



HAWAIIAN VOLCANO OBSERVATORY 1982 Annual Administrative Report

INTRODUCTORY NOTE BY THOMAS L. WRIGHT AND JENNIFER S. NAKATA

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SUMMARY 82

SEISMIC DATA, JANUARY TO DECEMBER 1982

BY WILFRED R. TANIGAWA, JENNIFER S. NAKATA, AND ALVIN H. TOMORI

CHRONOLOGICAL SUMMARY

BY ROBERT W. DECKER

OPEN-FILE REPORT 2007-1342

**U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY**

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INTRODUCTORY NOTE

The Hawaiian Volcano Observatory Summaries have been published in the current format since 1956. The Quarterly Summaries (1956 through 1973) and the Annual Summaries (1974 through 1985) were originally published as Administrative Reports. These reports have been compiled and published as U.S. Geological Survey Open-File Reports. The quarterly reports have been combined and published as one annual summary. All the summaries from 1956 to the present are now available as .pdf files at <http://www.usgs.gov/pubprod>.

The earthquake summary data are presented as a listing of origin time, depth, magnitude, and other location parameters. Network instrumentation, field station sites, and location algorithms are described. Tilt and other deformation data are included until Summary 77, January to December 1977. From 1978, the seismic and deformation data are published separately, due to differing schedules of data reduction.

There are eight quarters—from the fourth quarter of 1959 to the third quarter of 1961—that were never published. Two of these (4th quarter 1959, 1st quarter 1960) have now been published, using handwritten notes of Jerry Eaton (HVO seismologist at the time) and his colleagues. The seismic records for the remaining six summaries went back to California in 1961 with Jerry Eaton. Other responsibilities intervened, and the seismic summaries were never prepared.

Chronology

The following Kīlauea eruption chronology covers the two recent reports and the six missing quarters:

Location	Beginning Date	Ending Date	Comment
Kīlauea Iki crater (Kīlauea's summit)	11/14/1959	12/20/1959	19 eruptive episodes
Kapoho (lower east rift zone)	1/13/1960	2/18/1960	4 eruption stages
Halemaumau (Kīlauea's summit)	2/24/1961	2/24/1961	Intermittent activity during uninterrupted inflation following the 1960 eruption
Halemaumau (Kīlauea's summit)	3/22/1961	3/25/1961	Same as above.
Halemaumau (Kīlauea's summit)	7/10/1961	7/17/1961	Same as above.
Heiheiāhulu (middle east rift zone)	9/22/1961	9/25/1961	First historical east rift eruption at this location

The 1959-1960 eruptions were among two of the most spectacular Kīlauea eruptions. The HVO staff was kept busy with acquisition of unusually high quantities of instrumental data and observations of the two sequences, which were separated by less than one month. Even with a year's interval before the beginning of the summit-east rift sequence in 1961, the staff never caught up, and the seismic records were set aside for later study.

A total of 1,672 earthquakes—1,106 for 1960 and 566 for 1961—are part of HVO's cataloged database. The annual listings have been appended to the 1st Quarter Report of 1960 and to the 4th Quarter Report for 1961. The number of earthquakes is probably low, biased toward the larger magnitudes. The entire HVO catalog, including 1960 and 1961, is accessible from the ANSS CATALOG SEARCH site at <http://www.ncedc.org/anss/catalog-search>.

UNITED STATES DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

HAWAIIAN VOLCANO OBSERVATORY

SUMMARY 82

SEISMIC DATA, JANUARY TO DECEMBER 1982



This report (map) is preliminary and has not been reviewed for conformity with U.S. Geological Survey editorial standards (and stratigraphic nomenclature). Any use of trade names is for descriptive purposes only and does not imply endorsement by the U.S.G.S.

Menlo Park, California

1983

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INTRODUCTION

The Hawaiian Volcano Observatory (HVO) summary presents data gathered during the year together with a chronological narrative describing the volcanic events and significant observatory related activities. The seismic summary is offered without interpretation as a source of preliminary data. The seismic summary is complete in the sense that all data 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 will be published separately.

The HVO summaries have been published in various formats 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 format beginning with summary 74 for the year 1974. Summary 74 includes an extensive 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 use the data and understand the essentials of how it was gathered.

A report tabulating the instrumentation, calibration and recording history of each seismic station in the network by Klein and Koyanagi is available as a USGS open file report ("Hawaiian Volcano Observatory Seismic Network History 1950-79," U.S.G.S. open file report 80-302, 1980). It is designed as a reference for users of seismograms and phase data, and so includes and expands the information in the station table in this summary.

CHRONOLOGICAL SUMMARY - 1982

by

Robert W. Decker

1982 was an active year for Kilauea Volcano. The major events were a summit eruption on April 30-May 1, a southwest rift intrusion on June 22-24, another summit eruption on September 25-26, and an upper east rift intrusion on December 9.

The April 30 eruption began at 11:37 (Hawaiian Standard Time) following nearly 3 hours of rapid summit inflation, tremor, and an intense seismic swarm. Lava was erupted from an east-northeast-trending fissure about 1 km long extending across the floor of Kilauea Caldera from the northeast rim of Halemaumau Crater. The lava fountains were about 5 to 10 meters high, with bursts up to 25 to 50 meters. About $0.5 \times 10^6 \text{ m}^3$ of pahoehoe flows covering $0.3 \times 10^6 \text{ m}^2$ were formed before the eruption ended at about 06:30 May 1.

On June 22-24 a major intrusion of magma moved into the southwest rift of Kilauea, continuing the series of intrusions into the southwest rift that began in January 1981. Summit deflation, an earthquake swarm, and tremor accompanied this injection of at least $20 \times 10^6 \text{ m}^3$ of magma into the middle southwest rift between Puu Koae and Kamakaia Hills.

On September 25-26 another Kilauea summit eruption issued from an east-northeast-trending group of fissures about 1 km long in the south caldera area 1.2 km south-southeast of Halemaumau Crater. This eruption was preceded by nearly 2 hours of rapid summit inflation, tremor, and an earthquake swarm. The outbreak began at 18:45 on September 25 and lasted until about 08:30 on September 26. Lava fountains reached a general height of 20 to 40 meters with bursts up to 50 to 70 meters. About $3 \times 10^6 \text{ m}^3$ of pahoehoe lava was erupted, and covered an area of 0.7×10^6 . Some $2 \times 10^6 \text{ m}^3$ of ponded lava drained back down the vents on September 26-27, lowering the lava surface by 2 to 4 meters. One tongue of lava extended northeast across the Crater Rim Road, and another flowed over the low south rim of the caldera and moved about 1.5 km to the south-southeast.

Following the September eruption, most of the earthquake activity shifted from the southwest rift to the east rift of Kilauea. From 17:30 until 20:00 on December 9, an intense earthquake swarm, but no tremor, occurred between Lua Manu and Kokoolau Craters on the upper east rift zone. This was accompanied by 3 microradians of summit deflation, indicating an intrusion of at least $1 \times 10^6 \text{ m}^3$.

The fact that two eruptions and two intrusions without eruptions occurred in 1982 suggests that the rift zones of Kilauea may be getting back to a state more normal than during the years following the major 7.2 magnitude earthquake on the south flank of Kilauea in 1975. During 1976 through 1981, there were only 2 eruptions of Kilauea compared to 14 intrusions without eruptions--3 near the summit; 3 into the southwest rift; and 8 into the east rift.

It now appears that one of those east rift intrusions, the one beneath Mauna Ulu on March 10-11, 1980, may have been a very small eruption. In March 1982, Norm Banks and Jeff Judd discovered a small pad of lava spatter and flows of less than 3 m^3 in volume along the east end of the surface cracks that formed on March 10-11, 1980. Since that intrusion involved at least $5 \times 10^6 \text{ m}^3$ of magma injected into the shallow subsurface beneath the Mauna Ulu area, less than 1/1,000,000 of which may have been erupted, we will leave to future statisticians the problem of whether this unobserved event should be officially listed as an eruption or an intrusion. It's somehow pleasing that science isn't always tidy.

Table 1. ERUPTIONS OF KILAUEA, 1982

Starting Date	Location	Vent Length	Vent Elevation	Duration	Area km^2	Volume $\times 10^6 \text{ m}^3$
Apr. 30	Summit	1 km	1100 m	19 hrs	0.3	0.5
Sept. 25	Summit	1 km	1100 m	14 hrs	0.7	3(-2)

Table 2. INTRUSIONS OF KILAUEA, 1982

Starting Date	Location	Length	Height	Minimum Depth	Volume $\times 10^6 \text{ m}^3$	Propagation Rate km/hr	Local Gases	Electrical Anomalies
June 22	SW Rift	20 km	8 km	1 km	>20	.32	yes	yes
Dec. 9	E Rift	2 km	3 km	2 km	>1	?	?	?

Mauna Loa Volcano continued to inflate during 1982 at about the same rate that it has since 1977. The increase in volume of the summit region is about $4 \times 10^6 \text{ m}^3/\text{year}$, and the center of inflation remains southeast of the rim of the caldera. Shallow earthquakes beneath the summit area of Mauna Loa continued to occur at a gradually increasing rate that began in 1980. This rate of earthquake occurrence is higher than during 1971 to 1973, but much lower than during late 1974 and early 1975 preceding the July 1975 eruption. There have been no eruptions or apparent dike intrusions of Mauna Loa since the 1975 activity. The magma supply rate into Mauna Loa since 1975 appears to be only about 5 to 10% of the magma supply rate into Kilauea during this same period.

Twenty-one earthquakes of magnitude 4.0 or greater occurred beneath or near Hawaii in 1982, including a 5.6 M and a 5.4 M quake at 10-to-14 km depths beneath the south flank of Mauna Loa, on January 21. First motions of these two large quakes and the distribution of their aftershocks indicate failure on a nearly horizontal fault, with the upper plate moving away from the southwest rift of Mauna Loa in a seaward direction. It thus appears that the flanks of Mauna Loa move away from the growing rift zones in the direction of least resistance, probably as a result of push-apart stresses in the rift zones combined with gravitational stresses in the down-slope directions of the volcanic pile.

Besides the key role of deformation studies in estimating the volumes, locations and volume rates of new dikes formed during intrusions and eruptions, the deformation group has made at least two new significant steps in 1982. The increasing number of recording tiltmeters along the east and southwest rifts of Kilauea have produced a much clearer picture of the slow, relatively aseismic intrusions into the rift zones. Apparently the more active parts of the rifts develop fluid or plastic cores so hot that new magma from the summit can intrude slowly into them without forming the seismic swarms associated with cracking open new dikes. The main evidence for these slow intrusions are one or more of the following: (1) slow subsidence or no change in summit tilt; (2) local deformation along the rift zones, sometimes moving progressively down the rift, detected by recording tiltmeters, level lines or dry tilt stations along the rift zones; (3) scattered shallow earthquakes along those parts of the rift undergoing deformation; (4) gas temperature and composition anomalies along the rift zone; and (5) SP (self-potential) anomalies along the rift zone. The upper and middle east rift experienced one of these slow intrusions in late October and November 1982.

Another significant deformation study was the establishment of EDM (electronic distance measurement) lines across the locations where eruption fissures might occur. In the September eruptions the fissure vents formed directly across a segmented line of EDM stations. The extension of the ground surface by the erupting dike was at least 705 mm, and 392 mm of this was accommodated by contraction in the adjoining line segments within a few kilometers of the newly formed fissure.

The volcanic gas monitoring program continues to expand, as does the complexity of its results. Fundamental changes in temperature, volume, and composition of the escaping gases indicate real changes in the configuration and composition of magma bodies in the subsurface beneath Kilauea's summit and rift zones. Continuous measurements of temperature, CO₂ content, and condensate conductivity are now being made at five gas vents. Twelve-hour (tidal?) cycles of CO₂ content at some vents show that intermittent sampling could be quite misleading.

For 6 months in 1982, Dallas Jackson was on loan to the newly formed volcano observatory on Reunion Island in the Indian Ocean. Electromagnetic investigations were slowed down by his absence, but new SP (self-potential) anomalies were measured related to the rift zone intrusive events. A major effort in the electromagnetic program was automating the large inductance loop and sensors in the Kilauea summit area in order to obtain regular measurements on a daily basis.

The observatory staff consists of 9 scientists and 16 support personnel. In addition, 19 students and volunteers helped HVO during 1982. The staff monitored 48 seismic stations, 609 electronic distance measurement lines, 275 km of level lines, 135 tilt stations, 14 recording tilt meters, 2 strain gages, 127 gravity stations, 12 self-potential lines, 1 electromagnetic induction loop with 4 receiver stations, and 21 gas-sampling and temperature sites. Many of these monitors record continuously; others are observed at various intervals. Most of the data reduction, graphics, and data storage are handled by HVO's computer system.

Eight members of the staff were involved in investigations of Indonesian

volcanoes (particularly Galunggung and Merapi), Pagan Volcano in the Marianas, Piton de la Fournaise Volcano on Reunion Island, Mount St. Helens and Long Valley Caldera in the western United States, and three quarternary strato-volcanoes on San Miguel, Azores (Sete Cidades, Agua de Pau, Furnas).

Geologic mapping on Hawaii was conducted by four USGS geologists who were closely associated with the observatory. Their availability and help during the April and September eruptions was a great asset.

HVO cooperated with 40 guest investigators during the year for time periods up to 3 months. Staff members and guest investigators presented 4 papers at scientific meetings and published 20 papers and 9 open-file reports. HVO also issued weekly, monthly, and annual reports.

Hawaii Volcanoes National Park estimated they had 2,626,00 visitors in 1982. About 70% of these visitors stopped at HVO to view Kilauea Caldera and to peer through the windows at HVO's seismographs. Close to 1200 visitors, including 13 university student groups, 7 public school groups, 7 professional meeting groups, and 14 TV filmmakers, were shown the inner workings of the observatory.

It's been another busy year at HVO. The buildings are a wreck but morale is high. There's nothing like a few eruptions to raise the spirits of volcanologists.

SEISMIC INSTRUMENTATION

The network. The Hawaiian Volcano Observatory maintains an extensive telemetering seismometer network on the island of Hawaii. In 1982 the seismometer network consisted of 48 stations; two are low-gain multicomponent stations (optical), ten are three-component, and 38 are vertical only. The coverage is most complete on and around Kilauea Volcano. With the exception of self-contained systems at Uwekahuna and Hilo stations, all seismometer signals from the short period network are telemetered to the observatory for recording.

Figure 1 is a map of selected geographic and geologic features, and Figure 2 shows the seismic stations which were operated on the Island of Hawaii during the year. Table 1 lists all seismic stations operated by the U.S. Geological Survey in Hawaii during 1982. Listed are station names, three- and four-letter codes, coordinates in degrees and minutes, elevation in meters, and other data described below. In addition to seismometers listed in Table 1, a horizontal seismometer of Type 3 or H1 and a long-period, three-component set of Press-Ewing seismometers are operated in the Uwekahuna vault, all recorded on photographic paper.

Instrumentation and recording. Each telemetering station has a voltage controlled oscillator (VCO) for FM multiplex transmission to HVO via either hardwire or radio. These telemetering stations are now all of Type 1, the OEVE standard system used in USGS seismic networks (see Table 2 for details). After discrimination, the analog signals from 36 stations are recorded on two Develocorders using 16mm microfilm. FM signals from the telemetering network are also recorded directly on one-inch magnetic tape. Selected larger events are copied onto condensed FM library tapes which are currently archived in Menlo Park and archived in digital form at HVO as part of the routine location processing. The type of recording used for each station (in addition to magnetic tape for the telemetered stations) is coded in Table 1 as follows: D - Develocorder film, S - smoked paper drum, P - photographic paper, H - Helicorder paper.

In addition to the standard stations, optical seismographs are maintained at Uwekahuna (HVO), Hilo, Maui, and on Oahu (Honolulu and Kipapa stations 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 (optical) records as well as the 16mm Develocorder microfilm are archived at HVO.

In late August, Rex Allen and Jim Ellis from the U.S. Geological Survey's Office of Earthquake Studies came to HVO to install their seismic monitoring system uniquely designed to automate picking of P-phase onset times, measuring coda lengths, and determining preliminary epicenters for adequately recorded earthquakes. The Hawaii picker is configured to monitor a maximum of 80 stations, but is currently wired to 45 stations. Attached to the picker are a Datasouth Printer and an Apple II microcomputer. The picker output is logged on a disk and printed out on chart paper within three minutes after the earthquake occurs. The data collected on disk is transferred to the Eclipse, the main computer system, on a daily basis using a second Apple II. The earthquake records are filtered and run through our standard location program (HYPOINVERSE). Summary listings and epicenter plots are prepared on chart paper, and the phase data are archived on tape. The picker output is routinely compared with readings from our standard format. Modifications are being made to adapt the

automated system to better accommodate seismic monitoring needs around Hawaii's active volcanoes.

Seismograph response and calibration. Displacement response curves for the four short-period seismograph types in use are given in Figure 3. Types three and four 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 should be multiplied by a constant but known factor (CAL, 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 mm on the 20X Develocorder viewer of a 10 microvolt 5 Hz signal introduced to the preamp/VCO in place of the geophone. Calibration is normally done each time a station is visited. CAL factors range from about 1 to 8, averaging about 4. A detailed history of CAL factors and other data is given in F.W. Klein and R.Y. Koyanagi, Hawaiian Volcano Observatory Seismic Network History 1950-79, U.S. Geological Survey Open File Report 80-302, 1980.

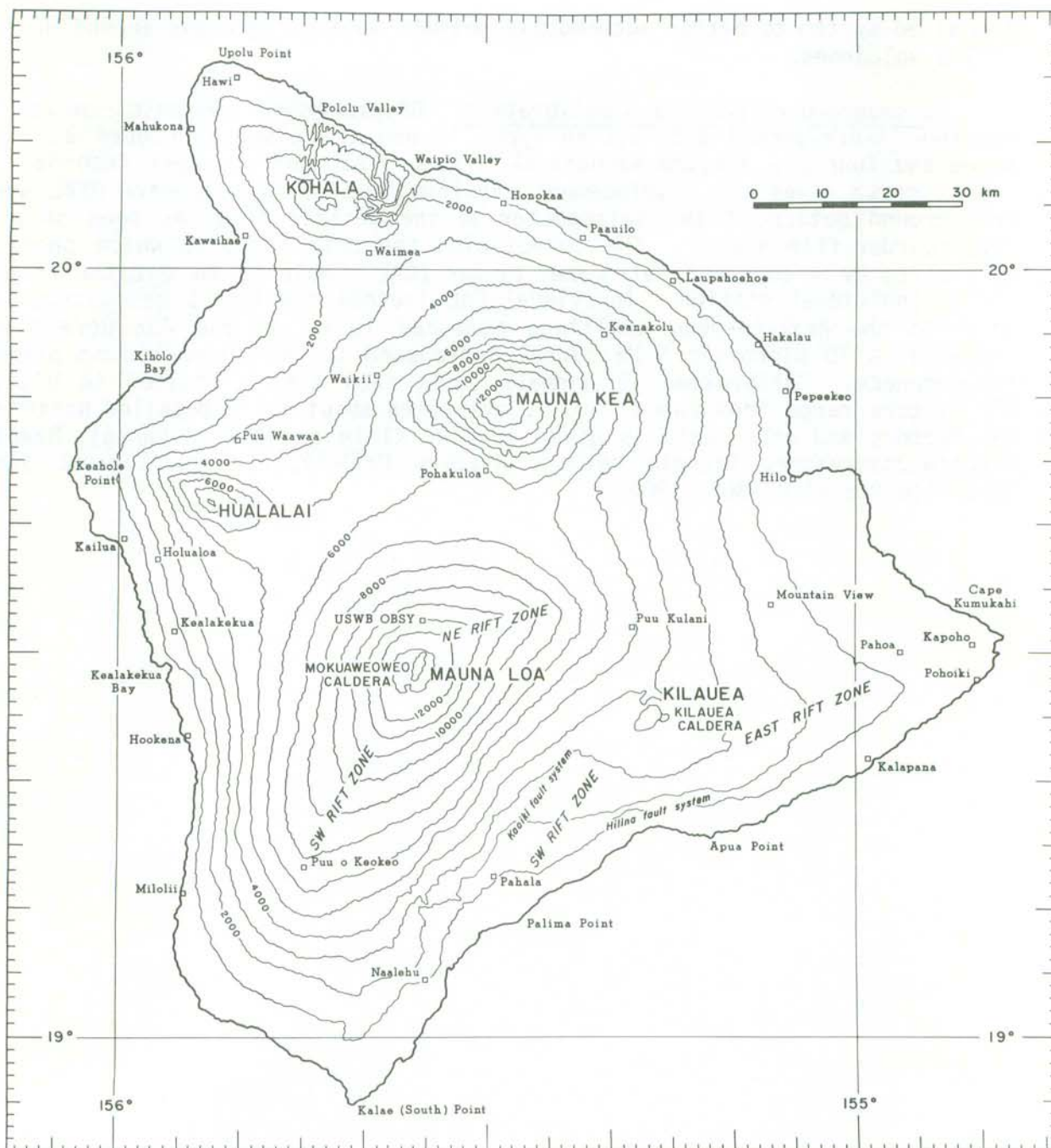


Figure 1. Map of the island of Hawaii showing principal settlements and selected geographic and geologic features.

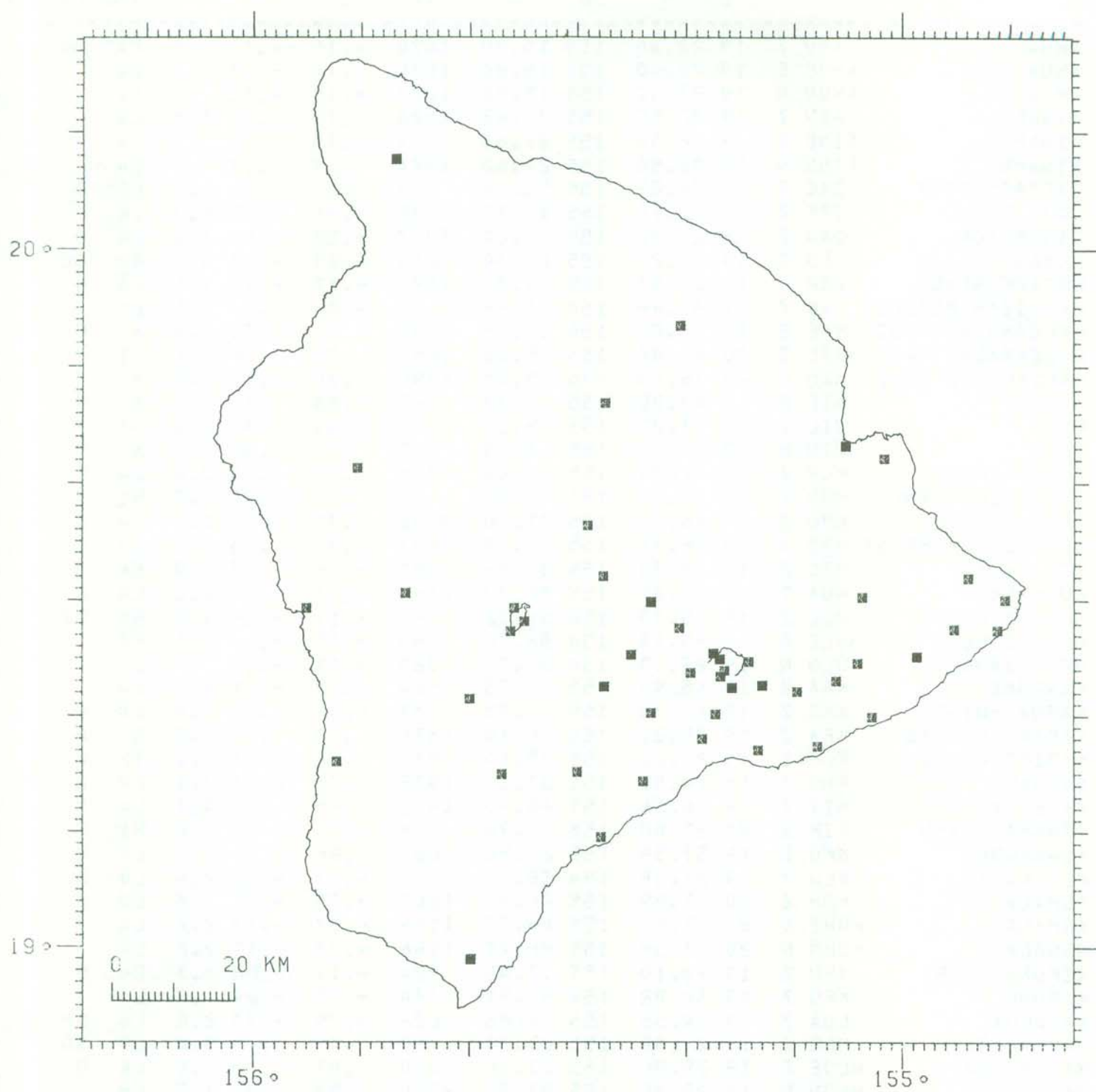


Figure 2. Map of the island of Hawaii showing seismic stations operational during 1982.

Table 1. Seismometer stations in Hawaii operated by the U.S. Geological Survey, 1982

STATION NAME	CODE	--LAT--		--LON--		ELEV (M)	DELAY 1	DELAY 2	CAL	SEIS TYPE	OPTIC RECORD
		D	M	D	M						
AHUA	AHU Z	19	22.40	155	15.90	1070	-.10	-.13	2.1	E4	SD
AHUA	AHUE E	19	22.40	155	15.90	1070	-.10	-.13	.0	E4	
AHUA	AHUN N	19	22.40	155	15.90	1070	-.10	-.13	.0	E4	
AINAPO	AIN Z	19	22.50	155	27.62	1524	.13	.17	5.5	L4	D
AINAPO	AINE E	19	22.50	155	27.62	1524	.13	.17	.0	L4	
AINAPO	AINN N	19	22.50	155	27.62	1524	.13	.17	.0	L4	
CAPTAIN COOK	CAC Z	19	29.29	155	55.09	323	.00	-.16	1.1	L4	D
CONE PEAK	CPK Z	19	23.70	155	19.70	1038	-.26	-.07	6.0	L4	D
DANDELION	DAN Z	19	21.42	155	40.04	3003	-.27	.03	7.0	L4	D
DESERT	DES Z	19	20.20	155	23.30	815	-.29	-.13	3.0	E4	SD
ESCAPE ROAD	ESR Z	19	24.68	155	14.33	1177	-.17	-.19	1.8	L4	D
HAWAIIAN BEACHES	HAB Z	19	31.89	154	53.89	92	-.09	-.24	1.0	L4	
HALEAKALA, MAUI	HAE E	20	46.00	156	15.00	2090	.00	.00	1.0	W	P
HALEAKALA, MAUI	HAL Z	20	46.00	156	15.00	2090	.00	.00	.7	H1	P
HALEAKALA, MAUI	HAN N	20	46.00	156	15.00	2090	.00	.00	1.0	W	P
HILO	HIE E	19	43.20	155	5.30	20	.54	.30	1.0	W	P
HILO	HIL Z	19	43.20	155	5.30	20	.54	.30	1.0	H1	P
HILO	HIN N	19	43.20	155	5.30	20	.54	.30	1.0	W	P
HILINA PALI	HLP Z	19	17.96	155	18.63	707	.02	.07	2.6	L4	D
HONOLULU, OAHU	HON Z	21	19.30	158	.50	2	.00	.00	.0	H1	P
HALE POHAKU	HPU Z	19	46.85	155	27.50	3396	.31	.17	3.7	L4	D
HUMUULA SHEEP ST	HSS Z	19	36.31	155	29.13	2445	.20	.35	2.7	L4	D
HOT CAVES	HTC Z	19	14.33	155	24.02	381	-.16	-.07	.0	E4	
HUALALAI	HUA Z	19	41.25	155	50.32	2189	.67	.38	2.8	L4	D
HEIHEIAHULU	HUL Z	19	25.13	154	58.72	369	-.17	-.16	1.6	E4	DS
HEIHEIAHULU	HULE E	19	25.13	154	58.72	369	-.17	-.16	.0	E4	
HEIHEIAHULU	HULN N	19	25.13	154	58.72	369	-.17	-.16	.0	L4	
KAAPUNA	KAA Z	19	15.98	155	52.28	524	-.12	-.01	2.8	L4	
KAENA POINT	KAE Z	19	17.35	155	7.95	37	-.01	.06	.8	L4	D
KAOIKI FAULTS	KFA Z	19	25.26	155	25.14	1579	.13	.17	.0	E	H
KAOIKI FAULTS	KFB Z	19	25.26	155	25.14	1579	.13	.17	.0	TE	\$
KAHUKU	KHU Z	19	14.90	155	37.10	1939	.03	-.03	2.7	E4	D
KANEKII	KII Z	19	30.56	155	45.90	1841	.15	.37	4.1	L4	D
KIPAPA, OAHU	KIP Z	21	25.40	158	.90	76	.00	.00	.6	H1	P
KEANAKOLU	KKU Z	19	53.39	155	20.58	1863	.68	.24	1.2	L4	D
PUU KALIU	KLU Z	19	27.48	154	55.26	271	-.17	-.30	2.9	L4	D
KOHALA	KOH Z	20	7.69	155	46.77	1166	-.03	-.17	1.5	L4	D
KOHALA	KOHE E	20	7.69	155	46.77	1166	-.03	-.17	2.2	L4	
KOHALA	KOHN N	20	7.69	155	46.77	1166	-.03	-.17	2.2	L4	
KIPUKA NENE	KPN Z	19	20.10	155	17.40	924	-.11	-.08	4.3	E4	D
KAPOHO	KPO Z	19	30.02	154	50.51	134	-.09	-.24	.0	L4	
KALALUA	LUA Z	19	24.55	155	4.25	622	-.25	-.30	2.8	L4	DH
MAUNA LOA	MLO Z	19	29.80	155	23.30	2010	.03	.08	5.8	L4	SD
MAUNA LOA	MLOE E	19	29.80	155	23.30	2010	.03	.08	.0	L4	D
MAUNA LOA	MLON N	19	29.80	155	23.30	2010	.03	.08	1.5	L4	
MAUNA LOA X	MLX Z	19	27.60	155	20.70	1475	.06	.15	3.0	L4	
MOKUAWEOWEO	MOK Z	19	29.28	155	35.98	4104	.15	.16	4.0	L4	DH
MAKAOPUHI	MPR Z	19	22.07	155	9.85	881	-.17	-.20	3.0	L4	D
MOUNTAIN VIEW	MTV Z	19	30.25	155	3.75	409	-.02	.01	5.0	E4	D
NATIONAL GUARD	NAG Z	19	42.12	155	1.72	18	.54	.30	4.5	E4	D
NORTH PIT	NPT Z	19	24.90	155	17.00	1115	-.30	-.18	3.0	E4	SD
NORTH PIT	NPTE E	19	24.90	155	17.00	1115	-.30	-.18	.0	E4	
NORTH PIT	NPTN N	19	24.90	155	17.00	1115	-.30	-.18	.0	E4	
OUTLET	OTL Z	19	23.38	155	16.94	1038	-.19	-.18	4.9	L4	
PAUHI	PAU Z	19	22.62	155	13.10	994	-.21	-.24	2.8	L4	SD
PAUHI	PAUE E	19	22.62	155	13.10	994	-.21	-.24	.0	L4	
PAUHI	PAUN N	19	22.62	155	13.10	994	-.21	-.24	.0	L4	
PUU ULAULA	PLA Z	19	32.00	155	27.67	2992	-.03	.13	5.4	L	D
POHOIKI	POI Z	19	27.42	154	51.22	16	-.09	-.24	.0	L4	

Table 1 (continued)

POLIOKEAWE PALI	POL Z	19	17.02	155	13.47	169	-.02	.03	3.0	E4	D
PUU PILI	PPL Z	19	9.50	155	27.87	35	-.15	-.15	1.4	E4	D
PUU KAMOAMOA	PUK Z	19	23.00	155	6.25	704	-.25	-.30	.0	E4	D
RIM	RIM Z	19	23.90	155	16.60	1128	-.21	-.13	.0	L4	
SOUTH POINT	SPT Z	18	58.91	155	39.92	244	-.17	-.22	1.4	L4	D
SOUTH POINT	SPT E	18	58.91	155	39.92	244	-.17	-.22	.0	L4	
SOUTH POINT	SPTN N	18	58.91	155	39.92	244	-.17	-.22	.0	L4	
SOUTHWEST RIFT	SWR Z	19	27.26	155	36.30	4048	.01	.04	6.0	E4	D
UWEKAHUNA	USE E	19	25.40	155	17.60	1240	-.21	.00	1.0	S	P
UWEKAHUNA	USZ Z	19	25.40	155	17.60	1240	-.21	.00	1.0	S	P
WAHAULA	WHA Z	19	19.90	155	2.92	29	-.10	-.04	1.1	E4	D
WILKES CAMP	WIL Z	19	28.15	155	35.02	4037	.22	.17	2.6	E4	D
WOOD VALLEY	WOO Z	19	15.08	155	30.12	909	-.15	-.06	4.6	E4	D

Table 2. Seismic Instrumentation Types

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

Type 1. (Codes E, L, and 4) Consists of:

- a) Geophone - Electrotech EV-17 (E) or Mark Products L4C (L) 1.0 sec. period moving magnet vertical component seismometer or horizontal component adjusted for an output of 0.5 volts/cm/sec. and 0.8 critically damped.
- b) Preamp/VCO - USGS/OEVE Model J302 or J402 (4) 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 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.

Type 4. (Code S) Consists of:

Sprengnether short period vertical and horizontal seismometers (E-W) with 1.5 sec. galvanometers, coupling factor = 0.25, 2X critically damped. Peak magnification approximately 1500X at 2 Hz.

Type 2 instruments have been discontinued.

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

Codes (TE) and (S5) are experimental seismometers.

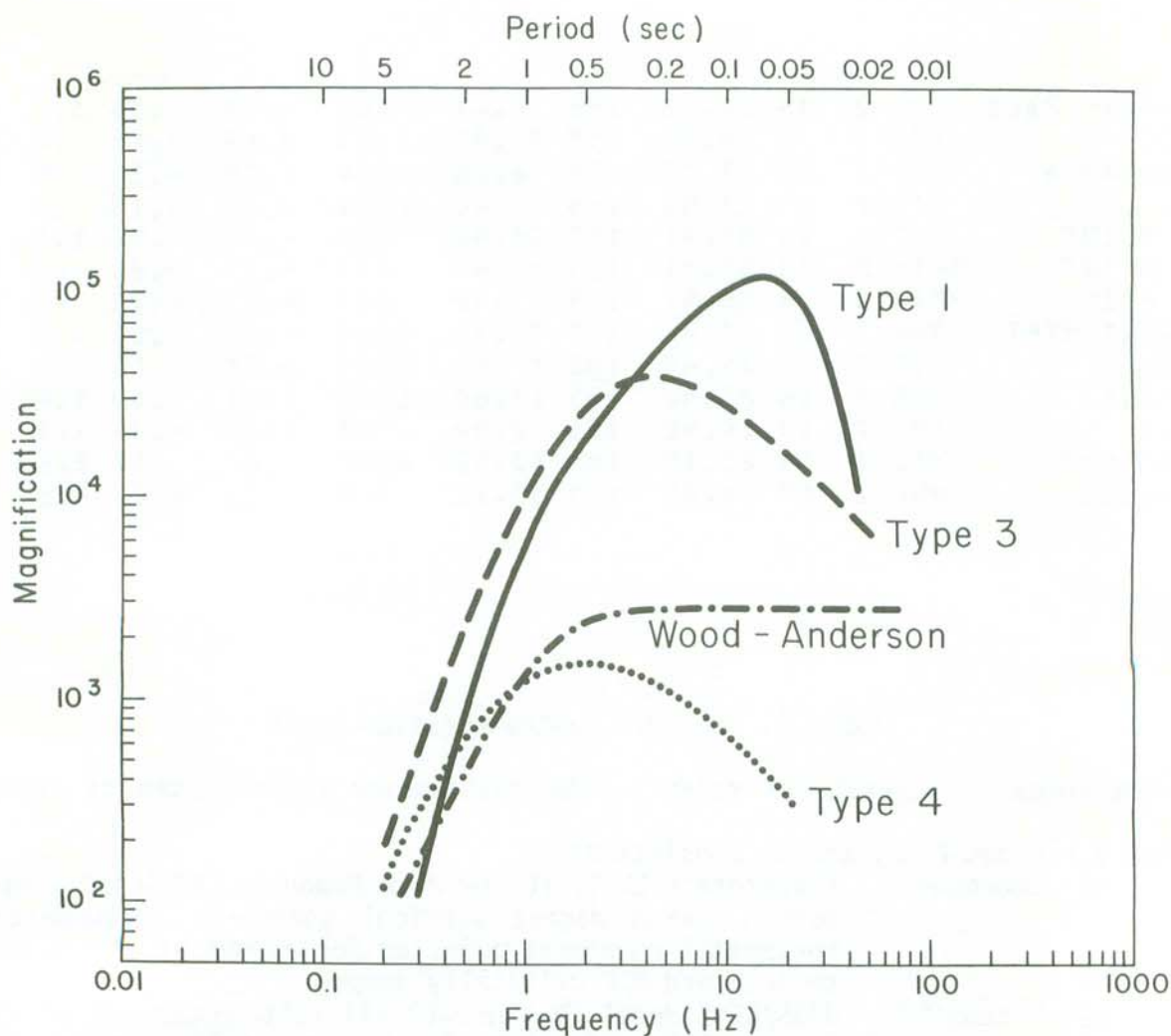


Figure 3. System response curves for the Wood-Anderson torsion seismograph and for the 3 different types of seismometers in use by the Hawaiian Volcano Observatory. Types 3 and 4 are electro-mechanical seismographs recorded optically on photographic paper. Type 1 is the standard OEVE seismometer recorded 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 earthquakes, and coda durations are measured for magnitude determination. Events are digitized, timed, and located on the Eclipse computer at HVO. Computer locations are made using the program HYPOINVERSE (Klein, F.W., Hypocenter location program HYPOINVERSE, U.S.G.S. Open file report 78-694, 1978), and problem events are reread and rerun. Magnetic tape copies of all arrival time and output summary data are kept in Menlo Park and HVO.

The crustal model used is specified by velocities at 4 depth points. Velocity at any depth is given by linear interpolation between points and uses a homogeneous half-space 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 locations, and are given in Table 1. Delay model 1 is used for events on Kilauea and its south flank, and delay model 2 applies to the rest of the island and offshore earthquakes. The delay models are in fact separated by a circle of radius 34 km centered at 19°22'N and 155°10'W.

Magnitudes for most events were computed using both recorded amplitudes on low gain or Wood-Anderson stations, and signal or coda duration on selected short-period vertical stations. Amplitudes read from other than Wood-Anderson instruments are corrected to an equivalent Wood-Anderson amplitude using the curves of Figure 3 and CAL factors. Amplitude magnitudes larger than 2.5 are generally based on the Wood-Anderson instruments in Hilo or Type 4 seismographs at Uwekahuna. Smaller events may occasionally include amplitude readings from stations AHU, OTL, PPL, KHU, or WIL.

Duration magnitudes are determined from the length of signal in seconds read from the Develocorder viewer. This time, also called the "F-P time" is measured from the first P arrival to the point where the earthquake signal has decayed nearly to the noise level. A bilinear relation is an appropriate fit to the data sample and is used to compute all duration magnitudes. Duration times are only read from Type 1 seismographs. Because duration magnitudes are relatively insensitive to station response and can be determined using the high-gain short-period stations, it is felt that duration magnitudes are more accurate and complete at the lower magnitudes (below 2).

The equations used in magnitude determination are:

$$\begin{array}{ll} \text{duration} < 210 \text{ sec} & M = -5.2 + 3.89 \log (F-P) + .013 Z + .0037 D \\ \text{duration} > 210 \text{ sec} & M = -.905 + 2.026 \log (F-P) + .013 Z + .0037 D \end{array}$$

where Z and D are the depth and epicentral distance in km, respectively.

SEISMIC SUMMARY

The emphasis in both station coverage and detailed data analysis is on the highly active south half of the island of Hawaii. Hundreds of earthquakes too small to locate are counted daily, and the set of located earthquakes in the Kilauea region is nearly complete above magnitude about 2.0. Many smaller events are located also. Substantial effort is made to locate earthquakes elsewhere on the island and within about 150 km of the island. Such coverage cannot be as complete as on the south flank, but nearly all events above magnitude 3.0 to 3.5 are located.

Data presented in the seismic summary is in four parts. Table 3 gives duration of harmonic tremor and numbers of earthquakes (most too small to locate) from several source regions around Kilauea. The source region is determined visually from signal character and pattern of arrival times at key stations. Maps showing computer located epicenters are given in Figures 8-13. The epicenter maps are on different scales, and show both all located earthquakes and large events only.

The list of computer locations constitutes the bulk of this summary, and is given in Table 5. Each earthquake in the list is assigned a three-letter code based on its location and depth. Figures 4-7 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 imply an overlap, precedence is given according to Figures 4-7. Table 6 relists the events in Table 5 for which either duration or amplitude magnitude is 3.0 or larger. It is felt that this list is a more objective measure of large earthquakes than a list of felt earthquakes.

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

Earthquake categories are:

- 1) Kilauea summit, short period caldera: shallow earthquakes beneath the caldera.
- 2) Kilauea summit, long period caldera: earthquakes characterized by low frequency signatures, often originating 5-10 km below the caldera.
- 3) Kilauea summit 30 km: deep earthquakes about 30 km beneath the summit region.
- 4) Kaoiki and southwest rift: earthquakes beneath the southwest rift of Kilauea, western parts of the Koae faults and adjacent Kaoiki fault system.
- 5) Upper east rift: earthquakes in the upper and middle east rift zone, the adjacent parts of the south flank, and eastern parts of the Koae faults.
- 6) Lower east rift: earthquakes in the lower east rift zone and adjacent parts of the south flank.
- 7) Offshore PPL: earthquakes from offshore areas south of the Puu Pili station, including Loihi seamount.
- 8) Mauna Loa long period: low frequency events near Mauna Loa summit.
- 9) Mauna Loa short period: shallow earthquakes in the Mauna Loa caldera region.

Tremor is separated into four categories: shallow, intermediate and deep Kilauea, and Mauna Loa. Depth is inferred on the basis of relative amplitudes on seismographs.

KILAUEA SUMMIT					KILAUEA FLANK			MAUNA LOA		TREMOR (MINUTES)	
I	ISHORT	LONG	I	KAO.	UP.	LOW.	OFF-	I	I	KILAUEA	MAUNAI
I DATE	I PER.	PER.	30	I & SW	EAST	EAST	SHORE	LONG	SHORT	INT.	LOA
I 1982	I CALDERA	KM	I	RIFT	RIFT	RIFT	PPL	I PER.	PER.	I SHAL.	DEEP
I JAN 1	I 187	9	I	16	82	13	I	4	I		
I 2	I 228	25	I	28	86	10	I	1	2	I 15	
I 3	I 363	8	I	49	103	13	I		4	I	3
I 4	I 441	8	I	62	153	2	I		3	I	
I 5	I 421	7	1	I 57	131	1	I		3	I	25
I 6	I 7	2	I		2		I		1	I	
I 7	I 226	9	I	51	93	2	I		3	I	
I 8	I 126		1	I 38	112	12	I		5	I	
I 9	I 7		1	I 47	114	8	I		1	I	
I 10	I	1	1	I 42	106	4	I		3	I	
I 11	I 336	4	I	59	170	4	I		5	I	
I 12	I 263	3	3	I 32	114	12	I	1	1	I	
I 13	I 306	5	I	48	158	9	I		8	I	
I 14	I 179	7	1	I 47	184	5	I		3	I	
I 15	I 253	7	3	I 36	82	23	I	4	2	I	
I 16	I 173	11	I	28	145	20	I			I	
I 17	I 244	14	I	39	120	6	I		1	I	
I 18	I 129		6	I 43	92	16	I			I	
I 19	I 278	1	I	54	121	4	I		2	I	
I 20	I 114	7	I	33	105	5	I		1	I	56
I 21	I 175	3	I	895	67	4	I		11	I	
I 22	I 95	12	I	130	79	7	I		3	I	30
I 23	I 220	8	1	I 79	115	13	I			I	
I 24	I 228	1	I	118	90	4	I			I	
I 25	I 105	3	I	46	78	7	I	1	1	I	5
I 26	I 218		1	I 43	67	3	I		3	I	
I 27	I 86	4	I	49	63	8	I		1	I	
I 28	I 360	3	4	I 68	139	1	I		1	I	
I 29	I 240	2	I	46	88	4	I	1		I	15
I 30	I 166	2	1	I 54	127	8	I		1	I	
I 31	I 273		I	124	143	4	I		3	I	
I FEB 1	I 172	7	2	I 46	98	4	I		3	I	
I 2	I 263	10	I	74	159	3	I		1	I	
I 3	I 132	5	I	54	113	9	I		1	I	
I 4	I 242	14	I	47	167	11	I	1	1	I	
I 5	I 73	78	7	I 41	129	10	I	2	8	I 86	
I 6	I 48	15	3	I 30	114	5	I	1	4	I 32	
I 7	I 46		2	I 36	105	15	I			I	
I 8	I 39		1	I 27	79	9	I			I	
I 9	I 67	6	1	I 22	74	5	I		1	I	
I 10	I 42	1	1	I 19	43	7	I			I	11
I 11	I 1		I	23	49	4	I			I	
I 12	I 56	2	I	21	140	17	I			I	
I 13	I 56	15	I	6	103	8	I		2	I 5	
I 14	I 70	14	I	22	92	6	I	1	1	I	

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KILAUEA SUMMIT				KILAUEA FLANK				MAUNA LOA		TREMOR (MINUTES)		
I	DATE	ISHORT	LONG	I	KAO.	UP.	LOW.	OFF-	I	I	KILAUEA	MAUNAI
I	1982	I	PER. PER. 30	I	& SW	EAST	EAST	SHORE	I	I	INT.	LOA
I	I	I	CALDERA KM	I	RIFT	RIFT	RIFT	PPL	I	I	SHAL.	DEEP
I	APR 1	I	140	25	3	I	35	85	13	I		
I	2	I	148	20	I	I	34	96	11	I	1	7
I	3	I	158	7	2	I	39	89	9	I		1
I	4	I	281	18	3	I	35	88	7	I		
I	5	I	254	16	1	I	36	85	12	I		3
I	6	I	277	17	1	I	44	100	17	I		4
I	7	I	270	19	1	I	44	85	7	I		
I	8	I	436	33	I	I	26	78	3	I		15
I	9	I	248	9	I	I	29	103	16	I	1	1
I	10	I	247	13	2	I	27	92	8	I		3
I	11	I	379	4	I	I	109	233	6	I		
I	12	I	299	6	1	I	50	127	12	I		54
I	13	I	425	13	I	I	73	109	10	I		15
I	14	I	107	1	I	I	18	30	2	I		
I	15	I	363	18	I	I	23	97		I		
I	16	I	626	25	I	I	10	136	10	I	1	2
I	17	I	189	5	1	I	17	119	11	I	1	
I	18	I	342	9	1	I	27	91	4	I		
I	19	I	303	15	1	I	37	81	24	I		
I	20	I	235	13	1	I	25	118	9	I		2
I	21	I	223	6	4	I	24	94	13	I		3
I	22	I	305	15	1	I	45	100	4	I		9
I	23	I	157	14	I	I	29	82	8	I		1
I	24	I	95	4	I	I	25	61	16	I		6
I	25	I	109	61	3	I	41	97		I		2
I	26	I	152	61	1	I	54	91	22	I		5
I	27	I	110	37	I	I	31	128	2	I		3
I	28	I	96	11	2	I	34	69	12	I		8
I	29	I	121	8	1	I	27	65	3	I	1	6
I	30	I	653	1	I	I	44	63	8	I		
I	MAY 1	I	549	5	I	I	58	84	12	I		8
I	2	I	676	13	1	I	67	95	5	I		6
I	3	I	412	12	2	I	38	91	11	I		8
I	4	I	652	30	I	I	46	133	5	I		4
I	5	I	455	19	3	I	37	89	14	I		8
I	6	I	500	23	5	I	33	111	13	I		8
I	7	I	520	86	3	I	21	84	17	I		3
I	8	I	664	98	I	I	26	90	11	I		2
I	9	I	455	27	2	I	47	113	15	I		5
I	10	I	416	17	2	I	47	92	10	I		6
I	11	I	401	8	2	I	54	82	10	I		6
I	12	I	481	47	1	I	76	69	5	I		5
I	13	I	499	24	I	I	34	84	7	I		7
I	14	I	324	58	1	I	12	139	11	I		5
I	15	I	221	36	I	I	8	94	5	I		7

KILAUEA SUMMIT				KILAUEA FLANK				MAUNA LOA		TREMOR (MINUTES)	
I	ISHORT LONG			I	KAO.	UP.	LOW.	OFF-	I	KILAUEA MAUNAI	
I	DATE	I	PER. PER. 30	I	& SW EAST EAST	SHORE	ILONG	SHORT	I	INT.	LOA
I	1982	I	CALDERA KM	I	RIFT RIFT RIFT	PPL	IPER.	PER.	I	SHAL.	DEEP

I	MAY 16	I	533 61 1	I	47 97 1	I		I	9	I	
I	17	I	418 6	I	34 82 7	I	1	I	1	I	18
I	18	I	679 90 2	I	49 99 7	I		I		I	
I	19	I	248 20	I	62 51 3	I		I	3	I	
I	20	I	364 67	I	20 83 3	I		I		I	

I	21	I	298 24	I	26 159 8	I	2	I	8	I	
I	22	I	301 42 1	I	25 120 1	I		I	19	I	86
I	23	I	472 47	I	39 67 2	I		I	6	I	38
I	24	I	352 35	I	46 111 11	I	1	I	12	I	21
I	25	I	349 29	I	47 108 8	I		I	2	I	

I	26	I	325 29 2	I	22 104 12	I	3	I	3	I	3
I	27	I	379 64	I	41 95 2	I		I	6	I	
I	28	I	339 67	I	53 84 3	I		I	3	I	
I	29	I	299 97	I	32 77 5	I		I	3	I	
I	30	I	285 42 1	I	27 87 5	I		I	2	I	

I	31	I	260 23 2	I	17 99 6	I	3	I	8	I	
I	JUN 1	I	379 39 2	I	41 154 2	I	1	I	4	I	
I	2	I	552 45 1	I	59 133 10	I		I	5	I	
I	3	I	202 135	I	21 95 6	I	4	I	8	I	9
I	4	I	381 22 2	I	48 72 5	I		I	7	I	

I	5	I	367 43	I	38 95 23	I		I	13	I	4
I	6	I	269 33	I	52 100 4	I		I	5	I	
I	7	I	146 18	I	13 69 8	I		I	11	I	
I	8	I	877 84	I	70 129 2	I		I	2	I	
I	9	I	437 40 1	I	64 112 8	I		I	8	I	

I	10	I	463 76	I	67 118 3	I		I	6	I	
I	11	I	380 47 2	I	28 96 11	I	1	I	4	I	25
I	12	I	263 33 1	I	24 102 16	I		I	7	I	48
I	13	I	233 35 1	I	56 130 2	I		I	4	I	
I	14	I	62 1	I	9 39 9	I		I	1	I	

I	15	I	441 52	I	47 77	I		I	8	I	
I	16	I	197 7	I	39 110 2	I		I	4	I	
I	17	I	273 29	I	64 80 7	I		I	4	I	
I	18	I	268 24 1	I	125 110 5	I		I	2	I	40
I	19	I	227 35	I	75 103 8	I		I	8	I	

I	20	I	125 62 1	I	40 121 10	I		I	4	I	15
I	21	I	80 66	I	214 138 14	I		I	6	I	
I	22	I	35 47	I	4752 64 6	I		I	3	I	
I	23	I	180 119	I	6022 89 7	I		I	1	I	
I	24	I	80 17	I	2824 86 10	I	1	I	3	I	

I	25	I	54 40	I	722 238 19	I		I	5	I	
I	26	I	59 33 1	I	951 86 19	I	1	I	7	I	19
I	27	I	26 16 1	I	726 151 14	I		I	1	I	
I	28	I	29 50 2	I	449 172 13	I		I	2	I	
I	29	I	47 105	I	628 112 4	I		I	4	I	

KILAUEA SUMMIT				KILAUEA FLANK				MAUNA LOA		TREMOR (MINUTES)	
I	ISHORT	LONG	I	KAO.	UP.	LOW.	OFF-	I	I	KILAUEA	MAUNAI
I DATE	I PER.	PER.	30	I & SW	EAST	EAST	SHORE	ILONG	SHORT	INT.	LOA
I 1982	I CALDERA	KM	I RIFT	RIFT	RIFT	PPL	I PER.	PER.	I SHAL.	DEEP	I

I JUN 30	I	23	42	1	I 288	208	6	I	1	1	I 5
I JUL 1	I	31	32	I	I 344	102	21	I		1	I
I 2	I	13	19	2	I 109	142	13	I			I
I 3	I	29	11	I	I 247	72	14	I			I
I 4	I	29	17	1	I 628	70	8	I		10	I

I 5	I	31	15	1	I 367	210	14	I	1	3	I
I 6	I	27	16	I	I 362	138	13	I	1		I
I 7	I	34	29	4	I 370	159	18	I	1		I 3
I 8	I	19	21	I	I 353	117	15	I		2	I 31
I 9	I	32	16	I	I 469	99	2	I		1	I

I 10	I	38	36	1	I 362	119	3	I			I
I 11	I	18	14	1	I 310	143	20	I			I 8
I 12	I	26	21	I	I 195	110	23	I		2	I 2
I 13	I	12	28	1	I 186	108	10	I			I 6
I 14	I	14	20	2	I 111	80	13	I		1	I 4

I 15	I	98	22	I	I 192	90	2	I			I
I 16	I	20	7	1	I 379	128	10	I		1	I
I 17	I	22	7	1	I 184	60	7	I			I
I 18	I	17	46	3	I 169	113	13	I			I
I 19	I	21	26	2	I 159	135	17	I	1		I 15

I 20	I	42	118	I	I 216	132	9	I		1	I
I 21	I	30	99	I	I 131	140	20	I		3	I
I 22	I	30	16	2	I 167	100	4	I			I
I 23	I	22	58	2	I 256	186	12	I	1	1	I
I 24	I	27	36	2	I 195	109	11	I		5	I

I 25	I	26	48	2	I 92	118	14	I			I 3
I 26	I	11	31	I	I 94	108	16	I			I 3
I 27	I	15	27	I	I 108	121	17	I			I 30
I 28	I	17	19	I	I 91	171	17	I	1	2	I
I 29	I	28	59	I	I 179	87	4	I		4	I

I 30	I	21	52	I	I 103	50	1	I		7	I
I 31	I	4	12	1	I 48	41	4	I		1	I
I AUG 1	I	1	12	I	I 102	63	2	I		1	I
I 2	I	15	30	I	I 113	77	5	I		7	I 2
I 3	I	17	17	2	I 59	120	11	I	1	1	I 42

I 4	I	10	14	I	I 102	183	10	I		3	I 4
I 5	I	26	24	4	I 73	108	15	I		2	I
I 6	I	28	16	I	I 51	70	10	I			I
I 7	I	14	21	1	I 42	63	5	I	1	7	I
I 8	I	9	6	2	I 24	84	8	I			I

I 9	I	27	79	I	I 28	120	19	I	1	1	I
I 10	I	20	32	I	I 33	99	18	I			I
I 11	I	15	87	1	I 29	62	11	I			I 10
I 12	I	20	106	I	I 44	66	8	I		1	I 40
I 13	I	26	53	2	I 48	82	8	I	3	5	I

KILAUEA SUMMIT				KILAUEA FLANK				MAUNA LOA		TREMOR (MINUTES)	
I	ISHORT	LONG	I	KAO.	UP.	LOW.	OFF-	I	I	KILAUEA	MAUNAI
I DATE	I PER.	PER.	30	I & SW	EAST	EAST	SHORE	I LONG	SHORT	INT.	LOA
I 1982	I CALDERA	KM	I	I RIFT	RIFT	RIFT	PPL	I PER.	PER.	I SHAL.	DEEP
I	I	I	I	I	I	I	I	I	I	I	I
I AUG 14	I	18	47	1	I	64	130	28	I	2	8
I 15	I	57	94	I	I	73	126	16	I	I	I
I 16	I	53	70	I	I	103	80	6	I	3	7
I 17	I	23	32	3	I	67	148	26	I	1	2
I 18	I	38	114	I	I	60	103	20	I	3	30
I	I	I	I	I	I	I	I	I	I	I	I
I 19	I	23	31	1	I	44	118	8	I	1	2
I 20	I	44	39	I	I	83	119	26	I	4	57
I 21	I	46	24	I	I	66	77	4	I	3	I
I 22	I	37	13	I	I	77	59	6	I	1	60
I 23	I	38	52	I	I	83	96	14	I	1	17
I	I	I	I	I	I	I	I	I	I	I	I
I 24	I	17	11	1	I	74	132	9	I	1	1
I 25	I	31	41	I	I	42	90	22	I	1	2
I 26	I	33	10	I	I	44	40	I	I	3	I
I 27	I	52	15	I	I	40	59	5	I	2	I
I 28	I	69	6	I	I	80	63	4	I	6	I
I	I	I	I	I	I	I	I	I	I	I	I
I 29	I	45	8	3	I	87	86	3	I	1	I
I 30	I	23	3	I	I	47	81	11	I	4	1
I 31	I	56	8	2	I	61	94	6	I	1	2
I SEP 1	I	78	7	I	I	83	74	2	I	6	I
I 2	I	88	16	I	I	38	103	17	I	7	I
I	I	I	I	I	I	I	I	I	I	I	I
I 3	I	30	7	I	I	44	42	15	I	I	I
I 4	I	39	I	I	I	58	62	10	I	1	1
I 5	I	36	I	I	I	69	78	9	I	2	18
I 6	I	87	81	I	I	84	91	3	I	4	24
I 7	I	49	1	1	I	75	81	14	I	1	I
I	I	I	I	I	I	I	I	I	I	I	I
I 8	I	70	43	I	I	47	69	5	I	I	I
I 9	I	41	14	I	I	36	66	7	I	I	I
I 10	I	76	4	I	I	84	44	11	I	1	5
I 11	I	72	2	1	I	69	82	14	I	17	I
I 12	I	69	1	I	I	51	145	17	I	28	3
I	I	I	I	I	I	I	I	I	I	I	I
I 13	I	64	61	I	I	77	89	3	I	6	I
I 14	I	57	2	1	I	56	139	17	I	2	11
I 15	I	90	40	1	I	110	78	8	I	5	I
I 16	I	86	15	I	I	94	95	5	I	9	I
I 17	I	89	13	I	I	113	80	2	I	2	21
I	I	I	I	I	I	I	I	I	I	I	I
I 18	I	244	28	1	I	132	93	2	I	12	I
I 19	I	78	3	I	I	45	206	22	I	1	13
I 20	I	51	10	1	I	149	92	7	I	3	7
I 21	I	114	48	I	I	86	148	13	I	4	1
I 22	I	68	11	1	I	83	125	5	I	3	I
I	I	I	I	I	I	I	I	I	I	I	I
I 23	I	70	1	I	I	38	66	11	I	1	I
I 24	I	93	8	I	I	56	79	20	I	2	I
I 25	I	483	1	I	I	67	77	11	I	3	969
I 26	I	1038	19	I	I	74	122	5	I	2	3
I 27	I	303	35	3	I	91	100	2	I	2	125
I	I	I	I	I	I	I	I	I	I	I	I

KILAUEA SUMMIT				KILAUEA FLANK				MAUNA LOA		TREMOR (MINUTES)		
I	ISHORT	LONG	I	KAO.	UP.	LOW.	OFF-	I	I	KILAUEA	MAUNAI	I
I DATE I	PER.	PER.	30 I	I & SW	EAST	EAST	SHORE	ILONG	SHORT	INT.	LOA	I
I 1982 I	I CALDERA	I KM	I	I RIFT	I RIFT	I RIFT	I PPL	I PER.	I PER.	I SHAL.	I DEEP	I
I SEP 28 I	I 407	I 26	I 3	I 47	I 130	I 10	I	I 4	I 76	I	I 28	I
I 29 I	I 400	I 35	I 1	I 63	I 115	I 7	I	I 1	I 58	I	I	I
I 30 I	I 273	I 39	I	I 41	I 67	I 1	I	I 4	I 67	I	I	I
I OCT 1 I	I 166	I 80	I 1	I 65	I 157	I 6	I	I 7	I 29	I	I	I
I 2 I	I 233	I 76	I	I 59	I 121	I 3	I	I 1	I 38	I	I	I
I 3 I	I 163	I 159	I 2	I 47	I 138	I 16	I	I 7	I 35	I	I	I
I 4 I	I 230	I 52	I	I 41	I 126	I 21	I	I 2	I 17	I 8	I 8	I
I 5 I	I 166	I 34	I 2	I 66	I 128	I 20	I 2	I	I 19	I 5	I	I
I 6 I	I 96	I 50	I	I 76	I 133	I 10	I 3	I	I 22	I	I	I
I 7 I	I 116	I 24	I	I 77	I 134	I 2	I	I 3	I 5	I	I	I
I 8 I	I 117	I 85	I	I 40	I 156	I 8	I	I 1	I 3	I 4	I	I
I 9 I	I 106	I 47	I	I 44	I 166	I 15	I	I 1	I 1	I	I	I
I 10 I	I 134	I 26	I	I 45	I 193	I 15	I	I 4	I 37	I	I	I
I 11 I	I 112	I 89	I 2	I 53	I 170	I 4	I	I	I 28	I	I	I
I 12 I	I 68	I 37	I	I 31	I 164	I 15	I	I 1	I 7	I 64	I	I
I 13 I	I 90	I 55	I	I 64	I 133	I 2	I	I	I 14	I	I	I
I 14 I	I 30	I 29	I	I 79	I 130	I 2	I	I	I 17	I 3	I	I
I 15 I	I 55	I 32	I	I 27	I 193	I 6	I	I 2	I 29	I	I	I
I 16 I	I 39	I 30	I 1	I 44	I 218	I 6	I	I 1	I 14	I	I	I
I 17 I	I 81	I 16	I	I 26	I 232	I 6	I	I	I 4	I	I	I
I 18 I	I 51	I 29	I 1	I 84	I 166	I 1	I	I 4	I 14	I	I	I
I 19 I	I 33	I 10	I 1	I 84	I 149	I 5	I	I 7	I 9	I	I	I
I 20 I	I 31	I 60	I	I 35	I 227	I 13	I	I 1	I 14	I 7	I	I
I 21 I	I 37	I 28	I	I 85	I 169	I 2	I	I	I 1	I	I	I
I 22 I	I 33	I 7	I	I 59	I 136	I 4	I	I 1	I 4	I	I	I
I 23 I	I 33	I 19	I	I 96	I 246	I 7	I	I 2	I 9	I 40	I	I
I 24 I	I 37	I 3	I	I 50	I 372	I 10	I	I 5	I 2	I	I	I
I 25 I	I 62	I	I	I 94	I 485	I 4	I	I 2	I	I	I	I
I 26 I	I 33	I 7	I	I 51	I 457	I 18	I	I	I 1	I	I	I
I 27 I	I 29	I 11	I	I 32	I 297	I 14	I	I 1	I	I	I 3	I
I 28 I	I 40	I 7	I	I 105	I 208	I 3	I	I	I	I	I	I
I 29 I	I 26	I 20	I 1	I 42	I 299	I 21	I	I 4	I 4	I 14	I	I
I 30 I	I 25	I 4	I 2	I 74	I 194	I 20	I	I 1	I 3	I 3	I	I
I 31 I	I 26	I 15	I 2	I 40	I 232	I 9	I	I	I 4	I	I	I
I NOV 1 I	I 54	I 22	I	I 105	I 220	I 4	I	I 5	I 5	I	I	I
I 2 I	I 41	I 25	I	I 38	I 317	I 19	I	I 1	I 3	I	I	I
I 3 I	I 25	I 36	I	I 25	I 167	I 14	I	I 1	I 2	I	I	I
I 4 I	I 45	I 22	I	I 53	I 193	I 7	I	I 12	I 52	I	I	I
I 5 I	I 38	I 13	I	I 19	I 224	I 17	I	I 9	I 3	I	I	I
I 6 I	I 29	I 7	I 2	I 44	I 125	I 11	I	I 7	I 4	I 1	I	I
I 7 I	I 35	I 46	I	I 27	I 178	I 9	I	I 9	I 2	I	I	I
I 8 I	I 28	I 11	I	I 37	I 153	I 10	I	I 4	I 2	I	I	I
I 9 I	I 28	I 24	I 1	I 35	I 284	I 15	I	I 4	I 3	I	I	I
I 10 I	I 13	I 27	I	I 35	I 123	I 1	I	I 4	I 2	I	I	I
I 11 I	I 10	I 9	I	I 40	I 72	I 1	I	I 2	I 4	I	I	I

KILAUEA SUMMIT				KILAUEA FLANK				MAUNA LOA		TREMOR (MINUTES)	
I	ISHORT	LONG	I	KA0.	UP.	LOW.	OFF-	I	I	KILAUEA	MAUNAI
I DATE	I PER.	PER.	30	I & SW	EAST	EAST	SHORE	I LONG	SHORT	INT.	LOA
I 1982	I CALDERA	KM	I	I RIFT	RIFT	RIFT	PPL	I PER.	PER.	I SHAL.	DEEP
I	I	I	I	I	I	I	I	I	I	I	I
I NOV 12	I 11	13	I	I 35	88	3	I	I 3	7	I	I
I 13	I 16	22	I	I 33	52	2	I	I	4	I	I
I 14	I 12	1	1	I 21	88	9	I	I 4	2	I	I
I 15	I 12	1	1	I 20	78	2	I	I 4	6	I	I
I 16	I 19	6	1	I 35	114	18	I	I 8	1	I	46 I
I	I	I	I	I	I	I	I	I	I	I	I
I 17	I 23	35	I	I 43	114	2	I	I 8	7	I	I
I 18	I 35	12	I	I 86	119	1	I	I 5	65	I	I
I 19	I 26	20	3	I 29	203	18	I	I 2	19	I	I
I 20	I 37	7	I	I 57	75	16	I	I	21	I	I
I 21	I 66	21	1	I 16	156	16	I	I 5	3	I	I
I	I	I	I	I	I	I	I	I	I	I	I
I 22	I 37	25	I	I 35	84	1	I	I	I	I	I
I 23	I 28	8	I	I 26	35	4	I	I	I	I	I
I 24	I 90	62	2	I 24	99	7	I	I	4	I	14 I
I 25	I 129	97	5	I 52	77	5	I	I 2	1	I	I
I 26	I 84	40	I	I 24	89	18	I	I	11	I	I
I	I	I	I	I	I	I	I	I	I	I	I
I 27	I 129	88	I	I 35	90	5	I	I 1	3	I	9 I
I 28	I 62	9	2	I 79	89	6	I	I	I	I	I
I 29	I 245	18	1	I 29	133	14	I	I 2	2	I	I
I 30	I 155	12	I	I 43	79	1	I	I	3	I	27 I
I DEC 1	I 84	5	I	I 32	126	15	I	I 1	3	I	I
I	I	I	I	I	I	I	I	I	I	I	I
I 2	I 281	23	I	I 36	127	18	I	I 1	9	I	I
I 3	I 151	3	1	I 41	104	17	I	I	18	I	I
I 4	I 70	3	2	I 17	29	7	I	I 2	2	I	I
I 5	I 206	20	2	I 21	91	22	I	I	3	I	142 I
I 6	I 229	20	2	I 32	80	18	I	I	I	I	8 I
I	I	I	I	I	I	I	I	I	I	I	I
I 7	I 145	15	1	I 31	99	23	I	I	I	I	I
I 8	I 145	8	I	I 49	89	2	I	I	1	I	I
I 9	I 1625	13	I	I 41	151	3	I	I	1	I	I
I 10	I 410	22	I	I 73	134	1	I	I 1	5	I	I
I 11	I 139	27	I	I 134	144	1	I	I	3	I	I
I	I	I	I	I	I	I	I	I	I	I	I
I 12	I 58	5	I	I 58	112	I	I	I	2	I	I
I 13	I 266	22	I	I 28	135	12	I	I	3	I	I
I 14	I 184	34	I	I 38	128	8	I	I 1	7	I	I
I 15	I 220	22	I	I 29	77	2	I	I	1	I	I
I 16	I 114	12	I	I 24	71	I	I	I	1	I	I
I	I	I	I	I	I	I	I	I	I	I	I
I 17	I 125	6	I	I 24	84	6	I	I	5	I	34 I
I 18	I 52	I	I	I 15	77	5	I	I	2	I	I
I 19	I 26	I	I	I 17	77	5	I	I	I	I	I
I 20	I 122	8	3	I 23	199	12	I	I 3	5	I	3 I
I 21	I 190	7	1	I 44	434	8	I	I	4	I	4 I
I	I	I	I	I	I	I	I	I	I	I	I
I 22	I 120	10	2	I 37	343	3	I	I	4	I	4 I
I 23	I 94	23	I	I 49	366	13	I	I	I	I	I
I 24	I 114	14	I	I 38	272	4	I	I	I	I	I
I 25	I 95	48	2	I 66	284	4	I	I 1	3	I	I
I 26	I 57	5	6	I 38	281	16	I	I 3	2	I	I

KILAUEA SUMMIT				KILAUEA FLANK				MAUNA LOA		TREMOR (MINUTES)		
I	IS	SHORT	LONG	I	KAO.	UP.	LOW.	OFF-	I	I	KILAUEA	MAUNAI
I	DATE	I	PER.	PER.	30	I	& SW	EAST	EAST	SHORE	ILONG	SHORT
I	1982	I	CALDERA	KM	I	RIFT	RIFT	RIFT	PPL	I	PER.	PER.
I	I	I	I	I	I	I	I	I	I	I	I	I
I	I	I	I	I	I	I	I	I	I	I	I	I
I	DEC	27	I	57	27	I	55	329	5	I	2	I
I	28	I	61		2	I	33	284	11	I	1	4
I	29	I	61	12	2	I	44	669	7	I	1	1
I	30	I	43	3	1	I	47	1213	16	I	1	I
I	31	I	17	7	1	I	40	485	13	I	3	I
I	I	I	I	I	I	I	I	I	I	I	I	I

Table 4. Coordinates of named earthquake regions.

--All earthquakes are in one of the following groups.
 --Identified by a numerical class or 3-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 SLF - 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 SW rifts of Kilauea & Mauna Loa (0-13 km)
- 17 GLN - Glenwood (0-13 km)
- 18 SWR - SW 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 SW rift (>13 km) (below region 14)
- 23 DML - Deep Mauna Loa (>13 km) (below regions 15, 20)

--Outer regions, all depths:

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

Table 4 (continued)

 --The latitude and longitude limits of the regions are given below.

--When the coordinates imply an overlap, precedence is given as in the maps.

No.	Code	N.Lat.	S.Lat.	W.Lon.	E.Lon.
1	SNC	19 28	19 24.5	155 19	155 14
2	SSC	19 24.5	19 22	155 19	155 16.5
3	SEC	19 24.5	19 22	155 16.5	155 14
4	SER	19 26	19 20.5	155 14	155 07.2
5	SME	19 26	-----	155 07.2	155 00
6	KOA	19 22	19 20.5	155 17	155 14
7	SSF	-----	19 10	155 17	155 00
8	SLE	19 32	19 16	155 00	154 40
9	SF1	19 22	19 10	155 17	155 14.5
10	SF2	19 26	19 10	155 14.5	155 12.3
11	SF3	19 26	19 10	155 12.3	155 09.1
12	SF4	19 26	19 10	155 09.1	155 05.3
13	SF5	19 26	19 10	155 05.3	155 00
14	LER	19 32	19 16	155 00	154 40
15	MLO	19 43	19 19	155 35	155 19
16	LSW	19 19	18 40	155 43	155 25
17	GLN	19 43	19 26	155 19	155 00
18	SWR	19 22	19 10	155 25	155 17
19	INT	19 28	19 22	155 19	155 14
20	KA0	19 30	19 19	155 32	155 19
21	DEP	19 43	19 10	155 25	155 00
22	DLS	19 19	18 40	155 43	155 25
23	DML	19 43	19 19	155 35	155 19
24	LOI	19 10	18 40	155 25	155 00
25	KON	19 39	19 00	156 20	155 43
26	HUA	19 55	19 39	156 20	155 43
27	KOH	20 25	19 55	156 20	155 34
28	KEA	20 25	19 43	155 43	154 40
29	HIL	19 47	19 32	155 09	154 40

Figure 4. Earthquake classification, shallow 0-5 km deep Kilauea and east flank Mauna Loa.

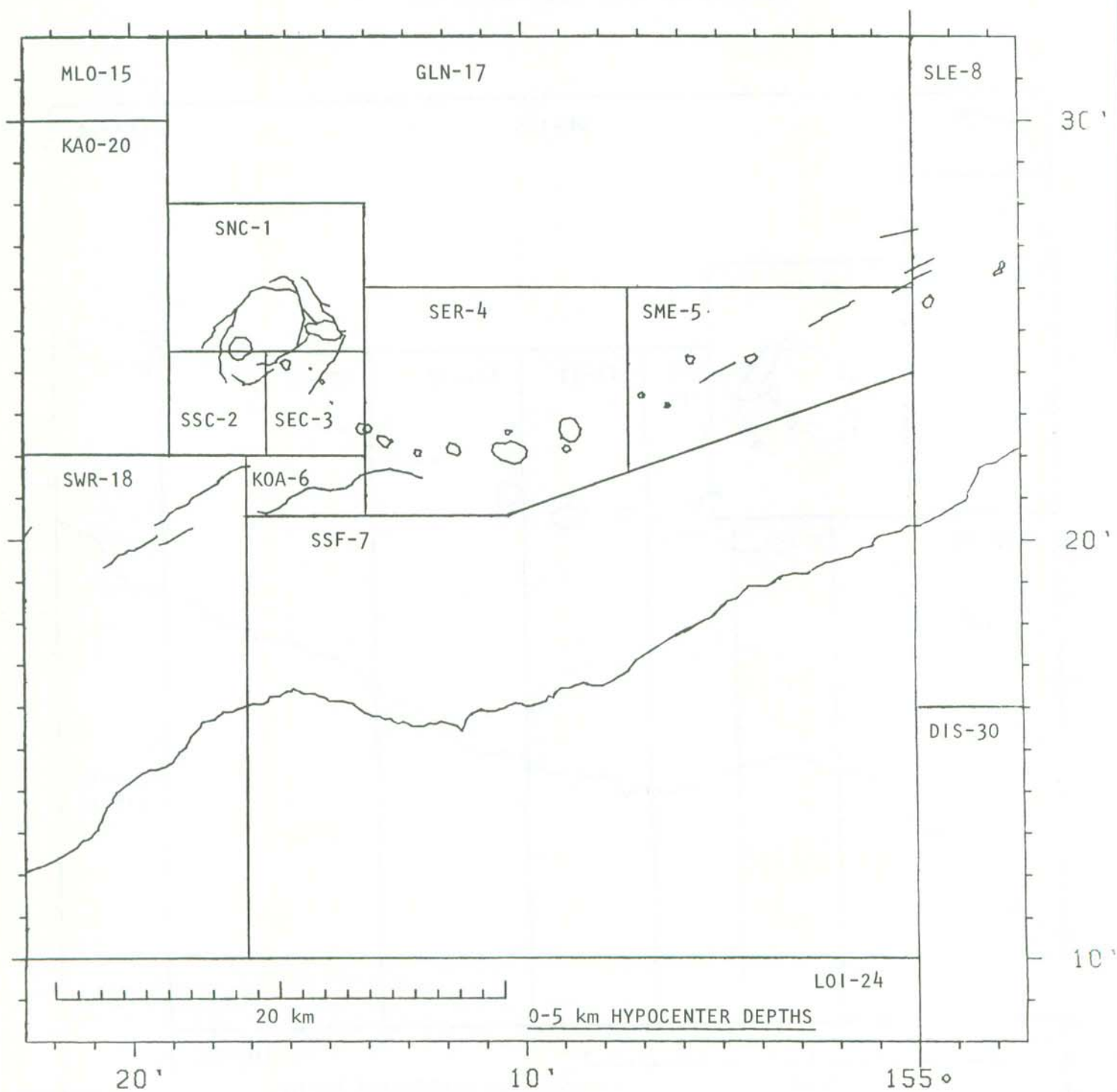


Figure 5. Earthquake classification, intermediate 5-13 km
Kilauea and east flank Mauna Loa.

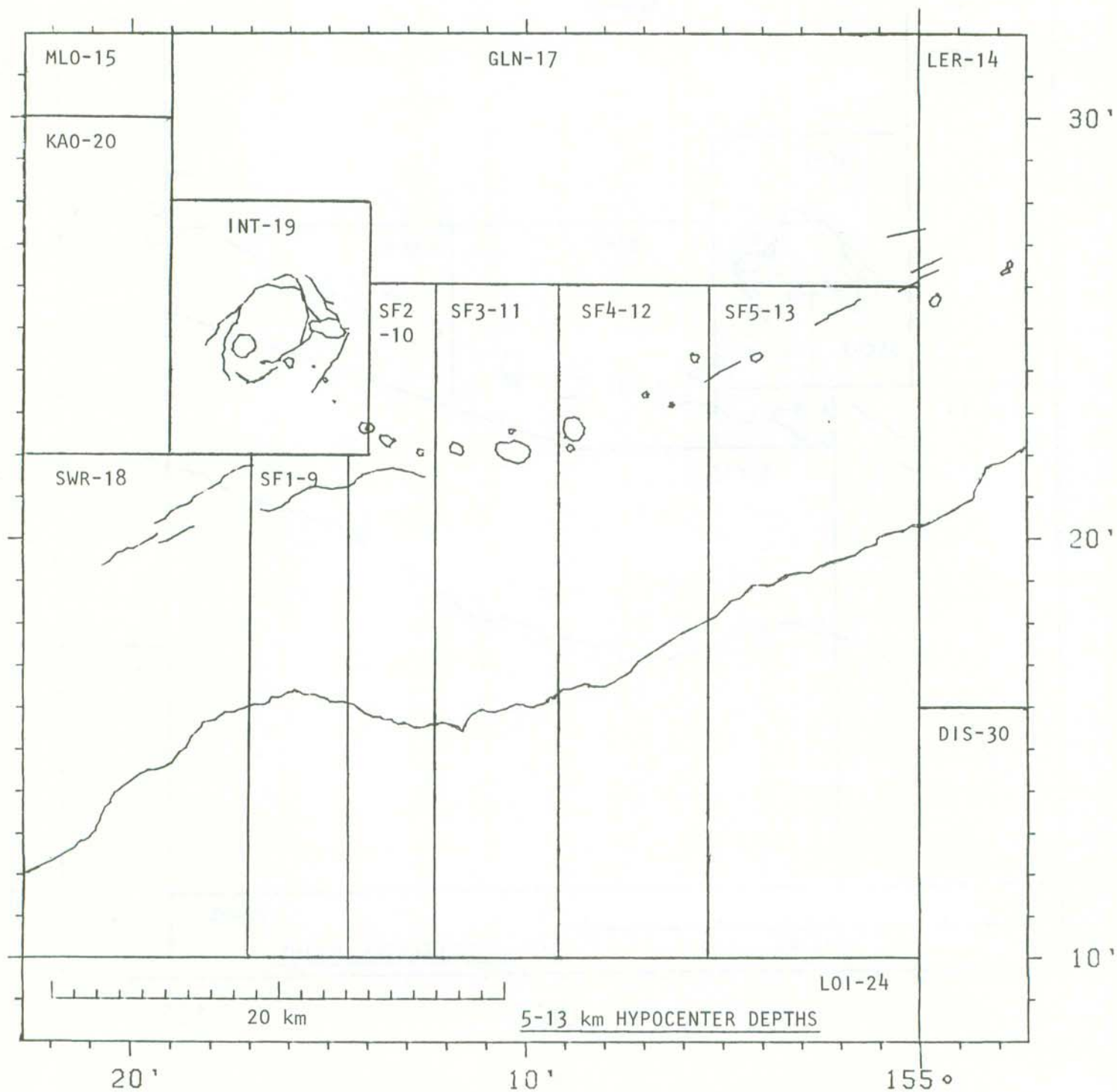


Figure 6. Earthquake classification, crustal 0-13 km deep island of Hawaii.

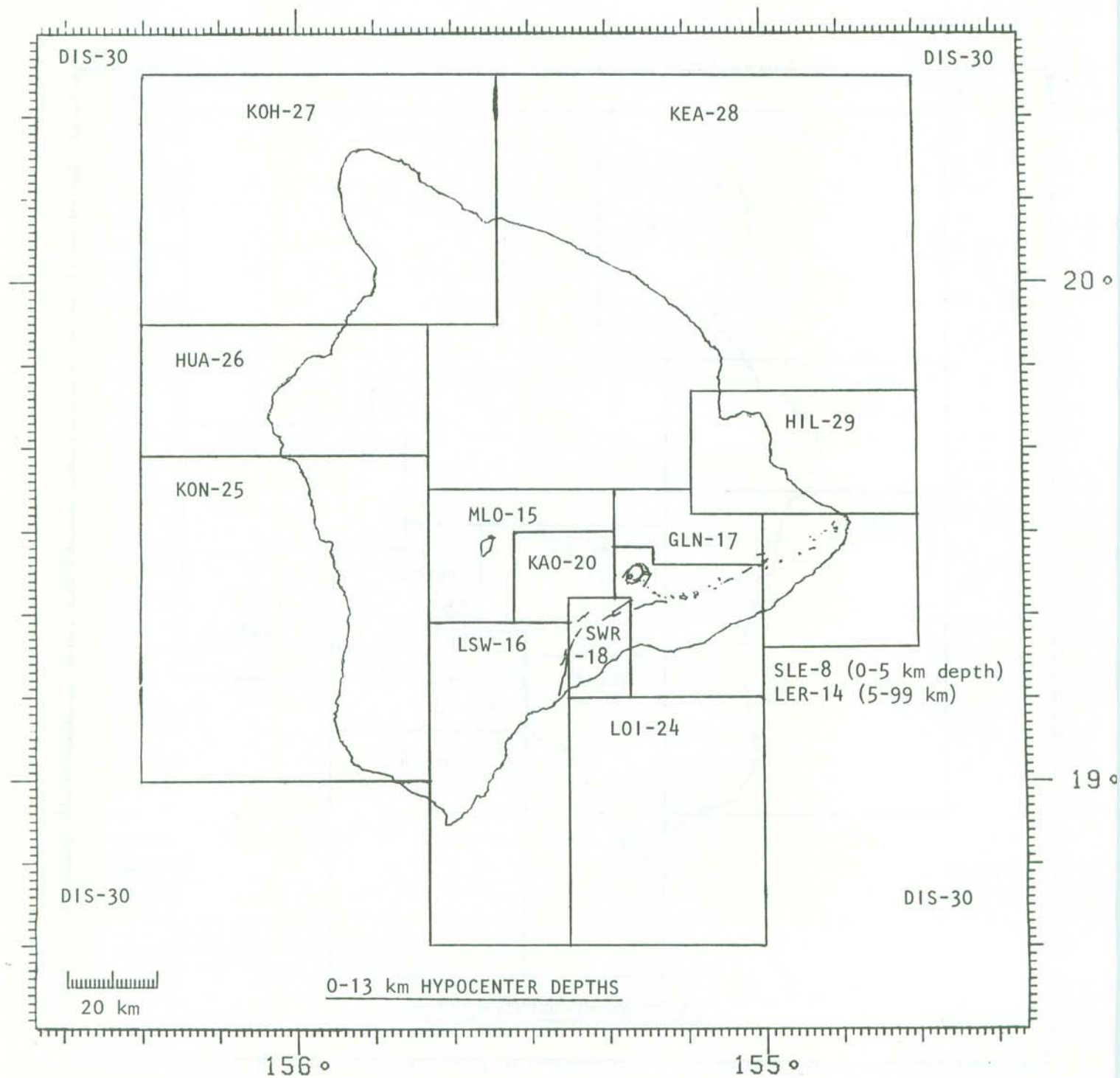
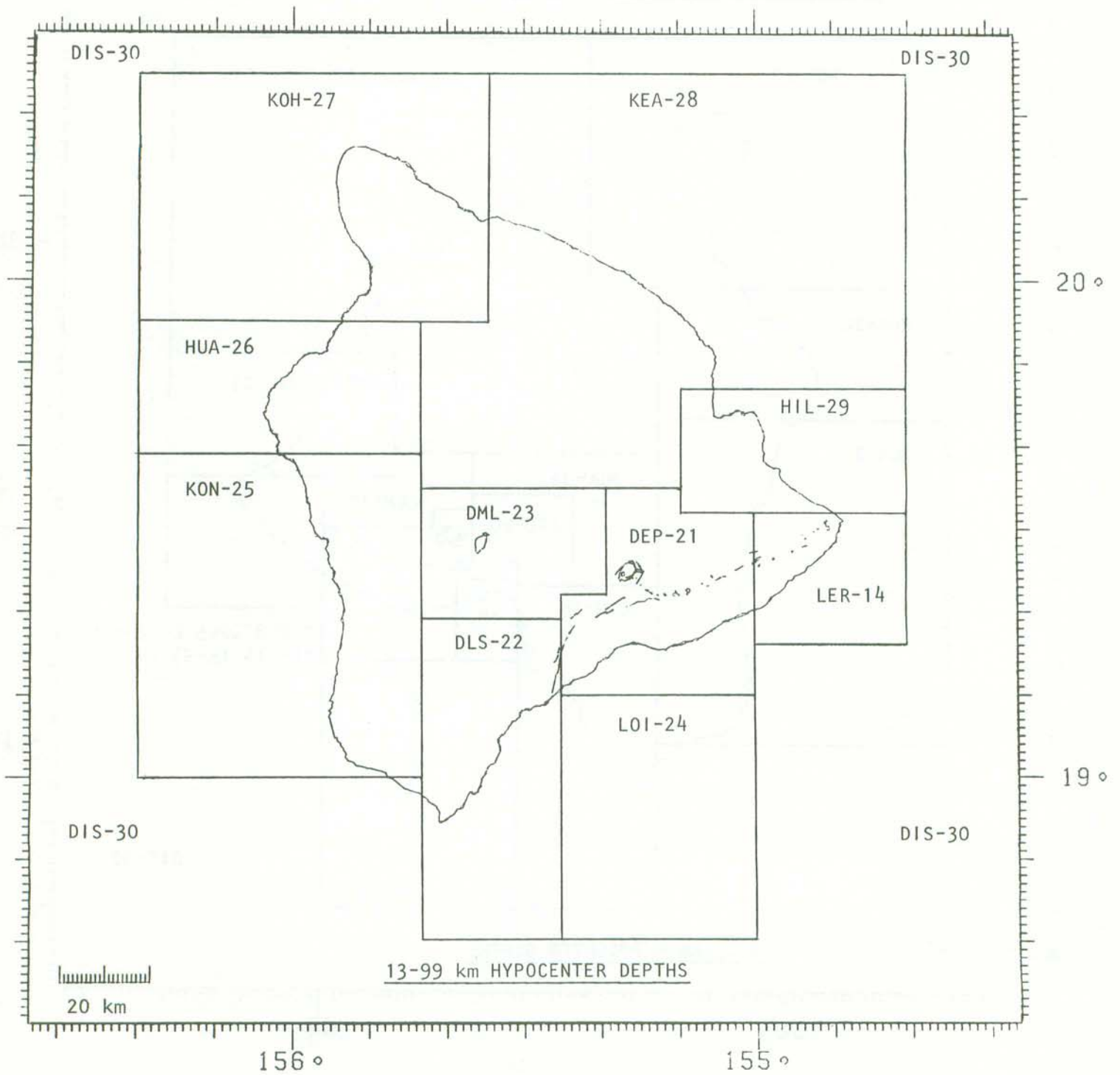
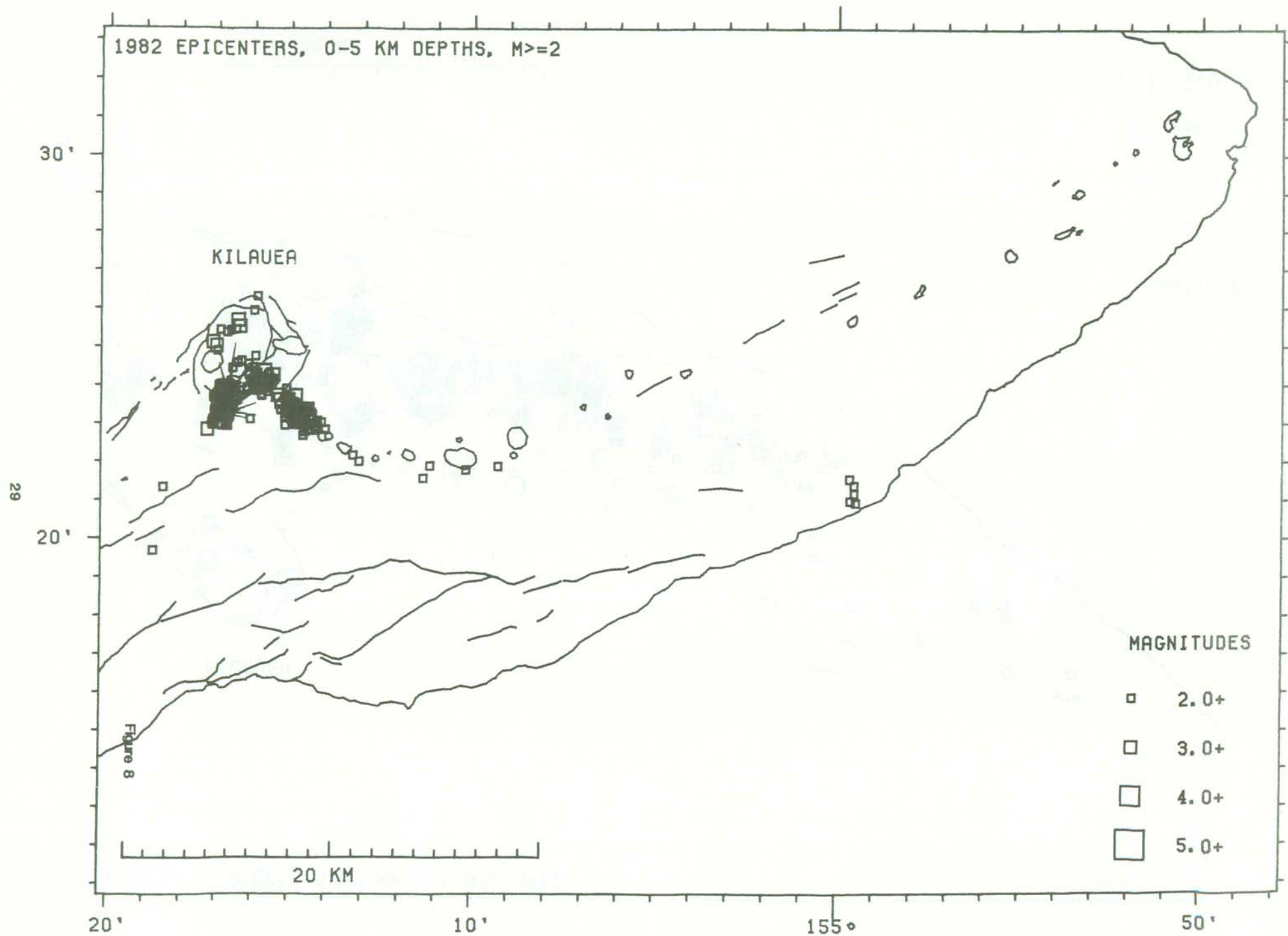
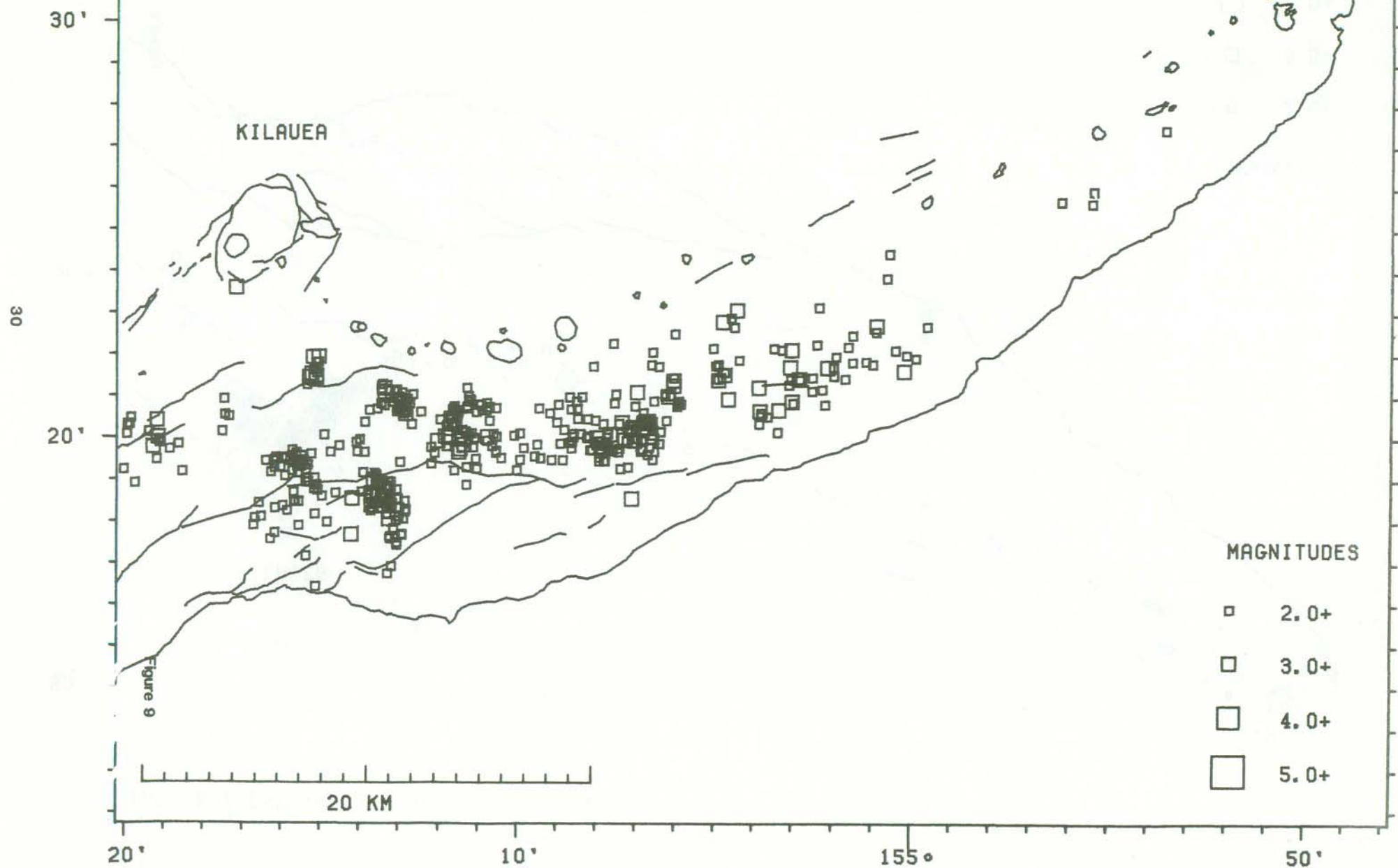


Figure 7. Earthquake classification mantle >13 km deep island of Hawaii.





1982 EPICENTERS, 5-13 KM DEPTHS, $M \geq 2$



1982 EPICENTERS, 0-13 KM DEPTHS, $M \geq 2$

MAGNITUDES

□ 2.0+

□ 3.0+

□ 4.0+

□ 5.0+

MAUNA LOA

Figure 10

20 KM

31

30'

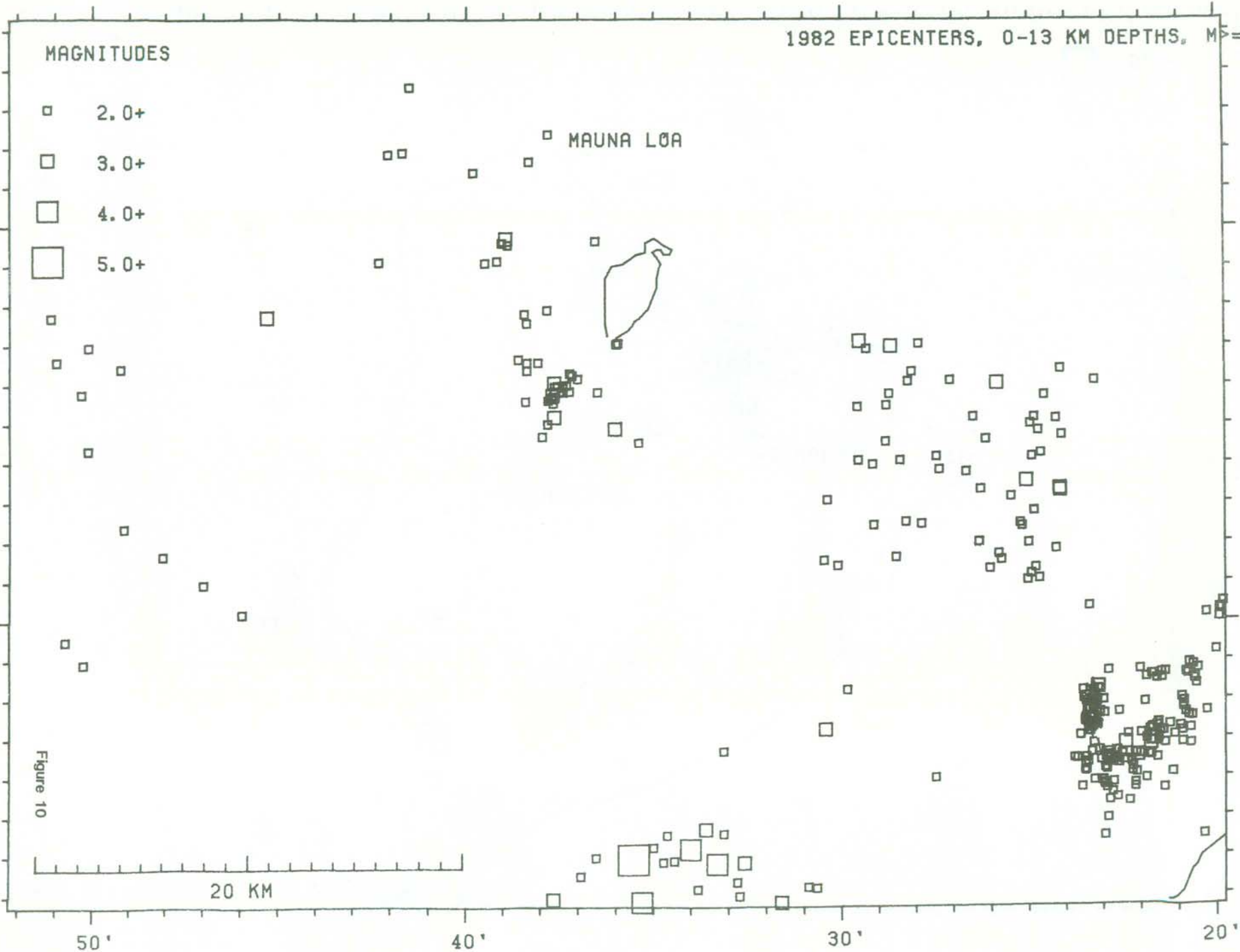
20'

50'

40'

30'

20'



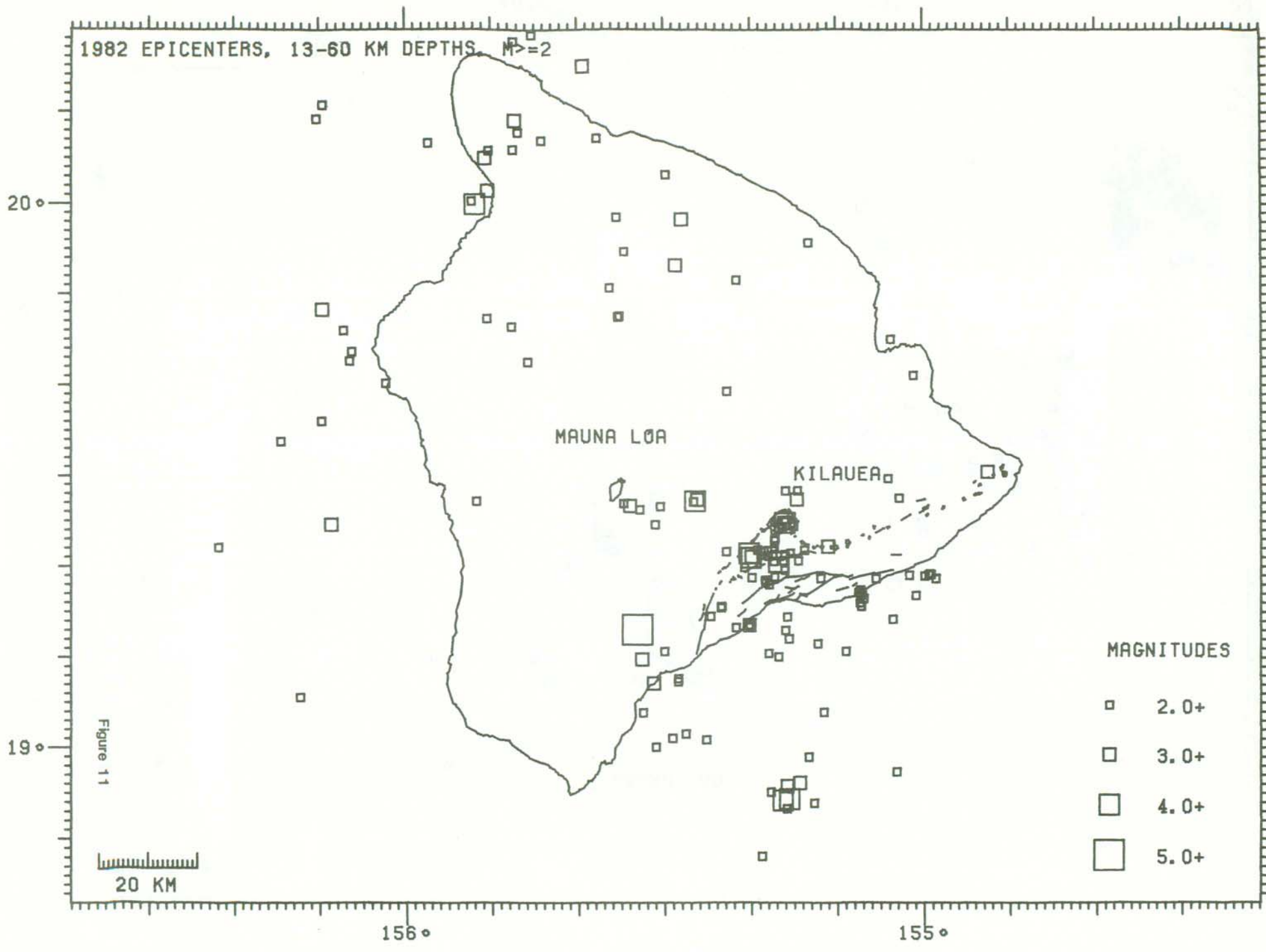
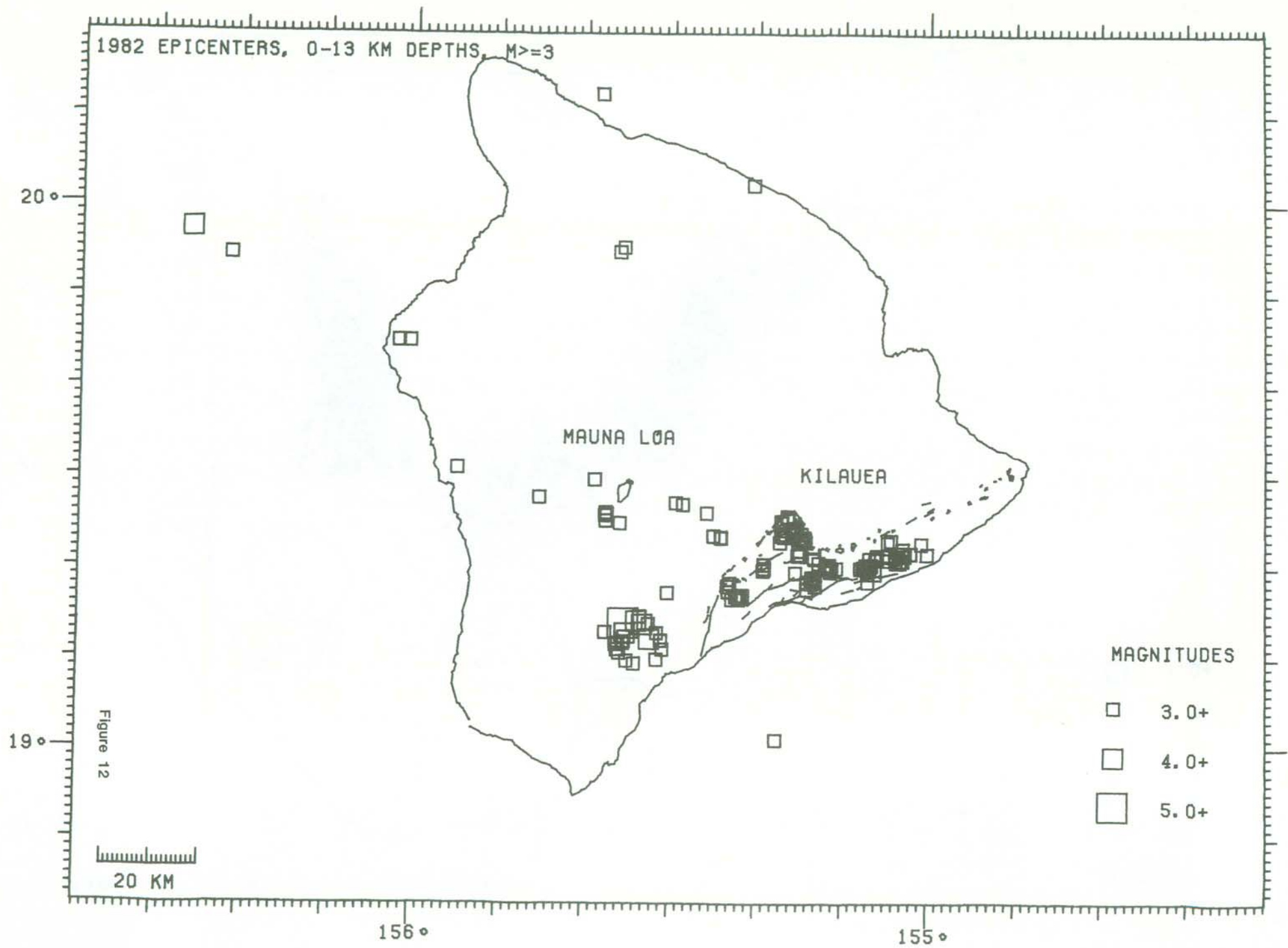


Figure 11



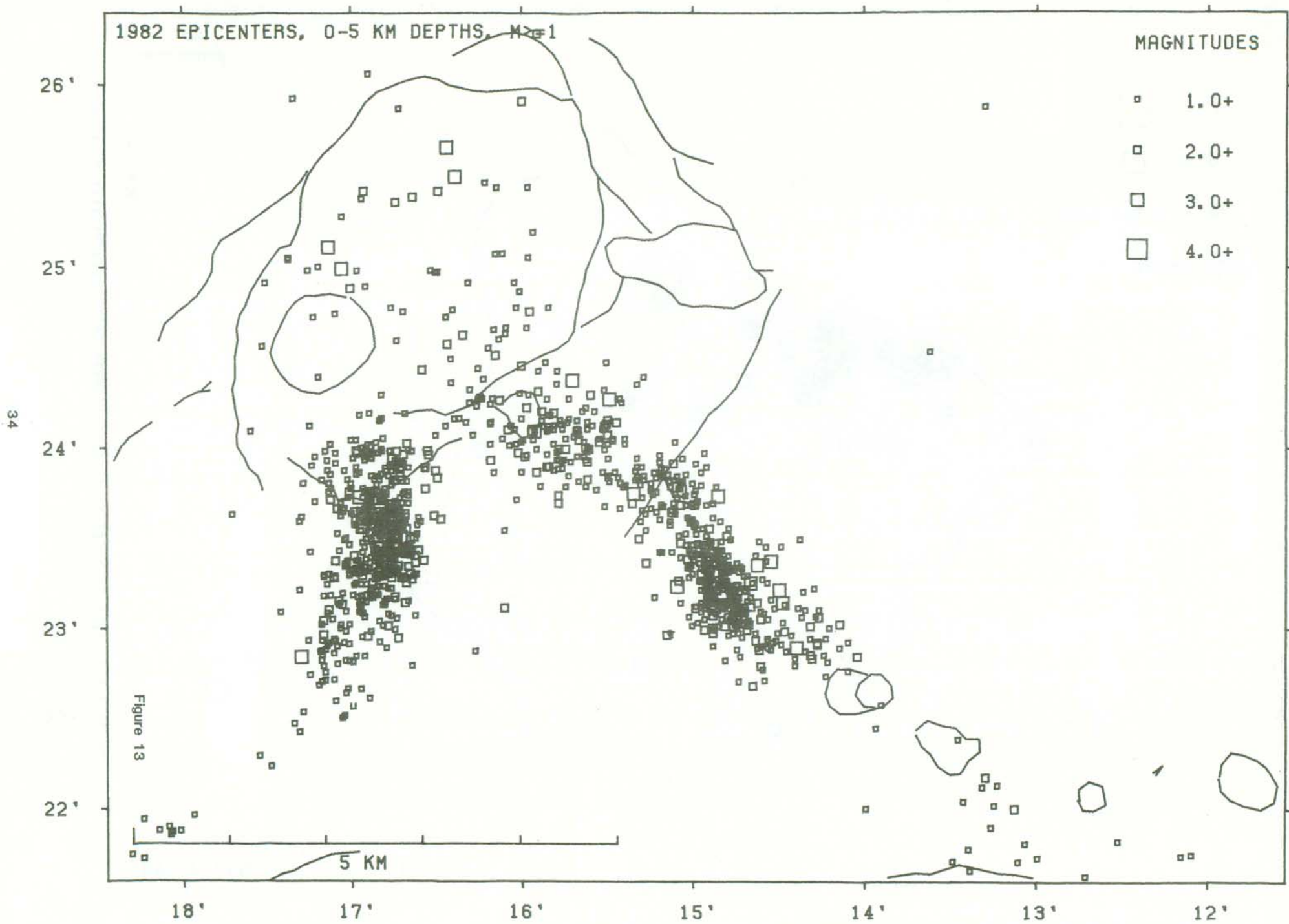


Table 5 is a chronological listing of successfully located earthquakes. For each event the following data are presented:

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).

