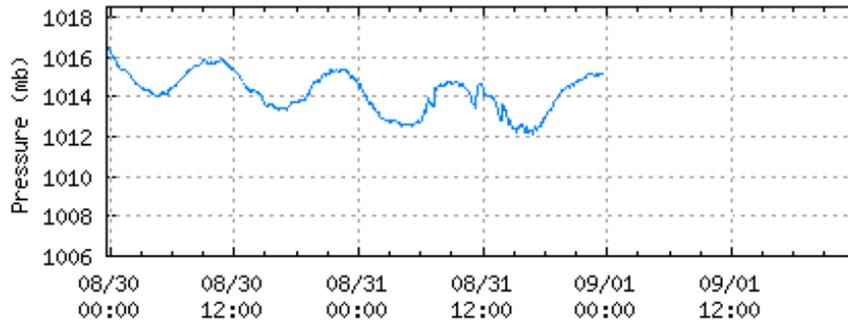


speed ——— red ——— gusts ——— blue ——— direction +

Last Observed Sample: 08/31/2016 23:30 (HST)

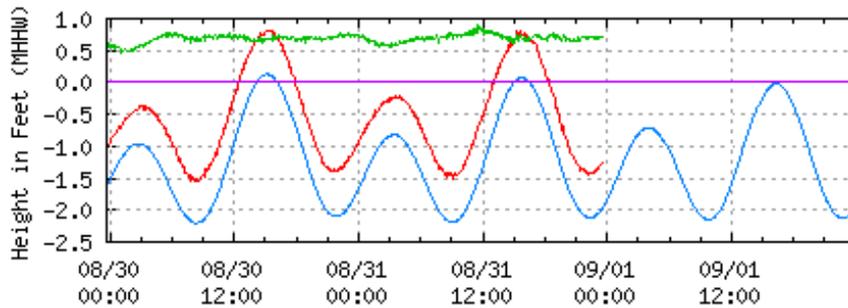
Wind Speed: 4 knots Gusts: 8 knots Direction: 103° T

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



barometric pressure —
Last Observed Sample: 08/31/2016 23:30 (HST)
Barometric Pressure: 1015.1 mb

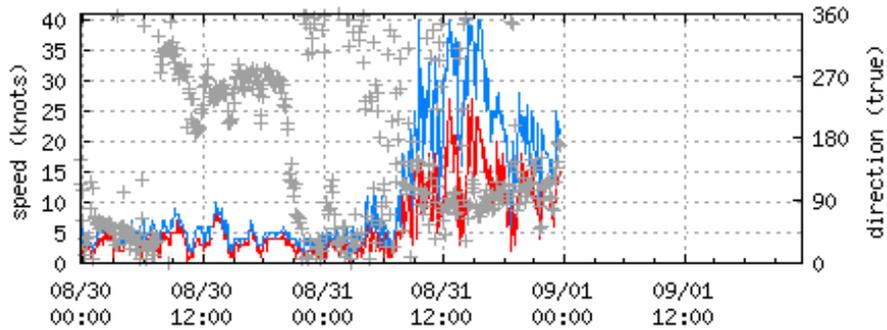
NOAA/NOS/CO-OPS 1617433 Kawaihae, HI
Preliminary Water Level, relative to Mean Higher High Water (MHHW)



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

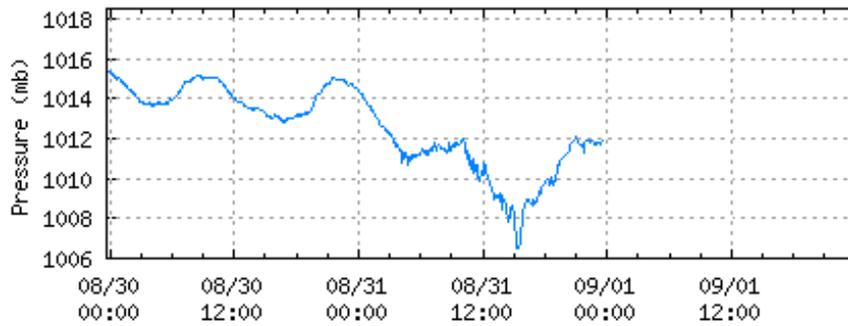
Last Observed Sample: 08/31/2016 23:30 (HST). Data relative to MHHW
Observed: -1.27 ft. Predicted: -1.98 ft. Residual: 0.71 ft.
Historical Maximum Water Level: Dec 13 2008, 1.22 ft.
Next High Tide: 09/01/2016 04:02 (HST), -0.71 ft.

