Date	HST	HST (W&K)	Date	GMT	GMThon	region	qual mag	Max Intensity	pub AMP	meas AMP	LAO	Mcalc	Notes	M det	M det source	Source	Comments	Remarks
9/1/1903	19:16		9/2/1903	5:46		east hawaii		felt		0.2	4.2	5.16					not listed in Hon station bulletin (Hazard, 1910); found on Hon film record; PCA, 10/14/1903; HG, 10/16/1903; not found in HS, HEB, HH, HT or MN	Magnitude calculation for Milne instrument based on three independently determined magnitudes >6. M = 3.16+0.516*log((peak-to-peak amp)/2)+LA0
10/2/1903	6:05	10/2/1903	16:35			east hawaii?		felt		0.3	4.2	5.27	threshold mag				disturbed record; PCA, 11/16/1903; not found in HH or HT	Warshauer notes: felt at Hilo [eruption precursor?]
12/8/1903	7:15	12/8/1903	17:45			east hawaii		felt		0.5	4.2	5.41	threshold mag				disturbed record; PCA, January 11, 1904, p. 6; not found in HH or HT; no mention in VHR entry covering this date	Warshauer notes: slight earthquake felt in Hilo
2/18/04	10:25		2/18/04	10:25		east hawaii		IV?		0.1	4.2	4.97	time marks on Hon film are HST				not found in Hon Station Bulletin (Hazard, 1910); found on Hon film record; HT, 2/191904	Warshauer notes: vigorous earthquake felt in Hilo between 10 and 11 o'clock
3/29/04	11:45		3/29/04	22:15	22:13	kohala				1	3.85	5.38					found on Hon film record; HG, 4/5/1904; PCA, 4/13/1904; not found in HS, HEB, MN, HH or HT	Warshauer notes: A severe earthquake was felt in Kohala on the afternoon of the 29th inst. It lasted ten minutes, moved NW from Kohala toward Mahukona; felt in Kohala [11:45] and Waimea [no time]
3/29/04	11:48		3/29/04		22:18	kohala??				0.8	3.85	5.32	sseismogram suggest location different from preceding				not recognized in newspaper reports	
4/29/04	10:30		4/29/04	21:00	21:00	kaoiki??		VI?		2	4.2	5.79					not listed in Hon station Bulletin (Hazard, 1910); found on Hon film record; PCA, 5/71904; 5/16/1904; not found in HH or HT	Warshauer notes: On Friday, April 29 at 10:30 o'clock [am assumed] a most severe earthquake shock was felt at Keauhou and Punaluu. The shock lasted about eight seconds and was apparently from north to south; heavy shock at pepeekeo [10:15] [same quake?]
6/4/04	12:25	12:25	6/4/04	22:55	22:58	molokai?		VI; V (S&C)		1.6	4.05	5.63	local, boom caught by spider web				"Appearance of Hon seismogram suggests a distance of Hawaii or closer; Lyman states (a long gentle shake) suggesting that this M5 must be farther from Hilo than Kilauea's distance	many felt reports-see 1903-1921 eq file and bib
6/28/04	22:00	22:00	6/29/04	8:30		east hawaii		IV?		0.2	4.05	5.07	threshold mag				not found on Hon film record; HT, 7/1/1904; HS, 7/2/1904; PCA, 7/14/1904; not found in HG, HEB or HH	Lyman notes: a long shake, two shocks; Warshauer notes: a pretty vigorous earthquake shock was felt [Hilo] Tuesday night at 10 o'clock; slight shock at Pepeekeo on the 28th

Date	HST	HST (W&K)	Date	GMT	GMThon	region	qual mag	Max Intensity	pub AMP	meas AMP	LAO	Mcalc	Notes	M det	M det source	Source	Comments	Remarks
7/12/04	10:10	10:10	7/12/04	20:40		east hawaii		IV?		0.2	4.3	5.22	threshold mag				not reported in Hon Station Bulletin (Hazard, 1910); not found on hon film record; WKC, 1992, p. 28; HT, 7/15/1904; not found in HH	Lyman notes: a smart shock; Warshauer notes: Tuesday morning about 10 o'clock there was another shock [felt in Hilo]
7/17/04	14:00	unknown	7/18/04	0:30	0:30	kaoiki??		V-VI (hilo)		0.1	4.2	4.97	time marks on Hon film are HST				not reported in Hon Station Bulletin (Hazard, 1910); found on hon film record; WKC, 1992, p. 28; VHR, v. 4, W.D. Westerveldt entry dated 7/20/1904; PCA, 7/20; 24/1904, p. 5; HH, 7/21/1904; HT, 7/22/1904	Lyman notes: a 2 shock quake, the 2nd quite hard; In the afternoon [of July 17] there was an earthquake accompanied by rumbling sounds; also felt and heard by the Lymans while resting by the three craters; other felt reports in 1903-1921 eq file and bib
10/14/04	3:40		10/14/04	14:10		maui?		V		2	3.5	5.35	trace too light to read; amp estimated				not reported in Hon Station Bulletin (Hazard, 1910); seen on hon film record; WKC, 1992, p. 28; HT, 10/18/1904; PCA, 10/15; 17, 11/18/1904; MN, 10/15/1904; not found in HH	Lyman notes: a slight shock; Warshauer notes: 3:40 am; distinct shock in Hilo; sharp and prolonged in Honolulu; heavy at Lahaina; violent shaking in East Maui; felt reports from Kohala, Puueo (Hilo), Waiawa and Aliamanu (Oahu), and Kipahulu (Maui)
11/13/04	20:15	20:15	11/14/04	6:45		east hawaii		IV; IV (W&K)		0.2	4.3	5.22	threshold mag				not reported in Hon Station Bulletin (Hazard, 1910); not found on Hon film record; WKC, 1992, p. 28; HT, 11/19/1904; PCA, 12/19/1904; HG, 12/20/1904	Lyman notes: a shock that shook windows in Haili Church; Warshauer notes: A distinct earthquake shock was felt Sunday night about 8:40 o'clock [discrepant time-same event?]; light earthquake felt at Pepeekeo at 8 p.m.
