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U.S. GEOLOGICAL SURVEY

HAWAIIAN VOLCANO OBSERVATORY
SUMMARY 92 PART I
SEISMIC DATA, JANUARY TO DECEMBER 1992

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CHRONOLOGICAL SUMMARY
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INTRODUCTION

The Hawaiian Volcano Observatory (HVO) summary presents seismic data gathered during the year, and a chronological narrative describing the volcanic events. The seismic summary is offered without interpretation as a source of preliminary data. It is complete in the sense that all data for events of $M \geq 1.5$ routinely gathered by the Observatory are included. The emphasis in collection of tilt and deformation data has shifted from quarterly measurements at a few water-tube tilt stations ("wet" tilt) to a larger number of continuously recording borehole tiltmeters, repeated measurements at numerous spirit-level tilt stations ("dry" tilt), and surveying of level and trilateration networks. Because of the large quantity of deformation data now gathered and differing schedules of data reduction, the seismic and deformation summaries are published separately.

The HVO summaries have been published in various forms since 1956. Summaries prior to 1974 were issued quarterly, but cost, convenience of preparation and distribution, and the large quantities of data dictated an annual publication beginning with Summary 74 for the year 1974. Summary 86 (the introduction of CUSP at HVO) includes a description of the seismic instrumentation, calibration, and processing used in recent years. The present summary includes enough background information on the seismic network and processing to allow use of the data and to provide an understanding of how they were gathered.

A report tabulating instrumentation, calibration, and recording history of each seismic station in the network by Klein and Koyanagi is available as a USGS Open-File Report¹. It is designed as a reference for users of seismograms and phase data and includes and augments the information in the station table of this summary.

¹ Klein, F.W., and Koyanagi, R.Y., 1980, Hawaiian Volcano Observatory seismic network history, 1950-1979: U.S. Geological Survey Open-File Report 80-302, 84 p.

CHRONOLOGICAL SUMMARY 1992

by

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February saw the demise of the Kupaianaha vent, which had erupted nearly continuously since July 1986. Throughout January, the vent produced only minor breakouts within 3 km of the vent. On February 6, the last pasty ooze-outs were observed at the 1850-ft elevation. For the next 10 days, there was a hiatus in eruptive activity, although the lava pond at the bottom of the Pu'u 'O'o crater remained active.

The 50th episode of the eruption began on February 17, when a 150-m-long fissure opened on the uprift flank of Pu'u 'O'o. Flows from the episode 50 fissure covered 1 sq km and formed a large perched lava pond north of the fissure on top of the ponded pahoehoe field formed July 18, 1986. This episode ended abruptly on March 3, coincident with an intrusion in Kilauea's upper east rift zone.

Episode 51 started on March 7, when the episode 50 fissure propagated another 34 m up the steep slope of the Pu'u 'O'o cone. Flows from the episode 51 fissure built a 60-m-high shield immediately west of the fissure. The shield was capped by a lava pond that was active until July. Most of the episode 51 flows advanced to the south, and a lava tube system developed in that direction. The eruption at the 51 vents was fitful; during 1992 there were 18 pauses in lava production (Table G-1). The pauses lasted an average of 3 days, with the shortest pause lasting 3 hours and the longest, 7 days. The intervals during which the 51 vent was active lasted anywhere from 1 to 90 days. The interrupted lava output limited the distance that flows could advance and slowed the development of a stable tube system beyond the margins of the lava shield.

During one unusually long eruptive interval (32 days) in July, lava from the episode 51 vent advanced halfway down the Pulama pali. However, another pause in the eruption stopped this flow before it reached the coastal plain.

On October 2, during another pause in episode 51 activity, an M4.5 earthquake occurred at a depth of 7 km between the Pulama pali and the 51 flow field. Tremor at the eruption site increased, and early in the morning of October 3, lava began to erupt from a new fissure on the south flank of Pu'u 'O'o. The episode 52 fissure fed flows which travelled over 2 km before stagnating.

At 1530 hours on October 3, the eruption resumed at the episode 51 vents. In the days that followed, activity at the episode 52 fissure declined while the output of the episode 51 fissure increased. The episode 52 fissure last erupted on October 17, while the episode 51 vent erupted almost continuously for the rest of the year.

Pu'u 'O'o

Since 1990, the level of Pu'u 'O'o lava pond has had an inverse reaction to the eruptive activity at the episodes 48, 49, 50, and 51 vents, drawing down during vigorous eruptive episodes and rising to levels high in the crater when the other vents were in repose. Early in 1992, the pond in Pu'u 'O'o rose as Kupaianaha died. When episode 50 began, the Pu'u 'O'o pond dropped to 85 m below the crater rim. In the months that followed, the level of the pond fluctuated between 70 m below the rim when the 50 and 51 vents were active and 35 m of the rim when the vents were in repose. Since the October 2 earthquake and the opening of the episode 52 fissure, the pond in Pu'u 'O'o has remained at a low level; 70-75 m below the crater rim.

Table C-1. ERUPTION STATISTICS

Areas

Total area covered by lava, Jan 1983 through Dec 1992 = 83 sq km (32 sq mi)

Exposed areas of:

Pu'u 'O'o flows (episodes 1-47) and the "A vent" flow of episode 48 = 26 sq km* (10 sq mi)

*Pu'u 'O'o flows originally covered about 42 sq km, but much of this area was reburied by Kupaianaha flows.

Kupaianaha flows, Jul 20, 1986-Feb 6, 1992 = 41 sq km (16 sq mi)

Episode 49 flows, Nov 8-26, 1991 = 4 sq km (1.5 sq mi)

Episode 50 flows, Feb 17-Mar 3, 1992 = 0.5 sq km (0.2 sq mi)

Episode 51 flows, Mar 7-Dec 31, 1992 = 11 sq km (4.3 sq mi)

Episode 52 flows, Oct 3-17, 1992 = 0.5 sq km (0.2 sq mi)

New land created December 86 - Dec 92 = 379 acres (This is a net figure, which does not include new land that was claimed by wave erosion or collapse of the active lava bench).

Table C-1. (continued)

Volumes

This eruption:

Total, 1/83 thru 12/92	925 x 10 ⁶ m ³ (magma volume)
Episodes 1-47 (1/83 thru 6/86)	385 x 10 ⁶ m ³
Episode 48 (7/86 thru 2/92)	500 x 10 ⁶ m ³
Episode 49 (11/92)	11 x 10 ⁶ m ³
Episode 50 (2/92 thru 3/92)	3 x 10 ⁶ m ³
Episode 51 (3/92 thru 12/92)	24 x 10 ⁶ m ³
Episode 52 (10/92)	2 x 10 ⁶ m ³

Other fascinating facts

Height of episode 51 lava shield: approx 60 m
Episode 51 lava pond active Mar-July 92

Height of Kupaianaha lava shield: 56 m
Kupaianaha lava pond active July 86-June 90
Kupaianaha vent inactive since Feb 92

Height of Pu'u 'O'o cone, Jul 92: 234 m (768 ft). The cone has lost 23 m due to collapse since 1986
Dimensions of Pu'u 'O'o crater, Jan 93: approx 200 m x 300 m
Depth of Pu'u crater floor, Feb 93: 60 m
Pu'u 'O'o pond status: continuously active in 92

Thickness of lava at the coast:
approx 25 m (75 ft) over Hwy 130 at Queens Bath
roughly 50-75 ft over Kalapana Gardens
1.5 m (5 ft) over Chain of Craters Rd at Kamoamoa

Structures destroyed

Residences destroyed through Oct 91 (none since then) = 181 (Pu'u 'O'o - 16; Kupaianaha - 165) Total losses = \$61 million

Other structures include the Waha'ula Visitor Center and maintenance shop, Royal Gardens community center, Mauna Kea Congregational Church, Puna Canoe Club halau, and the Kalapana Drive-in

Pu'u 'O'o:

Episodes 1-47	Royal Gardens	16
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Kupaianaha:

Nov 1986-Dec 1989	58
Feb 1990-Jan 1991	105
Oct 1991	2

11-12/86	Kapa'ahu	11
12/86	Keone Dr, Kalapana Gardens	17
5-6/87	Kapa'ahu	4
9-12/87	Royal Gardens	9
12/87-1/88	Kapa'ahu	2
2/88	Royal Gardens	3
5/88	Kapa'ahu	2
5-9/89	Royal Gardens, Waha'ula	13
2/90	Royal Gardens	2
4/90-1/91	Keone Dr, Kalapana Gardens, Kalapana, Kalapana Shores	103
10/91	Royal Gardens	2

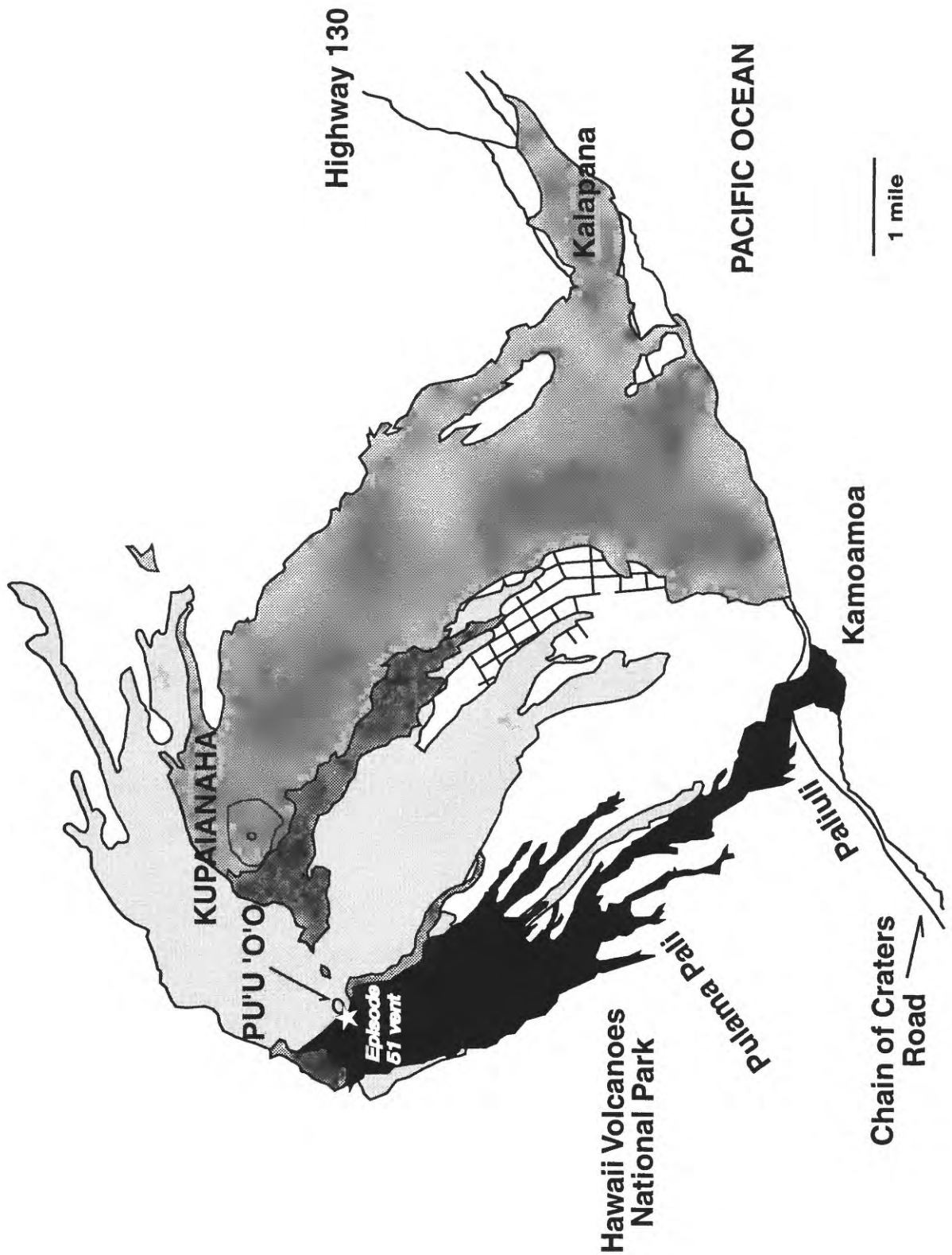


Figure C-1. Lava flows produced from 1983 through 1992. The star marks the location of the episode 51 vent.

KILAUEA

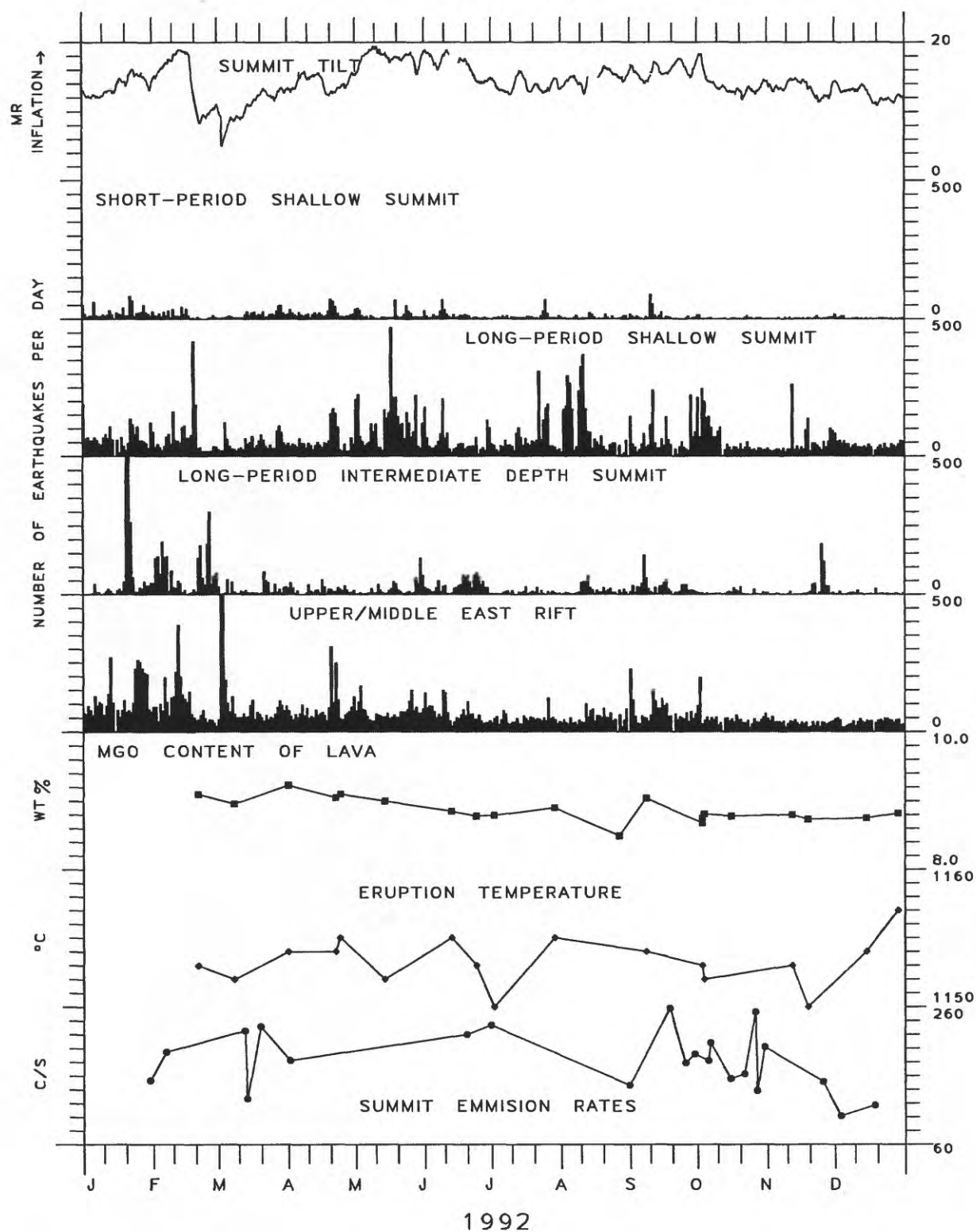


Figure C-2. Selected seismic, geodetic, petrologic and geochemical data for Kilauea, 1992.

SEISMIC INSTRUMENTATION

The network. The Hawaiian Volcano Observatory maintains an extensive telemetered seismic network on the Island of Hawaii. The 1992 network consisted of 53 stations—51 digital and 2 low-gain, three-component optical. The 50 digital stations include 13 three-component and 38 vertical-component-only sites. The coverage is most dense on and around Kilauea Volcano. With the exception of self-contained photographic systems at the Uwekahuna and the Hilo stations, all seismic signals from the short-period network are telemetered to the Observatory for recording.

Figure 1 is a map of selected geographic and geologic features, figure 2 shows the seismic stations operated on the Island of Hawaii during 1992, and figure 3 indicates the telemetry scheme for the respective seismic stations. Table 1 lists all seismic stations operated by the U.S. Geological Survey field office in Hawaii during 1992. Listed are names, four-letter station codes, coordinates in degrees and minutes, elevation in meters, and other data, as described below, pertaining to each station. In addition to the seismometers listed in Table 1, a long-period, three-component set of Press-Ewing seismometers was operated in the Uwekahuna vault and recorded on photographic paper.

Instrumentation and recording. Each telemetered station has a voltage-controlled oscillator (VCO) for FM multiplex transmission to HVO via either hardwire or radio. These telemetering stations are all of Type 1, the standard system of the Office of Earthquakes, Volcanoes and Engineering (OEVE) used in USGS seismic networks (see Table 2 for details). After discrimination at the receiver, the analog signals are converted to digital form as part of the routine computer location processing and archiving. Analog signals from 36 selected stations are recorded on two Develocorders ('A' and 'B') using 16-mm microfilm. FM signals from the telemetering network are also recorded directly on one-inch magnetic tape. The type(s) of continuous recording used for each station (in addition to magnetic tape for the telemetered stations) is coded in Table 1 as follows: D - Develocorder film, P - photographic paper, H - Helicorder paper, and I - ink paper.

In addition to the standard stations, optical drum seismographs are maintained at Uwekahuna (HVO) and Hilo, and a helicorder drum seismograph is maintained on Oahu (Honolulu station operated by the Pacific Tsunami Warning Center). The less sensitive optical records are used primarily for amplitude measurements for magnitude calculations to supplement readings from the high-gain stations. The paper records, as well as the 16-mm Develocorder microfilms, are archived at HVO.

On September 1, 1992, the one-inch magnetic tape recorder and Develocorder 'B' were discontinued. The magnetic tape recorder was replaced by three 4-mm digital-audio tape (DAT) recording units. The DAT recorders run continuously, in automatic rotation, as each 30-hr tape is filled. The optical drum seismographs at Uwekahuna Vault were also discontinued. The last record day for both the three-component set of short-period and three-component set of Press-Ewing seismometers was September 9, 1992.

Seismograph response and calibration. Displacement response curves for the three short-period seismograph types in use are given in figure 4. Types 2 and 3 are electro-mechanical systems recorded on paper records. The Type 1 curve gives the displacement magnification of the standard OEVE system from ground motion at the seismometer to the seismic trace, as seen on a 20x Develocorder film viewer. The curves plot the unit response, which is multiplied by a constant but known factor (CAL-factors range from about 1 to 7, averaging about 4, Table 1) to get the response for an individual station. Individual CAL factors for Type 1 seismographs are equal to the peak-to-peak amplitude measured in millimeters on the 20x Develocorder viewer of a 100-microvolt 5 to 8-Hz signal introduced to the preamp/VCO in place of the geophone at the field station. The calibration process is normally performed each time a station is visited for other maintenance.

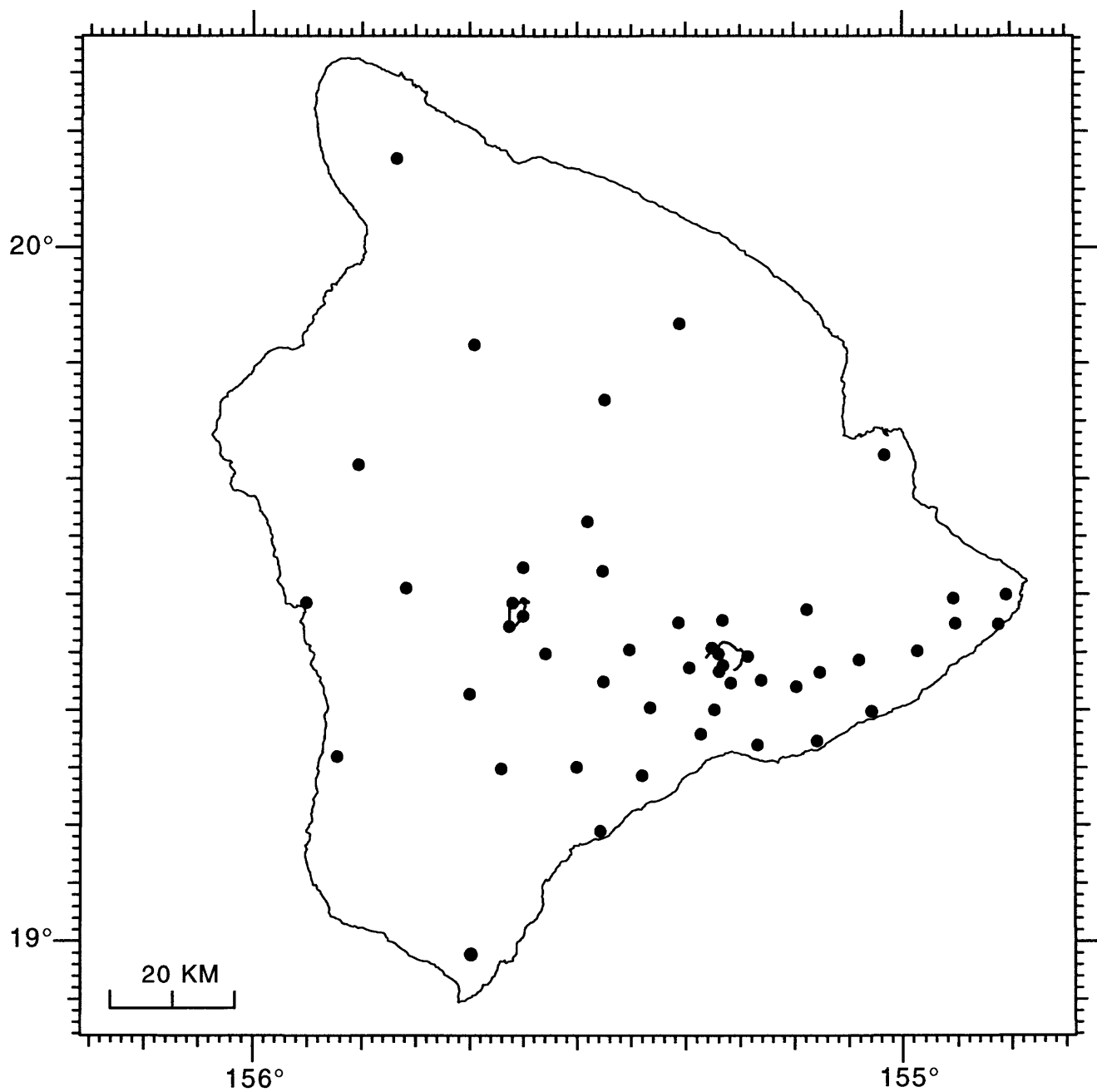


Figure 2. Seismic stations operational during 1992 on the Island of Hawaii.

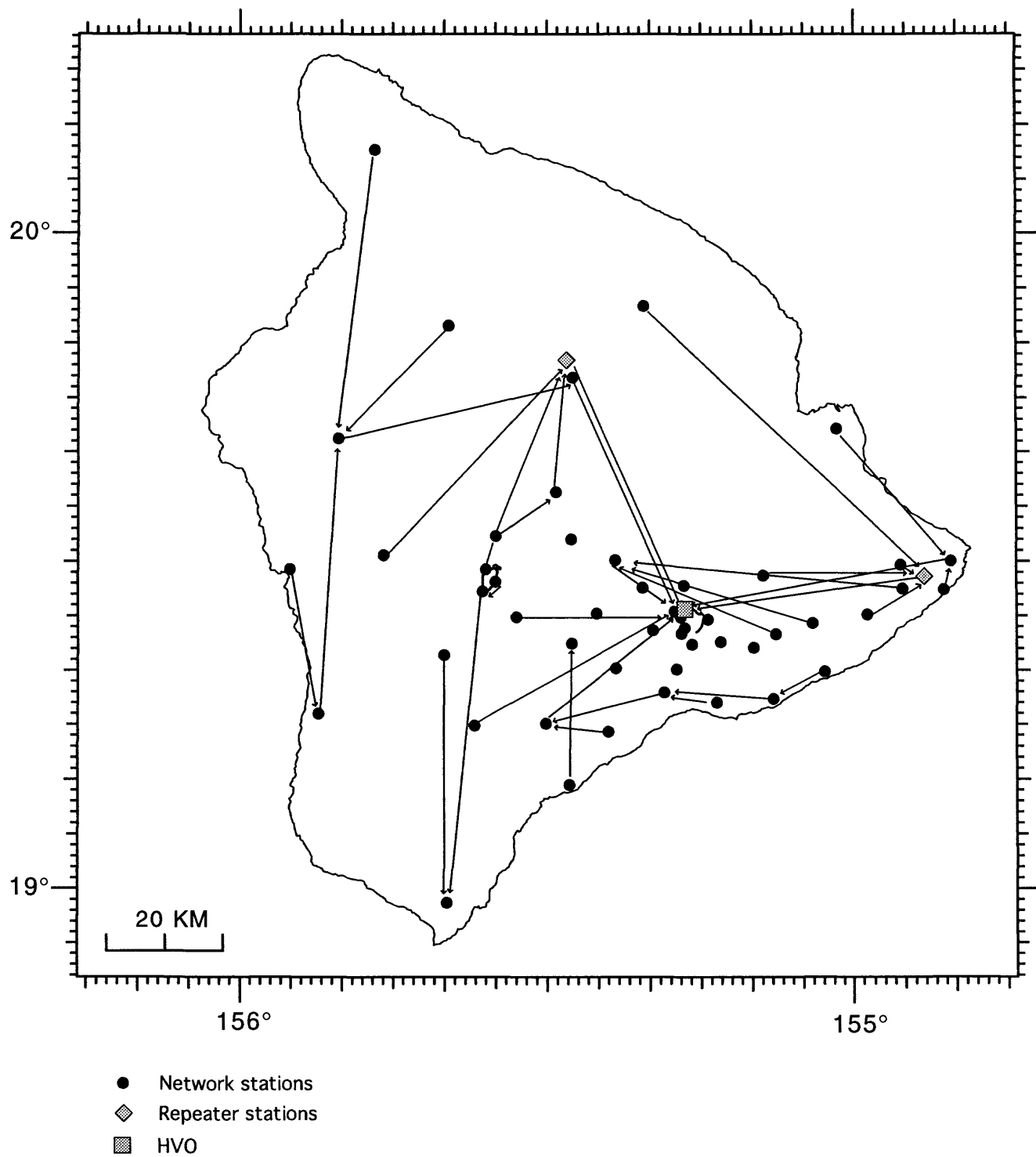


Figure 3. Telemetry scheme for the 1992 Hawaiian Volcano Observatory seismic network.

Table 1. Seismic stations in Hawaii operated by the USGS in 1992.

STATION NAME	CODE	-LAT-		-LON-		ELEV (M)	DELAY 1	DELAY 2	CAL	SEIS TYPE	OPTIC RECORD
		D	M	D	M						
AHUA	AHUV	19	22.40	155	15.90	1070	-0.10	-0.13	2.1	E5	DI
AHUA	AHUE	19	22.40	155	15.90	1070	-0.10	-0.13	3.0	MW	
AHUA	AHUN	19	22.40	155	15.90	1070	-0.10	-0.13	3.0	MW	
AINAPO	AINV	19	22.50	155	27.62	1524	0.13	0.17	5.5	L5	D
AINAPO	AINE	19	22.50	155	27.62	1524	0.13	0.17	3.0	MW	
AINAPO	AINN	19	22.50	155	27.62	1524	0.13	0.17	3.0	MW	
CAPTAIN COOK	CACV	19	29.29	155	55.09	323	0.00	-0.16	1.1	L5	D
CONE PEAK	CPKV	19	23.70	155	19.70	1038	-0.26	-0.07	6.0	L5	
DANDELION	DANV	19	21.42	155	40.04	3003	-0.27	0.03	7.0	E5	D
DESERT	DESV	19	20.20	155	23.30	815	-0.29	-0.13	3.0	L5	DI
ESCAPE ROAD	ESRV	19	24.68	155	14.33	1177	-0.17	-0.19	2.2	L5	D
FERN FOREST	FEFV	19	28.70	155	8.91	691	0.01	0.05	0.0	L5	
HAWAIIAN BEACHES	HABV	19	31.89	154	53.89	92	-0.09	-0.24	1.0	L4	
HILO	HIEE	19	43.20	155	5.30	20	0.54	0.30	1.0	W	P
HILO	HILV	19	43.20	155	5.30	20	0.54	0.30	1.0	H1	P
HILO	HINN	19	43.20	155	5.30	20	0.54	0.30	1.0	W	P
HILINA PALI	HLPV	19	17.96	155	18.63	707	0.02	0.07	2.6	L5	D
HALE POHAKU	HPUV	19	46.85	155	27.50	3396	0.31	0.17	3.3	L4	D
HUMUULA SHEEP ST	HSSV	19	36.31	155	29.13	2445	0.20	0.35	5.3	L5	D
HUMUULA SHEEP ST	HSSE	19	36.31	155	29.13	2445	0.20	0.35	3.0	MW	
HUMUULA SHEEP ST	HSSN	19	36.31	155	29.13	2445	0.20	0.35	3.0	MW	
HOT CAVES	HTCV	19	14.33	155	24.02	381	-0.16	-0.07	0.0	E4	
HUALALAI	HUAV	19	41.25	155	50.32	2189	0.67	0.38	3.0	L4	DI
HEIHEIAHULU	HULV	19	25.13	154	58.72	369	-0.17	-0.16	1.6	L5	DI
HEIHEIAHULU	HULE	19	25.13	154	58.72	369	-0.17	-0.16	3.0	MW	
HEIHEIAHULU	HULN	19	25.13	154	58.72	369	-0.17	-0.16	3.0	MW	
KAAPUNA	KAHV	19	15.98	155	52.28	524	-0.12	-0.01	3.5	E5	D
KAENA POINT	KAEV	19	17.35	155	7.95	37	-0.01	0.06	1.4	L5	D
KAOIKI FAULTS	KFAV	19	25.25	155	25.18	1579	0.13	0.17	0.0	E5	
KAHUKU	KHUV	19	14.90	155	37.10	1939	0.03	-0.03	2.7	E4	D
KANEKII	KIIV	19	30.56	155	45.90	1841	0.15	0.37	2.9	L5	D
KANEKII	KIIE	19	30.56	155	45.90	1841	0.15	0.37	3.0	MW	
KANEKII	KIIN	19	30.56	155	45.90	1841	0.15	0.37	3.0	MW	
KEANAKOLU	KKUV	19	53.39	155	20.58	1863	0.68	0.24	3.3	L5	D
KALALUA CONE	KLCV	19	24.35	155	4.08	659	-0.25	-0.30	0.0	L5	DH
PUU KALIU	KLUV	19	27.48	154	55.26	271	-0.17	-0.30	2.9	L5	D
KOHALA	KOHV	20	7.69	155	46.77	1166	-0.03	-0.17	1.5	L5	D
KOHALA	KOHE	20	7.69	155	46.77	1166	-0.03	-0.17	3.0	MW	
KOHALA	KOHN	20	7.69	155	46.77	1166	-0.03	-0.17	3.0	MW	
KIPUKA NENE	KPNV	19	20.10	155	17.40	924	-0.11	-0.08	3.5	L5	D
KAPOHO	KPOV	19	30.02	154	50.51	134	-0.09	-0.24	2.5	L5	D
MAUNA LOA	MLOV	19	29.80	155	23.30	2010	0.03	0.08	5.8	L5	DI
MAUNA LOA	MLOE	19	29.80	155	23.30	2010	0.03	0.08	3.0	MW	
MAUNA LOA	MLON	19	29.80	155	23.30	2010	0.03	0.08	3.0	MW	
MAUNA LOA X	MLXV	19	27.60	155	20.70	1475	0.06	0.15	3.0	L5	
MOKUAWEOWEO	MOKV	19	29.28	155	35.98	4104	0.15	0.16	5.5	L4	DI
MAKAOPUHI	MPRV	19	22.07	155	9.85	881	-0.17	-0.20	4.2	L5	DI
MOUNTAIN VIEW	MTVV	19	30.25	155	3.75	409	-0.02	0.01	5.0	E5	D
NATIONAL GUARD	NAGV	19	42.12	155	1.72	18	0.54	0.30	3.2	E5	D
NORTH PIT	NPTV	19	24.90	155	17.00	1115	-0.30	-0.18	3.0	L4	DI
NORTH PIT	NPTE	19	24.90	155	17.00	1115	-0.30	-0.18	3.0	MW	
NORTH PIT	NPTN	19	24.90	155	17.00	1115	-0.30	-0.18	3.0	MW	
OUTLET	OTLV	19	23.38	155	16.94	1038	-0.19	-0.18	4.9	L5	
PAUHI	PAUV	19	22.62	155	13.10	994	-0.21	-0.24	2.4	L4	D
PAUHI	PAUE	19	22.62	155	13.10	994	-0.21	-0.24	3.0	MW	
PAUHI	PAUN	19	22.62	155	13.10	994	-0.21	-0.24	3.0	MW	
PUU ULAULA	PLAV	19	32.00	155	27.67	2992	-0.03	0.13	5.4	L5	DI
POHOIKI	POIV	19	27.42	154	51.22	16	-0.09	-0.24	0.0	L5	

POLIOKEAWE PALI	POLV	19	17.02	155	13.47	169	-0.02	0.03	2.8	E5	D
PUU PILI	PPLV	19	9.50	155	27.87	35	-0.15	-0.15	1.7	E5	D
RIM	RIMV	19	23.90	155	16.60	1128	-0.21	-0.13	0.0	L5	
RAINSHED	RSDV	19	27.78	155	16.68	1270	0.06	0.15	0.0	L5	
SOUTH POINT	SPTV	18	58.91	155	39.92	244	-0.17	-0.22	2.8	L5	D
SOUTH POINT	SPTV	18	58.91	155	39.92	244	-0.17	-0.22	3.0	MW	
SOUTH POINT	SPTN	18	58.91	155	39.92	244	-0.17	-0.22	3.0	MW	
STEAM CRACKS	STCV	19	23.30	155	7.67	765	-0.25	-0.30	2.4	L5	DH
STEAM CRACKS	STCE	19	23.30	155	7.67	765	-0.25	-0.30	3.0	MW	
STEAM CRACKS	STCN	19	23.30	155	7.67	765	-0.25	-0.30	3.0	MW	
SOUTHWEST RIFT	SWRV	19	27.26	155	36.30	4048	0.01	0.04	5.6	E5	D
TRAIL	TRAV	19	24.91	155	32.96	3207	0.00	0.00	0.0	L5	
UWEKAHUNA	UEEE	19	25.40	155	17.60	1240	-0.21	0.00	2.5	E	P
UWEKAHUNA	UENN	19	25.40	155	17.60	1240	-0.21	0.00	2.5	E	P
UWEKAHUNA	UEZV	19	25.40	155	17.60	1240	-0.21	0.00	2.5	E	P
UWEKAHUNA	URAV	19	25.40	155	17.60	1240	-0.21	0.00	0.0	RA	
UWEKAHUNA	URAE	19	25.40	155	17.60	1240	-0.21	0.00	0.0	RA	
UWEKAHUNA	URAN	19	25.40	155	17.60	1240	-0.21	0.00	0.0	RA	
WAIKII	WAIV	19	51.58	155	39.60	1433	0.20	0.35	0.0	L5	
WAHAULA	WHAV	19	19.90	155	2.92	29	-0.10	-0.04	1.5	E5	D
WILKES CAMP	WILV	19	28.15	155	35.02	4037	0.22	0.17	2.6	E5	D
WILKES CAMP	WILE	19	28.15	155	35.02	4037	0.22	0.17	3.0	MW	
WILKES CAMP	WILN	19	28.15	155	35.02	4037	0.22	0.17	3.0	MW	
WEATHER OBSERVAT	WOBV	19	32.31	155	35.01	3396	0.00	0.00	0.0	E5	
WOOD VALLEY	WOOV	19	15.08	155	30.12	909	-0.15	-0.06	4.6	E5	

Table 2. Seismic Instrument Types (SEIS TYPE)

The codes in parentheses refer to the seismometer types listed in Table 1.

Type 1 (Codes E, L, and 3, 4, 5) consists of:

- a) Geophone - Electrotech EV-17 (E), or Mark Products L4C (L) 1.0-sec. period moving-magnet vertical- or horizontal- (E-W and N-S) component seismometer adjusted for an output of 0.5 volts/cm/sec and 0.8, critically damped.
- b) Preamp/VCO - USGS/OEVE Model J302 (3), J402 (4), J502 (5) voltage-controlled oscillator. Three db points for bandpass filter at 0.1 Hz and 30 Hz. Signals are transmitted on audio FM carrier over cable or FM radio link to HVO.

Type 2 (Code E) consists of:

- a) Electrotech EV-17 1.0-sec. period moving-magnet vertical- or horizontal- (E-W and N-S) component seismometer.
- b) 3.5 Hz galvanometer with appropriate shunt resistances for critical damping. System is poorly calibrated. Peak magnification approximately 25,000 at 4 Hz.

Type 3 (Code H1) consists of:

Electrotech EV-17 or Observatory-built 0.8-sec. period moving-coil seismometer, with HVO-built solid-state seismic preamplifier, galvanometer driver, and 2 Hz galvanometer. Peak magnification approximately 40,000 at 4 Hz.

Code (W) is a Wood-Anderson torsion seismograph.

Code (MW) is a horizontal-component seismograph based on a Type 1 system and modified to a Wood-Anderson response.

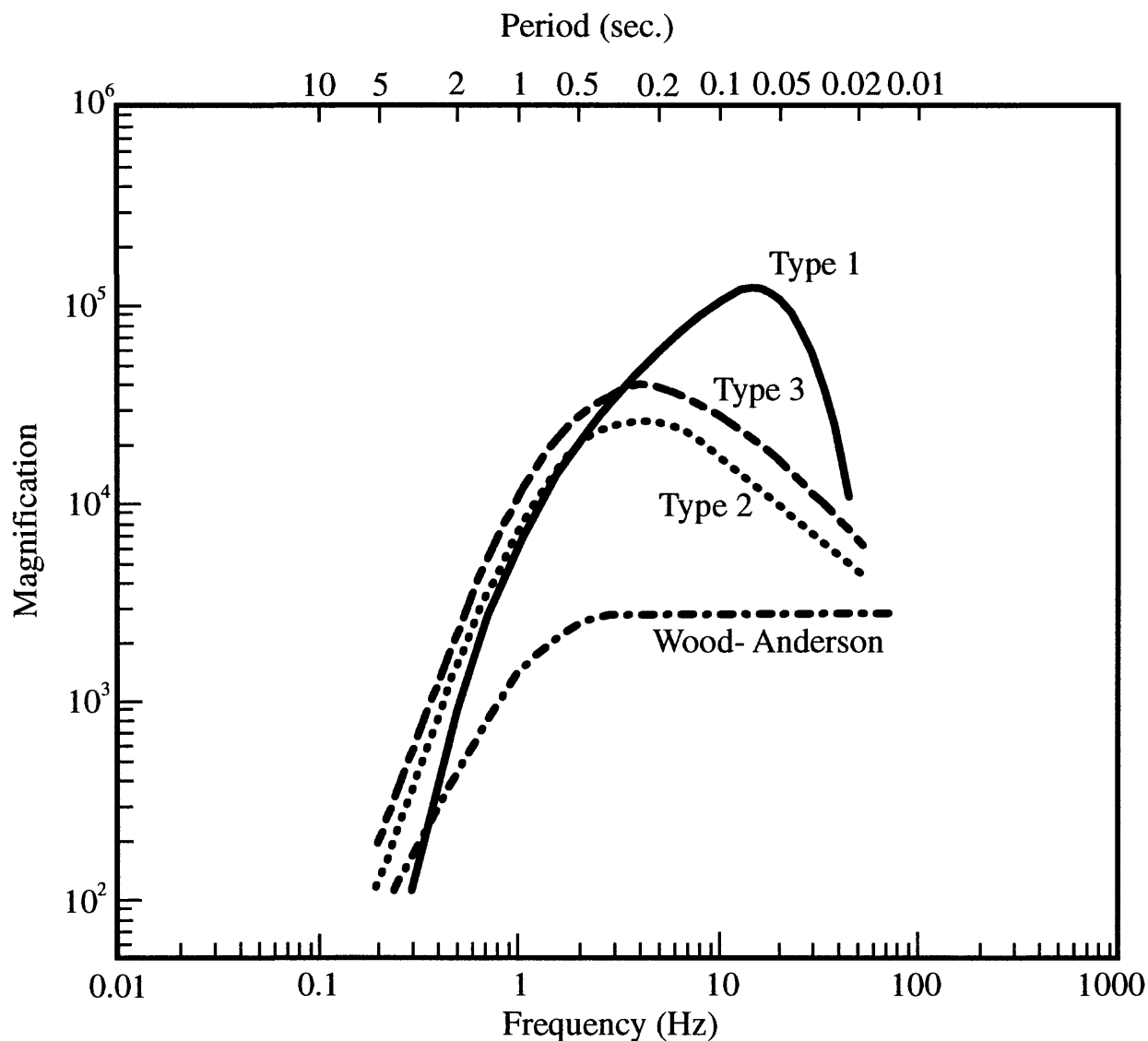


Figure 4. System response curves for the Wood-Anderson torsion seismograph and for the three different types of seismometers used by the Hawaiian Volcano Observatory. Types 2 and 3 are electro-magnetic seismographs recorded optically on photographic paper. Type 1 is the standard OEVE seismometer system recorded on Develocorder film and magnetic tape. The curve for Type 1 includes response of the geophone, all electronics including telemetry, Develocorder galvanometer, and projection of film by a 20x viewer. The curves plot the unit response, which should be multiplied by a constant but known factor (CAL) to get the response for an individual station.

SEISMIC DATA PROCESSING

Develocorder films are scanned on a daily basis for frequency of earthquakes, and coda durations in seconds are measured for coda magnitude M_b . In 1986, HVO acquired a VAX 11-750 computer and adopted the CUSP (California Institute of Technology USGS Seismic Processing) routine. Discriminated analog signals are converted to digital form, and detected events are saved in real time. Detected events are demultiplexed, and P-picks are made by the computer, producing a rough location and coda-amplitude magnitude. Events are examined by an analyst, on a TEK 4014, to refine computer P-picks and to time additional P- and S-phases for a preliminary location. Binary CUSP files are tape-archived and translated into ASCII phase files. Locations and amplitude magnitudes are then determined, using the program HYPOINVERSE (Klein, 1989)². Events are reworked and rerun, as needed, to produce a final solution. Magnetic tape copies of all arrival times and output summary data are kept at Menlo Park and at HVO.

In July 1992, HVO acquired VAX workstations for timing earthquakes using a "generic" version of CUSP. In addition to timing P and S arrival signals, the VAX workstations are capable of measuring peak-to-peak amplitudes along with the associated period. This capability allowed the renewal of amplitude magnitude determinations from the network seismic stations. Amplitude data gathered from July to December became part of a test set to determine magnitude corrections for network stations. The amplitude magnitudes included in this report, however, were calculated from the existing photographic stations.

The crustal model used is specified by velocities at four depth points. Velocity at any depth is given by linear interpolation between points and uses a homogeneous half-space, as listed below:

VELOCITY (km/sec)	DEPTH (km)
1.9	0.0
6.5	4.6
6.9	15.0
8.3	16.5

Two empirical sets of station delays or corrections were used in the HYPOINVERSE locations and are given in Table 1. The delay models are separated by a circle of radius 34 km, centered at 19°22' N and 155°10' W. Delay model 1 is used for epicenters occurring within a circle of radius 31 km from the center. This region includes Kilauea and its south flank. A combination of the two delay models is used for epicenters that fall in a transition zone that is 6 km wide. Delay model 2 is applied to the rest of the island and offshore earthquakes. (For a detailed description, refer to Klein, 1989.)²

Magnitudes for most events are computed using recorded amplitudes on low gain or Wood-Anderson stations. Amplitudes read from other than Wood-Anderson instruments are corrected to an equivalent Wood-Anderson amplitude using the curves of Figure 4 and CAL factors listed in Table 1. Amplitude magnitudes larger than 2.5 are generally based on the Wood-Anderson instruments in Hilo or on Type 2 seismographs at Uwekahuna. A coda-amplitude (CD) magnitude determined by CUSP has also been included. The CD magnitudes were computed using maximum amplitudes and coda decay rates from digitized signals.

² Klein, F.W., 1989, User's guide to HYPOINVERSE: U.S. Geological Survey Open-File Report 89-314, 58 p.

SEISMIC CATALOG

The emphasis in both station coverage and detailed data analysis is on the highly active southern half of the Island of Hawaii. Hundreds of earthquakes too small to locate are classified as type³ and counted daily. The set of well-recorded earthquakes located in the Hawaii Island region is nearly complete above magnitude 2.0. Many smaller events are located in the densely instrumented Kilauea area. Substantial effort is made to locate earthquakes elsewhere within the Hawaiian Archipelago. Such coverage cannot be as complete as in south Hawaii, but nearly all events above magnitude 4.0 are located with limited precision. Data presented in the seismic catalog are in four parts: (1) Table 3 gives duration of harmonic tremor and numbers of earthquakes (most too small to locate) from several source regions around Kilauea and Mauna Loa. The source region is determined visually from signal character and pattern of arrival times at key stations. (2) Maps showing computer-located hypocenters are given in Figures 9-22. The location maps are of different scales and provide hypocenters with magnitude thresholds set at 1.0, 2.0, 3.0, and 3.5, varying according to region. (3) The list of computer locations constitutes the bulk of this summary and is given in Table 5. Each earthquake on the list is assigned a three-letter code based on its general location and depth. Figures 5-8 are maps of the regions used to assign the location codes. The latitude and longitude limits of rectangular regions are listed in Table 4. When the listed coordinates overlap, precedence is given according to Figures 5-8. (4) Table 6 re-lists the events in Table 5 for which either duration or amplitude magnitude is 3.0 or larger. This list includes many of the earthquakes felt in Hawaii.

Table 3. Number of earthquakes and minutes of tremor recorded on seismographs around Kilauea and Mauna Loa.

Earthquake categories are as follows:

- 1) Kilauea summit, short-period caldera: shallow earthquakes beneath the caldera.
- 2) Kilauea summit, long-period caldera A: earthquakes characterized by low frequency signatures of 3 to 5 Hz, often originating 0-5 km beneath the summit.
- 3) Kilauea summit, long-period caldera B: earthquakes characterized by low frequency signatures of 1 to 3 Hz, often originating 0-5 km beneath the summit.
- 4) Kilauea summit, long-period caldera C: earthquakes characterized by low frequency signatures of 1 to 5 Hz, often originating 5-15 km beneath the summit.
- 5) Kilauea summit 30 km: earthquakes about 30 km deep beneath the summit region.
- 6) Koaiki and southwest rift: earthquakes beneath the southwest rift of Kilauea, western parts of the Koaie faults, and adjacent Koaiki fault system of Mauna Loa.
- 7) Upper east rift: earthquakes in the upper and middle east rift zones, the adjacent parts of the south flank, and eastern parts of the Koaie faults.
- 8) Lower east rift: earthquakes in the lower east rift zone and adjacent parts of the south flank.
- 9) Mauna Loa short-period: shallow earthquakes in the Mauna Loa summit region.
- 10) Mauna Loa long-period: earthquakes characterized by low-frequency signatures near the summit region.
- 11) Mauna Loa northeast rift: earthquakes beneath the northeast rift zone of Mauna Loa.
- 12-15) Tremor is separated into four categories: Kilauea—shallow, intermediate, and deep, and Mauna Loa. Depth is inferred on the basis of relative amplitudes on seismographs.

The criteria for Kilauea shallow tremor have been changed to accommodate the ongoing eruption, for which tremor in the middle east rift zone is continuous. Distinction is made between high-amplitude tremor related to strong eruptive periods and low-amplitude tremor during periods with no surface lava production. Only minutes of tremor at saturated levels recorded locally at STC and/or KLC are included in Table 3.

³ Koyanagi, R. Y., 1982, Procedure for routine analyses and classification of seismic events at the Hawaiian Volcano Observatory, Part I: U.S. Geological Survey Open-File Report 82-625, 32 p.; figs., 59 p.

