Hawaiian Volcano Observatory Summary 94; Part I, Seismic Data, January to December 1994

by Jennifer S. Nakata

Chronological Summary
by C. Heliker, T. Mattox, & C. Thornber

Open-File Report 00-326

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INTRODUCTION

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

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

A report tabulating instrumentation, calibration, and recording history of each seismic station in the network by Klein and Koyanagi is available as a USGS Open-File Report [1]. It is designed as a reference for users of seismograms and phase data and includes and augments the information in the station table in this summary.

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

CHRONOLOGICAL SUMMARY 1994

by
C. Heliker, T. Mattox, and C. Thornber

Episode 53 continues: flowfield expands, eruption pauses return

The entire flowfield below the 200 ft elevation was resurfaced by lava during 1994, and the flowfield expanded to both the east and west. In contrast, there were no surface flows above the 2100 ft elevation all year. The Kamoamoa flowfield (Feb 1992 to present) now covers 19.4 sq km, and has added 180 acres of new land to the island.

For a year following February 1993, the eruption was continuous. Intermittent pauses in the activity resumed in March 1994, and by the end of the year we had recorded six. The pauses occurred in two clusters, with three in March-April and the another three in October-November. The pauses lasted from less than 24 hrs to roughly 60 hrs.

Pu'u 'O'o still standing: collapse pits grow, pond stable

In January 1994, the two largest collapse pits at the episode 51 vent site coalesced. Near the end of February, the episode 53 pit enlarged and engulfed the remnants of the 53 spatter cone. In late October, the upper collapse pit on the steep slope of Pu'u 'O'o cone above the episode 51 vents enlarged dramatically.

The lava pond at the bottom of the Pu'u 'O'o crater was quite stable during 1994, in terms of its level, dimensions, and circulation pattern. The surface of the pond was generally 79-88 m below the low point on the crater rim, with the exception of March 1994, when the level dropped to 90-95 m below the rim.

At the coast: bench collapses and littoral explosions

Two significant bench collapses occurred in 1994; the first on February 22, when about 2.5 acres of the bench plus 100 m of land inshore of the bench collapsed, and the second in early July, when an unwitnessed bench collapse claimed an area 170 m long x 50 m wide. This event triggered a large wave that deposited lithic blocks up to 0.5 m in diameter 30-40 m inland.

In early March, we witnessed four days of spectacular explosions at the Kamoamoa entry—the longest sustained period of major littoral explosions during this eruption. The explosions followed the first pause in March and were apparently related to lava re-entering a partially obstructed tube and breaking through to water-saturated portions of the bench. Two littoral cones formed; the largest was 28 m in diameter and 10 m high. The "March 9 cone" still formed a prominent landmark on the coast at the year's end. Explosive activity formed another prominent littoral cone on July 27. This cone also survived at the end of the year.

Ocean entries

The ocean entries were located on the western side of the Kamoamoa delta from July 1993 through March 1994. After the first pause in March, lava re-entered the ocean through the pre-existing tube system when the eruption resumed. Following the second and third pauses, the tube was not reoccupied on the coastal plain, but surface flows re-entered the ocean in the same area as well as on the eastern side of the flowfield.

By May, the tube system had stabilized, and lava entered the ocean along a 500-m front between the Kamoamoa and Lae'apuki areas until late October. Concurrently, a large breakout from the 900 ft elevation that began on August 20 reached the ocean in early October on the eastern side of the flowfield. Both entries survived the first pause in October but met their demise during the second, when neither tube system was reoccupied. Before the new surface flows could establish a path to the sea, the tube system broke down again for the final pause of the year in late November. Surface flows began once again from the 2100 ft elevation and reached the ocean at Kamoamoa on December 20. The volume of lava entering the ocean remained low, and surface flow activity high, through the end of 1994.

Table C-1. Eruption statistics

Areas

Total area covered by lava, January 1983 - December 1994 = **89.4sq km**
Pu'u 'O'o flows (episodes 1-47 48A = **25 sq km***
* Pu'u 'O'o flows originally covered about 42 sq km, but much of this area was buried by episode 48-53 flows.
Kupaianaha flows, July 20, 1986 - February 6, 1992 = **41 sq km**
Episode 49 flows, November 8-26, 1991 = **3.9 sq km**
Episodes 50 -53 (ongoing as of 12/31/94) = **19.4 sq km**
New land created December 1986 - December 1994 = **499 acres** (This is a net figure, which does not include new land that was claimed by wave erosion or collapse of the active lava bench).

Volumes

Total, 1/83 through 11/93	Approximately: **1150x 10^6 m^3** (dense rock equivalent)
Episodes 1-47 (1/83 - 6/86)	**385 x 10^6 m^3**
Episode 48 (7/86 - 2/92)	**500 x 10^6 m^3**
Episode 49 (11/92)	**11 x 10^6 m^3**
Episode 50 (2/92 - 3/92)	**4.5 x 10^6 m^3**
Episode 51 (3/92 - 2/93)	**32 x 10^6 m^3**
Episode 52 (10/92)	**2 x 10^6 m^3**
Episode 53 (2/93-12/94, ongoing)	**217 x 10^6 m^3**

Other facts
Height of episode 51 lava shield: **~60 m**
Episode 51 lava pond active March 1992 - July 1992

Height of Kupaianaha lava shield: **56 m**
Kupaianaha vent inactive since February '92

Height of Pu'u 'O'o cone, 3/94: **233 m.** Cone has lost 24 m due to collapse since 1986
Dimensions of Pu'u 'O'o crater, December 1994: **~240 m x 330 m**
Pu'u 'O'o pond status: **continuously active**

Thickness of lava at coast:
- **~25 m** (75 ft) over Hwy 130 at Queens Bath
- **~16-25 m** (50-75 ft) over Kalapana Gardens
- **~5 m** (15 ft) over Chain of Craters at Lae'apuki

Highway covered by lava flows from this eruption: **12 km**

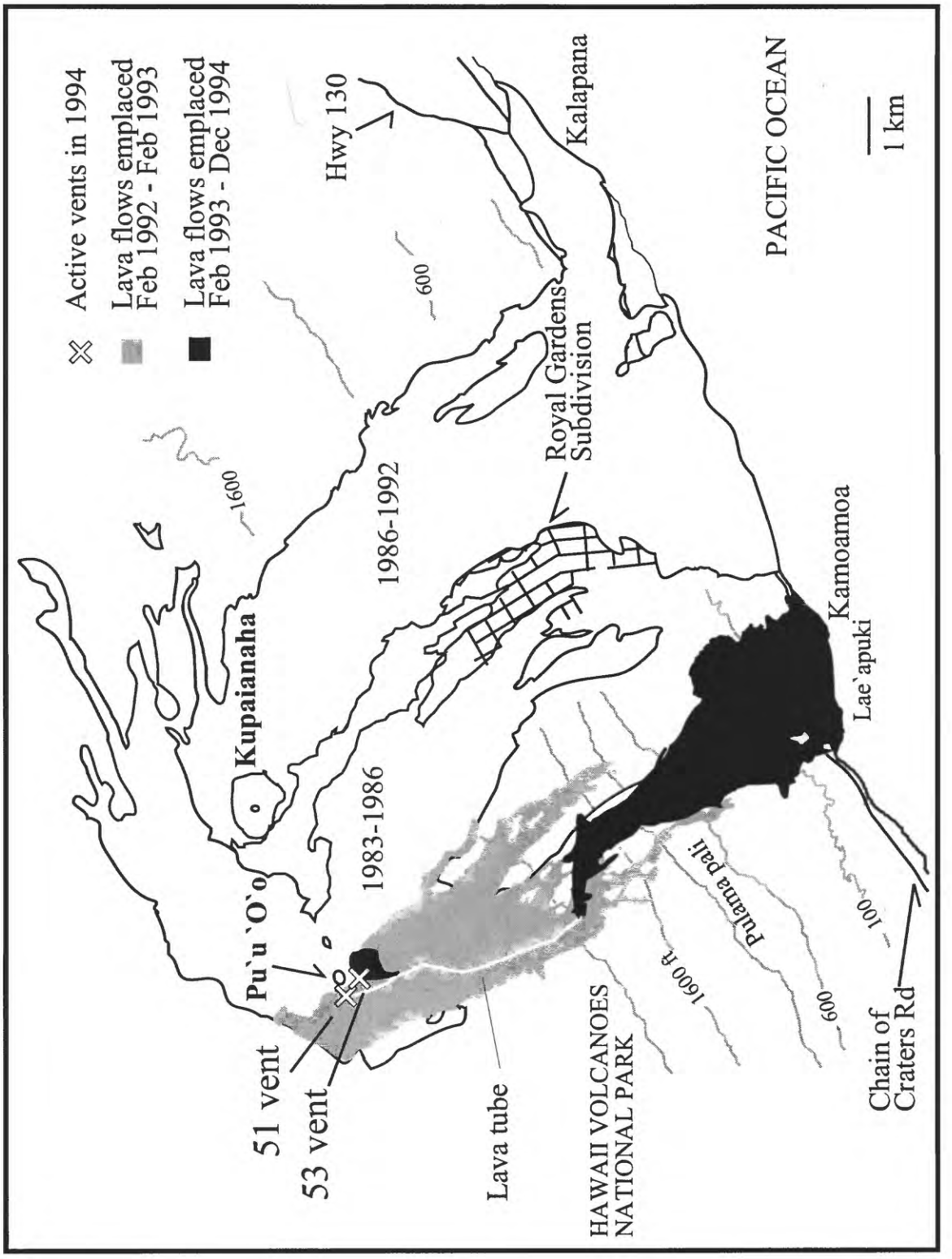


Figure C-1. Lava flows produced from 1983 through 1994.

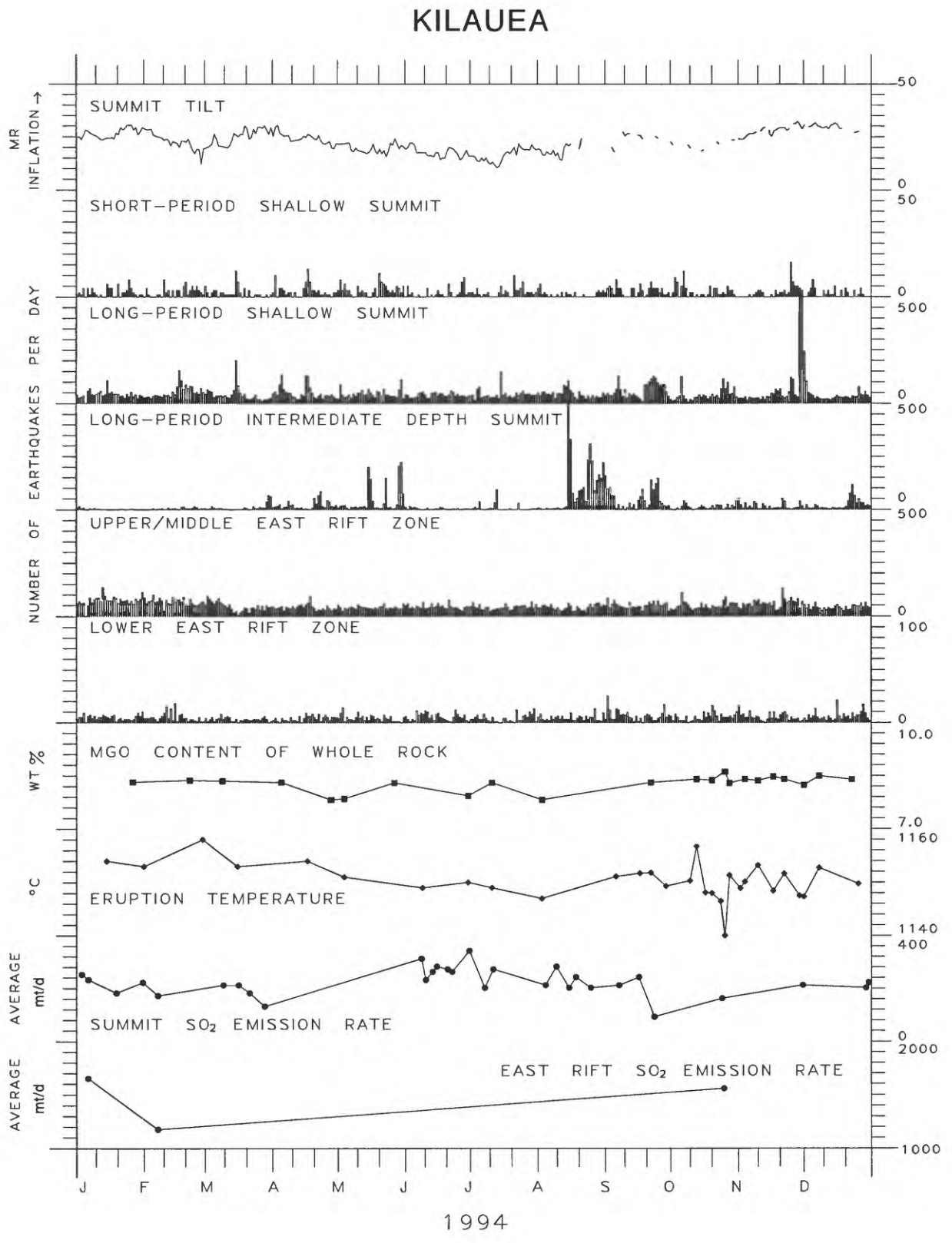


Figure C-2a. Selected seismic, geodetic, petrologic and geochemical data for Kilauea, 1994.

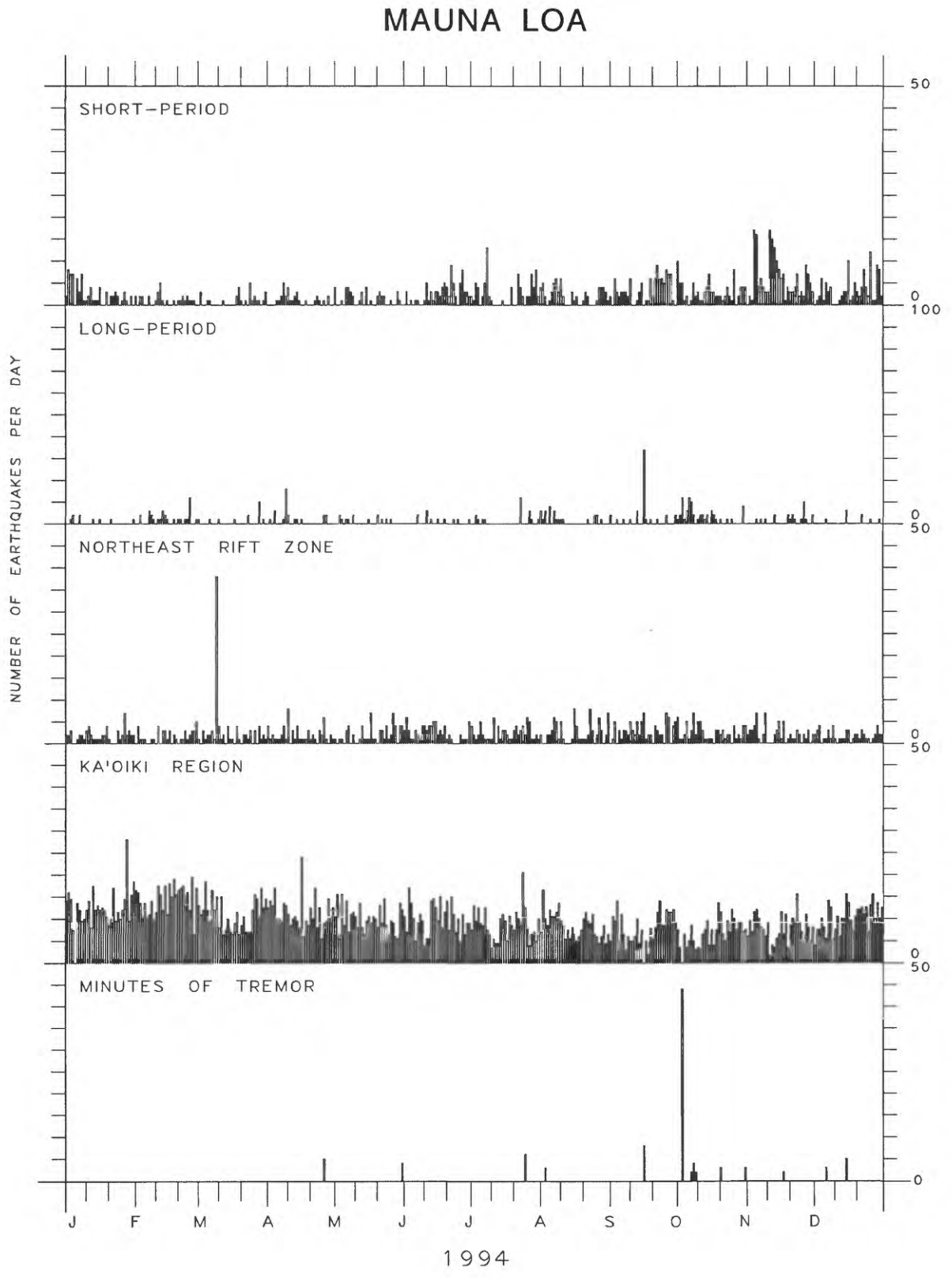


Figure C-2b. Selected seismic data for Mauna Loa, 1994.

SEISMIC INSTRUMENTATION

The network. The Hawaiian Volcano Observatory maintains an extensive telemetered seismic network on the Island of Hawai'i. The 1994 network consisted of 52 station sites: 12 three-component, 1 four-component (which included a low-gain vertical with a unity gain setting),1 four-component and 2 two-component (each site included a moderate-gain vertical with a 48db setting), and 36 vertical-component-only sites. The coverage is most dense on and around Kilauea Volcano. All seismic signals from the short-period network are telemetered to the Observatory for recording.

Figure 1 is a map of selected geographic and geologic features. Figure 2 shows the seismic stations operated on the Island of Hawai'i during 1994. Figure 3 indicates the telemetry scheme for the seismic stations, and Figures 4a and 4b are expanded telemetry schemes at Kilauea summit: 4a, HVO seismic stations and 4b, broadband network installed by Menlo Park and maintained by HVO.

Table 1 lists seismic stations by names, four-letter station codes, coordinates in degrees and minutes, elevation in meters, and other data, as described below, pertaining to each station. The list includes all the stations operated by the U.S. Geological Survey in Hawai'i during 1994. A few seismic stations operated by the Pacific Tsunami Warning Center (NOAA) on the Islands of O'ahu and Maui are also listed. Phase times from these stations are occasionally used to supplement data for events that occur within the Hawaiian Archipelago but distant from the Hawai'i Island network.

Instrumentation and recording. Each telemetered station has a voltage-controlled oscillator (VCO) for FM multiplex transmission to HVO via radio. These telemetering stations are all of Type 1, Earthquake Hazards Team (EHT) standard system used in USGS seismic networks (see Table 2 for details). After discrimination at the receiver, the analog signals are converted to digital form as part of the routine computer-location processing and archiving. Continuous signals from the telemetered network are saved on 4-mm digital-audio tape (DAT) recording units. Three DAT recorders run in automatic rotation, as each 30-hr tape is filled. Analog signals from 18 selected stations are recorded on one Develocorder ('A') using 16-mm microfilm. The type of recording used for each station is coded in Table 1 as follows: D - Develocorder film, H - Helicorder paper, and I - ink paper. The paper records, as well as the 16-mm Develocorder microfilms, are archived at HVO.

Seismograph response and calibration. Displacement response curve for the short-period seismograph type in use is given in Figure 5. The Type 1 curve gives the displacement magnification of the standard EHT system from ground motion at the seismometer to the seismic trace, as seen on a 20x Develocorder film viewer. The curve plots the unit response, which is multiplied by a constant but known factor, CAL, to get the response for an individual station. Individual CAL factors for Type 1 seismographs are Develocorder-equivalent, peak-to-peak amplitudes, measured in millimeters, of a 100-microvolt 5 to 8-Hz signal introduced to the preamp/VCO in place of the geophone at the field station. The calibration process is normally performed each time a station is visited for other required maintenance.

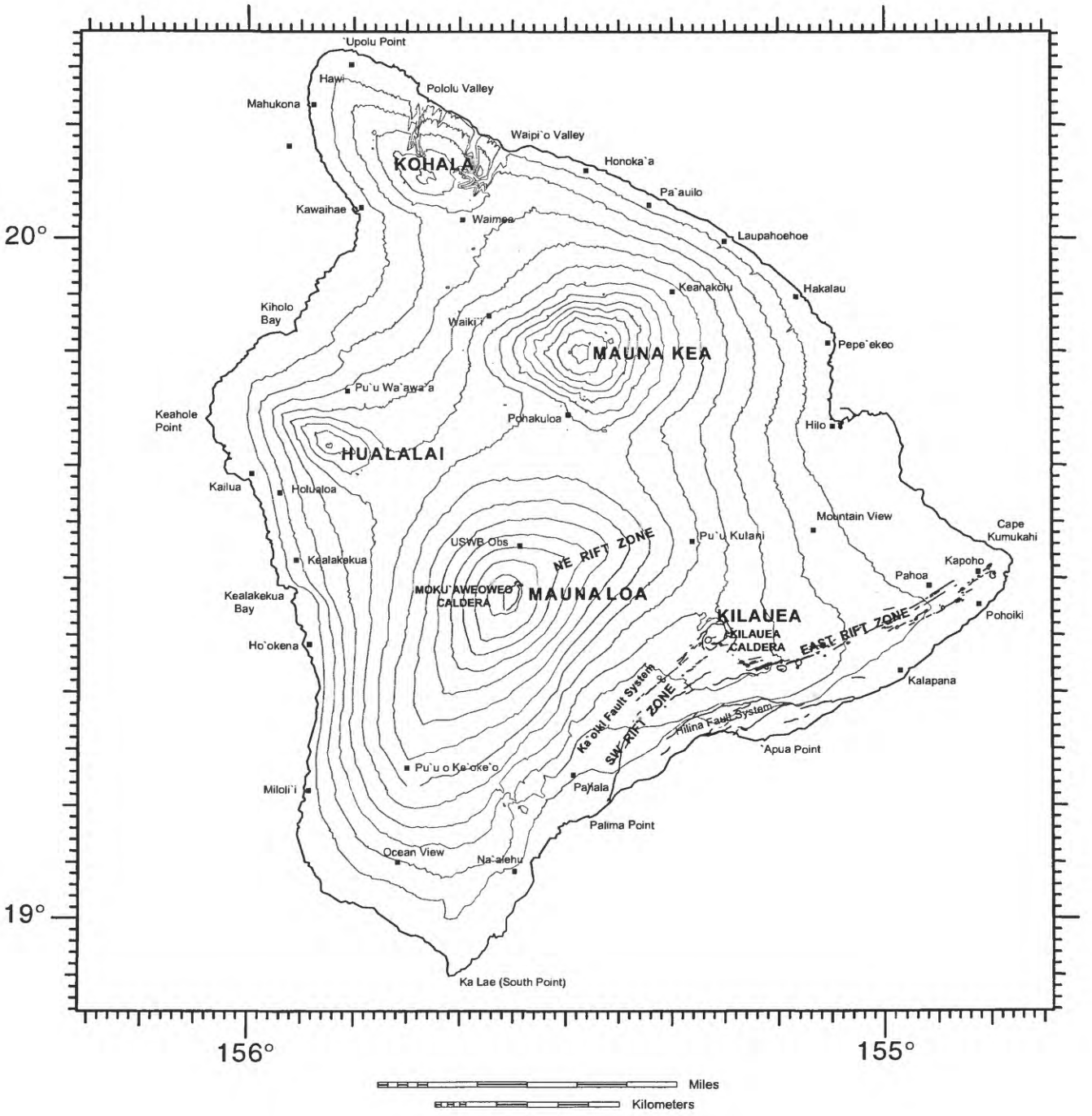


Figure 1. Map of the Island of Hawai'i, showing principal settlements and selected geographic and geologic features.

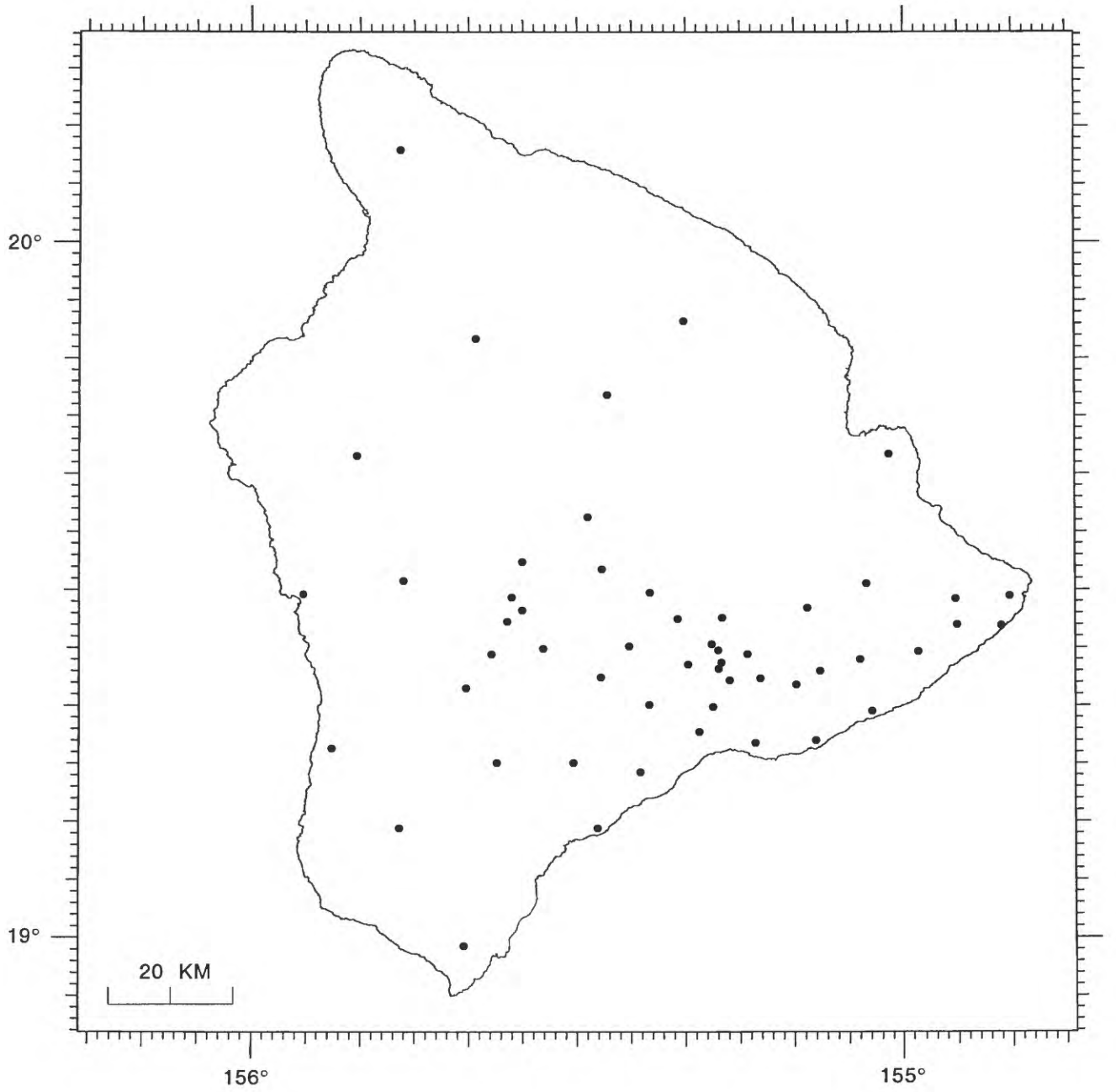


Figure 2. Seismic stations operational during 1994 on the Island of Hawai'i.

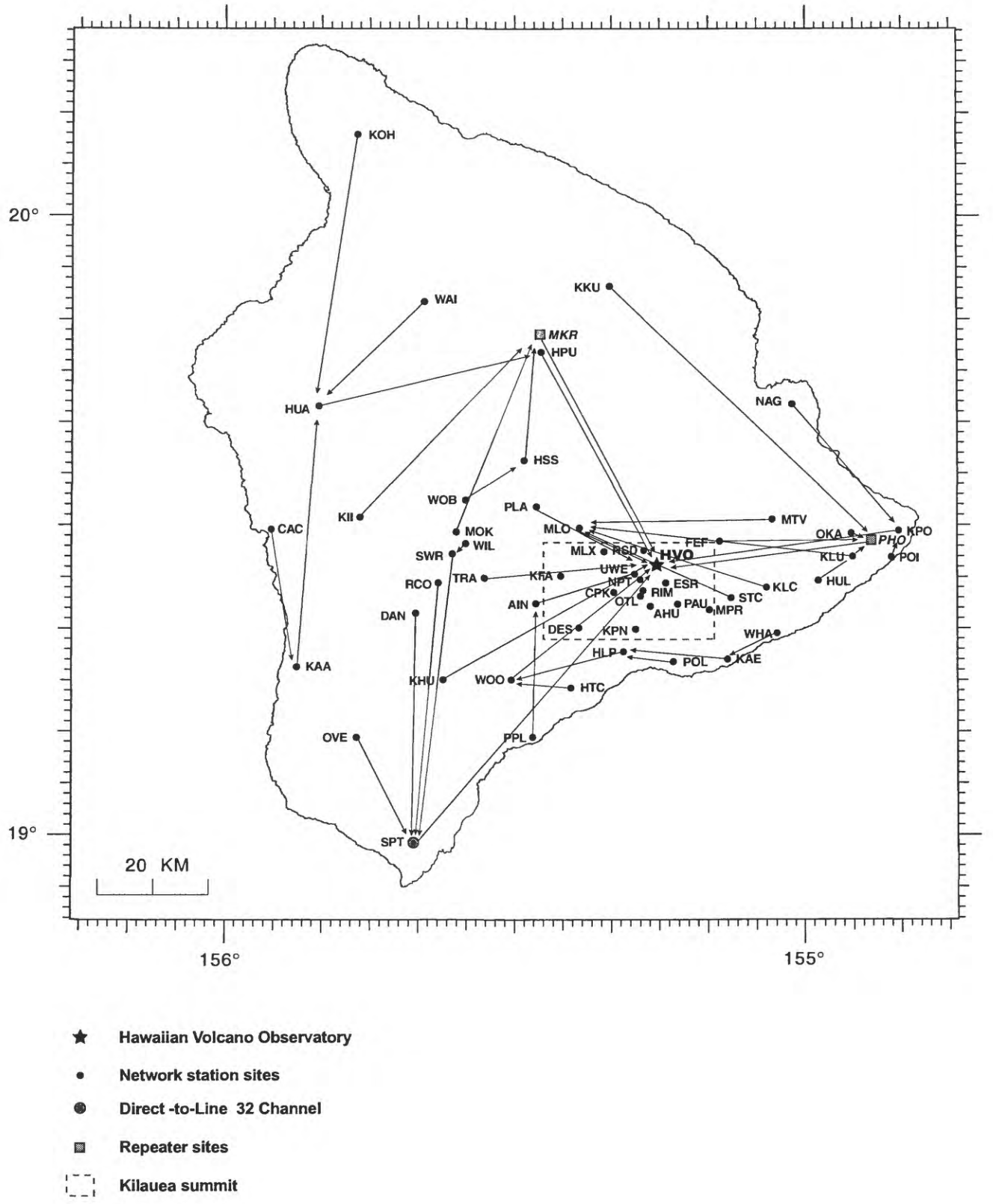
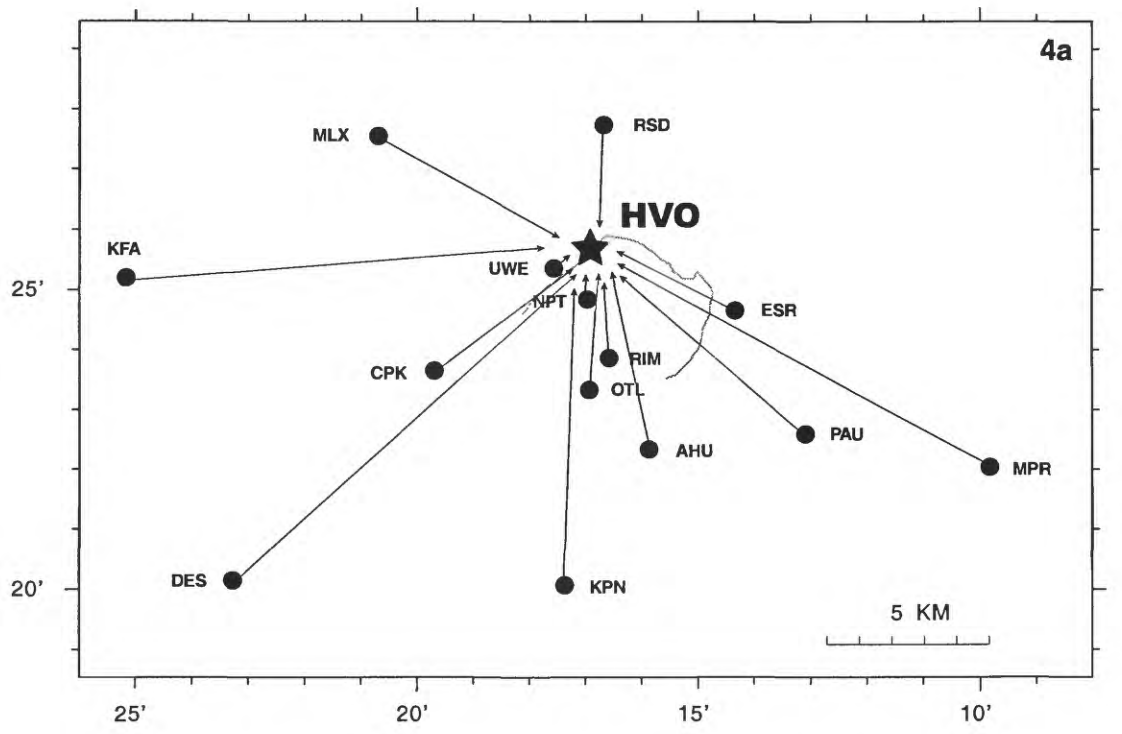
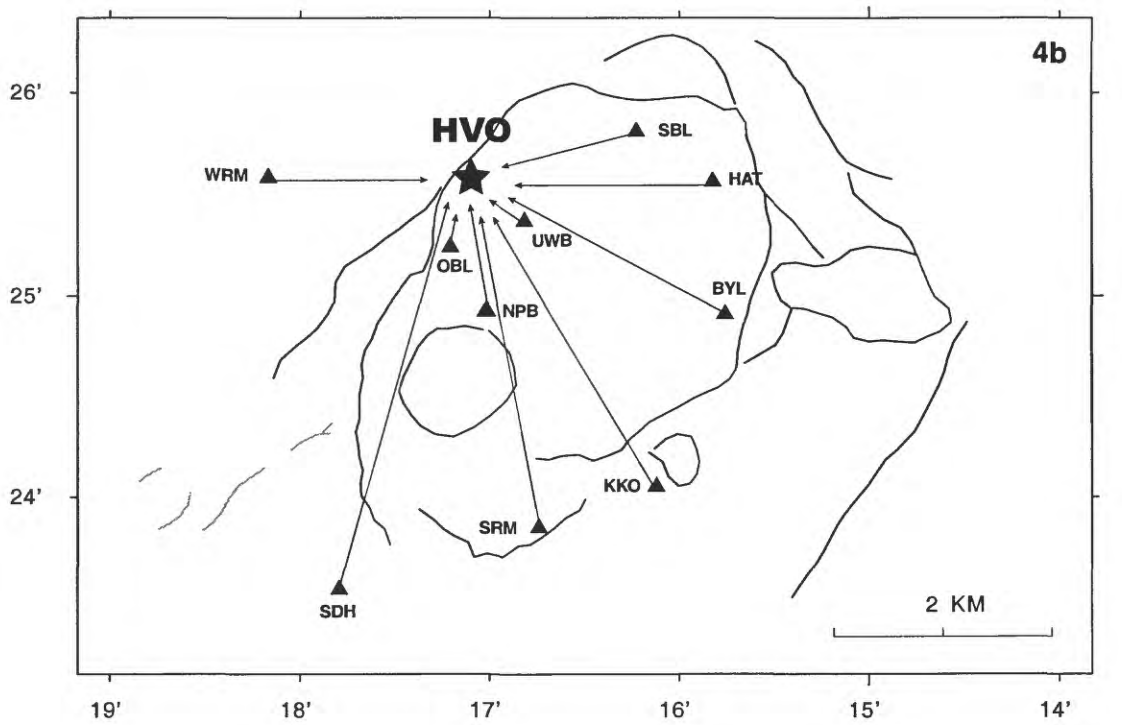


Figure 3. Telemetry scheme for the 1994 Hawaiian Volcano Observatory seismic network.





★ Hawaiian Volcano Observatory

● Network sites

▲ Broadband sites

Figure 4a. Expanded telemetry scheme for the 1994 Hawaiian Volcano Observatory seismic network at Kilauea summit.

Figure 4b. Expanded telemetry scheme for the 1994 Menlo Park broadband network at Kilauea summit.

Table 1. Seismic stations in Hawai'i operated by the USGS in 1994.

