



Hawaiian Volcano Observatory Summary 102; Part I, Seismic Data, January to December 2002

by Jennifer S. Nakata

Chronological Summary
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Open-File Report 03-132

2003

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

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* Left in 2002

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 most 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 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 by Klein and Koyanagi (1980)¹ tabulating instrumentation, calibration, and recording history of each seismic station in the network. 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 2002
by

C. Heliker, T. Orr, and R. Hoblitt

Statistics

Lava covered 9.6 km² in 2002, 6.9 km² of which was virgin, vegetated land. The total area covered by lava since 1983 is 112.1 km², and the volume of lava is approximately 2.4 km³ (dense rock equivalent). For the latest statistics, refer to table G-2.

No pauses in magma supply to the Pu'u 'O'o flank vent(s) occurred in 2002 (table G-3). In addition to the Mother's Day event, however, several other events perturbed the eruption. Three tilt events that were local to Pu'u 'O'o triggered increased activity in the crater and shield area, as did a surge-style event initiated at the summit on April 5–6.

Whole-rock MgO showed no significant change throughout 2002. Eruption temperatures showed more scatter—mainly because of frequent changes in sampling sites and methods through the year—but no consistent trends.

Flows, rootless shields, and hornitos

The tube/flow system that began after a pause in December 2000 finally broke down in January 2002. During this two-year interval, a stable tube led from the flank vent(s) on the southwest side of Pu'u 'O'o cone to the top of Pulama pali, producing a series of overlapping surface flows that were mapped as a single expanding unit through January 2002 (see December 2001–January 2002 report).

The upper reaches of this tube persisted into 2002, but the flow activity began to change significantly in early December 2001, when persistent breakouts began between the 2,300- and 2,000-ft elevations. Within a month, the lower half of the tube system, which included two main branches feeding ocean entries at East Kupapa'u and Kamoamoa, was stagnating. Concurrently, the breakouts high on the tube grew in number and output, and, by the end of March, eight rootless shields formed a continuous ridge, 2.7 km long and up to 1.5 km wide, between the 2,250- and 2,000-ft elevations (fig. G-6). Several pahoehoe breakout areas developed at the lower end of the rootless shield field—on both the Kamoamoa and Ocean entry tubes—that were not quite shields but failed to produce any long flows.

This was the longest of only two periods of rootless-shield building during this eruption. The first, in September–November 1999, seemed to be occur in response to irregular lava supply through the tubes due to a succession of eruptive pauses. The 2002 crop of shields, however, is more puzzling. First, we don't know what caused the lower part of the tube system to atrophy. The magma supply apparently waned during this period (see Geophysics section, February–March 2003 report), but a prolonged and well-documented period of reduced supply during 1991 did not produce rootless shields.

Hornitos are another piece of the rootless shield puzzle. A fantastic crop formed in the first three months of 2002—more than the sum total of the previous 19 years of eruption—and these were by far the largest specimens, with several in the 8-to-12-m-high bracket. Both the hornitos and the rootless shields require a full tube to form, a condition that was met during January–March 2002. Then the lower end of the tube had stagnated, and the breakouts that built the rootless shields, even though fluid pahoehoe, did not flow long or far enough from their source to form new tubes.

The rootless shield activity declined during the last half of April. Between April 25 and April 30, two substantial flows (HALP and Boundary, fig. G-6) had struck out from the line of rootless shields and advanced rapidly to the southeast, both progressing more than 2 km within a few days. This resumption of "normal" flow behavior was relatively abrupt and did not correspond to a long-term change in lava flux (see Geophysics section, April–May 2002 report). It may have been triggered by a short-term increase in flux associated with the April 23–24 tilt event, local to Pu'u 'O'o, which caused 10 mrad of inflation at POC, followed by gradual deflation that continued until about April 28. This event initiated several days of heightened activity in the crater of Pu'u 'O'o that ended late on April 27.

The HALP flow soon entered the remains of the Royal Gardens subdivision and in late May claimed the only structure of 2002, a long-abandoned house on Ekaha Street. The HALP flow continued its advance through Royal Gardens until June 14 and stagnated completely by July 5. The Boundary flow was active through August 19, though activity was much diminished after the Mother's Day flow began (see below). The tube that fed these flows was declared dead at the end of August 2002 (see Geophysics section, August–September 2002 report).

Mother's Day flow

On May 12, the Mother's Day flow broke out on the west flank of the episode 50–55 shield (fig. G-5 and G-6) as the POC tiltmeter recorded more than 18 microradians of deflation. The summit also responded to this event but lagged behind POC and recorded only about 2 microradians at UWE. GPS data show that the active magmatic system of Kilauea, from the summit down the east rift zone to at least Pu'u 'O'o, began to inflate sometime between mid-November 2001 and January 2002, which may have been the reason for the decline in lava flux early in 2002. The rate of inflation at the summit and on the east rift zone did not immediately turn over after May 12, as we might have expected if the Mother's Day breakout represented magma stored in the rift zone. Instead, the rate of inflation slowed after May 12, flattened in June, and finally turned over in July.

Initially, a line of steam plumes headed upslope from the source of the Mother's Day flow toward the 55 cone/pit–Puka Nui area (fig. G-5). VLF measurements taken by Jim Kauahikaua on May 17 over the steaming area suggested that a shallow tube was feeding the source. Subsequent VLF measurements farther upslope, however, failed to find an active tube that could be traced upslope to known flank vents in the West Gap or Puka Nui areas. Probably the Mother's Day flow is fed by a new flank vent that intercepted an old (early episode 55) tube in the shield.

The new flow advanced down the west margin of the flow field, sparking forest fires and reaching the ocean at West Highcastle on July 19. The subsequent ocean entries are listed in table G-4 and shown on fig. G-2. The Mother's Day flow continued through the end of 2002.

Pu'u 'O'o crater

On January 22, a small tilt event recorded only on POC initiated the first crater activity of the year, and flows repaved the inner trough on the crater floor with pahoehoe. During February, the inner trough slowly filled, with small flows contributed by most of the vents shown in fig. G-5. In the last week of February, lava overflowed the trough, and by the end of March, only a thin slice of the old 1999 terrace was still visible below the West Gap. Crater activity surged during the two tilt events in April, producing a lava pond at the east end of the crater, fed mainly by the East Pond and January vents.

By the end of April, the crater floor had risen to within 12 m of the east rim, and the top of the highest cone, at the East Pond vent, was only 3.7 m below the east rim. In May, the crater activity diminished to a few bouts of spattering. Thereafter, only a single short lava flow, on July 2, was active in the crater for the remainder of the year.

West Gap

On March 8, a new spatter cone, perched halfway up the southeast wall of the 55 cone/pit (fig. G-5), was intermittently feeding a thin stream of pahoehoe that ran down to the bottom of the pit. At the end of March, a new pad of pahoehoe floored the West Gap Pit, the first activity in this pit since 2001. At the same time, an active lava pond filled the 55 cone/pit to within 10 m of its low northwest rim. The new pond waxed and waned through mid-April and was briefly rejuvenated during the Mothers' Day event, when it overtopped its east and north rims. By May 17, it was inactive and remained so for the rest of the year.

On April 11, the spatter cone that hugs the west wall of the West Gap Pit fed flows that formed a pond a few meters deep. Several hours later, the pond drained, then partially refilled. By the following day, it was inactive. A 10-m-high hornito formed over the spatter cone in the West Gap pit in May, probably on Mother's Day.

Puka Nui

Puka Nui hosted a small lava pond within an inner collapse pit for a week in March, then lapsed into inactivity until the surge of April 6, which produced the first overflow from Puka Nui since late 1999. The new flow extended about 800 m to the south-southeast. Three small spatter cones formed inside Puka Nui at this time, all along the trace of the cone-shield contact (fig. G-5). By mid-April, a larger spatter cone had formed near the center of Puka Nui; this cone appeared to be the source of the flows that continued to issue from Puka Nui through mid-May. The last activity probably occurred on May 12; by the following week the flows were stagnant.

Table C-1. Eruption Statistics**Areas**

Total area covered by lava, 3/83–12/31/02: **112.1 km²** (43.3 mi²)

Episode	Area originally covered	Area exposed, 12/31/02
1–48b (mostly Pu'u 'O'o)	42.0 km ²	17.3 km ²
48 (Kupaianaha)	41.0	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	8.4
54 (in & NE of Napau Crater)	0.24	0.24
55 (Pu'u 'O'o flank vents)	46.6	46.6
New (vegetated) territory covered in 2002: 6.9 km²		

Net total of new land created, Nov 86–Dec. 2002: **225 hectares** (561 acres)**#**

Net new land created during 2002: **~12.8 hectares** (31.6 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 through 12/02. Approximately: **2.4 km³** (dense rock equivalent)

Episodes 1–48b (1/83 - 6/86)	$391 \times 10^6 \text{ m}^3$
Episode 48 (7/86–2/92)	$500 \times 10^6 \text{ m}^3$
Episode 49 (11/91)	$11 \times 10^6 \text{ m}^3$
Episode 50 (2/92–3/92)	$4.5 \times 10^6 \text{ m}^3$
Episode 51–52 (3/92–2/93)	$78 \times 10^6 \text{ m}^3$
Episode 53 (2/93–1/97)	$535 \times 10^6 \text{ m}^3$
Episode 54 (1/97)	$0.3 \times 10^6 \text{ m}^3$
Episode 55 (2/97– ongoing)	$833 \times 10^6 \text{ m}^3$

Other fascinating facts

Height of Pu'u 'O'o cone: **~187 m** (613 ft). Cone has lost **~68 m** (223 ft) to collapse since 1986

Dimensions of Pu'u 'O'o crater: **~250 m x 400 m** (820 x 1312)

Depth of Pu'u 'O'o crater floor below east rim, Dec 2002: **~12 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:

~15–35 m (33–115 ft) over Chain of Craters Rd/Hwy 130

Highway covered by lava flows from this eruption: **13.7 km** (8.5 mi)

Structures destroyed

Structures destroyed in 2002: **1** (upper Royal Gardens)

Total structures destroyed since 1983: **189**

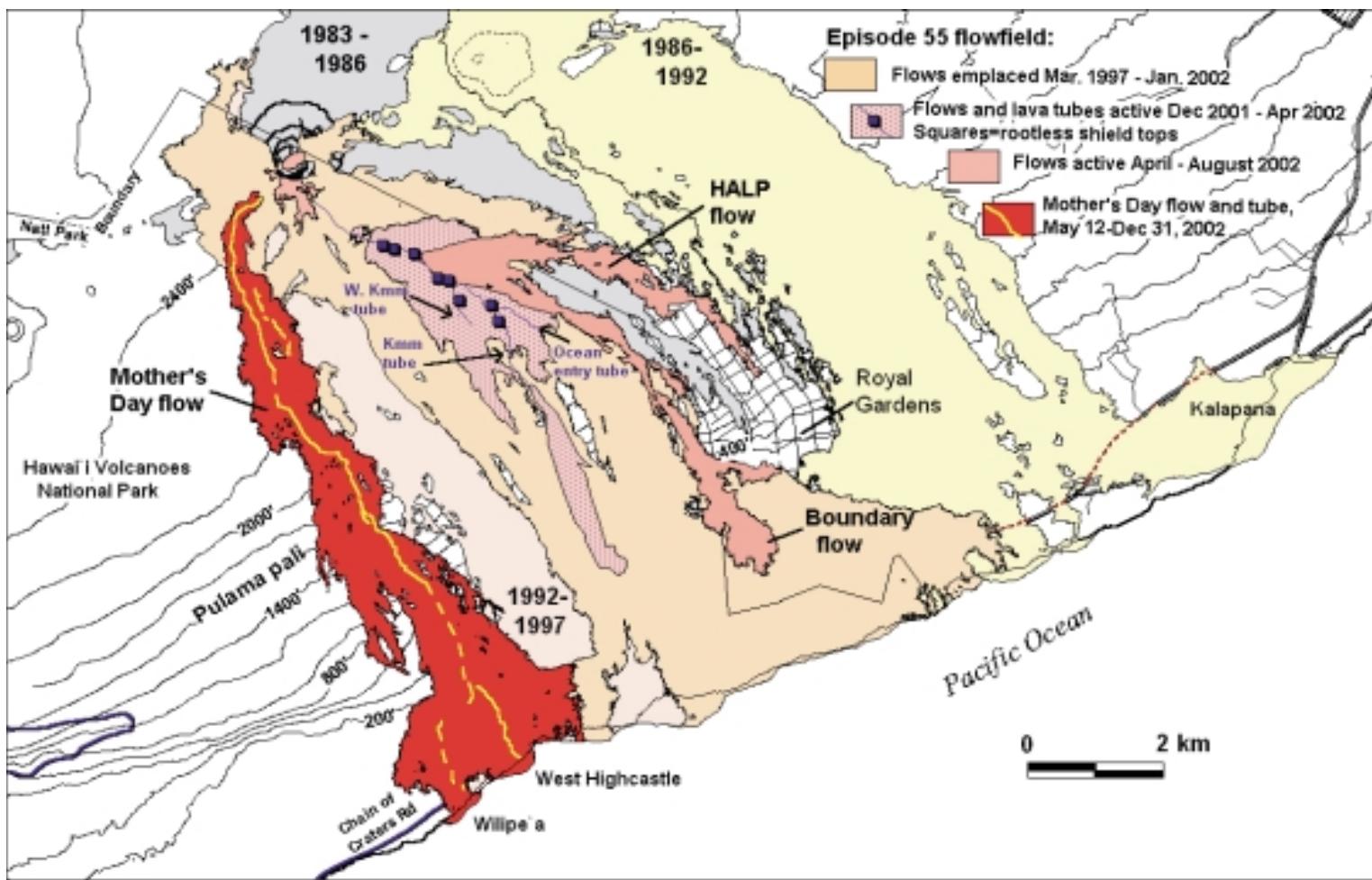
Table C-2. Episode 55 eruptive pauses and other magmatic events through December 2002.

Episode 55 pause no. or magmatic event		Start date & time, H.s.t.	End date & time, H.s.t.	Length, hours
1	5/03/97	0000	5/03/97	0530
2	5/10/97	0700	5/10/97	1230
3	5/11/97	2000	5/12/97	0600
4	5/12/97	2139	5/13/98	0030
5	5/14/97	0200	5/14/97	0700
6	5/23/97	0630	5/23/97	2134
7	5/27/97	0430	5/27/97	0654
8	6/06/97	2330	6/07/97	1005
9	6/16/97	1600	6/16/92	2027
10	6/17/97	1010	6/18/97	~0530
11	1/15/98	1030	1/16/98	1100
12	1/26/98	1130	1/27/98	0600
13	2/21/98	0000	2/21/98	2400
14	3/02/98	0400	3/02/98	1600
15	3/09/98	1400	3/10/98	0800
16	4/04/98	0400	4/05/98	0041
17	5/19/98	0350	5/20/98	2230
18	6/19/98	~1400	6/20/98	~0100
19	7/16/98	2100	7/19/98	0200
20	8/12/98	~1500	8/14/98	~0930
21	11/07/98	~0600	11/08/98	~1000
22	2/06/99	0400-0800	2/07/99	~0300
23	5/04/99	~1300	5/05/99	~2200
24	6/14/99	0010	6/17/99	2300
25	8/21/99	~2000	8/22/99	~2000
26	INTRUSION	9/12/99	0131	9/23/99
27		10/03/99	~2200	1100
28		11/07/99	1400	0900
29		11/11/99	~1530	35
INTRUSION		2/23/00	1342	1015
30	Dog Day surge	8/23/00	~2300	20.25
31	9/24/00		9/25/00	1030
SLOWDOWN	12/15/00	1715	9/25/00	67
Surge	4/05/01		12/17/00	
Pu'u 'O'o /summit	5/20/01		4/08/01	
Summit event	8/25/01		5/23/01	
Pu'u 'O'o tilt	12/08/01		8/25/01	
Pu'u 'O'o tilt	1/22/02		12/10/01	
Surge	2/10/02	1149	1/22/02	
Pu'u 'O'o tilt	4/05/02		2/10/02	
Mother's Day event	4/23/02		4/06/02	
	5/12/02		4/24/02	
				1600
				Two summit tilt cycles
				Small crater-floor collapse
				No effect on eruption
				Lava flows in crater
				Increase in crater/cone activity
				Increase in crater/cone activity
				New flank vent, high lava-flux rate

Table C-3. Ocean entries, from west to east, active during 2002. Dimensions and areas for Kamoamoa and East Kupapa'u are for January 2002, rather than end of year.

Ocean entry	Dates of activity	End of year bench dimension	End of year bench area (hectares)	Maximum bench area (hectares)
Wilipe'a	Jul. 21-Aug. 8, Aug. 11, 14, 16, Sep. 3-Dec. 31	750 x 100 m	5.4	14.8
West Highcastle	Jul. 19-Aug. 2, Aug. 7, Aug. 13, Sep. 16-18, Sep. 20-Dec. 31	800 x 150 m	6.2	10.7
Highcastle	Aug. 8-15, Aug 20-24, Sep. 20-21, Oct. 29, Nov. 11-21, Dec. 9-31	290 x 60 m	1.2	1.3
West Lae'apuki	Nov. 19-24	Not mappable	Not mappable	Tiny
Lae'apuki	Nov. 20-28	98 x 12 m	<0.1	0.2
Kamoamoa	Sep. 27, 2001- Jan. 30, 2002	490 x 130 m	3.1	3.1
East Kupapa'u	Apr. 25, 2001- Jan. 22, 2002	600 x 120 m	3.9	3.9

Figure C-1. The eruption site, showing flows emplaced in 2002, with the exception of those active only through January (see December 2001–January 2002 monthly report).



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 2002 network consisted of 50 station sites: 9 three-component, 3 six-component (which included a three-component Kinematic Force-Balance accelerometer), 2 four-component (Uwekahuna included a low-gain vertical with a unity gain setting; Ainapo included a moderate-gain vertical with a 48db setting), 3 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 2002. 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 2002. 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. Response curve for the short-period seismograph type in use is given in figure 6. The Type 1 curve gives the 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.

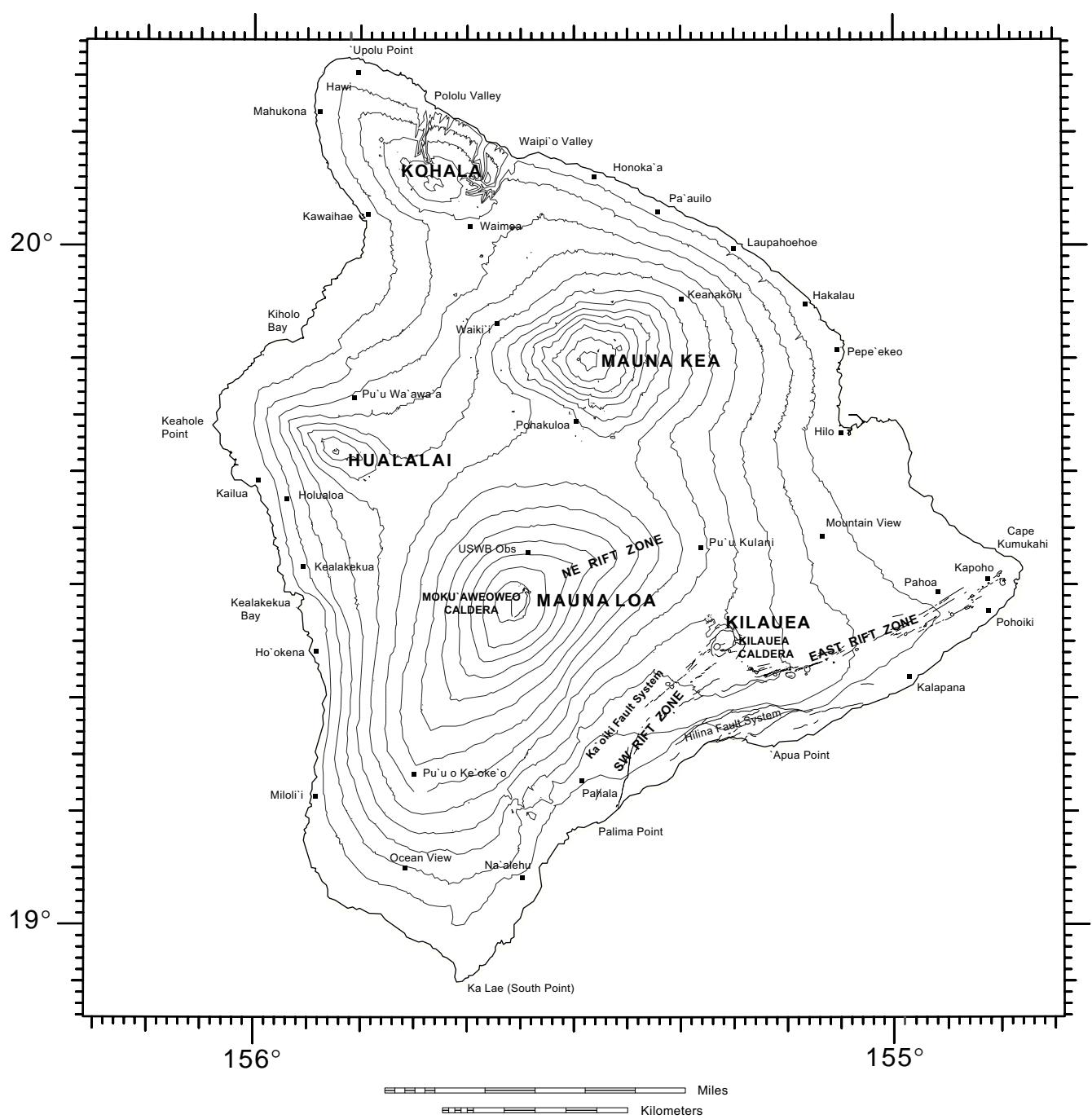
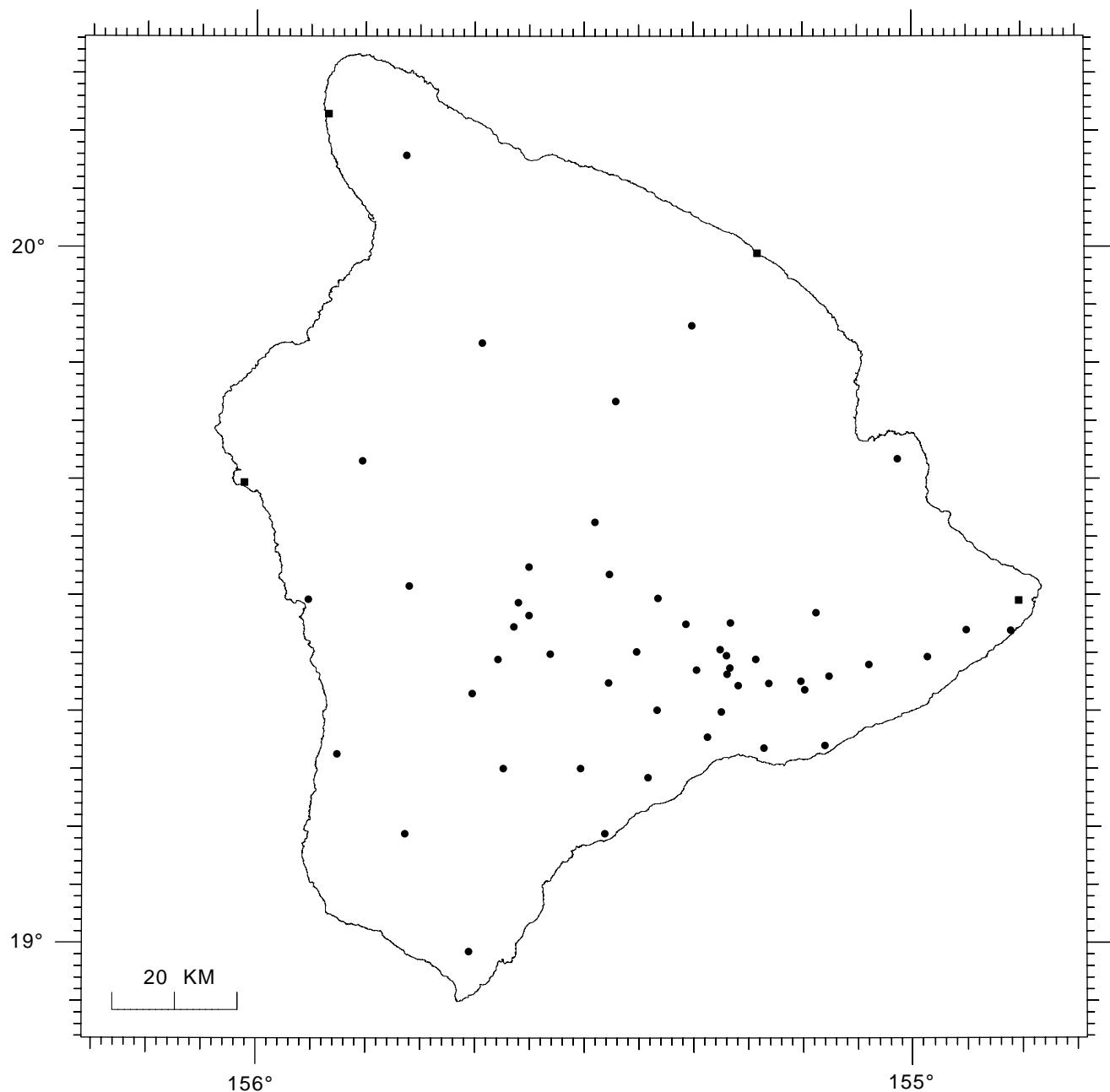


Figure 1. Map of the Island of Hawai'i, showing principal settlements and selected geographic and geologic features.



- Network sites
- PTWC station sites

Figure 2. Seismic station sites operated by the USGS and NOAA on Hawai'i Island during 2002 on the Island of Hawai'i.

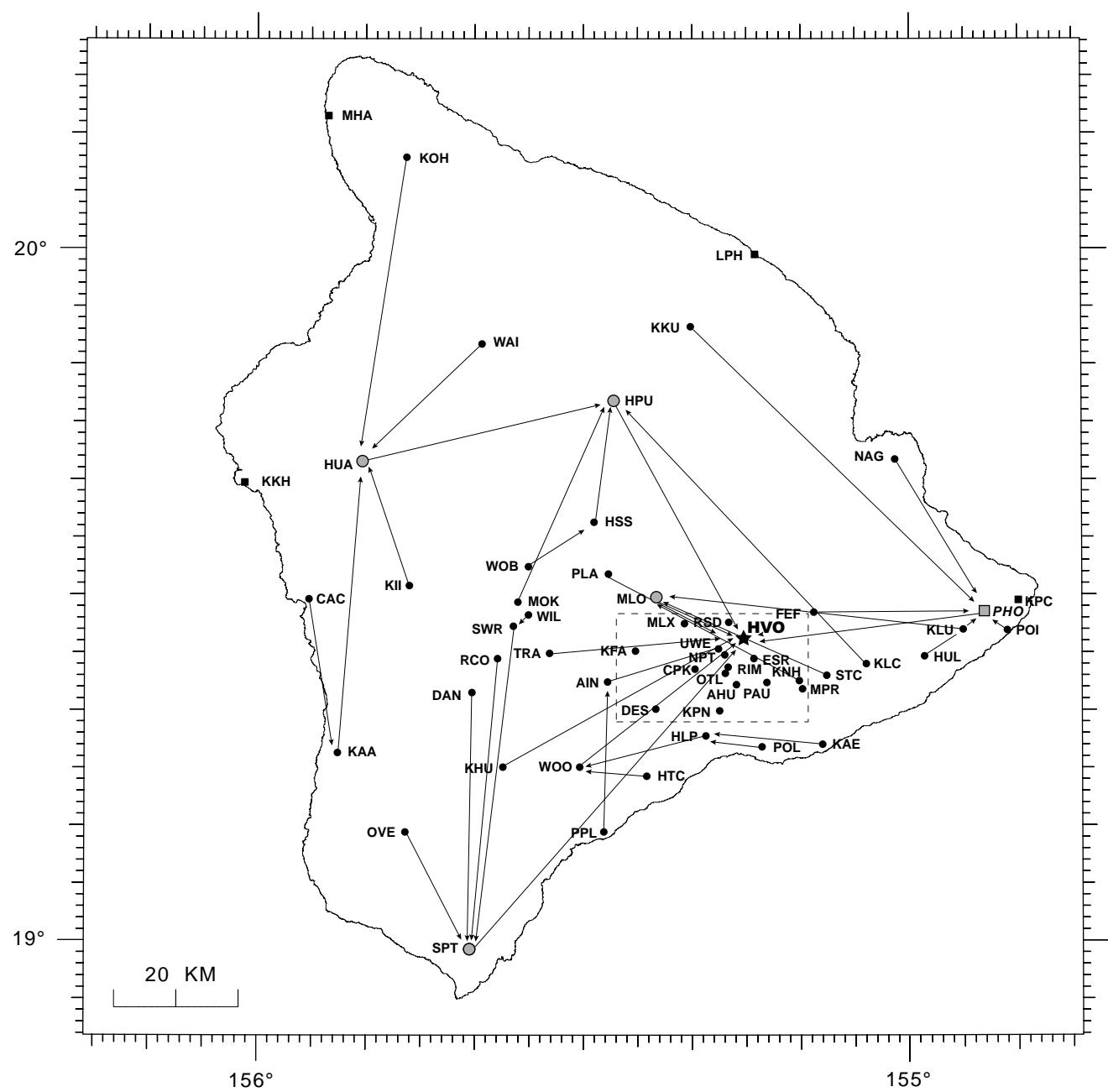
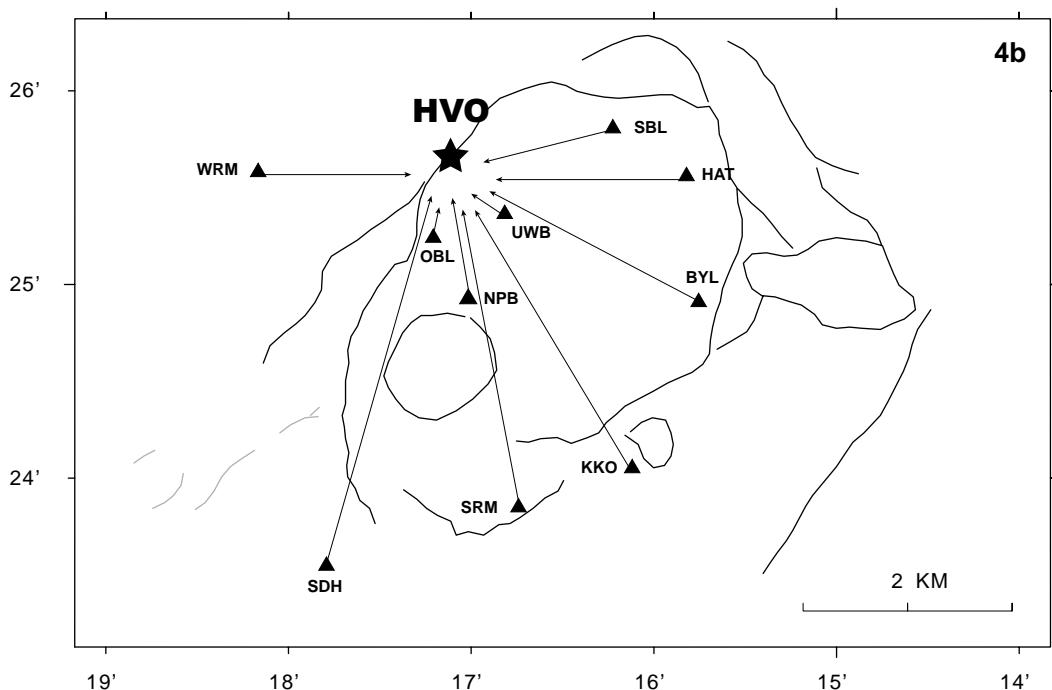
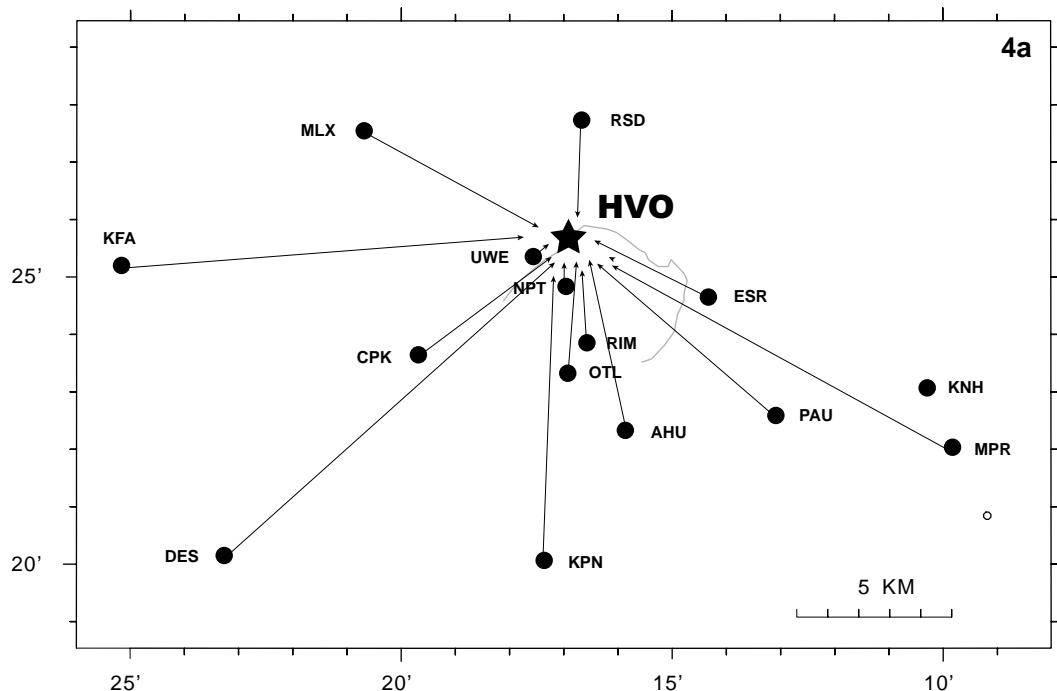


Figure 3. Telemetry scheme for seismic stations operational during 2002 on the Island of Hawai'i.



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

Figure 4a. Expanded telemetry scheme for the 2002 Hawaiian Volcano Observatory seismic network at Kilauea summit.

Figure 4b. Expanded telemetry scheme for the 2002 Menlo Park broadband network at Kilauea summit.

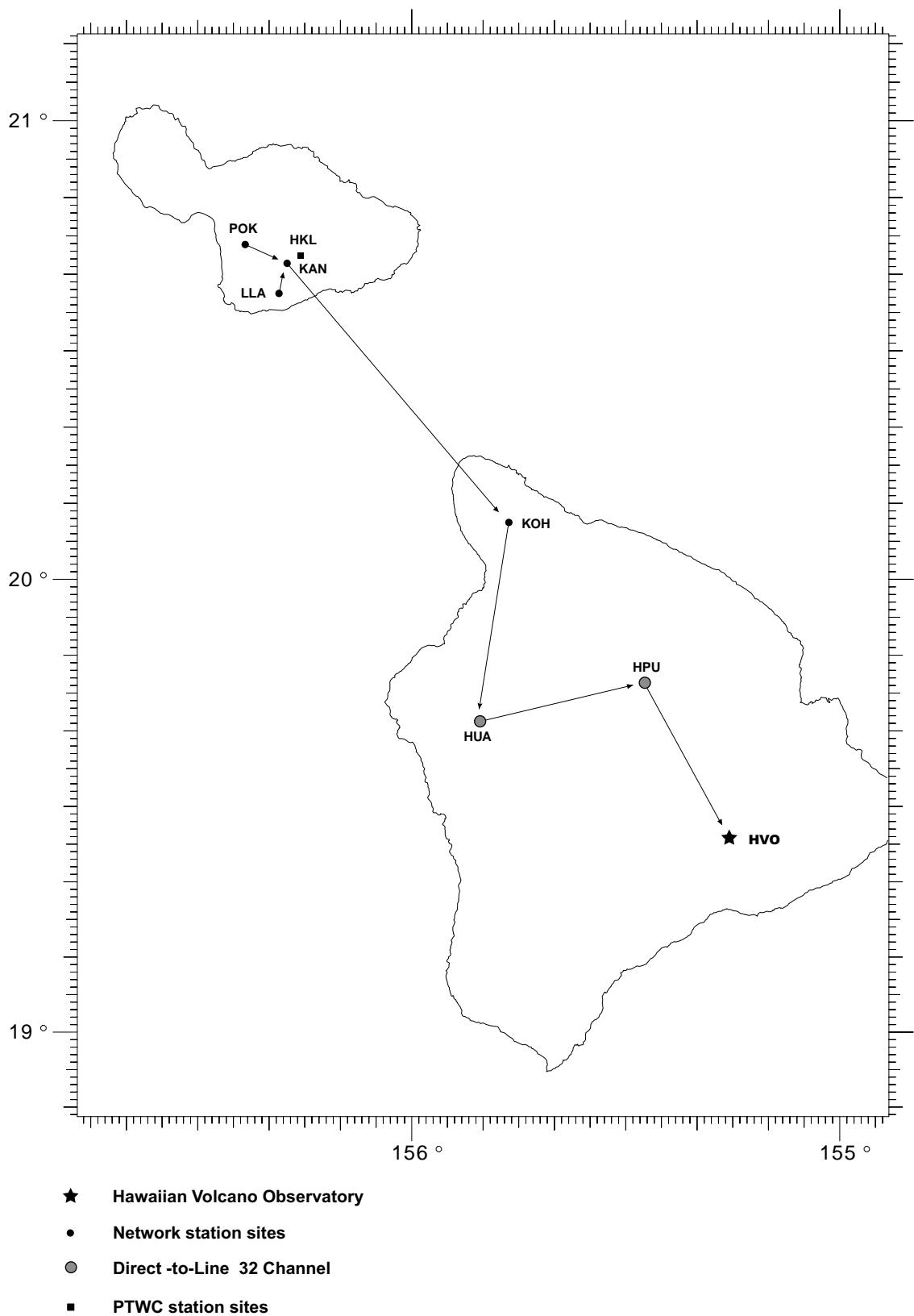


Figure 5. Telemetry scheme for seismic stations operational during 2002 on the Island of Maui.

Table 1. Seismic stations in Hawai'i operated by the USGS in 2002.

STATION NAME	CODE	-LAT-		-LON-		ELEV (M)	DELAY 1	DELAY 2	CAL	SEIS TYPE	OPTIC RECORD
		D	M	D	M						
AHUA	AHUV	19	22.40	155	15.90	1070	-0.10	-0.13	2.6	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 HEAD, OA	DHHZ	21	16.12	157	48.25	137	0.00	0.00	0.0	S13	
ESCAPE ROAD	ESRV	19	24.68	155	14.33	1177	-0.17	-0.19	1.2	L5	
FERN FOREST	FEFV	19	28.70	155	8.91	691	0.01	0.05	0.0	L5	
HALEAKALA, MAUI	HKLZ	20	42.63	156	15.55	3051	0.00	0.00	0.0	S13	
HILINA PALI	HLPV	19	17.96	155	18.63	707	0.02	0.07	2.1	L5	
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	
HUMUULA SHEEP ST	HSAZ	19	36.31	155	29.13	2445	0.20	0.35	0.0	F5	
HUMUULA SHEEP ST	HSAN	19	36.31	155	29.13	2445	0.20	0.35	0.0	F5	
HUMUULA SHEEP ST	HSAE	19	36.31	155	29.13	2445	0.20	0.35	0.0	F5	
HUMUULA SHEEP ST	HSSV	19	36.31	155	29.13	2445	0.20	0.35	4.0	L5	
HUMUULA SHEEP ST	HSSE	19	36.31	155	29.13	2445	0.20	0.35	3.0	L5	MW
HUMUULA 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	I
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	
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	
KANE NUI O HAMO	KNHV	19	22.77	155	10.16	954	-0.17	-0.20	0.0	L5	I
KANE NUI O HAMO	KNHZ	19	22.77	155	10.16	954	-0.17	-0.20	0.0	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	

STATION NAME	CODE	-LAT-	-LON-	ELEV	DELAY	DELAY	CAL	SEIS	OPTIC
		D M	D M	(M)	1	2		TYPE	RECORD
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	
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	H
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	L5	
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	MW
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	
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 OBSERVAT	WOBV	19 32.31	155 35.01	3396	0.00	0.00	0.0	E5	
WOOD VALLEY	WOOV	19 15.08	155 30.12	909	-0.15	-0.06	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 J502, J512 (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.

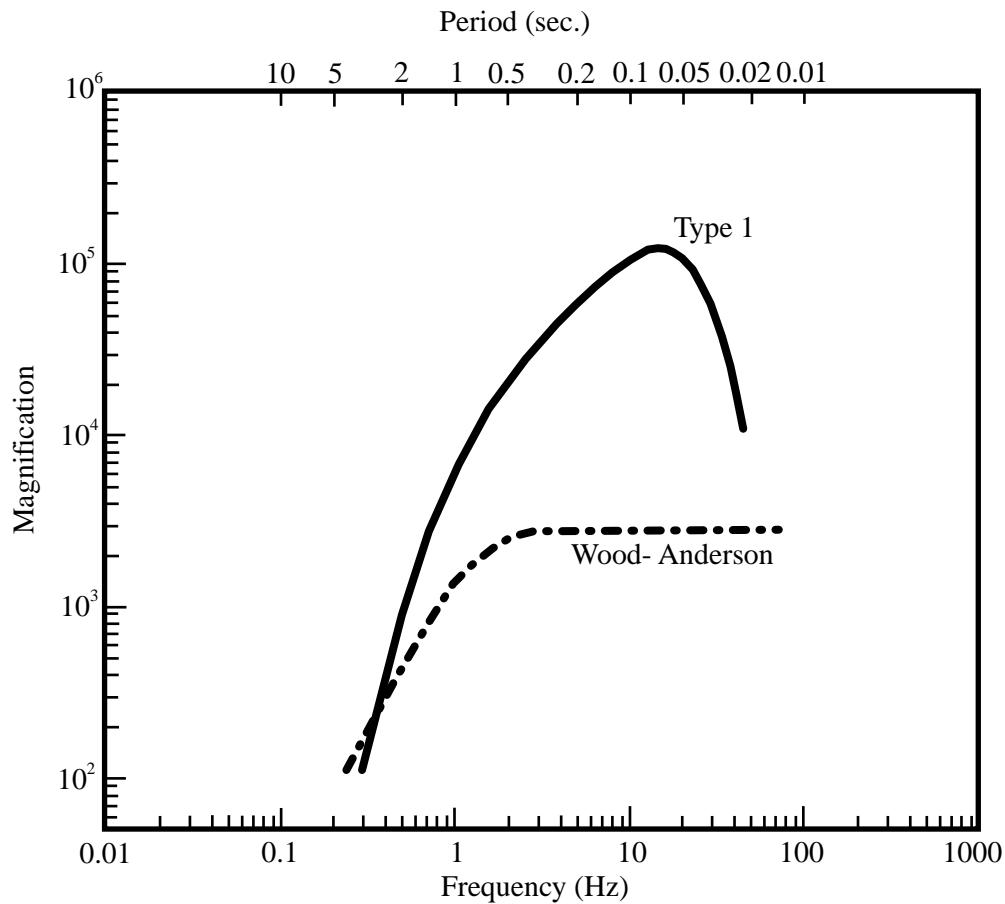


Figure 6. System-response curves for the Wood-Anderson torsion seismograph and for seismometers used by the Hawaiian Volcano Observatory. The Type 1 curve plots the unit response of the standard USGS microearthquake seismometer system recorded on Develocorder film. This includes the geophone, all electronics including telemetry, Develocorder galvanometer, and projection of film by a 20x viewer. The unit response curve is multiplied by constant but known factors (CAL) to obtain the responses for individual stations.

