

Date	Time HST	Lat deg	Lat min	Lon deg	Lon min	Region	Pref depth	M other	M other source	M pref	M pref source	I max	Location/felt report	Comment
11/01/1790						kilauea				6.40	int	VII-VIII	The natives say that in the days of Kamehameha, 80 shocks were felt in one day, some of them so hard as to throw down houses. This was soon followed by an eruption of the volcano which destroyed some lives and did much damage. . . .	Martin, 1979, p. 71; minimum magnitude of largest event estimated from intensity
8/31/1821	19:00					west hawaii				5.30	int	V	. . . at 7 pm we had a very smart shock of an earth quake. . . . [p. 8]	Young, 1801 [Note: Young was living in west Hawaii; journal page labeled 1821, but day/date do not agree with perpetual calendar. If day is accepted, then date is Aug. 31, 1821.]; intensity interpreted from "smart" as used in Lyman diary
6/01/1823	22:00					kl sf		~7	W&K	7.00	w&k	IX (S&C)	Graben on Kilauea's lower SW rift formed two months before Ellis visit on July 31; felt at Kaimu (Puna) where it formed a crack one foot wide; seawater entered a freshwater well; stone wall, 4 ft thick, 6 ft high, thrown down; no mention of tsunami	Wyss and Koyanagi, 1992, App. 3, p. 57; Ellis/1825; Stover and Coffmann, 1993
1/6/1825	23:30					kona?				6.20	int	VII	a heavy shock at Kaawaloa, preceded by rumbling; motion so rapid that it woke us from sleep and shook us violently; standing persons thrown suddenly to the earth, lying persons tossed from side to side; acc by landslides from Kealakekua pali	Ely, 1825, p. 686-687; stationed at Kaawaloa, now Kealakekua Bay
1/7/1825	2:00					kona?				4.50	int	IV-V	At the hours of 2 and 3 the same night two others were experienced much lighter than the one before described. The vibrations of the earth were from the North east to the south west terminating suddenly like the motion of a carriage slipping on a pavement.	Ely, 1825, p. 686-687; aftershocks? Intensity assumed strong enough to waken people
1/7/1825	3:00					kona?				4.50	int	IV-V	do	do
9/6/1825	11:59					maui?				5.90	int	VI	. . . there was a shock of an earthquake perceived here [Lahaina, Maui] which though not considerable was nonetheless sufficient to alarm the people . . . Not reported elsewhere on Maui. [no time given]	Richards, 1825; stationed at Lahaina, Maui
1/9/1826	6:00					south hawaii?				5.30	int	V	. . . a little before sunrise, we had a considerable smart shock of an earthquake. I first perceived by the trembling or shaking of things in the house and was soon followed by a shock that made crockery rattle considerable. The whole duration was perhaps 8 or 10 seconds.	Goodrich, 1826; stationed at Hilo, Hawaii
11/5/1827	1:59					hawaii				5.30	int	V	Last night we were awakened from our quiet slumbers by the shock of an earthquake. It was much lighter than what is often expressed in this island though it shook our house very sensibly [time assumed]	Ely, 1825, p. 686
4/12/1829	11:59					south hawaii?				5.30	int	V	. . . We were somewhat alarmed by the sudden convulsion of the earth, the rushing [of] our house over us, & the rattling of the crockery, a slight shock of an earthquake, which we occasionally experience at this place. They are so common here & so slight that they are not much thought of by the natives: it continues by a few seconds quite severe to many that we have experienced here before. [no time given]	Goodrich, 1829 [letter to Jeremiah Ewarts dated Apr. 12, 1829 from J. Goodrich's journal at Byron's Bay (Hilo, HI)]

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Date	Time HST	Lat deg	Lat min	Lon deg	Lon min	Region	Pref depth	M other	M other source	M pref	M pref source	I max	Location/felt report	Comment
11/22/1829	14:00					south hawaii				5.30	int	V-VI (Kiluea); IV (Hilo)	. . . On the 22nd 2 o'clock pm another shock of an earthquake, & as I afterwards was informed that Mr. Anderson & Green were down at the bottom of the crater [Kilauea], & that many rocks & stones were precipitated from the walls at the sides of the crater. . . ; . . . we felt a slight shock of an earthquake which rattled the stones down the mountain. . . .	Goodrich, 1829 [letter to Jeramiah Ewarts dated Dec. 8, 1829, from J. Goodrich's journal at Byron's Bay (Hilo, HI)]; Green, 1829 [Journal entry dated Dec. 22, 1829-note discrepancy of date with Goodrich's journal entry for what is presumed to be the same event]; high intensity at Kilauea suggests high intensity at Hilo by analogy with modern events
1/10/1832	18:00					kl sf				6.20	int	VII (Puna); VI (Hilo)	. . . I was then in Hilo, the nearest station to the volcano of Kilauea. In the after-part of the day we experienced several earthquakes, and about six o'clock we felt a shock so severe as induced us to leave our house for the night. The trembling, heaving, rocking, and undulating movements of the convulsed earth, produced sensations that are altogether indescribable. The foundations underneath us seemed to be uncertain and treacherous. But, to add immeasurably to the awe and grandeur, the whole heavens, in the direction of the volcano, were intensely lighted. . . .; see also bib	Dibble, 1839
1/10/1832	18:00					do				6.20	do	do	. . . just at dark, another, which for duration seemed like all that I had ever felt united in one. Then it was, I doubt not, that the eruption took place. . . .; . . . We have heard since the earthquakes of one or more rents made in the earth in the district of Puna about one days walk distant from this place. An enclosure of stones in which hogs were kept was leveled with the ground and a house fell in the neighborhood.; see also bib	Green, 1832; Dibble, 1832 [letter to Samuel Ruggles from Hilo?, HI dated Jan. 14, 1832]; Tomlinson, 1833; see entry for 11/12/1834
1/10/1832	11:00					kl sf				5.60	int	V-VI? (Hilo)	. . . Tuesday noon and evening [Jan 10] were the two severest shocks. The evening was harder than at noon [see below]. . . .; . . . one strong shock, accompanied by an eruption lighting the heavens . . . ; . . .Next day [Jan. 10] at 11 O.C. A.M. a smart shock of an earthquake . . .	Dibble, 1832 [letter to Samuel Ruggles from Hilo?, HI dated Jan. 14, 1832]; 1839; Green, 1832 [letter to Levi Chamberlain from Byron's Bay (Hilo, HI) dated Jan. 7, 1832]; 1833
6/21/1832						ml mok?				4.50	int	IV-V?	Quake felt in Kona. We hear of the breaking out of a new volcano near the center of the island, this was followed by a shock of earthquake	Makua Laiana, Doyle page 39. 7/9/1832 [date of earthquake guessed as the day following the eruption]
10/03/1833	21:59					south hawaii?				5.90	int	6.0 (Hilo-Cox); VI (Hilo-quite heavy)	Lyman notes:2 shocks in the night, one of them quite heavy; October 3, 1833. . . . Last night two shocks of earthquake were felt at this station [Hilo], one was quite heavy. [time assumed]	Wyss and others, 1992, p. 8; Martin, 1979, p. 58; see entry for 11/12/1834
10/13/1833	15:00					kl sf?				5.30	int	5.0 (Hilo-Cox)	Lyman notes: one at 3 o'clock pm rather heavy. Motion up and down; a shock at 3 o'clock pm, motion quick, up and down	Wyss and others, 1992, p. 8; Lyman, 1859, p. 264

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Date	Time HST	Lat deg	Lat min	Lon deg	Lon min	Region	Pref depth	M other	M other source	M pref	M pref source	I max	Location/felt report	Comment
2/19/1834	18:00					kl sf?				5.90	int	VI (Hilo); 5.5 (Hilo-Cox); V (W&K; S&C)	Lyman notes: a shock so heavy, at 6 pm, as to throw down stone walls, throw cream off the milk, and upset small jars, etc.; at 6 pm there was a slight shaking of the earth, which was almost instantaneously followed by a shock so heavy as to upset some things in the house, throw the cream off from milk standing in pans, and throw water out of a pitcher standing in a wash-bowl.	[Table 4 of W&K lists an earthquake on 9/19 at 1800, citing the text as a reference--could not find, probably a misprinted repeat of the 2/19/34 event]; Wyss and others, 1992, p. 8; Lyman, 1859, p. 264; PCA, 05/02/1868, p. 3 also mentions this as an event comparable to 1868. [We assign this event to Kilauea's south flank because of the close intervals between phases of the shaking felt at Hilo]; see entry for 11/12/1834
2/19/1834	18:00					do				5.90	do	do	Lyman notes: . . . at the dinner table tonight, we experienced a severe shock of earthquake. . . we [first] heard a rustling among the thatch . . . instantly followed by a heavy shaking, which lasted some seconds and abated [soon followed] by a more powerful shaking. Everything . . . in commotion around us, and our little cottage shook so terribly that I, fearful it would be down on our heads, sprang from my chair and ran out of doors and husband followed. I looked . . . toward the houses of Mr. Dibble and Goodrich to see if they were standing, for it appeared to me that they could not stand the shock. Things standing on the bureau were upset but nothing was precipitated to the ground. The walls of Mr. Dibble's house were somewhat injured. Mr. Goodrich's sustained no injury though it is a two story building with a cellar under the whole of it. All the cream was thrown out of the pans of milk standing in their cellar. The undulations were from north to south and lasted some seconds and were rather gentle at first. . . ."	Martin, 1979, p. 64
5/14/1834	14:30					south hawaii?				5.60	int	6.0 (Hilo-Cox); V-VI	Lyman notes: a heavy shock between 2 and 3 PM	Wyss and others, 1992, p. 8
8/3/1834	4:00					hawaii deep?				5.60	int	5.5 (Hilo-Cox); V (W&K)	Lyman notes: One at near four AM so heavy as to awaken nearly everyone; felt in Waimea 2 or 3 hours before light (the same time as shock felt in Hilo), heaviest since station was occupied.; one shock felt in Kailua [prob. 4 a.m.]	[Table 4 of W&K lists quake on 8/3 at 4 am (listed this way in Lyman, 1859) and 8/31 at 12:04 am--only one quake on 8/31 at 4 am listed in Wyss and others, 1992, p. 8]; Wyss and others, 1992, p. 8; Martin, 1979, p. 71; see entry for 11/12/1834
8/3/1834	18:59					north hawaii?				5.30	int	V?	. . . a heavier one in the evening, total of eight for the day. [time assumed]	Martin, 1979, p. 71; see entry for 11/12/1834
3/26/1835	18:15					south hawaii?				4.50	int	4.5 (Hilo-Cox)	Lyman notes: Three successive shocks at six and a quarter P.M.; Three shocks following each other in quick succession at 25 minutes past 6 o'clock am [note time discrepancy-original accepted]	Wyss and others, 1992, p. 8; Lyman, 1859, p. 264
7/21/1835	12:01					south hawaii?				4.50	int	4.5 (Hilo-Cox); III	Lyman notes: three shocks during the day [time assumed]	Wyss and others, 1992, p. 8; Cox intensity is the total for three quakes
9/06/1835	2:30					south hawaii?				4.50	int	4.5 (Hilo-Cox)	Lyman notes: a shock at 2 or 3 am	Wyss and others, 1992, p. 8
6/20/1837	18:40					south hawaii?				5.60	int	5.5 (Hilo-Cox)	Lyman notes: A smart shock at 2 minutes before 7 PM [misprint? Lyman, 1859 gives time as 20 min before 7 PM]	Wyss and others, 1992, p. 8; Lyman, 1859, p. 264
1/19/1838	0:15					south hawaii?				5.60	int	5.5 (Hilo-Cox)	Lyman notes: A smart shock after 12 o'clock midnight [Lyman, 1859 gives date as 1/12/1838]	Wyss and others, 1992, p. 8; Lyman, 1859, p. 264

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1/29/1838	22:00					south hawaii??				5.90	int	6.0 (Hilo-Cox)	Lyman notes: Three shocks in quick succession near 10 P.M. The two first heavy, the last slight; Three shocks in pretty quick succession a little past 10 o'clock pm	Wyss and others, 1992, p. 8; Lyman, 1859, p. 264
11/05/1838	9:59					kl ler?				4.50	int	4.5 (Hilo-Cox); III	Lyman notes: three shocks during the day, one in the am, two in the PM [time assumed]	Wyss and others, 1992, p. 8; Cox intensity is the total for three quakes
11/06/1838	23:45					kl sf?				5.60	int	5.5 (Hilo-Cox)	Lyman notes: A smart shock at 1/4 before 12 M	[Lyman, 1859 gives time as midnight]; Wyss and others, 1992, p. 8
11/07/1838	3:00					kl sf?				5.60	int	5.5 (Hilo-Cox)	Lyman notes: another at 3 A.M.	[Lyman, 1859 gives time as twenty past 3 am]; Wyss and others, 1992, p. 8
11/07/1838	4:00					kl sf?				5.60	int	5.5 (Hilo-Cox)	Lyman notes: another about 4 A.M.	Wyss and others, 1992, p. 8
11/17/1838						kl sf?				5.90	int	VI	Damon notes: Hilo, Nov. 17, 1838-- . . .P.S. We have had perhaps a hundred shocks of earthquakes during last week and the first of this week.; Jarves notes: At Hilo, in November, 1838, during the space of eight days, from forty to fifty shocks occurred. Twelve distinct ones were counted in one night. For two days and nights, the earth was in a state of continual agitation, the plants and flowers trembling like frightened animals. In some cases the motion was perpendicular, like that of a ship pitching, and attended by nosies and sensations similar to those produced by heavy waves striking against her sides, and some degree of nausea was felt. In others, the motion was lateral, easy, and undulating, unaccompanied by any sounds; Cheever notes: Forty or fifty shocks over eight days [Nov. 5-12] and twelve in one night [Nov. 8]	Damon, 1950, p. 164; Jarves, 1843; Cheever, 1871, p. 346 [quoting Rev. Mr. Lyman]; maximum intensity estimated
12/4/1838	11:59					kl sf?				4.50	int	4.5 (Hilo-Cox)	Lyman notes: a slight shock, but decided and distinct; a distinct though not heavy shock [time assumed]	Wilkes, 1845 [quoting D.B. Lyman]; Wyss and others, 1992, p. 34 [date misprinted as 1839]; Lyman, 1859, p. 265
12/12/1838	13:00					kl sf				6.10	int	6.5 (Hilo-Cox); VI (W&K; S&C-Hilo)	Lyman notes: A tremendous [severe] shock at one o'clock P.M. The doors and windows rattled and was difficult to walk (around) across the room. The little plants shook and trembled and a person walking near the house has to brace himself to keep his position. Stone walls were thrown down and the plastering in the house cracked [but no other damage done]; earthquakes frequent since 5 November; a severe shock on the 12th, terrifying the natives and throwing me off balance; two years ago a great rent was made in the ground [near site of 1840 eruption], and all the springs in the vicinity dried up	Wyss and others, 1992, p. 8; Lyman, 1859, p. 265; Martin, 1979, p. 103; Jarves, 1840
12/12/1838	13:00					do				6.10	do	do	. . . You are aware that we have earthquakes on this island The last time T. was in Puna [Dec. 1838] we experienced a shock which tore off plastering from our house, threw down stone walls, spilled milk out of pans, and water out of pails &c. We live in a twostory weak-framed house . . .	Coan, 1839 [letter from F. Coan to Maria C. Robinson from Hilo, HI dated Mar. 12, 1839]

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3/18/1839	11:59					hawaii				6.10	int	VI-VII (Hilo?)	Lyman notes: severe, felt at Maui [time asumed]	Wilkes, 1845 [quoting D.B. Lyman]; Wyss and others, 1992, p. 34
4/07/1839	12:00					south hawaii?				5.30	int	5.0 (Hilo-Cox)	Lyman notes: a pretty smart shock felt at noon [midday]	Wyss and others, 1992, p. 8; Lyman, 1859, p. 265
2/01/1840	13:30					south hawaii?				6.10	int	6.5 (Hilo-Cox); V (S&C)	Lyman notes: A severe shock at 1 1/2 P.M.	Wyss and others, 1992, p. 8
12/18/1840	5:00					south hawaii?				5.30	int	5.0 (Hilo-Cox); V (W&K)	Lyman notes: Two smart shocks about five A.M. waking us from sound sleep.	Wyss and others, 1992, p. 8
3/11/1841	12:45					kona?				6.10	int	VI-VII (Kona); IV (Hilo); 3.0 (Hilo-Cox)	Lyman notes: Two shocks one at 1/4 before one o'clock, and the other at 20 minutes before two P.M. Motion up and down. - gently and easy; Forbes note: Today at a little past noon had a very severe shock of an earthquake, so severe that we all instinctively left the house fearing the result; earthquake March 1841 felt in Kona; On the 11th inst. two earthquakes were felt at Kailua, Hawaii--the first shock occurred 15 minutes before 10 o'clock [1 o'clock?], P.M. The second about half an hour later. Rev. Mr. Thurston states that they were the strongest that he has ever felt there. At Kealakekua much rock was thrown down from the pali	Wyss and others, 1992, p. 8; Forbes, 1841, p. 93 [Forbes entry of March 12, 1841 from Kaawaloa, Kona] [Forbes or Lyman date one day off?]; Jarves, 1843; Anonymous, 1841; analogy with May, 1952 Kona earthquake allows Hilo intensity to be IV
3/11/1841	12:45					do				6.10	do	do	Cheever notes: The first time I felt a shock at these islands, it was in the house about noon, at Kohala; and I could not help going to the door after such a commotion, to see if there were no signs of sympathy with the laboring earth and the other elements. . . . and the throe had passed like an evil thought, which will sometimes dart across the mind and you are glad to have it go as quick as it came.	Cheever, 1871, p. 340, 343; date guessed from time and location/intensity
3/11/1841	13:40					kona?				5.70	int	3.0 (Hilo-Cox)	Lyman notes: two shocks; . . . the other at 20 minutes before two p.m.; motion up and down, gentle and easy; Forbes note: In a short time afterward followed 3 others, at short intervals.	Wyss and others, 1992, p. 8; Anonymous, 1841; Forbes, 1841, p. 93 [Forbes entry of March 12, 1841 from Kaawaloa, Kona] (Forbes or Lyman date one day off?); aftershock; magnitude adjusted down from mainshock
4/05/1841	13:30					south hawaii?				5.30	int	V; 3.0 (Hilo-Cox)	Lyman notes: A smart shock at 1 1/2 P.M. undulations North and South; I was sitting in my room alone when I felt the premonitory shock. I arose and stepped to the verandah where the children were playing when there was such a violent shaking as to arrest them in their play and excite their fears. . . .	Wyss and others, 1992, p. 8; Martin, 1979, p. 108

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4/07/1841	23:45					kl sf?				6.50	k&w	VII (Hilo-W&K); VI (S&C); 6.9 (Hilo-Cox)	Lyman notes: The most severe shock we ever felt at 11 3/4 PM. Seams were opened in the plastering in every room in the house, and the whitewash scattered a foot or two from the walls. Every soul in the house was awaked and it seemed as if the house was really coming down on us. Milk was thrown out of pans and water out of a pail only half full. A little before one A.M. and again at two there were slight jars; stone walls thrown down, plastering cracked and chimney also. Milk thrown out of pans and water from a pail half full; Jarves notes: [at Hilo] In April, 1841, several more powerful shocks were experienced at the same place; one of which was quite severe. The houses were violently shaken, and had they not been constructed of yielding materials, would have been prostrated. The plastering was shattered, crockery were destroyed, milk thrown from pans, stone walls cast down, and other damage done. ; not reported felt at Kona or Oahu [see bib for detail]	Wyss and others, 1992, p. 8-9; Lyman, 1859, p. 265; Jarves, 1843; location inferred from Hilo high intensity and lack of reports from Honolulu or Kona, where intensities of VI or VII in Kona (as for an earthquake west of Kilauea's south flank) would have been noted; magnitude assigned by analogy with intensity map for the earthquake of March 30, 1954 (W&K)
4/07/1841	23:45					do	do	do	do	6.50	do	do	On the night of the 8th inst. we experienced a severe shock of earthquake and so much was I affected by it, I could not record it for several days and have not been able till last evening to write anyone about it. . . We felt the shock not far from 12. It was more severe than any former one. We arose and looked about the house and saw its effects on the plastering, milk etc. and retired. About 1 a.m. there was a jar and we sprang up expecting a heavy shock to follow but were disappointed, but our feelings had become too much excited to allow of our sleeping. We therefore dressed and sat up the remainder of the night, and never shall I forget how intensely I watched for the morning. . . I then raised the curtain of the children's bed and also of the crib, placing the latter near the door and kept myself in a situation to flee. . . Our plastering and chimney are cracked and some stone walls thrown down. It has been remarked by the natives that it was the most severe shock they ever felt. . .	Martin, 1979, p. 108-109 [gives date of mainshock as 4/8; aftershocks would be 4/9]
4/07/1841	23:45					do	do	do	do	6.50	do	do	Cheever notes: One of the two shocks experienced at Hilo was in the night, when I was awakened by its jar, but the mind took no cognizance of it till it was passed. Its suddenness was like that of lightning . . .	Cheever, 1871, p. 343; date guessed from time/intensity
5/18/1841	0:30					oahu?				5.30	int	V	On Monday night last, between 12 and 1 o'clock [May 18 A.M.], a shock was experienced here of sufficient violence to shake a house and awake its inmates.	Anonymous, 1841
6/26/1841	21:59					south hawaii?				4.50	int	4.5 (Hilo-Cox)	Lyman notes: a shock in the night [time assumed]	Wyss and others, 1992, p. 9
7/03/1841	5:30					south hawaii?				4.50	int	4.5 (Hilo-Cox)	Lyman notes: a shock between 5 and 6 am	Wyss and others, 1992, p. 9
9/30/1841	23:59					south hawaii?				5.30	int	V; 4.5 (Hilo-Cox)	Lyman notes: one shock; time forgotten (no date given); a smart shock in the night [no time or date]	Wyss and others, 1992, p. 9; Lyman, 1859, p. 265
11/28/1841	21:59					south hawaii?				4.50	int	4.5 (Hilo-Cox)	Lyman notes: a shock in the night [time assumed]	Wyss and others, 1992, p. 9

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2/14/1842	5:00					south hawaii?				4.50	int	4.5 (Hilo-Cox)	Lyman notes: a shock at five AM	Wyss and others, 1992, p. 9
8/15/1842	21:59					south hawaii?				4.50	int	4.5 (Hilo-Cox)	Lyman notes: a shock in the night [time assumed]	Wyss and others, 1992, p. 9
8/31/1842	21:30					south hawaii?				4.50	int	4.5 (Hilo-Cox)	Lyman notes: A shock at half past nine evening; not heavy	Wyss and others, 1992, p. 9; Lyman, 1859, p. 265
11/09/1842	21:59					south hawaii?				5.30	int	V (W&K); 5.0 (Hilo-Cox)	Lyman notes: a shock in the night so heavy as to awaken us [time assumed]	Wyss and others, 1992, p. 9
3/6/1843	20:00					mauna loa				4.50	int	IV-V	. . . The same evening [Mar. 6], after light, a smart shock of earthquake, which lasted 30 seconds . . .	Coan, 1843 [letter to Rev. R. Anderson dated Apr. 12, 1843 from T. Coan's letters from Byron's Bay (Hilo, HI)]
4/27/1843	21:59					south hawaii?				4.50	int	4.5 (Hilo-Cox)	Lyman notes: a shock in the night [time assumed]	Wyss and others, 1992, p. 9
2/18/1844	18:30					kl sf?				6.10	int	6.5 (Hilo-Cox); VI (Puna); V (W&K; S&C)	Lyman notes: A severe shock at 6 1/2 P.M.	Wyss and others, 1992, p. 9
2/18/1844	18:30					do				6.10	do	do	Cheever notes: Another shock was more prolonged while we were at the supper-table. First, there was a premonitory jarring of the house, like as I had felt three times before; then a violent jerk, as if the house were heavily knocked in one corner, and the blow transmitted to the other until there was a recoil. Native houses were seen through the window to pitch and reel. Mr. Coan, who was absent on a tour [probably in Puna], and sitting at the time under some trees, said that they moved to and fro, and the leaves rustled as from the blow of a woodsman's ax. His little son insisted upon it, at first, that he felt something warm strike through him, but became convinced at length, that it was only the natural glow of excitement and alarm, which not boys only, but boys' parents too, and else is subject to when they hear the coarse rumble, and feel the fearful vibration of an earthquake. (p. 343).	Cheever, 1871
9/01/1844	7:57					south hawaii?				5.60	int	V-VI; 6.0 (Hilo-Cox)	Lyman notes: a heavy shock a little before 8 AM; between 7 and 8 am	Wyss and others, 1992, p. 9; Lyman, 1859, p. 265
6/13/1845	6:30					hilea?				5.00	k&w	V	June 13, 1845--This morning at half past 6 o'clock we had the longest continued & perhaps the scariest earthquake we have ever felt. The house continued to shake or roll as if on a kind of cesaw [see-saw] rolling & turning from North to South which continued nearly a minute perhaps quite.	Paris, 1845; stationed at Waiohinu, Hawaii; region/magnitude assigned by analogy to earthquake of August 20, 1924 (W&K)
10/14/1847	15:00					south hawaii?				5.60	int	V-VI; 6.0 (Hilo-Cox)	Lyman notes: a heavy shock about 3 PM	Wyss and others, 1992, p. 9; Lyman, 1859, p. 265, [date given as 10/4]
2/28/1848	17:00					south hawaii?				5.60	int	V-VI; 6.0 (Hilo-Cox)	Lyman notes: a heavy shock at 5 PM (date missing)	Wyss and others, 1992, p. 9
7/09/1848	4:15					south hawaii?				6.10	int	6.5 (Hilo-Cox); V (S&C)	Lyman notes: A severe protracted shock at a quarter past four morning	Wyss and others, 1992, p. 9; Lyman, 1859, p. 265 [time given as 4:45 am]
5/30/1849	21:59					hilea?				5.30	int	V	Last night [May 30-Jun. 1] there was a shock of a earthquake which shook the house considerably. [time assumed]	Kinney, 1849 [letter to Rufus Anderson dated May 30, 1849 from H. Kinney (continuation dated Jun. 1) at Waiohinu, HI]

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Date	Time HST	Lat deg	Lat min	Lon deg	Lon min	Region	Pref depth	M other	M other source	M pref	M pref source	I max	Location/felt report	Comment
7/15/1849	4:05					hilea?				6.20	k&w	VII (Kau); VI (Kona); V (Hilo)	During his [Dr. Wetmore's] absence [June-August] we had quite a severe earthquake, severe I mean for this region. It did no injury but threw down a stone wall at Kau, which was strongly laid, and at Kealakekua rocked a stone church so much that it is feared it will fall down. It occurred a little past 4 in the morning while I was lying awake and rocked my bed at a rather uncomfortable rate. . . . It was supposed to last 10 or 12 seconds. slight shocks are common here but they seldom have one so heavy as this.	Wetmore, 1849 [Letter from L. Wetmore to Fanny dated Hilo, HI, Aug. 31, 1849]; date approximate; region/magnitude estimated from isoseismal map
7/14/1851	10:20					south hawaii?				5.30	int	V-VI	Lyman notes: a heavy shock	Perrey, 1860; Lyman, 1859, p. 266 [omitted from Wyss and others, 1992]
3/31/1852	16:15					kaoiiki??				6.20	int	VII; 6.5 (Hilo-Cox)	Lyman notes: A very severe shock 4 1/4 P.M.; Warshauer notes: 1852 eruption accompanied by earthquake shocks and detonations that shook the great island from summit to sea	Wyss and others, 1992, p. 9; Lyman, 1859, p. 266 [time given as 1:15 PM]; PCA, 11/20/1880, p. 2
10/19/1852	4:45					south hawaii?				5.60	int	5.5 (Hilo-Cox)	Lyman notes: A smart shock at 4 3/4 A.M.	Wyss and others, 1992, p. 9
3/02/1853	5:00					south hawaii?				5.60	int	5.5 (Hilo-Cox)	Lyman notes: A smart shock at 5 A.M.	Wyss and others, 1992, p. 9; Lyman, 1859, p. 266 [time given as 5 PM]
3/08/1853	11:59					south hawaii?				5.60	int	5.5 (Hilo-Cox)	Lyman notes: a smart shock-time forgotten; a slight shock [time assumed]	Wyss and others, 1992, p. 9; Lyman, 1859, p. 266
3/11/1853	4:30					south hawaii?				5.60	int	5.5 (Hilo-Cox)	Lyman notes: A smart shock at 4 1/2 A.M.	Wyss and others, 1992, p. 9
8/26/1854	16:00					south hawaii??				5.30	int	5.5 (Hilo-Cox)	Lyman notes: A smart shock at 4 P.M.	Wyss and others, 1992, p. 9
10/29/1854	20:00					south hawaii?				5.30	int	5.5 (Hilo-Cox)	Lyman notes: A smart shock at 8 1/2 P.M., the vibrations continuing several seconds; premonitory distinct	Wyss and others, 1992, p. 9; Lyman, 1859, p. 266
3/18/1855	20:30					south hawaii?				5.30	int	5.5 (Hilo-Cox)	Lyman notes: a smart shock; the vibrations continuing several seconds	Wyss and others, 1992, p. 9
5/24/1855	9:00					south hawaii?				5.30	int	5.0 (Hilo-Cox)	Lyman notes: A protracted & tolerably smart shock at 9 o'clock A.M.	Wyss and others, 1992, p. 9
6/30/1855	16:30					south hawaii?				5.30	int	5.5 (Hilo-Cox)	Lyman notes: A smart shock at 4 1/2 P.M. [date in June omitted]	Wyss and others, 1992, p. 9
8/03/1855	20:30					south hawaii?				5.30	int	5.0 (Hilo-Cox)	Lyman notes: A tolerably smart shock at 8 1/2 P.M., motion up and down	Wyss and others, 1992, p. 9
9/17/1855	8:00					south hawaii?				5.30	int	5.5 (Hilo-Cox)	Lyman notes: A smart shock at 8 A.M.; a shock	Wyss and others, 1992, p. 10; Lyman, 1859, p. 266
11/02/1855	7:00					south hawaii?				5.30	int	5.5 (Hilo-Cox)	Lyman notes: A smart shock at 7 A.M.	Wyss and others, 1992, p. 10
1/08/1856	4:00					south hawaii?				5.30	int	5.5 (Hilo-Cox)	Lyman notes: A smart shock at 4 A.M.	Wyss and others, 1992, p. 10
8/18/1856	1:00					mauna loa				5.30	int	V	Warshauer notes: On the night of the 18th of August an earthquake occurred in Kona, so severe as to wake the inhabitants from sleep.	PCA, 9/11/1856, p. 3