STATION NAME	CODE	LAT		LON		ELEV	DELAY 1	DELAY 2	CAL	SEIS TYPE	OPTIC RECORD
		D	M	D	M	(M)					
AHUA	AHUV	19	22.40	155	15.90	1070	-0.10	-0.13	2.6	E5	DI
AHUA	AHUE	19	22.40	155	15.90	1070	-0.10	-0.13	3.0	E5 MW	
AHUA	AHUN	19	22.40	155	15.90	1070	-0.10	-0.13	3.0	E5 MW	
AINAPO	AINV	19	22.50	155	27.62	1524	0.13	0.17	6.8	L5	
AINAPO	AINE	19	22.50	155	27.62	1524	0.13	0.17	3.0	L5 MW	
AINAPO	AINN	19	22.50	155	27.62	1524	0.13	0.17	3.0	L5 MW	
AINAPO	AINZ	19	22.50	155	27.62	1524	0.13	0.17	0.0	L5	
CAPTAIN COOK	CACV	19	29.29	155	55.09	323	0.00	-0.16	1.1	L5	D
CONE PEAK	CPKV	19	23.70	155	19.70	1038	-0.26	-0.07	6.0	L5	
DANDELION	DANV	19	21.42	155	40.04	3003	-0.27	0.03	4.3	E5	
DESERT	DESV	19	20.20	155	23.30	815	-0.29	-0.13	4.5	L5	DI
DIAMOND HEAD,OA	DHHZ	21	16.12	157	48.25	137	0.00	0.00	0.0	S13	
ESCAPE ROAD	ESRV	19	24.68	155	14.33	1177	-0.17	-0.19	2.2	L5	D
FERN FOREST	FEFV	19	28.70	155	8.91	691	0.01	0.05	0.0	L5	
HALEAKALA, MAUI	HKLZ	20	42.63	156	15.55	3051	0.00	0.00	0.0	S13	
HILINA PALI	HLPV	19	17.96	155	18.63	707	0.02	0.07	2.1	L5	D
HONOLULU, OAHU	HON	21	19.30	158	0.50	2	0.00	0.00	0.0	S13	
HALE POHAKU	HPUV	19	46.85	155	27.50	3396	0.31	0.17	3.3	L5	
HUMUULA SHEEP	HSSV	19	36.31	155	29.13	2445	0.20	0.35	4.0	L5	
HUMUULA SHEEP	HSSE	19	36.31	155	29.13	2445	0.20	0.35	3.0	L5 MW	
HUMUULA SHEEP	HSSN	19	36.31	155	29.13	2445	0.20	0.35	3.0	L5 MW	
HOT CAVES	HTCV	19	14.33	155	24.02	381	-0.16	-0.07	2.3	E4	
HUALALAI	HUAV	19	41.25	155	50.32	2189	0.67	0.38	2.8	L5	I
HEIHEIAHULU	HULV	19	25.13	154	58.72	369	-0.17	-0.16	1.7	L5	DI
HEIHEIAHULU	HULE	19	25.13	154	58.72	369	-0.17	-0.16	3.0	E5 MW	
HEIHEIAHULU	HULN	19	25.13	154	58.72	369	-0.17	-0.16	3.0	L5 MW	
KAAPUNA	KAAV	19	15.98	155	52.28	524	-0.12	-0.01	3.3	E5	
KAENA POINT	KAEV	19	17.35	155	7.95	37	-0.01	0.06	1.4	L5	
KAOIKI FAULTS	KFAV	19	25.25	155	25.18	1579	0.13	0.17	0.0	E5	
KAHUKU	KHUV	19	14.90	155	37.10	1939	0.03	-0.03	5.0	E5	
KANEKII	KIIV	19	30.56	155	45.90	1841	0.15	0.37	3.0	L5	
KANEKII	KIIE	19	30.56	155	45.90	1841	0.15	0.37	3.0	L5 MW	
KANEKII	KIIN	19	30.56	155	45.90	1841	0.15	0.37	3.0	L5 MW	
KEANAKOLU	KKUV	19	53.39	155	20.58	1863	0.68	0.24	3.3	L5	
KALALUA CONE	KLCV	19	24.35	155	4.08	659	-0.25	-0.30	3.4	L5	
PUU KALIU	KLUV	19	27.48	154	55.26	271	-0.17	-0.30	3.4	L5	
KOHALA	KOHV	20	7.69	155	46.77	1166	-0.03	-0.17	6.3	L5	
KOHALA	KOHE	20	7.69	155	46.77	1166	-0.03	-0.17	3.0	L5 MW	
KOHALA	KOHN	20	7.69	155	46.77	1166	-0.03	-0.17	3.0	L5 MW	
KIPUKA NENE	KPNV	19	20.10	155	17.40	924	-0.11	-0.08	3.5	L5	D
KAPOHO	KPOV	19	30.02	154	50.51	134	-0.09	-0.24	1.9	L5	D
MAUNA LOA	MLOV	19	29.80	155	23.30	2010	0.03	0.08	5.6	L5	DI
MAUNA LOA	MLOE	19	29.80	155	23.30	2010	0.03	0.08	3.0	L5 MW	
MAUNA LOA	MLON	19	29.80	155	23.30	2010	0.03	0.08	3.0	L5 MW	
MAUNA LOA X	MLXV	19	27.60	155	20.70	1475	0.06	0.15	3.0	L5	
MOKUAWEOWEO	MOKV	19	29.28	155	35.98	4104	0.15	0.16	4.2	L5	DI
MAKAOPUHI	MPRV	19	22.07	155	9.85	881	-0.17	-0.20	3.0	L5	DI
MAKAOPUHI	MPRZ	19	22.07	155	9.85	881	-0.17	-0.20	0.0	L5	
MOUNTAIN VIEW	MTVV	19	30.25	155	3.75	409	-0.02	0.01	5.6	E5	
NATIONAL GUARD	NAGV	19	42.12	155	1.72	18	0.54	0.30	4.0	R5	
NATIONAL GUARD	NAGE	19	42.12	155	1.72	18	0.54	0.30	3.0	R5 MW	

NATIONAL GUARD	NAGN	19 42.12	155 1.72	18	0.54	0.30	3.0	R5 MW		
NORTH PIT	NPTV	19 24.90	155 17.00	1115	-0.30	-0.18	3.0	L5		DI
NORTH PIT	NPTE	19 24.90	155 17.00	1115	-0.30	-0.18	3.0	L5 MW		
NORTH PIT	NPTN	19 24.90	155 17.00	1115	-0.30	-0.18	3.0	L5 MW		
OOKA	OKAV	19 29.66	154 55.44	180	0.00	0.00	0.0	L5		
OPANA, OAHU	OPAZ	21 41.45	158 0.70	134	0.00	0.00	0.0	S13		
OUTLET	OTLV	19 23.38	155 16.94	1038	-0.19	-0.18	4.9	L5		
OUTLET	OTLZ	19 23.38	155 16.94	1038	-0.19	-0.18	0.0	L5		
PAUAHI	PAUV	19 22.62	155 13.10	994	-0.21	-0.24	2.2	L4		D
PAUAHI	PAUE	19 22.62	155 13.10	994	-0.21	-0.24	3.0	L5 MW		
PAUAHI	PAUN	19 22.62	155 13.10	994	-0.21	-0.24	3.0	L5 MW		
PUU ULAULA	PLAV	19 32.00	155 27.67	2992	-0.03	0.13	5.4	L5		DI
POHOIKI	POIV	19 27.42	154 51.22	16	-0.09	-0.24	0.0	L5		
POLIOKEAWE PALI	POLV	19 17.02	155 13.47	169	-0.02	0.03	3.4	E5		
PUU PILI	PPLV	19 9.50	155 27.87	35	-0.15	-0.15	1.3	E5		D
RED CONE	RCOV	19 24.36	155 37.79	3601	0.00	0.00	0.0	L5		
RIM	RIMV	19 23.90	155 16.60	1128	-0.21	-0.13	0.0	L5		
RAINSHED	RSDV	19 27.78	155 16.68	1270	0.06	0.15	0.0	L5		
SOUTH POINT	SPTV	18 58.91	155 39.92	244	-0.17	-0.22	2.8	L5		
SOUTH POINT	SPTE	18 58.91	155 39.92	244	-0.17	-0.22	3.0	L4 MW		
SOUTH POINT	SPTN	18 58.91	155 39.92	244	-0.17	-0.22	3.0	L4 MW		
STEAM CRACKS	STCV	19 23.30	155 7.67	765	-0.25	-0.30	2.8	L5		DH
STEAM CRACKS	STCE	19 23.30	155 7.67	765	-0.25	-0.30	3.0	L5 MW		
STEAM CRACKS	STCN	19 23.30	155 7.67	765	-0.25	-0.30	3.0	L5 MW		
SOUTHWEST RIFT	SWRV	19 27.26	155 36.30	4048	0.01	0.04	5.6	E5		D
TRAIL	TRAV	19 24.91	155 32.96	3207	0.00	0.00	0.0	L5		
UWEKAHUNA	URAV	19 25.40	155 17.60	1240	-0.21	0.00	0.0	R5		
UWEKAHUNA	URAE	19 25.40	155 17.60	1240	-0.21	0.00	3.0	R5 MW		
UWEKAHUNA	URAN	19 25.40	155 17.60	1240	-0.21	0.00	3.0	R5 MW		
UWEKAHUNA	UUGZ	19 25.40	155 17.60	1240	0.00	0.00	0.0	L0		
WAIKII	WAIV	19 51.58	155 39.60	1433	0.20	0.35	0.0	L5		
WAHAULA	WHAV	19 19.90	155 2.92	29	-0.10	-0.04	2.4	E5		
WILKES CAMP	WILV	19 28.15	155 35.02	4037	0.22	0.17	2.6	E5		D
WILKES CAMP	WILE	19 28.15	155 35.02	4037	0.22	0.17	3.0	L5 MW		
WILKES CAMP	WILN	19 28.15	155 35.02	4037	0.22	0.17	3.0	L5 MW		
WEATHER OBSERV	WOBV	19 32.31	155 35.01	3396	0.00	0.00	0.0	E5		
WOOD VALLEY	WOOV	19 15.08	155 30.12	909	-0.15	-0.06	2.6	E5		

Table 2. Seismic instrument types

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

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

a) Geophone - Electrotech EV-17 (E), Mark Products L4C (L) or Kinemetric Ranger SS1 (R). (L) and (R) are 1.0-sec. period moving-magnet vertical- or horizontal- (E-W and N-S) component seismometers adjusted for an output of 0.5 volts/cm/sec and 0.8, critically damped.

b) Preamp/VCO - USGS/OEVE Model J402 (4), J502 (5) voltage-controlled oscillator. Three db points for bandpass filter at 0.1 Hz and 30 Hz. Signals are transmitted on audio FM carrier over cable or FM radio link to HVO.

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

Code (MW) is a horizontal-component seismograph based on a Type 1 system and modified to 3x a Wood-Anderson response.

Code (S13) - Geotech, 1Hz seismometer with A1 VCO operated by the Pacific Tsunami Warning Center.

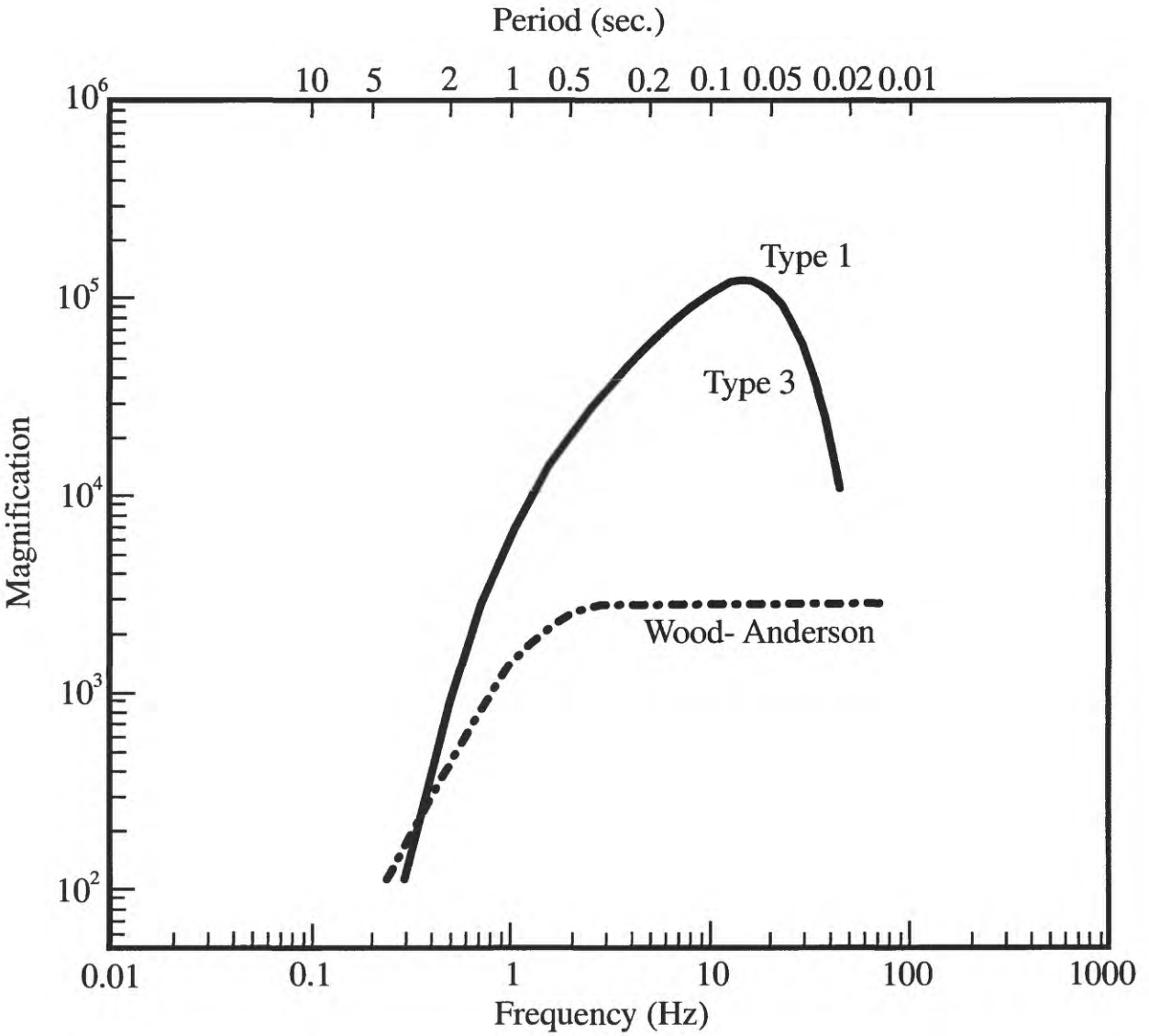


Figure 5. System-response curves for the Wood-Anderson torsion seismograph and for seismometers used by the Hawaiian Volcano Observatory. Type 1 is the standard OEVE seismometer system recorded on Develocorder film and DAT tape. The curve for Type 1 includes response of the geophone, all electronics including telemetry, Develocorder galvanometer, and projection of film by a 20x viewer. The curve plots 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

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

In July 1992, HVO acquired VAX workstations for timing earthquakes using a "generic" version of CUSP. In addition to timing P and S arrival signals, the VAX workstations are capable of measuring peak-to-peak amplitudes along with the associated period. This capability allowed the renewal of amplitude magnitude determinations from the network seismic stations. Amplitude data gathered from July 1992 to July 1997 became part of a test set to determine magnitude corrections for network stations. Results of newly determined magnitude corrections are detailed by Nakata and Okubo, (1997) [3].

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

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

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

Magnitudes for events are computed using recorded amplitudes on selected network vertical, Modified Wood-Anderson (MW) horizontal, and/or moderate and low gain stations. Amplitude readings are corrected to an equivalent Wood-Anderson amplitude using the curves of Figure 5 and CAL factors listed in Table 1.

Duration magnitude is determined by the length of signal, in seconds, from Type 1 seismographs read from the develocorder viewer. This length of time, also called "F-P time," is measured from the P arrival to the point where the earthquake signal has decayed to nearly the background noise level. A bilinear relation used to compute duration magnitude is described in Klein, (1989)[2].

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

[3] Nakata, J., and Okubo, P., 1997, Determination of station amplitude magnitude corrections for the Hawaiian Volcano Observatory telemetered seismograph network: Data from 1992-1997: U.S. GeologicalSurvey Open-File Report 97-863, 73 p.

SEISMIC CATALOG

The emphasis in both station coverage and detailed data analysis is on the highly active south half of the Island of Hawai'i. Hundreds of earthquakes too small to locate are classified as to type [4] and counted daily. The set of well-recorded earthquakes located in the Hawai'i Island region is nearly complete above magnitude 2.0. Many smaller events are located in the densely instrumented Kilauea area. Substantial effort is made to locate earthquakes elsewhere within the Hawaiian Archipelago. Such coverage cannot be as complete as in south Hawai'i, but nearly all events above magnitude 4.0 are located with limited precision.

Data presented in the seismic catalog are in four parts: (1) Table 3 gives duration of harmonic tremor and numbers of earthquakes (most too small to locate) from several source regions around Kilauea and Mauna Loa. The source region is determined visually from signal character and pattern of arrival times at key stations. (2) Maps showing computer-located hypocenters are given in Figures 10-23. The location maps are of different scales and provide hypocenters with magnitude thresholds set at 1.0, 2.0, 3.0, and 3.5, varying according to region. (3) The list of computer locations constitutes the bulk of this summary and is given in Table 5. Each earthquake in the list is assigned a three-letter code based on its general location and depth. Figures 6-9 are maps of the regions used to assign the location codes. The latitude and longitude limits of rectangular regions are listed in Table 4. When the listed coordinates overlap, precedence is given according to Figures 6-9. (4) Table 6 re-lists the events in Table 5 for which the preferred magnitude is 3.0 or larger. This list includes many of the earthquakes felt in Hawai'i.

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

Earthquake categories are as follows:

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

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

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

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

DATE 1994	SHORT PER. CALD.	LONG PERIOD CALDERA A	B	C	30 KM	KAO. & SW RIFT	UP. EAST RIFT	LOW. EAST RIFT	SHT PER.	LONG PER.	NE RIFT	KILAUEA SHAL.	INT.	MAUNA LOA DEEP
JAN 1	1	39		6		28	58	3	2		2	1440		
2	2	26		16	1	32	69	5	8		2	1440		10
3	1	30		5		29	59	5	7	1	3	1440		
4	4	37		9		15	62	9	7	2		1440	23	9
5		36		7		25	54	5	10	1	1	1440		7
6	4	57	1			27	49	6	6		1	1440		
7	1	70		5		24	85	7	3	2	2	1440		
8	4	42		2		19	63	4	7		2	1440		
9	2	39		6		20	77	6	1		1	1440		
10	1	43		2		24	84	3	1		3	1440		
11		49		3		28	85	5	2		4	1440		9
12	1	57		2		16	70	5	4		2	1440		
13		37		1		35	135	7	1	1	1	1440		
14		42		1		24	94	6	1		1	1440		5
15	6	107				26	75	5	1		1	1440		
16	4	48				24	74	4	4	1	1	1440		
17	4	54				25	74	6			2	1440		6
18		44				24	90	7			2	1440		
19		45		1		21	84	1	3		4	1440		
20	6	43				17	61	3			1	1440		
21		33		2		20	79	4	2	1		1440		
22	2	35		3	1	34	70	2	2			1440		
23	2	26				19	71	3	3			1440		59
24	3	43			1	23	75	3	2		3	1440		
25	8	33		1		20	61	3			1	1440		
26	4	53		3	1	24	71	2	1		2	1440		
27	2	32		2		29	57	3	3		7	1440		
28	1	41				56	80	6	1		2	1440		
29		24				19	71	9			3	1440		50
30	1	39			1	31	78	6	2		2	1440		
31	1	33				37	112	10		1	2	1440		20
FEB 1		27			21	33	86	4	2			1440		
2	4	28			26	32	60	4			4	1440		35
3	1	31			16	27	70	4	2	2	1	1440		
4		23		1	5	20	72	5	2		1	1440		
5		33		4		27	100	5			1	1440	1	22
6		39		1		21	65	3				1440		
7	1	37		2		22	69	1	2	3		1440		
8	1	34		2	2	28	85	4		2	1	1440		
9		30		5	1	20	73	6		1	1	1440		
10	8	41		1		23	26	9	1			1440		
11	2	37		1		35	76	16	3	1	4	1440		
12	3	39		7	3	31	60	4	5	1		1440		3
13		30		3	2	24	56	13	1	3	3	1440		
14	3	54		4	1	35	90	2		2	3	1440		38
15		42		5		22	67	18	1	1	1	1440		
16	3	78		2	1	36	81	1			3	1440		2
17	3	154				30	77	7				1440		17
18		107		12	2	38	68	8	1	1	2	1440		
19	5	67		13		31	88	4			1	1440		
20	7	87		5		33	55	4	1	1		1440		
21	1	71		4	2	34	49	1	1	1	1	1440		
22	3	80		4		35	80	3	2		1	1440		19
23	5	79		7	1	26	60	3	1	1	3	1440		4
24	3	49		15	2	32	52	2	2	1	1	1440		

	KILAUEA SUMMIT					KILAUEA FLANK			MAUNA LOA			TREMOR (MINUTES)		
DATE 1994	SHORT PER. CALD.	LONG PERIOD CALDERA A	B	C	30 KM	KAO. & SW RIFT	UP. EAST RIFT	LOW. EAST RIFT	SHT PER.	LONG PER.	NE RIFT	KILAUEA SHAL.	INT.	MAUNA LOA DEEP
FEB25	5	53		10		24	50	1	1	6	2	1440		
26	3	44		2	2	39	56	5	1		3	1440		
27	2	71		5		13	64	1	1		3	1440		7
28	1	52		4		34	68	1		1	5	1440		
MAR 1	5	44		5		26	54	4		1	1	1440		
2	2	65		2		22	93	1	1			1440		
3		58		4		24	79	3			3	1440		
4	2	54		14	1	37	69	5			1	1440		9
5	3	29		7	1	24	58	1	1		2	1440		8
6	3	35		4		19	71	3	1	1	2	1440		32
7		35		6		33	83	4			3	1440		26
8	2	37		6		24	64	8			1	1440		
9	2	33		3	1	30	55	3			38	1440		
10	1	38		2		16	49	5		1	4	1440		
11	1	29		3	2	30	41	6			1	1440		41
12	1	25			1	13	54	5	1		2	1320		
13	1	41			3	15	33	1				1020		
14	1	62				20	15	1			4	1440		22
15	12	200			1	14	22	3			1	1440		
16	7	84		1		13	5				1	1440		
17	2	49				18	18	2		1		1440	3	
18		33		3		23	25	2	2		4	1440		35
19	4	43		9		13	39	3	4		1	1440		
20		22		6		17	36	3	1			1440		
21	3	19				21	16	2			2	1440		
22		20		1		14	37	2	1		2	1440		
23		27		14		14	40	3		2	1	1440		
24	1	40		5		14	32	3	5		3	1440		
25	1	18		5		24	50	3	1			1440		
26	1	19		11		31	28	2	2		3	1440		
27		10		8		29	47	4	1			1440		11
28		18		8	2	21	26	6	1	5	4	1440		
29	1	17		37		34	49	3			1	1440		
30		21		65	1	25	40		1	1	2	1440		4
31	1	25		61		29	43	1	3		1	1440		7
APR 1	2	46		10		25	43	2			4	1440		
2	10	54		12		28	34	4		1	1	1440		9
3		39		17		26	37	1			2	1440		4
4	4	88		24		34	41			3	1	1440		23
5	4	134		4		20	45	4	1		1	1440		
6	3	65		11	1	20	25	2	1		1	1440		14
7	1	53		12		19	42	2	2		2	1440		4
8	2	49		40		27	38	1	5	1	4	1440		
9	2	48		19	1	26	35	5	2	8	1	1440		7
10		32		23		22	45	2	4	2	8	1440		16
11	2	28		5		17	33	2	1			1440		
12		19		8		20	43	1	1		3	1440		5
13		19		5		21	50	6	2	1	1	1440		4
14		42		9		19	54		3	1	4	1440		13
15	4	35		2		16	42	4	1		1	240		
16	7	130		4		48	53	9		1	1	60		
17	13	129		2		12	62	6			1	1440		
18	7	73			2	19	92	6	1		1	1440		22
19	3	48		7	1	17	44	8			3	1440	3	
20	3	29		53		25	36	5			1	1440	6	

	KILAUEA SUMMIT					KILAUEA FLANK			MAUNA LOA			TREMOR (MINUTES)		
DATE 1994	SHORT PER. CALD.	LONG PERIOD CALDERA A	B	C	30 KM	KAO. & SW RIFT	UP. EAST RIFT	LOW. EAST RIFT	SHT PER.	LONG PER.	NE RIFT	KILAUEA SHAL.	INT.	MAUNA LOA DEEP
APR21	2	24		27		20	23	3			2	1440		
22	3	34		65		34	31	8	1		1	1440		
23	1	43		84		16	27	1	2			1440		9
24	1	21		14		25	35	5	1		3	1440		
25	2	36		9		11	27	7			2	1440		
26	1	38		44		18	48	5	1	2	6	1440		5
27	1	33	1	36	1	19	34	2		2	1	1440		
28		41		14		29	26	5	2			1440		
29	2	31		12		20	34	5			2	1440		
30	2	24		20		25	32	5			1	1440		19
MAY 1	3	21		8		21	51	4	4		1	1440		
2	8	88		16		31	40	9				1440		
3	3	38		18		11	24	14		2	1	1440		
4	6	29		19	1	31	37	1	1	1	1	1440		
5	3	32		7	2	17	33	5				1440		44
6	3	40		1		28	40	3	4	1	3	1440		4
7	1	26		11		14	44	3	4	1	4	1440		
8		46		10		22	39	2	3			1440		50
9		34		13	1	23	33	5	2	2	2	1440		37
10	5	49		8	1	21	53	10				1440		9
11	2	47		12		16	46	4				1440		
12	3	62		12	1	27	41	6	1		1	1440		
13	2	39		15		16	41	2	3		4	1440		3
14	2	44		8		13	39	5			1	1440		
15		68		198		19	36	2	4		1	1440		
16		50		142		21	35	7		1	1	1440		
17	2	38		40		18	33	6	1		7	1440		
18	4	27		7		21	40	3			1	1440		
19		57		9		20	33	4			1	1440		
20	11	52		6		16	44	3	2	2		1440		
21	7	35		5		26	44	1	3		3	1440		
22	6	68		27		18	59	7	2	1	3	1440		35
23	5	39	1	146		29	34	4	2		1	1440		90
24	3	40		9		17	37	3		1	4	1440		
25	2	34		11		13	38	6			1	1440		40
26	3	34		3		19	35	1	1	1	2	1440		
27	2	34		5		18	43	1			7	1440		
28	5	28		23		12	39	1			4	1440		
29	4	64		204		11	33	1	3			1440		
30	2	112		223		27	35		1		4	1440		
31	5	23		72		24	59	5			4	1440		4
JUN 1		41		11		21	49	6			3	1440		
2	5	39		1		14	58	3	3		6	1440	32	
3	1	26		15		34	36	1			3	1440		
4	2	25		8		27	42	3	1		1	1440		
5		26		11		20	34	2			1	1440		
6		30	1	7		10	47	11	1		3	1440		
7	1	48		4		18	42	7	1	2	2	1440		
8		51				22	37	9			1	1440		
9		54			1	19	64	8			4	1440		
10		24	17	2		8	35	11	1		4	1440		3
11	4	26		7		11	37	10	5	3	3	1440		
12		21	3	1		11	41	4	1		4	1440		
13	1	47		2		28	58	7	3	1	4	1440		7
14		46	4	1		29	40	2	1		5	1440		

	KILAUEA SUMMIT					KILAUEA FLANK			MAUNA LOA			TREMOR (MINUTES)		
DATE 1994	SHORT PER. CALD.	LONG PERIOD CALDERA A	B	C	30 KM	KAO. & SW RIFT	UP. EAST RIFT	LOW. EAST RIFT	SHT PER.	LONG PER.	NE RIFT	KILAUEA SHAL.	INT.	DEEP	MAUNA LOA
JUN15	1	52		4		25	45	8	3		5	1440			
16	3	44		3		19	60	9	3	1	2	1440			
17	1	47		10		30	43	5	2		3	1440		11	
18	1	45		9		16	48	4	4		2	1440			
19		35		4		23	37	3	5	1	4	1440	7		
20		33		1		28	34	2	4		1	1440		3	
21	6	41		1		15	75	1	2		2	1440			
22	2	60		1		30	43	1	9		1	1440			
23		52		4		22	38	5	5	1		1440		35	
24		35		2		14	41	12	2			1440		30	
25	1	44		5		20	37	8		1		1440		4	
26	2	32	1		2	10	30	5	5		2	1440			
27	7	37		1		22	23	4	8		1	1440			
28	9	34		3		13	39	7	3		1	1440			
29	1	29		3	2	18	45	2	3		1	1440			
30	2	35		4		18	42	1	2	1	5	1440		21	
JUL 1	2	36		2	1	15	45	3	2		4	1440			
2	2	39		5		26	63	3	1		2	1440			
3	1	14		11		19	42	5	5	2	1	1440			
4	4	67		5		25	38	7	4	1	2	1440			
5	1	77		37		18	54	3			5	1440			
6		27		2		17	31	3	2	1	2	1440			
7	1	29	2			25	29	8	5	1	1	1440			
8	1	34		1		15	41	4	13		1	1440		10	
9	2	37		3		13	41	2	2		1	1440			
10		26		7	1	7	22	1	1		1	1440		27	
11		29		4		11	29	5			6	1440		27	
12		29		32		9	31	1				1440		3	
13		39		93		9	35	1			4	1440		35	
14	2	23				20	33				1	1440			
15	5	142	5			22	38		1		3	1440		2	
16	1	39				19	38	4			3	1440			
17	3	47				10	57	4			2	1440			
18	2	30				21	41	1			1	1440		8	
19		35		4	2	17	26	2	4		1	1440			
20		26		1		15	29	1			3	1440			
21	10	31				23	44				4	1440			
22	3	49	1	1		20	48	12	7		2	1440			
23	3	37		30	1	17	44	2	4	6	3	1440			
24	4	47			1	41	47	2	2		4	1440			
25	7	58				25	49	6			2	1440		3	6
26	1	42				16	48	7	2		6	1440			
27	2	44				8	36	5	2	3	5	1440			
28	2	45		1		13	41	10	7	1	1	1440			
29	2	38		3		14	66	8	4		1	1440			
30	1	40		4		10	37	13	8		2	1440			
31	2	38		4		20	54	1	2	1	1	1440	3		
AUG 1	4	50		7		14	38	5	4	3	2	1440			
2	6	37		5		33	39	8	5	1		1440			
3	1	54		2		20	49	3	2	3		1440			3
4	2	54		2		17	51	2			2	1440			
5	1	43		5		24	43	3	1	4	2	1440			
6		43		3		21	41	2	3		3	1440			
7	1	40		2		21	53	6	5	3	6	1440			
8		51		4		23	35	3	6	1	5	1440			

	KILAUEA SUMMIT					KILAUEA FLANK			MAUNA LOA			TREMOR (MINUTES)		
DATE 1994	SHORT PER. CALD.	LONG PERIOD CALDERA A	B	C	30 KM	KAO. & SW RIFT	UP. EAST RIFT	LOW. EAST RIFT	SHT PER.	LONG PER.	NE RIFT	KILAUEA SHAL.	INT.	MAUNA LOA DEEP
AUG 9		23		4		27	29	5	3	1	1	1440		34
10	1	46		7		19	39	6	6	1	5	1440		
11		47		4		17	26	3	2	1	1	1440		
12	2	44		2		11	24	6				1440		
13		85		7		15	32	3				1440		
14	2	78	1	13		11	37	3				1440		
15	1	105		597	1	16	59	3	3		1	1440		
16	1	61		330	1	13	47	9	1		8	1440		
17		48	1	75		10	21	2	2		4	1440		
18	2	29		34		12	23	2			1	1440		
19		19		52		15	43	4			1	1440	7	
20		55		86		20	34	6	1		1	1440		
21		37		92		23	24	5	3		1	1440		
22	1	34		103		19	26	2	2	1	2	1440	11	
23		21		39		18	35	6			8	1440		
24		35		234		22	42	3			3	1440		
25		22		309		13	56	5		2		1440	45	
26		36		228		12	39	5	1	2	2	1440	71	
27		25		88		9	54	13	4		6	1440		11
28	2	33		136		12	61	2	4	1	3	1440	7	
29	3	27		164		17	61	2	4			1440		
30	2	28		146		9	43	1	3		2	1440		4
31	3	50		221		13	52	9	1		7	1440		
SEP 1	2	35	1	158		10	48	3	2	2		1440		63
2	4	47		98		21	84	25			1	1440		18
3	5	39		103		19	38	12	6		5	1440		
4	4	36		65		28	55	3	3	1		1440		
5	1	48		63		10	73	3	2		3	1440		
6	8	67		5		22	56	13	3		1	1440		
7	4	129		24		13	50	12	3	1	3	1440		
8	4	65		3		6	44	7	3		3	1440		
9	1	33		15	1	12	42	8	2		2	1440		
10		64	1	1		10	37	7	6	1	5	1440		
11		26		9		10	36	10			3	1440		
12		45	1	30		12	63	5			2	1440		
13	4	37		9	1	20	42	4	1	3	5	1440		
14	4	45		23	1	9	42	1	3		2	1440		
15		35				15	40	6	5		5	1440		
16	2	29		42			45	1		17	7	1440		8
17	6	20		62		10	43	4	1	1	1	1440		
18	3	9		95		4	24		1		2	1440		
19		86	1	41	2	16	49	6	6	1	2	1440		
20	1	88		9		11	49	8	2			1440		
21	4	101		21	1	16	64	7	6		4	1440		
22	7	115		138	1	23	55	5	9	1	3	1440		
23	4	128		93		28	70	2	6		2	1440		
24	4	119		122		17	51	2	6		2	1440	11	
25	4	97		146		17	71	4	5			1440		
26	2	85		39		24	51	5	8	2	7	1440		
27	4	89		28		23	49	9	7		6	1440		14
28	1	88		18		23	57	17	7			1440		
29	1	52	3	15		24	62	5	1		4	1440		6
30	2	34		19		18	23	7		2	5	1440		
OCT 1		18	1	3		15	34	6	10	1	6	1440		
2	2	13				7	29	2	5	2	1	1440		

	KILAUEA SUMMIT					KILAUEA FLANK			MAUNA LOA			TREMOR (MINUTES)			
DATE 1994	SHORT PER. CALD.	LONG PERIOD CALDERA A	B	C	30 KM	KAO. & SW RIFT	UP. EAST RIFT	LOW. EAST RIFT	SHT PER.	LONG PER.	NE RIFT	KILAUEA SHAL.	INT.	DEEP	MAUNA LOA
OCT 3	9	17		1			33	8	5	6	1	1440			44
4	7	29		7		13	45	5	1	1	2	1440			
5		36		2		7	48	2	2	3	5	120			
6	5	126		16		10	111	2		6	1	1020			
7	12	37		42		17	66	2	1	5	3	1440			2
8	4	21		30		10	63	6	5	2	7	1440			4
9		8		13		6	52		2		2	1440			2
10*	2	19		8		7	37	1	3	1	5	1440	18		
11*	2	14			1	7	27	2	1	2	5	1440			
12		28		1		13	34	6	1	2	3	1440			
13	1	30		4	1	15	36	3	3	1	1	1440		2	
14		39	1	10		19	39	3	4	2	1	1440			
15	1	29	1	19		8	61	2	7		1	1440		4	
16	1	40		12		15	39	10	3	3	1	1440			
17		34		5		8	53	5	3	2		1440			
18	1	22		3	1	15	38	9	2	1	3	1440		13	
19	5	31		7		27	32	6	2		3	1440			
20		43		18		23	48	16	2	1	2	1440	6		3
21	4	29	1	5		13	42	11	1		3	1440			
22	4	37		22		10	40	6	2		1	1440			
23	1	23	2	19		19	43	1	4	1	2	1440			
24	1	69		19		14	45	8	2		2	840		102	
25	2	114	1	1		24	74	5	1	1				23	
26	1	70		8		20	88	5	8		4	1140			
27	5	99		24		15	43	5			1	1440			
28	3	43		6		18	60	6	2		2	1440			
29	3	46		20		18	62	4	4		1	1440			
30	1	77	1	12		14	58	7	4	4	4	1440			
31		30		48		15	59	10	4		4	1440		13	3
NOV 1		24		52		12	39	16			2	1440			
2		25		23		19	32	7	2		3	1440			
3		24		6		14	58	8	1		3	1440			
4		30		31		23	50	5	17		4	1440		4	
5		16		7		24	55	5	16	1	7	1440			
6	1	28		16		20	57	11	3		1	1440		8	
7		25		6		16	43	5	6	1		1440			
8	1	24		37		15	73	4	4		2	1440			
9	2	26		28		12	67	6	3	1	7	1440			
10	3	26		4		18	76	5	3			1440			
11	3	19		3		4	53	2	17			1440			
12	2	30		26		8	62	1	15			1440			
13		19		16		7	59		13	2	2	1440			
14		30	2	4		11	54	3	10		3	1440		12	
15		31		15		13	61	10	8		5	1440			
16	1	46	2	4		23	47	4	6		1	1440			
17		43		6		13	69	10	7		5	1440			2
18	3	65	1	7		22	25	4	1			1440			
19	1	56	1	8		7	28	3	4	2	1	1440			
20	2	67	1	7		17	38	7	3	1	2	1440			
21	2	34		52		20	130	9	3	2	1	1440		37	
22	3	25	1	39		18	79	10	4	1	1	1440	105		
23	1	32		4		31	61	7	7		3	1440			
24	2	54		4	1	18	69	2	2		2	1440			
25	16	121	1	2		14	85	5	3	1		1440			
26	7	112		4		10	69	3	2	5	2	1440			

	KILAUEA SUMMIT					KILAUEA FLANK			MAUNA LOA			TREMOR (MINUTES)		
DATE 1994	SHORT PER. CALD.	LONG PERIOD CALDERA A	B	C	30 KM	KAO. & SW RIFT	UP. EAST RIFT	LOW. EAST RIFT	SHT PER.	LONG PER.	NE RIFT	KILAUEA SHAL.	INT.	MAUNA LOA DEEP
NOV27	5	39		7		22	64	3	9	1	1	1440		
28	5	31		8	1	16	80	4	7		3	1440		18
29	4	761		39		10	36	1	5			150		
30	3	671		17		16	68	2	3	2	2	720	16	
DEC 1		243		3		8	53	4			2	1440		
2		104		22		15	36	2	1		3	1440		
3	2	51		6		15	53	7	2		4	1440		
4	4	44		5		20	30	4	6			1440		5
5	8	37		6		16	42	6	1		1	1440		
6	4	22	1	22		11	63	13	5	1	1	1440		20 3
7		30		17		28	41	5	3		3	1440		
8		23	1	6		25	36	3	4		1	1440		4
9		19		8		11	26	4			4	1440		
10	3	20		7		15	37	5			1	1440		
11	1	21		6		21	29	2				1440		
12	3	20		3		12	39	6	1		1	1440		
13	1	17		3		20	33	4	2		1	1440		10
14	1	24		8		20	33	2	3		1	1440		12
15	5	29		7	1	31	45	3	3	3	3	1440		5
16		36	1	4		27	52	21	10		3	1440		10
17		30		7		19	42	6	1			1440	3	
18	3	28		5		15	34	3	2		1	1440		
19		29		6		21	25	8	5		2	1440	5	
20	4	32		13		24	43	5	3		2	1440		
21	2	29		40		24	28	6	2		1	1440		
22		23		75		25	31	3	4	2	3	1440		
23		35		116		22	51	9	8		2	1440		5
24	3	31		65		25	50	5	4		1	1440		3
25		29	3	31		14	46	7	2		1	1440		
26	1	78		49	1	26	46	7	12	1		1440		
27	4	41	2	33		31	60	10	1		1	1440		12
28	1	39		31		20	42	17	1		2	1440		
29		55		17		27	63	9	9		4	1440		
30		39		21	1	20	43	4	8	1	2	1440		
31		28		17		25	39	2	2		2	1440		

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

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

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

—Shallow:

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

—Intermediate depth:

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

—Deep:

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

—Outer regions, all depths:

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

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

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

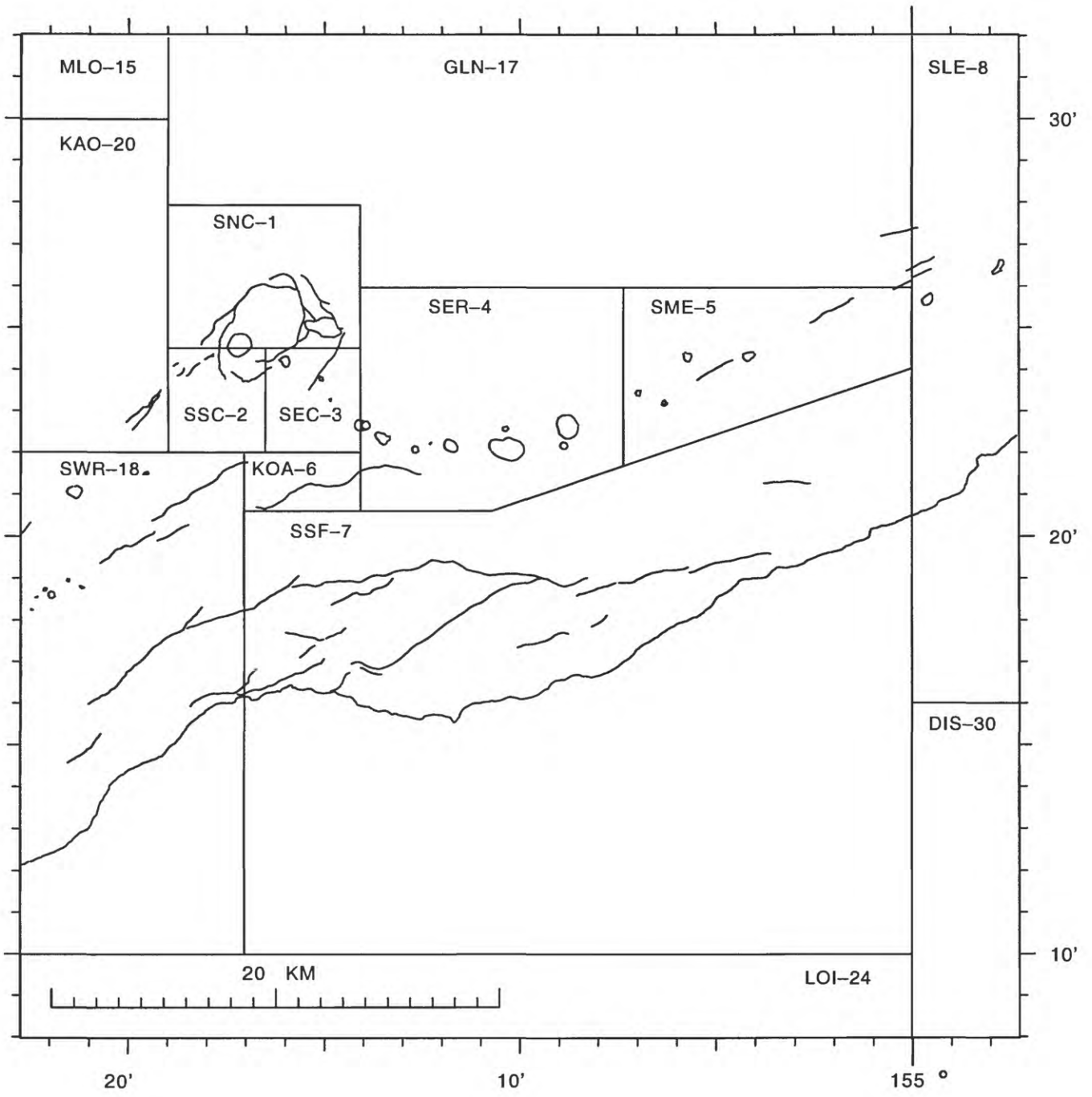


Figure 6. Earthquake classification, shallow (0-5 km deep), for Kilauea and the east flank of Mauna Loa.