DEPTH - Depth of focus in km.

AMP MAG - Amplitude magnitude, if determined.

DUR MAG - Duration magnitude, if determined.

NR - Number of arrivals (P or S) used for solution.

NS - Number of S arrivals used for solution.

GAP DEG - Largest azimuthal separation in degrees between stations.

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

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

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

ERH km - Standard error of the epicenter in km.

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

REMK - Remarks, three letter code for geographic location of event. See Figure 2 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.

Table 5 lists all events located during 1982. Table 6 lists only events of magnitude 3.0 or larger.

Table 6.

HVO EARTHQUAKE SUMMARY LIST

PAGE 1

YEAR	MON	DA	HR	MIN	SEC	ORIGIN TIME	LAT N	DEG	MIN	LON W	DEG	MIN	DEPTH	KM	MAG	AMP	DUR	NR	NS	GAP	RMS	MIN	DIS	ERH	KM	ERZ	NO	REMK
1982	JAN	1	134	20.23	19	23.59	155	16.91		2.75	2.3	2.6	32	5	40	.11	0	.2	.2	20	SSC			.2	.2	20	SSC	
		1	138	2.56	19	23.50	155	17.04		2.79	1.3	1.2	19	4	55	.08	0	.3	.3	11	SSC			.3	.3	11	SSC	
		1	143	.27	19	23.79	155	16.77		2.52	1.1	1.0	17	3	67	.08	0	.3	.2	14	SSC			.3	.2	14	SSC	
		1	156	5.11	19	23.22	155	16.95		2.58	.8	.5	15	5	59	.07	0	.3	.3	9	SSC			.3	.3	9	SSC	
		1	22	2.00	19	23.60	155	16.96		3.13	.8	.5	13	4	69	.06	0	.3	.4	10	SSC			.3	.4	10	SSC	
		2	341	22.74	19	26.10	155	27.09		8.20	2.8	2.8	31	2	49	.13	7	.4	.9	28	KA0			.4	.9	28	KA0	
		2	6	1	8.62	19	23.18	155	16.91	2.36	1.9	2.4	22	2	60	.10	2	.3	.5	19	SSC			.3	.5	19	SSC	
		2	918	6.28	19	25.95	155	23.91		9.09	2.1	1.7	24	1	52	.11	7	.4	1.0	19	KA0			.4	1.0	19	KA0	
		2	1430	50.72	19	42.44	155	42.98		16.80	1.8	2.0	26	0	91	.10	13	.6	2.8	15	KEA			.6	2.8	15	KEA	
		3	453	6.30	19	24.16	155	16.59		8.60	1.6	1.8	24	4	56	.11	1	.4	.7	12	INT L			.4	.7	12	INT L	
		3	456	2.41	19	18.45	155	15.05		9.56	1.9	1.6	29	3	101	.09	4	.5	.7	18	SF1			.5	.7	18	SF1	
		3	545	55.33	19	23.50	155	16.86		2.77	2.0	2.3	30	4	37	.10	0	.2	.2	20	SSC			.2	.2	20	SSC	
		3	556	49.16	19	23.87	155	16.80		2.89	1.4	1.6	20	3	72	.05	0	.3	.2	10	SSC			.3	.2	10	SSC	
		3	615	7.06	19	25.38	155	16.94		1.74	1.6	1.8	18	2	158	.11	1	.5	.2	12	SNC			.5	.2	12	SNC	
		3	829	38.53	19	24.56	155	17.53		2.11	1.5	1.6	16	3	59	.10	1	.4	.3	11	SNC			.4	.3	11	SNC	
		3	1415	10.50	19	23.30	155	16.62		2.64	1.7	1.4	18	3	56	.13	1	.4	.3	9	SSC			.4	.3	9	SSC	
		3	164	39.02	19	23.39	155	16.89		2.99	1.1	1.2	19	3	53	.08	0	.3	.3	12	SSC			.3	.3	12	SSC	
		3	197	44.81	19	25.76	155	50.30		11.67	2.6	2.4	34	3	117	.19	11	.6	.5	20	KON			.6	.5	20	KON	
		3	1955	44.36	19	23.75	155	16.67		2.62	1.3	1.4	21	3	43	.10	0	.3	.3	16	SSC			.3	.3	16	SSC	
		3	2157	41.71	19	24.19	155	16.90		2.78	1.0	1.0	14	3	85	.05	1	.3	.2	10	SSC			.3	.2	10	SSC	
		3	2359	38.32	19	23.23	155	16.81		3.03	1.6	1.9	24	5	57	.08	0	.3	.2	16	SSC			.3	.2	16	SSC	
		4	034	23.32	19	16.88	155	12.53		7.13	1.7	1.4	31	1	187	.12	2	.7	1.0	18	SF2			.7	1.0	18	SF2	
		4	039	2.08	19	29.49	155	41.90		7.93	2.3	1.3	29	1	71	.14	7	.5	1.2	19	MLO			.5	1.2	19	MLO	
		4	449	8.39	19	20.60	155	12.44		8.86	1.9	2.1	34	3	102	.11	4	.5	.6	23	SF2			.5	.6	23	SF2	
		4	1039	27.26	19	23.86	155	16.96		2.79	1.3	1.6	19	3	64	.08	1	.3	.2	11	SSC			.3	.2	11	SSC	
		4	1114	40.27	19	18.48	155	13.26		9.99	2.9	3.0	39	3	171	.09	8	.6	.5	30	SF2			.6	.5	30	SF2	
		4	1129	44.48	19	17.61	155	13.22		9.20	2.1	2.0	27	1	205	.09	9	1.0	.8	22	SF2			1.0	.8	22	SF2	
		4	1230	8.38	19	18.73	155	13.45		8.51	1.9	1.5	28	2	171	.09	7	.8	.7	9	SF2			.8	.7	9	SF2	
		4	1254	47.60	19	18.08	155	13.05		6.30	1.9	1.6	26	2	174	.10	8	.6	1.6	16	SF2			.6	1.6	16	SF2	
		4	13	3	28.73	19	17.78	155	13.01	6.45	1.6	1.6	25	3	115	.10	2	.5	.9	15	SF2			.5	.9	15	SF2	
		4	1336	1.87	19	24.77	155	16.77		1.70	1.3	1.8	15	1	142	.09	0	.4	.3	10	SNC			.4	.3	10	SNC	
		4	1345	14.74	19	23.72	155	16.82		2.81	1.5	1.7	24	3	56	.08	1	.3	.2	14	SSC			.3	.2	14	SSC	
		4	1433	9.20	19	17.27	155	13.02		7.92	1.9	1.8	33	1	154	.11	1	.6	.8	23	SF2			.6	.8	23	SF2	
		4	1557	42.58	19	23.63	155	16.69		3.24	2.0	2.5	28	3	44	.10	1	.3	.2	19	SSC			.3	.2	19	SSC	
		4	1814	11.12	19	19.97	155	26.32		10.37	1.9	1.9	36	4	59	.11	5	.4	.5	19	KA0			.4	.5	19	KA0	
		4	1940	29.55	19	19.71	155	6.82		7.83	2.1	1.9	33	1	119	.10	5	.4	.7	20	SF4			.4	.7	20	SF4	
		4	22	3	13.74	19	23.71	155	16.90	2.92	1.3	1.5	20	3	60	.08	1	.3	.2	10	SSC			.3	.2	10	SSC	
		5	635	39.83	19	21.71	155	6.64		6.41	1.7	1.8	34	3	80	.13	6	.5	1.2	25	SF4			.5	1.2	25	SF4	
		5	849	11.37	19	19.29	155	15.27		7.10	1.6	1.3	29	1	89	.10	4	.5	.9	16	SF1			.5	.9	16	SF1	
		5	1240	39.28	19	19.87	155	11.08		7.98	1.8	1.0	27	2	89	.11	5	.6	1.1	21	SF3			.6	1.1	21	SF3	
		5	1246	55.79	19	23.33	155	16.90		2.83	1.1	1.4	17	3	55	.06	0	.3	.3	10	SSC			.3	.3	10	SSC	
		5	19	3	53.72	19	23.67	155	16.91	3.05	1.1	1.0	17	4	54	.05	1	.3	.2	9	SSC			.3	.2	9	SSC	
		5	1920	56.40	19	20.48	155	13.45		7.02	1.5	1.3	27	2	62	.12	4	.5	.9	17	SF2			.5	.9	17	SF2	
		5	1922	56.37	19	25.18	155	25.08		9.86	2.1	1.6	40	4	33	.11	0	.4	.5	23	KA0			.4	.5	23	KA0	
		5	22	9	48.03	19	23.77	155	16.94	3.10	1.6	2.1	25	4	64	.08	1	.3	.2	16	SSC			.3	.2	16	SSC	
		5	2211	52.44	19	23.65	155	16.86		2.68	1.9	1.8	23	4	51	.08	1	.3	.2	15	SSC			.3	.2	15	SSC	
		6	152	2.68	19	23.98	155	16.65		3.35	1.7	1.7	22	3	81	.14	0	.4	.3	7	SSC			.4	.3	7	SSC	
		6	218	28.79	19	23.28	155	17.17		2.85	.8	.8	14	3	70	.21	0	.5	.6	8	SSC			.5	.6	8	SSC	

HVO EARTHQUAKE SUMMARY LIST

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YEAR	MON	DA	HR	MIN	SEC	ORIGIN TIME	LAT N	DEG	MIN	LON W	DEG	MIN	DEPTH	KM	AMP	MAG	DUR	MAG	NR	NS	GAP	RMS	MIN	DIS	ERH	KM	ERZ	NO	REMK
1982	JAN	6	3	4	28.13	19	23.30	155	16.66	2.93	1.9	2.3	27	3	40	.10	1	.3	.2	19	SSC			.3	.2	19	SSC		
		6	531	53.84	19	22.64	155	17.04		2.75	1.4	1.4	16	0	46	.06	1	.3	.4	12	SSC			.3	.4	12	SSC		
		6	6	9	23.15	19	19.52	155	13.35	6.02	2.0	1.8	37	2	71	.14	5	.5	.9	24	SF2			.5	.9	24	SF2		
		6	1147	10.63	19	21.14	155	2.42		7.09	1.3	1.3	14	2	143	.05	2	.5	.9	6	SF5			.5	.9	6	SF5		
		6	12	8	32.00	19	21.32	155	7.17	5.67	1.4	1.3	29	5	82	.09	5	.4	1.0	16	SF4			.4	1.0	16	SF4		
		6	1640	12.30	19	23.58	155	16.91		2.88	1.7	1.7	18	3	46	.07	0	.3	.2	14	SSC			.3	.2	14	SSC		
		6	2125	14.30	19	51.59	155	21.64		25.97	2.3	1.8	30	4	87	.09	4	.6	1.4	22	KEA			.6	1.4	22	KEA		
		6	2348	23.40	19	24.99	155	24.84		8.15	1.5	1.2	28	4	36	.09	1	.4	.9	18	KA0			.4	.9	18	KA0		
		7	336	.58	19	23.83	155	27.89		9.48	1.9	1.8	35	2	49	.10	3	.4	.7	31	KA0			.4	.7	31	KA0		
		7	9	42	3.32	19	16.80	155	22.21	6.31	1.8	1.8	30	2	127	.12	6	.5	1.3	21	SWR			.5	1.3	21	SWR		
		7	1239	15.79	19	21.09	155	18.06		31.08	2.1	1.8	36	0	43	.11	2	.7	1.3	28	DEP			.					
		7	1858	48.66	19	18.25	155	14.94		6.86	1.3	1.6	25	2	128	.09	3	.5	1.0	19	SF1			.					
		7	2348	22.30	19	23.81	155	16.68		2.80	1.7	1.4	23	4	54	.10	0	.3	.2	11	SSC			.					
		8	116	36.08	19	23.37	155	16.98		2.67	1.3	1.6	21	3	46	.11	0	.3	.3	14	SSC			.					
		8	136	30.49	19	20.54	155	4.27		7.94	1.9	1.6	32	2	112	.10	3	.5	.8	20	SF5			.					
		8	624	51.43	19	26.24	155	37.17		2.90	2.4	2.3	28	2	112	.14	2	.5	.7	21	ML0			.					
		8	836	30.57	19	26.32	155	38.35		3.28	2.2	1.5	13	1	102	.10	4	.6	1.2	9	ML0			.					
		8	1325	20.23	19	23.61	155	16.92		2.75	1.5	1.5	20	4	49	.07	0	.3	.2	10	SSC			.					
		8	1329	43.68	19	23.53	155	16.84		2.98	1.4	1.3	19	2	37	.07	0	.3	.2	13	SSC			.					
		8	1825	37.61	19	19.79	155	14.51		8.68	2.5	2.2	36	0	79	.11	5	.4	.5	29	SF2			.					
		8	2042	42.51	19	19.95	155	9.09		7.11	1.6	1.4	27	2	78	.11	4	.5	.9	19	SF4			.					
		9	014	34.15	19	20.17	155	7.05		7.93	1.9	1.3	26	4	105	.07	5	.4	.7	13	SF4			.					
		9	231	18.21	19	23.07	155	16.63		2.62	1.6	2.1	20	1	55	.09	1	.4	.3	15	SSC			.					
		9	432	7.29	19	9.80	155	32.58		34.14	3.1	3.2	33	1	120	.08	8	.7	1.6	32	DLS			.					
		9	640	32.38	19	16.69	155	23.12		8.76	2.1	2.5	22	0	125	.14	7	.7	1.0	17	SWR			.					
		9	1055	22.15	19	23.70	155	16.89		2.89	1.4	1.1	13	0	96	.08	1	.6	.3	9	SSC			.					
		9	1119	55.68	19	23.98	155	15.79		2.66	1.5	1.9	14	1	112	.10	3	.5	.8	11	SEC			.					
		9	1324	59.53	20	14.94	155	39.28		42.95	3.6	3.3	47	3	267	.11	19	1.4	1.5	40	KOH F			.					
		9	1354	36.88	19	42.13	156	9.10		12.77	2.7	2.4	39	2	251	.13	33	1.6	.9	27	HUA			.					
		9	1728	59.82	19	23.42	155	16.66		3.00	2.4	2.7	34	3	38	.11	1	.2	.3	24	SSC			.					
		9	1730	12.72	19	23.41	155	16.66		2.99	1.9	2.1	24	2	54	.11	1	.3	.3	17	SSC			.					
		9	2143	23.54	19	33.77	156	14.42		28.39	2.1	1.9	12	0	267	.08	35	2.8	3.0	6	KON			.					
		10	547	5.89	19	20.39	155	12.78		8.04	1.6	1.4	29	1	68	.11	4	.5	.8	18	SF2			.					
		10	7	4	32.61	19	21.44	155	5.80	7.56	1.4	1.2	25	2	88	.13	3	.6	.7	19	SF4			.					
		10	1643	9.02	19	21.56	155	18.53		1.52	1.1	1.5	11	1	96	.09	3	.4	.9	8	SWR			.					
		10	22	9	11.04	19	17.58	155	21.17	5.47	1.7	1.2	19	2	126	.09	5	.5	1.5	9	SWR			.					
		11	234	59.86	20	6.09	155	34.20		34.34	2.0	1.8	21	2	210	.08	22	.9	1.4	12	KOH			.					
		11	825	31.75	19	23.31	155	16.98		2.61	1.1	1.4	10	1	88	.04	4	.4	1.0	10	SSC			.					
		11	937	17.35	19	17.21	155	21.76		7.04	2.1	2.7	40	0	126	.15	6	.4	.8	31	SWR			.					
		11	1127	15.94	19	23.93	155	16.75		2.70	1.1	1.0	13	2	84	.10	2	.4	.5	7	SSC			.					
		11	1135	27.71	19	26.06	155	16.90		1.63	1.5	1.4	12	1	177	.09	2	.7	.5	11	SNC			.					
		11	1347	39.79	19	19.70	155	11.25		7.77	1.8	2.1	39	2	92	.11	5	.5	.8	21	SF3			.					
		11	1629	23.90	19	23.40	155	16.78		3.04	2.4	2.6	34	3	38	.10	0	.2	.2	21	SSC			.					
		11	1746	14.77	19	23.59	155	16.85		2.78	1.6	1.8	22	2	43	.10	0	.3	.2	15	SSC			.					
		11	2223	3.62	19	23.51	155	16.84		2.93	1.2	1.3	17	2	39	.08	0	.3	.3	10	SSC			.					
		12	327	40.30	19	20.36	155	6.52		8.71	1.1	1.1	23	1	108	.07	5	.5	.8	13	SF4			.					
		12	328	28.31	18	53.38	155	15.63		11.58	2.4	2.6	32	1	252	.11	37	1.7	.8	13	LOT			.					
		12	613	33.50	19	18.21	155	20.95		7.73	2.0	1.8	37	3	118	.13	4	.4	.7	21	SWR			.					

HVO EARTHQUAKE SUMMARY LIST

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YEAR	MON	DA	HR	MIN	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	
1982	JAN	12	835	59.22	19	17.11	155 23.41	4.97	1.7	1.6	25	1	119	.16	6	.6	1.9	20	SWR	
		12	1032	2.80	19	20.17	155 6.54	8.60	2.5	2.2	39	4	112	.09	5	.4	.6	30	SF4	
		12	1215	16.59	19	27.66	155 24.04	7.32	2.1	1.3	39	4	34	.12	4	.3	.7	27	KA0	
		12	1255	4.06	19	23.84	155 .61	8.82	2.6	2.2	44	3	142	.14	4	.6	.5	33	SF5	
		12	2030	24.97	19	24.72	155 17.23	2.51	1.8	1.6	26	3	46	.09	1	.3	.2	17	SNC	
		12	2239	53.09	19	20.01	155 12.77	7.25	1.5	1.2	32	2	73	.10	5	.4	.7	19	SF2	
		12	2254	1.37	19	23.16	155 16.75	2.95	1.6	1.3	23	3	46	.10	1	.3	.3	14	SSC	
		12	2259	9.12	19	23.64	155 16.77	2.27	2.7	2.9	44	2	36	.12	1	.2	.2	32	SSC	
		12	2352	53.52	19	21.48	155 15.18	8.68	2.0	1.6	33	1	64	.10	2	.4	.7	24	SF1	
		13	848	53.50	19	23.93	155 15.79	3.57	1.0	1.2	14	2	110	.06	1	.4	.5	10	SEC	
		13	853	55.99	19	23.29	155 16.84	3.01	1.0	1.4	15	1	46	.05	0	.3	.3	10	SSC	
		13	936	34.86	19	11.94	155 36.70	7.13	2.2	1.6	34	3	92	.24	6	.8	1.2	20	LSW	
		13	1029	9.04	19	25.60	155 37.81	1.72	2.8	2.8	33	1	97	.12	4	.4	1.1	26	ML0	
		13	1327	11.87	19	18.31	155 12.98	10.00	2.7	2.5	43	4	137	.12	8	.5	.6	30	SF2	
		13	1553	50.06	19	19.69	155 9.78	8.04	1.4	1.4	27	2	90	.08	4	.6	1.0	15	SF3	
		13	16	29.83	19	19.44	155 50.74	7.15	2.6	1.6	30	2	158	.15	7	.5	.8	14	KON	
		13	1613	53.75	19	24.00	155 16.95	2.66	1.8	1.9	25	3	65	.12	1	.3	.2	17	SSC	
		13	1624	33.94	19	23.47	155 16.88	3.07	.9	1.0	17	4	59	.05	0	.3	.3	11	SSC	
		14	249	42.45	19	23.54	155 16.92	3.20	.8	1.2	17	3	68	.06	0	.3	.3	8	SSC	
		14	240	47.71	19	27.42	154 52.84	4.52	1.4	1.2	18	0	142	.14	3	.8	1.6	15	SLE	
		14	356	23.51	19	21.06	155 12.91	7.84	2.1	2.3	41	3	60	.12	3	.4	.6	26	SF2	
		14	542	23.37	19	18.05	155 23.51	3.26	1.7	1.4	24	2	92	.07	4	.3	.8	12	SWR	
		14	637	54.89	19	43.63	156 6.19	32.19	2.4	2.1	32	3	243	.10	28	1.2	1.5	25	HUA	
		14	650	32.68	20	5.81	155 50.14	28.46	2.4	2.0	33	3	231	.11	7	1.5	1.6	20	KOH	
		14	1059	48.53	19	20.39	155 12.76	7.50	1.5	1.7	36	3	69	.10	4	.4	.7	23	SF2	
		14	1142	44.69	19	16.68	155 21.85	6.30	.9	1.5	23	2	132	.09	6	.5	1.4	16	SWR	
		14	2349	16.74	19	19.54	155 15.68	8.69	2.2	2.4	46	3	88	.12	3	.4	.5	22	SF1	
		15	0	52.65	20	5.02	155 50.61	27.78	3.6	3.8	50	5	226	.11	8	1.1	1.4	44	KOH F	
		15	1	42.07	19	18.59	155 13.67	9.55	3.7	3.8	47	3	70	.12	3	.5	.5	40	SF2	
		15	235	21.55	19	18.97	155 13.25	7.52	1.6	1.5	29	2	79	.09	4	.4	.8	18	SF2	
		15	4	39.10	19	20.79	155 3.05	7.11	1.6	1.5	30	2	121	.13	2	.5	.7	12	SF5	
		15	417	53.67	19	20.99	155 13.33	8.92	1.3	1.3	26	1	57	.09	3	.5	.8	14	SF2	
		15	749	20.61	19	16.74	155 22.25	5.51	1.8	1.8	33	3	128	.12	5	.4	1.3	18	SWR	
		15	1135	44.30	19	27.69	155 51.12	7.96	2.8	2.0	29	3	108	.15	8	.6	.7	18	KON	
		15	1434	43.03	19	20.16	155 12.52	7.80	1.6	1.5	31	2	73	.11	5	.5	.8	22	SF2	
		15	16	7	26.34	19	18.07	155 16.68	9.09	2.5	2.7	44	3	123	.13	3	.4	.5	34	SF1
		15	1844	31.15	19	23.88	155 16.80	2.94	1.8	2.4	31	4	68	.11	0	.3	.2	16	SSC	
		15	1956	15.96	19	23.61	155 16.84	2.87	1.4	1.6	19	3	44	.06	0	.3	.2	13	SSC	
		15	2359	50.54	19	21.47	155 18.42	1.46	1.5	2.0	16	2	71	.08	3	.5	.7	12	SWR	
		16	337	36.72	19	23.27	155 16.65	3.07	2.6	3.1	43	2	39	.11	1	.2	.3	32	SSC	
		16	454	26.70	19	23.14	155 16.69	3.39	2.1	2.5	30	4	40	.11	1	.3	.3	23	SSC	
		16	459	10.81	19	23.33	155 16.74	3.00	1.2	1.3	21	4	46	.08	0	.3	.3	13	SSC	
		16	507	35.78	19	44.09	155 17.81	27.54	2.3	1.6	45	4	109	.11	18	.6	1.5	36	KEA	
		16	6	9	28.25	19	19.43	31.48	2.0	1.7	43	2	86	.10	5	.6	1.0	33	DEP	
		16	840	13.43	19	23.27	155 16.70	3.45	1.8		27	5	49	.09	0	.3	.3	18	SSC	
		16	840	56.47	19	23.36	155 16.93	2.91	.8	1.1	16	4	54	.06	0	.3	.2	9	SSC	
		16	957	9.95	19	21.52	155 15.21	9.87	3.1	3.4	46	2	64	.11	2	.4	.4	39	SF1 F	
		16	10	8	50.19	19	23.49	3.13	.8	.9	16	3	46	.09	0	.3	.3	7	SSC	

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	HR	MIN	SEC	DEG	MIN	DEG	MIN	KM	MAG	MAG	NR	NS	DEG	SEC	DIS	KM	KM	FM	REMK			
1982	JAN	16	1440	16.18	19	23.42		155	16.73	2.78	1.8	2.1	26	4	47	.10	0	.3	.2	19	SSC			
		16	1616	49.84	19	23.59		155	16.89	3.18	.9	.9	19	5	47	.07	0	.3	.3	15	SSC			
		16	17	9	16.86	19	18.46	155	13.34	5.39	1.3	1.0	32	3	83	.09	3	.4	1.0	18	SF2			
		16	1945	.13	19	20.03		155	13.42	8.59	1.8	1.8	36	1	67	.10	5	.4	.6	24	SF2			
		16	2330	17.13	19	19.92		155	6.80	7.55	2.1	2.2	35	1	115	.10	5	.4	.8	26	SF4			
		17	2	5	28.51	19	19.76	155	7.68	7.66	2.0	2.2	37	0	100	.11	5	.5	.7	25	SF4			
		17	4	0	3.19	19	19.92	155	10.49	8.04	1.5	1.1	27	1	88	.09	4	.5	1.0	19	SF3			
		17	847	51.18	19	11.35		155	41.05	5.75	2.4	1.6	28	2	119	.22	10	.7	2.2	13	LSW			
		17	1041	3.21	19	20.40		155	3.28	5.83	1.4	1.5	20	2	90	.11	1	.6	1.1	13	SF5			
		17	1352	2.52	19	19.29		155	15.45	7.64	1.9	1.5	37	2	91	.09	4	.4	.6	24	SF1			
		17	2215	43.87	19	25.81		155	25.49	5.27	1.5	1.7	32	3	41	.10	1	.3	.8	23	KA0			
		18	023	44.54	19	30.20		155	53.32	7.49	2.5	2.1	29	2	128	.24	4	.7	.9	19	KON			
		18	152	37.16	19	29.82		155	55.92	12.57	2.5	2.4	29	3	207	.10	2	.9	.4	17	KON			
		18	17	3	32.50	19	16.61	155	22.12	6.60	1.9	2.4	34	4	131	.13	5	.4	1.0	27	SWR			
		19	1111	50.80	19	21.75		155	25.84	9.41	1.9	1.4	34	5	45	.12	3	.4	.7	27	KA0			
		19	1335	44.93	19	20.19		155	7.16	7.96	1.1	1.3	20	1	102	.04	5	.5	1.0	11	SF4			
		19	17	7	39.67	19	17.77	155	21.01	5.42	1.7	1.5	29	2	124	.11	4	.5	1.2	16	SWR			
		19	2142	52.62	19	20.01		155	10.53	7.76	2.6	2.9	43	2	86	.13	4	.5	.8	32	SF3			
		19	2221	14.83	19	23.58		155	17.00	2.48	.7		12	4	86	.04	0	.4	.3	7	SSC			
		19	2221	17.86	19	23.53		155	16.90	2.85	2.1	2.6	29	4	41	.09	0	.3	.2	22	SSC			
		20	111	14.15	19	10.91		155	33.38	6.62	2.7	3.0	37	2	134	.14	10	.5	1.1	30	LSW			
		20	710	37.44	19	20.78		155	12.99	7.84	1.6	1.6	35	4	67	.13	3	.5	.6	33	SF2			
		20	1143	44.06	19	18.00		155	13.06	7.66	2.0	2.2	24	0	105	.09	2	.6	.8	19	SF2			
		21	2	6	30.20	19	20.01	155	10.77	9.48	2.9	3.1	31	2	87	.09	4	.5	.4	24	SF3			
		21	441	58.39	19	24.94		155	25.35	5.85	1.8	1.5	18	0	68	.11	6	.5	2.5	15	KA0			
		21	841	14.17	19	19.92		155	10.82	7.12	1.5	1.1	21	3	88	.09	4	.5	.8	9	SF3			
		21	1152	41.17	19	13.91		155	35.53	10.32	5.4	5.6	41	0	218	.12	3	.9	.5	40	LSW F			
		21	12	3	26.79	19	14.17	155	34.20	6.98	1.9	1.2	36	3	111	.21	5	.6	1.4	19	LSW			
		21	1216	42.50	19	12.41		155	32.08	8.47	2.1	1.5	31	1	132	.14	6	.5	.9	11	LSW			
		21	1223	41.65	19	11.07		155	36.73	8.55	2.9	2.2	28	3	120	.11	7	.5	.8	17	LSW			
		21	1229	13.88	19	13.11		155	33.10	13.73	5.4	5.4	36	1	126	.12	8	.6	.5	33	LS F			
		21	1240	49.48	19	10.55		155	31.37	7.69	2.9	2.5	34	1	108	.17	6	.6	1.0	25	LSW			
		21	1242	5.91	19	10.28		155	31.52	8.31	3.0	2.9	31	1	143	.16	9	.7	1.1	20	LSW			
		21	1245	12.69	19	11.58		155	33.45	7.26	3.0	2.5	34	3	130	.17	9	.6	1.2	22	LSW			
		21	1246	22.64	19	10.04		155	32.46	.46	2.2	1.1	23	1	117	.16	8	.5	1.2	15	LSW			
		21	1247	10.37	19	9.51		155	31.48	7.02	2.3	1.5	29	2	128	.13	6	.6	1.1	18	LSW			
		21	1248	9.58	19	13.82		155	32.58	11.71	3.4	3.3	44	4	119	.17	5	.5	.6	35	LSW			
		21	1251	56.43	19	9.45		155	31.82	12.28	3.0	2.7	37	3	147	.15	11	.5	.5	27	LSW			
		21	1253	41.39	19	11.92		155	31.60	7.44	2.2	1.9	35	1	88	.18	6	.5	1.0	21	LSW			
		21	13	1	9.69	19	12.16	155	32.48	10.44	4.1	4.0	44	1	87	.17	7	.6	.6	41	LSW F			
		21	13	3	51.65	19	10.29	155	32.31	.87	1.9	.9	20	1	113	.10	8	.5	1.3	11	LSW			
		21	13	5	39.70	19	12.98	155	32.71	8.45	2.8	2.4	37	3	79	.17	9	.6	1.0	19	LSW			
		21	13	8	29.54	19	10.04	155	31.86	.39	2.0	1.4	24	1	118	.13	7	.5	1.0	16	LSW			
		21	1312	59.70	19	12.19		155	31.11	7.78	2.7	2.7	32	0	137	.19	6	.8	1.2	21	LSW			
		21	1317	13.88	19	13.10		155	31.57	8.60	2.3	1.6	17	1	133	.14	5	.8	1.0	9	LSW			
		21	1321	7.39	19	13.36		155	31.46	8.68	1.8	1.4	22	2	127	.12	4	.5	.8	13	LSW			
		21	1321	35.15	19	12.33		155	31.22	6.15	2.2	1.6	29	3	81	.13	6	.4	1.4	17	LSW			
		21	1331	44.47	19	13.23		155	30.58	8.76	1.9	1.6	29	1	133	.11	4	.6	.9	22	LSW			

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YEAR	MON	DA	HR	MIN	SEC	ORIGIN TIME	LAT N	DEG	MIN	DEG	MIN	DEG	MIN	DEPTH	AMP	DUR	NR	NS	DEG	SEC	DIS	RM	NO	REMK	
1982	JAN	21	1332	49.74	19	10.99	155	31.56	6.42	1.7	1.2	27	1	102	.13	7	.5	1.3	17	LSW					
		21	1335	10.86	19	11.01	155	30.96	6.43	3.1	3.0	41	2	99	.20	6	.6	1.1	33	LSW					
		21	1337	17.41	19	13.79	155	33.31	12.23	4.2	4.3	41	2	117	.14	6	.5	.6	39	LSW					
		21	1342	12.23	19	11.91	155	31.32	7.36	2.9	2.7	36	1	137	.15	6	.6	.9	33	LSW					
		21	1345	3.21	19	12.91	155	32.50	8.22	2.3	1.5	27	2	128	.15	6	.5	.9	15	LSW					
		21	1350	21.10	19	11.71	155	32.57	6.02	2.4	1.9	31	1	93	.16	8	.5	1.3	17	LSW					
		21	1359	47.13	19	11.48	155	33.75	8.37	1.8	1.6	25	2	96	.17	9	.5	1.1	15	LSW					
		21	1411	27.74	19	12.38	155	30.50	8.81	2.2	2.0	20	1	138	.14	5	.7	.8	12	LSW					
		21	1412	49.61	19	13.54	155	31.69	10.35	1.8	1.1	27	3	126	.15	4	.5	.9	19	LSW					
		21	1414	7.74	19	11.99	155	32.69	8.06	2.7	2.5	35	3	90	.15	7	.5	.8	24	LSW					
		21	1419	21.79	19	11.11	155	32.06	.28	1.9	1.5	26	2	101	.14	8	.4	.6	14	LSW					
		21	1420	49.74	19	11.02	155	31.63	6.58	2.2	2.1	24	1	101	.13	7	.5	1.3	14	LSW					
		21	1429	44.73	19	9.66	155	31.54	6.86	1.8	1.4	27	3	125	.12	6	.5	1.5	16	LSW					
		21	1430	52.13	19	12.69	155	30.32	7.46	1.9	1.4	23	2	107	.13	4	.5	.9	9	LSW					
		21	1436	42.46	19	11.54	155	30.68	6.33	1.7	1.6	17	0	88	.16	6	.7	1.7	11	LSW					
		21	1438	57.20	19	12.82	155	32.57	8.33	1.7	1.6	29	2	81	.15	6	.5	.9	12	LSW					
		21	1446	48.49	19	10.46	155	32.18	7.11	2.8	2.8	40	4	111	.17	8	.6	1.1	29	LSW					
		21	15	4	13.04	19	9.36	155	31.32	5.42	1.9	1.4	20	1	131	.11	6	.5	2.1	14	LSW				
		21	15	9	.33	19	14.03	155	34.46	8.12	1.6	1.2	20	2	78	.13	5	.4	.8	12	LSW				
		21	1511	17.79	19	15.48	155	35.35	8.37	1.5	1.4	22	1	167	.14	3	.7	1.0	17	LSW					
		21	1519	41.00	19	12.82	155	31.59	8.05	3.1	3.0	41	4	132	.15	5	.5	.8	33	LSW					
		21	1524	49.32	19	11.80	155	30.21	7.13	1.6	1.4	24	2	81	.13	6	.5	1.3	14	LSW					
		21	1524	49.33	19	11.94	155	30.20	7.07	1.6	1.3	24	1	79	.14	6	.5	1.4	10	LSW					
		21	1526	39.00	19	11.68	155	30.28	7.06	1.5	1.0	19	2	83	.11	6	.5	1.2	10	LSW					
		21	1535	12.49	19	12.02	155	31.15	8.85	3.2	3.1	39	2	85	.16	6	.5	.8	29	LSW					
		21	1538	1.02	19	10.48	155	32.61	7.41	1.9	1.7	34	5	109	.17	9	.5	1.2	29	LSW					
		21	1546	36.34	19	10.59	155	32.59	.85	1.8	1.3	23	3	108	.15	9	.5	.7	18	LSW					
		21	16	0	4.46	19	10.71	155	31.05	7.11	2.5	2.0	22	1	174	.13	6	.7	1.3	20	LSW				
		21	16	3	5.09	19	9.58	155	31.82	.05	1.8	1.1	24	2	126	.15	7	.5	.6	17	LSW				
		21	1614	19.31	19	10.51	155	32.26	6.46	1.6	1.2	29	2	109	.15	8	.5	1.5	26	LSW					
		21	1623	36.02	19	9.87	155	31.65	11.88	3.1	3.1	40	3	145	.15	10	.6	.7	32	LSW					
		21	1626	3.30	19	12.47	155	32.76	8.28	2.4	2.0	37	4	159	.18	7	.6	.8	28	LSW					
		21	1634	54.04	19	9.85	155	35.57	8.41	2.2	1.8	22	2	130	.12	10	.5	1.2	17	LSW					
		21	1645	59.73	19	11.61	155	30.23	7.95	2.1	2.0	29	1	83	.13	6	.5	1.1	23	LSW					
		21	1648	30.97	19	12.17	155	30.75	8.82	2.2	1.7	25	2	80	.13	6	.5	.7	20	LSW					
		21	1657	58.61	19	11.75	155	32.56	8.79	1.9	1.5	19	3	93	.20	8	.7	1.1	18	LSW					
		21	1737	56.48	19	9.71	155	31.38	7.27	2.2	2.0	23	1	124	.13	6	.5	1.1	21	LSW					
		21	1758	59.02	19	9.94	155	32.69	.00	2.0	1.5	21	1	117	.18	9	.6	1.3	20	LSW					
		21	18	0	45.07	19	10.66	155	32.27	7.44	2.2	2.0	26	3	107	.15	8	.5	1.0	19	LSW				
		21	1812	2.98	19	9.54	155	29.35	7.28	2.1	1.9	29	2	197	.12	3	.8	.7	23	LSW					
		21	1856	38.51	19	11.07	155	31.33	7.40	2.1	1.2	23	2	169	.18	7	.8	1.2	18	LSW					
		21	19	9	57.54	19	11.12	155	32.62	5.44	1.8	1.7	23	2	176	.11	9	.7	2.1	22	LSW				
		21	1913	22.30	19	10.48	155	30.17	3.64	1.7	1.7	24	1	106	.15	4	.9	2.3	21	LSW					
		21	1934	55.28	19	10.70	155	32.73	6.83	2.0	1.7	28	3	106	.15	9	.6	1.4	23	LSW					
		21	2031	37.79	19	9.20	155	31.22	8.00		1.4	18	1	135	.11	6	.8	1.2	15	LSW					
		21	2036	14.08	19	12.32	155	32.46	7.01	2.0	1.4	21	2	160	.16	7	.8	1.4	17	LSW					
		21	21	2	52.67	19	11.66	155	30.60	8.52	2.1	1.4	23	2	86	.15	6	.5	.9	20	LSW				
		21	2150	46.65	19	9.05	155	34.67	7.95	2.8	2.8	35	3	122	.17	12	.5	1.2	25	LSW					

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		ORIGIN TIME			LAT N		LON W		DEPTH		AMP		DUR		GAP		RMS		MIN		ERH		ENZ NO	
YEAR	MON	DA	HR	MIN	SEC	DEG	MIN	DEG	MIN	KM	MAG	MAG	MAG	NR	NS	DEG	SEC	DIS	KM	KM	FM	REMK		
1982	JAN	21	22	7	37.26	19	10.31	155	29.57	6.88	1.5	1.2	18	1	105	.14	3	.5	.9	9	LSW			
		21	2215	55.17	19	9.00	155	34.71	7.67	2.7	2.5	37	3	122	.14	12	.5	1.0	23	LSW				
		21	2217	16.38	19	8.92	155	34.64	7.29	2.6	2.3	29	4	123	.15	12	.5	1.2	20	LSW				
		21	2224	47.12	19	10.56	155	32.07	2.03	1.8	1.6	26	3	109	.13	8	.4	1.0	14	LSW				
		21	2243	40.47	19	12.80	155	31.62	9.48	1.5	1.0	27	2	78	.11	5	.5	.7	14	LSW				
		21	2255	54.52	19	9.73	155	30.47	7.36	2.7	2.6	41	3	126	.18	5	.6	1.1	30	LSW				
		21	23	6	.58	19	12.42	155	31.37	8.83	1.6	1.3	22	3	80	.13	5	.5	.9	11	LSW			
		21	2316	19.88	19	8.78	155	34.36	7.59	2.8	2.7	35	4	126	.14	11	.5	1.0	24	LSW				
		21	2348	13.84	19	11.16	155	31.34	8.11	1.9	1.2	12	2	98	.14	7	.7	1.5	10	LSW				
		22	029	57.54	19	12.57	155	32.72	8.99	1.8	1.2	31	3	129	.15	7	.5	.9	16	LSW				
		22	120	6.62	19	22.75	155	2.58	8.48	1.8	1.3	29	1	130	.14	4	.6	.9	22	SF5				
		22	127	21.92	19	11.83	155	30.72	8.37	1.5	1.5	21	2	84	.13	6	.5	.9	13	LSW				
		22	131	18.49	19	10.37	155	32.66	7.39	2.3	1.9	33	3	111	.15	9	.5	1.1	22	LSW				
		22	153	6.31	19	9.44	155	31.26	8.34	2.3	1.9	30	1	130	.13	6	.6	1.0	20	LSW				
		22	2	1	40.66	19	22.85	155	2.31	6.45	1.6	1.4	21	1	126	.13	5	.6	1.2	8	SF5			
		22	2	6	49.13	19	9.70	155	32.48	7.67	1.9	1.6	30	1	122	.18	8	.6	1.5	15	LSW			
		22	225	5.24	19	11.75	155	36.10	10.04	3.6	3.4	48	4	91	.20	6	.6	.7	35	LSW				
		22	238	38.77	19	22.19	155	29.41	5.74	1.3	.9	20	1	94	.09	3	.5	1.0	13	KA0				
		22	240	39.53	19	12.25	155	32.69	8.57	2.1	2.0	28	3	88	.21	7	.6	1.0	17	LSW				
		22	247	45.40	19	10.99	155	35.98	8.82	1.8	1.5	23	2	98	.21	8	.7	1.4	16	LSW				
		22	313	26.36	19	24.57	155	16.44	1.63	1.7	2.4	20	2	114	.11	1	.3	.2	15	SNC				
		22	356	.47	19	10.61	155	29.55	7.26	1.6	1.5	23	0	96	.22	4	.7	1.4	11	LSW				
		22	426	56.40	19	10.13	155	31.54	5.67	2.1	2.0	28	1	117	.13	7	.5	2.1	15	LSW				
		22	448	39.68	19	11.34	155	36.34	8.51	2.5	1.9	37	6	94	.21	7	.5	1.0	32	LSW				
		22	5	3	14.01	19	9.88	155	32.21	.84	2.0	1.0	19	3	119	.14	8	.4	.8	17	LSW			
		22	551	39.59	19	12.28	155	31.13	8.27	2.0	1.2	23	2	81	.13	6	.5	.9	20	LSW				
		22	638	44.87	19	11.82	155	32.70	5.59	2.3	2.0	28	3	92	.17	8	.5	2.1	24	LSW				
		22	7	0	48.92	19	24.58	155	31.02	13.91	2.0	1.3	10	0	152	.12	7	1.0	3.0	10	DML			
		22	7	9	5.69	19	24.69	155	24.83	9.09	1.5	1.3	26	5	39	.11	1	.4	.8	20	KA0			
		22	1118	55.23	19	19.49	155	15.52	7.89	2.9	3.2	46	7	89	.12	4	.4	.5	38	SF1				
		22	1652	8.85	19	21.56	155	4.72	8.45	2.9	3.0	44	4	82	.09	4	.4	.5	33	SF5				
		22	1745	8.12	19	14.16	155	34.01	9.54	4.3	4.2	49	4	76	.14	6	.4	.6	46	LSW				
		22	1939	49.10	19	10.40	155	29.94	5.82	2.4	2.6	34	2	106	.15	4	.5	1.3	30	LSW				
		22	2326	36.30	19	12.20	155	31.27	8.23	2.4	2.7	35	3	83	.15	6	.4	.8	28	LSW				
		23	449	24.14	19	10.53	155	29.74	3.22	1.6	1.3	22	2	101	.13	4	.7	1.5	19	LSW				
		23	516	8.94	19	11.36	155	32.66	9.39	2.1	2.0	31	3	97	.13	8	.5	.8	28	LSW				
		23	643	39.43	19	9.46	155	31.57	11.67	2.6	3.0	35	2	147	.14	11	.6	.5	28	LSW				
		23	648	54.90	19	9.23	155	31.40	8.00	1.7	1.5	27	1	133	.12	6	.6	1.1	17	LSW				
		23	736	6.95	19	9.73	155	32.41	4.75	1.6	1.6	24	2	122	.14	8	.6	6.5	16	LSW				
		23	8	7	33.30	19	20.24	155	13.04	7.20	1.5	1.1	25	2	67	.12	4	.5	1.0	17	SF2			
		23	823	51.57	19	23.69	155	16.71	2.69	1.8	2.1	25	4	43	.11	0	.3	.2	17	SSC				
		23	934	11.51	19	23.96	155	15.86	2.99	1.2	1.3	18	2	109	.08	1	.3	.3	12	SEC				
		23	1137	36.19	19	23.25	155	16.88	2.70	2.0	2.4	29	5	37	.09	0	.2	.2	21	SSC				
		23	1214	.22	19	23.30	155	17.14	2.79	1.3	1.8	24	4	58	.09	0	.2	.3	14	SSC				
		23	1253	29.08	19	19.39	155	12.96	5.65	2.2	2.5	42	6	79	.14	4	.4	1.1	35	SF2				
		23	14	6	45.70	19	9.42	155	34.25	9.09	3.0	3.0	41	5	119	.15	11	.5	.8	33	LSW			
		23	1439	6.99	19	12.34	155	30.87	10.05	1.7	1.5	28	3	79	.12	5	.5	.7	15	LSW				
		23	1619	16.29	19	12.17	155	32.49	5.07	1.6	1.7	30	4	87	.18	7	.5	2.8	18	LSW				

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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 NO KM FM	REMK
1982	JAN	23	1652	6.02	19 24.30	155 16.02	1.16	1.6	2.1	23	4	113	.10	1	.2	.2 12 SEC	
		23	1822	20.36	19 23.66	155 16.76	2.63	2.1	2.4	31	4	38	.11	1	.3	.2 24 SSC	
		23	1844	21.40	19 19.38	155 11.31	7.40	1.8	1.3	31	3	99	.08	6	.4	.8 23 SF3	
		23	1846	13.43	19 11.90	155 30.31	8.85	1.8	1.8	34	6	80	.12	6	.4	.8 29 LSW	
		23	1945	54.16	19 8.17	155 35.14	9.52	1.9	1.5	27	2	129	.14	13	.6	1.3 22 LSW	
		23	2215	15.89	19 19.85	155 6.39	8.48	2.4	2.6	38	4	123	.09	5	.4	.6 29 SF4	
		23	2240	44.12	19 23.44	155 16.84	3.42	3.1	3.4	39	5	36	.10	0	.2	.2 30 SSC	
		23	2243	12.25	19 23.95	155 16.76	3.09	1.1	.7	17	6	85	.08	0	.4	.2 12 SSC	
		24	028	34.39	19 18.43	155 13.25	8.94	1.9	1.9	37	3	87	.10	3	.4	.6 29 SF2	
		24	4 0	23.75	19 20.33	155 11.92	9.67	2.0	1.8	34	3	76	.10	5	.5	.6 21 SF3	
		24	629	34.81	19 20.65	155 6.89	7.85	1.9	1.7	30	1	97	.09	6	.4	1.0 23 SF4	
		24	1630	52.27	19 24.70	155 .78	7.31	1.7	.23	3	127	.10	4	.5	1.0 17 SF5		
		24	1751	3.09	19 26.40	155 29.57	10.19	1.5	1.2	23	2	66	.08	8	.5	1.2 19 KAO	
		24	1847	30.59	19 17.99	155 15.05	5.41	1.2	1.1	21	2	125	.11	3	.5	1.4 14 SF1	
		24	1949	1.76	19 20.13	155 3.37	8.23	2.7	2.9	44	3	121	.10	1	.5	.5 38 SF5	
		24	2012	34.97	19 12.79	155 33.99	7.83	1.2	1.2	23	3	83	.20	7	.6	1.2 20 LSW	
		24	2216	1.65	19 12.33	155 31.46	9.21	2.2	.27	3	152	.12	6	.5	.7 16 LSW		
		24	2236	1.17	19 13.34	155 32.77	7.50	2.0	2.0	36	4	77	.16	6	.5	1.0 26 LSW	
		25	148	16.61	19 10.01	155 31.83	3.96	1.8	1.5	23	4	118	.13	7	.5	3.4 15 LSW	
		25	930	31.79	19 43.73	156 4.54	7.49	2.8	2.6	28	2	237	.14	25	1.3	1.0 20 HUA	
		25	1341	13.30	19 20.36	155 13.22	8.94	1.5	1.4	20	2	63	.08	4	.5	.9 17 SF2	
		25	17 3	51.09	19 11.89	155 35.46	8.58	3.4	3.2	47	6	91	.22	6	.6	.8 41 LSW	F
		25	1725	10.65	19 11.30	155 35.41	1.07	2.5	1.4	24	2	95	.18	7	.6	1.3 20 LSW	
		25	1946	4.69	19 20.22	155 8.04	7.32	1.4	1.2	33	4	85	.09	5	.5	.7 26 SF4	
		25	2216	43.29	19 14.15	155 34.68	7.73	2.1	1.5	35	3	111	.17	4	.6	.9 21 LSW	
		26	1 2	7.07	19 10.74	155 32.55	7.65	2.3	2.2	38	3	137	.17	9	.6	1.0 23 LSW	
		26	234	29.04	19 11.70	155 32.65	7.18	2.3	2.0	30	1	94	.14	8	.5	.9 17 LSW	
		26	337	39.04	19 18.79	155 15.40	7.15	1.3	1.2	24	2	109	.10	4	.5	.9 19 SF1	
		26	515	7.18	19 12.01	155 32.61	5.00	2.2	2.0	35	2	89	.16	7	.5	3.2 27 LSW	
		26	1110	12.75	19 20.20	155 10.68	9.28	2.0	1.5	29	1	83	.06	4	.4	.7 25 SF3	
		26	1256	46.31	19 8.90	155 32.91	7.78	2.1	1.6	22	3	132	.16	9	.6	1.2 20 LSW	
		26	1345	17.11	19 12.44	155 35.42	8.83	3.6	3.1	47	7	86	.23	5	.6	.9 38 LSW	
		26	1615	39.13	19 23.30	155 16.86	3.01	1.8	1.8	24	6	56	.10	0	.3	.2 20 SSC	
		26	1618	12.48	19 23.42	155 16.73	3.58	2.4	2.5	33	7	46	.11	0	.3	.2 28 SSC	
		26	1838	17.79	19 19.65	155 8.19	7.54	1.4	1.1	27	4	88	.09	4	.5	.8 17 SF4	
		26	1916	23.84	19 15.54	155 23.75	7.77	1.9	1.8	27	2	129	.11	2	.5	.9 20 SWR	
		27	012	22.21	19 14.85	155 35.33	7.09	1.6	1.4	33	3	104	.20	3	.6	1.1 22 LSW	
		27	4 0	14.77	19 26.29	155 37.24	2.70	3.3	2.6	36	2	112	.16	2	.5	.7 27 MLO	
		27	634	54.30	19 10.10	155 32.41	8.52	2.3	2.0	31	2	145	.14	10	.6	1.1 23 LSW	
		27	1546	29.62	19 12.76	155 32.40	8.82	2.2	1.5	31	3	130	.13	6	.6	.8 24 LSW	
		27	16 2	26.53	19 12.83	155 32.31	7.09	2.2	1.6	31	4	80	.15	6	.5	1.1 17 LSW	
		28	441	39.67	19 18.64	155 13.61	8.20	2.4	2.6	43	5	71	.11	3	.5	.5 35 SF2	
		28	859	44.68	19 18.35	155 13.23	7.55	2.3	2.4	43	3	89	.13	2	.5	.6 28 SF2	
		28	9 1	59.92	19 20.89	155 11.19	8.40	2.2	2.1	35	4	71	.11	3	.4	.5 30 SF3	
		28	1015	55.76	19 19.21	155 15.00	6.86	1.6	1.3	31	3	95	.08	5	.4	.7 21 SF1	
		28	1038	7.51	19 18.16	155 13.33	7.08	1.8	1.8	35	3	89	.12	2	.5	.8 25 SF2	
		28	1442	6.41	19 43.39	155 2.28	.02	2.6	2.8	28	2	204	.29	3	1.5	.9 16 HIL B	
		28	1528	29.16	19 10.30	155 31.42	8.24	2.6	1.9	34	3	144	.15	9	.6	1.1 26 LSW	

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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 NO KM FM	REMK
1982	JAN	28	1539	22.18	19 22.15	155 3.46	7.45	2.2	1.9	31	2	110	.16	4	.6	.8 19 SF5	
		28	16 1	52.28	19 13.08	155 32.16	8.06	1.6	1.2	24	1	128	.16	5	.7	1.0 16 LSW	
		28	1638	15.59	19 10.65	155 32.17	7.21	1.6	1.3	22	2	142	.16	9	.6	1.3 13 LSW	
		28	2015	9.40	19 19.67	155 8.61	8.22	1.7	1.5	32	2	78	.09	4	.5	.9 26 SF4	
		29	217	35.89	19 17.91	155 21.90	8.42	2.0	2.1	38	4	114	.10	5	.4	.6 25 SWR	
		29	343	2.29	19 16.66	155 33.13	5.28	3.0	2.9	46	4	82	.15	6	.4	1.0 35 LSW	
		29	719	19.17	19 23.48	155 16.89	2.93	1.5	1.4	22	3	37	.07	0	.3	.2 16 SSC	
		29	739	22.22	19 23.89	155 16.98	2.93	1.0	1.0	11	2	74	.04	1	.4	.3 8 SSC	
		29	8 7	42.56	19 23.70	155 16.75	2.66	1.8	1.6	18	2	77	.07	2	.3	.4 17 SSC	
		29	818	39.39	19 23.92	155 16.71	2.27	1.4	1.3	16	2	86	.12	2	.4	.4 14 SSC	
		29	1220	19.17	19 23.63	155 16.75	2.60	1.4	1.3	21	5	55	.13	1	.3	.2 15 SSC	
		29	1713	25.94	19 55.25	155 35.73	12.78	3.6	3.6	46	3	136	.13	21	.7	.7 40 KOH	F
		29	1716	49.38	19 54.90	155 36.24	10.89	3.0	2.6	40	3	132	.10	21	.5	.6 26 KEA	
		29	18 3	34.38	19 55.04	155 35.15	8.96	2.4	2.5	25	1	136	.18	20	.7	.9 16 KOH	F
		29	1950	32.77	19 23.43	155 16.81	2.77	.9	.8	17	5	64	.05	0	.3	.2 9 SSC	
		29	2115	34.17	19 23.62	155 16.95	3.00	1.4	1.2	23	4	51	.09	0	.3	.2 16 SSC	
		29	2122	12.51	19 23.53	155 16.78	3.06	1.3	1.0	21	5	47	.10	0	.3	.3 14 SSC	
		29	23 9	8.95	19 23.28	155 16.77	2.86	1.9	2.4	25	3	44	.11	0	.3	.2 20 SSC	
		30	021	43.10	19 10.81	155 42.44	.03	2.9	2.4	33	3	132	.23	12	.7	.8 28 LSW	
		30	117	47.90	20 17.67	155 47.36	39.43	2.9	1.9	35	4	302	.13	19	1.7	1.0 23 KOH	
		30	714	9.21	19 8.43	155 35.43	6.94	1.8	1.2	24	1	124	.17	12	.7	1.7 17 LSW	
		30	18 2	15.61	19 18.18	155 13.35	7.40	1.3	1.3	29	1	87	.10	2	.5	1.0 17 SF2	
		30	1940	39.30	19 21.50	155 15.40	26.64	3.0	2.9	49	4	64	.12	2	.6	.7 45 DEP	
		30	2115	7.64	19 21.29	155 25.64	9.65	1.4	1.3	32	3	51	.09	4	.4	.7 24 KAO	
		31	452	28.56	19 19.63	155 7.04	7.27	1.8	1.3	34	4	116	.10	5	.5	.9 26 SF4	
		31	559	14.06	19 11.40	155 27.95	3.90	1.4	1.2	24	0	110	.13	4	.5	1.6 17 LSW	
		31	1112	3.01	19 16.34	155 21.54	6.87	1.8	1.8	30	3	138	.08	6	.5	.7 21 SWR	
		31	1211	8.39	19 19.51	155 16.14	7.93	2.2	1.9	41	4	94	.10	2	.4	.6 30 SF1	
		31	1551	42.09	19 26.22	154 54.32	4.90	1.3	1.3	20	1	165	.14	6	.9	3.9 14 SLE	
		31	1641	22.93	19 12.80	155 30.12	7.82	1.4	1.4	31	6	71	.12	4	.4	.9 21 LSW	
31	1856	33.28	19 12.70	155 30.52	8.85	2.4	2.2	38	3	72	.12	5	.4	.7 31 LSW	F		
31	19 5	1.46	19 12.85	155 30.56	8.32	1.4	1.2	34	5	71	.15	4	.5	.8 26 LSW			
31	1921	19.99	19 17.50	155 21.03	5.39	1.0	1.2	23	3	126	.09	4	.5	1.5 19 SWR			
31	2055	37.31	19 12.52	155 30.20	9.07	1.5	1.4	29	2	72	.13	5	.5	.8 15 LSW			
31	2126	12.07	19 12.57	155 30.48	9.23	1.2	1.2	27	2	73	.15	5	.5	.8 16 LSW			
FEB		31	2257	50.72	19 12.66	155 30.34	8.66	1.3	1.2	25	2	71	.13	5	.5	.8 17 LSW	
		1	039	3.26	19 10.21	155 35.18	9.29	2.1	1.9	32	3	107	.17	9	.5	.9 20 LSW	
		1	239	16.64	19 19.20	155 15.37	7.32	1.8	1.8	36	4	91	.08	4	.4	.6 23 SF1	
		1	351	27.43	19 12.88	155 30.30	8.10	2.2	1.5	28	0	136	.13	4	.6	.9 18 LSW	F
		1	456	12.62	19 13.21	155 30.88	8.90	1.9	2.1	38	6	131	.13	4	.5	.7 23 LSW	F
		1	613	.64	19 29.10	155 52.47	6.48	2.4	2.3	27	2	96	.14	5	.6	1.0 13 KON	
		1	7 3	1.21	19 12.32	155 30.38	8.41	1.3	1.4	25	2	75	.13	5	.5	1.2 11 LSW	
		1	854	33.11	19 24.02	155 15.82	3.20	1.6	2.2	24	4	111	.09	1	.3	.3 16 SEC	
		1	1212	20.31	19 23.85	155 17.13	2.75	1.3	1.7	13	3	83	.07	1	.4	.3 6 SSC	
		1	1242	33.53	19 10.75	155 35.53	8.12	2.1	1.6	30	3	101	.17	8	.7	1.1 18 LSW	
		1	1638	43.12	19 23.31	155 16.94	2.98	1.6	1.8	22	4	46	.09	0	.3	.3 13 SSC	
		1	1752	17.70	19 23.60	155 16.72	2.94	2.0	2.3	31	3	40	.10	1	.3	.2 24 SSC	
1	20 9	37.78	19 21.88	155 18.02	2.87	1.1	1.1	25	4	50	.10	3	.3	.5 12 SWR			

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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	KM	FM	REMK	
1982	FEB	1	2247	17.36	19	28.46	155	16.48	10.74	2.1	1.4	43	4	43	.14	6	.4	.8	33	GLN	
		1	2353	39.25	19	24.71	155	24.13	11.27	2.2	2.1	40	5	40	.10	2	.4	.5	27	KAO	
		2	120	55.27	19	26.07	155	28.01	8.19	2.2	1.5	35	2	61	.10	5	.3	1.0	27	KAO	
		2	458	14.29	19	11.29	155	35.48	8.39	3.0	2.7	45	7	96	.25	7	.6	1.0	29	LSW F	
		2	629	49.85	19	12.83	155	35.30	11.18	4.3	4.1	43	2	201	.15	5	.9	.5	37	LSW F	
		2	811	33.90	19	18.65	155	14.85	7.17	1.6	1.1	7	0	228	.02	5	1.7	2.5	7	SF1	
		2	1017	50.82	19	26.18	155	24.01	9.64	1.5	1.3	32	6	55	.10	3	.4	.7	15	KAO	
		2	1247	36.80	19	11.91	155	32.72	7.22	1.6	1.4	27	2	91	.17	7	.7	1.1	9	LSW	
		2	1254	17.55	19	23.69	155	15.79	3.09	2.6	2.9	36	3	35	.11	1	.3	.3	27	SEC F	
		2	1916	34.99	20	.17	155	26.35	7.89	2.1	1.8	20	0	271	.13	16	2.8	.9	14	KEA F	
		2	2158	.96	19	20.63	155	12.85	9.26	2.9	2.9	46	4	65	.13	4	.4	.5	38	SF2 F	
		3	120	36.86	19	18.86	155	14.76	5.95	1.9	1.6	33	0	87	.13	4	.5	1.0	24	SF1	
		3	519	55.27	19	19.42	155	10.98	7.56	1.8	1.3	31	2	100	.09	5	.5	1.0	22	SF3	
		3	826	50.34	19	18.72	155	13.77	8.60	2.3	2.2	43	4	91	.11	3	.4	.4	29	SF2	
		3	1131	45.01	19	19.44	155	13.85	6.15	1.7	1.6	33	1	82	.11	5	.5	1.0	23	SF2	
		3	1246	48.48	19	23.57	155	16.72	2.78	1.7	2.3	25	4	45	.10	1	.3	.2	20	SSC	
		3	1725	46.09	19	17.73	155	12.87	5.36	1.1	1.3	27	5	125	.09	2	.4	.8	16	SF2	
		3	2023	35.51	19	17.10	155	23.32	7.49	1.8	1.6	34	4	104	.11	5	.4	.8	21	SWR	
		4	228	31.76	19	19.75	155	7.78	7.38	2.0	1.5	33	2	98	.10	4	.5	.8	24	SF4	
		4	6	7	48.69	19	16.57	155	22.88	7.18	2.8	3.3	46	3	120	.15	5	.4	.7	38	SWR
		4	955	33.07	19	24.61	155	26.16	8.40	2.2	1.9	43	3	40	.12	2	.4	.7	35	KAO	
		4	1047	18.49	19	21.43	155	6.02	8.37	2.4	2.3	46	6	88	.11	3	.4	.6	32	SF4	
		4	2058	35.74	19	18.82	155	13.33	10.17	2.9	2.9	47	2	130	.11	7	.5	.4	39	SF3 F	
		5	116	9.02	19	23.06	155	30.39	8.86	2.9	2.9	47	2	34	.11	5	.3	.6	39	KAO	
		5	522	16.34	19	12.41	155	32.77	8.53	1.6	1.8	28	3	129	.14	7	.5	.8	14	LSW	
		5	948	28.74	19	18.23	155	13.00	7.15	1.1	1.1	30	2	100	.08	2	.5	.9	16	SF2	
		5	949	.38	19	18.15	155	12.93	6.93	1.3	1.1	28	2	106	.11	2	.5	1.0	21	SF2	
		5	1419	24.22	19	20.75	155	13.00	8.23	2.1	2.1	35	2	62	.12	3	.4	.7	24	SF2	
		5	1635	29.04	19	19.18	155	15.26	8.28	1.6	1.6	28	1	90	.09	4	.4	.7	16	SF1	
		5	19	4	31.57	19	18.60	155	13.47	6.38	1.5	1.4	35	1	76	.12	3	.5	.8	20	SF2
		6	156	13.88	19	18.61	155	13.12	6.60	1.5	1.4	35	2	88	.13	3	.5	1.0	25	SF2	
		6	323	1.29	19	27.42	155	14.66	32.29	3.1	2.9	45	2	51	.10	5	.6	1.1	39	DEP	
		6	4	2	55.00	19	22.07	156	21.83	39.20	3.0	2.9	30	1	275	.09	49	3.7	1.9	23	DIS
		6	615	49.40	19	12.31	155	32.20	7.48	2.2	1.5	34	1	85	.17	6	.6	.9	24	LSW	
		7	128	59.49	19	10.71	155	29.94	38.86	2.1		40	2	98	.14	4	.8	1.5	24	DLS T	
		7	338	51.88	19	20.77	155	10.93	7.66	2.4	2.0	43	3	73	.13	3	.4	.6	30	SF3	
		7	421	4.12	19	20.69	155	10.54	7.27	2.2	1.9	40	2	75	.14	3	.4	.7	27	SF3	
		7	752	40.79	19	19.36	155	8.98	7.31	1.9	1.6	36	2	88	.12	4	.5	.9	23	SF4	
		7	2316	53.09	19	21.53	155	30.48	9.96	2.6	2.5	35	0	36	.08	5	.3	.6	28	KAO	
		8	144	15.11	19	11.87	155	32.55	8.32	2.2	2.2	32	2	91	.18	7	.6	1.2	21	LSW	
		8	529	42.80	19	14.66	155	33.60	9.01	3.2	3.0	41	2	74	.17	6	.5	.7	31	LSW	
		8	1748	50.94	19	20.30	155	12.80	8.06	1.6	1.6	31	2	69	.10	4	.5	.7	20	SF2	
		9	043	18.73	19	11.28	155	35.99	9.44	3.0	2.5	42	4	95	.23	7	.6	.9	32	LSW	
		9	240	35.03	19	11.51	155	30.85	7.92	2.3	2.3	35	1	141	.15	7	.6	1.0	20	LSW	
		9	353	34.42	19	18.42	155	15.37	6.61	.9	1.2	23	3	117	.11	4	.5	1.0	17	SF1	
		9	435	21.30	19	22.40	155	27.55	7.07	1.8	1.3	26	1	39	.10	0	.4	.9	19	KAO	
		9	458	36.03	20	2.71	155	16.90	7.97	2.3	2.1	29	2	221	.11	18	1.0	.6	13	KEA	
		9	542	22.92	19	20.24	155	7.05	8.94	3.8	3.7	47	4	103	.08	5	.3	.4	38	SF4	

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	KM	FM	REMK	
1982	FEB	9	1733	14.17	19	22.08	155	28.02	9.62	1.9	1.4	32	5	46	.11	1	.4	.8	22	KAO	
		9	1827	28.07	19	16.00	155	22.46	6.85	1.4	1.4	24	2	158	.11	4	.6	1.4	16	SWR	
		9	1842	13.31	19	19.06	155	12.92	6.74	1.5	1.1	31	3	85	.11	4	.5	1.0	22	SF2	
		9	1853	12.53	19	57.21	155	26.98	33.77	2.2	1.5	31	3	182	.12	13	.9	1.2	19	KEA	
		9	1957	50.57	19	23.59	154	59.64	6.33	1.6	1.3	24	3	157	.11	3	.6	.9	12	LER	
		9	2224	2.27	19	22.84	155	29.87	9.69	1.8	1.3	36	4	44	.11	4	.4	.7	22	KAO	
		10	325	21.75	19	21.32	155	8.01	8.28	1.2	1.1	23	1	74	.07	4	.5	1.0	21	SF4	
		10	1614	11.08	19	10.72	155	33.06	8.85	1.9	1.8	30	0	184	.13	9	.7	.9	20	LSW	
		10	1743	19.58	19	20.61	155	10.90	7.47	1.9	1.7	32	5	75	.11	3	.4	.7	25	SF3	
		10	2348	12.56	19	11.46	155	32.35	5.26	2.2	2.2	31	2	96	.15	8	.6	1.7	20	LSW	
		11	822	33.29	19	20.37	155	13.42	7.24		1.6	13	0	69	.08	4	.7	1.2	7	SF2	
		11	854	52.28	19	19.21	155	10.01	7.76	2.2	2.2	24	3	104	.10	5	.4	.8	19	SF3	
		11	10	6	45.78	19	22.07	155	14.96	27.78	1.8	2.0	33	1	57	.10	3	.7	1.2	28	DEP
		11	1432	52.51	19	18.46	155	15.63	5.42	2.2	1.8	26	2	109	.12	4	.5	1.1	15	SF1	
		11	1457	15.77	19	1.57	155	27.55	41.81		2.3	26	0	207	.05	15	1.2	.2	3	DLS	
		12	653	42.44	19	21.81	155	1.48	7.23	2.2	2.0	17	0	166	.11	4	.7	1.5	15	SF5	
		12	1354	26.09	19	19.12	155	15.05	5.00	2.1	1.7	27	2	88	.13	5	.4	1.3	21	SF1	
		12	16	6	30.86	19	21.69	155	3.05	8.77	3.4	3.5	38	3	114	.10	3	.5	.5	29	SF5
		12	1632	42.87	19	21.70	155	2.66	8.15	1.6	1.4	26	2	135	.08	3	.7	.6	17	SF5	
		12	2349	11.06	19	1.09	155	29.10	39.80	2.3	2.1	31	1	206	.07	19	1.3	.2	0	DLS	
		13	330	3.91	19	21.05	155	13.10	8.35	1.6	1.7	29	1	58	.11	3	.5	.7	20	SF2	
		13	947	45.93	19	28.36	154	51.68	4.65	2.1	1.4	9	0	122	.05	2	3.2	4.4	6	SLE	
		13	19	9	35.01	19	20.21	155	8.12	6.30	1.4	1.7	30	3	83	.12	5	.5	1.1	23	SF4
		13	2135	34.14	19	55.91	155	34.97	12.33	2.3	2.1	14	1	143	.09	21	.7	.6	6	KOW	
		13	2222	31.62	19	26.94	154	54.12	5.56	1.4	1.3	22	3	150	.11	5	.7	2.3	16	LER	
		13	23	1	38.22	19	16.71	155	22.12	6.04	1.8	1.9	26	0	131	.10	6	.5	1.3	20	SWR
		14	028	10.18	19	22.50	155	.81	4.77	1.5	1.4	30	2	157	.16	6	.7	1.9	21	SSF	
		14	1624	28.38	19	21.40	155	2.82	7.98	3.3	3.4	39	5	124	.10	3	.5	.5	27	SF5	
		15	318	40.73	19	19.14	155	9.65	7.91	1.7	1.0	20	1	158	.07	5	.7	1.2	13	SF3	
		15	452	9.14	19	20.60	155	12.36	7.64	1.8	1.7	30	2	103	.12	4	.5	.8	19	SF2	
		15	5	8	52.26	19	19.64	155	8.70	7.37	1.6	1.6	21	2	153	.08	5	.6	1.0	15	SF4
		15	8	7	11.51	19	23.14	155	25.48	10.36	2.5	1.8	39	5	38	.13	4	.4	.6	30	KAO
		15	1736	28.23	19	21.49	155	20.25	32.05	4.2	4.3	46	2	51	.11	4	.6	1.0	42	DEP	
		15	1928	31.17	19	20.09	155	7.04	6.61	1.6	1.2	25	1	106	.12	5	.6	1.3	20	SF4	
		15	1957	45.91	19	31.73	155	52.66	6.35	2.6	1.4	16	2	194	.13	6	1.2	2.1	7	KON	
		16	0	2	43.35	19	17.81	155	13.13	8.62	2.2	2.3	28	2	107	.13	2	.5	.7	20	SF2
		16	055	22.87	19	19.44	155	15.76	9.32	2.7	2.9	39	4	100	.12	3	.5	.5	27	SF1	
		16	426	47.33	19	30.06	155	28.59	4.01	1.5	1.1	15	3	92	.06	4	.5	.9	8	MLO	
		16	942	1.35	19	26.99	155	36.09	9.17	2.2	1.2	17	2	82	.19	1	.8	1.5	8	MLO	
		16	1148	26.98	19	23.28	155	16.86	3.15	2.3	2.6	25	2	38	.10	1	.3	.4	17	SSC	
		16	1427	35.53	19	20.78	155	9.28	7.29	1.6	1.3	19	3	67	.08	3	.5	1.0	12	SF3	
		16	2010	27.90	19	23.83	155	27.39	12.35	2.5	2.4	34	3	44	.11	5	.4	.5	26	KAO	
		17	037	55.88	19	16.62	155	21.50	6.58	1.4	1.5	24	2	164	.11	6	.6	1.0	15	SWR	
		17	116	12.57	19	22.85	155	16.89	34.14	1.8	1.8	29	1	41	.10	2	.8	1.5	23	DEP	
		17	127	45.51	19	24.78	155	16.90	8.83	1.6	1.1	16	1	105	.08	0	.6	.8	5	INT	
		17	317	17.52	19	18.94	155	15.09	7.09	1.4	1.1	24	1	102	.10	5	.5	1.0	17	SF1	
		17	526	14.54	19	9.77	155	30.71	10.33	1.6	1.3	16	0	154	.11	10	.8	1.7	7	LSW	
		17	549	54.75	19	20.83	155	2.98	6.04	2.2	2.1	27	2	118	.10	2	.5	.7	17	SF5	

HVO EARTHQUAKE SUMMARY LIST

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YEAR	MON	DA	HR	MIN	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 NO KM FM REMK
1982	FEB	17	17	4	45.42	19 20.57	155 11.44	7.26	1.6	1.4	26	1	75	.11	5	.5	1.3 23 SF3
		18	014	57.57	19 15.92	155 22.72	6.95	1.8	1.9	29	2	134	.11	4	.5	.9 20 SWR	
		18	038	58.73	19 20.60	155 11.50	8.35	2.6	3.1	41	2	74	.12	4	.4	.6 31 SF3	
		18	522	25.64	19 23.35	155 16.83	3.08	2.1	2.0	29	5	37	.09	1	.2	.3 18 SSC	
		18	6	3	50.49	19 23.89	155 15.30	3.35	1.6	1.7	21	4	100	.09	2	.3	.3 12 SEC
		18	8	4	9.12	19 9.73	155 35.12	9.62	3.6		34	4	112	.16	10	.6	.8 27 LSW
		18	811	58.20	19 16.85	155 21.22	8.01		1.3	11	0	156	.07	5	.8	1.6 8 SWR	
		18	1136	46.57	19 16.60	155 25.46	35.82	1.5	1.1	32	1	62	.09	5	.7	1.8 26 DLS	
		18	1152	21.56	19 19.02	155 13.54	7.22	1.7	1.2	30	2	70	.10	4	.5	1.0 22 SF2	
		18	1336	26.71	19 25.85	155 27.96	7.19	2.1	1.8	38	4	56	.13	6	.4	1.2 26 KAO	
		18	1641	.16	19 23.20	155 27.01	6.64	1.8	1.7	31	1	46	.12	2	.4	.8 23 KAO	
		18	1811	57.44	19 22.09	155 5.57	7.73	1.5	1.3	27	3	75	.11	2	.5	.8 18 SF4	
		18	1812	43.33	19 19.85	155 8.90	6.83	2.1	1.9	35	2	77	.09	4	.4	.8 26 SF4	
		18	2216	23.95	19 22.59	155 .63	7.50	1.5	1.3	23	4	168	.09	6	.5	.8 15 SF5	
		18	23	0	25.01	19 20.43	155 13.33	8.52	1.3	1.1	21	1	62	.05	4	.5	.9 16 SF2
		19	1125	39.42	19 19.02	155 13.59	7.75	1.6	1.4	32	2	69	.10	4	.5	.8 25 SF2	
		19	2359	8.97	20 3.28	155 29.43	14.35	2.3	1.8	27	1	202	.11	24	1.0	.6 18 KEA	
		20	018	52.25	19 15.49	155 23.46	35.90	2.4	1.6	40	1	123	.09	2	.7	1.2 31 DEP	
		20	417	34.41	19 20.95	155 12.92	9.41	1.6	1.2	30	2	61	.09	3	.5	.7 23 SF2	
		20	1514	21.74	19 23.43	155 17.08	3.09	1.4	1.2	20	3	47	.09	0	.3	.3 13 SSC	
		20	1516	37.17	19 23.97	155 16.97	2.89	1.9	2.3	27	4	75	.10	1	.3	.2 16 SSC	
		20	1658	21.05	19 23.18	155 17.17	2.22	1.6	1.4	21	2	62	.12	1	.3	.3 11 SSC	
		20	1811	37.40	19 9.70	155 30.80	11.27	2.3	1.3	25	0	126	.12	5	.6	.7 17 LSW	
		21	256	48.18	19 11.73	155 35.57	2.48	3.1	2.9	35	2	92	.17	11	.5	2.0 23 LSW	
		21	427	32.10	19 24.05	155 16.12	3.24	1.1	1.0	14	2	113	.09	1	.4	.4 7 SEC	
		21	638	17.34	19 19.68	155 15.38	6.75	1.4	1.1	27	3	102	.10	4	.5	.9 17 SF1	
		21	643	13.43	19 20.42	155 11.92	9.40	1.5	1.3	35	2	75	.12	5	.5	.7 27 SF3	
		21	2058	34.38	19 20.82	155 10.12	8.10	1.7	1.3	29	3	71	.09	2	.5	.7 20 SF3	
		22	627	48.64	19 25.53	155 37.67	2.67	3.2	2.6	32	1	94	.11	4	.4	1.0 21 MLO	
		22	1727	29.80	19 11.35	155 36.18	6.82	2.3	1.6	40	6	93	.19	7	.5	1.1 32 LSW	
		22	2116	.71	19 24.16	155 27.46	10.00	2.3	1.8	41	1	44	.11	3	.4	.6 28 KAO	
		23	1050	48.99	19 18.58	155 14.95	9.72	2.2	2.1	42	2	134	.11	5	.5	.5 27 SF1	
		23	1237	55.27	19 23.42	155 16.68	2.87	1.8	1.8	25	4	49	.09	1	.3	.2 15 SSC	
		23	1516	15.08	19 31.37	155 39.83	6.98	2.7	2.4	40	3	83	.12	8	.4	.8 18 MLO	
		24	135	31.35	19 23.52	155 16.79	3.18	2.1	2.4	34	5	36	.09	0	.2	.2 22 SSC	
		24	139	37.16	19 13.60	155 20.14	31.01	2.5	2.2	48	3	161	.10	7	.7	.9 38 DEP	
		24	326	34.95	19 20.18	155 11.57	8.23	1.8	1.4	29	2	81	.07	5	.5	.8 18 SF3	
		24	334	37.15	19 17.99	155 23.40	3.02	.8	1.1	16	2	100	.08	4	.4	.8 12 SWR	
		24	352	18.76	19 19.90	155 7.35	6.94	1.4	1.2	27	3	104	.11	5	.5	1.1 15 SF4	
		24	740	14.84	19 23.22	155 16.79	3.07	1.8	2.1	23	4	43	.10	0	.3	.3 15 SSC	
		24	844	15.71	19 24.89	155 16.92	1.74	1.7	2.1	17	2	144	.09	0	.3	.2 10 SNC	
		24	931	45.88	19 36.09	155 38.46	2.83	1.7	1.4	15	0	153	.12	13	1.4	41.7 8 KEA	
		24	1840	9.30	19 24.99	155 17.06	1.56	2.7	3.5	34	2	39	.12	0	.2	.2 27 SNC	
		24	1932	41.01	19 25.39	155 16.64	1.73	1.9	2.2	21	1	122	.11	1	.4	.3 14 SNC	
		25	528	31.87	19 24.74	155 17.10	1.19	1.3	1.6	9	0	79	.05	0	.3	.2 8 SNC	
		25	843	11.47	19 21.97	155 25.01	10.18	2.1	2.0	34	2	39	.11	4	.4	.8 22 SWR	
		25	935	13.69	19 23.88	155 15.79	3.58	1.7	1.8	23	3	108	.06	1	.3	.3 15 SEC	
		25	1049	32.09	19 25.97	155 37.56	2.61	2.9	2.3	24	1	93	.12	3	.5	.9 17 MLO	

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	KM	FM	REMK	
1982	FEB	25	1216	28.02	19	13.75	155	30.80	8.91	2.2	1.6	24	1	131	.14	3	.6	1.0	8	LSW	
		25	2024	16.41	19	23.38	155	23.55	10.93	1.8	1.8	36	3	36	.08	4	.4	.5	21	KAO	
		25	2236	14.94	19	19.35	155	11.26	6.80	1.6	1.2	32	4	100	.10	6	.4	.8	16	SF3	
		26	428	48.59	19	13.84	155	34.74	7.80	2.3	1.8	34	3	97	.20	5	.6	1.1	20	LSW	
		26	527	32.53	19	13.97	155	36.52	8.90	2.2	1.9	31	3	138	.21	2	.6	.9	23	LSW	
		26	626	11.43	19	20.81	155	7.52	8.63	2.4	2.0	39	4	86	.11	5	.4	.6	25	SF4	
		26	639	35.85	19	20.11	155	9.92	7.01	1.8	1.2	27	3	82	.09	4	.5	.9	18	SF3	
		26	828	11.62	19	23.77	155	16.81	2.66	1.3	1.3	11	1	77	.07	2	.4	.6	10	SSC	
		26	9	4	27.24	19	23.61	155	16.61	2.79	1.3	1.2	15	2	78	.12	1	.4	.5	9	SSC
		26	1115	14.52	19	23.60	155	16.77	2.84	1.2	1.0	18	3	74	.09	1	.3	.2	8	SSC	
	26	1318	14.37	19	10.80	155	33.31	7.29	2.4	2.4	50	1	134	.15	10	.5	.9	21	LSW		
	26	1627	17.84	19	23.13	155	16.96	3.27	1.3	1.4	15	2	70	.12	0	.4	.4	8	SSC		
	26	1736	55.66	19	19.67	155	8.09	6.79	1.5	1.1	25	3	90	.11	4	.5	1.0	18	SF4		
	26	1821	47.21	19	23.84	155	15.73	3.50	1.3	1.4	16	4	105	.12	2	.4	.5	8	SEC		
	26	1947	51.62	19	23.72	155	16.72	2.61	1.8	1.7	23	4	73	.08	1	.3	.2	14	SSC		
	26	1950	31.68	19	23.60	155	16.82	3.07	1.9	2.2	27	4	68	.11	0	.2	.3	18	SSC		
	27	3	7	33.20	19	12.90	155	32.01	8.46	1.9	1.8	28	1	130	.13	5	.5	1.0	21	LSW	
	27	551	46.70	19	15.62	155	23.43	35.17	2.7	2.3	38	3	121	.10	3	.8	1.2	34	DFP		
	27	717	26.92	19	20.27	155	13.26	7.63	1.7	1.4	24	2	64	.08	4	.5	.8	15	SF2		
	27	2244	4.73	19	23.55	155	16.79	3.39	1.6	1.8	22	3	69	.09	0	.3	.3	12	SSC		
MAR	28	129	5.99	19	23.69	155	16.67	2.88	1.4	1.3	19	3	79	.10	1	.3	.3	13	SSC		
	28	2	9	40.71	19	23.35	155	16.83	2.92	1.2		16	3	65	.09	0	.3	.3	11	SSC	
	28	214	38.54	19	23.54	155	16.85	2.83	1.4	1.3	21	4	66	.09	0	.3	.2	8	SSC		
	28	250	4.08	19	23.64	155	16.96	3.59	1.7	1.9	21	3	63	.10	1	.3	.4	12	SSC		
	28	344	30.17	19	23.89	155	16.57	2.73	2.1	2.3	29	4	83	.10	1	.2	.2	15	SSC		
	28	352	37.80	19	23.45	155	16.66	3.42	1.9	1.9	23	3	72	.12	1	.3	.4	16	SSC		
	28	356	50.51	19	23.63	155	17.71	3.84	1.0	1.0	11	3	125	.12	1	.7	.7	6	SSC		
	28	425	51.94	19	23.28	155	16.70	3.15	2.3	2.7	31	3	39	.11	0	.3	.3	23	SSC		
	28	439	3.99	19	23.41	155	16.77	3.01	1.7	2.1	24	4	68	.10	0	.3	.3	16	SSC		
	28	541	47.21	19	23.63	155	16.84	3.14	1.1	1.9	15	3	72	.09	1	.4	.3	8	SSC		
28	554	19.78	19	23.53	155	16.81	2.93	1.4	1.3	19	4	68	.09	0	.3	.3	12	SSC			
28	747	40.99	19	20.15	155	11.50	7.85		1.5	13	0	193	.08	5	1.1	1.5	11	SF3			
28	756	46.43	19	23.43	155	16.86	2.87	1.8	1.8	14	1	66	.07	3	.4	.5	12	SSC			
28	1714	31.64	19	20.13	155	6.36	8.72	2.1	1.9	29	1	153	.08	5	.5	.6	21	SF4			
28	2228	40.41	19	19.73	155	9.83	6.45	2.2	2.1	34	3	144	.11	4	.6	1.1	26	SF3			
1	139	54.80	20	13.11	155	51.54	1.20	2.1	1.5	20	0	315	.08	64	14.1	18.4	15	KOH			
1	612	55.24	19	17.68	155	23.12	3.04	1.1	1.1	13	1	101	.06	5	.4	.9	8	SWR			
1	856	36.47	19	24.25	155	25.06	10.04	1.4	1.0	26	3	46	.09	6	.4	.8	18	KAO			
1	18	7	16.51	19	21.68	155	6.00	8.13	1.6	1.6	31	3	83	.10	3	.4	.6	18	SF4		
1	2129	3.38	19	20.61	155	12.76	7.89	1.7	1.1	29	2	66	.12	4	.5	.7	17	SF2			
1	2135	18.06	18	30.28	154	4.37	35.21	2.9	2.4	39	3	324	.11137		2.5	3.2	31	DIS			
2	341	.98	19	53.89	155	23.16	30.93	2.2	1.7	34	3	238	.09	5	1.3	1.7	20	KEA			
2	453	30.73	19	23.00	155	17.02	2.72	.9	.8	11	1	73	.04	1	.3	.4	6	SSC			
2	1026	6.35	19	19.34	155	13.41	6.57	2.0	1.8	42	3	71	.17	4	.5	1.0	27	SF2			
2	1614	42.02	19	20.38	155	13.44	8.61	1.5	1.3	32	3	61	.11	4	.5	.7	18	SF2			
2	2041	29.91	19	20.60	155	11.43	8.52	1.7	1.4	33	4	75	.10	4	.4	.6	18	SF3			
2	2124	36.58	19	20.50	155	12.80	8.46	1.5	1.5	31	4	67	.11	4	.5	.8	22	SF2			
3	132	1.51	19	18.46	155	12.84	10.03	2.5	2.6	45	5	100	.12	3	.5	.5	31	SF2			

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YEAR	MON	DA	HRMN	SEC	ORIGIN TIME	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
1982	MAR	13	1645	16.96	19 19.54	155 6.97	8.53 2.1	1.5 35	2	120	.09	4	.5	.6 25	SF4				
		13	1731	58.00	19 23.98	155 16.74	2.98 2.2	2.4 28	3	68	.11	0	.3	.2 19	SSC				
		13	2259	33.55	19 23.82	155 16.77	2.94 1.6	1.3 18	3	73	.07	0	.4	.2 13	SSC				
		13	2322	42.34	19 23.74	155 16.70	2.66 1.9	2.0 29	5	45	.12	0	.3	.2 16	SSC				
		14	253	8.75	19 23.40	155 16.84	2.55 2.2	2.1 23	1	45	.10	3	.3	.5 21	SSC				
		14	438	27.47	19 23.31	155 16.73	4.03 1.6	1.2 15	1	67	.08	2	.4	.8 13	SSC				
		14	517	15.77	19 22.61	155 16.90	2.74 1.6	1.3 18	1	51	.10	2	.3	.6 15	SSC				
		14	712	28.48	19 23.31	155 16.85	2.89 2.5	2.4 23	1	45	.11	2	.3	.5 20	SSC				
		14	1236	50.07	19 22.31	155 1.65	8.30 1.9	1.1 26	2	154	.09	5	.7	.4 23	SF5				
		15	1313	55.68	19 23.42	155 17.25	2.28 1.5	1.3 13	1	56	.07	3	.3	.6 11	SSC				
		15	1321	38.59	19 23.23	155 16.94	2.46 .9	1.0 12	1	60	.09	2	.4	.6 8	SSC				
		15	1448	37.88	19 23.99	155 16.67	2.74 1.5	1.4 14	1	90	.06	2	.3	.4 12	SSC				
		15	1630	58.73	19 23.40	155 16.85	3.12 1.6	1.4 14	1	66	.03	3	.3	.5 11	SSC				
		15	2141	35.58	19 18.70	155 13.27	10.44 3.5	3.7 38	2	128	.11	7	.6	.5 32	SF2 F				
		16	210	40.08	19 18.86	155 15.42	8.26 1.8	1.1 20	0	120	.11	4	.6	.7 20	SF1				
		16	315	9.68	19 23.52	155 16.62	3.01 1.7	1.7 16	1	74	.07	2	.4	.5 15	SSC				
		16	1056	19.92	19 23.59	155 16.86	2.55 1.4	1.0 13	1	70	.09	2	.3	.5 11	SSC				
		16	1139	49.09	19 23.81	155 15.67	3.03 1.4	1.2 17	1	103	.10	3	.4	.5 13	SEC				
		16	1355	45.12	19 18.95	155 13.79	7.53 1.7	1.5 25	0	88	.12	4	.6	.8 21	SF2				
		16	1413	9.83	19 19.63	155 13.87	7.48 2.8	1.0 33	2	79	.10	5	.4	.6 30	SF2				
		16	1546	19.05	19 23.46	155 16.82	2.87 .9	1.0 13	1	68	.08	3	.4	.6 9	SSC				
		16	1826	19.06	19 23.35	155 16.77	3.29 2.2	2.3 19	1	67	.06	2	.3	.5 18	SSC				
		16	19 6	55.80	19 23.58	155 16.76	2.63 1.1	.9 12	1	73	.06	3	.3	.5 11	SSC				
		16	2211	10.52	19 23.15	155 16.67	3.30 1.4	1.2 13	2	65	.05	2	.4	.5 11	SSC				
		17	1741	6.87	19 17.98	155 22.13	7.42 1.7	1.2 22	0	162	.11	5	.7	.9 16	SWR				
		17	1856	12.95	19 23.97	155 15.80	2.86 1.5	1.6 12	0	113	.07	3	.4	.5 8	SEC				
		17	2012	14.39	19 24.06	155 28.44	9.55 2.1	2.0 30	0	47	.12	3	.4	.7 24	KAO				
		18	722	11.22	19 13.50	155 36.92	8.53 2.7	2.4 26	0	199	.21	3	1.3	1.0 22	LSW				
		18	931	12.32	19 18.91	155 15.76	7.55	1.1 17	0	122	.08	4	.5	.8 12	SF1				
		18	1017	48.50	19 20.72	155 12.72	8.51 1.5	1.8 24	1	65	.07	4	.5	.8 19	SF2				
		18	1049	12.56	19 25.66	155 16.44	2.41 2.7	1.4 20	1	117	.11	2	.5	.3 15	SNC F				
		18	1054	40.24	19 25.91	155 16.00	1.99 2.0	2.1 13	1	146	.05	3	.5	.5 10	SNC F				
		18	1120	17.50	19 26.28	155 15.91	1.80 2.1	2.6 20	1	150	.10	3	.5	.7 14	SNC F				
		18	1153	8.50	19 19.69	155 8.67	6.21	1.2 18	0	77	.08	5	.5	1.4 11	SF4				
		18	1410	19.71	19 25.42	155 16.49	2.00 2.5	2.9 27	1	48	.08	1	.5	.2 15	SNC F				
		18	15 7	8.65	19 25.50	155 16.39	1.92 2.8	1.4 34	1	38	.10	2	.3	.3 21	SNC F				
		18	16 7	6.08	19 17.54	155 20.66	9.27 2.4	2.4 42	4	127	.11	4	.4	.5 23	SWR				
		19	010	19.22	19 19.01	155 15.14	8.90 2.8	2.6 43	3	89	.13	4	.5	.6 24	SF1				
		19	7 7	47.79	19 18.96	155 14.89	6.97 1.6	1.2 29	1	98	.11	4	.5	.8 18	SF1				
		19	940	8.66	19 21.74	155 2.45	7.30 1.4	1.0 21	3	134	.11	4	.7	.9 12	SF5				
		19	1714	.29	19 17.87	155 14.26	7.96 1.7	1.5 27	2	100	.10	2	.5	.8 18	SF2				
		19	1912	15.24	19 10.93	155 33.30	7.58 2.6	2.6 32	2	134	.15	10	.5	1.0 22	LSW F				
		19	2031	44.47	19 26.12	154 54.00	4.75 1.4	1.0 21	1	170	.12	5	1.0	4.4 12	SLE				
		20	551	8.60	19 19.99	155 10.70	8.91 1.8	1.5 28	3	87	.08	4	.5	.8 19	SF3				
		20	1310	22.30	19 20.53	155 16.84	36.16 3.9	4.3 45	2	77	.10	1	.6	1.1 42	DEP F				
		20	1437	54.05	19 19.97	155 16.88	33.80 2.2	1.7 39	4	88	.09	1	.8	1.0 33	DEP				
		20	1554	30.48	19 17.84	155 28.01	9.73 1.3	1.5 24	2	47	.11	6	.4	.9 15	LSW				
		20	1947	55.28	19 20.83	155 13.33	9.00 1.6	1.8 28	2	58	.10	3	.5	.7 19	SF2				

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YEAR	MON	DA	HRMN	SEC	ORIGIN TIME	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
1982	MAR	20	20 8	19.05	19 19.37	155 11.58	6.90 1.4 1.0	23	2	98	.07	5	.4	.9 16	SF3				
		20	2223	5.52	19 19.38	155 16.26	7.54 1.7 1.7	28	2	105	.09	2	.4	.8 18	SF1				
		21	359	47.15	19 42.53	155 45.78	15.80 2.3 2.1	30	2	104	.09	8	.4	.9 12	HUA				
		21	425	59.74	19 19.20	155 13.80	7.94 1.4 1.2	31	3	84	.08	4	.4	.7 17	SF2				
		21	855	34.36	19 20.06	155 11.45	9.17 1.8 1.6	30	3	84	.07	5	.4	.6 19	SF3				
		21	1043	.63	19 19.46	155 10.06	8.52 1.8 1.8	30	3	98	.08	5	.5	.8 21	SF3				
		21	2238	38.33	19 21.04	155 6.25	8.33 2.6 2.5	35	2	95	.09	4	.4	.5 23	SF4				
		21	2348	55.70	19 18.57	155 14.01	5.98 1.6 1.6	27	2	85	.11	3	.4	1.0 16	SF2				
		22	049	45.50	19 18.62	155 14.25	7.47 1.8 1.6	29	1	81	.12	3	.5	.9 15	SF2				
		22	456	19.13	19 23.38	155 16.92	2.71 1.2 1.2	9	1	87	.07	3	.5	1.0 8	SSC				
		22	7 8	.20	19 19.02	155 16.20	7.10 1.7 1.3	24	3	111	.10	3	.5	.9 13	SF1				
		22	915	50.30	19 21.12	155 2.50	6.53 2.7 2.7	36	4	141	.11	2	.4	.6 23	SF5				
		22	1026	1.68	19 23.60	155 16.99	3.54 1.6 1.3	12	2	83	.06	2	.5	.8 8	SSC				
		22	1213	57.33	19 23.73	155 15.79	2.43 2.1 2.3	23	3	79	.10	3	.3	.5 19	SEC F				
		22	1621	28.88	19 28.38	155 14.56	26.63 2.7 2.4	45	5	53	.11	7	.5	.9 37	DEP F				
		22	1740	41.69	19 23.89	155 16.72	3.40 2.2 2.4	25	0	43	.10	2	.3	.6 20	SSC				
		22	1911	1.62	19 18.88	155 15.12	6.65 1.8 1.3	25	2	94	.12	5	.5	1.0 17	SF1				
		22	1916	9.60	19 21.30	155 18.50	2.74 2.1 2.6	21	2	47	.10	3	.3	.7 13	SWR				
		22	1927	48.83	19 19.66	155 13.90	8.96 1.9 1.2	27	2	71	.08	5	.5	.8 15	SF2				
		22	1942	38.19	19 13.16	155 33.82	8.11 2.4 1.6	28	1	121	.18	7	.7	.9 17	LSW				
		22	1945	18.39	19 21.05	155 18.50	2.89 1.5 2.0	15	1	52	.09	3	.4	.7 7	SWR				
		23	9 5	4.58	19 23.55	155 17.46	5.24 1.3 1.1	11	2	118	.07	3	.4	1.8 5	INT				
		23	1139	44.91	19 23.12	155 16.95	2.94 1.2 1.0	17	3	63	.07	1	.4	.3 8	SSC				
		23	12 0	3.64	19 23.09	155 16.96	2.86 1.0 1.0	14	3	64	.06	1	.4	.4 7	SSC				
		23	12 8	7.21	19 23.10	155 17.20	2.46 .8 .9	13	3	65	.25	1	.6	.5 9	SSC				
		23	1242	31.75	19 24.76	155 16.78	10.65 1.4 .9	18	2	140	.14	0	.8	1.2 8	INT				
		23	15 9	9.61	19 23.04	155 16.84	2.95 1.5 1.2	21	4	47	.08	1	.3	.3 11	SSC				
		23	1511	16.76	19 23.16	155 16.87	3.21 1.2 .8	17	3	55	.10	0	.4	.3 8	SSC				
		23	1512	22.73	19 23.42	155 16.71	3.09 2.1 2.0	27	4	48	.07	0	.3	.2 16	SSC				
		23	1514	2.85	19 23.08	155 16.79	3.10 1.2 1.0	18	3	46	.09	1	.4	.3 8	SSC				
		23	1517	2.39	19 23.37	155 16.94	3.42 1.3 .5	15	2	55	.12	0	.4	.3 10	SSC				
		23	1518	58.18	19 23.09	155 17.42	3.09 1.4 1.0	13	3	114	.07	1	.4	.3 6	SSC				
		23	1520	5.07	19 23.18	155 16.95	3.08 1.3 1.0	15	3	78	.07	0	.4	.3 8	SSC				
		23	1521	48.35	19 23.24	155 16.99	2.82 1.1 1.0	13	3	80	.06	1	.3	.4 7	SSC				
		23	1522	27.45	19 23.09	155 16.95	2.94 1.7 1.2	18	3	47	.08	1	.3	.3 11	SSC				
		23	1523	55.24	19 20.57	155 6.80	8.70 1.9 2.0	27	3	99	.11	5	.6	.8 18	SF4				
		23	1527	2.31	19 23.07	155 16.77	2.95 1.6 1.0	13	2	66	.08	1	.4	.3 10	SSC				
		23	1528	1.15	19 23.19	155 16.89	2.95 2.3 2.2	23	2	46	.09	0	.3	.3 12	SSC				
		23	1534	31.08	19 23.13	155 16.81	2.66 2.1 1.7	29	4	39	.09	1	.3	.3 18	SSC				
		23	1535	6.56	19 23.17	155 16.88	3.08 1.8 1.2	15	3	61	.05	0	.3	.3 11	SSC				
		23	1537	23.63	19 23.37	155 16.89	3.06 1.2 .8	15	3	59	.06	0	.4	.3 7	SSC				
		23	1537	58.78	19 23.25	155 16.68	3.15 2.6 2.4	30	2	40	.10	1	.3	.3 20	SSC				
		23	1539	34.20	19 23.55	155 16.68	3.10 2.5 2.3	29	3	49	.12	1	.3	.2 18	SSC				
		23	1545	40.57	19 23.61	155 16.81	2.90 1.8 1.9	23	4	42	.08	1	.3	.2 14	SSC				
		23	1552	25.72	19 23.89	155 16.74	2.73 1.2 1.0	16	3	83	.09	0	.4	.3 10	SSC				
		23	1554	32.02	19 23.98	155 17.16	2.98 1.1 1.0	14	3	81	.08	1	.5	.4 7	SSC				
		23	1610	34.36	19 23.74	155 16.88	2.78 1.4 1.2	14	3	99	.06	1	.4	.3 8	SSC				
		23	1823	57.91	19 19.14	155 28.51	9.23 1.9 2.0	34	1	40	.12	6	.4	.8 19	KAO				

HVO EARTHQUAKE SUMMARY LIST

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YEAR	MON	DA	HR	MIN	SEC	ORIGIN TIME	LAT N	DEG	MIN	DEG	MIN	DETH	KM	AMP	MAG	OUR	MAG	NR	NS	GAP	RMS	MIN	DIS	ERH	KM	ERZ	NO	KM	FM	REMK	
1982	MAR	23	22	4	56.33	19 20.64	155	12.67				8.25	1.8	1.5	31	3	66	.09	4	.5	.7	22	SF2								
		24	219	57.13	19 19.11	155	13.40				8.09	1.7	1.8	35	2	74	.12	4	.5	.8	22	SF2									
		24	221	25.84	19 19.09	155	13.57				8.96	2.6	2.5	42	4	69	.12	4	.4	.4	30	SF2									
		24	233	53.82	19 16.15	155	23.50				6.18	2.3	2.1	37	1	111	.12	4	.4	.8	27	SWR									
		24	239	28.31	19 15.71	155	23.11				6.48	1.9	1.8	27	3	131	.10	3	.4	.8	19	SWR									
		24	240	53.31	19 15.66	155	23.56				6.84	1.9	1.5	23	2	117	.11	3	.5	1.1	15	SWR									
		24	241	42.59	19 19.04	155	13.22				7.40	1.7	1.5	32	2	79	.11	4	.5	.9	22	SF2									
		24	1237	12.51	19 18.50	155	18.40				33.62	2.6	2.6	47	3	95	.10	1	.6	1.0	43	DEP									
		24	1251	7.51	19 18.01	155	17.84				32.06	1.5	.9	26	0	135	.07	1	.9	1.3	19	DEP									
		24	1440	37.14	19 58.58	155	35.45				44.03	2.8	2.0	40	2	159	.11	26	.9	2.0	32	KOH									
		24	1754	53.57	19 23.82	155	16.84				2.85	1.4	1.4	16	4	77	.06	0	.4	.3	10	SSC									
		24	2050	53.39	19 23.69	155	16.89				2.66	1.9	1.8	27	4	56	.11	1	.3	.2	16	SSC									
		24	2059	33.03	19 23.65	155	16.88				2.72	1.2	1.0	14	3	58	.07	1	.4	.3	7	SSC									
		25	050	30.78	19 23.43	155	16.76				2.69	.8	1.2	13	3	55	.08	0	.4	.3	8	SSC									
		25	1033	34.58	19 24.28	155	16.25				3.26	1.2	1.2	13	3	125	.06	1	.5	.5	9	SEC									
		25	1251	55.24	19 13.18	155	30.66				7.74	2.5	2.1	36	2	133	.17	4	.6	.9	21	LSW									
		25	15	8	18.13	19 23.34	155	16.67			3.02	2.3	2.7	31	5	38	.09	0	.2	.2	22	SSC									
		25	1621	58.66	19 18.33	155	18.27				33.43	2.0	1.6	40	2	118	.10	1	.7	1.0	33	DEP									
		25	2020	50.49	19 21.03	155	7.48				8.80	2.6	2.8	43	5	84	.11	4	.4	.5	27	SF4									
		25	2119	29.22	19 20.66	155	13.16				8.22	1.6	1.3	30	1	62	.10	4	.5	.7	17	SF2									
		26	1	0	1.64	19 20.73	155	11.61			9.33	2.3	2.1	41	6	72	.09	4	.3	.5	24	SF3									
		26	1	4	34.00	19 54.75	155	36.20			11.33	3.6	3.5	47	4	130	.13	21	.5	.6	28	KEA									
		26	1122	45.56	19 25.83	155	37.25				3.25	2.8	2.9	34	2	78	.11	3	.4	1.0	26	MLO									
		26	1314	46.88	20 15.08	156	35.09				.11	2.6	2.3	27	4	246	.12	67	2.5	.5	13	DIS									
		26	1418	43.86	19 21.70	155	6.40				8.89	2.2	1.9	32	3	81	.08	2	.4	.8	21	SF4									
		26	1426	57.49	19 19.23	155	15.42				7.52	1.4	1.0	24	3	100	.10	4	.5	1.0	14	SF1									
		26	16	3	24.19	19 17.86	155	13.41			7.82	1.9	1.5	32	2	89	.11	2	.5	.8	20	SF2									
		26	2029	8.23	19 20.55	155	12.72				9.53	1.8	1.8	33	2	67	.11	4	.4	.6	20	SF2									
		27	358	8.44	19 25.64	155	37.66				2.03	2.2	1.8	22	1	94	.12	4	.4	1.1	13	MLO									
		27	710	29.22	19 20.20	155	12.51				7.81	1.9	1.1	26	2	73	.10	5	.5	.9	19	SF2									
		27	10	8	10.48	19 19.58	155	8.52			8.43	1.9	1.6	32	4	80	.08	4	.5	.7	18	SF4									
		27	1332	12.59	19 20.74	155	12.84				8.29	2.1	1.9	36	3	63	.11	4	.4	.6	27	SF2									
		27	15	8	20.07	19 18.30	155	18.32			33.12	2.4	1.8	41	1	117	.10	1	.7	1.1	36	DEP									
		27	1555	6.66	19 22.38	155	1.50				8.14	2.1	1.8	33	3	147	.11	5	.5	.7	20	SF5									
		28	045	6.37	19 22.22	155	5.92				8.14	1.8	1.1	24	4	73	.06	2	.4	.8	14	SF4									
		28	656	20.22	19 19.65	155	6.48				8.22	1.8	1.1	24	3	127	.08	5	.5	1.0	13	SF4									
		28	835	43.55	19 21.10	155	13.00				9.37	1.6	1.2	24	2	69	.06	3	.6	.8	18	SF2									
		28	1039	47.28	19 19.73	155	11.43				9.44	2.9	2.8	41	3	91	.09	5	.4	.4	32	SF3									
		28	1228	52.55	19 17.71	155	16.17				9.55	2.3	2.0	33	3	130	.08	4	.5	.6	21	SF1									
		28	1358	19.94	19 17.24	155	12.60				7.64	1.5	1.1	22	2	168	.10	2	.7	1.2	10	SF2									
		28	1557	40.87	19 11.66	155	35.80				8.17	2.3	1.2	25	2	92	.19	6	.6	1.2	11	LSW									
		28	18	0	48.65	19 20.88	155	10.76			8.76	1.9	1.8	34	3	71	.10	3	.4	.6	23	SF3									
		28	20	6	44.89	19 21.32	155	.85			3.84	1.4	1.3	25	1	187	.19	5	.9	2.1	10	SF5									
		29	028	5.34	19 21.71	155	5.88				7.59	1.4	1.3	26	3	83	.12	3	.5	.6	15	SF4									
		29	1430	8.55	19 20.18	155	8.40				7.40	1.8	1.3	31	4	79	.09	4	.4	.7	14	SF4									
		30	1117	.37	19 58.79	155	20.30				13.15	1.9	1.3	18	3	203	.12	10	1.1	.6	.9	KEA									
		30	1125	39.02	19 18.77	155	13.20				6.01	1.4	1.1	25	1	83	.13	3	.6	1.5	20	SF2									
		30	1214	50.92	19 15.70	155	27.97				9.30	1.4	1.1	20	2	68	.12	4	.5	.8	9	LSW									