Table 3. KILAUEA SUMMIT KILAUEA FLANK MAUNA LOA TREMOR (MINUTES)

DATE 1992	SHORT PER. CALD.	LONG PER. CALDERA A	PERIOD B	30 KM C	KAO. & SW RIFT	UP. EAST RIFT	LOW. EAST RIFT	SHORT PER.	LONG PER.	NE RIFT	KILAUEA SHAL.	MAUNA LOA INT.	DEEP
JAN 1	51	190		1	19	68	11	2	30	2			
2	18	64		1	17	62	7	3	17				
3	7	68		1	11	91	8	1	6	1			
4	11	56		1	29	78	11	3	6	3			
5	10	56		3	33	59	9	14	4	7			
6	61	66		37	31	127	3	3	6	1			
7	12	58		6	25	93	11	8	5	5			
8	8	46		6	20	106	8	5		7			
9	9	41			22	99		4	2	2			
10	14	66		3	20	61	3	3	17	3			3
11	10	79		11	24	92	3	1	12	5			
12	14	64		19	37	134	9	5	1				1
13	30	107		12	37	267	8	6	3				
14	15	59		3	24	104	7	9		2		19	
15	27	41		12	31	86	6	9	1				12
16	21	58		13	59	77	8	3		1			
17	17	11	1	19	26	53	9	3	1	3			
18	14	67		11	27	77	6		1	2			
19	40	33	3	46	34	112	6	1	4				1
20	10	21		594	43	71	7	2	3	2			
21	11	46		741	28	76	10	10		2			6
22	81	134		262	33	69	19	8	1	4			
23	64	114		62	32	103	5		1	3			
24	8	78		9	15	228	11	4		4			
25	20	104	3	8	23	259	7	3	14	1			
26	22	56		24	42	251	8	4		4			3
27	24	56		21	25	227	13	3	5	2			
28	49	52		45	28	212	11	1	1				1
29	23	45		31	35	206	9	3	1	1			
30	17	28		32	17	80	6	1		1		60	
31	10	121		41	17	72	8	1		2			
FEB 1	26	87		40	20	89	9	6	3	5			
2	12	32		132	17	88	4	1					3
3	10	42		138	25	37	6	1					
4	19	32		74	121	100	5	2	1	2			
5	8	21		191	17	76	2	1		2			11
6	25	36		135	6	196	1	6	4				
7	11	69		139	9	106	15	1	20	7			
8	29	79		11	16	58	8	1	7	3			
9	3	42		85	32	122	10	1	2				38
10	34	160		26	29	126	8	2	4	1			11
11	11	56		22	21	215	15	2					
12	10	53		48	31	387	6	2	3	1			46
13	8	47		40	35	198	7	2					
14	43	104		6	28	133	6						3
15	16	108	1	15	18	117	6	1	2	1			
16	36	65			18	107	4		1	1			
17	10	65		4	26	144	10			1		780	
18	2	23	53	7	17	63	10					1440	
19	3	23	394	18	27	51	16	5		3		1440	
20		16	171	8	30	41	10	8		1		1440	
21	6	4	25	133	20	44	8	4	2	5		1440	
22	2	25	7	179	28	59	4	3	2	4		1440	4
23		17	1	61	31	77	5	2	1	3		1440	
24		17		35	30	48	9	2				1440	

KILAUEA SUMMIT					KILAUEA FLANK			MAUNA LOA			TREMOR (MINUTES)		
DATE	SHORT PER.	LONG PER.	PERIOD	30	KAO. UP. LOW.	UP. EAST	LOW. EAST	SHORT PER.	LONG PER.	NE RIFT	KILAUEA MAUNA LOA		
1992	CALD.	A	B C	KM	& SW RIFT	RIFT	RIFT				SHAL.	INT.	DEEP
FEB25		14	2	184		39	34	2	4	1	1440		
26	4	9	7	299		11	42	3	1		1440		
27	3	16	1	37	1	25	41	6	1		1440		
28	12	29	5	68		26	31	5		4	1440		
29	5	32	1	77		38	19	10	3	6	1440		
MAR 1	2	23		27		32	42	3	1	1	2	1440	5
2	2	19		1		19	2384	10	1	1		1440	3
3	4	14	5	2		27	569	4	2				35
4	3	39	83	5		37	186		1	1			
5	6	23	37	54		38	104	8	3	4			6
6	11	32	4	1		19	72	5	5	3	6		
7	8	26		46		30	126	4	4	2	9	1035	
8	4	24		9		25	63	10	3		1	1380	
9	3	18		4		21	51	5	2		1	1440	5
10	2	25		2		24	51	11	6	1	2	1140	6
11	4	29		12		23	52	14	3	1	1	1440	29
12	3	23		9		37	65	6	4		1	780	
13	16	62	1	15		13	52	3		2	2		
14	26	44		7		17	55	5		3	6	1320	
15	12	50		5		29	95	7	2	1		540	
16	22	72		7		30	114	8	8	3	1	12	
17	25	29		5		30	45	5	2		2	1260	
18	12	39		5		22	71	4	1		1	1440	
19	16	55		3		24	64	5	1		1	1440	
20	15	76	1	5		20	51	2	4	1	8	1440	
21	26	56	2	83		24	39	4	5	1	7	1440	
22	7	36		51		25	59	17	5	1	1	1140	
23	8	27		44		32	42	1	4	1	1	1440	
24	16	39	1	4		37	52	3	7	1	3	1440	
25	18	27		6		26	48	6	7	2	1	1440	
26	13	27		37		30	64	8	6	4		360	5
27	29	91		8		41	87	8	3	3	7		11
28	48	109		19		24	111	11	6	9	6		
29	50	86	1	4		29	95	5		9	1	1410	5
30	21	48		26		23	76	6	1	1		900	9
31	14	39		28		31	93	9	4	2	1	1170	5
APR 1	17	47		22		18	76	7	3	2	3	1440	19
2	34	34		43		23	57	6	3		3	1440	
3	22	40	3	23		20	42	9	2	3	6	1500	
4	15	35	3	4		25	62	8	4	1	5	1380	
5	9	33		13		15	51	6		1		1380	
6	23	62	2			42	65	8		1		1440	32
7	14	47				34	97	3	2	5		1440	
8	11	46				64	58	12	3		1	1440	
9	15	29		5		47	84	10	3	1	3	1470	
10	17	40	7	35		43	49	13	3	2	6	1470	
11	4	32	6	12		19	56	7	4	2	8	1440	
12	16	23		7		24	51	7	1		2	1380	2
13	21	38		15		23	79	7	5	2	3	1440	
14	14	25	24	16		20	60	9	8	2	3	1440	
15	21	40		4		44	66	7	1	1		1440	
16	14	31		58		50	71	5	3	3	2	1470	10
17	9	43	5	28		37	59	8		2	9	1470	8
18	13	35	10	2		18	40	2	1	5	7	1320	
19	28	53		19		28	86	3	2			1020	

KILAUEA SUMMIT					KILAUEA FLANK			MAUNA LOA			TREMOR (MINUTES)		
DATE	SHORT PER.	LONG PER.	PERIOD	30	KAO.	UP.	LOW.	SHORT	LONG	NE	KILAUEA		
1992	CALD.	A	B C	KM	& SW RIFT	EAST RIFT	EAST RIFT	PER.	PER.	RIFT	SHAL.	INT.	DEEP
APR 20	70	152		17	28	308	5	2		1			21
21	63	171		10	37	104	12	7	3	2			5
22	44	155		11	35	248	9	2	2	2			3
23	20	105		24	36	115	5	1			780	7	23
24	9	23		19	25	47	10		2	5	1500		
25	9	16	1	14	17	42	4			6	1440		
26	6	11	32	30	30	60	3			2	1440	8	
27	9	7	9	15	46	66	4	4		2	1410		3
28	9	16	2	6	60	73	3	4	5		180		
29	14	66		8	47	88	6	4	1	1			15
30	18	43		15	51	126	3	3	2				
MAY 1	36	206		3	21	74	12	6	3	3			
2	38	223	2	2	23	106	9	4	2	9			2
3	31	71	1	7	24	165	7	1	10	2			
4	12	52	2	3	24	82	3	3	1		1140		
5	6	39		3	27	77	2	2	3		1440		
6	9	34	11	4	33	57	2	1		1	1440		
7		47	2	5	22	43	2	2	2		1440		
8	12	35	83	21	32	39	14	1	1	10	1500	2	
9	6	15	72	5	22	37	14	2	3	13	1440		
10	2	18	98	5	38	63	7	3	1	1	1380		
11	1	31		35	49	60	1	2			1140	35	
12	1	30	1	15	43	57	2			2	1410		
13	7	19	1	6	30	52	6	1	1	3	1440		50
14	6	31	136	3	39	54	5	1	1		1440		3
15	4	21	116	4	34	66	9	1	3	3	1500		
16	4	18	139	13	23	47	9		7	5	1440		
17	3	26	442	20	38	51	10	1		1	1380		4
18	5	21	192	46	24	59	12			3	1440		4
19	67	28	185	39	22	51	3		1	1	1470		23
20	8	25	118	15	24	51	7				1410		
21	3	27	86	10	21	71	8	1			1440		
22	7	68	49	4	23	72	13	1	1	3	300		
23	16	61	2	4	13	70	8	5	3	3			
24	48	157	1	8	30	79	3		3				
25	28	120		11	35	109	3		1				
26	20	69		4	29	153	8	4	1	6	360		6
27	6	56	33	6	26	76	9	2	1	4	1470		13
28	8	29	192	61	32	88	9	6		1	900		
29	6	28	7	39	29	67	7	3	5	1			
30	7	17	12	133	16	67	5	1		3			
JUN 31	7	119		69	32	81	10	4	1	1			
1	30	177	1	26	22	140	4	7	4		450		
2	10	44	22	20	20	86	6	6	2	2	1440		
3	4	36		16	31	93	4	5		4	1410		
4	5	27		9	38	91	11	4	2		1470		4
5	14	23	5	9	34	72	11		5	12	1440		3
6	9	17	20	23	22	49	2		12	4	1350		
7	9	23	29	49	26	62	12	3					45
8	27	80		9	27	52	3	1	1				
9	69	208		29	27	151	4	2	3				
10	33	64		32	47	140	2	1		1	1085		
11	18	49	34	3	33	67	7		3	1	1440		2
12	8	12	12	1	18	38	2	4	7	7	1440		
13	4	9	3	4	19	19	3	7	2	1	1440		

KILAUEA SUMMIT					KILAUEA FLANK			MAUNA LOA			TREMOR (MINUTES)			
DATE 1992	SHORT PER. CALD.	LONG A	PERIOD CALDERA B C	30 KM	KAO. & SW RIFT	UP. EAST RIFT	LOW. EAST RIFT	SHORT PER.	LONG PER.	NE RIFT	KILAUEA MAUNA SHAL. INT. DEEP LOA			
JUN14	14	22	3	20		23	35	8	2	2	3	1440		
15	4	28		24		16	51	5	1	2	4	1215		
16	6	43		32		18	45	5	3	1	9			
17	13	46		36		26	61	5	2					
18	12	45		71		32	79	8	4				6	
19	16	24	2	64	1	25	58	4	1	3	20			
20	13	32	1	69		25	108	5		1	5	540		
21	10	27	9	46		27	64	1	2			1380		
22	2	30	6	23		32	63	3			2	1470		
23	5	21	14	71		24	45	11	2		5	1440		
24	7	20	48	79		28	44	5	2			1410		18
25	4	6		63		30	60	7	5			1440		113
26	1	23		36		26	38	6	2	1	1	1470		5
27	4	18	12	47		16	29	3	4	3	2	1410	7	7
28	5	18	1	24		21	31	5	3	3	6	1440		
29	2	20	110	25		28	32	6	7		1	1440		
30	1	28	74	3	1	36	38	4	3	2	3	1440		3
JUL 1		30	14	3		20	30	10	3		6	1440		
2	4	24	14	1	1	11	47	9	4	4	3	1500		
3	4	17	5	3		17	54	6	2	1	4	1440		
4	6	14		1	1	18	24	3	2		3	1440		
5	3	36	1	1		24	43	5	4	2	1	1380		4
6	10	32	1	6		31	74	13	6		3	1440		11
7	5	34	23	9		20	63	7	8	3	5	1440		
8	10	26	13	12		10	29	1	2	1	3	1440		
9		15	25	3		17	28	4	4		1	1440		
10	6	28	7	13	1	27	33	3	3	1	3	1470		
11	6	19				14	35	8	4		3	1440		
12	5	45	38			39	48	2	7		1	1380	8	
13	5	50	52	8		39	29	3	8	1	1	1440		
14	5	41	26	7		28	26	2	4	1	2	1440		
15	5	36	3	10		20	57	4	4	5		1440		
16	3	35	28	27		19	48	3	2			1440	10	
17	9	23	23	3		21	38	6	2			1440		
18	8	25	13	7		22	53	1	2	2	1	1500		
19	8	45	8	10		20	50	1	8		1	1380		
20	4	32	18	7		21	43		2			1470	7	
21	3	48	8	25		23	47	3	3		4	1380		
22	1	34	275	3		24	45	1	4		4	690		
23	11	56	2	13		17	38	1	5		2			
24	29	130		2	1	23	50	5	2	1	4			
25	69	175				21	39	2	1		1			
26	20	188		9		25	121	2	4	1	1	408		3
27	4	35		3		18	47	3	7	2	4	1440		
28	4	36		11		20	51	4	4	2	5	1440	4	10
29	3	31	1	5		24	42	8	3		3	1440		
30	2	21		1	2	31	28	2	2	1	3	1440		2
31	10	23	1	4		14	36	4		3	1	1500		7
AUG 1	7	13	1			13	32	5	2	1	3	1380		
2	2	12	157	3		21	42	4		2		1440		2
3	3	14	167	6	1	33	33	3	4		1	1440		4
4	1	26	266	5		23	26	8	3	3		1410		7
5	2	28	238	2		21	50	5	3	2	1	1470		
6	1	27	143	1	3	29	30	1	1	1	4	1440		
7	5	12	7	3		16	33	4		2	7	1440		11

KILAUEA SUMMIT					KILAUEA FLANK			MAUNA LOA			TREMOR (MINUTES)		
DATE	SHORT PER.	LONG PER.	PERIOD	30	KAO. UP. LOW.	SHORT LONG NE	SHORT LONG NE	SHORT LONG NE	KILAUEA	MAUNA			
1992	CALD.	A	B C	KM	& SW RIFT	EAST RIFT	EAST RIFT	EAST RIFT	SHAL.	INT.	DEEP	LOA	
AUG 8	13	17	17	5	13	23	2	3	1	3	1440		
9	1	20	217	8	38	41	10	2	1	1	1440		
10	2	29	297	42	18	35	1	3	4	1	1440		
11	3	24	345	48	25	32	2	5	1	1	510		
12	2	30	142	48	20	100	1	7	3			3	
13	2	69	20	68	12	53	3	3	3	3			
14	21	83	2	24	21	75	4	2	5	4			41
15	16	27		16	43	80	4			7	990		
16	7	54	7	3	43	37		7	5	4	1410		26
17		47	4	15	27	58	6	3		4	1440		13
18	2	27	12	8	30	57	5	8	2	1	1380		
19		23	49	8	39	49	3	4	2	2	1470		2
20	2	26	8	23	29	83	3	3	6	2	1440		
21	16	22		10	14	51	1	5	1	3	1470		
22	5	18		15	14	49	4		5	3	1410		
23		27	13	20	26	66	1	2	1	4	1470		
24	9	43	2	7	15	39	4	6	7	2	1380		
25	1	36	10	6	22	44	1	3	2	1	1440		4
26*											1440		
27	2	32	6	15	25	61	1	2	1		1440		
28	5	3		5	8	17	1		1	1	1560		
29	10	9	1	18	11	41	2		3	7	120		
30	12	56		8	41	82	2	8	2	1		5	
31*											1440		
SEP 1	16	141	2	9	22	225	4	2		3	835		
2	9	39	3	31	33	114	1	6	2	3	1440	3	
3	4	31	1	6	31	55	5	5	1	6	1440		
4	10	14		27	19	30	1	3	5	3	1440		6
5	5	13	10	24	15	27		1	4	4	1440		
6	2	27	15	40	19	56	2	7	1		1440	23	
7		24	58	143	24	51	2	5			1440		
8	8	23	9	59	26	48	4	2	1	4	1170		
9	3	38		21	22	37	1	4	1	1			
10	88	114		9	16	60	1	1					
11	53	240		4	17	149	4	1		3			
12	13	47		24	26	110	1	3		2	900		
13	5	29		1	13	84	2	2		1	1500		
14	12	21	7	29	13	83	2	4	1	1	1350		32
15	25	31	29	31	11	117	4	9	1	2	1470		29
16	1	22	16	43	10	93	2	5	1	2	1440		
17	8	28	113	52	16	99	1	6		1	1440		31
18	6	21	37	19	18	55	3	4	2	2	1470		
19	4	28	13	11	23	56	3	4		1	1410		
20*											1440		
21	2	25		7	23	64	3	5	7	1	1380	4	
22	1	5		7	28	41	3	3	4	1	1470		
23		31	2	11	24	54	10	7	2	3	1440		3
24		30	21	34	25	49	9	7	1		1440		
25		30	2	36	23	46	2	2		2	1440		
26	4	24	1	35	23	68	5	1		3	1440		
27	9	18	1	14	26	36	4	1	2	5	1200		
28	1	24	197	15	27	72	4	7		2			
29	3	69		13	27	47	4	4	2				3
30	5	85	2	11	25	65	9	4		6			37
OCT 1	13	213		6	20	93	2	2	1				

KILAUEA SUMMIT					KILAUEA FLANK			MAUNA LOA			TREMOR (MINUTES)		
DATE 1992	SHORT PER. CALD.	LONG A	PERIOD CALDERA B C	30 KM	KAO. & SW RIFT	UP. EAST RIFT	LOW. EAST RIFT	SHORT PER.	LONG PER.	NE RIFT	KILAUEA SHAL. INT. DEEP	MAUNA LOA	
OCT 2	13	69		5	15	197	4	5	1		1020		
3	1	26	219	5	20	28	2	4		3	1440		
4	1	25	175	1	10	41	2	2		2	1500		
5	1	28	111	5	15	51			1	1	1380		
6	2	23	119	1	19	38	4	1			1440	7	
7	3	19	85	2	18	49	5	5		4	1440		
8		25	44	2	18	42	2	3		2	1440		
9		36	33	2	26	51	3	4	1	3	1470		
10		80	9	2	15	23	3	1	2	3	1410		
11	1	98	5	2	18	31	3	7		7	1680		
12*											1440		
13	2	20	2	3	22	48	4	7		3	1440	35	
14		42		8	29	50	8	2		1	1440		
15		32	1	10	22	39	10	6	2	4	1440		
16	2	21		8	10	45	2	7			1470		
17	3	33		23	22	35	8	3		1	1410	3	
18	2	32		15	26	60	6	3	1	1	103		
19	1	23		11	16	44	6	3		2	1230		
20	1	37	7	28	6	44	2	6	1		1440		
21	1	21	2	3	14	33	5	1			1500		
22	5	30	1	1	14	31	6		1		1380		
23	10	51		1	9	40	3				1470		
24	3	30			11	15	3	1			1470		
25	4	22			13	28	6	2			1440		
26		25		17	17	45	4	1		2	1380	2	
27	2	17		2	28	35	6	6	2	2	1470		
28	3	28		1	19	33	7	3	1		1410		
29	3	27			14	43	8			2	1440		
30	1	22		8	24	52	12				1440		
31	1	23		5	23	66	12	8			1500	6	
NOV 1	1	27	1	7	18	48	9	2			1440	10	
2	1	21			22	39	4				1410		
3	1	16			24	54	2				1410		
4	1	19			12	34	9	4	1	2	1440	3	
5		23		3	18	35	3	3		1	1440		
6	4	22	1	2	15	36	4	1		1	1470		
7		18			20	32		1		4	1470	3	
8		21	6	1	16	37	7			2	1440	8	
9	5	14			26	16	4			5	1380		
10	1	24		2	19	29	2	2		1	1500	50	
11	5	24		11	13	38	9	2		2	1380	42	
12		26	236		26	36	5	3	2	3	1440	38	
13	2	22	1	1	18	42	2	1		1	1500		
14	2	34	2		17	32	5	3		2	1440		
15	2	22		1	19	24		2	1	1	1380	45	
16	1	31	2		13	34	9	1		1	1440	6	
17	4	25		2	22	27	6	3	1	3	1440		
18		43	51	2	15	33	9	2	1	3	1500	15	
19	4	133	2	5	10	15				1	1380	312	
20	2	17		9	25	17	5	2	1		1470	30	
21		45		35	10	35	5	9			1440	107	
22	3	46		40	14	21	4	2		1	1470		
23	10	35	4		16	35	1	6		4	1380		
24	2	27	3	7	19	16	3	6		7	1440		
25		17	4	183	13	33	5	2	1	6	1470	60	

KILAUEA SUMMIT						KILAUEA FLANK			MAUNA LOA			TREMOR (MINUTES)		
DATE	SHORT PER.	LONG PER.	PERIOD	30		KAO. UP. LOW.			SHORT PER.	LONG PER.	NE RIFT	KILAUEA MAUNA		
1992	CALD.	A	B C	KM		& SW RIFT	EAST RIFT	EAST RIFT				SHAL.	INT.	DEEP
NOV26	2	31	20	121	6	22	32	2	3		2	1440		
27	2	31	1	30	1	13	26	1	3		1	1440		
28	4	52		29	1	6	30	1	3	1	2	1440		
29	5	100		2		14	34	2	4			1410		
30	5	87	4	7		19	38	1	5	2	3	1440		
DEC 1	16	83		3		9	46	3	3	2	3	1440		
2	3	54		2		20	49	2	4	1	1	1440		11
3	7	56		11		15	42	7	1		2	1440	5	28
4	10	44	1	1		6	16		4	8	2	1440		
5	10	51	4	1		3	16		2	5	3	1440		
6		43	1	1		8	21	2	1		1	1440		
7	1	42	2	4		17	24	5	3	4	2	1440		
8		28	1	6		20	27	6	6	1	3	1440		
9	2	35	3	6		19	37	9	4	2		1440		
10	2	43		4		22	19	6	2	2		1440		
11	3	33		13		20	34	1	8	1		1440		
12	1	32		3		21	46		6			1440		
13	2	31		2		14	36	5	8			1440		
14		36				15	31	1	1			1440		
15	4	28		1		5	40	7	2		2	1440		
16		41		1		17	37	3	9	1	4	1440		
17	2	33		3		15	38	4		3	2	1440		5
18*												1440		
19	1	21		20		18	32	7	9		2	1440		
20	1	30		1		24	40	8	7	1	3	1440		
21	3	39		3		29	42	5	6	1	3	1440		
22	3	25		4		28	36	2	2		4	1440		12
23	2	44		1		24	48	4	5	4	13	1440		5
24	1	30		4		22	48		5	1	1	1440		2
25	1	27		3		19	43	3	4	2	1	1440		77
26	4	44		2		18	41	2	2			1440		4
27		38		2		18	33		6			1440		3
28	2	33		5		18	42		3		2	1440		11
29	1	43		2		24	44	4	6		4	1440		
30	2	57				16	25	1	3			1440		
31	3	53		5		14	28	6	1	8	1	1440		

*Data incomplete - station(s) or recorder not in operation.

Table 4. Names and coordinates of regions used for classifying earthquakes.

All earthquakes locate in one of the following groups, identified by a numerical class or three-letter code:

—Shallow:

- 1 SNC - Shallow north caldera (0-5 km)
- 2 SSC - Shallow south caldera (0-5 km)
- 3 SEC - Shallow east caldera (0-5 km)
- 4 SER - Shallow east rift (0-5 km)
- 5 SME - Shallow middle east rift (0-5 km)
- 6 KOA - Koaie fault zone (0-5 km)
- 7 SSF - Shallow south flank (0-5 km)
- 8 SLE - Shallow lower east rift (0-5 km)

—Intermediate depth:

- 9 SF1 - Kilauea south flank (5-13 km) (west end)
- 10 SF2 - Kilauea south flank (5-13 km)
- 11 SF3 - Kilauea south flank (5-13 km)
- 12 SF4 - Kilauea south flank (5-13 km)
- 13 SF5 - Kilauea south flank (5-13 km) (east end)
- 14 LER - Lower east rift (5-99 km)
- 15 MLO - Mauna Loa (0-13 km)
- 16 LSW - Lower southwest rifts of Kilauea and Mauna Loa (0-13 km)
- 17 GLN - Glenwood (0-13 km)
- 18 SWR - Southwest rift (0-13 km)
- 19 INT - Intermediate caldera (5-13 km)
- 20 KAO - Kaoiki (0-13 km)

—Deep:

- 21 DEP - Deep Kilauea (>13 km) (below regions 1-13, 17-19)
- 22 DLS - Deep lower southwest rift (>13 km) (below region 16)
- 23 DML - Deep Mauna Loa (>13 km) (below regions 15, 20)

—Outer regions, all depths:

- 24 LOI - Loihi
- 25 KON - South Kona
- 26 HUA - Hualalai
- 27 KOH - Kohala
- 28 KEA - Mauna Kea
- 29 HIL - Hilo
- 30 DIS - Distant, everywhere else

Table 4 (continued). The latitude and longitude limits of the regions are given below. When the coordinates overlap, precedence is given as in the maps.

No.	Code	N. Lat.	S. Lat.	W. Lon.	E. Lon.
1	SNC	19 28.0	19 24.5	155 19.0	155 14.0
2	SSC	19 24.5	19 22.0	155 19.0	155 16.5
3	SEC	19 24.5	19 22.0	155 16.5	155 14.0
4	SER	19 26.0	19 20.5	155 14.0	155 07.2
5	SME	19 26.0	-----	155 07.2	155 00.0
6	KOA	19 22.0	19 20.5	155 17.0	155 14.0
7	SSF	-----	19 10.0	155 17.0	155 00.0
8	SLE	19 32.0	19 16.0	155 00.0	154 40.0
9	SF1	19 22.0	19 10.0	155 17.0	155 14.5
10	SF2	19 26.0	19 10.0	155 14.5	155 12.3
11	SF3	19 26.0	19 10.0	155 12.3	155 09.1
12	SF4	19 26.0	19 10.0	155 09.1	155 05.3
13	SF5	19 26.0	19 10.0	155 05.3	155 00.0
14	LER	19 32.0	19 16.0	155 00.0	154 40.0
15	MLO	19 35.0	19 19.0	155 35.0	155 19.0
16	LSW	19 19.0	18 40.0	155 43.0	155 25.0
17	GLN	19 35.0	19 26.0	155 19.0	155 00.0
18	SWR	19 22.0	19 10.0	155 25.0	155 17.0
19	INT	19 28.0	19 22.0	155 19.0	155 14.0
20	KAO	19 30.0	19 19.0	155 32.0	155 19.0
21	DEP	19 35.0	19 10.0	155 25.0	155 00.0
22	DLS	19 19.0	18 40.0	155 43.0	155 25.0
23	DML	19 35.0	19 19.0	155 35.0	155 19.0
24	LOI	19 10.0	18 40.0	155 25.0	155 00.0
25	KON	19 39.0	19 00.0	156 20.0	155 43.0
26	HUA	19 55.0	19 39.0	156 20.0	155 43.0
27	KOH	20 25.0	19 55.0	156 20.0	155 34.0
28	KEA	20 25.0	19 35.0	155 34.0	154 40.0
29	HIL	19 47.0	19 32.0	155 09.0	154 40.0

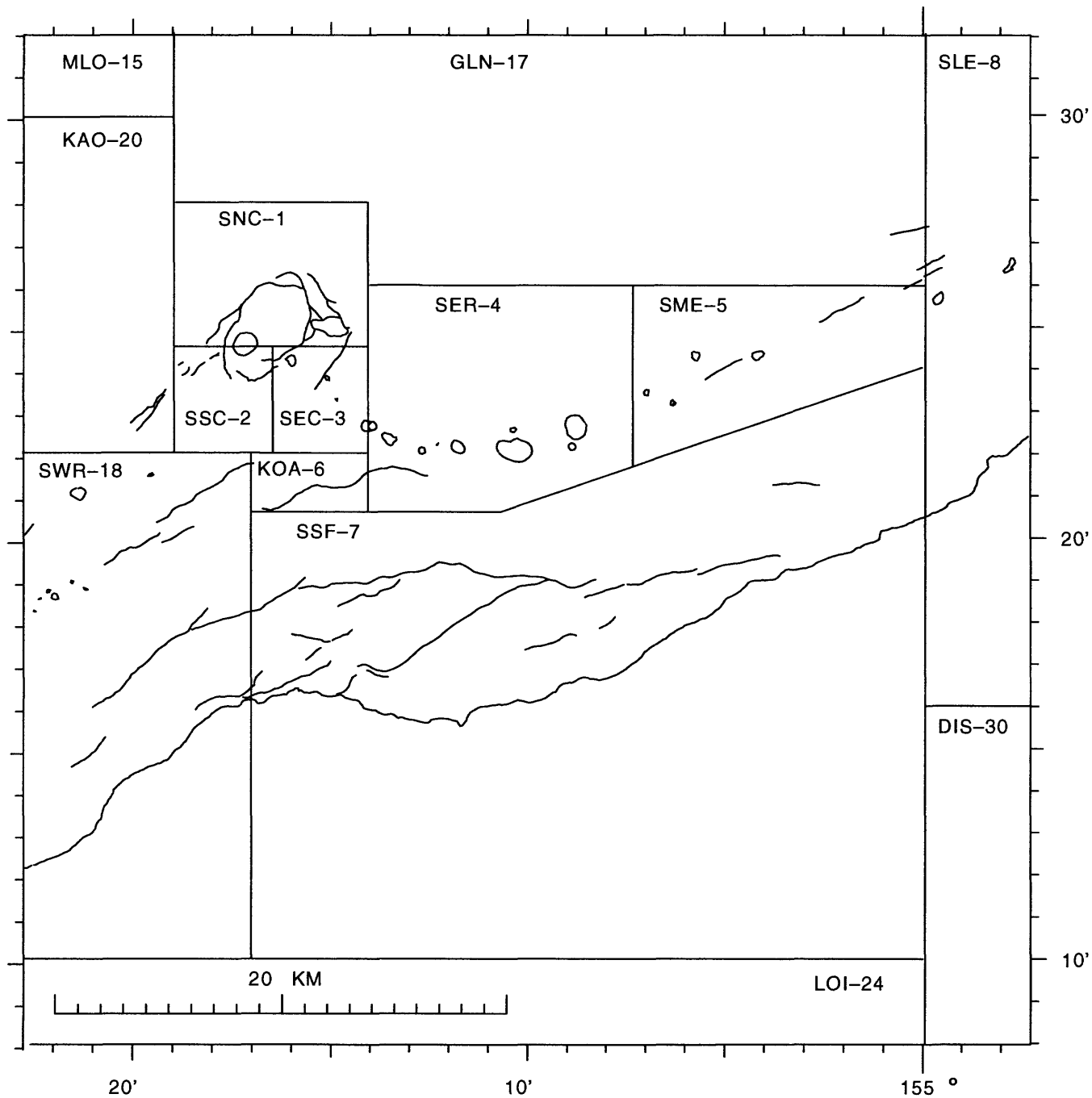


Figure 5. Earthquake classification, shallow (0-5 km deep), for Kilauea and the east flank of Mauna Loa.

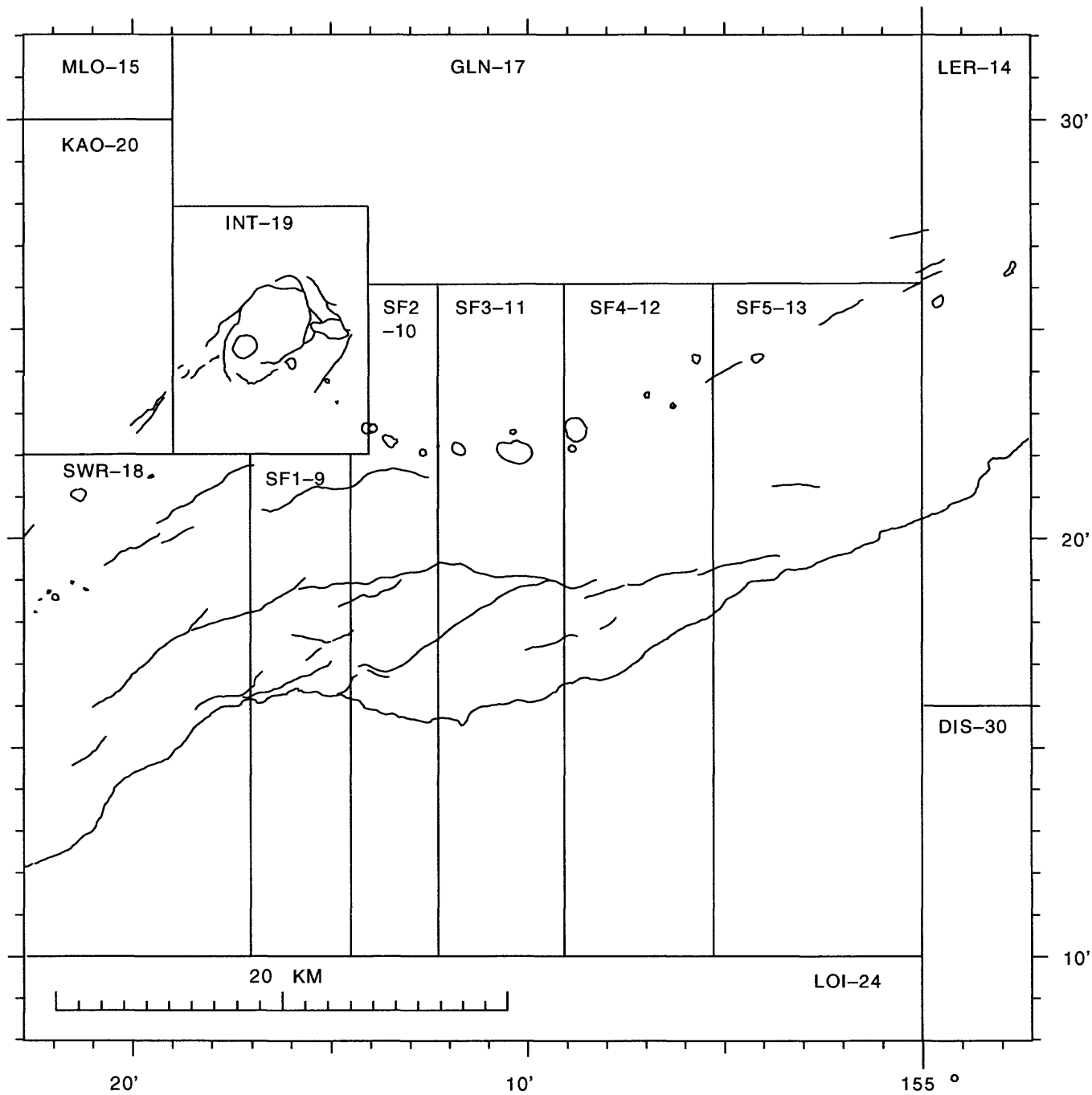


Figure 6. Earthquake classification, intermediate (5.1-13 km deep), for Kilauea and the east flank of Mauna Loa.

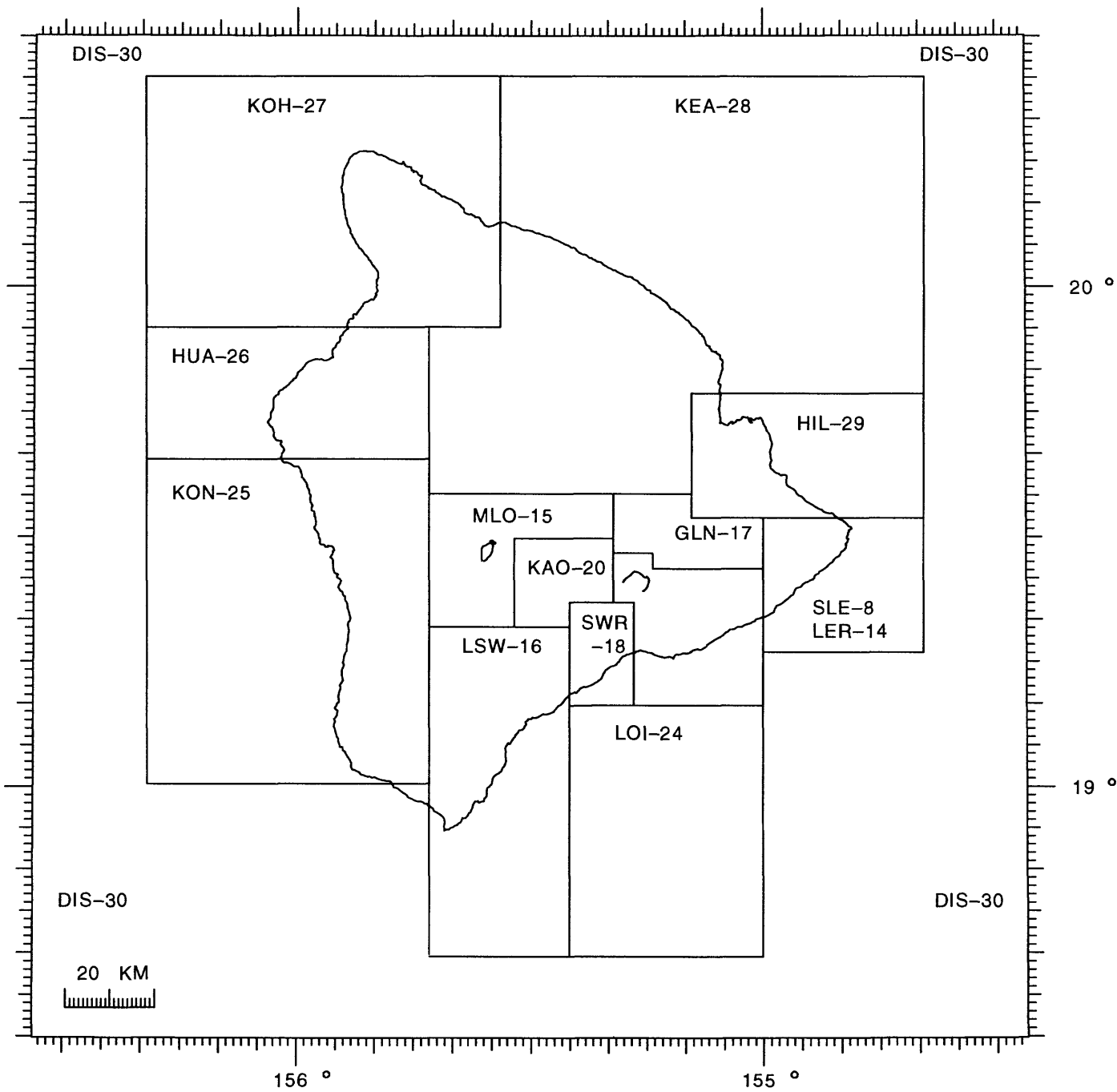


Figure 7. Earthquake classification, crustal (0-13 km deep), for the Island of Hawaii.

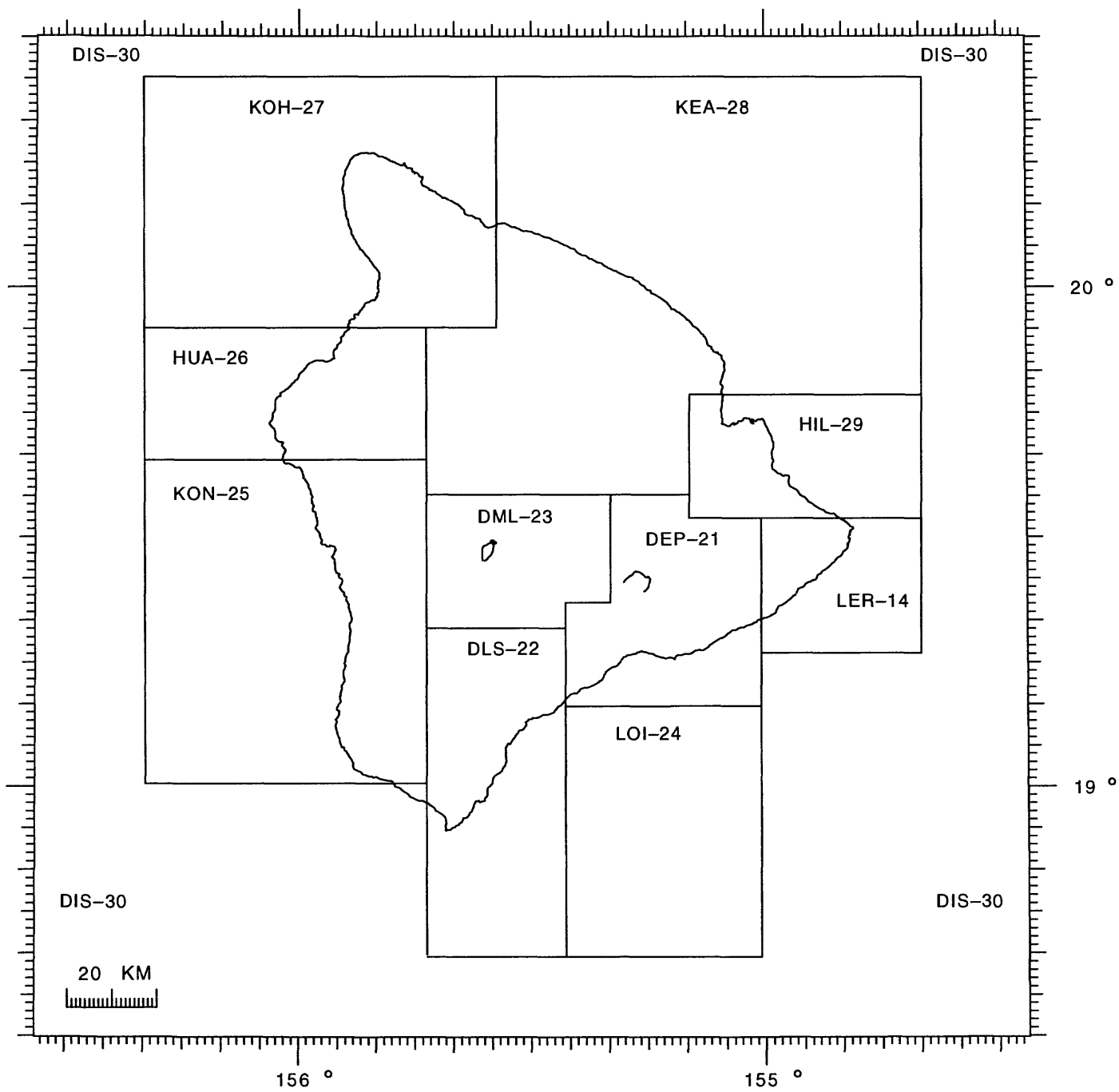


Figure 8. Earthquake classification, deep (greater than 13 km deep), for the Island of Hawaii.

DEPTHS

- 0.0+ (plus sign)
- 5.0+ (square)
- 13.0+ (diamond)
- 20.0+ (triangle)

MAGNITUDES

- 3.5+ (small square)
- 4.0+ (medium square)
- 5.0+ (large square)
- 6.0+ (very large square)

100 KM

Latitude: 23°, 22°, 21°, 20°, 19°, 18°

Longitude: 161°, 160°, 159°, 158°, 157°, 156°, 155°, 154°

Figure 10. 1992 Earthquake Locations, Hawaii Island,
0–60 km depth, $M \geq 3.0$.

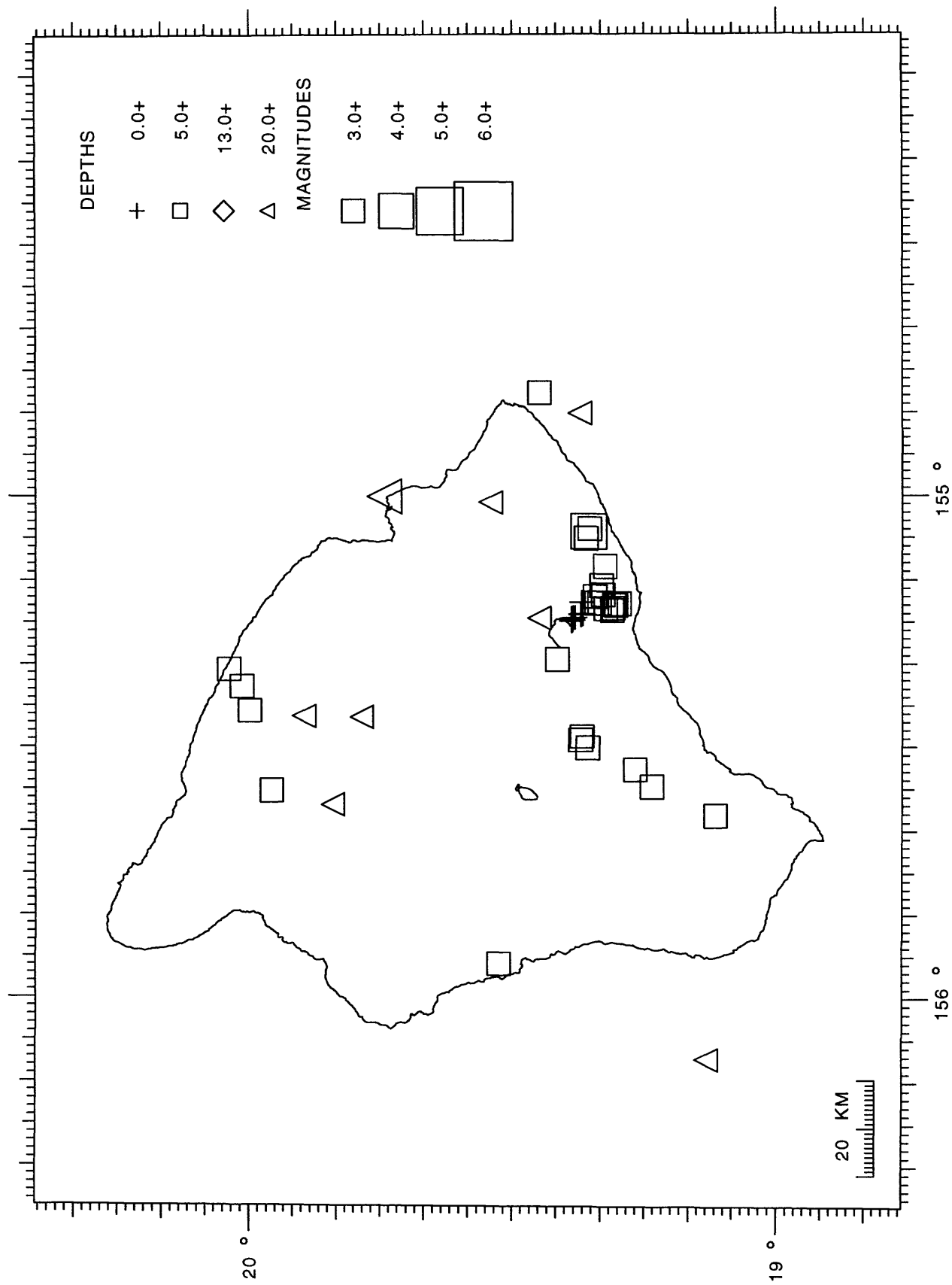


Figure 11. 1992 Earthquake Locations, Hawaii Island, shallow (0–5.0 km depth), $M \geq 2.0$.

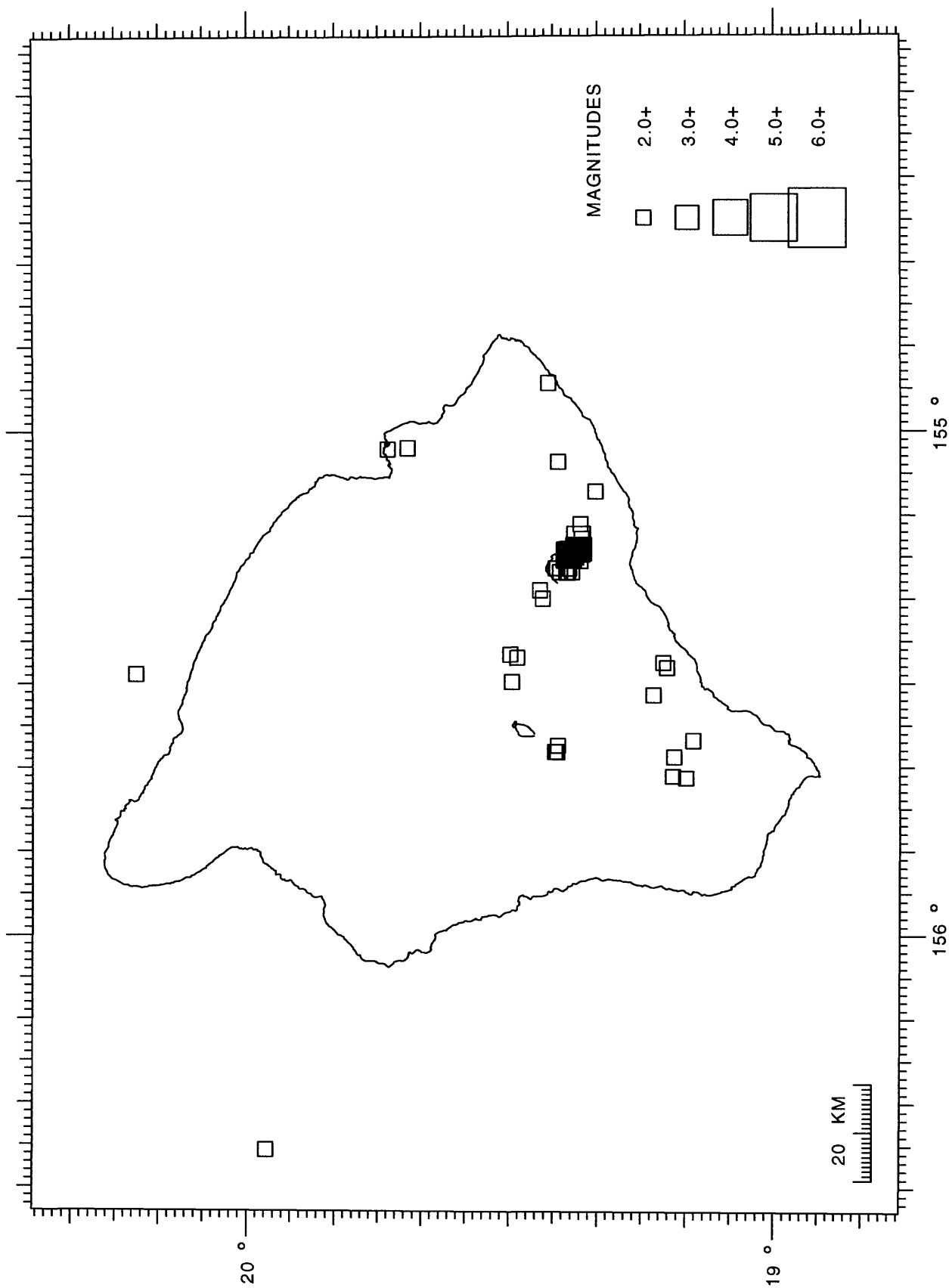


Figure 12. 1992 Earthquake Locations, Hawaii Island, intermediate (5.1–13.0 km depth), $M \geq 2.0$.

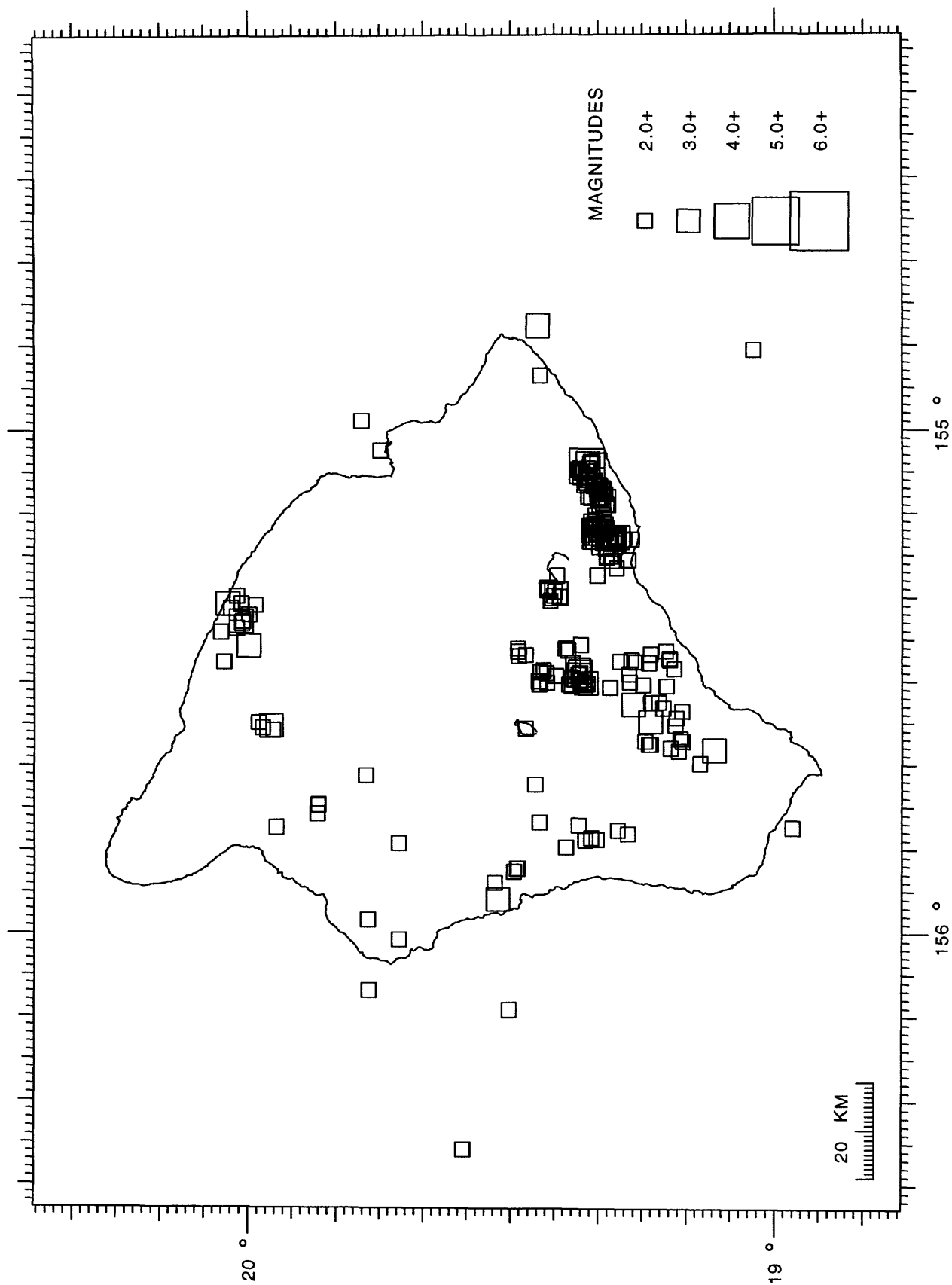


Figure 13. 1992 Earthquake Locations, Hawaii Island, deep (13.1–60.0 km depth), $M \geq 2.0$.

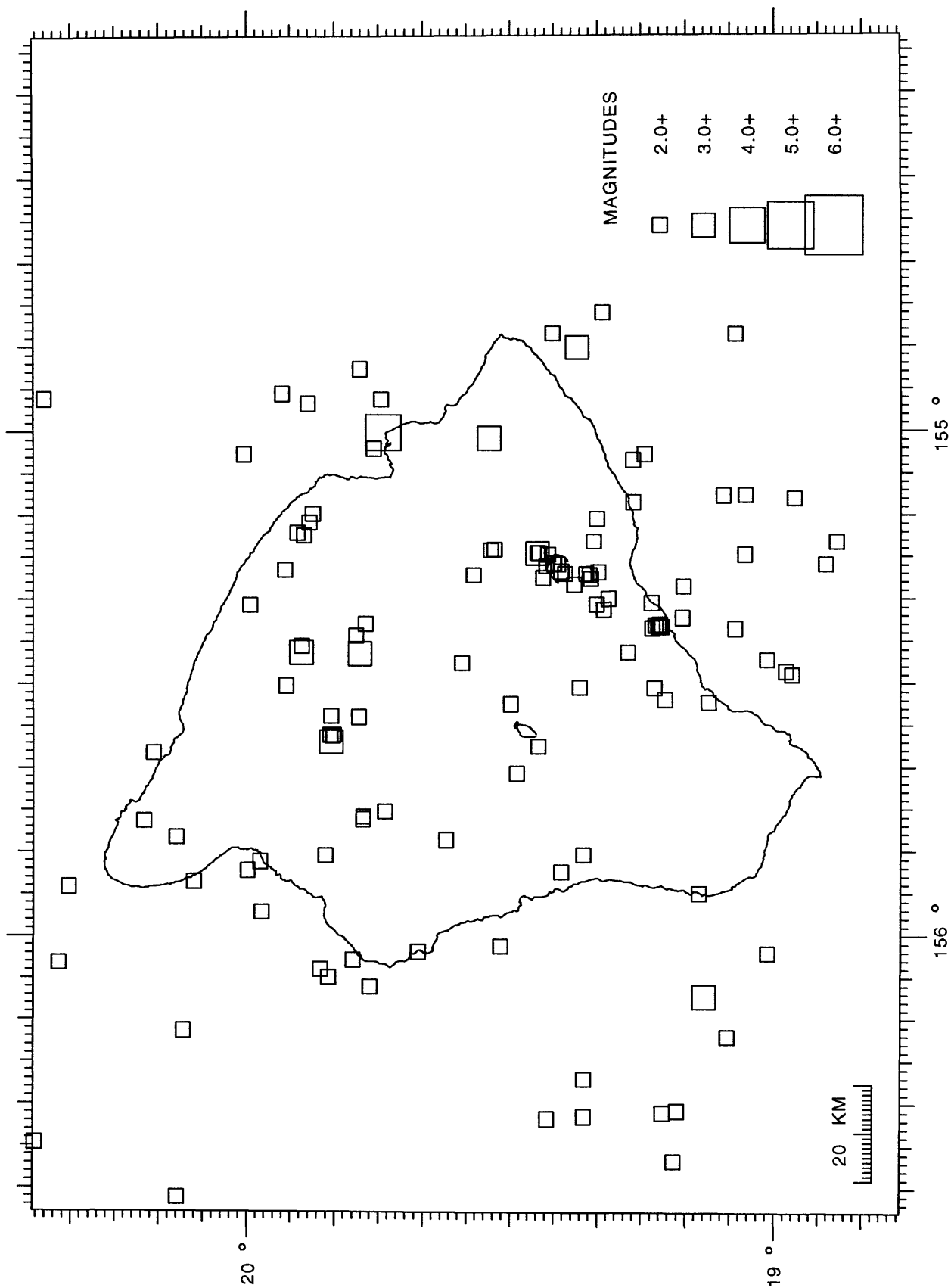


Figure 14. 1992 Earthquake Locations, Kilauea Summit, shallow (0–5.0 km depth), $M \geq 1.0$.

