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

HAWAIIAN VOLCANO OBSERVATORY
SUMMARY 86 PART I
SEISMIC DATA, JANUARY TO DECEMBER 1986

by
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CHRONOLOGICAL SUMMARY
by
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Hawaiian Volcano Observatory
Hawaii Volcanoes National Park, Hawaii 96718

Open-File Report 92-301

1992

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1986 HAWAIIAN VOLCANO OBSERVATORY STAFF

THOMAS L. WRIGHT (SCIENTIST-IN-CHARGE)
REGINALD T. OKAMURA (CHIEF OF OPERATIONS)

GEOLOGY

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GEORGE E. ULRICH

GEOPHYSICS

DALLAS B. JACKSON

SEISMOLOGY

CARL E. JOHNSON+
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KENNETH T. HONMA
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J. BARRY STOKES

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THOMAS T. ENGLISH

PHOTOGRAPHY

J.D. GRIGGS

LIBRARY

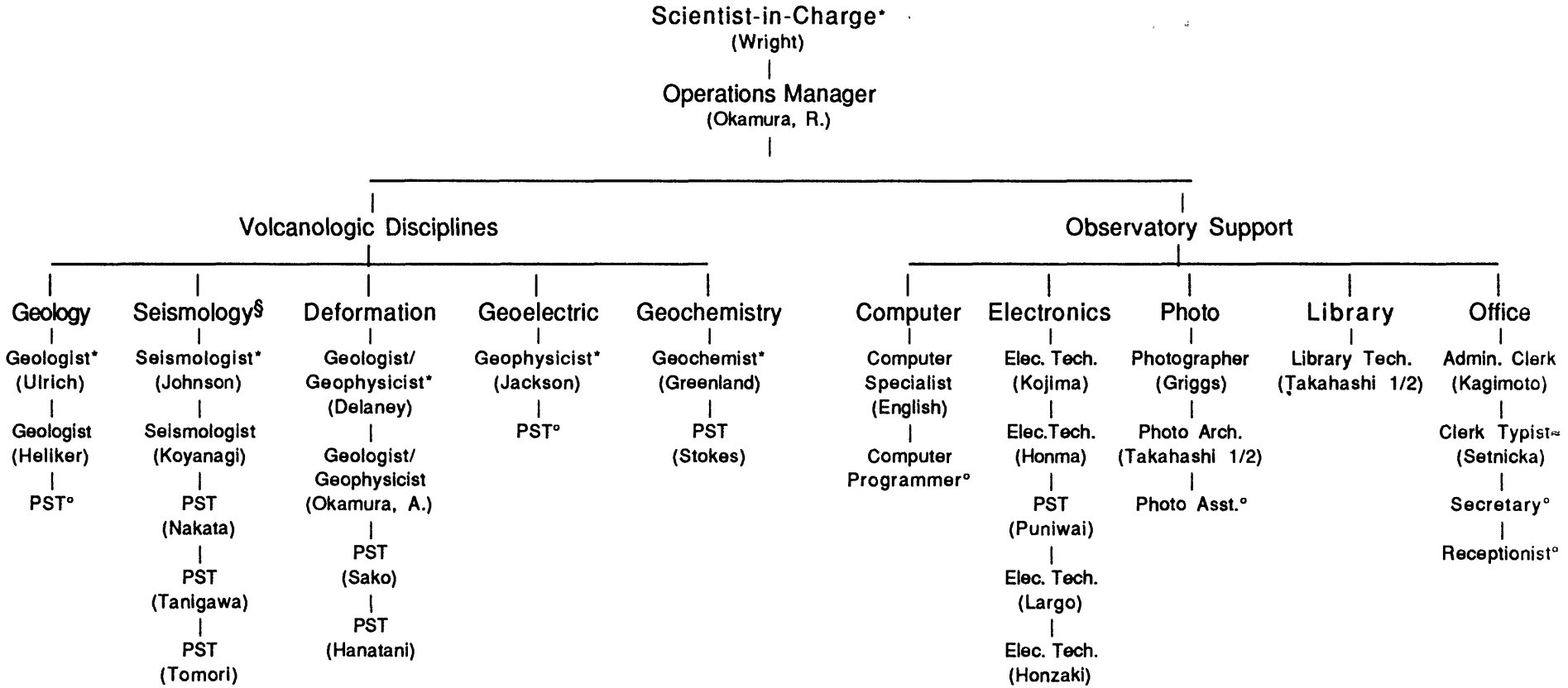
T. JANE TAKAHASHI

OFFICE

MARIAN M. KAGIMOTO
LUCINDA M. SETNICKA

+ Arrived during 1986
* Left during 1986

HAWAIIAN VOLCANO OBSERVATORY ORGANIZATIONAL CHART - 1986



*Rotating Assignment

°Vacancy

≈20 hr/week

§Seismic record changing done under contracts to:
Z. Jacobi, J. Forbes,
A. Yamamoto, J. Kagimoto

Affiliated U. S. Geological Survey Projects, Hawaii National Park

J. Kauahikaua	Hawaii Geothermal
J. Lockwood	Geologic History of Mauna Loa Volcano
R. Moore F. Trusdell (PST)	Geology and Petrology of Hualalai Volcano
E. Wolfe C. Neal J. Morris (Cartographer)	Geologic map of the Island of Hawaii

INTRODUCTION

The Hawaiian Volcano Observatory (HVO) summary presents data gathered during the year with a narrative highlighting seismic activity and a chronological narrative describing the volcanic events and significant Observatory-related activities. The seismic summary is offered without interpretation as a source of preliminary data. The seismic summary is complete in the sense that all data for events of M≥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 74 includes an extensive description of the seismic instrumentation, calibration, and processing used in recent years. The present summary includes enough background information on the seismic network and processing to 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.

SEISMIC SUMMARY - 1986

For the first half of 1986, seismic activity beneath Kilauea's summit and east rift zone mimicked the cyclic patterns of Puu Oo's eruptive episodes (table 3 and fig. C-2 in Chronological Summary). Eruptive episodes, with fountains measuring several meters in height, were characterized by high-amplitude tremor, recorded on the STC station near the vent. Low level tremor, increase of shallow, long-period (LPC-A type, 3-5 Hz) microearthquakes and rapid deflation simultaneously occurred at the summit. Repose periods were marked by weak tremor near the eruptive vent along with a gradual increase in number of shallow microearthquakes and inflation at the summit..

Shallow, short-period microearthquake counts remained relatively high through the month of June, peaking in mid-July, when focus of activity converted to shallow, long-period events on July 19. The transformation in microearthquake activity coincides with the shift in eruptive activity from Puu Oo to the down rift Kupaianaha vent. The shallow, short-period seismicity level remained low but steady for the remainder of the year while the shallow, long-period counts were insignificant after August. Intermediate depth, long-period (LPC-C type, 1-5 Hz) events occurred intermittently in bursts of several days duration.

In late September, there was a Loihi swarm (fig. 12 & 13 and table 5). Several tens of earthquakes were processed for location. Of the serveral thousand events located in 1986, 104 were of magnitude 3.0 or greater, including a M5.0+ which was located to the east of Maui Island on April 26 (fig. 9 and table 6).

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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 - 1986

by

Thomas L. Wright

New Facility. A decade after plans were first drawn up for a new Volcano Observatory, HVO moved into modern, spacious quarters (fig. C-1). We first moved in May into a new building constructed on the site of the old garage, adjacent to the older HVO building. By September we were able to occupy the renovated "Geochemistry" wing of the old HVO, and by the end of the year the Park Service was preparing to occupy the "Library" wing of the old HVO, renovated to house the Thomas A. Jaggar Museum of Volcanology. The transition for HVO was long overdue. Our new "digs" have ample office and laboratory space and include dedicated space for a conference room, computer room, library, photographic darkrooms, lunch room, and crisis center (lookout tower with a 360°-view of Kilauea and Mauna Loa). A full basement includes space for the photo archive, seismic record storage, and testing room for electronic equipment. Because of the increase in staff since the plans were first drawn, we had to sacrifice space dedicated to a dormitory and office to house visiting investigators.

Staff. Paul Greenland, staff geochemist since 1979, retired at the end of the year. Carl Johnson joined the staff in July as a research seismologist. Carl previously headed the USGS Southern California network project, located at the California Institute of Technology in Pasadena. Paul Delaney joined HVO in December as the ground deformation specialist. Paul and his wife Marie Jackson, also a geologist, came from the USGS field office in Flagstaff, Arizona.

HVO Activities. Much of the year's work was spent preparing for the celebration of the 75th Anniversary of the founding of HVO in January 1912. Completed by the end of 1986 were the following:

1. *USGS Professional Paper 1350*, a two-volume set covering recent work on Hawaiian volcanism.(published in 1987).

2. The January 1986 issue of *Earthquakes and Volcanoes*, covering the mission and work of HVO.

3. The USGS general-interest publication *Eruptions of Hawaiian Volcanoes: Past, Present, and Future*, covering both the work of HVO and a broad summary of Hawaiian volcanic activity.

4. The USGS 1:100,000 scale topographic map *Hawaii Volcanoes National Park and Vicinity, Hawaii*, published in cooperation with the National Park Servic.

Volcanic Activity. Eruption statistics are given in Table C-1 and Figure C-2. The ongoing Kilauea eruption underwent a major shift in style of activity, from episodic fountaining at Puu Oo, to continuous activity at a point 3 km downrift (fig. C-3). Eight episodes (nos. 40-47) of eruption at Puu Oo, the last on June 26, completed the building of Puu Oo. The repose periods (24.6 ± 2.5 days) and eruption duration (12 ± 1.5 hrs) were remarkably regular and, in hindsight, may have foretold a change in style of a system so delicately in balance. Episode 48 was on schedule when the Puu Oo edifce failed, evidenced by a small earthquake swarm, lowering of the magma level within the Puu Oo conduit, and the beginning of a series of fissure eruptions extending from just uprift of Puu Oo to the eventual site of continuous activity. We surmise that the combination of increased pressure necessary to raise magma to the surface of the Puu Oo conduit, which was becoming higher in altitude with each eruptive episode, with gradual weakening of the Puu edifice by intrusion associated with each episode, caused the edifice to fail.

The point at which continuous activity was possible was determined by (1) the limits of the initial rift breakage in January 1983, which extended to the vicinity of Kalalua Crater, and (2) the elevation

of the reservoir immediately to the southwest of Puu Oo, which inflated and deflated in sympathy with cycles of Puu Oo activity, evidenced by leveling changes on our monitor line (fig. C-4a-c). We presume that the continuous activity beginning at Vent C, near the eastern termination of the 1983 breakage, was at an altitude such that the shallow Puu Oo reservoir could no longer be pressurized, thus allowing continuous eruption.

From August through the end of the year, a shield, surmounted by a kidney-shaped pond, grew over Vent C, and a lava-tube system began to develop which, before the end of November, sent flows to the ocean with tragic consequences for the communities of Kapaahu and the residential subdivision of Kalapana Gardens, where a total of 26 homes (11 in Kapaahu, 15 in Kalapana Gardens) were destroyed.

One positive aspect of the shield-building eruption was the establishment of a fine, cooperative relationship with Hawaii County Civil Defense. Our timely information and their evacuations and road-closings ensured that no lives were threatened. Continuous activity in an area accessible by road was a scientific bonus, an unparalleled chance to study the mechanics of lava tube formation and shoreline processes associated with entry of lava into the ocean.

Deformation Program. Most of the year's deformation measurements were aimed at monitoring the changes associated with Kilauea's ongoing eruption and Mauna Loa's re-inflation. Figure C-5 shows the continuing deflation of Kilauea's summit associated with the Puu Oo eruption. We confirmed the deflation shown by the tilt network by releveling the road connecting Hilo to Kilauea's summit. Mauna Loa continued to re-inflate following its three-week northeast rift eruption in 1984 (fig. C-6a-c). Shallow seismic activity remained low. In addition to work on Kilauea and Mauna Loa, we completed a skeletal monitoring network on Hualalai.

Other Studies. An expanded program of vertical electrical soundings (VES) has resulted in a preliminary mapping of the apparent depth to the water table beneath Kilauea Volcano. A profile (fig. C-7) drawn from the ocean to the slopes of Mauna Loa shows an abrupt rise of the water table beneath the Kilauea summit and upper rift zone areas. The data are interpreted to reflect the transition from the normal Ghyben-Herzberg relationship (a fresh-water lens overlying seawater at sea level) beneath the lower parts of the volcanic edifice to high-standing, dike-impounded geothermal waters beneath the active parts of the volcano.

Ongoing geochemical monitoring shows that sulfur emissions remained constant across the transition from episodic to continuous activity, implying little or no change in the magma supply rate, estimated from a variety of sources at 500,000 m^3/day, uncorrected for void space. Collections at active vents associated with the early shield-building showed a higher CO_2/SO_2 ratio than corresponding samples taken during episodic activity. We speculate that perhaps the summit storage of magma is minimized by the increased efficiency of transfer of magma between the summit and east rift zone.

DEPARTURES		ARRIVALS	
Name	Position	Name	Position
Paul Greenland	Geochemist	Carl Johnson	Seismologist
Dorothy Footer	Secretary	Pau Delaney	Geophysicist
		Norma Carter	Receptionist (volunteer)

Student appointments in 1986 were as follows:

Minority Program in the Earth Sciences (MPES):

Carl Arakaki - Electronics
Renee Ellorda - Electronics
Charlotte Forbes - Geochemistry
Brian Moniz - Shop
Terry Ignacio - Deformation
Keone Ah Chong - Deformation
Kent Kikuchi - Deformation
Lureen Helliangao - Office/Library
Sandra Zane - Seismic
Laurie Roberts - Geoelectric
Marcie Vicente - Reception/Office

Stay-in-School Program: David Little - Geology

Federal Junior Fellows:

Pauline Tamura - Seismology
Nicole Torres - Deformation

National Association of Geology Teachers:

Walter Lanik - Geology
Ann Marie Cox - Geoelectric

Alu Like (Native American Program);

Mark Ishii - 6 weeks
Anthony Moniz - 6 weeks
James Pacheco - 6 weeks
Kalani Mahoe - 6 weeks

Figure C-1. Hawaiian Volcano Observatory building, completed in 1986.

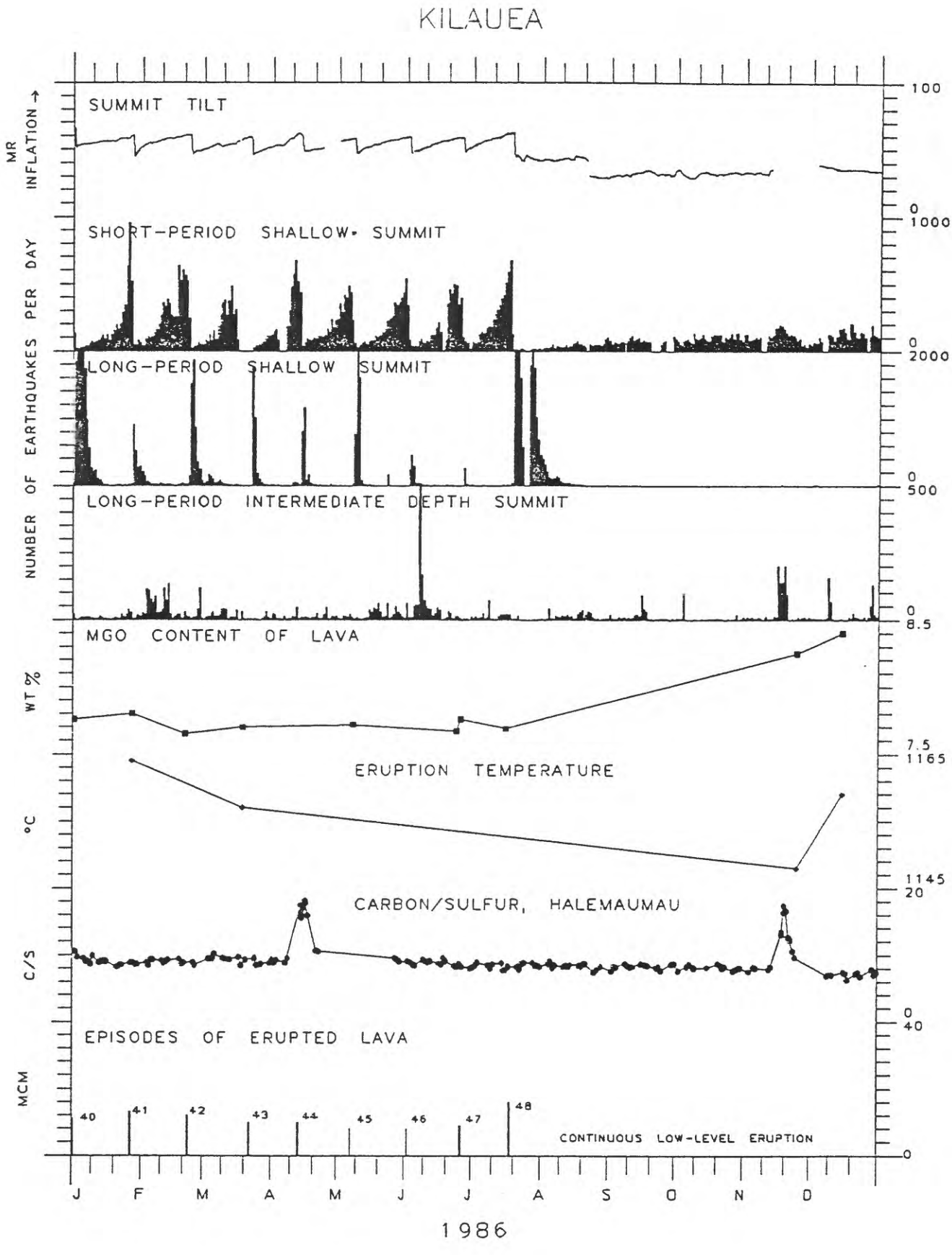


Figure C-2. Selected seismic, geodetic, petrologic and geochemical data for Kilauea, 1986.

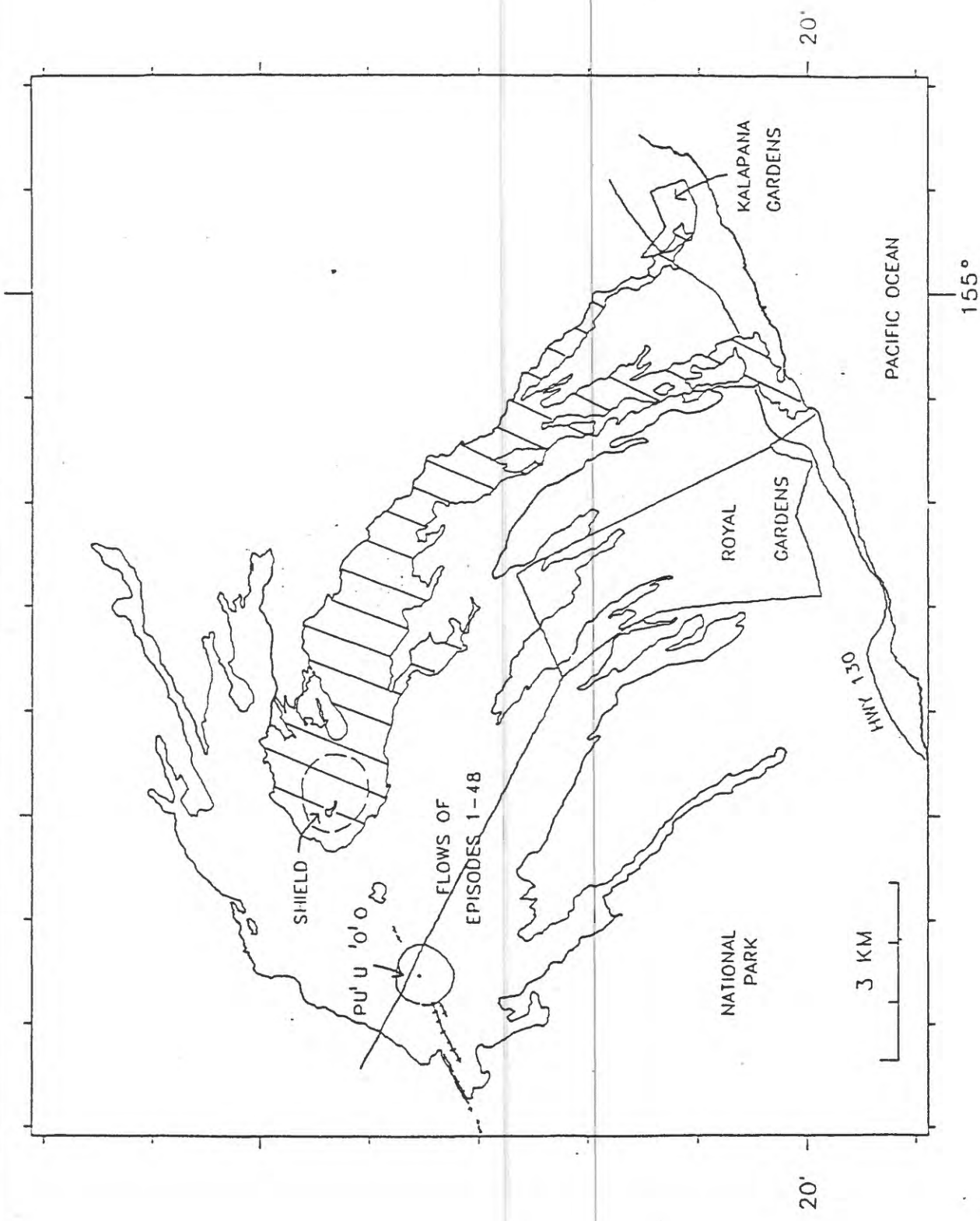


Figure C-3. Map showing area covered by lava from Kilauea's east rift eruption. Blank areas extending outward from Puu Oo are covered by lava erupted from January 1983 through July 1986. Hachured areas are cover by lava erupted from Kupaianaha from July 1986 to the end of 1986.

Figure C-4a.

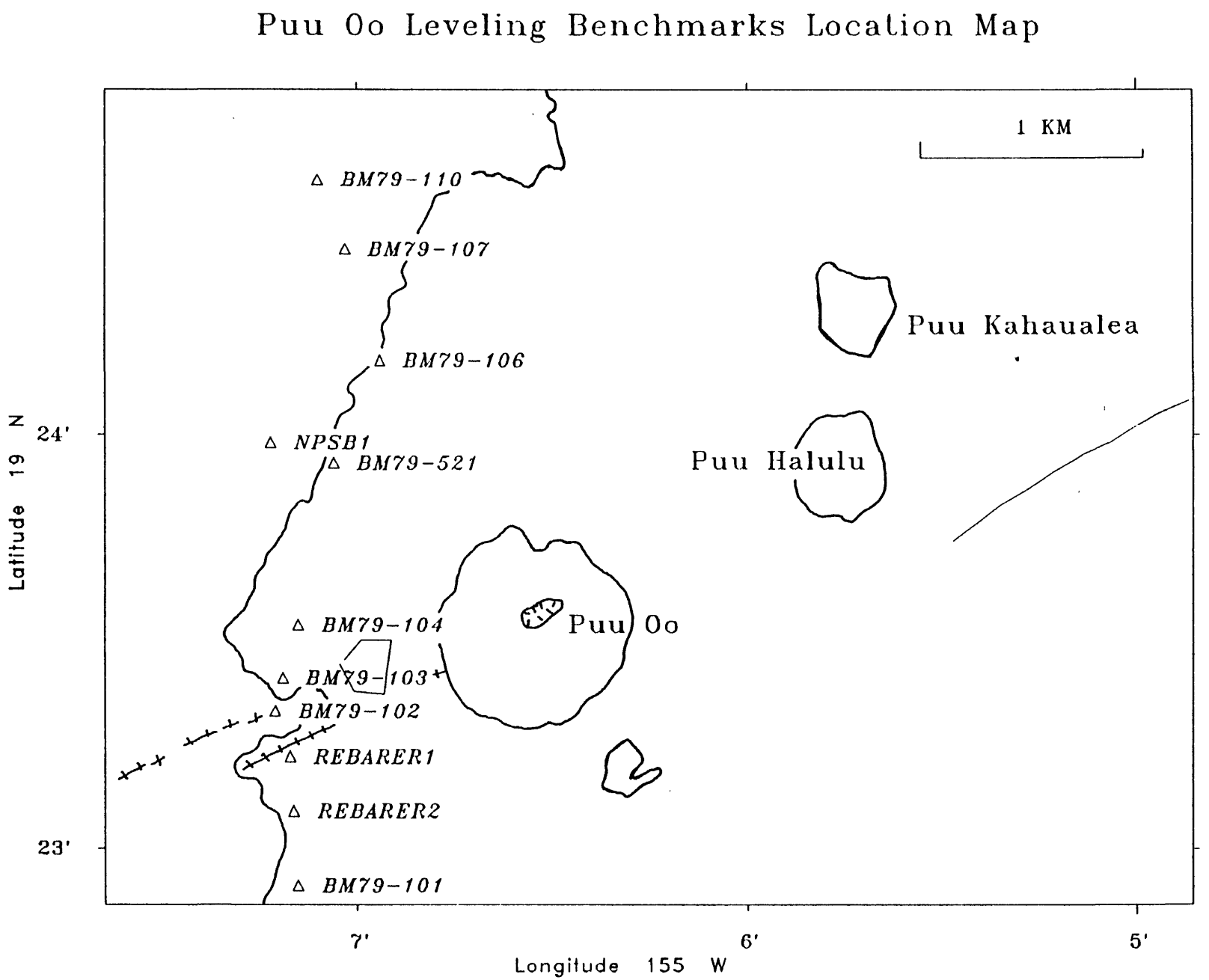
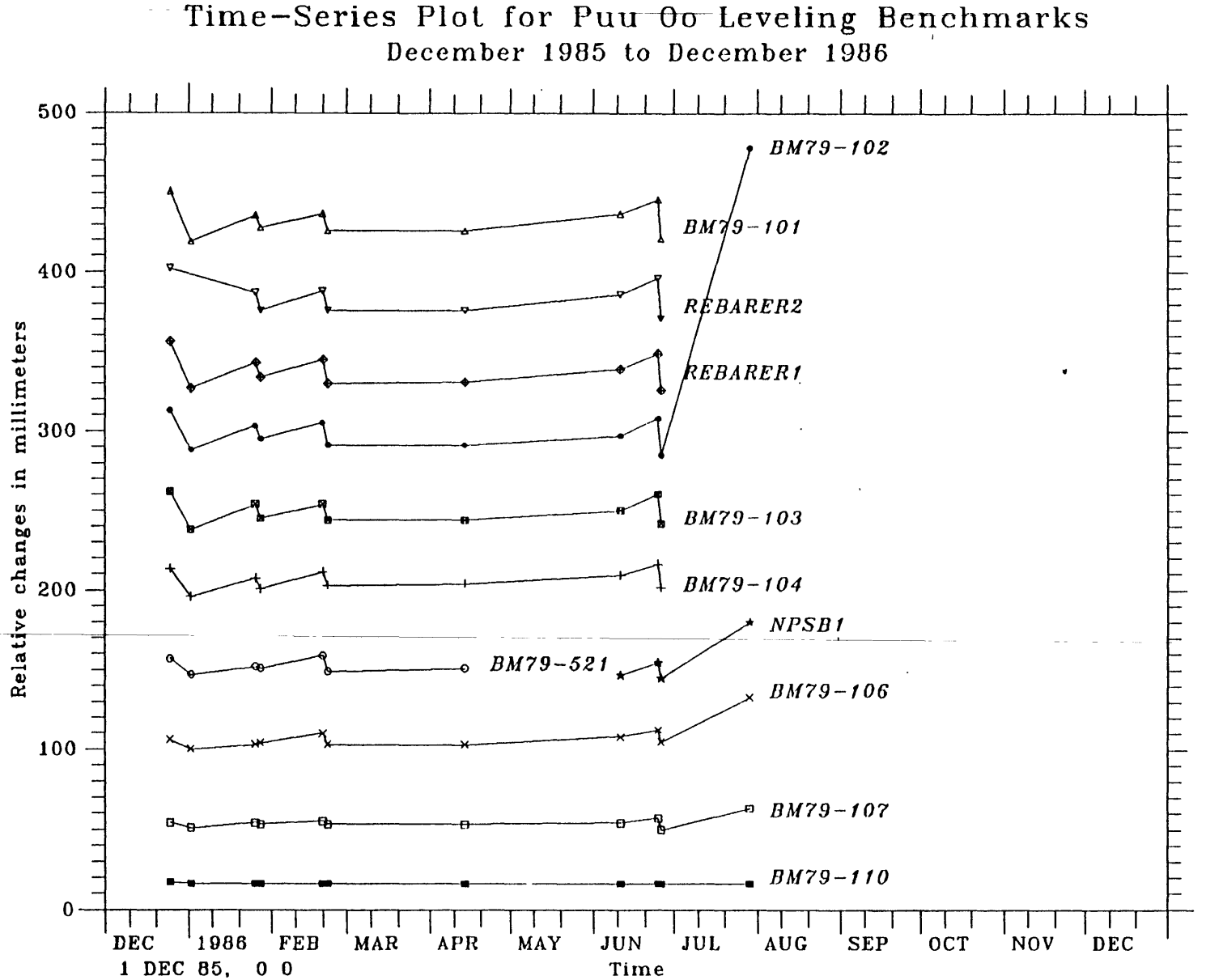

Puu Oo Leveling Benchmarks Location Map
1 KM
BM79-110
BM79-107
BM79-106
NPSB1
BM79-521
BM79-104
BM79-103
BM79-102
REBARER1
REBARER2
BM79-101
Puu Kahaualea
Puu Halulu
Puu Oo
24'
23'
Latitude 19 N
7'
6'
5'
Longitude 155 W

Figure C-4b.


Time-Series Plot for Puu Oo Leveling Benchmarks
December 1985 to December 1986
Relative changes in millimeters
500
400
300
200
100
0
BM79-102
BM79-101
REBARER2
REBARER1
BM79-103
BM79-104
NPSB1
BM79-521
BM79-106
BM79-107
BM79-110
DEC
1986
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC
1 DEC 85, 0 0
Time

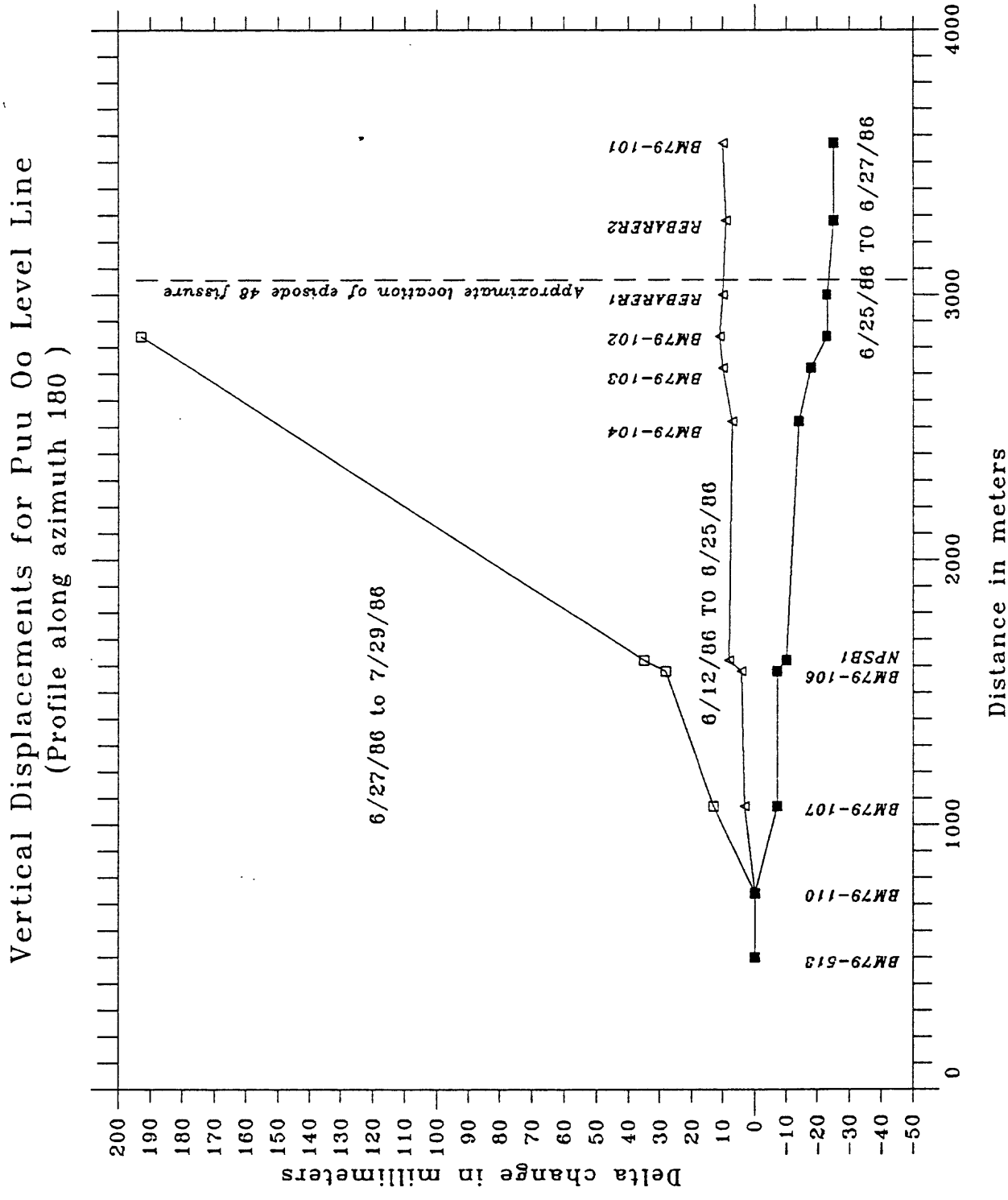

Vertical Displacements for Puu Oo Level Line
(Profile along azimuth 180)
Delta change in millimeters
Distance in meters
6/27/86 to 7/29/86
6/12/86 TO 6/25/86
6/25/86 TO 6/27/86
Approximate location of episode 48 fissure
REBARER1
REBARER2
BM79-101
BM79-102
BM79-103
BM79-104
BM79-106
NPSB1
BM79-107
BM79-110
BM79-513

Figure C-4c.

Figure C-5.

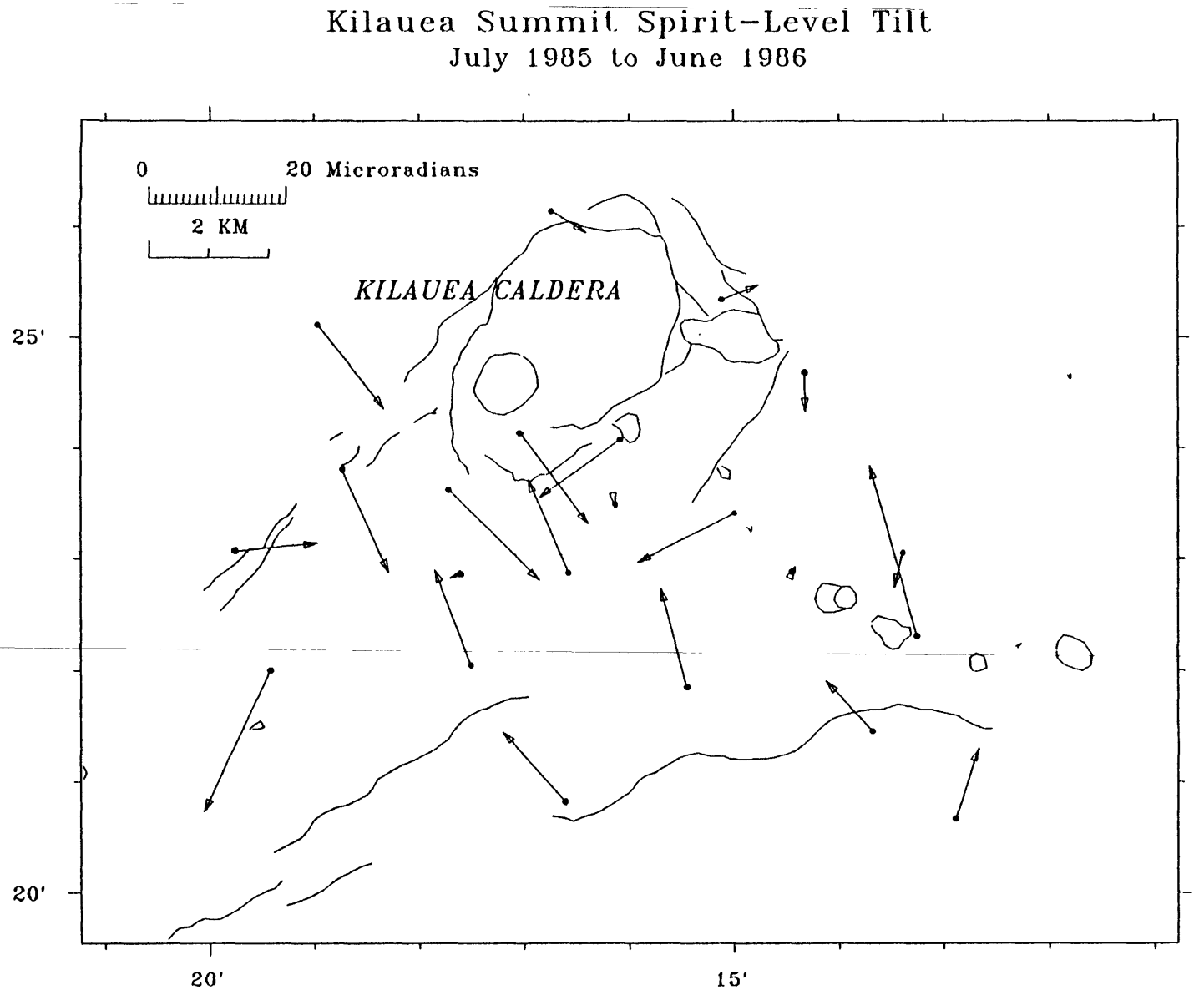
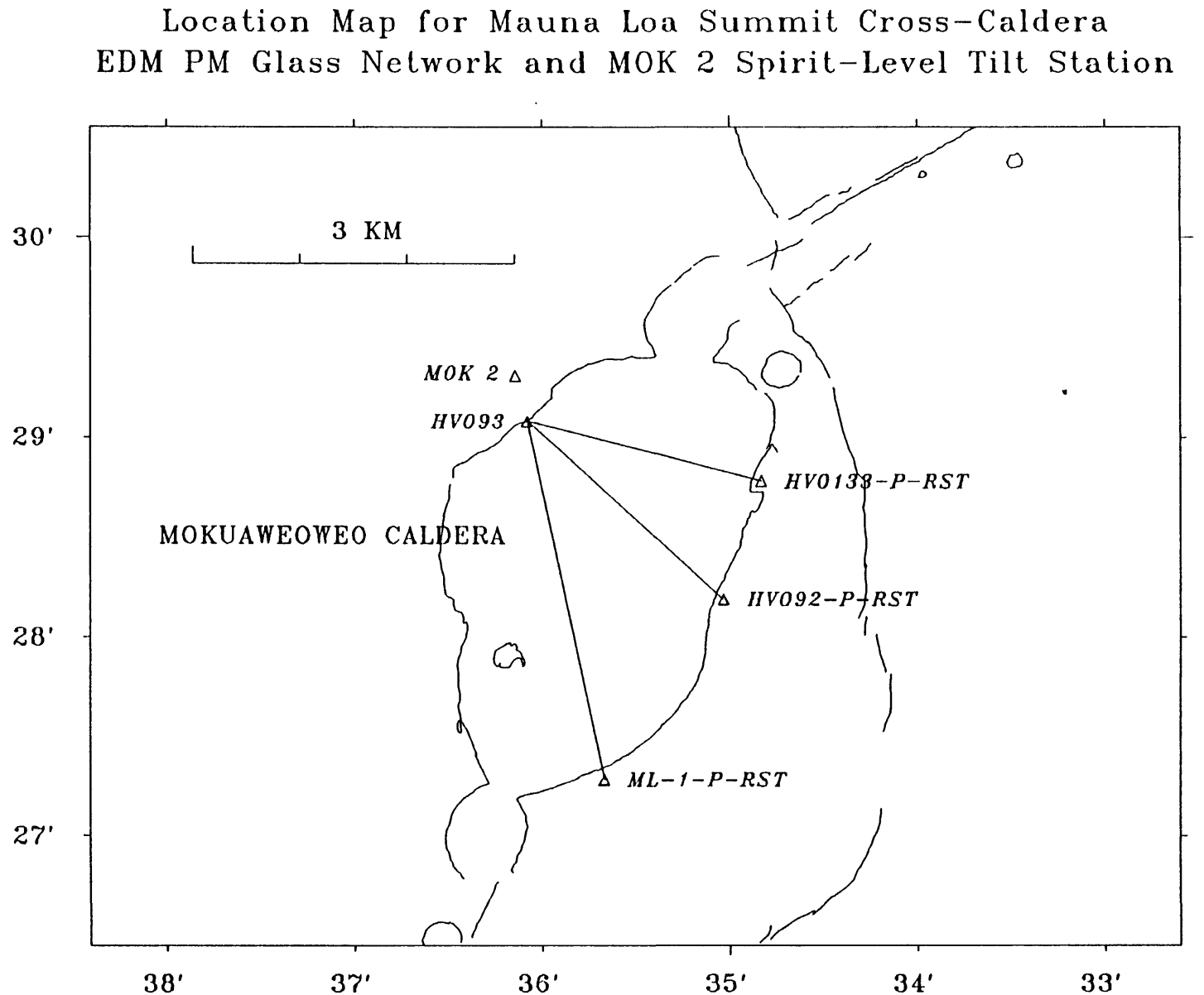

Kilauea Summit Spirit-Level Tilt
July 1985 to June 1986
0
20 Microradians
2 KM
KILAUEA CALDERA
25'
20'
20'
15'

Figure C-6a.


Location Map for Mauna Loa Summit Cross-Caldera
EDM PM Glass Network and MOK 2 Spirit-Level Tilt Station
3 KM
MOK 2
HV093
HV0133-P-RST
MOKUAWEOWEO CALDERA
HV092-P-RST
ML-1-P-RST
30'
29'
28'
27'
38'
37'
36'
35'
34'
33'

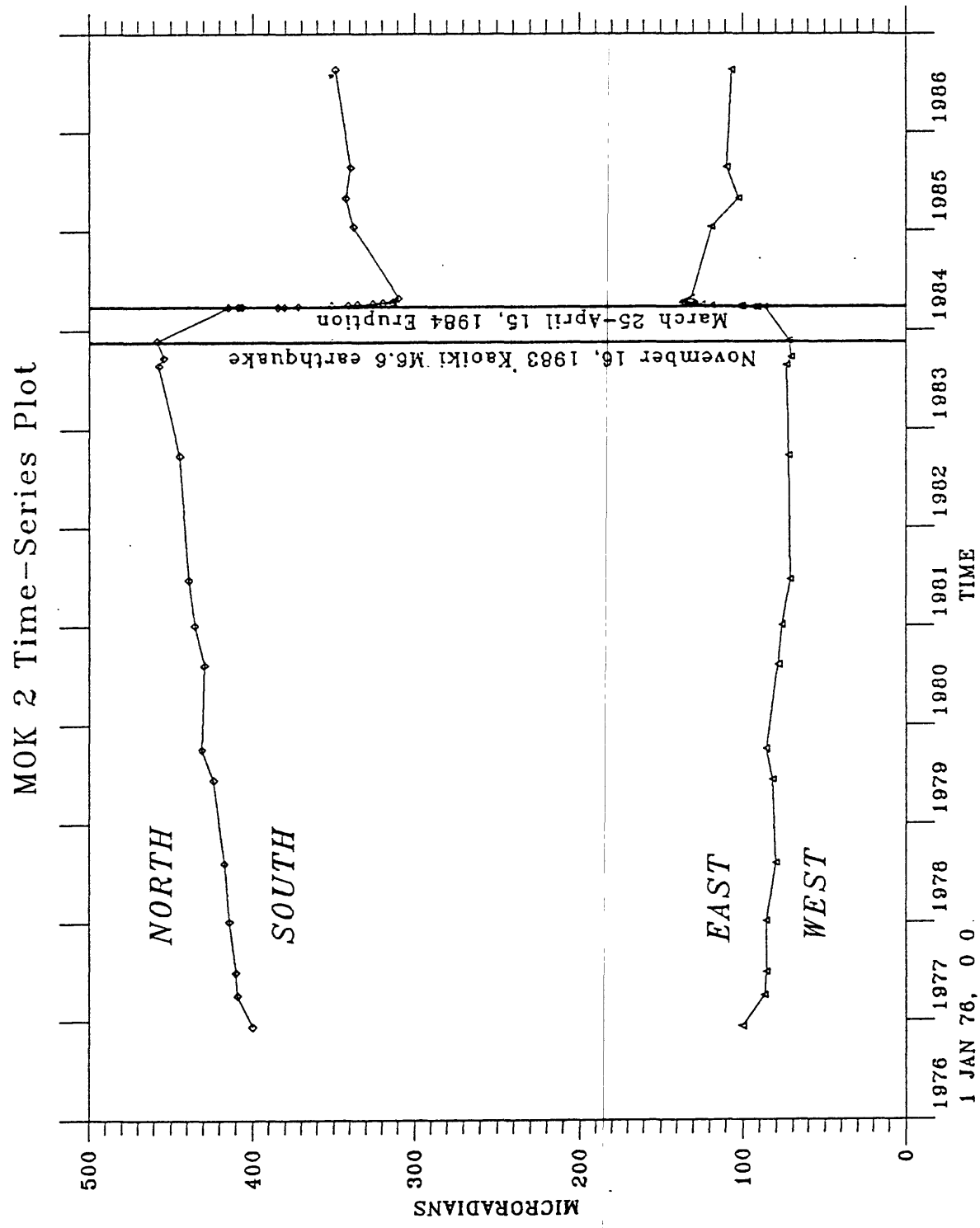

MOK 2 Time-Series Plot
NORTH
SOUTH
EAST
WEST
November 16, 1983 Kaoiki M6.6 earthquake
March 25-April 15, 1984 Eruption
MICRORADIANS
500
400
300
200
100
0
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1 JAN 76, 0 0
TIME

Figure C-6b.

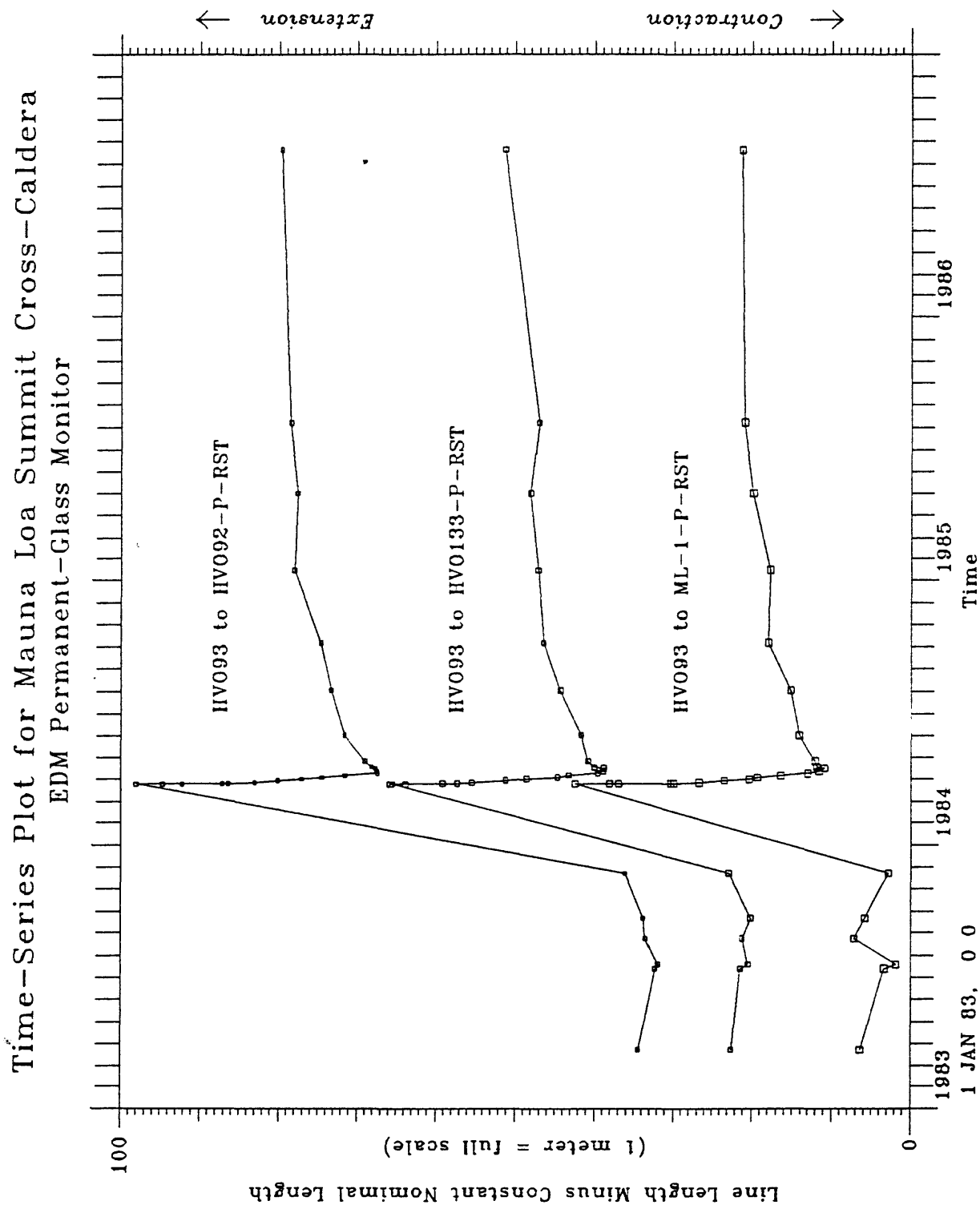

Time-Series Plot for Mauna Loa Summit Cross-Caldera
EDM Permanent-Glass Monitor
← Extension
Contraction →
HV093 to HV092-P-RST
HV093 to HV0133-P-RST
HV093 to ML-1-P-RST
Line Length Minus Constant Nominal Length
(1 meter = full scale)
100
0
1983
1984
1985
1986
Time
1 JAN 83, 0 0

Figure C-6c.

Figure C-7.

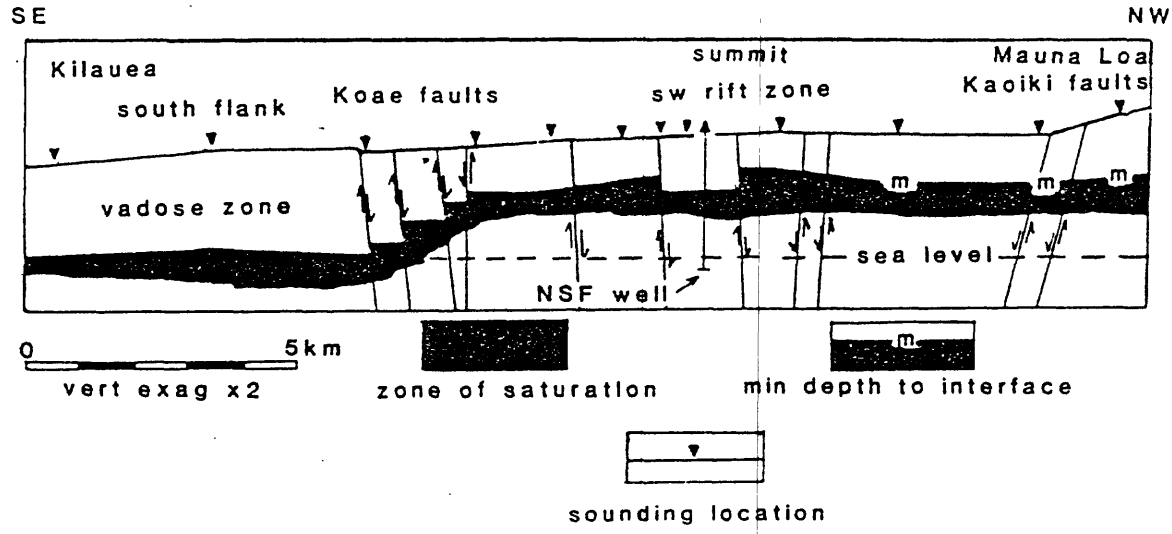


Table C-1.

1986 ERUPTION STATISTICS

Areas

Total area covered by lava, January 1983 through December 1986 = 46 sq km

Volumes

Total, 1/83 through 12/86	Approximately 640 million cubic meters
Episodes 1-47	Approximately 560 million cubic meters
Episode 48 (7/86 through 12/86)	Approximately 80 million cubic meters

Other fascinating facts

Kupaianaha:
Pond level: 0-13 m below rim
Height of Kupaianaha lava shield: 50 m
Pond dimensions: 140 x 300 m

Puu Oo:
Height of cone: 255 m
Diameter of crater: 15 m

Structures destroyed

Residences destroyed through 12/86 = 44

Puu Oo:		
Episodes 1-47	Royal Gardens	16
Kupaianaha:		
11-12/86	Kapa'ahu	11
12/86	Keone Dr., Kalapana Gardens	17

SEISMIC INSTRUMENTATION

The network. The Hawaiian Volcano Observatory maintains an extensive telemetered seismic network on the Island of Hawaii. The 1986 network consisted of 51 stations; 49 digital and two low-gain, three-component optical. The 49 digital stations include 12 three-component and 37 vertical component sites. The coverage is most dense on and around Kilauea Volcano. With the exception of self-contained systems at the Uwekahuna and Hilo stations, all seismic signals from the short-period network are telemetered to the Observatory for recording.

Figure 1 is a map of selected geographic and geologic features, Figure 2 shows the seismic stations operated on the Island of Hawaii during 1986, and Figure 3 indicates the telemetry scheme for the respective seismic stations. Table 1 lists all seismic stations operated by the U.S. Geological Survey field office in Hawaii during 1986. Listed are names, three-and four-letter codes, coordinates in degrees and minutes, elevation in meters, and other data, as described below, pertaining to each station. In addition to the seismometers listed in Table 1, a long-period, three-component set of Press-Ewing seismometers were operated in the Uwekahuna vault and recorded on photographic paper.

Instrumentation and recording. Each telemetered station has a voltage-controlled oscillator (VCO) for FM multiplex transmission to HVO via either hardwire or radio. These telemetering stations are all of Type 1, the Office of Earthquakes, Volcanoes and Engineering 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. Analog signals from 36 selected stations are recorded on two Develocorders using 16-mm microfilm. FM signals from the telemetering network are also recorded directly on one-inch magnetic tape. Selected larger events are copied onto condensed FM library tapes, which are currently archived in Menlo Park. The type(s) of continuous recording used for each station (in addition to magnetic tape for the telemetered stations) is coded in Table 1 as follows: D - Develocorder film, P - photographic paper, H - Helicorder paper, and S - smoke drums.

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

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

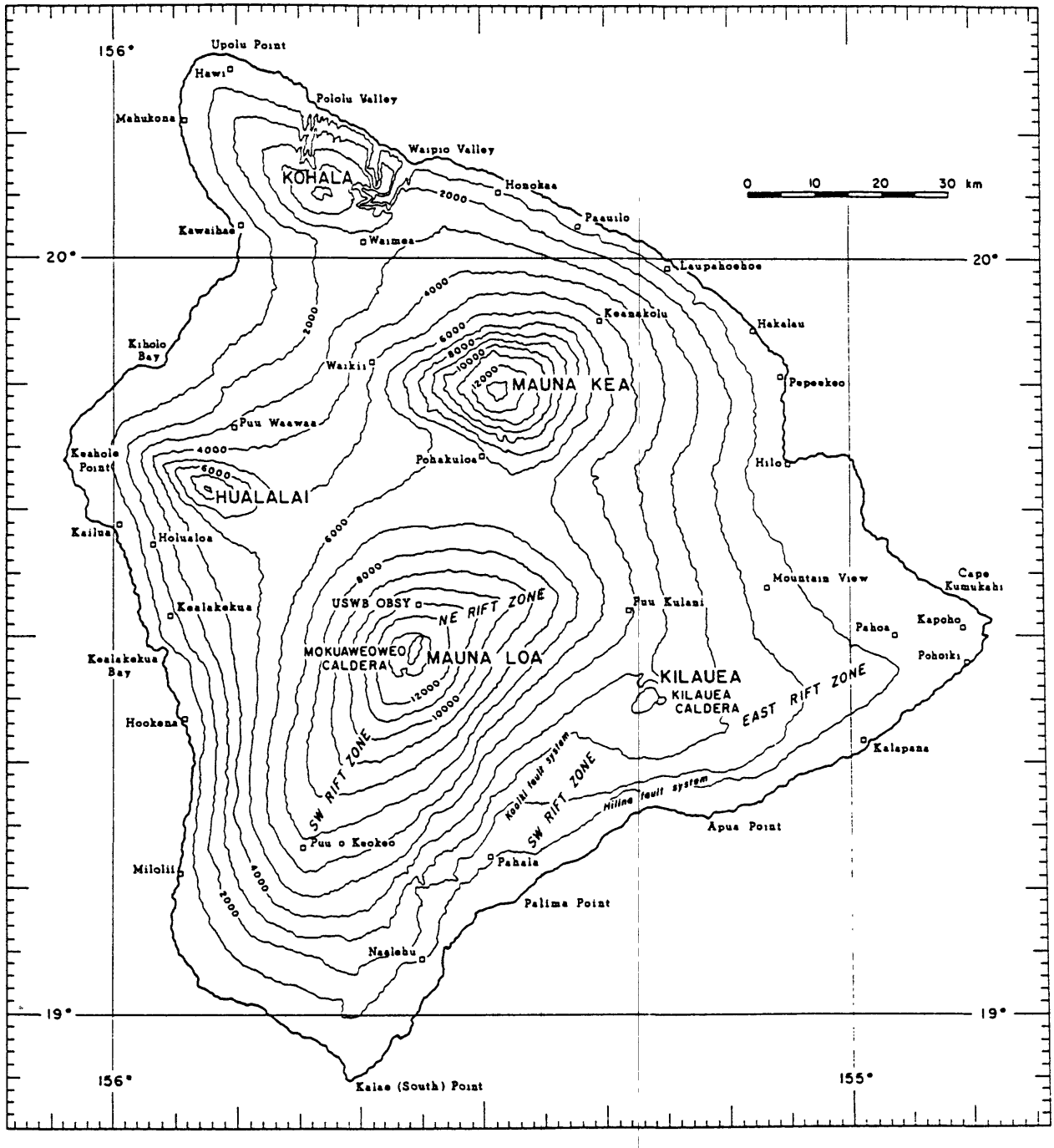


Figure 1. Map of the Island of Hawaii, showing principal settlements and selected geographic and geologic features.

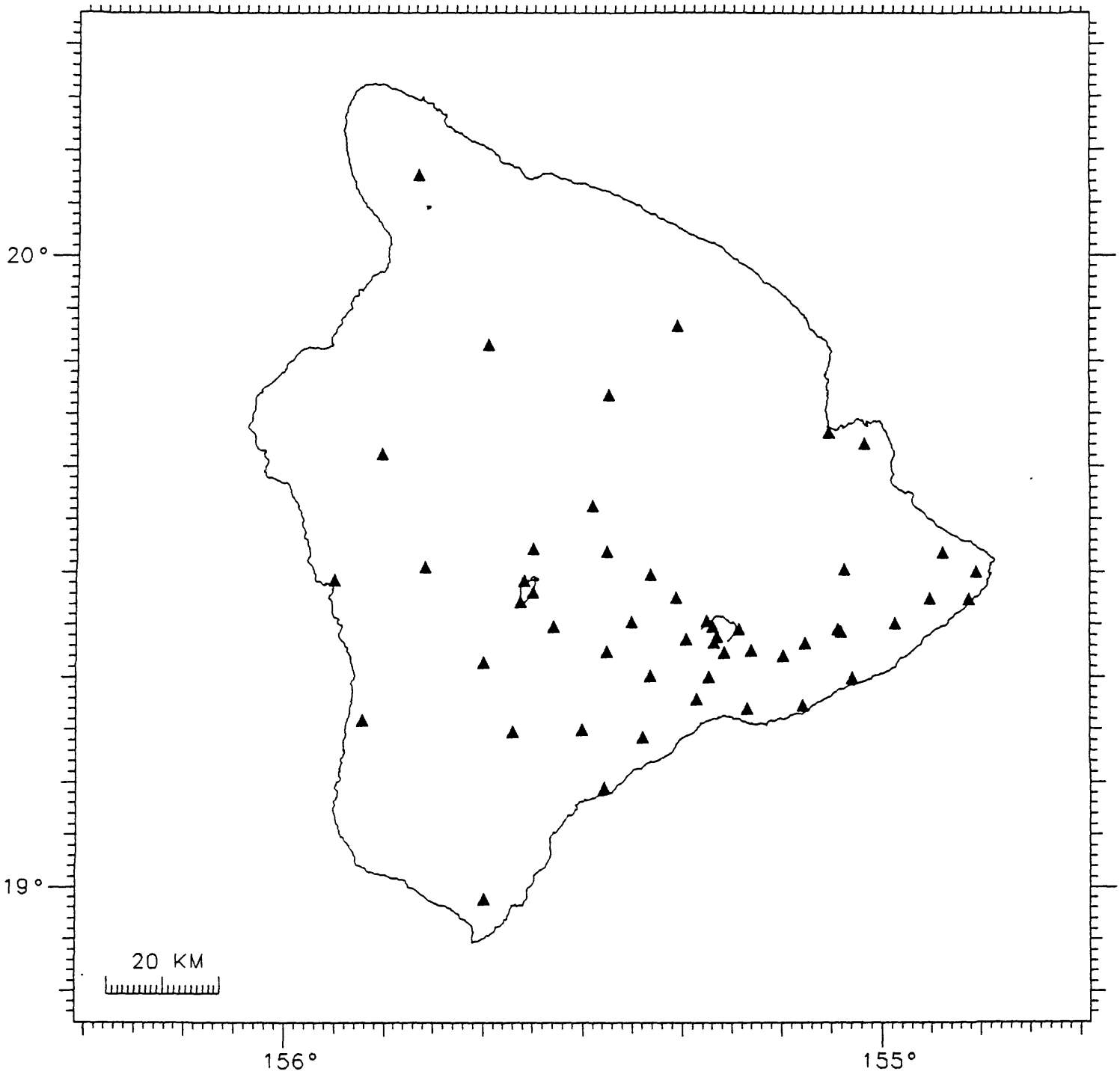


Figure 2. Seismic stations operational during 1986 on the Island of Hawaii.

