



Hawaiian Volcano Observatory Summary 101; Part I, Seismic Data, January to December 2001

by Jennifer S. Nakata

Chronological Summary
by C. Heliker

Open-File Report 02-157

2002

This report is preliminary and has not been reviewed for conformity with U.S. Geological Survey editorial standards or with the North American Stratigraphic Code. Any use of trade, product, or firm names is for descriptive purposes only and does not imply endorsement by the U.S. Government.

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

Hawaiian Volcano Observatory
Hawai‘i Volcanoes National Park, Hawai‘i 96718

TABLE OF CONTENTS

	Page
Hawaiian Volcano Observatory Staff	1
Introduction	2
Chronological Summary	3
Table C-1 2001 Eruption statistics	4
Table C-2 Episode 55 pauses and other magmatic events	5
Figure C-1 Eruption flow map	6
Figure C-2 Map of Pu'u 'O'o features	7
Seismic Instrumentation	8
Figure 1 Map of Hawai'i Island showing geographic and geologic features	9
Figure 2 Seismic stations operated by the USGS and NOAA on Hawai'i Island	10
Figure 3 Seismic network telemetry scheme on Hawai'i Island	11
Figure 4a Seismic network telemetry scheme at Kilauea summit	12
Figure 4b Broad-band telemetry scheme at Kilauea summit	12
Figure 5 Seismic network telemetry scheme on Maui Island	13
Table 1 Seismic stations in Hawai'i operated by the USGS	14
Table 2 Seismic instrument types in use by HVO	16
Figure 6 HVO system response curve of the four basic seismograph types	16
Seismic Data Processing	17
Seismic Catalog	18
Table 3 Coordinates of named regions used for classifying earthquakes	18
Figure 7 Earthquake classification, shallow for Kilauea and Mauna Loa	20
Figure 8 Earthquake classification, intermediate for Kilauea and Mauna Loa	21
Figure 9 Earthquake classification, crustal, for Hawai'i Island	22
Figure 10 Earthquake classification, deep, for Hawai'i Island	23
Figure 11 Earthquake locations, Hawaiian Islands, all depths, $M \geq 3.5$	24
Figure 12 Earthquake locations, Hawai'i Island, all depths, $M \geq 3.0$	25
Figure 13 Earthquake locations, Hawai'i Island, shallow, $M \geq 2.0$	26
Figure 14 Earthquake locations, Hawai'i Island, intermediate, $M \geq 2.0$	27
Figure 15 Earthquake locations, Hawai'i Island, deep, $M \geq 2.0$	28
Figure 16 Earthquake locations, Kilauea summit, shallow, $M \geq 1.0$	29
Figure 17 Earthquake locations, Kilauea summit, intermediate, $M \geq 1.0$	30
Figure 18 Earthquake locations, Kilauea summit, deep, $M \geq 1.0$	31
Figure 19 Earthquake locations, Kilauea south flank, shallow, $M \geq 2.0$	32
Figure 20 Earthquake locations, Kilauea south flank, intermediate, $M \geq 2.0$	33
Figure 21 Earthquake locations, Kilauea south flank, deep, $M \geq 2.0$	34
Figure 22 Earthquake locations, Mauna Loa summit, shallow, $M \geq 2.0$	35
Figure 23 Earthquake locations, Mauna Loa summit, intermediate, $M \geq 2.0$	36
Figure 24 Earthquake locations, Mauna Loa summit, deep, $M \geq 2.0$	37
Table 4 List of all located earthquakes	38
Table 5 List of located earthquakes of magnitude 3.0 or greater	70

2001 HAWAIIAN VOLCANO OBSERVATORY STAFF

DONALD A. SWANSON (SCIENTIST-IN-CHARGE)

ARNOLD T. OKAMURA (DEPUTY SCIENTIST-IN-CHARGE)

GEOLOGY

C. CHRISTINA HELIKER
RICHARD P. HOBLITT +
DAVID R. SHERROD
FRANK A. TRUSDELL

GEOPHYSICS

JAMES P. KAUAIKAUA

SEISMOLOGY

STUART K. KOYANAGI
JENNIFER S. NAKATA
PAUL G. OKUBO
ALVIN H. TOMORI *

DEFORMATION

ASTA MIKLIUS
MAURICE K. SAKO

GEOCHEMISTRY

TAMAR ELIAS
A. JEFFERSON SUTTON

ELECTRONICS

STEVEN FUKE
BRUCE FURUKAWA
KENNETH T. HONMA

COMPUTER

WILFRED R. TANIGAWA

LIBRARY/PHOTO ARCHIVE

T. JANE TAKAHASHI

ADMINISTRATION

PAULINE N. FUKUNAGA
MARIAN M. KAGIMOTO

PROGRAM OUTREACH COORDINATOR

STEVE BRANTLEY

SCIENTIST EMERITUS

ROBERT Y. KOYANAGI

CONTRACTS

Seismic :
L. GLADYS FORBES - record changing
ADOLPH R. TEVES - record changing

CSAV Cooperative Employees

JEAN BATTAGLIA - Seismic
FRANCINE COLOMA - Deformation
CHAN SHIM - Deformation
JEFF URIBE - Seismic
RALF KRUG - Deformation

+ Arrived in 2001

* Left in 2001

INTRODUCTION

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

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

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

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

CHRONOLOGICAL SUMMARY 2001

by

C. Heliker

The episode 55 flow field expanded eastward in 2001, repaving coastal areas that had already been buried by Kupaianaha flows and whittling away at the large kipuka that contains Royal Gardens subdivision (fig. C-1). One long-abandoned structure in lower Royal Gardens was overrun in February 2001. Lava covered 4.7 km² in 2001, only 1.5 km² of which was virgin, vegetated land. The total area covered by lava since 1983 is 105.2 square kilometers, and the volume of lava is 2.1 cubic kilometers (dense rock equivalent). For the latest statistics, refer to table C-1.

No pauses in magma supply to the Pu'u 'O'o flank vent(s) occurred in 2001. This was the culmination of the trend of decreasing pause frequency over the last few years of episode 55 (table C-2). Three "magmatic events," however, perturbed the eruption without shutting off the flank vents. These were the near-pause in April; the May surge, which caused a marked increase in eruption flux following two inflation/deflation cycles at the summit; and the August partial-crater-floor collapse, which apparently triggered summit inflation.

It was a relatively quiet year at the ocean. Lava entered the ocean for only a few days during the first five months of 2001. The E. Kupapa'u and Kamoamoa entries were established in May and late September, respectively, and each was active until the end of the year. Both these entries formed stable benches, and no large littoral explosions were observed at either site. The shape and size of the E. Kupapa'u bench showed little change from July through the end of the year. As with other benches that have formed near or east of Waha'ula in the last few years, bench growth equaled wave attrition, making for a constant bench size and no spectacular collapses. The Kamoamoa bench was more changeable in size and shape but had only small collapses. About 5.1 hectares of new land were added to the island in 2001.

The Pu'u 'O'o crater floor topography changed only slightly in 2001. The main features of the crater floor—the inner trough and the terrace that surrounds it (fig. C-2)—are remnants of the last period of sustained lava pond activity, which took place in September-October 1999. For the first time since then, lava resurfaced the entire trough on May 20, 2001, during a surge event. This activity lasted less than a day, however, and no more flows were observed in the crater through the end of 2001.

The main active vents on the crater floor during 2001 were the July pit and the NE- and SE pond vents. These were the source of the lava erupted in May, as well as intermittent night-time glow. Small lava ponds were visible deep within the NE- and SE pond vents on March 30. These two vents apparently merged by autumn to form the E pond vent, where a single pond was visible September 13 and again on November 16. Crater observations in the interim were dogged by heavy fume, so we don't know if the pond was continuously present or not. On August 25, the July pit was engulfed by a small crater-floor collapse event but continued to produce intermittent glow.

Puka Nui, the composite collapse pit that is consuming the southwest flank of Pu'u 'O'o (fig. C-2), continued to grow during 2001. An inner collapse pit on the east edge of Puka Nui formed at the beginning of May and doubled by the end of the month. During the same interval, the crater rim at the upper edge of Puka Nui gave way, forming a large red-rock slide and a new notch in the rim. Matching red talus on the inside of the crater below the same notch was observed on an exceptionally clear day in February 2002.

Lua Hou, a small pit on the shield just south of Puka Nui (fig. C-2), was first seen in February 2001. Flowing lava was seen at the bottom of it following the February 2000 intrusion, and the pit was floored by pond lava or, incandescence was seen, frequently through September 2000. Since then, active ponded lava was seen only once, on March 30, 2001. No activity or glow was seen at the West Gap pit in 2001.

Table C-1. Eruption Statistics

Areas

Total area covered by lava, 3/83 - 12/31/01: **105.2 km²** (40.6 mi²)

Episode	Area originally covered	Area exposed, 12/31/01
1-48b (mostly Pu'u 'O'o)	42 km ²	17.7 km ²
48 (Kupaianaha)	41	34.7
49 (between Pu'u 'O'o & Kupaianaha)	3.9	3.9
50 (Pu'u 'O'o flank vents)	1.0	0.2
51-52 (Pu'u 'O'o flank vents)	12.3	0.8
53 (Pu'u 'O'o flank vents)	19.4	10.7
54 (in & NE of Napau Crater)	0.24	0.24
55 (Pu'u 'O'o flank vents)	37	37
New (vegetated) territory covered in 2001:	1.5 km ²	

Net total of new land created, Nov 86 - Dec 2001: 212 hectares (524 acres) #

Net new land created during 2001: ~5.1 hectares (12.6 acres)

#These figures do not include new land that was claimed by wave erosion or collapse of the active lava bench. Due to these processes, mapping in 1998 and 1999 revealed a decrease in total acreage.

Volumes

Total, 1/83 thru 12/01 Approximately: **2.1 km³** (dense rock equivalent)

Episodes 1-48b (1/83 - 7/86)	391 x 10⁶ m³
Episode 48 (7/86 - 2/92)	500 x 10⁶ m³
Episode 49 (11/91)	11 x 10⁶ m³
Episode 50 (2/92 - 3/92)	4.5 x 10⁶ m³
Episode 51-52 (3/92 - 2/93)	34 x 10⁶ m³
Episode 53 (2/93 - 1/97)	535 x 10⁶ m³
Episode 54 (1/97)	0.3 x 10⁶ m³
Episode 55 (2/97 - ongoing)	667 x 10⁶ m³

Other fascinating facts

Height of Pu'u 'O'o cone: **~187 m** (613 ft) Cone has lost **68 m** due to collapse since 1986

Dimensions of Pu'u 'O'o crater: **~250 m x 400 m**

Depth of Pu'u 'O'o crater floor (terrace around the inner trough), Dec 2001: **~40 m**

Dimensions of Episode 50-55 lava shield: **1.8 x 0.8 km**

Height of Episode 50-55 lava shield: **~80 m**

Height of Kupaianaha lava shield: **56 m**

Kupaianaha vent inactive since Feb 92

Thickness of lava at the coast:

~15-25 m (50-80 ft) over Kalapana Gardens

~25 m (80 ft) over Chain of Craters Rd at Kamoamoa

Highway covered by lava flows from this eruption: **13 km** (8 mi)

Structures destroyed

Structures destroyed in 2001: **1** (Royal Gardens)

Total structures destroyed since 1983: **188**

Total losses: **\$61 million**

Table C-2. Episode 55 eruptive pauses and other magmatic events

Ep 55 pause #	Start date & time, Hst	End date & time	Length, hrs
1	5/03/97 0000	5/03/97 0530	5.5
2	5/10/97 0700	5/10/97 1230	5.5
3	5/11/97 2000	5/12/97 0600	10
4	5/12/97 2139	5/13/98 0030	3
5	5/14/97 0200	5/14/97 0700	5
6	5/23/97 0630	5/23/97 2134	15
7	5/27/97 0430	5/27/97 0654	2.5
8	6/06/97 2330	6/07/97 1005	10.5
9	6/16/97 1600	6/16/97 2027	4.5
10	6/17/97 1010	6/18/97 ~0530	19.5
11	1/15/98 1030	1/16/98 1100	24.5
12	1/26/98 1130	1/27/98 0600	18.5
13	2/21/98 0000	2/21/98 2400	24
14	3/02/98 0400	3/02/98 1600	12
15	3/09/98 1400	3/10/98 0800	18
16	4/04/98 0400	4/05/98 0041	20.5
17	5/19/98 0350	5/20/98 2230	42.5
18	6/19/98 ~1400	6/20/98 ~0100	11
19	7/16/98 2100	7/19/98 0200	53
20	8/12/98 ~1500	8/14/98 ~0930	42
21	11/07/98 ~0600	11/08/98 ~1000	28
22	2/06/99 0400-0800	2/07/99 ~0300	19-23
23	5/04/99 ~1300	5/05/99 ~2200	33
24	6/14/99 0010	6/17/99 2300	95
25	8/21/99 ~2000	8/22/99 ~2000	24
26 INTRUSION	9/12/99 0131	9/23/99 1100	273.5
27	10/03/99 ~2200	10/05/99 0900	35
28	11/07/99 1400	11/08/99 1015	20.25
29	11/11/99 ~1530	11/14/99 1030	67
INTRUSION	2/23/00 1342	NO PAUSE	
30	8/23/00 ~2300	8/26/00 ~1900	68
Dog Day SURGE	9/24/00	9/25/00	
31	12/15/00 1715	12/17/00 ~0200	~33
SLOWDOWN	4/05/01	4/08/01	
SURGE	5/20/01	5/23/01 two summit tilt cycles	
Crater/summit	8/25/01	8/25/01 small crater-floor collapse	

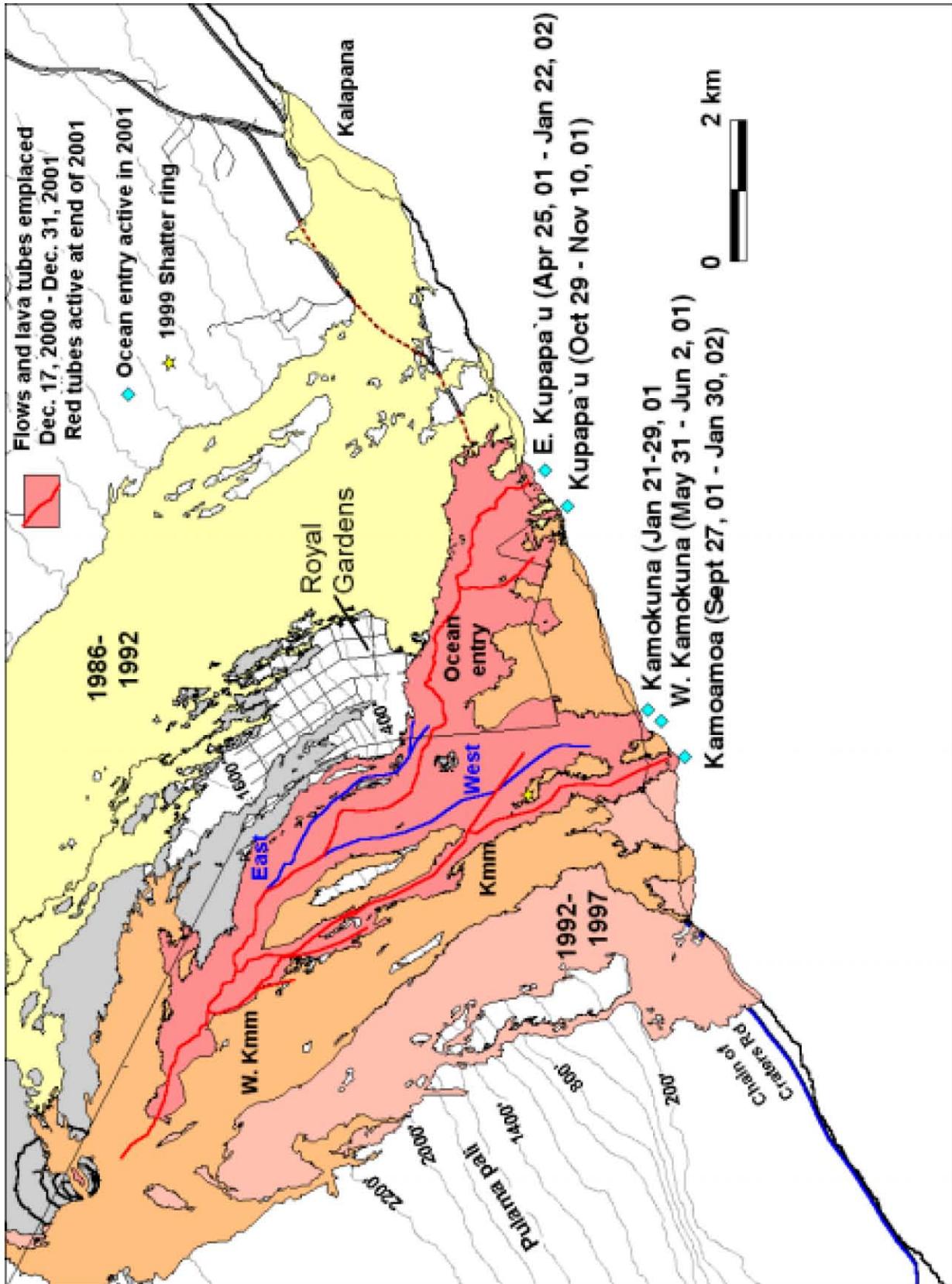
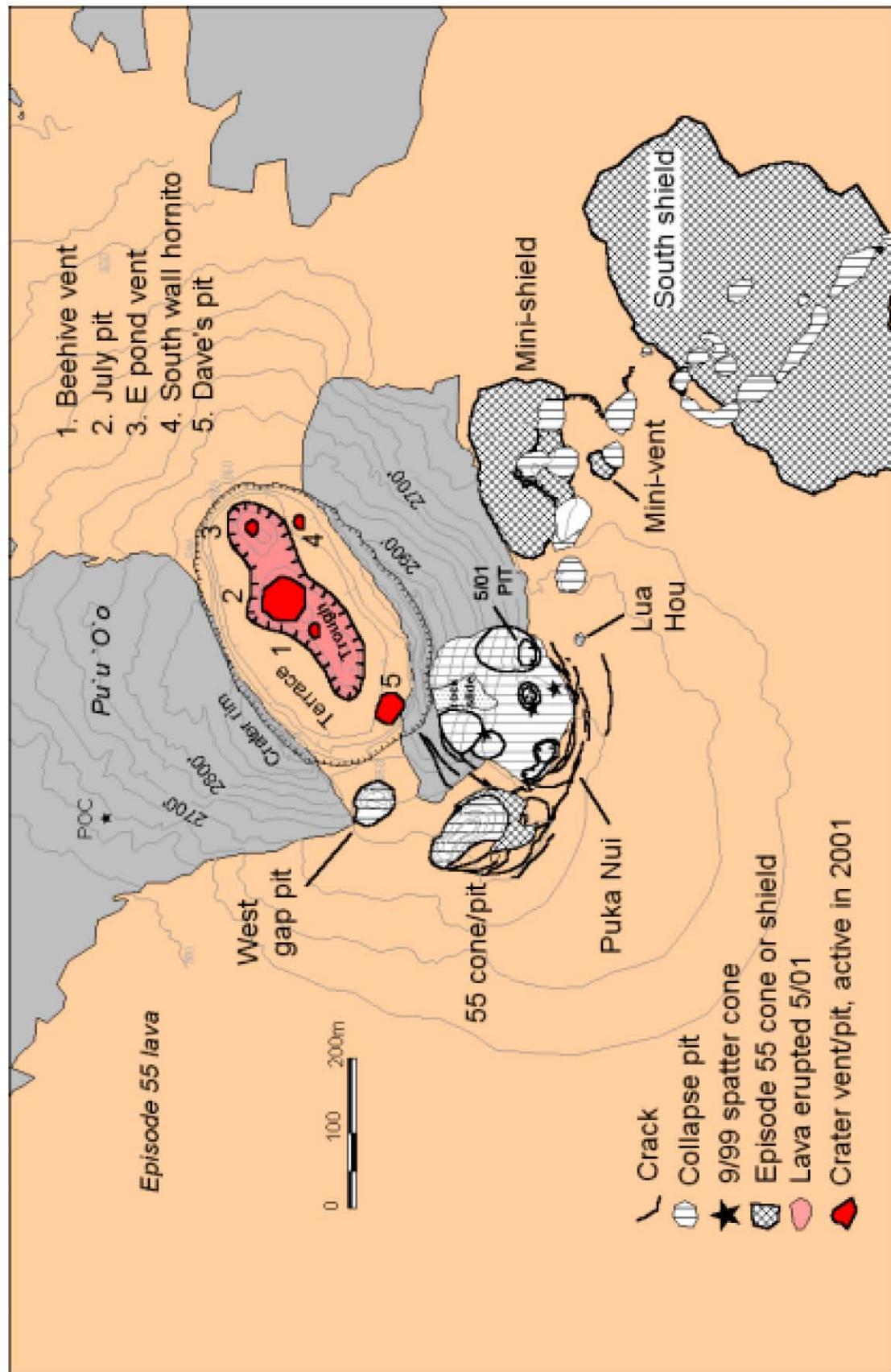


Fig. C-1 The eruption site, showing flows emplaced from December 17, 2000 through December 2001, and tubes and ocean entries active in 2001. Kmm, Kamoamoa.



SEISMIC INSTRUMENTATION

The network. The Hawaiian Volcano Observatory maintains an extensive telemetered seismic network on the Island of Hawai'i. The standard HVO field sensors, 1-Hz geophones, are deployed as single-component, vertical-only units or as three-component combinations of one vertical and two orthogonal horizontal units. The 2001 network consisted of 49 station sites: 10 three-component, 2 six-component (which included a three-component Kinematic Force-Balance accelerometer), one four-component (which included a low-gain vertical with a unity gain setting), one four-component and two two-component (each site included a moderate-gain vertical with a 48db setting), and 33 vertical-component-only sites. The coverage is most dense on and around Kilauea Volcano. During 1999 HVO added to the network three vertical-component-only sites on the Island of Maui. All seismic signals from the network are telemetered in real time to the Observatory for recording.

The Pacific Tsunami Warning Center (NOAA) operates and maintains a network of stations on the islands of Hawai'i, Maui, and O'ahu. In 1999, radio links were established to share data, in real-time, between PTWC and HVO. PTWC signals from one O'ahu three-component station, and one Maui and four Hawai'i vertical-component-only stations, were telemetered to the Observatory for recording.

Figure 1 is a map of selected geographic and geologic features. Figure 2 shows the sites of seismic stations operated by HVO and PTWC on the Island of Hawai'i during 2001. Figure 3 indicates the telemetry scheme for the seismic stations on Hawai'i Island, and figures 4a and 4b are expanded views of the telemetry schemes at Kilauea summit: 4a, HVO seismic stations and 4b, broadband network installed by Menlo Park and maintained by HVO. Figure 5 indicates the telemetry scheme for the seismic stations on Maui Island.

Table 1 lists seismic stations by names, four-letter station codes, coordinates in degrees and minutes (old Hawaiian datum), elevation in meters, and other data, as described below, pertaining to each station. The list includes all the stations operated by HVO during 2001. Seismic stations operated by PTWC on the Islands of Hawai'i, O'ahu and Maui are also listed. Phase times from PTWC stations, not telemetered to HVO, are used to supplement local earthquakes and earthquakes that occur within the Hawaiian Archipelago but distant from the Hawai'i Island network.

Instrumentation and recording. Each telemetered station's data channel has a voltage-controlled oscillator (VCO) for FM multiplex transmission to HVO via radio. These telemetering stations are all of Type 1, Earthquake Hazards Team (EHT) standard system used in USGS seismic networks (see table 2 for details). After discrimination at the receiver, the analog signals are converted to digital form as part of the routine computer location processing and archiving. Through July 2001, continuous signals from the telemetered network were saved on 4-mm digital-audio tape (DAT) recording units. Three DAT recorders ran in automatic rotation, as each ~20-hr tape was filled. Optic recordings are coded in table 1 as follows: H - Helicorder paper, and I - ink paper. DAT and paper records are archived at HVO.

Seismograph response and calibration. Displacement response curve for the short-period seismograph type in use is given in figure 6. The Type 1 curve gives the displacement magnification of the standard EHT system from ground motion at the seismometer to the seismic trace, as seen on a 20x Developcorder film viewer. The curve plots the unit response, which is multiplied by a constant but known factor, CAL, to get the response for an individual station. Individual CAL factors for Type 1 seismographs are Developcorder equivalent peak-to-peak amplitudes, measured in millimeters, of a 100-microvolt 5 to 8-Hz signal introduced to the preamp/VCO in place of the geophone at the field station. The calibration process is normally performed each time a station is visited for other required maintenance.

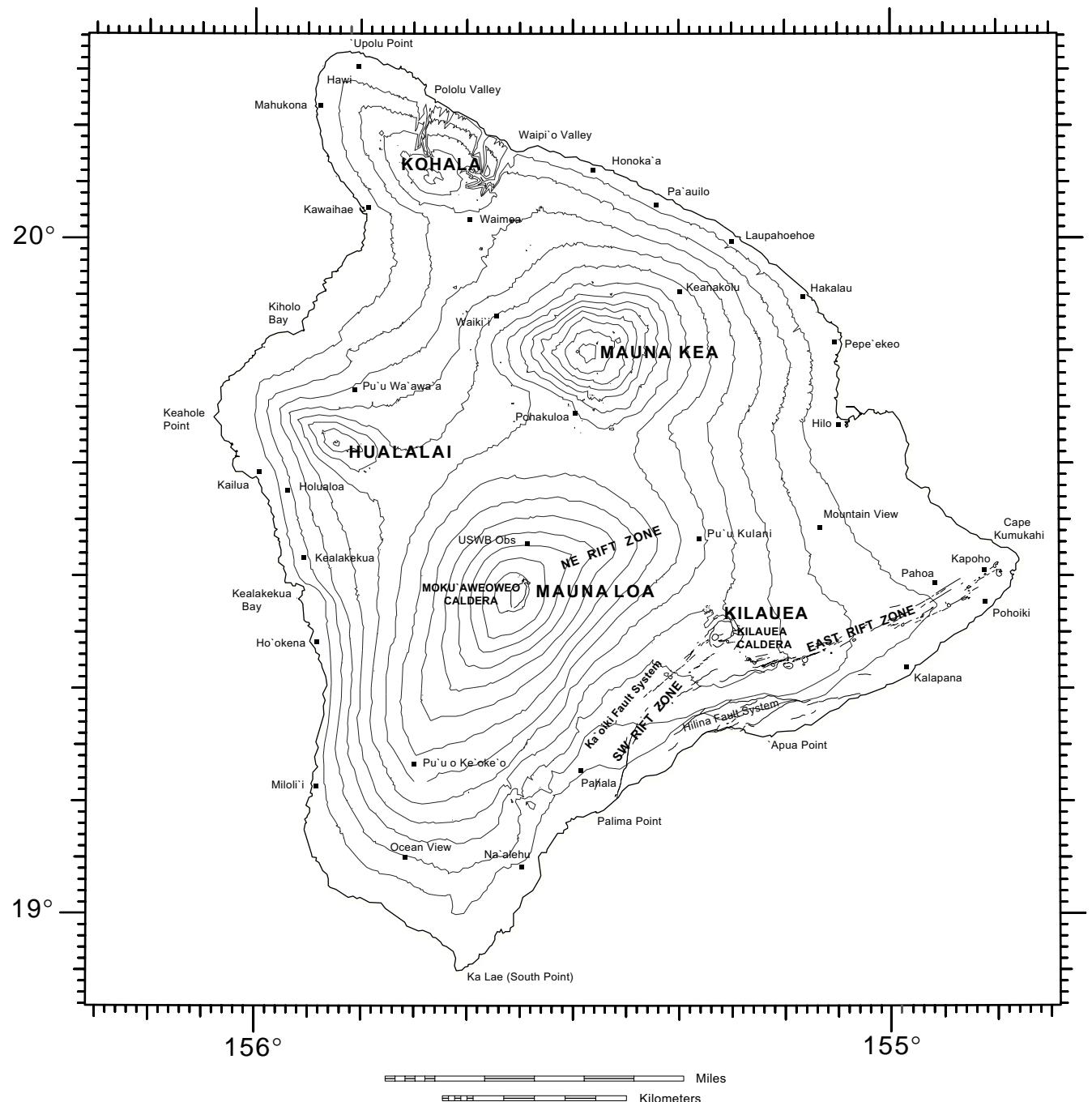
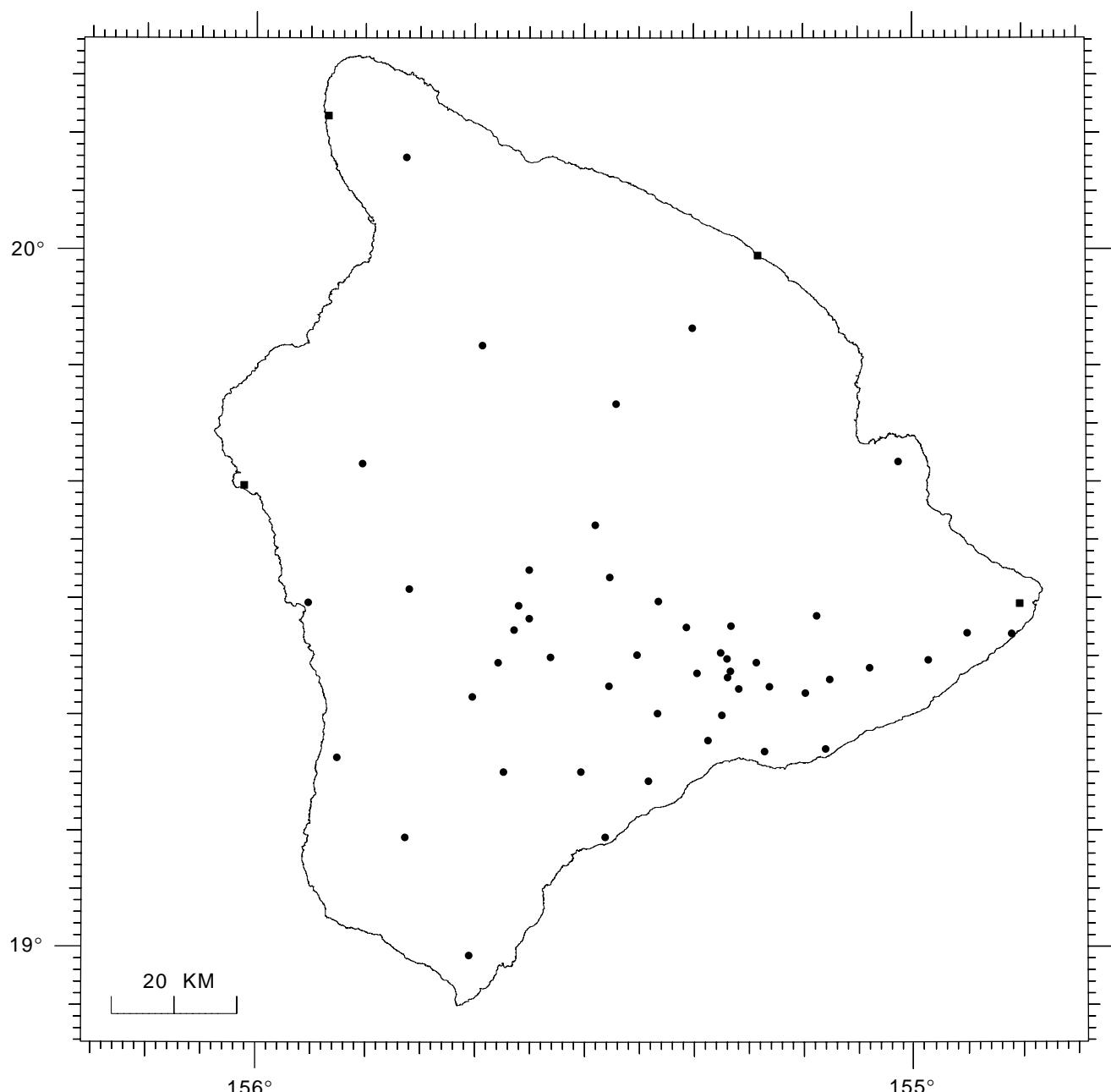
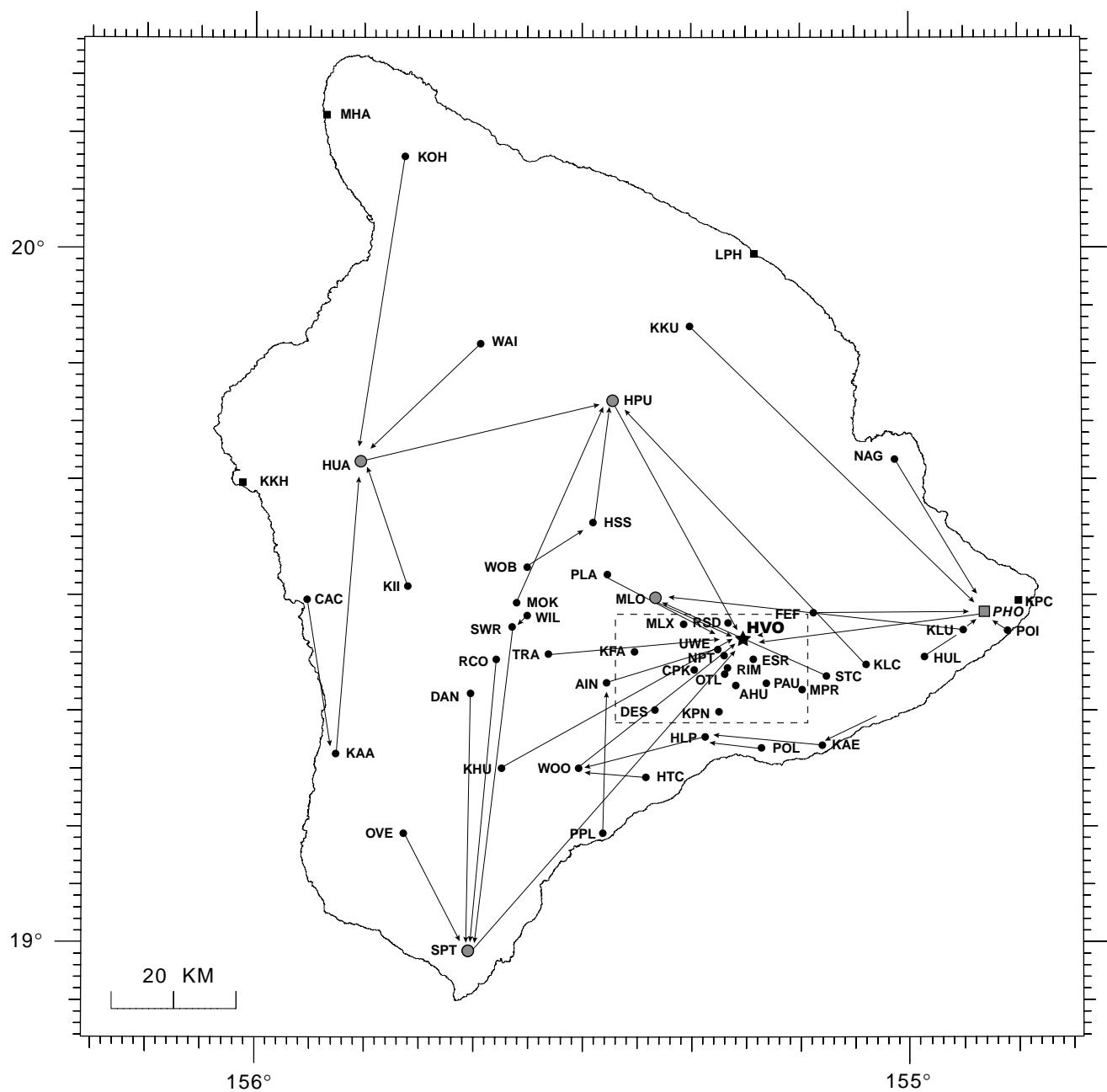


Figure 1. Map of the Island of Hawai'i, showing principal settlements and selected geographic and geologic features.



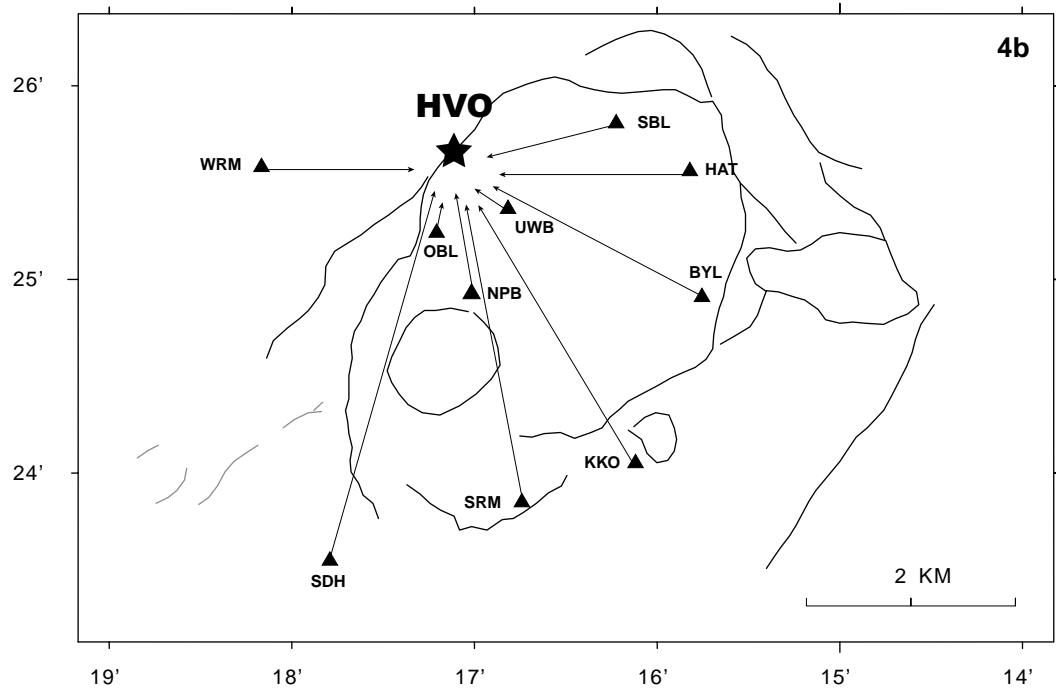
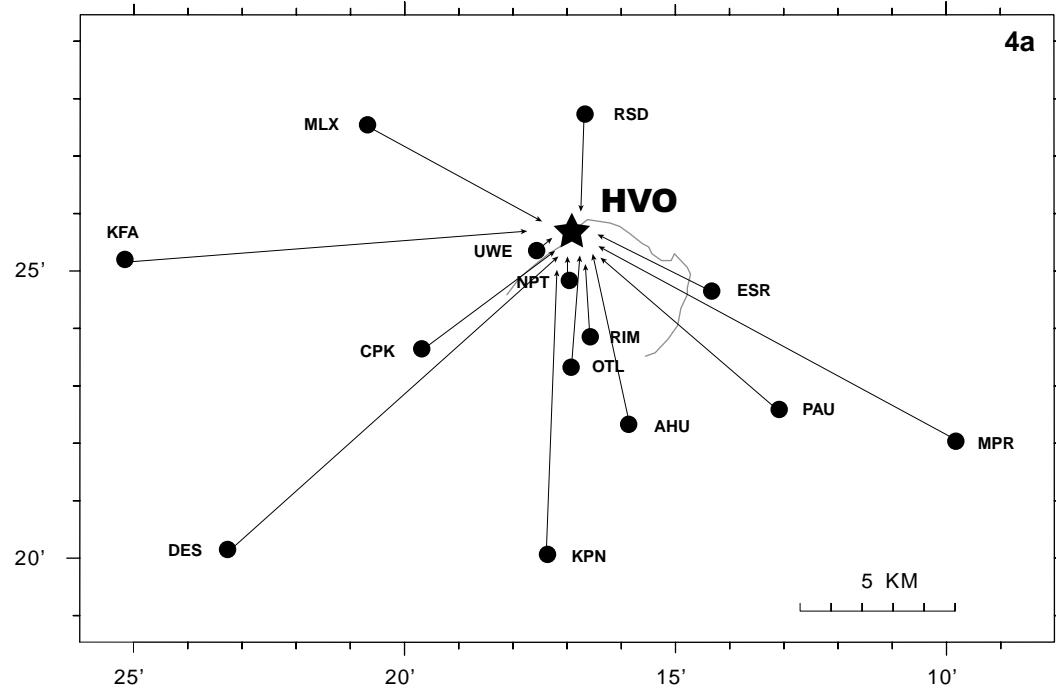
- Network sites
- PTWC station sites

Figure 2. Seismic station sites operated by the USGS and NOAA on Hawai'i Island during 2001 on the Island of Hawai'i.



- ★ Hawaiian Volcano Observatory
- Network sites
- Direct-to-Line 32 Channel
- Direct-to-Line 32 Channel repeater sites
- Inset Kilauea Summit
- PTWC station sites

Figure 3. Telemetry scheme for seismic stations operational during 2001 on the Island of Hawai'i.



- ★ Hawaiian Volcano Observatory
- Network sites
- ▲ Broadband sites

Figure 4a. Expanded telemetry scheme for the 2001 Hawaiian Volcano Observatory seismic network at Kilauea summit.

Figure 4b. Expanded telemetry scheme for the 2001 Menlo Park broadband network at Kilauea summit.

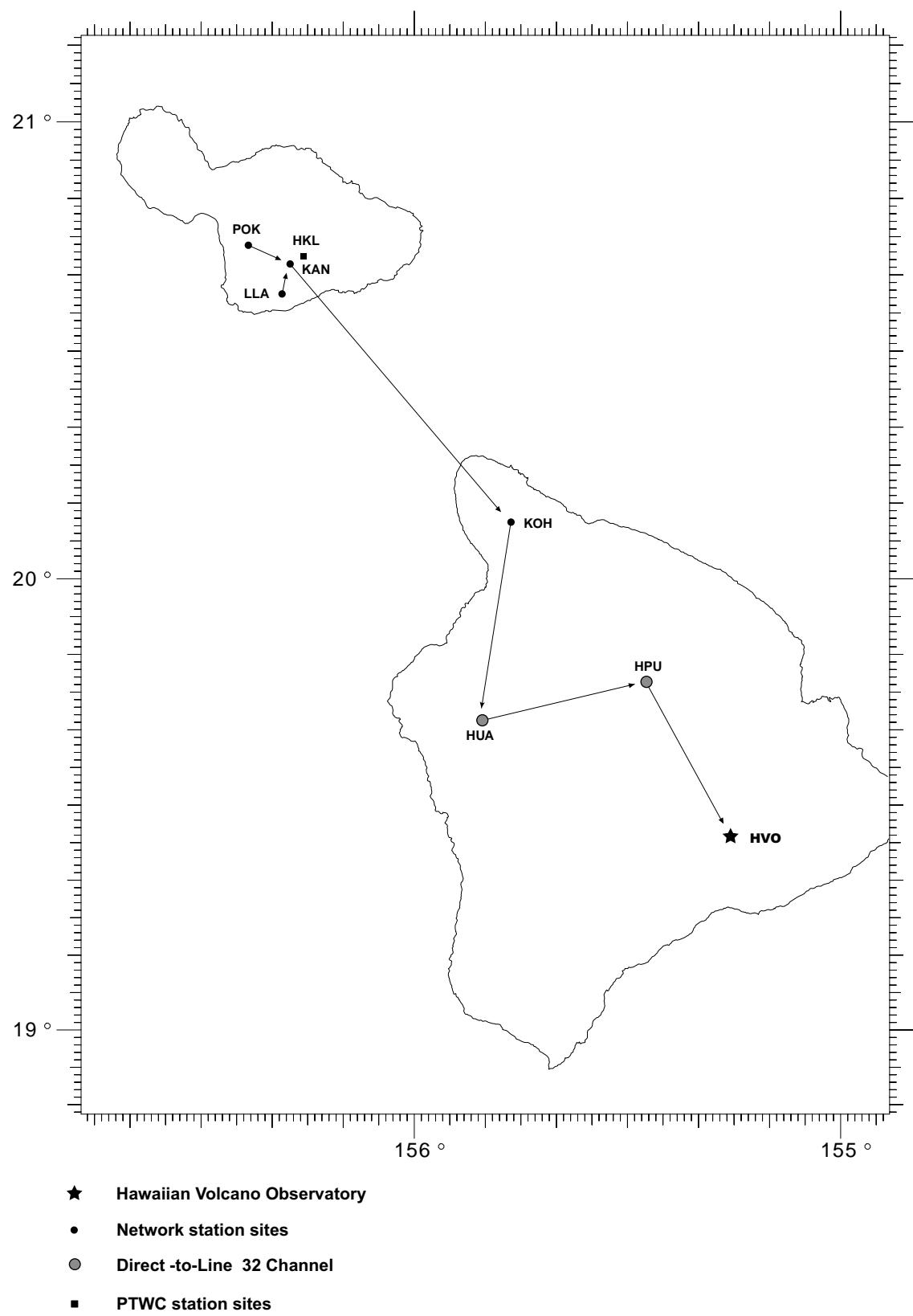


Figure 5. Telemetry scheme for seismic stations operational during 2001 on the Island of Maui.

Table 1. Seismic stations in Hawai'i operated by the USGS in 2001.

STATION NAME	CODE	-LAT-		-LON-		ELEV (M)	DELAY 1	DELAY 2	CAL	SEIS	OPTIC TYPE	RECORD
		D	M	D	M							
AHUA	AHUV	19	22.40	155	15.90	1070	-0.10	-0.13	2.6	L5	I	
AHUA	AHUE	19	22.40	155	15.90	1070	-0.10	-0.13	3.0	E5	MW	
AHUA	AHUN	19	22.40	155	15.90	1070	-0.10	-0.13	3.0	E5	MW	
AINAPO	AINV	19	22.50	155	27.62	1524	0.13	0.17	6.8	L5		
AINAPO	AINE	19	22.50	155	27.62	1524	0.13	0.17	3.0	L5	MW	
AINAPO	AINN	19	22.50	155	27.62	1524	0.13	0.17	3.0	L5	MW	
AINAPO	AINZ	19	22.50	155	27.62	1524	0.13	0.17	0.0	L5		
CAPTAIN COOK	CACV	19	29.29	155	55.09	323	0.00	-0.16	1.1	L5		
CONE PEAK	CPKV	19	23.70	155	19.70	1038	-0.26	-0.07	6.0	L5		
DANDELION	DANV	19	21.42	155	40.04	3003	-0.27	0.03	4.3	E5		
DESERT	DESV	19	20.20	155	23.30	815	-0.29	-0.13	4.5	L5	I	
DIAMOND HD, OAHU	DHHZ	21	16.12	157	48.25	137	0.00	0.00	0.0	S13		
ESCAPE ROAD	ESRV	19	24.68	155	14.33	1177	-0.17	-0.19	1.2	L5		
FERN FOREST	FEFV	19	28.70	155	8.91	691	0.01	0.05	0.0	L5		
HEIHEIAHULU	HHAZ	19	25.13	154	58.72	369	-0.17	-0.16	0.0	F5		
HEIHEIAHULU	HHAE	19	25.13	154	58.72	369	-0.17	-0.16	0.0	F5		
HEIHEIAHULU	HHAN	19	25.13	154	58.72	369	-0.17	-0.16	0.0	F5		
HALEAKALA, MAUI	HKLZ	20	42.63	156	15.55	3051	0.00	0.00	0.0	S13		
HILINA PALI	HLPV	19	17.96	155	18.63	707	0.02	0.07	2.1	L5		
HONOLULU, OAHU	HONZ	21	19.30	158	0.50	2	0.00	0.00	0.0	S13		
HONOLULU, OAHU	HONE	21	19.30	158	0.50	2	0.00	0.00	0.0	S13		
HONOLULU, OAHU	HONN	21	19.30	158	0.50	2	0.00	0.00	0.0	S13		
HONUAPO	HPOZ	19	5.34	155	33.23	15	0.00	0.00	0.0	S13		
HALE POHAKU	HPUV	19	46.85	155	27.50	3396	0.31	0.17	3.3	L5		
HUMUJULA SHEEP ST	HSSV	19	36.31	155	29.13	2445	0.20	0.35	4.0	L5		
HUMUJULA SHEEP ST	HSSE	19	36.31	155	29.13	2445	0.20	0.35	3.0	L5	MW	
HUMUJULA SHEEP ST	HSSN	19	36.31	155	29.13	2445	0.20	0.35	3.0	L5	MW	
HOT CAVES	HTCV	19	14.33	155	24.02	381	-0.16	-0.07	2.3	E4		
HUALALAI	HUAV	19	41.25	155	50.32	2189	0.67	0.38	2.8	L5		
HEIHEIAHULU	HULV	19	25.13	154	58.72	369	-0.17	-0.16	1.6	L5	H	
HEIHEIAHULU	HULE	19	25.13	154	58.72	369	-0.17	-0.16	3.0	E5	MW	
HEIHEIAHULU	HULN	19	25.13	154	58.72	369	-0.17	-0.16	3.0	L5	MW	
KAAPUNA	KAAV	19	15.98	155	52.28	524	-0.12	-0.01	3.3	E5		
KAENA POINT	KAEV	19	17.35	155	7.95	37	-0.01	0.06	1.4	L5		
KANAHAU, MAUI	KANV	20	41.60	156	17.48	2745	0.00	0.00	0.0	L5		
KAOIKI FAULTS	KFAV	19	25.25	155	25.18	1579	0.13	0.17	0.0	L5		
KAHUKU	KHUV	19	14.90	155	37.10	1939	0.03	-0.03	5.0	E5		
KANEKII	KIIV	19	30.56	155	45.90	1841	0.15	0.37	3.0	L5		
KANEKII	KIIE	19	30.56	155	45.90	1841	0.15	0.37	3.0	L5	MW	
KANEKII	KIIN	19	30.56	155	45.90	1841	0.15	0.37	3.0	L5	MW	
KIPAPA, OAHU	KIPZ	21	25.40	158	0.90	2	0.00	0.00	0.0	S13		
KAILUA, KONA	KKHZ	19	39.40	156	1.12	1	0.00	0.00	0.0	S13		
KEANAKOLU	KKUV	19	53.39	155	20.58	1863	0.68	0.24	3.3	L5		
KALALUA CONE	KLCV	19	24.35	155	4.08	659	-0.25	-0.30	3.4	L5		
PUU KALIU	KLUV	19	27.48	154	55.26	271	-0.17	-0.30	3.4	L5		
KOHALA	KOHV	20	7.69	155	46.77	1166	-0.03	-0.17	6.3	L5		
KOHALA	KOHE	20	7.69	155	46.77	1166	-0.03	-0.17	3.0	L5	MW	
KOHALA	KOHN	20	7.69	155	46.77	1166	-0.03	-0.17	3.0	L5	MW	
KAPOHO CONE	KPCZ	19	30.02	154	50.51	134	0.00	0.00	0.0	S13		
KIPUKA NENE	KPNV	19	20.10	155	17.40	924	-0.11	-0.08	3.5	L5		
LUALAILUA, MAUI	LLAV	20	37.62	156	18.62	683	0.00	0.00	0.0	L5		
LAUPAHOEHOE	LPHZ	19	59.82	155	14.58	1	0.00	0.00	0.0	S13		
MAHUKONA	MHAZ	20	11.27	155	54.18	1	0.00	0.00	0.0	S13		

STATION NAME	CODE	-LAT-		-LON-		ELEV (M)	DELAY 1	DELAY 2	CAL	SEIS	TYPE	OPTIC RECORD
		D	M	D	M							
MAUNA LOA	MLOV	19	29.80	155	23.30	2010	0.03	0.08	5.6	L5		I
MAUNA LOA	MLOE	19	29.80	155	23.30	2010	0.03	0.08	3.0	L5	MW	
MAUNA LOA	MLON	19	29.80	155	23.30	2010	0.03	0.08	3.0	L5	MW	
MAUNA LOA X	MLXV	19	27.60	155	20.70	1475	0.06	0.15	3.0	L5		
MOKUAWEOWEO	MOKV	19	29.28	155	35.98	4104	0.15	0.16	4.2	L5		IH
MAKAOPUHI	MPRV	19	22.07	155	9.85	881	-0.17	-0.20	2.6	L5		I
MAKAOPUHI	MPRZ	19	22.07	155	9.85	881	-0.17	-0.20	0.1	L5		
NATIONAL GUARD	NAGV	19	42.12	155	1.72	18	0.54	0.30	4.0	R5		
NATIONAL GUARD	NAGE	19	42.12	155	1.72	18	0.54	0.30	3.0	R5	MW	
NATIONAL GUARD	NAGN	19	42.12	155	1.72	18	0.54	0.30	3.0	R5	MW	
NORTH PIT	NPTV	19	24.90	155	17.00	1115	-0.30	-0.18	3.0	L5		I
NORTH PIT	NPTE	19	24.90	155	17.00	1115	-0.30	-0.18	3.0	L5	MW	
NORTH PIT	NPTN	19	24.90	155	17.00	1115	-0.30	-0.18	3.0	L5	MW	
OPANA, OAHU	OPAZ	21	41.45	158	0.70	100	0.00	0.00	0.0	S13		
OUTLET	OTLV	19	23.38	155	16.94	1038	-0.19	-0.18	2.6	L5		
OUTLET	OTLZ	19	23.38	155	16.94	1038	-0.19	-0.18	0.0	L5		
OCEANVIEW ESTATE	OVEV	19	9.21	155	45.92	1378	0.00	0.00	0.0	L5		
PAUAHI	PAAZ	19	22.62	155	13.10	994	-0.21	-0.24	0.0	F5		
PAUAHI	PAAE	19	22.62	155	13.10	994	-0.21	-0.24	0.0	F5		
PAUAHI	PAAN	19	22.62	155	13.10	994	-0.21	-0.24	0.0	F5		
PAUAHI	PAUV	19	22.62	155	13.10	994	-0.21	-0.24	2.9	L4		
PAUAHI	PAUE	19	22.62	155	13.10	994	-0.21	-0.24	3.0	L5	MW	
PAUAHI	PAUN	19	22.62	155	13.10	994	-0.21	-0.24	3.0	L5	MW	
PUU ULAULA	PLAV	19	32.00	155	27.67	2992	-0.03	0.13	6.3	L5		I
POHOIKI	POIV	19	27.42	154	51.22	16	-0.09	-0.24	0.0	L5		
PUUOKALI, MAUI	POKV	20	44.00	156	23.32	511	0.00	0.00	0.0	L5		
POLIOKEAWE PALI	POLV	19	17.02	155	13.47	169	-0.02	0.03	3.4	E5		
PUU PILI	PPLV	19	9.50	155	27.87	35	-0.15	-0.15	1.4	E5		
RED CONE	RCOV	19	24.36	155	37.79	3601	0.00	0.00	0.0	L5		
RIM	RIMV	19	23.90	155	16.60	1128	-0.21	-0.13	0.0	L5		
RAINSHED	RSDV	19	27.78	155	16.68	1270	0.06	0.15	0.0	L5		
SOUTH POINT	SPTV	18	58.91	155	39.92	244	-0.17	-0.22	2.8	L5		
SOUTH POINT	SPTE	18	58.91	155	39.92	244	-0.17	-0.22	3.0	L5	MW	
SOUTH POINT	SPTN	18	58.91	155	39.92	244	-0.17	-0.22	3.0	L5	MW	
STEAM CRACKS	STCV	19	23.30	155	7.67	765	-0.25	-0.30	3.4	L5		H
STEAM CRACKS	STCE	19	23.30	155	7.67	765	-0.25	-0.30	3.0	L5	MW	
STEAM CRACKS	STCN	19	23.30	155	7.67	765	-0.25	-0.30	3.0	L5	MW	
SOUTHWEST RIFT	SWRV	19	27.26	155	36.30	4048	0.01	0.04	5.6	E5		
TRAIL	TRAV	19	24.91	155	32.96	3207	0.00	0.00	0.0	L5		
UWEKAHUNA	URAV	19	25.40	155	17.60	1240	-0.21	0.00	0.0	R5		
UWEKAHUNA	URAE	19	25.40	155	17.60	1240	-0.21	0.00	3.0	R5	MW	
UWEKAHUNA	URAN	19	25.40	155	17.60	1240	-0.21	0.00	3.0	R5	MW	
UWEKAHUNA	UUGZ	19	25.40	155	17.60	1240	0.00	0.00	0.0	L0		
WAIKII	WAIV	19	51.58	155	39.60	1433	0.20	0.35	0.0	L5		
WILKES CAMP	WILV	19	28.15	155	35.02	4037	0.22	0.17	2.6	E5		
WILKES CAMP	WILE	19	28.15	155	35.02	4037	0.22	0.17	3.0	L5	MW	
WILKES CAMP	WILN	19	28.15	155	35.02	4037	0.22	0.17	3.0	L5	MW	
WAIMANALO RG,OAHU	WMRZ	21	19.22	157	40.94	200	0.00	0.00	0.0	S13		
WEATHER OBSERV	WOBV	19	32.31	155	35.01	3396	0.00	0.00	0.0	E5		
WOOD VALLEY	WOOV	19	15.08	155	30.12	909	-0.15	-0.06	2.6	E5		

Table 2. Seismic instrument types

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

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

- a) Geophone - Electrotech EV-17 (E), Mark Products L4C (L) or Kinematic Ranger SS1 (R). (L) and (R) are 1.0-sec. period moving-magnet vertical- or horizontal- (E-W and N-S) component seismometers adjusted for an output of 0.5 volts/cm/sec and 0.8, critically damped.
- b) Preamp/VCO - USGS/OEVE Model J402 (4), J502 (5) voltage-controlled oscillator. Three db points for bandpass filter at 0.1 Hz and 30 Hz. Signals are transmitted on audio FM carrier over cable or FM radio link to HVO.