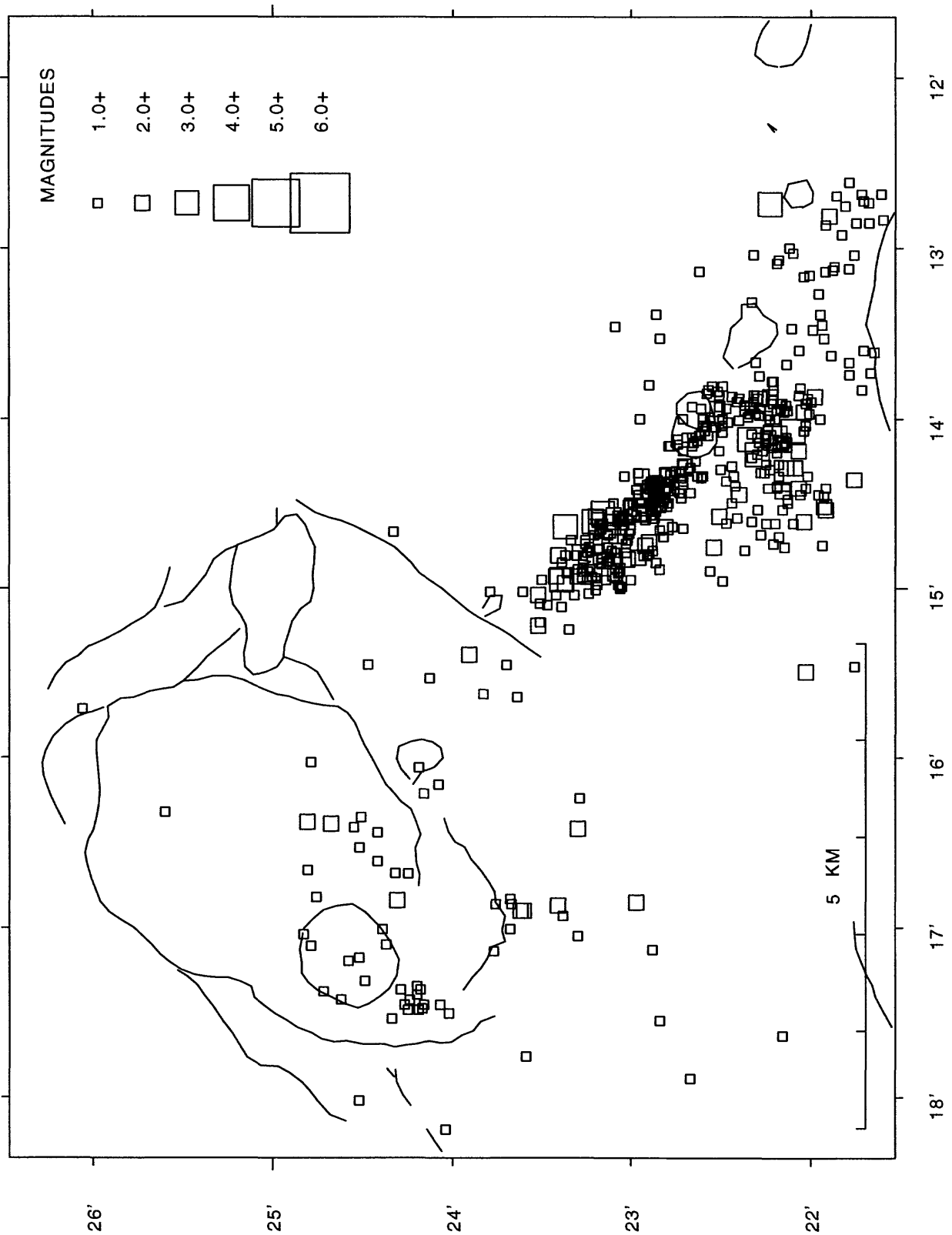


Figure 15. 1992 Earthquake Locations, Kilauea Summit, intermediate (5.1–13.0 km depth), $M \geq 1.0$.

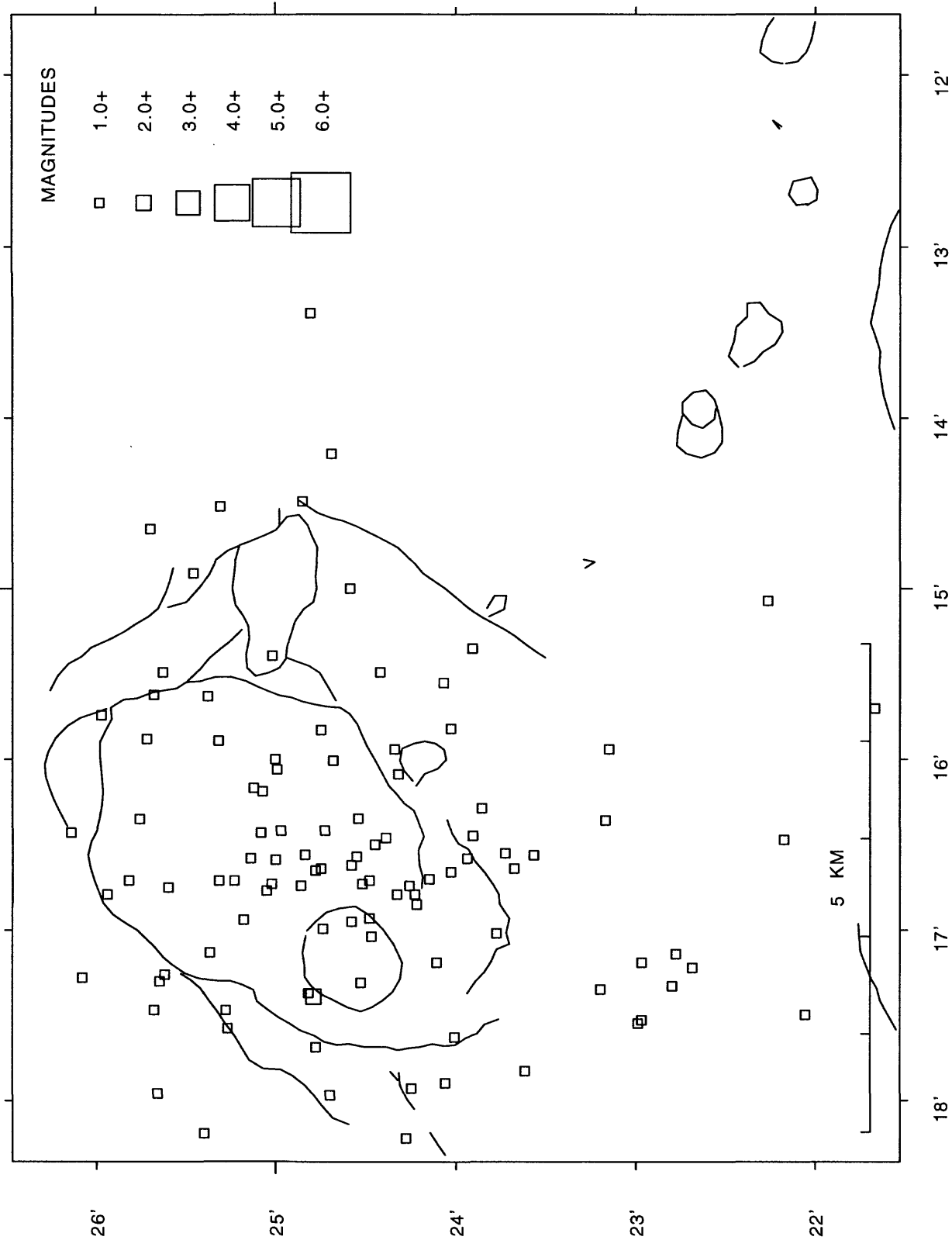


Figure 16. 1992 Earthquake Locations, Kilauea Summit,
deep (13.1–60.0 km depth), $M \geq 1.0$.

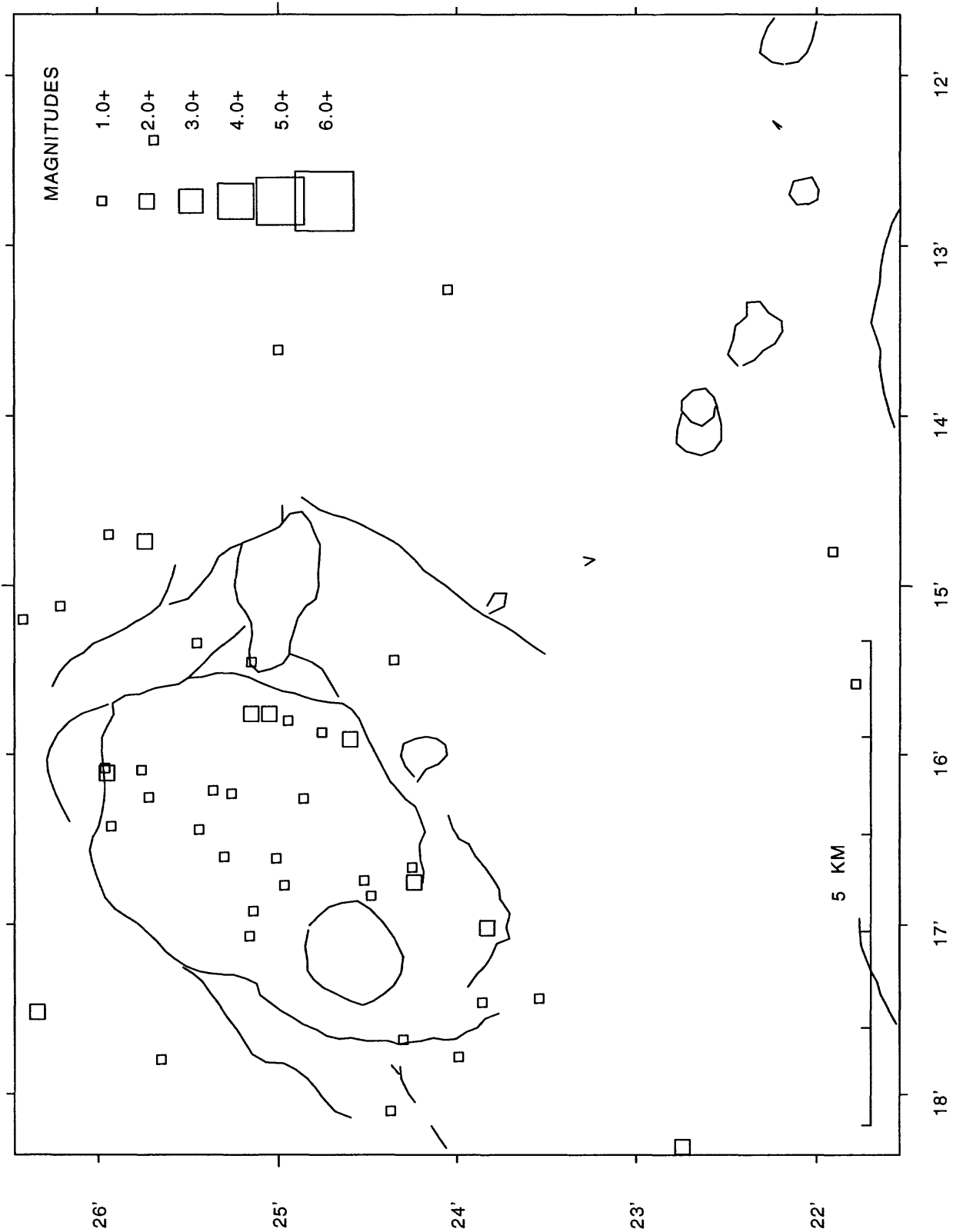


Figure 17. 1992 Earthquake Locations, Kilauea South Flank, shallow (0–5.0 km depth), $M \geq 2.0$.

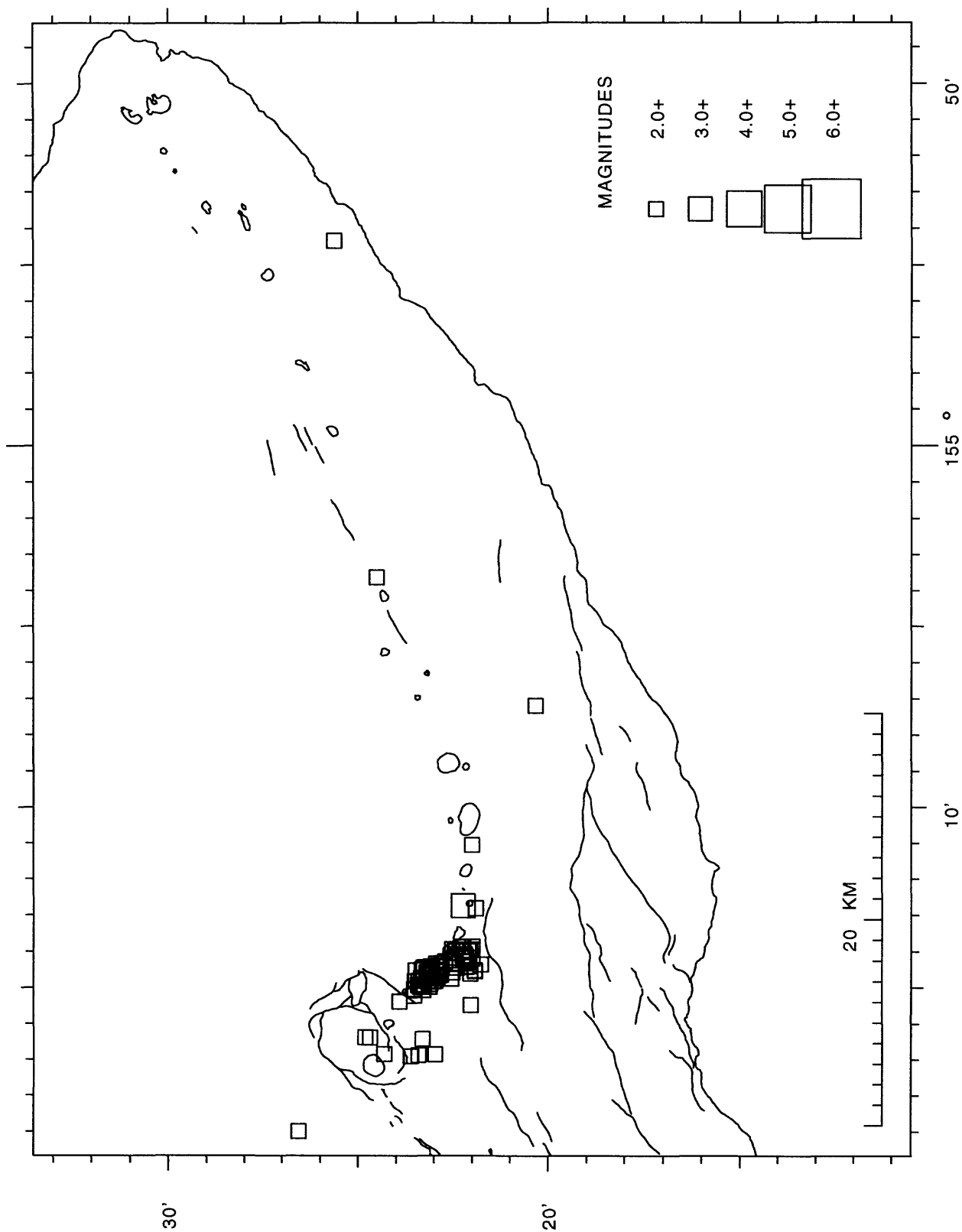


Figure 18. 1992 Earthquake Locations, Kilauea South Flank, intermediate (5.1–13.0 km depth), $M \geq 2.0$.

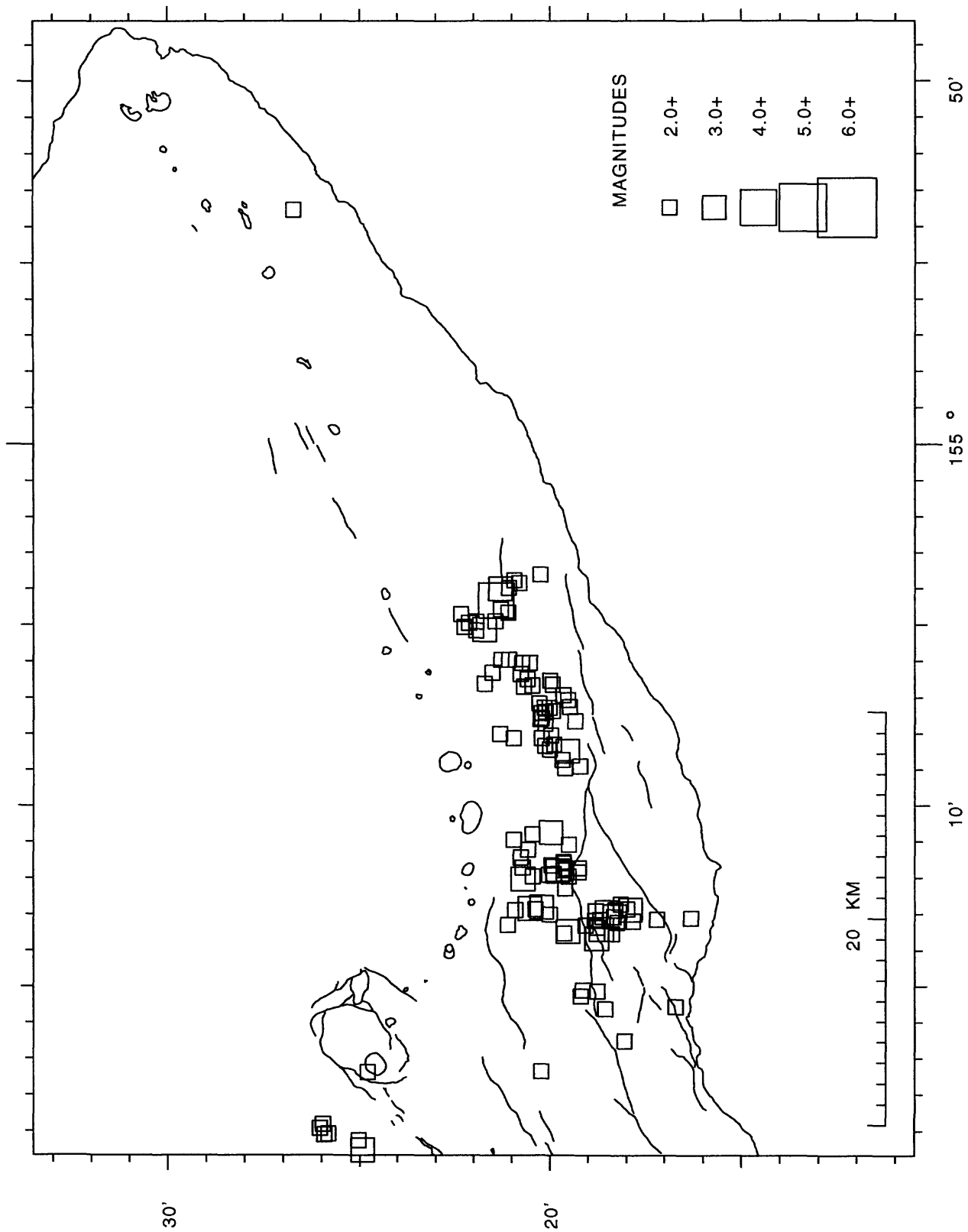


Figure 19. 1992 Earthquake Locations, Kilauea South Flank, deep (13.1–60.0 km depth), $M \geq 2.0$.

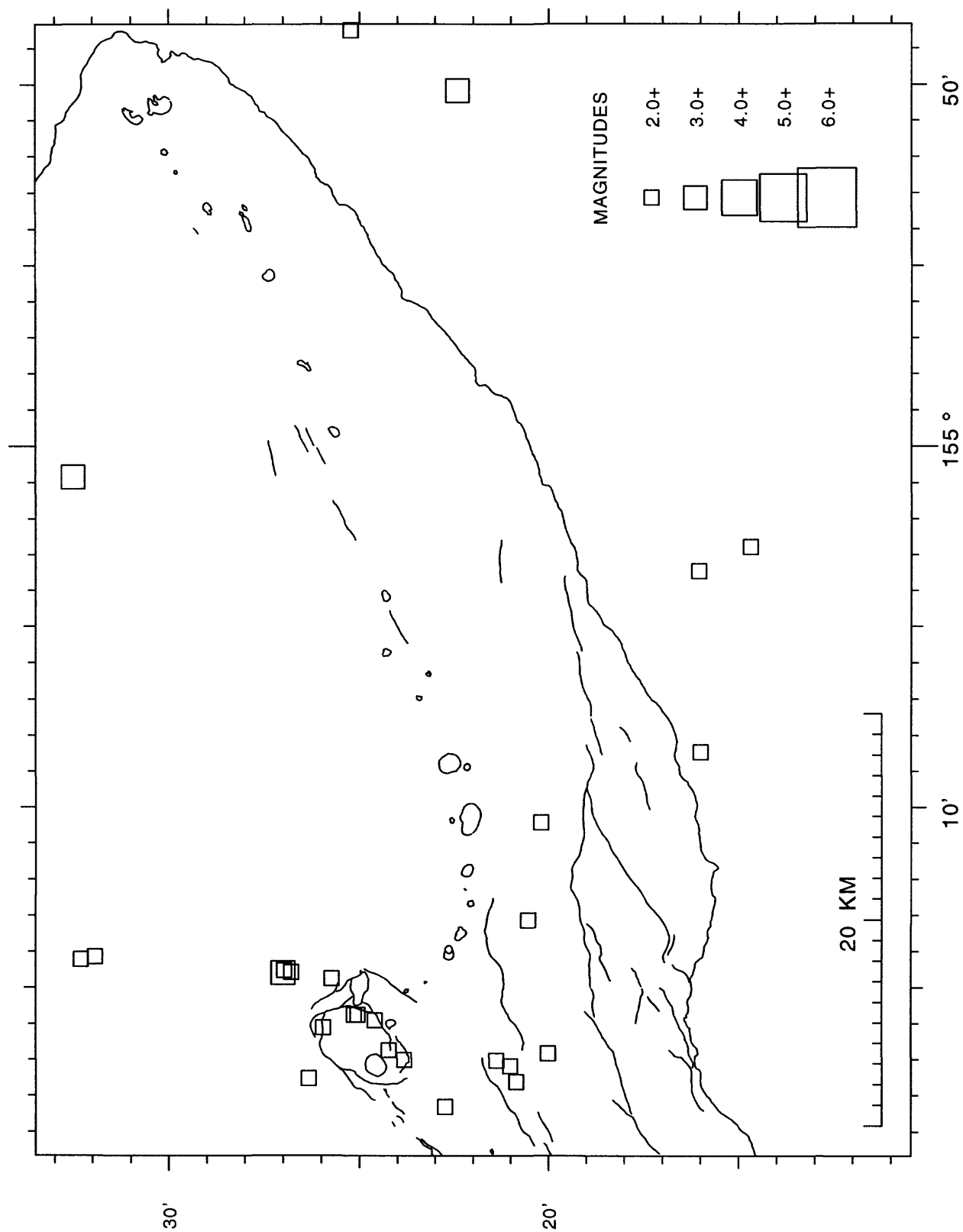


Figure 20. 1992 Earthquake Locations, Mauna Loa Summit,
shallow (0–5.0 km depth), $M \geq 2.0$.

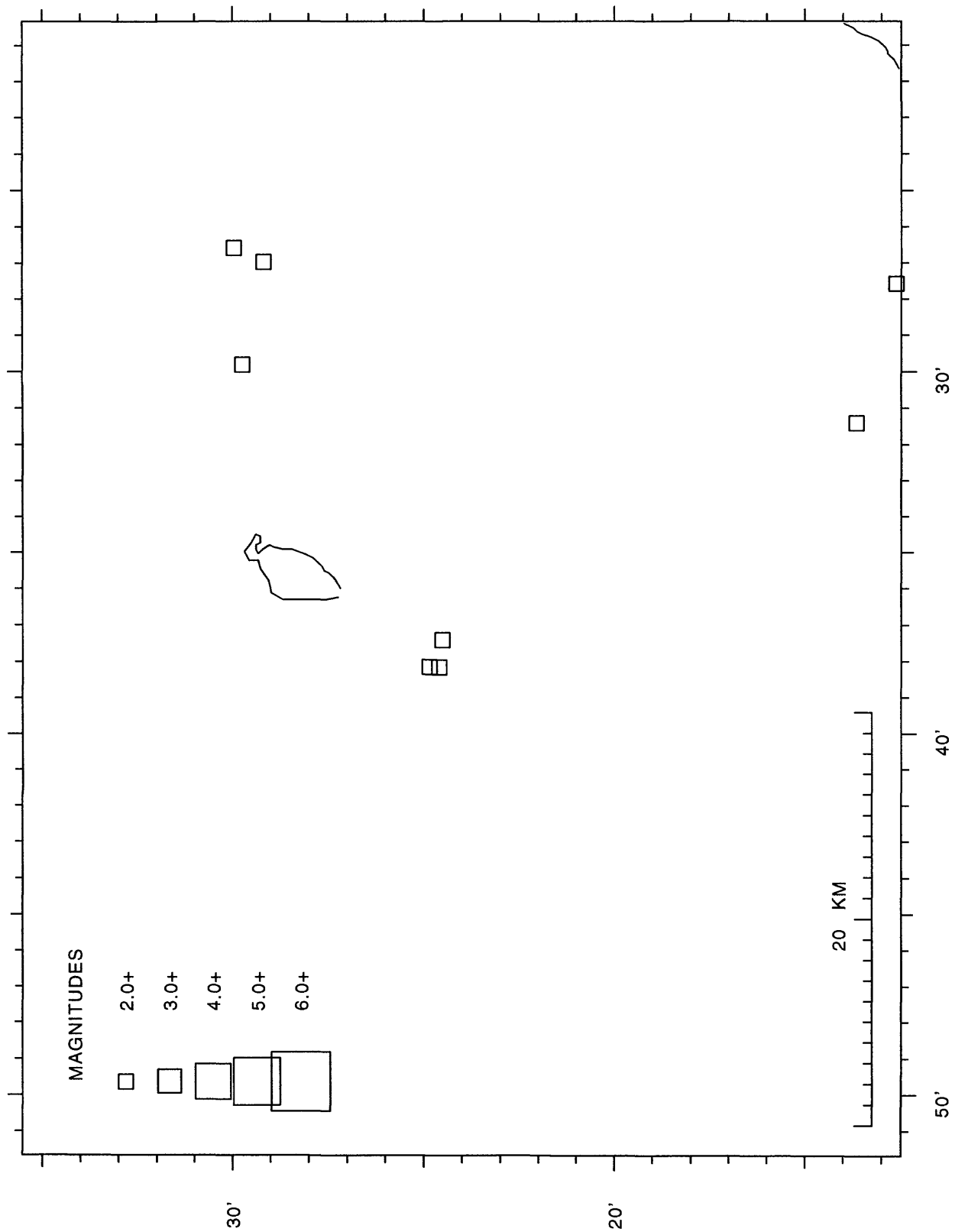


Figure 21. 1992 Earthquake Locations, Mauna Loa Summit, intermediate (5.1–13.0 km depth), $M \geq 2.0$.

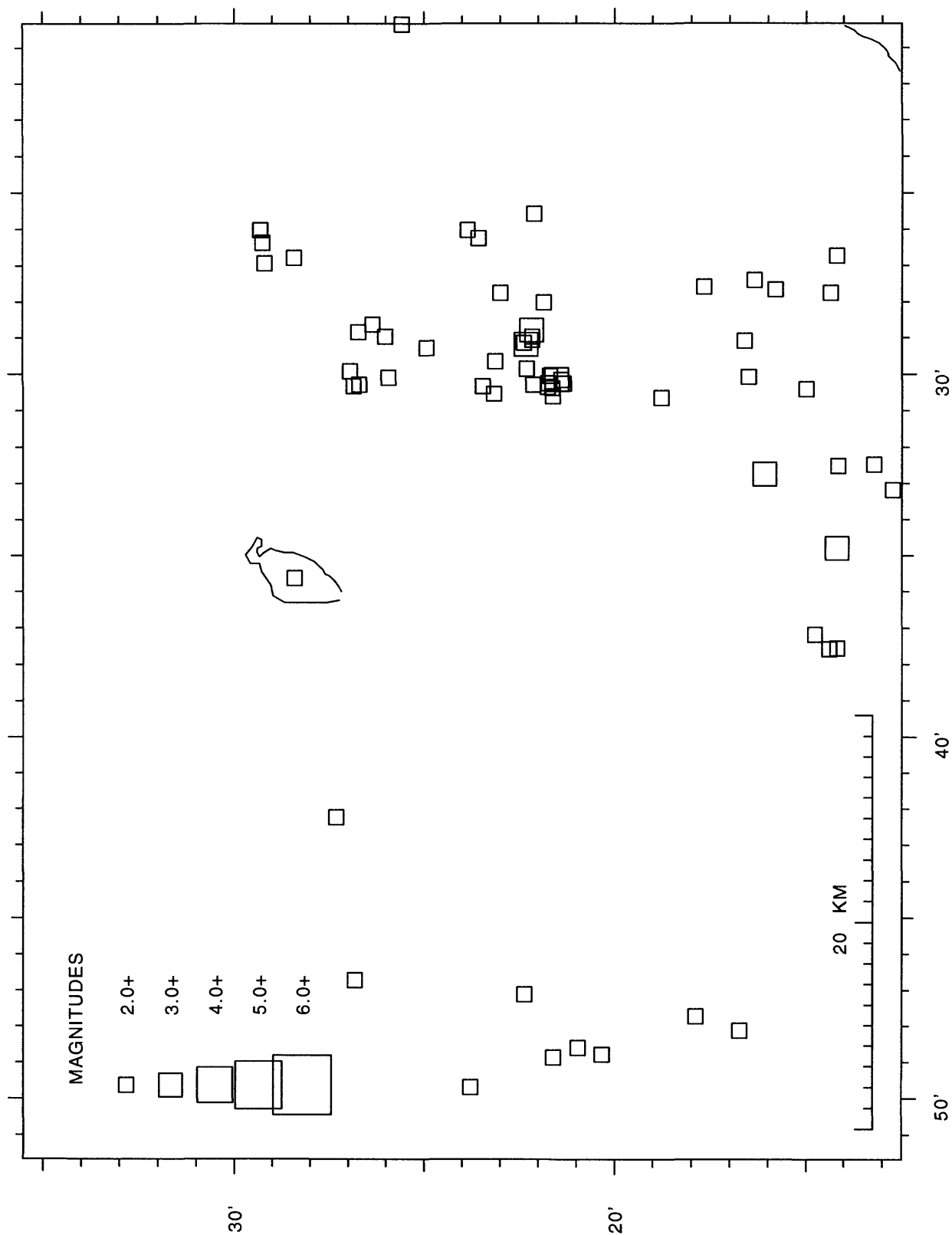


Figure 22. 1992 Earthquake Locations, Mauna Loa Summit, deep (13.1–60.0 km depth), $M \geq 2.0$.

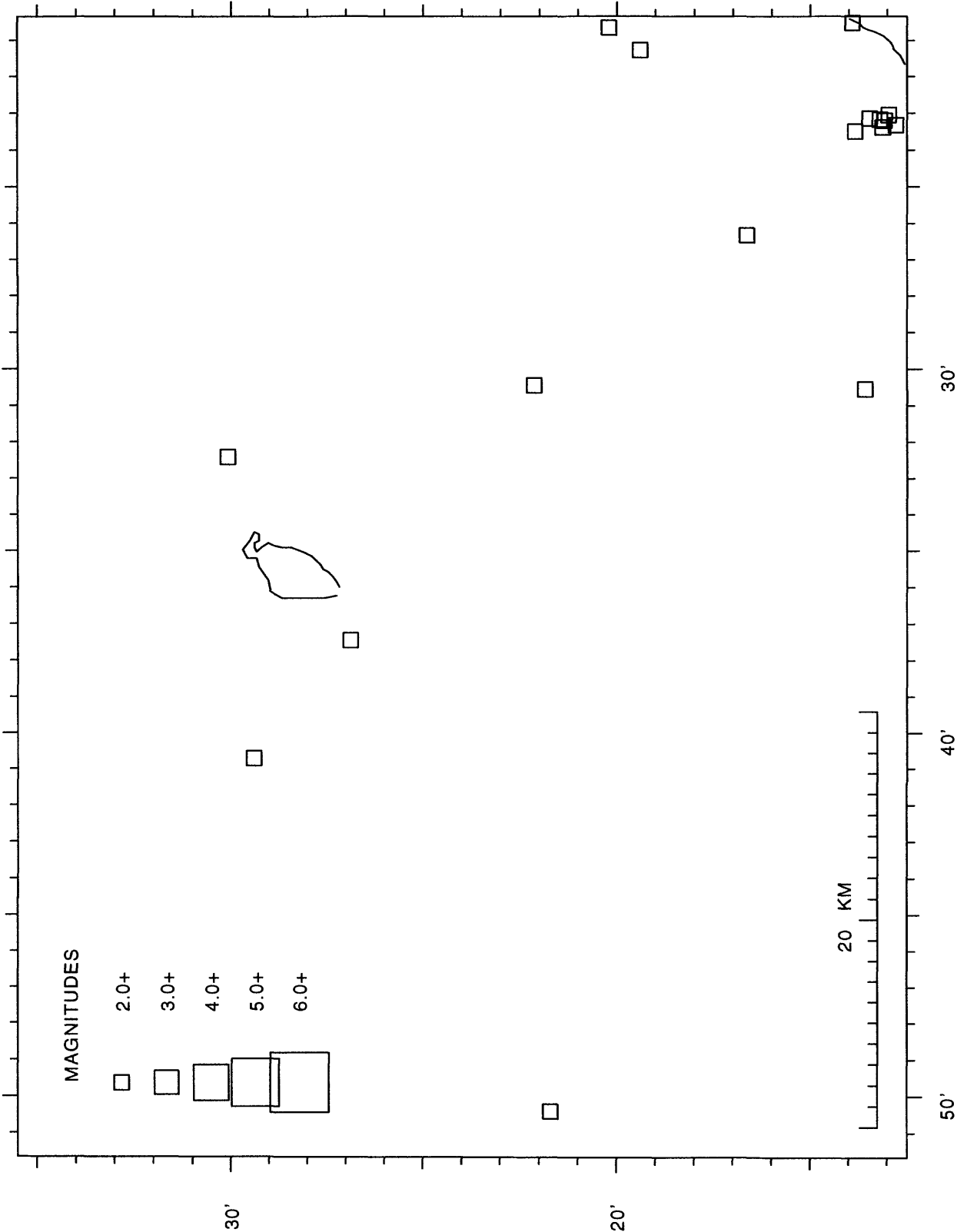


Table 5 is a chronological list of selected events $M \geq 1.4$, successfully located during 1992. For each event, the following data are presented:

ORIGIN TIME - in Hawaiian Standard Time: date, hour (HR), minute(MN), and second (SEC).

EPICENTER - in degrees and minutes of north latitude (LAT N) and west longitude (LON W) in Old Hawaiian Datum.

DEPTH - Depth of focus in kilometers.

AMP MAG - Amplitude magnitude, if determined.

DUR MAG - Duration magnitude, if determined.

NR - Number of arrivals (P and S) used in the solution.

NS - Number of S arrivals used in the solution.

GAP DEG - Largest azimuthal separation in degrees between stations.

RMS SEC - Root mean square error of time residuals, in seconds.

$$RMS = (\sum R_i^2 / NR)^{1/2}$$

MIN DIS - Epicentral distance, in kilometers, to the third nearest station.

ERH km - Standard error of the epicenter, in kilometers.

ERZ km - Standard error of depth of focus, in kilometers.

REMK - Remarks, three-letter code for geographic location of events. See Figures 5-8 for location of mnemonic code. Additional one-letter codes have the following meanings:

- F felt
- L long-period character
- T associated with harmonic tremor
- B quarry or other blast
- * the location program had a convergence problem, which usually means that the depth may be unreliable.
- the depth was held fixed.

Table 6 is a list of events of magnitude 3.0 or greater, selected from Table 5.

1992 HVO EARTHQUAKE SUMMARY LIST

ORIGIN TIME		LAT N		LON W		DEPTH AMP DUR		GAP RMS MIN ERH				ERZ NO							
		HRN	SEC	DEG MIN	DEG MIN			KM	MAG	NR	NS			DEG	SEC	DIS	KM	FM	REMY
7	056	44.70	19	20.77	155	6.10	8.99	1.7	1.3	24	5	102	.08	5	0.5	0.9	0	SF4	
7	2	50.17	19	13.91	155	13.61	7.58	1.9	1.6	33	5	80	.09	4	0.4	0.6	0	SF2	
7	233	26.39	19	23.91	155	15.39	2.92	2.6	1.5	36	9	98	.09	2	0.3	0.3	0	SEC	
7	239	37.62	19	11.18	155	37.27	9.20	1.4	2.0	2	2	189	.13	7	0.9	1.2	0	LSW	
7	1333	47.49	19	26.68	155	35.13	35.49	2.3	1.3	20	5	139	.10	3	1.0	1.4	0	DML L	
7	1633	23.84	19	40.60	156	8.98	13.55	1.1	1.2	2	2	317	.13	33	4.4	1.7	0	HUA	
7	1810	46.70	19	54.30	155	16.21	12.85	0.8	1.5	13	0	239	.05	8	3.2	1.4	0	KEA	
7	1841	10.42	19	25.15	155	22.37	11.64	2.1	1.5	39	11	54	.07	5	0.3	0.6	0	KAO	
7	1848	21.79	19	0.26	155	27.00	45.26	1.5	2.6	1	0	267	.08	17	4.3	4.8	0	DLS	
7	1932	20.51	19	46.34	156	6.86	7.61	2.8	2.4	36	4	263	.11	47	1.3	0.8	0	HUA	
7	2024	58.42	19	21.12	155	4.62	7.97	0.9	1.4	21	3	93	.07	4	0.6	1.0	0	SF5	
7	2211	5.08	19	27.48	155	14.11	13.06	2.0	1.1	8	2	287	.09	7	3.4	2.2	0	DEP L	
8	336	39.96	18	51.29	155	12.44	10.82	1.7	3.3	2	284	.18	47	2.4	2.6	0	LOI		
8	1439	6.64	19	16.47	155	25.38	7.08	1.0	1.8	4	67	.09	5	0.4	1.1	0	LSW		
8	1716	16.35	19	11.30	155	27.18	7.68	1.2	2.2	4	134	.17	4	0.8	1.4	0	LSW		
8	1848	20.47	19	19.99	155	10.61	6.20	1.9	1.6	39	6	87	.12	4	0.4	0.9	0	SF3	
8	2348	55.91	20	0.27	155	22.17	12.85	1.5	1.3	4	326	.07	13	2.9	0.8	0	KEA		
9	043	56.86	19	31.74	155	52.33	7.28	1.2	1.5	4	211	.12	7	0.9	1.0	0	KON		
9	045	20.47	19	23.23	155	14.78	3.11	2.3	1.6	20	6	73	.08	2	0.3	0.4	0	SEC	
9	1249	14.10	19	16.56	155	25.31	7.77	0.9	1.3	3	68	.08	5	0.5	1.3	0	LSW		
9	1819	30.62	19	22.69	155	54.07	13.87	2.2	1.5	13	2	254	.08	13	1.6	0.6	0	KON	
9	1951	51.49	19	23.10	155	14.71	3.23	2.0	1.5	23	7	70	.07	2	0.3	0.3	0	SEC	
9	2241	11.17	19	24.31	155	2.90	3.78	2.1	1.6	24	2	103	.09	2	0.5	0.6	0	SNE	
10	039	43.45	19	20.58	155	11.23	9.41	2.4	2.2	46	9	75	.09	4	0.4	0.5	0	SF3	
10	721	38.41	19	15.31	155	27.04	10.50	1.7	1.5	21	3	117	.08	5	0.5	0.9	0	LSW	
10	13	6	23.10	19	20.56	155	13.47	7.28	1.5	1.4	35	2	60	.11	4	0.4	0.7	0	SF2
10	1342	47.42	19	22.03	155	30.36	9.34	1.2	2.5	2	47	.06	5	0.4	0.9	0	KAO		
10	1343	37.12	19	22.14	155	30.29	9.62	2.3	2.0	41	4	.09	5	0.3	0.7	0	KAO		
10	1203	4.45	19	21.08	155	7.95	8.55	1.4	1.3	0	98	.04	4	0.8	1.4	0	SF4		
11	2235	7.55	19	23.24	155	15.03	3.18	1.9	1.4	23	7	72	.08	2	0.3	0.3	0	SEC	
12	536	47.45	19	24.47	155	15.45	4.94	1.9	1.1	17	1	132	.13	2	0.6	0.7	0	SEC L	
12	759	54.76	19	9.18	155	36.82	3.20	2.2	1.9	33	2	109	.13	11	0.5	2.6	0	LSW	
13	332	36.72	19	36.99	156	28.46	28.17	1.7	2.1	0	318	.11	75	12.1	6.6	0	DIS		
13	336	30.23	19	21.75	155	12.85	2.68	1.7	1.5	18	4	87	.06	2	0.4	0.4	0	SER	
13	512	57.16	19	20.77	155	6.36	8.32	2.2	2.0	37	5	99	.07	5	0.4	0.5	0	SF4	
13	1433	1427	52.26	19	11.28	155	40.58	12.33	2.0	1.6	24	3	117	.11	9	0.5	0.6	0	LSW
13	1624	6.64	19	21.96	155	13.27	3.00	1.7	1.3	18	4	95	.04	1	0.4	0.3	0	SER	
13	17	48.69	19	19.60	155	11.64	7.04	1.6	1.3	34	4	92	.09	6	0.4	0.8	0	SF3	
13	1755	28.44	19	20.60	155	7.07	7.24	1.3	20	4	95	.11	5	0.5	1.0	0	SF4		
13	1841	24.51	19	22.58	155	10.73	2.44	1.5	1.2	13	3	134	.10	2	1.0	0.4	0	SER	
13	1842	18	54.63	19	17.99	155	12.86	10.15	2.9	2.7	53	8	137	.12	9	0.0	0.6	0	SF2

1992 HVO EARTHQUAKE SUMMARY 1.1ST

YEAR	MON	DA	ORIGIN TIME		LAT N	LON W	DEPTH AMP DUR			GAP RMS MIN ERH				ERZ NO								
			HRMN	SEC			DEG	MIN	KM	MAG	NR	NS	DEG		SEC	DIS	KM	KM	FW	REMX		
1992	JAN	1	1	8	31.51	19	29.28	155	34.14	28.67	1.9	0.9	14	2	68	10	3	1.2	1.7	0	DML	L
		1	417	37.44	19	25.53	155	38.89	22.90	1.9	1.2	12	3	113	11	6	1.1	1.5	0	DML	L	
		1	637	40.52	19	26.44	155	34.15	29.13	1.9	1.1	13	0	63	13	4	1.4	5.0	0	DML	L	
		1	743	40.99	19	25.32	155	29.26	9.69	2.0	1.6	41	6	35	10	6	0.3	0.6	0	KAO	0	
		1	841	47.85	19	24.37	155	26.53	9.94	1.6	1.3	33	3	36	10	3	0.4	0.7	0	KAO	0	
		1	918	48.06	19	24.16	155	16.21	1.35	2.0	1.5	16	5	118	08	1	0.2	0.3	0	SEC	0	
		1	921	36.25	19	24.08	155	16.16	1.53	2.0	1.4	15	5	114	13	1	0.3	0.3	0	SEC	0	
		1	1149	58.65	19	24.60	155	15.91	46.74	2.4	1.6	34	4	85	11	2	1.1	1.1	0	DEP	L	
		1	1957	39.16	19	27.65	155	16.64	41.52	1.1	1.28	14	21	127	10	19	1.2	0.8	0	KEA	0	
		1	2247	14.80	19	19.69	155	7.13	6.79	1.7	1.5	37	6	112	10	5	0.4	0.8	0	SF4	0	
1992	JAN	1	2257	7.69	19	19.76	155	7.11	7.14	1.7	1.5	33	6	111	08	5	0.4	0.8	0	SF4	0	
		2	226	51.39	19	23.47	155	15.10	3.16	1.7	1.3	17	4	98	10	2	0.3	0.4	0	SEC	0	
		2	717	40.16	19	24.24	155	16.75	16.15	2.7	2.7	57	10	36	12	1	0.4	0.3	0	DEP	F	
		2	821	49.94	19	23.50	155	14.95	3.09	1.8	1.6	14	3	99	06	2	0.3	0.6	0	SEC	0	
		2	2049	34.15	19	44.41	155	45.27	20.67	2.1	1.9	36	3	159	12	11	1.1	2.0	0	HUA	0	
		3	5	25.48	19	21.10	155	4.67	7.12	2.1	2.1	46	5	94	11	4	0.4	0.5	0	SF5	0	
		3	625	17.14	19	19.68	155	12.44	6.74	1.2	1.3	5	5	83	08	5	0.4	0.7	0	SF2	0	
		3	849	30.21	19	20.15	155	7.28	7.18	2.1	2.2	49	6	100	13	5	0.4	0.7	0	SF4	0	
		3	2117	21.73	19	28.28	155	32.86	11.81	2.2	1.2	18	3	56	10	4	0.7	1.4	0	MLO	L	
		4	023	59.95	19	22.86	155	14.45	3.71	2.4	1.4	39	8	50	10	2	0.3	0.4	0	SEC	0	
1992	JAN	4	418	53.63	19	23.54	155	50.31	14.24	1.3	24	2	128	11	14	0.6	0.5	0	KON	0		
		4	633	26.79	19	56.33	155	28.75	28.65	1.0	1.2	19	2	236	09	15	1.6	1.0	0	KEA	0	
		4	758	55.19	19	27.58	155	36.13	20.88	1.1	14	0	77	10	1	0.9	2.0	0	DML	L		
		4	1822	6.36	19	24.90	155	35.92	11.12	1.8	1.1	14	1	115	12	4	0.7	1.3	0	MLO	L	
		4	1823	5.28	19	22.89	155	14.57	3.50	1.8	1.5	23	6	74	12	3	0.3	0.3	0	SEC	0	
		4	1831	18.98	19	22.87	155	14.59	3.23	1.8	1.4	23	7	79	07	2	0.3	0.3	0	SEC	0	
		4	19	2	38.92	19	24.28	155	31.89	20.21	1.8	1.0	12	0	92	12	2	1.1	3.2	0	DML	L
		5	0	2	10.37	19	35.46	156	25.79	5.98	2.6	2.1	30	2	287	15	69	5.1	5.3	0	DIS	0
		5	350	50.74	19	12.78	155	15.63	45.85	2.1	1.6	30	0	196	09	9	1.8	3.9	0	DEP	L	
		5	431	9.39	19	18.45	155	13.39	7.59	1.6	1.5	44	5	81	12	3	0.4	0.6	0	SF2	0	
1992	JAN	5	447	46.09	19	27.24	155	35.29	24.21	1.9	1.3	17	3	60	13	2	1.1	1.5	0	DML	L	
		5	525	12.92	19	13.39	154	41.09	16.12	1.4	19	4	306	19	35	4.9	47.7	0	DIS	0		
		5	534	31.60	19	26.61	155	32.79	25.17	1.9	1.2	15	1	56	09	3	0.9	2.1	0	DML	L	
		5	626	15.93	19	29.09	154	53.46	2.36	1.9	1.7	29	1	102	19	5	0.9	2.3	0	SLE	0	
		5	956	9.59	19	26.86	155	34.26	7.46	2.1	1.2	19	2	56	14	3	0.6	1.0	0	MLO	L	
		5	1530	33.84	19	26.68	155	36.18	35.26	2.3	1.3	20	5	78	11	1	0.9	1.6	0	DML	L	
		5	1940	25.59	19	22.38	155	48.87	11.25	2.3	1.6	33	4	113	16	13	0.6	0.6	0	KON	0	
		5	1941	4.44	19	22.28	155	30.08	9.68	1.2	21	5	46	06	4	0.3	0.8	0	KAO	0		
		5	2228	51.68	19	25.38	155	2.18	4.36	1.1	15	3	110	09	4	0.6	1.3	0	SNE	0		
		6	136	52.54	19	26.71	155	35.24	36.04	2.3	1.3	21	3	70	10	2	1.0	1.6	0	DML	L	
1992	JAN	6	1017	49.43	19	22.42	155	30.04	10.24	1.2	21	4	52	05	4	0.4	0.7	0	KAO	0		
		6	1349	10.09	19	26.76	155	35.76	36.02	2.3	1.3	22	6	74	10	1	0.8	1.4	0	DML	L	
		6	1513	18.92	19	52.26	156	12.22	6.74	1.6	18	4	323	11	43	2.3	2.4	0	HUA	0		
		6	1524	19.56	19	21.32	155	29.94	10.27	1.7	1.3	29	5	45	09	5	0.4	0.8	0	KAO	0	
		6	1857	14.59	19	58.82	155	21.08	13.17	0.9	1.5	12	3	244	10	13	0.4	0.4	0	KEA	0	
		6	1957	39.16	19	27.65	155	16.64	41.52	1.1	1.28	14	21	127	10	19	1.2	0.8	0	KEA	0	
		6	2247	14.80	19	19.69	155	7.13	6.79	1.7	1.5	37	6	112	10	5	0.4	0.8	0	SF4	0	
		6	2257	7.69	19	19.76	155	7.11	7.14	1.7	1.5	33	6	111	08	5	0.4	0.8	0	SF4	0	
		6	226	51.39	19	23.47	155	15.10	3.16	1.7	1.3	17	4	98	10	2	0.3	0.4	0	SEC	0	
		6	717	40.16	19	24.24	155	16.75	16.15	2.7	2.7	57	10	36	12	1	0.4	0.3	0	DEP	F	

1992 HVO EARTHQUAKE SUMMARY LIST

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ORIGIN TIME	LAT N	LONG W	DEPTH AMP DUR	GAP RMS MIN ERH	ERZ NO
YEAR MON DA HRMN SEC	DEG MIN	DEG MIN	KM MAG MAG NR NS DEG SEC DIS KM	KM FM REMK	
1992 JAN 25 2010 46.33 19 21.91	155 11.20	3.01 2.0 1.4 24	4 116 .07 2	0.4 0.3 0 SER	
25 2140 19.28 19 21.73	155 6.74	7.85 2.0 1.7 41	2 79 .11 5	0.4 0.7 0 KEA	
26 623 30.30 20 0.90	155 22.77	8.06 3.4 3.4 54	10 206 .12 27	0.6 0.5 0 KEA F	
26 731 58.94 19 24.41	155 3.41	3.61 2.0 1.4 25	0 94 .10 1	0.5 0.6 0 SWE	
26 855 28.98 19 22.72	155 14.31	3.54 2.1 1.4 18	3 80 .05 2	0.3 0.4 0 SEC	
26 914 47.90 19 23.16	155 14.56	3.70 3.3 3.3 49	5 47 .12 3	0.3 0.4 0 SEC	
26 940 2.66 19 22.57	155 14.10	3.47 1.8 1.5 16	4 91 .06 2	0.3 0.4 0 SEC	
26 1030 16.61 19 20.35	155 11.62	8.04 2.0 1.8 40	2 78 .12 4	0.5 0.7 0 SF3	
26 1318 24.40 19 19.14	155 15.11	7.78 2.3 2.1 46	1 89 .13 4	0.4 0.6 0 SF1	
26 1319 15.61 19 18.50	155 15.05	7.05 1.5 1.2 22	3 110 .08 4	0.4 0.9 0 SF1	
26 1338 38.07 19 20.27	155 6.81	5.99 1.8 1.6 25	5 106 .08 6	0.4 1.2 0 SF4	
26 17 0 21.49 19 21.59	155 11.50	2.82 1.5 1.4 18	4 108 .04 3	0.3 0.4 0 SER	
26 1832 37.16 19 12.71	155 20.69	46.75 1.4 23	5 213 .08 7	2.3 1.0 0 DEP	
26 1913 44.38 19 9.48	155 40.70	2.56 1.4 25	6 125 .20 12	0.6 1.1 0 LSW	
27 427 39.38 20 0.80	155 23.01	8.12 2.7 2.7 53	11 205 .14 27	0.6 0.7 0 KEA	
27 659 22.70 19 21.81	155 8.98	3.27 1.6 1.1 16	2 121 .05 2	0.5 0.4 0 SER	
27 711 38.72 19 23.42	155 14.93	3.51 2.4 1.7 23	7 75 .07 3	0.3 0.4 0 SEC	
27 738 14.01 19 15.91	155 26.30	9.74 1.7 1.6 38	5 67 .12 5	0.3 0.6 0 LSW	
27 1645 59.80 19 24.37	155 30.50	10.56 2.2 1.4 34	5 38 .06 4	0.4 0.7 0 KAO	
27 1716 31.82 19 12.91	155 30.19	8.75 1.2 20	4 140 .13 4	0.6 1.0 0 LSW	
27 1751 28.41 19 22.75	155 14.31	3.30 1.3 1.2 17	5 122 .06 2	0.3 0.4 0 SEC	
27 1822 48.62 19 45.62	155 2.07	37.49 2.4 2.1 43	3 210 .12 7	1.4 1.9 0 HIL	
27 2244 6.68 19 20.16	155 7.48	7.98 1.8 1.7 31	7 96 .08 5	0.4 0.7 0 SF4	
28 0 42.90 19 22.20	155 10.82	2.89 2.0 1.5 22	3 92 .08 2	0.5 0.4 0 SER	
28 023 0.88 19 21.97	155 10.98	2.82 1.8 1.3 17	2 118 .05 2	0.6 0.3 0 SER	
28 117 7.27 19 18.67	155 14.91	7.91 1.6 1.3 25	3 104 .07 4	0.5 0.8 0 SF1	
28 2 41.97 19 21.67	155 28.23	47.48 1.6 29	4 45 .11 2	1.2 1.5 0 DML	
28 718 35.46 19 22.91	155 14.80	3.28 2.3 1.6 29	8 67 .09 2	0.3 0.3 0 SEC	
28 935 2.09 19 22.87	155 14.40	3.58 1.5 17	5 98 .04 2	0.3 0.3 0 SEC	
28 1259 20.43 19 23.15	155 14.84	3.02 2.4 2.0 26	8 66 .07 2	0.3 0.3 0 SEC	
28 13 2 55.26 19 23.00	155 14.95	3.03 2.1 1.6 22	7 64 .09 2	0.3 0.3 0 SEC	
28 13 4 22.54 19 23.14	155 14.95	2.95 1.6 1.2 15	4 108 .06 2	0.3 0.4 0 SEC	
28 13 4 36.40 19 23.09	155 14.93	3.24 2.1 1.7 19	6 83 .06 2	0.3 0.3 0 SEC	
28 16 7 54.39 19 23.83	155 15.62	2.94 2.3 1.5 21	6 104 .06 2	0.3 0.3 0 SEC	
28 19 0 54.74 19 23.32	155 15.04	3.29 2.3 1.5 31	8 75 .07 2	0.3 0.3 0 SEC	
28 1928 21.26 19 23.09	155 14.94	3.17 1.9 1.4 18	4 83 .05 2	0.3 0.3 0 SEC	
28 1948 24.68 19 23.39	155 14.95	3.32 3.5 3.7 52	11 46 .11 2	0.3 0.3 0 SEC F	
28 1952 15.00 19 22.90	155 14.73	2.89 2.4 3.3 30	9 57 .10 2	0.3 0.3 0 SEC	
28 1958 39.93 19 23.03	155 14.79	3.25 2.1 1.6 24	6 68 .06 2	0.3 0.3 0 SEC	
28 2029 5.61 19 23.08	155 14.79	3.30 1.8 1.4 25	8 67 .07 2	0.3 0.3 0 SEC	
28 2139 37.27 19 23.20	155 14.94	3.08 1.6 1.4 25	9 82 .09 2	0.3 0.3 0 SEC	
29 119 16.40 19 22.85	155 14.43	3.51 2.0 1.6 32	6 51 .07 2	0.3 0.3 0 SEC	
29 315 53.03 19 22.11	155 14.61	3.47 2.5 2.0 47	8 48 .12 3	0.3 0.3 0 SEC	
29 821 34.32 19 23.46	155 14.02	3.23 1.6 26	6 85 .06 2	0.3 0.3 0 SEC	
29 927 30.74 19 25.50	155 36.98	14.01 2.2 1.7 36	7 72 .11 3	0.4 0.4 0 DML	