Date	Time HST	Lat deg	Lat min	Lon deg	Lon min	Region	Pref depth	M other	M other source	M pref	M pref source	I max	Location/felt report	Comment
7/30/1857	1:00					south hawaii?				6.10	int	6.5 (Hilo-Cox); VI-VII; V (S&C)	Lyman notes: A severe shock at one in the morning, motion undulating; Warshauer notes: A few minutes past one o'clock this morning, the people of Hilo and of the surrounding districts were suddenly aroused from their usually quiet slumber by a very heavy quake of the earth which lasted for several seconds and was felt more severely than any we have had on this side of the island for a number of years past: during my residence on the island of nearly five years, I have not experienced its equal. No damage however was done though it created a little fright to those who had not previously experienced the effects of a heavy shock. The undulation of the earth was from west to east. . .	Wyss and others, 1992, p. 10; PCA, 8/13/1857, p. 2
9/09/1857	9:00					kl sf?				5.60	int	5.5 (Hilo-Cox)	Lyman notes: A [short] smart shock at 9 A.M.	Wyss and others, 1992, p. 10; Lyman, 1859, p. 266; not noted in PCA
4/30/1858	23:59					south hawaii?				5.60	int	V-VI; 6.0 (Hilo-Cox)	Lyman notes: a protracted and rather heavy shock (no date or time given)	Wyss and others, 1992, p. 10; not noted in PCA
7/05/1858	2:00					south hawaii?				4.50	int	4.5 (Hilo-Cox)	Lyman notes: a smart jar before morning; a smart shock or jar	Wyss and others, 1992, p. 10; Lyman, 1859, p. 266; not noted in PCA
7/16/1859	23:00					south hawaii?				5.60	int	5.5 (Hilo-Cox)	Lyman notes: a smart shock at 11 PM	Wyss and others, 1992, p. 10; not noted in PCA
11/21/1859	2:25					alenuihaha?				5.90	k&w	VI (Kawaihae, Waimea); IV (Honolulu); 3.8 (Cox-Honolulu); 5.5 (Cox-Hilo); V (S&C-Hilo)	Lyman notes: A smart shock at 3 A.M. The trembling continued unusually long after the shock; Cox notes: Int 3.8 in Honolulu; felt Maui; severe in Kawaihae; Warshauer notes: felt by several on Oahu as a severe shock, sensation of being taken by the shoulders and shaken, persons awakened; felt very sensibly at Lahaina and Kawaihae (strongest in years); The shock was felt here [Waimea] about three o'clock on the morning of Monday, the 1st of November [other reports place it on Nov. 21], and lasted about 10 seconds. It was preceded by a heavy rumbling sound, like distant thunder, which lasted about the same length of time.	Wyss and others, 1992, p. 10 [time given as 3 am]; Cox, 1986; PCA, 11/24/1859, p. 2; PCA, 12/01/1859, p. 2; PCA, 12/15/1859, p. 2 [date given as 11/1]; region/magnitude estimated from isoseismal map; analogy to earthquake of 3/19/1926 (W&K)
11/21/1859	2:55					alenuihaha?				5.30	int	VI? (Waimea)	Warshauer notes: Nor was that all: about a half an hour after we felt another, not quite so severe, but it made the tree tops tremble. As there was no wind, we could hear the leaves shake over the house. The bed on which I slept shook like a man with the fever and ague. [no felt confirmation from elsewhere; local to Waimea?]	aftershock?; PCA, 12/15/1859, p. 2 [date given as 11/1]
6/01/1860						south hawaii?				5.60	int	V-VI	Warshauer notes: On the 1st of June, at 3 o'clock A.M., we had a quite severe shock of an earthquake [at Hilo]. It awoke persons out of a sound sleep, and lasted about two minutes.	Perrey, 1867; PCA, 6/14/1860, p. 2
7/18/1860	16:00					south hawaii?				6.10	int	6.5 (Hilo-Cox); V (W&K; S&C)	Lyman notes: A severe shock at 4 P.M.	Wyss and others, 1992, p. 10; not noted in PCA
3/12/1861	10:00					south hawaii?				5.30	int	5.5 (Hilo-Cox)	Lyman notes: a smart shock at 10 AM	Wyss and others, 1992, p. 10; not noted in PCA

Date	Time HST	Lat deg	Lat min	Lon deg	Lon min	Region	Pref depth	M other	M other source	M pref	M pref source	I max	Location/felt report	Comment
6/01/1861	20:30					south hawaii?				6.10	int	6.5 (Hilo-Cox); V (W&K; S&C)	Lyman notes: Quite a severe shock at 8 1/2 P.M.; Warshauer notes: From Hawaii, we hear that three earthquakes have recently occurred on that island	Wyss and others, 1992, p. 10; PCA, 6/13/1861, p. 2
12/05/1861	11:49					molokai?				5.90	int	VI (S&C; Hon, Lahaina); V (W&K-Hon and Maui); 5.0 (Cox-Hon)	Cox notes: felt Oahu and Maui but not Hawaii; awakened 'all hands' on Maui; probably Molokai-Lanai vic.; Warshauer notes: heavy eq on Oahu, 2 distinct shocks, felt with fright sitting/standing/walking, houses shaken, plaster fell; ink spilled at Lahaina; first quake lifted buildings/houses up and down, followed by e-w motion, shook windows/glassware/crockery as if under bombardment	Cox, 1986 [See his evaluation of the entire earthquake sequence]; Perrey, 1864; PCA, 12/12/1861; Polynesian, 12/07/61
12/15/1861	4:40					maui?				5.60	int	V-VI	A correspondent writing from Ulupalakua, E. Maui, says: There was a heavy shock of an earthquake here on Sunday morning December 15, at 20 minutes before 5 o'clock. it awoke all hands. [It was described as more intense than the shake of the previous Thursday].	Cox, 1986; PCA, 12/26/1861, p. 2
12/15/1861	19:21					molokai?				5.60	int	V-VI (Hon); V (Hon-W&K); 4.8 (Hon-Cox)	Cox notes (felt Oahu but not Maui; probably Molokai-Lanai vic.); Warshauer notes: On Sunday evening last, at about 21 minutes past seven o'clock, another severe shock was felt all over this island (Oahu). It consisted of ten or twelve very regular vibrations from East to West, felt equally by those sitting or walking. It was accompanied by a noise more distant than that which accompanied the shock of the 12th. Some persons felt an electric sensation in the knees. . . . some persons standing at the harbor-master's office, observed the fishes suddenly flying on the surface toward the sea . . . The schooners lying by the wharves were also set to rocking; water bubbled in harbor	Cox, 1986; PCA, 12/26/1861, p. 2; Polynesian, 12/28/1861
12/30/1861	9:59					south hawaii?				5.60	int	V-VI	Warshauer notes: The earthquake was felt on Hawaii on Sunday night [12/29-30/1861], but the heaviest shocks were noticed on the following morning, which were unusually severe, even for that island, where they are of frequent occurrence. [time assumed]	PCA, 1/2/1862, p. 2

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Date	Time HST	Lat deg	Lat min	Lon deg	Lon min	Region	Pref depth	M other	M other source	M pref	M pref source	I max	Location/felt report	Comment
1/29/1862	5:00					north hawaii??				5.30	int	V (Hilo; Maui)	Perrey notes: an earthquake occurred around January 29, 1862, lasting more than 5 seconds; Warshauer notes: [letter from Hawaii] On the morning of the 29th January (one letter says the 29th another the 30th,) a few minutes after 5 o'clock, a very severe shock was felt--so heavy as to wake up all who were asleep, and set doors, windows, lamps, crockery, &c., into an unusual nervous state. One correspondent, writing from Maui, says: . . . , the supply of earthquakes is fully up to demand. A fine sample was offered at 5 A.M. this morning, and there was a lively time among the spectators for about 20 seconds, which was met with a corresponding briskness among the lamps and crockery. . . . Another correspondent writing from Makawao, (Jan. 30,) says: At 5 o'clock this morning, we were pretty thoroughly shaken up by an earthquake. I had risen and was striking a light, so that I fully realized the movement . . .	Perrey, 1864; PCA, 2/6/1862, p. 2
1/29/1862	5:00					do			do	5.30	do	do	Warshauer notes: several severe shocks of earthquake felt on the Kona side of Hawaii during the past month	PCA, 1/30/1862, p. 2
5/06/1863	15:30					south hawaii??				5.90	int	6.0 (Hilo-Cox)	Lyman notes: Two heavy shocks at 3 1/2 P.M.	Wyss and others, 1992, p. 10; not noted in PCA
11/26/1863	3:30					south hawaii??				5.90	int	6.0 (Hilo-Cox)	Lyman notes: A heavy shock at 3 1/2 A.M.; Warshauer notes: An unusually severe shock of occurred at Hilo, about 4 o'clock on the morning of the 26th--the heaviest that has been experienced there for many years.	Wyss and others, 1992, p. 10; PCA, 12/3/1863
3/03/1865	0:45					west hawaii deep?	40			6.50	k&w	VII (Kona); VI-VII (Pahala); V-VI (Maui); V-VI (Hilo); 6.0 (Hilo-Cox); V (Hon)	Warshauer notes: On Friday morning, March 3rd, about fifteen minutes before one o'clock, a very severe shock of an earthquake was felt [on Oahu], many being waked out of a sound sleep by it. It appears to have been accompanied by a noise like that of persons tramping heavily over the floor. The frame dwelling we occupy was shaken very sensibly. It continued an unusually long period, and the motion was heaving up and down, rather than sideways as it generally is; The earthquake noticed in our last issue, was felt on Maui, more distinctly than on this island. Many of the people were waked up by it. On Hawaii it was very severe. Mr. Paris writes, under the date of March 8--On Thursday night, the 2nd inst. about half past 12 o'clock, we had the hardest shake of earthquake I have experienced in 25 years [at Kaawaloa]. The plastering of our house is much damaged, and a great deal of stone wall in this region damaged.	PCA, 3/4/1865, p. 2, 3/11/1865, p. 2; region/magnitude assigned from isoseismal map; possible analog to earthquake of April 22, 1951, but at different epicenter

Date	Time HST	Lat deg	Lat min	Lon deg	Lon min	Region	Pref depth	M other	M other source	M pref	M pref source	I max	Location/felt report	Comment
3/03/1865	0:45					do				6.50	do	do	Warshauer notes: At 1 A.M. Friday, March 3, we were awakened from sleep by the most severe earthquake that we have ever experienced. The shock was accompanied by a heavy rumbling sound, which with the violent rattling of every door and window in the house, startled from their slumber twenty-four out of twenty-six inmates of our house. The first and most violent shock seemed to continue with a quick rumbling motion for half a minute after we were fairly awake. A few minutes later two slight shocks were noticed. A band-box which fell from a shelf, was the only article which was displaced in our house . . . A few persons ran out of their houses . . . The dogs of the village set of a most vigorous barking . . . The shock . . . was felt in Kona . . .	PCA, 3/18/1865 [letter from missionary Gulick at Waiohinu dated Mar. 6, 1865]
3/03/1865	0:45					do				6.50	do	do	Warshauer notes cont.: [a native living in Keaiwa describes] the most violent earthquake he has ever experienced. He was up when [they] heard a loud report [followed by] slight shocks of the earthquake which increased in severity every shock for a minute or so, then passed off as it came, with slight shocks. [Dur 3 or 4 min], shock after shock shaking the house as if it would tear it from its foundation. Windows and doors rattling, and bottles falling. . . . great convulsions and noises in the earth right under our house. . . . After the hard shocks, it passed off gradually. Shortly after, . . . a report as if something had come bounding up against the side of the mountain . . . till it reached us as another shock, but it did not continue very long. . . as many as five more slight shocks before morning! Our stone walls are tumbled down in six different places. Doors . . . shut as tight as could be, were opened; and the safe door . . . was unfastened . . . All over the house we find things thrown down and tipped over. . .	PCA, 3/18/1865 [Gulick, 1863--report from missionary Gulick at Waiohinu]
7/17/1865	4:00					south hawaii?				4.50	int	4.5 (Hilo-Cox)	Lyman notes: two shocks at 4 AM; VHR-no entry for this date	Wyss and others, 1992, p. 10; not in PCA or HG
12/11/1865	1:30					south hawaii?				5.30	int	V; 5.5 (Hilo-Cox)	Lyman notes: A smart shake at 1 1/2 A.M.; VHR-no entry for this date	Wyss and others, 1992, p. 10; not in PCA or HG
10/30/1867	17:30					south hawaii?				5.60	int	V-VI	Lyman notes: A heavy shock at 5 1/2 P.M.; VHR-no entry for this date	Wyss and others, 1992, p. 11; not in PCA or HG
11/07/1867	2:00					south hawaii?				5.30	int	V	Lyman notes: a smart shock at 2 AM; VHR-no entry for this date	Wyss and others, 1992, p. 11; not in PCA or HG
3/08/1868	11:59					hilea?				5.30	int	V (Kona)	Warshauer notes: On Monday the 8th ult., a hard shake of earthquake passed through the Kona district, and caused the residents to believe that the volcano was preparing for another exhibition of pyrotechnics. [no time given]	PCA, 4/1/1868, p. 3

Date	Time HST	Lat deg	Lat min	Lon deg	Lon min	Region	Pref depth	M other	M other source	M pref	M pref source	I max	Location/felt report	Comment
3/28/1868	13:22					hilea				6.10	int	6.5; VH	no mention of earthquakes in VHR; felt-Kona, Kau and Hilo [see entry for 3/28 10:15]; felt-Volcano [Fornander speaks of the event at 1:28 (below) as being the first heavy shock, implying that some previous events were felt at Volcano]	HG, 4/8/1868, p. 2 [list of earthquakes on 3/28-31/1868, from Rev. C.G. Williamson]; Fornander, 1868
3/28/1868	13:28	19	6	155	39	hilea		7.00	W&K	7.00	w&k	IX (W&K); VIII (S&C); 7.5; VVH	Lyman notes: Felt a shock of earthquake quite severe at 1 4/5 P.M. [the preceding one not felt in Hilo?]; . . . Saturday [3/28] is a day ever to be remembered here: in . . . less than half a day, there were 51 decisive shocks, one of which was the strongest shock that the oldest inhabitant has experienced. [It threw] down a portion of Kealakekua Pali, and overturning stone walls in certain places. This occurred at 1:28 pm; [footnote] This lasted for some time, causing everything to rock backward and forward; . . . masses of rocks thrown off the pali at the bay, buildings seriously strained so as to alarm their inmates. Some stone buildings rendered unsafe. Cisterns of Kona plantation were cracked so as to be unfit for service . . . Waiohinu, Kau seems more seriously shaken than Kona. . . News via Hilo from there to Tuesday, 31st ult., says the earth has opened, and the people are going to a safer distance. . . Stone house of Captain Brown [Kahuku] destroyed, mission parsonage chimney thrown down, and stone church walls cracked. . . .	Wyss and others, 1992, p. 11; HG, 4/8/1868, p. 2 [Williamson letter dated March 31; text and footnote to table]; do [letter following Williamson--first lines, including date, missing--reference is to events on 3/28-29]; Wyss and Koyanagi, 1992; Intensity map in W&K
3/28/1868	13:28	do	do	do	do	do		do	do	7.00	do	do	felt-Kona, Kau and Hilo [see entry for 3/28 10:15]; We have been most thoroughly shaken up for the past two days, and still continue shaking [with over three hundred shocks of earthquake since Friday night [Mar. 27], some of which were terrible. . . Walls were thrown down and houses moved from their foundations; the earth moved up and down so that walking was a difficult thing to accomplish, Capt. Brown's stone house at Kahuku is down. Mr Pogue's chimney was thrown down. The stream of water has increased one half . . .	HG, 4/8/1868, p. 2 [letter from kau dated March 29]

Date	Time HST	Lat deg	Lat min	Lon deg	Lon min	Region	Pref depth	M other	M other source	M pref	M pref source	I max	Location/felt report	Comment
3/28/1868	13:28	do	do	do	do	do		do	do	7.00	do	do	<p>Warshauer notes: . . . While at dinner [we assume this time as the most likely to fit other observations] we had a heavy shock--crockery jingled and the house creaked like a ship in a storm. I left the table . . . and we had a fearful shock. [I ran out of the house] while vases, books, boxes, lamps and dishes were falling about us. When we got out, walls were falling down with a thundering noise, and the air was filled with dust, the earth still quivering. In less than twenty-four hours we had over two hundred shocks. . . ; The most severe shock took place at a quarter of 2 o'clock yesterday afternoon [Mar. 28]. The earth moved like a troubled sea, and the wonder is that more damage was not done; We have had shocks ever since Saturday last, 28th March</p>	PCA, 4/11/1868, p. 3 [a correspondent, writing from Kau; letter from Kau, dated 3/29/1868; letter from Hilo dated 4/3/1868]
3/28/1868	13:28	do	do	do	do	do		do	do	7.00	do	do	<p>[at Volcano House] At 1:28 pm, (my watch), . . . the first heavy shock occurred, making me sway to and fro as if I had lost my footing, on a vessel's deck, rolling in a rough sea. [I saw the effects of] . . . the tumbling down of a portion of the southern wall of Kilauea crater] near the road to Kau; The first shock [1:28 pm] was felt throughout Kau, Puna and Hilo. At Keauhou, the ground shook continually all the afternoon on Saturday [March 28]. In Kau, the shock seemed to have been stronger the more southward you went. At Waiohinu it shook down walls, and cracked the stone church from top to bottom. At Kahuku, Capt. Brown's place, the dwelling house, cattle pens, stone walls, etc., were thrown flat on the ground--fortunately no one was hurt . . .</p>	HG, 4/29/1868, p. 4 [Fornander, 1868]
3/28/1868	15:30					hilea				5.60	int	V-VI (hilo); 5.5; H	<p>Lyman notes: Another hard one at 3 o'clock [assume time to agree with nearest strong Kona shake]; felt-Kona, Kau and Hilo [see entry for 3/28 10:15]; continuous shaking at Keauhou on Saturday afternoon [3/28]</p>	Wyss and others, 1992, p. 11; HG, 4/8/1868, p. 2; Fornander, 1868
3/28/1868	16:00					hilea				5.60	int	5.5; H	<p>felt-Kona, Kau and Hilo [see entry for 3/28 10:15]; [footnote to Williamson table] from 2:50 PM until 4 PM, the ground was incessantly rocking, being occasionally relieved by a more decisive shake, which I have noticed; Continuous shaking at Keauhou on Saturday afternoon [3/28]</p>	HG, 4/8/1868, p. 2; Fornander, 1868
3/28/1868	16:15					hilea				6.10	int	6.5; VH	<p>felt by Lyman in Hilo; felt-Kona, Kau and Hilo [see entry for 3/28 10:15]; Continuous shaking at Keauhou on Saturday afternoon [3/28]</p>	Fuchs (1886); HG, 4/8/1868, p. 2; Fornander, 1868
3/28/1868	17:08					hilea				5.60	int	5.5; H	<p>felt-Kona, Kau and Hilo [see entry for 3/28 10:15]</p>	HG, 4/8/1868, p. 2; Fornander, 1868

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Date	Time HST	Lat deg	Lat min	Lon deg	Lon min	Region	Pref depth	M other	M other source	M pref	M pref source	I max	Location/felt report	Comment
3/28/1868	18:00					hilea				5.90	int	V (Kilauea summit, Hilo); 5.5; H	Lyman notes: another [hard one assumed] at 6; felt-Kona, Kau and Hilo [see entry for 3/28 10:15]; [at Volcano House] At 5:55 pm, another smart shock occurred, longer in duration, but not so violent as the first one; Continous shaking at Keauhou on Saturday afternoon [3/28]	Wyss and others, 1992, p. 11; HG, 4/8/1868, p. 2; HG, 4/29/1868, p. 4 [Fornander, 1868]
3/28/1868	19:05					hilea				4.50	int	4.0; M; III (Hilo)	Lyman notes: another at 7 PM [assume time to agree with nearest strong Kona shake]; felt-Kona, Kau and Hilo [see entry for 3/28 10:15]	Wyss and others, 1992, p. 11; HG, 4/8/1868, p. 2
3/28/1868	20:45					hilea				4.50	int	IV-V (kona); 3.0; L	[footnote to Williamson table] distinctive character, vertical motion rather than horizontal and during its continuance presented the idea of an attempt being made to lift the house from underneath	HG, 4/8/1868, p. 2
3/28/1868	21:04					hilea				5.00	int	4.8; MH	felt-Kona, Kau and Hilo [see entry for 3/28 10:15]	HG, 4/8/1868, p. 2
3/28/1868	21:35					hilea				5.00	int	4.8; MH	felt-Kona, Kau and Hilo [see entry for 3/28 10:15]	HG, 4/8/1868, p. 2
3/28/1868	22:17					hilea				5.60	int	5.5; H	Lyman notes: another at 10 PM [assume time to agree with nearest strong Kona shake]; felt-Kona, Kau and Hilo [see entry for 3/28 10:15]	Wyss and others, 1992, p. 11; HG, 4/8/1868, p. 2
3/29/1868	1:10					hilea				6.10	int	6.5; VH; V-VI (Hilo)	Lyman notes: A hard shock in the night which waked us all from sleep. This was at one o'clock A.M.; felt-Kona, Kau and Hilo [see entry for 3/28 10:15]; awoke at 1:10 am, very heavy shock, with continuous trembling of the ground for 1 min, ending with moderate shock at 1:11, felt-Kona, Hilo	Wyss and others, 1992, p. 11; HG, 4/8/1868, p. 2
3/29/1868	3:21					hilea				5.60	int	5.5; H	felt-Kona, Kau and Hilo [see entry for 3/28 10:15]; [see comment and entry for 3/30/1868, 23:59] woke up again; felt-Kona, Hilo	HG, 4/8/1868, p. 2
3/29/1868	4:00					hilea				5.60	int	5.5; H	felt-Kona, Kau and Hilo [see entry for 3/28 10:15]; [see comment and entry for 3/30/1868, 23:59] felt-Kona, Hilo	HG, 4/8/1868, p. 2
3/29/1868	5:00					hilea				5.60	int	5.5; H	felt-Kona, Kau and Hilo [see entry for 3/28 10:15]; [see comment and entry for 3/30/1868, 23:59] felt-Kona, Hilo	HG, 4/8/1868, p. 2
3/29/1868	5:36					hilea				5.60	int	5.5; H; III (Hilo)	Lyman notes: Then a slight shock at six [assume time to agree with nearest strong Kona shake]; felt-Kona, Kau and Hilo [see entry for 3/28 10:15]; [see comment and entry for 3/30/1868, 23:59; lasted about 30 sec]	Wyss and others, 1992, p. 11; HG, 4/8/1868, p. 2
3/29/1868	7:35					hilea				4.50	int	IV-V (kona); 4.5 (Hilo); 4.0; M	Lyman notes: a jar at 8 [assume time to agree with nearest strong Kona shake]; felt-Kona, Kau and Hilo [see entry for 3/28 10:15]	Wyss and others, 1992, p. 11; HG, 4/8/1868, p. 2
3/29/1868	7:40					hilea				4.50	int	IV-V (kona); 4.5 (Hilo); 4.0; M	Lyman notes: another [jar] at a short time after [assume time to agree with nearest strong Kona shake]; felt-Kona, Kau and Hilo [see entry for 3/28 10:15]	Wyss and others, 1992, p. 11; HG, 4/8/1868, p. 2

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Date	Time HST	Lat deg	Lat min	Lon deg	Lon min	Region	Pref depth	M other	M other source	M pref	M pref source	I max	Location/felt report	Comment
3/29/1868	12:12					kl sf?				5.30	int	V (Hilo, Kilauea summit); III-IV (kona; 4.0; M	Lyman notes: another a smart shock at twelve M.[Noon?], motion undulatory [assume time to agree with nearest strong Kona shake]; felt-Kona, Kau and Hilo [see entry for 3/28 10:15]; On Sunday, the 29th, another smart shock was felt at the Volcano House, at about 12 o'clock, noon. No special damage done there	Wyss and others, 1992, p. 11; HG, 4/8/1868, p. 2; HG, 4/29/1868, p. 4 [Fornander, 1868]
3/29/1868	13:09					hilea				5.60	int	5.5; H; III (Hilo)	Lyman notes: At one P.M. an easy shake [assume time to agree with nearest strong Kona shake]; felt-Kona, Kau and Hilo [see entry for 3/28 10:15]	Wyss and others, 1992, p. 11; HG, 4/8/1868, p. 2
3/30/1868	1:00					hilea				6.10	int	6.5; VH; V (Hilo)	felt-Kona, Kau and Hilo [see entry for 3/28 10:15]; On the 30th and 31st, and April 1st, a number of shocks were felt at Hilo, some of them sufficiently powerful to awaken persons from sleep, causing furniture, etc. to rattle.	HG, 4/8/1868, p. 2; HG, 4/15/1868, p. 2
3/30/1868	23:35					hilea				5.60	int	5.5; H; V (Hilo)	felt-Kona, Kau and Hilo [see entries for 3/28 10:15 and 3/30 01:00]	HG, 4/8/1868, p. 2; HG, 4/15/1868, p. 2
3/31/1868	5:22					hilea				5.60	int	5.5; H; V (Hilo)	felt-Kona and Hilo [see entry for 3/30 01:00]	HG, 4/8/1868, p. 2
4/01/1868	0:00					hilea				5.30	int	IV-V (Hilo)	Lyman notes: see entry for 6 am; felt-Kona and Hilo [see entry for 3/30 01:00]	Wyss and others, 1992, p. 11; no entry for Kona--Williamson asleep?
4/01/1868	1:00					hilea				5.30	int	IV-V (Hilo)	Lyman notes: see entry for 6 am; felt-Kona and Hilo [see entry for 3/30 01:00]	Wyss and others, 1992, p. 11; no entry for Kona--Williamson asleep?
4/01/1868	1:45					hilea				5.60	int	5.5; H; V (Hilo)	Lyman notes: see entry for 6 am; felt-Kona and Hilo [see entry for 3/30 01:00]; Warshauer notes: Tuesday night, from about ten [3/31] till two in the morning [4/1], the shaking was almost incessant [at Keaiwa, Kau], and then subsided [lack of events felt elsewhere, except for 1:45 am, suggests intense, local, Mauna Loa southwest rift or hilea swarm]	HG, 4/15/1868, p. 3 [Williamson, 1868b]; PCA, 4/18/1868, p. 3 [Lyman, 1868c]
4/01/1868	3:00					hilea				5.30	int	IV-V (Hilo)	Lyman notes: see entry for 6 am; felt-Kona and Hilo [see entry for 3/30 01:00]	Wyss and others, 1992, p. 11; no entry for Kona--Williamson asleep?
4/01/1868	4:00					hilea				5.30	int	IV-V (Hilo)	Lyman notes: see entry for 6 am; felt-Kona and Hilo [see entry for 3/30 01:00]	Wyss and others, 1992, p. 11; no entry for Kona--Williamson asleep?
4/01/1868	5:40					hilea				5.60	int	5.5; H; V (Hilo)	Lyman notes: see entry for 6 am; Wednesday morning (April 1st,) about sunrise, there was a hard shake; felt-Kona, Hilo, Kau	Wyss and others, 1992, p. 11; HG, 4/15/1868, p. 3 [Williamson, 1868b]; PCA, 4/18/1868, p. 3 [Lyman, 1868c]
4/01/1868	17:00					hilea				5.30	int	V-VI (Kau); III-IV (Hilo)	Lyman notes: see entry for 4/01 6 am; felt-Kona and Hilo [see entry for 3/30 01:00]; Warshauer notes: . . . and again about five pm [on Apr. 1] there was a severe and protracted shaking with a great deal of swaying to and fro of the earth [at Lyman's home in Kau]	Wyss and others, 1992, p. 11; PCA, 4/18/1868, p. 3 [Lyman, 1868c]
4/01/1868	20:15					hilea				4.50	int	4.0; M	Lyman notes: see entry for 4/01 6 am; felt-Kona and Hilo [see entry for 3/30 01:00]	Wyss and others, 1992, p. 11; HG, 4/15/1868, p. 3 [Williamson, 1868b]
4/01/1868	21:21					hilea				5.00	int	4.8; MH		HG, 4/15/1868, p. 3 [Williamson, 1868b]
4/01/1868	22:25					hilea				5.90	int	5.5; H; V (Hilo)	Lyman notes: a jar [see entry for 4/01 6 am]	Wyss and others, 1992, p. 11; HG, 4/15/1868, p. 3 [Williamson, 1868b]
4/01/1868	23:00					hilea				5.60	int	5.5; H; III (Hilo)	accompanied with the sound of an explosion; Lyman notes: see entry for 9:40 am, Apr. 2	Wyss and others, 1992, p. 11; HG, 4/15/1868, p. 3 [Williamson, 1868b]
4/01/1868	23:08					hilea				6.10	int	6.5; VH; V-VI (Hilo)	accompanied with the sound of an explosion; Lyman notes: see entry for 9:40 am, Apr. 2: rocked the bed considerably	Wyss and others, 1992, p. 11; HG, 4/15/1868, p. 3 [Williamson, 1868b]; Wyss and others, 1992