Code (W) - Wood-Anderson torsion seismograph.

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

Code (F) - Kinematic Force-Balance Accelerometer (FBA23).

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

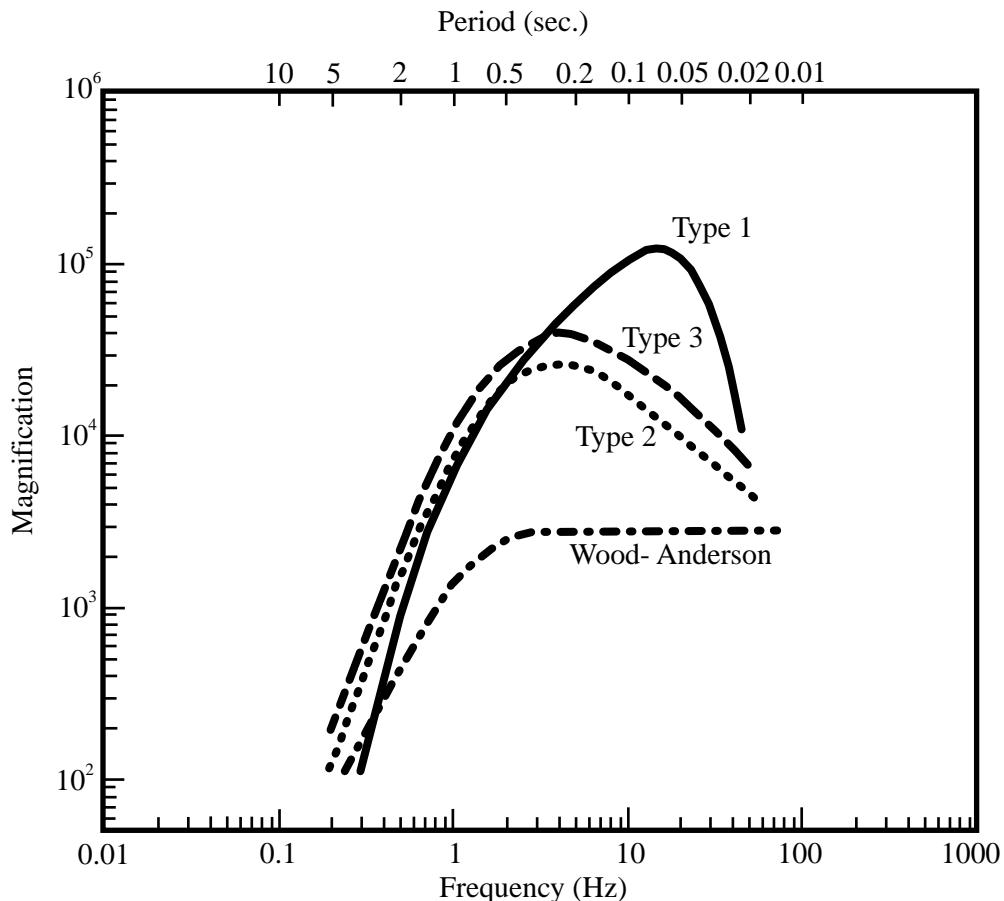


Figure 6. System-response curves for the Wood-Anderson torsion seismograph and for seismometers used by the Hawaiian Volcano Observatory. Type 1 is the standard OEVE seismometer system recorded on Develocorder film and DAT tape. The curve for Type 1 includes response of the geophone, all electronics including telemetry, Develocorder galvanometer, and projection of film by a 20x viewer. The curve plots the unit response, which should be multiplied by a constant but known factor (CAL) to get the response for an individual station.

SEISMIC DATA PROCESSING

Due to age and high cost of maintenance, Developcorder 'A' was discontinued on August 1, 1997. Daily count of classified microearthquakes from source regions around Kilauea and Mauna Loa, and duration of tremor, were also discontinued. Coda duration, however, is measured in seconds from drum (ink or helicorder) records to determine a coda magnitude that is entered as an external magnitude in the final solution.

In 1986, HVO acquired a VAX 11-750 computer and adopted the CUSP ([California Institute of Technology USGS Seismic Processing](#)) routine. Discriminated analog signals are converted to digital form, and detected events are saved in real time. Detected events are demultiplexed, and P-picks are made by the computer, producing a rough location. Events are examined by an analyst, on a graphics terminal, to refine computer P-picks and to time additional P- and S-phases for a preliminary location. Binary CUSP files are archived on magneto-optical media and translated into ASCII phase files. Locations and amplitude magnitudes are then determined, using the program HYPOINVERSE-2000 (Klein)². Events are reworked and rerun, as needed, to produce a final solution. Magneto-optical copies of arrival times and output summary data are kept at HVO.

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

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

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

Two empirical sets of station delays or corrections were used in the HYPOINVERSE locations and are given in table 1. The delay models are separated by a circle of radius 34 km, centered at 19°22' N and 155°10' W. Delay model 1 is used for epicenters occurring within a circle of radius 31 km from the center. This region includes Kilauea and its south flank. A combination of the two delay models is used for epicenters that fall in a transition zone that is 6 km wide. Delay model 2 is applied to the rest of the island and offshore earthquakes. For a detailed description, refer to Klein².

Magnitudes for events are computed using recorded amplitudes on selected network vertical, Modified Wood-Anderson (MW) horizontal, and/or moderate and low gain stations. Amplitude readings are corrected to an equivalent Wood-Anderson amplitude using the curves of figure 6 and CAL factors listed in table 1.

Duration magnitude is determined by the length of signal, in seconds, read from drum recordings of Type 1 seismographs. This length of time is measured from the P arrival to the point where the earthquake signal has decayed to nearly the background noise level. Drum-recorded duration magnitude is calculated with a relationship equivalent to the developcorder viewer output.

² Klein, F.W., User's guide to HYPOINVERSE-2000, a Fortran Program to solve for earthquake locations and magnitudes: U.S. Geological Survey Open-File Report 02-171, 116 p.

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

SEISMIC CATALOG

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

Data presented in the seismic catalog are in three parts: (1) Maps showing computer-located hypocenters are given in figures 11-24. 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. (2) The list of computer locations constitutes the bulk of this summary and is given in table 4. Each earthquake in the list is assigned a three-letter code based on its general location and depth. Figures 7-10 are maps of the regions used to assign the location codes. The latitude and longitude limits of rectangular regions are listed in table 3. When the listed coordinates overlap, precedence is given according to figures 7-10. (3) Table 5 re-lists the events in table 4 for which the preferred magnitude is 3.0 or larger. This list includes many of the earthquakes felt in Hawai'i.

Table 3. Names and coordinates of regions used for classifying earthquakes.

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

—Shallow:

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

—Intermediate depth:

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

—Deep:

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

—Outer regions, all depths:

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

Table 3 (continued). The latitude and longitude limits of the regions are given below. If the coordinates overlap, precedence is given according to maps in figures 7-10.

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

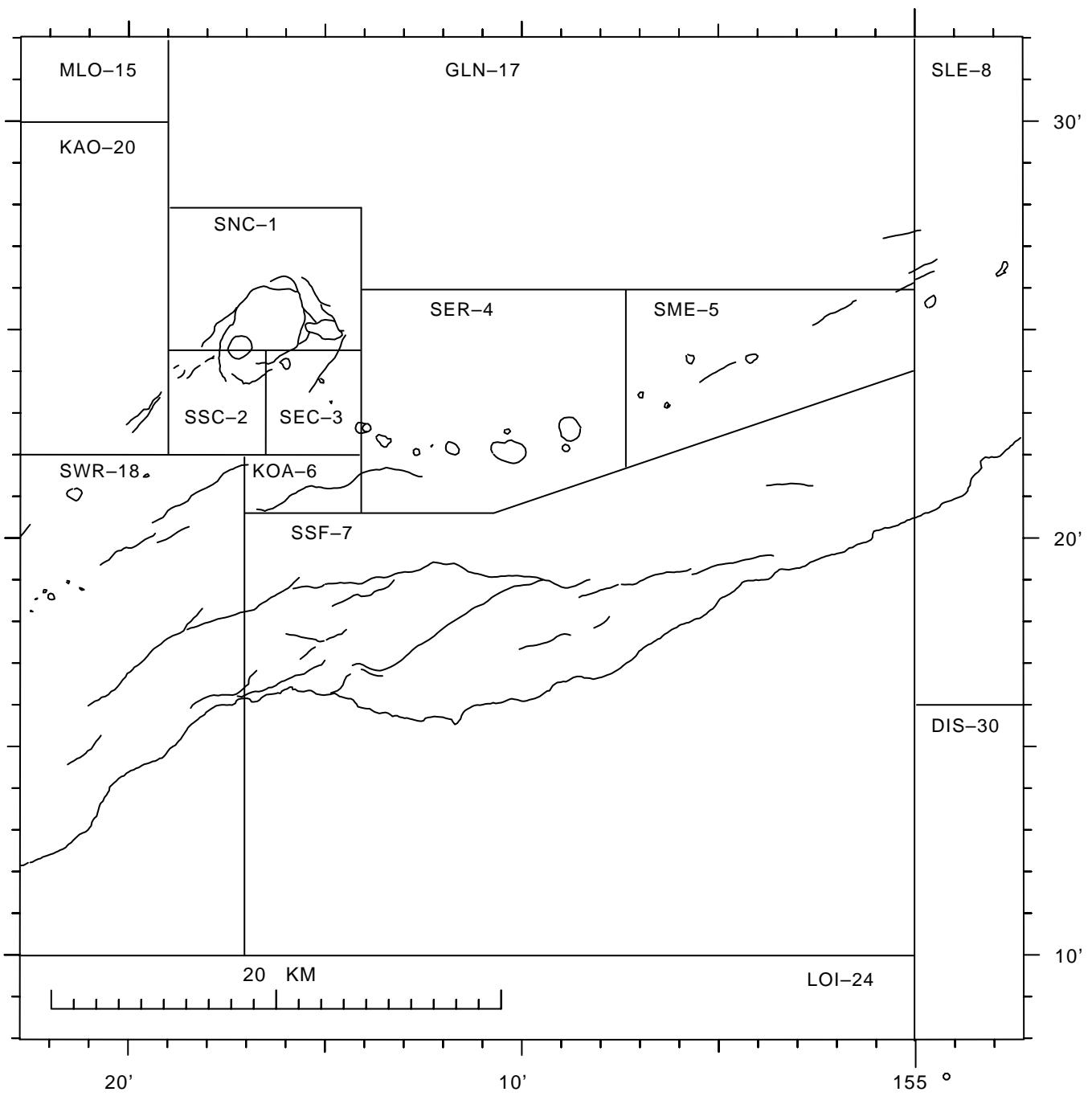


Figure 7. Earthquake classification, shallow (0-5 km deep), for Kilauea and the east flank of Mauna Loa.

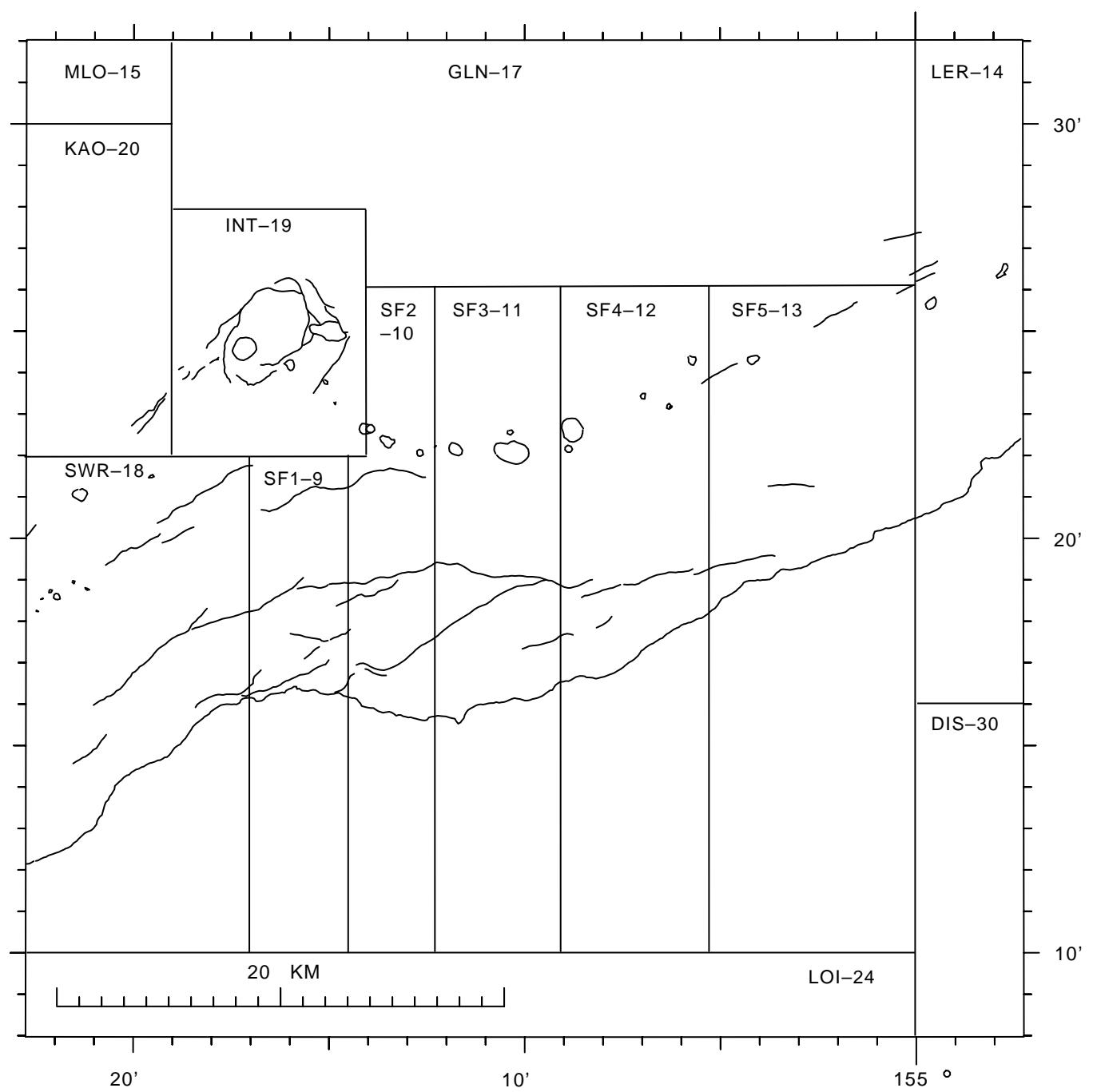


Figure 8. Earthquake classification, intermediate (5.1-13 km deep), for Kilauea and the east flank of Mauna Loa.

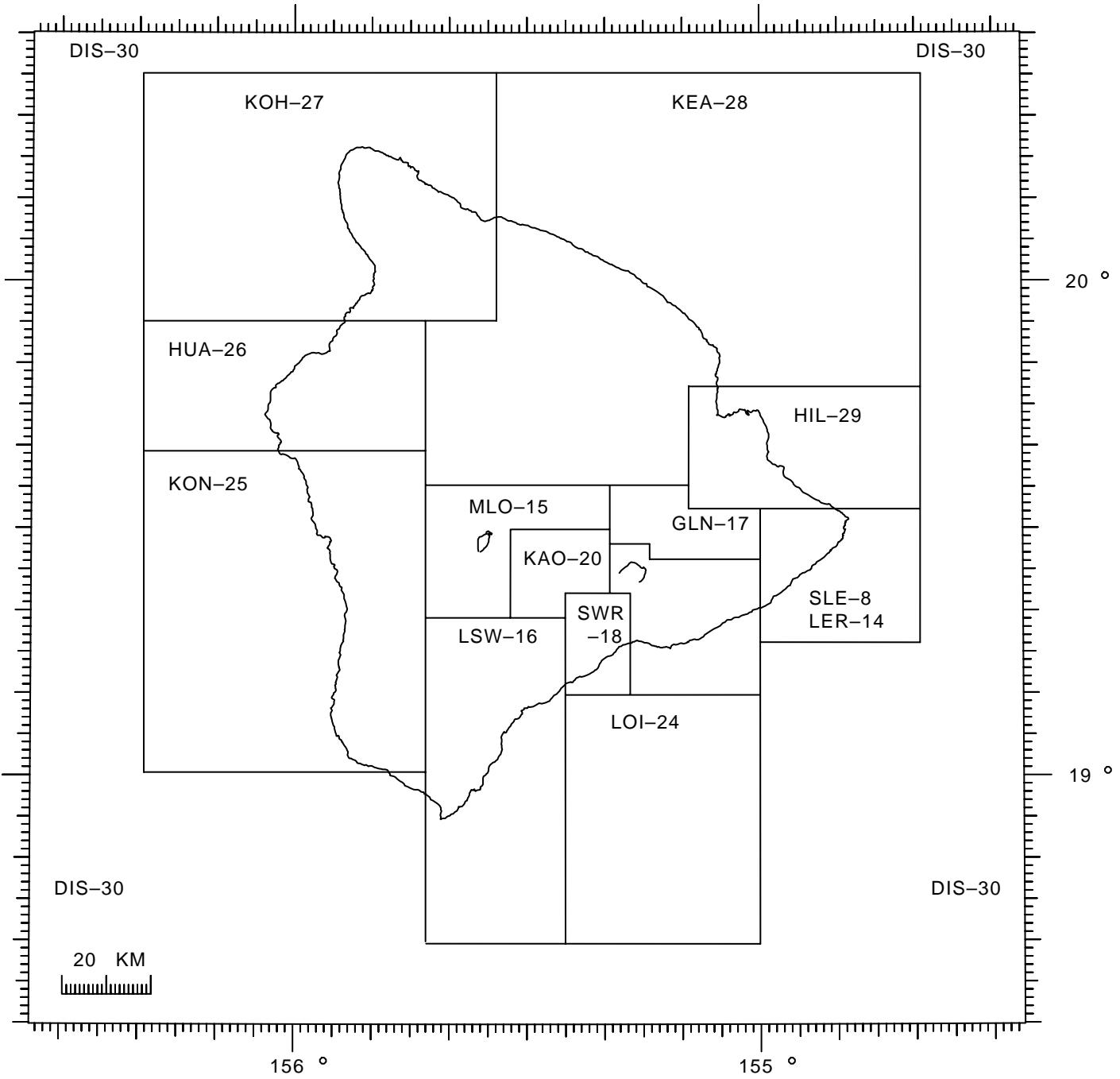


Figure 9. Earthquake classification, crustal (0-13 km deep), for the Island of Hawai'i.

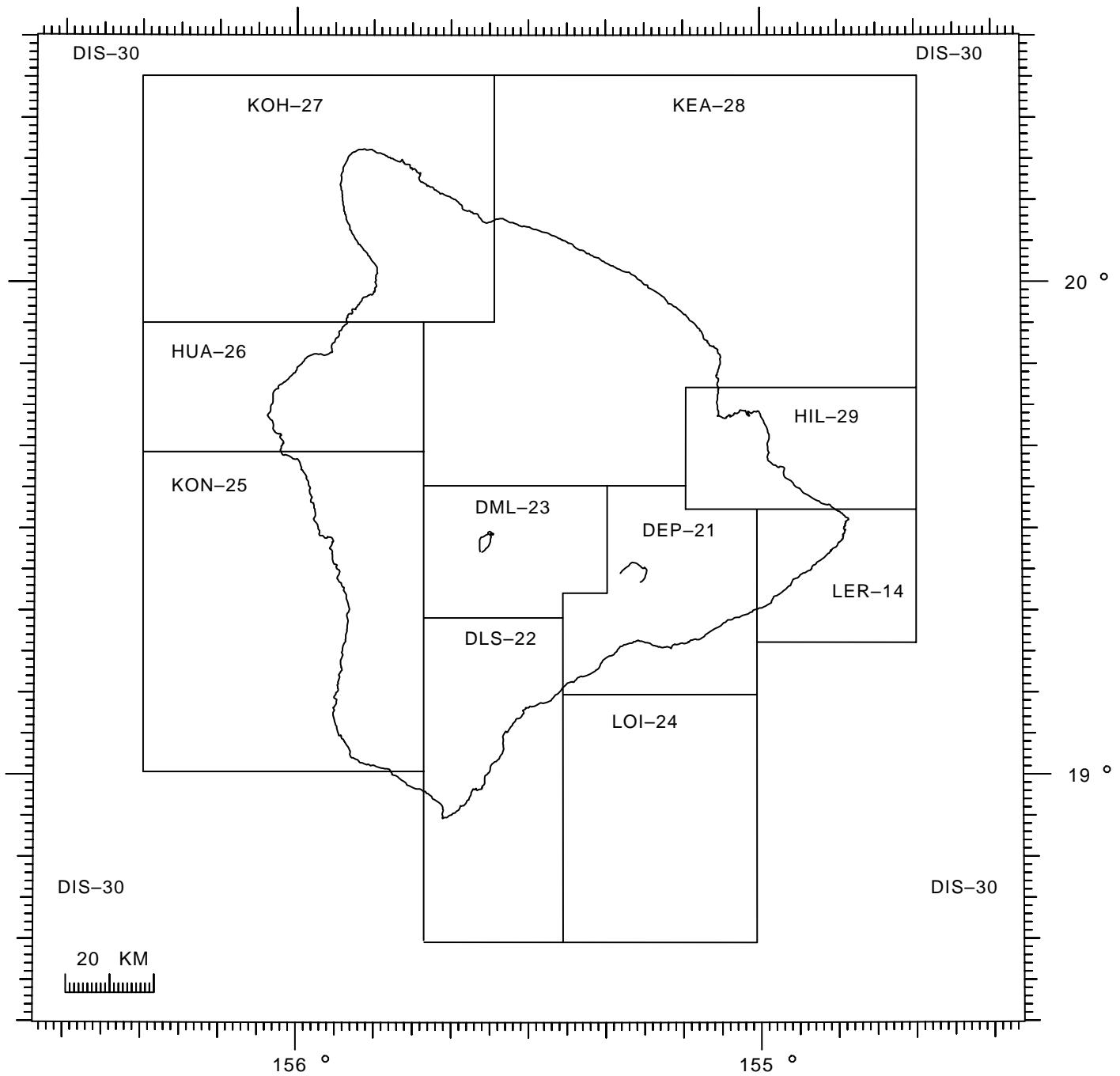


Figure 10. Earthquake classification, deep (greater than 13 km deep), for the Island of Hawai‘i.

Figure 11. 2001 earthquake locations, Hawaiian Islands,
0–60 km depth, $M \geq 3.5$.

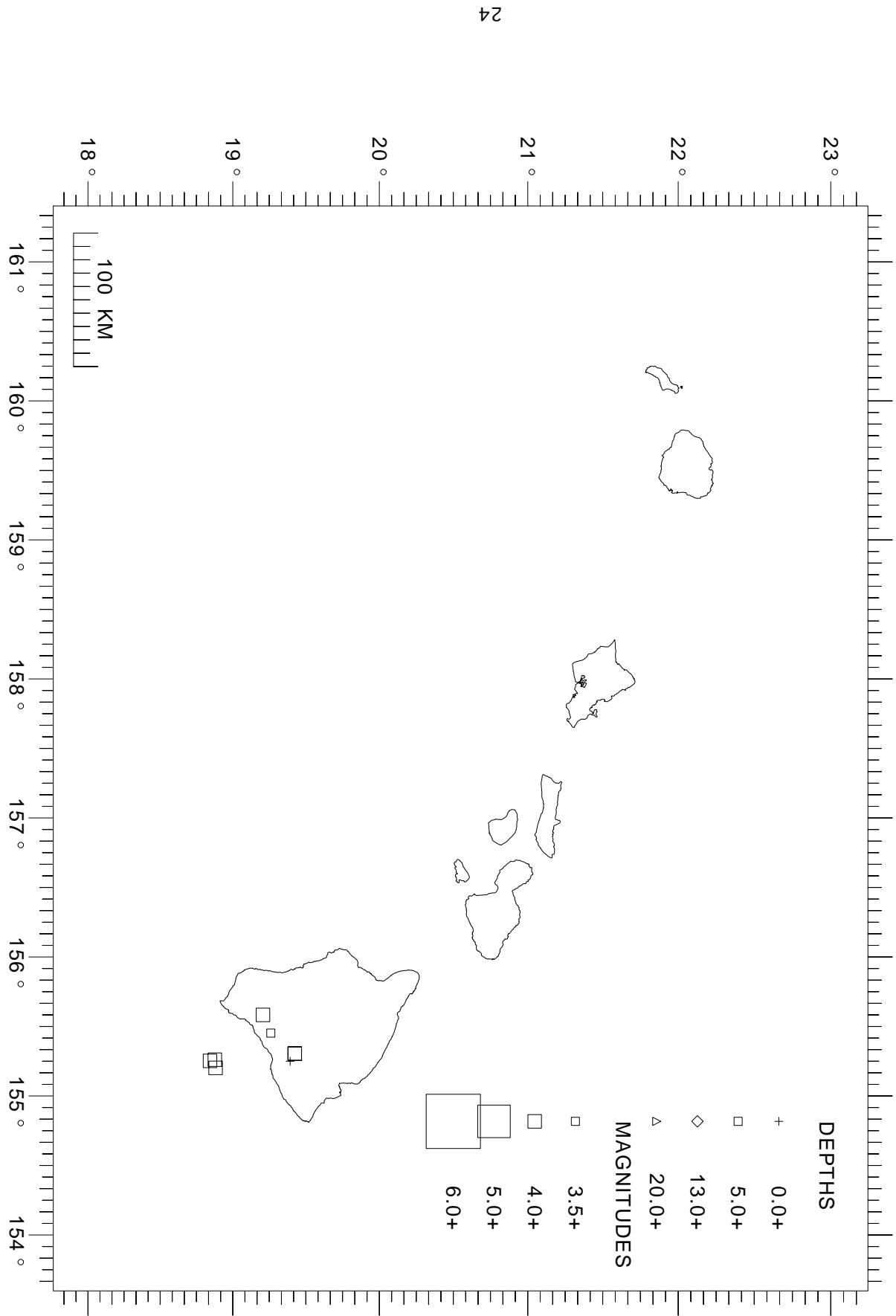


Figure 12. 2001 earthquake locations, Hawai'i Island,
0–60 km depth, $M \geq 3.0$.

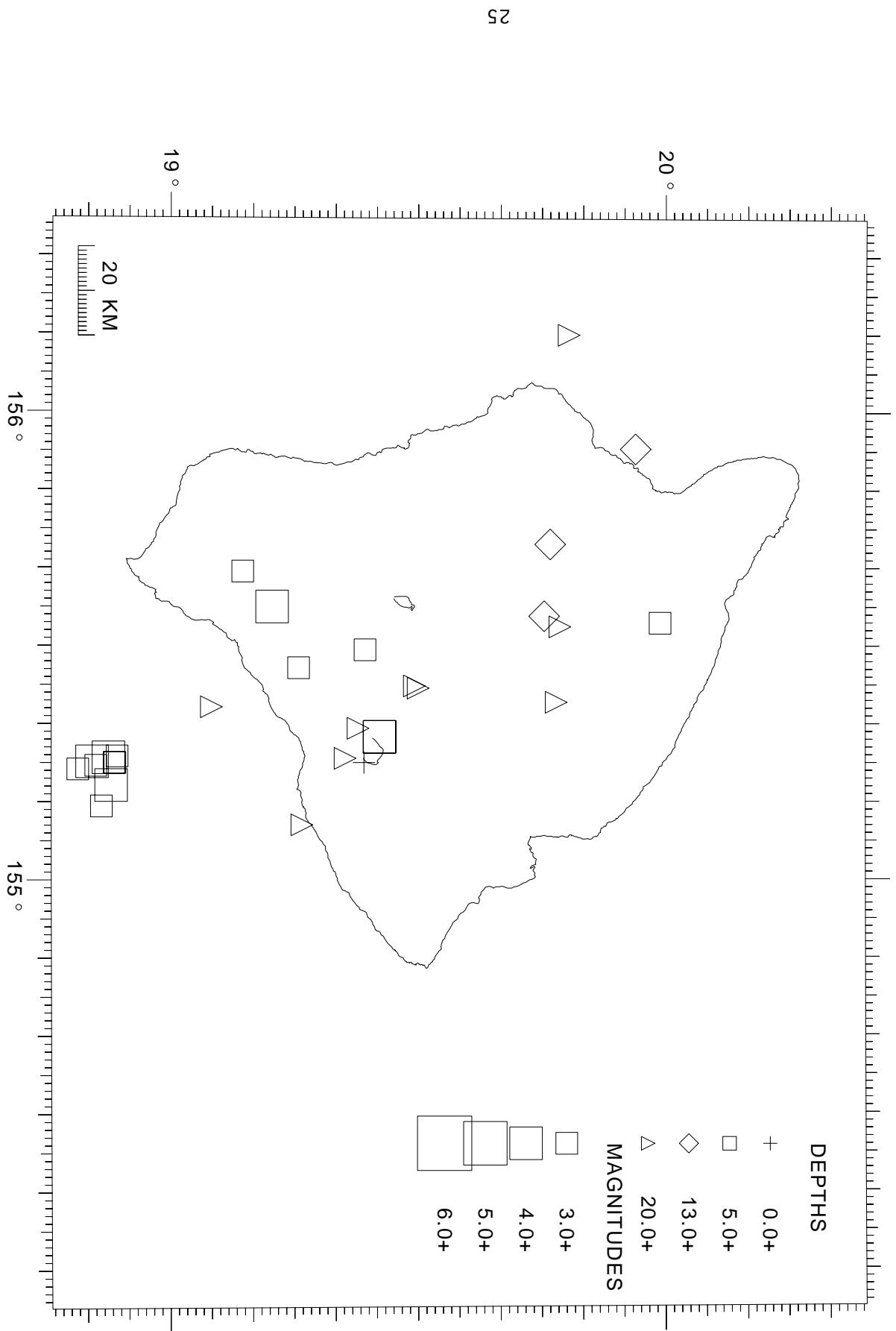
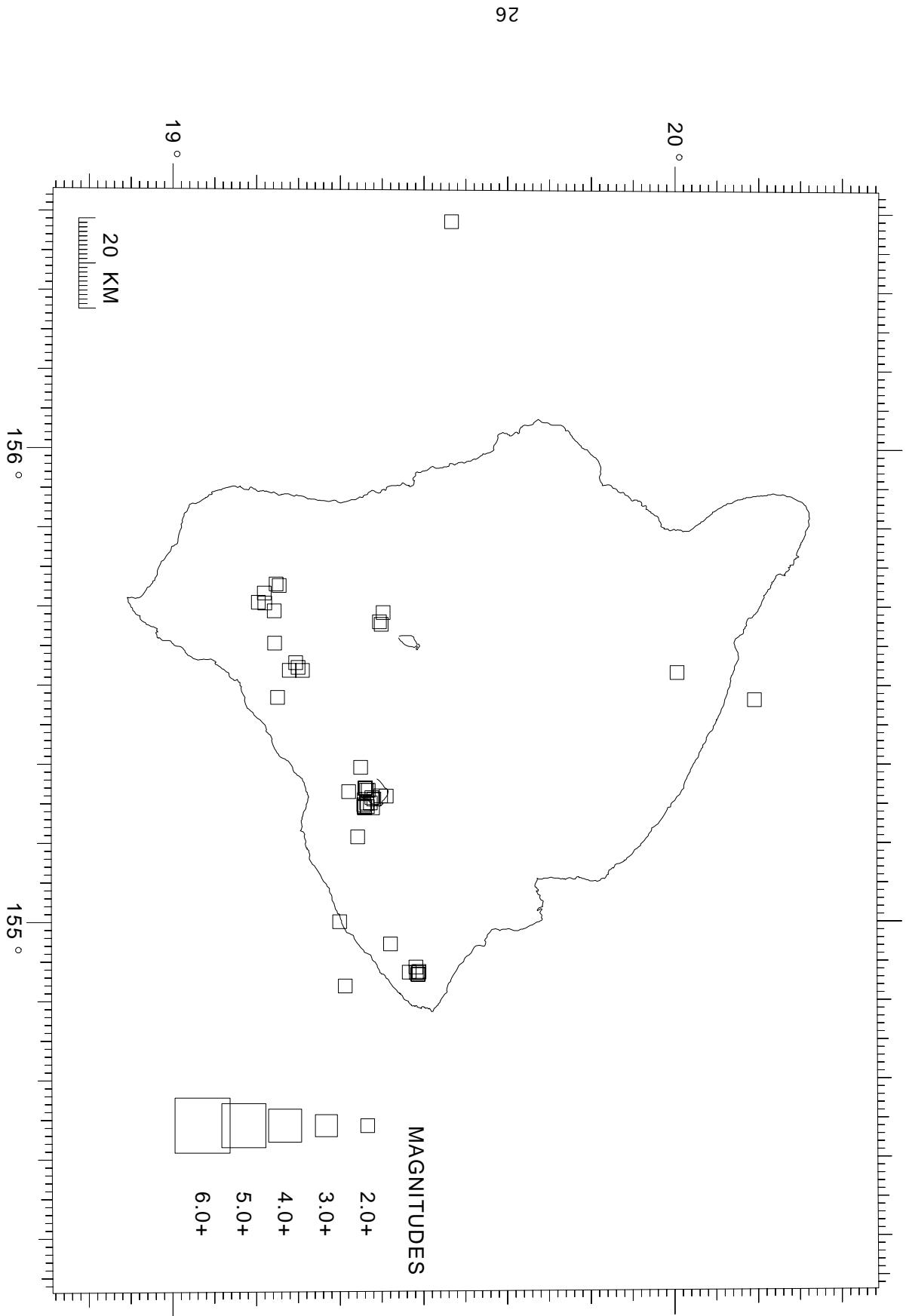


Figure 13. 2001 earthquake locations, Hawai'i Island,

shallow (0–5.0 km depth), $M \geq 2.0$.



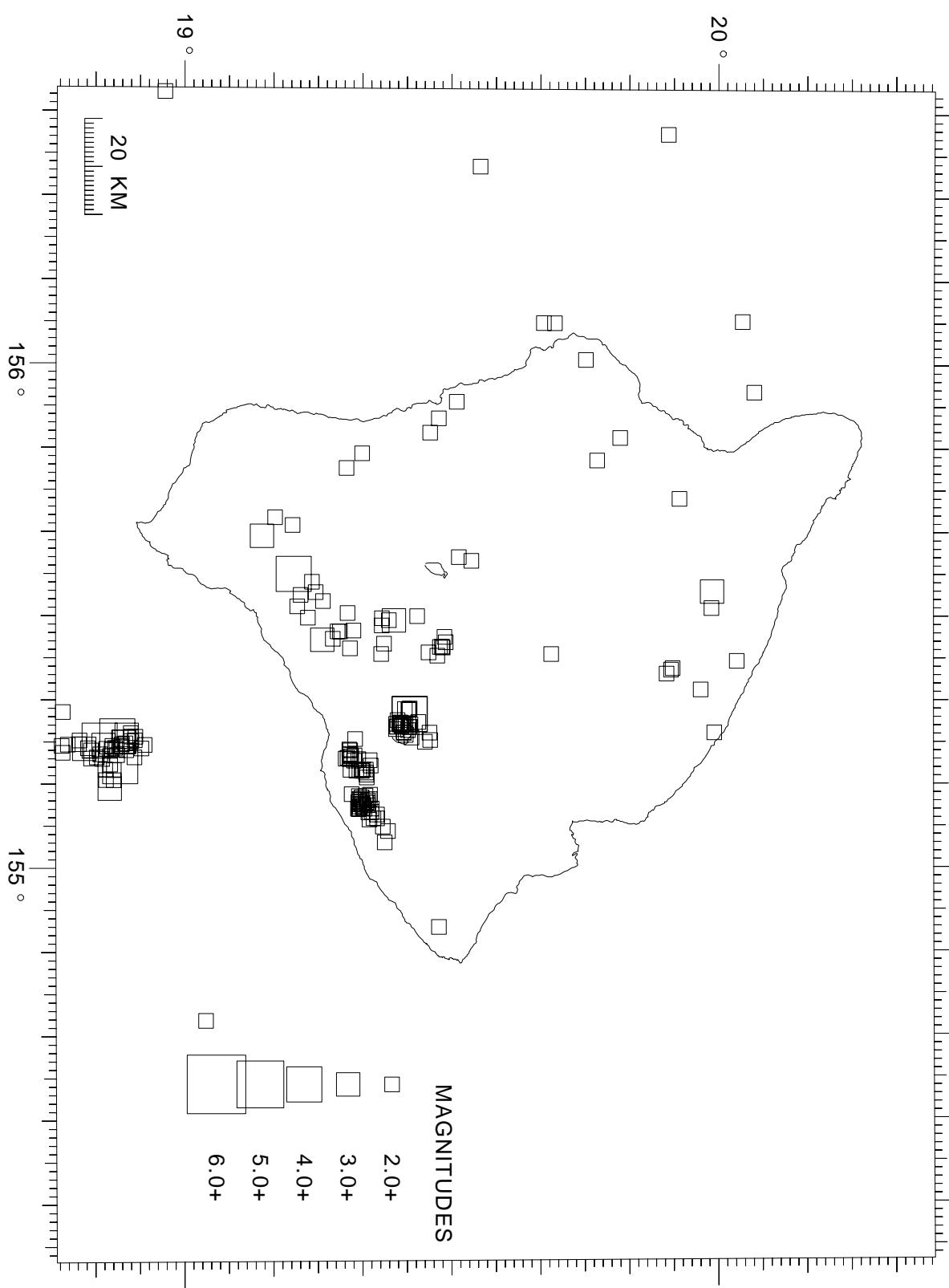


Figure 14. 2001 earthquake locations, Hawai'i Island, intermediate (5.1–13.0 km depth), $M \geq 2.0$.

Figure 15. 2001 earthquake locations, Hawai'i Island, deep (13.1–60.0 km depth), $M \geq 2.0$.

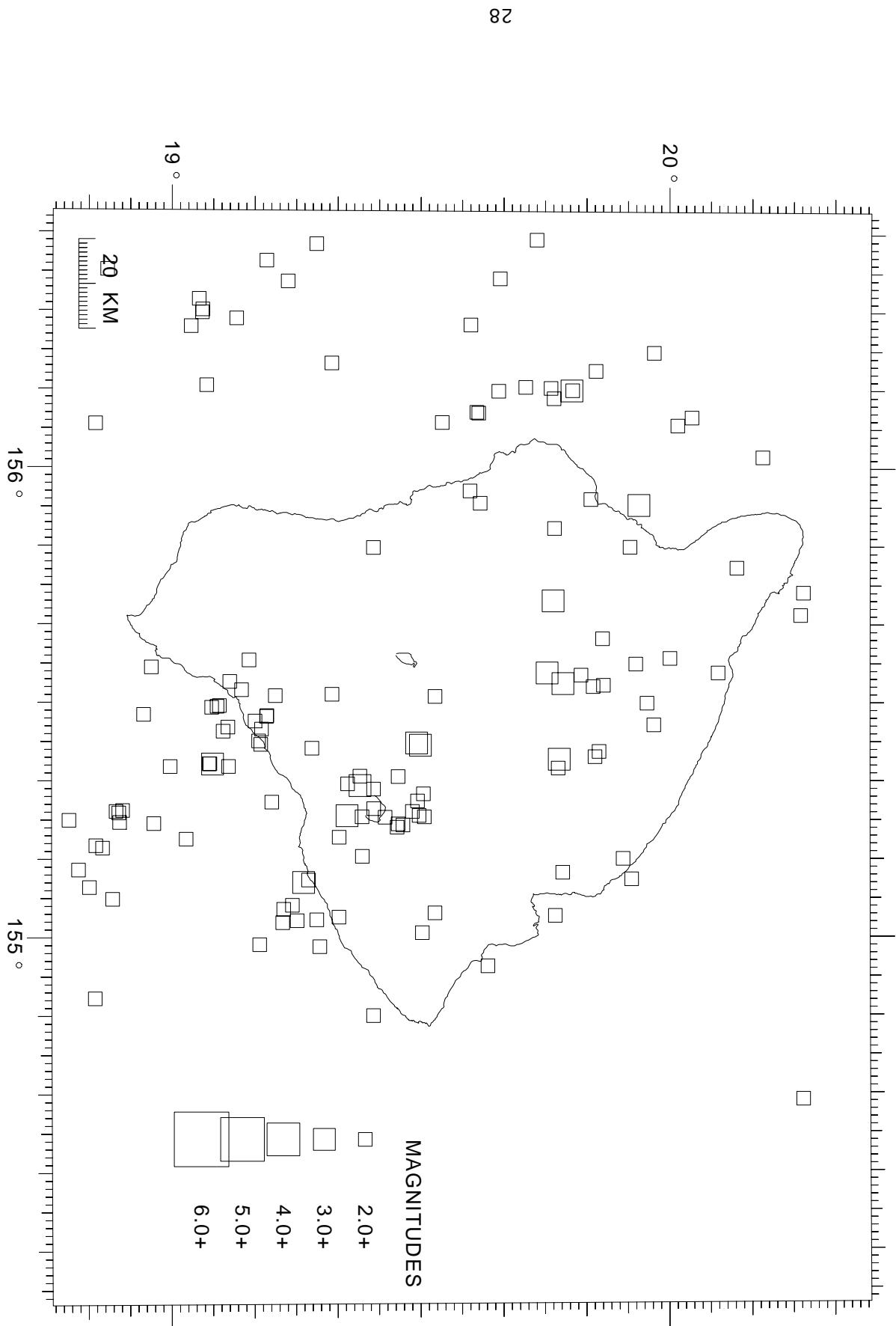


Figure 16. 2001 earthquake locations, Kilauea summit,
shallow (0–5.0 km depth), $M \geq 1.0$.

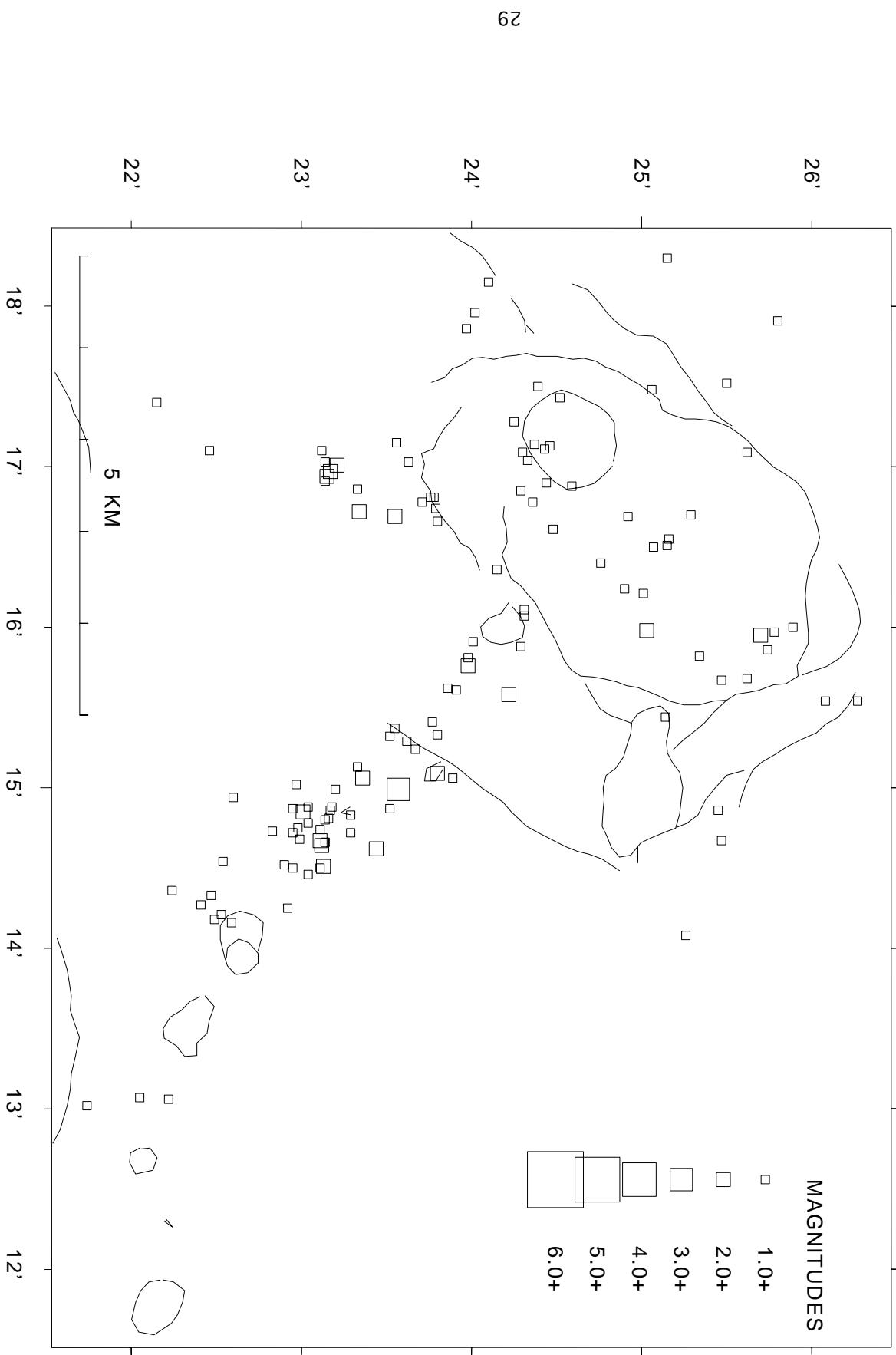


Figure 17. 2001 earthquake locations, Kilauea summit,
intermediate (5.1–13.0 km depth), $M \geq 1.0$.

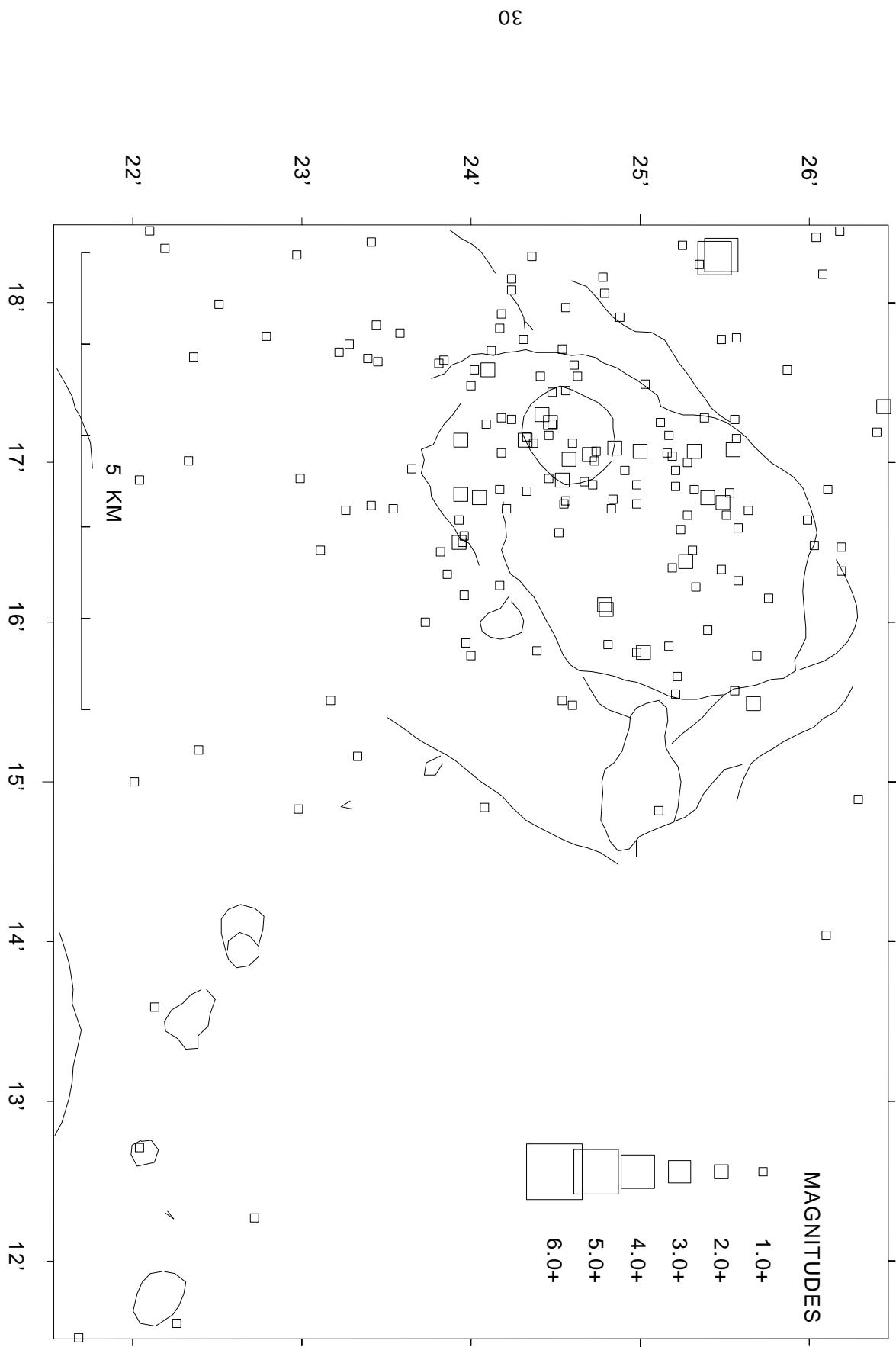


Figure 18. 2001 earthquake locations, Kilauea summit,
deep (13.1–60.0 km depth), $M \geq 1.0$.

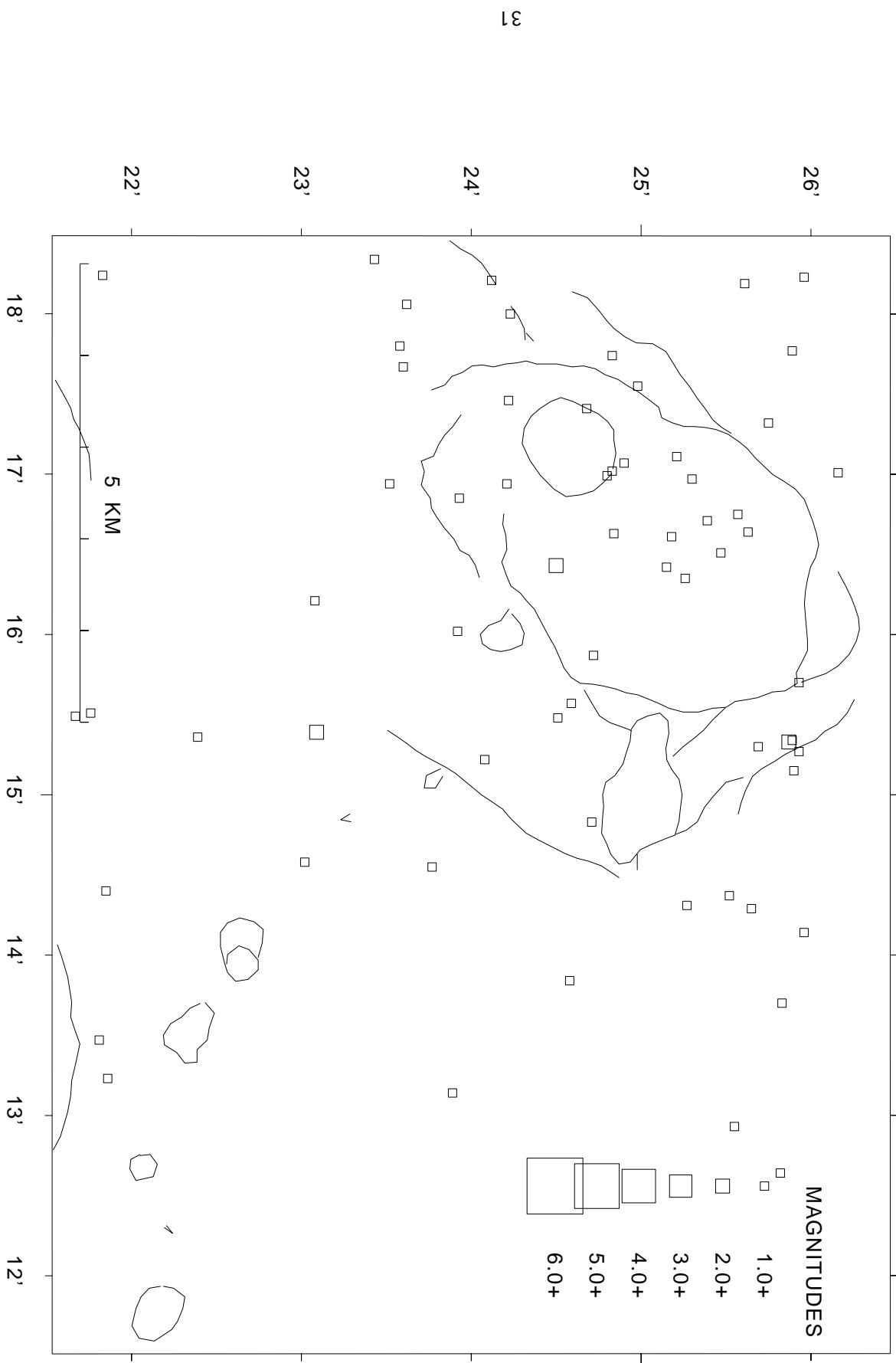


Figure 19. 2001 earthquake locations, Kilauea south flank, shallow (0–5.0 km depth), $M \geq 2.0$.