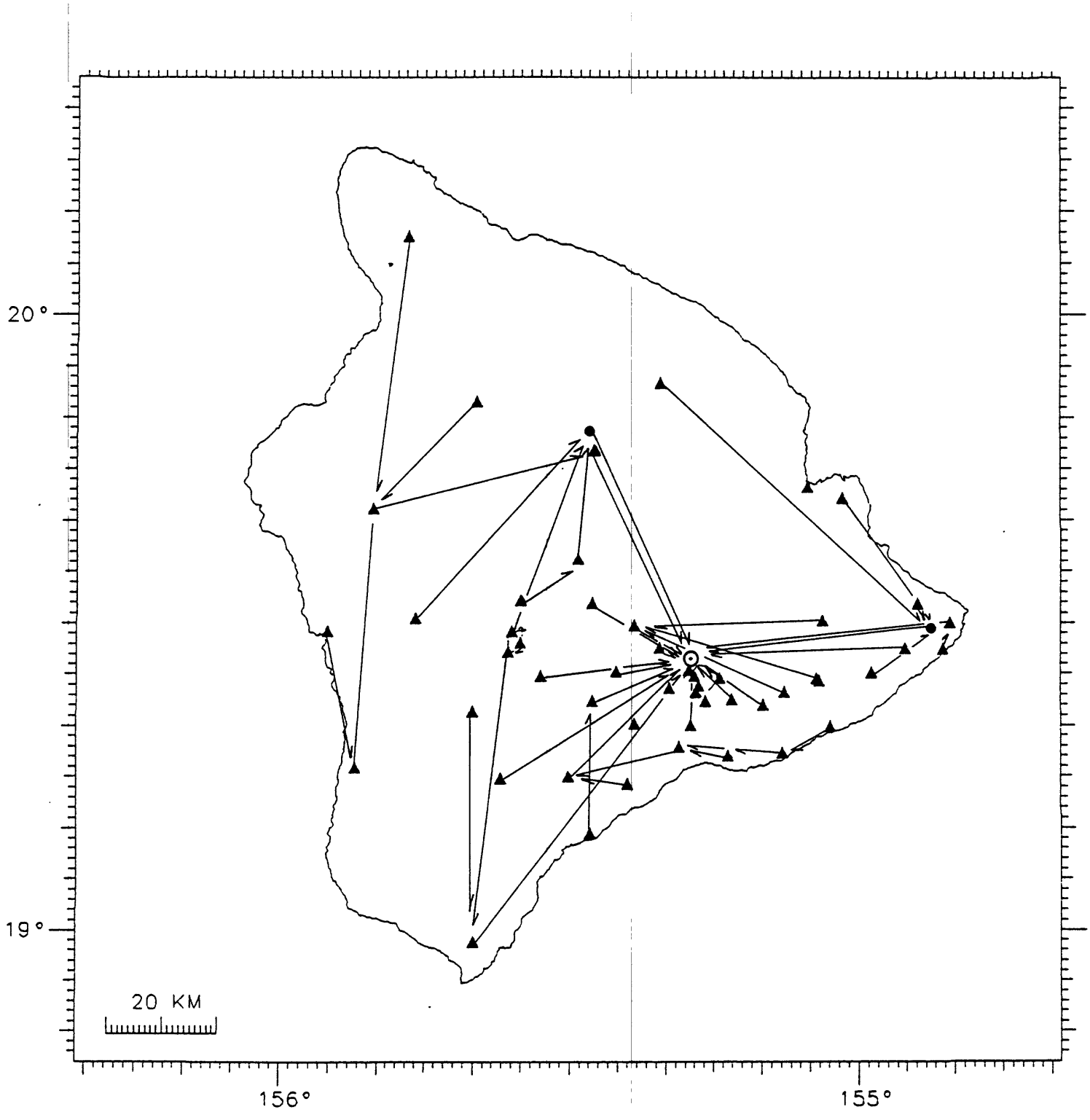


Figure 3. Telemetry scheme for the 1986 Hawaiian Volcano Observatory seismic network.

Legend
▲ Seismometer location
● Repeater station
⊙ HVO

Table 1. Seismic stations in Hawaii operated by the USGS in 1986.

STATION NAME	CODE	--LAT--- D	M	---LON--- D	M	ELEV (M)	DELAY 1	DELAY 2	CAL	SEIS TYPE	OPTIC RECORD
AHUA	AHUV	19	22.40	155	15.90	1070	-0.10	-0.13	2.1	E4	DS
AHUA	AHUE	19	22.40	155	15.90	1070	-0.10	-0.13	3.0	MW	
AHUA	AHUN	19	22.40	155	15.90	1070	-0.10	-0.13	3.0	MW	
AINAPO	AINV	19	22.50	155	27.62	1524	0.13	0.17	5.5	L4	D
AINAPO	AINE	19	22.50	155	27.62	1524	0.13	0.17	3.0	MW	
AINAPO	AINN	19	22.50	155	27.62	1524	0.13	0.17	3.0	MW	
CAPTAIN COOK	CACV	19	29.29	155	55.09	323	0.00	-0.16	1.1	L4	D
CONE PEAK	CPKV	19	23.70	155	19.70	1038	-0.26	-0.07	6.0	L4	
DANDELION	DANV	19	21.42	155	40.04	3003	-0.27	0.03	7.0	L4	D
DESERT	DESV	19	20.20	155	23.30	815	-0.29	-0.13	3.0	L4	DS
ESCAPE ROAD	ESRV	19	24.68	155	14.33	1177	-0.17	-0.19	2.2	L4	D
HAWAIIAN BEACHES	HABV	19	31.89	154	53.89	92	-0.09	-0.24	1.0	L4	
HALEAKALA, MAUI	HAE	20	46.00	156	15.00	2090	0.00	0.00	1.0	W	P
HALEAKALA, MAUI	HAL	20	46.00	156	15.00	2090	0.00	0.00	1.0	H1	P
HALEAKALA, MAUI	HAN	20	46.00	156	15.00	2090	0.00	0.00	1.0	W	P
HILO	HIE	19	43.20	155	5.30	20	0.54	0.30	1.0	W	P
HILO	HIL	19	43.20	155	5.30	20	0.54	0.30	1.0	H1	P
HILO	HIN	19	43.20	155	5.30	20	0.54	0.30	1.0	W	P
HILINA PALI	HLPV	19	17.96	155	18.63	707	0.02	0.07	2.6	L4	D
HONOLULU, OAHU	HON	21	19.30	158	0.50	2	0.00	0.00	0.0	H1	P
HALE POHAKU	HPUV	19	46.85	155	27.50	3396	0.31	0.17	3.3	L4	D
HUMUULA SHEEP ST	HSSV	19	36.31	155	29.13	2445	0.20	0.35	5.3	L4	D
HUMUULA SHEEP ST	HSSE	19	36.31	155	29.13	2445	0.20	0.35	3.0	MW	
HUMUULA SHEEP ST	HSSN	19	36.31	155	29.13	2445	0.20	0.35	3.0	MW	
HOT CAVES	HTCV	19	14.33	155	24.02	381	-0.16	-0.07	0.0	E4	
HUALALAI	HUAV	19	41.25	155	50.32	2189	0.67	0.38	3.0	L4	D
HEIHEIAHULU	HULV	19	25.13	154	58.72	369	-0.17	-0.16	1.6	L4	DS
HEIHEIAHULU	HULE	19	25.13	154	58.72	369	-0.17	-0.16	3.0	MW	
HEIHEIAHULU	HULN	19	25.13	154	58.72	369	-0.17	-0.16	3.0	MW	
KAAPUNA	KAAV	19	15.98	155	52.28	524	-0.12	-0.01	3.5	E4	D
KAENA POINT	KAEV	19	17.35	155	7.95	37	-0.01	0.06	1.4	L4	D
KAHAUALEA	KAHV	19	24.58	155	4.36	625	-0.25	-0.30	0.0	L4	D
KAOIKI FAULTS	KFAV	19	25.25	155	25.18	1579	0.13	0.17	0.0	E3	
KAHUKU	KHUV	19	14.90	155	37.10	1939	0.03	-0.03	2.7	E4	D
KANEKII	KIIV	19	30.56	155	45.90	1841	0.15	0.37	2.9	L4	D
KANEKII	KIIE	19	30.56	155	45.90	1841	0.15	0.37	3.0	MW	
KANEKII	KIIN	19	30.56	155	45.90	1841	0.15	0.37	3.0	MW	
KEANAKOLU	KKUV	19	53.39	155	20.58	1863	0.68	0.24	3.3	L4	D
KALALUA CONE	KLCV	19	24.35	155	4.08	659	-0.25	-0.30	0.0	L4	DH
PUU KALIU	KLUV	19	27.48	154	55.26	271	-0.17	-0.30	2.9	L4	D
KOHALA	KOHV	20	7.69	155	46.77	1166	-0.03	-0.17	1.5	L4	D
KOHALA	KOHE	20	7.69	155	46.77	1166	-0.03	-0.17	3.0	MW	
KOHALA	KOHN	20	7.69	155	46.77	1166	-0.03	-0.17	3.0	MW	
KIPUKA NENE	KPNV	19	20.10	155	17.40	924	-0.11	-0.08	3.5	L4	D
KAPOHO	KPOV	19	30.02	154	50.51	134	-0.09	-0.24	2.5	L4	DH
MAUNA LOA	MLOV	19	29.80	155	23.30	2010	0.03	0.08	5.8	L4	DS
MAUNA LOA	MLOE	19	29.80	155	23.30	2010	0.03	0.08	3.0	MW	D
MAUNA LOA	MLON	19	29.80	155	23.30	2010	0.03	0.08	3.0	MW	
MAUNA LOA X	MLXV	19	27.60	155	20.70	1475	0.06	0.15	3.0	L4	
MOKUAWEOWEO	MOKV	19	29.28	155	35.98	4104	0.15	0.16	5.5	L4	DH
MAKAOPUHI	MPRV	19	22.07	155	9.85	881	-0.17	-0.20	4.2	L4	D
MOUNTAIN VIEW	MTVV	19	30.25	155	3.75	409	-0.02	0.01	5.0	E4	D
NATIONAL GUARD	NAGV	19	42.12	155	1.72	18	0.54	0.30	3.2	E4	D
NORTH PIT	NPTV	19	24.90	155	17.00	1115	-0.30	-0.18	3.0	E4	DS
NORTH PIT	NPTE	19	24.90	155	17.00	1115	-0.30	-0.18	3.0	MW	
NORTH PIT	NPTN	19	24.90	155	17.00	1115	-0.30	-0.18	3.0	MW	
OUTLET	OTLV	19	23.38	155	16.94	1038	-0.19	-0.18	4.9	L4	
PAUAHI	PAUV	19	22.62	155	13.10	994	-0.21	-0.24	2.4	L4	DS
PAUAHI	PAUE	19	22.62	155	13.10	994	-0.21	-0.24	3.0	MW	

Table 1. (continued)

PAUAHI	PAUN	19	22.62	155	13.10	994	-0.21	-0.24	3.0	MW	
PUU ULAULA	PLAV	19	32.00	155	27.67	2992	-0.03	0.13	5.4	L4	D
POHOIKI	POIV	19	27.42	154	51.22	16	-0.09	-0.24	0.0	L4	
POLIOKEAWE PALI	POLV	19	17.02	155	13.47	169	-0.02	0.03	2.8	E4	D
PUU PILI	PPLV	19	9.50	155	27.87	35	-0.15	-0.15	1.7	E4	D
RIM	RIMV	19	23.90	155	16.60	1128	-0.21	-0.13	0.0	L4	
SOUTH POINT	SPTV	18	58.91	155	39.92	244	-0.17	-0.22	2.8	L4	D
SOUTH POINT	SPTE	18	58.91	155	39.92	244	-0.17	-0.22	3.0	MW	
SOUTH POINT	SPTN	18	58.91	155	39.92	244	-0.17	-0.22	3.0	MW	
STEAM CRACKS	STCV	19	23.30	155	7.67	765	-0.25	-0.30	2.4	L4	D
STEAM CRACKS	STCE	19	23.30	155	7.67	765	-0.25	-0.30	3.0	MW	
STEAM CRACKS	STCN	19	23.30	155	7.67	765	-0.25	-0.30	3.0	MW	
SOUTHWEST RIFT	SWRV	19	27.26	155	36.30	4048	0.01	0.04	5.6	E4	D
TRAIL	TRAV	19	24.91	155	32.96	3207	0.00	0.00	0.0	L4	
UWEKAHUNA	UEE	19	25.40	155	17.60	1240	-0.21	0.00	2.5	E	P
UWEKAHUNA	UEN	19	25.40	155	17.60	1240	-0.21	0.00	2.5	E	P
UWEKAHUNA	UEZ	19	25.40	155	17.60	1240	-0.21	0.00	2.5	E	P
WAIKII	WAIV	19	51.58	155	39.60	1433	0.20	0.35	0.0	L4	
WAHAULA	WHAV	19	19.90	155	2.92	29	-0.10	-0.04	1.5	E4	D
WILKES CAMP	WILV	19	28.15	155	35.02	4037	0.22	0.17	2.6	E4	D
WILKES CAMP	WILE	19	28.15	155	35.02	4037	0.22	0.17	3.0	MW	
WILKES CAMP	WILN	19	28.15	155	35.02	4037	0.22	0.17	3.0	MW	
WEATHER OBSERVAT	WOBV	19	32.31	155	35.01	3396	0.00	0.00	0.0	E4	
WOOD VALLEY	WOOV	19	15.08	155	30.12	909	-0.15	-0.06	4.6	E4	

Table 2. Seismic Instrument Types

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

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

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

b) Preamp/VCO - USGS/OEVE Model J302 (3), J402 (4) voltage-controlled oscillator. Three db points for bandpass filter at 0.1 Hz and 30 Hz. Signals are transmitted on audio FM carrier over cable or FM radio link to HVO.

Type 2 (Code E) consists of:

a) Electrotech EV-17 1.0-sec. period moving-magnet vertical- or horizontal- (E-W and N-S) component seismometer.

b) 3.5 Hz galvanometer with appropriate shunt resistances for critical damping. System is poorly calibrated. Peak magnification approximately 25,000 at 4 Hz.

Type 3 (Code H1) consists of:

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

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

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

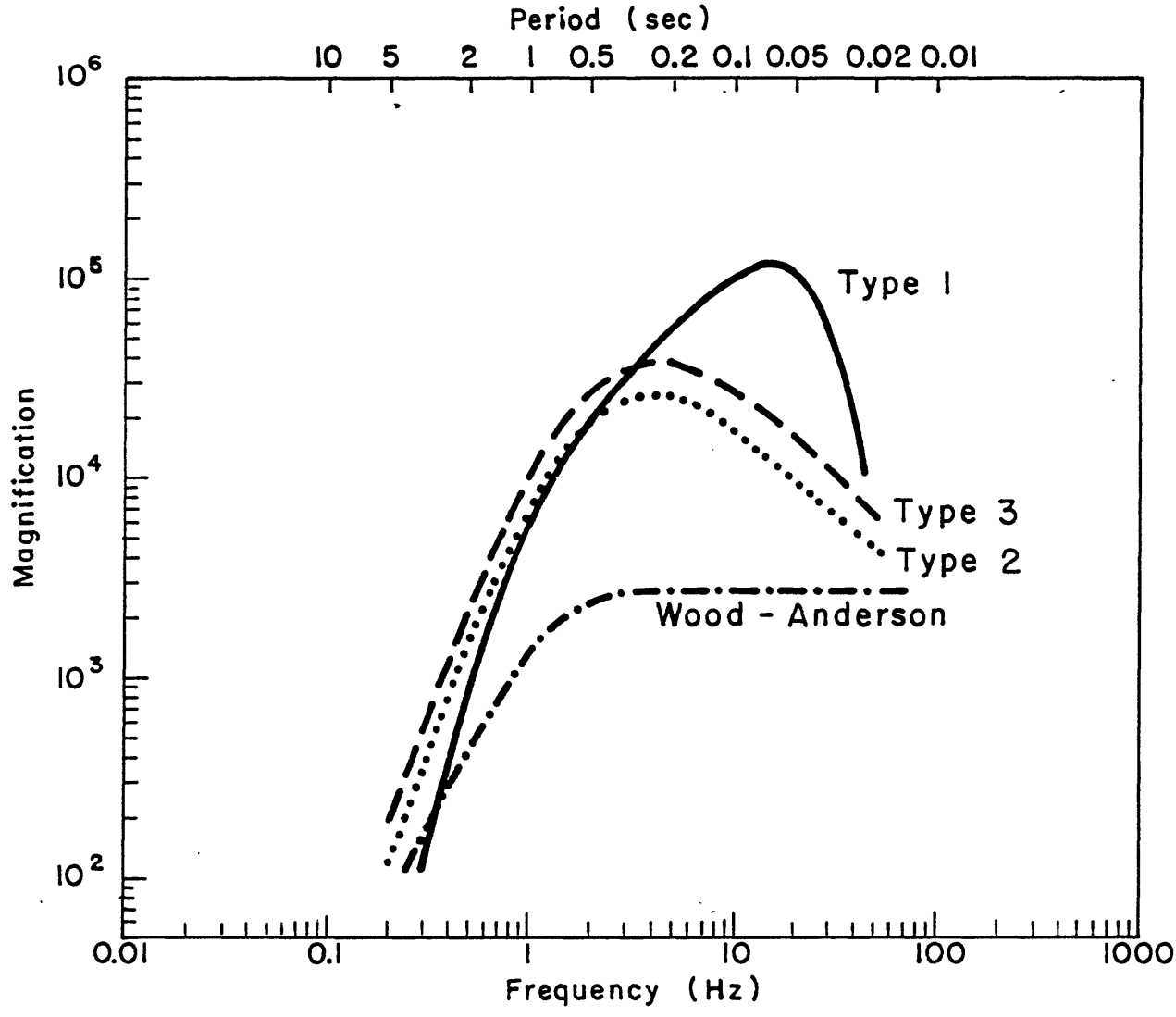


Figure 4. System response curves for the Wood-Anderson torsion seismograph and for the three different types of seismometers used by the Hawaiian Volcano Observatory. Types 2 and 3 are electro-magnetic seismographs recorded optically on photographic paper. Type 1 is the standard OEVE seismometer system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

SEISMIC DATA PROCESSING

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

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 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 was used for events on Kilauea and its south flank, and delay model 2 applies to the rest of the island and offshore earthquakes. A combination of the two delay models was used for epicenters that fall in a transition zone. (For a detailed description, refer to Klein, 1989.)[2]

Magnitudes for most events were computed using both recorded amplitudes on low gain or Wood-Anderson stations and signal or coda duration on selected short-period vertical stations. Amplitudes read from other than Wood-Anderson instruments are corrected to an equivalent Wood-Anderson amplitude using the curves of Figure 4 and CAL factors listed in Table 1. Amplitude magnitudes larger than 2.5 are generally based on the Wood-Anderson instruments in Hilo or on Type 2 seismographs at Uwekahuna.

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

duration < 210 sec $M = -5.2 + 3.89 \log (F-P) + .013 Z + .0037 D$

duration > 210 sec $M = -.905 + 2.026 \log (F-P) + .013 Z + .0037 D$

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

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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.

SEISMIC SUMMARY

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

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

Earthquake categories are as follows:

1) Kilauea summit, short-period caldera: shallow earthquakes beneath the caldera.
2) Kilauea summit, long-period caldera A: earthquakes characterized by low frequency signatures of 3 to 5 Hz, often originating 0-5 km beneath the summit.
3) Kilauea summit, long-period caldera B: earthquakes characterized by low frequency signatures of 1 to 3 Hz, often originating 0-5 km beneath the summit.
4) Kilauea summit, long-period caldera C: earthquakes characterized by low frequency signatures of 1 to 5 Hz, often originating 5-15 km beneath the summit.
5) Kilauea summit 30 km: deep earthquakes about 30 km beneath the summit region.
6) Kaoiki and southwest rift: earthquakes beneath the southwest rift of Kilauea, western parts of the Koae faults, and adjacent Kaoiki 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 Koae faults.
8) Lower east rift: earthquakes in the lower east rift zone and adjacent parts of the south flank.
9) Mauna Loa short-period: shallow earthquakes in the Mauna Loa summit region.
10) Mauna Loa long-period: earthquakes characterized by the 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 where tremor in the middle east rift zone was continuous. Distinction was made between high-amplitude tremor related to strong eruptive periods and low-amplitude tremor during periods with no lava production. Only minutes of tremor at saturated levels recorded locally at STC and KLC are included in Table 3.

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

Table 3.

	KILAUEA SUMMIT					KILAUEA FLANK			MAUNA LOA			TREMOR (MINUTES)		
DATE 1986	SHORT PER. CALD.	LONG CALDERA A	B	C	30 KM	KAO. & SW RIFT	UP. EAST RIFT	LOW. EAST RIFT	SHORT PER.	LONG PER.	NE RIFT	KILAUEA SHAL.	INT.	DEEP	MAUNA LOA
JAN 1	137	9	7	21		21	26	4	3		2	773			
2	18	1842		2		38	34	1			1	60			
3	14	2905	23			41	32	1	1	1	3				
4	23	2715		3	1	48	45		3		5				
5	27	2100	5	8	1	47	62	4	3	3	2				
6	39	1735		7	1	54	53	6	4	1	1				
7	39	982		9		45	58	8	2	1	2				
8	54	562		8		35	34	6	7	1	2				
9	69	255		5		40	47	5		3	6				
10	60	209		4		29	61	4	6	4	2				
11	71	223	2	3		56	59	1		3	5			2	
12	85	107		6		38	52	8	9	11	3				4
13	98	75		12		27	68	5	4		7				
14	119	41		7	1	38	61	5	2	3	8				
15	95	10		4	1	64	51	7		2	5				
16	123	4	1	1	1	37	82		1	4	10			23	
17	76			2		31	45	1			2			54	
18	121					28	45		2	2	4				5
19	157	1		4		47	47	2		3	3				
20	197	7		7		49	57	10	3	2	7				
21	161	6		4		37	43	9	5	4	13			42	
22	205	3	1	6		37	50	6	4	1	8				
23	285	1		19		48	53	13	4	3	10				
24	345	5		11	2	41	69	4	1	1	10			37	
25	630			21		56	87	7	2		4				
26	951	11		37		53	86	3	2	2	1			17	
27	518	22	5	26		35	129	7		2	4	595			3
28	49	265	640	1		35	48	10	1		2				
29	44	13	501	4		43	80	15	3	1	7				
30	79	182	89	17		46	53	8		2	11			7	
31	61	258	31	13	1	45	35		4						
FEB 1	41	199	8	24		38	37		1		2				7
2	90	136		21		31	52	4	2	1	2			10	
3	109	52	2	113		36	64	4	1	3	7				
4	98	38		109	2	30	47	1	1		5				
5	115	21	2	74		29	59	6		1	4				
6	138	19		60		52	56	4	4		6				
7	165	20	2	87		30	62	5	1		4			4	
8	200	9	4	25		49	49	7		1	5				
9	269	18	19	31		34	74	10	1		5			10	
10	358	17		37		28	62	7		2	6				
11	330	9		117		49	55	2	2	1	8			14	
12	383	17		73		33	78	6	1		4				
13	354	19		133		35	69	6	1		10				
14	264	4		20	1	26	49		1		1			9	
15	253			3		23	48								
16	254	2		13		24	36		1		2		4		
17	632	6		21		24	65	4	1		3				
18	522	17	2	20	1	53	88	4	5	2	3				
19	601	37		5		57	87	6	6	1	5				
20	564	23		28		47	88	7		1	4			3	
21	518	11		12		39	74	5	5	1	9				
22	244	36	113	11		21	69	2		3	5	785			
23	16	1340	183	2		37	47	7						4	
24	35	1850	21	7		25	41	4			7				

	KILAUEA SUMMIT					KILAUEA FLANK			MAUNA LOA			TREMOR (MINUTES)		
DATE 1986	SHORT PER. CALD.	LONG PERIOD CALDERA A	B	C	30 KM	KAO. & SW RIFT	UP. EAST RIFT	LOW. EAST RIFT	SHORT PER.	LONG PER.	NE RIFT	KILAUEA SHAL.	INT.	DEEP	MAUNA LOA
FEB25	40	833	27	8		26	43	3			6				
26	67	343	10	38		40	60	10	4	2	5				
27	50	204	31	120		37	75	3	2	3	9				
28	52	64	7	5		42	54	2	2		9				
MAR 1	80	24	5	2	2	19	43	2	2		10				
2	70	59		8	1	43	66	2	1	1	1			26	
3	120	147	18	12		38	43	6			5				
4	85	122	13	22		40	34	9	4		1				
5	151	93		30		44	49	5	2		3			12	
6	88	40	2	12		32	42	4	3	1	1				
7	183	46	3	16		27	44	6	1		6			17	
8	269	72	1	18	1	47	56	4	3		6				
9	363	41		38		47	59	2	7		2				
10	378	12		40		36	50	6	1	1	1				
11	263	17		37	2	23	69	2	1		15			7	
12	370	6	1	2		45	99	4	2	1	4			14	5
13	484	6		9		35	45	5	5	1	2				
14	266	1		8		25	74		3		6				
15	315	16		11		25	58	2	2		1				
16*	79	7		35		7	10	2			2				
17*															
18*				32		31	72	1		2	1				
19*				1		60	52	2		2	1				
20*				2	1	44	81	2	2	4	4				
21*				1		37	81	1	2		5	85			5
22*				5		32	86	5		1	4	474			
23	25	1745		1		40	107	5		2	1	4			
24	44	1005	5	5		26	96	8	1		4				
25	49	189		1		37	85	12	2	1	1				
26	62	88				34	58	3		1	3				
27	73	38	7	5		59	55	5		2	8			23	
28	86	8		12		22	45	8	1						
29	114	8		32	1	35	53		1		7				
30	114	7	1	11		47	82	19	2	1	1				
31	119	7	1	5		50	53	6	5	1	2				
APR 1	143	8		23		37	45	8	1	1	4				
2	161	3		18		25	70	11	4	1	10			3	
3*	81	6		1		12	20	1							
4*				4		39	60	4	2	1	9			25	
5*				1		33	68	16	6	2	4			87	
6*				12		44	70	10	2	1	2			18	
7	187			2		32	25	7	2	1	5			12	
8	302			3		33	26	10	1	2	2				
9	475			3		21	32	5			1			30	
10	574	33		12	1	23	59	1	3		1			27	
11	674	52		9		17	73	1			1				
12	513	37		45		31	81	2	2		3				
13	430	7	1	5		31	59	6	1	12	2	650		49	
14	42	453	357	9		28	67	6	4		1				
15	64	587	580	7		37	70	14	3		7				
16	89	64	12	9		45	64	7	5	4	5			56	
17	82	148	12	7		33	49	8		1	1			63	
18	81	34	6	6		44	77	3	7	3	2			2	
19	97	12		8		34	52	1	4		5				
20	92	9	1	9		34	65	7	3	1	1				

	KILAUEA SUMMIT					KILAUEA FLANK			MAUNA LOA			TREMOR (MINUTES)		
	SHORT	LONG	PERIOD		30	KAO.	UP.	LOW.	SHORT	LONG	NE	KILAUEA		MAUNA
DATE	PER.	CALDERA			KM	& SW	EAST	EAST	PER.	PER.	RIFT			LOA
1986	CALD.	A	B	C		RIFT	RIFT	RIFT				SHAL.	INT.	DEEP
APR21	107	3		22		35	77	11	3		1			6
22	113	6		3		73	59	1	17	1	1			
23	104	1		6		91	55	8	4		3			
24	119	1		20		58	44	3	2	1	2			
25	165			45	1	30	37		5		21			
26	140	3		5		25	38	2	2		36			31
27	233	21		5		101	62	7	8		3			60
28	178			14		76	37	12	10	3	6			33
29	227			8		35	73	8	3	1	4			
30	241			15		45	66	6	3	3	3			
MAY 1	352		1	4	1	42	65	6		1	9			
2	289			3		28	61	6	3	6	3			5
3	415			16		43	85	8	2	4	5			
4	397			13		49	68	12	4	3	4			
5	481			11		34	74	7	3	5	3			3
6	431			20		49	74	6	3	8	5			19 4
7	225	14	14	8		33	78	5	5	3	7	558		16 10
8	55	734	35	1		36	55	4	2	5	5	186		
9	23	2471	6	7	1	27	34	5	3	1	1			
10	46	1594	4	2	1	28	57	2	3	1	1			29
11	61	66		2	1	39	94	3	5	2	4			31
12	71	17		4	1	44	43	1	4	2	1			4
13	52	4		8		44	49	19	6	7	3			4
14	72	6		10		51	68	7	5	8	3			3
15	84	4		37		48	57	6	4	4	2			
16	80	2		27		37	58	10	4	3	4			2
17	115	1		44		41	58	5	5		5			
18	104			36		29	71	2	2					29
19	125			60		45	54	5	3	4	4			8 3
20	139		1	27		49	47	7	3	1	2			
21	159	3		11	1	30	64	2	2		1			17
22	230		2	15		35	59	8		8	3			
23	231	2	156	62		40	66	3	4	1	3			
24	243			4		42	63	4	5	1	1			
25	261			10		39	57	1	3	1	1			
26	356			19		35	54	8	3	5	7			3
27	345			49		50	93	8	4	2	1			
28	365			27		49	49	7	4	1	4			5
29	394			21		45	64	3	1		1			11
30	430			9	1	31	80	3	4	3	1			
31	535			5		36	85	11	4	3	2			6 11
JUN 1	337			62		51	95	7	2	4	3	200		
2	85	230	7	7		48	74	10	8	6	3	429		3
3	36	460		11		28	105	4	4	2	1			
4	43	282	13	49	1	32	85	13	9	3	7			13 2
5	33	27		56		27	55	8	7	4	1			
6	71	25		56		40	70	2	2	1	1			
7	88	30		665		35	73	4	2	1	3		3	2
8	63	4		167		42	63	7	2	2	9			4
9	77	3		71		48	58	3	5	2	2			2
10	69	4		49		25	45	8	4	1	4			
11	120	1		42		33	50	8	7	1	4			
12	122			38		30	51	5	2		8			
13	120	6		16		34	50	8	1	2	8			
14	169			24		15	63	13	3		1			3

	KILAUEA SUMMIT					KILAUEA FLANK			MAUNA LOA			TREMOR (MINUTES)			
DATE 1986	SHORT PER. CALD.	LONG PERIOD CALDERA A	B	C	30 KM	KAO. & SW RIFT	UP. EAST RIFT	LOW. EAST RIFT	SHORT PER.	LONG PER.	NE RIFT	KILAUEA SHAL.	INT.	DEEP	MAUNA LOA
JUN15	211	1		43		33	33	3	2	1	2				
16*	138			35		13	16	2	1	2	4				
17*															
18*	82	2		2		15	7	4	3	1	2				
19	355	7		9		32	37	8	5	1	3				
20	458	3		29		35	59	6	4	1				2	
21	424	10		22		31	75	6	1		3				
22	495	2		4		21	102	9	4	1	1				
23	486	1		12	1	37	63	10	5	3	4				4
24	340	3		12		36	80	4	1	2	6				
25	394	1		6	1	48	73	5	4	2	3	148			
26*	104	2				29	74	1	1		4	575			
27*	69	208	46	4		39	65	5	3	3	6				
28*	61	12		4		39	50	2	3	12	17				
29*	13					53	67	6	4	2	8				
30*	70	6	1	13		37	58	9	8	6	3				
JUL 1	55	2	1	3		30	32	6		7	10			3	
2	69			12	1	36	51	6	3	1	14			34	
3	124	1		3		37	53		2	4	16				
4	142	1		10		35	42	3	4		15				
5	131	5		22		43	54	2	2	4	10		3		
6	169		1	3		26	48	4		4	18				
7	185	1	1	9		39	42	6	2	2	9			43	
8	185	1		71		28	53	1	3	2	10				
9	241			2		28	38	3	1	2	8		3		
10	274			2		29	57	5	2		5		2	56	
11	310	1		2		139	59	3	6	3	5				
12	345	3		13		58	75	7			7				
13	389	1		17		48	56	11	5	1	7			5	
14	413	6	1	19		28	54	6	2	4	8			13	
15	506			18		39	70	12	1	2	6				
16	588	6		20		50	79	10	2	3	9				14
17	678	6		18		21	81		4	4	1				
18	123	41		1		24	165		2	2	5	1195			
19	7	3279		2		21	299	8	1	1		90		5	
20	7	4114		1		29	141	6		2		1380			
21	9	3935		14		22	77	6	1	3	3	1140			
22	20	1590				21	57	2	3			1440			
23	11	570				23	113	4	6	2	5	60			
24						32	115	8	4	2	3				
25						32	101	5	7	1	2			20	
26	12	1795				31	98	15	4	2	6				
27	13	2850				34	77	1	2	1	3			7	3
28	15	1750		1		35	80	11	5	3	1				
29	12	1020				34	99	6	1		2				4
30	21	684		2		37	66	6	5	1	2			48	
31	11	452		1		35	51	6	9	6	5				
AUG 1	22	396		2		31	74		1	2	1				
2	26	312				22	92				4			17	
3	18	201		3		27	53	2	1		2				
4	29	122		41		34	85	11	2	6	4			2	
5	49	95		5		31	70	7	2	2	3			2	5
6	21	109		2	1	26	46	11	2	9	3				7
7	34	139		12		37	56	6	3	3	4				
8	30	109		10		31	63	1	3	1	4				

	KILAUEA SUMMIT					KILAUEA FLANK			MAUNA LOA			TREMOR (MINUTES)		
	SHORT	LONG	PERIOD		30	KAO.	UP.	LOW.	SHORT	LONG	NE	KILAUEA		MAUNA
DATE	PER.	CALDERA			KM	& SW	EAST	EAST	PER.	PER.	RIFT			LOA
1986	CALD.	A	B	C		RIFT	RIFT	RIFT				SHAL.	INT.	DEEP
AUG 9	23	65		7		36	66	1	7	2	2			
10	29	38		14		41	44	1	3	1	3			
11	46	42		13		50	66	2	2	1	3			
12	25	39		18		20	60	3	2		2			
13	35	34		9		39	53		3	7	10		4	
14	55	17		12		55	54	1	4		4			
15	59	12		1	1	43	60	3	2	1	1			
16	68	8		5		40	70	6	1	1	3			
17	47	12		20		33	55	4	6	4				3
18	48	8		27		40	77	2	1	2	3		39	
19	39	7		34		29	63	4	3	8	4			4
20	24			6		31	54	2	5	1	3			
21				18		30	52	8	1	1				
22	53	1		31		31	76	13		2	9			
23	37	3		24		52	55	5	2	1	5		29	
24	44			9		37	60	3		4	3			
25	45			1		31	58	9		1				
26	45	1		5		35	67	2			3			
27*	38					32	51	7		1	1			
28	54	1		2		23	58	10	3	1	3		7	
29	86	1		3		37	58	3	1	1	8			
30	102	4		5		32	84	2	1	1	7			
31	75			3		22	70	1	1		2			
SEP 1	49			17		37	58	7	3	1	5			
2	67			1		33	61	5	3	2	6			
3	59			2		47	72	4	4	2	1			
4	57			5		42	60	6	2		4			
5	74			10		35	59	6	5	2	5			
6	73			5	1	39	56	3	5	1	3			
7	64			8		35	60	4	3	1	4			
8	76			6		40	56	6	23		4		40	5
9	102			7	1	27	59	1	2		2			
10	110			5		17	71	3	1		6			
11	76			11		16	49	6	4	2	1			
12	88			18		21	57	3		1	6			
13	96			21	1	128	83	3	4	4	2			1
14	71			12		20	56	7						4
15	80	1		94		32	64	2	2		3		64	2
16	68	3		38		30	82	7	7		4		6	
17	74			29		27	76	9	2		5			
18	67			2		54	65	9	2	1	2			
19				2		36	69	11	5		4			6
20						44	57	8	6	1	1		62	
21				1		40	63	16						
22				1		39	69	8	2	1	3		5	
23	53			5		38	62	9	3		5			
24	68			3		20	62	4	4	3	5			
25	76	1		3		29	76						3	
26				3		26	67	1	1	1	1		47	
27						42	70	3			2			
28						43	45	7	2	1	7		75	
29	109			5		25	45	8	5	2	4			
30	88	1			1	27	48	4	9	2	2		2	3
OCT 1	68			3		28	63	4	3		3			
2	53	2		4		29	53	2	3	1	3		23	

	KILAUEA SUMMIT					KILAUEA FLANK			MAUNA LOA			TREMOR (MINUTES)		
DATE 1986	SHORT PER. CALD.	LONG PERIOD CALDERA A	B	C	30 KM	KAO. & SW RIFT	UP. EAST RIFT	LOW. EAST RIFT	SHORT PER.	LONG PER.	NE RIFT	KILAUEA SHAL.	INT.	DEEP	MAUNA LOA
OCT 3	70			5		35	56	4	3		3				
4	83			97		31	49	1	2		6				
5	87					39	65	5	5		6				
6	70			*		38	47	5	2	2	2			20	
7	59					27	37	4	3	1	3				
8	133					36	63	9	2	1	1			13	
9	92	1		1		37	67	11	4		5				
10	87	2				33	51	2	1		2				
11	98	3				31	49	3	2						
12	121	1		1		42	55				3			36	
13	89					25	43	8	1	3	3			15	
14	76			2		33	50	9		1	4				7
15	75			1		33	56	6		1	2				
16	113			1	1	27	47	1	3	1	1				
17	123			1		31	62	6			5			3	
18	117			1		47	41	8	4	1	8				
19	119			3		26	37	2	1	2	1			6	
20	117			2		31	44	6	6	1	3				
21	72			2		41	47	5	5		4			27	
22	99					50	47	4	3	1	1			4	
23	91					43	56	9	5		6			6	
24	101			1		44	54		2	2	11			6	
25	129				2	53	50	2	3	2	6				
26	92			2		53	76	7	2	3	2			3	
27	132			2	1	24	65	7	4		1			28	
28	134			18		51	59	3	2	1	6			3	
29	87					27	59	8	4	2	4				
30	72			2		31	49	7	3		8				
31	123			8		36	58	3	3		3			12	
NOV 1	122			2	1	42	59	4	3						
2	83			9		50	69	4	2		1				
3	88			5		45	61	1	2	1	6				
4	94			8		44	47	2	1	1	5			3	
5	99			4		37	61	7	4	2	4				
6	86			5	1	43	50	4	4	1	2			48	
7	103			7		23	49		1		1				
8				4	3	34	41				6				
9						40	41	3	1	2	2				
10	75			12		38	67		2	4	6				
11	112		3	1	1	25	57	1	2		4				
12	104			2		24	51		2		5				
13	118			2		32	63	4	2					2	
14	169	1		13	1	29	66	5	3	2	13				2
15	173	1		10		29	87	8	3	1	16			4	
16	196			200		19	55	6	6	1	6			4	
17	185	4		137		31	63	5	4		16				
18	161			140		30	59	10	5	1	12			92	
19	133	1		200	1	24	48	5	7		8				
20	116			94		22	52	2	7	2	10				
21	126				1	27	62	3	2	4	4				4
22	116			1		27	45	1		1					
23	96					28	51	2			3				
24	76			1		36	46	4	2	1	5				
25	94			8	1	26	54	1	3		5				
26	38			1		23	32	2	1		3				

	KILAUEA SUMMIT					KILAUEA FLANK			MAUNA LOA			TREMOR (MINUTES)		
	SHORT	LONG	PERIOD		30	KAO.	UP.	LOW.	SHORT	LONG	NE	KILAUEA		MAUNA
DATE	PER.		CALDERA		KM	& SW	EAST	EAST	PER.	PER.	RIFT			LOA
1986	CALD.	A	B	C		RIFT	RIFT	RIFT				SHAL.	INT.	DEEP
NOV27	51			7		27	30	3	1	6	1			23
28	29			8		36	37	2	2		2			
29	57	1		2		35	31	5	1	3	9			
30	45			9		24	30		2	1	4			83
DEC 1	68			6		38	38	2		1	4			
2	64	4		4		32	32	4	1		4			2
3	63	10		3		35	30		4	1	3			
4	102	2		5		35	53		1	2	4			
5	70			4		27	36	1	1		1			
6*				1	2	27	52	4			4			
7*				1		65	71	2	2		6			
8	123	1		7	2	48	53	1						
9	123			157	2	25	74		2	2	4			
10	108			68		32	61		1	3	1		11	
11	78			2		31	53	4	3	1	6			
12	113					28	39	7	4		7			2
13	167					44	28	4	1		3			
14	165			1		40	66	3	3		9			
15	173	2		1		41	65	3	1		1			30 3
16	138					36	44	9	2	1	2			
17	95					39	31				7			5
18	205			11		46	33	5	3	3	5			
19	201			6		56	39	4	1		1			31
20	147			22		42	56	1	1					
21	102			8		37	41	3		1	1			32
22*	104			7		24	32	2	1	1	3			
23	147			3		42	49	2	3	1	3			
24	135			1		33	39	4	4	1	2			
25	105			8		42	82	3	3		3			14
26*						43	63	7	1		4			9
27*	112			8		44	51	5	2	1	7			
28	198			52		35	58	3	1		1			5
29	117	1		129	2	45	63	2	4		3			
30	111	3		17		38	69		1					
31	103	13		9	1	44	59	1	6					

*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 - Koae fault zone (0-5 km)
7 SSF - Shallow south flank (0-5 km)
8 SLE - Shallow lower east rift (0-5 km)

--Intermediate depth:

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

--Deep:

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

--Outer regions, all depths:

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

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

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

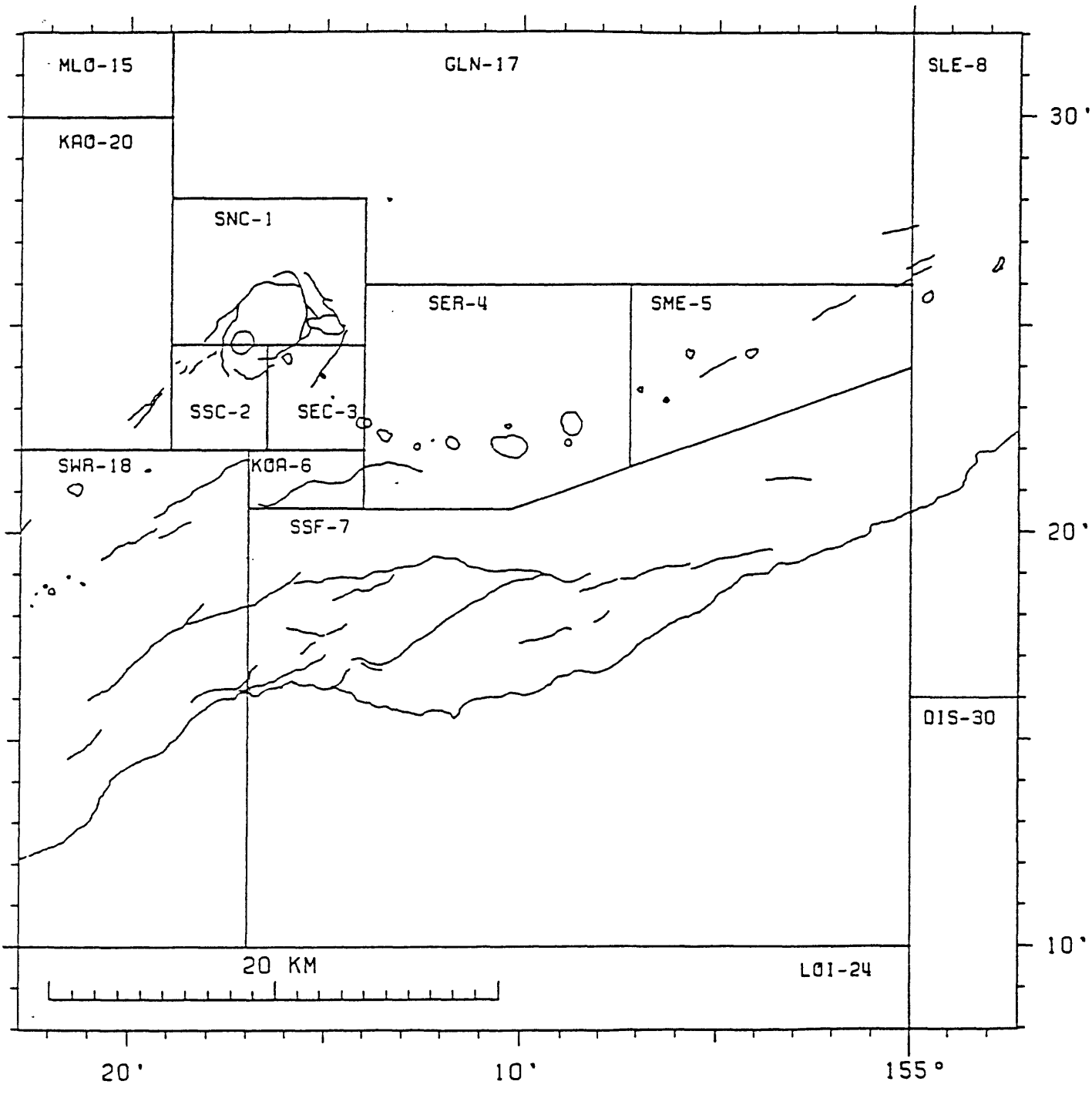

Figure 5. Earthquake classification, shallow (0-5 km deep), for Kilauea and the east flank of Mauna Loa.

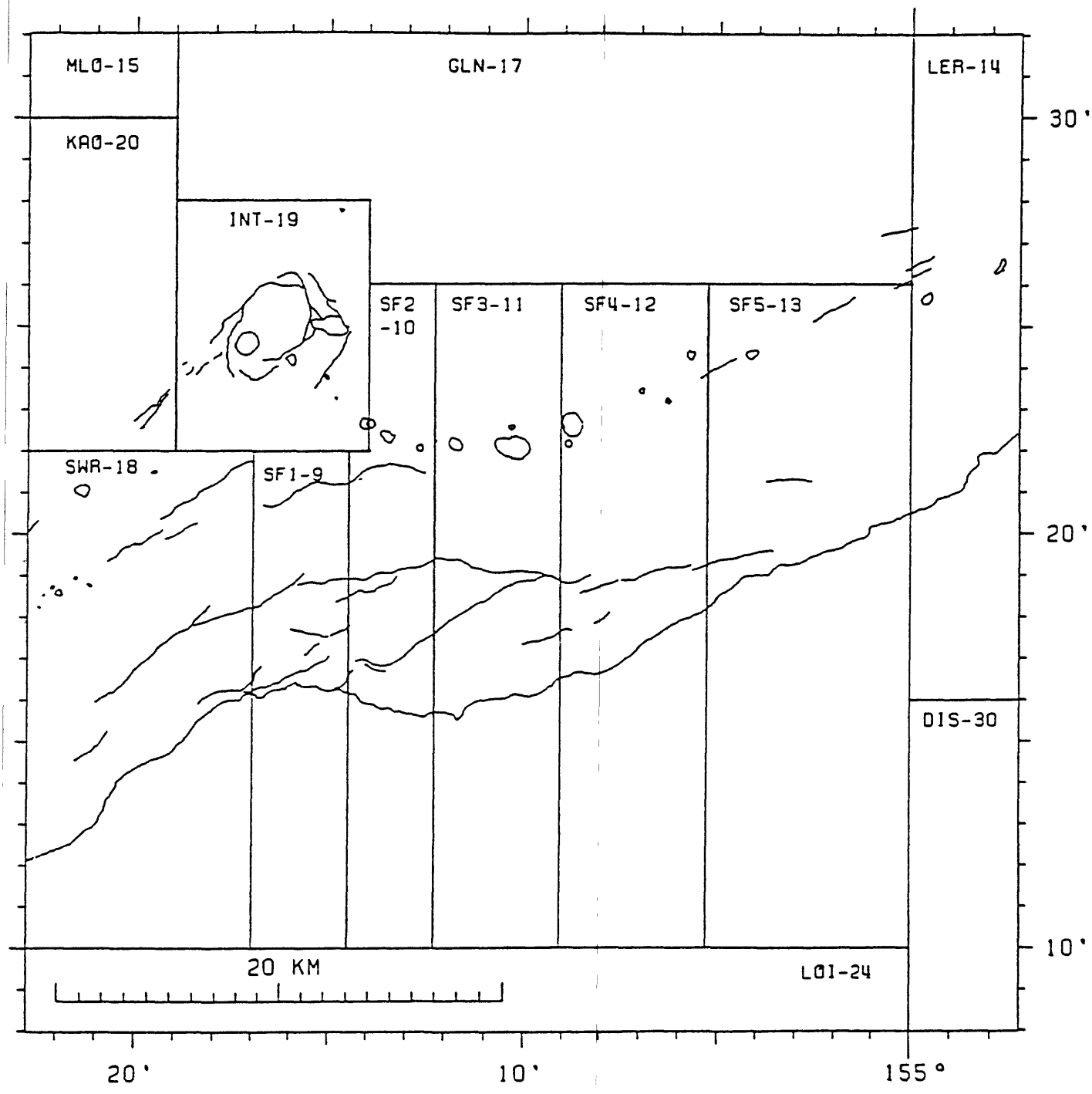

Figure 6. Earthquake classification, intermediate (5.1-13 km deep), for Kilauea and the east flank of Mauna Loa.

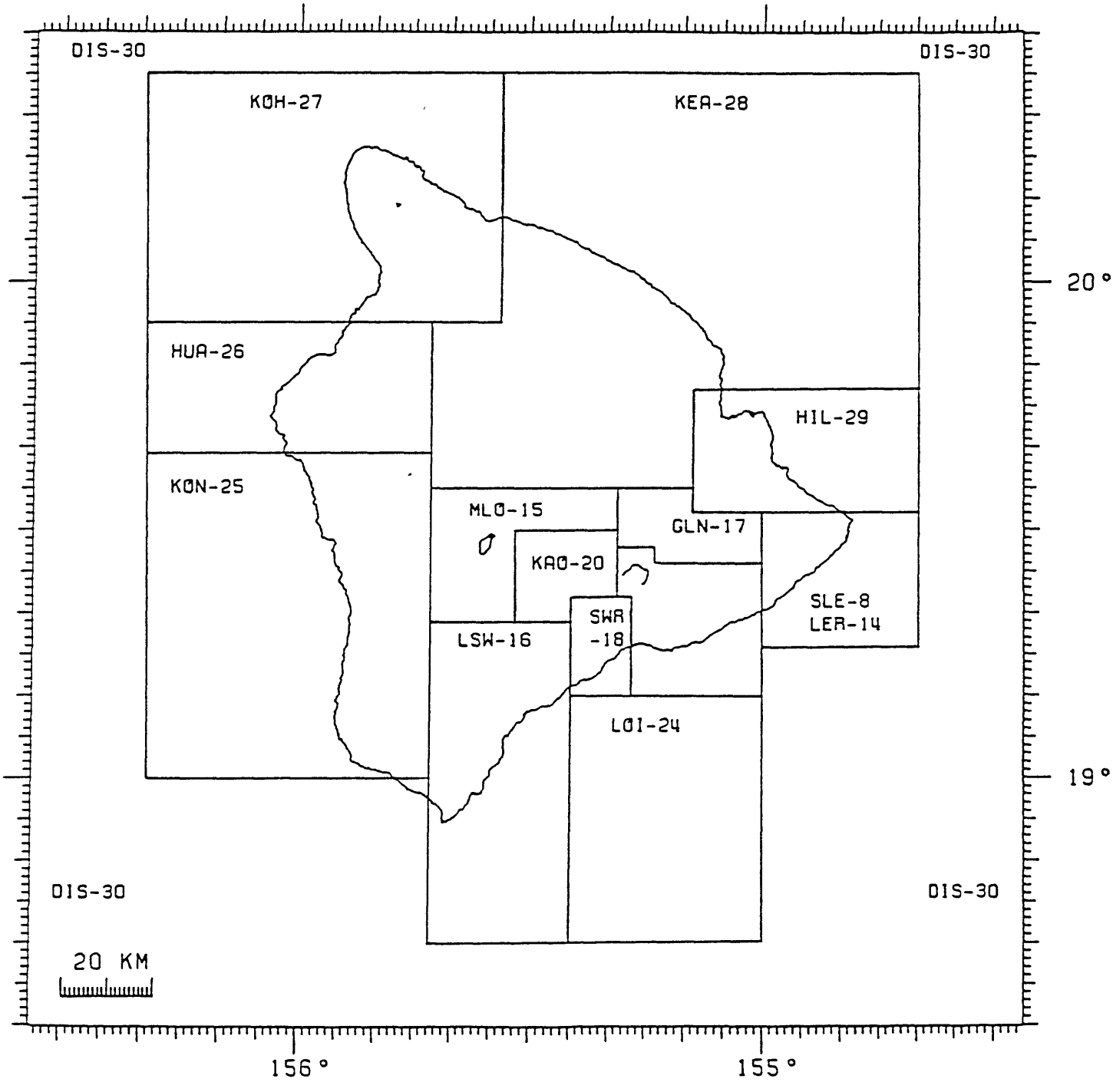

Figure 7. Earthquake classification, crustal (0-13 km deep), for the Island of Hawaii.

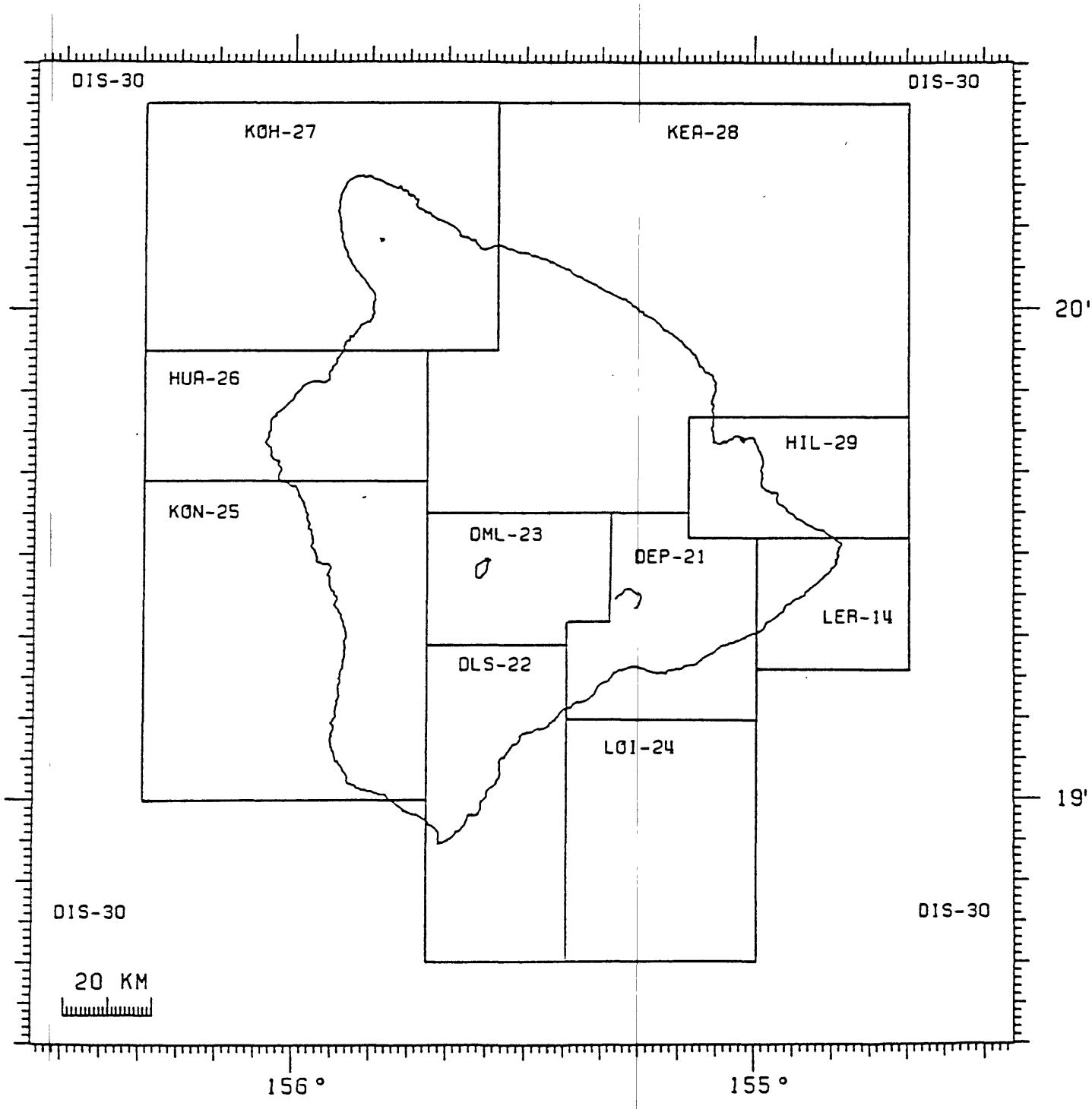

Figure 8. Earthquake classification, deep (greater than 13 km deep), for the Island of Hawaii.

Figure 9. 1986 Earthquake locations, Hawaiian Islands,
0-60 km depth, M>=3.5.

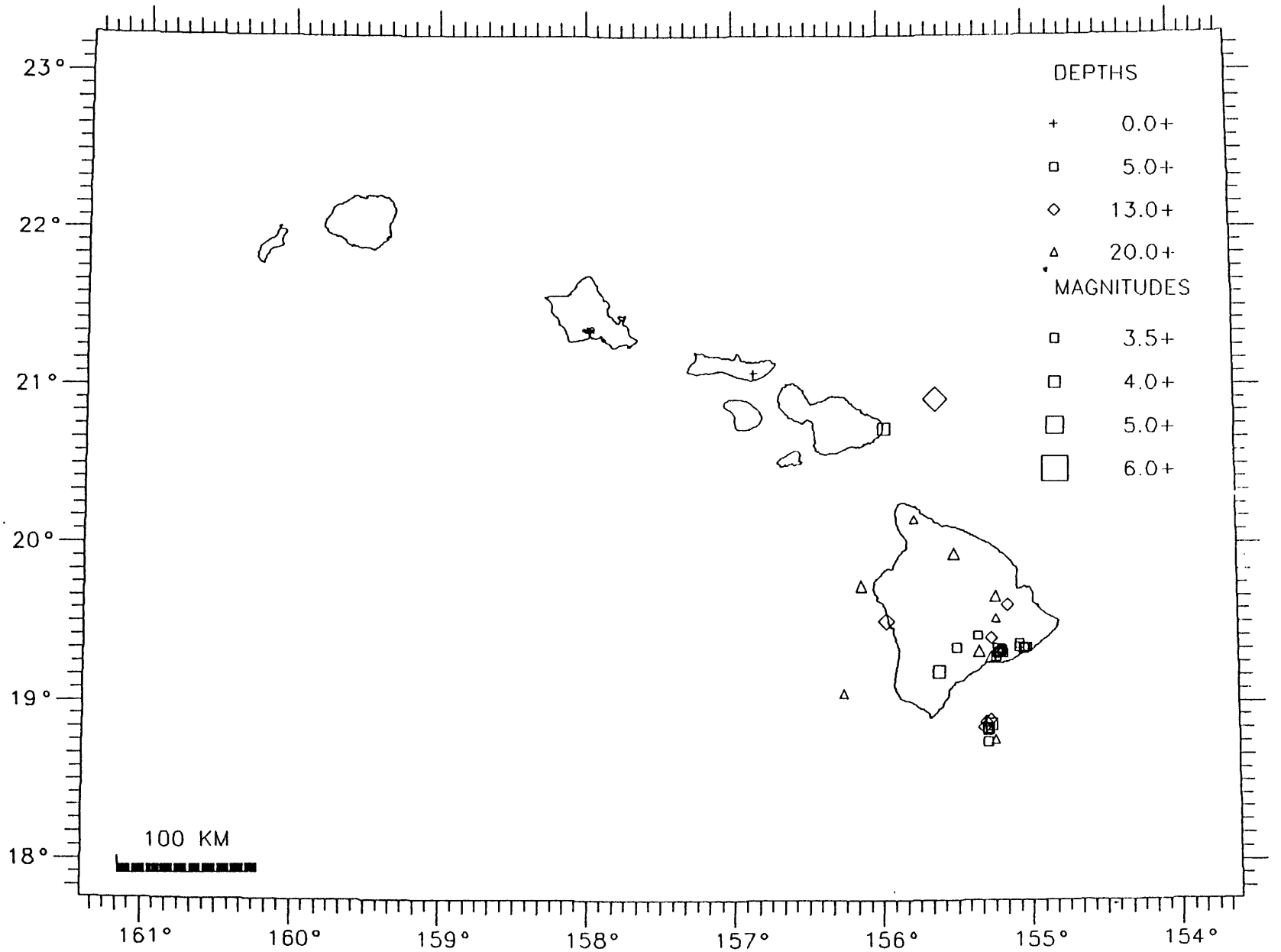

Figure 10. 1986 Earthquake locations, Hawaii Island,
0-60 km depth, M>=3.0.

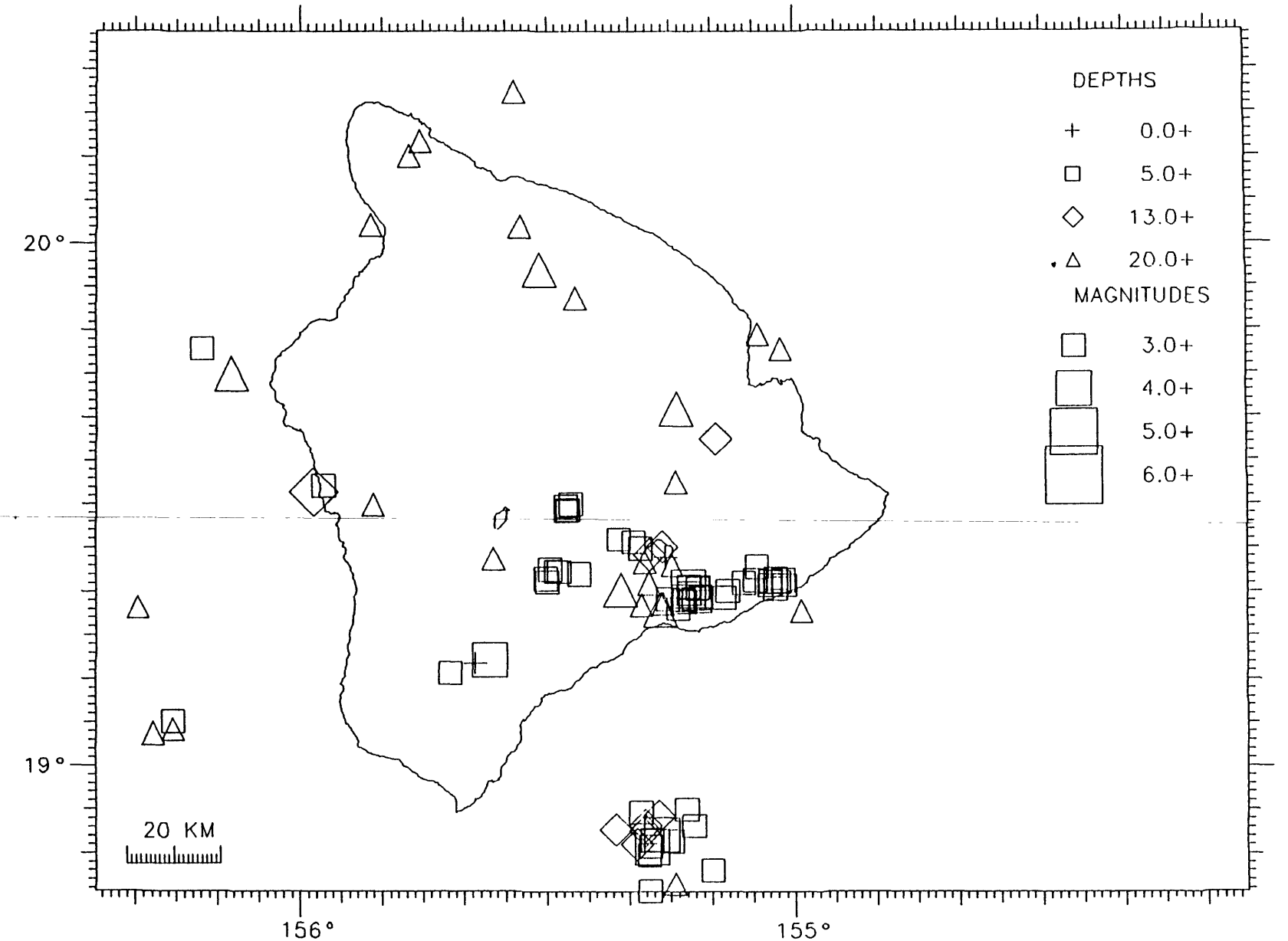

Figure 11. 1986 Earthquake locations, Hawaii Island, shallow (0–5.0 km depth), M>=2.0.