Date	Time HST	Lat deg	Lat min	Lon deg	Lon min	Region	Pref depth	M other	M other source	M pref	M pref source	I max	Location/felt report	Comment
4/01/1868	23:12					hilea				5.60	int	5.5; H; III (Hilo)	Lyman notes: see entry for 9:40 am, Apr. 2	Wyss and others, 1992, p. 11; HG, 4/15/1868, p. 3 [Williamson, 1868b]
4/01/1868	23:14					hilea				5.60	int	5.5; H; III (Hilo)	Lyman notes: see entry for 9:40 am, Apr. 2	Wyss and others, 1992, p. 11; HG, 4/15/1868, p. 3 [Williamson, 1868b]
4/01/1868	23:31					hilea				5.60	int	5.5; H; III (Hilo)	[Williamson footnote] from 11:31 to 11:50 continual explosions, followed by shocks of moderate severity; Lyman notes: see entry for 9:40 am, Apr. 2	Wyss and others, 1992, p. 11; HG, 4/15/1868, p. 3 [Williamson, 1868b]
4/01/1868	23:50					hilea				5.60	int	5.5; H; III (Hilo)	Lyman notes: see entry for 9:40 am, Apr. 2	Wyss and others, 1992, p. 11; HG, 4/15/1868, p. 3 [Williamson, 1868b]
4/02/1868	0:35					hilea				5.60	int	5.5; H; III (Hilo)	Lyman notes [see note for 9:40 am, Apr. 2]	Wyss and others, 1992, p. 11; HG, 4/15/1868, p. 3 [Williamson, 1868b]
4/02/1868	16:00	19	12	155	30	hilea		7.90	W&K	7.90	w&k	XII (W&K); X (S&C)	At four o'clock that afternoon [Apr. 2] there was such an awful rocking and heaving of the earth as we never felt before. . . a series of shocks following each other in quick succession the third of which drove us from the house. After a cessation of only one or two minutes, the fourth came, in which violent undulations, rotary, and most all other motions were combined or followed each other in quick succession. (At one moment the surface of the earth seemed to move like the surface of the ocean and the large trees to sway hither and thither-like ships masts in a storm. The few stone buildings in the place were ruined. The chimneys of cook and dwelling houses were thrown down. Clocks, mirrors and crockery, not firmly secured, were thrown down and broken. Cellar walls and underpinning were much damaged. Stone walls were generally prostrated, even the foundation stones being generally removed from their original position, and it was not easy to tell in which direction from the wall the larger portion of the stones had fallen.	Wyss and others, 1992, p. 11
4/02/1868	16:00	19	12	155	30	do		do	do	7.90	do	do	The best chimney stacks of the Hilo Sugar Mills were thrown down while some of the old cracked chimneys supposed all most ready to fall were little affected. The shocks were considerably more severe here than they were at the crater of Kilauea thirty miles from here, but less severe than they were in Kau from Kapapala to Kahuku. Then slight jars were felt almost constantly for a few minutes after which the earth commenced rocking again fearfully. This continued but a short time and was followed by a tidal wave. After the fearful shaking subsided slight jars were felt almost constantly for about five minutes when the earth commenced rocking again fearfully, but it was of short duration. The wonder was that any building was left standing; terrific shock [Williamson time 3:40 PM]	Wyss and others, 1992, p. 11 cont.; HG, 4/15/1868, p. 3 [Williamson, 1868b]; Wyss and Koyanagi, 1992; Intensity map and damage reports in W&K; additional damage/fatality reports in bib

Date	Time HST	Lat deg	Lat min	Lon deg	Lon min	Region	Pref depth	M other	M other source	M pref	M pref source	I max	Location/felt report	Comment
4/02/1868	16:00	do	do	do	do	do		do	do	7.90	do	do	Waiohinu (Kau)-total destruction; Kohala-dur 30 s, landslides, both inland and at the coast; no damage to buildings; Hamakua-several shocks acc by landslides into the sea; Lahaina (Maui)-furniture moved, pictures shook, dur 90 s; Oahu-distinct, dur 30 m, clocks stopped; light, lateral and quick, not noticed by all; Hilo-panic, difficult to stand, chimneys/stone walls down, crockery destroyed, houses damaged/destroyed; kona-trees swayed, houses damaged/down, landslides, some stone walls down, windows/doors rattle; Volcano landslides, cracks in road; Volcano House undamagedpuna-no damage at coast, shocks light; stone walls down, houses intact, landslides [For details of damage and fatalities from earthquake, mudslide and tsunami, see bib]	PCA, 4/4/1868, p. 3; HG, 4/8/1868, p. 2; PCA, 4/11/1868, p. 3 [Anonymous, 1868]; HG, 4/15/1868, p. 2; HG, 4/29/1868, p. 4 [Fornander, 1868]; PCA, 8/8/1868, p. 3; [Times are discrepant. Lyman time is 4 pm; Williamson time is 3:40 pm. Times in spreadsheet for Williamson events are not corrected; Flitner's astronomical clock in Honolulu stopped at 3:54 pm--local hawaii time equivalent would be 3:51 pm]
4/02/1868	20:07					hilea				5.00	int	4.8; MH		HG, 4/15/1868, p. 3 [Williamson, 1868b]
4/02/1868	23:03					hilea				5.00	int	4.8; MH		HG, 4/15/1868, p. 3 [Williamson, 1868b]
4/03/1868	0:24					hilea				5.00	int	4.8; MH		HG, 4/15/1868, p. 3 [Williamson, 1868b]
4/03/1868	1:45					hilea				6.20	int	6.5; VH; VI (Hilo)	Lyman notes: drove us from the house [time assumed; see entry for 4/3 23:59]	Wyss and others, 1992, p. 11; HG, 4/15/1868, p. 3 [Williamson, 1868b]
4/03/1868	2:33					hilea				5.60	int	5.5; H		HG, 4/15/1868, p. 3 [Williamson, 1868b]
4/03/1868	3:15					hilea				5.30	int	VI (kau)	[report from lanai?] Again on Friday the 3rd inst., at about 3:15 am, we felt another earthquake. It awoke every islander . . . from their slumbers. The earth waves seemed to lift us up and toss us, as they rolled from east to west, keeping us moving and anxious for a period of about three minutes. [This is a very confusing report datelined Lanai, mixing language that suggests the reporter is on Lanai, with references to the King's party anchored at Honuapo. The description is probably from that place (i.e., kau). The time doesn't fit any time recorded by Lyman or Williamson. The nearest correlative event would be 90 minutes earlier (see above)]	HG, 4/22/1868, p. 3
4/03/1868	5:45					hilea				5.60	int	V (Hilo); 5.5; H	Lyman notes: see entry for 4/3 23:59	Wyss and others, 1992, p. 11; HG, 4/15/1868, p. 3 [Williamson, 1868b]
4/03/1868	21:25					hilea				5.60	int	5.5; H; V (Hilo)	Lyman notes: see entry for 4/3 23:59	Wyss and others, 1992, p. 11; HG, 4/15/1868, p. 3 [Williamson, 1868b]
4/03/1868	23:53					hilea				5.60	int	5.5; H; V (Hilo)	Lyman notes: see entry for 4/3 23:59	Wyss and others, 1992, p. 11; HG, 4/15/1868, p. 3 [Williamson, 1868b]
4/04/1868	0:07					west hawaii deep??				5.90	int	6.5; VH	Between twelve and one o'clock this morning [April 4] three distinct shocks were also felt, said to be the heaviest ever experienced in Honolulu	PCA, 4/4/1868, p. 3; HG, 4/15/1868, p. 3 [Williamson, 1868b]

Date	Time HST	Lat deg	Lat min	Lon deg	Lon min	Region	Pref depth	M other	M other source	M pref	M pref source	I max	Location/felt report	Comment
4/04/1868	0:12					west hawaii deep??	40			6.10	int	6.5; VH	Between twelve and one o'clock this morning [April 4] three distinct shocks were also felt, said to be the heaviest ever experienced in Honolulu; [Kawaihae] experienced the same shocks which were felt that night on Maui and Oahu. They were so violent that the stone store and dwelling on the beach was abandoned by Mr. Conway; There were two earthquakes at [Lahaina] last night, the first occurred at nineteen minutes past twelve o'clock, and the other twenty-three minutes to one o'clock. The first lasted about thirty seconds, and the other a little longer. They were both more violent than the one on Thursday (the latter more particularly so,) and were attended with the same rumbling sound, my house was shaken violently; The shocks and vibrations experienced some days ago at Honolulu [4/2 at 4pm, between 12 and 1 am 4/4], were felt at Lahaina more severely, without, however, causing any damage; . . . another Friday night, at 19 minutes past 12 . . . Each succeeding shock was heavier than its predecessor	PCA, 4/4/1868, p. 3; HG, 4/8/1868, p. 2; HG, 4/15/1868, p. 3 [Williamson, 1868b]; HG, 5/6/1868, p. 4
4/04/1868	0:30					west hawaii deep??	40	≥6.5	W&K	6.5; 6.4	w&k; k&w	VII (W&K; S&C); 7.5; VVH	Warshauer notes: and On Friday night we [Honolulu] were visited again severe at 12:30, with another very shock. the vibration was very perceptible, windows and doors rattled, and many were awakened from their sleep; The shocks and vibrations experienced some days ago at Honolulu [4/2 at 4pm, between 12 and 1 am 4/4], were felt at Lahaina more severely, without, however, causing any damage; . . and shortly afterwards, about 23 minutes to 1, a third shock took place. Each succeeding shock was heavier than its predecessor [location closer to Maui than Hilea?]	Wyss and Koyanagi, 1992; PCA, 4/4/1868, p. 3; HG, 4/8/1868, p. 2; HG, 4/15/1868, p. 3 [Williamson, 1868b]; HG, 5/6/1868, p. 4; Intensity map in W&K; Wood (1914) determines that this series of quakes is deep and northwest of Hawaii island; location assigned from new isoseismal map
4/04/1868	0:45					west hawaii deep??				5.60	int	5.5; H		HG, 4/15/1868, p. 3 [Williamson, 1868b]
4/04/1868	9:30					kl sf?				5.30	int	V (Hilo)	Warshauer notes: A severe shock, but very short, at Hilo between 9 and 10 am. No particular damage done	HG, 4/15/1868, p. 2
4/06/1868	14:53					hilea				5.60	int	5.5; H		HG, 4/15/1868, p. 3 [Williamson, 1868b]; HG, 4/29/1868, p. 4 [Fornander, 1868]
4/07/1868	2:10					hilea				5.60	int	5.5; H; V (Hilo)	Last night, between 12 o'clock and daylight, several right smart shocks were felt here [Hilo]. I was awakened four times by the shocks and the rattling of things in and about the house; felt-Kona, Hilo	HG, 4/15/1868, p. 3 [Williamson, 1868b]; HG, 4/29/1868, p. 4 [Fornander, 1868]
4/07/1868	3:55					hilea				5.30	int	V (Hilo); 4.0; M do		HG, 4/15/1868, p. 3 [Williamson, 1868b]; HG, 4/29/1868, p. 4 [Fornander, 1868]
4/07/1868	4:40					hilea				5.30	int	V (Hilo); 4.0; M do	entry of 4/7 2:10	HG, 4/15/1868, p. 3 [Williamson, 1868b]; HG, 4/29/1868, p. 4 [Fornander, 1868]
4/07/1868	5:00					hilea				5.60	int	5.5; H; V (Hilo)	do entry of 4/7 2:10	HG, 4/15/1868, p. 3 [Williamson, 1868b]; HG, 4/29/1868, p. 4 [Fornander, 1868]
4/07/1868	12:00					hilea				5.00	int	4.8; MH; IV (Hilo)	see entry of 4/7 14:18	HG, 4/15/1868, p. 3 [Williamson, 1868b]; HG, 4/29/1868, p. 4 [Fornander, 1868]
4/07/1868	12:06					hilea				5.00	int	4.8; MH; IV (Hilo)	see entry of 4/7 14:18	HG, 4/15/1868, p. 3 [Williamson, 1868b]; HG, 4/29/1868, p. 4 [Fornander, 1868]

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Date	Time HST	Lat deg	Lat min	Lon deg	Lon min	Region	Pref depth	M other	M other source	M pref	M pref source	I max	Location/felt report	Comment
4/07/1868	12:09					hilea				5.00	int	4.8; MH; IV (Hilo)	see entry of 4/7 14:18	HG, 4/15/1868, p. 3 [Williamson, 1868b]; HG, 4/29/1868, p. 4 [Fornander, 1868]
4/07/1868	13:57					hilea				5.00	int	4.8; MH; IV (Hilo)	see entry of 4/7 14:18	HG, 4/15/1868, p. 3 [Williamson, 1868b]; HG, 4/29/1868, p. 4 [Fornander, 1868]
4/07/1868	14:18					hilea				5.60	int	5.5; H; V (Hilo)	Several shocks have been felt this afternoon [Hilo, Apr. 7]; one at about 2:15, was quite sharp . . .	HG, 4/15/1868, p. 3 [Williamson, 1868b]; HG, 4/29/1868, p. 4 [Fornander, 1868]
4/07/1868	16:20					hilea				5.00	int	4.8; MH; IV (Hilo)	see entry of 4/7 14:18	HG, 4/15/1868, p. 3 [Williamson, 1868b]
4/07/1868	19:25					hilea				5.60	int	5.5; H		HG, 4/15/1868, p. 3 [Williamson, 1868b]
4/07/1868	23:05					hilea				5.60	int	5.5; H	April 8.--Last night at 11:10 pm, [at Hilo] we had another very smart shock. . . No damage done, however, but for several minutes after the shock, the earth was trembling incessantly	HG, 4/15/1868, p. 3 [Williamson, 1868b]; HG, 4/29/1868, p. 4 [Fornander, 1868]
4/08/1868	5:30					hilea				5.60	int	5.5; H; M	[earthquake given two intensities, one at the end of Williamson's second list, the other begins the third--higher intensity chosen]	HG, 4/15/1868, p. 3 [Williamson, 1868b]; HG, 4/29/68, p. 2 [Williamson, 1868c]
4/08/1868	11:00					kl sf?				5.30	int	V (Hilo)	Lyman notes: two smart shocks at eleven AM, and several slight ones during the day	Wyss and others, 1992, p. 11; not in PCA or HG
4/08/1868	12:12					hilea				4.50	int	4.0; M; III (Hilo)	long and distinct motion	HG, 4/29/1868, p. 2 [Williamson, 1868c]
4/08/1868	17:41					hilea				4.50	int	4.0; M; III (Hilo)	long and distinct motion	HG, 4/29/1868, p. 2 [Williamson, 1868c]
4/09/1868	2:30					hilea				5.30	int	V (hilo)	Lyman notes: All slept well last night for the first time since the 2nd instant, only one shake felt during the night - occasional shakes felt during the day; Warshauer notes: a few slight undulations, but no distinct shock; April 9.-- . . [at Hilo] there was a rather smart shock about 2:30 this morning	Wyss and others, 1992, p. 11; HG, 4/29/1868, p. 2 [Williamson, 1868c]; HG, 4/29/1868, p. 4 [Fornander, 1868]
4/10/1868	6:02					hilea				5.60	int	5.5; H; V (Hilo)	Lyman notes: A quiet night but was waked by a shock this morning; Hilo is still being shaken, a hard shock occurring on Friday morning [Apr. 10]	Wyss and others, 1992, p. 11; HG, 4/29/1868, p. 2 [Williamson, 1868c]; HG, 4/15/1868, p. 2
4/11/1868	5:40					hilea				5.00	int	4.8	a moderately smart shock [Williamson narrative--no letter designation of intensity]	HG, 4/29/1868, p. 2 [Williamson, 1868c]
4/11/1868	23:00					south hawaii?				4.50	int	IV-V	Lyman notes; A shaking at 11 o'clock in the night	Wyss and others, 1992, p. 11
4/14/1868	6:44					hilea				4.50	int	IV (Hilo, Kohala); 4.0; M	see entry for 4/14 23:59	PCA, 4/18/1868, p. 2; HG, 4/22/1868, p. 3; HG, 4/29/1868, p. 2 [Williamson, 1868c]
4/14/1868	17:14					hilea				4.50	int	IV (Hilo, Kohala); 4.0; M	see entry for 4/14 23:59	PCA, 4/18/1868, p. 2; HG, 4/22/1868, p. 3; HG, 4/29/1868, p. 2 [Williamson, 1868c]
4/15/1868	5:00					south hawaii?				4.50	int	IV-V (Hilo)	Lyman notes: one shake at 5 AM	Wyss and others, 1992, p. 11; not in PCA or HG
4/15/1868	20:05					hilea				4.50	int	4.8; MH; IV (Hilo)	Lyman notes: another in the evening; Williamson notes: moderately heavy shock	Wyss and others, 1992, p. 11; HG, 4/29/1868, p. 2 [Williamson, 1868c]
4/19/1868	20:00					south hawaii?				5.30	int	V (Hilo)	Lyman notes: a smart shake about 8 in the evening	Wyss and others, 1992, p. 11; not in PCA or HG
4/21/1868	7:58					hilea				5.00	int	4.8; MH		HG, 4/29/1868, p. 2 [Williamson, 1868c]
4/29/1868	0:00					kaoiiki?				5.60	int	V-VI (Hilo, Kapapala)	Experienced shocks of earthquake at Kahuku and Keaina [sic-Lyman home at Keaiwa], but more severe at Kapapala [4/29-30/1868]; Lyman notes: A smart shock about midnight that drove us from our beds	VHR, v. 1, Alfred W Carter entry dated 4/30/1868; Wyss and others, 1992, p. 12; not in PCA or HG

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Date	Time HST	Lat deg	Lat min	Lon deg	Lon min	Region	Pref depth	M other	M other source	M pref	M pref source	I max	Location/felt report	Comment
4/30/1868	6:15					kohala?		~6	W&K	5.50	k&w	VI (kohala); V (Kilauea summit); IV (Maui, Hilo), III (Honolulu); VI (W&K)	This morning some of us [going to Kilauea crater from Volcano House] experienced quite an earthquake, and during the night a loud report as of a cannon, but much louder . . . ; Lyman notes: A shake at five in the morning . . . [time assumed to be wrong]; Warshauer notes: several very light shocks have been felt here [Honolulu] during the past week, particularly on Thursday [April 30] morning about six o'clock. On Maui a shock was felt about the same hour. . . The same shock was very severe at Kohala, occurring at 6:15; There was a smart shock of earthquake felt in Kohala on Thursday [3/30], also the same day, a slight vibration here in Honolulu.	VHR, v. 1, Alfred W Carter party entry dated 5/1/1868; Wyss and others, 1992, p. 12; Wyss and Koyanagi, 1992; PCA, 5/2/1868, p. 3; HG, 5/6/1868, p. 2 [Hillebrand, 1868]; Intensity map in W&K; location refined from new isoseismal map; magnitude derived from area of intensity V
5/06/1868	23:59					south hawaii?				4.50	int	IV-V; III	Lyman notes: a shock in the night and two today	Wyss and others, 1992, p. 12; not in PCA or HG
5/09/1868	21:00					south hawaii?				5.30	int	V; 4.0; M?	Lyman notes [5/10]: Two smart shocks last evening at nine o'clock; Williamson tabulates four moderate and one light shake felt in Kona in May	Wyss and others, 1992, p. 12; Williamson, 1869; not in PCA or HG
5/15/1868	5:45					south hawaii?				5.30	int	V; 4.0; M?	Lyman notes: Three smart shakes in quick succession at a quarter to six A.M.; Williamson tabulates four moderate and one light shake felt in Kona in May	Wyss and others, 1992, p. 12; Williamson, 1869; not in PCA or HG
5/17/1868	20:20					south hawaii?				5.30	int	V; 3.0; L?	Lyman notes: A smart shock at twenty minutes past eight P.M.; Williamson tabulates four moderate and one light shake felt in Kona in May	Wyss and others, 1992, p. 12; Williamson, 1869; not in PCA or HG
5/18/1868	21:59					south hawaii?				4.50	int	IV-V	Lyman notes: a shock in the night [time assumed]	Wyss and others, 1992, p. 12; not in PCA or HG
5/24/1868	0:00					kl sf?				6.20	int	VII (W&K); V (S&C); 4.0; M	Lyman notes: A severe shake about midnight last night; Williamson tabulates four moderate and one light shake felt in Kona in May	[Stover and Coffman, 1993 give date as 5/25]; Wyss and others, 1992, p. 12; Williamson, 1869; not in PCA or HG
5/26/1868	7:40					kl sf?				5.90	int	VI; 4.0; M	Lyman notes: another quite hard at twenty minutes to eight; Williamson tabulates four moderate and one light shake felt in Kona in May	Wyss and others, 1992, p. 12; Williamson, 1869; not in PCA or HG
5/26/1868	19:00					kl sf?				4.50	int	IV-V	Lyman notes: another at seven P.M	Wyss and others, 1992, p. 12; not in PCA or HG
5/28/1868	0:00					south hawaii?				4.50	int	IV-V	Lyman notes: A protracted trembling of the earth at midnight	Wyss and others, 1992, p. 12
5/28/1868	5:00					south hawaii?				4.50	int	IV-V	Lyman notes: a protracted trembling of the earth before morning	Wyss and others, 1992, p. 12
5/29/1868	21:59					south hawaii?				4.50	int	IV-V	Lyman notes: one shake in the night [time assumed]	Wyss and others, 1992, p. 12; not in PCA or HG
6/05/1868	21:59					south hawaii?				4.50	int	IV-V	Lyman notes: one shock in the night [time assumed]	Wyss and others, 1992, p. 12; not in PCA or HG
6/07/1868	21:59					south hawaii?				4.50	int	IV-V	Lyman notes: one shake last night [time assumed]	Wyss and others, 1992, p. 12; not in PCA or HG
6/09/1868	4:00					south hawaii?				4.50	int	IV-V	Lyman notes [Jun. 9]: another at 4 this morning	Wyss and others, 1992, p. 12; not in PCA or HG
6/10/1868	7:15					south hawaii?				5.30	int	V	Lyman notes: A smart shock preceded by a decided premonitory shock at a quarter past seven A.M. (P.M.?)	Wyss and others, 1992, p. 12; not in PCA or HG
7/08/1868	21:59					south hawaii?				4.50	int	IV-V	Lyman notes: a shake in the night [time assumed]	Wyss and others, 1992, p. 12; not in PCA or HG
7/12/1868	8:00					south hawaii?				5.30	int	V	Lyman notes: a smart shock at 8 AM which caused all at the table to give a sudden spring forward	Wyss and others, 1992, p. 12; not in PCA or HG
7/20/1868	5:00					south hawaii?				4.50	int	IV-V	Lyman notes: a shake at 5 AM	Wyss and others, 1992, p. 12; Martin, 1979, p. 151
7/21/1868	22:15					south hawaii?				5.60	int	V (Hilo); 5.5; H	felt at Hilo [see comment for 7/23 23:40]; Williamson date off?--intensity fits well with event at 22:40 July 23 (see below)	HG, 10/7/1868, p. 3 [Williamson, 1868d]; Martin, 1979, p. 151

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Date	Time HST	Lat deg	Lat min	Lon deg	Lon min	Region	Pref depth	M other	M other source	M pref	M pref source	I max	Location/felt report	Comment
7/23/1868	22:40					south hawaii?				5.90	int	VI (kau); V-VI (Hilo); V (S&C)	Lyman notes: A decided shake at twenty minutes to eleven last night, which drove us from our beds; We have had several shakes during the week and three of them no mean ones either; Warshauer notes: On the evening of July 23d, two smart shocks were felt in various sections of the island, and also at sea. It occurred about ten o'clock in the evening. The schooner Kale Lae and the Kona Packet were at the time off the Kau coast, when the shock was distinctly felt, especially by the natives on board, who at once declared it an earthquake, as it felt as if the vessel had been stopped.	[Stover and Coffman, 1993 give date as 7/24]; Wyss and others, 1992, p. 12; Martin, 1979, p. 151; PCA, 8/8/1868, p. 3
7/29/1868	21:59					south hawaii?				4.50	int	IV-V	Lyman notes: two shakes last night [time assumed]	Wyss and others, 1992, p. 12; not in PCA or HG
7/31/1868	21:59					south hawaii?				4.50	int	IV-V (Hilo); 3.0; L	Lyman notes: two shakes last night; Williamson notes: light shakes felt in Kona during the nights of July 30 and 31 [time assumed]	Wyss and others, 1992, p. 12; HG, 10/7/1868, p. 3 [Williamson, 1868d]
8/05/1868	21:59					south hawaii?				4.50	int	IV-V	Lyman notes: one shake in the night [time assumed]	Wyss and others, 1992, p. 13; not in PCA or HG
8/07/1868	22:00					south hawaii?				5.30	int	V (Hilo); 3.0; L	Lyman notes: A smart shake at ten last night; Williamson notes: a light shake felt in Kona at 9:55 PM	Wyss and others, 1992, p. 12; HG, 10/7/1868, p. 3 [Williamson, 1868d]
8/10/1868	10:40					south hawaii?				5.30	int	V	Lyman notes: A smart shake twenty minutes to eleven A.M	Wyss and others, 1992, p. 13
8/14/1868	1:40					south hawaii?				5.30	int	V (Hilo); 3.0; L?	Lyman notes [Aug. 15]: It is reported that there were three shocks yesterday, and two during the night during the kai mimiki, but I did not feel them; Williamson notes: a shock early in the morning, did not get the time; seldom a night we do not feel earthquakes; a shock Sat. 1:40 a.m. that waked us out of a sound sleep.	Wyss and others, 1992, p. 13; HG, 10/7/1868, p. 3 [Williamson, 1868d]; Martin, 1979, p. 152; Williamson, 1869
8/17/1868	21:59					south hawaii?				4.50	int	IV-V	Lyman notes: one slight shake last night [time assumed]	Wyss and others, 1992, p. 13; not in PCA or HG
8/20/1868	8:00					south hawaii?				5.30	int	V	Lyman notes: A smart shake at 8 A.M.	Wyss and others, 1992, p. 13; not in PCA or HG
8/23/1868						south hawaii?				4.50	int	IV-V	Lyman notes: three shakes during last night	Wyss and others, 1992, p. 13; not in PCA or HG
8/25/1868	15:40					south hawaii?				4.50	int	IV-V	Lyman notes: A decided shake at 20 min to 4 P.M.	Wyss and others, 1992, p. 13; not in PCA or HG
8/29/1868	5:00					south hawaii?				4.50	int	IV-V	Lyman notes: a shake at 5 AM	Wyss and others, 1992, p. 13; not in PCA or HG
9/06/1868	15:40					south hawaii?				5.60	int	V-VI (Hilo); 3.0; L (Waimea)	Lyman notes: A hard shake at half three P.M.; Williamson notes: felt at Waimea, also in Kona [assume Lyman entry for 8/7 refers to previous day]	Wyss and others, 1992, p. 13; HG, 10/7/1868, p. 3 [Williamson, 1868d]; not in PCA or HG
9/08/1868	5:59					south hawaii?				4.50	int	IV-V	Lyman notes: a shake near morning [time assumed]	Wyss and others, 1992, p. 13; not in PCA or HG
9/11/1868	10:00					south hawaii?				4.50	int	IV-V	Lyman notes: A decided shake (preceded by a distinct premonitory shock) at 10 A.M.	Wyss and others, 1992, p. 13; not in PCA or HG
9/12/1868	18:53					south hawaii?				4.50	int	IV-V	Lyman notes [Sept. 13]: a decided shake at eight last evening; Williamson notes: 6:53 PM-felt in Hilo [Lyman time off?]	Wyss and others, 1992, p. 13; HG, 10/7/1868, p. 3 [Williamson, 1868d]
9/15/1868	21:59					kaoiki??				4.00	int	IV-V	Williamson notes: felt-Kapapala during the night [time assumed]	HG, 10/7/1868, p. 3 [Williamson, 1868d]
9/16/1868	3:03					kaoiki??				4.00	int	IV-V	felt-Kapapala	HG, 10/7/1868, p. 3 [Williamson, 1868d]
9/16/1868	4:45					kaoiki??				4.00	int	IV-V	felt-Kapapala	HG, 10/7/1868, p. 3 [Williamson, 1868d]