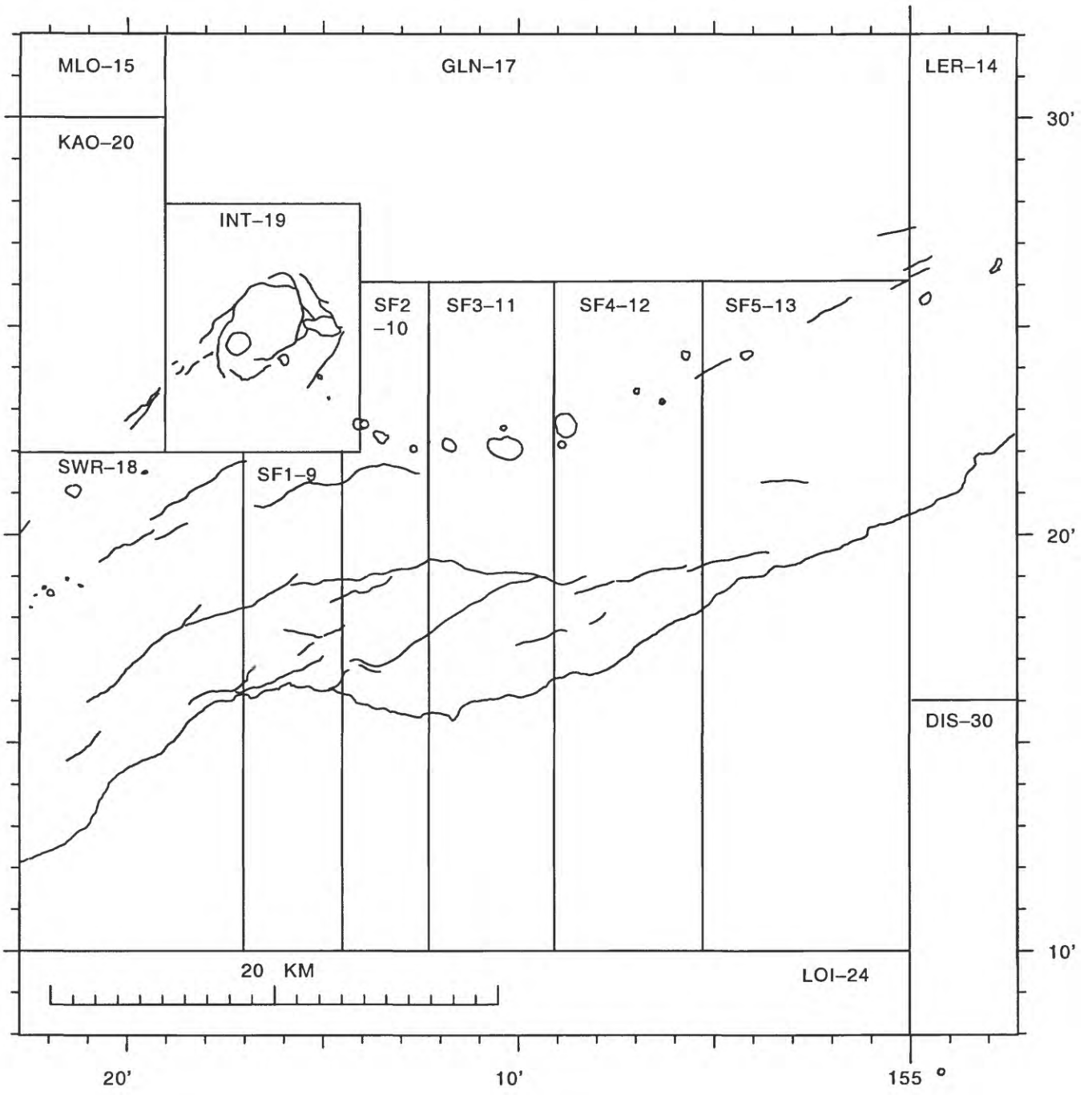


Figure 7. Earthquake classification, intermediate (5.1-13 km deep), for Kilauea and the east flank of Mauna Loa.

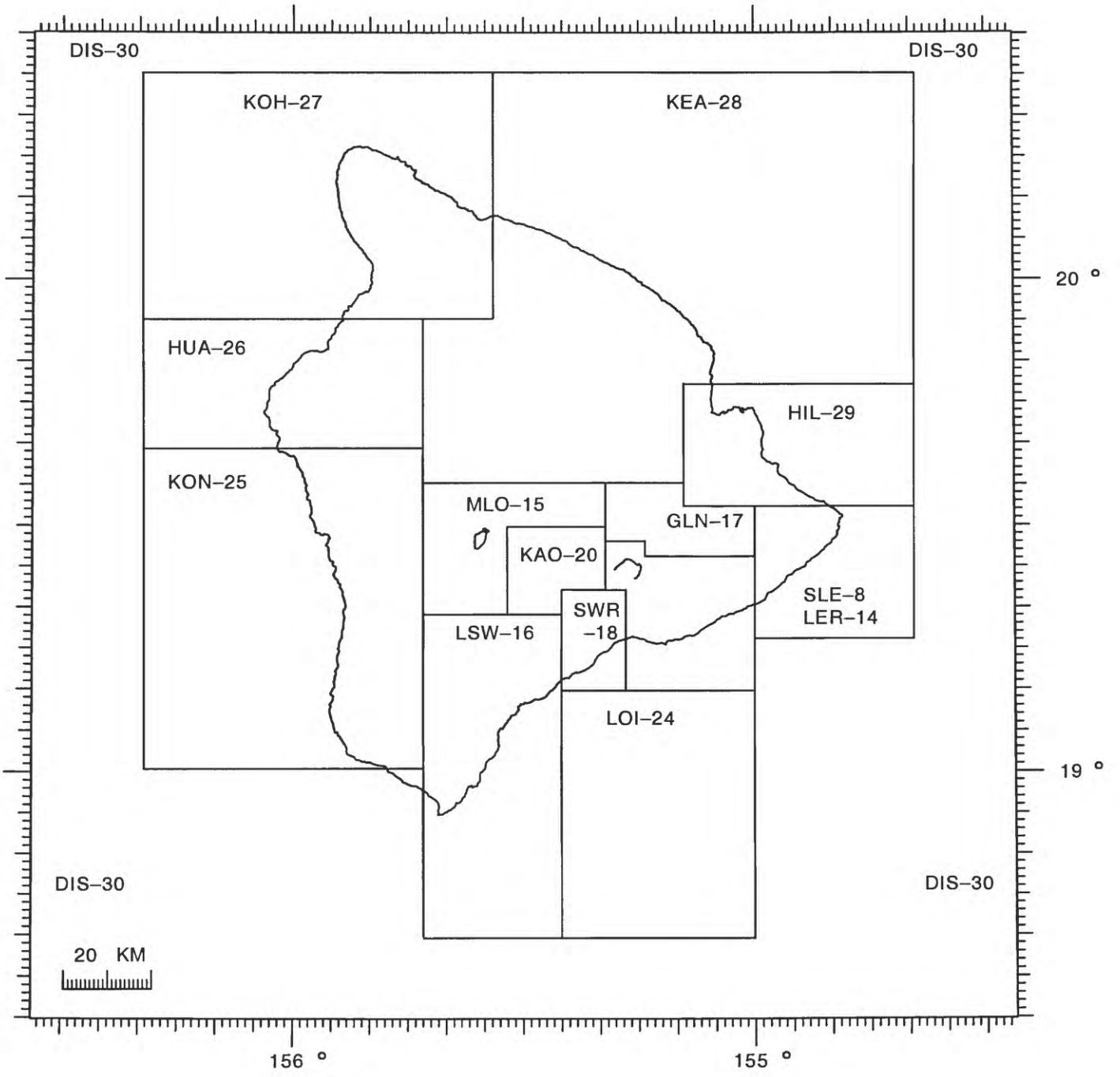


Figure 8. Earthquake classification, crustal (0-13 km deep), for the Island of Hawai'i.

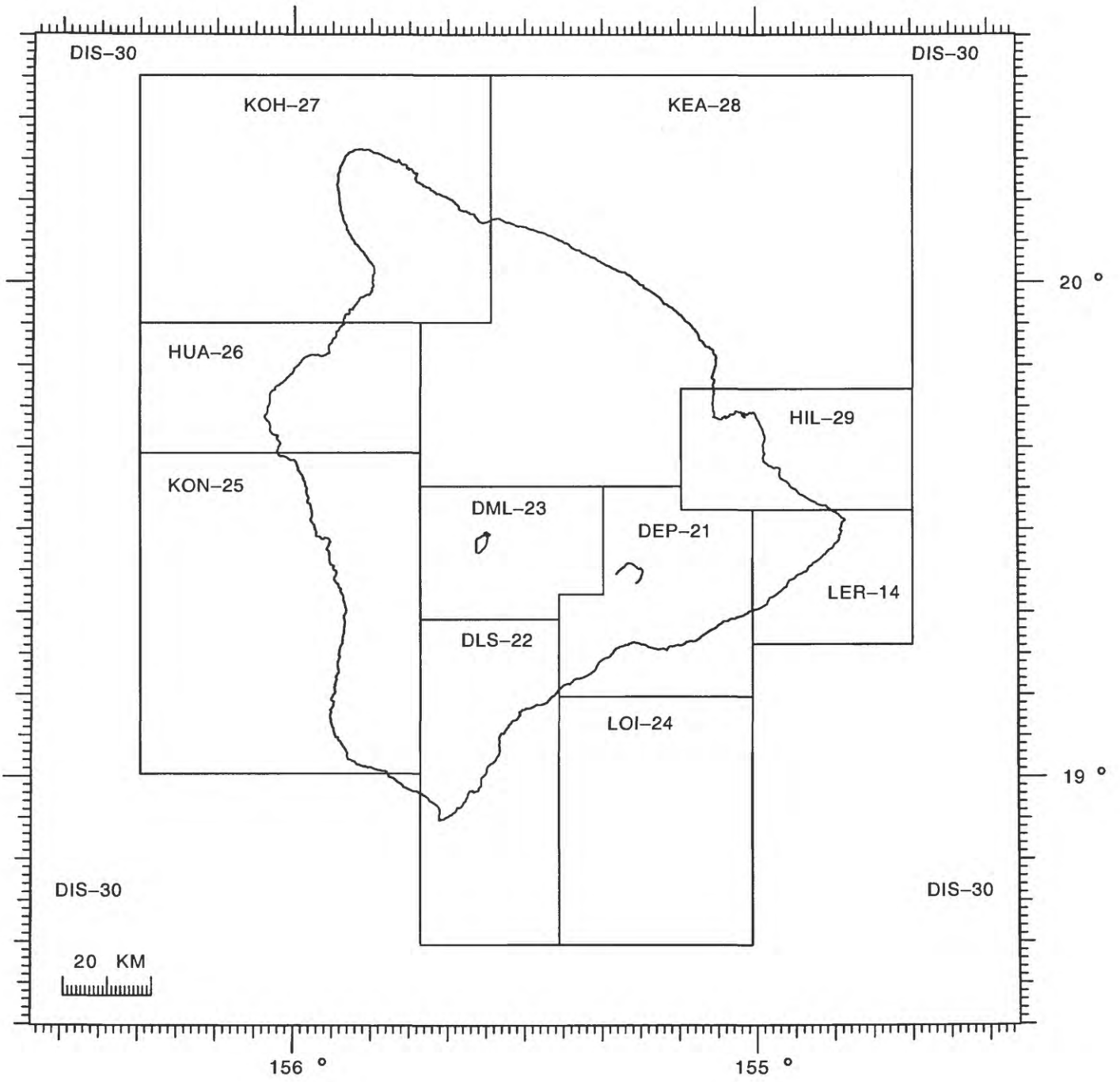


Figure 9. Earthquake classification, deep (greater than 13 km deep), for the Island of Hawai'i.

Figure 10. 1994 earthquake locations, Hawaiian Islands,
0–60 km depth, M>=3.5.

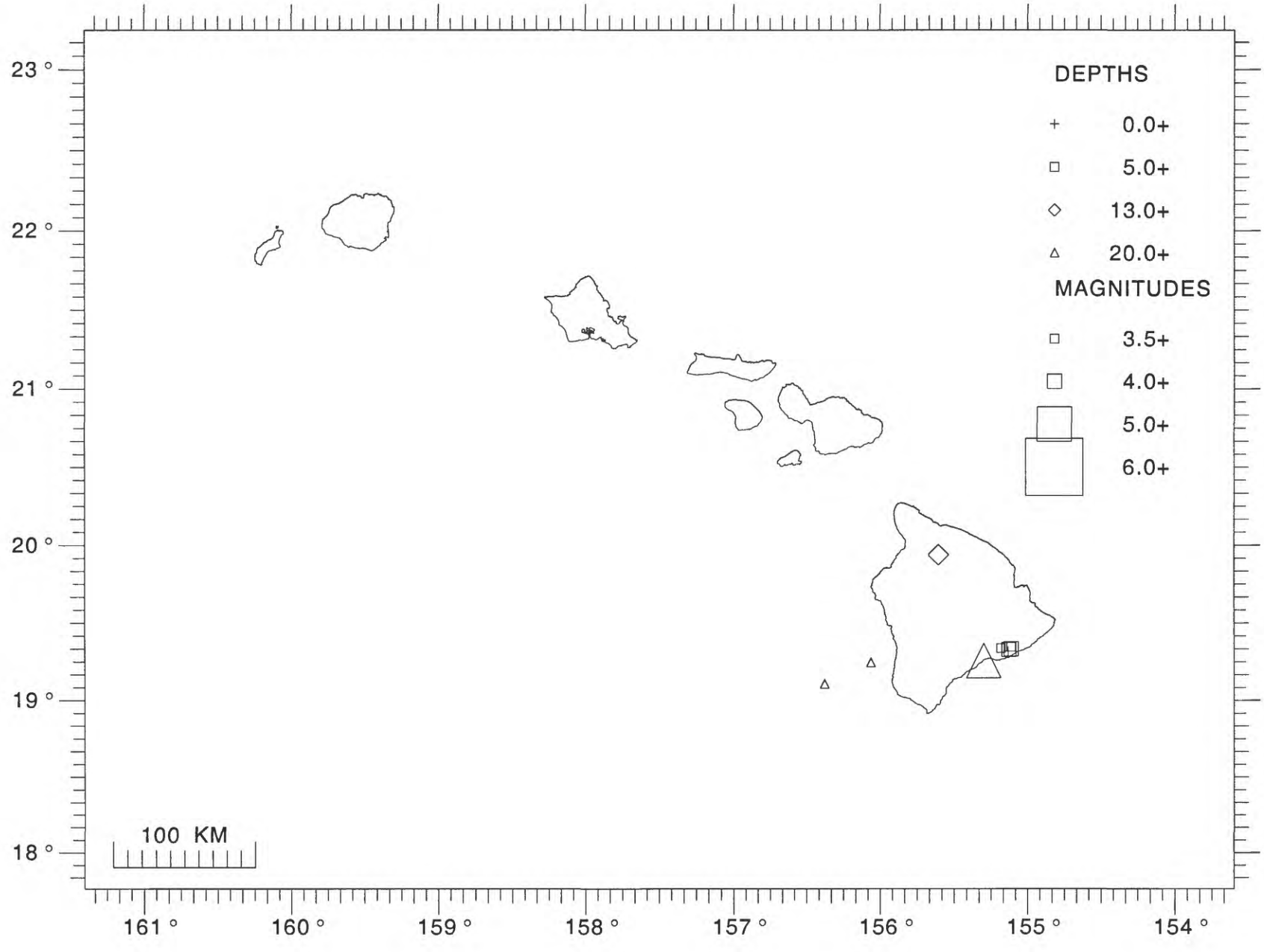


Figure 11. 1994 earthquake locations, Hawai'i Island,
0–60 km depth, M>=3.0.

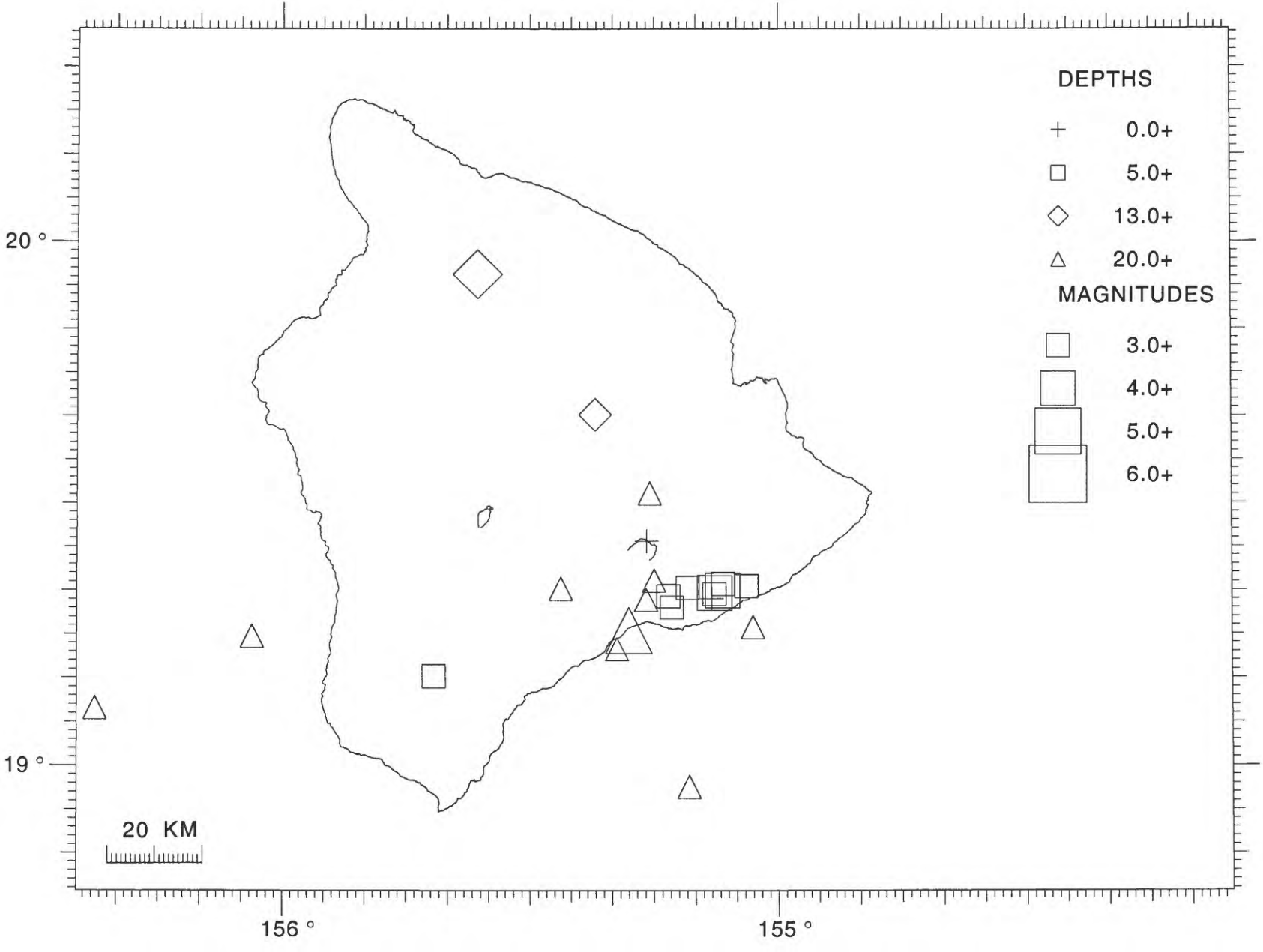
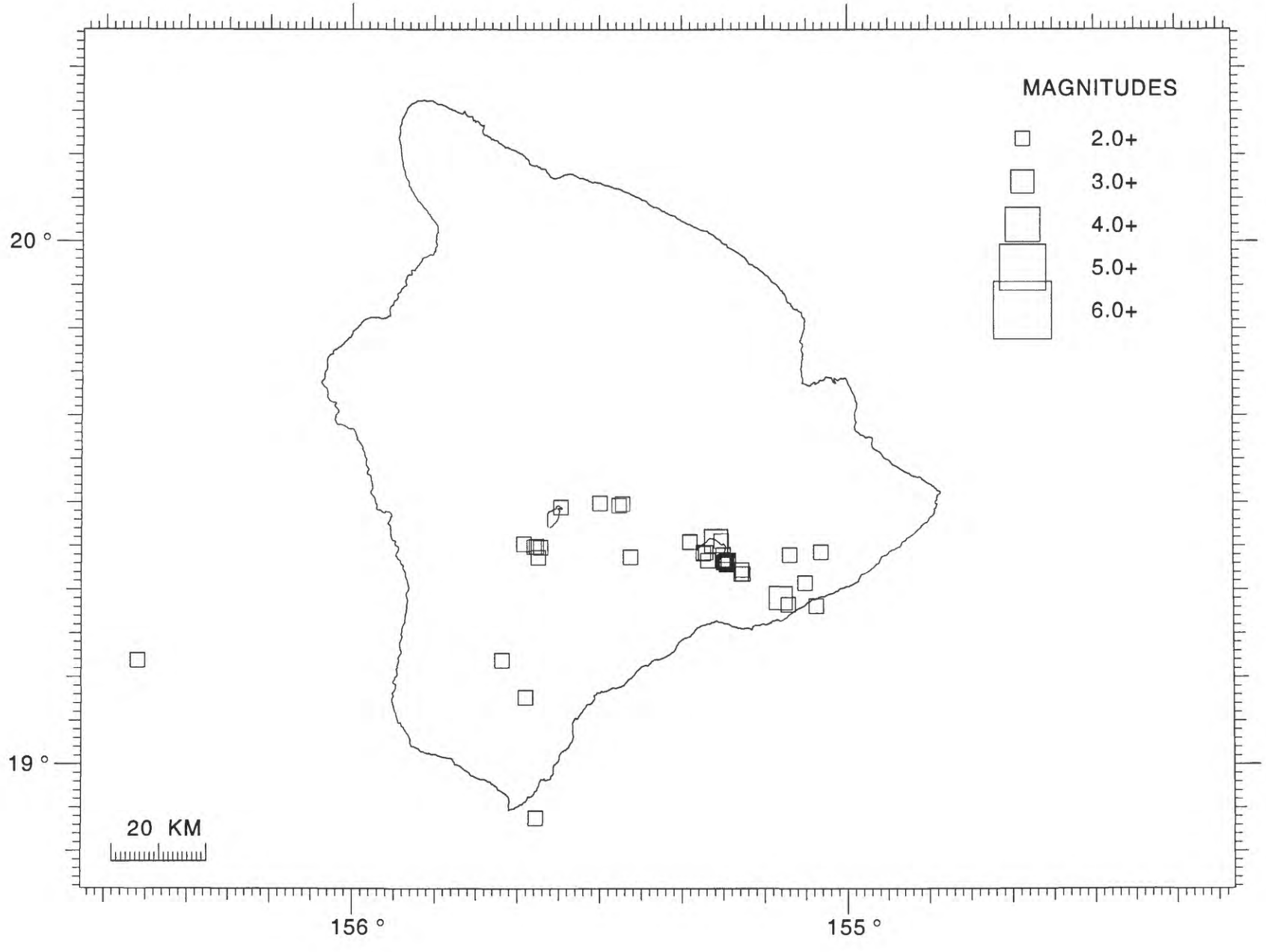


Figure 12. 1994 earthquake locations, Hawai'i Island, shallow (0–5.0 km depth), M>=2.0.



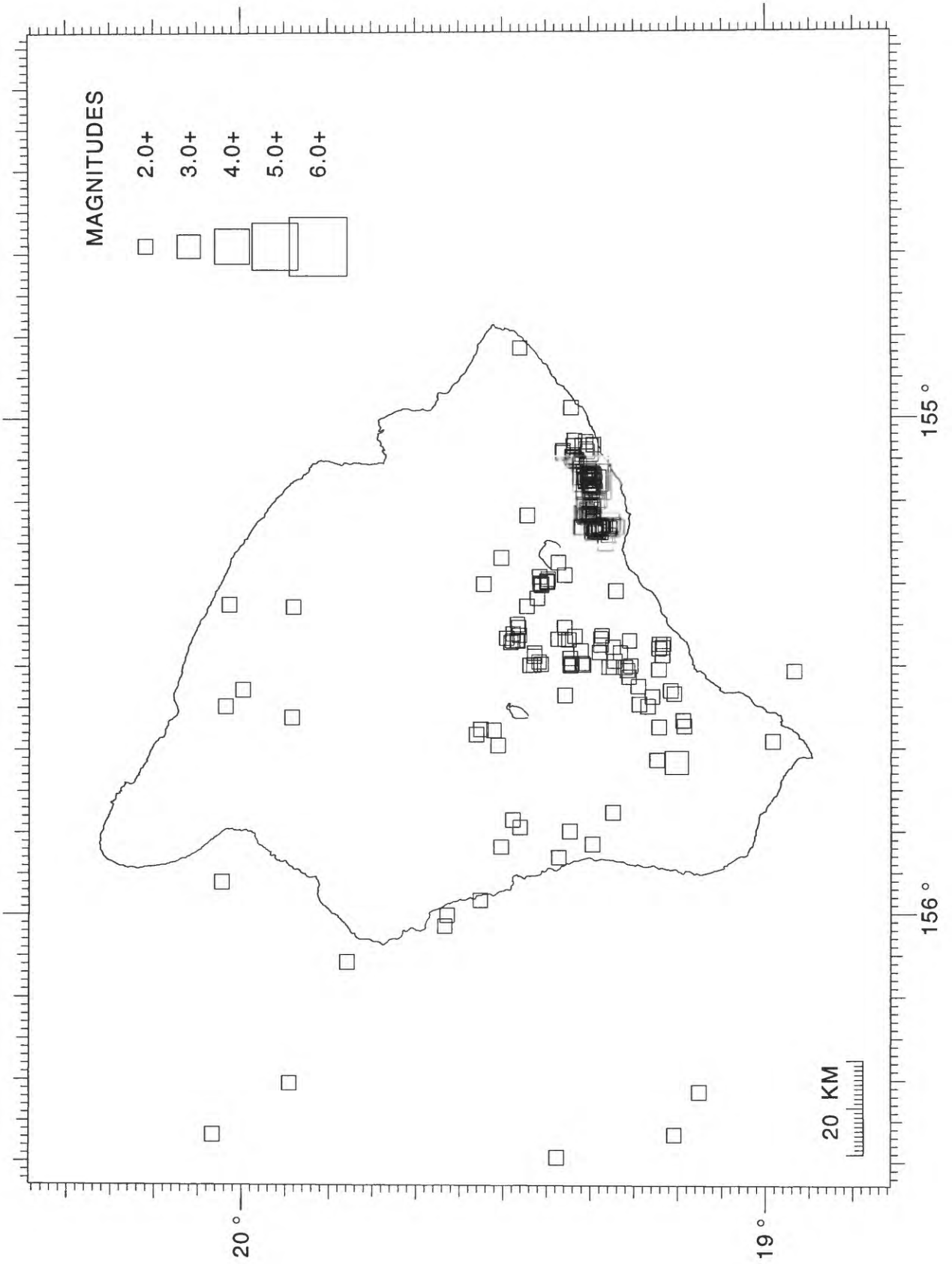


Figure 13. 1994 earthquake locations, Hawai'i Island, intermediate (5.1–13.0 km depth), M>=2.0.

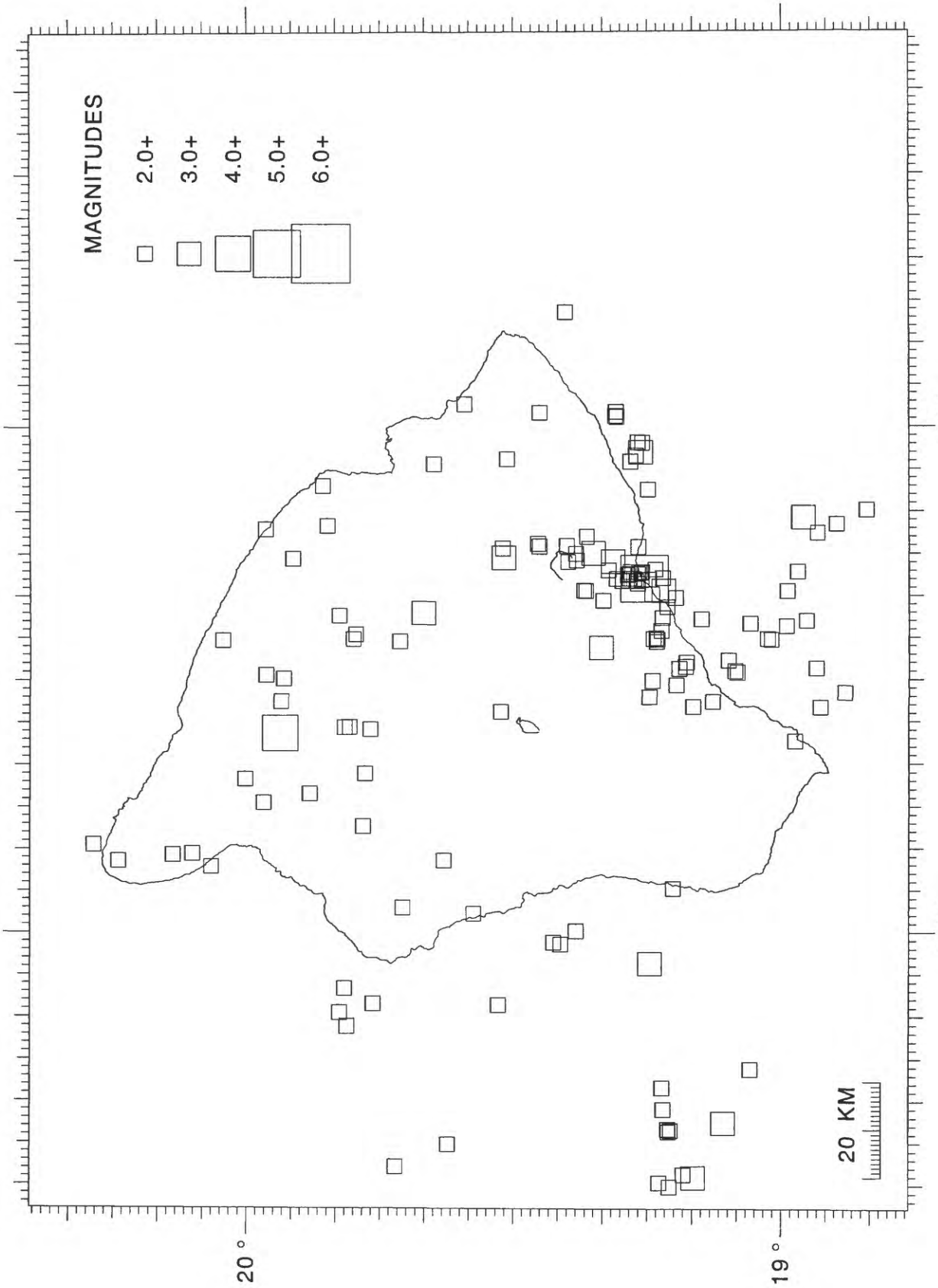


Figure 14. 1994 earthquake locations, Hawai'i Island, deep (13.1–60.0 km depth), M>=2.0.

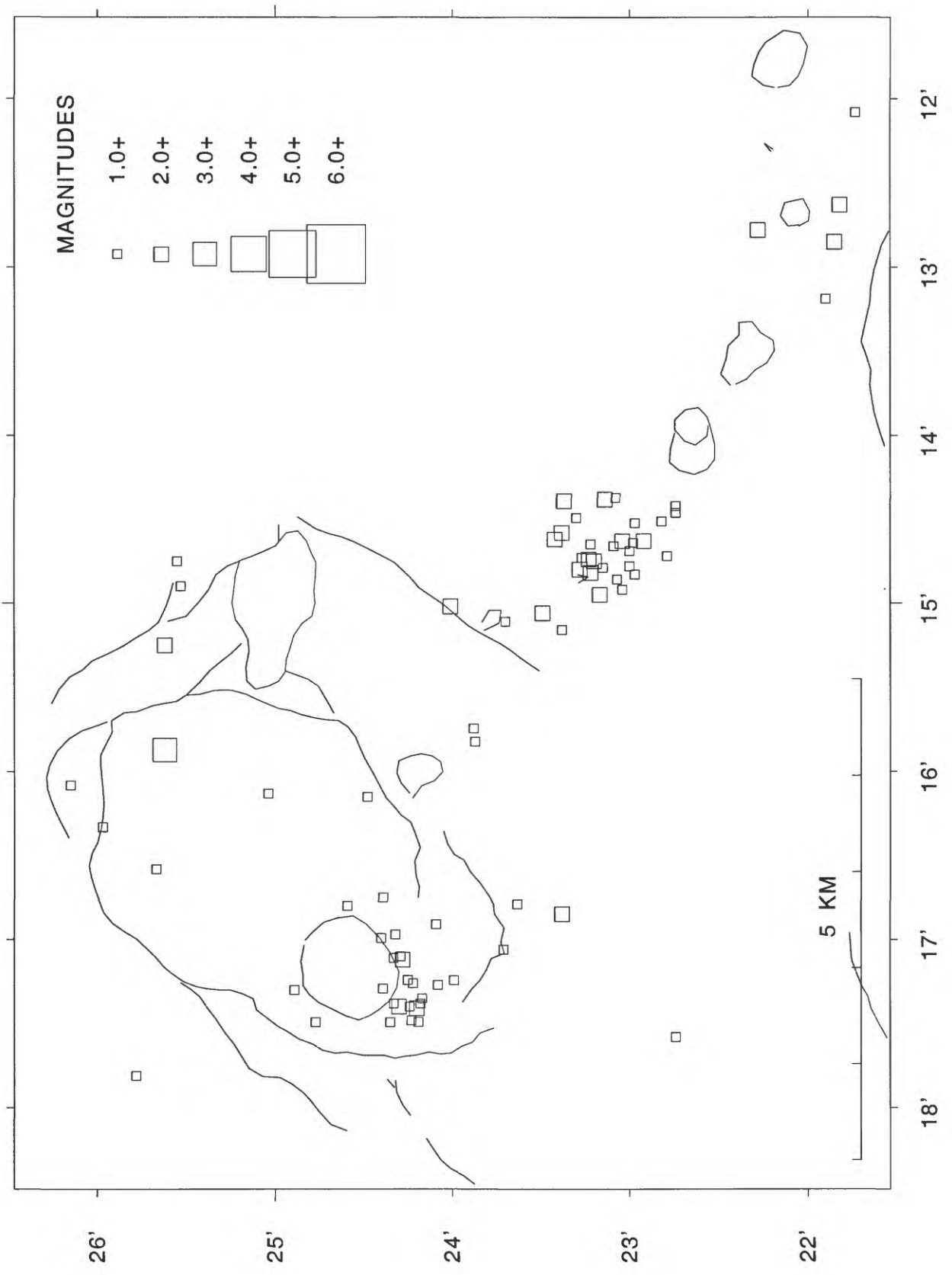


Figure 15. 1994 earthquake locations, Kilauea summit, shallow (0–5.0 km depth), M>=1.0.

Figure 16. 1994 earthquake locations, Kilauea summit, intermediate (5.1–13.0 km depth), M>=1.0.