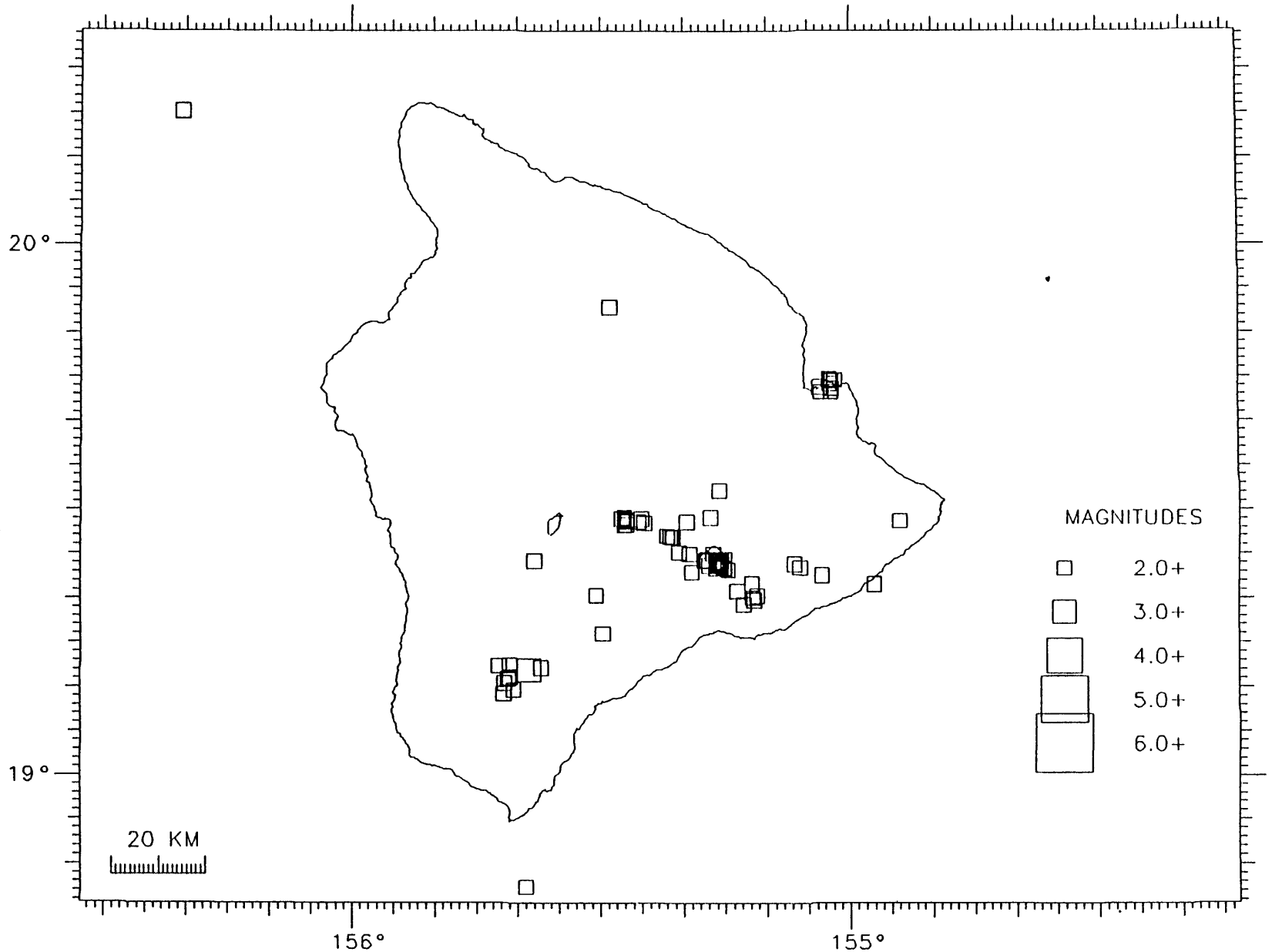

Figure 12. 1986 Earthquake locations, Hawaii Island, intermediate (5.1–13.0 km depth), M>=2.0.

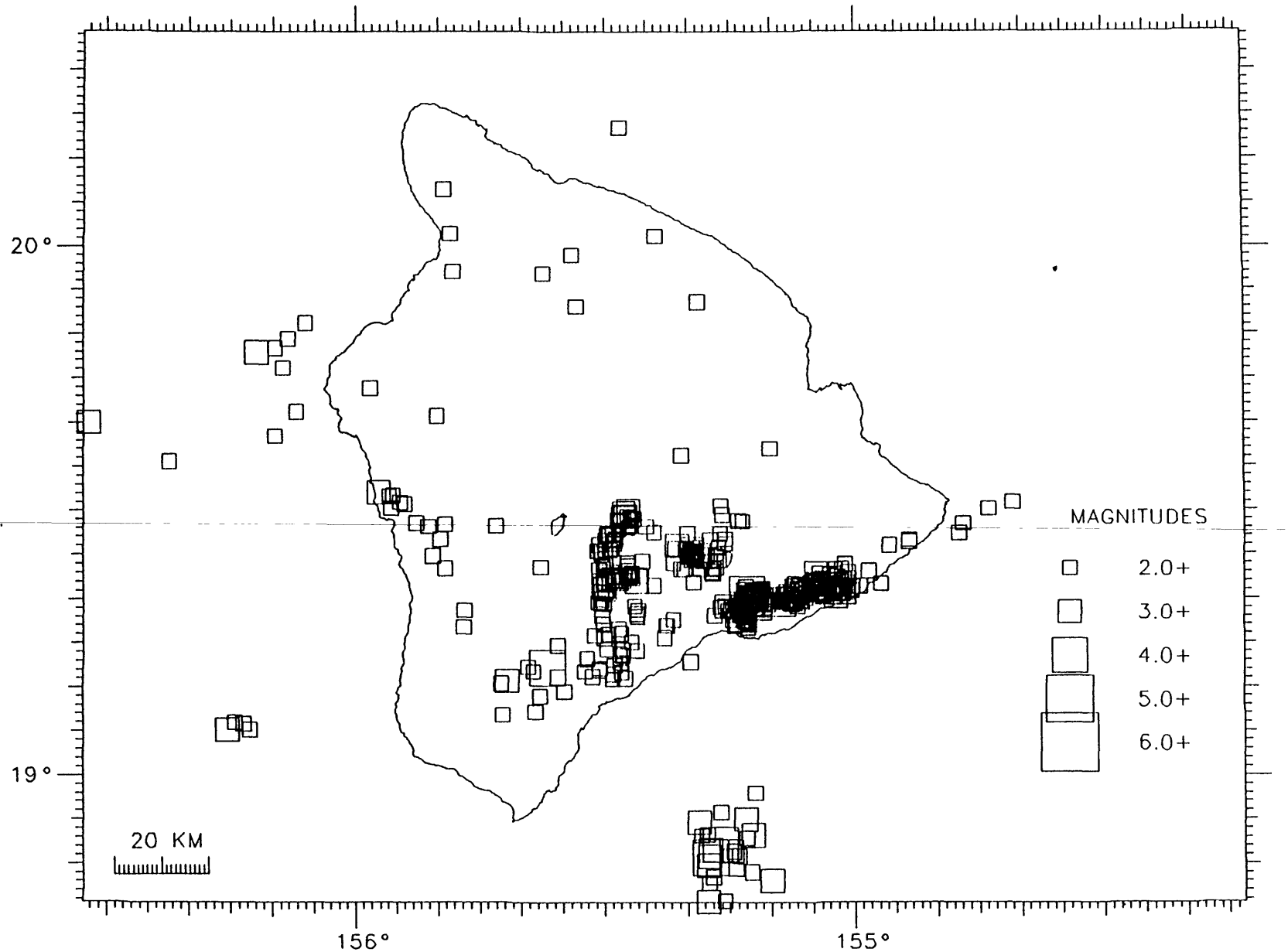

Figure 13. 1986 Earthquake locations, Hawaii Island, deep (13.1–60.0 km depth), M>=2.0.

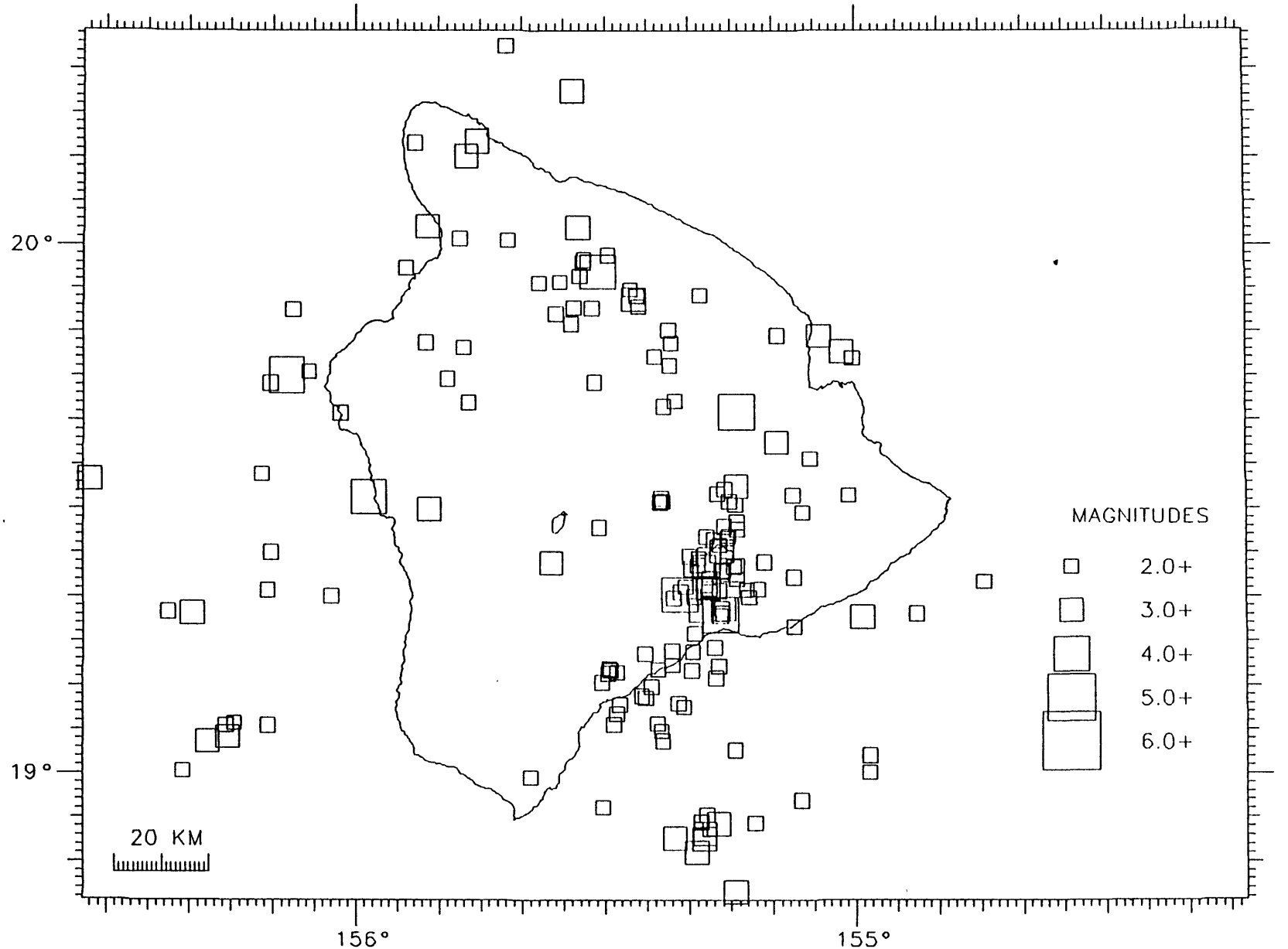

Figure 14. 1986 Earthquake locations, Kilauea summit, shallow (0–5.0 km depth), M>=1.0.

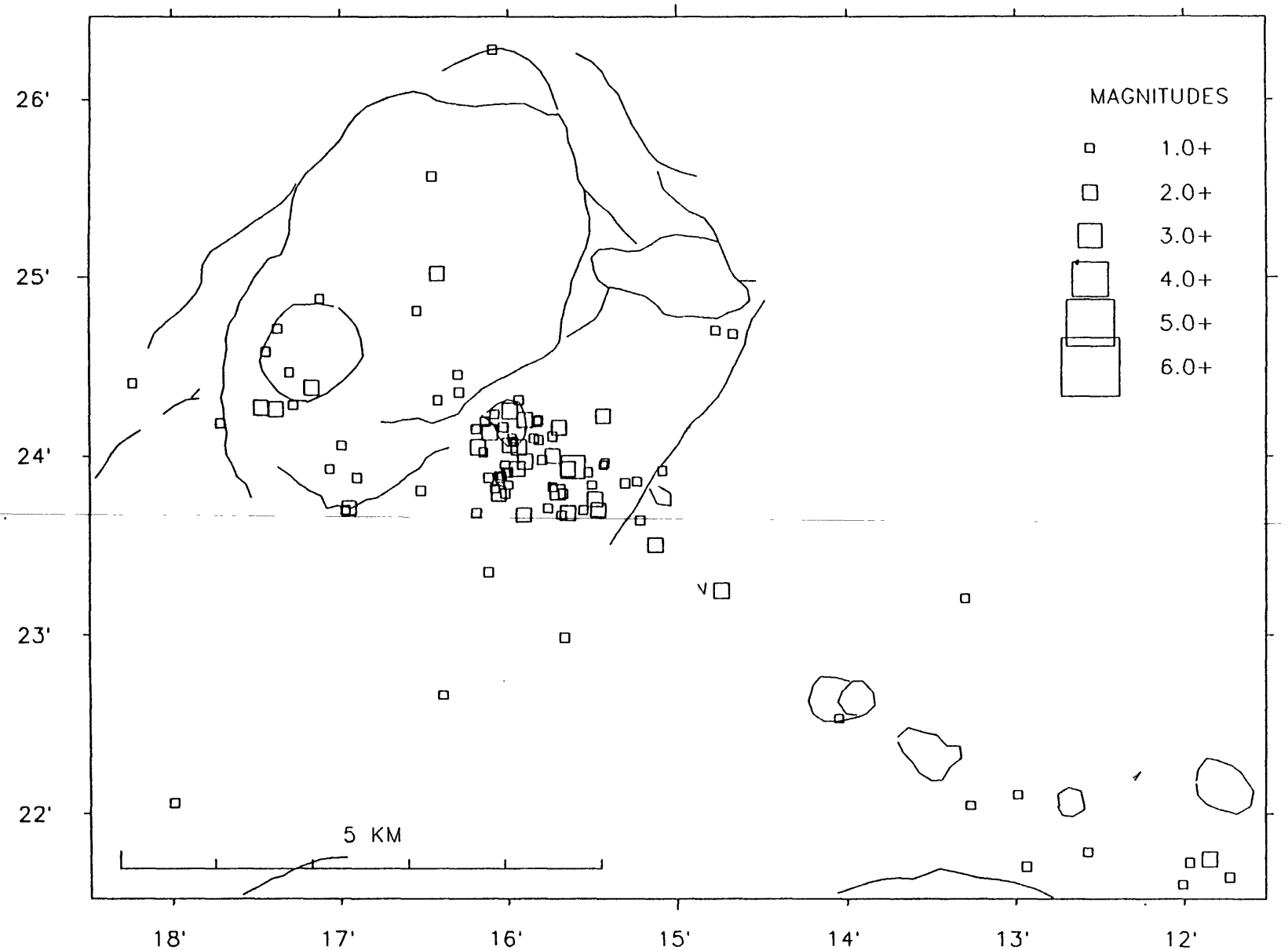

Figure 15. 1986 Earthquake locations, Kilauea summit, intermediate (5.1–13.0 km depth), M>=1.0.

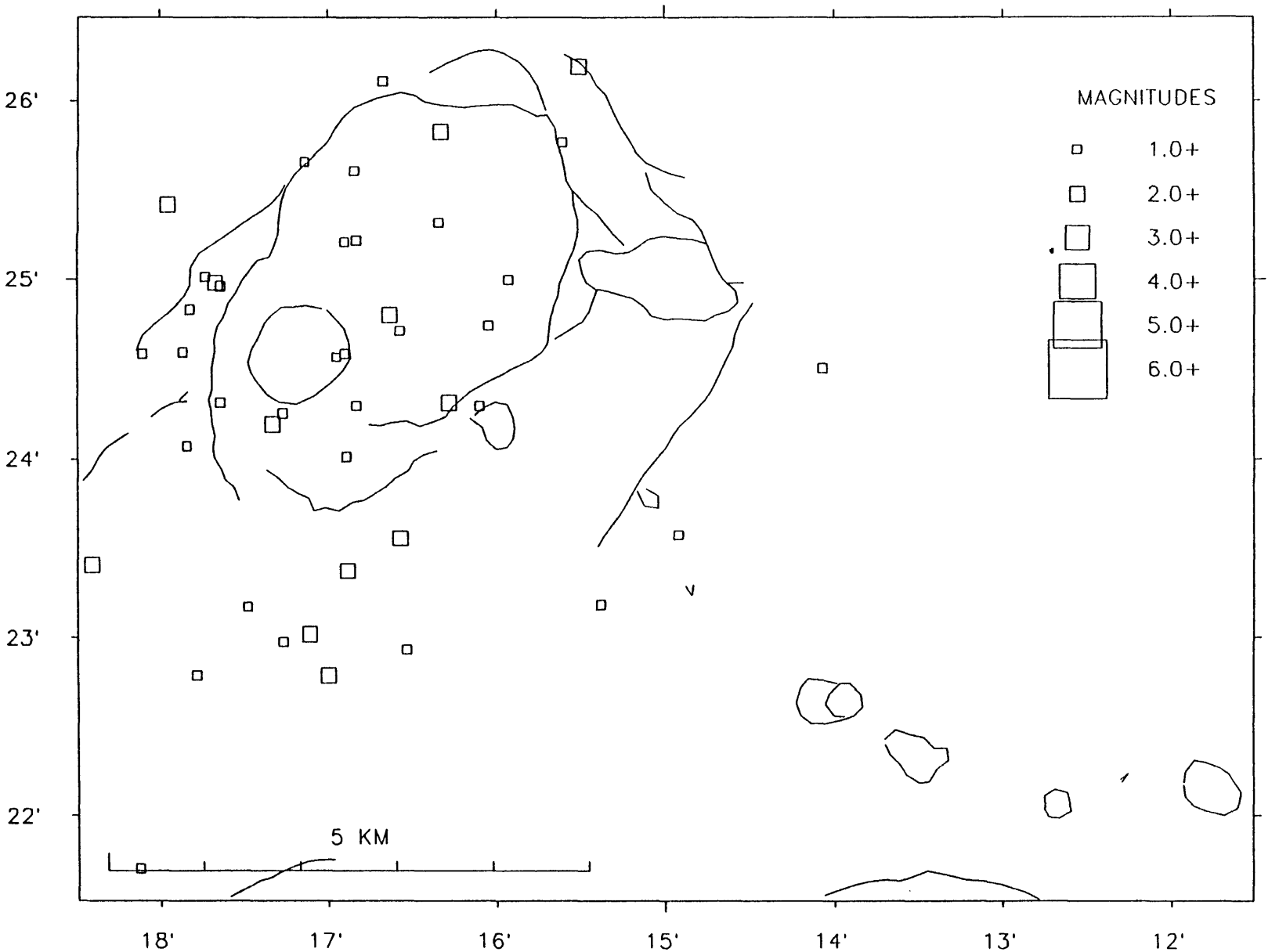

Figure 16. 1986 Earthquake locations, Kilauea summit, deep (13.1–60.0 km depth), M>=1.0.

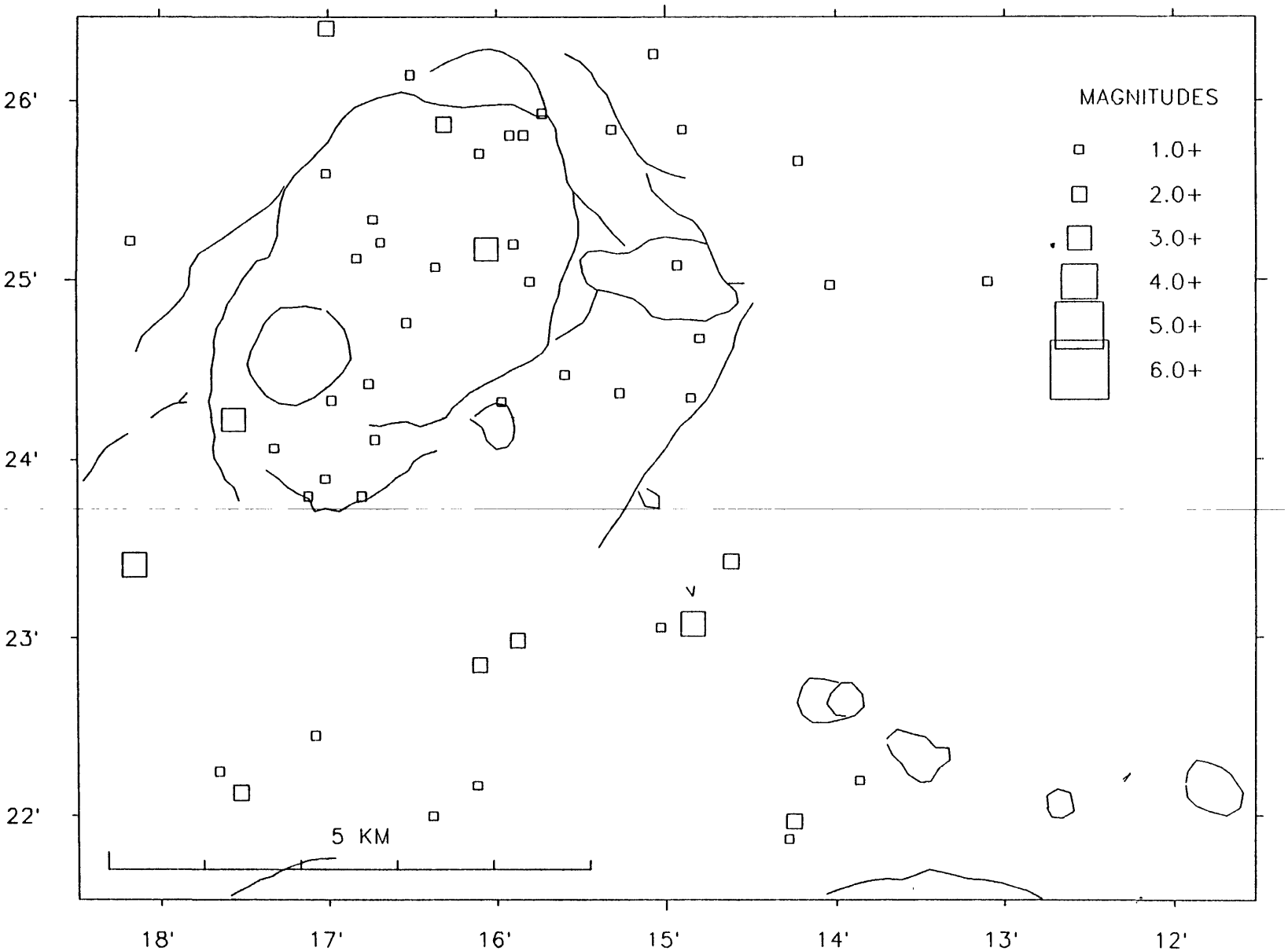

Figure 17. 1986 Earthquake locations, Kilauea south flank, shallow (0–5.0 km depth), M>=2.0.

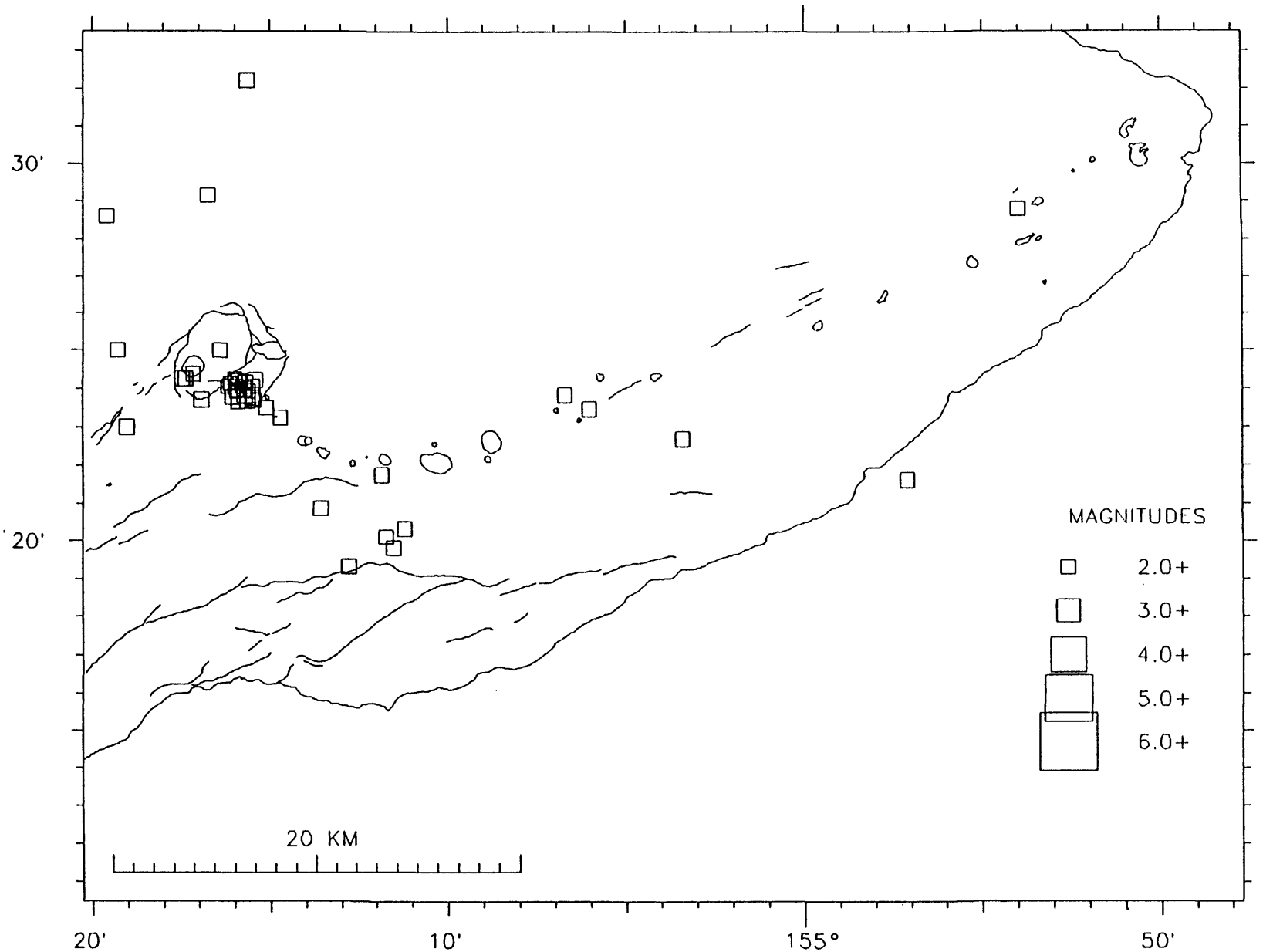

Figure 18. 1986 Earthquake locations, Kilauea south flank, intermediate (5.1–13.0 km depth), M>=2.0.

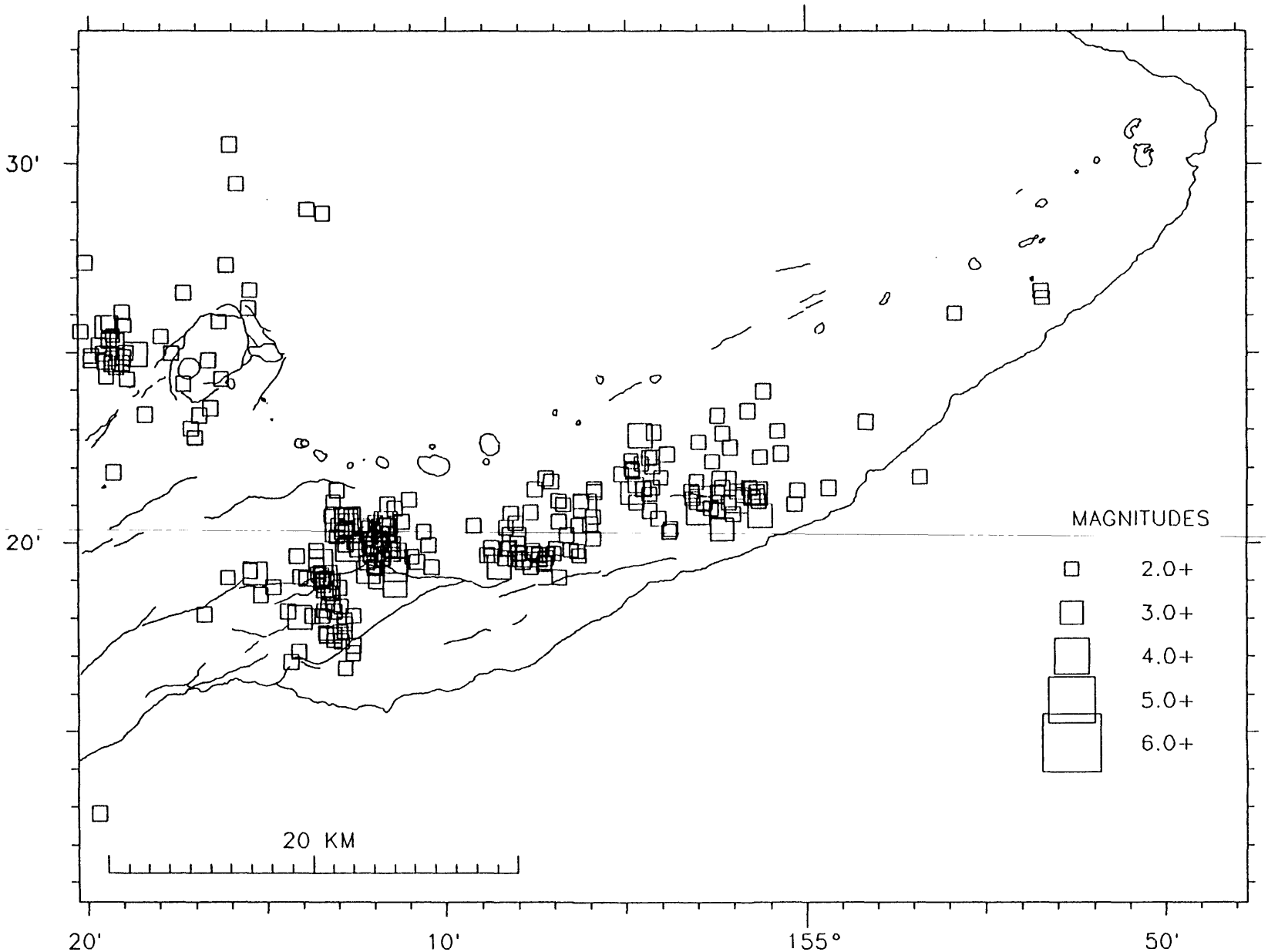

Figure 19. 1986 Earthquake locations, Kilauea south flank, deep (13.1–60.0 km depth), M>=2.0.

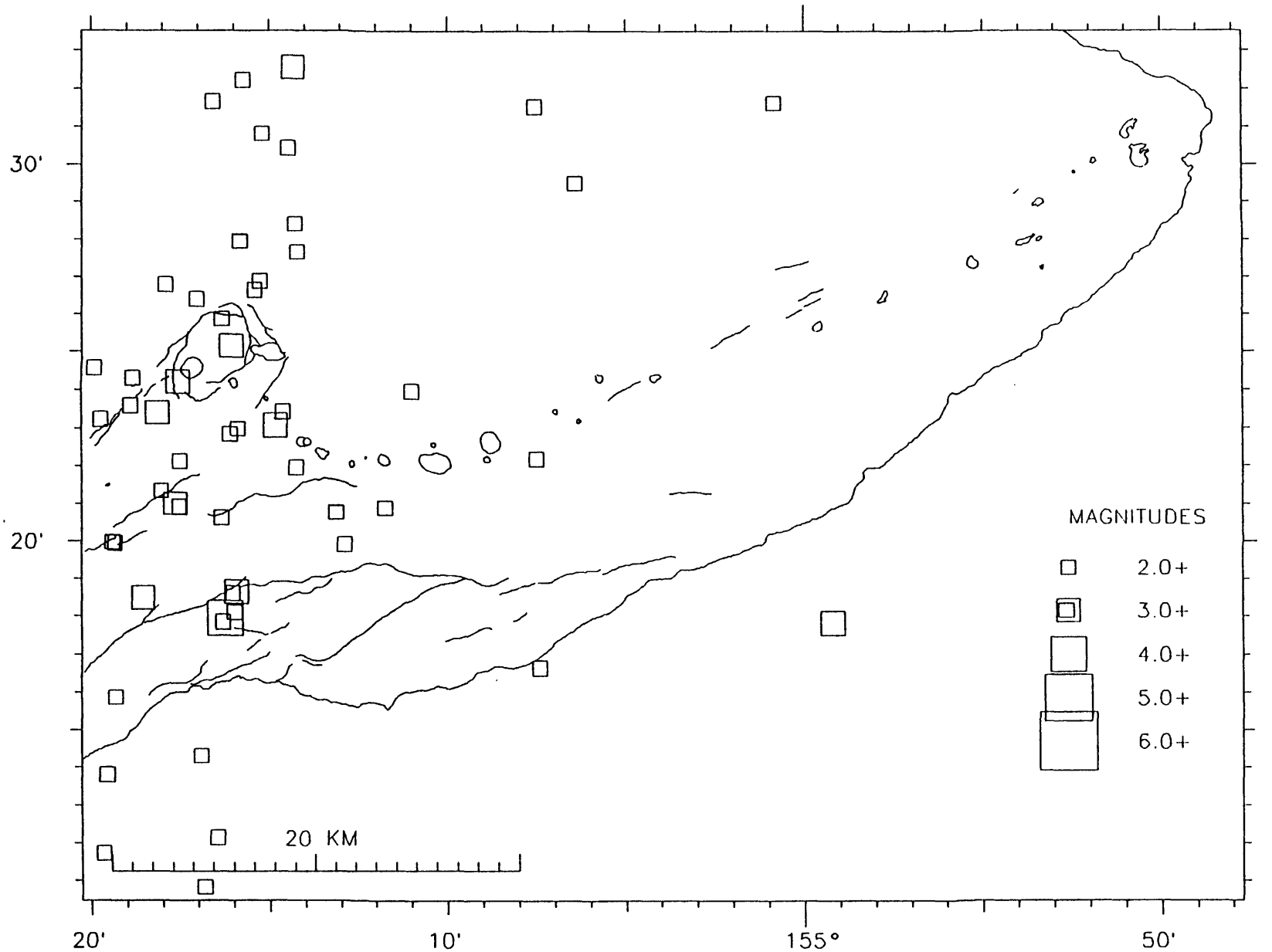

Figure 20. 1986 Earthquake locations, Mauna Loa summit, shallow (0-5.0 km depth), M>=2.0.

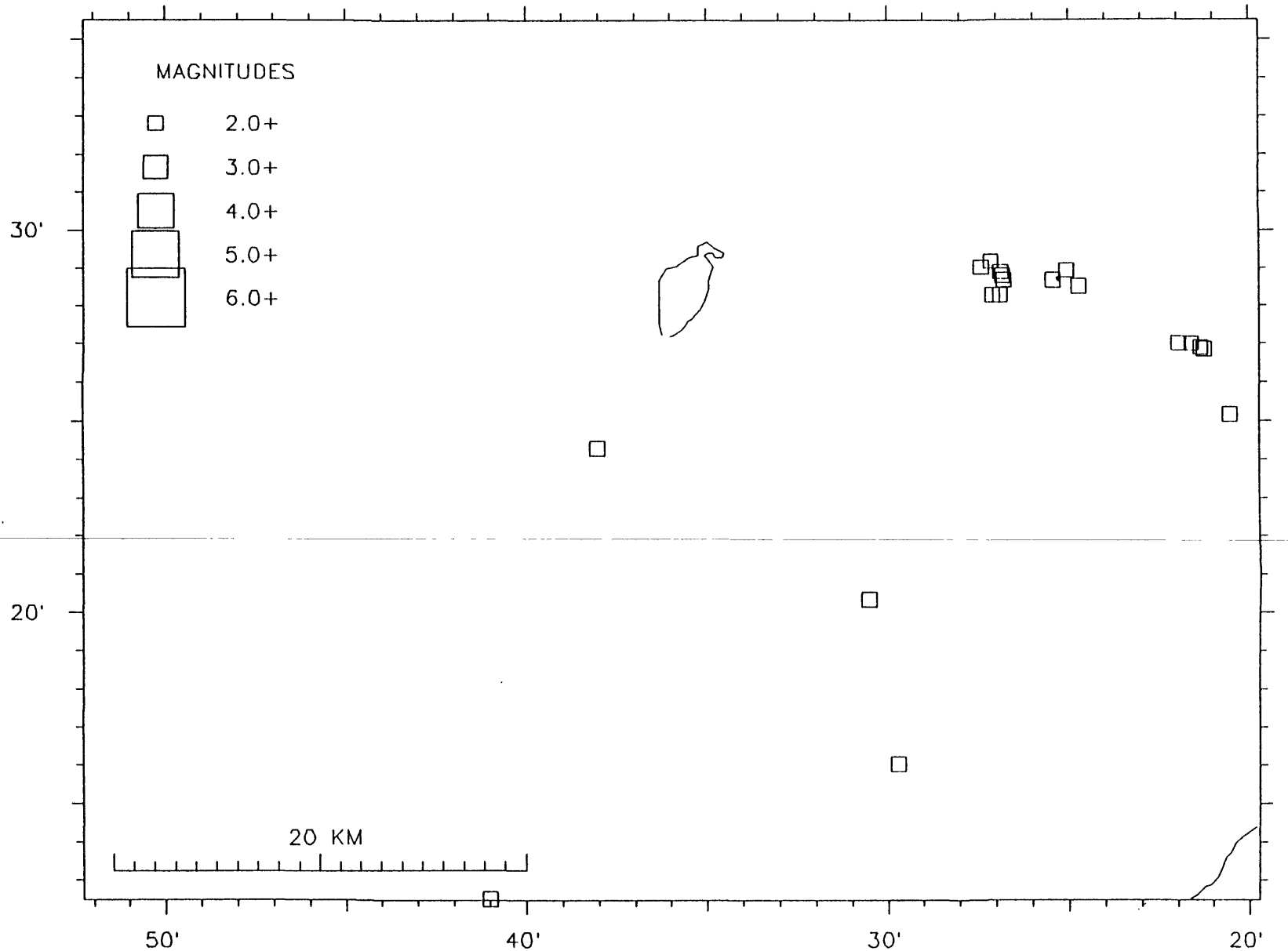

Figure 21. 1986 Earthquake locations, Mauna Loa summit, intermediate (5.1–13.0 km depth), M>=2.0.

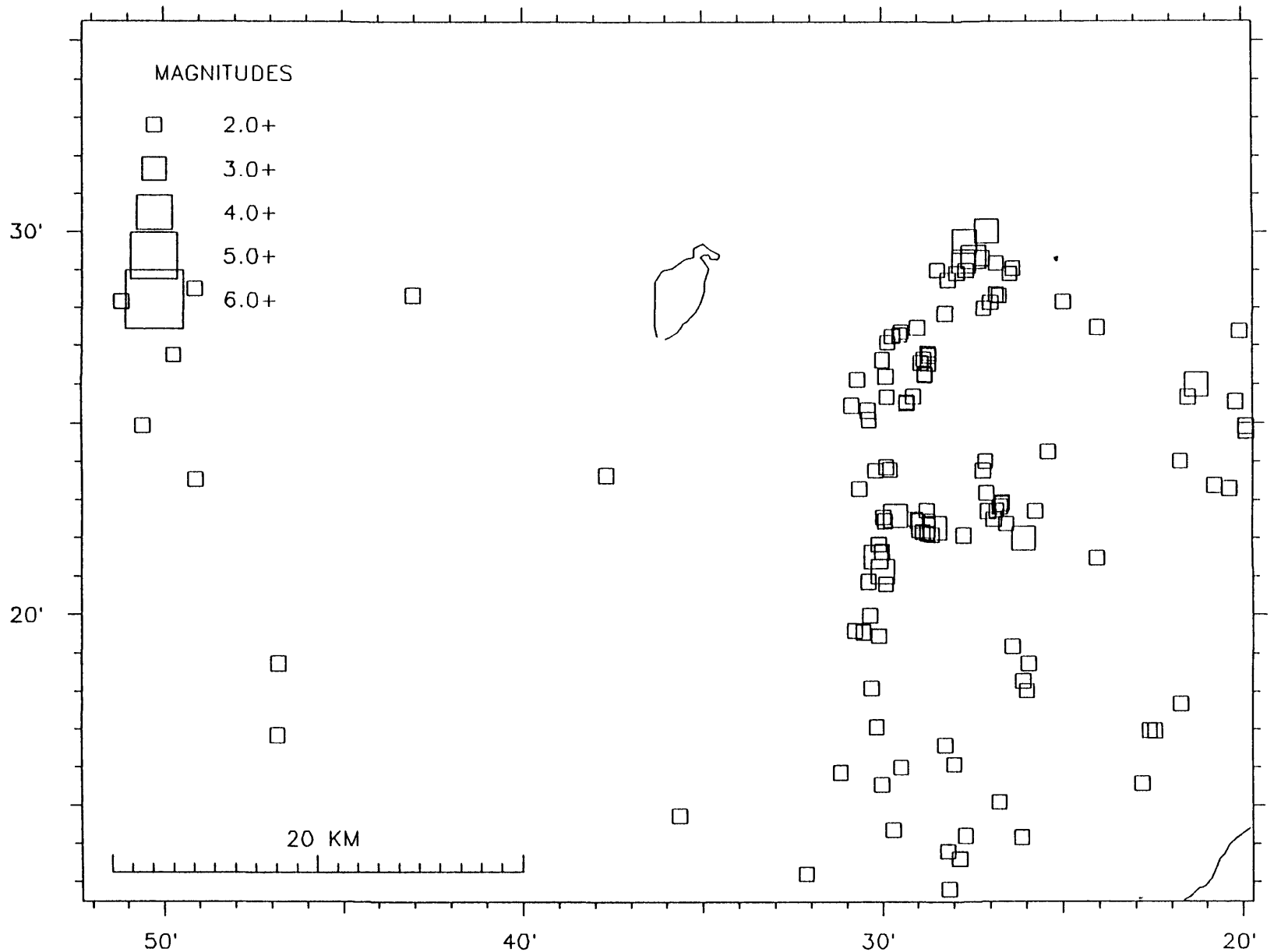

Figure 22. 1986 Earthquake locations, Mauna Loa summit, deep (13.1–60.0 km depth), M>=2.0.

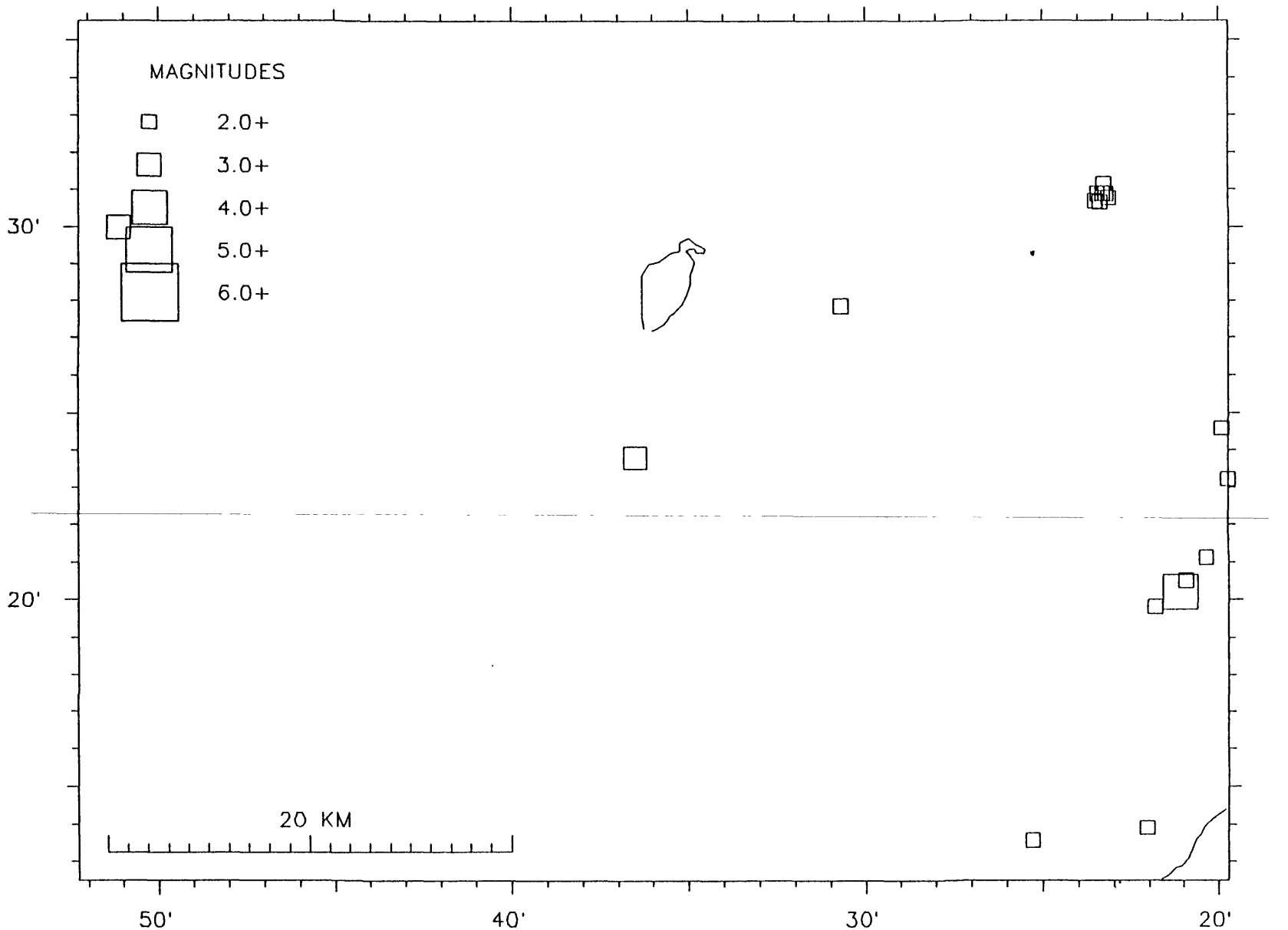

Table 5 is a chronological listing of all events successfully located during 1986. For each event, the following data are presented:

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

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

DEPTH - Depth of focus in kilometers.

AMP MAG - Amplitude magnitude, if determined.

DUR MAG - Duration magnitude, if determined.

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

NS - Number of S arrivals used in the solution.

GAP DEG - Largest azimuthal separation in degrees between stations.

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

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

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

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

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

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

F - felt

L - long-period character

T - associated with harmonic tremor

B - quarry or other blast

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

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

Table 5. 1986 HVO EARTHQUAKE SUMMARY LIST

YEAR	MON	DA	ORIGIN TIME HRMN	SEC	LAT N DEG	MIN	LON W DEG	MIN	DEPTH KM	AMP MAG	DUR MAG	NR	GAP NS	DEG	RMS SEC	MIN DIS	ERH KM	ERZ KM	NO FM	REMK	
1986	JAN	1	210	55.21	19	25.72	155	20.09	2.45	1.7		16	3	113	.11	4	0.4	0.7	12	KAO	
		1	245	11.25	19	25.78	155	19.18	6.13	1.0		10	1	151	.12	4	0.7	1.8	6	KAO	
		1	245	24.57	19	25.80	155	19.43	5.30	1.0		8	0	168	.09	4	0.8	1.6	7	KAO	
		1	255	31.22	19	25.78	155	20.02	2.40	0.9		6	1	126	.04	4	0.5	1.0	4	KAO	
		1	512	5.45	19	25.82	155	19.61	7.38	1.4		18	3	131	.11	4	0.7	1.0	10	KAO	
		1	1641	59.93	19	24.29	155	38.03	0.03	2.1		15	1	97	.15	6	0.4	0.7	9	MLO	*
		1	1846	22.10	19	23.91	155	15.53	2.66	1.2		13	5	107	.04	2	0.5	0.6	4	SEC	
		1	2020	3.88	19	24.06	155	15.99	2.82	2.0		18	6	116	.09	1	0.4	0.3	9	SEC	
		1	2110	4.50	19	25.81	155	19.75	6.47	1.7		18	4	127	.11	4	0.4	1.0	13	KAO	
		1	2140	42.43	19	24.35	155	16.29	3.17	1.2		9	3	219	.12	1	1.1	0.5	6	SEC	
		2	356	22.00	19	48.13	155	31.98	9.58	0.9		12	3	127	.20	8	0.7	1.5	13	KEA	
		2	4	9 40.07	19	28.69	155	26.78	0.87	2.2		26	8	58	.14	6	0.3	0.3	21	KAO	
		2	442	45.43	19	25.72	155	19.00	9.04	2.1		28	8	149	.14	4	0.4	0.6	22	INT	
		2	648	20.56	19	24.45	155	16.30	0.02	1.4		7	2	134	.12	1	0.3	0.7	1	SEC	*
		2	738	32.00	19	28.60	155	19.60	4.72	2.0		8	2	199	.27	7	4.5	12.9	4	KAO	
		2	1152	26.16	19	23.94	155	19.13	3.40	1.8		7	2	157	.10	1	1.7	2.2	2	KAO	
		2	1423	43.74	19	23.60	155	19.23	2.73	1.9		7	2	184	.14	1	1.4	1.3	5	KAO	
		2	1943	43.93	19	25.13	155	19.57	4.20	1.2		16	4	104	.08	3	0.4	0.8	9	KAO	
		2	2038	55.28	19	25.87	155	19.51	4.61	1.4		20	3	135	.08	3	0.4	0.8	11	KAO	
		2	2043	31.22	19	28.79	154	52.52	1.51	0.7		7	0	106	.07	3	0.6	1.4	7	SLE	
		3	020	56.05	19	28.98	155	27.68	5.34	2.3		59	17	41	.15	6	0.3	1.0	44	KAO	
		3	134	20.07	19	29.35	155	27.46	7.75	3.3		64	18	41	.13	5	0.2	0.5	48	KAO	
		3	323	8.51	19	29.03	155	27.40	4.39	2.0		30	4	64	.13	6	0.3	2.5	22	KAO	
		3	424	59.41	19	13.58	155	25.28	37.42	2.3		40	1	134	.10	3	0.7	1.5	33	DLS	
		3	1447	45.11	19	24.96	155	19.57	7.32	1.4		23	6	97	.12	2	0.5	0.7	19	KAO	
		3	15	5 34.01	19	20.54	155	8.07	7.17	2.1		46	6	80	.13	4	0.4	0.6	42	SF4	
		3	1529	16.77	19	24.88	155	17.12	2.16	1.4		22	8	119	.17	0	0.4	0.2	15	SNC	
		3	2057	24.37	19	23.81	155	16.52	3.59	1.2		6	1	99	.06	0	0.6	0.9	1	SSC	L
		3	2251	19.39	19	28.85	155	22.31	15.30	1.5		20	6	125	.11	2	0.6	0.4	15	DML	
		4	043	58.77	19	29.48	155	9.18	6.50	1.8		4	0	351	.30	16	27.3	23.4	1	GLN	L*
		4	343	57.48	19	24.25	155	17.27	9.91	1.5		4	1	139	.01	1	3.6	2.0	1	INT	L
		4	715	2.36	19	20.50	155	11.75	8.06	2.0		47	7	104	.13	4	0.4	0.5	44	SF3	
		4	822	30.02	19	19.20	155	13.66	5.34	1.9		44	8	69	.13	4	0.3	0.7	40	SF2	
		4	923	53.22	19	26.02	155	20.42	5.77	1.1		16	4	118	.14	3	0.5	1.0	13	KAO	
		4	1348	0.48	19	24.86	155	16.79	1.59	0.9		11	5	240	.10	0	0.6	0.2	7	SNC	
		4	1628	37.90	19	32.91	155	13.95	6.45	1.5		7	2	332	.27	15	5.3	21.5	1	GLN	L*
		4	1854	29.38	19	19.82	155	11.44	6.52	1.4		40	5	89	.13	5	0.4	0.6	37	SF3	
		4	2017	39.42	19	25.18	155	16.68	0.97	0.5		8	2	219	.06	1	0.7	0.4	5	SNC	
		4	2353	43.48	19	25.00	155	18.95	7.19	1.1		17	3	125	.09	3	0.5	0.6	14	INT	
		5	030	33.64	19	25.55	155	19.32	3.11	0.8		13	2	138	.11	3	0.6	0.9	11	KAO	
		5	450	40.18	19	23.06	155	15.03	27.74	1.7		24	4	84	.08	2	1.1	0.8	20	DEP	
		5	835	11.24	19	23.93	155	17.06	2.08	1.4		11	3	97	.11	1	0.3	0.4	4	SSC	L
		5	844	3.97	19	37.64	155	12.79	12.39	1.8		53	14	75	.13	17	0.3	0.5	41	KEA	
		5	1040	58.94	19	28.41	155	24.34	11.57	1.8		37	8	66	.10	3	0.3	0.5	29	KAO	
		5	11	1 51.73	19	25.13	155	19.87	4.72	1.0		15	6	111	.12	3	0.4	0.9	9	KAO	

YEAR	MON	DA	ORIGIN TIME HRMN	SEC	LAT N DEG	MIN	LON W DEG	MIN	DEPTH KM	AMP MAG	DUR MAG	NR	GAP NS	DEG	RMS SEC	MIN DIS	ERH KM	ERZ KM	NO FM	REMK	
1986	JAN	5	1146	32.93	19	25.96	155	29.87	11.11	1.6		25	5	69	.13	6	0.5	0.8	22	KAO	
		5	14	7 19.45	19	20.40	155	9.84	5.85	1.5		34	6	77	.11	3	0.4	0.6	33	SF3	
		5	1423	2.87	19	24.20	155	17.82	0.03	0.9		6	0	121	.19	2	0.4	1.4	5	SSC	*
		5	1450	25.15	19	24.02	155	21.74	10.00	2.2		52	14	48	.12	4	0.3	0.4	42	KAO	
		5	1558	24.87	19	24.82	155	19.14	6.46	1.1		19	3	114	.11	2	0.4	0.7	16	KAO	
		5	1824	29.75	19	57.93	155	32.66	43.48	2.3		48	11	164	.11	17	0.5	0.6	38	KEA	
		5	1911	55.50	19	20.32	155	12.93	4.95	1.4		32	6	67	.17	4	0.4	1.3	28	SSF	
		5	2030	31.14	19	24.15	155	21.86	10.79	1.7		32	9	55	.12	4	0.4	0.6	23	KAO	
		5	2310	8.72	19	25.49	155	30.02	11.93	1.7		23	3	78	.07	5	0.5	0.8	15	KAO	
		5	2325	10.64	19	22.06	155	17.99	3.44	1.1		20	4	75	.10	3	0.3	0.5	17	SSC	
		6	041	39.97	19	19.74	155	12.27	6.72	1.2		31	2	83	.12	5	0.4	0.9	22	SF3	
		6	153	51.42	19	22.54	155	29.99	9.95	2.0		37	3	45	.07	4	0.3	0.6	32	KAO	
		6	834	34.59	19	26.75	155	30.04	8.58	1.9		31	3	70	.09	9	0.4	0.9	21	KAO	
		6	844	21.15	19	20.76	155	7.67	7.66	0.8		21	0	85	.06	5	0.4	1.0	21	SF4	
		6	944	30.75	19	17.25	155	16.10	6.78	1.8		35	1	141	.12	5	0.5	0.9	29	SF1	
		6	14	2 39.75	19	22.37	154	58.30	5.29	0.8		26	2	198	.18	5	1.0	1.6	16	LER	
		6	1720	53.51	19	25.70	155	19.42	3.18	1.5		17	2	131	.10	3	0.4	0.7	11	KAO	
		6	1723	39.46	19	25.50	155	19.55	3.49	1.5		21	4	120	.11	3	0.4	0.6	14	KAO	
		6	1816	22.75	19	30.51	155	16.04	7.74	2.0		40	7	54	.11	10	0.3	1.0	23	GLN	
		6	20	5 45.24	19	26.49	155	30.10	9.97	1.6		23	2	68	.09	9	0.4	0.9	19	KAO	
		6	2027	28.32	19	30.19	154	43.92	10.30	2.2		19	1	298	.09	12	2.2	0.5	13	LER	
		6	2112	43.80	19	22.25	155	4.50	9.95	0.8		9	1	142	.03	4	0.6	1.7	8	SF5	
		6	22	0 40.45	19	19.00	155	10.02	5.29	1.8		46	8	109	.14	5	0.3	0.9	43	SF3	
		7	156	51.33	19	24.08	155	16.65	2.63	0.8		8	3	96	.09	0	0.5	0.4	5	SSC	
		7	232	41.07	19	26.73	155	28.77	9.67	1.6		32	6	58	.09	7	0.3	0.6	28	KAO	
		7	314	28.62	19	25.45	155	19.09	6.56	1.1		21	4	127	.09	3	0.4	0.6	18	KAO	
		7	346	2.34	19	26.49	155	28.00	8.60	1.6		20	6	111	.13	5	0.5	0.8	18	KAO	
		7	5	3 52.79	19	24.06	155	16.99	2.20	1.0		11	5	98	.12	1	0.3	0.3	6	SSC	
		7	2243	25.21	19	21.21	155	7.13	7.59	1.1		33	7	84	.11	4	0.4	0.5	32	SF4	
		8	142	42.10	19	27.19	154	54.04	7.07	0.8		12	3	196	.17	2	1.3	1.0	9	LER	
		8	416	45.40	19	21.56	155	2.02	5.88	1.1		37	6	156	.15	3	0.4	0.7	37	SF5	
		8	1543	38.54	19	19.99	155	30.35	7.08	2.0		31	5	55	.07	7	0.3	0.7	30	KAO	
		8	1759	45.76	19	26.06	155	20.25	3.85	1.0		11	2	118	.11	3	0.5	0.9	4	KAO	
		8	1830	33.44	19	19.44	155	8.71	6.35	1.9		37	5	81	.11	4	0.4	1.0	28	SF4	
		8	22	0 8.83	19	5.59	155	29.01	28.42	2.3		49	6	179	.09	8	0.6	1.2	44	DLS	
		8	2241	56.97	19	28.91	155	27.11	6.20	1.5		24	3	85	.11	6	0.4	1.1	22	KAO	
		8	2357	1.29	19	25.37	155	17.82	0.41			7	3	234	.12	2	0.4	0.5	5	SNC	
		9	013	6.86	19	23.33	155	20.37	10.37	1.6		37	10	63	.11	1	0.4	0.5	28	KAO	
		9	142	27.11	19	25.75	155	20.40	4.07	1.0		9	4	170	.09	3	1.1	1.6	7	KAO	
		9	219	58.77	19	29.19	155	26.14	6.05	1.5		20	5	98	.18	5	0.4	1.4	16	KAO	
		9	359	16.36	19	26.18	155	21.84	9.98	1.3		19	6	68	.10	3	0.5	0.7	14	KAO	
		9	632	0.32	19	26.79	155	29.66	12.17	1.7		20	5	56	.12	7	0.5	1.0	15	KAO	
		9	822	25.73	19	25.67	155	19.31	3.01	0.8		9	3	143	.07	4	0.4	0.7	6	KAO	
		9	12	3 57.59	19	25.58	155	19.23	3.41	1.2		14	3	141	.08	4	0.4	0.6	11	KAO	
		10	027	52.05	19	22.52	155	1.27	0.03	1.7		32	6	149	.22	6	0.6	0.3	28	SSF	*

YEAR	MON	DA	ORIGIN TIME HRMN	SEC	LAT N DEG	MIN	LON W DEG	MIN	DEPTH KM	AMP MAG	DUR MAG	NR	GAP NS	DEG	RMS SEC	MIN DIS	ERH KM	ERZ KM	NO FM	REMK	
1986	JAN	10	127	6.43	19	22.69	155	3.41	0.12	2.6		55	15	152	.14	8	0.5	0.1	45	SSF	
		10	252	9.46	19	27.89	155	23.51	9.43	1.4		9	3	101	.09	4	0.6	1.1	7	KAO	
		10	424	3.50	19	26.62	155	30.00	9.34	2.0		44	11	41	.10	6	0.3	0.6	35	KAO	
		10	539	31.27	19	17.90	155	28.00	9.07	1.7		29	4	46	.13	6	0.4	0.8	28	LSW	
		10	649	42.86	19	18.90	155	0.05	8.18	0.9		24	5	263	.24	5	1.7	1.1	21	SF5	
		10	853	45.53	19	24.46	155	17.30	0.46	1.1		8	2	92	.11	1	0.3	0.6	5	SSC	
		10	1243	3.85	19	24.51	155	19.57	6.00	1.1		15	4	99	.08	2	0.5	0.7	11	KAO	
		10	15 1	21.23	19	9.35	155	41.79	4.15	2.1		25	5	215	.23	13	1.4	4.7	24	LSW	
		10	1623	36.10	19	18.32	155	12.40	9.58	1.5		34	9	137	.13	8	0.6	0.8	26	SF2	
		10	1729	22.50	19	29.15	155	14.31	4.47	1.2		4	0	340	.13	9	15.0	15.2	2	GLN	*
		10	22 9	45.34	19	22.03	155	3.21	4.70	1.1		27	1	119	.18	4	0.6	2.0	21	SSF	
		11	142	14.57	19	20.51	155	5.88	7.96	1.6		25	1	110	.09	5	0.5	1.1	20	SF4	
		11	350	33.86	19	22.30	155	29.20	10.16	1.6		31	2	41	.10	3	0.4	0.6	22	KAO	
		11	352	8.22	19	22.36	155	3.91	6.36	1.7		37	9	99	.18	4	0.4	0.6	34	SF5	
		11	731	17.62	19	28.91	155	27.93	10.22	2.0		38	11	74	.10	6	0.3	0.6	31	KAO	
		11	820	52.10	19	24.33	155	16.98	14.16	1.7		9	0	129	.05	1	1.2	3.8	1	DEP	L
		11	2150	26.19	19	25.78	155	29.74	12.37	1.0		44	9	39	.08	7	0.3	0.4	37	KAO	
		11	2225	47.73	19	28.52	155	24.72	3.74	2.2		54	16	54	.15	3	0.2	0.5	41	KAO	
		11	2344	22.03	19	28.03	155	45.83	7.66	1.2		30	4	72	.10	16	0.4	1.4	28	KON	
		12	122	33.37	19	22.56	155	2.47	0.02	1.1		33	11	136	.24	5	0.7	0.2	27	SSF	*
		12	521	52.02	19	26.36	155	28.51	9.59	1.0		33	9	63	.10	6	0.3	0.7	24	KAO	
		12	735	0.63	19	28.36	155	37.36	13.40	1.9		22	1	211	.14	3	0.9	0.9	21	DML	
		12	1129	2.77	19	28.37	155	26.54	3.35	1.5		22	6	80	.15	6	0.3	1.1	16	KAO	
		12	1233	17.81	19	21.84	155	6.39	7.92	1.1		25	3	79	.12	4	0.5	0.8	26	SF4	
		12	1322	32.91	19	21.83	155	30.11	9.75	2.0		40	3	45	.08	5	0.3	0.6	33	KAO	
		12	1755	1.24	19	23.79	155	17.12	22.90	1.6		5	2	135	.07	2	5.4	1.8	2	DEP	L
		12	2036	47.91	19	28.17	155	24.99	9.52	2.6		52	12	51	.13	4	0.3	0.6	31	KAO	
		12	2243	9.38	19	25.08	155	14.93	13.34	1.4		10	3	207	.13	1	2.3	0.9	1	DEP	L
		12	2244	51.15	19	25.68	155	38.91	14.21	1.9		12	0	278	.13	5	3.2	1.0	2	DML	L
		13	419	19.89	19	11.88	155	30.69	7.69	2.0		34	2	83	.13	6	0.4	1.0	16	LSW	
		13	954	1.83	19	29.25	155	26.14	5.53	1.5		20	5	99	.12	5	0.3	1.3	16	KAO	
		13	1753	53.80	19	23.08	155	1.98	7.40	1.7		44	8	130	.13	5	0.4	0.5	40	SF5	
		14	2 5	35.15	19	24.18	155	17.71	4.44	1.2		16	4	81	.12	2	0.5	0.4	13	SSC	L
		14	210	37.52	19	24.58	155	17.44	3.43	1.1		18	5	96	.14	1	0.5	0.3	13	SNC	L
		14	317	9.63	19	25.66	155	17.14	5.22	1.2		19	5	164	.16	1	0.5	0.7	14	INT	L
		14	450	11.15	19	26.77	155	15.98	4.94	1.0		18	7	222	.11	4	0.7	1.0	12	SNC	L
		14	527	53.15	19	20.36	155	11.80	7.46	1.9		49	9	77	.17	5	0.4	0.5	43	SF3	
		14	6 1	28.46	19	25.50	155	19.26	5.89	1.0		16	5	125	.10	3	0.5	0.8	11	KAO	
		14	636	17.12	19	24.29	155	16.83	9.53	1.2		21	8	94	.14	1	0.7	0.7	13	INT	L
		14	734	48.12	19	24.90	155	18.24	1.03	0.5		6	2	221	.12	2	3.7	6.8	1	SNC	*
		14	818	6.34	19	20.23	155	11.60	7.70	2.1		41	8	80	.15	5	0.4	0.6	38	SF3	
		14	1435	3.85	19	17.54	155	13.09	5.66	1.8	2.0	35	4	123	.12	1	0.4	0.6	34	SF2	
		14	1450	56.60	19	16.13	155	13.58	4.34	1.5	1.5	26	0	167	.11	2	0.6	0.8	19	SSF	
		14	1711	14.39	19	17.60	155	12.93	5.67	1.5	1.1	20	2	129	.06	1	0.5	1.2	12	SF2	
		15	025	6.91	19	18.83	155	14.85	9.16	2.3	2.8	55	12	89	.13	4	0.3	0.3	46	SF1	