HVO EARTHQUAKE SUMMARY LIST

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YEAR	MON	DA	HR	MIN	SEC	ORIGIN TIME	LAT N	DEG	MIN	DEG	MIN	DEPT	KM	AMP	MAG	OUR	MAG	NR	NS	GAP	RMS	MIN	DIS	ERH	KM	ERZ	NO	KM	FM	REMK
1982	MAR	30	1339	24.33	19	17.76	155	14.98				8.46	1.7	1.5	36	4	120	.12	3	.5				.7	19	SF1				
		30	1512	55.81	19	14.93	155	22.88				8.41	2.6	2.3	33	3	167	.11	2	.5				.6	21	SWR				
		30	17	7	18.66	19	20.10	155	6.88			8.07	1.9	1.6	32	1	109	.11	5	.5				.9	19	SF4				
		30	1818	52.58	19	20.29	155	12.68				9.48	1.7	1.6	32	4	70	.08	4	.5				.8	19	SF2				
		31	0	1	22.69	19	15.39	155	22.84			6.30	2.2	1.9	23	1	166	.10	3	.8				1.5	15	SWR				
		31	044	23.87	19	16.19	155	22.92				6.00	2.1	2.1	31	1	126	.14	4	.5				1.3	20	SWR				
		31	757	27.29	19	59.73	155	24.91				11.63	2.0	1.5	10	2	215	.08	14	1.5				.8	7	KEA				
		31	1717	1.33	19	18.15	155	13.29				8.09	2.0	2.0	41	6	91	.11	2	.4				.6	23	SF2				
		31	1721	25.67	19	18.15	155	13.30				9.23	2.2	2.4	40	4	90	.11	2	.5				.4	24	SF2				
		31	2324	32.39	19	20.72	155	11.47				9.80	2.0	1.6	35	4	73	.10	4	.4				.6	21	SF3				
	APR	1	547	35.69	19	24.00	155	15.63				3.31	2.9	3.0	37	2	43	.09	2	.3				.3	27	SEC	F			
		1	1728	7.56	19	20.02	155	11.25				7.22	2.2	2.2	34	1	85	.14	5	.5				.8	27	SF3				
		2	1858	5.00	19	22.00	155	26.33				12.30	2.2	2.1	40	4	43	.10	2	.5				.4	28	KA0				
		2	2213	12.98	19	20.42	155	11.96				7.01	2.1	2.2	39	4	75	.13	5	.4				.7	22	SF3				
		3	349	17.40	19	23.57	155	16.98				3.12	.8	1.0	11	2	119	.02	0	.4				.4	9	SSC				
		3	1220	8.53	19	21.94	155	4.70				8.43	2.1	1.5	33	3	80	.11	3	.4				.6	23	SF5				
		3	1229	45.40	19	21.69	155	29.84				8.92	2.0	1.4	33	1	39	.12	4	.4				.8	16	KA0				
		3	21	8	14.64	19	23.44	155	16.69			3.06	1.9	2.2	26	3	50	.11	0	.3				.3	13	SSC				
		3	2331	1.94	19	23.65	155	16.82				3.07	1.4	1.2	18	2	47	.07	1	.4				.2	10	SSC				
		4	329	17.88	19	20.06	155	8.71				6.79	1.7	1.7	30	3	74	.09	4	.5				.9	16	SF4				
		4	4	2	21.92	19	21.92	154	59.88			7.50	2.4	1.7	34	3	180	.12	6	.6				.7	22	LER				
		4	421	22.95	19	15.83	155	22.98				5.63	2.1	2.1	37	2	132	.10	3	.4				.8	23	SWR				
		4	548	41.45	19	21.65	155	15.22				9.27	2.0	1.8	32	4	62	.10	2	.4				.5	20	SF1				
		4	726	50.70	19	19.87	155	8.46				7.79	1.8	1.1	31	4	80	.10	5	.5				.8	18	SF4				
		4	1039	48.99	19	15.85	155	23.34				8.86	1.9	1.8	25	4	139	.09	3	.5				.7	15	SWR				
		4	1658	.22	19	21.24	155	14.81				9.56	1.5	1.2	28	3	65	.08	3	.5				.7	16	SF1				
		4	2357	44.27	19	24.60	155	16.14				3.54	1.6	1.3	14	1	118	.09	2	.4				.3	9	SNC				
		5	419	6.32	19	19.94	155	7.26				8.85	3.0	3.1	43	4	105	.10	5	.4				.4	27	SF4				
		5	551	8.19	19	20.64	155	12.62				8.34	1.8	1.4	33	3	67	.10	4	.4				.7	20	SF2				
		5	1823	19.09	19	20.46	155	13.09				9.03	1.6	1.4	25	3	64	.08	4	.4				.8	18	SF2				
		5	20	9	13.60	19	23.66	154	58.46			7.17	2.2	1.7	32	3	168	.15	3	.6				.6	18	LER				
		5	2229	13.62	19	24.04	155	16.00				3.53	1.2	1.3	15	3	115	.09	1	.4				.4	8	SEC				
		6	053	50.83	19	23.59	155	16.94				2.75	2.2	3.0	29	2	48	.09	1	.2				.3	20	SSC				
		6	321	16.11	19	17.03	155	21.74				6.91	1.8	1.5	30	2	130	.11	6	.4				.9	21	SWR				
		6	638	5.44	19	23.61	155	16.92				3.05	1.3	1.2	19	3	49	.06	0	.3				.3	11	SSC				
		6	757	4.88	19	21.33	155	8.15				8.40	1.9	1.4	36	4	71	.09	3	.4				.6	21	SF4				
		6	1058	58.93	19	20.98	155	6.17				9.07	3.0	3.1	40	2	97	.11	4	.5				.5	27	SF1				
		6	1148	.44	18	53.50	155	12.34				36.13	2.3	1.6	31	0	260	.08	40	2.1				3.6	24	LO1				
		6	2224	11.83	19	19.88	155	10.72				9.44	2.0	1.8	37	5	89	.09	4	.3				.5	23	SF3				
		7	019	48.24	19	30.97	155	55.00				11.59	3.1	3.2	28	3	200	.08	3	1.2				.7	15	KON				
		7	8	2	5.19	19	20.29	155	11.78			9.40	2.1	1.9	36	3	77	.08	5	.3				.6	29	SF3				
		7	1054	55.06	19	21.93	155	15.03				9.52	3.0	3.2	44	4	58	.11	2	.4				.5	31	SF1				
		7	1947	3.37	19	23.96	155	29.18				9.43	2.4	2.4	42	3	34	.10	4	.3				.6	28	KA0				
		8	149	36.23	19	22.63	155	.64				8.52	2.3	1.6	37	3	158	.15	6	.6				.7	24	SF5				
		8	6	6	18.47	19	46.05	156	2.95			8.45	1.8	1.8	15	1	239	.16	24	2.4				1.1	5	HUA				
		8	836	17.48	20	.48	155	22.98				9.37	2.7	2.4	25	4	204	.12	27	.9				.6	10	KEA				
		8	15	5	10.30	19	23.23	155	16.85			2.75	1.6	1.7	21	3	46	.09	0	.3				.2	11	SSC				
		8	2345	8.01	19	20.16	155	8.11				7.47	1.4	1.0	26	2	200	.09	5	.7				1.0	18	SF4				

HVO EARTHQUAKE SUMMARY LIST

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YEAR	MON	DA	HR	MIN	SEC	ORIGIN TIME	LAT N	LON W	DEPTH	AMP	DIR	GAP	RMS	MIN	ERH	ERZ	NO	REMK					
							DEG	MIN	DEG	MIN	KM	MAG	MAG	NR	NS	DEG	SEC	DIS	KM	KM	FM	REMK	
1982	APR	9	128	7.07	18	53.68	155	15.04	12.57	2.4	2.7	25	0	251	.11	37	2.5	1.0	4	LOI			
		9	1046	16.06	19	23.52	155	16.84	3.00	1.5	1.3	23	3	48	.10	0	.3	.2	13	SSC			
		9	1051	29.46	19	20.75	155	12.21	8.78	2.1	1.8	37	3	68	.11	4	.4	.6	27	SF3			
		9	1552	13.37	19	23.63	155	16.72	2.86	1.5	1.6	22	3	44	.11	1	.3	.3	12	SSC			
		9	16	2	55.20	19	21.75	155	4.89	7.40	2.2	2.1	33	2	80	.12	3	.5	.7	17	SF5		
		9	1634	17.98	19	23.66	155	16.79	2.84	1.4	1.3	18	4	45	.07	1	.3	.2	11	SSC			
		9	21	2	48.26	19	24.27	155	16.26	1.43	1.4	1.3	20	4	110	.11	1	.2	.2	10	SEC		
		10	229	47.23	19	18.93	155	13.37	8.61	1.9	1.7	36	3	76	.11	4	.5	.7	20	SF2			
		10	236	33.42	19	20.30	155	13.11	7.71	1.3	1.1	22	2	65	.06	4	.5	.8	14	SF2			
		10	525	5.38	19	26.65	154	53.69	7.14	1.9	1.4	23	2	161	.13	3	.7	.8	16	LER			
		10	550	29.70	19	23.62	155	17.07	1.66	1.2	1.6	14	3	65	.11	1	.2	.3	6	SSC			
		10	559	49.60	19	23.56	155	16.94	2.81	1.1	1.1	41	3	39	.13	0	.2	.2	30	SSC	F		
		10	732	4.47	19	23.37	155	16.87	2.85	2.0	1.4	28	4	36	.09	0	.2	.2	19	SSC			
		10	733	38.74	19	23.35	155	17.04	3.07	1.3	1.5	19	4	55	.08	0	.3	.3	12	SSC			
		10	1050	32.22	19	19.86	155	5.04	5.93	1.3	1.3	20	1	140	.12	4	.6	1.3	8	SF5			
		10	1523	29.89	19	22.90	155	17.09	2.91	.9	1.1	16	3	73	.06	1	.3	.4	11	SSC			
		10	1551	22.35	19	22.79	155	4.78	8.11	2.9	1.1	41	3	78	.10	3	.4	.5	23	SF5			
		10	2227	59.76	19	20.36	155	13.22	8.10	1.4	1.4	28	2	63	.09	4	.5	.8	18	SF2			
		11	0	3	12.03	19	19.33	155	15.31	7.95	2.4	2.3	36	4	89	.12	4	.4	.7	21	SF1		
		11	120	21.00	19	24.01	155	16.90	3.25	2.4	2.8	37	5	35	.12	1	.3	.2	23	SSC			
		11	234	53.26	19	20.03	155	8.41	8.30	1.8	1.9	33	4	79	.10	5	.4	.7	18	SF4			
		11	552	56.84	19	23.45	155	16.93	3.11	1.5	1.8	21	3	51	.08	0	.2	.2	13	SSC			
		11	921	8.23	19	23.46	155	16.88	3.27	1.3	1.2	19	5	51	.06	0	.3	.3	13	SSC			
		11	1255	30.52	19	22.82	155	17.04	2.89	1.5	1.3	14	3	77	.04	2	.3	.5	11	SSC			
		11	16	4	2.40	19	19.82	155	6.69	9.18	4.2	4.2	45	3	118	.12	5	.3	.4	42	SF4	F	
		11	16	8	21.93	19	19.76	155	6.65	8.45	2.3	2.1	38	3	121	.09	5	.4	.5	27	SF4		
		11	1620	33.56	19	19.60	155	6.58	8.00	1.5	1.1	29	3	127	.09	5	.5	.9	21	SF4			
		11	1635	54.60	19	20.41	155	6.68	8.27	1.9	1.3	32	4	105	.10	5	.5	.8	19	SF4			
		11	1843	41.37	19	23.92	155	15.77	3.96	1.0	1.4	16	2	110	.10	1	.4	.4	11	SEC			
		11	1916	59.05	19	23.99	155	15.61	1.54	2.2	2.5	34	3	42	.12	2	.2	.3	23	SEC	F		
		12	2254	35.33	19	23.37	155	16.85	3.07	1.4	1.0	17	3	53	.08	0	.3	.3	11	SSC			
		12	1	2	24.11	19	19.19	155	15.70	8.28	2.4	2.2	42	3	94	.12	3	.4	.6	26	SF1		
		12	5	9	42.41	19	19.59	155	6.24	8.47	1.4	1.2	29	3	134	.07	5	.5	.8	19	SF4		
		12	623	32.90	19	21.94	155	18.24	2.49	1.0	1.2	18	2	55	.12	4	.3	.7	10	SWR			
		12	644	13.29	19	23.97	155	16.92	2.45	1.3	1.4	19	4	77	.07	1	.3	.3	11	SSC			
		12	715	22.46	19	21.93	155	5.16	8.29	1.5	1.4	23	1	77	.08	3	.5	.9	12	SF5			
		12	956	53.01	19	20.59	155	6.79	7.97	2.2	2.3	35	3	99	.08	5	.4	.6	22	SF4			
		12	1836	9.51	19	22.47	155	17.34	2.63	1.1	1.0	19	2	53	.08	2	.3	.4	13	SSC			
		12	2225	8.51	19	12.69	155	19.49	39.52		1.6	22	0	183	.07	9	1.6	3.2	5	DEP	L		
		13	612	47.31	19	17.32	155	12.85	7.88	1.8	1.9	38	4	81	.12	1	.5	.6	22	SF2			
		13	618	21.28	19	24.88	155	17.01	1.63	2.1	2.0	20	1	67	.06	0	.3	.2	15	SNC			
		13	1337	39.74	19	23.67	155	16.97	2.85	.9	1.0	16	5	60	.05	1	.3	.1	11	SSC			
		13	1349	1.26	19	23.62	155	16.79	2.83	1.3	1.5	16	5	56	.09	1	.4	.2	10	SSC			
		13	2021	25.37	19	23.95	155	16.93	2.77	1.1	1.0	14	4	78	.09	1	.3	.3	9	SSC			
		13	2044	51.83	19	24.19	155	16.69	3.08	1.8	2.0	26	4	85	.10	1	.3	.2	16	SSC			
		13	2154	15.12	19	21.90	155	18.09	2.71	1.2	1.0	20	3	78	.08	3	.3	.6	12	SWR			
		13	2316	49.18	19	17.64	155	20.86	8.24	1.7	1.2	26	3	129	.11	4	.4	.8	19	SWR			
		14	139	25.14	19	23.43	155	16.87	2.87	2.7	1.1	38	4	36	.11	0	.2	.2	26	SSC			

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			ORIGIN TIME			LAT N		LON W		DEPTH AMP DIR				GAP RMS MIN ERH			ERZ NO					
YEAR	MON	DA	HR	MIN	SEC	DEG	MIN	DEG	MIN	KM	MAG	MAG	NR	NS	DEG	SEC	DIS	KM	KM	FM	REMK	
1982	APR	14	217	58.66	19	17.62		155	12.83	6.81	2.0	1.8	30	2	133	.08	2	.5	.9	17	SF2	
		14	341	52.84	20	5.85		155	47.41	26.85	2.7	2.1	38	4	186	.09	4	1.3	1.5	24	KOH	
		14	422	16.30	19	17.82		155	12.86	7.71	2.0	1.9	34	4	121	.12	2	.5	.8	20	SF2	
		14	430	28.94	19	14.59		155	24.66	36.56	2.8	2.6	45	2	99	.10	1	.7	1.1	39	DEP	
		14	434	27.52	19	17.44		155	12.90	7.22	1.5	1.4	27	3	142	.10	1	.6	1.0	17	SF2	
		14	957	3.70	19	19.07		155	14.98	8.45	2.0	1.7	32	1	98	.09	5	.5	.7	22	SF1	
		14	1059	8.02	19	25.40		155	25.64	9.17	2.0	1.6	32	2	41	.09	1	.4	.8	19	KAO	
		14	14	0	6.05	19	21.77		155	2.41	7.17	1.6	1.2	27	5	135	.12	4	.5	.8	14	SF5
		14	1438	45.72	19	22.93		155	17.10	2.61	1.0	1.0	16	4	71	.05	1	.3	.3	11	SSC	
		14	1741	44.55	19	23.21		155	17.12	2.35	.8	1.0	9	2	97	.03	0	.3	.4	6	SSC	
14	1929	55.90	19	20.61		155	13.05	8.59	1.8	2.2	32	3	63	.09	4	.4	.6	24	SF2			
14	1938	12.92	19	24.64		155	31.07	15.47	1.9	2.3	16	1	67	.14	10	.7	1.0	1	DML			
14	1940	59.87	19	23.48		155	16.80	2.96	1.9	2.3	29	4	37	.09	0	.2	.2	18	SSC			
14	2038	16.72	19	12.13		155	32.07	7.31	2.2	1.6	24	0	91	.14	7	.6	1.2	16	LSW			
14	2319	41.37	19	18.61		155	14.75	6.57	1.1	1.3	23	0	102	.11	4	.6	1.1	15	SF1			
15	237	4.43	19	23.82		155	16.71	2.89	2.4	1.1	35	4	57	.11	0	.3	.2	26	SSC			
15	240	34.68	19	23.82		155	17.18	2.57	.8	2.0	13	3	79	.08	1	.3	.3	7	SSC			
15	452	37.61	19	20.32		155	12.66	8.93	1.3	1.5	23	2	70	.06	4	.5	.9	18	SF2			
15	920	49.25	19	17.67		155	22.59	7.78	2.1	2.1	32	2	109	.12	5	.4	.9	25	SWR			
15	1043	35.11	19	21.75		155	18.31	2.67	1.4	1.4	22	4	55	.07	3	.3	.6	13	SWR			
15	1240	2.55	19	23.13		155	16.82	2.88	1.8	1.9	26	5	41	.09	1	.3	.2	16	SSC			
15	1357	6.97	19	17.94		155	21.03	6.51	1.7	1.2	24	5	121	.10	4	.4	1.2	18	SWR			
15	1629	34.94	19	23.64		154	59.27	6.08	2.0	1.6	31	3	160	.16	3	.6	.9	17	LER			
15	1742	32.48	19	20.11		155	6.84	7.47	2.0	1.8	29	3	110	.11	5	.5	.8	19	SF4			
15	2014	55.33	19	23.38		155	16.82	2.84	.9	1.0	17	4	57	.05	0	.3	.2	10	REMK			
16	0	0	24.54	19	17.97		155	15.74	5.91	1.2	1.3	27	1	133	.11	4	.5	1.1	17	SF1		
16	435	24.91	19	23.64		155	16.76	2.89	1.8	1.6	24	3	40	.10	1	.3	.2	18	SSC			
16	436	4.16	19	23.82		155	16.75	2.83	1.9	2.2	27	3	73	.09	0	.5	.2	21	SSC			
16	5	0	23.22	20	2.16		155	20.64	6.83	1.6	1.6	46	3	215	.10	47	.7	.9	39	KEA		
16	15	4	47.52	19	19.91		155	12.02	9.88	1.0	1.2	42	4	83	.09	5	.4	.4	29	SF3		
16	1515	40.70	19	20.21		155	11.72	10.22	1.7	1.7	45	4	80	.09	5	.4	.3	41	SF3			
16	1724	16.21	19	22.50		155	17.06	3.22	1.1	1.2	20	2	53	.08	2	.5	.4	15	SSC			
16	1921	2.75	19	25.93		155	37.42	1.61	2.0	2.1	28	1	92	.14	7	.4	1.6	17	MLD			
16	2359	40.17	19	24.39		155	17.59	16.18	2.0	1.3	36	3	45	.09	1	.5	.4	27	DEP			
17	120	50.73	19	25.11		155	17.14	1.40	1.9	1.9	40	0	64	.10	0	.2	.2	36	C			
17	150	30.74	19	24.91		155	17.51	1.64	1.3	1.2	15	3	98	.10	1	.4	.2	10	SNC			
17	226	2.46	19	25.36		155	16.74	1.85	2.2	2.6	31	1	47	.10	1	.3	.3	26	SNC			
17	5	6	31	19	24.07		155	15.93	2.78	1.1	.9	13	2	118	.10	1	.4	.4	9	SEC		
17	535	42.73	19	25.87		155	16.72	1.51	1.5	1.5	14	1	182	.08	2	.5	.4	.9	SNC			
17	6	9	58.90	19	21.00		155	6.11	7.96	2.2	2.1	38	2	97	.11	4	.4	.6	28	SF4		
17	923	45.64	19	25.04		155	17.37	1.27	1.4	1.8	20	2	126	.11	1	.4	.2	12	SNC			
17	1034	44.08	19	8.79		155	35.13	8.94	1.4	1.7	31	2	122	.13	12	.5	.9	18	LSW			
17	1329	33.61	19	20.64		155	10.74	7.93	2.0	1.8	39	3	75	.12	3	.4	.7	32	SF3			
17	1519	22.58	19	21.15		155	18.48	4.32	1.1	1.1	20	2	59	.10	3	.4	1.1	15	SWR			
17	18	7	14.66	19	19.64		155	7.53	7.79	1.8	1.7	35	4	105	.08	4	.5	.8	24	SF4		
17	1942	35.70	19	41.52		155	18.33	28.50	1.8	1.4	36	4	97	.10	19	.7	1.8	28	KEA			
17	2010	22.28	19	23.50		155	16.87	2.86	1.7	1.7	25	3	44	.10	0	.5	.2	15	SSC			
17	2116	50.41	19	23.39		155	16.74	3.00	1.1	.9	14	2	72	.04	0	.5	.3	8	SSC			

HVO EARTHQUAKE SUMMARY LIST

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YEAR	MON	DA	HRMN	SEC	ORIGIN TIME	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 NO KM FM	REMK
1982	APR	17	2317	27.89	19 20.61	155 12.98	8.86 1.8 1.3	31	2	64 .09	4	.4	.7 22	SF2				
		18	322	35.11	19 19.91	155 10.91	8.29 1.7 1.1	29	1	89 .08	4	.5	.8 20	SF3				
		18	4 8	39.19	19 24.31	155 16.01	4.47 .9 .8	14	3	141 .09	1	.5	.5 7	SEC				
		18	751	27.68	19 19.83	155 9.61	6.87 1.6 1.1	25	3	86 .09	4	.5	1.0 14	SF3				
		19	012	21.67	19 23.75	155 16.89	2.92 1.1 1.0	16	3	66 .08	1	.3	.3 11	SSC				
		19	2 1	4.21	19 46.38	155 47.62	14.85 2.7 2.4	34	5	155 .09	11	.5	.8 29	HUA				
		19	223	55.89	19 20.92	155 4.63	8.98 3.8 4.1	47	2	100 .11	4	.5	.4 42	SF5 F				
		19	240	55.90	19 20.32	155 3.84	8.28 2.1 1.9	35	2	118 .10	2	.5	.5 23	SF5				
		19	3 2	.66	19 20.63	155 3.82	8.97 3.9 4.0	44	2	101 .11	2	.5	.4 41	SF5 F				
		19	3 7	47.93	19 23.65	155 16.85	2.77 1.8 1.8	27	5	50 .09	1	.3	.2 17	SSC				
		19	312	7.33	19 20.56	155 3.40	8.33 1.8 1.3	29	0	93 .12	1	.7	.8 18	SF5				
		19	314	4.11	19 20.49	155 3.63	8.11 2.2 2.1	35	1	102 .11	2	.6	.6 26	SF5 F				
		19	4 4	39.34	19 20.24	155 7.09	6.73 2.0 1.4	33	3	102 .14	5	.5	1.0 22	SF4				
		19	11 0	51.37	19 20.61	155 13.56	8.54 1.8 1.5	27	3	64 .07	4	.5	.7 23	SF2				
		19	1918	26.61	19 23.44	155 16.15	3.40 1.3 1.3	16	3	176 .07	2	.6	.4 10	SNC				
		19	2043	13.95	19 26.01	155 28.17	9.42 2.1 1.4	39	4	49 .12	5	.3	.7 30	KA0				
		19	2056	31.89	19 9.10	155 40.04	6.54 2.7 2.6	34	1	122 .23	12	.8	1.4 24	LSW				
		20	654	45.31	19 26.66	155 16.46	.23 1.6 2.3	17	1	189 .17	3	.4	1.1 8	SNC				
		20	1325	37.79	19 20.50	155 13.11	8.74 1.5 1.1	26	2	64 .09	4	.5	.7 20	SF2				
		20	1335	11.63	19 23.83	155 15.44	2.44 1.6 1.9	24	4	102 .08	2	.3	.3 13	SEC				
		20	1757	20.36	19 21.76	155 6.91	7.29 1.3 1.3	28	5	77 .13	3	.5	.9 17	SF4				
		20	1912	50.99	19 21.44	155 2.49	7.23 2.4 2.2	31	2	136 .11	3	.5	.6 20	SF5				
		20	2042	42.66	19 20.32	155 7.41	8.97 2.5 2.5	38	1	95 .09	5	.4	.4 24	SF4				
		21	146	53.56	19 54.73	155 34.54	31.88 2.6 2.0	47	5	136 .09	19	.6	1.4 36	KEA				
		21	548	53.14	19 20.48	155 11.93	9.07 1.6 1.1	27	3	74 .07	4	.4	.6 19	SF3				
		21	1120	30.03	19 21.96	155 52.59	6.78 2.3 2.1	28	4	166 .28	11	.9	1.8 10	KON				
		21	1755	.94	19 20.41	155 12.46	8.38 1.3 1.1	25	2	71 .07	4	.5	.9 17	SF2				
		21	20 0	59.84	19 23.06	155 16.93	2.72 1.6 2.0	21	4	40 .10	1	.3	.3 13	SSC				
		21	2155	26.91	19 19.62	155 11.13	9.27 1.8 1.3	28	1	94 .06	5	.4	.8 21	SF3				
		22	239	24.26	19 23.58	155 16.71	2.88 2.1 2.3	27	3	43 .10	1	.3	.2 19	SSC				
		22	249	45.15	19 23.36	155 16.63	3.06 2.0 2.4	31	4	56 .11	1	.3	.2 20	SSC				
		22	358	1.24	19 18.84	155 13.74	8.26 1.4 1.3	28	2	89 .07	3	.4	.8 21	SF2				
		22	410	14.35	19 23.36	155 16.85	3.20 .9 1.0	16	3	54 .06	0	.3	.3 18	SSC				
		22	825	31.07	19 18.96	155 13.43	9.24 2.6 2.5	30	2	78 .10	4	.4	.5 25	SF2				
		22	913	11.21	19 23.29	155 16.64	2.95 1.3 1.0	21	5	53 .08	1	.3	.2 13	SSC				
		22	913	42.33	19 23.16	155 16.80	2.86 1.4 1.2	18	3	46 .07	0	.3	.3 12	SSC				
		22	12 7	45.78	19 20.94	155 13.23	9.11 2.8 2.8	43	3	59 .13	3	.4	.6 33	SF2				
		22	1440	42.04	19 23.55	155 16.74	2.87 2.5 2.8	33	3	37 .11	0	.2	.2 26	SSC				
		22	1445	56.02	19 23.45	155 16.76	2.89 2.9 3.2	38	2	37 .12	0	.2	.2 29	SSC				
		22	1752	19.56	19 23.33	155 2.24	7.68 1.7 1.4	35	2	123 .17	4	.6	.8 21	SF5				
		22	1822	17.99	19 27.02	155 26.75	8.22 2.1 1.1	31	3	51 .11	4	.4	.9 21	KA0				
		22	1859	19.22	19 25.82	155 37.65	3.29 2.2 1.8	21	0	94 .12	4	.6	1.1 8	MLO				
		22	2134	58.83	19 25.99	155 37.32	2.86 2.6 2.4	34	0	81 .15	3	.5	.9 21	MLO				
		23	259	42.97	19 31.83	155 42.09	8.87 2.8 2.2	39	3	81 .13	7	.5	.8 31	MLO				
		23	1025	40.45	19 21.47	155 15.10	9.23 3.4 3.4	42	3	64 .11	2	.4	.5 33	SF1				
		23	1136	39.17	19 15.98	155 27.48	9.98 2.8 3.0	44	2	68 .13	5	.4	.5 29	LSW F				
		23	2327	1.57	19 22.80	155 17.09	2.39 1.2 1.1	15	3	78 .08	1	.3	.4 9	SSC				
		24	141	54.83	19 20.36	155 13.30	7.73 1.8 1.5	32	3	63 .11	4	.5	.8 21	SF2				

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YEAR	MON	DA	HRMN	SEC	ORIGIN TIME	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 NO KM FM	REMK
1982	APR	24	238	52.18	19 23.98	155 16.78		3.04	1.6	1.6	24	3	74	.07	0	.3	.2 15	SSC
		24	252	40.95	19 23.87	155 15.82		1.59	1.6	1.9	23	4	107	.08	1	.2	.2 11	SEC
		24	254	56.97	19 23.89	155 15.85		1.63	2.1	2.8	30	5	107	.10	1	.2	.2 18	SEC
		24	355	6.44	19 24.27	155 16.18		1.50	1.0		11	2	125	.07	1	.3	.4 7	SEC
		24	448	12.39	19 23.78	155 15.90		1.49	1.2	1.1	17	4	100	.10	1	.3	.3 9	SEC
		24	542	47.79	19 20.62	155 4.35		7.79	1.4	1.2	21	1	110	.09	3	.7	1.2 13	SF5
		24	9 9	52.50	19 18.93	155 13.46		5.98	1.4	1.2	32	3	95	.12	4	.5	1.0 14	SF2
		24	1213	31.86	19 54.36	155 36.34		8.66	2.9	2.6	24	0	129	.19	21	.8	1.0 11	KEA F
		24	2022	24.18	19 10.48	155 17.92		23.89	2.4	1.9	33	1	214	.08	13	.9	1.1 25	DEP
		25	918	32.55	19 19.48	155 16.14		7.26	2.3	1.9	40	3	96	.11	3	.4	.7 29	SF1
		25	2133	3.85	19 24.16	155 24.93		9.79	2.4	2.1	37	2	36	.11	2	.4	.5 28	KA0
		25	2217	29.29	19 21.01	155 5.79		8.42	1.5	1.3	27	1	98	.10	4	.5	.8 16	SF4
		26	053	2.11	19 19.82	155 7.88		8.95	1.8	1.4	34	4	94	.07	5	.4	.6 23	SF4
		26	135	17.77	19 16.16	155 22.82		6.22	1.9	1.8	36	5	128	.11	4	.4	.9 25	SWR
		26	557	9.86	19 19.79	155 8.39		8.08	1.6	1.1	26	5	82	.08	5	.5	.7 21	SF4
		26	1651	14.53	20 10.78	156 9.53		30.80	3.1	2.8	38	2	295	.13	40	2.1	2.1 30	KOH
		27	127	6.14	19 25.42	155 16.93		2.72	2.5	2.9	34	2	40	.11	1	.2	.3 25	SNC
		27	241	30.64	19 23.36	155 24.27		8.98	1.6	1.2	34	5	38	.07	4	.3	.6 28	KA0
		27	417	40.37	19 24.14	155 15.62		3.26	1.5	1.4	20	3	115	.08	2	.4	.3 11	SEC
		27	1313	54.16	19 18.13	155 13.77		6.39	2.0	1.6	29	3	74	.12	2	.5	.9 21	SF2
		27	2023	1.39	19 20.66	155 3.34		8.98	3.4	3.4	47	4	94	.10	2	.6	.4 40	SF5
		27	2356	31.36	19 19.25	155 15.24		6.81	1.3	1.3	25	1	98	.10	4	.5	1.0 19	SF1
		29	414	20.22	19 26.56	155 38.38		3.46	2.5	2.0	16	0	201	.12	4	1.0	1.0 8	MLO
		29	528	20.20	19 24.22	155 15.98		.96	1.7	2.3	24	3	112	.13	1	.3	.3 16	SEC
		29	1150	7.18	19 25.28	155 17.06		2.77	1.3	1.4	11	1	158	.05	1	.5	.4 7	SNC
		29	14 2	27.76	19 22.74	155 17.07		24.24	2.0	1.4	25	0	49	.08	1	.8	1.4 24	DEP
		29	14 5	35.15	19 25.00	155 37.82		.84	2.8	2.0	17	0	96	.12	5	.5	1.5 16	MLO
		29	1741	40.06	19 27.04	155 35.96		2.69	2.5	2.2	9	1	95	.10	1	.6	.3 8	MLO
		30	258	53.29	19 19.63	155 8.86		7.04		1.1	14	0	81	.05	5	.6	1.3 10	SF4
		30	833	32.95	19 20.82	155 4.54		6.77		1.1	21	0	103	.11	3	.6	.9 17	SF5
		30	848	52.76	19 21.38	155 4.89		8.87	3.4	3.1	34	1	88	.11	4	.5	.4 32	SF5
		30	854	37.72	19 24.83	155 16.80		1.99	1.3	.5	16	2	145	.10	0	.4	.3 10	SNC
		30	855	5.36	19 23.82	155 15.62		3.15	2.5	2.2	27	1	43	.12	2	.4	.4 21	SEC
		30	858	7.66	19 24.90	155 16.49		2.31		.9	15	3	151	.09	1	.4	.3 11	SNC
		30	9 1	43.34	19 24.27	155 16.24		1.43		1.6	16	2	125	.06	1	.2	.2 7	SEC
		30	9 2	37.15	19 24.18	155 16.96		3.01		1.7	25	2	66	.10	1	.3	.2 14	SSC
		30	9 4	19.20	19 24.97	155 16.50		2.37	1.1	.9	13	1	154	.08	1	.5	.3 8	SNC
		30	9 9	36.91	19 24.98	155 17.26		1.44	1.2	1.1	13	3	131	.06	1	.3	.2 10	SNC
		30	910	15.67	19 24.28	155 16.25		1.58	1.3	.9	13	3	125	.06	1	.3	.3 7	SEC
		30	910	51.07	19 24.32	155 16.31		1.42	1.6	1.4	18	4	111	.09	1	.2	.2 10	SEC
		30	911	30.22	19 24.91	155 16.32		2.33	1.4	1.4	14	3	152	.06	1	.3	.2 6	SNC
		30	916	6.34	19 23.33	155 16.84		2.85	2.6	2.3	35	2	37	.11	0	.2	.3 28	SSC
		30	918	2.11	19 23.87	155 17.15		2.73	1.3	.9	16	3	66	.05	1	.3	.2 9	SSC
		30	920	42.21	19 24.45	155 16.01		1.64	2.4	2.5	25	4	89	.08	1	.2	.3 14	SEC
		30	921	42.86	19 24.26	155 16.14		1.46	2.1	2.0	22	2	112	.09	1	.3	.2 15	SEC
		30	926	45.87	19 24.72	155 16.45		1.80	1.2	.9	11	0	145	.10	1	.5	.3 6	SNC
		30	929	55.59	19 25.00	155 17.20		1.35	1.7	1.4	15	2	137	.07	0	.4	.1 11	SNC
		30	934	46.58	19 23.87	155 17.05		2.78	1.8	1.6	23	3	61	.10	1	.3	.2 14	SSC

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YEAR	MON	DA	HR	MIN	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 NO KM FM	REMK
1982	APR	30	935	50.70	19 24.13	155 16.19	1.44 1.9 1.7 15	1 106 .07	1	.3	.2	8 SEC						
		30	939	38.63	19 24.62	155 16.35	1.79 2.1 2.0 31	3 45 .10	1	.2	.2	21 SNC						
		30	947	23.73	19 24.91	155 16.05	1.87 1.8 1.5 17	2 136 .08	2	.4	.4	9 SNC						
		30	949	11.75	19 24.19	155 15.82	1.35 2.1 2.0 22	1 112 .10	1	.2	.3	13 SEC						
		30	956	19.35	19 25.07	155 16.16	2.38 1.3 .9 10	2 161 .06	2	.4	.3	6 SNC						
		30	958	37.27	19 24.13	155 15.78	1.77 2.0 1.7 15	0 114 .09	2	.4	.3	4 SEC						
		30	959	20.44	19 24.36	155 16.42	.90 1.7 1.2 14	3 125 .09	1	.2	.3	5 SEC						
		30	10 0	17.40	19 24.75	155 16.70	1.85 1.3 .8 13	1 143 .08	1	.4	.2	8 SNC						
		30	10 1	49.66	19 24.42	155 15.80	1.93 1.8 1.4 15	2 129 .09	2	.3	.4	6 SEC						
		30	10 3	36.16	19 24.59	155 16.74	1.53 1.8 1.4 15	3 125 .11	1	.4	.3	10 SNC						
		30	10 5	30.56	19 24.29	155 15.97	1.51 1.9 1.4 14	2 115 .11	1	.3	.4	5 SEC						
		30	10 7	23.53	19 25.09	155 13.87	6.52 2.2 1.3 9	1 242 .08	3	1.6	2.2	2 GLN						
		30	10 10	5.51	19 26.20	155 16.76	1.41 1.8 1.4 10	1 253 .10	4	1.3	1.4	2 SNC						
		30	10 16	3.60	19 23.46	155 17.02	2.76 1.8 1.4 17	3 50 .10	0	.3	.3	9 SSC						
		30	10 21	34.41	19 24.66	155 16.10	1.76 1.3 .7 12	2 144 .05	2	.3	.3	4 SNC						
		30	10 24	4.55	19 23.35	155 16.76	2.13 1.4 .8 11	1 105 .26	0	.8	.6	3 SSC						
		30	10 27	25.91	19 24.77	155 16.04	1.90 1.6 1.0 19	3 121 .10	2	.3	.3	10 SNC						
		30	10 31	11.00	19 24.72	155 16.45	1.62 2.0 1.8 23	4 119 .12	1	.3	.2	16 SNC						
		30	10 33	36.63	19 24.24	155 16.19	1.54 1.6 1.4 18	2 111 .11	1	.3	.2	7 SEC						
		30	10 37	33.86	19 23.77	155 17.13	2.47 1.2 1.0 18	4 65 .08	1	.3	.2	10 SSC						
		30	10 43	24.99	19 24.43	155 16.59	1.78 2.1 2.0 22	4 103 .11	1	.3	.2	11 SSC						
		30	10 48	38.52	19 23.80	155 17.29	2.86 1.6 1.2 11	3 106 .07	1	.5	.3	6 SSC						
		30	10 51	16.74	19 24.77	155 15.65	1.18 1.5 1.0 14	1 146 .12	2	.4	.4	5 SNC						
		30	10 56	25.01	19 24.65	155 16.17	1.68 1.6 1.0 17	3 119 .08	2	.3	.3	6 SNC						
		30	11 10	18.69	19 24.10	155 15.62	.43 1.5 1.2 10	1 122 .08	2	.3	.6	4 SEC						
		30	11 12	36.86	19 23.49	155 17.03	3.01 .9 .8 13	3 86 .05	0	.4	.3	9 SSC						
		30	11 15	31.53	19 24.47	155 15.87	1.65 1.9 1.6 17	1 118 .08	2	.3	.2	5 SEC						
		30	11 25	51.69	19 24.76	155 16.41	1.47 1.2 1.1 11	2 167 .10	1	.4	.3	4 SNC						
		30	11 36	43.99	19 24.97	155 16.51	1.64 1.2 1.2 14	2 122 .11	2	.3	.5	7 SNC						
		30	11 41	17.92	19 24.37	155 15.71	1.40 3.2 3.7 41	3 44 .12	2	.2	.3	29 SEC						
		30	11 52	13.21	19 26.67	155 24.10	5.73 2.1 1.2 19	2 61 .11	3	.4	1.2	13 KAO						
		30	12 16	6.91	19 24.39	155 17.20	2.62 1.4 .9 7	0 189 .07	1	.7	.6	5 SSC						
		30	12 18	40.19	19 24.23	155 16.27	1.93 1.4 .9 12	1 121 .14	1	.5	.3	6 SEC						
		30	12 46	26.68	19 24.98	155 16.54	2.37 1.5 1.4 12	2 154 .09	1	.3	.4	4 SNC						
		30	15 4	15.12	19 19.16	154 59.39	38.03 2.4 1.6 38	3 227 .08	6	1.5	1.8	32 LER						
		30	17 24	53.39	19 24.16	155 27.70	5.30 1.6 1.1 21	0 63 .13	3	.4	1.3	18 KAO						
		30	22 42	3.32	19 16.79	155 21.69	4.19 1.3 1.1 19	2 131 .10	6	.4	1.9	12 SWR						
	MAY	1	050	49.68	19 19.69	155 11.58	8.65 1.6 1.1 28	2 90 .07	5	.5	.9	17 SF3						
		1	359	53.19	19 23.80	155 15.43	1.65 1.3 1.3 14	2 100 .09	2	.3	.4	8 SEC						
		1	17 43	58.99	19 23.95	155 15.53	1.50 .8 1.1 10	1 149 .04	2	.3	.4	7 SEC						
		2	0 9	41.57	19 19.35	155 15.61	7.90 1.2 1.1 29	3 100 .10	3	.4	.8	18 SF1						
		2	5 13	28.57	19 20.44	155 11.49	8.91 2.1 1.8 39	4 77 .11	4	.4	.6	24 SF3						
		2	7 40	23.72	19 33.56	155 41.52	9.11 2.8 2.3 43	4 91 .12	9	.4	.6	30 MLD						
		2	8 50	39.38	19 23.99	155 15.62	3.06 1.0 1.0 15	4 112 .07	2	.3	.5	9 SEC						
		2	9 28	24.96	19 25.47	155 16.22	3.53 1.2 1.3 10	1 176 .03	2	.6	.3	7 SNC						
		2	9 29	59.56	19 19.83	155 18.61	5.41 2.1 2.3 40	4 62 .12	2	.4	.7	27 SWR						
		2	10 19	51.84	19 10.66	155 35.56	6.15 2.3 1.6 28	2 102 .22	8	.6	1.7	19 LSW						
		2	11 38	.36	19 19.66	155 18.77	4.06 2.2 2.1 35	2 58 .12	3	.4	.8	26 SWR						

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		ORIGIN TIME			LAT N		LON W		DEPTH			AMP DUR		GAP RMS		MIN ERH		ERZ NO	
YEAR	MON	DA	HR	MIN	SEC	DEG	MIN	DEG	MIN	KM	MAG	MAG	NR	NS	SEC	DIS	KM	FM	REMK
1982	MAY	2	1141	3.00	19 23.62	155	15.11			.37	.9	1.0	10	2	95	.08	2	.2	.5 5 SEC
		2	1143	53.32	19 19.01	154	59.92	36.43	2.3	1.8	37	2	224	.08	6	1.1	1.4	30 LFR	
		2	1435	3.59	19 15.90	155	22.95	6.86	1.9	1.5	25	3	151	.07	3	.5	1.1	20 SWR	
		2	1925	53.75	19 22.43	155	29.67	8.88	1.9	1.3	34	4	42	.10	4	.3	.8	26 KAO	
		2	2234	2.03	19 20.35	155	12.61	8.21	1.5	1.3	34	4	70	.11	4	.5	.7	21 SF2	
		3	433	30.92	19 19.84	155	10.68	8.72	1.7	1.2	29	4	91	.07	4	.5	.8	20 SF3	
		3	640	2.12	19 18.12	155	22.50	6.84	.8	1.1	20	3	104	.06	4	.4	1.1	15 SWR	
		3	652	9.76	19 23.84	155	15.50	3.34	1.1	1.0	15	4	104	.05	2	.3	.4	10 SEC	
		3	914	.80	19 24.66	155	15.98	3.02	1.1	1.0	15	2	127	.08	2	.4	.3	11 SNC	
		3	956	1.99	19 19.20	154	59.19	38.46	2.4	1.6	42	2	209	.08	7	1.3	1.5	34 LER	
		3	1457	15.17	19 20.40	155	12.80	8.74	1.6	1.5	36	2	68	.11	4	.4	.6	24 SF2	
		3	2217	43.08	19 19.25	155	14.07	6.97	1.6	1.2	31	3	78	.09	4	.5	.9	21 SF2	
		4	125	10.19	19 19.90	155	8.90	6.97	1.8	1.2	25	4	77	.07	4	.4	.9	15 SF4	
		4	155	41.67	19 23.67	155	16.77	3.08	1.4	1.7	25	4	44	.10	1	.3	.2	15 SSC	
		4	729	42.61	19 18.85	155	13.26	10.08	3.6	3.5	47	5	81	.11	3	.3	.3	36 SF2	
		4	732	7.37	19 19.33	155	13.17	7.84	2.0	1.5	36	3	76	.11	4	.5	.8	26 SF2	
		4	738	55.15	19 20.53	155	9.64	7.92	2.1	1.8	32	2	73	.08	3	.4	.6	19 SF3	
		4	912	7.09	19 18.92	155	12.78	6.94	1.3	1.1	22	1	91	.08	4	.5	1.3	16 SF2	
		4	1238	48.32	19 13.42	155	20.25	30.77	2.4	2.0	42	3	162	.09	7	.8	1.0	35 DEP	
		4	1320	12.55	19 12.89	155	15.26	42.63	1.6	1.4	31	0	221	.07	8	1.7	2.0	22 DEP	
		4	1515	43.34	19 19.43	155	7.79	7.61	2.3	2.1	35	3	102	.10	4	.4	.7	23 SF4	
		4	1517	6.02	19 18.73	155	11.94	31.58	2.2	2.1	45	2	111	.09	4	.7	.9	39 DEP	
		4	1612	29.51	19 23.93	155	16.93	2.58	1.3	1.2	19	6	76	.07	1	.3	.2	10 SSC	
		4	1815	16.98	19 20.16	155	45.99	9.99	2.6	1.6	31	1	125	.14	11	.6	.6	18 KDN	
		4	1946	45.44	19 19.22	154	59.31	38.07	2.4	1.6	44	3	208	.08	6	.9	1.3	34 LER	
		4	2125	17.46	19 53.11	155	32.32	16.99	1.9	1.4	27	2	130	.09	14	.7	1.8	22 KEA	
		4	2313	54.36	19 23.97	155	16.85	2.55	1.4	1.3	23	5	71	.08	0	.3	.2	13 SSC	
		5	521	48.42	19 23.35	155	17.03	2.82	.9	1.0	19	5	47	.08	0	.3	.3	14 SSC	
		5	754	21.20	19 19.69	155	7.87	8.56	2.7	2.4	38	3	96	.10	4	.4	.5	28 SF4	
		5	1555	51.75	19 19.36	155	12.18	7.38	2.0	2.0	40	2	92	.12	5	.4	.6	25 SF3	
5	20	3	31.39	19 23.73	155	16.83	2.98	2.1	2.6	28	3	60	.08	1	.3	.2	19 SSC		
5	210	22.30	19 18.49	155	15.66	7.08	1.7	1.5	33	3	119	.12	4	.5	.9	21 SF1			
5	2034	59.26	19 23.34	155	16.95	2.80	1.2	1.4	18	3	60	.09	0	.3	.3	11 SSC			
6	6	4	3.33	19 20.26	155	12.58	8.67	1.6	1.2	28	3	72	.09	4	.5	.8	17 SF2		
6	812	22.65	19 27.60	155	2.91	45.47	2.5	2.3	19	2	157	.08	9	1.7	1.6	19 DEP			
6	1018	31.35	19 23.66	155	16.92	3.26	1.4	1.2	24	5	55	.08	1	.3	.2	12 SSC			
6	1018	43.09	19 23.63	155	17.01	2.63	1.6	1.9	16	4	76	.06	0	.3	.3	11 SSC			
6	15	5	38.07	19 23.98	155	16.83	2.68	1.2	1.2	19	5	83	.09	0	.3	.2	12 SSC		
6	2142	58.25	19 19.57	155	7.57	7.80	1.9	1.1	30	3	105	.09	4	.5	.8	23 SF4			
6	2143	28.26	19 19.74	155	7.56	6.73	1.3	1.2	23	2	102	.09	4	.5	1.2	16 SF4			
6	2321	36.78	19 23.29	155	16.83	2.72	2.4	2.9	35	4	37	.09	0	.2	.2	23 SSC			
7	428	19.53	19 27.74	154	53.09	7.45	2.3	1.6	29	3	129	.14	3	.7	.5	17 LER			
7	1023	47.40	19 24.25	155	16.96	6.19	1.2	1.3	9	2	100	.08	1	1.1	1.4	6 INT			
7	14	5	10.88	19 20.40	155	7.07	7.22	1.2	1.8	23	1	100	.10	5	.6	1.0	18 SF4		
7	18	9	3.22	19 28.42	155	16.00	24.22	2.3	1.7	38	4	151	.08	6	.8	.9	33 DEP		
7	19	0	43.66	19 23.47	155	16.85	2.94	.9	1.0	15	4	58	.06	0	.3	.3	10 SSC		
8	545	27.34	19 23.72	155	17.03	2.67	1.2	1.2	15	3	65	.07	1	.3	.3	12 SSC			
8	632	35.39	19 23.96	155	16.89	2.92	1.6	2.0	27	5	69	.10	1	.3	.2	17 SSC			

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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 NO KM FM	REMK
1982	MAY	8	1016	40.55	19 23.52	155 16.85	2.83	.9	1.0	18	6	57	.07	0	.3	.2 13 SSC
		8	1512	19.06	19 20.21	155 13.43	7.58	1.3	1.3	22	2	63	.08	5	.5	1.0 18 SF2
		8	1846	31.86	19 23.96	155 16.70	3.36	2.2	2.6	32	4	78	.11	0	.3	.3 22 SSC
		8	2243	53.15	19 19.62	155 7.88	6.41	2.0	2.1	37	4	96	.14	4	.5	1.0 25 SF4
		9	138	37.55	19 20.09	155 11.17	8.45	2.7		42	3	84	.12	4	.4	.6 33 SF3
		9	139	44.31	19 19.75	155 11.13	8.20	2.3	2.0	29	2	92	.07	5	.4	.5 21 SF3
		9	6	9	19 18.71	154 58.60	40.15	2.5	2.0	39	2	225	.11	8	1.6	1.9 32 LER
		9	7	3	19 18.83	155 12.61	7.94	1.6	1.6	27	2	97	.09	4	.5	1.0 18 SF2
		9	931	43.19	19 23.72	155 16.82	2.51	2.4	2.3	25	3	57	.09	1	.3	.2 15 SSC
		9	1229	28.86	19 23.41	155 16.69	2.93	2.1	2.2	32	5	51	.09	0	.2	.2 20 SSC
		9	1240	49.30	19 23.50	155 16.72	2.87	2.8	3.2	37	2	37	.10	0	.2	.2 25 SSC
		9	15	3	19 20.82	155 13.16	7.69	1.6	1.3	27	2	90	.11	3	.5	.8 19 SF2
		9	17	5	19 20.07	155 4.53	9.32	1.8	1.6	31	2	80	.08	4	.4	.6 22 SF3
		9	1854	9.37	19 23.54	155 16.81	2.81	2.5	2.9	39	4	36	.11	0	.2	.2 27 SSC
		9	1945	26.25	19 20.75	155 13.36	8.78	2.0	2.0	38	3	59	.11	4	.4	.5 26 SF2
		9	2046	52.75	19 30.11	155 42.57	6.01		1.1	20	3	144	.14	6	.8	1.4 13 ML0
		10	311	50.18	19 23.30	155 16.66	3.11	2.4	2.5	33	4	39	.11	1	.2	.2 23 SSC
		10	8	6	19 21.42	155 1.33	7.75	1.8	1.3	26	3	169	.13	4	.7	.9 17 SF5
		10	937	21.00	19 19.73	155 6.65	8.20	2.1	1.5	31	3	122	.10	5	.5	.7 21 SF4
		10	1047	27.23	19 10.59	155 36.01	10.47	3.9	3.9	47	4	101	.18	8	.5	.5 42 LSW F
		10	12	8	19 20.35	155 6.68	8.91	3.0	3.0	47	6	107	.09	5	.4	.4 32 SF4
		10	1223	52.61	19 23.98	155 16.56	3.32	2.2	2.5	32	4	69	.12	0	.3	.2 20 SSC
		10	16	1	19 23.94	155 16.77	3.13	2.3	2.7	30	3	68	.10	0	.3	.2 21 SSC
		10	1944	47.40	19 23.99	155 15.79	2.93	1.8	2.2	28	5	86	.11	1	.3	.3 16 SSC
		10	22	8	19 20.59	155 4.30	7.03	1.3	1.4	31	2	110	.11	3	.5	.8 18 SF5
		11	1042	43.28	19 23.72	155 16.94	2.77	1.5	1.4	19	3	62	.07	1	.3	.2 13 SSC
		11	1335	41.90	19 23.65	155 16.95	3.23	1.1	1.1	21	5	55	.07	1	.3	.3 12 SSC
		11	1945	32.21	19 19.66	155 10.98	8.73	1.9	1.1	31	2	94	.09	5	.5	.8 22 SF3
		11	1948	17.17	19 17.26	155 20.98	8.61	1.4	1.3	34	5	129	.10	4	.4	.7 19 SWR
		12	147	.01	19 16.72	155 13.28	9.73	2.3	2.4	37	4	161	.11	9	.6	.6 24 SF2
		12	152	21.59	19 16.90	155 13.18	6.77	2.3	2.3	38	3	158	.13	1	.5	1.0 30 SF2
		12	157	29.18	19 17.30	155 13.30	5.88	1.7	1.1	29	3	121	.11	1	.5	.9 20 SF2
		12	157	53.99	19 17.57	155 13.23	10.18	2.4	2.6	36	2	161	.10	9	.6	.7 24 SF2
		12	951	4.96	19 21.26	155 25.68	9.46	1.4	1.2	27	3	51	.11	4	.4	.8 21 KAO
		12	1622	41.91	19 27.01	155 34.68	38.39	2.7	3.2	30	1	45	.18	3	1.0	1.9 10 DML L
		12	1659	33.28	19 19.21	155 15.35	8.83	2.4	2.5	42	3	100	.11	4	.5	.6 30 SF1
		12	17	1	19 19.62	155 6.11	8.22	2.1	1.4	26	3	134	.11	5	.5	.8 17 SF4
		12	2327	32.78	19 22.65	155 1.96	7.34	1.4	1.4	28	2	147	.16	5	.7	.7 13 SF5
		12	2357	19.33	19 23.44	155 16.84	3.07	1.4	2.2	29	4	38	.09	0	.3	.2 20 SSC
		13	1	3	19 23.48	155 16.89	3.62	1.0	1.4	18	4	50	.10	0	.4	.4 10 SSC
		13	252	34.95	19 17.21	155 13.01	4.74	1.3	1.3	32	3	154	.09	1	.4	.7 21 SSF
		13	543	8.43	19 21.98	155 28.16	10.01	2.1	1.1	38	2	42	.11	1	.4	.7 27 KAO
		13	9	1	19 23.34	155 49.54	12.06	2.0	1.8	31	4	119	.14	14	.5	.5 21 KON
		13	1140	30.21	20 4.28	156 36.57	.03	3.2	2.1	33	3	305	.17	87	8.1	1.7 22 DTS
		13	1512	17.80	19 3.96	155 32.47	45.52	2.2	1.8	31	4	182	.06	13	.9	1.4 23 DLS
		13	1728	31.53	19 17.35	155 20.92	8.54	1.7	1.6	34	7	133	.12	4	.4	.6 15 SWR
		13	1758	3.44	19 20.49	155 6.78	8.29	2.2	1.7	34	5	102	.08	5	.5	.6 25 SF4
		13	2028	59.62	19 17.93	155 21.47	7.34	1.7	1.6	31	3	113	.11	5	.4	.7 21 SWR

HVO EARTHQUAKE SUMMARY LIST

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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 NO KM FM	REMK
1982	MAY	14	039	45.95	19 20.18	155 8.80	8.94	2.3	2.1	40	4	72	.09	4	.3	.5 26 SF4
		14	237	2.63	19 19.83	155 7.58	7.38	1.4	1.3	24	2	101	.07	5	.5	1.1 18 SF4
		14	626	31.75	20 .07	155 51.82	19.88	4.8	4.5	47	3	205	.11	17	1.4	3.8 44 KOH F
		14	631	29.14	20 .41	155 52.19	21.37	3.1	2.7	43	7	209	.12	16	1.0	2.3 30 KOH
		14	1233	52.85	19 19.34	155 9.69	6.66	1.6	1.0	28	4	98	.10	5	.5	.9 22 SF3
		14	1235	41.34	19 20.09	155 9.93	7.90	1.9	2.1	38	5	83	.09	4	.5	.7 22 SF3
		14	14	3	19 17.11	155 21.29	7.87	1.8	2.1	36	1	130	.12	5	.4	.6 28 SWR
		14	14	6	19 20.66	155 13.01	8.92	2.6	2.6	43	5	63	.10	4	.5	.4 30 SF2
		14	1428	35.58	19 22.50	155 6.00	7.77	2.4	2.5	38	3	69	.10	1	.4	.7 22 SF4
		14	1655	10.74	19 50.73	155 36.20	22.92	2.6	2.3	45	7	109	.08	17	.5	1.5 33 KFA
		14	1711	47.26	19 18.33	155 14.03	3.79	1.6	1.3	20	0	91	.11	3	.4	1.1 14 SSF
		14	2140	53.36	19 19.16	155 14.72	6.77	1.6	1.4	30	3	92	.15	5	.5	1.0 20 SF1
		15	233	53.57	19 22.88	155 2.68	7.23	1.6	1.8	30	4	196	.14	4	1.0	.7 17 SF5
		15	258	18.65	19 23.57	155 16.62	2.48	1.6	2.1	23	5	59	.12	1	.3	.2 10 SSC
		15	342	12.13	19 19.45	155 8.84	9.02	2.0	2.3	28	4	215	.07	5	.9	.7 19 SF4
		15	422	4.49	19 25.92	154 55.38	8.50	2.3	2.3	27	1	186	.11	3	1.0	.6 19 LER
		15	5	9	19 17.66	155 14.21	10.74	3.1	3.1	44	5	156	.11	7	.5	.4 32 SF2 F
		15	914	58.06	19 23.84	155 16.79	2.89	1.2	1.9	20	4	80	.07	0	.3	.2 14 SSC
		15	915	32.55	19 23.91	155 16.70	2.53	1.2	1.0	18	5	86	.08	0	.3	.2 12 SSC
		15	1111	46.00	19 17.47	155 13.95	6.51	1.9	1.8	33	2	106	.13	1	.5	.9 24 SF2
		15	1426	32.93	19 22.51	155 17.05	2.86	1.5	1.4	21	3	53	.07	2	.5	.4 15 SSC
		15	2324	10.49	19 18.07	155 17.76	33.95	1.9	1.2	37	1	134	.09	2	.7	1.1 25 NFP
		15	2357	21.15	19 5.94	155 25.15	51.40	2.0	1.6	19	0	200	.10	8	2.4	6.2 12 DLS
		16	354	11.98	19 58.70	155 20.31	9.15	2.0	1.8	22	2	203	.10	25	1.0	.9 8 KEA
		16	829	33.50	19 23.75	155 17.02	2.83	1.9	2.3	31	3	62	.10	1	.5	.2 21 SSC
		16	1326	39.44	19 20.18	155 7.35	7.62	2.0	1.7	35	4	99	.11	5	.4	.7 22 SF4
		16	1355	50.94	19 58.35	155 21.47	11.86	2.1	1.8	23	4	199	.10	9	1.0	.5 12 KEA
		16	1434	54.33	19 19.39	155 15.54	8.61	1.9	2.2	43	4	90	.10	4	.4	.5 29 SF1
		16	17	0	19 20.24	155 12.64	7.92	1.5	1.1	28	4	71	.08	4	.4	.7 20 SF2
		16	1955	54.82	19 20.80	155 13.45	9.42	2.6	2.5	45	5	58	.11	3	.4	.4 38 SF2
		16	2014	51.68	19 17.62	155 14.23	7.07	1.6	1.3	30	3	133	.10	2	.5	.8 20 SF2
		16	2129	36.08	19 17.18	155 22.15	7.99	1.8	1.6	36	4	121	.11	6	.4	.7 23 SWR
		17	421	1.31	19 23.63	155 16.78	3.22	1.3	1.4	22	4	42	.08	1	.3	.2 14 SSC
		17	615	50.24	19 23.98	155 16.98	2.55	2.0	2.2	31	5	64	.12	1	.3	.2 21 SSC
		17	623	46.12	19 23.81	155 17.14	2.70	1.0	.8	18	5	64	.07	1	.3	.2 12 SSC
		17	1213	10.10	19 23.17	155 16.97	3.03	1.3	1.7	22	6	47	.10	0	.5	.3 17 SSC
		17	1258	56.52	19 20.67	155 11.65	8.91	2.6	2.7	44	5	73	.12	4	.4	.5 29 SF3
		17	1511	19.75	19 23.69	155 16.90	2.89	1.1	1.0	17	4	57	.07	1	.3	.3 12 SSC
		17	1721	58.86	19 23.20	155 16.87	2.96	2.5	3.1	39	4	38	.11	0	.2	.3 40 SSC
		17	19	1	19 18.29	155 13.08	6.10	1.3	1.0	31	4	97	.11	2	.5	1.0 24 SF2
		17	21	5	19 11.29	155 30.29	8.04	2.1	2.3	35	1	144	.14	7	.6	.9 22 LSW
		17	2111	51.30	19 23.94	155 16.89	2.88	1.1	1.0	15	4	79	.06	1	.2	.3 11 SSC
		17	2225	32.17	19 18.55	155 13.21	8.25	1.4	1.5	28	2	86	.09	3	.5	.8 19 SF2
		18	131	18.27	19 18.98	155 15.56	7.10	1.1	1.0	26	4	106	.10	4	.5	.9 16 SF1
		18	6	6	19 24.70	155 22.76	9.17	1.7	1.6	35	4	39	.11	4	.4	.6 28 KAD
		18	11	7	19 23.65	155 16.85	2.83	.9	1.0	18	4	49	.10	1	.3	.2 14 SSC
		18	1131	53.95	19 23.37	155 16.97	3.02	1.2	1.2	20	5	69	.10	0	.3	.2 13 SSC
		18	1410	32.00	19 54.42	156 21.51	.34	3.4	3.0	47	4	283	.12	50	2.0	.5 40 DIS

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YEAR	MON	DA	HR	MIN	SEC	DEG	MIN	DEG	MIN	DEPTH	AMP	DUR	GAP	RMS	MIN	ERH	ERZ	NO	REMK
										KM	MAG	MAG	NR	NS	DEG	SEC	DIS	KM	KM
1982	MAY	18	14	12	24.76	19	23.06	155	17.08	2.34	1.9	1.0	19	5	62	.08	1	.3	.3 10 SSC
		18	17	8	9.49	19	19.87	155	8.66	8.51	2.3	2.3	41	5	76	.11	5	.4	.6 23 SF4
		18	17	36	19.40	19	57.25	156	26.16	1.36	4.8	4.5	49	3	229	.11	69	1.3	.7 45 DIS F
		18	21	24	57.99	19	22.19	155	3.89	8.24	2.1	1.8	37	5	92	.12	4	.5	.6 24 SF5
		18	21	36	12.73	19	19.82	155	11.23	7.94	1.8	1.1	30	2	90	.08	5	.5	.7 18 SF3
		18	23	53	16.29	19	23.58	155	16.84	2.72	2.7	3.0	37	5	36	.10	0	.2	.2 29 SSC
		19	0	5	51.54	19	23.65	155	16.84	2.85	3.0	3.3	42	5	43	.13	1	.2	.2 30 SSC
		19	02	1	55.45	19	23.84	155	16.89	2.86	1.6	1.7	24	3	67	.11	1	.3	.2 12 SSC
		19	7	39	56.60	19	19.87	155	11.75	7.67	2.1	1.7	34	2	85	.12	5	.5	.6 26 SF3
		19	15	47	30.71	19	10.40	155	37.32	5.56	1.4	1.4	24	2	99	.17	8	.5	2.9 17 LSW
		19	17	47	20.49	19	10.01	155	37.46	8.48	1.6	1.4	25	2	102	.13	9	.5	1.0 16 LSW
		20	3	38	54.17	19	26.74	155	33.93	39.18	2.7	3.5	38	3	39	.22	4	.9	1.9 2 DML
		20	4	43	54.19	19	28.09	155	25.70	10.30	1.9	1.3	34	3	46	.11	5	.4	.7 20 KAO
		20	6	11	14.74	19	22.99	155	16.75	2.83	1.8	2.1	26	3	45	.08	1	.2	.2 19 SSC
		20	11	14	3.34	19	23.24	155	16.92	2.78	1.9	1.7	28	6	40	.10	1	.2	.3 19 SSC
		20	11	14	30.35	19	19.91	155	8.48	5.48	1.6	1.2	27	3	80	.11	5	.5	1.4 16 SF4
		21	1	21	46.46	19	19.45	155	10.47	7.89	1.3	1.1	25	3	94	.08	5	.5	1.0 19 SF3
		21	13	42	40.61	19	22.70	155	.88	8.91	3.0	3.0	42	3	153	.10	6	.6	.4 26 SF5
		21	14	54	56.48	19	23.71	155	16.82	2.71	1.5	1.3	23	4	55	.08	1	.3	.2 15 SF3
		21	17	44	5.15	19	19.46	155	10.34	8.71	2.0	1.6	35	5	99	.09	5	.4	.6 20 SF3
		21	17	57	7.86	19	19.90	155	7.81	7.43	1.5	.8	24	2	95	.11	5	.5	.8 12 SF4
		21	19	5	10.02	19	26.41	155	37.65	3.65	1.4	1.3	20	2	94	.12	3	.5	.8 7 MLO
		21	22	32	30.30	19	20.86	155	7.68	7.59	2.1	1.8	39	4	84	.11	4	.4	.7 29 SF4
		21	23	25	59.62	19	20.93	155	13.11	8.96	1.7	1.3	27	2	59	.08	3	.5	.8 20 SF2
		22	2	38	26.36	19	21.15	155	13.44	8.48	2.0	2.1	37	3	55	.12	3	.4	.5 27 SF2
		22	3	4	45.16	19	42.68	156	8.43	35.18	2.4	1.8	32	2	243	.11	28	1.3	2.3 22 HUA
		22	7	18	35.83	19	23.89	155	15.35	4.14	1.0	.7	11	2	108	.10	2	.4	.8 7 SEC
		22	8	52	51.09	19	20.90	155	10.80	8.81	2.0	1.9	40	5	72	.09	3	.4	.5 25 SF3
		22	8	50	44.83	19	20.04	155	12.49	8.35	1.5	1.0	26	2	75	.08	5	.5	.8 20 SF2
		22	12	15	53.27	19	20.45	155	10.73	7.98	1.6	1.2	29	4	79	.10	3	.5	.7 20 SF3
		22	14	9	49.90	19	18.72	155	15.06	9.10	2.3	2.1	44	4	95	.11	4	.4	.5 26 SF1
		22	19	16	39.84	19	54.70	156	20.44	1.44	2.0	3.4	3	3	282	.11	58	1.8	1.2 18 DIS
		22	21	45	.57	19	24.83	155	36.79	.00	1.6	.9	0	0	81	.09	5	.4	2.0 7 MLO
		23	0	15	28.54	19	23.18	155	16.89	3.19	1.3	1.4	22	4	59	.10	0	.3	.3 12 SSC
		23	3	48	.86	19	26.15	155	37.02	3.00	2.8	3.1	35	1	79	.12	2	.4	.7 27 MLO
		23	4	21	13.84	19	25.81	155	37.41	2.69	2.2	2.2	29	3	80	.13	3	.4	.8 17 MLO
		23	8	4	8.07	19	24.57	155	22.93	9.45	1.7	1.6	34	4	39	.08	4	.3	.6 26 KAO
		23	9	6	56.56	19	24.16	155	16.83	3.36	1.5	1.6	20	4	75	.09	1	.4	.3 12 SSC
		23	10	58	9.05	19	25.17	155	26.48	6.83	2.4	1.9	43	7	41	.13	2	.3	.8 31 KAO
		23	12	38	16.26	19	23.75	155	16.93	2.47	1.4	1.4	25	4	65	.10	1	.3	.2 13 SSC
		23	12	52	7.65	19	21.63	155	15.10	9.12	1.9	1.8	34	5	62	.08	2	.4	.5 26 SF1
		23	13	43	50.78	19	20.51	155	12.89	7.77	1.1	1.1	18	0	65	.10	4	.6	1.1 15 SF2
		23	14	48	35.03	19	23.29	155	17.02	3.11	1.2	1.3	19	5	61	.08	0	.3	.3 12 SSC
		23	15	58	30.06	19	24.04	155	17.01	2.88	1.2	1.2	17	4	75	.09	1	.3	.8 31 KAO
		23	18	22	54.65	19	19.05	155	15.34	8.12	1.6	1.7	34	4	103	.12	4	.5	.7 23 SF1
		23	18	52	54.86	19	24.42	155	15.91	1.48	1.3	1.7	12	1	137	.05	2	.3	.4 7 SEC
		24	0	5	56.74	20	1.48	155	25.24	12.19	2.2	2.0	23	1	203	.08	17	1.3	.7 14 KEA
		24	0	8	53.81	19	20.15	155	13.25	6.20	1.6	1.1	28	2	65	.12	5	.5	1.1 20 SF2

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		ORIGIN TIME			LAT N		LON W		DEPTH				AMP		DUR		GAP		RMS	MIN	ERM	ERZ NO	
YEAR	MON	DA	HR	MIN	SEC	DEG	MIN	DEG	MIN	KM	MAG	MAG	NR	NS	DEG	SEC	DIS	KM	KM	FM	REMK		
1982	MAY	24	042	23.95	19	23.41	155	15.76		3.22	2.0	2.2	26	3	45	.08	0	.3	.2	20	SSC		
		24	241	49.18	19	18.91	155	15.14		8.23	1.1	1.1	26	4	103	.09	5	.5	.9	17	SF1		
		24	416	27.38	19	21.84	155	2.07		8.12	1.4	1.3	25	2	143	.12	4	.7	1.0	19	SF5		
		24	531	15.40	19	19.72	155	8.20		8.10	1.5	1.3	28	4	87	.07	4	.5	.7	19	SF4		
		24	933	17.95	19	24.06	155	29.56		7.94	2.4	1.6	43	4	49	.10	4	.5	.8	31	KAO		
		24	1051	20.14	19	23.77	155	26.67		10.43	2.5	2.4	47	7	41	.11	3	.4	.5	30	KAO		
		24	1855	45.81	19	23.08	155	16.94		2.72	1.3	1.3	18	5	65	.09	1	.3	.3	14	SSC		
		24	1935	2.54	19	20.24	155	4.06		6.00	1.4	1.5	29	2	125	.10	2	.5	.9	17	SF5		
		24	20	0	44.97	19	23.70	155	16.84		2.96	1.1	1.3	20	4	56	.08	1	.3	.3	13	SSC	
		24	21	8	2.80	19	20.42	155	12.98		7.90	1.4	1.3	27	2	66	.08	4	.5	.8	20	SF2	
		25	1	9	56.70	19	23.65	155	16.95		3.05	.8	1.1	15	4	60	.05	1	.3	.2	9	SSC	
		25	133	57.77	19	22.42	155	29.15		10.34	2.6	2.4	41	1	35	.11	3	.3	.5	31	KAO		
		25	747	43.88	19	19.49	155	6.62		8.52	1.6	1.3	31	2	129	.10	5	.5	.8	22	SF4		
		25	1021	45.58	19	22.76	155	24.37		9.41	1.5	1.2	27	3	41	.07	5	.4	.8	22	KAO		
		25	2028	53.42	19	20.48	155	8.94		9.15	1.8	1.6	31	2	69	.07	3	.4	.7	22	SF4		
		25	22	6	36.26	19	29.07	155	42.79		7.32	1.4	1.3	29	3	69	.11	6	.5	1.1	17	MLO	
		25	23	8	33.42	19	18.44	155	13.30		7.51	1.4	1.4	33	3	85	.10	3	.5	.8	21	SF2	
		26	1	4	21.07	19	25.48	155	29.64		8.25	1.8	1.1	34	3	59	.12	7	.4	1.0	16	KAO	
		26	25	53	51.13	19	17.34	155	20.94		7.67	1.1	1.1	22	2	133	.08	4	.5	1.0	15	SWR	
		26	551	21.09	19	21.95	155	1.94		8.24	1.6	1.4	25	1	152	.10	4	.8	.7	17	SF5		
		26	1452	59.98	19	21.87	155	18.07		3.25	1.6	1.7	24	3	49	.10	3	.3	.6	17	SWR		
		26	19	9	36.28	19	23.04	155	2.98		8.32	2.1	1.7	29	6	117	.10	4	.5	.4	20	SF5	
		27	528	32.38	19	21.72	155	5.90		8.97	2.0	1.8	29	3	83	.11	2	.5	.7	23	SF4		
		27	916	47.10	19	23.85	155	16.83		2.94	1.9	1.9	27	5	70	.09	0	.3	.2	15	SSC		
		27	952	32.55	19	23.66	155	17.05		2.89	1.1	1.1	20	5	58	.06	1	.5	.2	14	SSC		
		27	1018	26.76	19	20.84	155	12.45		9.13	1.6	1.3	26	3	66	.08	3	.6	.8	20	SF2		
		27	1044	1.38	19	23.50	155	16.73		3.80	2.1	2.4	30	4	44	.10	0	.3	.3	24	SSC		
		27	1232	37.40	19	20.78	155	10.57		8.92	2.0	1.9	39	6	73	.07	3	.4	.5	24	SF3		
		27	1528	9.58	19	21.17	155	13.36		8.87	3.0	3.1	43	6	56	.11	3	.4	.5	33	SF2		
		27	1551	58.31	19	19.83	155	8.29		8.60	1.3	1.1	25	3	84	.07	5	.6	.9	16	SF4		
		27	1555	52.40	19	20.55	155	10.14		7.02	1.4	1.1	25	4	75	.08	3	.5	.9	15	SF3		
		27	1626	36.62	19	23.24	155	16.95		3.33	1.5	1.4	19	4	58	.08	0	.3	.3	14	SSC		
		27	2145	24.81	19	24.10	155	15.77		3.31	1.2	1.0	13	3	121	.06	2	.4	.4	7	SEC		
		27	2154	57.59	19	24.75	155	25.86		9.82	2.0	1.6	38	3	40	.11	2	.4	.6	23	KAO		
		27	2220	58.97	19	8.78	155	37.43		9.73	1.4	1.8	26	1	109	.18	11	.6	1.0	11	LSW		
		28	156	.36	19	19.27	155	12.94		8.34	1.9	1.9	40	2	81	.10	4	.7	.6	31	SF2		
		28	721	20.22	19	21.55	155	.99		5.94	1.9	1.9	30	2	172	.11	5	.7	.7	16	SF5		
		28	820	9.44	19	12.62	155	33.80		6.57	2.4	1.9	24	1	124	.14	20	.6	1.4	19	LSW		
		28	1327	57.69	19	21.85	155	25.49		9.20	1.8	1.5	34	4	44	.12	4	.4	.6	26	KAO		
		28	1333	37.57	19	24.15	155	16.84		3.11	1.3	1.4	20	6	88	.09	1	.4	.2	14	SSC		
		28	1843	7.91	19	23.38	155	17.06		2.67	.9	1.0	15	5	89	.08	0	.2	.3	9	SSC		
		28	1957	5.14	19	22.66	155	17.03		2.68	1.3	1.2	16	4	85	.05	1	.2	.3	11	SSC		
		28	2012	45.28	19	21.94	155	6.74		7.55	1.1	1.1	24	1	76	.09	2	.5	.8	14	SF4		
		28	2154	35.50	19	24.04	155	16.98		2.89	1.4	1.4	16	4	76	.04	1	.3	.2	10	SSC		
		28	2358	43.70	19	26.61	155	29.12		6.88	1.7	1.4	28	3	59	.11	7	.4	1.3	16	KAO		
		29	0	5	8.06	19	26.90	155	29.35		11.10	2.7	2.3	41	3	70	.10	8	.3	.5	29	KAO	
		29	022	34.36	19	24.14	155	16.19		3.02	.9	1.1	13	3	118	.07	1	.4	.5	7	SEC		
		29	632	36.58	19	21.38	155	2.79		6.75	1.8	1.3	29	1	133	.14	3	.6	.8	18	SF5		

HVO EARTHQUAKE SUMMARY LIST

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YEAR	MON	DA	HRMN	SEC	LAT N DEG MIN	LON W DEG MIN	DEPTH KM	AMP MAG	DUR MAG NR	GAP NS	RMS DEG	MIN SEC	ERH DIS	ERM KM	ERZ KM	NO FM	REMK
1982	MAY	29	1235	17.45	19 23.85	155 16.98	2.88	1.3	1.2 19	6	72	.07	1	.3	.3	12	SSC
		29	14 9	1.77	19 22.79	155 16.65	3.21	1.3	1.4 20	3	47	.12	1	.3	.3	12	SSC
		29	1529	47.21	19 23.94	155 17.00	2.87	1.1	1.4 19	4	63	.07	1	.3	.2	9	SSC
		29	1743	58.14	19 23.54	155 16.79	3.03	2.9	3.2 33	3	47	.11	0	.3	.2	20	SSC F
		29	1756	48.77	19 23.28	155 16.82	2.78	1.0	1.2 16	5	55	.05	0	.3	.2	11	SSC
		29	1853	9.88	19 24.17	155 25.97	8.04	2.1	1.6 42	2	40	.13	3	.3	.8	29	KA0
		29	19 4	23.66	19 41.17	155 1.14	38.80	2.5	1.9 48	4	167	.12	2	.8	1.5	39	HIL
		29	1932	53.78	19 18.83	155 13.23	9.50	2.0	2.0 40	2	131	.09	7	.5	.5	27	SF2
		29	2042	49.82	19 23.76	155 16.90	2.72	1.1	1.0 17	4	68	.06	1	.3	.3	12	SSC
		29	2210	22.95	19 23.72	155 16.96	2.88	2.9	3.3 36	2	30	.12	1	.2	.2	30	SSC F
		29	2255	33.43	19 23.96	155 16.90	3.14	1.6	1.9 26	5	68	.09	1	.3	.2	14	SSC
		29	23 1	20.47	19 24.86	155 16.02	3.17	1.6	1.6 19	2	123	.10	2	.4	.3	14	SNC
		29	2348	32.84	19 25.49	155 28.49	8.33	1.9	1.3 31	2	60	.09	6	.3	.9	21	KA0
		30	11 7	34.83	19 17.11	155 14.93	6.52	1.3	1.3 29	4	189	.09	3	.5	.8	18	SF1
		30	1334	6.06	19 20.82	155 13.01	8.86	2.0	1.9 37	3	62	.11	3	.4	.5	27	SF2
		30	1354	19.42	19 23.88	155 1.95	7.96	1.7	1.6 28	2	127	.14	4	.6	.9	17	SF5
		30	1528	52.20	19 19.40	155 10.51	8.08	1.4	1.3 30	2	100	.09	5	.5	.8	15	SF3
		30	1535	49.46	19 25.19	155 15.94	2.99	1.8	1.9 24	3	74	.11	2	.3	.3	15	SNC
		30	1738	48.47	19 25.07	155 16.12	2.90	1.5	1.7 25	3	93	.12	2	.3	.3	11	SNC
		30	21 6	48.88	19 23.16	155 14.88	3.20	1.5	1.7 23	4	67	.07	2	.3	.2	15	SEC
		31	11 4	36.76	19 21.15	155 7.91	8.67	1.3	1.1 30	2	77	.08	4	.5	.7	17	SF4
		1	552	19.70	19 19.03	155 11.43	8.60	1.5	1.2 26	2	107	.08	5	.5	1.0	15	SF3
		1	821	33.39	19 21.41	155 7.26	7.76	1.6	1.3 26	1	80	.10	3	.5	.8	17	SF4
		1	828	39.25	19 16.90	155 .93	46.60	2.3	2.0 30	0	218	.11	7	2.1	2.7	23	DEP
		1	924	33.98	19 20.10	155 6.89	8.15	1.4	1.1 23	1	109	.09	5	.5	1.1	14	SF4
		1	1641	29.37	19 20.87	155 13.12	8.37	1.8	1.8 40	3	60	.13	3	.4	.6	25	SF2
		1	2110	30.65	19 21.61	155 28.54	9.54	2.7	2.6 44	4	38	.11	2	.3	.6	37	KA0
		1	2121	35.92	19 31.73	155 25.53	7.51	1.9	1.1 34	5	46	.13	4	.3	.6	23	MLO
		1	2234	29.98	19 21.20	155 3.85	8.26	2.9	3.1 43	2	84	.10	3	.5	.4	34	SF5
		1	2242	40.86	19 20.45	155 13.24	8.25	1.4	1.3 28	2	63	.07	4	.4	.7	19	SF2
		2	215	43.05	19 24.32	155 16.48	14.85	1.5	1.3 39	3	70	.11	1	.5	.4	27	DEP
		2	3 0	35.95	19 23.01	155 16.79	2.90	2.2	2.4 33	1	40	.10	1	.2	.3	27	SSC
		2	813	35.53	19 23.30	155 16.79	2.85	2.2	2.3 33	4	38	.12	0	.2	.2	20	SSC
		2	831	15.68	19 23.19	155 17.06	2.72	1.3	1.2 17	5	71	.07	0	.2	.3	11	SSC
		2	852	16.98	19 23.15	155 16.94	2.87	1.3	1.0 10	1	75	.05	2	.4	.7	9	SSC
		2	856	29.08	19 23.17	155 16.75	3.26	2.1	2.0 12	1	66	.04	2	.4	.6	11	SSC
		2	857	39.52	19 22.87	155 16.28	2.47	1.1	1.0 9	1	68	.12	1	.4	.6	8	SEC
		2	911	39.70	19 23.49	155 16.66	3.12	2.1	2.4 19	1	73	.06	2	.3	.5	18	SSC
		2	918	49.68	19 23.56	155 16.85	2.33	1.1	1.0 12	1	70	.10	3	.4	.5	8	SSC
		2	929	3.97	19 23.17	155 16.68	2.57	.9	1.0 8	1	124	.08	2	.5	.7	6	SSC
		2	1034	57.08	19 26.96	155 28.69	11.38	3.2	3.2 45	4	37	.11	7	.3	.5	38	KA0
		2	1153	25.48	19 22.43	155 27.50	9.52	1.5	1.3 24	1	70	.11	0	.4	.8	17	KA0
		2	1436	3.42	19 18.40	155 15.12	4.73	.9	1.1 22	2	114	.12	4	.5	1.7	19	SF5
		2	1746	37.53	19 13.56	155 15.57	43.15	1.5	1.6 20	0	214	.04	7	2.1	4.4	14	DEP L
		2	1841	50.76	19 22.53	155 17.29	2.82	1.0	1.0 18	4	88	.09	2	.3	.4	10	SSC
		3	127	51.86	19 23.36	155 16.84	2.80	1.4	1.7 24	4	38	.10	0	.3	.2	15	SSC
		3	135	34.01	19 20.21	155 13.28	6.95	1.2	1.0 23	2	65	.10	5	.5	1.0	20	SF2
		3	258	11.19	20 1.53	155 50.31	27.98	3.3	3.0 46	4	200	.10	13	1.1	1.7	40	KOH

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YEAR	MON	DA	HRMN	SEC	LAT N DEG MIN	LON W DEG MIN	DEPTH KM	AMP MAG	DUR MAG NR	GAP NS	RMS DEG	MIN SEC	ERH DIS	ERM KM	ERZ KM	NO FM	REMK
1982	JUN	3	435	11.05	19 25.42	155 24.83	6.85	1.5	1.3 24	2	47	.10	1	.4	1.0	17	KA0
		3	752	56.44	19 25.44	155 15.97	3.28	1.1	1.0 15	1	179	.08	2	.7	.5	10	SNC
		3	941	20.74	19 19.13	155 13.15	4.16	1.3	1.3 30	1	80	.13	4	.4	1.4	20	SF5
		3	1812	3.92	19 13.52	155 37.57	8.16	2.1	1.6 35	5	92	.18	3	.5	.8	21	LSW
		3	1920	3.86	19 21.96	155 5.11	8.79	1.5	1.3 31	3	77	.10	3	.4	.5	19	SF5
		3	1921	39.03	19 10.49	155 33.34	8.03	2.3	2.2 33	3	139	.16	10	.6	1.0	18	LSW
		3	21 6	36.69	19 24.45	155 27.04	9.44	1.9	1.5 34	3	51	.13	4	.4	.7	23	KA0
		3	2240	15.24	19 18.91	155 50.25	9.45	2.8	2.9 34	3	123	.14	6	.5	.5	20	KOH
		3	2254	46.86	19 18.65	155 15.48	7.97	1.4	1.3 28	2	112	.11	4	.5	.9	14	SF1
		4	248	36.53	19 20.42	155 9.73	8.01	1.3	1.1 26	1	76	.07	3	.5	.9	16	SF3
		4	639	56.56	19 18.72	155 15.09	7.35	1.4	1.7 27	2	106	.09	4	.4	.7	20	SF1
		4	11 1	23.23	19 19.33	155 15.45	8.22	1.9	1.9 34	2	91	.10	4	.4	.6	22	SF1
		4	1722	46.79	19 26.35	155 27.22	8.57	2.2	1.5 39	1	45	.13	7	.4	.9	24	KA0
		4	1955	49.27	19 23.50	155 16.64	3.41	2.1	2.4 30	4	55	.10	1	.3	.3	24	SSC
		4	1957	20.97	19 23.65	155 16.81	2.71	1.8	1.6 24	3	46	.09	1	.3	.2	19	SSC
		4	20 1	28.94	19 20.33	155 11.94	7.84	1.4	1.3 26	1	76	.08	5	.5	.7	18	SF3
		4	21 0	31.36	19 23.62	155 16.90	2.90	1.6	2.0 22	3	49	.07	0	.3	.2	14	SSC
		5	050	58.67	19 24.29	155 16.83	3.14	1.3	1.4 21	3	94	.09	1	.4	.3	13	SSC
		5	123	28.41	19 21.96	155 4.82	7.39	1.8	1.3 34	4	77	.14	3	.4	.8	22	SF5
		5	126	51.56	19 23.61	155 17.30	3.22	.9	1.3 12	3	159	.06	1	.5	.3	8	SSC
		5	143	36.18	19 23.49	155 16.92	3.35	1.4	1.7 22	4	68	.09	0	.3	.3	12	SSC
		5	147	6.23	19 23.35	155 16.95	2.90	1.7	2.0 27	4	54	.08	0	.2	.2	18	SSC
		5	212	52.12	19 18.21	155 20.23	7.07	1.2	1.2 22	1	120	.09	3	.5	1.3	17	SF5
		5	958	2.45	19 22.91	155 17.02	2.35	1.0	1.3 17	5	72	.06	1	.3	.3	9	SSC
		5	1114	3.26	19 25.14	155 24.29	8.89	2.6	2.1 42	3	43	.13	2	.4	.6	35	KA0
		5	1133	34.00	19 11.09	155 40.70	5.33	2.4	2.2 35	3	119	.18	10	.6	1.5	25	LSW
		5	1136	48.42	19 23.29	155 17.17	3.05	1.2	1.2 16	3	71	.10	0	.3	.4	9	SSC
		5	1250	24.73	19 22.71	155 17.11	2.70	.9	1.1 16	4	103	.06	1	.5	.3	11	SSC
		5	1317	8.06	19 17.66	155 13.24	6.84	1.6	1.6 25	1	106	.11	1	.6	1.0	16	SF2
		5	1346	41.81	19 23.39	155 37.04	9.95	2.2	1.3 28	4	49	.11	6	.4	1.0	13	MLO
		5	1531	55.13	19 19.40	155 7.91	8.32	2.0	2.0 35	4	92	.08	5	.4	.6	24	SF4
		5	16 1	49.56	19 19.45	155 8.51	7.35	1.8	1.8 30	4	82	.07	4	.4	.7	17	SF4
		5	2027	6.22	19 19.26	155 16.17	8.53	2.3	2.2 42	4	107	.10	3	.4	.5	23	SF

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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	ERM KM	ERZ NO KM FM	REMK
1982	JUN	8	1930	30.80	19 23.53	155 16.86	2.92	2.4	3.1	30	3	39	.10	0	.3	.2 13	SSC
		8	2013	43.56	19 23.30	155 16.79	2.99	2.4	2.7	43	5	38	.10	0	.2	.2 26	SSC
		8	2014	52.89	19 23.77	155 17.01	2.44	1.6	1.7	12	3	83	.06	1	.4	.4 7	SSC
		8	2040	45.38	19 22.91	155 16.97	2.58	.9	1.0	14	4	79	.06	1	.3	.3 10	SSC
		8	2155	27.48	19 23.14	155 16.92	2.84	1.0	1.4	17	4	59	.08	0	.3	.3 10	SSC
		8	2214	48.34	19 22.75	155 17.16	2.44	.9	1.2	14	4	92	.05	1	.3	.3 10	SSC
		8	2258	29.66	19 22.94	155 16.73	2.92	1.8	2.4	25	4	45	.11	1	.3	.3 18	SSC
		8	23 6	59.07	19 24.05	155 16.82	2.70	1.2	1.2	18	5	84	.08	1	.3	.2 11	SSC
		9	041	20.43	19 22.77	155 17.10	2.71	.9	1.0	14	2	79	.08	1	.3	.4 11	SSC
		9	136	35.85	19 24.04	155 15.94	3.20	1.4	1.8	21	3	109	.08	1	.3	.3 12	SEC
		9	140	45.50	19 22.90	155 17.15	2.44	1.2	1.2	20	6	62	.07	1	.2	.3 12	SSC
		9	225	52.92	19 18.23	155 27.52	10.15	1.4	1.3	22	2	80	.09	7	.5	.9 16	LSW
		9	322	14.80	19 27.78	155 20.90	7.62	1.8	1.1	25	5	81	.11	1	.5	.7 16	KA0
		9	338	5.52	19 23.91	155 17.10	3.37	1.2	1.0	14	2	78	.10	1	.4	.4 9	SSC
		9	727	50.39	19 23.34	155 16.73	3.20	2.5	2.3	37	3	39	.11	0	.2	.2 26	SSC F
		9	728	33.59	19 22.95	155 16.91	2.69	2.1	2.3	25	3	40	.09	1	.2	.3 20	SSC
		9	745	50.78	19 23.38	155 16.75	2.97	1.5	1.8	22	3	45	.09	0	.3	.2 15	SSC
		9	837	16.96	19 17.82	155 12.90	5.85	1.5	1.4	30	3	120	.11	2	.5	1.0 17	SF2
		9	1291	32.65	19 18.38	155 15.19	7.66	1.9	1.9	34	2	105	.11	4	.4	.6 25	SF1
		9	1455	2.89	19 21.85	155 18.08	2.82	1.1	1.0	14	1	64	.08	3	.3	.7 11	SWR
		9	1746	51.05	19 23.57	155 16.99	3.21	1.1	1.2	18	5	71	.09	0	.3	.3 12	SSC
		9	18 6	1.46	19 23.46	155 16.67	3.25	1.6	1.9	26	3	53	.10	1	.3	.3 19	SSC
		9	1857	35.34	19 19.38	155 11.10	9.03	1.6	1.7	26	0	100	.07	5	.5	1.0 24	SF3
		9	1922	29.22	19 22.59	155 17.10	2.96	1.3	1.2	19	3	88	.06	2	.3	.3 11	SSC
		9	2250	19.18	19 22.84	155 16.98	2.65	1.5	1.6	22	4	76	.08	1	.2	.3 13	SSC
		9	23 4	36.54	19 22.68	155 17.12	2.40	.9	1.0	15	4	96	.08	1	.3	.4 10	SSC
		10	039	50.20	19 21.96	155 17.94	3.11	1.4	1.1	23	3	50	.09	3	.3	.5 16	SWR
		10	050	18.51	19 20.29	155 11.16	9.86	1.5	1.1	23	1	80	.06	4	.5	.8 19	SF3
		10	052	48.43	19 23.62	155 16.91	3.00	1.3	1.1	21	4	49	.06	0	.3	.2 13	SSC
		10	216	55.68	19 20.55	155 12.83	10.24	3.1	3.1	46	4	66	.10	4	.4	.3 36	SF2 F
		10	227	3.82	19 23.59	155 16.69	3.03	1.5	1.2	16	3	48	.12	1	.4	.3 8	SSC
		10	231	8.81	19 20.29	155 13.20	7.49	1.5	1.3	29	3	65	.09	4	.5	.8 22	SF2
		10	251	22.46	19 20.40	155 13.10	8.83	1.4	1.2	25	2	64	.07	4	.5	.9 18	SF2
		10	4 2	58.16	20 1.94	155 42.61	9.89	1.7	1.4	20	1	146	.09	13	1.7	1.6 14	KOH
		10	519	7.96	19 24.02	155 16.68	3.12	2.0	2.1	28	5	80	.10	0	.3	.2 17	SSC
		10	946	46.82	19 23.20	155 16.90	2.95	.9	1.0	16	4	83	.07	0	.3	.3 9	SSC
		10	1016	43.54	19 22.84	155 16.93	2.89	1.0	1.2	19	4	70	.09	1	.3	.3 12	SSC
		10	1226	48.46	19 21.04	155 13.78	8.21	2.0	1.8	37	4	61	.12	3	.4	.6 28	SF2
		10	1332	17.00	19 22.92	155 16.84	2.75	1.3	1.2	14	3	88	.05	1	.2	.3 10	SSC
		10	1337	42.76	19 20.59	155 3.08	6.78	1.9	1.9	32	2	111	.13	1	.5	.7 19	SF5
		10	14 0	35.01	19 19.96	155 10.11	7.59	1.6	1.3	28	3	86	.09	4	.5	.8 20	SF3
		10	1416	38.97	19 20.02	155 12.89	8.51	1.5	1.5	31	3	72	.09	5	.5	.7 21	SF2
		10	1524	54.01	19 23.82	155 16.87	2.91	1.8	1.9	21	4	76	.11	1	.4	.2 14	SSC
		10	1835	27.93	19 21.58	155 18.45	1.37	.5	1.2	12	1	94	.07	3	.3	.8 11	SWR
		10	1946	52.38	20 1.26	155 41.96	11.00	2.1	1.6	24	2	146	.12	15	.8	.8 17	KOH
		10	1953	1.41	19 23.92	155 28.33	9.41	1.9	1.8	36	1	60	.10	3	.4	.7 28	KA0
		10	2041	17.45	19 23.28	155 17.17	2.10	1.2	1.2	14	2	85	.09	0	.2	.3 11	SSC
		10	2149	15.86	19 24.66	156 8.64	40.79	3.2	3.7	47	5	252	.09	25	1.1	.9 38	KOH

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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	KM	FM	REMK
1982	JUN	10	2150	38.01	19	21.51	155	18.59	1.68	1.2	1.0	12	2	81	.07	3	.5	.7	9	SWR
		11	011	46.34	19	21.45	154	59.89	4.76	1.3	1.1	23	3	197	.13	6	.9	3.1	11	SLE
		11	020	51.26	19	22.50	155	2.78	6.75	1.5	1.3	30	2	128	.12	5	.5	.7	17	SF5
		11	047	13.80	19	20.97	155	8.35	7.65	2.5	2.6	39	2	130	.11	3	.5	.7	27	SF4
		11	055	11.53	19	23.64	155	16.77	3.00	1.2	1.2	21	5	44	.09	1	.3	.2	16	SSC
		11	1 4	14.05	19	23.18	155	16.85	2.78	1.4	1.4	18	3	69	.08	0	.3	.2	13	SSC
		11	115	47.81	19	23.06	155	14.29	1.43	1.2	1.7	11	0	81	.06	2	.4	.5	10	SEC
		11	2 3	38.11	19	19.87	155	10.39	8.15	1.6	1.3	26	1	89	.07	4	.5	.8	18	SF3
		11	812	3.91	19	23.63	155	16.78	3.00	1.4	1.7	22	2	54	.07	1	.3	.3	13	SSC
		11	1120	31.17	19	23.64	155	16.91	3.08	1.2	1.4	18	3	50	.08	1	.3	.3	12	SSC
		11	12 2	34.77	19	22.98	155	17.04	2.41	1.0	1.1	13	2	89	.04	1	.3	.3	8	SSC
		11	1247	49.68	19	23.01	155	16.82	3.13	1.0	1.3	18	2	47	.06	1	.3	.3	10	SSC
		11	1353	35.93	19	23.76	155	15.57	4.13	1.0	1.1	17	3	107	.12	2	.4	.5	7	SEC
		11	1552	36.66	19	21.49	155	18.15	3.69	1.5	1.5	25	4	50	.21	3	.5	1.0	14	SWR
		11	1812	52.87	19	22.35	155	5.86	6.25	1.1	1.3	27	2	71	.14	1	.5	.9	14	SF4
		11	1814	4.16	19	23.94	155	17.16	2.71	.7	.9	15	4	65	.06	1	.3	.3	10	SSC
		11	1841	54.01	19	23.71	155	16.84	2.60	1.6	1.8	22	4	56	.10	1	.3	.2	15	SSC
		11	1951	59.03	19	23.91	155	15.81	2.68	.8	.8	15	1	109	.09	1	.4	.3	5	SEC
		11	21 3	36.55	19	15.79	155	22.97	7.61	2.0	2.6	40	3	132	.12	3	.5	.7	21	SWR
		11	2229	33.22	19	23.09	155	17.04	2.64	.9	1.1	15	3	65	.06	1	.3	.3	10	SSC
		11	2250	33.76	19	23.76	155	16.86	2.78	1.5	1.7	24	3	66	.08	1	.3	.2	16	SSC
		12	2 3	9.07	19	20.18	155	9.51	7.50	1.4	1.1	27	1	78	.11	4	.5	.7	19	SF3
		12	236	8.06	19	24.57	155	.40	8.02	1.7	1.6	30	2	137	.14	3	.5	.7	10	SF5
		12	5 4	59.02	19	19.69	155	8.14	8.26	2.1	2.3	39	4	88	.11	4	.4	.6	23	SF4
		12	611	25.08	19	21.72	155	18.24	1.48	1.1	1.5	15	2	67	.12	3	.3	.7	8	SWR
		12	811	3.17	19	23.64	155	16.99	3.13	2.3	3.0	31	1	45	.11	1	.3	.3	22	SSC
		12	947	33.84	19	23.59	155	16.83	3.01	1.6	1.9	25	3	41	.10	0	.3	.2	15	SSC
		12	1028	33.43	19	23.38	155	16.78	3.01	1.3	1.6	19	3	51	.08	0	.3	.3	14	SSC
		12	1130	31.58	19	23.69	155	16.78	2.83	1.4	1.6	21	3	47	.08	1	.3	.2	11	SSC
		12	15 3	50.10	19	23.47	155	16.94	2.68	1.1	1.5	21	4	42	.10	0	.3	.3	11	SSC
		12	1735	51.84	19	20.67	155	13.54	9.06	2.4	2.5	43	3	56	.12	4	.4	.5	29	SF2
		12	19 6	47.20	19	22.11	155	.40	8.55	2.3	2.2	39	3	170	.12	6	.8	.5	25	SF5
		12	2018	46.48	19	21.20	155	13.00	8.83	1.8	2.0	34	3	58	.09	3	.4	.6	25	SF2
		12	2222	20.84	19	19.30	155	11.19	5.83	1.3	1.1	24	2	102	.09	6	.5	1.4	12	SF3
		13	4 8	7.53	19	23.73	155	16.67	2.80	1.6	1.7	21	4	43	.10	0	.3	.2	14	SSC
		13	8 3	57.51	19	19.08	155	13.58	9.24	2.0	1.5	15	0	191	.09	7	.8	1.0	14	SF2
		13	1351	26.53	19	26.32	155	28.13	7.86	2.5	2.1	38	3	56	.12	6	.4	1.0	29	KAO
		13	1538	9.26	20	1.90	155	42.91	11.99	2.6	2.1	37	4	144	.13	13	.7	.7	29	KOH
		13	16 6	9.78	19	20.77	155	10.97	8.26	2.5	2.4	42	2	73	.12	3	.4	.6	32	SF3
		13	1632	46.05	19	23.27	155	16.72	3.12	2.1	1.7	32	4	64	.08	0	.2	.3	22	SSC
		13	1634	36.95	19	23.54	155	16.86	2.87	1.9	2.0	24	4	66	.09	0	.2	.3	18	SSC
		13	1959	29.51	19	21.77	155	6.36	6.92	1.4	1.1	30	4	80	.12	2	.5	.8	19	SF4
		13	2122	52.04	19	.16	155	30.95	39.37	2.3	2.0	37	4	217	.07	16	.8	1.3	33	DL5
		13	2235	36.53	19	18.55	155	13.31	7.23	1.4	1.2	27	1	83	.09	3	.5	1.0	15	SF2
		13	2256	22.19	19	19.99	155	8.97	6.29	1.5	1.2	33	5	77	.12	4	.5	.9	25	SF4
		14	148	23.16	19	19.78	155	8.08	7.98	1.7	1.7	24	3	89	.09	5	.5	.8	15	SF4
		14	349	8.88	19	19.36	155	28.52	8.32	1.3	1.2	25	2	61	.11	6	.5	.9	20	KAO
		14	533	7.70	19	20.47	155	13.73	6.44	1.1	1.1	25	2	67	.13	4	.5	1.0	15	SF2

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YEAR	MON	DA	HR	MIN	SEC	ORIGIN TIME	LAT N	LON W	DEPTH	AMP	DIR	GAP	RMS	MIN	ERH	ERZ	NO	REMK
							DEG	MIN	KM	MAG	MAG	NR	NS	DEG	SEC	DIS	KM	KM FM REMK
1982	JUN	14	727	13.76	19	15.24	155	25.53	6.29	1.2	1.3	21	2	98	.10	3	.5	1.1 11 LSW
		14	815	38.83	19	18.86	155	13.32	10.19	3.5		45	4	151	.11	7	.5	.5 36 SF2
		14	817	42.93	19	18.33	155	13.15	8.34	1.4	1.1	23	2	148	.09	8	.6	1.1 16 SF2
		14	820	2.02	19	18.07	155	13.21	6.13	1.0	1.1	24	3	95	.12	2	.6	1.2 17 SF2
		14	117	49.27	19	23.05	155	16.74	2.87	1.5	2.1	20	2	61	.11	1	.3	.3 13 SSC
		14	1455	16.02	19	20.04	155	13.42	7.28	1.3	1.1	25	1	67	.10	5	.5	.9 16 SF2
		14	1517	33.57	19	16.55	155	22.11	6.96	.9		17	1	134	.09	5	.6	1.4 8 SWR
		14	1855	12.12	19	44.87	155	17.26	41.02	1.8	2.1	35	1	120	.10	17	.8	1.8 27 KEA
		14	1856	59.32	19	20.12	155	6.61	7.77	2.1	1.5	34	3	112	.10	5	.4	.8 25 SF4
		14	1955	51.92	19	1.10	155	28.95	41.23	2.0	1.9	34	1	209	.07	20	1.0	1.9 31 DLS
		15	016	3.90	19	47.55	155	35.30	15.52	2.5	2.7	38	4	95	.09	14	.5	.8 24 KEA
		15	540	56.53	19	23.82	155	17.03	2.76	1.8	1.8	24	3	61	.11	1	.3	.3 16 SSC
		15	555	52.32	19	20.01	155	7.55	6.99	1.4	1.8	28	2	98	.10	5	.4	.7 13 SF4
		15	630	40.92	19	29.16	155	46.13	8.32	1.5	1.2	17	1	199	.14	3	1.2	1.2 10 KON
		15	1115	31.81	19	23.15	155	16.82	2.31	2.3	2.5	28	1	43	.11	0	.2	.3 18 SSC
		15	1117	47.66	19	23.39	155	16.96	2.58	.8	1.0	12	3	63	.09	0	.3	.4 6 SSC
		15	1225	23.40	19	23.47	155	16.78	2.68	2.1	2.5	29	4	43	.13	0	.3	.3 18 SSC
		15	1357	25.89	19	22.87	155	17.18	2.24	1.2	1.6	17	3	74	.08	1	.3	.3 8 SSC
		15	1646	53.74	19	13.08	155	14.75	32.43	1.7	1.5	27	1	200	.08	8	1.1	1.8 21 DEP
		15	174	21.20	19	23.09	155	17.60	2.52	1.3	1.2	15	2	50	.06	2	.3	.3 9 SSC
		15	1734	38.34	19	23.90	155	16.78	2.91	1.0	1.2	16	4	116	.07	1	.4	.3 10 SSC
		15	1810	25.36	19	24.00	155	16.89	2.91	1.1	1.2	17	4	80	.07	1	.3	.2 8 SSC
		15	1949	56.80	19	21.10	155	4.66	8.05	1.6	1.6	33	2	94	.13	4	.5	.6 17 SF5
		15	1951	46.13	19	23.31	155	16.91	2.90	1.6	1.6	20	4	63	.10	0	.3	.3 14 SSC
		15	2027	16.36	19	22.56	155	17.00	2.88	1.4	1.2	20	5	91	.08	2	.3	.3 13 SSC
		16	153	32.45	19	23.18	155	17.00	2.57	1.3	1.2	17	5	62	.06	0	.3	.3 12 SSC
		16	253	22.02	19	26.12	155	22.86	8.22	1.9	1.5	35	3	40	.12	4	.4	.7 24 KAO
		16	71	46.64	18	53.96	155	12.68	48.00	2.3	1.8	34	2	251	.10	39	1.8	2.3 29 LOI
		16	722	43.60	19	16.56	155	21.73	6.28	2.3	2.5	45	4	134	.13	6	.4	.8 35 SWR
		16	1348	46.21	19	19.00	155	15.01	7.76	1.9	1.8	36	1	89	.13	5	.5	.7 25 SF1
		16	169	2.24	19	19.93	155	6.83	7.80	2.1	1.9	29	2	113	.11	5	.5	.8 23 SF4
		16	2247	41.10	19	19.78	155	10.64	8.43	2.0	2.1	37	1	92	.11	4	.4	.6 29 SF3
		16	2329	50.15	19	17.75	155	23.01	9.37	.9	1.1	21	2	102	.09	5	.5	.8 16 SWR
		17	427	6.48	19	55.79	155	13.27	41.71	2.6	2.4	46	3	209	.11	13	.8	1.5 40 KEA
		17	77	44.67	19	10.81	155	39.63	9.07	2.8	2.7	41	3	112	.18	9	.5	.8 26 LSW
		17	1111	14.98	19	23.14	155	16.81	2.94	1.0	1.4	17	4	61	.09	1	.3	.3 8 SSC
		17	1213	47.53	19	20.96	155	8.66	6.72	2.4	2.6	38	3	162	.12	3	.5	.7 30 SF4
		17	1244	50.99	19	15.98	155	23.51	6.12	1.1	1.5	33	3	113	.13	3	.4	.9 17 SWR
		17	144	14.69	19	31.65	155	38.33	7.02	2.3	1.9	12	0	195	.06	6	1.1	1.6 8 MLO
		17	1710	36.82	19	23.33	155	16.82	2.88	.9	1.0	13	4	88	.06	0	.3	.3 10 SSC
		17	2210	3.45	19	16.16	155	22.53	3.68	1.1	1.5	22	1	134	.08	4	.5	1.4 16 SWR
		18	63	23.15	19	23.56	155	16.89	2.81	2.1	2.4	30	5	35	.11	0	.2	.3 21 SSC
		18	618	36.86	19	18.22	155	13.02	4.37	1.7	1.5	32	2	100	.12	2	.4	1.2 24 SF5
		18	621	3.03	19	23.62	155	16.84	3.10	1.3	1.4	19	4	71	.08	0	.3	.3 13 SSC
		18	717	22.92	19	23.63	155	16.82	3.03	.8	1.0	13	4	113	.04	1	.4	.3 8 SSC
		18	854	.36	19	23.40	155	16.69	2.36	.9	1.0	16	5	74	.12	0	.3	.3 9 SSC
		18	947	5.83	19	22.81	155	17.00	2.66	1.3	1.6	14	3	77	.10	1	.3	.4 8 SSC
		18	1035	20.59	19	18.94	155	18.53	4.88	1.0	1.1	22	5	75	.07	2	.4	.8 16 SWR