5/3/05	15:16	15:20	5/4/05	1:46		kl sf?		V	0.3	0.3	4.3	5.33					WKC, 1992, p. 28; HH, 5/4/1905; HT, 5/9/1905; PCA, 5/10, 12/1905: time given as 3:18 p.m.; HS, 5/6, 10, 1905; [Lyman comment may be exchanged with the following event; possible foreshock to event at 16:07]	Lyman notes: a long tremble, hard at the end, throwing down some things, 3:30 PM; Warshauer notes: first of 3 shocks, felt in Hilo (heaviest in 9 yrs) and volcano (distinct), and Hamakua coast; dishes rattled and damage to furniture and bric-a-brac (Hilo)
5/3/05	16:07	1615	5/4/05	2:37		kl sf?		VI; V (W&K; S&C)	6.8	6.8	4.3	6.18					Hon Station Bulletin (Hazard, 1910); WKC, 1992, p. 28; WK, 1992, p. 32; HH, 5/4/1905; HT, 5/9/1905; PCA, 5/10, 12/1905; HS, 5/6, 10/1905; not in MN; [Lyman comment exchanged with previous event?-seismogram shows this as a larger event. s-p about 1 minute]	Lyman notes: a long tremble and a twister; W&K notes: eastern or southern Hawaii; Warshauer notes: another shock at 4:10 PM, stronger (Hilo) than the first; rang church bell; damage to furniture, bric-a-brac and china; also felt volcano and Hamakua coast

Date	HST	HST (W&K)	Date	GMT	GMThon	region	qual mag	Max Intensity	pub AMP	meas AMP	LAO	Mcalc	Notes	M det	M det source	Source	Comments	Remarks
5/3/05	18:40	1840	5/4/05	5:20		kl sf?		felt		0.2	4.3	5.22	threshold mag				Hon notes: local shock; Lyman notes: long continued slight tremble; Warshauer notes: felt all territory; Honolulu-duration 20 sec, nowhere severe; Maui-two severe shocks at Wailuku, buildings shook, people ran out; Hawaii-felt generally, not at Halemaumau	Lyman notes: a long tremble slight, at 6:40 p.m.; Warshauer notes: probably felt on Hamakua coast; 6:35 p.m., weakest of three shocks felt in Hilo; shock at 6:34
5/7/05	19:20		5/8/05	5:50	5:55	kl sf?		felt		0.1	4.3	5.03					aftershock?; found on Hon film record; PCA, 5/12/1905; HT, 5/9/1905; not found in HS	Warshauer notes: a shock at 7:20 p.m. felt in Hilo
5/28/05	9:22	922	5/28/05	19:52		north hawaii		IV?		0.2	4.3	5.22	threshold mag				not reported in Hon Station Bulletin (Hazard, 1910); not found on hon film record; WKC, 1992, p. 28; PCA, 6/6/1905; not found in MN, HH or HT	Lyman notes: one smart shock and a tremble; Warshauer notes: felt at Honomu (10 a.m.; sharp), Kohala Mission (9:27 a.m.), Waimea (10:25 a.m. [9:25?]; smart) and Kealakekua (9:15 a.m.)
11/14/05	8:30	830	11/14/05	19:00		east hawaii		IV; IV (W&K)		0.2	4.3	5.22	threshold mag				not reported in Hon Station Bulletin (Hazard, 1910); not found on hon film record; WKC, 1992, p. 28; not found in HH, HT, HG or PCA	Lyman notes: a slight tremble [felt in Hilo], rattling windows
4/25/06	1:47	200	4/25/06	12:16		north hawaii		V	0.6	3.6	4.3	6.01	"Honolulu seismogram is impulsive, incorrect amplitude in Hon bulletin."				Hon Station Bulletin (Hazard, 1910); WKC, 1992, p. 29; PCA, 5/1/1906; HH, 4/26/1906; HT, 5/1/1906; HG, 5/1/1906; HS, 4/28/1906; HEB, 4/28/1906; not found in MN	Lyman notes: a smart shake at 2 am; Warshauer notes: heavy in (2 a.m.), followed by two slight at intervals of 10 min., Hakalau (1:57 a.m.) and Kau (2 a.m.), direction N to S; more felt reports in 1903-1921 eq file and bib
9/4/06	3:15	315	9/4/06	13:45		east hawaii		V		0.4	4.3	5.41	threshold mag; event found at 2:35 GMT, 0.4 mm, teleseism?				not reported in Hon Station Bulletin (Hazard, 1910); not found on hon film record-disturbed record; WKC, 1992, p. 29; PCA, 9/5/1906; HH, quoted in PCA, 9/10/1906	Lyman notes: [9/3-wrong?] a smart shake, 2 shocks, SE & NW; Warshauer notes: severe [in Hilo] at 3:15 a.m.; not perceived at the Volcano House, felt lightly at Mountain View.; A sharp earthquake shock awakened most Hilonians at 3:15 a.m., no damage
1/8/07	pm		1/8/07			ml swr?		VI?		0.4	4.2	5.35	threshold mag				not found on hon film record; PCA, 1/15,18/1907; HS, 1/11/1907; HT, 1/15/1907; not in HH or MN; [precursory seismicity north of Mokuaweoweo--saddle??; large event might be Hilea]	Warshauer notes: Slight shocks felt at several stations [north Hawaii] from 8th to 10th inc. [no individual reports]; over 50 shocks at Pahala 8th-9th, one quite heavy on PM of 8th w swaying bushes/trees [not mentioned in Lyman Diary]

Date	HST	HST (W&K)	Date	GMT	GMThon	region	qual mag	Max Intensity	pub AMP	meas AMP	LAO	Mcalc	Notes	M det	M det source	Source	Comments	Remarks
1/10/07	13:31	2100	1/11/07	0:01	0:01:24	hilea?		felt	1.8	1.8	4.3	5.82	"Honolulu seismogram is impulsive, Hon notes (probably local)."				Hon station bulletin (Hazard, 1911); WKC, 1992, p. 29; PCA, 1/22/1907; HEB, 1/12/1907; HG, 1/18/1907; HS, 1/22/1907; HT, 1/15/1907	Lyman notes: a slight long tremble at 1:30 PM; Warshauer notes: Earthquake shocks were felt during the week at a number of stations in the western and southern portions of Hawaii; more felt reports in 1903-1921 eq file and bib