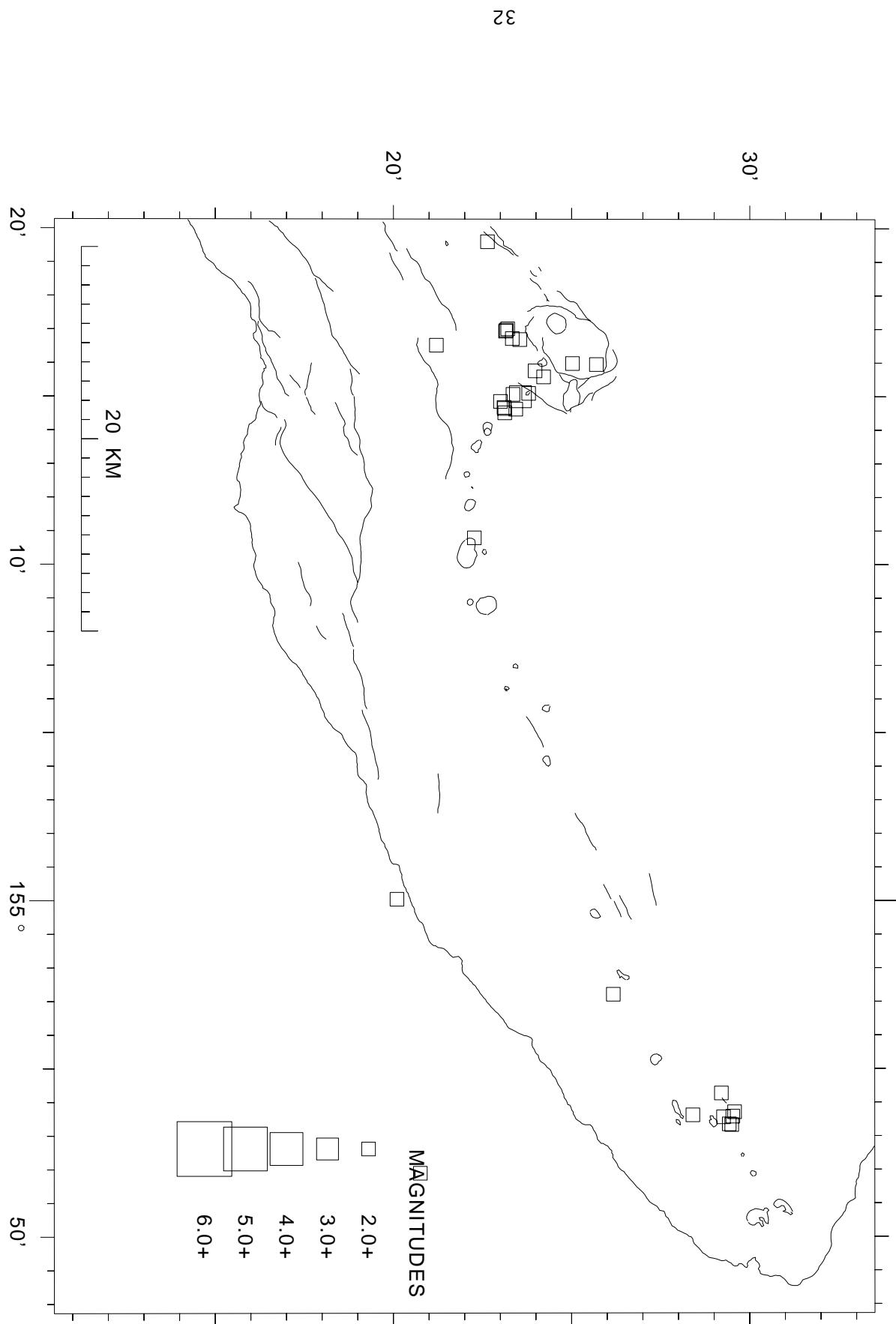


Figure 20. 2001 earthquake locations, Kilauea south flank, intermediate (5.1–13.0 km depth), $M \geq 2.0$.

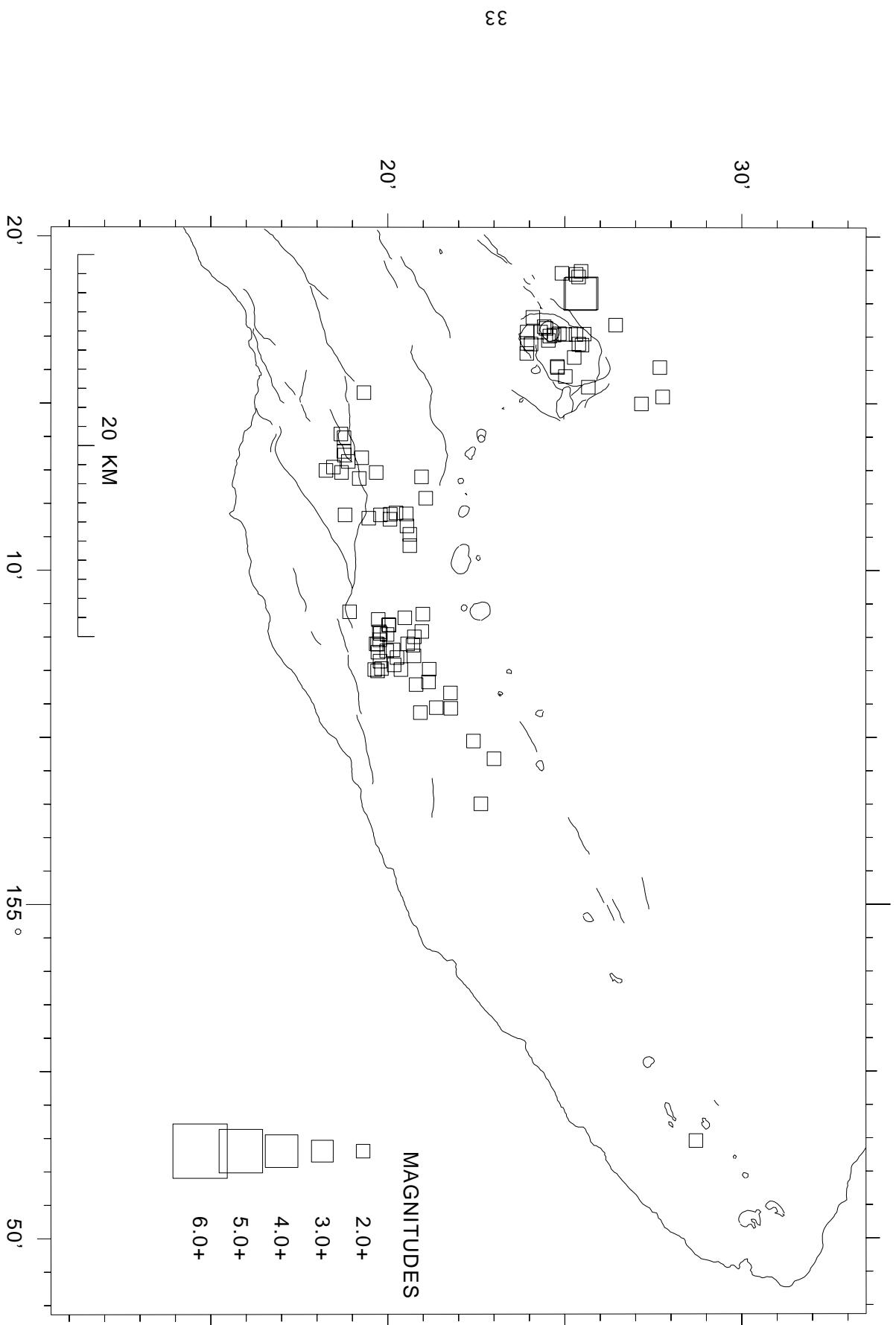


Figure 21. 2001 earthquake locations, Kilauea south flank, deep (13.1–60.0 km depth), $M \geq 2.0$.

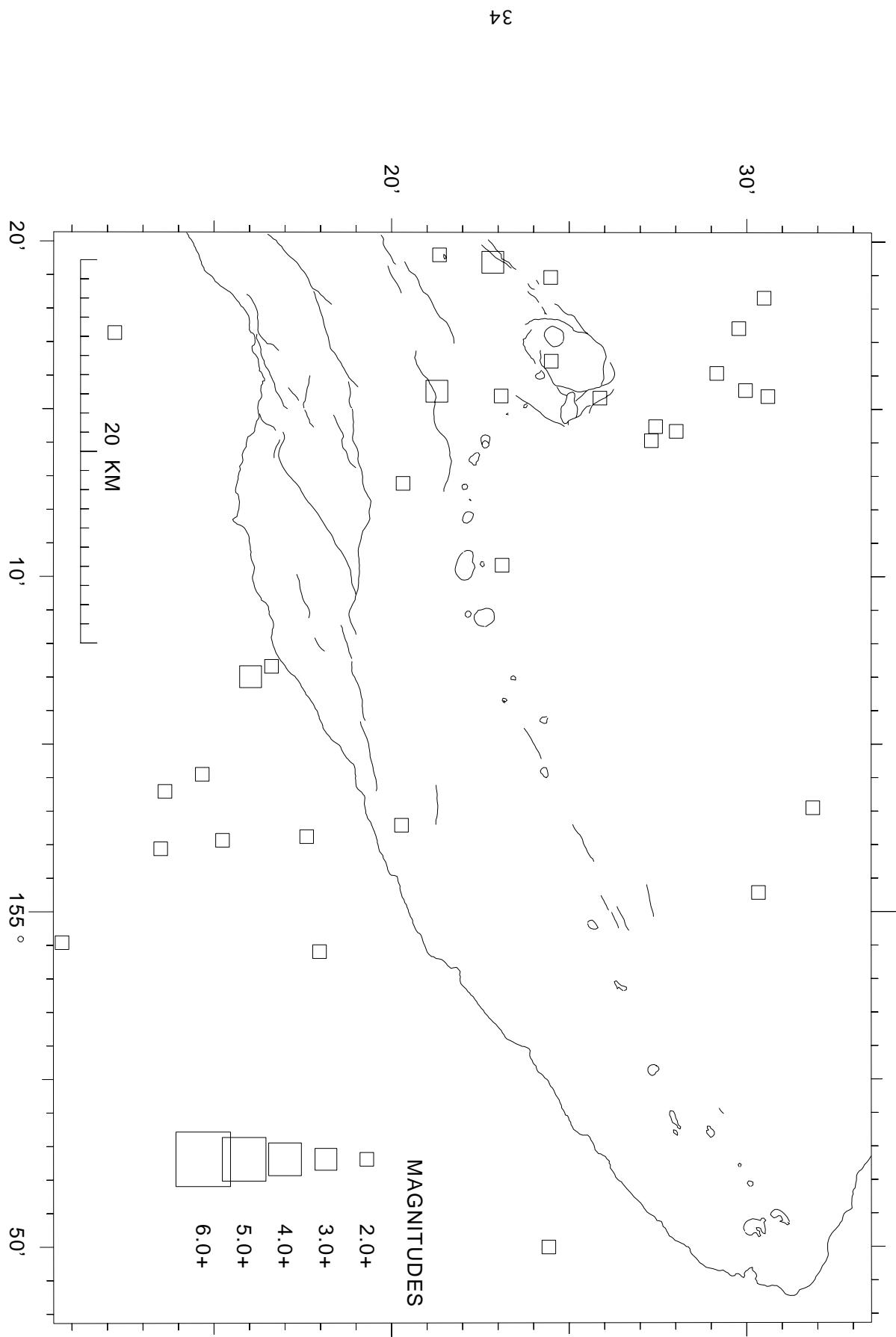


Figure 22. 2001 earthquake locations, Mauna Loa summit, shallow (0–5.0 km depth), $M \geq 2.0$.

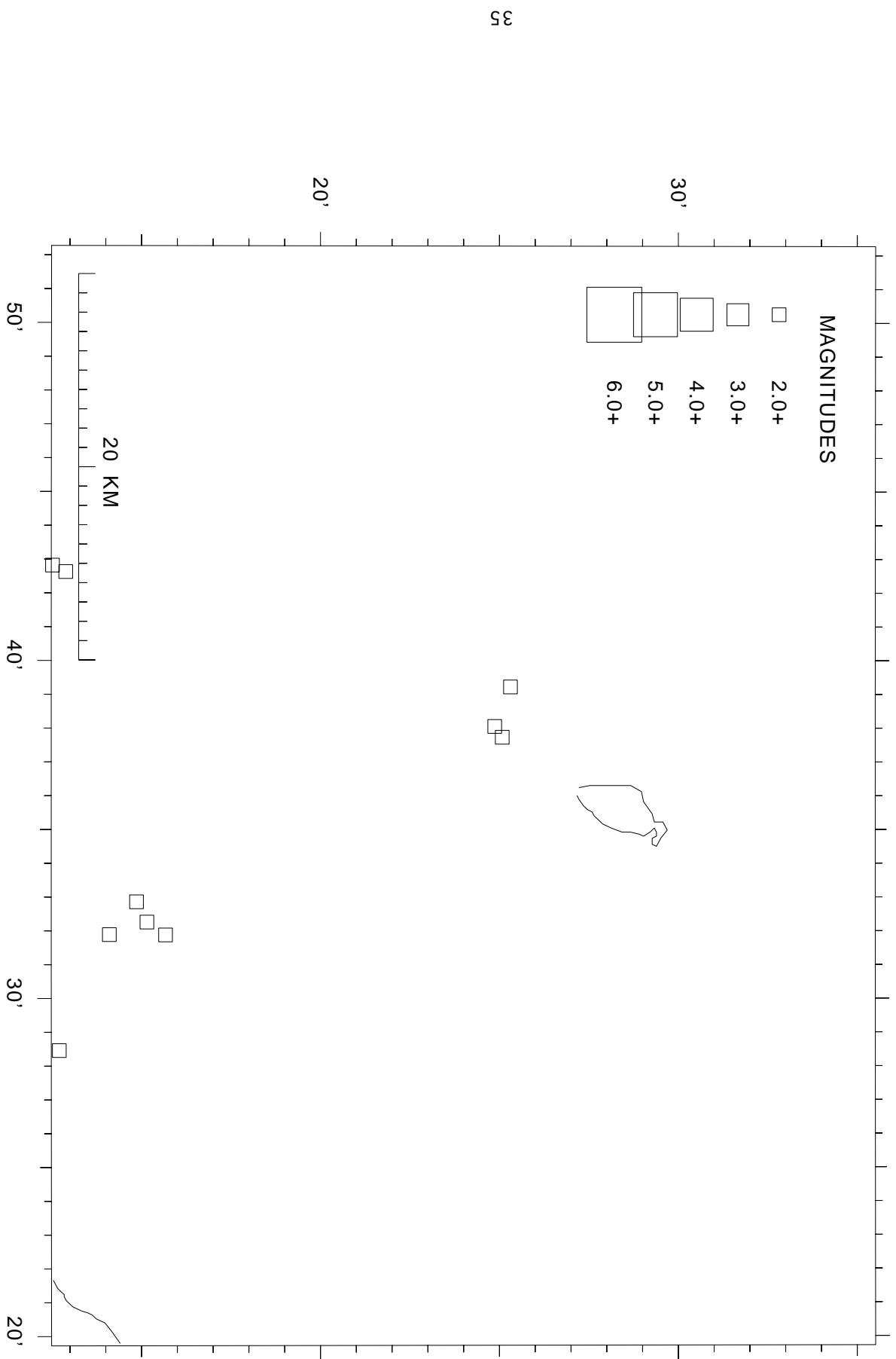


Figure 23. 2001 earthquake locations, Mauna Loa summit, intermediate (5.1–13.0 km depth), $M \geq 2.0$.

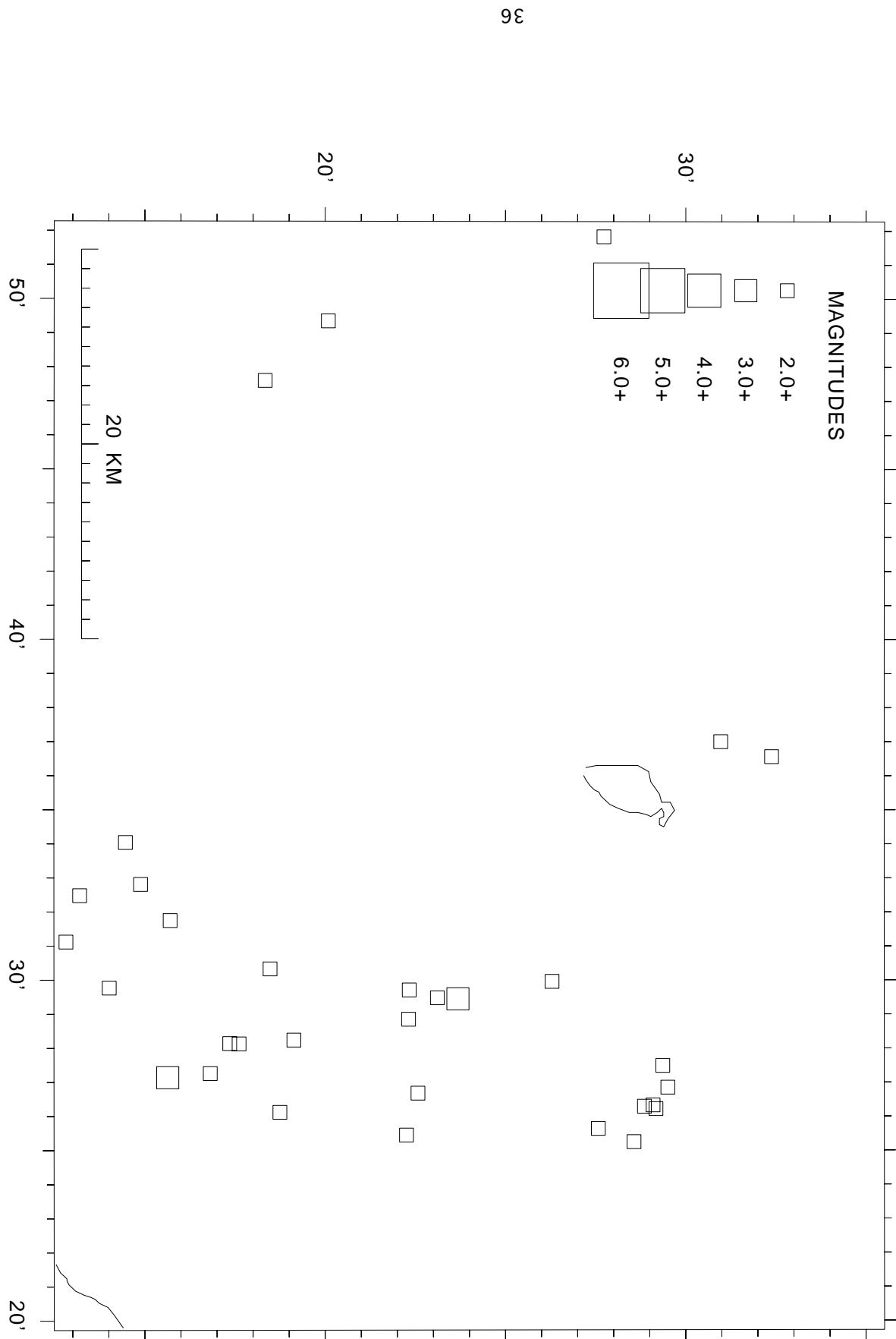


Figure 24. 2001 earthquake locations, Mauna Loa summit, deep (13.1–60.0 km depth), $M \geq 2.0$.

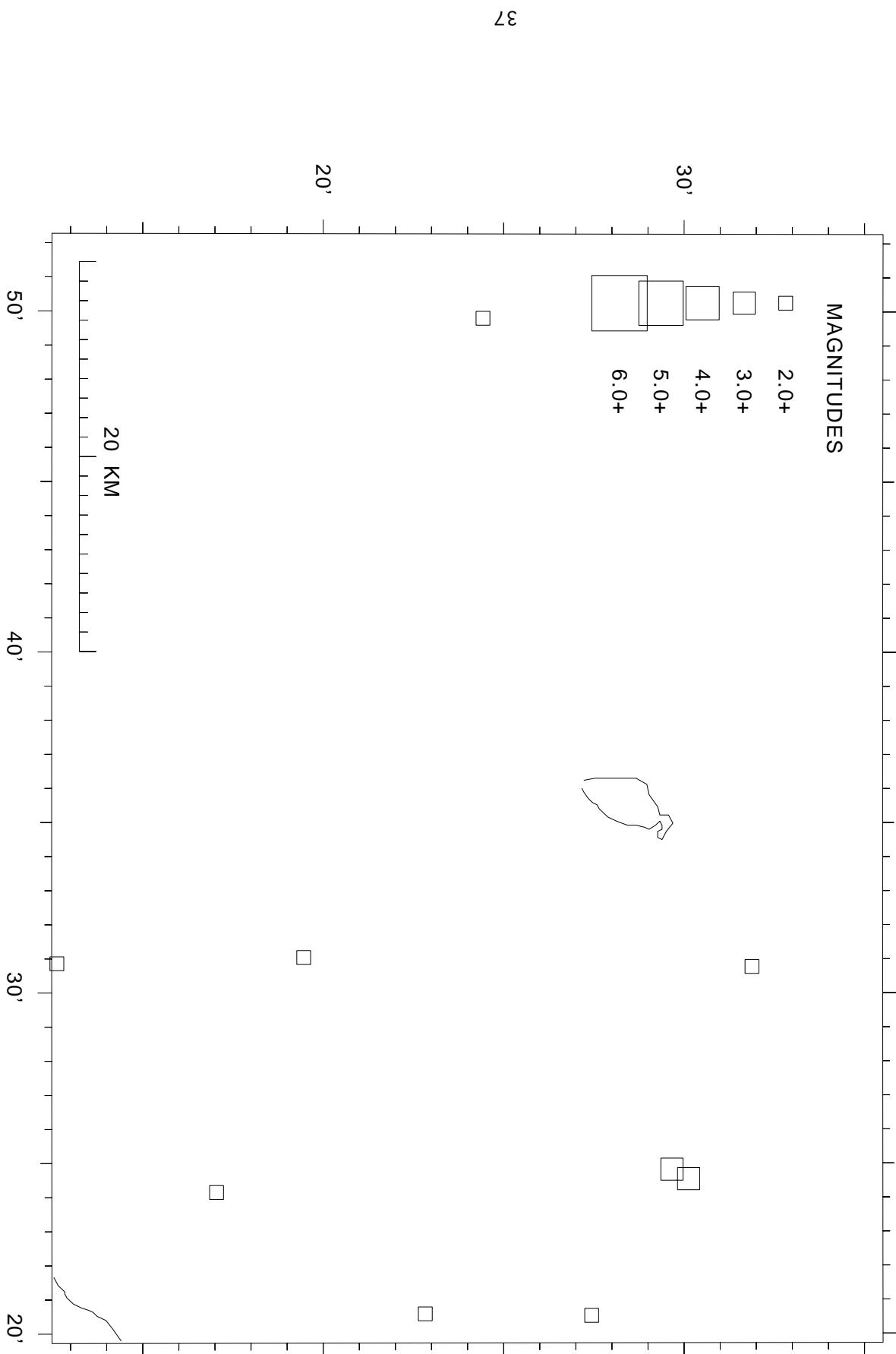


Table 4 is a chronological list of selected events successfully located during 2001. For each event, the following data are presented:

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

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

DEPTH - Depth of focus in kilometers.

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

NS - Number of S readings with final weights > 0.1

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

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

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

LOC REMKS - Remarks, three-letter code for geographic location of events. See Figures 7-10 for location of mnemonic code. Additional one-letter codes have the following meanings:

F felt

L long-period character

T associated with harmonic tremor

B quarry or other blast

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

- the depth was held fixed.

PREF MAG - The preferred magnitude chosen from the available magnitudes.

Preference set as: X-amplitude magnitude, if none

D-Develocorder duration magnitude, if none

U-external magnitude, usually calculated from drum records.

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

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

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

Table 5 is a list of events of magnitude 3.0 or greater, selected from Table 4.

Table 4.

YEAR	MON	DA	HRMN	ORIGIN TIME (HST)			LAT	N	LON	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN	RD	GAP	DS		
				DEG	MIN	SEC																			
2001	JAN	1	0044	36.11	19	12.63	155	25.72	39.91	30	3	.10	.8	1.8	DLS	1.7X	151	4							
2001	JAN	1	0335	27.10	19	12.86	155	32.44	5.79	13	.13	.6	2.3	LSW	1.5X	130	6								
2001	JAN	1	0353	16.73	19	12.48	155	22.51	40.13	28	.4	.10	.8	1.7	DLS	1.6X	153	4							
2001	JAN	1	0519	8.54	19	28.75	154	53.43	0.12	11	2	.09	1.0	.6	SIE	.6X	169	4							
2001	JAN	1	0519	12.45	19	29.58	154	53.71	0.03	10	1	.14	.6	1.0	SLE #	2.0U	166	5							
2001	JAN	1	0634	35.85	19	25.87	155	18.72	6.66	28	.8	.08	.5	.7	INT	1.8X	88	2							
2001	JAN	1	0913	30.29	19	13.62	155	26.98	12.60	15	1	.09	.7	1.1	LSW	1.3X	145	5							
2001	JAN	1	1144	38.33	19	14.52	155	19.06	29.71	35	.7	.11	.7	1.4	DEP	1.7X	158	6							
2001	JAN	1	1242	16.04	19	12.83	155	28.24	5.48	19	2	.16	.7	1.9	LSW	1.2X	140	4							
2001	JAN	2	0104	40.20	19	17.60	155	28.04	8.54	22	1	.12	.4	1.3	LSW	1.4X	120	6							
2001	JAN	2	1929	7.40	19	21.11	155	5.10	5.22	15	.08	.9	2.2	SF5	1.3X	200	6								
2001	JAN	2	1949	38.93	19	21.81	155	4.69	6.81	16	2	.10	.9	7	SF5	1.3X	203	5							
2001	JAN	2	24.58	19	11.08	155	30.99	12.54	18	2	.08	.6	.8	LSW	1.1X	142	8								
2001	JAN	2	2140	41.09	19	29.89	155	17.05	23.14	29	.6	.09	.7	.7	DEP	1.6X	144	4							
2001	JAN	2	2147	38.79	19	59.43	155	18.05	4.81	13	3	.09	1.5	1.6	KEA	1.5X	310	28							
2001	JAN	3	0135	59.86	19	20.24	155	11.31	8.58	20	1	.11	.5	.7	SF3	1.2X	81	4							
2001	JAN	3	2233	41.46	19	19.38	155	9.71	7.63	23	2	.11	.6	.8	SF3	1.3X	97	5							
2001	JAN	3	2247	4.55	19	20.13	155	11.83	7.23	22	2	.12	.5	.9	SF3	1.4X	80	5							
2001	JAN	3	2337	25.30	19	26.93	155	53.50	15.74	14	1	.12	1.4	1	3	KON	.8X	155	6						
2001	JAN	3	0132	16.79	19	59.43	155	18.05	4.81	13	3	.09	1.5	1.6	KEA	1.5X	310	28							
2001	JAN	3	0447	51.17	19	21.74	155	6.96	8.05	18	2	.10	.6	.7	SF4	1.2X	147	3							
2001	JAN	3	0712	21.91	19	13.93	155	28.63	7.97	10	1	.08	.7	.9	LSW	1.0X	178								
2001	JAN	3	1452	33.81	19	20.54	155	19.12	5.03	38	7	.12	.3	1.2	SWR	2.0X	63	3							
2001	JAN	3	1607	24.76	19	19.62	155	7.72	7.98	20	2	.08	.7	.9	SF4	1.3X	150	4							
2001	JAN	3	2230	37.79	19	19.95	155	7.32	7.40	21	2	.07	.6	.7	SF4	1.3X	160	5							
2001	JAN	3	2310	56.08	19	29.64	155	57.26	18.78	14	1	.14	4.5	3.7	KON	1.3X	275	4							
2001	JAN	4	0033	20.17	19	23.79	154	59.93	8.37	18	.13	.2	.9	1.7	LER	1.5X	278	7							
2001	JAN	4	0117	38.81	19	10.68	155	15.98	7.66	29	3	.12	.4	.6	SF2	1.5X	67	3							
2001	JAN	4	0128	41.11	19	10.68	155	16.64	5.21	12	1.2	.1	.6	1.2	DEP	1.5X	192	3							
2001	JAN	4	0148	40.83	19	13.52	155	28.01	8.94	14	1	.11	.6	1.0	LSW	1.1X	140	5							
2001	JAN	4	0524	27.92	19	40.05	155	7.76	7.63	26	2	.08	.5	.6	SF4	1.8X	145	5							
2001	JAN	4	0630	20.19	19	15.51	155	27.18	17.18	14	.13	.9	3.0	DLS	1.2X	106	6								
2001	JAN	4	0924	24.85	19	18.59	155	15.01	5.65	18	1	.07	.5	1.4	SPI	.9X	108	4							
2001	JAN	4	1654	57.28	19	18.70	155	14.81	4.96	16	.07	.6	1.9	SSF	1.0X	143	5								
2001	JAN	4	1722	30.67	19	59.25	155	5.09	9.44	19	2	.15	.8	1.4	KOH	1.8X	176	36							
2001	JAN	4	1749	17.33	19	11.99	155	29.19	6.76	16	.13	.7	1.8	LSW	1.3X	143	6								
2001	JAN	4	1838	30.71	19	50.58	156	5.10	38.26	22	3	.13	2.5	2.1	HUA	1.8X	312	31							
2001	JAN	4	2155	9.23	19	30.76	155	45.94	9.95	18	.11	.6	1.9	KON	1.1X	78	16								
2001	JAN	4	2223	2.96	19	22.12	155	5.41	6.46	24	2	.14	.7	.9	SF4	1.5X	178	5							
YEAR	MON	DA	HRMN	ORIGIN TIME (HST)			LAT	N	ION	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN	RD	GAP	DS		
				DEG	MIN	SEC																			

YEAR	MON	DA	HRVN	SEC	ORIGIN TIME (HST)			LAT N			LON W			DEPTH N			RMS ERH			ERZ LOC			PREF N															
					DEG	MIN	DDBG	DEG	MIN	DDBG	KM	RD	S	SEC	KM	RD	S	SEC	KM	RD	GAP	DS																
2001	JAN	10	0734	12:23	19	25:78	155	27:86	10:84	19:3	10	5	1:5	KAO	1:2X	68	9	2001	JAN	18	1824	54:40	19	41:37	155	25:45	12:96	4813	13	3	.3	KEA	2:7X	68	11			
2001	JAN	10	0815	1:24	19	25:06	155	17:48	3:20	14:5	12	.8	.3	SNCL	1:4X	132	1	2001	JAN	18	2047	3:58	19	29:18	155	26:22	7:59	4512	12	.3	.7	KAO	2:7X	63	5			
2001	JAN	10	1506	47:02	19	22:01	155	28:55	11:81	21:1	2	.12	.5	1:1	KAO	1:2X	63	9	2001	JAN	18	2013	6:37	19	29:10	155	26:47	7:29	34	6	.12	.4	1:1	KAO	1:8X	48	6	
2001	JAN	10	2148	6:31	19	15:48	155	28:06	8:42	22:1	1	.14	.5	.9	LSW	1:4X	144	4	2001	JAN	18	2105	23:76	19	7:99	155	20:49	54:37	26	2	.15	1:5	2:3	LOI	1:6X	222	13	
2001	JAN	10	2331	28:41	19	15:03	155	2:55	41:79	22	1	.12	1:8	2:0	DEP	1:7X	244	10	2001	JAN	11	0725	44:91	19	24:57	155	29:44	14:29	14:1	.14	.8	1:8	DML	1:3X	68	6		
2001	JAN	11	1743	29:37	19	24:62	154	40:54	35:64	25	1	.14	4:6	2:8	LER	2:0X	303	19	2001	JAN	11	1903	11:73	19	21:03	155	12:75	8:29	25	2	.13	.6	.6	SF2	1:5X	114	3	
2001	JAN	11	1912	05:14	16:49	19	28:78	155	27:05	11:95	20	.4	.12	.6	1:5	KAO	1:2X	102	6	2001	JAN	11	1911	06:18	19	28:63	155	15:55	33:30	8:23	20	.11	.6	1:0	LSW	1:1X	123	6
2001	JAN	11	0616	45:59	19	28:11	155	26:81	8:10	31:4	.12	.4	.1:1	KAO	1:8X	46	6	2001	JAN	11	0615	45:59	19	28:11	155	26:81	8:10	31:4	.12	.4	.1:1	KAO	1:8X	46	13			
2001	JAN	11	0725	44:91	19	24:57	155	29:44	14:29	14:1	.14	.8	1:8	DML	1:3X	68	6	2001	JAN	11	0725	44:91	19	24:57	155	29:44	14:29	14:1	.14	.8	1:8	DML	1:3X	68	6			
2001	JAN	11	1743	29:37	19	24:62	154	40:54	35:64	25	1	.14	4:6	2:8	LER	2:0X	303	19	2001	JAN	11	1903	11:73	19	21:03	155	12:75	8:29	25	2	.13	.6	.6	SF2	1:5X	114	3	
2001	JAN	11	1912	05:14	16:49	19	28:78	155	27:05	11:95	20	.4	.12	.6	1:5	KAO	1:2X	102	6	2001	JAN	11	1911	06:18	19	28:63	155	15:55	33:30	8:23	20	.11	.6	1:0	LSW	1:1X	123	6
2001	JAN	12	0959	30:69	19	12:73	155	26:00	38:84	28	5	.09	.7	1:3	DLS	1:7X	150	5	2001	JAN	12	1331	30:81	19	20:25	155	7:64	6:59	26	5	.08	.4	.8	SF4	1:2X	126	5	
2001	JAN	12	1428	57:29	19	27:29	155	37:22	10:98	16	3	.08	1:1	.9	MLO	1:3X	177	2	2001	JAN	12	1943	24:62	19	24:10	155	18:15	2:34	14	6	.08	.6	.6	SSCL	1:4X	198	3	
2001	JAN	12	2035	40:09	19	26:52	155	18:54	6:48	30	6	.10	.5	.6	INT	1:3X	158	3	2001	JAN	12	2209	52:28	19	22:12	155	7:64	6:59	26	5	.08	.4	.8	SF4	1:2X	126	5	
2001	JAN	13	0821	56:17	19	12:52	155	9:39	45:00	36	9	.10	1:0	1:1	DEP	1:8X	207	9	2001	JAN	13	1143	32:82	19	27:87	155	23:98	10:50	24	9	.09	.5	.8	KAO	1:4X	124	6	
2001	JAN	13	1205	32:22	19	23:34	155	30:39	13:96	19	3	.09	.6	1:0	DML	1:4X	49	5	2001	JAN	13	1225	4:69	19	19:53	155	10:94	7:35	25	5	.11	.4	.6	SF3	1:3X	105	5	
2001	JAN	14	0917	7:28	19	20:29	155	10:91	7:23	26	6	.09	.4	.6	SF3	1:3X	81	4	2001	JAN	14	1514	9:77	19	18:59	155	13:19	6:61	34	7	.12	.4	.8	SF2	1:9X	87	3	
2001	JAN	15	0526	15:20	19	12:53	155	22:89	54:71	25	2	.15	1:2	2:4	DEPT	1:2X	159	4	2001	JAN	15	1123	52:34	19	17:57	155	24:87	6:64	37	8	.15	.3	1:1	SWR	1:3X	73	6	
2001	JAN	15	2105	42:40	19	4:53	155	23:40	37:49	16	1	.12	1:5	2:7	LOI	1:3X	247	18	2001	JAN	15	2106	2:89	19	19:52	155	7:44	7:48	35	9	.09	.4	.5	SF4	1:6X	138	4	
2001	JAN	16	0929	27:96	19	20:03	155	9:80	6:27	21	2	.08	.6	1:1	SF3	1:4X	95	4	2001	JAN	16	1034	45:15	19	22:18	155	29:99	12:80	22	4	.10	.4	1:0	KAO	1:2X	196	3	
2001	JAN	16	0606	16:56	19	24:37	155	17:14	14:56	19	1:5	.3	SSCL	1:7X	115	1	2001	JAN	16	0734	12:23	19	25:78	155	27:86	10:84	19	3	.10	.5	1:0	DEP	1:2X	159	4			
2001	JAN	17	0837	42:35	19	16:56	155	29:19	17:88	34	4	.18	1:7	14:7	KON	-	222	42	2001	JAN	17	1022	22:34	19	25:29	155	19:52	6:71	27	6	.11	.4	.8	KAO	1:4X	72	3	
2001	JAN	17	1439	42:43	19	23:25	155	1:84	7:48	20	2	.13	.9	.6	SF5	1:5X	168	4	2001	JAN	17	1743	45:15	19	22:18	155	29:99	12:80	22	4	.10	.4	1:0	KAO	1:2X	196	3	
2001	JAN	17	1603	58:90	19	19:25	155	11:28	6:55	20	4	.08	.5	1:2	SF3	1:1X	103	6	2001	JAN	17	1743	45:15	19	22:18	155	29:99	12:80	22	4	.10	.4	1:0	DEP	1:2X	196	3	
2001	JAN	17	1632	58:68	19	11:17	155	40:41	2:26	42	8	.15	.4	1:0	LSW	2:3X	99	10	2001	JAN	17	1743	45:15	19	22:18	155	29:99	12:80	22	4	.10	.4	1:0	DEP	1:2X	196	3	
2001	JAN	17	1653	54:81	19	47:28	155	8:27	39:10	1:61	4:11	.7	.7	1:0	KEA	2:1X	189	15	2001	JAN	17	2216	1:33	19	22:66	155	1:47	7:96	25	3	.13	.8	.6	SF5	1:2X	184	6	
2001	JAN	17	1801	44:11	19	13:30	155	32:76	5:02	26	5	.12	.5	1:4	LSW	1:4X	153	26	2001	JAN	17	2322	41:09	19	10:65	155	27:84	3:5	16	27	3	.08	.7	1:3	DLS	1:3X	155	9
2001	JAN	17	1824	54:40	19	41:37	155	25:45	12:96	4813	13	.3	.3	KEA	2:7X	68	9	2001	JAN	17	2047	3:58	19	29:18	155	26:22	7:59	4512	12	.3	.7	KAO	2:7X	63	5			
2001	JAN	18	0734	12:23	19	25:78	155	27:86	10:84	19	3	.10	.5	1:0	LSW	1:1X	123	6	2001	JAN	18	2013	6:37	19	29:10	155	26:47	7:29	34	6	.12	.4	1:1	KAO	1:8X	48	6	
2001	JAN	18	1056	47:02	19	22:01	155	28:55	11:81	21	2	.12	.5	.1:1	KAO	1:2X	63	9	2001	JAN	18	2015	23:76	19	7:99	155	20:49	54:37	26	2	.15	1:5	2:3	LOI	1:6X	222	13	
2001	JAN	18	1021	28:41	19	15:03	155	2:55	41:79	22	1	.12	1:8	2:0	DEP	1:7X	244	10	2001	JAN	18	1908	30:27	19	12:91	155	15:33	3:27	.8	.8	.09	.4	.9	KEA	2:0X	177	4	
2001	JAN	18	1100	48:18	19	28:63	155	15:55	33:30	8:23	20	.11	.6	1:1	KAO	1:2X	123	6	2001	JAN	18	1941	48:24	19	4:25	155	29:91	11:50	25	4	.09	.4	.9	SF4	1:3X	117	4	
2001	JAN	18	1941	48:24	19	4:25	155	29:91	11:50	25	4	.09	.4	.9	SF4	1:3X	117	4	2001	JAN	18	2047	3:58	19	15:55	155	26:22	7:59	4512	12	.3	.7	KAO	2:0X	177	4		
2001	JAN	19	0008	30:27	19	12:91	155	15:33	3:27	.8	.8	.09	.4	.9	KEA	2:1X	123	6	2001	JAN	19	0106	22:99	19	24:50	155	16:43	15:05	5015	11	.1	.4	2	DEP	2:2X	42	1	
2001	JAN	19	0106	22:99	19	24:50	155	16:43	15:05	5015	11	.1	.4	.2	DEP	2:2X	42	1	2001	JAN	19	0107	48:24	19	4:25	155	29:91	11:50	25	4	.09	.4	1:3	KAO	1:0X	46	13	
2001	JAN	19	0107	48:24	19	4:25	155	29:91	11:50	25	4	.09	.4	.9	SF4	1:3X	117	4	2001	JAN	19	0141	48:24	19	4:25	155	29:91	11:50	25	4	.09	.4	.9	SF4	1:3X	117	4	
2001	JAN	19	0141	48:24	19	4:25	155	29:91	11:50	25	4	.09	.4	.9	SF4	1:3X	117	4	2001	JAN	19	0142	48:24	19	4:25	155	29:91	11:50	25	4	.09	.4	.9	SF4	1:3X	117	4	
2001	JAN	19	0142	48:24	19	4:25	155	29:91	11:50	25	4	.09	.4	.9	SF4	1:3X	117	4	2001	JAN	19	0143	48:24	19	4:25	155	29:91	11:50	25	4	.09	.4	.9	SF4	1:3X	117	4	
2001	JAN	1																																				

YEAR	MON	DA	HRMN	SEC	LAT N	LONG W	DEPTH N	N	RMS	ERH	ERZ	LOC	PREF N	AZ	MIN
					DEG	MIN	KM	RD	S	SEC	KM	REMKS	MAG	RD	GAP
2001	JAN	25	1256	26.63	19	18.01	155	30	.39	2.84	28	3	.11	.3	1.3 LSW
2001	JAN	25	1301	54.01	19	18.48	155	15	.07	5.62	27	2	.09	.4	1.1 SP1
2001	JAN	25	1342	18.81	19	22.21	155	28	.78	8.64	42	10	.12	.3	1.3 KAO
2001	JAN	25	1517	9.09	19	12.30	155	39	.42	1.42	50	12	.18	.4	1.6 LSW
2001	JAN	25	1531	15.36	19	27.87	154	56	.54	46.48	40	11	.11	.7	.7 LER
2001	JAN	25	2205	13.06	19	24.99	155	3	.15	3.76	21	5	.08	.6	.4 SNE
2001	JAN	26	0022	50.74	19	23.33	155	15	.86	3.18	33	7	.09	.3	.2 SSC
2001	JAN	26	0433	16.77	19	23.17	155	14	.86	3.62	22	8	.08	.3	.3 SEC
2001	JAN	26	1044	0.80	19	24.80	155	15	.99	13.55	21	4	.07	.8	.6 DEPL
2001	JAN	26	1324	54.59	19	23.60	155	17	.67	15.65	24	6	.14	.9	.5 DEPL
2001	JAN	26	1452	50.69	19	24.07	155	19	.41	1.93	21	1	.11	.4	1.2 KAOL
2001	JAN	26	1657	27.77	19	24.00	155	17	.79	10.95	27	5	.13	.8	.6 INTL
2001	JAN	26	1818	48.08	19	20.51	155	12	.85	8.31	27	4	.12	.4	.5 SF2
2001	JAN	26	1928	53.23	19	25.21	155	15	.85	11.76	16	2	.11	1.0	INTL
2001	JAN	26	1952	44.40	19	26.76	155	15	.33	3.03	8	.38	.26	.5	.10
2001	JAN	26	2038	54.56	19	24.83	155	17	.74	14.24	20	5	.13	1.5	.6 DEPL
2001	JAN	26	2201	40.88	19	25.12	155	17	.25	11.75	21	3	.14	.7	.7 INTL
2001	JAN	26	2354	6.13	19	25.26	155	15	.35	14.22	27	6	.12	.7	.4 DEPL
2001	JAN	27	0003	40.69	19	38.00	155	59	15.98	15.89	21	7	.11	.3	.9 KON
2001	JAN	27	0030	12.88	19	26.19	155	15	.32	10.22	1	1.0	.8	1.1 INTL	
2001	JAN	27	0126	48.08	19	24.83	155	17	.02	13.28	21	5	.10	1.0	.6 DEPL
2001	JAN	27	0525	27.00	19	23.54	155	17	.03	3.52	22	3	.14	.4	.4 SSCL
2001	JAN	27	0639	1.91	19	25.99	155	15	.71	9.97	7	.08	.7	.6 INTL	
2001	JAN	27	0720	21.15	19	26.73	155	15	.95	11.93	26	6	.11	.9	.6 INTL
2001	JAN	27	0800	42.85	19	33.41	155	44	.50	10.83	27	6	.12	.5	.6 KON
2001	JAN	27	1001	58.37	19	24.22	155	18	.99	13.94	26	6	.12	.9	.7 DEPL
2001	JAN	27	1126	34.10	19	51.18	155	23	.07	23.10	30	4	.09	.9	.1 KEA
2001	JAN	27	1157	22.30	19	25.99	155	16	.64	12.91	20	5	.10	.9	.7 INTL
2001	JAN	27	1426	32.07	19	25.46	155	15	.33	12.51	25	5	.09	.7	.4 INTL
2001	JAN	27	1306	19.38	19	24.08	155	15	.22	14.50	17	1	.13	1.1	.4 DEPL
2001	JAN	27	1649	5.83	19	24.48	155	17	.24	10.12	28	7	.06	.5	.4 INTL
2001	JAN	27	1734	27.20	19	25.33	155	15	.22	7.77	14	2	.08	.7	.1 INTL
2001	JAN	27	1809	38.96	19	27.36	155	15	.44	10.70	23	7	.12	.5	.4 KON
2001	JAN	27	1851	46.91	19	25.22	155	15	.66	11.93	19	3	.12	.6	.6 INTL
2001	JAN	27	1853	47.56	19	24.52	155	17	.43	1.85	18	7	.10	.4	.2 SSCL
2001	JAN	27	2038	32.41	19	12.98	155	32	.67	8.78	40	9	.12	.5	.8 LSWF
2001	JAN	27	2104	27.29	19	24.90	155	17	.07	13.16	20	1	.12	.9	.6 DEPL
2001	JAN	27	2110	6.72	19	23.37	155	15	.87	12.65	24	7	.09	1.0	.5 INTL
2001	JAN	27	2335	29.11	19	12.84	155	32	.18	0.47	24	4	.14	.4	.4 LSW
2001	JAN	28	0005	0.77	19	18.42	155	15	.31	7.94	35	7	.09	.4	.6 SP1
2001	JAN	28	0122	51.21	19	22.14	155	30	.17	13.29	13	0	.09	.8	.1 DML
2001	JAN	28	0124	51.21	19	12.11	155	30	.36	10.73	40	9	.12	.3	.8 KAO
2001	JAN	28	0302	55.61	19	12.52	155	29	.82	7.87	21	.11	.6	.8 LSW	

4

YEAR	MON	DA	HRMN	SEC	LAT N	LONG W	DEPTH N	N	RMS	ERH	ERZ	LOC	PREF N	AZ	MIN	
					DEG	MIN	KM	RD	S	SEC	KM	KM	REMKS	MAG	RD	GAP
2001	JAN	28	0306	32.94	19	13.11	155	30	.26	7.48	29	3	.10	.4	1.0 LSW	
2001	JAN	28	0612	35.55	19	56.09	155	34	.94	31.42	35	6	.12	1.0	1.2 KOH	
2001	JAN	28	0727	33.17	19	27.89	154	54	.91	3.91	13	1	.07	1.0	.5 SLE	
2001	JAN	28	2245	11.13	19	5.20	155	16	.60	48.00	33	2	.09	1.0	1.0 LOI	
2001	JAN	29	1031	42.52	19	20.65	155	8.57	.941	24	3	.06	.4	.7 SF4		
2001	JAN	29	2305	57.15	19	20.11	155	7.22	.7.15	27	6	.08	.5	.7 SF4		
2001	JAN	29	2336	40.93	19	25.63	155	16	.64	13.39	20	5	.11	.1	.6 DEPL	
2001	JAN	30	1915	44.18	19	29.00	155	26	.62	8.13	37	0	.11	.4	.1 KAOL	
2001	JAN	30	2215	44.18	19	16.04	155	12	.59	32	4	.11	.6	.4 DLS		
2001	JAN	31	0942	34.20	19	19.99	155	8.08	.685	47	14	.13	.4	.6 SF4		
2001	JAN	31	1121	54.63	19	10.71	155	31	.44	8.59	21	.3	.19	.8	.1 LSW	
2001	JAN	31	1123	41.14	19	11.43	155	32	.74	7.36	23	.3	.12	.5	.1 LSW	
2001	JAN	31	1511	15.73	19	19.53	155	14	.86	5.99	28	.7	.09	.3	.8 SF1	
2001	JAN	31	1605	27.64	19	23.89	155	13	.14	14.28	15	.1	.10	.8	.5 DEPL	
2001	JAN	31	1836	15.65	19	11.94	155	41	.77	7.41	24	.5	.18	.6	.1 LSW	
2001	JAN	31	1941	42.68	19	25.15	155	16	.42	14.16	28	.7	.13	.8	.5 DEPL	
2001	JAN	31	2107	43.85	19	25.51	155	16	.67	11.42	25	.6	.12	.9	.6 INTL	
2001	JAN	31	2301	35.83	19	24.98	155	10	.74	11.00	24	.5	.09	.5	.4 INTL	
2001	JAN	31	2327	55.29	19	25.75	155	17	.54	9.59	24	.4	.10	.6	.5 INTL	
2001	JAN	31	0232	7.99	19	27.99	155	13	.74	1.55	23	.6	.13	.5	.8 GINT	
2001	JAN	31	1033	47.43	19	23.93	155	16	.64	11.29	23	.4	.11	.6	.5 INTL	
2001	FEB	1	0602	58.17	19	27.33	155	16	.60	6.71	14	.2	.08	.6	.1 INTL	
2001	FEB	1	0646	12.74	19	24.41	155	17	.54	9.59	24	.4	.10	.6	.5 INTL	
2001	FEB	1	0740	23.05	19	26.19	155	15	.07	13.01	22	.5	.10	.8	.6 DEPL	
2001	FEB	1	1221	35.40	19	24.08	155	29	.66	11.35	22	.3	.12	.5	.1 SF3	
2001	FEB	1	0824	22.69	19	19.14	155	10.00	.10	12.28	28	.6	.09	.5	.1 SF3	
2001	FEB	1	1220	35.40	19	24.08	155	11.35	.22	3	.12	.1	.07	.1	.7 INTL	
2001	FEB	1	1300	27.15	19	31.70	155	15	.05	29.66	11	.35	.22	.1	.7 INTL	
2001	FEB	1	1301	27.15	19	24.11	155	18	.87	4.11	17	.1	.09	.5	.1 SSCL	
2001	FEB	1	1302	27.15	19	24.41	155	18	.87	7.21	20	.6	.10	.5	.1 MLO	
2001	FEB	1	1400	34.67	19	24.11	155	15	.44	8.74	21	.1	.09	.5	.1 MLO	
2001	FEB	1	1451	4.74	19	22.52	155	20	.56	9.88	21	.5	.15	.6	.1 KAOL	
2001	FEB	1	1717	13.02	19	25.57	155	16	.75	14.63	25	.7	.09	.9	.5 DEPL	
2001	FEB	1	1743	53.47	19	20.52	155	6	.86	8.89	29	.6	.12	.4	.5 SF4	
2001	FEB	1	2042	41.49	19	21.16	155	29	.94	7.79	24	.4	.12	.3	.1 KAO	
2001	FEB	1	2151	3.27	19	13.77	155	26	.17	6.98	24	.1	.11	.6	.1 LSW	
2001	FEB	1	2220	2.98	19	24.46	155	17	.13	2.16	17	.6	.11	.8	.2 SSCL	