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



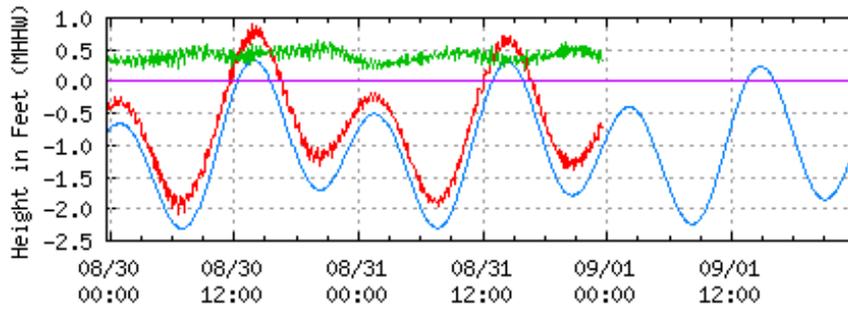
speed — gusts — direction +
Last Observed Sample: 08/31/2016 23:30 (HST)
Wind Speed: 15 knots Gusts: 22 knots Direction: 170° T

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



barometric pressure —
Last Observed Sample: 08/31/2016 23:30 (HST)
Barometric Pressure: 1011.9 mb

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



Predicted Tide ——— (blue line)
 Observed WL ——— (red line)
 (Obs-Pred) ——— (green line)
 MHHW ——— (purple line)

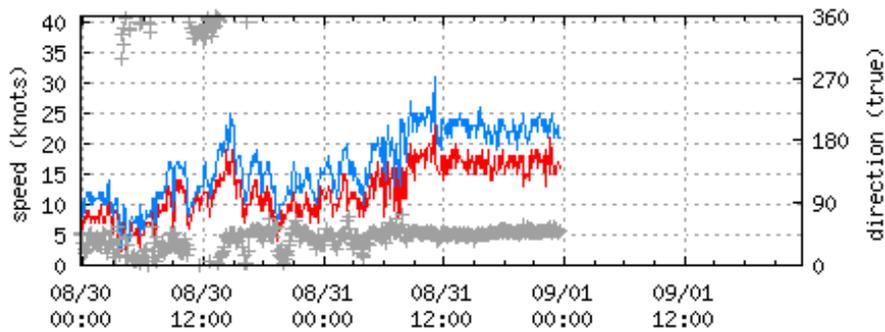
Last Observed Sample: 08/31/2016 23:30 (HST). Data relative to MHHW

Observed: -0.71 ft. Predicted: -1.05 ft. Residual: 0.34 ft.

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

Next High Tide: 09/01/2016 02:10 (HST), -0.40 ft.

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

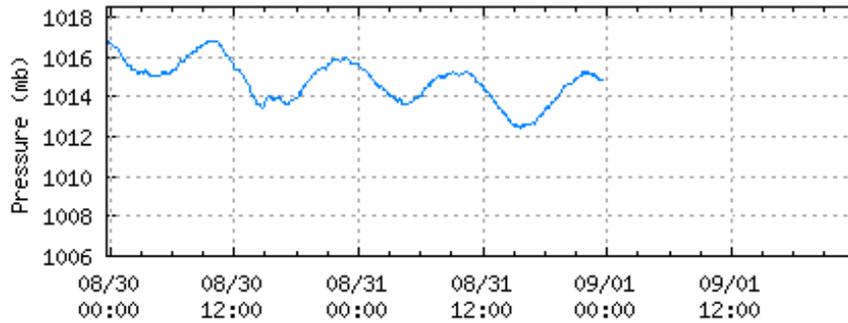


speed ——— (red line) gusts ——— (blue line) direction +

Last Observed Sample: 08/31/2016 23:30 (HST)