6/11/07	3:40		6/11/07	14:10		hilea?		IV-V?		0.3	4.2	5.27	threshold magnitude				not reported in Hon Station Bulletin (Hazard, 1911); not found on hon film-disturbed rec; no mention in VHR entry on this date; WKC, 1992, p. 29; PCA, 6/15; 18/1907; HS & HEB, 6/14/1907; not in MN, HH or HT; possible analog to quake of 8/20/24 (WK, p. 31)	Lyman notes: a 2 shock mild shake; Warshauer notes: heavy shocks of earthquakes at 3:43 on Hawaii; also felt at Paauilo, Laupahoehoe, Naalehu-heavy, and Kealakekua; Honuapo-most severe shake, about 40 sec; also felt at Hilo, Kona and Waiohinu
7/5/07	23:45		7/6/07	10:15		molokai??		felt		0.25	3.2	4.60					not reported in Hon Station Bulletin (Hazard, 1911); found on hon film record; WKC, 1992, p. 29; PCA, 7/6; 16/1907; MN, 7/13/1907; not found in HEB, HH or HT	Lyman notes: a long continued shake near 12 last night; Warshauer notes: slight shock felt over Honolulu at 11:55 p.m., duration a few sec, quite distinct; slight at Makawao [Maui} at 11:40 p.m.; distinct on Maui and throughout territory at 11:45
9/5/07	18:52		9/6/07	5:22	5:25	kl sf?		V	0.2	0.2	4.3	5.22	tremor				Hazard, 1911; WKC, 1992, p. 29; HEB, 9/6, 7/1907; PCA, 9/8/1907; HH, 9/12/1907; PCA, 9/13/1907	Lyman notes; a smart 2 shock quake, dur several sec; Warshauer notes: severe quake in Hilo, dur several min; ship in dock shook stem to stern, wharf shaken; felt all haw island, esp Kohala, Kau, Papaikou; more felt reports in 1903-1921 eq file and bib
9/6/07	11:45		9/6/07	22:15		unknown			0.2	0.2			Hon notes: doubtful; local quake-region uncertain; LA0 not assigned				Hazard, 1911	
12/19/07	20:55		12/20/07	7:25	7:22	alenuihah a deep?		V	4	4	3.65	5.63	Hon notes: local shock; duration 11.2 min				Hazard, 1911; PCA, 12/20; MN, 12/21/1907 [not mentioned by Cox, 1986 or WK, 1992]	Warshauer notes: an earthquake felt all over Honolulu. Two shocks followed within a few seconds, the entire disturbance occupying about fifteen seconds; also felt in Nuuanu valley, Palolo, Waikiki and Kalihi; more felt reports in 1903 1921 eq file and bib

Date	HST	HST (W&K)	Date	GMT	GMThon	region	qual mag	Max Intensity	pub AMP	meas AMP	LAO	Mcalc	Notes	M det	M det source	Source	Comments	Remarks
9/5/08	18:15		9/6/08	4:45		kl cal 05-10?		felt		0.2	4.3	5.22	threshold magnitude				PCA, 9/9, 15/1908; HH, 9/10/1908; not found in HG	Warshauer notes: On Saturday afternoon another shock was felt [Hilo] and that night [actually the next night] the volcano was again active and the molten lake was rising. ; A third shock 24 hours later, the strongest of the three, motion east to west
9/20/08	20:15	20:15	9/21/08	6:45	6:35	kl sf		VII; VI (S&C)	'large'	46	4.3	6.70	Hon notes: [footnote} A sharp local shock, which probably had its origin near the volcano Kilauea on the island of Hawaii; amplitude large; amp estimated	6.8	Abe, 1988		Hazard, 1911 [amp on Hon seismogram much larger than M6.2 11/2/18, traces large and obscure each other, max amp extrapolated]; WK, 1992, p. 32, 62; WKC, p. 29-30; many newspaper reports-see bib	detailed felt reports given in 1903-1921 eq file and bib
9/21/08	23:30	1915(22)	9/22/08	10:00		kl sf		IV		0.2	4.3	5.22	threshold mag				aftershock; WKC, 1992, p. 29; HH, 9/24/1908; not found in PCA or HG	Lyman notes: from 11:30 to 3:30 last night- a dozen or more tremors, 3 of them hard enough to rattle windows a little; Warshauer notes: Shocks were felt slightly on Monday [Sept. 21], and at least six distinct ones Monday night
9/26/08	20:05	20:05	9/27/08	6:35		kl sf		IV?		0.2	4.3	5.22	threshold mag				aftershock; not found on hon film record; WKC, 1992, p. 30; PCA, 10/5/1908; HH, Oct., 1/1908	Lyman notes: Quite a smart shake; Warshauer notes: 2 quakes, this one at 8:04 PM, short but particularly sharp [Largest aftershock of 9/20/08]
10/24/08	17:45		10/25/08	4:15		hilea?		felt		0.2	4.2	5.16					found on hon film record; PCA, 11/4/1908; not found in HS, HEB, HH or HT	Warshauer notes: The following earthquake shocks were reported felt--all from Hawaii: 24th--Naalehu, light followed by heavier, Kealakekua (Davis) 5:45 p.m., lasting two seconds
3/13/09	3:30	3:30	3/12/09	14:00	14:02:36	kl cal deep??		V	0.4	0.4	4.2	5.35	Hon notes: local shock, felt generally over Island of Hawaii, recorded on magnetograph				Hazard, 1912 [time of large waves and ending time given]; no mention in VHR entry on this date; WKC, 1992, p. 30; PCA, 3/14, 23/1909; HEB, 3/13/1909; not found in MN, HH or HT [in USE, no int or mag]	Lyman notes: shook water out of vases, no damage done; Warshauer notes: An earthquake shock, which was severe in parts of the island, was felt generally over Hawaii about 3:20 a.m. of the 13th; more felt reports in 1903-1921 eq file and bib

Date	HST	HST (W&K)	Date	GMT	GMThon	region	qual mag	Max Intensity	pub AMP	meas AMP	LAO	Mcalc	Notes	M det	M det source	Source	Comments	Remarks
10/21/10	13:50	13:05	10/21/10	23:35		east hawaii		IV?		0.2	4.3	5.22	threshold mag				W&K mistranscribe time as 13:05; not reported in Hon Station Bulletin (Hazard, 1912); not found on hon film record; WKC, 1992, p. 30; not reported in HG, HH or HT	Lyman notes: quite a shock, swaying motion E + W.