4

5

YEAR	MON	DA	HRMN	SEC	DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	REMKS	MAG	RD	GAP	DS				
ORIGIN TIME (HST)				LAT N				LON W				DEPTH N				RMS ERH ERZ LOC				PREF N	AZ	MIN	
ORIGIN TIME (HST)				LAT N				LON W				DEPTH N				RMS ERH ERZ LOC				PREF			
2001	FEB	2	23:34	10	27	19	15	55	15	13	40	5	48	23	3	11	4	1.0	SF2	1.3X	81	3	
2001	FEB	3	0021	23	24	19	126	10	155	14	04	11	24	12	3	19	1.5	.8	INTL	1.3X	179	6	
2001	FEB	3	0149	27	25	19	122	79	155	17	79	11	97	12	3	.10	1.9	1.1	INTL	1.5X	125	3	
2001	FEB	3	0226	50	17	19	131	17	155	29	39	4	29	33	7	.12	.3	1.0	MLD	1.8X	65	3	
2001	FEB	3	0255	0	91	19	122	36	155	17	66	12	99	10	3	.14	1.4	1.3	INTL	1.6X	151	3	
2001	FEB	3	0341	51	20	19	123	79	155	18	77	10	43	10	2	.11	1.1	1.9	INTL	1.5X	86	4	
2001	FEB	3	0520	43	31	19	124	24	155	18	15	10	66	10	2	.06	.9	1.1	INTL	1.3X	84	2	
2001	FEB	3	0541	58	53	19	125	36	155	18	73	8	55	21	5	.11	.9	1.0	INTL	1.3X	108	2	
2001	FEB	3	0759	51	56	19	124	09	155	17	24	9	14	14	3	.11	1.6	1.3	INTL	1.4X	157	2	
2001	FEB	3	1356	18	80	19	122	10	155	18	45	10	66	7	2	.04	1.7	2.1	INTL	1.6X	136	4	
2001	FEB	3	1434	15	86	19	124	18	155	17	93	7	11	12	3	.12	1.1	1.5	INTL	1.1X	169	5	
2001	FEB	3	1540	23	87	19	124	91	155	16	95	8	47	20	5	.08	.8	.7	INTL	1.2X	140	0	
2001	FEB	3	1659	29	01	19	123	78	155	18	52	8	92	19	3	.12	.7	1.0	INTL	1.5X	56	3	
2001	FEB	3	2142	20	57	19	127	50	155	13	98	12	73	10	2	.08	1.9	.8	INTL	1.6X	233	7	
2001	FEB	3	2239	26	95	19	120	11	155	10	47	7	80	28	4	.10	.4	.6	SF3	1.5X	84	4	
2001	FEB	3	2256	34	68	19	125	16	155	17	06	12	05	8	2	.10	2	7	INTL	1.6X	175	1	
2001	FEB	3	2300	13	48	19	120	04	155	16	33	8	34	38	11	.11	.4	.4	SF3	1.9X	86	4	
2001	FEB	4	0358	56	12	19	123	96	155	16	17	10	05	4	12	1.7	.8	INTL	1.6X	209	1		
2001	FEB	4	0220	29	75	19	157	67	155	16	53	11	67	28	4	.10	.7	.8	KOH	1.9X	148	26	
2001	FEB	4	0544	1	49	19	122	04	155	16	89	12	37	9	3	.11	1.9	1.6	INTL	1.7X	135	2	
2001	FEB	4	1543	52	01	19	123	66	155	16	30	10	03	11	3	.11	1.2	1.4	INTL	1.3X	99	1	
2001	FEB	4	1652	29	30	19	127	21	154	52	89	6	48	35	7	.13	.9	.6	LER	1.9X	198	3	
2001	FEB	4	1847	37	88	19	125	11	155	14	82	10	46	10	2	.12	1.7	.8	INTL	1.6X	205	5	
2001	FEB	4	2048	37	23	19	123	92	155	15	19	47	7	32	10	2	.14	2	3	KAOL	1.6X	157	4
2001	FEB	5	0040	10	17	19	155	21	72	11	62	11	4	.15	2	3	3	2	KAOL	1.9X	179	8	
2001	FEB	5	0350	13	94	19	122	85	155	18	72	12	49	10	3	.08	2	0	1.3	INTL	1.5X	99	1
2001	FEB	5	0417	4	84	19	124	68	155	18	97	9	33	8	3	.04	3	7	1.4	INTL	1.4X	194	3
2001	FEB	5	0941	49	98	19	122	77	155	15	59	6	87	9	10	.10	2	0	KAOL	1.4X	165	6	
2001	FEB	5	1005	24	19	155	18	08	10	91	11	3	.09	1	7	1.9	1.9	1.9	INTL	1.4X	139	5	
2001	FEB	5	1134	10	57	19	150	95	155	19	06	9	68	9	2	.05	.9	1.2	KEA	1.7X	148	5	
2001	FEB	5	1738	57	13	19	120	46	155	18	33	17	64	31	7	.10	.6	.8	DEP	1.6X	61	5	
2001	FEB	6	0149	39	64	19	127	08	155	54	34	17	58	18	5	.10	1.3	1.7	KON	1.1X	174	4	
2001	FEB	6	0319	10	86	19	124	02	155	30	44	10	21	39	11	.10	1.3	1.1	KAO	1.5X	34	11	
2001	FEB	6	0434	34	29	19	3	70	156	19	79	36	51	41	12	.13	1.2	2.1	KON	2.8X	288	53	
2001	FEB	6	1602	38	22	19	123	73	155	19	47	5	83	10	4	.14	.9	2.6	KAOL	1.2X	158	5	
2001	FEB	6	1657	15	78	19	151	24	155	41	06	12	83	10	3	.11	1.2	.7	KEA	1.2X	214	3	
2001	FEB	6	1838	43	62	19	125	29	155	14	89	12	40	10	2	.12	1.3	.9	INTL	1.3X	166	5	
2001	FEB	6	2341	28	50	19	124	84	155	16	77	9	65	13	4	.15	1.6	1.9	INTL	1.6X	143	0	
2001	FEB	7	0033	17	73	19	127	44	155	14	48	31	61	57	17	.12	.4	.6	DEPF	2.8X	51	4	
2001	FEB	7	0053	23	61	19	123	26	155	16	70	9	67	11	2	.07	.9	.8	INTL	1.5X	81	1	
2001	FEB	7	0259	47	90	19	119	68	155	16	97	13	05	46	12	.11	.3	.4	DML	2.6X	55	6	
2001	FEB	7	1817	7	72	19	123	73	155	16	00	7	27	39	7	.15	.7	.8	LSW	1.8X	104	5	
2001	FEB	7	1926	41	23	19	119	51	155	16	44	8	15	34	6	.13	.5	.7	SF2	1.7X	131	6	
2001	FEB	7	2346	49	73	19	120	01	155	20	35	50	63	38	6	.12	.8	1.0	DEP	1.8X	170	8	
2001	FEB	8	1730	20	06	20	9.51	156	49	61	0	04	19	3	.12	.4	.1	.8	DIS #	2.3X	261	75	
2001	FEB	8	1924	19	18	19	18.47	155	16	50	11	55	13	09	.10	.1	.4	.8	SWR	1.4X	87	5	
2001	FEB	8	2248	47	61	19	21	28	155	4	78	7.54	15	4	.09	.6	.8	SF5	1.5X	162	6		
2001	FEB	8	0738	30	05	19	22	97	155	15	02	3	17	12	3	.08	.4	.3	SEC	1.6X	226	2	
2001	FEB	8	1031	25	80	19	24	79	155	16	85	9	05	10	3	.15	1.4	1.8	INTL	1.1X	132	3	
2001	FEB	8	1250	17	35	19	29	28	154	54	14	0	02	15	4	.15	.4	.6	SLE #	1.5X	105	4	
2001	FEB	8	1350	55	09	19	17	26	154	58	41	40	9.2	28	7	.10	1.4	.8	LER	1.6X	254	15	
2001	FEB	8	1532	42	85	19	27	20	155	58	41	40	9.2	28	7	.10	1.4	.8	INTL	1.5X	253	3	
2001	FEB	8	1613	22	42	19	18	06	154	58	96	41	31	21	6	.11	2.0	1.0	LER	1.4X	276	15	
2001	FEB	8	1951	15	04	19	8.70	155	16	57	27	20	30	53	41	7	.10	.6	DLS	1.8X	168	2	
2001	FEB	10	2333	27	53	19	29	28	154	54	14	0	02	15	4	.15	.4	.6	SLE #	1.5X	105	4	
2001	FEB	10	2359	28	32	19	45	03	156	12	1.7	6	26	21	4	.12	1.0	1.0	HUA	1.8X	228	20	
2001	FEB	11	0019	22	25	19	20.53	155	10	45	8	16	37	8	.12	.4	.4	.4	SF3	1.8X	77	3	
2001	FEB	11	0359	33	94	19	18.05	155	23	07	5.54	17	4	.14	.7	.7	.7	.7	SWR	1.8X	98	7	
2001	FEB	11	0610	26	93	19	15.27	16.87	8	2	.11	3.7	1.3	DEPL	1.7X	257	5						
2001	FEB	11	1501	4	28	19	19.83	155	7.66	7.78	40	9	1.0	.4	.5	.5	.5	.5	SF4	1.5X	124	5	
2001	FEB	11	1910	59	09	19	25.69	155	15	7.9	12.73	12	3	.06	1.8	1.1	1.1	1.1					

YEAR	MON	DA	HRMN	ORIGIN TIME (HST)				LAT N LON W DEPTH N N RMS ERH ERZ LOC				PREF N AZ MIN						
				SEC	DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	RD	GAP DS			
2001	FEB	13	0441	51.80	19	1.70	155	19.78	35.43	32	3	.08	1.1	1.7	LOI	1.6X	216	20
2001	FEB	13	0547	4.80	19	22.35	155	27.87	6.31	30	6	.10	.3	.9	KAO	1.4X	58	1
2001	FEB	13	1818	3.90	19	24.02	155	17.58	12.18	22	5	.14	.8	.5	INTL	1.7X	99	2
2001	FEB	13	1832	48.89	19	29.03	155	27.48	9.07	21	6	.12	.4	1.1	KAO	1.6X	81	5
2001	FEB	13	1925	25.87	19	30.57	155	50.18	12.52	21	7	.12	.5	.6	KON	1.4X	105	9
2001	FEB	14	0024	1.37	19	22.35	155	22.79	8.67	18	6	.11	.8	1.3	KAO	1.9X	159	11
2001	FEB	14	0226	57.14	19	17.44	156	28.57	38.43	22	6	.12	2.2	3.2	DIS	2.4U	252	63
2001	FEB	14	0426	30.31	19	22.48	155	18.89	7.51	22	7	.08	.7	1.1	KAO	1.3X	123	5
2001	FEB	14	1221	40.25	19	24.56	155	17.45	9.78	20	5	.12	1.3	.9	INTL	1.4X	82	1
2001	FEB	14	2034	50.48	19	20.68	155	13.10	7.42	26	4	.10	.4	.6	SF2	1.3X	63	4
2001	FEB	15	0535	14.54	19	50.94	155	51.02	37.57	25	4	.11	.8	1.3	HUA	1.9X	140	18
2001	FEB	15	0549	12.89	19	19.46	155	8.74	8.05	34	8	.10	.3	.4	SF4	1.8X	101	4
2001	FEB	15	0906	13.83	19	29.88	155	53.36	11.97	19	8	.12	.6	6.7	KON	1.6X	123	3
2001	FEB	15	1633	47.30	19	15.33	155	18.92	5	02	3.6	6.7	DEPL	2.1X	208	6	1.1	
2001	FEB	15	1805	21.18	19	2.77	155	21.68	37.82	3910	10	.9	.9	LOT	1.8X	213	16	
2001	FEB	15	2028	24.70	19	19.89	155	7.37	7.57	3610	11	.4	.6	SF4	1.7X	136	5	
2001	FEB	15	2028	50.26	19	19.98	155	7.59	7.06	4513	.11	.4	.5	SF4	2.3X	130	1	
2001	FEB	15	2153	55.69	19	30.13	155	24.54	23.71	5111	.11	.4	.7	DML	3.2X	51	2	
2001	FEB	16	0011	31.43	19	27.93	155	16.41	7.08	9	3	.10	3.3	2.3	INT	1.3X	229	5
2001	FEB	16	0323	32.68	20	0.21	155	35.67	44.94	19	4	.10	1.4	1.3	KOH	2.2X	169	24
2001	FEB	16	0649	50.17	19	26.50	155	17.97	7.00	12	3	.08	2.0	1.0	INTL	1.5X	196	2
2001	FEB	16	0716	46.92	19	27.06	155	17.81	5.30	12	3	.10	2.3	1.4	INT	1.3X	207	3
2001	FEB	16	1633	25.59	19	24.17	155	16.83	10.58	12	3	.12	2.0	1.3	INTL	1.5X	125	1
2001	FEB	16	1743	19.59	19	22.67	155	16.82	24.19	9	.11	.4	.7	DMLF	3.3X	51	1	
2001	FEB	16	1834	19.05	19	24.00	155	1.31	5.29	13	1	.10	.9	1.1	SF5	1.7X	199	5
2001	FEB	16	2024	4.39	19	21.19	155	30.10	6.94	18	4	.12	.4	2.3	KAO	1.3X	85	8
2001	FEB	16	2328	15.53	19	24.21	155	19.83	8.71	9	.3	.08	2.8	2.0	KAO	1.5X	214	4
2001	FEB	17	0128	25.66	19	19.34	156	13.35	35.10	33	5	.10	1.3	1.3	KON	2.1X	236	37
2001	FEB	17	0320	29.96	19	21.17	155	11.04	8.02	30	6	.12	.5	.6	SF3	1.8X	78	3
2001	FEB	17	0558	39.27	19	19.47	155	11.56	7.52	4314	.16	.4	.6	SF3	2.0X	96	6	
2001	FEB	17	0814	50.12	19	25.40	155	19.01	5.96	21	5	.12	.9	1.3	INT	1.7X	83	2
2001	FEB	17	1043	24.36	19	21.67	155	30.15	5.44	28	4	.10	.4	1.7	KAO	1.4X	194	12
2001	FEB	17	1119	41.13	19	25.14	155	10.01	1.50	20	6	.15	.1	.8	KAO	1.4X	146	4
2001	FEB	17	1127	5.24	19	25.46	155	18.96	5.83	22	6	.09	.6	1.1	INT	2.0X	133	2
2001	FEB	17	1241	39.60	19	25.35	155	19.33	5.08	13	4	.07	1.4	1.4	KAO	1.3X	137	3
2001	FEB	17	1419	13.28	19	25.03	155	20.23	6.4	9	KAO	1.3X	104	3	SF3	1.5X	38	9
2001	FEB	17	1425	3.20	19	24.90	155	24.60	10.36	32	8	.10	.3	.8	KAO	1.8X	234	18
2001	FEB	17	1551	22.10	18	59.39	155	29.84	38.45	25	6	.08	1.4	1.0	DLS	1.8X	143	4
2001	FEB	17	1801	10.31	19	25.31	155	19.89	2.55	16	4	.14	.5	.7	KAO	1.4X	52	2
2001	FEB	17	2008	26.37	19	25.75	155	19.08	5.24	16	6	.09	1.1	.6	KAO	1.5X	142	3
2001	FEB	17	2139	9.83	19	25.69	155	19.16	4.34	15	3	.09	.5	.8	KAO	1.5X	137	3
2001	FEB	17	2205	4.21	19	27.10	155	18.66	3.92	13	4	.18	2.8	1.0	SNC	1.2X	167	4
2001	FEB	18	0001	54.88	19	14.71	155	27.56	4.58	29	2	.16	.5	2.1	LSW	1.3X	88	6
2001	FEB	18	0036	48.80	19	25.99	155	18.64	6.04	34	7	.14	.5	.6	INT	1.7X	52	2
YEAR	MON	DA	HRMN	ORIGIN TIME (HST)				LAT N LON W DEPTH N N RMS ERH ERZ LOC				PREF N AZ MIN						
				SEC	DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	RD	GAP DS			
2001	FEB	18	0042	42.22	19	25.62	155	18.91	5.15	31	6	.11	.4	.6	INT	1.5X	98	2
2001	FEB	18	0148	47.81	19	25.86	155	18.65	6.15	34	8	.10	.4	.6	INT	2.0X	48	2
2001	FEB	18	0606	56.07	19	29.41	154	53.39	0.03	28	1	.13	.4	.1	SIEF#	1.9X	108	5
2001	FEB	18	0635	42.40	19	22.81	155	30.40	15.10	19	4	.09	.5	.9	DML	1.2X	50	6
2001	FEB	18	1230	46.92	19	25.52	155	19.11	5.15	31	8	.10	.4	.9	KAO	1.8X	50	3
2001	FEB	18	1324	48.50	19	24.12	155	18.21	16.08	23	3	.15	.9	.6	DBPL	1.7X	79	3
2001	FEB	18	1655	58.23	19	25.39	155	16.71	13.89	33.11	.12	.6	.4	.6	DBPL	1.9X	87	1
2001	FEB	18	1723	46.41	19	25.57	155	17.15	10.14	21	2	.13	.6	.8	INTL	1.6X	141	1
2001	FEB	18	1725	10.5	19	11.58	155	28.22	33.35	42	9	.07	.6	1.0	DLS	2.0X	97	4
2001	FEB	18	1729	30.11	19	24.17	155	17.84	8.80	17	3	.13	.8	1.1	INTL	1.4X	76	2
2001	FEB	19	0200	30.59	19	16.04	155	7.01	43.76	43	8	.12	.8	1.4	DBPL	3.2X	190	3
2001	FEB	19	0205	6.27	19	26.18	155	10.45	6.00	25	5	.11	.6	.8	INT	1.7X	75	2
2001	FEB	19	0433	19.03	18	50.21	155	6.40	55.66	33	4	.11	1.6	2.5	LOI	2.3X	265	50
2001	FEB	19	0509	52.06	19	21.35	155	16.60	29.89	41	9	.13	.9	2.1X	2.1X	47	6	
2001	FEB	19	1426	46.01	19	24.88	155	17.91	11.93	10	2	.14	1.4	1.3	INTL	1.6X	136	3
2001	FEB	19	1604	39.33	19	21.77	155	26.74	14.27	26	7	.11	.4	1.0	DML	1.5X	46	12
2001	FEB	19	2138	16.63	19	25.17	155	17.17	10.17	10	2	.10	3.4	1.1	INT	1.6X	151	1
2001	FEB	19	2205	1.32	19	25.21	155	16.95	12.25	10	2	.08	1.2	1.0	INTL	1.4X	153	1
2001	FEB	19	2341	50.53	19	23.14	155	21.73	7.00	10	4	.10	5.011	1.1	KAO-	1.3X	231	8
2001	FEB	20	0241	56.50	19	47.96	155	34.38	14.20	11	3	.11	1.6	.9	KBA	1.3X	241	12
2001	FEB	20	1317	53.36	19	23.57	155	14.99	3.42	4610	.11	.3	.3	.5	SFCF	3.8U	82	2
2001	FEB	20	1329	57.74	19	23.16	155	14.81	2.99	13	5	.06	.3	.5	SBC	1.5X	107	2
2001	FEB	20	1343	26.14	19	16.32	155	20.05	13.71	15	3	.15	1.4	2.2	DIS	1.0X	123	6
2001	FEB	20	1537	37.10	19	19.68	155	10.83	10.30	33	7	.11	.5	.7	SF3	1.8X	117	5
2001	FEB	20																

YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN	YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN
2001	FEB	23	0714	30.83	19	54.39	155	23.06	9.06	30	6	.15	.9	.4	KEA	1.8X	229	5	2001	FEB	28	0727	9.38	19	21.00	155	29.76	10.42	3912	.13	.3	.8	KAO	1.6X	44	5			
2001	FEB	23	0716	43.68	19	54.48	155	23.41	8.68	27	7	.19	.9	.5	KEA	1.7X	229	5	2001	FEB	28	0731	2.64	19	21.10	155	29.87	9.02	4311	.08	.3	.7	KAO	2.0X	43	5			
2001	FEB	23	0718	50.53	19	55.53	155	22.98	2.92	33	8	.10	.6	1.0	KEA	1.9X	184	18	2001	FEB	28	1333	29.95	19	24.95	155	46.51	155	48.56	12.29	4312	.11	.4	.3	HUA	2.1X	134	10	
2001	FEB	23	0721	40.49	19	55.02	155	23.77	9.72	4212	.12	.6	.4	KEA	2.2X	166	6	2001	FEB	23	0723	13.10	19	54.32	155	22.90	9.64	20	4	.14	.9	.4	KEA	1.5X	229	4			
2001	FEB	23	0734	42.54	19	54.90	155	23.65	9.71	3510	.11	.5	.3	KEA	2.0X	176	6	2001	FEB	23	0745	36.06	19	54.34	155	23.12	9.34	35	9	.16	.8	.3	KEA	2.0X	227	5			
2001	FEB	23	0754	44.69	19	54.97	155	23.30	1.66	13	4	.07	.4	.9	KAO	1.4X	149	1	2001	FEB	23	0755	23.10	19	54.32	155	22.90	9.64	20	4	.14	.9	.4	KEA	1.5X	229	4		
2001	FEB	23	1433	1.50	19	24.63	155	17.54	5.48	23	8	.14	.4	.5	INTL	1.2X	66	1	2001	FEB	23	1511	42.15	19	18.36	155	12.60	7.80	35	9	.13	.4	.8	SF2	1.4X	148	8		
2001	FEB	23	1607	13.94	18	57.99	155	14.54	38.72	38	9	.09	.8	1.3	LOI	2.0X	245	34	2001	FEB	23	1747	5.40	19	54.37	155	22.73	10.90	13	2	.10	1.7	.5	KEA	1.3X	227	5		
2001	FEB	23	1731	21.59	19	18.33	155	12.67	8.72	35	8	.12	.5	.6	SF2	1.5X	148	8	2001	FEB	24	0208	20.40	19	26.08	155	18.18	6.61	25	6	.10	.6	.6	INT	1.5X	150	2		
2001	FEB	24	0309	56.48	19	53.76	155	24.37	5.98	23	6	.19	.9	1.4	KEA	1.6X	211	7	2001	FEB	24	0324	13.07	19	54.11	155	23.21	8.55	27	7	.14	.8	.5	KEA	1.7X	222	5		
2001	FEB	24	0324	13.07	19	54.11	155	23.21	8.55	27	7	.14	.8	.5	KEA	1.7X	2001	MAR	2	0212	51.43	19	28.57	154	53.95	2.79	32	.7	.12	.4	.4	SLE	1.7X	116	3				
2001	FEB	24	0332	3.66	19	55.83	155	22.89	10.49	18	5.12	1.0	.4	KEA	1.2X	243	6	2001	MAR	2	0806	1.07	19	20.40	155	8.93	7.78	3111	.10	.3	.6	SF4	1.2X	100	3				
2001	FEB	24	0345	29.09	19	53.53	155	22.83	9.02	21	1.31	0	.4	KEA	1.3X	217	4	2001	FEB	24	0351	16.03	19	56.46	155	24.15	8.28	28	8	.21	.8	.8	KEA	1.9X	185	8			
2001	FEB	24	0546	7.78	20	7.90	155	47.1	24.15	25	4	.09	.8	1.2	KOH	1.8X	158	1	2001	FEB	24	1631	14.33	19	26.16	155	17.01	13.31	34	8	.13	.6	.4	DEBL	1.8X	93	2		
2001	FEB	24	1719	36.31	19	9.79	155	36.21	0.93	25	4	.14	.5	.6	LSW	1.5X	124	14	2001	FEB	24	1911	31.75	19	24.06	155	13.11	10.61	25	4	.10	.5	.8	KAO	1.7X	69	4		
2001	FEB	25	0007	14.26	19	28.99	155	26.46	10.59	32	11	.13	.3	.7	KAO	1.5X	48	6	2001	FEB	25	0130	46.43	19	28.30	155	15.32	6.62	24	6	.10	.5	1.4	GINL	1.5X	121	7		
2001	FEB	25	0604	16.90	19	19.38	155	12.36	6.26	41	12	.14	.3	.6	SF2	1.7X	90	5	2001	MAR	3	0549	1.59	19	12.09	155	22.04	10.26	29	3	.15	.8	.6	SWR	1.5X	186	5		
2001	FEB	25	0919	59.99	19	25.58	155	16.26	11.72	35	7	.10	.4	.3	INTL	1.6X	2001	MAR	3	1025	59.54	19	20.93	155	6.87	6.81	3816	.08	.3	.6	SF4	1.1X	131	5					
2001	FEB	25	1240	12.01	19	27.37	155	24.25	7.95	33	11	.12	.3	.9	KAO	1.5X	2001	MAR	3	2132	47.24	20	14.94	156	38.01	8.25	37	.7	.14	.8	.8	DIS	2.4X	242	54				
2001	FEB	25	1335	58.43	19	19.27	155	24.25	7.95	33	11	.12	.3	.9	KAO	1.5X	2001	MAR	3	2311	29.24	19	26.91	155	12.91	5.53	12	1	.12	.6	4.1	GINTL	1.2X	247	8				
2001	FEB	25	1413	36.46	19	24.61	155	17.61	9.61	6	1	.01	3.7	1.7	INTL	1.3X	2001	MAR	4	0229	7.66	19	21.16	155	6.66	7.87	4011	.09	.4	.4	SF4	2.2X	132	4					
2001	FEB	25	1512	5.47	19	31.53	155	15.18	25.86	44	14	.13	.8	.8	DEP	1.7X	2001	MAR	4	0622	5.53	19	19.20	155	12.75	7.46	5019	.15	.3	.5	SF2	2.4X	86	4					
2001	FEB	25	1732	27.88	19	19.17	155	10.31	7.86	26	8	.09	.5	.8	SF3	1.4X	2001	MAR	4	0741	16.28	19	19.26	155	12.69	7.70	39	.8	.14	.5	.7	SF2	1.7X	87	4				
2001	FEB	25	2047	50.61	19	24.54	155	17.71	11.35	26	5	.11	.6	.5	INTL	1.5X	2001	MAR	5	2154	54.99	19	26.85	155	28.88	9.98	3812	.12	.3	.8	KAO	1.6X	45	8					
2001	FEB	25	2201	0.43	19	24.74	155	17.07	7.28	25	9	.09	.5	.5	INTL	1.4X	68	0	2001	MAR	6	0326	47.98	19	24.75	155	38.37	2.96	4620	.12	.3	.3	MLO	2.0X	65	1			
2001	FEB	26	0306	9.26	19	52.19	155	32.22	32.56	43	11	.10	.6	1.1	KEA	2.2X	124	13	2001	MAR	6	1840	55.62	19	19.18	155	13.05	7.67	5120	.14	.3	.5	SF2	1.9X	81	4			
2001	FEB	26	0814	33.23	19	17.98	154	58.81	41.77	47	11	.10	.8	.8	LER	2.8X	2001	MAR	7	1948	9.65	19	20.72	155	11.18	8.32	30	.4	.09	.4	.5	SF3	1.7X	76	3				
2001	FEB	26	1012	16.01	19	14.67	155	33.93	15.54	15	4	.09	.8	.6	KEA	1.4X	2001	MAR	7	2020	18.94	19	11.92	155	20.11	9.30	2213	.14	.6	.9	SWR	1.1X	225	8					
2001	FEB	26	1502	52.12	19	24.46	155	16.90	8.78	26	6	.10	.5	.3	INTL	1.5X	2001	MAR	7	2051	18.75	19	23.12	155	24.88	10.50	6526	.11	.2	.3	KAO	1.6X	45	8					
2001	FEB	27	0549	1.09	19	19.86	155	6.75	8.62	37	11	.10	.4	.4	SF4	1.4X	2001	MAR	7	0735	26.13	19	19.15	155	13.07	8.21	3617	.11	.3	.5	SF2	2.7X	33	3					
2001	FEB	27	0923	23.98	19	23.80	155	16.66	3.07	10	3	.04	.6	.4	SSC	1.3X	2001	MAR	7	0954	28.23	19	25.32	155	29.87	11.59	2912	.09	.3	1.0	KAO	1.1X	42	10					
2001	FEB	27	1845	43.50	19	15.5	155	17.49	7.64	26	5	.11	.6	.5	INTL	1.6X	2001	MAR	7	1406	42.20	19	19.21	155	9.67	6.87	3815	.10	.4	.7	SF3	1.4X	124	5					
2001	FEB	28	0032	8.83	20	15.5	153	15.34	2.54	29	9	.17	.6	.5	KOH	1.7X	2001	MAR	7	2336	43.34	19	16.50	155	31.23	17.61	23.9	.14	1.0	2.6	KEA	1.3X	235	19					
2001	FEB	28	0416	35.21	19	24.81	155	15.86	12.78	32	7	.12	.6	.4	INTL	1.9X	2001	MAR	8	0334	30.06	18	15.87	155	28.92	41.49	3115	.08	.7	.8	DLS	1.7X	245	19					
2001	FEB	28	0642	56.01	19	25.76	155	16.15	10.26	23	6	.12	.7	.5	INTL	1.6X	2001	MAR	8	0417	56.43	21	41.42	157	4.65	5.09	24	.7	.10	.5	9	4.5	DIS	2.7X	249105	66			
2001	FEB	28	0657	23.11	19	23.52	155	18.97	9.09	20	5	.11	.6	.9	INTL	1.4X	2001	MAR	8	0720	31.43	19	48.08	156	9.05	0.00	2812	.16	1.1	.3	HUA	#	1.8X	197	66				

YEAR	MON	DA	HWMN	SEC	DEG	MIN	DEG	MIN	DEPTH	N	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN	
					KM	RD	S	SEC	KM	KM	RD	S	SEC	KM	RD	REMARKS	MAG	RD	GAP	
2001	MAR	8	0736	28.77	19	56.00	155	30.72	20.41	2410	.12	.9	1.9	KEA	1.3X	233	18			
2001	MAR	8	0754	9.00	19	55.73	155	30.83	19.33	2311	.12	.8	1.7	KEA	1.1X	231	17			
2001	MAR	8	0831	55.62	19	14.72	155	27.97	3.62	365	.13	.4	1.6	LSW	1.9X	83	7			
2001	MAR	8	1216	4.33	19	23.54	155	27.41	9.76	2710	.13	.4	1.0	KAO	1.1X	68	2			
2001	MAR	8	2104	4.10	19	40.20	155	15.08	47.54	5121	.11	.5	.8	KEA	1.6X	102	24			
2001	MAR	9	0231	34.43	19	23.07	154	58.64	8.53	4017	.13	.7	.3	LER	1.4X	202	4			
2001	MAR	9	0526	8.78	19	22.47	155	14.33	3.35	21	.9	.6	.3	SEC	1.6X	125	2			
2001	MAR	9	0539	21.99	18	57.70	155	9.43	39.40	6127	.11	.6	1.2	LOI	1.8X	243	36			
2001	MAR	9	0623	34.38	19	19.29	155	10.45	8.96	4318	.09	.3	.5	SF3	1.3X	103	5			
2001	MAR	9	0840	59.40	19	19.59	155	10.93	6.29	5121	.11	.3	.5	SF3	1.8X	96	5			
2001	MAR	9	1121	42.57	19	19.26	155	30.42	2.64	365	.11	.3	1.0	KAO	1.5X	47	8			
2001	MAR	10	0800	5.99	19	16.92	155	13.25	5.48	2610	.08	.4	.7	SF2	1.2X	171	0			
2001	MAR	10	1515	42.40	19	8.56	155	31.61	50.09	4110	.12	.8	.9	DUST	2.3X	152	12			
2001	MAR	11	0505	8.73	19	14.02	155	29.77	6.70	5924	.19	.3	.6	LSWF	2.8X	72	2			
2001	MAR	11	0821	28.18	19	16.28	155	27.72	8.49	26	.3	.13	.4	LSW	1.4X	63	5			
2001	MAR	11	2358	9.98	19	18.20	155	14.75	2.68	3515	.10	.2	.4	SF	1.0X	113	3			
2001	MAR	12	0029	4.54	19	24.52	155	16.56	9.04	256	.14	.6	.4	INTL	1.7X	135	1			
2001	MAR	12	0215	34.94	19	12.52	155	19.75	45.64	37	.9	.10	.8	1.1	DEP	1.7X	169	8		
2001	MAR	12	0321	13.89	19	19.27	155	13.37	8.88	40	.9	.12	.4	.4	SF2	2.0X	122	6		
2001	MAR	12	0943	10.56	19	25.19	155	16.34	11.53	16	.1	.09	.8	1.2	INT	1.4X	163	1		
2001	MAR	12	1025	3.23	19	25.69	155	15.30	15.24	12	.4	.11	1.0	1.3	DEPL	1.7X	185	4		
2001	MAR	12	1223	48.10	19	12.62	155	20.07	44.22	42	.9	.09	.8	1.1	DEP	2.0X	168	8		
2001	MAR	12	1327	15.41	19	24.00	155	19.02	10.51	21	.6	.07	.6	.7	INTL	1.1X	98	4		
2001	MAR	12	1338	22.13	19	22.58	155	26.68	11.79	6629	.11	.2	.4	KAO	2.2X	36	2			
2001	MAR	13	2351	10.33	19	14.87	155	27.20	25.74	4018	.13	.6	.8	DLS	1.4X	175	5			
2001	MAR	14	0610	35.05	19	17.55	155	29.01	6.49	3816	.15	.3	1.0	LSW	1.1X	48	5			
2001	MAR	14	1850	57.72	19	26.11	155	16.83	7.86	287	.13	.6	.5	INTL	1.3X	123	2			
2001	MAR	15	0019	45.73	19	20.19	155	30.07	8.73	5526	.13	.2	.6	KAO	1.4X	46	6			
2001	MAR	15	0122	10.83	19	17.74	155	13.03	8.34	327	.12	.4	.6	SF2	1.5X	116	2			
2001	MAR	15	0143	14.09	19	18.39	155	12.86	8.01	4118	.12	.4	.5	SF2	1.1X	101	3			
2001	MAR	15	1951	15.98	19	15.94	155	27.37	8.16	3913	.15	.3	.5	LSW	1.4X	134	5			
2001	MAR	16	0454	2.44	19	26.03	155	16.48	8.03	255	.15	.5	.5	INTL	1.6X	147	2			
2001	MAR	16	0456	36.56	19	26.75	155	15.17	7.18	24	.6	.12	.4	.7	INTL	1.5X	156	1		
2001	MAR	16	10602	32.72	19	16.45	155	11.11	20	6	.13	.1	.0	.7	INTL	1.5X	164	1		
2001	MAR	16	1404	22.06	19	13.84	155	18.94	15.84	4179	.3715	.10	.1	.9	DEP	1.5X	205	8		
2001	MAR	16	1436	22.90	19	18.76	155	13.00	8.32	4314	.12	.4	.4	SF2	1.7X	89	3			
2001	MAR	17	0155	22.36	19	25.90	155	24.45	9.90	4415	.10	.3	.7	KAO	1.5X	46	5			
2001	MAR	17	0540	16.80	19	19.33	155	15.17	5.10	277	.10	.3	1.2	SF1	1.2X	103	5			
2001	MAR	17	0543	27.01	19	18.70	155	15.52	7.85	3010	.10	.4	.7	SF1	1.3X	112	5			
2001	MAR	17	1216	27.55	19	5.26	155	8.58	20.54	3310	.09	.9	1.7	LOI	1.9X	273	22			
2001	MAR	17	1448	27.37	19	13.27	156	23.57	6.30	217	.15	1.5	1.9	DIS	2.7X	237	50			
2001	MAR	18	1954	9.29	19	3.57	155	30.04	44.02	23	.6	.18	1.7	1.3	DSL	2.0X	242	12		
2001	MAR	18	2229	12.77	19	20.14	155	7.09	9.29	429	.08	.4	.4	SF4	1.8X	133	5			
2001	MAR	19	1313	18.76	19	10.49	155	36.52	8.79	331	.17	.5	1.5	LSW	1.8X	100	14			
2001	MAR	19	1358	45.30	19	4.96	155	29.37	31.87	4813	.11	.7	.8	DLS	2.0X	181	9			

YEAR	MON	DA	HWMN	SEC	DEG	MIN	DEG	MIN	DEPTH	N	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN		
					KM	RD	S	SEC	KM	KM	RD	S	SEC	KM	RD	REMARKS	MAG	RD	GAP		
2001	MAR	19	2034	30.32	19	18.52	155	15.18	5.04	3110	.12	.4	1.4	SFL	1.0X	112	4				
2001	MAR	20	0110	48.79	19	23.08	155	16.21	25.52	4410	.12	.5	.7	DEP	2.0X	48	1				
2001	MAR	20	0437	42.39	19	27.89	155	14.39	6.43	32	.2	.16	.6	LER	1.6X	131	3				
2001	MAR	20	1508	11.28	19	24.92	155	39.17	2.70	28	.8	.12	.3	.4	MLO	1.9X	125	3			
2001	MAR	20	1940	42.27	19	46.26	155	33.99	13.61	3511	.18	.6	.5	KEA	1.6X	89	11				
2001	MAR	21	1453	34.50	19	22.95	155	14.72	3.32	23	.9	.08	.3	.4	SEC	1.5X	71	2			
2001	MAR	21	1940	20.55	19	25.39	155	18.79	6.75	5416	.11	.3	.4	INTP	2.7X	42	2				
2001	MAR	21	1941	12.15	19	24.92	155	18.90	6.72	24	.7	.14	.5	.7	INT	2.3X	98	2			
2001	MAR	21	2158	7.93	19	15.46	155	16.49	39.36	39	.12	.9	1.1	DEP	1.6X	166	6				
2001	MAR	22	0624	44.07	19	23.89	155	15.41	1.25	13	.05	.3	.6	SEC	1.0X	147	2				
2001	MAR	22	0639	53.87	19	55.68	155	21.31	17.86	25	.15	.1	.3	1.2	KEA	1.7X	280	4			
2001	MAR	23	1219	19.75	19	26.41	155	14.18	2.27	3811	.16	.6	.4	SLEP	1.8X	156	3				
2001	MAR	23	1245	5.31	19	24.33	155	16.82	10.89	25	.09	.4	.4	INTU	1.6X	87	1				
2001	MAR	23	1621	39.65	19	49.25	155	5.27	39	47	.9	.11	.8	1.1	KEA	1.9X	195	15			
2001	MAR	23	1931	23.74	19	29.98	155	28.54	6.45	19	.3	.09	.4	1.5	KAO	1.7X	70	4			
2001	MAR	24	0346	45.65	19	21.54	155	18.89	36.03	164	.14	1.5	1.7	DEP	1.7X	191	7				
2001	MAR	24	2308	8.79	19	17.52	155	27.14	10.58	13	.11	.6	1.8	LSW	1.9X	93	7				
2001	MAR	24	0849	50.71	19	50.95	155	32.05	21.	05	12	.4	.10	.9	1.8	KEA	2.3X	166	11		
2001	MAR	24	1520	50.00	19	35.50	155	46.33	13.30	33	.6	.17	.7	.5	KON	1.9X	93	13			
2001	MAR	24	1710	35.52	18	54.98	155	9.86	48.13	365	.10	1.7	1.9	LOI	1.9X	220	41				
2001	MAR	24	2330	43.57	19	23.41	155	16.73	9.94	23	.4	.14	.5	.6	INTU	1.5X	57	0			
2001	MAR	25	0123	23.62	19	25.57	155	18.49	11.20	21	.3	.09	.7	.5	INTU	1.4X	105	2			
2001	MAR	25	0432	12.40	19	26.72	155	13.58	4410	.11	.3	.3	.3	.3	DML	1.9X	48	5			
2001	MAR	25	0442	3.78	19	24.33	155	17.16	11.85	185	.09	.6	.7	.7	INTL	1.6X	69	1			
2001	MAR	25																			

YEAR	MON	DA	HRMN	ORIGIN TIME (HST)		LAT N	LON W	DEPTH N	N	RMS	ERH	ERZ	LOC	PREF N	AZ	MIN
				SEC	DEG MIN SEC											
2001	MAR	26	1244	37-54	19 14-28	155	27-16	9-09	19	3-10	.7	.7	LSW	1-2X	166	5
2001	MAR	26	1339	18-42	19 22-08	155	29-48	10-66	25	3-11	.4	1-1	KAO	1-0X	46	8
2001	MAR	26	1457	45-14	19 24-48	155	17-44	12-23	23	5-10	.6	.5	INTL	1-6X	53	1
2001	MAR	26	1516	23-59	19 24-98	155	16-86	11-73	27	5-10	.5	.4	INTL	1-5X	84	0
2001	MAR	26	1616	44-25	19 24-39	155	17-50	1-82	12	3-07	.5	.3	SSCL	1-1X	139	1
2001	MAR	26	2239	9-21	19 19-39	155	8-37	7-58	34	6-09	.5	.5	SF4	1-4X	111	4
2001	MAR	27	0135	47-82	19 18-12	155	12-58	9-44	38	8-11	.4	.6	SF2	1-3X	135	8
2001	MAR	27	0155	58-89	19 25-03	155	15-98	9-40	24	6-12	.4	1-0	KAO	2-0X	200	1
2001	MAR	27	0837	9-42	19 25-32	155	16-42	24-25	4410	.09	.6	.7	DEP	1-9X	103	3
2001	MAR	27	1350	11-95	19 25-32	155	16-42	24-25	4410	.09	.6	.7	DEP	1-9X	103	3
2001	MAR	27	1447	47-22	19 24-67	155	16-88	8-47	27	6-07	.4	.4	INTL	1-4X	51	0
2001	MAR	27	1538	50-70	19 23-44	155	17-86	12-25	19	4-11	1-1.1	1-2	INTL	1-7X	93	4
2001	MAR	27	1743	56-85	19 15-29	155	33-64	10-60	18	.10	.6	1-6	LSW	1-1X	107	6
2001	MAR	28	0403	12-24	19 20-26	155	11-74	8-28	3710	.09	.4	.5	SF3	1-4X	123	5
2001	MAR	28	0843	19-98	19 24-68	155	17-41	13-11	23	5-.09	.9	.7	DEPL	1-6X	74	1
2001	MAR	28	1435	53-73	19 20-07	155	11-53	8-74	4412	.12	.4	.5	SF3	2-2X	104	5
2001	MAR	28	1445	44-21	19 17-75	155	23-23	2-94	27	4-13	.4	.9	SWR	1-5X	106	5
2001	MAR	28	1517	18-62	19 19-66	155	11-76	7-66	33	7-08	.5	.7	SF3	1-4X	134	6
2001	MAR	28	2325	25-72	19 10-51	155	29-28	30-93	22	4-08	.8	1-8	DLS	1-5X	163	9
2001	MAR	29	0321	2-64	19 13-51	155	1-88	49-55	35	2-11	1-1	1-1	DEP	2-1X	214	13
2001	MAR	29	0744	39-13	19 14-15	155	8-90	32-41	21	13	1-5	3-4	HUA	2-1X	195	34
2001	MAR	29	1640	16-71	19 25-93	155	15-70	15-70	34	9-12	.6	.4	DEPL	1-9X	59	3
2001	MAR	30	0104	3-79	19 29-53	154	53-58	0-18	41	9-15	.4	.3	SFEP	2-2X	111	5
2001	MAR	30	0441	24-32	19 23-48	155	25-70	9-96	28	3-11	.4	1-1	KAO	1-4X	56	7
2001	MAR	30	0518	28-96	19 18-38	155	14-10	8-99	40	8-13	.4	.6	SF2	1-6X	133	8
2001	MAR	30	1249	54-36	18 51-42	155	15-22	12-07	23	2-09	2-2	1-6	LOT	1-9X	274	40
2001	MAR	30	1320	25-74	19 27-78	155	25-07	10-19	28	7-08	.4	.8	KAO	1-5X	38	5
2001	MAR	30	1423	6-57	19 25-56	155	15-57	12-89	31	7-07	.6	.5	INTL	1-9X	105	3
2001	MAR	30	1845	5-34	19 17-84	155	19-04	17-91	41	9-10	1-0	1-4	KON	2-2X	283	49
2001	MAR	30	2218	50-51	20 16-25	154	39-20	18-47	27	4-15	1-61	1-5	DTS	2-1X	279	74
2001	MAR	30	2331	49-69	19 15-12	155	44-16	35-87	31	6-09	.7	1-2	HUA	1-5X	119	25
2001	MAR	31	0016	22-30	19 22-48	155	29-05	8-43	23	4-09	.4	.9	KAO	4-3	43	3
2001	MAR	31	0456	48-21	19 25-47	155	16-51	14-64	17	2-12	1-2	.6	DEPL	1-6X	160	2
2001	MAR	31	0525	41-93	19 13-20	155	16-53	32-09	37	5-10	.8	1-2	DEP	1-6X	175	9
2001	MAR	31	0725	5-39	19 25-65	155	14-29	14-09	24	5-10	.9	.3	DEPL	1-8X	160	5
2001	MAR	31	0729	45-71	19 19-64	155	10-79	6-84	14	1-05	.5	1-2	SF3	.9X	95	5
2001	MAR	31	1149	26-78	19 20-45	155	11-33	8-22	4210	.10	.4	.5	SF3	1-7X	77	4
2001	MAR	31	1211	43-15	19 19-70	155	2-83	7-05	29	3-14	.7	.7	SF5	1-1X	191	9
2001	MAR	31	1402	17-79	19 11-90	155	33-63	8-01	21	3-12	.8	1-1	LSW	1-4X	215	10
2001	MAR	31	1840	10-99	19 12-66	155	37-34	2-12	14	3-07	.6	.4	MLOL	1-6X	178	2
2001	MAR	31	1923	58-01	19 12-88	155	31-12	10-17	16	2-13	.6	1-6	LSW	1-3X	74	4
2001	MAR	31	2023	14-07	19 12-60	155	28-89	10-34	7-11	.4	.9	KAO	1-4X	58	5	
2001	APR	1	0722	54-76	19 22-40	155	29-92	9-24	34	5-08	.3	.9	KAO	1-4X	48	4
2001	APR	1	0753	49-23	19 12-27	155	33-46	7-21	17	3-13	.9	1-0	LSW	1-1X	209	8
2001	APR	1	1018	54-94	19 17-19	155	29-38	6-89	27	4-16	.4	1-1	LSW	1-8X	50	4

YEAR	MON	DA	HRMN	ORIGIN TIME (HST)		LAT N	LON W	DEPTH N	N	RMS	ERH	ERZ	LOC	PREF N	AZ	MIN	
				SEC	DEG MIN SEC												
2001	APR	1	1626	4-30	19 50-20	155	30-23	18-99	16	1-11	1-0	1-6	KAO	1-8X	185	8	
2001	APR	1	1631	53-05	19 19-00	155	10-92	4-78	22	3-10	.8	2-9	SSF	1-1X	212	6	
2001	APR	1	1715	45-59	19 19-83	155	7-73	5-63	22	2-10	.5	1-2	SF4	1-4X	121	5	
2001	APR	1	1948	45-24	19 18-13	155	22-11	8-07	17	1-13	.6	1-0	SIR	1-0X	114	4	
2001	APR	1	2325	35-91	19 30-57	155	46-78	10-67	19	2-10	.6	1-4	KON	1-5X	82	15	
2001	APR	2	0006	50-92	19 17-79	155	13-86	0-10	37	8-13	.4	.3	SSF	1-4X	157	8	
2001	APR	2	0110	8-48	19 18-68	155	14-08	9-32	38	5-12	.4	.5	SF2	2-5X	130	7	
2001	APR	2	0135	9-97	19 30-10	155	43-43	5-56	23	6-12	.6	3-0	KON	1-3X	71	13	
2001	APR	2	0722	23-86	19 20-08	155	10-75	8-98	35	7-10	.5	.5	SF3	1-4X	118	4	
2001	APR	2	1078	37-19	18 48-90	155	8-63	56	24	30	6	0.9	LOI	2-1X	266	53	
2001	APR	2	1708	37-19	18 48-90	155	8-63	56	24	30	6	0.9	LOI	2-1X	135	8	
2001	APR	2	1835	55-19	19 25-30	155	19-93	3-86	22	5	0.8	0.8	KAO	1-3X	104	4	
2001	APR	2	2129	41-19	19 50-42	155	30-14	19-70	19	5-14	.8	1-2	KAO	1-5X	86	8	
2001	APR	2	2355	38-68	19 19-67	155	7-06	7-08	38	9	.08	.4	SF4	1-7X	138	5	
2001	APR	3	0817	18-55	19 42-60	155	25-04	27-49	17	3-09	.9	1-0	KAO	1-5X	129	9	
2001	APR	4	0652	18-84	19 45-21	156	0-56	7-84	21	.12	2-8	1-1	HUA	2-2X	273	19	
2001	APR	4	0730	21-82	19 18-17	155	12-91	9-56	4111	.13	.4	.6	SF2	1-9X	135	8	
2001	APR	4	1738	28-76	19 26-06	155	22-40	8-84	31	6	.14	.4	1-0	KAO	1-6X	48	4
2001	APR	5	0742	18-81	19 21-94	155	11-39	3-46	33	7	.08	.3	.4	SER	1-7X	73	3
2001	APR	5	1001	20-45	19 13-94	155	31-31	0-68	38	6	.12	.4	.4	LSW	1-6X	123	13
2001	APR	5	1113	40-71	19 28-26	155	8-61	24-34	30	7	1.0	1.0	DEP	1-7X	92	9	
2001	APR	5	125														

YEAR	MON	DA	HRMN	ORIGIN TIME (HST)			LAT N			LON W			DEPTH N			RMS			ERH			ERZ			LOC			PREF N			AZ			MIN					
				SEC	DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	RD	S	SEC	KM	KM	RD	S	SEC	KM	KM	RD	GAP	DS												
2001	APR	9	0725	14.13	19	17.84	155	28.73	5.68	35	6	14	4	1.5	LSW	1.6X	78	6	109	4	2001	APR	17	2010	27.53	19	20.24	155	11.72	9.30	4411	1.13	.4	.4	SF3	2.2X	104	5	
2001	APR	9	1042	59.74	19	20.45	155	8.19	7.46	34	6	09	.5	.6	SF4	1.6X	109	4	2001	APR	18	0741	59.74	19	20.76	154	51.89	0.01	3810	1.18	1.9	.6	SFE	# 2.1X	250	14			
2001	APR	9	2123	12.37	19	12.32	155	32.52	7.08	29	4	14	.5	1.3	LSW	1.3X	135	7	2001	APR	18	0833	54.14	19	26.43	155	29.68	10.81	286	6.08	.4	.4	KAO	1.5X	61	10			
2001	APR	10	0228	7.54	19	29.88	155	26.41	12.25	21	5	17	.5	1.0	KAO	1.4X	94	4	2001	APR	18	1203	35.31	19	20.20	155	7.64	6.23	4010	1.10	.5	.8	SF4	1.7X	121	5			
2001	APR	10	0802	42.16	19	22.76	155	4.68	2.52	18	6	.06	.5	.6	SME	1.6X	143	3	2001	APR	18	1731	27.61	19	23.62	155	18.06	13.38	244	.12	.7	.9	DBPL	1.7X	49	2			
2001	APR	10	1156	27.85	19	12.89	155	42.63	0.02	32	4	.6	.5	LSW	# 2.0X	84	9	2001	APR	18	1906	10.17	19	22.99	155	0.13	8.84	35	.4	.12	.9	.4	SF5	1.7X	171	5			
2001	APR	10	2020	54.79	19	18.82	155	13.07	7.83	4010	.13	.4	.8	SF2	1.6X	141	7	2001	APR	18	1920	24.40	19	11.11	155	41.67	1.08	4211	.14	.4	.4	LSW	2.4X	93	8				
2001	APR	10	2052	21.52	19	19.19	155	12.35	7.48	32	.5	.09	.5	.8	SF2	1.3X	134	6	2001	APR	18	2217	3.66	19	24.11	154	50.28	38	17	.36	.4	.11	.1.5	1.1	LBR	1.5X	264	6	
2001	APR	10	2315	57.61	19	15.26	155	26.96	8.78	22	3	.13	.6	.7	LSW	1.1X	144	5	2001	APR	18	2258	18.38	19	18.77	155	13.56	9.82	4710	.12	.3	.5	SF2	2.2X	128	7			
2001	APR	11	0211	24.35	19	13.02	155	30.96	6.96	4411	.16	.4	.8	LSW	1.8X	134	4	2001	APR	18	2303	45.35	19	18.78	155	13.45	9.45	4229	.10	.4	.5	SF2	2.0X	127	7				
2001	APR	11	1657	34.15	20	31.52	155	17.69	29	13	27	7	.12	.1	2	4.0	DIS	2.0X	2001	APR	19	1332	46.62	19	25.27	155	14.31	15.37	18	.2	.06	.9	.4	DBPL	1.8X	147	1		
2001	APR	12	0001	19.09	19	20.69	155	7.01	7.21	35	8	.11	.5	.7	SF4	1.5X	135	5	2001	APR	19	1624	45.17	19	18.94	155	15.03	7.64	35	.6	.09	.4	.7	SF1	1.4X	139	5		
2001	APR	12	0241	43.82	19	21.95	155	29.59	12.94	26	5	.12	.4	.7	KAO	1.4X	70	8	2001	APR	19	2003	30.17	19	23.64	155	27.98	11.97	31	.8	.09	.5	1.0	KAO	1.5X	103	9		
2001	APR	12	0421	30.74	19	20.61	155	8.05	8.79	24	2	.08	.5	.7	SF4	1.2X	116	4	2001	APR	19	2052	19.31	19	27.74	155	29.35	10	87	.33	.7	.10	.5	.8	KAO	1.4X	79	8	
2001	APR	12	1332	27.14	19	28.65	155	25.20	5.94	34	6	.12	.4	1.2	KAO	1.5X	47	4	2001	APR	19	2135	6.89	19	23.56	155	17.15	2.81	32	.7	.11	.3	.2	SSC	2.0X	61	0		
2001	APR	12	1853	19.81	19	20.25	155	8.39	7.45	39	8	.11	.5	.7	SF4	1.7X	105	4	2001	APR	20	0016	18.92	19	27.12	155	30.35	10.59	34	.7	.11	.4	.9	KAO	1.4X	47	6		
2001	APR	15	1309	39.21	19	57.20	157	38.36	0.01	4411	.11	5.7	1.4	DIS	# 3.2X	299157		2001	APR	20	1145	47.83	19	18.64	155	29.86	3.74	4221	.11	.3	1.5	LSW	1.4X	57	7				
2001	APR	15	1700	29.52	19	8.92	155	26.27	40	38	29	4	10	1.0	1.5	DLS	1.7X	234	3	2001	APR	20	0436	32.91	19	20.97	155	24.39	8.82	23	4	.13	.4	.1	3	SIR	1.0X	50	2
2001	APR	15	1403	47.48	19	26.91	155	19.51	2.77	35	8	.11	.4	.3	KAO	1.6X	74	2	2001	APR	20	0849	34.88	19	21.12	155	15.07	6.85	31	.4	.10	.6	.8	SPI	.9X	188	3		
2001	APR	15	0348	40.47	19	22.55	155	21.78	7.22	40	9	.09	.4	.6	SF4	1.6X	82	14	2001	APR	20	1010	0.77	19	21.40	155	30.32	9.20	30	.7	.10	.4	.1	0	KAO	1.5X	53	8	
2001	APR	15	2333	16.71	19	24.43	155	17.11	1.79	16	4	.04	.3	.2	SSC	1.3X	78	1	2001	APR	20	1145	18.74	19	18.91	155	20.25	1.69	40	.7	.15	.3	.8	LSW	1.6X	51	7		
2001	APR	16	0029	59.71	19	3.81	155	23.45	35.55	23	5	.09	1.5	1.0	LOT	1.7X	268	19	2001	APR	20	2077	39.29	20	0.49	155	32.77	20.86	24	.4	.14	1.1	2.4	KEA	1.6X	182	25		
2001	APR	16	0418	1.57	19	47.31	155	32.43	23.84	49	8	.11	.4	1.2	KEAF	3.3X	94	9	2001	APR	20	2057	26.95	19	26.60	155	29.57	11.54	24	.3	.14	.5	1.5	KAO	1.2X	46	7		
2001	APR	16	1008	57.01	19	19.36	155	11.66	7.30	39	8	.08	.4	.6	SF3	1.4X	130	6	2001	APR	20	1431	19.27	19	24.15	155	16.36	0.84	25	.4	.11	.2	.2	SECL	1.4X	113	1		
2001	APR	16	1226	50.45	19	19.80	155	7.86	7.22	40	9	.09	.4	.6	SF4	1.6X	119	5	2001	APR	20	1735	27.24	19	22.04	155	34.41	5.79	19	.1	.10	.4	.8	MLO	1.5X	72	6		
2001	APR	16	1336	11.27	19	27.07	155	12.59	10.58	4511	.09	.4	.5	.5	GLN	1.5X	54	5	2001	APR	20	2076	39.29	20	0.49	155	32.77	20.86	24	.4	.14	1.1	2.4	KEA	1.6X	299	54		
2001	APR	16	1506	59.91	19	19.57	155	34.03	10.97	30	6	.17	.8	.5	KOH	1.8X	160	24	2001	APR	21	0746	56.42	19	18.90	155	28.66	3.14	42	.9	.11	.3	1.1	LSW	1.6X	64	7		
2001	APR	16	1838	44.00	19	19.38	155	15.43	27.70	52	12	.11	.7	1.1	KEA	1.4X	78	13	2001	APR	22	0459	55.69	19	8.96	155	31.57	40	82	.41	.6	.10	.7	1.1	DLS	1.9X	138	7	
2001	APR	16	1932	34.50	19	25.21	155	19.32	5.68	34	6	.11	.4	.9	KAO	1.6X	46	3	2001	APR	22	0613	15.47	19	3.31	156	21.51	38	03	.35	.8	1.3	2.3	DIS	2.4X	301	56		
2001	APR	16	1955	8.22	19	22.42	155	29.66	12.73	21	4	.09	.5	1.2	KAO	1.3X	70	7	2001	APR	23	0324	36.85	19	12.94	155	16.60	47	02	.37	.7	.11	1.0	1.0	DBP	1.8X	209	10	
2001	APR	17	0534	18.29	19	10.87	155	33.28	33.76	4010	.11	.6	1.1	DLS	1.7X	134	10	2001	APR	23	0325	19.12	18.89	155	16.38	47	.72	3810	.11	.8	.8	DEP	1.7X	210	10				
2001	APR	17	0635	54.99	19	14.63	155	45.64	15.45	30	6	.14	.9	1.3	HUA	1.5X	137	12	2001	APR	22	1040	19.43	19	20.73	155	6.54	7.29	4711	.12	.4	.5	SF4	1.8X	137	5			
2001	APR	17	0644	11.19	19	14.28	155	35.75	1.57	36	9	.15	.4	.6	LSW	1.3X	106	10	2001	APR	23	0733	7.56	19	2.36	156	18.02	34	76	.25	.13	2.0	2.6	KON	2.1X	329	52		
2001	APR	17	1139	35.26	19	25.34	155	19.80	5.40	34	6	.12	.4	1.1	KAO	1.6X	46	4	2001	APR	23	0942	31.88	19	23.55	155	30.08	15	27	.8	.09	.5	1.0	DML	1.6X	77	6</td		