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YEAR	MON	DA	HR	MIN	SEC	ORIGIN TIME	LAT N	LON W	DEPTH	AMP	DIR	GAP	RMS	MIN	ERH	ERZ	NO	REMK
							DEG	MIN	KM	MAG	MAG	NR	NS	DEG	SEC	DIS	KM	KM FM REMK
1982	JUN	18	13	6	29.24	19 20.72	155	7.71	6.84	1.0	1.1	23	0	85	.12	5	.6	1.1 17 SF4
		18	14	5	8.93	19 22.70	155	17.18	2.47	1.3	1.6	20	5	50	.07	1	.2	.3 14 SSC
		18	2020	35.82	19 19.18	155	13.87	6.19	1.6	1.5	35	4	65	.12	4	.4	.8 25 SF2	
		18	2212	30.18	19 22.86	155	27.79	8.14	1.8	1.1	27	1	58	.11	1	.4	.8 19 KAO	
		18	2341	13.85	19 22.89	155	16.80	2.84	1.6	2.0	30	4	41	.12	1	.3	.3 17 SSC	
		19	07	39.28	19 23.02	155	17.02	2.48	.9	1.4	15	3	71	.07	1	.3	.3 9 SSC	
		19	028	11.12	19 22.88	155	17.16	2.33	1.0	1.0	13	3	73	.04	1	.3	.3 9 SSC	
		19	444	35.69	19 22.67	155	1.18	8.12	1.5	1.2	24	4	159	.14	6	.7	.9 18 SF5	
		19	50	4.27	19 22.93	155	17.18	2.40	1.0	1.2	14	2	72	.06	1	.3	.4 10 SSC	
		19	539	39.28	19 26.51	155	29.90	7.45	1.4	2.0	38	3	58	.12	8	.4	1.1 23 KAO	
		19	624	4.08	19 17.76	155	15.38	8.28	.9	1.1	18	3	164	.07	4	.6	1.1 13 SF1	
		19	630	58.51	20 6.86	155	44.15	22.80	2.1	1.9	27	3	192	.08	5	1.7	1.8 19 KOH	
		19	852	48.20	19 20.48	155	10.89	6.71	1.5	1.1	26	4	78	.11	3	.5	.9 16 SF3	
		19	853	27.13	19 20.18	155	8.80	7.11	1.3	1.1	22	1	72	.10	4	.5	1.2 18 SF4	
		19	854	14.53	19 20.12	155	8.64	7.52	1.1	1.1	21	1	74	.09	4	.5	1.2 16 SF4	
		19	858	55.38	19 20.73	155	11.28	8.12	2.2	1.8	31	3	73	.10	4	.4	.7 20 SF3	
		19	1029	52.80	19 23.08	155	17.15	2.73	1.2	1.2	17	5	65	.09	1	.3	.3 9 SSC	
		19	1047	35.41	19 22.68	155	17.20	2.47	1.2	1.2	13	3	83	.06	1	.3	.4 9 SSC	
		19	1123	58.32	19 21.01	155	7.97	8.55	1.3	1.3	27	3	77	.09	4	.5	.9 16 SF4	
		19	1158	24.66	19 20.06	155	12.17	8.48	1.5	1.5	24	2	78	.08	5	.5	.8 17 SF3	
		19	1323	27.53	19 20.56	155	12.87	8.77	2.0	2.0	34	4	66	.11	4	.4	.6 27 SF2	
		19	1540	5.40	19 18.85	155	13.94	7.19	1.3	1.5	27	1	80	.11	3	.5	1.0 18 SF2	
		19	1734	55.24	19 20.91	155	13.12	7.76	1.9	2.0	37	4	59	.13	3	.5	.6 22 SF2	
		19	2212	33.14	19 20.70	155	13.84	7.70	1.1	1.1	19	2	65	.08	4	.5	1.1 13 SF2	
		20	014	24.59	19 13.92	155	32.50	7.33	1.6	1.3	24	1	120	.17	5	.6	1.1 15 LSW	
		20	14	52.18	19 21.98	155	4.94	6.92	1.1	1.1	21	3	76	.15	3	.7	.9 14 SF5	
		20	118	34.88	19 17.41	155	15.36	6.13	1.0	1.1	22	3	149	.11	3	.6	1.1 16 SF1	
		20	37	48.12	20 7.73	155	46.85	24.43	2.4	2.9	37	5	288	.10	0	1.3	1.2 24 KOH	
		20	722	11.20	19 22.23	155	17.48	2.88	1.3	1.4	22	4	55	.08	2	.3	.4 14 SSC	
		20	723	3.37	19 20.72	155	12.13	8.58	1.9	1.7	34	3	69	.11	4	.4	.5 23 SF3	
		20	730	13.51	19 19.92	155	7.02	8.65	3.0	3.0	44	4	111	.08	5	.4	.4 33 SF4	
		20	855	36.83	19 19.09	155	16.34	6.78	1.2	1.2	28	5	110	.11	3	.4	.8 16 SF1	
		20	1334	53.64	19 19.19	155	15.58	7.24	1.2	1.4	24	4	103	.09	4	.4	.8 19 SF1	
		20	179	43.24	19 19.70	155	16.07	35.64	2.3	2.2	43	1	91	.12	2	.6	1.3 36 DEP	
		20	1840	30.64	19 21.87	155	18.08	2.65	1.5	1.6	25	4	49	.11	3	.3	.6 15 SWR	
		21	050	45.63	19 21.14	155	13.28	8.06	1.8	1.6	34	3	57	.13	3	.5	.6 25 SF2	
		21	327	27.19	19 22.04	155	4.56	7.03	2.0	1.8	26	2	84	.12	3	.5	.8 19 SF5	
		21	443	47.42	19 25.19	154	57.51	5.78	1.6	1.6	28	3	156	.14	2	.6	.9 16 LER	
		21	64	14.82	19 21.42	155	15.10	9.83	3.4	3.5	41	4	65	.11	2	.4	.3 33 SF1	
		21	1032	27.09	19 26.36	155	38.38	3.96	2.5	2.7	23	1	125	.08	4	.6	1.1 12 MLO	
		21	1049	53.36	19 20.87	155	6.58	6.48	1.5	1.3	28	1	96	.13	4	.5	1.1 16 SF4	
		21	1158	37.09	19 19.42	155	8.80	6.16	1.8	1.5	29	3	83	.10	4	.5	1.2 15 SF4	
		21	1245	51.66	19 20.56	155	13.45	8.02	1.2	1.6	22	1	62	.08	4	.5	.9 16 SF2	
		22	257	2.21	19 19.89	155	18.58	7.42	1.2	1.3	18	1	62	.09	2	.5	1.1 13 SWR	
		22	311	43.78	19 20.36	155	18.54	7.63	1.7	1.9	38	4	96	.12	2	.4	.6 26 SWR	
		22	74	8.42	19 20.12	155	20.28	1.90	1.4	1.3	13	1	130	.11	5	.4	1.2 8 SWR	
		22	713	24.09	19 20.17	155	20.28	1.46	1.9	2.2	15	1	68	.11	5	.4	.9 12 SWR	
		22	738	46.32	19 19.91	155	19.54	7.89	1.5	1.5	24	5	63	.08	4	.4	.9 15 SWR	

HVO EARTHQUAKE SUMMARY LIST

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YEAR	MON	ORIGIN DA HRMN	TIME 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	
1982	JUN	22	816	47.56	19 19.39	155 19.19	7.85	1.6	1.1	19	2	64	.08	3	.5	1.0	13 SWR	
		22	849	30.87	19 19.81	155 19.46	7.34	.9	1.0	17	1	63	.06	4	.5	1.0	16 SWR	
		22	858	18.98	19 20.43	155 19.34	7.68	1.4	1.5	26	4	52	.11	3	.4	.8	22 SWR	
		22	953	44.64	19 21.31	155 18.92	1.70	1.3	1.7	16	3	81	.10	3	.3	.7	12 SWR	
		22	955	4.65	19 21.37	155 18.85	2.44	.5	.8	10	0	79	.07	3	.4	1.2	7 SWR	
		22	1051	26.09	19 18.76	155 19.68	5.72	.5	.6	16	1	95	.11	2	.6	1.4	14 SWR	
		22	1139	12.97	19 19.42	155 19.27	7.27	1.5	1.1	24	6	66	.07	3	.4	.9	16 SWR	
		22	1141	31.84	19 20.30	155 19.93	7.85	2.0	2.3	35	5	62	.10	4	.4	.6	25 SWR	
		22	1145	13.25	19 19.29	155 18.99	7.45	1.6	1.1	25	5	92	.07	3	.5	.9	17 SWR	
		22	12	2	31.83	19 20.13	155 19.38	7.56	2.2	2.7	47	7	57	.12	3	.4	.5	32 SWR
		22	12	9	55.11	19 18.80	155 19.96	7.08	.9	.9	20	2	99	.08	3	.5	1.3	13 SWR
		22	1232	24.39	19 19.78	155 19.19	8.03	1.5	1.3	26	6	57	.10	3	.4	.9	18 SWR	
		22	13	9	22.74	19 19.89	7.08	.8	.6	22	2	53	.08	3	.5	1.0	17 SWR	
		22	1311	50.84	19 19.71	155 19.11	8.73	1.6	1.5	25	5	89	.10	3	.5	.8	15 SWR	
		22	1312	39.39	19 19.84	155 19.33	7.49	1.5	1.5	28	6	59	.08	3	.4	.7	19 SWR	
		22	1315	1.54	19 20.14	155 19.93	7.83	.9	1.1	19	2	64	.06	4	.5	1.2	11 SWR	
		22	1332	29.08	19 22.33	155 .61	6.90	1.9	1.4	28	2	172	.15	6	.7	.8	17 SF5	
		22	1347	21.56	19 19.86	155 19.35	7.40	.9	.6	21	4	77	.08	3	.4	.9	14 SWR	
		22	1348	29.46	19 19.94	155 19.11	9.31	2.2	2.5	48	8	53	.12	3	.4	.4	32 SWR	
		22	1358	6.30	19 20.00	155 19.14	9.56	3.1	3.8	50	5	53	.12	3	.4	.4	40 SWR	
		22	1413	2.46	19 20.46	155 19.72	7.57	.8	.9	16	3	109	.06	4	.6	1.4	13 SWR	
		22	15	0	5.26	19 19.82	7.89	.8	.9	20	5	135	.09	4	.5	1.0	15 SWR	
		22	15	7	35.00	19 20.07	7.85	1.2	.9	23	5	64	.06	4	.4	.9	18 SWR	
		22	1513	23.11	19 20.40	155 20.05	7.59	1.6	1.5	33	6	62	.11	5	.4	.6	16 SWR	
		22	1517	43.50	19 16.40	155 22.52	1.54	1.2	1.1	17	3	130	.13	5	.5	1.1	13 SWR	
		22	1522	22.40	19 19.66	155 19.31	7.46	1.8	1.9	27	3	62	.09	3	.4	.9	19 SWR	
		22	1535	26.66	19 20.20	155 19.87	2.34	.4	1.0	14	2	62	.15	4	.4	1.3	11 SWR	
		22	1610	.03	19 19.85	155 20.07	8.96	1.6	1.3	21	3	72	.07	4	.5	1.1	14 SWR	
		22	1624	38.87	19 20.15	155 19.99	7.95	1.5	1.5	26	5	65	.09	5	.4	.9	18 SWR	
		22	1631	17.29	19 20.30	155 19.88	7.43	1.9	2.5	36	5	62	.09	4	.3	.6	24 SWR	
		22	1640	27.63	19 18.36	155 20.44	7.51	.8	.9	23	5	119	.09	3	.5	.9	17 SWR	
		22	1650	52.76	19 19.77	155 19.16	8.22	1.7	2.1	36	4	58	.10	3	.4	.6	19 SWR	
		22	1652	11.08	19 19.59	155 19.61	3.88	1.5	1.3	15	1	106	.11	3	.7	1.4	9 SWR	
		22	17	4	14.61	19 19.68	4.32	.8	.8	20	4	108	.12	3	.4	1.1	14 SWR	
		22	17	4	54.44	19 20.46	8.31	2.4	2.8	43	5	59	.14	4	.4	.6	28 SWR	
		22	1713	25.83	19 20.01	155 19.97	8.28	1.7	1.9	30	7	126	.09	4	.4	.8	19 SWR	
		22	1717	34.03	19 20.44	155 19.01	8.10	1.5	1.5	30	7	48	.08	3	.4	.7	25 SWR	
		22	1719	9.94	19 19.31	155 19.24	7.79	.8	.6	19	5	128	.09	3	.5	.9	15 SWR	
		22	1727	31.57	19 18.45	155 15.11	6.41	1.3	1.3	26	5	112	.10	4	.4	.9	22 SF1	
		22	1754	49.02	19 20.51	155 19.75	7.20	1.0	.6	19	6	109	.06	4	.4	1.0	15 SWR	
		22	1740	47.92	19 20.32	155 19.31	8.44	1.6	1.8	36	9	53	.09	3	.3	.6	24 SWR	
		22	1745	14.03	19 20.30	155 19.95	7.67	1.7	2.1	39	7	62	.11	5	.3	.6	27 SWR	
		22	1747	59.43	19 20.15	155 19.78	7.26	1.2	1.1	25	7	62	.09	4	.4	.8	18 SWR	
		22	1754	47.73	19 19.65	155 19.06	7.38	1.0	.9	20	4	110	.08	3	.5	1.0	17 SWR	
		22	18	7	1.47	19 19.53	7.23	1.6	1.8	36	9	67	.09	3	.3	.6	22 SWR	
		22	18	8	25.74	19 19.65	6.86	1.2	1.1	24	8	56	.08	3	.4	.7	14 SWR	
		22	1819	3.58	19 19.41	155 19.37	7.17	1.4	1.3	29	8	94	.10	3	.4	.9	22 SWR	
		22	1825	41.05	19 20.24	155 20.23	7.21	1.2	1.5	25	5	66	.06	5	.4	.9	21 SWR	

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YEAR	MON	ORIGIN DA HRMN	TIME 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	
1982	JUN	22	1828	18.99	19 19.85	155 19.36	7.61	.8	1.1	22	5	60	.10	3	.5	1.0	19 SWR	
		22	1840	7.39	19 20.61	155 19.85	8.11	1.6	1.5	24	7	108	.07	4	.4	.9	17 SWR	
		22	1842	58.55	19 20.02	155 20.01	7.96	1.5	1.3	27	5	67	.07	5	.4	.8	13 SWR	
		22	1844	49.00	19 20.84	155 19.68	7.27	1.4	1.1	21	4	80	.07	4	.4	.9	16 SWR	
		22	1853	33.56	19 18.99	155 19.48	6.18	.8	1.1	15	3	82	.07	2	.5	1.1	11 SWR	
		22	1859	37.38	19 20.49	155 20.18	6.47	.7	.6	19	2	62	.06	5	.4	1.3	18 SWR	
		22	1916	50.42	19 20.55	155 19.85	7.50	1.0	1.1	18	2	86	.04	4	.5	1.1	11 SWR	
		22	1921	19.38	19 20.87	155 19.67	6.44	.8	.9	17	2	99	.05	4	.5	1.4	12 SWR	
		22	1928	18.15	19 19.04	155 19.57	7.73	.8	1.1	15	1	83	.07	3	.6	1.3	12 SWR	
		22	1930	10.49	19 20.64	155 19.43	6.89	.4	.3	18	6	101	.09	4	.4	1.0	11 SWR	
		22	1936	18.18	19 20.50	155 20.14	7.07	.6	.3	23	6	61	.06	5	.4	.8	19 SWR	
		22	2016	3.13	19 19.94	155 17.11	7.58	1.1	.20	5	86	.11	1	.5	.8	15 SWR		
		22	21	3	19.56	19 20.14	155 19.83	8.42	1.5	1.3	23	4	63	.07	4	.4	.9	20 SWR
		22	2126	24.50	19 19.90	155 18.92	7.81	1.6	1.5	28	4	52	.09	3	.4	.8	17 SWR	
		22	2142	9.22	19 18.74	155 20.93	6.87	1.7	1.9	34	5	105	.11	4	.4	.9	24 SWR	
		22	2148	18.02	19 20.38	155 20.14	6.52	.9	.9	17	2	76	.06	5	.5	1.4	14 SWR	
		22	2227	45.24	19 20.77	155 19.82	7.36	1.5	1.5	33	5	55	.12	4	.4	.9	24 SWR	
		22	2230	14.26	19 20.54	155 19.79	6.79	.8	.3	19	2	57	.09	4	.5	1.5	11 SWR	
		22	2232	49.12	19 20.45	155 19.97	7.39	1.5	.6	21	3	61	.07	5	.4	1.1	17 SWR	
		22	2236	16.09	19 20.46	155 19.57	8.68	.8	.6	19	3	55	.07	4	.5	1.1	13 SWR	
		22	2249	36.89	19 20.01	155 17.48	8.28	1.5	1.3	13	2	123	.06	0	.7	1.5	10 SWR	
		22	2250	28.00	19 20.01	155 17.30	8.52	.8	.6	12	1	83	.05	0	.7	1.6	10 SWR	
		22	2255	25.87	19 20.42	155 20.18	8.37	.8	.9	19	3	63	.08	5	.5	1.1	14 SWR	
		22	23	1	20.17	19 18.34	155 20.02	7.72	.9	.9	22	4	119	.09	3	.5	.9	15 SWR
		22	2322	21.33	19 20.42	155 17.32	8.74	1.8	1.8	28	2	62	.08	1	.4	.7	22 SWR	
		22	2334	7.90	19 20.40	155 19.17	9.41	2.9	3.1	46	6	51	.12	3	.4	.4	36 SWR	
		22	2336	31.52	19 20.53	155 20.26	7.92	1.5	1.3	26	6	62	.08	5	.4	.9	11 SWR	
		22	2350	46.27	19 20.27	155 20.21	8.17	.8	.3	19	3	66	.08	5	.4	1.2	16 SWR	
		22	2354	45.80	19 20.96	155 18.77	7.62	1.4	1.1	19	3	84	.07	3	.4	1.1	12 SWR	
		22	2358	17.23	19 21.04	155 18.81	7.39	1.4	1.1	15	3	83	.05	3	.5	1.3	9 SWR	
		23	0	5	30.86	19 19.71	155 19.16	7.70	1.6	1.8	32	6	58	.10	3	.4	.7	22 SWR
		23	0	8	50.74	19 20.54	155 20.32	7.52	1.5	1.1	20	2	63	.06	5	.5	1.0	14 SWR
		23	013	29.98	19 20.17	155 18.41	7.01	1.5	.9	15	3	85	.11	2	.5	1.1	11 SWR	
		23	018	19.64	19 21.19	155 18.85	5.89	1.3	.9	19	5	81	.09	3	.4	1.1	15 SWR	
		23	029	23.59	19 21.38	155 18.74	6.74	1.4	.9	16	4	77	.06	3	.5	1.1	12 SWR	
		23	034	10.31	19 21.20	155 18.80	6.76	1.4	.9	20	4	81	.06	3	.4	.9	15 SWR	
		23	038	37.92	19 20.55	155 19.92	8.12	1.5	1.1	27	6	58	.09	5	.4	.8	20 SWR	
		23	041	20.72	19 20.46	155 20.23	8.23	1.5	.9	26	7	63	.09	5	.3	.8	16 SWR	
		23	042	15.31	19 21.20	155 18.74	7.10	1.4	.9	17	3	80	.09	3	.5	1.2	10 SWR	
		23	043	39.94	19 20.78	155 19.55	7.01	1.4	1.3	22	3	52	.07	4	.4	1.0	21 SWR	
		23	059	57.21	19 20.92	155 18.82	4.09	1.3	1.1	22	4	49	.13	3	.4	1.0	15 SWR	
		23	1	7	36.63	19 21.41	155 18.75	6.12	1.3	1.1	21	5	63	.08	3	.4	1.0	17 SWR
		23	110	18.90	19 21.04	155 19.03	8.28	1.5	.9	28	6	45	.10	3	.4	.8	24 SWR	
		23	121	8.60	19 20.50	155 20.03	6.88	.8	.6	17	2	60	.06	5	.5	1.2	12 SWR	
		23	127	19.44	19 21.09	155 18.34	8.27	1.4	.9	21	5	75	.07	2	.4	.9	16 SWR	
		23	132	46.61	19 20.56	155 19.54	6.80	1.2	.9	26	6	54	.08	4	.3	.8	23 SWR	
		23	145	10.30	19 20.41	155 19.85	7.54	1.5	1.9	32	5	59	.10	4	.4	.8	24 SWR	
		23	2	2	5.70	19 19.99	155 20.27	9.04	.6	.3	19	3	101	.05	5	.5	1.0	12 SWR

HVO EARTHQUAKE SUMMARY LIST

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		ORIGIN TIME			LAT N		LON W		DETH			AMP		DUR		GAP		RMS		MIN		ERH		ERZ NO	
YEAR	MON	DA	HR	MIN	SEC	DEG	MIN	DEG	MIN	KM	MAG	MAG	NR	NS	DEG	SEC	DIS	KM	KM	FM	REMK				
1982	JUN	23	2	4	35.94	19	20.55	155	17.21	8.59	1.7	1.8	28	4	69	.07	1	.5	.7	14	SWR				
		23	214	43.59	19	20.57	155	19.80	7.74		.9	30	7	57	.10	4	.4	.8	19	SWR					
		23	215	12.73	19	18.65	155	20.68	8.12	1.4		26	5	108	.08	4	.4	.8	19	SWR					
		23	217	27.46	19	19.86	155	18.98	7.99	1.0	.9	21	3	54	.08	3	.5	1.1	10	SWR					
		23	219	17.47	19	19.22	155	16.83	6.11	1.5	1.5	21	3	110	.13	2	.6	1.4	14	SF1					
		23	223	15.37	19	20.70	155	19.79	7.74	1.5	1.1	27	6	56	.09	4	.4	.8	23	SWR					
		23	223	52.96	19	20.27	155	17.64	8.79	1.0	1.3	18	4	73	.06	1	.5	.9	15	SWR					
		23	230	30.08	19	16.18	155	20.97	2.24	1.9	1.4	24	3	155	.15	5	.6	1.2	10	SWR					
		23	237	38.07	19	20.10	155	17.46	8.61	1.1	.9	16	0	80	.07	0	.6	1.3	13	SWR					
		23	241	33.82	19	21.30	155	18.66	7.19	1.4	.9	20	4	55	.07	3	.4	1.1	15	SWR					
		23	242	42.16	19	20.03	155	11.01	8.99	1.5	.9	21	3	86	.06	4	.6	1.0	16	SF3					
		23	245	36.83	19	20.46	155	20.33	6.64	1.5	1.5	24	3	64	.07	5	.4	1.0	19	SWR					
		23	248	19.61	19	20.43	155	20.30	7.16	.8	.6	19	3	63	.10	5	.5	1.5	14	SWR					
		23	249	52.51	19	18.81	155	21.15	7.91	1.0	.6	16	1	103	.09	5	.5	1.2	12	SWR					
		23	254	58.24	19	20.46	155	20.03	7.32	1.5	.9	22	3	61	.07	5	.4	1.1	18	SWR					
		23	3	3	9.91	19	20.48	155	19.84	7.28	1.5	.6	21	4	58	.09	4	.4	1.0	15	SWR				
		23	3	6	30.49	19	20.50	155	17.34	8.26	2.3	2.7	45	5	55	.10	1	.3	.4	30	SWR				
		23	3	9	2.70	19	20.14	155	17.40	7.66	.7	.6	10	1	71	.06	0	.6	1.2	8	SWR				
		23	314	45.29	19	20.07	155	17.62	7.55	.8	.9	12	1	78	.09	0	.7	1.2	11	SWR					
		23	332	34.81	19	18.72	155	19.71	7.68	1.1	1.1	21	2	98	.11	2	.5	1.3	18	SWR					
		23	338	4.68	19	20.17	155	17.42	8.84	1.3	.9	19	3	71	.07	0	.5	1.0	14	SWR					
		23	348	38.98	19	20.32	155	20.26	7.40	1.5	1.1	28	6	65	.09	5	.4	.8	18	SWR					
		23	349	48.50	19	19.84	155	18.92	7.20	1.6		24	5	53	.09	3	.4	.9	21	SWR					
		23	350	27.10	19	19.02	155	19.39	6.38	.9	.9	13	1	144	.05	2	.6	1.4	11	SWR					
		23	353	23.35	19	19.01	155	19.69	7.28	.8	.6	17	3	87	.09	3	.6	1.1	10	SWR					
		23	4	0	.51	19	18.90	155	18.53	7.21	1.0	.9	20	4	75	.08	2	.5	1.1	17	SWR				
		23	4	2	19.79	19	19.99	155	20.09	8.86	.8	.6	20	3	69	.08	5	.5	.9	12	SWR				
		23	4	5	28.50	19	24.09	155	15.86	3.17	1.5	2.0	17	3	112	.07	1	.4	.4	11	SEC				
		23	411	29.27	19	20.53	155	19.75	8.17	1.5		32	7	57	.09	4	.4	.7	27	SWR					
		23	420	9.30	19	20.19	155	19.80	7.11	1.1	.9	23	6	62	.08	4	.4	.9	19	SWR					
		23	430	43.81	19	20.62	155	17.95	6.85	.7	.9	20	5	72	.08	1	.4	.9	17	SWR					
		23	433	32.20	19	19.61	155	19.19	7.36	.9	.9	24	6	60	.08	3	.4	.8	22	SWR					
		23	443	52.20	19	20.60	155	20.16	7.46	.7	.6	22	6	61	.09	5	.4	.9	19	SWR					
		23	447	35.40	19	19.54	155	19.19	7.47	1.5	1.3	26	7	115	.07	3	.4	.7	22	SWR					
		23	448	34.70	19	17.88	155	19.05	6.29	.9	.9	24	5	134	.06	1	.4	.7	18	SWR					
		23	452	16.06	19	20.39	155	20.20	7.54	.8	.6	24	6	63	.08	5	.4	.9	22	SWR					
		23	454	40.33	19	20.60	155	19.85	8.04	1.4	.9	30	7	57	.09	4	.4	.7	26	SWR					
		23	516	48.62	19	19.30	155	19.18	7.26	.9	.6	21	5	65	.08	3	.5	.8	17	SWR					
		23	521	12.55	19	20.29	155	19.53	7.35	.5	.3	20	7	110	.06	4	.4	.9	16	SWR					
		23	521	58.33	19	18.69	155	20.60	7.27	.8	.9	21	4	107	.09	4	.5	1.0	19	SWR					
		23	532	52.83	19	19.98	155	19.03	7.25	1.3	1.1	27	8	54	.09	3	.4	.8	20	SWR					
		23	549	28.64	19	20.43	155	19.67	7.95	.8	.6	24	6	110	.07	4	.4	.8	21	SWR					
		23	551	53.82	19	19.79	155	19.13	6.84	1.2	.9	22	5	110	.09	3	.4	.8	20	SWR					
		23	554	27.33	19	20.28	155	17.59	7.18	1.0	.3	22	6	72	.08	0	.4	.8	18	SWR					
		23	555	34.94	19	18.90	155	19.74	8.60	2.0	2.1	50	12	89	.11	3	.3	.5	37	SWR					
		23	556	29.70	19	17.84	155	23.12	3.45	1.3	1.5	22	4	99	.11	4	.4	1.0	21	SWR					
		23	559	3.45	19	20.23	155	19.69	6.64	1.3	.9	25	7	60	.08	4	.3	.8	23	SWR					
		23	6	3	18.35	19	20.22	155	17.53	7.42	1.0	1.3	22	7	76	.07	0	.4	.7	19	SWR				

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		ORIGIN TIME			LAT N		LON W		DEPTH		AMP		DUR		GAP		RMS		MIN		ERH		ERZ NO	
YEAR	MON	DA	HR	MIN	SEC	DEG	MIN	DEG	MIN	KM	MAG	MAG	NR	NS	DEG	SEC	DIS	KM	KM	FM	REMK			
1982	JUN	23	6	7	29.75	19	38.33	155	59.13	.20	2.6	2.2	36	5	218	.15	16	.9	.4	24	KON			
		23	613	14.91	19	20.58	155	19.72	7.98	1.4	1.5	29	7	56	.08	4	.4	.7	25	SWR				
		23	616	12.56	19	19.63	155	19.15	6.64	1.0	.9	22	6	113	.09	3	.4	.9	19	SWR				
		23	619	8.80	19	19.82	155	19.23	6.97	1.1	.6	21	6	113	.06	3	.4	.8	19	SWR				
		23	621	30.90	19	20.61	155	19.51	7.64	.7	.6	23	7	102	.07	4	.4	.8	20	SWR				
		23	625	23.69	19	20.92	155	17.46	8.07	2.1	2.6	42	5	40	.11	2	.4	.5	26	SWR				
		23	635	4.04	19	15.05	155	20.55	3.71	1.1	.9	21	2	159	.11	6	.7	1.9	13	SWR				
		23	636	45.82	19	20.22	155	20.26	7.78	1.5	.6	25	6	67	.10	5	.4	.9	12	SWR				
		23	637	33.27	19	20.60	155	19.69	7.43	1.5	1.3	26	7	56	.06	4	.3	.8	20	SWR				
		23	645	42.84	19	20.43	155	17.24	7.36	.8	.6	18	4	73	.11	1	.6	.9	11	SWR				
		23	650	17.36	19	20.50	155	20.37	6.25	.8	.6	20	5	64	.09	5	.4	1.3	14	SWR				
		23	650	56.96	19	18.77	155	19.85	7.69	.9	.6	19	2	98	.08	3	.5	1.2	16	SWR				
		23	651	13.41	19	18.87	155	19.73	7.17	1.6	1.1	24	4	92	.09	3	.5	1.1	14	SWR				
		23	7	7	56.62	19	19.72	155	16.61	6.22	1.2	1.3	31	2	96	.13	2	.5	.8	21	SF1			
		23	711	5.51	19	18.97	155	9.91	8.97	1.5	1.5	28	2	110	.07	5	.5	.9	19	SF3				
		23	712	38.79	19	19.74	155	19.12	6.52	1.5	.9	23	5	57	.07	3	.4	1.0	13	SWR				
		23	725	51.25	19	19.19	155	20.67	7.32	.8	.6	20	5	93	.06	4	.4	.9	15	SWR				
		23	730	7.77	19	17.90	155	15.69	7.03	.9	.9	23	2	134	.09	4	.5	1.1	17	SF1				
		23	731	45.63	19	19.19	155	19.33	6.29	1.7	2.0	36	5	69	.11	3	.4	.7	25	SWR				
		23	733	24.37	19	19.96	155	17.38	8.68	1.5		17	3	83	.05	0	.5	1.1	10	SWR				
		23	733	48.00	19	19.06	155	19.90	7.89	1.0	.9	25	5	89	.08	3	.5	1.0	21	SWR				
		23	734	42.63	19	20.27	155	17.23	8.17	1.7	1.8	33	4	78	.10	0	.4	.6	21	SWR				
		23	736	42.23	19	18.39	155	15.75	6.76	1.0	1.3	17	0	122	.09	4	.6	1.3	14	SF1				
		23	738	6.28	19	20.31	155	18.47	8.81	1.5	1.4	26	7	85	.08	2	.4	.7	21	SWR				
		23	738	27.28	19	19.76	155	19.27	8.05	2.9	1.1	49	7	60	.14	3	.4	.6	34	SWR				
		23	741	.77	19	20.24	155	16.93	7.56	1.0	1.1	17	2	82	.09	1	.5	.9	11	SF1				
		23	745	43.23	19	18.52	155	20.47	7.59	1.1	1.3	23	3	112	.07	3	.4	.9	13	SWR				
		23	756	15.98	19	20.64	155	19.28	7.80	1.5	1.1	23	6	50	.07	3	.4	.9	13	SWR				
		23	757	16.79	19	20.00	155	17.35	7.26	.8	.3	16	1	83	.08	0	.5	1.1	10	SWR				
		23	758	7.63	19	20.73	155	19.51	7.39	.8	.6	20	5	100	.08	4	.5	1.0	13	SWR				
		23	832	58.77	19	14.59	155	20.40	9.16	1.8	1.5	36	2	158	.17	6	.7	.8	25	SWR				
		23	833	40.27	19	14.93	155	20.44	7.04	1.9	1.8	35	1	156	.12	6	.5	1.0	25	SWR				
		23	844	2.59	19	20.62	155	17.49	7.61	1.8	1.8	33	4	77	.10	1	.4	.7	21	SWR				
		23	853	52.86	19	20.14	155	17.51	8.41	2.1	1.9	45	8	137	.08	0	.3	.4	31	SWR				
		23	859	55.07	19	20.17	155	17.67	7.57	1.1	.6	21	6	75	.07	1	.4	.8	18	SWR				
		23	9	3	30.70	19	20.12	155	17.34	8.27	.9	.9	17	4	80	.09	0	.5	.9	15	SWR			
		23	9	6	27.99	19	20.00	155	17.55	7.98	1.3	1.1	31	8	80	.09	0	.4	.6	21	SWR			
		23	9	8	7.52	19	19.50	155	19.19	7.51	1.6	1.6	31	8	62	.08	3	.4	.7	24	SWR			
		23	912	34.08	19	19.33	155	19.45	6.80	1.4	1.3	24	5	72	.09	3	.4	1.0	16	SWR				
		23	915	7.70	19	20.31	155	17.30	7.61	1.3	1.3	32	9	73	.08	0	.3	.6	21	SWR				
		23	916	21.90	19	20.66	155	19.71	8.17	1.5	1.5	32	8	54	.09	4	.4	.7	28	SWR				
		23	918	53.32	19	19.93	155	17.20	7.99	1.0	.6	26	8	86	.09	1	.4	.6	20	SWR				
		23	921	20.87	19	20.43	155	19.99	7.69	1.0	.9	29	7	60	.08	5	.4	.8	22	SWR				
		23	924	21.76	19	20.25	155	17.34	7.39	1.3	.9	27	8	74	.07	0	.3	.6	21	SWR				
		23	925	56.98	19	20.42	155	18.78	8.22	.7	.3	20	6	92	.06	3	.5	.8	17	SWR				
		23	936	38.38	19	20.29	155	20.18	7.39	.7	.9	24	7	65	.07	5	.4	.8	19	SWR				
		23	948	13.28	19	20.63	155	19.81	7.93	1.3	.6	28	6	56	.08	4	.4	.8	20	SWR				
		23	957	7.88	19	20.90	155	19.64	7.41	.5	.6	22	6	98	.10	4	.5	.9	19	SWR				

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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 NO KM FM	REMK
1982	JUN	23	10	2	38.05	19 20.35	155 20.44	7.09	.7	.6	20	7	66	.12	5	.4	1.0 14 SWR
		23	10	12	10.56	19 19.10	155 20.30	7.32	1.4	1.1	30	8	122	.08	4	.4	.7 22 SWR
		23	10	34	.80	19 19.60	155 19.14	8.26	1.4	1.1	25	6	83	.11	3	.5	.8 22 SWR
		23	10	38	9.89	19 20.21	155 19.71	7.83	1.8	1.9	37	7	60	.09	4	.3	.6 22 SWR
		23	10	40	2.51	19 19.23	155 20.65	7.33	1.4	1.1	25	5	90	.08	4	.4	.8 19 SWR
		23	10	50	9.88	19 18.84	155 20.71	6.59	.8	.7	20	4	102	.09	4	.4	1.1 15 SWR
		23	11	19	18.21	19 18.53	155 20.59	7.78	2.3	2.3	46	10	112	.09	4	.3	.6 34 SWR
		23	11	59	38.31	19 20.51	155 19.78	8.45	1.4	1.3	31	7	57	.08	4	.4	.7 25 SWR
		23	12	3	2.62	19 20.44	155 17.45	7.30	1.3	1.1	24	8	63	.08	1	.4	.7 21 SWR
		23	12	9	14.89	19 20.10	155 17.50	6.59	.7	.6	19	4	79	.05	0	.5	.8 16 SWR
		23	12	10	5.03	19 20.39	155 20.13	7.89	1.3	1.1	25	6	63	.07	5	.4	.8 23 SWR
		23	12	16	2.21	19 20.54	155 17.44	8.04	2.1	2.2	47	9	42	.10	1	.3	.4 31 SWR
		23	12	19	50.48	19 20.01	155 17.38	7.95	1.4	1.1	24	8	82	.06	0	.4	.7 20 SWR
		23	12	22	50.16	19 18.86	155 18.80	7.05	.7	1.1	25	6	60	.08	2	.4	.7 19 SWR
		23	12	47	31.89	19 14.19	155 19.93	2.40	1.9	1.1	21	2	175	.07	7	.5	1.1 10 SWR
		23	12	51	14.18	19 20.65	155 20.07	7.16	1.5	1.3	29	8	59	.09	5	.3	.8 21 SWR
		23	12	54	9.14	19 18.66	155 20.84	8.26	1.7	1.3	29	6	108	.10	4	.4	.9 19 SWR
		23	13	0	55.06	19 23.99	155 15.75	3.06	2.1	2.5	33	5	72	.10	2	.3	.3 23 SEC
		23	13	4	53.99	19 18.89	155 20.60	8.03	1.6	1.7	29	4	101	.10	4	.4	.8 20 SWR
		23	13	19	10.37	19 20.22	155 16.77	6.16	.9	.6	9	0	83	.10	1	.7	1.2 7 SF1
		23	13	35	10.54	19 19.17	155 20.21	8.68	1.2	.9	23	4	89	.08	4	.5	.9 16 SWR
		23	13	44	40.08	19 20.72	155 18.61	9.54	1.5	.9	21	4	64	.10	2	.5	1.0 11 SWR
		23	13	51	56.86	19 19.90	155 19.11	7.62	2.0	2.2	38	5	53	.10	3	.3	.6 25 SWR
		23	13	55	47.56	19 20.46	155 20.04	7.63	1.5	1.1	23	4	90	.08	5	.5	1.0 18 SWR
		23	14	8	10.02	19 19.97	155 20.53	8.31	.8	.3	17	4	74	.08	5	.5	.9 10 SWR
		23	14	19	51.94	19 20.02	155 20.67	8.05	1.0	.9	21	6	74	.06	5	.4	1.0 17 SWR
		23	14	48	36.45	19 19.96	155 20.03	7.33	1.1	1.3	21	4	68	.07	4	.4	1.1 17 SWR
		23	14	49	17.24	19 20.15	155 19.94	8.16	.8	.6	21	5	122	.08	4	.5	.9 15 SWR
		23	14	51	27.46	19 19.53	155 11.52	5.89	1.4	1.1	28	3	95	.12	6	.4	1.2 18 SF3
		23	14	53	50.08	19 19.38	155 19.87	6.78	1.1	1.3	14	2	79	.12	3	.5	1.6 11 SWR
		23	14	54	25.30	19 18.64	155 20.87	8.12	1.0		20	5	108	.07	4	.5	.9 15 SWR
		23	14	54	39.37	19 20.30	155 20.15	7.50	.9	1.1	23	7	64	.10	5	.4	.9 17 SWR
		23	14	56	15.65	19 20.07	155 20.05	8.20	1.3	1.5	24	6	67	.09	5	.4	.9 16 SWR
		23	15	2	10.18	19 19.12	155 21.74	7.07	1.8	1.9	39	6	94	.12	3	.4	.6 29 SWR
		23	15	6	35.84	19 18.91	155 13.03	8.14	1.6	1.5	33	2	86	.10	4	.5	.7 26 SF2
		23	15	21	51.78	19 19.92	155 20.40	7.88	.8	.6	24	7	73	.10	5	.4	.9 18 SWR
		23	15	27	56.57	19 20.28	155 19.95	7.81	1.0	.9	21	7	118	.11	4	.5	1.0 15 SWR
		23	15	32	15.08	19 20.24	155 18.01	7.48	.7	1.1	18	5	90	.12	1	.6	1.0 13 SWR
		23	15	33	9.56	19 20.17	155 20.14	7.57	.7	1.1	24	7	67	.07	5	.4	.8 16 SWR
		23	15	35	4.72	19 19.94	155 17.33	8.70	1.3		25	8	84	.08	0	.4	.7 18 SWR
		23	15	35	18.98	19 20.12	155 20.38	6.97	1.4	1.5	23	8	69	.09	5	.4	.9 19 SWR
		23	15	39	16.97	19 16.28	155 21.10	6.46	1.5	1.8	35	6	141	.10	5	.4	.9 27 SWR
		23	15	39	56.57	19 19.92	155 17.36	7.52	.7	.9	15	4	84	.09	0	.5	.9 13 SWR
		23	15	43	41.25	19 20.25	155 20.81	10.01	.8	.7	19	4	133	.09	4	.6	1.2 17 SWR
		23	15	44	51.01	19 19.77	155 16.56	5.76	.5	.6	16	4	96	.15	2	.6	1.0 14 SF1
		23	15	48	27.32	19 19.67	155 20.40	7.21	.7	.6	20	6	109	.10	4	.5	1.0 18 SWR
		23	15	50	2.11	19 19.57	155 20.15	7.45	.9	.6	23	6	78	.07	4	.4	.9 19 SWR
		23	15	52	1.48	19 20.27	155 20.39	6.45	.6	.6	22	6	68	.08	5	.4	1.1 18 SWR

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YEAR	MON	DA	HR	MIN	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 NO KM FM	REMK
1982	JUN	23	15	56	43.15	19 19.68	155 20.13	8.76	1.1	1.1	23	5	75	.08	4	.4	.8 19	SWR
		23	16	1	23.05	19 20.04	155 20.38	7.32	.8	.3	24	7	71	.07	5	.4	.9 20	SWR
		23	16	8	16.33	19 19.85	155 20.69	7.20	.6	.6	23	6	77	.10	5	.4	1.0 18	SWR
		23	16	9	44.25	19 19.99	155 20.32	8.11	1.0	.9	29	8	71	.07	5	.3	.7 21	SWR
		23	16	12	57.31	19 20.50	155 17.04	7.66	.7	.6	14	3	76	.07	1	.5	.8 13	SWR
		23	16	22	47.13	19 18.55	155 20.52	7.84	1.2	1.3	26	7	112	.07	4	.4	.8 20	SWR
		23	16	27	24.36	19 20.11	155 20.36	7.42	.9	.9	25	7	69	.06	5	.4	.8 21	SWR
		23	16	28	23.50	19 20.40	155 20.03	7.63	1.4	1.8	34	8	61	.10	5	.3	.7 26	SWR
		23	16	37	27.23	19 20.40	155 20.47	8.13	.8	.6	23	7	65	.09	5	.4	.9 19	SWR
		23	16	38	55.25	19 19.52	155 19.74	8.83	1.8	1.9	40	8	73	.12	3	.4	.6 27	SWR
		23	16	47	28.26	19 20.50	155 20.20	7.23	.8	1.1	24	6	62	.09	5	.4	.9 15	SWR
		23	16	47	52.07	19 20.42	155 20.23	7.60	1.5	1.3	23	4	63	.09	5	.4	1.0 17	SWR
		23	16	57	18.37	19 18.75	155 21.18	7.49	.9	.9	21	3	105	.09	5	.4	1.0 18	SWR
		23	16	58	1.88	19 20.07	155 19.94	8.96	1.9	2.3	46	7	65	.12	4	.4	.5 28	SWR
		23	17	7	7.68	19 18.38	155 19.88	7.69	1.0	1.3	25	4	113	.10	2	.5	1.0 19	SWR
		23	17	11	33.51	19 17.88	155 21.19	6.78	1.0	.9	17	3	122	.07	5	.5	1.2 12	SWR
		23	17	14	10.57	19 20.15	155 20.60	8.17	.9	1.1	20	3	96	.07	5	.5	1.0 18	SWR
		23	17	17	55.64	19 19.35	155 20.27	8.12	1.6	1.5	23	4	85	.08	4	.4	.9 18	SWR
		23	17	19	43.92	19 20.07	155 20.59	6.95	.8	1.5	18	3	136	.07	5	.5	1.1 11	SWR
		23	17	27	.40	19 20.23	155 20.14	7.22	.7	.6	20	6	123	.07	5	.5	1.0 14	SWR
		23	17	27	31.27	19 20.23	155 20.28	8.08	.9	1.3	25	6	66	.11	5	.4	.9 18	SWR
		23	17	32	6.86	19 20.04	155 20.44	8.06	.9	.9	21	5	71	.08	5	.4	1.0 17	SWR
		23	17	33	3.68	19 20.29	155 17.61	6.68	1.4	1.5	28	4	74	.11	1	.4	.7 18	SWR
		23	17	51	59.06	19 18.87	155 20.60	9.30	1.7	1.7	27	6	101	.07	4	.4	.8 18	SWR
		23	17	55	43.76	19 17.56	155 23.15	2.26	.9	1.3	17	1	102	.09	5	.4	1.0 11	SWR
		23	18	1	33.57	19 22.62	155 23.76	10.40	1.8	1.5	36	4	43	.11	5	.3	.5 26	KAO
		23	18	6	52.15	19 16.87	155 23.27	4.42	1.8	2.2	16	0	108	.13	5	.7	2.5 12	SWR
		23	18	12	53.88	19 17.33	155 21.24	7.35	2.4	3.1	44	6	127	.12	5	.4	.7 30	SWR
		23	18	16	4.01	19 20.16	155 19.93	8.26	1.5	1.3	28	4	64	.06	4	.4	.8 20	SWR
		23	18	21	10.73	19 20.18	155 20.48	7.67	.8	.3	21	4	69	.09	5	.4	1.0 14	SWR
		23	18	29	8.17	19 12.27	155 19.70	1.24	1.2	.8	13	0	201	.11	9	1.3	7.8 10	SWR
		23	18	30	41.62	19 18.76	155 19.57	6.26	.8	.9	16	1	93	.09	2	.5	1.3 10	SWR
		23	18	38	52.09	19 12.57	155 20.22	6.57	2.6	2.8	40	2	176	.11	7	.6	.8 28	SWR
		23	18	43	10.97	19 18.57	155 20.72	7.63	1.6	1.5	26	4	111	.07	4	.4	.9 21	SWR
		23	18	55	52.21	19 18.25	155 21.37	6.41	1.0	.3	16	4	114	.10	5	.5	1.2 11	SWR
		23	19	1	43.57	19 18.01	155 23.19	3.84	.7	.9	18	4	96	.09	4	.4	.8 16	SWR
		23	19	7	22.88	19 19.92	155 20.57	7.72	1.3	1.5	27	7	106	.09	5	.4	.8 20	SWR
		23	19	11	46.66	19 20.24	155 19.36	7.59	1.0	.9	27	7	55	.08	3	.4	.8 23	SWR
		23	19	18	53.65	19 19.29	155 20.31	7.38	.8	1.3	23	7	87	.06	4	.4	.8 20	SWR
		23	19	21	54.15	19 19.49	155 19.88	7.73	1.7	2.2	41	10	77	.10	4	.3	.6 33	SWR
		23	19	27	26.97	19 19.20	155 20.27	8.31	1.5	1.8	36	11	89	.09	4	.3	.5 24	SWR
		23	19	29	4.75	19 16.42	155 21.23	7.81	1.3	1.3	29	6	138	.10	5	.4	.8 25	SWR
		23	19	30	13.24	19 20.32	155 20.31	6.86	.8	.9	25	7	66	.08	5	.3	.8 19	SWR
		23	19	31	7.09	19 17.09	155 21.73	6.02	1.4	1.5	22	5	129	.11	6	.4	1.3 18	SWR
		23	19	33	54.36	19 20.17	155 20.45	7.28	.9	.6	24	6	70	.06	5	.4	.9 20	SWR
		23	19	37	39.19	19 18.98	155 18.68	7.68	.8	.9	21	5	65	.08	2	.5	.8 19	SWR
		23	19	48	7.56	19 17.53	155 23.06	3.35	.9	.9	19	5	103	.08	5	.3	1.0 18	SWR
		23	19	50	40.48	19 18.31	155 21.05	7.81	.9	1.3	20	5	116	.13	4	.5	.9 17	SWR

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	HR	MIN	SEC	DEG	MIN	DEG	MIN	KM	MAG	MAG	NR	NS	DEG	SEC	DIS	KM	KM	FM	REMK					
1982	JUN	23	1954	25.10	19	17.25	155	20.80	6.56	1.4		26	4	130	.10	4			.9	24	SWR					
		23	1954	50.02	19	18.51	155	21.45	7.09	2.2	2.5	45	9	110	.11	5			.5	35	SWR					
		23	1958	40.00	19	16.17	155	22.12	6.68	.6	.6	15	4	137	.10	5			1.3	14	SWR					
		23	20	1	12.09	19	19.36	155	20.21	7.45	.9	20	4	84	.07	4			.9	14	SWR					
		23	20	1	30.93	19	17.17	155	20.28	6.66	1.3	1.9	24	7	141	.09	3		.9	21	SWR					
		23	20	3	30.77	19	19.30	155	20.13	6.93	.7	1.1	20	5	85	.06	4		.9	17	SWR					
		23	20	6	25.57	19	17.12	155	21.06	6.84	1.3	1.1	23	5	131	.10	5		1.1	20	SWR					
		23	2013	41.62	19	17.27	155	21.49	7.32	1.0	.6	18	5	129	.08	5		1.0	16	SWR						
		23	2016	51.18	19	16.24	155	21.18	5.77	1.2	1.3	19	5	141	.07	6		1.3	16	SWR						
		23	2020	41.13	19	17.06	155	21.11	5.89	2.1	2.7	39	7	131	.10	5		.8	29	SWR						
		23	2021	52.64	19	19.21	155	20.59	7.73	.8	1.3	21	4	91	.07	4		.8	14	SWR						
		23	2023	38.57	19	18.72	155	20.84	8.98	1.0		24	5	106	.09	4		.8	17	SWR						
		23	2023	53.35	19	17.19	155	20.65	6.66	1.0	1.7	17	2	131	.11	4		1.3	10	SWR						
		23	2025	41.82	19	16.87	155	20.91	6.78	2.1	2.4	34	3	134	.12	5		1.1	23	SWR						
		23	2036	6.71	19	15.40	155	21.44	7.52	.9	.9	20	4	200	.09	5		1.3	13	SWR						
		23	2038	12.14	19	18.02	155	23.30	3.36	1.7	1.9	29	2	95	.10	4		1.0	20	SWR						
		23	2040	21.18	19	15.93	155	22.23	3.17	.8	1.1	19	1	138	.09	4		1.3	15	SWR						
		23	2042	26.87	19	18.12	155	14.88	6.00	.9	.9	14	2	119	.09	3		1.5	11	SF1						
		23	2043	25.86	19	18.73	155	21.69	8.29	1.7	1.5	28	4	103	.11	4		1.0	20	SWR						
		23	2047	1.95	19	14.73	155	20.11	.93	.9	.8	16	1	166	.08	7		1.6	14	SWR						
		23	21	0	1.27	19	19.64	155	20.75	8.14	.8	.6	20	3	82	.07	5		.9	14	SWR					
		23	2124	38.64	19	18.68	155	21.85	8.31	.9	.9	22	3	104	.10	4		1.0	18	SWR						
		23	2125	36.41	19	20.37	155	20.44	6.46	1.5	.9	13	2	104	.07	5		1.5	8	SWR						
		23	2130	37.41	19	17.14	155	21.45	4.50	.8	1.1	13	4	131	.07	5		2.4	11	SWR						
		23	2132	30.32	19	19.33	155	20.17	8.51	1.6	1.9	31	3	85	.08	4		.7	22	SWR						
		23	2141	36.47	19	18.82	155	20.97	8.78	.8	.9	21	4	103	.06	4		.8	16	SWR						
		23	2142	12.75	19	13.61	155	19.39	1.60	.9	1.1	16	1	221	.11	8		1.5	9	SWR						
		23	2151	15.89	19	19.45	155	20.54	8.28	1.9	1.9	33	5	85	.10	4		.7	21	SWR						
		23	2158	57.32	19	19.53	155	20.32	8.51	.9	.9	23	4	80	.08	4		.8	15	SWR						
		23	22	1	2.48	19	20.02	155	20.42	8.27	.9	.3	22	5	71	.08	5		1.0	14	SWR					
		23	22	3	51.24	19	18.99	155	21.52	8.18	1.7	2.0	37	4	97	.12	4		.6	25	SWR					
		23	22	4	54.26	19	19.67	155	20.27	8.54	.9	.9	20	3	107	.07	4		.9	14	SWR					
		23	22	5	35.55	19	20.31	155	20.07	6.97	.8	.6	20	5	120	.08	5		1.1	19	SWR					
		23	22	6	46.62	19	17.35	155	20.76	6.50	.8	.9	20	4	129	.11	4		1.4	9	SWR					
		23	2214	28.01	19	18.37	155	21.71	8.17	1.7	1.7	27	5	110	.11	4		.9	19	SWR						
		23	2228	6.55	19	19.04	155	21.38	6.05	1.6	1.3	27	4	96	.13	4		1.4	15	SWR						
		23	2231	24.69	19	18.11	155	23.23	3.42	.8	.6	17	3	96	.08	4		.9	11	SWR						
		23	2232	43.47	19	18.08	155	21.70	8.21	1.0	.7	21	4	114	.10	5		.9	15	SWR						
		23	2236	19.11	19	20.41	155	20.16	8.02	.8	.3	23	5	62	.07	5		.8	21	SWR						
		23	2238	32.69	19	20.07	155	15.65	3.21	.9	1.0	11	4	117	.03	2		.8	7	SEC						
		23	2249	33.40	19	17.99	155	21.59	6.30	.9	1.1	15	3	116	.08	5		1.4	13	SWR						
		23	2251	30.97	19	18.04	155	22.71	7.50	1.5	.9	10	2	216	.08	4		.8	7	SWR						
		23	2256	30.54	19	16.11	155	21.17	7.62	2.1	2.3	33	3	140	.09	6		.7	25	SWR						
		23	23	5	9.16	19	17.37	155	23.28	2.13	1.7	1.1	11	2	101	.07	5		1.0	6	SWR					
		23	23	6	56.39	19	18.80	155	21.15	8.85	1.1	.9	24	4	104	.08	5		.8	19	SWR					
		23	2313	38.56	19	18.10	155	21.89	8.58	.9	.9	25	6	112	.12	5		.9	16	SWR						
		23	2325	18.72	19	17.60	155	20.97	6.48	.8	1.1	15	3	128	.08	4		1.4	11	SWR						
		23	2326	39.09	19	17.41	155	20.79	5.54	.7	.16	2	132	.08	4		1.6	.9	SWR							

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YEAR	MON	DA	HR	MIN	SEC	ORIGIN TIME	LAT N	DEG	MIN	DEG	MIN	DEG	MIN	DEPTH	KM	AMP	MAG	OUR	MAG	NR	NS	GAP	RMS	MIN	ERH	ERZ	NO	REMK
1982	JUN	23	2327	56.08	19	15.61	155	20.14	6.66	1.7	1.7	23	1	154	.11	5	.6	1.2	20	SWR								
		23	2330	7.71	19	19.57	155	20.22	7.37	.8	.9	20	4	140	.08	4	.6	1.1	13	SWR								
		23	2336	39.25	19	14.51	155	20.34	9.20	2.5	2.7	43	1	159	.13	6	.5	.6	35	SWR								
		23	2342	22.86	19	15.55	155	20.79	2.90	1.8	1.8	26	1	147	.14	6	.6	1.7	24	SWR								
		23	2343	8.28	19	14.70	155	20.15	6.85	1.9	2.0	28	1	166	.12	7	.7	1.1	21	SWR								
		23	2347	41.10	19	18.93	155	20.55	8.04	1.6	.26	4	99	.11	4	.5	1.0	17	SWR									
		23	2347	49.88	19	16.25	155	22.22	3.94	2.0	2.3	17	1	135	.16	5	.7	2.2	13	SWR								
		23	2351	32.02	19	19.38	155	20.45	7.38	.8	.9	19	3	85	.09	4	.5	1.2	14	SWR								
		23	2353	6.87	19	18.70	155	21.61	7.87	.8	.3	20	5	104	.08	4	.5	.9	16	SWR								
		23	2357	13.50	19	15.63	155	21.33	5.85	1.8	1.7	21	1	165	.09	5	.6	1.6	17	SWR								
		24	0	6	51.56	19	18.19	155	23.37	3.89	2.2	2.7	32	2	94	.12	4	.4	1.2	26	SWR							
		24	013	9.04	19	18.55	155	21.86	9.38	2.4	2.5	47	7	106	.11	4	.4	.5	25	SWR								
		24	018	33.55	19	20.34	155	22.84	9.17	1.1	.4	19	2	113	.07	8	.5	1.3	14	SWR								
		24	020	.66	19	20.34	155	20.13	7.88	.8	.3	22	3	64	.07	5	.5	1.0	17	SWR								
		24	022	8.97	19	16.15	155	21.12	7.33	1.1	1.1	22	4	142	.09	6	.6	1.1	17	SWR								
		24	022	56.79	19	16.37	155	21.31	6.37	1.0	.14	1	139	.09	6	.6	1.5	8	SWR									
		24	023	16.11	19	17.28	155	20.81	6.41	1.1	1.1	21	3	129	.08	4	.5	1.3	16	SWR								
		24	032	27.75	19	19.48	155	20.52	7.23	.8	.6	20	3	84	.10	4	.5	1.1	17	SWR								
		24	033	32.35	19	18.66	155	20.82	7.57	2.2	2.8	34	4	107	.09	4	.4	.7	24	SWR								
		24	035	5.75	19	16.46	155	21.49	7.07	1.1	.9	19	4	136	.09	6	.5	1.2	16	SWR								
		24	037	53.66	19	18.42	155	21.00	6.78	.8	.9	12	2	114	.09	4	.5	1.2	9	SWR								
		24	039	27.09	19	18.10	155	23.26	3.45	2.0	2.1	24	2	95	.08	4	.4	1.0	14	SWR								
		24	041	58.07	19	20.26	155	22.84	8.52	1.7	.9	24	3	72	.10	1	.4	.8	18	SWR								
		24	042	23.24	19	19.38	155	24.58	4.14	1.1	1.1	13	1	128	.14	3	.7	1.0	11	SWR								
		24	043	12.09	19	16.73	155	21.76	6.42	1.8	1.9	23	2	135	.10	6	.5	1.6	20	SWR								
		24	045	45.96	19	18.76	155	21.23	7.98	1.7	.20	1	104	.08	5	.4	1.0	14	SWR									
		24	046	38.38	19	21.83	155	24.28	10.13	2.1	.21	2	65	.09	3	.5	.8	18	SWR									
		24	047	23.41	19	21.75	155	24.36	10.73	2.1	1.7	24	2	60	.09	3	.4	.6	19	SWR								
		24	049	11.27	19	17.91	155	20.72	6.83	1.6	1.1	15	1	125	.07	4	.6	1.3	12	SWR								
		24	051	47.86	19	18.78	155	20.77	3.70	1.3	.6	6	1	168	.06	4	1.4	1.1	4	SWR								
		24	052	25.24	19	17.98	155	23.26	3.04	1.6	.9	9	1	103	.03	4	.4	.9	6	SWR								
		24	056	53.66	19	17.85	155	23.13	3.55	1.8	2.0	26	3	99	.12	4	.4	1.1	17	SWR								
		24	1	4	36.49	19	17.57	155	20.73	5.81	1.6	1.5	27	2	126	.10	4	.4	1.2	21	SWR							
		24	112	2.96	19	19.29	155	22.01	8.88	1.0	.6	22	3	89	.09	3	.4	.9	13	SWR								
		24	123	56.38	19	18.65	155	21.56	8.23	1.3	.6	26	5	106	.10	4	.4	.9	14	SWR								
		24	140	54.38	19	20.27	155	11.56	8.65	2.3	2.0	39	5	80	.10	4	.4	.7	28	SF3								
		24	158	52.24	19	18.97	155	21.08	8.03	.9	.9	24	5	98	.08	5	.5	.8	19	SWR								
		24	2	2	6.37	19	15.71	155	21.38	7.93	2.3	2.1	43	4	146	.11	5	.4	.6	35	SWR							
		24	2	2	58.05	19	17.34	155	21.98	5.81	1.3	.9	30	5	121	.12	6	.4	1.3	24	SWR							
		24	2	3	25.94	19	18.93	155	21.00	8.15	1.6	1.2	27	4	100	.09	5	.5	.9	23	SWR							
		24	2	4	7.84	19	20.50	155	22.82	8.80	1.6	.9	29	5	69	.09	1	.4	.9	18	SWR							
		24	2	7	6.78	19	16.98	155	22.07	7.47	1.3	1.1	25	4	126	.09	6	.4	1.0	19	SWR							
		24	2	7	48.62	19	16.30	155	22.23	2.46	.8	.8	22	3	135	.09	5	.4	1.0	16	SWR							
		24	212	45.67	19	21.07	155	24.73	7.36	2.4	2.3	41	4	53	.12	3	.4	.7	27	SWR								
		24	218	39.61	19	17.91	155	20.88	6.20	1.0	.9	21	4	123	.10	4	.5	1.3	18	SWR								
		24	220	17.30	19	17.42	155	20.68	6.55	1.7	1.3	30	4	128	.10	4	.4	.9	24	SWR								
		24	231	2.48	19	16.04	155	22.92	6.05	1.9	1.8	32	2	129	.11	4	.5	1.0	24	SWR								
		24	234	13.28	19	20.04	155	20.31	8.12	.9	.9	20	2	70	.11	5	.5	1.2	14	SWR								

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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 NO KM FM	REMK
1982	JUN	24	240	14.76	19 17.53	155 21.10	4.00	1.1		21	5	126	.12	4	.5	1.4 15	SWR
		24	241	23.78	19 18.65	155 21.46	9.54	2.8	2.5	44	4	106	.13	4	.4	.5 32	SWR
		24	242	16.00	19 17.16	155 21.41	5.27	2.2	2.2	26	1	129	.09	5	.4	1.6 19	SWR
		24	245	52.72	19 16.13	155 22.52	6.18	1.1	.8	21	2	155	.10	4	.5	1.6 16	SWR
		24	251	51.79	19 18.82	155 21.76	7.68	1.7	.9	14	0	101	.07	4	.5	1.3 11	SWR
		24	255	4.52	19 17.32	155 21.79	6.38		.9	10	2	139	.03	6	.5	2.0 7	SWR
		24	257	57.48	19 20.67	155 22.79	8.09	1.6	.9	18	1	67	.10	1	.5	1.1 13	SWR
		24	3 0	8.98	19 17.57	155 21.42	5.03	1.7	2.2	21	2	124	.12	5	.5	2.0 15	SWR
		24	3 1	31.78	19 18.92	155 21.79	7.56		.6	13	2	197	.05	4	1.0	1.2 9	SWR
		24	3 2	14.01	19 16.98	155 21.27	3.96		.9	11	1	136	.06	5	.6	1.5 4	SWR
		24	3 2	56.00	19 16.67	155 21.80	6.59		.6	9	0	172	.09	6	1.0	2.4 7	SWR
		24	313	48.08	19 16.60	155 21.32	7.62		.3	12	0	136	.07	5	.7	1.8 6	SWR
		24	317	58.08	19 19.92	155 20.05	7.73		1.1	17	1	69	.06	4	.4	1.2 14	SWR
		24	320	3.09	19 16.96	155 21.54	6.49	2.5	3.1	32	2	130	.12	5	.5	1.2 28	SWR
		24	321	33.07	19 16.09	155 21.47	6.57		.9	9	0	152	.06	6	.7	2.3 6	SWR
		24	322	55.06	19 18.89	155 20.50	4.97	1.6	1.5	13	1	161	.12	4	.8	1.6 8	SWR
		24	329	.23	19 16.87	155 21.48	5.33		1.3	16	1	136	.06	5	.5	2.1 11	SWR
		24	330	28.44	19 23.97	155 16.03	3.00	1.9	2.4	24	3	71	.10	1	.3	.3 18	SEC
		24	337	34.03	19 17.62	155 21.02	5.86	1.7	1.6	26	3	125	.10	4	.4	1.4 20	SWR
		24	339	44.14	19 17.23	155 20.62	7.07	1.1		24	4	137	.08	4	.5	.9 20	SWR
		24	339	59.01	19 17.16	155 20.71	8.16	1.3		19	3	139	.09	4	.6	1.5 15	SWR
		24	342	41.51	19 16.83	155 21.46	5.59	.9		19	3	137	.08	5	.5	1.6 13	SWR
		24	342	50.12	19 17.28	155 20.69	6.43	1.6	1.9	32	2	130	.12	4	.5	.9 21	SWR
		24	345	25.05	19 18.60	155 21.76	8.34	1.7	1.7	27	5	146	.11	4	.5	.9 19	SWR
		24	346	23.86	19 24.10	155 15.85	2.72	1.4	1.6	18	3	119	.07	1	.3	.3 10	SEC
		24	347	58.02	19 17.27	155 20.97	7.09	2.4	3.1	46	4	129	.12	4	.4	.7 30	SWR
		24	352	19.36	19 16.56	155 21.23	6.19	1.0		15	2	159	.11	5	.6	1.3 12	SWR
		24	354	53.88	19 18.38	155 21.58	7.47	1.8		33	5	111	.14	5	.4	.7 18	SWR
		24	355	31.80	19 17.20	155 22.11	6.63	1.9	1.8	28	3	122	.12	6	.4	.9 24	SWR
		24	356	24.27	19 17.40	155 22.23	6.75	.9	.6	17	3	117	.11	6	.5	1.7 6	SWR
		24	358	23.75	19 18.77	155 20.74	7.00	.8	.3	19	2	104	.10	4	.5	1.3 17	SWR
		24	4 1	1.62	19 17.03	155 20.45	6.30	1.7	2.2	35	5	134	.11	4	.4	.9 24	SWR
		24	4 3	54.37	19 18.44	155 21.57	7.10	.9	.6	21	4	180	.12	4	.7	1.2 16	SWR
		24	4 8	29.79	19 19.32	155 20.26	8.51	1.6	1.7	31	4	86	.10	4	.4	.8 19	SWR
		24	414	33.51	19 15.76	155 22.18	6.54	1.0	.9	23	4	175	.08	4	.5	1.2 18	SWR
		24	415	30.24	19 19.28	155 20.45	7.74	1.0	.9	20	1	89	.08	4	.5	1.2 14	SWR
		24	423	13.41	19 19.31	155 20.39	9.23	1.7	1.8	33	4	87	.10	4	.4	.6 20	SWR
		24	428	21.10	19 17.34	155 23.17	6.43	2.1	2.5	33	2	104	.12	5	.4	.9 19	SWR
		24	430	22.31	19 20.51	155 20.29	3.16	1.4	1.4	23	4	62	.07	5	.3	.9 19	SWR
		24	439	34.57	19 19.80	155 19.45	8.24	1.4	1.7	34	7	62	.07	4	.3	.6 26	SWR
		24	441	51.51	19 19.22	155 20.03	9.21	2.4	2.8	51	12	86	.10	3	.3	.4 36	SWR
		24	448	18.36	19 18.93	155 21.58	7.68	1.1	1.3	26	6	99	.08	4	.4	.8 20	SWR
		24	452	31.47	19 19.66	155 20.08	8.64	1.7	1.5	40	7	75	.09	4	.3	.5 29	SWR
		24	453	54.71	19 20.40	155 23.29	8.60	1.0	.7	20	4	67	.05	0	.4	.8 19	SWR
		24	5 4	8.59	19 20.35	155 23.26	9.32	1.7	1.5	28	4	69	.09	0	.3	.6 22	SWR
		24	5 6	44.58	19 17.10	155 21.77	6.28	1.5	1.8	28	5	128	.09	6	.4	1.0 25	SWR
		24	517	.99	19 18.07	155 21.13	5.85	1.3	1.3	22	5	119	.06	4	.4	1.0 19	SWR
		24	521	6.25	19 17.20	155 21.84	4.96	.9	.3	24	6	125	.11	6	.4	1.8 18	SWR

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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	SEC	DIS	KM	KM	FM	REMK		
1982	JUN	24	533	32.89	19	17.76	155	21.51	6.36	.8	.6	24	6	120	.07	5	.4	.9	19	SWR				
		24	544	2.78	19	17.45	155	20.81	1.85	1.4	1.6	19	3	127	.10	4	.4	.8	18	SWR				
		24	553	19.35	19	18.76	155	20.67	8.07	1.9	1.8	39	10	104	.09	4	.3	.6	31	SWR				
		24	556	33.53	19	19.32	155	20.52	8.12	1.5	1.3	28	6	88	.09	4	.4	.8	22	SWR				
		24	557	46.73	19	20.06	155	18.12	8.22	1.0	.9	26	6	79	.06	1	.4	.7	19	SWR				
		24	6 3	.95	19	18.53	155	21.21	8.12	1.4	1.5	30	6	111	.07	5	.3	.6	23	SWR				
		24	611	38.28	19	19.43	155	20.23	7.62	1.2	1.1	26	5	83	.08	4	.4	.8	20	SWR				
		24	619	59.75	19	21.03	155	25.03	8.13	2.3	2.1	41	5	55	.12	3	.3	.6	34	KAO				
		24	620	59.37	19	17.63	155	23.13	2.40	1.1	1.4	26	6	102	.07	5	.3	.6	22	SWR				
		24	622	24.88	19	17.50	155	20.86	6.30	1.2	1.3	23	5	127	.10	4	.4	.9	20	SWR				
		24	624	10.86	19	17.32	155	20.86	6.11	1.1	1.3	22	6	129	.10	4	.4	1.0	18	SWR				
		24	624	40.54	19	18.86	155	21.52	7.60	.9	1.1	24	5	101	.09	4	.4	.9	19	SWR				
		24	632	13.55	19	18.51	155	21.45	7.33	.6	.9	24	6	110	.08	5	.5	.8	16	SWR				
		24	634	26.06	19	16.19	155	21.63	5.41	1.2	1.3	25	4	139	.11	5	.5	1.7	20	SWR				
		24	649	43.34	19	18.65	155	21.73	8.78	1.7	1.6	24	3	105	.11	4	.5	.9	16	SWR				
		24	651	37.68	19	20.37	155	23.39	9.67	2.3	1.9	39	5	45	.12	0	.4	.5	29	SWR				
		24	653	56.00	19	18.57	155	21.64	8.23	1.7	1.3	28	5	107	.10	4	.4	.9	18	SWR				
		24	723	53.58	19	17.86	155	23.28	3.79	1.7	1.4	20	2	97	.07	4	.4	1.2	15	SWR				
		24	726	5.62	19	18.49	155	21.74	8.28	1.7	1.6	31	4	108	.10	4	.4	.6	21	SWR				
		24	729	24.26	19	15.70	155	19.99	5.83	.9	.6	18	1	154	.09	5	.7	1.7	12	SWR				
		24	730	30.98	19	18.00	155	20.65	5.99	.8	.6	18	2	124	.10	4	.6	1.5	15	SWR				
		24	730	57.58	19	18.17	155	22.47	8.76	1.8	1.8	26	3	104	.08	4	.5	.8	19	SWR				
		24	734	36.24	19	17.24	155	21.94	5.18	1.0	.9	24	4	124	.13	6	.4	2.1	17	SWR				
		24	735	41.95	19	17.62	155	21.22	8.12	1.5	1.1	26	6	124	.10	5	.4	1.0	16	SWR				
		24	739	35.41	19	17.94	155	23.23	2.92	.9	1.1	19	2	97	.09	4	.4	.9	12	SWR				
		24	747	29.27	19	18.68	155	20.50	8.27	1.9	1.9	37	4	107	.10	4	.4	.6	23	SWR				
		24	826	15.50	19	17.51	155	22.38	8.45	1.0	.9	25	4	114	.11	5	.4	.8	16	SWR				
		24	9 0	23.98	19	19.03	155	21.84	8.55	1.3	1.1	22	3	95	.09	3	.5	1.1	15	SWR				
		24	9 4	46.72	19	17.62	155	15.49	8.41	.6	.6	10	1	171	.04	4	1.0	1.6	9	SF1				
		24	9 5	52.43	19	16.05	155	21.34	6.13	.7	.9	17	2	154	.10	6	.6	1.8	11	SWR				
		24	9 6	42.76	19	17.95	155	23.24	2.91	1.7		22	2	97	.09	4	.4	.9	14	SWR				
		24	912	59.82	19	14.04	155	20.83	13.47	.9	1.0	11	1	210	.11	6	1.4	3.1	18	DEP				
		24	919	33.43	19	20.33	155	22.52	8.05	.6	1.1	15	2	118	.11	1	.6	1.1	11	SWR				
		24	922	44.60	19	17.99	155	23.42	7.58	3.7	4.0	46	2	94	.14	4	.4	.6	40	SWR				
		24	947	42.23	19	20.04	155	17.55	8.32	1.0	.6	20	4	80	.08	0	.5	.8	16	SWH				
		24	952	21.68	19	16.81	155	15.10	8.95	.8	.5	13	1	209	.04	3	1.1	1.3	11	SF1				
		24	955	9.97	19	18.39	155	21.75	7.77	.6	.6	16	4	109	.10	4	.6	1.1	15	SWR				
		24	957	24.81	19	20.36	155	23.04	8.80	1.4	.7	25	2	70	.09	1	.4	.9	21	SWR				
		24	958	40.07	19	18.65	155	20.50	.83	1.4	1.4	17	5	190	.08	4	.6	.6	16	SWR				
		24	10 0	25.30	19	19.52	155	20.43	7.07	1.1	1.1	26	5	82	.10	4	.4	.9	19	SWR				
		24	1021	1.26	19	23.92	155	15.72	2.98	1.5	1.7	22	3	109	.10	2	.3	.3	14	SEC				
		24	1028	18.17	19	17.16	155	21.19	5.02	1.3	1.3	25	5	130	.10	5	.4	1.5	20	SWR				
		24	1029	18.05	19	17.01	155	21.18	4.81	1.5	1.6	29	5	132	.10	5	.4	1.5	24	SWR				
		24	1033	36.95	19	17.26	155	21.26	5.93	.6	.3	16	5	131	.09	5	.5	1.3	15	SWR				
		24	1050	49.13	19	17.16	155	21.49	6.87	2.5	2.9	47	6	129	.14	5	.4	.8	45	SWR				
		24	1055	22.84	19	18.41	155	20.68	7.30	.9	.5	17	5	116	.07	4	.5	1.0	15	SWR				
		24	11 0	22.91	19	17.59	155	20.78	5.97	1.5	1.8	32	7	126	.09	4	.4	.9	26	SWR				
		24	11 2	44.50	19	17.22	155	20.98	5.65	1.6	2.2	32	7	130	.11	4	.4	1.1	24	SWR				

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YEAR	MON	DA	HR	MIN	SEC	LAT N DEG MIN	LON W DEG MIN	DEPTH KM	AMP MAG	DIR MAG	NR	NS	GAP DEG	RMS SEC	MIN DIS	ERM KM	ERZ NO KM FM	REMK
1982	JUN	24	1115	28.94	19	17.03	155 21.80	6.61	1.0	1.1	24	6	129	.10	6	.4	.8 20	SWR
		24	1124	6.18	19	15.97	155 22.07	5.80	.9	1.1	23	5	163	.12	5	.5	1.3 19	SWR
		24	1125	40.33	19	19.80	155 21.23	4.98	.5	.9	13	3	80	.10	4	.5	1.1 11	SWR
		24	1128	54.28	19	18.77	155 19.63	6.87	.5	.8	19	5	121	.08	2	.5	.8 16	SWR
		24	1139	2.23	19	15.92	155 22.43	6.39	1.2	1.3	25	5	159	.08	4	.5	.9 21	SWR
		24	12 3	23.19	19	18.10	155 21.95	7.84	.7	.6	20	4	111	.16	5	.5	.9 16	SWR
		24	12 3	39.40	19	16.36	155 22.65	3.24	1.4	1.1	12	3	124	.11	4	.5	1.6 11	SWR
		24	12 5	45.40	19	24.13	155 25.36	7.11	1.1	.9	25	6	54	.12	2	.4	.9 20	KAO
		24	1223	51.58	19	17.62	155 21.08	6.15	.8	.9	20	1	125	.09	4	.6	1.5 16	SWR
		24	1240	39.84	19	18.33	155 21.74	8.17	.8	.9	23	5	110	.07	4	.4	.9 16	SWR
		24	1241	24.48	19	16.31	155 21.58	3.70	.5	.6	14	2	146	.09	6	.5	1.7 12	SWR
		24	1253	22.17	19	18.59	155 20.70	7.08	.7	.6	15	3	110	.10	4	.6	1.5 12	SWR
		24	1256	32.47	19	17.71	155 21.64	5.10	.8	1.1	23	2	120	.09	5	.5	.9 14	SWR
		24	13 5	10.63	19	20.36	155 22.77	8.25	1.0	.6	23	3	71	.10	1	.5	.9 18	SWR
		24	13 9	37.59	19	17.13	155 21.98	5.28	.9	.8	18	4	125	.08	6	.4	2.1 14	SWR
		24	1332	50.04	19	17.04	155 22.12	6.85	1.0	1.1	19	4	125	.10	6	.5	1.1 14	SWR
		24	1336	5.24	19	17.68	155 22.11	7.42	.8	.6	23	6	115	.09	5	.4	1.0 19	SWR
		24	1413	20.40	19	19.57	155 20.25	8.10	1.0	.9	22	5	79	.08	4	.5	.9 19	SWR
		24	1416	10.11	19	19.38	155 20.42	7.27	.8	.9	25	4	85	.07	4	.4	.8 14	SWR
		24	1416	33.60	19	20.49	155 23.28	9.36	1.5	1.2	25	5	66	.09	1	.4	.8 18	SWR
		24	1420	35.36	19	19.18	155 18.88	7.79	1.6	1.5	28	5	58	.11	2	.5	.9 16	SWR
		24	1428	18.17	19	18.76	155 19.87	6.30	.8	.7	23	4	127	.08	3	.5	.9 14	SWR
		24	1437	53.86	19	14.48	155 22.97	8.41	2.7	3.0	43	2	149	.14	2	.5	.6 34	SWR
		24	1441	22.30	19	17.51	155 22.27	6.30	1.7	1.8	35	3	115	.13	5	.4	1.1 25	SWR
		24	1455	58.50	19	16.40	155 22.76	8.96	1.2	1.5	18	2	207	.09	7	.8	1.3 13	SWR
		24	1456	37.45	19	18.35	155 21.83	7.25	.8	.9	21	4	109	.12	4	.5	1.1 14	SWR
		24	1456	56.44	19	19.34	155 18.15	7.25	.6	.3	13	2	82	.07	2	.6	1.3 11	SWR
		24	1513	28.44	19	18.84	155 21.68	7.14	.6	.6	17	1	101	.08	4	.5	1.0 14	SWR
		24	1528	48.97	19	17.16	155 21.18	6.32	.9	1.1	23	3	130	.10	5	.5	1.4 19	SWR
		24	1538	25.26	19	18.64	155 20.07	6.92	.8	1.1	23	4	106	.07	3	.4	.8 17	SWR
		24	1540	23.31	19	19.32	155 20.25	7.79	.8	.6	17	4	86	.09	4	.5	1.1 14	SWR
		24	1552	51.68	19	17.47	155 21.60	5.67	.7	.6	15	1	124	.11	5	.6	1.7 13	SWR
		24	1558	59.77	19	18.72	155 22.43	7.62	.9	1.1	16	2	98	.10	3	.6	1.0 11	SWR
		24	16 0	9.11	19	18.62	155 21.89	7.58	.8	.9	14	4	105	.07	4	.6	.8 13	SWR
		24	16 3	2.49	19	19.13	155 20.57	6.62	.5	.3	17	4	93	.06	4	.5	.8 15	SWR
		24	16 3	40.90	19	16.77	155 22.05	6.07	.7	1.1	21	4	130	.11	6	.4	1.2 20	SWR
		24	16 4	28.17	19	14.65	155 22.53	4.25	1.6	1.3	28	6	151	.12	3	.5	.8 24	SWR
		24	16 5	4.48	19	15.97	155 21.79	3.84	.6	.6	20	5	140	.10	5	.5	1.7 18	SWR
		24	1614	3.52	19	19.28	155 21.89	7.41	.4	.9	16	4	98	.09	3	.5	.7 14	SWR
		24	1630	49.85	19	19.21	155 20.25	8.57	1.4	1.5	26	4	89	.07	4	.4	.8 24	SWR
		24	1638	41.20	19	17.61	155 21.53	6.26	1.6	1.8	35	8	122	.11	5	.3	.7 25	SWR
		24	1641	6.27	19	19.17	155 18.88	7.30	.4	.3	17	4	117	.08	2	.6	.7 15	SWR
		24	1650	20.58	19	18.86	155 18.82	6.57	.7	.3	20	6	120	.10	2	.6	.7 16	SWR
		24	1650	45.67	19	20.54	155 11.67	8.61	1.2	.6	18	2	79	.07	4	.6	1.0 14	SF3
		24	1719	.68	19	20.75	155 19.55	7.62	.3	.3	15	5	100	.07	4	.5	1.0 13	SWR
		24	1719	9.06	19	17.97	155 21.36	6.14	.8	1.1	21	5	118	.07	5	.4	.8 17	SWR
		24	1746	51.19	19	19.39	155 20.66	7.86	.8	.9	21	4	87	.06	4	.5	.9 17	SWR
		24	1811	27.75	19	19.49	155 20.51	8.42	.8	.6	18	4	83	.10	4	.5	.8 17	SWR

HVO EARTHQUAKE SUMMARY LIST

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		ORIGIN TIME			LAT N		LON W		DEPTH			AMP		DIR		GAP		RMS		MIN		ERH		ERZ NO	
YEAR	MON	DA	HR	MIN	SEC	DEG	MIN	DEG	MIN	KM	MAG	MAG	NR	NS	DEG	SEC	DIS	KM	KM	FM	REMK				
1982	JUN	24	1831	20.55	19	17.29		155	21.57	6.30	2.2	2.5	41	2	127	.16	5	.4		.9	31	SWR			
		24	1841	21.13	19	17.49		155	23.34	2.78	.8	1.1	13	1	100	.09	5	.4		1.1	11	SWR			
		24	1842	9.69	19	18.79		155	20.78	6.45	.9	.9	22	2	104	.09	4	.5		1.3	15	SWR			
		24	1847	38.91	19	18.85		155	21.80	8.30	.7	1.1	22	3	99	.08	4	.5		1.0	16	SWR			
		24	1850	27.07	19	16.82		155	23.35	3.64	1.1	1.1	21	2	107	.11	5	.4		1.5	16	SWR			
		24	19 9	2.26	19	16.81		155	21.84	6.31	.8	.9	19	3	132	.08	6	.5		1.4	16	SWR			
		24	1925	48.55	19	19.99		155	20.41	7.42	.6	.6	15	1	136	.08	5	.6		1.6	10	SWR			
		24	1938	42.13	19	14.87		155	22.68	5.58	1.9	1.7	27	1	148	.12	3	.6		1.4	20	SWR			
		24	20 8	27.10	19	17.71		155	20.44	5.28	.8	.9	13	1	131	.06	3	.6		1.6	11	SWR			
		24	2021	51.74	19	14.85		155	22.72	4.53	1.8	1.8	24	0	148	.10	2	.6		1.1	18	SWR			
		24	2033	13.19	19	17.94		155	20.96	6.94	1.1	1.1	28	2	121	.11	4	.5		1.1	23	SWR			
		24	2051	4.57	19	19.23		155	20.23	7.72	1.0	1.1	26	3	88	.10	4	.4		1.0	16	SWR			
		24	2052	33.35	19	18.67		155	21.80	8.30	1.1	1.3	26	4	104	.11	4	.4		1.0	16	SWR			
		24	2059	31.83	19	16.96		155	21.68	6.98	2.9	3.4	50	8	130	.16	6	.4		.7	40	SWR			
		24	21 6	17.86	19	22.27		155	25.27	7.74	.9	.7	21	3	71	.09	4	.4		.8	18	KAO			
		24	2130	27.12	19	17.10		155	21.16	7.11	.9	1.1	25	6	156	.08	5	.4		.7	21	SWR			
		24	2135	50.21	19	16.85		155	21.36	8.30	2.0	2.4	47	8	132	.11	5	.3		.5	33	SWR			
		24	2212	50.90	19	24.43		155	.55	8.15	2.0	2.1	36	3	136	.13	3	.5		.8	29	SF5			
		24	2215	27.22	19	17.34		155	21.94	3.25	1.5	.6	27	7	122	.10	6	.3		.9	20	SWR			
		24	2233	13.76	19	16.52		155	21.27	5.92	.7	.7	23	6	144	.10	5	.4		.9	16	SWR			
		24	2257	12.33	19	22.68		155	24.15	3.07	.9	.6	15	3	74	.12	5	.4		1.1	14	KAO			
		24	2314	11.83	19	18.06		155	20.69	4.19	1.2	1.1	24	6	121	.10	4	.3		.8	19	SWR			
		24	2315	32.54	19	20.13		155	8.19	8.58	1.2	1.3	21	2	83	.06	5	.6		1.2	19	SF4			
		24	2333	32.90	19	18.34		155	21.75	8.08	.8	.9	27	7	110	.09	4	.4		.6	22	SWR			
		24	2335	30.05	19	20.69		155	6.65	7.79	1.0	1.5	17	1	99	.09	4	.6		1.3	15	SF4			
		25	015	41.70	19	19.04		155	20.23	7.39	.7	.9	24	5	94	.08	3	.4		.7	19	SWR			
		25	115	44.84	19	20.58		155	18.43	8.32	1.4	1.3	35	9	57	.08	2	.3		.6	26	SWR			
		25	148	35.99	19	19.31		155	11.83	8.77	1.3	1.1	19	2	97	.08	5	.6		1.0	15	SF3			
		25	2 6	39.44	19	18.57		155	22.15	8.30	.9	1.1	24	4	103	.09	4	.4		1.0	16	SWR			
		25	236	15.08	19	22.55		155	24.24	9.17	1.1	.7	20	4	72	.07	5	.4		1.0	16	KAO			
		25	251	32.18	19	17.38		155	20.47	5.88	.8	.3	17	2	136	.07	3	.5		1.4	11	SWR			
		25	259	30.51	19	17.26		155	21.42	5.12	.8	.9	18	2	128	.08	5	.5		2.0	17	SWR			
		25	3 1	4.14	19	20.40		155	20.12	8.04	.8	.6	16	3	63	.06	5	.4		.9	14	SWR			
		25	316	2.97	19	18.23		155	21.87	8.44	1.0	.7	22	4	110	.10	4	.5		1.0	14	SWR			
		25	336	45.60	19	19.32		155	20.30	7.26	1.0	1.1	22	2	86	.08	4	.4		1.2	16	SWR			
		25	341	9.36	19	17.59		155	20.63	6.17	1.0	1.3	22	2	131	.08	4	.5		1.3	16	SWR			
		25	345	33.05	19	18.74		155	15.09	7.47	.9	.6	18	0	106	.11	4	.6		1.4	16	SF1			
		25	418	43.76	19	20.03		155	19.98	7.98	1.0	1.1	23	4	67	.08	5	.4		1.0	17	SWR			
		25	433	39.46	19	15.15		155	23.92	7.68	1.0	.9	25	3	108	.10	2	.6		.8	19	SWR			
		25	434	6.26	19	18.80		155	21.67	8.07	.8	.6	17	4	140	.11	4	.6		1.0	10	SWR			
		25	448	27.38	19	19.31		155	18.76	7.11	.7	1.1	18	1	60	.10	3	.5		1.2	13	SWR			
		25	5 0	47.57	19	21.13		155	23.71	9.03	.9	.9	19	3	51	.09	2	.5		.9	13	SWR			
		25	557	12.85	19	18.00		155	21.08	7.19	1.0	1.5	27	4	121	.10	4	.4		.9	17	SWR			
		25	6 1	38.13	19	19.59		155	20.28	8.45	1.6	1.7	30	3	79	.09	4	.4		.8	22	SWR			
		25	648	1.63	19	18.90		155	21.34	7.50	1.6	1.3	25	4	101	.08	4	.4		.8	19	SWR			
		25	7 1	48.96	19	17.18		155	20.74	6.07	.8	1.1	19	2	137	.07	4	.5		1.5	17	SWR			
		25	712	34.32	19	19.42		155	20.56	6.33	.8	1.1	19	3	85	.09	4	.5		1.3	15	SWR			
		25	8 6	38.00	19	19.18		155	18.52	8.23	2.0	2.2	46	4	71	.11	2	.4		.6	31	SWR			

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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
1982	JUN	25	832	26.92	19 21.40	155 2.92	6.94		1.1	14	0	128	.08	3	.7	1.2	8	SF5
		25	833	51.78	19 20.25	155 18.23	7.68		.6	12	1	80	.03	2	.6	1.2	11	SWR
		25	9	9 57.18	19 22.20	155 23.75	6.72	1.0	.8	19	4	65	.09	4	.4	1.1	16	KAO
		25	915	9.83	19 19.94	155 20.32	7.31	.9	.9	21	3	72	.07	5	.4	1.0	17	SWR
		25	927	37.08	19 16.52	155 21.97	2.40	.9	1.0	20	2	133	.12	5	.4	1.2	15	SWR
		25	932	19.87	19 16.45	155 22.06	2.68	.3	.6	15	2	134	.09	5	.5	1.3	9	SWR
		25	949	32.34	19 19.29	155 20.89	5.40	.8	.6	20	3	90	.10	5	.5	1.5	15	SWR
		25	1029	46.03	19 18.84	155 20.63	8.67	2.3	2.4	41	2	102	.14	4	.4	.6	27	SWR
		25	11	3 9.93	19 20.65	155 11.21	6.79	1.1	.6	18	2	74	.10	4	.6	1.0	9	SF3
		25	11	5 54.39	19 21.20	155 23.84	9.55	1.3	.9	25	3	46	.10	2	.5	.9	20	SWR
		25	1114	52.70	19 19.22	155 20.23	7.91	.9	1.3	23	3	88	.08	4	.4	1.1	18	SWR
		25	1143	29.70	19 17.37	155 21.55	5.86	2.2	2.7	39	1	126	.13	5	.4	.9	25	SWR
		25	12	0 8.65	19 16.88	155 21.29	4.03	.8	.6	17	1	133	.12	5	.6	2.0	14	SWR
		25	1215	23.36	19 18.45	155 21.34	7.62	1.1	1.3	23	4	112	.11	5	.5	1.0	16	SWR
		25	13	2 9.35	19 17.16	155 21.94	7.21	1.4	1.6	25	4	125	.12	6	.4	1.2	18	SWR
		25	13	3 30.47	19 18.54	155 21.80	7.32	.8	.6	18	1	107	.09	4	.5	1.3	14	SWR
		25	1316	10.33	19 20.31	155 13.15	8.15	.9	.6	15	1	82	.06	4	.6	1.3	12	SF2
		25	1323	47.51	19 19.31	155 20.48	7.04	.8	.6	19	2	87	.06	4	.4	1.2	14	SWR
		25	1335	42.36	19 17.40	155 14.48	5.83	.7	.6	14	0	169	.08	2	.8	1.5	8	SF2
		25	1359	22.83	19 20.04	155 17.71	8.51	.8	.6	16	2	77	.08	1	.6	1.1	15	SWR
		25	1430	52.06	19 15.15	155 19.14	6.57	1.0	.9	18	0	166	.08	5	.7	1.4	7	SWR
		25	1454	.32	19 19.14	155 20.65	8.50	1.3	1.5	27	4	93	.08	4	.4	.7	20	SWR
		25	15	1 37.43	19 17.04	155 21.56	3.79	.8	1.3	20	2	129	.10	5	.4	1.5	16	SWR
		25	15	4 42.51	19 18.77	155 15.40	7.73	1.1	1.1	25	4	123	.08	4	.5	.9	16	SF1
		25	1520	3.22	19 19.39	155 19.08	6.96	.7	.6	14	1	120	.10	3	.7	1.3	12	SWR
		25	1522	43.30	19 15.92	155 22.44	5.15	1.8	1.9	21	0	137	.13	4	.6	2.0	19	SWR
		25	1636	40.96	19 21.08	155 13.31	7.05	1.3	1.5	22	2	164	.15	3	.8	.9	14	SF2
		25	1716	52.70	19 16.50	155 21.53	5.85	1.1	1.5	22	4	169	.07	6	.5	1.5	15	SWR
		25	1834	22.83	19 26.75	155 28.57	9.69	1.9	1.1	24	2	56	.11	7	.5	1.2	14	KAO
		25	1857	51.05	19 17.65	155 21.07	6.91	1.7	1.6	31	5	152	.09	6	.4	.7	20	SWR
		25	19	1 41.18	19 19.49	155 15.56	8.09	1.9	1.9	30	2	166	.09	3	.5	.6	22	SF1
		25	1913	52.53	19 16.57	155 21.63	6.33	1.1	1.5	24	5	167	.09	6	.5	1.2	15	SWR
		25	2056	18.14	19 16.73	155 21.24	3.28	.8	1.3	23	4	158	.07	7	.4	1.7	16	SWR
		25	2142	50.99	20 9.28	156 10.24	36.82	2.9	2.8	34	2	192	.14	41	1.0	1.8	29	KOH
		25	2225	12.43	19 19.04	155 21.72	8.28	1.7	1.6	26	4	130	.11	4	.5	.8	16	SWR
		25	2336	7.89	19 18.73	155 20.73	8.45	1.0	1.5	23	5	150	.08	5	.5	.9	19	SWR
		26	030	38.77	19 19.45	155 20.52	8.42	1.6	1.6	25	4	136	.09	5	.5	.9	21	SWR
		26	050	3.21	19 19.92	155 20.32	8.54	1.6	1.8	31	4	127	.11	5	.4	.6	23	SWR
		26	112	10.71	19 18.43	155 16.58	9.62	2.8	2.9	43	3	163	.13	3	.5	.5	34	SF1
		26	156	19.10	19 18.65	155 15.89	6.94	.8	1.1	15	0	213	.09	4	1.0	1.2	9	SF1
		26	249	4.16	19 20.65	155 10.48	6.75	1.1	1.1	19	2	207	.11	3	1.4	1.0	11	SF3
		26	328	10.31	18 55.86	155 15.81	17.70	2.6	3.4	15	0	266	.10	33	4.0	24.1	2	LOI L*
		26	347	34.38	19 20.50	155 17.46	7.73	.8	.3	17	3	108	.10	1	.7	1.0	11	SWR
		26	410	42.61	19 18.01	155 15.34	8.89	.8	.6	15	0	228	.05	5	1.4	1.5	11	SF1
		26	539	3.29	19 17.91	155 19.36	8.27	.7	.3	15	2	180	.07	5	.8	1.4	12	SWR
		26	643	35.46	19 17.33	155 13.35	10.13	1.0	.7	13	1	205	.09	9	1.1	1.5	6	SF2
		26	7	6 37.74	19 19.06	155 19.02	8.47	1.6	1.7	28	2	155	.08	3	.5	.6	20	SWR
		26	738	37.76	19 18.35	155 20.41	6.12	1.1	1.5	24	3	118	.10	6	.5	1.5	16	SWR

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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	KM	FM	REMK					
1982	JUN	26	8	0	23.62	19 18.78	155	15.66	8.09	1.8	2.1	28	0	103	.11	4	.5	.7	23	SF1					
		26	8	3	45.48	19 18.64	155	21.70	7.40	1.0	26	5	163	.11	4	.5	.5	21	SWR						
		26	853	58.79	19 18.50	155	21.59	9.51	2.0	2.2	31	2	109	.11	4	.5	.7	24	SWR						
		26	9	1	20.79	19 18.47	155	15.66	7.37	2.6	2.3	37	2	109	.14	4	.5	.7	28	SF1					
		26	9	2	25.90	19 17.94	155	20.68	6.34	.9	1.3	21	2	122	.09	4	.5	1.3	15	SWR					
		26	1022	13.24	19 17.17	155	21.10	3.92	1.0	1.1	21	5	129	.10	5	.4	1.4	16	SWR						
		26	1031	.67	19 18.36	155	16.47	7.95	.8	.6	13	0	146	.03	4	.7	1.5	10	SF1						
		26	1127	5.66	19 16.02	155	20.78	.97	1.0	1.3	17	3	179	.05	5	.5	.8	13	SWR						
		26	1156	43.15	19 18.79	155	21.35	8.18	1.0	1.2	25	5	176	.10	4	.6	.9	18	SWR						
		26	1259	25.83	19 18.31	155	20.77	8.39	.7	.6	15	3	158	.07	6	.7	.8	14	SWR						
		26	1321	59.01	19 18.56	155	21.82	9.05	1.0	1.5	23	6	228	.07	4	.8	.5	17	SWR						
		26	1325	3.77	19 22.91	155	22.14	1.05	.8	.5	8	3	165	.09	5	.5	.7	7	KAO						
		26	1330	18.65	19 17.93	155	20.70	6.88	.8	1.1	22	5	163	.08	6	.5	.8	19	SWR						
		26	1412	38.67	19 17.75	155	20.64	7.70	1.3	1.5	25	6	165	.06	7	.5	.9	19	SWR						
		26	1430	22.29	19 18.01	155	21.09	6.61	.8	.9	21	6	159	.07	6	.7	.9	14	SWR						
		26	1447	39.34	19 18.37	155	21.74	6.84	.6	.9	18	5	143	.07	4	.5	1.0	15	SWR						
		26	1525	20.15	19 19.20	155	21.75	3.81	.6	.7	15	3	127	.07	3	.6	.7	11	SWR						
		26	1535	51.03	19 17.88	155	20.72	7.85	.7	.6	18	5	163	.09	6	.6	1.0	11	SWR						
		26	1550	8.83	19 17.38	155	22.23	8.92	.3	.6	14	3	151	.08	6	.6	.9	13	SWR						
		26	16	1	59.07	19 17.14	155	21.91	6.52	.6	.6	11	3	161	.07	6	.6	1.2	8	SWR					
		26	1622	12.68	19 18.93	155	21.46	8.51	1.1	1.8	29	5	134	.09	4	.4	.7	22	SWR						
		26	1627	23.71	19 16.57	155	21.43	6.18	.5	.6	17	4	176	.08	6	.6	1.3	15	SWR						
		26	1650	37.18	19 17.06	155	20.27	9.03	.9	.6	16	2	183	.06	8	.7	1.1	15	SWR						
		26	1651	13.84	19 22.81	155	24.82	7.82	1.7	1.9	37	7	39	.12	5	.5	.7	27	KAO						
		26	1659	46.25	19 18.45	155	21.45	7.60	.5	.9	18	4	145	.07	5	.5	1.0	13	SWR						
		26	17	6	48.08	19 19.47	155	16.63	8.23	.7	.8	16	4	231	.05	2	1.2	.7	12	SF1					
		26	17	8	57.34	19 18.69	155	21.28	8.12	1.1	1.5	28	6	143	.10	5	.4	.8	21	SWR					
		26	1836	56.75	19 18.43	155	21.49	7.94	.7	1.1	20	5	145	.07	5	.4	.8	16	SWR						
		26	1851	24.24	19 21.10	155	14.11	3.09	.5	.6	17	3	177	.15	3	.8	.8	13	KOA						
		26	19	2	18.50	19 17.36	155	20.65	8.61	1.6	1.9	31	5	153	.09	4	.4	.6	23	SWR					
		26	1918	21.88	19 17.79	155	15.12	4.84	.7	1.0	19	1	199	.12	6	.7	1.9	14	SSF						
		26	1922	32.97	19 19.86	155	21.13	3.63	.4	.8	14	4	195	.10	4	.8	.8	13	SWR						
		26	1937	57.23	19 16.19	155	21.61	2.92	.7	1.2	22	4	171	.05	5	.5	1.3	19	SWR						
		26	1946	20.39	19 16.10	155	22.12	6.05	1.9	2.6	36	3	153	.12	5	.4	.9	27	SWR						
		26	20	5	21.97	19 19.05	155	15.16	6.91	1.9	1.8	32	1	167	.11	4	.6	.7	21	SF1					
		26	20	7	32.67	19 16.22	155	22.35	8.03	.7	.8	19	1	165	.16	5	.7	1.7	8	SWR					
		26	2016	31.31	19 18.36	155	20.55	9.14	2.4	2.8	44	7	149	.12	6	.4	.5	28	SWR						
		26	2129	56.38	19 18.42	155	13.44	6.11	1.2	1.1	18	3	226	.07	8	.9	1.8	12	SF2						
		26	2145	43.59	19 18.75	155	22.03	7.48	2.2	2.4	39	4	130	.13	4	.4	.6	24	SWR						
		26	2149	19.32	19 19.73	155	7.40	7.23	1.9	2.1	28	0	201	.12	6	1.2	1.0	20	SF4						
		26	2152	21.01	19 18.70	155	21.67	7.56	1.2	1.5	25	5	137	.10	4	.5	.8	17	SWR						
		26	22	1	22.67	19 18.35	155	22.10	7.68	.8	.9	19	3	136	.11	4	.5	1.4	13	SWR					
		26	2215	28.69	19 17.51	155	21.11	5.76	.8	1.1	14	3	168	.08	6	.6	1.7	8	SWR						
		26	23	2	22.86	19 18.68	155	14.81	6.86	1.1	1.4	21	0	198	.07	5	.8	1.0	16	SF1					
		26	2311	51.98	19 15.69	155	22.66	4.87	.6	.9	13	2	176	.08	3	.8	2.2	8	SWR						
		27	0	8	47.26	19 18.97	155	21.56	8.22	1.1	1.9	28	6	134	.10	4	.4	.8	19	SWR					
		27	014	51.07	19 20.05	155	7.87	6.90	1.0	1.1	20	3	213	.09	5	1.4	.9	8	SF4						
		27	026	14.88	19 14.49	155	22.45	4.83	.9	.9	13	0	179	.08	3	.8	1.3	8	SWR						