YEAR	MON	DA	ORIGIN TIME HRMN	SEC	LAT N DEG	MIN	LON W DEG	MIN	DEPTH KM	AMP MAG	DUR MAG	NR	GAP NS	DEG	RMS SEC	MIN DIS	ERH KM	ERZ KM	NO FM	REMK	
1986	JAN	15	212	35.37	19	30.76	155	54.04	10.75	2.7	2.5	41	11	179	.18	3	0.7	0.4	33	KON	
		15	1658	37.74	19	22.04	155	4.27	8.94	2.1	2.4	47	7	83	.12	5	0.3	0.4	32	SF5	
		15	17 7	45.01	19	21.07	155	2.13	6.31	1.7	2.3	38	2	155	.13	3	0.5	0.7	27	SF5	
		15	2037	6.94	19	22.47	155	26.76	10.07	1.5	1.6	37	6	38	.12	2	0.3	0.4	33	KAO	
		15	2313	4.04	19	25.82	154	55.87	5.20	0.8	1.0	31	9	160	.14	3	0.7	0.8	24	LER	
		16	030	2.79	19	22.46	155	2.19	0.02	1.7	1.6	45	13	141	.18	5	0.3	0.2	36	SSF	*
		16	1410	33.49	19	17.81	155	14.38	7.32	1.5	1.4	22	4	118	.12	2	0.4	0.7	20	SF2	
		16	2056	16.01	19	7.22	155	38.38	8.15	2.0	2.1	29	1	164	.18	14	0.8	2.2	16	LSW	
		17	330	5.46	19	20.14	155	8.42	6.72	1.6	1.2	28	2	78	.12	4	0.5	1.0	19	SF4	
		17	336	24.31	19	24.89	155	19.47	6.17	1.9	1.4	31	9	96	.10	2	0.3	0.7	21	KAO	
		17	1253	50.89	19	21.08	155	4.70	7.53	2.0	2.2	45	7	95	.14	4	0.4	0.7	32	SF5	
		17	1348	31.67	19	22.85	155	4.60	9.46	3.6	3.9	57	8	81	.11	3	0.4	0.3	48	SF5	F
		17	1352	15.82	19	22.36	155	3.85	8.42	2.8	3.1	52	10	151	.11	4	0.3	0.3	40	SF5	
		17	1826	31.16	19	19.79	155	10.77	6.82	0.9	1.1	34	5	91	.12	5	0.4	0.7	32	SF3	
		17	2019	41.05	19	22.32	155	4.45	8.98	1.7	1.4	33	2	82	.11	4	0.4	0.5	18	SF5	
		17	2037	52.04	19	18.02	155	15.46	7.11	1.7	1.5	36	5	116	.13	4	0.4	0.9	26	SF1	
		17	2317	22.55	19	16.87	155	22.20	2.09		1.0	24	3	127	.12	6	0.3	0.8	21	SWR	
		18	342	14.14	19	23.65	155	1.92	6.27	0.8	1.0	32	3	132	.18	5	0.6	1.2	24	SF5	
		18	520	35.79	19	18.46	155	13.13	4.76	1.4	1.2	36	3	91	.11	3	0.4	1.1	25	SSF	
		18	1138	3.26	19	22.05	155	0.08	7.04	1.8	1.6	35	4	175	.17	6	0.5	0.7	25	SF5	
		18	1215	24.08	19	19.45	155	10.48	8.49		1.1	22	3	99	.04	5	0.5	1.0	17	SF3	
		18	1238	50.15	19	18.86	155	13.57	7.07		0.8	30	3	72	.09	3	0.4	0.9	19	SF2	
		18	1528	39.98	19	17.73	155	3.36	44.94	1.1	1.5	39	0	207	.11	4	1.6	2.5	28	DEP	
		18	1817	13.55	19	21.78	155	29.94	10.24	1.7	1.2	46	15	43	.12	4	0.3	0.4	33	KAO	
		18	2018	20.89	19	17.51	155	14.15	6.99		1.0	34	4	134	.09	1	0.4	0.7	18	SF2	
		18	2122	34.02	19	20.52	155	6.00	7.78	2.5	2.5	52	10	109	.10	6	0.4	0.4	31	SF4	
		19	138	26.42	19	6.78	155	27.64	31.08		1.5	37	5	176	.09	5	0.7	1.4	30	DLS	
		19	4 7	46.49	19	16.74	155	22.25	9.97	1.6	1.5	32	4	127	.10	5	0.4	0.7	24	SWR	
		19	959	47.05	19	24.53	155	30.80	10.11	1.7	1.4	30	0	47	.07	7	0.4	1.0	26	KAO	
		19	1142	51.30	19	25.22	155	18.98	5.51	1.7	1.2	27	7	115	.12	2	0.4	0.6	17	INT	
		19	12 2	3.06	19	24.74	155	19.41	5.98	1.5	0.6	21	4	91	.06	2	0.4	0.8	14	KAO	
		19	1241	8.31	19	11.65	155	38.16	7.41		1.2	34	2	100	.18	6	0.6	1.2	13	LSW	
		20	925	18.15	19	28.43	155	27.35	2.20	2.1	0.9	31	10	74	.12	7	0.3	0.4	22	KAO	
		20	1634	37.23	19	19.57	155	11.46	6.04	1.4	1.5	37	4	94	.12	5	0.4	1.0	27	SF3	
		20	21 7	59.67	19	19.76	155	8.95	6.56	1.8	2.0	44	6	80	.11	5	0.4	0.7	29	SF4	
		21	414	54.82	19	20.20	155	12.01	7.79	1.4	1.2	24	2	78	.09	5	0.5	0.9	19	SF3	F
		21	548	10.93	19	20.30	155	13.39	6.81	1.4	1.1	28	1	63	.12	4	0.5	0.8	23	SF2	
		21	1040	5.43	19	25.84	155	23.48	9.41	1.7	1.0	33	9	54	.12	3	0.4	0.7	24	KAO	
		22	15 7	19.32	19	18.90	155	12.20	5.14	1.4	1.1	29	5	102	.13	4	0.4	1.6	26	SF3	
		22	1511	56.23	19	18.53	155	14.77	6.68	1.4	1.4	33	5	105	.13	4	0.5	0.8	29	SF1	
		23	042	30.40	19	20.65	155	14.91	7.95	1.3	0.9	35	8	74	.15	4	0.4	0.6	29	SF1	
		23	1 3	19.33	19	20.37	155	13.05	7.14	1.4	0.9	34	7	65	.13	4	0.4	0.5	31	SF2	
		23	113	41.50	19	21.41	155	3.64	2.40	1.7	1.7	40	9	100	.22	3	0.5	0.8	37	SSF	
		23	146	53.65	19	9.65	155	31.07	0.00	2.2	1.7	48	14	126	.14	6	0.3	0.2	35	LSW	
		23	6 4	23.59	20	28.57	156	7.32	10.57		1.2	21	4	328	.13	53	8.5	11.5	18	DIS	*

YEAR	MON	DA	ORIGIN TIME HRMN	SEC	LAT N DEG	MIN	LON W DEG	MIN	DEPTH KM	AMP MAG	DUR MAG	NR	GAP NS	DEG	RMS SEC	MIN DIS	ERH KM	ERZ KM	NO FM	REMK
1986	JAN	23	11 0	45.85	19	17.43	155	27.66	11.54	1.7	1.4	26	5	50	.09	6	0.4	0.7	22	LSW
		23	1235	57.66	19	20.55	155	11.68	9.60	3.5	3.9	59	16	74	.12	4	0.3	0.3	49	SF3 F
		23	14 6	10.36	19	20.31	155	11.21	0.01	2.4	2.8	66	27	80	.20	5	0.3	0.2	42	SSF *
		23	1526	28.41	19	43.84	155	3.65	0.00	2.1	2.5	15	0	240	.13	5	1.8	2.0	15	HIL B*
		23	1628	55.61	20	46.01	156	54.71	0.98	3.2	3.4	34	5	333	.13	137	13.7	4.8	31	DIS *
		23	1928	50.13	19	23.88	155	16.90	2.69	1.6	1.5	22	4	76	.10	1	0.3	0.2	13	SSC
		23	2037	2.84	19	26.26	155	28.79	9.49	2.1	1.9	47	12	40	.11	7	0.3	0.6	32	KAO
		23	23 6	29.15	19	22.71	155	25.77	10.40	2.2	2.0	43	10	31	.11	3	0.3	0.5	33	KAO
		24	855	43.29	19	16.85	155	14.34	7.46	2.1	2.5	36	10	180	.14	2	0.4	1.0	30	SF2
		24	1056	57.83	19	19.92	155	12.43	11.27	1.5	1.6	20	3	151	.06	5	0.6	0.8	22	SF2
		24	1632	44.63	19	19.52	155	8.93	7.01	1.6	1.2	18	2	84	.06	4	0.5	1.3	13	SF4
		24	17 8	29.40	19	21.47	155	6.67	8.58	1.1	1.2	29	4	84	.10	4	0.5	0.6	20	SF4
		24	1913	29.78	19	6.82	155	21.97	43.54			23	3	257	.12	11	1.5	2.0	12	LOI
		24	2052	12.24	19	22.18	155	4.86	7.72	2.0	2.6	43	4	74	.11	5	0.4	0.5	28	SF5
		24	2143	1.55	19	16.85	155	46.85	10.43	2.6	2.6	42	4	149	.09	10	0.4	0.4	30	KON
		24	22 5	2.33	19	22.54	155	26.91	10.52	1.9	1.7	39	2	42	.11	1	0.3	0.4	32	KAO
		25	3 1	20.91	19	18.99	155	15.55	7.05	1.2	0.9	29	4	105	.08	4	0.4	0.8	17	SF1
		25	450	5.91	19	28.16	155	13.61	29.03	2.1	1.8	50	7	41	.13	7	0.4	0.9	38	DEP
		25	741	33.92	19	20.30	155	12.83	7.32	2.2		46	7	69	.13	4	0.4	0.6	37	SF2
		25	1027	28.57	19	10.91	155	29.10	7.14	2.1	1.9	36	3	144	.13	3	0.4	0.6	39	LSW
		25	1219	58.60	19	20.09	155	10.66	7.51	1.5	1.4	32	4	85	.09	4	0.4	0.6	17	SF3
		25	2048	35.34	19	19.58	155	11.85	8.23		0.9	25	2	90	.07	6	0.5	0.9	21	SF3
		25	22 7	4.56	19	18.02	155	14.99	7.09	1.2	1.4	27	3	123	.11	3	0.6	1.0	22	SF1
		26	141	10.63	19	20.63	155	12.48	8.83		1.2	25	1	68	.08	4	0.5	0.8	20	SF2
		26	614	40.73	19	25.31	155	19.18	7.94	2.2	1.9	38	14	118	.12	3	0.3	0.5	27	KAO
		26	1559	13.95	19	19.33	155	7.23	7.54		1.2	29	6	117	.11	4	0.4	0.6	28	SF4
		26	1716	25.87	19	48.81	155	51.50	14.95	2.3	2.2	33	7	183	.13	14	0.6	0.6	37	HUA
		26	19 2	58.40	19	24.00	155	15.74	2.88	2.5	2.6	40	8	35	.12	2	0.2	0.2	40	SEC
		26	2023	40.12	19	20.07	155	12.69	5.97	1.4	1.1	42	13	73	.14	5	0.3	0.8	31	SF2
		26	2038	42.47	18	51.39	155	14.86	10.18	2.9	3.7	46	10	267	.12	41	0.6	0.5	42	LOI
		27	137	31.92	19	25.06	155	19.50	7.49	1.8	1.4	34	9	103	.13	3	0.3	0.6	19	KAO
		27	256	53.07	19	21.51	155	2.51	5.91	1.4	1.6	35	1	133	.16	3	0.6	1.1	12	SF5
		27	314	12.32	19	20.40	155	12.16	8.09	2.0	2.3	43	7	74	.09	4	0.3	0.4	39	SF3
		27	5 9	35.56	19	44.69	155	48.95	23.44	2.2	2.0	27	2	243	.11	21	1.9	1.4	17	HUA
		27	1336	28.07	19	19.53	155	13.52	8.64	3.8	4.0	57	11	66	.13	5	0.4	0.5	50	SF2 F
		27	1337	56.91	19	19.01	155	13.48	7.47	2.5	3.0	49	6	72	.15	4	0.4	0.5	44	SF2
		27	1341	1.40	19	19.37	155	13.78	4.92	1.1	1.1	18	2	81	.12	4	0.5	1.7	16	SSF
		27	1359	22.39	19	18.87	155	13.46	7.87	1.4	1.5	32	5	75	.09	3	0.4	0.8	22	SF2
		27	18 2	22.81	19	28.39	155	28.07	8.36	1.9	1.1	41	11	57	.13	7	0.3	0.7	30	KAO
		28	141	40.61	19	20.10	155	11.73	0.37	2.2	2.3	63	24	82	.21	5	0.3	0.2	48	SSF
		28	154	8.85	19	19.87	155	11.12	6.96	1.5	1.3	46	12	88	.15	5	0.3	0.6	37	SF3
		28	350	39.71	19	22.87	155	30.43	9.88	2.1	1.4	43	10	42	.11	5	0.3	0.4	36	KAO
		28	5 3	24.05	19	24.13	155	16.11	2.83	2.4	2.6	43	9	36	.11	1	0.2	0.2	32	SEC
		28	1232	53.10	19	22.08	155	27.75	9.89	2.3	2.6	55	11	40	.12	1	0.3	0.4	35	KAO
		28	13 0	24.25	19	13.86	155	35.40	7.67	1.2	1.6	33	0	82	.19	4	0.6	1.3	23	LSW

YEAR	MON	DA	ORIGIN TIME HRMN	SEC	LAT N DEG	MIN	LON W DEG	MIN	DEPTH KM	AMP MAG	DUR MAG	NR	GAP NS	DEG	RMS SEC	MIN DIS	ERH KM	ERZ KM	NO FM	REMK
1986	JAN	28	20 7	20.07	19	23.35	155	16.12	0.90	1.9	1.9	11	3	79	.04	1	0.2	0.3	6	SEC L
		29	046	38.18	19	10.57	155	32.39	0.46	1.9	1.5	35	3	108	.12	8	0.3	0.3	16	LSW
		29	244	13.25	19	50.17	155	22.36	30.08	2.5	2.2	61	17	85	.11	7	0.5	0.9	41	KEA
		29	316	39.87	19	44.24	155	31.26	36.02	2.7	3.0	67	20	78	.10	8	0.4	0.6	47	KEA
		29	425	44.73	19	22.98	155	26.49	10.59	1.5	1.0	30	2	40	.10	2	0.4	0.5	26	KAO
		29	2046	39.80	19	22.06	155	26.51	10.12	1.8	1.5	40	4	42	.12	2	0.4	0.5	31	KAO
		29	2139	12.27	19	19.80	155	13.63	9.43	2.3	3.0	51	6	119	.13	5	0.4	0.4	44	SF2
		29	2255	4.34	19	23.65	155	29.93	9.74	1.6	1.2	38	5	36	.10	5	0.3	0.5	36	KAO
		30	211	27.71	19	19.02	155	13.47	4.83	1.4	0.9	36	6	128	.14	4	0.4	1.1	31	SSF
		30	257	35.32	19	20.56	155	7.92	7.56	1.6	1.5	41	10	84	.12	4	0.3	0.5	39	SF4
		30	328	6.84	19	23.82	154	58.01	4.58	1.3	1.2	38	7	170	.22	3	0.6	1.0	33	SLE
		30	510	9.04	19	19.15	155	13.49	8.82	2.8	3.1	57	12	127	.14	6	0.4	0.3	48	SF2
		30	518	27.51	19	18.65	155	13.10	8.07	1.8	1.7	47	9	88	.16	3	0.4	0.6	39	SF2
		30	541	59.87	19	19.07	155	13.23	1.21	1.4	1.1	33	7	78	.17	4	0.3	0.5	26	SSF
		30	6 6	28.42	19	18.34	155	13.27	6.11	1.8	1.7	36	6	88	.13	2	0.4	0.7	30	SF2
		30	654	33.99	19	19.47	155	11.46	7.19	1.5	1.8	38	5	96	.13	6	0.4	0.6	35	SF3
		30	920	36.39	19	21.07	155	2.40	5.74	1.3	1.9	35	4	145	.14	2	0.4	0.6	35	SF5
		30	934	9.51	19	21.90	155	2.61	0.85	1.4	1.1	32	7	135	.14	4	0.3	0.4	30	SSF
		30	1117	3.55	19	22.54	154	57.73	4.36	1.8	1.9	36	3	191	.21	5	0.8	2.1	25	SLE
		30	1617	59.86	19	25.70	155	18.97	7.41	2.0	1.2	26	5	143	.09	2	0.6	0.6	20	INT
		30	19 8	40.45	19	19.82	155	13.15	7.57	1.4	1.2	26	1	71	.11	5	0.4	0.8	21	SF2
		30	2334	6.54	19	18.12	155	30.86	8.53	2.0	1.7	33	2	76	.12	6	0.3	0.8	39	LSW
		31	1 2	27.19	19	19.79	155	7.60	8.58	2.4	2.7	49	10	100	.07	5	0.3	0.4	38	SF4
		31	229	30.62	19	22.27	155	4.35	8.35	2.1	2.1	47	8	89	.12	4	0.4	0.3	36	SF5
		31	256	40.89	19	9.87	155	24.48	42.42	2.2	2.6	23	0	200	.06	6	1.7	4.2	5	LOI T
		31	356	7.05	19	19.94	155	8.84	7.26	1.5	1.4	32	5	75	.11	4	0.4	0.7	22	SF4
		31	1137	7.31	19	44.59	155	2.25	0.00	2.4	2.4	28	0	263	.24	6	3.7	2.4	23	HIL B*
		31	14 3	37.28	19	22.73	155	28.62	10.22		1.0	28	2	38	.09	2	0.4	0.5	22	KAO
		31	19 4	10.37	19	18.96	155	16.00	8.39	1.9	1.5	46	8	110	.12	3	0.4	0.5	26	SF1
		31	2143	15.65	19	23.66	155	25.96	10.99	1.0	1.3	39	3	37	.10	3	0.3	0.4	32	KAO
	FEB	1	051	42.73	19	28.39	155	27.69	6.76	2.2	1.5	46	15	54	.13	7	0.3	0.9	31	KAO
		1	415	22.89	19	19.38	155	11.66	6.23	1.9	1.9	43	7	96	.15	5	0.4	1.0	32	SF3
		1	423	9.81	19	28.44	155	48.94	7.91		1.3	29	3	139	.12	7	0.7	0.6	19	KON
		1	457	39.32	19	20.81	155	12.84	8.33		0.9	23	4	69	.06	3	0.4	0.5	16	SF2
		1	738	37.78	19	21.27	155	29.84	9.86	2.3	1.6	43	5	43	.09	4	0.3	0.4	30	KAO
		1	756	30.22	19	22.33	155	19.00	29.45	2.1	1.6	43	5	38	.11	3	0.6	0.5	35	DEP
		1	1354	29.67	19	18.81	155	13.76	7.23		1.1	28	2	75	.11	3	0.4	0.9	24	SF2
		1	1533	51.28	19	26.26	155	29.11	9.78		1.0	20	2	65	.08	7	0.4	1.3	19	KAO
		1	1535	26.62	19	26.63	155	22.12	9.68	1.8	1.3	39	5	65	.12	3	0.4	0.5	23	KAO
		2	1151	44.03	19	25.55	155	20.20	8.34	2.2	2.2	48	12	38	.12	4	0.3	0.4	38	KAO
		2	1210	36.34	19	18.09	155	12.63	6.63	1.5	1.0	22	5	167	.11	2	0.4	0.8	18	SF2
		2	2021	18.42	19	21.44	155	28.02	10.63	1.6	1.3	33	2	41	.11	2	0.4	0.5	25	KAO
		2	2035	55.33	19	26.24	155	28.82	9.60	2.3	2.3	48	10	37	.10	7	0.3	0.6	32	KAO
		2	22 7	25.29	19	23.02	155	30.58	9.74	1.7	1.1	25	2	61	.07	5	0.5	0.5	20	KAO
		3	140	58.26	19	20.34	155	13.20	7.76	1.7	1.8	35	4	64	.10	4	0.3	0.5	25	SF2

YEAR	MON	DA	ORIGIN TIME HRMN	SEC	LAT N DEG	MIN	LON W DEG	MIN	DEPTH KM	AMP MAG	DUR MAG	NR	GAP NS	DEG	RMS SEC	MIN DIS	ERH KM	ERZ KM	NO FM	REMK
1986	FEB	3	8 3	27.95	19	28.91	155	52.19	5.27		1.5	22	2	152	.16	5	0.8	1.6	11	KON *
		3	8 4	51.79	19	21.78	155	4.94	5.91	1.1	1.7	25	0	79	.10	5	0.5	1.0	17	SF5
		3	10 3	56.93	19	22.82	155	2.29	6.23	0.8	1.4	28	1	135	.14	5	0.5	0.9	12	SF5
		3	11 1	22.09	19	21.32	155	1.38	8.22	3.5	3.7	58	14	169	.12	4	0.4	0.3	47	SF5 F
		3	15 5	10.95	19	29.16	155	16.74	0.03	2.0	2.0	12	4	260	.17	7	1.0	0.7	3	GLN L*
		3	1622	47.96	19	28.00	155	27.19	8.93	2.5	1.9	51	15	50	.13	6	0.3	0.7	32	KAO
		3	1723	32.24	19	20.51	155	12.60	7.79	1.4	1.2	28	2	69	.10	4	0.4	0.6	21	SF2
		3	1737	39.15	19	22.29	155	28.98	9.06	1.9	1.7	24	0	64	.12	2	0.4	1.1	24	KAO
		3	1841	14.16	19	21.48	154	59.37	8.47	2.1	2.2	51	10	191	.20	7	0.7	0.5	41	LER
		3	1852	52.62	19	24.29	155	16.10	11.65	2.0	1.6	20	5	126	.15	1	1.4	0.8	5	INT L
		3	1854	27.05	19	28.44	155	14.27	20.30	2.3	2.0	16	4	243	.21	7	2.6	1.3	7	DEP L
		3	2117	12.08	19	22.88	155	0.08	7.68	1.8	1.4	36	4	173	.13	5	0.7	0.7	33	SF5
		3	2123	18.65	19	24.19	155	17.33	9.88	2.1	2.3	19	5	54	.13	1	0.6	0.5	6	INT L
		3	2244	13.33	19	25.87	155	16.31	14.94	2.2	2.1	23	8	181	.19	2	1.4	0.8	10	DEP L
		3	2245	41.59	19	20.31	155	3.79	8.03	2.5	3.0	49	10	118	.12	2	0.4	0.5	44	SF5
		4	025	45.55	19	24.26	155	30.19	8.54	1.6	1.2	36	5	39	.11	5	0.4	0.6	33	KAO
		4	152	52.62	19	25.21	155	16.90	9.10	1.9	2.0	31	15	119	.14	1	0.6	0.6	18	INT L
		4	311	2.26	19	24.31	155	16.28	11.45	2.1	2.4	17	2	126	.10	1	1.1	0.6	6	INT L
		4	553	14.55	19	24.30	155	18.90	11.44	2.2	2.6	22	7	75	.14	2	0.8	0.4	6	INT L
		4	652	43.15	19	25.01	155	17.73	9.55	1.8	1.6	18	6	78	.17	1	1.2	0.6	5	INT L
		4	659	54.77	19	26.80	155	17.90	16.58	2.1	2.0	15	4	194	.10	3	1.8	0.8	3	DEP L
		4	7 6	23.39	19	27.35	155	16.15	9.59	2.1	1.9	13	5	217	.18	4	1.8	1.3	5	INT L
		4	717	3.61	19	24.07	155	17.84	10.86	1.9	1.6	13	4	85	.09	2	1.1	0.8	4	INT L
		4	857	36.20	19	24.26	155	19.72	9.59	1.8	1.2	14	4	167	.11	1	1.2	0.8	2	KAO L
		4	858	36.59	19	23.23	155	19.74	13.61	2.2	2.2	18	5	124	.16	1	1.2	1.1	3	DML L
		4	9 8	8.01	19	22.94	155	16.53	8.40	1.9	1.9	11	2	153	.29	1	2.2	2.2	3	INT L
		4	928	59.36	19	23.59	155	18.90	15.64	2.0	2.1	12	3	122	.10	1	2.0	0.8	1	DEP L
		4	931	17.46	19	22.79	155	17.78	6.98	1.8	1.8	17	5	118	.13	2	0.6	1.0	6	INT L
		4	959	33.69	19	27.40	155	20.08	5.75	1.9	2.1	11	2	305	.10	6	3.8	3.7	1	KAO L
		4	1015	54.44	19	22.99	155	19.04	3.96	1.8	2.5	17	5	92	.09	2	0.3	0.4	15	KAO L
		4	1048	57.20	19	21.06	155	20.03	6.78	1.9	1.5	11	3	200	.18	5	1.1	3.3	1	SWR L
		4	1056	33.17	19	32.57	155	14.33	24.11	3.5	3.7	70	22	66	.13	14	0.4	0.6	50	DEP F
		4	1139	34.52	19	13.79	155	28.17	8.46	2.5	2.9	44	5	100	.20	4	0.5	0.9	28	LSW
		4	1728	46.10	19	24.11	155	16.72	15.52	2.0	1.5	47	12	81	.11	0	0.5	0.2	35	DEP
		5	9 4	12.12	19	16.01	155	26.88	9.21	1.7	1.4	24	3	68	.20	6	0.5	1.1	21	LSW
		5	2125	57.48	19	22.38	155	26.58	10.10	2.6	2.6	55	15	38	.12	2	0.3	0.4	39	KAO
		5	23 3	47.42	19	20.59	155	7.57	7.20	1.6	1.3	29	4	89	.11	5	0.4	0.6	29	SF4
		5	2355	0.33	19	22.50	155	26.93	9.99	2.3	1.9	58	17	38	.13	1	0.3	0.4	42	KAO
		6	1212	29.62	19	27.86	155	24.21	8.97	2.0	1.2	34	10	71	.13	4	0.3	0.7	21	KAO
		6	13 2	48.36	19	23.57	155	14.92	12.43	1.7	1.2	39	4	72	.09	2	0.5	0.4	24	INT
		6	13 3	53.31	19	23.80	155	36.49	25.66	3.3	3.4	75	24	47	.10	6	0.3	0.6	51	DML
		6	1837	26.85	19	20.97	155	0.46	5.48	1.8	1.4	35	0	190	.18	5	0.8	0.9	17	SF5
		6	2345	30.64	19	19.66	155	12.96	7.18	1.4	1.3	31	4	75	.13	5	0.4	0.7	28	SF2
		7	8 7	44.19	19	25.22	155	16.83	11.71	1.8	1.6	16	4	155	.09	1	1.3	0.7	12	INT L
		7	1157	33.08	19	25.61	155	16.84	12.73	1.7	1.6	16	4	172	.13	1	1.1	0.7	6	INT L

YEAR	MON	DA	ORIGIN TIME HRMN	SEC	LAT N DEG	MIN	LON W DEG	MIN	DEPTH KM	AMP MAG	DUR MAG	NR	GAP NS	DEG	RMS SEC	MIN DIS	ERH KM	ERZ KM	NO FM	REMK
1986	FEB	7	1413	46.92	19	22.78	154	57.84	4.89	1.8	1.6	27	6	186	.23	5	0.7	1.7	21	SLE
		7	2038	17.42	19	19.57	155	7.34	7.32	1.6	1.2	26	4	110	.10	4	0.5	0.6	26	SF4
		7	2259	32.81	19	24.74	155	16.05	8.60	1.7	1.2	20	4	145	.12	2	0.6	0.6	16	INT L
		7	23 4	40.00	19	21.88	155	19.28	6.79	2.0	2.3	16	3	149	.11	3	0.6	0.9	6	SWR L
		7	2318	41.26	19	24.56	155	16.95	12.69	1.7	1.6	18	3	94	.20	1	1.5	0.7	6	INT L
		8	1 4	55.28	19	22.61	154	59.64	7.39	1.8	1.4	31	6	180	.15	5	0.6	0.8	29	LER
		8	2 7	6.77	19	21.16	155	11.03	8.22	2.5	3.1	57	16	68	.13	3	0.3	0.3	47	SF3
		8	636	41.43	19	32.25	155	47.39	8.02	2.1	1.1	17	3	203	.13	4	0.7	0.7	16	KON
		8	1028	59.52	19	20.32	155	4.30	6.11	1.7	2.0	36	2	123	.15	3	0.5	0.7	35	SF5
		8	1049	21.45	19	23.45	155	18.56	3.39	1.4	1.7	12	2	103	.06	2	0.6	0.5	2	SSC L
		8	12 6	40.54	19	4.24	155	40.55	26.43	2.2	1.5	35	4	144	.09	10	0.9	1.3	30	DLS
		8	1510	32.75	19	24.96	155	17.64	5.66	1.6	2.1	8	2	90	.10	1	0.9	1.1	4	INT L
		9	115	52.02	19	24.80	155	16.63	12.47	2.1	2.4	20	8	142	.14	1	1.0	0.6	4	INT L
		9	144	23.60	19	19.70	155	12.32	7.59	1.4	1.4	16	1	83	.05	5	0.5	1.3	14	SF2
		9	737	44.38	19	27.07	155	16.50	0.02	1.4	1.8	10	3	205	.17	4	0.4	1.1	5	SNC L*
		9	739	29.60	19	24.47	155	15.60	16.63	2.0	1.8	11	3	136	.10	2	2.6	1.2	2	DEP L
		9	832	53.45	19	21.98	155	28.17	9.19	1.9	1.4	39	3	38	.12	1	0.4	0.6	31	KAO
		9	11 9	6.13	19	19.21	155	9.98	9.01	1.8	1.4	22	2	103	.06	5	0.6	1.1	22	SF3
		9	1556	3.13	19	26.60	155	17.35	6.91	2.0	2.3	12	6	195	.18	2	1.6	0.7	0	INT L
		9	2058	46.27	19	22.67	155	16.39	3.16	1.6	2.0	11	2	86	.11	1	0.4	0.5	3	SEC L
		9	2317	28.60	19	17.81	155	21.16	6.51	1.8	1.3	23	2	122	.11	4	0.4	1.3	16	SWR
		10	149	54.56	19	24.85	155	19.32	9.55	2.1	2.3	14	4	233	.14	2	0.9	1.2	3	KAO L
		10	5 9	32.32	19	58.30	155	32.53	40.21	3.0	2.8	57	12	167	.10	18	0.6	1.1	41	KEA
		10	620	47.81	19	19.96	155	7.44	6.41		0.9	18	3	101	.10	5	0.6	1.2	8	SF4
		10	623	22.81	19	27.44	155	29.82	9.73	2.0	1.4	34	5	57	.12	9	0.4	0.8	20	KAO
		10	640	5.09	19	23.23	155	26.50	10.69	1.5	1.0	27	1	45	.10	2	0.4	0.7	20	KAO
		10	811	20.57	19	25.83	155	16.33	9.28	2.0	2.0	16	3	162	.22	2	2.1	1.1	2	INT L
		10	942	33.54	19	10.46	155	35.28	12.76	2.0	1.3	8	0	266	.28	12	5.9	3.3	5	LSW
		10	2156	24.70	19	26.19	155	15.51	7.03	2.1	2.3	13	3	190	.12	3	1.0	1.4	1	INT L
		11	056	12.89	19	26.54	155	29.07	9.34	1.0	1.4	39	10	43	.11	7	0.3	0.6	32	KAO
		11	240	59.45	19	26.91	155	16.38	10.82	0.8	2.4	24	9	181	.14	4	0.9	0.6	17	INT L
		11	651	48.58	19	26.87	155	15.25	14.62	2.1	1.9	11	3	235	.13	5	1.6	0.9	0	DEP L
		11	950	2.33	19	20.63	155	13.00	4.61	0.9	2.7	32	5	64	.14	4	0.4	1.6	28	SER
		11	1131	5.44	19	23.38	155	19.01	0.53	1.3	2.3	8	3	109	.02	1	0.2	0.4	0	SSC L
		11	16 7	45.09	19	24.76	155	16.53	14.17	0.8	1.9	13	1	143	.12	1	1.1	1.3	0	DEP L
		11	1719	5.13	19	24.91	155	19.91	5.77	2.7	2.9	55	11	38	.14	2	0.3	0.7	35	KAO
		11	2014	25.48	19	31.85	155	54.28	16.56		1.7	15	2	184	.12	5	1.1	1.0	12	KON
		11	2045	8.88	19	20.36	155	11.99	8.03	2.4	2.8	34	2	75	.10	5	0.4	0.7	28	SF3
		11	22 8	12.84	19	22.72	155	3.44	5.11	1.1	1.5	39	8	103	.19	4	0.5	1.0	33	SF5
		11	23 9	8.14	19	27.01	155	18.30	23.55	0.9	2.2	14	4	175	.14	4	2.2	1.3	2	DEP L
		12	144	22.42	19	23.98	155	15.80	3.22	1.4	2.2	32	10	111	.13	1	0.2	0.2	22	SEC
		12	255	40.85	19	33.04	155	38.19	8.99	1.1	1.2	35	5	104	.12	8	0.4	0.6	31	MLO
		12	913	50.83	19	28.82	155	13.91	6.24	2.0	2.3	9	3	286	.12	8	1.3	4.0	0	GLN L
		12	941	31.98	19	19.78	155	11.59	6.02		1.1	23	5	88	.13	5	0.4	0.9	20	SF3
		12	1427	15.37	19	26.56	155	28.92	9.22	2.2	1.9	28	5	72	.09	7	0.4	0.8	18	KAO

YEAR	MON	DA	ORIGIN TIME HRMN	SEC	LAT N DEG	MIN	LON W DEG	MIN	DEPTH KM	AMP MAG	DUR MAG	NR	NS	GAP DEG	RMS SEC	MIN DIS	ERH KM	ERZ KM	NO FM	REMK
1986	FEB	12	2120	32.87	19	12.46	155	41.52	4.47	2.0	1.2	29	3	117	.20	9	0.8	2.7	30	LSW
		13	2 2	7.91	19	22.02	155	1.50	1.76	1.7	1.5	42	8	153	.20	5	0.4	0.6	37	SSF
		13	323	16.40	19	21.62	154	57.12	4.95	2.7	3.0	60	19	212	.19	7	0.5	1.1	44	SLE F
		13	1057	40.49	19	18.84	155	13.40	4.12	1.7	1.3	29	2	77	.12	3	0.3	1.2	17	SSF
		13	1749	39.59	19	24.40	155	18.23	0.35	1.2	2.1	9	0	102	.21	2	0.5	0.8	5	SSC L
		13	2014	8.77	19	20.20	155	13.28	7.25	1.4	1.1	32	4	65	.13	5	0.4	0.7	27	SF2
		13	21 4	27.48	19	24.97	155	19.58	7.04	2.8	2.9	56	16	37	.15	2	0.3	0.5	42	KAO
		14	140	52.75	19	21.72	155	2.41	7.97	2.2	2.1	38	4	134	.10	3	0.6	0.4	23	SF5
		14	143	24.45	19	8.79	155	25.70	38.52	2.6		34	3	228	.08	4	1.0	1.5	25	DLS
		14	242	25.88	19	21.73	155	7.23	7.95	2.0	2.1	39	6	75	.11	3	0.4	0.7	27	SF4
		14	425	27.38	19	20.34	155	11.76	8.94	3.1	3.6	57	12	77	.14	5	0.3	0.4	44	SF3
		14	437	8.18	19	19.99	155	11.79	7.25	1.4	1.4	30	3	83	.12	5	0.5	0.9	25	SF3
		14	813	41.42	19	19.41	155	13.34	6.76		1.1	32	2	71	.12	4	0.4	0.9	24	SF2
		14	10 4	17.76	19	10.78	155	34.29	0.76	2.1	1.2	24	2	123	.12	9	0.4	0.8	11	LSW
		14	13 1	29.68	19	17.97	155	27.59	10.51	1.7	1.3	34	2	45	.12	7	0.4	0.7	21	LSW
		14	1739	15.84	19	23.94	155	15.52	3.16	1.0	0.9	18	7	109	.14	2	0.4	0.6	7	SEC
		14	1924	43.66	19	20.66	156	1.91	38.65	1.5	1.7	29	3	251	.09	19	0.9	1.2	16	KON
		14	2330	9.95	19	20.36	155	13.16	7.08	1.4	1.0	32	5	65	.12	4	0.3	0.6	23	SF2
		15	258	59.60	19	53.31	155	33.73	24.49	1.0	1.3	33	4	129	.08	11	0.6	1.3	22	KEA
		15	639	10.32	19	21.70	155	2.66	6.53	1.1	1.2	37	7	126	.18	3	0.5	0.7	37	SF5
		15	1314	37.18	19	26.74	155	29.13	9.57	2.1	1.5	45	14	44	.14	7	0.3	0.6	32	KAO
		15	1751	13.15	19	20.03	155	11.87	6.42	1.4	1.1	29	8	82	.14	5	0.4	0.8	23	SF3
		15	1938	28.02	19	18.75	155	25.97	10.39	2.4	2.1	42	8	59	.15	5	0.4	0.6	36	LSW
		15	2115	35.89	19	19.71	155	7.65	6.18	0.9	1.2	25	4	100	.13	4	0.4	0.8	26	SF4
		15	2335	5.94	19	26.70	155	30.06	9.43	2.2	1.3	42	9	41	.13	9	0.3	0.8	32	KAO
		16	258	14.36	19	24.72	155	19.03	5.98	2.0		31	9	65	.11	2	0.3	0.5	24	KAO
		16	323	59.37	19	23.86	155	15.24	2.41	1.4	0.8	15	6	98	.09	2	0.2	0.4	9	SEC
		16	413	42.85	19	22.73	155	26.51	9.89	1.7	1.4	34	5	54	.12	2	0.4	0.5	30	KAO
		16	1056	28.07	19	18.92	155	13.65	7.44		1.1	13	0	104	.07	4	0.7	1.5	12	SF2
		16	1321	58.98	19	22.04	155	2.03	5.03	0.8	1.2	31	5	153	.15	4	0.5	1.1	27	SF5
		16	1452	44.11	19	19.59	155	11.67	6.21	1.9	1.7	39	4	92	.15	6	0.4	0.9	33	SF3
		17	16 5	6.79	19	26.25	155	21.00	7.97	0.8	1.4	23	7	92	.09	3	0.4	0.9	14	KAO
		18	834	41.82	19	20.48	155	10.29	6.47	1.5	1.1	29	7	78	.11	3	0.3	0.7	23	SF3
		18	1637	12.34	19	17.72	155	14.58	10.57	1.7	1.7	37	5	144	.13	7	0.5	0.7	34	SF1
		19	053	26.27	19	40.01	156	32.13	6.06	3.1	3.0	59	15	288	.13	68	3.4	4.4	45	DIS *
		19	2 2	49.25	19	21.75	155	11.85	2.67	2.1	2.0	30	9	106	.11	3	0.4	0.3	21	SER
		19	3 3	55.00	19	34.30	155	15.43	1.45	1.6	1.3	35	2	177	.11	15	0.5	0.7	19	GLN
		19	1158	5.09	19	23.53	155	30.49	8.83	1.7	1.2	38	4	48	.10	5	0.4	0.6	36	KAO
		19	1446	38.53	19	19.81	155	12.08	4.71	1.4	1.1	36	10	84	.13	6	0.3	1.3	28	SSF
		19	2117	48.08	19	18.89	155	11.43	8.00	3.3	3.6	54	15	111	.13	5	0.3	0.4	43	SF3 F
		20	634	6.41	19	22.10	155	2.35	5.85	1.7	1.2	29	6	140	.14	4	0.5	0.8	26	SF5
		20	635	55.27	19	9.30	155	34.97	7.92	2.0	1.6	31	4	130	.16	11	0.5	1.0	29	LSW
		20	10 6	59.06	19	19.47	155	10.15	7.46	1.7	1.8	33	4	97	.12	5	0.6	0.7	31	SF3
		21	417	34.39	19	22.43	155	27.12	10.29	1.9	1.7	32	3	42	.11	1	0.4	0.5	28	KAO
		21	452	19.71	19	46.11	156	8.74	9.40	2.5	1.5	28	2	267	.12	52	1.1	1.8	25	HUA

YEAR	MON	DA	ORIGIN TIME HRMN	SEC	LAT N DEG	MIN	LON W DEG	MIN	DEPTH KM	AMP MAG	DUR MAG	NR	NS	GAP DEG	RMS SEC	MIN DIS	ERH KM	ERZ KM	NO FM	REMK
1986	FEB	21	842	14.43	19	17.72	155	20.39	7.75	1.0	2.1	38	7	125	.10	3	0.4	0.8	25	SWR
		21	10 2	29.70	19	20.12	155	7.43	8.68	1.6	1.4	19	1	98	.05	5	0.6	1.1	18	SF4
		21	2311	49.79	19	24.22	155	15.44	2.72	2.3	2.4	39	13	40	.13	2	0.2	0.2	29	SEC
		22	838	5.93	19	20.08	155	13.20	5.85	1.4	1.0	25	3	67	.12	5	0.4	0.9	24	SF2
		22	1427	25.59	19	18.91	155	15.62	6.41	1.4	1.2	32	4	107	.13	4	0.5	1.0	20	SF1
		23	241	1.52	19	23.84	155	16.00	2.99	1.7	1.1	20	6	102	.11	1	0.2	0.3	11	SEC
		23	255	13.87	19	23.89	155	16.04	3.32	1.9	1.1	24	7	105	.14	1	0.4	0.3	18	SEC
		23	255	38.98	19	23.89	155	16.06	3.01	1.8	1.1	25	10	105	.12	1	0.2	0.2	17	SEC
		23	2213	13.84	19	20.01	155	11.80	6.07	2.0	2.1	49	10	82	.17	5	0.4	0.7	41	SF3
		24	514	4.14	19	16.09	155	28.01	10.39	2.2	2.3	50	16	66	.14	4	0.3	0.5	40	LSW
		24	749	18.54	19	21.63	155	3.03	7.56	2.3	2.4	49	9	114	.11	3	0.4	0.4	41	SF5
		24	1014	29.07	19	18.94	155	15.59	5.32	1.7	1.5	34	5	107	.13	4	0.4	0.8	31	SF1
		24	1357	0.62	19	25.72	155	24.23	9.07	2.0	1.9	38	10	48	.10	2	0.3	0.5	28	KAO
		24	1945	15.56	20	15.24	156	20.49	1.90		2.0	18	4	340	.12	102	13.9	6.9	16	DIS *
		24	2020	5.20	19	29.65	155	27.78	3.42	2.0	1.2	29	7	85	.09	4	0.3	1.1	23	KAO
		24	2247	51.54	19	19.64	155	8.18	5.48	1.6	1.7	32	5	88	.12	4	0.3	0.8	32	SF4
		25	1739	59.99	19	19.82	155	12.49	7.82	2.5	3.0	41	6	80	.14	5	0.4	0.5	35	SF2
		25	1951	35.44	19	18.53	155	13.29	7.97		1.2	28	3	84	.09	3	0.4	0.8	22	SF2
		26	849	29.23	19	20.15	156	2.96	38.50		2.3	58	20	255	.12	20	0.6	0.5	39	KON
		26	1454	35.68	19	22.32	155	4.11	7.42	1.1	1.6	31	0	88	.13	4	0.6	0.9	23	SF5
		26	1730	37.52	19	26.11	155	16.67	6.67	1.7	2.0	10	0	190	.06	2	0.9	1.5	3	INT L
		26	2210	5.42	19	20.72	155	13.21	6.83	2.0	2.2	56	12	60	.14	4	0.3	0.3	46	SF2
		27	1 3	3.85	19	28.30	155	27.10	3.04	2.2	1.8	55	15	48	.14	7	0.2	0.6	44	KAO
		27	237	17.04	19	25.42	154	55.94	5.84	1.9	1.9	57	15	166	.18	4	0.5	0.6	42	LER
		27	244	34.11	19	25.75	154	56.08	4.55	2.0	1.9	54	15	159	.14	4	0.5	0.7	39	SLE
		27	635	48.48	19	11.30	154	39.01	35.94	1.3	1.7	17	1	333	.10	43	4.5	4.2	13	DIS
		27	849	51.40	19	22.68	155	26.78	10.56		1.4	33	4	41	.10	2	0.4	0.6	23	KAO
		27	1410	59.88	19	20.92	155	11.42	7.64	2.1	2.2	48	6	70	.14	3	0.4	0.5	33	SF3
		27	1420	15.36	19	19.84	155	15.36	8.09	1.8	1.7	32	8	89	.08	4	0.3	0.6	22	SF1
		27	17 6	20.45	19	19.12	155	12.70	5.68	1.4	1.3	35	3	89	.14	4	0.4	0.8	32	SF2
		27	1839	49.15	19	22.24	155	27.46	9.86	1.9	1.6	43	6	40	.12	1	0.4	0.5	38	KAO
		27	2121	14.70	19	19.30	155	11.42	8.17	3.4	3.7	53	8	101	.12	6	0.4	0.4	44	SF3 F
		28	427	19.21	19	16.98	155	22.60	5.43	2.4	2.0	7	3	344	.07	15	6.7	13.5	0	SWR L*
		28	1240	34.09	19	23.70	154	58.15	4.55	1.8	1.3	31	4	170	.16	9	0.6	2.8	18	SLE
		28	1257	31.52	19	20.74	155	6.12	7.37	1.4	1.4	26	3	103	.12	5	0.6	0.9	21	SF4
		28	1311	1.48	19	22.71	155	30.05	9.57	1.7	1.2	36	3	45	.10	4	0.3	0.6	31	KAO
		28	1313	14.82	19	18.90	155	47.44	10.59	2.1	1.1	26	2	129	.11	10	0.5	1.0	15	KON
		28	1856	38.77	19	19.49	155	7.28	8.59	2.3	2.4	47	9	113	.11	4	0.4	0.5	32	SF4
	MAR	1	132	12.05	19	19.05	155	13.91	7.92	2.6	2.6	66	20	67	.14	4	0.4	0.4	48	SF2
		1	227	18.88	19	21.43	155	5.88	7.54	2.7	2.7	64	20	88	.12	5	0.3	0.4	47	SF4
		1	439	50.95	20	2.02	155	33.20	32.35	3.5	3.3	82	34	189	.11	22	0.5	0.8	49	KEA
		1	941	55.65	19	12.11	155	37.99	7.91	1.2	1.3	33	0	99	.19	5	0.7	1.0	23	LSW
		1	1110	34.23	19	24.22	155	17.56	16.30	3.3	3.3	59	14	39	.11	2	0.3	0.3	46	DEP F
		1	1640	23.02	19	27.36	155	44.47	5.54		0.8	26	2	188	.13	6	0.8	2.2	17	KON
		2	751	30.99	19	21.49	155	2.32	7.77	2.3	1.9	45	7	140	.11	3	0.4	0.5	29	SF5

YEAR	MON	DA	ORIGIN TIME HRMN	SEC	LAT N DEG	MIN	LON W DEG	MIN	DEPTH KM	AMP MAG	DUR MAG	NR	NS	GAP DEG	RMS SEC	MIN DIS	ERH KM	ERZ KM	NO FM	REMK
1986	MAR	2	16 9	30.36	19	18.62	155	15.19	7.44	2.2	2.5	52	9	99	.15	4	0.4	0.6	40	SF1
		2	1858	10.00	19	18.48	155	13.97	5.66	1.4	1.4	43	7	75	.16	3	0.4	0.7	36	SF2
		2	2043	17.47	19	23.98	155	26.30	9.44	1.5	1.1	51	12	24	.13	3	0.3	0.4	40	KAO
		3	4 9	18.68	19	19.05	155	7.98	7.05		1.1	36	9	99	.14	3	0.4	0.6	31	SF4
		3	411	39.63	19	19.99	155	8.02	8.30	2.3	2.7	54	14	87	.12	5	0.3	0.3	48	SF4
		3	1236	20.04	19	20.37	155	9.15	6.46	1.5	1.3	35	6	72	.16	3	0.4	0.7	31	SF3
		3	17 9	42.42	19	22.29	155	30.05	9.78	1.7	1.2	34	4	41	.10	4	0.3	0.5	34	KAO
		3	1936	47.31	19	17.67	155	48.40	10.31	2.1	1.3	26	2	134	.09	7	0.5	0.3	24	KON
		3	2121	57.21	19	20.87	155	6.17	7.07	1.6	2.0	35	2	99	.14	5	0.5	0.7	26	SF4
		4	5 8	0.98	19	20.73	155	2.99	6.89	1.7	1.4	27	0	124	.11	2	0.5	0.8	22	SF5
		4	626	17.72	19	26.53	155	30.08	10.37	1.8	1.1	24	1	68	.08	9	0.5	1.0	23	KAO
		4	15 0	29.63	19	20.18	155	10.76	8.46	1.5	1.5	27	2	84	.08	4	0.5	0.9	23	SF3
		4	1526	47.94	19	20.18	155	10.81	9.13	1.5	1.4	21	2	83	.05	4	0.6	1.0	18	SF3
		4	2150	26.05	19	41.03	155	19.66	20.76		1.8	19	0	265	.11	22	2.4	3.2	20	KEA
		5	344	12.67	19	19.26	155	11.95	3.96	1.4	1.8	43	6	97	.14	5	0.3	1.2	39	SSF
		5	1136	46.69	19	22.19	155	7.49	47.41	2.2	2.1	51	12	69	.12	2	0.8	0.4	39	DEP
		5	1440	17.87	19	23.53	155	49.11	10.86	2.6	2.5	35	7	114	.14	14	0.5	0.5	31	KON
		5	1814	32.60	19	22.09	155	2.58	6.45	1.7	1.4	43	7	126	.17	4	0.4	0.5	38	SF5
		5	2244	55.51	19	20.52	155	20.93	29.40	2.4	2.6	59	16	67	.13	4	0.5	0.4	44	DEP
		6	515	12.74	19	24.42	155	16.76	13.91	1.8	1.8	16	5	107	.08	1	1.4	0.7	8	DEP L
		6	517	55.27	19	26.47	155	16.43	9.98	1.5	1.4	17	3	187	.11	3	0.9	0.6	15	INT L
		6	549	28.20	19	23.17	155	17.48	9.09	1.5	1.6	12	2	88	.09	1	1.0	1.2	4	INT L
		6	21 8	54.68	19	30.23	155	27.37	3.52	1.8	1.2	16	5	111	.07	7	0.3	1.3	10	MLO
		8	723	11.35	19	16.39	155	29.19	12.07	1.7	1.2	27	2	57	.13	3	0.5	0.9	15	LSW
		8	1738	22.54	19	27.41	155	28.44	9.07	2.1	1.4	38	5	48	.12	7	0.3	0.7	27	KAO
		8	18 7	28.90	19	20.43	155	11.67	8.41	1.8	2.0	42	4	76	.13	4	0.5	0.5	34	SF3
		8	1822	32.78	19	17.09	155	12.62	7.38	2.0	2.0	35	6	179	.11	1	0.4	0.8	20	SF2
		8	1852	7.04	19	19.10	155	11.30	3.65	1.4	1.1	36	9	106	.13	5	0.3	1.2	31	SSF
		8	1910	4.45	19	19.37	155	11.89	3.37	1.6	1.5	44	7	95	.14	5	0.3	0.8	39	SSF
		9	1 1	27.07	19	28.72	155	13.46	10.45	2.3	1.8	58	17	42	.14	8	0.2	0.6	44	GLN
		9	1424	56.85	19	22.16	155	28.88	9.84	2.3	2.4	48	7	36	.10	2	0.3	0.5	41	KAO
		9	2353	1.34	19	20.45	155	12.36	8.65	2.0	2.6	46	8	72	.12	4	0.3	0.4	39	SF2
		10	7 5	27.13	19	11.12	155	28.68	34.69	2.0	1.6	28	1	95	.06	3	0.9	2.3	26	DLS
		10	1048	11.20	19	24.10	155	15.98	3.38	1.4	1.1	23	8	119	.09	1	0.3	0.3	17	SEC
		10	1725	32.47	19	19.68	155	12.29	7.00	1.4	1.1	37	6	84	.13	5	0.4	0.6	34	SF3
		10	22 4	39.31	19	19.88	155	12.92	6.31	1.4	1.1	32	5	73	.14	5	0.4	0.7	27	SF2
		11	050	55.50	19	19.60	155	15.15	7.72	1.7	1.5	45	7	82	.12	4	0.4	0.5	38	SF1
		11	142	11.53	19	25.64	155	22.00	10.84	2.1	1.8	45	10	49	.11	4	0.3	0.3	36	KAO
		11	820	52.06	19	19.81	155	11.16	7.94	1.6	1.5	36	5	90	.11	5	0.4	0.6	33	SF3
		11	1049	39.63	19	22.70	155	27.07	9.90	2.1	1.9	50	10	36	.12	1	0.3	0.4	41	KAO
		11	1056	31.65	19	29.11	154	46.75	9.19	2.2	1.4	25	4	290	.13	7	1.2	0.5	21	LER
		11	12 9	8.35	19	18.69	155	11.93	6.02	2.0	1.4	42	8	113	.12	4	0.3	0.6	37	SF3
		11	1328	17.74	19	21.15	155	6.63	7.67	1.6	1.5	32	6	90	.15	4	0.4	0.6	30	SF4
		11	1340	57.91	19	26.14	155	16.51	16.89	2.1	1.1	38	8	120	.11	2	0.6	0.4	30	DEP
		11	1527	35.99	19	22.27	155	30.27	9.19		1.1	33	5	90	.11	5	0.4	0.6	29	KAO

YEAR	MON	DA	ORIGIN TIME HRMN	SEC	LAT N DEG	MIN	LON W DEG	MIN	DEPTH KM	AMP MAG	DUR MAG	NR	NS	GAP DEG	RMS SEC	MIN DIS	ERH KM	ERZ KM	NO FM	REMK
1986	MAR	11	2217	51.42	19	7.66	155	33.05	47.62			35	7	264	.12	10	1.4	0.9	30	DLS T
		12	1034	49.16	19	46.52	155	15.11	17.57	1.4	1.4	17	0	182	.11	16	1.6	7.5	13	KEA
		12	1116	29.96	19	28.10	155	27.33	8.52	2.1	1.2	31	7	69	.10	6	0.4	1.0	22	KAO
		12	1229	34.67	19	19.09	155	13.39	11.43	3.7	3.8	66	18	124	.14	7	0.3	0.3	50	SF2 F
		12	1233	52.15	19	19.06	155	13.43	9.43	2.7	3.0	50	6	127	.13	7	0.4	0.4	44	SF2
		12	1240	29.56	19	17.92	155	13.34	6.99	1.8	1.4	31	4	92	.11	2	0.5	0.8	20	SF2
		12	1255	39.35	19	17.62	155	13.37	8.63	2.1	2.4	43	9	97	.12	1	0.4	0.7	30	SF2
		12	1316	18.15	19	19.49	155	11.49	9.27		1.0	19	1	96	.07	6	0.6	1.5	15	SF3
		12	1333	18.60	19	18.00	155	13.41	6.48	1.8	1.7	31	3	87	.10	2	0.4	0.8	19	SF2
		12	1340	29.04	19	18.35	155	13.17	7.69	1.8	2.0	35	3	92	.12	3	0.4	0.8	28	SF2
		12	1459	53.17	19	18.33	155	13.26	7.39		1.2	25	2	88	.09	2	0.5	0.9	19	SF2
		12	1937	11.70	19	22.80	155	8.59	3.03		1.5	12	1	121	.10	2	0.8	0.4	8	SER
		12	2031	31.02	19	17.44	155	29.63	11.67	1.7	1.1	16	2	59	.08	4	0.5	1.0	15	LSW
		12	2332	20.43	19	17.56	155	13.36	6.08	2.1	2.4	65	24	99	.14	1	0.3	0.4	41	SF2
		13	233	44.33	19	19.14	155	13.66	4.45	1.4	1.0	30	5	81	.12	4	0.3	1.3	31	SSF
		13	436	27.22	19	12.13	155	35.72	7.94	1.9	1.4	39	6	88	.14	6	0.4	0.6	35	LSW
		13	1348	9.28	19	23.15	155	0.33	6.34		1.4	27	4	241	.14	8	0.7	0.7	25	SF5
		13	1641	35.52	19	22.03	155	4.89	8.37	1.7	1.9	40	3	77	.13	5	0.4	0.4	24	SF5
		13	22 1	17.03	19	21.16	155	29.28	6.16	2.1	1.8	35	5	42	.09	4	0.3	0.6	35	KAO
		14	248	17.85	19	17.60	155	30.27	8.71	1.7	1.4	32	8	72	.16	5	0.3	0.8	26	LSW
		14	346	43.67	20	2.94	155	50.22	26.20	1.3	1.2	39	9	222	.12	11	0.7	0.8	34	KOH
		14	5 5	26.30	19	24.95	155	19.38	7.65	1.6	1.2	33	9	99	.13	2	0.4	0.5	24	KAO
		14	634	36.50	19	17.84	155	12.83	9.31	1.5	1.9	36	8	121	.14	2	0.5	0.5	31	SF2
		14	641	21.21	19	18.21	155	13.41	8.23	2.0	2.0	49	11	84	.15	2	0.4	0.5	39	SF2
		14	642	55.75	19	18.66	155	13.31	6.15		0.9	25	3	82	.10	3	0.4	0.8	23	SF2
		14	645	2.40	19	17.97	155	12.97	9.24	1.9	2.0	40	8	110	.13	2	0.4	0.4	34	SF2
		14	7 2	47.12	19	20.19	155	12.87	4.82	1.4	1.0	31	9	70	.13	5	0.3	1.0	24	SSF
		14	927	39.72	19	20.82	155	3.00	5.84	1.7	1.7	34	4	123	.15	2	0.4	0.6	34	SF5
		14	1130	31.38	19	21.61	155	2.00	7.26	1.7	1.5	38	3	155	.11	4	0.5	0.4	36	SF5
		14	1339	16.73	19	43.53	155	2.53	0.03	2.0	1.6	8	0	248	.30	3	14.9	5.5	13	HIL B*
		14	1632	38.48	19	43.32	155	3.48	0.00	2.2	1.8	18	2	218	.25	3	3.5	0.8	8	HIL B*
		14	2214	29.33	19	28.82	155	53.71	5.80	2.5	1.3	34	3	117	.21	3	0.6	0.7	35	KON
		15	121	59.89	19	17.80	155	13.21	7.88	1.8	2.0	48	9	103	.14	2	0.4	0.6	27	SF2
		15	3 6	50.35	19	22.91	155	27.54	10.13	1.6	1.2	36	3	34	.11	1	0.3	0.5	31	KAO
		15	1015	28.65	19	22.17	155	2.59	7.83	2.0	2.0	40	5	133	.13	4	0.4	0.6	30	SF5
		15	1449	45.36	19	25.01	155	19.28	4.47	2.2	2.0	34	9	62	.13	3	0.3	0.5	24	KAO
		15	1621	33.23	19	19.66	155	6.31	8.80	2.4	2.6	44	7	129	.11	5	0.4	0.4	35	SF4
		15	17 9	8.25	19	21.40	155	4.04	6.90	1.7	1.6	31	3	91	.14	3	0.5	0.7	24	SF5
		15	1710	8.72	19	21.49	155	4.27	7.87	2.1	2.4	29	5	80	.10	4	0.4	0.8	21	SF5
		15	1813	11.35	19	24.02	155	3.29	3.69	1.7	1.4	22	0	100	.09	2	0.5	0.7	16	SME
		15	1834	57.19	19	21.44	155	4.49	7.75	2.4	2.8	44	7	83	.13	4	0.4	0.5	32	SF5
		16	952	5.81	19	25.42	155	17.95	6.10	1.8	2.3	17	1	142	.15	1	0.7	0.9	5	INT L
		16	1035	21.75	19	23.75	154	58.17	5.52		1.6	35	3	170	.19	3	1.0	1.1	28	LER
		16	1058	35.58	19	44.99	156	8.33	38.52	3.7	4.6	59	15	249	.12	37	0.9	1.1	49	HUA F
		16	12 9	38.23	19	24.31	155	15.94	3.06		1.1	17	5	135	.07	1	0.3	0.4	12	SEC