7/14/11	11:30	11:30	7/14/11	22:00	22:05	maui deep?		V?	12.4	12.4	3.6	5.91					no mention in VHR of this date; Hazard, 1913 [Hon seismogram s-p <1 min]; ESPHVO, v. 1, p. 36 [repeats info, but gives 13th as date]; WKC, 1992, p. 30; PCA, 7/15; 19/1911; HS, HEB, 7/14/1911; HH, 7/20/1911; not found in HT or MN	Hon notes: local shock; Lyman notes: long continued slight tremble; Warshauer notes: felt all territory; Honolulu-duration 20 sec, nowhere severe; Maui-two severe shocks at Wailuku, buildings shook, people ran out; Hawaii-felt generally, not at Halemaumau
5/5/12	8:58				19:28	hilea?		V	0.2	0.2	4.2	5.16					Hon Station Bulletin (Hazard, 1913); not mentioned in ESPHVO supp. (Jaggar, 1947); HS, 5/6/1912, quoted in HH, 5/16/1912; not found in HT, HEB, HG or PCA	Warshauer notes: It appears that the shock reported at Hilo on Sunday week [May 5] was severely felt on the Kau coast as well. The quake was distinctly felt aboard the steamer Kilauea. lying at Honuapo; landslide from sea cliffs observed
5/14/12	13:43	unknown	5/15/12	0:13	0:13	east hawaii		quite a shake	0.6	0.6	4.3	5.52					Hon station bulletin (Hazard, 1913); not mentioned in ESPHVO supp. (Jaggar, 1947); WKC, 1992, p. 31; not found in HT, HG, HS, HEB or PCA	Hon notes: very slight, amplitude 0.3 mm, duration 1 hr 16.3 min [strange that this doesn't correspond to the much heavier event on the 22nd!]; Lyman notes: May 15, quite a shake [no time given; event on the 14th or the 22nd]
5/22/12	23:00		5/23/12	9:30		kl sf?		VI-VII		0.3	4.3	5.33	threshold magnitude				not reported in Hon Station Bulletin (Hazard, 1913); not found on hon film record; ESPHVO supp. (Jaggar, 1947, p. 15); PCA, 5/24; 27/1912; HT, 5/28/1912; HH, 5/30/1912; [int dist analog to kl sf events of 3/54 and 9/79?]	quake felt [Volcano-no date] and elsewhere in Hawaii; Warshauer notes: heaviest shake in years [Hilo], tidal waves in ponds, livestock terrorized, little damage, brief but distinct in Kau, west to east, duration 7 sec; many smaller events earlier in week
10/13/12	5:45	6:45	10/13/12	16:15	16:15	alenuihaha deep?		V; V (W&K)	0.2	0.3	3.8	5.02	Hon notes (Local shock, felt on all the islands); seismogram shape indicates some distance and not Oahu				Hazard, 1913 [seismogram shape indicates some distance and not Oahu]; ESPHVO supp (Jaggar, 1947, p. 44) [origin at a moderate rather than great distance]; PCA, 10/21/1912 [repeats info in Jaggar, 1947]; WKC, 1992, p. 31	Hon notes: Local shock, felt on all the islands; 8 maxima, wakened light sleepers at Volcano House, felt distinctly at Hilo, lightly in Honolulu; submarine shock, fairly deep, slight energy; Lyman notes: about 5:30 A.M., a long continued shake, not hard

Date	HST	HST (W&K)	Date	GMT	GMThon	region	qual mag	Max Intensity	pub AMP	meas AMP	LAO	Mcalc	Notes	M det	M det source	Source	Comments	Remarks
12/5/12	2:12		12/5/12	12:38	12:38	oahu	"very small" [prob . about 1 mm] (Jaggar, 1947, p. 55)		2.2	2.2	3.3	5.25					Hazard, 1913 [assume double amp of 1 mm to get separate phases]; ESPHVO supp (Jaggar, 1947, p. 55); not reported in PCA, HSB, HH or MN	Hon amp 1.1 mm; moderate shock at its origin 280 mi from HVO; very small at HVO; duration many minutes; second phase at 2:15:06 and third phase at 2:15:53, both very distinct
5/18/13	19:52	19:40	5/19/13	6:22	6:22	kl sf?	offscale	V; IV-V (R-F)		0.2	4.3	5.22					not listed in Honolulu Station Bulletin (Hazard, 1916); seen on hon film record; WKC, 1992, p. 31; ESPHVO supp (Jaggar, 1947, p.86); HSB, 5/20/1913; HH, 5/23/1913; not found in PCA or HG	Lyman notes: at 7:40 PM, 2 slight tremors followed by 2 short sharp shock; a few minutes before 8 p.m. a moderately strong focal shock was felt at Volcano House and generally felt in Hilo; more felt reports in 1903-1921 eq file and bib
9/8/13	11:38	12:08	9/8/13	23:08		kaoiki??	offscale	IV (R-F)		0.2	4.3	5.22	threshold mag				not found in Honolulu Station Bulletin (Hazard, 1916); looked for, not seen on hon film record; ESPHVO, v. 2, p. 19; ESPHVO, v. 2, p. 38; WKC, 1992, p. 31; PCA, 9/10/1913; not found in HG, HSB, HT or HH; no additional felt reports in PCA	Local shock felt at margin of Kilauea, sharply in Hilo; all pens swept off; Lyman notes: a long sharp tremble then a short sharp shake; Warshauer notes: A very sharp and short shock was felt in Hilo Monday morning just before noon; [mag too high?]