HVO EARTHQUAKE SUMMARY LIST

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YEAR	MON	ORIGIN TIME			LAT N		LON W		DEPTH KM	AMP MAG	DUR MAG	GAP NR	RMS NS	MIN DEG	ERH SEC	ERM DIS	ERZ KM	NO			
		DA	HR	SEC	DEG	MIN	DEG	MIN										KM	FM	REMK	
1982	JUN	27	1	1	54.07	19	20.38	155	18.10	8.62	1.2	1.3	19	2	158	.07	1	.7	.9	15	SWR
		27	123	24.42	19	18.66	155	21.36	9.55	2.7	3.1	45	7	138	.12	4	.4	.4	27	SWR	
		27	132	13.41	19	17.94	155	12.90	6.41	1.4	1.4	23	2	227	.10	9	1.0	1.5	17	SF2	
		27	139	27.89	19	16.83	155	20.70	7.25	2.2	2.5	41	4	155	.13	7	.4	.7	29	SWR	
		27	2	7	11.38	19	18.70	155	22.25	6.91	.3	.8	13	2	129	.13	3	.7	1.1	9	SWR
		27	210	40.85	19	27.88	155	37.85	.43	2.2	2.3	8	1	140	.06	3	.4	.7	5	MLO	
		27	217	16.26	19	20.63	155	11.53	8.10	2.3	2.3	38	5	173	.11	4	.5	.5	23	SF3	
		27	224	25.45	19	17.41	155	20.86	7.73	.3	.7	7	1	175	.11	7	1.1	3.6	4	SWR	
		27	231	38.56	19	16.86	155	21.74	5.10	.9	1.0	16	4	170	.10	6	.6	2.6	12	SWR	
		27	234	31.70	19	19.82	155	11.04	7.19	1.6	1.3	29	5	184	.12	5	.7	.7	18	SF3	
		27	327	51.23	19	17.64	155	20.54	5.68	.7	.7	18	3	171	.07	7	.7	2.1	12	SWR	
		27	338	26.10	19	18.58	155	22.10	7.67	.7	1.1	20	4	134	.07	4	.4	.8	14	SWR	
		27	352	33.83	19	17.70	155	23.28	3.50	.7	1.0	18	4	126	.08	5	.4	.9	15	SWR	
		27	4	6	27.74	19	17.95	155	23.17	3.03	.9	1.8	19	2	125	.10	4	.4	.9	17	SWR
		27	414	46.08	19	18.01	155	22.99	3.28	.8	1.0	16	3	127	.09	4	.4	.8	11	SWR	
		27	439	47.98	19	16.64	155	21.37	3.10	1.6	1.7	29	7	158	.07	6	.4	1.3	22	SWR	
		27	452	11.39	19	17.70	155	23.09	3.23	.4	1.0	15	3	130	.07	5	.4	.9	14	SWR	
		27	457	14.29	19	58.10	155	35.39	15.44	1.6	1.5	21	4	156	.07	25	.6	1.0	15	KDH	
		27	459	38.67	19	17.57	155	23.23	3.51	.7	1.0	19	4	128	.08	5	.4	.9	16	SWR	
		27	5	6	43.03	19	16.27	155	21.62	5.44	.7	.6	19	4	179	.05	6	.6	2.2	18	SWR
		27	5	7	10.89	19	17.37	155	23.25	2.86	.7	.9	19	4	131	.12	5	.5	1.1	16	SWR
		27	5	8	37.94	19	56.11	155	35.83	13.06	1.9	1.7	21	4	141	.09	23	.5	.6	17	KDH
		27	522	47.70	19	18.01	155	20.55	6.42	.8	1.2	21	6	166	.11	6	.6	.9	17	SWR	
		27	616	59.36	19	24.25	155	24.69	9.89	2.1	2.1	41	6	32	.11	2	.3	.4	30	KAO	
		27	7	3	9.47	19	17.54	155	23.38	2.70	.8	1.2	14	2	126	.10	5	.5	1.0	12	SWR
		27	711	41.85	19	17.67	155	20.27	5.86	2.1	2.4	39	4	144	.12	3	.5	.7	29	SWR	
		27	738	1.26	19	15.36	155	22.51	7.53	2.0	2.4	31	2	158	.11	9	.6	.9	21	SWR	
		27	742	34.62	19	29.72	155	39.21	8.18	.1	1.2	18	4	97	.09	6	.6	1.0	13	MLO	
		27	749	22.29	19	17.60	155	22.11	8.44	1.4	2.0	25	4	199	.09	5	.6	.6	13	SWR	
		27	834	52.61	19	17.50	155	23.51	2.96	.1	1.9	16	0	175	.07	5	.6	1.4	14	SWR	
		27	933	53.45	19	17.56	155	23.21	3.10	1.7	1.9	31	5	101	.10	5	.3	1.0	23	SWR	
		27	944	20.51	19	17.85	155	13.02	7.29	1.7	1.8	36	4	112	.12	2	.5	.8	18	SF2	
		27	949	.68	19	17.08	155	12.28	7.53	1.4	1.1	23	3	196	.08	2	.6	.9	11	SF3	
		27	10	9	42.17	19	17.11	155	22.00	6.39	1.7	2.4	32	3	125	.11	6	.4	1.0	18	SWR
		27	1038	36.43	19	17.52	155	20.51	6.40	1.1	1.3	22	3	133	.08	3	.5	1.0	18	SWR	
		27	1058	55.82	19	17.54	155	21.56	6.35	1.7	1.9	34	5	123	.13	5	.4	.8	26	SWR	
		27	13	8	11.16	19	21.19	155	24.94	8.06	2.3	2.3	39	4	51	.10	3	.4	.6	28	SWR
		27	1326	58.52	19	19.24	155	11.03	9.60	2.7	3.2	41	5	104	.09	6	.4	.4	30	SF3	
		27	1442	26.22	18	8.43	155	47.46	15.04	2.6	2.5	29	1	322	.12	95	16.9	29.7	18	DIS	
		27	1538	13.16	19	19.47	155	20.43	8.54	1.6	1.7	27	2	83	.08	4	.4	.9	18	SWR	
		27	19	6	47.27	19	20.18	155	19.64	7.77	1.5	1.9	34	7	125	.13	4	.4	.6	26	SWR
		27	2122	32.34	19	17.61	155	23.11	3.17	1.7	1.7	19	2	130	.07	5	.4	1.0	14	SWR	
		28	020	1.93	19	19.70	155	18.98	7.16	1.2	1.1	25	5	148	.10	3	.5	.9	21	SWR	
		28	217	53.73	19	18.64	155	21.36	7.98	1.3	1.7	29	6	142	.08	4	.4	.7	24	SWR	
		28	258	40.39	19	17.84	155	16.13	9.35	1.5	1.9	29	2	175	.08	4	.5	.6	25	SF1	
		28	435	3.59	19	16.48	155	21.57	5.70	1.9	2.3	38	6	155	.09	6	.4	1.0	30	SWR	
		28	443	19.32	19	17.22	155	20.70	5.73	2.0	2.9	40	7	156	.09	7	.4	1.0	31	SWR	
		28	530	4.42	19	17.58	155	22.86	3.50	.7	1.0	19	4	136	.08	5	.4	.9	17	SWR	

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	HR	MIN	SEC	DEG	MIN	DEG	MIN	KM	MAG	MAG	NR	NS	DEG	SEC	DIS		KM	KM	FM	REMK	
1982	JUN	28	657	9.57	19	20.05	155	9.18	8.30	1.8	1.5	18	2	115	.06	4	1.1	1.0	16	SF3			
		28	17	4	34.69	19	20.17	155	17.99	8.79	1.1	1.1	29	7	70	.07	1	.4	.7	21	SWR		
		28	22	6	42.52	19	18.83	155	20.64	7.69	1.4	1.7	35	7	102	.08	4	.5	.6	28	SWR		
		28	2258	6.40	19	17.71	155	21.05	8.26	1.0	1.4	26	4	124	.11	4	.5	.9	22	SWR			
		28	2357	14.80	19	17.30	155	23.27	2.61	.9	1.5	28	6	103	.07	5	.5	.8	25	SWR			
		29	125	11.64	19	21.24	155	16.27	31.79	1.9	1.7	27	4	68	.05	2	1.0	1.3	20	NEP			
		29	331	35.05	19	18.61	155	21.72	9.33	2.4	2.9	49	7	105	.11	4	.5	.5	37	SWR			
		29	5	5	34.79	19	17.42	155	19.79	5.80	.9	1.1	23	4	131	.11	2	.5	1.2	19	SWR		
		29	510	3.64	19	16.75	155	20.28	7.93	1.2	1.5	25	5	175	.08	4	.5	.8	22	SWR			
		29	550	21.77	19	16.09	155	7.35	42.86	2.4	2.1	40	4	193	.10	3	.9	1.2	36	NEP			
		29	6	3	43.32	19	18.22	155	14.62	6.96	.9	1.1	20	2	131	.09	3	.5	1.0	14	SF1		
		29	634	5.55	19	1.01	155	17.66	7.84	2.6	3.6	16	0	229	.12	24	1.3	2.1	3	LOI	L		
		29	836	21.27	19	16.85	155	20.92	8.22	1.0	1.0	26	4	134	.09	5	.5	1.0	18	SWR			
		29	1146	40.77	19	17.55	155	20.75	9.28	2.0	2.1	38	8	130	.10	4	.4	.5	29	SWR			
		29	1247	21.49	19	17.52	155	23.34	2.69	.9	1.5	20	2	108	.08	5	.4	.9	11	SWR			
		29	1251	17.73	19	18.08	155	21.86	7.51	1.3	1.4	26	5	112	.10	5	.5	1.0	16	SWR			
		29	1329	42.36	19	19.87	155	19.11	8.64	2.3	2.4	45	6	53	.12	3	.5	.5	28	SWR			
		29	1550	49.71	19	18.84	155	22.85	4.63	.8	1.1	21	2	92	.08	3	.5	.4	16	SWR			
		29	16	5	5.98	19	20.00	155	7.71	8.75	2.5	2.5	40	2	96	.08	5	.4	.5	30	SF4		
		29	1649	59.25	19	17.61	155	23.42	3.50	.9	1.1	18	2	97	.08	5	.4	1.0	12	SWR			
		29	1925	44.52	19	20.30	155	15.75	5.47	.9	1.0	28	5	84	.13	3	.4	1.0	20	SF1			
		29	1945	19.85	19	17.71	155	23.31	2.82	.7	1.0	16	4	106	.06	5	.3	.8	14	SWR			
		29	2017	28.82	19	19.18	155	16.94	7.21	1.2	1.2	27	4	60	.09	2	.4	.9	20	SWR			
		29	2033	39.11	19	17.32	155	21.95	5.57	.9	1.1	29	4	122	.09	6	.4	1.4	20	SWR			
		29	2116	4.99	19	17.36	155	23.43	2.72	.7	1.0	17	3	109	.05	5	.4	.9	13	SWR			
		29	2250	30.23	19	19.32	155	18.77	7.44	1.2	1.1	25	3	60	.09	4	.4	.9	19	SWR			
		29	2251	46.95	19	21.48	155	1.95	7.91	2.2	2.2	34	4	161	.10	3	.5	.5	24	SF5			
		29	2328	50.58	19	17.34	155	22.82	3.97	1.7	1.8	25	3	110	.08	5	.4	1.5	20	SWR			
		30	058	32.11	19	20.55	155	10.95	7.14	1.3	1.1	26	4	121	.10	3	.5	.9	17	SF3			
		30	2	2	12.47	19	18.47	155	21.09	7.56	1.3	1.1	26	2	113	.09	4	.4	.9	19	SWR		
		30	3	2	1.13	19	18.13	155	20.33	6.37	1.2	1.3	22	2	121	.11	3	.5	1.3	18	SWR		
		30	542	24.70	19	17.28	155	21.10	6.69	1.1	1.2	22	4	133	.08	5	.5	1.2	20	SWR			
		30	546	26.16	19	18.98	155	13.53	7.62	2.4	2.5	43	5	70	.12	4	.4	.6	33	SF2			
		30	720	27.96	19	17.69	155	23.67	3.15	.8	1.1	16	3	93	.09	5	.4	1.0	9	SWR			
		30	1056	30.61	19	16.96	155	21.77	6.40	.9	1.1	18	3	130	.10	6	.6	2.2	14	SWR			
		30	1310	32.10	19	17.20	155	20.56	5.99	1.4	1.5	27	1	131	.12	4	.5	1.5	22	SWR			
		30	1347	7.63	19	26.07	155	28.22	6.82	2.5	2.4	40	3	46	.10	6	.3	.7	27	KA0			
		30	1621	4.39	19	15.95	155	21.85	7.82	2.3	2.9	39	4	150	.11	5	.5	.6	24	SWR			
		30	1641	12.45	19	17.90	155	23.34	2.98	1.0	1.6	23	4	96	.09	4	.4	.9	17	SWR			
		30	1715	54.85	19	12.15	155	27.03	7.11	2.1	2.0	36	1	124	.15	5	.5	.9	27	LSW			
		30	18	7	5.67	19	17.58	155	23.59	2.42	1.7	1.6	25	1	95	.10	5	.4	1.0	17	SWR		
		30	1830	26.17	19	18.21	155	14.10	4.27	1.0	1.1	25	2	85	.11	2	.4	1.0	17	SSF			
		30	1943	54.59	19	17.45	155	23.14	3.33	1.7	1.8	22	3	103	.11	5	.4	1.2	13	SWR			
		30	1955	19.24	19	26.71	154	55.69	6.40	1.7	1.6	24	3	161	.13	2	.8	.7	14	LER			
		30	2156	8.29	19	18.26	155	12.82	9.20	2.4	2.3	46	6	106	.12	3	.5	.6	33	SF2			
		30	2229	58.01	19	19.55	155	18.88	6.58	1.0	1.3	28	5	55	.10	3	.4	.9	23	SWR			
		30	2235	19.95	19	18.87	155	22.80	5.27	1.7	1.4	24	3	93	.11	3	.4	1.0	20	SWR			
		30	2329	40.30	19	21.05	155	24.40	7.99	1.6	1.5	27	3	48	.12	3	.4	.8	18	SWR			

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						
1982	JUL	1	031	41.26	19	19.43	155	15.40	8.67	2.2	2.4	42	3	88	.10	4	.4	.5	25	SF1					
		1	032	54.08	19	19.18	155	16.47	6.57	1.9	1.9	34	2	109	.14	2	.5	.7	25	SF1					
		1	4	58.66	19	17.91	155	20.87	7.45	2.1	2.3	43	7	122	.11	4	.4	.7	26	SWR					
		1	442	46.98	19	16.33	155	21.45	7.52	1.2	1.5	24	2	138	.10	6	.5	1.1	19	SWR					
		1	449	52.89	19	27.57	154	52.96	6.33	1.8	1.5	27	2	136	.13	3	.7	1.0	17	LER					
		1	456	16.82	19	19.46	155	14.06	6.50	1.8	1.8	37	3	67	.12	5	.4	.8	25	SF2					
		1	512	5.18	19	17.07	155	21.84	6.88	.9	1.1	22	2	127	.11	6	.5	1.5	18	SWR					
		1	633	31.60	19	17.64	155	20.86	5.64	1.3	1.5	24	5	129	.08	4	.4	.9	14	SWR					
		1	650	58.54	19	19.55	155	12.30	5.47	1.3	1.1	18	3	86	.09	5	.4	.9	11	SF3					
		1	7	3	45.69	19	17.61	155	20.70	7.06	1.7	1.6	33	8	126	.09	4	.4	.8	24	SWR				
		1	920	28.44	19	20.92	155	.69	6.12	1.4	1.3	18	0	199	.11	4	1.0	1.6	14	SF5					
		1	930	43.40	19	18.66	155	23.08	4.58	1.5	1.4	24	4	120	.07	3	.4	.9	19	SWR					
		1	937	37.38	19	52.58	155	23.05	27.28	1.4	1.5	25	0	126	.13	5	.9	1.8	16	KEA					
		1	942	25.71	19	17.26	155	21.16	5.09	1.7	1.8	35	2	129	.12	5	.4	1.3	26	SWR					
		1	10	8	15.32	19	16.85	155	21.92	7.12	1.8	1.6	28	4	131	.11	6	.4	.8	20	SWR				
		1	1138	27.99	19	18.47	155	20.49	7.20	1.9	1.9	36	5	113	.11	3	.4	.7	24	SWR					
		1	1327	31.14	19	11.58	155	36.39	9.95	3.6	3.3	46	6	92	.21	6	.6	.8	38	LSW					
		1	1335	41.87	19	16.98	155	21.85	3.06	2.0	2.0	38	5	129	.13	6	.3	1.1	28	SWR					
		1	1433	31.65	19	18.24	155	23.15	4.54	2.5	3.2	43	2	95	.13	4	.4	1.5	33	SWR					
		1	16	5	45.78	19	17.70	155	23.45	3.35	2.0	2.1	31	4	104	.14	5	.4	1.2	19	SWR				
		1	1613	56.66	19	3.43	155	24.99	42.89	1.9	3.1	2	211	.07	12	1.0	2.0	27	LOI						
		1	1627	39.20	19	25.36	154	58.52	4.88	2.1	1.8	27	1	145	.14	1	.8	.6	15	SLE					
		1	1739	28.73	19	16.42	155	22.67	4.91	2.1	2.1	33	2	127	.14	5	.5	1.6	21	SWR					
		1	2147	45.72	19	20.90	155	12.78	8.55	2.0	2.1	38	3	63	.09	3	.4	.5	25	SF2					
		1	2224	9.87	19	17.75	155	21.73	7.64	1.7	1.1	26	2	118	.11	5	.4	1.1	15	SWR					
		1	2228	50.05	19	20.93	155	13.10	8.55	1.5	1.3	27	3	59	.07	3	.5	.7	19	SF2					
		1	2240	33.26	19	17.56	155	23.33	2.87	1.7	1.7	16	2	99	.08	5	.4	.9	9	SWR					
		2	0	1	42.73	19	16.53	155	21.67	6.30	1.1	1.3	23	4	134	.07	6	.5	1.2	19	SWR				
		2	122	54.08	19	19.46	155	13.45	5.36	1.0	1.1	26	4	69	.13	5	.4	1.5	20	SF2					
		2	252	16.04	19	20.75	155	12.81	8.82	2.3	2.4	43	3	64	.12	4	.4	.5	35	SF2					
		2	355	55.65	19	20.18	155	6.93	6.67	1.2	1.1	25	2	107	.11	5	.6	1.3	16	SF4					
		2	414	19.97	19	18.94	155	15.41	7.40	1.3	1.3	27	2	106	.10	4	.5	.8	19	SF1					
		2	625	24.25	19	55.76	155	21.11	11.62	2.6	1.7	17	1	293	.10	5	3.3	.5	10	KEA					
		2	627	24.25	19	22.05	155	6.56	7.55	2.1	2.0	35	3	75	.10	2	.4	.6	24	SF4					
		2	831	50.94	19	17.16	155	23.42	2.75	2.0	1.1	2	182	.03	6	.6	1.4	11	SWR						
		2	1127	25.59	19	20.89	155	3.31	5.88	2.0	1.5	27	0	100	.13	2	.6	1.2	20	SF5					
		2	1352	34.25	19	22.92	155	24.09	8.94	1.6	1.2	31	3	38	.10	5	.4	.7	25	KA0					
		2	1550	30.82	19	18.75	155	20.51	8.02	1.9	2.1	37	5	104	.10	4	.4	.7	24	SWR					
		2	1832	58.67	19	18.83	155	16.41	6.47	1.2	1.3	30	3	116	.11	3	.4	.7	17	SF1					
		2	1944	17.45	19	18.38	155	16.04	7.04	1.1	1.3	28	2	124	.11	4	.5	.8	20	SF1					
		2	2346	45.43	19	22.30	155	.00	7.20	1.6	1.6	21	0	179	.10	6	.9	1.3	15	SF5					
		3	115	47.91	19	19.20	155	18.71	7.77	1.9	1.9	36	4	62	.11	2	.4	.7	22	SWR					
		3	547	39.86	19	20.23	155	6.67	6.36	1.6	1.3	31	5	108	.13	5	.5	.9	20	SF4					
		3	11	5	12.98	19	19.01	155	7.16	1.3	1.1	31	4	105	.11	4	.4	.9	20	SF1					
		3	19	5	45.50	19	17.33	155	5.94	.9	1.2	25	4	129	.10	4	.5	1.3	16	SWR					
		3	2217	16.33	18	54.83	155	14.37	12.31	2.6	2.5	28	1	257	.13	36	2.1	.9	11	LOI					
		3	2251	5.81	19	17.53	155	23.14	3.16	1.8	2.1	26	4	102	.10	5	.4	1.0	19	SWR					
		3	2351	25.04	19	17.30	155	23.58	3.12	1.0	1.2	23	2	97	.08	5	.4	1.2	19	SWR					

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YEAR	MON	DA	HR	MIN	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-NO KM FM	REMK
1982	JUL	4	456	58.73	19	21.15	155 2.24	7.78	2.1	2.1	30	2	151	.12	3	.7	.6 22	SF5
		4	525	28.33	19	18.60	155 22.88	5.14	1.7	1.4	24	3	96	.10	3	.4	.9 20	SWR
		4	558	52.44	19	18.61	155 15.31	7.18	1.1	1.1	22	3	128	.07	4	.4	.9 16	SF1
		4	737	8.71	19	20.74	155 7.01	7.93	2.3	2.0	33	0	93	.08	4	.5	.6 27	SF4
		4	813	32.78	19	17.63	155 21.52	8.28	1.7	1.3	26	2	122	.09	5	.4	1.0 17	SWR
		4	1144	9.51	19	20.26	155 18.19	8.46	1.5	1.1	27	7	66	.08	1	.4	.8 19	SWR
		4	14	8	52.61	19	17.91	6.89	1.7	1.1	20	2	123	.10	4	.5	1.3 17	SWR
		4	1429	33.57	19	16.22	155 22.25	7.54	1.4	1.3	24	2	156	.10	5	.5	1.2 19	SWR
		4	1435	19.36	19	16.41	155 22.44	6.79	2.1	2.5	39	3	131	.13	5	.4	.8 26	SWR
		4	19	0	8.86	19	17.18	6.00	1.8	1.3	18	1	103	.13	5	.5	1.8 9	SWR
		4	19	6	27.55	19	17.84	8.49	1.7	1.3	29	7	119	.10	5	.4	.8 22	SWR
		4	1941	45.97	19	17.38	155 23.38	2.43	1.8	1.4	23	2	100	.10	5	.4	.9 17	SWR
		4	2045	40.35	19	16.30	155 22.59	6.60	1.0	1.3	27	4	130	.10	4	.5	1.1 23	SWR
		4	21	5	37.45	19	24.79	7.12	1.6	1.1	24	2	47	.09	1	.4	.9 16	KAD
		4	2122	15.18	19	16.53	155 22.59	5.97	1.8	1.5	30	3	126	.11	5	.5	1.1 25	SWR
		4	2123	3.24	19	16.75	155 22.71	4.48	1.8	1.4	31	1	120	.13	5	.4	2.0 24	SWR
		4	2150	.63	19	17.33	155 23.55	2.45	.7	1.0	18	2	107	.06	5	.4	1.0 12	SWR
		4	2159	27.62	19	17.81	155 23.21	3.31	1.7	1.2	23	2	99	.10	4	.4	1.0 12	SWR
		4	2254	36.45	19	17.46	155 23.33	2.55	.7	1.0	19	4	100	.08	5	.4	.8 12	SWR
		4	2314	47.02	19	17.07	155 23.63	6.54	2.4	2.5	39	4	98	.12	5	.4	.8 27	SWR
		4	2328	21.16	19	17.68	155 23.20	3.81	1.1	1.0	20	2	100	.11	5	.4	1.2 9	SWR
		4	2343	1.90	19	16.97	155 23.84	5.38	1.6	1.7	22	1	95	.10	5	.4	1.8 13	SWR
		4	2346	1.34	19	17.72	155 23.19	3.09	1.7	1.2	24	2	100	.09	5	.4	1.0 16	SWR
		5	051	6.91	19	18.73	155 13.29	6.84	1.1	1.1	28	3	81	.10	3	.5	1.0 19	SF2
		5	114	7.55	19	17.63	155 23.28	2.87	.8	1.2	17	2	99	.09	5	.4	.9 12	SWR
		5	412	56.06	19	17.49	155 23.58	3.47	1.7	2.1	26	3	99	.10	5	.3	1.1 11	SWR
		5	644	44.21	19	16.24	155 23.09	7.07	1.1	1.1	23	4	121	.11	4	.4	1.0 16	SWR
		5	744	42.34	19	18.51	155 13.02	10.47	2.6	2.4	44	5	93	.11	3	.5	.5 30	SF2
		5	916	27.04	19	17.81	155 23.31	3.59	1.2	1.7	20	1	97	.10	4	.4	1.1 13	SWR
		5	1621	24.08	19	17.63	155 23.18	3.61	.9	1.6	27	5	101	.08	5	.3	1.0 18	SWR
		5	1735	56.28	19	17.80	155 23.21	3.04	2.1	2.5	27	3	99	.10	5	.4	1.0 20	SWR
		5	1759	8.73	19	20.86	155 3.33	8.62	1.6	1.4	22	3	110	.05	2	.5	.7 12	SF5
		5	2042	33.47	19	17.74	155 23.38	2.49	.9	1.2	22	3	97	.09	5	.4	.9 16	SWR
		5	2059	10.52	19	22.83	155 27.34	6.47	1.8	1.6	29	1	45	.11	1	.4	.8 20	KAD
		5	2119	2.42	19	17.43	155 23.29	6.37	3.2	3.8	46	5	101	.16	5	.4	.8 38	SWR
		5	22	3	29.37	19	31.87	7.61	2.4	1.5	34	4	81	.12	7	.5	1.1 25	MLD
		5	22	8	29.11	19	17.32	3.67	1.8	1.6	28	2	97	.12	5	.4	1.3 15	SWR
		6	150	33.55	19	17.34	155 23.69	3.08	.8	1.2	24	5	95	.10	5	.3	1.0 16	SWR
		6	622	34.89	19	17.58	155 13.09	8.20	1.9	2.1	35	3	121	.11	1	.6	.8 19	SF2
		6	638	54.03	19	15.05	155 20.04	5.91	1.1	1.1	18	1	162	.08	6	.6	1.6 9	SWR
		6	9	6	53.25	19	19.02	6.73	1.8	1.6	30	0	65	.11	4	.5	1.0 25	SF2
		6	944	46.18	19	11.60	155 35.58	9.44	2.4	1.9	37	4	93	.22	7	.6	.9 21	LSW
		6	1243	57.63	19	17.32	155 23.58	2.72	.9	1.2	23	3	97	.09	5	.3	.9 13	SWR
		6	1418	10.92	19	16.32	155 23.32	5.69	1.2	1.1	25	3	114	.11	4	.4	1.3 16	SWR
		6	1451	54.67	19	18.11	155 13.15	6.69	1.3	1.1	25	4	98	.09	2	.6	1.0 16	SF2
		6	1524	59.23	19	17.44	155 23.44	3.14	1.0	1.0	17	3	107	.08	5	.4	1.0 14	SWR
		6	1647	21.42	19	13.31	155 27.82	2.31	2.1	1.8	34	4	104	.13	5	.3	1.2 24	LSW
		6	18	9	32.92	19	16.07	7.30	1.8	1.9	26	5	161	.09	4	.4	.9 20	SWR

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YEAR	MON	DA	HRMN	SEC	LAT N DEG MIN	LON W DEG MIN	DEPTH KM	AMP MAG	DUR MAG NR	GAP NS	RMS DEG	MIN SEC DIS	ERH KM	ERZ NO KM FM REMK
1982	JUL	6	1816	38.01	19 16.51	155 22.81	7.45	2.4	3.0 42	3 122	.15	5	.5	.7 29 SWR
		6	2158	6.16	19 16.66	155 22.64	5.16	1.8	2.4 35	3 123	.14	5	.4	1.2 28 SWR
		6	23	58.23	18 57.11	155 15.06	12.85	2.5	.8 21	0 249	.14	32	2.8	.9 8 LOI
		7	411	14.67	19 17.68	155 23.71	2.97	1.8	1.9 35	4 93	.11	5	.3	1.0 22 SWR
		7	413	59.39	19 18.76	155 14.89	6.86	1.3	1.3 31	4 92	.11	4	.5	.9 17 SF1
		7	5	3.27	19 17.37	155 23.73	2.55	.7	1.0 17	2 104	.07	5	.4	1.0 10 SWR
		7	748	9.18	19 17.85	155 23.18	3.52	.8	1.1 20	2 98	.07	4	.4	.9 12 SWR
		7	834	36.43	19 18.72	155 22.88	5.33	2.4	1.7 0	0 120	.08	3	.5	1.0 16 SWR
		7	853	2.80	19 21.86	155 4.63	8.55	1.1	1.2 24	5 81	.11	4	.5	.9 14 SF5
		7	943	14.19	19 22.53	155 2.58	9.05	1.3	1.4 18	2 132	.08	5	.6	.7 9 SF5
		7	958	48.16	19 16.34	155 22.59	6.40	2.1	2.2 35	3 130	.11	4	.4	.9 27 SWR
		7	1128	34.90	19 16.21	155 22.19	6.46	1.2	1.5 24	2 138	.09	5	.5	1.1 19 SWR
		7	1250	.46	19 22.92	155 17.31	25.62	2.3	1.7 38	2 34	.09	1	.6	.9 31 DEP
		7	1436	16.04	19 19.00	155 15.58	7.21	1.2	1.3 23	1 106	.08	4	.5	1.0 17 SF1
		7	1534	4.08	19 18.25	155 16.41	4.79	1.1	1.1 14	2 150	.06	4	.5	1.2 11 SF5
		7	1621	38.67	19 21.69	155 1.96	8.12	2.1	2.5 32	3 148	.11	4	.7	.5 20 SF5
		7	1625	5.34	19 15.70	155 22.92	6.02	2.0	2.5 40	3 135	.12	3	.4	.9 24 SWR
		7	1649	31.34	19 19.40	155 7.87	8.19	2.7	2.9 43	4 93	.12	5	.4	.6 29 SF4
		7	17	6	57.72	19 19.43	7.85	2.0	2.6 37	4 97	.11	4	.4	.6 28 SF4
		7	1721	9.09	19 17.50	155 20.40	6.01	.9	1.3 25	2 129	.10	3	.4	.9 20 SWR
		7	1733	37.36	19 17.93	155 23.18	3.40	1.8	2.4 31	3 98	.12	4	.4	1.1 20 SWR
		7	18	4	35.87	19 17.73	3.18	1.0	1.6 22	3 100	.07	5	.4	1.0 17 SWR
		7	19	5	50.44	19 19.75	6.98	1.6	1.5 31	2 94	.09	4	.4	.9 24 SF4
		7	1945	56.11	19 21.90	155 24.94	10.05	1.8	1.2 25	2 53	.08	4	.4	.9 22 SWR
		7	2046	42.30	19 17.47	155 23.45	3.78	1.2	1.8 31	5 98	.07	5	.3	.9 26 SWR
		7	2311	52.90	19 20.35	155 13.86	8.86	1.8	2.2 37	4 58	.11	4	.4	.6 23 SF2
		8	159	.58	19 17.82	155 23.07	2.72	1.5	2.0 26	5 101	.08	4	.3	.8 24 SWR
		8	329	36.93	19 17.38	155 22.12	5.91	1.5	2.1 33	7 119	.13	6	.4	.9 26 SWR
		8	652	38.21	19 17.63	155 21.37	8.43	.8	1.3 26	7 124	.10	5	.4	.8 21 SWR
		8	955	8.38	19 17.79	155 23.54	2.42	1.7	2.1 26	5 94	.11	5	.3	.7 15 SWR
		8	1416	46.26	19 19.43	155 15.48	7.46	1.8	1.6 32	4 89	.10	4	.4	.7 23 SF1
		8	15	7	12.46	19 16.66	7.55	2.0	1.8 30	2 208	.06	2	1.4	2.1 25 DEP
		8	1635	43.61	19 18.43	155 22.06	8.43	1.1	1.3 26	6 106	.11	4	.5	.8 21 SWR
		8	1937	23.76	19 19.79	155 7.88	7.18	1.9	.33 3	3 94	.09	5	.4	.8 22 SF4
		8	1938	24.46	19 19.69	155 7.57	7.49	2.6	3.0 40	4 102	.10	4	.4	.6 30 SF4
		8	2235	25.25	19 19.64	155 7.42	8.20	2.7	2.7 43	5 107	.09	4	.4	.5 29 SF4
		8	2259	44.37	19 23.31	155 3.36	5.24	1.3	1.1 26	4 103	.22	3	.7	1.5 18 SF5
		8	2318	41.34	19 16.70	155 22.07	3.13	.8	1.0 23	3 131	.11	6	.4	1.4 17 SWR
		8	2355	3.74	19 17.71	155 21.61	8.14	.8	1.1 23	3 119	.10	5	.5	1.0 19 SWR
		9	0	0	53.40	19 17.21	4.45	1.8	1.9 26	4 100	.11	5	.3	1.9 20 SWR
		9	839	50.21	19 17.57	155 23.47	2.90	.9	1.4 20	2 97	.10	5	.3	1.0 11 SWR
		9	922	16.99	19 19.64	155 11.45	7.85	1.9	1.6 30	3 93	.10	5	.5	.9 25 SF3
		9	10	0	29.93	19 17.37	2.97	1.1	1.1 22	3 127	.11	5	.4	1.0 17 SWR
		9	1248	25.76	19 19.84	155 7.93	7.76	1.6	1.2 25	4 92	.08	5	.5	1.0 20 SF4
		9	1613	12.03	19 17.45	155 23.50	3.58	2.0	2.4 31	4 97	.10	5	.3	1.2 22 SWR
		9	1928	39.32	19 16.36	155 22.75	5.72	1.8	2.4 36	2 126	.13	4	.4	1.0 29 SWR
		9	1930	50.98	19 15.83	155 22.50	7.51	1.3	1.6 24	2 157	.09	4	.5	1.0 17 SWR
		9	2137	59.79	19 16.58	155 23.66	3.59	.9	1.3 22	4 102	.11	4	.4	1.1 15 SWR

HVO EARTHQUAKE SUMMARY LIST

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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
1982	JUL	9	23	7	34.27	19 17.39	155 23.47	2.68	.7	1.0	14	2	108	.06	5	.4	.9	8 SWR
		10	1	2	27.26	19 17.46	155 23.38	2.58	.8	1.0	15	2	99	.07	5	.4	1.0	10 SWR
		10	246	47	41.19	22.43	155 24.39	9.26	1.8	1.4	32	5	50	.10	5	.4	.6	24 KAO
		10	5	1	3.44	19 17.79	155 23.40	3.38	1.7	1.6	24	4	96	.07	5	.3	.9	18 SWR
		10	612	43	25	19 17.91	155 23.28	3.52	1.9	2.5	33	6	97	.09	4	.3	.8	30 SWR
		10	627	32	99	19 17.28	155 23.37	2.91	1.3	1.6	30	4	101	.09	5	.3	.9	27 SWR
		10	820	25	46	19 17.62	155 23.34	2.84	1.5	1.7	32	5	99	.11	5	.3	.8	24 SWR
		10	10	5	7.86	19 17.27	155 23.58	3.45	1.3	1.6	30	5	98	.08	6	.3	1.0	27 SWR
		10	1017	54	99	19 17.49	155 23.16	3.16	.8	1.2	21	5	112	.07	5	.3	.9	19 SWR
		10	1035	9	03	19 17.82	155 20.34	8.08	1.8	1.9	41	10	129	.09	3	.3	.6	28 SWR
		10	1211	15	86	19 20.97	155 7.59	7.51	1.1	1.1	27	2	83	.10	4	.4	.8	18 SF4
		10	1329	51	94	19 20.83	155 12.83	8.90	2.0	2.0	36	4	62	.08	3	.4	.6	30 SF2
		10	1534	22	89	19 19.28	155 18.82	8.09	1.6	1.8	36	9	58	.08	2	.3	.6	25 SWR
		10	1659	1	61	19 17.78	155 23.09	5.43	1.2	1.4	27	5	101	.09	5	.4	.9	24 SWR
		10	17	1	6	30	19 18.99	8.43	1.7	1.6	34	3	81	.10	4	.4	.7	27 SF2
		10	1724	34	17	19 11.16	155 28.74	33.99	1.9	1.5	38	8	86	.07	3	.7	1.1	34 DLS
		10	1921	.94	19 16.64	155 20.34	7.59	.9	1.5	27	5	139	.10	4	.5	.9	24 SWR	
		10	2326	59	57	19 17.63	155 23.23	3.02	.5	1.3	22	6	100	.08	5	.3	.8	20 SWR
		10	2349	8	87	19 19.83	155 10.23	7.59	1.7	1.4	23	3	89	.05	4	.5	.9	19 SF3
		11	036	27	60	19 19.16	155 13.62	8.17	1.6	1.8	37	5	67	.10	4	.4	.7	29 SF2
		11	211	23	98	19 17.46	155 23.62	2.29	1.0	.9	21	5	95	.07	5	.3	.8	18 SWR
		11	314	50	02	19 21.54	155 25.73	10.11	2.1	2.3	41	5	48	.12	4	.4	.6	34 KAO
		11	320	22	45	19 21.60	155 3.44	6.78	.8	1.1	25	1	109	.15	3	.6	1.0	22 SF5
		11	345	27	04	19 17.34	155 23.40	3.02	.6	1.0	22	5	100	.09	5	.4	.9	21 SWR
		11	447	52	80	19 17.52	155 23.42	3.35	1.2	1.3	22	5	99	.08	5	.3	1.0	20 SWR
		11	10	0	15	10	19 17.20	3.05	1.0	1.3	25	5	100	.09	5	.3	1.0	22 SWR
		11	1011	45	74	19 11.70	155 37.64	8.66	2.6	2.4	41	6	98	.18	6	.5	.7	36 LSW
		11	12	5	52	67	19 17.80	8.16	1.5	1.3	30	7	125	.11	3	.4	.8	26 SWR
		11	1410	50	46	19 17.32	155 23.71	2.91	.9	1.0	25	4	95	.08	5	.3	.9	23 SWR
		11	1452	12	65	19 17.15	155 20.91	7.42	1.9	2.1	43	8	131	.11	4	.4	.7	35 SWR
		11	1454	53	45	19 17.10	155 20.69	6.86	1.1	1.1	28	5	132	.09	4	.4	.9	17 SWR
		11	16	0	24	68	19 16.98	7.85	1.4	1.1	23	3	200	.08	3	.6	.9	13 SF1
		11	1818	37	01	19 16.30	155 7.07	40.89	1.8	1.6	28	0	211	.08	3	1.9	2.8	22 DEP
		12	141	24	80	19 17.72	155 21.78	6.78	1.4	1.3	28	5	118	.11	5	.4	1.0	16 SWR
		12	222	50	86	19 20.41	155 7.17	5.42	1.5	1.1	30	4	98	.14	5	.5	1.3	17 SF4
		12	259	48	06	19 16.84	155 21.75	8.16	3.1	3.7	47	6	131	.14	6	.4	.6	36 SWR
		12	3	2	5	73	19 16.46	6.32	1.1	1.3	25	4	142	.09	6	.5	1.1	20 SWR
		12	3	8	36	04	19 16.56	6.09	1.8	2.2	29	3	134	.11	6	.5	.8	22 SWR
		12	311	36	46	19 16.57	155 22.02	5.41	1.8	2.3	38	5	133	.12	5	.4	1.2	30 SWR
		12	315	7	64	19 16.28	155 22.97	2.74	1.8	1.4	26	2	122	.12	4	.4	1.0	18 SWR
		12	328	29	97	19 16.62	155 21.91	3.71	1.2	1.4	28	4	132	.11	6	.4	1.4	18 SWR
		12	421	35	50	19 16.48	155 23.79	6.16	2.5	3.1	37	4	100	.13	4	.4	.9	27 SWR
		12	517	13	24	19 20.08	155 7.68	7.11	1.3	1.3	28	5	94	.09	5	.4	.8	18 SF4
		12	518	50	45	19 20.19	155 7.67	6.89	1.4	1.3	30	5	93	.10	5	.5	.9	22 SF4
		12	1038	23	74	19 17.54	155 14.10	6.60	1.1	1.3	23	3	147	.09	1	.5	1.0	10 SF2
		12	1044	44	09	19 21.68	155 6.78	8.12	1.8	1.9	30	4	80	.10	3	.4	.8	21 SF4
		12	1138	53	52	19 17.54	155 21.54	7.86	1.7	1.5	25	5	124	.10	5	.4	1.0	16 SWR
		12	1216	41	95	19 17.08	155 23.30	3.07	.9	1.3	22	4	116	.09	5	.4	1.0	17 SWR

HVO EARTHQUAKE SUMMARY LIST

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YEAR	MON	DA	HR	MIN	SEC	LAT N DEG MIN	LON W DEG MIN	DEPTH KM	AMP MAG	DIR MAG	NR	NS	GAP DEG	RMS SEC	MIN DIS	ERH KM	ERZ KM	NO FM	REMK	
1982	JUL	12	1545	39.26	19	16.31	155 23.49	7.76	2.5	3.0	43	6	110	.12	4	.4	.6	29	SWR	
		12	1641	26.14	19	17.70	155 23.28	3.15	2.3	3.1	40	5	98	.11	5	.3	.9	27	SWR	
		12	1730	39.10	19	19.49	155 10.41	8.07	1.9	2.3	37	4	98	.10	5	.4	.7	25	SF3	
		12	2314	22.22	19	18.48	155 20.60	9.95	2.7	3.2	44	5	114	.13	4	.4	.4	33	SWR	
		12	2334	17.99	19	17.80	155 23.49	2.60	.9	1.3	20	4	95	.07	5	.3	.8	14	SWR	
		13	013	32.34	19	16.57	155 22.51	6.93	2.5	3.1	42	3	127	.17	5	.5	.8	37	SWR	
		13	028	.08	19	16.75	155 21.70	6.42	1.8	1.8	32	3	132	.10	6	.4	.9	24	SWR	
		13	129	47.44	19	29.03	155 24.13	13.60	2.2	1.6	30	3	41	.14	2	.4	.6	17	DML	
		13	932	2.54	19	21.68	155 2.12	8.61	2.9	3.4	27	1	152	.08	4	.7	.5	19	SF5	
		13	1221	17.07	19	20.31	155 7.81	8.15	2.3	2.4	30	3	89	.11	5	.5	1.2	24	SF4	
		13	1424	57.78	19	19.44	155 18.93	6.69	1.5	1.6	25	3	56	.10	3	.4	.9	18	SWR	
		13	1758	24.01	19	17.69	155 23.17	2.93	1.7	1.6	20	2	108	.08	5	.4	.9	11	SWR	
		13	21	5	21.74	19	17.25	155 21.70	7.78	2.6	3.3	43	2	126	.15	6	.4	.7	36	SWR
		13	21	8	43.58	19	16.94	155 21.65	8.24	2.9	3.6	42	3	130	.14	6	.4	.6	34	SWR
		13	2212	40.58	19	21.57	155 2.58	4.99	1.3	1.3	19	3	139	.14	3	.6	1.4	11	SSF	
		14	240	27.58	19	17.40	155 21.42	5.02	1.7	1.4	22	2	126	.12	5	.4	1.8	18	SWR	
		14	354	14.25	19	19.33	155 10.00	6.55	1.8	1.7	33	3	100	.07	5	.4	.6	25	SF3	
		14	534	49.77	19	18.79	155 13.58	7.55	1.7	1.6	36	2	71	.13	3	.5	.8	25	SF2	
		14	636	23.28	19	17.24	155 23.23	2.88	1.8	1.6	18	2	104	.10	6	.4	1.1	13	SWR	
		14	744	52.20	19	17.99	155 20.79	7.01	1.8	1.6	28	3	122	.11	4	.4	1.1	19	SWR	
		14	931	49.91	19	19.08	155 15.28	7.52	1.4	1.5	26	4	102	.10	4	.4	.8	19	SF1	
		14	1052	34.17	19	17.77	155 23.00	3.25	1.7	2.1	25	5	102	.10	5	.3	.6	18	SWR	
		14	12	7	38.03	19	10.49	155 37.02	9.26	2.9	3.0	33	1	98	.15	8	.6	.8	23	LSW
		14	1344	40.46	19	22.48	155 25.14	8.75	2.2	2.3	38	4	41	.11	4	.4	.5	22	KA0	
		14	1449	10.59	19	19.63	155 7.58	8.13	1.6	1.7	23	1	103	.08	4	.5	.8	17	SF4	
		14	1551	4.67	19	17.58	155 21.03	7.27	1.1	1.1	23	6	128	.09	4	.4	1.0	16	SWR	
		14	2145	14.55	19	16.59	155 15.31	5.95	1.4	1.1	18	2	172	.10	3	.7	1.2	8	SF1	
		14	2315	23.71	19	20.58	155 7.26	7.42	1.7	1.5	31	4	93	.11	5	.5	.9	16	SF4	
		15	154	25.54	19	27.40	154 53.97	4.59	1.9	1.2	21	4	139	.13	5	.9	4.3	11	SLE	
		15	2	5	36.45	19	19.46	155 7.49	6.06	1.6	1.1	21	4	109	.08	4	.5	1.1	12	SF4
		15	339	52.14	19	18.08	155 15.45	7.57	1.5	1.6	27	2	116	.10	4	.5	.8	17	SF1	
		15	340	33.15	19	17.79	155 15.28	6.60	1.0	1.3	23	1	123	.11	3	.5	1.0	13	SF1	
		15	1352	4.13	19	23.95	155 25.42	9.21	1.7	1.3	24	2	38	.09	2	.4	.8	20	KA0	
		15	16	7	51.09	19	19.85	155 9.81	7.36	1.9	1.6	32	3	87	.09	4	.5	.8	24	SF3
		15	16	9	40.97	19	16.88	155 22.04	7.50	1.8	1.7	22	2	129	.09	6	.6	1.5	19	SWR
		15	1754	18.59	19	23.95	155 17.22	2.70	1.0	1.2	14	4	81	.06	1	.3	.3	10	SSC	
		15	1812	27.87	19	19.41	155 11.51	7.49	1.1	1.0	22	2	97	.08	6	.6	1.1	18	SF3	
		15	1917	33.95	19	18.14	155 23.41	3.73	1.2	1.1	22	3	94	.09	4	.4	.9	14	SWR	
		15	2122	11.55	19	18.10	155 20.76	6.75	1.7	1.5	24	2	122	.09	4	.5	1.2	16	SWR	
		15	2256	22.05	19	19.08	155 15.55	8.07	1.6	1.5	27	3	104	.10	4	.5	.8	18	SF1	
		16	214	15.52	19	18.53	155 14.93	7.41	1.1	1.3	28	2	98	.07	4	.4	.8	24	SF1	
		16	3	0	20.05	19	18.88	155 16.20	7.84	1.6	1.3	34	6	114	.11	3	.4	.6	26	SF1
		16	438	52.84	19	17.58	155 20.92	7.18	1.3	1.5	33	7	126	.08	4	.3	.7	27	SWR	
		16	510	35.54	19	17.44	155 23.55	2.86	1.0	1.4	28	3	97	.06	5	.3	.8	25	SWR	
		16	633	15.59	19	26.97	155 27.13	10.52	1.9	1.6	40	7	45	.12	5	.4	.8	34	KA0	
		16	7	5	20.46	19	16.01	155 23.30	1.20	.6	1.1	22	4	131	.10	8	.4	.8	20	SWR
		16	822	59.80	19	17.10	155 21.64	6.55	1.4	1.3	27	5	128	.11	6	.4	.8	25	SWR	
		16	828	27.75	19	20.11	155 11.76	8.48	1.6	1.3	28	2	81	.09	5	.5	.8	26	SF3	

HVO EARTHQUAKE SUMMARY LIST

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ORIGIN TIME					LAT N		LON W		DEPTH		AMP		DIR		GAP		RMS		MIN		ERH		ERZ		NO		
YEAR	MON	DA	HRMN	SEC	DEG	MIN	DEG	MIN	KM	MAG	°46	NR	NS	DEG	SEC	DIS	DIS	KM	KM	FM	REMK						
1982	JUL	16	834	35.35	19	15.65	155	23.02	5.98	1.3	1.5	28	5	156	.08	3	.4	.8	25	SWR							
		16	853	9.73	19	15.90	155	23.25	6.41	2.2	2.6	44	7	121	.12	3	.3	.7	36	SWR							
		16	1318	33.92	19	15.89	155	23.01	6.47	2.0	2.4	40	7	128	.11	3	.3	.7	34	SWR							
		16	1642	14.50	19	17.37	155	23.38	3.10	1.7	1.9	29	5	100	.07	5	.3	.9	25	SWR							
		16	1840	11.83	19	17.92	155	21.33	6.77	1.3	1.3	24	4	120	.14	5	.4	.8	22	SWR							
		16	2133	32.06	19	17.83	155	23.11	3.81	1.5	1.6	27	4	100	.09	4	.3	.9	23	SWR							
		16	22	0	30.96	19	17.50	155	23.48	6.51	2.4	2.8	42	6	98	.11	5	.3	.7	38	SWR						
		16	22	2	37.44	19	17.50	155	23.28	2.93	1.6	1.4	24	6	101	.08	5	.3	.9	21	SWR						
		16	2358	45.13	19	17.65	155	23.10	3.46	2.1	2.7	41	8	102	.10	5	.3	.7	33	SWR							
		17	0	3	55.82	19	17.90	155	23.34	5.44	2.4	2.6	36	4	96	.12	4	.4	1.0	24	SWR						
		17	011	13.19	19	17.76	155	23.18	2.97	1.7	1.9	23	5	99	.07	5	.4	.8	18	SWR							
		17	013	51.30	19	17.74	155	23.40	2.81	1.7	1.4	23	4	96	.09	5	.4	.9	18	SWR							
		17	212	39.44	19	17.61	155	23.38	2.53	.9	1.3	22	3	98	.09	5	.3	.9	14	SWR							
		17	233	32.41	19	21.26	155	6.93	7.30	1.3	1.1	25	3	85	.10	3	.3	.9	17	SF4							
		17	459	31.38	19	18.07	155	23.22	4.01	2.4	2.7	30	3	96	.12	4	.4	1.3	22	SWR							
		17	5	1	19.50	19	17.95	155	23.17	2.97	1.4	1.4	21	4	98	.12	4	.4	.8	18	SWR						
		17	951	56.09	19	23.92	155	15.46	2.23	.9	.9	13	4	110	.06	2	.3	.4	10	SFC							
		17	1142	38.05	19	17.63	155	20.83	8.01	2.2	2.4	37	5	126	.12	4	.4	.6	25	SWR							
		17	1736	14.22	19	15.73	155	7.20	42.47	2.4	2.0	38	0	190	.08	3	1.0	1.6	32	DFP							
		17	1813	42.76	19	17.54	155	23.46	2.56	1.7	1.6	23	4	97	.06	5	.3	.7	18	SWR							
		17	19	4	3.53	19	24.39	155	29.78	9.01	1.9	1.3	21	1	57	.08	5	.4	.9	13	KA0						
		18	034	25.97	19	25.17	155	30.79	8.50	2.0	1.2	21	1	63	.09	7	.4	1.5	13	KA0							
		18	330	11.07	19	7.25	155	31.24	13.05	3.0	3.4	42	1	160	.12	7	.8	.5	31	DLS							
		18	652	49.01	19	19.78	155	8.24	7.79	1.8	1.5	30	3	85	.09	5	.4	.8	20	SF4							
		18	1217	35.11	18	56.22	155	14.35	15.48	3.0	3.4	30	1	288	.11	34	2.3	1.0	13	L01	L						
		18	1853	39.12	19	27.37	154	53.41	5.89	1.7	1.2	22	2	142	.10	4	.8	1.8	10	LFR							
		18	2147	25.32	19	20.47	155	10.83	7.26	1.4	1.3	25	5	78	.08	3	.3	.8	17	SF3							
		18	22	5	2.52	19	20.54	155	12.89	8.22	1.4	1.1	25	2	65	.10	4	.6	.9	18	SF2						
		18	2250	11.77	19	18.15	155	23.34	3.90	.9	1.4	22	3	94	.09	4	.4	.9	17	SWR							
		19	229	31.61	19	17.37	155	23.42	2.92	1.6	2.4	32	7	100	.09	5	.3	.9	28	SWR							
		19	425	53.00	19	18.83	155	15.41	7.69	1.1	1.1	28	5	96	.08	4	.4	.7	22	SF1							
		19	5	5	24.52	19	16.73	155	21.99	3.03	1.1	1.0	25	6	131	.11	6	.4	1.2	23	SWR						
		19	5	7	16.04	19	20.06	155	12.98	8.14	1.3	1.1	24	3	70	.08	5	.3	.8	20	SF2						
		19	7	6	42.62	19	17.29	155	23.32	3.24	2.2	2.5	38	8	102	.10	5	.3	.8	32	SWR						
		19	947	9.46	19	23.19	155	17.27	26.07	2.3	2.4	52	10	34	.10	1	.3	.6	43	DFP							
		19	1046	44.47	19	19.78	155	7.26	7.97	1.3	1.1	26	2	108	.10	5	.3	1.0	22	SF4							
		19	116	9.77	19	22.46	155	1.48	8.19	2.1	2.4	37	5	147	.14	5	.6	.7	33	SF5							
		19	1122	28.95	19	25.35	155	15.84	15.80	1.9	1.4	34	7	75	.09	2	.3	.4	30	DFP							
		19	1210	26.34	19	19.38	155	13.97	6.83	1.1	1.3	28	3	75	.09	4	.4	.8	23	SF2							
		19	18	1	5.12	19	15.76	155	22.15	7.20	1.4	1.3	24	4	165	.09	4	.3	1.0	22	SWR						
		19	1837	13.67	19	18.30	155	20.68	6.98	1.0	1.3	28	7	119	.12	4	.4	.9	24	SWR							
		19	2128	51.42	19	18.64	155	21.28	7.93	1.0	1.1	26	6	106	.08	5	.4	.8	23	SWR							
		19	2258	24.06	19	26.41	155	49.26	8.36	2.5	1.6	28	4	102	.12	10	.5	.7	22	KON							
		20	048	22.97	19	15.73	155	22.16	7.43	2.1	2.4	39	8	156	.11	4	.4	.7	33	SWR							
		20	051	21.99	19	15.83	155	22.16	6.04	2.0	2.6	38	7	156	.11	4	.4	.7	32	SWR							
		20	056	34.34	19	15.66	155	22.16	6.99	1.5	1.6	27	6	142	.08	4	.3	.9	22	SWR							
		20	849	7.37	19	19.01	155	18.78	8.56	1.4	1.3	34	7	60	.08	2	.4	.6	22	SWR							
		20	854	9.51	19	17.56	155	20.59	7.43	1.4	1.4	26	5	132	.08	4	.4	.8	21	SWR							

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YEAR	MON	DA	HRMN	SEC	LAT N DEG MIN	LON W DEG MIN	DEPTH KM	AMP MAG	DIR MAG	NR	NS	GAP DEG	RMS SEC	MIN DIS	ERH KM	ERZ NO KM FM	REMK
1982	JUL	20	1534	48.55	19 18.57	155 15.28	7.56	1.7	1.4	32	6	112	.12	4	.4	.7 27	SF1
		20	1617	31.31	19 18.90	155 13.15	6.14	1.3	1.1	27	2	83	.11	4	.5	1.1 24	SF2
		20	1856	13.26	19 16.17	155 22.39	8.05	.9	1.1	23	5	134	.07	4	.5	.8 18	SWR
		20	19	9 36.67	19 19.26	155 16.01	9.42	2.4	2.4	44	6	95	.09	3	.3	.4 35	SF1
		20	2226	29.42	19 19.39	155 15.47	8.17	1.9	1.9	41	5	89	.09	4	.3	.6 32	SF1
		21	057	27.54	19 17.22	155 7.55	39.07	2.3	1.9	31	2	202	.07	1	1.1	1.5 27	DEP
		21	136	48.96	19 16.68	155 22.31	3.01	.9	1.4	24	2	128	.12	5	.4	1.3 16	SWR
		21	242	50.21	19 17.50	155 20.51	7.09	1.7	1.5	25	6	134	.10	3	.5	1.0 19	SWR
		21	4	0 25.48	19 20.71	155 12.68	8.24	1.4	1.1	29	4	66	.09	4	.5	.7 21	SF2
		21	4	1 33.56	19 20.08	155 8.39	8.43	2.0	2.2	36	3	80	.09	5	.4	.6 26	SF4
		21	449	54.99	19 16.23	155 22.30	4.95	.9	1.1	23	4	135	.09	5	.5	1.7 19	SWR
		21	7	6 15.10	19 15.91	155 21.91	7.19	1.8	1.1	23	3	170	.09	5	.5	1.3 19	SWR
		21	1131	14.07	19 14.64	155 21.77	7.44	1.2	1.3	25	2	156	.11	4	.5	.9 16	SWR
		21	1635	34.68	19 24.22	155 17.56	16.88	1.7	1.6	40	4	38	.09	2	.4	.5 31	DEP
		21	2137	2.05	19 18.78	155 14.94	7.19	1.1	1.3	22	2	102	.09	4	.5	.9 17	SF1
		21	2257	4.56	19 22.55	155 .89	7.14	2.3	2.1	26	3	156	.13	6	.5	.9 17	SF5
		22	441	3.72	19 17.18	155 21.79	6.22	1.7	2.1	29	1	126	.11	6	.4	.9 20	SWR
		22	517	48.46	19 21.87	155 1.49	6.26	1.4	1.1	20	3	156	.12	4	.7	1.2 14	SF5
		22	7	3 37.80	19 17.43	155 23.48	2.74	2.1	2.5	24	4	98	.09	5	.3	.9 19	SWR
		22	942	4.97	19 23.33	155 26.29	8.23	2.3	1.9	18	0	94	.07	3	.5	1.1 13	KA0
		22	1155	9.44	19 19.14	155 13.90	8.29	2.3	2.5	37	2	66	.11	4	.5	.6 22	SF2
		22	13	0 35.76	19 18.61	155 13.51	8.29	1.3	1.1	19	1	85	.05	3	.5	.8 14	SF2
		22	15	2 1.59	19 16.99	155 21.06	5.50	1.7	1.6	30	5	132	.11	5	.4	1.0 22	SWR
		22	1535	51.65	19 20.67	155 17.37	34.65	2.6	2.8	43	4	50	.09	1	.6	.9 36	DEP
		22	2017	55.67	19 21.69	155 24.86	10.07	1.4	1.3	28	4	44	.10	4	.4	.9 20	SWR
		22	2322	20.86	19 17.50	155 7.31	40.22	2.4	2.1	33	1	198	.10	1	1.1	2.1 27	DEP
		23	014	39.93	19 16.75	155 23.06	5.97	.9	1.3	15	3	113	.10	5	.5	1.5 9	SWR
		23	040	59.69	19 16.63	155 23.32	7.71	2.4	1.0	32	2	110	.12	4	.4	.9 19	SWR
		23	1	1 19.00	19 16.62	155 23.38	5.12	1.2	1.6	22	3	108	.12	4	.4	1.3 15	SWR
		23	451	45.04	19 17.33	155 23.26	3.14	.9	1.1	19	3	103	.07	5	.3	1.0 15	SWR
		23	738	3.72	19 10.60	155 37.35	6.77	2.4	1.6	27	1	99	.19	8	.6	1.4 18	LSW
		23	922	54.35	19 18.02	155 23.54	3.39	2.3	3.3	37	7	93	.14	4	.3	.9 33	SWR
		23	1020	11.68	19 20.43	155 11.95	9.49	1.6	1.5	29	4	74	.08	5	.5	.7 23	SF3
		23	1021	40.87	19 17.54	155 23.45	5.98	.8	1.3	21	6	97	.10	5	.4	1.0 19	SWR
		23	1755	34.16	19 18.27	155 15.42	6.47	.7	1.1	27	6	111	.12	4	.5	.9 23	SF1
		23	1922	28.53	19 15.90	155 23.04	6.69	2.1	2.6	39	6	129	.10	3	.3	.7 32	SWR
		23	2148	52.37	19 17.97	155 23.02	4.16	1.9	2.4	31	3	100	.09	4	.4	1.0 27	SWR
		24	110	54.81	19 19.00	155 15.33	7.91	1.8	2.2	37	6	104	.12	4	.4	.6 33	SF1
		24	141	23.59	19 14.29	155 3.59	46.54	2.2	2.1	41	5	218	.09	10	1.2	.9 36	DEP
		24	229	53.77	19 18.31	155 23.15	6.24	2.7	3.5	40	6	95	.14	4	.3	.7 35	SWR
		24	247	38.54	19 17.22	155 23.71	2.76	.8	1.4	24	5	95	.10	5	.3	1.0 22	SWR
		24	249	31.12	19 17.15	155 23.76	3.17	.8	1.4	28	5	95	.08	5	.3	.9 23	SWR
		24	252	54.37	19 17.34	155 23.19	9.37	2.0	2.4	42	7	104	.12	5	.3	.5 36	SWR
		24	325	50.21	19 20.43	155 8.20	7.08	1.8	2.2	38	6	80	.11	4	.4	.7 30	SF4
		24	818	39.13	19 18.01	155 20.93	8.39	2.6	3.0	21	4	128	.11	4	.6	.8 20	SWR
		24	1532	55.02	19 18.94	155 13.48	8.82	1.6	1.2	27	2	80	.09	4	.5	.8 15	SF2
		24	1613	53.20	19 19.49	155 7.63	8.51	1.9	1.5	32	3	105	.08	4	.4	.8 25	SF4
		24	1716	31.82	19 23.16	155 26.89	6.81	1.7	1.6	31	6	45	.11	2	.4	.7 23	KA0

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YEAR	MON	DA	HRMN	SEC	LAT N DEG MIN	LON W DEG MIN	DEPTH KM	AMP MAG	DIR MAG	NR	NS	GAP DEG	RMS SEC	MIN DIS	ERM KM	ERZ NO KM FM	REMK	
1982	JUL	24	1741	43.78	19 17.72	155 23.23	2.65	.9	1.2	19	5	99	.09	5	.3	.8 16	SWR	
		24	1847	28.36	19 19.51	155 15.87	7.90	2.2	2.4	37	3	91	.11	3	.4	.5 29	SF1	
		24	1959	30.62	19 16.84	155 22.72	7.97	1.0	1.1	17	3	119	.09	5	.5	1.0 14	SWR	
		24	2134	17.39	19 24.02	155 16.99	14.17	1.4	1.1	27	1	63	.09	1	.6	.7 24	DEP	
		24	2144	57.12	19 22.91	155 .29	6.60	1.6	1.2	22	2	158	.13	5	.7	1.2 15	SF5	
		24	22	6	31.16	19 18.17	155 21.85	6.72	1.7	1.3	27	3	111	.13	5	.4	1.0 19	SWR
		25	016	48.55	19 16.13	155 22.15	6.54	1.0	1.1	20	3	142	.10	5	.5	1.2 18	SWR	
		25	151	1.71	19 18.41	155 15.93	6.79	1.0	1.1	26	1	122	.10	4	.5	.9 18	SF1	
		25	238	23.83	19 17.34	155 21.23	8.79	1.8	1.4	28	3	127	.10	5	.5	.8 21	SWR	
		25	329	15.73	19 20.39	155 11.07	8.72	1.7	1.1	27	3	79	.09	4	.4	.8 19	SF3	
		25	740	30.63	19 17.19	155 7.16	41.54	2.4	1.9	32	0	205	.09	1	1.5	2.3 29	DEP	
		25	927	12.76	19 21.43	155 3.67	7.01	1.0	1.3	17	1	92	.13	3	.6	1.1 11	SF5	
		25	932	1.09	19 18.05	155 14.77	7.06	1.0	1.3	23	2	107	.09	3	.5	.9 18	SF1	
		25	941	15.75	19 19.02	155 18.92	8.30	1.2	1.3	23	4	62	.10	2	.5	.9 18	SWR	
		25	1027	14.38	19 13.81	155 31.04	7.49	2.2	1.7	25	2	125	.15	3	.6	.9 12	LSW	
		25	11	7	51.78	19 19.30	155 13.11	9.51	1.6	1.7	26	3	78	.09	4	.5	.8 15	SF2
		25	13	7	4.78	19 19.85	155 17.86	9.41	1.1	1.1	19	4	128	.06	1	.8	1.1 12	SWR
		25	1537	1.23	19 20.13	155 11.32	9.28	2.1	2.4	35	3	83	.10	4	.4	.6 23	SF3	
		25	1632	40.07	19 18.90	155 20.74	7.74	1.8	2.2	23	2	101	.08	4	.4	1.2 20	SWR	
		25	2226	56.97	19 24.36	155 16.11	11.67	1.6	2.3	14	1	130	.05	1	1.0	1.2 5	INT L	
		26	055	40.64	19 18.98	155 13.62	8.74	1.6	1.8	27	2	69	.08	4	.5	.8 17	SF2	
		26	241	47.76	19 14.21	155 35.01	7.61	2.7	2.4	32	1	108	.21	4	.7	1.1 22	LSW	
		26	5	1	29.37	19 17.26	155 21.72	4.54	.9	1.3	24	2	126	.14	6	.5	2.8 19	SWR
		26	7	8	16.34	19 19.13	155 13.61	5.59	1.1	1.3	22	2	68	.11	4	.5	1.2 19	SF2
		26	1949	16.04	19 21.00	155 6.25	8.21	2.7	3.1	28	1	95	.07	4	.4	.7 19	SF4	
		27	033	22.48	19 16.58	155 6.97	43.60	2.6	2.1	25	0	202	.09	2	2.5	3.6 21	DEP	
		27	7	5	28.11	19 18.55	155 13.22	8.22	1.7	1.8	24	0	86	.09	3	.4	.6 17	SF2
		27	942	18.25	19 15.40	155 32.63	6.13	.9	1.6	17	0	179	.10	8	.7	2.6 15	LSW	
		27	1053	33.66	19 9.20	155 30.87	11.17	2.4	2.6	26	1	137	.13	5	.6	.7 17	LSW	
		27	11	5	10.81	19 26.77	155 29.66	8.54	1.8	1.4	29	3	56	.08	9	.3	.9 21	KA0
		27	1219	44.50	19 17.43	155 23.76	2.55	.9	1.4	25	4	93	.12	5	.4	.9 15	SWR	
		27	14	3	38.46	19 18.08	155 13.80	6.60	1.1	1.3	24	4	98	.09	2	.5	1.0 18	SF2
		27	1555	34.44	19 20.35	155 10.83	7.56	1.3	1.1	25	4	116	.08	4	.6	.8 14	SF3	
		27	1625	1.61	19 20.92	155 47.01	11.42	2.5	1.8	24	1	92	.13	12	.6	.6 18	KON	
		27	18	4	2.02	19 17.85	155 20.82	7.73	1.7	1.6	30	4	123	.10	4	.4	.8 20	SWR
		27	2036	26.25	19 22.65	155 5.89	7.18	1.9	1.5	29	4	67	.13	1	.4	.7 17	SF4	
		28	320	20.81	19 15.94	155 22.37	7.9A	1.1	1.3	26	4	137	.10	4	.4	.7 21	SWR	
		28	933	34.56	19 17.76	155 23.14	3.30	.9	1.0	18	4	100	.08	5	.4	.9 14	SWR	
		28	1311	25.81	19 18.05	155 21.68	6.70	1.7	1.6	26	1	114	.10	5	.4	1.2 15	SWR	
		28	1330	3.72	19 23.14	154 57.42	5.20	1.6	1.3	23	3	186	.16	4	.8	1.3 11	LER	
		28	1345	48.89	19 19.64	155 14.05	7.49	2.4	3.0	43	5	66	.13	5	.4	.7 33	SF2	
		28	1930	31.44	19 17.73	155 21.75	8.49	1.6	1.7	25	2	118	.10	5	.4	.8 19	SWR	
		28	2340	19.39	19 17.76	155 20.88	7.19	1.7	2.5	35	7	126	.08	4	.4	.6 26	SWR	
		29	044	53.78	19 18.19	155 23.27	3.52	2.1	3.4	34	5	94	.12	4	.5	.9 24	SWR	
		29	319	55.05	19 19.75	155 15.01	6.35	1.4	1.5	29	3	79	.13	4	.4	1.1 20	SF1	
		29	340	53.47	19 19.43	155 15.43	9.17	2.4	2.8	41	3	96	.10	4	.4	.5 30	SF1	
		29	714	37.43	19 21.17	155 11.28	9.05	2.6	3.1	40	5	67	.10	3	.4	.6 30	SF3	
		29	10	5	43.51	19 23.85	155 2.32	6.90	1.3	1.3	15	2	120	.12	4	.7	1.2 10	SF5

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YEAR	MON	DA	HR	MIN	SEC	ORIGIN TIME	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
1982	JUL	29	1128	51.80	19	18.70	155 15.11	7.96 1.1 1.1	23	2 120 .08	4	.5	.9	16	SF1					
		29	1137	24.93	19	20.13	155 10.40	7.83 1.7 1.5	36	4 84 .12	4	.4	.8	27	SF3					
		29	1152	55.43	19	21.26	155 13.41	9.48 2.8 3.1	43	4 55 .10	3	.3	.4	34	SF2					
		29	1538	28.63	19	15.59	155 22.75	6.49 1.9 2.1	31	3 137 .10	3	.4	.9	23	SWR					
		29	1550	48.75	19	17.41	155 29.02	5.87 2.0 1.6	37	3 49 .19	5	.4	1.4	31	LSW					
		29	2047	1.24	19	19.41	155 18.87	7.32 .9 1.1	27	3 56 .09	3	.4	1.0	22	SWR					
		30	056	43.64	19	17.39	155 23.12	2.93 1.7 1.8	19	1 104 .06	5	.4	1.0	14	SWR					
		30	1 4	49.39	19	16.39	155 21.52	8.14 1.8 1.6	26	3 167 .08	6	.5	.9	22	SWR					
		30	137	10.74	19	26.60	157 11.21	20.03 3.4 3.9	15	1 315 .15144	4	.5	24.7	6	DIS					
		30	146	13.36	19	15.79	155 22.38	6.22 .9 1.2	22	4 169 .09	4	.5	1.3	17	SWR					
		30	351	43.33	19	19.24	155 7.37	9.13 2.1 2.2	35	3 117 .08	4	.4	.5	27	SF4					
		30	410	12.24	19	20.88	155 13.01	7.91 1.8 1.7	31	3 61 .10	3	.4	.7	21	SF2					
		30	429	56.19	19	26.54	155 29.25	7.69 2.1 1.2	35	4 53 .11	8	.4	1.0	26	KA0					
		30	459	10.31	19	11.10	155 33.41	8.79 2.3 1.7	28	1 138 .17	9	.7	1.1	14	LSW					
		30	5 5	6.38	19	16.21	155 22.77	2.48 1.8 1.6	33	2 128 .12	4	.4	1.0	22	SWR					
		30	546	45.39	19	15.72	155 22.70	8.26 1.3 1.3	27	3 159 .08	3	.5	1.0	18	SWR					
		30	749	21.04	19	17.66	155 21.86	8.22 1.7 1.5	33	4 118 .10	5	.4	.7	24	SWR					
		30	1510	16.35	19	17.64	155 20.88	5.79 1.0 1.2	22	4 126 .10	4	.5	1.1	17	SWR					
		30	17 9	12.68	19	19.49	155 15.87	7.32 2.2 2.2	35	3 100 .12	3	.4	.7	25	SF1					
		30	1759	37.47	19	17.05	155 7.21	40.81 2.4 2.3	33	3 206 .08	1	.9	1.6	29	DEP					
		30	2228	41.58	19	20.27	155 13.20	7.14 1.3 1.3	24	2 65 .10	4	.5	1.0	19	SF2					
		31	4 2	58.25	19	18.92	155 15.30	7.00 2.4 2.4	38	5 95 .12	4	.4	.7	29	SF1					
		31	845	42.47	19	19.54	155 11.37	7.43 1.5 1.2	28	4 95 .09	5	.5	.8	21	SF3					
		31	1654	5.48	19	19.91	155 8.82	6.94 1.6 1.1	27	3 75 .08	4	.5	.9	21	SF4					
		31	23 5	38.25	19	19.54	155 15.05	7.79 1.8 1.8	30	3 90 .11	4	.5	.7	21	SF1					
		31	2350	18.58	19	19.39	155 9.84	8.14 1.9 1.8	26	2 98 .07	5	.5	.8	21	SF3					
		1	151	41.01	19	25.88	155 37.57	3.16 3.4 2.7	27	1 93 .12	3	.5	1.1	23	MLO					
		1	1148	41.92	19	16.27	155 21.47	7.50 1.1 1.3	23	3 169 .06	6	.5	1.1	18	SWR					
		1	1432	43.13	19	15.34	155 23.53	6.01 .1 1.1	17	2 126 .10	2	.5	1.2	7	SWR					
		1	1544	15.22	19	20.81	155 10.78	8.48 2.1 2.0	23	2 72 .07	3	.4	.7	16	SF3					
		1	1652	40.75	19	17.13	155 21.34	6.40 .1 1.1	21	4 129 .12	5	.5	1.2	16	SWR					
		1	1730	.12	19	20.73	155 13.57	8.03 .1 1.3	21	2 62 .11	4	.6	1.0	16	SF2					
		1	2019	54.56	19	17.22	155 23.00	5.13 1.2 1.5	13	2 108 .10	6	.6	2.0	10	SWR					
		1	2247	56.80	19	22.25	155 2.38	8.20 2.1 2.1	29	4 130 .13	4	.6	.5	21	SF5					
		2	413	8.75	19	19.59	155 7.43	8.75 1.9 1.8	24	1 108 .11	4	.7	.7	18	SF4					
		2	435	51.34	19	24.14	155 25.00	11.51 1.7 1.5	27	2 37 .10	2	.4	.5	18	KA0					
		2	6 4	3.35	19	21.03	155 5.89	7.45 1.9 1.8	19	0 98 .12	6	.6	.9	16	SF4					
		2	1046	19.02	19	18.63	155 13.59	8.05 1.7 1.8	33	2 72 .12	3	.5	.7	22	SF2					
		2	1316	37.66	19	25.74	155 37.69	2.25 2.9 3.4	34	1 94 .13	4	.4	.9	25	MLO					
		2	15 3	50.04	19	15.88	155 27.14	8.60 2.0 1.7	33	2 70 .14	5	.4	.7	21	LSW					
		2	1745	.31	19	19.29	155 15.49	8.88 2.1 2.5	42	3 100 .09	4	.4	.4	27	SF1					
		3	133	4.06	19	19.34	155 18.83	6.97 .9 1.0	26	2 57 .10	3	.4	1.0	20	SWR					
		3	345	28.99	19	24.68	155 24.57	9.15 1.6 1.3	35	3 37 .11	1	.4	.7	23	KA0					
		3	417	52.61	19	19.47	155 6.56	8.92 2.2 2.1	40	4 131 .08	5	.5	.4	26	SF4					
		3	5 0	3.35	19	17.96	155 23.25	3.40 .9 1.2	16	3 97 .06	4	.4	.9	12	SWR					
		3	654	5.58	19	19.86	155 7.95	7.42 1.3 1.1	25	4 92 .08	5	.5	.9	21	SF4					
		3	741	6.47	19	17.76	155 20.75	8.27 1.7 1.6	32	3 125 .11	4	.4	.8	18	SWR					
		3	944	36.35	19	25.16	155 24.87	8.54 2.2 2.4	38	3 35 .14	1	.4	.8	27	KA0					

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YEAR	MON	DA	HR	MIN	SEC	ORIGIN TIME	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
1982	AUG	3	10	9	35.39	19 27.70	155 45.34	9.55 3.2 3.4	37	2	140 .11	5	.5	.5	27	KON				
		3	1151		6.21	19 24.21	154 58.87	6.57 1.6 1.4	25	2	177 .15	2	.8	.8	16	LER				
		3	1212	31	10	19 20.02	155 11.83	10.08 2.9 3.4	41	4	82 .09	5	.3	.3	32	SF3				
		3	2212	47	38	19 21.80	155 15.04	10.07 2.1 2.4	34	2	60 .09	2	.4	.5	25	SF1				
		4	1 5	43	75	19 17.64	155 23.48	2.49 1.7 2.2	31	5	96 .11	5	.3	.8	24	SWR				
		4	3 8	31	64	19 18.86	155 15.27	7.31 1.6 1.6	28	1	106 .11	4	.4	.9	20	SF1				
		4	649	59	56	19 21.39	155 2.81	7.86 2.2 2.4	35	4	124 .08	3	.4	.6	20	SF5				
		4	729	41	25	19 19.92	155 9.42	7.44 1.6 1.5	30	4	82 .08	4	.5	.9	21	SF3				
		4	734		.72	19 19.93	155 13.60	7.48 1.3 1.3	23	3	87 .08	5	.5	.9	19	SF2				
		4	850	44	25	19 20.13	155 13.49	9.03 1.3 1.3	20	2	68 .05	5	.5	.9	15	SF2				
		4	1751	7	78	19 23.51	155 26.24	8.33 1.4 1.3	32	3	46 .10	3	.4	.8	22	KA0				
		4	23 8	45	08	19 21.40	155 4.90	8.53 1.9 2.3	30	1	88 .09	4	.6	.6	23	SF5				
		5	3 2	20	18	19 20.56	155 13.09	9.55 1.5 1.7	27	2	63 .07	4	.5	.7	21	SF2				
		5	437	29	83	20 3.12	155 26.74	8.04 2.7 2.9	32	2	207 .13	21	1.0	.9	14	KEA				
		5	1827	26	59	19 17.79	155 20.50	7.40 1.7 1.5	28	5	128 .10	3	.5	.9	20	SWR				
		5	1946	42	22	19 20.63	155 10.90	8.33 2.4 2.7	42	3	75 .12	3	.4	.6	31	SF3				
		5	2059	58	89	19 17.66	155 20.86	7.95 1.7 1.4	27	3	127 .09	4	.4	.9	25	SWR				
		6	724	5	34	19 21.81	155 18.53	35.95 2.2 1.8	39	0	43 .11	4	.7	1.3	37	DEP				
		6	1317	2	96	19 28.96	155 52.70	7.01 2.6 1.7	17	3	152 .12	4	1.1	1.7	13	KON				
		6	1324	40	86	19 17.88	155 12.73	6.65 1.5 1.5	25	3	170 .08	2	.5	.9	16	SF2				
		6	1627	33	99	19 17.14	155 15.36	7.56 2.1 2.5	34	1	150 .13	6	.5	.8	20	SF1				
		6	2316	34	62	19 43.83	155 46.33	41.61 .1 1.9	18	1	124 .07	8	.9	2.1	13	HUA				
		7	1 1	45	98	19 20.24	155 9.23	7.36 1.5 1.1	22	1	75 .07	4	.5	1.0	19	SF3				
		7	130	3	40	19 17.97	155 21.03	7.31 1.8 1.9	34	3	121 .11	4	.4	.7	26	SWR				
		7	136	3	08	19 21.70	155 8.06	8.31 2.5 3.1	38	2	68 .11	3	.4	.8	28	SF4				
		7	210	2	10	19 .98	155 25.28	42.92 2.3 1.9	33	0	218 .06	16	1.7	2.5	32	DLS				
		7	215	24	25	19 18.68	155 15.67	7.70 2.1 2.3	35	2	104 .11	4	.4	.7	23	SF1				
		7	312	39	19	19 19.89	155 10.25	6.87 1.6 1.6	24	3	89 .08	4	.5	1.1	18	SF3				
		7	412	12	41	19 18.53	155 13.12	6.71 1.7 1.8	34	4	90 .11	3	.5	.8	20	SF2				
		7	11 3	3	92	19 21.24	155 6.03	8.15 3.2 3.4	45	4	92 .12	3	.4	.5	36	SF4				
		7	1223	29	24	19 19.77	155 11.80	7.81 2.0 2.0	29	3	87 .10	5	.4	.8	17	SF3				
		7	14 2	26	83	19 19.71	155 11.46	9.73 3.4 3.8	43	3	91 .11	5	.4	.4	36	SF3				
		7	14 5	41	40	19 16.37	155 15.21	2.93 1.8 2.1	27	0	169 .12	3	.6	.9	15	SSF				
		7	2332	19	35	19 19.11	155 15.59	7.49 2.0 1.3	26	1	105 .11	4	.5	.9	14	SF1				
		8	15 3	7	16	19 21.36	155 6.03	8.55 3.3 3.4	48	6	89 .09	3	.3	.5	32	SF4				
		8	15 5	36	10	19 21.15	155 5.73	7.69 1.9 1.5	30	5	94 .12	4	.4	.9	16	SF4				
		8	15 6	34	81	19 21.05	155 5.71	6.60 2.0 1.7	28	1	97 .14	4	.5	1.1	15	SF4				
		8	15 7	42	20	19 21.47	155 5.88	6.94 1.7 1.3	30	4	87 .11	3	.4	.8	20	SF4				
		8	1517	51	28	19 21.36	155 5.66	6.37 1.9 1.7	34	5	90 .11	3	.4	.6	23	SF4				
		8	1619	58	23	19 18.09	155 13.00	5.42 2.2 2.1	36	2	105 .12	2	.4	1.1	28	SF2				
		8	2054	45	94	19 18.30	155 16.16	8.63 2.1 2.0	35	3	146 .08	4	.5	.5	27	SF1				
		9	322	2	21	19 13.39	155 21.79	33.51 2.2 2.3	38	1	157 .10	4	.7	1.3	35	DEP				
		9	545	52	19	19 18.53	155 13.23	6.85 1.8 1.8	32	2	86 .13	3	.5	.9	21	SF2				
		9	612	39	08	19 18.71	155 14.41	7.54 1.4 1.6	30	2	106 .11	4	.5	.9	23	SF2				
		9	952	39	66	19 17.91	155 20.89	7.66 1.9 1.8	37	6	122 .11	4	.4	.6	26	SWR				
		9	1232	50	53	19 21.78	155 22.93	32.15 2.6 2.6	46	4	55 .11	3	.6	1.0	38	DEP				
		9	1655	9	52	19 23.07	155 4.41	7.62 3.1 3.0	41	3	86 .12	3	.4	.6	29	SF5				
		9	1755	49	09	19 18.98	155 16.03	8.02 1.4 1.3	24	4	111 .07	3	.4	.8	18	SF1				

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YEAR	MON	DA	HR	MIN	SEC	ORIGIN TIME	LAT N	LON W	DEPTH	AMP	DUR	GAP	RMS	MIN	ERH	ERZ	NO	REMK			
							DEG	MIN	KM	MAG	MAG	NR	NS	DEG	SEC	DIS	KM	KM	FM	REMK	
1982	AUG	10	037	34.26	19	20.73	155	8.40	7.17	1.8	1.7	28	1	74	.08	4	.5	.9	24	SF4	
		10	121	54.15	19	18.03	155	13.25	9.80	3.6	3.8	43	3	95	.12	2	.4	.4	37	SF2 F	
		10	125	49.18	19	18.29	155	13.49	8.42	2.1	2.2	38	4	81	.11	2	.5	.5	26	SF2	
		10	133	50.05	19	18.45	155	13.32	7.38	1.7	1.8	35	3	84	.11	3	.4	.6	22	SF2	
		10	137	39.83	19	18.43	155	13.64	7.71	1.7		32	3	71	.10	3	.5	.7	24	SF2	
		10	137	51.40	19	18.49	155	13.41	8.54	3.4	3.8	40	5	80	.13	3	.5	.6	31	SF2 F	
		10	310	35.28	19	18.39	155	13.69	7.90	2.2	2.1	37	2	70	.10	3	.5	.6	27	SF2	
		10	418	2.83	19	28.81	155	13.59	26.78	2.1	1.8	38	1	115	.09	8	.6	1.2	35	DEP	
		10	442	14.88	19	18.04	155	12.88	7.06	2.0	2.0	29	3	111	.11	2	.6	.9	18	SF2	
		10	1512	25.75	19	17.88	155	13.58	5.45	1.7		31	4	77	.10	2	.4	.8	24	SF2	
		10	1514	42.86	19	17.80	155	13.30	7.39	1.7	1.6	27	1	97	.13	1	.5	.8	21	SF2	
		10	1539	4.91	19	19.36	155	8.56	6.04	1.5	1.3	23	3	81	.09	4	.5	1.3	19	SF4	
		10	1825	52.15	19	19.11	155	13.12	5.59	1.6	1.5	33	3	80	.13	4	.5	1.0	20	SF2	
		10	2027	12.25	19	20.06	155	11.18	8.26	2.0	1.8	35	2	85	.11	4	.5	.7	26	SF3	
		11	145	52.54	19	19.00	155	14.25	7.77	1.3	1.6	28	1	85	.11	4	.5	1.0	22	SF2	
		11	3	1	20.89	19	18.93	155	19.28	8.61	1.6	1.6	17	1	149	.10	2	.7	.7	13	SWR
		11	13	4	58.78	19	22.93	154	59.82	6.56	2.0	1.6	28	3	174	.13	5	.6	1.1	23	LER
		11	20	5	21.02	19	20.85	155	11.21	8.43	2.1	2.1	34	3	72	.10	3	.4	.7	23	SF3
		11	2054	4.45	19	22.14	155	17.37	31.21	2.0	1.6	30	1	37	.11	2	.8	1.4	23	DEP	
		12	043	35.76	19	24.90	155	16.09	16.17	4.0	4.3	41	1	46	.09	2	.4	.3	40	DEP F	
		12	1	0	11.72	19	24.62	155	16.28	15.96	1.3	1.4	32	0	78	.09	1	.5	.4	25	DEP
		12	1	8	14.96	19	25.12	155	16.07	16.14	2.1	2.3	42	2	46	.11	2	.4	.4	38	DEP
		12	224	3.37	19	24.77	155	16.14	16.08	1.7	1.6	38	1	72	.12	2	.5	.4	29	DEP	
		12	238	32.24	19	24.97	155	16.17	16.06	2.3	1.6	37	1	73	.11	1	.5	.4	31	DEP	
		12	244	4.46	19	24.91	155	16.17	16.20	3.3	3.6	46	2	46	.11	1	.4	.3	44	DEP F	
		12	412	25.10	19	18.87	155	13.58	9.42	2.4	2.9	42	4	84	.11	3	.4	.4	25	SF2	
		12	530	57.30	19	20.09	155	12.74	8.03	1.6	1.3	27	2	72	.09	5	.5	.9	17	SF2	
		12	744	26.00	19	25.08	155	16.06	17.73	2.5	2.4	45	6	37	.11	2	.4	.6	37	DEP	
		12	758	19.23	19	25.02	155	16.18	17.49	1.8	1.6	38	2	73	.11	1	.5	.7	28	DEP	
		12	1717	25.45	19	24.11	155	16.09	16.42	2.0	2.2	41	4	74	.11	2	.4	.5	36	DEP	
		12	1812	55.83	19	27.42	155	20.93	7.74	1.8	1.1	19	5	70	.10	1	.5	.9	15	KAO	
		13	1	7	19.74	19	18.86	155	13.56	8.41	1.9	2.0	29	1	80	.10	3	.5	.8	21	SF2
		13	126	48.32	19	16.35	155	22.56	2.11	1.8	1.6	24	3	130	.13	5	.4	1.0	18	SWR	
		13	349	51.90	19	18.81	155	15.20	7.89	2.1	1.8	35	1	96	.09	5	.4	.6	22	SF1	
		13	5	7	52.09	19	20.19	155	11.59	8.13	1.9	1.5	30	3	81	.09	5	.5	.8	25	SF3
		13	729	35.20	19	36.12	156	9.68	25.61	2.7	2.6	17	3	252	.12	28	1.7	2.3	13	KON	
		13	1451	37.35	19	16.13	155	15.07	6.58	1.1	1.1	22	1	224	.08	3	1.1	1.0	14	SF1	
		13	1843	38.04	19	18.94	155	17.24	32.90	2.6	2.8	46	2	110	.11	2	.7	1.0	41	DEP	
		13	2027	2.69	19	18.93	155	19.86	7.52	.9	1.1	23	3	92	.10	3	.4	1.0	16	SWR	
		14	0	3	18.64	19	19.39	155	15.42	7.34	1.7	1.5	26	0	98	.09	4	.5	.9	19	SF1
		14	018	45.08	19	16.49	155	23.47	1.69	2.3	2.7	35	3	108	.12	4	.3	.9	23	SWR	
		14	815	53.01	19	58.46	155	20.75	9.68	2.2	2.0	24	3	201	.10	25	.8	.8	11	KEA	
		14	9	8	19.74	19	24.44	155	25.97	9.48	1.5	1.3	32	4	48	.11	2	.4	.8	22	KAO
		14	1053	57.53	19	17.59	155	21.98	7.19	1.2	1.3	28	4	118	.10	5	.4	.9	19	SWR	
		15	131	29.32	19	19.83	155	8.01	5.15	1.4	1.5	28	2	90	.13	5	.5	1.4	18	SF4	
		15	3	0	16.12	19	16.76	155	23.43	5.09	1.2	1.6	28	4	105	.11	5	.4	1.8	17	SWR
		15	539	58.99	19	19.38	155	18.99	7.08	1.1	1.2	30	5	59	.11	3	.4	.8	21	SWR	
		15	7	1	43.99	19	19.99	155	7.97	9.16	3.4	3.9	40	2	89	.10	5	.5	.4	33	SF4

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YEAR	NON	DA	HR	MIN	SEC	ORIGIN TIME	LAT N	LON W	DEPTH	AMP	DUR	GAP	RMS	MIN	ERH	ERZ	NO	REMK	
							DEG	MIN	KM	MAG	MAG	NR	NS	DEG	SEC	DIS	KM	FM	
1982	AUG	15	836	45.99	19	17.71	155	20.91	5.98	1.0	1.5	26	3	124	.11	4	.4	1.1 19 SWR	
		15	921	37.89	19	17.33	155	21.17	7.63	1.7	1.6	29	4	130	.10	5	.5	.8 22 SWR	
		15	927	41.99	19	20.27	155	7.35	7.95	1.2	1.4	24	1	98	.06	5	.4	1.0 14 SF4	
		15	1241	24.10	19	18.64	155	13.38	8.35	1.9		37	2	79	.10	3	.4	.5 21 SF2	
		15	1714	14.29	19	20.16	155	24.83	9.63	1.7	1.4	28	4	62	.08	3	.4	.7 17 SWR	
		15	2053	18.78	19	20.43	155	11.43	8.24	1.4	1.1	27	2	77	.07	4	.5	.9 16 SF3	
		15	2212	38.41	19	20.30	155	12.67	9.24	2.5	2.9	39	2	70	.09	4	.4	.5 24 SF2	
		16	246	35.00	19	18.97	155	13.54	8.00	1.7	1.9	31	0	70	.10	4	.4	.8 22 SF2	
		16	3	6	47.19	19	18.80	155	14.95	4.73	.8	1.1	23	1	102	.13	4	.5	1.8 19 SSF
		16	4	1	46.70	19	18.97	155	13.64	9.27	2.8	3.4	43	1	83	.11	4	.4	.4 37 SF2
		16	647	3.37	19	19.82	155	10.15	7.53	1.8		28	2	90	.09	4	.5	.9 23 SF3	
		16	737	10.62	19	19.75	155	8.26	8.31	1.5	1.3	28	2	85	.09	4	.5	.9 21 SWR	
		16	919	8.05	19	19.20	155	18.80	8.03	1.6	1.4	26	1	58	.09	2	.4	.8 20 SF4	
		16	10	2	9.19	19	18.75	155	19.79	7.93	1.1	1.1	23	0	99	.07	3	.5	1.0 18 SWR
		16	1239	53.63	19	7.37	155	31.73	12.99	2.2	2.3	32	2	157	.12	8	.7	.5 25 LSW	
		16	1442	4.42	19	42.24	155	3.66	2.03	1.9	2.0	18	0	219	.13	31	1.6	92.7 6 HIL B*	
		16	1912	2.41	19	21.03	155	1.47	7.89	1.2	1.3	22	2	184	.10	3	.9	.7 13 SF5	
		16	1949	32.49	18	53.73	155	14.47	11.71	1.8	1.6	14	0	269	.08	38	3.1	1.0 7 LOI	
		16	1955	19.51	18	51.72	155	13.90	8.41	1.8	1.8	11	0	317	.11	41	12.7	3.7 7 LOI	
		16	2119	22.47	19	19.49	155	9.22	6.06	1.4	1.3	27	4	89	.10	5	.4	1.1 15 SF3	
		17	055	29.21	19	4.02	155	11.54	26.48	2.6	2.4	42	2	223	.10	24	1.2	1.7 38 LOI	
		17	321	59.47	19	10.31	155	32.06	8.54	1.5	1.7	23	1	145	.14	10	.7	1.4 15 LSW	
		17	339	4.87	19	50.37	155	42.36	40.29		1.8	21	1	127	.08	22	.9	2.7 18 KEA	
		17	548	59.85	19	27.30	155	51.75	13.65	2.4	2.0	12	0	172	.09	7	1.2	.5 7 KON	
		17	857	39.61	18	54.31	155	16.34	13.73	3.9	4.2	39	0	248	.08	35	1.6	1.2 28 LOI	
		17	13	7	48.75	19	19.78	155	8.40	8.34	1.8	1.8	28	0	82	.06	5	.5	.8 22 SF4
		17	1544	30.84	19	20.28	155	13.07	10.16	1.4	1.3	22	2	66	.06	4	.6	1.0 18 SF2	
		17	2136	38.96	19	22.14	155	5.12	8.40	1.9	1.7	26	1	73	.09	3	.5	.9 15 SF5	
		17	2355	9.09	19	16.55	155	22.10	8.17	2.7	3.3	40	3	132	.14	5	.5	.6 34 SWR	
		17	2358	22.05	19	18.08	155	16.52	6.20	1.0	1.3	24	2	134	.10	4	.5	1.0 16 SF1	
		18	135	32.77	19	19.74	155	11.20	8.11	1.5	1.3	24	1	92	.08	5	.5	1.0 18 SF3	
		18	247	5.09	19	25.75	155	28.65	8.68	1.9	1.1	27	2	60	.09	6	.4	1.0 21 KA0	
		18	340	56.40	19	16.87	155	22.00	7.70	1.8	1.6	29	2	129	.10	6	.4	1.0 17 SWR	
		18	452	2.07	19	18.07	155	13.10	4.73	1.2	1.2	24	4	101	.08	2	.5	1.0 14 SSF	
		18	456	34.03	19	10.67	155	7.10	51.69	2.1	1.8	36	0	212	.08	13	1.2	2.3 29 DEP	
		18	537	.79	19	17.12	155	15.26	4.40	.8	1.1	20	1	160	.08	3	.6	1.3 14 SSF	
		18	10	7	32.84	19	20.73	155	9.34	1.7	1.7	28	1	74	.09	3	.5	.9 18 SF3	
		18	1137	37.48	19	12.39	155	27.03	6.73	2.2	2.4	33	0	122	.14	6	.5	1.0 22 LSW	
		18	1415	40.34	19	16.87	155	29.39	6.21	1.5	1.6	31	2	52	.20	4	.5	1.4 18 LSW	
		18	1626	8.97	19	19.42	155	9.90	7.89	1.6	1.8	28	4	97	.06	5	.4	.7 23 SF3	
		18	2116	32.48	19	19.01	155	13.17	9.12	1.4	1.3	26	1	81	.09	4	.6	1.0 18 SF2	
		18	2220	43.77	19	18.31	155	19.94	5.26	.8	1.2	21	3	121	.11	2	.5	1.2 14 SWR	
		19	210	17.58	19	19.31	155	15.45	7.78	1.7	1.6	25	0	99	.10	4	.5	1.0 18 SF1	
		19	1053	6.12	19	15.77	155	21.65	8.06	1.0	1.4	22	2	177	.09	5	.6	1.3 11 SWR	
		19	13	6	22.35	19	20.57	155	5.74	1.5	1.3	21	2	105	.13	2	.6	1.1 14 SF5	
		19	1415	54.31	19	20.57	155	13.37	9.02	1.8	1.8	26	1	61	.08	4	.5	.8 20 SF2	
		19	1432	18.06	19	18.57	155	13.42	6.68	1.5	1.3	24	2	79	.07	3	.4	.9 16 SF2	
		19	2022	4.03	19	18.64	155	20.52	7.14	.9	1.1	22	2	108	.10	4	.5	1.0 16 SWR	

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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 NO KM FM	REMK
1982	AUG	19	2251	20.53	19 44.94	156 1.88	8.07	3.6	3.6	43	1	229	.12	21	1.2	.7 33 HUA F	
		19	2259	59.10	19 44.91	156 .54	7.60	3.0	3.3	39	2	225	.13	19	1.1	.7 25 HUA F	
		20	231	10.71	19 21.66	155 48.58	9.75	1.6	1.3	26	1	110	.14	12	.7	.7 13 KON	
		20	5 7	58.67	19 20.60	155 7.88	7.48	1.2	1.3	22	1	84	.08	4	.5	1.1 15 SF4	
		20	11 3	22.75	19 18.51	155 14.88	6.34	1.1	1.1	26	1	108	.09	4	.5	1.0 20 SF1	
		20	13 7	45.39	19 20.78	155 8.94	8.23	2.4	2.8	40	2	131	.13	3	.5	.6 30 SF4	
		20	2026	35.65	19 17.18	155 22.09	3.75	1.1	1.2	18	2	123	.07	6	.4	1.4 13 SWR	
		20	22 8	37.16	19 16.93	155 21.98	3.48	1.1	1.6	28	3	128	.13	6	.4	1.6 20 SWR	
		21	752	7.11	19 16.77	155 19.91	8.19	1.9	1.9	34	2	140	.08	3	.4	.6 20 SWR	
		21	1250	50.76	19 19.36	155 11.73	7.60	1.6	1.3	29	0	97	.09	5	.5	.9 21 SF3	
		21	1334	15.08	19 24.02	155 27.42	9.65	1.6	1.4	32	1	48	.11	3	.4	.7 23 KAO	
		21	1633	2.60	19 19.13	155 16.02	7.40	1.6	1.3	27	3	108	.10	3	.4	.7 17 SF1	
		21	2235	12.42	19 19.29	155 15.58	8.68	2.1	2.1	36	2	92	.10	4	.4	.5 26 SF1	
		21	2325	22.92	19 18.84	155 15.09	8.62	2.6	2.6	45	4	94	.12	4	.4	.5 28 SF1	
		22	024	37.75	19 25.21	155 16.06	15.90	1.7	1.4	39	3	74	.09	2	.5	.3 29 DEP	
		22	451	51.35	19 17.10	155 22.04	2.79	.8	1.2	18	3	125	.11	6	.4	1.1 13 SWR	
		22	625	10.87	19 23.80	155 17.14	2.60	1.8	2.0	16	1	65	.10	1	.4	.3 9 SSC	
		22	1026	47.06	19 20.26	155 4.23	7.79	1.5	1.4	26	5	126	.08	2	.5	.9 16 SF5	
		22	14 4	55.48	19 22.21	155 9.42	3.93	1.5	1.3	26	1	85	.09	1	.5	.6 17 SER	
		22	1451	54.11	19 17.16	155 23.26	1.89	1.3	1.3	20	3	105	.11	5	.4	1.0 17 SWR	
		22	1946	46.34	19 23.59	155 25.68	9.60	1.8	1.3	36	4	38	.10	3	.3	.6 23 KAO	
		23	426	49.42	19 18.65	155 14.60	9.17	2.2	1.9	35	1	88	.12	4	.5	.6 22 SF1	
		23	743	48.56	19 26.20	155 14.40	24.17	1.8	1.4	37	1	98	.09	3	.6	1.0 27 DEP	
		23	1059	2.68	19 15.79	155 13.13	7.04	1.1	1.1	21	0	196	.12	2	.9	1.2 13 SF2	
		23	1157	3.88	19 21.03	155 14.79	9.79	1.6	1.5	23	3	68	.07	3	.5	.8 14 SF1	
		23	1835	16.17	19 21.64	155 4.74	7.03	1.2	1.1	23	4	81	.12	4	.6	.8 15 SF5	
		23	1959	15.23	19 11.34	155 37.88	9.58	2.4	1.8	28	2	100	.19	7	.5	1.0 15 LSW	
		23	2123	53.63	19 17.86	155 21.06	6.79	.9	1.2	23	3	123	.10	4	.5	1.1 15 SWR	
		23	2312	17.18	19 18.80	155 13.63	8.37	1.3	1.6	24	1	72	.07	3	.6	.9 17 SF2	
		24	824	26.14	19 18.87	155 13.42	8.96	1.9	2.1	24	1	78	.10	3	.5	.9 18 SF2	
		24	916	49.01	19 18.68	155 13.94	8.05	1.9	2.3	31	2	72	.11	3	.5	.7 17 SF2	
		24	1130	9.63	19 21.81	155 6.89	8.39	1.2	1.1	26	4	77	.07	2	.5	.8 16 SF4	
		24	1527	38.14	19 15.73	155 23.58	8.57	2.5	3.1	34	2	115	.11	3	.5	.6 25 SWR	
		24	1530	38.50	19 17.09	155 22.35	8.83	2.3	2.9	34	1	120	.13	6	.4	.6 24 SWR	
		25	2 3	46.41	19 17.29	155 21.81	6.47	.9	1.1	19	2	125	.10	6	.5	1.6 14 SWR	
		25	334	39.40	19 20.17	155 13.27	7.00	1.1	1.1	23	2	65	.11	5	.5	1.0 17 SF2	
		25	653	34.36	19 17.67	155 13.16	7.46	1.4	1.1	20	2	112	.10	1	.6	1.1 13 SF2	
		25	1220	19.78	19 21.32	155 26.04	9.76	2.3	2.4	36	2	49	.12	4	.4	.6 28 KAO	
		25	2024	53.91	19 19.98	155 10.51	8.93	1.9	1.8	33	1	87	.09	4	.5	.8 25 SF3	
		25	2221	53.14	19 17.59	155 21.07	7.98	1.7	1.5	23	4	125	.11	4	.4	1.0 14 SWR	
		26	125	6.83	19 21.18	154 59.54	1.52	2.2	2.5	20	1	202	.10	6	.9	1.5 9 SLE	
		26	126	41.68	19 20.94	154 59.51	.01	2.5	3.0	23	2	203	.10	6	.8	.5 11 SLE	
		26	251	58.91	19 20.39	155 6.88	7.99	1.3	1.5	25	1	102	.08	5	.5	.9 21 SF4	
		26	735	7.21	19 21.74	154 59.99	.01	1.1	1.9	14	0	182	.20	6	1.2	2.6 7 SLE F*	
		26	1331	2.75	19 20.48	155 12.78	7.95	1.6	1.3	26	3	75	.10	4	.5	.8 16 SF2	
		26	1458	55.09	19 21.10	155 24.65	8.39	2.0	1.8	29	2	56	.10	6	.5	.9 22 SWR	
		26	1528	26.08	19 15.66	155 22.07	7.97	1.2	1.3	24	1	173	.09	4	.6	1.4 16 SWR	
		26	1539	44.43	19 21.63	155 7.10	7.45	2.0	1.8	30	2	78	.10	3	.5	.8 21 SF4	

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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	KM	FM	REMK			
1982	AUG	27	148	30.73	20	12.23	155	38.33	9.98	3.8	3.6	43	3	178	.10	47	.9	.8	38	KOH	F		
		27	3	56.66	19	18.56	155	13.81	4.56	1.0	1.4	29	1	69	.14	3	.4	1.5	21	SSF			
		27	521	2.79	19	18.28	155	13.64	7.42	1.1	1.0	22	2	118	.08	2	.6	1.0	19	SF2			
		27	535	37.07	19	18.96	155	22.57	4.32	1.1	1.1	19	2	93	.08	3	.4	.9	16	SWR			
		27	6	2	54.05	19	20.34	155	7.18	5.61	1.5	1.1	22	1	98	.13	5	.6	1.7	16	SF4		
		27	813	13.37	19	20.74	155	13.45	8.59	1.6	1.3	14	0	60	.05	4	.6	1.1	12	SF2			
		27	939	53.75	19	23.46	155	.80	4.27	1.5	1.3	24	1	176	.16	5	.9	1.8	17	SSF			
		27	1351	2.39	19	17.78	155	23.24	1.79	1.7	1.5	18	3	105	.09	5	.4	.9	15	SWR			
		28	027	36.95	19	20.42	155	8.56	7.40	1.4	1.4	30	4	74	.09	4	.5	.8	24	SF4			
		28	445	38.68	19	21.39	154	59.55	.75	2.7	3.2	32	4	194	.12	7	.6	.6	17	SLE			
		28	520	10.65	19	21.56	154	59.68	.37	2.4	2.8	29	3	189	.11	6	.7	.5	16	SLE			
		28	1555	23.31	19	23.34	155	24.18	11.32	3.0	3.3	43	2	30	.11	4	.4	.5	35	KAO			
		28	1719	7.85	19	19.59	155	12.17	7.34	.3	1.3	22	0	87	.10	5	.5	1.0	19	SF3			
		28	19	4	52.24	19	20.54	155	12.65	7.74	1.6	1.5	23	0	68	.09	4	.5	.8	18	SF2		
		29	143	57.14	19	12.63	155	29.16	8.07	2.3	2.0	30	0	130	.13	5	.6	.8	19	LSW			
		29	6	8	39.56	19	6.73	155	27.67	31.30	1.5	1.8	23	0	176	.08	5	.9	1.8	16	DLS		
		29	611	53.55	19	11.54	155	30.27	7.81	2.2	1.7	25	0	85	.13	6	.6	1.3	13	LSW			
		29	1333	45.78	19	16.43	155	23.07	6.33	1.8	2.3	28	1	118	.11	4	.5	1.5	18	SWR			
		29	1741	37.31	19	20.99	154	59.66	.00	2.2	2.6	21	1	200	.11	6	.8	.9	15	SLE			
		29	21	3	52.34	19	21.86	155	5.08	7.51	2.0	1.8	34	3	79	.16	3	.6	.9	25	SF5		
		29	2134	23.41	19	21.87	155	2.38	7.63	2.1	1.8	32	3	133	.15	4	.7	.6	23	SF5			
		29	22	7	26.37	19	22.12	155	3.09	8.49	1.8	1.6	30	2	120	.11	4	.6	.6	21	SF5		
		29	2257	14.43	19	18.49	155	13.15	7.57	1.4	1.1	28	2	90	.09	3	.5	.8	20	SF2			
		29	2316	39.27	19	19.20	155	13.16	7.61	2.1	1.8	38	4	78	.09	4	.5	.6	28	SF2			
		30	2016	10.46	19	20.15	155	9.09	6.85	1.6	1.2	26	2	74	.10	4	.5	1.0	16	SF4			
		30	2258	15.77	19	19.71	155	7.92	6.56	1.3	1.1	19	0	94	.09	4	.5	1.4	15	SF4			
		31	141	45.29	19	21.77	155	15.08	9.13	1.9	1.9	32	2	60	.08	2	.4	.6	24	SF1			
		31	638	47.08	19	20.33	155	11.64	8.63	2.4	2.7	42	3	78	.12	4	.5	.6	31	SF3	F		
		31	722	29.88	19	17.56	155	20.93	7.42	1.0	1.4	20	3	129	.11	4	.5	1.2	10	SWR			
		31	1016	21.55	19	18.84	155	15.27	8.12	1.3	1.4	25	1	119	.07	4	.5	.8	21	SF1			
		31	1132	25.35	19	18.48	155	13.36	10.98	3.5	3.6	49	6	131	.10	8	.5	.4	41	SF2	F		
		31	1352	39.84	19	25.18	155	26.02	5.45	1.3	1.1	23	1	52	.10	2	.4	1.1	15	KAO			
		31	15	0	44.11	19	18.28	155	13.66	8.44	2.2	2.5	38	3	91	.12	2	.5	.6	27	SF2		
		31	1717	58.55	19	17.37	155	12.95	6.48	1.2	1.1	24	2	146	.10	1	.6	1.1	15	SF2			
		31	1845	1.20	19	16.48	155	22.69	3.13	1.9	2.4	31	3	125	.12	5	.4	1.2	23	SWR			
		31	2348	58.78	19	19.25	155	13.36	9.49	1.8	1.4	27	2	73	.09	4	.5	.8	19	SF2			
		31	2350	58.90	19	24.91	155	24.12	9.30	1.9	1.3	31	3	43	.11	2	.4	.8	25	KAO			
		31	2357	42.19	19	23.40	155	26.47	8.64	2.1	1.8	34	2	46	.11	3	.4	.8	26	KAO			
SEP		1	044	18.02	19	18.10	155	16.52	8.99	2.4	2.0	39	0	122	.12	4	.4	.5	34	SF1			
		1	217	21.30	19	20.42	155	6.85	7.99	2.5	2.5	36	3	102	.11	5	.4	.6	26	SF4			
		1	733	7.75	19	22.17	155	29.86	8.50	2.0	1.8	31	1	44	.11	4	.4	.8	25	KAO			
		1	939	59.70	19	21.02	155	26.18	10.03	1.3	1.3	27	3	59	.10	4	.4	.9	21	KAO			
		1	1634	53.23	19	18.17	155	15.12	8.37	1.4	1.7	26	0	139	.11	5	.5	.7	20	SF1			
		2	519	35.75	19	20.86	155	10.44	7.12	1.3	1.1	24	2	71	.09	2	.6	.9	18	SF3			
		2	6	9	54.22	21	23.65	155	15.35	2.30	3.1	2.9	25	1	292	.10125	5.9	3.9	18	DIS			
		2	8	0	29.68	19	18.33	155	14.83	5.64	1.0	1.1	23	2	112	.08	3	.4	1.1	20	SF1		
		2	13	3	22.30	19	17.62	155	22.99	4.73	2.1	2.4	30	2	104	.11	5	.4	1.4	24	SWR		
		2	1353	14.07	19	17.70	155	12.96	6.44	1.5	1.4	23	2	122	.11	2	.6	1.1	15	SF2			