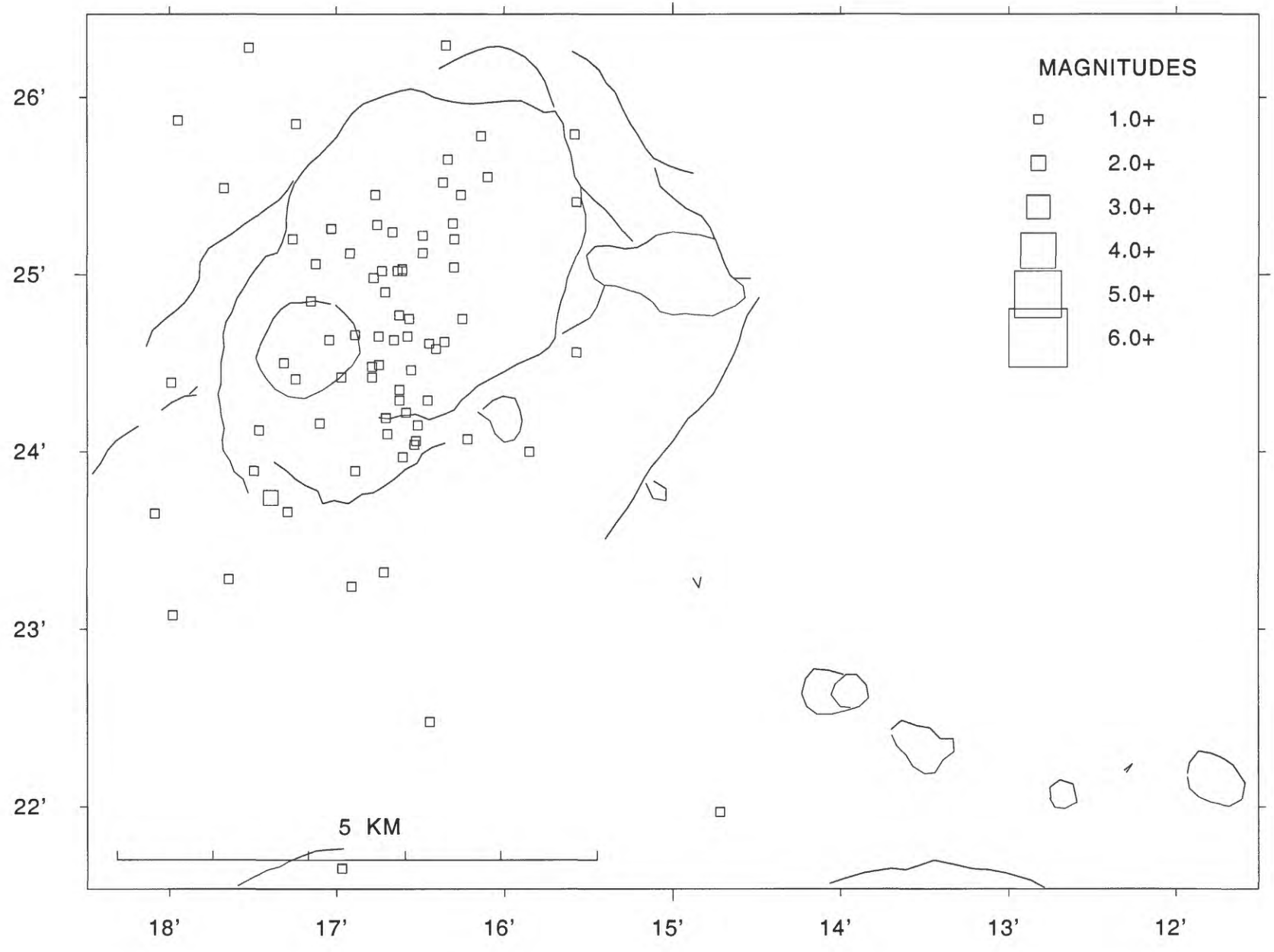


Figure 17. 1994 earthquake locations, Kilauea summit, deep (13.1–60.0 km depth), M>=1.0.

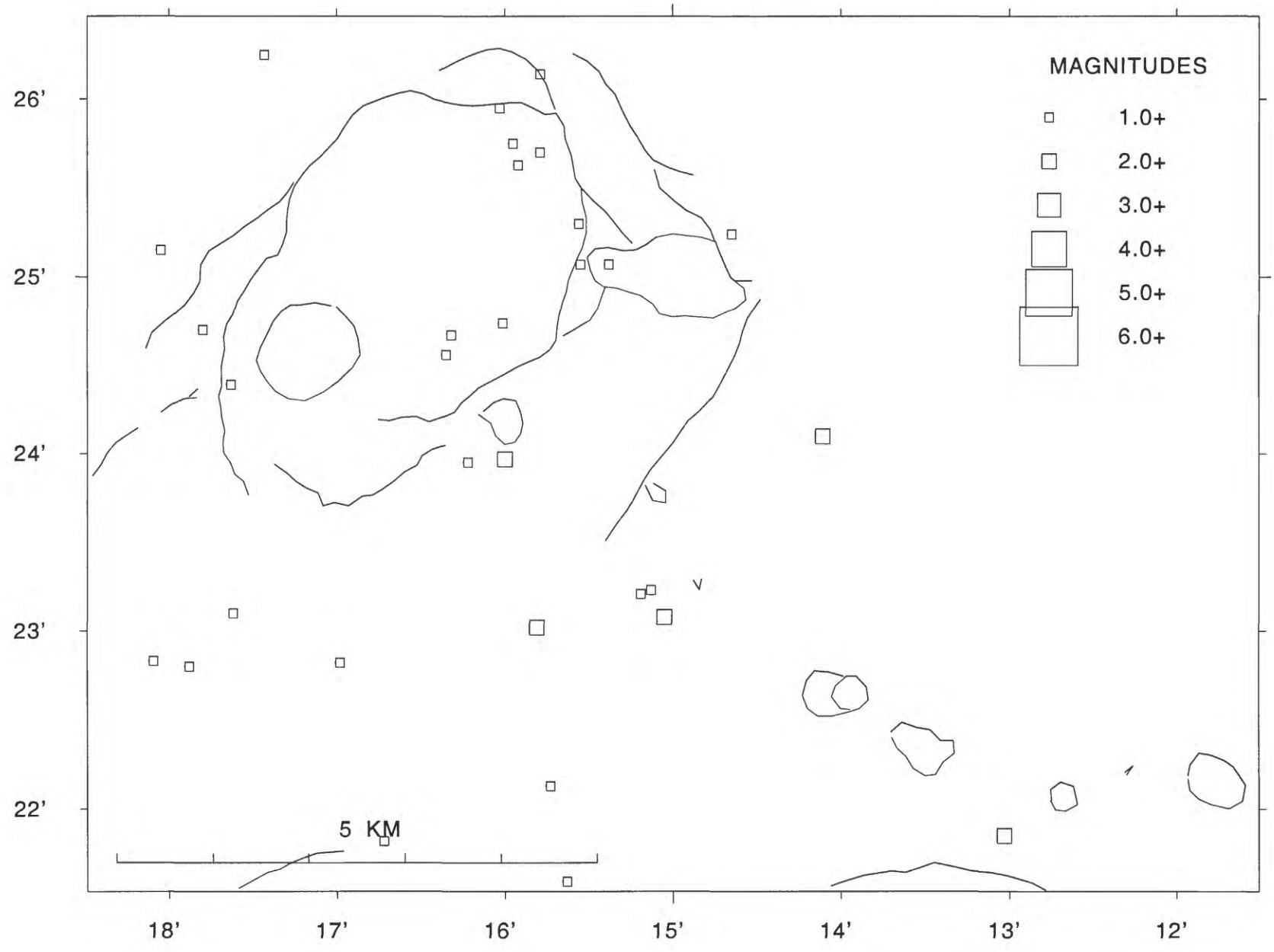
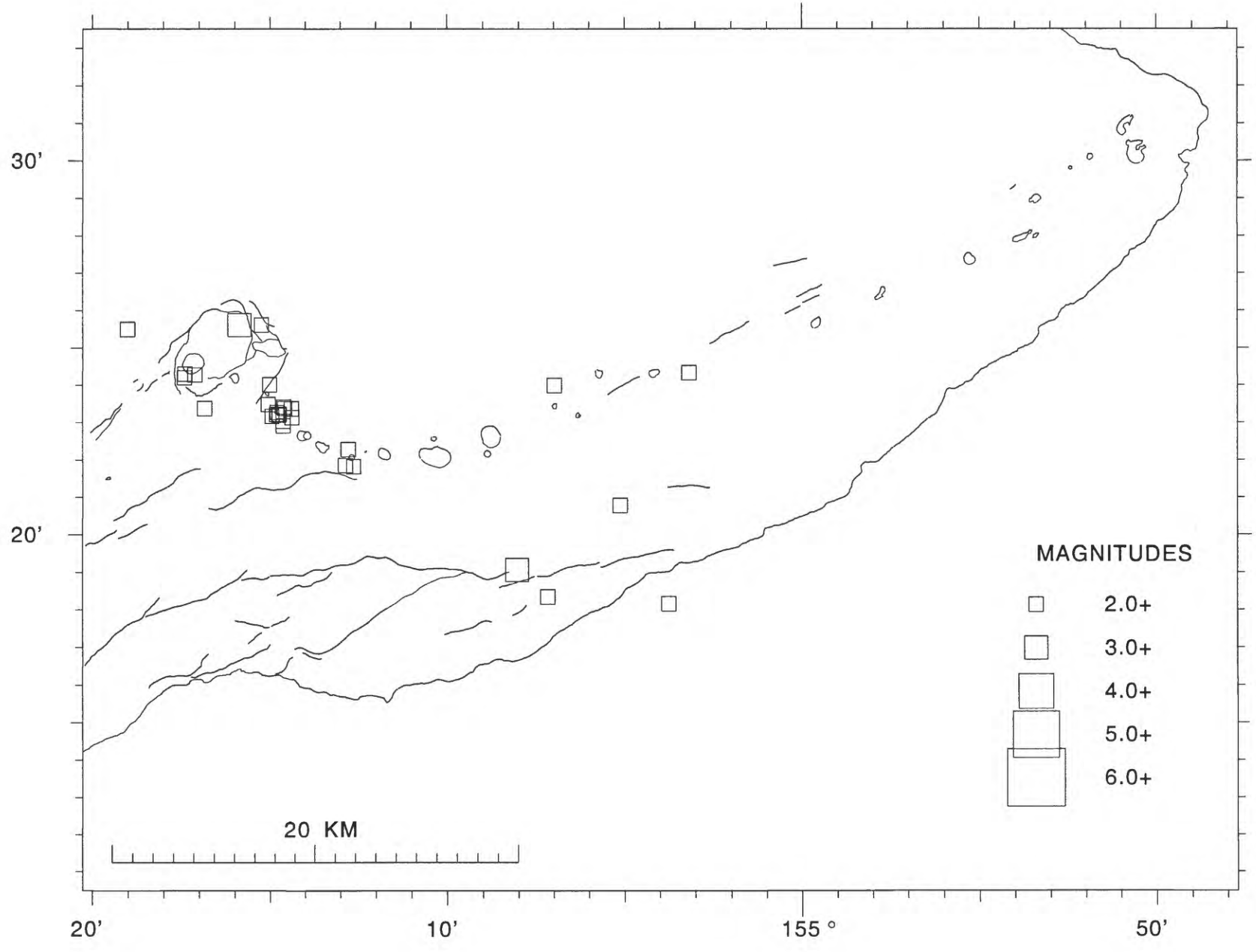


Figure 18. 1994 earthquake locations, Kilauea south flank, shallow (0–5.0 km depth), M>=2.0.



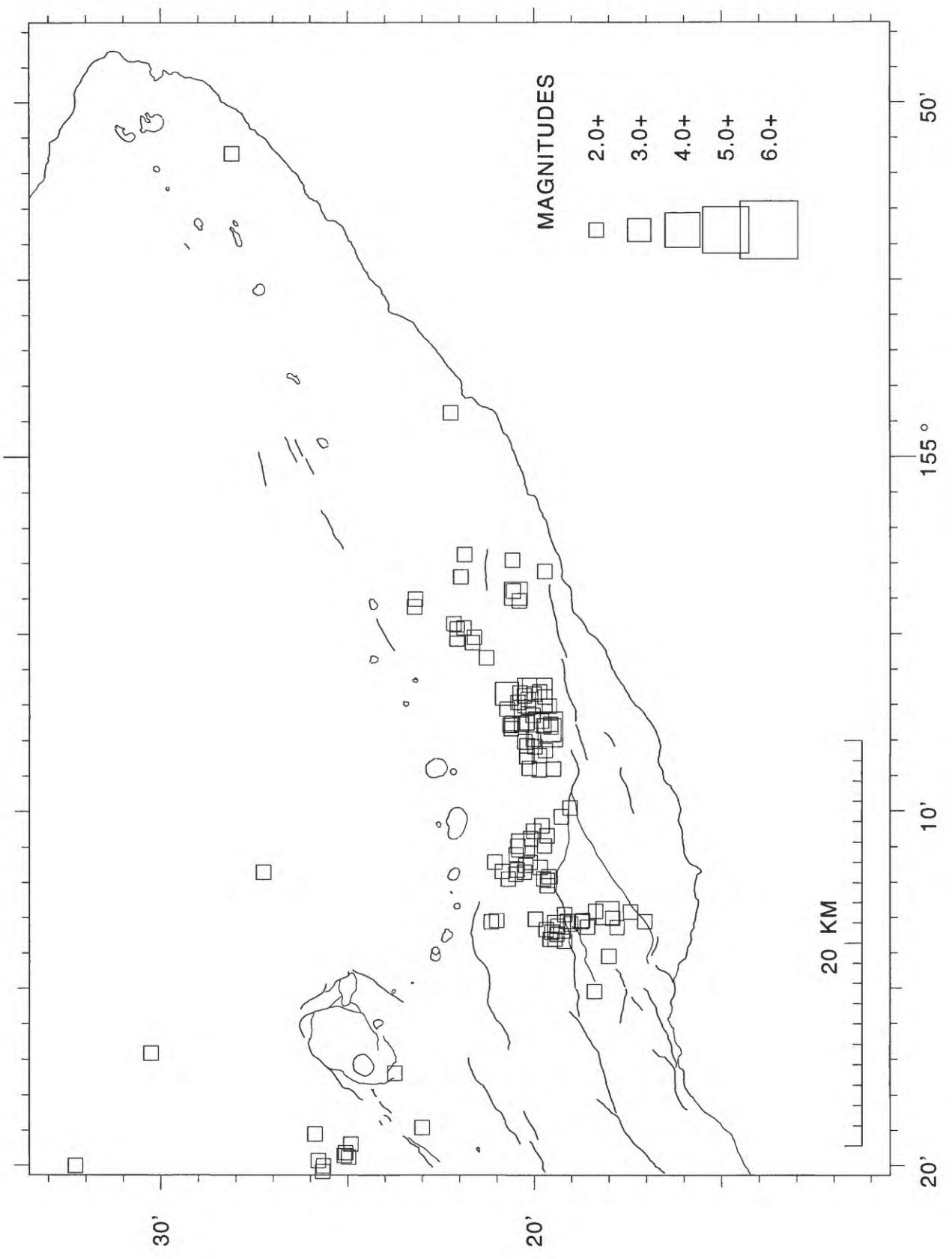


Figure 19. 1994 earthquake locations, Kilauea south flank, intermediate (5.1–13.0 km depth), M>=2.0.

Figure 20. 1994 earthquake locations, Kilauea south flank, deep (13.1–60.0 km depth), M>=2.0.

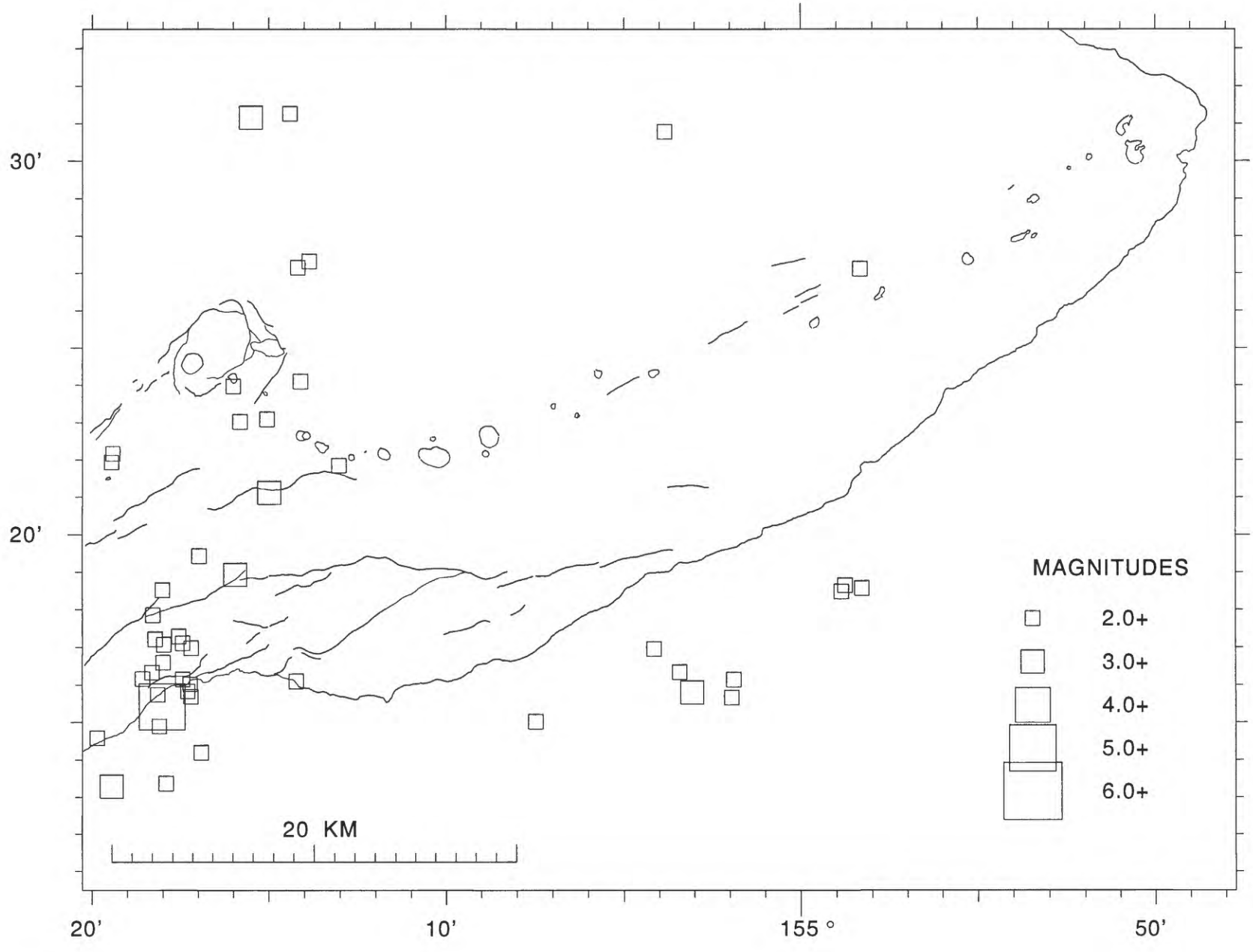


Figure 21. 1994 earthquake locations, Mauna Loa summit, shallow (0–5.0 km depth), M>=2.0.

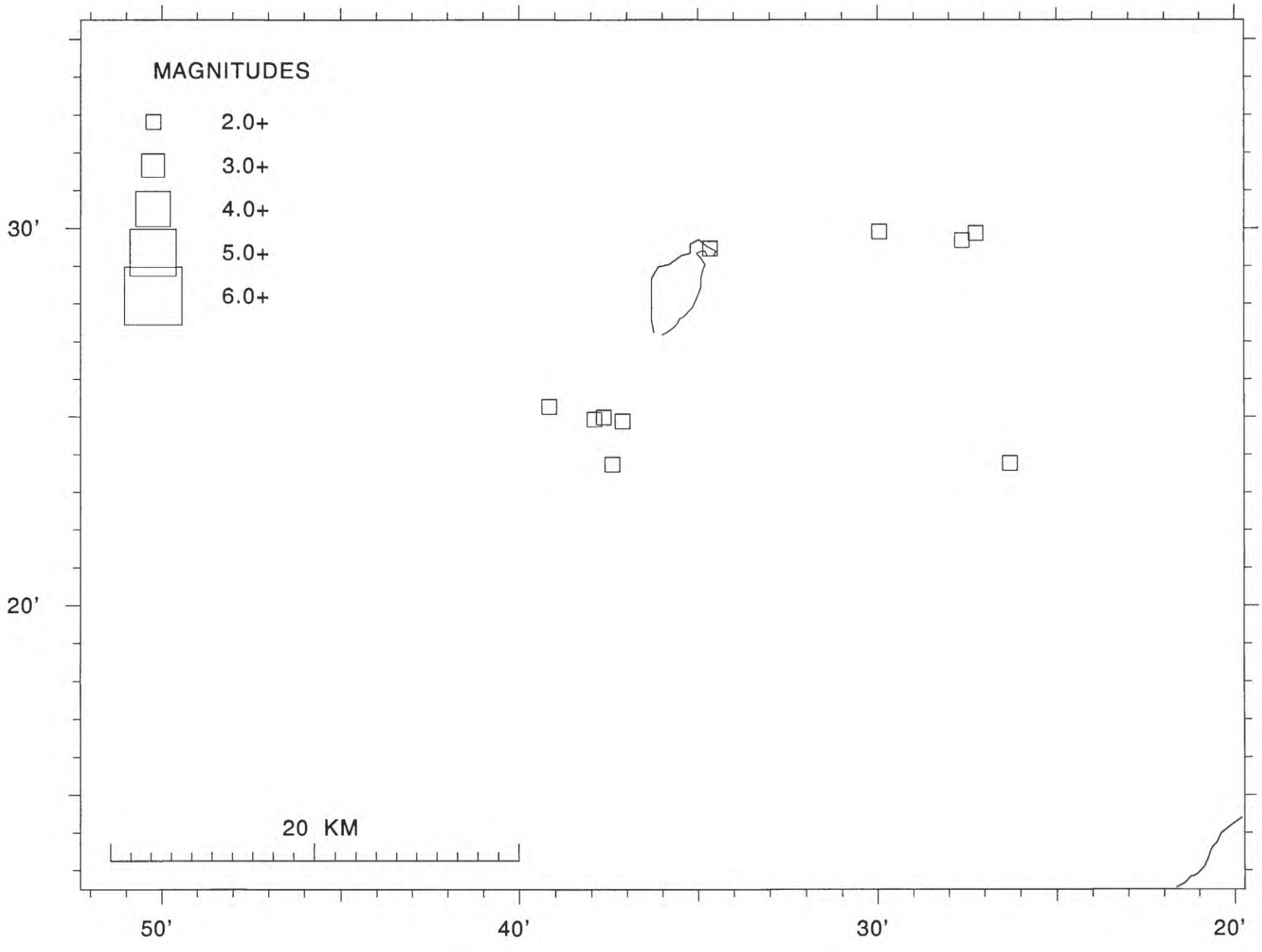


Figure 22. 1994 earthquake locations, Mauna Loa summit, intermediate (5.1–13.0 km depth), M>=2.0.

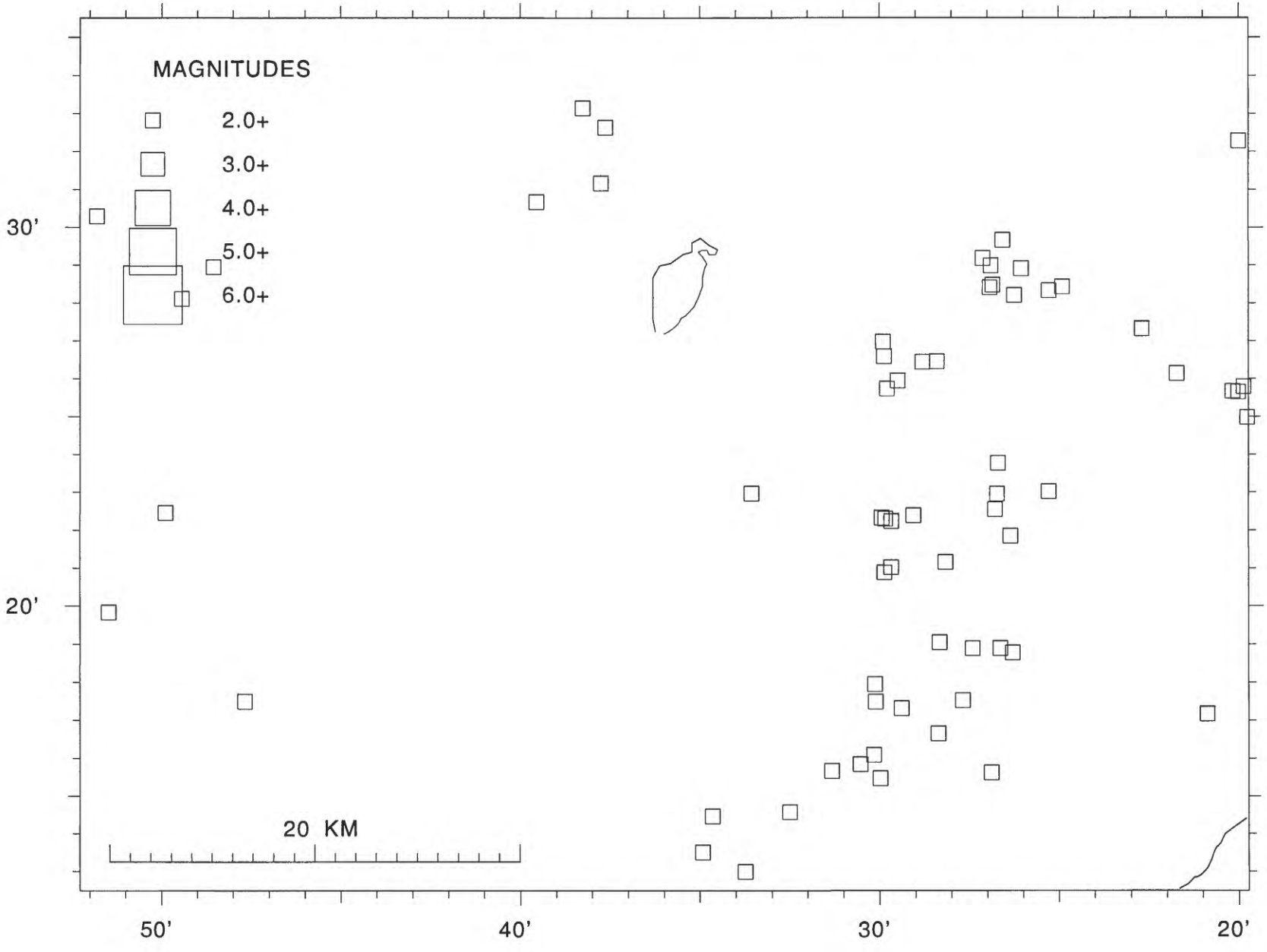


Figure 23. 1994 earthquake locations, Mauna Loa summit, deep (13.1–60.0 km depth), M>=2.0.

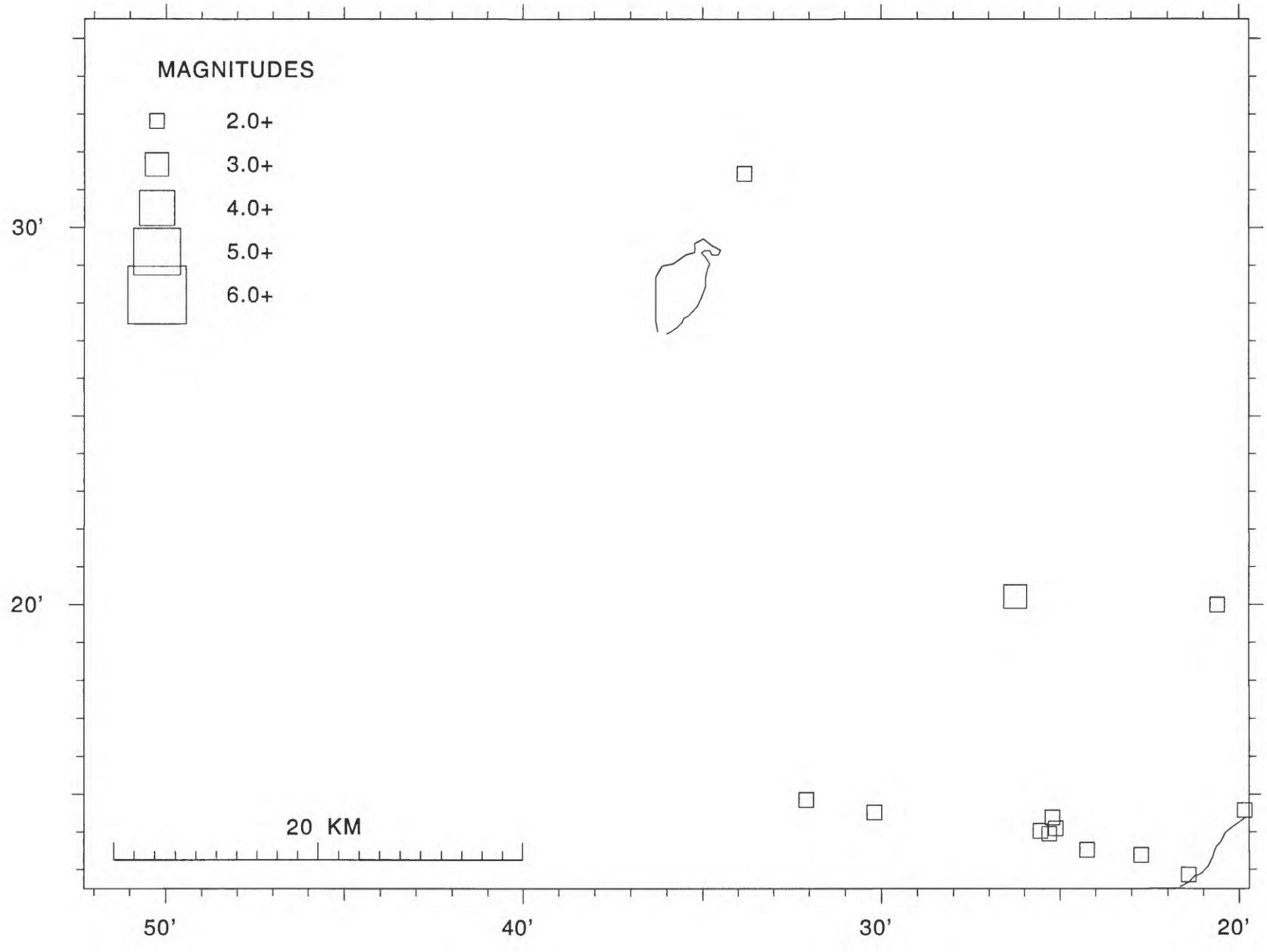


Table 5 is a chronological list of selected events successfully located during 1994. For each event, the following data are presented:

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

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

DEPTH - Depth of focus in kilometers.

NRD - Number of P & S readings with final weights > 0.1.

NS - Number of S. readings with final weights > 0.1

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

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

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

LOC REMKS - Remarks, three-letter code for geographic location of events. See Figures 6-9 for location of mnemonic code. Additional one-letter codes have the following meanings:

F felt

L long-period character

T associated with harmonic tremor

B quarry or other blast

* the location program had a convergence problem, which usually means that the depth may be unreliable.

\- the depth was held fixed.

PREF MAG – The preferred magnitude chosen from the available magnitudes.
Preference set as: X-amplitude magnitude, if none
D-Develocorder duration magnitude, if none
U-external magnitude, usually calculated from drum records.

NRD – The total weight of amplitude magnitude readings from contributing stations.

AZ GAP - Largest azimuthal gap in degrees between azimuthally adjacent stations.

MIN DS – Distance to the nearest station, in kilometers.

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

Table 5.

YR	MON	DA	ORIGIN TIME HRMN	SEC	LAT DEG	N MIN	LON DEG	W MIN	DEPTH KM	N RD	N S	RMS SEC	ERH KM	ERZ KM	LOC REMKS	PREF MAG	N RD	AZ GAP	MIN DS
94	JAN	1	617	34.41	19	24.63	155	36.19	12.20	43	5	.09	.3	.5	MLO	1.8X	2	55	5
94	JAN	1	642	27.59	19	19.87	155	8.43	8.32	45	7	.10	.4	.3	SF4	2.5X	2	80	5
94	JAN	1	844	42.07	19	24.82	155	36.30	13.33	30	2	.10	.5	.9	DML	1.9X	2	63	4
94	JAN	1	1016	43.23	19	24.22	155	29.43	9.78	23	2	.06	.4	.9	KAO	1.7X	1	52	4
94	JAN	1	1152	33.49	19	28.04	155	27.00	8.50	33	5	.11	.4	.9	KAO	1.6X	2	72	6
94	JAN	2	802	15.99	19	18.24	155	30.43	8.46	30	3	.14	.4	1.0	LSW	1.4X	1	69	6
94	JAN	2	1514	21.15	19	23.00	155	27.63	10.10	31	3	.10	.4	.7	KAO	1.2X	2	35	1
94	JAN	2	1540	19.88	19	28.96	155	25.93	2.01	23	5	.14	.3	.9	KAO	1.5X	2	93	5
94	JAN	2	2204	22.15	19	17.49	155	47.67	8.98	26	4	.13	.5	.8	KON	2.1X	1	115	9
94	JAN	3	20	31.58	18	59.90	155	12.56	40.76	51	7	.10	1.2	1.3	LOI	2.0X	4	234	32
94	JAN	3	57	57.86	19	21.85	155	13.03	33.21	41	5	.11	.7	1.1	DEP	2.1X	1	52	1
94	JAN	4	28	31.38	19	43.28	156	27.86	37.11	49	5	.12	1.2	1.7	DIS	2.8X	1	283	63
94	JAN	4	2330	55.98	19	21.25	155	16.73	1.65	28	6	.10	.3	.3	KOA	1.8X	2	66	2
94	JAN	5	142	37.79	19	25.67	155	20.17	7.89	48	11	.12	.3	.5	KAO	2.0X	3	46	4
94	JAN	5	1028	29.46	19	22.12	155	3.79	7.68	38	5	.10	.4	.5	SF5	1.8X	2	102	4
94	JAN	5	1049	43.43	19	27.14	155	21.04	2.67	19	6	.11	.4	.4	KAO	1.7X	1	84	1
94	JAN	5	1205	44.53	19	29.47	155	27.50	5.31	20	3	.09	.4	2.0	KAO	.9D	1	88	5
94	JAN	5	1723	8.27	19	28.41	155	27.01	6.99	36	6	.11	.3	1.0	KAO	1.8X	2	77	7
94	JAN	6	309	31.27	19	18.05	155	16.57	7.88	43	6	.11	.4	.6	SF1	1.7X	2	123	4
94	JAN	6	321	55.45	19	23.22	155	14.65	3.43	23	8	.07	.3	.4	SEC	1.5X	3	78	3
94	JAN	6	1049	52.64	19	12.35	155	29.53	7.26	19		.13	.6	1.4	LSW	1.5X	1	129	5
94	JAN	6	1251	43.16	19	20.36	155	13.47	7.05	35	3	.12	.4	.8	SF2	1.7X	2	62	4
94	JAN	6	1904	56.92	20	9.65	155	37.39	28.03	18	2	.10	1.4	1.7	KOH	1.3D	1	237	17
94	JAN	6	1958	32.11	19	23.04	155	14.63	3.64	36	8	.10	.3	.4	SEC	2.0X	1	48	3
94	JAN	7	607	57.90	19	17.52	155	27.68	10.42	55	9	.13	.3	.4	LSW	2.3X	1	50	6
94	JAN	7	608	41.84	19	19.04	155	9.91	7.66	20	4	.05	.5	1.0	SF3	2.1X	2	108	5
94	JAN	7	1327	19.86	19	25.51	155	29.46	8.68	39	3	.10	.3	.8	KAO	1.7X	1	38	6
94	JAN	7	1952	10.84	19	5.03	155	29.20	30.58	54	9	.09	.6	.8	DLS	2.9X	5	181	9
94	JAN	8	115	17.47	19	48.73	155	18.50	16.45	33	3	.08	1.1	2.0	KEA	1.7X	3	164	9
94	JAN	8	133	59.39	19	28.99	155	21.13	6.83	38	10	.10	.4	.6	KAO	1.8X	5	103	3
94	JAN	8	301	22.76	19	17.79	155	23.61	10.01	46	7	.12	.3	.5	SWR	1.5X	2	93	4
94	JAN	9	613	37.05	19	10.78	155	41.91	6.98	28	5	.18	.7	2.1	LSW	1.9X	1	128	11
94	JAN	9	2347	8.86	19	19.84	155	11.58	7.62	43	4	.11	.4	.6	SF3	2.1X	1	88	5
94	JAN	10	233	32.27	19	24.20	155	17.41	1.75	17	4	.10	.2	.3	SSCL	2.1D	1	51	1
94	JAN	10	235	27.13	19	24.28	155	17.12	2.06	23	6	.11	.3	.2	SSCL	2.2X	2	71	1
94	JAN	10	1220	3.99	19	24.30	155	17.40	2.27	18	5	.08	.3	.2	SSCL	2.1X	3	60	1
94	JAN	10	1220	16.14	19	24.09	155	16.91	2.18	11	3	.07	.6	.3	SSCL	1.9X	2	96	1
94	JAN	10	1723	2.08	19	20.73	155	6.69	8.59	47	7	.12	.4	.5	SF4F	3.5D	1	97	5
94	JAN	10	2140	28.40	19	19.38	155	13.13	7.82	36	4	.09	.4	.8	SF2	1.7X	3	76	4
94	JAN	11	847	26.01	19	23.22	155	14.82	3.59	13	4	.06	.5	.4	SEC	2.3X	2	122	2
94	JAN	12	1241	14.63	19	21.83	155	5.09	7.65	38	3	.11	.4	.6	SF5	1.7X	1	79	5
94	JAN	13	837	42.88	19	24.02	155	25.51	10.15	36	7	.09	.3	.6	KAO	1.6X	2	45	2
94	JAN	13	911	18.32	20	45.33	155	32.28	6.96	32	2	.07	7.2	8.9	DIS -	2.9X	1	323	122
94	JAN	13	2348	19.94	19	20.30	155	10.96	9.24	48	10	.11	.5	.3	SF3F	3.6D	1	82	4
94	JAN	13	2350	29.64	19	20.02	155	10.56	9.08	25	7	.06	.4	.8	SF3	2.0X	2	86	4
94	JAN	14	413	56.44	19	21.71	155	25.97	10.81	32	4	.10	.4	.6	KAO	1.6X	1	58	3
94	JAN	14	633	9.10	19	24.25	155	17.24	1.70	20	6	.07	.2	.2	SSCL	1.8X	2	62	1
94	JAN	15	1350	49.64	19	19.70	155	7.78	6.60	27	5	.10	.4	.9	SF4	1.8X	1	97	4
94	JAN	15	1736	18.02	19	23.99	155	17.24	0.29	20	6	.09	.1	.2	SSCL	1.6X	3	62	1
94	JAN	15	1801	52.79	19	24.23	155	17.48	1.90	14	3	.07	.3	.2	SSCL	1.9X	1	85	1
94	JAN	15	2353	10.96	19	16.87	155	46.85	1.03	31		.24	.8	8.0	KON #	1.4D	1	149	10
94	JAN	16	6	42.28	19	29.69	155	27.62	4.16	42	7	.12	.3	1.4	KAO	2.1X	2	73	4
94	JAN	16	425	1.33	19	28.92	155	26.90	6.07	34	6	.12	.3	1.1	KAO	1.6X	2	76	6
94	JAN	17	1354	3.93	19	20.56	155	6.77	8.64	22	3	.04	.5	.7	SF4	1.7X	2	100	5
94	JAN	18	142	23.59	19	19.92	155	9.75	8.15	35	4	.08	.4	.7	SF3	1.5X	1	85	4
94	JAN	18	2008	26.65	19	24.35	155	17.49	1.86	20	6	.09	.2	.2	SSCL	1.8X	5	62	1
94	JAN	19	612	42.62	19	4.97	155	26.14	36.60	33	5	.10	1.4	1.0	DLS	1.9X	2	250	9
94	JAN	19	1453	51.07	19	18.39	155	15.09	8.85	46	7	.10	.4	.5	SF1	2.1X	3	136	5
94	JAN	19	1937	11.34	19	10.09	155	34.52	9.07	24	6	.13	.7	1.1	LSW	1.8X	1	195	10
94	JAN	20	814	22.62	19	21.02	155	29.67	5.96	42	8	.09	.3	.8	KAO	2.6X	2	45	5
94	JAN	20	847	43.33	19	10.82	155	28.53	33.42	40	4	.07	.7	1.3	DLS	2.1D	1	129	3
94	JAN	21	316	11.96	19	22.04	155	5.06	8.73	29	6	.10	.5	.6	SF5	1.2X	2	75	5
94	JAN	21	859	13.15	19	24.39	155	17.29	1.97	20	4	.11	.3	.2	SSCL	1.9X	1	56	1
94	JAN	21	1248	24.12	20	2.32	155	56.10	11.00	21	1	.10	2.1	1.0	KOH	2.2D	1	243	19
94	JAN	21	1438	11.10	19	22.06	155	4.82	7.46	25	2	.10	.4	.7	SF5	1.6X	3	78	4
94	JAN	21	2123	57.57	19	22.24	154	58.75	8.88	38	1	.14	.9	.6	LER	2.2X	4	187	5
94	JAN	22	225	38.72	19	9.87	155	41.99	0.99	23	2	.17	1.0	.9	LSW	1.4D	1	212	13
94	JAN	22	237	59.25	19	19.66	155	7.41	7.64	31	3	.08	.4	.7	SF4	1.9X	1	107	4
94	JAN	22	1125	56.92	19	18.79	155	13.87	7.23	31	1	.10	.4	.9	SF2	1.5X	1	79	3
94	JAN	23	1530	43.30	20	14.44	155	51.46	25.25	40	7	.16	1.4	1.1	KOH	2.4X	1	299	15
94	JAN	23	2324	1.42	19	16.83	155	33.94	7.19	27	2	.19	.5	1.0	LSW	1.8X	1	97	7
94	JAN	25	911	20.75	19	23.14	155	2.67	7.76	37	5	.15	.5	.4	SF5	1.6X	2	123	3
94	JAN	25	1543	41.34	19	21.85	155	26.36	10.89	38	6	.12	.3	.6	KAO	2.3X	2	44	3
94	JAN	26	950	33.98	19	33.14	155	38.26	10.31	41	7	.12	.5	.6	MLO	2.3X	4	93	8
94	JAN	26	1003	50.66	19	31.26	155	14.40	40.78	52	13	.11	.6	.9	DEP	2.3X	5	65	8
94	JAN	26	2136	43.44	20	4.06	155	52.15	25.01	43	5	.11	1.0	1.4	KOH	2.0X	2	229	12
94	JAN	26	2308	8.95	19	14.03	155	25.55	37.47	55	14	.11	.5	.6	DLS	2.4X	5	128	3
94	JAN	27	2143	32.66	19	24.19	155	17.49	2.00	18	5	.10	.2	.3	SSCL	1.8X	2	59	2
94	JAN	28	1011	50.88	19	24.24	155	17.40	1.89	12	3	.06	.3	.3	SSCL	1.6X	2	104	1
94	JAN	28	1301	0.34	19	48.71	155	51.81	25.27	24	7	.10	.9	1.0	HUA	1.6D	1	266	14
94	JAN	28	1542	52.01	19	14.10	155	25.12	35.84	42	5	.10	.8	1.0	DLS	2.0X	2	132	2
94	JAN	28	1923	35.47	19	14.48	155	31.16	7.09	36	3	.13	.4	.8	LSW	1.8X	2	128	2
94	JAN	28	2035	22.82	19	14.39	155	25.21	35.77	47	8	.10	.6	.9	DLS	2.6X	3	115	2
94	JAN	29	432	38.36	19	14.57	155	32.50	7.11	46	9	.16	.5	.9	LSW	2.4X	3	136	4
94	JAN	30	153	15.47	19	6.68	155	41.67	0.19	19	7	.12	1.1	.3	LSW	1.6X	1	236	17
94	JAN	30	529	45.64	19	20.00	155	20.61	31.10	41	7	.11	.7	1.1	DEP	2.2X	2	73	5
94	JAN	30	725	17.60	19	21.66	155	5.24	7.49	41	8	.10	.4	.5	SF5	2.0X	2	83	5
94	JAN	30	1553	8.43	19	23.27	155	14.73	3.67	26	5	.09	.3	.4	SEC	1.9X	3	65	3
94	JAN	31	937	4.80	19	20.26	155	6.65	6.64	42	9	.10	.4	.7	SF4	1.9X	2	108	6
94	JAN	31	1130	36.97	19	13.96	155	25.30	37.93	46	10	.11	.7	.9	DLS	2.3X	2	131	2