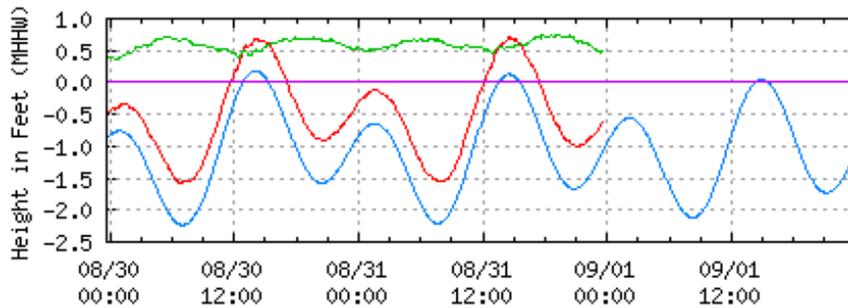
Wind Speed: 16 knots Gusts: 21 knots Direction: 51° T

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



barometric pressure —
Last Observed Sample: 08/31/2016 23:30 (HST)
Barometric Pressure: 1014.8 mb

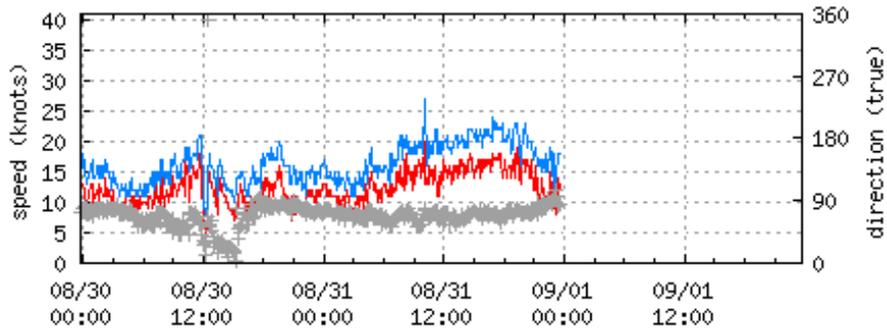
NOAA/NOS/CO-OPS 1612480 Mokuoloe, HI
Preliminary Water Level, relative to Mean Higher High Water (MHHW)



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

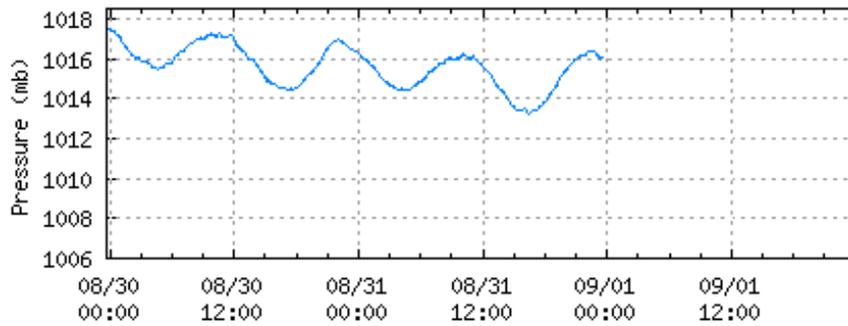
Last Observed Sample: 08/31/2016 23:30 (HST). Data relative to MHHW
Observed: -0.63 ft. Predicted: -1.11 ft. Residual: 0.48 ft.
Historical Maximum Water Level: Jan 8 1974, 1.46 ft.
Next High Tide: 09/01/2016 02:12 (HST), -0.56 ft.

NOAA/NOS/CO-OPS 1612480 Mokuoloe, HI
Wind Speed / Gusts / Direction



speed — gusts — direction +
Last Observed Sample: 08/31/2016 23:30 (HST)
Wind Speed: 12 knots Gusts: 18 knots Direction: 85° T