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Date	Time HST	Lat deg	Lat min	Lon deg	Lon min	Region	Pref depth	M other	M other source	M pref	M pref source	I max	Location/felt report	Comment
9/17/1868	4:30					kaoiki??				4.50	int	V (kapapala); 4.0; M	felt-Kapapala, sharp shock between 4 and 5 am [should be moderate from tabulation in Williamson, 1869]	HG, 10/7/1868, p. 3 [Williamson, 1868d]; Williamson, 1869
9/22/1868	6:00					south hawaii?				5.30	int	V	Lyman notes: One sudden decided jar at 6 A.M.; Warshauer notes: At Hilo, on the 22nd ult., the atmosphere was loaded with smoke, and frequent slight shocks of earthquakes were felt. . . .	Wyss and others, 1992, p. 13; HG, 10/7/1868, p. 3
9/28/1868	15:40					south hawaii?				5.00	int	4.8; MH	felt-Kona	HG, 10/7/1868, p. 3 [Williamson, 1868d]; not in PCA or HG
9/29/1868	20:45					south hawaii?				5.50	int	4.8; MH	Two sharp shocks were felt at Waimea on the 29th and 30th of September. That on the 29th occurred at 9 pm, and was accompanied with a peculiar whizzing, rushing sound over head. This sound was heard in various quarters, and from all we can gather very much resembled that caused by an aerolite. The same earthquake was distinctly felt in Kona and other parts of Hawaii	HG, 10/7/1868, p. 3 [Williamson, 1868d]; PCA, 10/10/1868, p. 3
9/30/1868	17:06					west hawaii?				5.60	k&w	V-VI (Kawaihae); IV-V (Waimea); 5.5; H	Warshauer notes: Two sharp shocks were felt at Waimea on the 29th and 30th of September; On Thursday last [10/1--we guess date should be Wednesday 9/30 to match other reports], there was a smart shock of earthquake at Kawaihae, Hawaii, that started everybody out of their houses	HG, 10/7/1868, p. 3 [Williamson, 1868d]; HG, 10/7/1868, p. 3; region/magnitude assigned from isoseismal map
10/20/1868	5:00					south hawaii?				5.30	int	V (Hilo); 4.0; M	Lyman notes: a smart shake at 5 AM preceded by a premonitory shock; Warshauer notes: Williamson tabulates one moderate shake in October	Wyss and others, 1992, p. 13; Williamson, 1869; not in PCA or HG
11/02/1868	13:00					south hawaii?				5.60	int	V-VI	Lyman notes: another hard shake preceded by slight one at 1 PM	Wyss and others, 1992, p. 13; not in PCA or HG
11/10/1868	22:00					south hawaii?				5.30	int	V	Lyman notes: quite a shake at 10 PM	Wyss and others, 1992, p. 13; not in PCA or HG
11/16/1868	22:00					kl sf?				5.90	int	VI; V (S&C); 4.0; M	Lyman notes: A severe and protracted shake which drove us from our beds, to the verandah at 10 P.M.; Williamson tabulates one moderate shock in November	Wyss and others, 1992, p. 13; Williamson, 1869; not in PCA or HG
11/22/1868	5:00					south hawaii?				5.30	int	V	Lyman notes: two smart shakes at 5 AM	Wyss and others, 1992, p. 13; not in PCA or HG
11/28/1868	8:30					south hawaii?				5.60	int	V-VI	Lyman notes: A hard shake at half past 8 A.M.	Wyss and others, 1992, p. 13; not in PCA or HG
12/11/1868	2:00					south hawaii?				5.60	int	V (Hilo); 5.5; H	Lyman notes: a smart shake about 2 AM; Williamson tabulates one heavy and three moderate shakes in December	Wyss and others, 1992, p. 13; Williamson, 1869; not in PCA or HG
12/25/1868						south hawaii?				5.30	int	V (Hilo); 4.0; M	Lyman notes: a smart shake at 5 AM; Williamson tabulates one heavy and three moderate shakes in December	Wyss and others, 1992, p. 13; Williamson, 1869; not in PCA or HG
12/28/1868	17:30					south hawaii?				4.00	int	4.0; M; III	Lyman notes: A slight shake at 5 1/2 P.M.; Williamson tabulates one heavy and three moderate shakes in December	Wyss and others, 1992, p. 13; Williamson, 1869; not in PCA or HG

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Date	Time HST	Lat deg	Lat min	Lon deg	Lon min	Region	Pref depth	M other	M other source	M pref	M pref source	I max	Location/felt report	Comment
1/20/1869	17:30					oahu?				4.50	int	IV-V; 2.8 (Hon); 3.0 (Kaneohe)	Cox notes: felt with greater intensity at Kaneohe than Honolulu, possible damage at Kaalaea, not felt on other islands; Another [earthquake] startled our citizens [Honolulu] on Wednesday [Jan. 20] afternoon at half past five o'clock. In the valley and near the harbor it was not so distinctly felt as on a line between the two points. From Kaalaea, on the windward side of the island, we learn that it was quite severe, so much that it was feared that the sugar works were injured, but after careful inspection everything was found in order; The shock felt at Kaalaea, on this island [Oahu], on the 19th [sic-20th], was not remarked on Hawaii	Cox, 1986, p. 60; PCA, 1/23/1869; PCA, 1/30/1869; no evidence for an earlier earthquake on Oahu
1/30/1869	20:30					south hawaii?				4.10	int	4.3 (Hilo-Cox)	Lyman notes: a sudden shake at 8 1/2 P.M.	Wyss and others, 1992, p. 14; not found in PCA or HG
1/31/1869	5:00					south hawaii?				5.30	int	V (W&K); 5.5 (Hilo-Cox)	Lyman notes: A smart shake at 5 A.M.	Wyss and others, 1992, p. 14; not found in PCA or HG
2/04/1869	0:05					south hawaii?				5.30	int	5.2 (Hilo-Cox); IV-V (W&K)	Lyman notes: a short decided up and down shake after midnight	Wyss and others, 1992, p. 14; not found in PCA or HG
2/11/1869	21:59					south hawaii?				5.60	int	V (W&K); 6.0 (Hilo-Cox)	Lyman notes: a smart shake in the night which waked all the sleepers [time assumed]	Wyss and others, 1992, p. 14; not found in PCA or HG
2/18/1869	0:00					hilea?				6.00	int	VI (W&K); 6.5 (Hilo-Cox)	Lyman notes: a protracted trembling at 12 M succeeded by a violent shaking which caused some of us to fly out of the house; the hardest we have had since Aug.; Warshauer notes: On the 19th inst. [sic-18th?], the Hilo people experienced two shocks of earthquake, sufficiently severe to cause some little alarm. We cannot learn of any damage sustained	Wyss and others, 1992, p. 14; PCA, 2/27/1869, p. 3
2/18/1869	0:15					kilauea?				5.30	int	V (W&K); 5.5 (Hilo-Cox)	Lyman notes: At fifteen minutes past twelve, there was a sudden smart bump followed by quite a smart shaking; Warshauer notes: see above	do
2/19/1869	0:29					south hawaii?				5.30	int	V (S&C); 4.0 (Hilo-Cox)	Lyman notes: a moderate shake sometime after midnight [time assumed]	Wyss and others, 1992, p. 14; not found in PCA or HG
2/21/1869	1:40					south hawaii?				5.90	int	6.5 (Hilo-Cox); V (W&K; S&C)	Lyman notes: we were roused from our slumbers by a violent shaking which continued for some seconds, then there was a cessation of a few seconds followed by a short shake that alarmed us a good deal	[Stover and Coffman, 1993 give date as 2/22]; Wyss and others, 1992, p. 14; not found in PCA or HG
2/22/1869	4:45					south hawaii?				5.60	int	V-VI (W&K); 5.5 (Hilo-Cox)	Lyman notes: This morning at a quarter to five there was a repetition of the same but not quite so hard as the night before	Wyss and others, 1992, p. 14; not found in PCA or HG
4/14/1869	11:00					south hawaii?				5.30	int	V; 5.5 (Hilo-Cox); IV (W&K)	Lyman notes: a slight trembling of a few seconds was succeeded by a sudden hard jerk which made the whole house creak. This was at 11 A.M.	Wyss and others, 1992, p. 14; not found in PCA or HG
4/19/1869	0:00					south hawaii?				5.30	int	V (W&K); 5.5 (Hilo-Cox)	Lyman notes: a smart short shake at midnight last night	Wyss and others, 1992, p. 14; not found in PCA or HG
4/21/1869	19:40					south hawaii?				5.90	int	VI (W&K); 6.0 (Hilo-Cox)	Lyman notes: two hard shocks at twenty minutes to 8 P.M. which drove us out	[date given as April 12, but out of order]; Wyss and others, 1992, p. 14; not found in PCA or HG
4/24/1869	0:55					south hawaii?				5.90	int	VI (W&K); 6.0 (Hilo-Cox)	Lyman notes: In five minutes after there was another similar shake, which drove us from our bed	Wyss and others, 1992, p. 14; not found in PCA or HG
4/24/1869	0:50					south hawaii?				5.30	int	V (W&K); 5.5 (Hilo-Cox)	Lyman notes: A smart shake at 10 minutes to 1 o'clock A.M.	Wyss and others, 1992, p. 14; not found in PCA or HG

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Date	Time HST	Lat deg	Lat min	Lon deg	Lon min	Region	Pref depth	M other	M other source	M pref	M pref source	I max	Location/felt report	Comment
5/20/1869	6:45					south hawaii?				5.30	int	V (W&K); 5.5 (Hilo-Cox)	Lyman notes: At a quarter to 7 A.M. There was one of those sudden sharp bumps which startles everyone, and this was followed by a smart shake which caused the house to tremble for several seconds	Wyss and others, 1992, p. 14; not found in PCA or HG
5/24/1869	21:59					south hawaii?				4.10	int	4.3 (Hilo-Cox)	Lyman notes: a sudden but not hard shake in the night [time assumed]	Wyss and others, 1992, p. 14; not found in PCA or HG
5/30/1869	5:00					south hawaii?				5.30	int	V (W&K); 5.5 (Hilo-Cox)	Lyman notes: a smart shock towards morning	Wyss and others, 1992, p. 14; not found in PCA or HG
6/09/1869	0:00					south hawaii?				4.50	int	4.6 (Hilo-Cox)	Lyman notes: A shake in the night at 12	Wyss and others, 1992, p. 14; not found in PCA or HG
6/22/1869	15:00					south hawaii?				5.30	int	V (W&K); 5.5 (Hilo-Cox)	Lyman notes: a smart shock at 3 PM	Wyss and others, 1992, p. 14; not found in PCA or HG
6/23/1869	21:59					south hawaii?				4.50	int	4.6 (Hilo-Cox)	Lyman notes:A shake in the night [time assumed]	Wyss and others, 1992, p. 14; not found in PCA or HG
8/01/1869	0:00					south hawaii?				5.30	int	V (W&K); 5.5 (Hilo-Cox)	Lyman notes: Last night (about midnight) there was a smart shock of earthquake preceded by a premonitory shock which waked us all	Wyss and others, 1992, p. 15; not found in PCA or HG
8/14/1869						south hawaii?				4.50	int	4.6 (Hilo-Cox)	Lyman notes: a shock in the night	Wyss and others, 1992, p. 15; not found in PCA or HG
8/15/1869	4:00					hilea?				5.30	int	V (S&C); 5.7 (Hilo-Cox)	Lyman notes: A shock at 4 this morning which resembled very strikingly the beginning of the one of the 2nd of April. '68	Wyss and others, 1992, p. 15; not found in PCA or HG
8/17/1869	11:00					south hawaii?				5.30	int	V (W&K); 5.5 (Hilo-Cox)	Lyman notes: A smart shock at 11 A.M.	Wyss and others, 1992, p. 15; not found in PCA or HG
8/19/1869	17:00					south hawaii?				5.30	int	V (W&K); 5.5 (Hilo-Cox)	Lyman notes: a smart shock at 5 PM	Wyss and others, 1992, p. 15; not found in PCA or HG
10/21/1869	23:00					south hawaii?				5.60	int	5.5 (Hilo-Cox); V (W&K)	Lyman notes: A smart shock at 11 P.M. last night. Undulations sharp and distinct N. & S.	Wyss and others, 1992, p. 15; not found in PCA or HG
12/28/1869	20:00					south hawaii?				5.40	int	5.2 (Hilo-Cox)	Lyman notes: a decided shock at 8 PM	Wyss and others, 1992, p. 15; not found in PCA or HG
1/07/1870	19:30					south hawaii?				5.30	int	5.2 (Hilo-Cox)	Lyman notes: A decided shock at 7 1/2 P.M. preceded by a trembling	Wyss and others, 1992, p. 15; not found in PCA or HG
2/26/1870	19:40					south hawaii?				5.30	int	V (W&K); 5.5 (Hilo-Cox)	Lyman notes: A sudden smart shake at 20 minutes to 8 P.M.	Wyss and others, 1992, p. 15; not found in PCA or HG
3/21/1870	20:30					south hawaii?				6.20	int	VII (W&K); 6.0 (Hilo-Cox); V (S&C)	Lyman notes: A protracted & quite severe shock at 8 1/2 P.M.; Warshauer notes: [an earthquake] some three weeks ago [from 4/13] was the most severe that has been felt since the Earthquake times of two years ago; felt in Hilo, Kau	Wyss and others, 1992, p. 15; PCA, 4/13/1870, p. 3
5/02/1870	4:15					south hawaii?				5.60	int	5.5 (Hilo-Cox); V (W&K)	Lyman notes: A smart shock at 4 1/4 this morning	Wyss and others, 1992, p. 15; not found in PCA or HG
6/13/1870	3:00					south hawaii?				5.40	int	5.2 (Hilo-Cox)	Lyman notes: A protracted shaking (not severe) at 3 A.M.	Wyss and others, 1992, p. 15; not found in PCA or HG
7/21/1870	2:30					south hawaii?				5.30	int	V; 2.8 (Hilo-Cox)	Lyman notes: a protracted trembling between 2 and 3 am	Wyss and others, 1992, p. 15; not found in PCA or HG
7/25/1870	4:00					south hawaii?				4.50	int	4.6 (Hilo-Cox)	Lyman notes: a shake at 4 AM	Wyss and others, 1992, p. 15; not found in PCA or HG
8/01/1870	9:00					south hawaii?				4.10	int	4.3 (Hilo-Cox)	Lyman notes: a jar at 9 AM	Wyss and others, 1992, p. 15; not found in PCA or HG

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Date	Time HST	Lat deg	Lat min	Lon deg	Lon min	Region	Pref depth	M other	M other source	M pref	M pref source	I max	Location/felt report	Comment
8/07/1870	4:13					molokai		≥6	W&K	6.40	k&w	VI (W&K); 5.2 (Hilo-Cox); V (S&C)	Lyman notes: The most protracted shaking at 4 A.M. that we ever felt with the exception of the great earthquake. It was not severe however; no entry in VHR on this date; . . . and again at ten minutes past four a quite severe shock startled nearly all the people of the town from their slumbers. This last shock was the most severe that has been felt here for many years . . . ; A severe shock of earthquake was felt in this city [Honolulu] and all over this island, at thirteen minutes past 4 o'clock Sunday morning, August 7th. It woke us from asound sleep; others, however, were not disturbed. On Molokai it was more severe, and shook crockery from shelves, rattled doors and windows. At Waimea on Hawaii, it was the heaviest shock felt since April, 1868	Wyss and others, 1992, p. 15; Wyss and Koyanagi, 1992; HG, 8/10/1870, p. 3; PCA, 8/13/1870, p. 3; Intensity map in W&K; region/magnitude assigned from new isoseismal map
9/28/1870	4:00					kl cal 05-10?				4.20	int	V	Halemaumau partial draining: a heavy earthquake, at daylight the [active] cones had disappeared, and in their places were three fiery lakes; a severe earthquake, lake sunk and became three distinct lakes; a strong earthquake that really shook down	VHR, v. 1, W.H. Rogers entry dated 10/6/1870; Frances Johnson entry dated 10/5/1870; L. Kaina entry of 10/28/1870; not found in PCA or HG
11/05/1870	7:40					kl sf?				4.50	int	V (Kilauea summit); 3.0 (Hilo-Cox)	Akana says that shocks of earthquakes are becoming frequent, some of them strong enough to throw down articles in his cook room; Lyman notes: Two slight shocks at 20 m. to 8 A.M.	VHR, v. 1, J. Kavanaugh entry dated 11/7/1870; Wyss and others, 1992, p. 15; not found in PCA or HG; location interpreted as near-summit south flank associated with small intrusion and caldera-rift swarm of small events
11/20/1870	4:00					kl sf?				5.30	int	V (W&K); 5.5 (Hilo-Cox)	Lyman notes: At 4 o'clock A.M. there was a smart shock, which was succeeded in a few seconds by a heavy shaking which reminded one of the shaking of a horse	Wyss and others, 1992, p. 16; not found in PCA or HG
11/24/1870	21:00					kl sf?				5.00	int	4.8 (Hilo-Cox)	Lyman notes: a sudden heavy jar at 9 PM	Wyss and others, 1992, p. 16; not found in PCA or HG
12/11/1870	0:45					kl sf??				5.60	int	V-VI (W&K); 5.5 (Hilo-Cox)	Lyman notes: A hard shake at a quarter to 1 A.M.; another slight one in December not recorded	Wyss and others, 1992, p. 16; not found in PCA or HG
2/08/1871	22:30					south hawaii?				5.30	int	V (W&K); 5.5 (Hilo-Cox)	Lyman notes: A smart shaking at half past 10 P.M. preceded by a slight jar	Wyss and others, 1992, p. 16; not found in PCA or HG
2/12/1871	0:00					south hawaii?				4.50	int	4.6 (Hilo-Cox)	Lyman notes: a shake about 12 M	Wyss and others, 1992, p. 16; not found in PCA or HG
2/19/1871	22:15	21	0	156	12	lanai		6.8; 7.0	W&K; Cox, 1985, 1986	6.80	w&k	VIII (W&K; S&C); 6.5 (Cox-Hon); 4.8 (Cox-Hilo)	Lyman notes: A shake which lasted 2 min. at 10:15 P.M. A part of the time it was quite hard & yet nothing was displaced in the house. The length of it was what alarmed us.; Alexander notes: strongest ever felt on Oahu; damage report given for all islands; dur 2 min [PCA, 2/25]; kauai-severest ever, no damage; molokai-stone walls, houses down, earth opened; kau/n kona-strongly felt, few stone walls down; maui-houses cracked, earth opened; [HG, 3/1]: lanai-difficult to stand, strongest ever, palis down, earth opened, stone wall down; kawaihae-stone walls down; waimea-less severe; hilo-passably strong, no alarm; kailua-severe; [HG, 3/8]: kau-mild but unusually long; see bib for additional damage reports	Cox, 1985; Cox, 1986, p. 25-26 [Cox time 22:11; summarizes magnitude, intensity and damage]; Wyss and others, 1992, p. 16; Alexander/1871; Wyss and Koyanagi, 1992; Bishop, 1871; Treadway, 1871; HG, 2/22/1871, p. 3; PCA, 2/25,1871, p. 3; HG, 3/1/1871, p. 2; HG, 3/8/1871, p. 3; PCA, 3/11/1871, p. 3; intensity map in W&K; erroneous date given of 3/19 given in United States Earthquakes (S&C)
2/22/1871	0:00					lanai				5.30	int	V	decidedly felt-lahaina	[aftershock]; HG, 3/1/1871, p. 2

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Date	Time HST	Lat deg	Lat min	Lon deg	Lon min	Region	Pref depth	M other	M other source	M pref	M pref source	I max	Location/felt report	Comment
2/23/1871	16:00					south hawaii?				4.10	int	4.3 (Hilo-Cox)	Lyman notes: a sudden jar at 4 PM	Wyss and others, 1992, p. 16; not found in PCA or HG
3/03/1871	23:45					lanai				4.50	int	III; 2.2 (Hon-Cox)	felt downtown Honolulu and Punahou; slight on oahu, more strongly on Molokai, where slight shocks have been frequent since February 19	[aftershock]; Cox, 1985, 1986; PCA, 3/11/1871, p. 3
3/04/1871	4:30					south hawaii?				4.50	int	4.3 (Hilo-Cox)	Lyman notes: a sudden jar between 4 and 5 AM	Wyss and others, 1992, p. 16; not found in PCA or HG
3/06/1871	21:59					south hawaii?				4.50	int	4.6 (Hilo-Cox)	Lyman notes: 2 shakes in the night [time assumed]	Wyss and others, 1992, p. 16; not found in PCA or HG
3/15/1871	21:55					lanai				4.50	int	IV	Warshauer notes: A little before ten o'clock on Wednesday evening [Mar. 15], a sensible shock of earthquake was felt by several persons in town. The vibration was sufficient in one case to cause a feeling of nausea, and set a hanging lamp to swinging	[aftershock]; PCA, 3/18/1871, p. 3
4/09/1871	7:40					south hawaii?				4.10	int	4.3 (Hilo-Cox)	Lyman notes: A sudden jar at 20 min. to 8 A.M.	Wyss and others, 1992, p. 16; not found in PCA or HG
4/14/1871	0:00					south hawaii?				4.10	int	4.3 (Hilo-Cox)	Lyman notes: a sudden bump at 12 M	Wyss and others, 1992, p. 16; not found in PCA or HG
6/12/1871	7:50					hilea?				5.90	int	VI (Kau); 4.0 (Hilo-Cox)	Lyman notes: A moderate shaking of a few seconds at 10 min. to 8 A.M.; . . . There was a severe shock of earthquake felt throughout Kau on the 12th of June	Wyss and others, 1992, p. 16; HG, 7/15/1871, p. 3
6/19/1871	5:45					south hawaii?				5.30	int	V (W&K); 5.5 (Hilo-Cox)	Lyman notes: A smart shake at a quarter to 6 A.M.	Wyss and others, 1992, p. 16; not found in PCA or HG
6/20/1871	1:00					south hawaii?				4.50	int	4.6 (Hilo-Cox)	Lyman notes: A shake at 1 o'clock A.M.	Wyss and others, 1992, p. 16; not found in PCA or HG
6/23/1871	11:59					kl sf?				5.90	int	VI (Kilauea summit); 6.0 (Hilo-Cox); V (W&K)	Lyman notes: a smart decided shake that woke us all from sleep; Warshauer notes: Reports received from Hilo state that several shocks of earthquake were felt on the 23d ult., one of which in the vicinity of the Volcano House was quite severe, and that the crater is very active [no time given]	Wyss and others, 1992, p. 16; HG, 7/5/1871, p. 3; Lyman date assumed one day later to fit newspaper report; assume that several shocks refer to ongoing east rift intrusion
7/11/1871	4:00					south hawaii?				4.50	int	IV-V	Lyman notes: A protracted trembling at 4 A.M. but not hard; There have been several slight earthquakes of late	Wyss and others, 1992, p. 16; not found in PCA or HG
9/11/1871	11:00					south hawaii?				5.60	int	V-VI (W&K); 5.5 (Hilo-Cox)	Lyman notes: a hard shock at 11 AM	Wyss and others, 1992, p. 16; not found in PCA or HG
9/13/1871	12:15					kl sf?				5.90	k&w	6.5 (Hilo-Cox); VI (W&K); V (Kilauea summit); III-IV (Kailua, Waimea); VII (S&C)	A slight shock of earthquake which gave the [Kilauea crater floor] a sensible sense of depression, and gave a general rattling to the cliffs on all sides and sent down streams of stones; Lyman notes: Severe shock at 12 1/4 M. from S. - N. walls thrown down; Warshauer notes: Hilo and its vicinity was visited by a short but severe shake on Wednesday the 12th inst. [sic-13th], at about half an hour after noon. The shock. . . lasted some twenty seconds. The wave of motion was from SW to NE, and was felt quite distinctly, not to say severely, at Onomea. In town, a quantity of stone-wall was frostrated [sic-prostrated?] . . . small article, vases, bottle &c., were tipped over, and at Kaiwiki, persons at work out doors were made quite seasick, and though owing to the shortness of time that the motion continued, its effects were not so violent, still it was equal in intensity to the last 'great shake' [Apr. 2 1868]; We hear that slight shocks were felt at Kailua and Waimea, Hawaii, last week.	VHR, v. 1, M.A. Chamberlain entry dated 9/13/1871; Wyss and others, 1992, p. 16; PCA, 9/23/1871, p. 3; region/magnitude assigned from isoseismal map; analogy to earthquake of September 21, 1979 (W&K)

Date	Time HST	Lat deg	Lat min	Lon deg	Lon min	Region	Pref depth	M other	M other source	M pref	M pref source	I max	Location/felt report	Comment
9/13/1871	12:15					do				5.90	do	do	Warshauer notes: We learn from Hilo that on Wednesday, the 13th inst., a severe shock of earthquake was felt in that district. Although very short, lasting only a few seconds, it was the most severe that has been felt since the shock of 1868. Considerable damage was done to stone walls, and some damage in the way of crockery breaking, was done in almost every house in Hilo. . . . the wall around the Court House,--which, by the way, is a very substantial one and in every respect adapted to the purpose for which it was built--was entirely unharmed. In fact, a correspondent writes, 'The wall will stand a very heavy shock.' . . . ; Small shocks are common, but on the 13th inst., at noon [persons were sent out of their houses and into the street]. On the 13th, occurred the heaviest shake since the big one [Apr. 2, 1868]. . . .	PCA, 9/27, 30/1871
9/25/1871	3:03					south hawaii?				5.30	int	V (W&K); 5.5 (Hilo-Cox)	Lyman notes: two smart shakes, only 2 or 3 seconds apart, a few minutes after 3 A.M.	Wyss and others, 1992, p. 16; not found in PCA or HG
1/06/1872	15:30					south hawaii?				5.30	int	V (W&K); 5.5 (Hilo-Cox)	Lyman notes: a slight premonitory followed by a smart but not hard shake at 3:30 P.M.; Warshauer notes: From advices from Hilo we learn that on Saturday the 6th inst., a severe shock of earthquake was felt at that place, which, however, did no damage	Wyss and others, 1992, p. 16; HG, 1/17/1872, p. 3
2/05/1872	17:45					south hawaii?				5.30	int	V (W&K); 5.5 (Hilo-Cox)	Lyman notes: A smart shake at 5.45 P.M.	Wyss and others, 1992, p. 16; not found in PCA or HG
3/06/1872	4:00					south hawaii?				5.30	int	V (W&K); 5.5 (Hilo-Cox)	Lyman notes: a smart shock at 4 AM	Wyss and others, 1992, p. 16; not found in PCA or HG
4/22/1872	18:00					south hawaii?				6.10	int	6.5 (Hilo-Cox); VI (W&K); V (S&C)	Lyman notes: three distinct shocks, which shook the house fearfully at 6 P.M. the motion of the earth was very perceptible to those standing out of doors; no entry in VHR on this day, or in entries on April 24 and 26; Warshauer notes: . . . a smart shock of earthquake was felt there [Hilo], on the afternoon of the 22d inst. [a decided shake at half-past 4, that caused persons outdoors to jump] . . . ; [foreshock?, or wrong time?]; On Monday, 22d ult., at 6 o'clock pm, a very severe shock of earthquake was felt at Hilo. It was so severe that the inhabitants . . . generally rushed out of their houses, amid a general rattle of crockery and furniture. There were three distinct shocks felt at short intervals, each succeeding one being stronger than the last. Save the breaking of a little crockery, the levelling a few stone walls and the caving in of the banks of some of the water runs, no damage was done	[Stover and Coffman, 1993 give date as April 21, 16:30]; Wyss and others, 1992, p. 17]; PCA, 4/27/1872, p. 3; HG, 5/1/1872, p. 3
4/23/1872	2:30					south hawaii?				4.50	int	4.6 (Hilo-Cox)	Lyman notes: A shock at 2 1/2 A.M.	Wyss and others, 1992, p. 17; not found in PCA or HG
5/02/1872	19:30					south hawaii?				4.10	int	4.3 (Hilo-Cox)	Lyman notes: A sudden shake not hard at 7 1/2 P.M.	Wyss and others, 1992, p. 17; not found in PCA or HG
7/11/1872	21:59					south hawaii?				4.50	int	4.6 (Hilo-Cox)	Lyman notes: a shock last night, time not known [time assumed]	Wyss and others, 1992, p. 17; not found in PCA or HG