1992 HVO EARTHQUAKE SUMMARY LIST

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ORIGIN TIME	LAT N	LONG W	DEPTH AMP DUR	GAP RMS MIN ERH	ERZ NO
YEAR MON DA HRMN SEC	DEG MIN	DEG MIN	KM MAG MAG NR NS DEG SEC DIS KM	KM FM REMK	
1992 JAN 29 1120 34.34 19 22.71	155 8.71	3.22 1.6 1.2 16	2 100 .05 2	0.5 0.3 0 SER	
29 1241 17.73 19 15.24	155 25.92	10.33 1.0 14	4 152 .11 4	0.7 1.1 0 LSW	
29 1650 16.70 20 1.40	155 23.61	11.49 2.4 1.9 18	3 231 .07 16	1.6 0.6 0 KEA	
29 1856 31.78 19 19.51	155 11.08	8.60 2.5 2.3 45	7 97 .10 5	0.4 0.6 0 SF3	
29 1949 13.77 19 22.58	155 13.85	3.58 1.4 1.1 12	4 137 .06 1	0.6 0.5 0 SER	
29 2151 21.50 18 39.35	155 38.53	9.68 1.8 20	1 324 .09 36	3.3 3.2 0 DIS	
29 2331 51.26 19 23.35	155 15.24	2.93 1.7 1.2 23	6 79 .07 2	0.3 0.3 0 SEC	
30 152 50.40 19 14.87	155 29.20	9.97 1.2 20	2 105 .11 2	0.5 1.1 0 LSW	
30 820 18.47 19 22.84	155 14.49	3.36 1.5 21	5 77 .05 2	0.3 0.3 0 SEC	
30 1231 27.53 19 23.08	155 22.79	12.27 1.6 1.0 21	4 73 .09 5	0.6 1.1 0 KAO	
30 1432 59.39 19 47.22	154 58.82	6.57 2.8 1.7 15	0 308 .25 14	11.9 3.8 0 KEA B	
30 1636 25.09 19 22.84	155 17.55	2.59 1.6 0.9 7	1 118 .08 1	0.5 1.1 0 SEC L	
30 1813 52.65 19 22.80	155 14.33	3.58 2.5 1.6 35	7 53 .09 2	0.3 0.3 0 SEC	
31 058 58.10 18 52.90	155 13.27	14.39 2.1 2.1 42	3 272 .18 45	3.2 5.8 0 LOI	
31 337 17.21 19 45.96	156 9.12	4.07 1.6 13	3 303 .11 50	2.2 1.3 0 HUA	
31 1045 43.64 19 15.78	155 27.31	11.16 1.7 1.5 21	4 71 .09 5	0.4 1.1 0 LSW	
31 1056 28.07 19 25.18	155 16.94	12.81 1.8 1.0 9	2 215 .03 1	3.7 1.6 0 INT L	
31 1429 50.53 19 57.80	156 25.55	2.86 3.0 2.4 39	4 291 .12 70	4.4 2.6 0 DIS	
31 1555 49.76 19 23.46	155 30.33	10.32 2.2 1.9 35	3 41 .07 5	0.4 0.9 0 KAO	
31 1736 0.45 19 20.49	155 9.92	8.34 1.1 25	2 76 .05 3	0.5 0.9 0 SF3	
31 1821 41.01 19 25.23	155 16.71	12.30 1.8 1.0 18	3 156 .09 1	1.1 0.7 0 INT L	
31 1918 0.56 19 16.04	155 27.50	6.95 1.7 1.7 36	0 67 .12 5	0.4 1.0 0 LSW	
31 21 9 46.35 19 24.79	155 17.11	1.11 1.7 1.1 17	3 79 .08 0	0.3 0.1 0 SNC	
FEB 1 323 24.73 19 19.56	155 11.43	6.27 1.3 35	6 95 .09 5	0.4 0.9 0 SF3	
1 6 2 40.08 19 18.34	155 13.08	7.33 1.3 37	6 95 .10 3	0.4 0.7 0 SF2	
1 1026 32.27 19 21.78	155 28.83	9.39 1.5 38	4 39 .09 2	0.3 0.6 0 KAO	
1 11 5 11.68 19 18.77	155 30.46	8.25 2.0 1.5 35	0 39 .11 7	0.4 1.2 0 LSW	
1 1540 13.65 19 12.19	155 28.15	0.00 2.5 2.5 48	10 100 .16 5	0.3 0.3 0 DLS	
1 19 2 51.45 19 13.21	155 30.46	37.47 1.5 30	2 67 .07 4	0.7 1.5 0 DLS	
2 034 32.80 19 18.06	155 16.52	8.38 2.3 2.1 53	7 123 .14 4	0.4 0.5 0 SF1	
2 229 13.47 19 19.67	155 7.56	6.67 0.9 1.5 38	4 103 .08 4	0.4 0.7 0 SF4	
2 234 37.71 19 23.26	155 14.72	3.07 1.7 1.5 22	6 69 .07 3	0.3 0.3 0 SEC	
2 8 28.36 19 27.31	155 42.24	7.99 2.4 1.8 36	4 94 .13 9	0.4 1.1 0 MLO	
2 948 16.76 19 17.60	155 12.69	6.32 1.3 32	6 139 .10 2	0.4 0.7 0 SF2	
2 11 5 39.89 19 20.28	155 7.73	6.48 1.9 1.8 40	4 90 .12 5	0.5 0.9 0 SF4	
2 1437 7.81 19 58.43	155 57.17	48.32 2.8 2.3 34	8 299 .11 55	1.6 1.8 0 KOH	
2 16 1 34.72 19 24.35	155 15.44	13.16 2.2 1.3 12	2 128 .08 2	1.7 0.8 0 DEP L	
3 034 23.27 19 14.78	155 37.19	8.19 2.4 2.0 42	3 85 .20 0	0.6 0.9 0 LSW	
3 449 36.22 19 19.65	155 6.94	8.58 2.6 2.6 48	8 117 .09 5	0.4 0.4 0 SF4	
3 720 9.11 19 22.36	155 47.11	10.97 2.4 1.8 24	4 149 .10 12	0.4 0.7 0 KON	
3 12 3 57.42 19 19.64	155 8.62	7.90 1.4 17	2 77 .04 4	0.5 1.1 0 SF4	
3 1321 53.10 19 13.58	155 30.54	35.82 2.6 2.2 38	5 65 .07 3	0.6 1.1 0 DLS	
3 1740 11.25 19 19.58	155 11.74	8.27 2.1 1.9 36	6 126 .10 6	0.5 0.7 0 SF3	
3 1749 26.60 19 20.41	155 6.06	7.55 1.5 22	4 146 .10 6	0.6 0.9 0 SF4	
3 21 8 3.45 19 23.41	155 16.87	2.96 2.4 1.8 33	9 40 .11 0	0.3 0.2 0 SSC	

1992 HVO EARTHQUAKE SUMMARY LIST

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YEAR	MON	DA	HRMN	SEC	LAT N	DEG	MIN	LONG W	DEPTH	AMP	DUR	KM	MAG	NR	NS	DEG	SEC	DIS	KM	ERH	ERZ	NO
ORIGIN TIME																						
1992	FEB	3	23	0	29.53	19	56.03	154	55.62	42.55	2.8	2.3	54	13	245	10	28	0.7	1.0	0	KEA	
		4	125	18.64	19	25.91	155	18.96	7.51	2.1	1.1	24	7	153	10	3	0.7	0.9	0	INT		
		4	540	50.44	19	24.37	155	18.10	14.38	1.9	1.0	9	2	97	10	2	2.8	0.9	0	DEP	L	
		4	619	17.71	19	18.20	155	14.58	7.44	1.2	20	4	109	08	3	0.5	0.8	0	SF1			
		4	7	2	59.11	20	0.71	155	22.77	8.70	2.8	2.4	28	3	205	07	34	0.7	0.6	0	KEA	
		4	836	37.34	19	26.04	155	18.92	7.80	2.6	2.7	44	6	57	12	3	0.4	0.6	0	INT		
		4	846	41.77	19	25.65	155	19.24	7.55	2.3	1.2	29	5	134	10	3	0.6	0.7	0	KAO		
		4	848	5.87	19	25.93	155	19.10	7.47	2.9	2.2	44	8	53	11	3	0.3	0.4	0	KAO		
		4	855	0.37	19	25.74	155	18.85	8.29	1.9	1.0	21	5	148	08	2	0.8	0.7	0	INT		
		4	855	21.43	19	25.82	155	19.08	7.29	2.8	1.9	35	6	143	11	3	0.4	0.6	0	KAO		
		4	12	4	57.99	19	25.96	155	18.81	7.55	2.9	1.9	39	8	125	12	2	0.3	0.4	0	INT	
		4	1250	51.38	19	25.79	155	19.37	6.29	1.9	1.0	22	7	137	08	3	0.6	0.9	0	KAO		
		4	16	2	24.07	19	22.87	155	14.36	3.64	2.1	1.5	21	3	86	04	3	0.3	0.4	0	SEC	
		4	1647	47.16	19	22.56	155	9.20	2.77	1.4	1.2	14	4	128	04	1	0.7	0.3	0	SER		
		4	17	9	25.82	19	23.37	155	14.81	3.28	2.3	1.6	28	5	71	10	3	0.3	0.3	0	SEC	
		4	2343	29.79	19	18.54	155	30.32	9.44	2.0	1.5	31	5	65	12	6	0.4	1.0	0	LSW		
		5	543	51.89	19	24.20	155	18.37	2.92	1.8	1.1	18	6	63	06	3	0.4	0.6	0	SEC		
		5	553	34.59	19	22.64	155	14.25	3.51	1.6	1.4	18	5	93	06	2	0.3	0.4	0	SEC		
		5	736	32.37	19	46.55	155	22.94	25.99	2.6	2.0	36	8	127	09	8	0.6	1.0	0	KEA		
		5	1054	11.00	19	14.83	155	45.84	8.25	1.4	1.7	3	174	14	11	0.9	2.1	0	KON			
		5	1239	7.86	19	25.06	155	19.90	6.31	1.8	1.1	17	3	97	08	3	0.4	0.9	0	KAO		
		5	1950	39.20	17	53.24	155	23.43	20.00	2.1	31	5	336	10125	2.5	11.0	0	DIS	*			
		5	2052	6.40	19	22.95	155	14.50	3.56	1.8	1.4	19	5	96	07	3	0.3	0.4	0	SEC		
		5	2144	7.86	19	21.93	155	4.91	7.45	2.0	2.0	47	5	76	12	5	0.4	0.6	0	SFS		
		5	2151	40.02	19	21.57	155	9.89	2.95	1.1	1.6	3	61	07	1	0.4	0.3	0	SER			
		5	2316	58.95	19	57.58	156	12.03	9.58	1.5	2.1	27	2	271	12	48	1.4	0.9	0	KOH		
		6	021	5.49	19	23.20	155	14.58	3.44	3.0	2.2	54	9	47	11	3	0.3	0.3	0	SEC		
		6	519	50.27	19	23.02	155	14.59	3.32	1.9	1.6	33	8	57	08	3	0.2	0.3	0	SEC		
		6	1356	59.81	19	20.79	155	48.70	13.14	1.2	15	2	159	10	11	0.8	1.0	0	KON			
		6	1418	22.53	19	23.06	155	14.88	3.09	2.0	1.7	18	6	111	08	2	0.3	0.3	0	SEC		
		6	1858	9.54	19	23.20	155	15.01	3.15	1.7	1.4	19	6	80	06	2	0.3	0.3	0	SEC		
		6	2327	42.50	19	22.34	155	4.71	8.48	2.0	2.0	39	7	82	10	4	0.4	0.4	0	SFS		
		7	058	7.65	19	23.14	155	14.80	3.09	1.5	1.4	16	6	112	06	2	0.3	0.5	0	SEC		
		7	132	21.54	20	46.28	154	58.26	3.50	2.8	2.6	34	3	307	13105	6.9	5.2	0	DIS			
		7	312	11.75	19	22.79	155	14.50	3.01	1.4	1.3	19	6	81	07	2	0.3	0.4	0	SEC		
		7	340	35.79	19	23.70	155	15.45	2.20	1.5	1.0	13	2	151	07	2	0.3	0.4	0	SEC	L	
		7	8	48.51	19	21.54	155	10.16	2.90	1.4	1.2	17	3	79	07	1	0.5	0.3	0	SER		
		7	826	42.29	19	23.17	155	16.36	9.59	1.9	1.2	9	1	117	09	1	1.8	2.5	0	INT	L	
		7	1050	11.64	19	22.01	155	13.16	3.19	1.2	1.3	14	4	96	06	1	0.5	0.4	0	SER		
		7	1238	6.23	19	21.76	155	13.04	1.77	1.9	1.5	19	3	101	06	2	0.3	0.5	0	SER		
		7	13	5	48.41	19	22.06	155	17.50	9.49	1.8	1.2	10	3	255	12	3	3.0	1.2	0	INT	L
		7	1320	51.20	19	24.59	155	15.00	9.14	1.7	1.1	9	2	262	10	3	1.7	0.7	0	INT	L	
		7	1544	1.84	19	20.19	155	13.47	6.40	1.7	1.4	40	8	63	11	5	0.3	0.7	0	SF2		
		7	1639	21.73	19	24.52	155	3.64	3.77	2.3	1.8	47	4	89	12	1	0.4	0.4	0	SME		
		7	1912	6.46	19	25.55	155	50.49	6.74	2.1	1.2	26	4	121	23	11	0.6	2.9	0	KON		

1992 HVO EARTHQUAKE SUMMARY LIST

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YEAR	MON	DA	HRMN	SEC	LAT N	DEG	MIN	LONG W	DEPTH	AMP	DUR	KM	MAG	NR	NS	DEG	SEC	DIS	KM	RM	FM	ERZ	NO
ORIGIN TIME																							
1992	FEB	7	2038	53.38	19	21.87	155	4.78	6.47	0.8	1.3	22	3	78	13	5	0.7	1.1	0	SFS			
		8	1218	52.28	19	21.54	155	30.26	10.19	2.1	1.7	38	4	47	06	5	0.3	0.6	0	KAO			
		9	334	49.53	19	24.84	155	20.07	6.35	2.1	1.4	37	6	59	09	4	0.3	0.7	0	KAO			
		9	425	42.47	19	22.25	155	29.89	9.46	1.2	32	3	41	09	4	0.4	0.7	0	KAO				
		9	710	20.91	19	26.86	155	30.33	10.84	2.4	2.0	49	9	40	10	9	0.3	0.5	0	KAO			
		9	7	31.50	19	22.19	155	3.13	7.71	1.7	1.8	43	3	110	12	4	0.4	0.5	0	SFS			
		9	930	10.13	19	22.62	155	14.10	3.27	1.3	16	3	89	06	2	0.3	0.4	0	SEC				
		9	1612	16.21	19	11.87	155	32.02	35.27	1.2	1.7	32	4	93	14	7	1.4	1.0	0	DLS			
		9	2032	32.71	19	20.71	155	7.83	8.19	1.2	24	4	83	09	4	0.5	0.7	0	SF4				
		10	053	28.29	19	21.30	155	13.59	0.79	1.0	15	4	175	10	3	0.3	0.8	0	SEC				
		10	1849	32.46	19	37.60	155	21.39	13.55	2.0	1.6	37	7	69	13	14	0.5	0.7	0	KEA			
		10	19	9	23.78	19	15.43	155	32.55	10.78	1.8	1.4	21	6	121	13	4	0.5	1.1	0	LSW		
		10	20	9	34.62	20	2.63	155	37.39	19.21	1.5	19	5	180	12	19	1.0	2.3	0	KOH			
		10	2016	21.95	19	19.59	155	15.11	7.07	1.4	1.1	30	4	83	07	4	0.3	0.6	0	SF1			
		10	2130	11.38	20	13.42	155	37.52	36.62	1.3	1.6	21	4	264	13	19	2.0	1.1	0	KOH			
		10	22	1	35.43	19	24.19	155	16.06	1.48	2.1	1.5	19	6	123	10	2	0.2	0.4	0	SEC		
		11	030	2.09	19	22.85	155	14.46	3.18	1.1	1.1	12	3	126	07	2	0.5	0.7	0	SEC			
		11	145	55.67	19	21.99	155	13.48	3.05	1.5	1.4	13	3	91	04	1	0.4	0.3	0	SEC			
		11	330	15.39	19	24.19	155	17.49	1.58	1.7	1.2	14	5	122	09	2	0.4	0.3	0	SEC			
		11	648	50.80	19	22.86	155	14.48	3.53	1.7	1.6	22	5	77	06	2	0.3	0.3	0	SEC			
		11	735	58.69	19	22.85	155	14.39	3.56	1.7	1.6	26	7	80	06	2	0.3	0.2	0	SEC			
		11	822	34.33	19	22.92	155	14.45	3.65	1.5	26	6	78	07	2	0.3	0.3	0	SEC				
		11	12	8	27.13	19	59.66	155	14.01	4.50	1.2	1.8	19	5	245	13	33	0.9	1.5	0	KEA		
		11	1315	25.91	19	27.32	155	27.36	6.95	2.0	1.4	32	6	45	09	5	0.3	0.9	0	KAO			
		11	2015	59.74	19	19.63	155	11.79	7.94	2.1	1.9	44	7	90	11	6	0.4	0.6	0	SF3			
		12	013	8.33	19	21.81	155	12.75	2.68	1.6	1.2	12	2	105	03	2	0.5	0.4	0	SEC			
		12	021	44.37	19	19.51	155	7.49	7.44	1.9	1.8	42	7	108	10	4	0.4	0.5	0	SF4			
		12	323	2.42	19	13.00	155	19.32	29.86	1.5	36	6	178	09	9	0.7	0.9	0	DEP				
		12	5	13.84	19	23.03	155	14.74	3.32	1.6	1.5	23	7	74	07	2	0.3	0.3	0	SEC			
		12	717	38.13	19	22.70	155	8.65	3.25	1.1	11	2	125	07	2	0.9	0.4	0	SEC				
		12	722	30.04	19	22.60	155	14.04	3.45	1.6	1.6	18	5	90	04	2	0.4	0.3	0	SEC			
		12	916	3.18	19	14.07	155	26.33	7.92	2.0	1.9	40	5	115	11	4	0.3	0.7	0	LSW			
		12	939	28.48	19	22.61	155	13.94	3.61	1.5	1.4	16	4	93	05	1	0.4	0.3	0	SEC			
		12	952	13.69	19	22.82	155	14.70	2.52	1.6	1.5	16	3	71	11	2	0.3	0.4	0	SEC			
		12	12	7	28.92	19	21.84	155	13.45	2.92	1.5	1.3	16	4	94	05	1	0.4	0.4	0	SEC		
		12	1251	24.37	19	12.32	155	27.16	2.01	1.8	1.3	20	1	120	12	5	0.5	1.4	0	LSW			
		12	1349	51.17	19	19.81	155	7.37	8.34	1.4	24	5	105	07	5	0.5	0.9	0	SF4				
		12	1535	40.10	19	22.23	155	14.00	3.12	1.8	1.5	26	9	82	08	2	0.2	0.3	0	SEC			
		12	1710	33.62	19	23.01	155	14.64	3.61	2.5	1.8	40	10	57	08	3	0.3	0.3	0	SEC			
		12	21	3	17.35	19	14.20	155	26.46	7.32	1.2	20	2	115	13	4	0.5	1.2	0	LSW			
		12	2122	45.62	19	19.93	155	7.37	8.22	2.3	2.3	45	6	102	08	5	0.3	0.4	0	SF4			
		13	034	13.81	19	23.07	155	14.91	3.05	1.4	1.2	14	4	83	06	2	0.3	0.5	0	SEC			
		13	325	33.74	19	22.49	155	2.38	7.84	0.8	1.4	19	4	139	12	5	0.5	0.8	0	SFS			
		13	333	7.21	19	22.93	155	14.81	3.07	1.7	1.5	19	5	68	08	2	0.3	0.3	0	SEC			
		13	337	13.43	19	22.15	155	10.92	2.74	1.4	1.0	12	2	120	10	2	0.6	0.5	0	SEC			

1992 HVO EARTHQUAKE SUMMARY LIST

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YEAR	MON	DA	HRMN	SEC	LAT N	DEG	MIN	LON W	DEPTH	AMP	DUR	KM	MAG	NR	NS	DEG	SEC	DIS	KM	ERH	ERZ	NO	KM	FM	REMK	
1992	FEB	13	344	9.05	19	22.97	155	10.90	1.70	1.3	1.1	12	3	139	.08	2	0.9	0.8	0	0.8	0	0.8	0	0.8	0	0.8
									3.09	1.4	0.10	2	140	.06	2	0.9	0.5	0	0.5	0	0.5	0	0.5	0	0.5	
									3.12	1.3	0.9	11	2	98	.03	1	0.5	0.5	0	0.5	0	0.5	0	0.5	0	0.5
									3.11	1.2	1.2	12	3	89	.03	1	0.5	0.4	0	0.4	0	0.4	0	0.4	0	0.4
									6.22	1.1	19	4	106	.08	3	0.6	1.3	0	0.6	1.3	0	0.6	1.3	0	0.6	
									5.29	1.3	24	4	109	.12	3	0.4	1.2	0	0.4	1.2	0	0.4	1.2	0	0.4	
									6.29	1.8	0.9	18	5	116	.10	3	0.8	1.3	0	0.8	1.3	0	0.8	1.3	0	0.8
									1.50	1.6	0.9	16	4	85	.09	5	0.3	0.8	0	0.3	0.8	0	0.3	0.8	0	0.3
									3.20	2.2	1.4	27	8	67	.09	2	0.3	0.3	0	0.3	0.3	0	0.3	0.3	0	0.3
									2.64	1.1	11	3	108	.08	2	0.4	0.6	0	0.6	0	0.6	0	0.6	0	0.6	
									4.44	1.8	1.1	19	5	63	.10	4	0.7	1.8	0	0.7	1.8	0	0.7	1.8	0	0.7
									3.41	1.5	1.3	17	5	92	.06	1	0.3	0.4	0	0.3	0.4	0	0.3	0.4	0	0.3
									3.35	1.6	1.5	17	5	81	.06	2	0.3	0.3	0	0.3	0.3	0	0.3	0.3	0	0.3
									35.68	1.2	15	0	313	.10	51	10.7	4.0	0	HVA	*						
									3.53	2.1	1.4	30	8	79	.08	3	0.3	0.3	0	0.3	0.3	0	0.3	0.3	0	0.3
									34.11	2.2	1.7	36	5	156	.11	3	0.9	1.1	0	0.9	1.1	0	0.9	1.1	0	0.9
									10.77	2.3	1.9	26	5	75	.13	3	0.4	0.9	0	0.4	0.9	0	0.4	0.9	0	0.4
									3.19	1.6	1.4	18	2	79	.06	2	0.3	0.3	0	0.3	0.3	0	0.3	0.3	0	0.3
									1.28	1.8	1.3	17	4	136	.11	1	0.2	0.3	0	0.3	0.3	0	0.3	0.3	0	0.3
									3.50	2.3	1.7	30	7	73	.08	3	0.3	0.3	0	0.3	0.3	0	0.3	0.3	0	0.3
									6.17	1.4	1.5	32	3	81	.12	5	0.4	1.0	0	0.4	1.0	0	0.4	1.0	0	0.4
									9.26	1.6	1.3	27	4	60	.06	6	0.4	0.7	0	0.4	0.7	0	0.4	0.7	0	0.4
									5.35	1.1	18	2	120	.07	1	0.6	1.1	0	0.6	1.1	0	0.6	1.1	0	0.6	
									2.82	1.3	23	4	66	.10	2	0.5	0.3	0	0.3	0.3	0	0.3	0.3	0	0.3	
									3.57	1.4	1.3	20	6	84	.07	2	0.3	0.4	0	0.3	0.4	0	0.3	0.4	0	0.3
									7.93	1.8	1.8	49	5	73	.12	4	0.4	0.5	0	0.4	0.5	0	0.4	0.5	0	0.4
									2.93	2.4	1.8	45	9	48	.11	2	0.2	0.3	0	0.2	0.3	0	0.2	0.3	0	0.2
									21.28	2.6	2.7	55	9	107	.09	6	0.5	0.9	0	0.5	0.9	0	0.5	0.9	0	0.5
									3.63	1.7	1.5	22	4	77	.09	2	0.3	0.4	0	0.3	0.4	0	0.3	0.4	0	0.3
									2.75	1.4	1.3	25	0	73	.12	3	0.4	0.8	0	0.4	0.8	0	0.4	0.8	0	0.4
									4.43	1.3	39	10	102	.12	5	0.4	2.0	0	0.4	2.0	0	0.4	2.0	0	0.4	
									8.20	1.2	21	5	76	.05	3	0.5	0.8	0	0.5	0.8	0	0.5	0.8	0	0.5	
									2.51	1.5	1.2	14	5	101	.06	2	0.3	0.5	0	0.3	0.5	0	0.3	0.5	0	0.3
									7.91	1.6	1.6	27	3	92	.08	5	0.5	0.7	0	0.5	0.7	0	0.5	0.7	0	0.5
									8.11	1.6	21	5	95	.19	7	0.6	1.6	0	0.6	1.6	0	0.6	1.6	0	0.6	
									8.93	2.5	2.4	37	2	159	.14	7	0.5	0.6	0	0.5	0.6	0	0.5	0.6	0	0.5
									4.81	1.8	1.2	24	4	105	.10	3	0.4	0.9	0	0.4	0.9	0	0.4	0.9	0	0.4
									8.40	2.4	1.8	34	5	89	.17	2	0.5	1.0	0	0.5	1.0	0	0.5	1.0	0	0.5
									8.41	2.4	1.9	33	4	88	.15	1	0.5	0.8	0	0.5	0.8	0	0.5	0.8	0	0.5
									42.36	2.0	1.8	39	6	79	.11	7	0.8	1.0	0	0.8	1.0	0	0.8	1.0	0	0.8
									1.68	1.4	19	3	200	.10	6	0.7	0.8	0	0.7	0.8	0	0.7	0.8	0	0.7	
									8.33	1.6	1.8	39	7	111	.09	4	0.4	0.5	0	0.4	0.5	0	0.4	0.5	0	0.4
									8.44	2.1	2.1	47	6	114	.08	4	0.3	0.4	0	0.3	0.4	0	0.3	0.4	0	0.3
									7.82	2.0	1.9	45	8	115	.09	4	0.4	0.4	0	0.4	0.4	0	0.4	0.4	0	0.4
									8.23	2.1	1.9	37	4	98	.09	5	0.4	0.7	0	0.4	0.7	0	0.4	0.7	0	0.4

1992 HVO EARTHQUAKE SUMMARY LIST

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ORIGIN TIME			LAT N		LON W		DEPTH AMP DUR		GAP RMS MIN ERH			ERZ NO													
YEAR	MON	DA	HRMN	SEC	DEG	MIN	DEG	MIN	KM	MAG	NR	NS	DEG	SEC	DIS	KM	FM	REMK							
1992	FEB	19	2359	48.54	18	25.13	154	41.88	7.00	1.2	19	0	321	.12	108	12.5	16.1	0	DIS						
		20	316	7.90	19	53.16	154	57.15	49.25	1.3	1.7	28	4	265	.10	23	1.1	1.2	0	REA					
		20	2025	53.08	19	21.44	155	4.90	8.49	2.7	3.0	52	7	87	.09	4	0.4	0.3	0	SF5	F				
		21	837	44.26	19	24.88	155	38.83	2.49	1.9	1.1	17	6	192	.08	6	0.6	0.9	0	MLO					
		21	1344	30.28	19	23.59	155	17.76	0.03	1.5	1.5	18	3	69	.14	1	0.2	0.4	0	S5C					
		21	1518	46.39	19	25.08	155	16.43	9.64	2.3	1.5	18	2	154	.08	1	0.7	0.9	0	INT	L				
		21	19	9	20.75	19	18.35	155	13.28	7.57	1.3	34	5	97	.10	3	0.4	0.7	0	SF2					
		21	1924	22.57	19	18.28	155	13.02	6.46	1.5	1.5	39	5	89	.13	2	0.5	0.8	0	SF2					
		22	046	31.54	19	19.59	155	7.28	6.22	1.6	1.5	35	3	111	.10	4	0.5	0.9	0	SF4					
		22	115	44.67	19	24.47	155	17.04	11.16	1.8	1.0	18	2	80	.12	1	0.7	1.1	0	INT	L				
		22	219	28.66	19	23.91	155	16.45	12.02	1.8	1.1	17	2	95	.12	0	0.9	1.3	0	INT	L				
		22	242	15.41	19	17.64	155	12.90	7.10	0.9	1.5	43	6	129	.12	2	0.4	0.7	0	SF2					
		22	339	40.35	19	24.03	155	15.82	7.84	1.6	0.8	13	2	118	.11	1	1.3	1.3	0	INT	L				
		22	343	36.89	19	21.03	155	29.76	5.01	1.6	1.3	28	3	45	.10	5	0.3	1.6	0	XAO					
		22	626	13.54	19	24.52	155	16.73	10.36	1.7	1.1	15	2	118	.08	1	0.7	1.1	0	INT	L				
		22	656	54.17	19	22.97	155	17.53	9.35	1.7	1.1	14	2	82	.12	1	0.7	1.2	0	INT	L				
		22	734	22.07	19	20.27	155	7.06	5.92	0.8	1.5	34	5	102	.12	6	0.4	1.0	0	SF4					
		22	751	3.85	19	22.91	155	17.63	9.51	1.9	1.1	18	2	46	.14	2	0.8	1.0	0	INT	L				
		22	1247	47.63	19	24.07	155	17.19	9.47	2.1	1.1	18	3	70	.14	1	0.8	1.4	0	INT	L				
		22	1340	43.14	19	24.03	155	16.66	10.32	1.9	1.1	16	2	93	.06	0	0.7	1.1	0	INT	L				
		22	14	8	22.02	19	22.27	155	15.07	7.51	1.9	1.2	13	2	147	.10	1	0.7	1.2	0	INT	L			
22	1447	37.16	19	23.57	155	16.56	7.60	1.9	1.3	13	0	69	.09	1	0.6	1.2	0	INT	L						
22	17	8	20.33	19	22.13	155	4.95	7.90	2.2	2.2	48	6	72	.10	4	0.3	0.4	0	SF5						
22	1722	52.75	19	24.01	155	18.44	9.94	1.8	1.1	19	4	59	.13	2	0.6	0.9	0	INT	L						
22	1745	25.39	19	23.30	155	26.89	4.64	1.8	1.3	30	3	48	.13	2	0.4	0.7	0	XAO							
22	1845	49.13	19	21.86	155	19.76	17.67	2.0	1.0	1.1	15	1	116	.13	3	1.6	2.1	0	DEP	L					
22	1919	6.31	19	25.39	155	29.98	9.83	1.3	32	2	48	.08	5	0.4	1.0	0	XAO								
22	1953	57.14	19	23.19	155	19.25	5.45	1.8	1.1	16	2	128	.22	1	1.0	0.8	0	XAO	L						
22	20	2	38.84	19	22.99	155	17.55	5.90	1.7	1.1	1	2	98	.08	1	0.7	1.0	0	INT	L					
22	22	6	17.82	19	24.11	155	17.19	11.96	1.9	1.1	21	1	66	.11	1	0.6	0.8	0	INT	L					
22	2350	13.85	19	22.71	155	18.38	9.16	2.0	1.2	15	2	109	.14	3	1.0	1.1	0	INT	L						
23	1	4	58.84	19	42.88	156	0.75	10.05	2.5	2.2	42	3	224	.13	18	1.2	0.7	0	HUA						
23	141	47.37	19	23.79	155	15.02	4.85	1.6	1.0	16	2	90	.12	2	0.5	0.9	0	SEC	L						
23	224	9.53	19	23.29	155	16.24	4.31	1.4	1.0	12	1	86	.12	1	0.5	0.6	0	SEC	L						
23	3	2	38.84	19	23.78	155	17.02	10.13	1.7	1.1	16	2	70	.10	1	0.8	1.2	0	INT	L					
23	438	32.26	19	25.01	155	16.61	13.12	2.0	1.2	19	3	150	.08	1	1.1	0.7	0	DEP	L						
23	8	2	43.12	19	23.54	155	17.44	13.79	2.0	1.3	14	3	60	.11	1	2.2	1.0	0	DEP	L					
23	945	49.59	19	22.81	155	3.26	7.90	0.8	1.4	30	4	112	.16	3	0.6	0.9	0	SF5							
23	946	12.61	19	26.58	155	16.54	6.14	1.6	1.1	16	3	207	.13	3	1.1	0.9	0	INT	L						
23	10	7	16.44	19	29.40	155	52.23	9.94	2.8	2.4	45	5	99	.17	5	0.6	0.4	0	KON						
23	11	6	4.45	19	50.79	155	55.48	41.13	1.4	1.9	46	6	210	.11	20	0.9	1.0	0	HUA						
23	1143	9.33	19	24.85	155	14.49	11.27	1.8	1.2	14	0	162	.14	4	1.4	1.9	0	INT	L						
23	1721	47.32	19	23.27	155	19.69	14.50	2.0	1.2	13	3	203	.08	1	1.4	1.4	0	DML	L						
23	2022	42.01	19	22.16	155	17.64	4.82	1.6	1.0	12	2	167	.10	3	0.7	1.2	0	SEC	L						
23	23	7	35.33	19	25.00	155	13.61	15.69	2.0	1.2	12	3	288	.15	6	1.1	1.2	0	DEP	L					

1992 HVO EARTHQUAKE SUMMARY LIST

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YEAR	MON	DA	ORIGIN TIME			LAT N	LON W	DEPTH AMP DUR			CAP RMS MIN ERH			ERZ NO							
			HRMN	SEC	DEG MIN			KM	MAG	NR	NS	DEG	SEC		DIS	KM	KM	FM	REM		
1992	FEB	24	10	2	53.65	19	28.78	155	26.79	5.41	2.0	1.4	26	5	86	10	6	0.3	1.7	0	KAO
		24	1151	7.31	19	24.97	155	16.77	15.78	2.0	1.1	13	3	178	0.9	2	1.7	1.0	0	DEP	
		24	1526	13.73	19	24.73	155	16.42	9.11	2.0	1.3	19	6	145	0.5	1	0.8	0.6	0	INT	
		24	1527	3.70	19	24.58	155	16.62	10.91	2.0	1.3	21	5	135	0.9	1	0.7	0.8	0	INT	
		24	1556	36.88	19	24.28	155	18.22	12.39	1.9	1.1	14	3	77	0.6	2	1.3	1.0	0	INT	
		24	1612	59.83	19	22.41	154	50.17	43.30	3.6	3.4	62	12	246	1.0	9	0.8	0.7	0	LER	
		24	1740	33.00	19	3.39	155	14.77	17.56	2.3	1.9	40	6	260	1.0	25	1.2	3.7	0	LOI	
		24	1952	25.70	19	23.86	155	17.46	21.37	1.7	1.0	13	1	55	0.5	1	1.2	1.8	0	DEP	
		24	2035	57.50	20	31.48	155	47.16	13.90	3.0	2.4	30	4	315	2.4	44	1.2	3.9	0	DIS	
		25	118	55.86	19	22.67	155	17.89	4.68	1.5	1.1	10	1	147	0.8	2	0.6	0.9	0	SSC	
		25	1835	10.27	19	26.56	155	18.99	4.04	2.3	1.8	32	6	97	1.2	3	0.4	0.8	0	SNC	
		25	1849	9.77	19	8.00	156	7.27	37.19	3.2	3.1	51	5	268	0.9	30	1.0	1.2	0	KON	
		25	1957	19.60	19	22.80	155	2.68	7.60	2.0	1.9	41	5	119	1.3	4	0.4	0.4	0	SFS	
		25	21	9	40.49	19	1.73	155	18.84	34.95	1.4	34	6	223	1.0	21	1.5	1.3	0	LOI	
		26	228	51.93	19	20.92	155	12.89	8.79	2.2	2.6	51	8	61	1.1	3	0.4	0.4	0	SF2	
		26	938	52.64	19	25.16	155	17.07	15.22	1.7	1.1	13	4	154	0.4	0	2.5	1.1	0	DEP	
		26	953	59.51	19	25.45	155	15.34	14.24	1.7	1.0	13	2	194	1.1	2	2.0	1.4	0	DEP	
		26	1141	33.45	19	21.49	155	18.42	10.78	1.6	1.0	9	1	255	0.5	4	1.8	1.5	0	SWR	
		26	1156	34.44	19	24.30	155	17.68	16.73	1.8	1.1	12	2	77	0.6	2	2.0	1.4	0	DEP	
		26	1353	55.25	19	20.95	155	6.02	8.36	1.6	1.6	27	4	98	0.7	5	0.5	0.7	0	SF4	
		26	1554	8.16	19	11.33	155	38.78	0.46	2.9	2.8	45	11	106	1.8	17	0.5	0.3	0	LSW	
		26	19	5	34.64	19	20.00	155	6.54	8.21	2.1	2.0	44	8	116	1.0	5	0.4	0.5	0	SF4
		26	2155	34.35	19	20.27	155	3.97	7.05	1.4	25	5	123	0.8	2	0.4	0.6	0	SFS		
		27	357	24.53	19	32.50	155	57.85	11.08	1.5	29	1	214	1.6	8	1.4	0.5	0	KON		
		27	628	19.03	19	24.23	155	16.66	8.32	0.8	16	2	103	1.2	1	0.8	0.9	0	INT		
		27	2213	26.35	19	11.03	155	41.33	12.31	2.1	1.6	17	3	123	0.7	10	0.4	0.7	0	LSW	
		28	413	42.11	19	17.55	155	27.51	10.62	1.7	1.3	31	6	49	1.2	6	0.4	0.8	0	LSW	
		28	13	1	55.67	19	21.99	155	19.71	9.06	1.6	0.9	10	2	220	1.0	3	1.8	1.8	0	SWR
		28	18	0	33.81	19	19.62	155	6.69	7.19	1.2	24	5	123	0.8	5	0.4	0.8	0	SF4	
		29	4	5	57.96	19	15.90	155	29.36	7.30	1.1	26	4	60	2.0	2	0.5	1.1	0	LSW	
		29	653	59.57	19	19.23	155	12.75	5.76	1.4	1.4	42	5	86	1.3	4	0.4	0.9	0	SF2	
		29	1347	26.18	19	42.88	155	49.25	12.34	2.2	1.9	29	1	257	1.3	4	1.4	0.4	0	HUA	
		29	1822	31.06	19	19.54	155	49.02	8.82	1.6	23	0	136	1.3	9	0.8	1.3	0	KON		
		29	2242	33.64	19	9.87	155	32.48	1.64	1.4	22	2	119	2.0	8	0.9	1.8	0	LSW		
		MAR	1	035	21.25	19	26.43	155	19.75	3.13	1.7	10	18	2	153	0.9	3	0.5	0.5	0	KAO
		1	237	1.20	19	20.23	155	10.69	8.84	1.3	30	2	82	0.8	4	0.4	0.8	0	SF3		
		1	659	13.77	19	26.90	155	19.01	6.08	1.4	1.1	14	2	122	1.0	4	0.7	1.3	0	INT	
		1	813	7.67	19	25.20	155	19.85	6.59	1.6	1.0	20	2	102	0.9	3	0.4	0.8	0	KAO	
		1	10	7	40.86	19	19.43	155	8.63	6.29	1.4	31	2	81	0.9	4	0.4	0.9	0	SF4	
		1	1539	27.59	19	14.70	155	2.78	43.54	2.4	1.9	49	8	206	1.0	10	1.2	0.9	0	DEP	
		1	1922	31.49	19	17.88	155	15.21	7.57	1.2	26	4	145	0.9	3	0.5	0.8	0	SF1		
		2	020	59.06	19	41.88	155	7.12	45.47	0.9	1.5	27	4	99	1.0	4	1.1	2.2	0	HIL	
		3	045	21.19	19	22.19	155	13.45	3.05	0.9	8	2	184	0.4	1	0.9	0.4	0	SER		
		3	046	36.40	19	22.33	155	13.32	3.12	1.2	1.1	17	5	135	0.6	1	0.6	0.3	0	SER	
		3	046	56.68	19	22.46	155	13.29	3.24	0.8	11	4	143	0.9	0	0.6	0.4	0	SER		
		3	046	56.68	19	22.46	155	13.29	3.24	0.8	11	4	143	0.9	0	0.6	0.4	0	SER		
		3	046	56.68	19	22.46	155	13.29	3.24	0.8	11	4	143	0.9	0	0.6	0.4	0	SER		
		3	046	56.68	19	22.46	155	13.29	3.24	0.8	11	4	143	0.9	0	0.6	0.4	0	SER		
		3	046	56.68	19	22.46	155	13.29	3.24	0.8	11	4	143	0.9	0	0.6	0.4	0	SER		
		3	046	56.68	19	22.46	155	13.29	3.24	0.8	11	4	143	0.9	0	0.6	0.4	0	SER		

1992 HVO EARTHQUAKE SUMMARY LIST

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YEAR	MON	DA	ORIGIN TIME		LAT N	LON W	DEPTH AMP DUR		NS	DEG	SEC	DIS	KM	ERH	ERZ NO						
			HRMN	SEC			KM	MAG								NR					
1992	MAR	3	047	16.05	19	22.89	155	13.05	3.10	0.9	14	5	138	.07	0	0.5	0.3	0	SER		
		3	047	27.46	19	22.04	155	13.17	2.88	1.1	14	4	95	-10	1	0.6	0.3	0	SER		
		3	047	33.53	19	22.62	155	13.14	3.21	1.2	13	21	5	110	-11	0	0.5	0.2	0	SER	
		3	048	15.49	19	21.95	155	13.39	1.77	1.7	15	20	4	94	-12	1	0.3	0.3	0	SER	
		3	053	4.42	19	22.69	155	14.11	3.05	1.1	1.2	13	4	137	.05	2	0.4	0.3	0	SER	
		3	054	45.06	19	22.12	155	13.00	3.12	1.2	9	2	155	.05	1	0.8	0.3	0	SER		
		3	056	59.89	19	22.90	155	13.80	3.22	1.5	1.3	20	5	117	-10	1	0.3	0.3	0	SER	
		3	057	19.92	19	22.30	155	13.88	3.31	1.5	1.4	18	6	82	-04	1	0.3	0.4	0	SER	
		3	057	36.84	19	22.35	155	13.99	3.43	1.1	14	6	142	.06	2	0.4	0.5	0	SER		
		3	058	31.13	19	22.31	155	13.67	3.17	1.7	1.4	19	4	84	-06	1	0.3	0.3	0	SER	
		3	059	44.89	19	22.49	155	13.81	3.19	1.5	1.3	17	5	130	.09	1	0.3	0.4	0	SER	
		3	1	0	7.71	19	22.25	155	14.14	3.16	1.5	1.2	19	4	81	-10	2	0.4	0.4	0	SER
		3	1	0	18.58	19	22.51	155	14.19	2.28	1.6	1.5	18	5	85	-12	2	0.3	0.4	0	SER
		3	1	8	28.61	19	22.60	155	14.00	3.54	1.5	1.4	13	3	136	.07	2	0.5	0.5	0	SER
		3	112	9.19	19	22.58	155	14.04	3.33	1.6	1.4	15	3	94	.04	2	0.4	0.4	0	SER	
		3	114	44.64	19	22.68	155	14.31	3.15	1.7	1.4	25	6	93	.09	2	0.3	0.3	0	SER	
		3	115	59.96	19	22.49	155	14.00	3.04	1.2	1.1	2	138	-04	2	0.4	0.4	0	SER		
		3	116	4.97	19	22.15	155	13.96	2.89	1.2	1.3	16	4	83	.05	2	0.3	0.4	0	SER	
		3	116	30.91	19	22.41	155	13.91	3.09	0.9	1.3	4	130	.06	1	0.3	0.4	0	SER		
		3	116	52.41	19	22.20	155	14.00	3.18	1.2	1.2	17	4	83	.05	2	0.5	0.3	0	SER	
		3	117	10.68	19	21.79	155	13.67	1.78	1.8	1.6	23	5	54	.07	2	0.3	0.4	0	SER	
		3	117	40.46	19	22.94	155	14.53	2.51	1.1	9	4	145	-04	3	0.3	1.3	0	SER		
		3	120	39.26	19	21.71	155	13.60	1.41	1.5	1.4	17	3	94	.03	2	0.3	0.5	0	SER	
		3	120	54.29	19	22.34	155	13.97	3.31	1.5	1.4	23	6	81	.04	2	0.3	0.3	0	SER	
		3	126	48.69	19	23.06	155	14.53	2.38	0.8	14	5	115	.05	3	0.3	0.6	0	SER		
		3	126	57.39	19	22.07	155	13.60	2.70	1.2	1.2	17	4	88	.06	1	0.4	0.4	0	SER	
		3	128	22.25	19	22.19	155	13.09	2.69	1.3	9	3	183	.03	1	0.7	0.3	0	SER		
		3	129	22.92	19	22.63	155	14.13	3.01	1.1	16	5	95	-10	2	0.3	0.4	0	SER		
		3	129	29.89	19	22.04	155	14.34	2.40	1.1	1.2	15	5	110	.05	2	0.3	0.4	0	SER	
		3	130	34.20	19	22.32	155	13.04	4.17	1.0	15	4	105	-12	1	0.6	0.4	0	SER		
		3	130	51.36	19	23.45	155	12.31	1.53		9	4	177	.06	2	0.6	1.0	0	SER		
		3	131	30.64	19	22.32	155	13.90	3.46	1.2	1.4	19	5	82	.07	2	0.4	0.4	0	SER	
		3	132	35.34	19	22.49	155	13.87	3.27	1.5	1.3	21	7	86	.07	1	0.3	0.4	0	SER	
		3	133	36.41	19	22.24	155	13.75	2.47	1.7	10	2	145	.03	1	0.5	0.4	0	SER		
		3	133	39.22	19	22.25	155	14.10	3.05	1.8	1.6	32	9	73	.09	2	0.3	0.3	0	SER	
		3	134	5.88	19	22.29	155	13.98	3.22	1.8	1.3	21	6	81	.06	2	0.3	0.3	0	SER	
		3	134	29.57	19	22.41	155	13.90	3.67	1.5	1.2	14	4	84	-06	1	0.4	0.4	0	SER	
		3	137	24.25	19	21.93	155	13.53	2.12	2.1	1.4	40	6	49	-11	1	0.2	0.3	0	SER	
		3	138	45.98	19	22.37	155	13.92	1.61	1.4	1.4	15	4	184	.08	3	0.3	0.7	0	SER	
		3	142	5.40	19	22.33	155	14.09	1.57	1.1	1.2	14	6	180	-10	2	0.3	0.3	0	SER	
		3	142	31.74	19	22.51	155	13.69	2.50		10	4	189	.02	1	0.7	0.8	0	SER		
		3	142	52.13	19	21.67	155	13.73	1.51	2.0	1.7	23	6	93	-06	2	0.3	0.4	0	SER	
		3	145	47.76	19	21.79	155	13.74	1.78	1.5	1.4	18	4	91	.03	2	0.3	0.5	0	SER	
		3	146	42.79	19	22.47	155	14.37	3.37	1.2	1.1	13	3	89	.04	2	0.4	0.5	0	SER	
		3	147	38.26	19	22.77	155	14.64	2.65	1.8	1.6	23	6	73	-10	2	0.3	0.3	0	SER	

1992 HVO EARTHQUAKE SUMMARY LIST

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YEAR	MON	DA	HRMN	SEC	LAT N	DEG	MIN	LON W	DEPTH	KM	MAG	AMP	DUR	NS	DEG	SEC	DIS	KM	ERH	ERZ	NO
ORIGIN TIME																					
1992	MAR	3	150	39.93	19	23.06	155	14.59	1.41	1.1	1.1	1.1	1.1	3	135	.05	3	0.3	0.8	0	SEC
3		150	49.69	19	21.72	155	13.83	1.76	1.2	1.5	1.5	3	147	.06	2	0.3	0.5	0	0.3	0	SEC
3		153	42.67	19	22.14	155	13.92	1.61	1.8	1.7	30	8	84	.08	2	0.2	0.3	0	0.3	0	SEC
3		154	43.71	19	22.49	155	14.08	3.12	1.2	1.2	5	173	.07	2	0.7	0.4	0	0.4	0	0	SEC
3		159	3.23	19	22.32	155	13.93	3.41	1.5	1.4	20	6	82	.04	2	0.3	0.4	0	0.4	0	SEC
3		2	0	52.23	19	22.03	155	13.91	1.41	1.2	1.5	17	6	86	.07	2	0.3	0.4	0	0.4	SEC
3		2	2	57.90	19	22.52	155	13.84	3.62	2.2	1.5	37	8	90	.08	1	0.3	0.3	0	0.3	SEC
3		2	7	8.21	19	21.95	155	14.00	1.71	1.5	1.4	21	8	86	.05	2	0.3	0.3	0	0.3	KOA
3		2	8	13.55	19	21.75	155	13.45	4.42			7	3	266	.06	2	2.0	1.3	0	0.3	SEC
3		2	8	38.25	19	22.19	155	13.95	3.20	1.5	1.3	22	7	84	.05	2	0.3	0.3	0	0.3	SEC
3		210	45.56	19	22.81	155	14.32	3.69		1.0	1.2		3	121	.08	2	0.5	0.7	0	0.7	SEC
3		211	14.97	19	22.21	155	14.12	1.99	1.2	1.3	20	5	81	.10	2	0.3	0.4	0	0.4	0	SEC
3		211	33.84	19	21.89	155	13.63	1.99	1.8	1.5	23	6	91	.09	2	0.3	0.4	0	0.4	0	SEC
3		212	17.90	19	22.54	155	14.01	2.01	1.4		17	6	137	.10	2	0.3	0.4	0	0.4	0	SEC
3		213	15.61	19	22.82	155	14.49	3.73	1.6	1.4	22	7	94	.06	2	0.3	0.4	0	0.4	0	SEC
3		214	12.38	19	22.84	155	14.89	3.02	1.7	1.4	20	6	70	.09	2	0.3	0.3	0	0.3	0	SEC
3		215	51.30	19	22.73	155	14.44	3.34	1.6	1.5	26	8	78	.09	2	0.3	0.3	0	0.3	0	SEC
3		216	53.00	19	22.71	155	14.00	3.34	1.3	1.6	21	4	105	.12	2	0.4	0.4	0	0.4	0	SEC
3		218	28.52	19	21.68	155	12.85	2.85		1.4	22	5	59	.05	2	0.4	0.4	0	0.4	0	SEC
3		224	43.92	19	22.49	155	14.04	3.12	1.5	1.3	16	3	128	.05	2	0.4	0.3	0	0.3	0	SEC
3		225	42.46	19	22.13	155	13.95	2.04	0.8	1.3	36	6	57	.09	2	0.2	0.3	0	0.3	0	SEC
3		227	30.82	19	22.61	155	14.35	3.47	1.4	1.4	23	7	89	.09	2	0.3	0.4	0	0.4	0	SEC
3		228	3.20	19	21.76	155	15.46	1.78	1.1	1.5	12	4	210	.12	1	0.7	0.5	0	0.5	0	KOA
3		230	14.23	19	22.10	155	14.07	1.28	3.2	3.7	54	5	53	.13	2	0.2	0.4	0	0.4	0	SEC
3		235	29.70	19	22.22	155	13.78	1.95	1.7	1.7	19	5	84	.06	1	0.3	0.3	0	0.3	0	SEC
3		236	59.68	19	22.07	155	13.86	1.98	1.2	1.2	12	4	191	.06	2	0.4	0.3	0	0.3	0	SEC
3		239	35.88	19	22.33	155	14.23	1.50	1.4	2.1	16	7	141	.13	2	0.4	0.3	0	0.3	0	SEC
3		240	0.33	19	22.88	155	14.37	1.70	1.4	1.2	5	1	150	.02	2	0.9	3.9	0	0.3	0	SEC
3		240	36.32	19	22.86	155	13.39	4.61	1.2	1.4	15	3	128	.09	1	0.5	0.6	0	0.6	0	SEC
3		241	9.74	19	22.94	155	14.34	3.84	2.4	1.7	43	7	53	.09	2	0.3	0.3	0	0.3	0	SEC
3		241	56.11	19	22.23	155	12.74	3.24	3.0	3.4	52	6	51	.11	1	0.2	0.3	0	0.3	0	SEC
3		242	56.61	19	22.30	155	14.21	1.76	2.7	3.3	33	5	75	.11	2	0.2	0.3	0	0.3	0	SEC
3		248	15.04	19	22.57	155	13.83	3.34	1.9	1.8	18	6	97	.08	1	0.3	0.3	0	0.3	0	SEC
3		249	51.97	19	22.51	155	14.01	1.94	1.7	1.7	21	6	90	.08	2	0.2	0.3	0	0.3	0	SEC
3		254	27.25	19	22.84	155	13.53	1.47		1.6	13	3	124	.14	1	0.5	0.5	0	0.5	0	SEC
3		254	33.72	19	22.00	155	13.90	1.37		1.7	19	5	87	.10	2	0.3	0.4	0	0.4	0	SEC
3		259	55.17	19	22.17	155	13.94	1.73		1.3	11	2	147	.06	2	0.3	0.4	0	0.4	0	SEC
3		3	0	38.07	19	22.19	155	14.41	1.45	1.6	1.4	15	2	79	.07	2	0.3	0.4	0	0.4	SEC
3		3	1	32.18	19	22.66	155	14.11	3.51	1.4	1.4	16	2	89	.08	2	0.4	0.5	0	0.5	SEC
3		3	4	2.71	19	22.34	155	13.93	3.30	1.5	1.4	18	5	81	.06	2	0.3	0.4	0	0.4	SEC
3		3	5	37.71	19	22.29	155	14.14	2.98		1.1	19	5	80	.08	2	0.3	0.4	0	0.4	SEC
3		3	8	7.99	19	22.37	155	13.95	3.36		1.8	24	7	81	.06	2	0.3	0.3	0	0.3	SEC
3		3	8	11.52	19	22.32	155	13.86	2.65	2.1	1.8	47	7	50	.15	1	0.3	0.3	0	0.3	SEC
3		310	31.18	19	22.30	155	14.11	2.95	1.5	1.4	16	4	80	.06	2	0.4	0.3	0	0.3	0	SEC
3		311	40.00	19	22.40	155	14.01	3.35	1.9	1.9	21	5	82	.05	2	0.3	0.2	0	0.2	0	SEC