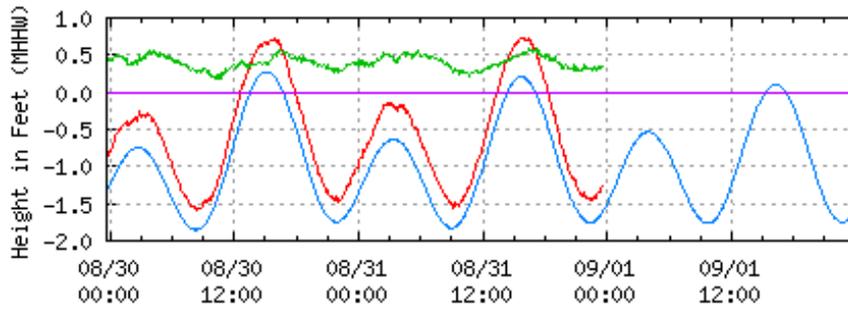
NOAA/NOS/CO-OPS 1612480 Mokuoloe, HI
Barometric Pressure



barometric pressure —

Last Observed Sample: 08/31/2016 23:30 (HST)
Barometric Pressure: 1016.1 mb

NOAA/NOS/CO-OPS 1612340 Honolulu, HI
Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Predicted Tide ——— blue ———
Observed WL ——— red ———
(Obs-Pred) ——— green ———
MHHW ——— purple ———

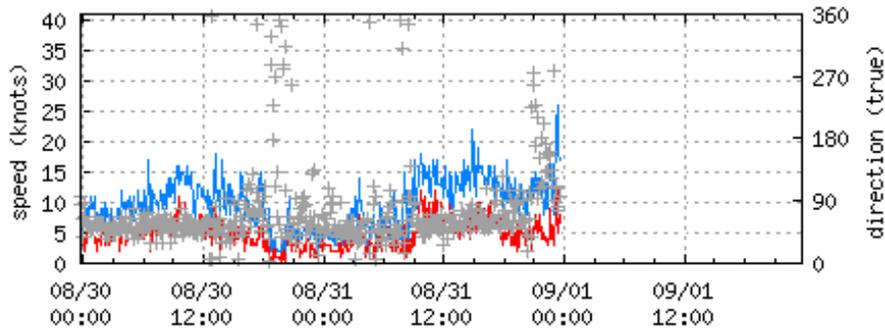
Last Observed Sample: 08/31/2016 23:30 (HST). Data relative to MHHW

Observed: -1.27 ft. Predicted: -1.62 ft. Residual: 0.35 ft.

Historical Maximum Water Level: Feb 14 1967, 1.49 ft.

Next High Tide: 09/01/2016 04:00 (HST), -0.53 ft.

NOAA/NOS/CO-OPS 1612340 Honolulu, HI
Wind Speed / Gusts / Direction

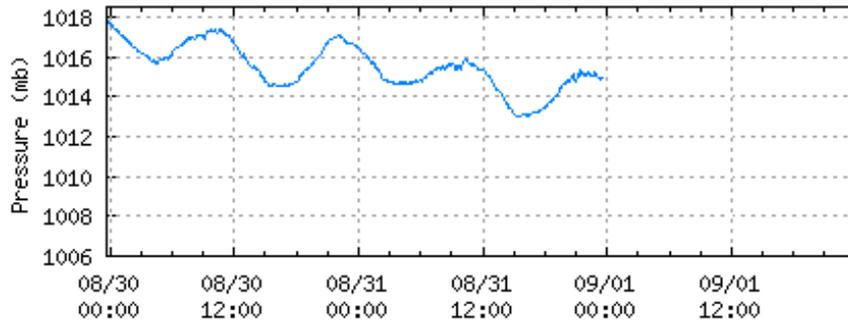


speed ——— red ——— gusts ——— blue ——— direction +

Last Observed Sample: 08/31/2016 23:30 (HST)

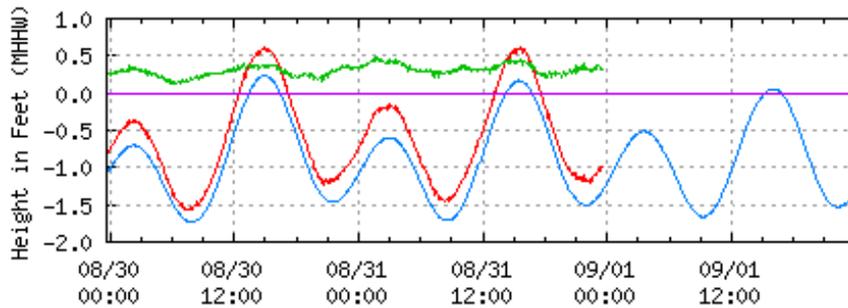
Wind Speed: 8 knots Gusts: 17 knots Direction: 98° T