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Date	Time HST	Lat deg	Lat min	Lon deg	Lon min	Region	Pref depth	M other	M other source	M pref	M pref source	I max	Location/felt report	Comment
8/18/1872	1:00					mauna loa?				5.60	k&w	VI? (Kau); IV? (Kailua); 5.5 (Hilo-Cox); V (W&K)	Lyman notes: a smart shock preceded by a decided premonitory shock at 1 o'clock A.M.; felt-hilo, kau and kona--see below	Wyss and others, 1992, p. 17; not found in PCA or HG; intensities assigned by analogy with earthquake of January 21, 1982 (W&K)
10/13/1872	18:00					south hawaii?				5.30	int	5.2 (Hilo-Cox)	Lyman notes: a decided jerking shake at 6 PM	Wyss and others, 1992, p. 17; not found in PCA or HG
1/23/1873	9:45					south hawaii?				5.30	int	V (W&K); 5.5 (Hilo-Cox)	Lyman notes: A smart shock at 9 3/4 A.M.; no mention in VHR entry of 1/23/1873 [arrived from Hilo in morning]	Wyss and others, 1992, p. 17; not found in PCA or HG
6/05/1873	7:30					south hawaii?				5.30	int	V (W&K); 5.5 (Hilo-Cox)	Lyman notes: A smart shock at 7 1/2 A.M.	Wyss and others, 1992, p. 17; not found in PCA or HG
6/05/1873	8:30					south hawaii?				5.30	int	5.5 (Hilo-Cox)	Lyman notes: another between 8 & 9 A.M.	Wyss and others, 1992, p. 17; not found in PCA or HG
7/10/1873	11:00					south hawaii?				5.30	int	V (W&K); 5.5 (Hilo-Cox)	Lyman notes: A smart shock at 11 A.M.; no mention in VHR entry on this date	Wyss and others, 1992, p. 17; not found in PCA or HG
7/29/1873	6:00					south hawaii?				4.50	int	IV-V (kau); 3.0 (Hilo-Cox)	Lyman notes: a slight shock at 6 AM; Warshauer notes: . . . several smart shocks were experienced [at Kau] on the 29th ult.	Wyss and others, 1992, p. 17; PCA, 8/9/1873, p. 3
8/30/1873	15:30					south hawaii?				5.30	int	5.2 (Hilo-Cox)	Lyman notes: a decided shock at 3 1/2 P.M.	Wyss and others, 1992, p. 17; not found in PCA or HG
9/03/1873	3:00					south hawaii?				5.30	int	V (W&K); 5.5 (Hilo-Cox)	Lyman notes: a smart shock at 3 AM	Wyss and others, 1992, p. 17; not found in PCA or HG
9/05/1873	16:30					south hawaii?				5.30	int	V (W&K); 5.5 (Hilo-Cox)	Lyman notes: two smart shocks at 4 1/2 P.M.	Wyss and others, 1992, p. 17; not found in PCA or HG
11/03/1873	11:59					north hawaii?				5.30	int	V (kona); III (maui)	Warshauer notes: Four distinct earthquake shocks were on Monday, November 3d, felt by those residing on Haleakala, Maui. In Kona, Hawaii, on the same day, or rather night, a heavy shock was felt [no times given]	HG, 11/12/1873, p. 3
11/13/1873	6:00					south hawaii?				4.50	int	IV-V; 5.2 (Hilo-Cox)	Lyman notes: a decided shake st 6 AM	Wyss and others, 1992, p. 17; not found in PCA or HG
1/11/1874	23:00					mauna loa?				5.30	int	V	Warshauer notes: The summit crater of Mokuaweoweo was in most brilliant action on Sunday night last [Jan. 11], and the display was accompanied with a severe earthquake at 11 pm, which, however, produced no damage	HG, 1/14/1874, p. 3
2/06/1874	21:59					south hawaii?				4.50	int	4.6 (Hilo-Cox)	Lyman notes: a shock in the night [time assumed]	Wyss and others, 1992, p. 17; not found in PCA or HG
2/12/1874	20:15					east hawaii?				5.30	int	V (W&K); 5.5 (Hilo-Cox)	Lyman notes: A smart shock at 8 1/4 P.M.; Warshauer notes: Quite a severe earthquake shock was felt at Hilo on the night of Feb. 12th. No damage was done; the shocks [that] occurred at Hilo on the evening of the 12th, were felt in Hamakua. There were two shocks felt there	Wyss and others, 1992, p. 17; HG, 2/18/1874, p. 3; HG, 2/25/1874, p. 3
3/28/1874	21:00					south hawaii?				5.30	int	V (W&K); 5.5 (Hilo-Cox)	Lyman notes: a real smart shake at 9 PM; not mentioned [Kapapala] in VHR entry of 3/30/1874	Wyss and others, 1992, p. 17; not found in PCA or HG
4/10/1874	4:30					south hawaii?				5.30	int	V (W&K); 5.5 (Hilo-Cox)	Lyman notes: a real smart shake at 4 1/2 A.M.	Wyss and others, 1992, p. 17; not found in PCA or HG
4/30/1874	5:15					south hawaii?				5.30	int	V (W&K); 5.5 (Hilo-Cox)	Lyman notes: two smart shakes at 5 1/4 [AM/PM not specified; am assumed]	Wyss and others, 1992, p. 17; not found in PCA or HG

Date	Time HST	Lat deg	Lat min	Lon deg	Lon min	Region	Pref depth	M other	M other source	M pref	M pref source	I max	Location/felt report	Comment
5/14/1874	9:00					east hawaii?				5.90	int	VI	Warshauer notes: A severe shock, or series of shocks, was felt at Hilo about 9 am on the 14th instant. Along the coast, from Hilo to Waimea it is reported to have been the heaviest shake experienced for a long time. Simultaneously with this earthquake, the crater of Kilauea has become more brilliant and active	HG, 5/27/1874, p. 3
5/15/1874	11:45					east hawaii?				5.90	int	6.1 (Hilo-Cox); VII (W&K); V (S&C)	Lyman notes: a severe shake at 11 3/4 A.M.	Wyss and others, 1992, p. 18; not found in PCA or HG
6/29/1874	16:00					south hawaii?				5.60	int	V-VI (W&K); 5.5 (Hilo-Cox)	Lyman notes: a hard shake at 4 PM	Wyss and others, 1992, p. 18; not found in PCA or HG
10/02/1874	23:00					south hawaii?				5.30	int	V (W&K); 5.5 (Hilo-Cox)	Lyman notes: a smart shake at 11 PM	Wyss and others, 1992, p. 18; not found in PCA or HG
11/09/1874	16:00					south hawaii?				4.50	int	4.6 (Hilo-Cox)	Lyman notes: a shake at 4 PM, not severe; no mention in VHR entry on this date [possibly en route Volcano-Hilo]	Wyss and others, 1992, p. 18; not found in PCA or HG
12/29/1874	6:00					north hawaii?				5.90	k&w	V-VI (maui); 5.7 (Cox-Hilo); V (S&C; W&K-Hilo); IV (W&K-Hon)	Lyman notes: A protracted and somewhat severe shock at 6 o'clock A.M. There were really three distinct shocks, but the trembling between them did not cease and continued some seconds after the last shock. This shock was felt on Oahu; no mention in VHR entry on this date; Warshauer notes: . . . a rushing sound,--as of a high wind through a forest--preceded the shocks, which made window-sash rattle; The earthquake which we noticed as having been felt here [Honolulu] on Tuesday morning, Dec. 29, was also felt at Hilo, where, Mr. Coan writes, it was the severest shock that has occurred for many months. It was also quite severe on Maui; strong at Hilo, dur 2-3 min; At 6 o'clock on the morning of Tuesday, the earth began to tremble for a few seconds with starts and a jerking motion, in an instant it seemed as if everything was coming to pieces. this lasted for 10 or 15 seconds, when it slowed down gradually. [Total duration] was perhaps two minutes. People here say it was equal to the one of 1868, though not of so long duration. . . .	Wyss and others, 1992, p. 18; Wyss and Koyanagi, 1992; PCA, 1/2/1875, p. 3; HG, 1/6/1875, p. 3; PCA, 1/23/1875, p. 3; PCA, 1/29/1875, p. 3; Intensity map in W&K [time given as 4:30 am]; region/magnitude assigned from new isoseismal map; analogy with Honomu earthquake of April 26, 1973 (W&K), but of smaller magnitude
1/30/1875	0:15					west hawaii?				5.60	int	V (W&K); 5.5 (Hilo-Cox)	Lyman notes: A smart shake at 12:15 M. preceded some 12 seconds by a sudden bump & followed by several seconds of trembling. No noise save -what was made by the shaking of the house; Warshauer notes: Another heavy earthquake shock on Saturday last [Jan. 30]	Wyss and others, 1992, p. 18; HG, 2/3/1875, p. 3; not found in PCA
2/11/1875	21:00					south hawaii?				4.10	int	4.3 (Hilo-Cox)	Lyman notes: a sudden jar, not hard, at 9 PM	Wyss and others, 1992, p. 18; not found in PCA or HG
6/06/1875	1:40					south hawaii?				5.60	int	5.5 (Hilo-Cox); V (W&K)	Lyman notes: a smart shake at 20 min. to 2 A.M. preceded by a premonitory shock that waked us from a sound sleep	Wyss and others, 1992, p. 18; not found in PCA or HG

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Date	Time HST	Lat deg	Lat min	Lon deg	Lon min	Region	Pref depth	M other	M other source	M pref	M pref source	I max	Location/felt report	Comment
11/23/1875	11:30					kaoiki?				5.90	k&w	VI (kapapala, kona, hilo); V (W&K; S&C); 5.5 (Hilo-Cox)	Lyman notes: a protracted and hard shaking at 11 1/2 A.M. The children of the foreign school ran out; At 11:15 a.m. there was quite a hard earthquake shock felt in Kau, Kona and Hilo [that] threw down several fathoms of good stone wall on Mr. Reed's ranch at Kapapala; also stopped our horses on the road, for the moment, by the motion of the earth; Warshauer notes: By a letter from South Kona, dated on the 23d ult., we learn that a severe shock of earthquake was felt on that day, the heaviest experienced there for years	Wyss and others, 1992, p. 18; VHR, v. 2, F.L. Lyman entry dated 11/22/1875 and 12/3/1875; PCA, 12/4/1875, p. 3; region could be kaoiki if deeper than 11 km, by analogy with modern events
3/30/1876	4:00					kaoiki?				5.30	int	V-VI (W&K); 5.5 (Hilo-Cox)	Lyman notes: a protracted and quite hard shake at about 4 A.M.; Warshauer notes: . . . two very severe shocks of earthquake occurred at Kau, Hawaii, on the 30th of March, about midnight [Lyman or newspaper time wrong?], and again on the 1st of April, sufficiently severe to open doors. . . .	Wyss and others, 1992, p. 18; HG, 4/19/1876, p. 3
4/01/1876	11:59					hilea?				5.30	int	V	Warshauer notes: . . . two very severe shocks of earthquake occurred at Kau, Hawaii, on the 30th of March, about midnight, and again on the 1st of April, sufficiently severe to open doors. . . . [no time given]	HG, 4/19/1876, p. 3
5/03/1876	21:00					south hawaii?				5.30	int	V (W&K); 5.5 (Hilo-Cox)	Lyman notes: a smart shake at 9 PM	Wyss and others, 1992, p. 18; not found in PCA or HG
10/23/1876	5:00					south hawaii?				4.10	int	4.3 (Hilo-Cox)	Lyman notes: a sudden jar at about 5 A.M.	Wyss and others, 1992, p. 19; not found in PCA or HG
11/01/1876	4:30					south hawaii?				5.30	int	V (W&K); 5.3 (Hilo-Cox)	Lyman notes: a moderately smart shock between 4 & 5 A.M.	Wyss and others, 1992, p. 19; not found in PCA or HG
2/23/1877	18:00					kona?				5.30	int	V (kona); IV-V (W&K); 5.2 (Hilo-Cox)	Lyman notes: a decided shock at 6 PM; bib notes: A severe earthquake shock was felt, by those living at Kaawaloa and Keei during the night of eruption, which must have preceded the outbreak. It was quite severe, but no damage is reported; a severe shock of earthquake had been felt [in kona] on the night of the 23d	[precursor to 1877 submarine eruption]; Wyss and others, 1992, p. 19; PCA, 2/24/1877, p. 3; PCA, 3/3/1877
5/04/1877	14:45					kl cal 05-10?				4.50	int	V (kilauea summit); III-IV (hilo); IV (kau)	bib notes: . . . On Friday the 4th inst., several severe shocks of earthquake were felt at the volcano house (and also at Hilo at the same time); at 2:45 pm, several pretty severe earthquake shocks were felt at the Volcano House . . . The earthquakes were felt not only at the volcano, but at Hilo and at different points in Kau. They were not destructive, but light, with an easy tremor of the ground, accompanied with rumbling noises, like that of a dray or a cart driven rapidly over a paved road; VHR notes: experienced 13 shocks of earthquakes during the evening [of May 4]	PCA, 5/12/1877, p. 3; HG, 5/16/1877, p. 2; VHR, v. 2, [signature unclear] entry dated 5/5/1877
5/05/1877	1:20					kl sf?				4.50	int	4.6 (Hilo-Cox)	Lyman notes: two shocks within an hour between 1 & 2 o'clock A.M.	Wyss and others, 1992, p. 19; not found in PCA or HG
5/05/1877	1:40					kl sf?				4.50	int	4.6 (Hilo-Cox)	do	do.

Date	Time HST	Lat deg	Lat min	Lon deg	Lon min	Region	Pref depth	M other	M other source	M pref	M pref source	I max	Location/felt report	Comment
5/31/1877	4:20					kl cal deep?	35	6.25	W&K	6.3; 6.25	k&w; w&k	VI (kau); VI (W&K; S&C); 6.2 (Hilo-Cox)	Lyman notes: A severe and protracted shaking at 4:20 A.M. Some things thrown down and displaced in the house and walls damaged; Warshauer notes: At Hilo and Kohala on Hawaii, and on some parts of Maui, a smart shock of earthquake is reported as having occurred early in the morning of May 31st; On the morning of the 31st ultimate, a heavy earthquake shock occurred on the island of Hawaii, which was also distinctly felt on Maui. It was most distinct in the district of Kau on the southern part of Hawaii where stone walls were thrown down, and cisterns were cracked, and other damage done. Mr. G.W.C. Jones suffered to the amount of about \$2,500. The shock was so severe in Hilo and other parts of the island as to stop clocks	Wyss and others, 1992, p. 19; Wyss and Koyanagi, 1992; PCA, 6/9/1877; HG, 6/13/1877, p. 3; Intensity map in W&K [missing second newspaper reference]; region/magnitude assigned from new isoseismal map; analogy to earthquake of April 21, 1951 (W&K)
8/02/1877	20:03					south hawaii?				5.30	int	5.2 (Hilo-Cox); IV-V (W&K)	Lyman notes: another quite protracted and decided [shake] at a little past 8 P.M.; no mention in VHR entry on this date; Warshauer notes: A severe earthquake shock is reported to have been felt at Hilo on the evening of the 2nd instant	Wyss and others, 1992, p. 19; HG, 8/8/1877, p. 3
4/30/1878	15:30					south hawaii?				4.50	int	4.5 (Hilo-Cox)	Lyman notes: a decided jar at 3 1/2 P.M.	Wyss and others, 1992, p. 19; not in PCA or HG
3/11/1879	2:00					south hawaii?				5.30	int	V (W&K); 5.5 (Hilo-Cox)	Lyman notes: a smart shake at 2 AM	Wyss and others, 1992, p. 19; not in PCA or HG
3/16/1879	21:59					north hawaii?				5.30	int	V	Warshauer notes: Letters from Kohala state that a severe shock of earthquake was felt there the night of Sunday the 16th inst [time assumed]	PCA, 3/29/1879, p. 3
5/15/1879	21:30					south hawaii?				5.30	int	V (W&K; S&C); 4.8 (Hilo-Cox)	Lyman notes: A smart shock at 9:30 P.M. A respite of several seconds, then a shake that made the house tremble (a crack) violently	Wyss and others, 1992, p. 19; not in PCA or HG
11/04/1879	8:55					south hawaii?				5.30	int	V (W&K; S&C); 5.2 (Hilo-Cox)	Lyman notes: Had the hardest shake at 5 min to 9 A.M. that we have had in a long time. The premonitory shock came suddenly, was quite hard & protracted after which we had a real upshaking. No damage done however; Warshauer notes: quite severe earthquake in Hilo	Wyss and others, 1992, p. 19; PCA, 11/15/1879, p. 3
11/27/1879	8:40					south hawaii?				5.30	int	V (W&K); 5.5 (Hilo-Cox)	Lyman notes: A smart shake at 20 min to 9 A.M.	Wyss and others, 1992, p. 19; not in PCA or HG
4/21/1880	1:00					south hawaii?				5.60	int	5.5 (Hilo-Cox); V (W&K)	Lyman notes: Were waked about 1 A.M. by a smart shake which was succeeded by one still harder	Wyss and others, 1992, p. 20
6/20/1880	5:00					south hawaii?				5.30	int	V	quite a heavy shock of an earthquake--no damage--no change in volcano	VHR, v. 2, L. [probably Wm. H. Lentz] entry dated 6/20/1880
8/18/1880	3:45					mauna loa?				5.60	int	6.0 (Hilo-Cox); V (W&K)	Lyman notes: A smart protracted shake at 3 3/4 A.M. which drove some from their beds & waked every body; Warshauer notes: A sharp earthquake shock startled the inhabitants of Hilo from their beds at the rather early hour of 3 o'clock on Wednesday morning, August 18th. There were two distinct shocks, one following the other in quick succession, the second being the heavier of the two	Wyss and others, 1992, p. 20; HG, 8/25/1880, p. 3

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Date	Time HST	Lat deg	Lat min	Lon deg	Lon min	Region	Pref depth	M other	M other source	M pref	M pref source	I max	Location/felt report	Comment
9/23/1880	15:15					kaoiiki?				6.60	k&w	VII (Hilo); VI (kona);VII (W&K); 6.1 (Hilo-Cox); V (S&C)	Wood notes: severe earthquake; Lyman notes: Two severe shocks at a quarter past three P.M. The first nearly equal to the second & only a few seconds intervening between them; Warshauer notes: A sharp earthquake shock was felt in Hilo on Thursday Sept. 23 at 3:13 pm. It was by far the severest shock that has been felt at Hilo for some years; On September 23rd, at 3 pm, we [in Kona] had a heavy shake of earthquake, so that it jumped some of the furniture out of place in the houses	Wood, 1917, chart 1, p. 117; Wyss and others, 1992, p. 20; HG, 9/29/1880, p. 3; HG, 10/6/1880, p. 3; region/magnitude assigned by analogy with the Kaoiki earthquake of November 16, 1983 (W&K)
9/25/1880	4:00					kl sf?				6.00	k&w	VI-VII (Hilo); V (Volcano); IV (kona); V (W&K; S&C); 5.0 (Hilo-Cox)	Severe shock of earthquake here at 4:15 a.m. this day; Lyman notes: We were startled by a severe shaking at 4 o'clock this morning which was followed by a still harder one after a few seconds, & followed by a trembling motion which continued several seconds; Warshauer notes: Hilo was visited on Saturday morning, September 25th, at 1 [4?] o'clock by an earthquake more severe than that of September 23rd. Many of the natives were so alarmed that they fled from their houses in terror. There have been several slight shocks since, creating some apprehension lest the days 1868 be repeated; . . . finally some time in the night of the 25th we [in Kona] had a light shake . . . [times off--presumed to be the same event]	VHR, v. 2, W.H. Lentz entry dated 9/25/1880; Wyss and others, 1992, p. 20; HG, 10/6/1880, p. 3; region/magnitude assigned by analogy with Kilauea south flank earthquakes of September 21, 1979 and June 25, 1989 (W&K)
1/05/1881	16:20					south hawaii?				4.10	int	4.3 (Hilo-Cox)	Lyman notes: A little more than a moderate shake at 20 min past 4 P.M.; Warshauer notes: A sharp shock of earthquake was felt at Hilo at twenty-three minutes of 5 o'clock on Wednesday afternoon, Jan. 5th	Wyss and others, 1992, p. 20; HG, 1/12/1881, p. 3
4/21/1881	14:25					maui deep?				5.50	k&w	V (Lahaina); IV (hon, hilo); V (S&C); 3.0 (Cox-Hon)	felt all Honolulu, Maui and Hawaii; lamps/crockery rattle [Hon]; Lyman notes: A not very heavy shake preceded by a premonitory shock at 2.25 P.M.; Warshauer notes: the earthquake mentioned by our Maui and Hawaii correspondents was felt by several of our citizens [Honolulu]. One lady reports all the lamps and crockery as rattling freely; A sharp shock of earthquake was felt at Hilo at half-past 2 o'clock Thursday afternoon, April 22; A gentle earthquake shook up the college [Lahainaluna, Maui] on the 'Barren Hill.' It occurred last Thursday [April 22] at half-past 2 o'clock in the afternoon and lasted three or four seconds. It was almost strong enough to disturb the member of the senior class who was struggling across the [unintelligible] . . .	Cox, 1986, p. 60; Wyss and others, 1992, p. 20; HG, 4/27/1881; region/magnitude assigned from isoseismal map; analogy to earthquake of March 19, 1926 (W&K)

Date	Time HST	Lat deg	Lat min	Lon deg	Lon min	Region	Pref depth	M other	M other source	M pref	M pref source	I max	Location/felt report	Comment
9/30/1881	4:53	20	4	155	42	mauna kea deep	40	≥6	W&K	6.40	k&w	VII-VIII (Honokaa, kohala); VII (rest of Hawaii island); VI (maui, molokai); V (oahu); III (kauai); VIII (S&C); IV-V (W&K-hon); VI (W&K-kona); V-VI (W&K-ne hawaii); 6.5 (Hilo Cox)	Lyman notes: At early dawn [dawn] the earth commenced trembling and for nearly a minute there was a violent shaking causing the house to creak & groan making it seem as tho' it must come down. It was the most violent one we ever felt & yet strange to say very few things were displaced in the house. The motion was principally up & down, apparently everything moved with the house	Wyss and others, 1992, p. 20; Wyss and Koyanagi, 1992; Intensity map in W&K; intensity map augmented from that of W&K; region/magnitude assigned from new isoseismal map using additional newspaper references; location and magnitude estimated by analogy to earthquakes of April 4, 1868 (W&K) and November 18, 1941
9/30/1881	4:53					do		do	do	6.40	do	IV-V (W&K-hon); VI (W&K-kona); V-VI (W&K-ne hawaii); 6.5 (Hilo Cox)	felt in Oahu, Molokai, Maui and especially Hawaii; Warshauer notes: Honolulu-clock stopped, dur 30 s, windows, crockery rattle; A severe shock of earthquake was felt at Pukoo, Molokai, on Friday morning [Sept. 30]; Kauai-felt island-wide, 3 distinct shocks within 1-2 m; Maui-severe, dur 15-20 s; Waimea-stone walls thrown down, houses rocked fearfully; Hamakua-3 houses destroyed, cisterns cracked, stronger than 4/2/1868; severe earthquake felt throughout Hawaii; stone walls and buildings cracked and cisterns damaged, esp in Kona, Waimea and Hamakua districts; Kailua [Kona]-stone walls down, crockery broken, buildings cracked; Kohala-walls cracked, crockery off shelves, stronger than 4/2/68; S Kona-hardest eq in 40 yrs, dur 2 m, stone walls down, buildings/cisterns cracked, crockery thrown down; Hilo [time given as 5:05]-stone walls down, bath tubs cracked, curios damaged; Kau-cisterns cracked; Volcano-caldera wall caved, Kau road cracked; no entry in VHR	Cox, 1986, p. 60-61; PCA, 10/1/1881, p. 2, 3; HG, 10/5/1881, p. 3; PCA, 10/8/1881, p. 3; HG, 10/12/1881 [Bond, 1881; Paris, 1881; Anonymous, 1881]
9/30/1881	4:53					do		do	do	6.40	do	IV-V (W&K-hon); VI (W&K-kona); V-VI (W&K-ne hawaii); 6.5 (Hilo Cox)	At 5 a.m. this morning received the most destructive and fearful earthquake shock of all I have known during my residence [Kaawaloa, Kona] in the Sandwich Islands, Much damage has been done, many stone walls thrown down, cistern cracked, my stone store severely injured	Greenwell, Henry N [unpub. journal, 9/30/1881, provided courtesy of Jean Greenwell]

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Date	Time HST	Lat deg	Lat min	Lon deg	Lon min	Region	Pref depth	M other	M other source	M pref	M pref source	I max	Location/felt report	Comment
9/30/1881	4:58	20	4	155	42	mauna kea deep	40			6.00	int	V (kona, lahaina); III (Hon, hilo)	Lyman notes: In about five minutes there was another slight shock; Warshauer notes: . . . in [Honolulu] about five minutes afterwards was followed by another very light roll and tremble of the earth; After an interval of a few minutes, another slight shaking was experienced [Maui], but not as heavy as the first; a second shock felt [Kailua Kona] three minutes after the first; [the mainshock] lasted about two minutes--then a cessation of about two or three minutes, and then followed another shake [Kaawaloa, Kona], similar to the first, but not quite equal in terrific violence	[aftershock]; Wyss and others, 1992, p. 20; PCA, 10/1/1881, p. 2; HG, 10/5/1881, p. 3; PCA, 10/8/1881; HG, 10/12/1881 [Paris, 1881]; magnitude assigned from intensity analogous to earthquake of August 14, 1955
9/30/1881	21:30					north hawaii deep				5.30	poor		Warshauer notes: A shock of earthquake, very slight, was noticed by some of our citizens [Honolulu] on Friday evening about 10 o'clock; this has been corroborated by letters received from the other islands; Some declare that there was another slight shock on Friday evening, but if so it was so exceedingly slight as to be noticeable only by a few [Maui]; . . . Some light tremblings were felt the same day [s kona]. . .	HG, 10/5/1881, p. 3; HG, 10/12/1881 [Paris, 1881]; magnitude assigned as minimum magnitude consistent with being felt from hawaii to oahu
9/30/1881	5:15					north hawaii deep				4.50	poor		Warshauer notes: a third shock felt [Kailua Kona] about 1/4 past 5 a.m.; thirty minutes [after the mainshock] a fourth occurred [Hilo] but of a milder character	[aftershock] PCA, 10/8/1881; HG, 10/12/1881 [Anonymous, 1881]; magnitude assigned as minimum magnitude felt on both sides of Hawaii island, but not noticed on other islands
10/1/1881	11:59					north hawaii deep				4.00	poor	III	Oct. 1. Two or three slight earthquakes (shocks) felt today [kona] . . . ; Warshauer notes: . . . and three moderate shakes [s kona] the next day [after 9/30]. . . [no times given]	[aftershocks]; Greenwell, Henry N [unpub. journal, 10/1/1881, provided courtesy of Jean Greenwell]; HG, 10/12/1881 [Paris, 1881]
10/3/1881	11:59					north hawaii deep				4.00	poor	III	Warshauer notes: . . . These light shakes [s kona] continued through the third inst. . . . [no times given]	[aftershocks]; HG, 10/12/1881 [Paris, 1881]
10/16/1881	4:30					west hawaii?				5.30	int	V	A smart shock of earthquake at 4:30 am [Kaawaloa, Kona]	Greenwell, Henry N [unpub. journal, 10/16/1881, provided courtesy of Jean Greenwell]; not found in PCA or HG
5/21/1882	6:00					south hawaii?				5.00	int	4.8 (Hilo-Cox)	Lyman notes: a slight jar, followed by a decided but not hard shake; Warshauer notes: Hilo was aroused on Sunday morning, May 21, at about six o'clock by a sharp earthquake	no mention in VHR entry on this day [5/19-22/1881]; HG, 5/31/1882, p. 3
7/26/1882	2:00					north hawaii?				5.40	int	5.2 (Hilo-Cox); V (W&K)	Lyman notes: a decided shake at 2 AM; Warshauer notes: Quite a heavy earthquake [at Kohala] during the night of Tuesday [Jul. 25-26], shaking us up in a very respectable way; Hilo was aroused from her slumbers on Wednesday morning [Jul. 26] at quarter past two o'clock by a shock of earthquake; no mention in VHR	Wyss and others, 1992, p. 20; PCA, 8/1/1882, p. 2; HG, 8/2/1882, p. 3
10/18/1882	0:30					south hawaii?				5.40	int	5.2 (Hilo-Cox); V (W&K);	Lyman notes: A decided shake at 12 M. not protracted however; Warshauer notes: A sharp shock of earthquake was felt at Hilo, on Tuesday, Oct. 17th [sic- after midnight, make 18th to agree with Lyman], at half past twelve o'clock	Wyss and others, 1992, p. 20; not found in PCA or HG
5/15/1883	6:00					south hawaii?				4.50	int	IV-V; 5.2 (Hilo-Cox)	Lyman notes: a decided shake, but not hard at about 6 o'clock A.M.	Wyss and others, 1992, p. 20; not found in PCA or HG