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1992 HVO EARTHQUAKE SUMMARY LIST

YEAR	MON	DA	HRMN	SEC	LAT N	DEG	MIN	LON W	DEPTH	KM	MAG	AMP	DUR	NS	DEG	RMS	MIN	ERH	ERZ	NO	
ORIGIN TIME	TIME	TIME	TIME	TIME	TIME	TIME	TIME	TIME	TIME	TIME	TIME	TIME	TIME	TIME	TIME	TIME	TIME	TIME	TIME	TIME	
1992	MAR	3	313	28.65	19	22.26	155	14.32	1.40	1.7	1.7	19	4	79	.07	2	0.2	0.3	0	SEC	
		3	314	8.02	19	22.21	155	13.83	2.78	1.6	1.5	18	5	117	.10	1	0.4	0.4	0	SEC	
		3	318	47.14	19	22.24	155	14.41	1.45	1.8	1.4	30	6	78	.09	2	0.2	0.3	0	SEC	
		3	322	18.12	19	22.56	155	13.99	0.47	1.4	1.7	17	5	93	.11	2	0.3	0.4	0	SEC	
		3	334	35.40	19	22.06	155	13.82	3.35	1.5	1.2	9	2	191	.06	4	0.8	1.1	0	SEC	
		3	336	31.58	19	22.19	155	14.20	1.67	2.1	1.7	39	6	53	.11	2	0.2	0.3	0	SEC	
		3	339	30.18	19	22.23	155	13.87	1.76	2.1	1.9	30	4	59	.10	2	0.3	0.3	0	SEC	
		3	331	42.62	19	22.18	155	14.27	1.58	2.1	1.8	29	6	54	.11	2	0.2	0.3	0	SEC	
		3	334	4.41	19	22.96	155	14.45	1.68	1.4	1.5	18	6	98	.08	2	0.3	0.4	0	SEC	
		3	334	13.53	19	22.21	155	13.91	2.98		1.6	16	4	83	.08	2	0.4	0.4	0	SEC	
		3	335	59.71	19	22.16	155	13.91	3.07	1.7	1.6	19	4	84	.07	2	0.4	0.3	0	SEC	
		3	336	16.45	19	22.55	155	13.81	3.76		1.2	16	5	95	.06	1	0.4	0.4	0	SEC	
		3	340	18.38	19	22.31	155	13.97	3.33	1.8	1.3	26	5	62	.09	2	0.3	0.3	0	SEC	
		3	342	9.38	19	22.43	155	14.34	1.72	1.1	1.3	18	5	91	.05	2	0.2	0.3	0	SEC	
		3	342	24.92	19	22.24	155	14.06	2.00	1.6	1.7	19	5	81	.06	2	0.3	0.3	0	SEC	
		3	347	3.94	19	22.27	155	14.19	1.55	1.3	1.6	20	5	80	.08	2	0.3	0.4	0	SEC	
		3	348	20.19	19	22.16	155	14.43	1.89	2.6	2.0	47	5	55	.10	2	0.2	0.3	0	SEC	
		3	352	48.62	19	21.93	155	14.46	1.12	1.8	1.7	20	4	81	.07	3	0.2	0.4	0	KOA	
		3	353	42.74	19	22.54	155	14.76	3.05	2.1	3.0	27	0	52	.15	2	0.4	0.5	0	SEC	
		3	354	50.85	19	23.13	155	14.69	3.09	1.4		17	7	108	.07	3	0.3	0.4	0	SEC	
		3	356	30.16	19	23.01	155	14.68	3.23	1.6	1.4	10	3	211	.04	2	0.6	0.5	0	SEC	
		3	4	0	49.30	19	22.23	155	14.30	1.47	2.1	1.5	26	4	79	.09	2	0.2	0.3	0	SEC
		3	4	1	34.33	19	22.13	155	14.48	1.53		1.4	16	3	79	.07	3	0.2	0.4	0	SEC
		3	418	21.99	19	22.28	155	13.94	3.18	1.8	1.3	33	6	58	.10	2	0.3	0.3	0	SEC	
		3	4	5	48.14	19	22.15	155	14.15	1.61	3.1	2.3	45	5	54	.11	2	0.2	0.3	0	SEC
		3	4	8	43.61	19	22.19	155	14.40	1.61	1.4	2.4	12	2	143	.07	2	0.3	0.4	0	SEC
		3	411	41.81	19	22.21	155	13.78	1.88	1.7	1.6	16	5	84	.08	1	0.3	0.3	0	SEC	
		3	414	20.32	19	22.16	155	14.36	0.50	2.0	2.8	16	3	84	.16	3	0.3	0.5	0	KOA	
		3	418	21.99	19	22.74	155	14.12	1.08	0.8	1.7	21	2	74	.12	2	0.3	0.4	0	SEC	
		3	420	54.15	19	22.65	155	14.14	1.66	1.6	1.7	21	5	88	.08	2	0.3	0.3	0	SEC	
		3	421	57.92	19	22.03	155	14.04	1.54		1.6	23	4	72	.08	2	0.3	0.4	0	SEC	
		3	424	5.35	19	22.03	155	14.41	1.27		1.6	24	4	80	.10	3	0.2	0.4	0	SEC	
		3	426	42.80	19	22.30	155	14.21	2.05	2.1	1.6	29	5	74	.10	2	0.2	0.3	0	SEC	
		3	430	5.92	19	22.51	155	14.58	1.63	2.1	1.9	42	7	51	.10	2	0.2	0.3	0	SEC	
		3	433	28.30	19	22.40	155	13.68	3.48	1.5	1.5	17	5	82	.05	1	0.4	0.4	0	SEC	
		3	436	31.23	19	22.74	155	14.15	2.10	1.4	1.8	10	5	160	.08	2	0.3	0.5	0	SEC	
		3	437	42.58	19	22.30	155	14.54	1.78	1.4	1.3	19	4	76	.07	2	0.3	0.3	0	SEC	
		3	437	57.24	19	22.14	155	14.29	1.70	2.6	2.0	39	5	54	.10	2	0.2	0.3	0	SEC	
		3	439	34.10	19	22.40	155	14.45	2.05	2.1	2.4	17	4	78	.07	2	0.3	0.4	0	SEC	
		3	440	27.24	19	22.20	155	14.11	1.88	3.1		26	0	53	.09	2	0.3	0.4	0	SEC	
		3	443	40.14	19	21.98	155	13.87	1.53	2.1	3.2	21	4	87	.09	2	0.3	0.4	0	SEC	
		3	444	52.62	19	22.28	155	14.32	1.81	0.8	2.8	18	4	79	.11	2	0.3	0.3	0	SEC	
		3	451	20.22	19	23.02	155	14.83	3.29	2.4	1.8	43	3	49	.11	2	0.3	0.3	0	SEC	
		3	457	10.95	19	22.65	155	13.61	2.08	1.7	1.6	20	5	95	.13	2	0.4	0.6	0	SEC	
		3	458	36.83	19	22.25	155	14.62	2.09	1.4	1.5	19	5	76	.11	2	0.3	0.3	0	SEC	

1992 HVO EARTHQUAKE SUMMARY LIST

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ORIGIN TIME				LAT N		LON W		DEPTH AMP DUR		GAP RMS MIN ERH				ERZ NO						
YEAR	MON	DA	HRMN	SEC	DEG	MIN	DEG	MIN	KM	MAG	NR	NS	DEG	SEC	DIS	KM	RM	FM	REMK	
1992 MAR	3	459	30.95	19	21.96	155	14.45	0.13	2.1	1.4	28	5	81	12	3	0.2	0.4	0	0.4	
	3	5	11.93	19	22.22	155	14.17	1.35	2.1	1.7	31	3	53	11	2	0.2	0.4	0	0.4	
	3	5	17.73	19	22.02	155	14.29	1.55	2.4	2.1	23	4	81	08	2	0.2	0.4	0	0.4	
	3	5	6	18.03	19	22.04	155	14.61	1.44	2.6	2.2	47	6	56	11	2	0.2	0.3	0	0.3
	3	5	11	13.93	19	22.25	155	14.27	1.86	1.6	25	5	79	10	2	0.2	0.3	0	0.3	
	3	511	30.48	19	22.34	155	14.12	1.75	3.1	3.3	49	4	52	13	2	0.2	0.3	0	0.3	
	3	523	9.57	19	22.02	155	14.34	1.56	1.8	1.5	15	3	81	08	2	0.3	0.4	0	0.4	
	3	524	8.48	19	22.15	155	14.76	1.57	2.0	1.8	17	2	110	09	2	0.3	0.4	0	0.4	
	3	528	44.50	19	22.04	155	14.07	1.93	2.0	1.7	22	5	84	11	2	0.3	0.4	0	0.4	
	3	532	5.67	19	21.93	155	14.52	0.42	3.1	2.4	39	0	57	12	3	0.3	0.5	0	0.5	
	3	532	38.69	19	22.04	155	13.96	1.56	2.6	2.4	16	4	151	14	2	0.5	0.4	0	0.4	
	3	533	28.03	19	22.42	155	14.40	2.60	1.7	1.8	4	79	12	2	0.3	0.4	0	0.4	0	0.4
	3	537	35.22	19	22.88	155	14.78	3.31	1.8	1.5	3	145	09	2	0.4	0.4	0	0.4	0	0.4
	3	540	59.45	19	21.94	155	14.75	4.18	1.7	1.6	10	3	78	14	2	0.8	0.6	0	0.6	
	3	541	39.51	19	22.66	155	13.93	0.02	0.8	1.7	12	1	149	14	3	0.5	0.9	0	0.9	
	3	542	39.80	19	22.17	155	14.14	1.48	2.9	2.3	40	0	54	11	2	0.2	0.4	0	0.4	
	3	546	27.92	19	22.10	155	14.62	1.65	1.6	2.0	24	1	56	10	2	0.3	0.5	0	0.5	
	3	548	31.90	19	22.33	155	14.61	1.45	1.8	9	0	143	03	2	0.7	0.4	0	0.4		
	3	550	20.65	19	22.29	155	13.88	1.11	1.9	2.2	12	4	209	12	1	0.9	0.4	0	0.4	
	3	554	31.40	19	22.16	155	14.54	1.69	1.4	1.6	14	2	77	04	2	0.3	0.4	0	0.4	
	3	558	57.29	19	22.06	155	14.45	1.61	1.7	1.8	36	4	55	10	3	0.2	0.3	0	0.3	
	3	6	5	0.71	19	22.21	155	14.74	1.52	1.4	1.6	13	2	76	05	2	0.4	0.3	0	0.3
	3	6	6	52.09	19	22.18	155	14.70	1.43	1.3	1.3	0	76	05	2	0.3	0.4	0	0.4	
	3	6	8	16.33	19	21.52	155	13.73	1.39	1.6	4	1	141	01	7	0.8	1.5	0	1.5	
	3	6	11	33.71	19	22.72	155	14.47	3.50	1.5	1.2	12	2	91	04	2	0.4	0.4	0	0.4
	3	616	38.38	19	22.24	155	14.11	0.96	2.1	1.9	35	2	52	10	2	0.3	0.6	0	0.6	
	3	620	11.16	19	22.14	155	14.14	1.93	1.6	1.8	8	2	189	04	2	0.6	0.4	0	0.4	
	3	621	23.28	19	21.29	155	14.82	2.40	1.7	1.7	39	5	64	11	3	0.2	0.5	0	0.5	
	3	624	24.24	19	22.01	155	13.97	1.33	2.0	1.8	14	1	85	07	3	0.3	0.8	0	0.8	
	3	626	6.90	19	22.18	155	14.34	1.33	1.7	1.6	9	1	91	04	3	0.4	0.7	0	0.7	
	3	627	39.94	19	22.78	155	14.16	2.99	1.5	1.6	29	5	102	11	3	0.4	0.6	0	0.6	
	3	630	38.04	19	22.24	155	13.98	3.10	1.8	1.5	12	1	82	06	2	0.5	0.5	0	0.5	
	3	634	28.59	19	22.14	155	14.11	1.85	1.5	1.4	11	2	136	05	2	0.7	0.4	0	0.4	
	3	636	55.87	19	22.85	155	14.51	3.55	2.5	2.5	20	0	49	09	3	0.4	0.5	0	0.5	
	3	641	1.51	19	23.09	155	13.46	2.61	1.6	1.2	8	1	255	04	4	0.8	1.3	0	1.3	
	3	644	58.69	19	22.47	155	14.62	1.68	1.4	1.4	14	4	78	04	2	0.2	0.3	0	0.3	
	3	653	4.82	19	23.10	155	14.50	3.61	2.3	1.6	31	5	77	08	3	0.3	0.3	0	0.3	
	3	653	44.72	19	22.03	155	15.49	4.52	2.4	1.8	38	4	58	10	1	0.3	0.5	0	0.5	
	3	7	0	40.73	19	22.95	155	14.00	1.68	1.9	1.8	22	5	96	10	2	0.3	0.3	0	0.3
	3	710	31.85	19	22.72	155	14.35	3.37	1.7	1.5	21	6	84	08	2	0.3	0.3	0	0.3	
	3	710	53.34	19	22.13	155	14.50	1.88	2.1	1.5	38	6	66	10	2	0.2	0.3	0	0.3	
	3	713	24.66	19	22.71	155	14.65	1.83	1.6	1.8	8	2	121	07	2	0.3	0.4	0	0.4	
	3	718	33.41	19	22.21	155	13.89	3.38	1.5	1.3	14	4	83	05	2	0.5	0.4	0	0.4	
	3	733	34.82	19	22.28	155	14.69	1.59	1.6	1.4	17	3	75	04	2	0.2	0.4	0	0.4	
	3	741	17.54	19	22.02	155	13.88	1.87	1.3	1.3	2	86	10	2	0.4	0.5	0	0.5		

1992 HVO EARTHQUAKE SUMMARY LIST

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ORIGIN TIME	LAT N	DEG	MIN	DEPT	AMP	DUR	RM	MAG	NR	NS	DEG	SEC	DIS	RM	ERH	ERZ	NO								
YEAR	MON	DA	HRMN	SEC	DEG	MIN	DEPT	AMP	DUR	RM	MAG	NR	NS	DEG	SEC	DIS	RM	ERH	ERZ	NO					
1992 MAR	3	741	31.80	19	21.92	155	14.41	1.24	2.1	1.6	27	6	59	10	3	0.2	0.4	0	0.4	0	0.4				
		3	741	41.63	19	21.92	155	14.54	1.60	2.6	2.0	34	6	68	11	3	0.2	0.3	0	0.3	0	0.3			
		3	743	27.08	19	22.52	155	13.94	2.98	2.2	2.8	17	2	87	11	1	0.5	0.3	0	0.3	0	0.3			
		3	744	43.76	19	23.06	155	14.60	1.24	4.3	1.1	5	135	07	3	0.3	0.6	0	0.6	0	0.6	0	0.6		
		3	746	53.50	19	22.07	155	14.19	1.65	2.3	1.8	37	4	54	11	2	0.2	0.3	0	0.3	0	0.3			
		3	749	44.73	19	22.17	155	13.91	1.74	2.0	1.8	22	5	84	08	2	0.3	0.3	0	0.3	0	0.3			
		3	756	13.20	19	22.44	155	14.28	3.58	1.0	1.0	4	174	12	2	0.9	0.8	0	0.8	0	0.8	0	0.8		
		3	812	11.37	19	22.14	155	13.68	2.25	1.5	1.5	19	5	61	07	1	0.3	0.3	0	0.3	0	0.3			
		3	812	18.93	19	22.93	155	14.56	3.61	2.1	2.0	35	4	65	10	3	0.3	0.4	0	0.4	0	0.4			
		3	832	38.77	19	20.23	155	10.56	9.23	1.4	1.5	30	5	82	07	4	0.5	0.7	0	0.7	0	0.7			
		3	843	3.31	19	22.35	155	13.88	3.48	0.8	9	3	81	03	1	0.5	0.5	0	0.5	0	0.5	0	0.5		
		3	9	36.91	19	22.20	155	14.62	1.28	1.4	1.3	13	1	120	05	2	0.4	0.6	0	0.6	0	0.6			
		3	912	3.72	19	22.61	155	14.09	3.51	1.5	1.1	9	1	135	03	2	0.6	0.7	0	0.7	0	0.7			
		3	922	33.64	19	22.56	155	14.90	1.84	2.1	1.7	44	8	52	12	2	0.2	0.2	0	0.2	0	0.2			
		3	922	54.84	19	22.07	155	14.41	1.47	3.0	2.2	42	6	55	13	3	0.2	0.4	0	0.4	0	0.4			
		3	933	48.87	19	22.41	155	14.59	2.13	1.7	1.5	21	6	75	08	2	0.2	0.3	0	0.3	0	0.3			
		3	947	33.33	19	20.00	155	10.77	6.96	0.9	15	2	93	05	4	0.5	1.4	0	0.5	1.4	0	0.5			
		3	947	39.29	19	19.78	155	11.32	9.29	1.1	19	5	258	01	5	0.6	1.1	0	0.5	1.1	0	0.5			
		3	10	10.12	19	22.79	155	14.38	4.10	0.9	7	2	158	03	2	1.3	2.5	0	0.5	0.5	0	0.5			
		3	1019	24.20	19	23.08	155	14.79	3.41	1.7	1.5	16	4	67	04	2	0.3	0.4	0	0.4	0	0.4			
		3	1027	40.38	19	22.15	155	14.15	2.07	1.9	1.5	29	3	81	09	2	0.3	0.3	0	0.3	0	0.3			
		3	1036	39.39	19	23.23	155	14.75	2.16	7	2	122	03	3	0.4	1.9	0	0.5	0.5	0	0.5	0	0.5		
		3	1039	8.18	19	22.71	155	14.19	3.39	1.0	11	2	132	07	2	0.5	0.7	0	0.5	0.7	0	0.5			
		3	1130	17.85	19	20.95	155	14.94	1.60	0.8	14	4	84	09	3	0.3	0.9	0	0.4	0.4	0	0.4			
		3	1137	19.48	19	28.79	155	27.08	5.69	2.1	1.5	40	5	61	14	6	0.4	1.1	0	0.4	1.1	0	0.4		
		3	1148	36.29	19	19.64	155	11.56	8.93	2.2	2.2	53	6	92	11	5	0.4	0.4	0	0.4	0	0.4			
		3	12	5	9.55	19	17.88	155	13.20	5.66	0.9	15	1	101	07	2	0.7	1.2	0	0.5	1.2	0	0.5		
		3	1231	36.42	19	23.19	155	14.83	3.23	1.1	15	6	106	08	2	0.3	0.5	0	0.5	0.5	0	0.5			
		3	1233	25.64	19	22.14	155	14.40	1.70	1.6	1.4	15	2	80	06	2	0.3	0.4	0	0.4	0	0.4			
		3	1240	17.87	19	22.50	155	14.30	1.07	1.4	1.2	13	2	141	07	3	0.5	0.8	0	0.8	0	0.8			
		3	1241	58.62	19	22.86	155	24.27	13.11	2.0	1.6	35	3	29	09	5	0.4	0.6	0	0.6	0	0.6			
		3	1242	49.04	19	22.44	155	14.50	1.41	1.6	1.3	17	3	125	11	2	0.4	0.6	0	0.6	0	0.6			
		3	1331	41.56	19	22.95	155	15.10	3.49	0.9	12	3	142	09	2	0.5	0.3	0	0.3	0	0.3	0	0.3		
		3	14	2	38.62	19	21.61	155	12.68	2.09	2.0	1.8	34	5	57	09	2	0.3	0.4	0	0.4	0	0.4		
		3	1413	30.49	19	23.25	155	14.79	2.83	1.2	15	6	108	08	3	0.3	0.5	0	0.5	0	0.5	0	0.5		
		3	1441	25.04	19	23.09	155	14.91	3.52	2.4	1.6	34	8	66	10	2	0.3	0.3	0	0.3	0	0.3	0	0.3	
		3	1453	6.15	19	21.00	155	14.97	1.82	0.8	11	1	83	06	3	0.3	0.9	0	0.4	0.4	0	0.4	0	0.4	
		3	1516	7.06	19	20.99	155	14.96	1.63	1.1	14	2	83	08	3	0.3	0.6	0	0.4	0.4	0	0.4	0	0.4	
		3	1518	47.93	19	23.24	155	14.79	1.51	0.8	11	5	121	07	2	0.2	1.1	0	0.6	0.6	0	0.6	0	0.6	
		3	1523	5.06	19	23.15	155	14.72	3.45	0.8	12	4	112	09	2	0.5	0.6	0	0.6	0	0.6	0	0.6		
		3	1559	16.53	19	22.49	155	14.96	1.94	1.4	1.3	17	6	71	08	2	0.3	0.3	0	0.3	0	0.3	0	0.3	
		3	1621	37.72	19	21.49	155	12.68	1.82	1.2	16	4	88	06	2	0.3	0.5	0	0.5	0	0.5	0	0.5		
		3	1655	9.02	19	22.67	155	14.15	3.77	0.9	13	4	96	10	2	0.5	0.6	0	0.6	0	0.6	0	0.6		
		3	1746	26.62	19	19.37	155	11.51	5.48	1.3	32	6	98	11	6	0.4	1.2	0	0.5	1.2	0	0.5	1.2	0	0.5
		3	1816	54.52	19	21.83	155	12.92	2.74	1.6	1.5	20	5	85	05	1	0.3	0.3	0	0.3	0	0.3	0	0.3	
		3	1816	54.52	19	21.83	155	12.92	2.74	1.6	1.5	20	5	85	05	1	0.3	0.3	0	0.3	0	0.3	0	0.3	

1992 HVO EARTHQUAKE SUMMARY LIST

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YEAR	MON	DA	HRMN	SEC	LAT N	DEG	MIN	LO N W	DEPTH	AMP	DUR	GAP	RMS	MIN	NS	DEG	SEC	DIS	KM	FM	REMK	ERZ	NO
ORIGIN TIME																							
1992	MAR	3	1832	20.09	19	23.03	155	14.48	2.12	0.7	11	5	138	.07	3	0.3	1.2	0.3	1.2	0	SEC		
		3	197	8.81	19	22.99	155	14.55	2.66	1.0	14	5	119	.06	3	0.3	0.6	0.6	0.6	0	SEC		
		3	1950	48.86	19	22.78	155	14.37	3.39	1.4	1.1	17	5	96	.07	2	0.3	0.4	0.4	0	SEC		
		3	203	42.69	19	22.71	155	14.27	3.65	1.6	1.4	19	5	81	.05	2	0.3	0.3	0.3	0	SEC		
		3	2011	56.96	19	22.59	155	14.07	3.52	1.6	1.5	16	4	94	.04	2	0.3	0.4	0.4	0	SEC		
		3	2057	24.00	19	22.87	155	14.43	3.42	1.4	1.2	20	6	98	.08	2	0.3	0.3	0.3	0	SEC		
		3	2058	4.70	19	23.10	155	14.39	3.03	0.9	14	5	113	.07	2	0.3	0.6	0.6	0.6	0	SEC		
		3	2058	28.27	19	19.44	155	11.57	6.99			13	0	96	.02	6	0.5	1.7	0	SF3			
		3	2118	57.26	19	23.01	155	14.55	2.78	0.9	14	5	118	.05	3	0.3	0.6	0.6	0.6	0	SEC		
		3	2132	56.73	19	22.77	155	14.30	1.34	0.9	12	5	97	.04	2	0.3	0.5	0.5	0.5	0	SEC		
		3	227	48.36	19	22.18	155	13.07	3.22	1.5	1.4	12	5	183	.07	1	0.7	0.4	0.4	0	SER		
		3	236	21.83	19	19.82	155	7.80	5.36	1.1	30	4	96	.13	5	0.4	1.2	0	0	SF4			
		3	2343	17.33	19	23.05	155	14.72	2.55	0.7	14	5	135	.08	2	0.3	0.4	0.4	0.4	0	SEC		
		4	126	5.87	19	21.92	155	13.14	3.09	1.2	1.1	16	3	97	.04	1	0.5	0.3	0.3	0	SER		
		4	138	14.17	19	23.21	155	14.69	1.59	1.6	1.4	34	9	62	.14	3	0.2	0.3	0.3	0	SEC		
		4	215	59.54	19	22.47	155	30.10	8.93	1.2	37	6	46	.10	4	0.3	0.6	0	0	KAO			
		4	230	17.32	19	11.77	155	41.65	10.74	1.5	24	4	121	.12	10	0.6	1.0	0	0	LSW			
		4	346	23.19	19	20.32	155	13.26	6.59			12	3	64	.05	4	0.5	1.6	0	SF2			
		4	355	3.93	19	23.30	155	14.88	1.30	0.8	10	4	115	.08	2	0.2	1.2	0	0	SEC			
		4	43	9.60	19	22.97	155	14.54	3.56	3.2	3.3	54	7	48	.11	3	0.3	0.3	0.3	0	SEC	F	
		4	46	24.37	19	22.93	155	14.58	3.00	1.7	1.7	19	6	116	.13	2	0.4	0.4	0.4	0	SEC		
		4	412	9.42	19	23.19	155	14.72	2.58	1.0	11	5	125	.05	3	0.3	1.0	0	0	SEC			
		4	429	41.58	19	22.88	155	14.43	2.68	0.5	7	3	150	.04	2	0.7	1.9	0	0	SEC			
		4	429	57.76	19	20.81	155	14.56	3.63	0.6	9	2	219	.08	4	1.0	1.2	0	0	KOA			
		4	444	59.22	19	22.77	155	14.35	2.94	0.8	16	6	129	.10	2	0.4	0.5	0	0	SEC			
		4	618	3.13	19	23.05	155	14.71	3.51	1.9	1.5	19	6	70	.07	2	0.3	0.4	0	SEC			
		4	631	40.31	19	23.02	155	14.51	3.18	1.0	15	5	117	.06	3	0.3	0.5	0	0	SEC			
		4	7	5	50.62	19	21.10	155	15.29	1.55	0.9	14	3	104	.07	3	0.3	0.5	0	KOA			
		4	727	14.79	19	20.75	155	7.02	5.54	0.8	10	2	174	.08	5	0.7	1.7	0	0	SF4			
		4	745	53.52	19	15.39	155	32.92	8.85	1.5	32	5	61	.16	5	0.4	0.9	0	0	LSW			
		4	754	46.94	19	22.91	155	14.81	3.13	1.1	19	5	86	.07	2	0.3	0.4	0	0	SEC			
		4	8	1	38.56	19	22.66	155	13.99	3.48	0.8	12	5	134	.07	2	0.4	0.6	0	SEC			
		4	950	47.87	19	22.85	155	14.44	3.39	1.4	1.4	23	6	78	.07	2	0.2	0.3	0	SEC			
		4	1015	45.52	19	22.66	155	14.16	3.48	1.4	1.3	15	5	96	.03	2	0.3	0.4	0	SEC			
		4	1121	16.36	19	21.04	155	14.81	2.16	2.1	1.3	29	5	68	.11	3	0.2	0.5	0	KOA			
		4	13	9	30.19	22.76	155	14.39	3.27	1.4	1.3	21	7	84	.07	2	0.3	0.3	0	SEC			
		4	15	4	8.06	19	21.16	155	15.01	2.24	1.5	1.3	19	5	109	.06	3	0.3	0.5	0	KOA		
		4	1645	34.54	19	20.05	155	50.88	12.29	1.5	24	3	186	.11	8	0.7	0.3	0	0	KON			
		4	18	2	58.37	19	22.37	155	14.78	1.70	2.2	1.6	28	6	74	.07	2	0.2	0.2	0	SEC		
		4	2220	38.97	19	22.79	155	14.37	3.69	2.2	1.6	33	6	52	.09	2	0.3	0.3	0	SEC			
		5	117	17.58	19	51.40	155	45.75	15.36	1.2	1.9	18	2	242	.10	11	3.0	1.0	0	HUA			
		5	213	18.69	19	19.98	155	10.75	9.67	2.8	3.2	56	6	87	.11	4	0.4	0.4	0	SF3			
		5	327	33.03	19	19.73	155	11.50	8.02	1.5	1.4	40	4	90	.10	5	0.4	0.7	0	SF3			
		5	344	24.26	19	19.71	155	10.61	7.50			1.3	26	3	93	.05	5	0.4	0.8	0	SF3		
		5	344	33.62	19	19.67	155	10.65	7.59	1.8	1.5	17	4	94	.03	5	0.4	1.1	0	SF3			

1992 HVO EARTHQUAKE SUMMARY LIST

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ORIGIN TIME				LAT N		LON W		DEPTH AMP DUR		GAP RMS MIN ERH				ERZ NO							
YEAR	MON	DA	HRMN	SEC	DEG	MIN	DEG	MIN	KM	MAG	MAG	NR	NS	DEG	SEC	DIS	KM	FM	REMK		
1992	MAR	5	1139	51.61	19	22.88	155	14.40	3.73	2.4	1.7	30	6	71	.07	2	0.3	0.3	0	SEC	
		5	1144	46.65	19	22.63	155	14.34	3.32	1.4	1.3	17	5	83	.04	2	0.4	0.3	0	SEC	
		5	1338	7.11	19	43.95	155	2.12	0.03	2.6	1.9	24	0	247	.12	3	1.3	1.4	0	HIL B*	
		5	1716	56.03	19	23.23	155	14.89	3.25	1.5	1.3	16	4	83	.04	2	0.3	0.4	0	SEC	
		5	1953	5.89	19	20.50	155	13.07	8.67	1.4	1.2	31	4	64	.06	4	0.4	0.6	0	SF2	
		5	2154	14.46	19	23.23	155	14.86	3.30	3.1	3.1	56	7	47	.11	2	0.2	0.3	0	SEC	
		5	2214	13.33	19	23.26	155	14.92	3.25	2.2	1.8	36	8	70	.10	2	0.3	0.3	0	SEC	
		6	132	12.06	19	16.40	155	27.37	9.43	2.1	1.8	50	6	61	.13	5	0.3	0.5	0	LSW	
		6	514	16.65	19	23.02	155	14.64	3.28	2.3	1.9	34	10	58	.09	2	0.2	0.3	0	SEC	
		6	1535	21.46	19	44.99	155	2.41	7.65	2.6	1.7	16	0	206	.13	5	1.3	1.1	0	HIL B*	
		6	1732	57.32	19	18.80	155	12.91	7.91	1.2	22	3	90	.09	3	0.5	1.0	0	0	SF2	
		7	012	34.28	19	21.17	155	0.88	6.77	0.8	1.6	32	7	196	.11	20	0.8	0.9	0	SF5	
		7	213	3.62	19	22.89	155	14.37	1.33	1.1	1.4	16	2	85	.07	2	0.3	0.4	0	SEC	
		7	216	27.46	19	21.17	155	29.82	10.88	1.1	25	1	43	.10	5	0.4	1.0	0	KAO		
		7	437	39.58	19	23.12	155	14.84	3.24	1.9	1.5	28	7	65	.07	2	0.3	0.3	0	SEC	
		7	15	8	37.61	19	20.29	155	7.23	7.45	1.6	1.6	34	0	99	.09	6	0.4	0.8	0	SF4
		7	1854	43.44	19	22.86	155	14.44	3.58	1.6	1.5	20	3	78	.06	2	0.3	0.4	0	SEC	
		7	2333	5.89	19	17.97	155	17.44	7.65	0.9	24	2	136	.08	2	0.4	0.6	0	SNR		
		8	111	26.17	19	21.19	155	30.12	9.03	1.3	29	1	48	.08	5	0.3	0.7	0	KAO		
		8	2030	25.69	19	22.91	155	14.39	3.46	1.6	1.4	19	6	100	.06	2	0.3	0.4	0	SEC	
		8	2217	0.37	19	18.52	155	13.91	6.76	1.4	1.2	28	3	83	.08	3	0.4	0.8	0	0	SF2
		9	022	14.02	19	8.11	155	41.18	2.39	2.1	1.6	35	6	135	.14	14	0.4	0.9	0	LSW	
		9	022	43.26	19	17.02	155	19.13	12.28	1.6	1.4	37	4	139	.10	2	0.5	0.7	0	SNR	
		9	313	20.49	19	26.25	155	20.45	2.42	2.0	1.3	27	8	75	.11	3	0.3	0.5	0	KAO	
		9	511	18.03	19	25.83	156	21.75	37.81	2.9	2.5	33	4	274	.10	55	2.0	2.7	0	DIS	
		9	540	34.00	19	26.14	155	20.54	2.08	1.6	1.1	20	6	109	.10	3	0.3	0.6	0	KAO	
		9	715	21.21	19	26.04	155	20.54	2.17	1.7	1.1	20	6	69	.10	3	0.3	0.6	0	KAO	
		9	811	50.30	19	20.20	155	9.82	5.93	1.3	26	4	102	.08	5	0.4	1.0	0	SF3		
		9	9	21.27	19	26.27	155	19.98	2.76	2.4	1.6	27	5	138	.14	3	0.3	0.5	0	KAO	
		9	947	47.28	19	17.64	155	13.28	7.38	1.8	1.5	39	7	103	.10	1	0.5	0.7	0	SF2	
		9	1736	27.47	19	4.87	156	20.71	40.47	1.6	26	5	314	.11	54	2.5	3.2	0	0	DIS	
		9	20	0	34.19	22.79	155	14.16	3.43	1.1	1.1	14	4	129	.06	2	0.4	0.5	0	SEC	
		9	2231	34.40	19	22.97	155	14.42	3.47	1.4	1.4	18	6	99	.06	2	0.3	0.4	0	SEC	
		9	2314	15.75	19	22.99	155	14.50	3.34	1.6	1.5	21	8	96	.08	3	0.3	0.4	0	SEC	
		10	154	26.97	19	20.31	155	8.82	7.72	1.5	1.6	36	5	70	.09	4	0.5	0.6	0	SF4	
		10	157	56.81	19	19.70	155	4.19	43.88	1.7	46	6	157	.10	2	1.4	1.2	0	0	DEP	
		10	215	48.01	19	19.61	155	12.17	8.15	1.8	1.8	39	5	87	.10	5	0.4	0.7	0	SF3	
		10	1059	30.53	19	17.83	155	13.20	8.25	2.2	2.2	41	4	103	.11	2	0.4	0.6	0	SF2	
		10	1234	29.49	19	22.83	155	3.12	6.14	1.7	1.5	14	1	115	.11	3	0.7	1.3	0	SF5	
		10	16	7	55.74	19	18.26	155	15.872	11.19	1.5	1.2	37	6	62	.10	1	0.5	0.6	0	SNR
		11	134	46.06	19	30.05	155	29.20	4.39	2.1	1.5	35	11	67	.11	4	0.3	1.4	0	0	MLO
		11	234	42.36	19	19.84	155	8.85	8.03	1.4	32	5	77	.08	4	0.4	0.7	0	0	SF4	
		11	1237	35.83	19	22.14	155	30.45	24.13	2.4	2.0	36	5	80	.09	5	0.5	0.8	0	DML	
		11	13	8	0.39	19	30.27	156	9.22	11.77	2.0	2.0	3	287	.11	39	1.5	0.9	0	KON	
		11	1832	32.79	19	20.05	155	13.11	7.47	1.4	1.2	28	4	68	.09	5	0.4	0.7	0	SF2	
		11	234	42.36	19	19.84	155	8.85	8.03	1.4	32	5	77	.08	4	0.4	0.7	0	0	SF4	
		11	1237	35.83	19	22.14	155	30.45	24.13	2.4	2.0	36	5	80	.09	5	0.5	0.8	0	DML	
		11	13	8	0.39	19	30.27	156	9.22	11.77	2.0	2.0	3	287	.11	39	1.5	0.9	0	KON	
		11	1832	32.79	19	20.05	155	13.11	7.47	1.4	1.2	28	4	68	.09	5	0.4	0.7	0	SF2	
		11	234	42.36	19	19.84	155	8.85	8.03	1.4	32	5	77	.08	4	0.4	0.7	0	0	SF4	

1992 HVO EARTHQUAKE SUMMARY LIST																				19				
YEAR	MON	DA	HRMN	SEC	LAT N	DEG MIN	DEG MIN	DEG MIN	DEG MIN	DEPTH AMP	DUR	KM	MAG	MAG	NR	NS	DEG	SEC	DIS	RM	RMS	MIN	ERH	ERZ NO
ORIGIN TIME																								
1992	MAR	11	1914	51.95	19 25.94	155 14.70	20.77	1.6	1.5	46	9	115	.09	2	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
		11	2340	17.40	19 19.79	155 7.38	8.55	1.4	28	6	105	.08	5	0.4	0.7	0.4	0.7	0.4	0.7	0.4	0.7	0.4	0.7	0.4
		12	917	39.10	19 22.32	155 30.31	9.44	1.7	1.4	29	5	47	.05	5	0.3	0.7	0.4	0.7	0.4	0.7	0.4	0.7	0.4	0.7
		12	1152	31.10	19 20.43	155 13.38	7.92	1.1	19	4	62	.04	4	0.4	0.9	0.4	0.9	0.4	0.9	0.4	0.9	0.4	0.9	0.4
		12	13	8	32.45	19 19.14	155 8.80	6.53	1.4	22	4	90	.06	4	0.5	1.2	0.5	1.2	0.5	1.2	0.5	1.2	0.5	1.2
		12	1346	37.31	19 48.32	155 37.03	17.24	1.6	1.5	6	107	.15	8	0.8	1.5	0.8	1.5	0.8	1.5	0.8	1.5	0.8	1.5	0.8
		12	1350	7.98	19 19.51	155 6.97	7.18	1.4	21	3	120	.07	4	0.4	0.9	0.4	0.9	0.4	0.9	0.4	0.9	0.4	0.9	0.4
		12	1523	37.96	19 4.50	155 23.56	36.01	2.6	2.2	53	11	200	.09	12	0.8	1.0	0.8	1.0	0.8	1.0	0.8	1.0	0.8	1.0
		12	2218	54.95	19 20.35	155 11.40	6.25	1.2	26	2	79	.10	4	0.5	1.0	0.5	1.0	0.5	1.0	0.5	1.0	0.5	1.0	0.5
		12	2252	43.71	19 22.47	155 13.94	3.50	1.5	1.5	26	8	87	.06	1	0.2	0.3	0.2	0.3	0.2	0.3	0.2	0.3	0.2	0.3
		13	433	38.29	19 43.81	156 11.03	11.24	1.8	1.9	5	310	.12	36	2.2	1.0	0.4	0.6	0.4	0.6	0.4	0.6	0.4	0.6	0.4
		13	1946	35.70	19 19.60	155 11.82	7.90	1.9	1.7	42	2	91	.09	6	0.4	0.6	0.4	0.6	0.4	0.6	0.4	0.6	0.4	0.6
		13	22	6	22.52	19 19.38	155 11.87	6.65	1.4	1.4	42	7	95	.10	5	0.4	0.7	0.4	0.7	0.4	0.7	0.4	0.7	0.4
		14	319	38.31	19 22.70	155 14.28	3.51	2.4	1.6	36	4	68	.10	2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
		14	321	44.94	19 22.92	155 14.41	3.75	1.4	1.6	10	2	123	.04	2	0.4	0.6	0.4	0.6	0.4	0.6	0.4	0.6	0.4	0.6
		14	336	57.73	19 19.40	155 12.12	5.85	1.1	28	4	92	.09	5	0.4	1.1	0.5	0.4	1.1	0.5	0.4	1.1	0.5	0.4	1.1
		14	1435	58.56	19 22.88	155 14.59	3.23	1.6	1.4	17	3	93	.07	2	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
		14	1858	26.52	19 26.79	155 28.92	9.53	1.6	1.2	24	2	58	.06	7	0.4	1.2	0.5	0.6	0.4	1.2	0.5	0.6	0.4	1.2
		14	20	4	46.90	19 23.09	155 14.79	3.34	1.6	1.2	15	2	87	.04	2	0.3	0.5	0.3	0.5	0.3	0.5	0.3	0.5	0.3
		14	21	7	35.89	19 25.85	154 57.03	6.71	1.4	29	2	169	.11	3	0.8	0.5	0.8	0.5	0.8	0.5	0.8	0.5	0.8	0.5
		15	545	36.28	19 18.87	155 12.81	8.37	1.8	1.7	41	1	91	.09	4	0.4	0.6	0.4	0.6	0.4	0.6	0.4	0.6	0.4	0.6
		15	630	22.84	19 25.36	155 29.20	9.91	1.0	21	0	64	.12	6	0.5	1.4	0.4	0.5	1.4	0.4	0.5	1.4	0.4	0.5	1.4
		15	646	52.68	19 30.54	155 22.73	7.76	1.4	1.1	29	4	91	.12	2	0.5	0.6	0.4	0.6	0.4	0.6	0.4	0.6	0.4	0.6
		15	1051	28.72	19 30.67	155 50.53	7.24	2.1	1.3	18	2	112	.12	8	0.7	0.9	0.7	0.9	0.7	0.9	0.7	0.9	0.7	0.9
		15	1722	43.09	19 20.11	155 8.06	7.90	1.6	1.5	29	6	85	.06	5	0.3	0.5	0.3	0.5	0.3	0.5	0.3	0.5	0.3	0.5
		15	1833	18.05	19 20.48	155 13.35	7.96	1.2	26	2	62	.07	4	0.4	0.7	0.4	0.7	0.4	0.7	0.4	0.7	0.4	0.7	0.4
		15	22	7	25.52	19 28.55	155 28.08	5.55	1.6	1.2	24	3	68	.11	6	0.3	1.9	0.4	0.3	1.9	0.4	0.3	1.9	0.4
		15	2210	18.53	19 25.03	155 19.74	6.16	1.7	0.9	20	5	98	.08	2	0.4	0.8	0.4	0.8	0.4	0.8	0.4	0.8	0.4	0.8
		15	2248	55.17	19 23.95	155 29.27	8.98	1.6	1.4	30	4	40	.09	4	0.4	0.8	0.4	0.8	0.4	0.8	0.4	0.8	0.4	0.8
		16	544	54.78	19 19.72	155 13.19	6.24	1.7	1.9	19	1	98	.10	5	0.7	1.3	0.5	0.7	1.3	0.5	0.7	1.3	0.5	0.7
		16	658	33.97	19 23.13	155 14.76	3.00	1.8	1.5	24	10	88	.08	2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
		16	1019	32.32	19 23.18	155 14.68	2.67	1.4	1.3	17	5	106	.08	3	0.3	0.4	0.3	0.4	0.3	0.4	0.3	0.4	0.3	0.4
		16	1152	30.17	19 19.68	155 7.81	5.96	1.3	24	7	97	.10	4	0.4	1.1	0.5	0.4	1.1	0.5	0.4	1.1	0.5	0.4	1.1
		16	1251	15.84	19 21.52	155 5.70	8.91	0.8	1.3	22	4	86	.08	5	0.5	0.8	0.5	0.8	0.5	0.8	0.5	0.8	0.5	0.8
		16	2053	6.16	19 25.62	155 30.72	10.24	2.1	1.6	43	8	36	.09	4	0.3	0.5	0.3	0.5	0.3	0.5	0.3	0.5	0.3	0.5
		16	2338	20.34	19 22.80	155 14.50	3.31	1.7	1.5	28	9	77	.09	2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
		17	0	53.95	19 22.92	155 14.60	3.56	1.6	1.5	23	7	78	.08	2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
		17	016	3.97	19 22.71	155 14.39	3.37	1.4	1.3	19	4	93	.09	2	0.3	0.4	0.3	0.4	0.3	0.4	0.3	0.4	0.3	0.4
		17	349	8.45	19 24.96	155 19.19	6.14	1.3	0.9	19	3	101	.08	2	0.5	0.9	0.4	0.5	0.9	0.4	0.5	0.9	0.4	0.5
		17	450	3.01	19 22.85	155 14.36	3.15	1.1	1.1	14	5	127	.05	2	0.4	0.5	0.4	0.5	0.4	0.5	0.4	0.5	0.4	0.5
		17	1043	40.24	19 20.26	155 3.61	7.43	2.3	2.4	41	3	117	.09	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
		17	1531	4.95	19 22.67	155 14.29	3.37	1.4	1.4	18	5	93	.05	2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
		17	1737	6.98	19 23.26	155 14.74	3.11	1.4	1.4	17	6	103	.08	3	0.3	0.4	0.3	0.4	0.3	0.4	0.3	0.4	0.3	0.4
		17	2112	57.29	19 23.04	155 14.63	2.72	1.4	1.5	16	6	116	.09	3	0.4	0.5	0.4	0.5	0.4	0.5	0.4	0.5	0.4	0.5
		17	2311	0.96	19 22.67	156 21.03	34.54	1.7	2.4	44	2	281	.10	51	1.6	1.5	0.6	1.6	1.5	0.6	1.6	1.5	0.6	1.6

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1992 HVO EARTHQUAKE SUMMARY LIST

ORIGIN TIME	LAT N	LON W	DEPTH AMP DUR		GAP	RMS	MIN	ERH	ERZ NO			
DA HRMN SEC	DEG MIN	DEG MIN	KM	MAG	MAG NR	NS	DEG	SEC	DIS	KM	FM	REMK
18 1 6 23.64	19 19.54	155 10.03	7.89	1.9	1.9	51	8	95	11	5	0.4	0.5 0 SF3
18 818 45.04	19 34.34	155 17.19	13.13	2.7	2.2	53	12	60	12	14	0.3	0.5 0 DEP
18 620 43.81	19 16.37	155 25.26	7.78	1.6	1.5	32	3	64	15	4	0.4	1.0 0 LSW
18 1519 43.67	19 14.41	155 21.65	5.97	1.6	1.4	24	4	154	10	4	0.6	1.1 0 SWR
19 023 37.02	19 22.24	155 10.76	2.95	1.4	1.1	22	3	93	11	2	0.6	0.5 0 SER
19 355 21.11	19 23.13	155 14.84	3.06	1.5	1.3	18	4	85	06	2	0.3	0.4 0 SEC
19 9 48.81	19 19.42	155 8.69	5.50	1.3	2.2	3	81	08	4	0.4	1.0	0 SF4
19 1725 42.90	19 19.24	155 9.75	7.38	2.0	1.9	34	7	100	07	5	0.4	0.7 0 SF3
20 111 3.00	19 27.35	155 51.04	8.11	2.1	1.6	21	3	111	20	8	0.7	1.5 0 KON
20 546 7.20	19 20.88	155 5.78	7.75	1.6	1.5	26	6	101	11	5	0.5	0.6 0 SF4
20 7 0 46.34	19 23.09	155 14.88	2.97	1.5	1.3	17	6	110	07	2	0.3	0.4 0 SEC
20 714 53.06	19 23.01	155 14.51	3.34	1.6	1.5	10	8	97	07	3	0.3	0.4 0 SEC
20 13 94.13	19 22.97	155 14.57	3.61	2.0	1.4	29	9	75	08	3	0.3	0.3 0 SF3
20 1426 13.15	19 20.59	155 13.08	7.18	1.7	1.5	36	2	63	11	4	0.4	0.7 0 SF2
20 17 5 40.58	19 23.35	155 27.18	10.33	1.6	1.3	31	2	38	09	2	0.4	0.7 0 KAO
20 2042 33.87	19 25.46	155 20.45	5.66	1.6	1.1	22	1	97	10	4	0.4	1.0 0 KAO
20 2246 18.69	19 21.58	155 6.75	7.35	0.8	1.1	18	1	81	08	4	0.5	1.0 0 SF4
21 037 29.17	19 26.98	155 28.53	8.65	1.6	1.3	29	1	44	08	7	0.3	1.0 0 KAO
21 1030 10.66	19 22.16	155 5.14	7.08	1.6	1.6	31	0	74	09	4	0.4	0.7 0 SF5
21 1122 54.18	19 24.00	155 18.68	6.39	1.8	0.8	12	1	73	11	2	0.6	1.1 0 INT
21 2044 33.79	18 57.81	155 8.05	40.38	2.7	2.3	44	0	245	10	36	1.5	2.2 0 LOI
21 21 9 22.00	19 22.90	155 14.50	3.62	2.2	1.5	31	8	65	08	3	0.3	0.3 0 SEC
22 153 41.49	19 20.18	155 11.55	6.99	1.6	1.4	39	0	81	12	5	0.4	0.8 0 SF3
22 431 8.30	19 20.74	155 6.05	8.41	2.1	1.9	43	5	103	10	6	0.4	0.4 0 SF4
23 333 19.83	19 47.20	155 26.46	21.76	3.6	3.4	68	18	83	11	2	0.4	1.1 0 KEA
23 1123 54.06	19 24.28	155 3.59	3.40	1.2	1.0	1	92	12	1	0.6	0.4	0 SME
23 1320 55.83	19 23.06	155 14.90	3.05	1.7	1.5	20	7	86	08	2	0.3	0.4 0 SEC
23 1811 39.46	19 13.70	155 11.66	7.91	1.5	1.5	33	5	90	09	5	0.4	0.7 0 SF3
24 050 24.24	19 25.19	155 39.83	5.49	1.9	1.1	17	4	217	08	7	0.9	1.7 0 MLO
24 114 45.80	19 20.07	155 11.41	6.94	1.4	1.4	41	6	84	12	5	0.4	0.6 0 SF3
24 435 44.27	19 20.38	155 10.76	8.66	1.5	1.5	33	5	80	10	4	0.5	0.7 0 SF3
24 619 1.92	19 24.84	155 19.20	5.65	2.0	1.4	32	7	82	12	2	0.4	0.7 0 KAO
24 646 38.38	19 25.00	155 19.14	5.00	1.6	1.1	24	4	103	10	3	0.4	0.7 0 KAO
24 833 20.08	19 24.90	155 19.11	6.61	2.1	1.5	26	5	99	09	2	0.4	0.7 0 KAO
24 1055 52.02	19 22.71	155 14.37	3.51	2.0	1.5	27	7	83	07	2	0.3	0.3 0 SEC
24 1220 3.44	19 22.79	155 13.43	3.51	2.0	1.5	26	7	83	06	2	0.3	0.3 0 SEC
24 1620 59.26	19 18.12	155 14.32	4.85	1.2	2.2	5	90	07	2	0.4	1.0	0 SSF
24 23 6 55.44	19 25.55	155 19.53	5.65	1.8	1.1	22	5	122	11	3	0.4	0.9 0 KAO
25 2 3 8.42	19 18.54	155 28.98	10.09	1.2	2.3	6	47	11	7	0.4	0.8	0 LSW
25 818 58.43	19 25.81	155 28.78	9.04	1.1	28	5	87	11	6	0.4	0.9	0 KAO
25 1715 37.83	19 12.40	155 31.94	13.20	2.5	2.1	43	6	83	11	6	0.4	0.5 0 DLS
25 1938 56.30	19 20.22	155 12.41	7.90	2.0	1.9	42	6	74	11	5	0.4	0.6 0 SF2
25 2053 19.13	19 19.74	155 11.32	8.52	1.1	2.2	4	91	07	5	0.5	0.8	0 SF3
26 1635 53.87	19 27.58	156 3.95	12.84	1.2	1.5	228	14	31	2.1	1.6	0	0 KON
27 031 37.28	19 21.16	155 7.97	9.06	1.3	2.5	5	128	06	4	0.6	0.8	0 SF4

1992 HVO EARTHQUAKE SUMMARY LIST

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YEAR	MON	DA	HRMN	SEC	LAT N	DEG MIN	DEPT W	DEPTH	AMP	DUR	GAP	RMS	MIN	ERH	ERZ	NO			
ORIGIN TIME					LAT N	DEG MIN	DEPT W	KM	MAG	MAG	NR	NS	DEG	SEC	DIS	KM	FM	REMK	
1992	MAR	27	610	50.32	19	55.38	155	27.03	31.28	1.3	11	3	215	.06	12	1.2	1.6	0	KEA
27	632	49.07	19	22.18	155	28.79	10.87	3.8	4.1	58	6	37	.12	2	0.3	0.4	0	KAO F	
27	2021	26.38	19	29.72	155	28.11	4.68	2.2	1.4	36	3	72	.11	4	0.3	1.6	0	KAO	
27	2149	0.40	19	26.01	155	20.02	5.08	2.1	1.0	14	0	126	.07	3	0.5	1.4	0	KAO	
27	2252	39.28	19	25.14	155	19.70	5.70	1.6	0.9	17	1	82	.07	3	0.5	1.6	0	KAO	
28	515	38.96	19	21.90	155	12.81	2.96	2.1	1.9	38	10	58	.09	1	0.3	0.2	0	SER	
28	6	38.84	19	24.78	155	19.55	4.45	2.1	1.3	27	7	77	.12	2	0.4	0.7	0	KAO	
28	625	58.35	19	23.36	155	14.91	3.03	1.6	1.3	14	1	73	.09	2	0.4	0.5	0	SEC	
28	727	27.41	19	23.11	155	14.78	3.38	2.0	1.6	22	3	68	.06	2	0.3	0.4	0	SEC	
28	1146	32.37	19	23.19	155	14.77	3.45	1.6	2.3	2	68	.06	2	0.3	0.3	0	SEC		
28	16	56.52	19	23.41	155	14.81	3.42	2.7	2.2	38	6	46	.08	3	0.3	0.3	0	SEC	
28	1642	36.54	19	23.17	155	14.85	2.69	1.5	1.6	2	107	.07	2	0.3	0.4	0	SEC		
28	1754	0.07	19	20.66	155	27.84	9.93	1.3	28	2	43	.11	3	0.4	0.8	0	KAO		
28	1845	58.03	19	22.25	155	10.80	3.04	0.8	1.3	25	5	92	.06	2	0.4	0.3	0	SER	
28	2025	50.84	19	23.34	155	14.72	3.27	0.8	1.4	24	5	82	.07	3	0.3	0.3	0	SEC	
28	2337	34.52	19	23.17	155	14.82	3.49	0.8	1.5	27	5	65	.08	2	0.3	0.3	0	SEC	
29	614	44.61	19	28.73	155	38.58	11.98	1.4	1.4	23	2	212	.10	5	1.5	0.9	0	MLO L	
29	641	10.36	19	29.02	155	42.10	27.64	1.2	1.4	5	1	308	.03	11	6.4	2.3	0	DML I	
29	730	58.36	19	23.19	155	14.98	3.09	1.5	1.6	1	70	.07	2	0.4	0.4	0	SEC		
29	8	52.40	19	15.13	155	25.23	8.25	1.1	20	3	79	.06	3	0.4	0.9	0	LSW		
29	9	6	3.44	19	23.05	155	14.66	3.28	1.5	24	6	72	.08	2	0.3	0.3	0	SEC	
29	1056	16.88	19	22.80	155	14.52	3.12	1.4	1.3	24	7	80	.09	2	0.3	0.3	0	SEC	
29	11	36.47	19	21.11	155	13.29	8.29	2.4	2.6	52	6	57	.13	3	0.4	0.4	0	SF2	
29	1524	15.96	19	21.96	155	8.83	3.59	1.1	19	3	112	.07	2	0.7	0.4	0	SER		
29	17	2	33.32	19	23.16	155	14.62	3.49	2.2	1.4	23	6	73	.06	3	0.3	0.3	SEC	
29	1743	56.16	19	23.12	155	14.82	2.72	1.1	1.1	18	6	112	.06	2	0.3	0.3	0	SEC	
29	1911	55.64	19	23.02	155	14.72	3.03	1.4	1.3	20	6	113	.05	2	0.3	0.3	0	SEC	
29	1912	56.18	19	23.17	155	14.63	3.23	1.6	1.4	14	3	111	.04	3	0.4	0.5	0	SEC	
30	1228	45.01	19	49.19	155	25.21	24.29	0.9	1.4	29	2	124	.10	6	1.0	1.5	0	KEA	
30	15	3	2.97	20	0.09	155	33.92	39.79	1.5	25	5	175	.07	19	0.8	1.0	0	KEA	
31	053	32.50	19	28.64	155	27.92	5.08	2.5	1.8	46	7	40	.13	6	0.3	1.4	0	KAO	
31	953	39.45	19	26.72	155	28.34	9.32	1.6	1.4	32	5	56	.09	6	0.3	0.9	0	KAO	
31	1229	4.51	19	23.05	155	14.58	3.53	2.3	1.5	34	8	74	.09	3	0.3	0.3	0	SEC	
31	1233	41.06	19	22.92	155	14.75	1.56	3.0	2.8	44	8	49	.13	2	0.2	0.3	0	SEC	
31	1255	54.87	20	3.18	155	24.05	11.83	2.3	1.7	12	3	329	.06	19	2.6	0.7	0	KEA	
31	1450	17.87	19	16.10	155	29.28	10.17	1.1	21	5	59	.13	2	0.4	1.1	0	LSW		
31	1559	39.21	19	53.79	155	25.53	29.93	2.8	2.2	49	7	149	.10	9	0.5	0.9	0	KEA	
31	1651	29.11	19	23.21	155	14.61	3.67	3.3	3.3	49	8	46	.11	3	0.3	0.4	0	SEC	
APR	1	2	37.11	19	22.42	155	20.78	9.63	2.0	1.3	26	7	12	.07	3	0.4	0.8	0	KAO
1	714	47.25	19	10.58	155	37.19	6.35	2.5	2.1	41	2	98	.20	8	0.6	1.4	0	LSW	
1	1144	16.37	19	20.09	155	7.74	8.19	1.3	17	1	93	.05	5	0.6	1.3	0	SF4		
1	1457	59.27	19	18.70	155	11.23	5.95	1.6	1.5	27	3	119	.09	5	0.4	1.1	0	SF3	
1	17	1	49.42	19	22.81	155	14.47	3.54	2.2	1.4	28	7	77	.07	2	0.3	0.3	0	SEC
1	2017	54.02	19	19.33	155	12.46	7.46	1.6	1.4	22	4	89	.07	5	0.4	0.9	0	SF2	
2	821	53.22	19	5.34	155	25.87	31.49	1.6	25	1	249	.09	8	1.8	1.5	0	DLS		