YEAR	MON	DA	HRMN	SEC	TIME (HST)	LAT	N	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN	ORIGIN	TIME (HST)	LAT	N	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN								
						DEG	MIN	DEG	MIN	KM	RD	S	REMK	KM	REMK	MAG	RD	GAP	DS		YEAR	MON	DA	HRMN	SEC	DEG	MIN	DEG	MIN	KM	RD	S	REMK	KM	REMK	MAG	RD	GAP	DS
2001	APR	24	0643	10-41	19 25-61	155	19-20	6-65	35-7	.10	.4	.7	KAO	1-7X	49	3		2001	APR	29	0956	0-33	19 21-54	155	30-11	4-64	15 1	.09	.410-5	KAO	-.9X	50	12						
2001	APR	24	1719	4-13	19 29-97	155	27-37	6-49	28 6	.12	.4	1-3	KAO	1-7X	58	4		2001	APR	29	1011	14-13	19 18-40	155	12-62	8-05	33 2	.09	.4	.6 SF2	1-4X	108	3						
2001	APR	24	1807	30-11	19 19-80	155	8-67	6-91	26 2	.08	.5	.8	SF4	1-5X	121	5		2001	APR	29	1343	41-10	19 19-45	155	13-54	7-01	40 9	.14	.4	.8 SF2	1-5X	67	4						
2001	APR	24	1822	42-13	19 31-88	155	28 05	10-77	13 2	.12	1-3	1-5	MLO	1-4X	181	1		2001	APR	29	1740	27-51	19 40-47	155	4-94	8-61	34 1	.15	2-1	.8 HUA	2-6X	279	26						
2001	APR	24	2123	37-67	19 30-01	155	26-69	11-76	14 2	.06	.5	.8	MLO	1-3X	95	4		2001	APR	29	1755	29-59	19 15-16	155	32-25	1-08	4811	.15	.3	.5 LSW	2-6X	62	13						
2001	APR	24	2200	19-85	19 22-14	155	1-84	6-23	22	.12	1-3	.8	SF5	1-2X	201	6		2001	APR	29	1822	22-51	19 24-73	155	19-81	6-14	14 2	.09	.5	1-9 KAO	1-0X	89	4						
2001	APR	25	0607	51-40	19 28-83	155	23-94	12-23	14 2	.13	1-7	1-5	KAO	1-4X	87	2		2001	APR	29	2052	18-67	19 27-41	155	27-85	11-72	22 3	.11	.4	1-0 KAO	1-4X	59	8						
2001	APR	25	0955	40-01	19 17-67	155	30-06	8-99	11 2	.12	1-1	2-3	LSW	1-3X	110	5		2001	APR	30	0422	55-77	19 12-31	155	38-07	7-58	24 2	.13	.3	.9 LSW	2-3X	74	11						
2001	APR	25	1737	39-35	19 25-44	155	18-28	6-34	45	.11	.3	.5	INTP	4-4U	37	1		2001	APR	30	1305	49-94	19 18-78	155	47-60	8-56	34 9	.12	.5	.9 KON	1-5X	116	10						
2001	APR	25	1738	24-21	19 24-82	155	19-02	5-18	14 2	.09	.5	1-2	INT	1-8X	99	3		2001	APR	30	1536	33-35	19 27-63	155	14-19	29-23	43 8	.10	.5	.8 DEP	1-7X	52	4						
2001	APR	25	1745	15-95	19 24-78	155	18-16	6-72	19 7	.09	.6	.7	INT	1-4X	82	2		2001	APR	30	1613	11-47	19 16-51	155	30-24	8-78	39 9	.20	.4	1-1 LSW	1-6X	61	3						
2001	APR	25	1745	55-38	19 25-07	155	18-82	5-04	14 2	.12	.6	1-0	INT	1-1X	88	2		2001	APR	30	1622	49-60	19 22-68	155	30-00	8-63	32 4	.08	.3	.9 KAO	1-4X	48	4						
2001	APR	25	1750	2-82	19 24-71	155	19-18	4-74	18 3	.10	.5	1-2	KAO	1-2X	92	3		2001	APR	30	1249	11-77	19 24-48	155	19-66	3-01	15 1	.07	.6	1-4 KAO	1-2X	96	4						
2001	APR	25	1751	39-50	19 24-71	155	19-10	4-87	18 3	.10	.5	1-1	KAO	1-1X	90	3		2001	APR	30	1327	51-08	19 24-73	155	19-31	4-50	27 4	.09	.3	1-0 KAO	1-6X	69	3						
2001	APR	25	1757	44-64	19 24-24	155	19-93	1-13	15 2	.09	.3	.9	KAO	1-3X	55	5		2001	APR	30	1755	19 29-24	155	28-47	6-88	22 5	.07	.3	1-3 KAO	1-2X	66	5							
2001	APR	25	1804	25-47	19 24-63	155	19-44	3-87	16 4	.10	.9	1-6	KAO	1-9X	94	4		2001	APR	30	1427	35-01	19 18-75	155	15-67	7-72	43 8	.12	.4	.6 SF1	1-5X	101	5						
2001	APR	25	1819	24-80	19 25-48	155	18-30	6-22	46	.11	.3	.4	INTP	4-0U	37	1		2001	APR	30	0751	13-29	18 24-48	155	30-00	4-06	13 2	.11	.4	.6 SF1	1-5X	246	36						
2001	APR	25	1837	29-64	19 24-66	155	19-67	4-17	11 1	.08	1-2	2-2	KAO	1-8X	97	4		2001	APR	30	1054	44-32	19 29-67	155	32-67	4-57	32 88	.14	.5	1-0 DIST	2-5X	154	9						
2001	APR	25	1918	8-89	19 30-75	155	23-38	13-71	15 2	.06	.6	.5	DML	1-5X	135	2		2001	APR	30	1055	36-44	19 9-46	155	35-41	50-48	37 7	.13	1-0	1-2 DIST	2-7X	114	13						
2001	APR	26	0201	41-92	19 24-49	155	29-89	14-34	15 1	.10	.6	1-4	DML	1-4X	54	5		2001	APR	30	1100	10-86	19 6-92	155	26-85	45-57	30 3	.12	1-0	1-4 DIST	2-2X	179	5						
2001	APR	26	0133	27-93	19 19-89	155	8-68	4-61	34 2	.09	.5	.6	SF4	1-6X	99	5		2001	APR	30	1316	12-83	19 18-27	155	12-94	6-57	32 5	.12	.5	.1-2 SF2	1-4X	138	8						
2001	APR	26	0324	57-55	19 25-01	155	19-30	4-51	24 4	.11	.4	1-1	KAO	1-8X	114	3		2001	APR	30	1619	13-52	19 20-32	155	12-81	9-36	33 5	.08	.5	.5 SF2	1-2X	119	4						
2001	APR	26	0420	29-74	19 24-92	155	16-69	3-87	12 3	.08	.6	.6	SNCL	1-4X	148	1		2001	APR	30	1701	56-41	19 42-35	155	14-19	5-37	18 3	.11	2-3	2-4 HUA	1-7X	316	41						
2001	APR	26	0423	51-46	19 24-98	155	19-32	4-75	20 5	.08	.4	1-2	KAO	1-5X	79	3		2001	APR	30	1704	11-68	19 43-88	156	9-06	6-31	18 1	.13	3-1	1-0 HUA	1-9X	308	33						
2001	APR	26	0435	36-18	19 14-39	155	33-46	6-25	33 3	.19	.5	1-8	LSW	1-8X	112	6		2001	APR	30	1719	3-90	19 40-50	156	16-62	7-86	15 2	.11	2-0	1-9 HUA	1-4X	319	43						
2001	APR	26	0512	19-25	19 26-20	155	19-42	8-16	9	.2	0-0	1-5	KAO	1-5X	156	4		2001	APR	30	1753	37-00	19 15-25	156	20-70	12-38	21 3	.11	.6	.9 MLO	1-3X	84	4						
2001	APR	26	0518	40-43	19 26-36	155	19-60	8-15	35	.11	.4	.7	KAO	1-9X	48	4		2001	APR	30	0124	44-55	19 6-72	155	24-18	34-96	4-09	.09	.8	1-5 LOI	1-6X	188	8						
2001	APR	26	0751	52-11	19 27-36	155	19-54	8-11	49	.20	.4	1-5	KON	1-7X	261	21		2001	APR	30	0245	51-64	19 7-12	155	13-59	12-89	34 4	.11	.5	.7 DEP	2-3X	53	3						
2001	APR	26	0914	23-38	19 26-77	155	19-08	10-89	15 5	.10	2-0	1-1	KAO	1-6X	159	4		2001	APR	30	0335	7-17	18 51-16	155	12-15	6-49	38 7	.12	1-0	.7 LOI	2-0X	259	44						
2001	APR	26	2338	29-99	19 24-87	155	19-07	6-78	16 4	.05	.5	1-0	KAO	1-2X	108	3		2001	APR	30	1739	19 18-97	155	15-12	6-98	31 6	.10	.4	.8 SF1	1-4X	101	4							
2001	APR	27	0525	1-67	19 47-39	155	25-71	24-39	22 5	.10	.6	1-1	KEA	1-5X	142	3		2001	APR	30	0550	40-07	19 22-16	155	6-22	0-01	33 6	.11	.3	.2 SME #	1-4X	130	3						
2001	APR	27	0820	21-71	19 46-89	155	20-98	14-87	23	.4	.09	.7	KEA	1-7X	148	11		2001	APR	30	0912	38-93	19 12-54	155	32-98	4-48	29 2	.14	.5	3-3 LSW	1-5X	128	7						
2001	APR	27	0953	52-16	19 25-80	155	17-91	4-71	13 3	.13	.5	.7	SNC	1-1X	145	1		2001	APR	30	1957	49-17	19 20-99	155	7-92	9-52	40 10	.09	.5	.4 SF4	2-0X	114	4						
2001	APR	27	1223	17-92	19 26-34	155	30-31	13-18	19 2	.12	.5	1-1	DML	1-3X	62	5		2001	APR	30	1940	8-54	19 15-63	155	55-01	37-73	4710	.12	.7	1-3 HUA	2-4X	158	20						
2001	APR	27	2338	29-99	19 24-87	155	19-07	6-78	16 4	.05	.5	1-0	KAO	1-2X	108	3		2001	APR	30	1011	21-78	19 18-97	155	15-12	6-98	31 6	.10	.4	.8 SF1	1-4X	101	4						
2001	APR	27	2150	24-68	19 29-75	156	10-88	42-03	19 4	.12	1-4	2-1	KON	X	1-4X	229	23		2001	APR	30	1232	38-87	19 21-16	155	6-04	7-31	38 7	.11	.4	.5 SF4	1-7X	141	5					
2001	APR	27	0818	20-11	155	7-42																																	

YEAR	MON	DA	HRMN	SEC	LAT N	LON W	DEPTH N	N	RMS	ERH	ERZ	LOC	PREF N	AZ	MIN	ORIGIN TIME (HST)																						
																DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	REMK5	MAG	RD	GAP	DS								
2001	MAY	6	0044	43.01	19	14.01	155	32.88	5.86	25	3	.15	.4	1.4	LSW	1.4X	71	15	2001	MAY	14	2034	17.22	19	20.24	155	11.77	7.18	34	6	.09	.5	.6	SF3	1.4X	123	5	
2001	MAY	6	0054	45.55	17	53.33	153	37.31	0.71	30	2	.15	.6	1.4	LSW	2.9X	344217		2001	MAY	14	2102	4.96	19	10.46	155	32.78	6.30	22	1	.12	.6	.2	1.1	LSW	1.4X	110	9
2001	MAY	6	0211	9.06	19	20.44	155	11.04	8.49	37	8	.11	.5	.5	SF3	1.8X	108	4	2001	MAY	15	0019	10.60	19	12.42	155	37.34	6.50	36	5	.15	.4	.4	1.3	LSW	1.6X	84	14
2001	MAY	6	0213	50.07	18	20.23	155	11.10	7.45	39	8	.08	.4	.5	SF3	1.4X	104	4	2001	MAY	15	0342	13.91	19	16.32	155	27.15	7.22	32	2	.13	.4	.4	1.0	LSW	1.5X	63	6
2001	MAY	6	0225	2.98	19	20.63	155	10.74	7.77	35	4	.12	.5	.5	SF3	2.1X	92	3	2001	MAY	15	0730	30.87	19	19.80	155	8.26	6.82	32	4	.08	.4	.4	.7	SF4	1.4X	114	5
2001	MAY	6	0509	37.67	19	19.75	155	8.48	7.33	37	7	.10	.4	.6	SF4	1.5X	104	5	2001	MAY	15	1559	4.48	19	24.00	155	22.61	10.92	36	5	.09	.3	.6	KAO	1.4X	41	7	
2001	MAY	6	0742	43.65	19	20.29	155	2.58	39.08	4810	.10	.7	.9	DEP	2.6X	184	8	2001	MAY	15	2324	52.97	19	19.09	155	29.38	8.15	42	9	.13	.3	.1	1	KAO	1.5X	38	8	
2001	MAY	6	1137	5.53	19	23.22	155	17.69	12.28	38	8	.10	.4	.4	INT	1.5X	52	1	2001	MAY	16	0144	55.63	19	12.59	155	19.22	28.07	32	4	.13	.8	.1	.2	DBP	1.6X	171	9
2001	MAY	6	1419	59.80	19	28.15	155	27.39	7.53	37	9	.11	.3	1.0	KAO	1.6X	49	7	2001	MAY	16	0216	45.25	19	20.38	155	10.63	9.22	38	6	.12	.6	.5	SF3	1.5X	106	3	
2001	MAY	6	1549	59.49	19	24.87	155	19.02	4.31	25	4.08	.4	.8	SNC	1.2X	98	3	2001	MAY	16	0249	40.41	19	21.11	155	22.95	9.17	29	4	.12	.4	.7	SWR	1.4X	62	2		
2001	MAY	6	1981	28.07	19	19.97	155	12.37	7.52	41	8	.12	.4	.6	SF2	1.7X	79	5	2001	MAY	16	0250	11.56	19	20.58	155	22.60	9.90	39	8	.11	.4	.6	SWR	1.6X	69	1	
2001	MAY	7	0022	39.72	19	24.05	155	26.36	10.04	42	8	.10	.3	.6	KAO	1.9X	35	4	2001	MAY	16	0418	10.44	19	12.85	155	31.23	9.70	29	3	.15	.5	.9	LSW	1.6X	75	5	
2001	MAY	7	0348	54.37	19	30.98	155	25.47	13.06	6	.12	.1	1.1	DEP	1.2X	84	6	2001	MAY	17	2102	10.16	19	12.56	155	30.05	6.85	12	.3	.5	1.1	MLO	1.2X	128	3			
2001	MAY	7	1311	25.23	19	19.47	155	11.39	8.16	30	3	.09	.6	.8	SF3	1.6X	136	6	2001	MAY	16	0249	40.41	19	21.11	155	22.95	9.17	29	4	.12	.4	.7	SWR	1.4X	129	3	
2001	MAY	7	1421	53.56	19	21.81	155	13.47	29.63	32	4	.11	.8	1.0	DEP	1.4X	102	2	2001	MAY	16	1319	51.46	19	17.21	155	29.01	6.90	26	4	.09	.4	1.0	LSW	1.4X	122	4	
2001	MAY	7	1815	28.28	19	19.48	155	8.59	3.00	15	3	.12	.2	3	1.0	HUA	1.6X	315	30	2001	MAY	16	1530	32.81	19	15.42	155	26.60	7.30	23	2	.11	.5	.9	LSW	1.5X	139	5
2001	MAY	7	1821	10.59	19	58.16	155	30.09	32.75	24	6	.09	.8	1.6	KEA	1.7X	175	19	2001	MAY	16	2208	47.84	19	24.85	155	38.95	3.16	20	2	.10	.7	.6	MLO	1.5X	189	2	
2001	MAY	7	1958	5.40	19	28.23	155	27.84	9.77	28	5	.08	.3	.8	KAO	1.4X	50	7	2001	MAY	17	0130	39.80	19	28.83	155	25.05	8.69	21	4	.12	.6	.1	4	KAO	1.3X	86	4
2001	MAY	7	2225	1.59	19	32.82	155	14.19	24.67	42	10	.11	.5	.9	DEP	1.7X	67	10	2001	MAY	17	0631	34.05	19	36.85	155	16.72	39.50	20	3	.13	.2	.2	1.7	KON	2.0X	291	25
2001	MAY	8	1150	13.33	18	57.79	155	32.34	6.85	30	6	.09	.8	8	7	DIS	-	2.94	2001	MAY	17	0717	39.54	19	19.59	155	9.13	8.33	37	5	.09	.5	.6	SF3	1.4X	88	5	
2001	MAY	8	1405	49.60	19	20.21	155	8.59	7.18	34	5	.10	.6	.7	SF4	1.4X	101	4	2001	MAY	18	0644	19.86	19	17.56	155	15.53	5.89	33	3	.10	.4	1.0	SF1	1.4X	144	4	
2001	MAY	8	2326	25.37	19	22.53	155	15.5	2.18	8.29	34	4	.13	.7	.4	SF5	1.6X	163	5	2001	MAY	17	1128	5.77	19	19.74	155	13.16	7.69	35	6	.10	.4	.7	SF2	1.4X	128	5
2001	MAY	8	2354	19.19	19	37.08	155	9.65	27.65	31	7	.12	.7	1.5	KEA	1.6X	148	17	2001	MAY	17	2107	1.77	19	21.83	155	30.40	8.60	29	3	.08	.4	.9	KAO	1.2X	53	12	
2001	MAY	9	0433	19.14	19	39.14	155	22.38	13.75	33	6	.12	.4	.5	KEA	1.7X	81	13	2001	MAY	18	2252	16.18	19	25.27	155	18.87	6.30	40	11	.11	.4	.6	INT	1.6X	80	2	
2001	MAY	9	2006	3.37	19	21.13	155	15.95	15.62	37	5	.13	.6	.3	DEP	1.5X	103	2	2001	MAY	18	0401	17.15	19	19.55	155	32.07	8.88	22	.17	.8	1.1	LSW	1.2X	107	3		
2001	MAY	10	0013	57.67	19	21.78	155	29.90	2.45	18	2	.10	.4	1.8	KAO	1.3X	61	12	2001	MAY	18	0644	19.86	19	17.56	155	15.53	5.89	33	3	.10	.4	1.0	SF1	1.4X	144	4	
2001	MAY	10	0049	7.80	19	23.86	155	50.31	12.39	17	1	.10	.7	.5	KON	1.5X	127	13	2001	MAY	18	1059	39.28	19	51.67	155	23.74	23.93	38	9	.11	.6	.1	5	KEA	2.0X	113	6
2001	MAY	10	1239	23.54	19	37.08	155	9.65	27.65	31	7	.12	.7	1.5	KEA	1.6X	148	17	2001	MAY	18	1529	16.97	19	21.01	155	5.09	6.38	39	6	.13	.6	.1	4	SF5	1.9X	154	6
2001	MAY	10	2005	9.41	19	39.14	155	22.38	13.75	33	6	.12	.4	.5	KEA	1.7X	81	13	2001	MAY	18	2252	16.18	19	25.27	155	18.87	6.30	40	11	.11	.4	.6	INT	1.6X	80	2	
2001	MAY	10	2208	59.58	19	16.36	155	29.45	8.23	27	4	.14	.4	.9	LSW	1.3X	96	3	2001	MAY	18	2342	20.94	19	17.62	155	2.24	45.53	39	7	.13	.9	1.2	DBP	2.2X	206	10	
2001	MAY	11	1449	25.89	19	18.26	155	12.99	9.46	35	5	.10	.5	.5	SF2	1.6X	101	2	2001	MAY	19	1821	19.50	19	19.26	155	30.11	52.67	27	4	.14	1.5	1.9	DML	2.0X	102	8	
2001	MAY	11	1241	52.19	19	18.30	155	13.14	8.33	27	3	.10	.5	.7	SF2	1.6X	94	2	2001	MAY	20	0250	22.08	19	24.02	155	27.52	9.81	27	.13	.4	.1	0	KAO	1.3X	35	10	
2001	MAY	11	2207	19.56	19	18.91	155	13.11	7.14	23	2	.11	.6	1.0	SF2	1.5X	88	2	2001	MAY	20	0459	3.44	19	25.01	155	16.21	4.59	20	5	.09	.4	.5	SNC1	1.6X	147	1	
2001	MAY	12	0130	35.34	19	18.91	155	13.07	8.55	32	3	.09	.4	.5	SF2	1.5X	85	4	2001	MAY	20	0753	49.29	19	7.18	155	27.37	1.16	19	16	.07	.9	1.2	DIS	1.8X	171	5	
2001	MAY	12	1041	30.75	19	19.73	155	7.55	9.30	4812																												

YEAR	MON	DA	HRMN	ORIGIN TIME (HST)		LAT N	LON W	DEPTH N	N	RMS	ERH	ERZ	LOC	PREF N	AZ	MIN	
				SEC	DEG MIN DEG MIN				KM RD S	SBC KM KM	REMKS	MAG	RD	GAP DS			
2001	MAY	20	2043	43.98	19 25.64	155	16-70	11.59	22	4 .09	.9	.8	INTL	1.2X	160	1	
2001	MAY	20	2100	9.90	19 25.30	155	16.97	13.94	21	4 .11	1.0	.8	DEPL	1.1X	149	1	
2001	MAY	20	2138	18.55	19 25.14	155	17.40	9.86	17	.14	1.1	1.5	INTL	.7X	135	1	
2001	MAY	20	2157	29.32	19 23.93	155	16.85	13.11	19	3 .12	.9	.9	DEPL	1.0X	80	0	
2001	MAY	20	2205	5.36	19 25.66	155	16.59	12.95	20	3 .06	.9	.4	INTL	1.0X	139	2	
2001	MAY	20	2223	23.55	19 25.07	155	16.83	12.36	26	3 .09	.7	.6	INTL	.9X	139	0	
2001	MAY	20	2229	25.31	19 25.18	155	16.61	13.16	26	3 .10	.7	.5	DEPL	1.2X	127	1	
2001	MAY	20	2318	19.79	155	14.5	18.32	20	3 .11	1.5	.7	.7	DEPL	1.2X	232	5	
2001	MAY	20	2322	44.76	19 25.09	155	15.99	14.18	20	4 .07	1.0	.5	DEPL	1.0X	159	2	
2001	MAY	20	2328	41.15	19 25.58	155	16.59	12.67	19	2 .08	.9	.8	INTL	1.2X	159	1	
2001	MAY	20	2332	3.78	19 24.77	155	16.87	11.70	18	3 .09	.9	.9	INTL	.9X	135	0	
2001	MAY	20	2342	36.02	19 23.72	155	15.75	16.03	14	3 .07	1.3	.8	DEPL	.9X	133	2	
2001	MAY	21	0223	49.11	19 25.19	155	17.04	11.39	18	1 .06	.9	1.1	INTL	1.3X	146	1	
2001	MAY	21	0305	46.30	19 19.53	155	6.74	7.44	26	4 .08	.5	.7	SF4	1.2X	181	5	
2001	MAY	21	0354	2.69	19 18.71	155	15.16	5.83	22	1 .11	.5	1.4	SF1	1.1X	107	4	
2001	MAY	21	0442	53.98	19 20.35	155	11.45	8.84	30	3 .08	.5	.5	SF3	1.4X	78	4	
2001	MAY	21	0450	20.81	19 15.96	155	31.96	5.93	23	2 .13	.5	1.1	LSW	.9X	88	4	
2001	MAY	21	0606	41.15	19 20.39	155	11.73	8.76	32	3 .08	.5	.6	SF3	1.4X	77	5	
2001	MAY	21	1510	23.71	19 21.88	155	28.04	9.50	38	6 .12	.4	.8	KAO	1.6X	44	1	
2001	MAY	21	1615	35.92	19 21.89	155	7.86	47.53	30	4 .10	1.3	1.4	DEP	1.5X	127	3	
2001	MAY	21	2339	4.15	19 15.56	155	39.55	11.57	15	3 .07	1.5	.6	KOH	1.4X	240	26	
2001	MAY	21	2354	40.43	19 10.97	155	15.95	15.5	30	34 .44	5.08	.6	1.1	DLS	1.5X	152	8
2001	MAY	22	0144	4.15	19 11.99	155	27.42	6.92	37	5 .14	.4	.9	LSW	1.6X	117	5	
2001	MAY	22	0145	2.16	19 12.01	155	27.17	3.94	15	.15	.8	3.0	LSW	1.2X	122	5	
2001	MAY	22	0310	53.29	19 28.97	155	24.21	11.35	23	3 .13	.5	.8	KAO	1.3X	68	2	
2001	MAY	22	0352	13.02	19 51.83	155	30.51	13.55	22	3 .10	1.1	.6	KEA	1.8X	199	18	
2001	MAY	22	0359	7.96	19 21.21	155	30.34	14.62	15	1 .09	.7	1.6	DML	1.2X	94	8	
2001	MAY	22	0543	19.22	19 22.53	155	30.29	20.14	13	3 .09	1.3	1.2	DML	1.3X	187	14	
2001	MAY	22	0656	32.87	19 24.26	155	30.29	20.14	13	1 .11	.6	2.0	KAO	1.0X	63	8	
2001	MAY	22	1107	32.20	19 13.82	155	20.18	43.42	22	5 .10	1.2	1.3	DEP	1.6X	187	7	
2001	MAY	23	0137	22.18	19 6.97	155	28.29	31.40	19	2 .09	1.3	2.4	DLS	1.4X	239	5	
2001	MAY	23	0219	57.76	19 19.64	155	7.09	8.08	27	1 .09	.5	.7	SF4	1.45	4		
2001	MAY	23	0416	3.84	19 25.48	155	20.12	8.42	17	3 .09	.5	1.3	KAO	1.1X	126	4	
2001	MAY	23	1528	23.81	19 20.26	155	8.76	6.94	17	2 .13	.6	1.3	SF4	1.1X	103	4	
2001	MAY	23	1632	50.50	19 29.42	155	26.31	7.69	10	1 .13	.9	2.2	KAO	1.1X	120	5	
2001	MAY	23	1800	29.83	19 18.68	155	13.11	9.45	34	3 .08	.5	.6	SF2	1.7X	132	7	
2001	MAY	23	1924	53.83	19 23.98	155	15.76	3.19	34	5 .11	.3	.3	SBC	2.2X	54	1	
2001	MAY	24	0128	12.25	19 28.74	155	25.77	11.06	21	4 .11	.4	.8	KAO	1.4X	103	4	
2001	MAY	24	0234	59.24	19 27.72	155	25.55	8.95	38	7 .11	.3	.9	KAO	1.8X	50	5	
2001	MAY	24	0251	42.67	19 27.58	155	25.64	9.06	49	11 .12	.3	.6	KAO	2.6X	36	6	
2001	MAY	24	0420	6.12	19 17.66	155	22.37	34.99	22	3 .12	.9	2.0	DEP	1.5X	112	5	
2001	MAY	24	0528	56.82	19 27.80	155	25.48	7.01	12	.12	.5	1.8	KAO	1.0X	84	5	
2001	MAY	24	1021	42.34	19 23.77	155	14.55	29.49	21	2 .11	1.0	1.3	DEP	1.6X	130	2	
2001	MAY	24	1212	19.79	19 44.30	155	27.06	19.13	11	3 .11	1.1	1.3	1.8	KEA	1.4X	183	15
2001	MAY	24	1616	45.47	19 12.28	155	27.44	0.60	22	5 .12	.3	.3	LSW	1.3X	115	5	

YEAR	MON	DA	HRMN	TIME (HST)			LAT	N	LON	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN	
				SEC	DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	REMS	MAG	RD	GAP	DS		
2001	JUN	30	0549	17.86	19	20.24	155	7.94	7.09	30	4	1.0	.5	.6	SF4	1.4X	116	5			
2001	JUN	30	0638	12.81	19	20.11	155	0.04	0.03	35	7	1.9	1.0	4	SF#	2.2X	202	10			
2001	JUN	30	0658	32.91	19	19.54	17	155	55.59	41.47	28	5	.08	1.2	1.1	HUA	1.9X	276	26		
2001	JUN	30	1008	57.98	19	19.55	22	155	20.28	10.46	23	4	.12	1.4	.5	KEA	1.5X	242	3		
2001	JUN	30	1138	29.24	19	19.36	06	155	57.06	13.92	29	3	.13	2.5	1.6	KON	2.2X	243	15		
2001	JUN	30	1805	23.13	19	19.25	77	155	27.92	12.90	18	2	.09	.5	1.6	KAO	1.2X	58	9		
2001	JUN	30	1852	40.58	20	3.44	155	13.26	22.46	26	5	1.0	1.4	1.9	KEA	1.9X	294	23			
2001	JUN	30	1902	47.67	19	4.11	155	21.88	37.58	37	6	.09	.9	1.3	LOI	1.7X	207	19			
2001	JUN	30	2137	14.29	19	19.25	06	155	31.29	11.16	24	3	.09	.4	.9	KAO	1.1X	65	9		
2001	JUN	31	0118	54.28	19	19.19	06	155	15.55	8.64	32	4	.09	.5	.7	SF1	1.5X	137	6		
2001	JUN	31	0124	5.40	19	19.58	17	155	21.22	10.81	38	5	.12	.7	.5	KEA	2.4X	181	9		
2001	JUN	31	0431	21.53	19	27.73	155	51.83	12.91	26	2	.13	1.2	.4	KON	2.1X	183	22			
2001	JUN	31	0502	3.36	19	21.28	53	155	54.53	26.64	51.0	.02	.5	.6	DEP	3.1X	67	2			
2001	JUN	31	0854	50.68	19	21.76	155	15.51	25.08	28	3	.08	.8	1.0	DEP	1.4X	61	1			
2001	JUN	31	0856	15.84	19	21.67	155	15.49	25.00	40	8	.10	.7	.7	DEP	1.7X	98	2			
2001	JUN	31	0856	49.58	19	21.52	155	15.32	24.87	26	2	.07	.8	1.0	DEP	1.3X	102	2			
2001	JUN	31	1022	43.08	19	20.16	155	12.29	8.31	33	5	.10	.5	.6	SF3	1.3X	119	5			
2001	JUN	31	1515	24.04	19	0.65	155	20.34	32	73	32	4	.11	1.1	1.7	LOI	1.8X	224	26		
2001	JUN	31	2126	37.82	19	5.07	155	22.13	34.36	47	10	.10	.8	1.1	LOI	3.3X	199	17			
2001	JUN	31	2146	1.20	19	5.03	155	22.06	33.96	32	2	.11	1.1	1.3	LOI	1.8X	233	17			
2001	JUN	1	0241	52.25	19	3.78	155	21.95	38.15	23	4	.08	1.3	1.9	LOI	1.5X	270	20			
2001	JUN	31	2155	9.18	19	12.16	155	32.36	8.18	23	3	.11	.6	.8	LSW	1.3X	184	7			
2001	JUN	31	2202	22.56	19	4.47	155	21.81	36.64	36	4	.09	.9	1.6	LOI	1.8X	202	19			
2001	JUN	1	0042	50.41	19	4.31	155	21.85	36.97	30	5	.08	.9	1.6	LOI	1.6X	208	19			
2001	JUN	1	0152	1.94	19	3.93	155	21.85	39.18	25	2	.07	1.3	1.9	LOI	1.5X	240	20			
2001	JUN	1	0241	52.25	19	3.78	155	21.95	38.15	23	4	.08	1.3	1.9	LOI	1.5X	270	20			
2001	JUN	1	1504	0.03	19	5.41	155	22.55	34.59	22	3	.07	.9	1.8	LOI	1.4X	253	17			
2001	JUN	1	1528	22.18	19	19.79	155	7.28	8.91	36	6	.08	.5	.5	SF4	2.3X	132	5			
2001	JUN	1	1550	17.22	19	4.40	155	22.28	36.74	29	3	.08	.9	2.0	LOI	1.5X	205	19			
2001	JUN	1	2166	42.29	19	15.64	155	27.14	10.76	44	7	.13	.4	.4	LSWF	3.8XU	138	5			
2001	JUN	1	2130	36.40	19	23.26	155	26.90	9.73	20	3	.10	.4	.8	KAO	1.2X	55	8			
2001	JUN	2	0352	33.57	18	34.59	156	12.24	6.88	37	7	.11	7.4	9.4	DISF-	2.9X	324	72			
2001	JUN	2	0417	9.16	19	3.87	155	21.88	37.84	31	5	.10	1.0	1.4	LOI	1.5X	208	20			
2001	JUN	2	0504	48.90	19	15.25	155	21.55	21.13	42	02	39	3	.11	1.1	1.2	DEP	2.1X	226	11	
2001	JUN	2	1335	59.85	19	15.21	37	155	21.37	42.02	39	3	.11	.3	1.0	KAO	1.8X	44	12		
2001	JUN	2	1802	5.62	18	55.50	155	16.76	33.12	29	.13	2.1	3	.7	LOI	2.0X	242	37			
2001	JUN	3	0039	22.46	19	48.39	156	9.94	33.65	46	6	.13	.9	2.0	HUA	2.8X	196	37			
2001	JUN	3	0516	33.55	19	58.23	155	22.35	11.15	18	5	.11	.8	.5	KEA	1.7X	196	9			
2001	JUN	3	1124	53.16	19	20.53	155	11.69	9.64	39	4	.12	.5	.5	SF3	2.2X	101	4			
2001	JUN	3	1213	36.73	19	19.50	155	7.02	8.70	37	7	.09	.5	.4	SF4	1.9X	141	4			
2001	JUN	3	1358	43.51	19	28.15	155	24.75	10.64	30	7	.10	.4	.9	KAO	1.6X	59	4			
2001	JUN	3	1310	3.80	19	19.34	13	155	54.98	31.27	32	6	.11	.7	1.2	KON	1.9X	158	9		
2001	JUN	3	1911	34.07	19	22.40	155	30.15	10.04	21	4	.07	.4	1.5	KAO	1.3X	50	13			
2001	JUN	4	0032	27.13	19	13.14	155	22.68	34.62	40	9	.11	.6	.9	DEP	1.7X	157	3			
2001	JUN	4	0515	15.49	19	5.44	155	22.28	33.54	35	6	.09	1.0	1.1	LOI	1.5X	200	17			
2001	JUN	4	0621	44.08	19	12.82	155	41.91	1.54	30	5	.17	.5	.9	LSW	1.5X	88	10			
ORIGIN TIME (HST)																					
YEAR	MON	DA	HRMN	SEC	DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	REMS	MAG	RD	GAP	DS		
2001	JUN	4	0632	39.42	19	22.48	155	30.01	9.26	25	3	.07	.3	.4	KAO	1.4X	48	12			
2001	JUN	4	1533	2.64	19	25.55	155	22.34	11.47	32	6	.10	.3	.6	KAO	1.4X	64	3			
2001	JUN	4	1841	28.89	19	1.72	155	25.49	40.13	34	6	.09	1.0	1.2	DLS	1.5X	211	23			
2001	JUN	5	0032	53.88	19	13.72	155	22.99	36.53	41	10	.11	.7	1.0	DEP	1.9X	153	2			
2001	JUN	5	0155	39.69	19	30.49	155	18.32	23.81	48	14	.11	.4	.7	DIS	2.3X	58	6			
2001	JUN	5	0335	52.73	20	52.24	155	38.10	4.27	40	7	.15	2.4	2.3	DIS	2.9X	253	67			
2001	JUN	6	0720	6.02	19	30.68	155	19.56	155	14.83	7.75	.37	.7	.13	.5	SF1	1.5X	170	5		
2001	JUN	6	1450	37.88	19	19.00	155	13.08	9.34	32	3	.12	.6	.8	SF2	1.6X	138	7			
2001	JUN	6	1513	44.93	19	25.30	155	28.10	10.41	19	2	.13	.6	1.5	KAO	1.1X	92	9			
2001	JUN	6	1657	7.61	19	4.66	155	22.16	35.56	47	9	.10	.9	1.3	LOI	2.5X	200	18			
2001	JUN	6	1807	16.97	19	20.15	155	10.66	9.30	35	4	.09	.5	.6	SF3	1.7X	109	4			
2001	JUN	6	1807	27.17	19	19.64	155	10.77	8.09	15	3	.05	.6	1.4	SF3	1.6X	128	5			
2001	JUN	6	2138	43.37	19	22.39	155	15.36	25.46	36	8	.09	.7	.6	DLS	1.7X	91	1			
2001	JUN	8	0134	48.43	19	5.89	155	29.59	29.08	44	9	.08	.6	1.2	DLS	2.2X	175	17			
2001	JUN	8	0745	50.89	19	12.52	155	42.82	0.54	43	11	.15	.4	.3	LSW	2.4X	84	8			
2001	JUN	8	0910	3.55	19	19.24	155	7.91	7.50	29	4	.12	.6	.8	SF4	1.4X	127	3			
2001	JUN	9	0411	21.89	19	16.43	155	30.22	9.43	30	1	.09	.4	.6	LSW	1.3X	69	3			
2001	JUN	9	0550	28.04	19	22.24	155	30.07	17.70	23	6	.10	.4	1.0	KAO	1.4X	49	7			
2001	JUN	9	0638	51.23	19	22.30	155	14.52	3.26	32	6	.10	.3	.3	SEC	1.5X	68	3			
2001	JUN	9	0831	14.27	19	25.48															

YEAR	MON	DA	HRMN			TIME (HST)			LAT N			LON W			DEPTH N			N RMS			ERH ERZ LOC			PREF N			AZ MIN											
			SEC	DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	REMKS	MAG	RD	GAP	DS	YEAR	MON	DA	HRMN	SEC	DEG	MIN	KM	RD	S	SEC	KM	KM	REMKS	MAG	RD	GAP	DS		
2001	JUN	11	2230	2.46	20	38.17	156	4.84	10.19	32	4	.15	1.3	2.5	DIS	2.3X	199	20	2001	JUN	18	1627	50.80	19	22.28	154	58.87	9.56	25	3	.09	1.0	.6	LRR	1.8X	219	5	
2001	JUN	11	2343	1.50	19	26.27	155	29.79	13.25	21	3	.12	.5	.8	DML	1.4X	42	6	2001	JUN	18	2008	42.0	19	47.79	155	32.91	24.49	21	4	.09	.8	.15	KEA	2.0X	175	10	
2001	JUN	12	0212	48.43	19	23.77	155	49.78	13.41	30	6	.12	.5	.4	KON	1.9X	121	14	2001	JUN	19	1558	13.61	19	23.09	155	15.39	31.94	47	9	.11	.5	.8	DEP	2.9X	82	2	
2001	JUN	12	0629	33.53	20	15.96	155	41.20	40.29	34	3	.11	1.1	2.1	KOH	2.3X	185	55	2001	JUN	19	20	0303	2.09	19	19.0	155	13.37	9.20	35	3	.12	.6	.7	SF2	1.6X	135	6
2001	JUN	12	0634	27.01	19	20.07	155	10.06	6.89	27	3	.08	.5	.8	SF3	1.2X	113	4	2001	JUN	20	0452	57.75	19	28.01	155	26.74	9.48	28	8	.10	.4	.9	KAO	1.3X	54	7	
5																																						
2001	JUN	12	0955	46.49	19	22.66	155	30.11	10.62	30	4	.08	.3	1.1	KAO	1.4X	48	13	2001	JUN	20	0649	56.33	19	27.81	155	15.84	26.13	13	34	.11	.6	.9	DEP	1.5X	73	1	
2001	JUN	12	1031	55.70	19	23.71	155	21.71	10.57	36	7	.10	.4	.6	KAO	1.6X	41	7	2001	JUN	20	0714	58.45	19	21.44	155	30.43	12.75	15	2	.11	.7	1.3	KAO	1.1X	55	5	
2001	JUN	12	2212	14.21	19	19.84	155	13.09	7.77	28	4	.11	.6	.7	SF2	1.2X	187	5	2001	JUN	20	1358	30.50	19	36.94	155	18.11	12.31	16	4	.10	.9	.6	KEA	1.1X	179	16	
2001	JUN	12	2237	44.88	19	49.09	155	51.26	12.23	47	10	.11	.5	.7	HUA	2.3X	151	15	2001	JUN	20	1438	17.78	19	18.36	155	14.65	4.61	21	2	.13	.9	3.0	SSF	1.3X	196	6	
2001	JUN	13	0053	19.90	19	25.25	155	18.36	7.76	25	5	.13	.5	.8	INTL	1.6X	120	1	2001	JUN	20	1710	54.03	19	12.70	155	24.67	45	94	17	3	.11	1.4	1.6	DEP	1.4X	219	3
6																																						
2001	JUN	13	0919	53.32	19	20.10	155	13.18	4.76	27	4	.11	.5	1.6	SSF	1.2X	130	5	2001	JUN	20	1910	22.46	19	45.83	155	20.16	13.49	20	7	.13	.9	.5	KEA	1.6X	185	13	
2001	JUN	13	1451	27.43	19	25.45	155	19.89	5.02	38	7	.11	.3	1.1	KAO	1.8X	46	4	2001	JUN	20	2045	8.10	19	45.80	155	20.04	13.83	18	4	.10	.8	.4	KEA	1.4X	168	13	
2001	JUN	13	2121	24.83	19	29.20	155	27.44	11.34	32	6	.10	.4	.7	KAO	1.3X	48	5	2001	JUN	20	2102	0.25	19	28.89	155	26.55	9.39	29	6	.12	.4	.9	KAO	1.6X	61	6	
2001	JUN	14	0252	43.38	19	12.12	155	41.07	5.41	30	3	.15	.6	1.1	LSW	1.6X	156	10	2001	JUN	21	1642	48.08	19	20.28	155	11.48	9.09	31	2	.12	.6	.8	SF3	1.5X	113	4	
2001	JUN	14	0421	26.15	19	25.21	155	15.55	12.30	17	2	.14	1.4	1.1	INTL	1.7X	163	2	2001	JUN	21	2302	26.59	19	25.24	155	28.30	9.63	37	5	.09	.3	.7	KAO	1.7X	43	5	
7																																						
2001	JUN	14	0443	35.15	20	17.38	155	40.03	41.46	38	3	.11	1.1	1.3	KOH	1.8X	189	21	2001	JUN	22	0147	33.66	19	20.67	155	13.20	9.12	40	7	.13	.4	.6	SF2	1.9X	107	4	
2001	JUN	14	0533	32.76	19	22.46	155	24.49	6.19	28	3	.12	.6	.7	SF5	1.5X	161	4	2001	JUN	22	0948	13.93	19	29.46	155	27.29	5.97	21	4	.08	.4	.7	KAO	1.6X	92	4	
2001	JUN	14	0924	31.25	19	31.31	155	31.39	32.86	27	4	.13	.9	1.8	KEA	1.6X	148	19	2001	JUN	22	1110	44.20	19	29.39	155	20.12	12.77	37	1	.10	.4	.5	INTL	1.7X	91	4	
2001	JUN	14	1822	23.20	19	24.83	155	16.71	9.41	24	5	.11	.7	.6	INTL	1.6X	138	1	2001	JUN	22	1850	59.15	19	15.71	155	31.75	8.92	35	4	.15	.5	.9	LSW	2.1X	93	3	
2001	JUN	14	2021	4.26	19	24.51	155	26.93	11.12	37	8	.10	.4	.7	KAO	1.3X	34	4	2001	JUN	22	2137	49.48	19	26.09	155	24.07	9.36	23	4	.08	.3	.9	KAO	1.4X	53	7	
8																																						
2001	JUN	14	2027	2.35	19	3.93	155	21.58	37.07	38	.10	1.0	1.2	LOI	1.7X	204	20	2001	JUN	23	0238	18.10	19	22.71	155	1.75	8.03	28	1	.13	1.0	.6	SF5	1.4X	164	5		
2001	JUN	14	2135	27.67	19	3.37	155	21.23	37.99	32	.4	.11	1.1	1.6	LOI	1.5X	207	21	2001	JUN	23	0643	10.79	19	19.79	155	10.28	7.88	27	3	.10	.6	.8	SF3	1.4X	111	4	
2001	JUN	15	0155	53.16	19	3.63	155	21.83	38.21	45	.11	.9	1.1	LOI	1.9X	205	20	2001	JUN	23	0903	17.26	19	18.55	155	14.91	5.99	24	1	.10	.7	.13	SF1	1.4X	191	5		
2001	JUN	15	1530	26.31	19	4.09	155	21.65	39.76	39	.09	1.0	1.3	LOI	1.8X	209	19	2001	JUN	23	1322	35.76	19	17.75	155	12.89	7.30	20	1	.10	.9	.9	LSW	1.9X	159	9		
2001	JUN	15	2357	5.15	19	25.80	155	25.56	11.96	17	2	.11	.5	1.4	KAO	1.2X	72	6	2001	JUN	23	1609	43.03	19	57.45	155	29.93	30.71	50	8	.10	.6	.13	KEA	3.0X	161	18	
9																																						
2001	JUN	16	0004	49.33	19	28.12	155	26.96	8.16	32	5	.10	.8	.8	KAO	1.7X	48	7	2001	JUN	23	1614	12.80	19	24.79	155	19.24	5.77	19	5	.09	.4	.13	KAO	1.2X	65	3	
2001	JUN	16	0044	54.45	19	17.58	155	38.87	14.37	21	3	.12	.5	.7	DLS	1.4X	81	7	2001	JUN	23	2106	29.71	19	12.50	155	32.83	9.30	27	3	.14	.5	1.0	LSW	1.6X	129	7	
2001	JUN	16	0355	17.67	19	4.46	155	22.23	36.63	21	2	.08	1.3	1.9	LOI	1.6X	242	18	2001	JUN	23	2157	15.27	19	18.94	155	13.01	.92	35	3	.12	.5	.7	SF2	1.6X	127	7	
2001	JUN	16	0620	4.42	19	25.29	155	21.11	3	.09	1.4	1.9	LOI	1.5X	270	19	2001	JUN	23	2251	11.83	19	18.54	155	12.64	8.63	24	.14	.6	1.3	SF2	1.5X	145	8				
2001	JUN	16	0659	8.56	19	19.29	155	12.60	7.80	26	.10	.6	1.0	1.2	SF2	1.3X	139	8	2001	JUN	23	2252	41.28	19	18.70	155	12.93	9.27	45	9	.13	.4	.5	SF2	2.2X	128	7	
2001	JUN																																					

YEAR	MON	DA	HRMN		SEC		DEG MIN		DEG MIN		DEPTH		N		RMS		ERH		ENZ		LOC		PREF N		AZ		MIN	
			MM	SS	MM	SS	MM	SS	MM	SS	M	KM	R	D	S	SEC	KM	KM	REMARKS	MAG	RD	GAP	DS					
2001	JUN	26	0821	4	66	19	19.18	155	8	84	9	12	33	6	.11	.6	.6	SF4	1.9X	100	4							
2001	JUN	26	0950	54	30	19	26.50	155	22	46	9	95	27	4	.12	.4	.9	KAO	1.3X	48	4							
2001	JUN	26	1010	47	38	19	22.89	155	25	60	9	83	16	1	.08	.5	.9	KAO	1.1U	74	2							
2001	JUN	26	1250	49	20	19	44.29	155	44	96	10	21	14	2	.08	1.5	2.8	HUA	1.5X	237	11							
2001	JUN	27	0721	57	51	19	12.73	155	41	30	9	05	21	2	.14	.6	2.4	LSW	1.5X	114	16							
2001	JUN	27	0842	41	84	19	12.86	155	29	44	7	59	15	2	.09	.6	1.1	LSW	1.3X	139	4							
2001	JUN	27	1335	29	33	19	23.93	155	26	62	10	65	20	3	.11	.5	1.1	KAO	1.3X	48	3							
2001	JUN	27	1646	31	04	19	23.84	155	26	62	10	41	33	3	.09	.4	.6	KAO	1.5X	37	3							
2001	JUN	27	1839	24	19	24.88	155	28	25	8	67	16	1	.12	.6	1.2	KAO	1.3X	65	5								
2001	JUN	27	2134	59	13	19	15.69	155	31	60	7	70	28	3	.14	.5	1.0	LSW	1.7X	132	3							
2001	JUN	27	2206	10	55	19	21.86	155	3	92	6	68	24	2	.11	.6	.8	SF5	1.4X	165	5							
2001	JUN	27	2213	56	07	19	19.64	155	7	20	10	37	24	1	.09	.9	.3	SF4	1.4X	166	4							
2001	JUN	28	0140	14	79	19	34.47	155	38	82	11	46	16	3	.14	.8	1.2	MLO	1.1X	116	8							
2001	JUN	28	2200	41	76	19	21.95	155	0.55	7.95	31	2	.14	.8	.5	SF5	1.8X	179	7									
2001	JUN	29	0026	50	79	19	18.59	155	13	69	8	22	25	1	.11	.6	1.0	SF2	1.2X	145	8							
2001	JUN	29	0621	30	82	19	15.01	155	37	45	9	17	21	4	.13	.5	1.8	LSW	1.2X	96	13							
2001	JUN	29	0835	16	95	19	58.62	155	32	52	20	27	18	3	.10	1.1	2.6	KEA	1.8X	169	23							
2001	JUN	29	1445	21	75	19	18.77	155	13	97	9	62	44	6	.13	.4	.5	SF2	2.1X	129	6							
2001	JUN	30	1305	17	94	19	17.44	155	47	21	2	3	.13	.5	2.0	KON	1.5X	83	9									
2001	JUN	30	1322	27	95	19	41.71	156	4	93	10	69	41	4	.13	1.1	.4	HUA	2.4X	191	8							
2001	JUN	30	1408	10	68	19	24.59	155	20	85	7	68	15	2	.10	.5	2.0	KAO	1.6X	73	6							
2001	JUN	30	1451	4	89	19	47.79	156	4	27	3	87	16	2	.12	1.6	1.7	HUA	1.4X	288	3							
2001	JUN	30	1901	48	36	19	29.39	155	26	68	8	05	24	6	.09	.3	.9	KAO	1.3X	69	5							
2001	JUN	30	2255	53	78	19	20.22	155	8	39	5	82	30	2	.12	.6	1.0	SF4	1.6X	105	4							
2001	JUL	1	0332	17	62	19	20.70	155	53	31	13	96	26	6	.11	1.0	.4	KON	1.4X	199	9							
2001	JUL	1	0616	58	94	19	25.61	155	29	36	10	80	20	2	.10	.4	.9	KAO	1.1X	69	6							
2001	JUL	1	1433	49	18	19	26.96	155	24	34	12	89	20	4	.11	.6	1.1	KAO	1.2X	60	6							
2001	JUL	1	1517	1	61	19	40.41	155	8	43	14	22	23	3	.09	.7	.7	HIL	1.2X	175	12							
2001	JUL	1	2117	11	28	19	24.59	155	16	88	1	50	11	2	.10	.4	.3	SNC	1.2X	84	1							
2001	JUL	1	2304	16	87	19	26.81	155	28	98	9	26	33	4	.11	.3	.9	KAO	1.6X	46	8							
2001	JUL	2	0406	45	67	19	20.33	155	12	78	32	05	41	8	.12	.6	.8	DEP	2.0X	119	4							
2001	JUL	2	0437	1	79	19	29.44	156	1	60	11	19	14	2	.12	.7	KON	1.3X	306	11								
2001	JUL	2	0722	25	47	19	28.9	155	26	23	10	13	35	6	.12	.4	.8	KAO	1.6X	48	5							
2001	JUL	2	0902	12	34	19	28.02	155	14	34	31	12	47	10	.12	.5	.9	DEP	2.0X	53	4							
2001	JUL	2	1231	32	28	19	20.04	155	8	36	6	69	40	8	.13	.5	.6	SF4	2.1X	111	5							
2001	JUL	3	1958	21	04	19	19.32	155	36	87	11	15	21	6	.16	.8	.7	MLO	1.1X	174	3							
2001	JUL	3	1959	21	04	19	19.32	155	36	87	11	15	21	6	.16	.8	.7	MLO	1.1X	174	3							
2001	JUL	3	1959	21	04	19	19.32	155	36	87	11	15	21	6	.16	.8	.7	MLO	1.1X	174	3							
2001	JUL	3	1959	21	04	19	19.32	155	36	87	11	15	21	6	.16	.8	.7	MLO	1.1X	174	3							
2001	JUL	3	1959	21	04	19	19.32	155	36	87	11	15	21	6	.16	.8	.7	MLO	1.1X	174	3							
2001	JUL	3	1959	21	04	19	19.32	155	36	87	11	15	21	6	.16	.8	.7	MLO	1.1X	174	3							
2001	JUL	3	1959	21	04	19	19.32	155	36	87	11	15	21	6	.16	.8	.7	MLO	1.1X	174	3							
2001	JUL	3	1959	21	04	19	19.32	155	36	87	11	15	21	6	.16	.8	.7	MLO	1.1X	174	3							
2001	JUL	3	1959	21	04	19	19.32	155	36	87	11	15	21	6	.16	.8	.7	MLO	1.1X	174	3							
2001	JUL	3	1959	21	04	19	19.32	155	36	87	11	15	21	6	.16	.8	.7	MLO	1.1X	174	3							
2001	JUL	3	1959	21	04	19	19.32	155	36	87	11	15	21	6	.16	.8	.7	MLO	1.1X	174	3							
2001	JUL	3	1959	21	04	19	19.32	155	36	87	11	15	21	6	.16	.8	.7	MLO	1.1X	174	3							
2001	JUL	3	1959	21	04	19	19.32	155	36	87	11	15	21	6	.16	.8	.7	MLO	1.1X	174	3							
2001	JUL	3	1959	21	04	19	19.32	155	36	87	11	15	21	6	.16	.8	.7	MLO	1.1X	174	3							
2001	JUL	3	1959	21	04	19	19.32	155	36	87	11	15	21	6	.16	.8	.7	MLO	1.1X	174	3							
2001	JUL	3	1959	21	04	19	19.32	155	36	87	11	15	21	6	.16	.8	.7	MLO	1.1X	174	3							
2001	JUL	3	1959	21	04	19	19.32	155	36	87	11	15	21	6	.16	.8	.7	MLO	1.1X	174	3							
2001	JUL	3	1959	21	04	19	19.32	155	36	87	11	15	21	6	.16	.8	.7	MLO	1.1X	174	3							
2001	JUL	3	1959	21	04	19	19.32	155	36	87	11	15	21	6	.16	.8	.7	MLO	1.1X	174	3							
2001	JUL	3	1959	21	04	19	19.32	155	36	87	11	15	21	6	.16	.8	.7	MLO	1.1X	174	3							
2001	JUL	3	1959	21	04	19	19.32	155	36	87	11	15	21	6	.16	.8	.7	MLO	1.1X	174	3							
2001	JUL	3	1959	21	04	19	19.32	155	36	87	11	15	21	6	.16	.8	.7	MLO	1.1X	174	3							
2001	JUL	3	1959	21	04	19	19.32	155	36	87	11	15	21	6	.16	.8	.7	MLO	1.1X	174	3							
2001	JUL	3	1959	21	04	19	19.32	155	36	87	11	15	21	6	.16	.8	.7	MLO	1.1X	174	3							
2001	JUL	3	1959	21	04	19	19.32	155	36	87	11	15	21	6	.16	.8	.7	MLO	1.1X	174	3							
2001	JUL	3	1959	21	04	19	19.32	155	36	87	11	15	21	6	.16	.8	.7	MLO	1.1X	174	3							
2001	JUL	3	1959	21	04	19	19.32	155	36	87	11	15	21	6	.16	.8	.7	MLO	1.1X	174	3							
2001	JUL	3	1959	21	04	19	19.32	155	36	87	11	15	21	6	.													