9/20/13	8:14	8:15	9/20/13	18:45		kl sf??	slight	IV		0.2	4.3	5.22	threshold mag				ESPHVO v. 2, p. 44; WKC, 1992, p. 31; not reported in HH	not felt [at Kilauea]; duration 2 min 12 sec; Lyman notes: a long sharp tremble, rattled the windows
10/25/13	0:57	1:28	10/25/13	11:28	11:28	kl sf	offscale	VII; VI (R-F)	3	2.2	4.2	5.81					Hazard, 1916; ESPHVO, v. 2, p. 62, 64-65 [distance est. 10-20 km; distance and felt reports implies Kilauea south flank]; WKC, 1992, p. 31	Hon notes: felt strongly at Hilo; [at HVO] shook buildings, objects fell, pictures swayed, walls cracked, rockslides, seismometers broken, felt most strongly between Hilo and HVO; Lyman notes: a long smart shaking North and South East
3/29/14	20:04					molokai?		felt	3	3	3.1	5.21	Hon notes: Local. Felt in Honolulu but not at observatory				Hon Station Bulletin (Hazard, 1916); ESPHVO, v. 2, p. 140, 149; PCA, 3/30/1914; MN, 4/4/1914; not found in HH	felt on SE flank of Mauna Loa, more strongly on Maui and Oahu; felt strongly in all parts of Honolulu; most severe in Maui in many years; recorded in Washington DC; [HVO mag high?, hon mag low

Date	HST	HST (W&K)	Date	GMT	GMThon	region	qual mag	Max Intensity	pub AMP	meas AMP	LAO	Mcalc	Notes	M det	M det source	Source	Comments	Remarks
4/29/14	14:50	14:50	4/30/14	1:20		ml mok??		II; II (R-F)		0.2	4.3	5.22	threshold mag				not found in Honolulu Station Bulletin (Hazard, 1916); looked for, not seen on hon film record; ESPHVO, v. 2, p. 193 [ESPHVO time given as 14:50]; repeated in Wood/1915, table III, p. 49; WKC, 1992, p. 31; HT, 5/5/1914; not found in HH or PCA	felt, feeble, duration 19 min, minimum 6 mpu; Lyman notes: a long shake E&W then N&S; [Rossi-Forel and Cancani readings conflict]; mild shock felt in Hilo by those seated or lying down; long duration; [mag high?]
6/1/14	6:29		6/1/14	16:59	17:00	kl sf??		IV; III (R-F)	0.2	0.2	4.3	5.22					Hazard, 1916; ESPHVO, v. 2, p. 194; repeated in Wood/1915, table III, p. 49 [6 assumed as minimum mpu for offscale]; WKC, 1992, p. 31; HH, 6/5/1914; not found in PCA, HSB, HT or MN [south flank?]	Hon notes; apparently of a local character; amp 0.1 mm; nearby; felt locally, duration 6 min 37 sec; Lyman notes: quite a smart 4 shock earthquake [no day or time given]; Warshauer notes: at 6:20, two distinct shocks in Hilo, first heavier, no damage
6/20/14	13:40		6/21/14	0:10		ml ner??	moderate	V (hilo)		0.2	4.3	5.22	threshold mag				ESPHVO v. 2, p. 186, 195; repeated in Wood/1915, table III, p. 49; not reported in HH	moderate local shock, felt in Hilo and disturbed ordinary seismograph; time given as 1:40 PM; duration 2 min 38 sec, not felt locally; Lyman notes: a moderate 2 shock shake from Mauna Loa
7/20/14	4:03	4:15	7/20/14	14:33		ml mok??		V (hilo); II (R-F)	<0.2	0.1	4.3	5.03	detected?				not found in Honolulu Station Bulletin (Hazard, 1916); detected? on hon film record; ESPHVO v. 2, p.193, 196; repeated in Wood/1915, table III, p. 49; WKC, 1992, p. 31; HH, 7/24/1914; not found in PCA	distinctly felt by 2 persons and one or two more were wakened [Hawaii National Park?]; a felt shock; Lyman notes: a sharp shock at 4:15 am; Warshauer notes: shock felt from Hilo to volcano, sharp, 3 distinct parts, duration several seconds; no damage
8/8/14	8:57		8/8/14	19:27	19:27	unknown	several phases detected		4.8	5.5		3.43					Hon seismogram: two phases about 2 min apart; probable intraplate earthquake	
9/27/14	10:09	10:15	9/27/14	20:39	20:39	hilea?	notwork	II-III	0.4	0.4	4.2	5.35					ESPHVO, v. 2, p. 227; repeated in Wood/1915, table 1, p. 43 [shocks of 9/27-28 considered precursory to ML eruption 2 months later]; WKC, 1992, p. 31: see below; second shock closer to the time recorded in Honolulu [foreshock?]; HH, 10/2/1914; not in PCA	no instrumental record; probably a succession of shocks, or several maxima in one shock; Lyman notes: at 10:15 am 2 slight shocks & long tremble at the end; Warshauer notes: rather severe shock at 10:14 a.m., N to S, duration 15 sec; also felt elsewhere

Date	HST	HST (W&K)	Date	GMT	GMThon	region	qual mag	Max Intensity	pub AMP	meas AMP	LAO	Mcalc	Notes	M det	M det source	Source	Comments	Remarks
11/13/14	19:57		11/14/14	6:27	6:27	kaoiki?		V		0.2	4.2	5.16	threshold mag				not found in Honolulu Station Bulletin (Hazard, 1916); looked for, not seen on hon film record; ESPHVO, v. 2, p. 250; repeated in Wood/1915, table 1, p. 44; HH, 11/20/1914; PCA, 11/23/1914	1.2-1.6 mpu; duration 2 min 10 sec; not felt at HVO; Warshauer notes: [Nov. 13] at 7:50 p.m. a shake of duration 15 sec; distinctly felt at Puueo where pictures hanging from walls swung to and fro; no damage