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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 NO KM FM REMK
1982	SEP	2	1624	23.86	19 20.98	155 11.06	8.80	1.7	1.1	27	2	69	.07	3	.5	.7 19 SF3
		2	1951	23.40	19 24.75	155 25.28	5.58	1.6	1.3	25	1	48	.10	1	.4	1.0 20 KAO
		2	2019	10.33	19 20.44	155 12.90	8.84	1.4	1.3	25	1	66	.07	4	.5	.7 16 SF2
		2	21 2	6.30	19 23.19	155 2.21	7.20	1.3	1.2	28	0	125	.17	4	.6	1.0 20 SF5
		3	722	45.52	19 19.46	155 15.88	7.85	1.6	1.6	27	2	93	.10	3	.5	.7 16 SF1
		3	1057	24.07	18 57.46	155 3.18	48.48	2.7	3.0	43	2	253	.11	38	1.8	2.3 40 LOI
		3	1910	46.53	19 21.26	155 1.91	5.77	1.4	1.4	26	2	166	.13	3	.7	.8 15 SF5
		3	2019	33.05	19 20.87	155 3.01	8.16	2.6	3.4	42	3	124	.10	2	.5	.4 29 SF5
		3	2347	48.80	19 16.77	155 22.57	2.77	1.1	1.0	18	2	122	.10	5	.4	1.2 15 SWR
		4	729	35.86	19 22.78	155 24.87	10.20	2.7	2.9	48	3	36	.13	5	.4	.5 36 KAO
		4	1041	59.98	19 20.08	155 8.57	7.63	2.0	2.5	40	5	76	.10	4	.4	.6 27 SF4
		4	1219	37.18	19 20.45	155 7.67	4.80	1.3	1.3	23	2	90	.12	5	.5	1.4 11 SSF
		4	1230	32.94	19 19.43	155 10.92	7.88	1.7	1.7	27	4	99	.11	5	.5	.9 20 SF3
		4	21 6	24.24	19 16.04	155 22.36	6.52	1.0	1.1	21	2	158	.07	4	.5	1.3 17 SWR
		4	23 6	21.12	19 18.92	155 22.75	4.35	1.6	1.4	21	3	92	.09	3	.4	1.1 18 SWR
		5	143	6.65	19 20.60	155 7.99	8.11	1.3	1.5	23	0	81	.07	4	.4	.9 20 SF4
		5	457	20.53	19 19.83	155 9.89	7.68	1.8	1.5	20	2	88	.07	4	.6	1.1 18 SF3
		5	557	15.83	19 20.47	155 13.00	8.48	1.9	1.9	35	3	65	.10	4	.4	.6 26 SF2
		5	653	27.78	19 23.97	155 17.10	2.77	1.1	1.7	16	3	69	.10	1	.4	.3 11 SSC
		5	833	50.53	19 18.03	155 13.04	4.60	1.7	1.5	30	2	105	.10	2	.4	1.1 19 SSF
		5	946	49.00	19 24.66	155 24.64	8.21	1.6	1.7	27	2	37	.10	1	.4	.9 18 KAO
		5	1513	46.24	19 17.68	155 20.16	5.43	1.7	1.5	20	3	133	.07	3	.4	1.1 16 SWR
		5	1545	28.82	18 54.75	155 20.12	44.23	2.1	1.7	37	0	245	.07	31	2.0	2.2 28 LOI
		5	1752	12.72	19 26.78	154 55.53	5.96	1.5	1.9	21	2	161	.11	1	.6	.7 9 LER
		6	028	58.77	19 22.15	155 5.02	7.63	2.0	2.2	30	1	75	.11	3	.4	.6 24 SF5
		6	423	4.63	19 40.27	155 27.49	1.10	2.2	1.5	9	2	159	.17	12	1.4	1.1 7 KEA
		6	824	38.70	19 34.23	155 5.14	17.29	1.7	1.3	26	2	161	.07	8	.8	1.2 18 HIL
		6	1127	50.48	19 18.87	155 13.45	8.47	1.7	1.8	37	3	76	.10	3	.4	.6 25 SF2
		6	13 6	55.05	19 17.09	155 21.62	6.53	1.1	1.1	24	4	128	.10	6	.5	1.3 20 SWR
		6	1818	13.54	19 16.86	155 21.81	6.32	1.7	1.8	36	2	130	.12	6	.5	.9 25 SWR
		6	2220	57.67	19 21.37	155 4.59	7.32	1.6	1.6	33	2	87	.12	4	.4	.7 20 SF5
		6	23 1	2.78	19 19.73	155 10.63	8.50	1.6	1.1	30	4	92	.07	5	.5	.7 24 SF3
		7	443	27.93	19 19.20	155 9.99	7.51	1.9	1.8	37	5	104	.10	5	.4	.7 21 SF3
		7	5 1	57.15	19 18.96	155 11.35	7.59	1.9	1.8	34	1	111	.09	5	.4	.7 24 SF3
		7	620	38.72	19 18.07	155 23.21	3.43	1.7	1.4	25	2	96	.10	4	.4	1.0 16 SWR
		7	1530	1.10	19 24.31	155 50.13	10.91	2.4	1.5	24	2	123	.16	13	.6	.6 15 KON
		7	1645	17.18	19 17.25	155 23.49	2.50	.9	1.1	17	2	99	.09	5	.4	1.1 10 SWR
		7	1945	19.02	19 19.32	155 15.45	8.63	2.0	2.2	35	3	99	.09	4	.4	.6 22 SF1
		8	157	1.93	19 16.73	155 22.49	3.20	1.0	1.4	15	2	125	.11	5	.5	1.5 12 SWR
		8	2 7	38.79	19 18.78	155 15.89	8.85	1.9	1.5	31	4	113	.10	4	.4	.6 20 SF1
		8	242	47.66	19 21.69	155 25.80	9.63	2.4	2.6	44	3	46	.13	4	.4	.5 34 KAO
		8	439	19.56	19 22.10	155 17.08	32.54	1.8	1.5	28	0	55	.10	2	.9	2.0 21 DEP
		8	446	33.96	19 20.46	155 10.88	7.27	1.7	1.6	27	4	78	.09	3	.5	.8 20 SF3
		8	6 4	20.52	19 18.23	155 13.71	8.32	2.2	2.3	41	4	94	.11	2	.5	.6 27 SF2
		8	8 8	28.04	19 20.26	155 13.20	9.01	1.6	1.4	26	2	65	.07	4	.5	.8 17 SF2
		8	1036	17.39	19 18.10	155 13.18	7.64	1.7	1.7	26	1	97	.11	2	.6	1.0 19 SF2
		8	1048	4.07	19 19.02	155 14.99	7.40	1.9	1.9	33	3	89	.12	5	.4	.8 26 SF1
		8	1129	39.61	19 53.54	155 32.83	14.05	1.2	1.2	17	0	216	.07	21	1.5	1.0 12 KEA F

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	KM	FM	REMK
1982	SEP	8	1631	2.21	19	21.42	155	18.85	3.27	1.2	1.0	20	3	79	.09	4	.3	.8	13	SWR
		8	1953	35.05	19	22.25	155	24.71	5.36	1.6	1.2	20	2	92	.10	5	.5	1.3	17	KAO
		8	2017	51.25	19	23.93	155	17.15	2.76	1.5	1.4	21	4	55	.08	1	.3	.2	11	SSC
		8	2045	20.64	19	20.15	155	7.76	6.31	1.6	1.2	25	2	92	.11	5	.5	1.0	20	SF4
		8	2142	44.44	19	10.66	155	33.19	7.37	2.4	1.9	33	2	135	.13	10	.5	1.0	18	LSW
		9	1 8	42.92	19	23.90	155	17.24	2.66	1.1	1.4	17	3	62	.08	1	.3	.3	10	SSC
		9	656	19.29	19	20.64	155	3.52	7.30	1.6	1.4	27	1	90	.13	2	.6	1.0	19	SF5
		10	340	3.98	19	12.16	155	15.60	46.05	2.5	2.1	40	0	184	.07	10	1.0	1.6	37	DEP
		10	1736	52.98	19	18.14	155	19.58	7.86	1.7	1.5	26	4	128	.07	2	.4	.8	19	SWR
		10	19 3	44.66	19	23.53	155	25.07	10.71	3.4	3.6	49	5	37	.13	3	.3	.4	40	KAO F
		10	20 3	41.21	19	14.37	155	32.86	6.76	2.2	1.6	20	1	114	.16	5	.7	1.2	8	LSW
		10	2130	10.09	19	46.04	156	7.16	25.81	2.9	2.0	26	3	247	.13	31	1.8	2.2	17	HUA
		10	2341	12.63	19	58.27	155	22.13	11.88	1.9	1.6	11	3	230	.05	9	1.2	.4	7	KEA
		11	024	49.09	19	29.68	155	38.96	7.27	2.9	3.1	39	2	49	.13	5	.4	.8	25	MLO
		11	2 1	17.80	19	29.44	155	39.13	4.96	2.3	1.4	23	3	94	.19	6	.7	2.6	15	MLO
		11	654	42.62	19	20.04	155	14.89	7.69	2.2	2.3	40	1	75	.11	4	.4	.6	29	SF1
		11	14 9	4.14	19	29.52	155	38.90	7.16	2.1	2.4	27	1	95	.12	5	.5	1.1	13	MLO
		11	2058	49.15	20	7.16	155	37.63	26.01	2.4	1.9	14	3	214	.10	16	2.4	.7	9	KOH
		11	2229	25.47	19	20.59	155	11.04	8.72	2.0	2.1	31	1	76	.08	3	.4	.6	20	SF3
		12	6 4	23.65	19	29.22	155	38.95	8.78	2.3	1.2	14	1	93	.14	5	.7	1.5	9	MLO
		12	618	34.62	19	21.60	155	.18	9.25	3.1	3.1	44	4	183	.09	6	.7	.5	34	SF5 F
		12	619	26.25	19	21.99	155	.12	7.35	2.5	2.9	34	2	176	.14	6	.6	.8	23	SF5
		12	758	56.70	19	17.70	155	21.53	7.24	1.3	1.5	24	2	123	.14	5	.6	1.1	17	SWR
		12	847	26.28	19	19.42	155	16.20	8.45	2.3	2.5	44	3	96	.11	2	.4	.5	25	SF1
		12	953	.37	19	20.22	155	13.29	6.98	1.3	1.3	26	3	64	.13	4	.5	.8	15	SF2
		12	1846	5.60	19	18.02	155	20.19	7.45	1.7	1.3	29	3	123	.10	3	.4	.9	19	SWR
		12	2033	29.32	19	20.80	155	12.92	9.39	1.8	1.9	37	3	62	.10	3	.4	.6	26	SF2
		12	2346	15.50	19	22.66	155	4.47	7.93	2.2	2.0	32	3	87	.13	3	.5	.6	25	SF5
		13	2 7	29.98	19	20.44	155	8.46	8.23	2.5	2.7	43	4	76	.11	4	.4	.5	27	SF4
		13	249	56.29	19	29.11	155	39.19	4.98	2.4	2.0	34	4	92	.14	6	.5	1.1	19	MLO
		13	259	35.50	19	29.06	155	39.51	6.59	2.2	1.8	21	3	125	.15	6	.7	1.1	12	MLO
		13	336	22.01	19	19.69	155	7.93	7.62	1.4	1.1	25	1	94	.09	4	.5	1.1	18	SF4
		13	417	48.87	19	18.21	155	13.11	6.73	1.4	1.5	29	3	97	.10	2	.5	.9	20	SF2
		13	513	32.04	19	20.75	155	13.02	7.85	2.0	1.9	36	4	62	.12	3	.4	.6	23	SF2
		13	14 2	3.37	19	26.67	155	22.96	9.09	1.8	1.4	34	4	48	.10	4	.4	.7	24	KAO
		13	1441	36.86	19	20.23	155	6.57	8.30	2.1	2.0	36	3	110	.09	5	.4	.6	27	SF4
		13	1558	25.73	19	19.33	155	13.80	8.08	1.3	1.1	28	2	71	.09	4	.5	.8	17	SF2
		13	1612	55.32	19	21.83	155	1.14	6.86	2.3	2.0	38	3	163	.13	5	.5	.7	40	SF5
		13	18 8	31.66	19	21.63	155	48.09	11.69	2.5	1.8	25	1	105	.14	13	.7	.5	17	KOH
		13	2125	44.25	19	22.09	155	5.09	7.08	1.5	1.3	31	3	74	.17	3	.5	.8	23	SF5
		14	217	30.70	19	32.35	155	37.81	9.01	2.5	1.8	39	3	85	.15	7	.5	.7	27	MLO
		14	333	15.74	19	18.92	155	15.74	6.76	2.0	1.6	42	4	100	.13	4	.4	.7	32	SF1
		14	649	41.95	19	19.81	155	11.36	10.09	3.0	3.1	44	4	89	.08	5	.4	.3	32	SF3
		14	831	39.05	19	19.62	155	10.55	6.96	2.8	3.1	29	1	95	.11	5	.5	.7	21	SF3
		14	917	32.65	19	11.00	155	36.26	9.88	3.6	3.4	42	1	96	.19	7	.7	.7	36	LSW F
		14	1037	8.83	19	17.99	155	24.32	8.53	1.8	1.7	30	2	80	.13	5	.4	.7	20	SWR
		14	13 5	19.92	19	10.77	155	8.96	36.15	2.6	2.2	44	1	203	.11	12	1.0	1.3	41	DEP
		14	1349	36.73	19	18.61	155	15.55	6.54	1.0	1.6	22	0	104	.10	4	.5	1.1	18	SF1

HVO EARTHQUAKE SUMMARY LIST

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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
1982	SEP	14	1350	22.47	19 42.12	155 1.79	1.27	2.3	2.4	11	0	285	.15	22	5.6	31.4	8	HIL B*
		14	1453	19.47	19 17.70	155 20.63	5.82	1.4	1.1	19	2	129	.10	4	.5	1.3	11	SWR
		14	1630	30.55	19 18.52	155 20.81	7.08	1.6	1.3	26	3	112	.10	4	.4	1.1	19	SWR
		14	1634	49.36	19 18.62	155 20.77	9.03	2.3	2.5	42	3	109	.12	4	.4	.6	30	SWR
		14	1650	26.34	19 20.78	155 11.48	8.50	2.0	1.8	32	3	72	.11	4	.4	.7	22	SF3
		14	2022	47.51	19 20.26	155 8.24	7.77	1.3	1.1	27	3	81	.10	4	.5	.8	15	SF4
		15	110	50.26	19 20.48	155 9.50	8.60	1.8	1.7	26	1	74	.06	3	.5	.8	20	SF3
		15	348	57.07	19 19.51	155 7.91	7.86	2.0	2.2	32	2	98	.08	4	.5	.7	23	SF4
		15	1618	44.56	19 19.69	155 9.08	7.45	1.8	1.3	33	4	83	.09	5	.4	.7	18	SF4
		15	2032	11.01	19 19.73	155 8.62	8.03	2.2	2.1	40	4	78	.10	5	.4	.6	25	SF4
		15	21	8 49.58	19 17.79	155 22.79	3.21	.7	.8	16	2	112	.06	5	.4	.9	10	SWR
		15	2229	20.95	19 14.89	155 22.98	6.55	1.2	1.2	22	3	188	.08	2	.6	1.2	18	SWR
		15	2244	8.17	19 15.15	155 22.95	6.81	1.1	1.4	20	2	165	.11	2	.6	1.4	13	SWR
		16	0	4 30.35	19 15.75	155 23.05	3.79	.9	1.1	17	1	152	.08	3	.5	1.2	10	SWR
		16	0	5 14.52	19 15.33	155 22.95	6.46	1.2	1.2	18	1	169	.08	3	.7	1.5	13	SWR
		16	028	2.97	19 15.05	155 22.84	6.98	1.5	1.4	21	3	185	.09	2	.6	1.2	15	SWR
		16	211	17.52	19 19.13	155 15.56	9.17	2.3	2.1	42	4	93	.11	4	.4	.5	28	SF1
		16	453	19.88	19 15.94	155 24.99	9.87	1.2	1.3	18	2	111	.10	3	.5	.7	14	SWR
		16	9	5 16.72	19 20.40	155 10.56	8.52	1.8	1.4	31	5	79	.08	3	.4	.6	22	SF3
		16	913	28.40	19 27.55	155 28.39	4.98	2.4	1.7	29	5	92	.09	4	.4	.8	19	MLO
		16	13	7 22.55	19 19.35	155 10.44	8.22	2.2	1.3	31	2	102	.09	5	.4	.9	20	SF3
		16	1313	36.17	19 10.63	155 35.36	9.10	1.4	1.4	23	2	103	.18	9	.7	1.2	14	LSW
		16	1719	3.53	19 21.17	155 15.23	8.80	1.3	1.0	21	2	69	.07	3	.5	.7	15	SF1
		16	1811	32.99	19 21.92	155 2.97	6.58	1.8	1.6	30	3	124	.13	4	.5	.8	18	SF5
		16	1856	4.37	19 18.78	155 13.46	8.49	2.4	2.1	37	3	77	.11	3	.4	.6	26	SF2
		16	1930	4.13	19 27.78	155 38.45	6.17	2.4	1.6	27	4	96	.10	4	.5	.6	17	MLO
		16	1944	13.57	19 21.12	155 24.79	9.41	1.6	1.3	26	3	52	.10	3	.4	.8	21	SWR
		17	759	38.04	19 21.94	155 4.61	7.79	1.9	1.3	28	3	76	.14	4	.5	.7	16	SF5
		17	1332	29.31	19 18.74	155 13.05	9.83	2.8	2.8	43	4	87	.10	3	.4	.3	31	SF2
		17	1514	5.08	19 15.87	155 23.06	1.62	1.9	2.0	33	2	134	.11	8	.4	1.2	26	SWR
		17	2117	17.42	19 15.79	155 27.00	8.05	1.9	1.6	23	2	71	.15	6	.5	1.2	15	LSW
		17	2158	3.65	19 13.60	155 24.84	6.55	2.1	1.5	15	2	149	.09	2	.6	.7	10	SWR
		17	2158	35.04	19 16.26	155 22.68	2.82	1.9	1.8	16	1	130	.09	4	.5	1.2	11	SWR
		17	22	8 6.20	19 19.25	155 13.71	7.42	1.5	1.0	26	3	71	.11	4	.5	.9	16	SF2
		17	2211	50.18	19 15.67	155 22.67	4.93	1.3	1.1	17	0	138	.08	3	.8	2.0	13	SWR
		18	258	33.09	19 29.57	155 39.06	6.68	2.5	2.1	34	3	74	.14	5	.4	.9	26	MLO
		18	8	2 4.42	19 18.77	155 22.84	4.42	.8	1.0	23	3	94	.08	3	.4	.8	13	SWR
		18	8	5 54.54	19 17.83	155 19.76	7.30	1.2	1.3	26	4	126	.08	2	.4	.9	18	SWR
		18	1011	1.13	19 28.83	154 49.96	6.59	1.9	1.3	13	1	244	.13	2	2.1	1.0	6	LER
		18	1656	44.76	19 21.91	155 13.80	26.48	2.3	2.0	40	1	51	.10	2	.7	.9	36	DEP
		18	1827	33.95	19 24.07	155 16.51	2.55	1.7	1.9	22	4	102	.07	0	.3	.2	14	SSC
		18	2235	3.81	19 23.09	155 14.90	3.04	1.2	1.4	21	4	65	.07	2	.3	.3	10	SEC
		18	23	3 5.88	19 22.90	155 14.89	3.18	1.7	1.7	23	4	67	.10	2	.3	.4	15	SEC
		19	221	46.64	19 20.83	155 12.06	9.10	1.8	1.5	32	3	69	.09	4	.4	.7	23	SF3
		19	419	22.62	19 20.95	155 12.99	8.83	2.3	2.4	43	4	60	.12	3	.4	.5	35	SF2
		19	438	7.65	19 20.62	155 12.95	9.10	1.5	1.6	31	2	64	.08	4	.4	.5	20	SF2
		19	715	28.27	19 17.47	155 13.05	8.40	2.6	2.4	41	4	131	.10	1	.5	.6	25	SF2
		19	727	48.92	19 19.80	155 8.72	7.13	1.9	1.8	36	3	76	.10	5	.4	.7	20	SF4

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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
1982	SEP	19	728	3.19	19 20.01	155 8.56	6.13	2.6	2.8	35	5	77	.10	4	.4	.9	20	SF4
		19	732	27.13	19 26.98	155 49.63	7.96	2.1	1.8	25	1	109	.13	9	.6	.9	15	KON
		19	747	28.45	19 16.62	155 12.37	3.82	1.8	1.1	32	2	166	.11	2	.5	.8	22	SF5
		19	752	57.34	19 18.02	155 12.98	6.23	1.6	1.5	25	0	108	.09	2	.5	1.0	24	SF2
		19	1017	46.92	19 17.67	155 12.93	7.19	2.0	2.2	35	4	126	.12	2	.5	.8	27	SF2
		19	13	3 36.86	19 19.91	155 10.78	9.46	2.8	2.9	46	4	89	.10	4	.4	.4	34	SF3
		19	1327	31.57	19 21.28	155 3.18	5.53	1.4	1.1	27	0	109	.13	3	.5	.9	15	SF5
		19	1420	3.32	19 18.21	155 12.83	10.14	2.7	2.9	44	4	139	.12	8	.5	.5	30	SF2
		19	21	3 49.23	19 20.38	155 10.71	7.41	2.0	2.1	35	4	79	.11	3	.5	.8	23	SF3
		19	2336	40.75	19 12.36	155 31.17	9.73	2.2	1.6	28	1	80	.12	5	.5	.8	17	LSW
		20	040	24.86	19 19.81	155 6.88	7.89	1.3	1.3	23	2	115	.08	5	.5	.9	13	SF4
		20	228	17.04	19 20.12	155 7.30	5.54	1.4	1.1	30	2	101	.12	5	.5	1.5	18	SF4
		20	429	25.02	19 17.23	155 22.97	2.70	.8	1.2	19	4	108	.08	6	.4	.9	15	SWR
		20	1037	28.59	19 17.99	155 16.15	5.99	1.6	1.3	28	3	123	.10	4	.4	.9	19	SF1
		20	1237	18.52	19 18.74	155 15.47	6.56	1.1	1.2	24	3	111	.10	4	.5	.9	16	SF1
		20	1352	57.85	19 20.87	155 25.26	9.38	1.4	1.3	29	4	55	.10	4	.4	.8	23	KAO
		20	1614	13.61	19 21.20	155 15.25	8.87	1.5	1.1	29	4	68	.08	3	.4	.6	22	SF1
		20	2048	53.23	19 23.41	155 2.52	8.07	1.3	1.2	24	1	118	.13	4	.6	1.1	13	SF5
		20	2057	46.57	19 21.37	155 14.95	9.09	1.5	1.3	26	4	65	.07	3	.4	.8	18	SF1
		20	22	3 8.30	19 21.22	155 14.89	9.59	1.5	1.3	24	2	66	.09	3	.6	.8	14	SF1
		20	22	5 23.69	19 16.23	155 23.78	4.69	1.8	1.8	30	2	102	.09	4	.4	1.5	18	SWR
		20	2317	50.48	19 17.64	155 12.98	5.62	1.2	1.3	21	2	124	.07	1	.5	1.1	15	SF2
		21	127	24.60	19 16.53	155 23.63	3.25	1.0	1.2	18	2	104	.08	4	.4	1.2	13	SWR
		21	155	54.60	19 20.13	155 7.86	7.64	1.3	1.1	26	2	90	.08	5	.5	1.0	15	SF4
		21	258	6.83	19 24.12	155 25.21	9.21	1.6	1.2	22	2	47	.09	2	.4	.8	14	KAO
		21	559	9.74	19 20.87	155 12.79	6.87	1.8	1.8	39	3	63	.14	3	.4	.7	22	SF2
		21	6	1 10.84	19 11.62	155 35.72	8.34	1.4	1.2	17	1	93	.16	7	.6	1.1	9	LSW
		21	637	14.07	19 16.51	155 22.86	2.77	1.2	1.0	18	2	121	.09	5	.4	.9	10	SWR
		21	1031	44.83	19 22.83	155 3.41	6.84	1.9	1.5	30	2	103	.14	4	.5	.9	15	SF5
		21	1239	59.90	19 21.73	155 25.23	8.79	1.7	1.2	27	4	44	.09	4	.4	.8	18	KAO
		21	1334	13.32	19 16.42	155 22.97	2.47	1.8	1.5	24	1	120	.10	4	.4	1.0	18	SWR
		21	1535	27.83	19 20.21	155 6.84	9.43	3.7	4.0	43	3	107	.10	5	.5	.4	38	SF5
		21	1655	35.24	19 19.17	155 18.92	7.93	1.6	1.8	29	4	95	.09	2	.4	.6	18	SWR
		21	1726	57.21	19 17.67	155 13.16	4.71	1.7	1.1	27	2	112	.08	1	.4	.9	17	SF5
		22	119	33.13	19 19.32	155 18.89	8.15	1.7	1.7	37	6	56	.11	3	.4	.6	26	SWR
		22	2	8 .40	19 16.78	155 15.25	4.85	1.3	1.1	24	2	169	.12	3	.6	1.3	15	SF5
		22	354	23.56	19 20.75	155 12.96	7.10	1.5	1.3	31	4	63	.12	4	.5	.8	24	SF2
		22	4	3 34.27	19 25.58	155 38.42	2.89	2.3	2.0	19	2	191	.10	5	.7	1.2	11	MLO
		22	521	20.58	19 18.73	155 15.57	5.94	1.3	1.1	22	2	112	.09	4	.5	1.3	15	SF1
		22	552	37.88	19 19.96	155 11.30	8.06	1.5	1.3	26	3	86	.08	5	.5	.7	16	SF3
		22	6	9 5.15	19 17.72	155 20.82	6.51	.9	1.1	22	3	127	.09	4	.4	1.3	15	SWR
		22	917	6.05	19 20.65	155 12.87	8.89	1.1	1.5	25	3	64	.08	4	.5	.8	18	SF2
		22	1136	3.00	19 20.11	155 13.35	6.65	1.3	1.1	25	2	65	.11	5	.5	.9	17	SF2
		22	1343	37.32	19 19.21	155 9.12	7.50	1.4	1.1	27	3	109	.07	4	.5	.9	16	SF4
		22	1840	24.48	19 26.95	155 50.12	10.37	2.6	1.5	23	1	110	.15	10	.7	.7	14	KON
		22	2244	55.83	19 20.03	155 10.08	8.05	2.2	2.1	42	3	84	.11	4	.4	.6	29	SF3
		22	2356	5.08	19 19.80	155 13.15	7.11	1.1	1.1	22	2	71	.08	5	.5	.9	17	SF2
		23	555	23.83	19 21.94	155 3.42	7.71	1.6	1.4	30	2	111	.11	4	.5	.8	19	SF2

HVO EARTHQUAKE SUMMARY LIST

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YEAR	MON	DA	HR	MIN	SEC	ORIGIN TIME	LAT N	DEG	MIN	DEG	MIN	DEPTH	AMP	MAG	OUR	MAG	NR	NS	GAP	RMS	MIN	DIS	ERH	ERZ	NO	REMK
1982	SEP	23	6	3	53.81	19 20.50	155	11.75				8.70	2.2	2.1	38	3	74	.12	4	.4	.5	28	SF3			
		23	1021	25.70	19 19.09	155	13.59					6.89	1.3	1.3	27	3	69	.11	4	.5	1.1	17	SF2			
		23	1030	54.90	19 7.43	155	28.46					30.14	2.5	2.3	38	3	229	.08	4	.8	1.1	31	DL8			
		23	1053	3.72	19 19.05	155	11.35					7.51	1.7	1.5	28	2	108	.10	5	.5	.9	24	SF3			
		23	1323	39.96	19 19.69	155	7.16					7.37	1.6	1.3	28	3	112	.10	5	.5	1.0	20	SF4			
		23	1423	37.55	19 23.30	155	24.17					10.98	3.2	3.2	43	2	41	.12	4	.3	.4	37	KAD			
		24	122	30.58	19 20.86	155	5.90					7.77	2.2	2.0	32	2	102	.09	4	.4	.7	23	SF4			
		24	134	29.82	19 19.71	155	16.91					8.36	1.5	1.1	20	2	94	.10	1	.5	.9	14	SF1			
		24	2	7	11.45	19 20.36	155	12.91				8.61	1.4	1.3	21	1	67	.05	4	.5	.7	18	SF2			
		24	426	15.08	19 19.40	155	10.38					8.86	1.6	1.3	27	4	100	.08	5	.5	.8	16	SF3			
		24	1359	8.63	19 19.23	155	11.85					7.25	1.4	1.5	25	1	99	.09	5	.5	1.1	18	SF3			
		24	2055	14.89	19 17.74	155	21.28					8.56	1.6	1.5	27	2	123	.09	5	.4	.9	20	SWR			
		25	822	57.84	19 16.05	155	22.68					3.89	.9	1.1	12	1	154	.04	4	.6	1.6	7	SWR			
		25	837	21.21	19 16.25	155	23.06					4.14	1.0	1.1	13	2	121	.12	4	.5	1.6	11	SWR			
		25	1651	59.05	19 23.90	155	17.02					2.75	.6	.2	6	1	95	.01	1	.7	.4	5	SSC			
		25	1652	4.60	19 23.68	155	17.52					2.09	.5	.5	7	2	142	.10	1	.4	.7	3	SSC			
		25	1652	21.03	19 23.76	155	17.78					3.28	.8	1.0	10	3	141	.08	2	.5	.6	6	SSC			
		25	1653	14.30	19 23.70	155	17.22					2.42	1.5	.9	2	99	.06	1	.4	.5	2	SSC				
		25	1653	33.45	19 24.12	155	17.25					3.47	2.2	.9	20	4	62	.13	1	.4	.3	11	SSC			
		25	1654	6.56	19 23.81	155	17.29					3.50			8	1	126	.10	1	.9	.8	3	SSC			
		25	1655	6.24	19 23.47	155	16.90					2.39	.6	.6	19	3	44	.13	0	.4	.3	11	SSC			
		25	1655	34.43	19 23.43	155	16.61					3.36	2.1	2.5	3	59	.13	1	.3	.4	10	SSC				
		25	1656	32.11	19 23.62	155	16.52					2.91	2.1	2.8	4	50	.14	3	.3	.4	17	SSC				
		25	1657	34.93	19 23.66	155	17.09					3.20	2.6	1.8	21	3	59	.13	1	.4	.4	7	SSC			
		25	1658	21.87	19 23.65	155	17.06					1.01	2.6	2.6	30	1	43	.10	2	.3	.6	18	SSC			
		25	1659	52.36	19 23.33	155	16.78					2.79	2.5	.20	3	45	.10	2	.4	.5	9	SSC				
		25	17	0	59.38	19 23.58	155	17.42				1.95	.3	.7	1	110	.10	3	.5	.8	3	SSC				
		25	17	1	37.10	19 22.10	155	16.12				3.57	.8	.8	1	142	.04	9	.8	3.8	4	SEC				
		25	17	2	15.07	19 23.59	155	17.17				5.47	3.3	3.3	27	0	44	.15	7	.4	2.1	18	INT			
		25	17	5	15.73	19 23.40	155	16.63				1.98	2.5	1.9	14	2	72	.16	2	.4	.8	2	SSC			
		25	17	6	32.92	19 23.18	155	16.90				3.10			11	2	84	.08	0	.4	.3	5	SSC			
		25	17	6	52.53	19 23.71	155	17.13				2.42	2.4	1.8	26	4	63	.14	1	.3	.3	13	SSC			
		25	17	9	5.28	19 23.69	155	17.08				2.58			15	3	62	.07	1	.3	.3	11	SSC			
		25	17	9	23.81	19 23.30	155	16.96				3.23	2.3	1.3	17	4	66	.09	3	.4	.4	9	SSC			
		25	1710	6.36	19 23.06	155	17.14					2.48			17	2	44	.08	1	.3	.4	9	SSC			
		25	1710	13.07	19 23.37	155	17.10					3.28	2.5	2.2	21	3	47	.12	3	.3	.5	16	SSC			
		25	1712	5.91	19 23.13	155	17.08					2.70		1.5	24	5	48	.07	1	.2	.2	19	SSC			
		25	1714	5.68	19 23.43	155	16.82					3.19		1.3	26	6	45	.07	0	.3	.2	19	SSC			
		25	1714	49.24	19 23.38	155	17.12					2.74			21	5	55	.10	0	.3	.3	16	SSC			
		25	1715	40.42	19 23.37	155	17.03					2.95	1.8	1.5	27	5	46	.08	0	.3	.2	20	SSC			
		25	1716	46.09	19 23.66	155	16.72					3.54	1.3	1.1	24	5	42	.09	1	.3	.2	20	SSC			
		25	1717	19.23	19 23.99	155	16.83					1.60	2.1	1.8	19	4	87	.07	0	.2	.2	15	SSC			
		25	1718	11.51	19 23.54	155	16.79					3.52	1.5	1.7	20	3	44	.07	1	.3	.3	17	SSC			
		25	1719	28.33	19 23.65	155	16.86					3.43	1.7	.3	23	5	50	.08	1	.3	.2	18	SSC			
		25	1719	46.84	19 23.86	155	16.01					2.73	1.6		17	4	103	.09	1	.3	.2	13	SEC			
		25	1720	24.36	19 23.24	155	17.15					2.77	1.7	.6	21	6	48	.11	0	.2	.2	17	SSC			
		25	1721	47.18	19 23.43	155	16.74					3.47	2.3	1.5	27	5	45	.10	0	.3	.3	22	SSC			
		25	1722	25.86	19 23.28	155	17.11					2.46	2.3	2.0	34	4	45	.09	0	.2	.2	23	SSC			

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		ORIGIN TIME			LAT N		LON W		DEPTH		AMP		DIR		GAP		RMS	MIN	ERH	ERZ NO	
YEAR	MON	DA	HR	SEC	DEG	MIN	DEG	MIN	KM	MAG	MAG	NR	NS	DEG	SEC	DIS	KM	KM	FM	REMK	
1982	SEP	25	1723	42.13	19	23.47	155	17.01	3.10			21	3	46	.08	0	.3	.2	18	SSC	
		25	1724	2.21	19	23.74	155	16.80	2.12	2.0	1.8	19	3	47	.14	0	.3	.2	15	SSC	
		25	1727	56.01	19	23.59	155	17.31	2.45	1.3		21	6	58	.06	1	.3	.2	16	SSC	
		25	1729	43.62	19	24.08	155	15.68	3.23	2.2	1.3	22	4	114	.07	2	.3	.2	18	SEC	
		25	1730	37.51	19	23.99	155	16.92	3.92	1.4		20	5	78	.09	1	.4	.3	15	SSC	
		25	1731	34.64	19	22.96	155	17.17	2.56	2.2	2.2	29	7	49	.10	1	.2	.2	24	SSC	
		25	1735	29.65	19	24.55	155	16.20	3.27	1.2		12	3	150	.08	1	.5	.3	10	SNC	
		25	1736	.47	19	24.73	155	15.71	2.07			14	5	161	.13	2	.4	.4	9	SNC	
		25	1737	24.76	19	24.25	155	16.17	1.34			11	4	126	.05	1	.2	.3	8	SEC	
		25	1737	58.75	19	24.16	155	16.66	1.76			18	3	131	.13	1	.5	.2	16	SSC	
		25	1738	50.86	19	23.29	155	16.94	3.32	2.5	1.9	28	6	38	.10	0	.3	.2	24	SSC	
		25	1739	48.60	19	23.11	155	16.11	2.20	2.2		11	1	125	.11	1	.6	1.6	7	SEC	
		25	1741	52.12	19	23.83	155	16.50	1.48	2.6	2.0	31	2	47	.12	0	.2	.2	22	SEC	
		25	1742	43.19	19	24.75	155	15.96	1.27	2.5	2.3	18	3	121	.10	2	.3	.3	13	SSC	
		25	1744	14.83	19	24.35	155	15.80	.78	1.6	1.3	21	2	114	.12	2	.3	.4	8	SEC	
		25	1745	40.40	19	23.86	155	16.56	1.17			17	4	89	.09	0	.3	.2	9	SSC	
		25	1746	18.22	19	23.04	155	17.17	3.72	2.8	2.5	14	1	47	.11	10	.4	4.3	8	SSC	
		25	1748	50.37	19	23.86	155	15.92	2.32	2.4	1.6	22	1	76	.13	3	.3	.5	9	SEC	
		25	1750	33.76	19	23.77	155	16.57	1.17	2.5	2.6	28	2	46	.12	0	.3	.2	17	SSC	
		25	1752	23.55	19	23.87	155	16.51	1.26	2.2	2.3	25	4	86	.14	0	.3	.2	16	SSC	
		25	1753	21.29	19	23.45	155	16.67	1.81	2.2	2.3	17	1	102	.14	1	.5	.2	10	SSC	
		25	1754	47.18	19	30.95	155	19.33	4.49		.4	5	0	333	.25	12	54.8	82.5	0	MLC	
		25	1755	41.45	19	24.49	155	16.42	3.16	1.9	1.5	10	1	137	.07	1	.6	.4	3	SEC	
		25	1756	38.40	19	23.60	155	16.48	1.75	2.4	2.6	31	4	49	.13	1	.3	.2	18	SEC	
		25	1759	16.66	19	24.38	155	16.23	1.67	2.1	.9	21	3	113	.11	1	.3	.2	14	SEC	
		25	18	3	16.40	19	24.31	155	15.91	.85	2.4		16	1	78	.13	1	.3	.5	7	SEC
		25	18	5	20.43	19	23.02	155	17.18	2.28	1.6	1.1	22	1	49	.12	1	.3	.4	12	SSC
		25	18	6	5.13	19	23.96	155	16.55	1.45	2.8		19	0	86	.12	0	.3	.2	9	SSC
		25	18	8	3.23	19	23.15	155	17.08	3.01	2.5		22	5	48	.11	1	.3	.3	18	SSC
		25	18	9	57.40	19	24.18	155	16.28	1.76			13	4	117	.07	1	.3	.3	10	SEC
		25	1811	33.36	19	23.86	155	15.46	1.14		1.5	18	4	106	.08	2	.2	.3	15	SEC	
		25	1812	45.99	19	23.17	155	17.08	2.76			24	5	48	.09	0	.3	.2	20	SSC	
		25	1813	12.92	19	23.21	155	17.00	2.33			14	4	75	.04	0	.3	.2	11	SSC	
		25	1813	31.65	19	23.75	155	17.14	1.27		1.1	18	3	67	.13	1	.4	.4	14	SSC	
		25	1814	28.12	19	23.22	155	16.89	2.91	2.1	1.8	29	6	46	.09	0	.2	.2	21	SSC	
		25	1817	.73	19	23.10	155	17.14	2.63	2.1	2.2	28	6	48	.12	1	.3	.2	22	SSC	
		25	1819	3.69	19	24.04	155	15.67	1.73	2.5	2.7	28	5	78	.10	2	.2	.3	24	SEC	
		25	1820	47.55	19	23.58	155	16.79	3.60		1.3	24	4	39	.11	0	.3	.3	19	SSC	
		25	1821	51.86	19	22.70	155	14.74	3.11	2.4	1.3	24	3	63	.12	2	.3	.4	21	SEC	
		25	1822	52.42	19	23.59	155	16.60	1.89		1.9	13	4	122	.09	1	.3	.2	10	SSC	
		25	1824	5.17	19	24.09	155	15.95	.76	2.2	2.3	20	4	111	.10	1	.2	.3	17	SEC	
		25	1825	15.54	19	23.93	155	16.19	1.24	2.6	2.5	21	3	66	.14	1	.2	.2	17	SEC	
		25	1826	43.01	19	23.41	155	16.76	3.53	2.1	2.2	27	6	45	.11	0	.3	.2	20	SSC	
		25	1829	23.87	19	23.13	155	17.06	2.63	1.7	3.1	24	5	41	.09	1	.3	.2	18	SSC	
		25	1831	20.23	19	24.11	155	15.99	1.26			14	4	120	.10	1	.3	.3	11	SEC	
		25	1831	34.19	19	23.88	155	16.57	1.51	1.6	1.5	28	5	49	.12	0	.3	.1	21	SSC	
		25	1833	5.37	19	24.07	155	16.30	3.19	1.5	.3	21	5	100	.10	1	.3	.2	18	SEC	
		25	1833	38.09	19	23.64	155	15.89	1.21	.8		10	3	150	.12	1	.3	.4	7	SEC	

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YEAR	MON	DA	HRMN	SEC	DEG MIN	DEG MIN	DEPTH KM	AMP MAG	DUR MAG	NR	NS	GAP DEG	RMS SEC	MIN DIS	ERH KM	ERZ NO KM FM REMK
1982	SEP	25	1834	41.25	19 24.14	155 16.00	1.86	.8	12	4	122	.09	1	.3	.4	9 SEC
		25	1835	10.65	19 22.99	155 17.09	2.62	1.3	.6	15	3	69	.03	1	.3	.3 12 SSC
		25	1835	42.19	19 24.07	155 16.29	1.49		1.6	18	4	153	.11	1	.4	.2 15 SEC
		25	1836	37.04	19 24.18	155 16.02	1.56		.6	18	4	138	.08	1	.3	.2 11 SEC
		25	1837	6.51	19 23.96	155 16.53	1.43		.6	17	4	95	.13	0	.3	.2 14 SSC
		25	1838	25.85	19 24.50	155 16.00	.77	.9	12	4	150	.13	2	.3	.5	8 SEC
		25	1838	58.80	19 23.38	155 17.27	2.84			24	6	47	.10	1	.3	.2 20 SSC
		25	1838	47.33	19 23.74	155 15.35	.57	3.3	3.5	30	4	79	.13	2	.2	.3 11 SEC
		25	1842	7.17	19 24.57	155 15.93	1.30			15	1	137	.12	2	.5	.3 6 SNC
		25	1842	33.52	19 23.78	155 15.52	1.22		.6	16	2	131	.10	2	.3	.4 10 SEC
		25	1843	2.86	19 23.95	155 15.99	.94	2.7	2.9	35	4	45	.14	1	.2	.3 20 SEC
		25	1845	4.07	19 22.95	155 16.94	2.84		1.1	21	1	48	.09	1	.3	.3 12 SSC
		25	1846	11.13	19 24.27	155 15.43	1.89	1.9	1.5	22	3	79	.10	2	.3	.4 12 SEC
		25	1848	30.47	19 23.67	155 15.52	3.32	1.9	.6	24	3	74	.08	2	.3	.3 16 SEC
		25	1849	39.31	19 23.84	155 15.29	1.69		1.5	9	1	103	.06	2	.4	.6 6 SEC
		25	1850	34.48	19 24.25	155 16.31	2.99	1.4		13	2	122	.16	2	.5	.6 6 SEC
		25	1853	14.02	19 24.09	155 16.01	1.87		.6	17	3	118	.10	2	.3	.4 12 SEC
		25	1853	58.97	19 23.78	155 15.63	3.24	1.5		24	5	101	.09	2	.3	.3 13 SEC
		25	1855	28.97	19 23.49	155 15.32	4.81	2.3	2.1	26	3	52	.13	2	.4	.8 17 SEC
		25	1857	25.59	19 23.18	155 15.34	3.05			7	1	114	.27	2	1.1	1.0 5 SEC
		25	1857	42.16	19 23.06	155 15.03	1.87		1.6	12	0	71	.10	2	.3	.3 6 SEC
		25	1859	24.76	19 24.09	155 15.93	1.10	2.9	3.1	35	2	43	.13	1	.2	.3 18 SEC
		25	19 3	55.73	19 22.62	155 24.79	8.77	1.4	1.3	27	1	41	.12	5	.4	.8 20 KAO
		25	19 5	38.67	19 23.90	155 15.55	1.05			7	1	148	.02	3	.3	.6 4 SEC
		25	19 7	3.00	19 24.16	155 15.79	1.36			10	2	126	.09	3	.7	.9 5 SEC
		25	19 9	39.42	19 22.79	155 25.11	9.25		.9	11	1	81	.08	4	.8	1.2 9 KAO
		25	1910	36.81	19 24.20	155 15.89	1.51	2.2	2.3	20	3	123	.08	2	.3	.4 13 SEC
		25	1912	56.77	19 23.71	155 15.64	.82			9	1	99	.06	2	.3	.6 5 SEC
		25	1913	31.92	19 24.71	155 15.29	2.43	1.4	.3	14	2	123	.08	2	.5	.4 5 SNC
		25	1915	58.29	19 23.86	155 15.53	1.86	1.9	1.8	14	1	104	.12	3	.4	.5 8 SEC
		25	1918	41.41	19 24.10	155 15.82	1.80		1.3	11	2	121	.06	3	.3	.5 5 SEC
		25	1921	52.18	19 24.29	155 15.60	1.89	2.2	2.2	28	4	45	.09	2	.3	.3 20 SEC
		25	1924	34.19	19 24.22	155 15.69	3.49			17	2	122	.10	2	.4	.4 9 SEC
		25	1925	7.59	19 24.18	155 15.56	2.45			13	1	120	.07	2	.4	.3 3 SEC
		25	1930	41.38	19 23.94	155 15.37	1.89			8	0	111	.08	2	.4	.6 6 SEC
		25	1935	23.59	19 24.03	155 15.55	1.60	2.3	2.3	29	4	43	.11	2	.3	.4 16 SEC
		25	1937	24.84	19 23.95	155 15.17	1.67		.9	18	3	108	.09	2	.2	.3 16 SEC
		25	1938	41.32	19 24.05	155 15.75	1.17		1.4	18	3	114	.12	2	.3	.3 14 SEC
		25	1944	25.76	19 24.22	155 15.63	1.58	2.3	1.5	26	5	79	.13	2	.3	.3 21 SEC
		25	1946	4.67	19 24.09	155 15.68	2.18	2.2	2.4	28	4	78	.10	2	.2	.2 25 SEC
		25	1948	30.24	19 23.81	155 15.50	4.00		.6	13	4	104	.12	3	.5	.7 11 SEC
		25	1956	4.22	19 24.20	155 15.58	1.83	2.2	1.6	23	5	79	.12	2	.3	.3 20 SEC
		25	1959	39.65	19 23.10	155 14.86	3.19			12	4	110	.10	2	.3	.5 9 SEC
		25	20 0	36.06	19 23.04	155 14.56	1.83		.8	15	3	117	.13	3	.3	.4 11 SEC
		25	20 1	10.98	19 24.15	155 15.54	1.88		.3	17	3	117	.08	2	.2	.3 13 SEC
		25	20 1	50.85	19 24.18	155 15.84	3.26	2.1	1.8	34	7	78	.08	1	.3	.2 26 SEC
		25	20 4	.56	19 23.54	155 17.22	2.91		.6	22	5	50	.12	1	.4	.2 19 SSC
		25	20 8	59.46	19 24.23	155 15.36	1.92			10	4	131	.07	2	.3	.5 8 SEC

HVO EARTHQUAKE SUMMARY LIST

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YEAR	MON	DA	HRMN	SEC	LAT N DEG MIN	LONG W DEG MIN	DEPTH KM	AMP MAG	DUR MAG	NR	NS	GAP DEG	RMS SEC	MIN DIS	ERH KM	ERZ NO KM FM	REMK
1982	SEP	25	2012	36.52	19 25.56	155 14.47	3.59			10	3	260	.11	2	1.8	.6 9	SNC
		25	2014	8.60	19 24.07	155 15.50	1.60	2.5	2.4	28	4	78	.12	2	.3	.3 21	SEC
		25	2024	.22	19 23.21	155 17.17	2.16			12	2	60	.07	3	.4	.5 8	SSC
		25	2024	33.86	19 23.70	155 15.43	1.57	.7		11	4	97	.07	3	.2	.5 9	SEC
		25	2025	6.75	19 23.83	155 15.50	2.02	2.1	1.1	23	6	104	.07	2	.2	.3 20	SEC
		25	2026	47.21	19 24.10	155 16.09	1.81	2.2	2.5	26	4	75	.10	1	.2	.2 23	SEC
		25	2031	32.61	19 6.97	155 28.34	29.92	1.9	.8	22	3	180	.07	5	1.0	1.2 20	DLS
		25	2031	59.91	19 24.32	155 15.52	1.78	1.9	.9	21	3	114	.08	2	.3	.3 17	SEC
		25	2034	4.84	19 24.27	155 15.73	1.48	2.1	1.1	22	4	114	.07	3	.2	.3 15	SEC
		25	2040	1.45	19 23.75	155 15.20	3.14			19	6	92	.10	2	.3	.3 15	SEC
		25	2040	25.58	19 24.15	155 15.50	2.62	2.3	2.2	21	3	113	.10	2	.3	.2 18	SEC
		25	2044	30.10	19 23.75	155 15.04	2.16			17	2	88	.16	2	.3	.5 15	SEC
		25	2048	3.62	19 23.81	155 15.28	1.52		.8	17	6	102	.12	2	.3	.4 14	SEC
		25	2052	45.91	19 24.02	155 15.40	1.52	2.1	1.5	19	2	78	.09	2	.2	.4 14	SEC
		25	2057	17.32	19 23.55	155 15.03	1.73			10	4	98	.12	2	.3	.6 7	SEC
		25	21 0	23.10	19 23.25	155 14.57	1.44		1.6	13	3	93	.10	3	.3	.4 11	SEC
		25	21 3	21.70	19 22.25	155 14.40	1.62		.8	14	4	132	.18	2	.4	.5 11	SEC
		25	21 4	7.99	19 24.14	155 15.45	1.94	2.3	2.2	24	4	78	.08	2	.2	.3 18	SEC
		25	21 6	29.95	19 24.35	155 15.33	1.53	2.0	.9	16	3	114	.07	2	.3	.3 8	SEC
		25	2131	8.92	19 23.72	155 15.30	3.18	1.9	1.3	18	3	136	.14	3	.4	.5 6	SEC
		25	2134	39.22	19 23.79	155 15.26	2.29		.6	11	2	99	.14	2	.4	.6 7	SEC
		25	2136	59.00	19 24.22	155 15.16	2.43		.6	15	1	112	.12	2	.4	.4 6	SEC
		25	2139	14.74	19 23.87	155 15.85	2.46		.3	15	2	106	.12	3	.4	.4 8	SEC
		25	2144	21.53	19 23.88	155 15.19	2.73			9	3	104	.05	2	.3	.6 4	SEC
		25	22 8	54.66	19 24.13	155 15.51	1.55	2.0		19	1	78	.12	2	.3	.4 6	SEC
		25	2218	29.15	19 23.05	155 14.79	2.87	2.1	1.1	20	1	66	.10	2	.3	.4 17	SEC
		25	2228	28.87	19 24.47	155 15.51	1.90	2.2	1.3	19	3	119	.09	2	.3	.3 12	SEC
		25	2230	11.78	19 24.05	155 15.79	3.51			13	3	115	.09	3	.4	.5 3	SEC
		25	2232	20.42	19 23.93	155 15.31	1.57			9	1	105	.09	2	.3	.4 3	SEC
		25	2242	8.60	19 24.05	155 15.40	1.30	1.6	.9	17	2	110	.07	2	.3	.4 7	SEC
		25	2256	46.39	19 23.58	155 .94	5.66		1.5	14	2	192	.14	5	1.1	1.5 7	SF5
		25	2258	7.65	19 23.66	155 15.34	1.32			11	2	94	.28	3	.6	.8 4	SEC
		25	2258	46.24	19 23.54	155 16.11	1.86	1.8	1.8	16	4	87	.07	2	.3	.3 5	SEC
		25	2333	43.11	19 24.91	155 18.42	8.38			7	1	195	.16	3	1.7	1.8 3	INT
		25	2344	29.96	19 24.01	155 15.89	2.80			8	2	114	.06	3	.4	.7 5	SEC
		25	2355	18.45	19 23.86	155 16.17	.04	1.5	.8	13	3	100	.26	2	.4	.9 5	SEC
		25	2356	8.46	19 24.43	155 16.01	3.37			11	2	144	.13	2	.5	.6 4	SEC
		26	012	27.95	19 24.63	155 16.10	2.82	1.7	1.5	14	3	140	.13	3	.4	.5 7	SNC
		26	022	28.62	19 23.10	155 14.86	2.99	1.8	1.7	23	3	65	.09	2	.3	.4 12	SEC
		26	031	17.47	19 23.84	155 15.50	1.94	1.3	1.0	12	4	106	.09	3	.3	.4 9	SEC
		26	141	49.94	19 20.40	155 12.18	6.14	1.5	1.0	13	2	75	.14	4	.6	1.5 10	SF3
		26	158	5.15	19 23.78	155 15.75	2.71	1.6	1.4	22	5	102	.12	2	.3	.3 19	SEC
		26	2 31	9.92	19 24.25	155 15.42	1.99	1.5	1.6	12	4	133	.08	2	.3	.4 9	SEC
		26	254	58.80	19 24.12	155 15.73	2.42		.5	12	5	123	.06	2	.3	.4 9	SEC
		26	3 9	15.08	19 19.35	155 8.81	7.72		.6	15	2	85	.10	4	.7	1.6 14	SF4
		26	321	55.08	19 23.22	155 17.06	2.93		.2	15	4	77	.07	2	.3	.4 12	SSC
		26	425	57.76	19 23.99	155 15.92	2.88	1.3	1.3	21	5	112	.08	1	.3	.2 17	SEC
		26	6 3	48.60	19 17.48	155 20.56	7.97		1.3	9	2	153	.04	4	.7	1.4 7	SWR

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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	KM	FM	REMK			
1982	SEP	26	6	9	51.08	19 19.93	155 13.99	6.94	2.2	2.4	41	4	62	.14	5	.4	.7	36	SF2				
		26	622	57.09	19 23.95	155 15.64	2.77		1.0	15	5	112	.08	2	.3	.4	11	SEC					
		26	624	9.07	19 23.96	155 15.61	3.33	1.0	.8	13	5	113	.05	2	.3	.5	9	SEC					
		26	626	40.10	19 24.17	155 15.83	3.14	.9	.9	13	4	126	.05	1	.4	.4	9	SEC					
		26	631	35.01	19 24.17	155 15.85	2.90	1.0	.7	11	4	125	.06	1	.3	.5	7	SEC					
		26	639	25.68	19 23.18	155 17.13	2.60	1.4	1.4	19	4	62	.07	2	.3	.4	15	SSC					
		26	652	6.81	19 24.21	155 16.25	3.26	.7	.6	9	3	121	.04	1	.4	.4	7	SEC					
		26	658	56.60	19 23.40	155 17.22	2.54	1.0	.8	11	3	90	.07	1	.3	.5	8	SSC					
		26	7	2	33.93	19 23.46	155 16.94	3.09	.9	.6	16	5	59	.10	1	.3	.4	10	SSC				
		26	712	5.34	19 23.75	155 16.69	1.32	1.3	1.2	13	2	52	.07	0	.2	.2	10	SSC					
		26	722	36.53	19 22.99	155 17.19	2.78	1.1	.6	13	4	78	.04	2	.3	.5	10	SSC					
		26	758	26.07	19 23.81	155 15.49	2.78	1.5	1.8	13	2	101	.07	3	.3	.4	11	SEC					
		26	8	4	13.76	19 23.66	155 15.43	1.95	1.4		12	2	94	.09	3	.3	.5	10	SEC				
		26	8	4	49.46	19 23.88	155 15.77	1.09		1.0	7	1	109	.08	3	.3	.7	7	SEC				
		26	815	28.36	19 24.18	155 15.85	3.16	1.4	1.7	22	5	121	.07	1	.3	.2	18	SEC					
		26	819	6.13	19 24.07	155 16.15	2.78	.5		9	3	113	.03	1	.4	.4	7	SEC					
		26	827	35.32	19 23.17	155 14.78	3.13	1.0		10	4	110	.05	2	.4	.7	7	SEC					
		26	844	38.83	19 23.88	155 15.19	2.85	1.1	1.4	14	5	104	.05	2	.3	.4	11	SEC					
		26	850	34.02	19 23.95	155 16.05	2.90	.8		10	3	108	.06	1	.4	.4	8	SEC					
		26	853	56.42	19 23.89	155 15.56	2.56	.7		10	4	138	.12	2	.4	.6	8	SEC					
		26	854	37.97	19 23.20	155 14.86	3.43	1.5	1.6	15	4	68	.08	2	.3	.4	10	SEC					
		26	857	29.09	19 24.05	155 15.88	1.98	.5	.2	11	3	117	.06	1	.3	.4	7	SEC					
		26	857	34.67	19 23.95	155 15.68	1.95	.8		9	3	128	.13	2	.3	.5	8	SEC					
		26	857	54.66	19 24.19	155 15.77	2.14	.6	.8	10	4	128	.07	2	.3	.5	7	SEC					
		26	858	28.82	19 24.12	155 15.82	2.39	.9	1.4	10	3	122	.08	1	.4	.5	8	SEC					
		26	9	0	33.02	19 24.15	155 15.78	3.33	1.0		11	4	124	.05	2	.4	.5	9	SEC				
		26	9	0	50.43	19 24.15	155 15.73	3.06	.9		11	4	125	.05	2	.3	.4	8	SEC				
		26	9	2	17.25	19 24.15	155 15.68	3.14	1.1	1.0	12	5	126	.03	2	.3	.4	9	SEC				
		26	9	3	.10	19 24.06	155 15.70	2.98	1.0		15	4	119	.06	2	.3	.4	9	SEC				
		26	9	3	32.61	19 23.95	155 15.64	3.07	1.3		17	5	109	.06	2	.3	.3	8	SEC				
		26	9	4	58.94	19 24.20	155 15.65	3.26	1.0		16	3	121	.12	2	.4	.4	7	SEC				
		26	9	5	43.49	19 23.98	155 15.76	2.59	.9		14	3	112	.06	2	.3	.3	6	SEC				
		26	9	6	4.41	19 24.02	155 15.82	2.40			8	2	118	.05	1	.4	.5	6	SEC				
		26	9	7	6.85	19 24.16	155 15.96	3.86	.8		7	2	123	.06	2	.5	.9	3	SEC				
		26	9	7	28.84	19 24.06	155 15.72	2.58		.5	7	2	121	.03	3	.3	.6	4	SEC				
		26	9	8	25.95	19 24.11	155 15.85	2.97	2.2	2.6	33	5	77	.09	1	.3	.3	18	SEC				
		26	910	25.77	19 24.11	155 15.80	2.15	.8	1.2	6	1	123	.08	3	.5	.9	3	SEC					
		26	911	48.54	19 24.06	155 15.67	3.38	.8	.2	9	3	124	.04	2	.5	.6	6	SEC					
		26	913	19.73	19 24.24	155 15.97	3.43	.9		14	4	126	.06	1	.4	.3	9	SEC					
		26	913	30.17	19 24.10	155 15.68	2.73	.9	1.4	11	4	122	.07	2	.3	.5	7	SEC					
		26	916	10.80	19 24.07	155 15.67	3.02	1.3		20	4	115	.04	2	.3	.2	10	SEC					
		26	916	34.24	19 24.10	155 15.53	3.37	1.2	1.9	14	3	123	.08	2	.3	.4	5	SEC					
		26	917	33.50	19 23.93	155 15.80	2.96	1.7	2.2	26	4	84	.09	1	.3	.2	17	SEC					
		26	919	14.46	19 24.12	155 15.59	2.81	1.0	1.4	14	5	124	.05	2	.3	.4	7	SEC					
		26	920	24.01	19 24.16	155 16.01	3.30	.9	1.4	16	5	121	.05	1	.3	.4	10	SEC					
		26	925	27.67	19 23.99	155 15.98	3.13	.7	.2	8	2	112	.04	1	.4	.6	3	SEC					
		26	928	55.46	19 24.03	155 16.01	3.04	.9	1.4	17	4	113	.08	1	.3	.3	12	SEC					
		26	931	14.80	19 24.08	155 15.93	3.06	.7	.2	10	3	118	.03	1	.3	.5	7	SEC					

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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	KM	FM	REMK		
1982	SEP	26	931	57.55	19	24.10	155	15.99	3.07		.5	11	4	119	.03	1	.4	.4	8	SEC		
		26	934	21.42	19	24.08	155	16.11	3.87	.8	.2	9	4	115	.03	1	.5	1.0	6	SEC		
		26	936	5.09	19	22.44	155	13.94	2.34	1.2	1.2	11	4	140	.06	2	.3	.4	6	SEC		
		26	937	40.62	19	23.99	155	16.04	2.95	.8	.5	13	5	111	.06	1	.3	.3	10	SEC		
		26	937	58.45	19	24.18	155	16.13	2.68	.8		10	3	121	.05	1	.4	.4	8	SEC		
		26	938	21.71	19	24.14	155	16.16	3.11	.9	1.0	13	4	118	.04	1	.4	.3	10	SEC		
		26	939	11.24	19	24.24	155	16.08	2.72	.7	.5	10	4	127	.05	1	.3	.4	8	SEC		
		26	939	32.48	19	24.12	155	16.07	3.42	1.0	1.2	14	5	119	.06	1	.4	.4	11	SEC		
		26	940	4.28	19	24.26	155	15.97	2.68	.6	.5	10	3	130	.04	1	.4	.4	7	SEC		
		26	940	58.60	19	24.13	155	16.08	2.87	.7	.2	11	4	119	.03	1	.3	.4	9	SEC		
		26	941	15.26	19	24.31	155	16.14	2.87	.4	.2	10	4	131	.10	1	.4	.5	8	SEC		
		26	941	43.83	19	24.07	155	16.07	3.32	.9	.2	13	5	115	.07	1	.4	.4	10	SEC		
		26	942	18.33	19	24.16	155	16.26	3.05	.9	.5	11	4	117	.05	1	.3	.4	9	SEC		
		26	942	29.16	19	24.10	155	16.05	3.57	1.0	1.0	14	6	117	.08	1	.3	.4	10	SEC		
		26	943	48.42	19	24.15	155	16.17	3.17	.5	.2	8	2	119	.09	1	.5	.6	6	SEC		
		26	944	10.49	19	24.32	155	15.84	3.34	.9	.2	10	4	138	.09	2	.4	.5	8	SEC		
		26	944	34.72	19	24.31	155	16.00	2.93	.5	.2	11	4	135	.04	1	.3	.4	9	SEC		
		26	945	47.37	19	24.21	155	16.19	2.84	.8	1.0	14	6	122	.07	1	.3	.3	9	SEC		
		26	946	36.32	19	23.14	155	14.87	3.41	2.1	2.3	24	6	66	.05	2	.3	.3	20	SEC		
		26	948	8.41	19	23.87	155	15.66	2.71	.9	.2	10	3	107	.07	2	.4	.5	8	SEC		
		26	949	31.81	19	24.15	155	15.89	2.95	1.0	1.4	16	6	122	.09	1	.3	.4	11	SEC		
		26	953	3.50	19	23.83	155	15.22	2.95	1.0	1.2	14	5	102	.07	2	.3	.4	10	SEC		
		26	957	42.33	19	24.16	155	16.20	2.78	.8	.5	11	4	118	.06	1	.3	.4	9	SEC		
		26	958	15.05	19	24.39	155	16.12	2.28	.4	.2	10	4	138	.14	1	.4	.4	8	SEC		
		26	958	21.43	19	23.85	155	15.19	2.75	1.1	1.0	13	5	102	.05	2	.3	.5	10	SEC		
		26	959	45.18	19	23.41	155	15.05	3.31	1.0	.5	12	5	101	.08	2	.4	.6	9	SEC		
		26	10	0	48.65	19	23.86	155	15.50	2.28	.9	.8	14	5	106	.10	2	.3	.4	9	SEC	
		26	10	3	36.40	19	23.68	155	15.19	3.25	1.6	1.9	21	6	91	.05	2	.2	.3	16	SEC	
		26	10	5	51.68	19	23.71	155	15.17	2.29	.9	.8	12	5	94	.06	2	.3	.5	8	SEC	
		26	10	6	28.63	19	24.13	155	15.73	2.93			.5	12	5	124	.02	2	.3	.4	9	SEC
		26	10	6	51.35	19	24.02	155	15.50	2.59	.9	1.4	14	4	117	.07	2	.3	.4	11	SEC	
		26	1011	41.91	19	23.97	155	15.31	2.51	.8	.2	12	5	111	.07	2	.3	.5	9	SEC		
		26	1012	23.12	19	24.19	155	16.23	3.36	.9	.6	11	4	119	.07	1	.4	.5	9	SEC		
		26	1013	56.75	19	24.05	155	15.86	3.55	.8	.6	11	4	117	.06	1	.4	.5	9	SEC		
		26	1022	35.66	19	23.74	155	15.25	3.92	1.0	.6	12	5	97	.04	2	.4	.7	8	SEC		
		26	1022	46.85	19	24.21	155	15.81	2.81	.9	.5	10	4	129	.07	2	.3	.5	8	SEC		
		26	1024	5.26	19	23.65	155	15.30	3.08	1.7	1.7	22	5	91	.11	2	.3	.3	17	SEC		
		26	1027	50.97	19	23.75	155	15.22	2.98	1.4	1.6	16	6	95	.07	2	.3	.4	12	SEC		
		26	1033	42.32	19	24.19	155	15.96	3.13	.8	1.2	16	6	123	.07	1	.3	.3	12	SEC		
		26	1035	29.66	19	23.30	155	15.03	2.64	.9	1.0	13	5	106	.06	2	.3	.5	10	SEC		
		26	1046	52.36	19	24.19	155	15.79	2.99	.8	.2	10	4	128	.04	2	.3	.5	8	SEC		
		26	1134	55.14	19	23.78	155	15.41	1.75	1.2	1.7	15	6	100	.06	2	.2	.4	10	SEC		
		26	1139	.37	19	23.85	155	15.36	1.27	.6	1.2	11	4	104	.05	2	.2	.5	9	SEC		
		26	1143	31.26	19	23.91	155	16.80	2.13	.6	.5	11	4	84	.05	0	.3	.3	9	SEC		
		26	1158	36.17	19	24.16	155	16.23	3.44	.8	1.0	11	3	117	.06	1	.5	.4	9	SEC		
		26	12	0	39.80	19	24.05	155	15.55	2.56	1.2	1.4	15	5	115	.10	2	.3	.3	11	SEC	
		26	1229	17.03	19	24.02	155	16.19	2.81	1.1	1.4	14	4	109	.07	1	.3	.3	8	SEC		
		26	1232	21.55	19	23.91	155	15.12	1.76	1.7	2.6	17	2	98	.06	2	.2	.3	10	SEC		

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		ORIGIN TIME			LAT N		LON W		DEPTH		AMP		DUR		SAP RMS		MIN ERM		ERZ NO	
YEAR	MON	DA	HRMN	SEC	DEG	MIN	DEG	MIN	KM	MAG	MAG	NR	NS	DEG	SEC	DIS	KM	PM	FM	REMK
1982	SEP	26	1317	26.10	19	16.74	155	14.98	7.05	1.4	1.1	21	1	104	.08	4	.5	1.0	16	SF1
		26	1324	37.88	19	23.50	155	16.97	2.66	.9	.5	8	2	88	.05	1	.4	.6	7	SSC
		26	1351	15.31	19	25.52	155	12.10	2.79	.8	.5	1	295	.12	4	3.0	1.3	2	SER	
		26	1447	27.15	19	23.32	155	16.98	2.67	2.2	2.7	32	5	39	.11	0	.3	.2	21	SSC
		26	1448	36.77	19	23.47	155	16.95	2.57	.8	.5	9	3	102	.04	0	.4	.3	7	SSC
		26	1519	39.65	19	5.69	156	12.27	33.42	2.3	2.2	34	3	279	.10	40	1.7	1.5	29	KON
		26	1534	27.73	19	23.35	155	16.83	2.97	1.8	2.1	26	5	41	.10	0	.3	.3	17	SSC
		26	1537	56.30	19	23.14	155	14.93	3.21	1.1	1.2	14	4	108	.09	2	.4	.5	8	SEC
		26	1617	4.50	19	23.76	155	15.13	2.47	.8	.8	12	4	96	.04	2	.3	.6	7	SEC
		26	1634	24.09	19	23.11	155	14.39	1.17	1.3	2.0	18	4	60	.11	2	.3	.4	10	SEC
		26	1710	29.92	19	23.66	155	16.93	3.08	.9	1.2	15	4	70	.04	1	.3	.3	9	SSC
		26	1717	56.76	19	23.00	155	17.07	2.29	1.0	1.2	18	6	127	.08	1	.3	.2	11	SSC
		26	1941	8.05	19	16.15	155	22.26	6.32	1.4	1.5	22	1	156	.07	5	.5	1.5	16	SWR
		26	2031	58.95	19	23.66	155	15.25	2.40	1.4	1.8	17	4	91	.10	2	.3	.4	10	SEC
		26	2138	13.63	19	24.13	155	15.81	3.19	.8	.5	11	4	123	.04	1	.4	.7	7	SEC
		26	2230	29.94	19	23.85	155	15.11	2.84	.8	.5	10	3	100	.05	2	.4	.7	9	SEC
		26	2222	57.19	19	22.79	155	17.17	2.40	1.6	2.0	24	4	88	.10	1	.3	.3	15	SSC
		26	2233	6.59	19	18.91	155	22.67	4.20	.8	1.1	21	2	93	.09	3	.4	.8	17	SWR
		26	2336	55.05	19	18.76	155	22.74	4.27	.8	.8	16	2	114	.06	3	.6	.8	10	SWR
		27	0226	5.78	19	23.89	155	15.86	2.96	1.9	2.2	26	4	82	.09	1	.3	.2	20	SEC
	27	0513	32.04	19	23.30	155	17.02	2.53	1.2	1.0	16	4	66	.12	0	.4	.3	11	SSC	
	27	1217	17.20	19	24.01	155	16.08	3.24	1.2	1.2	15	4	112	.07	1	.3	.4	10	SEC	
	27	1454	54.50	19	23.23	155	14.89	2.48	.5	.5	8	2	120	.05	2	.4	1.3	2	SEC	
	27	1314	40.86	19	22.93	155	17.26	2.00	1.8	2.1	23	6	50	.10	1	.2	.3	15	SSC	
	27	2338	1.26	19	23.49	155	17.12	2.51	1.1	.6	10	2	108	.09	0	.4	.4	7	SSC	
	27	338	16.32	19	26.50	155	27.36	8.43	1.6	.9	26	2	46	.12	5	.4	1.0	17	KA0	
	27	420	50.46	19	23.67	155	15.18	2.38	1.1	1.0	13	4	92	.08	2	.3	.5	10	SEC	
	27	521	59.05	19	23.64	155	15.22	2.95	1.4	1.4	18	4	89	.06	2	.3	.3	8	SEC	
	27	535	45.75	19	23.74	155	15.11	2.85	1.0	.11	4	94	.03	2	.4	.8	7	SEC		
	27	548	8.19	19	23.28	155	15.03	3.09	1.2	1.4	17	4	79	.07	2	.4	.4	9	SEC	
	27	627	46.65	19	23.19	155	14.90	3.09	1.2	1.6	12	3	83	.03	2	.4	.4	6	SEC	
	27	649	44.03	19	18.30	155	15.96	2.40	1.7	2.0	29	3	114	.14	5	.4	.9	22	SSC	
	27	710	27.30	19	19.74	155	13.51	5.55	1.2	1.1	19	2	71	.12	5	.6	1.8	15	SF2	
	27	713	41.40	19	16.58	155	22.34	5.47	1.2	1.1	19	2	130	.10	5	.5	2.0	17	SWR	
	27	716	50.56	19	16.86	155	22.26	5.20	1.6	1.6	24	1	126	.11	6	.5	2.2	21	SWR	
	27	723	49.98	19	19.22	155	13.98	6.87	1.3	1.3	24	2	76	.11	4	.5	1.0	18	SF2	
	27	810	53.95	19	16.37	155	22.26	6.20	2.3	2.4	41	5	133	.12	5	.4	.8	31	SWR	
	27	812	13.44	19	23.34	155	15.03	3.06	1.1	1.0	15	5	85	.07	2	.3	.5	11	SEC	
	27	818	.09	19	16.13	155	21.92	7.40	1.3	1.8	21	1	162	.08	5	.6	1.3	18	SWR	
	27	837	.49	19	16.63	155	23.04	6.47	1.1	.13	1	116	.08	5	.5	1.8	8	SWR		
	27	937	44.07	19	20.94	155	6.88	5.64	1.9	1.1	13	0	91	.12	6	.7	2.6	6	SF4	
	27	941	5.77	19	18.43	155	14.94	8.21	1.0	.3	10	1	129	.04	4	.8	1.6	7	SF1	
	27	1131	13.23	19	18.35	155	13.40	8.14	1.3	.6	10	0	141	.04	2	1.1	2.9	6	SF2	
	27	1133	35.53	19	26.66	155	27.16	8.41	1.2	.3	18	2	62	.10	4	.5	1.3	11	KA0	
	27	1157	13.81	19	19.76	155	10.34	4.25	1.0	.6	10	1	125	.14	4	1.3	3.9	8	SF5	
	27	1217	4.69	19	22.80	155	15.82	6.81	1.3	.6	9	2	98	.14	1	1.1	1.6	7	INT	
	27	1351	47.19	19	23.85	155	15.16	4.22	.6	.9	2	101	.06	2	.7	1.2	5	SEC		
	27	148	25.81	19	22.41	155	5.10	5.07	1.0	.6	15	0	75	.11	6	.8	4.9	8	SF5	

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YEAR	MON	DA	HRMN	SEC	ORIGIN TIME	LAT N DEG MIN	LON W DEG MIN	DEPTH KM	AMP MAG	DUR MAG	NR	NS	DEG	RMS SEC	MIN DIS	ERM KM	ERZ KM	NO FM	REMK
1982	SEP	27	1415	23.78	19 20.38	155 12.36	5.33	1.1	.9	17	3	72	.09	4	.5	1.5	10	SF2	
		27	1512	9.32	19 19.97	155 8.79	6.89	1.6	1.1	25	3	74	.12	4	.6	1.1	16	SF4	
		27	1522	53.92	19 24.28	155 25.99	8.62	1.3	.9	23	3	49	.09	2	.4	.9	17	KA0	
		27	1536	59.73	19 21.39	155 6.47	5.30	1.0	.7	16	0	87	.11	6	.6	2.9	11	SF4	
		27	1711	55.91	19 20.30	155 14.18	4.17	.7	.8	6	1	280	.04	5	3.1	1.9	2	SSF	
		27	1714	17.05	19 20.30	155 14.74	31.45	1.9	.9	25	0	77	.06	4	1.0	2.0	23	DEP	
		27	1714	37.20	19 16.98	155 23.25	5.10	.8	.8	8	2	107	.06	5	.5	2.3	4	SWR	
		27	1835	57.72	19 23.05	155 17.34	3.05	.9	.5	9	2	172	.05	1	.8	.5	5	SSC	
		27	1923	10.49	19 22.26	155 7.55	7.91	2.2	2.3	34	4	67	.13	4	.5	.9	23	SF4	
		27	1930	12.03	19 23.20	155 28.10	9.77	.9	.7	8	1	216	.07	2	1.9	1.7	4	KA0	
		27	1938	23.13	19 21.74	155 6.59	8.64	2.6	2.4	38	4	80	.09	6	.4	.6	25	SF4	
		27	1956	34.83	19 23.77	155 14.97	3.20	.8	.8	10	4	93	.05	2	.4	1.2	8	SEC	
		27	2025	45.93	19 19.80	155 11.17	7.14	1.5	1.0	23	2	91	.10	5	.5	1.0	13	SF3	
		27	2123	21.22	19 20.25	155 8.42	6.83	1.2	.6	17	2	78	.12	4	.5	1.2	7	SF4	
		27	2220	41.73	19 16.33	155 23.41	3.11	.8	.7	10	2	112	.10	4	.5	1.2	7	SWR	
		27	2223	57.20	19 18.18	155 14.64	8.06	1.0	.9	17	1	132	.08	3	.5	1.2	11	SF1	
		27	2234	8.83	19 24.46	155 16.32	15.79	2.8	2.9	43	3	44	.10	1	.4	.3	38	DEP	F
		27	2249	14.42	19 20.41	155 13.74	7.62	1.0	1.0	20	1	68	.07	4	.5	.9	11	SF2	
		27	2253	29.09	19 22.14	155 13.96	1.51	.6	1.0	9	1	187	.12	2	.7	.5	4	SER	
		27	2255	17.01	19 20.23	155 12.76	6.09	.9	.6	13	2	70	.11	4	.7	1.5	9	SF2	
		28	113	43.69	19 22.68	155 14.18	1.62	.7	1.2	9	2	163	.05	2	.4	.5	3	SEC	
		28	117	35.82	19 20.70	155 13.29	8.91	1.8	1.8	32	3	60	.10	4	.4	.6	20	SF2	
		28	249	58.41	19 21.11	155 3.12	6.05	1.9	1.5	26	2	118	.11	2	.6	1.3	17	SF5	
		28	310	.73	19 21.64	155 2.49	4.29	1.2	1.1	22	2	141	.11	3	.9	1.8	9	SSF	
		28	614	35.28	19 19.85	155 14.42	32.35	2.0	1.4	36	5	69	.09	5	.8	1.0	29	DEP	
		28	659	34.72	19 23.70	155 17.02	2.69	.8	.8	12	4	99	.04	1	.4	.3	10	SSC	
		28	79	17.13	19 26.64	155 38.62	2.11	2.0	2.1	24	7	105	.11	4	.4	.6	19	MLO	
		28	729	28.48	19 20.36	155 12.05	8.06	1.3	.6	12	1	77	.06	5	.6	1.5	10	SF3	
		28	915	46.46	19 22.92	155 14.10	1.81	.9	1.8	14	1	67	.09	2	.3	.4	11	SEC	
		28	921	38.15	19 23.02	155 14.15	1.32	.8	.7	17	3	108	.10	2	.3	.4	12	SEC	
		28	1026	31.75	19 24.03	155 15.64	3.12	1.0	1.0	14	5	118	.05	2	.3	.4	11	SEC	
		28	1041	1.38	19 24.03	155 15.11	3.25	1.0	1.0	15	6	112	.09	2	.3	.5	12	SEC	
		28	1115	2.14	19 18.78	155 13.71	7.44	1.6	1.1	17	2	89	.07	3	.5	1.1	14	SF2	
		28	1247	11.36	19 24.27	155 16.20	2.96	.8	1.0	12	5	125	.03	1	.4	.4	10	SEC	
		28	1340	35.21	19 16.32	155 23.75	3.13	1.5	1.6	28	6	103	.13	4	.4	1.0	24	SWR	
		28	144	34.97	19 20.00	155 10.05	7.81	1.8	1.3	20	2	85	.07	4	.6	1.0	17	SF3	
		28	1449	5.71	19 23.21	155 17.31	2.72	1.2	1.4	20	7	72	.12	1	.3	.3	15	SSC	
		28	1451	5.85	19 16.66	155 15.61	9.21	1.2	.18	0	211	.08	4	.8	1.2	10	SF1		
		28	1451	34.95	19 18.16	155 15.86	3.78	.8	1.3	15	1	117	.11	5	.6	1.7	12	SSF	
		28	1522	6.84	19 23.73	155 15.05	3.38	1.8	2.1	24	5	87	.08	2	.3	.3	20	SEC	
		28	2023	20.32	19 17.98	155 15.35	7.93	1.1	1.3	19	4	153	.04	4	.5	.9	17	SF1	
		28	2319	1.07	19 23.12	155 14.99	3.28	1.1	1.0	17	6	109	.09	2	.3	.4	14	SEC	
		28	2348	22.96	19 23.19	155 14.89	3.49	1.7	.20	6	84	.08	2	.3	.4	16	SEC		
		28	2350	42.58	19 23.38	155 15.04	3.05	2.3	2.9	27	7	76	.08	2	.3	.2	22	SEC	
		29	010	7.70	19 23.27	155 14.91	3.44	2.0	2.5	22	6	83	.07	2	.3	.3	17	SEC	
		29	212	50.54	19 25.31	155 17.05	8.37	1.7	2.1	9	1	182	.11	1	1.6	1.8	6	INT	L
		29	620	52.07	19 22.29	155 11.06	32.28	3.4	3.6	48	5	55	.11	2	.6	.9	43	DEP	F
		29	635	51.42	19 24.68	155 37.97	.09	2.3	2.7	18	3	74	.15	6	.4	.6	12	MLO	

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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	ERM KM	ERZ NO KM FM REMK
1982	SEP	29	730	53.56	19 21.08	155 6.96	6.69	2.9	3.1	41	6	89	.13	5	.4	.9 35 SF4 F
		29	1017	11.04	19 23.75	155 15.24	2.81	1.4	1.6	20	7	96	.09	2	.3	.3 16 SEC
		29	1019	54.16	19 15.46	155 22.63	8.43	1.8	2.3	38	9	155	.10	3	.4	.6 29 SWR
		29	1120	48.82	19 23.05	155 17.12	2.58	1.0	1.2	18	5	77	.07	1	.3	.3 10 SSC
		29	1354	40.57	19 19.97	155 6.95	7.22	2.1	2.1	28	0	111	.10	5	.5	1.0 18 SF4
		29	15 5	45.89	19 24.20	155 16.01	3.00	.8	1.0	9	2	125	.01	1	.4	.6 4 SEC
		29	16 0	7.31	19 23.63	155 15.28	2.16	.9	1.2	8	1	91	.09	3	.4	.7 5 SEC
		29	1638	41.31	19 22.71	155 17.16	2.21	1.0	1.2	15	5	185	.08	1	.4	.3 9 SSC
		29	17 4	51.19	19 23.79	155 15.31	3.00		1.2	5	0	103	.01	2	.6	1.2 4 SEC
		29	17 5	21.05	19 15.59	155 7.32	43.22		1.8	25	1	195	.07	3	1.1	1.7 18 DEP
		29	1913	41.45	19 18.63	155 14.06	4.86	1.5	1.5	30	2	76	.12	3	.4	1.4 14 SBF
		29	2059	13.94	19 20.43	155 12.49	7.96	1.4	1.1	21	2	71	.09	4	.6	1.0 15 SF2
		30	028	41.26	19 23.43	155 16.82	2.76	1.2	1.4	17	4	104	.08	0	.3	.2 11 SSC
		30	1 2	16.47	19 23.49	155 17.04	2.70	.8	.8	13	4	102	.05	0	.3	.3 8 SSC
		30	136	12.42	19 23.33	155 16.90	2.99	1.6	2.0	18	4	55	.07	0	.3	.3 13 SSC
		30	152	50.49	19 23.14	155 17.09	2.81	.9	.9	12	4	121	.08	1	.4	.3 7 SSC
		30	257	38.42	19 16.66	155 22.81	5.95	.8	.9	12	1	120	.10	5	.6	2.2 6 SWR
		30	312	51.60	19 19.65	155 7.15	7.27	1.3	1.1	22	2	113	.12	4	.7	1.5 16 SF4
		30	417	7.10	19 17.87	155 14.51	7.14	1.0	1.1	17	3	142	.07	2	.7	1.2 11 SF2
		30	434	57.09	19 23.77	155 15.09	2.86	.7	.5	11	4	96	.05	2	.4	.7 6 SEC
		30	444	56.45	19 23.19	155 14.86	3.14	.7	.8	9	2	124	.03	2	.4	1.1 6 SEC
		30	451	17.92	19 22.42	155 17.18	2.27	.9	.6	12	4	174	.04	1	.4	.3 8 SSC
		30	5 7	45.73	19 27.95	154 53.54	5.40	2.2	1.9	28	1	140	.11	3	.5	.8 22 LER
		30	643	8.50	19 24.88	155 36.04	.08	3.0	3.0	34	3	51	.11	4	.3	.5 21 MLO
		30	646	27.65	19 24.52	155 35.41	1.02	2.4	1.9	18	0	83	.10	14	.5	16.8 8 MLO *
		30	731	31.95	19 23.81	155 15.13	2.48	.8	.8	11	4	99	.04	2	.3	.7 9 SEC
		30	1116	26.79	19 20.12	155 12.01	8.64	1.7	1.3	17	4	79	.07	5	.6	1.0 13 SF3
		30	1344	55.37	19 23.95	155 16.05	.04	.9	.8	13	4	109	.19	1	.2	.4 10 SEC
		30	1346	36.56	19 23.62	155 16.79	3.61	1.3	1.3	18	6	56	.08	1	.3	.3 13 SSC
		30	1356	28.92	19 20.32	155 8.55	7.76		1.0	11	0	75	.06	4	.7	1.4 10 SF4
		30	1433	53.96	19 23.77	155 15.08	2.90	1.3	1.4	13	6	93	.06	2	.3	.6 8 SEC
		30	1536	2.23	19 13.08	155 16.00	45.93	1.7	1.4	16	2	278	.12	9	3.5	2.6 13 DEP L
		30	1544	49.33	19 23.86	155 15.09	2.52		.8	9	1	101	.06	2	.4	.7 5 SEC
		30	1642	26.65	19 19.25	155 9.15	7.40	1.9	1.8	35	5	93	.11	4	.4	.7 30 SF3
		30	1714	49.32	19 21.38	155 14.53	25.03	1.6	1.1	17	3	132	.04	3	1.6	1.0 15 DEP
		30	1751	51.45	19 23.27	155 14.91	2.92	1.1	.8	13	4	118	.07	2	.3	.6 6 SEC
		30	1828	29.32	19 28.91	154 52.03	2.69		1.2	10	0	101	.07	3	.7	1.2 5 SLE
		30	1845	30.57	19 22.95	155 17.06	8.52		.9	8	1	174	.14	1	1.9	2.5 5 INT
		30	1925	36.60	19 22.92	155 17.05	2.63	1.8	1.8	20	4	72	.06	1	.2	.3 12 SSC
		30	2030	20.81	19 20.79	155 12.72	9.01	2.5	2.7	40	5	64	.12	3	.4	.5 28 SF2
		30	2036	32.38	19 25.90	155 28.34	8.56	1.6	1.1	30	6	60	.10	6	.4	.9 26 KAO
		30	2051	29.57	19 23.08	155 14.87	3.99	1.2	1.4	17	5	85	.10	2	.4	.6 12 SEC
		30	2125	8.76	19 23.40	155 16.99	3.35	1.8	2.2	24	5	46	.07	0	.3	.2 21 SSC
		30	2143	7.72	19 22.08	155 15.78	6.53	1.6	1.3	13	3	124	.13	1	.6	1.1 10 INT
		30	2148	56.83	19 23.77	155 15.09	2.62	1.0	1.0	14	6	95	.07	2	.3	.5 11 SEC
		30	2158	.45	19 22.82	155 17.18	2.82	1.0	1.0	17	7	92	.07	1	.3	.3 12 SSC
		30	2241	46.66	19 23.17	155 14.78	3.43	1.0	.8	15	6	106	.06	2	.3	.5 12 SEC
		30	2357	35.66	19 23.48	155 14.95	3.24	1.0	.8	13	6	104	.06	3	.4	.8 9 SEC

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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	ERM KM	ERZ NO KM FM REMK
1982	OCT	1	0 9	53.40	19 23.31	155 16.99	2.84	2.4	2.8	26	8	46	.09	0	.2	.2 22 SSC
		1	035	20.88	19 23.52	155 17.09	2.59	1.0	1.0	16	6	107	.07	0	.3	.3 11 SSC
		1	131	29.62	19 23.01	155 15.01	3.31	1.2	1.2	17	5	113	.08	2	.3	.3 13 SEC
		1	140	56.56	19 22.15	155 15.16	5.73	1.3	1.1	12	4	137	.12	1	.8	1.3 8 INT
		1	234	57.88	19 19.37	155 11.63	4.89	1.4	.9	17	2	173	.13	6	.8	3.6 15 SBF *
		1	237	2.13	19 23.31	155 16.75	3.10	2.5	2.9	29	6	45	.09	0	.3	.2 23 SSC
		1	240	7.22	19 19.41	155 13.89	7.70	1.3	.8	18	3	83	.07	4	.5	1.0 14 SF2
		1	3 6	4.94	19 18.08	155 12.91	9.21	1.0	.7	10	1	234	.07	8	1.5	2.2 9 SF2
		1	912	11.75	19 21.92	155 19.23	31.64	2.2	1.9	38	1	40	.10	3	.6	1.1 25 DEP
		1	943	46.49	19 29.62	155 36.56	3.68	2.2	1.8	8	0	204	.13	1	1.4	.6 4 MLO
		1	11 0	53.91	19 19.95	155 12.68	7.19	1.6	1.5	25	2	75	.09	5	.5	.9 17 SF2
		1	1118	24.02	19 18.25	155 29.86	6.41	2.4	1.9	36	2	42	.14	6	.4	1.2 28 LSW
		1	1143	5.83	19 21.86	155 4.35	6.03	2.4	2.2	35	2	80	.12	4	.5	1.2 21 SF5
		1	1146	11.96	19 23.31	155 14.92	3.06	1.1	1.2	12	5	106	.06	2	.4	.7 7 SEC
		1	1215	15.60	19 19.66	155 11.07	11.06	1.7	.9	17	1	196	.06	5	1.3	2.1 12 SF3
		1	1312	31.36	19 19.57	155 15.06	7.27	1.6	1.5	27	1	90	.13	4	.5	.9 20 SF1
		1	1343	52.99	19 19.56	155 15.11	6.67	1.3	1.3	24	2	91	.08	4	.5	1.0 15 SF1
		1	1517	52.61	19 23.25	155 14.22	6.45		1.1	12	2	123	.14	2	1.2	1.9 12 INT
		1	1542	47.66	19 18.67	155 13.64	7.35	1.6	1.5	21	2	127	.08	3	.6	1.1 17 SF2
		1	1712	50.65	19 23.06	155 14.80	2.92	2.4	2.5	34	5	48	.10	2	.3	.3 21 SEC
		1	1851	52.24	20 19.31	155 25.89	2.80		1.8	11	0	302	.07	49	9.0	11.7 5 KEA *
		1	1912	1.03	19 24.55	155 28.83	9.61	2.5	2.1	40	3	49	.12	4	.3	.6 32 KAO
		1	20 5	5.35	19 22.42	154 58.08	4.21	1.6	1.2	18	3	190	.11	5	.7	1.7 15 SLE
		1	2010	39.08	19 23.04	155 14.87	4.15	1.0	.8	14	5	112	.09	2	.4	.8 11 SEC
		1	2025	34.75	19 23.32	155 14.91	3.31	1.9	2.1	24	6	82	.08	2	.2	.3 19 SEC
		1	21 4	57.61	19 25.17	155 37.65	2.34	3.0	3.1	41	5	93	.12	5	.4	.9 36 MLO
		1	2325	9.24	19 23.19	155 14.79	3.19	1.4	1.6	19	6	106	.11	2	.3	.4 15 SEC
		2	147	57.10	19 18.45	155 14.98	8.23	1.2	.9	18	3	129	.05	4	.5	1.1 15 SF1
		2	3 1	23.94	19 23.25	155 15.07	3.09	1.2	.8	19	7	105	.11	2	.3	.4 14 SEC
		2	312	58.91	19 20.51	155 12.50	9.14	1.3	.6	19	2	72	.09	4	.7	1.1 17 SF2
		2	328	31.90	19 19.54	155 12.48	7.24	1.3	.9	20	3	84	.08	5	.5	1.2 18 SF2
		2	4 8	17.41	19 23.45	155 15.00	2.68	1.0	.8	15	7	101	.06	3	.3	.5 10 SEC
		2	437	59.29	19 18.57	155 14.53	9.92	1.3	1.1	18	2	116	.09	3	.7	1.3 14 SF1
		2	5 9	34.03	19 23.20	155 14.81	3.07	1.0	.8	14	6	110	.04	2	.4	.6 10 SEC
		2	528	6.77	19 20.71	155 10.71	9.37	2.7	2.8	46	6	74	.12	3	.4	.5 33 SF3
		2	529	47.63	19 22.82	155 14.82	3.48	1.2	1.6	17	4	118	.06	2	.3	.4 12 SEC
		2	537	45.29	19 20.04	155 10.28	8.95	1.6	.9	21	5	109	.09	4	.5	.9 18 SF3

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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 NO KM FM REMK
1982	OCT	2	2010	31.54	19 22.99	155 14.89	2.97	1.6	2.0	26	4	63	.09	2	.3	.3 13 SEC
		2	2028	24.36	19 23.15	155 14.76	3.77	1.5	1.7	18	5	88	.10	2	.4	.5 9 SEC
		2	2031	38.98	18 55.24	155 17.73	26.76	2.6	2.4	16	1	270	.21	32	4.1	7.0 2 LOI
		2	2038	21.63	19 23.58	155 15.00	3.10	1.4	1.2	14	4	95	.05	2	.3	.5 8 SEC
		2	2047	28.99	19 23.40	155 14.89	2.54	.7	.8	12	4	99	.04	3	.3	.6 8 SEC
		2	2210	51.86	19 23.69	155 15.01	3.07	.9	.8	11	5	93	.04	2	.4	1.0 8 SEC
		2	2246	39.84	19 17.73	155 14.27	6.05	1.1	1.1	20	1	143	.09	2	.5	1.1 8 SF2
		2	23 3	48.74	19 19.44	155 15.51	7.33	1.9	2.0	32	2	89	.10	6	.4	.7 23 SF1
		2	2343	6.82	19 20.77	155 7.99	8.34	1.5	1.1	25	4	79	.08	4	.4	1.1 16 SF4
		3	011	23.73	19 18.88	155 13.81	4.63	1.4	1.3	19	4	76	.12	3	.4	1.4 12 SSF
		3	1 6	2.08	19 18.32	155 14.14	3.86	1.1	.8	18	1	94	.09	3	.5	1.1 9 SSF
		3	1 9	11.85	19 23.96	155 15.98	2.26	1.2	1.6	19	3	110	.12	2	.3	.3 10 SEC
		3	110	27.21	19 19.19	155 9.81	5.28	1.4	.9	23	2	109	.11	5	.6	1.9 14 SF3
		3	329	5.14	18 53.44	155 15.86	17.75	2.8	3.1	28	0	260	.09	37	3.0	22.8 10 LOI
		3	343	48.59	19 22.99	155 14.94	2.92	1.9	2.1	27	5	65	.11	2	.3	.4 15 SEC
		3	347	24.88	19 22.29	155 15.12	5.94	.9	.8	9	2	145	.11	1	.8	1.4 5 INT
		3	427	.40	19 22.99	155 17.03	2.31	.9	1.0	14	3	126	.04	1	.3	.3 8 S8C
		3	755	31.55	19 24.57	155 25.75	9.24	1.3	1.2	18	1	51	.09	2	.5	.9 10 KAO
		3	834	16.63	19 23.92	155 15.62	3.24	1.9	2.2	12	1	108	.07	3	.4	.5 10 SEC
		3	1110	33.03	19 21.40	155 30.11	9.82	2.4	2.4	33	1	45	.08	5	.3	.8 25 KAO
		3	1441	10.72	19 19.68	155 12.05	7.76	1.5	1.1	28	3	86	.09	6	.5	.8 13 SF3
		3	2045	9.76	19 20.26	155 13.24	7.03	1.4	1.5	25	2	64	.12	4	.5	1.0 16 SF2
		3	2137	12.77	19 17.91	155 23.22	2.67	1.7	1.6	17	2	98	.07	4	.3	.7 12 SWR
		3	2256	1.85	19 22.84	155 14.73	3.07	1.4	1.9	17	4	87	.10	2	.4	.4 12 SEC
		4	010	35.07	19 19.71	155 18.84	10.89	2.0	2.1	34	2	56	.10	3	.4	.5 23 SWR
		4	238	20.02	19 22.94	155 16.74	10.66	.9	.9	11	0	144	.08	1	1.4	1.3 1 INT L
		4	341	50.39	19 23.96	155 16.74	9.41	1.3	.6	15	1	86	.09	0	.9	1.2 6 INT L
		4	417	33.84	19 22.10	155 15.04	6.93	1.3	1.1	8	1	155	.09	2	1.0	2.9 7 INT
		4	440	50.65	19 20.96	155 14.36	26.35	1.7	1.5	28	1	153	.08	4	.7	.8 23 DEP
		4	8 7	24.30	19 18.19	155 13.84	2.45	1.3	1.2	19	2	234	.07	8	1.0	1.7 11 SSF
		4	957	9.10	19 43.93	155 59.88	9.67	2.8	3.0	16	0	299	.12	17	4.8	.9 14 HUA
		4	12 6	2.54	19 23.27	155 14.87	3.55	1.1	1.4	16	6	103	.06	2	.4	.5 13 SEC
		4	1534	28.91	19 21.68	155 24.80	9.63	1.5	1.2	27	6	52	.10	4	.4	.8 23 SWR
		4	16 9	22.82	19 23.41	155 14.95	3.34	1.6	1.7	21	7	81	.10	3	.3	.4 16 SEC
		4	1617	39.92	19 23.14	155 14.96	4.04	1.1	1.2	15	6	108	.06	2	.5	.6 12 SEC
		4	19 1	44.20	19 23.42	155 14.89	2.42	.9	1.0	14	6	101	.09	3	.3	.6 11 SEC
		4	2048	2.25	19 20.40	155 13.33	8.61	1.7	1.8	33	3	63	.11	4	.5	.7 23 SF2
		5	058	44.71	19 22.23	155 15.33	5.43	1.3	1.1	13	4	132	.13	1	.7	1.2 9 INT
		5	150	.67	19 23.21	155 14.76	3.20	1.2	1.4	19	6	105	.08	3	.3	.4 13 SEC
		5	153	6.10	19 23.24	155 14.75	3.56	1.0	1.0	15	5	104	.08	3	.4	.5 12 SEC
		5	2 6	14.24	19 23.32	155 14.84	3.51	1.1	1.6	16	5	102	.08	3	.3	.5 12 SEC
		5	3 7	44.96	19 20.14	155 13.20	9.24	1.4	1.1	19	2	66	.08	5	.6	1.3 17 SF2
		5	4 5	16.32	19 23.68	155 15.08	3.32	2.3	2.5	24	4	76	.07	2	.3	.3 21 SEC
		5	4 9	9.95	19 23.86	155 15.23	3.21	1.0	1.2	15	6	104	.06	2	.4	.5 11 SEC
		5	412	36.03	19 25.93	155 17.34	3.29	1.2	1.1	11	3	248	.11	1	.9	.4 8 SNC
		5	421	5.45	19 23.21	155 14.70	3.25	1.4	1.7	22	6	91	.07	3	.3	.3 15 SEC
		5	436	7.70	19 23.38	155 14.83	3.08	1.0	1.0	13	5	112	.06	3	.4	.6 8 SEC
		5	545	16.44	19 18.90	155 11.43	7.60	1.8	1.8	22	3	111	.08	5	.5	.9 18 SF3

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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 NO KM FM REMK
1982	OCT	5	546	17.43	19 23.42	155 14.90	3.22	2.1	2.3	27	7	74	.08	3	.2	.3 21 SEC
		5	621	42.79	19 23.12	155 14.96	3.34	1.1	1.0	15	5	109	.07	2	.3	.5 12 SEC
		5	622	13.24	19 23.31	155 14.80	2.61	1.1	1.0	15	5	103	.08	3	.3	.6 10 SEC
		5	727	25.41	19 23.61	155 15.04	3.78	1.1	1.2	14	4	93	.06	2	.4	.6 10 SEC
		5	732	27.37	19 22.97	155 14.74	4.05	1.1	1.0	12	2	115	.04	2	.4	.6 9 SEC
		5	856	27.34	19 23.01	155 14.88	3.52	1.1	1.0	13	4	113	.06	2	.4	.5 8 SEC
		5	9 4	43.92	19 23.11	155 14.74	3.36	1.2	1.7	19	4	88	.06	2	.3	.3 9 SEC
		5	918	32.81	19 20.65	155 10.85	8.78	1.7	2.1	31	2	75	.09	3	.4	.6 18 SF3
		5	920	46.45	19 23.14	155 14.86	3.03	2.8	3.1	38	2	48	.11	2	.3	.4 20 SEC
		5	939	9.34	19 21.92	155 14.92	5.65	1.3	1.3	10	2	165	.11	2	.8	1.4 7 SF1
		5	1026	57.91	19 23.04	155 14.79	3.26	1.6	2.2	24	5	64	.06	2	.3	.3 12 SEC
		5	1032	57.81	19 23.18	155 14.93	3.31	1.3	1.7	17	4	82	.07	2	.4	.4 9 SEC
		5	1139	36.83	18 54.48	155 15.61	16.71	3.9	4.1	37	1	247	.08	35	1.7	36.0 25 LOI
		5	1210	48.39	19 19.15	155 14.92	7.33	1.6	1.5	25	2	95	.11	5	.5	1.0 19 SF1
		5	1518	45.15	19 20.38	155 6.56	8.21	2.2	2.4	32	0	107	.11	5	.5	.6 19 SF4
		5	1541	47.67	19 16.94	155 21.36	6.25	1.4	1.3	24	4	131	.10	5	.5	1.4 20 SWR
		5	1624	3.41	19 23.78	155 15.22	2.43	.9	.9	11	3	99	.05	2	.3	.5 8 SEC
		5	1930	30.43	19 29.84	155 4.12	45.66	2.4	2.5	42	0	49	.11	1	.9	2.2 34 DEP
		5	2038	27.78	19 19.07	155 13.27	7.41	1.3	1.3	19	1	78	.08	4	.6	1.4 14 SF2
		5	2137	46.09	19 23.03	155 14.98	2.79	1.8	2.0	25	6	65	.12	2	.3	.3 17 SEC
		6	211	34.65	19 22.88	155 14.55	3.33	1.6	2.0	21	4	94	.07	3	.4	.3 13 SEC
		6	518	11.33	19 23.16	155 14.89	3.20	1.6	1.9	16	4	84	.10	2	.4	.5 9 SEC
		6	656	9.21	19 22.60	155 16.44	7.69	.9	1.1	10	3	129	.15	1	1.4	1.9 7 INT
		6	728	37.64	19 20.69	155 12.07	9.38	1.9	1.3	23	1	70	.08	4	.6	.9 17 SF3
		6	751	45.78	19 23.23	155 17.12	2.40	.9	.9	9	3	156	.03	0	.5	.3 4 SSC
		6	752	7.30	19 23.10	155 17.13	2.33	.8	1.0	9	3	163	.04	1	.4	.4 7 SSC
		6	838	27.17	19 18.80	155 13.81	7.79	1.4	1.1	20	3	91	.07	3	.5	1.0 16 SF2
		6	857	59.13	19 23.30	155 14.84	3.39	1.1	1.2	16	6	102	.06	3	.3	.5 12 SEC
		6	1024	29.81	19 23.24	155 14.92	3.22	2.6	3.0	32	2	47	.11	2	.3	.4 22 SEC
		6	1135	47.36	19 20.13	155 7.22	8.35	2.0	1.7	35	5	102	.11	5	.4	.6 28 SF4
		6	1241	48.55	19 23.45	155 14.97	2.29	.9	1.0	15	6	100	.08	3	.3	.5 12 SEC
		6	13 1	2.38	19 22.92	155 17.14	2.71	1.6	1.6	24	9	72	.07	1	.2	.3 19 SSC
		6	13 7	27.54	19 17.68	155 20.70	7.21	1.3	1.1	25	5	125	.09	4	.5	1.0 20 SWR
		6	1312	58.09	19 23.24	155 14.91	3.40	1.2	1.6	19	7	105	.06	2	.3	.4 15 SEC
		6	1735	28.62	19 26.04	155 37.65	3.14	3.4	3.7	35	1	94	.13	3	.4	.9 28 MLO
		6	1741	21.68	19 18.92	155 16.05	8.18	1.4	1.3	21	4	122	.05	3	.4	.9 19 SF1
		6	1825	23.91	19 18.97	155 15.75	7.62	1.8	1.3	23	4	100	.10	4	.5	.9 19 SF1
		6	1858	26.60	19 16.00	155 21.69	6.74	1.2	1.1	29	2	167	.08	5	.6	1.4 17 SWR
		6	2148	47.74	19 22.06	155 25.21	9.36	1.7	1.4	27	3	43	.12	4	.5	1.0 22 KAO
		6	2341	53.86	19 20.68	155 13.31	8.78	1.8	2.1	35	1	60	.09	4	.4	.6 26 SF2
		6	2351	29.43	19 22.82	155 12.26	2.35	.7	1.0	7	1	154	.04	2	.6	.4 4 SER
		7	259	58.38	19 23.17	155 15.23	3.69	1.1	1.0	16	5	107	.09	2	.3	.5 12 SEC
		7	438	42.61	19 19.67	155 7.89	8.24	1.4	1.1	20	3	96	.07	4	.6	.9 16 SF4
		7	444	1.43	19 20.41	155 10.28	9.05	1.3	1.1	20	3	78	.08	3	.6	.9 13 SF3
		7	957	55.10	19 23.33	155 14.96	2.03	1.0	1.2	17	7	102	.09	2	.3	.4 12 SEC
		7	12 9	54.36	19 20.72	155 12.84	8.95	1.4	1.1	18	3	70	.06	4	.6	1.0 16 SF2
		7	1330	32.53	19 19.73	155 7.99	7.59	1.7	1.1	15	3	124	.06	4	.6	.9 11 SF4
		7	1725	18.51	19 24.47	155 26.13	9.37	1.5	1.2	30	5	49	.10	2	.4	.7 22 KAO