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, 2002)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., 2002, 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'ōiki (0-13 km)

—Deep:

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

—Outer regions, all depths:

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

Table 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

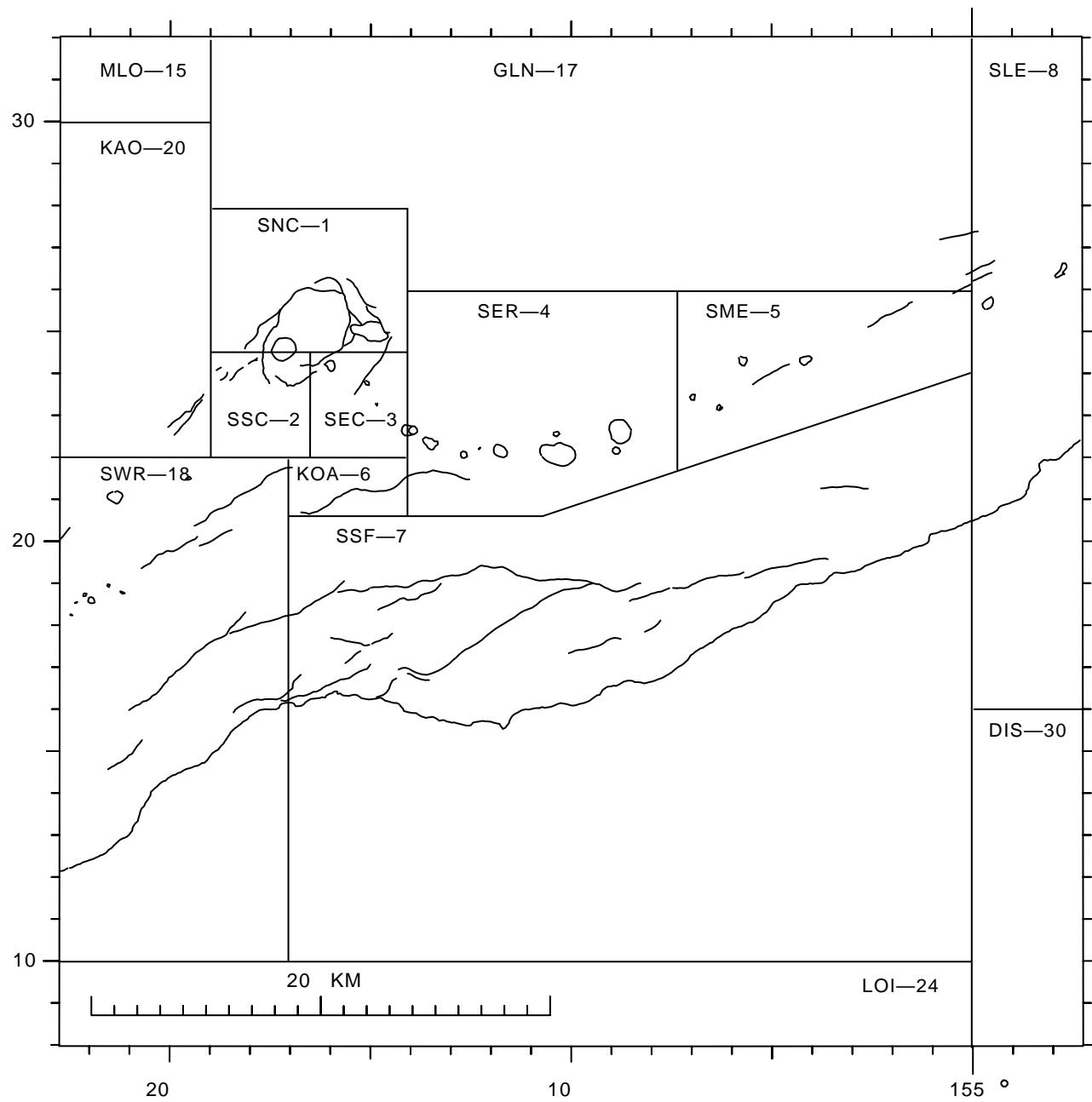


Figure 7. Earthquake classification, shallow (0-5 km deep), for Kilauea and the east flank of Mauna Loa.

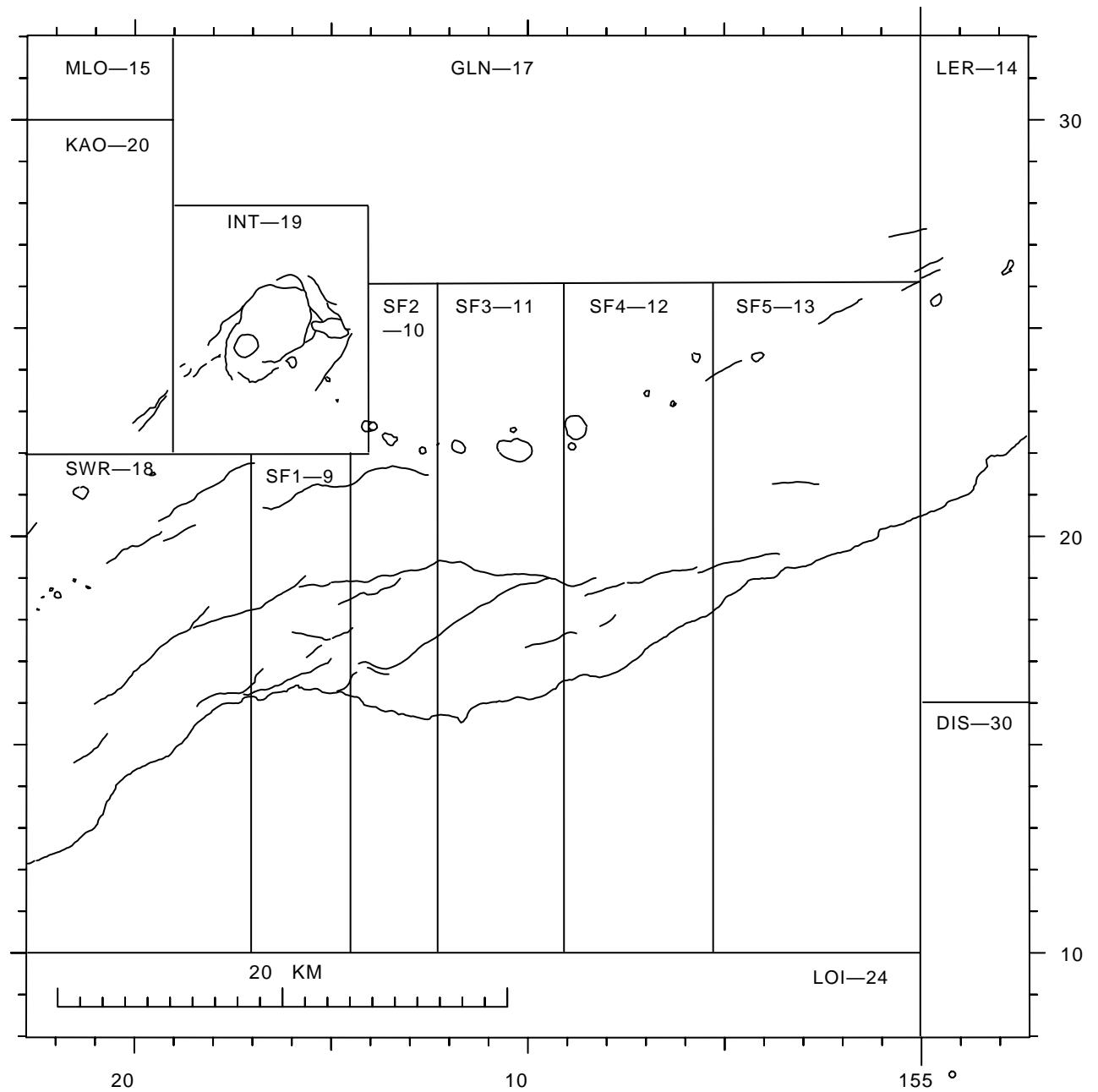


Figure 8. Earthquake classification, intermediate (5.1-13 km deep), for Kilauea and the east flank of Mauna Loa.

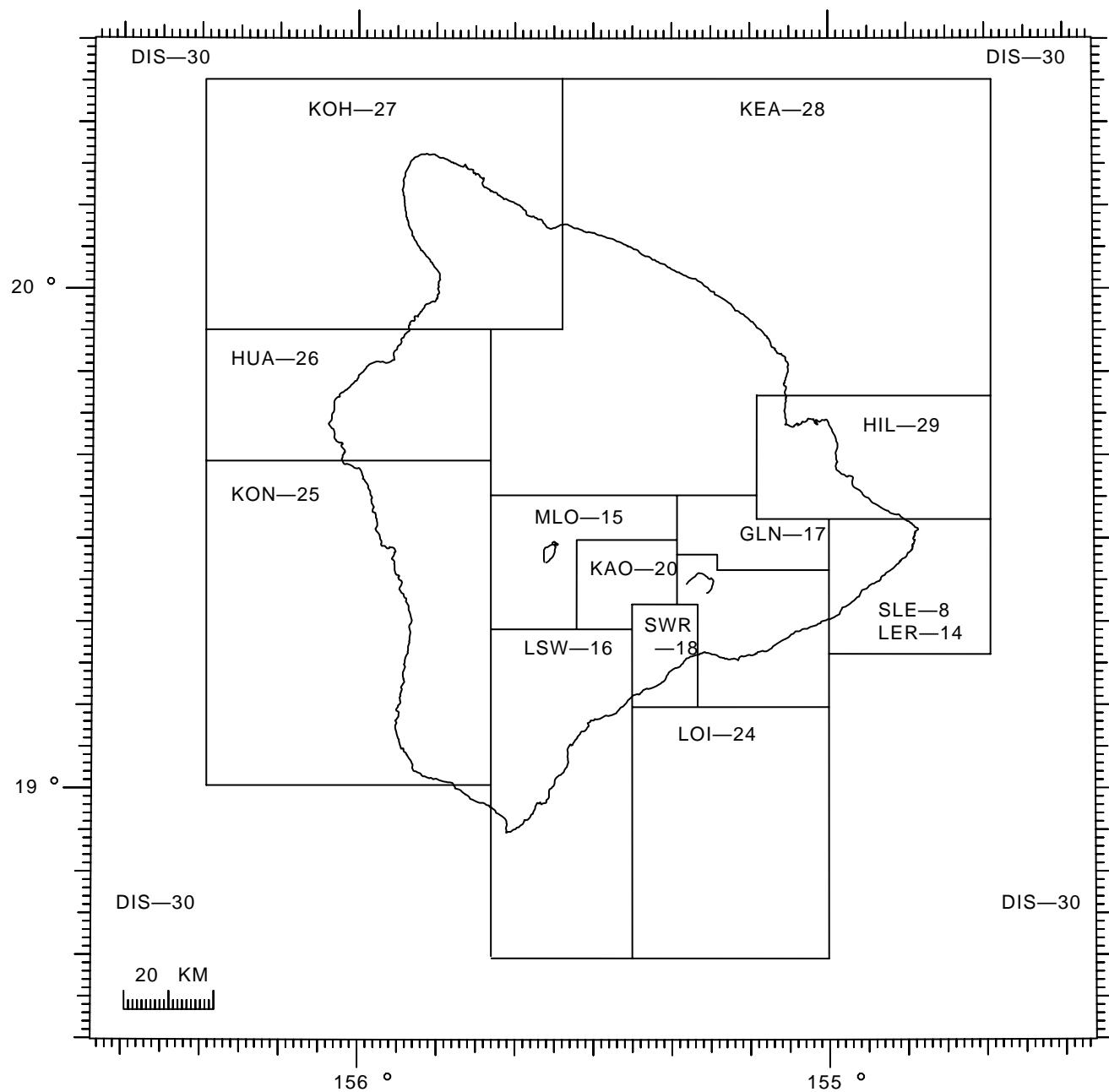


Figure 9. Earthquake classification, crustal (0-13 km deep), for the Island of Hawai'i.

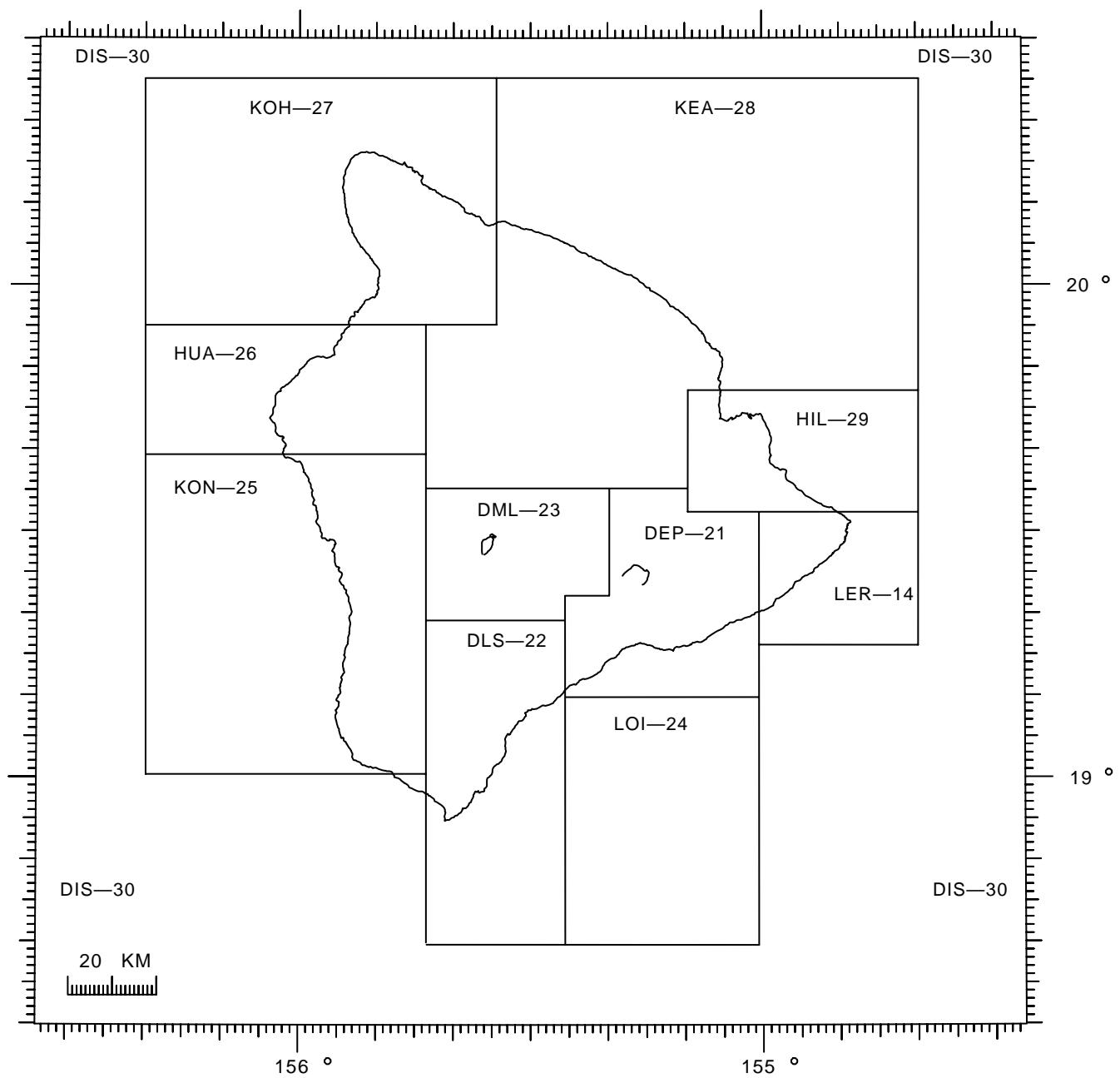


Figure 10. Earthquake classification, deep (greater than 13 km deep), for the Island of Hawai‘i.

Figure 11. 2002 earthquake locations, Hawaiian Islands,
 0 ± 60 km depth, $M\geq 3.5$.

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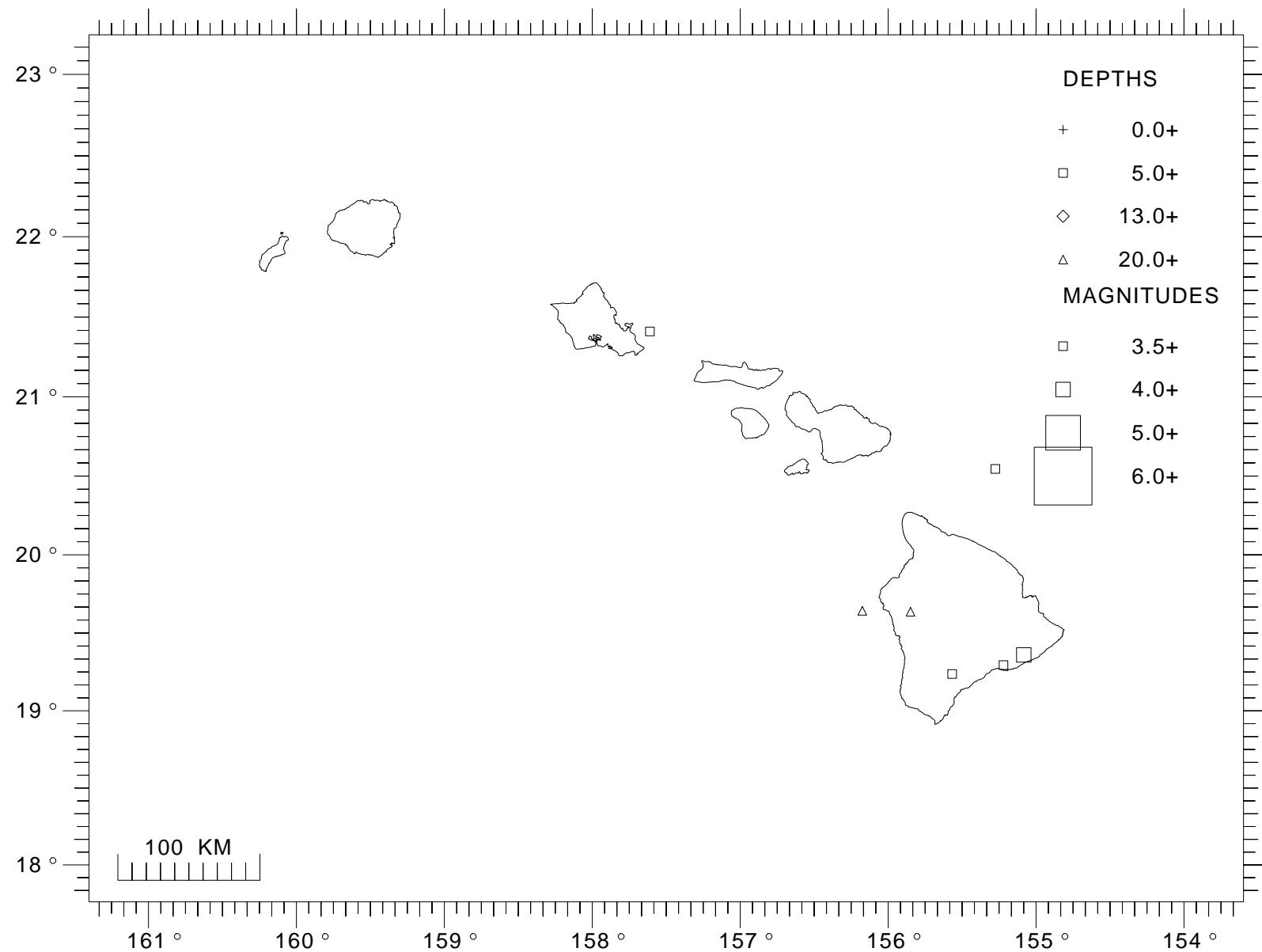


Figure 12. 2002 earthquake locations, Hawai'i Island,
 0 ± 60 km depth, $M>=3.0$.

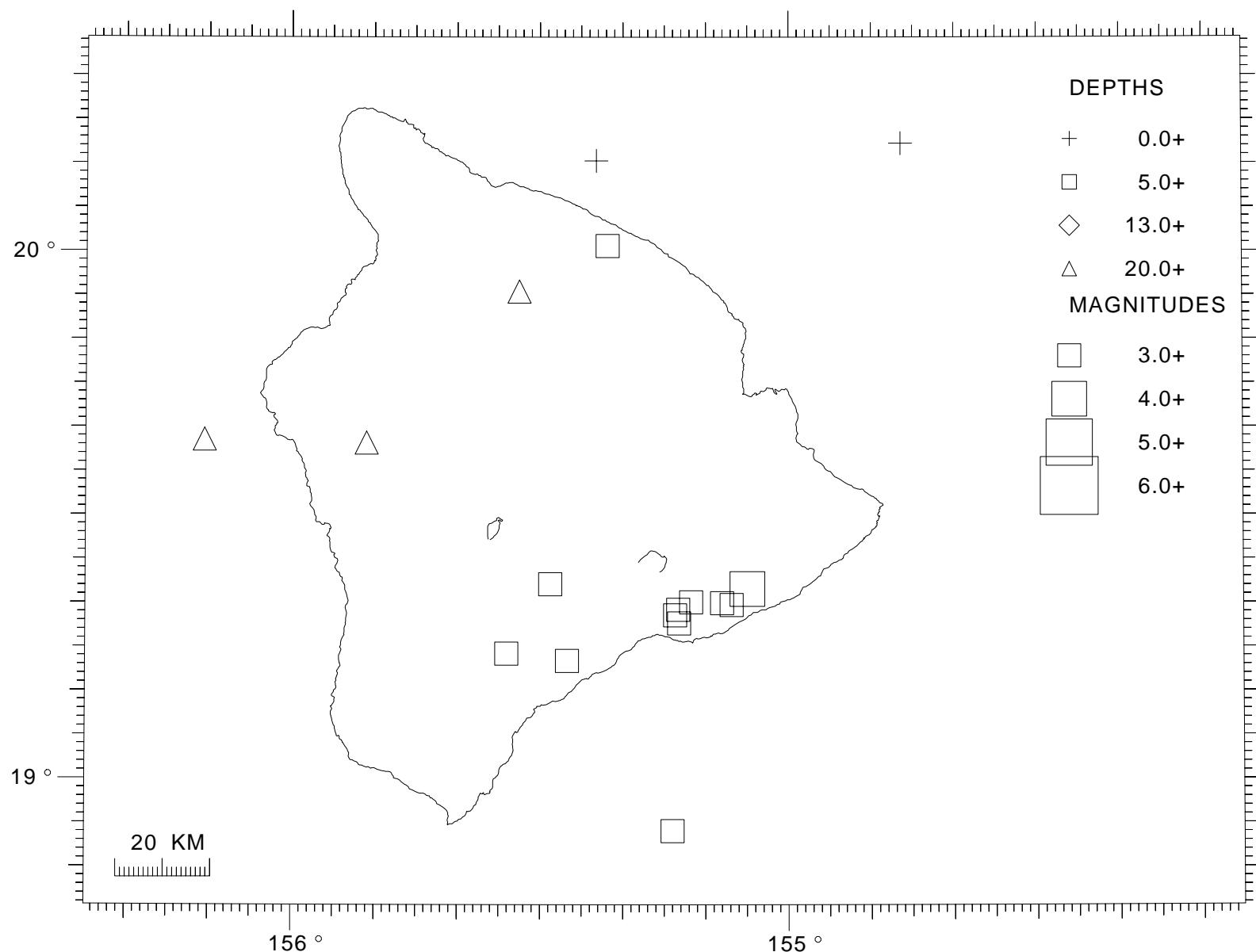


Figure 13. 2002 earthquake locations, Hawai'i Island,
shallow (0 ± 5.0 km depth), $M\geq2.0$.

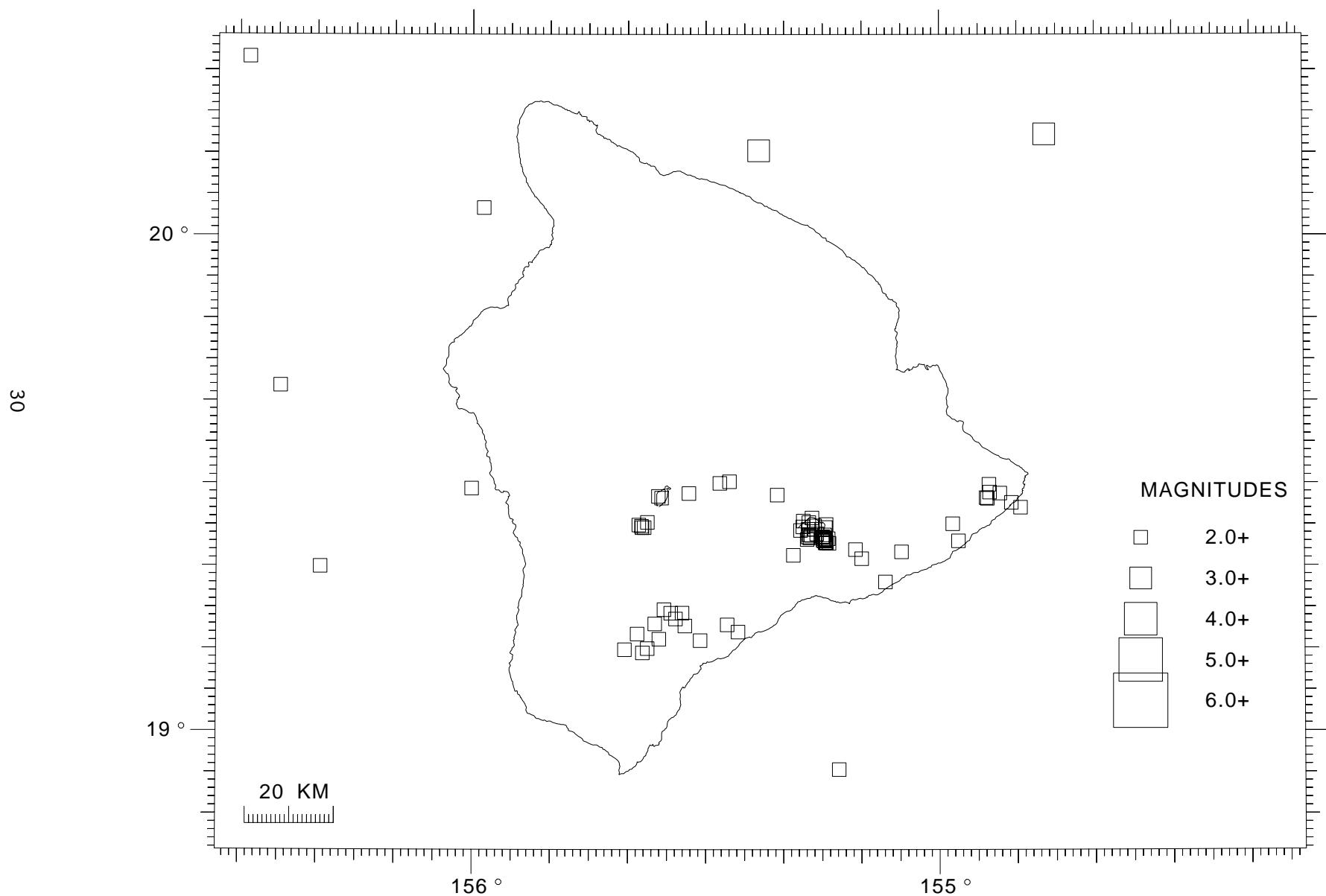


Figure 14. 2002 earthquake locations, Hawai`i Island,
intermediate (5.1 ± 13.0 km depth), $M \geq 2.0$.

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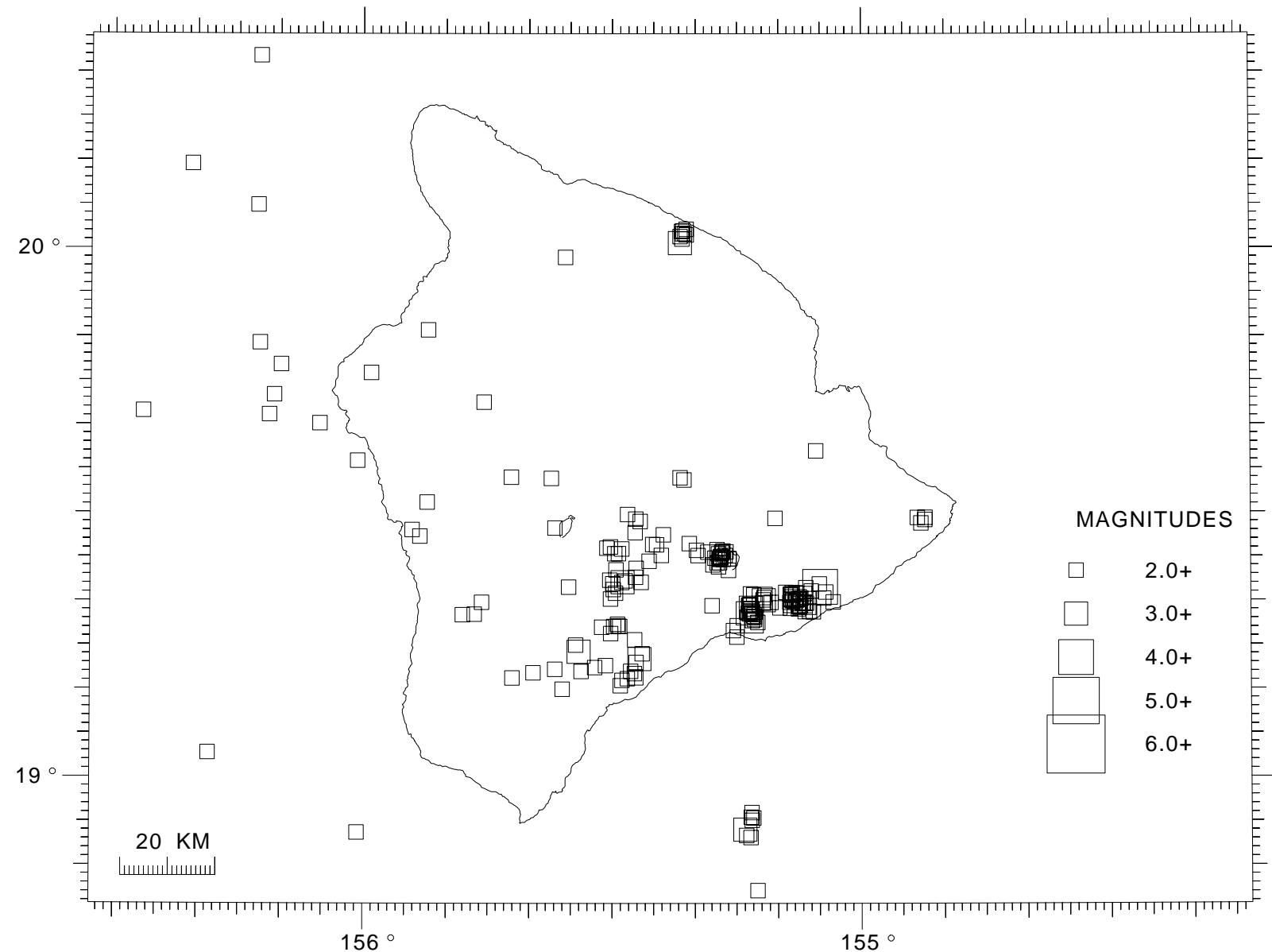


Figure 15. 2002 earthquake locations, Hawai`i Island,
deep (13.1 ± 60.0 km depth), $M \geq 2.0$.

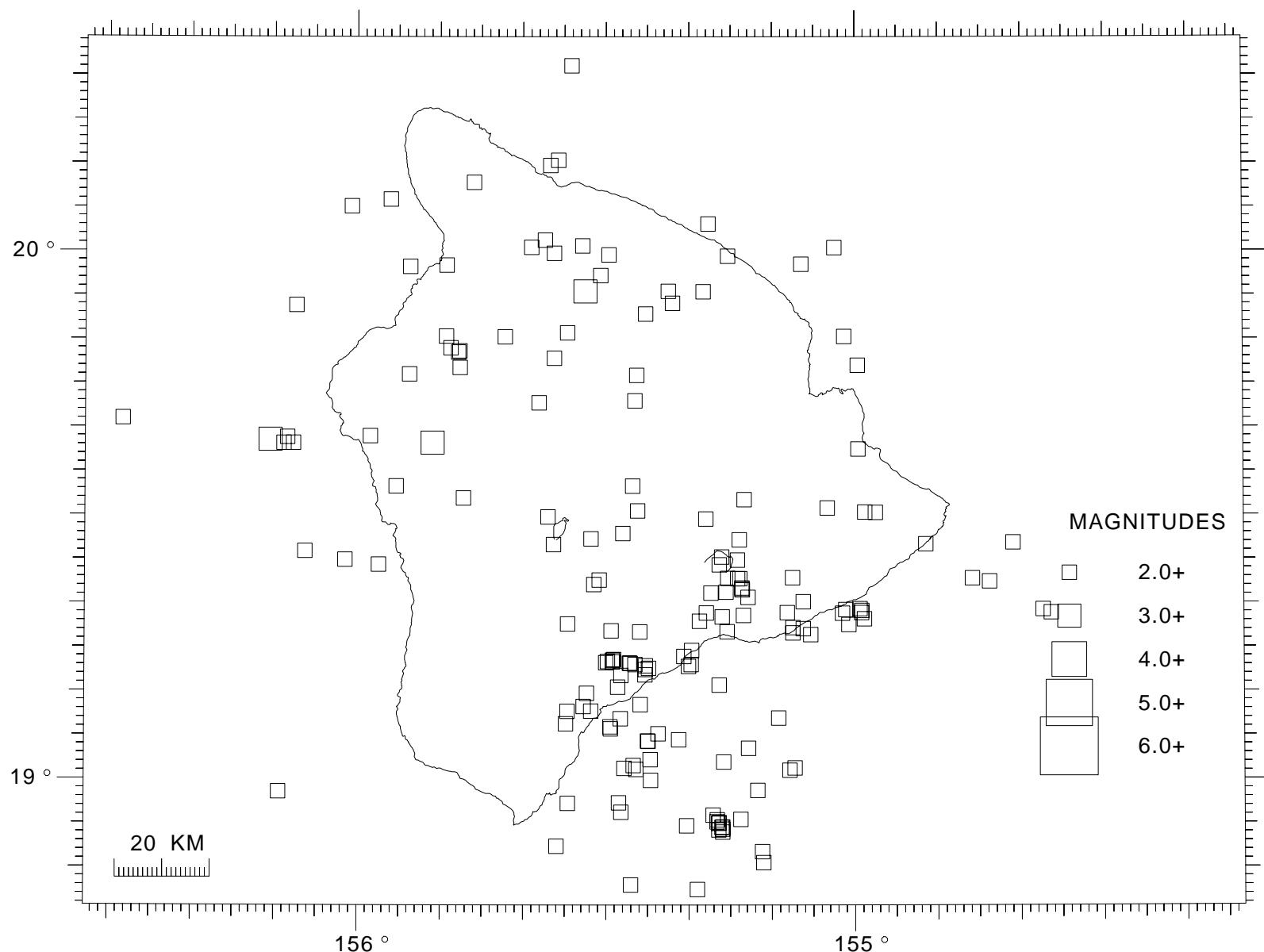


Figure 16. 2002 earthquake locations, Kilauea summit,
shallow (0 ± 5.0 km depth), $M \geq 1.0$.

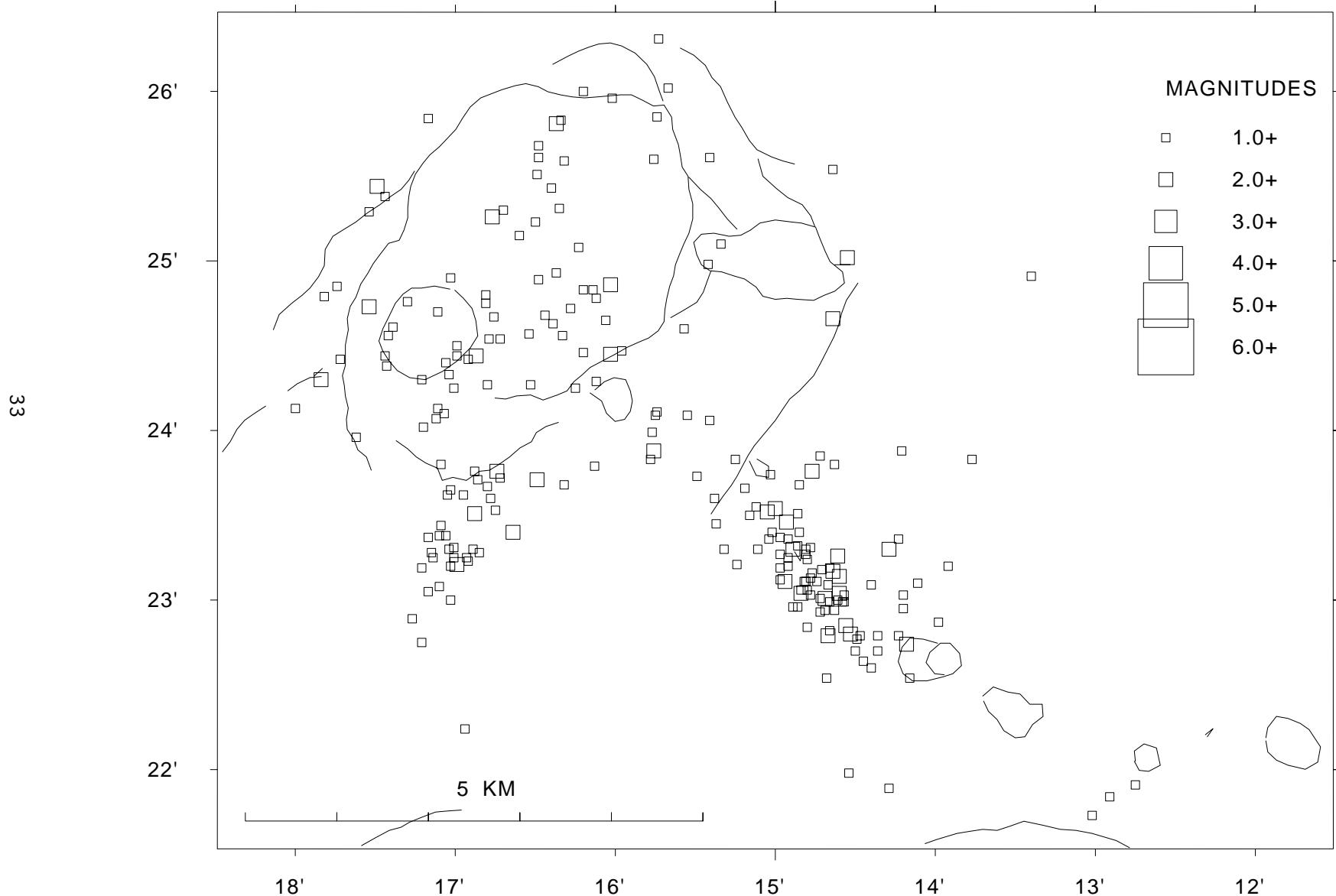


Figure 17. 2002 earthquake locations, Kilauea summit,
intermediate (5.1 ± 13.0 km depth), $M \geq 1.0$.

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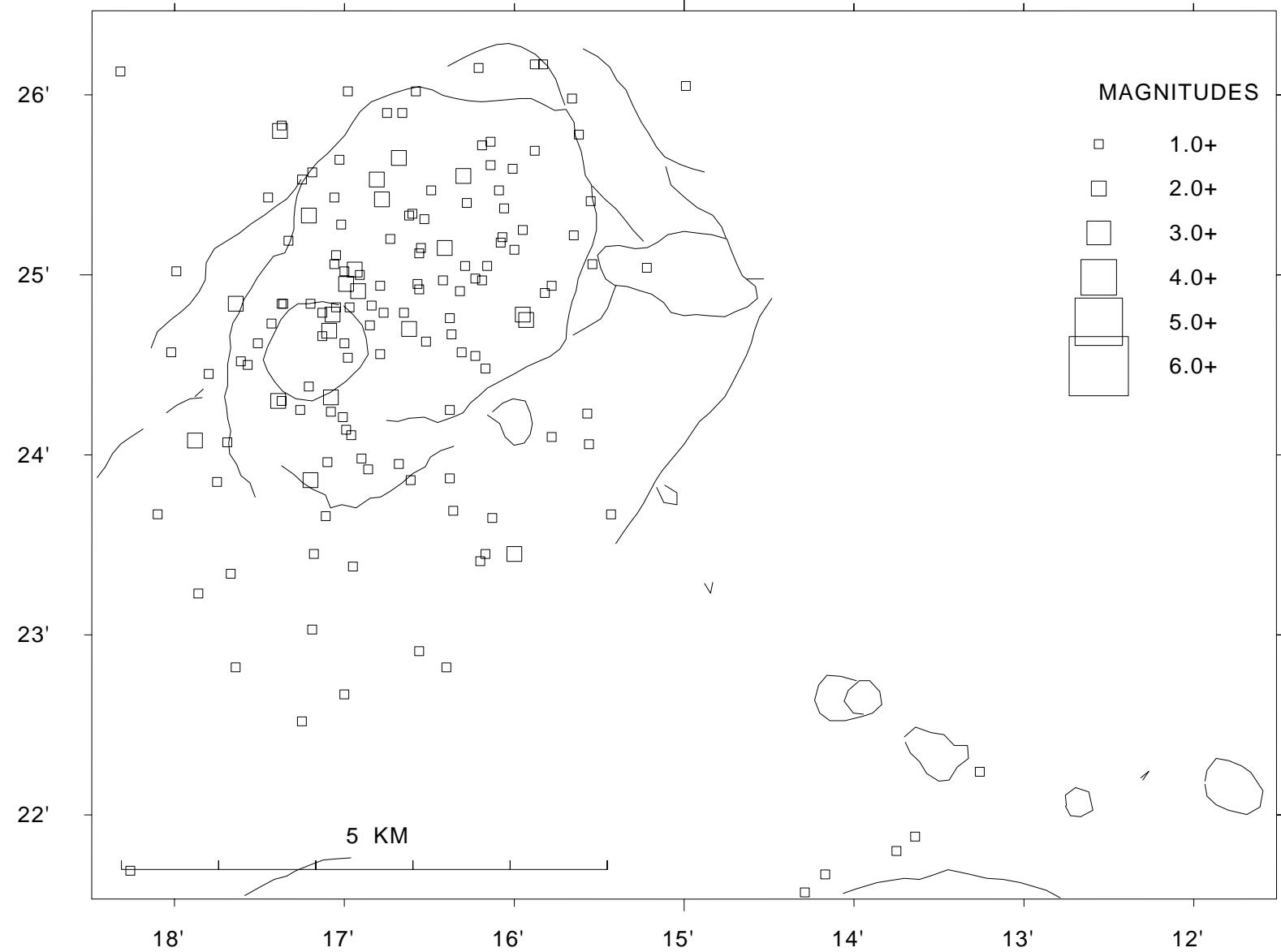


Figure 18. 2002 earthquake locations, Kilauea summit,
deep (13.1 ± 60.0 km depth), $M \geq 1.0$.