1992 HVO EARTHQUAKE SUMMARY LIST

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YEAR	MON	DA	HRMN	SEC	LAT N	DEG MIN	DEPT W	DEPTH	AMP	DUR	GAP	RMS	MIN	ERH	ERZ	NO					
ORIGIN TIME								KM	MAG	NR	NS	DEG	SEC	DIS	KM	FM REMK					
1992	APR	2	2111	44.74	19	22.16	155	29.06	10.38	2.9	2.9	50	5	35	.10	3	0.3	0.4	0	KAO	
		3	351	27.95	19	19.75	155	28.19	10.65	1.2	21	5	60	.11	5	0.4	0.9	0	KAO		
		3	439	41.45	19	22.78	155	14.33	3.28	1.7	1.4	17	6	129	.06	2	0.4	0.4	0	SEC	
		3	457	20.57	19	24.33	155	14.67	0.75	1.5	1.3	10	2	110	.08	1	0.5	0.7	0	SEC L	
		3	616	48.39	19	25.30	155	16.60	13.51	2.1	1.1	15	4	188	.06	1	1.5	0.8	0	DEP L	
		3	1621	44.22	19	22.69	155	17.22	12.30	2.0	1.2	20	3	81	.12	1	0.9	1.0	0	INT L	
		4	654	4.84	19	20.14	155	7.81	6.37	0.9	1.5	36	5	91	.10	5	0.4	0.8	0	SF4	
		4	839	41.29	19	22.52	155	26.90	10.87	1.3	1.7	39	1	37	.11	1	0.4	0.7	0	KAO	
		4	11	4	46.03	19	32.32	155	14.21	24.78	2.4	4	51	4	142	.10	9	0.6	0.9	0	DEP
		4	11	8	45.51	19	31.94	155	14.14	23.93	2.2	2.1	46	2	134	.10	9	0.6	0.9	0	DEP
		4	1459	24.45	19	28.42	155	26.78	8.39	2.5	1.8	41	2	40	.11	7	0.4	0.9	0	KAO	
		4	2342	28.79	19	22.20	155	5.21	6.63	1.7	1.7	36	0	73	.12	4	0.5	0.8	0	SF5	
		5	417	14.36	19	23.52	155	15.22	3.19	2.7	1.6	31	3	81	.09	2	0.3	0.3	0	SEC	
		5	548	24.95	19	12.00	155	27.43	8.70	2.6	2.6	40	0	121	.15	5	0.6	0.7	0	LSW F	
		5	617	15.86	19	19.19	155	15.27	8.49	2.2	2.2	42	2	90	.12	4	0.4	0.6	0	SF1	
		5	10	6	44.31	19	18.56	155	48.34	10.64	1.4	25	1	166	.12	8	0.7	0.5	0	KON	
		5	1837	39.91	19	27.52	155	50.82	7.94	1.4	25	4	122	.14	8	0.6	0.7	0	KON		
		5	2225	1.19	19	24.39	155	16.46	8.80	1.7	1.0	16	2	155	.09	1	0.7	0.7	0	INT L	
		6	851	19.96	19	24.17	155	17.48	1.53	1.6	1.0	9	2	111	.08	2	0.3	0.6	0	SEC L	
		6	939	4.28	19	13.88	155	32.61	6.18	1.7	31	5	72	.16	5	0.5	1.1	0	LSW		
		6	944	57.71	19	26.27	155	20.14	4.15	0.8	15	2	130	.08	3	0.4	0.8	0	KAO		
		6	1143	45.39	19	13.34	155	23.08	35.01	2.0	1.8	44	7	154	.10	2	0.7	1.0	0	DEP	
		6	1833	18.20	19	26.86	155	28.19	9.26	2.0	1.4	36	6	44	.09	6	0.3	0.8	0	KAO	
		6	2021	20.90	19	17.65	155	30.13	9.83	2.0	1.5	31	5	69	.13	5	0.4	0.9	0	LSW	
		6	21	7	57.30	19	44.38	155	43.10	47.62	1.6	1.7	43	8	193	.10	15	0.8	0.7	0	HUA
		6	2248	52.17	19	53.10	154	56.76	46.97	2.3	1.9	48	7	254	.11	24	1.0	1.1	0	KEA	
		6	2326	13.68	19	2.14	155	21.91	34.42	1.2	33	5	228	.08	17	1.3	1.0	0	LOI		
		7	113	51.99	19	23.39	155	15.11	2.86	1.8	1.5	22	6	78	.07	2	0.3	0.3	0	SEC	
		7	120	16.42	19	20.09	155	7.64	6.44	1.7	1.4	30	3	95	.11	5	0.5	1.1	0	SF4	
		7	2	6	59.86	19	23.86	155	26.02	8.34	2.6	2.4	48	7	32	.13	3	0.3	0.6	0	KAO
		7	1911	31.91	19	21.51	155	6.05	7.56	1.0	12	3	86	.08	4	0.6	1.3	0	SF4		
		8	046	54.80	19	18.58	155	15.20	8.11	0.9	1.2	25	4	127	.06	4	0.5	0.8	0	SF1	
		8	832	37.97	19	16.76	155	21.84	5.13	1.2	28	6	131	.10	6	0.4	1.7	0	SWR		
		8	853	55.09	19	20.54	155	6.05	7.23	2.1	1.9	41	7	108	.11	6	0.4	0.6	0	SF4	
		8	1124	48.08	19	10.23	155	32.81	6.39	1.6	34	5	113	.17	9	0.4	1.7	0	LSW		
		8	1336	44.77	19	18.22	155	29.37	10.47	1.0	18	6	88	.11	6	0.5	1.0	0	LSW		
		8	2044	53.27	19	24.67	155	19.74	6.66	1.6	1.9	30	6	71	.10	2	0.4	0.7	0	KAO	
		8	2044	57.57	19	24.52	155	19.88	5.45	2.4	2.0	32	6	48	.11	2	0.3	0.7	0	KAO	
		8	2059	31.25	19	24.67	155	19.68	6.86	1.6	1.1	24	3	60	.09	2	0.5	0.8	0	KAO	
		8	2116	59.88	19	24.52	155	19.81	7.36	1.9	1.1	31	6	57	.10	2	0.4	0.7	0	KAO	
		8	2257	44.37	20	1.99	155	21.23	7.44	2.5	2.5	43	7	213	.10	30	0.6	0.7	0	KEA	
		9	447	52.00	19	57.28	155	35.78	9.26	2.2	2.4	30	4	149	.13	24	0.5	0.6	0	KOH F	
		9	739	6.68	19	22.69	155	26.59	10.17	1.9	1.5	33	4	14	.10	2	0.4	0.6	0	KAO	
		9	932	24.91	19	17.16	155	48.28	9.95	2.0	1.4	22	2	142	.12	7	0.7	0.5	0	KON	
		9	11	2	57.81	19	21.78	155	5.09	7.74	1.7	1.7	33	5	80	.11	5	0.4	0.6	0	SF5

ORIGIN TIME		LAT N		LON W		DEPTH		AMP		DUR		GAP		RMS		MIN		ERH		ERZ		NO	
YEAR	MON	DA	HRMN	SEC	DEG	MIN	DEG	MIN	KM	MAG	NR	NS	DEG	SEC	DIS	KM	FM	REMK					
1992	APR	9	1215	37.25	19	22.69	155	3.91	3.44	1.4	1.1	13	3	109	10	3	0.4	0.7	0	SSF			
		9	1245	58.02	19	58.93	155	34.85	11.97	2.5	2.5	26	2	163	14	16	0.6	0.5	0	KOH			
		9	1442	2.78	19	25.63	155	51.54	14.10	2.4	1.5	21	2	133	11	9	0.7	0.5	0	KON			
		9	1926	23.16	19	9.99	155	40.83	11.35	1.6	23	7	207	11	11	0.7	1.0	0	LSW				
9	1926	36.74	19	8.92	155	41.00	3.48	2.0	1.6	12	3	130	10	13	0.4	1.6	0	LSW					
9	1930	16.51	19	18.89	155	11.19	6.48	1.6	1.3	31	5	113	07	5	0.4	0.9	0	SF3					
		9	2050	11.09	19	10.01	155	41.31	2.79	2.3	2.0	39	4	127	17	12	0.6	1.6	0	LSW			
		9	2254	46.85	19	8.79	155	34.82	1.80	1.4	30	2	123	16	12	0.8	1.3	0	LSW				
		9	2345	26.75	19	57.49	155	35.26	10.64	3.1	3.3	54	9	152	17	13	0.4	0.4	0	KOH			
9	2350	55.88	19	58.46	155	35.48	11.28	2.7	2.3	31	3	157	14	15	0.5	0.5	0	KOH					
10	010	45.84	19	24.67	155	19.80	6.04	1.8	1.1	25	6	86	08	2	0.4	0.7	0	KAO					
		10	011	46.22	19	24.59	155	19.91	5.69	2.0	1.2	23	7	82	08	2	0.4	0.8	0	KAO			
		10	015	54.77	20	1.58	155	22.44	13.09	1.5	14	4	271	07	16	1.3	0.5	0	KEA				
		10	128	14.56	19	53.59	155	34.05	3.83	1.6	14	1	201	07	10	0.9	3.6	0	KEA				
10	158	57.31	19	21.06	155	8.52	7.91	1.6	1.4	40	5	69	12	3	0.5	0.5	0	SF4					
10	1740	16.28	19	23.17	155	30.54	9.79	2.8	3.1	50	11	39	08	5	0.2	0.5	0	KAO					
		10	1949	2.12	20	0.47	155	36.84	8.97	1.6	22	3	198	08	22	1.0	1.0	0	KOH				
		10	1953	36.29	20	7.92	156	31.12	36.64	3.2	2.5	38	3	305	14	77	1.6	2.2	0	DIS			
		10	2323	0.51	19	24.61	155	19.49	6.92	2.1	1.2	33	3	59	10	2	0.4	0.7	0	KAO			
11	712	45.57	19	25.04	155	19.47	6.11	2.1	1.1	25	6	117	09	3	0.4	0.8	0	KAO					
11	939	53.18	19	18.31	155	13.07	10.37	3.3	3.5	50	7	132	10	8	0.4	0.3	0	SF2					
		11	1037	53.57	19	17.73	155	13.23	7.95	1.6	1.4	24	5	105	08	1	0.5	1.0	0	SF2			
		11	1418	43.40	19	19.52	155	11.82	8.34	1.9	1.7	26	3	92	09	5	0.5	1.0	0	SF3			
		11	19	7	42.16	19	20.95	155	3.77	7.44	2.3	2.5	45	4	86	10	2	0.4	0.4	0	SF5		
11	2027	42.27	19	6.96	155	38.22	7.12	3.0	3.1	43	5	117	16	15	0.5	1.1	0	LSW					
12	1030	40.22	19	24.67	155	19.63	6.43	1.8	1.0	19	5	87	08	2	0.4	1.0	0	KAO					
		12	1159	54.88	19	29.41	155	27.87	5.89	2.2	1.3	34	3	69	10	5	0.3	1.2	0	KAO			
		12	1553	51.35	19	18.24	155	15.38	8.67	1.9	1.5	36	5	121	09	4	0.4	0.5	0	SF1			
		12	1659	20.05	19	25.18	155	19.76	6.24	2.7	1.6	35	8	46	12	3	0.4	0.8	0	KAO			
13	413	14.09	19	22.11	155	24.85	13.28	2.1	1.7	44	6	51	09	4	0.4	0.5	0	DML					
13	1128	54.44	20	0.29	155	15.96	13.67	1.5	9	2	335	06	15	3.3	0.6	0	KEA						
		13	1250	2.63	19	26.83	155	46.72	9.75	2.6	2.0	34	5	83	14	7	0.4	0.8	0	KON			
		13	1912	24.52	19	14.87	155	6.92	44.38	1.7	33	3	224	08	5	1.5	1.0	0	DEP				
		13	2345	15.01	19	15.24	155	29.44	11.78	1.8	1.4	22	5	92	13	1	0.4	1.1	0	LSW			
14	058	46.80	20	1.62	155	22.80	12.32	0.9	1.7	13	5	239	09	16	1.1	0.6	0	KEA					
14	149	33.81	19	19.27	155	8.80	9.11	1.2	20	3	86	08	4	0.6	0.9	0	SF4						
		14	1243	16.13	19	23.37	155	30.31	10.14	1.3	29	5	46	06	5	0.4	0.7	0	KAO				
		14	1418	31.61	19	28.28	155	25.18	9.89	2.3	1.6	40	10	73	10	4	0.3	0.6	0	KAO			
		14	18	7	35.33	19	26.17	155	43.76	9.83	1.9	1.5	19	2	263	10	11	1.4	1.0	0	KON		
14	1821	50.90	19	23.13	155	29.65	10.07	2.5	2.7	47	5	35	09	4	0.3	0.5	0	KAO					
14	23	7	17.54	18	48.16	155	9.83	20.07	1.6	17	6	306	10	51	1.3	11.9	0	LOI					
		15	114	28.28	19	21.86	155	28.01	9.05	2.3	1.7	48	9	40	12	1	0.3	0.6	0	KAO			
		15	723	18.32	19	50.35	156	2.97	42.50	1.7	35	4	282	09	28	1.5	1.1	0	HUA				
		15	1119	44.10	19	20.96	155	10.95	8.60	2.7	2.6	46	10	71	10	3	0.4	0.5	0	SF3			
15	1440	38.64	19	19.20	155	8.71	6.20	1.6	1.6	30	4	87	07	4	0.4	0.8	0	SF4					

ORIGIN TIME				LAT N	LON W	DEPTH		GAP				RMS		ERH		ERZ						
YEAR	MON	DA	HRMN	SEC	DEG	MIN	KM	MAG	NR	NS	DEG	SEC	DIS	KM	KM	FM	REMK					
1992	APR	15	17	4	34.58	19	21.94	155	5.36	7.16	1.7	1.6	35	5	78	11	5	0.4	0.6	0	SF4	
15	1727	51.86	19	20.29	155	8.25	7.90	1.2	19	4	80	06	4	0.5	0.8	0	SF4					
15	1811	3.05	19	23.23	155	29.68	10.27	1.7	1.4	31	5	39	07	4	0.4	0.7	0	KAO				
15	2036	54.30	19	21.91	155	24.79	12.71	1.6	1.0	23	6	65	08	4	0.5	0.8	0	SWR				
15	2048	26.73	19	21.80	155	24.75	13.28	1.1	30	6	44	08	4	0.5	0.6	0	DEP					
15	2115	48.68	19	21.92	155	24.76	13.40	2.1	1.6	43	7	33	09	4	0.4	0.4	0	DEP				
15	2141	48.59	19	16.17	155	25.39	9.19	1.7	1.6	31	4	59	11	4	0.4	0.7	0	LSW				
15	2316	48.23	19	15.61	155	29.41	10.74	1.8	1.3	19	4	82	14	2	0.5	1.0	0	LSW				
16	1652	39.36	19	19.60	155	12.33	7.74	1.6	1.3	28	5	85	07	5	0.4	0.7	0	SF2				
16	1746	59.83	19	37.44	155	48.70	16.02	2.6	2.0	32	8	259	14	14	1.0	0.8	0	KON				
16	2036	4.45	19	27.59	155	25.85	9.24	2.3	1.4	36	6	51	10	5	0.3	0.7	0	KAO				
16	2041	19.03	19	18.38	155	13.22	3.73	1.1	15	4	89	07	3	0.5	1.0	0	SSF					
17	337	58.51	19	18.50	155	13.09	7.92	0.9	1.3	30	6	91	09	3	0.4	0.6	0	SF2				
17	517	46.97	19	21.19	155	5.87	6.59	1.7	1.7	33	4	94	12	5	0.4	0.8	0	SF4				
17	733	59.36	19	21.69	155	30.05	10.88	2.6	2.7	49	5	33	08	5	0.3	0.5	0	KAO				
17	746	56.01	19	21.54	155	30.15	10.10	1.2	23	4	52	07	5	0.4	0.7	0	KAO					
17	1316	5.90	19	18.35	155	13.37	6.88	2.0	1.8	33	5	83	10	2	0.4	0.8	0	SF2				
17	1320	1.69	19	18.15	155	13.17	6.96	1.6	1.6	28	5	95	08	2	0.4	0.8	0	SF2				
17	19	4	28.76	19	24.53	155	1.38	6.49	1.9	1.8	41	3	122	15	5	0.4	0.7	0	SF5			
17	1952	20.66	19	19.54	154	46.01	43.63	2.3	2.1	49	3	278	11	17	2.4	1.9	0	LER				
18	833	29.46	19	21.24	155	7.68	5.85	1.6	1.6	38	3	78	11	4	0.4	0.7	0	SF4				
18	1029	1.87	19	19.76	155	12.99	7.53	1.5	1.3	24	1	74	11	5	0.5	1.1	0	SF2				
18	2226	26.67	19	40.24	157	37.16	15.28	3.7	3.4	43	8	325	13	188	7.3	13.3	0	DIS				
18	2235	47.39	19	23.05	155	14.99	3.29	2.1	1.4	19	5	67	07	2	0.3	0.3	0	SEC				
19	438	25.98	19	23.61	155	15.02	3.52	2.3	1.6	16	5	94	05	2	0.3	0.4	0	SEC				
19	1736	12.89	19	26.71	155	30.29	10.88	2.5	3.0	50	11	40	10	6	0.3	0.5	0	KAO				
20	115	34.86	19	49.04	155	23.92	26.85	1.2	1.3	20	5	115	10	7	0.7	1.1	0	KEA				
20	756	42.13	19	23.83	155	27.71	6.52	1.9	1.5	34	5	34	12	2	0.3	0.7	0	KAO				
20	912	58.32	19	59.55	155	21.73	11.49	0.9	1.6	14	3	274	08	12	1.4	0.7	0	KEA				
20	1135	10.40	19	24.52	155	18.02	3.54	1.1	19	5	62	09	2	0.5	0.4	0	SEC					
20	1431	50.76	19	22.10	155	13.03	3.32	1.4	1.2	16	6	95	08	1	0.4	0.3	0	SER				
21	034	19.66	19	29.34	155	26.91	5.12	2.1	1.4	35	8	83	12	5	0.3	1.5	0	KAO				
21	2	6	41.51	19	7.46	155	32.27	44.71	2.5	1.7	16	2	266	13	9	3	1.6	0	DLS			
21	430	20.97	19	22.83	155	14.52	3.51	2.3	1.5	36	8	49	09	3	0.3	0.3	0	SEC				
21	453	41.80	19	22.89	155	14.51	3.47	2.0	1.3	31	8	54	07	3	0.3	0.3	0	SEC				
21	614	24.34	19	23.02	155	10.68	1.95	1.5	1.1	11	3	141	09	2	1.1	1.1	0	SER				
21	1157	29.44	19	19.55	155	7.12	6.85	1.7	1.5	33	5	116	09	4	0.4	0.8	0	SF4				
21	1347	14.52	19	26.36	155	29.17	9.61	1.2	27	5	46	10	7	0.4	0.9	0	KAO					
21	1437	22.12	19	24.53	155	19.57	6.29	2.2	1.7	36	8	40	10	2	0.3	0.7	0	KAO				
21	1527	47.34	19	19.53	155	7.07	7.48	2.0	2.0	42	7	117	10	4	0.5	0.7	0	SF4				
21	1922	48.63	19	24.59	155	19.60	6.09	1.9	1.4	30	6	85	11	2	0.4	0.7	0	KAO				
21	2023	47.65	19	24.68	155	19.61	5.67	2.0	1.4	28	3	70	09	2	0.3	0.7	0	KAO				
21	2024	24.49	19	24.64	155	19.63	5.91	1.6	1.0	21	2	86	08	2	0.4	0.8	0	KAO				
21	2027	15.18	19	24.61	155	19.54	6.76	2.0	1.4	35	6	58	11	2	0.4	0.7	0	KAO				
22	156	4.52	19	0.80	156	2.06	16.75	2.0	2.3	5	278	19	33	1.5	13.9	0	KON					

1992 HVO EARTHQUAKE SUMMARY LIST

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ORIGIN TIME			LAT N	LONG W	DEPTH AMP DUR			GAP RMS MIN ERH			ERZ NO
YEAR MON DA HRMN SEC	DEG MIN	DEG MIN	DEG MIN	DEG MIN	KM	MAG	MAG NR NS	DEG SEC DIS	KM	KM	FM REMK
1992 APR 22	651 52.73	19 24.92	155 19.65	3.44 2.3 1.4 27	6	79 .08	2 0.3	0.5	0	KAO	
22 1046 17.65	19 24.97	155 19.53	4.25 1.9 1.1 23	6	79 .10	2 0.4	0.6	0	KAO		
22 12 0 2.37	19 20.46	155 10.69	8.98 1.6 1.4 29	6	78 .06	3 0.4	0.6	0	SF3		
22 1259 42.71	19 10.38	155 33.68	32.80 2.0 1.8 33	7	109 .09	10 0.6	0.9	0	DLS		
22 1433 7.44	19 24.86	155 19.54	3.79 2.4 1.4 34	4	108 .08	2 0.3	0.5	0	KAO		
22 1848 37.02	19 26.95	155 29.92	10.13 2.6 2.3 51	10	43 .10	9 0.3	0.6	0	KAO		
23 250 18.19	19 27.56	155 36.89	11.82 2.1 1.2 25	5	174 .12	1 0.7	0.6	0	MLO		
23 450 55.69	19 19.07	155 14.98	7.74 1.5 1.4 28	4	108 .08	5 0.4	0.8	0	SF1		
23 6 8 11.13	19 24.32	155 16.68	1.85 1.9 1.1 16	5	107 .09	1 0.3	0.2	0	SSC		
23 1421 49.51	19 22.00	155 11.05	2.61 2.4 1.6 28	5	116 .08	2 0.3	0.4	0	SER		
23 1842 3.45	19 21.69	155 30.13	9.88 2.0 1.5 34	6	46 .06	5 0.3	0.7	0	KAO		
23 20 7 37.09	19 27.57	154 53.38	5.02 1.9 1.6 32	4	136 .11	3 0.4	1.0	0	LER		
24 158 58.83	19 21.39	155 17.04	31.37 2.2 1.8 42	7	53 .10	2 0.6	1.0	0	DEP		
24 453 44.57	19 24.88	155 21.92	9.91 1.8 1.1 26	4	60 .08	4 0.4	0.7	0	KAO		
24 814 10.21	19 22.81	155 14.64	3.04 2.4 1.6 27	8	73 .07	2 0.3	0.3	0	SEC		
24 15 8 34.14	19 25.60	155 27.36	8.87 2.2 1.7 42	2	30 .11	4 0.3	0.8	0	KAO		
24 21 5 26.01	19 18.19	155 14.92	6.34 0.9 1.3 30	2	105 .10	3 0.5	0.9	0	SF1		
25 042 12.67	19 20.44	155 7.56	7.24 1.7 1.6 27	1	127 .10	5 0.6	0.8	0	SF4		
25 1035 59.43	19 25.96	155 20.29	7.26 1.8 1.1 21	3	115 .10	3 0.5	1.1	0	KAO		
25 2025 46.82	19 11.00	156 20.82	39.60 2.9 2.5 40	2	282 .10	51 1.5	1.3	0	DIS		
25 2048 46.41	19 25.65	155 17.30	11.02 2.3 1.3 12	3	185 .11	1 1.8	1.0	0	INT L		
25 2110 2.12	19 20.37	155 11.51	8.58 1.6 1.5 20	4	78 .05	4 0.5	1.0	0	SF3		
26 9 8 45.77	19 25.31	155 14.52	8.99 2.2 1.4 11	4	293 .08	4 2.0	0.9	0	INT L		
26 1049 22.89	19 23.07	155 14.98	2.90 1.6 1.3 11	3	264 .08	2 1.5	0.4	0	SEC		
26 12 9 44.46	19 23.20	155 17.35	12.87 2.2 1.1 11	3	163 .07	1 2.7	0.9	0	INT L		
26 1732 13.38	19 12.75	155 11.43	33.61 2.0 1.8 33	2	211 .08	9 1.0	1.6	0	DEP		
26 2040 48.62	19 29.04	155 16.25	31.92 1.9 1.4 35	8	155 .08	2 0.8	0.7	0	DEP		
27 020 30.38	19 20.67	155 23.28	8.89 1.6 1.2 23	4	62 .08	1 0.5	0.8	0	SWR		
27 18 6 10.20	19 27.45	155 29.53	9.68 1.7 1.2 32	8	48 .09	8 0.4	0.8	0	KAO		
27 2329 32.06	19 16.45	155 25.67	9.97 1.3 25	4	109 .10	5 0.4	0.9	0	LSW		
28 258 7.48	19 19.54	155 8.78	6.91 2.0 1.8 41	6	81 .12	4 0.4	0.6	0	SF4		
28 556 19.63	19 25.03	155 19.26	5.42 2.5 1.6 37	8	68 .11	3 0.3	0.7	0	KAO		
28 558 57.46	19 24.97	155 19.60	4.14 1.8 1.0 19	4	65 .08	2 0.3	0.7	0	KAO		
28 6 2 3.00	19 24.95	155 19.42	5.17 1.8 1.0 23	5	99 .09	2 0.4	0.7	0	KAO		
28 657 22.06	18 56.99	155 28.53	34.80 1.6 35	5	235 .09	20 1.1	1.4	0	DLS		
28 749 16.12	19 22.22	155 4.97	6.48 0.8 1.5 21	4	77 .11	4 0.4	0.7	0	SF5		
28 11 0 46.22	19 25.37	155 19.88	6.77 2.3 1.5 30	4	108 .11	3 0.4	0.8	0	KAO		
28 1232 54.58	19 19.27	155 12.07	5.62 1.6 1.4 28	5	95 .10	5 0.4	1.2	0	SF3		
29 9 40.76	19 27.51	155 21.20	2.46 2.0 1.3 28	7	119 .12	1 0.4	0.3	0	KAO		
29 012 10.51	19 27.85	155 20.93	2.73 2.1 1.3 26	7	169 .11	1 0.5	0.3	0	KAO		
29 744 52.72	19 26.13	155 19.28	5.70 2.1 1.2 23	6	156 .10	3 0.5	0.8	0	KAO		
29 930 15.61	19 15.09	155 27.08	7.97 1.4 22	5	84 .12	5 0.5	1.0	0	LSW		
29 1822 14.49	19 10.83	155 36.90	8.75 2.2 1.8 42	7	96 .21	8 0.8	1.2	0	LSW		
30 6 46.29	19 15.90	155 27.68	10.08 1.2 23	5	97 .11	5 0.5	0.9	0	LSW		
30 732 52.63	19 19.05	155 10.06	5.63 1.8 1.7 36	7	108 .10	5 0.3	1.0	0	SF3		

1992 HVO EARTHQUAKE SUMMARY LIST

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ORIGIN TIME		LAT N		LONG W		DEPTH AMP DUR			GAP RMS MIN ERH			ERZ NO					
YEAR MON DA HRMN SEC	DEG MIN	DEG MIN	DEG MIN	KM	MAG	MAG	NR	NS	DEG	SEC	DIS	KM	KM	FM	REMK		
1992 MAY	1 2011	40.66	18 49.10	155	13.07	49.62	1.4	28	0	284	.08	46	4.8	4.5	0	LOI	
	2 351	39.48	19 21.36	155	4.73	7.95	2.0	1.9	42	2	88	.09	4	0.4	0.5	0	SS5
	2 727	10.46	19 24.42	155	16.61	1.34	2.2	1.3	17	4	120	.11	1	0.3	0.3	0	SFC
	2 949	48.00	19 59.74	155	20.70	13.13	2.2	1.9	21	2	208	.09	12	1.1	0.5	0	KEA
	2 1116	19.67	19 28.36	155	25.00	2.15	2.0	1.1	24	5	74	.11	4	0.3	0.7	0	KAO
	2 1132	19.62	19 20.20	155	10.43	33.34	2.2	2.2	46	2	83	.12	4	0.7	1.3	0	DEP
	2 1359	28.12	19 22.72	155	14.47	3.41	1.9	1.4	17	2	77	.06	2	0.3	0.3	0	SEC
	2 14	0 56.20	19 22.86	155	14.55	3.43	1.9	1.4	19	2	75	.06	3	0.3	0.3	0	SEC
	2 1938	32.30	19 23.38	155	16.93	2.95	2.2	1.5	28	7	40	.10	0	0.3	0.3	0	SSC
	2 2046	40.38	19 19.54	155	8.48	9.42	3.0	3.3	48	9	81	.10	4	0.3	0.4	0	SF4
	3 343	8.94	19 22.76	155	14.43	3.55	2.0	1.4	30	6	78	.09	2	0.3	0.3	0	SEC
	3 1038	22.27	19 23.09	155	14.84	3.12	2.6	1.7	30	7	66	.10	2	0.3	0.3	0	SEC
	4 1	8 33.86	19 12.47	155	17.64	35.61	1.0	17		1	213	.10	10	1.5	2.5	0	DEP
	4 110	20.93	19 12.67	155	15.80	45.17	1.2	24		4	225	.10	9	1.5	1.1	0	DEP
	4 111	21.97	19 12.77	155	15.46	48.25	1.4	25		4	197	.09	9	1.3	1.1	0	DEP
	4 349	46.12	19 23.06	155	14.59	3.72	2.4	1.9	48	8	49	.10	3	0.3	0.3	0	SEC
	4 4	4 37.33	19 23.67	155	16.86	2.93	1.7	1.2	23	7	52	.09	1	0.3	0.2	0	SSC
	4 757	21.39	19 19.47	155	11.71	8.19	1.6	1.6	30	4	95	.10	5	0.5	0.9	0	SF3
	4 855	27.02	19 23.37	155	14.97	3.54	2.6	1.4	24	5	74	.08	2	0.3	0.4	0	SEC
	4 1124	58.42	19 17.33	155	13.24	6.07	1.2	30		6	127	.10	1	0.5	0.8	0	SF2
	4 1129	27.73	19 21.77	155	11.34	3.17	1.8	1.4	20	6	110	.07	3	0.3	0.4	0	SER
	4 1240	54.36	19 23.06	155	15.00	3.25	1.6	1.0	18	5	113	.09	2	0.4	0.4	0	SEC
	4 1356	29.13	19 22.86	155	14.85	3.02	2.1	1.7	27	8	68	.10	2	0.3	0.3	0	SEC
	4 1854	57.96	19 23.24	155	14.76	2.88	1.7	1.3	20	6	108	.09	3	0.3	0.4	0	SEC
	4 2134	2.10	19 27.39	155	25.90	4.20	0.9	1.1	26	5	63	.12	4	0.4	1.3	0	KAO
	4 22	1 24.00	19 18.89	155	13.76	7.30	1.2	28		2	88	.09	3	0.4	0.9	0	SF2
	4 2213	42.12	19 18.78	155	13.68	10.15	3.8	3.9	53	3	69	.11	3	0.4	0.4	0	SF2 F
	4 2338	44.46	19 23.30	155	14.93	3.05	2.8	1.7	39	9	47	.10	2	0.3	0.3	0	SEC
	5 1	7 26.29	19 10.60	155	33.56	8.97	2.4	2.3	36	2	107	.11	10	0.5	1.1	0	LSW
	5 1159	18.38	19 25.94	155	30.10	9.64	2.2	1.8	38	7	41	.10	8	0.3	0.6	0	KAO
	5 1811	46.15	19 26.25	155	29.30	9.89	1.7	1.3	32	7	42	.10	7	0.4	0.9	0	KAO
	6 231	57.44	19 19.30	155	8.95	8.90	1.4	35		4	88	.10	4	0.5	0.7	0	SF4
	6 256	29.89	19 10.55	155	16.34	40.94	1.3	17		2	216	.09	13	2.3	1.9	0	DEP
	6 454	45.73	19 26.95	155	50.86	5.09	2.5	2.1	34	3	114	.12	9	0.4	1.2	0	KON
	6 459	25.21	19 23.39	155	14.85	2.84	1.7	1.5	20	7	102	.07	3	0.3	0.3	0	SEC
	6 742	45.74	19 21.32	155	18.79	4.03	2.0	1.6	32	4	46	.12	3	0.4	1.0	0	SWR
	6 753	24.22	19 24.22	155	2.92	3.69	2.0	1.5	32	5	104	.10	2	0.4	0.5	0	SNE
	6 1114	11.32	19 24.10	155	29.66	9.86	1.7	1.4	31	3	42	.09	5	0.4	0.6	0	KAO
	6 1422	13.56	19 19.04	155	13.42	4.39	1.8	1.4	29	5	74	.11	4	0.4	1.5	0	SFF
	6 1632	28.96	19 19.53	155	13.47	8.15	3.1	3.2	61	9	67	.14	5	0.4	0.5	0	SF2
	6 1638	23.41	19 24.95	155	19.12	5.61	2.1	1.4	28	5	68	.11	3	0.4	0.8	0	KAO
	6 1848	39.79	19 28.85	155	30.70	22.73	2.1	1.6	37	8	58	.09	8	0.5	0.9	0	DML
	7 356	16.67	19 12.01	155	26.47	43.72	1.5	37		4	141	.09	5	0.8	1.4	0	DLS
	7 658	50.30	19 55.68	155	16.55	42.67	2.2	1.9	44	4	201	.13	8	0.8	1.3	0	KEA
	7 1838	33.82	19 21.51	155	6.32	8.88	2.8	2.8	52	6	85	.12	4	0.4	0.3	0	SF4

YEAR	MON	DA	HRMN	SEC	LAT N	DEG	MIN	LON W	DEG	MIN	DEPTH AMP	DUR	KM	MAG	MAG NR	NS	DEG	RMS	MIN	ERH	ERZ	NO	KM	FM	REMK
1992	MAY	8	928	16.40	19	24.79	155	29.83	8.17	1.7	1.5	39	6	35	10	5	0.3	0.8	0	0	0	0	0	0	0
		8	12	3	39.33	19	20.16	155	13.00	6.17	1.5	1.3	32	4	68	13	5	0.4	1.0	0	0	0	0	0	0
		9	1	15.61	19	6.87	155	37.83	16.53	1.5	1.5	15	3	120	10	15	0.9	1.2	0	0	0	0	0	0	0
		9	1	7	33.69	19	9.64	155	36.45	2.87	1.6	1.8	34	2	107	15	10	0.5	2.5	0	0	0	0	0	0
		9	145	53.65	19	24.24	155	17.43	1.43	1.7	0.9	10	3	105	10	1	0.4	0.3	0	0	0	0	0	0	0
		9	241	56.05	19	9.19	155	36.21	0.82	1.5	24	2	112	20	11	0.7	1.9	0	0	0	0	0	0	0	0
		9	16	5	9.97	19	54.06	155	45.85	41.45	1.4	1.7	41	5	252	08	25	1.0	0.9	0	0	0	0	0	0
		10	3	0	16.36	19	55.54	155	30.24	30.18	2.5	1.6	37	7	217	08	17	0.7	1.3	0	0	0	0	0	0
		10	810	26.79	19	26.81	155	15.24	0.33	2.0	1.1	10	3	235	06	5	0.4	0.6	0	0	0	0	0	0	0
		10	1020	19.71	19	21.78	155	15.58	25.20	2.1	1.5	45	12	61	11	1	0.6	0.8	0	0	0	0	0	0	0
		10	2029	41.35	19	23.28	155	3.11	8.18	1.7	1.7	30	4	111	11	3	0.4	0.5	0	0	0	0	0	0	0
		11	113	23.28	19	24.93	155	29.28	10.26	2.3	2.0	38	6	34	08	5	0.3	0.6	0	0	0	0	0	0	0
		11	723	29.15	19	26.15	155	22.38	8.49	1.5	1.0	16	2	68	06	4	0.5	1.1	0	0	0	0	0	0	0
		11	755	45.92	19	23.33	155	25.27	11.22	1.6	1.4	30	6	38	10	4	0.4	0.8	0	0	0	0	0	0	0
		11	1041	53.20	19	12.61	155	27.57	2.16	2.2	2.2	33	2	111	14	6	0.3	1.8	0	0	0	0	0	0	0
		11	1056	23.27	19	25.77	155	19.12	7.27	2.3	1.3	27	6	141	11	3	0.4	0.7	0	0	0	0	0	0	0
		11	1414	45.06	19	25.72	155	19.20	7.13	2.0	1.0	23	6	138	10	3	0.5	0.7	0	0	0	0	0	0	0
		11	18	1	58.42	19	18.24	155	13.23	8.06	2.2	2.0	37	5	91	11	2	0.4	0.8	0	0	0	0	0	0
		11	1950	48.07	19	27.11	155	29.52	10.15	2.0	1.7	31	4	46	11	8	0.4	0.9	0	0	0	0	0	0	0
		12	4	8	38.65	19	25.31	155	30.17	11.58	2.1	1.5	33	6	38	08	5	0.4	0.8	0	0	0	0	0	0
		12	521	19.67	19	20.20	155	7.86	8.29	1.7	1.6	25	2	89	06	5	0.5	0.9	0	0	0	0	0	0	0
		12	1510	14.73	19	19.82	155	7.16	7.82	1.7	1.6	30	6	109	09	5	0.4	0.7	0	0	0	0	0	0	0
		12	2231	22.81	19	26.16	155	18.83	7.04	2.1	1.7	34	8	94	10	3	0.4	0.5	0	0	0	0	0	0	0
		13	1547	25.26	19	19.79	155	11.32	8.71	1.6	1.5	28	4	90	07	5	0.5	0.9	0	0	0	0	0	0	0
		13	1555	30.83	19	26.95	155	19.11	8.21	2.3	1.1	20	5	181	08	4	0.5	0.7	0	0	0	0	0	0	0
		14	452	17.16	19	32.51	155	0.85	43.38	3.2	2.9	56	12	99	11	7	0.6	0.8	0	0	0	0	0	0	0
		14	842	48.26	19	49.40	155	34.68	8.96	1.7	1.6	24	0	203	12	9	1.0	0.7	0	0	0	0	0	0	0
		14	949	17.71	19	20.21	155	11.47	7.92	1.3	28	5	81	08	4	0.5	0.8	0	0	0	0	0	0	0	0
		14	1448	55.72	19	19.59	155	12.71	8.01	1.6	1.2	22	4	80	05	5	0.5	0.9	0	0	0	0	0	0	0
		14	2352	5.26	19	24.95	155	51.56	18.83	1.3	15	4	238	12	14	1.5	1.5	0	0	0	0	0	0	0	0
		14	2353	45.26	19	24.28	155	52.38	18.27	2.6	1.9	27	4	211	10	16	1.1	1.5	0	0	0	0	0	0	0
		15	826	53.93	19	19.24	155	11.74	7.63	2.2	2.0	34	5	100	09	5	0.4	0.8	0	0	0	0	0	0	0
		15	835	50.88	19	19.36	155	11.78	7.93	1.9	1.5	28	3	96	07	5	0.4	0.8	0	0	0	0	0	0	0
		15	938	8.59	19	16.41	155	24.41	10.22	1.0	11	4	99	08	4	0.7	1.3	0	0	0	0	0	0	0	0
		15	956	19.94	19	19.63	155	11.63	7.94	1.5	25	3	91	06	5	0.4	0.9	0	0	0	0	0	0	0	0
		15	1222	38.57	19	16.31	155	13.33	4.80	1.6	1.3	24	5	181	09	1	0.5	0.6	0	0	0	0	0	0	0
		15	1937	21.91	19	21.33	155	8.06	9.02	1.9	1.8	38	3	72	09	3	0.4	0.6	0	0	0	0	0	0	0
		15	2031	10.46	19	18.78	155	30.65	9.50	2.8	2.7	40	2	68	10	7	0.3	0.7	0	0	0	0	0	0	0
		15	2312	14.40	19	20.46	155	13.00	8.11	1.5	1.2	26	2	65	08	4	0.5	0.9	0	0	0	0	0	0	0
		16	136	50.74	19	24.40	155	3.14	3.67	1.7	1.0	12	1	170	05	2	1.0	0.5	0	0	0	0	0	0	0
		16	4	14.71	20	2.74	155	27.59	7.23	2.6	2.1	31	0	268	13	21	2.8	0.8	0	0	0	0	0	0	0
		16	512	5.83	19	25.32	155	15.89	12.51	1.8	0.9	11	2	244	09	2	2.2	0.8	0	0	0	0	0	0	0
		16	944	45.37	19	26.97	155	52.42	7.59	1.7	1.9	32	2	134	16	6	0.7	0.7	0	0	0	0	0	0	0
		16	1055	30.72	19	19.62	155	13.53	8.59	2.1	1.9	39	3	121	12	6	0.4	0.6	0	0	0	0	0	0	0
		16	11	2	40.62	19	26.73	154	53.54	9.36	2.7	2.5	42	2	161	10	4	0.7	0.3	0	0	0	0	0	0

YEAR	MON	DA	HRMN	SEC	LAT N	DEG	MIN	LON W	DEG	MIN	DEPTH AMP	DUR	KM	MAG	MAG NR	NS	DEG	RMS	MIN	ERH	ERZ	NO	KM	FM	REMK
1992	MAY	17	1	5	27.82	20	7.31	156	11.39	41.65	2.1	34	12	318	11	81	1.4	3.1	0	0	0	0	0	0	0
		17	759	20.75	19	22.85	155	25.21	11.43	1.0	23	3	43	10	4	0.5	0.8	0	0	0	0	0	0	0	0
		17	1118	16.33	19	24.61	155	38.16	0.00	2.6	2.2	31	4	100	11	6	0.3	0.4	0	0	0	0	0	0	0
		17	1749	22.82	19	19.49	155	11.74	8.39	1.6	1.5	25	4	94	05	5	0.4	0.9	0	0	0	0	0	0	0
		17	1932	25.88	19	20.01	155	13.01	7.94	2.1	2.0	50	7	70	12	5	0.4	0.6	0	0	0	0	0	0	0
		17	2152	18.53	19	19.35	155	7.50	6.60	1.7	1.6	34	5	111	12	4	0.4	0.8	0	0	0	0	0	0	0
		18	2335	46.11	19	22.24	155	30.17	9.89	1.7	1.4	30	4	46	07	4	0.3	0.7	0	0	0	0	0	0	0
		19	4	7	13.59	19	18.71	155	47.26	2.31	2.0	1.5	23	6	206	12	14	0.8	0.8	0	0	0	0	0	0
		19	1634	29.01	19	30.03	155	29.50	3.22	1.7	1.1	19	4	69	09	5	0.3	0.9	0	0	0	0	0	0	0
		19	17	6	17.36	19	30.60	155	43.83	10.26	1.3	18	4	169	09	4	0.8	1.0	0	0	0	0	0	0	0
		20	1741	43.87	19	19.14	155	11.85	7.10	0.9	1.3	26	5	101	07	5	0.4	0.9	0	0	0	0	0	0	0
		20	1834	15.29	19	19.71	155	8.88	7.11	1.6	1.4	22	3	80	07	5	0.5	0.9	0	0	0	0	0	0	0
		21	240	7.46	19	28.26	155	48.82	7.65	1.4	1.5	27	10	7	1.7	0.8	0	0	0	0	0	0	0	0	0
		21	1047	51.13	19	21.41	155	28.56	4.99	2.0	1.5	27	4	46	12	3	0.4	0.8	0	0	0	0	0	0	0
		22	110	19.32	19	22.32	155	27.10	10.08	1.0	22	5	72	09	1	0.5	0.7	0	0	0	0	0	0	0	0
		22	411	11.86	19	21.72	155	5.14	8.62	3.0	3.2	52	10	81	10	5	0.3	0.3	0	0	0	0	0	0	0
		22	415	59.95	19	21.33	155	30.38	10.71	1.1	20	5	71	12	5	0.5	0.9	0	0	0	0	0	0	0	0

YEAR	MON	DA	ORIGIN TIME		LAT N	DEG	MIN	LON W	DEPTH		AMP	DUR	GAP			RMS	MIN	ERH	ERZ	NO	
			HRMN	SEC					KM	MAG			NR	NS	DEG						SEC
1992	MAY	26	1359	0.13	19	22.22	155	10.66	2.91	1.5	1.1	16	3	142.11	1	0.6	0.4	0	SER		
		26	1441	10.87	19	22.38	155	29.14	10.21	2.3	2.1	44	8	39.10	3	0.3	0.6	0	KAO		
		27	233	33.92	19	34.32	155	16.03	27.27	2.0	1.5	42	10	189.10	12	0.9	0.6	0	DEP		
		27	747	13.32	19	23.11	155	2.41	7.62	1.7	34	3	130.13	4	0.4	0.5	0	SF5			
		27	1236	45.24	19	44.83	154	56.25	31.67	2.4	1.7	41	4	228.11	11	1.3	1.0	0	HIL		
		27	1446	5.03	19	18.65	155	8.42	6.93	1.3	22	6	91.08	3	0.4	0.9	0	SF4			
		27	2256	13.81	19	24.52	155	16.74	12.00	2.2	1.4	14	4	118.15	1	1.7	0.9	0	DEP	L	
		28	733	42.13	19	25.02	155	15.39	12.00	2.1	1.2	14	3	171.08	2	1.6	0.9	0	INT	L	
		28	1035	28.01	19	22.47	155	30.06	9.96	1.6	29	5	46.06	4	0.3	0.7	0	KAO			
		28	1129	15.18	19	24.86	155	16.74	11.33	1.3	16	4	147.05	0	1.3	0.8	0	INT			
		28	1617	44.56	19	24.32	155	16.09	11.89	1.3	14	3	129.09	1	1.3	0.9	0	INT			
		28	1810	45.82	19	19.96	155	6.46	8.14	1.8	2.1	38	5	118.09	6	0.4	0.6	0	SF4		
		28	2350	24.55	19	17.18	155	13.19	6.68	0.9	1.6	36	5	150.10	1	0.4	0.6	0	SF2		
		29	1	23.46	19	25.07	155	19.30	5.73	1.2	24	5	105.08	3	0.4	0.8	0	KAO			
		29	14	2	59.39	19	19.90	155	11.89	9.14	2.6	3.3	50	7	84.11	5	0.3	0.4	0	SF3	
		29	2026	43.42	19	30.69	155	28.75	7.36	0.9	1.3	23	4	71.09	3	0.4	1.1	0	MLO		
		30	415	28.22	19	46.70	155	41.20	11.17	2.0	2.5	39	5	147.12	9	0.6	0.5	0	KEA		
		30	835	14.44	19	20.90	155	13.09	7.47	0.9	1.5	38	6	64.12	3	0.4	0.6	0	SF2		
		30	938	21.48	19	52.70	155	30.15	25.47	2.1	1.7	25	3	233.08	12	1.1	1.8	0	KEA		
		30	13	9	38.49	19	20.14	155	8.95	7.35	1.9	1.8	35	3	73.10	4	0.5	0.8	0	SF4	
		30	1932	16.24	19	20.49	155	11.59	7.90	1.1	29	2	76.09	4	0.5	0.8	0	SF3			
		31	451	50.74	19	25.19	155	16.28	12.53	0.8	1.0	10	2	164.07	1	1.7	1.3	0	INT	L	
		31	855	7.52	19	16.51	155	25.69	9.53	2.2	1.3	22	5	57.09	5	0.4	0.9	0	LSW		
		31	1616	2.11	20	20.30	155	54.20	32.86	1.9	2.1	26	4	319.12	27	1.8	1.1	0	KOH		
		31	1642	56.40	19	28.54	154	47.54	6.51	1.2	1.5	10	2	297.08	6	2.2	0.9	0	LER		
		31	1747	53.17	19	29.19	155	26.97	3.59	2.3	1.7	30	8	68.11	5	0.3	1.0	0	KAO		
		31	20	0	38.49	19	27.14	155	29.84	9.13	1.7	1.4	31	5	47.08	7	0.4	0.9	0	KAO	
		31	2311	2.60	19	20.07	155	12.13	8.18	2.0	1.8	41	5	79.11	5	0.4	0.6	0	SF3		
		31	2312	29.31	19	19.96	155	12.08	8.75	1.3	26	4	81.06	5	0.4	0.7	0	SF3			
		JUN 1	1627	51.03	19	20.98	155	6.02	8.70	0.9	1.7	27	6	97.08	5	0.5	0.6	0	SF4		
		JUN 2	127	3.62	19	22.24	155	10.68	3.03	1.5	1.2	17	3	123.07	1	0.7	0.4	0	SER		
		2	154	4.20	19	21.36	155	6.85	7.94	0.8	1.3	24	5	84.09	4	0.5	0.7	0	SF4		
		2	10	4	50.13	19	24.86	155	30.97	11.87	1.5	29	4	38.07	3	0.4	0.8	0	KAO		
		2	1059	27.42	20	10.69	155	38.21	26.37	2.2	2.0	29	3	242.10	16	1.3	1.0	0	KOH		
		2	1728	4.22	19	31.78	155	32.57	15.10	1.3	31	9	112.12	4	0.6	0.6	0	DML			
		3	128	12.28	19	26.09	155	28.93	9.19	1.0	1.7	38	7	41.10	7	0.3	0.8	0	KAO		
		3	355	5.73	19	20.25	155	11.83	8.54	1.5	36	5	78.11	5	0.5	0.7	0	SF3			
		3	532	21.07	19	29.20	155	26.93	7.55	2.4	2.2	52	12	56.12	5	0.3	0.6	0	KAO		
		3	1836	12.62	19	20.13	155	7.96	7.32	1.4	20	1	87.06	5	0.4	1.0	0	SF4			
		4	040	13.66	19	21.83	155	30.42	10.46	1.2	26	6	47.07	5	0.3	0.7	0	KAO			
		4	125	7.19	19	26.27	155	18.78	7.22	2.5	1.0	26	9	168.11	3	0.5	0.6	0	INT		
		4	2	49.49	19	17.62	155	29.98	10.54	1.3	25	5	65.13	5	0.4	1.0	0	LSW			
		4	525	53.36	19	24.57	155	28.94	9.41	1.2	24	3	59.06	4	0.4	0.8	0	KAO			
		4	849	32.99	19	12.03	155	27.36	6.38	1.2	20	4	137.15	5	0.6	1.5	0	LSW			
		4	851	14.48	19	12.27	155	27.37	2.60	1.5	2.3	33	3	116.15	5	0.4	1.1	0	LSW		