HVO EARTHQUAKE SUMMARY LIST

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		ORIGIN TIME			LAT N		LON W		DEPTH		AMP		DUR		GAP		RMS		MIN		ERM		ERZ NO			
YEAR	MON	DA	HR	MIN	SEC	DEG	MIN	DEG	MIN	KM	MAG	MAG	NR	NS	DEG	SEC	DIS	KM	KM	FM	REMK					
1982	OCT	7	1727	3.41	19	19.47	155	10.56	8.66	1.6	1.3	24	4	99	.09	5	.6			.9	21	SF3				
		7	1826	36.03	19	30.72	155	11.80	10.26	1.6	1.0	34	8	53	.10	12	.4			1.4	22	GLN				
		7	20	6	48.03	19	19.82	155	11.35	8.59	1.6	.9	23	4	89	.06	5	.5			.9	20	SF3			
		7	2015	51.58	19	23.32	155	14.82	4.56	1.2	1.1	17	6	101	.11	3	.5			.8	12	SEC				
		7	2049	36.69	19	22.94	155	14.32	1.44	1.0	1.4	16	3	80	.10	2	.3			.4	12	SEC				
		7	2211	54.59	19	27.07	155	28.54	10.55	1.8	1.0	23	4	84	.07	7	.4			1.0	19	KA0				
		7	2242	23.41	19	23.13	155	14.80	3.33	.9	.5	14	6	109	.05	2	.3			.6	11	SEC				
		7	2346	33.27	19	23.56	155	15.05	2.97	.9	.5	15	6	97	.05	2	.3			.5	10	SEC				
		8	053	44.80	19	23.18	155	14.77	2.84	.8	.5	12	5	111	.03	2	.3			.7	9	SEC				
		8	120	15.02	19	23.39	155	14.92	3.06	.7	.4	13	6	103	.04	3	.3			.7	10	SEC				
		8	120	33.06	19	23.38	155	14.81	3.24	.7	.5	13	6	102	.05	3	.3			.7	10	SEC				
		8	121	9.04	19	23.25	155	14.82	3.34	1.2	1.2	14	2	104	.08	2	.4			.6	11	SEC				
		8	121	44.77	19	23.36	155	14.93	3.73	1.0	1.0	16	6	100	.05	2	.3			.5	12	SEC				
		8	135	53.41	19	23.02	155	14.69	4.05	1.5	1.7	22	6	113	.08	2	.4			.5	17	SEC				
		8	147	44.61	19	19.24	155	13.68	7.58	1.6	1.5	33	3	65	.11	4	.5			.9	20	SF2				
		8	151	31.60	19	23.08	155	14.70	3.08	1.2	1.4	19	3	110	.08	2	.4			.4	9	SEC				
		8	1553	33.27	19	23.42	155	15.13	3.05	1.6	1.7	18	4	80	.08	2	.3			.4	10	SEC				
		8	1554	22.54	19	10.34	155	13.43	8.28	2.6	2.4	34	2	136	.17	11	.6			1.0	19	L3W				
		8	1632	55.88	19	23.57	155	16.98	2.81	1.7	1.7	24	3	48	.09	0	.3			.3	15	SEC				
		8	9	3	34.88	19	23.59	155	15.02	3.27	1.3	1.4	13	2	91	.06	2	.4			.5	12	SEC			
		8	1029	48.21	19	17.90	155	20.96	6.50	1.7	1.5	24	2	122	.09	4	.5			1.2	18	SWR				
		8	1332	13.94	19	23.36	155	14.87	3.25	2.1	2.5	19	2	101	.10	3	.4			.5	15	SEC				
		8	1347	20.83	19	23.02	155	14.76	3.33	1.8	.2	22	2	63	.12	2	.4			.5	19	SEC				
		8	1347	47.36	19	23.13	155	14.84	3.28	1.9	2.3	19	2	109	.06	2	.3			.3	14	SEC				
		8	1349	41.78	19	23.21	155	14.86	3.29	1.5	1.6	15	4	109	.06	2	.4			.5	8	SEC				
		8	1743	56.66	19	23.35	155	15.02	2.71	1.0	1.0	12	3	104	.04	2	.4			.5	9	SEC				
		8	1952	33.97	19	23.42	155	14.89	3.34	2.3	2.7	36	4	45	.11	3	.3			.4	24	SEC				
		8	1955	27.16	19	23.43	155	14.84	3.25	1.4	1.6	17	4	73	.09	3	.3			.5	10	SEC				
		8	2054	9.28	19	20.74	155	10.93	7.58	1.9	1.9	39	4	73	.13	3	.5			.8	28	SF3				
		8	2127	45.08	19	23.12	155	14.73	2.93	1.1	1.0	14	4	113	.06	2	.3			.5	9	SEC				
		9	046	57.13	19	21.30	155	2.93	6.60	1.9	1.5	25	1	128	.14	3	.5			.8	12	SF5				
		9	445	15.62	19	29.09	155	42.34	8.08	2.4	1.8	22	1	69	.11	7	.5			1.4	15	MLO				
		9	1038	44.74	19	18.44	155	15.03	6.77	1.5	1.5	27	2	112	.10	4	.5			.9	20	SF1				
		9	1254	47.43	19	20.34	155	12.92	7.82	1.6	1.3	29	3	67	.08	4	.4			.7	25	SF2				
		9	13	6	22.62	19	6.56	155	28.67	29.67	2.2	1.7	42	8	174	.09	6	.6			.8	37	DLS			
		9	14	7	31.32	19	16.95	155	20.96	6.50	1.2	1.1	19	3	163	.08	5	.5			1.1	17	SWR			
		9	1753	24.87	19	23.20	155	14.79	3.29	2.3	2.7	31	4	61	.10	2	.3			.4	23	SEC				
		9	2351	45.84	19	20.68	155	11.28	9.25	2.0	2.0	34	5	74	.08	4	.4			.6	30	SF3				
		10	1	56	51.17	19	25.01	155	24.39	8.32	1.7	1.3	27	2	45	.11	1	.4			1.0	21	KA0			
		10	1	53	45.17	19	32.91	155	23.05	13.63	1.5	1.4	26	3	92	.08	6	.6			.8	23	DML			
		10	1054	24.96	19	23.09	155	14.72	3.23	2.6	2.9	36	2	48	.08	2	.3			.3	23	SEC				
		10	1120	5.15	19	23.31	155	14.74	3.40	1.0	1.2	17	6	102	.06	3	.3			.4	13	SEC				
		10	1126	2.79	19	19.54	155	9.55	9.66	2.0	2.0	37	5	91	.12	5	.5			.7	30	SF3				
		10	1210	49.87	19	24.26	155	16.12	3.15	.9	1.0	14	6	127	.07	1	.3			.4	11	SEC				
		10	1228	50.63	19	23.39	155	15.08	3.11	1.1	1.6	18	6	100	.08	2	.3			.4	15	SEC				
		10	1233	50.94	19	16.35	155	22.32	7.56	1.7	2.2	35	6	133	.13	5	.4			.9	26	SWR				
		10	1558	5.20	19	17.36	155	12.73	6.81	1.5	1.1	18	2	197	.07	1	.7			1.1	16	SF2				
		10	1634	59.09	19	23.45	155	14.49	1.94	1.1	1.4	17	6	95	.07	2	.3			.4	13	SEC				

HVO EARTHQUAKE SUMMARY LIST

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YEAR	MON	DA	HR	MIN	SEC	ORIGIN	TIME	LAT N	DEG	MIN	DEG	MIN	DEPTH	KM	AMP	MAG	DUR	MAG	NR	NS	GAP	RMS	MIN	DIS	ERM	KM	ERZ	NO	REMK
1982	OCT	10	17	17	26.12	19	21.67	155	25.01				10.22	1.9	1.9	41	8	41	.11	4	.3				.5	33	SWR		
		10	20	14	53.52	19	23.82	155	15.12				3.39	1.4	1.4	22	7	96	.05	2	.3				.3	17	SEC		
		10	21	51	23.27	19	22.87	155	17.19				2.10	1.2	1.4	19	7	74	.05	1	.2				.2	15	SFC		
		11	01	26	51.31	19	21.66	155	13.39				2.94	1.3	1.2	19	4	98	.08	2	.3				.5	15	SER		
		11	11	18	23.71	19	22.84	155	14.05				1.00	2.5	3.3	19	3	69	.10	2	.3				.4	9	SEC	F	
		11	23	37	17.94	20	27.07	155	39.81				28.62	2.7	2.6	24	2	302	.11	38	2.6				2.0	21	DIS		
		11	3	8	54.65	19	23.21	155	14.94				3.28	1.1	1.0	16	6	106	.07	2	.3				.5	11	SEC		
		11	3	50	49.92	19	23.26	155	14.96				3.91	1.5	1.6	21	7	105	.07	2	.3				.4	17	SEC		
		11	4	25	50.41	19	23.30	155	14.68				3.24	1.1	.8	10	2	105	.06	3	.4				.7	9	SEC		
		11	4	25	59.82	19	22.94	155	14.62				2.53	.9	1.0	9	2	121	.06	2	.4				.7	4	SEC		
		11	4	30	37.74	19	23.00	155	24.97				7.19	2.1	2.1	42	4	27	.13	1	.4				.8	32	KA0		
		11	7	14	30.80	19	23.47	155	14.88				3.36	2.1	2.6	30	4	69	.09	2	.3				.3	21	SEC		
		11	7	52	22.00	19	23.46	155	15.05				3.29	1.0	1.0	7	0	98	.03	2	.5				.7	7	SEC		
		11	8	19	49.34	19	23.21	155	14.96				2.94	1.9	1.8	26	4	70	.10	2	.3				.3	20	SEC		
		11	8	21	59.68	19	23.23	155	15.02				2.34	.8	.5	13	5	108	.14	2	.4				.7	10	SEC		
		11	8	56	8.34	19	23.74	155	15.24				2.54	1.5	1.8	18	2	95	.08	2	.4				.4	13	SEC		
		11	8	57	41.67	19	23.29	155	14.91				2.02	1.0	1.0	10	0	103	.06	2	.3				.5	7	SEC		
		11	8	59	53.48	19	23.23	155	15.10				3.31	3.1	3.2	41	1	47	.12	2	.3				.4	35	SEC	F	
		11	9	7	19.06	19	23.05	155	14.40				1.39	.7	.8	13	3	116	.07	2	.3				.5	6	SEC		
		11	9	20	14.34	19	23.11	155	14.82				2.79	1.9	1.7	24	2	64	.10	2	.3				.4	18	SEC		
		11	9	20	53.60	19	23.32	155	14.94				3.15	1.5	1.4	13	2	92	.06	2	.3				.3	7	SEC		
		11	9	24	29.69	19	19.57	155	11.38				7.44	1.9	1.7	35	5	94	.10	5	.5				.8	25	SF3	F	
		11	9	27	42.76	19	23.17	155	14.76				3.43	.7	.8	11	3	111	.05	2	.4				.8	7	SEC		
		11	9	33	25.37	19	23.22	155	14.78				3.46	2.4	2.5	35	3	47	.09	3	.3				.4	27	SEC	F	
		11	9	58	2.78	19	23.24	155	14.91				2.99	.8	.8	11	3	108	.04	2	.4				.6	8	SEC		
		11	10	30	54.62	19	23.36	155	14.97				3.01	1.0	1.0	15	3	80	.05	2	.3				.4	8	SEC		
		11	10	36	17.61	19	23.27	155	14.78				2.95	.7	.8	10	2	108	.04	3	.4				.7	7	SEC		
		11	10	36	36.39	19	23.26	155	14.97				3.06	1.0	1.1	15	4	105	.06	2	.3				.4	11	SEC		
		11	20	11	23.96	19	20.17	155	12.72				8.72	1.6	1.1	21	2	77	.06	5	.6				.9	15	SF2		
		12	2	6	12.17	19	18.35	155	15.96				9.18	2.4	2.2	41	2	135	.11	4	.5				.5	30	SF1		
		12	3	2	41.01	19	17.20	155	48.64				9.90	1.9	1.3	28	3	140	.14	7	.7				.7	13	KON		
		12	5	47	42.02	19	23.22	155	14.83				3.03	1.5	1.6	21	4	68	.08	2	.3				.4	15	SEC		
		12	6	16	46.78	19	16.81	155	15.63				8.06	1.2	1.1	20	1	180	.07	4	.7				.9	13	SF1		
		12	6	23	5.39	19	22.12	155	17.20				31.94	1.8	1.4	31	1	55	.11	2	.7				1.3	23	DEP		
		12	6	53	.72	19	20.37	155	12.99				7.47	1.3	1.1	27	2	66	.09	4	.5				.8	18	SF2		
		12	7	30	32.35	19	23.41	155	14.97				2.87	1.0	1.2	14	4	99	.04	3	.3				.4	10	SEC		
		12	8	42	45.89	19	20.47	155	12.55				9.29	1.1	1.1	13	0	122	.05	4	.7				1.2	12	SF2		
		12	13	23	6.86	19	23.97	155	16.98				14.90	1.8	1.6	32	2	64	.11	1	.6				.5	27	DEP		
		12	14	34	24.11	19	23.06	155	14.37				1.42	1.3	2.0	13	3	137	.09	2	.4				.4	8	SEC		
		12	16	14	11.55	19	20.60	155	12.94				7.90	1.8	1.6	27	2	64	.10	4	.4				.8	21	SF2		
		12	18	27	25.54	19	23.23	155	14.93				3.29	1.1	1.4	17	4	69	.05	2	.4				.4	10	SEC		
		12	19	40	28.83	19	22.24	155	26.07				9.48	1.6	1.2	32	2	43	.11	3	.4				.7	24	KA0		
		13	3	24	19.06	19	23.14	155	2.33				7.98	2.2	2.0	34	2	124	.14	4	.6				.7	19	SF5		
		13	10	32	37.89	19	22.32	155	49.16				9.34	2.5	1.6	21	1	117	.13	13	.6				1.1	11	KON		
		13	11	12	3.69	19	27.10	155	29.54				10.48	3.0	3.2	50	4	35	.10	8	.3				.5	37	KA0		
		13	12	48	7.89	19	23.12	155	14.73				2.95	1.2	1.2	16	3	109	.09	2	.4				.5	12	SEC		
		13	14	39	21.70	19	23.01	155	14.75				3.39	1.6	2.1	21	4	68	.08	2	.3				.4	13	SEC		
		13	15	2	14.53	19	19.44	155	13.81				7.24	1.9	1.9	38	1	171	.13	5	.5				.8	25	SF2		

HVO EARTHQUAKE SUMMARY LIST

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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
1982	OCT	13	1747	31.84	19 22.98	155 17.08	2.41	.9	.8	16	4	70	.11	1	.3	.3	10	SSC
		13	1955	53.98	19 20.54	155 9.54	5.94	1.6	1.4	23	3	73	.11	3	.6	1.1	13	SF3
		13	20 0	50.07	19 23.01	155 4.05	7.29	1.3	1.2	21	1	100	.12	3	.5	.8	14	SF5
		13	2017	16.61	19 23.23	155 14.86	2.87	1.1	1.0	14	4	105	.08	2	.4	.5	10	SEC
		13	2052	14.74	19 17.22	155 21.59	5.63	1.7	1.6	36	2	127	.13	5	.4	1.1	26	SWR
		13	2054	44.64	19 30.59	154 52.53	38.18	3.3	3.2	47	3	149	.09	3	.9	1.4	41	LER
		13	2145	5.34	19 19.56	155 9.13	8.62	1.6	1.5	27	4	86	.08	5	.6	.8	16	SF3
		13	2313	26.33	19 22.94	155 14.23	1.86	1.1	1.3	11	3	133	.07	2	.4	.3	8	SEC
		13	2314	55.97	19 22.98	155 14.27	1.76	.7	1.2	.9	1	124	.08	3	.4	.8	5	SEC
		14	330	57.35	19 19.04	155 13.67	8.80	1.7	2.1	30	0	84	.09	4	.4	.5	26	SF2
		14	4 3	41.53	19 18.98	155 15.26	5.24	.9	1.1	18	0	103	.10	4	.6	1.7	14	SF1
		14	456	45.99	19 24.13	155 26.48	8.00	1.7	1.2	30	3	45	.11	3	.4	.8	21	KAO
		14	5 4	6.59	19 16.49	155 23.43	7.37	.8	1.3	13	1	125	.11	7	.7	2.4	10	SWR
		14	5 6	56.76	19 15.51	155 23.00	6.97	1.9	1.4	23	1	159	.09	3	.5	1.3	15	SWR
		14	527	37.68	19 22.17	155 13.30	3.57	2.1	2.6	28	3	49	.06	1	.3	.4	23	SER
		14	544	29.19	19 16.07	155 23.13	5.08	1.8	1.9	30	3	123	.13	4	.4	1.2	21	SWR
		14	615	37.29	19 23.57	155 14.96	2.75	.9	1.0	10	2	96	.04	2	.4	.7	8	SEC
		14	1059	47.07	19 20.02	155 9.02	7.38	1.5	1.0	22	2	76	.09	4	.5	1.1	14	SF4
		14	13 5	39.72	19 23.55	155 14.80	2.80	1.4	1.7	22	3	73	.10	2	.3	.3	12	SEC
		14	1353	38.29	19 15.92	155 22.28	6.47	1.2	1.1	19	3	168	.06	4	.5	1.3	13	SWR
		14	14 8	21.14	19 16.00	155 22.26	5.93	1.1	1.1	20	2	160	.09	4	.5	1.5	14	SWR
		14	1414	24.92	19 22.82	155 14.29	1.74	.8	1.0	10	3	128	.09	2	.4	.5	7	SEC
		14	1443	57.57	19 20.68	155 8.47	8.07	2.7	2.8	42	3	73	.12	4	.4	.6	29	SF4
		14	1535	18.40	19 20.39	155 11.70	8.95	1.8	1.8	36	1	77	.09	4	.4	.6	24	SF3
		14	1537	32.23	19 24.74	155 26.00	10.36	2.0	1.8	37	3	50	.12	2	.4	.6	25	KAO
		14	1830	26.54	19 26.03	155 25.86	10.25	3.5	3.1	47	4	36	.14	2	.4	.5	39	KAO
		14	2117	48.27	19 17.48	155 22.45	5.70	.9	1.1	23	2	114	.13	5	.4	1.6	9	SWR
		14	23 4	39.58	19 20.50	155 11.53	9.38	2.6	2.6	41	2	76	.12	4	.4	.6	31	SF3
		15	037	44.30	19 22.07	155 5.82	6.57	1.8	1.5	28	2	76	.12	2	.5	.9	21	SF4
		15	3 2	55.23	19 20.86	155 8.48	7.49	2.4	2.4	37	2	163	.12	3	.5	.6	24	SF4
		15	749	49.65	19 20.34	155 12.58	8.38	1.8	1.6	31	3	71	.10	4	.5	.8	17	SF2
		15	842	9.81	19 25.33	155 25.18	8.58	1.8	.8	17	0	64	.09	7	.6	1.7	16	KAO
		15	1030	22.37	19 21.79	155 6.68	8.12	1.6	1.3	11	0	79	.04	2	.6	1.3	11	SF4
		15	1049	24.35	19 21.82	155 12.53	2.67	1.4	1.2	7	0	166	.06	2	1.1	.5	6	SER
		15	1319	51.75	19 23.13	155 14.78	3.06	1.1	1.0	10	0	109	.03	2	.4	.7	10	SEC
		15	1855	40.29	19 22.96	155 15.16	1.56	1.8	2.6	21	1	65	.06	2	.2	.3	20	SEC
		15	21 8	54.84	19 23.01	155 14.86	2.93	1.6	2.2	22	1	64	.07	2	.3	.4	21	SEC
		15	2154	58.31	19 20.66	155 9.78	7.18	.1	1.1	24	0	72	.08	3	.4	.7	24	SF3
		16	153	8.42	19 19.80	155 7.76	8.18	2.0	2.1	27	0	97	.06	5	.4	.7	26	SF4
		16	638	36.84	19 17.65	155 12.92	6.41	2.4	2.4	38	1	127	.12	1	.4	.8	37	SF2
		16	911	26.13	19 18.42	155 15.36	8.08	1.9	1.6	29	0	117	.09	4	.4	.7	28	SF1
		16	1130	23.56	19 17.72	155 13.20	5.52	1.7	1.8	24	0	106	.09	1	.4	.9	24	SF2
		16	1246	40.99	19 20.28	155 11.81	6.75	1.9	1.3	20	0	144	.07	5	.5	1.0	20	SF3
		16	2149	15.01	19 33.09	155 37.14	7.06	2.3	.7	17	1	168	.11	7	.7	1.4	16	MLO
		16	2310	22.89	19 17.85	155 23.18	3.64	1.7	1.5	16	0	105	.04	4	.4	.9	16	SWR
		17	248	13.29	19 22.97	155 14.51	2.55	1.1	1.4	14	1	114	.11	3	.4	.5	13	SEC
		17	447	40.63	19 23.02	155 14.68	2.82	1.6	2.6	17	1	65	.05	2	.4	.6	16	SEC
		17	5 9	34.15	19 12.92	155 37.65	8.29	3.1	3.1	35	1	202	.16	4	.9	.7	34	L3W

HVO EARTHQUAKE SUMMARY LIST

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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
1982	OCT	17	546	30.56	19 21.63	155 12.72	2.61	1.4	1.6	14	0	109	.07	2	.4	.5	14	SER
		17	1037	34.61	19 10.77	155 30.07	6.17	2.6	3.0	24	1	99	.14	5	.5	1.1	19	LSW
		17	1249	58.62	19 23.22	155 14.83	3.18	1.1	.8	8	0	110	.03	2	.5	.9	8	SEC
		17	1250	28.76	19 22.97	155 14.89	2.71	2.4	2.7	22	2	66	.09	3	.3	.6	19	SEC
		17	1548	15.96	19 22.93	155 14.64	3.45	2.4	2.7	28	1	68	.08	2	.3	.4	27	SEC
		17	1656	50.43	19 23.24	155 14.92	2.87	1.1	1.2	6	0	119	.01	2	.5	.9	6	SEC
		17	18 4	.55	19 23.17	155 14.78	2.23	1.1	1.0	9	0	107	.06	2	.4	.7	9	SEC
		17	1930	38.72	19 23.31	155 14.84	3.18	1.5	1.7	13	1	102	.07	3	.4	.6	12	SEC
		17	1931	26.97	19 23.10	155 14.70	3.10	1.2	1.4	10	0	71	.11	2	.6	.7	10	SEC
		18	026	35.43	19 20.35	155 15.90	6.55	1.5	1.1	14	0	83	.09	4	.5	1.6	14	SF1
		18	115	1.81	19 18.41	155 13.17	9.39	2.4	2.6	37	0	131	.07	8	.5	.5	35	SF2
		18	129	54.96	19 21.40	155 3.04	7.98	2.8	3.0	41	0	115	.10	3	.5	.4	41	SF5
		18	217	37.26	19 22.87	155 14.46	1.47	1.1	2.0	10	0	126	.04	2	.5	.4	10	SEC
		18	315	20.59	19 23.00	155 14.21	2.35	1.2	1.0	9	0	111	.06	2	.4	.6	9	SEC
		18	350	49.81	19 23.01	155 14.32	2.65	2.0	2.3	22	1	64	.05	2	.3	.3	20	SEC
		18	559	40.03	19 23.35	155 14.94	3.00	1.2	1.0	11	0	89	.03	2	.4	.6	11	SEC
		18	718	16.57	19 22.03	155 2.89	7.52	2.0	1.4	30	0	127	.11	4	.5	.5	30	SF5
		18	821	43.63	19 23.02	155 17.07	2.40	1.0	1.2	12	1	89	.03	1	.3	.3	10	SBC
		18	1138	32.90	19 18.75	155 15.15	7.71	2.3	2.1	36	1	97	.11	4	.4	.7	35	SF1
		18	1150	54.90	19 18.39	155 15.32	6.88	.1	1.0	20	0	117	.09	4	.5	1.0	20	SF1
		18	1330	22.93	19 23.09	155 26.23	6.25	1.7	1.3	14	0	80	.09	3	.5	1.0	14	KAO
		18	1518	36.63	19 19.91	155 16.64	6.32	1.3	1.0	26	2	92	.10	1	.4	.8	18	SF1
		18	1529	10.90	19 20.60	155 13.45	7.37	1.5	1.3	27	2	61	.10	4	.5	.8	18	SF2
		18	1632	49.44	19 32.89	155 35.91	9.86	1.3	1.3	13	1	207	.09	7	1.3	1.2	7	MLO
		18	1726	39.53	19 23.42	155 15.19	2.92	1.0	1.0	19	6	81	.08	2	.3	.4	11	SEC
		18	1750	3.71	19 17.17	155 21.86	6.52	1.1	1.1	18	2	126	.09	6	.4	1.4	15	SWR
		18	1826	14.62	19 20.49	155 3.84	5.04	1.4	1.1	21	1	109	.14	2	.7	1.4	10	SF5
		18	1855	55.83	19 23.64	155 15.13	3.26	2.0	2.4	30	3	87	.08	2	.3	.3	20	SEC
		18	19 3	38.11	19 23.75	155 15.15	2.97	1.0	.8	14	5	96	.05	2	.3	.5	9	SEC
		18	2013	2.53	19 23.26	155 14.81	2.87	1.2	1.2	14	2	104	.10	3	.4	.5	8	SEC
		18	2254	53.12	19 17.78	155 13.28	7.09	1.6	1.4	29	1	99	.10	1	.6	1.0	21	SF2
		18	2356	22.18	19 20.64	155 12.88	8.87	1.5	1.3	27	1	68	.08	4	.5	.7	16	SF2
		19	111	19.97	19 25.81	155 36.50	3.78	2.5	2.1	15	0	103	.11	3	.5	1.0	7	MLO
		19	244	35.36	19 16.65	155 22.39	2.61	1.8	1.9	26	3	127	.09	5	.4	1.1	18	SWR
		19	724	27.24	19 20.74	155 5.94	8.46	2.4	2.2	34	2	104	.11	4	.5	.7	23	SF4
		19	9 1	48.21	19 20.64	155 14.89	10.07	1.5	1.5	22	6	86	.06	4	.5	.8	18	SF1
		19	1119	9.97	19 21.60	155 1.18	3.86	1.3	1.1	22	3	167	.13	4	.5	1.4	17	SF6
		19	1333	47.95	19 23.65	155 15.13	2.31	1.1	1.2	18	7	94	.11	2	.3	.4	13	SEC
		19	1350	21.46	19 19.37	155 6.92	9.19	1.4	1.2	26	5	125	.09	4	.5	.7	25	SF4
		19	1440	17.88	19 41.85	155 2.86	.11	2.4	3.1	27	1	237	.14	22	1.4	1.2	21	HIL B*
		19	1614	52.40	20 24.32	155 57.60	33.23	3.1	3.3	54	7	164	.13	36	1.0	1.4	45	KOH
		19	1725	1.87	19 22.12	155 3.26	7.89	2.1	2.8	32	2	107	.14	4	.5	.9	26	SF5
		19	1754	4.33	19 16.58	155 22.12	5.96	1.2	1.2	21	2	132	.10	5	.5	1.6	19	SWR
		19	21 7	11.38	19 17.66	155 14.36	6.98	1.6	2.0	30	2	112	.10	2	.5	.8	24	SF2
		19	2310	49.59	19 19.80	155 8.35	7.47	1.3	1.1	23	3	83	.09	5	.5	.9	17	SF4
		20	1 5	40.31	19 13.54	155 20.74	12.57	1.5	1.2	25	4	177	.09	6	.7	1.0	20	SWR
		20	121	31.71	19 19.76	155 14.12	29.84	1.8	1.3	34	4	63	.09	5	.9	1.0	29	SF4
		20	137	43.57	19 19.61	155 7.96	5.53	1.2	1.0	22	2	95	.12	4	.5	1.6	20	DEP

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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	ERM KM	ERZ NO KM FM	REMK
1982	OCT	20	151	10.13	19 27.59	154 53.51	5.35	1.2	1.1	19	3	135	.12	3	.7	.9 17	LER
		20	159	43.51	19 22.91	155 14.49	3.76	1.5	2.1	24	7	75	.07	3	.3	.4 20	SEC
		20	234	5.56	19 34.91	155 24.29	12.06	1.3	1.2	20	4	137	.11	8	.7	1.0 14	MLO
		20	351	52.13	19 19.76	155 12.97	6.57	1.1	.9	22	2	74	.07	5	.4	1.1 14	SF2
		20	444	45.63	19 20.22	155 12.54	6.94	1.1	1.0	22	1	73	.09	5	.5	.9 16	SF2
		20	511	59.71	19 18.66	155 13.22	7.86	1.3	1.2	21	2	84	.07	3	.5	.9 15	SF2
		20	630	11.97	19 21.02	155 15.18	8.74	1.0	1.0	17	2	79	.03	3	.5	.9 12	SF1
		20	1033	49.39	19 19.76	155 6.17	8.32	2.0	1.5	25	1	129	.09	5	.5	1.0 22	SF4
		20	16	3 20.75	19 19.82	155 11.56	7.94	2.0	1.8	35	2	88	.11	5	.5	.8 26	SF3
		20	1829	39.38	19 21.51	155 24.94	10.20	1.5	1.2	23	2	45	.08	4	.4	.9 14	SWR
		20	2136	25.66	19 20.25	155 12.87	7.16	1.4	1.1	28	2	69	.09	4	.5	.9 18	SF2
		20	2152	17.56	19 19.78	155 15.55	34.83	2.2	1.5	37	0	84	.08	3	.8	1.3 29	DEP
		21	055	33.34	19 20.66	155 11.31	9.07	2.0	1.8	39	4	74	.09	4	.4	.7 24	SF3
		21	414	53.79	19 18.04	155 14.92	9.12	1.6	1.5	27	2	143	.07	3	.5	.6 14	SF1
		21	1153	8.58	19 13.63	155 23.99	36.05	1.9	1.5	36	1	150	.08	1	.7	1.5 29	DEP
		21	1216	6.48	19 23.34	155 14.73	2.77	1.1	1.2	17	3	69	.09	3	.4	.4 7	SEC
		21	1239	2.59	19 20.70	155 5.89	6.62	1.7	1.8	32	2	106	.11	4	.5	1.0 22	SF4
		21	1341	20.97	19 22.03	155 25.27	9.46	1.7	1.1	29	3	43	.10	4	.4	.8 16	KAO
		21	1344	8.18	19 18.99	155 15.34	6.72	1.9	1.6	37	1	95	.11	4	.4	.8 23	SF1
		21	1529	35.30	19 21.85	155 12.85	3.04	.8	1.0	17	3	102	.05	2	.4	.4 10	SER
		21	1618	27.41	19 16.73	155 23.63	7.53	1.4	1.3	25	3	101	.12	5	.5	1.1 15	SWR
		21	1721	54.47	19 20.66	155 10.55	7.28	1.5	1.7	40	4	75	.11	3	.4	.6 26	SF3
		21	1739	5.08	19 23.08	155 14.78	3.21	1.1	1.0	17	4	66	.07	2	.3	.4 9	SEC
		21	1758	27.98	19 14.55	155 33.13	7.45	2.3	1.8	37	2	112	.18	5	.6	1.0 21	LSW
		21	19	7 12.49	19 17.15	155 15.05	4.08	1.4	1.2	26	0	158	.12	3	.6	1.1 13	SSF
		21	1915	34.29	19 18.87	155 19.97	33.00	2.7	2.4	46	3	95	.10	3	.6	.9 41	DEP
		21	2053	13.98	19 17.12	155 34.31	6.81	2.2	1.6	31	2	56	.18	6	.5	1.8 18	LSW
		21	2056	36.66	19 18.26	155 13.34	5.76	1.4	1.1	33	2	86	.10	2	.5	1.1 21	SF2
		21	2135	41.92	19 20.78	155 12.95	8.47	2.0	2.1	39	2	63	.11	3	.4	.5 26	SF2
		21	23	9 36.17	19 18.84	155 13.44	9.32	2.6	2.6	42	2	76	.10	3	.4	.5 36	SF2
		22	313	29.03	19 19.96	155 11.49	10.17	3.3	3.5	45	3	86	.09	5	.4	.3 37	SF3
		22	510	51.38	19 19.43	155 16.40	8.51	2.3	2.2	42	0	98	.12	2	.4	.5 25	SF1
		22	621	7.86	19 20.43	155 12.42	9.00	1.9	1.8	38	3	71	.13	4	.4	.5 26	SF2
		22	713	16.67	19 18.02	155 15.17	8.31	1.5	1.3	29	2	114	.08	4	.5	.7 20	SF1
		22	810	49.84	19 17.25	155 20.67	5.84	1.8		31	2	131	.10	4	.5	1.0 18	SWR
		22	1845	33.45	19 18.51	155 15.18	5.25	1.3	1.1	28	3	112	.11	4	.4	1.3 19	SF1
		22	19	4 19.44	19 17.73	155 23.29	3.06	1.7	1.7	28	2	98	.10	5	.4	1.1 22	SWR
		22	1929	20.34	19 19.82	155 7.62	6.12	1.9	1.4	36	2	100	.10	5	.4	.9 23	SF4
		22	1941	55.09	19 20.48	155 13.06	7.41	1.3	1.1	28	2	65	.10	4	.5	.9 21	SF2
		22	2050	38.79	19 17.95	155 20.67	7.60	1.7	1.1	31	4	122	.10	4	.4	1.0 20	SWR
		22	2142	56.38	19 21.07	155 13.36	9.38	3.0	3.1	45	2	56	.11	3	.3	.5 37	SF2 F
		22	23	3 27.82	19 23.82	155 1.09	6.58	1.5	1.1	27	1	181	.16	5	.8	1.1 16	SF5
		23	012	57.84	19 18.81	155 15.68	6.58	1.6	1.3	33	2	111	.13	4	.5	.9 19	SF1
		23	014	9.88	19 19.47	155 11.06	9.79	2.8	2.9	43	3	98	.11	5	.4	.4 34	SF3
		23	148	13.51	19 23.05	155 14.84	3.58	1.4	1.2	20	4	63	.12	2	.4	.5 8	SEC
		23	159	40.17	19 22.09	155 10.45	2.86	.9	1.0	16	1	91	.10	1	.7	.5 7	SER
		23	318	16.62	19 18.11	155 13.12	5.41	1.3	1.1	23	2	99	.09	2	.5	1.4 14	SF2
		23	956	46.33	19 20.83	155 13.14	9.75	2.6	2.8	45	5	60	.10	3	.4	.4 37	SF2

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		ORIGIN TIME			LAT N		LON W		DEPTH		AMP		DUR		GAP		RMS		MIN		ERM		ERZ NO		
YEAR	MON	DA	HRMN	SEC	DEG	MIN	DEG	MIN	KM	MAG	MAG	NR	NS	DEG	SEC	DIS	KM	KM	FM	REMK					
1982	OCT	23	1047	18.85	19	20.32	155	13.11	8.09	1.4	1.0	21	2	65	.08	4	.5	.9	18	SF2					
		23	1132	39.47	19	19.62	155	7.22	8.88	2.1	1.8	34	2	113	.08	4	.4	.6	27	SF4					
		23	1243	18.09	19	19.74	155	7.76	8.51	1.5	1.1	28	4	98	.09	4	.5	.8	21	SF4					
		23	1349	56.38	19	26.39	155	24.17	10.27	2.5	2.2	46	4	40	.11	3	.3	.6	33	KAO					
		23	1545	51.93	20	6.78	155	57.22	17.65	2.4	1.8	19	3	279	.14	18	2.2	3.0	14	KOH					
		23	1549	54.11	19	23.54	155	27.39	10.65	2.0	1.9	38	2	47	.10	2	.4	.7	33	KAO					
		23	1746	19.46	19	20.20	155	12.83	9.48	1.8	1.3	33	3	70	.10	5	.4	.7	25	SF2					
		23	2256	54.87	19	31.21	155	35.06	12.62	1.9		27	6	102	.11	4	.6	.8	23	MLO					
		24	1	1 47.38	19	19.42	155	15.47	9.08	2.4	2.4	43	5	88	.10	4	.4	.5	36	SF1					
		24	657	38.48	19	16.62	155	15.67	6.88	.9	1.1	21	3	186	.10	4	.6	1.0	19	SF1					
		24	913	1.51	19	18.84	155	13.54	7.28	1.7	1.1	29	2	72	.09	3	.5	.9	17	SF2					
		24	10	5 27.60	19	22.27	155	10.86	3.08	1.5	1.1	16	2	104	.07	2	.6	.5	10	SER					
		24	1416	23.49	19	19.76	155	11.21	8.68	1.7	1.1	30	2	90	.08	5	.5	.7	17	SF3					
		24	17	4 7.65	19	21.02	155	6.00	8.91	1.2	1.4	22	3	97	.08	4	.5	.8	13	SF4					
		24	20	5 15.16	19	19.32	155	9.95	8.72	1.8	1.7	40	4	100	.07	5	.4	.7	26	SF3					
		24	2112	49.55	19	21.02	155	12.64	8.10	1.9	2.1	41	4	62	.11	3	.4	.6	22	SF2					
		25	240	2.02	19	19.71	155	7.99	7.82	1.8	1.5	37	5	92	.09	4	.4	.7	22	SF4					
		25	316	7.68	19	17.94	155	23.26	3.59	1.7	2.0	30	3	97	.13	4	.3	1.0	18	SWR					
		25	358	37.62	19	22.16	155	11.47	2.91	1.5	1.0	17	1	96	.08	3	.5	.4	11	SER					
		25	619	30.62	19	19.63	155	11.50	9.89	3.2	3.5	43	1	92	.09	5	.4	.3	37	SF3					
		25	13	3 14.08	19	20.97	155	11.24	8.60	2.1	1.9	40	5	70	.09	3	.4	.5	25	SF3					
		25	1533	7.49	19	18.93	155	14.72	6.15	1.1	1.1	27	0	96	.10	4	.5	1.2	19	SF1					
		25	1730	54.48	19	23.40	155	14.64	3.20	1.5	1.9	23	4	59	.08	2	.3	.4	14	SEC					
		25	1834	47.48	19	23.15	155	14.76	3.45	1.7	2.2	26	4	48	.08	2	.3	.4	14	SEC					
		25	1914	35.09	19	19.17	155	15.49	7.70	1.5	1.5	30	1	103	.08	4	.4	.7	18	SF1					
		25	20	7 31.98	19	23.25	155	14.66	3.01	1.1	1.2	15	4	92	.06	3	.3	.5	11	SEC					
		25	2057	.37	19	13.18	155	32.20	5.88	1.5	1.1	25	3	77	.20	5	.6	1.6	13	LSW					
		25	2315	6.69	19	26.22	155	24.18	4.92	1.5	1.1	23	2	62	.11	2	.4	1.2	13	KAO					
		26	654	47.62	19	19.69	155	8.10	8.56	2.9	2.9	46	5	89	.09	4	.4	.5	35	SF4					
		26	656	59.93	19	20.02	155	8.18	8.52	2.5	2.4	43	5	84	.11	5	.4	.5	32	SF4					
		26	658	39.27	19	19.99	155	8.23	9.00	2.9	3.0	44	3	84	.11	5	.4	.5	33	SF4					
		26	1217	44.46	19	19.41	155	9.44	7.47	1.6	1.1	25	2	94	.10	5	.6	1.0	17	SF3					
		26	1430	12.16	19	16.55	155	22.90	7.60	2.4	2.8	36	3	120	.14	5	.5	.8	25	SWR					
		26	15	3 54.00	19	19.23	155	18.90	6.58	1.1	1.1	24	3	58	.09	2	.4	.9	15	SWR					
		26	1523	22.37	19	21.83	155	9.15	3.33	1.7	1.3	17	1	90	.07	1	.5	.4	12	SER					
		26	1532	39.11	19	21.83	155	9.98	3.41	1.6		25	2	76	.08	0	.4	.4	14	SER					
		26	1538	58.41	19	22.00	155	11.10	2.92	1.5	1.3	15	1	116	.06	2	.5	.4	8	SER					
		26	1728	38.74	19	25.15	155	16.15	14.49	1.5	1.2	34	1	74	.10	2	.5	.3	23	DEP					
		26	1740	47.16	19	21.89	155	11.19	2.93	2.1	2.3	24	1	85	.08	2	.4	.5	16	SER					
		26	20	1 46.20	19	21.87	155	10.97	2.67	1.5	1.4	17	1	102	.08	2	.6	.5	13	SER					
		26	2212	1.97	19	20.83	155	12.61	7.08	1.5	1.5	28	2	64	.09	3	.4	.7	17	SF2					
		27	423	1.96	19	25.54	155	25.13	9.74	1.6	1.4	33	2	49	.10	1	.4	.7	23	KAO					
		27	5	9 21.13	19	17.21	155	13.85	2.15	1.8	1.9	35	0	126	.11	1	.7	.3	28	SSF					
		27	7	8 22.62	19	20.46	155	10.90	7.69	1.9	1.8	34	4	78	.08	3	.4	.6	23	SF3					
		27	910	47.99	19	21.76	155	9.93	3.35	1.7	1.4	19	1	116	.05	1	.4	.4	12	SER					
		27	1043	25.97	19	19.77	155	16.60	7.42	1.5	1.5	32	1	95	.11	2	.4	.7	16	SF1					
		27	1054	6.91	19	19.28	155	7.19	8.13	2.1	2.1	32	2	120	.09	4	.6	.8	23	SF4					
		27	1456	20.97	19	18.59	155	13.44	6.65	1.1	1.1	29	2	78	.13	3	.5	.9	15	SF4					

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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	
1982	OCT	27	1757	51.20	19 20.15	155 9.77	7.61	1.5	1.1	27	3	81	.08	4	.5	1.0	20	SF3	
		27	2353	25.88	19 26.04	155 28.19	7.66	2.0	1.4	35	3	49	.09	6	.3	.8	22	KA0	
		28	137	2.96	19 19.46	155 15.43	7.77	1.9	1.6	33	2	96	.10	4	.4	.7	20	SF1	
		28	5	46.09	19 19.30	155 9.81	7.80	1.9	1.8	34	2	99	.08	5	.4	.7	25	SF3	
		28	610	47.82	19 19.56	155 7.83	6.73	1.5	1.1	26	2	99	.09	4	.5	1.0	15	SF4	
		28	817	47.46	19 17.24	155 21.14	7.45	1.4	1.8	26	2	133	.11	5	.5	.8	12	SWR	
		28	950	11.93	19 16.68	155 23.10	5.32	1.7	1.8	28	0	114	.14	5	.5	1.5	15	SWR	
		28	1034	48.05	19 18.21	155 21.79	6.69	1.7	1.2	27	3	111	.12	5	.4	1.2	17	SWR	
		28	1050	5.05	19 23.66	155 30.35	8.68	1.2	3.0	1	50	.08	5	.4	.9	16	KA0		
		28	1347	31.92	19 23.21	155 14.90	3.26	1.9	1.9	25	4	69	.07	2	.3	.3	16	SEC	
		28	16	0	3.85	19 21.74	155 10.31	2.97	.9	1.1	16	1	88	.09	1	.6	.4	5	SER
		28	1634	37.20	19 23.15	155 14.87	3.20	1.2	1.2	14	3	108	.08	2	.4	.5	9	SEC	
		28	1728	5.44	19 18.92	155 15.53	7.05	1.2	1.1	26	1	107	.08	4	.5	.8	15	SF1	
		28	1844	10.34	19 22.39	155 27.80	5.03	1.8	1.3	28	2	43	.11	0	.4	.7	16	KA0	
		28	2230	16.59	19 19.07	155 15.90	8.34	2.2	2.1	38	3	108	.13	3	.4	.6	21	SF1	
		29	014	39.74	19 21.72	155 4.96	8.49	2.8	2.6	43	4	81	.08	3	.5	.4	32	SF5	
		29	1	3	50.48	19 23.14	155 14.84	3.42	1.1	1.0	13	3	66	.04	2	.4	.5	7	SEC
		29	2	1	23.64	19 23.05	155 14.94	3.42	1.6	1.7	22	4	65	.08	2	.3	.4	13	SEC
		29	339	32.16	19 22.41	155 10.73	1.92	.9	1.0	13	0	96	.15	2	.7	.5	3	SER	
		29	420	35.69	19 19.36	155 13.53	7.18	2.0	1.8	39	1	68	.12	4	.4	.8	25	SF2	
		29	657	46.19	19 20.60	155 13.10	8.11	1.8	1.8	39	4	63	.11	4	.4	.6	23	SF2	
		29	725	30.26	19 19.52	155 8.69	6.95	1.8	1.3	22	0	80	.07	4	.6	1.3	19	SF4	
		29	8	8	29.81	19 20.82	155 7.15	6.05	1.3	1.1	27	3	91	.11	4	.5	1.3	16	SF4
		29	1111	35.31	19 20.29	155 13.16	7.09	1.5	1.6	31	2	65	.11	4	.4	.7	21	SF2	
		29	1150	5.23	19 16.18	155 23.47	7.85	2.6	2.9	46	4	111	.17	4	.5	.6	38	SWR	
		29	1154	36.72	19 16.20	155 23.43	6.20	1.8	1.9	31	1	113	.13	4	.4	1.3	19	SWR	
		29	2019	27.93	19 18.40	155 6.84	3.46	1.2	1.1	22	0	159	.11	3	.8	1.0	11	SSF	
		29	22	7	7.59	19 24.95	155 14.25	6.95	1.3	1.1	11	2	195	.14	1	1.5	1.3	8	INT
		30	0	6	.68	19 20.71	155 6.32	6.49	1.7	1.3	30	2	102	.10	4	.5	1.0	19	SF4
		30	123	30.41	19 20.63	155 10.61	6.88	1.4	1.2	23	0	75	.12	3	.6	1.2	19	SF3	
		30	344	27.81	19 18.03	155 13.00	8.21	1.6	1.5	27	3	106	.10	2	.4	.7	13	SF2	
		30	436	58.40	19 18.50	155 13.28	10.30	2.9	3.1	44	5	131	.10	8	.5	.4	32	SF2	
		30	519	12.20	19 19.63	155 12.27	4.39	1.3	1.1	21	1	85	.09	5	.5	2.1	13	SSF	
		30	653	36.84	19 16.97	155 15.68	28.08	1.8	1.4	30	0	164	.10	4	1.2	1.5	20	DEP	
		30	812	36.88	19 22.25	155 17.25	32.33	2.1	2.5	35	1	43	.09	2	.7	1.1	30	DEP	
		30	935	45.67	19 18.53	155 7.09	9.50	2.9	3.1	39	1	187	.11	8	.7	.5	29	SF4	
		30	1056	22.14	19 22.10	155 9.16	3.47	1.7	1.1	18	0	92	.06	1	.6	.5	12	SER	
		30	15	4	14.15	19 18.35	155 6.92	3.53	1.2	1.3	23	0	158	.10	3	.8	1.0	15	SSF
		30	1631	8.03	19 21.96	155 10.75	3.23	1.6	1.4	13	1	125	.10	2	.7	.6	7	SER	
		30	1717	9.95	19 19.99	155 6.67	7.21	1.2	1.3	26	2	114	.10	5	.5	1.1	12	SF4	
		30	2016	17.25	19 21.89	155 11.20	3.03	.7	1.1	13	1	86	.08	2	.5	.4	5	SER	
		30	2017	55.31	19 19.13	155 17.51	4.13	1.0	1.1	16	2	156	.12	2	.7	.5	7	SWR	
		30	2040	18.53	19 18.57	155 6.93	3.27	1.2	1.1	23	1	149	.12	3	.6	.9	8	SSF	
		30	2040	33.28	19 17.90	155 6.68	3.92	1.4	1.5	14	1	186	.10	2	1.0	1.1	12	SSF	
		31	124	29.75	19 21.72	155 9.15	3.67	1.3	1.3	18	0	82	.05	1	.5	.6	10	SER	
		31	616	27.36	19 22.63	155 9.23	3.81	1.4	1.5	20	1	102	.09	2	.5	.6	12	SER	
		31	649	48.97	19 21.82	155 10.26	3.13	1.6	1.9	20	1	89	.08	1	.4	.4	13	SER	
		31	710	56.68	19 17.55	155 16.28	7.35	2.0	2.0	33	0	147	.12	4	.5	.8	23	SF1	

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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	
1982	OCT	31	756	8.90	19 20.64	155 13.74	9.18	2.6	2.4	43	4	62	.13	4	.4	.5	36	SF2	
		31	1312	59.70	19 18.36	155 13.02	6.97	1.3	1.1	32	3	97	.12	3	.5	.9	23	SF2	
		31	1333	47.33	19 21.63	155 6.26	7.89	1.3	1.1	27	0	83	.12	3	.5	.8	19	SF4	
		31	1624	45.73	19 20.20	155 7.12	8.30	3.0	3.3	43	3	102	.09	5	.4	.5	31	SF4	
	NOV	1	027	5.34	19 19.43	155 7.77	7.69	2.5	2.6	36	1	102	.09	4	.5	.6	21	SF4	
		1	029	28.83	19 19.67	155 7.66	8.70	2.9	3.0	40	2	101	.09	4	.5	.4	26	SF4	
		1	612	20.49	19 21.27	155 15.03	9.39	1.6	1.7	26	1	66	.07	3	.4	.6	19	SF1	
		1	714	28.84	19 19.58	155 15.22	9.94	2.4	2.5	37	2	122	.10	4	.5	.6	28	SF1	
		1	735	31.91	18 54.11	155 15.23	11.93	2.3	3.6	27	0	292	.13	36	5.8	1.5	14	LOI L	
		1	1215	21.99	18 59.06	155 13.31	13.60	2.8	3.1	39	0	259	.12	32	2.1	.7	25	LOI	
		2	2034	.53	19 22.21	155 10.27	3.33	.8	1.1	16	1	94	.08	1	.6	.5	6	SER	
		2	132	40.88	19 6.81	155 28.78	30.87	2.0	1.3	27	0	239	.06	5	1.6	2.0	23	DLS	
		2	215	9.37	19 21.00	155 26.09	10.74	1.2	1.0	23	2	59	.09	4	.5	.9	13	KA0	
		2	421	3.51	19 18.78	155 5.53	39.41	2.5	2.0	44	1	175	.10	5	1.0	.5	4	DEP	
		2	427	43.93	19 16.40	155 15.11	7.99	2.5	2.3	39	1	160	.12	3	.6	.9	28	SF1	
		2	542	9.03	19 19.81	155 7.99	8.79	2.5	2.4	41	3	91	.09	5	.4	.5	30	SF4	
		2	543	20.24	19 23.14	155 14.10	5.87	1.3	1.2	12	3	108	.11	2	.8	1.4	10	INT	
		2	544	16.97	19 22.97	155 14.66	4.06	.8	.8	12	4	114	.09	2	.5	.9	9	SEC	
		2	1052	35.08	18 53.17	155 14.48	11.61	2.6	2.9	22	0	262	.12	36	3.0	1.1	8	LOI L	
		2	1353	19.90	19 23.41	155 14.93	3.03	1.2	1.4	15	4	99	.06	3	.3	.5	9	SEC	
		2	1413	33.48	19 21.72	155 11.34	2.66	1.5	1.0	12	1	110	.05	3	.6	.4	4	SER	
		2	1811	19.23	19 21.77	155 9.17	3.49	1.7	1.3	21	1	77	.09	1	.4	.5	11	SER	
		2	2013	48.10	19 17.94	155 12.97	6.36	1.6	1.5	31	3	111	.11	2	.5	1.0	18	SF2	
		3	030	36.87	19 19.48	155 19.10	6.39	1.1	1.1	24	4	85	.12	3	.5	1.0	20	SWR	
		3	741	19.88	19 23.29	155 14.84	3.24	1.1	1.0	13	3	103	.04	3	.3	.5	9	SEC	
		3	9	4	4.75	19 21.60	155 11.15	2.64	1.3	1.6	19	2	82	.12	2	.4	.5	11	SER
		3	1053	14.96	19 20.40	155 7.74	7.21	2.0	1.8	34	2	88	.11	5	.5	.9	25	SF4	
		3	2023	41.21	19 17.17	155 23.37	3.91	2.1	2.6	33	2	103	.12	5	.4	1.5	21	SWR	
		4	028	46.05	19 19.06	155 13.62	8.37	1.7	1.3	35	3	70	.10	4	.5	.7	24	SF2	
		4	030	37.51	19 19.01	155 13.68	8.13	1.9	1.7	39	3	72	.12	4	.5	.7	24	SF2	
		4	221	58.57	19 24.91	155 25.84	8.70	2.0	1.7	39	4	50	.11	1	.3	.6	27	KA0	
		4	339	35.18	19 21.97	155 9.15	3.46	1.8	1.8	24	0	78	.07	1	.5	.5	17	SER	
		4	5	4	7.43	19 23.30	154 57.78	7.92	1.8	1.7	35	2	195	.18	4	1.0	.7	22	LER
		4	711	20.06	19 22.65	155 8.27	3.69	.9	1.1	14	2	109	.11	3	.7	.6	8	SER	
		4	743	51.14	19 24.27	154 58.44	5.46	1.6	1.2	26	0	178	.14	2	.9	1.0	15	LER	
		4	830	46.29	19 24.09	154 58.07	5.76	1.6	1.2	22	0	183	.15	2	1.0	1.3	15	LER	
		4	14	9	48.48	19 16.19	155 33.60	5.62	1.2	1.0	28	3	60	.18	6	.5	1.9	12	L5W
		4	1510	14.71	19 21.82	155 8.92	3.40	1.7	1.2	21	1	90	.06	2	.4	.5	16	SER	
		4	1525	20.71	19 17.46	155 21.61	4.84	1.8	1.7	34	2	124	.13	5	.4	1.5	21	SWR	
		4	1658	2.14	19 20.96	155 49.29	10.14	1.4	1.3	19	0	168	.12	11	.8	.7	11	KON	
		4	2212	21.71	19 22.03	155 9.14	3.58	.9	1.1	15	0	92	.07	1	.7	.6	11	SER	
		5	026	28.42	19 21.81	155 10.36	3.07	.9	1.1	17	1	88	.08	1	.5	.4	13	SER	
		5	148	55.48	19 15.28	155 22.87	6.89	1.1	1.1	17	1	175	.10	3	.7	1.3	10	SWR	
		5	157	28.97	19 22.70	155 4.12	7.73	2.0	1.8	36	5	90	.11	3	.4	.6	16	SF5	
		5	232	.21	19 23.76	155 15.25	2.41	.9	1.0	13	3	98	.05	2	.3	.4	8	SEC	
		5	236	23.87	19 21.94	155 9.41	3.45	1.7	1.8	20	1	91	.07	1	.5	.5	17	SER	
		5	246	15.36	19 22.11	155 9.29	3.52	1.1	1.1	18	1	145	.08	1	.9	.5	11	SER	
		5	646	49.65	19 19.75	155 12.19	8.26	2.6	2.4	42	5	84	.09	6	.4	.4	28	SF3	

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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	ERM KM	ERZ NO KM FM REMK	
1982	NOV	5	9	6	45.16	19 20.59	155 12.82	8.81	2.3	2.4	43	3	65	.11	4	.4	.5 33 SF2
		5	947	24.73	19 21.49	155 10.83	2.95	1.6	1.3	15	1	140	.09	2	.6	.4 6 SER	
		5	1110	17.09	19 16.56	155 22.62	5.49	1.0	1.1	21	1	125	.12	5	.5	1.9 17 SWR	
		5	1135	38.16	20 1.55	155 22.68	8.78	2.9	2.5	40	1	208	.12	29	1.0	.7 30 KEA F	
		5	1434	10.82	19 21.85	155 15.19	8.93	1.9	1.8	38	3	59	.11	2	.4	.5 25 SF1	
		5	15	1	48.15	19 25.47	155 28.81	7.77	2.4	2.0	43	3	59	.11	6	.3	.9 36 KAO
		5	1633	51.76	19 22.15	155 9.24	3.38	1.7	1.3	15	0	94	.06	1	.5	.5 12 SER	
		5	17	7	33.52	19 21.26	155 3.08	8.30	2.0	2.0	30	2	113	.13	3	.7	.6 19 SF5
		5	1954	59.09	19 19.87	155 14.07	7.33	2.2	2.4	48	5	64	.13	5	.4	.6 36 SF2	
		6	047	16.46	19 20.86	155 12.42	9.33	2.1	1.8	38	4	66	.09	3	.3	.5 22 SF2	
		6	057	30.64	19 22.47	155 25.24	10.13	2.1	2.0	36	2	42	.12	4	.4	.6 30 KAO	
		6	445	29.69	19 21.08	155 10.34	9.28	2.0	1.8	35	2	69	.09	2	.4	.6 25 SF3	
		6	833	53.46	19 13.10	155 15.99	32.64	2.5	2.8	48	2	177	.09	9	.7	1.0 41 DEP	
		6	1151	20.74	19 20.28	155 13.35	7.02	1.3	1.3	26	2	64	.10	4	.5	.9 18 SF2	
		6	1254	48.47	19 20.79	155 5.85	7.95	2.0	2.3	36	1	104	.12	4	.5	.6 23 SF4	
		6	15	8	17.69	19 26.38	155 32.84	21.38	2.2	2.6	9	0	68	.09	5	1.1	3.4 2 DML
		6	1752	35.82	19 24.84	155 24.72	9.04	1.6	1.2	28	3	39	.09	1	.4	.8 22 KAO	
		6	2113	.98	19 19.61	155 15.60	8.10	2.4	3.0	44	4	87	.12	3	.4	.6 28 SF1	
		6	2115	17.96	19 18.84	155 15.38	6.65	.9	.9	24	1	108	.09	4	.5	1.0 14 SF1	
		6	2252	2.46	19 20.00	155 6.77	7.74	1.1	.9	23	2	112	.08	5	.5	1.0 14 SF4	
		6	2252	23.48	19 18.11	155 14.84	7.20	.8	.9	16	1	118	.07	3	.7	1.4 12 SF1	
		6	2329	42.97	19 30.36	155 54.26	15.45	1.5	1.8	14	3	162	.09	2	1.1	.6 10 KON	
		6	2347	41.55	19 21.67	155 10.14	3.13	1.5	2.2	23	1	61	.08	1	.4	.4 14 SER	
		7	012	5.99	19 16.49	155 23.38	3.65	.8	1.1	18	1	110	.10	4	.5	1.6 12 SWR	
		7	543	23.88	19 21.53	155 14.33	27.39	1.5	1.3	24	0	58	.10	3	1.0	1.5 21 DEP	
		7	823	48.99	20 6.82	155 26.00	1.12	2.3	1.8	24	1	275	.12	27	2.0	1.4 14 KEA	
		7	947	36.92	19 17.90	155 16.72	8.69	2.6	2.8	46	4	127	.13	3	.5	.6 30 SF1	
		7	1619	43.75	19 22.06	155 9.29	3.40	1.7	1.3	19	0	91	.07	1	.5	.5 13 SER	
		7	1820	32.45	19 14.51	155 34.65	7.98	2.3	2.0	40	2	78	.20	4	.6	1.1 25 LSW	
		7	1952	25.05	19 20.07	155 7.19	7.87	2.1	1.8	34	1	103	.10	5	.5	.7 26 SF4	
		7	2133	27.97	19 21.06	155 6.15	7.21	2.0	1.5	31	1	95	.10	4	.5	.7 20 SF4	
		8	0	6	12.21	19 20.51	155 10.83	8.43	1.7	1.5	35	2	77	.09	3	.4	.7 18 SF3
		8	537	8.89	19 19.85	155 7.41	7.62	1.4	1.1	26	3	103	.10	5	.5	.9 14 SF4	
		8	538	46.87	19 19.20	155 11.61	9.08	2.2	2.1	40	2	101	.10	5	.4	.5 28 SF3	
		8	8	5	23.42	19 19.82	155 7.78	8.48	2.0	2.0	35	2	96	.10	5	.5	.7 24 SF4
		8	8	9	34.87	19 22.19	155 5.94	6.83	1.3	1.3	25	1	74	.12	2	.6	1.0 13 SF4
		8	935	38.78	19 25.68	154 56.20	5.81	2.1	2.2	35	3	159	.14	4	.8	.6 18 LER	
		8	1035	30.34	19 22.83	155 2.28	6.32	1.8	1.7	32	3	136	.14	5	.5	.9 13 SF5	
		8	13	9	1.66	19 21.12	155 13.05	9.28	2.3	2.5	42	3	58	.11	3	.4	.5 32 SF2
		8	1314	17.61	19 20.34	155 12.01	7.44	1.4	1.3	28	3	76	.08	5	.5	.8 19 SF3	
		8	1346	15.19	19 20.81	155 13.27	7.03	1.9	.32	32	2	59	.13	3	.5	.7 22 SF2	
		8	1346	53.21	19 21.53	155 15.08	9.27	2.4	2.2	39	3	63	.11	2	.4	.5 26 SF1	
		8	1643	39.22	19 25.73	155 24.60	9.85	2.2	2.1	36	2	47	.11	8	.4	.9 28 KAO	
		8	19	3	22.32	19 20.71	155 13.03	7.91	1.8	1.9	43	4	63	.13	4	.4	.5 29 SF2
		8	2013	19.66	19 10.48	155 33.16	7.48	1.3	1.2	22	2	139	.15	10	.6	1.5 9 LSW	
		8	22	1	37.95	19 20.64	155 10.78	8.81	2.4	2.4	37	4	75	.11	3	.4	.5 22 SF3
		8	22	6	21.38	19 20.45	155 10.62	6.93	1.6	1.1	28	4	79	.08	3	.5	.7 22 SF3
		9	246	51.40	19 20.94	155 12.56	7.83	1.5	1.1	26	3	64	.10	3	.5	.6 10 SF2	

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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	ERM KM	ERZ NO KM FM REMK	
1982	NOV	9	945	53.44	19 19.39	155 15.48	6.14	1.4	1.5	29	0	98	.11	4	.4	1.0 18 SF1	
		9	1153	29.19	19 19.28	155 15.59	7.18	1.9	1.6	34	3	101	.10	4	.4	.7 21 SF1	
		9	1428	3.21	19 18.00	155 14.66	7.11	1.2	1.1	23	2	140	.09	3	.6	1.0 15 SF1	
		9	23	4	32.68	19 19.99	155 11.75	10.10	3.2	3.6	44	3	83	.10	5	.3	.3 37 SF3 F
		10	1	7	3.08	19 21.46	155 16.05	34.58	2.2	2.0	42	1	64	.09	2	.7	1.2 36 DEP
		10	248	13.51	19 20.81	155 5.91	8.18	2.3	2.2	40	4	103	.10	4	.4	.5 31 SF4	
		10	755	59.35	19 18.89	155 13.67	8.10	1.8	.29	2	86	.09	3	.5	.8 20 SF2		
		10	756	26.41	19 18.85	155 14.91	6.63	1.2	1.1	26	3	101	.10	4	.5	.9 17 SF1	
		10	956	22.88	19 18.90	155 15.89	7.01	1.3	1.1	25	2	111	.08	3	.5	.9 17 SF1	
		10	1013	13.77	19 20.34	155 10.20	1.86	.8	1.0	12	1	169	.13	3	.6	.9 7 SSF	
		10	14	2	27.28	19 21.71	155 11.44	3.26	.7	1.0	13	2	82	.08	3	.5	.6 6 SER
		10	15	4	48.16	19 26.98	155 24.21	8.11	2.0	1.8	43	5	46	.12	4	.3	.6 26 KAO
		10	16	7	37.65	19 18.72	155 15.14	6.78	1.1	1.1	18	1	110	.09	4	.7	1.5 12 SF1
		10	1940	3.85	19 18.89	155 15.36	5.95	1.0	1.0	23	3	106	.10	4	.4	1.1 14 SF1	
		10	2239	.39	19 17.92	155 14.52	6.64	1.0	1.0	23	2	140	.08	2	.6	1.0 17 SF1	
		11	1656	7.69	20 25.56	155 29.76	.25	2.6	1.9	19	0	285	.19	44	11.2	8.7 13 DIS *	
		11	1812	56.07	19 19.22	155 15.64	8.12	1.9	1.8	34	0	103	.10	4	.4	.7 23 SF1	
		11	19	2	41.06	19 24.68	154 59.24	8.26	1.8	1.5	23	2	159	.15	1	1.0	.7 8 LER
		11	2013	.48	19 14.61	155 15.79	30.69	2.1	1.9	41	2	177	.09	6	.7	1.2 37 DEP	
		11	22	4	20.99	19 19.58	155 6.69	8.00	2.6	2.8	38	2	125	.09	5	.5	.5 30 SF4
		12	247	35.97	19 18.23	155 13.39	6.87	1.0	.8	26	3	85	.10	2	.5	.9 14 SF2	
		12	4	0	4.33	19 19.06	155 13.68	6.20	1.5	1.3	35	4	71	.12	4	.4	.9 19 SF2
		12	644	19.64	19 24.45	155 25.65	9.95	1.7	1.3	29	2	39	.10	2	.4	.6 21 KAO	
		12	910	35.73	19 23.47	155 2.88	6.56	1.4	1.1	23	1	114	.17	3	.5	.9 12 SF5	
		12	13	6	11.73	19 19.73	155 10.51	6.54	1.7	1.6	35	2	92	.11	4	.5	.9 26 SF3
		12	1345	29.30	19 20.57	155 9.17	7.60	2.1	2.2	36	2	69	.11	3	.4	.8 23 SF3	
		12	1410	56.22	19 19.83	155 8.58	7.36	1.9	1.9	35	3	77	.10	5	.5	.8 18 SF4	
		12	1553	2.15	20 40.11	155 29.94	4.16	2.7	1.9	22	1	306	.06	67	9.7	10.5 10 DIS *	
		12	1618	58.25	19 27.32	155 26.47	14.93	4.1	4.1	50	4	38	.12	4	.4	.3 42 DML F	
		12	1628	29.00	19 27.48	155 26.22	14.53	3.3	3.2	47	2	39	.13	5	.4	.3 41 DML	
		12	1920	18.14	19 17.72	155 13.09	7.21	2.0	1.8	31	0	114	.13	1	.6	1.0 25 SF2	
		12	1921	54.63	19 17.56	155 12.90	7.35	1.6	1.4	25	0	134	.11	1	.6	.9 14 SF2	
		12	2016	17.40	19 21.74	155 6.02	7.08	1.2	1.0	19	1	82	.10	2	.5	1.0 10 SF4	
		12	2147	51.92	19 27.28	155 26.65	14.06	2.0	1.9	33	3	53	.10	5	.5	.5 24 DML	
		12	22	7	6.71	19 24.84	155 24.97	6.69	1.1	1.1	17	1	47	.10	1	.5	1.1 11 KAO
		12	22	8	4.94	19 19.25	155 15.05	7.08	1.1	1.1	19	1	175	.09	4	.7	1.0 12 SF1
		13	1	27.38	20 45.82	155 30.47	15.33	3.0	3.3	38	2	242	.11	76	1.3	4.8 27 DIS	
		13	220	23.85	19 18.65	155 10.06	.90	1.4	1.2	9	0	144	.14	4	1.7	4.0 5 SSF *	
		13	440	4.01	19 21.96	155 5.85	6.01	1.1	1.1	18	1	78	.14	2	.7	1.3 11 SF4	
		13	534	31.21	19 18.09	155 12.84	6.79	1.6	1.1	25	1	111	.10	2	.5	1.1 18 SF2	
		13	735	25.26	19 18.15	155 15.13	9.72	2.4	2.4	43	4	150	.09	5	.5	.4 25 SF1	
		13	941	40.69	19 17.49	155 21.30	3.88	1.7	1.4	25	4	125	.11	5	.4	1.2 18 SWR	
		13	1312	12.94	19 18.85	155 11.30	8.75	3.0	2.9	42	4	114	.11	5	.4	.5 31 SF3	
		13	14	9	1.99	19 16.94	155 21.40	7.04	1.9	1.8	35	3	135	.12	5	.5	.7 21 SWR
		13	1419	49.69	19 11.15	155 31.66	7.52	1.6	1.6	21	0	209	.12	7	.9	1.0 11 LSW	
		13	1541	20.80	19 18.71	155 13.90	8.13	1.5	1.3	29	2	81	.09	3	.5	.9 20 SF2	
		13	1813	43.86	19 20.27	155 11.67	9.67	2.6	2.8	42	3	79	.12	5	.4	.5 29 SF3	
		13	2259	57.48	19 21.83	155 7.02	8.14	2.0	1.6	29	0	76	.11	3	.4	.8 21 SF4	

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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 NO KM FM	REMK
1982	NOV	14	628	54.04	19 19.72	155 10.29	7.20	1.6	1.0	23	2	92	.08	4	.6	1.0 19	SF3
		14	933	35.20	19 20.92	155 12.88	7.84	1.9	1.8	37	4	61	.13	3	.5	.7 28	SF2
		14	1325	31.05	19 19.68	155 13.76	6.45	1.9	1.8	41	4	69	.11	5	.4	.7 29	SF2
		14	1911	11.55	19 23.73	155 29.43	8.57	1.6	1.4	27	1	73	.12	4	.5	.9 19	KAO
		14	2316	12.87	19 21.12	155 7.13	7.45	1.8	1.5	25	0	86	.12	4	.5	.9 19	SF4
		14	2331	40.09	19 21.44	155 4.29	7.15	1.3	1.2	23	4	127	.13	4	.6	.8 16	SF5
		14	2341	51.83	19 19.11	155 13.90	7.24	1.5	1.3	29	2	76	.11	4	.5	.9 15	SF2
		15	017	46.69	19 26.95	155 27.94	6.30	1.8	1.1	26	1	49	.11	6	.4	1.4 15	KAO
		15	021	5.10	19 27.02	155 27.94	6.52	2.4	2.0	43	4	49	.13	6	.4	.9 29	KAO
		15	031	46.75	19 27.25	155 26.67	13.90	2.8	2.9	43	3	43	.10	5	.3	.3 34	DML
		15	310	44.36	19 26.97	155 26.52	12.88	1.8	1.2	30	2	51	.09	4	.5	.7 24	KAO
		15	534	51.36	19 20.59	155 6.17	7.51	1.9	1.3	28	1	106	.12	4	.5	1.0 21	SF4
		15	7	1 33.24	19 22.83	155 .82	6.42	2.2	1.7	29	2	162	.16	6	.6	1.0 15	SF5
		15	726	10.34	19 21.76	155 .97	7.33	2.1	1.9	35	5	168	.19	5	.7	.7 15	SF5
		15	820	31.59	19 19.11	155 13.51	6.51	2.0	1.8	33	1	70	.13	4	.4	.8 20	SF2
		15	1018	8.29	19 19.97	155 10.32	8.53	1.9	1.7	33	3	87	.10	4	.4	.7 23	SF3
		15	1055	48.43	19 20.23	155 13.19	7.06	1.6	1.3	27	2	118	.11	4	.6	.8 21	SF2
		15	1212	37.23	19 20.76	155 14.49	31.23	2.3	2.1	45	2	63	.09	4	.6	.9 42	DEP
		15	13	8 31.85	19 19.93	155 9.90	6.99	1.5	1.1	25	2	86	.12	4	.6	1.2 20	SF3
		15	17	3 4.73	19 18.37	155 15.48	6.68	1.7	1.5	28	1	119	.11	4	.5	.9 23	SF1
		15	1849	27.32	19 16.78	155 23.83	2.53	1.0	1.0	13	2	97	.07	5	.4	1.1 6	SWR
		15	1919	44.83	19 25.76	155 28.74	7.59	2.5	2.1	41	5	51	.12	6	.3	1.0 30	KAO
		15	2252	38.29	19 19.89	155 8.36	7.50	1.9	1.8	35	3	82	.11	5	.4	.6 23	SF4
		16	344	41.87	19 20.47	155 11.75	7.37	2.3	2.4	43	4	75	.13	4	.4	.6 33	SF3
		16	4	4 52.68	19 25.64	155 36.96	2.07	2.2	1.7	12	1	86	.20	3	.8	1.3 11	MLO
		16	510	42.89	19 16.83	155 22.50	4.92	1.1	1.6	23	2	122	.13	5	.5	2.5 18	SWR
		16	536	46.92	19 26.83	155 24.64	4.51	1.5	1.1	20	3	65	.11	6	.4	3.4 10	KAO
		16	1150	5.14	19 21.10	155 13.08	8.67	2.6	2.9	42	4	59	.13	3	.4	.5 30	SF2
		16	1832	29.85	19 20.19	155 9.58	7.13	1.8	1.5	28	3	79	.08	4	.5	.8 21	SF3
		16	1851	12.72	19 25.86	155 28.86	8.37	1.9	1.6	29	2	61	.10	7	.4	1.0 19	KAO
		16	2253	15.34	19 20.15	155 13.28	6.75	1.2	1.1	25	2	65	.11	5	.5	1.0 16	SF2
		16	2328	43.37	19 21.21	155 19.99	31.87	3.3	3.6	47	1	51	.11	5	.6	1.0 43	DEP
		17	155	30.95	19 17.42	155 23.50	6.29	2.1	2.7	36	3	98	.13	5	.4	1.0 26	SWR
		17	429	58.52	19 23.79	155 .61	8.66	2.1	1.7	33	2	143	.14	4	.6	.5 24	SF5
		17	516	35.57	19 20.31	155 12.53	7.11	1.6	1.3	26	2	71	.11	4	.5	.9 18	SF2
		17	529	28.98	19 19.93	155 7.59	7.69	1.8	1.3	33	4	98	.10	5	.5	.7 24	SF4
		17	533	6.95	19 20.48	155 6.08	7.82	1.8	1.3	31	2	110	.10	5	.4	.6 17	SF4
		17	539	49.46	19 20.07	155 10.61	8.39	2.3	2.5	44	5	85	.11	4	.4	.5 31	SF3
		17	540	31.91	19 19.60	155 10.56	6.32	1.7	1.3	22	1	95	.11	5	.6	1.4 20	SF3
		17	847	17.98	19 19.02	155 12.18	5.56	1.1	1.1	23	4	100	.11	4	.5	1.2 15	SF3
		17	9	4 51.04	19 20.19	155 12.86	7.81	1.4	1.1	24	5	70	.08	5	.5	.8 17	SF2
		17	1314	14.29	19 20.42	155 11.00	7.07	1.3	1.1	28	5	79	.10	4	.5	.8 17	SF3
		17	2124	44.13	19 20.35	155 7.34	8.35	3.0	3.1	42	3	97	.08	5	.4	.5 31	SF3
		17	22	7 36.34	19 17.34	155 15.38	5.10	1.3	1.2	27	4	151	.09	3	.4	1.0 16	SF1
		17	2324	50.78	19 19.32	155 11.56	6.22	1.3	1.1	23	2	99	.09	5	.5	1.1 16	SF3
		18	430	52.89	19 19.26	155 13.28	6.05	1.1	1.1	30	4	75	.12	4	.4	1.1 21	SF2
		18	637	10.17	19 18.95	155 13.69	6.18	1.3	1.0	30	3	72	.12	4	.5	1.1 23	SF2
		18	650	22.40	19 25.55	155 23.70	3.84	1.4	1.1	25	2	48	.12	3	.4	.9 17	KAO

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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 NO KM FM	REMK
1982	NOV	18	7 9	12.86	19 20.27	155 6.95	9.06	2.4	2.3	38	3	104	.13	5	.4	.7 26	SF4
		18	1849	13.93	19 19.45	155 9.12	8.51	2.8	3.1	42	3	88	.10	4	.4	.6 34	SF4
		18	1918	22.56	19 39.48	155 22.79	46.29	2.2	1.9	38	1	61	.09	13	.8	1.9 28	KEA
		18	2120	24.78	19 20.78	155 16.23	41.62	2.1	2.3	44	0	74	.11	2	.8	1.4 38	DEP
		19	236	37.76	19 16.73	155 21.69	2.99	.9	1.1	15	2	136	.06	6	.4	1.3 12	SWR
		19	925	48.11	19 21.48	155 24.88	9.52	1.7	1.2	32	3	45	.10	4	.4	.7 21	SWR
		19	936	19.74	19 11.66	155 12.22	45.38	2.6	2.5	44	2	194	.11	10	.9	1.5 32	DEP
		19	1859	29.06	19 21.85	155 4.80	7.82	1.1	1.2	22	1	77	.14	3	.6	.9 18	SF5
		19	1921	17.72	19 45.13	155 3.79	39.75	2.7	2.5	49	3	200	.11	5	.8	1.5 43	MIL
		19	1952	30.52	19 20.95	155 18.13	29.87	1.9	1.4	35	2	49	.09	2	.8	1.2 23	DEP
		19	2037	30.36	19 24.64	154 56.88	6.25	1.6	1.4	26	2	169	.11	3	.7	.8 15	LER
		20	244	49.92	19 20.35	155 11.64	7.53	1.5	1.6	30	2	78	.11	4	.5	.9 23	SF3
		20	458	27.28	19 20.35	155 13.60	7.00	1.6	1.3	29	1	62	.10	4	.5	.9 20	SF2
		20	621	31.77	19 19.89	155 8.60	8.48	2.1	2.3	40	3	77	.09	5	.4	.7 24	SF4
		20	815	30.58	19 25.63	154 55.42	8.19	2.5	2.9	39	2	167	.14	3	.8	.5 29	LER
		20	824	7.20	19 19.31	155 10.17	6.65	1.5	1.2	30	4	101	.10	5	.5	1.1 20	SF3
		20	1053	19.40	19 30.44	155 39.27	8.38	1.3	1.1	12	2	132	.08	6	.7	1.0 8	MLO
		20	1549	47.11	18 48.25	155 18.83	26.72	2.7	2.7	28	1	267	.11	42	2.0	4.8 9	LOI
		20	1815	4.74	19 30.50	155 39.11	8.95	1.5	1.2	12	3	130	.12	6	.6	1.2 8	MLO
		20	22	1 1.13	19 20.06	155 7.63	8.66	2.8	3.3	44	4	96	.11	5	.4	.5 33	SF4
		20	2257	37.09	19 20.05	155 6.57	7.73	2.1	2.6	36	2	114	.10	6	.5	.6 30	SF4
		20	2334	32.32	19 19.50	155 13.88	6.03	1.8	1.6	39	6	72	.11	5	.4	.9 29	SF2
		21	259	3.28	19 17.24	155 20.60	6.74	1.4	1.3	28	4	134	.10	4	.4	.8 18	SWR
		21	645	30.84	19 18.27	155 15.34	8.62	1.2	.9	20	4	141	.07	4	.5	.9 14	SF1
		21	759	9.68	19 17.25	155 23.42	2.69	1.8	2.2	31	5	101	.11	6	.3	1.0 21	SWR
		21	1743	39.26	19 20.18	155 7.20	8.22	2.4	2.4	39	3	102	.11	5	.4	.6 25	SF4
		21	1811	16.24	19 19.46	155 10.64	5.84	1.6	1.3	38	4	99	.13	5	.5	1.2 26	SF3
		22	412	36.06	19 9.17	155 36.18	.23	2.4	1.3	23	0	113	.14	11	.6	2.3 17	LSW
		22	11	4 27.65	19 19.81	155 10.06	6.48	1.7	1.5	34	2	89	.12	4	.5	1.1 22	SF3
		22	1252	45.48	19 21.66	155 11.31	3.31	1.5	1.2	20	3	82	.07	3	.4	.5 13	SER
		22	1345	38.32	19 19.35	155 11.96	5.55	1.1	1.1	20	1	95	.12	5	.5	1.7 13	SF3
		22	1356	16.87	19 19.33	155 11.44	5.52	1.1	1.1	23	3	100	.09	6	.4	1.4 13	SF3
		22	15	1 34.10	19 20.73	155 10.41	7.47	1.4	1.1	28	5	86	.10	3	.5	.7 15	SF3
		22	1730	33.45	19 22.02	155 8.73	3.45	.8	1.1	13	0	155	.09	2	1.0	.7 9	SER
		22	2315	18.74	19 23.18	155 27.83	8.69	1.3	1.1	25	1	56	.09	1	.3	.6 17	KA0
		22	2334	18.41	19 8.92	155 35.08	2.38	.8	1.1	12	1	130	.08	12	.6	2.2 8	LSW
		23	2	1 56.57	19 19.61	155 8.71	7.49	1.9	1.9	37	2	79	.11	4	.4	.7 25	SF4
		23	2 7	.09	19 19.67	155 8.96	7.18	1.7	1.4	37	5	82	.11	5	.5	.7 26	SF4
		23	6 0	57.85	19 20.57	155 11.51	9.26	2.7	2.8	43	3	75	.11	4	.4	.5 32	SF3
		23	2111	34.89	19 18.07	155 23.31	2.84	1.3	1.4	16	3	95	.08	4	.4	.8 12	SWR
		24	024	8.97	19 15.70	155 14.27	7.34	1.3	1.1	21	0	222	.09	3	1.2	.8 13	SF2
		24	715	23.29	19 21.72	155 30.33	9.31	2.0	1.4	30	2	83	.08	5	.5	1.0 20	KA0
		24	720	24.55	19 20.71	155 10.58	9.25	1.7	1.5	27	3	83	.07	3	.4	.5 18	SF3
		24	728	14.43	19 19.80	155 13.65	5.63	1.1	1.1	23	3	73	.11	5	.4	1.4 18	SF2
		24	1118	31.64	19 23.28	155 17.10	2.71	1.4	1.7	19	1	59	.11	0	.3	.3 16	SSC
		24	1129	26.85	19 18.90	155 13.23	5.71	1.4	1.5	26	1	80	.11	3	.5	1.3 19	SF2
		24	1546	34.23	19 23.59	155 15.14	3.42		1.0	11	3	95	.06	2	.4	.6 9	SEC
		24	1844	10.66	19 20.05	155 20.84	31.43	2.2	1.8	37	1	74	.09	4	.6	1.3 29	DEP

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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	ERM KM	ERZ KM	NO FM	REMK
1982	NOV	25	4	1	19 11.53	155 36.18	8.07	3.0	2.7	38	2	92	.22	7	.6	1.1	30	LSW
		25	9	3	19 21.92	155 15.18	9.80	3.0	3.1	43	1	59	.12	2	.4	.4	32	SF1
		25	9	8	19 19.46	155 19.18	7.70	2.0	2.1	39	3	62	.13	3	.4	.8	24	SWR
		25	9	10	19 21.64	155 17.76	34.97	3.6	3.6	47	2	29	.10	3	.6	1.0	45	DEP F
		25	1044	51.51	19 23.36	155 15.28	2.59	2.2	2.6	31	4	47	.11	2	.3	.3	20	SEC
		25	1139	36.69	19 21.70	155 17.73	31.26	1.7	1.3	33	2	32	.09	3	.7	1.3	26	DEP
		25	1257	20.61	19 19.81	155 12.94	5.30	1.0	1.1	21	1	73	.10	5	.5	1.6	16	SF2
		25	17	3	19 19.28	155 8.77	8.30	1.8	1.3	28	3	120	.09	4	.5	.6	20	SF4
		25	2150	17.62	19 20.09	155 9.04	7.70	1.8	1.8	34	3	75	.08	4	.4	.7	23	SF4
		25	2152	54.89	19 19.96	155 6.73	7.36	1.3	1.6	29	4	115	.12	5	.6	.9	18	SF4
		25	2222	52.95	19 16.87	155 20.58	6.69	.9	1.1	19	2	136	.10	4	.6	1.3	12	SWR
		25	2319	43.38	19 23.84	155 15.18	3.09	1.0	1.2	10	3	102	.02	2	.4	.7	7	SEC
		26	115	26.12	19 24.13	155 15.80	2.64	.8	1.0	11	3	123	.06	1	.4	.5	8	SEC
		26	444	47.38	19 19.96	155 10.85	6.85	1.7	1.4	29	1	88	.10	4	.5	1.1	23	SF3
		26	639	13.51	19 21.90	155 8.53	7.72	1.6	1.1	31	3	63	.16	2	.5	.8	21	SF4
		26	639	42.46	19 22.24	155 13.48	26.53	1.6	1.2	27	0	96	.08	1	.9	1.2	23	DEP
		26	13	1	19 19.40	155 15.30	6.56	1.9	1.9	35	1	96	.12	5	.4	.9	25	SF1
		26	1544	4.24	19 20.86	155 13.07	7.79	1.8	1.6	33	2	61	.12	3	.4	.7	28	SF2
		26	2121	39.57	19 19.77	155 13.24	7.80	1.5	1.6	34	3	70	.11	5	.5	.8	25	SF2
		26	23	4	19 19.62	155 25.21	10.39	1.8	1.2	27	3	63	.11	4	.4	.8	16	KAO
		27	945	30.60	19 16.88	155 22.42	7.76	2.9	3.6	45	2	123	.16	6	.5	.7	37	SWR
		27	951	40.20	19 16.83	155 22.15	3.21	1.7	1.9	29	2	128	.10	6	.4	1.2	18	SWR
		27	1011	57.40	19 58.47	155 27.98	39.50	3.2	3.0	48	2	185	.11	16	.8	1.9	40	KEA
		27	1146	34.19	19 23.34	155 17.03	2.88	1.1	1.6	19	4	65	.08	0	.3	.3	11	SWR
		27	1226	45.13	19 25.62	155 25.20	7.60	1.8	1.5	34	4	50	.12	1	.4	.9	26	KAO
		27	1543	48.07	19 20.40	155 8.01	7.39	2.0	2.5	38	4	84	.12	4	.4	.8	28	SF4
		27	16	1	19 17.23	155 30.44	9.30	3.8	3.9	42	1	47	.13	4	.4	.6	40	LSW F
		27	2221	57.20	19 19.89	155 10.35	8.00	1.9	1.5	29	2	88	.10	4	.5	.9	16	SF3
		28	1	5	19 20.35	155 6.99	7.66	2.1	2.6	39	1	71	.14	4	.6	.8	25	SF4
		28	319	12.85	19 19.60	155 11.40	6.80	1.4	1.3	25	1	94	.09	5	.5	1.0	18	SF3
		28	4	5	19 20.30	155 6.58	5.14	1.3	1.3	27	3	108	.13	5	.6	1.6	17	SF4
		28	713	27.02	19 19.92	155 7.22	7.92	2.5	2.9	41	5	107	.09	5	.4	.6	26	SF4
		28	1131	49.41	19 19.10	155 13.82	6.08	1.5	1.5	32	3	74	.12	4	.4	.9	17	SF2
		28	1342	42.44	19 22.12	155 4.85	7.18	1.3	1.3	26	4	78	.11	3	.5	.8	17	SF5
		28	16	5	19 18.89	155 13.74	6.76	1.6	1.5	26	3	88	.10	3	.5	1.0	21	SF2
		28	1947	36.41	19 15.68	155 22.76	6.43	1.0	1.3	20	1	163	.08	3	.5	1.4	12	SWR
		28	1953	52.44	19 16.64	155 22.93	2.90	1.0	1.3	21	2	118	.12	5	.4	1.2	15	SWR
		28	1958	15.70	19 16.35	155 22.88	3.28	1.9	2.1	37	3	124	.14	4	.4	1.2	25	SWR
		28	1959	28.65	19 16.22	155 22.97	7.02	2.6	3.1	48	4	123	.17	4	.5	.8	37	SWR F
		28	2014	19.00	19 16.45	155 22.91	6.12	2.5	3.1	47	3	121	.17	4	.4	1.0	34	SWR
		28	2022	52.39	19 15.39	155 22.57	8.23	1.9	1.7	26	2	152	.08	3	.5	.9	15	SWR
		28	2058	1.81	19 16.97	155 23.24	.57	1.1	1.0	26	2	107	.12	5	.4	.7	13	SWR
		28	2136	13.73	19 16.47	155 22.68	5.09	1.4	1.6	27	2	143	.13	5	.5	1.7	18	SWR
		28	2211	54.19	19 16.64	155 22.71	2.45	1.0	1.3	22	2	122	.11	5	.5	1.1	16	SWR
		29	1333	40.70	19 22.26	155 3.05	7.36	1.6	1.2	23	2	121	.12	4	.5	.8	15	SF5
		29	1440	36.60	19 18.83	155 13.11	6.98	1.7	1.6	28	1	85	.11	3	.5	1.0	16	SF2
		29	1450	38.05	19 21.12	155 20.03	31.99	4.0	4.4	47	0	54	.10	5	.6	1.0	47	DEP F
		29	1523	58.63	19 20.31	155 7.00	6.57	1.4	1.1	26	4	103	.09	5	.4	.8	14	SF4

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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	ERM KM	ERZ KM	NO FM	REMK
1982	NOV	29	16	8	1.48 19.77	155 8.18	7.66	1.5	1.1	29	3	87	.08	5	.5	1.0	23	SF4
		29	18	1	4.75 19.18.37	155 13.70	9.26	3.1	3.4	44	2	70	.12	3	.5	.5	36	SF2
		29	1924	57.10	19 18.91	155 15.36	8.32	2.5	2.4	37	3	105	.13	4	.5	.7	27	SF1
		29	2022	35.54	19 22.93	155 17.09	2.39	.9	1.0	15	3	71	.06	1	.3	.3	10	SSC
		29	2039	16.09	19 22.42	155 17.31	2.46	1.0	1.0	14	3	92	.13	2	.4	.6	10	SSC
		29	22	2	46.75 19.18.25	155 13.05	6.03	1.5	1.5	24	0	98	.11	2	.6	1.4	17	SF2
		29	2245	51.59	19 19.47	155 9.27	6.35	1.4	1.1	24	4	106	.08	5	.5	1.0	14	SF3
		30	439	55.47	19 20.46	155 10.98	9.70	1.8	1.5	26	1	115	.07	4	.6	.8	18	SF3
		30	632	.04	19 21.25	155 15.33	8.92	2.1	1.9	34	3	67	.11	2	.5	.6	22	SF1
		30	711	57.62	19 23.44	155 16.86	2.96	1.7	2.2	28	3	36	.09	0	.3	.2	16	SSC
		30	726	43.45	19 19.90	155 9.68	6.75	1.6	1.1	27	3	100	.08	4	.5	1.0	15	SF3
		30	1315	.41	19 21.43	155 15.27	9.69	3.0	3.1	42	2	65	.11	2	.4	.4	31	SF1
		30	1430	31.51	19 19.29	155 7.27	7.95	1.6	1.3	26	2	145	.06	4	.5	.8	18	SF4
		30	1456	39.17	19 47.68	155 35.13	15.56	2.6	2.3	33	4	95	.10	13	.5	.9	19	KEA
		30	1549	7.96	19 22.50	155 28.28	9.88	2.4	1.9	33	2	47	.12	1	.4	.6	17	KAO
		30	1833	3.45	19 47.43	155 50.44	31.10	2.0	2.0	26	1	244	.08	11	1.3	2.0	21	HUA
		30	2136	2.87	19 19.35	155 11.46	6.03	1.5	1.0	24	3	99	.10	6	.5	1.1	12	SF3
		30	2335	19.03	19 20.47	155 12.97	8.01	1.3	1.1	27	4	65	.08	4	.5	.7	19	SF2
DEC		1	533	7.84	19 20.61	155 10.81	8.02	2.0	1.7	40	2	75	.12	3	.4	.7	29	SF1
		1	654	35.09	19 21.52	155 1.26	5.83	1.9	1.4	30	3	167	.13	4	.6	.9	21	SF5
		1	1025	18.60	19 19.68	155 15.70	8.07	2.2	2.3	41	3	95	.11	3	.4	.6	29	SF1
		1	1028	8.90	19 19.56	155 15.56	8.30	1.9	1.9	36	2	96	.10	3	.4	.6	20	SF1
		1	1225	52.98	19 19.94	155 13.10	7.60	1.3	1.1	21	2	70	.10	5	.6	1.1	14	SF2
		1	1646	54.35	19 26.56	155 38.09	4.31	2.5	2.1	19	0	196	.10	3	.8	1.4	16	MLO
		1	17	0	4.84 19.15.89	155 22.52	8.19	1.1	1.2	20	2	160	.08	4	.6	1.1	16	SWR
		1	18	9	54.46 19.20.07	155 10.49	7.37	1.6	1.3	31	5	85	.09	4	.5	.8	23	SF3
		1	2257	13.62	19 20.38	155 11.57	8.86	1.8	1.1	30	4	78	.08	4	.5	.7	18	SF3
		2	451	26.75	19 7.83	155 28.37	29.99	2.1	2.0	37	2	168	.10	3	.8	1.5	31	DLS
		2	10	5	11.01 19.19.27	155 11.30	7.05	2.3	2.2	43	5	102	.12	6	.4	.7	29	SF3
		2	1125	37.67	19 31.87	155 41.71	2.78	2.6	2.1	36	4	81	.13	8	.5	1.7	26	MLO
		3	2	3	9.73 19.21.42	155 28.32	8.72	1.5	1.2	31	4	46	.11	2	.4	.7	18	KAO
		3	411	.60	19.19.97	155 11.10	7.53	2.1	2.2	38	4	87	.09	4	.4	.6	22	SF1
		3	853	32.36	19.19.37	155 11.04	9.78	1.6	1.4	18	0	174	.09	5	.7	1.1	18	SF3
		3	1238	13.65	19.19.41	155 10.44	7.79	1.8	1.5	26	3	100	.08	5	.5	1.1	14	SF3
		3	14	2	2.32 19.19.59	155 50.77	7.87	1.6	1.5	19	3	180	.15	7	1.2	2.7	7	KON
		3	1753	36.14	19 18.98	155 15.54	8.01	1.6	1.6	31	3	106	.10	4	.4	.7	17	SF1
		3	1945	44.18	19.19.19	155 15.86	7.16	1.7	1.8	33	2	105	.12	3	.5	.8	18	SF1
		3	2130	55.97	19 24.80	155 25.94	9.22	1.6	1.5	37	5	50	.12	2	.4	.7	25	KAO
		3	2350	15.30	19 16.48	155 23.71	6.53	1.8	2.4	34	3	102	.14	4	.4	1.1	23	SWR
		4	152	38.53	19 31.73	155 41.07	3.19	1.6	1.2	14	1	171	.13	9	.9	4.2	10	MLO
		4	235	7.26	19 16.23	155 24.05	8.26	1.3	1.3	18	2	111	.13	4	.7	1.2	8	SWR
		4	236	29.25	19.19.19	155 15.98	6.71	1.1	1.1	24	3	106	.09	3	.4	.8	15	SF1
		4	354	42.05	19 30.28	155 42.83	7.61	.9	1.0	18	3	149	.14	5	.8	1.4	12	MLO
		4	630	2.76	19 22.29	155 17.55	2.87	1.0	1.1	14	2	90	.06	2	.3	.5	5	SSC
		4	915	20.26	19 22.41	155 24.58	8.58	1.7	1.3	28	4	40	.11	5	.4	.8	18	KAO
		4	10	3	13.21 19.23.06	155 17.16	2.19	.9	1.0	16	4	89	.06	1	.2	.3	8	SSC
		4	1011	5.01	19 24.76	154 49.87	40.95	2.2	1.5	21	1	253	.11	5	2.1	2.0	12	LER
		4	1235	10.79	19 23.56	155 15.16	2.96	1.0	.9	15	4	87	.09	3	.4	.5	6	SEC

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YEAR	MON	DA	HRMN	SEC	ORIGIN TIME	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 NO KM FM	REMK
1982	DEC	4	1239	41.91	19 29.49	155 39.03	7.14 1.1 1.1 13	3 95 .12 5	.7	1.2 5 MLO								
		4	1248	35.25	19 23.42	155 15.20	2.93 1.7 2.2 28	5 81 .11 2	.3	.4 18 SEC								
		4	1313	54.18	19 8.45	156 10.39	9.02 1.6 8	1 298 .09 56	12.0	14.8 6 KON								
		4	1639	38.76	19 18.18	155 17.87	33.20 2.5 2.9 42	1 123 .10 1	.7	1.0 35 DEP								
		4	2329	51.19	19 19.65	155 8.81	4.77 1.3 1.1 25	4 96 .11 5	.4	1.5 13 SSF								
		5	037	16.33	19 20.03	155 6.35	5.32 1.3 1.2 27	3 156 .11 6	.6	1.5 15 SF4								
		5	142	32.87	19 20.74	155 10.79	7.71 1.7 1.3 33	5 79 .10 3	.5	.7 21 SF3								
		5	313	42.72	19 23.86	155 24.56	10.83 1.2 1.1 31	3 42 .12 3	.4	.8 19 KAO								
		5	321	9.91	19 19.99	155 7.50	7.65 1.9 1.3 34	4 100 .08 5	.4	.8 23 SF4								
		5	56	6.36	19 21.06	155 19.15	27.70 1.6 1.4 28	2 45 .08 5	.8	1.2 17 DEP								
		5	526	12.98	19 23.69	155 2.30	7.80 1.1 1.1 16	3 171 .08 4	.9	.6 9 SF5								
		5	537	37.72	19 48.36	156 9.59	38.47 3.8 4.0 45	4 254 .10 44	1.0	1.6 41 HUA F								
		5	66	57.81	19 19.74	155 11.97	6.00 1.3 1.0 21	0 86 .10 6	.5	1.6 14 SF3								
		5	723	32.87	19 19.49	155 13.95	4.42 1.4 1.3 34	5 73 .13 5	.4	1.6 22 SSF								
		5	840	20.55	19 17.15	155 21.89	6.59 1.8 1.8 32	3 126 .13 6	.4	1.0 23 SWR								
		5	945	38.60	19 22.52	155 14.50	31.75 1.9 1.4 37	1 52 .09 2	.8	1.2 31 DEP								
		5	946	38.53	19 22.74	155 17.25	2.48 1.0 1.6 21	4 51 .09 1	.2	.3 10 SSC								
		5	1124	14.41	19 22.85	155 17.18	2.47 1.0 1.4 22	5 50 .09 1	.3	.3 10 SSC								
		5	1552	49.62	19 25.95	154 57.90	5.96 1.8 1.6 29	2 146 .19 2	.9	1.0 17 LER								
		5	1817	57.65	19 17.94	155 20.73	7.34 1.3 1.1 24	2 124 .08 4	.5	1.0 17 SWR								
		5	225	33.04	19 26.10	155 23.25	9.69 2.8 2.7 47	5 39 .11 4	.3	.5 30 KAO								
		6	039	44.62	19 12.11	155 29.20	30.71 1.6 1.6	10 0 138 .10 4	3.7	7.4 10 DLS T								
		6	045	22.00	19 8.88	155 28.01	40.39 1.9 1.0	0 254 .03 1	4.9	9.6 10 DLS T								
		6	119	19.90	19 13.17	155 32.96	43.16 1.7 1.7	9 0 146 .09 11	2.1	6.0 7 DLS T								
		6	129	2.70	19 13.82	155 32.10	38.28 1.7 1.7	24 0 179 .12 4	2.0	3.7 8 DLS T								
		6	142	10.40	19 8.76	155 26.94	43.34 1.7 1.7	26 0 176 .07 2	1.1	2.6 13 DLS T								
		6	712	43.86	19 19.12	155 13.43	6.64 1.6 1.6 35	2 73 .12 4	.5	.9 23 SF2								
		6	117	46.39	19 21.88	155 18.15	2.51 1.4 1.4 23	4 56 .10 4	.3	.6 13 SWR								
		6	1912	31.17	19 21.04	155 2.51	6.78 2.1 1.5 31	4 184 .14 7	.8	1.3 21 SF5								
		6	1943	37.10	19 23.33	155 16.93	3.05 2.4 3.3 36	4 36 .10 0	.2	.2 30 SSC								
		7	036	56.58	19 20.43	155 13.05	8.22 1.5 1.5 27	3 65 .09 4	.4	.7 20 SF2								
		7	1136	7.17	19 23.21	155 24.75	12.11 1.8 1.6 36	3 43 .09 4	.4	.6 28 KAO								
		7	1556	49.82	19 17.87	155 15.54	8.99 2.7 2.9 40	3 141 .10 5	.4	.5 33 SF1								
		7	1651	55.67	19 16.76	155 15.15	5.93 1.3 1.1 23	3 174 .10 3	.6	1.0 11 SF1								
		7	1720	37.45	19 22.76	155 17.14	2.32 .9 1.0 14	2 79 .07 1	.3	.3 9 SSC								
		7	1735	56.20	19 20.52	155 6.77	8.00 2.0 1.8 31	1 142 .08 5	.5	.6 25 SF4								
		7	186	57.32	19 18.90	155 14.68	7.09 1.4 1.1 31	2 95 .10 4	.5	.9 17 SF1								
		7	2037	5.03	19 17.16	155 15.51	7.05 2.0 1.9 34	4 158 .10 4	.5	.8 22 SF1								
		7	2059	59.52	19 22.87	155 4.56	7.51 2.3 2.0 36	5 144 .11 3	.4	.6 20 SF5								
		8	147	52.63	19 23.48	155 16.86	2.91 .8 1.0 13	4 80 .04 0	.3	.3 8 SSC								
		8	38	33.07	19 21.61	155 2.13	6.06 2.1 1.7 33	3 195 .13 7	.8	.9 22 SF5								
		8	321	15.36	19 22.86	155 17.11	2.85 1.5 1.7 26	4 49 .08 1	.2	.3 15 SSC								
		8	441	20.97	19 19.20	155 13.00	5.06 1.4 1.1 33	3 81 .12 4	.4	1.5 22 SF2								
		8	99	.36	19 23.09	155 16.95	2.47 1.2 1.0 14	2 65 .08 1	.3	.3 11 SSC								
		8	919	26.23	19 17.66	155 22.90	2.67 1.1 1.4 19	1 105 .06 5	.4	1.0 15 SWR								
		8	1035	17.60	19 27.36	154 54.13	5.83 1.9 1.6 27	2 190 .13 2	1.2	.6 10 LER								
		8	1221	37.56	19 21.50	155 4.73	8.82 3.3 3.6 42	2 160 .08 4	.6	.4 34 SF5								
		8	142	14.17	19 20.94	155 4.69	7.02 1.3 1.1 20	1 100 .11 4	.5	1.0 10 SF5								

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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	KM	FM	REMK				
1982	DEC	8	14	2	55.74	19	17.81	155	20.62	6.22	1.0	1.0	21	2	127	.10	4	.6	1.4	16	SWR			
		8	1722	49.91	18	48.56	157	15.16	49.12	2.6	2.6	21	0	340	.13154	95.6		3.2	11	DIS				
		8	2139	15.49	19	21.24	155	18.86	3.16	1.2	1.4	27	6	82	.10	3	.3	.6	18	SWR				
		8	2258	55.41	19	16.59	155	22.45	2.83	1.0	1.0	21	2	128	.09	5	.4	1.2	13	SWR				
		9	237	29.63	19	19.75	155	7.14	6.56	1.4	1.1	27	2	111	.11	5	.5	1.1	22	SF4				
		9	245	20.81	19	20.21	155	11.81	7.33	1.4	.9	28	3	79	.09	5	.5	.9	20	SF3				
		9	342	57.44	19	33.80	155	27.36	21.48	1.6	1.4	30	1	86	.09	3	.5	1.1	18	DML				
		9	558	13.92	19	19.56	155	12.27	5.53	1.5	1.1	25	3	86	.10	5	.4	1.2	15	SF3				
		9	925	48.77	19	22.98	155	16.89	2.66	1.5	1.8	24	4	69	.09	1	.3	.3	11	SSC				
		9	1027	42.92	19	20.32	155	7.11	7.07	1.7	1.5	28	2	101	.11	5	.6	.8	21	SF4				
		9	1348	19.33	19	23.56	155	16.84	2.64	1.7	2.0	27	4	40	.11	0	.3	.2	15	SSC				
		9	140	31.71	19	22.66	155	16.95	2.57	1.3	1.7	20	3	86	.09	1	.3	.3	11	SSC				
		9	143	55.11	19	22.84	155	17.04	2.41	.9	1.0	14	3	90	.08	1	.3	.3	10	SSC				
		9	1517	17.42	19	26.33	155	29.80	9.55	1.6	1.0	24	1	66	.09	8	.4	1.2	18	KAO				
		9	1543	53.15	19	23.46	155	16.84	2.89	.8	.9	11	3	79	.03	0	.4	.4	7	SSC				
		9	1629	53.74	19	23.57	155	16.97	2.65	.9	1.0	16	4	54	.09	0	.3	.3	8	SSC				
		9	1746	28.11	19	24.08	155	15.81	3.11	.9	.8	11	3	114	.05	1	.4	.6	6	SEC				
		9	1749	55.97	19	24.16	155	16.37	2.80	1.0	1.2	13	3	112	.08	1	.5	.3	9	SEC				
		9	1753	3.46	19	23.95	155	15.68	2.73	1.0	1.2	17	4	110	.09	2	.3	.3	9	SEC				
		9	1755	52.59	19	23.93	155	15.76	3.17	1.7	2.2	24	2	110	.09	1	.4	.3	14	SEC				
		9	1756	35.09	19	23.94	155	15.13	2.55	1.3	1.6	15	1	104	.07	2	.3	.3	7	SEC				
		9	181	8.13	19	23.84	155	15.10	3.15	1.1	1.3	18	4	95	.05	2	.3	.4	8	SEC				
		9	181	54.11	19	24.05	155	15.70	2.87	.9	1.0	16	2	116	.05	2	.3	.3	6	SEC				
		9	182	32.20	19	23.98	155	15.62	3.06	1.7	2.1	28	2	105	.08	2	.3	.3	19	SEC				
		9	183	21.31	19	22.94	155	14.57	2.58	1.1	1.0	15	2	116	.23	3	.6	.7	6	SEC				
		9	186	16.66	19	24.02	155	14.02	6.08	1.3	1.0	12	1	90	.13	1	.8	1.2	8	INT				
		9	189	27.06	19	23.15	155	14.90	2.77	2.5	3.0	29	1	64	.09	2	.3	.3	15	SEC				
		9	1812	54.44	19	23.09	155	14.77	3.12	1.5	1.6	23	3	64	.09	2	.3	.4	15	SEC				
		9	1814	14.68	19	23.69	155	15.01	3.09	1.6	2.0	26	4	84	.10	2	.3	.2	15	SEC				
		9	1814	48.08	19	23.29	155	14.69	2.90	1.5	1.6	16	3	65	.06	3	.3	.4	8	SEC				
		9	1815	29.23	19	24.14	155	16.12	3.02	.9	1.0	14	3	109	.06	1	.4	.3	9	SEC				
		9	1815	59.60	19	23.11	155	14.53	3.54	1.6	1.9	13	1	114	.08	3	.6	.5	9	SEC				
		9	1817	44.91	19	24.27	155	15.86	3.48	1.3	1.2	15	3	115	.11	1	.4	.4	6	SEC				
		9	1819	5.90	19	23.32	155	14.91	1.73	1.4	1.0	16	4	102	.10	2	.3	.4	8	SEC				
		9	1820	23.51	19	23.01	155	14.77	2.93	2.0	2.1	28	3	62	.10	2	.3	.4	16	SEC				
		9	1821	19.32	19	22.96	155	14.80	2.96	1.7	1.8	26	3	62	.09	2	.3	.3	15	SEC				
		9	1822	13.52	19	23.03	155	14.75	2.78	2.1	2.4	24	2	61	.11	2	.3	.4	17	SEC				
		9	1825	28.73	19	24.16	155	15.71	3.54	.9	.8	12	2	126	.07	2	.5	.5	9	SEC				
		9	1830	32.74	19	23.02	155	14.71	4.14	1.2	1.0	13	4	89	.07	2	.3	.6	7	SEC				
		9	1832	53.98	19	23.44	155	14.86	2.88	1.1	.8	11	3	101	.03	3	.4	.6	9	SEC				
		9	1838	39.01	19	24.40	155	16.29	3.35	1.1	.8	15	3	116	.08	1	.5	.4	8	SEC				
		9	1839	38.05	19	24.14	155	16.33	3.04	1.1	1.6	11	1	113	.07	1	.4	.4	7	SEC				
		9	1840	53.01	19	24.12	155	16.45	3.01	1.2	1.4	15	2	107	.09	1	.4	.3	10	SEC				
		9	1842	33.35	19	24.44	155	16.26	3.41	1.4	1.2	15	3	119	.12	1	.5	.4	11	SEC				
		9	1843	25.01	19	24.16	155	16.40	2.90	1.3	1.4	15	3	99	.07	1	.3	.2	11	SEC				
		9	1844	56.32	19	23.81	155	15.14	2.85	1.1	.9	13	3	99	.04	2	.3	.4	9	SEC				
		9	1850	22.43	19	23.78	155	15.41	3.10	1.4	1.2	15	1	101	.05	2	.4	.3	11	SEC				
		9	1853	6.79	19	23.89	155	15.33	2.66	.9	1.2	12	3	107	.05	2	.3	.5	8	SEC				