YEAR	MON	DA	HRMN	SEC	D EG	M IN	D EG	M IN	DEPTH	N	RMS	DRH	ERZ	LOC	PREF	N	AZ	MIN	
					KM	KM	RD	S	KM	KM	REWK5	MAG	RD	GAP	DS				
2001	JUL	4	0601	42.66	19	27.53	155	36.49	10.64	29	7	1.2	.4	.6	MLOT	1.1K	58	1	
2001	JUL	5	0225	50.82	19	24.88	155	38.76	3.60	24	5	.11	.6	.5	MLO	1.2K	127	2	
2001	JUL	5	1309	59.31	19	16.86	155	31.30	6.19	40	7	.15	.3	.1.2	LSW	1.7K	58	4	
2001	JUL	5	1711	40.26	19	25.09	155	19.44	5.12	23	6	.10	.4	.1.1	KAO	1.2K	104	3	
2001	JUL	5	1959	59.97	20	9.71	155	20.28	0.00	46	9	.1.0	.3	.1.1	KEA	#	192	33	
2001	JUL	5	1540	37.14	19	20.17	155	11.59	7.04	37	6	.11	.5	.6	SF3	1.3K	123	5	
2001	JUL	6	1057	21.62	19	24.22	155	15.58	1.64	39	9	.12	.2	.3	SEC	2.4K	57	2	
2001	JUL	6	1618	2.77	19	30.27	155	26.56	5.93	22	6	.09	.3	1.0	MLO	1.2K	119	4	
2001	JUL	7	0117	11.30	19	21.12	155	4.64	6.54	32	4	.12	.6	.8	SF5	1.5K	157	6	
2001	JUL	7	0339	31.27	19	20.45	155	7.43	7.55	39	8	.11	.5	.6	SP4	2.0K	125	5	
2001	JUL	7	0850	1.97	19	19.68	155	7.80	8.45	39	8	.09	.4	.4	SP4	2.1K	121	4	
2001	JUL	7	0935	31.77	19	57.13	155	17.69	10.58	22	3.	.12	.5	.5	KEA	1.5K	251	9	
2001	JUL	8	0733	57.52	18	55.49	155	16.68	33.14	23	2	.12	1.8	2.4	LOI	1.8K	250	37	
2001	JUL	8	1030	36.29	19	21.85	155	20.56	27.82	30	9	.12	.6	1.1	DEP	1.5K	50	6	
2001	JUL	9	0342	27.93	19	20.25	155	12.05	8.50	35	6	.11	.5	.6	SF3	1.2K	117	5	
2001	JUL	9	0945	56.19	19	17.76	155	0.46	42.39	32	7	.11	.9	.8	DEP	1.9K	261	13	
2001	JUL	9	1007	52.86	19	32.15	155	41.79	7.01	20	5	.13	.6	2.1	MLO	1.2K	148	11	
2001	JUL	9	1548	58.93	19	24.29	155	29.46	9.70	25	4	.06	.4	.9	KAO	1.3K	71	5	
2001	JUL	9	2222	41.23	19	21.65	155	28.63	11.12	31	4	.10	.4	.7	KAO	1.3K	44	2	
2001	JUL	9	2229	59.42	19	25.71	155	19.78	5.14	22	4	.10	.4	.1.1	KAO	1.4K	73	4	
2001	JUL	10	0246	8.19	19	25.51	155	2.72	6.13	31	1	.16	.6	1.0	SF5	1.7K	134	3	
2001	JUL	10	0542	2.54	19	14.93	155	26.31	5.43	19	31	.2	.5	1.5	LSW	1.4K	148	4	
2001	JUL	10	0905	26.65	19	26.06	155	18.98	6.40	17	3	.11	.6	1.1	INT	1.5K	97	3	
2001	JUL	10	1536	21.21	19	16.84	155	15.33	9.97	4410	.13	.4	.6	.6	SF1	1.8K	148	6	
2001	JUL	10	1703	43.05	19	24.27	155	25.23	9.23	22	1	.12	.5	.5	1.2	KAO	1.3K	36	5
2001	JUL	11	0428	56.15	19	50.33	155	0.41	35.09	38.78	39	.12	.1.1	.2	.4	LOI	2.3K	261	45
2001	JUL	11	0441	48.01	19	20.83	155	6.83	7.80	30	4	.09	.4	.5	SF4	1.4K	135	5	
2001	JUL	11	0040	36.95	19	24.25	155	17.28	1.75	17	5	.08	.3	.2	SSC	1.1K	60	4	

YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN	YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	REMK	MAG	RD	GAP	DS						DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	REMK	MAG	RD	GAP	DS
2001	JUL	11	11:07	57.46	19	18.68	155	12.90	7.75	35	5	11	.5	.7	SF2	1.6X	143	7	2001	JUL	19	06:43	42.98	19	17.69	155	16.34	6.67	39	3	14	.5	.8	SF1	2.0X	139	4		
2001	JUL	11	12:26	0.47	19	11.34	155	28.67	7.97	30	3	12	.7	1.2	LSW	1.6X	149	7	2001	JUL	19	18:20	28.21	19	16.85	154	58.74	43.96	30	7	14	2.2	1.0	LER	1.3X	316	27		
2001	JUL	11	12:39	22.03	19	11.72	155	28.80	8.15	32	2	13	.7	.9	LSW	1.8X	188	7	2001	JUL	19	23:05	19.76	19	19.71	155	8.89	7.17	33	4	11	.5	.8	SF4	1.6X	99	5		
2001	JUL	11	12:53	6.91	19	22.42	155	30.19	10.66	20	4	05	.3	.9	KAO	1.5X	50	5	2001	JUL	20	07:45	51.86	19	25.64	154	59.77	3.60	22	.10	.7	.6	.8	SLE	1.6X	107	2		
2001	JUL	11	14:13	54.00	20	0.20	155	32.20	1.74	16	6	15	.7	.5	KEA	1.7X	182	24	2001	JUL	20	09:21	48.81	19	51.98	155	21.52	32.44	40	9	.10	.6	.1	0	KEA	1.8X	88	3	
2001	JUL	11	19:36	50.51	19	19.64	155	8.85	6.70	39	8	09	.4	.6	SF2	1.5X	155	7	2001	JUL	20	11:43	24.17	19	24.46	155	16.55	16.86	20	3	.11	1.4	1.4	DEP	.9X	208	4		
2001	JUL	11	22:30	30.59	19	18.82	155	13.15	8.29	36	7	09	.5	.6	SF2	1.5X	155	7	2001	JUL	20	14:05	15.65	19	23.30	155	29.77	10.26	25	4	.06	.4	.8	KAO	1.5X	45	4		
2001	JUL	11	22:33	51.96	19	18.77	155	13.26	9.20	27	4	11	.6	.8	SF2	1.1X	142	7	2001	JUL	20	16:42	22.49	19	24.01	155	15.91	2.36	17	.5	.09	.3	.4	SEC	1.2X	114	2		
2001	JUL	12	04:51	30.52	19	19.77	154	44.68	51.39	33	4	11	1.1	1.8	LER	1.5X	284	18	2001	JUL	20	18:00	14.32	19	16.69	155	30.39	9.39	24	2	.09	.5	1.1	LSW	1.5X	82	3		
2001	JUL	12	08:11	41.72	19	48.51	155	34.20	21	9.3	20	2	.10	.9	2.3	KEA	1.4X	184	24	2001	JUL	20	18:09	40.20	19	13.40	155	34.30	9.95	20	2	.11	.5	1.1	LSW	1.3X	117	8	
2001	JUL	12	13:19	3.26	19	25.24	155	19.37	5.75	23	6	.10	.4	1.1	KAO	1.4X	77	3	2001	JUL	21	01:26	45.42	19	28.33	155	27.05	9.53	38	7	.12	.3	.8	KAO	1.7X	47	7		
2001	JUL	12	15:31	46.80	18	53.05	155	14.53	12.35	34	3	1.0	.2	.7	2.5	LOI	2.1X	259	43	2001	JUL	21	08:01	7.85	18	53.65	155	15.84	12.54	42	6	.11	1.0	1.3	LOI	3.4X	205	41	
2001	JUL	13	03:18	35.89	19	21.40	155	4.47	7.33	32	2	.12	.6	.5	SF5	1.6X	165	5	2001	JUL	21	14:00	52.70	19	13.69	155	32.22	6.92	25	2	.18	.8	1.5	LSW	1.5X	157	4		
2001	JUL	13	20:21	17.28	19	19.16	155	15.28	6.92	35	6	.12	.5	.9	SF1	1.3X	136	6	2001	JUL	21	18:43	8.82	19	10.46	155	23.15	41.32	34	5	.10	1.1	1.2	DEP	1.7X	203	7		
2001	JUL	13	23:59	2.70	19	34.66	155	11.08	23	3	.13	.8	.4	KON	1.5X	170	11	2001	JUL	21	18:52	6.87	19	37.19	155	57.19	7.72	18	1	.13	.8	8. KON	1.8X	173	14				
2001	JUL	14	00:17	30.81	19	13.52	155	33.03	11.06	27	.7	.12	.5	.9	LSW	1.6X	167	6	2001	JUL	21	19:29	41.28	18	51.35	155	14.19	11.30	20	.02	.07	.1	9.1	4. LOI	2.1X	276	46		
2001	JUL	14	04:22	59.84	19	21.85	155	14.40	13.18	41	8	.11	.5	.4	DEP	1.6X	100	3	2001	JUL	21	22:28	25.92	19	12.74	155	27.88	0.02	34	7	.15	.6	.3	LSW	#	1.5X	144	7	
2001	JUL	14	05:27	53.12	19	9.07	155	32.03	44.62	33	4	.15	1.3	1.8	DLST	209	12		2001	JUL	21	23:32	8.14	18	55.18	155	15.96	11.27	17	.11	3.0	.9	LOI	1.3X	249	38			
2001	JUL	14	06:55	7.24	19	21.76	155	5.08	7.16	27	2	.10	.6	.7	SF5	1.3X	152	5	2001	JUL	21	23:38	41.24	19	11.91	155	24.86	14.68	17	3	.11	.15	.5	DEP	1.4X	259	5		
2001	JUL	14	19:56	51.62	19	25.10	155	19.40	6.48	25	8	.09	.4	1.0	KAO	1.1X	69	3	2001	JUL	21	23:40	5.98	18	53.60	155	14.01	10.42	32	5	.12	.13	.7	LOI	2.2X	256	42		
2001	JUL	14	22:51	8.64	19	19.16	155	15.65	6.26	26	4	.09	.6	1.0	SF1	1.4X	145	6	2001	JUL	21	23:42	14.76	18	55.46	155	15.81	14.40	25	.10	2.114	.4	LOI	-	2.0X	248	38		
2001	JUL	15	02:07	32.96	19	19.78	155	10.14	7.64	29	7	.10	.5	.8	SF3	1.4X	109	4	2001	JUL	21	23:44	35.90	18	54.17	155	14.94	10.57	9	.07	3.6	1.3	LOI	1.5U	267	40			
2001	JUL	15	04:34	20.94	19	1.88	155	12.55	17.01	40	7	.12	1.111	7	LOI	-	2.1X	226	30	2001	JUL	21	23:45	22.02	18	55.12	155	15.83	12.34	27	2	.10	1.7	1.1	LOI	1.8X	249	38	
2001	JUL	15	07:16	0.15	19	10.99	155	6.76	52.36	36	6	.13	1.1	1.6	DEP	1.9X	209	12	2001	JUL	21	23:46	16.97	18	54.17	155	15.11	11.87	28	.10	2.1	1.2	LOI	2.0X	253	40			
2001	JUL	15	07:32	54.24	18	53.38	155	32.44	39.47	23	3	.09	1.9	1.6	DLS	1.5X	281	17	2001	JUL	21	23:40	5.98	18	53.60	155	14.01	10.42	32	5	.12	.13	.7	LOI	2.2X	274	45		
2001	JUL	15	09:07	3.51	19	96.15	155	36.53	0.61	22	2	.12	.6	.8	LSW	1.2X	126	16	2001	JUL	21	23:52	26.87	18	50.99	155	11.73	25.74	5	.11	1.5	4.2	LOI	2.2X	233	48			
2001	JUL	16	04:56	30.65	19	19.67	155	9.74	8.11	34	5	.10	.5	.6	SF3	1.4X	106	4	2001	JUL	21	04:25	18.52	19	20.20	155	11.65	9.79	37	7	.13	1.2	.8	LOI	2.7X	246	46		
2001	JUL	16	08:58	58.52	19	16.82	155	27.26	7.07	41	5	.14	.4	.8	LSW	2.5X	86	6	2001	JUL	21	05:57	37.30	18	54.92	155	15.06	12.98	14	.10	2.0	1.9	LOI	1.6X	251	39			
2001	JUL	16	14:21	53.84	19	16.46	155	27.74	12.28	18	1	.10	.7	1.4	LSW	1.5X	118	5	2001	JUL	21	05:57	54.55	18	51.96	155	14.06	11.77	35	4	.12	1.2	1.6	LOI	2.4X	256	45		
2001	JUL	16	23:19	26.97	19	12.63	155	33.13	5.51	19	.14	.6	1.1	1.5	LSW	1.5X	128	7	2001	JUL	22	06:27	52.24	18	55.90	155	12.95	12.70	16	.08	2.6	1.2	LOI	1.5X	239	39			
2001	JUL	17	02:30	8.75	19	24.21	155	16.94	15.90	36	8	.08	.4	.4	DEP	1.6X	41	1	2001	JUL	22	06:32	10.47	18	55.49	155	14.59	10.66	22	.09	1.9	.8	LOI	1.9X	250	38			
2001	JUL	17	07:20	45.69	19	18.33	155	21.84	4.24	18	1.11	.5	1.1	1.5	SWR	1.1X	112	4	2001	JUL	22	07:10	28.46	19	33.12	155	57.72	13.34	18	.2	.13	.6	KON	1.1X	270	8			
2001	JUL	17	08:07	1.71	19	20.31	155	10.85	7.53	25	3	.08	.5	.8	SF3	1.4X	116	6	2001	JUL	22	10:33	2.03	19	29.00	156	4.69	41.08	23	4	.12	1.6	1.9	KON	1.2U	271	17		
2001	JUL	17	08:13	41.88	19	20.65	155	10.97	7.73	34	6	.10	.5	.6	SF3	1.8X	111	3	2001	JUL	22	10:41	30.90	18	51.87	155	13.25	11.38	27										

YEAR	MON	DA	HRMN	SEC	ORIGIN TIME (HST)				LAT N				LON W				DEPTH N				RMS ERH ERZ LOC				PREF N													
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	RD	GAP	MAG	RD	GAP	DS																		
2001	JUL	23	0716	58.57	19	18.96	155	13.10	6.13	26	.13	.6	1.4	SF2	1.2X	138	7	2001	JUL	30	1105	51.38	19	18.26	155	23.58	5.52	40	9	.14	.4	1.2	SWR	1.9X	94	4		
2001	JUL	23	0913	23.23	18	54.03	155	12.88	11.38	19	2	.11	2.6	1.0	LOI	1.8X	270	42	2001	JUL	30	1219	39.29	19	16.98	155	17.94	30.25	28	8	.10	.8	1.2	DEP	1.3X	185	2	
2001	JUL	23	1236	28.33	19	18.30	155	13.27	0.01	30	.6	.12	.4	.3	SSF #	1.2X	149	8	2001	JUL	30	1239	56.03	19	17.82	155	15.16	8.58	33	3	.10	.5	.5	SF1	1.5X	155	6	
2001	JUL	23	1257	0.45	19	20.00	155	10.22	7.80	41	.8	.14	.5	.7	SF3	1.8X	107	4	2001	JUL	30	1519	29.43	19	11.55	155	41.37	3.85	19	.15	.613	0	LSW	-	1.3X	93	9	
2001	JUL	23	1736	17.43	18	55.37	155	12.74	8.20	14	1	.14	2.3	1.0	LOI	1.5X	294	40	2001	JUL	30	1536	50.60	19	32.92	155	58.51	36.11	26	4	.08	1.6	2.0	KON	2.0X	282	33	
2001	JUL	24	1509	26.50	19	23.33	155	15.16	11.45	38	.8	.11	.4	.5	INT	1.5X	81	2	2001	JUL	31	0203	33.01	19	19.22	155	29.76	8.26	33	4	.10	.3	.7	KAO	1.8X	47	4	
2001	JUL	24	1644	43.30	19	16.38	155	31.58	7.90	22	.3	.13	.5	1.4	LSW	1.2X	111	4	2001	JUL	31	0244	20.31	19	22.51	155	29.82	8.59	37	.7	.09	.3	.7	KAO	1.9X	44	4	
2001	JUL	24	1711	23.38	19	18.96	154	58.86	39.71	22	.4	.09	1.7	1.3	LER	1.5X	239	17	2001	JUL	31	0614	33.53	19	19.61	155	7.37	5.45	27	4	.13	.5	1.2	SF4	1.1X	138	4	
2001	JUL	24	1844	10.70	19	26.18	154	57.21	3.14	12	.2	.09	1.6	1.6	SLE	2.3X	157	3	2001	JUL	31	0656	47.63	19	56.00	155	31.04	37.63	18	5	.10	1.1	1.6	KEA	1.4X	232	19	
2001	JUL	24	2336	3.60	19	14.72	155	35.00	9.05	16	.2	.09	.5	1.1	LSW	1.3X	151	9	2001	JUL	31	1046	25.25	19	39.59	156	24.21	43.92	27	3	.15	1.6	4.1	DIS	2.2X	277	71	
2001	JUL	25	0003	23.51	19	26.94	155	25.14	6.34	16	1	.10	.5	2.2	KAO	1.0X	53	6	2001	JUL	31	1216	53.05	19	12.28	155	28.51	0.30	43	.8	.14	.4	.3	LSW	1.7X	145	9	
2001	JUL	25	0036	23.16	19	25.62	155	55.43	16.82	19	.4	.06	1.2	1.3	KON	1.3X	215	10	2001	JUL	31	1423	52.64	19	22.28	155	26.73	9.35	38	.8	.11	.3	.6	KAO	1.8X	43	5	
2001	JUL	25	0233	51.60	19	58.41	155	15.19	11	1.1	.13	.9	7.2	KEA	1.1X	298	12	2001	JUL	31	2356	18.85	19	22.59	155	26.92	8.67	28	3	.11	.4	.8	KAO	1.1X	142	1		
2001	JUL	25	2144	25.39	19	59.11	155	30.44	10.67	22	.4	.12	.9	.5	KEA	1.2X	182	6	2001	JUL	31	2146	23.26	19	18.22	155	13.10	8.54	29	5	.10	.5	.7	SF2	1.1X	168	8	
2001	JUL	26	0052	57.35	19	23.88	155	25.57	10.14	26	4	.11	.4	.9	KAO	1.2X	46	4	2001	JUL	31	2209	54.79	19	26.91	155	29.21	12.13	30	6	.11	.4	.8	KAO	1.5X	46	8	
2001	JUL	26	0215	1.37	19	37.35	155	10.60	11.87	29	.8	.13	.4	.7	KAO	1.0X	90	18	2001	JUL	31	2218	2.07	19	27.01	155	30.58	14.02	29	4	.12	.4	.9	DML	1.4X	46	6	
2001	JUL	26	0551	32.95	19	16.49	155	12.02	11.56	39	.8	.13	.6	.4	SF3	1.4X	183	7	2001	JUL	31	1843	16.09	19	24.19	155	19.50	14.31	21	3.1	.2	.4	KON	1.5X	191	7		
2001	JUL	26	0837	31.80	19	14.18	155	29.40	31	5	.10	.9	1.4	DLS	1.4X	165	2	2001	JUL	31	1844	19.24	19	24.16	155	19.98	14.31	21	3.1	.2	.4	KON	1.5X	191	3			
2001	JUL	26	0928	36.42	19	16.37	155	11.67	11.73	27	3	.12	.9	.4	SF3	1.3X	184	7	2001	JUL	31	1944	11.50	19	15.90	155	17.21	17.21	21	4.0	.1	.4	KAO	1.1X	142	1		
2001	JUL	26	0939	41.27	18	49.52	155	12.00	11.37	21	3	.11	4.1	6.4	LOI	1.8X	283	50	2001	JUL	31	2030	53.13	19	23.13	155	14.51	3.87	42	9	.12	.3	.4	SEC	2.4X	86	3	
2001	JUL	26	0945	55.12	19	20.05	155	6.02	8.05	31	.5	.10	.5	.5	SF4	1.2X	162	6	2001	JUL	31	1247	53.63	19	21.27	155	3.22	6.44	21	6	.14	.8	1.1	SF2	1.2X	243	6	
2001	JUL	26	1343	15.24	19	22.33	155	5.45	8.56	40	.8	.11	.4	.5	SF4	1.9X	137	4	2001	JUL	31	31.32	19	22.02	155	27.97	8.18	19	2	.12	.5	1.0	KAO	.9X	71	1		
2001	JUL	26	1448	44.44	19	22.43	155	29.86	9.35	36	.5	.11	.3	.6	KAO	1.5X	37	4	2001	AUG	1	1348	13.89	19	20.91	155	4.91	6.18	28	2	.10	.6	.8	SF5	1.5X	208	7	
2001	JUL	26	0837	31.80	19	14.18	155	29.40	31	5	.10	.9	1.4	DLS	1.4X	165	2	2001	AUG	1	1843	16.09	19	24.19	155	19.50	14.31	21	3.1	.2	.4	KON	1.5X	191	3			
2001	JUL	26	1608	2.97	19	13.06	155	26.98	35.26	46	1.0	.09	.6	.8	DLS	1.7X	146	6	2001	AUG	1	1844	19.24	19	24.16	155	19.98	14.31	21	3.1	.2	.4	KAO	1.1X	142	1		
2001	JUL	26	1727	0.014	15.37	19	20.63	155	7.15	6.67	21	2	.09	.6	1.2	SF4	1.4X	159	7	2001	AUG	2	0946	47.01	19	33.52	155	41.91	7.70	15	1	.12	.8	2.1	MLO	1.1X	126	12
2001	JUL	27	0157	12.03	19	24.29	155	16.85	1.27	13	5	.11	.3	.3	SSC	1.0X	92	1	2001	AUG	2	0959	42.09	19	27.02	155	28.81	8.73	18	4	.13	.6	2.0	KAO	1.0U	76	8	
2001	JUL	27	0514	0.77	19	12.12	155	21.23	49.25	43	.8	.11	.9	1.0	DEP	1.5X	167	6	2001	AUG	2	1013	15.62	19	12.35	155	21.56	43.84	27	7	.10	1.0	1.2	DEP	1.3X	237	6	
2001	JUL	27	1151	27.37	19	20.63	155	7.15	15.49	47	10.76	16	1	.10	.8	KON	1.5X	152	5	2001	AUG	3	2026	9.33	19	22.65	155	28.71	8.86	21	4	.07	.4	.6	KAO	1.4X	63	2
2001	JUL	27	1228	15.37	19	25.32	155	18.87	6.08	44	10	.11	.8	.8	KON	1.5X	152	2	2001	AUG	3	1241	14.11	19	18.78	155	17.11	15.12	19	3	.17	.4	.6	KAO	1.4X	251	14	
2001	JUL	27	2128	19.59	19	21.28	155	18.87	6.08	44	10	.11	.8	.8	KON	1.5X	152	2	2001	AUG	3	1241	14.11	19	18.78	155	17.11	15.12	19	3	.17	.4	.6	KAO	1.4X	239	10	
2001	JUL	28	0639	37.84	19	19.87	155	8.22	7.62	26	4	.08	.5	.7	SF4	1.4X	110	5	2001	AUG	3	1758	31.22	19	33.87	155	57.67	12.48	28	5	.14	.4	.5	KON	1.7X	239	10	
2001	JUL	28	0828	26.77	19	26.63	155	17.78	15.48	40	.8	.10	.5	.3	DEP	2.0X	47	2	2001	AUG	3	2226	23.33	19	19.47	155	15.52	7.38	42	8	.11	.4	.6	SF2	1.2X	123	5	
2001	JUL	28	0930	19.55	19	15.57	155	44.00	10.05	38	8	.13	.6	.7	KOH	2.4X	126	23	2001	AUG	4	0509	42.67	19	20.32	155	12.94	6.97	23	1	.10	.6	.9	SF2	1.2X	125	4	
2001	JUL	28	1905	18.12	19	26.60	154	54.06	6.08	18	3	.12	.6	.6	LER	1.2X	174	3	2001	AUG	4	0820	18.13	19	23.09	155	25.72	9.83	25	2	.10	.4	1.0	KAO	1.0X	155	4	

YEAR	MON	DA	HRMN			TIME (HST)			LAT N			LON W			DEPTH N			N RMS			ERH ERZ LOC			PREF N			AZ MIN											
			SEC	DEG	MIN	SEC	DEG	MIN	SEC	KM	RD	S	SEC	KM	RD	S	SEC	KM	RD	S	SEC	KM	RD	S	SEC	KM	RD	GAP	DS									
2001	AUG	5	0620	51.94	18	57.68	155	34.51	39.57	33	8	.10	.9	1.2	DLS	2.0X	233	10	2001	AUG	13	2049	8.65	19	22.72	155	12.27	.87	35	.12	.4	.5	SF3	1.5X	127	1		
2001	AUG	5	0723	1.12	19	15.50	155	3.23	44.59	36	3	.11	1.1	1.6	DEP	1.7X	219	9	2001	AUG	13	2050	17.20	19	25.68	155	29.59	9.06	30	6	.09	.3	.8	KAO	1.3X	39	7	
2001	AUG	5	0910	17.73	19	20.30	155	26.91	10.50	20	2	.13	.6	1.1	KAO	.9X	65	4	2001	AUG	14	0031	51.88	19	21.13	155	4.37	5.85	35	6	.15	.6	1.0	SF5	1.4X	169	6	
2001	AUG	5	1020	55.95	19	12.47	155	26.25	38.24	21	5	.13	1.3	1.5	DLS	1.1X	213	5	2001	AUG	5	1604	55.95	19	29.94	155	49.12	14.88	23	5	.14	1.0	.6	KON	1.1X	184	21	
2001	AUG	5	2239	48.28	19	45.55	155	33.00	13.05	26	6	.11	.6	.4	KEA	1.6X	160	10	2001	AUG	14	1820	9.64	19	21.57	155	27.48	10.50	38	5	.13	.3	.7	KAO	1.2X	42	2	
2001	AUG	6	0010	44.59	19	5.63	155	30.46	51.92	15	.11	3.8	7.8	DLS	1.4X	249	17	2001	AUG	14	1838	6.93	19	19.45	155	9.09	6.54	35	5	.09	.4	.6	SF4	1.0X	88	4		
2001	AUG	6	0132	22.41	18	56.21	155	17.18	12.90	21	2	.10	1.6	1.0	LOI	1.5X	245	36	2001	AUG	14	2029	26.13	19	23.63	155	29.65	9.52	33	0	.09	.3	.8	KAO	1.0X	45	4	
2001	AUG	6	1052	48.04	19	19.50	155	11.56	7.31	36	5	.12	.5	.8	SF3	1.3X	125	6	2001	AUG	14	2325	19.93	18	57.07	155	35.26	43.02	35	7	.09	.8	1.0	DLS	1.8X	242	9	
2001	AUG	7	1307	17.27	19	19.33	155	15.32	8.10	52	12	.13	.4	.5	SF1	2.0X	124	4	2001	AUG	15	0543	3.24	19	20.27	155	10.08	6.46	30	4	.17	.7	.9	SF3	1.2X	110	3	
2001	AUG	7	1614	53.33	19	27.82	155	24.34	9.82	36	7	.10	.4	.8	KAO	1.4X	35	4	2001	AUG	15	1023	5.22	19	31.47	155	43.88	2.96	17	2	.12	.7	1.8	KON	1.3X	85	4	
2001	AUG	7	1646	55.01	19	25.45	155	19.07	6.72	27	6	.11	.4	1.0	KAO	1.3X	48	3	2001	AUG	15	1420	31.11	19	13.17	155	29.88	41.95	35	8	.11	.7	1.3	DLS	1.5X	74	4	
2001	AUG	8	0002	21.97	19	22.43	155	29.93	9.50	25	3	.05	.4	.8	KAO	1.2X	48	4	2001	AUG	15	1742	11.28	19	22.92	155	14.25	3.69	33	7	.10	.3	.4	SEC	1.9X	116	2	
2001	AUG	8	0225	2.23	20	17.64	155	41.66	41.26	22	1	.12	1.8	2.6	KOH	1.9X	162	13	2001	AUG	16	0729	54.19	19	19.95	155	7.58	5.70	40	9	.12	.4	1.0	SF4	1.6X	124	5	
2001	AUG	8	1924	47.97	19	15.59	154	53.59	2.60	25	2	.17	.7	.7	SLE	1.1X	118	4	2001	AUG	16	0852	50.19	19	15.99	155	12.15	9.52	21	4	.12	1.0	1.1	SF5	1.2X	265	12	
2001	AUG	8	2002	52.03	19	28.43	154	53.45	1.46	19	1	.13	.6	.8	SLE	1.8X	122	4	2001	AUG	16	0921	2.89	19	19.28	155	15.29	7.14	36	6	.12	.4	.7	SF1	1.4X	126	4	
2001	AUG	8	2101	36.31	18	54.99	155	15.78	10.52	21	5	.16	1.5	.7	LOI	1.2X	262	34	2001	AUG	16	0938	1.71	19	26.51	154	55.54	5.95	29	3	.11	.8	.6	LER	1.6X	151	3	
2001	AUG	9	0031	53.77	19	10.62	155	40.55	0.88	31	3	.13	.4	.6	LSW	1.5X	82	10	2001	AUG	16	1140	47.79	19	21.70	155	8.23	7.73	48	13	.12	.5	.6	SF4	1.8X	106	3	
2001	AUG	9	0322	16.19	19	23.76	155	16.81	3.16	17	5	.10	.4	.3	SSC	1.2X	53	0	2001	AUG	16	1557	59.52	19	49.07	155	21.85	28.64	26	5	.13	1.1	1.6	KEA	1.3X	147	8	
2001	AUG	9	0743	40.40	19	26.04	155	18.41	6.71	22	5	.11	.6	1.1	INT	1.1X	87	2	2001	AUG	16	1943	50.80	20	2.23	155	24.64	11.66	37	6	.12	.9	.6	KEAF	2.1X	184	18	
2001	AUG	9	1309	13.36	19	20.10	155	7.41	6.98	40	8	.11	.4	.7	SF4	1.7X	127	5	2001	AUG	16	1958	54.75	19	14.46	155	28.61	13.02	35	6	.11	.4	.7	DLS	1.7X	80	3	
2001	AUG	9	1316	6.74	19	11.47	155	20.15	46.80	32	5	.12	1.0	1.5	DEP	1.9X	174	9	2001	AUG	17	0042	1.21	19	20.51	155	6.02	8.04	29	3	.10	.6	.8	SF4	1.5X	148	6	
2001	AUG	10	1507	5.80	19	25.93	155	15.27	30.15	24	5	.12	1.2	1.1	DEP	1.4X	200	4	2001	AUG	18	0523	7.57	19	25.24	155	51.21	13.87	27	5	.13	1.1	4	KON	1.7X	176	17	
2001	AUG	10	1605	2.10	19	19.16	155	10.16	8.22	30	3	.11	.5	.8	SF3	1.6X	132	5	2001	AUG	17	0108	54.63	19	20.18	155	7.89	6.81	28	4	.11	.5	.8	SF4	1.3X	122	5	
2001	AUG	10	2214	17.58	19	12.42	155	34.98	10.96	46	10	.12	.4	.6	LSWF	4.5U	121	10	2001	AUG	18	1407	5.75	19	57.64	155	32.05	37	.72	.24	.6	.08	.9	1.0	KEA	1.7X	244	21
2001	AUG	10	2314	28.42	19	20.30	155	11.70	7.39	28	5	.09	.5	.6	SF3	1.2X	114	5	2001	AUG	18	2029	14.70	19	21.33	155	10.86	6.88	22	2	.10	.6	.7	SF3	1.2X	154	2	
2001	AUG	11	0027	38.39	19	25.96	155	18.23	14.47	35	5	.13	.5	.5	DEP	1.5X	48	2	2001	AUG	19	0016	26.68	20	2.55	155	55.26	1.23	19	1	.14	.8	1.1	KOH	1.5X	158	16	
2001	AUG	11	0139	31.29	19	19.97	155	22.97	32.59	29	5	.11	.7	1.3	DEP	1.7X	76	1	2001	AUG	19	1146	30.43	19	19.09	155	13.91	8.24	33	5	.12	.6	.7	SF2	1.4X	171	6	
2001	AUG	11	0658	52.25	19	22.98	155	14.83	5.26	18	7	.11	.6	.8	INT	1.2X	114	2	2001	AUG	19	1408	35.65	19	36.33	155	18.30	11.80	17	3	.10	.8	1.0	KEA	1.1X	176	15	
2001	AUG	11	1046	55.04	19	22.17	155	14.30	3.23	20	1	.14	.6	.4	SEC	.8X	134	2	2001	AUG	19	1449	59.38	19	21.38	155	5.89	7.31	42	11	.13	.6	.5	SF4	2.0X	175	5	
2001	AUG	11	1413	54.53	19	29.87	155	25.15	4.57	16	4	.14	.5	1.4	KAO	1.3X	122	3	2001	AUG	19	1634	52.27	19	16.04	154	57.12	4.94	22	6	.11	1.2	1.0	SLE	1.5X	250	23	
2001	AUG	12	0103	24.17	155	25.15	4.57	16	4	.14	.5	.1	.4	.5	SME	1.8X	140	2	2001	AUG	19	1728	18.05	19	24.75	155	38.32	3.14	24	6	.15	.6	.5	MLO	1.02	1	1	
2001	AUG	12	0828	13.71	19	14.65	156	3.72	29	29	7	.12	1.5	2	HUA	1.6X	285	24	2001	AUG	19	1948	13.00	19	47.38	155	33.25	12.69	29	5	.10	.7	.5	KEA	1.4X	173	22	
2001	AUG	12	2143	16.15	19	22.83	155	51.67	12.54	21	4	.10	.5	KON	1.3X	178	13	2001	AUG	20	0728	50.89	19	20.04	155	13.14	6.70	28	4	.12	.5	.1	SF2	1.0X	128	7		
2001	AUG	12	2153	11.12	19	15.40	155	24.72	12.54	10	1	.0	.7	1	KEA	1.4X	86	5	2001	AUG	20	1332	17.95	19	20.04	155	12.33	7.77	39	6	.11	.4	.5	SF2	1.0X	165	5	
2001	AUG	13	1236	43.11	19	12.34	155	27.45	15.51	20	4	.10	.1	.5	DLS	1.2X	204	7	2001	AUG	20	1508	57.94	19	21.0													

YEAR	MON	DA	HHRN	SEC	LAT N	DEPTH N	N	RMS	ERH	ERZ	LOC	PREF N	AZ	MIN
					DEG	MIN	DEG	MIN	KM	RD S	SEC KM	MAG	RD	GAP DS
2001	AUG	21	0146	41.08	19	18.63	155	13.33	8.74	37	8	.11	.4	.6 SF2
2001	AUG	21	0346	56.24	19	21.57	155	16.72	1.42	18	4	.07	.3	.6 SWR
2001	AUG	21	0530	7.84	19	21.29	155	20.29	3.16	22	4	.09	.4	.9 SWR
2001	AUG	21	1118	58.86	19	27.95	155	24.24	10.66	25	6	.09	.5	1.0 KAO
2001	AUG	21	1715	47.56	19	22.55	155	30.15	10.28	30	6	.08	.3	.6 KAO
2001	AUG	22	0055	28.87	19	12.66	155	36.84	8.05	22	1	.12	.5	1.1 LSW
2001	AUG	22	0200	6.40	19	23.49	155	30.60	9.59	31	7	.09	.3	.8 KAO
2001	AUG	22	0238	43.85	19	48.92	155	24.20	23.10	4210	10	.5	1.1 KEA	1.6X
2001	AUG	22	2131	22.02	19	21.17	155	13.11	8.23	31	6	.13	.5	.4 SF2
2001	AUG	22	2202	34.45	19	25.75	155	29.24	9.13	5015	.09	.2	.6 KAO	1.9X
2001	AUG	23	0100	56.13	19	27.61	155	25.73	8.27	19	4	.12	.4	1.2 KAO
2001	AUG	23	0128	19.91	19	17.14	155	14.85	8.63	33	9	.11	.6	.5 SF1
2001	AUG	23	0714	7.65	19	21.21	155	25.05	1.75	25	4	.14	.9	.7 SSF
2001	AUG	23	1040	16.03	19	44.01	155	26.26	7.75	23	1	.11	.4	1.0 LSW
2001	AUG	23	1530	34.57	19	30.88	155	43.03	6.75	17	3	.12	.7	1.8 KON
2001	AUG	23	1941	10.45	19	10.69	155	28.23	35.78	29	9	.10	.9	1.3 DLS
2001	AUG	23	2128	46.50	19	22.78	155	17.13	2.14	15	5	.07	.3	.2 SSC
2001	AUG	23	2211	50.66	19	19.57	155	6.46	1.75	25	4	.14	.9	.7 SSF
2001	AUG	24	0033	22.46	19	19.59	155	6.32	5.01	24	2	.11	.8	2.2 SF4
2001	AUG	24	0041	53.58	19	24.43	155	49.80	13.86	33	5	.13	.9	3. KON
2001	AUG	24	1116	42.75	19	17.36	155	28.14	10.92	5113	.14	.3	.4	1.8 LSW
2001	AUG	24	0538	2.71	19	50.89	156	5.59	42.71	43	9	.11	1.1	1.1 DIS
2001	AUG	24	0910	34.58	19	22.52	155	26.84	9.67	25	2	.10	.4	.8 KAO
2001	AUG	24	1111	49.92	19	16.59	155	24.04	14.63	23	3	.15	.5	.8 DLS
2001	AUG	24	1039	57.55	19	17.85	155	18.39	27.37	28	6	.12	.8	1.5 KEA
2001	AUG	24	1116	42.75	19	17.36	155	28.14	10.92	5113	.14	.3	.4	1.8 LSW
2001	AUG	24	1300	25.88	19	48.43	156	3.91	11.29	20	6	.11	1.8	1.1 HUA
2001	AUG	24	2356	0.09	19	11.25	155	28.51	35.09	3810	.08	.6	.6	.9 DLS
2001	AUG	25	0016	47.96	19	22.22	155	13.06	3.50	20	6	.08	.6	.4 SER
2001	AUG	25	0128	32.69	19	25.07	155	16.50	1.80	14	4	.08	.6	.3 SNCL
2001	AUG	25	0158	35.12	19	25.24	155	16.58	9.75	16	5	.13	1.0	.8 INTL
2001	AUG	25	0158	58.42	19	21.73	155	27.95	9.19	31	2	.09	.3	.7 KAO
2001	AUG	25	0215	23.59	19	18.56	155	14.28	9.64	40	5	.11	.4	.4 SF2
2001	AUG	25	0219	59.64	19	19.19	155	13.92	0.86	15	3	.11	.7	.7 SSF
2001	AUG	25	0756	19	19.06	155	16.61	6.30	24	4	.12	.6	.8 SF1	
2001	AUG	25	1520	48.88	19	18.89	155	14.29	8.49	31	6	.13	.6	.9 SF2
2001	AUG	25	2317	11.84	19	20.35	155	7.61	9.76	32	6	.08	.6	.6 SF4
2001	AUG	26	0114	2.29	19	29.42	155	28.14	6.80	3911	.11	.3	1.0 KAO	1.7X
2001	AUG	26	0402	45.69	19	11.36	155	15.25	53.21	28	5	.14	1.2 DEP	1.8X
2001	AUG	26	0858	7.11	19	21.86	155	13.23	32.66	3410	.11	.8	1.0 DEP	1.1X
2001	AUG	26	0941	28.69	19	30.24	155	29.33	4.75	21	5	.13	.4	2.1 MLO
2001	AUG	26	1348	8.92	19	14.50	155	32.83	10.38	26	5	.13	.4	1.4 LSW
2001	AUG	26	1407	54.40	19	19.17	155	29.12	9.34	28	6	.12	.4	1.0 KAO
2001	AUG	26	1419	13.97	19	21.57	155	18.43	4.25	17	4	.08	.4	1.1 SWR
2001	AUG	26	1957	12.31	19	22.46	155	10.20	2.91	26	7	.11	.3	.4 SSC
2001	AUG	26	2348	38.90	19	14.50	155	32.43	6.44	26	5	.17	.5	1.3 LSW
2001	SEP	1927	31.90	19	15.60	155	25.06	8.77	26	3	.10	.4	.8 LSW	1.1X
2001	SEP	1930	27.69	19	34.73	155	58.82	10.19	21	3	.11	.4	.6 KON	1.2X
2001	SEP	2035	11.72	19	17.04	155	47.38	10.32	33	8	.12	.3	.5 KON	1.6X
2001	SEP	2043	8.04	19	23.21	155	17.01	3.12	33	8	.12	.3	.2 SSC	2.0X
2001	SEP	2059	37.72	19	20.96	155	12.80	10.77	38	4	.11	.6	.4 SF2	2.7X

YEAR	MON	DA	HHRN	SEC	LAT N	DEPTH N	N	RMS	ERH	ERZ	LOC	PREF N	AZ	MIN
					DEG	MIN	DEG	MIN	KM	RD S	SEC KM	MAG	RD	GAP DS
2001	SEP	2	0259	18.19	19	22.36	155	11.61	7.74	32	5	.10	.5	.5 SF3
2001	SEP	2	0544	46.13	19	22.51	155	13.42	5.86	33	5	.13	.4	.5 SF2
2001	SEP	2	0624	55.85	19	19.74	155	13.49	9.01	36	7	.11	.4	.6 SF2
2001	SEP	2	0509	29.54	19	57.44	155	32.45	31.66	25	5	.11	.3	.4 KAO
2001	SEP	2	0816	39.66	19	21.05	155	12.90	7.20	40	8	.12	.5	.6 SF2
2001	SEP	2	1002	38.94	20	6.74	155	47.69	24.10	22	2	.12	.1	.2 KOH
2001	SEP	2	1136	38.52	19	20.48	155	12.37	5.41	29	3	.12	.6	.1 SF2
2001	SEP	2	1513	24.56	19	12.08	155	20.03	45.60	35	9	.11	.8	.1 DEP
2001	SEP	2	1219	14.98	19	20.07	155	12.88	7.16	42	9	.13	.5	.7 SF2
2001	SEP	2	1326	26.21	19	12.55	155	32.35	5.72	22	2	.12	.5	.8 LSW
2001	SEP	2	1802	52.81	19	19.74	155	18.81	16.01	16	5	.11	.3	.0 DEPL
2001	SEP	2	1902	1.00	19	49.45	155	37.08	10.97	22	4	.15	.8	.9 KAO
2001	SEP	2	0848	22.61	19	25.91	155	23.33	9.31	36	8	.09	.3	.8 KAO
2001	SEP	2	0856	3.47	19	20.09	155	49.35	5.45	39	9	.13	.4	.8 KON
2001	SEP	2	1602	8.05	19	54.40	155	27.49	10.19	45	9	.13	.1	.2 DIS
2001	SEP	2	0822	13.33	19	56.59	155	17.24	8.18	17	3	.15	.1	.7 KAO
2001	SEP	2	1802	52.81	19	19.74	155	6.04	6.73	23	.14	.1	.5	.0 SF4
2001	SEP	2	1902	1.00	19	49.45	155	37.08	10.97	22	4	.15	.8	.9 KAO
2001	SEP	2	2220	34.95	19	24.71	155	14.83	13.75	18	2	.13	.6	.6 DEPL
2001	SEP	2	2355	42.15	19	17.90	155	13.23	0.02	31	5	.13	.5	.4 SSF #
2001	SEP	2	0645	4.72	19	16.13	155	28.98	9.66	35	4	.13	.4	.6 LSW
2001	SEP	2	1046	26.22	19	20.02	155	4.53	5.30	27	3	.09	.8	.1 SF5
2001	SEP	2	1223	59.78	19	22.54	155	14.54	2.99	16	5	.07	.4	.3 SEC
2001	SEP	2	1248	44.00	19	25.15	155	6.57	6.51	29	4	.11	.9	.8 SF4
2001	SEP	2	1246	42.53	19	19.74	155	14.39	7.26	24	9	.11	.7	.1 SF2
2001	SEP	2	1246	44.00	19	25.15	155	26.45	4.26	27	6	.10	.3	.1 KAO
2001	SEP	2	0705	49.93	19	24.90	155	16.24	1.43	20	5	.08	.4	.2 SNCL
2001	SEP	2	0330	7.66	20	6.74	155	32.35	35.19	28	4	.12	.2	.1 KAO
2001	SEP	2	1433	4.84	19	18.45	155	14.93	6.02	29	4	.16	.8	.1 SF1
2001	SEP	2	0134	44.85	19	27.23	155	28.04	9.62	22	3	.11	.4	.1 KAO
2001	SEP	2	1552	55.65	18	46.97	155	1.02	49.69	21	2	.10	.2	.7 LOI
2001														

YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN	YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN
					DEG	MIN	DEG	MIN	KM	RD	S	SBC	KM	KM	REMARKS	MAG	RD	GAP	DS						DEG	MIN	DEG	MIN	KM	RD	S	SBC	KM	KM	REMARKS	MAG	RD	GAP	DS
2001	SEP	4	0307	47.58	19	22.85	155	19.38	30.43	5415	.12	.5	.6	DMLF	3.2X	74	4		2001	SEP	7	0502	24.11	19	20.34	155	12.62	6.62	23	3	.12	.7	.8	SF2	1.1X	185	4		
2001	SEP	4	0954	54.52	19	22.79	155	7.58	6.18	20	2	.12	.9	1.0	SF4	1.1X	178	1		2001	SEP	7	0601	36.75	19	11.94	155	26.83	8.14	14	2	.13	.9	.9	LSW	1.3X	155	5	
2001	SEP	4	1356	38.21	19	24.88	155	38.05	2.77	3810	.13	.3	.3	MLO	2.2X	99	1		2001	SEP	7	0625	37.54	19	26.88	155	29.90	11.95	17	4	.12	.6	1.3	KAO	1.0X	65	6		
2001	SEP	4	1615	44.75	19	38.66	155	28.48	27.05	20	4	.09	.7	1.2	KEA	1.8X	116	4		2001	SEP	7	0934	56.64	19	10.56	155	19.55	47.50	36	8	.11	1.0	1.3	DFP	2.0X	217	10	
2001	SEP	4	1709	1.00	19	22.47	155	2.44	8.27	22	2	.14	1.4	.5	SF5	1.1X	201	4		2001	SEP	7	1005	44.09	19	18.76	155	15.30	8.72	37	6	.13	.5	.6	SF1	1.4X	166	4	
2001	SEP	4	1740	36.71	19	15.33	155	29.49	9.17	21	2	.16	.6	1.1	LSW	1.0X	83	1		2001	SEP	7	1039	29.81	19	27.33	155	15.99	23.76	28	4	.12	.9	1.1	DEP	1.4X	106	5	
2001	SEP	4	2146	34.36	19	52.17	155	24.02	27.84	37	9	.10	.6	1.1	KEA	1.5X	182	6		2001	SEP	7	1507	37.15	19	46.11	155	43.02	18.13	45	8	.13	.6	.25	KEPF	3.3X	116	16	
2001	SEP	4	2231	13.38	19	49.94	155	42.39	47.25	24	4	.11	1.0	1.0	1.5	KEA	1.9X	219	21		2001	SEP	7	1945	7.78	19	21.85	155	8.55	7.77	40	6	.14	.6	.5	SF4	1.7X	165	3
2001	SEP	5	0239	21.22	19	24.58	155	13.84	39.48	21	5	.14	1.5	1.1	DEP	1.7X	210	4		2001	SEP	8	0237	12.58	19	19.48	155	11.67	5.29	28	4	.13	.7	1.7	SF3	1.1X	191	6	
2001	SEP	5	0421	28.63	19	16.59	155	30.17	8.38	33	5	.15	.4	.9	LSW	1.6X	54	3		2001	SEP	8	0312	10.37	19	23.55	155	15.37	3.30	16	5	.08	.4	.3	SBC	1.3X	139	2	
2001	SEP	5	0853	19.79	19	29.37	155	27.49	5.58	4110	.12	.3	1.2	KAO	2.0X	55	5		2001	SEP	8	1420	57.30	20	53.42	156	5.77	24.09	25	5	.10	1.5	2.8	DIS	2.5X	258	30		
2001	SEP	5	0916	4.79	19	27.12	155	27.93	10.13	21	4	.09	.4	1.1	KAO	1.3X	56	9		2001	SEP	8	1748	15.84	19	31.78	155	40.75	9.15	17	5	.13	.8	1.6	MLO	1.0X	170	9	
2001	SEP	5	1143	37.19	19	18.08	155	1.33	8.69	19	4	.14	1.5	.6	SF5	1.4X	292	13		2001	SEP	9	0712	12.43	19	25.65	155	28.91	11.33	22	3	.11	.5	1.0	KAO	1.6X	42	6	
2001	SEP	5	1353	8.31	19	15.81	155	22.85	3.10	21	4	.10	.4	.9	SWR	1.2X	156	3		2001	SEP	9	0751	3.38	19	19.65	155	11.82	5.56	23	2	.11	.8	1.3	SF3	1.2X	199	6	
2001	SEP	5	1419	59.35	19	16.24	155	23.14	2.04	23	6	.11	.4	.7	SWR	1.2X	136	4		2001	SEP	9	1133	23.91	19	14.89	155	32.81	7.47	36	5	.14	.4	1.0	LSW	2.2X	110	5	
2001	SEP	5	1437	46.12	19	16.14	155	23.50	3.84	32	7	.14	.3	1.0	SWR	1.6X	127	3		2001	SEP	9	1234	46.12	19	21.45	155	32.81	7.47	36	5	.14	.4	1.0	LSW	2.2X	110	5	
2001	SEP	5	1443	15.63	19	16.61	155	33.34	1.71	19	1	.15	.4	1.1	SWR	1.3X	123	3		2001	SEP	9	1323	15.63	19	21.45	155	32.81	7.47	36	5	.14	.3	.8	SWR	1.6X	64	3	
2001	SEP	5	1444	25.23	19	16.28	155	23.37	2.99	32	6	.15	.4	1.0	SWR	1.9X	129	4		2001	SEP	9	1707	25.06	19	10.00	155	32.21	32.22	39	5	.07	.6	1.2	DIS	1.9X	118	8	
2001	SEP	5	1603	42.17	19	15.43	155	33.87	3.53	17	4	.21	1.8	4.7	KEA	1.5X	223	18		2001	SEP	9	1722	58.38	19	9.17	155	32.68	35.47	27	5	.08	.8	1.3	DIS	1.4X	129	8	
2001	SEP	5	1641	10.98	19	22.80	155	24.10	12.81	21	2	.09	.5	.8	KAO	1.2X	86	5		2001	SEP	9	1839	7.06	19	25.31	155	29.47	9.57	27	3	.12	.4	1.0	KAO	1.1X	41	6	
2001	SEP	5	1714	54.20	19	29.63	155	25.92	6.05	20	5	.15	.4	1.4	KAO	1.5X	74	5		2001	SEP	9	2035	21.13	19	18.57	155	14.88	2.60	19	1	.11	1.0	1.5	SF	.9X	192	7	
2001	SEP	5	1813	47.96	19	23.73	155	19.23	10.22	22	4	.12	.7	1.0	KAOL	1.5X	62	4		2001	SEP	9	2122	29.70	20	2.00	157	23.80	6.95	27	.14	.8	15.6	DIS	-	2.6X	294131		
2001	SEP	5	1858	37.43	19	29.29	155	6.09	38.93	27	3	.11	1.2	1.2	1.7	DEP	1.4X	128	10		2001	SEP	10	0232	46.28	19	14.02	156	23.79	32.58	38	7	.13	1.2	3.4	DIS	2.1X	300	67
2001	SEP	5	2117	0.26	19	22.54	155	30.04	11.31	25	5	.12	.5	1.1	KAO	1.1X	48	4		2001	SEP	10	0822	51.42	19	20.82	155	48.39	9.30	26	5	.13	.9	.7	KON	1.5X	187	15	
2001	SEP	6	0059	44.08	19	15.97	155	23.18	3.00	17	2	.12	.5	1.0	SWR	1.2X	141	3		2001	SEP	10	1453	43.13	18	51.68	155	12.82	11.15	17	2	.13	2.1	1.2	LOT	1.9X	265	42	
2001	SEP	6	0104	20.39	19	16.24	155	23.50	3.19	18	3	.12	.4	1.0	SWR	.9X	126	4		2001	SEP	10	1501	16.92	19	12.02	155	27.02	1.57	20	2	.12	.5	1.0	LSW	1.4X	145	5	
2001	SEP	6	0105	56.07	19	15.37	155	22.87	4.97	21	3	.11	.5	1.1	SWR	1.0X	162	3		2001	SEP	10	1509	26.85	18	50.68	155	13.53	11.99	29	5	.11	.7	1.3	LOT	2.4X	293	43	
2001	SEP	6	0122	10.80	19	16.02	155	23.10	3.32	18	4	.12	.5	1.1	SWR	1.1X	143	4		2001	SEP	10	1543	56.69	19	6.95	155	26.67	45.23	21	3	.09	1.5	1.8	DIS	1.7X	285	5	
2001	SEP	6	0342	41.50	19	22.38	155	30.10	11.34	23	2	.10	.4	.9	KAO	1.3X	45	4		2001	SEP	10	1554	44.68	18	51.06	155	14.64	12.05	44	9	.11	1.2	1.4	LOT	3.2X	259	41	
2001	SEP	6	0342	57.02	19	22.17	155	30.04	11.56	22	1	.10	.5	.8	KAO	1.1X	59	4		2001	SEP	10	1601	0.80	18	52.04	155	14.53	11.95	41	7	.10	.8	.9	LOT	2.5X	255	40	
2001	SEP	6	0447	8.42	19	13.78	154	59.27	44.63	17	2	.10	2.6	2.8	DIS	1.3X	310	33		2001	SEP	10	1623	7.94	18	47.75	155	14.97	13.89	29	5	.11	4.0	6.1	LOT	2.3X	282	46	
2001	SEP	6	0447	47.48	19	25.27	155	19.06	9.02	13	4	.09	.5	1.0	KAO	1.0X	124	3		2001	SEP	10	1629	11.38	18	51.80	155	12.31	10.81	18	3	.12	1.9	1.1	LOT	2.2X	292	43	
2001	SEP	6	1248	1.83	19	19.40	155	14.83	6.93	37	8	.13	.4	.7	SFI	1.3X	163	5		2001	SEP	10	1632	9.31	18	49.29	155	14.25	11.16	19	2	.10	2.0	1.5	LOT	2.2X	279	44	
2001	SEP	6	1524	52.01	19	22.32	155	15.83	32.14	23	5	.11	.9	1.4	DEP	1.0X	108	5		2001	SEP	10	1653	1.9	155														