YEAR	MON	DA	ORIGIN TIME HRMN	SEC	LAT N DEG	MIN	LON W DEG	MIN	DEPTH KM	AMP MAG	DUR MAG	NR	GAP NS	DEG	SEC	RMS DIS	MIN KM	ERH KM	ERZ KM	NO FM	REMK	
1986	MAR	18	1248	49.48	19	21.49	155	24.06	12.65	2.7	2.3	13	0	73	.08	3	0.6	0.8	11	SWR		
		18	1250	59.76	19	20.29	155	4.35	6.14	1.7	1.4	11	0	217	.11	8	1.9	2.8	11	SF5		
		18	15 6	50.69	19	19.25	155	8.78	5.29		1.4	10	0	216	.12	6	2.1	3.3	10	SF4		
		18	1542	32.63	19	18.27	155	12.96	5.87	1.5	1.2	9	2	230	.08	8	1.2	3.5	6	SF2		
		19	2242	25.18	19	12.17	155	10.92	3.42	1.7	1.2	6	0	258	.12	18	3.1	15.1	4	SSF	*	
		20	044	33.33	19	24.70	155	19.34	6.19	2.7	2.1	10	3	111	.06	3	0.5	0.7	9	KAO		
		20	120	40.95	19	24.76	155	19.52	6.83	2.6	1.8	11	2	110	.06	4	0.7	0.6	10	KAO		
		20	127	32.13	19	24.62	155	19.21	5.52	2.3	1.7	13	3	113	.10	3	0.6	0.8	10	KAO		
		20	2043	41.11	19	22.02	155	2.30	8.04		1.1	14	1	142	.13	4	0.9	1.0	11	SF5		
		21	134	38.07	19	52.53	156	7.55	13.59	2.5	1.6	19	4	320	.12	48	8.1	11.2	12	HUA	*	
		21	214	52.84	19	20.70	155	10.14	7.46	1.5	1.3	14	1	73	.08	3	0.7	1.1	12	SF3		
		21	4 2	40.24	19	27.14	155	15.20	30.28		1.3	19	4	171	.09	9	1.1	0.9	15	DEP		
		21	731	8.80	19	22.48	155	2.18	7.54	1.7	1.5	16	0	141	.14	5	0.9	1.0	15	SF5		
		21	1034	49.91	19	18.66	155	14.96	5.51		1.1	15	1	120	.12	4	0.7	1.5	13	SF1		
		21	1842	13.16	19	13.04	155	22.09	44.81		1.7	18	2	166	.05	11	1.1	1.3	16	DEP		
		21	2112	6.26	19	20.89	155	12.17	6.47	1.4	1.1	17	1	88	.10	4	0.6	1.0	16	SF3		
		22	350	42.96	19	18.89	155	14.96	6.56	1.4	1.5	19	1	112	.12	4	0.6	1.2	17	SF1		
		22	714	12.07	19	18.15	155	13.22	5.98		1.5	15	2	93	.08	2	0.4	1.1	15	SF2		
		22	1445	47.59	19	18.60	155	13.24	6.67	0.9	1.5	20	2	84	.09	3	0.5	0.9	16	SF2		
		22	16 9	34.29	19	18.11	155	13.17	4.95		1.1	17	1	97	.13	2	0.6	1.5	14	SSF		
		22	1610	2.47	19	18.86	155	13.32	3.96	0.9	1.3	15	1	79	.09	3	0.4	1.3	12	SSF		
		22	2214	52.76	19	19.82	155	11.31	6.88	1.9	2.2	21	1	90	.10	5	0.6	1.1	19	SF3		
		23	1515	31.75	19	22.09	155	30.23	7.68	2.0	1.6	22	1	113	.11	5	0.6	1.4	17	KAO		
		23	1648	18.18	19	20.42	155	8.34	7.79	2.2	2.3	29	2	78	.09	4	0.5	0.7	20	SF4		
		23	1935	49.70	19	19.81	155	11.52	4.86	2.0	2.4	31	7	88	.14	5	0.3	1.3	26	SSF		
		24	4 2	0.46	19	45.66	156	5.99	26.86			24	2	319	.11	29	1.7	1.6	20	HUA		
		24	426	43.99	19	21.05	155	2.82	7.65	2.7	3.2	25	1	133	.09	2	0.6	0.7	20	SF5		
		24	7 9	30.05	19	22.99	155	2.78	1.10	1.1	1.3	13	2	194	.23	9	2.6	1.1	13	SSF		
		24	1219	1.03	19	20.25	155	13.20	6.54		1.1	19	6	65	.11	4	0.5	0.9	13	SF2		
		24	1228	56.07	19	18.08	155	13.47	6.57	2.0	2.1	31	7	83	.13	2	0.4	0.6	26	SF2		
		24	2228	44.19	19	54.31	155	31.78	33.66	2.2	1.5	42	7	140	.13	15	0.7	0.6	37	KEA		
		25	459	3.12	18	50.38	155	24.78	24.86		1.8	48	16	261	.15	31	0.7	2.2	36	LOI		
		25	617	53.39	19	25.63	155	30.37	8.50	1.9	1.2	34	7	67	.11	8	0.3	0.7	28	KAO		
		25	819	52.88	19	20.09	155	6.90	3.62	1.6	1.5	30	7	108	.13	5	0.3	0.9	28	SSF		
		25	1458	48.50	19	18.95	155	15.24	7.41	1.7	1.5	33	7	102	.14	4	0.4	0.6	27	SF1		
		25	1819	43.51	19	24.52	155	25.88	9.85	1.5	1.1	30	4	55	.11	5	0.4	0.6	24	KAO		
		26	23 0	40.36	19	22.72	155	28.77	8.78	2.2	2.1	29	2	60	.13	2	0.5	1.0	19	KAO		
		27	512	9.66	19	18.32	155	12.95	9.69	2.8	2.9	30	2	137	.10	8	0.6	0.7	23	SF2		
		27	515	21.50	19	17.91	155	13.10	5.72	1.8	1.5	25	1	106	.12	2	0.6	1.0	17	SF2		
		27	6 4	49.19	19	21.11	155	6.26	7.67	2.1	1.9	16	3	94	.14	6	0.5	1.0	9	SF4		
		27	6 6	21.75	19	17.82	155	13.31	5.63	1.5	0.9	7	0	121	.05	2	1.5	1.4	2	SF2		
		27	6 8	9.34	19	16.70	155	12.82	11.86	2.3	1.9	16	2	185	.13	9	0.8	0.6	8	SF2		
		27	710	16.75	19	21.76	155	4.68	6.89	1.7	1.3	8	0	132	.09	5	1.2	1.2	3	SF5		
		27	734	15.83	19	20.11	155	8.11	8.81	3.0	3.3	18	2	84	.12	5	0.4	0.7	6	SF4		
		28	5 7	38.28	19	25.01	155	20.35	1.56	1.7	1.1	26	9	81	.15	5	0.3	0.6	17	KAO		

YEAR	MON	DA	ORIGIN TIME HRMN	SEC	LAT N DEG	MIN	LON W DEG	MIN	DEPTH KM	AMP MAG	DUR MAG	NR	GAP NS	DEG	SEC	RMS DIS	MIN KM	ERH KM	ERZ KM	NO FM	REMK	
1986	MAR	28	10 6	36.67	19	12.96	155	33.53	6.97		1.3	34	5	123	.21	7	0.5	1.1	30	LSW		
		28	1229	49.12	19	22.65	155	2.52	8.52	2.0	1.7	37	10	123	.14	5	0.4	0.4	34	SF5		
		28	1828	25.40	19	20.54	155	5.80	7.13	1.6	1.6	38	7	110	.13	5	0.4	0.6	35	SF4		
		28	2034	11.61	19	17.48	155	14.07	8.33		1.0	25	6	135	.10	1	0.4	0.6	22	SF2		
		28	2233	45.64	19	19.81	155	3.99	6.30	1.8	1.1	36	6	153	.14	2	0.5	0.6	36	SF5		
		29	0 2	43.03	19	23.19	155	27.12	10.39	2.3	2.1	49	9	32	.16	2	0.3	0.3	42	KAO		
		29	556	34.69	19	18.68	155	13.30	7.50	2.4	2.1	52	11	82	.16	3	0.4	0.5	41	SF2		
		29	951	26.58	19	19.75	155	12.45	6.98	1.7	1.6	40	7	81	.13	5	0.4	0.5	36	SF2		
		29	954	3.38	19	22.09	155	56.73	4.03		1.0	19	7	227	.16	14	0.8	2.0	18	KON		
		29	10 1	10.31	19	22.28	155	0.74	6.81	2.1	1.2	38	6	170	.15	6	0.5	0.6	32	SF5		
		29	1122	56.89	19	20.21	155	3.80	6.46	0.8	1.2	23	7	124	.11	2	0.4	0.6	24	SF5		
		29	18 6	22.32	19	19.00	155	9.86	8.86	0.9	1.1	26	8	108	.12	5	0.4	0.6	24	SF3		
		29	2023	8.66	19	19.05	155	13.57	7.06	1.4	1.2	36	5	70	.12	4	0.4	0.6	32	SF2		
		30	317	47.35	19	20.72	156	10.61	34.75		2.0	38	3	298	.13	31	1.7	0.7	38	KON		
		30	722	32.14	19	18.91	155	14.54	6.65		1.3	31	5	83	.11	4	0.4	0.6	26	SF1		
		30	948	3.12	19	20.80	155	2.99	8.87	3.7	4.0	46	6	116	.12	2	0.4	0.4	39	SF5	F	
		30	1128	44.63	19	20.71	155	5.92	7.70	2.2	2.7	42	6	105	.13	5	0.4	0.5	27	SF4		
		30	1137	5.49	19	19.78	155	15.16	7.89	1.7	1.7	29	6	88	.08	4	0.4	0.5	24	SF1		
		30	1337	6.25	19	26.00	155	21.27	10.77	3.5	3.5	50	9	31	.10	3	0.3	0.3	37	KAO		
		30	1531	34.96	19	18.92	155	13.25	6.01	1.4	1.3	23	4	80	.08	4	0.3	0.8	19	SF2		
		30	1615	24.10	19	39.07	155	55.36	27.57	2.3	1.4	21	1	231	.06	10	1.5	2.3	20	HUA		
		30	1813	1.80	19	3.69	156	17.87	37.73	3.0	3.2	43	3	297	.10	50	2.3	1.6	32	KON		
		31	1322	20.43	19	25.46	155	30.85	9.01	2.3	1.9	22	3	129	.09	8	0.5	1.0	18	KAO		
		31	1711	16.97	19	19.53	155	10.68	7.38	2.0	1.8	29	8	97	.11	5	0.4	0.8	18	SF3		
		31	2257	19.63	19	19.15	155	16.08	7.00	1.4	1.1	18	1	108	.09	3	0.5	1.3	18	SF1		
	APR	1	1053	34.81	19	20.61	155	6.32	4.87		0.9	32	7	104	.13	6	0.4	1.5	25	SSF		
		2	553	27.66	19	19.61	155	12.20	7.40	1.7	1.8	31	3	86	.10	5	0.4	0.7	18	SF3		
		2	1834	37.23	19	20.15	155	12.15	7.37	1.7	1.7	44	4	77	.13	5	0.4	0.6	30	SF3		
		2	2328	55.97	19	30.02	155	29.04	3.04	1.9	1.1	28	10	67	.14	4	0.3	0.8	18	MLO		
		3	0 6	40.56	19	29.49	155	29.46	2.08	2.1	1.7	32	6	63	.10	6	0.3	0.5	29	KAO		
		3	438	12.89	19	19.08	155	28.28	9.12	1.6	1.4	37	4	41	.12	6	0.3	0.5	34	KAO		
		3	1324	20.64	19	0.28	156	20.81	13.85		2.7	31	3	316	.09	58	6.9	10.2	31	DIS	*	
		3	1430	21.52	19	19.95	155	12.15	7.51	1.9	2.2	50	9	81	.13	5	0.3	0.4	44	SF3		
		4	1257	31.36	19	18.37	155	13.17	7.61	2.0	2.3	25	1	91	.10	3	0.5	0.8	22	SF2		
		4	1258	14.36	19	18.30	155	12.93	8.39		1.9	21	2	101	.07	3	0.6	1.0	16	SF2		
		4	2252	42.30	19	22.11	155	12.99	3.27	1.6	1.6	12	1	96	.05	1	0.5	0.5	10	SER		
		5	026	35.37	19	20.42	155	16.84	27.44	1.7	1.2	22	0	79	.07	1	0.9	1.3	17	DEP		
		5	320	22.61	21	21.00	155	35.22	6.80		2.5	20	1	338	.12	164	9.7	12.6	20	DIS	*	
		5	652	14.85	19	21.39	155	3.16	6.69	2.4	2.6	29	2	117	.12	3	0.5	0.7	21	SF5		
		5	811	44.16	19	19.01	155	12.76	5.26		1.5	21	1	115	.09	4	0.5	1.3	20	SF2		
		5	9 4	25.40	19	5.80	156	13.59	36.44		1.6	24	2	294	.09	42	1.7	1.4	19	KON		
		5	1334	14.76	19	19.95	155	11.83	6.56	2.0	2.4	24	0	118	.13	5	0.6	1.0	24	SF3		
		5	1453	49.94	19	34.02	155	47.34	8.26	2.1	1.4	17	2	218	.11	7	1.2	0.8	14	KON		
		5	1634	38.69	19	19.38	155	7.26	4.75		1.1	18	2	167	.09	7	0.6	3.3	13	SSF		
		5	18 4	32.03	19	24.83	155	19.61	7.19	2.0	1.5	15	3	126	.07	8	0.4	1.5	14	KAO		

YEAR	MON	DA	ORIGIN TIME HRMN	SEC	LAT N DEG	MIN	LON W DEG	MIN	DEPTH KM	AMP MAG	DUR MAG	NR	NS	GAP DEG	RMS SEC	MIN DIS	ERH KM	ERZ KM	NO FM	REMK	
1986	APR	5	2018	57.53	21	24.97	155	34.50	15.05	3.2	2.9	30	7	334	.14	171	8.3	14.2	20	DIS	*
		5	2332	54.05	19	21.60	155	2.77	7.11	1.7	1.6	24	0	132	.12	3	0.7	0.6	22	SF5	
		6	354	51.43	19	22.97	155	24.71	10.82	2.2	1.7	30	1	42	.12	6	0.5	0.6	25	KAO	
		6	8 6	1.93	19	22.96	155	26.68	10.45	2.6	2.7	29	0	55	.14	8	0.5	0.8	24	KAO	
		6	2214	44.66	19	18.84	155	8.67	5.28		1.1	12	2	241	.05	6	1.0	2.7	11	SF4	
		6	2233	2.84	19	20.22	155	1.44	1.25	1.8	1.1	15	2	220	.09	3	1.5	0.8	13	SSF	
		6	2237	49.67	19	12.22	155	36.91	8.50	4.4	4.3	27	1	92	.14	17	0.6	0.9	25	LSW	F
		7	114	46.91	19	5.99	156	14.56	6.15	2.5	1.8	21	2	296	.13	55	2.1	2.0	20	KON	
		7	137	0.29	19	11.50	155	37.59	0.33	2.0	1.2	16	3	98	.14	6	0.5	0.5	15	LSW	
		7	2 7	30.29	19	21.80	155	4.56	6.75	1.7	1.6	22	0	101	.12	5	0.7	1.2	17	SF5	
		7	744	34.91	19	20.12	155	8.34	5.51	1.5	1.8	25	0	146	.12	4	0.7	1.2	24	SF4	
		7	1512	14.31	19	23.94	155	27.33	10.61	1.6	1.2	20	1	34	.09	3	0.5	0.7	12	KAO	
		7	1633	7.95	19	22.09	155	28.64	10.17	2.1	2.1	35	2	37	.10	2	0.3	0.4	28	KAO	
		7	2039	35.62	19	21.96	155	3.33	4.79	1.7	1.1	24	4	115	.15	4	0.4	1.0	23	SSF	
		8	1455	36.54	19	20.87	155	10.98	7.92	1.4	1.2	11	2	81	.04	3	0.6	1.3	8	SF3	
		8	1535	18.37	19	11.74	155	31.02	37.94	2.1	1.8	25	0	156	.06	7	1.0	2.6	22	DLS	
		8	2046	43.60	19	20.31	155	13.10	8.32	1.4	1.2	15	2	66	.04	4	0.4	0.8	12	SF2	
		8	23 9	21.73	19	20.83	155	2.57	6.85	1.7	1.6	22	3	154	.14	2	0.8	1.2	19	SF5	
		9	011	57.08	19	10.46	155	42.45	9.46	2.8	2.0	18	3	250	.11	12	1.0	0.9	21	LSW	
		9	035	57.27	19	23.79	155	16.02	2.50	1.6	1.1	13	5	99	.12	3	0.3	0.5	8	SEC	
		9	1113	23.39	20	13.50	155	28.16	10.41	2.7	1.9	25	7	288	.15	40	1.1	0.9	21	KEA	
		9	2142	3.66	19	19.94	155	11.24	7.82	1.5	1.2	21	4	87	.10	5	0.4	0.7	18	SF3	
		9	2159	14.55	19	20.44	155	57.42	3.21	2.3	1.4	19	4	262	.22	17	1.5	1.6	16	KON	
		10	115	6.28	19	19.34	155	11.84	4.59			24	3	96	.11	5	0.4	1.7	21	SSF	
		10	243	15.39	19	23.67	155	15.69	2.75	1.7	1.8	18	5	96	.12	2	0.3	0.4	12	SEC	
		10	332	8.01	19	23.68	155	15.65	2.80	2.2	2.0	22	5	97	.12	2	0.4	0.4	17	SEC	
		10	453	8.15	19	18.04	155	15.02	5.64	1.7	2.0	25	3	111	.11	3	0.4	0.8	25	SF1	
		10	626	2.49	19	5.58	155	38.22	80.75	2.8		19	0	306	.13	20	8.9	11.0	23	DLS	T*
		10	736	52.84	19	13.11	155	30.80	34.00			17	0	145	.18	8	2.3	4.2	16	DLS	T
		10	835	22.80	19	20.24	155	11.91	7.40		0.9	13	2	152	.04	5	0.5	1.1	12	SF3	
		10	1224	17.12	19	23.38	155	20.79	10.63	2.8	2.5	36	11	76	.09	7	0.4	0.5	31	KAO	
		10	1320	15.12	19	17.78	155	11.80	7.88		1.0	17	3	149	.08	3	0.5	0.8	14	SF3	
		10	1655	51.59	19	25.99	155	21.33	10.28	1.8	1.3	22	7	120	.06	7	0.4	0.6	15	KAO	
		11	234	29.86	19	22.78	155	26.47	9.57	2.1	1.7	26	7	51	.11	2	0.4	0.5	20	KAO	
		11	847	20.22	19	21.86	155	4.30	6.19		1.1	19	3	88	.13	4	0.5	1.0	18	SF5	
		11	15 4	34.76	19	31.43	155	18.95	8.65	2.1	1.5	5	1	325	.01	11	2.8	3.5	1	GLN	L
		11	17 7	28.70	19	21.43	155	13.18	1.98		1.1	17	6	106	.14	2	0.3	0.4	12	SER	
		11	1758	4.44	19	16.06	155	12.39	4.90		1.2	22	6	174	.13	3	0.6	0.7	16	SSF	
		11	2134	0.58	19	15.66	155	28.66	7.32	2.0	1.3	26	5	126	.15	12	0.4	1.5	26	LSW	
		12	436	50.99	19	25.04	155	3.85	7.60	2.0	1.7	11	1	102	.10	10	0.7	2.2	10	SF5	
		12	818	47.42	19	20.87	155	4.33	7.98	2.0	2.3	28	10	99	.15	3	0.6	0.8	20	SF5	
		12	2041	15.90	19	24.77	155	15.91	4.90	1.3	0.6	12	4	161	.14	2	0.9	1.1	8	SNC	
		12	2041	50.21	19	24.32	155	16.53	3.33	1.1	0.8	14	3	117	.11	1	0.4	0.4	9	SSC	
		12	2111	4.14	19	24.19	155	16.38	3.60	0.9	0.6	11	3	114	.09	1	0.7	0.4	7	SEC	
		12	2354	35.49	19	47.92	155	37.11	13.66		0.9	12	4	128	.08	8	0.8	0.8	10	KEA	

YEAR	MON	DA	ORIGIN TIME HRMN	SEC	LAT N DEG	MIN	LON W DEG	MIN	DEPTH KM	AMP MAG	DUR MAG	NR	NS	GAP DEG	RMS SEC	MIN DIS	ERH KM	ERZ KM	NO FM	REMK	
1986	APR	13	345	27.00	19	19.36	155	7.29	6.45		1.2	24	4	116	.13	4	0.4	0.8	23	SF4	
		13	510	7.69	19	22.75	155	27.58	2.20	2.1	1.1	13	2	96	.15	0	0.6	0.2	8	KAO	
		13	937	49.16	19	23.03	155	26.61	10.02	2.0	1.9	26	2	56	.08	2	0.5	0.5	19	KAO	
		13	1135	6.29	19	19.13	155	11.28	5.93	1.5	1.1	21	1	106	.06	5	0.4	1.2	11	SF3	
		13	22 7	58.49	18	47.38	155	39.10	1.62	2.3	2.4	12	0	313	.06	63	4.5	10.0	3	LSW	*
		13	2341	17.32	19	33.37	156	32.03	14.27	3.5	3.4	22	3	336	.12	65	8.8	13.0	16	DIS	*
		13	2358	3.58	19	22.54	155	2.09	5.89	2.4	2.2	31	9	142	.13	5	0.4	0.6	25	SF5	
		14	028	24.51	19	23.68	155	16.19	3.26	1.6	0.9	15	5	91	.12	1	0.3	0.4	9	SEC	
		14	115	51.79	19	24.08	155	15.97	3.67	1.4	0.9	14	6	117	.09	1	0.3	0.5	9	SEC	
		14	154	14.56	19	24.05	155	15.94	2.97	2.6	2.8	26	5	110	.10	1	0.3	0.3	22	SEC	F
		14	318	0.13	19	21.95	155	2.12	4.83	1.7	1.7	23	4	148	.15	4	0.6	1.1	19	SSF	
		14	7 6	47.37	19	25.57	155	16.45	1.94	2.2	1.3	10	4	169	.17	2	1.4	0.7	7	SNC	
		14	1441	5.46	19	20.17	155	13.06	7.15	1.9	2.1	23	2	68	.11	5	0.5	0.9	20	SF2	
		15	034	21.00	19	42.15	155	21.62	35.14	2.6	2.5	42	10	181	.10	17	0.7	1.0	35	KEA	
		15	123	1.57	19	19.15	155	11.47	5.85	1.5	1.3	26	5	104	.12	5	0.4	1.0	21	SF3	
		15	1848	8.45	19	17.52	155	13.16	7.54	1.8	1.9	30	5	120	.09	1	0.4	0.8	18	SF2	
		15	2021	32.36	19	17.43	155	13.14	6.23	2.2	2.3	38	11	128	.12	1	0.4	0.6	28	SF2	
		15	2044	7.24	19	17.63	155	12.96	6.39	2.6	2.8	38	10	126	.12	1	0.4	0.6	31	SF2	
		15	2120	51.09	19	19.50	155	11.33	6.54	1.5	1.3	27	4	97	.12	5	0.4	0.7	24	SF3	
		16	1 5	45.11	19	57.55	155	19.46	12.87	2.2	1.5	7	3	242	.15	24	1.4	1.3	7	KEA	
		16	2 2	19.15	19	29.32	155	27.22	5.94	2.7	2.6	30	8	82	.14	5	0.4	0.9	25	KAO	
		16	249	12.46	19	21.18	155	2.52	7.39	1.9	1.6	12	2	145	.06	2	0.4	0.5	13	SF5	
		16	255	42.74	19	15.86	155	19.32	31.88	2.3	2.2	27	3	150	.11	4	0.9	1.0	24	DEP	
		16	449	14.94	19	21.22	155	2.71	4.80	2.0	1.7	23	2	129	.13	2	0.8	1.0	25	SSF	
		16	1046	12.34	19	29.19	155	27.08	2.62	2.1	1.8	20	7	108	.15	5	0.3	0.7	10	KAO	
		16	1412	28.38	19	48.24	155	22.76	25.57	2.1	1.6	31	4	86	.10	10	0.6	1.0	26	KEA	
		16	1430	16.15	19	15.44	155	27.69	3.47	1.7	1.2	13	1	116	.15	11	0.7	2.6	6	LSW	
		16	1431	3.37	19	20.92	155	17.54	27.68	2.6	2.8	45	10	35	.10	2	0.6	0.7	30	DEP	
		16	2012	50.45	19	16.21	155	27.92	8.99	1.7	1.2	20	6	116	.11	11	0.4	1.0	21	LSW	
		17	023	45.74	19	16.66	155	34.63	5.15	1.8	1.1	22	5	166	.22	13	0.7	10.0	20	LSW	*
		17	414	39.06	19	3.17	155	29.54	40.70			22	2	277	.13	12	1.9	2.1	1	DLS	T
		17	8 2	21.07	19	20.48	155	9.23	5.96	1.8	2.3	31	1	72	.12	3	0.5	0.8	20	SF3	
		17	1027	19.88	19	24.76	155	19.21	5.95	1.8	1.2	27	11	104	.09	2	0.4	0.5	16	KAO	
		17	1255	29.22	19	28.79	155	28.60	7.75	2.1	1.2	23	4	81	.14	9	0.5	1.6	11	KAO	
		17	1342	11.45	19	14.99	155	26.87	8.42	1.7	1.4	21	3	113	.13	10	0.4	1.2	6	LSW	
		17	14 0	56.98	19	18.08	155	30.31	11.40	2.4	2.2	27	3	113	.16	9	0.5	0.8	19	LSW	
		17	1543	17.97	19	19.82	155	11.54	6.78		1.1	15	0	88	.07	5	0.6	1.5	16	SF3	
		17	1819	19.36	19	19.34	155	12.01	8.21	2.6	3.0	34	5	94	.11	5	0.4	0.7	29	SF3	
		17	2233	28.93	19	24.17	155	29.00	10.72	2.0	1.6	19	1	63	.07	4	0.4	0.6	19	KAO	
		18	1 2	39.91	19	19.51	155	7.43	4.86	1.9	2.0	18	4	191	.13	11	0.7	7.2	18	SSF	*
		18	837	14.30	19	21.00	155	17.64	30.51	2.9	3.2	48	17	38	.12	2	0.6	0.5	31	DEP	
		18	1826	40.34	19	30.03	155	27.09	6.12	3.1	3.0	59	12	49	.13	4	0.3	0.7	38	MLO	
		19	657	39.56	19	19.39	155	11.96	8.31	2.2	2.4	44	7	93	.12	5	0.4	0.4	33	SF3	
		19	952	29.53	19	13.82	155	19.57	30.24	2.3	1.9	41	3	161	.10	8	0.7	1.0	36	DEP	
		19	1145	56.70	19	25.36	155	19.45	5.30	2.0	1.4	19	5	115	.10	3	0.5	1.0	14	KAO	

YEAR	MON	DA	ORIGIN TIME HRMN	SEC	LAT N DEG	MIN	LON W DEG	MIN	DEPTH KM	AMP MAG	DUR MAG	NR	GAP NS	DEG	RMS SEC	MIN DIS	ERH KM	ERZ KM	NO FM	REMK
1986	APR	19	1349	13.02	19	20.75	155	12.92	8.67	2.0	2.2	37	3	63	.09	3	0.3	0.3	28 SF2	
		19	22 5	20.92	19	20.09	155	12.27	8.31	1.4	1.2	23	2	78	.07	5	0.5	0.8	16 SF3	
		20	148	28.49	19	15.12	155	29.68	8.38	2.1	1.4	30	2	102	.15	1	0.5	1.0	18 LSW	
		20	1049	19.01	19	19.68	155	6.83	7.14	1.6	2.0	38	6	119	.11	5	0.3	0.5	39 SF4	
		20	1240	24.34	19	16.34	155	13.19	5.24		1.0	25	5	181	.11	1	0.5	0.5	21 SF2	
		20	2016	17.87	19	21.42	155	6.65	6.66	1.7	1.5	34	4	84	.13	4	0.5	0.8	21 SF4	
		20	23 9	32.34	19	11.77	155	32.47	6.15	2.3	2.3	34	4	166	.14	7	0.6	1.2	32 LSW	
		21	257	26.04	19	21.35	155	18.04	27.58	2.7	2.6	60	17	36	.11	3	0.4	0.4	44 DEP	
		21	931	32.54	19	19.85	155	8.28	7.95	1.9	2.5	36	6	83	.09	5	0.4	0.6	22 SF4	
		21	1344	50.02	19	33.55	155	22.28	13.18	1.6	1.3	15	2	192	.09	7	1.3	0.7	10 DML	
		21	16 6	40.62	19	32.93	155	22.90	13.23	1.7	1.4	26	2	92	.10	6	0.6	0.5	18 DML	
		21	1811	0.18	19	21.65	155	7.09	7.58	2.1	2.4	46	10	77	.13	3	0.4	0.6	33 SF4	
		22	241	53.18	19	30.96	154	41.03	8.49	2.2	2.0	23	1	303	.11	17	2.7	0.6	22 LER	
		22	752	34.03	19	11.00	155	27.57	8.88	2.5	3.2	47	9	120	.16	3	0.5	0.9	27 LSW F	
		22	1424	58.76	19	19.98	155	10.96	7.82	1.5	1.1	30	5	87	.11	4	0.4	0.6	28 SF3	
		22	1511	10.37	19	25.54	155	29.33	9.16	2.3	2.0	39	7	37	.11	6	0.3	0.6	35 KAO	
		22	1843	51.33	19	17.95	155	16.23	32.08	4.4	4.7	49	1	121	.12	4	0.6	1.1	50 DEP F	
		22	1856	27.49	19	17.85	155	16.29	29.58	2.5	2.9	59	18	123	.10	4	0.4	0.3	41 DEP	
		22	1940	6.50	19	18.11	155	15.97	29.01	2.3	1.8	46	12	116	.11	4	0.6	0.4	34 DEP	
		23	149	52.03	19	18.65	155	15.92	29.75	3.2	3.4	61	17	104	.12	4	0.5	0.4	45 DEP F	
		23	437	39.00	19	23.20	154	58.33	7.92	2.2	2.1	37	3	176	.14	4	0.8	0.5	36 LER	
		23	2044	1.00	19	28.94	155	25.06	4.05	2.5	2.2	44	7	79	.12	3	0.2	0.6	26 KAO	
		24	352	1.70	18	59.24	156	16.81	11.52		1.1	38	7	329	.15	53	7.8	11.1	33 DIS	*
		24	519	54.18	19	16.59	155	28.25	9.86	2.0	2.4	31	3	58	.13	4	0.4	0.6	31 LSW	
		24	17 9	58.98	19	31.39	156	38.97	16.08	2.8	2.4	10	2	325	.10	86	4.0	14.3	9 DIS	*
		24	2033	26.44	19	21.26	155	1.33	7.25	2.1	1.9	36	3	171	.13	4	0.6	0.5	24 SF5	
		25	8 6	27.27	19	24.23	155	16.08	3.52	1.5	1.1	14	2	124	.08	1	0.5	0.5	10 SEC	
		25	1320	38.75	19	19.32	155	11.07	6.47	1.5	1.2	29	3	102	.09	6	0.4	0.8	24 SF3	
		26	044	25.22	19	37.02	155	10.13	7.00	2.4	2.1	6	1	324	.10	24	2.6	14.1	1 KEA	L*
		26	159	23.32	19	18.61	155	16.03	31.02	2.6	2.7	57	12	106	.11	4	0.5	0.6	42 DEP	
		26	225	54.21	19	18.06	155	13.75	9.22	2.2	2.5	39	4	141	.12	7	0.5	0.7	33 SF2	
		26	456	47.06	19	20.89	155	2.45	7.10	2.0	2.1	34	3	155	.11	2	0.6	0.7	22 SF5	
		26	719	47.94	20	55.74	155	37.55	16.45	5.0	5.3	68	20	321	.16	90	2.3	17.3	49 DIS	F*
		26	8 2	21.42	20	52.55	155	40.59	17.55	2.6	2.2	32	11	258	.05	61	0.6	12.0	30 DIS	*
		26	836	47.15	20	57.74	155	39.62	16.99	3.0	2.8	45	11	261	.29	65	1.1	24.7	43 DIS	*
		26	1356	41.83	19	16.01	155	29.50	10.03	2.3	2.2	40	3	59	.15	2	0.4	0.6	25 LSW	
		26	1725	19.21	19	29.52	154	47.10	7.89	1.3	0.9	15	1	285	.24	6	4.8	1.5	9 LER	
		27	045	15.41	19	10.34	155	30.41	50.63	2.5		32	2	177	.13	5	1.4	1.4	11 DLS	T
		27	114	58.35	19	7.81	155	28.33	42.74	2.1		17	1	255	.07	14	2.2	2.2	11 DLS	T
		27	225	9.70	20	54.46	155	36.80	16.99	3.1	2.6	59	20	320	.14	88	0.8	16.9	43 DIS	*
		27	245	38.77	19	21.79	155	0.91	3.76	1.8	1.5	29	1	168	.19	5	0.8	2.2	13 SSF	
		27	249	22.99	19	16.89	155	21.11	6.14		1.1	25	2	133	.10	5	0.5	1.5	17 SWR	
		27	427	48.64	19	57.38	155	53.87	38.52	2.7	2.5	45	9	215	.11	23	0.8	0.9	25 KOH	
		27	539	38.28	19	20.02	155	9.80	7.02		1.2	18	2	84	.08	4	0.6	1.0	17 SF3	
		27	832	29.94	19	19.83	155	12.01	6.61	1.9	2.1	39	6	85	.10	6	0.3	0.6	29 SF3	

YEAR	MON	DA	ORIGIN TIME HRMN	SEC	LAT N DEG	MIN	LON W DEG	MIN	DEPTH KM	AMP MAG	DUR MAG	NR	GAP NS	DEG	RMS SEC	MIN DIS	ERH KM	ERZ KM	NO FM	REMK
1986	APR	27	1054	1.60	19	20.87	155	30.39	9.67	2.1	2.0	34	2	50	.07	6	0.4	0.6	27 KAO	
		27	1357	51.24	19	19.44	155	7.30	7.80	2.1	2.2	39	6	114	.11	4	0.4	0.5	30 SF4	
		28	146	13.98	19	23.79	155	29.79	9.16	2.1	1.9	45	12	43	.10	4	0.3	0.5	36 KAO	
		28	615	59.39	19	20.08	155	11.62	7.86	1.8	2.1	39	6	82	.13	5	0.4	0.5	36 SF3	
		28	1235	0.94	19	19.14	155	8.54	5.16	1.6	1.5	20	1	84	.10	3	0.5	1.5	16 SF4	
		28	1433	52.72	19	24.93	155	19.37	6.60	1.8	1.2	21	5	99	.10	2	0.4	0.6	16 KAO	
		28	2042	30.29	19	16.10	155	28.66	6.36	1.7	1.4	30	4	61	.18	3	0.4	1.0	27 LSW	
		29	0 4	10.66	20	1.25	155	26.90	12.84		1.9	16	0	313	.06	18	7.9	0.8	18 KEA	
		29	1125	44.26	19	26.66	154	53.46	7.63	2.4	2.9	38	4	163	.13	4	0.5	0.4	27 LER	
		29	1848	59.97	19	21.25	155	4.52	7.44		1.7	24	2	89	.15	4	0.6	0.9	16 SF5	
		30	230	31.71	19	21.21	155	7.29	5.53	1.6	2.0	49	14	83	.16	4	0.4	0.8	37 SF4	
		30	3 3	24.76	19	19.33	155	8.80	6.12	1.6	1.4	25	3	86	.10	4	0.4	0.8	27 SF4	
		30	318	33.58	20	22.62	155	41.87	34.37	2.6	1.9	34	6	308	.09	58	1.2	2.0	28 KOH	
		30	938	21.74	19	19.71	155	8.68	5.25	1.5	1.1	17	2	77	.07	5	0.4	0.9	18 SF4	
		30	1010	34.29	19	19.23	155	11.88	4.67	1.4	1.5	29	4	99	.11	5	0.3	1.5	25 SSF	
		30	1047	32.24	19	53.71	155	26.53	28.87	3.0	3.2	65	19	192	.11	10	0.5	0.6	47 KEA	
		30	2113	26.52	19	21.68	155	4.43	7.73	1.7	1.4	32	3	84	.13	4	0.5	0.6	31 SF5	
		30	2132	35.60	19	21.94	155	3.58	3.86	1.7	1.1	24	3	108	.27	4	0.8	1.8	22 SSF	
	MAY	1	325	59.03	19	17.77	155	13.40	4.23	1.5	1.1	20	0	92	.11	1	0.5	1.1	12 SSF	
		1	417	44.61	19	7.12	155	27.92	30.96	2.0	1.6	36	3	174	.08	4	0.8	1.3	32 DLS	
		1	1137	26.70	19	21.88	155	4.65	6.92	1.7	1.7	32	1	81	.12	5	0.5	1.0	24 SF5	
		1	1722	3.17	19	42.05	155	46.40	31.64	2.7	2.7	55	9	135	.10	7	0.6	0.8	41 HUA	
		1	1728	12.53	19	19.27	155	7.73	7.13	1.6	1.9	47	15	105	.11	4	0.3	0.5	39 SF4	
		2	1159	44.87	19	19.57	155	7.32	8.06		1.2	21	2	111	.08	4	0.6	1.0	16 SF4	
		2	1411	38.06	19	22.26	155	2.62	0.02	1.7	1.5	26	2	132	.27	4	0.6	0.4	14 SSF	*
		2	1537	2.81	19	18.74	155	13.38	7.88	1.8	1.4	22	3	79	.05	3	0.4	0.8	15 SF2	
		2	1644	24.44	19	15.55	155	30.02	8.91	2.4	2.3	40	3	73	.18	1	0.5	0.9	24 LSW	
		2	23 5	36.83	19	28.43	155	28.60	10.46	2.1	1.2	12	2	105	.10	7	0.8	2.5	10 KAO	
		3	416	6.65	19	47.19	155	24.09	15.35	2.4	2.0	27	8	250	.12	29	0.8	1.8	18 KEA	
		3	915	10.45	19	20.50	155	9.42	8.15	1.7	1.4	27	1	72	.07	3	0.5	0.8	20 SF3	
		3	11 9	47.58	19	19.77	155	7.07	7.21	1.6	1.4	18	0	112	.09	5	0.7	1.5	18 SF4	
		3	1542	11.94	19	28.34	155	26.76	5.91	2.8	2.4	58	16	55	.16	6	0.3	0.9	40 KAO	
		3	1651	43.07	19	26.65	155	28.88	9.79	1.9	1.2	24	1	47	.07	7	0.4	1.1	20 KAO	
		3	1749	39.14	19	24.20	155	15.90	3.06	2.0	2.1	26	8	123	.10	1	0.3	0.2	16 SEC	
		3	2137	6.63	19	11.62	155	29.41	35.84	2.0	1.5	35	1	73	.07	5	0.8	1.3	32 DLS	
		4	527	43.73	19	28.88	155	24.76	11.10	1.8	1.2	16	2	154	.10	3	0.8	1.1	12 KAO	
		4	829	1.00	19	19.82	155	11.57	7.25	1.9	2.2	43	2	88	.14	5	0.4	0.7	29 SF3	
		4	10 9	26.11	19	19.12	155	10.79	5.95	1.5	1.3	30	4	108	.12	6	0.4	1.1	18 SF3	
		4	11 6	41.04	19	11.98	155	28.33	4.32	2.1	1.5	29	1	96	.14	5	0.4	2.3	20 LSW	
		4	1257	6.46	19	22.92	155	4.21	7.70	2.0	2.3	36	2	91	.11	3	0.4	0.5	19 SF5	
		4	1528	1.48	19	20.31	155	10.63	7.12	2.0	2.3	43	5	81	.12	4	0.4	0.7	28 SF3	
		4	16 7	36.36	19	18.86	155	15.31	5.74	1.4	1.1	25	1	106	.10	4	0.4	1.3	17 SF1	
		4	1942	23.59	19	19.35	155	15.38	6.88	1.7	1.8	36	1	89	.11	4	0.4	0.8	26 SF1	
		5	154	29.95	19	22.90	155	26.72	9.87	2.5	2.6	49	2	34	.13	2	0.3	0.4	35 KAO	
		5	953	15.77	19	19.87	155	8.24	7.77	2.1	2.4	40	7	84	.10	5	0.4	0.6	31 SF4	

YEAR	MON	DA	ORIGIN TIME HRMN	SEC	LAT N DEG	MIN	LON W DEG	MIN	DEPTH KM	AMP MAG	DUR MAG	NR	GAP NS	DEG	RMS SEC	MIN DIS	ERH KM	ERZ KM	NO FM	REMK
1986	MAY	5	1230	11.15	19	18.82	155	12.57	8.37		1.2	35	7	98	.13	4	0.4	0.6	31	SF2
		5	1332	6.57	19	44.60	155	2.43	0.00	2.2	2.5	19	0	250	.23	6	3.1	5.0	12	HIL B*
		5	1719	15.16	19	27.52	155	29.71	11.49	1.7	1.4	28	2	46	.09	7	0.4	0.8	20	KAO
		5	1817	32.54	19	23.05	155	3.41	7.59	1.7	1.2	30	0	102	.13	3	0.6	1.1	19	SF5
		5	2026	4.58	19	21.23	155	1.48	7.01	2.1	2.4	38	1	169	.12	4	0.6	0.5	25	SF5
		5	2051	39.16	19	21.54	155	1.56	5.43	0.8	1.2	23	1	160	.12	4	0.7	1.5	13	SF5
		5	2139	11.69	19	20.41	155	12.58	7.97	1.4	1.2	26	2	70	.10	4	0.4	0.7	21	SF2
		5	2153	17.50	19	46.16	155	22.26	25.28	2.4	1.9	47	6	88	.11	9	0.5	1.2	37	KEA
		6	634	25.58	19	16.41	155	26.52	8.32	1.7	1.1	26	5	60	.13	6	0.4	0.9	27	LSW
		6	711	10.24	19	30.90	155	23.20	13.69	2.4	2.1	56	15	86	.09	2	0.3	0.3	44	DML
		6	1510	2.42	19	20.48	155	12.79	8.91	3.0	3.3	54	10	67	.13	4	0.3	0.3	43	SF2
		6	1650	13.86	19	13.46	155	24.79	37.69	2.0	1.8	44	9	141	.12	2	0.7	0.7	35	DEP
		6	1824	34.48	20	57.30	155	30.72	34.82	3.0	2.5	33	7	328	.12	120	1.9	4.5	31	DIS
		6	1924	33.79	19	30.91	155	23.29	13.79	2.9	2.8	53	12	48	.12	2	0.3	0.3	34	DML
		6	1948	59.89	19	21.41	155	0.23	8.27	2.6	2.9	46	4	186	.13	5	0.5	0.4	36	SF5
		6	2030	5.83	19	19.59	155	8.35	7.08	2.0	2.0	37	8	84	.12	4	0.3	0.6	24	SF4
		6	2036	17.55	19	54.83	155	26.95	29.83	2.5	1.7	44	7	158	.10	11	0.5	0.6	39	KEA
		7	011	47.18	19	21.73	155	11.97	2.57	1.6	1.6	18	3	105	.07	3	0.5	0.4	15	SER
		7	018	16.14	19	30.79	155	23.12	13.59	2.3	2.3	45	11	51	.09	2	0.3	0.3	35	DML
		7	048	7.91	19	30.90	155	23.44	13.80	2.7	2.6	52	14	48	.10	2	0.2	0.3	38	DML
		7	5	2 22.35	19	22.50	155	29.10	9.49	2.3	2.6	46	6	35	.10	3	0.3	0.4	43	KAO
		7	13	8 12.11	19	23.95	155	16.02	2.59	1.7	1.0	14	3	109	.10	1	0.4	0.4	10	SEC
		7	1545	26.16	19	18.03	155	14.09	11.36	3.2	3.8	56	9	141	.11	7	0.4	0.3	40	SF2
		7	1546	30.56	19	17.13	155	14.12	7.70	2.6	3.1	41	5	140	.13	1	0.4	0.7	35	SF2
		7	1556	30.95	19	17.17	155	14.10	6.84	1.5	1.2	29	2	161	.09	1	0.6	0.9	21	SF2
		7	1635	27.34	19	17.76	155	14.18	6.31	1.8	1.4	28	1	123	.11	2	0.6	1.0	24	SF2
		7	17	4 49.73	19	19.13	155	13.42	8.26	1.7	2.0	42	2	126	.13	6	0.4	0.6	28	SF2
		7	17	6 31.57	19	18.97	155	13.24	9.01	2.2	2.6	51	5	129	.12	7	0.4	0.3	39	SF2
		7	2016	50.46	19	22.25	155	26.67	10.53	1.6	1.2	27	2	52	.10	2	0.4	0.7	21	KAO
		7	2019	34.25	19	16.22	155	13.30	8.00	1.9	1.6	33	5	198	.11	2	0.6	0.9	23	SF2
		7	21	7 36.33	19	18.08	155	13.05	7.22	1.5	1.2	32	3	103	.10	2	0.5	0.8	32	SF2
		8	442	27.85	19	10.43	155	23.32	35.52			16	0	194	.08	7	2.1	5.7	13	DEP T
		8	547	24.75	19	25.17	155	19.36	4.73	1.6	1.1	25	9	109	.10	3	0.3	0.6	17	KAO
		8	627	4.27	19	20.34	155	13.32	8.41		1.2	21	2	63	.06	4	0.4	0.8	15	SF2
		8	1147	28.02	19	24.38	155	17.17	1.83	2.2	1.8	20	5	66	.11	1	0.3	0.2	11	SSC
		8	1322	53.29	21	13.13	155	32.57	15.67	2.7	3.3	35	2	283	.15	89	3.8	7.7	25	DIS
		8	1550	32.10	19	52.00	155	35.90	20.86	2.8	2.9	49	7	117	.09	6	0.5	1.1	33	KEA
		8	1656	50.12	19	24.31	155	16.42	0.67	1.7	1.6	13	3	121	.19	1	0.4	0.3	7	SEC L
		8	2249	8.36	19	19.17	155	13.58	8.89	2.0	2.3	45	3	136	.12	6	0.4	0.3	32	SF2
		9	425	17.52	19	25.97	155	30.07	9.52	1.9	1.6	40	6	39	.11	8	0.3	0.6	36	KAO
		9	717	58.54	19	30.70	155	23.50	13.89	2.7	2.5	56	16	47	.11	2	0.3	0.3	43	DML
		9	1052	6.75	19	23.95	155	15.44	3.62	1.9	1.8	38	12	101	.17	2	0.3	0.3	26	SEC
		9	1238	41.33	19	22.38	155	29.07	9.73	2.1	1.7	46	6	38	.13	3	0.3	0.5	41	KAO
		10	137	47.93	19	29.40	155	23.84	10.19	1.8	1.1	35	7	62	.11	1	0.4	0.5	30	KAO
		10	633	48.95	19	30.77	155	23.12	13.22	2.1	1.4	37	9	85	.10	2	0.3	0.3	22	DML

YEAR	MON	DA	ORIGIN TIME HRMN	SEC	LAT N DEG	MIN	LON W DEG	MIN	DEPTH KM	AMP MAG	DUR MAG	NR	GAP NS	DEG	RMS SEC	MIN DIS	ERH KM	ERZ KM	NO FM	REMK
1986	MAY	10	653	33.39	19	14.54	155	21.90	6.56		1.0	25	0	157	.10	4	0.6	1.4	16	SWR
		10	845	58.95	19	23.94	155	29.67	8.93		1.3	38	1	38	.09	4	0.3	0.6	29	KAO
		10	856	13.05	19	20.82	155	30.29	10.02		1.0	28	2	50	.08	6	0.4	0.9	22	KAO
		10	919	58.48	19	19.86	155	7.62	6.64	1.6	1.4	28	1	99	.11	5	0.5	1.0	23	SF4
		10	1310	3.39	19	20.34	155	13.07	7.59	1.4	1.1	27	2	66	.11	4	0.4	0.7	25	SF2
		11	050	50.07	19	20.84	155	6.68	6.90	1.9	1.3	30	3	95	.13	5	0.5	0.7	23	SF4
		11	922	22.09	19	14.32	155	16.92	44.50	2.3	2.6	50	6	165	.11	7	0.9	0.8	42	DEP
		11	1226	46.95	19	14.67	155	29.80	47.85	2.1	1.7	33	3	67	.07	1	0.8	1.3	28	DLS
		12	446	36.73	19	18.21	155	13.33	5.59	1.4	1.5	33	5	88	.12	2	0.3	0.6	32	SF2
		12	619	14.57	19	30.67	155	23.37	13.84	2.6	2.6	53	17	47	.12	2	0.3	0.3	39	DML
		12	950	31.92	19	24.28	155	25.42	8.86	2.6	2.6	58	15	32	.13	2	0.3	0.4	44	KAO
		12	1233	50.55	19	13.58	155	34.85	8.65	1.9	1.2	38	9	158	.17	5	0.5	0.7	31	LSW
		12	18	6 40.88	19	17.48	155	15.55	9.03	1.8	1.7	40	8	160	.11	4	0.3	0.3	40	SF1
		12	1846	36.60	19	26.51	155	30.07	8.93	2.1	1.4	46	9	40	.10	9	0.3	0.6	38	KAO
		12	2255	23.09	19	22.00	155	5.06	6.32	1.6	1.5	34	5	75	.12	5	0.4	0.7	32	SF5
		13	047	6.18	19	23.27	155	25.86	10.13	1.5	1.2	37	7	38	.12	3	0.3	0.5	32	KAO
		13	7	8 39.12	19	25.17	155	16.06	16.70	3.4	3.7	73	24	37	.14	2	0.3	0.3	48	DEP F
		13	18	9 13.64	19	10.97	155	31.18	40.26	2.1	1.6	34	3	100	.08	6	0.8	1.1	30	DLS
		14	0	5 26.70	19	19.21	155	11.68	5.39	1.4	1.3	33	4	101	.14	5	0.4	1.1	30	SF3
		14	650	7.09	19	19.41	155	11.62	7.19	1.5	1.5	25	2	97	.08	5	0.4	0.8	23	SF3
		14	951	26.57	19	51.30	155	32.85	23.20	2.1	1.6	21	3	166	.09	12	0.7	1.3	20	KEA
		14	1032	9.78	19	23.77	155	30.19	10.02	2.3	2.2	41	3	46	.09	5	0.3	0.5	39	KAO
		14	1624	41.96	19	29.17	154	53.00	1.92	2.0	1.4	23	0	156	.15	5	0.8	1.5	20	SLE
		15	1412	59.25	19	14.48	155	25.76	8.41		1.4	16	1	107	.09	3	0.6	1.4	10	LSW
		15	1822	53.39	19	12.49	155	32.59	3.32	1.9	1.4	22	1	158	.15	6	0.7	2.9	17	LSW
		15	1927	8.46	19	25.53	155	29.32	9.81	2.2	2.0	43	8	37	.12	6	0.3	0.7	29	KAO
		16	029	25.15	19	22.14	155	29.11	10.05	1.9		42	5	39	.09	3	0.3	0.4	40	KAO
		16	047	14.76	19	19.55	155	11.38	7.44	1.5	1.2	39	9	94	.13	5	0.3	0.5	34	SF3
		16	5	2 11.59	19	18.16	154	52.67	45.95	2.6	2.3	52	11	247	.12	17	0.8	0.8	41	LER
		16	542	47.29	19	18.74	155	13.01	5.94	1.4	1.7	41	5	89	.13	3	0.4	0.6	38	SF2
		16	1425	5.36	19	19.60	155	12.21	6.48	1.7	1.5	34	5	86	.12	5	0.3	0.7	30	SF3
		17	121	33.04	19	31.16	155	23.27	13.68	2.4	2.2	46	16	48	.11	3	0.3	0.3	32	DML
		17	652	45.49	19	25.58	155	19.93	7.96	2.0	1.4	35	10	113	.11	4	0.3	0.5	27	KAO
		17	1017	43.78	19	16.73	155	13.44	6.80	1.5	1.2	33	8	182	.11	1	0.4	0.6	27	SF2
		17	19	7 58.25	19	19.52	155	11.04	8.88	1.5	1.7	24	1	97	.07	5	0.5	1.0	27	SF3
		18	1013	59.59	19	20.58	155	11.23	8.25	2.2	2.4	42	8	75	.12	4	0.3	0.4	37	SF3
		18	1151	0.72	19	17.03	155	27.85	8.96	1.7	1.7	42	8	55	.15	5	0.4	0.6	36	LSW
		18	1953	18.88	20	1.54	155	48.46	12.83	2.4	1.7	26	14	189	.18	12	1.2	0.5	18	KOH
		19	1349	42.39	19	18.19	155	15.75	8.22	1.7	1.9	49	9	115	.14	5	0.3	0.5	40	SF1
		19	1548	7.92	19	24.10	155	15.85	3.15	1.8	1.6	28	10	118	.07	1	0.2	0.2	19	SEC
		19	1628	18.25	19	18.64	155	26.46	8.51	1.6	1.9	43	8	54	.16	6	0.3	0.7	36	LSW
		19	1946	57.52	19	18.27	156	22.60	37.77	2.6	2.6	35	5	313	.12	52	1.2	1.8	36	DIS
		19	2038	7.23	19	8.00	155	21.33	52.54	2.5	2.3	43	2	229	.09	12	1.7	1.7	41	LOI
		19	2224	33.68	19	25.35	155	22.98	8.81	2.0	1.6	45	8	39	.12	4	0.3	0.6	40	KAO
		20	022	47.12	19	18.60	155	13.41	7.22	1.8	1.8	39	5	80	.12	3	0.4	0.6	37	SF2

YEAR	MON	DA	ORIGIN TIME HRMN	SEC	LAT N DEG	MIN	LON W DEG	MIN	DEPTH KM	AMP MAG	DUR MAG	NR	NS	GAP DEG	RMS SEC	MIN DIS	ERH KM	ERZ KM	NO FM	REMK
1986	MAY	20	025	49.37	19	19.51	155	12.32	3.68	1.4	1.6	37	3	87	.13	5	0.3	1.2	35	SSF
		20	139	34.31	19	19.24	155	14.93	6.58	1.4	1.3	34	5	93	.13	5	0.4	0.6	31	SF1
		20	227	23.17	19	16.97	155	22.45	8.75	2.2	2.6	56	13	121	.15	6	0.4	0.4	48	SWR
		20	1041	2.08	19	22.00	155	16.38	27.47	2.1	1.8	52	14	56	.10	1	0.5	0.5	38	DEP
		20	1247	54.36	19	44.26	155	2.46	0.00	2.4	2.7	24	0	257	.21	5	2.9	1.8	37	HIL B*
		20	2042	56.82	19	35.65	156	22.45	10.98	2.6	1.8	23	5	315	.12	49	1.7	2.6	19	DIS
		21	837	16.70	19	23.41	155	18.15	29.26	3.1	3.4	69	20	27	.12	2	0.4	0.4	48	DEP F
		21	12	3 3.22	18	47.85	155	10.71	16.02	1.4	1.5	36	1	282	.12	54	2.6	12.2	33	LOI *
		21	1443	27.09	19	21.32	155	1.09	8.23	1.7	1.5	39	4	183	.14	4	0.7	0.5	23	SF5
		22	217	20.16	19	25.11	155	29.63	10.02	2.3	1.4	45	9	37	.12	6	0.3	0.5	36	KAO
		22	6	1 58.13	19	17.25	155	21.07	6.61		1.1	25	2	129	.09	4	0.5	1.3	19	SWR
		22	1236	52.74	19	23.88	155	16.12	2.48	1.7	1.5	19	5	103	.12	1	0.3	0.3	14	SEC
		22	1427	56.28	19	19.53	155	7.62	6.76		1.5	28	1	104	.09	4	0.5	0.9	21	SF4
		22	1826	33.72	19	20.25	155	7.26	6.89	0.8	1.2	25	0	99	.08	6	0.4	0.8	19	SF4
		22	20	4 50.55	19	19.50	155	11.39	9.05	2.9	3.5	42	5	96	.12	5	0.4	0.4	41	SF3
		22	2018	14.38	19	19.59	155	11.07	7.76	1.5	1.7	33	3	95	.12	5	0.5	0.7	26	SF3
		23	231	18.83	19	28.09	155	26.68	6.10	1.5	1.1	29	6	74	.14	6	0.3	1.2	24	KAO
		23	457	36.37	19	13.90	155	22.05	51.73	2.1	3.1	16	2	157	.08	4	2.2	2.0	5	DEP L
		23	1416	14.04	19	29.98	155	51.13	23.54	2.9	3.3	63	16	103	.11	7	0.5	0.7	47	KON F
		23	1618	58.13	19	23.51	155	30.19	9.32	1.6	1.2	36	2	46	.11	5	0.4	0.6	26	KAO
		23	1647	52.77	19	30.72	155	23.57	13.50	1.5	1.3	25	3	84	.09	2	0.5	0.4	12	DML
		24	055	8.56	19	21.85	155	27.98	7.26		1.2	29	4	44	.10	1	0.3	0.4	27	KAO
		24	954	13.10	19	15.99	155	26.15	7.89		1.2	28	6	66	.16	5	0.4	0.8	25	LSW
		25	633	11.90	19	28.53	154	46.93	10.54	2.9	3.0	42	4	286	.11	7	1.1	0.4	39	LER
		25	1043	58.96	19	23.93	155	15.65	3.19	2.3	2.0	29	8	108	.08	2	0.2	0.3	19	SEC
		25	1416	32.94	19	20.23	155	6.66	8.21	2.3	2.5	45	9	108	.12	6	0.4	0.5	33	SF4
		25	15	7 52.45	19	29.93	155	52.96	9.31	2.2	1.5	26	2	119	.14	4	0.8	0.4	10	KON
		25	1545	25.47	19	19.46	155	8.42	6.63	1.6	1.4	32	4	83	.09	4	0.4	0.8	17	SF4
		25	1654	40.81	19	27.18	155	51.35	7.85	2.1	1.3	27	2	116	.13	8	0.6	0.6	21	KON
		25	1815	28.96	19	26.19	155	18.64	7.60	1.9	1.2	23	7	154	.11	2	0.5	0.6	13	INT
		26	040	8.34	19	21.19	155	3.15	8.03	2.0	2.4	30	1	117	.13	2	0.6	0.6	27	SF5
		26	141	48.31	19	59.07	155	39.37	12.40	1.1	1.4	25	6	145	.12	21	2.5	3.8	18	KOH
		26	3	4 15.14	19	20.24	155	11.88	8.46	1.4	1.6	27	0	78	.10	5	0.5	0.8	28	SF3
		26	1412	26.29	19	20.53	155	8.38	7.23		1.2	19	1	75	.07	4	0.6	1.0	15	SF4
		27	1	2 18.04	19	24.16	155	15.70	3.28	2.9	3.0	48	7	38	.12	2	0.2	0.3	42	SEC F
		27	823	44.03	19	5.12	156	15.46	7.85	3.2		49	14	298	.11	45	0.6	0.8	41	KON
		27	1130	24.61	19	10.91	155	38.15	5.52	2.0	1.8	29	1	103	.17	8	0.7	1.7	15	LSW
		27	1815	39.30	19	9.22	155	35.63	4.64	2.1	1.4	32	8	115	.16	11	0.5	4.6	26	LSW
		27	2244	39.78	19	56.43	155	33.00	37.21	2.3	1.7	42	8	152	.12	15	0.7	0.9	36	KEA
		28	1028	47.51	19	26.72	155	29.18	8.47	1.9	1.2	27	2	90	.10	7	0.4	1.1	18	KAO
		28	1041	28.56	19	21.83	155	12.66	2.83	0.8	1.1	17	4	97	.06	2	0.4	0.3	14	SER
		28	1155	21.10	19	29.06	155	26.18	11.03	1.9	1.2	38	9	62	.09	5	0.3	0.4	29	KAO
		28	1255	43.21	19	18.29	155	26.11	11.19	2.1	2.1	31	3	57	.12	6	0.4	0.6	33	LSW
		28	2310	6.87	19	19.71	155	7.99	6.94	2.0	2.0	42	5	92	.14	4	0.4	0.7	42	SF4
		29	639	22.75	19	19.41	155	13.64	8.81	2.1	2.2	49	7	123	.13	6	0.3	0.5	44	SF2

YEAR	MON	DA	ORIGIN TIME HRMN	SEC	LAT N DEG	MIN	LON W DEG	MIN	DEPTH KM	AMP MAG	DUR MAG	NR	NS	GAP DEG	RMS SEC	MIN DIS	ERH KM	ERZ KM	NO FM	REMK
1986	MAY	29	1058	0.98	19	20.10	155	11.31	7.59	1.8	2.1	41	5	84	.11	4	0.4	0.5	38	SF3
		29	1124	43.57	19	20.01	155	12.57	8.38	2.0	2.4	40	5	75	.12	5	0.4	0.6	37	SF2
		29	1332	32.31	19	20.46	155	12.74	7.81	1.1	1.2	25	3	68	.11	4	0.5	0.7	23	SF2
		29	1815	10.34	19	19.51	155	12.56	6.46	1.7	1.8	38	6	83	.10	5	0.4	0.7	34	SF2
		29	1930	43.81	19	20.48	155	6.32	8.02	2.6	3.2	55	13	107	.12	6	0.3	0.3	47	SF4
		30	229	58.32	19	25.32	155	19.91	6.71	1.9	1.4	29	6	105	.11	3	0.4	0.8	23	KAO
		30	1248	19.30	19	21.79	155	12.58	3.41	1.9	2.0	27	7	99	.06	2	0.4	0.2	16	SER
		30	1432	46.17	19	23.43	155	14.62	28.22	2.0	2.0	50	8	54	.11	2	0.5	0.4	36	DEP
		30	1749	0.37	19	21.61	155	12.01	2.32	1.6	1.8	15	3	116	.08	3	0.7	0.5	9	SER
		30	2014	30.43	19	20.52	155	12.77	7.71	1.6	1.5	33	3	67	.12	4	0.4	0.5	29	SF2
		30	2033	11.82	19	47.90	156	11.90	12.69	3.4	3.4	51	9	294	.19	40	1.1	1.1	41	HUA
		30	2139	15.39	19	19.19	155	15.27	8.28	1.6	1.5	37	4	90	.11	4	0.4	0.6	23	SF1
		31	510	5.91	19	17.69	155	12.95	6.20	1.5	1.2	23	0	123	.11	2	0.6	1.2	15	SF2
	JUN	1	425	27.85	19	23.50	155	15.13	3.14	2.1	2.0	38	8*	51	.11	2	0.2	0.3	34	SEC
		1	830	41.07	19	25.19	155	19.47	7.50	1.4	1.2	38	14	85	.12	3	0.3	0.5	24	KAO
		1	1618	53.75	19	20.49	155	12.57	7.21	1.6	1.8	36	5	70	.13	4	0.4	0.5	33	SF2
		1	1944	17.73	19	23.46	155	6.02	1.27	1.9	2.5	10	0	110	.09	3	0.5	0.5	4	SME
		1	21	2 8.93	19	22.41	155	1.39	7.93	1.8	1.6	27	3	157	.13	5	0.5	0.5	26	SF5
		2	0	9 23.99	19	21.05	155	11.63	8.10	2.5	2.7	52	11	68	.13	4	0.3	0.4	45	SF3
		2	355	7.43	18	59.34	155	13.03	16.50	2.1	1.6	40	5	271	.16	32	1.6	15.3	38	LOI *
		2	929	43.95	19	23.84	155	15.51	2.97	1.9	1.6	21	7	102	.07	2	0.3	0.2	15	SEC
		2	13	3 10.44	19	23.93	155	15.95	3.25	2.2	2.0	32	9	69	.11	1	0.2	0.2	26	SEC
		2	1315	9.85	19	23.97	155	15.90	2.74	2.4	2.6	47	13	40	.13	1	0.2	0.2	36	SEC
		2	1359	48.43	19	16.31	155	21.72	7.43		1.8	40	6	136	.15	5	0.4	0.7	37	SWR
		2	14	2 7.15	19	17.02	155	21.74	5.40		1.8	38	7	128	.15	6	0.3	1.0	34	SWR
		2	1415	37.93	19	24.16	155	16.03	2.78	1.6	1.3	17	6	122	.09	1	0.3	0.3	13	SEC
		2	1719	22.37	19	24.80	155	19.92	6.93	2.5	2.4	55	13	37	.14	2	0.3	0.4	45	KAO
		2	1926	15.78	19	18.40	155	13.21	6.87	1.5	1.8	40	4	90	.12	3	0.4	0.7	37	SF2
		3	450	8.48	19	19.74	155	30.44	5.95	2.1	1.8	27	0	67	.16	7	0.6	1.7	21	KAO
		3	826	31.04	19	20.54	155	12.87	7.84	1.7	1.5	36	4	66	.12	4	0.4	0.6	36	SF2
		3	856	26.88	19	26.05	154	55.85	5.67	2.1	2.0	40	5	156	.13	3	0.5	0.7	37	LER
		3	1252	42.42	19	20.65	155	4.04	5.65	1.7	1.5	29	1	104	.12	2	0.6	1.2	29	SF5
		3	1334	36.30	19	53.74	155	20.28	26.52	2.3	1.6	44	8	219	.10	1	0.7	0.5	41	KEA
		3	1751	40.96	19	21.66	155	7.02	6.37	1.6	1.5	32	4	78	.12	3	0.5	0.6	32	SF4
		3	2231	46.74	19	40.82	155	50.07	8.53	2.7	2.8	34	3	128	.11	1	0.7	0.4	36	HUA
		4	0	8 29.05	19	12.80	155	28.13	11.21	2.3	2.1	38	6	103	.13	5	0.4	0.5	32	LSW
		4	244	43.89	19	28.11	154	54.01	5.50	1.9	1.6	31	4	122	.10	2	0.4	0.5	30	LER
		4	1218	56.37	19	19.61	155	11.75	6.93	1.9	2.4	42	6	91	.14	6	0.4	0.6	38	SF3
		4	13	0 56.84	19	19.41	155	8.36	6.63		1.7	31	2	85	.10	4	0.4	0.7	32	SF4
		4	15	8 58.07	19	27.50	155	27.80	10.76	2.0	1.5	31	5	47	.09	6	0.3	0.6	26	KAO
		4	1527	15.31	19	29.22	155	27.72	7.52	3.3	3.2	59	14	41	.14	5	0.3	0.7	46	KAO
		4	1631	21.26	19	22.85	155	16.10	31.93	2.4	2.3	58	15	49	.11	1	0.6	0.4	43	DEP
		4	21	9 52.79	19	21.29	155	1.73	6.38	2.1	2.0	40	6	161	.14	3	0.4	0.5	37	SF5
		4	2148	59.41	19	19.95	155	10.49	5.31	1.9	2.3	40	4	87	.14	4	0.3	1.1	40	SF3
		4	2238	30.20	19	23.00	155	30.28	9.26	1.7	1.3	36	3	41	.08	5	0.3	0.6	34	KAO