11/15/14	12:50		11/15/14	23:20	23:20	kaoiki??		V		0.2	4.2	5.16	threshold mag				not found in Hon film record; ESPHVO, v. 2, p. 250; repeated in Wood/1915, table 1, p. 44; HH, 11/20/1914; not found in PCA	duration 2 min 48 sec; felt gently; Warshauer notes: before one PM [Nov. 15], a more severe shake [than on the 13th], south to north, duration 10 sec, rattled windows and threw pictures out of plumb again
1/13/15	19:45	19:45	1/14/15	6:15		a3035		II-III		0.2	4.3	5.22	threshold mag				not found in Honolulu Station Bulletin (Hazard, 1918); looked for, not seen on hon film record; ESPHVO, v. 2, p. 267; SBHVO, v. 1, no. 1; WKC, 1992, p. 31; not found in HH or PCA	felt in Hilo; Lyman notes: slight shock, long duration at 7:45 PM
3/28/15	8:26		3/28/15	18:56	18:57:18	kaoiki??		V; IV-V (R-F)	10.4	13.5	4.3	6.37					Hazard, 1918; not mentioned in WK; ESPHVO, v. 2, p. 285 ; SBHVO, v. 1, no. 2 [distance assumed from preceding and succeeding quake]; HT, 3/30/1915; HSB 3/29/1915; MN, 4/3/1915; not in HH or PCA	shaking for 5-7 sec, 6 maxima, third was strongest, pens thrown off to S and E; clock stopped in Waiohinu where shock strongest to SW of HVO; needles thrown off to N (?) and E; more felt reports in 1903-1921 eq file and bib
3/28/15	9:06				19:36:00	kaoiki??				0.6	4.3	5.52					[aftershock?]; recorded in Honolulu; lost in mainshock, so not noted in SBHVO, v. 1, no 2	
4/8/16	14:53		4/9/16	1:23	1:23:00	ml mok?				0.2	4.2	5.16	event on film-doesn't fit newspaper report; teleseism?				not reported in SBHVO (Wood, unpub.) or in Hon Station Bulletin (Hazard, 1918); HT, 4/10/1916; not found in PCA, HG, MN or HH	Warshauer notes: Earthquakes shook the district severely last night and dismantled the instruments in the Volcano Observatory
5/23/16	5:53		5/23/16	16:23	16:20:00	ml wf?		felt		0.2	4.2	5.16					not found in Honolulu Station Bulletin (Hazard, 1918); event seen on Hon film record at 05:50, amp = 0.2 mm [Wood time off?]; SBHVO (Wood, unpub); ESPHVO, v. 2, p. 453	preferred magnitude calculated as average of nomogram and Honolulu; presumed felt HVO, s Hawaii
5/24/16	6:51		5/24/16	17:22	17:22	hilea?		felt		1.5	4.2	5.71					not found in Honolulu Station Bulletin (Hazard, 1918); seen on hon film record; SBHVO (Wood, unpub); ESPHVO, v. 2, p. 453	Pens swept off cylinder; the strongest shock of the series, up to this time, accompanying the eruption; presumed felt HVO, s Hawaii
5/24/16	19:29		5/25/16	5:59	5:59	hilea?		felt		0.15	4.2	5.08					not found in Honolulu Station Bulletin (Hazard, 1918); seen on hon film record; SBHVO (Wood, unpub); ESPHVO, v. 2, p. 453	preferred magnitude calculated as average of nomogram and Honolulu; presumed felt HVO, s Hawaii

Date	HST	HST (W&K)	Date	GMT	GMThon	region	qual mag	Max Intensity	pub AMP	meas AMP	LAO	Mcalc	Notes	M det	M det source	Source	Comments	Remarks
5/26/16	9:26		5/26/16	19:56	19:56	hilea?		V; V (R-F)		0.15	4.2	5.08					not found in Honolulu Station Bulletin (Hazard, 1918); seen on hon film record; SBHVO (Wood, unpub)	Felt distinctly by nearly all, but without stopping pendulum clocks or producing alarm
6/12/16	6:45		6/12/16	17:15		kl sf?	offscale	V; low VI (R-F)	0.4	0.4	4.3	5.41					Hazard, 1918; WKC, 1992, p. 31 [this is the last Lyman entry-time agrees with the Hon Station Bulletin]; HH, 6/16/1916	Hon notes: apparently local; Lyman notes: 2 shocks at 6:45 a.m.; Warshauer notes: severe in Hilo although less than last year's quake [Mar. 28, 1915], animals alarmed, pictures swung, crockery rattled; duration 10-15 sec, south to north
9/15/17	3:45	3:15	9/15/17	14:15		kl cal deep??		IV		0.2	4.3	5.22	threshold mag				not found in Honolulu Station Bulletin (Hazard, 1920); looked for, not seen on hon film record; ESPHVO, v. 2, p. 659; WKC, 1992, p. 31; HDT, 9/25/1917; not found in HH	two local earthquakes a few minutes apart... generally felt in Kau and Hilo. first at Volcano House was a prolonged rocking; Lyman notes: 2 shocks at 3:45 am, the first sharp North and South; Warshauer notes: repeats HVO info
5/21/18	15:30		5/22/18	2:00	2:00	kl cal deep?		IV		0.15	4.3	5.14					not found in Honolulu Station Bulletin (Hazard, 1920); seen on hon film record; ESPHVO, v. 2, p. 777	generally felt on island of Hawaii; felt at HVO as a prolonged n-s rocking; more felt reports in 1903-1921 eq file and bib
6/7/18	11:21		6/7/18	21:51	21:51	hawaii?	not seen		0.2	0.2	4.2	5.16	identical time differences to quake of June 14				Honolulu Station Bulletin (Hazard, 1920); not mentioned in ESPHVO; not found in PCA, HSB, HDT, HH or DPH	time differences and seismogram consistent with local shock or part of a teleseism; magnitude calculated assumes Hawaii origin
