Runups in the Hawaiian Islands for Large, Pacific-Wide, 20th and Early 21st CenturyTsunamis

Runups given are estimated maximum heights in feet of water levels on land relative to sea level, produced by inland flooding of the tsunami's waves. Runups should not be confused with inundation limits (i.e., horizontal measures of the inland penetrations of a tsunami's waves). In low-lying areas, inundation can extend inland for several hundred yards. Source locations for these tsunamis are the Aleutian Islands (1946 and 1957), the Kamchatka Peninsula (1952), Chile (1960), Alaska (1964), and Japan (2011). Runup data are not available for all of these tsunamis for all of the islands. Further discussion of runups, data sources, and the sectional runup maps from which these island-wide maps were derived may be found in

- Field Guide for Measuring Tsunami Runups and Inundations, State of Hawaii, Department of Defense, Civil Defense Division, Tsunami Technical Review Committee, 2002.
- Miller, J. and V. Roeber, 2012, Final Report Tsunami Observer Program and the Tsunami of March 11, 2011, Environmental Center, Univ. of Hawai'i.
- Trusdell, F.A., Chadderton, A., Hinchliffe, G., Hara, A. Patenge, B., and T Weber, 2012, Tohoku-Oki earthquake tsunami runup and inundation data for sites around the Island of Hawai'i, U.S. Geological Survey Open-File Report 2012–1229.

Illustrations by Nancy Hulbirt, data compiled by Daniel A. Walker and the NOAA International Tsunami Information Center.

Kauai

0–1000 feet
1000–2000 feet
2000–3000 feet
3000–4000 feet
4000–5000 feet
> 5000 feet
Urban areas
Highways
Streams
Canals

Runups in feet
1946 1957 1960 1964 2011

0 5 mi
0 5 km

N

Haena
Princeville
Hanalei Bay
Anahola Bay
Kilauea
Kepuhi Pt
Kalihiwai Bay
Klauea Bay
Moloaa Bay
Anapalau Pt
Kealia
Kealia Stream
KAPAA
Wailua
Wailua River
Hanamaulu Stream
Hanamaulu Bay
LIHUE
Nawiliwili
Huleia Stream
Kawelikoa Pt
Makahuena Pt
Waita Reservoir
Lawai Stream
Nomilu Fishpond
Kukuiula Bay
Koheo Pt
Wahiawa Bay
Hanapepe Bay
Paweo Pt
Puolo
Pakala Pt
Makaweli
Oomano Pt
Kekaha
Waimea
Kokole Pt
Kaumakani
Barking Sands
Polihale Heiau
Mana
Nohili Pt
Kaa Rd
Makaha Pt
Keawanui Landing
Makuaiki Pt
Puanaiea Pt
Kahilau Stream
Honakeaiki
Wainiha River
Lumahai River
Waioli Stream
Hanalei River

23, 29, 6.5,_,_
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30, 28, 9.5, 6,_
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