YEAR	MON	DA	ORIGIN TIME HRMN	SEC	LAT N DEG	MIN	LON W DEG	MIN	DEPTH KM	AMP MAG	DUR MAG	NR	GAP NS	DEG	RMS SEC	MIN DIS	ERH KM	ERZ KM	NO FM	REMK
1986	JUN	5	2019	10.38	19	19.59	155	10.73	8.26	1.5	1.5	35	7	96	.11	5	0.3	0.5	34	SF3
		5	2250	7.12	19	16.88	155	50.44	9.96	2.1	1.5	36	9	232	.15	20	0.9	0.5	34	KON
		6	025	57.04	19	24.21	155	26.91	9.83	1.9	1.6	47	7	26	.11	3	0.3	0.4	43	KAO
		6	232	19.48	19	22.68	155	2.96	7.97	2.1	2.4	43	9	113	.13	4	0.3	0.4	40	SF5
		6	446	45.77	20	0.50	156	51.62	6.99	3.0	2.7	42	15	326	.18	113	10.3	13.4	29	DIS *
		6	1218	45.92	19	32.22	155	15.72	21.69	2.3	1.8	58	15	78	.13	12	0.3	0.7	44	DEP
		6	1754	20.99	19	22.03	155	26.37	10.35	1.8	1.2	33	3	41	.11	2	0.4	0.7	31	KAO
		6	1923	12.56	19	21.56	155	4.71	8.00	2.3	2.0	47	10	82	.12	4	0.3	0.6	43	SF5
		6	2343	58.06	19	25.71	155	22.48	8.29	2.2	1.4	45	6	38	.14	5	0.3	0.6	39	KAO
		7	9 1	6.97	19	19.00	155	9.41	7.37	1.6	1.3	40	6	103	.14	4	0.5	0.6	39	SF3
		7	1010	44.61	19	21.86	155	4.98	6.23	1.6	1.2	34	3	77	.13	5	0.4	0.7	37	SF5
		7	1416	14.45	19	20.22	155	10.42	8.23	1.5	1.2	34	3	83	.13	4	0.4	0.4	37	SF3
		7	1652	38.13	19	28.71	155	8.51	5.63	1.8	1.5	10	4	311	.12	14	1.1	12.9	2	GLN L*
		7	2013	50.65	19	25.22	155	18.17	15.00	2.0	1.9	14	6	117	.13	1	1.5	0.8	16	DEP L
		7	2129	4.46	19	18.23	155	21.35	5.56	1.9	1.5	9	3	313	.27	11	3.0	19.7	0	SWR L*
		8	121	55.97	19	13.81	155	12.61	6.99	2.1	1.3	7	1	310	.17	17	2.5	14.7	3	SF2 L*
		8	139	9.46	19	24.10	155	18.83	11.35	1.6	1.5	10	2	124	.07	2	1.9	1.0	2	INT L
		8	319	29.96	19	5.49	156	15.69	39.14	2.6	2.3	25	5	315	.10	45	1.5	2.2	21	KON
		8	1133	9.91	19	20.73	155	1.28	9.23	3.3	3.5	34	3	195	.11	3	0.5	0.4	31	SF5
		8	1136	49.64	19	21.89	155	1.45	5.71	1.8	1.6	21	0	164	.12	4	0.8	1.2	19	SF5
		8	1142	41.82	19	25.17	155	20.53	0.88	2.1	1.9	21	3	47	.13	5	0.3	0.7	18	KAO
		8	1630	33.82	19	54.92	155	27.04	7.87	0.9	1.4	16	1	265	.11	12	1.8	0.6	13	KEA
		8	2027	5.91	19	21.93	155	1.59	8.22	1.8	1.2	35	3	152	.12	4	0.6	0.4	32	SF5
		9	330	37.72	19	18.65	155	28.80	29.08	2.0	1.4	45	5	45	.09	7	0.5	0.6	40	DLS
		9	832	38.15	19	5.49	156	10.63	32.26	2.5	2.0	31	3	318	.09	38	2.3	1.7	29	KON
		9	1327	20.80	19	21.44	155	4.52	7.60	2.1	2.5	45	11	84	.11	4	0.3	0.6	39	SF5
		10	248	17.72	19	21.51	155	30.18	9.83	2.8	3.2	60	17	33	.13	5	0.3	0.4	49	KAO
		10	5 6	14.47	18	56.14	155	30.33	32.66	2.5	2.5	57	10	238	.12	18	0.6	0.6	48	DLS
		10	623	30.39	19	25.32	155	16.34	12.67	1.8	1.4	17	5	163	.12	1	1.7	0.8	9	INT L
		10	927	12.50	19	24.71	155	16.57	12.69	1.8	1.6	24	8	141	.10	1	0.9	0.4	16	INT L
		10	1314	40.91	19	4.16	156	15.45	35.37	3.3	3.8	57	11	285	.10	46	0.7	1.4	49	KON
		10	1514	26.04	18	58.00	155	11.97	11.43	2.1	2.0	37	13	285	.14	35	0.6	0.4	24	LOI
		11	1 0	42.63	19	56.88	155	37.27	12.20	2.2	2.0	39	8	141	.11	11	0.5	0.4	34	KOH
		11	528	8.72	19	22.00	155	26.09	10.60	2.9	3.3	54	11	41	.13	3	0.3	0.4	41	KAO
		11	555	3.43	19	24.04	155	26.28	9.76	1.9	1.9	37	1	32	.11	3	0.4	0.6	30	KAO
		11	1520	7.60	19	18.81	155	12.99	8.80	2.2	2.3	46	4	130	.13	7	0.4	0.5	30	SF2
		11	2145	54.36	19	21.59	155	2.89	5.46	2.0	1.7	39	4	120	.15	3	0.6	1.0	41	SF5
		12	132	39.51	19	24.70	155	14.77	3.86	1.6	1.3	32	10	118	.11	1	0.3	0.3	24	SNC
		12	423	48.39	19	59.14	155	20.76	12.00	2.2	1.7	31	7	203	.10	11	0.8	0.4	31	KEA
		13	042	16.98	19	30.95	155	23.39	13.83	2.0	1.3	41	10	48	.12	2	0.4	0.3	32	DML
		13	623	0.16	19	14.96	155	26.47	7.65	1.7	1.9	38	5	89	.17	4	0.4	0.7	36	LSW
		13	623	52.29	19	20.29	155	22.90	9.36	1.9	1.7	51	13	71	.13	1	0.3	0.3	41	SWR
		14	126	55.65	19	19.47	155	11.82	7.55	1.5	1.2	21	3	93	.07	5	0.5	0.9	15	SF3
		14	447	26.58	19	20.74	155	12.79	7.86	2.0	2.2	43	4	64	.12	4	0.4	0.5	37	SF2
		14	457	22.33	19	25.48	155	29.27	9.63	1.9	1.4	32	3	39	.10	6	0.3	0.6	25	KAO

YEAR	MON	DA	ORIGIN TIME HRMN	SEC	LAT N DEG	MIN	LON W DEG	MIN	DEPTH KM	AMP MAG	DUR MAG	NR	GAP NS	DEG	RMS SEC	MIN DIS	ERH KM	ERZ KM	NO FM	REMK
1986	JUN	14	1713	0.36	19	19.09	155	6.86	7.85	2.2	2.5	47	6	134	.12	4	0.4	0.6	32	SF4
		14	1730	32.93	19	21.10	155	13.16	8.42	2.7	2.9	52	11	58	.13	3	0.3	0.4	41	SF2
		14	1922	58.91	19	20.71	155	12.66	7.86	1.9	2.1	44	9	65	.12	4	0.4	0.4	40	SF2
		15	8 6	7.69	19	47.04	155	0.31	39.16	2.7	2.6	58	17	222	.13	9	0.6	0.7	43	KEA
		15	1242	56.65	19	21.47	155	1.56	7.56	2.1		43	6	170	.15	4	0.7	0.5	39	SF5
		16	627	19.04	19	26.02	155	29.09	9.58	1.8	1.2	48	15	41	.12	7	0.3	0.5	34	KAO
		16	757	20.84	19	22.45	155	29.04	9.48	2.3		48	7	37	.11	2	0.3	0.4	43	KAO
		16	1414	2.21	19	22.29	155	1.38	0.03	1.1	1.2	15	1	164	.18	5	0.7	0.4	9	SSF *
		17	213	18.87	19	27.86	155	30.70	46.51	2.1		34	5	40	.09	7	0.8	1.1	22	DML
		17	3 7	13.17	19	18.72	155	14.04	7.70	1.6	1.7	29	1	83	.07	3	0.4	0.6	24	SF2
		17	449	48.94	19	20.56	155	10.72	8.77	1.5		17	3	77	.07	3	0.6	0.9	10	SF3
		17	1110	1.39	19	28.64	155	26.77	1.37	2.2	1.3	33	6	74	.14	6	0.3	0.4	20	KAO
		17	2055	13.43	19	14.42	155	42.14	7.87	2.3	1.6	26	5	190	.22	9	1.1	2.1	25	LSW
		17	2214	20.83	19	27.48	155	14.19	32.12	1.8	1.5	46	3	51	.11	5	0.5	0.7	43	DEP
		17	2359	25.73	19	20.77	155	13.12	32.36	2.1	1.9	50	8	61	.10	3	0.8	0.5	42	DEP
		18	339	49.15	19	27.66	155	14.21	31.77	2.3	2.2	65	17	41	.13	6	0.5	0.4	48	DEP
		18	2027	2.70	19	19.88	155	7.33	4.04	1.6	1.2	31	3	105	.11	5	0.4	1.3	33	SSF
		19	634	55.41	19	19.32	155	11.60	6.34	1.5	1.3	45	9	99	.10	5	0.3	0.5	36	SF3
		19	924	40.45	19	19.37	155	10.41	7.17	2.0	2.1	36	3	100	.11	5	0.4	0.7	29	SF3
		19	958	1.61	19	20.30	155	12.85	6.16	1.4	1.0	18	2	77	.11	4	0.5	1.0	14	SF2
		19	1151	49.58	19	12.47	155	42.32	0.02	2.3	1.7	14	1	208	.20	10	1.5	0.8	12	LSW *
		20	325	1.28	19	5.69	155	23.77	14.41	2.6	2.8	54	15	193	.12	10	0.5	0.2	44	LOI
		20	344	12.29	19	18.79	155	13.67	5.71	1.9	1.8	47	12	72	.17	3	0.3	0.7	36	SF2
		20	642	33.60	19	19.94	155	7.55	4.83	1.6	2.0	46	7	99	.13	5	0.3	1.0	43	SSF
		20	830	51.60	19	21.62	155	28.22	8.73	1.6	1.2	35	4	79	.11	2	0.4	0.4	34	KAO
		20	1038	58.06	19	11.73	155	19.67	45.93		2.3	22	1	191	.08	9	1.5	2.3	11	DEP L
		20	1411	46.85	19	22.29	155	26.74	10.10		1.2	23	5	100	.12	2	0.5	0.6	21	KAO
		20	2237	51.83	19	27.71	154	53.81	5.57	2.1	1.2	34	5	132	.12	3	0.4	0.6	31	LER
		21	116	0.75	19	12.83	155	19.67	9.76	2.3	2.5	52	8	180	.19	8	0.6	0.5	47	SWR
		21	8 8	53.83	20	51.22	155	1.28	6.85	2.9	2.8	54	16	321	.13	112	7.6	9.9	41	DIS *
		21	1036	37.81	19	20.91	155	3.38	38.18	2.0	1.8	55	14	96	.11	2	0.8	0.5	41	DEP
		21	1338	41.30	19	19.26	155	13.75	5.16		1.1	27	2	71	.10	4	0.4	1.5	27	SF2
		21	17 2	41.45	19	20.25	155	10.97	7.93	1.5	1.2	37	7	82	.13	4	0.5	0.4	34	SF3
		21	1745	9.12	19	29.34	155	53.12	12.86		1.2	26	6	163	.15	3	0.7	0.4	23	KON
		22	056	10.80	19	17.96	155	12.85	10.52	2.7	2.8	54	9	143	.13	9	0.4	0.4	48	SF2
		22	350	51.75	19	17.67	155	12.85	10.98	2.8	2.9	52	8	148	.11	9	0.4	0.3	47	SF2
		22	434	17.18	19	28.92	155	44.74	5.89	2.3	1.3	17	1	98	.12	4	0.8	1.0	18	KON
		22	510	21.63	19	19.80	155	11.52	8.62	1.5	1.3	30	5	88	.08	5	0.4	0.7	28	SF3
		22	530	1.26	19	24.68	155	14.67	3.94	1.6	1.2	20	9	164	.07	1	0.5	0.6	13	SNC
		22	937	50.74	19	19.56	155	7.51	7.12	1.6	1.7	32	5	106	.13	4	0.4	0.7	30	SF4
		22	1054	38.44	19	20.21	155	12.00	5.55	1.4	1.1	23	4	78	.11	5	0.4	1.1	19	SF3
		22	13 5	38.66	19	17.82	154	59.20	45.79	3.3	3.4	63	15	215	.11	8	0.9	0.6	47	LER
		22	1943	18.31	19	21.35	155	2.01	6.37	1.7	1.6	25	0	160	.13	3	0.6	1.3	20	SF5
		22	2053	14.47	19	21.71	155	12.94	2.92	1.6	1.6	18	2	87	.04	2	0.5	0.3	12	SER
		22	2146	22.84	19	25.71	155	19.32	7.00	1.9	1.2	25	7	134	.11	3	0.6	0.8	14	KAO

YEAR	MON	DA	ORIGIN TIME HRMN	SEC	LAT N DEG	MIN	LON W DEG	MIN	DEPTH KM	AMP MAG	DUR MAG	NR	NS	GAP DEG	RMS SEC	MIN DIS	ERH KM	ERZ KM	NO FM	REMK
1986	JUN	22	2228	13.54	19	24.20	155	15.82	3.20	1.5	1.5	9	1	128	.04	1	0.4	0.6	7	SEC
		23	0 1	44.19	19	20.69	155	9.82	8.89	1.5	1.2	23	2	72	.04	3	0.5	0.7	18	SF3
		23	15 4	17.04	19	43.78	155	2.16	0.00	2.6	2.7	27	0	242	.24	6	2.7	2.0	17	HIL B*
		23	2114	8.71	19	28.15	155	27.00	9.34	3.1	2.7	57	15	54	.13	6	0.3	0.5	42	KAO
		24	033	49.34	19	20.39	155	10.66	7.85	1.5	1.4	39	9	80	.13	3	0.4	0.4	34	SF3
		24	1540	21.37	19	22.15	155	6.03	6.92	1.9	1.7	21	1	74	.12	4	0.5	1.0	17	SF4
		24	1710	22.19	19	25.54	155	29.48	9.48	1.9	1.4	33	2	63	.08	6	0.4	0.7	21	KAO
		24	2146	59.83	19	22.25	155	29.89	9.73	2.0	1.4	42	7	41	.10	4	0.3	0.4	36	KAO
		25	212	2.94	19	18.08	155	12.60	10.53	2.2	2.3	51	12	141	.15	8	0.4	0.4	42	SF2
		25	213	59.68	19	24.95	155	18.67	5.41	3.1	3.5	53	9	37	.12	2	0.3	0.5	46	INT F
		25	1655	6.56	19	26.40	155	17.01	16.87	2.4	2.5	51	10	42	.14	2	0.3	0.4	38	DEP
		26	331	57.29	19	19.98	155	11.47	9.09	2.8	3.1	53	13	85	.13	5	0.3	0.3	46	SF3
		26	857	56.78	19	22.35	155	5.87	6.02		1.3	35	6	71	.13	4	0.5	0.8	31	SF4
		26	14 2	45.32	19	12.54	155	32.05	7.91		1.2	14	3	154	.17	6	0.8	1.5	14	LSW
		27	424	35.40	19	12.00	155	31.04	38.06			41	8	84	.08	6	0.7	0.6	33	DLS
		27	1048	28.37	19	22.44	155	29.90	9.76		1.2	31	2	71	.08	4	0.4	0.5	21	KAO
		27	1719	21.01	19	19.04	155	9.73	7.27	1.5	1.1	27	2	106	.09	4	0.5	0.9	17	SF3
		27	20 8	59.35	19	19.26	155	15.48	8.54	2.1	2.0	41	3	92	.11	4	0.4	0.5	25	SF1
		27	2237	36.59	19	19.52	155	6.27	8.36	1.9	1.6	37	2	134	.10	5	0.4	0.7	25	SF4
		28	853	31.83	19	3.53	155	24.24	31.49		1.4	40	9	212	.12	13	1.0	0.8	31	LOI
		28	1323	51.73	19	25.17	154	58.49	7.49	1.8	1.4	38	5	172	.17	0	0.9	0.4	36	LER
		28	1633	30.62	19	16.22	155	22.50	7.95	1.6	1.4	32	6	134	.11	4	0.4	0.7	31	SWR
		29	2 6	42.14	18	48.04	155	10.01	9.53	2.9	3.1	38	8	294	.11	51	1.2	1.6	36	LOI
		29	410	1.40	18	54.30	155	12.20	45.23	2.4	2.0	47	8	250	.10	39	1.3	1.6	39	LOI
		29	759	45.00	19	2.65	155	14.56	21.09	2.6	2.0	42	3	250	.10	27	1.0	2.5	37	LOI
		29	1513	55.14	19	40.85	156	1.81	43.18	2.4	2.1	42	3	262	.11	20	1.0	1.5	33	HUA
		29	1525	23.12	19	19.42	155	9.31	5.63	1.5	1.3	25	0	91	.11	5	0.6	1.5	19	SF3
		29	2321	14.28	19	18.93	155	14.72	6.32	1.4	1.1	25	1	95	.10	4	0.5	1.1	18	SF1
	JUL	1	112	12.06	19	19.82	155	12.04	8.55	1.5		32	7	84	.10	6	0.4	0.4	28	SF3
		1	814	35.17	19	18.69	155	25.00	10.36		1.6	36	8	69	.14	4	0.4	0.5	32	SWR
		1	1942	22.79	19	18.66	155	13.46	7.59	1.4	1.2	19	3	81	.07	3	0.5	0.9	15	SF2
		2	146	54.83	19	11.16	155	31.51	6.93	2.4	1.9	40	8	98	.14	7	0.5	0.7	36	LSW F
		2	942	42.53	19	19.57	155	11.79	8.75	2.4	2.5	39	2	91	.11	6	0.5	0.5	30	SF3
		2	1139	38.02	19	19.39	155	7.29	8.49	1.6	1.6	9	1	115	.03	4	0.8	2.0	8	SF4
		2	1350	29.85	19	29.75	155	27.70	5.19	3.5	3.4	51	8	42	.14	4	0.3	1.4	35	KAO
		2	1451	19.85	19	20.63	155	12.78	8.95	2.9	3.1	46	6	66	.12	4	0.4	0.4	37	SF2
		2	2130	23.69	19	53.64	155	18.80	11.38	2.1	2.0	16	1	246	.09	3	1.8	0.7	8	KEA
		3	857	15.58	19	20.39	155	12.65	8.32	1.6	1.7	38	10	69	.11	4	0.3	0.4	29	SF2
		3	1342	59.25	19	55.31	155	38.89	0.40	1.1	1.1	7	2	238	.07	32	1.4	0.6	10	KOH
		3	1741	2.56	19	33.97	156	11.26	27.13	2.6	2.3	34	7	255	.14	30	1.0	1.3	24	KON
		4	629	36.76	19	21.39	155	2.10	6.34	1.7	1.9	26	1	149	.10	3	0.6	1.0	13	SF5
		4	1221	13.28	19	20.38	155	12.75	8.17	1.4	1.5	23	5	69	.08	4	0.4	0.6	17	SF2
		5	839	28.78	19	25.59	155	19.29	8.03	2.1	1.7	28	5	134	.10	4	0.5	0.7	15	KAO
		5	1240	46.40	19	23.55	155	16.57	11.02	2.3	1.9	13	3	65	.14	1	0.9	0.6	3	INT L
		5	1715	42.12	19	24.83	155	17.82	5.34	1.4	0.9	10	0	65	.12	1	0.8	1.0	3	INT L

YEAR	MON	DA	ORIGIN TIME HRMN	SEC	LAT N DEG	MIN	LON W DEG	MIN	DEPTH KM	AMP MAG	DUR MAG	NR	NS	GAP DEG	RMS SEC	MIN DIS	ERH KM	ERZ KM	NO FM	REMK
1986	JUL	5	2341	40.76	20	7.03	155	49.14	25.77		1.4	29	7	250	.10	4	0.8	0.5	22	KOH
		6	1553	1.66	19	19.39	155	7.14	7.25	1.6	1.6	35	8	119	.11	4	0.4	0.8	31	SF4
		7	320	25.01	19	18.96	155	4.07	42.83	2.0	1.7	38	3	192	.11	3	1.0	0.6	35	DEP
		7	526	34.39	19	19.68	155	7.42	8.39	2.5	2.8	48	10	107	.10	4	0.4	0.5	40	SF4
		7	1122	48.28	19	19.60	155	10.47	8.23	1.5	2.1	32	3	95	.11	5	0.5	0.6	32	SF3
		7	1224	23.55	19	19.81	155	10.15	10.03	0.9	1.2	19	3	90	.09	4	0.5	0.8	19	SF3
		7	1313	29.47	19	25.31	155	19.95	7.22	1.9	1.2	22	6	88	.11	3	0.5	1.1	16	KAO
		7	1839	2.44	19	24.11	155	15.74	2.88	1.7	1.6	26	11	117	.12	2	0.3	0.3	15	SEC
		8	817	51.54	19	24.09	155	15.82	3.58		1.9	26	9	114	.09	1	0.3	0.3	19	SEC
		8	825	19.83	19	25.21	155	16.69	13.56		1.8	10	3	220	.27	1	3.6	1.6	2	DEP L
		8	1240	13.84	19	19.56	155	7.22	7.45	1.6	1.7	26	3	113	.10	4	0.5	0.7	26	SF4
		9	228	9.55	19	31.40	155	58.38	14.44	4.4	4.6	55	9	217	.16	7	0.9	0.5	50	KON F
		9	255	26.76	19	30.36	155	55.69	12.08	2.7	2.0	24	1	217	.12	2	1.0	0.4	12	KON
		9	548	5.40	19	31.63	155	55.93	11.56	2.8	2.5	18	0	221	.10	5	1.2	0.5	24	KON
		9	1459	7.66	19	16.35	155	26.21	9.33	2.0	1.9	33	1	59	.13	5	0.4	0.7	18	LSW
		9	1823	47.95	19	23.75	155	26.69	9.58	1.8	1.1	26	2	51	.09	3	0.4	0.5	18	KAO
		10	1743	40.47	19	19.75	155	10.50	6.45	1.5	1.3	24	0	91	.08	4	0.5	1.2	18	SF3
		10	2357	9.87	19	19.25	155	11.28	4.92	1.5	1.7	38	13	102	.14	6	0.3	1.2	34	SSF
		11	223	31.66	19	55.71	155	38.12	2.29	2.2	1.5	25	9	132	.17	27	0.6	0.6	24	KOH
		11	1023	11.67	19	23.81	155	27.30	9.83	1.5	1.4	42	11	59	.12	2	0.3	0.4	32	KAO
		11	1455	32.98	19	25.06	155	20.03	6.81	1.9	1.2	26	10	82	.10	3	0.3	0.7	17	KAO
		11	1541	30.56	19	27.26	155	28.68	7.80	2.1	1.4	44	12	57	.12	7	0.3	0.8	36	KAO
		11	1842	27.69	19	17.86	155	12.83	10.26	2.0	2.0	46	11	120	.14	2	0.4	0.3	38	SF2
		11	19 8	13.01	19	17.83	155	13.17	5.78	1.5	1.7	24	1	105	.10	2	0.5	1.1	19	SF2
		11	19 9	0.85	19	16.62	155	12.92	8.05	1.6	1.2	30	8	203	.14	1	0.6	1.0	22	SF2
		11	1937	2.45	19	24.99	155	18.94	8.00	2.8	3.0	49	10	38	.12	2	0.3	0.4	43	INT F
		11	20 8	35.60	19	17.57	155	28.53	9.30	1.7	1.4	31	5	78	.15	5	0.4	0.6	29	LSW
		11	2031	35.25	19	16.91	155	12.70	9.52	1.9	1.6	31	5	173	.12	1	0.5	0.8	16	SF2
		11	2144	57.70	19	24.80	155	19.26	6.93	2.1	1.4	29	4	105	.07	2	0.4	0.6	23	KAO
		11	2158	30.63	19	25.11	155	18.89	6.12	1.8	1.4	25	6	116	.10	2	0.4	0.7	16	INT
		12	239	2.30	19	54.13	155	26.20	33.08	2.8	2.5	64	19	151	.12	10	0.5	0.6	46	KEA
		12	7 3	39.63	19	24.79	155	19.14	6.83	1.9	1.4	27	7	69	.07	2	0.4	0.5	22	KAO
		12	827	51.54	19	17.45	155	13.16	7.53	1.5	1.4	41	10	124	.11	1	0.4	0.5	33	SF2
		12	9 6	28.31	19	29.19	155	27.12	8.84	2.1	1.4	43	8	66	.13	5	0.4	0.7	35	KAO
		12	1431	37.45	19	26.36	154	55.11	7.19	1.9	1.8	23	2	180	.13	2	1.0	0.6	21	LER
		12	1630	4.77	19	17.89	154	56.19	7.31	1.9	1.6	34	7	240	.23	12	0.9	1.5	27	LER
		12	1715	34.98	19	26.48	155	28.49	8.77	2.0	1.4	35	4	67	.10	6	0.4	0.8	19	KAO
		12	1725	31.99	19	18.67	155	13.21	9.46	2.7	3.2	42	5	85	.09	3	0.4	0.4	35	SF2
		12	2054	26.52	19	30.48	155	52.44	9.96	2.2	1.4	10	0	190	.10	5	1.7	0.9	8	KON
		12	2116	23.24	19	11.86	155	30.58	5.88	2.1	1.4	23	0	150	.15	6	0.7	1.8	8	LSW
		13	058	38.41	19	26.14	155	29.35	9.35	2.0	1.4	29	1	61	.09	7	0.4	0.8	21	KAO
		13	125	28.95	19	30.99	155	54.57	10.07	2.5	2.1	23	0	184	.15	3	1.1	0.6	17	KON
		13	756	12.26	19	12.50	155	41.00	3.75	2.8	2.8	49	13	114	.18	17	0.4	1.2	43	LSW
		13	1052	53.25	19	20.09	155	8.39	7.12		1.5	33	7	79	.16	4	0.4	0.7	29	SF4
		13	1427	51.79	19	19.20	155	26.04	10.66	1.6	1.4	24	1	66	.09	5	0.5	0.8	17	KAO

YEAR	MON	DA	ORIGIN TIME HRMN	SEC	LAT N DEG	MIN	LON W DEG	MIN	DEPTH KM	AMP MAG	DUR MAG	NR	GAP NS	DEG	RMS SEC	MIN DIS	ERH KM	ERZ KM	NO FM	REMK
1986	JUL	13	2148	32.87	19	11.99	155	27.45	6.41	1.8	1.2	25	1	120	.15	5	0.6	1.6	12	LSW
		14	10 5	44.98	19	23.12	155	0.98	6.51	2.1	1.7	36	4	155	.18	5	0.6	1.1	22	SF5
		14	1047	29.30	19	20.45	155	12.47	7.62	1.7	1.5	28	3	71	.10	4	0.5	0.6	19	SF2
		14	2044	49.42	19	23.22	155	8.55	4.27	1.8	1.7	17	4	107	.08	2	0.4	0.6	17	SER
		15	238	28.21	19	20.88	155	13.59	1.63	1.9	2.1	7	2	144	.09	3	0.6	0.8	6	SER
		15	639	11.50	19	19.62	155	12.29	5.11	0.9	1.8	36	5	86	.11	5	0.3	0.8	34	SF3
		15	724	41.97	19	23.64	155	15.22	3.33		1.3	11	2	93	.06	2	0.6	0.7	9	SEC
		15	1159	38.30	19	18.47	155	30.54	10.64	1.4	1.4	27	2	68	.08	6	0.4	0.8	19	LSW
		16	229	46.72	19	19.55	155	7.31	6.91		1.2	23	1	111	.11	4	0.6	0.9	12	SF4
		16	952	42.30	19	20.41	155	4.14	5.44		1.2	31	1	117	.14	2	0.6	1.3	16	SF5
		16	1220	2.49	19	23.92	155	26.97	10.03	1.9	1.7	33	2	48	.08	3	0.3	0.5	22	KAO
		16	1415	11.06	19	21.65	155	11.73	2.94	1.8	1.6	19	1	79	.12	3	0.4	0.7	17	SER
		16	1425	54.76	19	44.66	155	1.88	0.00	2.5	2.7	19	1	257	.28	7	4.7	1.8	27	HIL B*
		17	136	12.13	19	22.82	155	2.40	7.06	1.7	1.9	37	8	133	.14	5	0.4	0.6	31	SF5
		17	718	25.26	19	18.00	155	14.75	2.96	1.4	1.4	27	4	107	.11	3	0.4	0.7	23	SSF
		17	1139	45.26	19	9.29	155	30.48	11.20	1.5	2.2	33	1	136	.13	5	0.5	0.6	20	LSW
		17	18 6	49.28	19	19.86	155	6.95	8.38	2.6	2.7	39	4	112	.10	5	0.4	0.5	32	SF4
		17	2150	1.76	19	23.83	155	15.74	3.12		1.1	17	7	105	.11	2	0.3	0.3	12	SEC
		17	2357	19.57	19	19.72	155	8.99	7.29		1.2	29	8	81	.10	5	0.4	0.6	24	SF4
		18	059	30.28	19	20.16	155	12.76	6.50	0.9	1.1	21	1	72	.12	5	0.6	1.0	16	SF2
		18	7 5	19.29	19	22.05	155	13.27	3.09		1.1	22	8	57	.12	1	0.3	0.3	15	SER
		18	940	32.71	19	21.89	155	47.60	10.24		1.1	16	1	153	.09	13	0.7	1.2	11	KON
		18	1027	22.42	19	23.25	155	14.74	2.87	2.1	2.1	29	5	58	.09	3	0.3	0.3	21	SEC
		18	2040	5.42	19	24.71	155	17.37	1.75		1.1	12	1	108	.08	1	0.4	0.2	7	SNC
		18	2045	50.35	19	24.81	155	16.54	3.05		1.1	9	2	171	.06	1	0.7	0.6	6	SNC
		18	2225	7.74	19	25.18	155	30.44	10.32		1.2	25	1	68	.08	7	0.4	0.6	22	KAO
		19	148	1.37	19	24.35	155	15.52	3.53		0.9	11	2	141	.08	2	0.5	0.6	7	SEC
		19	426	44.01	19	19.70	155	11.49	7.67	2.3	2.4	46	7	90	.13	5	0.4	0.5	27	SF3
		19	1131	3.45	19	22.37	155	29.97	9.67		1.2	31	2	72	.09	4	0.4	0.5	25	KAO
		19	1221	52.23	19	19.38	155	10.96	6.29	0.9	1.2	30	2	101	.10	5	0.5	0.9	20	SF3
		19	2131	53.08	19	26.46	154	56.40	6.59	2.1	1.3	29	3	167	.13	3	0.8	0.4	24	LER
		19	2219	13.98	19	21.42	155	1.96	5.71	1.1	1.3	24	1	160	.15	3	0.6	1.0	23	SF5
		19	2351	38.17	18	55.03	155	13.13	12.17	3.0	3.5	28	0	273	.09	37	3.3	1.0	31	LOI L
		20	740	55.25	18	53.17	155	12.23	8.93	2.8	3.3	26	2	284	.10	41	1.6	0.7	25	LOI
		20	10 5	35.64	19	16.29	155	31.69	3.82	2.1	1.5	20	0	118	.19	10	0.7	16.0	18	LSW *
		20	16 5	37.58	19	5.71	156	14.66	38.78		2.7	24	2	313	.08	44	2.1	2.4	23	KON
		20	2328	35.46	19	15.78	155	27.95	9.09		1.2	33	8	73	.14	4	0.3	0.7	28	LSW
		21	336	53.33	19	21.52	155	6.41	8.06	2.1	1.6	33	2	84	.13	4	0.4	0.6	28	SF4
		21	1050	18.64	19	20.17	155	12.22	7.29			23	1	77	.11	5	0.6	0.9	18	SF3
		21	11 2	14.75	19	21.17	155	3.35	7.19		1.9	28	3	109	.10	2	0.5	0.7	17	SF5
		21	1734	40.77	19	20.39	155	12.83	7.86	2.6	2.7	41	4	68	.14	4	0.5	0.7	29	SF2
		21	1859	3.75	19	20.37	155	11.72	8.22		3.7	50	9	77	.12	5	0.4	0.5	35	SF3
		21	1910	35.13	19	19.05	155	13.78	6.21		1.5	27	2	86	.12	4	0.5	0.8	11	SF2
		21	2044	28.73	19	28.98	155	28.46	10.74		2.2	43	8	64	.12	6	0.3	0.6	27	KAO
		22	1016	22.35	19	11.91	155	38.69	4.44	3.1	3.1	43	9	102	.18	16	0.4	2.2	35	LSW

YEAR	MON	DA	ORIGIN TIME HRMN	SEC	LAT N DEG	MIN	LON W DEG	MIN	DEPTH KM	AMP MAG	DUR MAG	NR	GAP NS	DEG	RMS SEC	MIN DIS	ERH KM	ERZ KM	NO FM	REMK
1986	JUL	22	2134	28.91	19	19.54	155	30.55	9.36	2.7		35	2	87	.10	8	0.4	0.6	20	KAO
		23	423	6.73	19	19.19	155	12.75	8.87		1.2	29	6	86	.16	4	0.6	0.8	23	SF2
		23	627	41.08	19	19.97	155	11.92	7.56		1.8	26	3	129	.12	5	0.5	0.7	26	SF3
		23	636	11.13	19	19.99	155	11.62	9.10		1.6	24	5	126	.10	5	0.5	0.6	24	SF3
		23	931	13.75	19	28.33	155	43.03	8.58	2.7	2.5	32	5	59	.13	7	0.4	1.0	28	KON
		23	17 7	12.66	19	21.37	155	1.35	7.69	2.5	2.6	35	2	177	.09	4	0.7	0.4	23	SF5
		24	231	35.85	19	20.83	155	7.65	7.57	2.1	1.9	25	0	135	.08	4	0.5	0.6	23	SF4
		24	420	41.41	19	19.85	155	12.10	7.79		1.5	21	0	83	.12	5	0.6	0.6	21	SF3
		24	6 1	3.97	19	22.22	155	28.94	8.87		1.6	19	1	62	.12	2	0.5	1.0	15	KAO
		24	955	0.18	19	24.26	155	17.38	2.03		2.1	10	1	113	.13	1	0.5	0.4	6	SSC
		24	1416	58.84	19	19.50	155	10.80	7.13		2.2	24	0	98	.10	5	0.5	0.8	21	SF3
		24	1441	28.23	19	23.23	155	2.96	7.36		1.7	22	1	115	.12	3	0.7	0.5	24	SF5
		24	2211	5.97	19	18.81	155	12.95	4.70		1.8	24	1	89	.13	3	0.6	1.4	21	SSF
		24	2240	33.57	19	19.88	155	12.10	6.44		2.2	25	0	116	.14	5	0.7	1.1	22	SF3
		25	1415	37.58	19	17.67	155	20.78	5.89		1.1	13	2	128	.11	4	0.6	1.7	9	SWR
		25	1920	21.09	19	26.65	155	25.50	8.67		1.2	14	4	79	.10	7	0.4	0.9	11	KAO
		26	347	24.30	19	22.27	155	4.28	8.31	1.6	1.7	24	3	90	.12	4	0.5	0.6	26	SF5
		26	349	25.43	19	26.51	155	28.75	8.69	1.9	1.4	25	5	89	.08	7	0.4	0.8	20	KAO
		26	15 5	1.05	19	17.55	155	13.13	9.04	2.0	2.0	34	3	120	.12	1	0.4	0.5	35	SF2
		26	1511	13.70	19	23.92	155	15.09	1.78	2.0	1.6	7	3	210	.09	2	0.9	1.1	2	SEC
		26	2139	6.75	19	24.63	155	26.77	5.96	1.8	1.5	24	4	98	.11	3	0.4	0.7	22	KAO
		27	930	6.03	19	32.60	155	47.19	25.37	1.8	1.5	20	1	96	.09	4	1.0	1.8	14	KON
		27	1058	33.00	19	11.72	155	29.40	33.67	2.5	2.2	38	2	76	.08	5	0.7	0.9	23	DLS
		27	1228	43.79	19	22.00	155	1.22	3.69	1.1	1.2	19	0	167	.14	5	0.7	2.0	8	SSF
		27	1643	31.63	19	17.68	155	21.71	8.16	2.0	2.3	32	3	120	.11	5	0.4	0.7	16	SWR
		27	1649	6.57	19	18.99	155	15.51	6.57	1.4	1.2	25	1	105	.12	4	0.5	1.1	17	SF1
		27	1935	26.53	19	19.62	155	12.72	2.03		1.3	17	1	141	.14	5	0.5	1.4	10	SSF
		28	148	16.06	19	19.71	155	7.47	5.04	0.9	1.1	21	3	104	.13	4	0.4	1.2	22	SF4
		28	245	25.58	19	32.13	155	57.17	11.40	3.3	3.5	41	5	231	.12	6	0.8	0.3	40	KON F
		28	619	3.33	19	11.77	155	40.29	3.38	1.3	1.6	30	1	113	.21	18	0.9	2.8	17	LSW
		28	1047	23.55	19	11.14	155	35.66	7.83	2.5	2.4	34	2	123	.17	7	0.6	1.0	18	LSW
		28	2315	53.30	19	25.83	155	24.13	9.02	1.7	1.6	23	3	82	.11	2	0.4	0.8	21	KAO
		29	652	39.13	20	2.19	155	51.33	27.78	3.0	3.0	45	5	210	.11	13	0.6	1.4	39	KOH
		29	924	11.60	19	27.00	155	29.82	7.63	1.9	1.7	21	2	71	.11	9	0.4	1.4	19	KAO
		29	1847	21.70	19	21.98	155	2.99	4.17	0.8	1.2	21	1	127	.16	4	0.9	2.4	20	SSF
		29	22 4	25.95	19	21.02	155	6.15	8.34	3.0	3.2	52	11	95	.12	5	0.4	0.5	44	SF4
		30	0 4	9.08	19	19.13	155	13.73	4.86	1.7	1.7	28	1	71	.13	4	0.5	1.9	21	SSF
		30	310	35.03	19	19.98	155	9.48	8.64	1.5	1.2	12	1	124	.06	4	0.6	1.4	8	SF3
		30	749	32.79	19	17.41	155	29.76	9.81	2.0	1.9	31	2	78	.13	4	0.4	0.7	25	LSW
		30	817	26.59	19	13.60	155	27.86	6.96	2.0	2.2	27	1	103	.18	5	0.6	1.4	17	LSW
		30	1038	32.78	19	25.51	155	29.33	9.08	2.4	1.9	38	6	62	.10	6	0.3	0.7	24	KAO
		31	248	42.36	19	11.35	155	29.70	33.94	2.3	2.1	39	3	147	.10	5	0.7	0.7	36	DLS
		31	4 5	2.94	20	1.26	155	23.80	7.75	2.4	2.2	23	1	259	.11	16	1.7	0.7	15	KEA
		31	1758	40.42	19	21.83	155	28.67	10.14	1.9	1.7	34	2	64	.09	2	0.4	0.4	25	KAO
		31	22 5	52.38	19	23.84	155	25.65	10.79	1.8	1.4	29	2	62	.08	3	0.3	0.5	23	KAO

YEAR	MON	DA	ORIGIN TIME HRMN	SEC	LAT W DEG	MIN	LON W DEG	MIN	DEPTH KM	AMP MAG	DUR MAG	NR	NS	GAP DEG	RMS SEC	MIN DIS	ERH KM	ERZ KM	NO FM	REMK	
1986	AUG	1	1211	12.47	19	15.59	155	22.81	6.70	2.4	2.5	38	3	154	.13	3	0.4	0.7	36	SWR	
		1	1340	13.95	19	25.87	155	28.86	9.29	1.6	1.3	29	3	61	.09	7	0.4	0.6	17	KAO	
		1	1552	8.62	19	23.40	155	20.50	10.89	1.9	1.8	31	5	53	.08	2	0.4	0.5	17	KAO	
		1	16	8 57.96	19	24.57	155	19.55	5.88	1.7	1.2	15	1	116	.05	2	0.5	1.0	13	KAO	
		1	1952	7.27	19	12.20	155	37.24	2.74	1.9	2.1	34	4	94	.18	14	0.4	1.4	17	LSW	
		2	624	34.82	19	25.69	155	29.13	8.48	2.1	1.9	36	4	46	.11	6	0.4	1.0	23	KAO	
		2	741	3.78	19	10.71	155	41.27	4.13		1.3	15	0	124	.13	20	0.7	12.5	13	LSW	*
		2	1920	17.01	19	19.60	155	7.23	7.22	1.9	2.3	36	3	112	.10	4	0.4	0.7	24	SF4	
		2	2054	3.74	19	23.27	155	1.16	7.83	1.1	1.2	32	3	151	.14	5	0.6	0.6	12	SF5	
		2	2159	7.10	19	19.41	155	14.98	5.75	1.5	1.1	38	10	91	.14	4	0.3	0.7	30	SF1	
		3	319	54.91	19	32.43	156	22.14	32.88		1.6	28	7	294	.12	48	1.0	2.0	25	DIS	
		3	9	2 38.64	19	24.28	155	17.28	1.29	1.6		17	8	74	.21	1	0.3	0.3	9	SSC	
		3	1514	19.92	19	31.80	155	55.45	11.29	2.7	2.7	27	2	215	.14	5	1.0	0.5	18	KON	F
		4	651	33.63	19	20.23	155	11.83	7.59	1.4	1.2	27	1	78	.11	5	0.5	0.6	18	SF3	
		4	712	34.98	19	18.64	155	24.49	10.98	1.9	1.6	23	1	91	.09	4	0.6	0.7	12	SWR	
		4	1258	32.06	19	22.54	155	14.05	2.48	1.2	1.3	9	1	137	.22	2	1.0	0.9	6	SEC	
		4	1848	53.93	19	11.78	155	38.62	7.70	2.3	2.2	34	2	103	.21	6	0.5	1.4	23	LSW	
		5	321	39.57	19	48.67	155	22.10	24.16	2.7	2.7	71	28	92	.12	9	0.3	0.6	45	KEA	
		5	844	49.27	19	20.87	155	2.52	7.07	1.6	1.2	26	3	151	.13	2	0.7	0.6	26	SF5	
		5	1410	14.77	19	9.62	155	42.02	4.47	2.1	1.2	8	1	135	.13	20	1.4	11.5	7	LSW	
		5	1547	31.00	19	22.58	155	30.05	10.11	1.7	1.4	16	1	82	.04	4	0.6	0.8	15	KAO	
		5	1859	12.23	19	22.15	155	26.61	10.36	1.9	1.7	34	3	50	.10	2	0.3	0.4	21	KAO	
		5	22	7 49.35	19	24.27	155	17.47	2.00	2.1	2.3	27	9	48	.12	1	0.3	0.2	19	SSC	
		6	0	6 6.15	19	20.86	155	2.46	7.82	2.0	2.0	36	5	155	.13	2	0.6	0.4	33	SF5	
		6	645	23.59	19	11.70	155	55.16	14.69		1.6	24	7	229	.22	9	1.5	0.6	19	KON	
		6	934	10.69	19	20.12	155	5.91	7.37	2.1	2.4	39	8	121	.16	5	0.5	0.6	33	SF4	
		6	10	0 17.13	19	22.09	155	29.19	10.14	1.9	1.6	36	8	79	.12	3	0.3	0.5	32	KAO	
		6	1725	1.51	19	19.48	155	11.45	6.37	1.5	1.3	23	3	96	.10	6	0.4	0.6	13	SF3	
		6	1851	4.44	19	22.17	155	16.12	32.25	2.0	1.5	33	2	56	.09	1	1.0	1.1	24	DEP	
		6	2237	13.04	19	20.00	155	12.87	7.08	1.4	1.1	30	4	72	.13	5	0.5	0.6	26	SF2	
		7	333	44.83	19	20.90	155	10.76	7.80	1.8	1.7	38	8	71	.10	3	0.4	0.3	35	SF3	
		7	1644	29.46	19	19.20	155	26.41	9.82	2.5	3.0	48	8	58	.12	6	0.3	0.4	33	KAO	
		8	614	16.76	19	18.11	155	16.76	8.95	2.1	2.3	47	11	136	.13	4	0.3	0.5	37	SF1	
		8	629	49.80	19	24.76	155	19.18	5.61	1.9	1.7	26	8	87	.10	2	0.3	0.7	20	KAO	
		8	1154	1.83	19	20.39	155	13.25	8.13	1.7	1.2	17	2	82	.05	4	0.6	0.7	14	SF2	
		8	18	9 52.88	19	19.86	155	6.07	8.23	1.9	1.9	26	5	127	.11	6	0.5	0.6	24	SF4	
		9	856	1.92	19	13.45	155	27.16	6.35	1.7	1.4	24	5	113	.14	6	0.6	1.1	19	LSW	
		9	1128	58.68	19	18.61	155	10.18	5.66	1.5	1.3	32	10	123	.15	5	0.4	0.9	25	SF3	
		9	1134	21.00	19	25.63	155	19.81	6.74	1.7	1.2	25	7	134	.10	4	0.4	0.6	18	KAO	
		9	1352	49.58	19	19.62	155	11.79	7.04	1.4	1.2	30	6	90	.11	6	0.4	0.7	27	SF3	
		9	1548	25.15	19	22.29	155	1.26	7.23	2.1	2.4	34	7	162	.13	5	0.4	0.6	28	SF5	
		10	923	29.41	19	10.67	155	16.08	48.74	1.5		25	3	212	.09	13	1.4	1.2	6	DEP	
		10	1031	52.51	19	18.75	155	46.80	10.23	2.6	2.0	27	3	125	.12	11	0.5	0.7	25	KON	
		10	1654	28.64	19	12.02	155	27.26	5.17	1.8	1.2	21	3	125	.13	5	0.6	2.2	19	LSW	
		10	1716	12.14	19	21.35	155	4.82	8.90	3.2	3.8	52	14	89	.11	4	0.4	0.3	41	SF5	F

YEAR	MON	DA	ORIGIN TIME HRMN	SEC	LAT N DEG	MIN	LON W DEG	MIN	DEPTH KM	AMP MAG	DUR MAG	NR	NS	GAP DEG	RMS SEC	MIN DIS	ERH KM	ERZ KM	NO FM	REMK	
1986	AUG	10	1736	2.40	19	22.43	155	29.97	9.46	1.7	1.2	25	5	71	.07	4	0.3	0.6	21	KAO	
		10	2229	4.21	19	22.39	155	25.82	13.63	1.9	1.2	31	2	56	.08	3	0.4	0.5	22	DML	
		11	611	13.57	19	21.22	155	2.91	8.38	3.6	4.0	43	6	121	.11	2	0.4	0.5	38	SF5	F
		11	916	38.85	19	11.65	155	29.48	34.46	2.0	1.6	28	2	138	.07	5	0.9	1.2	13	DLS	
		11	939	49.90	19	20.02	155	12.50	8.12	1.9	2.2	38	4	76	.11	5	0.4	0.4	23	SF2	
		11	1411	42.24	19	20.06	155	11.97	4.98		1.1	33	10	80	.12	5	0.3	1.2	25	SSF	
		11	20	0 55.64	19	23.36	155	21.03	9.76	1.6	1.2	33	9	57	.09	2	0.3	0.5	26	KAO	
		11	2040	9.58	19	20.66	155	12.76	8.97	1.4	1.2	27	5	70	.12	4	0.5	0.4	24	SF2	
		12	010	45.11	19	22.62	155	3.55	7.96	1.7	1.6	23	3	109	.13	5	0.6	0.8	23	SF5	
		12	1	9 47.20	19	22.53	155	1.67	4.94	1.7	1.7	17	3	151	.10	5	0.7	2.4	17	SSF	
		12	2	9 7.14	19	28.50	155	49.12	7.93	2.5	2.0	20	3	85	.13	7	0.6	1.3	19	KON	
		12	713	15.31	19	16.10	154	57.47	8.58		1.4	16	6	258	.15	12	1.1	1.5	10	LER	
		12	1121	7.87	19	19.56	155	7.83	7.27	1.7	2.3	33	3	98	.10	4	0.4	0.8	22	SF4	
		12	1858	8.00	19	25.02	155	16.42	1.11		2.0	7	0	152	.04	1	0.8	0.3	3	SNC	L
		12	2115	16.41	19	41.54	155	22.96	13.35	2.3	3.3	71	29	74	.18	13	0.3	0.4	43	KEA	
		13	733	48.15	19	26.79	155	30.16	9.56		1.6	23	3	86	.07	9	0.6	0.9	20	KAO	
		13	1313	48.73	19	26.54	155	28.77	8.63	1.9	1.2	20	2	112	.08	7	0.5	1.3	16	KAO	
		13	1530	45.20	19	22.93	155	3.20	8.13	1.7	1.4	25	1	116	.14	4	0.5	0.6	17	SF5	
		14	8	0 21.07	19	28.30	155	26.89	2.23	2.4	2.1	39	10	56	.14	6	0.3	0.5	31	KAO	
		15	415	34.20	19	17.60	155	28.37	7.23	1.7	1.5	23	1	119	.12	10	0.6	1.2	30	LSW	
		15	737	17.22	19	19.65	155	14.18	8.08	2.2	2.6	34	2	84	.11	5	0.4	0.4	32	SF2	
		15	1051	24.51	19	7.62	155	28.14	31.24	1.6	1.7	28	4	177	.07	4	0.9	1.1	25	DLS	
		15	1825	14.43	19	25.88	155	30.41	9.87		1.2	27	7	106	.09	8	0.4	0.7	23	KAO	
		15	19	7 11.55	19	21.56	155	28.35	9.13		1.2	32	8	113	.11	2	0.3	0.5	26	KAO	
		15	2034	47.75	19	26.89	155	53.02	11.48		1.5	24	9	203	.16	6	0.8	0.4	20	KON	
		15	2141	37.21	19	15.97	155	24.90	9.45		1.6	33	10	74	.12	3	0.4	0.5	26	SWR	
		16	143	12.04	19	27.09	155	29.84	9.19	2.4	2.6	41	9	73	.12	9	0.3	0.6	35	KAO	
		16	13	0 56.62	19	21.76	154	56.82	6.52	2.7	2.6	55	22	213	.21	11	0.6	0.8	34	LER	
		16	1421	20.53	19	22.40	155	20.56	11.92	2.1	1.3	23	2	73	.10	6	0.5	0.6	25	KAO	
		16	2350	57.06	19	19.93	155	12.54	2.73		1.4	35	10	77	.14	5	0.3	0.8	29	SSF	
		17	038	14.04	19	43.90	155	58.20	12.77	2.7	2.8	41	8	216	.14	15	0.8	0.4	34	HUA	
		17	738	50.17	19	17.87	155	13.37	8.52		1.2	21	4	92	.09	2	0.5	0.6	20	SF2	
		17	1044	28.74	19	52.89	155	25.94	31.54	2.9	2.9	54	21	223	.11	9	0.5	0.6	34	KEA	
		17	12	6 29.34	19	18.18	155	13.19	4.77	1.4	1.3	16	2	94	.06	2	0.6	1.0	15	SSF	
		17	1547	40.86	19	14.72	155	35.64	5.43	2.4	2.5	33	5	134	.16	10	0.5	1.6	32	LSW	
		17	1849	25.57	19	12.26	155	38.34	5.43	2.0	1.2	23	3	234	.20	15	1.1	5.0	21	LSW	
		17	2140	35.02	19	20.24	155	10.91	8.63	1.6	1.7	27	1	81	.09	4	0.5	0.8	18	SF3	
		18	9	6 6.06	19	6.79	155	28.66	53.35	2.2		20	0	180	.13	5	1.7	6.1	20	DLS	T
		18	2037	42.69	19	19.93	155	12.89	15.52	2.2	2.1	13	5	82	.14	5	1.0	1.3	8	DEP	
		19	549	11.41	19	19.27	155	7.33	7.72		1.2	29	5	117	.13	4	0.5	0.7	24	SF4	
		19	1317	27.35	19	22.35	155	1.23	10.71	1.8	1.8	18	5	266	.24	5	1.6	2.0	11	SF5	*
		20	010	58.30	19	18.33	155	12.83	8.24		1.2	28	9	104	.18	3	0.5	0.8	20	SF2	
		20	334	11.72	19	17.55	155	13.10	6.33	1.9	1.8	27	2	122	.10	1	0.5	0.9	17	SF2	
		20	341	59.65	19	19.17	155	11.38	9.27	1.5	2.1	40	12	104	.14	5	0.4	0.5	31	SF3	
		20	811	11.04	19	37.15	155	9.39	10.50	1.7	1.7	28	6	124	.13	13	0.5	1.2	17	KEA	

YEAR	MON	DA	ORIGIN TIME HRMN	SEC	LAT N DEG	MIN	LON W DEG	MIN	DEPTH KM	AMP MAG	DUR MAG	NR	NS	GAP DEG	RMS SEC	MIN DIS	ERH KM	ERZ KM	NO FM	REMK
1986	AUG	20	1828	17.97	19	28.80	154	54.00	0.00	2.2	2.7	18	2	160	.22	6	1.0	0.9	15	SLE *
		20	2144	51.26	19	19.66	155	8.36	3.62	0.9	1.1	19	1	112	.12	4	0.6	1.2	17	SSF
		21	1	3 27.46	19	22.33	155	30.01	4.76	1.6	1.1	24	1	59	.13	12	0.5	6.7	16	KAO *
		21	419	42.82	19	24.92	155	19.37	6.31	1.4	0.7	16	5	110	.09	3	0.5	0.8	9	KAO
		21	420	4.14	19	24.82	155	19.25	7.76	1.6	1.1	16	4	106	.08	3	0.4	0.8	10	KAO
		21	1119	24.81	19	20.78	155	2.02	8.93	2.2	2.7	25	2	175	.09	2	0.5	0.6	18	SF5
		21	1314	51.99	19	37.53	155	9.47	19.25	3.5	3.8	33	2	145	.11	17	0.6	2.2	33	KEA
		21	1828	37.72	19	15.10	155	26.78	9.54	1.7	2.3	24	1	85	.12	5	0.4	0.8	14	LSW
		21	1926	51.07	19	19.10	155	14.08	7.85	2.0	2.2	38	4	80	.12	4	0.4	0.6	30	SF2
		22	855	42.62	19	21.74	155	4.66	7.16	0.8	1.2	13	1	80	.09	5	0.6	1.4	10	SF5
		22	1527	33.79	19	18.71	155	9.04	2.89	1.5	1.1	22	1	106	.13	3	0.4	1.1	19	SSF
		22	1945	0.39	19	19.33	155	12.79	1.62	2.2	2.3	28	4	83	.20	4	0.4	0.8	23	SSF
		22	2033	30.05	19	19.59	155	12.23	4.97	1.7	1.8	20	4	87	.09	5	0.4	1.3	17	SSF
		23	830	11.86	19	15.76	155	25.95	8.33	1.7	1.2	5	1	133	.03	4	1.8	6.0	4	LSW
		23	1025	40.21	19	20.86	155	13.24	6.81	1.7	1.9	26	0	59	.13	3	0.6	0.8	27	SF2
		24	0	3 48.96	19	21.87	155	27.61	10.62	1.6		16	3	159	.15	1	0.9	0.6	17	KAO T
		24	131	2.77	19	19.41	155	16.53	6.88	1.7	1.5	22	4	105	.11	2	0.4	1.0	14	SF1
		24	344	24.45	18	43.05	156	45.41	29.99	3.0	2.7	22	2	327	.08	111	2.5	3.9	8	DIS
		24	824	42.30	19	18.74	155	13.11	7.50	1.4	1.4	15	1	87	.08	3	0.6	1.2	13	SF2
		24	1211	41.19	19	22.58	155	29.64	9.66	2.9	3.2	49	8	34	.11	4	0.2	0.4	40	KAO
		24	1910	58.16	19	18.83	155	13.61	5.67	1.4	1.1	11	1	124	.08	3	0.9	1.9	10	SF2
		24	1927	3.18	19	45.45	156	5.67	36.67	2.5	1.8	23	2	279	.08	28	3.0	2.5	19	HUA
		24	2248	57.81	19	22.77	155	29.80	7.83	1.6	1.6	27	1	58	.14	4	0.4	1.1	25	KAO
		25	647	53.96	19	22.45	155	29.04	8.43	1.9		25	2	112	.13	2	0.4	0.9	22	KAO
		25	648	12.12	19	16.04	155	29.72	2.17	2.3	2.4	21	2	89	.13	13	0.5	1.3	13	LSW
		25	656	33.34	19	19.63	155	10.96	7.84	2.0	2.3	29	1	95	.10	5	0.4	0.7	25	SF3
		25	13	9 39.70	19	19.83	155	11.49	8.85	2.1	2.3	27	1	88	.09	5	0.4	0.7	24	SF3
		26	5	5 8.91	19	25.34	155	29.61	8.92	1.9	1.4	22	0	37	.10	11	0.4	1.2	17	KAO
		26	8	4 6.79	19	19.30	155	12.04	5.51	1.4	1.5	21	2	95	.09	5	0.5	1.0	17	SF3
		26	11	4 1.29	19	22.99	155	15.67	3.36	1.8	1.5	10	2	135	.07	1	0.5	0.6	10	SEC
		26	1111	51.46	19	19.22	155	14.21	4.68	1.4	1.1	16	1	92	.11	4	0.5	2.2	12	SSF
		26	1412	27.49	19	23.78	155	27.22	10.59	2.7	2.8	36	3	49	.13	2	0.4	0.6	23	KAO
		26	1447	35.96	19	20.99	155	29.66	7.96	1.9	1.6	23	2	65	.10	5	0.4	1.0	15	KAO
		26	1747	3.06	19	26.63	155	28.91	6.43	1.9	1.1	20	1	67	.09	8	0.4	1.9	12	KAO
		26	1954	25.54	19	19.82	155	12.26	6.67	1.6	1.8	25	1	82	.10	5	0.4	0.8	19	SF3
		27	043	12.84	19	16.22	155	27.00	7.50	1.7	1.5	19	1	130	.12	10	0.5	1.1	14	LSW
		27	342	43.66	19	16.84	155	24.55	34.14	1.9	1.5	18	1	126	.06	7	0.8	1.0	12	DEP
		27	546	40.16	19	20.88	155	11.74	31.28	2.6	2.3	30	1	69	.09	4	0.7	0.9	16	DEP
		27	831	58.57	19	19.07	155	16.10	8.19	2.1	2.0	24	2	117	.12	3	0.4	0.6	18	SF1
		27	952	43.91	19	17.17	155	26.72	7.86	1.6	1.5	16	1	105	.12	8	0.6	1.1	13	LSW
		28	5	8 4.44	19	23.17	155	30.62	7.60	2.0	1.9	45	8	34	.10	5	0.3	0.8	40	KAO
		28	1054	19.56	19	24.04	155	4.20	42.85		1.6	31	2	178	.11	1	1.7	1.5	16	DEP
		28	1858	35.41	19	17.52	155	51.35	9.35	2.2	1.3	15	1	196	.12	3	1.3	0.8	9	KON
		28	1937	3.73	19	20.00	155	6.64	7.35	0.9	1.1	19	0	114	.07	5	0.6	1.6	16	SF4
		28	2133	9.86	19	19.02	155	11.30	4.18	1.5	1.5	25	1	109	.12	5	0.5	2.2	20	SSF