NOAA/NOS/CO-OPS 1612340 Honolulu, HI
Barometric Pressure



barometric pressure —
Last Observed Sample: 08/31/2016 23:30 (HST)
Barometric Pressure: 1014.9 mb

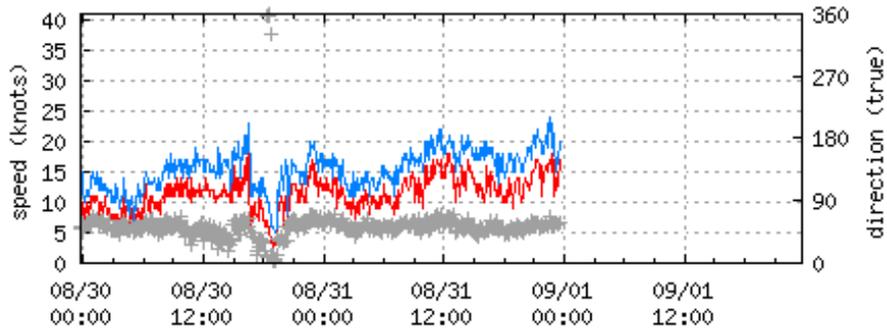
NOAA/NOS/CO-OPS 1611400 Nawiliwili, HI
Preliminary Water Level, relative to Mean Higher High Water (MHHW)



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

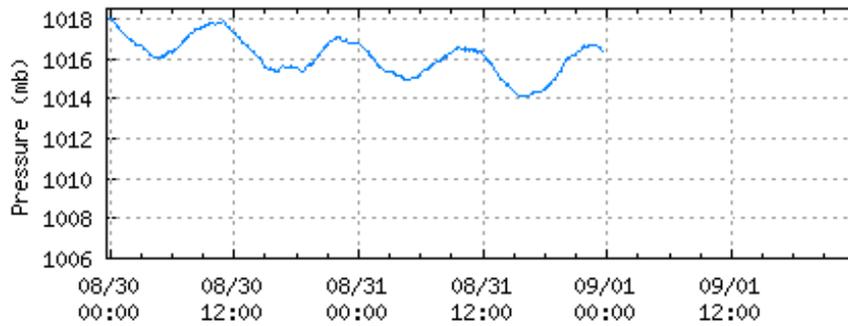
Last Observed Sample: 08/31/2016 23:30 (HST). Data relative to MHHW
Observed: -0.99 ft. Predicted: -1.32 ft. Residual: 0.33 ft.
Historical Maximum Water Level: Sep 11 1992, 3.15 ft.
Next High Tide: 09/01/2016 03:37 (HST), -0.51 ft.

NOAA/NOS/CO-OPS 1611400 Nawiliwili, HI
Wind Speed / Gusts / Direction



speed — gusts — direction +
Last Observed Sample: 08/31/2016 23:30 (HST)
Wind Speed: 17 knots Gusts: 20 knots Direction: 58° T

NOAA/NOS/CO-OPS 1611400 Nawiliwili, HI
Barometric Pressure



barometric pressure —

Last Observed Sample: 08/31/2016 23:30 (HST)
Barometric Pressure: 1016.4 mb

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 | 08/31/2016 23:30 (HST) | -0.91 ft | -1.53 ft | 0.62 ft | 0.98 ft |
| 1617433 | Kawaihae, HI | 08/31/2016 23:30 (HST) | -1.27 ft | -1.98 ft | 0.71 ft | 0.81 ft |
| 1615680 | Kahului, Kahului Harbor, HI | 08/31/2016 23:30 (HST) | -0.71 ft | -1.05 ft | 0.34 ft | 0.71 ft |
| 1612480 | Mokuoloe, HI | 08/31/2016 23:30 (HST) | -0.63 ft | -1.11 ft | 0.48 ft | 0.70 ft |
| 1612340 | Honolulu, HI | 08/31/2016 23:30 (HST) | -1.27 ft | -1.62 ft | 0.35 ft | 0.74 ft |
| 1611400 | Nawiliwili, HI | 08/31/2016 23:30 (HST) | -0.99 ft | -1.32 ft | 0.33 ft | 0.62 ft |

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