YEAR	MON	DA	HRMN	SEC	ORIGIN TIME (HST)				LAT N LON W DEPTH N				N RMS ERH ERZ LOC				PREF N	AZ	MIN																			
					DEG	MIN	DEG	MIN	KM	RD	S	SBC	KM	KM	RD	S	SEC	KM	KM	REMARKS	MAG	RD	GAP	DS														
2001	SEP	10	1827	30.03	18	54.34	155	16.30	13.38	24	.13	2.1	1.2	LOI	2.0X	247	35	2001	SEP	13	0814	32.04	19	20.02	1155	10.44	9.00	14.2	0.06	1.0	1.0	SF3	1.0X	218	4			
2001	SEP	10	1829	6.89	18	53.12	155	14.72	12.61	4310	.12	.9	1.0	LOI	2.9X	252	38	2001	SEP	10	1831	21.57	18	49.64	155	13.99	10.27	43	9.11	1.0	.8	LOI	2.8X	274	44			
2001	SEP	10	1832	15.12	18	48.88	155	14.18	10.53	4511	.13	1.1	1.2	LOI	3.3X	276	45	2001	SEP	10	1833	31.44	18	53.51	155	14.83	12.58	4212	.11	.8	.9	LOI	2.9X	250	37			
2001	SEP	10	1843	20.24	18	53.38	155	15.01	12.56	45	.7	.11	.9	LOI	3.2X	251	37	2001	SEP	10	1855	10.25	18	48.28	155	14.73	11.19	24	4.10	1.4	1.2	LOI	2.2X	281	45			
2001	SEP	10	1858	11.56	19	19.17	155	12.80	8.92	21	.5	.12	.8	1.1	SF2	1.5X	197	6	2001	SEP	10	1900	39.69	19	21.17	155	13.33	7.93	36	6	.13	.5	.4	SF2	1.6X	156	3	
2001	SEP	10	1918	13.91	18	51.22	155	11.86	10.39	22	.5	.13	.1.5	.9	LOI	2.0X	275	44	2001	SEP	13	1022	38.04	19	19.40	155	24.31	8.47	17	3	.10	.5	1.1	SWR	1.4U	72	2	
2001	SEP	10	1942	28.06	18	46.34	155	14.53	10.47	32	.4	.15	1.6	1.5	LOI	2.1X	285	49	2001	SEP	10	1948	11.73	18	57.65	155	20.47	20	.76	1.12	.08	3.5	4.1	LOI	1.6X	265	25	
2001	SEP	10	1958	18.84	18	55.30	155	14.22	10.50	31	.1	.11	.1.4	.7	LOI	2.0X	245	35	2001	SEP	10	1959	27.15	18	54.56	155	15.19	10.60	38	7	.12	1.1	.8	LOI	2.8X	247	35	
2001	SEP	10	2058	49.90	18	49.64	155	13.03	9.94	25	.6	.14	1.2	.9	LOI	2.0X	266	45	2001	SEP	13	2129	48.85	19	12.14	155	40.17	4.53	17	3	.13	.5	.8	2	LSW	1.1X	102	11
2001	SEP	10	2119	44.78	18	48.15	155	14.48	9.65	30	.7	.13	.1.1	.9	LOI	1.9X	271	46	2001	SEP	13	2147	0.12	19	19.40	155	12.33	5.27	21	2	.10	.8	1.5	SF2	1.2X	198	6	
2001	SEP	10	2217	43.50	19	17.26	155	18.49	32.28	25	.2	.10	.9	1.5	DEP	1.5X	162	1	2001	SEP	11	0433	28.47	18	48.35	155	15.17	11.53	18	3.09	1.5	1.1	LOI	2.7X	274	44		
2001	SEP	10	2234	57.08	18	46.47	155	18.55	7.84	29	.6	.15	1.3	.8	LOI	2.7X	275	45	2001	SEP	11	0227	53.72	19	17.25	155	6.55	40.55	17	4	.09	1.2	1.1	DEP	1.5X	215	15	
2001	SEP	11	0319	40.74	18	54.11	155	16.04	12.51	32	.7	.12	.9	.6	LOI	2.2X	247	35	2001	SEP	11	1034	14.17	18	44.94	155	10.09	8.70	21	3	.13	3.2	4.2	LOT	2.5X	291	55	
2001	SEP	11	0345	40.30	18	51.74	155	9.45	8.59	4412	.13	.9	.6	LOI	3.3X	259	46	2001	SEP	11	1314	19.76	20	11.35	156	1.43	16.07	26	2	.11	1.0	5.1	LOI	2.2X	281	45		
2001	SEP	11	0433	28.47	18	48.35	155	15.17	11.53	18	3.09	1.5	1.1	LOI	2.2X	281	45	2001	SEP	11	1728	23.37	19	20.70	155	8.20	6.26	30	5	.18	1.3	1.0	SF4	1.3X	182	7		
2001	SEP	11	1728	23.37	19	20.70	155	8.20	6.26	30	5	.18	1.3	1.0	SF4	1.5X	255	36	2001	SEP	11	2111	21.28	18	54.22	155	15.56	8.04	21	1.3	2.8	1.0	LOI	2.1X	247	35		
2001	SEP	11	2141	58.09	18	54.22	155	16.21	13.46	33	6	.13	1.0	.8	LOI	2.2X	252	35	2001	SEP	14	1920	54.27	19	22.37	155	30.03	10.25	33	.4	.07	.3	.8	KAO	1.1X	182	6	
2001	SEP	11	2141	58.09	18	54.22	155	16.21	13.46	33	6	.13	1.0	.8	LOI	2.2X	251	35	2001	SEP	14	1923	29.14	18	50.29	155	13.16	11.21	29	3	.11	.17	1.3	LOI	2.0X	265	44	
2001	SEP	11	2141	58.09	18	54.22	155	16.21	13.46	33	6	.13	1.0	.8	LOI	2.2X	250	35	2001	SEP	14	1927	19.22	24	155	30.03	10.25	33	.4	.07	.3	.8	KAO	1.1X	184	4		
2001	SEP	11	2141	58.09	18	54.22	155	16.21	13.46	33	6	.13	1.0	.8	LOI	2.2X	249	35	2001	SEP	14	1930	29.14	18	50.29	155	13.16	11.21	29	3	.11	.17	1.3	LOI	2.0X	250	34	
2001	SEP	11	2141	58.09	18	54.22	155	16.21	13.46	33	6	.13	1.0	.8	LOI	2.2X	248	35	2001	SEP	15	0011	30.34	19	22.24	155	24.40	11.98	20	1	.07	.5	.6	KAO	1.3X	187	11	
2001	SEP	11	2141	58.09	18	54.22	155	16.21	13.46	33	6	.13	1.0	.8	LOI	2.2X	247	35	2001	SEP	15	0211	14.12	19	16.79	155	6.81	41.81	4310	.11	.8	.9	.9	KAO	1.2X	187	11	
2001	SEP	11	2141	58.09	18	54.22	155	16.21	13.46	33	6	.13	1.0	.8	LOI	2.2X	246	35	2001	SEP	15	0410	41.43	19	58.98	155	24.49	12.07	32	4	.11	.8	.6	KEA	1.8X	194	12	
2001	SEP	11	2141	58.09	18	54.22	155	16.21	13.46	33	6	.13	1.0	.8	LOI	2.2X	245	35	2001	SEP	15	0611	35.74	19	27.03	155	15.18	15.54	21	3	.11	.9	.4	DEPL	1.7X	141	5	
2001	SEP	11	2141	58.09	18	54.22	155	16.21	13.46	33	6	.13	1.0	.8	LOI	2.2X	244	35	2001	SEP	15	0821	42.27	19	48.08	154	51.91	40.17	3714	.12	.8	1.3	1.3	KEA	1.8X	253	20	
2001	SEP	12	0420	54.74	19	28.31	155	26.58	5.25	26	.6	.12	.3	.2	KAO	1.3X	259	37	2001	SEP	15	0932	54.73	19	14.37	155	32.59	7.94	23	4	.19	.8	1.1	LSW	1.2X	111	5	
2001	SEP	12	0451	24.43	19	46.35	155	42.52	19	71	20	4	.15	.9	3.2	KAO	1.5X	195	17	2001	SEP	12	0454	29.13	18	52.50	155	18.37	8.84	18	2	.12	.1	.3	LOI	2.0X	279	36
2001	SEP	12	0454	29.13	18	52.50	155	18.37	8.84	18	2	.12	.1	.3	LOI	1.7X	278	36	2001	SEP	15	1022	5.43	19	12.23	155	35.01	8.55	28	7	.14	.4	.4	LSW	1.1X	89	10	
2001	SEP	12	0454	29.13	18	52.50	155	18.37	8.84	18	2	.12	.1	.3	LOI	1.7X	277	36	2001	SEP	15	1301	15.94	18	4.81	155	30.33	7.03	45	9	.15	.3	.1	LOI	2.0X	277	36	
2001	SEP	12	0454	29.13	18	52.50	155	18.37	8.84	18	2	.12	.1	.3	LOI	1.7X	276	36	2001	SEP	15	1306	19.38	19	18.41	155	33.60	8.14	33	6	.14	.4	.9	LSW	1.8X	49	6	
2001	SEP	12	1216	46.70	19	28.71	155	26.56	6.48	35	8	.12	.3	.1	KAO	1.8X	48	6	2001	SEP	15	1456	20.18	19	50.91	155	32.80	19.05	21	2	.12	.9	3.0	KEA	1.4X	115	12	
2001	SEP	12	1805	4.31	18	54.94	155	13.47	8.68	16	4	.12	1.8	.7	LOI	1.5X	284	37	2001	SEP	15	1556	27.49	19	51.50	155	32.68	23.19	22	5	.12	.7	.2	4	KEA	1.3X	119	12
2001	SEP	12	1853	26.37	18	53.49	155	12.50	20	47	11	13	.3	3.6	LOI	1.7X	259	23	2001	SEP	15	1637	39.21	19	49.99	155	15.05	10.32	29	5	.09	.9	.2	9	KEA	1.9X	188	21
2001	SEP	13	0311	45.35	18	50.61	155	15.15	11.91	35	4	1.3	1.0	1.0	LOI	4.9X	273	41	2001	SEP	16	2152	49.26	19	19.49	155	13.60	8.10	41	6	.12	.4	.6	SF2	1.6X	165	6	
2001	SEP	13	0320	11.48	18	54.51	155	14.99	13.06	22	1	.10	1.5	1.0	LOI	2.0X	252	36	2001	SEP	17	0144	28.92	19	18.59	155	13.28											

YEAR	MON	DA	HRMN	SEC	DEG	MIN	DBG	MIN	KM	RD	S	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN	YEAR	MON	DA	HRMN	SEC	DEG	MIN	DBG	MIN	KM	RD	S	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN
2001	SEP	17	2248	46.93	19	19.47	155	31.04	25.72	5317	.07	.4	.8	DML	2.6X	80	8	2001	SEP	23	0121	21.53	19	17.62	155	28.13	9.90	27	3	.14	.5	.8	LSW	2.1U	72	6			
2001	SEP	18	0732	42.36	19	12.14	155	44.78	11.67	20	6	.10	.7	.6	KON	1.3X	156	6	2001	SEP	23	0123	13.14	19	17.80	155	27.92	9.44	36	5	.13	.3	.6	LSW	1.4X	46	6		
2001	SEP	18	0739	28.81	19	126.65	155	18.48	7.51	20	6	.09	.6	.9	INT	1.3X	162	3	2001	SEP	23	0133	4.14	19	26.85	155	39.09	14.70	25	6	.11	.5	.3	DML	1.3X	99	5		
2001	SEP	18	0959	18.75	19	16.75	155	11.94	5.24	17	3	.09	1.3	3.5	SF3	1.4X	294	11	2001	SEP	23	1039	11.38	18	54.85	155	15.06	13.12	14	.08	2.3	1.1	1.0	LOI	1.9X	253	35		
2001	SEP	18	1615	16.65	19	24.30	155	17.09	1.46	19	5	.13	.4	.2	SSC	1.6X	89	1	2001	SEP	23	1154	11.56	20	1.74	155	11.90	33.95	14	.4	.07	2.1	1.6	KEA	1.6X	317	22		
2001	SEP	18	1656	37.45	19	18.62	155	14.48	5.21	18	5	.10	.8	1.8	SF2	.9X	243	6	2001	SEP	23	1736	35.61	19	21.08	155	12.16	8.74	38	5	.13	.6	.5	SF3	2.0X	159	3		
2001	SEP	18	1811	28.49	19	24.81	155	1.68	3.06	36	5	.13	.6	.8	SME	1.6X	156	4	2001	SEP	23	2016	36.71	19	27.08	155	53.10	7.36	16	3	.08	.9	.5	LER	1.9X	168	3		
2001	SEP	18	1842	47.33	19	1.55	155	21.24	18.50	15	.13	.7	3.1	LOI	1.7X	276	19	2001	SEP	23	2215	37.94	19	45.48	155	28.14	13.94	23	6	.12	.3	KEA	1.2X	281	46				
2001	SEP	18	2253	41.85	19	22.43	155	18.54	31.53	24	7	.12	.7	.9	DEP	1.5X	93	5	2001	SEP	24	0230	14.02	18	48.27	155	14.66	10.17	21	3	.07	1.4	.8	LOT	1.7X	177	4		
2001	SEP	19	0213	46.28	19	28.16	155	51.93	13.60	19	2	.12	1.9	.6	KON	1.5X	264	11	2001	SEP	24	0824	36.99	19	20.61	155	8.15	7.23	33	4	.12	.6	.7	SF4	1.4X	176	4		
2001	SEP	19	0217	20.75	19	38.82	155	39.80	12.88	16	3	.11	.6	.8	KEA	1.0X	247	19	2001	SEP	24	1458	57.05	19	48.93	155	56.67	31.18	22	4	.12	1.6	1.9	HUA	1.5X	310	18		
2001	SEP	19	0453	58.82	19	20.10	155	6.50	6.62	41	9	.11	.6	.7	SF4	1.5X	180	6	2001	SEP	24	2309	28.52	19	21.70	155	8.45	7.37	34	1	.13	.5	.5	SF4	1.8X	167	3		
2001	SEP	19	0629	40.89	19	11.53	155	35.23	5.17	31	2	.17	.5	1.4	LSW	1.7X	94	11	2001	SEP	25	0000	51.63	19	15.20	155	28.24	10.65	17	2	.09	.5	.8	LSW	1.5X	75	3		
2001	SEP	19	0738	58.89	19	53.53	90	155	47.23	19	11.22	.6	1.0	2.9	HUA	1.5X	257	24	2001	SEP	25	0818	58.27	19	23.70	155	27.10	10.17	22	5	.11	.4	.9	KAO	1.3X	66	2		
2001	SEP	19	1123	38.73	19	20.63	155	8.11	8.83	34	5	.10	.8	.7	SF4	1.9X	193	4	2001	SEP	25	1232	5.37	19	19.75	155	10.03	7.91	32	4	.10	.6	.7	SF3	1.6X	176	4		
2001	SEP	19	1320	30.23	19	19.45	155	8.48	6.63	26	3	.09	.8	.7	SF4	1.0X	222	5	2001	SEP	25	1313	11.95	19	17.07	155	27.62	12.64	19	4	.08	.5	.9	LSW	1.2X	54	6		
2001	SEP	19	1657	13.11	19	45.78	156	10.22	37.83	45	8.11	.9	1.9	HUA	2.5X	201	20	2001	SEP	25	1331	5.81	19	18.95	155	13.12	8.69	29	2	.12	.8	.9	SF2	1.9X	180	7			
2001	SEP	19	2224	0.54	19	22.66	155	8.29	20	3	.06	.6	.4	.4	SF4	2.1X	212	4	2001	SEP	25	2126	59.98	19	20.89	155	9.57	8.20	35	3	.12	.6	.7	SF3	1.4X	168	2		
2001	SEP	20	0052	20.54	19	30.34	155	0.57	41.93	31	9	.11	.8	1.0	DEP	2.9X	96	10	2001	SEP	25	2156	15.97	19	35.33	155	21.26	15.76	1.2	1.1	1.0	KON	1.8X	174	16				
2001	SEP	20	0859	17.53	19	44.66	155	24.52	19	38	28	6	.11	.8	1.5	KEA	1.5X	117	5	2001	SEP	25	2307	4.40	19	22.04	155	26.72	10.99	25	6	.11	.4	.8	KAO	1.3X	49	2	
2001	SEP	20	0942	42.75	19	28.70	155	53.54	11.97	34	5	.19	1.2	.6	KON	2.2X	214	14	2001	SEP	25	2338	4.45	19	22.48	155	25.29	12.41	8	.12	.4	.6	KAO	1.4X	35	4			
2001	SEP	20	1000	19.58	19	10.24	155	25.38	38.87	21	4	.09	1.0	1.6	DLS	1.4X	216	5	2001	SEP	25	0303	20.18	19	12.47	155	32.97	7.79	25	4	.12	.6	.9	LSW	1.2X	135	7		
2001	SEP	20	1207	24.98	19	22.71	155	3.25	7.75	20	2	.15	1.2	.7	SF5	1.4X	188	3	2001	SEP	25	0517	17.31	18	15.45	155	15.63	12.97	39	6	.09	1.1	.9	LOT	1.2X	249	36		
2001	SEP	20	1341	22.51	19	125.17	155	18.62	14.15	29	7	.08	.5	.6	DEP	1.4X	106	2	2001	SEP	25	0817	54.95	19	31.71	155	18.68	32.78	20	5	.09	.9	1.4	DEP	1.2X	135	9		
2001	SEP	20	1538	52.97	19	17.83	155	13.81	8.15	40	6	.11	.8	.8	SF2	1.2X	205	8	2001	SEP	26	0917	22.74	19	16.01	155	27.45	11.10	25	2	.09	.4	.8	LSW	1.6X	67	5		
2001	SEP	20	2032	48.03	19	26.96	155	29.68	11.46	31	6	.11	.4	.8	KAO	1.5X	46	7	2001	SEP	26	1447	57.68	19	21.63	155	30.47	12.33	22	3	.10	.4	1.4	KAO	1.4X	62	5		
2001	SEP	20	2225	26.93	19	28.28	155	26.51	6.44	21	4	.13	.4	1.6	KAO	1.9X	51	6	2001	SEP	25	2239	15.30	18	46.45	155	13.71	10.51	28	5	.12	1.4	1.5	LOT	2.2X	284	49		
2001	SEP	21	0210	39.76	20	0.26	155	55.80	8.12	17	3	.12	2.0	2.0	KOH	3.4X	324	36	2001	SEP	27	0314	58.12	19	8.18	155	30.26	10.67	6.94	14	.08	1.4	2.0	LSW	1.3X	210	2		
2001	SEP	21	0214	49.24	19	20.72	155	6.93	8.15	40	8	.13	.7	.6	SF4	1.8X	188	1	2001	SEP	27	0731	21.26	155	30.97	15.3	0.04	.04	1.4	1.0	KAO	1.2X	45	5					
2001	SEP	21	0240	32.53	19	20.04	155	6.37	6.44	23	4	.09	.7	.9	SF4	1.2X	217	6	2001	SEP	27	1149	49.76	19	23.98	155	15.81	3.12	32	6	.09	.2	.2	SEC	1.9X	67	1		
2001	SEP	21	0330	49.94	19	10.61	155	41.37	0.42	15	2	.12	.7	.6	LSW	1.8X	159	8	2001	SEP	27	1229	32.05	19	23.86	155	15.62	2.90	19	4	.08	.3	.3	SEC	1.7X	102	2		
2001	SEP	21	0817	16.23	19	20.72	155	6.65	6.71	31	6	.12	.6	.7	SF4	1.4X	192	5	2001	SEP	27	1529	38.75	19	8.93	155	36.64	11.82	23	4	.11	.6	.9	LSW	1.2X	86	15		
2001	SEP	21	0919	8.27	19	158.21	156	14.78	39.31	29	4	.13	1.2	2.2	KOH	2.1X	201	52	2001	SEP	27	2052	32.61	19	24.52	155	19.87	3.85	13	.07	.7	1.8	KAO	1.9X	81	4			
2001	SEP	21	1024	31.88	18	154.43	155	10.28	17.29	24	3	.11	1.1	1.8	LOI	-	1.8X	275	42	2001	SEP	27	2354	16.69	19	44.36	155	38.36	3.04	13	1.0	.6	2.5	KEA	1.5X	166	22		
2001	SEP	21	1813	38.94	19	6.63	155	28.17	29.56	3811	10	.6	1.0	DLS	1.6X	184	5	2001	SEP	28	0359	57.14	19	19.58	155	12.93	5.94	33	6	.14	.5	1.0	SF2	1.2X	168	6			
2001	SEP	21	2229	59.24	19	23.56	155	28.80	10.66	17	2	.10	.6	1.2	KAO	1.4X	60	3	2001	SEP	28	0404	47.94	19	49.14	156	12.40												

ORIGIN TIME (HST)												ORIGIN TIME (HST)											
YEAR	MON	DA	HRS	MIN	SEC	DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	RD	S	SEC	KM	RD	GAP	DS		
2001	SEP	29	2030	34.97	19	19.99	155	11.34	7.17	28	3	.12	.7	.8	SF3	1.0X	191	5					
2001	SEP	29	2220	21.55	19	19.41	155	6.82	7.33	30	7	.12	.8	.7	SF4	1.3X	210	7					
2001	SEP	30	0632	47.82	19	6.34	155	26.32	41.21	20	2	.10	1.2	2.3	DLS	2.7X	209	6					
2001	SEP	30	0904	51.80	19	40.80	156	8.59	35.39	39	24	3	.10	1.9	2.8	HUA	1.9X	306	44				
2001	SEP	30	2040	21.76	19	4.80	155	25.90	33.77	30	6	.09	.9	1.4	DLS	1.8X	196	9					
2001	SEP	30	2145	20.66	19	39.48	156	9.83	33.67	32	6	.12	1.3	2.3	HUA	2.0X	205	34					
2001	OCT	1	0035	44.52	19	19.28	155	13.09	8.30	27	2	.11	.7	.8	SF2	1.4X	179	6					
2001	OCT	1	1408	50.30	19	20.78	155	12.49	7.70	28	1	.13	.6	.9	SF2	1.5X	171	4					
2001	OCT	1	1446	28.20	19	16.33	155	26.49	1.14	21	.2	.15	.4	1.0	LSW	1.0X	63	3					
2001	OCT	1	1515	45.52	19	22.53	155	14.21	3.19	19	4	.06	.3	.3	SEC	1.6X	127	2					
2001	OCT	1	1521	27.75	19	19.40	155	12.87	5.88	23	6	.12	.8	1.4	SF2	1.0X	210	6					
2001	OCT	1	1633	46.19	21.61	6.60	10	41.20	4.0	.07	.4	1.0	KAO	1.9X	94	6							
2001	OCT	1	1718	44.35	19	17.62	155	33.94	11.77	18	4	.09	.6	1.1	KEA	1.2X	177	22					
2001	OCT	1	1729	33.31	19	17.44	155	22.72	35.93	23	5	.12	1.0	1.6	DEP	1.4X	120	5					
2001	OCT	1	1950	49.95	19	24.45	155	30.35	9.59	32	6	.12	.3	.9	KAO	1.4X	41	6					
2001	OCT	1	1952	42.07	19	24.48	155	30.12	10.73	21	4	.09	.4	1.0	KAO	1.3X	46						
2001	OCT	2	0420	14.40	19	20.06	155	10.54	3.25	27	5	.17	.7	1.4	SSF	1.0X	181	4					
2001	OCT	2	0524	28.63	19	28.41	155	15.71	32.38	26	7	.10	.7	1.0	DEP	1.4X	118	6					
2001	OCT	2	0604	38.71	19	23.40	155	8.40	22.34	5.45	13	.8	.5	.5	SF5	1.4X	172	3					
2001	OCT	2	1247	40.96	19	13.23	155	1.22	37.66	31	6	.11	1.1	1.0	DEP	1.5X	175	12					
2001	OCT	3	0519	32.00	19	10.87	155	26.16	35.23	19	5	.06	1.1	1.9	DLS	1.3X	185	4					
2001	OCT	3	0626	32.75	19	11.45	155	16.33	45.23	24	4	.09	1.0	1.6	DEP	1.5X	78	4					
2001	OCT	3	0910	44.11	19	0.16	155	25.65	40.76	16	2	.09	1.4	2.0	DLS	1.6X	165	7					
2001	OCT	3	1312	2.32	19	10.40	155	32.42	8.48	35	6	.14	.7	.8	LSW	1.6X	164	8					
2001	OCT	3	1356	14.26	19	15.13	155	4.53	31.82	18	2	.12	1.6	1.9	KEA	1.6X	244	17					
2001	OCT	3	1848	50.63	19	21.16	155	8.55	7.27	39	4	.13	.7	.6	SF4	2.0X	169	3					
2001	OCT	3	1938	7.85	19	22.39	155	9.57	5.90	30	4	.13	.5	.7	SF3	1.3X	145	1					
2001	OCT	3	2004	9.58	19	13.10	155	14.14	0.03	35	6	.18	.3	.4	SSF #	1.4X	165	7					
2001	OCT	3	2034	19.19	18.54	13.63	18.19	17	1.12	1.4	1.0	SF2	1.0X	215	8								
2001	OCT	4	0024	5.78	19	17.99	155	23.15	2.70	21	3	.11	.3	.7	SWR	1.0X	103	4					
2001	OCT	4	0046	4.64	19	11.90	155	27.52	0.44	17	4	.13	.4	.6	LSW	1.1X	134	4					
2001	OCT	4	0110	32.47	19	17.74	155	27.36	11.08	26	4	.13	.4	.9	LSW	1.2X	49	7					
2001	OCT	4	0339	1.79	19	18.66	155	13.06	5.47	21	3	.14	.7	2.3	SF2	1.0X	201	7					
2001	OCT	4	0524	11.81	19	1.57	155	25.24	44.30	22	3	.10	1.7	1.9	DLS	1.2X	237	15					
2001	OCT	4	1147	41.24	19	15.42	155	25.24	10.18	22	4	.14	.5	1.0	LSW	1.2X	70	3					
2001	OCT	4	1213	4.03	19	24.58	155	29.16	11.33	23	6	.09	.4	.9	KAO	1.4X	68	5					
2001	OCT	4	1731	50.28	19	23.88	155	26.30	6.72	29	4	.11	.3	.9	KAO	1.5X	37	3					
2001	OCT	4	1853	44.55	19	20.81	155	8.94	8.73	36	2	.10	.7	.6	SF4	1.9X	170	3					
2001	OCT	4	1903	56.96	19	49.49	155	53.23	32.91	22	10	.5	1.5	KEA	1.6X	106	12						
2001	OCT	4	2253	23.67	19	15.41	155	41.08	0.82	20	2	.17	.5	.9	LSW	1.5X	88	9					
2001	OCT	5	0339	5.74	19	15.14	155	17.70	1.58	35	4	.13	.5	.9	SWR	1.9X	170	5					

YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN	YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN
					DEG	MIN	DEG	MIN	KM	RD	S	BEC	KM	KM	REMARKS	MAG	RD	GAP	DS						DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	REMARKS	MAG	RD	GAP	DS
2001	OCT	11	2012	23:23	19	39.04	156	26.30	5.26	30	6	.14	1.4	2.3	DIS	1.8X	235	63		2001	OCT	17	0032	35.23	19	5.79	195	28.69	32.02	22.5	.10	1.2	1.2	DLS	1.3X	244	7		
2001	OCT	11	2042	57.02	19	28.82	155	26.66	6.21	26	6	.14	.4	1.6	KAO	1.1X	74	6		2001	OCT	17	0133	43.23	19	21.87	155	4.43	7.33	25.3	.14	.9	.7	SFS	1.0X	196	5		
2001	OCT	11	2251	45.24	19	17.64	155	13.74	6.62	21	2	.11	.8	1.7	SF2	1.0X	216	9		2001	OCT	17	0135	38.26	19	31.98	155	38.75	0.57	23.6	.13	3.1	.8	DIS	1.7X	257	93		
2001	OCT	11	2256	27.10	19	18.86	155	6.67	3.93	25	4	.12	.8	2.8	SF5	1.2X	215	8		2001	OCT	17	0240	53.65	19	16.81	155	30.63	8.15	28.4	.13	.4	1.1	LSD	1.3X	79	3		
2001	OCT	12	0046	18.21	19	21.52	155	2.47	6.01	26	3	.15	1.2	1.0	SF5	1.3X	219	6		2001	OCT	17	0703	8.78	19	16.05	155	14.97	7.85	18.3	.10	.9	.9	SF1	1.0X	225	7		
2001	OCT	12	0110	15.47	19	22.10	155	2.57	6.83	25	1	.11	1.1	.7	SF5	1.2X	198	5		2001	OCT	17	0940	1.14	19	2.73	155	22.33	34.97	20.3	.09	1.4	1.5	LOT	1.7X	275	16		
2001	OCT	12	0319	58.62	19	17.17	155	25.91	6.09	17	2	.10	.4	1.7	LSW	1.0X	64			2001	OCT	17	1043	34.84	19	13.29	155	22.89	35.93	37.8	.11	.7	1.1	DEP	1.7X	174	3		
2001	OCT	12	0352	10.91	19	20.44	155	12.32	9.86	20	2	.06	.9	.5	SF2	1.2X	179	4		2001	OCT	17	1110	9.62	19	21.83	155	18.24	27.31	31.6	.11	1.6	1.8	DEP	1.1X	97	4		
2001	OCT	12	0537	44.97	19	58.26	155	30.35	38.30	31	7	.12	.9	1.4	KEA	1.8X	175	19		2001	OCT	17	1322	50.27	19	10.30	155	28.58	35.67	27.7	.10	.8	1.4	DLS	1.4X	127	2		
2001	OCT	12	1320	44.45	19	19.33	155	10.02	6.90	27	2	.09	.6	.8	SF3	1.5X	200	5		2001	OCT	17	1924	14.52	19	23.83	155	26.77	10.04	19.5	.13	.4	1.1	KAO	1.0X	71	3		
2001	OCT	12	2334	41.27	19	27.37	155	29.71	11.44	39	7	.11	.4	.5	KAO	1.8X	48	9		2001	OCT	17	2340	45.72	19	23.02	155	30.01	10.98	22.3	.07	.4	.9	KAO	1.1X	49	4		
2001	OCT	13	0337	44.82	19	20.27	155	7.39	9.50	4813	1.1	.5	.4	.4	SF4	2.5X	172	5		2001	OCT	17	2356	26.39	19	23.12	155	10.23	2.38	11.1	.06	.8	.6	SER	1.2X	99	2		
2001	OCT	13	0338	19.14	19	20.57	155	7.80	8.30	4813	.13	.4	.4	.4	SF4	2.8X	169	5		2001	OCT	17	3040	57.87	19	29.09	155	26.54	10.05	20.4	.08	.3	.9	KAO	1.1X	78	6		
2001	OCT	13	0508	25.61	19	21.18	155	27.28	11.16	20	5	.09	.4	.8	KAO	1.2X	60	3		2001	OCT	18	0449	59.35	19	30.35	155	27.27	5.38	17.5	.11	.4	1.2	MLO	1.5X	110	3		
2001	OCT	13	0508	43.48	19	19.43	155	13.04	8.85	23	1	.11	.8	.8	SF2	1.2X	192	6		2001	OCT	18	0638	33.97	19	19.55	155	13.48	4.32	14.3	.11	.7	.7	SSP	.7X	198	6		
2001	OCT	13	0948	12.48	19	24.38	155	2.05	7.58	22	1	.10	.8	.6	SF5	1.1X	169	4		2001	OCT	18	1147	52.22	19	19.45	155	7.45	2.37	14.7	.11	.9	.7	SF3	1.3X	200	3		
2001	OCT	13	1601	14.78	19	19.65	155	10.31	7.86	31	5	.12	.7	.6	SF3	1.6X	195	5		2001	OCT	18	1348	23.30	19	25.54	155	29.58	9.87	36.6	.10	.3	.7	KAO	1.8X	41	7		
2001	OCT	13	1707	40.90	19	23.57	155	29.89	10.44	23	1	.07	.4	1.0	KAO	1.4X	45	4		2001	OCT	18	1401	45.38	19	18.39	155	3.50	41.71	24.6	.10	1.5	1.0	DEP	1.4X	296	12		
2001	OCT	13	1826	43.09	19	55.37	155	49.91	43.29	43	9	.10	.8	1.2	KOH	2.2X	146	23		2001	OCT	18	1535	3.10	19	16.85	155	34.76	5.04	29.7	.12	.3	2.4	LSW	1.3X	78	9		
2001	OCT	13	1953	12.48	19	24.38	155	2.05	7.58	22	1	.10	.8	.6	SF5	1.1X	169	4		2001	OCT	18	2238	4.28	19	11.06	155	30.73	12.59	22.5	.13	.9	.4	LSW	1.3X	201	6		
2001	OCT	14	0113	1.56	19	53.61	155	15.14	12.68	33	3	.11	1.5	1.3	LOT	2.0X	254	37		2001	OCT	18	0440	23.63	19	22.65	155	30.03	8.42	24.4	.11	.4	1.0	KAO	1.2X	48	4		
2001	OCT	14	0440	31.92	19	15.51	155	25.84	8.79	36	4	.14	.4	.9	LSW	1.7X	74	4		2001	OCT	19	0553	5.88	19	16.09	155	29.99	7.77	20.4	.20	.6	1.3	LSW	.9X	58	2		
2001	OCT	14	0504	21.98	19	22.65	155	24.41	6.72	24	2	.15	1.2	1.0	SF5	1.4X	198	4		2001	OCT	19	1128	27.98	19	17.75	155	23.54	4.72	24	.12	.5	1.8	SWR	1.2X	101	5		
2001	OCT	14	1639	19.54	19	10.18	155	10.46	13.93	23	2	.13	2.5	1.5	LOT	1.6X	273	5		2001	OCT	18	1348	18.30	19	24.19	155	2.85	5.84	19.2	.13	.8	1.0	SF5	1.3X	168	2		
2001	OCT	14	1639	35.21	19	15.27	155	17.81	32.61	19	3	.11	1.5	1.4	DEF	1.2X	225	5		2001	OCT	19	1357	7.76	19	17.89	155	22.97	3.09	17.1	.09	.4	.9	SWR	1.2U	108	4		
2001	OCT	14	0816	25.01	20	8.26	155	47.26	23.63	37	7	.11	.9	1.1	KOH	2.4X	160	1		2001	OCT	19	2027	19.09	19	18.99	155	15.05	8.41	34.5	.13	.6	.7	SFI	1.5X	165	6		
2001	OCT	14	0904	12.73	19	35.76	155	57.31	22.5	20	1.0	.17	1.7	1.0	KON	1.5X	326	22		2001	OCT	19	2350	15.35	19	23.28	155	29.74	12.98	32.5	.11	.4	.7	KAO	1.5X	45	4		
2001	OCT	14	2033	51.46	19	17.97	155	23.17	2.64	21	3	.14	.4	.9	SWR	1.1X	103	4		2001	OCT	20	0619	41.74	19	15.72	155	29.27	10.28	15.2	.10	1.4	.7	KEA	1.1X	242	17		
2001	OCT	14	2230	59.20	19	11.18	155	28.15	7.35	35	6	.15	.5	.6	LSW	1.8X	143	3		2001	OCT	20	1343	42.70	19	22.96	155	29.93	9.93	18.2	.08	.4	1.0	KAO	1.6X	79	4		
2001	OCT	15	0225	55.66	19	20.11	155	12.12	5.45	20	2	.13	.8	1.7	SF3	.9X	191	3		2001	OCT	20	1522	36.03	19	20.61	155	25.19	9.91	27.4	.12	.4	.8	KAO	1.0X	56	3		
2001	OCT	15	0249	26.72	19	18.96	155	13.15	8.05	35	3	.13	.5	.6	SF2	1.6X	169	7		2001	OCT	20	1750	18.59	19	26.41	155	21.90	9.21	27	.09	.4	.9	KAO	1.3X	64	3		
2001	OCT	15	0324	40.98	19	11.71	155	37.95	3.54	20	3	.14	.5	2.2	LSW	1.2X	87	15		2001	OCT	20	2045	16.06	19	55.21	155	48.28	14.34	21	.5	1.2	1.1	KOH	1.6X	264	26		
2001	OCT	15	1546	7.30	19	22.15	155	17.40	2.16	14	4	.10	.3	.5	SSC	1.1X	96	2		2001	OCT	20	2056	37.54	19	51.85	155	46.41	14.33	15	.10	3.2	1.4	HUA	1.5X	246	21		
2001	OCT	15	1724	16.96	19	21.04	155	11.70	6.69	29	3	.10	.6	.6	SF3	1.2X	170	4		2001	OCT	20	2225	54.42	19	12.82	155	37.35	11.33	18.3	.12	.5	1.4	LSW	1.6X	137	13		
2001	OCT	15	1830																																				

YEAR	MON	DA	HRMN	ORIGIN TIME (HST)			LAT N			LON W			DEPTH N			N			RMS			ERH			ERZ			LOC			PREF N			AZ			MIN		
				SEC	DEG	MIN	DRG	MIN	KM	RD	S	SEC	KM	RD	S	SEC	KM	RD	S	SEC	KM	RD	S	SEC	KM	RD	GAP	DS											
2001	OCT	22	1555	41.33	19	25.34	155	15.82	2.	32	10	4	.08	.9	.5	SNCL	1.9X	245	2	2001	OCT	26	1751	55.46	19	21.66	155	20.87	14.63	4410	.10	.4	.4	DEP	1.9X	63	5		
2001	OCT	22	1855	31.81	19	16.61	155	27.67	12.	05	19	4	.16	.6	1.2	LSW	.9X	114	5	2001	OCT	26	1925	13.63	19	20.66	155	11.02	7.27	32	.6	.11	.5	.5	SF3	1.2X	166	3	
2001	OCT	22	2006	55.68	19	22.16	155	41.63	29.	41	24	6	.09	.7	1.3	DML	1.2X	137	3	2001	OCT	26	1940	46.15	19	21.50	155	11.05	7.71	40	.7	.16	.7	.6	SF3	1.7X	159	2	
2001	OCT	22	2131	36.76	19	26.89	155	28.52	9.	79	24	5	.10	.3	1.1	KAO	1.1X	51	8	2001	OCT	26	2017	55.88	19	23.20	155	25.24	10.07	28	8	.10	.3	.8	KAO	.9X	56	4	
2001	OCT	23	0216	12.93	19	21.14	155	8.22	6.	87	28	5	.13	.9	.8	SF4	1.0X	180	3	2001	OCT	27	0615	16.42	19	18.92	155	30.49	7.44	28	6	.11	.3	.14	LSW	1.2X	49	7	
2001	OCT	23	0334	20.37	19	22.14	155	10.53	6.	24	19	3	.12	.8	.9	SF3	.9X	143	1	2001	OCT	27	0717	33.49	19	15.67	155	15.76	0.28	35	8	.11	.5	.3	SSP	1.4X	183	7	
2001	OCT	23	0345	43.83	19	41.22	155	13.83	40.	56	4310	.11	.6	1.1	KEA	1.9X	112	21	2001	OCT	27	0718	20.95	19	22.72	155	11.41	4.19	16	2	.13	.7	.9	SER	1.0X	123	3		
2001	OCT	23	0423	6.74	19	21.73	155	4.82	6.	53	19	3	.11	.0	.8	SF5	1.3X	211	5	2001	OCT	27	0837	29.41	18	52.99	155	13.04	7.36	20	1	.14	1.9	1.0	LOI	1.7X	262	40	
2001	OCT	23	0730	41.70	19	46.56	155	48.44	12.	45	24	1	.10	.0	.4	HUA	1.8X	165	10	2001	OCT	27	1230	6.04	19	29.09	154	53.59	0.06	26	3	.13	.3	.5	SLEP	1.8X	102	4	
2001	OCT	23	1567	22.90	19	25.65	155	20.49	6.	99	15	4	.10	.5	1.0	KAO	1.0X	100	4	2001	OCT	27	1954	42.65	19	22.98	155	14.75	3.36	19	5	.07	.4	.3	SEC	1.6X	114	2	
2001	OCT	23	1754	8.05	19	17.35	155	29.40	8.	30	24	7	.12	.4	1.0	LSW	1.2X	68	4	2001	OCT	27	2210	17.55	19	27.13	155	28.47	10.39	42	9	.08	.3	.5	KAO	2.0X	47	9	
2001	OCT	23	1869	51.56	19	17.19	155	30.65	8.	61	19	4	.14	.6	1.6	LSW	1.0X	130	1	2001	OCT	27	2210	52.33	19	50.31	155	24.22	28.11	29	1	.08	.9	1.5	KEA	1.8X	158	9	
2001	OCT	23	1831	21.35	19	22.04	155	12.71	8.	18	26	6	.13	.4	.4	SF2	1.5X	140	1	2001	OCT	27	2199	49.19	19	9.80	155	25.7	1.1	0.0	1.5	DIS	1.3X	175	5				
2001	OCT	23	2228	49.07	19	31.68	155	26.10	23.	72	38	7	.12	.6	.9	DML	1.5X	52	3	2001	OCT	27	0807	58.20	19	19.80	155	10.37	7.27	33	3	.12	.6	.7	SF3	1.5X	172	4	
2001	OCT	23	2322	14.38	19	24.92	155	39.09	3.	42	20	4	.08	.8	.6	MLO	1.1X	199	2	2001	OCT	28	0854	22.39	19	18.10	155	27.13	10.16	22	3	.10	.4	.9	LSW	1.3X	62	8	
2001	OCT	23	2338	22.98	19	23.69	155	29.45	10.	32	46	8	.10	.3	.4	KAO	3.0X	33	4	2001	OCT	28	1220	12.89	19	29.51	155	26.21	4.11	24	4	.16	.4	1.7	KAO	1.5X	71	5	
2001	OCT	24	0202	26.83	19	28.47	154	48.21	9.	18	17	5	.11	1.5	.4	LER	1.4X	291	5	2001	OCT	28	1322	17.85	19	16.85	155	28.75	10.61	41	6	.14	.4	.6	LSW	1.8X	54	4	
2001	OCT	24	0324	40.90	19	6.83	155	28.14	29.	86	4813	.09	.6	1.0	DLS	1.8X	176	5	2001	OCT	28	1757	6.25	19	21.23	155	10.80	7.40	32	5	.13	.8	.5	SF3	1.5X	176	2		
2001	OCT	24	0533	0.52	19	24.85	155	17.09	11.	23	21	7	.10	.5	.6	INTL	2.1X	81	0	2001	OCT	28	2355	37.15	19	20.50	155	11.77	7.30	23	5	.09	.4	.6	SF3	1.2X	181	4	
2001	OCT	24	1205	30.57	19	18.76	155	25.34	10.	99	20	3	.11	.5	1.1	LSW	1.1X	67	4	2001	OCT	29	0540	39.19	19	18.83	155	13.22	6.69	35	4	.13	.5	.8	SF2	1.5X	166	5	
2001	OCT	25	0015	33.73	19	14.22	155	15.47	0.02	22	5	.14	.9	.4	SF#	1.0X	216	9	2001	OCT	29	1735	27.39	19	21.24	155	10.91	6.76	21	2	.12	.7	.8	SF3	1.2X	177	2		
2001	OCT	25	0718	38.17	19	21.24	155	30.29	10.	69	20	3	.08	.4	.9	KAO	1.0X	54	5	2001	OCT	29	0824	56.07	19	30.84	155	42.22	1.25	19	5	.11	.5	.7	MLO	1.2X	102	6	
2001	OCT	25	0747	44.18	19	19.49	155	13.53	8.09	35	6	.11	.5	.8	SF2	1.5X	174	5	2001	OCT	29	0942	27.53	19	44.23	155	5.28	42.68	32	8	.11	.9	1.5	HIL	1.7X	198	29		
2001	OCT	25	2103	50.74	19	28.98	155	27.26	7.	24	16	4	.10	.4	1.5	KAO	1.1X	84	6	2001	OCT	29	0956	32.54	19	28.00	155	8.39	36.03	24	5	.11	.1	.1	DEP	1.3X	254	2	
2001	OCT	25	2344	19.86	19	46.26	155	52.29	31.	28	47	11	.10	.8	1.4	HUF	2.7X	203	31	2001	OCT	29	1324	11.30	19	13.85	155	26.03	6.38	21	4	.12	.5	.5	LSW	1.1X	127	4	
2001	OCT	25	0933	57.28	19	25.22	155	29.76	10.	34	27	6	.09	.4	1.0	KAO	1.3X	42	6	2001	OCT	29	1739	27.39	19	21.24	155	10.91	6.76	21	2	.12	.7	.8	DEP	1.2X	177	2	
2001	OCT	25	1054	16.98	19	2.56	155	23.03	32.	78	23	4	.09	1.2	1.7	LOI	1.3X	240	15	2001	OCT	30	0411	14.42	19	59.40	155	31.54	4.65	17	6	.11	.8	3.3	KEA	1.0X	180	22	
2001	OCT	25	1623	32.48	19	14.69	156	20.47	41.	69	14	.0913	0	5.7	DIS	-	1.9X	326	67	2001	OCT	30	2121	38.95	19	12.79	155	22.11	34.54	20	.10	.9	2.1	DEPT	1.7X	176	4		
2001	OCT	25	1656	8.52	19	22.96	155	25.24	10.	03	29	5	.11	.4	.8	KAO	1.6X	54	7	2001	OCT	30	0228	28.50	19	11.57	155	28.28	40.95	21	6	.10	1.1	1.4	DIS	1.2X	208	7	
2001	OCT	25	1732	14.76	19	20.75	155	13.73	7.75	21	6	.14	.8	.9	SF2	1.5X	54	7	2001	OCT	30	0259	43.47	19	17.19	155	20.51	7.66	17	4	.12	.7	.1	SWR	1.9X	164	4		
2001	OCT	25	1946	14.76	19	20.75	155	13.73	7.75	21	6	.14	.8	.9	SF2	1.5X	171	3	2001	OCT	30	0322	41.68	19	16.47	155	22.13	34.25	32	9	.12	.6	1.1	DEP	1.4X	174	5		
2001	OCT	25	2101	12.44	19	37.88	156	0.71	40.	67	20	5	.09	1.2	1.5	KON	1.3X	278	19	2001	OCT	30	0700	10.09	19	44.43	155	26.08	42.72	34	8	.08	.7	1.1	KEA	1.7X	96	5	
2001	OCT	26	0043	15.35	19	57.37	155	28.66	10.	11	25	5	.12	1.1	.4	KEA	1.3X	245	16	2001	OCT	30	2624	19	21.31	154	50.41	42.48	4611	.12	.9	.9	.9	1.3	KAO	1.9X	243	8	
2001	OCT	26	0121	43.25	19	12.04	155	29.43	33.	30	29	8	.08	.7	1.1	DLS	1.4X	84	5	2001	OCT	31	0109	13.49	19	25.9													