ORIGIN TIME				LAT	N	LON	W	DEPTH	N	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN
YR	MON	DA	HRMN	SEC	DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	REMKS	MAG	RD	GAP	DS
94	JAN	31	2129	15.57	19	22.13	155	4.97	7.84	29	4	.09	.4	.8	SF5	2.0X	2	75	4
94	JAN	31	2300	16.14	19	16.80	155	17.40	28.66	30	5	.07	.8	.9	DEP	1.8X	1	163	3
94	FEB	1	1	54.61	19	15.42	155	18.02	34.57	46	3	.10	.7	.9	DEPF	5.3D	1	160	5
94	FEB	1	3	12.13	19	5.45	155	22.61	82.33	17	1	.13	5.4	2.5	LOI			292	17
94	FEB	1	4	3.05	19	18.32	155	16.16	32.17	19	1	.09	1.6	2.8	DEP			126	4
94	FEB	1	4	19.73	19	21.12	155	14.99	34.45	26	6	.12	1.2	1.4	DEP	3.3X	1	68	3
94	FEB	1	6	29.30	19	18.94	155	17.71	28.65	27	4	.08	.8	.9	DEP			107	2
94	FEB	1	6	39.70	19	23.02	155	15.81	21.94	36	8	.08	.6	.6	DEP	2.5X	2	49	1
94	FEB	1	7	28.84	19	18.10	155	18.34	25.22	33	4	.11	.8	1.3	DEP			124	1
94	FEB	1	7	34.30	19	17.85	155	18.28	32.21	4411		.11	.7	.7	DEP	2.6X	2	138	1
94	FEB	1	8	22.73	19	13.37	155	17.92	31.68	27	3	.10	1.3	1.3	DEP	2.2X	1	199	9
94	FEB	1	9	49.46	19	19.43	155	16.98	30.49	47	9	.11	.6	.7	DEP	2.2X	3	102	1
94	FEB	1	10	20.34	19	14.13	155	17.35	30.15	34	3	.09	.8	1.1	DEP	1.9X	3	176	7
94	FEB	1	11	45.81	19	18.13	155	17.81	31.84	44	8	.11	.7	.9	DEP	1.8X	3	123	1
94	FEB	1	12	30.12	19	14.20	155	16.92	31.55	43	5	.10	.7	1.0	DEP	2.1X	3	177	8
94	FEB	1	14	44.19	19	14.49	155	18.52	31.17	32	4	.08	1.0	1.1	DEP	1.5X	1	195	6
94	FEB	1	19	12.38	19	13.01	155	12.11	32.00	25	4	.14	1.6	1.1	DEP	1.4X	1	233	8
94	FEB	1	20	32.89	19	16.99	155	17.38	31.18	29	4	.08	.9	1.3	DEP	1.4X	2	159	3
94	FEB	1	23	41.61	19	19.57	155	13.00	30.51	36	6	.11	.8	.9	DEP	1.4X	2	76	5
94	FEB	1	25	12.33	19	20.39	155	10.71	31.48	29	5	.09	1.1	1.2	DEP	1.6X	1	79	3
94	FEB	1	27	0.76	19	14.61	155	15.54	31.69	16	4	.09	2.2	1.0	DEP			289	15
94	FEB	1	27	51.34	19	15.41	155	17.51	29.39	33	4	.07	.8	.9	DEP			184	5
94	FEB	1	28	0.05	19	13.28	155	19.45	32.63	43	8	.09	.8	.9	DEP	3.2X	3	176	8
94	FEB	1	41	53.72	19	19.39	155	17.93	27.18	14	4	.07	1.5	1.1	DEP			178	2
94	FEB	1	43	8.41	19	15.31	155	16.87	28.55	19	1	.06	.9	1.7	DEP			165	6
94	FEB	1	43	14.95	19	19.15	155	15.48	30.26	24	6	.08	.9	1.3	DEP			111	5
94	FEB	1	44	54.09	19	18.39	155	16.52	29.64	11	1	.06	2.0	2.2	DEP			264	4
94	FEB	1	48	26.99	19	17.49	155	18.05	31.92	10	2	.06	2.3	1.0	DEP			254	1
94	FEB	1	49	34.65	19	20.81	155	20.31	28.54	31	4	.10	.7	1.1	DEP	1.8X	1	59	5
94	FEB	1	50	56.01	19	14.00	155	16.84	31.20	21	4	.10	1.5	1.4	DEP			179	8
94	FEB	1	52	49.95	19	14.46	155	17.76	30.03	14	3	.06	1.4	1.2	DEP			239	7
94	FEB	1	55	40.70	19	13.85	155	18.19	32.40	38	6	.09	.9	1.0	DEP	1.6X	3	204	8
94	FEB	1	57	11.73	19	13.53	155	24.24	56.17	38	7	.12	1.4	1.1	DEP	2.6X	2	145	2
94	FEB	1	104	36.87	19	19.77	155	19.18	25.66	38	6	.09	.6	.9	DEP	1.3X	3	56	3
94	FEB	1	117	10.06	19	17.02	155	17.43	31.30	40	8	.12	.8	.9	DEP	2.0X	2	144	3
94	FEB	1	123	25.58	19	18.49	155	16.98	33.42	43	9	.10	.6	.8	DEP	1.9X	3	117	3
94	FEB	1	124	11.31	19	18.61	155	17.36	28.13	23	4	.06	.9	1.0	DEP	1.4X	1	123	3
94	FEB	1	126	56.20	19	15.16	155	16.00	30.89	10	3	.07	1.7	1.0	DEP	1.2X	1	282	15
94	FEB	1	134	5.31	19	16.40	155	17.56	29.50	27	5	.11	.9	1.0	DEP	1.4X	1	168	3
94	FEB	1	136	24.23	19	18.79	155	17.66	28.25	18	6	.06	1.0	.8	DEP			115	2
94	FEB	1	143	21.61	19	13.66	155	15.46	31.03	16	2	.08	1.9	1.3	DEP			260	10
94	FEB	1	154	22.35	19	18.22	155	17.33	29.33	26	2	.06	.9	1.5	DEP	1.5X	2	131	2
94	FEB	1	155	10.52	19	16.61	155	16.93	31.92	18	6	.10	1.7	1.0	DEP	.8X	1	256	4
94	FEB	1	220	59.72	19	13.21	155	17.21	42.16	20	5	.09	2.1	1.1	DEP			237	9
94	FEB	1	222	30.81	19	17.33	155	17.75	33.62	11	1	.09	2.0	2.6	DEP			244	2

ORIGIN TIME				LAT	N	LON	W	DEPTH	N	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN
YR	MON	DA	HRMN	SEC	DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	REMKS	MAG	RD	GAP	DS
94	FEB	1	227	0.60	19	17.04	155	13.86	32.57	14	2	.08	2.6	1.6	DEP	1.2X	1	278	16
94	FEB	1	227	46.41	19	20.34	155	18.12	28.71	29	2	.09	.8	1.3	DEP	1.4X	2	66	1
94	FEB	1	230	28.15	19	20.32	155	18.16	29.50	35	3	.10	.7	1.1	DEP	1.5X	2	65	1
94	FEB	1	237	31.78	19	17.07	155	17.98	31.82	5516		.11	.5	.6	DEP	2.3X	5	142	2
94	FEB	1	256	8.41	19	15.06	155	23.15	32.19	13	2	.13	2.2	2.1	DEP	.9X	1	203	2
94	FEB	1	257	24.39	19	15.95	155	17.88	31.45	21	3	.11	1.2	1.7	DEP	1.0X	1	180	4
94	FEB	1	322	28.69	19	14.52	155	13.43	37.21	12	3	.09	2.8	1.2	DEP			288	19
94	FEB	1	331	35.90	19	17.80	155	15.29	32.48	21	6	.08	1.2	.6	DEP	1.5X	1	196	9
94	FEB	1	432	39.15	19	16.59	155	18.00	30.98	4910		.12	.6	.8	DEP	2.2X	4	148	3
94	FEB	1	448	24.62	19	18.93	155	15.94	31.59	5010		.11	.6	.7	DEP	3.0X	3	102	3
94	FEB	1	504	14.08	19	15.24	155	16.64	28.57	17	4	.08	1.3	1.3	DEP			204	6
94	FEB	1	523	7.37	19	22.23	155	18.89	29.50	27	3	.12	1.0	1.4	DEP	1.0X	2	38	3
94	FEB	1	527	21.90	19	16.52	155	17.68	30.34	15	4	.06	1.1	1.0	DEP			169	3
94	FEB	1	538	47.52	19	21.21	155	20.30	26.88	15	4	.09	1.4	1.4	DEP			130	5
94	FEB	1	607	42.51	19	21.39	155	17.26	27.56	18	3	.06	1.2	1.9	DEP	.9X	1	68	2
94	FEB	1	629	49.32	19	17.09	155	15.97	29.33	16	5	.06	1.5	.7	DEP			285	14
94	FEB	1	642	11.99	19	16.40	155	17.71	32.97	15	3	.08	1.3	1.0	DEP	1.4X	1	170	8
94	FEB	1	803	22.77	19	17.21	155	18.22	31.71	43	9	.11	.8	.9	DEP	2.7X	3	151	2
94	FEB	1	824	4.24	19	13.02	155	16.43	32.67	16	3	.09	1.6	1.4	DEP			245	9
94	FEB	1	842	52.57	19	21.59	155	15.63	25.01	25	4	.09	.7	1.0	DEP	1.3X	1	71	2
94	FEB	1	848	37.06	19	19.46	155	15.77	26.61	31	5	.06	.7	.9	DEP	1.7X	1	99	3
94	FEB	1	901	41.78	19	16.24	155	17.78	29.13	11	3	.08	1.6	1.1	DEP			174	4
94	FEB	1	906	10.27	19	17.09	155	17.31	27.95	31	3	.07	.7	1.0	DEP	1.9X	2	142	3
94	FEB	1	911	27.75	19	19.98	155	15.60	33.02	20	5	.07	1.3	1.1	DEP	1.5X	1	104	3
94	FEB	1	912	54.45	19	17.42	155	19.54	31.68	14	3	.12	1.9	1.6	DEP	1.1X	1	221	8
94	FEB	1	914	32.07	19	10.12	155	13.19	6.82	16	4	.11	1.1	2.7	SF2	1.2X	1	293	13
94	FEB	1	934	2.29	19	18.17	155	16.83	28.12	19	3	.09	1.1	1.8	DEP	1.1X	1	132	3
94	FEB	1	944	37.79	19	12.72	155	14.99	33.09	38	5	.09	.9	.8	DEP	1.8X	3	199	8
94	FEB	1	1021	55.00	19	20.61	155	13.67	34.30	29	5	.07	1.0	1.1	DEP	1.6X	1	62	4
94	FEB	1	1115	51.97	19	17.05	155	17.25	29.03	17	3	.07	1.0	1.3	DEP	1.4X	1	158	3
94	FEB	1	1143	52.36	19	13.28	155	15.01	34.28	29	4	.07	1.4	1.1	DEP	1.5X	2	219	7
94	FEB	1	1213	9.11	19	13.82	155	18.14	33.00	41	7	.10	.7	.8	DEP	2.0X	3	176	8
94	FEB	1	1232	34.74	19	18.74	155	17.94	28.54	23	4	.06	1.2	.9	DEP	1.4X	1	109	2
94	FEB	1	1425	52.73	19	14.95	155	17.60	30.54	15	3	.07	1.5	1.3	DEP			203	6
94	FEB	1	1433	7.90	19	21.24	155	14.27	29.63	20	5	.08	1.3	1.3	DEP			131	3
94	FEB	1	1537	26.95	19	12.36	155	17.52	30.16	19	3	.10	2.3	1.2	DEP	1.1X	1	256	11
94	FEB	1	1601	6.17	19	20.92	155	17.60	31.41	36	7	.09	.8	.9	DEP	1.9X	2	33	2
94	FEB	1	1657	8.21	19	16.16	155	18.58	32.00	5211		.11	.6	.7	DEP	2.7X	5	150	3
94	FEB	1	1738	52.68	19	23.10	155	17.62	27.25	15	4	.09	1.8	1.1	DEP	1.7X	1	223	10
94	FEB	1	1759	3.28	19	17.58	155	18.06	29.63	20	4	.12	1.2	1.4	DEP	1.1X	1	144	1
94	FEB	1	1800	27.69	19	23.05	155	19.62	25.04	15	2	.09	1.7	1.9	DML	1.7X	1	130	1
94	FEB	1	1842	16.07	19	17.45	155	17.73	29.18	29	3	.06	.8	1.3	DEP	1.4X	2	147	2
94	FEB	1	1916	22.70	19	15.61	155	16.23	24.98	24	4	.05	1.4	.9	DEP	1.5X	2	226	5
94	FEB	1	1916	58.66	19	14.29	155	17.05	31.62	37	4	.09	.8	1.0	DEP	1.6X	3	176	7
94	FEB	1	1959	31.13	19	14.34	155	16.50	30.61	11	4	.06	1.3	1.0	DEP	1.2X	1	223	7

ORIGIN TIME					LAT	N	LON	W	DEPTH	N	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN
YR	MON	DA	HRMN	SEC	DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	REMKS	MAG	RD	GAP	DS
94	FEB	1	1959	46.11	19	16.67	155	17.35	31.49	16	4	.07	1.2	1.2	DEP			166	3
94	FEB	1	2054	23.53	19	15.69	155	16.24	31.67	14	3	.09	2.1	1.6	DEP			275	15
94	FEB	1	2105	24.86	19	14.72	155	19.31	28.37	15	3	.10	2.0	1.4	DEP			255	6
94	FEB	1	2114	22.48	19	20.64	155	18.72	33.10	16	5	.11	2.2	.9	DEP	1.0X	1	207	6
94	FEB	1	2306	10.63	19	17.29	155	17.55	33.68	49	8	.10	.6	.8	DEP	2.5X	6	139	2
94	FEB	2	25	53.91	19	22.70	155	19.04	29.46	36	6	.12	.6	.9	DML	1.7X	2	43	2
94	FEB	2	240	23.23	19	21.82	155	16.72	25.86	22	7	.08	.8	.8	DEP	1.2X	2	94	2
94	FEB	2	258	16.55	19	19.32	155	16.42	29.45	13	3	.05	2.1	.9	DEP	1.2X	1	227	5
94	FEB	2	332	13.34	19	17.71	155	17.23	29.22	39	7	.07	.7	.8	DEP			143	2
94	FEB	2	454	56.40	19	13.89	155	16.70	28.47	16	5	.13	1.2	1.2	DEP	.8X	1	204	8
94	FEB	2	459	41.12	19	16.49	155	16.86	31.40	11	4	.07	1.1	1.6	DEP			223	4
94	FEB	2	528	37.40	19	15.75	155	14.45	27.82	35	6	.08	.8	.9	DEP	1.9X	1	169	3
94	FEB	2	550	36.55	19	17.39	155	18.05	29.29	24	1	.07	.9	1.9	DEP	1.4X	1	148	1
94	FEB	2	641	47.31	19	15.62	155	19.16	29.00	29	4	.09	.9	1.2	DEP	1.3X	2	159	4
94	FEB	2	644	11.17	19	14.11	155	15.25	27.75	27	2	.05	1.3	1.6	DEP	1.1X	1	208	6
94	FEB	2	725	33.25	19	17.36	155	18.17	27.81	20		.06	1.0	2.3	DEP	1.3X	1	148	1
94	FEB	2	727	19.66	19	18.05	155	16.61	27.53	17		.06	2.5	3.7	DEP	1.6X	1	134	4
94	FEB	2	752	42.27	19	16.24	155	16.42	31.50	20	6	.09	1.6	.9	DEP	.9X	1	191	5
94	FEB	2	943	31.17	19	17.34	155	16.59	31.77	13	5	.07	2.0	1.1	DEP	1.2X	1	151	4
94	FEB	2	1150	10.48	19	50.46	155	35.17	16.28	34	5	.14	.6	1.3	KEA	1.8X	1	109	8
94	FEB	2	1241	55.59	19	14.13	155	16.38	26.31	13		.05	2.8	4.1	DEP			232	7
94	FEB	2	1739	8.70	19	15.74	155	18.15	34.35	45	6	.11	.7	1.1	DEP	2.4X	2	156	4
94	FEB	2	1839	1.78	19	17.76	155	22.43	24.45	13	6	.09	2.0	.9	DEP			181	5
94	FEB	2	2119	32.06	19	11.86	155	14.45	31.49	39	5	.11	.8	.9	DEP	1.7X	3	207	10
94	FEB	2	2250	41.22	19	13.87	155	17.00	38.65	12		.08	2.7	4.9	DEP	1.0X	1	237	12
94	FEB	2	2300	27.39	19	16.73	155	17.89	32.63	13	2	.04	1.6	1.8	DEP			162	3
94	FEB	3	221	45.54	19	19.18	155	17.50	35.19	20	7	.12	1.2	.8	DEP	1.2X	1	103	3
94	FEB	3	248	6.67	19	24.00	155	6.98	3.70	18	2	.11	.5	.4	SME	2.1X	3	55	2
94	FEB	3	409	18.77	19	17.97	155	16.65	28.60	17	4	.11	1.5	1.2	DEP			136	4
94	FEB	3	434	37.39	19	14.99	155	17.51	29.30	17	4	.11	1.4	1.5	DEP	1.1X	1	202	6
94	FEB	3	601	58.71	19	22.80	155	17.88	28.42	23	6	.10	.8	.8	DEP	1.0X	2	87	3
94	FEB	3	1757	55.77	19	16.12	155	17.11	30.05	34	4	.08	.8	1.3	DEP	1.8X	1	157	4
94	FEB	3	1814	13.45	19	14.90	155	16.88	36.93	16	1	.11	1.5	2.1	DEP	1.6X	1	210	6
94	FEB	3	2239	57.06	19	17.26	155	27.55	9.31	24	2	.12	.4	.7	LSW	1.6X	1	60	6
94	FEB	3	2303	13.90	19	21.45	155	7.94	9.10	37	4	.08	.4	.6	SF4	1.9X	2	74	3
94	FEB	3	2320	3.76	19	17.00	155	16.02	29.37	13	4	.06	2.4	1.0	DEP			278	14
94	FEB	4	154	57.12	19	17.14	155	17.18	28.85	26	1	.05	.9	1.7	DEP	.9X	1	156	3
94	FEB	4	402	36.77	19	13.42	155	16.46	29.25	16	1	.04	1.4	2.0	DEP			228	8
94	FEB	4	407	28.16	19	20.47	155	18.25	32.07	15	2	.08	1.7	1.7	DEP	1.4X	1	182	5
94	FEB	4	426	7.27	19	14.93	155	17.20	30.31	17	3	.07	1.4	1.0	DEP			206	6
94	FEB	4	835	48.57	19	14.93	155	16.13	26.37	20		.04	1.2	2.4	DEP	1.0X	1	194	6
94	FEB	4	1154	22.55	19	19.77	155	17.85	31.77	22	4	.11	1.1	1.4	DEP	.9X	1	80	1
94	FEB	4	1236	5.18	19	14.82	155	18.18	29.86	21	5	.09	1.4	1.0	DEP	1.4X	1	202	6
94	FEB	4	1407	26.26	19	23.23	155	15.13	22.46	13	1	.03	2.2	3.2	DEP	1.0X	2	108	2
94	FEB	4	1557	36.29	19	17.04	155	20.59	26.35	11		.07	2.0	4.5	DEP	1.5X	1	168	4

ORIGIN TIME					LAT	N	LON	W	DEPTH	N	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN
YR	MON	DA	HRMN	SEC	DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	REMKS	MAG	RD	GAP	DS
94	FEB	4	1606	32.90	19	16.15	155	17.44	31.49	5514		.11	.7	.8	DEP	2.7X	2	155	4
94	FEB	4	1716	0.89	19	21.35	155	16.12	22.85	14		.05	1.6	3.1	DEP	1.2X	1	83	2
94	FEB	4	1837	12.75	19	18.17	155	15.07	24.84	16		.06	1.5	3.0	DEP	1.6X	1	119	4
94	FEB	5	221	6.73	19	16.93	155	14.78	8.58	33	2	.10	.6	.5	SF1	1.7X	1	155	2
94	FEB	5	405	57.72	19	23.04	155	10.40	42.61	25	4	.11	1.1	1.2	DEP	1.3X	2	165	5
94	FEB	5	1057	9.48	19	22.19	155	4.73	8.21	21	1	.07	.5	1.2	SF5	1.9X	1	81	4
94	FEB	5	1112	19.39	19	19.45	155	13.61	8.50	38	2	.11	.5	.7	SF2	2.1D	1	67	4
94	FEB	5	1902	35.98	19	15.02	155	7.47	47.31	51	8	.11	.9	.8	DEPF	2.9X	2	209	4
94	FEB	5	2046	2.38	19	19.08	155	13.41	7.36	33	1	.10	.4	.9	SF2	1.6X	2	74	4
94	FEB	6	1359	37.82	19	55.91	155	29.89	37.41	5815		.09	.6	1.0	KEA	2.5X	2	158	17
94	FEB	6	1449	42.48	19	28.15	155	24.38	2.67	16	4	.10	.3	.6	KAO	1.7X	2	72	4
94	FEB	7	431	9.03	19	19.41	155	11.18	8.85	38	5	.08	.4	.6	SF3	1.9X	2	100	5
94	FEB	7	831	50.86	19	20.78	155	5.12	4.75	30	1	.12	.6	2.4	SSF	2.1X	1	107	4
94	FEB	7	854	13.83	19	16.94	155	17.04	32.40	35	7	.10	.8	1.1	DEP	2.0X	2	147	3
94	FEB	7	1018	22.62	19	16.02	155	17.23	31.01	38	5	.10	.7	1.0	DEP	2.3X	1	157	4
94	FEB	7	2056	26.60	19	16.24	155	23.04	6.89	26	4	.11	.4	1.1	SWR	1.7X	2	121	4
94	FEB	8	550	32.01	19	16.11	155	30.22	9.94	24	1	.12	.5	.9	LSW	1.6X	1	86	2
94	FEB	9	1	33.49	19	26.12	155	24.42	7.50	26	4	.10	.3	1.1	KAO	1.8X	2	51	7
94	FEB	10	724	49.69	19	53.81	156	13.73	17.08	9	1	.11	1.6	15.2	HUA -	2.0X	1	290	47
94	FEB	10	2219	40.01	19	18.78	155	13.10	4.60	28	1	.10	.4	1.5	SSF	1.4X	2	86	3
94	FEB	11	214	30.25	19	18.19	155	15.41	7.51	29	1	.08	.4	.8	SF1	1.4X	1	112	4
94	FEB	11	735	53.28	19	15.57	155	26.98	8.31	27	2	.12	.4	.9	LSW	1.9X	1	75	6
94	FEB	11	1721	3.73	19	16.66	155	28.37	9.58	36	2	.13	.3	.7	LSW	2.3X	1	57	4
94	FEB	11	2213	2.33	19	24.17	155	17.35	1.60	19	4	.10	.2	.2	SSCL	1.8X	2	54	1
94	FEB	11	2257	33.17	19	15.86	155	26.91	8.29	36	2	.11	.3	.6	LSW	1.5X	1	70	6
94	FEB	12	746	15.77	19	16.30	155	26.57	9.33	29	1	.11	.4	.6	LSW	1.4X	1	62	6
94	FEB	12	1414	37.84	19	31.16	155	37.75	10.67	37		.11	.4	.4	MLO	2.4X	2	115	5
94	FEB	12	2004	20.79	19	47.78	155	24.68	23.58	40	8	.08	.7	1.1	KEA	2.2X	2	97	5
94	FEB	12	2140	4.73	19	32.63	155	37.63	11.34	47	6	.15	.4	.5	MLO	2.8X	2	47	5
94	FEB	13	207	24.61	19	18.61	155	12.66	7.83	22	3	.06	.5	1.1	SF2	1.8X	1	101	3
94	FEB	13	319	50.17	19	23.73	155	37.41	4.04	20		.05	.4	7.0	MLO	2.1D	1	133	8
94	FEB	13	1433	15.91	19	30.04	155	29.60	6.24	22	6	.13	.4	1.9	MLO	1.6X	1	70	5
94	FEB	14	2203	25.02	19	22.26	155	3.00	8.03	35	5	.14	.4	.5	SF5	2.0X	1	122	4
94	FEB	15	357	5.12	19	22.98	155	14.64	3.82	27	6	.07	.3	.4	SEC	1.8X	3	49	2
94	FEB	15	731	50.65	19	13.21	155	26.34	7.18	33	2	.13	.5	.8	LSW	1.7X	1	126	5
94	FEB	16	1726	54.47	19	26.59	155	19.93	8.59	32	5	.11	.4	.7	KAO	2.0X	3	87	2
94	FEB	17	919	23.44	19	14.79	155	30.13	9.76	30	1	.12	.4	.7	LSW	1.7X	1	114	1
94	FEB	17	1313	25.03	19	21.77	155	29.78	9.76	34	1	.12	.4	.7	KAO	1.4D	1	43	4
94	FEB	17	2110	15.85	19	26.25	155	17.43	16.61	40	8	.10	.4	.5	DEP	1.9X	2	78	2
94	FEB	18	933	14.93	19	20.20	155	7.89	7.29	28	3	.10	.4	.6	SF4	2.0X	1	89	5
94	FEB	18	2047	7.73	19	16.10	155	14.23	32.58	4710		.11	.7	.8	DEP	2.3X	2	166	2
94	FEB	19	903	3.82	19	20.27	155	11.64	8.01	32	5	.11	.4	.7	SF3	1.9X	2	80	5
94	FEB	19	1142	34.82	19	20.55	155	11.67	9.88	30	1	.08	.4	.8	SF3	1.9X	2	74	4
94	FEB	20	331	24.61	19	19.80	155	7.03	7.42	35	1	.08	.4	.6	SF4	1.9X	1	112	5
94	FEB	20	2234	29.85	19	49.10	155	45.03	38.47	37	5	.07	.6	1.2	HUA	2.0D	1	142	11

YR	MON	DA	ORIGIN TIME HRMN	SEC	LAT N DEG	MIN	LON W DEG	MIN	DEPTH KM	N RD	N S	RMS SEC	ERH KM	ERZ KM	LOC REMKS	PREF MAG	N RD	AZ GAP	MIN DS
94	FEB	21	1626	17.15	19	19.96	155	6.98	8.66	22	3	.08	.5	.9	SF4	1.5X	1	110	5
94	FEB	21	1642	30.76	19	23.24	155	3.62	7.69	25	2	.09	.4	.9	SF5	1.3X	1	101	6
94	FEB	21	2024	43.63	19	24.92	155	19.39	5.93	39	9	.11	.3	.6	KAO	2.1X	2	43	2
94	FEB	21	2309	7.48	19	10.93	155	27.80	7.27	37	2	.13	.5	.9	LSW	1.6D	1	112	3
94	FEB	22	650	33.74	19	25.40	155	20.01	5.34	30	5	.12	.3	1.0	KAO	1.7X	2	53	3
94	FEB	22	926	46.28	19	24.29	155	17.10	2.01	15	4	.09	.3	.2	SSCL	1.7X	2	73	1
94	FEB	22	936	14.51	19	19.49	155	8.81	7.60	34	5	.08	.4	.7	SF4	2.2X	1	82	4
94	FEB	22	939	16.43	19	19.72	155	6.72	8.69	34	7	.07	.4	.6	SF4	1.7X	3	120	5
94	FEB	22	1009	16.75	19	28.21	155	26.24	7.61	36	7	.13	.4	1.0	KAO	2.0X	2	48	6
94	FEB	22	1612	15.10	19	19.62	155	8.90	7.51	23	1	.06	.4	.9	SF4	1.2D	1	98	5
94	FEB	23	1845	16.09	19	9.48	155	36.61	7.26	42	6	.14	.7	.6	LSW	2.3X	2	205	10
94	FEB	24	401	32.99	19	14.90	155	18.10	29.74	44	9	.09	.6	.6	DEP	2.1X	3	165	6
94	FEB	25	548	2.39	19	12.25	155	30.44	6.67	33		.14	.5	1.0	LSWF	2.1X	1	143	5
94	FEB	25	1717	7.46	18	57.61	155	10.79	36.28	54	12	.11	.9	1.2	LOI	3.1X	2	243	36
94	FEB	27	1430	16.39	19	17.32	155	29.39	11.68	29	2	.11	.4	.9	LSW	2.2X	1	54	4
94	FEB	28	1007	57.27	19	19.83	155	6.79	9.15	41	6	.09	.4	.6	SF4	2.0X	3	116	5
94	FEB	28	1040	57.81	19	28.91	155	26.05	6.63	46	7	.13	.3	.7	KAO	2.5X	5	64	5
94	MAR	1	1313	55.59	19	24.98	155	19.76	6.11	34	7	.12	.3	.7	KAO	2.1X	2	47	2
94	MAR	1	1417	31.72	19	23.23	155	27.44	10.35	40	4	.10	.3	.6	KAO	1.9X	2	32	1
94	MAR	1	2310	52.13	19	19.62	155	29.23	11.89	37	3	.09	.3	.5	KAO	1.8X	2	46	6
94	MAR	2	216	59.57	19	23.30	155	14.49	3.61	43	7	.11	.3	.4	SEC	1.5X	1	46	3
94	MAR	2	1237	51.86	19	20.01	155	6.70	9.27	39	4	.10	.4	.5	SF4	2.5X	2	114	5
94	MAR	3	341	31.27	19	13.38	155	22.73	36.16	44	6	.10	.6	1.0	DEP	2.2X	3	155	3
94	MAR	3	1013	33.15	19	23.45	155	30.52	9.06	35	2	.09	.4	.9	KAO	1.8X	1	56	5
94	MAR	3	1628	10.78	19	22.18	155	27.15	10.74	31	3	.11	.3	.7	KAO	1.7X	1	41	1
94	MAR	4	1831	57.93	19	11.92	155	20.31	49.46	31	4	.08	1.3	1.0	DEP	2.1X	1	171	8
94	MAR	4	1834	45.32	19	12.32	155	19.94	49.15	32	6	.10	1.3	1.0	DEP	1.7X	1	214	8
94	MAR	4	2053	50.44	19	16.33	155	18.31	33.04	51	11	.11	.6	.8	DEP	2.6X	2	146	3
94	MAR	5	107	6.71	19	14.78	155	29.82	9.78	25	2	.12	.4	.9	LSW	1.6X	1	112	1
94	MAR	5	640	33.58	19	12.83	155	20.40	44.64	35	4	.09	1.1	1.6	DEP	1.9X	1	176	7
94	MAR	5	1808	30.59	19	24.68	155	37.75	0.01	14	1	.15	.6	1.5	MLO #	1.3D	1	94	7
94	MAR	7	846	46.07	19	18.93	155	8.37	7.56	29	3	.08	.4	.8	SF4	1.6X	1	86	3
94	MAR	7	1109	59.25	19	26.98	155	29.90	10.05	48	9	.10	.3	.5	KAO	2.9X	4	43	9
94	MAR	7	1148	37.47	19	29.57	155	27.41	5.64	41	8	.10	.3	1.3	KAO	1.6X	4	91	5
94	MAR	8	1658	0.57	19	30.20	154	54.18	4.21	22	4	.13	.6	2.9	SLE	1.5X	1	126	6
94	MAR	9	359	4.45	19	18.75	155	13.21	7.90	34	3	.10	.4	.7	SF2	1.7X	2	84	3
94	MAR	9	1632	32.11	20	27.74	156	32.42	6.97	23	5	.15	9.4	12.0	DIS -	1.5D	1	323	88
94	MAR	10	101	13.07	19	25.62	155	15.87	1.79	39	6	.11	.3	.3	SNCF	3.0D	1	77	2
94	MAR	10	2046	31.65	19	15.21	155	31.47	7.28	30	1	.19	.5	1.1	LSW	1.9X	1	60	2
94	MAR	10	2109	9.60	19	35.56	154	57.37	46.31	57	15	.10	.7	.7	HILF	2.4X	1	162	14
94	MAR	11	242	30.76	19	18.72	155	15.09	7.69	25	1	.09	.4	.9	SF1	1.5X	1	106	4
94	MAR	11	1339	29.15	19	25.97	155	16.33	1.50	22	4	.08	.2	.3	SNCL	2.0X	3	107	2
94	MAR	12	1023	5.18	19	20.22	155	26.25	28.44	62	17	.11	.4	.7	DML	3.2X	3	53	5
94	MAR	12	2217	32.24	19	20.49	155	11.22	9.03	32	2	.08	.4	.7	SF3	2.0X	1	77	4
94	MAR	13	1842	53.19	19	31.16	155	15.50	25.14	64	18	.13	.4	.7	DEPF	3.2X	4	61	11