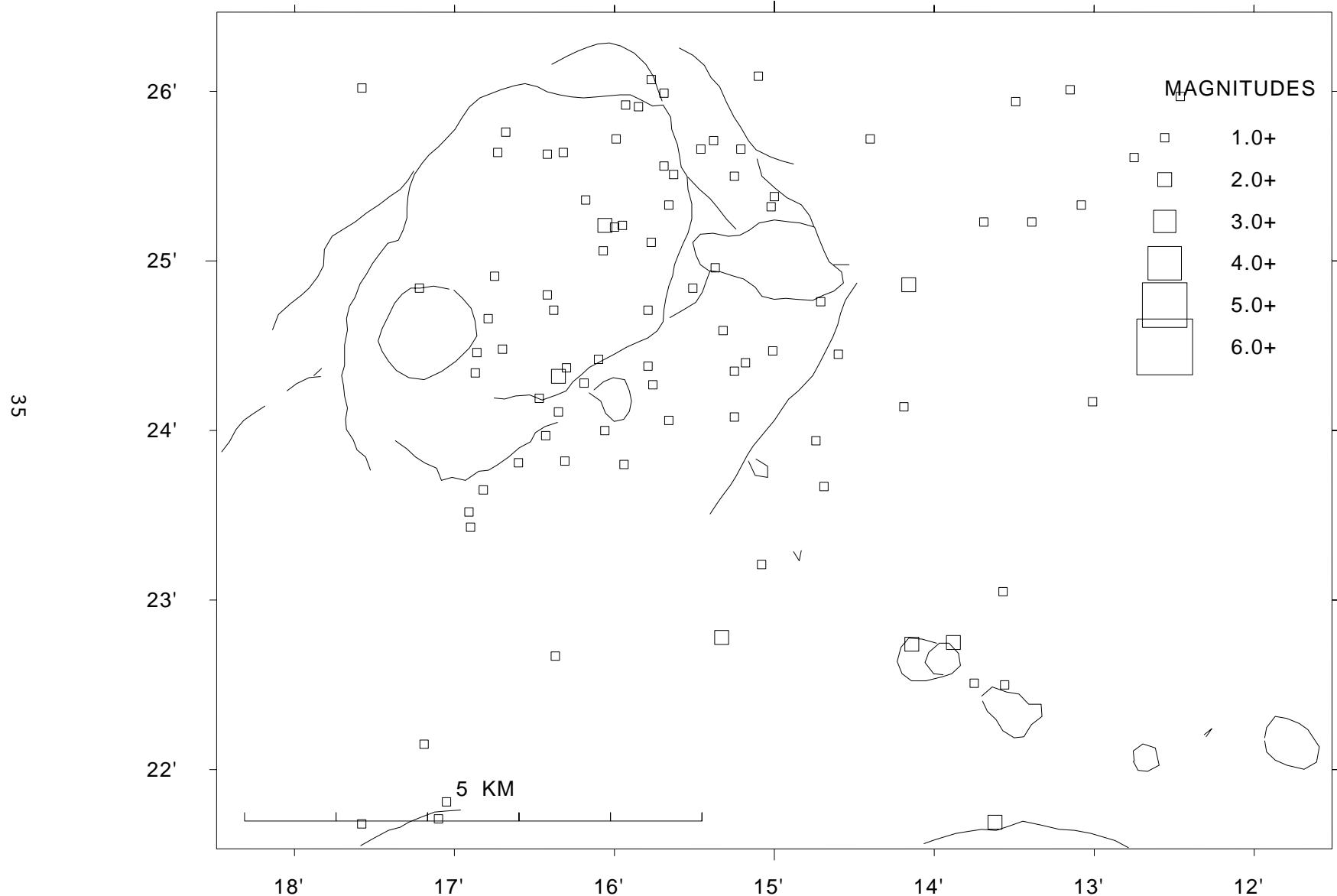


Figure 19. 2002 earthquake locations, Kilauea south flank,
shallow (0 ± 5.0 km depth), $M\geq2.0$.

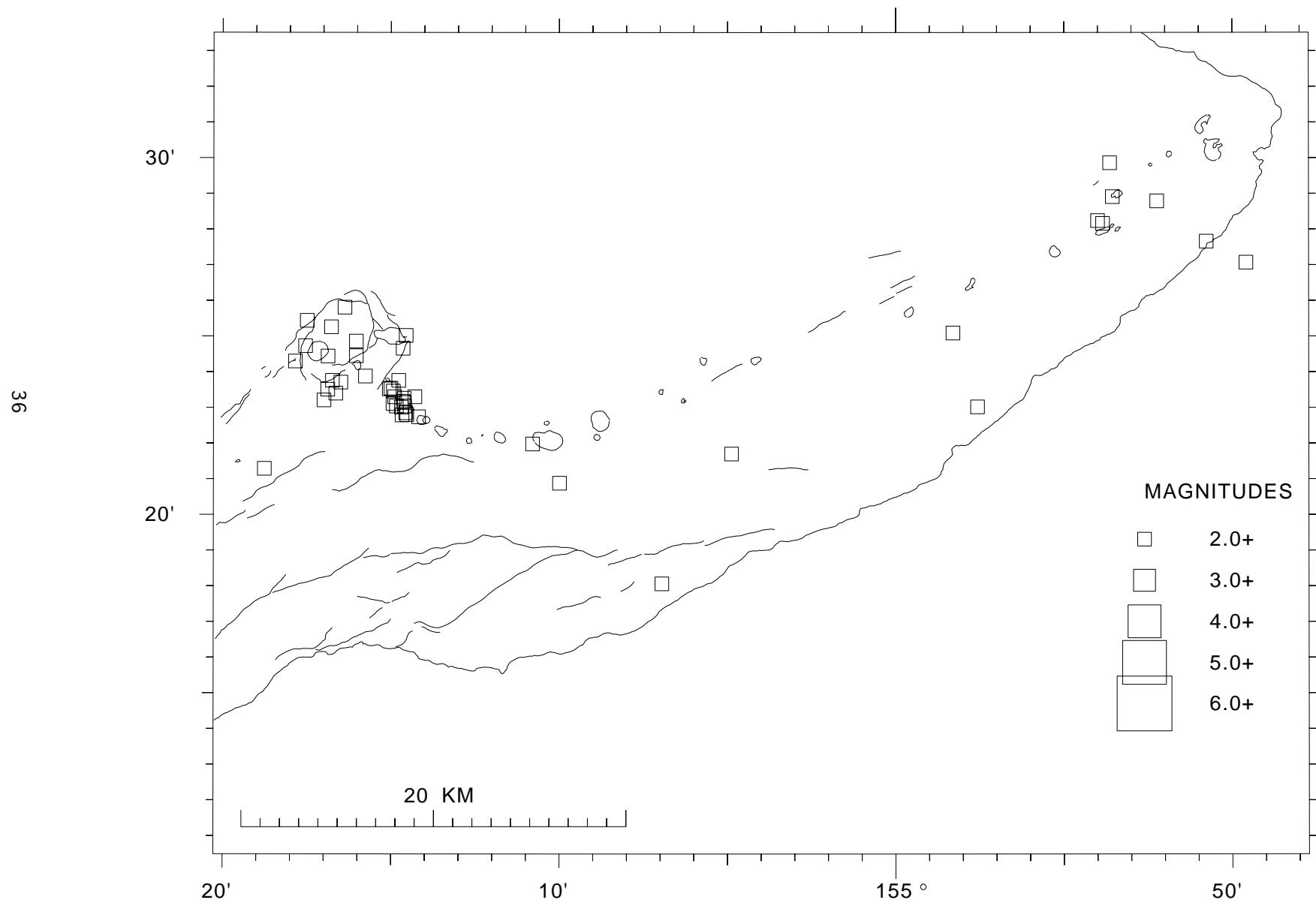


Figure 20. 2002 earthquake locations, Kilauea south flank,
intermediate (5.1 ± 13.0 km depth), $M \geq 2.0$.

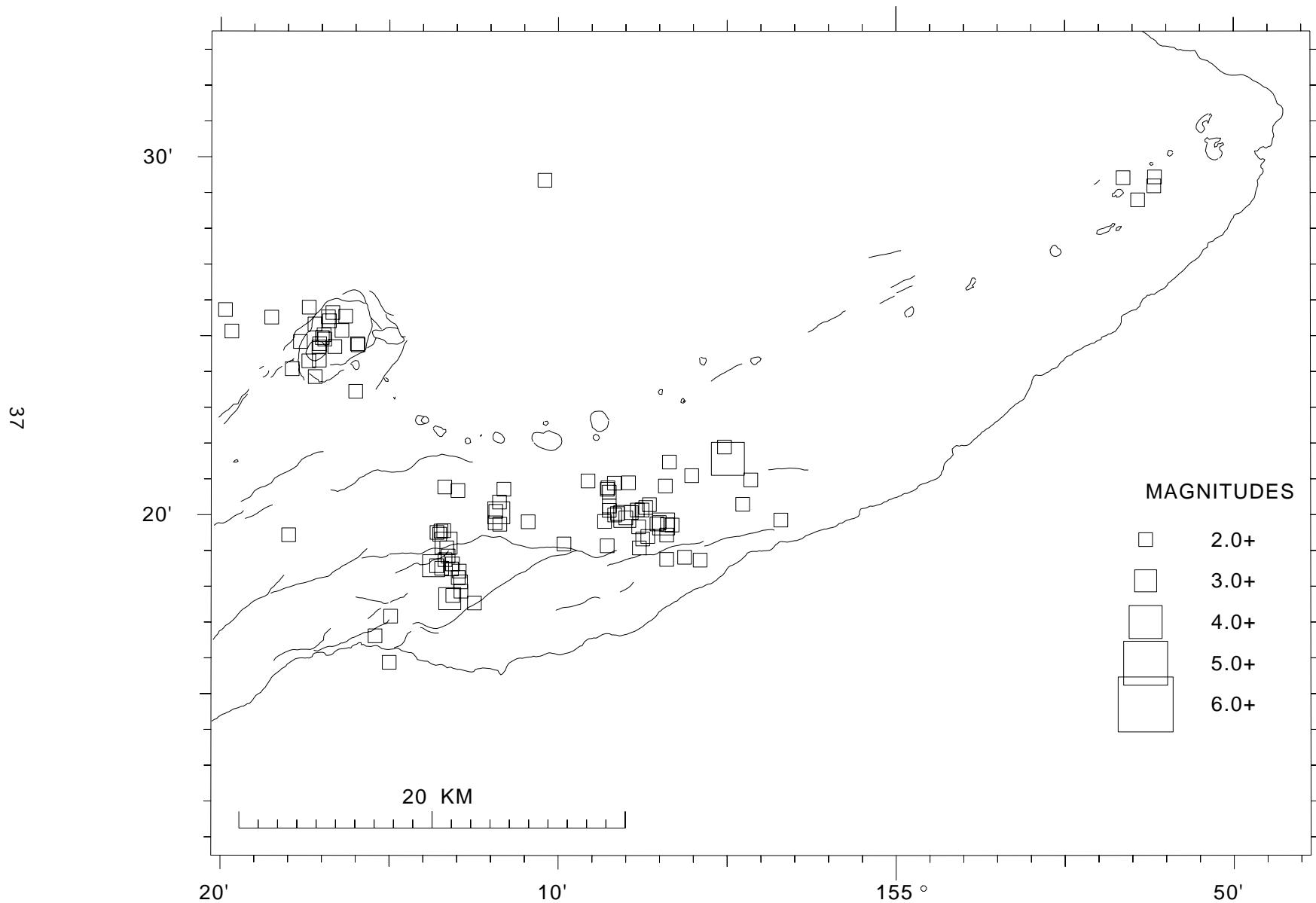


Figure 21. 2002 earthquake locations, Kilauea south flank,
deep (13.1 ± 60.0 km depth), $M \geq 2.0$.

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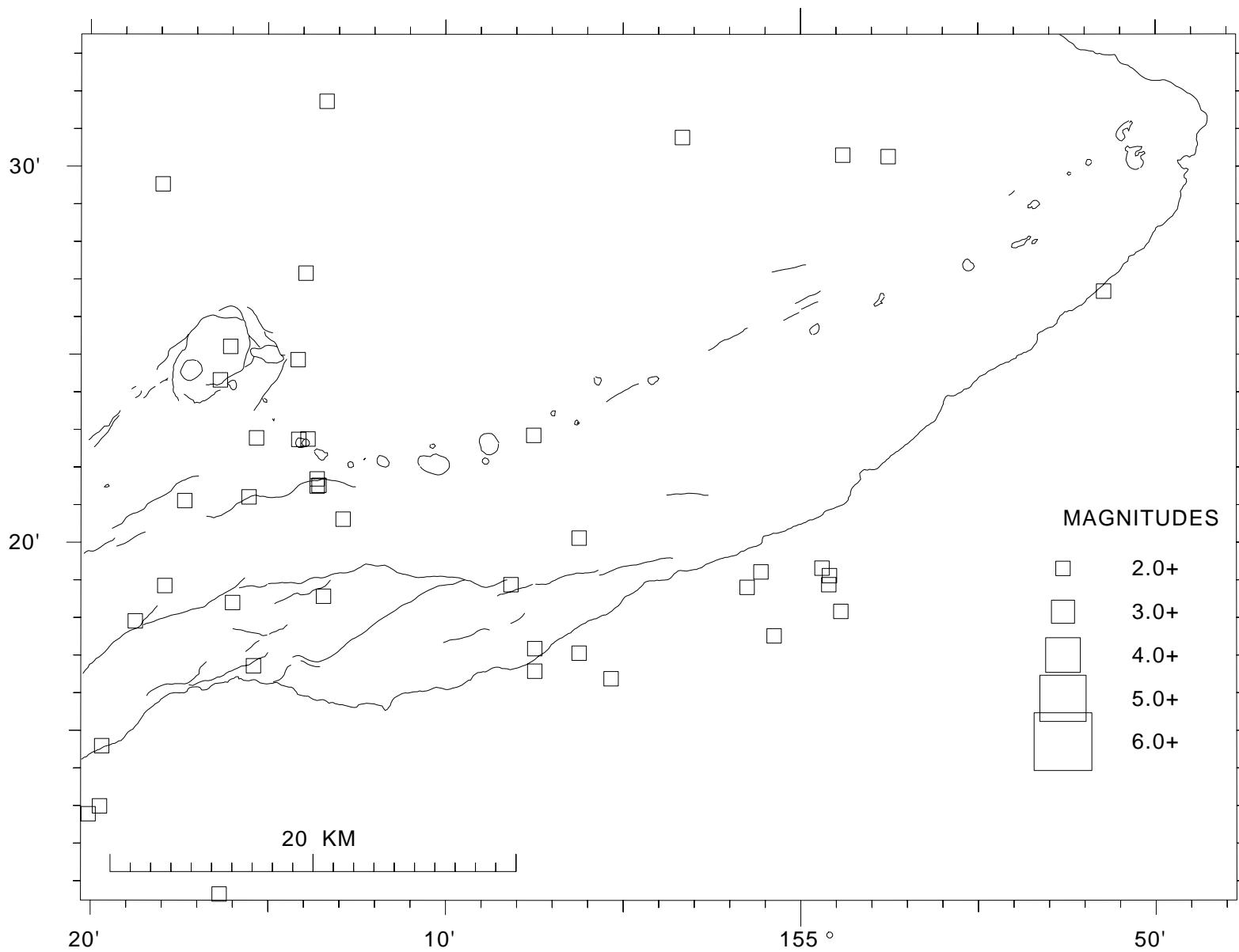


Figure 22. 2002 earthquake locations, Mauna Loa summit,
shallow (0 ± 5.0 km depth), $M \geq 2.0$.

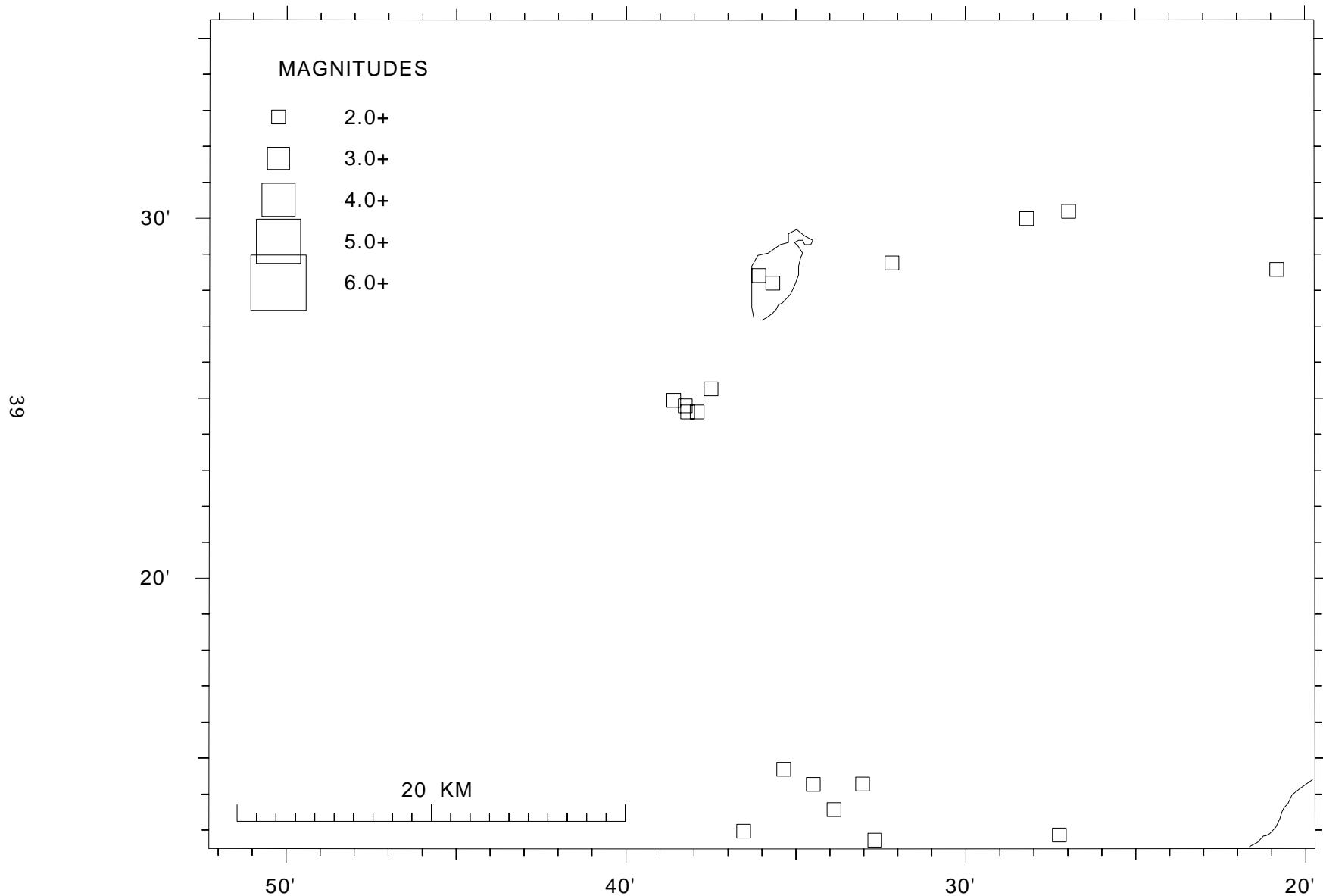


Figure 23. 2002 earthquake locations, Mauna Loa summit,
intermediate (5.1 ± 13.0 km depth), $M \geq 2.0$.

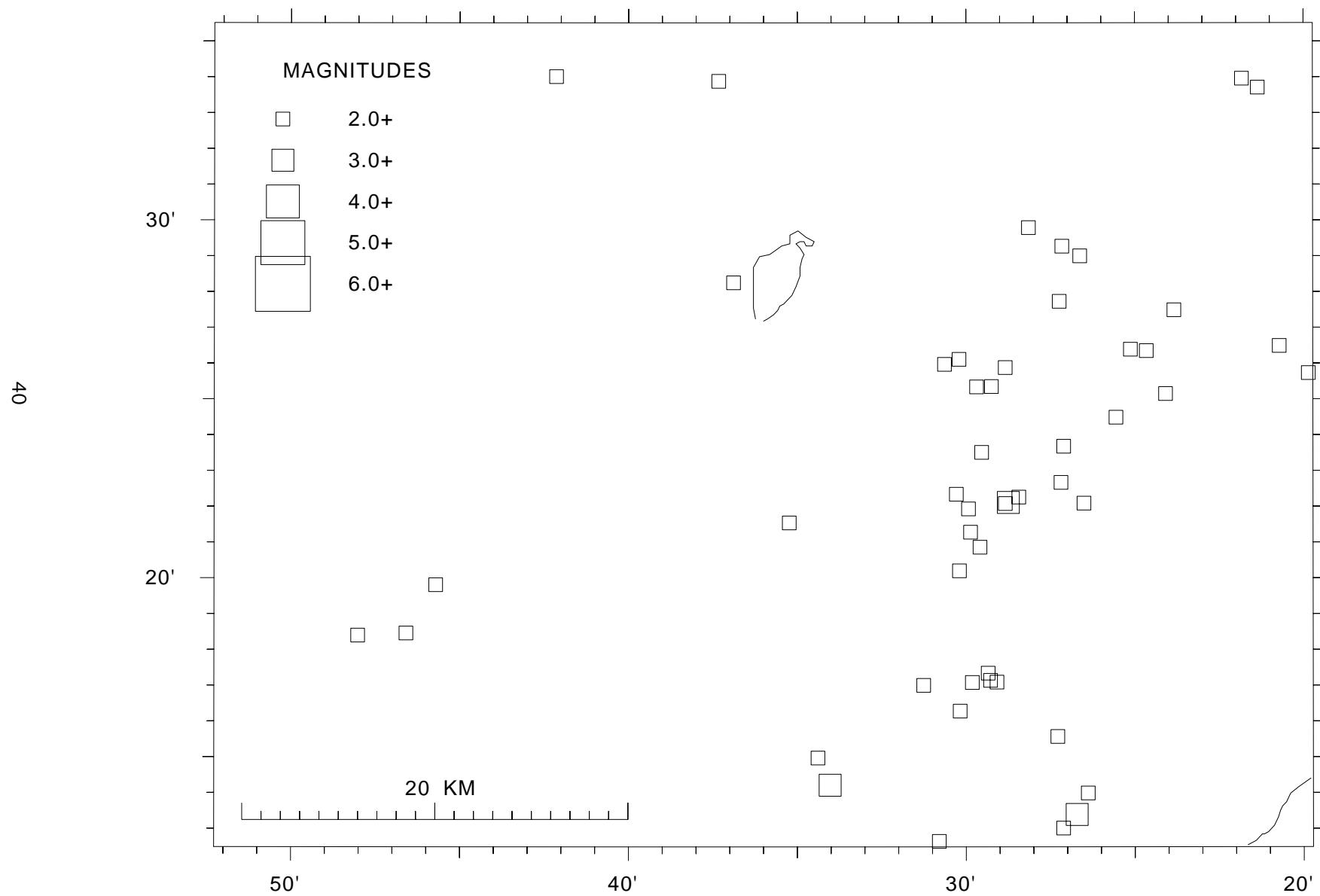


Figure 24. 2002 earthquake locations, Mauna Loa summit,
deep (13.1 ± 60.0 km depth), $M \geq 2.0$.

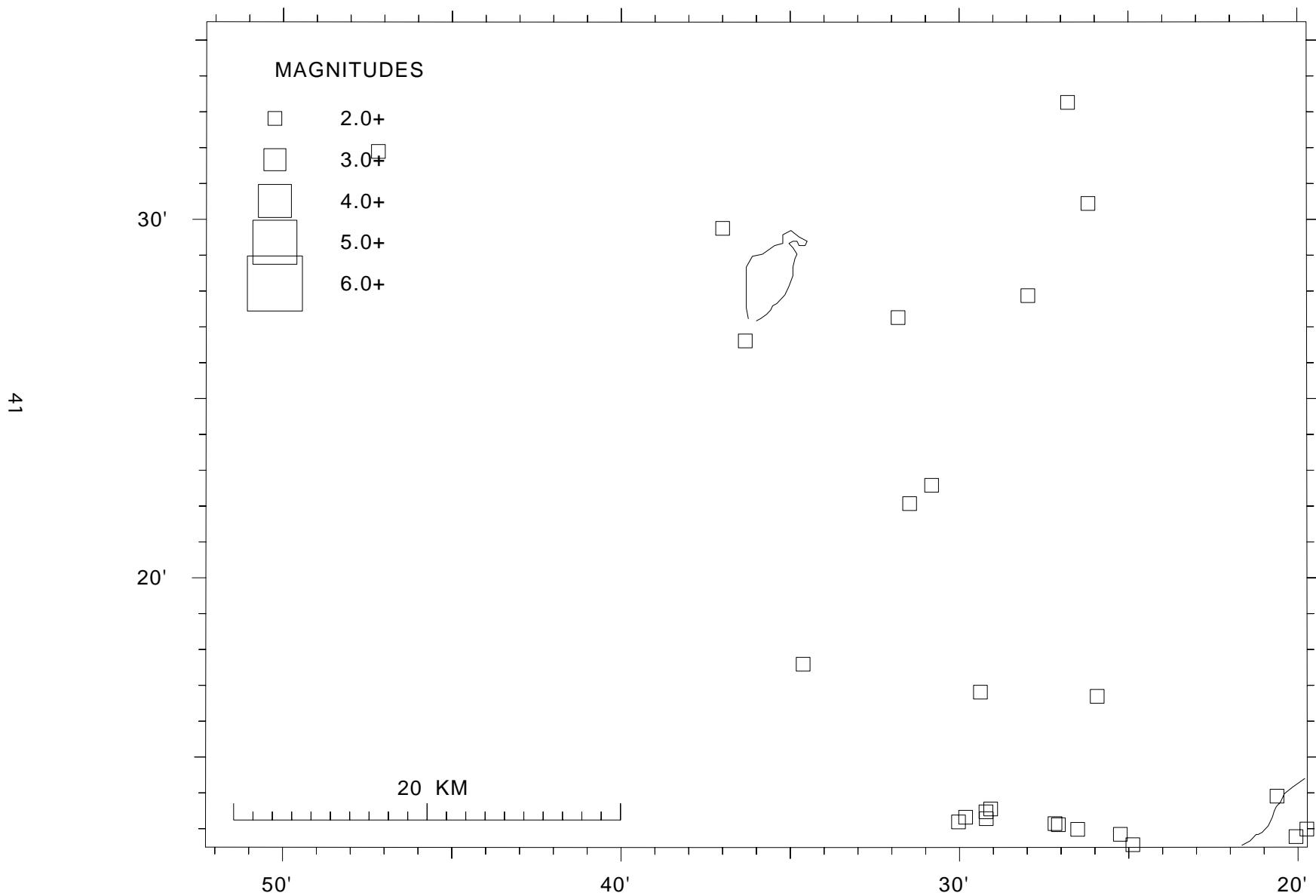


Table 4 is a chronological list of selected events successfully located during 2002. For each event, the following data are presented:

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.

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

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

Table 4.

ORIGIN TIME (HST)		LAT	N	LONG W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN				
YEAR	MON	DA	HRMN	SEC	DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	RMKS	MAG	GAP	DS
2002	JAN	1	0554	50.01	19	19.02	155	13.03	9.61	33	4	.12	.5	.8 SF2	1.8X	123	7
2002	JAN	1	0656	30.73	18	50.75	155	9.36	44.38	17	4	.10	1.8	3.2 LOI	1.8X	284	47
2002	JAN	1	0940	19.97	19	18.53	155	13.18	6.13	33	3	.14	.5	1.0 SF2	1.6X	88	3
2002	JAN	2	0054	46.69	19	21.81	155	17.05	49.09	24	5	.13	1.2	1.1 DEP	1.0U	125	2
2002	JAN	2	0323	51.28	19	23.83	155	3.07	7.05	23	5	.17	.6	.7 SF5	1.3X	144	2
2002	JAN	2	0618	11.17	19	48.97	155	22.65	26.92	19	3	.10	1.1	1.2 KEA	1.1U	223	9
2002	JAN	2	1907	47.27	19	58.64	155	32.38	3.81	18	2	.14	1.5	1.6 KEA	1.4X	323	23
2002	JAN	3	0545	1.35	19	20.14	155	7.66	7.43	34	4	.09	.4	.6 SF4	2.0X	127	5
2002	JAN	3	0604	36.68	19	20.34	155	7.86	6.84	31	5	.11	.5	.8 SF4	1.5X	117	5
2002	JAN	3	0929	12.79	19	18.71	155	8.52	5.92	20	4	.07	.4	1.0 SF4	1.2X	96	3
2002	JAN	3	1007	37.88	19	21.10	155	5.24	5.12	26	4	.14	.6	1.7 SF5	1.3X	151	6
2002	JAN	3	1206	27.32	19	12.01	155	26.05	5.31	13	3	.07	.8	2.1 LSW	1.4X	176	6
2002	JAN	3	1323	44.88	18	47.42	155	19.00	50.94	29	7	.09	1.3	1.5 LOI	2.2X	272	42
2002	JAN	3	1821	54.33	19	10.57	155	16.40	42.79	28	4	.12	1.0	1.5 DEP	1.9X	216	13
2002	JAN	3	2017	6.87	19	58.46	155	31.05	8.19	18	1	.13	2.2	1.1 KEA	1.5X	289	22
2002	JAN	3	2253	2.38	19	17.22	155	27.52	11.86	25	7	.12	.4	.9 LSW	1.1X	53	6
2002	JAN	4	0815	0.50	19	18.69	155	27.49	8.28	26	4	.14	.4	.8 LSW	1.3X	50	7
2002	JAN	4	0926	50.98	19	25.20	155	29.31	13.16	22	4	.11	.5	1.1 DML	1.0X	65	6
2002	JAN	4	0949	36.79	19	23.10	155	29.88	10.05	19	4	.07	.4	.9 KAO	.9U	89	4
2002	JAN	4	2114	3.77	18	58.81	155	31.83	41.24	31	4	.07	1.0	1.5 DLS	1.9X	221	14
2002	JAN	4	2142	4.25	19	11.92	155	41.56	0.85	30	3	.17	.5	.7 LSW	1.9X	131	9
2002	JAN	5	0023	53.45	19	33.47	155	37.67	11.16	19	1	.14	1.7	1.1 MLO	1.3X	239	5
2002	JAN	5	0421	9.66	19	15.23	155	25.17	8.67	17	1	.08	.5	1.0 LSW	1.0X	76	3
2002	JAN	5	1215	27.36	19	19.29	155	11.75	4.89	20	2	.08	.5	2.0 SSF	1.0X	98	5
2002	JAN	5	1510	57.08	19	21.48	155	4.65	5.98	19	1	.11	.6	1.0 SF5	1.6X	161	5
2002	JAN	5	1536	41.68	19	12.89	155	27.85	0.50	31	6	.11	.3	.4 LSW	1.8X	105	6
2002	JAN	5	1738	46.57	19	15.94	155	6.52	42.66	23	.10	2.4	3.2 DEP	1.4X	222	4	
2002	JAN	6	0309	44.74	19	20.10	155	7.41	7.04	24	3	.12	.5	1.1 SF4	1.2X	133	5
2002	JAN	6	0319	49.90	19	20.91	155	23.84	12.70	30	4	.09	.4	.5 SWR	1.5X	49	2
2002	JAN	6	0504	7.24	19	15.43	155	28.75	10.89	20	4	.14	.6	1.0 LSW	1.3X	79	2
2002	JAN	6	0624	26.16	19	15.83	155	26.04	6.42	23	3	.17	.5	1.4 LSW	1.2X	68	4
2002	JAN	6	0624	55.93	18	58.24	155	31.79	41.51	27	4	.08	1.1	1.7 DLS	1.9X	226	14
2002	JAN	6	0858	25.52	19	22.79	155	14.23	3.54	30	7	.09	.3	.3 SEC	1.7X	126	2
2002	JAN	6	1029	18.18	19	25.18	155	19.27	7.51	27	7	.10	.5	1.0 KAO	1.9X	120	3
2002	JAN	6	1409	59.44	19	24.44	155	16.99	1.78	15	5	.06	.6	.2 SSC	1.5X	116	1
2002	JAN	6	1525	35.45	19	23.40	155	15.02	2.77	14	5	.06	.3	.5 SEC	1.5X	140	2
2002	JAN	6	1601	3.16	19	18.67	154	59.08	38.85	27	3	.11	1.3	1.6 LER	1.6X	212	12
2002	JAN	6	1756	23.45	19	26.51	155	30.44	12.33	24	3	.10	.4	1.2 KAO	1.6X	59	5
2002	JAN	6	2116	1.82	19	25.27	155	30.54	10.33	34	6	.08	.3	.7 KAO	1.6X	37	7
2002	JAN	6	2220	49.27	19	33.27	155	18.35	6.01	14	3	.13	1.6	3.4 GLN	1.4X	247	11
2002	JAN	7	0031	47.25	19	15.38	155	33.24	6.79	19	2	.16	.8	2.1 LSW	1.6X	104	5
2002	JAN	7	0329	39.37	19	18.27	154	59.42	38.46	27	2	.10	1.7	1.7 LER	1.4X	238	13
2002	JAN	7	0432	15.18	19	33.02	155	38.37	10.50	25	4	.12	.9	.8 MLO	1.5X	232	8
2002	JAN	7	0440	56.07	19	21.86	155	48.59	12.28	17	1	.13	1.9	.9 KON	1.4U	242	15
2002	JAN	7	1109	22.86	19	12.73	155	29.28	42.06	26	6	.08	.8	1.3 DLS	1.9X	80	5

ORIGIN TIME (HST)		LAT	N	LONG W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN				
YEAR	MON	DA	HRMN	SEC	DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	RMKS	MAG	GAP	DS
2002	JAN	7	1419	9.34	19	26.72	155	51.56	23.17	18	4	.10	1.2	2.0 KON	1.4X	263	22
2002	JAN	7	1820	38.09	20	9.71	155	36.71	31.43	4311	.11	1.0	2.8 KOH	2.5X	300	45	
2002	JAN	7	1908	38.47	19	19.83	155	20.48	28.65	25	4	.12	.8	1.4 DEP	1.1X	76	5
2002	JAN	8	0208	19.90	19	20.77	155	6.62	7.39	20	5	.11	.6	.9 SF4	.9X	142	5
2002	JAN	8	0301	21.99	19	29.07	155	27.70	7.36	29	7	.10	.3	.9 KAO	1.5X	79	5
2002	JAN	8	0347	23.97	19	11.61	155	53.72	18.77	16	1	.11	3.2	3.0 KON	1.3U	293	14
2002	JAN	8	1522	3.19	17	39.69	155	4.42	36.61	29	4	.09	2.5	3.5 DIS	3.1X	331159	
2002	JAN	8	1646	50.83	19	17.52	155	29.30	9.89	19	3	.14	.5	1.0 LSW	1.2X	48	5
2002	JAN	8	1832	10.37	19	25.01	155	29.15	10.64	22	4	.08	.4	1.0 KAO	1.1X	65	5
2002	JAN	8	1900	45.00	20	1.90	155	45.32	6.08	23	6	.09	1.9	1.0 KOH	1.6X	322	55
2002	JAN	8	2146	52.72	18	47.93	155	27.03	33.38	39	8	.10	1.1	1.9 DLS	2.2X	272	30
2002	JAN	8	2213	31.50	19	25.11	155	1.53	5.19	14	3	.17	1.3	1.9 SF5	1.3X	155	5
2002	JAN	9	0209	7.62	19	26.54	155	29.47	9.01	30	7	.11	.3	.9 KAO	1.2X	43	7
2002	JAN	9	0242	58.58	19	21.84	155	12.91	3.08	16	4	.09	.7	.4 SER	1.4X	85	1
2002	JAN	9	0637	15.23	19	24.20	155	25.57	0.86	15	2	.14	.4	1.0 KAO	1.2U	59	5
2002	JAN	9	0842	30.49	19	19.46	155	13.51	8.62	38	4	.12	.4	.6 SF2	2.4X	120	6
2002	JAN	9	1520	57.87	19	27.08	155	29.27	9.18	30	5	.11	.3	1.0 KAO	1.4X	47	9
2002	JAN	9	1554	44.09	19	11.62	155	36.72	0.02	15	3	.19	.6	.4 LSW	1.2X	90	13
2002	JAN	9	1756	13.30	19	13.76	155	36.43	8.86	14	1	.12	.6	3.0 LSW	1.1X	127	11
2002	JAN	9	1922	39.58	19	18.37	155	13.49	8.58	29	5	.11	.5	.6 SF2	1.5X	79	2
2002	JAN	9	2017	55.31	19	18.40	155	13.72	8.26	40	7	.11	.4	.5 SF2	1.8X	70	3
2002	JAN	9	2100	14.37	19	14.69	155	33.12	5.21	22	3	.17	.4	2.5 LSW	1.2X	70	5
2002	JAN	9	2244	11.95	19	18.94	155	8.31	6.54	35	5	.10	.5	.7 SF4	1.5X	105	3
2002	JAN	9	2248	5.34	19	14.91	15										

YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN	
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	RMKS	MAG	GAP	DS

2002 JAN 12 0729 51.40 19 27.53 155 13.97 28.46 38 8 .11 .6 .9 DEP 1.5X 52 7
 2002 JAN 12 1143 2.01 19 18.57 155 13.44 35.72 5013 .12 .6 .8 DEP 2.6X 78 3
 2002 JAN 12 1528 9.35 20 51.29 156 3.52 22.03 31 4 .10 1.6 2.4 DIS 2.6X 250 26
 2002 JAN 12 1831 59.61 19 25.20 155 18.59 7.49 20 5 .08 .6 .9 INT 1.3X 119 2
 2002 JAN 12 1835 55.89 19 24.92 155 19.20 4.64 20 6 .08 .5 1.4 KAO 1.4X 110 3

2002 JAN 12 1855 52.98 19 24.95 155 18.93 6.41 27 6 .08 .4 .8 INT 1.8X 110 2
 2002 JAN 12 1913 47.66 19 11.45 155 27.74 2.83 20 3 .15 .8 1.6 LSW 1.7X 112 4
 2002 JAN 13 0241 17.23 19 18.17 155 30.41 9.04 25 2 .15 .5 1.2 LSW 1.5X 65 6
 2002 JAN 13 0443 9.12 19 12.06 155 30.13 8.61 18 2 .09 .5 .7 LSW 1.5X 175 6
 2002 JAN 13 0840 47.82 19 19.66 155 11.04 4.55 20 3 .08 .4 2.7 SSF 1.3X 94 5

2002 JAN 13 2023 8.29 19 24.29 155 17.57 1.78 12 5 .05 .7 .5 SSC .9X 88 1
 2002 JAN 13 2337 11.91 19 19.24 155 16.15 6.30 27 5 .11 .4 1.1 SF1 1.5X 98 5
 2002 JAN 14 0048 32.12 19 23.26 155 30.22 10.08 22 2 .05 .4 .9 KAO 1.4X 80 5
 2002 JAN 14 0415 15.38 19 23.71 155 16.49 2.99 34 7 .11 .3 .2 SEC 2.2X 101 0
 2002 JAN 14 0415 39.41 19 23.38 155 17.06 2.77 15 5 .08 .6 .3 SSC 1.8X 76 0

2002 JAN 14 0604 37.64 19 13.79 155 31.23 8.68 18 2 .12 .5 .9 LSW 1.7X 109 3
 2002 JAN 14 0636 35.00 19 29.55 155 46.17 7.42 21 3 .13 .7 .9 KON 1.6X 163 2
 2002 JAN 14 1153 6.04 19 19.34 155 8.23 6.59 18 3 .12 .6 1.4 SF4 .9X 134 4
 2002 JAN 14 1407 38.77 19 21.62 155 10.17 3.30 21 5 .08 .4 .3 SER 1.5X 81 1
 2002 JAN 14 2204 48.17 19 19.96 155 6.79 8.02 26 4 .08 .5 .7 SF4 1.4X 148 5

2002 JAN 14 2341 2.36 19 29.60 155 27.03 5.16 26 5 .12 .3 1.6 KAO 1.7X 87 5
 2002 JAN 15 0128 3.62 19 11.35 155 37.20 8.16 26 3 .12 .4 1.0 LSW 2.0X 91 14
 2002 JAN 15 0231 48.23 19 11.53 155 36.96 6.13 25 3 .15 .4 3.1 LSW 1.5X 90 14
 2002 JAN 15 0640 17.59 19 29.06 155 27.69 7.13 29 7 .11 .3 1.3 KAO 1.4X 79 5
 2002 JAN 15 0737 45.60 19 25.85 155 29.71 12.35 17 4 .10 .6 1.1 KAO .9X 71 6

2002 JAN 15 1229 17.44 19 55.99 155 20.20 19.87 20 6 .12 .7 .9 KEA 1.5X 192 5
 2002 JAN 15 1431 0.94 19 24.42 155 16.92 1.50 12 3 .08 .4 .3 SSC 1.5X 92 1
 2002 JAN 15 1439 22.06 19 19.35 155 11.33 4.82 28 4 .11 .4 1.7 SSF 1.4X 101 6
 2002 JAN 15 1722 16.48 19 24.25 155 17.26 8.74 12 4 .06 1.2 .8 INTL 1.6X 133 1
 2002 JAN 15 2024 21.20 19 24.21 155 17.01 10.45 16 5 .19 1.5 1.2 INTL 1.9X 113 1

2002 JAN 16 0429 7.09 19 25.91 155 15.85 15.22 28 5 .10 .6 .4 DEP 1.4X 119 3
 2002 JAN 16 0516 36.24 19 25.78 155 15.62 6.14 17 6 .11 .9 .7 INTL 1.7X 235 3
 2002 JAN 16 0954 6.08 19 18.92 155 8.40 9.10 26 5 .08 .5 .7 SF4 1.4X 109 3
 2002 JAN 16 1103 3.93 19 24.29 155 16.12 4.69 14 4 .13 1.0 .6 SECL 1.7X 211 1
 2002 JAN 16 1428 51.35 19 20.23 155 7.72 6.53 17 4 .11 .5 1.1 SF4 1.2X 125 5