YEAR	MON	DA	HRVN	SEC	DEG	MIN	DBG	MIN	KM	RD	S	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN	ORIGIN TIME (HST)	LAT N	LONG W	DEPTH N	N	RMS	ERH	ERZ	LOC	PREF	N	AZ	MIN			
2001	NOV	1	0824	4.74	19	13.43	155	31.59	5.54	23	5	1.6	5.1	1.4	LSW	1.1X	116	4	2036	10.98	19	39.40	155	52.94	29.25	27	7.12	.9	1.3	HUA	1.5X	246	6		
2001	NOV	1	1152	53.54	20	1.73	155	43.00	17.20	26	5	17	1.81	7.2	KOH	-1.5X	272	39	0032	59.45	19	24.82	155	28.80	8.89	29	3.08	.3	.9	KAO	1.2X	40	5		
2001	NOV	1	1223	37.39	19	20.21	155	7.10	7.82	22	5	12	6.1	1.0	SF4	1.3X	138	5	0507	44.04	19	37.96	155	57.40	15.70	32	6	1.3	.8	KON	1.9X	264	14		
2001	NOV	1	1443	42.91	19	34.24	155	9.13	24.74	17	5	10	6.1	1.9	DEP	1.6X	76	10	0509	56.79	19	37.26	155	55.49	15.71	45	8	1.3	.7	.9	KOF	2.5X	130	11	
2001	NOV	1	1856	11.77	19	26.59	155	9.37	35.36	21	8	0.9	1.2	.9	DEP	1.2X	192	4	0512	28.44	19	23.94	155	17.14	12.67	14	4	1.8	1.2	1.3	INTL	2.2X	52	1	
2001	NOV	1	1922	15.64	19	19.76	155	11.73	7.41	32	8	.12	.4	.7	SF3	1.2X	87	5	0644	30.72	19	19.29	155	9.09	7.53	22	1.09	.5	1.0	SF4	1.2X	92	4		
2001	NOV	1	2031	43.93	20	0.28	155	44.91	8.28	23	4	.09	.8	.8	KOH	1.4X	151	14	0737	5.47	19	30.85	155	51.92	27.63	19	4	.13	.1	1.2	KOH	2.0X	177	33	
2001	NOV	1	2209	44.19	19	23.14	155	14.80	3.13	19	4	.07	.3	.3	SEC	1.6X	65	2	0241	28.73	19	18.82	155	12.96	33.50	44	8	.11	.7	.9	DEP	1.2X	96	3	
2001	NOV	2	0038	29.20	19	51.20	156	12.43	43.45	37	7	1.2	1.3	2.2	HUA	2.2X	201	43	0241	28.73	19	18.82	155	12.96	33.50	44	8	.11	.7	.9	DEP	1.2X	52	1	
2001	NOV	2	1054	57.29	19	24.37	155	17.12	9.18	28	5	.16	.5	.6	INTL	2.0X	46	1	0256	21.10	19	22.05	155	13.07	3.45	15	2	.03	.4	.4	SER	1.2X	78	5	
2001	NOV	2	0315	29.84	19	30.59	155	51.35	6.08	16	3	.14	1.0	5	1	KON	.9X	184	10	0322	18.54	19	29.00	155	28.46	7.87	29	7	.11	.3	1.1	KAO	1.3X	66	6
2001	NOV	2	0418	8.78	19	22.99	155	16.90	12.22	31	6	.10	.5	.6	INTL	1.1X	48	2	0505	16.40	19	24.46	155	17.17	11.50	22	4	.14	.6	.7	INTL	1.8X	47	1	
2001	NOV	2	0511	15.12	19	34.37	155	21.84	9.07	26	6	.13	.4	.8	MLO	1.1X	64	9	0737	5.47	19	30.85	155	51.92	27.63	19	4	.13	.1	1.2	KON	1.2X	270	11	
2001	NOV	2	0732	6.42	19	16.99	155	31.22	7.49	29	5	.15	.5	1.4	LSW	1.3X	142	4	0835	31.95	19	19.54	155	8.55	8.06	20	3	.08	.6	1.0	SF4	1.2X	124	4	
2001	NOV	2	1054	57.29	19	24.37	155	17.12	9.18	28	5	.16	.5	.6	INTL	2.0X	46	1	1101	2.83	19	28.31	155	25.90	8.01	16	4	.11	.4	1.4	KAO	1.2X	78	5	
2001	NOV	2	1152	52.42	19	10.88	155	24.64	38.89	5012	.09	.8	.9	DEP	2.2X	179	6	0430	1.04	19	24.31	155	17.77	8.07	14	3	.13	.6	1.0	INTL	1.9X	85	2		
2001	NOV	2	1456	11.60	19	12.90	155	32.63	4.90	34	8	.20	.5	2.1	LSW	1.4X	81	20	0435	6.17	19	23.18	155	14.88	2.79	18	3	.08	.3	.4	SEC	1.4X	70	2	
2001	NOV	2	1647	43.54	19	26.47	155	24.26	8.55	34	6	.13	1.1	.4	LER	2.0X	266	4	0737	6.17	19	23.18	155	14.88	2.79	18	3	.08	.4	.5	SEC	1.4X	134	2	
2001	NOV	2	2038	10.90	19	19.19	155	12.50	7.06	26	1	.09	.5	.9	SF2	1.4X	85	5	1703	49.75	19	33.83	155	57.98	37.88	20	3	.13	.1	1.5	KON	1.4X	249	19	
2001	NOV	2	2237	23.85	19	25.87	155	22.33	10.50	31	8	.09	.4	.6	KAO	1.1X	55	4	0015	16.41	19	22.05	155	4.31	7.00	29	4	.14	.6	.7	SF5	1.1X	158	4	
2001	NOV	3	0044	21.21	19	20.37	155	4.19	6.67	29	2	.15	.7	1.0	SF5	1.2X	170	7	0142	49.45	19	50.99	155	22.32	29.93	29	7	.10	.7	1.2	KEA	1.4X	144	5	
2001	NOV	3	0046	6.32	19	44.96	155	32.94	15.75	16	2	.05	.7	.8	KEA	1.4X	156	10	0415	25.18	19	23.61	155	28.21	7.38	23	1	.13	.1	.7	SF5	1.5X	182	3	
2001	NOV	3	0106	6.98	19	25.50	155	30.48	11.95	17	3	.06	.5	1.2	KAO	1.1X	68	7	0529	48.55	19	18.13	155	0.20	38.56	39	4	.11	.9	1.4	DEP	2.0X	202	13	
2001	NOV	3	0442	22.42	19	32.04	155	52.17	8.69	21	3	.12	.7	.6	KON	1.5X	205	11	0933	7.21	19	19.33	155	8.46	7.15	25	2	.11	.5	1.0	SF4	1.3X	127	4	
2001	NOV	3	0518	22.67	19	18.52	154	58.75	39.23	4510	.12	.9	1.1	LER	1.6X	206	12	1133	42.24	19	32.41	155	51.26	9.16	14	3	.12	.8	1.6	KON	1.0X	135	9		
2001	NOV	3	0737	18.04	19	49.24	155	23.24	20.53	15	3	.11	1.4	1.7	KEA	# 1.5X	151	9	1138	50.72	19	36.14	156	33.36	33.53	38	7	.13	1.5	2.8	DIS	2.4X	288	68	
2001	NOV	3	1022	32.86	19	27.01	155	27.64	10.56	21	5	.10	.4	1.2	KAO	1.1X	66	8	1433	38.28	19	22.95	155	30.61	11.53	27	4	.12	.5	1.1	KAO	1.3X	51	5	
2001	NOV	3	1239	53.85	19	24.02	155	15.96	3.18	16	4	.08	.7	.7	SSC	1.2X	77	2	1604	14.18	19	19.20	155	13.01	4.01	38	6	.13	.3	.1	SSF	1.7X	81	4	
2001	NOV	3	1601	12.76	19	15.15	16.03	16.96	3.16	16	0	.06	2.4	4.3	DEP	1.3X	215	6	1600	19.47	19	16.96	155	27.25	7.11	27	6	.15	.5	1.0	SF3	1.7X	96	4	
2001	NOV	3	1747	31.08	19	13.72	155	26.26	6.40	16	2	.15	.5	1.2	LSW	1.0X	122	4	0256	19.12	155	12.86	5.53	39	6	.14	.4	1.0	SF2	1.2X	86	4			
2001	NOV	3	1759	53.52	19	13.13	155	32.32	6.26	32	3	.14	.5	1.0	LSW	1.4X	77	5	0831	35.11	19	18.67	155	15.69	3.75	24	3	.11	.3	1.4	SSF	1.1X	104	5	
2001	NOV	3	1948	37.77	19	23.34	155	16.72	3.15	41	8	.11	.3	.2	SSC	2.2X	46	0	2031	16.38	19	17.75	155	47.40	7.39	23	6	.14	.8	2.6	KON	.9X	196	15	
2001	NOV	3	1949	22.54	19	10.33	155	41.72	9.22	19	1	.12	.6	2.4	LSW	2.0X	113	8	2031	21.19	19	19.96	155	10.83	6.33	35	6	.13	.5	.9	SF3	1.2X	88	4	
2001	NOV	3	2125	6.74	19	19.69	155	27.41	10.60	25	4	.12	.4	.6	KAO	1.2X	82	5	0256	29.31	19	10.39	155	37.90	7.06	22	4	.16	.6	1.7	LSW	1.5X	116	6	
2001	NOV	3	2158	32.27	19	12.01	155	16.20	48.62	21	4	.09	1.0	2.0	DEP	1.4X	203	10	0033	11.95	20	4.87	155	31.37	43.60	3410	.10	.9	1.1	KEA	1.7X	270	28		
2001	NOV	3	2159	5.60	19	12.21	155	17.27	47.83	34	4	.09	.7	1.3	DEP	2.0X	180	11	0439	38.66	19	18.32	155	13.96	3.99	22	4	.09	.4	.9	SSF	.8X	89	3	
2001	NOV	3	2328	8.69	19	20.78	155	6.75	5.74	29	3	.11	.5	.8	SF4	1.3X	134	5	0537	41.41	19	23.14	155	14.66	3.32	16	6	.09	.4	.4	SEC	1.3X	95	3	
2001	NOV	4	0211	3.10	19	20.16	155	13.07	5.99	23	2	.10	.5	.9	SF2	1.9X	123	1	0445	53.05	19	19.80	155	11.66	10.30	512	.11	.4	4	SF2	2.8X	88	5		
2001	NOV	4	0522	55.24	19	25.75	155	17.32	14.00	21	6	.12	.7	.6	DEPL	1.9X	123	1	0750	27.84	19	10.60	155	38.76	5.66	27	4	.12							

YEAR	MON	DA	HRMN	ORIGIN TIME (HST)				LAT N				LON W				DEPTH N				N RMS				ERH ERZ LOC				PREF N				AZ MIN						
				SEC	DEG	MIN	SEC	DEG	MIN	SEC	KM	RD	S	SEC	KM	RD	S	SEC	KM	RD	S	SEC	KM	RD	S	SEC	KM	RD	S	SEC	KM	RD	GAP	DS				
2001	NOV	9	1706	44.25	19	22.43	155	4.89	8.73	37	3	.10	.6	.4	SF5	2.2X	142	4	2001	NOV	16	0845	15.31	19	27.52	155	25.81	6.01	19	2	.10	.4	.2	KAO	1.3X	65	6	
2001	NOV	9	2040	56.05	19	20.85	155	13.18	7.87	26	1	.12	.5	.9	SF2	1.2X	62	3	2001	NOV	16	1241	44.56	19	24.20	155	20.11	1.74	18	4	.08	.3	.8	KAO	1.1X	72	5	
2001	NOV	9	2113	29.62	19	27.69	155	16.08	10.06	25	4	.10	.7	.8	INTL	2.2X	145	5	2001	NOV	16	2013	40.49	19	21.11	155	30.01	8.00	23	3	.08	.4	.2	KAO	1.3X	51	5	
2001	NOV	9	2320	5.31	19	22.55	155	4.67	7.62	39	6	.12	.4	.4	SF5	1.9X	142	3	2001	NOV	16	2313	46.24	19	24.47	155	17.25	10.78	15	3	.08	.6	.8	INTL	2.1X	80	2	
2001	NOV	10	0504	26.47	19	24.84	155	19.12	6.01	16	4	.07	.6	1.2	KAO	1.1X	106	3	2001	NOV	17	0005	46.24	19	8.64	155	10.21	37.69	22	4	.10	1.7	1.2	IOI	1.4X	283	16	
2001	NOV	10	0626	20.82	19	19.93	155	16.80	7.23	27	4	.11	.4	.8	SF1	1.3X	90	5	2001	NOV	17	0012	35.73	19	21.40	155	29.93	8.98	36	8	.11	.3	.9	KAO	1.2X	39	5	
2001	NOV	10	1058	44.20	19	29.97	155	15.56	19.29	19	3	.09	.1.3	.9	DEPL	2.4X	194	9	2001	NOV	17	0142	8.52	19	20.21	155	7.00	5.44	22	4	.10	.6	1.3	SF4	.9X	142	6	
2001	NOV	10	1307	58.03	19	47.92	155	47.11	21	78	18	2	.14	1.3	2.9	HUA	1.2X	232	14	2001	NOV	17	0409	24.38	19	45.94	155	25.79	22.54	22	6	.13	1.1	1.2	KEA	1.3X	226	3
2001	NOV	10	2339	37.10	19	16.63	155	7.32	40.90	4811	.11	.8	.9	DEP	2.2X	187	2	2001	NOV	17	0542	54.89	19	20.99	155	5.69	4.78	28	3	.16	.6	2.4	SSF	1.2X	154	6		
2001	NOV	11	0330	0.23	19	25.02	155	15.81	11.20	25	3	.12	.7	.5	INTL	2.3X	116	2	2001	NOV	17	1458	20.10	19	14.01	155	26.32	6.68	25	6	.14	.4	1.2	LSW	.9X	118	4	
2001	NOV	11	0756	4.53	19	11.75	155	27.85	10.34	23	3	.08	.5	.6	LSW	1.9U	129	4	2001	NOV	17	1909	26.11	19	31.54	155	22.06	1.72	12	2	.10	.5	1.0	MLO	.9X	199	4	
2001	NOV	11	1248	34.50	19	27.42	155	13.43	36.12	37	6	.12	.6	1.1	DEP	1.8X	51	8	2001	NOV	17	2123	47.52	19	22.04	155	30.30	10.64	24	4	.13	.5	1.1	KAO	1.0X	37	4	
2001	NOV	11	1309	31.93	19	38.49	155	15.10	14.58	15	1.0	.14	.5	1.1	KON	1.5X	121	5	2001	NOV	19	0335	31.05	19	20.04	155	9.09	8.28	17	.05	.5	.9	SF4	1.2X	96	4		
2001	NOV	11	1454	34.30	19	18.70	155	13.14	6.76	34	5	.11	.5	1.0	SF2	1.6X	86	3	2001	NOV	18	0740	54.69	19	20.68	155	8.18	7.31	27	3	.11	.4	.9	SF4	1.0X	113	4	
2001	NOV	11	1714	30.20	19	25.38	155	17.28	8.57	19	3	.11	.6	.5	INTL	2.0X	119	1	2001	NOV	18	1143	10.57	19	33.04	155	37.16	10.45	20	2	.13	.8	.9	MLO	1.4X	172	4	
2001	NOV	12	0033	47.69	21	18.18	156	19.39	32.94	9	1	.04	.5	.5	SF1	2.2X	319	63	2001	NOV	18	2004	32.63	19	5.22	155	6.06	36.77	34	7	.11	.2	1.9	IOI	1.9X	250	23	
2001	NOV	12	1125	29.03	19	20.38	155	7.03	7.67	49	8	.12	.5	.5	SF4	2.5X	133	6	2001	NOV	18	2005	44.14	19	20.60	155	10.92	6.32	21	2	.12	1.0	1.3	SF3	1.0X	179	5	
2001	NOV	12	1136	49.31	19	22.64	155	19.60	0.03	21	4	.10	.3	.4	KAO#	2.0X	65	5	2001	NOV	19	17237	31.31	19	24.38	155	15.30	15.5	13	.08	.5	.9	SF4	1.6X	115	1		
2001	NOV	12	1353	19.77	20	49.52	156	50.06	6.53	14	.06	1.1	.6	1.1	SF2	1.6X	316	48	2001	NOV	19	0119	24.38	19	15.34	155	31.52	31.03	16	1	.06	.9	3.0	DUS	1.2X	97	3	
2001	NOV	13	0231	22.34	19	24.79	155	16.11	12.38	20	3	.10	.6	.7	INTL	2.1X	106	2	2001	NOV	19	0121	43.94	19	26.44	155	17.35	9.99	16	4	.11	.7	.9	INTL	2.4X	133	2	
2001	NOV	13	1258	19.88	19	20.83	155	13.10	7.93	36	5	.09	.4	.5	SF2	1.2X	61	3	2001	NOV	19	2105	43.82	19	20.25	155	7.35	7.74	32	5	.10	.4	.6	SF4	1.3X	128	5	
2001	NOV	13	1584	54.38	19	14.68	155	4.10	47.59	5412	.12	.8	.9	DEP	2.9X	203	8	2001	NOV	19	0705	15.23	19	20.66	155	10.03	6.77	23	3	.11	.5	.8	SF3	1.2X	93	3		
2001	NOV	13	1593	27.37	19	25.32	155	16.83	9.93	23	5	.09	.5	.6	INTL	1.9X	111	1	2001	NOV	19	1220	50.43	19	44.94	155	25.15	29.04	16	5	.08	.7	1.5	KEA	1.2X	139	17	
2001	NOV	13	1595	42.52	19	21.50	155	15.25	15.43	15	2	.07	.6	.1	SWR	1.2X	70	2	2001	NOV	19	1249	49.19	19	21.50	155	15.54	24.36	15	3	.13	.4	.7	SF1	1.8X	92	4	
2001	NOV	13	1738	13.08	19	23.67	155	15.24	2.91	13	5	.09	.4	.7	SEC	1.1X	169	2	2001	NOV	19	1612	59.15	19	12.41	155	37.81	2.09	26	4	.18	.5	.2	LSW	1.3X	90	14	
2001	NOV	13	2258	19.88	19	20.83	155	13.10	7.93	36	5	.09	.4	.5	SF2	1.2X	61	3	2001	NOV	19	2105	43.82	19	20.25	155	7.35	7.74	32	5	.10	.4	.6	SF4	1.3X	128	5	
2001	NOV	14	0056	6.48	19	19.50	155	11.98	7.36	22	2	.10	.5	.9	SF3	1.2X	91	5	2001	NOV	20	0439	2.71	19	30.71	155	55.52	12.59	33	7	.11	.8	.5	KON	2.0X	228	21	
2001	NOV	14	0133	30.58	19	24.76	155	20.68	2.11	22	5	.09	.3	.8	KAO	1.2X	77	5	2001	NOV	20	0536	56.73	19	17.92	155	13.76	4.39	17	.11	.5	1.1	SSP	1.1X	76	2		
2001	NOV	14	0945	15.01	19	23.62	155	15.29	4.35	14	4	.20	.6	.8	SECL	1.9X	157	2	2001	NOV	20	0714	28.11	19	22.36	155	29.44	8.87	20	1	.10	.4	.9	KAO	1.6X	44	3	
2001	NOV	14	2206	28.25	19	20.70	155	13.26	7.94	25	2	.12	.5	.8	SF2	1.4X	61	4	2001	NOV	20	0941	47.23	19	17.73	155	13.54	5.15	29	7	.10	.4	.7	SF2	1.3X	80	1	
2001	NOV	15	0127	22.17	19	21.81	155	4.34	6.93	23	3	.13	.7	.8	SF5	1.2X	160	5	2001	NOV	20	1118	29.60	19	19.63	155	13.03	5.78	29	3	.11	.4	1.0	SF2	1.4X	75	5	
2001	NOV	15	0517	19.76	155	12.96	7.77	25	2	.12	.5	.7	.7	.8	SF2	1.0X	63	3	2001	NOV	20	1534	15.96	19	29.46	154	50.87	3.45	11	.09	.2	7	1.7	SIE	1.3X	159	1	
2001	NOV	15	0529	56.69	19	23.63	155	17.03	2.06	6	.09	.12	.5	.7	SSC	1.4X	60	3	2001	NOV	20	1621	19.58	19	16.64	155	13.16	12.49	19	.11	.2	.3	.8	LOI	1.9X	251	35	
2001	NOV	15	1037	45.31	19	20.82	155	9.98	6.56	24	2	.11	.5	1.0	SF3	1.0X	94	2	2001	NOV	20	1736	24.97	19	14.93	155	33.05	10.12	20	4	.13	.5	1.1	LSW	1.1X	112	5	
2001	NOV																																					

YEAR	MON	DA	ORIGIN TIME (HST)		LAT N		LON W		DEPTH N		RMS		ERR		BRZ		LOC		PREF N	AZ	MIN
			HRMN	SBC	DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	REMKs	MAG	RD	GAP	DS		
2001	NOV	21	2151	56.39	19	25.78	155	15.97	2.37	19	5	.11	.4	.5	SNC	1.9X	125	2			
2001	NOV	21	2311	59.70	19	36.08	155	18.96	12.11	21	4	.13	.6	1.0	KAO	1.4X	105	14			
2001	NOV	21	2325	6.11	19	20.39	155	19.13	2.76	21	5	.11	.3	.9	SWR	1.3X	54	5			
2001	NOV	22	0226	11.55	19	17.91	155	30.37	9.18	23	3	.13	.4	.9	LSW	1.2X	65	5			
2001	NOV	22	0259	14.15	19	24.65	155	19.05	8.28	17	4	.11	.6	1.4	KAO	1.1X	99	3			
2001	NOV	22	1826	1.87	19	20.17	155	10.80	6.97	18	1	.09	.6	1.1	SF3	1.0X	93	4			
2001	NOV	22	2128	1.89	19	25.83	155	13.70	28.09	42	6	.10	.5	.8	DEP	1.6X	65	6			
2001	NOV	23	0003	58.51	19	9.69	155	26.42	31.03	42	9	.07	.6	1.0	DLS	1.5X	165	3			
2001	NOV	23	0454	52.44	19	32.83	155	44.60	3.58	15	3	.11	.7	2.2	KON	1.2X	119	5			
2001	NOV	23	0641	20.55	19	13.73	155	36.29	7.56	25	8	.13	.4	2.2	LSW	1.1X	88	11			
2001	NOV	23	0718	54.62	20	13.34	155	25.66	38.18	27	4	.10	1.0	2.1	KEA	1.7X	202	38			
2001	NOV	23	0809	10.40	19	18.48	155	15.32	7.73	23	7	.09	.4	.7	SF1	1.0X	115	4			
2001	NOV	23	0845	47.46	19	33.07	155	38.33	8.00	30	7	.11	.6	1.1	MLO	1.4X	172	8			
2001	NOV	23	0854	11.31	19	18.75	155	45.57	45.57	43	8	.10	.7	1.1	DEP	2.0X	180	10			
2001	NOV	23	1419	45.10	19	26.98	155	28.79	13.21	19	5	.12	.6	1.3	DML	1.3X	77	8			
2001	NOV	23	1811	47.42	19	24.90	155	19.57	3.35	17	4	.09	.6	1.1	KAO	1.0X	96	4			
2001	NOV	24	0011	17.53	19	27.16	155	29.11	10.59	18	3	.10	.6	1.4	KAO	.9X	76	6			
2001	NOV	24	0329	31.43	19	13.14	155	20.94	46.29	7.9	.12	.7	1.1	DEP	1.6X	161	6				
2001	NOV	24	0413	15.36	19	26.76	155	29.13	10.74	18	5	.10	.4	1.1	KAO	1.0X	82	8			
2001	NOV	24	0630	40.09	18	56.18	155	12.96	13.09	19	1	.10	1.9	1.0	LOT	1.7X	249	36			
2001	NOV	24	1109	14.88	19	1.34	155	23.40	41.02	23	6	.12	1.3	1.4	LOT	1.3X	166	23			
2001	NOV	24	1220	21.51	19	23.86	155	28.84	10.19	18	4	.10	.5	1.0	KAO	.9X	98	3			
2001	NOV	24	1237	19.70	19	11.99	155	31.36	5.75	21	6	.17	.9	1.7	LSW	1.1X	198	6			
2001	NOV	24	1349	13.38	19	45.35	155	20.91	13.23	23	5	.12	.4	.3	KEA	1.3X	98	12			
2001	NOV	24	1400	41.76	19	23.96	155	28.84	10.46	20	4	.10	.5	1.0	KAO	1.2X	103	3			
2001	NOV	24	2019	38.31	19	13.20	155	32.48	5.90	38	5	.13	.4	1.3	LSW	2.1X	77	5			
2001	NOV	24	2119	21.90	19	20.41	155	19.85	34.18	33	7	.13	.7	1.2	DEP	1.5X	60	6			
2001	NOV	24	2146	17.17	19	26.47	155	14.15	26.6	26	4	.10	.5	1.0	SNC1	2.0X	196	6			
2001	NOV	24	2158	37.80	19	12.13	155	26.43	38.90	28	7	.11	.8	1.1	DLS	1.3X	140	5			
2001	NOV	24	2205	1.63	19	23.53	155	18.72	7.56	14	4	.15	.8	1.1	INTL	1.5X	93	4			
2001	NOV	25	0101	24.02	19	9.65	155	32.87	48.43	19	.11	.6	1.6	3.6	DLST	1.6X	178	9			
2001	NOV	25	0113	12.28	19	10.01	155	33.78	52.06	35	8	.16	.8	1.3	DLS	1.6X	113	10			
2001	NOV	25	0631	26.61	19	11.96	155	39.71	4.83	25	6	.14	.4	4.8	LSW	1.4X	96	12			
2001	NOV	25	1357	47.19	19	23.78	155	16.81	3.36	15	3	.07	.6	.3	SSC	1.3X	77	0			

99

YEAR	MON	DA	HRMN	SEC	LAT N			LON W			DEPTH N			RMS ERH			ERZ LOC			PREF N	AZ	MN																	
					DEG	MIN	SEC	DEG	MIN	SEC	KM	RD	S	SEC	KM	RD	S	SEC	KM	RD	REMKs	MAG	RD	GAP	DS														
2001	NOV	30	1226	37.61	19	23.74	155	2.54	7.86	25.3	13	.6	.6	SF5	1.4X	150	3	2001	DEC	8	0650	8.90	19	28.41	154	53.62	2.61	19	2.10	.4	.6	SLEF	2.1X	118	3				
2001	NOV	30	1638	41.38	19	16.76	155	28.67	8.84	45.8	15	.4	.7	LSW	1.9X	55	4	2001	DEC	8	1200	47.78	19	24.54	155	16.89	10	80	23	5	.10	.6	INTL	2.3X	77	1			
2001	NOV	30	1720	51.43	19	21.77	155	19.10	28.80	36	5	.12	.7	1.0	DEP	1.9X	40	4	2001	DEC	8	1604	4.00	19	27.44	155	20.53	34	34	25	.11	2.0	1.3	DML	2.7X	125	0		
2001	NOV	30	1736	6.49	19	16.60	155	28.76	10.43	25	3	.13	.5	1.1	LSW	1.4X	74	4	2001	DEC	8	1605	5.83	19	27.77	155	15.20	7	31	22	.1	.11	.5	1.1	INTL	2.2X	138	6	
2001	NOV	30	1928	9.06	20	1.22	155	30.17	3.67	19	1.11	.1.1	2.0	KEA	1.8X	215	27	2001	DEC	8	1631	51.30	19	23.84	155	17.64	11	59	12	.2	.12	1.5	1.1	INTL	1.9X	135	2		
2001	NOV	30	2109	11.76	19	26.27	155	15.54	4.37	25	4	.12	.4	.9	SNCL	2.0X	131	4	2001	DEC	8	1633	17.64	19	24.55	155	16.74	9	76	12	.3	.07	1.1	.8	INTL	1.9X	120	1	
2001	NOV	30	2119	3.36	19	43.60	155	46.54	18.85	17	3	.12	.1.4	2.1	HUA	1.4X	236	8	2001	DEC	8	1635	44.66	19	22.52	155	19.21	8	03	13	.4	.10	1.2	1.5	KAO	2.0X	188	4	
2001	DEC	1	0127	8.02	19	12.42	155	26.55	38.87	24	4	.09	.1.0	1.7	DLS	1.5X	135	6	2001	DEC	8	1640	31.80	19	23.94	155	16.80	9	85	11	.3	.07	1.1	.1	INTL	2.3X	139	0	
2001	DEC	1	0444	13.94	18	54.04	155	12.63	1.69	20	4	.12	.1.9	.7	LOI	1.6X	281	39	2001	DEC	8	1644	1.61	19	24.32	155	17.14	7	35	18	.4	.09	.6	.6	INTL	2.2X	51	1	
2001	DEC	1	1014	11.46	19	19.43	155	7.74	6.92	21	4	.08	.5	.9	SF4	1.0X	151	4	2001	DEC	8	1645	54.15	19	24.05	155	16.78	12	89	19	.5	.16	.7	.9	INTL	2.1X	71	0	
2001	DEC	1	1309	59.09	19	27.35	155	26.04	2.82	13	.4	.13	.4	1.4	KAO	1.2X	64	7	2001	DEC	8	1905	54.40	18	55.67	155	14.64	11	33	41	.0	.13	.9	.4	LOI	2.2X	244	34	
2001	DEC	1	1524	59.38	19	30.54	155	4.45	13.22	32	.8	.15	.5	.7	DEP	1.6X	114	10	2001	DEC	9	0111	22.89	19	29.08	155	42.90	0	81	24	.6	.14	.4	.6	MLO	1.3X	109	6	
2001	DEC	1	2341	28.48	19	21.98	155	4.47	5.75	27	.4	.12	.5	1.0	SF5	1.4X	155	47	2001	DEC	9	0116	24.27	19	19.77	155	7.75	8	24	20	.3	.08	.5	.9	SF4	1.4X	128	4	
2001	DEC	2	0007	52.73	19	25.00	155	17.07	5.90	25	9	.12	.3	.4	INTL	2.0X	85	0	2001	DEC	9	0140	46.27	21	20.99	157	14.46	0	91	33	.8	.12	.2	.2	DIS	3.2X	216	80	
2001	DEC	2	0816	53.68	19	24.92	155	38.84	3.69	17	.4	.14	.8	2.3	MLO	1.8X	188	6	2001	DEC	9	0649	24.10	19	24.87	154	57.88	3	98	14	.1	.09	1.5	.5	SLE	1.5X	190	2	
2001	DEC	2	0828	44.45	19	14.26	155	20.95	29.75	22	.6	.10	.9	1.2	DEP	1.5X	160	5	2001	DEC	9	0819	58.35	19	17.55	155	12.97	6	48	34	.8	.13	.4	.8	SF2	1.4X	130	1	
2001	DEC	2	1751	3.41	19	25.40	155	15.78	5.97	17	.4	.12	.5	.6	INTL	2.3X	120	1	2001	DEC	9	0931	25.42	19	23.52	155	15.32	2	73	15	.5	.09	.3	.4	SEC	1.2X	139	2	
2001	DEC	2	2023	9.87	19	29.51	155	28.85	6.75	37	.6	.10	.3	1.0	KAO	2.2X	64	5	2001	DEC	9	0936	1.09	19	25.27	155	16.38	6	80	12	.5	.13	2.6	.9	INTL	2.2X	231	1	
2001	DEC	2	2143	23.90	19	27.83	155	24.03	9.70	26	7	.09	.4	1.0	KAO	1.4X	75	4	2001	DEC	9	0941	16.64	19	23.36	155	15.06	3	75	28	.11	.3	.4	SEC	2.1X	92	2		
2001	DEC	3	0349	21.18	20	1.82	155	30.04	6.07	27	.7	.14	.8	8	KEA	1.7X	215	28	2001	DEC	9	0942	27.43	19	30.85	155	15.09	3	38	46	.9	.11	.3	.3	SEC	2.8X	43	2	
2001	DEC	4	0136	18.63	19	27.17	155	14.99	11.36	12	.5	.11	.3	.9	INTL	2.2X	229	5	2001	DEC	9	2054	30.78	19	23.43	155	18.34	16	35	16	.3	.08	.9	.8	DEP	1.3X	121	2	
2001	DEC	4	1232	10.76	19	15.67	155	15.16	7.08	27	.3	.09	.6	.9	SF1	1.8X	203	4	2001	DEC	9	0949	39.66	19	24.31	155	16.11	1	42	10	.3	.06	.4	.4	SEC	1.8X	172	1	
2001	DEC	4	2214	2.78	19	19.43	155	10.86	6.18	25	.2	.10	.5	1.2	SF3	1.3X	100	5	2001	DEC	9	0954	58.34	19	24.31	155	15.32	2	73	15	.5	.09	.3	.4	SEC	1.8X	173	1	
2001	DEC	5	0212	7.36	19	17.50	155	30.42	8.86	23	.5	.14	.4	.8	LSW	1.2X	68	4	2001	DEC	9	1519	55.19	19	26.19	155	16.07	1	20	13	.6	.07	.4	.4	INTL	1.8X	172	2	
2001	DEC	5	0416	42.92	19	2.31	155	27.27	37.67	17	.7	.10	.1.5	2.1	DLS	1.2X	264	13	2001	DEC	9	1705	13.15	19	22.28	155	10.79	4	72	36	.6	.12	.4	.7	SER	2.0X	261	8	
2001	DEC	5	0621	52.83	19	13.76	155	25.02	8.98	26	1	.10	.4	.6	LSW	1.4X	125	4	2001	DEC	9	2344	6.38	19	24.27	155	19.25	0	15	14	.3	.14	.4	.4	KAO	.9X	104	4	
2001	DEC	5	1314	9.84	19	59.91	155	32.35	6.13	20	.5	.13	.7	.9	KEA	1.6X	180	24	2001	DEC	9	2333	37.14	19	25.56	155	17.27	10	57	19	.3	.12	1.1	1.3	INT	1.3X	203	1	
2001	DEC	5	1841	44.45	19	23.12	155	15.14	6.64	2.86	3	.8	.12	.2	.3	SEC	2.1X	78	3	2001	DEC	10	0010	19.09	19	23.28	155	17.74	7	90	18	.5	.13	.9	.14	INT	1.4X	123	2
2001	DEC	5	2123	35.06	19	20.90	155	19.05	1.41	19	.7	.08	.3	.5	SWR	.9X	89	5	2001	DEC	10	0414	25.31	19	24.72	155	15.87	15	17	18	.5	.08	.9	.4	DEP	1.5X	249	2	
2001	DEC	6	0113	36.56	19	16.56	155	7.32	6.60	27	.2	.13	.9	.6	SF4	1.1X	217	2	2001	DEC	10	0532	44.87	19	24.84	155	16.63	13	46	22	.4	.11	.6	.5	DEP	1.7X	189	1	
2001	DEC	6	1600	41.00	19	16.23	155	30.92	10.21	30	.4	.17	.4	.8	LSW	1.3X	57	3	2001	DEC	10	0748	42.29	19	24.21	155	16.71	10	96	16	.3	.10	.1.2	.4	INT	1.5X	192	2	
2001	DEC	6	1911	10.68	19	19.48	155	11.80	6.01	25	.4	.09	.4	1.1	SF3	1.2X	93	5	2001	DEC	10	0836	45.20	19	48.44	156	3.41	30	82	14	.3	.14	2.0	3.2	HUA	1.6X	259	26	
2001	DEC	6	2045	32.73	19	26.08	155	18.54	1.77	18	.4	.12	.3	.5	SNC	1.5X	129	3	2001	DEC	10	1103	51.06	19	23.04	155	14.88	3	21	15	.4	.08	.3	.5	SEC	1.4X	70	2	
2001	DEC	7	1156	15.21	19	28.16	155	26.98	7.15	3	.8	.11	.3	1.0	KAO	1.5X	47	7	2001	DEC	10	1631	56.58	19	45.48	155	30.77	10	79	17	.2	.11	.4	.8	KEA	1.5X	186	17	
2001	DEC	7	1302	25.08	19	24.80	155	15.08	8.56	25	.14	.8	.5	.1	INTL	2.2X	115	2	2001	DEC	10	1647	53.84	19	44.89	155	31.43	11	66	14	.2								

YEAR	MON	DA	HHRN	SEC	DEG	MIN	LAT N	LONG W	DEPTH N	N	RMS	ERH	ERZ	LOC	PREF N	AZ	MIN		
					KM	RD	S	KM	KM	RD	S	SEC	KM	KM	REMARKS	MAG	RD	GAP	DS
2001	DEC	11	1313	14.36	19	10.70	155	27.72	5.97	17	2	.11	.7	.9	LSW	1.4X	138	2	
2001	DEC	11	1923	16.43	19	18.76	155	12.94	5.09	35	6	.11	.3	1.0	SF2	1.3X	91	3	
2001	DEC	12	0055	13.33	19	20.32	155	6.78	6.92	35	6	.11	.5	.8	SF4	1.5X	144	4	
2001	DEC	12	0152	3.19	19	13.02	155	34.87	6.02	19	5	.11	.5	2.2	LSW	1.3X	134	6	
2001	DEC	12	0533	40.92	20	44.76	155	27.34	3.64	22	3	.09	2.4	2.4	DIS	2.6X	248	88	
2001	DEC	12	1147	39.22	19	10.07	155	40.69	3.43	33	5	.19	.6	2.0	LSW	1.8X	86	9	
2001	DEC	12	1159	55.84	19	22.04	155	47.72	7.96	27	2	.11	.6	.8	SF5	1.4X	153	4	
2001	DEC	12	2105	59.92	19	18.91	155	9.58	2.42	16	3	.11	.4	.8	SF5	1.1X	108	4	
2001	DEC	12	2216	46.61	19	44.48	156	6.56	45.83	17	4	.08	1.6	1.8	HUA	1.7X	221	44	
2001	DEC	13	0612	25.61	19	27.32	155	14.06	31.07	4810	.12	.6	.8	DEP	2.1X	71	7		
2001	DEC	13	1036	7.84	19	19.05	155	11.88	6.17	26	6	.10	.4	1.0	SF3	1.5X	103	5	
2001	DEC	13	1413	44.50	19	17.99	155	13.26	8.11	32	5	.12	.5	.5	SF2	1.7X	95	2	
2001	DEC	14	0034	52.93	19	20.30	155	8.80	7.23	31	7	.12	.4	.7	SF4	1.5X	101	4	
2001	DEC	14	0803	43.40	19	18.77	155	15.50	6.32	21	5	.08	.4	1.3	SF1	1.3X	110	5	
2001	DEC	14	1545	31.05	19	17.05	155	24.15	34.54	4311	.10	.6	.9	DEP	2.3X	116	6		
2001	DEC	14	1637	8.82	19	39.13	156	2.64	45.78	3110	.10	1.1	1.6	HUA	2.0X	284	33		
2001	DEC	14	1726	48.59	19	24.94	155	19.23	7.57	14	4	.09	.9	1.4	KAO	1.1X	111	3	
2001	DEC	14	1751	6.95	19	23.12	155	10.34	43.67	9	.12	.7	.8	DEP	2.0X	70	2		
2001	DEC	15	0012	19.72	19	27.89	155	51.62	8.00	22	4	.19	1.0	1.0	KON	1.3X	202	11	
2001	DEC	15	0112	26.28	19	19.65	155	11.89	6.49	36	8	.11	.4	.6	SF3	1.5X	89	6	
2001	DEC	15	0240	15.91	19	23.57	155	55.70	9.57	18	3	.19	1.7	1.0	KON	1.4X	266	21	
2001	DEC	15	1055	46.36	19	17.19	155	24.31	38.15	19	3	.12	1.3	1.5	DEP	1.2X	156	5	
2001	DEC	15	1443	11.88	19	18.80	155	11.66	6.58	38	6	.13	.4	.6	SF3	2.1X	113	5	
2001	DEC	16	0252	14.54	19	24.07	155	29.32	10.53	22	4	.11	.5	1.0	KAO	1.2X	42	4	
2001	DEC	16	0543	55.18	19	10.97	155	26.59	47.92	18	3	.08	1.4	2.2	DLST	2.1X	201	8	
2001	DEC	16	1446	29.13	19	11.89	155	41.62	6.22	22	3	.19	.7	4.7	LSW	1.9X	131	9	
2001	DEC	16	1829	28.39	19	29.17	155	1.38	46.66	35	7	.11	.8	1.0	DEP	1.8X	101	1	
2001	DEC	16	1921	34.84	20	2.13	155	28.99	1.24	3	.09	3	.1	1.6	KEA	1.5X	302	28	
2001	DEC	16	1922	26.54	20	1.48	155	29.89	6.18	16	4	.10	.9	.7	KEA	1.7X	284	27	
2001	DEC	16	1927	46.97	20	0.30	155	30.36	4.49	13	3	.11	1.1	1.7	KEA	1.3X	299	25	
2001	DEC	17	0050	6.41	19	59.38	155	30.95	5.27	35	6	.10	.6	.8	KEA	2.3X	181	32	
2001	DEC	17	0347	53.05	19	19.79	155	8.58	7.95	29	4	.11	.4	.7	SF4	1.8X	106	5	
2001	DEC	17	1347	49.44	19	21.53	155	17.69	21.16	23	6	.10	.7	1.0	DEP	1.3X	87	3	
2001	DEC	17	1316	46.57	18	52.25	156	25.26	41.03	38	5	.10	1.5	2.3	DIS	2.7X	313	76	
2001	DEC	17	2200	32.71	19	21.96	155	4.98	5.74	18	1	.12	.6	1.4	SF5	1.2X	151	5	
2001	DEC	17	1654	40.28	19	11.93	155	30.97	4.28	19	1	.13	.8	2.4	LSW	1.2X	189	6	
2001	DEC	18	0604	32.13	19	56.20	155	32.59	31.33	23	5	.11	1.5	1.6	KEA	1.4X	283	19	
2001	DEC	18	0827	26.95	19	20.65	155	8.65	5.98	35	7	.13	.5	1.0	SF4	1.4X	123	5	
2001	DEC	18	0851	57.12	19	26.30	155	29.39	4.42	40	8	.12	.3	.9	KAO	1.7X	42	8	
2001	DEC	18	1109	57.96	19	19.42	155	8.85	5.09	23	5	.08	4	1.3	SF4	1.0X	115	4	
2001	DEC	18	1654	40.28	19	11.93	155	30.97	4.28	19	1	.13	.8	2.4	LSW	1.2X	2001	21	
2001	DEC	18	1840	31.20	19	20.25	155	7.29	5.73	38	7	.12	.4	.7	SF4	1.5X	134	5	
2001	DEC	19	0332	37.45	19	25.47	155	14.67	1.47	14	6	.09	.3	.8	SNC	1.2X	150	4	
2001	DEC	19	0632	27.38	19	12.39	156	16.78	9.31	18	2	.10	7	21.0	0 KON	-	1.5X	304	54
2001	DEC	19	0849	1.18	19	22.95	155	14.87	3.30	26	5	.11	.3	.4	SEC	1.9X	66	2	
2001	DEC	19	1031	19	23.29	155	14.72	3.40	11	3	.06	.5	.6	SEC	1.9X	106	3		

YEAR	MON	DA	HRMN	SEC	ORIGIN TIME (HST)			LAT N			LON W			DEPTH N			N RMS			ERH ERZ LOC			PREF N	AZ	MIN											
					DEG	MIN	DRG	KM	RD	S	SEC	KM	KM	REMKs	MAG	RD	GAP	DS	YEAR	MON	DA	HRMN	SEC	DEG	MIN	DRG	KM	RD	S	SEC	KM	KM	REMKs	MAG	RD	GAP
2001	DEC	23	0043	50-24	19	24-48	155	29-93	10-44	40	7	.09	.3	.6 KAO	1.8X	34	5		2001	DEC	27	0627	32-67	19	50-30	155	39-67	9-83	13-4	.09	1.1	.9 KEA	1-4X	273	25	
2001	DEC	23	0343	10-23	19	21-12	155	17-03	0-83	16	2	.09	.3	.6 SWR	1.4X	72	3		2001	DEC	27	0710	28-22	19	48-80	155	50-45	5-82	15-2	.08	.7	1-2 HUA	1-4U	191	14	
2001	DEC	23	0406	17-28	19	15-30	155	26-23	9-78	20	2	.07	.5	.6 LSW	1.1X	82	4		2001	DEC	27	0745	34-02	19	26-25	155	30-65	12-08	24-4	.09	.4	1-2 KAO	1-4X	62	5	
2001	DEC	23	0519	8-93	19	32-58	155	53-78	10-24	17	3	.19	1-8	.7 KON	1.1X	218	14		2001	DEC	27	1040	16-83	19	46-12	155	39-77	11-08	21-3	.15	1-3	.6 KEA	1-4X	227	26	
2001	DEC	23	0551	40-21	19	15-44	155	27-19	9-87	25	3	.12	.4	.8 LSW	1.6X	77	5		2001	DEC	27	1239	12-18	19	20-46	155	4-82	4-60	35-6	.13	.6	1-4 SSF	1-7X	163	7	
2001	DEC	23	0639	6-85	19	22-17	155	11-18	3-37	17	2	.08	.6	.5 SER	1.7X	127	2		2001	DEC	27	1650	57-07	19	21-03	155	6-31	8-89	30-5	.08	.4	.5 SF4	1-7X	138	5	
2001	DEC	23	0914	17-21	20	4-33	156	11-74	4-88	22	3	.17	1-1	2-1 KOH	2.0X	190	44		2001	DEC	28	0331	10-74	19	20-06	155	13-33	4-82	21-2	.13	.4	1-5 SSF	1-0X	66	5	
2001	DEC	23	1223	10-61	19	24-48	155	16-61	1-31	16	6	.12	.5	.2 SSC	1.5X	160	1		2001	DEC	28	0400	8-66	19	20-45	155	7-44	7-20	26-4	.08	.4	.6 SF4	1-2X	129	5	
2001	DEC	23	1311	49-23	19	33-21	155	38-38	13-38	18	5	.13	.9	1-5 DML	1.2X	180	6		2001	DEC	28	1211	53-81	19	19-15	154	59-95	37-06	14-3	.08	1-5	.9 LER	.9X	246	11	
2001	DEC	23	1638	25-08	19	23-17	155	16-97	3-01	37	7	.11	.3	.3 SSC	2.1X	37	0		2001	DEC	28	1813	31-10	19	21-28	155	30-49	9-39	32-4	.12	.4	.9 KAO	1-5X	55	6	
2001	DEC	23	1919	3-31	19	58-60	155	27-74	13-97	17	2	.13	2-9	5-5 KEA	1.4X	252	41		2001	DEC	28	2043	0-31	19	24-18	155	27-21	4-18	21-2	.11	.4	1-1 KAO	1-3X	61	3	
2001	DEC	23	2011	37-27	19	18-81	155	13-15	9-52	36	4	.12	.5	.6 SF2	1.8X	131	7		2001	DEC	28	2044	49-62	19	19-83	155	9-94	6-44	37-4	.13	.5	.9 SF3	1-8X	89	4	
2001	DEC	23	2233	21-29	19	25-85	155	31-51	7-91	44	1	.16	.4	.7 LSWP	1.8X	80	8		2001	DEC	28	2114	6-98	19	21-95	155	4-67	6-96	17-1	.12	.7	.1 SF5	1-3X	155	5	
2001	DEC	24	0106	10-74	19	14-58	155	34-66	8-38	28	3	.13	.4	1-3 LSW	1.8X	80	8		2001	DEC	28	2235	1-97	20	19-86	155	33-36	10-86	14-3	.15	.8	91-16 KEA	-1-6X	323	51	
2001	DEC	24	1126	45-98	19	21-18	155	16-34	1-88	15	5	.07	.3	.4 KOA	1.3X	84	2		2001	DEC	29	0320	5-44	19	19-07	155	10-07	6-15	18-2	.07	.5	1-4 SF3	1-4X	108	5	
2001	DEC	24	1332	54-38	19	31-87	155	3-10	43-34	38	7	.10	.8	1-2 DEP	2.0X	113	14		2001	DEC	29	1048	2-22	19	29-41	155	35-42	1-80	9	1-12	.8	.6 MLO	1-7X	110	1	
2001	DEC	24	1341	12-81	19	24-51	155	15-48	14-33	13	1	.12	1-9	.9 DEP	1.1X	245	2		2001	DEC	29	1234	5-70	20	4-96	155	38-95	33-65	15-4	.10	1-4	2-2 KOH	1-5X	292	39	
2001	DEC	24	1406	0-29	19	18-70	155	1-80	32-49	23	2	.11	1-9	2-2 DEP	1.3X	218	11		2001	DEC	29	1313	25-17	19	24-42	155	28-03	10-69	18-3	.09	.5	.9 KAO	1-5X	67	4	
2001	DEC	24	1496	14-41	19	9-17	155	39-02	2-69	14	1	.13	.6	2-7 LSW	1.0X	97	12		2001	DEC	29	2246	13-11	19	11-44	155	26-43	36-34	3-6	.11	1-4	2-3 DIS	2-4X	303	71	
2001	DEC	24	2316	12-69	20	1-27	155	29-44	7-17	17	2	.10	1-2	.9 KEA	1.8X	234	27		2001	DEC	30	0252	48-57	19	27-60	155	29-01	10-48	17-3	.09	.5	1-4 KAO	1-6X	70	8	
2001	DEC	25	0055	7-30	19	20-18	155	50-96	12-07	28	4	.12	1-1	.6 KON	1.9X	205	19		2001	DEC	30	0317	4-54	19	26-49	155	28-79	10-68	16-3	.10	.6	1-5 KAO	1-1X	85	8	
2001	DEC	25	0104	45-75	19	22-59	155	14-16	3-59	12	4	.04	.6	.5 SEC	1.4X	137	2		2001	DEC	30	1027	6-64	19	12-40	155	28-61	7-36	31-9	.16	.5	1-3 LSW	1-5X	144	6	
2001	DEC	25	0437	55-49	19	19-63	155	15-66	7-53	21	1	.08	.5	.8 SF4	1.5X	155	5		2001	DEC	30	2027	28-27	19	32-34	155	57-50	13-11	13-2	.13	.2	.9 KON	1-1X	318	21	
2001	DEC	25	0820	12-28	19	21-05	155	16-02	1-07	22	5	.09	.2	.3 KOA	1.7X	71	3		2001	DEC	30	2212	22-05	19	28-46	155	57-44	10-22	12-2	.07	.1	.7 KON	1-0X	320	21	
2001	DEC	25	0830	17-81	19	24-02	155	26-49	10-05	41	6	.09	.3	.6 KAO	1.9X	33	3		2001	DEC	31	0038	54-68	19	19-81	155	12-79	4-81	28-3	.13	.4	1-7 SSF	1-1X	76	5	
2001	DEC	25	0945	42-90	20	3-26	156	37-88	7-53	19	7	.17	1-5	2-5 DIS	3.2X	239	79		2001	DEC	31	0104	3-28	19	15-54	155	10-04	40-21	3-9	.10	.9	1-3 KEA	2-1X	267	27	
2001	DEC	25	1007	55-90	19	13-88	155	29-28	8-44	16	1	.11	.5	1-0 LSW	1.1X	92	3		2001	DEC	31	0719	46-17	19	22-20	155	14-94	3-01	12-3	.10	.5	.4 SEC	1-3X	126	2	
2001	DEC	25	1552	8-02	19	22-49	155	14-18	3-07	15	4	.06	.3	.3 SEC	1.4X	130	2		2001	DEC	31	1425	29-22	19	18-32	155	17-92	44-64	20-6	.09	1-7	1-0 DEP	1-2X	129	1	
2001	DEC	25	1655	12-28	19	34-81	155	0-55	42-97	44	13	.06	.9	.6 HIL	2.0X	202	16		2001	DEC	31	1509	57-13	19	32-08	155	42-73	9-94	20-4	.14	1-3	1-2 MLO	1-3X	265	13	
2001	DEC	25	1932	9-40	20	47-41	155	55-72	5-96	15	3	.14	.9	4-12.8 DIS	-1.6X	343	122		2001	DEC	31	1807	7-03	19	10-27	155	31-11	6-74	25-7	.12	.6	1-6 LSW	1-4X	219	6	
2001	DEC	25	2154	59-01	19	23-72	155	54-22	12-99	18	2	.10	.6	KON	1.4X	299	19		2001	DEC	31	2203	24-92	19	20-81	155	6-58	6-78	37	6	.12	.5	.6 SF4	2-3X	136	5
2001	DEC	25	2216	38-56	19	58-60	155	35-05	44-75	40	7	.10	.9	1-2 KOH	1.9X	167	25		2001	DEC	31	2204	10-07	26	4-17	155	10-07	4-07	2-1	.08	.5	1-2 HUA	1-4X	267	25	
2001	DEC	26	0118	26-88	19	25-45	155	14-86	2-36	17	5	.09	.3	.7 SNC	1.4X	168	4		2001	DEC	31	2205	10-07	26	4-17	155	10-07	4-07	2-1	.08	.5	1-2 HUA	1-4X	267	25	
2001	DEC	26	0420	18-47	19	18-47	155	14-05	5-78	41	7	.14	.3	1-2 LSW	1.9X	49	6		2001	DEC	31	2206	10-07	26	4-17	155	10-07	4-07	2-1	.08	.5	1-2 HUA	1-4X	267	25	
2001	DEC	26	0443	58-38	19	34-67	155	45-58	0-64	16	3	.10	.4	.6 KON	1.3X	141	8		2001	DEC	31	2207	10-07	26	4-17	155	10-07	4-07	2-1	.08	.5	1-2 HUA	1-4X	267	25	
2001	DEC	26	0453	40-38	20	25-33	155	59-42	24-73	40																										

Table 5.

YEAR	MON	DA	HRSN	SEC	LAT N DEG	LON W DEG	DEPTH KM	N RD S	N SEC	RMS KM	ERH ERZ LOC	PREF KM REMKS	MAG	N RD	AZ GAP	MIN DS
2001	JAN	2	0654	48.77	19 45.40	155 33.79	14.71	42	7	.12	.4	.4 KEAF	3.2X	112	11	
2001	JAN	9	2236	26.91	19 46.87	155 22.74	27.22	44	8	.11	.6	1.2 KEAF	3.3X	162	8	
2001	FEB	15	2153	55.69	19 30.13	155 24.54	23.71	5111		.11	.4	.7 DML	3.2X	51	2	
2001	FEB	16	1743	55.49	19 29.67	155 24.82	24.19	50	9	.11	.4	.7 DMLF	3.3X	51	3	
2001	FEB	19	0200	30.59	19 16.04	155 7.01	43.76	43	8	.12	.9	1.0 DEP	3.2X	190	3	
2001	FEB	20	1317	53.36	19 23.57	155 14.99	3.42	4610		.11	.3	.3 SECF	3.8U	82	2	
2001	APR	15	1309	39.21	19 57.20	157 38.36	0.01	4411		.11	5.7	1.4 DIS #	3.2X	299157		
2001	APR	16	0418	1.57	19 47.31	155 32.43	23.84	49	8	.11	.4	1.2 KEAF	3.3X	94	9	
2001	APR	25	1737	39.35	19 25.44	155 18.28	6.34	45	5	.11	.3	.5 INTF	4.4U	37	1	
2001	APR	25	1819	24.80	19 25.48	155 18.30	6.22	46	7	.11	.3	.4 INTF	4.0U	37	1	
2001	MAY	9	0433	56.80	19 56.43	155 55.27	15.09	50	7	.11	.6	1.1 KOHF	3.0X	152	26	
2001	MAY	31	0802	0.36	19 21.28	155 15.53	26.64	5110		.12	.5	.6 DEPF	3.1X	67	2	
2001	MAY	31	2126	37.82	19 5.07	155 22.13	34.36	4710		.10	.8	1.1 LOIF	3.3X	199	17	
2001	JUN	1	2016	42.29	19 15.64	155 27.14	10.76	44	7	.13	.4	.4 LSWF	3.8U	138	5	
2001	JUN	17	2059	38.09	19 48.30	156 9.91	35.97	50	8	.11	.8	1.2 HUA	3.2X	196	22	
2001	JUL	21	0801	7.85	18 53.65	155 15.84	12.54	42	6	.11	1.0	1.3 LOI	3.4X	265	41	
2001	AUG	10	2214	17.58	19 12.42	155 34.98	10.96	4610		.12	.4	.6 LSWF	4.5U	121	10	
2001	SEP	4	0307	47.58	19 22.85	155 19.38	30.43	5415		.12	.5	.6 DMLF	3.2X	74	4	
2001	SEP	7	1507	37.15	19 46.11	155 43.02	18.13	45	8	.13	.6	2.5 KEAF	3.3X	116	16	
2001	SEP	10	1409	21.54	18 52.60	155 15.66	12.97	40	3	.12	1.3	1.5 LOIF	4.7U	253	38	
2001	SEP	10	1433	6.31	18 53.28	155 15.01	12.55	45	9	.11	.9	1.0 LOI	3.0X	251	37	
2001	SEP	10	1554	44.68	18 51.06	155 14.64	12.05	44	9	.11	1.2	1.4 LOI	3.2X	259	41	
2001	SEP	10	1832	15.12	18 48.88	155 14.18	10.53	4511		.13	1.1	1.2 LOI	3.3X	276	45	
2001	SEP	10	1843	20.24	18 53.38	155 15.01	12.56	45	7	.11	.9	.9 LOI	3.2X	251	37	
2001	SEP	11	0345	40.30	18 51.74	155 9.45	8.59	4412		.13	.9	.6 LOI	3.3X	259	46	
2001	SEP	13	0311	45.35	18 50.61	155 15.15	11.91	35	4	.12	1.3	1.3 LOIF	4.9U	273	41	
2001	SEP	13	0839	54.17	18 52.92	155 12.12	9.86	41	6	.16	1.5	1.1 LOI	4.4U	254	41	
2001	OCT	23	2338	22.98	19 23.69	155 29.45	10.32	46	8	.10	.3	.4 KAOF	3.0X	33	4	
2001	NOV	30	1128	28.42	19 59.45	155 32.92	7.01	4910		.14	.6	.7 KEAF	3.0X	134	24	
2001	DEC	9	0140	46.27	21 20.99	157 14.46	0.91	33	8	.12	2.2	.2 DIS	3.2X	216	80	
2001	DEC	23	2233	21.29	19 8.85	155 39.51	7.91	4411		.16	.4	.7 LSWF	3.0X	97	11	
2001	DEC	25	0945	42.90	20 3.26	156 37.88	7.53	19	7	.17	1.5	2.5 DIS	3.2X	239	79	