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Date	Time HST	Lat deg	Lat min	Lon deg	Lon min	Region	Pref depth	M other	M other source	M pref	M pref source	I max	Location/felt report	Comment
7/12/1883	19:00					south hawaii?				4.50	int	IV-V; 5.2 (Hilo-Cox)	Lyman notes: A decided, but not hard shake at 7 P.M.	Wyss and others, 1992, p. 20; not found in PCA or HG
7/26/1883	1:00					east hawaii?				5.40	int	5.3 (Hilo-Cox)	Lyman notes: a protracted but not heavy shock at 1 AM; Warshauer notes: Letters from Hilo and Hamakua state that a very sharp shock of earthquake was felt all through those districts at 1:05 am on Thursday July 26th. the direction was from east to west, and the shock is said to be unusually severe, shaking the houses considerably and causing all crockery to swing and rattle. . . . A sharp shock of earthquake was felt at Hilo on Thursday morning July 26th	Wyss and others, 1992, p. 21; PCA, 7/30/1883. P. 3; HG, 8/1/1883, p. 3
10/15/1883	17:54					maui??				6.00	k&w	V (Hon, honokaa); III (hilo-presumed)	Warshauer notes: The earthquake on Monday evening [Oct. 15] shook open a door in Capt. Flemings house, on Kukui street [Honolulu], and shook up things in general pretty lively. The Captain says the shock lasted 30 seconds; Monday night [Oct. 15], at eight minutes of six o'clock, a slight shock of earthquake was felt in this city [Honolulu]. Mr. George Beckley, who timed the shock at his residence on King street, says that it lasted for about two seconds, and was strong enough to shake his house sensibly. The shock was also felt at Messrs. Geo. W. Macfarlane & Co.'s premises in Fort street; A heavy shock of earthquake was felt here [Honokaa] on last Monday evening [Oct. 15]; . . . the shock of earthquake felt in Honolulu on Monday evening the 15th instant, was also experienced throughout Maui, and a similar report has reached us from Hawaii	HDB, 10/17/1883, p. 3; PCA, 10/20/1883, p. 5; PCA, 10/22/1883, p. 2; PCA, 10/27/1883, p. 5; region/magnitude assigned by analogy with earthquakes of June 16, 1940 and March 20, 1927 (W&K)
12/20/1883	21:00					south hawaii?				5.60	int	5.5 (Hilo-Cox); V (W&K)	Lyman notes: A sudden, decided, smart shake at 9 P.M.	Wyss and others, 1992, p. 21; not found in PCA or HG
4/19/1884	12:00					south hawaii?				5.40	int	5.2 (Hilo-Cox)	Lyman notes: Quite a protracted but not a severe shake at 12 M [sic-N? to agree with newspaper]. Have felt no other this year, tho' I have heard of others feeling some slight shocks; Warshauer notes: Quite a sharp shock of earthquake was felt at Hilo on Saturday, April 19th, at 12 o'clock noon	Wyss and others, 1992, p. 21; HG, 4/30/1884, p. 3
8/21/1884	3:00					south hawaii?				5.30	int	V; 3.7 (Hilo-Cox)	Lyman notes: a respectable shake at 3 AM	Wyss and others, 1992, p. 21; not found in PCA or HG
9/06/1884	4:15					south hawaii?				5.60	int	5.5 (Hilo-Cox)	Lyman notes: one quite smart one about the 11th Sept [assume newspaper date of Sept. 6]; Warshauer notes: Quite a shock of earthquake occurred in Hilo on Saturday morning at 4:15? [hard to read] o'clock	Wyss and others, 1992, p. 21; HG, 9/10/1884, p. 3
11/18/1884	13:00					south hawaii?				5.30	int	5.2 (Hilo-Cox)	Lyman notes: a decided shake at 1 PM	Wyss and others, 1992, p. 21; not found in PCA or HG
11/21/1884	1:00					south hawaii?				5.30	int	5.2 (Hilo-Cox)	Lyman notes: one decided shake at 1 AM	Wyss and others, 1992, p. 21; not found in PCA or HG
12/10/1884	9:00					south hawaii?				5.30	int	V (W&K); 5.5 (Hilo-Cox)	Lyman notes: a smart shock at 9 o'clock A.M.; Warshauer notes: A sharp shock of earthquake was felt at Hilo on Wednesday morning [Dec. 10] at five minutes to nine	Wyss and others, 1992, p. 21; HG, 12/17/1884, p. 3

Date	Time HST	Lat deg	Lat min	Lon deg	Lon min	Region	Pref depth	M other	M other source	M pref	M pref source	I max	Location/felt report	Comment
1/13/1885	6:30	20	0	155	10	mauna kea deep?	35	≥6	W&K	6.10	k&w	VII (Honokaa, hilo); VI-VII (Maui); V (Hon); VI (S&C); 5.0 (Hilo-Cox); IV (W&K-Hon, hawaii)	Cox notes: severe both leeward and windward oahu; severe at Honokaa; some damage at Kahului; Lyman notes: A hard protracted shake at early dawn. It was of the kind which may be called intermittent and which makes one nervous not knowing what the end may be, as it gains strength by each successive renewal. This was more protracted than usual; Warshauer notes: In Honolulu a sharp earthquake shock commenced at 5:59 am, lasting 15 s. The feeling was of a heavy blow under foundation of houses, followed by rattling of small articles on shelves, banging of doors and other sounds. No premonitory sounds, nor did it pass off in any given direction. . . . most violent in [Nuuanu] valley, wave traveled from north to south. Several pendulum clocks stopped, two that swung north to south, one east to west. A glass door facing west swung open, though the door generally sticks at the bottom. . . in lower part of town clocks and flow from the Artesian wells not disturbed. It is nearly five years since Honolulu has felt as severe a shock	Cox, 1986; Wyss and others, 1992, p. 21; Wyss and Koyanagi, 1992; PCA, 1/14/1885, p. 3; Intensity map in W&K; region/magnitude assigned from new isoseismal map; analogy to earthquake of April 26, 1973 (W&K)
1/13/1885	6:30	do	do	do	do	do	35	do	do	6.10	do	do	Warshauer notes: A report of a 60-foot high wave that dislodged rock and earth from the cliffs back of Laupahoehoe; The earthquake shock was more severe on the north side of Hawaii than here. The high wave felt at Laupahoehoe was, no doubt, due to the earthquake . . . Kohala, Jan. 15, 1885. . . . A sharp, and long shock of earthquake did not allow our citizens to over-sleep on Tuesday morning. . . Hilo, Jan. 14, 1885. On the 13th instant, at 6:20 am, the people of this place were startled by an earthquake--the heaviest since 1868. There was not much damage done; some glass and crockery were broken, stone walls more or less damaged, and people scared. [The correspondent had to hold on to a bed post to keep from going across the room]. It lasted long enough . . . A few seconds more would have done great damage here; there was no disturbance of the tides. On the Hamakua coast . . . the shock was felt very severely.	PCA, 1/19//1885, p. 3
2/23/1885	21:00					south hawaii?				5.40	int	5.3 (Hilo-Cox); V (W&K)	Lyman notes: A pretty smart shake (preceded by a slight one) at 9 P.M. ending with a protracted trembling; Warshauer notes: Hilo was visited by an earthquake on Monday evening, Feb. 23d, at 25 minutes past nine o'clock. Shock plainly felt, no damage.	Wyss and others, 1992, p. 21; HG, 3/4/1885, p. 3
12/12/1885	0:45					south hawaii?				5.30	int	V (W&K); 5.5 (Hilo-Cox)	Lyman notes: 1/4 of 1: o'clock A.M. one smart shake	Wyss and others, 1992, p. 21; not found in PCA or HG
2/02/1886	am					maui?				4.50	int	IV-V	Warshauer notes: A rather severe shock of earthquake was felt early last Tuesday morning [Feb. 2] at Honolua, East Maui.	PCA, 2/8/1886

Date	Time HST	Lat deg	Lat min	Lon deg	Lon min	Region	Pref depth	M other	M other source	M pref	M pref source	I max	Location/felt report	Comment
3/06/1886	21:30					kilauea?				4.50	int	VI (kilauea summit); 4.6 (Hilo-Cox)	Earthquake swarm and draining of lava from Halemaumau. Lyman notes: 1 quake during the night in Hilo [summarizes Maby info]; breakdown [collapse] and 43 earthquakes; no eq felt at Keauhou, 2 felt at Kapapala; 43 earthquakes lasting until 7:30 a.m. March 7; the first 3 slight, the 4th quite severe [felt-Hilo, Kapapala, see above]; all fire disappeared from New Lake and by 2-3 am, Halemaumau; several rents in the ground, 1 on road to Kilauea Iki, and 3 on Keauhou road; March 10. No fire in crater that can be seen from the House. During the shaking here there was nothing felt at Keauhou, and only two shakes felt at Kapapala ranch. . . .	Wyss and others, 1992, p. 21; Wood, 1917 chart 1, p. 117; VHR, v. 3, 3/6 entry; VHR, v. 3, quoted letter from J.H. Maby to S.G. Wilder, dated 3/6/1886; HDB, 3/30/1886, p. 2 [Earthquake swarm largely associated with collapse (kl cal 0-10?) and upper east or southwest rift intrusion. The largest events, those felt in Hilo or Kapapala are probably south flank response]
3/06/1886	21:30					do				4.50	do	do	Earthquake swarm [summit, east rift zone intrusion?, south flank response] and draining of lava from Halemaumau. Warshauer notes: Saturday evening (March 6th) both the Old and New lakes were unusually full and brilliant looking from the house, and remained so until 9:30 pm of the 6th instant, at which time there commenced a series of earthquakes, forty-three in number, lasting until 7:30 am of the 7th. The first three were slight, and the fourth one quite severe; and on looking out upon the crater, all fire had disappeared from the New Lake. At about 2 or 3 am the fire had also disappeared from Halemaumau.	PCA, 3/15/1886, p. 2 [Maby, 1886]; HDB, 3/15/1886, p. 3
4/23/1886	21:59					mauna kea?				5.30	int	V	Warshauer notes: The Schooner Kulamanu returned from Kukaiaiu, Hamakua, Hawaii, yesterday, and reports heavy earthquakes at that place last Friday night [Apr. 23], and also on Sunday [Apr. 25] at noon. The rocks, in vast quantities rolled down the steep precipices. [Two persons were injured; felt-Waimea, not Hilo--see entry for 4/29/1886] [time assumed]	PCA, 4/30/1886, p. 3
4/29/1886	3:30					south hawaii?				4.50	int	4.6 (Hilo-Cox)	Lyman notes: At half past 3. A.M. 1 shock from the direction of the volcano [Kilauea] to the sea	Wyss and others, 1992, p. 21; not found in PCA or HG [microfilm difficult to read]
10/18/1886	18:40					south hawaii?				5.60	int	V-VI	Lyman notes: 20 mts. of 7. P.M. two shocks first a slight tremble second quite hard; Warshauer notes: the Steamer W.G. Hall, which arrived Friday afternoon [Oct. 22] brought intelligence of two light shocks of earthquake, which occurred in rapid succession and were felt in the Kau district, on Hawaii [same event?]	Wyss and others, 1992, p. 21; PCA, 10/25/1886, p. 2
10/21/1886	23:45					south hawaii?				5.90	int	VI	Warshauer notes: Quite a shock of earthquake was felt in Hilo, on Friday night, Oct. 21st [sic, either Thursday, 21st or Friday 22nd], at quarter of twelve o'clock. It was severe enough to stop clocks at that hour and also to throw down dishes and other articles from shelves in some of the residences	HG, 11/9/1886, p. 5
11/19/1886	14:30					south hawaii?				4.50	int	4.6 (Hilo-Cox)	Lyman notes: 2:30. P.M. two shocks: first up and down, second waving; Warshauer notes: Several slight shocks have been felt recently	Wyss and others, 1992, p. 21; HG, 11/30/1886, p. 5

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Date	Time HST	Lat deg	Lat min	Lon deg	Lon min	Region	Pref depth	M other	M other source	M pref	M pref source	I max	Location/felt report	Comment
1/11/1887	1:20					mauna loa				5.60	int	5.2 (Hilo-Cox)	Lyman notes: 1:20. A.M. one sharp shock; Warshauer notes: quite a severe earthquake was felt at Hilo on the 11th inst. at 1 am [precursor to Mauna Loa eruption?]	Wyss and others, 1992, p. 21; PCA, 1/17/1887, p. 2
1/13/1887	5:00					oahu				5.30	int	5.0 (Oahu)?		Cox, unpub.
1/17/1887	2:12					ml swr?				5.60	int	VI (pahala); V-VI (hilo, kahuku)	Jones notes: On January 17, an earthquake swarm began with three quite severe earthquake shocks between 2 and 3 am, the first that have been felt for some time; Warshauer notes: The earthquake shocks began at 2:12 a.m. of the 17th ; . . . and we had six terrific earthquake shocks [at Pahala] between that and morning, not counting the trembling and occasional jerks, which were constant	Jones, 1887a; HG, 2/1/1887, p. 1 [Jones, 1887b; Anonymous, 1887]; HDH, 1/26/1887
1/17/1887	2:30					ml swr?				5.60	int	V-VI (kahuku)	do	do
1/17/1887	2:45					ml swr?				5.60	int	V-VI (kahuku)	do	do
1/17/1887	3:00					ml swr?				5.30	int	V (pahala); IV (kahuku)	do	do
1/17/1887	4:00					ml swr?				5.30	int	V (pahala); IV (kahuku)	do	do
1/17/1887	5:00					ml swr?				5.30	int	V (pahala); IV (kahuku)	do	do
1/17/1887	14:30					hilea?				5.90	int	VI (Pahala); V-VI (Kahuku); 5.2 (Hilo-Cox)	Lyman notes: At 2:30 P.M. one decided shock preceded by two slight shocks; Warshauer notes: not less than seven distinct shocks being felt there, on Monday Jan. 17; [Pahala, Jan 17th, day] big shocks seemed as though they meant to take the house down. . . then came a shock that was worse than what we had experienced already	Wyss and others, 1992, p. 21; HG, 1/25/1887, p. 8; HG, 2/1/1887, p. 1; HDH, 1/26/1887
1/17/1887	16:00					hilea?				4.50	int	IV-V (kahuku); 4.6 (Hilo-Cox); III (hilo)	Lyman notes: Another shake at 4 P.M.; Warshauer notes: not less than seven distinct shocks being felt there [hilo], on Monday Jan. 17	Wyss and others, 1992, p. 21; HG, 1/25/1887, p. 8
1/17/1887	16:20					hilea?				4.50	int	IV-V (kahuku); 4.6 (Hilo-Cox); III (hilo)	Lyman notes: Still another at 4:20, a long but slight shake; Warshauer notes: not less than seven distinct shocks being felt there [hilo], on Monday Jan. 17	Wyss and others, 1992, p. 21; HG, 1/25/1887, p. 8
1/17/1887	16:45					hilea?				4.50	int	IV-V (kahuku); 4.6 (Hilo-Cox); III (hilo)	Lyman notes: Another at 4:45; Warshauer notes: not less than seven distinct shocks being felt there [hilo], on Monday Jan. 17	Wyss and others, 1992, p. 21; HG, 1/25/1887, p. 8
1/17/1887	19:00					hilea?				5.55	calc	IV*100-(6)	Jones notes: A number more [earthquakes] were noticed during the morning, and in the afternoon they increased rapidly. Up to 7 pm 100 were counted; Jones notes: 97 earthquakes from 3 am to 7 pm. With one exception [see 14:30 above] all were light	HG, 2/1/1887, p. 1 [Jones, 1887b]; HDH, 1/26/1887
1/17/1887	20:00					hilea?				5.13	calc	IV*29	Jones notes: 29 light earthquakes between 7 and 8 pm	HDH, 1/26/1887
1/17/1887	21:00					hilea?				5.07	calc	IV*25	Jones notes: 25 light earthquakes between 8 and 9 pm	HDH, 1/26/1887
1/17/1887	21:15					hilea?				5.20	int	V	Jones notes: one hard and long	HDH, 1/26/1887
1/17/1887	21:30					hilea?				4.75	calc	IV*11	Jones notes: 11 light earthquakes between 9 and 9:30 pm	HDH, 1/26/1887
1/17/1887	21:45					hilea?				5.20	int	V	Jones notes: one hard	HDH, 1/26/1887
1/17/1887	22:00					hilea?				4.98	calc	IV*20	Jones notes: 20 light earthquakes between 9:30 and 10 pm	HDH, 1/26/1887

Date	Time HST	Lat deg	Lat min	Lon deg	Lon min	Region	Pref depth	M other	M other source	M pref	M pref source	I max	Location/felt report	Comment
1/17/1887	22:30					hilea?				4.96	calc	IV*19	Jones notes:19 light earthquakes between 10 and 10:30 pm	HDH, 1/26/1887
1/17/1887	22:45					hilea?				5.20	int	V	Jones notes: one hard	HDH, 1/26/1887
1/17/1887	23:00					hilea?				4.98	calc	IV*20	Jones notes:20 light earthquakes between 10:30 and 11 pm	HDH, 1/26/1887
1/17/1887	23:30					hilea?				4.96	calc	IV*16	Jones notes:16 light earthquakes between 11 and 11:30 pm	HDH, 1/26/1887
1/17/1887	23:55					hilea?				5.80	int	VI (kahuku); 5.3 (Hilo-Cox)	Lyman notes:2 long but not heavy shocks at 5 min. of 12 last night; Warshauer notes: The shock of Monday night--occurring at quarter of twelve o'clock--was particularly heavy; Jones notes:4 severe [2 quakes, each with two phases?]	Wyss and others, 1992, p. 21; HG, 1/25/1887, p. 8; HDH, 1/26/1887
1/18/1887	0:00					hilea?				4.96	calc	IV*19	Jones notes:19 light earthquakes between 11:30 pm and midnight	HDH, 1/26/1887
1/18/1887	0:05					hilea?				5.80	int	VI (kahuku); III (hilo)	Lyman notes: Near 12 M a slight shock; Warshauer notes: not less than seven distinct shocks being felt there, on Monday Jan. 17; Monday night [Pahala, Jan. 17] was literally a night of terror, and we felt as though we couldn't live through any more, the heavy shocks were nearly as continuous as the trembling had been for four hours, there was no pause longer than five minutes or often only three between the shocks, and sometimes three succeeded each other like ocean waves; Jones notes: From [7 pm] until midnight there was often not one minute's interval between them; Jones notes:4 severe [2 quakes, each with two phases?]	Wyss and others, 1992, p. 21; HG, 1/25/1887, p. 8; HG, 2/1/1887, p. 1; Jones, 1887a; HDH, 1/26/1887
1/18/1887	0:15					hilea?				5.20	int	V (Kahuku)	Jones notes:2 hard [1 quake with two phases?] earthquakes between midnight and 12:30 am	HDH, 1/26/1887
1/18/1887	1:00					hilea?				4.71	calc	IV*10	Jones notes:10 light earthquakes between 12:30 and 1 am	HDH, 1/26/1887
1/18/1887	1:30					hilea?				4.62	calc	IV*8	Jones notes: 8 light earthquakes between 1 and 1:30 am	HDH, 1/26/1887
1/18/1887	2:00					hilea?				4.35	calc	IV*4	Jones notes:4 light earthquakes between 1:30 and 2 am	HDH, 1/26/1887
1/18/1887	2:30					hilea?				4.07	calc	IV*2	Jones notes:2 light earthquakes between 2 and 2:30 am	HDH, 1/26/1887
1/18/1887	3:00					hilea?				4.07	calc	IV*2	Jones notes:2 light earthquakes between 2:30 and 3 am	HDH, 1/26/1887
1/18/1887	4:00					hilea?				5.91	calc	IV*214-(2)	Jones/Warshauer notes: at 4 am of the 18th, 314 distinct shocks had been recorded; Jones notes:4 light earthquakes between 3:30 and 4 am	Jones, 1887a; HG, 2/1/1887, p. 1 [Jones, 1887b]
1/18/1887	8:30					hilea?				4.44	calc	IV*5	Jones notes:5 light earthquakes between 8 and 8:30 am	HDH, 1/26/1887
1/18/1887	9:00					hilea?				4.71	calc	IV*10	Jones notes:10 light earthquakes between 8:30 and 9 am	HDH, 1/26/1887
1/18/1887	9:30					hilea?				4.57	calc	IV*7	Jones notes: 7 light earthquakes between 9 and 9:30 am	HDH, 1/26/1887
1/18/1887	10:00					hilea?				4.07	calc	IV*2	Jones notes:2 light earthquakes between 9:30 and 10 am	HDH, 1/26/1887

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Date	Time HST	Lat deg	Lat min	Lon deg	Lon min	Region	Pref depth	M other	M other source	M pref	M pref source	I max	Location/felt report	Comment
1/18/1887	10:30					hilea?				4.57	calc	IV*7	Jones notes: 7 light earthquakes between 10 and 10:30 am	HDH, 1/26/1887
1/18/1887	11:00					hilea?				4.51	calc	IV*6	Jones notes: 6 light earthquakes between 10:30 and 11 am	HDH, 1/26/1887
1/18/1887	11:30					hilea?				4.35	calc	IV*4	Jones notes:4 light earthquakes between 11 and 11:30 am	HDH, 1/26/1887
1/18/1887	12:00					hilea?				4.57	calc	IV*7	Jones notes: 7 light earthquakes between 11:30 and noon	HDH, 1/26/1887
1/18/1887	12:30					hilea?				4.23	calc	IV*3	Jones notes:3 light earthquakes between noon and 12:30 pm	HDH, 1/26/1887
1/18/1887	13:00					hilea?				4.07	calc	IV*2	Jones notes:2 light earthquakes between 12:30 and 1 pm	HDH, 1/26/1887
1/18/1887	13:30					hilea?				5.80	int	5.2 (Hilo-Cox)	Lyman notes: At 1:30 P.M. a long shock; Jones notes: hardest yet	Wyss and others, 1992, p. 22; HDH, 1/26/1887; HDH, 1/26/1887; not in PCA or HG
1/18/1887	14:00					hilea?				4.44	calc	IV*5	Jones notes:5 light earthquakes between 1:30 and 2 pm	HDH, 1/26/1887
1/18/1887	14:30					hilea?				4.07	calc	IV*2	Jones notes:2 light earthquakes between 2 and 2:30 pm	HDH, 1/26/1887
1/18/1887	16:00					hilea?				6.10	int	VII (kahuku); V (hilo)	Warshauer notes: Earthquakes occurred at Hilo on the 18th instant at 4 pm and 11 pm, and were quite severe; Jones notes: most severe of any occurred [time between 4 and 4:30 pm], no more until 8:30 pm	PCA, 1/24/1887, p. 2; HDH, 1/26/1887
1/18/1887	16:00					hilea?				4.23	calc	IV*3	Jones notes:3 light earthquakes between 3:30 and 4 pm	HDH, 1/26/1887
1/18/1887	19:00					hilea?				5.42	calc	III-IV*129	Mauna Loa southwest rift eruption. Jones notes: At 7 pm the eruption began in good earnest. The starting point is on the slope of Mauna Loa, about a mile to the north and a little above the well know extinct crater called Halepohaha. . . . The new crater is perhaps twenty miles from the sea and about ten north-west and above the fissure from which poured out the lava flow of 1868. . . . ; Warshauer notes: At 7 p.m. of the 18th . . . the lava burst out about ten miles N.N.W. of my ranch buildings, and has been running ever since . . . and during the day and until 12 midnight 67 [earthquakes] were added; . . . up to 7 o'clock Tuesday night [Jan. 18] we had 508 earthquakes [at Hilea], then we gave up counting. On Tuesday 4 p.m., smoke was seen on the slopes of Mauna Loa, and fire at 7 p.m.	Jones, 1887a; HG, 2/1/1887, p. 1 [Jones, 1887b]; HG, 2/1/1887, p. 8; intensities estimated for earthquakes counted at Pahala in excess of Jones' count at Kahuku
1/18/1887	23:00					hilea?				5.30	int	V	Warshauer notes: Earthquakes occurred at Hilo on the 18th instant at 4 pm and 11 pm, and were quite severe	PCA, 1/24/1887, p. 2
1/18/1887	23:30					hilea?				4.07	calc	IV*2	Jones notes:2 light earthquakes between 11 and 11:30 pm	HDH, 1/26/1887
1/18/1887	23:59					hilea?				5.44	calc	IV*67-(3)	Jones notes: [earthquakes] continued, although fewer in number, until midnight; Warshauer notes: . . . during the day [1/18] and until 12 midnight 67 were added	Jones, 1887a; HG, 2/1/1887, p. 1 [Jones, 1887b]
1/19/1887	1:00					hilea?				5.80	int	IV (kahuku)	Jones notes: quite heavy	HDH, 1/26/1887

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Date	Time HST	Lat deg	Lat min	Lon deg	Lon min	Region	Pref depth	M other	M other source	M pref	M pref source	I max	Location/felt report	Comment
1/19/1887	12:00					ml wf??				5.30	int	V	Warshauer notes: Long shakes at intervals of one or two hours throughout the day [at Kaawaloa]. While I write, my table rocks so that it is with considerable difficulty that I can keep my seat and hold my pen; On the 19th we had but two [at Kahuku] . . .	HG, 1/25/1887, p. 8 [Paris, 1887]; HG, 2/1/1887, p. 1 [Jones, 1887b]; times assumed
1/19/1887	16:15					ml wf??				5.60	int	V-VI (kaawaloa, kahuku)	Warshauer notes: Long shakes at intervals of one or two hours throughout the day [at Kaawaloa]. While I write, my table rocks so that it is with considerable difficulty that I can keep my seat and hold my pen; On the 19th we had but two [at Kahuku] . . . ; Jones notes: heavy	HG, 1/25/1887, p. 8 [Paris, 1887]; HG, 2/1/1887, p. 1 [Jones, 1887b]; HDH, 1/26/1887
1/21/1887	18:59					hilea?				5.30	int	V	Warshauer notes: [communication dated 1/22/1887] We have only two or three heavy shocks a day now [at Pahala] though frequent tremblings, and last evening [Jan. 21] a very long shock that swayed the house back and forth making us sick and dizzy [time assumed]	HG, 2/01/1887, p. 1
1/23/1887	23:20	19	24	155	30	hilea?				6.10	int	VII (kahuku); VI-VII (pahala); V (hilo)	Warshauer notes: Hilo shook up by seven earthquakes, two slight [times not given for these]; [At Pahala] We had two very heavy severe shocks of earthquake about 11:00 last night that did us considerable damage; [At Hilo] The first shake was a rouser, at 11:18 o'clock p.m., followed five minutes later by another more terrible than the first . . . determined to tear windows and doors off houses, many ran outside, crockery/chimneys thrown down; Jones notes: most severe shock	PCA, 1/31/1887, p. 3; HG, 2/1/1887, p. 8 [Foster, 1887; Anonymous, 1887]; HDH, 1/26/1887
1/23/1887	23:30	19	24	155	30	hilea?						VIII (W&K; S&C); 4.5 (Hilo-Cox)	Lyman notes: 11:27 at night a hard shake; [at volcano house] felt quite a severe shock of an earthquake at about 11 and until 12:30 more severe shocks were felt; clocks in the house stopped; Warshauer notes: Hilo-buildings shook, contents thrown down, clocks stopped; Kapapala-water tanks broke, building moved eight inches, stone fences thrown down, much more severe than at Hilo; Jones notes: Reports from Pahala, Punaluu and Naalehu-numerous and severe quakes, the one of 1/23, at 11:30 pm, that was experienced in Honolulu. A steamer off Punaluu steamed seaward to avoid repeat of 1868 tsunami. 4 or 5 buildings thrown down, cisterns broken, and the boilers at Pahala displaced; Dana notes: oscillations at Hilo from sse to nnw. According to Mr. F.L. Clarke, of the Government Survey, the walls that fell in Kau had a northeast and southwest direction and were thrown to the southeast, and the houses (light wooden buildings) were moved 8 to 10 inches in the same direction or down the slopes.	Cox, 1986; Wyss and others, 1992, p. 22; Wyss and Koyanagi, 1992; VHR, v. 3, John G. Eckhardt entry dated 1/24/1887; PCA, 1/31/1887, p. 3; HG, 2/1/1887, p. 8 [Foster, 1887; Anonymous, 1887--see above]; Jones, 1887a; Dana, 1887; Intensity map in W&K

Date	Time HST	Lat deg	Lat min	Lon deg	Lon min	Region	Pref depth	M other	M other source	M pref	M pref source	I max	Location/felt report	Comment
1/23/1887	23:30	do	do	do	do	do		do	do	6.50	do	do	<p>Warshauer notes: see above; 2nd quake shook things down all over Hilo; seemed as though houses would be shaken down; clocks stopped and bottles broken; much stronger at Kapapala-water tanks broke, building moved 8 in, stone fences thrown down; [At Pahala] Nearly all the work done in setting out new boilers was damaged, so that it will have to be done over again. The large iron tank at the mill was thrown down and a number of pipes broken about the mill. The Moaula and the new reservoir were badly damaged. The Whitney reservoir very little. Nearly all the houses on the slopes are off their underpinning. Last night was one of terror; Jones notes: another about as hard</p>	PCA, 1/31/1887, p. 3; HG, 2/1/1887, p. 8 [Foster, 1887; HDH, 1/26/1887; see also bib
1/23/1887	23:30	do	do	do	do	do		do	do	6.50	do	do	<p>Warshauer notes: We were however greatly astonished when on Sunday last the earth again became nervous, and when shock after shock came sabbath eve, each harder and more violent than the last, Hiloans began to think that the shake of 1868 was again to be enacted, and numbers availed themselves of their lanais in order to be ready for the next one. In twenty minutes nine shocks were felt, two of them being violent enough to shake down dishes, stop clocks, upset stoves, and set chandeliers to swinging. The one in my dining room had a swing of fifteen inches from the perpendicular and for two hours there were shocks heavy enough to keep it swinging. . .</p>	HG, 2/1/1887, p. 8 [Hitchcock, 1887a]
1/23/1887	23:30	do	do	do	do	do		do	do	6.50	do	do	<p>Warshauer notes: The principal shocks seemed to be from the interior of the mountain, with no rolling or undulating motion, but rather as severe blows directed outward. The effect produced was to throw down all the stone walls built along the side of the mountain, and running N.E. and S.W. [All] light wooden buildings, and the main dwelling were pushed eight or ten inches down hill, i.e. toward the S.E., by the shocks. . . crockery and other articles on shelves on the N.W. side of the house were thrown down . . . Some water pipes three miles up the mountain were broken and other damage done. At Pahala Mill . . . but little damage was done. A large water tank was dislodged from its foundation, falling toward the west. A boiler loosened and some steam connections broken. . . . little damage to the stone walls, those that were tumbled down falling to the west. . . . two of the springs, high up in the mountains . . . had disappeared since the earthquakes. Punaluu-no damage to speak of, Hilea--the shocks were much more numerous and violent.</p>	HG, 2/14/1887, p. 2 [Clarke, 1887]