2002 JAN 16 1710 51.70 19 53.87 155 22.07 27.51 34 9 .09 .6 1.1 KEA 2.0X 243 3
 2002 JAN 16 1733 12.41 19 24.62 155 17.51 8.55 14 4 .10 .7 .6 INTL 1.9X 65 1
 2002 JAN 16 2135 48.85 19 40.16 155 50.99 24.65 18 6 .17 1.5 2.5 HUA 1.5X 219 2
 2002 JAN 16 2341 22.27 19 19.84 155 8.33 6.18 27 2 .09 .4 .8 SF4 1.4X 112 5
 2002 JAN 17 0059 51.16 19 24.32 155 16.35 15.53 16 3 .11 1.1 .7 DEPL 2.1X 163 1

2002 JAN 17 1046 19.71 19 28.38 155 25.26 9.99 17 3 .09 .6 1.0 KAO 1.3X 60 4
 2002 JAN 17 1523 8.02 19 24.13 155 20.48 2.95 19 4 .10 .4 1.1 KAO 1.1X 90 6
 2002 JAN 17 1641 3.86 19 19.34 155 12.08 3.82 32 8 .12 .3 1.0 SSF 1.4X 94 5
 2002 JAN 17 1655 16.48 19 23.00 155 14.61 2.16 15 6 .11 .3 .3 SEC 1.4X 150 3
 2002 JAN 18 0118 14.50 19 21.57 155 4.98 9.08 4913 .13 .5 .4 SF5F 4.1U 149 5

YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN	
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	RMKS	MAG	GAP	DS

2002 JAN 18 0356 5.12 19 19.31 155 11.17 4.25 25 6 .10 .3 1.7 SSF 1.4X 102 6
 2002 JAN 18 0428 55.94 19 21.06 155 3.70 6.82 21 5 .13 .6 .9 SF5 1.3X 177 6
 2002 JAN 18 0828 26.52 19 29.45 155 23.98 3.81 31 7 .11 .3 .4 KAO 1.8X 62 1
 2002 JAN 18 1232 43.05 19 20.46 155 13.33 5.82 29 5 .13 .4 .9 SF2 1.5X 62 4
 2002 JAN 18 1257 15.69 19 20.53 155 13.30 5.36 32 6 .11 .4 1.0 SF2 1.5X 62 4

2002 JAN 18 1528 57.88 19 21.90 155 4.75 7.20 27 6 .10 .5 .8 SF5 1.4X 154 5
 2002 JAN 18 2213 46.66 19 18.54 155 10.75 5.96 8.68 19 4 .14 1.8 .9 LOI 1.8X 311 43
 2002 JAN 19 0402 54.53 18 50.81 155 10.67 10.62 26 4 .11 1.5 .8 LOI 1.8X 273 46
 2002 JAN 19 0512 33.25 19 19.93 155 3.91 32.85 22 4 .08 1.1 1.3 DEP 1.7X 210 8
 2002 JAN 19 0824 34.11 19 33.44 155 38.35 13.26 18 5 .13 .9 1.3 DML 1.5X 182 6

2002 JAN 19 1035 52.86 19 10.08 155 34.49 8.45 20 4 .08 .8 1.2 LSW 1.3X 238 12
 2002 JAN 19 1447 54.06 19 40.09 156 2.81 6.33 14 4 .16 1.8 .8 HUA 1.8X 301 22
 2002 JAN 19 1733 33.46 19 21.10 155 5.67 6.22 28 5 .12 .5 .9 SF4 1.5X 152 5
 2002 JAN 19 1826 28.09 18 49.22 155 8.99 14.57 23 4 .14 7.811.9 LOI - 2.0X 316 50
 2002 JAN 19 1853 27.67 19 15.02 155 27.04 8.76 23 3 .15 .4 .9 LSW 1.5X 86 5

2002 JAN 19 2128 30.92 19 20.33 155 13.06 8.44 32 7 .11 .4 .5 SF2 1.5X 66 4
 2002 JAN 20 0221 35.25 19 19.96 155 11.12 8.38 28 3 .08 .5 .6 SF3 1.4X 88 4
 2002 JAN 20 0600 4.50 18 47.62 155 9.80 13.72 18 3 .15 6.910.5 LOI - 1.8X 288 55
 2002 JAN 20 1102 12.72 19 19.98 155 10.85 6.18 23 3 .09 .5 1.1 SF3 1.4X 91 4
 2002 JAN 20 1132 41.79 19 15.84 155 31.94 6.73 37 6 .17 .4 1.2 LSW 1.9X 62 3

2002 JAN 20 1221 18.13 19 20.39 155 8.87 3.49 29 5 .13 .4 .7 SSF 1.4X 100 4
 2002 JAN 20 1421 24.93 19 18.67 155 27.08 10.02 23 3 .09 .4 .8 LSW 1.4X 64 7
 2002 JAN 20 1905 1.85 19 23.43 155 16.90 27.37 30 4 .12 .7 1.1 DEP 1.7X 48 1
 2002 JAN 20 2145 28.82 18 53.71 156 0.71 11.13 22 .11 9.5 1.7 DIS 2.0X 296 38
 2002 JAN 20 2210 10.02 19 12.34 155 13.90 50.92 23 1 .10 1.5 2.6 DEPT 1.9X 261 9

2002 JAN 21 0252 47.42 19 29.76 155 37.00 15.73 12 .12 1.6 1.4 DML 2.0X 196 2
 2002 JAN 21 0305 0.48 19 25.31 155 30.80 11.69 27 3 .09 .4 1.0 KAO 1.5X 46 8
 2002 JAN 21 0318 49.50 19 22.44 155 29.97 8.55 31 2 1 .3 .4 1.1 KAO 1.7X 35 4
 2002 JAN 21 0319 8.73 19 22.48 155 28.92 8.78 29 2 .12 .4 .9 KAO 1.7X 35 4
 2002 JAN 21 0408 14.38 19 20.03 155 11.90 6.38 20 1 .10 .5 1.2 SF3 1.2X 82 5

2002 JAN 21 0501 49.15 19 26.74 155 17.53 12.55 9 3 .17 3.7 1.6 INTL 2.0X 287 2
 2002 JAN 21 1022 31.68 19 18.39 155 0.72 36.03 28 1 .09 2.1 2.1 DEP 1.9X 223 12
 2002 JAN 21 1122 29.70 19 27.11 155 46.95 14.92 12 .06 1.4 .7 KON 1.0X 172 16
 2002 JAN 21 1325 16.44 19 19.51 155 8.33 5.81 26 1 .11 .5 1.2 SF4 1.1X 112 4
 2002 JAN 21 1826 10.11 19 24.70 155 29.60 11.29 16 2 .06 .5 1.2 KAO 1.4X 100 5

2002 JAN 21 2151 55.10 19 56.16 156 42.12 3.99 25 5 .18 2.5 2.5 DIS 2.1X 247 94
 2002 JAN 22 0244 33.17 19 47.69 155 25.83 28.66 23 3 .11 1.8 1.2 KEA 1.4X 264 3
 2002 JAN 22 0436 58.90 19 14.08 155 36.70 6.12 29 2 .16 .4 2.0 LSW 1.8X 92 12
 2002 JAN 22 0535 54.40 19 16.46 155 14.79 4.94 16 1 .13 .9 1.2 SSF 1.0X 175 3
 2002 JAN 22 0542 36.48 19 17.45 155 14.58 4.21 34 4 .13 .4 .9 SSF 1.3X 126 2

2002 JAN 22 0553 42.96 19 20.20 155 7.37 5.37 25 1 .16 .6 1.5 SF4 .9X 133 5
 2002 JAN 22 1750 58.68 19 17.80 155 29.37 32.04 23 3 .07 .7 1.4 DLS 1.5X 48 5
 2002 JAN 22 1957 47.63 19 27.03 155 20.05 9.55 17 6 .06 .6 .9 KAO .7X 166 5
 2002 JAN 22 2157 32.89 19 12.98 155 36.54 1.72 11 4 .10 .5 .9 LSW 2.4X 91 12
 2002 JAN 22 2303 1.41 19 25.05 155 29.08 9.35 33 8 .07 .3 .8 KAO 1.5X 39 5

YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN	
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	RMKS	MAG	GAP	DS
2002	JAN	23	0021	6.39	19	27.42	155	27.31	7.74	39	9	.10	.3	1.0	KAO	1.8X	61	8
2002	JAN	23	0100	44.79	19	19.22	155	1.12	41.85	43	8	.11	.9	.9	DEP	2.0X	200	11
2002	JAN	23	0311	37.02	19	19.40	155	10.90	6.75	33	6	.10	.4	.6	SF3	1.3X	100	5
2002	JAN	23	0911	48.65	19	20.23	155	6.86	6.04	23	1	.11	.6	1.2	SF4	1.3X	168	6
2002	JAN	23	0956	7.65	19	20.13	155	13.59	5.22	34	7	.12	.4	.9	SF2	1.2X	69	5
2002	JAN	23	1354	55.77	19	28.96	155	29.48	12.54	18	5	.14	.5	1.3	KAO	1.0X	59	6
2002	JAN	23	1443	8.14	19	25.21	155	30.34	46.48	19	4	.11	1.2	1.5	DML	1.7X	81	5
2002	JAN	23	2319	35.22	19	24.54	155	16.98	11.23	15	3	.17	1.9	.8	INTL	1.7X	119	1
2002	JAN	24	0017	15.18	19	31.38	155	4.18	40.99	27	5	.12	1.2	1.0	DEP	1.7X	194	13
2002	JAN	24	0551	59.86	19	30.44	155	51.27	9.81	19	4	.24	1.7	1.4	KON	1.0X	234	9
2002	JAN	24	0656	0.27	19	24.89	155	2.69	6.12	17	3	.13	1.0	.7	SF5	1.5X	157	3
2002	JAN	24	0903	15.26	19	19.48	155	6.95	6.87	19	4	.09	.5	1.0	SF4	1.2X	151	4
2002	JAN	24	1138	22.15	19	20.41	155	5.91	5.82	27	7	.11	.5	1.1	SF4	1.8X	158	6
2002	JAN	24	1617	56.96	19	20.69	155	30.29	10.56	34	8	.08	.3	.8	KAO	1.9X	55	6
2002	JAN	24	1637	27.57	19	25.56	155	30.96	10.21	14	2	.13	.8	1.5	KAO	1.1X	96	8
2002	JAN	24	1722	48.91	19	26.28	155	30.28	12.65	24	3	.10	.5	1.1	KAO	1.3X	89	5
2002	JAN	24	1843	29.77	19	5.85	155	20.68	12.91	15	3	.17	1.7	.8	LOI	1.5X	219	14
2002	JAN	24	2224	56.66	19	20.09	155	6.69	7.36	18	3	.11	.5	.7	SF4	.9X	174	6
2002	JAN	25	0003	36.67	19	19.86	155	9.89	3.72	32	8	.13	.5	1.6	SSF	1.5X	93	4
2002	JAN	25	0231	26.12	19	19.76	155	8.84	7.09	23	4	.08	.5	.8	SF4	1.4X	116	5
2002	JAN	25	1018	31.55	20	12.40	155	38.35	35.45	24	7	.10	1.1	1.3	KOH	1.9X	251	17
2002	JAN	25	1159	57.58	19	24.06	155	29.92	10.68	26	3	.08	.3	.8	KAO	1.4X	44	5
2002	JAN	25	1254	27.53	19	25.55	155	30.95	11.20	26	5	.10	.4	1.1	KAO	1.3X	47	8
2002	JAN	25	1424	15.16	19	20.41	155	4.45	4.09	27	6	.14	.6	2.3	SSF	1.1X	179	7
2002	JAN	25	1527	20.24	19	19.08	155	12.33	5.23	20	4	.09	.4	1.4	SF2	1.0X	123	4
2002	JAN	25	1657	33.24	19	14.02	155	27.70	6.40	20	3	.14	.5	1.0	LSW	1.8X	112	5
2002	JAN	25	2005	27.83	19	16.58	155	28.47	8.20	14	.12	.6	.9	LSW	1.3X	65	4	
2002	JAN	26	0031	57.89	19	18.51	155	13.45	8.04	41	7	.13	.4	.5	SF2	2.2X	79	3
2002	JAN	26	1016	48.39	19	18.67	155	52.91	10.73	15	3	.10	1.5	1.0	KON	1.3X	280	23
2002	JAN	26	1336	36.94	19	20.27	155	4.33	5.65	33	6	.11	.6	1.1	SF5	1.5X	180	8
2002	JAN	27	0404	59.68	19	18.49	155	13.16	5.96	37	6	.11	.3	.9	SF2	2.2X	90	3
2002	JAN	27	0613	39.33	19	19.76	155	8.53	5.32	29	6	.10	.4	.9	SF4	1.1X	108	5
2002	JAN	27	0721	38.94	19	14.36	155	13.49	6.30	30	4	.13	.7	1.4	SF2	1.5X	201	5
2002	JAN	27	1103	47.14	19	36.03	156	24.12	6.48	28	6	.14	1.4	1.6	DIS	2.0X	277	60
2002	JAN	27	1132	50.23	19	9.27	155	27.26	34.82	23	3	.08	1.2	1.9	DLS	1.3X	227	1
2002	JAN	27	1206	47.37	19	16.90	155	13.93	7.04	21	3	.08	.6	.9	SF2	1.0X	207	1
2002	JAN	27	1450	23.62	19	19.90	155	9.06	7.02	30	5	.07	.4	.7	SF4	1.6X	96	4
2002	JAN	27	1900	55.50	19	21.72	155	10.78	3.00	15	3	.08	.6	.4	SER	1.4X	121	2
2002	JAN	27	2356	24.94	19	22.62	155	26.51	9.70	38	7	.10	.3	.6	KAO	1.7X	55	2
2002	JAN	27	2356	41.85	19	23.00	155	26.30	8.96	23	6	.12	.4	.9	KAO	1.4X	55	2
2002	JAN	28	0142	40.52	19	32.51	155	45.20	31.22	20	5	.10	.9	1.2	KON	1.3X	132	4
2002	JAN	29	0652	38.48	19	23.01	155	27.57	9.78	37	7	.12	.3	.7	KAO	1.7X	45	1
2002	JAN	29	0721	17.25	19	12.04	155	26.21	3.56	13	1	.11	.7	2.6	LSW	1.5X	140	6
2002	JAN	29	1340	33.41	19	12.26	155	26.76	1.11	14	2	.10	.4	.7	LSW	1.3X	150	5
2002	JAN	29	1739	56.89	19	20.43	155	52.36	11.75	23	4	.14	1.0	.6	KON	1.4X	240	22

YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN		
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	RMKS	MAG	GAP	DS	
2002	JAN	29	1815	0.27	19	41.55	156	26.50	5.95	30	8	.12	1.5	2.5	DIS	2.1X	229	63	
2002	JAN	29	2249	44.18	19	17.42	155	30.39	11.60	18	4	.11	.4	1.3	LSW	1.1X	68	4	
2002	JAN	29	2353	3.27	19	9.89	155	36.56	0.27	25	3	.13	.4	.4	LSW	1.6X	105	15	
2002	JAN	30	0458	17.76	19	2.38	155	14.86	0.78	13	4	.13	8.9	3.8	LOI	1.2X	325	27	
2002	JAN	30	0547	31.50	19	20.06	155	7.01	7.38	32	5	.10	.5	.7	SF4	1.7X	136	5	
2002	JAN	30	0821	6.89	19	25.51	155	15.63	14.40	17	4	.06	.6	.8	DEP	1.1X	145	3	
2002	JAN	30	0934	48.05	19	53.05	155	20.66	11.15	22	2	.10	.8	.4	KEA	1.8X	124	1	
2002	JAN	30	0951	2.25	19	19.69	155	12.19	6.82	42	9	.11	.4	.6	SF3	1.8X	85	5	
2002	JAN	30	1227	15.92	19	19.08	155	11.49	6.37	33	6	.12	.5	.9	SF3	1.7X	170	5	
2002	JAN	30	1311	21.93	19	23.63	155	26.20	3.29	16	3	.08	.4	.8	KAO	1.1X	68	3	
2002	JAN	30	1709	38.76	18	50.47	155	11.02	18.05	26	5	.14	1.6	14.0	LOI	-	2.1X	270	46
2002	JAN	30	1710	56.27	19	17.21	155	29.05	8.56	20	4	.13	.4	.8	LSW	1.2X	82	4	
2002	JAN	30	1907	24.89	19	18.48	155	13.01	5.50	31	5	.11	.4	1.1	SF2	1.4X	94	3	
2002	JAN	30	2011	51.89	19	20.17	155	12.60	0.02	25	6	.13	.4	.3	SSF	#	1.0X	139	5
2002	JAN	30	2216	49.60	19	19.70	155	8.21	6.46	38	7	.10	.4	.6	SF4	1.8X	115	4	
2002	JAN	30	2235	10.96	19	17.01	155	13.32	5.61	31	2	.11	.5	.8	SF2	1.5X	156	0	
2002	JAN	30	2304	53.66	19	12.34	155	30.71	0.73	33	8	.13	.3	.3	LSW	1.6X	78	7	
2002	JAN	30	2339	8.52	19	21.29	155	5.55	6.16	33	7	.12	.5	.6	SF4	1.6X	152	5	
2002	JAN	31	0249	30.06	19	21.37	155	5.84	5.68	33	4	.13	.5	1.2	SF4	1.3X	147	5	
2002	JAN	31	0408	19.30	19	55.38	155	22.77	8.26	14	5	.07	1.1	.8	KEA	1.3U	225	37	
2002	JAN	31	0627	19.35	19	19.88	155	51.63	9.16	22	4	.19	.9	1.1	KON	1.5X	210	20	
2002	JAN	31	0714	11.66	19	29.35	155	10.40	12.02	12	4	.12	2.1	1.6	GLN	2.3X	295	13	
2002	JAN	31	1207	39.04	19	29.30	155	27.02	6.32	25	6	.09	.3	1.2	KAO	1.4X	67	5	
2002	JAN	31	1313	14.02	19	12.08	155	26.45	2.39	27	5	.12	.4	.7	LSW	1.4X	140	5	
2002	JAN	31	1315	27.05	19	25.35	155	28.36	7.20	32	5	.10	.3	1.0	KAO	1.5X	42	5	
2002	JAN	31	1503	16.63	19	20.12	155	8.21	6.18	25	4	.11	.6	1.2	SF4	1.2X	179	6	
2002	JAN	31	2233	46.31															

YEAR	MONTH	DAY	HR	MIN	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN	
						DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	RMKS	MAG	GAP	DS
2002	FEB	3	0904	0.26	19	18.85	155	13.74	8.52	15	1	.05	.7	1.2	SF2	1.1X	123	3	
2002	FEB	3	1412	35.47	19	25.03	155	39.18	2.90	17	1	.10	.7	.4	MLO	1.8X	195	3	
2002	FEB	3	1458	16.82	19	22.92	155	24.07	30.55	26	7	.10	.7	1.1	DML	1.4X	61	5	
2002	FEB	3	1543	19.22	19	21.67	155	26.80	12.30	4510	.09	.3	.5	KAO	1.7X	45	2		
2002	FEB	3	1544	4.88	19	21.91	155	26.72	11.20	31	4	.09	.4	.6	KAO	1.5X	50	2	
2002	FEB	3	1547	5.21	19	21.86	155	26.82	12.10	23	5	.11	.4	.9	KAO	.9X	64	2	
2002	FEB	3	1547	38.33	19	21.88	155	26.83	11.72	36	9	.11	.4	.7	KAO	1.1X	46	2	
2002	FEB	3	1610	1.89	19	22.00	155	26.59	11.99	35	6	.10	.4	.6	KAO	1.3X	51	2	
2002	FEB	3	1658	56.20	17	32.34	155	28.14	2.46	16			.1011	.110.9	DIS	- 2.4X	345161		
2002	FEB	3	2308	6.54	19	9.51	155	22.00	52.81	16	1	.13	2.3	2.2	LOIT	299	10		
2002	FEB	3	2324	25.76	19	25.70	155	28.18	10.89	26	6	.10	.4	.8	KAO	1.4X	57	6	
2002	FEB	4	0020	53.13	19	26.23	155	19.14	8.37	31	7	.12	.4	.8	KAO	1.9X	140	3	
2002	FEB	4	0405	52.25	19	13.38	155	25.76	7.30	19	3	.12	.8	1.5	LSW	1.2X	148	4	
2002	FEB	4	0840	48.87	19	19.68	155	18.47	3.85	23	5	.09	.3	.6	SWR	1.2X	67	2	
2002	FEB	4	1011	11.35	19	51.85	155	40.94	29.09	40	9	.11	.6	1.5	KEA	1.9X	104	25	
2002	FEB	4	1446	14.37	19	16.73	155	27.23	0.36	16	4	.14	.3	.4	LSW	1.0U	107	6	
2002	FEB	4	2256	10.20	19	11.98	155	32.22	4.76	25	6	.13	.5	2.9	LSW	1.6X	139	7	
2002	FEB	5	0127	58.25	19	20.12	155	10.56	6.39	28	3	.13	.5	.9	SF3	1.1X	84	4	
2002	FEB	5	0154	18.62	19	58.36	156	45.97	6.55	27	7	.14	2.5	2.8	DIS	2.5X	252	93	
2002	FEB	5	0623	1.89	19	25.35	155	29.25	9.46	40	9	.09	.3	.6	KAOF	2.4X	39	6	
2002	FEB	5	0652	14.36	19	19.90	155	7.90	5.44	23	2	.12	.5	1.3	SF4	1.1X	124	5	
2002	FEB	5	0819	25.38	19	22.27	155	23.67	12.39	21	3	.09	.5	1.1	KAO	1.2X	59	4	
2002	FEB	5	1158	56.19	19	20.81	155	27.06	9.72	23	4	.11	.6	.9	KAO	1.2X	66	3	
2002	FEB	5	1512	53.66	19	46.24	155	25.24	14.00	15	2	.10	.8	.3	KEA	1.3X	105	4	
2002	FEB	5	1628	30.96	19	17.52	155	29.33	6.42	31	6	.20	.4	1.4	LSW	1.2X	49	5	
2002	FEB	5	1708	5.03	18	56.54	155	26.21	25.23	26	6	.07	.9	1.6	DLS	1.7X	239	24	
2002	FEB	5	1711	14.44	19	10.23	155	43.11	8.07	22	2	.14	.8	2.1	KON	1.5X	103	5	
2002	FEB	5	2008	11.91	19	6.46	155	6.73	52.08	26	4	.09	1.5	1.7	LOI	1.7X	235	20	
2002	FEB	6	0107	15.13	20	21.34	155	55.77	2.76	17	3	.08	2.3	1.0	KOH	1.7X	185	49	
2002	FEB	6	0138	34.28	19	20.00	155	8.33	9.03	40	8	.08	.4	.4	SF4	2.7X	107	5	
2002	FEB	6	0517	7.88	19	56.38	155	32.00	33.43	21	5	.09	1.4	1.5	KEA	1.4X	286	19	
2002	FEB	6	1405	3.54	19	22.99	155	25.25	9.88	39	8	.11	.3	.6	KAO	1.7X	56	4	
2002	FEB	6	1526	25.61	19	9.34	155	6.36	45.98	39	8	.12	.9	1.2	LOI	1.8X	214	15	
2002	FEB	6	1532	18.65	19	26.35	155	30.65	10.58	15	2	.08	.5	1.4	KAO	1.1X	65	9	
2002	FEB	7	1152	29.46	19	16.28	155	30.18	10.03	40	7	.13	.4	.7	LSW	2.0X	54	2	
2002	FEB	7	1204	21.33	19	23.60	155	15.38	2.91	16	4	.09	.3	.4	SEC	1.4X	91	2	
2002	FEB	7	1229	46.44	19	23.68	155	16.32	2.67	24	6	.13	.6	.2	SEC	1.6X	119	1	
2002	FEB	7	1424	7.55	19	30.59	155	27.12	4.84	15	3	.09	.4	1.2	MLO	1.1X	120	3	
2002	FEB	7	1749	11.10	19	19.23	156	0.61	42.82	3510	.09	.8	1.3	KON	1.9X	248	32		
2002	FEB	7	1912	58.92	19	21.88	155	11.04	3.16	18	3	.08	.5	.4	SER	1.5X	120	2	
2002	FEB	7	2207	48.12	19	29.44	155	26.88	6.90	15	4	.09	.4	1.2	KAO	1.7X	99	5	
2002	FEB	7	2225	9.44	19	10.75	155	40.05	8.03	19	2	.12	.6	2.0	LSW	1.4X	88	11	
2002	FEB	7	2340	34.37	19	20.41	155	8.67	6.59	38	6	.10	.4	.6	SF4	1.7X	101	4	
2002	FEB	8	0553	18.73	19	25.20	155	19.09	7.51	18	4	.09	.6	1.1	KAO	1.3X	122	3	
2002	FEB	8	0758	22.19	19	27.29	155	29.24	10.98	26	4	.08	.4	.8	KAO	1.5X	48	8	

YEAR	MONTH	DAY	HR	MIN	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN	
						DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	RMKS	MAG	GAP	DS
2002	FEB	8	1159	37.72	19	22.50	155	28.73	9.73	41	7	.08	.3	.6	KAO	1.7X	39	2	
2002	FEB	8	1303	47.70	19	19.61	155	8.63	6.81	20	3	.08	.5	1.2	SF4	1.1X	122	4	
2002	FEB	9	0622	17.57	19	21.88	155	13.64	12.72	34	8	.08	.4	.5	SF2	1.9X	56	2	
2002	FEB	9	1514	9.52	19	16.62	155	37.97	7.77	15	4	.10	.4	2.5	LSW	1.5X	106	10	
2002	FEB	9	1628	52.13	19	33.26	155	55.31	25.94	5113	.10	.5	1.0	KONF	2.8X	160	15		
2002	FEB	9	1712	8.88	19	14.80	155	31.90	14.02	18	3	.13	.6	.7	DLS	1.6X	167	3	
2002	FEB	9	1820	57.59	19	27.98	155	0.45	45.76	27	6	1.1	.18	.9	DEP	1.8X	222	6	
2002	FEB	10	0048	50.26	19	7.51	155	33.56	5.46	14	.16	.9	2.1	LSW	1.6X	147	11		
2002	FEB	10	1617	40.03	19	19.81	155	10.89	7.87	39	8	.09	.4	.6	SF3	2.2X	91	5	
2002	FEB	10	1729	40.42	19	11.46	155	40.43	0.59	18	5	.20	.6	.4	LSW	1.2X	98	10	
2002	FEB	10	2115	6.77	19	18.31	155	15.67	5.35	27	5	.11	.4	1.3	SF1	1.3X	109	5	
2002	FEB	10	2320	23.01	20	1.00	155	28.76	6.90	14	3	.10	1.8	1.1	KEA	1.6X	321	26	
2002	FEB	11	0118	46.48	19	13.09	155	34.44	7.32	14	1	.11	.5	1.3	LSW	1.6X	132	8	
2002	FEB	11	0229	35.06	19	0.72	155	18.55	32.03	24	4	.10	1.2	2.0	LOI	1.3X	244	23	
2002	FEB	11	0307	58.42	19	31.12	155	42.50	2.50	15	3	.12	.6	1.5	MLO	.8X	103	6	
2002	FEB	11	0331	37.40	18	50.71	155	12.82	10.07	22	3	.18	2.0	1.2	LOI	1.6X	283	44	
2002	FEB	11	0717	20.54	19	46.23	155	53.13	26.60	18	5	.12	1.3	1.4	HUA	.9X	292	10	
2002	FEB	11	0828	51.54	19	19.90	155	12.09	4.23	22	3	.12	.5	1.8	SSF	1.3X	154	5	
2002	FEB	11	0927	36.40	19	19.16	155	9.06	4.23	27	6	.13	.5	.6	SSF	1.1X	185	6	
2002	FEB	11	0937	13.14	19	20.17	155	13.39	5.96	35	8	.11	.4	.7	SF2	1.6X	112	5	
2002	FEB	11	1144	16.13	19	18.56	155	12.81	4.70	19	3	.11	1.5	2.7	SSF	1.0X	206	3	
2002	FEB	11	1203	23.29	19	18.26	155	12.96	8.81	27	5	.11	.5	.6	SF2	1.6X	139	2	
2002	FEB	11	1239	58.61	18	43.61	155	12.68	4.31	21	4	.08	1.3	.6	LOI	2.3X	301	55	
2002	FEB	11	1317	9.28	19	19.64	155	10.52	8.96	21	3	.09	.7	.9	SF3	1.6X	175	5	
2002	FEB	11	1526	5.51	19	17.81	155	11.23	7.75	19	3	.10	1.3	1.0	SF3	1.0X	270	4	
2002	FEB	11	1537	37.62	19	27.68	155	52.59	6.60	30	6	.13	.8	.6	KONF	1.9X	208	13	
2002	FEB	11	1811	4.02	19	20.23	155	7.82	7.44	36	9	.09	.4						

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YEAR	MON	DA	HRMN	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN		
				DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	RMKS	MAG	GAP	DS	
2002	FEB	13	0152	48.21	19	23.51	155	29.54	10.36	38	8	.11	.3	.6	KAO	2.2X	54	4
2002	FEB	13	0213	55.39	19	17.07	155	29.36	12.14	15	3	.13	.6	1.8	LSW	.9X	125	10
2002	FEB	13	0952	14.92	19	24.95	155	28.44	9.50	21	4	.11	.4	.9	KAO	1.2X	65	5
2002	FEB	13	1404	18.75	19	21.85	155	29.57	9.15	29	4	.09	.4	.7	KAO	1.6X	62	4
2002	FEB	13	2133	6.49	19	14.48	155	27.09	3.23	16	5	.11	1.2	1.9	LSW	.9X	231	12
2002	FEB	13	2205	33.64	19	18.81	155	13.26	7.57	3310	.12	.6	.6	SF2	1.5X	196	7	
2002	FEB	13	2222	36.96	19	28.31	155	36.64	9.36	14	3	.12	.9	1.1	MLO	1.8X	185	2
2002	FEB	14	0136	41.74	19	27.12	155	29.96	8.81	24	7	.09	.4	1.2	KAO	1.3X	60	7
2002	FEB	14	1210	11.37	19	26.43	154	57.62	1.31	19	4	.13	.6	.6	SLE	1.8X	139	3
2002	FEB	14	1210	43.78	19	23.02	154	57.57	1.77	18	1	.15	1.1	1.5	SLE	2.0X	209	4
2002	FEB	14	1745	24.99	19	18.37	155	12.67	1.58	24	6	.11	.6	.7	SSF	1.2X	238	8
2002	FEB	14	1814	54.25	19	20.16	155	8.37	7.70	27	8	.10	.8	.7	SF4	1.5X	210	4
2002	FEB	14	1933	4.65	19	16.00	155	25.23	4.68	12	2	.13	1.5	9.6	LSW #	.8X	269	8
2002	FEB	14	2055	12.64	19	24.90	155	17.03	2.50	13	5	.11	.7	.2	SNC	1.1X	136	0
2002	FEB	15	0308	1.17	20	4.45	155	38.93	25.52	11	4	.12	1.5	1.9	KOH	1.6X	194	15
2002	FEB	15	1006	13.10	19	25.47	155	19.16	5.05	20	6	.11	.5	.9	KAO	1.7X	133	3
2002	FEB	15	1041	18.13	19	17.36	155	13.73	6.98	20	2	.08	.9	1.3	SF2	1.3X	234	8
2002	FEB	15	1450	51.07	19	18.85	155	11.83	4.86	20	4	.12	1.1	4.7	SSF	1.2X	280	7
2002	FEB	15	1603	47.08	19	18.40	155	16.00	31.42	5211	.10	.6	.7	DEP	3.0X	111	4	
2002	FEB	15	1800	15.56	19	21.86	155	11.25	3.14	30	7	.11	.7	.5	SER	1.8X	174	2
2002	FEB	15	1844	47.21	19	17.19	155	14.77	0.04	17	3	.11	2.5	.9	SSF #	1.2X	265	10
2002	FEB	15	2221	27.59	19	23.39	155	2.58	6.61	26	4	.13	.9	.6	SF5	1.6X	196	3
2002	FEB	15	2248	45.00	19	31.90	155	47.19	27.31	3811	.09	.5	.9	KON	2.0X	167	3	
2002	FEB	16	0144	49.58	19	5.15	154	43.10	15.91	19	4	.12	3.5	511.4	DIS -	1.7X	290	43
2002	FEB	16	0157	11.07	19	17.69	155	12.81	6.01	21	4	.08	.7	1.7	SF2	1.0X	214	9
2002	FEB	16	0231	25.12	19	20.78	155	13.36	8.63	36	8	.09	.5	.4	SF2	2.3X	169	3
2002	FEB	16	0555	57.26	19	20.46	155	10.76	7.36	23	2	.07	1.2	.7	SF3	1.6X	202	3
2002	FEB	16	0714	5.65	19	21.11	155	10.26	1.29	20	6	.10	.6	.4	SER	1.8X	197	2
2002	FEB	16	0831	46.48	19	21.00	155	13.43	12.84	22	5	.07	.9	.6	SF2	1.3X	185	3
2002	FEB	16	1349	49.83	19	29.00	155	26.63	7.72	34	6	.12	.4	.9	KAO	2.2X	49	6
2002	FEB	17	1859	41.56	19	26.55	155	28.37	9.47	18	4	.11	.5	1.6	KAO	1.5X	80	8
2002	FEB	18	0456	59.36	19	20.62	155	11.38	8.83	19	1	.07	1.3	.8	SF3	1.5X	203	4
2002	FEB	18	0648	38.74	19	27.11	155	27.70	9.33	22	5	.10	.4	1.1	KAO	1.5X	68	9
2002	FEB	18	1456	31.85	19	16.36	155	14.40	6.05	24	4	.12	.9	1.5	SF2	1.4X	229	2
2002	FEB	18	1526	18.31	19	25.94	155	13.49	20.86	15	6	.07	1.4	.9	DEP	1.3X	278	6
2002	FEB	18	1741	10.22	19	18.56	155	7.93	4.17	28	6	.12	.9	2.0	SSF	1.4X	128	2
2002	FEB	18	1746	26.44	19	19.32	155	29.93	9.07	13	2	.12	.9	1.3	KAO	.7X	201	7
2002	FEB	19	0050	28.83	21	4.22	155	17.33	31.11	18	.0811	3	4.6	DIS -	2.4X	320116		
2002	FEB	19	0157	59.75	19	12.25	155	32.37	0.13	23	4	.10	.3	.3	LSW	1.3X	87	7
2002	FEB	19	0500	0.45	19	21.47	155	30.40	7.06	18	1	.17	.7	1.6	KAO	1.3X	131	5
2002	FEB	19	1002	38.06	19	18.64	155	11.12	4.36	24	4	.11	.7	3.8	SSF	1.3X	216	7
2002	FEB	19	1023	1.96	19	17.82	155	12.91	4.54	29	6	.12	.7	2.2	SSF	1.4X	213	9
2002	FEB	19	1122	19.19	19	24.45	155	17.80	12.51	20	5	.16	.8	.8	INTL	1.5X	57	2
2002	FEB	19	1258	7.11	19	19.05	155	10.00	7.41	32	5	.09	.5	.6	SF3	1.7X	124	5
2002	FEB	19	1855	44.02	19	18.27	155	7.84	2.71	27	6	.11	.6	.9	SSF	1.2X	205	8

YEAR	MON	DA	HRMN	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN		
				DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	RMKS	MAG	GAP	DS	
2002	FEB	19	2134	1.06	19	19.03	155	5.36	1.43	21	5	.11	.7	.5	SSF	1.3X	229	9
2002	FEB	20	0713	15.32	19	25.19	154	54.12	27.97	21	3	.12	2.9	1.0	LER	1.4X	337	8
2002	FEB	20	0740	26.95	19	7.56	155	24.17	36.37	25	6	.12	1.1	1.2	LOI	1.6X	241	7
2002	FEB	20	1558	21.22	19	23.30	155	14.81	3.08	17	5	.08	.3	.4	SEC	1.5X	140	3
2002	FEB	20	2057	40.15	19	58.92	155	24.92	8.29	25	7	.12	.9	.6	KEA	1.7X	288	23
2002	FEB	21	0239	28.40	19	21.39	155	11.02	2.62	22	7	.09	.8	.4	SER	1.7X	193	2
2002	FEB	21	0455	46.21	19	17.00	155	29.53	8.90	24	4	.14	.5	1.0	LSW	1.3X	101	4
2002	FEB	21	0854	30.10	19	29.21	155	27.13	5.26	23	6	.10	.3	1.8	KAO	1.5X	90	5
2002	FEB	21	1147	5.76	19	11.96	155	30.09	12.22	20	3	.12	.6	1.4	LSW	1.5X	121	6
2002	FEB	21	1225	52.86	19	28.44	155	31.60	41.10	22	5	.11	.9	1.5	DML	1.6X	55	6
2002	FEB	21	1550	50.91	19	12.89	155	32.36	0.01	24	6	.11	.4	.3	LSW #	1.7X	80	10
2002	FEB	21	1625	22.90	19	16.87	155	12.17	1.16	18	4	.20	1.8	1.0	SSF #	1.0X	248	10
2002	FEB	21	1739	7.66	19	20.85	155	9.99	3.29	14	3	.10	1.2	.8	SER	1.4X	222	2
2002	FEB	21	1849	22.14	19	22.85	155	25.77	10.88	24	7	.10	.5	1.0	KAO	1.2X	75	1
2002	FEB	21	2323	53.70	19	28.48	155	26.38	8.36	20	5	.09	.4	1.2	KAO	1.1X	68	6
2002	FEB	22	0247	48.89	19	26.54	155	18.52	8.59	22	6	.11	.6	.9	INT	1.5X	160	3
2002	FEB	22	0831	41.27	19	8.93	155	36.37	1.34	17	3	.13	.5	.7	LSW	1.0X	114	15
2002	FEB	22	1007	37.17	19	18.92	155	7.74	2.87	23	6	.16	2.1	2.0	SSF	1.0X	275	7
2002	FEB	22	1119	6.60	19	22.75	155	29.73	8.95	32	7	.09	.3	.8	KAO	1.4X	58	4
2002	FEB	22	1141	2.46	19	11.64	155	31.48	4.74	25	5	.14	.6	2.2	LSW	1.7X	200	7
2002	FEB	22	2024	3.10	19	19.20	155	11.09	4.80	21	4	.12	1.0	2.9	SSF	1.1X	237	6
2002	FEB	23	0213	32.23	19	25.66	155	19.62	6.90	18	6	.08	.5	1.1	KAO	1.1X	137	4
2002	FEB	23	0406	7.73	19	17.92	155	13.05	31.38	4211	.10	.7	.8	.8	DEP	1.7X	169	9
2002	FEB	23	0436	51.88	19	4.44	155	21.25	34.41	4511	.11	.7	1.1	LOI	2.3X	202	15	
2002	FEB	23	0955	30.48	19	18.96	155	7.55	4.24	19	2	.10	1.4	3.5	SSF	.9X	244	7
2002	FEB	23	1213	29.64	19	27.44	155	23.80	9.12	21	4	.11	.5	1.0	KAO	1.0X	98	4
2002	FEB	23	1413	32.83	19	15.17	155	26.76	9.78	24	2	.09						

YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN		
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	RMKS	MAG	GAP	DS	
2002	FEB	25	1026	32.68	19	23.43	155	55.13	6.75	13	2	.12	1.3	1.3	KON	1.6X	262	21	
2002	FEB	25	1347	16.37	19	24.91	156	1.46	37.85	30	6	.08	1.1	1.5	KON	2.3X	256	29	
2002	FEB	25	1549	25.68	19	16.62	155	26.58	6.98	19	3	.15	.9	1.2	LSW	1.2X	212	9	
2002	FEB	25	2143	22.57	19	20.97	155	11.28	7.93	29	6	.11	.9	.7	SF3	1.9X	171	3	
2002	FEB	26	0124	34.38	19	19.08	155	13.30	8.58	32	4	.11	.5	.4	SF2	2.0X	168	7	
2002	FEB	26	1837	3.82	19	13.18	155	27.10	0.05	23	6	.18	.5	.4	LSW	#	1.4X	138	7
2002	FEB	26	1855	36.58	18	52.81	155	12.46	43.91	19	6	.11	2.0	3.0	LOI	1.9X	330	41	
2002	FEB	27	0004	59.05	19	18.88	155	13.11	9.56	23	3	.10	.7	.9	SF2	1.2X	146	7	
2002	FEB	27	0009	29.63	18	51.95	155	10.35	3.67	22	7	.09	1.2	.7	LOI	1.9X	293	45	
2002	FEB	27	0139	44.26	18	48.37	155	10.98	7.86	15	4	.12	1.5	1.2	LOI	1.8X	299	49	
2002	FEB	27	0343	49.33	19	29.42	154	53.27	5.18	21	4	.14	.9	1.3	LER	2.2X	138	5	
2002	FEB	27	0430	29.25	19	5.31	155	29.56	29.26	24	4	.09	.9	1.7	DLS	1.7X	201	8	
2002	FEB	27	0627	3.82	19	23.99	155	29.30	8.43	16	3	.13	.5	.9	KAO	.9X	75	4	
2002	FEB	27	1851	6.62	19	1.91	155	15.83	26.29	4511	.11	.8	1.9	1.0	LOI	2.4X	221	25	
2002	FEB	28	0223	18.01	19	13.61	155	28.78	0.06	4012	.17	.4	.2	.2	LSW	#	2.0X	102	8
2002	FEB	28	0234	13.20	19	20.44	155	4.02	5.83	19	3	.14	1.2	1.1	SF5	1.2X	224	7	
2002	FEB	28	0423	45.50	20	5.19	155	38.35	8.31	17	3	.19	2.2	1.0	KOH	1.5X	304	25	
2002	FEB	28	1150	39.57	19	21.98	155	14.54	2.37	16	5	.12	.3	.4	KOA	1.3X	137	3	
2002	FEB	28	1323	7.97	19	23.00	155	17.03	2.39	15	6	.09	.4	.3	SSC	1.1X	99	1	
2002	MAR	1	0206	25.61	20	1.34	155	30.24	3.30	20	5	.17	1.0	1.7	KEA	1.4X	235	24	
2002	MAR	1	0627	3.47	19	55.91	155	10.39	5.75	15	5	.11	.9	1.6	KEA	1.4X	251	34	
2002	MAR	1	0637	37.93	18	58.34	155	29.73	37.02	22	6	.11	1.3	1.6	DLS	1.6X	254	18	
2002	MAR	1	1326	16.26	19	28.58	155	27.48	8.18	31	6	.11	.4	1.0	KAO	1.5X	58	6	
2002	MAR	1	1651	34.25	19	26.11	155	18.80	6.97	31	8	.09	.4	.6	INTL	1.9X	89	2	
2002	MAR	1	1913	51.97	19	20.86	155	2.27	7.65	29	9	.09	.7	.6	SF5	1.1X	224	7	
2002	MAR	1	1942	18.35	19	22.22	154	57.87	1.68	14	4	.12	.8	.6	SLE	1.6X	246	6	
2002	MAR	2	0810	20.45	19	25.17	155	29.63	10.33	25	6	.09	.4	1.0	KAO	1.1X	77	6	
2002	MAR	2	0935	3.44	19	9.16	155	34.21	1.98	22	2	.13	.5	1.4	LSW	1.9X	122	11	
2002	MAR	2	1423	54.34	19	5.14	155	29.52	29.44	21	3	.09	1.2	2.1	DLS	1.8X	197	9	
2002	MAR	2	1617	25.31	19	7.67	155	34.68	48.30	14	2	.11	1.5	2.4	DLST	2.4X	136	12	
2002	MAR	2	1724	14.56	19	29.23	155	27.44	6.52	20	4	.10	.4	1.5	KAO	1.6X	85	5	
2002	MAR	2	1809	42.74	19	19.60	155	5.44	5.35	4011	.10	.6	.9	SF4	1.8X	214	8		
2002	MAR	2	1811	53.76	19	19.15	155	5.53	2.49	17	6	.06	.7	.8	SSF	1.0X	227	9	
2002	MAR	2	2045	53.45	19	18.53	155	13.28	8.04	31	2	.11	.5	.7	SF2	1.8X	169	8	
2002	MAR	3	1014	47.69	19	23.19	155	14.66	2.56	14	4	.08	.3	.5	SEC	1.3X	154	3	
2002	MAR	3	1052	50.16	19	20.30	155	4.54	7.49	31	4	.11	.7	.6	SF5	2.1X	192	8	
2002	MAR	3	1346	28.77	19	22.16	155	2.22	7.90	28	3	.12	1.0	.6	SF5	1.6X	199	5	
2002	MAR	3	1451	55.02	19	18.32	155	5.96	4.74	25	4	.09	1.0	3.8	SSF	1.8X	231	10	
2002	MAR	3	1659	58.42	19	24.30	155	17.84	3.38	39	8	.10	.2	.2	SSCF	2.3X	37	2	
2002	MAR	3	2038	26.96	19	18.05	155	46.37	10.95	25	6	.10	.6	.5	KON	1.5X	185	13	
2002	MAR	3	2058	55.85	19	47.12	156	8.66	6.42	17	3	.11	1.2	.9	HUA	1.4X	197	50	
2002	MAR	3	2315	52.67	19	22.38	155	29.10	10.15	39	8	.10	.4	.5	KAO	1.6X	61	3	
2002	MAR	4	0048	27.31	19	18.66	155	6.22	6.93	34	7	.09	.6	.8	SF4	1.8X	224	9	
2002	MAR	4	0108	14.68	19	13.25	155	30.35	36.99	30	6	.06	.6	1.3	DLS	1.7X	87	8	
2002	MAR	4	0611	49.93	19	18.51	155	13.02	9.02	33	6	.10	.7	.6	SF2	1.5X	175	8	

YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN	
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	RMKS	MAG	GAP	DS
2002	MAR	4	0815	15.23	19	25.88	155	18.95	6.54	23	6	.08	.5	.8	INT	1.6X	152	3
2002	MAR	4	1006	30.15	19	27.29	155	28.11	9.28	20	3	.10	.5	1.4	KAO	1.3X	69	9
2002	MAR	4	1053	2.61	19	58.21	155	53.63	24.66	26	3	.10	1.1	2.4	KOH	2.3X	162	21
2002	MAR	4	1409	20.33	19	50.69	155	34.65	33.16	4210	.10	.6	.9	KEA	2.4X	118	9	
2002	MAR	4	1523	17.73	19	23.38	155	17.10	2.51	25	6	.08	.3	.2	SSC	1.9X	55	0
2002	MAR	4	1659	44.42	19	21.10	155	6.05	8.05	37	3	.11	.8	.6	SF4	2.2X	176	5
2002	MAR	4	2014	29.87	19	22.45	155	11.06	2.97	19	4	.10	1.1	.4	SER	1.6X	152	2
2002	MAR	4	2024	4.39	19	23.65	155	16.13	10.85	11	2	.06	1.5	1.1	INTL	1.6X	142	1
2002	MAR	4	2319	9.61	19	46.74	155	47.62	14.09	38	7	.10	.6	.4	HUA	2.8X	121	11
2002	MAR	5	0437	42.72	19	5.68	155	29.47	28.72	4913	.09	.6	1.0	.1	DLS	2.7X	177	8
2002	MAR	5	0501	35.05	19	19.29	155	5.36	5.15	28	5	.12	.9	1.9	SF4	1.6X	225	8
2002	MAR	5	1125	20.42	19	17.93	155	13.95	5.81	16	3	.06	1.1	2.1	SF2	1.7X	228	7
2002	MAR	5	1235	57.77	19	28.75	155	26.88	9.49	38	9	.12	.4	.8	KAO	1.7X	59	6
2002	MAR	5	1311	56.27	19	16.52	155	16.13	9.12	32	6	.11	.4	.8	DEPL	1.9X	189	2
2002	MAR	5	1358	39.17	19	20.81	155	6.83	7.70	4412	.12	.7	.5	SF4	2.1X	176	5	
2002	MAR	5	1508	32.81	19	25.26	155	16.77	1.83	34	6	.11	.3	.2	SNCF	2.4X	50	1
2002	MAR	5	1515	26.35	19	18.94	155	13.73	6.08	26	2	.11	.8	1.5	SF2	1.9X	196	7
2002	MAR	5	1842	30.83	19	22.92	155	24.88	9.12	32	6	.11	.4	.8	KAO	1.8X	58	5
2002	MAR	5	1921	13.67	19	23.52	155	15.05	3.14	31	7	.10	.3	.3	SEC	2.4X	97	2
2002	MAR	5	2131	56.58	19	20.60	155	12.26	8.75	33	3	.14	1.0	.6	SF3	1.8X	197	4
2002	MAR	5	2214	50.94	19	42.52	155	45.45	12.54	34	4	.11	.6	.3	HUA	2.4X	75	9
2002	MAR	5	2314	21.35	19	23.45	155	16.17	11.60	13	2	.09	1.5	1.1	INTL	1.6X	194	1
2002	MAR	5	2359	50.84	19	23.57	155	16.97	3.09	12	5	.07	.6	.5	SSC	.8X	93	0
2002	MAR	6	0145	11.42	19	23.62	155	17.05	2.70	13	5	.05	.4	.3	SSC	1.3X	85	0
2002	MAR	6	0152	58.57	19	21.23	155	18.53	8.19	21	5	.13	.8	1.1	SWRL	1.6X	181	5
2002	MAR	6	0333	52.68	19	21.48	155	17.64	8.66	14	3	.10	1.0	1.5	SWRL	1.8X	182	3
2002	MAR	6	0810	22.44	19	22.67	155	17.00	10.08	1								

ORIGIN TIME (HST)				LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN		
YEAR	MON	DA	HRMN	SEC	DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	RMKS	MAG	GAP	DS
2002	MAR	8	0354	13.76	19	16.39	155	26.92	8.77	13	4	.11	1.3	.6	LSW	1.8X	275	9
2002	MAR	8	0419	51.63	19	49.98	155	20.47	9.16	14	5	.12	1.0	1.6	KEA	1.4X	240	29
2002	MAR	8	0516	6.38	19	16.91	155	30.08	10.36	25	4	.14	.5	1.3	LSW	1.3X	94	11
2002	MAR	8	0543	41.68	19	26.43	155	19.48	4.11	19	6	.10	.5	.9	KAO	1.3X	162	4
2002	MAR	8	0547	22.34	19	24.56	155	17.42	3.60	15	5	.10	.9	.6	SNCL	1.0X	81	1
2002	MAR	8	0701	41.93	18	58.97	155	30.99	39.03	21	4	.09	1.7	1.4	DLS	1.6X	245	16
2002	MAR	8	0917	17.69	19	27.18	155	18.26	5.66	22	5	.12	.8	1.1	INT	1.5X	180	3
2002	MAR	8	0927	31.41	19	21.29	155	18.76	2.86	4511	.11	.2	.5	.7	SWR	2.4X	48	3
2002	MAR	8	1522	11.21	19	26.49	155	19.28	4.91	25	6	.13	.5	1.2	KAO	1.6X	125	4
2002	MAR	8	1924	21.78	19	27.04	155	18.35	6.01	26	8	.12	.7	1.0	INT	1.3X	196	3
2002	MAR	8	2110	15.63	19	22.09	155	30.05	10.11	32	6	.10	.4	.6	KAO	1.5X	64	4
2002	MAR	8	2117	19.37	19	3.48	155	45.53	26.14	19	5	.10	1.1	1.6	KON	1.2X	224	11
2002	MAR	8	2134	31.13	19	25.73	155	19.86	6.63	39	7	.11	.4	.7	KAOF	2.7X	103	4
2002	MAR	8	2218	25.04	19	45.98	155	34.31	11.80	18	5	.11	.9	1.2	KEA	1.1X	188	14
2002	MAR	9	0030	11.14	19	26.58	155	19.10	5.31	30	8	.11	.5	1.0	KAO	1.8X	150	3
2002	MAR	9	0526	20.99	19	26.14	155	19.88	6.11	24	5	.10	.5	1.1	KAO	1.3X	127	4
2002	MAR	9	1036	55.08	19	24.38	155	17.43	4.98	16	4	.10	.7	.9	SSCL	1.6X	84	1
2002	MAR	9	1328	5.68	19	25.79	155	20.21	3.52	20	5	.08	.4	.7	KAO	1.4X	134	4
2002	MAR	9	1530	37.77	19	27.70	155	46.40	9.48	22	5	.11	.8	.8	KON	1.6X	233	5
2002	MAR	9	1551	26.41	19	25.55	155	16.26	2.74	11	2	.13	1.2	.6	SNCL	1.0X	221	2
2002	MAR	9	1740	21.70	19	25.10	155	15.34	0.18	19	5	.10	.2	.4	SNCL	1.3X	188	3
2002	MAR	9	1931	48.89	19	23.01	155	27.29	9.90	23	5	.11	.5	.8	KAO	1.0X	86	1
2002	MAR	10	0212	26.15	19	47.04	155	24.99	20.88	17	3	.10	1.6	1.1	KEA	1.4X	261	4
2002	MAR	10	0259	41.46	19	36.25	155	25.52	8.85	23	3	.12	.5	.8	KEA	1.1X	116	6
2002	MAR	10	0425	12.07	19	24.79	155	17.13	10.61	17	5	.14	.9	.9	INTL	1.7X	101	0
2002	MAR	10	0628	45.01	19	47.90	155	49.44	14.90	18	2	.12	3.0	1.3	HUA	1.5X	240	12
2002	MAR	10	1149	37.96	19	26.39	155	19.79	4.71	30	7	.10	.5	1.2	KAO	1.6X	116	4
2002	MAR	10	1228	50.83	19	26.31	155	19.80	3.94	21	6	.09	.6	.9	KAO	1.2X	154	4
2002	MAR	10	1302	16.34	19	26.76	155	19.27	5.56	28	6	.12	.5	1.1	KAO	1.6X	109	4
2002	MAR	10	1335	6.10	19	40.98	156	28.28	35.11	25	7	.13	1.1	4.0	DIS	2.1X	287	66
2002	MAR	10	1421	20.43	19	26.33	155	20.06	3.26	18	5	.09	.5	.8	KAO	1.1X	151	5
2002	MAR	10	1549	36.44	19	25.51	155	16.49	1.67	13	3	.08	.6	.4	SNC	1.3X	187	1
2002	MAR	10	1925	23.29	19	20.82	155	9.38	6.17	24	2	.08	1.5	.7	SF3	1.3X	205	2
2002	MAR	10	2148	19.13	19	30.78	155	15.97	8.25	26	2	.13	.6	2.0	GLN	1.2X	133	10
2002	MAR	10	2210	10.86	19	26.02	155	16.58	8.73	20	4	.09	.8	.8	INTL	1.6X	171	2
2002	MAR	10	2331	15.98	19	26.49	155	19.56	4.60	18	4	.08	.6	1.5	KAO	1.4X	162	4
2002	MAR	11	0033	21.95	19	26.44	155	19.52	5.78	29	7	.10	.5	1.1	KAO	1.8X	142	4
2002	MAR	11	0130	11.00	19	8.22	155	32.74	31.51	5116	.08	.5	.9	DLSF	2.9X	143	9	
2002	MAR	11	0538	3.88	19	24.66	155	19.31	4.70	14	4	.09	.5	1.0	KAO	1.0X	101	2
2002	MAR	11	1206	34.13	20	5.08	156	0.71	14.72	32	5	.11	1.2	1.4	KOH	2.3X	167	25
2002	MAR	11	1503	46.68	19	31.90	155	50.84	9.83	15	5	.16	.8	.9	KON	1.2X	173	9
2002	MAR	11	2100	3.02	19	21.73	155	3.87	7.05	28	4	.15	1.3	.7	SF5	1.3X	211	5
2002	MAR	12	0132	18.12	19	25.22	155	15.65	6.21	13	4	.24	1.5	1.0	INTL	1.2X	242	2
2002	MAR	12	0313	39.41	19	17.83	155	6.06	6.67	25	4	.09	1.0	.8	SF4	1.4X	231	10
2002	MAR	12	0544	10.55	19	8.37	155	33.93	7.79	25	5	.09	.5	1.6	LSW	1.7X	134	11

ORIGIN TIME (HST)				LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN		
YEAR	MON	DA	HRMN	SEC	DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	RMKS	MAG	GAP	DS
2002	MAR	12	1318	54.64	19	26.30	154	57.07	3.08	15	3	.15	1.2	.6	SLE	1.5X	175	4
2002	MAR	12	1839	40.37	19	28.82	155	27.53	7.39	3410	.10	.3	1.1	KAO	1.5X	78	6	
2002	MAR	12	1901	14.04	19	24.63	155	16.52	8.21	13	4	.14	1.7	.7	INTL	1.5X	166	1
2002	MAR	12	2012	35.03	19	32.28	155	5.33	1.06	29	7	.09	.6	.4	HIL	1.3X	171	15
2002	MAR	12	2140	56.14	19	3.99	155	25.06	32.56	30	8	.08	.8	1.3	DLS	1.8X	220	11
2002	MAR	13	0204	57.01	19	53.08	155	34.51	18.12	17	3	.09	.8	1.3	KEA	1.1X	171	9
2002	MAR	13	0818	3.55	19	23.73	155	15.49	2.58	15	5	.08	.3	.3	SEC	1.2X	143	2
2002	MAR	13	0835	57.84	19	18.27	154	58.89	40.96	36	5	.10	1.0	1.2	LER	1.8X	210	13
2002	MAR	13	2132	17.28	19	7.32	156	39.57	4.26	14	3	.11	4.0	4.2	DIS	1.4U	281	94
2002	MAR	14	0205	47.82	19	25.90	155	16.66	8.51	18	5	.14	1.3	.6	INTL	1.3X	216	2
2002	MAR	14	0409	8.62	19	24.98	155	15.42	3.43	13	3	.11	.9	.5	SNCL	1.1X	248	3
2002	MAR	14	0714	31.72	19	18.11	155	25.10	8.81	27	5	.10	.6	.7	LSW	1.0X	130	5
2002	MAR	14	1748	14.15	19	25.18	155	16.08	9.44	16	4	.11	.5	.7	INTL	1.6X	149	2
2002	MAR	14	1839	46.93	19	31.40	155	41.46	7.65	23	4	.14	.6	1.5	MLO	1.6X	107	8
2002	MAR	14	2039	0.07	19	19.75	155	7.12	4.40	26	5	.10	.9	2.2	SSF	1.3X	217	6
2002	MAR	14	2058	23.15	19	29.71	155	19.80	23.03	24	6	.09	.9	1.0	DML	1.2X	204	6
2002	MAR	15	0145	43.15	19	24.50	155	16.99	1.33	14	3	.11	.4	.2	SSC	1.8X	118	1
2002	MAR	15	0348	8.05	19	12.57	155	30.58	.64	30	8	.17	.4	.3	LSW	1.5X	101	5
2002	MAR	15	0409	46.76	19	19.32	155	14.05	8.92	27	7	.14	.8	.5	SP2	1.1X	196	6
2002	MAR	15	0508	9.09	19	24.53	155	26.71	10.16	37	7	.12	.4	.7	KAO	1.8X	53	4
2002	MAR	15	0553	18.95	19	22.53	155	9.95	3.08	17	3	.09	1.2	.4	SER	1.6X	130	1
2002	MAR	15	0616	27.40	19	10.56	155	41.16	0.36	15	3	.15	.5	.4	LSW	1.4X	91	9
2002	MAR	15	0704	41.33	19	7.79	155	27.22	34.76	20	.12	2.4	3.0	DLST	267	3		
2002	MAR	15	1442	8.00	19	25.02	155	19.66	5.87	16	3	.05	.4	1.1	KAO	1.1X	113	2
2002	MAR	15	1841	18.87	19	29.01	155	26.45	11.82	25	7	.11	.4	.7	KAO	1.1X	94	6
2002	MAR	15	1842	35.71	19	18.70	155	25.03	9.02	24	5	.13	.6	.9	LSW	.9X	179	4
2002	MAR	15	2319	11.39	19	58.82	155	20.87	10.66	20	3	.09	1.2	.8	KEA	1.3X	244	25
2002	MAR	16	0048	39.68	19	22.29	155	27.94	5.04	3510	.14	.4	.6	KAO	1.8X	69	1	
2002	MAR	16	0713	47.87	19	25.77	155	37.26	12.95	22	6	.13	.6	1.0	MLO	.9X	95	3
2002	MAR	16	0723	5.77	19	12.99	155	30.70	0.12	3810	.15	.3	.2	LSW	1.7X	77	8	
2002	MAR	16	0946	39.16	18	57.27	155	28.48	35.14	37	9	.10	.9	1.3	DLS	2.1X	233	20
2002	MAR	16	1817	57.50	19	18.69	155	13.23	2.56	31	5	.11	.6	1.1	SSF	1.3X	213	7
2002	MAR	17	0221	38.95	19	22.20	155	8.91	4.47	32	5	.10	.8	.5	SER	1.8X	177	2
2002	MAR	17	0758	13.96	19	41.54	155	56.30	30.06	19	4	.10	1.4	1.5	HUA	1.4X	275	10
2002	MAR	17	0801	50.12	19	23.72	155	16.72	2.70	15	5	.06	.4	.3	SSC	1.0X	74	0
2002	MAR	17	1148	36.95	19	9.40	155	41.33	13.09	11	2	.14	1.5	1.0	DLS	1.3X	224	8
2002	MAR	17	1222	26.69	19	23.42	155	2.04	6.99	31	5	.14	1.2	.8	SF5	1.2X	197	4
2002	MAR	17	1634	44.75	19	29.71	155	27.60	5.29	19	6	.10	.3	1.5	KAO	1.8X	89	4
2002	MAR	17	1647	50.68	19	15.04	155	28.34	8.93	18	1	.14	.6	1.3	LSW	1.4X	113	3
2002	MAR	17	2053	33.72	19	40.22	155	48.80	13.48	16	4	.09	.9	.3	HUA	1.2X	155	3
2002	MAR	17	2341	48.23	19	22.00	155	19.00	31.31	19	5	.11	1.3	1.2	DEP	1.5X	223	3
2002	MAR	18	0416	49.35	19	24.86	155	29.81	11.14	21	3	.07	.4	.8	KAO	1.4X	87	6
2002	MAR	18	0503	5.28	19	45.62	155	35.14	5.65	20	3	.14	.5	1.7	KEA	1.8X	115	13
2002	MAR	18	0956	25.94	19	11.26	155	27.15	9.16	41	7	.13	.4	.5	LSW	2.5X	140	3
2002	MAR	18	0956	55.11	19	12.00	155	25.86	0.97	18	5	.11	.5	.4	LSW	2.0X	170	6

YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN	
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	RMKS	MAG	GAP	DS
2002	MAR	19	0027	13.58	19	23.16	155	14.77	2.58	15	4	.06	.3	.4	SEC	1.4X	127	2
2002	MAR	19	0413	54.42	19	47.01	155	0.38	8.10	18	7	.17	1.5	1.1	KEA	1.4X	322	48
2002	MAR	19	0651	42.85	19	55.53	155	30.43	18.31	15	3	.10	1.1	2.0	KEA	1.0X	276	17
2002	MAR	19	0941	54.04	19	26.20	155	19.03	6.66	23	6	.08	.6	.9	KAO	1.4X	163	3
2002	MAR	19	1320	20.71	19	19.34	155	6.91	7.42	28	6	.10	1.1	.7	SF4	1.6X	246	7
2002	MAR	19	1755	30.15	19	27.23	155	25.30	2.91	15	2	.09	.4	2.0	KAO	1.3X	68	6
2002	MAR	19	1918	54.95	19	19.84	155	9.84	2.75	15	6	.11	.9	.7	SSF	1.5X	265	4
2002	MAR	19	2134	37.20	19	21.99	155	28.25	6.07	30	5	.11	.5	.8	KAO	1.4X	68	1
2002	MAR	20	0310	16.05	19	52.66	155	29.54	23.68	26	7	.09	.7	1.3	KEA	1.7X	158	11
2002	MAR	20	0935	29.88	19	20.11	155	11.68	8.22	36	6	.10	.7	.5	SF3	1.6X	172	5
2002	MAR	20	0953	58.23	19	18.76	155	6.79	8.02	4110	.10	.5	.4	SF4	2.2X	196	8	
2002	MAR	20	1001	55.35	19	54.54	155	21.90	11.41	30	3	.11	1.2	.4	KEA	1.8X	238	3
2002	MAR	20	1051	16.77	19	26.23	155	19.44	3.68	23	5	.11	.5	.8	KAO	1.7X	157	4
2002	MAR	20	1419	59.38	19	16.17	155	29.35	12.57	23	3	.11	.4	1.1	LSW	1.6X	98	2
2002	MAR	20	1510	6.67	19	17.40	155	5.58	4.64	20	2	.09	1.2	5.7	SSF	1.3X	262	11
2002	MAR	20	1552	30.64	19	22.99	155	14.57	3.00	15	5	.06	.4	.5	SEC	1.3X	119	3
2002	MAR	20	2039	32.15	19	23.66	155	15.19	2.73	15	5	.08	.4	.5	SEC	1.2X	92	2
2002	MAR	20	2202	4.54	19	24.32	155	15.83	14.98	18	3	.09	.8	.5	DEP	.9X	228	2
2002	MAR	21	0543	5.33	19	42.99	155	37.71	6.37	16	2	.10	3.7	4.8	DIS	1.6X	248	83
2002	MAR	21	1438	54.10	19	24.33	155	17.04	1.34	15	4	.11	.3	.2	SSC	1.5X	79	1
2002	MAR	21	1549	5.35	19	23.40	155	16.64	1.33	37	8	.13	.3	.2	SSC	2.4X	49	1
2002	MAR	21	2324	43.48	19	29.75	155	54.49	12.03	18	5	.13	1.2	.6	KON	1.2X	220	22
2002	MAR	22	0409	21.80	19	22.11	155	28.75	10.70	5013	.12	.3	.4	KAOF	3.4X	37	2	
2002	MAR	22	0410	33.90	19	22.26	155	28.44	9.95	30	2	.09	.4	.5	KAO	2.3X	65	1
2002	MAR	22	0712	53.47	19	18.70	155	7.09	7.64	29	6	.09	1.0	.7	SF4	1.8X	225	9
2002	MAR	22	0905	17.67	19	30.15	155	54.40	13.09	17	2	.10	1.7	.6	KON	1.5X	277	15
2002	MAR	22	1018	26.97	19	26.51	155	19.51	2.97	21	7	.12	.6	.8	KAO	1.3X	163	4
2002	MAR	22	1520	28.91	19	27.08	154	50.65	8.09	15	4	.19	1.6	.7	LER	1.0X	254	1
2002	MAR	22	2121	56.15	19	21.80	155	11.39	3.42	21	5	.06	.8	.5	SER	1.5X	193	3
2002	MAR	22	2220	7.93	18	53.92	155	15.92	15.90	26	3	.10	1.5	6.8	LOI	1.6X	253	36
2002	MAR	23	1253	11.95	19	20.08	155	5.51	3.69	22	5	.10	.8	1.9	SSF	1.1X	254	7
2002	MAR	23	1346	50.72	19	59.35	156	12.99	6.87	18	5	.12	1.0	1.7	KOH	1.6X	214	48
2002	MAR	23	1459	48.63	18	58.55	155	27.97	39.68	34	6	.09	.9	1.2	DLS	2.0X	235	20
2002	MAR	23	1525	24.56	18	54.74	155	17.14	16.80	14	2	.13	2.015	7	LOI	-1.5X	321	33
2002	MAR	23	1946	46.56	19	17.33	155	27.85	8.26	32	7	.15	.4	.9	LSW	1.3X	109	6
2002	MAR	23	2152	24.27	19	20.08	155	11.80	6.82	25	4	.12	.9	1.0	SF3	1.4X	221	5
2002	MAR	24	0221	40.83	19	18.69	155	15.62	7.44	37	9	.09	.4	.7	SF1	1.7X	162	5
2002	MAR	24	0649	37.28	19	21.77	155	4.10	7.25	29	8	.15	.8	.8	SF5	1.6X	210	5
2002	MAR	24	0923	40.01	19	51.29	155	35.11	29.09	29	7	.10	.7	1.3	KEA	1.9X	114	8
2002	MAR	24	1133	37.36	19	16.76	155	12.25	5.94	30	8	.10	.5	1.0	SF3	1.4X	225	2
2002	MAR	24	1704	32.05	19	19.15	155	9.86	5.46	28	5	.10	.8	1.3	SF3	1.5X	215	9
2002	MAR	24	2308	57.41	20	12.26	154	46.44	2.44	4210	.10	1.7	1.1	KEA	3.3X	256	62	
2002	MAR	24	2353	4.72	19	26.72	155	30.29	12.25	22	4	.12	.5	.9	KAO	1.2X	72	6
2002	MAR	25	0000	0.17	19	21.15	155	10.67	1.20	15	4	.09	.7	.6	SER	1.8X	204	5
2002	MAR	25	0026	37.44	19	22.40	155	10.64	3.19	24	7	.09	.9	.6	SER	1.8X	184	4

YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN	
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	RMKS	MAG	GAP	DS
2002	MAR	25	0215	33.24	19	24.94	155	19.37	6.60	24	7	.09	.4	.9	KAO	1.4X	111	2
2002	MAR	25	0654	11.17	19	26.52	155	30.56	11.49	19	3	.12	.5	1.4	KAO	1.1X	90	5
2002	MAR	25	1236	16.33	19	30.20	155	26.96	4.20	19	3	.12	.4	1.6	MLO	2.0X	114	4
2002	MAR	25	1236	59.45	19	27.49	155	23.84	10.46	44	8	.12	.4	.5	KAO	2.4X	43	4
2002	MAR	25	1816	11.16	19	18.25	155	12.96	9.21	31	3	.10	.5	.8	SF2	2.0X	177	8
2002	MAR	25	1817	16.25	19	17.67	155	12.64	7.99	19	2	.09	1.2	1.9	SF2	1.6X	240	9
2002	MAR	25	1827	47.91	19	15.57	155	28.25	6.80	15	1	.13	.6	2.4	LSW	1.3X	131	11
2002	MAR	25	1937	11.82	19	27.62	155	29.38	7.42	27	5	.12	.4	1.5	KAO	1.7X	71	8
2002	MAR	25	1957	28.00	19	17.84	155	12.74	8.71	30	6	.09	.5	.8	SF2	1.8X	181	9
2002	MAR	25	2133	25.95	19	29.26	155	27.44	9.61	26	7	.11	.4	1.0	KAO	1.3X	86	5
2002	MAR	25	2346	29.86	19	25.02	155	31.57	11.56	23	5	.13	.5	1.0	KAO	1.3X	98	8
2002	MAR	26	0104	45.74	19	27.92	155	29.17	10.80	27	7	.11	.4	.8	KAO	1.4X	57	8
2002	MAR	26	0451	42.81	20	14.98	156	17.22	40.35	18	2	.17	2.4	3.7	KOH	1.7U	194	49
2002	MAR	26	0520	52.40	19	12.22	155	36.90	6.36	38	9	.18	.4	1.2	LSW	2.2X	86	13
2002	MAR	26	0538	14.01	19	50.71	155	52.17	11.97	27	5	.12	.8	.6	HUA	2.2X	161	18
2002	MAR	26	0626	44.10	19	19.83	155	2.33	1.11	34	7	.12	.9	.4	SSF	1.6X	209	9
2002	MAR	26	1215	56.70	19	23.46	155	14.93	3.14	31	7	.09	.3	.3	SEC	2.3X	98	2
2002	MAR	26	1755	48.47	19	23.19	155	29.37	10.17	30	6	.08	.4	.8	KAO	1.4X	87	3
2002	MAR	26	1842	34.63	19	26.09	154	54.44	2.24	15	4	.14	.8	.6	SLE	1.1X	191	3
2002	MAR	26	2035	56.86	19	15.38	155	30.46	7.63	29	4	.15	.5	1.1	LSW	1.5X	91	12
2002	MAR	27	2057	8.04	19	30.22	155	28.86	8.56	16	5	.13	.4	1.5	MLO	.8X	68	4
2002	MAR	27	2058	22.29	19	30.10	155	29.40	4.82	19	5	.11	.3	1.7	MLO	1.0X	69	5
2002	MAR	27	2202	54.51	19	17.95	155	13.88	9.34	30	5	.13	.5	.6	SF2	1.6X	177	8
2002	MAR	27	2341	21.72	19	17.12	155	11.44	0.01	28	7	.12	1.0	.4	SSF #	1.6X	213	11
2002	MAR	27	2703	46.53	19	24.80	155	17.01	1.24	10	4	.09	.4	.2	SNCT	154	0	
2002	MAR	27	2315	23.62	19	18.60	155	8.31	5.92	27	4	.09	.8	1.2	SF4	1.6X	242	9
2002	MAR	27	2344	57.67	19	23.60	155	16.										

YEAR	MON	DA	HRMN	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN		
				DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	RMKS	MAG	GAP	DS	
2002	MAR	29	1541	46.35	19	10.25	155	25.58	13.00	16	3	.12	1.3	1.7	DLS	1.6X	208	4
2002	MAR	29	1821	7.76	19	20.80	155	15.56	31.76	33	9	.11	.9	.7	DEP	1.7X	175	3
2002	MAR	29	2024	25.16	19	13.32	155	47.84	14.31	13	1	.08	2.4	.7	KON	1.3U	242	8
2002	MAR	30	0114	50.05	19	27.18	155	29.16	11.21	33	8	.10	.4	.5	KAO	1.6X	48	8
2002	MAR	30	0726	38.07	19	19.71	155	12.05	6.02	26	3	.12	.6	1.0	SF3	1.8X	170	6
2002	MAR	30	0729	54.83	19	1.61	155	21.80	35.39	23	3	.07	1.4	1.8	LOI	1.3X	220	18
2002	MAR	30	0945	17.20	19	17.55	155	19.28	6.44	24	4	.08	.5	.9	SWR	1.1X	162	1
2002	MAR	30	1228	5.64	19	22.25	155	28.72	10.19	4411	.10	.3	.6	KAO	1.7X	62	2	
2002	MAR	30	1900	13.36	19	22.43	155	2.61	4.30	17	2	.10	1.5	2.9	SSF	1.9X	210	4
2002	MAR	31	0151	30.50	19	15.88	155	26.98	1.25	21	4	.12	.5	.6	LSW	1.3X	126	10
2002	MAR	31	0411	20.81	19	9.23	155	40.39	2.24	25	6	.13	.4	.8	LSW	1.6X	93	10
2002	MAR	31	0833	27.19	19	12.19	155	27.53	3.76	29	5	.15	.4	1.5	LSW	1.7X	126	5
2002	MAR	31	0935	9.18	19	17.08	155	29.82	10.32	25	2	.09	.4	.9	LSW	2.3X	91	4
2002	MAR	31	1304	20.10	19	17.53	154	58.69	40.12	20	4	.07	2.0	1.3	LER	1.3X	259	14
2002	MAR	31	1551	46.27	19	22.80	155	26.88	8.83	28	7	.10	.4	.6	KAO	1.3X	58	1
2002	MAR	31	2313	48.58	19	58.37	155	49.23	30.25	30	7	.09	.7	1.0	KOH	2.1X	141	18
2002	APR	1	0052	51.67	19	11.23	155	42.04	6.33	39	8	.14	.4	.8	LSWF	2.9X	104	8
2002	APR	1	0540	50.45	19	17.59	155	29.87	7.21	27	4	.11	.3	1.2	LSW	1.5X	92	5
2002	APR	1	1203	20.23	19	23.62	155	16.95	2.88	13	4	.05	.3	.3	SSC	1.4X	69	0
2002	APR	1	1654	7.89	19	23.11	155	14.81	3.14	13	3	.03	.3	.4	SEC	1.4X	114	2
2002	APR	1	1719	18.67	19	13.44	155	33.07	6.45	40	8	.15	.5	1.0	LSW	1.9X	77	6
2002	APR	2	0112	30.66	19	20.54	155	5.98	6.66	19	2	.13	1.0	1.1	SF4	1.0X	206	6
2002	APR	2	0354	25.93	19	2.18	155	24.68	55.75	28	2	.14	1.2	2.0	LOI	2.3X	211	15
2002	APR	2	0836	32.43	19	23.31	155	17.01	2.79	17	5	.05	.3	.2	SSC	1.6X	57	0
2002	APR	2	0912	14.47	19	54.33	155	43.11	9.55	15	3	.08	1.4	.5	HUA	1.3X	244	8
2002	APR	2	1521	47.67	19	20.36	155	12.95	7.56	3910	.12	.5	.4	SF2	1.7X	177	4	
2002	APR	2	1839	26.11	19	13.98	155	26.16	2.12	3810	.10	.3	.5	LSW	1.8X	134	9	
2002	APR	3	0157	42.90	19	22.81	155	30.57	9.12	27	6	.11	.4	.7	KAO	1.5X	59	5
2002	APR	3	0314	26.24	19	19.13	154	59.53	39.10	39	7	.10	1.3	.8	LER	1.9X	200	11
2002	APR	3	0320	53.14	19	24.16	155	26.45	8.79	27	5	.13	.4	1.0	KAO	1.5X	72	4
2002	APR	3	0356	43.95	19	25.76	155	29.10	10.35	20	4	.10	.4	.8	KAO	1.3X	50	7
2002	APR	3	0443	19.73	19	29.26	155	27.20	6.10	23	6	.11	.4	1.4	KAO	1.1X	90	5
2002	APR	3	1412	33.71	19	23.04	155	14.84	3.28	31	8	.09	.2	.3	SEC	2.4X	112	2
2002	APR	3	1548	57.52	20	0.57	155	32.83	41.70	4111	.10	.7	1.2	KEA	2.3X	182	20	
2002	APR	3	2209	10.87	19	17.52	155	12.90	8.36	28	6	.13	.7	.7	SF2	1.3X	216	9
2002	APR	3	2303	2.24	20	53.54	155	10.64	7.24	26	5	.12	3.8	4.0	DIS	2.4X	267105	
2002	APR	4	0106	46.27	19	23.09	155	14.67	2.71	17	5	.08	.5	.4	SEC	1.3X	133	3
2002	APR	4	0427	53.53	19	18.15	154	58.69	40.95	31	5	.11	1.8	1.3	LER	1.6X	238	13
2002	APR	4	0729	15.52	19	30.15	155	5.86	12.68	25	7	.10	.5	1.1	GLN	1.2X	108	11
2002	APR	4	0750	29.55	19	10.59	155	16.75	43.33	37	7	.09	.9	1.1	DEP	1.7X	188	18
2002	APR	4	0816	38.48	19	25.12	155	29.87	10.51	17	3	.07	.5	1.2	KAO	1.2X	84	6
2002	APR	4	1103	50.50	19	28.41	155	37.25	12.76	20	4	.12	.6	.9	MLO	1.3X	103	3
2002	APR	4	1314	57.60	19	24.01	155	5.61	41.02	4812	.09	.6	.6	.6	DEP	1.8X	153	3
2002	APR	4	1642	54.29	19	20.69	155	13.26	8.44	38	8	.10	.5	.4	SF2	1.8X	170	4
2002	APR	4	2147	2.22	20	0.31	155	44.29	8.30	16	5	.08	.9	1.0	KOH	1.2X	163	14

YEAR	MON	DA	HRMN	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN		
				DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	RMKS	MAG	GAP	DS	
2002	APR	5	0047	14.92	19	30.04	155	26.71	22.59	25	7	.09	.6	1.0	DML	1.5X	96	4
2002	APR	5	0216	12.86	19	35.20	156	26.90	5.68	19	2	.11	1.8	3.9	DIS	1.1U	234	65
2002	APR	5	0725	27.72	19	22.58	155	46.97	13.61	15	1	.13	1.7	.8	KON	1.2U	222	12
2002	APR	5	0845	27.02	19	25.08	155	16.23	4.17	14	2	.14	.9	.6	SNCL	1.6X	138	1
2002	APR	5	1003	59.98	19	29.97	155	50.70	10.51	19	4	.17	1.8	.7	KON	1.4X	265	8
2002	APR	5	1417	16.33	19	25.33	155	16.62	8.79	15	4	.10	1.3	.6	INTL	1.9X	186	1
2002	APR	5	1549	46.13	19	24.56	155	16.33	4.98	13	5	.10	1.3	.7	SNCL	1.4X	220	1
2002	APR	5	1551	3.05	19	24.98	155	16.79	5.00	15	3	.13	.6	.6	INTT	1.21	0	
2002	APR	5	1619	25.53	19	23.30	155	15.32	2.96	8	2	.08	.6	.7	SEC	1.4X	151	2
2002	APR	5	1625	18.19	19	24.45	155	16.03	1.23	18	5	.13	.3	.4	SEC	2.1X	100	1
2002	APR	6	0803	27.64	19	23.26	155	14.61	3.36	32	9	.10	.3	.3	SEC	2.2X	102	3
2002	APR	6	0925	50.82	19	23.87	155	1.59	6.19	22	5	.13	.9	.8	SF5	1.3X	186	4
2002	APR	6	0958	12.54	19	23.06	155	14.80	3.06	15	5	.04	.4	.4	SEC	1.2X	153	2
2002	APR	6	1639	11.22	19	19.43	155	28.45	9.16	28	6	.10	.4	.6	KAO	1.2X	90	6
2002	APR	6	2056	47.43	19	23.98	155	29.72	9.41	22	5	.07	.5	1.0	KAO	1.4X	130	5
2002	APR	6	2111	0.06	19	20.95	155	45.44	9.75	21	6	.11	.9	1.2	KON	1.0X	267	9
2002	APR	6	2314	51.99	19	24.40	155	25.54	3.78	24	4	.13	.4	1.7	KAO	1.1X	74	5
2002	APR	7	0101	26.00	19	25.19	155	54.84	6.75	17	4	.15	1.4	.8	LER	1.0X	204	4
2002	APR	7	0123	9.71	19	26.67	155	29.61	12.09	22	5	.11	.5	1.1	KAO	.9X	67	7
2002	APR	7	0133	55.13	20	22.36	156	15.47	6.09	20	4	.11	1.4	2.0	KOH	1.8X	184	42
2002	APR	7	0844	47.61	19	21.07	155	52.71	10.64	14	1	.08	2.3	.7	KON	1.2X	303	21
2002	APR	7	1200	29.38	19	51.19	155	44.04	12.06	17	3	.12	1.1	.6	HUA	1.4X	141	8
2002	APR	7	1257	19.39	19	21.54	155	25.72	8.71	25	5	.12	.5	.8	KAO	1.2X	70	4
2002	APR	7	1506	18.01	19	29.72	155	27.42	6.15	40	9	.11	.3	1.1	KAO	1.9X	47	4
2002	APR	7	1522	1.47	19	29.92	155	27.28	6.38	21	5	.10	.4	1.3	KAO	1.2X	76	4
2002	APR	7	1854	11.58	19	27.05	155	28.24	9.75	21	5	.07	.4	1.2	KAO	1.1X	72	8
2002	APR	7	1950	17.10	19	20.85	155	13.87	7.92	38								

YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN	
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	RMKS	MAG	GAP	DS
2002	APR	9	0212	4.03	19	23.76	155	16.74	3.19	30	6	.11	.4	.3	SSC	2.3X	58	0
2002	APR	9	0219	3.67	19	23.80	155	17.09	2.92	13	4	.11	.5	.3	SSC	1.6X	79	1
2002	APR	9	0409	16.57	19	11.55	155	32.83	1.07	26	6	.12	.4	.5	LSW	1.6X	96	8
2002	APR	9	0654	7.32	19	22.62	155	26.35	9.42	28	5	.11	.4	.8	KAO	1.7X	58	2
2002	APR	9	1101	51.88	19	20.94	155	30.18	9.71	27	3	.08	.5	.8	KAO	1.4X	104	5
2002	APR	9	1236	55.21	19	53.93	155	27.65	28.64	3210	.08	.6	1.1	.1	KEA	1.6X	146	12
2002	APR	9	1934	35.34	19	27.88	155	27.97	14.99	4814	.10	.3	.3	.3	DML	2.7X	57	8
2002	APR	9	2039	48.28	19	14.86	155	59.03	11.60	34	4	.12	1.3	3.5	HUA	2.4X	178	46
2002	APR	9	2104	45.45	19	24.15	155	1.47	3.37	13	2	.09	1.6	.9	SME	1.4X	193	5
2002	APR	9	2245	31.70	19	19.16	155	12.73	3.59	32	8	.12	.5	1.3	SSF	1.3X	188	6
2002	APR	10	0132	50.60	19	23.20	155	13.92	3.69	28	8	.11	.5	.5	SER	2.0X	121	2
2002	APR	10	0143	31.00	19	20.30	155	51.11	8.96	27	5	.15	.8	.6	KON	1.5X	223	19
2002	APR	10	0257	36.07	19	16.38	155	5.34	49.06	4410	.13	1.0	.9	.9	DEP	2.4X	193	13
2002	APR	10	0556	49.01	19	20.27	155	2.47	7.74	19	3	.11	1.2	1.0	SF5	1.6X	227	8
2002	APR	10	1040	52.11	19	23.41	154	59.07	3.61	16	4	.10	1.1	.8	SLE	1.5X	222	3
2002	APR	10	1319	18.32	19	25.52	155	19.09	7.88	19	6	.10	.5	1.0	KAO	1.0X	86	3
2002	APR	10	1602	17.10	19	20.50	155	13.57	5.40	26	6	.13	.8	1.1	SF2	1.1X	201	4
2002	APR	10	1616	29.64	19	21.24	155	30.06	10.75	30	8	.09	.5	.9	KAO	1.4X	173	5
2002	APR	10	1836	58.46	19	21.06	155	12.91	2.46	14	4	.03	.8	.5	SER	1.4X	198	3
2002	APR	10	1929	30.06	19	27.03	155	28.71	8.41	34	8	.12	.4	.9	KAO	1.6X	50	8
2002	APR	10	2042	55.74	19	22.65	154	59.93	8.40	30	6	.17	1.4	.7	LER	1.5X	222	5
2002	APR	10	2056	21.75	19	12.99	155	26.51	39.12	41	9	.09	.7	1.0	DLS	2.0X	136	7
2002	APR	10	2115	47.89	19	12.57	155	26.47	40.03	30	4	.09	.9	1.4	DLS	1.4X	144	6
2002	APR	11	0433	1.90	18	48.53	155	8.24	49.29	27	4	.10	1.7	2.5	LOI	1.6X	273	52
2002	APR	11	0608	38.25	19	21.72	155	24.99	14.11	30	8	.09	.5	.6	DEP	1.3X	105	4
2002	APR	11	0926	56.80	19	25.47	155	25.96	7.27	28	7	.12	.4	1.2	KAO	1.2X	54	6
2002	APR	11	1024	22.89	19	24.96	155	15.37	14.38	23	6	.13	1.0	.4	DEP	1.1X	240	3
2002	APR	11	1241	15.48	19	10.36	155	29.02	7.89	38	9	.13	.4	.6	LSW	2.1X	189	3
2002	APR	11	1331	58.50	19	19.14	156	0.31	11.29	15	5	.16	1.7	.7	KON	1.4X	285	31
2002	APR	11	1545	24.78	18	47.15	155	13.19	13.64	24	5	.18	9.51	3.7	LOI	- 1.9X	316	49
2002	APR	11	2027	54.49	19	24.71	155	15.79	14.48	21	6	.12	.8	.5	DEP	1.0X	198	2
2002	APR	11	2038	36.03	19	23.20	155	14.92	3.18	15	6	.08	.4	.4	SEC	1.1X	127	2
2002	APR	11	2107	13.69	19	22.93	155	14.72	2.66	15	5	.10	.6	.3	SEC	1.5X	144	2
2002	APR	11	2224	35.27	19	50.26	155	1.30	39.09	4713	.12	.7	1.2	.0	KEA	2.3X	205	15
2002	APR	11	2335	43.29	18	48.58	155	24.25	4.70	15	4	.09	1.8	.7	LOI	1.1X	323	58
2002	APR	12	0012	29.29	19	28.99	154	53.89	0.01	23	3	.11	.4	.4	SLE	# 1.3X	101	4
2002	APR	12	0150	12.20	19	25.38	155	15.00	14.85	24	7	.14	.9	.3	DEP	1.2X	230	4
2002	APR	12	0239	9.61	19	22.59	154	57.84	7.98	22	6	.11	1.0	.6	LER	1.4X	239	5
2002	APR	12	0313	58.33	19	22.70	155	14.36	2.84	15	4	.08	.6	.4	SEC	1.1X	161	2
2002	APR	12	0535	43.41	19	12.40	155	27.94	0.03	4312	.14	.3	.2	.0	LSW	# 1.9X	112	5
2002	APR	12	0600	49.47	19	20.05	155	5.31	7.12	29	7	.12	.9	.9	SF4	1.3X	219	7
2002	APR	12	0638	46.61	19	22.55	154	59.76	3.69	29	6	.12	1.1	1.3	SLE	1.9X	207	5
2002	APR	12	0750	51.33	19	23.80	155	14.63	3.61	15	4	.10	.5	.6	SEC	1.4X	120	3
2002	APR	12	0840	3.08	19	24.86	155	14.16	31.28	45	9	.10	.5	.7	DEP	2.3X	57	5

YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN	
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	RMKS	MAG	GAP	DS
2002	APR	12	0845	32.36	19	20.65	155	4.59	5.47	34	8	.13	.8	1.3	SF5	1.5X	216	7
2002	APR	12	1157	44.14	19	26.09	155	15.10	13.92	17	5	.16	1.4	.7	DEP	1.2X	255	4
2002	APR	12	1502	29.28	19	26.76	155	29.31	9.98	21	6	.08	.4	1.3	KAO	1.0X	83	7
2002	APR	12	1522	20.97	19	24.35	155	15.25	14.84	18	5	.10	2.1	.4	DEPL	1.4X	252	2
2002	APR	12	1716	8.12	19	25.92	155	15.93	15.61	17	5	.11	1.1	.7	DEPL	1.5X	199	3
2002	APR	12	2236	38.13	19	12.82	155	26.58	37.17	38	9	.08	.6	1.1	DLS	1.7X	137	7
2002	APR	13	0109	12.03	19	23.69	155	16.36	12.64	24	6	.15	1.0	.9	INTL	1.4X	165	1
2002	APR	13	0141	10.76	19	16.77	155	20.22	6.68	25	6	.09	.6	1.8	SWR	1.0X	217	8
2002	APR	13	0323	12.87	19	23.16	155	24.47	12.81	21	5	.07	.5	.8	KAO	.8X	99	6
2002	APR	13	0330	27.98	19	23.29	155	29.87	9.81	29	7	.08	.4	.6	KAO	1.0X	112	4
2002	APR	13	0946	17.28	19	21.46	155	1.94	3.51	31	6	.10	.9	1.9	SSF	1.6X	219	9
2002	APR	13	0949	13.68	19	8.41	155	36.77	1.58	23	4	.13	.5	.8	LSW	1.4X	116	16
2002	APR	13	1141	4.55	19	26.33	155	30.15	10.52	19	4	.07	.6	1.2	KAO	1.1X	96	8
2002	APR	13	1803	14.30	19	11.16	155	28.17	6.69	42	9	.14	.4	.7	LSW	2.3X	105	3
2002	APR	13	2118	53.79	20	1.59	155	52.44	41.46	18	3	.10	1.8	1.9	KOH	1.3X	153	15
2002	APR	13	2203	22.81	19	50.77	155	17.10	11.92	16	3	.11	1.6	1.1	KEA	1.3X	269	20
2002	APR	14	0140	50.07	19	26.06	155	19.09	7.00	27	6	.11	.4	.9	KAO	1.7X	73	3
2002	APR	14	0305	4.50	19	24.84	155	38.78	3.55	18	4	.11	.6	.6	MLO	.9X	127	2
2002	APR	14	0507	42.50	19	23.68	155	14.85	2.72	16	5	.12	.4	.6	SEC	1.3X	115	3
2002	APR	14	0545	34.65	19	21.04	156	22.17	8.25	25	5	.11	3.7	5.1	DIS	1.4X	270	66
2002	APR	14	0727	53.35	19	23.45	155	15.37	2.68	16	5	.09	.3	.3	SEC	1.3X	137	2
2002	APR	14	0856	22.99	19	17.61	155	35.64	13.08	20	4	.09	.4	1.4	DLS	1.6X	93	10
2002	APR	14	1035	8.01	20	7.42	156	57.22	15.33	20	4	.16	6.4	9.4	DIS	2.3X	271	90
2002	APR	14	1327	19.25	19	18.21	155	13.57	7.15	23	2	.08	.9	.8	SF2	1.6X	204	8
2002	APR	14	1736	29.22	19	25.03	155	19.33	7.01	22	6	.07	.4	.9	KAO	1.3X	80	3
2002	APR	14	2139	17.58	19	23.32	155	25.06	9.63	29	8	.11	.4	.8	KAO	1.2X	84	5
2002	APR	14	2143	50.22	19	23.36	155	14.23	3.02	18	6	.10	.6	.5	SEC	1.8X		

YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN	GAP	DS	
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	RMKS	MAG				
2002	APR	18	0335	41.77	19	10.78	155	34.58	7.54	31	9	.12	.5	1.2	LSW	1.5X	231	11		
2002	APR	18	0418	44.73	19	26.64	155	27.92	9.70	4010	.11	.4	.7	KAO	2.0X	52	8			
2002	APR	18	0440	31.04	19	25.48	155	19.57	3.68	16	6	.09	.4	.6	KAO	1.1X	131	3		
2002	APR	18	0448	29.90	19	14.08	155	34.94	1.53	31	7	.18	.5	.8	LSW	1.5X	82	9		
2002	APR	18	0522	9.24	19	23.81	155	16.60	13.10	19	4	.10	.7	.7	DEP	1.1X	152	0		
2002	APR	18	0549	31.13	19	9.16	155	40.66	4.43	14	1	.14	.5	3.4	LSW	1.2X	95	9		
2002	APR	18	0557	19.16	19	25.50	155	19.37	4.59	16	3	.08	.4	1.1	KAO	1.3X	67	3		
2002	APR	18	0831	21.90	19	24.13	155	18.00	3.44	15	5	.05	.6	.5	SSC	1.3X	63	2		
2002	APR	18	0858	58.39	19	33.96	155	21.83	8.86	4410	.15	.3	.8	MLO	2.1X	63	8			
2002	APR	18	0912	20.39	19	15.16	155	26.62	1.50	18	4	.11	.6	.6	LSW	1.1X	155	11		
2002	APR	18	1117	46.70	19	23.79	155	16.13	3.05	16	5	.10	.4	.4	SEC	1.2X	100	1		
2002	APR	18	1518	23.64	19	19.67	155	12.60	4.82	30	8	.11	.6	2.0	SSF	.9X	202	6		
2002	APR	18	1646	35.84	19	24.84	155	19.21	5.79	24	6	.11	.4	.9	KAO	1.3X	77	2		
2002	APR	19	0230	48.12	19	20.67	155	4.24	5.87	32	8	.13	.8	1.0	SF5	1.3X	203	8		
2002	APR	19	0354	30.36	19	25.62	155	15.47	10.93	22	5	.13	.8	.8	INT	1.0X	215	3		
2002	APR	19	0447	36.79	19	24.74	155	29.96	10.87	27	7	.08	.3	.8	KAO	1.2X	90	6		
2002	APR	19	0705	13.54	19	15.43	155	27.92	7.30	23	4	.13	.5	1.5	LSW	1.1X	115	11		
2002	APR	19	1021	16.22	19	23.83	155	0.44	7.54	24	7	.15	1.2	.8	SF5	1.4X	204	4		
2002	APR	19	1357	25.57	20	0.91	156	37.64	2.09	24	4	.09	3.9	1.6	DIS	2.1X	241	83		
2002	APR	19	1512	20.00	20	1.70	156	36.46	6.82	13	2	.13	9.412	1.1	DIS	-1.6X	316	87		
2002	APR	19	1741	15.36	19	24.92	155	38.82	3.22	17	3	.08	.7	.5	MLO	1.2X	192	2		
2002	APR	19	1909	30.33	19	25.88	155	17.24	3.50	17	2	.13	1.0	.5	SNC	.9X	206	1		
2002	APR	19	2231	16.31	19	24.58	155	16.08	13.39	17	2	.12	1.0	.4	DEPL	.8X	200	2		
2002	APR	19	2240	8.08	19	41.84	156	24.68	0.34	42	6	.12	1.4	.4	DIS	2.4X	226	60		
2002	APR	20	0310	4.77	18	44.36	155	15.44	8.20	14	3	.13	1.6	1.1	LOI	1.6X	288	51		
2002	APR	20	0526	23.33	19	12.12	155	34.39	1.57	17	3	.11	.5	.8	LSW	1.7X	90	12		
2002	APR	20	0650	17.37	19	24.42	155	17.72	3.97	16	5	.10	.5	.5	SSC	1.2X	62	2		
2002	APR	20	0729	15.35	20	14.73	156	19.03	8.10	23	6	.11	1.2	2.5	KOH	2.0X	199	55		
2002	APR	20	0815	32.47	19	11.94	155	42.29	4.81	24	4	.14	.6	1.7	LSW	1.5X	114	8		
2002	APR	20	0838	20.23	20	0.83	156	38.00	5.36	24	4	.10	2.0	3.0	DIS	2.0X	241	84		
2002	APR	20	1215	37.71	19	22.54	155	14.16	2.97	19	6	.08	.4	.3	SEC	1.5X	138	2		
2002	APR	20	1529	6.90	19	24.24	155	37.41	2.67	13	3	.23	.8	.6	MLO	.7X	122	1		
2002	APR	20	2006	43.39	19	14.38	155	26.06	5.05	22	5	.10	.5	1.4	LSW	1.3X	150	10		
2002	APR	21	0102	41.58	19	33.32	155	37.23	8.63	28	8	.11	.5	1.2	MLO	1.5X	101	8		
2002	APR	21	0206	7.66	19	10.87	155	24.62	38.67	28	6	.09	.8	1.4	DEP	1.5X	172	6		
2002	APR	21	0956	17.34	19	32.19	155	55.26	10.16	16	3	.13	1.6	.9	KON	1.3X	282	17		
2002	APR	21	1159	23.85	19	11.74	155	27.32	9.45	39	7	.12	.4	.5	LSW	2.1X	131	4		
2002	APR	21	1425	17.29	19	13.39	155	26.72	10.73	46	9	.19	.5	.4	LSWF	3.2X	130	7		
2002	APR	21	1503	19.05	19	18.77	155	13.57	5.25	24	6	.11	.7	2.0	SF2	1.4X	210	7		
2002	APR	21	1810	52.46	19	24.67	155	29.29	8.79	35	8	.10	.4	.8	KAO	1.3X	41	5		
2002	APR	21	1841	5.95	19	23.25	155	17.14	2.77	16	5	.08	.3	.2	SSC	1.4X	118	0		
2002	APR	21	1931	54.05	19	24.95	155	38.60	3.34	28	6	.11	.4	.5	MLO	2.4X	106	2		
2002	APR	21	2229	23.36	19	33.03	155	37.64	9.41	15	2	.11	.9	1.6	MLO	1.0X	174	8		
2002	APR	22	0031	8.76	19	5.50	155	27.95	31.47	21	3	.09	1.0	2.1	DLS	1.7X	206	7		
2002	APR	22	0126	19.87	19	43.50	156	9.20	34.86	22	5	.11	1.6	2.5	HUA	1.1U	286	33		

YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN	GAP	DS	
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	RMKS	MAG				
2002	APR	22	0201	54.63	19	14.87	155	25.85	9.36	25	1	.09	.4	.6	LSW	1.8X	143	7		
2002	APR	22	0848	45.66	19	24.72	155	16.28	1.04	14	4	.08	.4	.3	SNC	1.5X	176	1		
2002	APR	22	0930	7.08	18	55.44	155	13.29	12.09	22	4	.11	1.3	1.1	LOI	2.1X	247	36		
2002	APR	22	1318	15.32	19	18.41	155	7.83	4.51	23	5	.11	1.1	6.9	SSF	1.3X	275	9		
2002	APR	22	1940	58.90	20	9.59	156	20.66	6.68	26	5	.12	.9	1.5	DIS	2.0X	205	59		
2002	APR	22	2042	26.42	19	18.83	155	6.41	3.66	2910	.08	.7	1.6	SSF	1.2X	226	9			
2002	APR	23	0035	4.58	19	18.40	155	48.02	11.02	38	5	.11	.7	.5	KON	2.7X	188	15		
2002	APR	23	1037	47.26	19	25.14	155	39.28	2.86	12	3	.05	.9	.5	MLO	1.3U	206	3		
2002	APR	23	1631	56.25	19	10.26	155	41.04	0.15	18	2	.14	.5	.5	LSW	1.4X	112	9		
2002	APR	23	1916	43.27	19	25.97	155	12.46	18.72	16	6	.13	1.2	.9	DEP	1.3X	149	8		
2002	APR	24	02105	51.88	19	25.29	155	18.93	7.03	25	8	.11	.4	.8	INT	1.7X	70	2		
2002	APR	24	2249	18.81	19	18.25	155	6.32	6.01	33	8	.13	.7	.9	SF4	1.6X	209	10		
2002	APR	23	2252	0.28	19	18.46	155	6.64	0.54	28	6	.11	1.3	.5	SSF	1.3X	228	9		
2002	APR	24	0041	45.57	19	21.54	155	35.24	7.93	28	5	.11	.4	1.0	MLO	2.0X	49	7		
2002	APR	24	0149	9.06	19	25.33	155	15.66	13.84	19	4	.09	1.0	.5	DEP	1.5X	206	2		
2002	APR	24	0401	50.23	19	23.26	155	2.55	2.68	21	2	.12	1.1	2.2	SME	1.5X	200	8		
2002	APR	24	0521	20.03	19	26.68	154	51.46	45.18	3910	.11	.9	.8	.6	LER	2.3X	236	1		
2002	APR	24	0645	39.86	19	27.13	155	35.35	38.66	20	5	.13	1.4	1.9	DML	1.8X	84	2		
2002	APR	24	0705	52.30	19	23.95	155	16.68	12.42	19	4	.12	.8	.6	INT	1.5X	140	0		
2002	APR	24	0915	1.26	18	55.39	155	13.77	13.42	24	4	.13	1.6	1.1	LOI	2.1X	265	36		
2002	APR	24	1220	20.17	19	12.86	155	41.81	3.37	26	2	.14	.6	2.6	LSW	1.9X	144	10		
2002	APR	24	1220	42.16	19	10.45	155	40.60	0.62	16	3	.10	.8	.6	LSW	1.8X	163	10		
2002	APR	24	1349	32.52</td																

YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN	
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	RMKS	MAG	GAP	DS
2002	APR	25	2020	57.15	19	26.47	155	36.90	39.68	17	5	.12	1.4	1.6	DML	1.6X	96	2
2002	APR	25	2103	34.21	19	25.92	155	36.23	37.77	15	4	.06	1.2	1.6	DML	1.6X	105	2
2002	APR	26	0007	20.03	19	54.99	155	21.02	19.40	18	5	.09	.6	1.2	KEA	1.5X	187	3
2002	APR	26	0021	19.87	19	27.13	155	36.84	39.25	19	5	.08	1.0	1.4	DML	1.5U	88	1
2002	APR	26	0225	29.49	19	27.51	155	35.78	41.37	13	3	.04	1.5	1.6	DML	1.7X	80	1
2002	APR	26	0257	29.64	19	36.15	155	52.74	22.40	18	3	.13	1.3	1.7	KON	1.2X	218	10
2002	APR	26	0412	47.38	19	27.12	155	35.72	35.01	18	4	.09	1.2	1.8	DML	1.9X	86	1
2002	APR	26	0633	19.72	19	26.95	155	36.47	36.62	16	3	.11	1.1	2.1	DML	1.5U	91	1
2002	APR	26	1044	24.23	19	27.27	155	35.57	39.46	17	4	.09	1.5	1.5	DML	1.7X	81	1
2002	APR	26	1241	3.41	19	13.08	155	26.15	0.13	24	2	.14	.5	.7	LSW	# 1.5X	129	7
2002	APR	26	1548	47.97	19	6.45	155	5.79	47.89	18	1	.07	2.7	1.7	LOI	1.6X	318	24
2002	APR	27	0034	27.97	19	46.86	156	7.36	6.34	18	3	.14	1.5	1.0	HUA	1.5X	288	48
2002	APR	27	0326	24.68	19	59.55	155	29.66	42.34	4916	.10	.6	.9	KEA	2.2X	151	19	
2002	APR	27	0724	45.97	19	24.82	155	16.97	8.67	15	2	.09	1.2	1.1	INTL	1.5X	152	0
2002	APR	27	0926	33.34	19	26.64	155	35.65	45.48	30	6	.10	1.0	1.1	DML	1.8X	71	2
2002	APR	27	1249	34.07	19	6.67	155	26.00	44.66	24	3	.10	1.2	1.6	DLS	1.9X	230	6
2002	APR	27	1649	49.19	19	22.78	155	15.33	26.71	4910	.12	.5	.7	DEP	2.5X	68	1	
2002	APR	27	1710	23.48	19	23.96	155	17.62	0.30	23	6	.18	.2	.3	SSCL	1.6X	103	2
2002	APR	27	2139	44.81	19	54.20	155	18.66	9.80	22	2	.14	1.3	.5	KEA	1.7X	239	4
2002	APR	27	2254	31.02	19	22.96	155	14.86	2.87	14	4	.08	.5	.3	SEC	1.5X	140	2
2002	APR	28	0343	16.24	19	14.20	155	27.72	7.89	21	1	.14	.6	.9	LSW	1.3X	129	9
2002	APR	28	0426	53.22	19	16.46	155	37.34	4.76	16	3	.13	.5	6.2	LSW	.8X	155	10
2002	APR	28	0428	8.67	19	57.47	155	22.17	11.82	14	5	.07	.9	.4	KEA	.7X	225	8
2002	APR	28	0437	51.27	19	19.09	155	51.06	10.59	16	3	.14	1.0	.8	KON	.8X	208	20
2002	APR	28	0652	26.96	19	20.04	155	6.73	6.23	38	7	.14	.5	.9	SF4	1.7X	148	5
2002	APR	28	0805	27.07	19	19.46	155	10.30	4.08	27	3	.11	.6	3.3	SSF	1.2X	99	6
2002	APR	28	0955	16.98	19	23.89	155	34.58	43.43	15	6	.18	2.8	1.4	DML	1.5U	144	3
2002	APR	28	1950	8.92	19	46.37	155	33.85	14.50	23	6	.13	.5	.5	KEA	1.5X	89	11
2002	APR	28	2124	45.69	19	27.49	154	54.64	3.18	15	3	.14	.8	.4	SLE	1.3X	148	1
2002	APR	29	0022	27.49	19	25.20	155	19.07	6.43	18	6	.07	.5	1.0	KAO	1.1X	121	3
2002	APR	29	0100	44.84	19	21.89	155	14.29	2.77	16	6	.10	.6	.4	KOA	1.6X	182	2
2002	APR	29	0213	51.40	19	28.09	155	36.30	52.38	15	3	.09	1.7	1.5	DML	1.9X	88	2
2002	APR	29	0218	30.60	19	22.59	155	30.82	42.44	13	3	.09	1.3	1.6	DML	2.1X	120	6
2002	APR	29	1050	20.83	19	23.51	155	14.86	2.57	15	4	.05	.3	.4	SEC	1.2X	144	3
2002	APR	29	1114	48.21	19	23.36	155	15.04	2.40	18	6	.09	.3	.4	SEC	1.5X	139	1
2002	APR	29	1356	56.16	20	7.52	155	49.08	23.54	23	4	.11	1.3	.8	KOH	1.6X	136	4
2002	APR	29	2156	31.04	19	27.09	155	29.15	56.21	18	7	.15	2.3	1.1	DML	1.9X	77	8
2002	APR	29	2210	4.73	19	23.18	155	36.21	39.03	16	5	.09	1.3	1.5	DML	1.9X	142	4
2002	APR	30	0328	52.26	19	22.34	155	4.96	8.19	33	5	.12	1.0	.5	SF5	1.7X	196	5
2002	APR	30	0514	7.44	19	24.67	155	16.76	1.41	14	4	.13	.4	.2	SNC	1.2X	119	1
2002	APR	30	0648	13.75	19	22.91	155	16.56	9.65	19	4	.11	1.1	.8	INTL	1.8X	130	1
2002	APR	30	1406	24.05	19	15.18	155	33.40	9.53	26	3	.09	.4	.8	LSW	1.6X	114	6
2002	APR	30	1856	57.97	19	26.43	155	30.21	8.63	20	4	.11	.5	1.5	KAO	1.0X	95	9
2002	APR	30	1948	49.52	19	47.04	155	53.28	5.90	19	4	.14	1.1	1.9	HUA	1.3X	274	12
2002	APR	30	2345	17.27	19	26.51	155	30.49	11.39	17	3	.10	.5	.8	KAO	1.0X	91	5

YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN	
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	RMKS	MAG	GAP	DS
2002	MAY	1	0351	39.07	19	25.12	155	16.56	9.64	15	4	.09	.8	.5	INTL	1.7X	129	1
2002	MAY	1	0612	12.61	19	20.07	155	7.84	7.92	40	9	.12	.6	.6	SF4	2.4X	182	6
2002	MAY	1	1104	32.48	18	53.13	155	13.32	12.03	34	4	.11	1.6	1.1	LOI	2.7X	257	40
2002	MAY	1	1610	9.39	19	16.33	155	27.65	11.08	25	4	.11	.4	.9	LSW	1.3X	62	5
2002	MAY	1	1838	51.62	19	22.07	155	49.00	13.31	27	6	.13	1.0	.5	KON	1.9X	212	16
2002	MAY	1	1856	29.22	19	13.15	155	14.86	42.26	19	4	.09	1.4	1.4	DEP	1.2X	269	17
2002	MAY	2	0117	52.57	19	23.52	155	33.98	48.97	15	3	.13	1.7	1.6	DML	1.4U	142	3
2002	MAY	2	0310	2.09	19	25.55	155	16.30	11.15	15	4	.08	.9	1.1	INTL	2.0X	182	2
2002	MAY	2	0617	22.26	19	18.85	155	13.70	7.51	33	4	.11	.5	.6	SF2	1.3X	87	3
2002	MAY	2	0726	17.27	19	49.40	155	36.70	14.80	23	5	.11	.5	.5	KEA	1.8X	102	6
2002	MAY	2	0859	56.05	19	19.43	155	7.22	7.85	28	3	.11	.6	.7	SF4	1.6X	145	4
2002	MAY	2	1015	12.45	19	20.89	155	17.24	25.68	27	6	.10	.9	1.1	DEP	1.4X	54	1
2002	MAY	2	1204	13.21	20	6.74	155	26.27	0.05	14	3	.11	2.2	.6	KEA	1.4X	296	27
2002	MAY	2	1408	46.67	19	21.22	155	30.05	9.33	31	7	.07	.4	.9	KAO	1.4X	51	5
2002	MAY	2	1443	23.40	19	40.39	155	31.29	31.03	21	3	.09	1.0	1.3	KEA	1.5X	162	8
2002	MAY	2	1709	17.45	19	26.83	155	22.41	10.18	31	7	.11	.4	.9	KAO	1.3X	122	6
2002	MAY	2	1815	8.95	19	25.69	155	15.88	6.61	21	5	.13	1.1	.5	INTL	1.5X	200	2
2002	MAY	2	1920	53.49	19	26.06	155	28.21	9.07	28	8	.12	.4	1.1	KAO	1.2X	77	7
2002	MAY	2	2233	41.98	19	28.68	155	28.06	5.04	28	9	.11	.3	2.4	KAO	1.4X	70	6
2002	MAY	2	2329	3.48	19	19.05	155	11.58	6.50	33	4	.11	.6	.7	SF3	1.5X	198	7
2002	MAY	3	0555	58.37	19	21.22	155	9.90	3.61	19	5	.10	1.0	1.4	SER	1.1X	221	5
2002	MAY	3	0614	37.38	19	19.13	155	24.64	9.91	19	3	.08	.5	.7	SWR	.9X	132	3
2002	MAY	3	0815	47.94	19	22.82	155	14.66	2.79	17	5	.07	.4	.4	SEC	1.5X	118	2
2002	MAY	3	0818	9.11	19	19.09	155	13.13	5.52	37	7	.11	.4	.7	SF2	1.5X	80	4
2002	MAY	3	1021	24.09	19	24.54	155	16.79	1.46	17	4	.12	.4	.2	SSC	1.4X	97	1
2002	MAY	3	1040	53.12	19	20.85	155	17.56	19.09	33	6	.11	.6	.9	DEP	1.3X	35	1
2002</																		

YEAR	MON	DA	HRMN	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN		
				DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	RMKS	MAG	GAP	DS	
2002	MAY	5	0840	4.99	19	2.89	155	28.53	45.80	22	2	.08	1.7	2.1	DLST		299	12
2002	MAY	5	0959	11.68	19	23.11	155	30.29	9.83	17	2	.07	.5	1.1	KAO	1.3X	113	5
2002	MAY	5	1313	32.25	19	23.37	155	14.97	3.33	16	6	.09	.4	.3	SEC	1.4X	163	2
2002	MAY	5	1614	38.11	19	12.71	155	35.25	2.02	4010	.14	.4	.6	LSW	1.9X	119	10	
2002	MAY	5	2326	1.64	19	23.21	155	15.24	3.31	15	6	.08	.5	.3	SEC	1.4X	133	2
2002	MAY	6	0148	14.14	19	24.72	155	18.92	5.48	25	7	.09	.4	.8	INT	1.8X	87	2
2002	MAY	6	0233	25.02	19	18.89	155	11.57	4.57	26	4	.11	.8	2.5	SSF	1.3X	237	7
2002	MAY	6	0519	49.18	20	25.18	156	27.46	16.31	13	1	.16	2.71	2.9	DIS	1.9U	227	28
2002	MAY	6	0757	54.76	19	19.21	155	8.63	7.16	35	7	.08	.4	.7	SF4	1.8X	103	4
2002	MAY	6	1404	0.07	19	6.58	155	28.19	29.84	39	9	.08	.6	1.2	DLS	1.9X	180	5
2002	MAY	6	1520	32.44	19	24.07	155	17.12	3.32	12	2	.09	.7	.3	SSCL	1.6X	102	1
2002	MAY	6	2245	51.74	20	10.27	155	23.22	0.43	4511	.12	.8	.3	KEAF	3.2X	201	41	
2002	MAY	7	0336	47.66	19	18.63	155	45.55	12.05	21	3	.11	.6	.6	KON	1.3X	166	11
2002	MAY	7	1039	0.58	20	9.68	155	27.26	9.95	17	4	.10	1.4	1.3	KEA	1.5X	267	34
2002	MAY	7	1113	0.23	19	25.59	155	16.32	3.56	20	6	.12	.5	.4	SNCL	1.1X	142	2
2002	MAY	7	1242	37.60	19	21.70	155	4.88	1.36	4911	.12	.4	.4	SSFF	2.5X	148	10	
2002	MAY	7	1426	41.61	19	23.85	155	14.72	3.23	16	5	.11	.4	.7	SEC	1.4X	153	3
2002	MAY	7	1949	6.79	19	25.34	155	30.65	11.72	30	9	.10	.4	.6	KAO	1.6X	88	7
2002	MAY	8	0235	29.60	19	16.70	155	25.93	50.32	39	9	.10	.7	1.1	DLS	2.1X	124	8
2002	MAY	8	0619	44.57	19	24.66	155	17.13	8.17	19	6	.15	.7	.7	INTL	1.9X	91	0
2002	MAY	8	0634	40.40	19	25.14	155	16.00	12.40	18	6	.12	1.0	.9	INTL	1.8X	191	2
2002	MAY	8	0859	16.72	19	31.99	155	47.61	7.80	22	4	.17	1.4	.7	KON	1.3X	291	4
2002	MAY	8	1006	22.08	19	32.56	155	48.79	0.02	16	3	.21	1.5	.6	KON #	.9X	208	6
2002	MAY	8	2047	6.09	19	19.11	156	19.88	6.62	23	7	.14	8.11	10.2	KON -	1.4X	313	63
2002	MAY	9	0258	20.69	19	34.74	155	40.94	8.50	27	5	.10	.3	1.5	MLO	1.7X	78	12
2002	MAY	9	0321	49.58	19	48.96	156	8.87	12.55	20	4	.09	1.3	1.4	HUA	1.0X	309	35
2002	MAY	9	0331	41.14	19	24.56	155	16.79	11.84	18	5	.12	.8	1.0	INTL	1.5X	157	1
2002	MAY	9	0354	17.62	19	19.55	155	13.47	9.81	42	7	.12	.5	.3	SF2	2.4X	162	6
2002	MAY	9	0537	21.87	19	29.23	155	28.16	7.60	31	9	.10	.3	.9	KAO	1.4X	73	5
2002	MAY	9	0628	36.83	19	31.73	155	42.07	8.33	27	5	.14	.5	1.3	MLO	1.5X	82	7
2002	MAY	9	1231	46.19	19	23.83	155	13.77	2.50	16	5	.12	.4	.9	SER	1.5X	129	5
2002	MAY	9	2008	54.95	19	19.28	155	24.99	9.38	30	7	.10	.5	.8	SWR	1.3X	126	3
2002	MAY	9	2027	10.08	19	10.92	155	39.53	0.01	34	9	.18	.4	.3	LSW #	1.6X	87	12
2002	MAY	9	2140	31.22	19	24.10	155	15.07	2.80	24	5	.07	.4	.2	SSC	1.1X	91	1
2002	MAY	9	2235	25.63	19	32.59	155	14.57	23.61	30	8	.11	.6	1.1	DEP	1.4X	120	10
2002	MAY	10	0219	2.66	19	25.29	155	17.54	4.35	24	7	.14	.7	.6	SNCL	1.5X	156	0
2002	MAY	10	1558	9.96	19	25.64	155	16.32	16.20	17	3	.12	1.5	.7	DEPL	1.7X	143	2
2002	MAY	10	1922	14.71	19	26.73	156	8.76	38.54	29	6	.10	1.1	1.8	KON	1.8X	222	41
2002	MAY	10	1959	27.26	19	18.52	155	15.20	8.59	27	6	.09	.7	.6	SF1	1.3X	205	6
2002	MAY	10	2107	51.75	18	51.76	155	14.40	7.21	20	4	.12	1.3	.9	LOI	1.7X	277	55
2002	MAY	11	0000	44.93	19	23.24	155	14.80	3.27	15	5	.06	.5	.3	SEC	1.4X	122	2
2002	MAY	11	0227	45.03	19	25.38	155	25.99	4.04	28	7	.12	.3	1.7	KAO	1.1X	56	6
2002	MAY	11	0330	3.37	19	17.45	155	23.16	3.03	15	3	.11	.9	.7	SWR	.8X	230	5
2002	MAY	11	0557	31.98	19	55.76	155	23.82	21.26	26	7	.13	.9	1.3	KEA	1.4X	232	7
2002	MAY	11	0620	57.92	19	28.76	155	27.46	8.30	32	8	.12	.3	1.0	KAO	1.5X	61	6

YEAR	MON	DA	HRMN	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN			
				DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	RMKS	MAG	GAP	DS		
2002	MAY	11	0812	19.56	19	54.76	155	24.59	18	45	20	5	.12	1.1	1.4	KEA	1.3X	211	7
2002	MAY	11	0944	17.72	19	24.24	155	17.08	7.80	18	4	.11	.6	.7	INTL	1.3X	107	2	
2002	MAY	11	0947	13.90	19	22.05	155	10.92	2.46	15	5	.10	.4	.4	SER	1.1X	129	4	
2002	MAY	11	1621	26.73	19	1.52	155	26.15	39.13	37	8	.08	.9	1.3	DLS	1.7X	222	15	
2002	MAY	11	1637	16.05	19	17.45	155	23.17	5.85	17	3	.10	.4	1.9	SWR	1.1X	103	5	
2002	MAY	11	1936	27.86	19	30.16	155	19.57	12.85	26	7	.11	.7	.8	MLO	1.3X	133	7	
2002	MAY	11	2111	12.06	19	22.64	155	10.66	3.10	28	6	.12	.9	.5	SER	1.5X	183	4	
2002	MAY	11	2232	26.94	18	55.93	155	29.25	35.97	28	9	.09	1.1	1.3	DLS	1.9X	267	20	
2002	MAY	12	0130	49.66	18	57.21	155	34.63	43.52	4212	.08	.8	1.0	.0	DLS	2.4X	239	10	
2002	MAY	12	0228	53.54	19	18.92	155	11.35	2.72	26	5	.13	.6	1.2	SSF	1.4X	216	7	
2002	MAY	12	0445	25.98	19	20.24	155	11.33	7.53	28	8	.13	.8	.6	SF3	1.3X	222	5	
2002	MAY	12	0516	41.42	19	14.03	155	19.62	4.34	31	7	.11	.6	2.0	SWR	1.7X	190	7	
2002	MAY	12	0914	39.21	19	25.84	155	17.17	4.75	19	3	.14	.7	.7	SNCL	1.5X	147	1	
2002	MAY	12	0916	30.27	19	24.85	155	17.74	1.14	16	.19	.4	.4	.4	SNCL	1.2X	67	1	
2002	MAY	12	1241	19.60	19	27.73	154	53.52	7.45	37	7	.13	.8	.4	LER	1.7X	135	3	
2002	MAY	12	1556	15.81	19	24.02	155	17.20	2.85	12	4	.09	.6	.3	SSC	1.0X	89	1	
2002	MAY	12	1747	30.81	19	26.56	155	26.49	5.10	30	7	.13	.3	3.1	KAO	1.5X	54	8	
2002	MAY	12	2033	46.73	19	22.54	155	14.68	3.04	15	6	.07	.6	.4	SEC	1.4X	169	2	
2002	MAY	13	0040	37.78	19	22.24	155	13.26	7.68	12	5	.06	1.5	.9	SF2	1.6X	196	1	
2002	MAY	13	0103	6.24	19	20.88	155	11.84	6.81	24	4	.12	1.1	.7	SF3	1.5X	200	4	
2002	MAY	13	0226	8.91	19	26.95	154	55.43	6.27	24	3	.12	1.0	.6	LER	1.7U	157	1	
2002	MAY	13	0817	49.77	19	31.95	155	54.77	8.32	30	5	.22	1.1	.7	KON	1.5X	225	16	
2002	MAY	13	1230	47.86	19	19.31	155	12.99	4.03	36	7	.13	.3	1.2	SSF	1.8X	80	4	
2002	MAY	13	1733	11.26	19	12.78	155	20.06	48.80	3710	.11	.8	.9	.9	DEP	2.3X	176	15	
2002	MAY	13	1931	23.51	19	54.55	155	23.54	10.69	13	2	.13	1.4	.6	KEA	1.1X	229	6	
2002	MAY	13	1955	52.70	19	21.78	155	25.93	11.27	27	6	.11	.6	.9	KAO	1.5X	115	3	
2002	MAY	14	0504	21.21	19	35.67	155	44.50	6.02	23	4	.11</td							

YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	RMKS	MAG	GAP	DS
2002	MAY	16	0113	58.36	19	24.99	155	29.44	10.50	28	8	.09	.3	.6	KAO	1.5X	80	6
2002	MAY	16	0142	14.09	19	25.53	155	16.81	9.33	26	5	.15	.5	.7	INTL	2.5X	51	1
2002	MAY	16	0147	49.90	19	24.08	155	17.88	9.99	23	7	.12	.5	.6	INTL	2.1X	102	2
2002	MAY	16	0333	38.98	19	24.89	155	50.20	13.48	15	1	.14	1.3	.5	KON	1.7X	215	13
2002	MAY	16	0626	38.43	20	4.31	155	18.08	12.28	27	5	.13	1.3	.6	KEA	1.9X	264	10
2002	MAY	16	1122	11.89	19	17.74	155	20.82	6.94	32	7	.14	.5	.9	SWR	1.5X	125	4
2002	MAY	16	1248	22.67	19	19.64	155	11.32	7.37	38	7	.10	.5	.7	SF3	1.7X	93	6
2002	MAY	16	1258	28.52	19	24.86	155	16.03	2.42	28	4	.13	.5	.3	SNCL	2.2X	112	2
2002	MAY	16	1310	20.50	19	25.02	155	14.55	2.01	23	4	.10	.4	.6	SNCL	2.2X	200	4
2002	MAY	16	1334	41.20	19	32.64	155	43.41	6.91	14	3	.11	.6	2.1	KON	1.3U	111	6
2002	MAY	16	1430	20.83	19	17.77	155	23.23	2.68	17	3	.11	.3	.7	SWR	1.4U	106	4
2002	MAY	16	1448	11.58	19	23.98	155	26.64	9.22	41	8	.12	.4	.8	KAO	1.8X	46	3
2002	MAY	16	2301	46.88	19	11.35	155	35.69	7.11	17	3	.12	.8	1.0	LSW	1.7X	233	14
2002	MAY	17	0334	4.04	19	22.67	155	27.19	8.97	42	9	.13	.4	.6	KAO	2.0X	60	1
2002	MAY	17	0342	28.40	19	25.52	155	18.49	10.03	12	2	.17	1.2	1.8	INTL	2.2X	90	2
2002	MAY	17	0706	57.86	19	26.15	154	59.41	2.53	16	1	.22	1.2	1.4	SLE	1.5X	99	2
2002	MAY	17	0905	3.92	19	24.73	155	17.54	3.27	24	2	.19	.5	.5	SNCL	2.2X	45	1
2002	MAY	17	1034	1.06	19	18.89	155	12.98	4.07	25	.13	.4	4.1	5.5	SSF	1.4X	87	4
2002	MAY	17	1126	15.51	19	24.25	155	17.01	1.36	15	5	.11	.4	.2	SSC	1.4X	113	1
2002	MAY	17	1430	27.91	19	23.86	155	17.20	8.28	25	7	.11	.5	.6	INTL	2.0X	75	1
2002	MAY	17	1707	58.77	19	25.81	155	16.37	1.66	25	5	.06	.3	.3	SNC	2.2X	143	2
2002	MAY	17	1856	35.90	19	25.83	155	16.34	1.56	15	4	.08	.3	.4	SNC	1.8X	145	2
2002	MAY	17	2003	35.13	19	15.50	155	29.19	5.46	25	3	.13	.5	3.0	LSW	1.2X	81	9
2002	MAY	17	2332	9.10	19	25.03	155	16.94	11.00	18	5	.11	.7	.9	INTL	2.4X	118	0
2002	MAY	18	0315	7.04	19	19.22	155	13.59	4.92	28	2	.14	.5	1.5	SSF	1.5X	67	4
2002	MAY	18	0348	47.96	19	19.32	154	59.40	39.24	38	5	.10	1.3	1.0	LER	2.1X	245	11
2002	MAY	18	0418	12.45	19	28.64	155	25.19	6.68	27	4	.13	.4	1.2	KAO	1.6X	47	4
2002	MAY	18	0438	47.44	20	5.86	155	56.00	14.92	23	.11	1.0	1.3	KOH	2.3X	157	16	
2002	MAY	18	0744	28.85	19	24.30	155	17.39	10.93	28	6	.15	.6	.6	INTL	2.3X	73	1
2002	MAY	18	1928	30.72	19	15.55	155	26.36	8.68	31	6	.13	.4	.9	LSW	1.2X	76	5
2002	MAY	18	1932	25.39	19	25.42	155	16.78	6.66	23	5	.11	.4	.4	INTL	2.3X	88	1
2002	MAY	19	0220	6.27	19	24.95	155	16.99	6.99	27	6	.13	.5	.5	INTL	2.0X	116	0
2002	MAY	19	0322	53.65	19	12.43	155	27.32	3.21	28	7	.15	.4	1.4	LSW	1.5X	135	5
2002	MAY	19	0615	35.42	19	23.21	155	16.99	2.87	40	8	.10	.3	.2	SSC	2.3X	46	0
2002	MAY	19	0924	11.33	19	25.21	155	16.06	15.34	27	6	.12	.8	.3	DEPL	2.6X	94	0
2002	MAY	19	0956	29.02	19	20.71	155	12.93	8.08	31	4	.10	.5	.4	SF2	1.7X	66	4
2002	MAY	19	1328	28.33	19	27.71	155	27.91	8.53	16	5	.08	.5	1.7	KAO	1.6X	112	8
2002	MAY	19	1559	10.08	19	17.29	155	18.61	11.93	4511	.12	.4	.5	.5	SWR	1.8X	135	1
2002	MAY	19	1758	4.85	19	8.71	155	6.01	45.94	18	5	.09	1.9	1.9	LOI	1.6X	322	28
2002	MAY	19	1857	5.13	19	25.44	155	17.49	3.70	30	4	.13	.3	.4	SNCL	2.0X	49	0
2002	MAY	19	1902	36.56	19	37.98	155	15.55	8.47	29	6	.13	.4	1.0	KEA	1.6X	89	19
2002	MAY	20	0023	30.26	19	37.89	155	15.83	8.39	24	3	.16	.8	1.2	KEA	1.5X	144	20
2002	MAY	20	0204	4.50	19	24.78	155	17.07	10.27	25	5	.12	.6	.6	INTL	2.1X	61	0
2002	MAY	20	0602	21.68	19	13.58	155	33.88	0.02	31	6	.16	.5	.3	LSW	# 2.1X	77	13
2002	MAY	20	1044	37.74	19	24.91	155	16.92	7.49	26	6	.12	.8	.5	INTL	2.2X	173	0

YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	RMKS	MAG	GAP	DS
2002	MAY	20	1153	35.36	19	22.23	155	29.03	9.75	32	6	.08	.4	.8	KAO	1.5X	43	3
2002	MAY	20	1204	41.97	19	27.01	155	24.74	2.08	18	4	.11	.4	1.1	KAO	1.4X	65	6
2002	MAY	20	1417	21.10	19	24.25	155	16.38	7.93	15	3	.10	.9	.6	INTL	1.8X	121	2
2002	MAY	20	1503	30.42	19	17.82	155	23.06	3.07	20	3	.09	.4	.9	SWR	.9X	100	4
2002	MAY	20	1929	40.51	19	24.69	155	17.09	10.12	26	6	.09	.4	.3	INTL	2.3X	59	0
2002	MAY	20	2310	47.24	19	25.15	155	16.60	2.84	20	5	.13	.7	.2	SNCL	1.4X	167	1
2002	MAY	21	0037	9.07	18	54.81	155	17.64	19.93	21	3	.10	1.8	5.0	LOI	1.5X	284	33
2002	MAY	21	0105	4.79	19	20.27	155	10.66	7.34	37	8	.11	.4	.7	SF3	1.5X	82	6
2002	MAY	21	0430	34.48	19	25.33	155	17.21	9.18	22	6	.14	.5	.6	INTL	2.3X	114	1
2002	MAY	21	0539	10.32	18	54.29	155	16.25	16.67	29	6	.12	1.614	7	LOI	- 1.9X	282	35
2002	MAY	21	0712	47.72	19	19.50	155	23.73	8.62	18	3	.07	.4	.9	SWR	1.2U	77	1
2002	MAY	21	0807	41.80	19	24.67	155	16.37	7.22	16	3	.11	.8	.8	INTL	1.7X	128	1
2002	MAY	21	0817	33.46	19	10.37	155	32.97	8.06	21	5	.15	.8	1.3	LSW	1.6X	229	9
2002	MAY	21	0827	36.42	19	17.46	155	26.27	3.00	18	4	.10	.3	1.3	LSW	1.1X	59	7
2002	MAY	21	0948	50.21	19	18.42	155	12.86	3.56	22	2	.12	.5	1.1	SSF	1.2X	101	3
2002	MAY	21	1058	33.60	18	56.86	155	17.19	21.27	16	4	.13	2.0	4.9	LOI	1.4X	310	30
2002	MAY	21	1223	28.74	19	24.32	155	17.08	5.85	30	6	.13	.4	.6	INTL	2.0X	57	1
2002	MAY	21	1500	57.42	19	43.41	155	42.76	14.20	31	3	.11	.6	.5	KEA	1.8X	98	14
2002	MAY	21	1702	4.33	19	25.31	155	16.53	7.85	19	3	.12	.6	.9	INTL	1.8X	132	1
2002	MAY	21	2140	54.76	19	20.42	155	7.49	5.50	20	1	.12	.6	1.6	SF4	1.1X	124	5
2002	MAY	21	2153	36.52	19	25.15	155	16.41	9.75	19	4	.14	1.0	1.0	INTL	2.1X	175	1
2002	MAY	22	0123	52.65	19	32.27	155	52.57	12.89	19	6	.14	1.3	.6	KON	1.1X	307	12
2002	MAY	22	0125	47.82	19	6.65	155	28.34	28.78	27	7	.09	.8	1.4	DLS	1.8X	199	5
2002	MAY	22	0144	38.47	19	21.06	155	18.22	13.43	4413	.12	.5	.3	.5	DEP	2.0X	111	5
2002	MAY	22	0221	49.24	19	11.99	155	27.05	6.17	22	.14	.14	.6	1.4	LSW	1.4X	153	5
2002	MAY	22	0251	19.86	19	28.09	155	27.90	7.47	17	3	.09	.4	1.3	KAO	1.1X	72	7
2002	MAY	22	0312	52.73	19	23.5												

YEAR	MON	DA	HRMN	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN	
				DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	RMKS	MAG	GAP	DS
2002	MAY	24	0059	21.62	19	23.25	155	14.92	2.78	16	5	.08	.5	.5 SEC	1.6X	118	2
2002	MAY	24	0100	9.53	19	23.11	155	14.82	3.20	17	6	.09	.5	.5 SEC	1.7X	130	2
2002	MAY	24	0220	43.78	19	23.32	155	14.86	2.92	19	5	.09	.3	.4 SEC	1.4X	116	2
2002	MAY	24	0413	18.90	19	19.15	155	26.32	10.34	3910	.12	.4	.7	KAO	1.5X	115	6
2002	MAY	24	1033	46.68	19	16.69	155	34.22	9.13	21	1	.10	.4	1.3 LSW	1.1X	74	8
2002	MAY	24	1125	42.74	19	50.56	155	15.41	10.97	15	5	.13	1.2	.9 KEA	1.4X	234	10
2002	MAY	24	1142	27.02	19	24.84	155	17.64	7.78	22	3	.15	.6	.9 INTL	2.2X	46	1
2002	MAY	24	1223	43.67	19	24.10	155	15.78	9.31	16	4	.11	1.8	1.0 INTL	1.6X	235	1
2002	MAY	24	1247	42.47	19	56.59	155	24.39	8.32	25	5	.16	1.0	.6 KEA	1.8X	193	9
2002	MAY	24	1300	24.51	19	23.17	155	57.96	41.35	17	4	.09	1.3	1.5 KON	1.7U	273	25
2002	MAY	24	1544	40.22	19	24.97	155	16.19	8.67	20	4	.10	.7	.8 INTL	1.8X	108	1
2002	MAY	24	1639	35.81	19	26.28	155	30.56	11.80	24	4	.10	.4	1.1 KAO	1.3X	87	5
2002	MAY	24	1857	8.38	19	26.35	155	27.96	10.31	31	5	.11	.4	1.1 KAO	1.4X	50	7
2002	MAY	25	0453	4.55	19	10.69	155	16.77	45.42	33	9	.08	.8	1.1 DEP	2.0X	187	20
2002	MAY	25	0641	17.03	19	11.98	155	37.05	0.22	35	7	.18	.4	.5 LSW	2.0X	87	16
2002	MAY	25	1459	47.72	19	25.65	155	16.68	11.24	21	4	.14	.8	.9 INTL	2.1X	113	2
2002	MAY	25	2004	48.65	19	26.31	154	52.03	10.28	23	3	.10	1.0	.3 LER	1.7X	218	2
2002	MAY	26	0052	57.01	19	23.85	155	17.75	11.55	13	4	.09	.8	1.3 INTL	2.0X	107	2
2002	MAY	26	0328	7.23	20	1.39	155	37.30	10.54	15	2	.20	1.1	.9 KOH	1.1X	170	19
2002	MAY	26	0624	13.04	19	24.93	155	16.37	1.46	12	2	.11	.3	.3 SNC	1.8X	102	1
2002	MAY	26	0819	47.86	19	26.02	155	15.67	1.56	16	4	.08	.3	.5 SNC	1.3X	164	3
2002	MAY	26	0821	15.90	19	20.32	155	11.42	6.72	23	3	.12	.9	1.1 SF3	1.7X	161	5
2002	MAY	26	1201	39.16	19	22.75	155	17.21	2.25	29	6	.11	.3	.3 SSC	1.9X	79	1
2002	MAY	26	1711	16.26	19	46.73	155	3.49	43.78	31	8	.11	.8	1.3 HIL	1.7X	205	9
2002	MAY	26	1901	9.00	19	23.19	155	14.97	3.24	16	4	.05	.4	.4 SEC	1.8X	107	2
2002	MAY	26	2137	5.81	19	22.29	155	30.14	9.08	24	3	.08	.4	.9 KAO	1.4X	122	4
2002	MAY	26	2326	28.32	19	27.31	155	53.15	6.87	33	6	.17	.9	.7 KON	2.0X	211	14
2002	MAY	27	0003	44.66	20	1.02	155	9.47	42.86	8	3	.07	3.0	1.6 KEA	1.8U	329	24
2002	MAY	27	0007	24.68	19	18.52	155	7.74	5.79	22	3	.10	.9	.8 SF4	1.5X	224	9
2002	MAY	27	0137	37.02	19	22.44	155	29.86	9.15	3810	.10	.3	.7	KAO	1.2X	62	4
2002	MAY	27	0217	15.17	19	31.92	155	52.49	8.11	16	4	.22	1.7	2.9 KON	1.1X	241	12
2002	MAY	27	0232	57.37	19	25.66	155	15.46	14.52	16	4	.11	1.7	.4 DEP	1.0X	238	4
2002	MAY	27	0420	53.48	19	24.67	155	37.70	11.10	31	8	.14	.4	.8 MLO	1.4X	93	1
2002	MAY	27	0456	54.44	19	24.89	155	16.48	1.96	23	6	.10	.3	.2 SNCL	1.6X	98	1
2002	MAY	27	0501	35.82	19	25.09	155	37.57	12.08	31	8	.13	.4	.6 MLO	1.5X	92	1
2002	MAY	27	0750	59.98	19	23.76	155	15.98	15.34	16	4	.17	1.3	.8 DEP	.8X	117	3
2002	MAY	27	1452	18.79	19	8.43	155	33.61	36.84	29	7	.11	.9	1.4 DLS	1.6X	196	10
2002	MAY	27	1947	38.58	19	24.98	155	16.23	7.01	26	5	.18	.6	.7 INTL	1.9X	107	1
2002	MAY	27	2010	57.06	19	22.94	155	14.63	3.05	15	4	.06	.4	.4 SEC	1.7X	116	2
2002	MAY	27	2239	56.40	19	37.70	156	4.81	42.80	22	5	.11	1.3	1.7 KON	1.3X	272	26
2002	MAY	27	2331	5.16	19	29.43	155	26.72	11.02	26	8	.12	.4	.8 KAO	1.2X	85	5
2002	MAY	28	0004	18.60	19	12.81	155	27.09	0.66	29	8	.13	.4	.3 LSW	1.2X	140	6
2002	MAY	28	0118	1.46	19	25.80	155	19.40	8.24	29	7	.09	.5	.8 KAO	1.7X	72	3
2002	MAY	28	0340	31.08	19	25.20	155	16.00	14.47	18	4	.07	1.0	.4 DEP	1.3U	156	3
2002	MAY	28	0447	8.13	19	25.32	155	16.18	13.31	20	5	.10	.7	.7 DEP	1.0X	158	2

YEAR	MON	DA	HRMN	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN	
				DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	RMKS	MAG	GAP	DS
2002	MAY	28	0501	20.91	19	33.43	155	37.85	8.13	37	9	.14	.4	.9 MLO	1.6X	105	8
2002	MAY	28	0551	12.51	19	26.30	155	30.82	12.27	27	6	.10	.5	1.0 KAO	1.2X	95	5
2002	MAY	28	0558	19.92	19	25.36	155	16.18	14.50	16	3	.08	1.3	.4 DEP	1.0X	167	2
2002	MAY	28	0649	48.08	19	25.38	155	17.44	4.57	20	4	.10	.4	.5 SNCL	1.4X	87	0
2002	MAY	28	0658	6.13	19	40.99	155	14.08	40.10	32	6	.12	.8	1.4 KEA	1.3X	133	22
2002	MAY	28	0825	13.11	19	46.41	155	34.18	14.69	26	7	.11	.4	.4 KEA	1.7X	100	12
2002	MAY	28	0857	29.13	19	28.48	155	12.89	30.94	29	5	.10	.8	1.2 DEP	1.4X	218	7
2002	MAY	28	1244	43.04	19	16.89	155	29.79	10.90	24	4	.09	.4	1.4 LSW	1.3X	129	11
2002	MAY	28	1448	11.57	19	46.83	156	9.90	5.88	20	2	.13	.2	1.8 HUA	2.1X	274	36
2002	MAY	28	1808	30.16	19	24.70	155	17.11	3.79	23	5	.13	.6	.2 SNCL	1.7X	62	0
2002	MAY	28	1833	11.71	18	56.15	155	12.59	30.14	4310	.11	.10	.2	0 LOI	1.9X	245	36
2002	MAY	28	1949	34.37	19	19.18	155	13.15	7.97	3912	.10	.4	.5 SF2	1.5X	147	6	
2002	MAY	29	0111	53.45	18	58.14	155	5.11	44.87	21	3	.11	.2	2.3 LOI	1.5X	305	49
2002	MAY	29	0429	21.68	19	46.44	155	34.18	14.68	16	3	.11	.7	1.4 KEA	.9X	105	12
2002	MAY	29	0456	40.98	20	3.34	155	58.58	3.98	36	7	.21	1.4	1.6 KOHF#	2.6X	176	62
2002	MAY	29	0835	47.67	19	25.59	155	16.01	9.37	20	5	.14	1.4	.6 INTL	1.9X	227	2
2002	MAY	29	1052	1.01	19	19.39	155	11.77	4.29	34	9	.11	.5	2.4 SSF	1.8X	128	6
2002	MAY	29	1250	28.79	19	41.16	156	10.23	36.83	23	6	.14	1.5	2.5 HUA	1.5X	275	35
2002	MAY	29	2155	19.23	19	9.90	155	26.32	31.67	19	3	.09	1.3	1.4 DLS	1.6X	222	3
2002	MAY	29	2210	49.32	19	30.45	155	26.19	24.90	37	8	.12	.5	.9 DML	2.0X	50	4
2002	MAY	30	0012	10.98	19	29.95	155	26.55	6.89	19	4	.12	.4	1.2 KAO	1.2X	113	4
2002	MAY	30	0118	11.01	19	26.01	155	13.15	14.55	17	4	.09	1.2	.4 DEP	1.0X	271	8
2002	MAY	30	0144	1.66	19	22.74	155	14.18	3.70	36	8	.12	.4	.4 SEC	2.2X	126	2
2002	MAY	30	0438	45.71	19	30.08	155	7.41	9.09	19	5	.10	.9	1.3 GLN	1.3X	203	16
2002	MAY	30	0541	4.38	19	24.09	155	15.75	3.01	15	3	.07	.3	.4 SEC	1.7X	79	2
2002	MAY	30	0551	47.88	20	3.29	155	30.38	9.21	20	5	.17	1.2	.7 KEA	1.4X	210	25
2002	MAY	30	0628	43.82	19	18.86	155	15.60	4.17	27	6	.11	.5	2.1 SSF	1.2X	121	5
2002	MAY	30	0713	34.60	19	24.94	155	16.79	6.46	26	6	.16	.6	.5 INTL	1.8X	94	0
2002	MAY	30	0933	17.85	19	28.37	155	27.93	8.48	19							

ORIGIN TIME (HST)		LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN
YEAR	MON	DA	HRMN	SEC	DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	RMKS
2002	MAY	31	1822	5.94	19	17.60	155	34.62	47.72	13	2.	.12	1.7	1.6 DLS
2002	MAY	31	1854	55.10	19	14.26	155	29.58	0.77	24	7	.14	.4	.3 LSW
2002	MAY	31	2046	11.64	19	48.19	156	13.75	37.39	22	7	.10	1.3	2.2 HUA
2002	MAY	31	2105	41.61	19	30.35	155	37.72	30.59	17	4	.11	.6	1.3 DML
2002	MAY	31	2139	57.24	19	25.66	155	15.21	16.38	15	6	.12	1.3	.8 DEP
2002	MAY	31	2147	38.86	19	49.03	155	43.18	10.00	20	4	.11	.7	.6 HUA
2002	MAY	31	2335	28.92	19	23.05	155	13.57	18.13	14	4	.11	1.5	.9 DEP
2002	JUN	1	0210	38.05	19	27.01	155	35.56	44.63	24	7	.14	1.1	1.4 DML
2002	JUN	1	0321	1.56	19	24.36	155	32.96	43.71	15	3	.15	1.6	1.9 DML
2002	JUN	1	0348	15.07	19	26.78	155	4.84	15.86	13	2	.08	1.7	.8 DEP
2002	JUN	1	0556	50.26	19	23.40	155	56.36	8.50	17	3	.18	1.5	1.1 KON
2002	JUN	1	0848	38.79	19	24.57	155	16.31	7.25	17	5	.10	.8	.6 INTL
2002	JUN	1	1007	31.04	19	42.73	155	38.08	40.08	17	2	.13	1.8	1.5 KEA
2002	JUN	1	1014	32.92	19	29.49	155	34.74	1.41	15	6	.09	.4	.3 MLO
2002	JUN	1	1540	47.11	19	19.28	155	17.62	31.91	36	9	.11	.8	.8 DEP
2002	JUN	1	1718	41.15	18	55.74	155	10.74	42.41	24	5	.10	1.5	1.8 LOI
2002	JUN	1	1757	41.83	19	52.23	155	21.16	12.28	26	5	.12	.7	.4 KEA
2002	JUN	1	1812	45.53	19	28.09	155	39.47	11.66	14	3	.11	.6	.9 MLO
2002	JUN	1	1817	3.63	19	17.58	155	29.61	0.08	4311	.11	.3	.2	LSW
2002	JUN	1	2302	53.30	19	25.57	155	17.19	6.22	12	2	.10	.7	1.1 INTL
2002	JUN	1	2316	36.01	19	12.32	155	28.62	0.08	31	7	.15	.4	.2 LSW
2002	JUN	1	2345	20.62	19	25.05	155	16.29	10.59	16	3	.11	.9	1.2 INT
2002	JUN	2	0003	31.29	19	20.14	155	9.31	6.73	28	6	.10	.9	.7 SF3
2002	JUN	2	0106	44.45	19	25.26	155	30.10	11.56	22	5	.08	.4	1.2 KAO
2002	JUN	2	0109	41.34	19	26.70	155	29.87	14.20	24	6	.13	.6	1.5 DML
2002	JUN	2	0439	28.67	19	25.23	155	16.50	3.04	19	5	.13	.4	.2 SNCL
2002	JUN	2	0451	41.78	19	21.24	155	23.59	9.54	23	4	.08	.5	.8 SWR
2002	JUN	2	0643	37.35	19	19.02	155	2.10	7.96	28	7	.13	1.0	.7 SF5
2002	JUN	2	0748	2.46	19	22.80	155	27.81	5.53	23	4	.09	.4	.7 KAO
2002	JUN	2	0813	1.36	19	19.79	155	7.01	7.71	43	7	.11	.4	.5 SF4F
2002	JUN	2	0815	4.56	19	20.37	155	2.41	38.42	4111	.12	1.0	.7	DEP
2002	JUN	2	0840	24.65	19	12.66	155	28.08	0.11	4311	.13	.3	.2	LSW
2002	JUN	2	0915	48.36	19	26.16	155	33.58	46.09	14	3	.12	2.0	1.9 DML
2002	JUN	2	1026	37.02	19	24.75	155	16.98	4.36	15	4	.15	.7	.5 SNCL
2002	JUN	2	1259	56.25	19	25.30	155	16.70	1.62	21	5	.13	.3	.2 SNCL
2002	JUN	2	1642	56.71	19	24.45	155	14.60	16.92	17	3	.12	1.7	.9 DEP
2002	JUN	2	1907	8.44	19	24.11	155	16.96	6.20	22	5	.11	.6	.5 INTL
2002	JUN	2	2117	23.33	19	13.46	155	4.87	43.07	15	3	.15	3.6	1.6 DEP
2002	JUN	2	2214	55.26	19	24.84	155	17.37	11.41	18	4	.12	1.0	.9 INTL
2002	JUN	3	0347	52.32	18	53.78	155	12.51	47.46	14	5	.13	3.0	3.5 LOI
2002	JUN	3	0515	21.90	18	52.33	155	35.99	38.25	4010	.09	1.0	1.2 DLS	
2002	JUN	3	0603	21.58	19	28.76	155	34.87	53.48	19	5	.12	2.3	1.0 DML
2002	JUN	3	0632	13.39	19	19.78	155	11.87	7.93	4310	.11	.4	.4 SF3	
2002	JUN	3	0729	50.42	19	15.18	155	30.17	3.79	34	7	.16	.5	2.1 LSW
2002	JUN	3	1005	30.03	19	21.05	155	6.20	6.60	34	7	.12	.5	.9 SF4

ORIGIN TIME (HST)		LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN
YEAR	MON	DA	HRMN	SEC	DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	RMKS
2002	JUN	3	1037	18.61	19	24.48	155	16.17	5.21	23	5	.11	.7	.4 INTL
2002	JUN	3	1059	31.43	19	25.40	155	16.28	9.05	16	3	.08	.9	.6 INTL
2002	JUN	3	1149	22.13	19	32.05	155	7.98	13.98	14	4	.11	1.6	1.8 HIL
2002	JUN	3	1412	43.05	19	18.54	155	52.70	9.13	17	3	.12	2.3	1.1 KON
2002	JUN	3	2004	44.25	19	17.70	155	6.34	6.88	30	5	.12	.9	.8 SF4
2002	JUN	4	2339	40.60	19	19.70	155	12.69	8.05	34	8	.12	.6	.4 SF2
2002	JUN	4	0129	38.00	19	23.19	155	26.58	5.19	23	4	.13	.4	1.0 KAO
2002	JUN	4	0737	48.31	19	25.54	155	14.64	4.34	18	4	.07	.6	.6 SNCL
2002	JUN	4	0857	55.24	19	23.27	155	14.81	2.32	18	5	.07	.3	.4 SEC
2002	JUN	4	1209	14.97	19	23.55	155	22.54	9.59	33	7	.09	.4	.8 KAO
2002	JUN	4	1219	54.99	19	16.97	155	15.43	5.34	20	1	.09	.7	1.6 SF1
2002	JUN	4	1246	15.10	19	24.63	155	16.39	2.93	16	3	.10	.3	.3 SNCL
2002	JUN	4	1423	34.91	19	26.97	155	29.29	11.94	20	1	.12	.6	1.9 KAO
2002	JUN	4	1825	54.54	19	20.23	155	6.84	6.78	24	2	.08	1.1	1.1 SF4
2002	JUN	4	1943	18.38	19	24.83	155	16.20	0.14	21	3	.10	.2	.3 SNCL
2002	JUN	4	2055	55.40	19	32.99	155	23.49	55.50	23	4	.13	1.2	1.4 DML
2002	JUN	4	2317	13.60	19	39.31	155	6.76	13.52	18	4	.11	.6	.9 HIL
2002	JUN	5	0001	40.88	19	20.55	155	50.79	12.1	1	.09	3.2	.7 KON	
2002	JUN	5	0018	48.52	19	26.17	155	15.88	6.36	14	3	.12	.9	1.1 INTL
2002	JUN	5	0215	6.06	19	22.17	155	29.83	9.36	35	6	.11	.4	.7 KAO
2002	JUN	5	0601	4.45	19	26.05	155	14.99	7.42	20	3	.07	.7	.8 INTL
2002	JUN	5	1051	59.63	19	19.95	155	7.36	8.64	24	3	.07	.5	.9 SF4
2002	JUN	5	1625	49.00	19	25.23	155	13.39	16.51	20	4	.09	1.3	.5 DEP
2002	JUN	5	2142	14.81	18	49.27	155	12.25	8.89	22	6	.11	3.3	4.6 LOI
2002	JUN	5	2204	8.37	19	24.76	155	17.30	4.26	19	6	.10	.5	.3 SNCL
2002	JUN	5	2315	47.02	19	24.76	155	14.71	13.94	15	3	.09	.9	.4 DEP
2002	JUN	5	2335	33.18	19	18.54	155	47.27	9.75	19	6	.11	.7	1.1 KON
2002	JUN	6	0127	22.48	19	19.51	155	9.64	1.92	29	7	.12	.7	.5 SSF
2002	JUN	6	0217	32.45	19	11.11	155	31.60	0.01	21	4	.16	.5	.3 LSW #
2002	JUN	6	0452	32.45	19	26.15	155	16.21	7.67	15	3	.12	.8	.9 INTL
2002	JUN	6	0505	49.31	19	12.28	155	27.88	0.30	32	6	.15	.4	.3 LSW
2002	JUN	6	0625	27.99	19	30.22	155	22.86	12.55	20	4	.08	.5	.7 MLO
2002	JUN	6	0649	2.95	19	1.69	155	24.86	40.58	30	6	.09	.9	1.5 LOI
2002	JUN	6	0909	52.74	19	24.92	155	16.56	7.87	22	5	.13	.9	.5 INTL
2002	JUN	6	1135	0.42	19	25.96	155	16.02	2.54	21	5	.06	.3	.3 SNC
2002	JUN	6	1432	14.94	19	32.50	155	49.80	8.17	17	3	.20	1.9	.9 KON
2002	JUN	6	1439	55.98	19	6.63	155	40.06	1.74	33	7	.15	.4	.6 LSW
2002	JUN	6	1614	31.79	19	26.11	155	28.24	9.62	16	3	.12	.6	1.3 KAO
2002	JUN	6	1736	44.82	19	24.84	155	17.36	9.50	17	4	.10	1.0	.9 INTL
2002	JUN	6	1836	29.46	19	27.09	155	29.83	5.30	27	6	.15	.4	3.4 KAO
2002	JUN	6	1907	56.78	19	23.71	155	16.86	2.41	16	6	.05	.3	.2 SSC
2002	JUN	6	1943	7.57	19	25.43	155	16.40	2.52	23	6	.12	.4	.2 SNCL
2002	JUN	6	2136	39.88	20	1.97	155	56.38	9.16	22	3	.11	1.8	1.0 KOH
2002	JUN	7	0419											

YEAR	MON	DA	HRMN	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN		
				SEC	DEG	MIN	DEG	KM	RD	S	SEC	KM	KM	RMKS	MAG	GAP	DS	
2002	JUN	7	0611	15.63	19	20.49	155	4.14	2.57	29	7	.13	.8	.7	SSF	1.5X	223	8
2002	JUN	7	0705	36.95	19	24.90	155	18.86	1.32	22	5	.15	.3	.6	SNCL	.8X	75	2
2002	JUN	7	0913	49.63	19	25.60	155	15.76	0.37	21	6	.14	.2	.3	SNCL	1.6X	183	3
2002	JUN	7	1137	1.46	19	24.48	155	16.70	13.48	19	4	.10	1.1	.7	DEP	1.4X	84	1
2002	JUN	7	1245	55.76	19	24.79	155	16.65	8.49	15	4	.10	.9	.7	INTL	1.7X	143	1
2002	JUN	7	1301	16.57	19	24.84	155	17.22	15.40	18	4	.09	.7	.4	DEP	1.4X	151	1
2002	JUN	7	2050	44.05	19	25.98	155	15.66	7.08	22	6	.17	.8	.7	INTL	1.4X	163	3
2002	JUN	8	0039	39.84	19	25.23	155	10.74	19.79	21	6	.12	1.1	1.0	DEP	1.3X	276	6
2002	JUN	8	0256	45.74	19	54.76	155	30.52	35.57	21	7	.10	.8	1.1	KEA	1.0X	208	16
2002	JUN	8	0347	6.41	19	25.83	155	17.37	7.48	20	4	.14	.8	.6	INTL	1.7X	93	1
2002	JUN	8	0857	36.73	19	26.18	155	30.57	11.02	30	5	.10	.4	.8	KAO	1.5X	91	9
2002	JUN	8	1218	31.97	19	24.06	155	15.41	3.06	16	5	.07	.3	.3	SEC	1.5X	152	2
2002	JUN	8	1340	54.07	19	13.27	155	29.10	42.25	4211	.07	.6	1.0	DLS	1.7X	84	7	
2002	JUN	8	1356	17.89	19	11.59	155	24.09	44.69	3911	.12	.9	1.0	DEP	1.5X	171	5	
2002	JUN	8	1804	47.53	19	13.56	155	46.36	14.50	15	3	.06	1.5	.6	KON	1.3X	218	8
2002	JUN	8	1849	6.54	19	25.61	155	12.75	14.03	19	6	.10	1.2	.4	DEP	1.5X	278	8
2002	JUN	8	2349	43.50	20	1.89	155	45.57	10.57	23	4	.11	.8	.9	KOH	1.6X	156	11
2002	JUN	8	2352	23.01	19	25.06	155	16.07	13.88	24	6	.13	.7	.5	DEP	1.3X	111	3
2002	JUN	9	0119	21.29	19	24.40	155	15.18	15.93	17	4	.12	1.2	.6	DEP	1.2X	125	2
2002	JUN	9	0332	51.78	19	24.65	155	16.06	0.03	25	7	.16	.2	.3	SNCL#	1.2X	98	2
2002	JUN	9	0411	13.57	19	1.51	155	26.72	38.09	4213	.10	.8	1.1	DLS	2.0X	211	15	
2002	JUN	9	0456	28.04	19	10.99	155	42.69	12.39	16	2	.10	.8	.7	LSW	1.2X	145	7
2002	JUN	9	0556	45.43	19	33.54	155	18.31	13.25	34	8	.11	.5	.6	DEP	1.4X	120	11
2002	JUN	9	0630	57.46	19	16.08	155	29.65	13.19	25	6	.15	.5	1.5	DLS	1.4X	82	12
2002	JUN	9	0656	48.23	19	11.58	155	41.75	0.19	20	6	.10	.6	.3	LSW	1.3X	160	9
2002	JUN	9	1221	48.94	19	25.07	155	3.21	2.94	23	4	.17	.8	1.8	SME	1.0X	154	8
2002	JUN	9	1223	31.82	18	54.39	155	14.35	12.31	34	7	.13	1.3	.5	LOI	1.7X	267	37
2002	JUN	9	1226	43.95	18	55.09	155	15.50	11.44	26	5	.10	1.1	.6	LOI	1.5X	263	34
2002	JUN	9	1309	37.40	19	47.81	155	23.81	27.13	16	6	.09	1.1	1.3	KEA	1.2X	176	12
2002	JUN	9	1313	32.07	19	20.26	155	6.00	6.13	25	3	.13	1.0	1.5	SF4	1.3X	240	6
2002	JUN	9	1327	48.12	19	53.92	155	26.93	31.07	28	5	.10	.7	1.0	KEA	1.6X	194	11
2002	JUN	9	1402	5.88	19	28.30	155	23.78	25.30	43	9	.11	.5	.9	DML	2.0X	78	3
2002	JUN	10	0026	56.59	19	24.48	155	37.58	3.02	16	3	.22	.7	.4	MLO	.9X	111	0
2002	JUN	10	0500	55.10	19	19.89	155	12.87	6.48	35	8	.13	.5	.7	SF2	1.6X	166	5
2002	JUN	10	0659	48.72	19	19.71	155	6.76	5.62	30	5	.10	.4	1.2	SF4	1.5X	152	5
2002	JUN	10	1205	58.32	19	18.52	155	12.93	5.21	37	8	.11	.3	.9	SF2	1.4X	96	3
2002	JUN	10	1425	51.44	19	16.42	155	26.41	9.09	34	7	.13	.4	.7	LSW	1.3X	60	6
2002	JUN	10	2133	5.93	19	21.31	155	18.51	1.35	26	7	.10	.3	.4	SWR	1.8X	107	5
2002	JUN	11	0401	56.75	19	15.11	155	8.20	42.12	35	8	.11	1.1	.7	DEP	1.5X	239	15
2002	JUN	11	1153	55.08	19	19.56	155	7.49	5.71	22	.08	.5	1.4	SF4	1.3X	136	4	
2002	JUN	11	1455	31.67	19	23.30	155	17.04	3.25	12	4	.07	.3	.4	SSC	1.6X	92	0
2002	JUN	11	1714	29.00	19	14.62	155	27.58	1.08	35	8	.16	.3	.4	LSW	1.4X	90	6
2002	JUN	11	1905	40.83	19	19.06	155	7.68	6.36	26	5	.12	.9	1.3	SF4	1.7X	210	8
2002	JUN	12	0148	3.15	19	22.55	155	2.27	7.06	26	3	.13	1.3	.8	SF5	1.3X	212	8
2002	JUN	12	0258	56.25	19	24.53	155	29.19	9.37	22	2	.12	.6	1.2	KAO	1.2X	111	5

YEAR	MON	DA	HRMN	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN			
				SEC	DEG	MIN	DEG	KM	RD	S	SEC	KM	KM	RMKS	MAG	GAP	DS		
2002	JUN	12	0349	34.02	19	21.69	155	18.26	10.03	15	1	.08	.9	.1.4	SWRL	1.2X	181	4	
2002	JUN	12	0854	57.63	19	39.30	155	58.10	35.51	20	4	.09	1.3	1.6	HUA	1.4X	277	14	
2002	JUN	12	1057	14.17	18	52.79	155	15.42	13.96	29	4	.10	1.2	1.7	LOI	2.0X	259	38	
2002	JUN	12	1312	34.46	19	12.43	155	28.38	0.12	32	8	.12	.3	.2	LSW	1.5X	95	5	
2002	JUN	12	1415	44.27	19	15.69	155	28.64	0.73	30	5	.12	.3	.4	LSW	1.3X	66	8	
2002	JUN	12	2311	1.78	19	38.45	155	21.13	2.24	15	4	.12	1.8	1.6	KEA	1.8X	240	15	
2002	JUN	12	2338	0.24	19	21.81	155	19.22	0.03	21	7	.12	.3	.2	SWR	1.6U	190	4	
2002	JUN	13	0151	58.54	19	18.46	155	30.58	8.14	3710	.10	.3	.9	LSW	1.6X	88	9		
2002	JUN	13	0158	27.78	19	17.90	155	6.49	6.92	26	4	.12	1.3	.9	SF4	1.3X	232	10	
2002	JUN	13	1103	44.47	19	12.99	155	28.19	0.42	4611	.15	.3	.2	LSW	1.9X	97	6		
2002	JUN	13	1419	56.05	19	31.00	155	22.88	12.46	27	7	.12	.5	.7	MLO	1.4X	99	2	
2002	JUN	13	1433	58.08	19	22.88	155	30.69	9.90	22	4	.06	.5	.9	KAO	1.4X	118	5	
2002	JUN	13	1516	43.74	19	11.75	155	28.20	33.99	4612	.08	.6	1.0	DLS	2.1X	99	4		
2002	JUN	13	1542	26.47	19	30.68	155	39.11	30.79	29	6	.07	.7	1.1	DML	1.7X	104	6	
2002	JUN	13	1802	55.51	19	41.03	155	26.59	24.75	27	6	.10	.5	1.0	KEA	1.5X	110	10	
2002	JUN	13	1835	1.87	19	19.25	155	11.89	6.38	26	6	.12	1.0	1.2	SF3	1.8X	288	7	
2002	JUN	13	2310	4.39	19	17.74	155	28.65	12.58	19	4	.13	.6	.9	LSW	1.4X	179	9	
2002	JUN	14	0023	57.43	19	13.80	155	29.11	40.56	4412	.08	.6	.9	DLS	1.9X	96	3		
2002	JUN	14	0214	44.90	19	19.01	155	8.33	2.25	24	5	.13	.6	.7	SSF	1.4X	199	8	
2002	JUN	14	0359	49.32	19	26.75	155	28.87	7.80	33	9	.14	.4	1.3	KAO	1.5X	80	8	
2002	JUN	14	0446	26.36	19	27.19	155	13.34	31.57	34	8	.11	.8	.9	DEP	1.4X	139	5	
2002	JUN	14	0850	9.78	19	38.96	155	58.44	13.63	19	3	.10	1.2	.5	KON	2.0X	292	15	
2002	JUN	14	1337	10.07	18	53.49	155	9.06	16.49	17	4	.15	2.017	3.0	LOI	-	1.7X	310	44
2002	JUN	14	1831	14.59	19	29.91	155	26.56	10.51	27	7	.13	.4	.8	KAO	1.6X	78	4	
2002	JUN	14	2131	16.34	19	19.47	155	7.26	5.92	36	8	.13	.6	.7	SF4	1.6X	200	7	
2002	JUN	15	0120	13.27	19	24.73	155	29.96	14.52	19	4	.10	.5	1.0	DML	1.4X	100	5	
2002	JUN	15	0418	27.99	19	39.65	156	0.83	0.94	24	5	.11	2.2</td						

ORIGIN TIME (HST)												PREF	AZ	MIN			
YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	MAG	GAP	DS
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	RMKS		

2002 JUN 17 1006 49.96 19 30.00 155 28.20 4.32 46 9 .11 .3 1.2 KAO 2.6X 47 4
 2002 JUN 17 2003 8.34 19 18.76 155 30.27 4.65 21 4 .13 .5 4.9 LSW 1.2X 161 8
 2002 JUN 17 2036 2.90 19 17.62 155 29.85 6.08 31 6 .16 .4 1.8 LSW 1.3X 94 10
 2002 JUN 17 2211 46.91 19 21.39 155 23.88 9.30 4111 .11 .3 .5 SWR 1.6X 43 2
 2002 JUN 18 0333 48.40 19 20.01 155 20.44 28.25 22 6 .12 1.1 1.2 DEP 1.5X 205 5

2002 JUN 18 0604 8.62 19 10.97 155 28.82 6.31 38 8 .17 .5 1.1 LSW 2.1X 116 3
 2002 JUN 18 0723 42.39 19 28.63 154 53.53 1.35 21 6 .17 .6 .8 SLE 1.3X 113 5
 2002 JUN 18 0914 28.44 19 23.05 155 17.17 2.66 16 5 .06 .3 .3 SSC 1.7X 67 1
 2002 JUN 18 0927 37.95 19 21.08 155 4.60 5.91 32 6 .13 .5 1.2 SF5 1.7X 167 7
 2002 JUN 18 0958 50.89 19 29.77 155 28.55 6.17 17 5 .08 .4 1.6 KAO 1.4X 69 4

2002 JUN 18 1027 49.80 19 46.80 155 28.04 19.40 24 4 .10 .5 1.2 KEA 1.5X 89 1
 2002 JUN 18 2030 30.44 19 24.28 155 16.19 13.91 15 5 .09 .9 1.0 DEP 1.4X 216 3
 2002 JUN 18 2316 7.76 19 19.81 155 45.71 11.10 36 8 .13 .5 .5 KON 2.4X 167 10
 2002 JUN 19 0453 39.91 19 24.72 155 16.85 5.13 14 4 .10 .7 .5 INTL 1.4X 88 0
 2002 JUN 19 0551 5.89 19 32.84 155 50.00 8.25 18 4 .21 1.1 1.3 KON 1.4X 218 8

2002 JUN 19 0944 15.81 20 0.18 155 35.92 5.23 16 5 .10 .6 1.3 KOH 1.7X 168 17
 2002 JUN 19 1256 58.20 19 17.00 155 31.26 6.12 45 9 .14 .4 1.0 LSW 2.3X 57 12
 2002 JUN 19 1347 3.15 19 26.92 155 23.91 9.29 28 7 .12 .5 .9 KAO 1.5X 71 5
 2002 JUN 19 2250 27.76 19 17.54 155 28.87 6.13 24 7 .15 .5 1.2 LSW 1.2X 110 11
 2002 JUN 20 0335 50.11 19 25.85 155 18.68 7.29 16 5 .08 .6 1.0 INT 1.4X 91 2

2002 JUN 20 1034 10.70 19 50.23 155 42.18 38.37 3910 .09 .7 1.1 KEA 2.2X 126 5
 2002 JUN 20 2015 34.21 19 24.14 155 16.99 12.57 20 4 .11 .7 .6 INT 1.1X 145 3
 2002 JUN 21 0018 48.44 19 25.68 155 16.48 2.33 19 5 .12 .4 .3 SNCL 1.7X 110 2
 2002 JUN 21 0129 45.67 19 20.37 155 4.37 7.36 26 6 .11 .8 .7 SF5 1.5X 222 8
 2002 JUN 21 1902 29.78 19 12.71 155 27.56 1.01 3310 .22 .4 .5 LSW 1.5X 132 6

2002 JUN 22 0027 46.47 19 24.63 155 38.19 2.85 35 6 .13 .3 .3 MLO 2.5X 101 1
 2002 JUN 22 0205 16.04 19 20.98 155 4.30 8.60 42 8 .09 .6 .5 SF5 2.9X 181 7
 2002 JUN 22 0807 21.23 19 23.30 154 59.09 2.27 20 4 .13 .7 .4 SLE 1.3X 174 3
 2002 JUN 22 0925 39.55 19 27.28 155 25.91 9.33 27 8 .13 .4 1.0 KAO 1.4X 59 7
 2002 JUN 22 1021 24.07 19 13.95 155 32.43 4.75 20 4 .12 .4 6.6 LSW 1.1X 115 11

2002 JUN 22 1811 49.02 19 18.42 155 16.23 5.78 36 7 .09 .3 .8 SF1 1.6X 114 4
 2002 JUN 22 1851 19.91 19 13.48 155 29.22 38.77 4813 .10 .5 .9 DLS 2.1X 82 8
 2002 JUN 22 1937 31.59 19 28.05 155 26.54 2.09 28 8 .12 .3 .6 KAO 1.4X 48 7
 2002 JUN 22 2011 52.56 19 3.47 155 12.84 16.56 20 6 .08 1.213.4 LOI - 2.7X 280 29
 2002 JUN 23 0246 22.44 19 11.92 155 37.14 10.07 26 6 .17 .5 1.3 LSW 1.8X 87 16

2002 JUN 23 0325 44.19 19 24.11 155 15.74 2.81 21 6 .11 .3 .3 SEC 1.7X 79 2
 2002 JUN 23 0419 7.73 19 33.91 155 45.96 1.55 24 5 .12 .4 .9 KON 1.8X 152 6
 2002 JUN 23 0618 8.50 19 58.96 155 35.65 11.12 34 6 .12 .9 .4 KOHF 2.3X 161 15
 2002 JUN 23 0706 0.09 19 19.74 155 11.73 9.19 41 6 .12 .4 .3 SF3 2.4X 89 6
 2002 JUN 23 0739 56.48 19 16.52 155 18.77 11.57 38 8 .10 .5 .6 SWR 1.6X 146 3

2002 JUN 23 0749 16.08 19 23.96 155 17.10 9.12 16 3 .11 .7 .8 INTL 1.0X 149 3
 2002 JUN 23 1257 34.02 19 33.82 155 45.85 1.04 27 6 .13 .5 .6 KON 1.6X 150 6
 2002 JUN 23 2335 14.44 18 51.28 155 9.70 7.99 18 5 .13 4.5 5.9 LOI # 1.6X 308 58
 2002 JUN 24 0015 51.77 19 17.45 155 25.83 51.35 17 3 .12 1.7 2.5 DLS 1.7X 205 7
 2002 JUN 24 0742 41.48 19 18.79 155 26.38 8.61 37 9 .15 .4 .8 LSW 1.3X 55 6

ORIGIN TIME (HST)												PREF	AZ	MIN			
YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	MAG	GAP	DS
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	RMKS		