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YEAR	MON	DA	HR	MIN	SEC	LAT N DEG MIN	LON W DEG MIN	DEPTH KM	AMP MAG	DUR MAG	NR	NS	GAP DEG	RMS SEC	MIN DIS	ERM KM	ERZ KM	NO FM	REMK	
1982	DEC	9	1853	19.02	19	23.11	155 14.99	3.26	2.8	3.0	33	1	48	.11	2	.3	.5	30	SEC	
		9	1854	59.71	19	23.60	155 15.20	2.34	1.6	1.7	18	3	89	.11	3	.3	.3	7	SEC	
		9	19	0	59.68	19	23.54	155 15.28	2.60	1.6	1.7	17	3	87	.11	2	.3	.4	10	SEC
		9	19	2	32.95	19	23.61	155 14.89	2.46		1.0	12	4	95	.07	2	.3	.6	8	SEC
		9	19	3	44.00	19	23.57	155 15.14	3.53	1.8	1.7	28	4	84	.10	3	.4	.4	17	SEC
		9	19	4	16.94	19	23.76	155 15.25	2.60	1.5	1.2	13	4	98	.07	2	.4	.5	9	SEC
		9	19	5	14.73	19	23.26	155 15.09	3.23	2.5	2.9	32	3	72	.09	2	.3	.3	22	SEC
		9	19	6	49.23	19	23.47	155 15.08	2.89	2.3	2.1	29	3	75	.09	2	.3	.3	21	SEC
		9	19	9	18.76	19	23.69	155 15.12	2.95	1.6	1.2	19	3	91	.08	2	.3	.3	11	SEC
		9	19	9	39.07	19	23.30	155 14.90	2.57	1.0	1.0	13	5	106	.05	2	.3	.5	9	SEC
		9	1910	20.47	19	23.72	155 15.10	3.13	1.1	1.2	18	5	93	.08	2	.3	.4	11	SEC	
		9	1916	38.26	19	23.68	155 15.00	3.06	1.9	2.1	23	1	83	.07	2	.3	.3	13	SEC	
		9	1918	7.80	19	23.60	155 15.05	2.90		.5	10	3	97	.04	2	.4	.8	7	SEC	
		9	1918	27.50	19	23.68	155 14.93	3.46	1.6	1.7	17	3	87	.09	2	.4	.5	8	SEC	
		9	1922	32.22	19	23.57	155 14.99	3.24	2.1	1.7	29	4	70	.11	2	.3	.4	22	SEC	
		9	1922	57.48	19	23.30	155 14.96	2.52	2.1	2.0	22	2	73	.08	2	.3	.3	14	SEC	
		9	1924	20.86	19	23.55	155 14.91	3.43	2.6	2.7	33	1	45	.10	2	.4	.4	25	SEC	
		9	1925	31.01	19	23.80	155 15.25	2.66	1.0	1.2	17	4	101	.10	2	.4	.5	9	SEC	
		9	1925	49.20	19	23.28	155 14.91	2.24	1.1	1.4	12	2	104	.14	2	.4	.6	8	SEC	
		9	1926	23.48	19	23.88	155 15.17	2.52	1.5	1.6	8	1	104	.05	2	.4	.8	5	SEC	
		9	1927	2.58	19	23.16	155 14.79	3.10	1.8	1.4	14	3	107	.08	2	.4	.5	8	SEC	
		9	1929	11.67	19	23.49	155 14.38	2.44	1.2	1.0	16	3	62	.12	2	.4	.4	8	SEC	
		9	1930	56.31	19	23.15	155 14.69	3.22	1.6	1.9	23	3	62	.08	3	.3	.4	11	SEC	
		9	1931	31.62	19	23.68	155 15.05	3.01	1.6	1.7	19	3	85	.06	2	.4	.4	13	SEC	
		9	1932	17.27	19	23.08	155 14.59	3.18	1.6	1.4	24	3	62	.09	3	.4	.3	10	SEC	
		9	1932	53.27	19	23.59	155 15.02	2.93	2.0	2.0	30	3	71	.12	2	.3	.3	16	SEC	
		9	1934	20.44	19	23.91	155 14.99	2.87	1.1	1.6	11	2	101	.04	2	.4	.5	9	SEC	
		9	1935	38.71	19	23.80	155 15.01	2.72	1.3	1.2	16	3	95	.09	2	.3	.4	8	SEC	
		9	1937	13.72	19	23.59	155 15.31	.01	1.3	1.4	11	1	90	.16	2	.3	.6	9	SEC	
		9	1937	34.13	19	23.85	155 15.05	2.46	2.0	1.4	13	3	99	.04	2	.3	.4	9	SEC	
		9	1938	3.85	19	23.40	155 14.94	2.80	1.3	1.6	18	4	76	.08	3	.3	.4	9	SEC	
		9	1938	11.71	19	23.73	155 14.86	3.21	3.1	3.3	38	1	44	.10	2	.3	.4	29	SEC	
		9	1940	34.53	19	23.82	155 15.34	2.11	1.4	1.2	17	3	103	.09	2	.3	.4	10	SEC	
		9	1940	57.43	19	23.81	155 15.08	2.37	1.0	1.0	11	2	97	.05	2	.3	.5	9	SEC	
		9	1943	27.32	19	22.99	155 14.69	2.82	2.3	2.6	30	2	59	.11	2	.3	.4	17	SEC	
		9	1945	11.77	19	23.11	155 14.94	.02	1.6	1.4	12	0	67	.12	3	.3	.8	7	SEC	
		9	1945	33.33	19	23.23	155 14.91	2.91	1.6	1.8	19	2	70	.08	2	.3	.4	12	SEC	
		9	1946	22.63	19	23.81	155 15.07	2.55		1.0	10	3	97	.04	2	.3	.6	6	SEC	
		9	1946	53.94	19	23.97	155 14.94	3.60	1.1	1.0	12	2	103	.09	2	.4	.6	7	SEC	
		9	1947	29.88	19	24.27	155 15.49	1.75	2.9	3.6	27	3	72	.09	2	.2	.3	20	SEC	
		9	1949	31.84	19	23.48	155 14.84	3.03	1.6	1.6	20	1	77	.12	2	.4	.4	10	SEC	
		9	1951	15.77	19	22.79	155 14.61	3.24	2.2	1.9	33	3	53	.12	2	.4	.4	24	SEC	
		9	1952	.72	19	23.45	155 14.58	3.17	1.6	1.6	15	3	68	.21	2	.7	.7	9	SEC	
		9	1952	23.50	19	23.89	155 14.93	2.62	1.1	1.4	15	4	97	.07	2	.3	.4	8	SEC	
		9	1953	58.33	19	23.14	155 15.08	3.02	1.5	1.6	21	5	77	.12	2	.4	.4	16	SEC	
		9	1959	2.74	19	23.79	155 15.40	3.22	1.0	1.2	17	0	102	.08	2	.4	.4	16	SEC	
		9	20	0	51.65	19	23.35	155 14.63	3.94	3.1	3.4	41	6	46	.09	3	.3	.3	37	SEC
		9	20	3	48.66	19	23.69	155 15.36	1.71	2.4	2.2	26	2	94	.08	2	.2	.3	20	SEC

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YEAR	MON	DA	HR	MIN	SEC	LAT N DEG MIN	LON W DEG MIN	DEPTH KM	AMP MAG	DUR MAG	NR	NS	GAP DEG	RMS SEC	MIN DIS	ERM KM	ERZ KM	NO FM	REMK	
1982	DEC	9	20	5	28.80	19	23.52	155 15.05	3.59	1.4	1.2	18	6	97	.09	3	.3	.4	16	SEC
		9	20	5	44.27	19	23.76	155 14.99	2.34	1.0	1.0	13	6	92	.06	2	.3	.6	10	SEC
		9	20	6	10.01	19	23.94	155 15.07	2.41	1.0	1.0	14	6	105	.07	2	.3	.5	11	SEC
		9	20	6	58.65	19	23.96	155 15.20	.82	1.3	1.2	16	5	109	.11	2	.2	.4	12	SEC
		9	20	7	38.84	19	19.28	155 19.05	8.29	1.6	1.1	26	4	62	.11	3	.5	1.0	15	SWR
		9	20	7	59.65	19	23.70	155 14.98	2.88	1.1	1.0	14	3	92	.06	2	.4	.5	8	SEC
		9	2011	39.72	19	24.14	155 15.74	1.70	1.3	1.4	15	3	121	.06	2	.3	.4	7	SEC	
		9	2012	9.37	19	23.85	155 15.15	1.45	1.6	2.2	22	3	95	.08	2	.3	.3	16	SEC	
		9	2017	15.79	19	23.87	155 15.34	1.59	1.2	1.2	18	4	105	.07	2	.2	.3	10	SEC	
		9	2018	13.81	19	23.34	155 15.03	3.11	2.5	2.7	33	2	73	.10	2	.3	.4	23	SEC	
		9	2022	55.19	19	24.04	155 15.47	1.80	.9	1.2	18	3	118	.09	2	.2	.3	10	SEC	
		9	2024	24.22	19	24.39	155 15.29	1.46	1.5	1.7	21	4	115	.08	2	.3	.3	11	SEC	
		9	2026	50.54	19	23.38	155 14.89	2.74	.9	.7	10	3	103	.03	3	.3	.8	7	SEC	
		9	2031	38.31	19	23.41	155 14.85	2.80	1.0	1.0	13	3	102	.05	3	.4	.5	8	SEC	
		9	2034	52.41	19	23.82	155 15.29	1.26	.9	1.2	14	4	103	.09	2	.3	.4	10	SEC	
		9	2038	48.74	19	22.86	155 14.57	3.15	.6	1.0	11	3	92	.03	2	.4	.6	7	SEC	
		9	2039	52.46	19	23.25	155 14.73	2.35	.8	1.0	12	3	104	.05	3	.3	.6	8	SEC	
		9	2040	4.99	19	23.36	155 14.75	1.19	1.0	1.0	15	2	103	.08	3	.3	.4	8	SEC	
		9	2044	29.57	19	23.93	155 15.63	2.54	.9	1.4	16	3	110	.10	2	.3	.3	11	SEC	
		9	2045	36.29	19	24.12	155 15.52	1.57	1.8	2.3	27	1	44	.10	2	.3	.3	20	SEC	
		9	2051	24.85	19	19.25	155 15.40	6.36	1.0	1.1	28	2	99	.11	4	.4	.9	21	SF1	
		9	2051	37.37	19	23.82	155 15.32	2.01	1.0	1.2	12	4	102	.07	2	.3	.5	8	SEC	
		9	2055	1.75	19	22.65	155 15.16	5.08	1.2	.8	14	3	67	.13	1	.7	.9	7	INT	
		9	2055	44.67	19	23.41	155 14.79	1.49	.8	1.0	11	2	101	.05	3	.3	.6	7	SEC	
		9	2058	48.71	19	23.19	155 15.21	.86	.5	1.0	8	0	109	.08	2	.3	.7	4	SEC	
		9	21	3	14.49	19	22.85	155 14.24	2.85	1.2	1.0	18	4	70	.08	2	.3	.4	11	SEC
		9	21	4	31.45	19	22.89	155 14.15	2.56	1.6	1.5	15	3	84	.05	2	.3	.3	9	SEC
		9	21	8	6.52	19	23.41	155 15.01	3.13	1.9	2.1	28	4	94	.08	2	.3	.3	15	SEC
		9	2111	13.71	19	23.69	155 14.97	3.36	1.0	.8	13	4	93	.04	2	.4	.7	9	SEC	
		9	2113	36.51	19	20.26	155 11.63	8.99	1.3	.9	17	2	80	.05	5	.5	1.1	13	SF3	
		9	2113	45.86	19	23.79	155 14.96	3.23	1.1	1.0	14	6	94	.07	2	.3	.6	11	SEC	
		9	2122	41.37	19	23.26	155 14.79	3.49	.9	.6	14	6	104	.04	3	.3	.6	10	SEC	
		9	2122	56.64	19	23.16	155 14.70	2.66	.9	.8	12	5	111	.05	3	.3	.6	9	SEC	
		9	2129	25.59	19	23.47	155 14.91	2.79	1.0	1.0	13	6	99	.04	2	.3	.6	10	SEC	
		9	2132	22.84	19	23.99	155 15.52	2.06	.9	1.4	15	5	115	.07	2	.2	.4	12	SEC	
		9	2137	46.73	19	24.05	155 15.47	3.42	1.0	1.0	16	6	119	.05	2	.3	.4	13	SEC	
		9	2139	15.12	19	22.92	155 14.26	2.71	1.2	.6	10	0	81	.06	2	.4	.5	9	SEC	
		9	2144	23.15	19	23.94	155 15.50	1.78	.9	1.4	16	6	111	.08	2	.2	.4	13	SEC	
		9	2145	51.56	19	23.33	155 14.72	3.87	1.6	1.9	20	6	68	.06	3	.3	.4	17	SEC	
		9	2147	34.12	19	23.31	155 14.78	3.55	1.1	.8	15	6	102	.06	3	.3	.6	12	SEC	
		9	2151	9.71	19	23.29	155 14.71	2.11	1.1	1.4	17	5	102	.07	3	.3	.4	13	SEC	
		9	22	1	57.48	19	22.92	155 14.28	1.57	1.9	2.5	18	1	68	.11	2	.2	.4	16	SEC
		9	22	4	59.98	19	25.88	155 13.30	2.83	1.2	1.2	11	3	281	.09	3	1.4	.6	9	SER
		9	2227	12.38	19	23.26	155 14.82	3.68	1.1	1.0	16	6	104	.04	2	.3	.5	13	SEC	
		9	2245	46.98	19	23.84	155 15.33	1.76	1.0	1.4	17	6	103	.07	2	.2	.4	11	SEC	
		9	2255	48.36	19	23.57	155 15.00	3.43	1.1	1.4	18	6	95	.05	2	.3	.4	14	SEC	
		9	2311	18.19	19	22.96	155 14.43	1.35	1.0	1.4	15	3	77	.11	2	.3	.4	10	SEC	
		9	2324	3.09	19	23.21	155 14.29	1.59	.7	1.0	14	3	107	.06	2	.3	.4	10	SEC	

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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	
1982	DEC	9	2325	35.28	19 24.23	155 15.80	3.13	.8	.8	12	5	131	.07	2	.4	.5	10	SEC	
		9	2325	51.68	19 22.91	155 14.28	1.56	2.1	2.6	23	4	67	.09	2	.3	.3	20	SEC	
		9	2331	53.18	19 23.10	155 14.27	1.64	1.6	2.0	21	4	59	.09	2	.3	.4	17	SEC	
		9	2342	22.95	19 23.22	155 14.30	1.39	1.1	1.5	15	3	82	.09	2	.3	.4	12	SEC	
		9	2355	30.82	19 23.21	155 14.80	3.40	1.5	1.8	24	6	67	.07	2	.2	.3	21	SEC	
		9	2356	10.25	19 23.36	155 14.83	2.77	1.1	1.0	14	5	103	.06	3	.3	.5	10	SEC	
		9	2359	45.57	19 24.16	155 15.73	3.12	1.0	1.0	14	6	126	.08	2	.3	.4	11	SEC	
		10	0	0	27.88	19 23.27	155 14.82	2.92	1.0	.9	13	5	107	.04	3	.3	.5	9	SEC
		10	016	34.40	19 23.82	155 15.04	1.15	.9	1.0	11	2	97	.18	2	.4	.8	10	SEC	
		10	030	58.31	19 23.60	155 15.01	3.39	1.1	1.7	23	6	82	.08	2	.3	.3	16	SEC	
		10	041	17.50	19 23.20	155 14.77	3.43	1.0	1.0	15	6	110	.05	2	.4	.5	12	SEC	
		10	058	58.78	19 23.10	155 14.73	3.85	1.2	1.4	18	5	68	.13	2	.4	.5	14	SEC	
		10	112	59.74	19 24.25	155 14.77	1.96	.9	1.0	14	5	116	.07	1	.3	.4	11	SEC	
		10	113	24.92	19 21.37	155 17.13	33.03	1.7	.9	20	2	76	.07	2	1.0	1.9	16	DEP	
		10	136	54.97	19 23.06	155 14.74	3.29	1.1	1.2	18	4	63	.05	2	.3	.4	14	SEC	
		10	143	9.06	19 19.72	155 13.05	7.69	1.1	1.1	18	1	73	.08	5	.5	1.2	16	SF2	
		10	158	33.35	19 23.36	155 14.94	3.07	1.2	.9	13	0	81	.08	2	.4	.5	13	SEC	
		10	236	56.99	19 54.82	155 20.08	10.14	1.5	1.7	25	2	241	.10	3	1.4	.4	22	KEA	
		10	253	10.12	19 23.39	155 14.86	3.67	1.0	1.0	13	5	103	.08	3	.4	.7	10	SEC	
		10	3	6	59.81	19 23.92	155 15.20	1.50	1.0	1.4	16	6	107	.08	2	.2	.4	13	SEC
		10	312	20.15	19 23.40	155 14.80	4.02	1.0	1.0	14	5	102	.06	3	.4	.8	10	SEC	
		10	326	20.87	19 23.16	155 14.55	.44	1.0	1.1	11	2	111	.11	3	.3	.7	5	SEC	
		10	338	18.16	19 23.42	155 15.19	4.92	1.2	1.7	9	1	103	.07	2	.7	1.1	3	SEC	
		10	4	4	33.33	19 22.99	155 14.59	3.32	1.1	.8	9	0	93	.07	3	.5	.7	9	SEC
		10	417	41.57	19 23.36	155 14.88	3.28	1.8	2.2	19	4	73	.06	3	.3	.4	10	SEC	
		10	418	50.65	19 23.43	155 14.84	3.24	1.1	1.0	15	3	98	.05	3	.4	.5	9	SEC	
		10	435	50.81	19 23.40	155 14.89	2.83	1.1	1.1	18	5	75	.08	3	.3	.4	10	SEC	
		10	456	15.83	19 23.73	155 14.98	2.88	1.0	.8	12	5	93	.03	2	.3	.7	8	SEC	
		10	520	48.21	19 23.74	155 15.00	2.76	1.0	1.2	15	4	92	.05	2	.3	.4	8	SEC	
		10	6	3	4.16	19 23.01	155 14.55	3.69	1.2	.6	10	0	95	.05	3	.4	.7	9	SEC
		10	6	9	35.20	19 23.18	155 14.77	3.02	1.4	1.6	16	0	67	.08	2	.3	.5	14	SEC
		10	610	35.18	19 22.97	155 14.77	2.88	1.2	.9	0	115	.13	2	.6	.7	8	SEC		
		10	615	3.53	19 23.65	155 15.06	2.76	1.0	.3	10	0	85	.05	2	.4	.5	8	SEC	
		10	643	5.95	19 23.08	155 14.63	3.25	1.1	.6	11	0	92	.05	3	.5	.6	10	SEC	
		10	7	0	13.00	19 23.45	155 14.92	3.37	.9	1.0	8	2	107	.03	3	.5	1.5	7	SEC
		10	715	34.68	19 23.83	155 15.25	1.35	.9	.8	8	0	103	.05	2	.3	.5	8	SEC	
		10	728	46.05	19 23.24	155 14.84	3.42	1.1	.9	13	0	105	.07	2	.4	.5	12	SEC	
		10	734	56.71	19 23.05	155 14.61	3.40	2.4	2.4	26	0	49	.07	3	.3	.4	25	SEC	
		10	738	30.85	19 23.12	155 14.67	3.48	2.3	2.4	25	0	56	.07	3	.4	.4	25	SEC	
		10	811	46.51	19 23.22	155 14.83	2.85	.1	.8	0	110	.01	2	.5	1.0	8	SEC		
		10	910	15.14	19 23.13	155 14.92	2.99	1.4	1.7	21	4	67	.08	2	.3	.3	10	SEC	
		10	932	45.74	19 23.30	155 15.01	3.31	1.8	2.1	27	4	56	.08	2	.3	.4	17	SEC	
		10	1121	12.06	19 13.72	155 20.18	32.09	3.0	3.2	47	2	160	.11	7	.7	1.1	45	DEP	
		10	1141	43.87	19 22.45	155 27.86	4.85	2.8	2.8	36	2	44	.12	0	.4	.9	27	KAO	
		10	1250	42.78	19 22.87	155 15.67	27.44	2.1	1.3	31	1	66	.09	1	.8	1.2	20	DEP	
		10	1327	43.44	19 23.23	155 14.82	2.87	.9	.8	11	3	109	.02	2	.4	.6	7	SEC	
		10	1343	4.85	19 23.44	155 25.67	6.74	1.7	1.3	28	2	44	.11	4	.4	1.0	20	KAO	
		10	1358	12.39	19 23.30	155 14.51	1.73	.8	1.2	13	3	105	.09	3	.3	.5	8	SEC	

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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	
1982	DEC	10	1552	12.53	19 23.48	155 14.90	3.13	1.1	1.2	14	3	78	.04	2	.4	.5	8	SEC	
		10	1624	15.83	19 23.09	155 14.96	2.88	1.6	2.1	30	5	49	.10	2	.3	.3	14	SEC	
		10	1641	17.00	19 19.94	155 8.47	7.56	1.8	1.9	30	3	79	.09	5	.5	.9	20	SF4	
		10	1740	45.05	19 23.57	155 14.85	1.00	.8	.8	0	96	.06	2	.3	.7	8	SEC		
		10	18	4	36.12	19 23.78	155 14.87	3.29	1.0	1.0	13	4	90	.07	2	.4	.5	7	SEC
		10	1820	14.72	19 23.14	155 14.48	3.95	3.0	3.2	38	1	47	.11	3	.3	.5	30	SEC	
		10	1825	54.82	19 23.31	155 14.83	2.96	1.6	2.1	27	3	46	.08	3	.3	.3	15	SEC	
		10	1834	34.43	19 23.32	155 14.77	3.32	1.2	1.2	17	3	70	.08	3	.4	.4	10	SEC	
		10	1834	46.52	19 23.39	155 14.94	2.79	1.1	1.4	14	5	103	.05	3	.3	.5	11	SEC	
		10	1839	51.16	19 23.32	155 14.79	3.24	1.1	1.0	14	6	105	.05	3	.4	.6	11	SEC	
		10	1852	11.88	19 19.73	155 13.49	8.64	1.5	1.1	27	2	65	.09	5	.5	.8	25	SF2	
		10	1852	46.53	19 20.40	155 14.06	8.01	1.1	1.3	18	2	103	.07	4	.5	1.0	16	SF2	
		10	19	6	26.88	19 23.36	155 14.84	3.33	1.0	.8	12	5	114	.03	3	.4	.7	9	SEC
		10	1934	34.43	19 18.81	155 13.13	7.30	1.6	1.3	21	3	84	.10	3	.5	1.1	18	SF2	
		10	1937	22.69	19 19.84	155 10.01	7.58	1.6	1.0	22	2	88	.07	4	.5	1.1	19	SF3	
		10	1945	17.48	19 22.89	155 14.63	3.26	1.3	1.4	23	6	69	.19	2	.5	.5	17	SEC	
		10	20	9	59.98	19 23.33	155 14.81	3.12	1.1	1.2	16	6	101	.05	3	.3	.4	13	SEC
		10	2037	12.75	19 23.51	155 15.09	3.38	1.0	1.2	17	5	97	.05	3	.3	.4	13	SEC	
		10	2113	10.99	19 23.28	155 14.92	2.93	1.1	1.2	16	6	107	.05	2	.3	.4	13	SEC	
		10	2118	44.61	19 23.41	155 14.99	3.11	1.2	1.4	16	6	100	.07	2	.3	.5	12	SEC	
		10	2118	52.65	19 23.18	155 14.91	2.96	2.7	3.0	43	7	47	.09	2	.2	.3	34	SEC	
		10	2244	44.44	19 23.35	155 14.80	3.29	1.1	1.2	18	5	100	.10	3	.3	.4	15	SEC	
		10	2247	36.69	19 23.27	155 14.60	3.15	1.1	1.0	15	6	106	.08	3	.4	.5	12	SEC	
		10	2257	47.71	19 20.38	155 12.56	8.41	1.6	1.1	27	2	71	.09	4	.5	.8	23	SF2	
		10	23	7	59.74	19 23.37	155 14.90	3.07	.9	.9	14	5	103	.07	3	.3	.6	11	SEC
		10	23	8	33.13	19 23.52	155 14.96	2.93	.9	1.0	14	6	99	.06	2	.3	.5	11	SEC
		10	2315	33.65	19 23.46	155 14.98	2.94	1.0	1.0	15	6	100	.04	3	.3	.5	12	SEC	
		10	2325	43.66	19 22.75	155 1.57	8.49	1.9	1.9	29	1	150	.14	6	.8	.8	23	SF5	
		11	021	39.90	19 23.19	155 14.77	3.59	1.1	1.0	16	6	106	.05	2	.3	.5	13	SEC	
		11	035	25.80	19 23.68	155 14.99	3.18	1.0	1.1	12	4	93	.05	2	.3	.5	10	SEC	
		11	054	35.24	19 23.27	155 14.61	3.78	.8	.8	14	6	106	.06	3	.4	.7	10	SEC	
		11	056	40.23	19 18.87	155 15.29	6.74	1.1	1.1	23	2	106	.09	4	.5	1.0	16	SF1	
		11	2	3	23.79	19 23.42	3.58	1.2	1.2	21	5	74	.08	3	.4	.4	10	SEC	
		11	214	43.64	19 21.72	155 4.89	7.89	2.4	2.4	34	2	80	.12	3	.4	.6	15	SF5	
		11	223	44.97	19 23.23	155 14.75	3.54	2.4	2.6	33	2	65	.08	3	.3	.4	20	SEC	
		11	227	16.70	19 24.12	155 15.88	3.30	1.0	1.0	13	3	122	.04	1	.3	.3	9	SEC	
		11	233	54.83	19 23.42	155 14.86	3.33	1.6	1.7	24	4	73	.06	3	.3	.3	15	SEC	
		11	328	22.74	19 23.06	155 14.27	1.26	2.0	2.6	23	4	61	.10	2	.3	.4	14	SEC	
		11	5	4	10.63	19 19.67	155 12.59	7.81	1.3	1.1	19	2	81	.07	5	.5	1.0	12	SF2
		11	614	31.85	19 23.15	155 14.82	2.95	1.2	1.2	17	3	66	.11	2	.4	.5	10	SEC	
		11	615	9.50	19 4.93	155 29.01	31.48	1.8	1.5	28	0	190	.08	9	1.0	2.0	21	DLS	
		11	620	7.13	19 18.45	155 14.84	6.42	1.0	1.1	26	2	108	.12	4	.5	1.1	15	SF1	
		11	9	6	9.02	19 20.89	8.14	1.1	1.26	2	83	.10	4	.5	.9	25	SF4		
		11	917	28.06	19 22.95	155 14.72	3.36	1.5	1.9	29	7	66	.09	2	.3	.4	23	SEC	
		11	919	1.48	19 23.09	155 14.73	3.66	1.9	2.1	33	7	62	.09	2	.3	.4	27	SF2	
		11	949	19.66	19 18.22	155 23.56	3.50	2.7	3.2	43	3	90	.14	4	.4	1.0	30	SWR	
		11	955	13.95	19 17.92	155 23.06	3.81	1.4	1.4	26	4	100	.10	4	.3	.9	24	SWR	
		11	10	0	5.88	19 22.68	8.00	2.2	2.3	31	4	180	.11	5	.7	.5	26	LWR	

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1982	DEC	11	1054	57.94	19 22.98	155 14.47	1.80	2.2	2.4	18	2	65	.08	3	.3	.3	16	SEC
		11	1059	9.45	19 19.90	155 6.75	8.00	1.8	1.9	31	1	116	.10	5	.5	.9	28	SF4
		11	13 6	9.17	19 17.85	155 23.44	3.01	1.7	1.6	18	1	95	.11	4	.4	1.0	12	SWR
		11	1318	12.89	19 17.84	155 23.36	3.51	.9	1.3	15	3	97	.06	4	.4	.9	11	SWR
		11	1851	16.29	19 20.10	155 12.97	8.21	1.1	1.0	15	2	206	.05	5	1.0	1.1	10	SF2
		11	1859	59.87	20 3.80	154 56.78	8.65	1.3	1.8	5	0	285	.05	46	8.8	2.4	4	KEA
		11	2259	16.85	19 23.46	155 26.33	7.69	1.6	1.5	29	3	92	.10	3	.4	.9	19	KA0
		12	0 2	1.29	19 19.00	155 8.62	5.67	1.6	1.3	17	2	240	.10	6	1.4	2.7	12	SF4
		12	227	2.31	19 20.75	155 3.17	6.57	1.4	1.5	18	0	217	.14	7	1.3	1.5	12	SF5
		12	255	44.97	19 19.16	155 13.36	6.11	1.7	1.6	26	1	213	.12	6	.8	1.3	24	SF2
		12	317	39.13	19 19.12	155 8.26	7.07	1.9	1.8	21	1	241	.09	6	1.4	1.1	18	SF4
		12	630	33.22	19 19.62	155 14.73	9.01	2.4	2.5	37	3	86	.10	5	.6	.5	34	SF1
		12	631	30.17	19 25.09	155 29.48	8.62	1.6	1.1	21	2	105	.11	6	.6	1.2	19	KA0
		12	751	38.05	19 21.44	155 4.55	8.17	1.8	1.4	15	0	209	.07	4	1.5	1.0	13	SF5
		12	947	15.54	19 20.40	155 13.43	8.07	1.6	1.9	25	2	164	.12	4	.6	.8	19	SF2
		12	1045	12.20	19 23.49	155 14.79	3.41	1.1	1.0	13	5	99	.03	2	.4	.6	10	SEC
		12	1223	56.28	19 24.83	155 24.77	8.48	2.0	2.0	30	4	67	.09	1	.4	.8	25	KA0
		12	1246	56.36	19 23.35	155 14.89	3.36	2.5	3.3	30	4	104	.09	3	.3	.3	19	SEC
		12	1249	50.03	19 23.51	155 14.93	3.12	1.6	2.0	19	5	99	.06	2	.3	.4	15	SEC
		12	13 9	11.28	19 23.51	155 14.81	3.36	2.8	3.0	30	2	109	.10	2	.4	.4	23	SEC
		12	1335	36.50	19 23.68	155 15.05	3.03	1.2	1.7	18	7	93	.09	2	.3	.4	14	SEC
		12	1440	32.71	19 23.12	155 14.70	3.07	1.0	1.0	13	5	113	.06	3	.4	.6	10	SEC
		12	1519	54.34	19 22.30	155 1.24	7.96	1.6	1.6	22	4	213	.13	7	1.0	.8	19	SF5
		12	1521	16.41	19 22.19	155 1.60	6.93	2.2	2.1	28	3	210	.18	6	1.0	1.1	25	SF5
		12	1622	34.62	19 20.20	155 13.12	7.74	1.4	1.1	21	2	211	.10	4	1.0	1.1	18	SF2
		12	2014	4.25	19 23.13	155 14.76	2.99	2.3	2.7	31	8	113	.09	2	.3	.2	26	SEC
		12	2149	12.69	19 10.00	155 17.10	12.27	2.2	2.7	25	0	219	.12	19	1.4	.6	25	LOI
		12	2151	9.83	19 16.47	155 22.21	8.47	1.5	1.5	21	1	152	.13	7	.8	1.5	20	SWR
		13	2 0	17.87	19 22.84	155 17.30	2.60	2.9	3.5	28	2	74	.10	1	.3	.3	24	SBC
		13	2027	25.53	19 23.14	155 14.63	3.62	2.1	2.0	30	6	48	.09	3	.3	.3	23	SEC
		13	2134	.23	19 23.71	155 16.04	1.06	.9	1.2	12	2	96	.13	1	.3	.4	9	SEC
		13	2248	39.07	19 23.33	155 14.78	3.02	1.0	1.0	14	6	104	.04	3	.3	.5	11	SEC
		13	2258	56.95	19 23.25	155 14.67	3.43	2.9	3.2	40	4	47	.07	3	.3	.4	27	SEC
		13	2324	51.94	19 20.09	155 6.70	7.28	1.7	1.5	29	3	112	.09	5	.5	.9	25	SF4
		14	2 7	9.83	19 19.25	155 11.33	5.63	1.5	1.5	31	3	103	.13	6	.6	1.5	22	SF3
		14	234	50.42	19 23.46	155 14.93	3.48	2.1	2.6	32	3	46	.10	3	.3	.4	22	SEC
		14	332	19.60	19 23.01	155 14.90	2.59	1.2	1.2	22	5	65	.13	2	.3	.4	12	SEC
		14	6 4	48.14	19 19.86	155 7.86	6.85	1.9	1.8	36	4	94	.11	5	.5	.8	24	SF4
		14	721	1.00	19 23.69	155 14.89	3.82	1.1	1.0	14	2	86	.09	2	.4	.5	9	SEC
		14	1330	38.90	19 22.76	155 14.10	1.67	1.2	1.8	17	4	85	.08	2	.3	.3	9	SEC
		14	14 9	24.17	19 20.18	155 12.82	7.24	1.4	1.3	28	3	70	.11	5	.5	.8	16	SF2
		14	1525	39.14	19 23.37	155 14.84	3.11	1.4	1.6	18	4	100	.10	3	.4	.5	9	SEC
		14	2039	59.30	19 23.37	155 14.55	3.35	2.7	3.3	36	3	82	.12	2	.3	.4	25	SEC
		14	2045	13.56	19 22.88	155 14.62	3.44	2.2	2.5	36	5	87	.10	2	.3	.4	22	SEC
		14	22 3	5.73	19 23.07	155 14.89	2.90	2.3	2.9	35	3	84	.10	2	.3	.4	25	SEC
		14	2241	36.98	19 21.57	155 1.34	5.35	1.4	1.1	25	1	173	.16	4	.8	1.6	10	SF5
		14	2338	15.45	19 29.45	155 47.05	8.94	2.1	1.7	30	3	145	.12	3	.6	.4	15	KON
		15	1 2	23.25	19 20.33	155 7.13	7.07	1.8	1.5	31	3	100	.12	5	.5	.8	15	SF4

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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	ERM KM	ERZ KM	NO FM	REMK
1982	DEC	15	522	42.39	19 20.07	155 7.69	8.07	2.4	2.3	39	3	95	.12	5	.5	.7	27	SF4
		15	823	50.46	19 19.96	155 8.09	7.20	1.4	1.3	19	0	87	.07	5	.6	1.2	14	SF4
		15	937	42.81	19 19.37	155 11.25	6.23	1.6	1.1	27	4	126	.09	6	.5	1.1	16	SF3
		15	1039	4.74	19 23.17	155 14.93	3.20	1.8	2.1	25	4	107	.08	2	.3	.4	17	SEC
		15	1140	34.08	19 23.35	155 14.88	2.54	.9	1.0	10	3	113	.03	3	.4	.7	6	SEC
		15	1410	6.31	19 23.01	155 14.82	3.12	2.0	2.5	25	3	85	.07	2	.3	.3	14	SEC
		15	1414	40.05	19 22.79	155 14.41	3.57	1.9	2.0	31	4	116	.10	2	.3	.4	15	SEC
		15	1553	53.70	19 23.34	155 14.80	2.93	.9	1.0	11	2	105	.04	3	.4	.5	8	SEC
		15	1613	26.56	19 20.02	155 10.13	6.68	1.5	1.1	23	3	85	.09	4	.5	1.1	19	SF3
		15	1622	53.88	19 23.03	155 14.76	2.85	1.9	2.0	31	3	85	.11	2	.3	.4	19	SEC
		15	1824	14.32	19 20.69	155 6.32	8.36	1.6	1.6	25	2	102	.11	4	.5	.9	18	SF4
		15	1827	.85	19 23.94	154 58.67	7.24	1.9	1.6	32	3	175	.19	2	1.0	.7	19	LER
		15	2246	11.15	19 22.93	155 14.57	3.47	1.7	2.1	22	4	67	.05	3	.4	.4	12	SEC
		16	0 5	16.23	19 23.10	155 14.74	3.07	1.4	1.7	20	5	63	.08	2	.3	.4	13	SEC
		16	014	34.82	19 23.37	155 14.58	3.55	1.6	1.9	22	2	61	.09	2	.4	.4	9	SEC
		16	054	5.07	19 23.47	155 14.98	2.44	1.1	1.2	12	3	100	.04	3	.3	.5	8	SEC
		16	257	32.36	19 23.39	155 14.88	2.76	.9	1.0	10	2	102	.03	3	.4	.6	7	SEC
		16	514	44.82	19 20.39	155 11.96	7.81	1.5	1.3	23	2	75	.07	5	.5	1.0	13	SF3
		16	1852	37.21	19 16.68	155 22.06	3.60	1.0	1.1	16	1	132	.09	6	.5	2.0	15	SWR
		16	2251	30.26	19 23.52	155 14.99	2.52	1.1	1.0	12	4	98	.05	2	.4	.6	8	SEC
		16	2349	.34	19 22.34	155 25.09	9.74	1.9	1.8	37	3	42	.12	4	.4	.7	24	KA0
		17	0 0	8.69	19 19.28	155 15.49	6.75	1.9	1.8	35	2	100	.11	4	.4	.8	24	SF1
		17	126	47.88	19 23.32	155 16.99	2.59	1.5	1.8	22	4	46	.09	0	.2	.2	11	SBC
		17	614	40.91	19 16.27	155 22.31	7.35	1.8	1.6	29	1	136	.10	5	.5	1.1	17	SWR
		17	615	46.64	19 23.29	155 14.84	2.81	1.2	1.0	13	2	102	.04	3	.4	.5	8	SEC
		17	627	6.45	19 23.52	154 58.07	4.88	2.0	1.6	31	4	185	.23	3	1.0	1.5	17	SLE
		17	631	38.60	19 23.56	155 15.00	2.79	1.4	1.4	21	5	81	.08	2	.3	.3	12	SEC
		17	637	55.75	19 16.38	155 23.42	4.73	1.9	2.4	35	0	110	.16	4	.5	1.6	22	SWR
		17	716	51.52	19 23.43	155 15.03	2.42	1.4	1.2	18	4	101	.07	2	.3	.4	10	SEC
		17	11 7	1.65	19 21.34	155 24.83	11.27	2.3	2.4	38	3	46	.12	3	.4	.6	26	SWR
		17	16 3	7.98	19 23.17	155 14.67	2.74	1.1	1.0	12	2	91	.05	3	.4	.5	7	SEC
		17	1952	56.95	19 23.46	155 15.01	2.41	1.4	1.2	16	3	78	.08	3	.3	.4	12	SEC
		18	234	59.57	19 19.44	155 12.20	8.51	1.4	1.1	17	1	90	.05	5	.6	1.3	15	SF3
		18	241	4.01	19 20.45	155 12.92	8.73	1.5	1.7	33	2	66	.11	4	.5	.7	21	SF2
		18	614	31.94	19 18.37	155 15.68	7.26	1.6	1.6	35	3	121	.10	4	.4	.7	18	SF1
		18	1110	9.47	19 17.64	155 13.16	9.34	1.9	.9	33	1	147	.11	9	.6	.8	21	SF4
		18	1253	27.06	19 19.86	155 8.24	7.65	1.8	1.5	34	4	84	.11	5	.5	.9	21	SF2
		18	2359	12.57	19 22.94	155 17.11	2.48	1.2	1.0	18	5	82	.09	1	.3	.3	12	SBC
		19	043	48.60	19 16.88	155 13.16	5.70	1.3	1.1	17	1	99	.10	1	.9	.8	11	SF2
		19	244	4.12	19 23.37	155 15.00	2.93	1.6	1.8	24	3	76	.09	2	.3	.4	12	SEC
		19	256	52.40	19 53.33	155 28.68	27.21	3.1	3.1	45	5	209	.10	12	.8	1.4	32	KA
		19	3 5	11.95	19 23.11	155 14.82	2.81	1.8	2.1	23	4	64	.11	2	.3	.4	15	SEC
		19	621	10.81	19 23.45	155 14.95	2.92	1.3	1.4	14	4	100	.05	3	.4	.5	10	SEC
		19	821	11.71	19 22.82	155 17.02	2.49	1.3	1.2	18	3	77	.07	1	.3	.3	11	SBC
		19	839	53.25	19 19.29	155 15.46	6.75	1.5	1.1	21	0	99	.11	4	.5	1.3	19	SF1
		19	957	27.17	19 23.55	155 14.95	3.44	1.1	1.0	12	4	95	.06	2	.4	.8	5	SEC
		19	1317	18.05	19 22.12	155 13.32	2.91	1.3	1.2	14	3	152	.04	1	.6	.3	5	SBC
		19	1451	20.14	19 20.30	155 6.63	7.37	2.4	2.3	37	4	108	.10	5	.4	.7	32	SF1

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YEAR	MON	DA	HRMN	SEC	LAT N DEG MIN	LON W DEG MIN	DEPTH KM	AMP MAG	OUR MAG	NR	NS	GAP DEG	RMS SEC	MIN DIS	ERH KM	ERZ NO KM FM	REMK
1982	DEC	19	2048	32.83	19 17.40	155 13.06	8.59	2.5	2.7	38	3	136	.10	1	.5	.6 26	SF2
		19	2123	35.51	19 18.85	155 13.35	8.15	1.5	1.3	31	3	78	.09	3	.5	.8 23	SF2
		19	2145	15.75	19 20.39	155 6.21	8.85	2.7	2.7	37	3	111	.09	5	.4	.6 26	SF4
		19	2310	53.35	19 17.53	155 12.98	7.07	1.6	1.7	25	1	131	.12	1	.7	1.0 10	SF2
		20	126	49.96	19 23.33	155 14.90	3.45	1.5	1.6	17	4	105	.09	2	.4	.5 10	SEC
		20	545	57.71	19 19.72	155 8.90	6.51	1.6	1.5	25	3	213	.09	5	1.2	1.0 10	SF4
		20	915	19.73	19 20.46	155 7.25	7.53	1.6		24	3	209	.10	5	.9	.8 17	SF4
		20	14	5 30.82	20 6.23	155 26.66	1.25	2.2	1.7	16	0	273	.12	26	2.9	4.8 5	KEA
		20	1844	45.44	19 23.48	155 14.62	1.20	1.0	1.4	12	1	98	.05	2	.3	.5 9	SEC
		20	2029	34.55	19 21.50	155 5.87	7.28	2.0	1.8	37	6	87	.12	3	.4	.6 20	SF4
		20	2257	51.59	19 22.02	155 13.25	2.97	1.4	1.2	11	2	94	.06	1	.5	.5 7	SER
		21	215	43.02	19 19.15	155 16.27	9.00	2.3	2.2	42	3	109	.13	3	.4	.5 24	SF1
		21	448	29.89	19 20.16	155 9.65	9.07	1.5	1.1	21	2	80	.07	4	.6	1.3 19	SF3
		21	744	51.62	19 19.40	155 11.31	5.68	1.9	1.5	31	0	99	.12	6	.5	1.0 27	SF3
		21	11	3 46.09	19 19.43	155 15.53	8.03	2.9	3.0	42	2	89	.10	4	.4	.6 37	SF1
		21	11	7 8.37	19 21.41	155 1.67	8.38	2.5	2.7	41	4	169	.10	4	.7	.4 25	SF5
		21	1212	59.01	19 20.35	155 11.61	8.98	3.2	3.4	45	6	78	.11	4	.4	.4 31	SF3
		21	1214	46.96	19 20.44	155 11.35	6.50	2.0	1.6	33	3	78	.12	4	.5	.9 21	SF3
		21	1243	6.86	19 20.27	155 11.67	7.41	1.8	1.6	34	4	79	.10	5	.5	.7 19	SF3
		21	14	6 27.19	19 23.05	155 14.57	3.41	1.3	1.2	17	2	110	.06	3	.4	.5 15	SEC
		21	1444	57.09	19 20.78	155 2.18	6.71	2.5	2.5	30	2	171	.11	2	.6	.6 21	SF5
		21	1535	22.79	19 23.03	155 14.48	2.35	1.2	1.6	22	5	63	.09	3	.3	.4 17	SEC
		21	1543	51.35	19 22.83	155 14.41	3.39	1.8	2.1	32	4	66	.08	2	.3	.4 18	SEC
		21	1612	11.69	19 22.89	155 14.57	3.33	1.5	2.0	26	4	69	.08	3	.3	.4 20	SEC
		21	1751	59.27	19 23.06	155 14.71	3.12	1.6	1.9	32	5	48	.09	2	.3	.4 19	SEC
		21	1756	16.58	19 23.21	155 14.50	4.06	3.1	3.5	39	1	47	.11	3	.3	.5 31	SEC
		21	1757	54.07	19 22.90	155 14.61	2.97	1.5	1.8	24	5	117	.13	2	.4	.4 14	SEC
		21	18	1 14.87	19 23.15	155 14.77	3.26	2.9	3.2	41	3	48	.11	2	.3	.4 33	SEC
		21	1853	52.87	19 23.13	155 14.47	3.24	1.2	1.6	22	5	60	.12	3	.4	.5 14	SEC
		21	2030	32.80	19 23.21	155 14.87	3.12	2.6	3.2	30	3	48	.09	2	.3	.4 24	SEC
		21	2117	31.04	19 21.58	155 12.84	2.73	1.4	1.4	21	4	56	.09	2	.3	.4 17	SER
		21	22	2 41.69	19 20.66	155 13.77	8.03	1.8	1.6	30	1	65	.13	4	.5	.8 24	SF2
		21	2342	17.44	19 22.38	155 13.46	2.91	1.3	1.0	12	2	86	.08	1	.5	.4 8	SER
		22	456	23.12	19 18.03	155 13.13	6.35	1.7	1.6	34	4	101	.12	2	.5	.9 17	SF2
		22	724	34.04	19 18.57	155 14.91	6.92	1.6	1.2	24	2	106	.08	4	.4	.9 19	SF1
		22	915	50.36	19 23.49	155 17.05	2.71	1.1	1.2	18	5	49	.10	0	.3	.3 12	SSC
		22	1252	9.07	19 18.15	155 13.21	6.76	1.6	1.6	31	2	93	.10	2	.5	.9 17	SF2
		22	1345	42.20	19 21.81	155 13.07	2.71	1.6	1.7	19	2	71	.06	2	.4	.4 14	SER
		22	16	9 11.02	19 19.42	155 11.48	6.31	1.7	1.1	23	2	98	.06	6	.5	1.0 15	SF3
		22	1625	24.73	19 20.21	155 12.79	8.24	1.6	1.3	26	2	70	.09	5	.5	.7 18	SF2
		22	1639	13.88	19 22.87	155 14.55	2.39	1.3	1.1	21	5	70	.09	2	.3	.4 11	SEC
		22	1947	20.88	19 23.59	155 14.85	3.32		1.0	8	0	95	.05	2	.5	.9 8	SEC
		22	2327	3.56	19 22.00	155 13.13	3.19	1.9	2.4	26	3	51	.08	1	.3	.4 21	SER
		23	016	21.12	19 21.90	155 13.27	2.63	1.4	1.0	15	2	96	.08	1	.4	.4 9	SER
		23	020	28.14	19 27.84	155 14.63	32.63	1.9	1.4	38	1	52	.11	6	.6	1.3 31	DEP
		23	1	2 38.61	19 19.48	155 12.08	4.61	1.3	1.1	21	3	91	.12	5	.5	2.0 14	SF3
		23	1	6 57.51	19 21.78	155 13.40	2.48	1.1	1.4	20	2	52	.10	2	.4	.5 11	SER
		23	4	2 25.04	19 18.86	155 8.54	6.47	1.6	1.3	27	3	90	.09	3	.5	1.2 19	SF4

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YEAR	MON	DA	HRMN	SEC	LAT N DEG MIN	LON W DEG MIN	DEPTH KM	AMP MAG	OUR MAG	NR	NS	GAP DEG	RMS SEC	MIN DIS	ERH KM	ERZ NO KM FM	REMK
1982	DEC	23	653	13.45	19 21.75	155 12.10	2.90	1.3	1.4	21	2	77	.05	2	.4	.4 15	SER
		23	713	14.88	19 22.77	155 14.60	1.27	1.6	2.3	27	4	65	.09	2	.3	.4 17	SEC
		23	747	30.96	19 21.49	155 12.07	2.40	1.5		18	2	100	.06	3	.4	.5 12	SER
		23	1053	48.76	19 21.93	155 4.73	7.02	1.1	1.1	22	1	79	.15	3	.6	.9 15	SF5
		23	1212	27.41	19 22.42	155 2.44	6.93	1.3	1.2	23	2	136	.12	5	.5	1.0 19	SF5
		23	13	5 57.21	19 18.75	155 13.69	6.79	1.6	1.6	30	3	89	.10	3	.5	.8 16	SF2
		23	16	3 47.18	19 51.07	155 20.14	1.82		1.3	11	2	126	.08	4	.6	1.3 7	KEA
		23	1623	50.93	19 22.85	155 14.32	1.55	1.9	2.3	20	4	79	.10	2	.3	.4 9	SEC
		23	17	6 25.29	19 23.08	155 14.44	1.24	.7	1.2	12	3	115	.06	3	.3	.5 6	SEC
		23	17	7 41.80	19 22.13	155 13.23	2.76	1.3	1.0	15	5	92	.09	1	.3	.3 10	SER
		23	1749	28.32	19 20.95	155 11.13	7.89	2.0	1.8	34	2	70	.09	3	.4	.6 10	SF3
		23	18	5 14.09	19 21.71	155 13.11	3.13	1.4	1.6	21	3	54	.09	2	.4	.5 16	SER
		23	1957	8.92	19 20.00	155 11.67	6.60	1.5	1.2	24	1	84	.08	5	.5	.9 17	SF3
		23	2050	42.41	19 22.68	155 14.66	1.18	2.6	3.2	33	2	51	.10	2	.3	.4 20	SEC
		23	2230	37.76	19 23.10	155 14.35	1.06	1.1	1.7	15	3	114	.09	2	.3	.4 8	SEC
		23	2352	15.46	19 19.60	155 12.10	6.90	2.3	2.3	40	6	88	.11	5	.4	.7 32	SF3
		23	2356	42.04	19 22.71	155 14.59	1.76	1.1	1.6	19	2	71	.08	2	.3	.4 13	SEC
		24	313	2.54	19 22.32	155 13.59	2.74	.8	1.0	17	3	84	.11	1	.4	.4 10	SER
		24	652	8.33	19 17.90	155 14.53	7.01	1.1	1.1	25	4	142	.07	2	.5	.8 17	SF1
		24	1151	24.31	19 19.23	155 13.22	4.57	1.6	1.6	29	2	76	.12	4	.4	1.8 15	SF5
		24	1325	48.77	19 11.61	155 35.97	8.17	1.6	1.7	24	2	92	.22	6	.7	1.7 17	LSW
		24	1530	28.69	19 23.35	155 17.04	2.81	2.0	2.4	30	3	36	.10	0	.3	.3 23	SSC
		24	1549	53.70	19 23.25	155 16.98	2.88	1.4	1.4	19	3	59	.10	0	.3	.3 14	SSC
		24	1710	52.40	19 6.62	155 28.81	30.53	2.0	1.9	32	1	173	.09	6	.9	1.7 27	DLS
		24	2014	38.69	19 18.66	155 13.59	7.97	1.7		21	2	87	.07	3	.6	.9 10	SF2
		24	2039	47.04	19 18.39	155 13.32	8.40	2.4	2.4	40	2	85	.12	3	.5	.6 28	SF2
		24	2042	59.50	19 18.26	155 13.15	6.21	1.4	1.3	28	3	94	.08	2	.5	1.0 19	SF2
		24	2114	11.87	19 23.04	155 14.68	3.18	1.5	1.7	28	4	49	.08	2	.3	.4 15	SEC
		25	045	18.20	19 19.59	155 13.55	6.94		1.1	26	2	66	.14	5	.5	.3 15	SF2
		25	255	25.96	19 23.09	155 14.61	2.97	1.1	1.6	17	3	115	.10	3	.4	.7 9	SEC
		25	336	56.16	19 23.86	155 14.96	3.12	1.0	1.0	14	4	97	.06	2	.3	.3 9	SEC
		25	439	5.30	19 18.49	155 .55	35.79	2.0	1.3	34	2	216	.08	5	1.2	1.4 29	DEP
		25	534	33.51	19 17.95	155 14.82	9.53	2.4	2.4	40	4	134	.07	3	.5	.4 2	SF1
		25	547	50.52	19 22.21	155 11.31	1.84	1.5	1.4	14	0	89	.10	3	.6	.5 10	SER
		25	1124	16.67	19 15.16	155 16.66	.50	1.1	1.1	24	0	189	.15	6	.7	2.3 13	SSF
		25	1244	47.80	19 19.66	155 10.54	9.05	2.9	3.0	42	2	94	.11	5	.4	.4 35	SF3 F
		25	1246	28.76	19 19.53	155 10.42	7.11	1.6	1.1	24	2	96	.08	5	.5	1.1 17	SF3
		25	13	4 1.15	19 19.48	155 9.41	8.30	2.1	2.4	36	2	91	.09	5	.4	.5 25	SF3
		25	1314	47.96	19 19.48	155 9.42	6.11	1.5	1.5	32	4	92	.10	5	.5	1.0 24	SF3
		25	1329	42.09	19 40.32	156 2.25	40.90	2.9	2.8	40	4	273	.09	24	1.2	1.0 33	HUA
		25	14	8 59.99	19 19.92	155 9.09	6.19	1.3	1.1	22	2	79	.11	4	.6	1.3 20	SF4
		25	1446	2.94	19 22.86	155 14.75	3.12	1.6	1.9	28	5	64	.10	2	.3	.4 17	SEC
		25	1524	51.93	19 24.58	155 15.02	38.76	2.1	2.6	34	3	45	.10	1	.7	1.4 7	DEP L
		25	1556	3.40	19 9.77	155 41.15	5.04	1.6	1.4	26	1	128	.11	12	.7	1.4 17	LSW
		25	1644	29.21	19 19.81	155 9.49	7.23	2.0	2.3	37	2	85	.11	4	.4	.7 28	SF3
		25	1646	6.83	19 19.65	155 9.56	6.91	1.4	1.0	28	1	89	.11	5	.5	1.0 18	SF3
		25	1958	50.88	19 22.93	155 14.52	3.23	1.6	1.6	29	4	65	.12	3	.4	.4 17	SEC
		25	2022	1.90	19 19.74	155 7.27	7.30	2.0	1.9	36	2	109	.10	5	.4	.7 22	SF4

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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	ERM KM	ERZ KM	NO FM	REMK
1982	DEC	25	2057	28.73	19 23.21	155 14.70	3.20	2.2	2.7	34	2	47	.09	3	.3	.4	25	SEC
		25	2115	9.34	19 18.25	155 13.08	5.81	1.4	1.1	23	2	97	.08	2	.5	1.3	17	SF2
		25	2153	3.36	19 19.63	155 12.06	6.76	1.1	1.0	22	2	87	.08	5	.5	1.0	15	SF3
		25	2318	24.49	19 18.99	155 15.01	6.50	1.9	1.6	35	1	99	.11	5	.5	.8	23	SF1
		26	0 1	8.01	19 20.86	155 6.53	8.94	2.2	2.2	38	5	97	.09	4	.4	.7	29	SF4
		26	026	50.62	19 16.72	155 22.20	2.62		1.1	10	0	129	.07	5	.5	1.5	9	SWR
		26	316	41.10	19 21.93	155 13.15	2.97	.8	1.0	12	3	97	.07	1	.4	.5	9	SWR
		26	335	52.90	19 25.08	155 16.82	15.39	1.1	1.2	23	1	119	.12	0	.8	1.0	18	DEP
		26	520	38.14	20 28.80	156 1.73	7.62	2.9	2.4	48	5	164	.10	39	1.0	2.9	40	DIS
		26	528	19.07	19 22.97	155 14.64	2.90	1.1	1.2	15	3	114	.08	2	.4	.5	8	SEC
		26	8 4	48.09	19 18.70	155 14.93	6.40	1.7	1.5	31	2	105	.09	4	.4	.9	20	SF1
		26	8 7	51.21	19 19.46	155 11.60	5.64	1.4	1.5	23	2	95	.10	6	.5	1.5	15	SF3
		26	2026	20.00	19 17.53	155 14.07	6.05	1.4	1.3	26	3	122	.08	1	.4	.8	19	SF2
		26	2037	41.12	19 18.13	155 15.11	5.52	1.1	1.3	25	3	121	.11	4	.5	1.1	15	SF1
		27	755	17.68	19 18.79	155 14.87	6.04	1.1	1.1	25	1	101	.12	4	.5	1.2	18	SF1
		27	8 7	3.85	19 18.68	155 14.81	6.27	1.1	1.1	23	1	102	.10	4	.5	1.1	19	SF1
		27	13 8	22.03	19 21.22	155 2.14	6.41	1.8	1.8	29	0	152	.15	3	.5	.9	17	SF5
		27	1536	35.53	19 20.15	155 11.40	9.28	2.5	2.6	41	3	83	.13	4	.4	.5	34	SF3
		27	1557	11.49	19 19.60	155 11.09	4.77	1.4	1.1	18	3	95	.08	5	.5	1.9	14	SF5
		27	2041	55.92	19 21.74	155 12.16	2.71	1.5	1.2	14	2	86	.07	2	.5	.5	9	SWR
		28	2335	1.86	19 20.38	155 6.68	9.23	3.2	3.2	46	3	105	.09	5	.5	.3	36	SF4
		28	244	33.15	19 19.51	155 9.34	6.52	1.3	1.1	25	2	90	.07	5	.4	.9	18	SF3
		28	354	51.19	19 21.73	155 13.00	3.01	1.8	1.8	29	4	54	.08	2	.3	.4	18	SWR
		28	444	44.09	19 20.50	155 3.80	7.34	2.1	2.4	34	0	107	.12	2	.5	.7	26	SF5
		28	446	8.57	19 20.92	155 3.95	6.77	1.5	1.1	34	0	91	.12	3	.5	.8	18	SF5
		28	5 6	53.04	19 20.57	155 3.80	8.19	2.3	2.6	39	1	103	.11	2	.6	.5	29	SF5
		28	620	.97	19 20.13	155 11.28	8.56	1.9	1.8	30	1	83	.09	4	.5	.9	23	SF3
		28	717	55.88	19 22.04	155 13.43	2.99	1.3	1.4	16	1	50	.10	1	.4	.5	11	SWR
		28	819	37.48	19 24.36	155 29.29	8.74	1.7	1.2	21	1	64	.10	5	.4	1.1	17	KAO
		28	833	3.90	19 24.87	155 15.20	30.15	2.5	2.5	44	2	46	.09	2	.6	.9	37	DEP
		28	944	39.87	19 21.71	155 13.49	2.57	1.7	1.6	21	3	54	.10	2	.4	.5	14	SWR
		28	1446	42.54	19 19.67	155 10.22	6.06	1.4	1.1	25	2	93	.11	4	.6	1.4	21	SF3
		28	18 1	22.67	19 22.25	155 6.07	7.85	1.4	1.3	25	1	72	.12	1	.5	.9	12	SF4
		29	059	31.00	19 20.45	155 6.78	6.70	1.3	1.1	23	0	102	.10	5	.6	1.2	15	SF4
		29	432	37.18	20 18.50	155 45.26	30.43	2.9	3.0	44	3	176	.10	63	1.1	3.0	35	KOH
		29	747	1.03	19 19.22	155 13.16	5.14	1.5	1.6	34	4	78	.12	4	.4	1.3	21	SF2
		29	1137	4.61	19 13.23	155 23.44	36.92	1.9	1.5	27	0	154	.08	2	.9	2.0	21	DEP
		29	1350	6.49	19 22.07	155 13.29	2.80	.9	1.0	14	2	54	.07	1	.5	.4	7	SWR
		29	1948	37.39	19 17.65	155 23.15	2.76	.7	1.1	11	1	101	.06	5	.4	.9	5	SWR
		29	20 8	2.56	19 28.73	154 52.62	2.42	1.5	1.2	12	1	93	.07	3	.5	.9	8	SLE
		29	21 0	1.65	19 26.87	155 49.43	6.96	1.8	1.2	15	1	107	.11	9	.7	1.7	8	KOH
		29	23 3	26.89	19 21.33	155 17.99	31.28	2.4	2.7	43	1	36	.10	2	.6	1.0	36	DEP
		29	2320	21.64	19 29.06	154 52.00	2.41	1.8	1.2	11	1	101	.09	3	.8	1.2	8	SLE
		30	011	2.62	19 19.86	155 12.65	6.38	1.4	1.3	25	4	77	.11	5	.5	1.0	19	SF2
		30	122	35.02	19 20.62	155 12.89	7.14	1.0	1.1	17	2	65	.07	4	.5	1.0	11	SF2
		30	136	23.98	19 21.70	155 11.22	.01	.5	1.3	11	2	131	.17	2	.5	.8	7	SWR
		30	241	10.51	19 13.44	155 21.26	36.68	1.4	1.3	0	0	159	.08	5	.9	1.9	26	DEP
		30	439	28.95	19 20.68	155 12.95	7.46	2.1	2.2	38	1	63	.12	4	.4	.7	30	SF2

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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	ERM KM	ERZ KM	NO FM	REMK
1982	DEC	30	442	8.58	19 21.63	155 11.32	2.35	1.1	1.2	15	1	108	.08	3	.4	.5	8	SER
		30	612	47.58	19 21.89	155 11.29	2.97	.7	1.0	12	2	121	.07	3	.6	.4	6	SER
		30	654	20.39	19 22.12	155 10.73	3.20	1.7	1.7	19	1	90	.06	2	.5	.5	13	SER
		30	856	2.44	19 21.82	155 11.22	2.42	1.9	2.0	24	3	84	.08	2	.3	.4	14	SER
		30	957	38.01	19 21.93	155 10.98	2.29	1.2	1.4	17	2	87	.09	4	.5	.9	8	SER
		30	1046	54.43	19 22.00	155 14.00	.60	.7	1.4	9	2	194	.13	2	.6	.8	6	KOA
		30	1457	25.67	19 22.05	155 11.08	2.37	1.5	1.4	18	0	116	.10	4	.6	1.0	16	SER
		30	1622	4.85	19 22.83	155 14.31	2.56	2.6	3.0	30	1	50	.10	2	.3	.4	29	SEC
		30	1648	13.63	19 23.29	155 14.82	1.44	.4	1.0	10	2	106	.11	3	.4	.7	6	SEC
		30	1720	56.99	19 20.10	155 9.77	6.86	1.4	1.1	28	2	81	.10	4	.4	1.0	21	SF3
		30	1721	57.21	19 18.51	155 14.18	10.06	2.9	3.2	42	2	131	.11	6	.5	.6	36	SF2
		30	1732	39.73	19 18.15	155 14.20	6.25	1.7	1.6	29	0	101	.11	2	.6	1.2	23	SF2
		30	1739	47.75	19 21.88	155 9.31	3.47	2.1	2.3	27	2	56	.07	1	.4	.5	18	SER
		30	18 1	50.48	19 21.65	155 9.27	3.23	1.4	1.1	15	0	115	.08	1	.8	.6	12	SER
		30	2025	.57	19 22.02	155 10.74	2.84	1.6	1.4	20	4	89	.08	2	.5	.4	11	SER
		30	2124	45.93	19 17.66	155 14.12	5.34	1.7	1.5	23	1	127	.09	2	.5	.9	17	SF2
		30	2148	23.92	19 22.81	155 14.22	1.21	1.2	1.7	17	3	72	.09	2	.3	.4	9	SEC
		30	2154	45.57	19 16.89	155 21.87	6.47	1.8	1.9	30	1	130	.11	6	.5	1.1	20	SWR
		30	2328	19.92	19 17.83	155 12.96	5.27		1.3	28	3	116	.12	2	.5	1.2	17	SF2
		30	2336	39.60	19 22.57	155 13.91	1.70	1.2	2.0	5	0	168	.03	1	.7	.6	1	SER
		30	2355	53.67	19 22.75	155 14.23	.53	1.2	2.4	14	2	73	.10	2	.3	.4	8	SEC
		31	0 5	7.32	19 18.08	155 15.08	7.68	1.3	1.1	23	3	123	.08	3	.5	.8	21	SF1
		31	150	17.25	19 20.53	155 10.86	7.99	1.2	1.1	19	2	77	.04	3	.6	1.0	17	SF3
		31	355	9.96	19 22.89	155 14.40	1.03	3.4	3.9	34	2	48	.13	2	.3	.4	28	SEC
		31	4 8	22.03	19 16.92	155 13.92	6.96	1.4	1.3	25	3	196	.10	1	.6	.8	22	SF2
		31	414	29.03	19 23.20	155 14.36	1.32	1.5	2.2	21	3	57	.08	3	.3	.3	16	SEC
		31	425	34.51	19 22.70	155 14.46	1.52	.6	1.0	11	2	130	.09	2	.4	.5	9	SEC
		31	430	12.11	19 23.03	155 14.45	.84	.5	1.4	9	2	117	.05	3	.3	.7	7	SEC
		31	456	30.17	19 23.23	155 14.24	1.59	.5	1.0	12	2	105	.06	2	.3	.4	5	SEC
		31	524	51.59	19 17.29	155 13.95	6.36	1.1	1.1	19	0	161	.07	1	.6	1.1	15	SF2
		31	854	28.74	19 29.53	155 39.32	3.02	2.1	1.6	14	0	96	.13	15	.6	58.1	10	MLO
		31	1035	5.98	19 21.82	155 9.12	3.30	1.8	2.1	26	2	89	.07	1	.4	.5	22	SER
		31	1050	31.76	19 19.72	155 13.39	6.73	1.6	1.8	31	2	68	.12	5	.5	1.0	21	SF2
		31	11 8	46.95	19 22.14	155 9.90	3.05	1.6	1.3	21	2	93	.07	0	.6	.4	13	SER
		31	1350	7.52	19 21.57	155 11.37	2.19	1.9	2.2	11	1	107	.06	3	.4	.6	5	SER
		31	1418	50.64	19 18.35	155 13.76	5.96	1.7	2.0	34	3	70	.11	3	.5	1.0	22	SF2
		31	1443	32.55	19 21.79	155 10.19	3.03	2.1	2.4	33	2	60	.10	1	.4	.4	16	SER
		31	1450	44.37	19 22.92	155 14.54	1.00	1.1	2.2	12	2	116	.11	3	.3	.6	5	SEC
		31	1525	44.74	19 20.67	155 9.44	8.68	1.8	2.2	31	3	70	.07	3	.4	.7	21	SF3
		31	1556	29.73	19 20.07	155 3.84	6.09	1.6	2.3	30	3	137	.11	2	.5	.7	18	SF5
		31	1831	22.89	19 27.02	155 36.01	3.44	2.2	2.0	9	0	172	.13	4	1.0	1.8	4	MLO
		31	1835	17.17	19 21.09	155 10.77	8.02	1.7	1.3	28	4	69	.09	2	.5	.8	21	SF3
		31	1926	1.63	19 20.99	155 10.66	8.05	1.4	1.3	27	2	70	.08	2	.5	.8	21	SF3
		31	1946	6.89	19 18.88	155 13.82	7.96	1.1	1.3	21	1	90	.06	3	.5	.8	12	SF2
		31	2015	16.32	19 21.76	155 10.91	2.77	1.6	2.0	18	1	85	.09	2	.4	.4	12	SER
		31	2025	50.90	19 25.66	154 56.01	6.16	1.8	1.4	27	2	161	.14	4	.7	.9	18	LER
		31	2337	21.11	19 18.93	155 13.56	8.63	1.5	1.2	28	1	70	.10	4	.8	.9	18	SF2

Table 6.

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 NO KM FM REMK
1982	JAN	4	1114	40.27	19 18.48	155 13.26	9.99	2.9	3.0	39	3	171	.09	8	.6	.5 30 SF2
		9	432	7.29	19 9.80	155 32.58	34.14	3.1	3.2	33	1	120	.08	8	.7	1.6 32 DLS
		9	1324	59.53	20 14.94	155 39.28	42.95	3.6	3.3	47	3	267	.11	19	1.4	1.5 40 KOH F
		15	0 7	52.65	20 5.02	155 50.61	27.78	3.6	3.8	50	5	226	.11	8	1.1	1.4 44 KOH F
		15	1 4	42.07	19 18.59	155 13.67	9.55	3.7	3.8	47	3	70	.12	3	.5	.5 40 SF2 F
		16	337	36.72	19 23.27	155 16.65	3.07	2.6	3.1	43	2	39	.11	1	.2	.3 32 SSC
		16	957	9.95	19 21.52	155 15.21	9.87	3.1	3.4	46	2	64	.11	2	.4	.4 39 SF1 F
		20	111	14.15	19 10.91	155 33.38	6.62	2.7	3.0	37	2	134	.14	10	.5	1.1 30 LSW
		21	2 6	30.20	19 20.01	155 10.77	9.48	2.9	3.1	31	2	87	.09	4	.5	.4 24 SF3
		21	1152	41.17	19 13.91	155 35.53	10.32	5.4	5.6	41	0	218	.12	3	.9	.5 40 LSW F
		21	1229	13.88	19 13.11	155 33.10	13.73	5.4	5.4	36	1	126	.12	8	.6	.5 33 DLS F
		21	1242	5.91	19 10.28	155 31.52	8.31	3.0	2.9	31	1	143	.16	9	.7	1.1 20 LSW
		21	1245	12.69	19 11.58	155 33.45	7.26	3.0	2.5	34	3	130	.17	9	.6	1.2 22 LSW
		21	1248	9.58	19 13.82	155 32.58	11.71	3.4	3.3	44	4	119	.17	5	.5	.6 35 LSW
		21	1251	56.43	19 9.45	155 31.82	12.28	3.0	2.7	37	3	147	.15	11	.5	.5 27 LSW
		21	13 1	9.69	19 12.16	155 32.48	10.44	4.1	4.0	44	1	87	.17	7	.6	.6 41 LSW F
		21	1335	10.86	19 11.01	155 30.96	6.43	3.1	3.0	41	2	99	.20	6	.6	1.1 33 LSW
		21	1337	17.41	19 13.79	155 33.31	12.23	4.2	4.3	41	2	117	.14	6	.5	.6 39 LSW
		21	1519	41.00	19 12.82	155 31.59	8.05	3.1	3.0	41	4	132	.15	5	.5	.6 33 LSW
		21	1535	12.49	19 12.02	155 31.15	8.85	3.2	3.1	39	2	85	.16	6	.5	.8 29 LSW
		21	1623	36.02	19 9.87	155 31.65	11.88	3.1	3.1	40	3	145	.15	10	.6	.7 32 LSW
		22	225	5.24	19 11.75	155 36.10	10.04	3.6	3.4	48	4	91	.20	6	.6	.7 35 LSW
		22	1118	55.23	19 19.49	155 15.52	7.89	2.9	3.2	46	7	89	.12	4	.4	.5 38 SF1 F
		22	1652	8.85	19 21.56	155 4.72	8.45	2.9	3.0	44	4	82	.09	4	.4	.5 33 SF5
		22	1745	8.12	19 14.16	155 34.01	9.54	4.3	4.2	49	4	76	.14	6	.4	.6 46 LSW F
		23	643	39.43	19 9.46	155 31.57	11.67	2.6	3.0	35	2	147	.14	11	.6	.5 28 LSW
		23	14 6	45.70	19 9.42	155 34.25	9.09	3.0	3.0	41	5	119	.15	11	.5	.8 33 LSW
		23	2240	44.12	19 23.44	155 16.84	3.42	3.1	3.4	39	5	36	.10	0	.2	.2 30 SSC F
		25	17 3	51.09	19 11.89	155 35.46	8.58	3.4	3.2	47	6	91	.22	6	.6	.8 41 LSW F
		26	1345	17.11	19 12.44	155 35.42	8.83	3.6	3.1	47	7	86	.23	5	.6	.9 38 LSW
		27	4 0	14.77	19 26.29	155 37.24	2.70	3.3	2.6	36	2	112	.16	2	.5	.7 27 MLO
		29	343	2.29	19 16.66	155 33.13	5.28	3.0	2.9	46	4	82	.15	6	.4	1.0 35 LSW
		29	1713	25.94	14 55.25	155 35.73	12.78	3.6	3.6	46	3	136	.13	21	.7	.7 40 KOH F
		29	1716	49.38	19 54.90	155 36.24	10.89	3.0	2.6	40	3	132	.10	21	.5	.6 26 KEA
		30	1940	39.30	19 21.50	155 15.40	26.64	3.0	2.9	49	4	64	.12	2	.6	.7 45 DEP
FEB		2	458	14.29	19 11.29	155 35.48	8.39	3.0	2.7	45	7	96	.25	7	.6	1.0 29 LSW F
		2	629	49.85	19 12.83	155 35.30	11.18	4.3	4.1	43	2	201	.15	5	.9	.5 37 LSW F
		4	6 7	48.69	19 16.57	155 22.88	7.18	2.8	3.3	46	3	120	.15	5	.4	.7 38 SWR
		6	323	1.29	19 27.42	155 14.66	32.29	3.1	2.9	45	2	51	.10	5	.6	1.1 39 DEP
		6	4 2	55.00	19 22.07	156 21.83	39.20	3.0	2.9	30	1	275	.09	49	3.7	1.9 23 DIS
		8	529	42.80	19 14.66	155 33.60	9.01	3.2	3.0	41	2	74	.17	6	.5	.7 31 LSW
		9	043	18.73	19 11.28	155 35.99	9.44	3.0	2.5	42	4	95	.23	7	.6	.9 32 LSW
		9	542	22.92	19 20.24	155 7.05	8.94	3.8	3.7	47	4	103	.08	5	.3	.4 38 SF4 F
		12	16 6	30.86	19 21.69	155 3.05	8.77	3.4	3.5	38	3	114	.10	3	.5	.5 29 SF5
		14	1624	28.38	19 21.40	155 2.82	7.98	3.3	3.4	39	5	124	.10	3	.5	.5 27 SF5
		15	1736	28.23	19 21.49	155 20.25	32.05	4.2	4.3	46	2	51	.11	4	.6	1.0 42 DEP F
		18	038	58.73	19 20.60	155 11.50	8.35	2.6	3.1	41	2	74	.12	4	.4	.6 31 SF3
		18	8 4	9.12	19 9.73	155 35.12	9.62	3.6		34	4	112	.16	10	.6	.8 27 LSW

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YEAR	MON	DA	ORIGIN TIME HRMN SEC	CAT N DEG MIN	LON W DEG MIN	DEPTH KM	AMP MAG	DUR MAG	NR	NS	GAP DEG	RMS SEC	MIN DIS	ERH KM	ERZ NO KM FM	REMK
1982	FEB	21	256 48.18	19 11.73	155 35.57	2.48 3.1	2.9 35	2	92	.17	11	.5	2.0 23	LSW		
		22	627 48.64	19 25.53	155 37.67	2.67 3.2	2.6 32	1	94	.11	4	.4	1.0 21	MLO		
		24	1840 9.30	19 24.99	155 17.06	1.56 2.7	3.5 34	2	39	.12	0	.2	.2 27	SNC	F	
	MAR	3	1020 27.80	19 23.72	155 16.83	3.15 2.7	3.0 38	4	35	.12	1	.3	.3 26	SNC	F	
		3	1045 24.94	19 23.36	155 16.77	2.99 2.6	3.0 39	5	38	.11	0	.2	.3 29	SSC	F	
		7	1231 36.13	19 22.12	155 3.02	8.79 3.2	3.2 46	3	113	.10	4	.5	.4 40	SF5		
		11	130 1.59	19 18.59	155 13.69	9.40 3.0	3.1 46	4	69	.10	3	.4	.4 36	SF2		
		15	2141 35.58	19 18.70	155 13.27	10.84 3.5	3.7 38	2	128	.11	7	.6	.5 32	SF2	F	
		16	1413 9.83	19 19.63	155 13.87	7.48 2.8	3.0 33	2	79	.10	5	.4	.6 30	SF2		
		18	1049 12.56	19 25.66	155 16.44	2.41 2.7	3.4 20	1	117	.11	2	.5	.3 15	SNC	F	
		18	15 7 8.65	19 25.50	155 16.39	1.92 2.8	3.4 34	1	38	.10	2	.3	.3 21	SNC	F	
		20	1310 22.30	19 20.53	155 16.84	36.16 3.9	4.3 45	2	77	.10	1	.6	1.1 42	DEP	F	
		26	1 4 34.00	19 54.75	155 36.20	11.33 3.6	3.5 47	4	130	.13	21	.5	.6 28	KEA		
	APR	1	547 35.69	19 24.00	155 15.63	3.31 2.9	3.0 37	2	43	.09	2	.3	.3 27	SEC	F	
		5	419 6.32	19 19.94	155 7.26	8.85 3.0	3.1 43	4	105	.10	5	.4	.4 27	SF4		
		6	053 50.83	19 23.59	155 16.94	2.75 2.2	3.0 29	2	48	.09	1	.2	.3 20	SSC		
		6	1058 58.93	19 20.98	155 6.17	9.07 3.0	3.1 40	2	97	.11	4	.5	.5 27	SF4	F	
		7	019 48.24	19 30.97	155 55.00	11.59 3.1	3.2 28	3	200	.08	3	1.2	.7 15	KOH		
		7	1054 55.06	19 21.93	155 15.03	9.52 3.0	3.2 44	4	58	.11	2	.4	.5 31	SF1		
		10	559 49.60	19 23.56	155 16.94	2.61 3.1	3.1 41	3	39	.13	0	.2	.2 30	SSC	F	
		10	1551 22.35	19 22.79	155 4.78	8.11 2.9	3.1 41	3	78	.10	3	.4	.5 23	SF5		
		11	16 4 2.40	19 19.82	155 6.69	9.18 4.2	4.2 45	3	118	.12	5	.5	.4 47	SF4	F	
		14	139 25.14	19 23.43	155 16.87	2.87 2.7	3.1 38	4	36	.11	0	.2	.2 27	SC	F	
		15	237 4.43	19 23.82	155 16.71	2.89 2.4	3.1 35	4	57	.11	0	.3	.2 26	SSC		
		16	5 0 23.22	20 2.16	155 20.64	6.83 3.6	3.6 46	3	215	.10	47	.7	.9 39	KEA	F	
		16	15 4 47.52	19 19.91	155 12.02	9.68 3.0	3.2 42	4	83	.09	5	.4	.4 29	SF3		
		16	1515 40.70	19 20.21	155 11.72	10.22 3.7	3.7 45	4	80	.09	5	.4	.3 41	SF3	F	
		17	120 50.73	19 25.11	155 17.14	1.40 3.9	3.9 40	0	64	.10	0	.2	.2 36	SNC	F	
		19	223 55.89	19 20.92	155 4.63	8.98 3.8	4.1 47	2	100	.11	4	.5	.4 42	SF5	F	
		19	3 2 .66	19 20.63	155 3.82	8.97 3.9	4.0 44	2	101	.11	2	.5	.8 41	SF5	F	
		22	1445 56.02	19 23.45	155 16.76	2.89 2.9	3.2 38	2	37	.12	0	.2	.2 29	SSC		
		23	1025 40.45	19 21.47	155 15.10	9.23 3.4	3.4 42	3	64	.11	2	.4	.5 33	SF1		
		23	1136 39.17	19 15.98	155 27.48	9.98 2.8	3.0 44	2	68	.13	5	.4	.5 29	LSW	F	
		26	1651 14.53	20 10.78	156 9.53	30.80 3.1	2.8 38	2	295	.13	40	2.1	2.1 30	KOH		
		27	2023 1.39	19 20.66	155 3.34	8.98 3.4	3.4 47	4	94	.10	2	.6	.4 40	SF5		
		30	848 52.76	19 21.38	155 4.89	8.87 3.4	3.1 34	1	88	.11	4	.5	.4 32	SF5		
	MAY	30	1141 17.92	19 24.37	155 15.71	1.30 3.2	3.7 41	3	44	.12	2	.2	.3 29	SEC		
		4	729 42.61	19 18.85	155 13.26	10.08 3.6	3.5 47	5	81	.11	3	.3	.3 36	SF2	F	
		9	1240 49.30	19 23.50	156 16.72	2.87 2.8	3.2 37	2	37	.10	0	.2	.2 25	SSC		
		10	1047 27.23	19 10.59	155 36.01	10.37 3.9	3.9 47	4	101	.18	8	.5	.5 42	LSW	F	
		10	12 8 48.00	19 20.35	155 6.68	8.91 3.0	3.0 47	6	107	.09	5	.4	.4 32	SF4		
		12	1622 41.91	19 27.01	155 34.88	38.39 2.7	3.2 30	1	45	.18	3	1.0	1.9 10	DML	L	
		13	1140 34.21	20 4.28	156 36.57	.03 3.2	2.1 33	3	305	.17	87	.1	1.7 22	OIS		
		14	626 31.75	20 .07	155 51.82	19.88 4.8	4.5 47	3	205	.11	17	1.4	3.8 44	KOH	F	
		14	631 29.14	20 .41	155 52.19	21.37 3.1	2.7 43	7	209	.12	16	1.0	2.3 30	KOH		
		15	5 9 46.16	19 17.66	155 14.21	10.74 3.1	3.1 44	5	156	.11	7	.5	.4 32	SF2	F	
		17	1721 58.86	19 23.20	155 16.87	2.96 2.5	3.1 39	4	38	.11	0	.2	.3 30	SSC		
		18	1410 32.00	19 54.42	156 21.51	.34 3.4	3.0 47	4	283	.12	60	2.0	.5 40	OIS		

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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	ERM KM	ERZ KM	NO FM	REMK
1982	MAY	18	1736	19.80	19 57.25	156 26.16	1.36	4.8	4.5	49	3	229	.11	69	1.3	.7	45	DIS F
		18	2353	16.29	19 23.58	155 16.84	2.72	2.7	3.0	37	5	36	.10	0	.2	.2	29	SSC
		19	0 5	51.54	19 23.65	155 16.84	2.85	3.0	3.3	42	5	43	.13	1	.2	.2	30	SSC
		20	338	54.17	19 26.74	155 33.93	39.18	2.7	3.5	38	3	39	.22	4	.9	1.9	2	DML L
		21	1342	40.61	19 22.70	155 .88	8.91	3.0	3.0	42	3	153	.10	6	.6	.4	26	SF5
		23	388	.86	19 26.15	155 37.02	3.00	2.8	3.1	35	1	79	.12	2	.4	.7	27	MLO
		27	1528	9.58	19 21.17	155 13.36	8.87	3.0	3.1	43	5	56	.11	3	.4	.5	33	SF2
		29	1743	58.14	19 23.54	155 16.79	3.03	2.9	3.2	33	3	47	.11	0	.3	.2	20	SSC F
		29	2210	22.95	19 23.72	155 16.96	2.88	2.9	3.3	36	2	30	.12	1	.2	.2	30	SSC F
	JUN	1	2234	29.98	19 21.20	155 3.85	8.26	2.9	3.1	43	2	84	.10	3	.5	.4	34	SF5
		2	1034	57.08	19 26.96	155 28.69	11.38	3.2	3.2	45	4	37	.11	7	.3	.5	38	KA0
		3	258	11.19	20 1.53	155 50.31	27.98	3.3	3.0	46	4	200	.10	13	1.1	1.7	40	KOH
		6	839	30.95	20 9.06	155 47.20	26.62	3.0	3.2	46	3	157	.11	3	.7	1.0	36	KOH F
		8	1930	30.80	19 23.53	155 16.86	2.92	2.4	3.1	30	3	39	.10	0	.3	.2	13	SSC
		10	216	55.68	19 20.55	155 12.83	10.24	3.1	3.1	46	4	66	.10	4	.4	.3	26	SF2 F
		10	2149	15.86	19 24.66	156 8.64	40.79	3.2	3.7	47	5	252	.09	25	1.1	.9	38	KON
		12	811	3.17	19 23.64	155 16.99	3.13	2.3	3.0	31	1	45	.11	1	.3	.3	22	SSC
		14	815	38.83	19 18.86	155 13.32	10.19	3.5	4.5	45	4	151	.11	7	.5	.5	36	SF2
		20	730	13.51	19 19.92	155 7.02	8.65	3.0	3.0	44	4	111	.08	5	.4	.4	33	SF4
		21	6 4	14.82	19 21.42	155 15.10	9.83	3.4	3.5	41	4	65	.11	2	.4	.3	33	SF1 F
		22	1358	6.30	19 20.00	155 19.14	9.56	3.1	3.8	50	5	53	.12	3	.4	.4	40	SWR
		22	2334	7.90	19 20.40	155 19.17	9.41	2.9	3.1	46	6	51	.12	3	.4	.4	36	SWR
		23	738	27.28	19 19.76	155 19.27	8.05	2.9	3.1	49	7	60	.12	3	.4	.6	34	SWR
		23	1812	53.88	19 17.33	155 21.24	7.35	2.4	3.1	44	6	127	.12	5	.4	.7	30	SWR
		24	320	3.09	19 16.96	155 21.54	6.89	2.5	3.1	32	2	130	.12	5	.5	1.2	28	SWR
		24	347	58.02	19 17.27	155 20.97	7.09	2.4	3.1	46	4	129	.12	4	.4	.7	30	SWR
		24	922	44.60	19 17.99	155 23.42	7.58	3.7	4.0	46	2	94	.14	4	.4	.6	40	SWR F
		24	1437	53.86	19 14.48	155 22.97	8.41	2.7	3.0	43	2	149	.14	2	.5	.6	34	SWR
		24	2059	31.83	19 16.96	155 21.68	6.98	2.9	3.4	50	8	130	.16	6	.4	.7	40	SWR
		26	328	10.31	18 55.86	155 15.81	17.70	2.6	3.4	15	0	266	.10	33	4.0	24.1	2	LOI L
		27	123	24.42	19 18.66	155 21.36	9.55	2.7	3.1	45	7	138	.12	4	.4	.4	27	SWR
		27	1326	58.52	19 19.24	155 11.03	9.60	2.7	3.2	41	5	104	.09	6	.4	.4	30	SF3
		29	634	5.55	19 1.01	155 17.66	7.84	2.6	3.6	16	0	229	.12	24	1.3	2.1	3	LOI L
	JUL	1	1327	31.14	19 11.58	155 36.39	9.95	3.6	3.3	46	6	92	.21	6	.6	.8	38	LSW
		1	1433	31.65	19 18.24	155 23.15	4.54	2.5	3.2	43	2	95	.13	4	.4	1.5	33	SWR
		5	2119	2.42	19 17.43	155 23.29	6.37	3.2	3.8	46	5	101	.16	5	.4	.8	38	SWR
		6	1816	38.01	19 16.51	155 22.81	7.45	2.4	3.0	42	3	122	.15	5	.5	.7	29	SWR
		8	1938	24.46	19 19.69	155 21.75	7.49	2.6	3.0	40	4	102	.10	4	.4	.6	30	SF4
		12	259	48.06	19 16.84	155 21.75	8.16	3.1	3.7	47	6	131	.14	6	.4	.6	36	SWR
		12	421	35.50	19 16.48	155 23.79	6.16	2.5	3.1	37	4	100	.13	4	.4	.9	27	SWR
		12	1545	39.26	19 16.31	155 23.49	7.76	2.5	3.0	43	6	110	.12	4	.4	.6	29	SWR
		12	1641	26.14	19 17.70	155 23.28	3.15	2.3	3.1	40	5	98	.11	5	.3	.9	27	SWR
		12	2314	22.22	19 18.48	155 20.60	9.95	2.7	3.2	44	5	114	.13	4	.4	.4	33	SWR
		13	013	32.34	19 16.57	155 22.51	6.93	2.5	3.1	42	3	127	.17	5	.5	.8	37	SWR
		13	932	2.59	19 21.68	155 22.12	8.61	2.9	3.4	27	1	152	.08	4	.7	.5	19	SF5
		13	21 5	21.76	19 17.25	155 21.70	7.78	2.6	3.3	43	2	126	.15	6	.4	.7	36	SWR
		13	21 8	43.38	19 16.96	155 21.65	8.24	2.9	3.6	42	3	130	.14	6	.4	.6	34	SWR
		14	12 7	38.03	19 10.49	155 37.02	9.26	2.9	3.0	33	1	98	.15	8	.6	.8	23	LSW

HVO EARTHQUAKE SUMMARY LIST

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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	ERM KM	ERZ KM	NO FM	REMK
1982	JUL	18	330	11.07	19 7.25	155 31.29	13.05	3.0	3.4	32	1	160	.12	7	.8	.5	31	DLS
		18	1217	35.11	18 56.22	155 14.35	13.48	3.0	3.4	30	1	288	.11	34	2.5	1.0	13	LOI L
		23	040	59.69	19 16.63	155 23.32	7.71	2.4	3.0	32	2	110	.12	4	.4	.9	19	SWR
		23	922	54.35	19 18.02	155 23.54	3.39	2.3	3.3	37	7	93	.14	4	.3	.9	33	SWR
		24	229	53.77	19 18.31	155 23.15	6.24	2.7	3.5	40	6	95	.14	4	.3	.7	35	SWR
		24	818	39.13	19 18.01	155 20.93	8.39	2.6	3.0	21	4	128	.11	4	.6	.8	20	SWR
		26	1949	16.04	19 21.00	155 6.25	8.21	2.7	3.1	28	1	95	.07	4	.4	.7	19	SF4
		28	1345	48.89	19 19.64	155 14.05	7.49	2.4	3.0	43	5	66	.13	5	.4	.7	33	SF2
		29	044	53.78	19 18.19	155 23.27	3.52	2.1	3.4	34	5	94	.12	4	.3	.9	24	SWR
		29	714	37.43	19 21.17	155 11.28	9.05	2.6	3.1	40	5	67	.10	3	.4	.6	30	SF3
		29	1152	55.43	19 21.26	155 13.41	9.48	2.8	3.1	43	4	55	.10	3	.3	.4	34	SF2
	AUG	30	137	10.74	19 26.60	157 11.21	20.03	3.4	3.9	15	1	315	.15144	4	4.5	24.7	6	DIS
		1	151	41.01	19 25.88	155 37.57	3.16	3.4	2.7	27	1	93	.12	3	.5	1.1	23	MLO
		2	1316	37.66	19 25.74	155 37.69	2.25	2.9	3.4	34	1	94	.13	4	.4	.9	25	MLO
		3	10 9	35.39	19 27.70	155 45.34	9.55	3.2	3.4	37	2	140	.11	5	.5	.5	27	KON
		3	1212	31.10	19 20.02	155 11.83	10.08	2.9	3.4	41	4	82	.09	5	.3	.3	32	SF3
		7	136	3.08	19 21.70	155 8.06	8.31	2.5	3.1	38	2	68	.11	3	.4	.6	28	SF4
		7	11 3	3.92	19 21.24	155 6.03	8.15	3.2	3.4	45	4	92	.12	3	.4	.5	36	SF4
		7	14 2	26.83	19 19.71	155 11.46	9.73	3.4	3.8	43	3	91	.11	5	.4	.4	36	SF3 F
		8	15 3	7.16	19 21.36	155 6.03	8.55	3.3	3.4	48	6	89	.09	3	.3	.5	32	SF4
		9	1655	9.52	19 23.07	155 4.41	7.62	3.1	3.0	41	3	86	.12	3	.4	.6	29	SF5
		10	121	54.15	19 18.03	155 13.25	9.80	3.6	3.8	43	3	95	.12	2	.4	.4	37	SF2 F
		10	137	51.40	19 18.49	155 13.41	8.34	3.4	3.8	40	5	80	.13	3	.5	.6	31	SF2 F
		12	043	35.76	19 24.90	155 16.09	16.17	4.0	4.3	41	1	46	.09	2	.4	.3	40	DEP F
		12	244	4.46	19 24.91	155 16.17	16.20	3.3	3.6	46	2	46	.11	1	.4	.3	44	DEP F
		15	7 1	43.99	19 19.99	155 7.97	9.16	3.4	3.9	40	2	89	.10	5	.5	.4	33	SF4
		16	4 1	46.70	19 18.97	155 13.64	9.27	2.8	3.4	43	1	83	.11	4	.4	.4	37	SF2
		17	857	39.61	18 54.31	155 16.34	13.73	3.9	4.2	39	0	248	.08	35	1.6	1.2	24	LOI
		17	2355	9.09	19 16.55	155 22.10	8.17	2.7	3.3	40	3	132	.14	5	.5	.6	34	SWR
		19	2251	20.53	19 44.94	156 1.88	8.07	3.6	3.8	43	1	229	.12	21	1.2	.7	33	HUA F
		19	2259	59.10	19 44.91	156 1.54	7.60	3.0	3.3	39	2	225	.13	19	1.1	.7	25	HUA F
		24	1527	38.14	19 15.73	155 23.58	8.57	2.5	3.1	34	2	115	.11	3	.5	.6	25	SWR
		26	126	41.68	19 20.94	154 59.51	.01	2.5	3.0	23	2	203	.10	6	.8	.5	11	SLE
		27	148	30.73	20 12.23	155 38.33	9.98	3.8	3.6	43	3	178	.10	47	.9	.8	38	KOH F
		28	445	38.68	19 21.39	154 59.55	.75	2.7	3.2	32	4	194	.12	7	.6	.6	17	SLE
		28	1555	23.31	19 23.34	155 24.18	11.32	3.0	3.3	43	2	30	.11	4	.4	.5	35	KAO
		31	1132	25.35	19 18.48	155 13.36	10.98	3.5	3.6	49	6	131	.10	8	.5	.4	41	SF2 F
	SEP	2	6 9	54.22	21 23.65	155 15.35	2.30	3.1	2.9	25	1	292	.10125	5	5.9	3.9	18	DIS
		3	1057	24.07	18 57.46	155 3.18	48.48	2.7	3.0	43	2	253	.11	38	1.8	2.3	40	LOI
		3	2019	33.05	19 20.87	155 3.01	8.16	2.6	3.4	42	3	124	.10	2	.5	.4	29	SF5
		10	19 3	44.66	19 23.53	155 25.07	10.71	3.4	3.6	49	5	37	.13	3	.3	.4	40	KAO F
		11	024	49.09	19 29.68	155 38.96	7.27	2.9	3.1	39	2	49	.13	5	.4	.8	25	MLO
		12	618	34.62	19 21.60	155 1.18	9.25	3.1	3.1	44	4	183	.09	6	.7	.5	34	SF5 F
		14	649	41.95	19 19.81	155 11.36	10.09	3.0	3.1	44	4	89	.08	5	.4	.3	32	SF3
		14	831	39.05	19 19.62	155 10.55	8.96	2.8	3.1	29	1	95	.11	5	.5	.7	21	SF3
		14	917	32.65	19 11.00	155 36.26	9.88	3.6	3.4	42	1	96	.19	7	.7	.7	36	LSW F
		21	1535	27.83	19 20.21	155 8.84	9.43	3.7	4.0	43	3	107	.10	5	.5	.4	38	SF4 F
		23	1423	37.55	19 23.30	155 24.17	10.98	3.2	3.2	43	2	41	.12	4	.3	.4	37	KAO F

HVO EARTHQUAKE SUMMARY LIST

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YEAR	MON	DA	HRMN	SEC	ORIGIN	LAT N	LON W	DEPTH	AMP	DUR	GAP	RMS	MIN	ERH	ERZ	NO	REMK
					DEG MIN	DEG MIN	KM	MAG	MAG	NR	NS	DEG	SEC	DIS	KM	KM	FM
1982	SEP	25	17	2	15.07	19 23.59	155 17.17	5.47	3.3	3.3	27	0	44	.15	7	.4	2.1 18 INT
		25	18	29	23.87	19 23.13	155 17.06	2.63	1.7	3.1	24	5	41	.09	1	.3	.2 18 SSC
		25	18	34	47.33	19 23.74	155 15.35	.57	3.3	3.5	30	4	79	.13	2	.2	.3 11 SEC
		25	18	59	24.76	19 24.09	155 15.93	1.10	2.9	3.1	35	2	43	.13	1	.2	.3 18 SEC
		29	6	20	52.07	19 22.29	155 11.06	32.26	3.4	3.6	48	5	55	.11	2	.6	.9 43 DEP F
		29	7	30	53.56	19 21.08	155 6.96	6.69	2.9	3.1	41	6	89	.13	5	.4	.9 35 SF4 F
		30	8	43	8.50	19 24.88	155 36.04	.08	3.0	3.0	34	3	51	.11	4	.3	.5 21 MLO
	OCT	1	21	4	57.61	19 25.17	155 37.65	2.34	3.0	3.1	41	5	93	.12	5	.4	.9 36 MLO
		3	3	29	5.14	18 53.44	155 15.86	17.75	2.8	3.1	28	0	260	.09	37	3.0	22.8 10 LOI *
		4	9	57	9.10	19 43.93	155 59.88	9.67	2.8	3.0	16	0	299	.12	17	4.8	.9 14 HUA
		5	9	20	46.45	19 23.14	155 14.86	3.03	2.8	3.1	38	2	48	.11	2	.3	.4 20 SEC F
		5	11	39	36.83	18 54.48	155 15.61	16.71	3.9	4.1	37	1	247	.08	35	1.7	36.0 25 LOI *
		6	10	24	29.81	19 23.24	155 14.92	3.22	2.6	3.0	32	2	47	.11	2	.3	.4 22 SEC F
		6	17	35	28.62	19 26.04	155 37.65	3.14	3.4	3.7	35	1	94	.13	3	.4	.9 28 MLO
		11	11	8	23.71	19 22.84	155 14.05	1.00	2.5	3.3	19	3	69	.10	2	.3	.4 9 SEC F
		11	8	59	53.48	19 23.23	155 15.10	3.31	3.1	3.2	41	1	47	.12	2	.3	.4 35 SEC F
		13	11	12	3.69	19 27.10	155 29.54	10.48	3.0	3.2	50	4	35	.10	8	.3	.5 37 KAO
		13	20	54	44.64	19 30.59	154 52.53	38.18	3.3	3.2	47	3	149	.09	3	.9	1.4 41 LER
		14	18	30	26.54	19 26.03	155 25.86	10.25	3.5	3.1	47	4	36	.14	2	.4	.5 39 KAO
		17	5	9	34.15	19 12.92	155 37.65	8.29	3.1	3.1	35	1	202	.16	4	.9	.7 34 LSW
		17	10	37	34.61	19 10.77	155 30.07	6.17	2.6	3.0	24	1	99	.14	5	.5	1.1 19 LSW
		18	12	9	54.96	19 21.40	155 3.04	7.48	2.8	3.0	41	0	115	.10	3	.5	.4 41 SF5
		19	14	40	17.88	19 41.85	155 2.86	.11	2.4	3.1	27	1	237	.14	22	1.4	1.2 21 HIL B*
		19	16	14	52.40	20 24.32	155 57.60	33.23	3.1	3.3	54	7	164	.13	36	1.0	1.4 45 KOH
		22	3	13	29.03	19 19.96	155 11.49	10.17	3.3	3.5	45	3	86	.09	5	.4	.3 37 SF3
		22	21	42	56.38	19 21.07	155 13.36	9.38	3.0	3.1	45	2	56	.11	3	.3	.5 37 SF2 F
		25	6	19	30.62	19 19.63	155 11.50	9.89	3.2	3.5	43	1	92	.09	5	.4	.3 37 SF3 F
		26	6	58	39.27	19 19.99	155 8.23	9.00	2.9	3.0	44	3	84	.11	5	.4	.5 33 SF4
		30	4	36	58.40	19 18.50	155 13.28	10.30	2.9	3.1	44	5	131	.10	8	.5	.4 32 SF2
		30	9	35	45.67	19 18.53	155 7.09	9.50	2.9	3.1	39	1	187	.11	8	.7	.5 29 SF4
	NOV	31	16	24	45.73	19 20.20	155 7.12	8.30	3.0	3.3	43	3	102	.09	5	.4	.5 31 SF4
		1	0	29	28.83	19 19.67	155 7.66	8.70	2.9	3.0	40	2	101	.09	4	.5	.4 26 SF4
		1	7	35	31.91	18 54.11	155 15.23	11.93	2.3	3.6	27	0	292	.13	36	5.8	1.5 14 LOI L
		1	12	15	21.99	18 59.06	155 13.31	13.60	2.8	3.1	39	0	259	.12	32	2.1	.7 25 LOI
		6	21	13	.98	19 19.61	155 15.60	8.10	2.4	3.0	44	4	87	.12	3	.4	.6 28 SF1
		9	23	4	32.68	19 19.99	155 11.75	10.10	3.2	3.6	44	3	83	.10	5	.3	.3 37 SF3 F
		12	16	18	58.25	19 27.32	155 26.47	14.93	4.1	4.1	50	4	38	.12	4	.4	.3 42 DML F
		12	16	28	29.00	19 27.48	155 26.22	14.53	3.3	3.2	47	2	39	.13	5	.4	.3 41 DML F
		13	1	1	27.38	20 45.82	155 30.47	15.33	3.0	3.3	38	2	242	.11	76	1.3	4.8 27 DIS
		13	13	12	12.94	19 18.85	155 11.30	8.75	3.0	2.9	42	4	114	.11	5	.4	.5 31 SF3
		16	23	28	43.37	19 21.21	155 19.99	31.87	3.3	3.6	47	1	51	.11	5	.6	1.0 43 DEP
		17	21	24	44.13	19 20.35	155 7.34	8.35	3.0	3.1	42	3	97	.08	5	.4	.5 31 SF4
		18	18	49	13.93	19 19.45	155 9.12	8.51	2.8	3.1	42	3	88	.10	4	.4	.6 34 SF4
		20	22	1	1.13	19 20.06	155 7.63	8.66	2.8	3.3	44	4	96	.11	5	.4	.5 33 SF4
		25	4	1	.98	19 11.53	155 36.18	8.07	3.0	2.7	38	2	92	.22	7	.6	1.1 30 LSW
		25	9	3	36.26	19 21.92	155 15.18	9.80	3.0	3.1	43	1	59	.12	2	.4	.4 32 SF1
		25	9	10	37.28	19 21.64	155 17.76	34.97	3.6	3.6	47	2	29	.10	3	.6	1.0 45 DEP F
		27	9	45	30.60	19 16.88	155 22.42	7.76	2.9	3.6	45	2	123	.16	6	.5	.7 37 SWR

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YEAR	MON	ORIGIN TIME			LAT N DEG MIN	LON W DEG MIN	DEPTH KM	AMP MAG	DIR NR	GAP NS	RMS DEG	MIN DIS	ERH KM	ERZ KM	NO	FM	REMK		
		DA	HRMN	SEC															
1982	NOV	27	1011	57.40	19 58.47	155 27.98	39.50	3.2	3.0	48	2	185	.11	16	.8	1.9	40	KEA	
		27	16	1	25.52	19 17.23	155 30.44	9.30	3.8	3.9	42	1	47	.13	4	.4	.6	40	LSW F
		28	1959	28.65	19 16.22	155 22.97	7.02	2.6	3.1	48	4	123	.17	4	.5	.8	37	SWR F	
		28	2014	19.00	19 16.45	155 22.91	6.12	2.5	3.1	47	3	121	.17	4	.4	1.0	34	SWR	
		29	1450	38.05	19 21.12	155 20.03	31.99	4.0	4.4	47	0	54	.10	5	.6	1.0	47	DEP F	
		29	18	1	4.75	19 18.37	155 13.70	9.26	3.1	3.4	44	2	70	.12	3	.5	.5	36	SF2
		30	1315	.41	19 21.43	155 15.27	9.69	3.0	3.1	42	2	65	.11	2	.4	.4	31	SF1	
		5	537	37.72	19 48.36	156 9.59	38.47	3.8	4.0	45	4	254	.10	44	1.0	1.6	41	HUA F	
		6	1943	37.10	19 23.33	155 16.93	3.05	2.4	3.3	36	4	36	.10	0	.2	.2	30	SSC	
		8	1221	37.56	19 21.50	155 4.73	8.82	3.3	3.6	42	2	160	.08	4	.6	.4	34	SFS	
DEC		9	18	9	27.06	19 23.15	155 14.90	2.77	2.5	3.0	29	1	64	.09	2	.3	.3	15	SEC
		9	1853	19.02	19 23.11	155 14.99	3.26	2.8	3.0	33	1	48	.11	2	.3	.5	30	SEC	
		9	1938	11.71	19 23.73	155 14.86	3.21	3.1	3.3	38	1	44	.10	2	.3	.4	29	SEC	
		9	1947	29.88	19 24.27	155 15.49	1.75	2.9	3.6	27	3	72	.09	2	.2	.3	20	SEC	
		9	20	0	51.65	19 23.35	155 14.63	3.94	3.1	3.4	41	6	46	.09	3	.3	.3	37	SEC
		10	1121	12.06	19 13.72	155 20.18	32.09	3.0	3.2	47	2	160	.11	7	.7	1.1	45	DEP	
		10	1820	14.72	19 23.14	155 14.48	3.95	3.0	3.2	38	1	47	.11	3	.3	.5	30	SEC	
		10	2118	52.65	19 23.18	155 14.91	2.96	2.7	3.0	43	7	47	.09	2	.2	.3	34	SEC F	
		11	949	19.66	19 18.22	155 23.56	3.50	2.7	3.2	43	3	90	.14	4	.4	1.0	30	SWR	
		12	1246	56.36	19 23.35	155 14.89	3.36	2.5	3.3	30	4	104	.09	3	.3	.3	19	SEC	
		12	13	9	11.28	19 23.51	155 14.81	3.36	2.8	3.0	30	2	109	.10	2	.4	.4	23	SEC
		13	2	0	17.87	19 22.84	155 17.30	2.60	2.9	3.5	28	2	74	.10	1	.3	.3	24	SSC
		13	2258	56.95	19 23.25	155 14.67	3.43	2.9	3.2	40	4	47	.07	3	.3	.4	27	SEC	
		14	2039	59.30	19 23.37	155 14.55	3.35	2.7	3.3	36	3	82	.12	2	.3	.4	25	SEC	
		19	256	52.40	19 53.33	155 28.68	27.21	3.1	3.1	45	5	209	.10	12	.6	1.4	32	KEA	
		21	11	3	46.09	19 19.43	155 15.53	8.03	2.9	3.0	42	2	89	.10	4	.4	.6	37	SF1
		21	1212	59.01	19 20.35	155 11.61	8.98	3.2	3.4	45	6	78	.11	4	.4	.4	31	SF3	
		21	1756	16.58	19 23.21	155 14.50	4.06	3.1	3.5	39	1	47	.11	3	.3	.5	31	SEC	
		21	18	1	14.87	19 23.15	155 14.77	3.26	2.9	3.2	41	3	48	.11	2	.3	.4	33	SEC
		21	2030	32.80	19 23.21	155 14.87	3.12	2.6	3.2	30	3	48	.09	2	.3	.4	24	SEC	
		23	2050	42.41	19 22.68	155 14.66	1.18	2.6	3.2	33	2	51	.10	2	.3	.4	20	SEC	
		25	1244	47.80	19 19.66	155 10.54	9.05	2.9	3.0	42	2	94	.11	5	.4	.35	SF3	F	
		27	2335	1.86	19 20.38	155 6.68	9.23	3.2	3.2	46	3	105	.09	5	.5	.3	36	SF4	
		29	432	37.18	20 18.50	155 45.26	30.43	2.9	3.0	44	3	176	.10	63	1.1	3.0	35	KDH	
		30	1622	4.85	19 22.83	155 14.31	2.56	2.6	3.0	30	1	50	.10	2	.3	.4	29	SEC	
		30	1721	57.21	19 18.51	155 14.18	10.06	2.9	3.2	42	2	131	.11	6	.5	.6	36	SF2	F
31	355	9.96	19 22.89	155 14.40	1.03	3.4	3.9	34	2	48	.13	2	.3	.4	28	SEC			