

# M 4.3, ISLAND OF HAWAII, HAWAII

Origin Time: Sat 2016-07-23 07:16:05 UTC (07:16:05 local)

Location: 19.53°N 155.96°W Depth: 11 km

Created: 2 hours, 2 minutes after earthquake

## Estimated Fatalities

Green alert for shaking-related fatalities and economic losses. There is a low likelihood of casualties and damage.

## Estimated Economic Losses



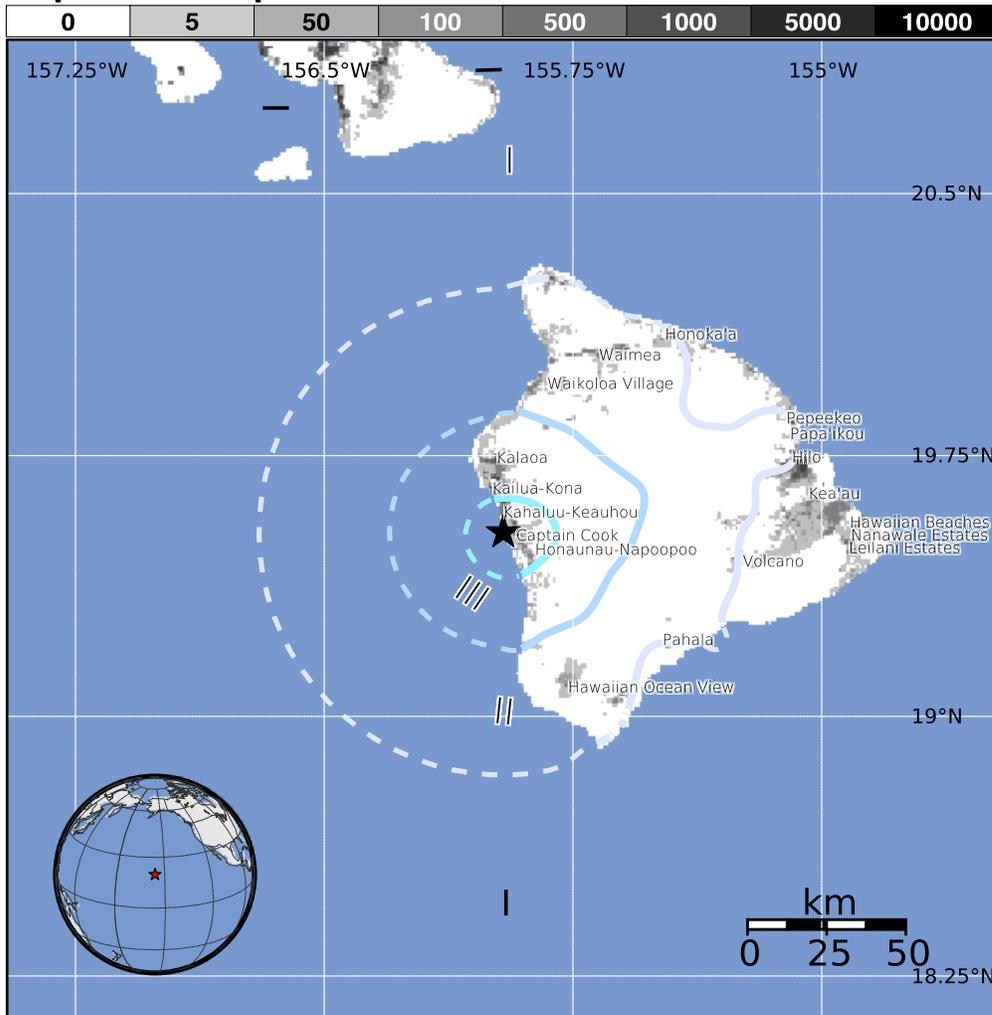
## Estimated Population Exposed to Earthquake Shaking

ESTIMATED POPULATION EXPOSURE (k = x1000)		222k	96k	20k	2k	0	0	0	0	0
ESTIMATED MODIFIED MERCALLI INTENSITY		I	II-III	IV	V	VI	VII	VIII	IX	X+
PERCEIVED SHAKING		Not felt	Weak	Light	Moderate	Strong	Very Strong	Severe	Violent	Extreme
POTENTIAL DAMAGE	Resistant Structures	none	none	none	V. Light	Light	Moderate	Moderate/Heavy	Heavy	V. Heavy
	Vulnerable Structures	none	none	none	Light	Moderate	Moderate/Heavy	Heavy	V. Heavy	V. Heavy

\*Estimated exposure only includes population within the map area.

## Population Exposure

population per ~1 sq. km from Landsat



## Structures:

Overall, the population in this region resides in structures that are resistant to earthquake shaking, though some vulnerable structures exist.

## Historical Earthquakes (with MMI levels):

Date (UTC)	Dist. (km)	Mag.	Max MMI(#)	Shaking Deaths
1982-01-21	52	5.6	VII(10)	0
1989-06-26	89	6.4	IX(355)	0
1975-11-29	100	7.2	IX(30k)	2

Recent earthquakes in this area have caused secondary hazards such as landslides that might have contributed to losses.

## Selected City Exposure

from GeoNames.org

MMI	City	Population
V	Kealahou	2k
IV	Honalo	2k
IV	Captain Cook	3k
IV	Kahaluu-Keauhou	4k
IV	Honaunau-Napooopoo	3k
III	Holualoa	9k
III	Kailua-Kona	12k
II	Hilo	43k
I	Kihei	21k
I	Kahului	26k
I	Wailuku	15k

bold cities appear on map

(k = x1000)

PAGER content is automatically generated, and only considers losses due to structural damage. Limitations of input data, shaking estimates, and loss models may add uncertainty.

<http://earthquake.usgs.gov/earthquakes/eventpage/hv61350131>

Event ID: hv61350131