1992 HVO EARTHQUAKE SUMMARY LIST

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YEAR	MON	DA	HRMN	SEC	LAT N	DEG	MIN	LON W	DEPTH	AMP	DUR	KM	MAG	NR	NS	DEG	SEC	DIS	KM	ERH	ERZ	NO	
ORIGIN TIME	YEAR	MON	DA	HRMN	SEC	LAT N	DEG	MIN	LON W	DEPTH	AMP	DUR	KM	MAG	NR	NS	DEG	SEC	DIS	KM	ERH	ERZ	NO
1992 JUN 10 1128	5.30	19	25.65	155	17.80	16.99	1.9	1.2	12	3	160	.11	1	3.6	1.1	0	DEP	L					
10 1219	10.61	19	23.68	155	17.01	3.14	1.9	1.4	20	5	59	.08	1	0.3	0.3	0	SEC						
10 17	1	25.80	19	25.60	155	16.75	8.59	1.9	1.1	17	1	116	.12	1	0.6	0.9	0	INT	L				
10 2141	56.03	19	20.12	155	7.40	8.17	2.3	2.5	48	5	98	.10	5	0.4	0.5	0	SF4						
10 2153	45.73	19	19.22	155	15.47	6.80	1.8	1.3	27	1	100	.09	4	0.5	0.9	0	SF1						
10 22	5	31.11	19	11.40	155	42.30	12.94	2.0	1.9	18	2	127	.10	11	0.6	0.8	0	LSW					
11 343	41.86	19	22.79	155	8.75	3.32	1.6		8	0	119	.04	2	0.9	0.5	0	SER						
11 438	49.86	19	18.76	155	15.14	8.29	2.4	2.3	51	7	96	.12	4	0.4	0.5	0	SF1						
11 555	33.33	19	23.30	155	14.89	3.22	2.0	1.5	19	5	103	.09	2	0.4	0.4	0	SEC						
11 556	6.99	19	23.29	155	14.79	3.45	2.4	2.3	14	1	78	.06	3	0.4	0.5	0	SEC						
11 9	5	21.94	19	23.27	155	14.88	3.46	1.5	15	3	104	.05	2	0.3	0.6	0	SEC						
11 1226	29.18	19	21.07	155	30.27	9.51	1.3	17	2	89	.07	5	0.5	0.8	0	KAO							
11 1441	51.46	19	13.01	155	31.29	7.50	1.7	26	1	142	.14	4	0.5	1.1	0	LSW							
11 2152	29.29	19	17.44	155	12.87	7.30	1.3	31	4	143	.10	1	0.5	0.9	0	SF2							
12 017	57.32	19	18.69	155	14.66	6.53	0.9	1.2	31	1	98	.10	4	0.5	1.0	0	SF1						
12 656	9.15	19	18.20	155	14.96	8.29	1.3	23	4	138	.05	3	0.5	0.9	0	SF1							
13 313	35.90	19	51.72	156	3.99	46.67	2.5	2.1	33	1	285	.07	50	2.1	1.4	0	HVA						
13 831	28.05	19	52.83	155	26.33	27.76	3.1	3.5	66	16	170	.11	13	0.5	1.1	0	KEA	F					
13 1041	11.12	19	52.91	155	10.87	41.55	2.6	2.0	39	6	206	.10	17	0.8	1.5	0	KEA						
13 2327	15.24	19	14.36	155	30.97	8.27	1.2	1.6	23	1	66	.14	2	0.4	0.9	0	LSW						
14 517	20.49	19	20.34	155	48.79	9.56	2.3	1.8	31	3	156	.13	10	0.6	0.6	0	KON						
14 653	6.83	19	20.53	155	7.49	8.14	1.7	1.6	34	4	141	.09	5	0.5	0.6	0	SF4						
14 1140	41.92	19	59.98	155	21.98	11.60	2.4	2.1	23	2	207	.08	26	1.3	0.7	0	KEA						
14 1155	39.59	19	28.37	155	27.39	3.45	1.9	1.4	25	5	73	.11	7	0.3	1.3	0	KAO						
15 1028	17.34	19	59.31	155	20.83	8.20	2.1	1.9	8	2	285	.04	36	1.5	1.6	0	KEA						
15 1957	6.85	19	16.05	155	3.46	44.79	2.0	46	4	203	.11	7	0.9	0.9	0	DEP							
16 1	6	2.00	19	21.19	155	29.51	5.52	1.7	1.2	23	2	43	.07	4	0.3	1.0	KAO						
16 143	4.58	19	25.17	155	39.17	3.27	2.0	1.2	16	4	203	.09	6	0.7	1.6	0	MLO						
16 343	58.43	19	21.10	155	5.99	7.78	0.9	1.5	28	2	95	.08	5	0.5	0.8	0	SF4						
16 457	21.15	19	25.76	155	16.35	10.06	2.1	1.4	16	6	184	.06	2	1.4	0.8	0	INT	L					
16 558	44.98	19	25.98	155	20.20	8.27	2.2	1.3	31	8	119	.10	3	0.4	0.7	0	KAO						
16 1319	25.77	19	19.06	155	25.70	29.97	1.5	31	4	61	.11	5	0.7	1.2	0	DML							
16 1510	59.82	19	26.01	155	18.76	18.07	1.2	11	2	266	.07	2	3.0	1.0	0	DEP							
16 1511	42.94	19	24.25	155	17.93	10.58	1.1	12	3	79	.09	2	1.7	0.9	0	INT							
16 1513	0.06	19	23.91	155	18.36	10.82	1.4	13	4	95	.16	2	2.3	1.3	0	INT							
16 1719	25.45	19	24.28	155	3.10	3.71	0.8	1.5	23	1	99	.07	2	0.4	0.5	0	SWE						
17 444	39.52	19	33.52	155	44.88	1.28	1.5	29	2	125	.14	6	0.7	1.5	0	KON							
17 530	26.90	19	17.90	155	16.60	7.67	1.0	1.6	40	4	126	.12	4	0.5	0.6	0	SF1						
17 14	7	1.36	19	25.36	155	16.21	15.07	2.2	1.2	12	2	172	.04	2	1.2	0.7	0	DEP	L				
17 2231	59.51	19	18.25	155	1.44	33.88	1.0	1.6	32	1	232	.09	12	2.8	2.7	0	DEP						
17 2345	13.26	18	53.68	155	15.73	13.63	1.8	41	6	254	.11	36	1.1	1.0	0	LOI							
18 242	30.52	19	18.23	155	13.13	6.66	1.6	1.4	30	1	95	.09	2	0.5	0.9	0	SF2						
18 455	3.73	18	52.70	155	15.74	13.01	1.8	35	0	254	.11	38	2.9	1.5	0	LOI							
18 748	48.91	18	54.17	155	15.93	16.72	2.1	1.9	32	3	270	.10	35	1.5	14.0	0	LOI						
18 1024	25.99	19	22.40	155	18.86	11.43	2.1	1.3	11	5	253	.06	4	3.8	2.1	0	INT	L					

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1992 HVO EARTHQUAKE SUMMARY LIST

YEAR	MON	DA	ORIGIN TIME		LAT N	DEG MIN	LON W	DEPTH		AMP	DUR	GAP		RMS	MIN	ERH	ERZ	NO				
			HRMN	SEC				KM	MAG			NR	NS						DEG	SEC	DIS	KM
1992	JUN	18	1414	24.04	19	24.48	155	16.93	9.82	1.9	1.1	9	2	94	.05	1	2.6	0.8	0	INT	L	
		18	1433	33.64	19	12.77	155	23.32	36.56	2.3	2.1	44	8	157	.10	3	0.7	1.0	0	DEP		
		18	1448	27.38	19	25.68	155	15.62	11.66	2.1	1.3	11	3	221	.09	3	1.5	0.6	0	INT	L	
		18	19	2	8.25	19	14.36	155	27.75	12.05	2.4	2.2	35	5	92	.10	4	0.5	0.6	0	LSW	
		18	21	4	46.37	19	30.55	155	8.38	10.31	2.4	1.5	10	1	324	.07	18	2.6	6.4	0	GLN	L
		18	2335	23.85	19	27.46	155	18.47	17.50	2.2	1.3	11	1	209	.10	4	1.8	0.9	0	DEP	L	
		19	0	3	54.45	19	26.71	155	22.73	8.48	1.8	1.2	23	3	74	.09	4	0.4	0.9	0	KAO	
		19	2	0	43.11	20	6.09	155	53.59	25.13	3.0	2.8	56	7	257	.12	12	0.8	1.3	0	KOH	
		19	451	10.97	19	25.38	155	15.63	11.77	2.2	1.3	15	3	160	.12	3	1.2	0.8	0	INT	L	
		19	731	24.62	19	23.15	155	15.94	7.53	2.1	1.4	13	1	75	.14	1	1.2	0.9	0	INT	L	
		19	821	2.62	19	31.14	155	29.97	4.03	1.5	24	5	84	.12	4	0.4	1.2	0	MLO			
		19	9	0	3.95	19	25.66	155	17.96	5.26	0.8	1.3	11	2	243	.12	1	1.9	0.6	0	INT	L
		19	951	46.75	19	31.18	155	30.39	4.96	1.4	26	5	122	.11	5	0.3	2.4	0	MLO			
		19	10	2	14.13	19	28.75	155	14.23	19.66	1.3	8	2	294	.11	9	5.1	1.9	0	DEP		
		19	1419	5.49	19	23.68	155	16.64	7.80	1.9	1.3	14	1	56	.13	0	0.9	1.4	0	INT	L	
		19	1934	33.41	19	26.30	155	18.78	11.62	2.1	1.2	12	2	161	.11	3	1.0	1.3	0	INT	L	
		19	2054	45.37	19	26.21	155	15.12	16.75	2.1	1.2	14	2	227	.12	3	2.4	0.8	0	DEP	L	
		20	231	59.82	19	25.96	155	16.08	16.75	2.3	1.4	16	2	196	.15	3	2.1	1.9	0	DEP	L	
		20	350	58.08	19	26.41	155	18.86	6.99	1.7	1.2	29	8	118	.09	3	0.4	0.5	0	INT		
		20	7	51.12	19	20.97	155	18.32	4.82	2.1	1.1	11	1	190	.10	5	0.9	2.5	0	SWR	L	
		20	920	50.01	19	26.42	155	15.20	20.60	1.2	6	1	267	.03	4	6.1	1.8	0	DEP	L		
		20	1016	55.02	19	24.47	155	29.59	9.81	1.7	1.5	30	1	41	.07	5	0.4	1.0	0	KAO		
		20	1033	25.09	19	24.60	155	29.51	8.33	2.1	1.6	36	4	40	.10	5	0.3	1.0	0	KAO		
		20	1154	4.60	19	24.53	155	17.31	12.43	2.2	1.5	14	3	68	.05	1	0.7	0.8	0	INT	L	
		20	1614	19.74	19	24.48	155	16.71	11.67	2.1	1.0	10	2	116	.12	1	3.2	0.9	0	INT	L	
		20	1840	52.90	19	21.91	155	14.80	18.45	2.4	1.5	9	1	264	.15	2	4.8	3.1	0	DEP	L	
		20	2143	10.34	19	26.20	155	20.46	5.32	2.1	0.9	23	4	112	.11	3	0.4	0.9	0	KAO		
		21	046	21.56	19	19.05	155	13.28	8.51	1.3	38	5	128	.12	7	0.5	0.8	0	SF2			
		21	110	27.81	19	24.52	155	18.79	14.38	2.1	1.3	11	3	103	.07	2	2.5	1.1	0	DEP	L	
		21	529	5.86	19	25.74	155	14.74	14.02	2.5	1.5	18	3	216	.10	2	1.3	0.9	0	DEP	L	
		21	6	56.44	19	53.84	155	30.76	19.32	2.1	1.8	31	4	139	.10	14	0.7	1.4	0	KEA		
		21	625	50.83	19	18.77	155	47.30	10.66	1.3	26	3	126	.14	10	0.7	0.9	0	KON			
		21	720	35.65	19	18.05	155	15.30	6.77	0.9	1.4	27	3	126	.09	4	0.4	0.9	0	SF1		
		21	9	2	5.27	19	25.69	155	12.38	17.80	2.0	1.0	11	1	294	.09	8	2.7	1.1	0	DEP	L
		21	1324	41.95	19	25.60	155	13.64	5.21	2.6	0.9	16	3	121	.04	4	2.4	1.1	0	KAO		
		21	1448	55.46	19	39.15	156	24.72	0.19	1.9	1.9	19	7	306	.12	60	2.0	0.6	0	DIS		
		21	16	4	3.38	19	24.84	155	16.56	11.33	2.1	1.3	11	2	148	.09	1	2.3	0.9	0	INT	L
		22	2029	44.52	19	24.25	155	16.66	13.65	2.2	1.4	25	2	89	.11	1	0.7	0.9	0	DEP	L	
		22	2035	47.15	19	21.93	155	4.70	8.04	0.8	1.8	15	3	40	.12	5	0.5	0.6	0	SF3		
		22	2323	21.34	19	19.46	155	11.83	6.32	1.3	26	1	94	.10	5	0.5	1.1	0	SF3			
		23	539	16.93	19	24.41	155	3.00	3.62	1.7	1.4	18	0	100	.07	2	0.5	0.5	0	SME		
		23	1246	53.29	19	29.75	155	29.81	2.99	2.4	1.6	38	7	67	.13	6	0.3	1.0	0	KAO		
		23	1316	19.46	19	25.72	155	16.25	13.64	2.2	1.4	14	1	184	.09	2	1.4	1.1	0	DEP	L	
		23	1537	43.08	19	23.91	155	15.35	9.87	2.0	1.3	13	2	104	.20	1.2	1.9	1.4	0	INT	L	
		23	1637	4.42	18	58.73	155	28.60	39.95	2.6	2.4	52	5	222	.08	20	1.1	1.3	0	DLS		
		23	1837	4.42	19	25.60	155	13.64	5.21	2.6	0.9	16	3	121	.04	4	2.4	1.1	0	KAO		
		23	1848	55.46	19	39.15	156	24.72	0.19	1.9	1.9	19	7	306	.12	60	2.0	0.6	0	DIS		
		23	1948	55.46	19	39.15	156	24.72	0.19	1.9	1.9	19	7	306	.12	60	2.0	0.6	0	DIS		
		23	2048	55.46	19	39.15	156	24.72	0.19	1.9	1.9	19	7	306	.12	60	2.0	0.6	0	DIS		
		23	2148	55.46	19	39.15	156	24.72	0.19	1.9	1.9	19	7	306	.12	60	2.0	0.6	0	DIS		

1992 HVO EARTHQUAKE SUMMARY LIST

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ORIGIN TIME		LAT N	LONG W	DEPTH AMP DUR		GAP RMS MIN ERH				ERZ NO
YEAR MON DA HRMN SEC	DEG MIN	DEG MIN	DEG MIN	KM	MAG	NS	DEG	SEC	DIS	KM FM REMK
1992 JUN 23 1729	50.91 19 23.98	155 17.26	13.04 2.1 1.3 12	1	61 .07	1	1.1	1.2	0 DEP L	
23 18 2	1.17 19 24.20	155 17.35	1.66 1.8 1.0 15	5	91 .09	1	0.2	0.3	0 SSC L	
23 2331	3.25 19 25.82	155 16.71	12.24 2.1 1.3 12	1	181 .12	2	1.4	1.8	0 INT L	
24 420	4.14 19 24.55	155 16.57	11.05 2.2 1.1 11	1	134 .09	1	1.4	1.0	0 INT L	
24 523	44.87 19 25.27	155 17.58	7.53 1.8 1.3 9	1	132 .08	0	1.6	0.9	0 INT L	
24 1956	47.71 19 28.82	155 15.93	25.57 2.3 1.4 11	1	261 .07	7	4.0	1.3	0 DEP L	
24 2122	1.38 19 28.35	155 7.56	15.41 2.4 1.1 9	1	326 .12	18	2.9	1.0	0 DEP L	
24 2241	54.91 19 21.24	155 6.54	6.79 0.8 1.4 23	5	88 .10	4	0.4	0.7	0 SF4	
25 148	27.02 19 21.71	155 6.62	8.62 2.4 1.6 14	3	80 .05	3	0.5	0.9	0 SF4	
25 234	9.29 19 9.14	155 27.37	41.71 2.0 1.7 24	0	165 .07	1	1.0	2.1	0 DLS	
25 655	9.70 19 19.16	155 12.26	7.48 1.6 1.5 28	2	95 .06	5	0.4	0.9	0 SF3	
25 13	2 10.73 19 28.91	155 27.31	5.57 1.9 1.2 23	5	82 .10	6	0.3	1.6	0 KAO	
25 1537	56.38 19 25.97	155 15.74	6.26 1.8 1.2 14	3	204 .10	3	1.2	0.8	0 INT L	
25 1644	54.64 19 25.93	155 16.42	15.06 2.2 1.3 11	2	229 .12	2	2.0	0.9	0 DEP L	
25 1830	34.47 19 11.86	155 27.99	6.89 1.3 20	1	108 .15	4	0.7	1.8	0 LSW	
25 2333	58.83 19 23.11	155 3.33	8.94 1.7 1.8 30	4	108 .08	3	0.3	0.5	0 SF5	
26 239	17.30 19 27.30	155 15.69	12.96 2.1 1.2 9	1	269 .09	5	4.0	1.1	0 INT L	
26 619	22.05 19 24.82	155 17.37	10.48 1.9 1.2 15	2	97 .11	1	1.4	1.0	0 INT L	
26 8	1 57.87 19 26.77	155 29.95	10.02 1.5 21	3	44 .07	6	0.4	1.0	0 KAO	
26 1036	45.90 19 11.38	156 26.75	33.71 2.4 43	5	302 .09	80	1.2	2.6	0 DIS	
26 1225	7.48 19 58.21	156 50.23	6.84 2.0 23	5	322 .13	109	8.6	11.1	0 DIS	
26 1623	20.05 19 20.20	155 12.68	8.34 1.6 1.4 34	5	72 .07	5	0.4	0.6	0 SF2	
26 2351	10.08 19 24.15	155 16.70	9.25 2.0 1.2 21	3	83 .11	0	0.7	0.8	0 INT L	
27 315	4.30 19 13.04	155 33.31	6.58 1.6 26	4	156 .15	7	0.6	1.1	0 LSW	
27 848	12.10 19 26.51	155 15.60	1.18 2.0 1.4 20	4	211 .10	4	0.3	0.7	0 SNC	
27 928	10.51 19 18.62	155 14.39	13.52 2.3 1.4 9	2	300 .15	7	4.9	1.6	0 DEP L	
27 11	5 30.02 19 24.23	155 16.79	8.21 1.9 1.3 15	2	95 .10	1	0.9	1.3	0 INT L	
27 1140	47.37 19 25.14	155 16.92	15.65 2.1 1.2 10	2	155 .04	0	2.3	1.6	0 DEP L	
27 1412	22.85 19 25.05	155 16.77	8.65 1.8 1.1 16	1	145 .13	0	1.1	1.1	0 INT L	
27 2358	46.87 19 31.00	155 22.09	14.35 2.1 1.2 8	2	328 .05	13	4.6	3.0	0 DML L	
28 0	7 41.34 19 20.05	155 10.65	7.36 1.3 28	4	86 .08	4	0.4	0.6	0 SF3	
28 1	0 53.71 19 11.71	155 30.82	4.88 1.4 23	0	154 .18	6	0.8	3.5	0 LSW	
28 19	27.38 19 41.40	155 23.47	36.30 2.0 1.7 46	4	71 .11	14	0.6	1.0	0 KEA	
28 543	54.31 19 20.00	155 12.25	7.14 1.6 1.6 34	2	138 .11	5	0.5	0.7	0 SF3	
28 618	29.19 19 51.15	155 50.46	14.51 2.6 2.1 28	2	266 .14	18	1.9	0.7	0 HVA	
28 2034	57.52 19 35.02	156 3.25	13.59 1.5 19	0	271 .12	25	10.5	2.5	0 KON	
28 2249	19.92 19 22.18	155 16.47	11.52 2.2 1.3 11	3	136 .27	1	2.9	1.9	0 INT L	
29 7	9 12.24 19 3.34	155 7.64	39.86 2.5 2.2 49	2	231 .09	26	1.2	1.4	0 LOI	
29 9	3 48.84 19 20.66	155 12.95	8.55 1.4 1.8 45	8	63 .09	4	0.4	0.5	0 SF2	
30 1719	28.06 19 54.27	155 12.10	39.14 2.6 1.9 34	4	236 .12	15	1.0	1.7	0 KEA	
30 20	2 1.76 19 16.63	155 32.90	3.21 1.8 1.5 31	2	81 .13	6	0.4	1.8	0 LSW	
30 2043	42.66 19 54.02	155 52.43	24.74 1.4 23	4	210 .10	23	1.3	0.9	0 HVA	
JUL 1	610 29.74 19 32.00	155 46.80	9.10 1.1 23	3	143 .14	3	0.8	0.7	21 KON	
1	647 14.49 19 25.03	155 19.12	6.36 1.9 1.2 38	6	69 .12	3	0.4	0.8	21 KAO	
2	240 24.35 19 19.91	155 5.60	6.25 0.9 1.4 38	5	131 .13	5	0.5	0.9	32 SF4	

1992 HVO EARTHQUAKE SUMMARY LIST

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ORIGIN TIME			LAT N		LON W		DEPTH AMP DUR			GAP RMS MIN ERH			ERZ NO				
YEAR	MON	DA	HRMN	SEC	DEG	MIN	KM	MAG	NR	NS	DEG	SEC	DIS	KM	FM	REMK	
1992	JUL	2	534	13.26	19	27.37	155	27.19	24.83	1.4	40	7	43 .11	5	0.7	0.9 32 DML	
		2	710	43.41	19	20.33	155	7.31	7.25	1.2	34	4	97 .06	5	0.4	0.7 30 SF4	
		2	932	6.69	19	16.74	155	48.13	9.78	2.5	2.1	41	4	108 .11	7	0.5	0.4 37 KON
		2	1121	38.54	19	29.83	155	57.17	8.77	2.2	1.6	29	4	308 .19	20	1.5	0.9 18 KON
		2	1734	45.85	19	16.62	155	29.09	10.13	2.2	2.1	41	4	55 .12	3	0.3	0.7 37 LSW
		2	23	2	30.71	19	21.67	156	21.47	34.05	2.3	36	5	296 .12	52	1.3	2.8 31 DIS
		3	729	48.57	19	29.28	155	52.26	7.62	2.4	2.2	34	3	179 .16	11	0.6	0.7 26 KON
		3	1431	40.93	19	26.49	155	15.85	10.77	1.8	2.0	13	5	217 .12	4	0.4	0.8 3 INT L
		3	1813	18.32	19	20.02	155	11.90	8.50	1.6	1.5	27	6	82 .07	5	0.4	0.5 15 SF3
		3	23	3	56.65	19	22.41	155	30.08	9.65	1.3	29	4	69 .06	4	0.4	0.7 24 KAO
		4	156	29.39	19	12.58	155	23.32	34.83	1.7	42	6	165 .10	10	0.6	0.9 37 DEP	
		4	836	26.37	19	23.68	155	30.65	10.12	1.2	28	3	49 .06	6	0.3	0.8 25 KAO	
		4	1112	36.70	19	19.81	155	7.66	7.84	1.2	29	5	99 .09	5	0.4	0.6 18 SF4	
		4	1537	13.09	19	49.24	155	34.69	23.76	1.3	1.9	35	2	222 .09	13	1.1	2.1 31 KEA
		4	1551	57.94	19	22.19	155	26.51	10.19	1.3	33	2	40 .11	2	0.4	0.5 29 KAO	
		5	030	1.65	19	11.52	155	28.46	5.98	2.6	2.7	43	6	118 .13	4	0.3	0.9 19 LSW
		5	1514	40.57	19	20.77	155	22.54	33.63	1.9	1.6	42	5	66 .11	2	0.6	1.1 36 DEP
		5	1528	33.52	19	53.56	155	12.40	38.75	2.4	2.0	51	8	229 .12	14	0.8	1.2 40 KEA
		5	1658	5.31	19	27.05	154	52.73	4.05	2.0	1.8	42	3	199 .14	4	0.6	0.7 32 SLE
		6	4	9.97	19	31.55	155	55.92	10.90	2.9	3.1	41	4	221 .13	18	0.6	0.4 30 KON
		6	643	32.22	19	25.70	155	19.84	8.18	2.0	1.2	32	10	96 .11	4	0.4	0.7 19 KAO
		6	1254	10.36	19	29.75	155	52.62	9.12	2.4	1.6	33	3	111 .22	4	1.0	0.5 30 KON
		6	1716	3.59	19	10.39	155	35.29	0.02	1.9	1.5	25	2	104 .13	13	0.4	0.6 24 LSW
		7	1340	39.30	19	20.02	155	12.75	7.78	1.2	28	6	73 .08	5	0.4	0.6 15 SF2	
		7	1923	54.50	19	52.64	155	47.39	12.64	1.3	1.8	33	6	168 .20	14	0.9	0.9 19 HUA
		8	1412	11.30	19	20.64	157	18.74	36.60	3.2	3.8	34	2	318 .10	151	2.0	2.8 25 DIS
		8	1955	17.22	19	19.23	155	16.02	7.74	1.8	1.4	38	5	106 .11	3	0.4	0.6 30 SF1
		9	832	12.31	19	18.24	155	1.29	36.45	1.0	1.8	45	4	220 .11	4	1.3	0.8 36 DEP
		9	1824	20.89	19	59.32	155	16.19	13.96	1.1	1.5	21	8	284 .10	13	1.0	0.4 9 KEA
		10	3	3	25.87	19	17.69	155	15.10	6.83	1.6	41	4	123 .10	3	0.4	0.6 33 SF1
		10	930	49.02	19	21.79	155	13.12	2.82	1.4	1.2	21	4	72 .07	2	0.5	0.4 15 SER
		10	1346	57.35	19	25.67	155	19.97	6.24	1.8	1.2	27	4	115 .09	4	0.4	0.9 18 KAO
		10	1514	52.04	19	5.77	155	7.72	35.87	2.5	2.2	47	8	225 .10	21	0.9	1.0 39 LOI
		10	1639	7.47	19	11.71	155	29.03	10.94	1.5	34	4	79 .11	5	0.4	0.7 25 LSW	
		10	1750	29.78	19	11.69	155	29.21	12.09	2.1	1.8	39	4	133 .12	5	0.6	0.3 30 LSW
		10	2348	52.09	19	24.04	155	18.19	0.42	1.7	1.4	13	4	105 .16	2	0.3	0.7 8 SSC L
		12	1230	2.16	19	12.95	155	31.12	7.40	1.8	1.4	29	1	141 .13	4	0.6	1.2 17 LSW
		12	1640	34.41	19	17.62	155	27.69	9.15	1.7	1.4	36	3	49 .12	6	0.4	0.6 33 LSW
		12	1645	53.24	19	17.40	155	27.74	11.02	1.7	1.8	29	2	94 .12	6	0.5	0.8 20 LSW
		12	1739	0.81	19	17.68	155	27.58	10.12	2.6	2.7	46	5	48 .13	7	0.3	0.6 31 LSW
		12	1744	58.54	19	22.81	155	30.46	8.68	2.0	1.7	42	4	56 .11	5	0.4	0.7 38 KAO
		13	1117	39.76	19	40.66	156	1.89	34.61	2.7	2.6	44	3	228 .11	24	1.0	1.1 35 HUA
		13	1350	43.62	20	1.34	155	19.77	7.70	2.5	2.2	42	5	213 .12	30	0.7	0.8 37 KEA
		13	1535	6.65	19	13.07	155	23.20	36.76	2.3	2.2	52	10	159 .10	3	0.6	0.8 43 DEP
		13	1640	37.39	19	13.61	155	23.20	34.55	1.8	52	11	152 .10	2	0.6	0.7 41 DEP	
		13	1640	37.39	19	13.61	155	23.20	34.55	1.8	52	11	152 .10	2	0.6	0.7 41 DEP	
		13	1640	37.39	19	13.61	155	23.20	34.55	1.8	52	11	152 .10	2	0.6	0.7 41 DEP	
		13	1640	37.39	19	13.61	155	23.20	34.55	1.8	52	11	152 .10	2	0.6	0.7 41 DEP	
		13	1640	37.39	19	13.61	155	23.20	34.55	1.8	52	11	152 .10	2	0.6	0.7 41 DEP	
		13	1640	37.39	19	13.61	155	23.20	34.55	1.8	52	11	152 .10	2	0.6	0.7 41 DEP	

[illegible]

1992 HVO EARTHQUAKE SUMMARY LIST

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ORIGIN TIME			LAT N		LON W		DEPTH AMP DUR		GAP RMS MIN ERH		ERZ NO										
YEAR	MON	DA	HRMN	SEC	DEG MIN	DEG MIN	KM	MAG	NR	NS	DEG	SEC	DIS	KM	KM	FM	REMK				
1992	AUG	4	4	9	42.00	20	42.79	156	45.10	6.87	2.6	35	4	331	16120	10.1	13.0	24	DIS		
		5	431	11.39	19	20.27	155	9.13	6.00	1.6	1.5	41	4	73	12	6	0.4	0.8	30	SF3	
		6	317	20.69	19	20.31	155	12.10	7.30	1.2	33	4	75	10	5	0.4	0.6	22	SF3		
		6	725	56.29	19	47.21	154	52.71	47.67	2.2	2.2	50	5	249	10	23	1.2	1.8	44	KEA	
		6	828	45.88	19	24.83	155	17.04	1.10	1.7	1.8	16	4	64	08	0	0.3	0.1	12	SNC L	
		6	10	9	48.69	19	19.39	155	12.79	5.77	1.5	1.3	31	0	82	11	5	0.4	1.3	25	SF2
		6	14	8	38.88	19	27.00	155	14.59	31.30	3.3	3.1	63	17	40	11	4	0.4	0.6	42	DEP F
		6	1544	44.33	18	58.07	155	47.43	12.53	2.6	28	0	263	12	13	3.0	0.5	22	DIS		
		6	18	4	8.06	19	20.55	155	13.14	29.77	2.8	2.9	61	13	62	13	4	0.5	0.5	47	DEP
		7	027	34.43	19	21.02	155	17.19	33.56	2.2	2.1	48	7	55	11	2	0.6	0.8	40	DEP	
		7	7	5	34.57	19	21.07	155	6.71	7.93	0.9	1.4	32	4	177	10	4	0.7	0.7	26	SF4
		7	1024	59.00	19	20.71	155	12.03	8.40	3.0	3.0	53	10	70	13	4	0.4	0.4	39	SF3	
		7	1614	53.28	19	20.33	155	7.20	4.93	2.4	2.2	43	0	135	12	6	0.5	1.3	32	SSF	
		7	1954	35.10	19	20.18	155	12.72	7.04	1.8	2.1	35	1	71	15	5	0.5	0.9	29	SF2	
		7	2252	0.95	19	26.89	155	37.45	14.86	2.1	2.7	15	2	205	10	2	1.5	1.0	12	DML	
		9	923	3.50	19	22.11	155	25.57	10.51	2.2	1.9	38	3	38	11	4	0.4	0.6	31	KAO	
		9	2259	17.38	19	18.44	155	27.43	10.99	1.4	32	4	15	12	8	0.3	0.8	22	LSW		
		10	025	25.42	19	22.25	155	5.07	7.07	2.0	2.1	40	3	145	12	4	0.5	0.7	29	SF5	
		10	4	6	59.36	19	18.79	155	14.79	7.34	1.2	30	2	99	10	4	0.4	0.7	27	SF1	
		10	556	17.73	19	22.80	155	17.33	7.23	1.8	1.7	9	3	186	11	1	1.8	2.5	0	INT L	
		10	822	0.88	19	22.17	155	4.65	9.12	1.6	38	5	151	11	4	0.4	0.3	26	SF5		
		10	1321	49.02	19	31.92	155	53.92	6.99	2.5	1.7	34	6	177	15	5	0.5	0.5	23	KON	
		10	18	2	18.04	19	45.60	156	42.43	38.23	2.6	20	3	305	13	88	2.7	4.4	13	HIS	
		10	2337	31.79	19	46.08	156	6.10	13.24	2.7	2.4	50	8	244	14	29	0.9	0.4	37	HUA	
		11	338	58.29	19	11.97	155	40.26	6.87	1.5	26	5	112	11	8	0.5	1.0	15	LSW		
		11	838	46.30	19	26.73	155	28.84	9.64	1.6	2.5	45	9	58	09	7	0.3	0.5	32	KAO	
		11	1832	14.68	19	23.13	155	14.66	3.93	2.5	2.2	35	7	47	09	3	0.3	0.3	21	SEC	
		11	2342	22.34	19	20.32	155	7.20	8.74	1.6	28	5	205	07	6	0.7	0.6	16	SF4		
		12	033	38.79	19	24.31	155	26.53	9.95	1.6	1.2	36	4	58	09	3	0.3	0.5	32	KAO	
		12	229	9.81	19	24.62	155	38.66	0.02	2.1	1.8	24	5	108	12	6	0.4	0.3	16	MLO	
		12	259	51.76	19	20.39	155	12.86	8.66	2.2	2.3	44	5	124	10	4	0.4	0.4	36	SF2	
		12	3	2	4.24	19	24.13	155	15.53	4.98	1.9	1.2	10	5	295	06	2	1.1	0.6	5	SEC L
		12	634	43.40	19	19.42	155	10.44	8.38	1.6	1.6	26	6	170	07	7	0.5	0.8	15	SF3	
		12	917	0.72	19	25.05	155	19.32	6.28	0.9	1.4	24	3	68	09	3	0.4	0.9	16	KAO	
		12	1346	53.91	19	50.55	155	33.86	22.76	2.4	1.9	32	4	112	10	10	0.6	1.7	26	KEA	
		12	1448	17.89	19	23.25	155	3.08	9.92	2.0	1.9	26	3	112	06	3	0.5	0.6	12	SF5	
		13	849	9.69	19	47.63	155	24.33	27.43	2.4	2.6	48	11	208	10	23	0.8	1.2	34	KEA	
		14	254	55.51	19	24.23	155	0.69	8.14	1.1	1.4	24	4	196	10	4	0.9	0.6	11	SF5	
		14	1322	8.88	19	20.36	155	7.30	7.53	0.9	1.3	32	5	96	10	5	0.4	0.8	26	SF4	
		14	1443	50.47	19	20.20	155	20.65	29.45	2.2	1.8	43	6	70	10	5	0.6	0.9	32	DEP	
		14	1452	17.20	19	20.20	155	20.59	31.16	1.9	1.6	32	4	69	11	5	0.9	1.2	23	DEP	
		14	1858	11.72	19	19.98	155	7.74	7.72	1.6	31	2	95	10	5	0.5	0.8	21	SF4		
		14	1929	18.29	19	20.23	155	12.80	9.99	3.1	3.3	46	3	70	09	4	0.4	0.4	37	SF2	
		14	2158	52.81	19	50.08	155	24.08	28.76	2.0	1.9	42	5	128	10	8	0.7	1.3	37	KEA	
		14	22	2	25.18	19	19.52	155	13.28	6.58	1.1	25	1	72	10	5	0.5	1.1	23	SF2	

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1992 HVO EARTHQUAKE SUMMARY LIST

ORIGIN TIME			LAT N		LON W		DEPTH AMP DUR		GAP RMS MIN ERH			ERZ NO									
YEAR	MON	DA	HRMN	SEC	DEG	MIN	KM	MAG	NR	NS	DEG	SEC	DIS	KM	KM	FM	REMK				
1992	AUG	14	2254	15.60	19	8.56	155	54.97	37.48	2.3	2.2	43	5	243	09	15	0.9	1.0	33	KON	
		15	118	21.38	19	22.32	155	30.39	9.73	1.4	35	4	58	08	5	0.4	0.7	31	KAO		
		15	339	46.29	19	21.55	155	26.16	10.52	1.4	24	4	122	10	3	0.5	0.7	21	KAO		
		15	425	1.19	19	24.81	155	16.66	1.16	1.5	1.4	15	0	92	11	1	0.3	0.2	15	SNC	
		15	533	51.34	19	28.88	155	27.86	6.72	1.3	24	3	74	10	6	0.4	1.3	20	KAO		
1992	AUG	15	640	3.69	19	21.73	155	11.19	2.35	1.1	11	3	137	09	4	0.5	0.9	9	SER		
		15	2022	35.94	19	16.58	155	25.76	2.29	1.5	18	0	107	11	5	0.4	1.7	18	LSW		
		16	040	36.61	19	25.46	155	29.68	9.14	2.0	1.6	37	3	38	13	7	0.3	0.8	26	KAO	
		16	249	53.64	19	21.41	155	6.06	7.46	1.7	1.6	32	4	121	09	4	0.4	0.6	20	SF4	
		16	653	1.28	19	18.30	155	12.89	9.85	2.1	2.5	45	6	159	11	8	0.5	0.4	27	SF2	
1992	AUG	16	855	6.39	19	16.21	155	13.51	5.37	1.6	1.5	30	0	167	12	2	0.7	1.1	27	SF2	
		16	1131	24.66	19	30.25	155	28.23	4.92	2.0	1.5	29	4	79	12	3	0.3	1.5	24	MLO	
		16	1314	11.18	19	20.12	155	24.14	8.62	1.2	29	4	66	14	1	0.5	0.8	26	SNR		
		16	1314	42.78	19	16.32	155	13.11	6.64	2.2	2.1	45	6	158	14	1	0.5	0.8	40	SF2	
		16	1929	11.36	19	19.60	155	12.29	8.46	2.1	2.1	37	3	86	09	5	0.4	0.5	28	SF3	
1992	AUG	17	111	49.98	19	17.61	155	12.89	8.88	1.9	1.6	38	4	130	12	1	0.5	0.6	26	SF2	
		17	1517	40.99	19	18.48	155	0.27	36.93	1.6	43	5	233	11	5	1.6	0.6	28	DEP		
		17	1552	30.18	19	18.83	155	13.18	6.64	2.3	2.5	47	4	83	12	3	0.4	0.5	35	SF2	
		17	1714	2.89	19	20.46	155	11.96	8.10	2.4	2.6	52	9	74	12	4	0.3	0.4	40	SF3	
		17	1733	48.16	19	18.67	155	12.97	8.00	2.0	1.9	41	5	91	09	3	0.3	0.5	21	SF2	
1992	AUG	18	529	42.34	19	18.82	155	13.19	9.38	1.6	1.6	26	3	106	09	3	0.5	0.8	19	SF2	
		18	1519	28.70	19	8.56	155	39.82	8.98	2.7	3.1	40	7	122	20	13	0.4	1.2	17	LSW	
		18	1545	19.42	19	8.02	155	39.41	11.79	1.5	11	0	120	10	13	0.9	1.6	9	LSW		
		18	19	2	38.69	19	22.80	155	28.08	10.08	1.2	28	5	46	11	1	0.4	0.6	18	KAO	
		18	2052	5.40	19	35.62	155	27.58	22.53	2.3	2.3	48	7	103	10	3	0.5	0.7	40	KEA	
1992	AUG	18	2315	7.61	19	15.23	155	30.85	9.11	1.2	25	5	114	12	1	0.3	0.7	17	LSW		
		19	012	25.46	19	28.40	155	26.59	3.68	2.3	1.5	39	6	53	12	6	0.3	1.1	28	KAO	
		19	3	5	15.64	19	27.20	155	13.15	8.20	2.2	2.4	47	6	153	13	1	0.4	0.6	31	SF2
		19	319	29.02	19	17.74	155	12.99	5.11	2.1	1.8	39	2	119	10	2	0.3	0.6	23	SF2	
		19	414	36.29	19	20.36	155	12.97	8.33	1.2	34	4	67	08	4	0.4	0.5	25	SF2		
1992	AUG	19	1342	35.59	19	12.48	155	26.35	8.46	2.5	2.4	33	3	135	11	5	0.5	0.6	15	LSW	
		20	14	8	58.28	19	20.20	155	8.44	7.16	1.9	1.8	45	8	77	10	4	0.3	0.5	23	SF4
		20	1827	24.43	19	20.05	155	6.36	6.34	0.9	1.4	41	6	118	11	6	0.4	0.8	30	SF4	
		20	1854	0.92	19	18.05	155	13.29	7.57	1.6	1.7	35	3	93	10	2	0.4	0.4	27	SF2	
		20	2221	25.41	20	8.07	155	48.33	26.27	2.8	2.9	51	8	279	13	3	0.9	0.7	39	KOH	
1992	AUG	21	540	23.23	19	18.68	155	26.47	10.89	1.7	1.6	40	4	54	12	6	0.4	0.5	29	LSW	
		21	1441	20.11	19	55.63	155	36.97	12.73	1.8	30	5	135	18	9	0.6	0.4	12	KOH		
		21	2135	34.34	19	20.01	155	16.83	37.72	2.6	3.0	62	17	87	11	1	0.6	0.6	45	DEP	
		21	2251	55.30	19	23.51	155	15.20	2.97	2.0	1.3	12	2	97	04	2	0.3	0.4	7	SEC	
		22	832	56.85	19	28.41	155	35.63	9.95	2.3	2.6	22	2	128	12	1	0.5	1.0	13	MLO	
1992	AUG	22	958	34.31	19	27.56	154	52.11	7.45	1.4	28	1	203	13	5	1.7	0.9	23	LER		
		23	1112	48.83	19	15.33	155	25.50	6.46	1.2	29	2	76	13	3	0.4	1.0	22	LSW		
		23	1328	8.69	19	4.28	155	36.55	9.34	1.3	15	2	154	11	12	0.8	1.1	5	LSW		
		23	16	4	52.29	19	27.90	154	53.18	4.89	1.2	25	2	180	14	4	0.9	1.0	15	SLE	
		24	1332	57.10	19	20.06	155	6.51	7.48	1.5	29	5	215	09	6	0.3	0.7	11	SF4		

YEAR	MON	DA	HRMN	SEC	ORIGIN TIME	LAT N DEG MIN	LOW W DEG MIN	DEPTH AMP KM	MAG	MAG NR	NS	DEG	RMS SEC	MIN	ERH KM	ERZ NO KM FM	REMK				
1992	AUG	24	1458	8.31	19 20.47	155	6.67	8.38	2.7	3.0	50	7	103	.08	6	0.3	0.4	24	SF4		
		24	1515	3.09	19 20.69	155	6.70	8.27	2.1	2.4	47	8	98	.09	5	0.4	0.5	34	SF4		
		24	1916	36.08	19 59.50	155	24.95	9.34	1.5	21	2	213	.15	14	1.4	0.7	9	KEA			
		25	141	41.38	19 28.09	155	52.01	6.30	1.5	42	7	184	.11	12	0.6	0.6	29	KON			
		25	143	57.72	19 27.93	155	51.84	6.76	1.7	35	5	112	.13	6	0.4	0.6	22	KON			
		25	1317	37.15	19 24.40	155	17.33	19.90				23	4	108	.11	2	0.8	1.1	18	DEP	
		25	1540	38.43	20 3.76	155	28.00	8.16	2.3	1.4	21	6	208	.12	23	0.7	0.7	8	KEA		
		26	913	15.95	19 20.75	155	13.02	7.74	1.2	32	3	65	.09	3	0.4	0.5	28	SF2			
		26	2041	17.43	19 16.36	155	27.40	10.20	2.1	2.3	41	2	62	.13	5	0.4	0.6	24	LSW		
		27	948	5.63	19 19.93	155	6.64	9.09	2.1	2.1	37	5	116	.07	5	0.4	0.5	24	SF4		
		27	1116	18.35	19 18.03	155	13.31	5.90	1.6	1.1	26	4	92	.07	2	0.4	0.8	16	SF2		
		27	1244	43.74	19 23.00	155	27.75	10.73	2.6	2.4	48	11	34	.11	1	0.3	0.6	27	KAO		
		28	143	41.96	19 19.97	155	8.04	8.35	2.1	2.9	46	6	88	.11	5	0.4	0.5	32	SF4		
		28	542	28.32	19 21.13	155	30.09	9.00	1.4	35	5	63	.14	5	0.4	0.8	30	KAO			
		28	11	6	53.35	19 19.18	155	11.15	5.25	1.2	24	0	105	.10	6	0.5	1.8	20	SF3		
		28	1734	19.05	19 25.04	155	30.11	8.88	2.0	1.6	35	2	42	.12	6	0.4	0.7	27	KAO		
		28	2141	28.16	19 19.59	155	11.00	8.20	1.9			52	12	96	.12	5	0.4	0.5	36	SF3	
		29	533	7.08	20 1.35	156	14.28	47.14				32	7	281	.07	49	1.1	1.3	20	KOH	
		29	2032	0.51	19 14.45	155	24.54	11.91	1.8	19	5	170	.09	1	0.6	1.0	10	SWR			
		29	2135	31.87	19 21.08	155	5.96	8.35	2.4	2.7	50	9	95	.10	5	0.4	0.4	35	SF4		
		30	3	53.85	19 19.33	155	13.27	5.82	1.5	40	9	121	.13	4	0.4	0.8	31	SF2			
		30	828	17.56	19 53.63	156	6.68	10.05	1.7	21	5	321	.12	37	1.4	0.6	16	HUA			
		30	1857	19.94	20 0.02	155	25.67	10.44	3.7	3.8	55	6	199	.12	15	0.7	0.5	45	KEA		
		31	613	15.23	19 24.18	155	17.37	1.71	1.8	1.2	16	3	54	.07	1	0.3	0.2	11	SSC		
		31	1416	58.09	20 31.86	156	10.85	30.27				17	7	339	.13	61	3.2	3.7	6	DIS	
		31	1941	58.82	19 16.92	155	42.43	1.96				15	5	147	.11	9	0.4	0.6	11	LSW	
		31	2129	29.90	19 18.45	155	15.02	8.50				12	3	128	.04	4	0.7	0.9	9	SF1	
		SEP	1	514	43.58	19 19.18	155	10.74	6.52				10	0	195	.01	6	1.5	2.7	8	SF3
		1	542	38.76	19 20.02	155	3.75	6.64				12	3	281	.08	8	1.7	1.7	7	SF5	
		1	7	9	11.73	19 21.94	155	5.16	6.89	2.0			37	1	104	.12	5	0.6	0.8	28	SF5
		1	1142	37.65	19 16.67	155	27.99	9.13	1.7	1.7	31	3	58	.14	5	0.4	0.7	23	LSW		
		1	1444	20.40	19 47.37	155	4.67	28.53	2.0	1.8	37	11	204	.12	8	0.7	1.0	18	KEA		
		1	23	5	45.45	19 18.04	155	12.78	8.11	1.6	1.9	42	7	135	.09	2	0.3	0.4	35	SF2	
		2	050	16.78	19 19.92	155	7.16	8.68	1.7	2.1	49	9	152	.07	6	0.4	0.3	34	SF4		
		2	214	7.48	19 56.55	155	22.93	14.17				1.2	28	3	208	.08	7	0.7	0.3	22	KEA
		2	1225	35.20	19 21.60	155	12.83	3.00	1.7	1.5	33	9	58	.09	2	0.3	0.3	24	SER		
		2	1825	22.09	19 26.78	155	30.67	11.33	1.7	1.4	47	11	38	.11	5	0.3	0.5	30	KAO		
		2	1828	51.68	19 15.31	155	27.41	8.33				1.2	35	6	80	.12	5	0.3	0.8	19	LSW
		2	1836	20.13	19 57.52	155	22.80	14.12	1.5	21	6	263	.10	9	1.0	0.4	13	KEA			
		3	1	40.93	19 16.82	155	12.93	6.87				1.2	36	8	209	.09	1	0.4	0.4	21	SF2
		3	2	5	7.99	19 21.11	155	49.98	7.21			1.5	38	6	174	.12	10	0.4	0.7	26	KON
		3	211	1.17	19 18.91	155	18.50	11.68	1.9	1.3	54	16	77	.12	2	0.3	0.4	36	SWR		
		3	556	53.55	19 23.83	155	17.02	16.10	2.4	1.7	49	10	53	.10	1	0.4	0.3	37	DEP		
		3	1634	14.61	19 26.26	155	20.52	8.61	1.9	1.2	26	8	114	.09	2	0.5	0.8	14	KAO		
		3	1928	4.87	19 20.49	155	13.10	8.72				1.2	32	7	93	.09	4	0.4	0.6	22	SF2

1992 HVO EARTHQUAKE SUMMARY LIST

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ORIGIN TIME			LAT N		LON W		DEPTH AMP DUR		GAP RMS MIN ERH			ERZ NO								
YEAR	MON	DA	HRMN	SEC	DEG	MIN	KM	MAG	MAG NR	NS	DEG	SEC	DIS	KM	KM FM REMK					
1992	SEP	14	1014	43.70	19	20.46	155	10.89	9.24	1.7	23	4	78	.06	3 0.5	0.9 16 SF3				
		14	1112	10.07	19	18.43	155	12.75	3.51	1.3	29	5	103	.11	3 0.3	0.6 21 SSF				
		14	15	2	37.78	19	25.05	155	15.76	14.75	2.0	45	6	69	.09	2 0.5	0.2 38 DEP			
		14	17	4	58.52	19	20.26	155	7.60	8.89	2.0	46	7	93	.10	5 0.4	0.5 37 SF4			
		14	1918	20.06	19	25.15	155	15.76	14.82	2.0	53	11	70	.10	2 0.4	0.2 42 DEP				
14	1922	19.99	19	20.45	155	6.43	10.44	1.9	39	5	178	.08	6 0.7	0.4	0.3	33 SF4				
		14	21	2	48.95	19	21.72	155	50.41	13.21	2.5	3	1.2	.12	11 0.5	0.3	31 KON			
		14	21	9	48.94	19	22.17	155	49.20	8.44	1.9	27	2	117	.11	13 0.5	0.6	17 KON		
		15	03	10.79	19	19.42	155	12.27	6.36	1.5	43	9	143	.10	5 0.4	0.6	28 SF3			
		15	1612	24.88	19	16.00	155	8.46	39.95	2.2	53	9	188	.10	3 1.0	0.6	38 DEP			
15	21	7	4.71	19	20.66	155	6.66	9.39	1.6	33	5	184	.05	5 0.6	0.5	17 SF4				
		16	533	13.58	19	31.90	155	52.98	9.25	1.6	25	5	237	.18	13 1.4	0.7	13 KON			
		16	710	8.21	19	17.84	155	12.97	7.29	1.2	29	6	168	.09	2 0.4	0.7	17 SF2			
		16	745	29.04	19	21.14	155	8.09	8.55	1.3	34	6	170	.10	4 0.5	0.4	18 SF4			
		16	750	46.95	18	59.42	156	57.52	32.71	2.9	35	6	314	.11118	2.3	3.4	24 DIS			
16	1044	3.59	19	19.93	155	9.65	7.66	1.4	33	6	84	.10	4 0.4	0.7	22 SF3					
		16	1711	20.98	19	24.05	155	13.26	42.40	1.7	29	6	171	.10	2 1.6	0.8	10 DEP L			
		16	1746	4.98	19	18.32	155	13.48	31.15	1.5	41	7	79	.10	2 0.6	0.8	32 DEP			
		17	1546	26.01	20	27.82	155	27.85	9.29	2.2	29	7	306	.16	50 1.6	1.5	16 DIS			
		17	19	2	36.19	19	20.09	155	13.07	9.15	1.4	31	4	68	.08	5 0.4	0.6	20 SF2		
18	736	1.17	19	17.62	155	23.32	8.26	1.2	28	6	99	.08	5 0.3	0.7	18 SWR					
		18	839	58.44	19	17.89	155	29.93	10.40	1.9	26	5	63	.11	5 0.4	0.9	16 LSW			
		18	957	3.59	19	28.20	155	38.68	12.66	1.2	24	20	5209	.13	5 1.0	0.4	7 MLO L			
		18	1455	50.28	19	10.21	155	30.18	31.86	1.5	41	7	113	.09	4 0.6	0.8	33 DIS			
		18	2233	35.90	19	3.90	155	23.48	38.34	1.8	44	6	205	.09	13 0.8	0.9	39 LOI			
19	532	53.88	19	20.68	155	7.99	8.69	0.9	2	0	37	5	169	.10	5 0.5	0.5	32 SF4			
		19	756	27.83	19	19.81	155	11.81	10.10	2.7	3	5	52	11	86	.11	6 0.3	0.4	45 SF3	
		19	815	5.01	19	11.39	155	35.27	7.99	2.2	2	1	41	1	95	.18	7 0.5	0.9	40 LSW	
		19	1724	1.26	19	25.12	155	16.17	11.76	1.7	17	4	163	.08	2 1.5	0.6	9 INT L			
		20	10	6	43.70	19	19.51	155	11.96	7.98	1.8	2	4	48	8	91	.11	5 0.4	0.6	34 SF3
20	2235	2.83	19	25.65	155	19.58	7.02	0.9	28	7	80	.11	3 0.4	0.7	18 KAO					
		22	324	0.29	19	21.29	155	4.58	8.79	2.1	2	1	40	6	189	.12	6 0.6	0.5	23 SF5	
		22	423	21.29	19	14.19	155	34.80	8.41	3	0	3	3	45	2	79	.16	4 0.4	0.6	38 LSW
		22	6	5	56.50	19	13.20	155	32.04	6.23	1.4	30	4	146	.15	5 0.5	1.0	24 LSW		
		22	818	51.79	19	29.40	155	19.74	8.70	1.2	38	10	138	.12	4 0.5	0.5	27 KAO			
22	848	12.76	19	18.19	155	13.24	5.55	1.1	26	5	92	.09	2 0.4	0.9	16 SF2					
		22	941	6.98	19	17.84	155	13.17	6.66	1.5	34	7	105	.10	2 0.4	0.7	18 SF2			
		22	14	3	42.13	19	19.61	155	8.95	7.33	1.7	2	5	39	5	82	.12	5 0.4	0.7	31 SF4
		23	9	7	11.47	19	20.33	155	10.92	7.37	1.2	31	1	81	.09	4 0.4	1.0	20 SF3		
		23	1117	26.40	19	32.38	155	54.93	23.24	1.9	24	1	203	.09	6 2.4	1.7	12 KON			
23	2326	12.07	19	20.02	155	7.28	9.35	2.1	2	7	41	6	137	.08	5 0.5	0.5	28 SF4			
		24	714	37.83	19	20.10	155	11.52	8.40	1.4	1	9	31	6	82	.07	5 0.4	0.6	17 SF3	
		24	12	5	40.67	18	55.89	155	3.89	15.12	1.4	2	0	44	7	274	.18	40 3.8	6.9	36 LOI
		24	1357	47.56	19	26.79	155	14.57	31.68	2.0	51	6	83	.10	4 0.6	0.8	40 DEP			
		24	1739	8.04	19	24.07	155	15.55	10.88	1.7	16	5	117	.13	2 1.2	0.6	2 INT L			