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Date	Time HST	Lat deg	Lat min	Lon deg	Lon min	Region	Pref depth	M other	M other source	M pref	M pref source	I max	Location/felt report	Comment
1/23/1887	23:30	do	do	do	do	do		do	do	6.50	do	do	Warshauer notes: Seven shocks of earthquake were felt in Kohala on the 23rd but, beyond giving the people a fright, no damage was done. At Laupahoehoe, nine shocks were felt the same night [1/23-24], a little after eleven. Two of these were quite severe. There have been light shocks ever since	HG, 2/1/1887, p. 8
1/23/1887	23:40					hilea?				5.60	int	5.5 (Hilo-Cox)	Cox date is 1/22; Lyman notes: At 20 min of 12 a hard shake; Warshauer notes: Hilo shook up by seven earthquakes, two slight [times not given for these]; after [the second shock] a few very slight shocks were felt; [At Hilo, the first two shocks] were followed by numerous minor shakes, and half an hour later by a third heavy shock, but not as heavy as the two previous ones . . . oscillations south-southeast to north-northwest	Wyss and others, 1992, p. 22; PCA, 1/31/1887; VHR, v. 3, John G. Eckhardt entry dated 1/24/1887; PCA, 1/31/1887, p. 3; HG, 2/1/1887, p. 8 [Anonymous, 1887]
1/23/1887	23:45					hilea?				4.50	int	IV	Warshauer notes: Hilo shook up by seven earthquakes, two slight [times not given for these]	PCA, 1/31/1887, p. 3
1/23/1887	23:51					hilea?				4.50	int	IV; 3.0 (Hilo-Cox)	Cox date is 1/22; Lyman notes: At 9 min of 12 a slight shake; Warshauer notes: Hilo shook up by seven earthquakes, two slight [times not given for these]	Wyss and others, 1992, p. 22; PCA, 1/31/1887
1/23/1887	23:54					hilea?				4.50	int	IV; 3.0 (Hilo-Cox)	Cox date is 1/22; Lyman notes: At 6 min of 12 a slight shake; Warshauer notes: Hilo shook up by seven earthquakes, two slight [times not given for these]	Wyss and others, 1992, p. 22; PCA, 1/31/1887
1/23/1887	23:57					hilea?				4.50	int	IV; 3.0 (Hilo-Cox)	Cox date is 1/22; Lyman notes: At 3 min of 12 a slight shake; Warshauer notes: Hilo shook up by seven earthquakes, two slight [times not given for these]	Wyss and others, 1992, p. 22; PCA, 1/31/1887
1/24/1887	0:00					hilea?				4.50	int	IV; 3.0 (Hilo-Cox)	Cox date is 1/23; Lyman notes: One at 12. long but slight	Wyss and others, 1992, p. 22
1/24/1887	0:08					hilea?				4.50	int	IV; 2.0 (Hilo-Cox)	Cox date is 1/23; Lyman notes: At 8 min past 12 another very slight	Wyss and others, 1992, p. 22
1/24/1887	9:30					kilauea?				4.50	int	V	this morning at 9:30 I was at the old crater of Kilauea Iki when I felt a severe shock, which was not however felt at the Volcano House; Jones notes: no shocks [at Kahuku] after daylight	VHR, v. 3, John G. Eckhardt entry dated 1/24/1887; HDH, 2/5/1887
1/24/1887	18:30					hilea?				4.50	int	IV; 4.5 (Hilo-Cox)	Lyman notes: Some felt a slight shake between 6 & 7 in the evening	Wyss and others, 1992, p. 22; not in PCA or HG
1/25/1887	0:30					hilea?				4.50	int	IV; 3.0 (Hilo-Cox)	Lyman notes: A slight shock at 12:30 last night	Wyss and others, 1992, p. 22; not in PCA or HG
1/25/1887	3:30					hilea?				4.50	int	IV; 3.0 (Hilo-Cox)	Lyman notes: another at 3:30; Jones notes: quite a heavy jar [at Kahuku] followed by a lighter one	Wyss and others, 1992, p. 22; HDH, 2/5/1887; not in PCA or HG
1/28/1887	0:00					hilea?				4.50	int	4.6 (Hilo-Cox)	Lyman notes: One shake near 12 last night	Wyss and others, 1992, p. 22; not in PCA or HG

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Date	Time HST	Lat deg	Lat min	Lon deg	Lon min	Region	Pref depth	M other	M other source	M pref	M pref source	I max	Location/felt report	Comment
1/31/1887	23:59					hilea?				4.50	int	IV	Warshauer notes: On January 31st, Mr. Spencer wrote: "The earthquakes are light and far between"; All through the past week, or since the heavy earthquake of Sunday night, Jan. 23d, there has been felt at Hilo a vast number of minor shakes, not less than a dozen a day of sufficient force to wake people from their slumber at night and often to rattle dishes, doors and windows	HG, 2/5/1887, p. 2; HG, 2/8/1887, p. 8
2/11/1887	21:59					hilea?				4.50	int	4.6 (Hilo-Cox)	Lyman notes: . . . it was said that there was one last night [Feb. 11-12] [time assumed]	Wyss and others, 1992, p. 22; not in PCA or HG
2/16/1887	13:20					mauna loa?				4.50	int	IV; 3.0 (Hilo-Cox)	Lyman notes: One slight but rather long shock at 20 min past 1 [pm to agree with newspaper]; Warshauer notes: We had a smart shock of earthquake yesterday [Feb. 16], about 1 pm, which may have been the time it broke out [see below]	Wyss and others, 1992, p. 22; HG, 2/22/1887, p. 8
3/08/1887	23:15					hilea?				4.00	int	IV (south kona); III (hilo)	Lyman notes: two very slight shakes between 11 and 12 last night [times assumed]; Warshauer notes: A sharp shock of earthquake was felt at South Kona, Hawaii, on the evening of March 8th	Wyss and others, 1992, p. 22; PCA, 3/16/1887, p. 3
5/10/1887	7:10					mauna loa?				5.30	int	V (Pahala); 3.0 (Hilo-Cox)	Lyman notes: A slight shake at 7. A.M.; Warshauer notes: severe earthquake in Pahala at 7:10 am	Wyss and others, 1992, p. 22; PCA, 5/23/1887, p. 3
7/23/1887	12:00					south hawaii?				5.30	int	V; 5.2 (Hilo-Cox)	Lyman notes: About noon, one decided shock	Wyss and others, 1992, p. 22; not in PCA or HG
8/07/1887	1:30					kl sf?				5.30	int	V; 5.0 (hawaii); 6.0-Hilo-Cox)	Lyman notes: 1.30 A.M. one quick sharp shock waked us all up; no mention in VHR entry of that date	Wyss and others, 1992, p. 22; not in PCA or HG
8/22/1887	4:45					east hawaii?				5.30	int	V (Hamakua); IV (Hilo)	Lyman notes: Qr - before 5. A.M. one slight shock; Warshauer notes: Two rather severe shocks of earthquake were felt at Kukuihaele, Hamakua, about 5 o'clock last Monday morning	Wyss and others, 1992, p. 22; PCA, 8/25/1887, p. 3; not in HG
9/13/1887	1:10					south hawaii?				5.30	int	V; 5.0 (hawaii); 5.7-Hilo-Cox)	Lyman notes: 10 m. after 1. A.M. one long continued shock, not severe enough to displace anything, but we all were awakened by it	Wyss and others, 1992, p. 22; not in PCA or HG
10/01/1887	23:05					mauna loa?				5.30	int	V (south kona); IV (hilo); 5.0 (hawaii); 5.2-Hilo-Cox)	Lyman notes: 5 mts. ps 11 P.M.- A long peculiar shake nothing was put out of place, but the bell of the hanging lamp struck from side to side so that we heard it several strokes; Warshauer notes: A shock of earthquake was felt at South Kona, Hawaii, last Saturday night [Oct. 1] at 11 o'clock. A number of inhabitants were awoke by it	Wyss and others, 1992, p. 22; PCA, 10/6/1887, p. 3
11/09/1887	5:10					mauna loa?				4.50	int	IV; 3.0 (Hilo-Cox)	Lyman notes: Ten minutes after 5. A.M. two shocks, first very slight, second slight but long continued	Wyss and others, 1992, p. 22; not in PCA or HG
12/09/1887	8:00					mauna loa?				4.50	int	4.6 (Hilo-Cox)	Lyman notes: About 8. A.M. two shocks-not very hard	Wyss and others, 1992, p. 22; not in PCA or HG
5/08/1888	0:30					south hawaii?				5.60	int	V-VI; 5.0 (hawaii); 6.0-Hilo-Cox)	Lyman notes: About half past 12 A.M. one hard shock waked us all up out of sound sleep	Wyss and others, 1992, p. 22; not in HG
5/24/1888						south hawaii?				4.50	int	IV-V	Warshauer notes: . . . two heavy shocks of earthquake on Thursday of last week [prob. May 24 rather than May 31]	PCA, 6/2/1888, p. 3

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Date	Time HST	Lat deg	Lat min	Lon deg	Lon min	Region	Pref depth	M other	M other source	M pref	M pref source	I max	Location/felt report	Comment
8/20/1888	7:35					south hawaii?				5.90	int	VI; V (S&C); 5.0 (hawaii; 6.0-Hilo-Cox	Lyman notes: quite a severe shock. began with a long trembling then a shock then a second which was severe enough to throw out water from vases fall of flowers & milk from the pans & many things fell down that were not secured with fastenings; Warshauer notes: There was a right smart earthquake on the 20th instant at Hilo; The earthquake shock briefly mentioned by our Hilo correspondent was, according to accounts in private letters, strong enough to knock articles off shelves and tables; Earthquake at 7:30 a.m. [volcano house 8/21-probably same event-someone's date is wrong]	Wyss and others, 1992, p. 22; PCA, 8/27/1888, p. 3; VHR, v. 3, J.H. Maby entry dated 8/21/1888
11/08/1888	18:00					maui deep??	40			6.00	k&w	V-VI (hilo); V (kona); 5.5 (Hilo-Cox); IV-V (Oahu)	Lyman notes: 6 P.M. - a long continued shock commenced with a rumble & trembling which increased more & more in one hard shock & went off as it began, trembling; Warshauer notes: The slight shock [5:45 pm 11/8] [was] generally felt [Oahu]. At Punahou college it was severe enough to rattle doors and windows, and was noticed by nearly everybody . . . Residents on the plains also felt the shock, the direction being apparently from southeast to northwest; Quite a severe shock of earthquake was felt at Hilo on the 8th inst., also at Laupahoehoe and Ookala; Hana, Maui, experienced the earthquake shock felt here [Honolulu] on Thursday, as well as Hilo, Hawaii, as reported in our news letter from there; The earthquake shock of the 8th inst. was strong and long enough at Kealakekua Bay to shake houses for the space of about a minute. It caused a sensation, reminding one of 'riding in a railcar on a rough track'; VHR notes: Earthquake occurred at 10 min before 6 PM. Quite a deep, sharp shock, felt all over Hawaii, on Maui, and also at Honolulu, Oahu	Wyss and others, 1992, p. 22; PCA, 11/10/1888, p. 3; PCA, 11/12/1888, p. 3; PCA, 11/20/1888, p. 7; VHR, v. 3, H.M. Whitney entry dated 11/08/1888; region/magnitude assigned from isoseismal map; analogy to earthquakes of Sept. 13, 1896 [M6.6] and June 16, 1940 [M6.0] (W&K); location not well defined. Could also be offshore Maui or deep Hawaii.
11/09/1888	3:30					south hawaii?				4.50	int	IV-V; 3.0 (Hilo-Cox)	Lyman notes:3:30 A.M. one shock quite long but slight	Wyss and others, 1992, p. 22; not in PCA or HG
2/21/1889	5:15					south hawaii?				5.40	int	5.2 (Hilo-Cox)	Lyman notes: About 5 o'clock A.M. one decided shake; Warshauer notes: another earthquake felt at Hilo at 5:15 am	Wyss and others, 1992, p. 23; PCA, 2/25/1889, p. 3
3/24/1890	20:25					kl sf??				5.20	k&w	5.2 (Hilo-Cox); III (Kona)	Lyman notes: 8.25 P.M. one shock very long trembling - with a good deal of noise; Warshauer notes: There was a shock of earthquake [felt at Kona] at 8:20 pm on the 24th inst; only a slight one	Wyss and others, 1992, p. 23; PCA, 3/31/1890, p. 3; region/magnitude assigned by analogy with earthquakes of August 18, 1962 and December 27, 1989 (W&K)
6/05/1890	15:10					south hawaii?				4.50	int	4.6 (Hilo-Cox)	Lyman notes: At 10 m. after 3.P.M. one shock with considerable noise	Wyss and others, 1992, p. 23; not in PCA or HG
7/01/1890	16:30					south hawaii?				4.50	int	IV-V; 5.2 (Hilo-Cox)	Lyman notes:4:30 P.M. one sharp decided shake	Wyss and others, 1992, p. 23; not in PCA or HG
7/10/1890	14:20					south hawaii?				4.50	int	IV-V; 5.2 (Hilo-Cox)	Lyman notes:2:20 P.M. one sharp decided shake	Wyss and others, 1992, p. 23; not in PCA or HG

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Date	Time HST	Lat deg	Lat min	Lon deg	Lon min	Region	Pref depth	M other	M other source	M pref	M pref source	I max	Location/felt report	Comment
7/28/1890	16:03					kl sf?				5.30	int	5.0 (hawaii); 4.6 (Hilo-Cox)	[apparently not felt at Mauna Loa summit]; Lyman notes: Shortly after 4.P.M. an earthquake with two shocks & long trembling with a good deal of noise. I felt it standing in the street; Warshauer notes: Two rather severe shocks of earthquake were experienced at Hilo on July 28th	VHR, v. 3, L.A. Thurston entry dated 7/29/1890; Wyss and others, 1992, p. 23; PCA, 8/2/1890, p. 3
8/06/1890	23:10	19	20	155	0	kl sf?				6.50	k&w	VI-VII (Hilo); VI (Puna); V-VI (Kilauea summit); III-IV (Mauna Loa summit); VI (W&K; S&C); 6.0 (Hawaii); 5.0 (Hilo-Cox)	Lyman notes: Ten minutes after 11. P.M. - we were all awakened by a prolonged shake - 5 shocks - with long continued trembling [additional felt information given in Lyman entry for 0:30, 8/07]; Lyman [E.B.], 1890 notes: . . . reaching Kau we heard that a dozen earthquakes had been felt, two of them quite severe. In Puna and in Hilo stone walls and many things in the houses were thrown down; at the volcano only three were felt and several of the cones around Halemaumau tumbled in, Strange to say we did not feel any of them [camped at Mauna Loa's summit on Wednesday night Aug. 6]; no mention in VHR on subsequent dates; Warshauer notes: The Kinau brings news of a series of earthquakes at Hilo on August 6th. Considerable damage was done in several houses; At Hilo, 6th inst., 11:20 pm, there was a very severe earthquake; felt at kona and kau	Wyss and others, 1992, p. 23; Lyman, 1890; PCA, 8/14/1890, p. 3; PCA, 8/09/1890; region/magnitude assigned from isoseismal map; analogy to the pair of earthquakes on March 30, 1954 (W&K)
8/07/1890	0:30					kl sf?				5.90	k&w	V-VI (estimated); 6.5 (Hilo-Cox)	Lyman notes: 12.30 a decided earthquake with two shocks. Small things were thrown down in nearly every room in the house during the first earthquake & in some houses tables & pianos were moved half a foot from the wall. Stone walls also fell down; Warshauer notes: . . . on the 7th inst. another one at 12:30 am, not quite so severe [as the one at 11:20 pm on the 6th]; felt at kona and kau	Wyss and others, 1992, p. 23; HG, 8/19/1890, p. 5; PCA, 8/09/1890; region/magnitude assigned by analogy with the pair of earthquakes on March 30, 1954 (W&K)
8/21/1890	3:50					south hawaii?				4.50	int	4.6 (Hilo-Cox)	Lyman notes: one shock was felt in the A.M. ten minutes before 4. wakening us all up - but nothing was overturned; Warshauer notes: There was an earthquake at Hilo on the 21st inst. at 3:40 am medium heavy	Wyss and others, 1992, p. 23; PCA, 8/25/1890, p. 3
10/08/1890	21:00					west hawaii?				5.00	int	V	Warshauer notes: There was quite a severe shock of earthquake felt in Kona last Wednesday night about 9 o'clock	PCA, 10/11/1890, p. 3
1/15/1891	15:20					south hawaii?				4.50	int	4.6 (Hilo-Cox)	cox time is 3 am; Lyman notes: Two shocks at 3:20 P.M. The second heavier than first, but nothing disturbed; Warshauer notes: On Thursday pm at 3 o'clock a very heavy shock of earthquake disturbed the repose of our usually quiet town. At first the shock as gentle, but as the second came it was harder, and finally wound up with a 'double twister' and 'under cut' that started everybody to their feet. It lasted about ten seconds, and gave us such a shaking as we have not had for a long time. . .	Wyss and others, 1992, p. 23; PCA, 1/29/1891, p. 3

Date	Time HST	Lat deg	Lat min	Lon deg	Lon min	Region	Pref depth	M other	M other source	M pref	M pref source	I max	Location/felt report	Comment
3/05/1891	21:00					kilauea?				5.30	int	VI-VII (kapapala); IV (kilauea summit)	Halemaumau draining and southwest rift zone intrusion [modern analogue is the earthquake swarm beginning Dec. 31, 1974]. Wood notes: breakdown [collapse] on March 6-7 accompanied by earthquakes; Warshauer notes: On the night of the 5th inst., at 9 pm, we had a slight shake at the Volcano House. At the same time the cones of Halemaumau sunk some seventy-five to 100 feet, leaving a depression from the floor of the crater, sloping toward the base of the cones. On the night of the 4th, the fires in the crater were very active and were so up to the time we felt the shaking; At the Half Way House, on the Kau side, they have had shaking going on for the past three days. Mr. Dalway telephoned me on the 5th, that he had felt over 100 shakes . . . On the 5th it was shaking at the Kapapala Ranch, and threw down some of their stone walls; VHR notes: slight earthquake at around 9:30 p.m.	Wood, 1917 chart 2, p. 118; PCA, 3/12/1891, p. 3 [Maby, 1891]; VHR entry of 3/6/1891
3/06/1891	21:00					kilauea?				4.50	int	IV-V (Pahala); 2.8 (Hilo-Cox)	Lyman notes: A long tremble at 9 in the evening; Warshauer notes: On the night of March 6th, at 9:10 o'clock, we had another shake; . . . and when we could see across the crater at 4 am, we found that the cones have sunken still further, leaving only the highest points to be seen above the edge of the crater floor; it was also shaking [at Half-way House] on the 6th; On Friday eve of last week [Mar. 6] there were four slight earthquakes felt in town [Hilo]	Wyss and others, 1992, p. 23; PCA, 3/12/1891, p. 3 [Maby, 1891]; PCA, 3/20/1891, p. 2
3/08/1891	2:00					kilauea?				5.60	int	V; 5.0 (Hawaii); 6.0 (Hilo-Cox)	Lyman notes: 2 A.M. another long trembling which shook the windows & waked us all up; at the 2 o'clock earthquake on the night of the 8th all fire went out of Kilauea; Warshauer notes: . . . at 2 am one heavy one [at Hilea] . . . ; and two again [felt at Hilo] on Sunday morning [Mar. 8]	Wyss and others, 1992, p. 23; 3/12/1891, p. 3 [Maby, 1891]; PCA, 3/20/1891, p. 2
3/13/1891	4:30					kilauea?				5.30	int	IV-V; 5.2 (Hilo-Cox)	Lyman notes: at 4.30 one decided shock [am assumed]; Warshauer notes: A slight earthquake felt in Kohala	Wyss and others, 1992, p. 23; PCA, 3/13/1891, p. 3
10/15/1891	17:30					south hawaii?				5.30	int	5.5 (Hilo-Cox)	a slight shock of earthquake, Mrs. Lee being the only person who felt it [at volcano house] although we learn by telephone that it was felt all along the country; Lyman notes: 1/2 6 P.M. - We felt a hard shock. It began with a long tremble & sound like thunder. Then a decided shock	VHR, v. 3, C.J. McCarthy entry dated 10/13-16/1891; Wyss and others, 1992, p. 24; not in PCA or HG
3/11/1892	0:15					south hawaii?				4.50	int	4.6 (Hilo-Cox)	Lyman notes: Quarter after 12. A.M. one shock, with very slight premonitory shock	Wyss and others, 1992, p. 24; not in PCA or HG

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Date	Time HST	Lat deg	Lat min	Lon deg	Lon min	Region	Pref depth	M other	M other source	M pref	M pref source	I max	Location/felt report	Comment
12/22/1892	0:30					south hawaii?				5.60	int	VI (Hilo); IV (Kohala); 5.0 (Hawaii); 6.0 (Hilo-Cox)	Lyman notes: At half past 12 A.M. - a sharp earthquake - waked every body in town; Warshauer notes: Two very heavy shocks of earthquake occurred here on Thursday morning, 22d December; first one at 12:30 am; second at 2:20 am; On that same night, Thursday, we had a very severe shock of earthquake, occurring about 12:15 am, accompanied an hour later by a lighter one. The first one lasted about ten seconds, and was the heaviest felt since August 1890. In fact it has been noteworthy, the absence of shakes during the past two years; At about midnight of Thursday, the 22d, the elite of Kohala were awakened by an earthquake. It was strong enough to make the glassware jingle, though no subterranean noise accompanied it. Almost immediately afterwards a second slight tremor was felt	Wyss and others, 1992, p. 24; PCA, 12/29/1892, p. 3; PCA, 1/3/1893, p. 1; HG, 1/3/1893, p. 4
12/23/1892	2:20					south hawaii?				5.30	int	V; 2.8 (Hilo-Cox)	Lyman notes: another at qr. of 2-a.m. - which was a long continued tremble [1:45 am-disagrees with newspaper time]; Warshauer notes: Two very heavy shocks of earthquake occurred here on Thursday morning, 22d December; first one at 12:30 am; second at 2:20 am; On that same night, Thursday, we had a very severe shock of earthquake, occurring about 12:15 am, accompanied an hour later by a lighter one; We had just got asleep again when still another considerable shock was felt, though not quite so violent as the first	Wyss and others, 1992, p. 24; PCA, 12/29/1892, p. 3; PCA, 1/3/1893, p. 1; HG, 1/3/1893, p. 4
12/29/1892	0:00					0				4.60	int	4.6 (Hilo-Cox)		Cox, unpub [date wrong?]
6/27/1893	2:10					molokai?				5.30	int	V	Warshauer notes: A moderate earthquake is reported from Pukoo, Molokai . . . occurring at 2:10 am of the 27th, lasting for about twenty-five seconds, the oscillations coming from the southeast. . . .	HS, 7/1/1893, p. 5
10/09/1893	20:50					south hawaii?				4.50	int	4.6 (Hilo-Cox)	Lyman notes: Ten minutes before 9 P.M. three separate earthquakes - none of them very hard, ending with a very slight tremble	Wyss and others, 1992, p. 24; not in HG or HS
11/04/1893	17:30					east hawaii?				5.60	int	V; 5.5 (Hilo-Cox)	Cox date is 11/3 and 11/4; Lyman notes: 5:30 P.M. - While we were at the dinner table, one smart shock with long trembling afterwards; Warshauer notes: On Saturday last [Nov. 4] we were visited [in Hamakua] by a very sharp and severe earthquake which shook the houses and caused many people to seek the open air. It came upon us without any warning. the shock was felt all through the district and also in Kohala; At 6:30 pm, Saturday, November 4th, residents of Hamakua were startled by three successive earthquakes, the third being the strongest and longest for some years the like of the last shock has no been felt here. . . .; no mention in VHR on subsequent dates	Wyss and others, 1992, p. 24; HS, 11/11/1893, p. 5; PCA, 11/13/1893

Date	Time HST	Lat deg	Lat min	Lon deg	Lon min	Region	Pref depth	M other	M other source	M pref	M pref source	I max	Location/felt report	Comment
2/02/1894	5:00					mauna loa				5.80	k&w	VI (kau); IV (Hilo); 3.0 (Hilo-Cox)	Lyman notes: At 5 o'clock Feb. 2. a slight shock [am assumed]; Warshauer notes: Advices from Kau state that the district was lately visited by quite a vigorous earthquake, which shook things up generally and disturbed some fences [assume same event; No mention of this event in subsequent Hilo/Hamakua notes]; Hawaii has had several shocks of earthquake lately	Wyss and others, 1992, p. 24; PCA, 2/12/1894, p. 5, 7; region/magnitude assigned by analogy with earthquake of June 27, 1962 and January 21, 1982 (W&K)
5/28/1894	0:15					south hawaii?				5.30	int	V; 5.0 (Hawaii); 6.0 (Hilo-Cox)	Lyman notes: Quarter after 12-A.M. - one shock that made the windows shake & awoke us all-course from the mountain to the sea	Wyss and others, 1992, p. 24; not in PCA, HG or HS
6/16/1894	2:20					south hawaii?				5.30	int	V; 5.2 (Hilo-Cox)	Lyman notes: About twenty mts. after 2. A.M. one shock quite long continued; Warshauer notes: A sharp shock of earthquake was felt here during the early hours of the 14th instant [wrong date in either Lyman or newspaper?]	Wyss and others, 1992, p. 24; PCA, 6/21/1894, p. 3
12/03/1894	3:30					molokai deep?	40			6.40	k&w	6.0 (Hilo-Cox); V-VI (waimea); V+ (Honolulu, Maui, Kau); V (Hawaii, Kauai, S&C)	Lyman notes: In the morning at half past 3-one long shock that finished with trembling and every one waked up; heard afterwards that it was felt at Waimea or in Honolulu; Warshauer notes: A severe earthquake shock was felt [Honolulu] yesterday morning about 3:30 o'clock; We [Honolulu] felt the earthquake at 3:30 last Monday morning. It awakened everybody. This shock was a wave; . . . a long slow earthquake was felt at Hilo at 3:40 o'clock Monday morning. . . . At the same time on the same day a heavy shock was felt on Maui. . .	Wyss and others, 1992, p. 24; PCA, 12/4/1894, p. 5; HS, 12/5/1894, p. 3; region/magnitude assigned from isoseismal map; analogy to earthquakes of March 20, 1927, August 7, 1870 and June 16, 1940 (W&K)
12/03/1894	3:30					do				6.40	do	do	Warshauer notes: The recent earthquake was felt in the vicinity [Volcano House]; . . . the most considerable earthquake for many years shook up Kohala . . . about 3:30 am, and lasted upward of [30 s]. It began very gently and increased in strength, and then subsided as gently as it began. The waves passed from south to north, from Mauka to the sea. There was no severe shock, just a prolonged and substantial shake; About 3 am on the 3d of December, there was a severe shock of earthquake felt throughout this portion of the island [Kauai]. At Kealia and Kapaa, the vibrations were sufficient to arouse people from sound slumbers and rattle the windows, crockery and chandeliers in the houses. No further damage is reported; quite a severe one [Kau] Monday at 3:30 am; A sharp shock of earthquake was felt [N Kona], the first in some time	PCA, 12/6/1894, p. 5; HG, 12/7/1894, p. 6; PCA, 12/10/1894; PCA, 12/12/1894, p. 1; HG, 12/14/1894, p. 2
12/03/1894	11:10					molokai?				5.30	int	V; 5.2 (Hilo-Cox)	Lyman notes: another shake at 10 mts after 11 a.m., two shocks, long swaying motion; Warshauer notes: At 10:10 there was a tremble [same event?]; felt-Kau [see note on 12/10]	aftershock?-intensity and magnitude approximate; Wyss and others, 1992, p. 24; HS, 12/5/1894, p. 3; HS, 12/12/1894, p. 3
12/03/1894	22:10					molokai?				5.30	int	V; 5.2 (Hilo-Cox)	Lyman notes: In the evening of same day at 10 mts. after 10 P.M. one long shake; Warshauer notes: felt-Kau [see note on 12/10]	aftershock?-intensity and magnitude approximate; Wyss and others, 1992, p. 24; HS, 12/12/1894, p. 3