6/14/18	11:13		6/14/18	21:43	21:45	ml wf?	offscale	V-VI (naalehu)	1.2	1.8	4.2	5.76					Honolulu Station Bulletin (Hazard, 1920); ESPHVO v. 2, p. 785, 787	Hon notes: local shock, very irregular; generally felt, seismograph pens flung in S80E direction, near shock of great intensity, items thrown from shelves in Naalehu in a westerly direction (ground displaced to east); long, slow swaying; duration 45 min
9/8/18	7:40		9/8/18	18:10	18:10	south hawaii		felt		0.2	4.2	5.16	threshold mag				not found in Honolulu Station Bulletin (Hazard, 1920); not seen on Honolulu film record; ESPHVO, v. 2, p. 820; HT, 9/17/1918 [repeats ESPHVO]; not found in HH, DPH or PCA	felt over southern half of island of Hawaii; recorded on rebuilt Bosch-Omori instrument

Date	HST	HST (W&K)	Date	GMT	GMThon	region	qual mag	Max Intensity	pub AMP	meas AMP	LAO	Mcalc	Notes	M det	M det source	Source	Comments	Remarks
11/1/18	23:33	23:33	11/2/18	10:03	10:02	kaoiki	strong	VII (W&K)	18.8	19	4.2	6.40		6.2	W&K		Isoseismal map in W&K [wrong date given]; Hon Station Bulletin (Hazard, 1920); ESPHVO v. 2, p. 840, 843; preferred mag calculated as average of hon and W&K; Hilea observer recorded time as 11:36 PM	Hon notes: sharp earthquake from the island of Hawaii, with renewed activity at Kilauea; felt all island of Hawaii, most strongly in Kau with damage at Kapapala; first movement WNW, toward Mokuaweoweo; duration 53 min
1/27/19	16:53	17:53	1/29/19		3:23	molokai?		V (W&K) II-III (Hon)	0.4	0.6	3.1	4.77	date given as 1/29-should be 1/28				Hon Station Bulletin (Hazard, 1922) [1/28--Jan. 27 in newspaper accounts; seismogram appears too short for Hawaii Island; intensity 5 not substantiated]; PCA, 2/2/1919; MN, 1/31/1919; not found in HH or DPH	Hon & USEQ notes: Felt by many persons in the islands; Warshauer notes: A very brief but sharp earthquake shock was felt on Maui by many persons in different parts of the island; also felt on Oahu; Romberg says local to Oahu within 20 mi of Honolulu
2/25/19	21:25			2/26/19	7:55	kl sf?	strongly felt	felt		0.2	4.3	5.22					not reported in Hon station bulletin; seen on Hon film record; duration 7 min; ESPHVO, v. 2, p. 899, 903; PCA, 2/26/1919; HDT, 2/26/1919; MN, 2/28/1919; not found in HSB or DPH	strongly felt; Warshauer notes: At 9:35 last night a sharp, grinding, abrupt earthquake was felt in Hilo, at the Volcano House, in the Puna district generally, and even in the Kohalas. Kawaihae noted that it was strongly felt at the wireless station
4/18/19	10:51			4/18/19	21:21								Hon notes: Probably local [Hon film checked-looks like teleseism]					
5/18/19	0:10			5/18/19	10:40								Hon notes: Probably local [Hon film checked-looks like teleseism]					
5/19/19	18:03			5/20/19	4:33								Hon notes: Probably local [Hon film checked-looks like teleseism]					
8/26/19	2:04	2:34	8/26/19	12:34		kl cal deep?	moderate	V (W&K)	0.2	0.2	4.2	5.16	threshold mag				not reported in Hon Station Bulletin (Hazard, 1922); not found on Hon film record; ESPHVO, v. 2, p. 994-995; not found in HH	moderate shock; strongly felt in Hilo and Kona

Date	HST	HST (W&K)	Date	GMT	GMThon	region	qual mag	Max Intensity	pub AMP	meas AMP	LAO	Mcalc	Notes	M det	M det source	Source	Comments	Remarks
9/14/19	17:20	17:50	9/15/19	3:50	3:52	hilea?	strong	VII (Kau)	4.2	4.2	4.2	5.99		6.1	W&K		Isoseismal map in W&K; Hon Station Bulletin (Hazard, 1922); ESPHVO, v. 2, p. 1001, 1002; damage report in ESPHVO; HSB, 9/16/1919; PCA, 9/18, 28. 1919; HDT, 9/16. 1919	Hon notes: Volcanic disturbance on Mauna Loa, Hawaii; recorded on all three variometers of the magnetograph; strong quake felt generally Hawaii island and slightly Maui and Oahu; 2 aftershocks within 1 hr; dur > 1 h; more felt reports in 1903-1921 and bib
9/18/19	3:37		9/18/19	14:07	14:11	hilea?	strong		0.6	0.6	4.2	5.46					Hon Station Bulletin (Hazard, 1922); ESPHVO, v. 2, p. 1001, 1005; PCA, 9/28/1919; not found in HSB, HH, DPH or MN	Hon notes: Local, recorded on magnetograph; A second strong local shock was registered at HVO; there was another strong local shock and two others in the course of thirty seconds; Warshauer notes: Another shock took place on September 18
10/9/19	11:28		10/9/19	21:58	21:56	hilea?	moderate			0.2	4.2	5.16	could be teleseism; hvo time of 10:26 one hour off?; ESPHVO, v. 2, p. 1025				event [teleseism?] on Hon film record at 11:28; [accepted as local; HVO time of 10:26 one hour off?; ESPHVO, v. 2, p. 1025	
10/15/19	8:28					hilea?		IV (R-F)?		0.2	4.2	5.16	threshold mag				not found on Hon film record; 43.2-51.2 km; ESPHVO, v. 2, p. 1031; see note for 10/5/19	moderate[ly felt?] at Hilea [time given as 10/15, 0:00, not consistent with Whitney record. We assign the felt report to the nearest m-st event]