YR	MON	DA	ORIGIN TIME HRMN	SEC	LAT N DEG	MIN	LON W DEG	MIN	DEPTH KM	N RD	N S	RMS SEC	ERH KM	ERZ KM	LOC REMKS	PREF MAG	N RD	AZ GAP	MIN DS
94	MAR	13	2130	2.07	19	26.12	155	47.77	14.60	11		.11	.8	.6	KON	1.5X	1	178	9
94	MAR	13	2326	1.59	19	25.06	155	19.64	6.73	27	5	.10	.4	.8	KAO	2.3X	2	101	3
94	MAR	13	2356	17.71	19	57.89	155	29.46	17.73	43	6	.10	1.0	2.3	KEA	2.4X	1	241	18
94	MAR	14	125	26.87	19	19.60	155	7.04	8.71	43	8	.07	.3	.4	SF4	2.6X	1	116	4
94	MAR	14	505	22.38	19	19.70	155	7.03	7.70	32		.07	.4	.6	SF4	1.9X	1	114	5
94	MAR	14	1718	32.51	19	13.26	156	21.00	33.33	41	10	.13	1.1	2.1	DIS	2.9X	1	280	51
94	MAR	14	2121	56.20	19	7.73	155	32.66	31.01	38	6	.08	.5	1.0	DLS	2.4X	2	151	9
94	MAR	15	1251	36.68	19	51.52	155	7.00	41.50	44	10	.11	.7	.9	KEA	2.8X	2	224	20
94	MAR	15	2316	6.72	19	21.01	155	13.08	9.27	29	5	.07	.4	.6	SF2	2.2X	1	60	3
94	MAR	16	947	7.91	19	3.57	156	16.21	32.92	38	6	.10	1.2	2.1	KON	2.8X	2	296	48
94	MAR	17	955	6.42	19	46.76	155	41.12	22.92	44	6	.12	.5	1.8	KEA	2.8X	2	108	19
94	MAR	18	1343	40.58	19	30.26	155	16.83	7.73	45	9	.13	.3	.8	GLN	2.3X	2	58	5
94	MAR	19	1348	42.97	19	18.79	155	13.67	7.53	36	1	.10	.4	.7	SF2	2.0X	2	72	3
94	MAR	19	2052	33.82	19	19.19	155	13.67	8.29	42	3	.12	.4	.6	SF2	2.1X	2	66	4
94	MAR	20	440	42.48	19	21.16	155	28.16	10.22	37	2	.11	.4	.7	KAO	2.3X	1	41	3
94	MAR	20	2205	52.26	19	21.75	155	6.61	8.48	31	3	.08	.4	.4	SF4	1.8X	1	80	3
94	MAR	22	2037	4.09	19	48.79	156	11.13	45.90	35	9	.09	1.1	1.4	HUA	2.5X	2	293	39
94	MAR	23	811	34.65	19	19.64	155	11.37	6.56	38	3	.12	.4	.9	SF3	1.3D	1	93	5
94	MAR	23	2157	17.84	19	14.98	155	17.41	31.69	42	6	.11	.7	1.0	DEP	1.9X	2	159	6
94	MAR	24	317	21.95	19	20.17	155	6.60	7.02	40	6	.10	.4	.6	SF4	1.9X	3	111	6
94	MAR	24	1620	17.69	19	40.16	155	22.11	14.65	54	11	.11	.3	.3	KEA	3.0X	3	78	14
94	MAR	25	1450	56.76	19	20.65	155	7.58	7.85	38	5	.07	.4	.7	SF4	2.4X	2	88	5
94	MAR	26	513	39.01	19	25.49	155	19.01	4.60	44	4	.13	.3	.6	SNC	2.1X	2	47	2
94	MAR	26	944	46.83	19	17.27	155	26.02	8.04	37	5	.16	.4	.8	LSW	1.6X	2	56	6
94	MAR	28	149	7.11	19	20.10	155	10.77	8.91	42	4	.10	.4	.6	SF3	2.4X	1	85	4
94	MAR	28	249	58.97	19	23.38	155	14.58	3.75	32	6	.11	.4	.4	SEC	2.4X	2	46	2
94	MAR	28	612	18.96	19	49.62	156	9.54	43.08	44	4	.10	1.9	1.4	HUA	2.4X	2	255	45
94	MAR	28	932	52.60	19	47.80	155	20.84	28.05	31	4	.10	.7	1.3	KEA	1.5X	3	135	10
94	MAR	28	1409	54.74	19	22.55	155	26.78	11.48	37	6	.11	.4	.6	KAO	2.0X	3	42	1
94	MAR	28	2136	36.26	19	49.62	156	4.20	38.79	26	1	.10	1.4	1.9	HUA	1.6X	2	241	29
94	MAR	29	151	45.38	19	23.72	155	37.40	2.99	11	2	.05	.4	1.2	MLO	.8D	1	83	6
94	MAR	29	153	48.31	19	20.67	155	8.12	8.89	32	4	.06	.5	.6	SF4	1.6X	2	79	4
94	MAR	29	650	37.15	19	27.15	155	14.18	32.34	49	9	.09	.5	.6	DEP	2.0X	2	84	5
94	MAR	29	949	52.77	19	25.04	155	16.13	2.63	15	2	.08	.3	.4	SNC	1.8X	2	111	2
94	MAR	29	1445	9.60	19	27.32	155	13.86	31.94	47	7	.12	.5	.7	DEP	2.1X	3	50	5
94	APR	2	120	13.13	19	27.89	155	17.42	22.56	44	9	.10	.5	.6	DEP	1.4D	1	52	1
94	APR	2	1642	22.19	19	11.72	155	27.32	6.00	29	1	.15	.5	1.1	LSW	2.1X	1	122	4
94	APR	3	1138	51.22	19	19.80	155	10.41	9.11	36	5	.09	.4	.6	SF3	2.4X	2	91	4
94	APR	4	301	46.91	19	11.83	155	28.72	12.45	30	1	.09	.6	.7	LSW	2.4X	2	121	5
94	APR	4	410	48.83	19	19.65	155	12.10	7.57	40	4	.12	.4	.7	SF3	2.2X	1	87	5
94	APR	4	2025	49.79	19	19.87	155	8.83	8.69	49	10	.11	.4	.5	SF4	2.5X	4	77	4
94	APR	4	2222	23.06	19	20.21	155	8.40	7.57	42	9	.10	.4	.6	SF4	1.9X	4	78	4
94	APR	4	2318	50.02	19	20.20	155	8.46	8.24	28	6	.08	.4	.7	SF4	2.2X	2	77	4
94	APR	4	2348	16.70	19	29.47	155	34.66	0.02	14	3	.14	.3	.5	MLO #	2.3D	1	78	2
94	APR	5	400	7.49	19	24.32	155	16.97	2.43	13	4	.07	.4	.3	SSCL	1.6X	2	83	1

ORIGIN TIME					LAT	N	LON	W	DEPTH	N	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN
YR	MON	DA	HRMN	SEC	DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	REMKS	MAG	RD	GAP	DS
94	APR	6	1246	9.70	19	21.93	155	19.45	30.98	37	5	.11	.6	1.0	DEP	2.2X	2	54	3
94	APR	8	59	7.19	19	37.85	155	51.41	14.36	26	4	.11	.6	.3	KON	2.3X	2	173	7
94	APR	9	1410	39.53	19	14.77	156	3.70	48.67	5513		.10	1.0	.9	KONF	3.6X	7	252	20
94	APR	10	1920	35.09	19	27.26	155	11.70	10.85	5212		.10	.3	.4	GLNF	2.5X	4	49	6
94	APR	10	2208	19.22	19	23.14	155	14.38	4.29	46	9	.11	.3	.4	SEC	2.2X	1	47	2
94	APR	12	143	23.50	19	28.99	155	26.90	6.86	4910		.13	.3	.9	KAO	2.2X	6	62	6
94	APR	12	323	28.73	19	21.92	155	3.66	8.19	26	4	.08	.6	.6	SF5	1.1X	1	105	4
94	APR	14	34	53.34	19	25.65	155	20.01	7.59	31	5	.10	.4	.7	KAO	2.2X	2	74	4
94	APR	14	329	49.53	20	2.75	155	25.35	16.36	30	2	.12	1.2	12.5	KEA -	2.1X	2	228	30
94	APR	14	1607	37.19	19	24.33	155	17.11	1.78	12	4	.07	.4	.3	SSCL	1.7X	1	86	1
94	APR	14	1842	2.32	19	30.67	155	39.55	6.83	41	7	.19	.5	1.3	MLO	2.0X	3	52	7
94	APR	14	2340	24.00	19	17.05	155	13.11	8.31	34	4	.10	.5	.6	SF2	2.0X	2	179	1
94	APR	16	1020	3.44	19	29.66	155	26.57	8.13	47	7	.13	.3	.6	KAO	2.5X	4	49	5
94	APR	17	1207	28.28	19	19.57	155	13.62	8.65	51	8	.15	.4	.4	SF2	2.7X	1	64	5
94	APR	17	1310	15.23	19	18.29	155	14.23	5.29	33	5	.10	.4	.9	SF2	1.5X	6	86	3
94	APR	17	1657	26.65	19	58.29	155	25.28	10.33	27	2	.12	1.0	.5	KEA	1.3X	1	202	12
94	APR	17	2159	28.36	19	23.71	155	17.06	3.16	31	7	.12	.2	.3	SSC	1.8X	3	61	1
94	APR	18	840	19.62	19	38.96	155	4.35	14.77	32	6	.08	.7	.6	HIL	2.0X	3	120	7
94	APR	18	845	9.66	19	38.99	155	4.41	14.91	38	9	.11	.8	.7	HIL	2.3X	2	119	7
94	APR	18	952	1.01	19	20.73	155	7.12	8.17	36	7	.09	.4	.6	SF4	2.2X	5	93	5
94	APR	18	2146	44.09	19	23.17	155	14.95	3.22	30	5	.08	.2	.3	SEC	2.4X	3	62	2
94	APR	18	2204	12.67	19	23.23	155	14.74	3.53	31	7	.08	.2	.3	SEC	2.0X	3	68	3
94	APR	19	1606	58.98	19	27.60	154	55.92	0.94	18	4	.08	.5	.4	SLE	1.6X	1	129	7
94	APR	20	1127	43.29	19	22.24	155	29.67	10.00	39	5	.10	.3	.6	KAO	2.1X	2	52	4
94	APR	22	759	39.72	19	11.84	155	30.71	39.09	42	3	.08	.7	1.4	DLS	2.5X	1	85	7
94	APR	22	1601	20.78	19	19.13	155	28.53	10.00	39	2	.12	.4	.7	KAO	1.8X	3	40	6
94	APR	23	1024	34.12	19	34.42	155	20.20	9.36	33	7	.11	.5	1.2	MLO	2.0X	2	124	10
94	APR	23	1414	26.82	19	18.74	155	13.11	8.67	41	2	.10	.4	.5	SF2	2.5X	1	87	3
94	APR	23	2340	1.34	19	21.61	155	5.09	6.12	28	1	.10	.5	1.0	SF5	2.1X	1	84	5
94	APR	24	829	17.57	19	3.58	155	23.37	39.47	41	5	.09	.9	1.1	LOI	2.3X	4	205	13
94	APR	24	2137	26.67	19	17.47	155	26.25	7.41	31	2	.13	.4	.9	LSW	1.4X	1	66	7
94	APR	25	37	51.96	18	50.47	155	9.89	47.61	5010		.11	1.3	1.3	LOI	2.4X	5	262	47
94	APR	25	1651	28.11	19	19.88	155	13.08	8.43	43	5	.12	.4	.6	SF2	2.0X	3	71	5
94	APR	26	1854	6.98	19	21.12	155	16.46	1.57	23	5	.09	.3	.5	KOA	1.7X	4	69	3
94	APR	27	418	55.49	18	59.50	155	23.71	33.61	35	8	.09	.9	.8	LOI	2.2X	1	224	20
94	APR	28	1409	51.46	19	25.19	155	18.82	6.82	30	9	.12	.4	.7	INT	1.8X	4	74	2
94	APR	28	1932	17.54	19	25.79	155	19.86	8.54	41	9	.10	.4	.6	KAO	2.4X	2	57	4
94	APR	28	2357	53.35	19	22.74	155	14.42	3.42	33	7	.10	.3	.3	SEC	1.9X	5	78	2
94	APR	29	138	3.67	19	17.72	155	21.87	8.24	30	5	.12	.4	.8	SWR	1.7X	2	116	5
94	APR	29	304	46.60	19	19.84	155	11.40	9.32	40	7	.11	.4	.7	SF3	1.9X	4	88	5
94	APR	29	1339	58.02	19	20.27	155	11.71	9.01	40	5	.10	.4	.5	SF3	2.5X	2	79	5
94	APR	30	306	18.26	19	20.23	155	11.52	9.56	42	7	.12	.4	.5	SF3	2.2X	6	106	4
94	APR	30	1508	2.80	19	24.71	155	19.33	6.17	25	5	.09	.4	.7	KAO	1.9X	3	63	2
94	APR	30	2013	45.28	19	19.68	155	13.34	9.34	42	5	.11	.4	.6	SF2	2.2X	2	120	5
94	APR	30	2257	33.63	20	5.30	156	37.02	27.84	15	2	.07	2.5	5.9	DIS	1.7D	1	320	93

ORIGIN TIME					LAT	N	LON	W	DEPTH	N	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN
YR	MON	DA	HRMN	SEC	DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	REMKS	MAG	RD	GAP	DS
94	MAY	1	1331	12.82	19	20.53	155	11.07	9.50	26	3	.07	.6	.9	SF3	2.0X	3	76	4
94	MAY	1	1604	17.30	19	56.17	155	32.58	15.81	43	4	.10	.6	.9	KEA	2.3X	4	152	15
94	MAY	1	1741	58.76	19	46.18	155	35.89	14.51	4410		.12	.4	.3	KEA	2.0X	4	88	12
94	MAY	1	1946	9.84	19	50.98	155	11.72	28.22	4312		.12	.7	1.1	KEAF	2.0X	4	196	16
94	MAY	2	1109	14.84	19	23.87	155	25.32	8.73	31	5	.09	.4	.7	KAO	1.6X	4	66	3
94	MAY	3	308	24.55	19	18.78	155	26.29	10.07	46	8	.10	.3	.7	LSW	2.0X	3	56	6
94	MAY	3	1309	40.16	19	19.83	155	51.47	8.37	49	8	.17	.6	.5	KON	2.8X	4	149	7
94	MAY	4	1756	56.38	18	53.90	156	47.63	7.49	17	6	.09	7.5	9.3	DIS -	1.5D	1	332	105
94	MAY	5	542	25.59	18	45.53	156	41.91	6.87	27	7	.10	7.5	9.4	DIS -	2.3X	1	324	104
94	MAY	5	1419	25.99	19	28.67	154	53.19	1.52	7		.09	3.7	9.8	SLEF-	1.8X	1	116	4
94	MAY	6	910	30.81	19	10.20	155	41.63	8.15	38	5	.17	.5	1.0	LSWF	3.5D	1	129	12
94	MAY	7	146	51.48	19	25.29	155	18.86	5.85	35	7	.11	.4	.6	INT	2.0X	6	45	2
94	MAY	7	230	6.21	18	59.41	155	19.50	30.85	45	3	.10	1.3	1.5	LOI	2.3X	4	226	24
94	MAY	7	859	53.42	19	19.45	155	18.69	4.09	24	5	.11	.3	.7	SWR	1.5X	2	103	3
94	MAY	7	1846	3.10	19	20.30	155	11.71	8.87	43	8	.11	.4	.6	SF3	1.9X	5	78	5
94	MAY	8	1218	3.05	19	12.23	155	37.39	9.75	30	5	.14	.3	.8	LSW	2.4X	3	94	5
94	MAY	9	736	29.22	19	20.16	155	7.07	8.77	47	8	.10	.5	.4	SF4	2.2X	3	104	5
94	MAY	9	1043	1.18	19	19.72	155	11.89	8.58	35	5	.10	.5	.7	SF3	1.9X	2	88	6
94	MAY	9	1551	57.88	19	19.78	155	11.85	9.05	32	7	.09	.4	.7	SF3	1.7X	2	87	5
94	MAY	10	247	39.21	19	23.83	156	29.51	9.28	30	7	.12	5.1	6.8	DIS	2.4X	2	302	61
94	MAY	10	1358	9.37	19	20.39	155	6.67	7.65	44	8	.10	.5	.5	SF4	2.2X	6	105	6
94	MAY	11	21	57.50	19	22.40	155	29.96	9.95	40	2	.11	.4	.6	KAO	1.6X	4	33	4
94	MAY	11	339	35.06	19	22.79	155	14.72	3.16	17	4	.07	.3	.3	SEC	1.7X	2	75	2
94	MAY	11	340	34.29	19	23.08	155	15.05	30.18	41	8	.09	.5	.6	DEP	2.5X	4	56	2
94	MAY	11	945	5.93	19	25.08	155	19.67	6.76	35	6	.10	.3	.7	KAO	1.9X	6	67	3
94	MAY	12	249	57.87	19	18.20	155	13.33	7.13	26	3	.10	.5	1.1	SF2	1.9X	2	88	2
94	MAY	12	406	53.31	19	18.03	155	13.28	7.88	30	4	.08	.5	.9	SF2	1.5X	2	94	2
94	MAY	12	812	38.40	19	12.22	155	27.88	5.98	39	1	.14	.4	1.0	LSW	2.5X	3	105	5
94	MAY	12	1523	19.95	19	19.98	155	6.89	8.71	34	6	.09	.5	.6	SF4	1.7X	1	110	5
94	MAY	13	1105	1.91	19	23.68	155	53.08	9.59	3910		.21	.6	.6	KON	2.1X	5	168	11
94	MAY	14	1801	33.86	19	23.63	155	16.79	3.39	34	8	.11	.3	.2	SSC	2.0X	4	44	1
94	MAY	17	819	53.75	19	25.68	155	20.95	10.61	39	9	.09	.4	.6	KAO	1.8X	7	90	4
94	MAY	17	1540	20.15	19	19.56	155	7.63	9.02	40	9	.09	.5	.6	SF4	2.2X	4	103	4
94	MAY	18	29	45.07	19	19.51	155	12.89	8.98	40	4	.11	.4	.6	SF2	2.0X	5	121	6
94	MAY	18	121	34.17	19	22.33	155	29.94	10.83	4610		.11	.3	.5	KAO	2.4X	5	32	4
94	MAY	18	221	40.29	19	23.60	155	37.67	1.52	11	2	.09	.4	1.0	MLO	1.7X	1	86	6
94	MAY	18	1606	16.48	19	23.97	155	16.00	16.27	45	9	.08	.5	.4	DEP	2.4X	4	44	1
94	MAY	20	228	35.32	19	24.33	155	17.38	1.88	9		.06	.5	.3	SSCL	1.4X	3	98	1
94	MAY	20	1016	55.00	19	19.05	155	13.59	7.53	30	1	.10	.5	1.0	SF2	1.8X	3	69	4
94	MAY	20	2122	12.35	19	20.61	155	7.52	7.69	31	4	.08	.4	.6	SF4	2.0X	3	89	5
94	MAY	22	52	24.32	19	52.99	155	43.48	36.33	5411		.08	.5	1.0	HUA	2.5X	1	140	7
94	MAY	22	750	45.18	19	56.28	155	36.35	14.92	49	8	.10	.6	1.0	KOHF	4.2U		140	23
94	MAY	22	940	6.47	19	18.34	155	7.16	3.81	16		.09	.7	.9	SSF	2.0X	1	150	2
94	MAY	22	954	34.39	19	54.09	155	35.47	9.07	25	3	.20	.6	.8	KEA	1.6X	2	130	9
94	MAY	22	2206	51.09	19	27.58	154	51.71	6.51	28	2	.12	1.3	.5	LERF	1.6X	3	127	1

ORIGIN TIME				LAT	N	LON	W	DEPTH	N	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN
YR	MON	DA	HRMN	SEC	DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	REMKS	MAG	RD	GAP	DS
94	MAY	22	2228	15.50	19	29.24	154	52.21	6.32	32	4	.13	.7	.9	LERF	1.8X	4	98	3
94	MAY	23	324	11.32	19	30.21	155	26.83	5.42	32	8	.10	.3	1.1	MLO	1.8X	5	99	4
94	MAY	23	327	41.63	19	24.49	155	16.75	7.67	20	4	.13	.6	.7	INTL	1.4X	3	84	1
94	MAY	24	228	11.50	19	18.65	155	26.45	10.50	29	5	.10	.4	.7	LSW	1.5X	4	99	6
94	MAY	24	434	6.14	19	23.70	155	15.11	3.72	26	8	.10	.3	.4	SEC	1.9X	5	57	2
94	MAY	24	732	24.58	18	56.15	155	28.71	42.96	38	8	.09	1.4	1.0	DLS	2.3X	4	240	20
94	MAY	25	237	50.39	19	14.46	155	34.64	7.79	42	6	.17	.5	.9	LSW	2.6X	2	108	4
94	MAY	25	1027	20.26	19	21.28	155	5.67	7.38	40	6	.13	.4	.6	SF4	2.1X	2	92	5
94	MAY	25	1908	33.56	19	54.00	155	35.66	11.10	27	7	.10	.4	.5	KEA	1.7X	1	129	26
94	MAY	27	1917	53.99	19	19.19	155	12.92	9.46	45	9	.11	.4	.5	SF2	2.0X	7	125	6
94	MAY	27	2319	15.46	19	20.86	155	11.69	8.18	2910		.11	.8	.3	SF3	2.2X	4	206	4
94	MAY	28	335	48.36	19	10.36	155	40.85	0.05	43	5	.18	.5	.3	LSW	2.0X	5	123	11
94	MAY	28	1405	46.29	19	21.92	155	4.88	7.00	34	5	.14	.5	.8	SF5	1.8X	3	76	5
94	MAY	28	2335	26.89	19	23.67	155	27.33	10.38	45	7	.10	.3	.5	KAO	1.9X	4	29	2
94	MAY	29	2	58.05	19	20.03	155	6.67	8.22	37	5	.10	.6	.5	SF4	2.0X	4	154	6
94	MAY	29	1235	38.18	19	20.26	155	8.04	8.46	45	7	.12	.4	.4	SF4	2.7X	3	84	5
94	MAY	29	1427	17.44	19	19.81	155	7.46	8.87	42	7	.07	.4	.5	SF4	2.0X	4	155	6
94	MAY	30	1316	34.23	19	49.71	156	26.60	71.16	16	1	.18	5.2	3.3	DIS	2.1X	1	289	65
94	MAY	30	1837	42.68	19	25.45	155	16.26	11.30	21	4	.10	.6	.7	INTL	1.7X	4	113	2
94	MAY	30	2034	18.33	20	56.97	157	28.77	0.93	39	2	.17	17.1	5.8	DISF-	3.4X	5	338	199
94	MAY	31	606	54.40	19	25.24	155	16.67	12.19	19	2	.10	.7	.9	INTL	1.7X	2	104	1
94	JUN	1	353	8.21	19	19.97	155	7.57	6.90	37	8	.08	.3	.6	SF4	1.7X	5	98	5
94	JUN	1	2335	19.75	19	25.58	155	25.56	6.56	26	3	.10	.3	1.3	KAO	1.5X	3	52	7
94	JUN	2	1647	28.37	19	19.76	155	13.16	8.90	39	7	.11	.5	.8	SF2	1.9X	3	119	5
94	JUN	2	1704	20.63	19	19.37	155	13.24	7.09	40	7	.14	.4	.9	SF2	2.0X	3	75	4
94	JUN	2	2043	16.24	19	23.85	155	37.38	3.73	15	1	.06	.3	3.5	MLO	1.7X	2	83	6
94	JUN	2	2154	50.32	19	7.64	156	21.46	9.86	3311		.12	4.1	5.9	DIS	2.3X	1	286	61
94	JUN	2	2157	43.29	19	19.44	155	13.52	8.81	41	5	.13	.5	.6	SF2	1.9X	4	123	6
94	JUN	3	2120	19.16	19	20.15	155	8.01	7.77	41	6	.11	.4	.5	SF4	1.9X	3	86	5
94	JUN	4	1222	55.51	19	25.21	155	29.25	9.62	4011		.11	.3	.7	KAO	1.7X	4	41	6
94	JUN	5	1622	26.71	19	18.49	155	13.68	7.08	39	6	.11	.4	.7	SF2	1.7X	4	71	3
94	JUN	8	749	43.16	19	11.53	155	28.75	33.32	5514		.08	.5	.7	DLS	2.6X	5	84	4
94	JUN	8	1341	11.64	19	18.48	154	58.86	39.73	35	1	.10	2.5	2.4	LER	2.4X	1	260	12
94	JUN	8	1500	31.78	19	16.10	155	30.16	9.82	41	2	.14	.4	.9	LSW	2.1X	4	55	2
94	JUN	9	732	27.19	19	28.08	154	52.91	7.33	29	1	.14	1.1	.9	LER	1.7X	4	118	3
94	JUN	9	1220	3.35	19	28.10	154	51.45	7.45	20		.13	1.3	.7	LER	2.3X	1	138	1
94	JUN	9	1801	41.75	19	15.83	155	17.30	30.15	43	8	.11	.8	.9	DEP	2.1X	5	152	5
94	JUN	9	2332	23.08	20	8.34	155	50.74	23.32	25	7	.11	1.3	1.2	KOH	2.0X	2	277	7
94	JUN	10	518	28.87	19	20.62	155	6.94	7.37	41	6	.12	.5	.7	SF4	1.9X	4	140	5
94	JUN	10	558	23.36	19	26.44	155	28.80	9.90	4710		.10	.3	.6	KAO	2.3X	7	44	7
94	JUN	10	1035	10.54	19	48.06	155	25.22	23.45	2710		.09	.6	1.4	KEA	2.0X	1	116	13
94	JUN	10	1415	40.00	19	21.90	155	13.19	3.04	16	5	.03	.3	.3	SER	1.8X	3	98	1
94	JUN	10	1745	9.84	19	18.50	155	14.92	4.68	27	2	.12	.5	1.6	SSF	1.1X	3	108	4
94	JUN	10	2248	53.11	19	19.81	155	8.97	7.42	33	3	.10	.6	.8	SF4	1.5X	4	148	4
94	JUN	11	442	15.93	19	47.81	155	24.80	23.96	3011		.11	.6	1.1	KEA	1.7X	3	111	13

ORIGIN TIME				LAT	N	LON	W	DEPTH	N	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN
YR	MON	DA	HRMN	SEC	DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	REMKS	MAG	RD	GAP	DS
94	JUN	11	951	43.97	19	31.41	155	33.82	15.11	3812		.11	.5	.2	DML	2.0X	3	85	3
94	JUN	11	1206	39.99	19	17.05	155	12.81	7.34	21	2	.09	.6	1.0	SF2	1.6X	1	182	1
94	JUN	11	1207	15.91	19	17.72	155	13.00	5.06	21	1	.09	.7	1.2	SF2	1.8X	1	119	2
94	JUN	11	2204	47.67	19	18.49	155	12.86	3.49	21		.09	.3	.8	SSF	1.6X	1	99	3
94	JUN	12	400	1.00	19	24.48	155	16.15	1.44	26	7	.11	.2	.2	SEC	2.0X	2	91	1
94	JUN	12	1119	40.74	19	11.26	155	37.69	8.57	16		.13	.5	1.4	LSW	1.9X	1	99	7
94	JUN	12	1930	52.30	19	12.21	155	54.79	45.67	5513		.10	.7	.8	KON	2.4X	8	227	8
94	JUN	13	120	42.41	19	21.06	155	11.43	10.00	44	9	.11	.4	.5	SF3	2.4X	5	136	3
94	JUN	13	1606	21.73	19	10.90	155	33.02	7.66	41	3	.14	.6	.6	LSW	2.1X	5	181	9
94	JUN	14	114	25.87	19	20.20	155	7.51	7.59	44	9	.12	.6	.7	SF4	2.2X	6	148	5
94	JUN	14	151	7.91	19	20.97	155	6.14	7.20	36	3	.12	.6	.7	SF4	1.9X	3	147	5
94	JUN	14	728	22.44	19	22.25	155	4.03	7.97	37	4	.12	.5	.6	SF5	1.8X	4	95	4
94	JUN	14	816	9.59	19	20.89	155	29.86	10.34	40	3	.09	.4	.6	KAO	2.0X	4	46	5
94	JUN	14	949	2.53	19	20.10	155	7.10	8.01	42	7	.08	.4	.7	SF4	1.9X	4	150	6
94	JUN	17	659	16.55	19	27.30	154	53.94	1.00	29	5	.14	.6	.7	SLE	1.7X	3	143	5
94	JUN	17	1919	43.63	19	21.97	155	5.29	7.30	34	3	.11	.4	.6	SF4	1.9X	4	77	5
94	JUN	18	502	29.38	19	25.47	155	20.39	6.39	28	4	.10	.4	1.0	KAO	1.7X	2	63	3
94	JUN	18	1901	45.00	19	17.96	155	30.13	11.11	35	3	.11	.4	.9	LSW	2.3X	1	67	5
94	JUN	19	2339	4.27	19	32.67	155	58.33	10.43	23	1	.14	3.8	.8	KON	2.1X	1	288	22
94	JUN	21	637	43.37	19	15.00	155	17.65	29.74	19		.10	1.0	3.2	DEP	1.7X	1	189	6
94	JUN	21	852	40.22	20	40.16	155	52.34	6.58	18	6	.12	8.6	11.1	DIS -	2.3X	1	326	102
94	JUN	21	2153	9.85	19	22.28	155	12.78	3.28	36	3	.12	.3	.5	SER	2.2X	3	51	1
94	JUN	22	107	51.97	18	56.00	155	12.63	15.97	37	2	.14	2.0	11.4	LOI	2.0X	1	253	37
94	JUN	22	641	45.97	19	16.96	155	4.15	46.75	53	11	.12	.8	1.0	DEP	2.7X	2	199	6
94	JUN	22	2226	45.53	19	10.25	155	32.45	5.02	36	3	.16	.6	2.1	LSW	1.9X	3	114	8
94	JUN	22	2247	21.89	19	22.74	155	14.46	3.29	21	4	.08	.3	.4	SEC	1.7X	2	81	2
94	JUN	23	32	30.20	19	25.95	155	29.49	10.36	49	9	.09	.3	.6	KAO	2.1X	7	40	7
94	JUN	23	253	24.54	19	22.16	155	19.41	30.62	51	9	.11	.5	.8	DML	2.9X	3	73	3
94	JUN	23	256	5.72	19	18.14	155	27.96	10.94	23	2	.11	.4	1.0	LSW	1.8X	1	44	7
94	JUN	23	732	32.74	19	13.68	156	29.73	35.61	28		.08	7.3	2.8	DIS	2.1D	1	306	67
94	JUN	23	805	37.31	19	11.27	155	28.88	6.88	17		.16	1.0	2.0	LSW	1.6X	1	144	4
94	JUN	23	1722	5.03	19	10.35	155	32.55	0.04	28	5	.17	.4	.3	LSW	1.9X	2	112	8
94	JUN	23	1845	28.72	19	10.65	155	32.41	0.77	35	6	.18	.4	.4	LSW	1.8X	2	108	8
94	JUN	23	1854	40.12	19	54.86	155	15.56	33.74	42	5	.10	.8	1.0	KEA	2.2X	5	200	9
94	JUN	23	2133	2.46	19	16.81	155	12.80	7.84	41	9	.11	.4	.6	SF2	1.7X	4	160	1
94	JUN	24	48	25.55	19	47.60	155	51.99	34.83	27	3	.09	1.0	1.8	HUA	1.5D	1	248	12
94	JUN	24	846	37.25	19	42.84	155	25.52	30.44	5814		.10	.5	.9	KEA	2.7X	2	68	8
94	JUN	24	1607	44.80	19	19.67	155	10.61	8.72	44	6	.09	.4	.5	SF3	1.6X	5	94	5
94	JUN	24	1841	19.41	19	24.25	154	46.39	43.18	6118		.13	.9	.8	LER	2.8X	5	278	13
94	JUN	25	237	48.15	19	20.50	155	11.77	8.40	41	4	.13	.5	.6	SF3	2.3X	2	111	4
94	JUN	25	351	4.32	19	27.33	155	22.69	9.48	53	7	.11	.3	.5	KAO	2.8X	3	49	4
94	JUN	26	1415	23.52	19	19.75	155	7.59	7.75	38	3	.10	.5	.5	SF4	2.0X	2	156	6
94	JUN	27	333	54.88	19	19.42	155	9.78	7.41	38	2	.09	.4	.4	SF3	1.9X	1	151	5
94	JUN	28	2024	44.74	19	30.94	155	51.38	8.17	27	3	.16	1.0	.7	KON	1.4X	3	120	7
94	JUN	29	146	35.30	19	25.27	155	39.16	3.18	18	2	.10	.9	1.7	MLO	2.0X	2	196	6

ORIGIN TIME				LAT	N	LON	W	DEPTH	N	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN
YR	MON	DA	HRMN	SEC	DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	REMKS	MAG	RD	GAP	DS
94	JUN	29	501	8.90	19	21.44	155	5.94	7.96	38	3	.10	.4	.6	SF4	1.9X	4	88	5
94	JUN	29	1405	47.77	18	58.26	155	17.21	16.90	51	5	.11	1.1	11.4	LOI -	2.7X	1	234	28
94	JUN	29	2350	50.49	19	17.79	155	13.13	7.76	35	5	.10	.4	.6	SF2	1.8X	5	108	2
94	JUN	30	43	8.24	19	19.55	155	29.12	11.01	42	7	.11	.3	.5	KAO	1.5X	3	47	6
94	JUN	30	200	37.76	19	11.65	155	42.27	13.16	17	1	.09	.6	.8	DLS	1.7X	1	125	11
94	JUN	30	655	50.78	19	19.85	155	11.49	7.95	36	1	.12	.5	.8	SF3	1.5D	1	125	5
94	JUN	30	1733	11.94	19	18.10	155	16.33	8.94	42	6	.13	.5	.6	SF1	1.7X	5	121	4
94	JUL	1	4	55.69	19	14.52	155	30.19	32.29	6018		.08	.4	.7	DLS	2.3X	9	65	1
94	JUL	1	1712	35.92	19	17.82	155	13.11	7.03	34	4	.10	.5	.9	SF2	1.6X	3	108	2
94	JUL	1	1820	15.55	19	29.53	155	27.08	5.32	19	5	.12	.4	2.1	KAO	1.6X	2	97	5
94	JUL	1	1923	3.66	19	19.87	155	10.66	9.08	31	2	.08	.5	.7	SF3	1.9X	2	90	4
94	JUL	2	1108	15.78	19	21.82	155	28.48	10.40	26	4	.11	.4	.8	KAO	1.2D	1	39	2
94	JUL	2	1133	11.97	19	7.71	155	38.99	2.50	19	4	.14	.5	1.2	LSW	2.2X	2	118	14
94	JUL	2	1228	11.21	19	17.59	155	13.15	7.47	34	6	.10	.5	.8	SF2	1.8X	3	116	1
94	JUL	3	702	53.97	19	25.74	155	29.79	9.66	45	7	.10	.3	.8	KAO	2.0X	3	39	7
94	JUL	4	1426	8.74	19	28.46	155	26.35	4.65	40	9	.13	.3	2.5	KAO	1.9X	7	53	6
94	JUL	4	2031	8.14	19	20.59	155	2.91	8.26	4711		.12	.6	.4	SF5	2.5X	6	131	1
94	JUL	5	457	43.62	19	17.17	155	21.10	5.42	27	3	.12	.5	1.7	SWR	1.3X	3	134	5
94	JUL	5	857	52.70	19	20.20	155	8.15	8.06	43	8	.12	.4	.4	SF4	2.3X	4	145	5
94	JUL	5	909	38.82	19	19.72	155	6.78	9.13	39	6	.09	.6	.4	SF4	2.5X	4	157	7
94	JUL	5	1536	37.84	19	20.13	155	6.69	9.62	4910		.12	.5	.3	SF4	1.3X	5	150	6
94	JUL	5	2013	34.51	19	51.49	155	30.29	16.22	35	3	.10	1.2	.8	KEA	1.7X	3	222	10
94	JUL	6	56	20.54	19	54.33	155	36.96	2.15	32	4	.13	.5	.9	KEA	1.7X	3	127	22
94	JUL	6	2322	11.67	19	42.56	155	57.09	15.23	25	4	.11	1.2	.6	HUA	2.1X	2	250	12
94	JUL	7	711	4.92	19	19.74	155	8.10	7.14	35	3	.11	.6	.7	SF4	1.7X	1	154	5
94	JUL	7	1548	32.98	19	0.29	155	25.47	39.95	41	7	.08	.9	1.0	DLS	1.8X	4	220	18
94	JUL	7	1605	45.44	19	1.22	155	25.32	41.50	45	5	.08	.8	1.0	DLS	2.1X	4	213	16
94	JUL	8	1123	10.04	19	23.02	155	25.28	11.07	38	3	.11	.4	.7	KAO	2.2X	1	28	4
94	JUL	9	1503	39.44	19	14.08	155	18.65	0.00	22	3	.12	.5	.4	SWR #	1.4X	2	171	7
94	JUL	10	513	54.56	19	26.47	155	29.82	10.32	47	7	.12	.3	.6	KAO	2.0X	5	41	6
94	JUL	10	1836	35.10	19	25.41	155	15.57	12.88	18	3	.08	1.0	.6	INT	1.8X	2	145	3
94	JUL	11	221	42.19	19	54.12	155	22.75	10.64	37	4	.10	.8	.4	KEA	2.8X	3	225	4
94	JUL	13	1215	53.25	19	19.58	155	11.28	6.97	23	3	.08	.5	1.1	SF3	1.5X	2	95	5
94	JUL	13	1607	15.04	19	20.65	155	48.92	8.40	26	4	.13	.5	1.0	KON	1.8X	3	111	10
94	JUL	13	1731	26.36	19	20.62	155	7.67	7.28	42	4	.09	.4	.5	SF4	2.2X	5	86	5
94	JUL	13	1826	1.78	19	20.48	155	6.82	7.85	42	5	.08	.4	.5	SF4	1.9X	5	144	5
94	JUL	14	804	59.21	19	31.73	156	8.64	42.08	29	2	.08	2.3	1.4	KON	2.2X	1	274	37
94	JUL	14	2228	27.59	19	18.33	155	15.41	7.52	33	2	.10	.5	.7	SF1	1.5X	3	119	4
94	JUL	15	1543	13.31	19	21.40	155	28.57	9.50	31	5	.11	.4	.6	KAO	1.5X	3	46	3
94	JUL	16	212	20.71	19	11.17	155	28.10	34.77	32	7	.10	.8	1.0	DLS	1.7X	3	110	3
94	JUL	16	1937	39.69	19	44.45	157	39.81	18.36	21	2	.18	4.6	12.5	DIS	2.5X	2	341	185
94	JUL	17	1044	35.45	19	22.76	155	3.40	8.40	29	4	.13	.7	.5	SF5	1.6X	2	110	3
94	JUL	17	1705	29.78	19	19.45	155	9.31	8.40	36	5	.09	.5	.6	SF3	2.0X	1	154	5
94	JUL	17	1925	52.81	19	21.90	155	9.21	3.50	21	2	.05	.4	.3	SER	1.6X	1	96	1
94	JUL	18	1553	23.13	19	6.00	155	27.80	31.50	37	8	.09	1.0	.9	DLS	2.2X	4	236	6