1992 HVO EARTHQUAKE SUMMARY LIST

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ORIGIN TIME			LAT N		LON W		DEPTH AMP DUR		GAP RMS MIN ERH		ERZ NO				
DA HRMN	SEC	DEG MIN	DEG	MIN	DEG	MIN	KM	MAG	MAG NR	NS	DEG SEC DIS	KM	KM	FM	REMK
24 1857	8.96	19 19.78	155	8.18			9.47	1.7	34	5	86 .07	5	0.4	0.6	16 SF4
24 2055	34.86	19 24.31	155	16.84			1.49	2.1	14	2	95 .16	1	0.4	0.3	4 SSC L
25 1050	10.36	19 20.40	155	3.77			6.97	1.6	22	4	112 .05	2	0.3	0.7	9 SF5
25 1129	0.16	19 22.74	155	18.31			31.03	2.3	3.1	67	18 29 .12	3	0.4	0.5	46 DEP
26 9 3	40.62	17 22.68	154	5.07			27.77	3.5	49	3	335 .12240	2.1	4.3	27	DIS
27 131	16.04	20 11.79	155	46.39			32.24	1.7	2.5	35	4 300 .11	8	1.2	0.9	23 KOH
27 732	19.60	19 28.06	154	53.84			7.67	1.3	35	3	123 .13	3	1.0	0.5	32 LER
27 756	17.45	19 8.77	155	32.85			35.05	1.8	24	3	134 .09	9	0.9	1.7	19 DLS
27 1058	26.16	19 20.24	155	17.35			7.51	2.3	50	12	69 .11	0	0.3	0.5	37 SWR
27 1453	11.51	19 20.16	155	7.63			6.50	1.8	26	0	94 .11	5	0.5	1.2	23 SF4
27 1613	37.51	19 22.16	155	28.97			10.15	2.2	51	7	36 .09	2	0.3	0.5	42 KAO
27 1929	29.41	19 15.44	155	32.70			9.85	1.4	33	4	61 .16	5	0.4	0.8	30 LSW
27 2037	10.82	19 21.81	155	6.76			8.42	1.2	32	2	186 .09	3	0.9	0.6	30 SF4
28 1429	26.92	19 19.82	155	7.73			7.64	1.4	24	2	97 .08	5	0.5	1.1	17 SF4
28 1730	50.92	21 11.51	156	10.55			6.45	2.3	27	3	337 .12125	9.5	12.5	17	DIS
29 1813	23.91	19 47.36	155	34.01			14.45	1.4	3.0	37	6 94 .11	11	0.4	0.3	27 KBA
30 1032	35.83	19 20.77	155	11.44			9.12	2.3	2.9	44	5 72 .11	4	0.4	0.5	36 SF3
1 315	8.08	19 20.57	155	13.11			8.43	1.2	34	6	119 .09	4	0.4	0.5	24 SF2
1 540	20.49	19 29.63	155	27.39			5.97	1.8	1.7	37	6 93 .09	4	0.3	1.1	28 KAO
1 1139	49.67	19 20.52	155	7.04			6.50	1.2	2.0	35	3 97 .10	5	0.4	0.8	26 SF4
1 13 7	51.07	19 23.60	155	16.90			3.14	2.6	17	2	46 .06	0	0.3	0.3	13 SSC
1 1323	36.18	19 20.03	155	12.12			8.84	1.2	2.3	40	5 79 .10	5	0.4	0.6	28 SF3
1 1919	20.99	19 23.62	155	16.90			3.16	2.3	22	4	44 .09	0	0.3	0.2	15 SSC
1 1924	40.09	19 25.70	155	29.93			10.14	1.6	28	2	65 .08	7	0.4	1.0	25 KAO
1 2032	0.70	19 26.12	155	22.34			8.71	0.9	1.6	40	6 40 .11	4	0.3	0.6	32 KAO
1 2050	25.67	19 15.71	155	22.18			8.24	1.7	29	5	160 .09	4	0.4	0.9	23 SWR
1 2258	57.64	19 20.03	155	11.92			8.60	2.4	3.0	47	7 139 .11	5	0.4	0.5	32 SF3
2 526	7.59	19 24.76	155	16.82			1.04	1.9	18	3	89 .14	0	0.4	0.3	9 SNC L
2 721	5.09	19 24.20	155	17.40			1.67	0.8	2.2	20	5 52 .08	1	0.3	0.2	10 SSC L
2 1012	50.15	19 21.79	155	12.61			3.18	1.2	2.0	27	5 55 .06	2	0.3	0.3	21 SER
2 13 0	26.58	19 22.19	155	10.69			3.14	1.6	24	2	59 .07	1	0.4	0.4	20 SER
2 1951	41.93	19 21.42	155	4.33			9.71	4.2	4.3	57	10 173 .12	5	0.5	0.4	45 SFS F
2 1959	23.58	19 21.08	155	3.99			8.86	2.1	2.6	43	6 184 .09	6	0.6	0.4	39 SFS
2 20 5	33.47	19 21.30	155	4.01			8.72	2.9	3.3	53	6 174 .10	6	0.6	0.4	45 SFS
2 2025	26.44	19 20.81	155	3.86			8.55	1.8	2.3	41	2 195 .09	7	0.7	0.6	27 SFS
3 1945	2.04	19 29.56	155	27.68			5.13	1.2	1.6	36	7 57 .11	5	0.3	1.8	23 KAO
4 414	16.99	19 17.39	155	23.26			2.35	1.1	19	2	159 .09	5	0.5	0.9	14 SWR
4 14 2	49.21	19 21.39	155	18.65			3.87	1.7	34	6	42 .11	3	0.3	0.6	26 SWR
4 1420	18.36	19 18.72	155	14.82			6.33	1.1	26	0	116 .10	4	0.5	1.2	20 SF1
5 310	10.51	19 18.84	155	14.82			7.47	1.2	30	1	98 .10	4	0.5	1.0	22 SF1
6 1044	9.56	19 26.89	155	29.93			11.63	1.4	26	4	55 .11	6	0.4	1.0	19 KAO
6 1957	27.23	19 20.29	155	13.40			8.91	1.4	2.1	43	6 112 .10	4	0.4	0.5	30 SF2
7 3 3	15.92	19 11.90	155	38.01			12.55	1.6	2.7	31	9 99 .12	6	0.3	0.8	15 LSW
7 5 5	31.47	19 52.57	155	9.83			14.88	2.1	2.4	23	1 236 .10	19	2.0	0.1	16 KBA
7 755	52.20	19 21.29	155	30.24			9.67	1.4	26	4	48 .09	5	0.3	0.8	21 KAO

YEAR	MON	DA	HRMN	SEC	LAT N	DEG	MIN	ION W	DEG	MIN	DEPTH AMP	DUR	KM	MAG	NR	NS	DEG	SEC	DIS	ERH	ERZ	NO	KM	FW	REMK
1992	OCT	7	1013	8.46	19	16.88	155	24.87	7.31	1.8	35	5	73	15	5	0.4	0.9	26	SWR						
		7	2133	3.43	19	24.48	155	16.83	15.21	1.3	12	3	155	11	2	1.7	1.4	6	DEP	L					
		8	3	7	52.42	19	18.52	155	13.68	7.96	1.2	34	5	110	0.6	3	0.3	0.6	24	SF2					
		8	6	7	7.80	19	23.11	155	2.28	8.22	1.1	1.8	39	4	181	12	4	0.6	0.4	18	SF5				
		8	742	3.44	19	20.47	155	10.80	9.41	2.1	2.6	45	5	123	0.9	3	0.4	0.5	32	SF3					
		9	758	12.43	19	12.38	155	30.53	7.11	2.0	34	4	142	17	5	0.4	1.0	24	LSW						
		9	855	26.70	19	20.77	155	3.80	5.30	0.9	2.6	35	5	93	11	2	0.4	0.9	28	SF5					
		9	14	2	58.77	19	19.99	155	8.89	7.25	1.4	29	5	75	0.9	4	0.3	0.6	15	SF4					
		9	1447	23.31	19	31.26	156	1.20	14.81	1.8	3.0	35	4	254	14	11	1.1	0.5	23	KON					
		9	1938	16.27	19	23.01	155	26.52	9.94	1.2	34	4	44	12	2	0.3	0.6	25	KAO						
		9	2125	26.21	19	44.57	155	0.15	49.80	4.3	4.7	66	18	213	11	5	0.7	1.0	49	HIL	F				
		10	323	50.87	19	12.26	155	32.52	7.57	1.2	37	6	86	14	7	0.5	1.0	31	LSW						
		10	1058	24.92	19	24.72	155	17.38	3.00	1.1	9	2	99	12	1	0.8	0.7	5	SNC	L					
		10	1311	24.18	19	20.42	155	6.93	7.63	1.6	1.7	31	1	101	10	5	0.5	0.7	21	SF4					
		11	1235	30.56	19	19.47	155	12.21	6.54	1.3	15	1	209	11	6	1.1	1.6	11	SF3						
		11	1242	46.81	19	17.80	155	12.87	6.73	1.2	12	0	231	05	9	1.3	1.9	10	SF2						
		12	20	1	53.96	19	4.24	155	7.52	44.24	1.7	49	4	230	10	24	0.9	1.1	42	LOI					
		13	1351	4.77	19	24.57	155	19.43	7.19	1.3	30	7	72	10	2	0.4	0.7	21	KAO						
		13	2016	52.57	19	58.20	155	38.35	11.95	1.1	1.2	18	3	145	10	12	0.6	0.6	12	KOH					
		14	619	49.27	19	19.35	155	11.43	5.79	0.9	1.7	39	7	99	12	6	0.4	0.9	30	SF3					
		14	9	2	1.41	19	24.07	155	17.46	1.19	1.2	18	4	51	08	2	0.2	0.3	10	SSC	L				
		14	9	8	6.18	19	24.02	155	17.51	0.19	0.8	1.4	11	3	100	0.9	2	0.2	0.6	2	SSC	L			
		14	12	4	1.44	19	24.39	155	17.01	1.34	1.2	11	3	83	0.9	1	0.3	0.3	5	SSC	L				
		14	1212	36.73	19	22.66	155	26.65	10.41	1.7	38	6	44	10	2	0.3	0.6	28	KAO	F					
		14	1755	50.32	19	29.32	155	26.02	6.09	2.5	3.2	56	12	58	13	5	0.3	0.8	45	KAO	F				
		15	043	34.37	19	23.77	155	17.14	2.17	0.8	1.6	14	2	69	13	1	0.6	0.3	6	SSC	L				
		15	045	15.48	19	24.25	155	17.49	1.87	1.2	13	3	99	10	1	0.4	0.4	3	SSC	L					
		16	5	3	31.15	19	15.01	155	30.41	8.51	2.0	40	4	60	14	1	0.4	0.7	25	LSW					
		16	1153	45.30	19	29.01	155	26.25	3.32	1.5	1.8	36	9	74	11	5	0.2	0.7	19	KAO					
		17	250	9.84	19	59.43	155	21.53	14.53	1.7	34	3	205	07	11	0.8	0.5	31	KEA						
		17	721	39.75	19	21.26	155	7.99	9.32	1.4	45	9	74	06	4	0.4	0.5	32	SF4						
		17	1348	29.61	19	41.70	155	1.98	0.02	1.7	2.5	9	0	131	17	1	2.5	2.9	7	HIL	B*				
		17	1623	36.18	19	21.03	155	5.87	7.19	1.2	36	5	97	12	5	0.5	0.7	30	SF4						
		18	1222	44.54	19	25.17	155	20.13	6.95	2.8	5	116	12	3	0.4	0.8	24	KAO							
		18	2126	27.01	20	8.19	155	31.79	1.69	1.2	31	8	286	09	34	1.1	0.6	18	KEA						
		19	532	55.73	19	45.56	155	35.25	5.51	1.0	1.5	24	4	113	15	14	0.6	2.2	13	KEA					
		19	1251	10.50	19	24.97	155	16.42	11.36	1.1	2.2	17	3	154	07	1	0.9	0.4	7	INT	L				
		19	1357	46.49	19	24.44	155	3.25	4.17	1.2	19	2	96	0.9	1	0.4	0.4	13	SNE						
		19	1540	27.13	19	24.49	155	17.32	1.75	0.8	2.1	17	4	52	10	1	0.4	0.2	7	SSC	L				
		20	245	20.80	19	20.12	155	7.72	9.38	2.8	3.1	49	9	93	0.9	5	0.3	0.4	36	SF4					
		20	2128	59.60	19	26.14	155	16.43	12.73	0.8	2.1	16	3	131	0.9	2	1.0	0.7	7	INT	L				
		21	151	35.84	19	24.75	155	15.83	11.01	1.3	15	3	106	11	2	1.3	0.6	7	INT	L					
		21	2	1	4.45	19	25.68	155	17.47	9.47	0.8	1.5	13	4	112	17	1	1.6	0.9	2	INT	L			
		21	1023	44.92	19	20.22	155	7.28	8.62	1.8	2.1	33	10	99	0.7	5	0.4	0.6	17	SF4					
		21	2015	8.61	19	24.23	155	37.74	0.02	1.2	2.0	17	1	92	16	6	0.5	1.3	12	MLO					

ORIGIN TIME		LAT N		LON W		DEPTH AMP DUR		GAP RMS MIN ERH		ERZ NO											
YEAR	MON	DA	HRMN	SEC	DEG	MIN	KM	MAG	MAG NR	NS	DEG	SEC	DIS	KM	KM	FW	REMK				
1992	OCT	22	1	2	39.95	19	20.37	155	7.09	7.62	1.2	1.3	26	0	100	0.8	6	0.5	0.9	16	SF4
		22	235	1.11	19	26.52	154	55.50	5.59	1.1	1.2	25	1	150	13	2	1.1	0.7	11	LER	
		22	1031	40.05	19	20.82	155	3.79	6.95	1.3	1.9	38	2	91	0.9	2	0.4	0.6	22	SF5	
		23	1624	48.88	19	19.80	155	12.39	7.79	1.2	1.7	40	6	81	0.9	5	0.3	0.6	31	SF2	
		23	1914	1.12	19	20.96	155	48.61	12.32	2.2	2.8	43	6	109	12	11	0.6	0.4	38	KON	
		23	2311	47.93	19	20.71	155	13.03	8.72	0.9	1.7	40	7	62	0.9	4	0.3	0.4	34	SF2	
		24	18	7	29.51	20	21.46	156	3.18	29.67	2.9	18	3	322	11	38	1.7	1.8	16	KOH	
		26	159	27.28	19	6.94	155	41.04	9.52	1.3	21	5	139	11	15	0.5	1.5	17	LSW		
		26	1617	54.30	19	25.94	155	16.79	11.07	0.8	2.1	14	4	128	0.6	2	1.1	0.9	10	INT	
		26	1824	13.62	19	19.44	155	11.50	6.81	1.2	2.2	41	6	97	11	6	0.4	0.7	26	SF3	
		26	1846	4.65	19	29.66	155	27.69	6.45	1.9	1.9	43	10	57	11	4	0.3	0.9	28	KAO	
		26	2019	43.88	19	25.07	155	16.19	10.64	1.1	1.9	14	4	111	0.8	1	1.8	0.9	6	INT	
		26	2038	8.92	19	25.00	155	16.00	9.76	1.2	11	4	206	0.6	2	1.8	1.1	6	INT		
		27	232	34.08	19	11.46	155	41.54	1.94	1.2	28	8	122	14	10	0.4	0.5	13	LSW		
		27	310	12.22	19	11.40	155	28.42	6.77	1.5	2.3	41	2	92	13	4	0.4	0.7	33	LSW	
		27	1025	52.41	19	11.46	155	26.71	6.87	0.9	24	4	139	14	4	0.5	0.9	17	LSW		
		27	2256	21.13	20	39.85	156	11.03	7.10	1.6	31	6	326	10	73	7.9	10.4	25	DIS		
		28	4	2	58.07	19	20.23	155	7.98	8.24	1.1	48	11	86	0.9	5	0.4	0.5	36	SF4	
		28	527	55.33	19	24.86	155	38.15	1.31	2.3	46	9	71	17	6	0.3	0.5	36	MLO		
		28	743	8.37	19	54.06	155	29.13	17.64	1.5	43	4	184	10	14	0.8	1.3	40	KEA		
		28	930	37.80	19	21.34	155	30.26	10.01	2.0	49	6	32	10	5	0.3	0.6	39	KAO		
		28	10	3	46.19	19	30.42	155	16.75	24.41	1.2	1.4	55	12	98	10	5	0.4	0.6	44	DEP
		30	013	59.93	19	10.59	155	15.78	48.51	1.5	51	8	191	0.9	13	0.7	0.7	41	DEP		
		30	1	2	17.80	19	18.74	155	15.07	6.03	0.9	1.1	40	5	95	11	4	0.3	0.7	32	SF1
		30	516	30.48	19	23.42	155	27.29	4.98	1.5	34	2	37	11	2	0.3	0.6	28	KAO		
		30	933	21.29	19	18.45	155	13.13	8.15	1.2	1.5	40	3	91	10	3	0.4	0.5	36	SF2	
		30	1244	3.07	19	19.57	155	11.69	8.14	1.2	1.7	45	7	92	10	6	0.3	0.5	33	SF3	
		30	19	0	10.94	19	24.78	155	16.65	10.57	1.1	1.9	27	5	92	10	1	0.4	0.5	22	INT
		31	023	44.69	19	23.86	155	16.29	6.53	1.3	16	2	97	0.4	1	0.4	0.7	15	INT		
		31	739	57.38	19	26.08	155	17.28	12.85	0.8	2.1	15	3	114	0.5	1	0.9	0.6	11	INT	
NOV		31	1754	49.30	19	25.46	155	14.91	11.74	0.8	1.4	19	3	160	12	2	1.0	0.8	16	INT	
		1	214	26.62	19	19.53	155	11.09	8.78	0.9	1.6	47	8	96	11	5	0.3	0.5	41	SF3	
		1	322	14.24	19	24.78	155	17.69	11.85	0.9	1.9	22	6	54	12	1	0.7	0.7	16	INT	
		1	826	16.07	19	25.00	155	16.59	10.12	1.1	2.6	24	4	67	0.9	1	0.5	0.6	20	INT	
		1	1334	24.98	19	24.54	155	16.35	10.42	0.8	2.0	19	4	90	0.6	1	0.9	0.5	17	INT	
		1	1815	4.98	19	57.91	155	16.96	13.53	1.1	1.7	34	3	216	10	10	1.1	0.5	31	KEA	
		1	2050	51.26	19	56.89	155	47.36	12.99	1.6	2.6	35	3	171	11	17	0.7	0.5	32	KOH	
		2	047	9.01	19	53.44	155	45.70	13.49	1.5	25	4	156	10	11	1.3	0.4	18	HUA		
		2	235	31.48	19	51.05	155	43.96	11.31	1.6	22	2	230	12	8	1.3	0.5	22	HUA		
		2	3	7	18.29	19	52.45	155	44.61	11.77	1.2	2.3	43	8	147	16	9	0.4	0.4	26	HUA
		2	1326	11.16	19	26.51	155	22.27	10.66	1.2	42	9	89	11	6	0.4	0.6	32	KAO		
		3	048	36.96	19	21.31	155	8.00	9.23	2.3	47	6	73	07	4	0.3	0.3	32	SF4		
		3	1811	6.01	19	18.09	155	29.23	13.07	1.8	2.5	56	12	44	09	6	0.3	0.4	38	DLS	
		3	2147	38.30	19	52.22	155	44.82	11.79	1.6	2.4	45	5	148	14	9	0.5	0.4	32	HUA	
		4	457	0.04	19	19.38	155	9.96	7.98	1.4	45	7	99	09	5	0.4	0.5	33	SF3		
		4	457	0.04	19	19.38	155	9.96	7.98	1.4	45	7	99	09	5	0.4	0.5	33	SF3		
		4	457	0.04	19	19.38	155	9.96	7.98	1.4	45	7	99	09	5	0.4	0.5	33	SF3		
		4	457	0.04	19	19.38	155	9.96	7.98	1.4	45	7	99	09	5	0.4	0.5	33	SF3		
		4	457	0.04	19	19.38	155	9.96	7.98	1.4	45	7	99	09	5	0.4	0.5	33	SF3		
		4	457	0.04	19	19.38	155	9.96	7.98	1.4	45	7	99	09	5	0.4	0.5	33	SF3		

1992 HVO EARTHQUAKE SUMMARY LIST

ORIGIN TIME				LAT N		LON W		DEPTH		AMP		DUR		GAP		RMS		MIN		ERH		ERZ		NO		
YEAR	MON	DA	HRMN	SEC	DEG	MIN	DEG	MIN	KM	MAG	MAG	NR	NS	DEG	SEC	DIS	KM	KM	FM	REMK						
1992	NOV	24	253	23.36	20	24.15	156	24.66	24.55	1.9	3.6	48	4	318	.17	73	1.4	4.3	44	DIS						
		24	256	36.74	19	26.58	155	28.87	9.66	1.2	40	4	42	.09	7	0.3	0.7	34	KAO							
		24	2023	17.52	19	20.17	155	12.92	6.75	1.1	30	1	70	.11	5	0.5	0.9	21	SF2							
		24	2344	30.11	19	50.25	155	36.10	16.39	2.6	2.8	49	5	106	.10	16	0.5	4.2	42	KEA						
		25	028	35.91	19	8.76	155	33.55	6.92	1.6	24	1	130	.15	10	0.5	1.7	15	LSW							
		25	1643	37.88	19	18.58	155	15.28	5.77	1.2	27	2	111	.11	4	0.5	1.2	19	SF1							
		25	2123	33.38	19	17.84	155	27.86	9.85	1.7	33	2	47	.11	6	0.4	0.9	17	LSW							
		26	046	23.71	19	20.25	155	4.72	6.13	1.3	1.6	29	3	126	.11	3	0.5	0.9	18	SF5						
		26	16	9	54.13	19	25.76	155	16.09	14.62	1.5	47	7	74	.10	2	0.5	0.2	40	DEP						
		26	1725	11.92	19	18.39	155	13.54	9.06	2.2	2.7	45	6	85	.10	3	0.5	0.5	33	SF2						
		26	1728	33.25	19	18.43	155	13.62	7.11	1.2	27	3	74	.09	3	0.5	0.9	16	SF2							
		26	1733	33.02	19	18.54	155	13.56	6.09	1.5	33	1	74	.10	3	0.4	0.9	17	SF2							
		26	2018	51.26	19	58.22	155	29.33	45.99	1.9	41	6	244	.07	18	0.8	1.1	25	KEA							
		26	2139	49.85	19	26.97	155	14.52	32.25	2.1	2.6	60	13	83	.11	4	0.5	0.6	46	DEP						
		27	435	51.65	19	26.95	155	14.51	30.37	1.5	52	10	83	.11	4	0.5	0.6	42	DEP							
		27	2031	18.33	19	24.34	155	15.94	5.28	1.9	12	4	133	.08	1	1.0	1.2	1	INT	L						
		28	242	38.81	19	18.76	155	13.37	8.79	2.1	2.5	43	4	79	.09	3	0.4	0.5	36	SF2						
		28	648	6.09	19	24.22	155	16.85	11.14	0.9	2.1	17	3	91	.07	1	0.8	0.9	15	INT	L					
		28	1119	42.29	19	23.94	155	16.58	10.29	0.9	2.3	19	5	87	.10	0	0.7	0.7	15	INT	L					
		28	1120	56.35	19	24.26	155	16.74	10.20	0.9	2.0	13	5	100	.13	1	1.3	0.8	4	INT	L					
		28	1128	48.33	19	24.06	155	17.90	11.41	0.9	1.9	16	3	71	.12	2	0.8	1.2	13	INT	L					
		28	1139	39.18	19	23.62	155	17.83	8.97	0.9	1.9	19	3	50	.14	2	0.7	1.1	17	INT	L					
		28	1153	51.02	19	28.91	155	45.84	0.11	1.2	24	3	136	.21	17	0.8	0.4	21	KON							
		28	1158	13.48	19	25.37	155	17.13	10.09	1.1	2.3	21	3	93	.12	1	0.6	0.7	18	INT	L					
		28	12	3	50.69	19	22.02	155	16.73	6.58	0.9	15	4	110	.07	2	0.6	1.1	12	SF1	L					
		28	12	4	48.95	19	23.99	155	17.78	13.11	1.9	12	5	192	.10	2	1.6	0.9	3	DEP	L					
		29	710	40.48	19	20.08	155	3.81	7.52	1.2	37	7	135	.10	2	0.4	0.5	31	SF5							
		30	218	49.99	19	24.27	155	17.46	2.08	1.6	15	5	99	.10	1	0.4	0.3	9	SSC	L						
		30	447	13.98	19	17.09	155	13.93	8.20	1.2	28	5	166	.08	1	0.4	0.6	21	SF2							
		30	1221	5.00	19	1.12	155	26.98	42.57	1.7	35	6	222	.09	16	1.2	1.0	29	DLS							
		30	1244	30.91	19	21.28	155	5.96	9.33	2.1	42	8	91	.07	5	0.4	0.5	30	SF4							
		30	1251	4.34	19	0.89	155	27.20	43.03	2.4	44	9	214	.08	16	0.9	0.9	35	DLS							
		30	1844	55.80	19	22.99	155	30.27	10.34	1.3	44	6	37	.08	5	0.3	0.6	39	KAO							
		DEC	1	1233	16.83	18	57.18	155	13.57	35.72	1.9	48	11	283	.12	34	1.4	1.4	33	LOI						
		2	850	36.38	19	13.83	155	23.49	33.74	2.1	52	10	148	.10	1	0.6	0.8	42	DEP							
		2	10	4	40.53	19	22.30	155	29.85	9.98	1.7	2.6	45	6	34	.08	4	0.3	0.6	35	KAO					
		3	050	2.88	19	19.52	155	11.12	8.16	1.2	43	8	97	.09	5	0.4	0.6	34	SF3							
		3	10	0	37.45	20	47.24	156	22.03	7.14	3.0	3.6	53	8	328	.12	95	8.5	11.0	46	DIS	F				
		3	1811	46.68	19	19.13	155	8.57	8.29	1.4	43	7	82	.10	3	0.4	0.5	34	SF4							
		4	625	33.54	19	20.21	155	3.97	8.37	1.2	1.3	38	5	126	.10	2	0.4	0.5	33	SF5						
		4	1917	16.49	19	16.63	155	29.69	11.08	1.1	24	2	62	.13	3	0.5	1.1	15	LSW							
		5	940	15.62	19	18.11	155	26.48	10.56	1.4	29	2	53	.10	7	0.5	0.6	19	LSW							
		5	1430	50.03	19	21.29	155	18.77	3.19	1.1	21	2	54	.08	3	0.3	0.7	14	SWR							
		5	1720	30.98	19	20.07	155	8.13	8.36	1.1	22	2	85	.05	5	0.5	0.9	14	SF4							
		6	1224	18.96	19	20.28	155	12.71	9.30	1.2	21	1	70	.06	4	0.5	1.1	17	SF2							

1992 HVO EARTHQUAKE SUMMARY LIST

ORIGIN TIME					LAT N		LON W		DEPTH		AMP		DUR		GAP		RMS		MIN		ERH		ERZ		NO			
YEAR	MON	DA	HRMN	SEC	DEG	MIN	DEG	MIN	KM	MAG	MAG	NR	NS	DEG	SEC	DIS	KM	KM	FW	REMK								
1992	NOV	4	9	0	9.55	19	16.73	155	24.91	10.40	1.6	34	4	72	.14	5	0.4	0.9	29	SWR								
		5	4	13.87	19	26.80	155	29.90	8.39	1.2	43	5	42	.11	6	0.3	0.7	25	KAO									
		5	558	11.87	19	59.79	155	51.23	0.02	1.9	29	2	205	.10	17	0.7	0.3	30	KOH									
		5	1324	20.06	19	52.13	155	44.71	10.65	2.0	28	4	147	.11	9	0.4	0.6	19	HUA									
		5	1652	38.51	19	26.54	155	28.88	9.40	1.6	53	12	42	.11	7	0.3	0.6	35	KAO									
		5	1656	41.12	19	52.25	155	45.77	12.56	2.5	3.2	53	12	155	.11	11	0.3	0.3	38	HUA								
		5	17	3	47.47	19	52.01	155	45.49	12.65	1.6	2.0	36	5	153	.10	10	0.4	0.3	28	HUA							
		5	2118	59.51	19	20.17	155	6.61	8.35	1.2	1.5	35	4	111	.10	6	0.4	0.7	24	SF4								
		5	2134	18.89	19	21.13	155	6.96	6.84	0.9	1.4	35	4	87	.11	4	0.4	0.6	27	SF4								
		6	716	13.47	20	2.68	155	34.14	34.40	1.8	49	11	270	.09	23	0.7	0.8	34	KOH									
6	1254	12.68	19	20.24	155	7.43	8.53	1.9	2.4	49	11	96	.08	5	0.3	0.4	26	SF4										
		7	19	6	43.19	19	21.64	155	30.38	9.11	2.6	2.7	56	16	33	.10	5	0.3	0.5	42	KAO							
		7	1921	48.86	19	21.52	155	30.15	9.74	3.0	3.8	58	15	53	.11	5	0.3	0.5	44	KAO								
		7	2044	37.01	19	21.49	155	30.13	10.02	1.2	45	7	34	.08	5	0.3	0.6	35	KAO									
		8	231	55.05	19	20.22	155	7.57	9.04	2.8	2.6	52	10	94	.09	5	0.3	0.4	40	SF4								
		8	1957	42.00	19	14.31	155	26.89	9.67	1.2	1.7	41	7	102	.13	5	0.4	0.6	29	LSW								
		11	131	27.38	19	18.81	155	12.91	8.14	2.1	2.2	56	14	90	.11	3	0.3	0.5	43	SF2								
		11	4	39.56	19	8.71	155	37.36	0.03	1.7	45	10	110	.15	11	0.3	0.2	29	LSW									
		11	1417	1.53	19	25.62	154	54.34	1.73	2.0	35	5	196	.13	4	0.4	0.3	25	SLE									
		12	212	46.34	19	24.79	155	17.39	11.94	2.1	3.1	27	5	51	.13	1	0.8	0.6	23	INT	L							
12	1141	32.90	19	22.80	155	14.41	1.56	1.8	17	1	83	.07	2	0.3	0.3	12	SSC											
		12	1819	53.29	19	14.74	155	34.74	8.10	1.3	40	7	106	.17	4	0.6	0.9	31	LSW									
		13	2038	23.66	19	19.86	155	26.06	10.62	1.3	43	6	152	.17	5	0.4	0.6	34	KAO									
		14	1	1	18	19	15.82	155	27.65	10.92	2.1	3.1	48	6	71	.13	5	0.4	0.6	38	LSW							
		14	935	9.66	19	28.99	155	26.17	1.08	1.7	31	6	98	.13	5	0.3	0.4	26	KAO									
		14	1633	15.76	19	19.07	155	13.31	9.08	2.5	3.1	57	16	77	.11	4	0.4	0.4	42	SF2								
		15	041	47.62	19	20.13	155	8.34	8.81	1.8	2.4	50	10	80	.11	4	0.4	0.5	39	SF4								
		15	453	12.84	19	20.47	155	12.72	8.84	1.4	1.9	47	8	68	.10	4	0.4	0.4	38	SF2								
		15	2016	40.01	19	49.78	155	42.02	16.43	1.3	22	7	188	.11	5	1.4	1.2	7	KEA									
		16	015	50.45	19	25.58	155	20.36	8.06	2.2	54	12	57	.11	4	0.3	0.5	40	KAO									
16	627	24.60	19	28.65	155	27.48	5.27	1.2	37	7	76	.13	6	0.3	1.8	31	KAO											
		17	5	0	23	17	19	18.72	155	13.34	7.81	0.9	1.5	44	10	80	.11	3	0.3	0.6	30	SF2						
		17	537	57.65	19	20.32	155	6.54	8.85	1.2	1.2	27	4	108	.06	6	0.5	0.7	21	SF4								
		17	10	3	5	80	19	23.36	155	22.52	10.26	1.2	42	8	57	.08	5	0.4	0.6	33	KAO							
		17	1257	32.13	19	23.73	155	30.03	9.79	1.2	35	5	44	.08	5	0.4	0.7	32	KAO									
		18	610	0	56	19	25.35	155	19.34	6.80	1.2	1.7	33	4	47	.10	3	0.4	0.8	24	KAO							
		18	656	35.02	19	25.34	155	19.19	7.49	1.4	26	3	84	.11	3	0.4	1.0	0.2	22	KAO								
		18	21	3	47	45	19	20.59	155	6.50	7.84	2.1	2.0	52	13	102	.09	5	0.3	0.5	29	SF4						
		19	235	9.66	19	20.43	155	6.43	7.87	0.9	1.6	30	4	106	.08	6	0.4	0.7	22	SF4								
		19	344	33.07	19	25.90	154	59.38	3.56	1.7	17	24	1	106	.09	2	0.5	0.5	16	SLE								
19	1018	47.34	19	19.89	155	8.30	8.60	2.1	2.8	43	5	83	.07	5	0.4	0.5	34	SF4										
		21	119	48	29	19	26.22	154	53.75	6.56	1.1	1.2	36	3	196	.13	4	1.0	0.7	33	LER							
		22	1927	37.32	19	19.34	155	7.66	7.29	2.1	22	3	171	.11	7	0.7	1.3	16	SF4									
		23	1340	37.68	19	17.60	155	13.05	7.14	1.2	25	12	83	.09	1	0.5	0.9	18	SF4									
		23	2256	3.20	19	19.39	155	21.28	33.68	2.2	3.0	58	13	89	.11	4	0.6	0.6	45	DEP								
		23	2256	3.20	19	19.39	155	21.28	33.68	2.2	3.0	58	13	89	.11	4	0.6	0.6	45	DEP								
		23	2256	3.20	19	19.39	155	21.28	33.68	2.2	3.0	58	13	89	.11	4	0.6	0.6	45	DEP								
		23	2256	3.20	19	19.39	155	21.28	33.68	2.2	3.0	58	13	89	.11	4	0.6	0.6	45	DEP								
		23	2256	3.20	19	19.39	155	21.28	33.68	2.2	3.0	58	13	89	.11	4	0.6	0.6	45	DEP								
		23	2256	3.20	19	19.39	155	21.28	33.68	2.2	3.0	58	13	89	.11	4	0.6	0.6	45	DEP								

ORIGIN TIME		LAT N		LON W		DEPTH		AMP		DUR		GAP		RMS		MIN		ERH		ERZ		NO	
YEAR	MON	DA	HRMN	SEC	DEG	MIN	DEG	MIN	KM	MAG	MAG	NR	NS	DEG	SEC	DIS	KM	KM	FM	REMK			
1992	DEC	6	2036	17.39	19	20.98	155	29.60	6.11	1.6	35	2	52	10	4	0.3	0.7	23	KAO				
		7	926	49.19	19	26.34	155	17.52	14.51	2.3	15	3	126	10	2	1.9	1.0	12	DEP	L			
		7	11	1	41.56	19	50.78	156	4.94	31.97	2.0	43	4	244	10	44	1.0	1.4	29	HUA			
		7	1353	27.92	19	34.24	156	23.95	3.50	1.6	24	2	297	16	60	2.5	3.5	13	DIS				
		7	1653	40.17	19	22.82	155	3.55	7.11	0.9	24	1	155	14	3	0.8	1.0	20	SFS				
		7	1846	56.90	19	8.57	155	37.10	8.72	0.9	17	1	113	13	12	0.8	1.6	8	LSW				
		7	2144	31.29	19	30.51	155	26.19	5.12	0.9	14	3	129	11	4	0.5	1.8	6	MLO				
		8	810	3.58	19	21.62	155	30.61	9.42	2.4	42	3	33	10	5	0.3	0.6	33	KAO				
		8	1127	22.12	19	18.66	155	13.42	8.91	3.5	44	3	78	11	3	0.4	0.4	38	SF2				
		8	1130	52.15	19	18.21	155	13.16	8.34	1.2	28	4	95	08	2	0.4	0.7	13	SF2				
		8	1438	22.91	19	22.79	155	25.04	10.57	1.2	28	3	61	09	5	0.4	0.6	23	KAO				
		8	1930	15.35	19	26.76	155	28.77	9.49	1.1	36	5	43	10	7	0.3	0.7	26	KAO				
		9	228	31.29	19	24.68	155	16.39	0.51	2.0	17	2	111	13	1	0.3	0.4	13	SNC	L			
		9	438	14.70	19	14.69	155	21.83	6.31	1.0	26	0	155	10	4	0.6	1.4	15	SWR				
		9	528	18.58	19	26.51	155	18.55	13.38	0.8	2.1	13	3	155	16	3	1.3	1.3	1	DEP	L		
		9	1241	31.87	19	29.26	155	26.37	5.32	1.8	2.2	43	9	57	13	5	0.3	1.2	24	KAO			
		9	1348	1.67	19	11.00	155	38.39	7.86	1.8	2.2	36	2	104	17	8	0.6	0.9	17	LSW			
		9	15	6	6.56	19	18.49	155	13.38	7.71	1.0	29	5	82	11	3	0.4	0.7	22	SF2			
		9	21	2	37.11	19	24.42	155	16.44	0.51	1.2	16	5	129	07	1	0.2	0.3	11	SEC	L		
		9	2139	21.09	19	20.42	155	10.72	8.51	1.1	37	7	82	08	3	0.4	0.6	28	SF3				
		9	2147	6.39	19	20.26	155	10.96	7.15	1.4	41	7	82	12	4	0.4	0.7	30	SF3				
		10	10	9	42.95	19	23.91	155	18.90	3.24	1.5	8	1	105	10	1	0.7	0.7	1	SEC	L		
		11	017	26.85	19	22.49	155	47.91	10.51	1.0	35	4	141	10	14	0.5	0.4	31	KON				
		11	828	45.52	19	21.87	155	13.11	3.36	1.1	30	10	72	08	1	0.3	0.3	20	SER				
		11	843	16.75	19	11.05	155	32.70	2.54	1.2	24	0	102	18	9	0.7	4.6	14	LSW				
		11	1442	31.95	19	23.30	155	16.42	0.07	2.0	16	3	57	11	1	0.2	0.2	13	SEC	L			
		11	1554	26.62	19	12.92	155	30.08	7.87	1.7	31	4	139	15	4	0.4	0.9	21	LSW				
		12	114	8.56	19	24.79	155	16.03	1.17	1.8	17	2	105	09	2	0.3	0.3	15	SNC	L			
		12	7	53	24	19	25.70	155	14.65	12.07	0.8	2.3	20	3	152	13	2	1.2	0.8	19	INT	L	
		14	2015	23.88	19	24.62	155	17.43	3.33	1.1	13	4	102	10	1	0.6	0.5	2	SNC	L			
		15	848	17.08	19	18.30	155	13.17	7.31	1.2	2.0	48	10	93	12	2	0.4	0.6	37	SF2			
		16	923	36.70	19	10.46	155	22.27	45.99	2.5	3.3	54	8	174	10	8	0.7	0.8	47	DEP			
		16	1521	34.02	19	14.16	155	32.52	8.94	2.5	2.9	51	11	117	13	5	0.4	0.6	42	LSW			
		16	2347	11.95	19	19.85	155	11.41	8.35	0.9	1.4	42	7	88	11	5	0.4	0.6	30	SF3			
		17	3	1	46.74	19	13.46	155	23.14	36.70	2.2	49	7	154	10	2	0.6	1.0	41	DEP			
		17	521	15.89	19	24.58	155	17.20	2.19	1.1	19	5	57	09	1	0.3	0.2	14	SNC	L			
		17	830	44.38	19	18.10	155	29.35	12.59	1.2	25	5	55	07	6	0.5	0.8	17	LSW				
		17	1549	44.90	19	5.40	156	12.13	39.06	2.1	2.8	46	6	287	11	40	1.1	1.2	40	KON			
		18	827	32.70	19	28.13	155	0.85	44.24	1.6	43	6	115	10	7	0.9	1.1	26	DEP				
		18	1152	21.25	19	18.69	155	13.16	9.88	2.3	3.0	47	8	132	09	7	0.4	0.5	33	SF2			
		18	1352	15.69	19	24.58	155	26.95	10.24	1.2	29	3	49	09	3	0.4	0.7	20	KAO				
		18	1333	32.26	19	18.07	155	13.14	7.76	1.2	2.1	35	7	99	08	2	0.4	0.7	22	SF2			
		18	15	1	43.63	19	17.89	155	13.14	8.52	1.4	27	5	104	09	2	0.5	0.9	19	SF2			
		19	412	59.60	19	26.06	155	15.71	2.37	1.8		23	3	113	12	3	0.4	0.4	20	SNC	L		
		19	1751	11.69	19	11.84	155	27.47	6.59	1.4	27	4	117	15	4	0.5	1.1	21	LSW				
		19	1751	11.69	19	11.84	155	27.47	6.59	1.4	27	4	117	15	4	0.5	1.1	21	LSW				
		19	1751	11.69	19	11.84	155	27.47	6.59	1.4	27	4	117	15	4	0.5	1.1	21	LSW				
		19	1751	11.69	19	11.84	155	27.47	6.59	1.4	27	4	117	15	4	0.5	1.1	21	LSW				
		19	1751	11.69	19	11.84	155	27.47	6.59	1.4	27	4	117	15	4	0.5	1.1	21	LSW				
		19	1751	11.69	19	11.84	155	27.47	6.59	1.4	27	4	117	15	4	0.5	1.1	21	LSW				

Table 6. List of events of magnitude 3.0 or greater.

1992 HVO EARTHQUAKE SUMMARY LIST M≥3.0

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YEAR	MON	DA	ORIGIN TIME		LAT N		LON W		DEPTH		AMP		CODA		GAP	RMS	MIN	ERH	ERZ	NO	
			HRMN	SEC	DEG	MIN	DEG	MIN	KM	MAG	MAG	NR	NS	DEG	SEC	DIS	KM	KM	FM	REMK	
1992	JAN	11	956	56.21	20	2.37	155	20.69	8.04	3.3	3.6	54	7	215	.12	31	0.7	0.7	0	KEA	F
		13	2120	45.47	19	17.90	155	12.88	10.37	3.1	3.1	58	12	144	.11	9	0.3	0.4	0	SF2	
		13	2253	0.19	19	18.51	155	12.95	9.89	3.1	3.3	57	9	96	.12	3	0.3	0.3	0	SF2	
		15	957	7.86	19	20.53	155	12.84	9.27	3.1	3.3	44	8	66	.10	4	0.4	0.6	0	SF2	
		20	045	24.16	19	23.37	155	14.64	3.38	3.3	3.6	47	2	45	.13	2	0.3	0.5	0	SEC	
		20	046	28.56	19	22.96	155	14.82	3.48	2.4	3.0	17	1	116	.11	2	0.6	0.5	0	SEC	
		21	148	1.61	19	50.50	155	36.93	21.27	3.9	3.8	64	14	107	.10	5	0.4	1.2	0	KEA	F
		26	623	30.30	20	0.90	155	22.77	8.06	3.4	3.4	54	10	206	.12	27	0.6	0.5	0	KEA	F
		26	914	47.90	19	23.16	155	14.56	3.70	3.3	3.3	49	5	47	.12	3	0.3	0.4	0	SEC	
		28	1948	24.68	19	23.39	155	14.95	3.32	3.5	3.7	52	11	46	.11	2	0.3	0.3	0	SEC	F
	28	1952	15.00	19	22.90	155	14.73	2.89	2.4	3.3	30	9	57	.10	2	0.3	0.3	0	SEC		
	31	1429	50.53	19	57.80	156	25.55	2.86	3.0	2.4	39	4	291	.12	70	4.4	2.6	0	DIS		
	FEB	6	021	5.49	19	23.20	155	14.58	3.44	3.0	2.2	54	9	47	.11	3	0.3	0.3	0	SEC	
		20	2025	53.08	19	21.44	155	4.90	8.49	2.7	3.0	52	7	87	.09	4	0.4	0.3	0	SF5	F
		24	1612	59.83	19	22.41	154	50.17	43.30	3.6	3.4	62	12	246	.10	9	0.8	0.7	0	LER	
	24	2035	57.50	20	31.48	155	47.16	21.90	3.0	2.4	30	4	315	.24	44	1.2	3.9	0	DIS		
	25	1849	9.77	19	8.00	156	7.27	37.19	3.2	3.1	51	5	268	.09	30	1.0	1.2	0	KON		
	MAR	3	230	14.23	19	22.10	155	14.07	1.28	3.2	3.7	54	5	53	.13	2	0.2	0.4	0	SEC	
		3	241	56.11	19	22.23	155	12.74	3.24	3.0	3.4	52	6	51	.11	1	0.2	0.3	0	SER	
		3	242	56.61	19	22.30	155	14.21	1.76	2.7	3.3	33	5	75	.11	2	0.2	0.3	0	SEC	
	3	353	42.74	19	22.54	155	14.76	3.05	2.1	3.0	27	0	52	.15	2	0.4	0.5	0	SEC		
	3	4	5	48.14	19	22.15	155	14.15	1.61	3.1	2.3	45	5	54	.11	2	0.2	0.3	0	SEC	
	3	440	27.24	19	22.20	155	14.11	1.88	3.1		26	0	53	.09	2	0.3	0.4	0	SEC		
	3	443	40.14	19	21.98	155	13.87	1.53	2.1	3.2	21	4	87	.09	2	0.3	0.4	0	SER		
	3	511	30.48	19	22.34	155	14.12	1.75	3.1	3.3	49	4	52	.13	2	0.2	0.3	0	SEC		
	3	532	5.67	19	21.93	155	14.52	0.42	3.1	2.4	39	0	57	.12	3	0.3	0.5	0	KOA		
	3	922	54.84	19	22.07	155	14.41	1.47	3.0	2.2	42	6	55	.13	3	0.2	0.4	0	SEC		
	4	4	3	9.60	19	22.97	155	14.54	3.56	3.2	3.3	54	7	48	.11	3	0.3	0.3	0	SEC	F
5	213	18.69	19	19.98	155	10.75	9.67	2.8	3.2	56	6	87	.11	4	0.4	0.4	0	SF3			
5	2154	14.46	19	23.23	155	14.86	3.30	3.1	3.1	56	7	47	.11	2	0.2	0.3	0	SEC			
23	333	19.83	19	47.20	155	26.46	21.76	3.6	3.4	68	18	83	.11	2	0.4	1.1	0	KEA	F		
27	632	49.07	19	22.18	155	28.79	10.87	3.8	4.1	58	6	37	.12	2	0.3	0.4	0	KAO	F		
31	1233	41.06	19	22.92	155	14.75	1.56	3.0	2.8	44	8	49	.13	2	0.2	0.3	0	SEC			
31	1651	29.11	19	23.21	155	14.61	3.67	3.3	3.3	49	8	46	.11	3	0.3	0.4	0	SEC			
APR	9	2345	26.75	19	57.49	155	35.26	10.64	3.1	3.3	54	9	152	.17	13	0.4	0.4	0	KOH	F	
10	1740	16.28	19	23.17	155	30.54	9.79	2.8	3.1	50	11	39	.08	5	0.2	0.5	0	KAO			
10	1953	36.29	20	7.92	156	31.12	36.64	3.2	2.5	38	3	305	.14	77	1.6	2.2	0	DIS			
11	939	53.18	19	18.31	155	13.07	10.37	3.3	3.5	50	7	132	.10	8	0.4	0.3	0	SF2			
11	2027	42.27	19	6.96	155	38.22	7.12	3.0	3.1	43	5	117	.16	15	0.5	1.1	0	LSW	F		
18	2226	26.67	19	40.24	157	37.16	15.28	3.7	3.4	43	8	325	.13	188	7.3	13.3	0	DIS	-		

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YEAR	MON	DA	ORIGIN TIME		LAT N		LON W		DEPTH		AMP		CODA		GAP	RMS	MIN	ERH	ERZ NO	
			HRMN	SEC	DEG	MIN	DEG	MIN	KM	MAG	MAG	NR	NS	DEG	SEC	DIS	KM	KM	FM	REMK
1992	APR	19	1736	12.89	19	26.71	155	30.29	10.88	2.5	3.0	50	11	40	.10	6	0.3	0.5	0	KAO
	MAY	2	2046	40.38	19	19.54	155	8.48	9.42	3.0	3.3	48	9	81	.10	4	0.3	0.4	0	SF4
		4	2213	42.12	19	18.78	155	13.68	10.15	3.8	3.9	53	3	69	.11	3	0.4	0.4	0	SF2 F
		6	1632	28.96	19	19.53	155	13.47	8.15	3.1	3.2	61	9	67	.14	5	0.4	0.5	0	SF2
		14	452	17.16	19	32.51	155	0.85	43.38	3.2	2.9	56	12	99	.11	7	0.6	0.8	0	HIL
	MAY	22	411	11.86	19	21.72	155	5.14	8.62	3.0	3.2	52	10	81	.10	5	0.3	0.3	0	SF5 F
		22	2230	47.77	19	20.22	155	8.13	8.91	2.8	3.0	45	4	83	.11	5	0.4	0.4	0	SF4
		29	14 2	59.39	19	19.90	155	11.89	9.14	2.6	3.3	50	7	84	.11	5	0.3	0.4	0	SF3
	JUN	5	1522	52.86	19	24.92	155	19.52	5.33	3.2	3.1	52	9	38	.13	2	0.3	0.6	0	KAO
		13	831	28.05	19	53.83	155	26.33	27.76	3.1	3.5	66	16	170	.11	13	0.5	1.1	0	KEA F
		19	2 0	43.11	20	6.09	155	53.59	25.13	3.0	2.8	56	7	257	.12	12	0.8	1.3	0	KOH
	JUL	6	4 8	9.97	19	31.55	155	55.92	10.90	2.9	3.1	41	4	221	.13	18	0.6	0.4	30	KON
		8	1412	11.30	19	20.64	157	18.74	36.60	3.2	3.8	34	2	318	.10	151	2.0	2.8	25	DIS
		17	1745	14.59	19	13.90	155	20.51	44.94	1.2	3.9	10	0	201	.05	8	1.8	5.7	9	DEP L
		18	2342	9.05	19	23.57	155	26.24	11.50	2.7	3.0	31	1	47	.11	8	0.4	0.8	24	KAO
		20	21 1	22.38	19	23.78	155	49.69	12.22	2.6	3.0	46	5	120	.13	14	0.5	0.3	33	KON
		24	1933	55.94	19	27.00	154	47.69	8.07	3.5	3.7	62	17	285	.15	6	0.7	0.3	35	LER F
	AUG	2	944	4.90	19	11.27	155	34.37	7.28	2.6	3.1	47	9	225	.13	10	0.5	0.7	30	LSW
		4	146	52.22	19	16.71	155	15.57	10.01	2.8	3.0	55	6	149	.10	6	0.4	0.3	39	SF1
		6	14 8	38.88	19	27.00	155	14.59	31.30	3.3	3.1	63	17	40	.11	4	0.4	0.6	42	DEP F
		7	1024	59.00	19	20.71	155	12.03	8.40	3.0	3.0	53	10	70	.13	4	0.4	0.4	39	SF3
		14	1929	18.29	19	20.23	155	12.80	9.99	3.1	3.3	46	3	70	.09	4	0.4	0.4	37	SF2
		18	1519	28.70	19	8.56	155	39.82	8.98	2.7	3.1	40	7	122	.20	13	0.4	1.2	17	LSW F
		21	2135	34.34	19	20.01	155	16.83	37.72	2.6	3.0	62	17	87	.11	1	0.6	0.6	45	DEP
		24	1458	8.31	19	20.47	155	6.67	8.38	2.7	3.0	50	7	103	.08	6	0.3	0.4	24	SF4
		30	1857	19.94	20	0.02	155	25.67	10.44	3.7	3.8	55	6	199	.12	15	0.7	0.5	45	KEA F
	SEP	3	2228	47.30	19	22.32	155	29.18	10.67	3.1	3.2	53	8	35	.09	3	0.3	0.6	36	KAO
		10	2222	57.03	19	16.10	155	32.74	10.40	3.5	3.8	54	11	57	.11	5	0.3	0.6	36	LSW F
		14	21 2	48.95	19	21.72	155	50.41	13.21	2.5	3.2	40	5	132	.12	11	0.5	0.3	31	KON
		19	756	27.83	19	19.81	155	11.81	10.10	2.7	3.5	52	11	86	.11	6	0.3	0.4	45	SF3
		22	423	21.29	19	14.19	155	34.80	8.41	3.0	3.3	45	2	79	.16	4	0.4	0.6	38	LSW
		25	1129	0.16	19	22.74	155	18.31	31.03	2.3	3.1	67	18	29	.12	3	0.4	0.5	46	DEP
		26	9 3	40.62	17	22.68	154	5.07	27.77		3.5	49	3	335	.12	240	2.1	4.3	27	DIS
		29	1813	23.91	19	47.36	155	34.01	14.45	1.4	3.0	37	6	94	.11	11	0.4	0.3	27	KEA
	OCT	1	2258	57.64	19	20.03	155	11.92	8.60	2.4	3.0	47	7	139	.11	5	0.4	0.5	32	SF3
		2	1951	41.93	19	21.42	155	4.33	9.71	4.2	4.3	57	10	173	.12	5	0.5	0.4	45	SF5 F
		2	20 5	33.47	19	21.30	155	4.01	8.72	2.9	3.3	53	6	174	.10	6	0.6	0.4	45	SF5
		9	1447	23.31	19	31.26	156	1.20	14.81	1.8	3.0	35	4	254	.14	11	1.1	0.5	23	KON
		9	2125	26.21	19	44.57	155	0.15	49.80	4.3	4.7	66	18	213	.11	5	0.7	1.0	49	HIL F
		14	1755	50.32	19	29.32	155	26.02	6.09	2.5	3.2	56	12	58	.13	5	0.3	0.8	45	KAO F

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YEAR	MON	DA	HRMN	SEC	LAT N DEG MIN	LON W DEG MIN	DEPTH KM	AMP MAG	DUR MAG	NR	NS	GAP DEG	RMS SEC	MIN DIS	ERH KM	ERZ KM	NO FM	REMK
1992	OCT	20	245	20.80	19 20.12	155 7.72	9.38	2.8	3.1	49	9	93	.09	5	0.3	0.4	36	SF4
	NOV	5	1656	41.12	19 52.25	155 45.77	12.56	2.5	3.2	53	12	155	.11	11	0.3	0.3	38	HUA
		7	1921	48.86	19 21.52	155 30.15	9.74	3.0	3.8	58	15	53	.11	5	0.3	0.5	44	KAO
		12	212	46.34	19 24.79	155 17.39	11.94	2.1	3.1	27	5	51	.13	1	0.8	0.6	23	INT L
		14	1 1	1.18	19 15.82	155 27.65	10.92	2.1	3.1	48	6	71	.13	5	0.4	0.6	38	LSW
		14	1633	15.76	19 19.07	155 13.31	9.08	2.5	3.1	57	16	77	.11	4	0.4	0.4	42	SF2
		23	2256	3.20	19 19.39	155 21.28	33.68	2.2	3.0	58	13	89	.11	4	0.6	0.6	45	DEP
		24	253	23.36	20 24.15	156 24.66	24.55	1.9	3.6	48	4	318	.17	73	1.4	4.3	44	DIS
	DEC	3	10 0	37.45	20 47.24	156 22.03	7.14	3.0	3.6	53	8	328	.12	95	8.5	11.0	46	DIS F-
		8	1127	22.12	19 18.66	155 13.42	8.91		3.5	44	3	78	.11	3	0.4	0.4	38	SF2
		16	923	36.70	19 10.46	155 22.27	45.99	2.5	3.3	54	8	174	.10	8	0.7	0.8	47	DEP
		18	1152	21.25	19 18.69	155 13.16	9.88	2.3	3.0	47	8	132	.09	7	0.4	0.5	33	SF2
		23	2212	41.65	19 46.81	155 45.88	15.86	2.3	3.2	52	6	141	.09	13	0.4	0.7	40	HUA