10/16/19	9:00					hilea?				0.2	4.2	5.16	threshold mag				not found on Hon film record; 43.2-51.2 km; 43.2-51.2 km; ESPHVO, v. 2, p. 1030, 1031	none of the four strong ones registered Oct. 16-18 was reported at Hilea
10/17/19	7:43		10/17/19	18:13						0.3	4.2	5.27	probably teleseism					not listed in ESPHVO
10/17/19	23:25					hilea?		II (R-F)?		0.2	4.2	5.16	threshold mag				not found on Hon film record; 43.2-51.2 km; ESPHVO, v. 2, p. 1030, 1031; see note for 10/5/19	none of the four strong ones registered Oct. 16-18 was reported at Hilea; And three other small disturbances; weak[ly felt?] at Hilea [time given as 10/15, 0:00, not consistent with Whitney record. We assign the felt report to the nearest m-st event]
10/18/19	13:14					hilea?				0.1	4.2	4.97	seen at low noise level				not found on Hon film record; 43.2-51.2 km; ESPHVO, v. 2, p. 1030, 1033; see note for 10/5/19	none of the four strong ones registered Oct. 16-18 was reported at Hilea
10/19/19	12:10					hilea?				0.2	4.2	5.16	threshold mag				not found on Hon film record; ESPHVO, v. 2, p. 1033; see note for 10/5/19	

Date	HST	HST (W&K)	Date	GMT	GMThon	region	qual mag	Max Intensity	pub AMP	meas AMP	LAO	Mcalc	Notes	M det	M det source	Source	Comments	Remarks
10/21/19	12:23					hilea?				0.2	4.2	5.16	threshold mag				not found on Hon film record; ESPHVO, v. 2, p. 1033; see note for 10/5/19	
10/22/19	12:40					hilea?				0.2	4.2	5.16					not found on Hon film record; ESPHVO, v. 2, p. 1033	prob not strong
10/22/19	14:08		10/23/19	0:38	0:43	hilea?	strong	felt	0.8	0.9	4.2	5.57					Hon Station Bulletin (Hazard, 1922); ESPHVO, v. 2, p. 1034	Hon notes: Local shock; very strong, felt
10/23/19	0:20					hilea?				0.2	4.2	5.16	threshold mag				not found on Hon film record; ESPHVO, v. 2, p. 1034; see note for 10/5/19	
10/23/19	16:35					hilea?				0.2	4.2	5.16	threshold mag				not found on Hon film record; ESPHVO, v. 2, p. 1034; see note for 10/5/19	And one other small disturbance
10/24/19	13:12					hilea?				0.2	4.2	5.16	threshold mag				not found on Hon film record; ESPHVO, v. 2, p. 1034	cannot be very strong
10/27/19	5:17					hilea?				0.2	4.2	5.16	threshold mag				not found on Hon film record; ESPHVO, v. 2, p. 1043; see note for 10/5/19	
10/29/19	5:00					hilea?		felt		0.2	4.2	5.16	threshold mag				not found on Hon film record; ESPHVO, v. 2, p. 1043; see note for 10/5/19	felt in Kona
10/31/19	5:12		10/31/19	15:42	15:42	hilea?	mod-st			0.3	4.2	5.27	threshold mag				not found on Hon film record; ESPHVO, v. 2, p. 1043; see note for 10/5/19	
11/25/19	21:58		11/26/19	8:28	8:30:30	maui?		IV	0.4	0.4	3.44	4.87					Hon Station Bulletin (Hazard, 1922); ESPHVO, v. 2, p. 1059; HSB, 11/26/1919; MN, 11/28/1919; not found in PCA, HDT, HH or DPH	Hon notes: amp 0.2; strongly felt in Maui; Warshauer notes: sharply felt in Maui at 10:03 p.m., rattled doors and windows, duration several seconds, no damage; shook upper floors of frame buildings
1/24/20	15:15		1/25/20	1:45	0:58:00	kl sf?		felt		0.3	4.2	5.27					not reported in Hon Station Bulletin (Hazard, 1922); looked for, not seen on Hon film record-possible event at 14:28, amp = 0.3 mm; possible teleseism; ESPHVO, v. 2, p. 1103; see note for 10/5/19; not found in HDT, HH or DPH	recorded at Hilo; strongly felt at Hilea as a double jolt accompanied by a loud rumbling
5/24/20	6:00:00		5/24/20	16:30	16:25:00	hilea?		IV-V; IV (R-F) at Hilea		0.15	4.2	5.08					not reported in Hon Station Bulletin (Hazard, 1922); event seen on Hon film record at 05:55, amp = 0.15 mm [HVO time wrong?]; ; ESPHVO, v. 2, p. 1162; not found in PCA, HSB, HDT, HH, DPH or MN	felt in Hilea
5/26/20	1:55:00					hilea?		IV-V; IV (R-F) at Hilea		0.2	4.2	5.16	threshold mag				not reported in Hon Station Bulletin (Hazard, 1922); looked for, not seen on Hon film record; ESPHVO, v. 2, p. 1162; not found in PCA, HSB, HDT, HH, DPH or MN	felt in Hilea

Date	HST	HST (W&K)	Date	GMT	GMThon	region	qual mag	Max Intensity	pub AMP	meas AMP	LAO	Mcalc	Notes	M det	M det source	Source	Comments	Remarks
																		Sources of published information
																		1 = Wyss and Koyanagi, 1992
																		2 = Wyss, Koyanagi, and Cox, 1992
																		3 = Bevens and others, 1988 (ESPHVO)
																		4 = Honolulu Station Bulletins
																		5 = Cox, 1986; USSR magnitude, quoted in Cox
																		6 = Coffman and others, 1982 (EQ history of United States)
																		7 = Fiske and others, 1987 (The Volcano Letter)