ORIGIN TIME				LAT	N	LON	W	DEPTH	N	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN
YR	MON	DA	HRMN	SEC	DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	REMKS	MAG	RD	GAP	DS
94	JUL	18	1619	24.98	19	47.96	156	5.80	5.20	20	4	.15	1.1	1.5	HUA	2.1X	2	284	47
94	JUL	20	31	49.25	20	12.02	155	50.06	26.73	19	1	.07	3.8	4.7	KOH	1.8D	1	296	57
94	JUL	20	411	47.77	19	26.59	155	29.87	8.63	37	6	.12	.3	.8	KAO	2.0X	1	41	6
94	JUL	20	514	12.50	19	24.47	155	38.21	0.02	13		.15	.7	2.3	MLO #	1.5D	1	171	6
94	JUL	20	648	55.15	19	18.61	155	13.98	7.64	25	3	.08	.4	.8	SF2	1.4X	3	95	3
94	JUL	20	1050	47.97	19	28.95	155	48.55	8.45	29	6	.12	.4	.6	KON	2.1X	1	79	6
94	JUL	20	2018	31.17	19	19.19	155	4.29	1.15	12	2	.08	1.0	1.0	SSF	1.5X	2	182	3
94	JUL	20	2253	30.11	19	10.49	155	39.17	6.14	22	4	.14	.8	2.2	LSW	1.9X	1	199	9
94	JUL	21	1958	26.60	20	43.95	155	46.10	7.41	21	4	.18	9.2	12.1	DIS -	2.2X	2	330	97
94	JUL	23	257	19.81	19	19.99	155	8.18	8.09	40	6	.10	.6	.6	SF4	2.0X	5	150	5
94	JUL	23	635	13.72	19	25.51	155	29.25	10.23	38	4	.11	.3	.6	KAO	1.7X	1	36	6
94	JUL	23	750	11.08	19	6.54	156	22.61	35.20	5312		.10	1.0	2.0	DIS	4.0X	8	302	56
94	JUL	23	1025	43.78	19	18.52	155	18.01	33.38	5413		.11	.6	.8	DEP	2.7X	7	118	2
94	JUL	23	1648	12.29	19	24.88	155	37.13	1.83	21	4	.15	.4	.9	MLO	2.2D	1	126	5
94	JUL	24	325	0.29	19	19.53	155	13.41	8.80	46	4	.12	.4	.4	SF2	2.2X	2	122	6
94	JUL	24	1222	31.01	19	22.13	155	15.73	24.08	5013		.09	.5	.6	DEP	1.9X	8	61	1
94	JUL	25	134	34.22	19	25.78	155	30.56	12.40	5613		.10	.3	.4	KAO	1.9X	10	36	5
94	JUL	25	701	57.42	19	20.37	155	4.36	7.07	28	1	.09	.5	.7	SF5	2.0X	1	120	3
94	JUL	25	2208	40.94	19	19.63	155	7.56	8.68	37	6	.05	.4	.4	SF4	1.9X	3	160	6
94	JUL	26	527	21.40	19	20.15	155	7.17	8.22	3211		.11	.4	.6	SF4	1.8X	4	102	5
94	JUL	26	534	30.97	19	58.14	155	44.50	16.79	19	7	.13	1.1	15.7	KOH -	2.1X	1	262	33
94	JUL	26	957	21.66	19	19.74	155	11.34	6.97	50	7	.12	.4	.6	SF3	1.9X	6	129	5
94	JUL	26	1724	42.68	20	1.87	155	34.85	10.46	44	5	.10	.4	.4	KOHF	3.0X	5	184	21
94	JUL	26	2006	57.97	19	25.43	155	29.70	9.88	45	7	.10	.3	.6	KAO	1.7X	5	41	7
94	JUL	26	2132	45.68	18	53.37	155	4.05	13.08	46	5	.14	1.9	3.8	LOI	2.3X	1	261	45
94	JUL	27	1500	54.13	19	23.15	155	29.78	9.68	40	4	.08	.3	.6	KAO	1.5X	4	46	4
94	JUL	27	1528	17.41	19	22.07	155	4.85	7.85	43	7	.10	.3	.5	SF5	2.1X	4	77	4
94	JUL	28	207	38.12	19	20.31	155	11.88	7.93	46	4	.15	.4	.5	SF3	2.0X	5	113	5
94	JUL	28	302	49.49	19	48.51	155	35.64	13.72	27	4	.13	.8	.6	KEA	2.1X	1	188	15
94	JUL	28	1517	59.64	19	19.72	155	6.71	7.73	29	2	.10	.5	.9	SF4	1.8X	1	120	5
94	JUL	28	1624	28.99	19	12.73	156	23.35	35.93	38	8	.12	1.1	2.5	DIS	2.0X	3	299	55
94	JUL	28	1939	0.51	19	12.46	156	23.49	37.34	37	5	.11	1.3	2.0	DIS	2.2X	2	299	55
94	JUL	29	335	4.71	19	19.89	155	18.03	5.32	4510		.12	.3	.7	SWR	1.8X	7	100	1
94	JUL	29	625	40.57	19	27.34	154	52.82	7.46	26	3	.10	.7	.8	LER	1.6X	3	146	3
94	JUL	29	920	53.22	19	25.88	155	19.10	6.29	4510		.13	.3	.6	KAO	2.0X	7	52	3
94	JUL	29	1316	25.26	20	6.16	155	50.61	24.38	32	7	.11	.9	1.2	KOH	2.2X	5	245	7
94	JUL	29	1638	14.23	19	19.73	155	3.24	9.44	5916		.12	.5	.4	SF5	2.5X	9	188	1
94	JUL	29	1756	21.38	19	20.49	155	3.86	8.77	52	9	.11	.5	.4	SF5	3.1X	2	109	2
94	JUL	29	1800	3.77	19	20.54	155	3.71	8.14	5010		.11	.4	.3	SF5	1.9X	7	102	2
94	JUL	29	1832	49.24	19	20.40	155	4.06	7.90	44	3	.10	.6	.4	SF5	2.3X	1	136	2
94	JUL	29	1938	25.45	19	20.56	155	3.79	7.69	41	3	.10	.6	.5	SF5	2.4X	1	121	2
94	JUL	30	452	58.26	20	17.22	155	49.53	30.01	38	5	.11	1.4	3.7	KOH	2.5X	3	304	67
94	JUL	30	1223	32.16	19	11.64	156	18.60	40.67	21	2	.10	2.7	2.4	KON #	1.9X	1	319	47
94	JUL	30	1408	17.13	19	20.63	155	3.62	6.75	32		.11	.6	.8	SF5	2.0X	2	95	2
94	JUL	31	356	56.23	19	19.03	155	13.18	9.27	44	7	.12	.4	.5	SF2	2.2X	4	128	7

ORIGIN TIME				LAT	N	LON	W	DEPTH	N	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN
YR	MON	DA	HRMN	SEC	DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	REMKS	MAG	RD	GAP	DS
94	JUL	31	649	57.27	19	19.77	155	7.59	8.69	44	6	.09	.4	.5	SF4	1.4X	5	100	5
94	JUL	31	728	37.41	19	19.12	155	13.11	10.02	40	3	.11	.4	.7	SF2	2.1X	2	127	6
94	JUL	31	1859	14.60	19	17.50	155	30.11	8.22	37	1	.14	.3	.8	LSW	2.0X	1	68	4
94	AUG	1	459	48.33	19	25.09	155	19.72	6.71	39	9	.11	.3	.6	KAO	2.2X	2	67	3
94	AUG	2	446	43.59	19	54.56	156	20.43	7.00	41	9	.12	1.2	1.9	DIS	2.5X	3	282	58
94	AUG	2	605	33.58	19	18.18	155	26.35	10.44	31	5	.12	.4	.6	LSW	1.5X	2	80	7
94	AUG	2	1029	2.77	19	20.23	155	7.02	8.17	41	4	.09	.4	.6	SF4	2.0X	2	104	6
94	AUG	3	556	6.75	19	18.05	155	28.01	9.47	30	5	.13	.4	.8	LSW	1.5X	2	80	7
94	AUG	3	853	20.24	19	25.20	155	30.65	9.37	36	3	.10	.3	.8	KAO	1.5X	4	35	7
94	AUG	3	1003	41.76	19	12.67	156	23.64	36.74	46	9	.11	1.2	2.0	DIS	2.4X	3	307	55
94	AUG	3	1327	33.96	19	55.13	156	28.59	38.41	25	4	.11	2.0	3.6	DIS	1.6X	1	316	72
94	AUG	4	1627	25.16	19	22.40	155	50.81	5.66	20	3	.07	.5	1.8	KON	1.5X	1	168	12
94	AUG	4	1740	50.39	18	56.83	155	30.68	12.35	24	1	.13	2.3	4.5	LSW	2.1X	1	276	44
94	AUG	5	315	7.56	19	17.89	155	14.68	4.38	32	1	.11	.4	1.1	SSF	1.7X	3	110	3
94	AUG	5	1143	42.51	19	21.42	155	8.04	8.61	41	3	.09	.4	.6	SF4	1.6X	3	71	3
94	AUG	5	1216	8.62	19	9.05	155	22.85	44.51	48	8	.09	.9	.9	LOI	2.4X	5	179	9
94	AUG	5	1346	51.44	19	26.00	155	18.91	7.90	37	9	.13	.4	.6	INT	1.8X	4	70	3
94	AUG	8	2315	32.41	19	25.17	155	50.37	11.85	33	2	.18	.7	.5	KON	1.6X	4	121	11
94	AUG	10	351	2.55	19	16.98	155	17.20	33.50	5211		.12	.6	.8	DEP	2.9X	2	142	3
94	AUG	10	2217	45.83	20	0.23	155	41.74	30.81	52	9	.10	.9	1.5	KOHF	2.7X	6	140	16
94	AUG	11	943	52.54	19	15.52	155	30.04	12.22	33	2	.11	.5	.6	LSW	1.4X	1	74	1
94	AUG	12	1224	43.97	19	20.17	155	6.85	7.24	34	3	.09	.5	.7	SF4	2.3X	2	150	6
94	AUG	13	558	22.37	19	23.05	155	59.84	34.50	40	9	.08	.8	.8	KON	2.0X	4	252	14
94	AUG	13	1529	7.73	19	18.48	155	13.48	7.45	39	7	.11	.4	.6	SF2	1.9X	5	77	3
94	AUG	14	532	5.20	19	25.70	155	15.79	13.15	22	5	.10	.8	.6	DEPL	2.0X	5	147	3
94	AUG	14	535	40.02	19	26.28	155	17.52	8.26	10	1	.12	1.6	.8	INTL	1.7X	2	169	2
94	AUG	14	1115	42.59	19	57.92	155	12.14	42.66	41	9	.11	.9	1.2	KEA	2.3X	4	216	17
94	AUG	14	1128	14.48	19	23.87	155	15.82	2.99	25	8	.08	.3	.3	SEC	1.5X	6	71	3
94	AUG	15	1253	19.46	19	23.13	155	3.58	8.23	36	4	.12	.4	.4	SF5	1.9X	4	102	2
94	AUG	16	2114	18.63	19	20.61	155	10.87	8.27	37	5	.09	.4	.5	SF3	1.9X	3	76	3
94	AUG	16	2233	28.06	19	31.70	155	53.21	6.88	19	3	.14	.5	1.0	KON	1.5X	2	158	6
94	AUG	17	2145	46.46	19	5.27	155	29.03	29.44	44	8	.08	.7	.8	DLS	2.3X	7	237	8
94	AUG	18	4	1.74	19	12.31	155	26.83	8.09	4710		.11	.3	.6	LSW	2.0X	8	129	5
94	AUG	18	442	8.90	19	20.35	155	7.55	7.93	40	5	.08	.5	.6	SF4	2.0X	6	145	5
94	AUG	18	549	19.35	19	16.35	155	3.43	40.73	40	4	.11	1.1	1.1	DEP	2.2X	5	228	7
94	AUG	20	1221	59.90	19	12.92	155	22.55	37.33	37	5	.11	.8	1.4	DEP	1.8X	4	164	4
94	AUG	20	1345	37.81	19	24.08	155	17.27	1.17	14	7	.08	.2	.5	SSCL	1.6X	5	86	2
94	AUG	21	557	26.89	19	29.61	155	27.20	5.66	4411		.12	.3	1.2	KAO	2.0X	7	86	4
94	AUG	22	1526	24.93	19	25.11	155	38.08	7.00	13	3	.13	.9	1.8	MLO	2.0X	1	211	9
94	AUG	23	1014	53.00	19	22.45	155	49.89	11.57	28	2	.13	.7	.6	KON	2.3X	7	125	13
94	AUG	23	2011	58.42	18	56.46	155	19.83	21.39	32	4	.11	1.7	3.3	LOI	1.9X	3	291	28
94	AUG	24	24	38.72	19	49.65	155	22.43	23.57	44	5	.10	.6	1.3	KEAF	2.8X	3	85	8
94	AUG	24	1118	16.69	19	18.90	155	26.64	10.26	33	5	.11	.3	.6	LSW	2.0X	1	70	6
94	AUG	24	2232	7.15	19	24.74	155	16.01	13.18	14	1	.07	1.1	1.7	DEPL	1.5X	2	103	2
94	AUG	26	1859	6.50	19	26.14	155	15.79	22.76	5714		.11	.5	.6	DEP	1.9X	9	77	3

ORIGIN TIME				LAT	N	LON	W	DEPTH	N	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN
YR	MON	DA	HRMN	SEC	DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	REMKS	MAG	RD	GAP	DS
94	AUG	27	1051	41.62	19	25.49	155	17.67	9.48	18	3	.12	.9	.8	INTL	1.5X	4	113	0
94	AUG	27	2044	58.24	19	23.87	155	18.62	10.83	16	4	.08	.6	.7	INTL	1.8X	2	99	2
94	AUG	28	1428	39.20	19	20.27	155	6.89	6.87	40	3	.11	.5	.8	SF4	1.8X	4	147	6
94	AUG	28	1636	37.77	19	19.65	155	11.94	7.22	42	1	.12	.5	.6	SF3	2.0X	1	121	6
94	AUG	28	1738	26.95	19	23.18	155	4.01	8.53	40	5	.08	.3	.4	SF5	2.3X	1	94	2
94	AUG	29	158	0.55	19	24.65	155	16.58	12.29	16	1	.07	.8	1.0	INTL	1.5X	2	61	1
94	AUG	29	514	6.75	19	26.85	155	15.91	14.35	13	2	.16	2.1	1.4	DEPL	1.6X	1	183	2
94	AUG	29	1251	2.06	19	25.12	155	16.92	12.31	17	2	.12	.8	1.0	INTL	1.6X	1	60	0
94	AUG	29	1544	13.03	19	19.06	155	8.49	7.29	33	6	.07	.4	.7	SF4	1.7X	3	167	6
94	AUG	29	1614	41.41	19	23.77	155	26.70	9.96	5010		.11	.3	.6	KAO	2.2X	2	37	3
94	AUG	29	1643	44.95	19	19.86	155	6.64	7.99	46	5	.12	.5	.5	SF4	2.7X	4	154	7
94	AUG	29	2214	30.21	19	21.45	155	50.57	7.08	38	3	.13	.4	.7	KON	1.9X	2	135	11
94	AUG	30	450	3.37	19	24.46	155	16.56	11.57	23	1	.09	.6	.5	INTL	1.3X	4	61	1
94	AUG	30	1058	12.29	19	23.95	155	16.22	16.98	12	2	.09	1.2	.9	DEPL	1.8X	1	109	3
94	AUG	30	1519	15.27	19	25.06	155	17.12	11.61	21	3	.14	.7	1.0	INTL	1.4X	4	114	0
94	AUG	30	1727	2.63	19	24.07	155	16.22	11.06	17	3	.13	.8	.8	INTL	1.7X	3	62	2
94	AUG	30	1846	56.41	19	23.00	155	14.69	3.46	23	4	.08	.3	.4	SEC	1.9X	3	65	2
94	AUG	30	2226	36.43	19	25.63	155	15.92	15.13	13	3	.08	1.0	.8	DEPL	1.6X	3	140	3
94	AUG	30	2333	24.43	19	25.87	155	17.95	12.73	14	3	.11	1.2	.8	INTL	1.7X	3	88	1
94	AUG	31	248	46.38	19	23.97	155	16.61	11.48	14	1	.07	.9	1.0	INTL	1.5X	1	85	2
94	AUG	31	306	43.46	19	24.10	155	14.11	15.03	10	2	.08	2.2	1.1	DEPL	2.0X	2	248	4
94	AUG	31	449	15.09	19	25.65	155	16.34	7.34	10	1	.07	.7	1.1	INTL	1.4X	3	93	2
94	AUG	31	614	20.39	19	24.06	155	16.53	12.26	7	1	.06	1.9	1.2	INTL	1.5X	1	87	3
94	AUG	31	850	34.49	19	21.15	155	13.12	8.23	38	3	.11	.4	.6	SF2	2.2X	2	58	3
94	AUG	31	937	22.76	19	22.46	155	2.77	6.96	35	4	.14	.5	.7	SF5	1.5X	3	129	4
94	AUG	31	1010	18.59	19	24.16	155	17.10	11.07	15	2	.07	.8	.7	INTL	1.6X	2	66	1
94	AUG	31	1456	25.31	18	53.84	155	37.85	2.34	10	2	.12	4.9	3.4	LSW	2.1X	1	298	10
94	AUG	31	1750	13.53	19	16.08	155	28.04	10.63	41	2	.13	.4	.8	LSW	1.6X	4	64	4
94	SEP	1	1024	35.07	19	25.15	155	18.05	20.93	10	1	.08	3.1	2.0	DEPL	1.9X	2	165	1
94	SEP	1	1917	0.75	19	23.24	155	16.91	10.80	16	3	.11	.7	.6	INTL	1.7X	3	58	0
94	SEP	1	1943	33.18	19	24.93	155	37.91	2.75	44	3	.12	.3	.3	MLO	2.7X	3	70	1
94	SEP	1	1958	25.76	19	23.74	155	17.39	12.52	27	5	.14	.6	.8	INTL	2.0X	4	48	1
94	SEP	1	2022	11.52	19	19.42	155	8.96	7.19	32	4	.10	.5	.6	SF4	1.5X	6	156	5
94	SEP	1	2026	11.54	19	24.41	155	17.24	9.66	24	3	.10	.5	.6	INTL	1.7X	4	41	1
94	SEP	1	2040	35.71	19	25.03	155	16.61	9.32	18	3	.13	.7	.7	INTL	1.8X	4	64	1
94	SEP	1	2051	27.07	19	24.50	155	17.31	11.74	19	3	.08	.6	.9	INTL	1.9X	3	42	1
94	SEP	1	2100	18.50	19	24.90	155	16.71	12.04	19	3	.10	.8	.7	INTL	1.6X	4	62	1
94	SEP	2	603	24.97	19	26.15	155	16.08	1.26	14		.09	.3	.5	SNC	1.4X	4	88	3
94	SEP	2	729	38.63	19	12.19	155	27.32	6.35	34	1	.15	.4	1.2	LSW	2.1X	3	117	5
94	SEP	2	1602	36.86	19	36.49	156	0.13	9.95	5110		.23	1.0	.5	KON	2.3X	7	222	16
94	SEP	2	2207	28.59	19	10.50	155	41.42	0.00	37	4	.23	.6	.5	LSW #	2.0X	7	127	11
94	SEP	2	2319	22.38	19	52.87	155	44.88	13.45	17	2	.12	1.2	.5	HUA	1.6X	1	150	10
94	SEP	3	111	46.85	19	23.32	155	16.72	10.27	16	3	.10	.6	.8	INTL	1.3X	2	67	0
94	SEP	3	1240	49.36	19	25.15	155	29.59	8.60	41	4	.09	.3	.7	KAO	1.4X	1	38	6
94	SEP	3	1528	52.28	19	21.65	155	16.97	8.30	15	3	.11	.9	1.3	SF1L	1.6X	3	142	2

ORIGIN TIME				LAT N		LON W		DEPTH	N	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN
YR	MON	DA	HRMN	SEC	DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	REMKS	MAG	RD	GAP	DS
94	SEP	3	1809	23.46	19	24.35	155	16.63	10.81	10	1	.05	1.1	.9	INTL	1.5X	1	113	1
94	SEP	4	342	51.41	19	23.49	155	15.06	3.22	25	6	.08	.3	.3	SEC	2.0X	5	52	2
94	SEP	4	1526	37.53	19	23.38	155	16.85	3.17	33	1	.11	.3	.3	SSC	2.2X	2	52	0
94	SEP	4	1626	44.71	19	12.56	155	16.64	47.80	45	6	.10	.9	.8	DEP	2.0X	4	179	10
94	SEP	4	2313	6.48	19	21.82	155	12.63	3.01	31	4	.09	.3	.4	SER	2.1X	4	56	2
94	SEP	4	2335	57.76	19	24.61	155	16.45	10.61	18	4	.10	.9	.7	INTL	1.6X	4	111	1
94	SEP	5	348	13.24	19	16.79	155	20.01	7.45	25	3	.12	.6	1.3	SWR	1.6X	3	151	8
94	SEP	5	410	12.16	19	24.63	155	17.04	11.65	13	2	.05	.8	1.0	INTL	1.7X	3	81	1
94	SEP	5	600	29.31	19	25.02	155	16.64	11.82	16	2	.10	.7	.8	INTL	1.6X	3	63	1
94	SEP	5	609	4.19	19	25.12	155	16.92	9.05	20	2	.12	.7	.9	INTL	1.5X	1	60	0
94	SEP	5	1232	9.45	19	56.74	155	31.18	8.48	19		.12	1.3	.7	KEA	1.7X	1	238	19
94	SEP	5	1742	2.19	19	23.20	155	14.75	3.60	26	7	.08	.3	.4	SEC	2.2X	4	48	2
94	SEP	5	1744	41.23	19	23.28	155	14.80	3.53	22	5	.09	.3	.4	SEC	2.2X	2	59	3
94	SEP	5	1813	17.65	19	59.92	155	32.90	9.71	30	2	.10	1.0	.6	KEA	2.1D	1	178	25
94	SEP	6	36	0.78	19	24.58	155	16.41	10.77	16		.10	.9	1.5	INTL	1.8X	1	63	1
94	SEP	6	408	7.40	19	23.09	155	14.66	3.43	21	5	.07	.3	.4	SEC	1.8X	4	62	3
94	SEP	6	503	52.99	20	0.60	155	32.05	10.37	23	1	.14	1.1	.5	KEA	1.6X	1	185	24
94	SEP	6	852	51.38	19	20.03	155	7.97	8.21	38	2	.10	.6	.6	SF4	2.3X	1	150	5
94	SEP	6	1302	50.45	19	23.42	155	14.62	3.63	35	5	.11	.3	.4	SEC	2.5X	2	45	2
94	SEP	6	1533	21.06	19	18.82	155	13.19	9.76	49	9	.11	.3	.5	SF2	2.0X	6	126	7
94	SEP	6	1919	45.87	19	22.97	155	14.83	3.22	24	8	.07	.3	.3	SEC	1.5X	5	65	2
94	SEP	6	1959	56.39	19	20.35	155	6.98	7.94	39	5	.13	.5	.7	SF4	1.7X	5	146	6
94	SEP	7	608	40.24	19	19.86	155	7.12	6.76	4611		.11	.4	.6	SF4	1.8X	5	109	5
94	SEP	7	905	57.74	19	15.80	155	3.07	46.15	6320		.11	.7	.5	DEP	3.0X	7	222	8
94	SEP	9	915	10.64	19	13.33	155	39.95	32.90	39	5	.09	.6	1.0	DLS	1.6D	1	104	6
94	SEP	9	2128	24.41	19	21.87	155	2.75	8.39	28		.11	.7	.6	SF5	2.2X	2	136	4
94	SEP	10	9	53.40	18	59.24	155	39.13	7.26	26	1	.12	1.3	.7	LSW	2.5X	1	194	2
94	SEP	11	1628	12.68	19	19.98	155	7.38	5.35	22	1	.11	.5	1.6	SF4	1.9X	1	101	5
94	SEP	13	34	36.23	19	19.97	155	13.05	10.27	5313		.12	.3	.3	SF2	2.6X	8	141	5
94	SEP	13	1614	35.51	19	20.13	155	11.88	8.56	38	4	.09	.4	.6	SF3	1.8X	4	80	5
94	SEP	13	2341	55.47	19	44.11	156	1.95	35.51	34	2	.11	.9	1.3	HUA	1.7X	3	230	21
94	SEP	14	800	14.02	19	20.08	155	12.19	7.98	49	8	.13	.4	.6	SF3	1.9X	6	111	5
94	SEP	14	937	7.51	19	28.16	155	26.91	7.76	43	8	.12	.3	.9	KAO	1.7X	5	74	6
94	SEP	14	1237	0.62	19	22.92	155	14.63	3.78	31	6	.08	.3	.4	SEC	2.2X	5	68	2
94	SEP	14	1714	4.70	19	18.87	155	13.08	8.01	36	5	.11	.5	.7	SF2	1.8X	5	85	3
94	SEP	15	522	32.17	19	17.11	155	17.44	33.33	47		.10	.6	1.2	DEP	2.4X	6	139	3
94	SEP	15	542	1.07	19	25.29	155	19.31	6.03	32	6	.10	.3	.7	KAO	1.7X	6	74	3
94	SEP	15	800	58.26	19	11.90	156	25.99	1.64	4015		.11	2.8	1.3	DIS	2.3X	4	287	78
94	SEP	17	1211	5.90	19	15.48	155	29.98	8.02	45	2	.19	.4	.8	LSW	2.6X	1	67	1
94	SEP	17	1309	53.73	19	28.11	155	49.44	9.64	22	2	.21	.9	1.4	KON	2.0X	1	130	8
94	SEP	17	1651	28.01	19	18.89	155	27.41	10.81	49	5	.13	.3	.6	LSW	2.2X	1	46	7
94	SEP	18	654	2.14	18	49.60	156	46.46	15.90	34	3	.12	4.8	13.8	DIS -	2.5X	1	314	107
94	SEP	18	657	17.30	18	53.12	156	40.92	7.00	46		.11	8.9	12.6	DIS -	2.5X	3	310	95
94	SEP	19	939	17.67	19	25.30	155	15.56	16.50	13	2	.05	1.0	1.4	DEPL	1.6X	1	175	2
94	SEP	19	1355	57.91	19	24.48	155	16.79	10.46	22	3	.12	.6	.7	INTL	1.6X	4	86	1

ORIGIN TIME				LAT N		LON W		DEPTH	N	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN
YR	MON	DA	HRMN	SEC	DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	REMKS	MAG	RD	GAP	DS
94	SEP	19	1435	34.14	19	24.75	155	16.25	10.57	18	4	.14	.7	.6	INTL	1.7X	1	67	1
94	SEP	20	217	6.24	19	25.02	155	16.73	11.78	19	3	.10	.6	.7	INTL	1.7X	4	115	1
94	SEP	20	630	10.37	19	28.41	155	26.93	6.94	42	8	.14	.3	.9	KAO	2.2X	2	55	7
94	SEP	20	1547	29.55	19	24.85	155	17.15	12.23	15	1	.12	.9	1.2	INTL	1.7X	1	62	0
94	SEP	20	2106	11.35	19	18.72	155	8.34	7.75	11	1	.04	1.3	2.4	SF4	1.6X	1	87	3
94	SEP	20	2313	52.57	19	46.93	155	41.01	12.13	25	1	.16	.7	.5	KEA	1.6D	1	146	9
94	SEP	22	842	47.54	19	10.99	156	28.75	32.21	41	6	.13	1.1	2.9	DIS	2.8X	1	290	65
94	SEP	22	1156	20.95	19	29.95	155	26.45	3.35	25	5	.12	.4	1.0	KAO	1.9X	3	113	4
94	SEP	22	1226	54.63	19	23.89	155	17.49	9.75	12	2	.11	1.0	1.3	INTL	1.8X	2	59	2
94	SEP	22	1430	59.26	19	19.39	155	8.63	6.48	28	7	.10	.4	.7	SF4	1.5X	2	81	4
94	SEP	22	1608	17.54	19	11.68	155	39.82	1.65	37	7	.18	.4	.7	LSW	1.9X	2	110	18
94	SEP	22	1801	18.07	19	24.39	155	17.63	14.10	27	3	.12	.6	.9	DEPL	1.8X	3	43	1
94	SEP	22	1919	2.46	19	24.56	155	16.35	14.43	11	2	.16	2.4	1.5	DEPL	1.8X	2	140	1
94	SEP	22	1942	3.54	19	24.63	155	16.66	11.26	14	2	.09	1.3	.9	INTL	1.7X	3	137	1
94	SEP	22	2124	28.23	19	24.65	155	16.75	12.75	15	3	.07	1.4	.7	INTL	1.9X	3	132	1
94	SEP	22	2156	22.35	19	25.20	155	16.30	12.31	19	3	.09	.7	.9	INTL	1.7X	4	70	1
94	SEP	22	2249	5.12	19	23.08	155	17.98	11.74	20	3	.19	.9	1.0	INTL	1.8X	5	98	2
94	SEP	23	353	44.44	19	21.50	155	14.81	10.71	11	2	.13	2.5	1.4	SF1L	1.8X	2	306	3
94	SEP	23	538	5.64	19	30.03	155	26.51	3.32	31	5	.12	.3	.9	MLO	1.8X	4	97	4
94	SEP	23	627	53.88	19	23.89	155	16.89	12.43	29	4	.13	.6	.6	INTL	1.7X	5	55	1
94	SEP	24	1311	9.40	19	49.05	156	6.69	40.53	48	5	.10	1.4	1.2	HUAF	2.6X	7	248	32
94	SEP	24	1451	34.54	19	12.56	156	30.21	30.71	41	3	.13	1.6	2.6	DIS	2.4X	4	307	67
94	SEP	24	2258	12.36	19	20.44	155	7.80	8.10	42	2	.12	.6	.6	SF4	1.9X	1	142	5
94	SEP	25	43	40.67	19	17.75	155	22.96	4.36	24	2	.10	.4	5.2	SWR	1.8X	1	103	7
94	SEP	25	218	35.02	19	22.48	155	16.45	10.73	12		.19	2.7	1.4	INTL	1.6X	1	169	1
94	SEP	25	254	9.30	19	25.07	155	15.55	15.23	14	2	.09	1.3	.8	DEPL	1.8X	2	129	2
94	SEP	25	333	17.13	19	22.15	155	4.70	8.25	39	4	.13	.6	.4	SF5	2.3X	1	96	4
94	SEP	25	412	25.60	19	24.12	155	17.46	9.44	17		.13	.7	1.3	INTL	1.6X	1	80	2
94	SEP	25	425	44.35	19	25.02	155	16.61	11.50	23	3	.10	.6	.8	INTL	1.6X	3	64	1
94	SEP	25	447	58.76	19	25.12	155	16.49	12.07	29	6	.11	.5	.5	INTL	1.9X	2	66	1
94	SEP	25	457	21.34	19	25.75	155	15.95	13.79	17	2	.09	.9	1.3	DEPL	1.6X	1	140	2
94	SEP	25	515	19.84	19	26.29	155	16.35	10.48	26	4	.13	.6	.7	INTL	1.6X	2	82	3
94	SEP	25	621	48.56	19	24.75	155	16.57	12.67	17	3	.09	.9	.9	INTL	1.9X	3	92	1
94	SEP	25	639	6.80	19	24.39	155	17.99	8.25	14	1	.09	.8	.8	INTL	1.3X	3	102	2
94	SEP	25	657	51.62	19	23.66	155	17.29	10.71	22		.10	.6	.8	INTL	1.9X	1	53	1
94	SEP	25	734	39.71	19	25.85	155	17.24	9.82	25	2	.11	.6	.8	INTL	1.8X	1	73	1
94	SEP	25	830	47.03	19	24.19	155	16.71	12.25	23	1	.14	.8	.9	INTL	1.8X	3	58	1
94	SEP	25	858	49.39	19	24.62	155	16.36	12.22	23	3	.13	.7	.9	INTL	1.7X	2	65	1
94	SEP	25	1107	21.28	19	23.00	155	18.92	12.16	16		.26	1.2	2.0	INTL	2.0X	2	83	2
94	SEP	25	1222	2.21	19	25.79	155	15.58	10.95	14	2	.10	1.4	1.1	INT	1.5X	3	160	3
94	SEP	25	1236	37.47	19	23.21	155	15.19	14.07	16	3	.23	1.9	1.0	DEPL	1.6X	2	165	2
94	SEP	25	1251	36.13	19	24.10	155	16.70	10.75	21	2	.09	.6	.6	INTL	1.6X	2	58	0
94	SEP	25	1318	25.73	19	22.83	155	18.09	13.14	16	1	.11	1.0	.8	DEPL	1.8X	2	124	2
94	SEP	25	1538	48.57	19	23.65	155	18.09	8.28	16		.10	.7	.9	INTL	1.6X	2	78	2
94	SEP	25	1544	48.58	19	24.70	155	17.80	13.44	15	3	.10	1.1	.6	DEPL	1.6X	3	100	1

ORIGIN TIME					LAT	N	LON	W	DEPTH	N	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN
YR	MON	DA	HRMN	SEC	DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	REMKS	MAG	RD	GAP	DS
94	SEP	25	1558	6.06	19	24.04	155	16.54	11.55	15	3	.10	1.1	.9	INTL	1.7X	2	59	0
94	SEP	25	1637	43.27	19	25.52	155	16.37	11.02	14	1	.07	1.0	1.2	INTL	1.7X	3	72	2
94	SEP	25	1807	43.88	19	25.24	155	14.65	14.68	15	1	.10	.9	.8	DEPL	1.7X	1	94	1
94	SEP	25	1934	40.97	19	25.20	155	17.26	11.68	24	2	.10	.6	.5	INTL	1.9X	2	55	1
94	SEP	25	2029	42.51	19	25.78	155	16.14	11.77	15	3	.07	1.0	.7	INTL	1.8X	3	136	2
94	SEP	25	2106	35.28	19	16.69	155	29.58	9.94	32	1	.16	.4	.9	LSW	1.7X	1	58	3
94	SEP	25	2116	32.25	19	24.66	155	16.89	9.96	26	2	.12	.5	.7	INTL	1.7X	2	58	0
94	SEP	25	2220	47.87	19	25.45	155	16.77	10.20	12	4	.12	1.2	.6	INTL	1.8X	2	107	1
94	SEP	26	16	49.50	19	17.79	155	13.28	8.69	43	4	.11	.5	.5	SF2	2.0X	5	100	1
94	SEP	26	55	49.69	19	18.15	155	13.39	9.47	43	5	.10	.4	.6	SF2	1.7X	7	140	8
94	SEP	26	144	59.01	19	13.50	155	34.92	7.66	41	4	.21	.6	1.2	LSW	2.1X	4	80	5
94	SEP	26	147	52.24	19	25.55	155	16.10	8.77	13	3	.11	1.1	.9	INTL	1.6X	3	130	2
94	SEP	26	159	59.81	19	24.29	155	16.63	9.32	16	3	.10	.8	.8	INTL	1.8X	2	60	1
94	SEP	26	204	52.77	19	21.97	155	14.72	11.08	10	2	.10	2.1	1.1	SF1L	1.8X	2	224	2
94	SEP	26	339	17.53	19	24.56	155	15.57	9.64	21		.17	.9	1.0	INTL	1.7X	3	133	2
94	SEP	26	425	46.85	19	25.26	155	17.03	11.39	16	2	.10	.8	1.0	INTL	1.6X	3	95	1
94	SEP	26	451	45.71	19	24.42	155	16.79	12.61	15	2	.13	.9	1.0	INTL	1.7X	3	82	1
94	SEP	26	520	46.81	19	24.00	155	15.85	10.23	14	3	.18	1.1	1.2	INTL	1.6X	3	65	1
94	SEP	26	654	49.78	19	25.29	155	16.31	9.88	16	2	.11	.9	1.0	INTL	1.9X	3	71	1
94	SEP	26	659	23.95	19	24.29	155	16.46	9.97	9	1	.06	1.4	1.8	INTL	1.6X	3	119	1
94	SEP	26	802	34.23	19	28.48	155	26.85	9.62	4711		.13	.3	.7	KAO	2.0X	2	69	7
94	SEP	26	916	8.75	19	22.74	155	17.58	4.85	9		.05	.5	1.0	SSCL	1.2X	2	113	2
94	SEP	26	1029	24.33	19	9.88	156	29.11	34.79	5614		.11	1.0	1.9	DIS	3.3X	10	291	66
94	SEP	26	1139	39.74	19	24.15	155	16.52	10.08	13	2	.10	.9	1.2	INTL	1.7X	3	59	0
94	SEP	26	1659	4.70	18	53.83	155	11.58	43.96	48	3	.10	1.5	1.3	LOI	2.6X	4	253	41
94	SEP	26	1907	30.13	19	26.62	155	29.40	10.78	48	7	.10	.3	.5	KAO	1.7X	2	44	8
94	SEP	28	421	51.64	19	14.61	155	31.74	6.19	41	5	.17	.6	1.1	LSW	1.6X	1	124	3
94	SEP	28	1107	7.95	19	19.28	155	8.81	8.42	42	5	.09	.4	.6	SF4	2.0X	6	86	4
94	SEP	29	940	25.42	19	20.09	155	7.44	7.44	4710		.10	.4	.6	SF4	2.0X	5	99	5
94	SEP	29	1255	54.25	19	14.59	155	34.76	7.85	39	7	.18	.4	1.0	LSW	1.9X	2	77	4
94	SEP	30	1002	47.01	19	18.13	155	13.95	4.23	10		.06	1.1	1.8	SSF	1.5X	1	113	2
94	SEP	30	1700	58.85	19	13.42	156	18.43	33.03	31		.11	8.5	2.6	KON	2.2X	1	319	46
94	SEP	30	1713	30.27	19	18.94	155	13.25	6.05	31	2	.12	.4	1.0	SF2	1.8X	2	80	4
94	SEP	30	1727	17.91	19	13.76	155	29.31	7.63	21	1	.12	.4	1.1	LSW	1.4X	1	114	3
94	OCT	1	353	40.07	19	18.16	155	3.74	0.00	24	2	.14	.9	.6	SSFE#	2.5X	1	225	4
94	OCT	1	823	22.06	19	13.59	155	33.10	7.24	44	5	.18	.6	1.0	LSW	1.6X	4	75	6
94	OCT	1	1340	33.64	19	26.46	155	28.40	8.62	38	6	.11	.3	.8	KAO	2.0X	1	57	6
94	OCT	1	1559	28.70	19	37.03	156	1.54	32.46	33	4	.11	1.9	1.1	KON	1.6X	3	271	18
94	OCT	2	312	53.72	19	13.73	156	26.85	38.28	23	2	.11	1.7	3.4	DIS	1.4X	1	301	61
94	OCT	2	856	18.96	18	58.52	155	37.36	47.24	51	9	.09	.9	1.1	DLS	2.4X	1	224	5
94	OCT	3	2254	7.65	19	19.88	155	9.28	8.43	40	6	.09	.4	.6	SF3	1.7X	6	82	4
94	OCT	3	2257	25.32	19	23.92	155	0.21	8.57	30	2	.15	.8	.7	SF5	1.9X	3	164	3
94	OCT	4	1710	42.54	19	25.07	155	19.27	6.43	38	8	.12	.3	.6	KAO	1.5X	6	70	3
94	OCT	4	1729	38.67	19	28.13	155	49.22	10.07	33	3	.16	.7	.5	KON	1.7X	4	88	7
94	OCT	4	2244	50.84	19	25.78	155	17.81	2.33	13	2	.05	.8	.3	SNCL	1.0X	3	244	1

