Storm Analysis

As of 9/11/2018 00:00 HST, water levels across the Hawaiian Islands continue to be slightly elevated and range between 0.2 and 0.8 feet above normal tide levels. Winds remain 15 knots or less, with gusts up to 20 knots, and barometric pressure is generally steady.
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 real-time and historical inundation information for select stations affected by this storm, please visit Coastal Inundation Dashboard. For additional data, please see the Center for Operational Oceanographic Products & Services website.

For more information or archived products and reports, please visit the Storm QuickLook Homepage.

Analyst: PFF

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Select Central Pacific Hurricane Center Advisory Information:

BULLETIN
Tropical Storm Olivia Advisory Number 43
NWS Central Pacific Hurricane Center Honolulu HI EP172018
1100 PM HST Mon Sep 10 2018

...OLIVIA CONTINUES MOVING TOWARD HAWAII...

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

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LOCATION...22.0N 150.1W
ABOUT 360 MI...580 KM ENE OF HILO HAWAII
ABOUT 505 MI...810 KM E OF HONOLULU HAWAII
MAXIMUM SUSTAINED WINDS...70 MPH...110 KM/H
PRESENT MOVEMENT...W OR 280 DEGREES AT 9 MPH...15 KM/H
MINIMUM CENTRAL PRESSURE...996 MB...29.42 INCHES

WATCHES AND WARNINGS

CHANGES WITH THIS ADVISORY:

None.

SUMMARY OF WATCHES AND WARNINGS IN EFFECT:

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

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 somewhere in the warning area within 36 hours.

A Tropical Storm Watch means that tropical storm conditions are possible in the watch area within 48 hours.
For storm information specific to your area, please monitor products issued by the National Weather Service office in Honolulu Hawaii.

DISCUSSION AND OUTLOOK
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At 1100 PM HST (0900 UTC), the center of Tropical Storm Olivia was located by aircraft near latitude 22.0 North, longitude 150.1 West. Olivia is moving toward the west near 9 mph (15 km/h). A turn to the west and west-southwest is expected early Tuesday, with this general motion continuing for the next couple of days. On the forecast track, the center of Olivia will be moving over the main Hawaiian Islands late Tuesday night into Wednesday.

Maximum sustained winds are near 70 mph (110 km/h) with higher gusts. Gradual weakening is forecast during the next 48 hours, but Olivia is expected to remain a tropical storm as it moves over the islands.

Tropical-storm-force winds extend outward up to 105 miles (165 km) from the center.

The estimated minimum central pressure is 996 mb (29.42 inches).

HAZARDS AFFECTING LAND
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WIND: Tropical storm conditions are expected over Maui County and the Big Island starting late Tuesday or Tuesday night. Tropical storm conditions are expected over Oahu starting late Tuesday night or Wednesday morning. Tropical storm conditions are possible over Kauai County starting Wednesday afternoon or evening.

RAINFALL: Olivia is expected to produce total rainfall accumulations of 10 to 15 inches, with isolated maximum amounts of 20 inches possible. This rainfall may produce life-threatening flash flooding.

SURF: Large swells generated by Olivia will impact the main Hawaiian Islands over the next couple of days. This will cause surf to build, mainly along exposed east facing shores, and surf may become damaging.

NEXT ADVISORY
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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.

Last Observed Sample: 09/10/2018 23:30 (HST). Data relative to MHHW
   Observed: -1.41 ft. Predicted: -2.06 ft. Residual: 0.65 ft.
   Historical Maximum Water Level: Jul 24 2017, 1.54 ft.
   Next High Tide: 09/11/2018 04:09 (HST), -0.08 ft.