YEAR	MON	DA	ORIGIN TIME HRMN	SEC	LAT N DEG	MIN	LON W DEG	MIN	DEPTH KM	AMP MAG	DUR MAG	NR	NS	GAP DEG	RMS SEC	MIN DIS	ERH KM	ERZ KM	NO FM	REMK
1986	AUG	28	2231	19.57	19	18.95	155	16.24	7.60	1.5	1.4	37	9	112	.10	3	0.3	0.4	31	SF1
		28	23	1 22.61	19	24.68	155	19.80	6.68	1.8	1.5	30	12	86	.12	2	0.3	0.7	19	KAO
		29	519	28.29	19	19.62	155	12.10	7.88	1.8	1.7	37	7	87	.13	5	0.4	0.5	34	SF3
		29	1042	18.79	19	11.37	155	27.77	5.86		1.4	26	1	117	.13	3	0.7	1.3	27	LSW
		29	12	5 9.39	19	24.04	155	21.23	39.25		1.6	25	7	70	.11	3	0.9	0.6	18	DML
		29	1240	46.61	19	25.52	155	29.05	9.32		1.1	16	4	104	.08	6	0.4	0.9	12	KAO
		29	1730	54.32	19	26.81	155	28.72	9.31	2.1	2.0	39	3	43	.10	7	0.3	0.7	30	KAO
		29	19	0 18.40	19	18.02	155	26.02	9.27	2.5	3.0	49	5	58	.13	6	0.3	0.6	40	LSW
		29	2214	23.95	19	21.36	155	5.89	7.90	2.4	2.7	48	9	89	.13	5	0.4	0.6	35	SF4
		30	239	37.10	19	19.53	155	12.00	5.16	2.1	2.6	46	7	90	.14	5	0.3	1.0	31	SF3
		30	926	56.83	19	19.68	155	8.62	2.63	1.5	1.6	25	3	100	.11	4	0.3	0.8	19	SSF
		30	1417	23.01	19	18.53	155	15.54	6.68	1.9	1.9	35	2	106	.11	4	0.4	0.9	25	SF1
		31	1021	30.93	19	8.98	155	37.76	8.14	2.1	2.3	29	2	106	.14	11	0.5	1.4	32	LSW
		31	1351	13.40	19	55.61	155	38.02	14.22	1.9	2.0	17	1	131	.11	8	0.6	0.5	7	KOH
		31	1646	29.81	19	22.73	155	26.85	10.45	2.1	2.4	46	7	35	.11	1	0.3	0.4	41	KAO
		31	2317	20.70	19	28.44	155	27.29	1.70	2.1	1.4	23	3	66	.11	7	0.4	0.6	21	KAO
		31	2352	25.47	19	20.30	155	29.54	9.17	1.7	1.4	8	3	140	.08	5	0.8	1.0	5	KAO
	SEP	1	1249	57.36	19	55.61	155	37.89	14.71	2.2	1.9	23	1	131	.09	8	0.8	0.3	9	KOH
		2	5	2 10.63	19	26.51	155	29.00	8.02	1.6	1.2	31	6	59	.10	7	0.3	0.7	28	KAO
		2	2032	25.30	19	11.55	155	35.18	3.93	1.9	1.6	17	2	180	.13	11	0.9	3.8	16	LSW *
		2	2355	59.03	19	18.43	155	18.38	30.92	1.8	1.7	43	7	101	.11	1	0.7	0.7	36	DEP
		3	041	9.66	19	20.35	155	30.53	3.66	2.4	2.8	36	5	54	.09	6	0.3	1.8	34	KAO
		3	5	0 26.82	19	26.21	155	29.90	10.31	2.4	2.8	42	6	41	.10	6	0.3	0.6	38	KAO
		3	752	15.68	19	18.66	155	15.43	7.30	1.4	1.2	21	1	111	.08	4	0.5	1.0	20	SF1
		3	1312	25.86	19	15.46	155	31.68	6.91	1.8	1.6	27	2	102	.19	3	0.6	1.4	14	LSW
		3	1637	41.02	19	20.98	155	30.27	9.56	1.7	1.4	29	2	49	.08	5	0.4	0.6	20	KAO
		3	1655	11.09	19	21.13	155	30.00	9.46	3.3	3.8	55	12	34	.12	5	0.3	0.5	45	KAO
		3	1657	6.85	19	20.80	155	29.92	9.93	2.0	2.0	32	2	47	.10	5	0.4	0.6	21	KAO
		3	1958	41.44	19	23.79	155	15.68	3.13	1.6	1.8	23	7	103	.09	2	0.3	0.3	14	SEC
		3	20	1 59.49	19	20.00	155	11.89	7.39	1.4	1.4	26	2	82	.10	5	0.4	0.6	19	SF3
		4	9	1 10.08	19	20.24	155	3.73	6.34	1.7	1.2	15	4	120	.06	2	0.5	0.6	15	SF5
		4	1228	26.74	19	21.70	154	44.62	38.00	2.4	1.6	43	7	287	.11	19	1.8	1.0	36	LER
		4	1358	36.59	19	20.63	155	10.50	8.66	1.5	1.1	33	12	75	.08	3	0.4	0.5	24	SF3
		4	1411	33.05	19	43.35	155	2.29	0.00	2.6	2.5	31	1	250	.24	2	2.4	1.0	36	HIL B*
		4	2129	10.25	19	26.65	155	28.83	9.58	2.3	2.3	53	10	42	.11	7	0.3	0.5	44	KAO
		5	233	47.32	19	19.22	155	12.98	6.03	1.7	1.8	43	7	81	.15	4	0.4	0.8	36	SF2
		5	455	28.49	19	19.67	155	12.10	7.55	1.9	2.1	43	5	87	.14	5	0.4	0.5	41	SF3
		5	1050	25.01	19	12.13	155	30.63	5.42	2.3	2.0	30	2	79	.19	6	0.5	2.0	30	LSW
		5	1112	6.24	19	18.49	155	18.55	31.09	3.1	3.5	60	14	82	.12	1	0.4	0.5	47	DEP
		5	2113	54.21	19	26.71	155	28.26	8.76	1.9	1.6	47	11	41	.13	6	0.3	0.6	37	KAO
		6	025	11.54	19	20.60	155	12.87	8.60		1.1	25	7	68	.09	4	0.4	0.6	18	SF2
		6	329	24.04	19	23.50	155	25.73	10.49	1.8	1.6	49	11	37	.13	3	0.3	0.4	38	KAO
		6	1333	7.82	19	21.71	155	4.50	7.67	1.7	1.7	33	2	83	.14	4	0.5	0.7	33	SF5
		6	1543	48.01	19	21.81	155	1.38	4.14	1.8	1.5	28	3	167	.14	4	0.6	1.6	25	SSF
		6	1833	52.97	19	18.20	155	22.97	7.73	1.5	1.4	20	3	98	.07	4	0.4	0.8	18	SWR

YEAR	MON	DA	ORIGIN TIME HRMN	SEC	LAT N DEG	MIN	LON W DEG	MIN	DEPTH KM	AMP	MAG	DUR	NR	NS	GAP DEG	RMS SEC	MIN DIS	ERH KM	ERZ KM	NO FM	REMK	
1986	SEP	7	240	3.82	19	9.68	155	38.65	4.70		1.1	16	2	226	.14	10	1.0	9.0	14	LSW		
		7	1146	6.98	19	14.35	155	29.70	10.93	2.2	2.3	35	3	115	.13	2	0.5	0.6	33	LSW		
		8	155	18.98	19	20.99	155	2.58	7.16	1.7	1.4	19	1	146	.10	2	0.6	1.0	8	SF5		
		8	416	22.91	21	5.62	156	51.82	0.96	3.7	3.9	42	4	336	.12	155	13.6	4.7	18	DIS	F*	
		8	746	18.77	19	23.06	155	27.25	11.22	2.0	1.9	30	2	39	.12	5	0.4	1.0	22	KAO		
		8	1130	42.90	19	23.84	155	6.71	2.64	1.9	2.4	8	1	124	.11	2	0.9	0.5	3	SME		
		8	1230	24.12	19	20.46	155	11.66	8.60	2.2	2.6	42	5	76	.12	4	0.4	0.4	35	SF3		
		8	1936	21.22	19	19.40	155	8.10	8.02	1.6	1.6	34	6	92	.13	4	0.4	0.6	30	SF4		
		8	2012	55.14	19	19.23	155	12.17	9.91	3.0	3.4	56	12	94	.12	5	0.3	0.3	48	SF3		
		8	2014	1.11	19	18.98	155	11.96	6.14	1.9	2.1	34	8	104	.13	4	0.3	0.8	28	SF3		
		9	535	52.25	19	15.98	155	23.23	3.89		1.1	17	2	122	.11	3	0.5	1.5	16	SWR		
		9	725	57.16	19	20.95	155	2.63	7.38	2.0	2.3	38	4	144	.13	2	0.4	0.5	36	SF5		
		9	736	5.58	19	23.70	155	16.97	2.75	1.4	1.1	14	3	60	.06	1	0.3	0.3	11	SSC		
		9	1442	36.36	18	44.77	155	2.23	10.66	2.3	1.7	48	9	279	.16	61	3.8	5.4	36	LOI		
		9	1911	17.86	19	19.84	155	11.41	8.74	1.5	1.9	30	2	88	.10	5	0.5	0.8	23	SF3		
		9	1942	14.50	19	19.47	155	11.77	5.87	1.7	2.2	40	2	94	.13	5	0.4	0.8	31	SF3		
		9	2143	6.21	19	20.51	155	13.71	7.69	1.4	1.4	28	4	66	.11	4	0.4	0.6	26	SF2		
		10	5 6	9.86	19	19.73	155	8.20	6.20	1.6	2.1	38	6	86	.10	4	0.4	0.7	37	SF4		
		10	1812	54.36	19	24.94	155	50.58	12.22	2.4	1.8	27	2	125	.13	11	0.6	0.5	21	KON		
		11	356	10.23	19	21.61	155	30.52	13.62		1.2	21	1	47	.09	7	0.4	1.5	14	DML		
		11	645	42.89	19	20.33	155	11.17	7.47	1.8	1.8	40	5	80	.12	4	0.4	0.5	33	SF3		
		11	713	54.35	19	19.52	155	8.67	6.89	1.9	1.9	36	4	80	.13	4	0.4	0.8	18	SF4		
		11	1440	51.94	20	0.79	155	47.38	13.17	2.6	2.5	33	0	171	.10	13	1.5	1.3	27	KOH		
		11	16 7	14.04	19	47.82	155	1.64	42.20	2.9	3.1	58	12	213	.13	11	0.6	0.7	43	KEA		
		11	1757	55.10	19	26.74	155	28.40	9.87	1.9	1.6	37	3	42	.09	6	0.3	0.6	27	KAO		
		11	1934	9.54	19	18.61	155	13.96	6.88	1.4	1.7	32	3	73	.09	3	0.4	0.9	21	SF2		
		11	2015	48.52	19	26.05	155	21.41	10.11	1.6	1.2	27	5	77	.09	3	0.4	0.9	20	KAO		
		12	555	59.84	19	25.31	155	19.61	7.12	1.9	1.4	26	5	111	.12	3	0.5	0.9	19	KAO		
		12	14 6	53.41	21	30.54	154	48.25	14.89		2.5	26	12	336	.15	188	9.0	14.5	13	DIS	*	
		12	1743	52.09	19	25.11	155	20.86	8.07	1.5	1.5	31	8	81	.12	3	0.3	0.6	23	KAO		
		12	18 0	13.30	19	25.32	155	30.41	9.22	2.1	2.1	46	8	35	.13	5	0.3	0.5	41	KAO		
		12	1840	36.09	19	38.79	155	58.06	34.67		1.3	30	9	247	.10	14	0.9	0.6	22	KON		
		13	0 0	42.14	19	30.43	155	51.80	9.27		1.3	20	1	193	.17	6	1.5	0.6	9	KON		
		13	355	41.75	19	25.99	155	19.75	4.31	1.7	1.1	17	3	133	.08	3	0.4	0.9	11	KAO		
		13	719	50.08	19	27.90	155	50.58	5.47		1.3	17	1	101	.21	8	1.2	5.1	10	KON		
		13	814	35.23	19	19.55	155	7.41	8.34	2.2	2.5	47	9	109	.11	4	0.4	0.4	34	SF4		
		13	1122	57.42	19	19.35	155	7.48	7.55		1.2	27	3	111	.09	4	0.5	0.8	22	SF4		
		13	12 6	37.59	19	25.67	155	19.48	7.03	3.2	3.0	54	11	56	.11	3	0.3	0.5	39	KAO		
		13	1212	53.39	19	20.68	155	12.93	8.66	1.4	1.2	28	2	66	.09	4	0.4	0.6	21	SF2		
		13	1215	23.36	19	25.72	155	19.26	7.29	2.0	1.3	22	4	136	.10	3	0.5	0.8	16	KAO		
		13	1223	4.14	19	25.79	155	19.43	7.35	2.6	2.4	49	12	96	.11	3	0.3	0.4	40	KAO		
		13	1226	2.51	19	25.51	155	19.18	7.75	1.7	1.1	25	9	136	.14	3	0.4	0.8	18	KAO		
		13	1239	55.58	19	25.46	155	19.18	6.70	1.9	1.2	38	11	94	.17	3	0.4	0.7	28	KAO		
		13	1240	27.68	19	26.33	155	18.94	6.70	1.7	1.1	27	9	159	.12	3	0.5	0.6	18	INT		
		13	1254	59.72	19	26.07	155	19.04	8.13	2.5	2.3	50	14	99	.12	3	0.3	0.4	40	KAO		

YEAR	MON	DA	ORIGIN TIME HRMN	SEC	LAT N DEG	MIN	LON W DEG	MIN	DEPTH KM	AMP	MAG	DUR	NR	NS	GAP DEG	RMS SEC	MIN DIS	ERH KM	ERZ KM	NO FM	REMK	
1986	SEP	13	1255	30.51	19	25.72	155	19.09	6.43	2.1	1.5	30	9	104	.12	3	0.4	0.5	21	KAO		
		13	1333	36.24	19	25.19	155	19.69	6.87	2.9	2.6	57	18	38	.14	3	0.3	0.5	43	KAO		
		13	1336	37.67	19	25.45	155	19.31	7.50	2.5	2.3	42	10	93	.13	3	0.3	0.5	36	KAO		
		13	1339	39.56	19	25.36	155	19.41	8.42	2.3	2.0	39	12	52	.14	3	0.3	0.4	32	KAO		
		13	1418	8.20	19	25.56	155	19.23	8.35	2.1	1.5	39	14	98	.12	3	0.3	0.6	28	KAO		
		13	1641	28.54	19	25.59	155	19.27	6.90	1.8	1.2	33	12	98	.12	3	0.3	0.5	22	KAO		
		13	18 4	51.01	19	25.31	155	19.42	6.84	2.1	1.9	39	12	82	.12	3	0.3	0.5	28	KAO		
		13	1958	27.00	19	25.36	155	19.02	8.85	2.0	1.6	34	13	123	.17	2	0.4	0.6	21	INT		
		13	22 4	11.75	19	28.74	155	25.31	3.70	1.4	1.1	20	1	94	.11	4	0.5	1.3	14	KAO		
		13	2234	19.88	19	24.80	155	19.12	4.70	1.6	1.3	21	4	94	.11	2	0.4	0.9	11	KAO		
		14	318	46.30	19	21.20	155	15.10	9.85	1.4	1.3	18	2	67	.06	3	0.6	0.8	15	SF1		
		14	647	52.84	19	19.71	155	7.55	8.01	1.9	2.1	21	1	103	.05	4	0.6	1.0	18	SF4		
		14	1223	9.45	19	25.44	155	19.42	6.94	1.7	1.2	22	5	120	.12	3	0.4	0.6	17	KAO		
		14	1338	34.50	19	23.29	155	20.37	10.26	2.3	2.4	43	9	51	.10	1	0.4	0.4	33	KAO		
		14	1839	17.20	18	46.52	155	14.50	29.45	3.1	4.0	41	5	300	.11	49	1.2	4.5	42	LOI	L	
		15	2 2	55.74	19	18.97	155	13.71	5.48	1.4	1.3	39	9	72	.13	4	0.3	0.8	33	SF2		
		15	655	15.19	19	25.59	155	18.98	7.59		1.7	11	3	148	.09	4	0.9	0.8	8	INT	L	
		15	742	21.58	19	22.45	155	30.00	10.61	1.7	1.2	37	8	35	.11	4	0.3	0.5	31	KAO		
		15	829	8.29	19	21.18	155	2.97	6.83	1.7	1.7	37	9	124	.16	2	0.4	0.6	29	SF5		
		15	1017	7.63	19	15.86	155	31.18	7.79	2.4	2.5	32	2	55	.19	2	0.5	1.2	32	LSW		
		15	1059	8.14	19	20.22	155	12.84	7.10	1.4	1.5	27	3	70	.12	4	0.4	0.8	24	SF2		
		15	1616	54.83	19	19.56	155	12.12	5.59	1.7	2.1	37	4	88	.15	5	0.4	1.0	34	SF3		
		15	1924	37.98	19	18.18	155	14.42	7.86	2.0	2.2	35	3	94	.11	3	0.4	0.6	35	SF2		
		16	036	54.29	19	58.79	155	29.66	31.03	2.3	1.7	23	4	183	.05	19	1.0	0.6	20	KEA		
		16	052	1.41	19	13.13	155	23.73	43.27	2.0	1.6	32	2	154	.09	2	1.1	1.0	31	DEP		
		16	1222	44.94	19	20.80	155	8.20	8.68	1.9	2.1	37	4	76	.08	4	0.4	0.4	38	SF4		
		17	457	37.03	19	19.36	155	12.05	6.54	1.4	1.5	35	6	93	.12	5	0.3	0.6	33	SF3		
		17	836	49.18	19	19.07	155	13.35	7.51	2.1	2.3	53	9	76	.14	4	0.4	0.4	46	SF2		
		17	1250	51.08	19	19.65	155	6.91	6.80	1.6	1.5	24	3	118	.10	5	0.5	1.0	23	SF4		
		17	1534	57.15	19	20.62	155	6.14	6.91	1.6	1.6	40	9	105	.16	6	0.4	0.6	34	SF4		
		17	21 7	56.65	19	19.68	155	11.42	7.03	1.5	1.4	49	14	91	.15	5	0.3	0.5	40	SF3		
		18	051	6.46	19	18.02	155	26.45	7.74	1.6	1.2	35	5	66	.18	7	0.5	1.0	32	LSW		
		18	144	28.04	19	19.96	155	12.82	8.06	1.9	2.1	53	11	73	.14	5	0.3	0.4	43	SF2		
		18	216	4.72	19	26.07	155	30.71	11.40	2.1	1.2	36	6	39	.09	4	0.3	0.5	32	KAO		
		18	320	5.45	19	28.17	155	51.18	8.08	2.5	2.3	36	2	102	.17	7	0.5	0.6	35	KON		
		18	652	39.93	19	19.97	155	13.44	5.82	1.7	1.7	34	4	65	.13	5	0.4	0.8	31	SF2		
		18	1523	20.64	19	26.74	155	28.69	8.93	2.2	2.0	44	7	44	.12	7	0.3	0.7	29	KAO		
		18	1632	19.62	19	19.18	155	10.28	7.82	1.5	1.5	30	4	106	.08	5	0.4	0.7	18	SF3		
		19	444	42.67	19	20.21	155	21.09	30.79	4.1	4.4	63	16	72	.13	4	0.4	0.5	48	DEP	F	
		19	551	39.66	19	19.91	155	19.09	30.41	1.8	1.8	46	9	52	.12	3	0.6	0.6	38	DEP		
		19	552	2.08	19	19.63	155	18.91	29.45	1.8	1.8	43	9	55	.11	3	0.6	0.5	38	DEP		
		19	9 8	41.13	19	24.19	155	15.83	3.24	1.5	1.1	25	10	121	.12	1	0.2	0.2	16	SEC		
		19	2332	21.14	19	16.13	155	22.94	1.53	1.5	1.8	29	9	126	.13	4	0.3	0.5	25	SWR		
		20	540	58.25	19	52.76	155	33.76	18.74	2.5	2.1	42	10	126	.11	10	0.4	0.8	34	KEA		
		20	1419	5.98	19	20.32	155	20.85	29.35	1.8	1.6	29	2	78	.12	4	0.8	1.3	24	DEP		

YEAR	MON	DA	ORIGIN TIME HRMN	SEC	LAT N DEG	MIN	LON W DEG	MIN	DEPTH KM	AMP MAG	DUR MAG	NR	GAP NS	DEG	RMS SEC	MIN DIS	ERH KM	ERZ KM	NO FM	REMK	
1986	SEP	20	1525	58.88	19	20.18	155	13.17	7.49		1.4	15	2	83	.11	5	0.5	0.9	13	SF2	
		20	16 4	40.12	19	20.89	155	2.62	6.03	1.1	1.2	11	1	150	.08	2	0.6	1.3	7	SF5	
		20	1931	37.41	17	41.75	154	49.58	21.58	3.6	4.3	23	7	336	.14	168	2.4	11.2	23	DIS	L
		20	2031	51.47	18	45.76	155	15.65	12.17		2.1	24	5	307	.11	49	6.3	8.9	20	LOI	*
		20	2033	30.94	18	50.80	155	13.89	9.84		2.2	26	3	278	.15	42	1.1	1.1	25	LOI	
		20	2035	2.68	18	54.24	155	16.54	14.30	3.2	4.3	38	1	248	.09	35	1.4	2.4	35	LOI	
		20	2054	32.24	18	53.66	155	17.60	13.47		2.1	19	0	263	.08	34	2.8	1.3	20	LOI	
		20	2057	23.65	18	52.17	155	16.13	12.26	3.9	4.3	44	5	255	.10	38	1.2	1.0	40	LOI	
		20	21 2	46.55	18	51.48	155	17.30	12.67	3.1	3.6	43	3	257	.10	38	1.1	0.9	33	LOI	
		20	21 6	50.50	18	50.43	155	16.13	10.28		1.6	18	3	269	.12	41	1.1	1.1	14	LOI	
		20	2110	23.11	18	49.54	155	16.22	9.35		1.9	21	4	301	.11	42	1.2	0.9	19	LOI	
		20	2111	5.53	18	49.85	155	15.96	10.74		1.9	23	4	270	.11	42	0.8	0.9	19	LOI	
		20	2112	32.42	18	50.89	155	14.96	9.47		2.4	22	3	262	.11	41	1.0	1.1	20	LOI	
		20	2115	5.50	18	50.69	155	17.34	11.99	3.7	4.3	44	5	260	.12	39	1.2	0.9	34	LOI	
		20	2127	21.70	18	49.80	155	16.14	11.86		1.8	15	3	278	.14	42	1.4	1.5	12	LOI	
		20	2128	7.87	18	53.17	155	18.18	13.10	3.1	4.0	40	1	251	.08	35	1.5	1.1	39	LOI	
		20	2131	7.59	18	48.42	155	17.02	9.00		2.2	13	3	309	.07	50	1.3	1.6	11	LOI	
		20	2135	5.04	18	52.57	155	18.20	13.46	2.8	3.3	33	0	254	.07	36	1.8	1.1	34	LOI	
		20	2149	21.09	19	23.03	155	2.46	7.41	0.8	1.4	24	2	129	.14	4	0.6	0.6	24	SF5	
		20	2154	59.23	18	47.83	155	17.48	11.00		2.2	18	4	303	.09	44	1.1	1.6	15	LOI	
		20	22 2	18.70	18	45.71	155	17.57	9.36		3.7	18	4	306	.08	48	1.6	0.8	14	LOI	
		20	22 7	39.00	19	49.46	156	8.12	8.33	1.8	2.9	21	1	251	.16	35	1.6	0.9	21	HUA	
		20	22 8	57.03	18	55.30	155	17.88	13.30		2.6	14	1	251	.09	32	4.3	1.3	13	LOI	
		20	2210	16.57	18	50.76	155	17.46	11.99	3.4	4.2	38	2	258	.11	39	1.3	0.9	29	LOI	
		20	2225	42.14	18	53.11	155	18.40	12.61		2.1	18	0	258	.08	35	2.7	1.1	10	LOI	
		20	2330	33.79	18	49.81	155	17.64	9.47	3.7	4.2	44	6	277	.10	41	1.1	0.8	40	LOI	F
		20	2333	56.05	18	53.90	155	18.03	13.91	1.3	2.5	18	0	285	.09	44	4.7	14.4	16	LOI	*
		20	2341	31.50	18	54.43	155	18.57	13.23	2.4	2.7	27	0	247	.08	32	1.8	1.2	20	LOI	
		21	1 8	44.24	18	49.40	155	14.34	11.00		2.1	11	0	273	.09	44	4.5	2.0	3	LOI	
		21	152	33.35	18	53.27	155	17.76	11.25	2.6	2.7	25	1	251	.10	35	1.5	0.8	16	LOI	
		21	257	34.16	18	48.91	155	18.18	6.81		1.7	17	1	264	.07	42	1.5	0.9	17	LOI	
		21	458	46.49	18	52.65	155	21.74	14.06	2.8	3.5	26	0	252	.09	33	2.2	1.5	22	LOI	
		21	749	27.47	18	51.03	155	19.13	14.38	3.5	4.2	13	0	302	.07	38	7.6	12.9	14	LOI	*
		21	839	10.88	18	47.96	155	17.53	7.48		1.7	18	1	295	.12	44	1.8	0.7	19	LOI	
		21	1447	47.36	18	54.69	155	18.68	12.16	2.7	3.4	29	1	245	.11	32	1.1	0.8	24	LOI	
		21	1513	39.45	18	55.13	155	18.95	13.07	2.4	2.6	20	1	244	.09	31	1.1	1.2	18	LOI	
		21	1547	11.16	19	27.35	155	29.39	6.99	1.0	1.6	19	0	73	.10	9	0.5	2.1	16	KAO	
		21	1659	50.88	18	54.48	155	18.59	13.18		2.2	18	1	247	.10	32	1.4	1.5	18	LOI	
		22	033	49.87	18	50.74	155	19.93	17.31		1.8	12	1	304	.09	37	5.5	13.9	8	LOI	*
		22	110	47.56	19	19.19	155	15.35	8.30	2.7	3.3	38	2	91	.14	4	0.4	0.6	30	SF1	
		22	150	47.63	19	20.11	155	11.66	7.18	1.3	2.1	27	3	81	.10	5	0.4	0.6	15	SF3	
		22	239	40.53	19	22.01	155	2.05	6.34	1.1	1.2	22	1	149	.14	4	0.6	0.9	18	SF5	
		22	434	19.27	19	55.69	155	35.42	42.84		2.0	10	0	234	.11	21	3.8	7.9	7	KOH	
		22	1925	20.21	19	19.24	155	12.21	4.94		1.2	30	4	94	.13	5	0.4	1.3	29	SSF	
		23	247	22.22	19	19.82	155	6.53	8.88	2.5	3.1	44	8	121	.13	5	0.4	0.4	40	SF4	

YEAR	MON	DA	ORIGIN TIME HRMN	SEC	LAT N DEG	MIN	LON W DEG	MIN	DEPTH KM	AMP MAG	DUR MAG	NR	GAP NS	DEG	RMS SEC	MIN DIS	ERH KM	ERZ KM	NO FM	REMK	
1986	SEP	23	531	5.37	19	21.13	155	20.35	31.05	2.8	3.0	52	10	55	.11	5	0.5	0.6	41	DEP	
		23	555	31.69	19	18.19	156	19.69	38.14	3.3	3.4	36	5	275	.11	48	1.3	1.6	38	KON	
		23	716	2.50	19	56.94	155	30.81	34.82	3.9	4.5	54	12	164	.10	18	0.6	0.9	43	KEA	F
		23	728	48.86	19	19.95	155	19.34	31.54	2.1	2.1	29	0	57	.08	3	0.7	1.4	19	DEP	
		23	733	34.94	19	19.98	155	19.41	31.60	2.5	2.8	31	0	58	.09	4	0.7	1.4	16	DEP	
		23	1033	39.41	19	22.69	155	20.62	10.41	1.9	1.6	27	1	44	.11	2	0.5	0.8	26	KAO	
		23	1448	54.19	19	21.89	155	4.33	9.11	1.7	1.8	16	2	88	.07	4	0.7	1.3	11	SF5	
		23	1845	5.87	19	14.17	155	26.15	8.27	1.9	2.3	31	4	115	.09	4	0.4	0.6	30	LSW	
		24	1248	55.89	19	22.34	155	28.67	10.15	1.9	1.6	39	8	40	.10	2	0.3	0.4	33	KAO	
		24	1617	57.44	19	22.05	155	3.11	8.92	1.7	1.4	35	6	122	.16	4	0.7	0.5	32	SF5	
		24	1618	22.48	19	20.02	155	13.13	5.69	1.4	1.1	22	2	69	.17	5	0.6	1.3	22	SF2	
		24	1631	5.98	19	22.88	155	20.84	10.23	1.6	1.2	22	2	51	.08	3	0.5	0.8	21	KAO	
		24	2020	14.10	19	24.02	155	16.15	2.92	1.8	2.0	16	3	111	.09	1	0.3	0.3	15	SEC	
		24	2243	10.36	19	19.27	155	11.55	7.39	1.5	1.5	26	3	100	.10	5	0.5	0.9	26	SF3	
		24	23 6	13.61	19	20.55	155	2.66	6.44	1.7	1.6	23	3	156	.16	1	0.6	0.9	21	SF5	
		25	412	2.51	19	20.08	155	11.76	6.51	2.4	2.7	44	9	81	.13	5	0.4	0.6	41	SF3	
		25	431	45.04	19	19.40	155	11.80	6.58	1.4	1.7	31	5	95	.13	5	0.5	1.0	27	SF3	
		25	838	28.45	19	35.82	155	38.27	11.06		1.2	11	0	212	.10	9	1.2	2.0	14	KEA	
		25	1128	17.73	19	10.51	155	37.56	2.55	2.0	1.4	30	1	101	.17	8	0.5	2.6	21	LSW	
		25	1319	48.11	18	52.92	155	12.98	9.52	2.2	2.5	21	2	259	.10	40	1.1	0.8	7	LOI	
		25	1454	55.32	19	20.47	155	11.80	8.69	1.8	1.7	23	5	77	.05	5	0.4	0.6	18	SF3	
		25	1515	35.43	18	48.92	155	13.40	11.76		1.8	20	2	275	.14	46	2.8	3.1	7	LOI	
		26	031	34.61	19	20.11	155	11.50	8.31	1.5	1.4	32	4	83	.09	5	0.4	0.7	21	SF3	
		26	1 3	56.34	19	50.97	155	47.36	37.71		1.7	23	3	162	.09	14	1.0	1.3	17	HUA	
		26	159	54.27	18	45.31	155	16.24	9.62		1.8	22	2	307	.13	49	1.9	1.4	9	LOI	
		26	419	47.52	19	29.18	155	27.14	4.93	2.2	1.9	35	3	81	.13	5	0.3	2.0	22	KAO	
		26	8 3	39.72	19	49.55	155	4.37	43.43	3.3	3.0	50	9	211	.11	29	0.6	1.3	42	KEA	
		26	1125	48.87	19	29.78	155	27.42	5.97	1.6	1.2	16	3	94	.09	4	0.4	1.3	12	KAO	
		26	1456	44.54	19	17.72	155	13.19	6.44	1.5	1.4	33	2	107	.11	1	0.5	0.9	23	SF2	
		26	1457	6.74	19	17.59	155	13.11	7.35	1.5	1.4	21	3	119	.07	1	0.5	1.0	17	SF2	
		26	15 1	30.38	19	17.78	155	13.24	6.93	1.5	1.7	23	1	102	.09	1	0.5	1.0	18	SF2	
		26	1531	57.98	19	31.62	155	0.83	39.80	2.5		55	10	127	.10	6	0.8	0.4	36	DEP	
		26	1556	32.58	19	38.48	156	9.69	11.55	2.9	2.7	25	1	269	.20	31	2.5	1.0	20	KON	
		26	1639	43.47	19	41.28	156	7.09	10.95	2.9	2.3	30	5	283	.12	29	0.8	0.5	30	HUA	
		26	1910	58.06	19	20.09	155	10.80	8.25	1.5	1.4	19	0	93	.06	4	0.4	0.9	21	SF3	
		26	1930	37.14	19	23.67	155	15.91	2.85	2.2	2.3	24	5	95	.08	1	0.3	0.3	20	SEC	
		26	23 0	6.09	19	17.59	155	21.67	6.64	2.0	1.4	35	7	121	.19	5	0.4	0.8	29	SWR	
		27	042	29.16	19	16.28	155	30.30	8.25	2.0	1.4	32	4	53	.14	2	0.4	0.7	32	LSW	
		27	817	54.42	19	54.19	155	18.64	35.76	2.5	1.9	46	14	194	.13	4	0.6	0.8	33	KEA	
		27	1019	28.95	19	31.53	155	7.54	25.45	2.7	2.4	51	16	138	.11	7	0.4	0.6	38	DEP	
		27	1042	32.93	19	20.73	155	6.00	7.95		1.5	28	5	104	.13	6	0.4	0.5	26	SF4	
		27	1049	21.24	19	18.76	155	9.48	6.93	1.6	1.2	28	6	112	.11	4	0.4	0.7	27	SF3	
		27	1352	16.38	19	23.76	155	15.49	3.87	2.3	2.2	33	8	58	.11	3	0.3	0.5	27	SEC	
		28	019	33.22	19	38.58	156	0.07	22.40		1.5	9	0	254	.12	19	2.3	3.6	4	KON	
		28	126	23.92	19	27.65	155	27.45	9.22	2.0	1.6	32	6	51	.09	6	0.3	0.8	28	KAO	

YEAR	MON	DA	ORIGIN TIME HRMN	SEC	LAT N DEG	MIN	LON W DEG	MIN	DEPTH KM	AMP MAG	DUR MAG	NR	GAP NS	DEG	RMS SEC	MIN DIS	ERH KM	ERZ KM	NO FM	REMK
1986	SEP	28	211	46.48	20	2.64	155	43.18	13.21		1.8	11	0	274	.16	21	4.4	1.0	4	KOH
		28	440	0.47	19	21.96	155	4.82	8.50	2.1	2.2	35	7	77	.12	5	0.5	0.4	34	SF5
		28	8 6	11.31	19	25.01	156	10.24	19.96	2.4	2.4	26	1	275	.14	28	3.2	4.4	28	KON
		28	957	15.42	19	48.39	156	9.65	12.47	2.9	2.7	35	2	255	.17	36	1.4	1.1	28	HUA
		29	1129	2.26	19	19.57	155	12.58	4.27		1.3	26	2	83	.11	5	0.4	1.5	17	SSF
		29	2016	52.01	19	27.52	154	54.12	4.87	2.1	1.2	19	4	175	.11	8	0.9	3.9	15	SLE
		30	1540	12.51	19	23.64	155	37.66	5.37	2.6	2.9	14	0	136	.05	9	0.6	4.1	15	MLO
		30	1735	46.04	18	56.93	155	6.60	49.18	2.6	2.4	48	4	249	.10	38	1.3	1.3	36	LOI
		30	18 6	25.31	19	20.13	155	12.03	6.67	2.5	3.0	50	6	79	.15	5	0.4	0.7	37	SF3
		30	22 2	16.26	19	40.97	155	14.25	36.13	4.0	4.4	58	14	140	.10	26	0.5	0.9	48	KEA F
	OCT	1	1 2	22.88	19	20.25	155	16.62	30.19	2.1	1.8	61	15	83	.12	1	0.5	0.5	47	DEP
		1	12 6	50.77	19	26.53	155	28.72	9.65	2.3	2.8	45	7	42	.12	7	0.3	0.7	42	KAO
		1	1931	51.44	19	19.60	155	30.77	9.86	2.4	2.6	42	2	60	.11	8	0.3	0.6	30	KAO
		2	1056	31.70	19	26.37	155	29.98	10.12	1.9	1.2	22	4	42	.08	8	0.4	1.1	20	KAO
		2	15 3	49.26	19	23.48	155	1.61	8.31	2.1	2.2	35	3	131	.13	5	0.6	0.4	20	SF5
		2	2119	5.03	19	24.71	155	41.71	18.75		1.2	11	0	125	.14	11	1.3	2.5	7	DML
		2	2132	40.58	19	19.38	155	49.82	9.02	2.1	1.2	24	1	144	.14	8	0.7	0.8	18	KON
		3	914	9.20	19	20.41	155	12.40	7.33	1.7	1.3	27	3	71	.13	4	0.5	0.7	17	SF2
		3	1525	46.43	19	19.45	155	12.61	5.96	1.7	1.8	32	3	84	.12	5	0.4	1.0	30	SF2
		4	157	36.55	19	2.15	154	58.36	14.07	2.1		26	4	276	.12	33	1.1	1.1	22	DIS
		4	3 0	36.09	19	22.21	155	29.99	9.32	2.0	1.4	36	3	33	.09	4	0.3	0.7	33	KAO
		4	458	13.79	19	23.03	155	2.39	6.24	1.7	1.2	20	2	132	.12	4	0.5	1.0	19	SF5
		4	556	16.30	18	51.48	155	17.21	16.99	2.2	1.7	39	14	257	.15	38	0.7	15.3	35	LOI *
		4	6 2	29.53	19	26.01	155	29.09	9.47	1.6	1.2	40	8	39	.12	7	0.3	0.5	34	KAO
		4	1848	12.89	19	18.66	155	14.78	5.76	1.4	1.3	38	4	101	.14	4	0.4	0.6	36	SF1
		4	1941	0.69	19	11.91	155	29.58	33.28	2.0	2.2	47	3	71	.09	5	0.6	0.6	44	DLS
		4	2218	47.73	19	24.98	155	17.67	5.95	2.3	3.3	11	1	89	.11	1	0.8	0.8	3	INT L
		4	2247	8.98	19	24.25	155	15.99	1.34	1.8	2.8	8	1	126	.10	2	0.3	0.4	1	SEC L
		5	015	56.70	19	22.63	155	18.60	0.44	1.7	2.0	10	3	74	.07	3	0.2	0.5	4	SSC L
		5	037	31.31	19	25.67	155	21.51	10.89	2.2	2.9	10	5	309	.07	5	1.5	1.1	1	KAO L
		5	117	17.40	19	26.66	155	2.14	5.02	2.5	2.5	9	1	322	.12	22	2.0	12.7	1	GLN L*
		5	123	43.47	19	29.49	155	15.86	9.96	2.2	2.5	14	4	274	.14	8	1.6	1.6	4	GLN L
		5	224	3.00	19	18.21	155	13.22	5.58	1.6	1.8	31	2	93	.09	2	0.4	0.9	29	SF2
		5	511	45.65	19	23.85	155	15.31	2.72	1.4	1.1	15	6	101	.07	2	0.3	0.4	9	SEC
		5	834	14.79	19	22.38	155	30.09	9.32	1.7	1.4	25	5	45	.07	4	0.3	0.6	21	KAO
		5	957	43.29	19	18.77	155	48.28	7.48	2.1	1.3	25	4	136	.13	9	0.5	1.5	21	KON
		5	1449	20.67	19	22.19	155	29.94	9.89	1.7	1.2	24	2	45	.05	4	0.3	0.5	18	KAO
		5	1745	58.93	19	22.32	155	29.97	9.50	1.7	1.2	26	2	45	.09	4	0.4	0.6	19	KAO
		6	643	47.72	19	12.26	155	39.21	8.30	2.6	3.0	38	3	104	.18	6	0.5	0.9	21	LSW
		6	1027	10.02	19	21.03	155	6.76	7.67	2.3	2.5	38	3	90	.12	4	0.4	0.5	30	SF4
		6	2317	45.29	19	22.32	155	28.87	10.07	3.0	3.4	60	12	36	.12	2	0.3	0.3	49	KAO
		7	913	4.47	19	33.62	156	24.56	9.85	1.6	2.3	52	10	277	.15	52	1.8	2.4	45	DIS
		7	14 7	14.58	19	18.62	155	13.35	5.16		1.1	25	1	81	.10	3	0.5	1.5	18	SF2
		7	18 5	5.20	19	20.03	155	12.94	5.70	1.4	1.3	24	0	71	.13	5	0.6	1.6	22	SF2
		7	1831	6.32	19	18.91	155	10.14	6.34	1.8	2.0	35	3	113	.14	5	0.5	0.9	22	SF3

YEAR	MON	DA	ORIGIN TIME HRMN	SEC	LAT N DEG	MIN	LON W DEG	MIN	DEPTH KM	AMP MAG	DUR MAG	NR	GAP NS	DEG	RMS SEC	MIN DIS	ERH KM	ERZ KM	NO FM	REMK
1986	OCT	8	1826	14.45	19	19.70	155	7.19	8.40	2.6	3.1	47	5	111	.11	5	0.5	0.4	38	SF4
		9	10 5	7.69	19	28.68	155	25.44	2.16	2.2	2.1	32	7	76	.13	4	0.3	0.7	27	KAO
		9	1045	24.59	19	45.19	155	44.29	29.70		1.6	20	1	158	.07	13	1.6	2.5	22	HUA
		9	1657	20.12	19	24.03	155	27.15	9.72	2.1	2.0	46	5	27	.10	3	0.3	0.4	30	KAO
		9	2240	45.01	18	59.49	155	39.00	13.44	2.5	2.5	34	3	179	.11	2	1.0	0.4	36	DLS
		10	118	22.31	19	20.58	155	6.88	7.55	1.9	2.2	39	3	98	.11	5	0.4	0.5	25	SF4
		10	1736	29.24	19	9.06	156	16.80	28.04		1.8	23	2	291	.15	45	2.0	4.6	23	KON
		10	2359	39.99	19	26.56	155	29.87	11.25		1.2	22	2	44	.09	6	0.5	1.0	17	KAO
		11	237	22.82	19	26.47	154	53.42	5.92	2.3	2.8	44	6	169	.14	4	0.6	0.5	26	LER
		11	414	28.05	19	17.01	155	54.78	12.90		1.3	15	0	246	.12	5	1.9	0.6	8	KON
		11	624	38.56	19	18.38	155	13.34	6.53	0.9	1.2	26	2	85	.10	3	0.4	1.0	15	SF2
		11	1547	59.78	19	21.63	155	23.89	9.28		1.1	19	2	62	.07	3	0.5	1.2	13	SWR
		11	16 7	47.76	19	19.27	155	15.40	7.68	1.7	1.6	37	3	98	.10	4	0.4	0.6	27	SF1
		12	114	36.17	19	19.57	155	8.08	8.73	2.3	2.7	49	9	90	.10	4	0.4	0.3	35	SF4
		12	123	13.67	19	19.84	155	7.92	7.09	1.6	1.4	24	2	92	.09	5	0.5	0.8	15	SF4
		12	1850	19.14	19	20.53	155	12.98	7.39	1.4	1.3	30	5	65	.13	4	0.4	0.5	29	SF2
		12	2228	4.19	19	23.46	155	30.53	10.85		1.4	24	3	42	.07	5	0.4	0.7	23	KAO
		13	014	28.04	19	20.22	155	3.19	6.80	0.9	1.7	29	5	97	.12	1	0.6	0.8	31	SF5
		13	139	53.59	19	25.51	155	19.28	4.32	1.5	1.0	14	3	132	.08	3	0.4	0.9	11	KAO
		13	1759	48.67	19	19.87	155	8.75	6.87	2.0	2.4	37	4	75	.11	5	0.4	0.7	36	SF4
		13	1848	22.92	19	3.96	156	14.60	36.80	1.7	2.2	29	5	293	.09	45	1.4	2.0	25	KON
		14	058	57.18	19	6.24	156	9.66	28.23	1.6	2.3	31	2	283	.13	35	2.0	1.8	23	KON
		14	7 9	16.10	19	16.20	155	28.68	8.19	1.1	1.7	32	2	60	.21	3	0.5	1.2	17	LSW
		14	10 5	26.21	19	21.75	155	28.94	3.85	1.9	1.7	20	4	50	.08	3	0.4	0.5	18	KAO
		14	1430	49.11	19	27.42	154	47.41	11.44	2.4	2.3	22	5	289	.11	7	1.3	0.5	17	LER
		14	1528	27.84	19	22.47	155	29.93	9.31	1.6	1.4	29	2	45	.09	4	0.3	0.7	28	KAO
		14	21 3	12.11	19	19.47	155	11.47	5.85	1.6	1.7	38	4	96	.13	6	0.4	1.0	35	SF3
		14	2338	45.57	19	8.81	155	37.44	1.96	2.0	1.4	18	2	109	.17	11	0.6	1.6	16	LSW
		15	558	41.02	19	27.36	155	29.47	8.88	2.2	2.0	38	5	60	.14	8	0.4	0.9	34	KAO
		15	615	18.17	19	22.26	155	28.55	9.82	3.0	3.2	53	10	50	.10	2	0.3	0.4	46	KAO
		15	856	47.34	19	21.97	155	14.25	13.50	2.0	2.0	24	0	55	.10	2	0.6	0.3	18	DEP
		15	1442	4.14	19	26.15	155	28.73	6.56	2.1	1.7	24	1	69	.11	7	0.4	1.7	9	KAO
		15	1636	35.70	19	28.46	155	26.82	3.68	2.0	1.3	27	5	55	.11	7	0.3	1.1	18	KAO
		15	1947	4.92	19	6.91	155	42.23	11.23	2.4	2.5	17	2	150	.11	15	0.7	0.8	14	LSW
		15	2033	25.75	19	19.50	155	7.21	7.72	1.6	1.6	35	3	114	.11	4	0.5	0.6	22	SF4
		16	546	41.33	19	21.73	155	2.62	3.61	1.7	1.4	35	7	127	.24	3	0.7	1.3	32	SSF
		16	9 0	53.01	19	22.12	155	28.75	10.25	2.4	2.2	50	9	39	.11	2	0.3	0.4	41	KAO
		16	1213	54.84	19	19.44	155	15.30	7.38	1.9	1.9	41	3	87	.12	4	0.4	0.6	41	SF1
		16	2328	2.31	19	17.53	155	13.28	4.69		1.2	19	1	108	.11	1	0.5	1.1	14	SSF
		17	038	23.77	19	20.43	155	8.45	7.15	2.2	1.5	45	5	76	.11	4	0.4	0.6	28	SF4
		17	038	49.05	19	19.97	155	8.36	6.98	1.9	1.3	9	1	81	.02	5	0.6	1.9	7	SF4
		17	747	9.95	19	24.28	154	58.86	6.52	1.8	1.4	21	0	190	.14	2	0.8	0.9	11	LER
		17	1518	15.22	19	23.94	155	15.62	3.03	2.7	3.3	46	6	67	.11	2	0.2	0.3	36	SEC F
		17	1934	12.74	19	23.82	155	16.08	3.00	1.7	1.6	18	4	101	.09	1	0.4	0.4	14	SEC
		18	1447	36.23	18	55.78	155	16.14	11.92	2.4	2.7	15	0	259	.11	33	3.1	0.9	5	LOI L

YEAR	MON	DA	ORIGIN TIME HRMN	SEC	LAT N DEG	MIN	LON W DEG	MIN	DEPTH KM	AMP MAG	DUR MAG	NR	GAP NS	DEG	RMS SEC	MIN DIS	ERH KM	ERZ KM	NO FM	REMK
1986	OCT	18	21 1	22.17	19	18.93	155	15.07	5.21	1.4	1.1	25	1	101	.15	5	0.5	1.5	24	SF1
		19	322	0.73	19	19.92	155	8.08	6.81	1.6	1.5	28	5	87	.14	5	0.5	0.7	26	SF4
		19	531	36.11	19	42.02	155	6.02	12.95	2.0	1.1	21	7	155	.11	3	0.7	0.7	6	HIL
		19	625	38.98	19	19.75	155	12.38	7.98	1.4	1.2	19	2	82	.05	5	0.5	0.9	15	SF2
		19	714	13.81	19	9.71	155	40.58	3.33	2.3	1.8	34	6	168	.18	11	0.7	1.7	32	LSW
		19	750	18.68	19	26.43	155	30.27	10.31	1.3	1.1	23	4	69	.09	9	0.4	1.1	21	KAO
		19	1858	11.07	19	17.07	155	30.17	8.24	2.2	2.0	37	0	48	.14	4	0.4	1.1	40	LSW
		19	1926	50.46	19	7.56	155	20.67	50.07	2.5	3.4	24	2	236	.18	13	1.5	1.5	5	LOI L
		20	257	33.67	19	19.90	155	12.17	5.15	1.4	1.3	29	4	82	.13	5	0.4	1.3	28	SF3
		20	953	5.00	19	19.76	155	8.00	7.72	2.6	3.2	49	8	90	.13	4	0.4	0.5	42	SF4
		20	1511	51.25	19	21.74	155	4.03	7.90	2.0	2.4	41	7	93	.20	4	0.5	0.6	27	SF5
		20	1626	9.65	19	20.41	155	12.82	7.71	1.9	2.3	43	5	68	.13	4	0.4	0.5	25	SF2
		20	2210	5.51	19	18.27	155	47.65	10.30	2.1	1.1	26	2	213	.11	15	0.8	0.6	19	KON
		20	2234	36.20	19	17.98	155	13.15	6.99	1.8	1.8	41	3	101	.11	2	0.4	0.7	24	SF2
		20	2351	42.02	19	28.81	155	26.82	3.56	2.4	1.7	49	9	41	.14	6	0.3	1.0	34	KAO
		21	623	25.16	19	23.88	155	16.05	3.09	2.1	1.5	22	6	104	.09	1	0.3	0.3	17	SEC
		21	623	59.88	19	23.91	155	16.00	2.95	1.9	1.7	22	7	107	.09	1	0.3	0.3	15	SEC
		21	628	46.22	19	24.15	155	16.19	3.06	2.0	1.5	22	6	118	.06	1	0.3	0.3	16	SEC
		21	840	0.78	19	24.19	155	16.14	3.18	1.6	1.6	17	4	121	.04	1	0.3	0.2	13	SEC
		21	942	22.40	19	50.84	155	34.02	20.55	2.6	2.3	40	7	113	.09	10	0.5	1.1	34	KEA
		21	1526	46.13	19	21.71	155	4.62	6.92	1.7	1.7	28	1	80	.13	4	0.5	0.9	20	SF5
		22	050	30.16	19	23.78	155	21.90	10.68	1.8	1.7	31	3	53	.08	4	0.4	0.7	25	KAO
		22	5	5 47.04	19	21.98	155	4.85	8.38	2.2	2.7	41	6	75	.12	5	0.5	0.4	30	SF5
		22	653	46.46	19	30.00	155	29.26	4.48	2.0	1.4	20	3	80	.08	5	0.4	2.0	11	MLO
		22	722	8.61	19	25.19	155	30.36	11.13	2.0	1.4	26	4	61	.08	5	0.4	0.8	24	KAO
		22	1228	16.71	19	22.14	155	30.02	9.95	1.7	1.2	20	4	79	.05	4	0.4	0.8	16	KAO
		22	1454	35.73	19	23.02	155	17.11	11.58	2.2	2.8	49	10	36	.10	1	0.3	0.3	38	INT
		22	2255	58.82	19	23.76	155	30.48	24.41	2.1	1.6	42	5	40	.09	5	0.5	0.9	37	DML
		23	132	4.57	19	20.45	155	7.86	5.08	1.6	1.1	31	3	86	.16	5	0.5	1.3	29	SF4
		23	419	24.00	19	19.68	155	11.80	7.12	1.4	1.2	23	4	89	.09	6	0.4	1.0	20	SF3
		23	1313	17.71	19	26.46	155	22.36	9.94	1.7	1.4	23	5	68	.10	4	0.4	0.8	18	KAO
		23	16	8 2.63	19	24.88	155	19.01	6.35	2.3	2.2	34	6	70	.12	2	0.4	0.6	26	INT
		23	1822	45.41	19	18.02	155	30.55	9.99	1.7	1.4	27	2	72	.12	6	0.4	0.8	16	LSW
		23	21	7 17.09	19	20.44	155	22.79	9.67	1.4	1.4	23	2	69	.08	1	0.5	1.0	15	SWR
		24	1142	57.41	19	28.90	155	26.87	1.88	2.3	2.3	45	8	41	.13	6	0.2	0.5	21	KAO
		24	14	9 58.20	19	16.99	155	25.21	3.65		1.3	13	1	90	.12	5	0.5	2.2	7	LSW
		24	1626	26.18	19	20.12	155	12.10	7.43	1.9	2.3	45	5	78	.15	5	0.4	0.5	31	SF3
		24	1710	28.96	19	16.77	155	15.69	26.75	1.8	1.4	32	2	168	.08	4	1.0	1.4	31	DEP
		25	111	53.09	19	24.41	155	16.32	2.86	0.8	0.9	14	4	131	.08	1	0.3	0.2	10	SEC
		25	138	47.90	19	8.37	155	35.47	7.51		1.3	21	1	133	.12	12	0.9	2.0	20	LSW
		25	610	49.07	19	14.22	155	27.75	9.68		1.2	20	3	94	.13	4	0.6	1.1	18	LSW
		25	1438	25.75	19	21.72	155	2.41	4.85	0.8	1.1	31	3	142	.16	3	0.6	1.6	17	SSF
		25	2212	33.04	19	20.07	155	12.31	7.36	1.4	2.0	44	5	77	.14	5	0.4	0.6	40	SF2
		26	326	20.31	19	23.96	155	15.43	2.80		1.1	19	6	106	.08	2	0.3	0.3	15	SEC
		26	411	23.52	19	23.71	155	27.17	9.58		1.1	37	5	60	.11	2	0.3	0.4	35	KAO

YEAR	MON	DA	ORIGIN TIME HRMN	SEC	LAT N DEG	MIN	LON W DEG	MIN	DEPTH KM	AMP MAG	DUR MAG	NR	GAP NS	DEG	RMS SEC	MIN DIS	ERH KM	ERZ KM	NO FM	REMK
1986	OCT	26	411	53.68	19	23.42	155	27.56	10.01		1.2	46	7	34	.12	2	0.3	0.4	41	KAO
		26	5	4 53.63	19	19.91	155	10.85	6.91	1.2	1.5	49	7	88	.14	4	0.4	0.5	44	SF3
		26	14	2 11.73	19	20.35	155	12.85	6.96	1.4	1.1	28	4	68	.12	4	0.5	0.9	25	SF2
		26	1548	8.10	19	18.68	155	24.09	6.83	1.5	1.1	16	5	81	.09	3	0.4	1.3	11	SWR
		26	1641	51.18	19	21.11	155	1.92	8.11	3.0	3.3	57	13	162	.11	3	0.5	0.4	47	SF5
		26	17	8 50.86	19	21.38	155	1.89	7.66	2.4	2.6	42	6	155	.13	3	0.6	0.5	39	SF5
		26	1957	6.04	19	20.14	155	13.42	6.00	1.4	1.0	28	4	66	.13	5	0.4	0.8	25	SF2
		26	20	4 18.28	20	17.51	155	33.90	22.39	2.9	3.4	59	12	192	.13	29	0.7	1.9	50	KEA
		27	5	2 23.29	19	19.57	155	8.78	6.44		1.1	24	2	81	.08	4	0.5	1.0	13	SF4
		27	556	41.30	18	39.85	156	25.61	7.11	2.8	2.3	39	3	322	.09	88	7.4	9.9	28	DIS *
		27	725	44.19	19	19.61	155	11.54	7.19	1.5	1.5	23	1	93	.11	5	0.5	0.9	19	SF3
		27	910	39.06	19	14.21	155	27.70	10.82	2.4	2.5	45	7	95	.11	5	0.4	0.6	23	LSW
		27	1543	6.85	19	24.99	155	15.80	14.60	1.9	1.7	41	8	113	.11	2	0.5	0.3	32	DEP
		27	17	3 22.92	19	22.79	155	17.00	8.31	1.9	2.3	7	1	194	.24	2	2.9	1.8	1	INT L
		28	025	40.26	19	22.38	155	0.70	7.85	2.1	1.9	41	6	161	.15	6	0.7	0.5	40	SF5
		28	212	7.58	19	22.19	155	29.02	9.93	1.6	1.2	38	6	39	.13	3	0.3	0.4	33	KAO
		28	227	51.43	19	32.22	155	15.66	4.93	2.0	2.2	12	5	320	.15	13	1.5	13.9	3	GLN L*
		28	9	1 48.00	19	18.83	155	12.85	7.97	1.5	1.2	26	5	91	.09	4	0.5	0.8	24	SF2
		28	9	5 39.22	19	19.45	155	8.11	6.05	1.6	1.2	25	4	91	.10	4	0.4	0.8	25	SF4
		28	12	4 32.71	19	23.37	155	16.88	12.23	2.2	2.3	12	4	84	.07	0	1.0	0.7	4	INT L
		28	1715	50.38	19	27.51	155	16.06	1.67	1.6	1.6	7	2	237	.05	5	0.5	0.6	1	SNC L
		28	2149	40.76	19	22.29	155	4.25	8.12	2.0	2.1	39	4	91	.13	4	0.4	0.5	26	SF5
		28	2155	30.99	19	26.68	155	15.49	8.79	2.1	2.6	19	5	217	.18	4	1.1	0.9	6	INT L
		29	031	18.16	19	23.91	155	16.01	3.12	1.9	2.0	23	7	70	.09	1	0.3	0.3	14	SEC
		29	336	57.13	19	24.05	155	16.18	3.02	2.5	2.4	32	7	70	.08	1	0.2	0.2	23	SEC
		29	1013	23.68	19	18.03	155	13.57	5.69	1.8	1.8	28	4	77	.12	2	0.4	1.1	24	SF2
		29	1416	3.62	19	20.67	155	12.78	8.26	1.7	1.5	38	7	69	.12	4	0.4	0.5	34	SF2
		29	1622	45.27	19	25.90	155	29.83	9.71	1.9		42	9	40	.10	7	0.3	0.6	35	KAO
		29	1622	58.03	19	25.66	155	29.87	8.95	2.1	2.3	43	10	72	.13	7	0.3	0.6	37	KAO
		29	19	0 50.16	19	26.11	155	30.68	9.57	2.4	2.2	53	15	37	.13	8	0.3	0.5	44	KAO
		30	1437	20.77	19	20.41	155	11.73	7.98	1.4	1.2	30	5	76	.10	4	0.4	0.5	30	SF3
		30	1834	59.59	19	25.72	155	19.37	7.61	2.0	1.6	26	7	141	.09	3	0.4	0.6	23	KAO
		30	1949	2.93	19	22.43	155	29.93	9.65	2.5	2.8	55	12	42	.13	4	0.3	0.4	48	KAO
		30	2227	32.84	19	18.94	155	15.03	8.31	1.2	1.6	32	3	91	.22	4	0.6	0.8	29	SF1
		31	4	5 1.33	19	18.86	155	13.68	7.64	1.4	1.2	20	3	87	.06	3	0.5	0.9	20	SF2
		31	756	20.35	19	19.61	155	7.38	5.47		1.2	21	2	108	.09	4	0.4	1.3	20	SF4
		31	1341	7.74	19	3.70	155	23.18	33.94	2.7	2.8	52	9	203	.08	14	0.8	1.1	44	LOI
		31	1843	2.11	19	22.79	155	1.65	7.56	1.7	1.2	25	2	151	.13	5	0.7	0.4	23	SF5
	NOV	1	139	39.90	19	22.20	155	5.12	7.77	1.8	2.0	33	2	72	.10	4	0.4	0.6	33	SF5
		1	218	58.92	19	23.71	155	16.95	2.87	2.3	2.4	23	5	62	.10	1	0.3	0.2	19	SSC
		1	652	38.94	19	17.29	155	12.61	10.56	2.0	2.1	38	3	153	.11	8	0.5	0.8	35	SF2
		1	749	13.06	19	23.98	155	1.17	7.74	2.1	2.2	34	4	139	.12	5	0.5	0.4	31	SF5
		1	831	56.37	19	25.08	155	30.38	11.25	2.4	2.2	37	4	37	.09	7	0.3	0.5	35	KAO
		1	1253	51.13	19	27.85	155	28.24	10.36	2.3	2.5	52	11	52	.12	7	0.3	0.4	45	KAO
		1	17	8 18.33	19	23.08	155	14.84	29.23	3.0	3.4	59	15	48	.12	2	0.5	0.4	47	DEP

YEAR	MON	DA	ORIGIN TIME HRMN	SEC	LAT N DEG	MIN	LON W DEG	MIN	DEPTH KM	AMP MAG	DUR MAG	NR	GAP NS	DEG	RMS SEC	MIN DIS	ERH KM	ERZ KM	NO FM	REMK
1986	NOV	2	713	26.47	19	20.28	155	11.80	8.56	2.5	2.6	47	9	78	.13	5	0.4	0.4	39	SF3
		2	10 7	0.15	19	23.29	155	30.66	8.93	2.3	2.5	39	1	43	.11	6	0.4	0.7	31	KAO
		2	1523	9.35	19	20.33	155	13.00	7.20	1.4	1.3	28	2	66	.12	4	0.5	0.8	22	SF2
		2	1616	46.18	19	28.59	155	52.59	10.82	2.8	3.1	35	2	154	.15	5	0.6	0.4	18	KON
		2	17 7	46.26	19	17.40	155	12.94	6.85	2.1	2.0	37	3	143	.12	1	0.4	0.8	20	SF2
		2	1728	30.03	19	17.93	155	13.04	4.57	1.5	1.3	21	1	108	.07	2	0.4	1.0	15	SSF
		2	18 6	59.16	19	17.19	155	13.07	6.78	1.8	1.8	37	2	158	.10	1	0.5	0.8	22	SF2
		2	1813	58.52	19	17.46	155	12.84	6.53	1.8	1.4	14	0	159	.08	1	1.2	1.6	11	SF2
		3	011	27.13	19	20.56	155	11.99	8.34	2.4	2.9	48	8	72	.13	4	0.4	0.5	43	SF3
		3	442	57.81	19	18.19	155	13.12	9.25	2.1	2.4	47	6	97	.14	2	0.5	0.4	42	SF2
		3	532	18.50	19	18.44	155	12.99	3.48	1.7	1.5	31	2	96	.10	3	0.4	0.9	28	SSF
		3	545	20.32	18	51.35	155	14.57	12.35	2.5	2.3	22	1	267	.11	41	2.4	1.1	8	LOI L
		3	6 5	21.93	19	17.36	155	12.77	6.37	1.5	1.2	19	3	154	.09	1	0.6	1.2	16	SF2
		3	647	12.72	18	44.31	155	12.34	11.00	2.6	2.4	32	7	276	.22	54	3.9	5.7	32	LOI
		3	1614	15.50	19	21.43	155	7.53	8.32	2.1	2.4	31	4	77	.12	3	0.4	0.6	23	SF4
		3	1743	19.44	19	32.63	155	54.80	6.07	2.2	1.5	19	0	201	.06	6	0.7	0.4	14	KON
		4	313	6.04	19	24.90	155	19.23	7.64	1.9	1.2	29	5	98	.12	2	0.4	0.8	21	KAO
		4	551	14.67	19	25.93	155	29.03	8.62	1.6	1.2	20	1	66	.07	7	0.3	1.3	17	KAO
		4	643	53.04	19	20.91	155	4.94	7.12	1.7	1.7	32	2	102	.11	4	0.5	0.7	22	SF5
		4	8 3	7.68	19	25.81	155	21.41	10.17	1.9	1.7	18	2	76	.07	4	0.6	1.0	16	KAO
		4	838	4.80	19	11.43	155	28.61	34.22	2.3	2.1	42	5	86	.07	4	0.6	0.9	38	DLS
		5	147	35.83	19	19.37	155	7.65	8.96	1.9	2.4	48	12	105	.14	4	0.3	0.3	43	SF4
		5	418	15.89	19	27.14	155	25.89	8.00	1.6	1.2	23	4	60	.11	4	0.4	1.0	20	KAO
		5	649	53.09	19	20.59	155	10.39	31.06		1.4	37	8	76	.10	3	1.0	0.7	29	DEP
		5	913	6.00	19	19.39	155	10.52	6.56	1.8	1.8	27	4	100	.11	5	0.4	0.8	19	SF3
		5	1035	43.48	19	19.25	155	8.52	6.71	1.9	1.7	36	5	81	.10	4	0.4	0.7	31	SF4
		5	14 6	55.32	19	44.80	155	2.50	0.00	2.6	3.1	23	0	263	.25	28	3.3	2.5	37	HIL B*
		5	1450	28.09	19	28.73	155	28.16	9.43	2.7	2.4	47	9	54	.13	6	0.3	0.7	41	KAO
		5	2325	18.17	19	19.82	155	12.76	10.71	3.4	3.9	61	16	76	.15	5	0.4	0.3	48	SF2
		6	219	4.15	19	19.42	155	11.77	5.26	1.7		29	4	95	.13	5	0.4	1.4	26	SF3
		6	12 2	44.92	19	10.75	155	41.73	6.11	3.1	3.2	40	4	127	.17	20	0.6	1.5	42	LSW
		6	1233	2.49	19	19.46	155	7.17	7.26	1.9	1.9	36	4	117	.10	4	0.4	0.6	33	SF4
		6	1852	0.72	19	19.57	155	7.37	7.39	0.9	1.4	10	2	109	.04	4	0.6	1.9	9	SF4
		6	1933	26.14	19	20.63	155	16.34	33.11	2.1	1.9	43	6	76	.10	2	0.6	0.6	32	DEP
		7	039	32.05	19	22.25	155	26.48	10.28	2.0	1.7	30	3	49	.11	2	0.4	0.6	20	KAO
		7	522	43.09	18	49.03	155	12.41	10.13	2.7	2.8	22	1	265	.11	47	1.8	0.9	7	LOI L
		7	739	58.96	19	19.55	155	8.96	6.76	1.5	1.2	22	3	84	.07	4	0.4	1.0	14	SF4
		7	1143	16.17	19	19.90	155	29.10	9.65	1.7	1.2	19	2	45	.10	5	0.4	0.9	14	KAO
		7	1316	9.86	19	20.22	155	12.21	8.51	2.2	2.3	48	7	76	.13	5	0.4	0.4	36	SF3
		7	1813	3.32	19	22.96	155	3.06	8.14	1.7	1.2	32	2	115	.14	3	0.6	0.4	18	SF5
		8	559	8.02	19	22.23	155	27.80	9.45		1.2	25	4	68	.12	1	0.5	0.7	23	KAO
		8	1528	11.68	19	22.99	155	15.88	31.81	2.8	2.6	56	13	42	.11	1	0.6	0.4	44	DEP
		8	1541	28.22	19	19.50	155	7.88	8.91	2.6	3.2	53	12	97	.12	4	0.4	0.4	47	SF4
		8	1854	13.50	19	27.49	155	24.04	11.51	2.4	1.9	40	10	65	.11	4	0.3	0.4	37	KAO
		8	2357	3.09	19	29.18	155	26.85	6.28	2.4	2.0	31	6	56	.11	5	0.3	1.1	27	KAO