ORIGIN TIME					LAT	N	LON	W	DEPTH	N	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN
YR	MON	DA	HRMN	SEC	DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	REMKS	MAG	RD	GAP	DS
94	OCT	4	2324	25.57	19	24.22	155	16.59	11.96	20	3	.06	.7	.7	INTL	1.7X	4	107	1
94	OCT	5	602	49.13	19	31.58	155	45.01	13.37	26	2	.16	.7	.4	KON	1.3X	2	76	2
94	OCT	5	654	34.57	19	20.61	155	11.54	8.44	42	6	.09	.4	.6	SF3	1.8X	5	75	4
94	OCT	5	1859	39.23	19	20.47	155	10.96	7.91	39		.12	.4	.7	SF3	1.7X	1	78	4
94	OCT	5	2357	40.92	19	12.44	155	41.34	5.19	49	7	.23	.5	1.4	LSW	2.5D	1	115	9
94	OCT	6	1637	8.66	19	54.28	155	36.22	10.01	24	1	.13	.6	.7	KEA	2.2X	1	129	20
94	OCT	6	1858	41.02	19	25.13	155	36.04	11.10	35	3	.11	.5	.6	MLO	1.2D	1	53	3
94	OCT	6	1915	57.48	19	21.73	155	12.08	2.94	22	4	.07	.3	.4	SER	1.5X	3	58	2
94	OCT	6	1942	46.41	19	12.86	155	21.42	49.41	35	2	.10	1.0	1.3	DEPL	2.3X	1	172	5
94	OCT	6	2233	23.67	19	25.19	155	19.21	6.63	26	5	.11	.4	.8	KAO	1.6X	2	72	3
94	OCT	6	2329	18.01	19	43.11	155	17.86	27.86	5311		.11	.6	1.1	KEA	1.9X	8	107	18
94	OCT	7	27	36.21	19	21.85	155	12.85	3.17	19	2	.06	.3	.5	SER	2.1X	3	53	1
94	OCT	7	136	39.31	19	18.65	154	58.76	40.38	43	5	.09	.8	.9	LER	2.7X	1	218	8
94	OCT	7	1140	36.88	19	56.80	155	18.41	13.54	43	1	.14	1.1	.5	KEA	1.9X	5	202	7
94	OCT	7	1442	36.92	19	23.38	155	15.16	2.99	20	2	.08	.3	.3	SEC	1.7X	2	79	2
94	OCT	7	1838	33.07	19	23.07	155	14.86	3.04	16	4	.05	.3	.5	SEC	1.3X	3	111	2
94	OCT	7	1908	45.79	19	24.62	155	37.24	1.63	15	2	.15	.4	.4	MLO	1.0X	1	68	1
94	OCT	7	1931	37.54	19	19.58	155	8.62	7.18	36		.08	.5	.7	SF4	1.9X	2	155	5
94	OCT	7	2127	25.45	19	23.28	155	17.64	10.94	18	3	.11	.8	1.1	INTL	1.3X	4	75	1
94	OCT	8	120	54.76	19	23.08	155	14.37	3.60	20	4	.09	.4	.4	SEC	1.8X	1	109	2
94	OCT	8	330	11.04	19	50.17	155	34.88	13.96	16	1	.09	.8	.6	KEA	1.4D	2	148	9
94	OCT	8	454	12.97	19	49.05	155	35.69	15.06	52	8	.10	.4	.6	KEA	2.5X	1	102	15
94	OCT	8	502	11.53	19	24.98	155	16.78	11.96	24	2	.08	.5	.7	INTL	1.3X	2	96	0
94	OCT	8	1219	43.24	19	1.64	155	25.23	42.41	38	4	.08	.9	1.5	DLS	2.3X	1	222	15
94	OCT	8	1628	25.29	19	10.42	156	26.69	7.06	42	4	.11	4.6	6.4	DIS	2.6X	1	289	65
94	OCT	8	2238	13.80	19	30.81	155	49.65	7.56	21	2	.25	.9	1.5	KON	1.8X	1	130	7
94	OCT	9	1538	43.40	19	19.39	155	11.33	6.29	33	2	.10	.5	.9	SF3	1.8X	1	99	6
94	OCT	11	243	37.35	19	20.04	155	11.88	7.87	30	2	.09	.5	.8	SF3	1.8X	2	82	5
94	OCT	12	2319	55.33	19	45.86	156	8.51	38.79	32	1	.09	2.2	1.6	HUA	2.2X	3	251	33
94	OCT	13	1310	22.34	19	10.50	155	33.41	7.48	44	1	.15	.8	1.0	LSW	2.2X	5	109	10
94	OCT	14	532	8.03	19	0.17	155	37.26	11.31	17		.10	3.3	.9	LSW	1.3D	1	265	24
94	OCT	15	5	22.22	20	3.33	156	26.74	6.48	46		.13	5.3	16.3	DIS -	3.0X	1	298	70
94	OCT	15	2301	39.52	19	36.18	156	35.95	36.34	45	2	.13	2.2	2.3	DIS	2.7X	4	309	80
94	OCT	16	1551	18.84	19	20.44	155	10.98	8.63	40	5	.10	.5	.6	SF3	2.2X	5	115	4
94	OCT	17	1622	21.72	20	49.54	155	37.59	14.99	26	3	.09	6.8	11.6	DIS -	2.4X	2	322	107
94	OCT	17	2056	13.66	19	21.67	155	4.70	8.91	40	4	.09	.4	.3	SF5	1.7X	4	80	5
94	OCT	18	2036	27.27	19	12.99	155	33.74	11.86	23	3	.12	.6	1.1	LSW	2.3X	1	81	7
94	OCT	21	39	30.04	19	29.91	155	29.96	3.42	30	4	.10	.3	1.1	KAO	2.1X	3	74	6
94	OCT	21	2329	47.03	19	18.01	155	14.09	7.15	44	5	.10	.4	.6	SF2	2.1X	6	89	2
94	OCT	21	2356	8.21	19	26.42	155	29.04	9.58	51	8	.09	.3	.6	KAO	1.9X	7	43	7
94	OCT	22	54	12.28	20	0.11	155	45.38	9.36	24	4	.10	1.0	1.5	KOH	1.9X	2	162	14
94	OCT	23	137	20.50	19	15.50	155	26.90	9.23	40	3	.10	.3	.5	LSW	1.9X	4	76	5
94	OCT	23	318	45.62	19	20.70	155	11.91	9.33	42	4	.10	.5	.4	SF3	2.2X	3	147	4
94	OCT	23	716	33.90	19	29.42	154	53.37	1.57	32	1	.16	.4	1.0	SLE	1.8X	3	108	5
94	OCT	24	1215	39.60	19	15.66	155	1.95	44.32	55	7	.10	.9	.7	DEP	2.9X	5	220	8

YR	MON	DA	ORIGIN TIME HRMN	SEC	LAT N DEG	MIN	LON W DEG	MIN	DEPTH KM	N RD	N S	RMS SEC	ERH KM	ERZ KM	LOC REMKS	PREF MAG	N RD	AZ GAP	MIN DS
94	OCT	24	1654	1.04	19	20.16	155	4.18	6.69	35	3	.09	.5	.6	SF5	1.9X	3	130	2
94	OCT	25	1043	2.79	19	21.77	155	4.38	7.44	23	5	.11	.5	.7	SF5F	1.2X	3	86	4
94	OCT	25	1146	45.68	19	18.85	155	15.02	7.67	45	5	.09	.4	.5	SF1	1.5X	4	92	4
94	OCT	25	2143	18.98	19	16.14	155	1.90	46.58	38	2	.09	1.3	1.4	DEP	2.4X	3	216	7
94	OCT	25	2320	10.24	19	19.57	155	7.55	7.92	41	3	.09	.5	.6	SF4	2.3X	3	105	4
94	OCT	26	335	38.63	19	17.55	155	12.95	8.45	46	9	.11	.4	.7	SF2	1.5D	1	172	9
94	OCT	26	441	9.88	19	18.05	155	12.87	10.47	52	8	.11	.5	.4	SF2	3.1D	1	156	8
94	OCT	26	449	12.92	19	17.22	155	12.72	8.88	32	5	.10	.5	1.0	SF2	1.2D	1	177	8
94	OCT	26	457	58.12	19	17.88	155	12.79	9.34	49	8	.12	.4	.5	SF2	1.9D	1	156	9
94	OCT	26	601	3.71	19	17.56	155	12.82	7.82	20	2	.09	.7	1.4	SF2	1.1D	1	172	9
94	OCT	26	929	51.48	19	17.62	155	12.98	9.93	39	3	.09	.5	.6	SF2	1.7X	1	148	9
94	OCT	26	937	38.23	19	18.36	155	12.82	6.47	37	3	.11	.4	1.2	SF2	2.2X	5	137	8
94	OCT	26	1019	6.31	19	17.91	155	13.02	8.17	39	4	.10	.4	.8	SF2	2.1X	1	144	9
94	OCT	26	1029	27.07	19	19.67	155	8.74	7.80	39	6	.09	.4	.6	SF4	1.7X	4	78	4
94	OCT	26	1422	52.60	19	17.43	155	12.84	10.55	45	5	.10	.4	.6	SF2	2.6X	5	151	9
94	OCT	27	101	29.70	19	29.87	155	27.23	4.89	42	7	.14	.3	1.4	KAO	2.3X	1	56	4
94	OCT	27	148	55.44	19	21.09	155	16.79	1.58	13	1	.04	.4	.4	KOA	1.3X	1	76	2
94	OCT	29	0	17.14	19	24.01	155	15.02	3.53	41	5	.11	.3	.3	SEC	2.2X	5	74	2
94	OCT	29	347	4.36	19	20.73	155	45.81	10.78	34	4	.13	.5	.5	KON	1.8X	1	127	10
94	OCT	29	855	52.12	19	25.53	155	14.90	2.43	13	2	.08	.4	.7	SNC	1.4X	2	161	2
94	OCT	29	1325	47.83	19	40.27	155	7.93	14.84	32	5	.10	.5	.7	HIL	1.4D	1	114	11
94	OCT	29	1328	55.14	19	20.27	155	6.75	8.43	35	2	.09	.6	.5	SF4	2.1X	2	162	6
94	OCT	29	1726	42.26	19	21.38	155	12.73	2.35	16	3	.07	.5	.5	SER	2.0X	2	164	2
94	OCT	29	1731	44.12	19	20.51	155	6.08	8.44	43	2	.09	.5	.3	SF4	1.4X	1	109	6
94	OCT	29	1937	38.54	20	1.77	155	56.65	11.23	20		.08	2.6	.7	KOH	1.5D	1	254	20
94	OCT	29	2106	0.06	19	58.12	155	52.05	12.14	34	2	.12	2.0	1.3	KOH	1.5D	1	206	20
94	OCT	30	1835	27.12	19	29.56	154	54.79	2.05	16	2	.17	.5	1.2	SLEF	1.9X	1	110	4
94	OCT	31	716	53.85	19	28.33	154	51.10	7.93	15		.10	1.8	.7	LER	1.3X	1	169	2
94	OCT	31	1009	12.09	19	19.28	155	10.16	5.61	28	2	.07	.6	1.6	SF3	2.1X	1	177	5
94	OCT	31	1318	39.03	19	25.35	154	51.98	2.76	13	2	.09	.9	1.3	SLEF	1.2X	1	239	4
94	NOV	1	111	41.68	19	20.21	155	4.49	7.49	35	6	.10	.4	.5	SF5	1.8X	3	144	3
94	NOV	1	820	16.11	19	25.04	155	16.30	12.17	22	3	.11	.6	.8	INTL	1.7X	3	107	1
94	NOV	1	943	26.86	19	24.39	155	16.75	1.51	25	7	.09	.3	.2	SSCL	1.8X	4	106	1
94	NOV	1	2128	48.07	19	25.67	155	16.58	3.91	15		.12	.5	.9	SNCL	1.8X	1	135	2
94	NOV	1	2333	32.21	19	22.82	155	16.98	13.85	27	3	.13	.8	.6	DEPL	1.8X	4	77	1
94	NOV	2	121	15.17	19	28.72	154	52.31	3.74	19		.11	.7	1.3	SLE	1.6X	1	99	3
94	NOV	2	1823	24.98	19	22.07	155	5.14	7.43	35	2	.12	.4	.6	SF5	2.2X	2	75	5
94	NOV	3	253	10.22	19	11.83	155	27.74	6.58	51	7	.15	.4	.7	LSW	2.2X	4	110	4
94	NOV	3	1838	11.29	19	14.85	155	32.09	32.06	43	4	.08	.5	1.0	DLS	2.3X	4	65	3
94	NOV	4	854	22.94	19	24.33	155	3.18	3.88	19		.09	.5	.5	SME	2.6X	1	125	2
94	NOV	4	2158	48.26	19	43.60	154	46.82	11.10	24		.12	8.7	1.5	HIL	1.7X	3	307	30
94	NOV	5	257	24.17	19	20.34	155	6.42	9.67	40	6	.08	.6	.4	SF4	1.5X	5	160	6
94	NOV	5	611	41.70	19	27.12	154	58.34	42.66	56	9	.10	.8	.8	LER	2.5X	6	108	4
94	NOV	5	1042	7.19	19	22.39	155	29.06	11.04	53	8	.08	.3	.4	KAO	2.5X	6	35	3
94	NOV	5	1905	4.43	19	21.89	155	4.82	8.83	55	12	.11	.5	.4	SF5F	2.7X	4	104	5
94	NOV	6	725	46.70	19	23.00	155	14.78	3.62	22	7	.08	.3	.4	SEC	1.9X	4	113	2
94	NOV	7	722	0.23	19	25.95	154	59.77	3.46	11	2	.09	1.1	.9	SLE	1.5X	1	151	2
94	NOV	7	1603	46.71	19	22.29	155	28.97	10.01	37	3	.09	.3	.6	KAO	1.7X	4	38	2
94	NOV	7	2353	47.47	19	18.57	154	58.29	42.04	30	1	.10	1.4	1.6	LER	2.3X	4	221	8
94	NOV	8	203	42.27	19	17.29	155	37.50	7.74	21	4	.11	.5	1.4	LSW	1.9X	2	95	4
94	NOV	8	1009	1.93	19	18.58	155	13.27	9.59	49	6	.11	.4	.4	SF2	2.6X	5	134	7
94	NOV	8	1310	23.38	19	18.71	155	13.08	9.87	53	9	.10	.3	.4	SF2	2.1X	6	128	7
94	NOV	8	1925	7.06	19	18.26	155	13.29	9.18	36	3	.09	.4	.6	SF2	1.6X	6	149	8
94	NOV	9	711	23.40	19	18.01	155	30.04	9.07	36	3	.11	.4	.7	LSW	1.7X	4	64	5
94	NOV	9	1300	57.89	19	19.61	155	11.84	8.49	35	5	.07	.4	.6	SF3	2.0X	4	135	6
94	NOV	10	1033	54.96	19	24.89	155	17.30	2.09	12	2	.08	.4	.2	SNCL	1.7X	2	117	1
94	NOV	10	1606	52.47	19	20.04	155	10.60	7.44	25	3	.07	.5	.6	SF3	1.9X	2	119	4
94	NOV	10	1746	26.51	19	19.40	155	13.47	9.00	51	6	.12	.4	.4	SF2	2.3X	4	148	6
94	NOV	12	1631	31.89	19	24.77	155	16.63	11.62	35	4	.09	.6	.5	INTL	1.8X	4	89	1
94	NOV	12	2245	9.68	19	19.75	155	11.90	7.34	45	4	.11	.4	.6	SF3	2.1X	4	123	6
94	NOV	13	613	17.52	19	11.60	155	28.27	6.68	38	3	.12	.4	.8	LSWF	1.8X	4	96	4
94	NOV	13	1007	14.23	19	19.43	155	13.16	9.02	39	1	.11	.4	.7	SF2	1.5X	5	123	6
94	NOV	14	151	52.10	19	24.59	155	16.80	1.23	22	5	.10	.3	.2	SNCL	1.8X	4	85	1
94	NOV	14	642	49.01	19	19.00	155	13.15	10.23	46	8	.13	.4	.6	SF2	1.9X	5	128	7
94	NOV	14	859	23.70	19	19.34	155	13.26	9.89	52	8	.13	.3	.4	SF2	3.2X	2	146	6
94	NOV	14	1653	27.95	19	18.89	155	13.23	9.26	42	6	.08	.4	.7	SF2	1.6X	5	130	7
94	NOV	15	323	26.65	19	28.33	155	25.27	8.11	44	10	.11	.3	.7	KAO	2.1X	6	75	4
94	NOV	15	1114	7.58	19	15.63	155	26.89	9.12	33	2	.12	.3	.8	LSW	2.1X	4	74	6
94	NOV	15	1117	11.01	19	15.07	155	26.75	10.43	19	3	.07	.5	1.2	LSW	1.4X	2	86	5
94	NOV	15	1403	42.34	19	22.82	155	14.51	3.47	20	4	.06	.3	.3	SEC	1.8X	3	120	2
94	NOV	16	821	1.85	19	36.75	156	1.49	11.54	24	4	.12	1.9	.9	KON	2.0X	2	269	21
94	NOV	17	145	9.18	19	15.94	155	22.55	7.21	43	4	.10	.4	.7	SWR	1.6X	4	135	4
94	NOV	17	149	13.24	19	15.53	155	22.33	8.22	27	4	.10	.6	1.0	SWR	1.6X	3	158	4
94	NOV	17	418	12.93	19	20.04	155	7.30	7.81	39	7	.09	.5	.4	SF4	2.2X	5	167	6
94	NOV	17	1203	26.79	19	25.07	155	15.38	14.49	11	2	.04	1.1	1.3	DEPL	1.8X	1	168	2
94	NOV	17	1236	24.70	19	20.11	155	11.44	6.57	38	1	.12	.5	.7	SF3	2.1X	1	145	5
94	NOV	18	547	5.72	19	19.65	155	18.74	5.08	30	3	.13	.4	1.1	SWR	1.8X	4	59	2
94	NOV	18	1102	25.47	19	15.85	155	30.53	10.84	32	2	.13	.4	1.0	LSW	2.0X	3	104	2
94	NOV	18	1848	15.53	19	23.77	155	26.28	3.75	35	2	.12	.3	.6	KAO	2.2X	2	36	3
94	NOV	19	44	2.92	19	29.18	155	27.12	5.13	44	8	.11	.3	1.4	KAO	2.3X	3	53	5
94	NOV	19	1140	16.56	19	30.78	155	3.85	48.46	53	9	.11	.7	.9	DEP	2.3D	1	83	12
94	NOV	20	524	48.32	19	19.17	155	50.16	6.70	27	1	.12	.5	.8	KON	1.8X	1	147	7
94	NOV	20	951	48.36	19	32.56	155	53.93	4.18	15	1	.13	1.2	6.7	KON	1.2D	1	182	6
94	NOV	20	2211	56.71	19	28.67	155	26.71	3.09	36	10	.13	.3	.8	KAO	1.6X	2	70	6
94	NOV	21	1910	6.61	19	19.99	155	6.74	9.19	47	2	.11	.7	.5	SF4F	4.1D	1	167	7
94	NOV	21	1917	4.73	19	20.14	155	7.19	7.07	35	4	.11	.6	.7	SF4	1.6X	4	102	5
94	NOV	21	1926	53.33	19	20.13	155	6.45	8.42	25	1	.08	.8	1.1	SF4	2.1X	3	167	6
94	NOV	21	1945	57.13	19	20.89	155	6.08	7.02	42	5	.12	.5	.7	SF4	1.9X	4	99	6
94	NOV	22	923	11.95	19	19.60	155	7.71	7.97	49	8	.09	.5	.5	SF4	3.1X	1	100	4
94	NOV	22	1321	13.79	19	19.60	155	8.75	6.77	24	2	.07	.5	.9	SF4	1.7X	3	100	4

YR	MON	DA	ORIGIN TIME HRMN	SEC	LAT N DEG	MIN	LON W DEG	MIN	DEPTH KM	N RD	N S	RMS SEC	ERH KM	ERZ KM	LOC REMKS	PREF MAG	N RD	AZ GAP	MIN DS
94	NOV	23	1533	47.75	19	19.05	155	28.33	10.82	46	5	.11	.3	.5	KAO	2.8X	1	41	6
94	NOV	23	2011	53.49	19	22.96	155	26.73	10.19	35	3	.11	.3	.6	KAO	2.2X	1	42	2
94	NOV	25	103	58.31	19	15.69	155	17.21	33.31	52	7	.10	.7	.8	DEP	2.6X	2	161	5
94	NOV	25	2015	36.07	19	21.97	155	3.39	9.29	44	4	.08	.5	.3	SF5	2.1X	4	111	4
94	NOV	25	2050	20.84	19	20.41	155	7.24	7.63	48	7	.10	.4	.5	SF4	1.9X	4	96	5
94	NOV	27	302	21.78	19	16.28	155	28.87	10.06	39	4	.14	.3	.8	LSW	1.8X	4	60	3
94	NOV	27	947	56.14	19	26.17	155	19.96	8.59	34	6	.06	.4	.7	KAO	2.0X	4	88	3
94	NOV	27	1143	16.99	19	22.96	155	33.56	6.08	35	4	.08	.3	1.1	MLO	2.0X	5	46	4
94	NOV	28	154	18.54	19	9.52	155	41.24	10.27	29	2	.12	.5	.7	LSW	1.7X	2	129	12
94	NOV	28	1633	1.19	19	25.55	155	14.75	1.62	18	1	.08	.3	.3	SNC	2.0X	1	135	2
94	NOV	28	1719	37.61	19	20.06	155	8.82	7.62	36	2	.09	.5	.6	SF4	1.9X	2	96	4
94	NOV	29	1923	37.61	18	26.36	155	32.53	10.28	5211		.13	5.6	7.6	DIS	2.7X	5	308	61
94	NOV	30	312	49.80	19	20.53	155	11.90	8.65	45	6	.11	.4	.3	SF3	2.0X	4	141	4
94	NOV	30	342	30.99	19	28.43	155	24.90	10.71	46	8	.12	.4	.5	KAO	2.1X	6	40	4
94	NOV	30	948	34.45	19	28.49	155	23.88	13.91	41	9	.11	.4	.5	DML	2.0X	6	73	3
94	NOV	30	2022	37.62	19	18.49	155	15.49	8.68	32	3	.10	.5	.7	SF1	1.4X	3	144	4
94	NOV	30	2204	44.49	19	28.45	155	23.82	13.79	42	9	.11	.4	.5	DML	1.9X	6	67	3
94	DEC	1	223	19.15	19	9.96	155	33.28	33.08	44	6	.08	.6	.9	DLS	2.0X	4	115	10
94	DEC	1	1914	51.74	19	20.00	155	8.03	8.40	46	7	.10	.4	.4	SF4	1.9X	5	145	5
94	DEC	2	206	3.24	19	25.58	156	1.21	14.46	37	7	.14	1.1	.5	KON	2.8X	7	251	13
94	DEC	3	1342	7.68	18	52.86	155	31.58	39.54	50	8	.09	1.0	1.3	DLS	2.9X	1	262	18
94	DEC	3	2352	33.46	19	19.60	155	8.48	7.90	35	1	.10	.6	.7	SF4	1.9X	1	156	5
94	DEC	4	16	22.08	19	18.96	155	10.78	7.12	40	2	.11	.5	.6	SF3	1.9X	2	141	6
94	DEC	5	2150	31.64	19	20.40	155	6.93	7.73	42	6	.11	.6	.5	SF4	2.2X	4	145	6
94	DEC	6	827	48.65	19	34.55	155	57.78	45.70	32	4	.09	.8	1.3	KON	2.8X	1	213	11
94	DEC	6	1104	25.65	19	20.45	155	6.94	8.57	41	4	.09	.5	.6	SF4	2.1X	4	100	5
94	DEC	6	1306	30.73	19	26.25	154	59.56	3.17	24	3	.10	.6	.7	SLE	1.6X	2	78	3
94	DEC	6	1538	26.67	19	15.01	155	35.43	7.85	39	5	.18	.5	1.0	LSW	1.8X	4	72	3
94	DEC	6	2219	47.10	19	20.00	155	7.68	7.69	44	5	.10	.4	.5	SF4	1.7X	5	151	5
94	DEC	6	2225	26.43	19	18.62	155	25.49	9.61	37	4	.13	.4	.7	LSW	1.5X	3	64	5
94	DEC	7	2244	24.03	19	46.97	155	47.34	20.96	48	8	.11	.6	1.3	HUA	2.2X	4	210	12
94	DEC	8	337	56.07	19	25.11	155	28.80	10.12	5110		.10	.3	.5	KAO	1.9X	7	33	5
94	DEC	8	536	14.51	19	10.70	155	28.03	35.52	50	7	.08	.6	.8	DLS	2.0X	4	102	2
94	DEC	8	1311	4.41	19	13.40	155	41.94	8.40	34	9	.19	.5	1.5	LSW	1.8X	2	113	9
94	DEC	8	1459	40.00	19	19.71	155	7.69	8.84	44	4	.10	.7	.5	SF4F	4.0U		171	6
94	DEC	8	1502	29.90	19	19.07	155	8.04	2.63	45	5	.14	.3	.8	SSF	3.5D	1	97	3
94	DEC	8	1513	47.08	19	20.04	155	7.87	9.02	45	7	.10	.4	.4	SF4	2.0X	5	150	5
94	DEC	8	1551	4.63	18	27.20	153	36.21	7.11	29	6	.20	10.9	12.7	DIS -	2.7X	2	342	180
94	DEC	8	2113	42.16	19	26.14	155	21.72	10.70	5912		.12	.3	.5	KAO	2.8X	5	31	3
94	DEC	9	432	55.14	19	22.30	155	29.84	9.98	48	5	.08	.3	.5	KAO	2.1X	5	33	4
94	DEC	10	1020	42.38	19	24.40	155	16.99	1.90	11	4	.07	.5	.3	SSCL	1.5X	4	154	1
94	DEC	10	2032	27.65	21	9.66	155	9.35	6.39	26	8	.12	8.9	11.6	DIS -	2.6X	2	328	142
94	DEC	11	919	42.55	18	57.21	155	23.05	21.87	53	8	.11	.9	2.2	LOIF	2.8X	3	234	24
94	DEC	11	933	9.14	19	23.15	155	14.79	3.09	18	4	.08	.3	.4	SEC	1.5X	3	108	2
94	DEC	11	1252	55.94	19	20.65	155	6.84	8.67	38	4	.07	.4	.6	SF4	1.8X	5	97	5

YR	MON	DA	ORIGIN TIME HRMN	SEC	LAT N DEG	MIN	LON W DEG	MIN	DEPTH KM	N RD	N S	RMS SEC	ERH KM	ERZ KM	LOC REMKS	PREF MAG	N RD	AZ GAP	MIN DS
94	DEC	12	354	32.21	20	16.85	156	35.24	47.43	34	3	.18	3.2	3.3	DIS #	2.5X	2	328	102
94	DEC	13	47	34.19	19	19.73	155	10.97	9.29	40	5	.09	.5	.6	SF3	2.1X	3	127	5
94	DEC	13	406	26.76	19	20.20	155	6.77	7.73	38	6	.11	.5	.6	SF4	1.8X	4	108	6
94	DEC	13	1349	18.73	19	19.66	155	10.69	8.14	40	8	.09	.4	.6	SF3	2.1X	3	95	5
94	DEC	13	1850	59.54	19	23.88	155	15.74	3.16	21	6	.06	.3	.3	SEC	1.8X	3	70	2
94	DEC	13	1924	7.27	19	23.37	155	14.39	3.76	42	6	.10	.3	.4	SECF	2.5X	1	83	2
94	DEC	13	2224	30.92	19	19.51	155	8.99	7.75	41	6	.09	.4	.5	SF4	1.6X	5	85	4
94	DEC	14	551	20.47	19	17.92	155	13.09	8.32	37	5	.11	.5	.8	SF2	2.0X	4	165	9
94	DEC	14	1148	15.05	19	30.29	155	51.80	7.55	34	5	.15	.4	.6	KON	2.3X	4	114	6
94	DEC	14	1346	37.87	19	9.34	155	37.28	8.45	28	1	.15	.5	1.3	LSW	2.4X	1	106	10
94	DEC	15	504	51.80	19	25.62	155	15.25	1.54	25	7	.09	.3	.4	SNC	2.1X	5	128	2
94	DEC	15	1024	26.72	19	21.84	155	9.19	3.34	15	3	.05	.6	.3	SER	1.6X	1	113	1
94	DEC	15	1312	53.10	19	14.02	155	30.88	10.83	26	6	.12	.4	.8	LSW	1.7X	2	132	2
94	DEC	15	1919	18.68	19	32.28	155	20.00	10.67	53	8	.14	.4	.7	MLO	2.0X	6	61	7
94	DEC	16	253	59.44	19	19.36	155	10.39	7.62	4710		.09	.3	.5	SF3	1.9X	3	102	5
94	DEC	16	723	51.69	19	19.47	155	13.67	7.67	44	4	.12	.4	.7	SF2	1.8X	5	123	6
94	DEC	16	811	12.16	19	23.04	155	14.92	3.21	18	4	.07	.3	.4	SEC	1.5X	1	69	2
94	DEC	16	1845	23.07	20	1.45	155	22.47	10.55	44	4	.10	.7	.8	KEA	2.1X	4	209	28
94	DEC	16	2306	40.59	18	42.16	156	36.78	6.26	33	3	.08	7.2	9.1	DIS -	2.2X	1	325	100
94	DEC	17	130	37.43	19	20.01	155	7.26	7.60	3910		.11	.3	.5	SF4	1.7X	4	103	5
94	DEC	18	1532	50.09	19	17.72	155	15.19	7.43	35	4	.11	.5	.8	SF1	1.7X	3	143	6
94	DEC	19	1723	40.93	19	17.22	155	21.18	7.19	45	5	.14	.4	.8	SWR	1.9X	6	133	5
94	DEC	19	1748	17.68	19	17.17	155	20.87	6.35	20	7	.08	.4	.8	SWR	2.2X	3	136	4
94	DEC	20	903	44.20	19	14.58	155	19.85	51.90	24	3	.10	1.6	1.5	DEP	2.0X	2	161	7
94	DEC	20	1605	6.16	19	11.65	155	32.95	5.33	33	3	.16	.7	2.0	LSW	2.0X	4	171	8
94	DEC	20	1610	12.65	19	14.39	155	32.22	6.73	34	1	.12	.6	.8	LSW	1.7X	4	193	4
94	DEC	20	2309	19.43	19	18.88	155	15.49	9.10	43	2	.11	.5	.6	SF1	1.6X	4	130	6
94	DEC	22	2145	16.77	19	24.67	155	16.32	13.85	21	4	.11	.8	.9	DEPL	1.6X	4	95	1
94	DEC	22	2219	36.56	19	26.75	155	17.08	18.82	18	3	.09	1.6	1.1	DEPL	1.7X	3	121	2
94	DEC	23	623	49.43	19	17.97	155	14.15	9.10	37	3	.11	.5	.8	SF2	1.8X	6	142	8
94	DEC	23	937	54.22	19	15.67	155	31.33	9.62	42	4	.15	.4	.8	LSW	2.1X	4	56	2
94	DEC	23	1119	2.84	19	25.95	155	16.03	14.47	15	5	.11	1.9	.9	DEPL	1.8X	3	217	3
94	DEC	23	1206	24.33	19	19.02	155	9.88	8.52	30	6	.08	.4	.6	SF3	1.7X	4	108	5
94	DEC	23	1801	1.99	19	19.71	155	8.29	7.95	38	5	.09	.4	.6	SF4	2.3X	1	86	4
94	DEC	23	2129	35.90	19	20.14	155	8.79	7.47	41	6	.10	.4	.4	SF4	2.1D	1	93	4
94	DEC	24	156	18.71	19	25.28	155	16.76	10.74	41	4	.13	.3	.4	INTL	1.7X	5	76	1
94	DEC	24	351	14.88	19	20.46	155	11.65	9.19	44	4	.12	.4	.4	SF3	2.6X	1	104	4
94	DEC	24	1113	27.63	19	11.94	155	41.82	0.01	33	7	.21	.6	.3	LSW #	2.3X	6	121	10
94	DEC	24	1700	1.76	19	24.42	155	16.97	11.00	16	1	.10	.7	.7	INTL	1.5X	1	57	1
94	DEC	24	1712	21.66	19	23.21	155	4.23	9.03	52	5	.09	.5	.3	SF5F	3.0X	1	90	2
94	DEC	24	1859	32.90	19	25.22	155	16.49	10.82	25	1	.10	.6	.7	INTL	1.6X	2	97	1
94	DEC	24	2201	8.00	19	26.63	155	16.99	6.55	23		.18	.6	.8	INTL	1.7X	1	45	2
94	DEC	26	1623	37.93	19	19.43	155	8.89	7.64	36	6	.10	.4	.6	SF4	2.0X	4	86	4
94	DEC	26	1819	41.53	19	22.97	155	14.52	4.01	36	8	.09	.3	.4	SEC	1.9X	5	48	3
94	DEC	28	657	34.98	19	21.81	155	4.82	6.64	33	2	.12	.4	.8	SF5	1.9X	3	78	5

ORIGIN TIME				LAT	N	LON	W	DEPTH	N	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN
YR	MON	DA	HRMN	SEC	DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	REMKS	MAG	RD	GAP	DS
94	DEC	28	948	5.51	19	28.74	155	26.80	9.78	45	11	.10	.3	.6	KAO	1.9X	7	59	6
94	DEC	29	930	37.85	19	24.78	156	1.44	35.09	37	1	.08	1.9	1.6	KON	2.0X	3	278	14
94	DEC	29	1015	39.96	19	37.39	156	25.17	37.65	53	9	.13	1.1	1.7	DIS	2.9X	5	279	55
94	DEC	29	1508	32.29	18	55.68	155	33.34	41.84	45	9	.09	.9	.8	DLS	2.4X	5	249	13
94	DEC	29	1525	15.96	19	24.22	155	17.26	1.50	11	2	.09	.3	.3	SSCL	1.7X	3	92	1
94	DEC	29	1924	16.32	19	24.77	155	17.49	2.73	16	5	.12	.4	.3	SNCL	1.5X	4	107	1
94	DEC	29	2048	24.18	19	24.18	155	17.38	3.20	16	3	.11	.3	.4	SSCL	1.9X	3	72	1
94	DEC	30	1239	36.52	19	14.51	155	26.30	9.28	31	5	.12	.4	.6	LSW	1.5X	3	103	4
94	DEC	30	1725	34.84	19	24.98	155	37.65	2.57	42	5	.12	.3	.3	MLO	2.4X	4	72	1
94	DEC	31	940	21.10	19	21.47	155	18.58	3.61	23	3	.10	.3	.8	SWR	1.7X	2	54	3
94	DEC	31	1654	42.69	19	30.61	155	29.03	5.26	45	9	.09	.3	1.0	MLO	1.9X	5	48	3

Table 6.

ORIGIN TIME				LAT N		LON W		DEPTH	N	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN
YR	MON	DA	HRMN	SEC	DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	RMK	MAG	RD	GAP	DS
94	JAN	10	1723	2.08	19	20.73	155	6.69	8.59	47	7	.12	.4	.5	SF4F	3.5D	1	97	5
94	JAN	13	2348	19.94	19	20.30	155	10.96	9.24	4810		.11	.5	.3	SF3F	3.6D	1	82	4
94	FEB	1	1	54.61	19	15.42	155	18.02	34.57	46	3	.10	.7	.9	DEPF	5.3D	1	160	5
94	FEB	1	4	19.73	19	21.12	155	14.99	34.45	26	6	.12	1.2	1.4	DEP	3.3X	1	68	3
94	FEB	1	28	0.05	19	13.28	155	19.45	32.63	43	8	.09	.8	.9	DEP	3.2X	3	176	8
94	FEB	1	448	24.62	19	18.93	155	15.94	31.59	5010		.11	.6	.7	DEP	3.0X	3	102	3
94	FEB	25	1717	7.46	18	57.61	155	10.79	36.28	5412		.11	.9	1.2	LOI	3.1X	2	243	36
94	MAR	10	101	13.07	19	25.62	155	15.87	1.79	39	6	.11	.3	.3	SNCF	3.0D	1	77	2
94	MAR	12	1023	5.18	19	20.22	155	26.25	28.44	6217		.11	.4	.7	DML	3.2X	3	53	5
94	MAR	13	1842	53.19	19	31.16	155	15.50	25.14	6418		.13	.4	.7	DEPF	3.2X	4	61	11
94	MAR	24	1620	17.69	19	40.16	155	22.11	14.65	5411		.11	.3	.3	KEA	3.0X	3	78	14
94	APR	9	1410	39.53	19	14.77	156	3.70	48.67	5513		.10	1.0	.9	KONF	3.6X	7	252	20
94	MAY	6	910	30.81	19	10.20	155	41.63	8.15	38	5	.17	.5	1.0	LSWF	3.5D	1	129	12
94	MAY	22	750	45.18	19	56.28	155	36.35	14.92	49	8	.10	.6	1.0	KOHF	4.2U		140	23
94	MAY	30	2034	18.33	20	56.97	157	28.77	0.93	39	2	.17	17.1	5.8	DISF-	3.4X	5	338	199
94	JUL	23	750	11.08	19	6.54	156	22.61	35.20	5312		.10	1.0	2.0	DIS	4.0X	8	302	56
94	JUL	26	1724	42.68	20	1.87	155	34.85	10.46	44	5	.10	.4	.4	KOHF	3.0X	5	184	21
94	JUL	29	1756	21.38	19	20.49	155	3.86	8.77	52	9	.11	.5	.4	SF5	3.1X	2	109	2
94	SEP	7	905	57.74	19	15.80	155	3.07	46.15	6320		.11	.7	.5	DEP	3.0X	7	222	8
94	SEP	26	1029	24.33	19	9.88	156	29.11	34.79	5614		.11	1.0	1.9	DIS	3.3X	10	291	66
94	OCT	15	5	22.22	20	3.33	156	26.74	6.48	46		.13	5.3	16.3	DIS -	3.0X	1	298	70
94	OCT	26	441	9.88	19	18.05	155	12.87	10.47	52	8	.11	.5	.4	SF2	3.1D	1	156	8
94	NOV	14	859	23.70	19	19.34	155	13.26	9.89	52	8	.13	.3	.4	SF2	3.2X	2	146	6
94	NOV	21	1910	6.61	19	19.99	155	6.74	9.19	47	2	.11	.7	.5	SF4F	4.1D	1	167	7
94	NOV	22	923	11.95	19	19.60	155	7.71	7.97	49	8	.09	.5	.5	SF4	3.1X	1	100	4
94	DEC	8	1459	40.00	19	19.71	155	7.69	8.84	44	4	.10	.7	.5	SF4F	4.0U		171	6
94	DEC	8	1502	29.90	19	19.07	155	8.04	2.63	45	5	.14	.3	.8	SSF	3.5D	1	97	3
94	DEC	24	1712	21.66	19	23.21	155	4.23	9.03	52	5	.09	.5	.3	SF5F	3.0X	1	90	2