Wind Speed: 7 knots Gusts: 7 knots Direction: 237° T
NOAA/NOS/CO-OPS 1617760 Hilo, Hilo Bay, Kuhio Bay, HI

Barometric Pressure

Last Observed Sample: 09/10/2018 23:30 (HST)
Barometric Pressure: 1013.9 mb

NOAA/NOS/CO-OPS 1617433 Kawaihae, HI

Preliminary Water Level, relative to Mean Higher High Water (MHHW)

Last Observed Sample: 09/10/2018 23:30 (HST). Data relative to MHHW
Observed: -1.76 ft. Predicted: -2.22 ft. Residual: 0.46 ft.
Historical Maximum Water Level: Dec 15 2016, 1.33 ft.
Next High Tide: 09/11/2018 05:15 (HST), -0.35 ft.
Wind Speed / Gusts / Direction

Last Observed Sample: 09/10/2018 23:30 (HST)
Wind Speed: 6 knots Gusts: 8 knots Direction: 257° T

Barometric Pressure

Last Observed Sample: 09/10/2018 23:30 (HST)
Barometric Pressure: 1013.5 mb
Last Observed Sample: 09/10/2018 23:30 (HST). Data relative to MHHW

- Observed: -1.40 ft  Predicted: -1.50 ft  Residual: 0.10 ft
- Historical Maximum Water Level: Aug 21 2017, 1.33 ft
- Next High Tide: 09/11/2018 03:21 (HST), -0.12 ft

Last Observed Sample: 09/10/2018 23:30 (HST)

- Wind Speed: 11 knots  Gusts: 14 knots  Direction: 31° T
NOAA/NOS/CO-OPS 1615680 Kahului, Kahului Harbor, HI

Last Observed Sample: 09/10/2018 23:30 (HST)
Barometric Pressure: 1014.9 mb

NOAA/NOS/CO-OPS 1612480 Mokuoloe, HI
Last Observed Sample: 09/10/2018 23:48 (HST). Data relative to MHHW
Observed: -0.98 ft. Predicted: -1.43 ft. Residual: 0.45 ft.
Historical Maximum Water Level: Aug 21 2017, 1.47 ft.
Next High Tide: 09/11/2018 03:31 (HST), -0.33 ft.
NOAA/NOS/CO-OPS 1612480 Mokuoloe, HI

Wind Speed / Gusts / Direction

Last Observed Sample: 09/10/2018 23:48 (HST)
Wind Speed: 8 knots Gusts: 10 knots Direction: 52° T

NOAA/NOS/CO-OPS 1612480 Mokuoloe, HI

Barometric Pressure

Last Observed Sample: 09/10/2018 23:48 (HST)
Barometric Pressure: 1015.2 mb
Last Observed Sample: 09/10/2018 23:30 (HST). Data relative to MHHW

- Observed: -1.63 ft. Predicted: -1.86 ft. Residual: 0.23 ft.
- Next High Tide: 09/11/2018 05:15 (HST), -0.21 ft.

Last Observed Sample: 09/10/2018 23:30 (HST)

- Wind Speed: 4 knots
- Gusts: 7 knots
- Direction: 67° T
NOAA/NOS/CO-OPS 1612340 Honolulu, HI

Barometric Pressure

Last Observed Sample: 09/10/2018 23:30 (HST)
Barometric Pressure: 1014.7 mb

NOAA/NOS/CO-OPS 1611400 Nawiliwili, HI

Preliminary Water Level, relative to Mean Higher High Water (MHHW)

Last Observed Sample: 09/10/2018 23:48 (HST). Data relative to MHHW
Observed: -1.15 ft. Predicted: -1.59 ft. Residual: 0.44 ft.
Historical Maximum Water Level: Sep 11 1992, 3.15 ft.
Next High Tide: 09/11/2018 04:52 (HST), -0.26 ft.
NOAA/NOS/CO-OPS 1611400 Nawiliwili, HI

**Wind Speed / Gusts / Direction**

Last Observed Sample: 09/10/2018 23:48 (HST)

Wind Speed: 9 knots  
Gusts: 12 knots  
Direction: 32° T

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This data type is not currently available from this station.

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Last Observed Sample: 09/10/2018 23:48 (HST)

Barometric Pressure: 1015.6 mb
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<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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<td>1617760</td>
<td>Hilo, Hilo Bay, Kuhio Bay, HI</td>
<td>09/10/2018 23:30 (HST)</td>
<td>-1.41 ft</td>
<td>-2.06 ft</td>
<td>0.65 ft</td>
<td>0.96 ft</td>
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<td>Kawaihae, HI</td>
<td>09/10/2018 23:30 (HST)</td>
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<td>-2.22 ft</td>
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<td>-1.59 ft</td>
<td>0.44 ft</td>
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</tbody>
</table>

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