Date	Time HST	Lat deg	Lat min	Lon deg	Lon min	Region	Pref depth	M other	M other source	M pref	M pref source	I max	Location/felt report	Comment
12/09/1894	16:20					kilauea?				4.50	int	IV (kau); III (hilo, kona); 4.6 (Hilo-Cox)	Lyman notes:20 mts after 4.P.M. - two shocks. Fire disappeared from the Lake at Kilauea but was seen early in Jan. but has disappeared again; Warshauer notes: Sunday afternoon, December 9th, at 5 o'clock, a long, but not very heavy one [same event?]; felt-Kau [see note on 12/10]; a slight tremble was felt yesterday afternoon [N Kona]	Wyss and others, 1992, p. 24; PCA, 12/12/1894, p. 1; HS, 12/12/1894, p. 3; HG, 12/14/1894, p. 2
1/11/1895	4:10					south hawaii?				4.50	int	IV-V; 5.0 (Hilo-Cox)	Lyman notes:10 mits after 4 a.m. - one shock slight but waked us up. No Fire in the lake	Wyss and others, 1992, p. 24; not in PCA, HG or HEB
1/22/1895	22:00					molokai?				6.50	k&w	VI (Hon); V (Maui, Kohala); III (hilo, kau); 3.0 (Hilo-Cox)	Lyman notes: Quarter after 10 P.M. - two shocks, long continued, but slight - from south to north; Warshauer notes: severest quake in years felt throughout Honolulu and Waialua; initial shock at 10 PM, heavier shake 30 sec later, waves passed NE, sea to mountain, building shook, occupants left; A severe earthquake shock was felt throughout Oahu at twenty seconds past 10 o'clock Tuesday night. It was preceded by a slight tremor at ten seconds to 10 o'clock. the distinguishing points in this shock from others of recent occurrence [sic] were that a jerky [sic] motion attended the tremor and it was more severe than any other in the past several years. It lasted 6 to 8 seconds. Lyons opines that it was felt on all islands. There was general alarm throughout the city. Houses trembled violently	Wyss and others, 1992, p. 25; PCA, 1/23/1895, p. 1; HS, 1/23/1894, p. 3; region/magnitude assigned from isoseismal map; analogy with earthquake of February 19, 1871 (W&K)
1/22/1895	22:00					do				6.50	do	do	Warshauer notes: On Tuesday night [Jan. 22] a severe shock of earthquake was felt [at Kohala]. There seems to have been two distinct shocks, the first of which waked people up in time to feel the second and heavier one. The waves passed from mauka to the sea, and the duration of each shock was about a second; At 9:35 pm, Tuesday, the 22d, a heavy prolonged shock of earthquake was felt on Maui; A shock of earthquake was felt throughout this island [Maui] on the night of the 22d inst., at about 9:40 pm. The shock, though not of very long duration, was the most severe experienced here for some years; The earthquake felt in Honolulu Tuesday night [Jan. 22] was very light here [kau]--in fact, very few felt it; Thursday [sic-Tuesday], January 22d, at 10:02 pm, at Kapaa, three distinct shocks of earthquake, following each other at intervals of about one or two seconds, were felt. It was noticed quite generally throughout the Island [Kauai]	PCA, 1/28/1895, p. 5, 6; HS, 1/29/1895, p. 3; PCA, 2/2/1895, p. 1; HG, 2/8/1895, p. 5
3/31/1895	14:20					south hawaii?				5.30	int	V; 5.2 (Hilo-Cox)	Lyman notes:25 mts. after 2. P.M. two shocks first long trembling then decided shock	Wyss and others, 1992, p. 25; not in PCA, HG or HS
8/27/1895	23:30					mauna loa?				5.30	int	V	Warshauer notes: A shock of earthquake was felt throughout the [Kau] district about 11:30 p.m. Tuesday night	PCA, 8/31/1895, p. 6
9/21/1895	21:30					kilauea?				5.30	int	V	Warshauer notes: On Saturday night, 21st inst., [there were two earthquakes] about 9:30 o'clock; the first was very light, but the other was quite heavy [in Kau]	PCA, 10/3/1895, p. 2

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Date	Time HST	Lat deg	Lat min	Lon deg	Lon min	Region	Pref depth	M other	M other source	M pref	M pref source	I max	Location/felt report	Comment
10/25/1895	14:30					kilauea?				5.30	int	5.0 (Hawaii); 5.0 (Hilo-Cox)	Lyman notes:1/2 past 2 P.M. one decided shock which started us all to our feet	Wyss and others, 1992, p. 25; not in HG
11/05/1895	11:45					maui??				5.30	int	IV (hilo); IV-V (Hon); 4.6 (Hilo-Cox)	Lyman notes: Quarter of 12 noon. one shock, not severe - We hear from the volcano that the lake pit has fallen still more, about 500 ft now, & stones are falling & there is a great deal of smoke - but no fire; a later note (12/13/95) states that the earthquakes of Nov. 5 were felt in Honolulu more heavily than on Hawaii	Wyss and others, 1992, p. 25; not in HG
12/08/1895	23:04	20	0	157	30	kona os?				6.80	k&w	VI (Hon, kohala, kona); V (hilo, kau); V (W&K; S&C-Hon); 5.0 (Hawaii); 5.2 (Hilo-Cox); 5.0 (Honolulu-Cox)	Lyman notes: Half past eleven P.M - one long shake and a trembling that kept up a whole minute-motion from the volcano to the sea; Cox notes: earthquake felt in Honolulu also felt on Maui [w volcanic activity on Hawaii]; Warshauer notes: two distinct shocks of earthquake at 11:04, each about ten sec dur. The first quite light, the second much stronger and perhaps the most severe ever felt on the island [oahu]. Downtown the shocks were heavy, but not quite as hard at Waikiki and King street. The clock at Lucas' mill was stopped, and in the Interisland dock office a clock was thrown to the floor and smashed. At Fred Whitney's residence, King street, contents of house strewn in all directions. . . Telephone messages from Waiialua and other places beyond the pali reported the earthquakes equally as strong as in Honolulu; The earthquake of 11:04 p.m. yesterday threw from the shelves of the Bishop Hall of Science several tall glass cylinders. . . the vibrations proceeded from a point about 10° to 12° north of east	Wyss and others, 1992, p. 25; Cox, 1986 [Thrum, 1895]; PCA, 12/9/1895, p. 1; PCA, 12/10/1895, p. 5; isoseismal map consistent with location about 150 km west of Hawaii
12/08/1895	23:04	do	do	do	do	do				6.80	do	do	Warshauer notes: Last Sunday night [Dec. 8] at 11 o'clock . . . a severe earthquake [occurred at Kau], followed by another . . . From reports the earthquakes were felt throughout the island, and more severe within a radius of thirty miles from the volcano [Kilauea]. At the volcano it was very light [from] fire [that] appeared in the crater Sunday night . . . ; A heavy earthquake shock was felt here [Hilo] shortly after eleven o'clock Sunday night--the first for months. The earthquakes that shook up Honolulu were also felt here [Hilo] at the same hours. The one at 11 o'clock began with a preliminary shock that wakened most of those who were asleep. After an interval of a second or two it was followed by a strong tremor that continued with decreasing force for probably thirty seconds [to] a full minute. The undulation proceeded from mauka to the sea. The waves were longer, and the shock less violent than is usual with such a considerable earthquake. On the Kona side the shocks [were] much more violent. . . the greatest shake up Kohala has had for years	PCA, 12/141895, p. 1; PCA, 12/18/1895, p. 1

Date	Time HST	Lat deg	Lat min	Lon deg	Lon min	Region	Pref depth	M other	M other source	M pref	M pref source	I max	Location/felt report	Comment
12/09/1895	3:20					kona os?				5.80	int	IV (Hon); III-IV (Hilo); 3.0 (Hilo-Cox); 1.5 (Honolulu-Cox)	cox time is 3:06; Lyman notes:20 mts after 3 a.m. - one slight shock; Warshauer notes: [A quake at Honolulu] most sensibly felt mauka occurred at 3:06 am; [At Honolulu] two shocks of earthquake were felt Monday morning [Dec. 9] at about 3:12 o'clock. The first lasted but a few seconds; the second being quite severe and of some fifteen seconds duration; . . . [at Hilo] one more shake 3 a.m. (Monday); At 3 o'clock there was a second prolonged tremor, less violent than the former; but characterized by the same long graceful undulations . . .	Wyss and others, 1992, p. 25; HS, 12/09/1895; PCA, 12/10/1895, p. 7; PCA, 12/18/1895, p. 1
1/31/1896	11:59					kaoiki?				5.00	int	V (kapapala)	Warshauer notes: A letter from Kapapala Ranch says that several light shocks of earthquake were felt during a few days previous to last Friday [Jan. 31st]. On that day a very heavy shock was experienced [More intrusion on Kilauea sw rift zone? See Lyman note on Jan. 3, 1896] [no time given]	PCA, 2/5/1896, p. 2
4/21/1896	1:30					mauna loa?				5.00	int	IV-V (Kau); III (Hilo)	Warshauer notes: Several severe shocks have been reported lately, both from Kau and from Hilo, which indicated increased activity in the volcanic craters; [At Kapapala ranch] we had five or six shakes about 1:30 Tuesday morning, April 21st. None of these were very severe, but the reflection was seen down at Pahala about 4 o'clock or earlier, so that the fire must have started soon after the cessation of the earthquakes. . . . ; The latest news from Hawaii is to the effect that there have been no earthquakes on the island since Tuesday morning, April 21st, the time of beginning of the outbreak	PCA, 4/23/1896, p. 1; PCA, 4/29/1896, p. 6
4/21/1896	21:50					mauna loa?				4.50	int	III	Lyman notes: Mauna Loa eruption visible from Hilo on April 22; With the exception of a slight earthquake at 9:50 this evening, everything is quiet	Wyss and others, 1992, p. 25; VHR, v. 4, J.M. Lee entry dated 4/21/1896
9/13/1896	4:30					maui east?				5.3	int	IV	Lyman notes: At 4.30 A.M. slight shock	foreshock?; Wyss and others, 1992, p. 25
9/13/1896	4:59	20	50	155	50	maui east?		≥6	W&K	6.60	k&w	VII (Hamakua); VI (Hilo, Maui); V (Hon, Kilauea summit, Kohala); IV (Kau, Kona); VI (W&K); 6.0 (Hawaii); 6.0 (Hilo-Cox); V (S&C)	Warshauer notes: There were two shocks of earthquake early Sunday morning [Honolulu] which shook people up considerably and banished sleep from the minds of many. . . The first shock was at 4:48 a.m. [4:58?-- assume same quake as below] and lasted perhaps three seconds, appearing to go off in a northeasterly direction. The sound died away gradually, lasting 15 or 20 seconds after the shock. Then after an interval of 10 seconds there came a second shock about equal in severity to the first but of shorter duration, apparently a reflection of the earthquake wave. It was impossible to tell from what direction the second shock came and it ended quite abruptly	PCA, 9/14/1896, p. 1; Wyss and Koyanagi, 1992; see also bib; Intensity map in W&K; new isoseismal map yields similar location to earthquake of January 22, 1938, but somewhat smaller magnitude

Date	Time HST	Lat deg	Lat min	Lon deg	Lon min	Region	Pref depth	M other	M other source	M pref	M pref source	I max	Location/felt report	Comment
9/13/1896	4:59	do	do	do	do	do				6.60	do	do	cox time 5:59; Lyman notes:5 a.m. felt a heavy shake most a half a minute. began all at once very hard shook things down stopped clocks - splashed milk out of pans, & water from the Fish globe - waked every body in town - It was from N.W. to S.E.; no entry in VHR	Wyss and others, 1992, p. 25
9/13/1896	4:59	do	do	do	do	do				6.60	do	do	Warshauer notes: . . . the severest shock since 1868 was felt [atVolcano house] at one minute before 5 a.m. Sunday. . . . [At Hilo] the shock came from NE to SW, light in the beginning and growing stronger during the 10 seconds it lasted. Dishes were thrown from the shelves in private houses and bottles from shelves and tables in the business section . . . [At] Wainaku . . . several pieces of valuable statuary and bric-a-brac . . . were thrown from their places and smashed to pieces. . . . As an evidence of the shock a crack beginning at the sea and running north for half a mile [can be seen]. . . . the stone wall around the Catholic Mission was thrown to the ground and one tree uprooted. . . . shock at the crater was not as severe as in Hilo [not felt by some]. . . . shock was severe [in Kohala], no damage. . . most severe shock experienced [on Maui] in many years. . . the shock was severely felt at every point [on Hawaii], no disturbance of the sea . . ; strong at Hamakua, light at Kau and Kona, crack in lava at Kilauea, Oahu considerably shaken	PCA, 9/16/1896, p. 1; HH, 9/17/1896; see bib for more complete damage reports
9/13/1896	14:59					maui east?				4.50	int	2.8 (Hilo-Cox)	Lyman notes: There was a slight jar in the afternoon. No more fire reported at the crater [time assumed]	[aftershock]; Wyss and others, 1992, p. 25
11/17/1896	13:45					kaoiiki??				5.60	int	V-VI (kau); V (Hilo); 4.6 (Hilo-Cox)	cox time is 13:35; Lyman notes: A little after half past one P.M. 2 shocks of earthquake felt. great noise - seemed to come in direction of the volcano; Warshauer notes: Shortly before 2 o'clock last Tuesday afternoon Hilo was treated to an earthquake shock which was not severe enough to cause any damage, though it was quite a little shake. The quiver was quite generally felt over the island; Tuesday, November 17th we [at Kau] had a very heavy earthquake shake at 1:45 pm. This was felt all over the island	Wyss and others, 1992, p. 25; PCA, 11/23/1896; PCA, 11/25/1896, p. 3
11/25/1896	4:20					hilea??				5.60	int	V-VI (kau); IV (Hilo); 2.8 (Hilo-Cox)	Lyman notes: Twenty minutes after 4 a.m. one long tremble; Warshauer notes: Nov. 25th (4 a.m.) we [in Kau] had a very heavy shock of earthquake which wakened us from sleep. It was one of those old time rumbler which come without warning and go with a rumble that suggests a repetition	PCA, 11/?/1896
3/10/1897	5:15					south hawaii??				5.30	int	5.2 (Hilo-Cox)	cox time is 5 am; Lyman notes: Quarter after 5-A.M. one decided shock N.W. to S.E.	Wyss and others, 1992, p. 26; not in HT or HH
4/01/1897	16:00					south hawaii??				5.30	int	5.2 (Hilo-Cox)	Lyman notes: About 4 P.M. one shock, quite decided	Wyss and others, 1992, p. 26; not in PCA, HG, HS, HEB, HT or HH
5/06/1897	21:00					south hawaii??				5.30	int	5.2 (Hilo-Cox)	Lyman notes: At nine in the evening one shock with rumbling sound & long trembling	Wyss and others, 1992, p. 26; not in HT or HH

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Date	Time HST	Lat deg	Lat min	Lon deg	Lon min	Region	Pref depth	M other	M other source	M pref	M pref source	I max	Location/felt report	Comment
8/06/1897	4:00					south hawaii?				4.50	int	IV-V; 3.0 (Hilo-Cox)	Lyman notes: Slight shock about 4 a.m. direction from the volcano toward the shore	Wyss and others, 1992, p. 26; not in HT or HH
10/24/1897	17:18					kl sf?				5.30	int	5.5 (Hilo-Cox)	cox time is 17:00; Lyman notes: 18 mts after 5 P.M. - one quick hard shock	Wyss and others, 1992, p. 26; not in PCA, HG, HS, HEB, HT or HH
12/18/1897	18:20					mauna loa?				4.50	int	IV-V; 5.2 (Hilo-Cox)	Lyman notes: 20 minutes after 6 P.M. - one long shake continued trembling from the mountain to the shore	Wyss and others, 1992, p. 26; not in PCA, HG, HS, HEB, HT or HH
5/01/1898	16:57					east hawaii?				5.30	int	V; 4.0 (Hawaii); 4.0 (Hilo-Cox)	cox time is 16:55; Lyman notes: A very decided earthquake at a little before 5 o'clock P.M. direction mauka to makai a decided rumbling first, then two decided shocks which shook doors & windows perceptibly; Warshauer notes: A quite heavy earthquake shock was felt a week ago Sunday [May 1] at Honokaa.	Wyss and others, 1992, p. 26; PCA, 5/10/1898, p. 7
5/17/1898	16:55					south hawaii?				5.40	int	5.2 (Hilo-Cox)	Lyman notes: Tuesday Five minutes of five P.M. a decided shock. A long tremble & strong up & down shake	Wyss and others, 1992, p. 26; not in HT or HH
8/05/1898	6:00					kaoiki?				4.50	int	IV-V; 4.0 (Hawaii); 5.2 (Hilo-Cox)	Lyman notes: one shock decidedly felt-windows and doors rattled; Warshauer notes: A rather heavy earthquake shock was experienced in Kau about six o'clock yesterday morning. It was apparently quite restricted in area, as no effects were felt in this vicinity [Hilo]; Punaluu, Kau, Aug. 13.--On August 5, at 6:30 a.m., there was a very heavy earthquake shock in this district--the strongest felt here in some time. It shook dishes, etc., up in great shape	Wyss and others, 1992, p. 26; HT, 8/6/1898, p. 5; PCA, 8/22/1898, p. 3
8/06/1898	6:00					hilea?				4.50	int	IV-V (kau); 3.0 (Hilo-Cox)	Lyman notes: one slight shock; others felt in Kau much heavier	Wyss and others, 1992, p. 26; not in HT or HH
8/19/1898	6:50					maui deep??				5.00	int	III (Hon, Hilo)	Warshauer notes: A slight earthquake shock was felt in the city [Honolulu] at 6:50 yesterday morning. A noticeable tremor was felt at the weather observatory at Punahou; A slight shock of earthquake was felt in Hilo at 6:55 on Friday morning [Aug. 19]	PCA, 8/20/1898, p. 7; HT, 8/20/1898, p. 5
9/11/1898	5:35					kl sf?				4.50	int	IV-V; 5.2 (Hilo-Cox)	Lyman notes: A sharp quick shock 5.35 a.m	Wyss and others, 1992, p. 27; not in HT or HH
9/15/1898	11:45					south hawaii?				5.30	int	V; 5.5 (Hilo-Cox)	Lyman notes: Quarter to 12 - noon an earthquake. 2 shocks hard, with long continued trembling. direction about North & South with noise before it came; Warshauer notes: A shock of earthquake, heavy enough to be interesting, but quite harmless, was felt in Hilo at ten minutes before twelve o'clock Thursday morning [Sept. 15]. . . .	Wyss and others, 1992, p. 27; HT, 9/17/1898, p. 5
12/04/1898	3:30					mauna loa?				5.30	int	4.6 (Hilo-Cox)	Lyman notes: At 3.30 one shock; Warshauer notes: The S.S. Mauna Loa, arrived yesterday from Hawaii, reports a heavy shock of earthquake in Kau last Sunday [12/04]	Wyss and others, 1992, p. 27 [am assumed]; PCA, 12/10/1898, p. 9
12/29/1898	21:00					south hawaii?				4.50	int	IV; 4.6 (Hilo-Cox)	Lyman notes: About 9. P.M. one shake like long tremble	Wyss and others, 1992, p. 27; not in HT or HH
12/30/1898	2:00					mauna loa?				4.50	int	4.6 (Hilo-Cox)	Lyman notes: 2 AM - one shake - long trembling, but slight	Wyss and others, 1992, p. 27; not in HT or HH

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Date	Time HST	Lat deg	Lat min	Lon deg	Lon min	Region	Pref depth	M other	M other source	M pref	M pref source	I max	Location/felt report	Comment
1/04/1899	2:10					south hawaii?				5.30	int	V; 5.0 (Hawaii); 6.0 (Hilo-Cox)	Lyman notes: 10 mts after 2 A.M. one long shock from S. East to North West. waked us all up; Warshauer notes: An earthquake shock was felt at Hilo at 4 o'clock last Wednesday morning [times discrepant-same shock?]	Wyss and others, 1992, p. 27; PCA, 1/9/1899, p. 9
3/06/1899	10:30					south hawaii?				4.50	int	4.6 (Hilo-Cox)	Lyman notes: About 10.30. AM one shock-North and South	Wyss and others, 1992, p. 27; not in HT or HH
6/20/1899	19:45					south hawaii?				4.50	int	4.6 (Hilo-Cox)	Lyman notes: About 15 mit of 8. P.M. - two shocks - North & South	Wyss and others, 1992, p. 27; not in HT or HH
7/07/1899	0:00					mauna loa?				4.50	int	4.6 (Hilo-Cox)	Lyman notes: There were several slight shakes about 12 o'clock (midnight)	Wyss and others, 1992, p. 27; not in HT, HH 7/13 missing
7/11/1899	10:40					mauna loa?				4.50	int	IV-V; 5.2 (Hilo-Cox)	Lyman notes: There was a decided shake at 20 mts of eleven o'clock a.m - coming on & going off with long trembling	Wyss and others, 1992, p. 27; not in HT or HH
7/24/1899	12:00					kaoiki?				5.30	int	V	Warshauer notes: During the day [July 24, following the eruption end] the whole island of Hawaii was shaken with earthquakes of various degrees. None were very heavy and no damage was done. . . On Monday [July 24] about lunchtime Hawaii had a heavy earthquake. It was most severe at Hilo and vicinity and very light here [Punaluu]; Mr. Baldwin reports the eruption as having ceased. . . It appears to have subsided about the time that the earthquake shock of the early part of the week occurred. . . .	PCA, 7/29/1899, p. 3 [Whitney, 1899]; HT, 7/29/1899, p. 5
8/24/1899	21:59					south hawaii?				4.50	int	IV-V	Warshauer notes: Rather heavy earthquake shocks were experienced in Olaa and Hilo on Thursday night [time assumed]	PCA, 8/28/1899, p. 11
10/29/1899	22:10					south hawaii?				4.50	int	4.6 (Hilo-Cox)	Lyman notes: Ten mts after 10 P.M. - an earthquake with two decided shocks though not very hard passing off with long trembling	Wyss and others, 1992, p. 27; not in HT or HH
10/31/1899	7:10					south hawaii?				5.30	int	V; 4.0 (Hawaii); 2.8 (Hilo-Cox)	Lyman notes: Ten mts. after 7. a.m. one long tremble; windows and doors shook and the ferns in their places shook; other slight shakes reported which we did not feel	Wyss and others, 1992, p. 27; not in HT or HH
11/06/1899	1:00					mauna loa?				5.30	int	V (kau); I-III (Hilo)	Lyman notes: quite severe earthquake in Kau reported, at 1 ac [sic-1 oc; AM assumed] (not felt in Hilo)	Wyss and others, 1992, p. 27; not in HT or HH
11/11/1899	20:20					south hawaii?				4.50	int	4.6 (Hilo-Cox)	Lyman notes: 20 mts after 8. P.M. 2 shocks went off with long trembling; Warshauer notes: Last Saturday evening at 8:20 the most severe earthquake shock was felt in Hilo since the eruption on Mauna Loa. Though no damage was done the residents said There's a shock.	Wyss and others, 1992, p. 27; PCA, 11/20/1899, p. 11
12/10/1899	23:59					kilauea?				4.50	int	V	Warshauer notes: an earthquake shock in the vicinity of the volcano overturned a stone wall and started the smoke a booming in Kilauea [no date or time given]	PCA, 12/11/1899, p. 13
1/16/1900	1:45					south hawaii?				4.50	int	IV-V	Warshauer notes: There was a sharp shock of earthquake at 1:45 yesterday morning [Jan. 16]	HH, 1/17/1900, p. 5
6/27/1900	5:30					mauna loa?				4.50	int	IV-V (W&K-kau); III (W&K-hilo); 4.0±1.8 (Hilo-Cox)	Heavy in Kau; Lyman notes: about 5-30 a m. there was a very long tremble, then a slight shock which went off with a trembling from North to South	Wyss and Koyanagi, 1992; Wyss and others, 1992, p. 27; not in HH

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Date	Time HST	Lat deg	Lat min	Lon deg	Lon min	Region	Pref depth	M other	M other source	M pref	M pref source	I max	Location/felt report	Comment
7/10/1900	20:40					south hawaii?				5.30	int	V; 6.0±1.5 (Hilo-Cox)	Lyman notes: Twenty mts of 9 P.M. one shock quite hard coming and going off with long S.W. to N.E. trembling.; Warshauer notes: A rather heavy shock of earthquake at about nine o'clock on Tuesday evening	Wyss and others, 1992, p. 27; HT, 7/14/1900, p. 5
10/11/1900	0:03					south hawaii?				4.50	int	IV-V; 3.5±1.8 (Hilo-Cox)	cox time is 0:05; Lyman notes: Just after midnight a long continued gentle trembling in two shocks windows rattled; Warshauer notes: A rather heavy shock of earthquake was felt by many residents of Hilo on last Wednesday evening between eleven and twelve o'clock. The pitching and rocking of the earth brought some alarm to those who roost above the ground floor; [felt at] Hilo, 10th, 11 p.m. [same event?]	Wyss and others, 1992, p. 27; HT, 10/13/1900, p. 5; PCA, 11/16/1900
10/12/1900	3:57					south hawaii?				5.30	int	V; 5.5±1.5 (Hilo-Cox)	cox time is 3:55; Lyman notes: Just before 4-A.M. an earthquake with three shocks, none of them very severe but enough to throw things down that were on the piano - from South to North; Warshauer notes: Earthquake felt at Hilo and Pepeekeo at 3:45 a.m.	Wyss and others, 1992, p. 27; PCA, 11/16/1900, p. 12
11/22/1900	3:00					south hawaii?				4.50	int	4.5±1.5 (Hilo-Cox)	Lyman notes: do	Wyss and others, 1992, p. 28; not in HH
11/25/1900	2:00					south hawaii?				4.50	int	4.5±1.5 (Hilo-Cox)	Lyman notes: Earthquake in the night 2 shocks [time assumed]	Wyss and others, 1992, p. 28; not in HH
1/16/1901	1:45					maui??				5.60	k&w	IV; 4.5±1.5 (Hilo-Cox)	cox time is 2 am; Lyman notes: 2 A.M. (Jan. 16) Two shocks; Warshauer notes: A slight earthquake was reported about 2 o'clock Wednesday morning, felt by only a few [on Oahu]; The report of a slight earthquake shock at a quarter past two o'clock last Wednesday morning [Jan. 16], has been corroborated by a report of a shock felt at Waimea at the same hour; Slight earthquake on Jan. 16; 1:45 a.m., felt at Honolulu, Hilo and Waimea	Wyss and others, 1992, p. 28; PCA, 1/18/1901, p. 5; 1/23/1901, p. 11; 2/15/1901, p. 14; region/magnitude assigned by analogy with earthquake of April 21, 1881 (K&W) and March 19, 1926 (W&K)
11/15/1901	22:00					south hawaii?				4.50	int	IV-V (Kilauea summit); IV (Hilo); 4.5±1.5 (Hilo-Cox)	Lyman notes: One shock about 10 P.M.; Warshauer notes: A vigorous earthquake was felt on this island Friday night [Nov. 15] at 10 o'clock. The shock came in two distinct waves, probably ten seconds apart. The second was the more violent of the two and made the windows rattle in many Hilo homes. At the Volcano Hotel the quaking was felt and the opinion of the manager was that the seismic wave started from the nether regions of Mauna Loa; Earthquake at Hilo, 15th at 10 p.m.	Wyss and others, 1992, p. 28; HT, 11/22/1901, p. 5; PCA, 12/17/1901, p. 9; not in MN
4/07/1902	22:30					maui??				4.70	k&w	II-III (Hon); 3.0±1.8 (Hilo-Cox)	cox time is 22:00; Lyman notes: One slight shock at 10 P.M.; Warshauer notes: Earthquake on Hawaii on the 7th, 10:30 p.m., also noticed at Honolulu	Wyss and others, 1992, p. 28; PCA, 5/16/1902, p. 12; not in MN; magnitude inferred from intensity-distance relation
9/28/1902	6:25					kl sf??				5.60	int	5.5±1.5 (Hilo-Cox)	Lyman notes: Sunday, 6:25 A.M. a smart short earthq. 2 shocks; Warshauer notes: Hilo, 28th, 6:13 a.m., smart shock, severest in six years, also felt in Waimea	Wyss and others, 1992, p. 28; PCA, 10/15/1902, p. 12

appendixtable0.ex1

Date	Time HST	Lat deg	Lat min	Lon deg	Lon min	Region	Pref depth	M other	M other source	M pref	M pref source	I max	Location/felt report	Comment
10/16/1902	4:30					maui deep?				5.50	k&w	V (maui); IV-V (Hilo); IV (Hon); 3.0±1.8 (Hilo-Cox)	Lyman notes: Slight shock at 4:30 A.M.; Warshauer notes:4:31 am; Warshauer notes: quite a heavy shock of earthquake felt in the Makawao region, Maui early Wednesday morning the 15th [assume Thursday 16th to agree with other reports]; The people of Hilo were awakened about 4 o'clock Thursday by a slight earthquake shock; slight but decided earthquake felt at Honolulu 4:31 am 16th--same reported from Kohala, Waimea (2 shocks), and Hilo (Pepeekeo)	Wyss and others, 1992, p. 28; PCA, 10/20/1902, p. 2; HT, 10/17/1902, p. 5; PCA, 11/17/1902, p. 4; not in MN; region/magnitude assigned by analogy to earthquake of April 21, 1881 (K&W) and March 19, 1926 (W&K)
11/11/1902	19:05					maui east??				5.00	int	IV-V; 4.0±1.8 (Hilo-Cox)	Lyman notes: long trembling motion; Warshauer notes: One of the heaviest earthquake shocks in recent years was experienced by the people of Honokaa shortly after 7 o'clock Tuesday night. Disturbances were reported at the same time by people in Waimea. The shock was noticed in Hilo and Olaa; Hilo, 11th, 6:45 p.m. [same event?]	Wyss and others, 1992, p. 28; ; PCA, 11/17/1902, p. 2, 12/15/1902, p. 12; uncertain region/magnitude
1/03/1903	7:30					maui?				5.50	k&w	V (east maui; IV? (Hilo,Waimea, Kohala); III (Hon)	Warshauer notes: at 7:29:30 yesterday morning a slight but distinct earthquake was felt in Punahou and also in Honolulu. A number of early risers also noticed that a tremblor was on; This morning (the 3rd) at 7:20 a.m., East Maui experienced two quite heavy shocks. The second vibration, was heavier than the first, making houses creak and windows rattle. There was an interval of a second or two between them; Earthquake noted at Hilo, Waimea and Kohala on the 3d between 7:20 and 7:25 a.m.	PCA, 1/4/1903, p. 4; PCA, 1/5/1903, p. 8; 2/17/1903, p. 6; not in MN; region/magnitude assigned from isoseismal map; analogy with earthquake of April 21, 1881 (K&W)
2/22/1903	5:03					south hawaii?				4.50	int	4.5±1.5 (Hilo-Cox)	cox time is 5 am; Lyman notes: One shock a little after five A.M.; Warshauer notes: Hilo, 21st [same as Lyman entry ?]	Wyss and others, 1992, p. 28; PCA, 3/18/1903, p. 5; not in HH