YEAR	MON	DA	ORIGIN TIME HRMN	SEC	LAT N DEG	MIN	LON W DEG	MIN	DEPTH KM	AMP MAG	DUR MAG	NR	GAP NS	DEG	RMS SEC	MIN DIS	ERH KM	ERZ KM	NO FM	REMK
1986	NOV	9	314	41.58	19	23.40	155	18.40	10.08	2.2	2.6	14	4	53	.08	4	0.5	0.8	4	INT L
		9	9 7	29.91	19	20.65	155	7.62	4.48	1.6	1.1	16	1	144	.15	5	0.6	1.7	8	SSF
		9	1422	1.72	19	44.13	156	10.29	36.39	2.5	1.6	12	1	325	.08	38	3.3	2.6	5	HUA
		10	525	56.78	19	52.70	155	31.51	24.61	3.0	2.6	44	9	129	.11	13	0.5	1.1	31	KEA
		10	541	31.52	20	25.29	155	20.68	5.94		2.2	26	5	277	.20	56	0.9	1.3	26	DIS
		10	19 9	15.40	19	16.96	155	14.81	5.05		1.1	19	1	152	.10	2	0.6	1.3	13	SF1
		10	2011	23.14	19	28.91	155	26.47	5.79	2.6	2.2	37	5	61	.12	6	0.3	0.8	20	KAO
		11	321	34.37	19	19.94	155	7.36	7.80	1.6	1.4	28	1	158	.10	5	0.5	0.6	20	SF4
		11	452	38.81	19	20.29	155	12.92	7.59	2.4		41	7	67	.13	4	0.4	0.5	36	SF2
		11	15 7	55.09	19	21.41	155	13.05	8.17	2.2	2.5	52	13	56	.17	2	0.3	0.5	41	SF2
		11	1925	15.85	19	21.31	155	4.34	7.50	2.0	2.1	38	5	158	.13	6	0.5	0.7	20	SF5
		12	637	24.72	19	27.90	155	24.28	7.13	2.0	1.2	20	3	70	.11	4	0.4	0.9	14	KAO
		12	1217	32.44	19	26.49	155	28.46	10.01	2.1	1.4	28	6	48	.11	6	0.4	0.8	18	KAO
		12	1253	2.12	19	54.65	155	23.12	11.41		1.8	13	0	269	.05	5	2.4	0.5	9	KEA
		12	20 6	3.47	19	28.23	155	47.70	0.52		1.3	14	1	136	.25	5	2.8	3.8	13	KON
		12	2015	59.70	19	12.29	155	22.04	46.15	2.4	2.2	32	4	163	.10	11	0.9	1.0	27	DEP
		13	8 2	55.84	19	22.98	155	0.79	6.63	2.2	2.4	32	4	168	.14	5	0.7	0.6	30	SF5
		13	1433	26.96	19	19.22	155	10.32	6.18	1.5	1.3	19	0	105	.13	5	0.7	2.0	14	SF3
		13	1542	7.51	19	28.23	155	26.75	7.86	2.5	1.4	25	3	52	.13	6	0.3	0.8	15	KAO
		14	019	42.63	19	18.02	155	27.63	8.99	1.9	1.9	33	3	45	.13	7	0.4	0.6	22	LSW
		14	540	59.19	19	24.52	155	0.25	7.54	1.8	1.4	23	1	172	.14	3	1.0	0.5	11	SF5
		14	1045	55.60	19	19.53	155	30.60	10.12		1.4	21	2	59	.08	8	0.4	0.8	14	KAO
		14	1113	9.82	19	21.87	155	14.28	30.38	2.1	1.5	27	5	83	.11	2	1.1	1.3	19	DEP
		14	1852	36.86	19	20.75	155	9.96	9.11	1.5	1.4	19	2	94	.07	2	0.6	0.8	15	SF3
		14	1952	8.68	19	53.09	155	33.38	11.57	2.7	3.0	27	2	192	.11	11	1.1	0.5	16	KEA
		15	3 0	45.66	19	24.02	155	25.74	6.68	1.4	1.2	21	2	48	.12	2	0.4	0.9	19	KAO
		15	1058	54.10	19	20.50	155	12.89	9.06	3.9	4.1	42	2	65	.13	4	0.4	0.5	35	SF2 F
		15	1358	32.81	19	19.92	155	18.93	29.03	1.8	1.6	44	13	52	.13	4	0.5	0.5	33	DEP
		15	1454	58.04	19	16.64	155	7.41	42.73	2.8	3.0	51	8	186	.12	2	0.7	0.9	42	DEP
		15	2049	42.86	19	23.70	155	15.56	3.08	1.4	1.6	20	7	97	.11	2	0.3	0.4	12	SEC
		16	131	15.30	19	23.85	155	29.89	9.54	2.8	3.0	51	14	55	.12	5	0.3	0.4	42	KAO
		16	2 8	19.56	19	20.17	155	12.24	7.00	1.4	1.3	41	8	77	.15	5	0.4	0.5	36	SF3
		16	519	58.09	19	17.41	155	13.08	6.22	1.5	1.7	36	8	133	.12	1	0.4	0.6	30	SF2
		16	7 9	26.49	19	59.02	155	33.97	12.21	2.2	2.1	23	6	253	.15	17	0.9	0.5	22	KEA
		16	953	27.23	19	20.14	155	10.30	9.28	1.5	1.4	24	5	103	.13	4	0.5	0.6	22	SF3
		16	1125	55.75	19	18.99	155	15.78	4.18	1.3	1.1	27	4	108	.13	5	0.4	1.8	23	SSF
		16	1217	41.04	20	29.49	155	11.94	1.20	2.6	2.2	18	3	292	.20	69	4.8	2.0	21	DIS
		16	1246	59.84	19	25.00	155	15.93	8.87	1.8	1.6	10	2	174	.15	3	1.5	0.9	0	INT L
		16	1359	56.55	19	51.24	156	6.09	11.31		2.4	19	2	264	.11	33	2.0	0.8	6	HUA
		16	1731	53.57	19	22.60	155	27.30	9.94	1.9	1.9	28	5	37	.14	1	0.4	0.5	25	KAO
		16	2014	47.19	19	19.45	155	30.10	10.34	2.2	2.0	36	2	55	.09	7	0.3	0.5	30	KAO
		16	2043	11.91	19	20.13	155	13.22	5.58	1.4	1.1	15	1	66	.12	5	0.6	1.7	12	SF2
		16	2214	59.11	20	11.73	155	52.87	17.06		2.3	10	1	311	.18	44	2.3	19.3	7	KOH *
		17	2 4	33.74	19	18.99	155	15.15	4.33	1.4	1.1	23	1	91	.12	5	0.4	2.1	17	SSF
		17	338	24.30	19	30.82	155	15.20	31.51	2.5	2.2	9	1	271	.11	11	3.3	3.1	2	DEP L

YEAR	MON	DA	ORIGIN TIME HRMN	SEC	LAT N DEG	MIN	LON W DEG	MIN	DEPTH KM	AMP MAG	DUR MAG	NR	GAP NS	DEG	RMS SEC	MIN DIS	ERH KM	ERZ KM	NO FM	REMK	
1986	NOV	17	420	32.80	19	23.21	155	13.30	3.65	2.0	1.6	5	1	142	.02	1	0.8	0.8	1	SER L	
		17	938	23.62	19	25.81	155	15.92	14.50	2.1	1.6	17	5	183	.18	3	0.9	0.9	2	DEP L	
		17	952	19.71	19	24.01	155	16.89	10.84	2.1	1.6	12	4	112	.15	3	1.3	0.9	3	INT L	
		17	1020	15.44	19	25.07	155	16.36	13.17	2.1	1.6	13	3	159	.14	2	1.7	1.0	1	DEP L	
		17	1036	22.29	19	25.84	155	15.32	15.44	2.2	1.6	10	1	203	.13	3	1.6	1.9	4	DEP L	
		17	1057	55.53	19	25.93	155	15.73	13.33	2.1	1.6	14	3	194	.09	3	0.8	0.6	2	DEP L	
		17	11 6	38.08	19	26.86	155	16.41	11.82	1.8	1.6	14	2	206	.21	4	1.6	1.7	4	INT L	
		17	1135	46.61	19	26.64	155	15.41	15.14	2.2	1.8	16	5	210	.11	4	1.4	1.0	2	DEP L	
		17	1151	16.58	19	26.28	155	16.09	2.19	1.4	1.8	8	1	198	.10	7	0.9	1.0	1	SNC L	
		17	1229	41.94	19	24.31	155	17.64	9.80	2.0	1.9	16	2	50	.18	2	0.8	1.0	4	INT L	
		17	1333	31.10	19	24.67	155	14.80	15.44	2.1	1.6	14	3	146	.12	1	1.5	0.8	1	DEP L	
		17	1351	30.58	19	24.99	155	13.10	15.44	2.1	1.6	10	3	248	.09	2	1.9	0.7	0	DEP L	
		17	1411	15.61	19	25.77	155	15.61	11.02	2.0	1.6	12	3	185	.19	4	1.7	1.2	5	INT L	
		17	1437	34.22	19	20.59	155	10.87	8.03	1.9	2.0	30	6	76	.11	3	0.4	0.6	28	SF3	
		17	16 6	38.99	19	25.71	155	16.10	14.27	2.1	1.6	12	2	181	.23	4	1.6	2.5	1	DEP L	
		17	1640	22.90	20	10.18	155	46.68	35.68	3.7	3.8	54	12	159	.12	5	0.7	0.5	44	KOH F	
		17	1830	43.96	19	26.22	155	19.65	8.10	2.2	1.4	33	10	139	.13	3	0.3	0.5	27	KAO	
		18	627	25.04	19	12.51	155	31.35	8.30	1.8	1.4	20	4	186	.13	5	0.7	1.0	18	LSW	
		18	1039	30.50	19	8.54	155	25.17	37.51	2.4	2.3	24	0	239	.09	11	2.4	3.4	25	DLS T	
		18	1632	56.99	19	23.18	155	15.38	10.97	1.8	1.4	14	3	143	.15	2	1.0	1.0	4	INT L	
		18	1659	0.37	19	24.50	155	14.07	12.88	2.0	1.4	18	3	160	.19	4	1.6	1.0	17	INT L	
		18	2035	46.86	19	19.34	155	11.25	5.06	1.5	1.1	34	6	101	.16	6	0.4	1.6	30	SF3	
		19	120	59.20	19	22.25	155	17.65	15.57	2.3	1.6	8	2	202	.07	3	1.5	0.7	2	DEP L	
		19	2 5	58.22	19	22.98	155	17.27	11.42	1.9	1.8	15	4	130	.14	3	0.7	0.6	4	INT L	
		19	412	24.46	19	18.78	155	12.84	6.57	1.4	1.5	38	5	92	.14	3	0.4	0.8	37	SF2	
		19	913	41.61	19	19.36	155	8.52	9.11	3.1	3.2	56	13	80	.12	4	0.4	0.3	48	SF4 F	
		19	1618	39.09	19	22.07	155	49.25	8.53	2.1	1.7	28	3	117	.13	12	0.5	0.9	25	KON	
		19	1637	52.01	19	19.66	155	8.73	8.04	2.6	2.6	41	5	78	.11	4	0.4	0.5	40	SF4	
		20	414	57.99	19	25.50	155	19.02	14.57	2.1	1.8	10	2	130	.30	2	4.6	3.0	2	DML L	
		20	418	9.39	19	27.96	155	15.81	17.31	2.3	1.8	15	3	215	.08	6	1.7	0.9	5	DEP L	
		20	930	59.84	19	38.16	156	27.33	27.76		1.8	27	7	302	.13	59	1.6	4.8	22	DIS	
		20	1841	32.81	19	19.59	155	7.18	6.73	1.9	2.0	28	3	113	.09	4	0.4	0.9	16	SF4	
		20	1920	8.83	19	16.90	155	27.53	10.64	1.7	1.2	19	2	60	.11	6	0.5	0.9	12	LSW	
		21	515	13.45	19	25.97	155	29.24	10.21	2.1	1.4	25	3	67	.09	7	0.4	0.8	19	KAO	
		22	1021	15.02	19	21.21	155	26.05	10.67	1.9	1.5	42	8	50	.13	4	0.3	0.5	38	KAO	
		22	1340	0.49	19	27.29	155	29.51	10.22	2.2	2.0	43	7	46	.12	8	0.3	0.5	41	KAO	
		22	1937	55.89	20	11.84	155	45.35	30.98	3.1	2.9	60	15	287	.11	8	0.6	0.9	47	KOH	
		23	617	55.45	19	25.03	155	9.63	12.49	1.8	1.7	43	5	38	.11	5	0.4	0.4	36	SF3	
		23	1740	34.71	19	20.71	155	29.28	4.75	1.6	1.2	13	2	89	.12	4	0.7	1.4	9	KAO	
		24	236	56.04	19	9.51	155	34.86	6.95	2.3		26	1	115	.16	12	0.6	1.3	10	LSW	
		24	1215	42.24	19	9.18	155	34.14	7.73	2.2	1.6	17	1	124	.15	11	0.7	1.6	10	LSW	
		24	2059	3.54	19	48.20	155	46.93	21.78	2.7	2.8	51	12	218	.13	14	0.6	1.0	39	HUA	
		24	2357	3.04	19	11.77	155	23.70	43.03	2.5	2.0	55	15	161	.11	5	0.6	0.5	43	DEP	
		25	1123	51.85	19	21.14	155	6.87	7.63	2.1	2.0	40	4	88	.12	4	0.4	0.6	38	SF4	
		25	1914	20.89	19	30.38	155	18.57	10.91	1.9	1.6	37	5	55	.13	6	0.4	0.7	27	GLN	

YEAR	MON	DA	ORIGIN TIME HRMN	SEC	LAT N DEG	MIN	LON W DEG	MIN	DEPTH KM	AMP MAG	DUR MAG	NR	GAP NS	DEG	RMS SEC	MIN DIS	ERH KM	ERZ KM	NO FM	REMK	
1986	NOV	25	2356	9.28	19	24.06	155	26.01	7.32	1.5	1.4	21	2	49	.11	3	0.4	0.8	19	KAO	
		26	1945	43.77	19	18.96	155	13.10	5.34	1.4	1.1	24	4	83	.12	4	0.4	1.1	21	SF2	
		26	2048	16.57	19	23.70	155	15.47	2.94	2.4	2.4	30	6	49	.10	2	0.2	0.3	25	SEC	
		26	2218	7.36	19	29.50	155	27.40	7.30	2.0	1.4	26	8	85	.10	5	0.3	0.9	22	KAO	
		27	0 1	54.55	19	22.82	155	26.75	9.86	2.2	2.0	42	7	46	.11	2	0.3	0.3	35	KAO	
		27	0 2	48.77	19	16.78	155	26.16	0.79	1.6	1.4	18	6	106	.11	6	0.3	0.5	16	LSW	
		27	227	44.17	19	17.90	155	16.27	4.43	1.4	1.3	22	1	136	.12	4	0.5	1.4	10	SSF	
		27	636	24.00	19	18.77	155	13.88	5.78	1.7	1.5	29	2	79	.11	3	0.4	1.1	16	SF2	
		27	1020	38.11	19	20.65	155	11.69	8.12	2.0	2.0	32	1	72	.12	4	0.5	0.6	29	SF3	
		27	1119	37.77	19	26.00	155	29.78	9.59	1.9	1.2	19	2	70	.09	7	0.4	0.9	14	KAO	
		27	1256	11.22	19	19.56	155	8.36	6.45	1.7	1.5	27	2	84	.12	4	0.6	1.0	17	SF4	
		27	1547	39.26	19	19.46	155	13.00	7.55	1.4	1.4	20	1	78	.08	5	0.5	0.9	17	SF2	
		28	853	18.61	19	22.13	155	17.52	33.54	3.0	2.6	59	13	52	.12	3	0.6	0.6	40	DEP	
		28	10 5	50.78	19	22.71	155	24.37	12.54	1.8	1.2	17	2	166	.09	5	0.7	0.9	10	KAO	
		28	1526	11.03	19	19.84	155	11.55	7.90	2.4	2.5	46	6	87	.12	5	0.4	0.5	43	SF3	
		28	1541	42.47	19	11.52	155	28.95	11.30	2.4		30	6	141	.10	4	0.5	0.5	27	LSW	
		28	1846	12.44	19	11.81	155	28.92	10.16	2.1	1.2	18	3	136	.10	5	0.5	1.0	15	LSW	
		29	214	49.50	19	57.12	155	48.19	9.87	2.6	2.3	18	1	192	.09	18	1.3	0.7	19	KOH	
		29	5 5	11.77	19	20.16	155	10.33	7.20	1.8	1.8	35	4	83	.13	4	0.4	0.7	33	SF3	
		29	550	36.27	19	21.83	155	5.12	7.86	2.1	2.1	36	5	79	.12	5	0.4	0.6	34	SF5	
		29	954	30.33	19	11.37	155	28.89	11.48	2.3	1.3	27	4	143	.12	4	0.6	0.5	23	LSW	
		29	2313	56.02	19	18.06	155	13.24	6.61	1.8	2.0	33	3	94	.12	2	0.5	0.9	25	SF2	
		30	1 0	25.23	18	37.06	155	33.46	9.54	2.8	2.8	35	2	305	.09	42	1.8	0.9	23	DIS	
		30	343	12.95	19	22.38	155	1.84	7.97	2.0	1.9	37	2	140	.12	5	0.6	0.4	26	SF5	
		30	423	48.66	19	25.27	155	20.46	5.25	1.9	1.5	21	4	92	.10	3	0.4	1.2	16	KAO	
		30	7 1	24.62	19	19.24	155	8.55	6.37	1.9	1.7	32	2	82	.08	4	0.4	0.9	21	SF4	
		30	920	46.11	19	24.37	155	19.49	6.26	2.7	2.9	46	9	37	.14	1	0.3	0.6	27	KAO	
		30	1952	17.93	19	22.90	155	2.30	8.09	2.3	1.9	40	8	126	.13	4	0.4	0.4	34	SF5	
		30	2045	53.50	19	12.39	155	34.01	45.49			17	1	108	.17	7	2.2	4.4	5	DLS T	
	DEC	1	1053	0.41	19	29.87	155	29.85	3.38	1.6	1.5	16	1	101	.08	5	0.4	1.9	13	KAO	
		1	13 0	43.51	19	16.99	155	12.12	8.81	1.9	1.4	20	3	243	.09	2	0.6	0.9	15	SF3	
		1	13 7	10.78	19	18.58	155	13.28	6.74	1.8		19	1	134	.10	8	0.6	1.5	15	SF2	
		1	2151	14.16	19	5.77	156	13.50	7.76	3.0	2.9	31	3	294	.11	54	2.7	1.5	21	KON	*
		2	1433	54.89	19	19.28	155	15.39	7.67	1.7	1.7	34	3	90	.10	4	0.4	0.7	25	SF1	
		2	1627	13.63	19	10.81	155	41.68	3.97	2.0	1.2	19	2	177	.19	11	1.3	7.0	11	LSW	
		2	1741	14.80	19	19.92	155	11.67	8.58	1.5	1.2	26	3	85	.07	5	0.4	0.7	16	SF3	
		2	19 2	24.62	20	2.93	155	21.36	13.96	0.9	1.9	12	1	247	.08	18	4.5	0.7	13	KEA	
		3	7 8	54.94	19	5.11	156	12.75	9.01	2.7		38	10	289	.12	54	2.1	2.6	30	KON	
		3	1239	28.03	19	11.73	155	27.99	6.19	2.3	1.7	29	1	114	.14	4	0.5	1.1	15	LSW	
		3	18 4	17.43	19	10.97	155	41.23	4.71	2.3	1.8	23	3	174	.22	10	0.9	8.8	17	LSW	*
		3	18 7	59.64	19	11.15	155	40.98	3.50	2.3	1.8	21	3	172	.20	10	1.0	3.2	13	LSW	
		4	037	4.39	19	19.69	155	11.49	5.85	1.4		30	4	91	.12	5	0.4	1.1	27	SF3	
		4	051	19.42	19	19.47	155	12.21	7.88	2.5	2.7	43	5	89	.12	5	0.5	0.6	40	SF3	
		4	242	5.00	19	36.30	155	20.74	5.75	2.3	2.0	5	1	325	.22	16	5.3	20.7	2	KEA	L*
		4	16 1	6.79	19	26.25	155	29.96	9.70	1.9	1.3	26	3	69	.09	8	0.4	0.9	17	KAO	

YEAR	MON	DA	ORIGIN TIME HRMN	SEC	LAT N DEG	MIN	LON W DEG	MIN	DEPTH KM	AMP MAG	DUR MAG	NR	NS	GAP DEG	RMS SEC	MIN DIS	ERH KM	ERZ KM	NO FM	REMK
1986	DEC	4	1957	5.60	19	12.80	155	32.09	6.96	2.0	1.5	36	3	85	.15	5	0.4	1.0	21	LSW
		4	2035	13.92	19	28.37	155	26.85	6.86	2.3	2.0	47	9	65	.13	6	0.3	0.6	27	KAO
		5	446	10.74	19	23.79	155	16.06	2.99	2.0	2.0	18	4	99	.09	3	0.4	0.6	16	SEC
		5	553	34.71	19	20.14	155	11.87	9.03	2.8	3.1	51	9	79	.10	5	0.3	0.3	34	SF3
		5	11 9	41.79	19	20.48	155	13.03	8.70	2.7	3.1	50	7	64	.13	4	0.4	0.5	37	SF2
		5	12 3	38.11	19	19.47	155	29.99	10.45	2.0	1.8	36	2	54	.10	7	0.3	0.5	25	KAO
		5	1725	36.35	19	22.12	155	4.57	7.91	2.4	2.4	45	9	77	.14	4	0.3	0.5	27	SF5
		5	18 8	40.34	19	19.28	155	9.77	7.30	0.9	1.3	25	0	100	.08	5	0.5	1.0	18	SF3
		6	343	26.06	19	20.67	155	12.50	9.07	1.7	1.5	20	2	68	.10	4	0.5	0.7	19	SF2
		6	1210	40.98	19	21.59	155	2.27	8.10	3.6	3.8	41	3	140	.11	3	0.4	0.4	28	SF5 F
		6	1223	11.82	19	11.18	155	18.72	44.87	2.1	1.8	14	3	202	.10	13	2.2	1.1	14	DEP L
		6	1226	46.74	19	10.84	155	16.83	46.09	2.1	1.9	22	2	187	.07	13	1.4	1.0	20	DEP L
		6	1633	11.93	19	11.59	155	17.68	47.40	2.1	1.8	21	3	180	.13	12	2.0	1.0	18	DEP L
		6	1637	52.01	19	10.76	155	16.52	44.89	2.1	1.8	19	3	210	.08	13	2.3	1.3	17	DEP L
		6	1645	32.02	20	44.62	155	58.55	11.05	4.2	4.6	6	1	229	.06	29	5.5	10.5	31	DIS F*
		6	2251	43.63	19	18.10	155	13.15	7.73	1.5	1.5	27	3	98	.12	2	0.5	0.6	23	SF2
		7	425	57.27	19	18.66	155	13.02	8.55	1.5	1.4	26	3	132	.11	7	0.5	0.5	20	SF2
		8	045	50.35	19	11.13	155	29.07	4.19	2.0	1.5	30	1	77	.15	4	0.5	1.8	17	LSW
		8	149	38.24	19	35.68	155	5.49	25.20	2.3	1.8	45	6	170	.10	11	0.6	1.4	41	HIL
		8	341	5.09	19	27.00	155	21.61	1.89	2.1	2.4	35	4	53	.12	2	0.3	0.4	16	KAO
		8	344	48.13	19	27.02	155	21.95	1.25	2.2	1.8	7	1	87	.02	2	0.5	0.9	4	KAO
		8	355	46.16	19	28.35	155	19.91	2.54	1.8	1.1	14	3	197	.11	2	0.8	0.5	8	KAO
		8	544	9.41	19	19.68	155	8.68	6.23	1.6		28	3	77	.10	5	0.4	0.9	14	SF4
		8	544	41.22	19	19.67	155	8.86	5.95	2.0	2.0	31	1	80	.09	5	0.4	0.7	20	SF4
		8	610	40.81	19	27.97	155	20.38	2.63	1.7	1.1	19	5	164	.11	1	0.6	0.4	10	KAO
		8	626	47.68	19	23.80	155	15.71	3.24	2.3	2.0	24	4	103	.07	2	0.3	0.3	19	SEC
		8	657	26.98	19	26.91	155	21.35	2.21	2.4	2.4	36	5	40	.14	2	0.3	0.4	22	KAO
		8	7 5	57.01	19	26.86	155	21.26	2.04	2.4	2.6	35	3	43	.17	2	0.3	0.5	22	KAO
		8	7 7	54.16	19	18.86	155	13.31	9.26	3.1	3.1	43	1	130	.12	7	0.4	0.4	37	SF2
		8	735	20.02	19	18.89	155	13.45	8.10	2.1	1.9	40	4	130	.15	7	0.4	0.7	24	SF2
		8	12 2	28.26	19	27.20	155	21.42	2.05	2.0	1.2	13	3	93	.06	1	0.3	0.4	9	KAO
		8	12 3	12.34	19	27.12	155	21.50	1.79	2.1	1.3	20	3	89	.10	2	0.3	0.4	13	KAO
		8	1637	22.88	19	18.41	155	13.32	9.48	2.4	2.6	45	5	137	.12	8	0.4	0.4	37	SF2
		8	1913	46.49	19	17.73	155	13.03	6.28		1.2	23	1	117	.09	2	0.5	1.1	16	SF2
		8	1918	35.58	19	16.40	155	21.83	7.81	1.6	1.4	22	2	158	.08	5	0.5	1.3	18	SWR
		8	2014	17.92	19	30.32	155	56.50	12.09			14	2	306	.11	3	2.2	0.5	9	KON
		9	157	22.72	19	22.73	155	25.61	11.33	1.5	1.1	18	1	41	.11	4	0.5	0.8	15	KAO
		9	538	22.24	19	28.68	155	27.20	1.66	2.1	1.0	21	5	80	.13	6	0.3	0.6	14	KAO
		9	10 4	44.84	19	13.20	155	32.14	7.47	2.4	2.4	36	3	127	.14	5	0.5	1.0	24	LSW
		9	1033	40.63	19	29.51	155	6.40	20.18	2.2	1.9	10	2	311	.16	16	3.4	4.4	2	DEP L
		9	1039	7.84	19	23.96	155	10.99	35.71	2.5	1.9	13	1	213	.12	4	4.8	1.2	2	DEP L
		9	1043	41.43	19	52.94	155	28.85	1.53	2.7	2.3	8	1	346	.13	55	13.0	7.8	1	KEA L*
		9	1046	20.94	19	23.03	155	18.86	12.99	2.0	1.4	12	2	209	.16	2	2.7	1.5	2	INT L
		9	1129	2.81	19	19.32	155	18.55	20.36	2.2	1.5	9	2	290	.10	7	4.4	4.5	1	DEP L*
		9	1142	13.02	19	12.88	155	31.24	6.68	2.1	1.2	18	1	155	.14	5	0.6	1.5	11	LSW

YEAR	MON	DA	ORIGIN TIME HRMN	SEC	LAT N DEG	MIN	LON W DEG	MIN	DEPTH KM	AMP MAG	DUR MAG	NR	NS	GAP DEG	RMS SEC	MIN DIS	ERH KM	ERZ KM	NO FM	REMK
1986	DEC	9	1311	54.71	19	54.29	155	16.72	9.46	2.1	1.4	8	1	291	.05	7	3.4	1.1	4	KEA
		9	1432	53.92	19	19.83	155	21.81	18.99	2.3	1.8	11	2	252	.11	8	2.4	2.6	3	DEP L
		9	1438	44.20	19	31.83	155	12.31	5.98	2.1	1.5	10	2	318	.10	15	1.5	9.2	3	GLN L
		9	1439	50.27	19	26.26	155	15.07	27.14	2.2	1.7	12	2	228	.14	3	4.6	1.2	1	DEP L
		9	1458	16.32	19	31.07	155	13.82	10.05	2.0	1.5	8	1	273	.05	12	1.6	6.8	2	GLN L
		9	16 3	50.52	20	49.82	154	59.90	12.07	3.2	3.1	43	3	318	.12111		7.3	10.7	27	DIS *
		9	1618	15.54	20	6.58	155	49.29	12.05	2.5	1.8	9	0	250	.04	5	2.0	0.7	10	KOH
		9	1721	29.70	19	19.62	155	8.48	7.64	1.6	0.7	17	2	81	.05	4	0.5	0.9	13	SF4
		9	1727	13.72	19	31.68	155	16.58	28.11	2.3	2.0	10	3	322	.27	12	8.3	3.3	0	DEP L
		9	1842	0.36	19	21.28	155	17.16	11.46	1.9	1.4	11	2	108	.17	2	1.4	1.2	3	SWR L
		9	1950	54.38	19	32.86	155	10.23	6.06	2.0	1.2	8	3	330	.10	19	1.9	12.4	2	GLN L*
		9	2016	57.50	19	17.55	155	21.23	6.89	1.9	1.2	4	2	317	.09	12	4.6	14.2	1	SWR L*
		9	2121	20.55	19	29.15	155	2.74	7.83	2.2	1.4	10	3	337	.30	22	4.0	16.8	3	GLN L
		9	2247	58.11	19	49.56	155	9.43	24.97	2.8	2.2	11	1	335	.23	47	6.2	17.9	3	KEA L*
		9	2250	59.41	19	23.89	155	17.02	16.53	2.1	1.3	11	2	80	.11	1	2.4	0.9	3	DEP L
		10	211	17.14	19	29.05	155	26.38	7.56	2.8	1.9	62	17	57	.14	6	0.3	0.5	49	KAO
		10	435	35.49	19	25.12	155	16.83	13.22	1.9	1.6	21	5	152	.14	1	1.1	0.6	17	DEP L
		10	520	50.56	19	24.59	155	17.86	11.86	1.7	1.3	20	7	58	.20	2	1.3	0.6	16	INT L
		10	533	14.82	19	19.46	155	8.16	6.31		1.2	35	7	90	.11	4	0.4	0.6	31	SF4
		10	542	34.01	19	24.34	155	14.85	17.81	1.8	1.4	17	5	152	.11	1	1.5	0.8	15	DEP L
		10	6 8	14.71	19	24.58	155	16.90	12.47	1.8	1.5	20	5	102	.10	1	0.9	0.5	17	INT L
		10	6 9	33.38	19	12.15	155	16.45	43.19	2.7	2.1	60	17	182	.13	10	0.8	0.4	48	DEP
		10	615	4.05	19	16.04	155	22.82	43.60	2.3	1.4	11	0	259	.10	15	3.9	5.0	6	DEP L
		10	7 7	15.74	19	23.79	155	16.80	17.49	1.9	1.6	15	2	68	.09	0	1.3	0.9	7	DEP L
		10	839	36.48	19	24.06	155	17.32	13.70	1.7	1.2	15	3	58	.13	1	1.2	0.9	3	DEP L
		10	955	25.90	19	25.84	155	14.90	24.00	2.0	1.4	13	2	224	.08	2	3.0	1.0	4	DEP L
		10	1034	35.38	20	12.61	155	28.52	9.60	2.1	1.5	31	2	246	.16	33	0.8	1.2	24	KEA
		10	11 5	18.03	19	24.31	155	18.83	18.59	2.0	2.1	15	3	98	.12	2	2.6	0.9	4	DEP L
		10	1150	59.11	19	22.33	155	19.36	14.97	1.8	1.4	14	4	207	.08	3	1.2	1.0	2	DML L
		10	1322	51.14	19	24.58	155	19.91	17.26	2.1	1.9	13	3	82	.13	2	1.6	1.2	5	DML L
		10	14 2	31.98	19	22.45	155	17.08	19.18	1.9	1.5	10	3	205	.07	2	3.7	1.3	1	DEP L
		10	1416	16.00	19	24.37	155	15.27	16.91	1.8	1.6	12	4	124	.08	2	2.0	0.6	2	DEP L
		10	1440	44.15	19	30.27	155	13.07	11.93	2.0	1.2	13	4	291	.18	11	2.2	1.9	3	GLN L
		10	1447	42.80	19	20.37	155	2.33	5.60	3.2	3.3	65	19	175	.16	1	0.4	0.5	49	SF5
		10	1932	51.51	19	23.23	155	1.30	7.44	1.8	1.3	32	3	149	.14	5	0.6	0.4	16	SF5
		10	2259	4.36	19	20.01	155	12.14	6.98	1.4	1.2	39	5	80	.15	5	0.5	0.8	27	SF3
		11	1748	42.66	19	19.67	155	6.91	6.64	1.9	1.4	36	8	117	.12	5	0.4	0.6	35	SF4
		11	18 3	57.81	19	19.49	155	13.45	8.76	1.7	1.7	46	6	122	.13	6	0.4	0.3	42	SF2
		11	23 9	39.88	19	25.80	155	19.38	5.90	1.9	1.2	25	5	137	.11	3	0.5	0.8	19	KAO
		11	2345	54.20	19	23.98	155	26.71	9.70	1.8	1.2	38	3	31	.11	3	0.4	0.6	35	KAO
		12	7 7	8.69	19	19.19	155	26.41	10.27	2.0	1.7	38	3	59	.13	6	0.4	0.5	30	KAO
		13	139	22.96	19	18.57	155	15.72	7.14	1.7	1.7	40	4	106	.13	4	0.4	0.7	24	SF1
		13	2 5	51.15	19	19.73	155	11.91	8.88	2.6	2.7	46	8	87	.12	6	0.4	0.4	43	SF3
		13	524	58.19	19	25.59	155	19.76	8.14	2.0	1.2	25	5	118	.10	3	0.4	0.7	15	KAO
		13	1729	23.38	19	4.13	155	22.69	38.43	2.1	1.4	32	2	217	.08	13	1.0	1.3	24	LOI

YEAR	MON	DA	ORIGIN TIME HRMN	SEC	LAT N DEG	MIN	LON W DEG	MIN	DEPTH KM	AMP MAG	DUR MAG	NR	GAP NS	RMS DEG	MIN SEC	ERH DIS	ERZ KM	NO KM	FM	REMK
1986	DEC	13	2111	24.06	19	27.64	154	53.81	5.66	1.9	1.2	20	1 133	.12	3	0.6	1.1	14	LER	
		14	528	27.64	19	29.54	155	40.02	15.97	2.0	1.2	24	2 100	.12	7	0.6	0.4	19	DML	
		14	744	12.89	19	16.34	155	33.85	7.49	2.2	1.7	36	2 90	.15	6	0.4	1.0	28	LSW	
		14	1241	43.19	19	27.25	155	29.71	9.38	2.3	1.7	43	10 61	.12	9	0.4	0.9	34	KAO	
		14	1421	36.47	19	19.99	155	11.57	7.73	2.1	2.3	44	6 85	.13	5	0.4	0.6	40	SF3	
		14	1953	57.89	19	4.82	155	23.32	36.07	2.5	2.0	49	8 197	.09	12	0.8	0.9	42	LOI	
		14	2218	20.99	19	27.94	155	26.77	2.78	2.0	1.3	36	6 49	.11	6	0.3	0.8	31	KAO	
		15	1337	51.59	19	27.18	154	53.42	5.33	2.1	1.8	28	1 148	.10	3	0.6	1.0	19	LER	
		15	1859	43.38	19	22.76	155	30.32	10.90	1.8	1.2	36	2 42	.08	5	0.4	0.5	27	KAO	
		16	953	39.59	19	22.37	155	3.91	8.16	2.0	1.7	35	4 101	.13	4	0.5	0.3	34	SF5	
		16	1329	45.10	19	40.04	155	3.68	0.00	2.1	1.7	8	0 305	.09	36	7.4	5.6	6	HIL	B*
		16	1738	35.99	19	17.68	155	25.73	9.16	1.6	1.2	17	1 61	.09	6	0.5	1.5	11	LSW	
		16	22 2	37.27	19	18.32	155	15.09	5.44	1.6	1.1	30	5 115	.13	4	0.5	1.3	26	SF1	
		16	2239	17.24	19	22.55	154	57.88	3.83	1.8	1.6	24	5 189	.20	5	0.7	1.5	20	SLE	
		17	438	26.93	19	17.24	155	24.65	9.93	1.9	1.2	32	4 77	.14	5	0.4	0.6	33	SWR	
		17	1844	24.86	19	26.59	155	30.13	9.35	2.1	1.4	31	4 67	.10	9	0.4	0.8	22	KAO	
		17	2341	49.91	19	28.78	155	27.02	1.89	2.1	1.3	23	7 50	.11	6	0.3	0.6	18	KAO	
		19	730	35.90	19	18.66	155	24.20	8.47	1.8	1.4	21	6 78	.09	3	0.4	0.9	17	SWR	
		19	1010	1.54	19	21.91	155	4.82	7.89	2.1	2.4	45	7 78	.13	5	0.4	0.6	39	SF5	
		19	1521	30.53	19	24.37	155	25.99	9.25	1.5	1.2	31	4 38	.11	2	0.4	0.6	29	KAO	
		19	1522	9.95	19	29.01	155	27.65	1.85	1.5	0.9	25	9 84	.11	6	0.3	0.6	17	KAO	
		19	1748	23.44	19	22.03	155	2.99	3.38		1.1	25	3 123	.27	4	0.6	1.3	23	SSF	
		19	2354	57.80	18	58.30	155	28.19	19.89		1.4	33	11 238	.11	21	0.8	1.4	22	DLS	
		20	3 3	18.53	19	25.60	155	17.01	14.02	1.7	1.4	15	3 163	.24	1	2.4	0.9	5	DEP	L
		20	1333	57.93	19	18.67	155	15.51	6.01	0.9	1.2	20	1 112	.11	4	0.5	1.3	14	SF1	
		20	1529	2.84	19	21.52	155	4.45	8.85	2.0	1.8	44	10 81	.14	4	0.5	0.4	39	SF5	
		20	19 1	16.26	19	25.34	155	16.73	20.63	2.0	1.4	11	2 223	.09	1	2.3	1.1	2	DEP	L
		20	1947	7.56	19	23.36	155	2.45	7.72	2.0	2.3	38	3 119	.12	3	0.4	0.5	14	SF5	
		20	2225	6.49	19	25.20	155	15.90	14.97	1.8	1.5	13	1 171	.11	2	2.1	0.8	3	DEP	L
		20	2246	1.53	19	15.92	155	39.75	1.02	2.3	1.5	11	2 227	.11	5	2.1	1.1	9	LSW	
		21	051	31.59	19	25.62	155	29.37	9.36	2.1	1.7	31	5 41	.10	7	0.4	0.7	18	KAO	
		21	4 6	3.84	19	24.32	155	15.97	15.04	2.0	1.8	17	4 127	.13	1	1.3	0.6	6	DEP	L
		21	5 7	57.53	19	24.58	155	18.10	7.48	1.1	1.3	14	4 127	.08	3	0.6	0.6	9	INT	L
		21	826	15.55	19	23.71	155	15.77	2.90	1.6	1.1	18	5 98	.11	1	0.3	0.4	13	SEC	
		22	720	42.25	19	26.77	155	49.72	10.05		2.3	31	2 247	.18	10	1.5	0.6	17	KON	
		22	1133	44.44	19	20.66	155	13.15	7.44	1.7	1.1	25	2 62	.10	4	0.4	0.6	18	SF2	
		22	1140	1.83	19	20.22	155	6.03	7.00	1.8	1.3	30	2 117	.12	5	0.5	0.8	17	SF4	
		22	15 4	53.69	19	21.64	155	30.02	9.41	2.4	2.1	43	3 44	.08	4	0.3	0.5	34	KAO	
		22	1611	37.18	19	19.78	155	6.36	8.19	2.4	2.3	46	7 125	.11	5	0.4	0.5	28	SF4	
		23	528	34.38	19	19.73	155	7.02	8.66	2.7	2.3	45	6 114	.10	5	0.4	0.4	43	SF4	
		23	1746	43.26	19	21.45	155	4.50	7.83	2.5	2.5	40	6 83	.11	4	0.4	0.5	34	SF5	
		23	2326	55.69	19	19.99	155	7.36	7.64	1.6	1.4	30	5 101	.09	5	0.4	0.7	26	SF4	
		23	2329	33.08	19	0.17	154	58.40	45.15	2.4	1.7	47	6 275	.11	36	1.8	1.4	42	DIS	
		24	1440	4.81	19	18.59	155	13.97	6.60	1.7	1.2	30	3 83	.12	3	0.4	0.9	23	SF2	
		24	2141	25.95	19	8.49	155	41.47	0.01	2.1	1.2	21	1 265	.16	14	2.6	0.9	15	LSW	*

YEAR	MON	DA	ORIGIN TIME HRMN	SEC	LAT N DEG	MIN	LON W DEG	MIN	DEPTH KM	AMP MAG	DUR MAG	NR	GAP NS	RMS DEG	MIN SEC	ERH DIS	ERZ KM	NO KM	FM	REMK
1986	DEC	25	833	10.89	19	20.39	155	3.75	7.22	2.5	2.5	44	2 112	.11	2	0.6	0.6	37	SF5	
		25	1228	47.58	19	21.13	155	1.30	7.33	2.3	2.1	42	3 176	.15	4	0.5	0.6	32	SF5	
		25	1241	57.14	19	20.65	155	4.09	6.93	2.6	2.4	43	2 104	.12	2	0.5	0.7	38	SF5	
		25	1754	20.95	19	21.04	155	0.32	9.41	2.2	1.9	34	0 190	.14	8	1.0	0.7	26	SF5	
		25	2237	26.04	19	10.72	155	37.44	1.98	2.0	1.3	21	1 147	.19	15	0.7	2.4	11	LSW	
		26	455	19.62	19	25.76	155	19.60	3.88	1.9	1.3	18	2 131	.11	4	0.5	0.8	16	KAO	
		26	1551	47.80	19	19.75	155	8.82	5.75	1.5	1.3	24	2 78	.10	5	0.4	1.1	13	SF4	
		26	1922	16.55	19	8.66	155	23.89	43.01			17	0 233	.06	7	2.2	4.9	11	LOI	T
		26	23 0	27.96	19	30.75	155	56.69	12.59		1.4	22	2 259	.11	22	1.3	0.7	14	KON	
		27	145	22.90	19	21.46	155	15.63	32.52		1.5	36	5 65	.10	2	1.0	0.7	26	DEP	
		27	1345	11.69	19	12.45	155	28.86	8.27	2.4	2.3	35	3 126	.15	5	0.5	0.8	28	LSW	F
		27	1436	16.98	19	21.77	154	46.87	39.55	2.2	1.6	41	2 275	.12	13	1.8	1.0	36	LER	
		27	2033	1.13	19	22.59	155	26.47	9.52	2.2	1.7	44	7 36	.13	2	0.3	0.4	39	KAO	
		27	2333	18.99	19	21.65	155	23.68	8.81	1.7	1.2	21	3 60	.09	3	0.5	1.1	14	SWR	
		28	6 6	35.48	20	0.61	155	41.65	30.24	2.7	1.5	24	4 267	.07	17	1.2	0.9	15	KOH	
		28	714	40.45	19	27.48	155	29.01	9.66	2.3	1.8	40	5 51	.11	8	0.3	0.7	29	KAO	
		28	9 4	48.38	19	20.39	155	11.30	7.14	2.0	1.8	32	2 79	.13	4	0.5	0.9	30	SF3	
		28	1335	5.60	19	15.77	155	21.55	7.56	1.6	1.2	23	3 164	.08	5	0.5	1.3	18	SWR	
		28	1543	59.66	19	19.84	155	11.93	7.83	1.8	1.5	36	5 85	.11	6	0.4	0.5	23	SF3	
		28	20 5	26.70	19	31.65	155	12.90	22.95	2.2	1.6	15	2 300	.17	13	3.2	1.6	3	DEP	L
		28	2134	28.90	19	29.30	155	10.03	18.57	2.1	1.5	11	3 317	.10	15	2.9	1.1	4	DEP	L
		28	2327	31.12	19	24.97	155	14.03	22.34	2.1	1.3	16	3 220	.14	1	1.9	1.0	9	DEP	L
		29	340	36.18	19	21.71	155	18.12	12.47	2.1	1.2	19	5 65	.20	3	0.9	0.6	21	SWR	L
		29	447	2.07	19	25.67	155	14.22	18.01	2.1	1.5	15	3 224	.13	5	1.9	1.2	16	DEP	L
		29	6 5	8.18	19	22.20	155	13.86	21.23	2.2	1.5	13	3 168	.11	2	1.7	0.9	3	DEP	L
		29	729	20.79	19	18.70	155	12.70	8.84	1.8	1.2	23	2 98	.09	3	0.5	0.8	19	SF2	
		29	831	23.52	19	25.81	155	15.84	13.31	1.8	1.2	14	3 241	.14	3	1.4	0.8	4	DEP	L
		29	1931	4.21	19	20.92	155	16.24	33.27	2.1	1.7	45	8 72	.11	3	0.5	0.6	35	DEP	
		29	2111	35.35	19	17.84	155	13.32	7.19	1.5	1.2	20	1 95	.09	2	0.6	1.1	16	SF2	
		29	2158	34.28	19	21.69	155	19.31	30.19	2.1	1.8	40	5 42	.12	4	0.7	0.8	29	DEP	
		30	521	50.94	19	20.68	155	6.47	0.04	1.1	1.2	39	10 100	.22	5	0.3	0.2	32	SSF	*
		30	1157	33.46	19	21.35	155	5.84	5.50	1.6	1.1	23	4 90	.14	5	0.5	1.2	21	SF4	
		30	2117	44.18	19	10.51	155	41.68	3.15	2.9	2.6	42	7 175	.18	11	0.6	1.4	37	LSW	
		31	17 4	35.13	19	22.02	155	1.15	2.00	1.1	1.2	27	2 168	.26	5	1.0	1.9	20	SSF	
		31	2031	42.85	19	30.44	155	14.46	26.97	2.8	2.6	60	15 48	.13	11	0.4	0.6	45	DEP	
		31	2219	57.44	19	21.36	155	2.45	8.04	2.6	2.6	46	7 137	.11	3	0.3	0.5	34	SF5	

Table 6. 1986 HVO EARTHQUAKE SUMMARY LIST M>=3.0 PAGE 1

YEAR	MON	DA	ORIGIN TIME HRMN	SEC	LAT N DEG	MIN	LON W DEG	MIN	DEPTH KM	AMP MAG	DUR MAG	NR	NS	GAP DEG	RMS SEC	MIN DIS	ERH KM	ERZ KM	NO FM	REMK	
1986	JAN	3	134	20.07	19	29.35	155	27.46	7.75	3.3		64	18	41	.13	5	0.2	0.5	48	KAO	
		17	1348	31.67	19	22.85	155	4.60	9.46	3.6	3.9	57	8	81	.11	3	0.4	0.3	48	SF5	F
		23	1235	57.66	19	20.55	155	11.68	9.60	3.5	3.9	59	16	74	.12	4	0.3	0.3	49	SF3	F
		23	1628	55.61	20	46.01	156	54.71	0.98	3.2	3.4	34	5	333	.13	137	13.7	4.8	31	DIS	*
		26	2038	42.47	18	51.39	155	14.86	10.18	2.9	3.7	46	10	267	.12	41	0.6	0.5	42	LOI	
		27	1336	28.07	19	19.53	155	13.52	8.64	3.8	4.0	57	11	66	.13	5	0.4	0.5	50	SF2	F
	FEB	3	11 1	22.09	19	21.32	155	1.38	8.22	3.5	3.7	58	14	169	.12	4	0.4	0.3	47	SF5	F
		4	1056	33.17	19	32.57	155	14.33	24.11	3.5	3.7	70	22	66	.13	14	0.4	0.6	50	DEP	F
		6	13 3	53.31	19	23.80	155	36.49	25.66	3.3	3.4	75	24	47	.10	6	0.3	0.6	51	DML	
		14	425	27.38	19	20.34	155	11.76	8.94	3.1	3.6	57	12	77	.14	5	0.3	0.4	44	SF3	
		19	053	26.27	19	40.01	156	32.13	6.06	3.1	3.0	59	15	288	.13	68	3.4	4.4	45	DIS	*
		19	2117	48.08	19	18.89	155	11.43	8.00	3.3	3.6	54	15	111	.13	5	0.3	0.4	43	SF3	F
		27	2121	14.70	19	19.30	155	11.42	8.17	3.4	3.7	53	8	101	.12	6	0.4	0.4	44	SF3	F
	MAR	1	439	50.95	20	2.02	155	33.20	32.35	3.5	3.3	82	34	189	.11	22	0.5	0.8	49	KEA	
		1	1110	34.23	19	24.22	155	17.56	16.30	3.3	3.3	59	14	39	.11	2	0.3	0.3	46	DEP	F
		12	1229	34.67	19	19.09	155	13.39	11.43	3.7	3.8	66	18	124	.14	7	0.3	0.3	50	SF2	F
		16	1058	35.58	19	44.99	156	8.33	38.52	3.7	4.6	59	15	249	.12	37	0.9	1.1	49	HUA	F
		27	734	15.83	19	20.11	155	8.11	8.81	3.0	3.3	18	2	84	.12	5	0.4	0.7	6	SF4	
		30	948	3.12	19	20.80	155	2.99	8.87	3.7	4.0	46	6	116	.12	2	0.4	0.4	39	SF5	F
		30	1337	6.25	19	26.00	155	21.27	10.77	3.5	3.5	50	9	31	.10	3	0.3	0.3	37	KAO	
		30	1813	1.80	19	3.69	156	17.87	37.73	3.0	3.2	43	3	297	.10	50	2.3	1.6	32	KON	
	APR	5	2018	57.53	21	24.97	155	34.50	15.05	3.2	2.9	30	7	334	.14	171	8.3	14.2	20	DIS	*
		6	2237	49.67	19	12.22	155	36.91	8.50	4.4	4.3	27	1	92	.14	17	0.6	0.9	25	LSW	F
		13	2341	17.32	19	33.37	156	32.03	14.27	3.5	3.4	22	3	336	.12	65	8.8	13.0	16	DIS	*
		18	837	14.30	19	21.00	155	17.64	30.51	2.9	3.2	48	17	38	.12	2	0.6	0.5	31	DEP	
		18	1826	40.34	19	30.03	155	27.09	6.12	3.1	3.0	59	12	49	.13	4	0.3	0.7	38	MLO	
		22	1843	51.33	19	17.95	155	16.23	32.08	4.4	4.7	49	1	121	.12	4	0.6	1.1	50	DEP	F
		23	149	52.03	19	18.65	155	15.92	29.75	3.2	3.4	61	17	104	.12	4	0.5	0.4	45	DEP	F
		26	719	47.94	20	55.74	155	37.55	16.45	5.0	5.3	68	20	321	.16	90	2.3	17.3	49	DIS	F*
		30	1047	32.24	19	53.71	155	26.53	28.87	3.0	3.2	65	19	192	.11	10	0.5	0.6	47	KEA	
	MAY	6	1510	2.42	19	20.48	155	12.79	8.91	3.0	3.3	54	10	67	.13	4	0.3	0.3	43	SF2	
		7	1545	26.16	19	18.03	155	14.09	11.36	3.2	3.8	56	9	141	.11	7	0.4	0.3	40	SF2	
		8	1322	53.29	21	13.13	155	32.57	15.67	2.7	3.3	35	2	283	.15	89	3.8	7.7	25	DIS	
		13	7 8	39.12	19	25.17	155	16.06	16.70	3.4	3.7	73	24	37	.14	2	0.3	0.3	48	DEP	F
		21	837	16.70	19	23.41	155	18.15	29.26	3.1	3.4	69	20	27	.12	2	0.4	0.4	48	DEP	F
		22	20 4	50.55	19	19.50	155	11.39	9.05	2.9	3.5	42	5	96	.12	5	0.4	0.4	41	SF3	
		23	1416	14.04	19	29.98	155	51.13	23.54	2.9	3.3	63	16	103	.11	7	0.5	0.7	47	KON	F
		27	823	44.03	19	5.12	156	15.46	7.85	3.2		49	14	298	.11	45	0.6	0.8	41	KON	
		30	2033	11.82	19	47.90	156	11.90	12.69	3.4	3.4	51	9	294	.19	40	1.1	1.1	41	HUA	
	JUN	4	1527	15.31	19	29.22	155	27.72	7.52	3.3	3.2	59	14	41	.14	5	0.3	0.7	46	KAO	
		8	1133	9.91	19	20.73	155	1.28	9.23	3.3	3.5	34	3	195	.11	3	0.5	0.4	31	SF5	
		10	248	17.72	19	21.51	155	30.18	9.83	2.8	3.2	60	17	33	.13	5	0.3	0.4	49	KAO	
		10	1314	40.91	19	4.16	156	15.45	35.37	3.3	3.8	57	11	285	.10	46	0.7	1.4	49	KON	
		11	528	8.72	19	22.00	155	26.09	10.60	2.9	3.3	54	11	41	.13	3	0.3	0.4	41	KAO	
		22	13 5	38.66	19	17.82	154	59.20	45.79	3.3	3.4	63	15	215	.11	8	0.9	0.6	47	LER	

YEAR	MON	DA	ORIGIN TIME HRMN	SEC	LAT N DEG	MIN	LON W DEG	MIN	DEPTH KM	AMP MAG	DUR MAG	NR	NS	GAP DEG	RMS SEC	MIN DIS	ERH KM	ERZ KM	NO FM	REMK
1986	JUN	25	213	59.68	19	24.95	155	18.67	5.41	3.1	3.5	53	9	37	.12	2	0.3	0.5	46	INT F
		29	2 6	42.14	18	48.04	155	10.01	9.53	2.9	3.1	38	8	294	.11	51	1.2	1.6	36	LOI
	JUL	2	1350	29.85	19	29.75	155	27.70	5.19	3.5	3.4	51	8	42	.14	4	0.3	1.4	35	KAO
		2	1451	19.85	19	20.63	155	12.78	8.95	2.9	3.1	46	6	66	.12	4	0.4	0.4	37	SF2
		9	228	9.55	19	31.40	155	58.38	14.44	4.4	4.6	55	9	217	.16	7	0.9	0.5	50	KON F
		19	2351	38.17	18	55.03	155	13.13	12.17	3.0	3.5	28	0	273	.09	37	3.3	1.0	31	LOI L
		20	740	55.25	18	53.17	155	12.23	8.93	2.8	3.3	26	2	284	.10	41	1.6	0.7	25	LOI
		21	1859	3.75	19	20.37	155	11.72	8.22		3.7	50	9	77	.12	5	0.4	0.5	35	SF3
		22	1016	22.35	19	11.91	155	38.69	4.44	3.1	3.1	43	9	102	.18	16	0.4	2.2	35	LSW
		28	245	25.58	19	32.13	155	57.17	11.40	3.3	3.5	41	5	231	.12	6	0.8	0.3	40	KON F
		29	652	39.13	20	2.19	155	51.33	27.78	3.0	3.0	45	5	210	.11	13	0.6	1.4	39	KOH
		29	22 4	25.95	19	21.02	155	6.15	8.34	3.0	3.2	52	11	95	.12	5	0.4	0.5	44	SF4
	AUG	10	1716	12.14	19	21.35	155	4.82	8.90	3.2	3.8	52	14	89	.11	4	0.4	0.3	41	SF5 F
		11	611	13.57	19	21.22	155	2.91	8.38	3.6	4.0	43	6	121	.11	2	0.4	0.5	38	SF5 F
		21	1314	51.99	19	37.53	155	9.47	19.25	3.5	3.8	33	2	145	.11	17	0.6	2.2	33	KEA
		24	1211	41.19	19	22.58	155	29.64	9.66	2.9	3.2	49	8	34	.11	4	0.2	0.4	40	KAO
	SEP	3	1655	11.09	19	21.13	155	30.00	9.46	3.3	3.8	55	12	34	.12	5	0.3	0.5	45	KAO
		5	1112	6.24	19	18.49	155	18.55	31.09	3.1	3.5	60	14	82	.12	1	0.4	0.5	47	DEP
		8	416	22.91	21	5.62	156	51.82	0.96	3.7	3.9	42	4	336	.12	155	13.6	4.7	18	DIS F*
		8	2012	55.14	19	19.23	155	12.17	9.91	3.0	3.4	56	12	94	.12	5	0.3	0.3	48	SF3
		11	16 7	14.04	19	47.82	155	1.64	42.20	2.9	3.1	58	12	213	.13	11	0.6	0.7	43	KEA
		13	12 6	37.59	19	25.67	155	19.48	7.03	3.2	3.0	54	11	56	.11	3	0.3	0.5	39	KAO
		14	1839	17.20	18	46.52	155	14.50	29.45	3.1	4.0	41	5	300	.11	49	1.2	4.5	42	LOI L
		19	444	42.67	19	20.21	155	21.09	30.79	4.1	4.4	63	16	72	.13	4	0.4	0.5	48	DEP F
		20	1931	37.41	17	41.75	154	49.58	21.58	3.6	4.3	23	7	336	.14	168	2.4	11.2	23	DIS L
		20	2035	2.68	18	54.24	155	16.54	14.30	3.2	4.3	38	1	248	.09	35	1.4	2.4	35	LOI
		20	2057	23.65	18	52.17	155	16.13	12.26	3.9	4.3	44	5	255	.10	38	1.2	1.0	40	LOI
		20	21 2	46.55	18	51.48	155	17.30	12.67	3.1	3.6	43	3	257	.10	38	1.1	0.9	33	LOI
		20	2115	5.50	18	50.69	155	17.34	11.99	3.7	4.3	44	5	260	.12	39	1.2	0.9	34	LOI
		20	2128	7.87	18	53.17	155	18.18	13.10	3.1	4.0	40	1	251	.08	35	1.5	1.1	39	LOI
		20	2135	5.04	18	52.57	155	18.20	13.46	2.8	3.3	33	0	254	.07	36	1.8	1.1	34	LOI
		20	22 2	18.70	18	45.71	155	17.57	9.36		3.7	18	4	306	.08	48	1.6	0.8	14	LOI
		20	2210	16.57	18	50.76	155	17.46	11.99	3.4	4.2	38	2	258	.11	39	1.3	0.9	29	LOI
		20	2330	33.79	18	49.81	155	17.64	9.47	3.7	4.2	44	6	277	.10	41	1.1	0.8	40	LOI F
		21	458	46.49	18	52.65	155	21.74	14.06	2.8	3.5	26	0	252	.09	33	2.2	1.5	22	LOI
		21	749	27.47	18	51.03	155	19.13	14.38	3.5	4.2	13	0	302	.07	38	7.6	12.9	14	LOI *
		21	1447	47.36	18	54.69	155	18.68	12.16	2.7	3.4	29	1	245	.11	32	1.1	0.8	24	LOI
		22	110	47.56	19	19.19	155	15.35	8.30	2.7	3.3	38	2	91	.14	4	0.4	0.6	30	SF1
		23	555	31.69	19	18.19	156	19.69	38.14	3.3	3.4	36	5	275	.11	48	1.3	1.6	38	KON
		23	716	2.50	19	56.94	155	30.81	34.82	3.9	4.5	54	12	164	.10	18	0.6	0.9	43	KEA F
		26	8 3	39.72	19	49.55	155	4.37	43.43	3.3	3.0	50	9	211	.11	29	0.6	1.3	42	KEA
		30	22 2	16.26	19	40.97	155	14.25	36.13	4.0	4.4	58	14	140	.10	26	0.5	0.9	48	KEA F
	OCT	6	2317	45.29	19	22.32	155	28.87	10.07	3.0	3.4	60	12	36	.12	2	0.3	0.3	49	KAO
		15	615	18.17	19	22.26	155	28.55	9.82	3.0	3.2	53	10	50	.10	2	0.3	0.4	46	KAO
		17	1518	15.22	19	23.94	155	15.62	3.03	2.7	3.3	46	6	67	.11	2	0.2	0.3	36	SEC F

YEAR	MON	DA	ORIGIN TIME HRMN	SEC	LAT N DEG	MIN	LON W DEG	MIN	DEPTH KM	AMP MAG	DUR MAG	NR	NS	GAP DEG	RMS SEC	MIN DIS	ERH KM	ERZ KM	NO FM	REMK	
1986	OCT	26	1641	51.18	19	21.11	155	1.92	8.11	3.0	3.3	57	13	162	.11	3	0.5	0.4	47	SF5	
		26	20 4	18.28	20	17.51	155	33.90	22.39	2.9	3.4	59	12	192	.13	29	0.7	1.9	50	KEA	
	NOV	1	17 8	18.33	19	23.08	155	14.84	29.23	3.0	3.4	59	15	48	.12	2	0.5	0.4	47	DEP	
		5	2325	18.17	19	19.82	155	12.76	10.71	3.4	3.9	61	16	76	.15	5	0.4	0.3	48	SF2	
		6	12 2	44.92	19	10.75	155	41.73	6.11	3.1	3.2	40	4	127	.17	20	0.6	1.5	42	LSW	
		15	1058	54.10	19	20.50	155	12.89	9.06	3.9	4.1	42	2	65	.13	4	0.4	0.5	35	SF2	F
		17	1640	22.90	20	10.18	155	46.68	35.68	3.7	3.8	54	12	159	.12	5	0.7	0.5	44	KOH	F
		19	913	41.61	19	19.36	155	8.52	9.11	3.1	3.2	56	13	80	.12	4	0.4	0.3	48	SF4	F
		22	1937	55.89	20	11.84	155	45.35	30.98	3.1	2.9	60	15	287	.11	8	0.6	0.9	47	KOH	
	DEC	6	1210	40.98	19	21.59	155	2.27	8.10	3.6	3.8	41	3	140	.11	3	0.4	0.4	28	SF5	F
		6	1645	32.02	20	44.62	155	58.55	11.05	4.2	4.6	6	1	229	.06	29	5.5	10.5	31	DIS	F*
		8	7 7	54.16	19	18.86	155	13.31	9.26	3.1	3.1	43	1	130	.12	7	0.4	0.4	37	SF2	
		9	16 3	50.52	20	49.82	154	59.90	12.07	3.2	3.1	43	3	318	.12	111	7.3	10.7	27	DIS	*
		10	1447	42.80	19	20.37	155	2.33	5.60	3.2	3.3	65	19	175	.16	1	0.4	0.5	49	SF5	

Table 7. 1986 PUBLICATIONS ON HAWAIIAN VOLCANISM AND SEISMICITY BY THE STAFF, AFFILIATES, AND ALUMNI OF THE HAWAIIAN VOLCANO OBSERVATORY

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