2002 JUN 24 1642 43.43 19 56.29 155 30.45 21.23 21 6 .11 .9 2.0 KEA 1.5X 225 18
 2002 JUN 24 1758 12.93 18 53.37 155 13.84 11.07 17 2 .09 1.9 .9 LOI 2.1X 270 39
 2002 JUN 24 1759 1.90 18 54.25 155 14.77 11.17 22 2 .12 2.8 .9 LOI 1.8X 279 36
 2002 JUN 24 1759 58.89 18 55.71 155 15.87 12.50 16 .11 3.2 1.1 LOI 1.7X 260 33
 2002 JUN 24 1953 53.67 19 11.43 155 27.88 35.80 3410 .08 .6 1.3 DLS 1.7X 126 4

2002 JUN 24 2218 50.66 18 55.35 155 12.98 8.58 29 6 .11 1.1 .7 LOI 2.9X 254 37
 2002 JUN 24 2242 3.07 19 15.58 155 25.52 8.82 25 5 .13 .5 .7 LSW 1.3X 142 9
 2002 JUN 24 2314 42.03 19 33.20 155 17.56 8.88 22 6 .14 .8 1.6 GLN 1.4X 192 10
 2002 JUN 24 2339 25.07 19 52.85 155 29.74 22.41 28 6 .11 .7 1.2 KEA 1.7X 183 12
 2002 JUN 25 0301 25.97 19 18.20 155 26.78 8.88 23 5 .15 .9 .9 LSW 1.3X 225 7

2002 JUN 25 0350 33.53 18 54.03 155 14.00 12.42 39 8 .12 1.2 1.1 LOI 3.0X 266 38
 2002 JUN 25 1331 3.53 19 29.44 155 27.76 6.94 20 5 .10 .4 1.5 KAO 1.5X 84 5
 2002 JUN 25 1717 10.33 19 28.19 155 24.08 12.99 31 8 .10 .4 .6 KAO 1.8X 69 3
 2002 JUN 26 0512 47.18 19 37.27 155 7.98 25.30 20 7 .09 2.1 3.3 HIL 1.4X 270 23
 2002 JUN 26 0532 47.50 19 12.79 155 30.17 0.01 27 8 .18 .4 .2 LSWE# 1.7X 88 7

2002 JUN 26 0604 33.17 19 29.66 155 42.76 8.84 20 5 .11 .7 1.3 MLO 1.6X 135 6
 2002 JUN 26 0612 56.99 19 21.10 155 15.70 15.26 32 8 .05 .6 .3 DEP 1.9X 147 2
 2002 JUN 26 1112 50.25 19 12.69 155 30.40 0.03 30 6 .17 .4 .3 LSW # 1.5X 72 7
 2002 JUN 26 1620 44.97 19 28.07 155 35.89 11.19 14 2 .11 .9 1.5 MLO 1.8X 151 2
 2002 JUN 26 1731 37.74 19 1.46 155 14.85 24.33 32 5 .11 1.1 2.2 LOI 2.0X 232 27

2002 JUN 26 2130 49.24 19 24.91 155 16.32 9.83 17 4 .16 1.1 .6 INTL 1.7X 102 1
 2002 JUN 27 0154 16.58 19 21.73 155 1.89 7.99 18 4 .19 1.4 1.0 SF5 1.2X 225 8
 2002 JUN 27 0525 7.85 19 24.59 155 15.32 13.33 21 6 .12 .9 .4 DEP 1.1X 111 2
 2002 JUN 27 1124 26.45 19 25.23 155 39.00 2.51 13 3 .06 .6 .4 MLO 1.0X 191 3
 2002 JUN 27 2146 3.64 19 21.26 155 28.89 9.16 26 6 .14 .5 .5 KAO 1.1X 133 3

2002 JUN 27 2310 49.96 19 25.31 155 16.35 3.01 14 5 .14 .5 .7 SNCL 1.3X 115 1
 2002 JUN 27 2337 31.84 19 39.06 155 47.37 12.45 17 3 .07 .7 .6 HUA 1.2X 139 7
 2002 JUN 28 0506 57.08 19 27.51 155 14.79 30.97 19 4 .11 1.0 1.3 DEP 1.7X 172 5
 2002 JUN 28 0523 3.60 19 3.41 155 29.59 29.59 18 3 .06 1.0 1.7 DLS 1.2X 227 12
 2002 JUN 28 0603 31.92 19 27.59 155 14.50 33.59 30 6 .10 1.0 1.0 DEP 1.6X 135 4

2002 JUN 28 0636 38.79 19 20.10 155 11.85 8.88 43 9 .11 .4 .3 SF3 2.5X 106 5
 2002 JUN 28 0830 11.78 19 28.06 155 14.41 30.31 25 6 .14 1.1 1.1 DEP 1.4X 113 4
 2002 JUN 28 0936 26.40 19 19.75 155 6.88 9.67 5212 .12 .5 .4 SF4F 3.1X 142 5
 2002 JUN 28 1904 50.08 19 22.97 155 30.72 10.54 33 7 .07 .3 .6 KAO 1.9X 55 5
 2002 JUN 29 0156 44.71 19 48.97 155 48.73 16.11 30 8 .12 1.2 1.4 HUA 2.3X 241 15

2002 JUN 29 0201 49.64 19 48.62 155 47.66 15.12 28 6 .11 1.7 1.1 HUA 2.1X 229 14
 2002 JUN 29 0213 47.38 19 48.49 155 47.81 15.25 29 6 .10 1.4 .9 HUA 2.0X 229 14
 2002 JUN 29 0512 57.13 19 17.93 155 28.81 9.55 24 6 .14 .6 .9 LSW 1.3X 173 9
 2002 JUN 29 0659 51.79 19 9.85 155 40.42 0.06 34 5 .18 .4 .2 LSW # 2.1X 86 10
 2002 JUN 29 1134 31.79 19 11.98 155 33.73 5.77 40 6 .14 .4 1.4 LSW 2.4X 128 18

2002 JUN 29 1358 30.87 19 19.14 155 12.68 5.43 26 4 .11 .5 1.2 SF2 1.3X 89 4
 2002 JUN 29 2303 19.40 19 35.39 155 55.51 27.52 17 3 .11 1.5 1.9 KON 1.3X 239 14
 2002 JUN 29 2315 49.82 19 23.31 155 11.34 18.09 17 6 .16 1.5 .9 DEP 1.6X 303 8
 2002 JUN 29 2358 16.43 18 52.68 155 13.60 11.31 16 2 .17 2.3 1.4 LOI 1.8X 262 40
 2002 JUN 30 0234 19.21 19 30.47 155 27.76 5.72 19 4 .06 .3 1.0 MLO 1.2X 82 3

YEAR	MON	DA	HRMN	S	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN	
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	RMKS	MAG	GAP	DS
2002	JUN	30	0257	35.91	19	18.22	155	8.48	1.74	32	7	.12	.9	.6	SSF	1.7X	224	9
2002	JUN	30	1311	18.11	19	25.64	155	19.26	5.92	19	6	.13	.6	1.0	KAO	1.0X	90	3
2002	JUN	30	1315	12.53	19	19.89	155	11.71	5.51	36	7	.12	.4	1.0	SF3	1.7X	86	6
2002	JUN	30	2053	57.53	19	28.67	155	23.99	13.79	28	9	.10	.5	.7	DML	1.6X	67	2
2002	JUN	30	2255	35.19	19	28.22	155	20.33	4.97	29	7	.10	.4	1.8	KAO	1.9X	117	6
2002	JUL	1	0501	34.07	19	28.07	155	21.90	3.08	24	7	.07	.4	.6	KAO	1.2X	130	4
2002	JUL	1	0639	10.32	19	27.74	155	21.26	2.69	23	6	.11	.4	.9	KAO	1.6X	130	5
2002	JUL	1	1045	52.41	19	28.05	155	54.09	12.10	36	6	.12	.9	.4	KON	2.9X	218	25
2002	JUL	1	1228	22.95	19	29.71	155	49.32	9.72	17	2	.23	2.3	1.5	KON	1.6X	223	6
2002	JUL	1	2329	8.83	19	11.46	155	30.99	36.61	23	3	.09	1.0	1.7	DLS	1.7X	206	21
2002	JUL	1	2352	47.33	19	16.62	155	15.42	9.78	38	7	.10	.5	.4	SF1	2.3X	172	6
2002	JUL	2	0353	54.74	19	11.87	155	31.26	36.00	17	1	.10	1.2	2.5	DLS	1.6X	206	21
2002	JUL	2	1013	47.47	19	11.77	155	30.88	40.66	36	8	.08	.7	1.1	DLS	2.0X	86	7
2002	JUL	2	1109	27.09	19	11.20	155	31.01	40.25	24	5	.07	.8	1.5	DLS	1.4X	193	14
2002	JUL	2	1224	47.05	19	12.31	155	36.69	4.30	16	3	.13	.5	5.2	LSW	1.7X	143	16
2002	JUL	2	1255	52.24	19	2.77	156	18.63	7.87	29	4	.10	5.2	6.6	KON	2.6X	312	59
2002	JUL	2	1307	23.15	19	38.17	156	8.86	44.27	3710	.09	1.0	1.4	KON	2.2X	253	33	
2002	JUL	2	1346	26.50	19	14.70	155	35.36	1.38	38	9	.18	.4	.6	LSW	2.1X	105	15
2002	JUL	2	1524	29.39	19	23.01	155	14.72	3.15	18	5	.09	.3	.3	SEC	1.5X	92	2
2002	JUL	2	1531	51.57	19	29.61	155	37.23	9.76	15	5	.14	.8	1.0	MLOL	1.4X	209	5
2002	JUL	2	1547	43.76	19	18.46	155	46.59	10.76	35	8	.09	.6	.3	KON	2.3X	176	13
2002	JUL	2	1630	41.50	19	23.01	155	14.69	3.00	27	7	.09	.3	.3	SEC	2.1X	70	2
2002	JUL	2	1713	23.77	19	57.20	155	30.65	33.22	41	9	.09	.6	1.2	KEA	2.3X	166	19
2002	JUL	2	2132	49.11	19	21.45	155	38.56	1.90	16	4	.14	.6	.6	MLO	.9X	175	3
2002	JUL	2	2319	48.98	19	11.30	155	30.54	40.77	31	6	.09	.8	1.1	DLS	1.8X	91	6
2002	JUL	3	0419	52.32	19	23.14	155	14.60	3.50	3811	.11	.3	.3	SEC	2.7X	107	3	
2002	JUL	3	0435	31.99	19	23.13	155	14.78	2.90	15	5	.09	.4	.5	SEC	1.4X	129	2
2002	JUL	3	0542	23.96	19	23.11	155	14.94	3.27	3910	.10	.3	.2	SECF	2.5X	110	2	
2002	JUL	3	0855	57.02	19	11.19	155	25.37	32.36	25	5	.07	1.0	1.3	DLS	1.3X	203	17
2002	JUL	3	1705	21.64	19	26.50	155	29.05	9.91	28	7	.10	.4	.9	KAO	1.3X	84	8
2002	JUL	3	2300	3.54	19	23.30	155	14.89	2.99	30	8	.12	.3	.3	SEC	2.1X	103	2
2002	JUL	3	2323	11.60	19	32.20	155	14.18	23.25	33	9	.10	.6	1.1	DEP	1.6X	155	9
2002	JUL	4	0022	3.60	19	17.75	155	13.12	10.32	40	6	.11	.6	.4	SF2	2.5X	170	9
2002	JUL	4	0023	55.59	19	17.13	155	12.57	7.72	16	4	.09	1.0	2.0	SF2	1.5X	243	10
2002	JUL	4	0030	45.59	19	18.13	155	12.89	10.23	41	7	.10	.6	.3	SF2	2.7X	169	8
2002	JUL	4	0037	56.07	19	23.49	155	27.45	9.54	34	6	.10	.4	.7	KAO	1.9X	53	2
2002	JUL	4	0233	23.13	19	54.64	155	11.96	5.74	16	4	.10	1.1	.6	KEA	1.4X	296	15
2002	JUL	4	0523	0.85	19	10.96	155	30.72	0.30	40	9	.15	.4	.2	LSW	2.3X	98	6
2002	JUL	4	0549	26.62	19	20.95	155	11.22	7.92	30	7	.13	.9	.6	SF3	1.7X	197	5
2002	JUL	4	0654	32.85	19	10.65	155	30.67	0.05	18	4	.09	.3	.3	LSW	1.6X	104	5
2002	JUL	4	0909	56.56	19	10.98	155	30.50	0.03	31	4	.13	.5	.3	LSW	# 1.8X	144	5
2002	JUL	4	1031	51.60	19	17.39	155	12.47	6.21	23	3	.10	.5	1.0	SF2	1.3X	159	2
2002	JUL	4	1049	23.10	19	17.61	155	12.93	5.31	28	5	.09	.4	.9	SF2	1.3X	129	1
2002	JUL	4	1355	26.92	19	56.80	155	29.51	30.11	18	4	.08	.8	1.4	KEA	1.1X	229	17
2002	JUL	4	1641	55.57	19	29.29	154	52.69	3.00	33	5	.18	1.0	1.9	SLE	1.5X	103	4

YEAR	MON	DA	HRMN	S	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN	
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	RMKS	MAG	GAP	DS
2002	JUL	4	1919	21.39	19	28.13	155	37.14	11.68	12	2	.10	.8	1.5	MLOL	1.4X	115	2
2002	JUL	5	0431	41.93	18	33.45	154	16.76	11.14	4714	.14	.7	5.10	4	DIS	- 3.5X	318120	
2002	JUL	5	1135	54.83	19	28.16	155	27.81	3.88	22	4	.11	.4	2.6	KAO	1.4X	75	7
2002	JUL	5	1230	4.47	19	19.27	154	37.35	49.52	4210	.12	1.5	.8	DIS	2.2X	297	29	
2002	JUL	5	1324	35.87	19	25.13	155	19.67	6.32	34	5	.11	.4	.8	KAO	2.0X	45	3
2002	JUL	5	1942	5.70	19	26.02	155	17.58	14.23	3711	.10	.4	.3	DEP	1.7X	67	1	
2002	JUL	6	0028	3.20	19	19.05	155	7.18	1.58	25	6	.10	.9	.5	SSF	1.4X	223	8
2002	JUL	6	0746	33.81	19	25.11	155	15.77	13.95	25	6	.12	.8	.3	DEPL	1.5X	151	3
2002	JUL	6	1133	45.15	19	20.68	155	12.97	8.66	38	7	.11	.4	.5	SF2	2.0X	65	4
2002	JUL	6	1735	34.65	19	25.34	155	19.56	7.97	23	6	.10	.5	.9	KAO	1.4X	126	3
2002	JUL	7	0455	18.83	19	15.86	155	13.18	8.29	34	9	.13	.6	.6	SF2	1.5X	246	10
2002	JUL	7	0713	59.06	19	29.51	155	28.32	7.51	23	6	.09	.3	1.0	KAO	1.4X	73	5
2002	JUL	7	0741	48.80	19	19.57	155	10.10	5.82	35	7	.12	.4	1.0	SF3	1.4X	95	6
2002	JUL	7	1047	10.07	19	30.30	154	58.81	46.39	4512	.11	.7	.8	LER	2.0X	124	10	
2002	JUL	7	1554	37.73	19	19.33	155	8.07	7.17	21	1	.09	.6	.8	SF4	1.6X	171	4
2002	JUL	7	1610	3.07	19	19.72	155	8.44	4.18	23	1	.09	.6	2.2	SSF	1.3X	109	4
2002	JUL	7	1956	37.72	19	59.87	155	35.86	6.85	19	5	.22	.9	1.4	KOH	1.8X	166	17
2002	JUL	7	2106	35.71	19	3.21	155	8.01	35.00	23	2	.10	2.0	3.1	LOI	1.6X	268	33
2002	JUL	7	2201	9.25	19	7.85	155	27.34	40.11	17	3	.08	1.8	3.2	DLS	1.8X	277	24
2002	JUL	8	0201	2.95	19	35.49	155	5.22	13.15	19	3	.10	.6	.8	HIL	1.5X	123	14
2002	JUL	8	0327	55.47	19	25.23	155	24.12	11.04	28	5	.11	.4	1.0	KAO	1.4X	61	8
2002	JUL	8	1118	18.56	19	19.43	155	10.35	4.90	25	2	.13	.6	3.6	SSF	1.6X	99	6
2002	JUL	8	1200	0.11	19	24.38	155	17.21	8.96	13	2	.09	1.1	.8	INTL	1.5X	63	1
2002	JUL	8	1508	5.56	19	25.85	155	28.25	9.84	20	4	.13	.5	1.1	KAO	1.1X	80	6
2002	JUL	8	2009	14.06	19	19.46	155	12.48	7.99	36	7	.10	.4	.5	SF2	1.8X	86	5
2002	JUL	8	2014	50.07	19	3.96	155	29.33	35.74	20	4	.06	1.2	1.3	DLS	1.5X	195	11
2002	JUL	8	2317	30.69	19	23.88	155	15.76	2.97	30	7	.10	.3	.2	SEC	2.0X	69	1
2002	J																	

YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN	
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	RMKS	MAG	GAP	DS

2002 JUL 12 0245 49.90 19 30.06 155 14.11 10.16 27 5 .12 .5 .9 GLN 1.3X 122 6
 2002 JUL 12 0820 48.88 19 9.61 155 36.43 0.53 31 8 .15 .4 .2 LSW 1.8X 108 15
 2002 JUL 12 1330 19.36 19 24.10 155 37.68 2.55 16 3 .24 .6 .4 MLO .9X 115 1
 2002 JUL 12 1437 10.07 19 29.44 154 52.34 5.10 36 6 .12 .5 .8 LERF 2.3X 106 3
 2002 JUL 12 1535 40.35 19 29.86 154 53.64 0.60 23 1 .12 .5 1.2 SLEF# 2.3X 117 5

2002 JUL 12 2049 15.13 19 49.84 155 47.52 11.02 20 5 .14 1.0 .7 HUA 1.4X 259 14
 2002 JUL 13 0312 11.02 19 20.66 155 15.22 1.64 29 7 .08 .3 .4 KOA 1.8X 162 3
 2002 JUL 13 0523 23.17 19 15.02 155 25.71 8.54 27 6 .10 .6 .7 LSW 1.2X 150 10
 2002 JUL 13 0554 41.41 19 25.74 155 16.14 12.01 16 4 .12 1.0 .9 INTL 1.5X 190 3
 2002 JUL 13 0615 56.62 19 58.48 155 6.47 35.33 4511 .10 .8 1.4 KEAF 2.9X 208 26

2002 JUL 13 0721 25.90 19 26.51 155 30.34 11.46 26 4 .11 .4 1.0 KAO 1.6X 68 9
 2002 JUL 13 0846 42.28 19 46.33 155 24.94 28.97 25 5 .11 .6 1.3 KEA 1.5X 99 5
 2002 JUL 13 1128 18.48 19 24.63 155 15.98 13.09 17 3 .12 1.5 .7 DEPL 1.1X 134 2
 2002 JUL 13 1439 10.87 19 20.61 155 6.08 5.90 40 9 .11 .4 .6 SF4 1.8X 145 6
 2002 JUL 13 1915 58.89 19 24.11 155 16.35 13.14 15 3 .13 1.5 .9 DEPL 1.6X 208 2

2002 JUL 13 2315 47.06 19 25.99 155 15.69 13.22 24 7 .12 1.0 .4 DEPL 1.3X 234 3
 2002 JUL 14 0001 43.73 19 25.63 155 16.42 13.38 20 7 .12 .9 .4 DEPL 1.5X 219 2
 2002 JUL 14 0135 8.47 19 24.46 155 16.86 19.80 21 6 .23 1.7 1.1 DEPL 2.0X 82 1
 2002 JUL 14 0532 53.04 19 19.24 155 13.64 8.80 38 9 .11 .4 .4 SF2 1.7X 188 6
 2002 JUL 14 0617 59.69 19 28.92 155 12.26 18.38 17 4 .11 1.3 1.4 DEP 1.8X 286 8

2002 JUL 14 0629 55.31 19 28.59 155 38.13 15.49 13 .10 1.1 .9 DMLT 113 4
 2002 JUL 14 1310 36.41 19 21.81 155 4.50 5.51 18 1 .13 .7 2.0 SF5 1.4X 159 6
 2002 JUL 14 2204 25.60 19 26.07 155 15.77 14.16 17 5 .12 1.1 .5 DEPL 1.3X 186 3
 2002 JUL 14 2240 25.42 19 30.09 155 27.95 5.49 22 5 .09 .3 1.3 MLO 1.2X 86 4
 2002 JUL 15 0102 13.52 19 16.48 155 28.65 5.76 31 5 .11 .4 1.6 LSW 1.5X 122 11

2002 JUL 15 0135 58.53 19 15.46 155 32.14 0.74 28 7 .17 .4 .4 LSW 1.4X 77 13
 2002 JUL 15 0627 30.61 19 9.16 155 37.42 0.55 34 9 .14 .4 .3 LSW 1.8X 107 15
 2002 JUL 15 1606 22.10 19 34.01 155 42.14 10.57 49 9 .11 .3 .4 MLO 2.8X 61 9
 2002 JUL 15 1815 15.57 19 23.30 155 15.11 3.36 20 5 .09 .3 .4 SEC 1.7X 75 2
 2002 JUL 15 1922 1.65 19 2.96 155 22.22 44.50 24 6 .10 1.3 1.5 LOI 1.6X 240 16

2002 JUL 15 2159 55.85 18 58.49 155 25.05 14.58 14 2 .10 7.411.5 DLS - 1.4X 325 40
 2002 JUL 15 2307 28.99 19 27.42 155 35.55 8.28 16 2 .12 .8 .8 MLOT 80 1
 2002 JUL 16 0041 50.79 19 21.01 155 3.79 7.33 25 3 .11 1.1 .6 SF5 1.3X 222 8
 2002 JUL 16 0400 16.91 19 26.21 155 24.04 9.99 22 6 .10 .4 1.1 KAO 1.1X 66 7
 2002 JUL 16 0736 0.17 20 3.76 155 34.23 41.98 25 4 .10 1.0 1.3 KOH 1.7X 273 24

2002 JUL 16 0758 25.40 19 24.44 155 16.87 1.54 27 7 .10 .2 .1 SSC 2.0X 81 1
 2002 JUL 16 0800 56.14 19 10.42 155 28.59 29.78 43 9 .08 .5 1.0 DLS 2.1X 81 2
 2002 JUL 16 0917 42.34 19 20.73 155 4.72 2.37 24 5 .18 .5 1.0 SSF 1.3X 171 7
 2002 JUL 16 2045 59.34 19 55.08 155 32.31 15.75 30 9 .10 1.1 1.0 KEA 1.7X 214 14
 2002 JUL 17 0022 6.29 19 21.83 155 27.36 10.11 24 4 .10 .5 .7 KAO 1.1X 123 1

2002 JUL 17 0313 21.79 19 26.25 155 30.70 11.88 22 6 .10 .4 .6 KAO 1.3X 96 5
 2002 JUL 17 0511 39.04 19 27.03 155 28.74 8.83 20 5 .09 .4 1.4 KAO 1.1X 77 8
 2002 JUL 17 1017 33.02 19 20.86 155 29.59 5.57 42 9 .09 .4 .9 KAO 2.2X 63 5
 2002 JUL 17 1030 23.65 19 16.46 155 23.41 2.28 17 3 .13 .5 .9 SWR 1.0X 110 4
 2002 JUL 17 1907 32.52 19 19.55 155 4.74 6.23 28 8 .10 .7 1.1 SF5 1.5X 210 9

YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN	
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	RMKS	MAG	GAP	DS

2002 JUL 18 0248 3.44 19 28.25 155 19.84 7.94 16 4 .06 .7 1.1 KAO 1.1X 145 6
 2002 JUL 18 0416 35.22 19 8.01 155 22.45 38.66 29 6 .12 1.0 1.4 LOI 1.6X 250 10
 2002 JUL 18 2001 22.15 19 20.51 155 16.31 36.74 25 5 .11 1.0 1.1 DEP 1.5X 194 4
 2002 JUL 18 2019 58.84 19 25.62 155 26.64 6.42 3210 .13 .3 1.3 KAO 1.3X 55 6
 2002 JUL 18 2210 5.68 19 55.82 155 31.15 23.82 20 6 .11 .9 1.8 KEA 1.4X 231 18

2002 JUL 18 2233 33.83 19 25.88 155 28.84 11.19 16 4 .08 .5 1.4 KAO 2.7X 108 7
 2002 JUL 19 0153 14.38 19 24.78 155 19.62 4.59 17 5 .11 .4 .8 KAO .8X 105 2
 2002 JUL 19 0207 16.35 19 25.38 155 19.27 5.40 28 6 .12 .4 .9 KAO 1.4X 64 3
 2002 JUL 19 0224 50.98 19 26.20 155 29.06 10.06 26 7 .11 .4 1.0 KAO 1.1X 87 7
 2002 JUL 19 0433 57.58 19 19.25 155 5.21 5.97 31 7 .12 .8 .9 SF5 1.8X 228 9

2002 JUL 19 0724 35.31 19 14.33 155 35.26 1.02 37 8 .18 .3 .5 LSW 1.9X 84 16
 2002 JUL 19 1922 24.51 19 56.23 155 31.64 32.87 23 8 .11 .7 1.2 KEA 1.5X 159 16
 2002 JUL 20 0726 41.04 19 4.26 155 24.93 31.34 4713 .10 .7 1.1 LOI 2.1X 196 11
 2002 JUL 20 0729 46.27 19 4.30 155 25.00 31.99 4914 .09 .7 1.0 LOI 2.4X 199 11
 2002 JUL 20 0758 13.97 19 21.67 155 14.17 11.56 26 6 .09 .5 .7 SF2 1.4X 58 3

2002 JUL 20 1506 0.78 19 27.79 155 24.10 11.60 26 7 .10 .5 1.0 KAO 1.3X 91 4
 2002 JUL 20 2116 6.38 19 29.02 155 50.68 4.45 22 5 .16 .8 5.6 KON 1.3X 194 9
 2002 JUL 20 2245 21.88 19 26.00 155 16.20 1.31 14 3 .09 .3 .5 SNC 1.1X 140 2
 2002 JUL 21 0221 25.36 19 23.18 155 30.23 19.99 32 9 .12 .4 .5 KAO 1.4X 57 5
 2002 JUL 21 0320 17.84 19 21.33 155 52.87 11.74 13 2 .08 1.9 .7 KON 1.7X 303 21

2002 JUL 21 0430 15.21 19 14.28 155 27.84 1.41 22 5 .14 .5 .9 LSW 1.7X 117 9
 2002 JUL 21 0639 37.96 19 56.88 155 36.24 38.33 23 5 .09 .9 1.7 KOH 1.8X 145 11
 2002 JUL 21 0715 54.86 19 20.04 155 9.09 7.10 27 4 .11 .5 .9 SF4 1.7X 95 5
 2002 JUL 21 0916 2.68 19 22.11 155 4.86 6.46 37 5 .15 .5 .9 SF5 1.8X 145 5
 2002 JUL 21 1126 49.19 19 27.81 155 21.03 0.60 33 7 .12 .3 .4 KAO 1.9X 51 5

2002 JUL 21 1217 21.83 19 30.07 155 26.68 7.12 14 4 .07 .5 1.1 MLO 1.2X 114 4
 2002 JUL 21 1252 35.95 19 17.09 155 29.09 7.21 45 7 .12 .4 .7 LSW 2.5X 73 10
 2002 JUL 21 1258 22.36 19 28.81 155 20.64 1.13 18 4 .12 .6 .7 KAO 1.4X 151 5
 2002 JUL 21 1445 35.59 19 19.96 155 8.03 8.56 46 9 .11 .4 .5 SF4 3.0X 114 5
 2002 JUL 21 1731 24.56 19 18.58 155 13.69 9.40 5112 .12 .4 .3 SF2F 3.3X 70 3

2002 JUL 21 1806 4.06 19 19.22 155 13.19 7.87 39 9 .12 .4 .5 SF2 1.8X 126 6
 2002 JUL 22 0437 7.25 19 45.96 156 8.84 39.91 19 4 .09 1.8 2.6 HUA 1.6X 315 34
 2002 JUL 22 1152 9.49 19 20.38 155 11.20 8.63 34 9 .09 .5 .6 SF3 1.5X 79 5
 2002 JUL 22 1459 47.12 19 23.86 155 26.54 10.15 31 6 .08 .4 .7 KAO 1.3X 53 3
 2002 JUL 22 1645 20.67 20 1.27 155 23.00 11.00 14 4 .10 1.1 .6 KEA 1.2X 254 15

2002 JUL 22 1719 57.45 19 7.50 155 28.38 26.85 4310 .10 .8 1.1 DLS 2.0X 213 4
 2002 JUL 22 2320 37.65 19 13.04 155 33.40 0.33 3911 .14 .3 .2 LSW 1.9X 81 12
 2002 JUL 23 0011 12.44 19 30.57 155 43.07 1.39 25 7 .14 .4 .6 KON 1.6X 82 5
 2002 JUL 23 0500 53.35 19 16.66 155 29.86 0.12 31 8 .12 .3 .2 LSW 1.4X 96 11
 2002 JUL 23 0603 19.34 19 27.12 155 27.97 10.23 27 7 .11 .4 .8 KAO 1.6X 69 9

2002 JUL 23 1004 54.02 19 9.74 155 16.43 42.87 26 2 .13 2.3 3.3 LOI 1.9X 198 14
 2002 JUL 23 1050 7.80 19 20.15 155 13.08 5.93 21 1 .12 .6 1.0 SF2 1.4X 119 5
 2002 JUL 23 2103 34.20 19 18.94 155 11.15 3.66 21 1 .11 1.3 3.3 SSF 1.4X 239 8
 2002 JUL 23 2243 28.12 19 18.36 155 10.39 4.03 22 1 .10 1.4 6.1 SSF 1.4X 250 9
 2002 JUL 23 2254 15.62 19 22.60 154 57.64 0.19 10 3 .13 .8 .6 SLE 1.6X 224 5

YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN	
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	RMKS	MAG	GAP	DS
2002	JUL	24	0408	7.97	19	25.34	155	19.25	8.49	24	6	.10	.7	.9 KAO	1.7X	106	3	
2002	JUL	24	0749	12.33	20	2.08	155	21.04	9.37	27	6	.21	1.3	.8 KEA	# 1.8X	245	16	
2002	JUL	24	0926	46.30	18	55.35	155	12.90	0.50	27	6	.12	1.5	.5 LOI	2.0X	246	37	
2002	JUL	24	1740	31.41	19	23.19	155	2.55	8.41	29	2	.13	.9	.6 SF5	1.7X	179	8	
2002	JUL	24	1825	0.18	19	18.17	154	58.87	41.54	44	8	.09	.8	.7 LER	2.5X	215	13	
2002	JUL	24	2045	21.61	19	35.90	156	0.67	10.49	3110	.14	.9	.5 KON	2.0X	259	21		
2002	JUL	25	0314	51.28	19	23.40	155	30.06	10.27	19	2	.06	.4	.7 KAO	1.3X	143	5	
2002	JUL	25	0725	23.97	19	18.00	155	30.07	0.03	28	3	.15	.4	.6 LSW	# 1.4X	74	9	
2002	JUL	25	1134	56.12	20	1.66	155	22.07	6.08	24	6	.17	.8	.9 KEA	2.0X	210	15	
2002	JUL	25	1137	8.17	20	1.65	155	21.54	9.06	2910	.14	.7	.6 KEA	2.2X	180	13		
2002	JUL	25	1137	44.53	20	1.66	155	21.29	7.06	29	9	.13	.6	.5 KEA	2.3X	181	12	
2002	JUL	25	1640	2.54	19	47.80	155	36.24	15.30	4513	.10	.4	.5 KEA	2.3X	95	9		
2002	JUL	25	1813	35.10	19	49.55	155	36.20	4.78	17	5	.18	.8	9.2 KEA	# 1.3X	109	13	
2002	JUL	25	1833	55.93	19	28.80	154	52.84	5.41	28	3	.12	.8	.8 LERF	2.3X	106	4	
2002	JUL	25	1914	7.91	19	12.83	155	24.95	35.08	3611	.11	.7	1.1 DEP	1.8X	163	8		
2002	JUL	25	1931	11.81	19	19.51	155	9.35	2.38	24	6	.12	.9	1.1 SSF	1.2X	214	8	
2002	JUL	25	2030	46.71	19	47.57	155	36.03	14.88	20	3	.09	.5	.6 KEA	1.5X	108	10	
2002	JUL	26	0242	42.61	20	1.92	155	21.65	9.49	26	9	.14	.7	.5 KEA	2.0X	183	13	
2002	JUL	26	0701	34.55	19	24.49	155	25.56	9.95	4612	.12	.3	.7 KAO	2.3X	30	5		
2002	JUL	26	0854	35.32	19	20.13	155	10.85	7.21	25	3	.09	.5	.8 SF3	1.6X	84	6	
2002	JUL	26	0854	42.36	19	20.18	155	11.02	7.06	37	8	.12	.4	.7 SF3	2.0X	83	7	
2002	JUL	26	0956	31.22	19	19.91	155	11.00	6.60	31	5	.09	.5	.8 SF3	1.6X	89	6	
2002	JUL	26	1006	2.23	19	20.00	155	10.73	8.09	34	6	.10	.4	.6 SF3	1.8X	87	6	
2002	JUL	26	1139	25.33	19	20.84	155	6.12	6.55	19	3	.11	.6	1.3 SF4	1.3X	149	5	
2002	JUL	26	1807	47.05	19	18.89	155	51.03	11.67	31	7	.11	.9	.4 KON	1.9X	225	20	
2002	JUL	27	0316	1.28	19	27.12	155	10.72	13.60	14	4	.14	1.7	.6 DEP	1.3X	289	10	
2002	JUL	27	0628	31.45	19	16.95	155	28.42	11.56	21	4	.11	.8	1.2 LSW	1.4X	210	10	
2002	JUL	27	0758	19.07	19	26.85	155	17.96	6.48	15	5	.06	.5	.8 INT	1.3X	102	3	
2002	JUL	27	1228	4.32	19	18.92	155	14.90	6.78	37	6	.10	.4	.6 SF1	1.6X	89	4	
2002	JUL	27	1647	49.90	19	19.19	155	9.83	7.36	27	3	.09	.4	.7 SF3	2.0X	103	5	
2002	JUL	27	1832	3.26	19	29.68	155	44.84	6.55	26	7	.16	.6	1.1 KON	2.0X	129	2	
2002	JUL	27	2108	32.64	19	24.91	155	20.12	7.31	21	5	.09	.5	.9 KAO	1.3X	52	2	
2002	JUL	28	0142	33.43	19	17.54	155	29.48	7.52	21	.14	.5	1.8 LSW	1.5X	100	10		
2002	JUL	28	0145	49.15	19	20.21	155	4.35	8.02	28	5	.13	1.0	.7 SF5	2.0X	224	8	
2002	JUL	28	0442	16.09	19	18.58	155	13.60	9.38	4813	.11	.5	.3 SF2	2.5X	165	8		
2002	JUL	28	1129	14.44	19	22.90	155	1.19	1.59	34	6	.14	.6	.7 SSF	1.7X	179	6	
2002	JUL	28	1531	46.83	19	28.33	155	20.67	0.57	23	5	.11	.4	.4 KAO	1.2X	143	5	
2002	JUL	28	1646	8.35	19	21.47	155	8.11	7.82	40	8	.12	.5	.6 SF4	1.8X	162	3	
2002	JUL	28	2134	18.32	19	23.95	155	25.92	9.37	4010	.11	.4	.7 KAO	1.8X	47	4		
2002	JUL	29	0002	47.78	19	57.23	155	23.37	8.15	17	4	.13	.9	.8 KEA	1.0X	255	9	
2002	JUL	29	0025	42.61	19	18.97	155	27.76	10.01	15	.11	.7	1.9 LSWT	1.8X	108	7		
2002	JUL	29	0211	17.62	19	14.94	155	24.93	7.05	25	4	.09	.6	.9 SWR	1.0X	160	10	
2002	JUL	29	0219	30.17	18	52.03	155	9.18	41.64	26	5	.10	1.4	2.3 LOI	1.9X	268	46	
2002	JUL	29	0250	9.17	19	10.57	155	23.91	43.73	35	9	.14	.9	1.1 DEP	1.8X	223	7	
2002	JUL	29	0907	22.25	19	12.59	155	28.30	33.27	11	.15	4.0	9.6 DLST	1.6X	137	6		

YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN	
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	RMKS	MAG	GAP	DS
2002	JUL	29	1227	27.60	19	58.41	155	21.75	10.64	18	6	.15	.8	.5 KEA	1.5X	146	9	
2002	JUL	29	1625	4.73	19	32.33	155	59.07	5.62	16	2	.11	1.9	.9 KON	1.5X	320	23	
2002	JUL	29	1657	12.23	19	19.52	155	9.28	7.64	31	2	.11	.7	.8 SF3	1.9X	178	9	
2002	JUL	29	1753	32.97	19	18.79	155	3.75	3.04	17	.11	.8	1.8	14.4 SSF	- 1.5X	239	11	
2002	JUL	29	2357	10.64	19	25.41	155	15.55	10.67	22	6	.18	.9	.8 INTL	1.4X	146	3	
2002	JUL	30	0245	20.38	19	25.35	155	26.86	6.28	19	4	.13	.4	1.7 KAO	1.0X	188	5	
2002	JUL	30	0303	27.53	19	19.48	155	5.68	6.52	23	3	.12	1.2	.9 SF4	1.3X	295	8	
2002	JUL	30	0336	40.55	19	24.34	155	29.30	10.02	40	9	.09	.3	.6 KAO	1.7X	35	4	
2002	JUL	30	0555	2.39	19	9.99	155	37.50	1.94	38	9	.13	.3	.6 LSW	2.1X	99	15	
2002	JUL	30	1526	33.08	18	15.09	155	13.17	10.85	17	2	.13	1.5	.9 LOI	2.1X	255	37	
2002	JUL	30	1624	44.87	19	19.46	155	8.94	6.22	20	2	.10	.7	1.9 SF4	1.7X	138	4	
2002	JUL	30	1952	25.26	20	1.98	155	21.51	9.85	32	6	.14	.7	.4 KEAF	2.2X	184	13	
2002	JUL	30	1954	21.74	20	1.55	155	21.42	7.56	17	4	.11	.7	.9 KEA	1.9X	180	12	
2002	JUL	30	2102	59.47	19	25.90	156	6.29	44.49	28	7	.10	1.1	2.0 KON	2.1X	246	37	
2002	JUL	30	2144	54.80	19	16.53	155	32.17	6.25	16	3	.15	1.2	3.5 LSW	1.3X	235	14	
2002	JUL	30	2229	45.82	20	2.07	155	21.76	8.21	23	6	.20	.9	.8 KEA	1.5X	188	13	
2002	JUL	31	1040	44.30	18	51.46	155	11.11	6.74	20	6	.12	1.1	.8 LOI	1.8X	289	44	
2002	JUL	31	1513	51.61	19	29.38	156	0.08	4.45	35	8	.17	.9	.7 KON	2.3X	250	25	
2002	JUL	31	1542	56.51	20	14.63	155	41.35	34.87	27	7	.10	.9	.9 KOH	# 1.9X	190	16	
2002	JUL	31	1816	32.78	19	55.36	155	18.28	16.72	3810	.11	.6	.8 KEA	2.0X	103	5		
2002	AUG	1	0448	4.94	19	28.95	155	27.94	10.22	35	9	.11	.3	.8 KAO	1.3X	64	6	
2002	AUG	1	0733	32.08	19	23.08	155	17.10	2.19	17	5	.09	.3	.2 SSC	1.4X	58	1	
2002	AUG	2	0355	40.81	19	9.67	155	25.80	36.05	21	6	.10	1.1	1.1 DLS	1.7X	253	4	
2002	AUG	2	0426	14.48	19	36.79	155	54.81	27.14	21	5	.12	1.3	1.6 KON	1.1X	241	11	
2002	AUG	2	0816	13.64	19	16.38	155	27.42	7.38	22	3	.12	.4	.6 LSW	1.2X	109	10	
2002	AUG	2	0829	23.43	19	17.80	155	14.38	4.82	31	8	.10	.4	1.2 SSF	1.3X	107	2	
2002	AUG	2	0937	59.30	19	23.67	155	14.69	27.25	2810	.09	1.0	.9	.8 DEP	1.2X	75	2	

ORIGIN TIME (HST)												ORIGIN TIME (HST)																									
YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN	YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	RMKS	MAG	GAP	DS							DEG	MIN	KM	RD	S	SEC	KM	KM	RMKS	MAG	GAP	DS	

2002 AUG 4 1355 53.12 19 9.26 155 33.06 34.04 32 9 .07 .6 1.3 DLS 1.9X 126 9
 2002 AUG 4 1450 22.05 19 23.83 155 29.64 8.56 36 9 .10 .3 .7 KAO 1.8X 49 4
 2002 AUG 4 1533 11.07 19 28.58 155 20.83 1.27 4111 .10 .3 .3 KAO 2.3X 106 5
 2002 AUG 5 0004 53.26 19 26.76 155 19.58 5.75 17 4 .11 .7 1.6 KAO 1.3X 112 4
 2002 AUG 5 0133 57.21 19 18.68 155 31.23 6.49 17 .14 .5 1.6 LSW 1.5X 82 9

2002 AUG 5 0337 39.22 19 26.13 155 18.32 7.54 19 4 .12 .6 .9 INT 1.6X 67 2
 2002 AUG 5 0841 38.58 19 38.29 155 47.70 11.17 15 1 .08 1.2 1.2 KON 1.5X 154 7
 2002 AUG 5 0958 0.58 19 17.79 155 5.02 1.93 22 3 .08 2.2 1.8 SSF 1.7X 270 11
 2002 AUG 5 2031 30.47 19 20.18 155 11.84 7.87 33 7 .12 .8 .6 SF3 1.7X 203 5
 2002 AUG 5 2048 41.69 19 25.16 155 19.46 7.97 25 7 .12 .5 1.0 KAO 1.6X 60 3

2002 AUG 5 2123 34.79 19 49.30 155 47.68 21.83 19 5 .12 1.2 1.8 HUA 1.4X 259 15
 2002 AUG 6 0023 21.75 19 22.00 155 2.46 6.91 26 6 .15 1.3 .9 SF5 1.4X 217 9
 2002 AUG 6 0426 49.36 19 33.71 155 21.36 11.67 4210 .13 .4 .7 MLO 2.2X 63 8
 2002 AUG 6 0544 55.33 19 22.08 155 28.84 10.63 4711 .10 .3 .4 KAO 2.5X 62 2
 2002 AUG 6 1329 18.53 19 19.94 155 7.04 7.89 32 6 .12 .6 .5 SF4 1.5X 187 6

2002 AUG 6 1443 32.17 19 19.89 155 8.29 6.16 3610 .12 .4 .8 SF4 1.7X 112 5
 2002 AUG 6 2317 27.56 19 18.61 155 12.54 4.60 23 6 .09 .6 3.3 SSF 1.6X 201 7
 2002 AUG 7 0103 38.65 19 43.41 155 58.79 14.43 18 5 .12 1.5 .5 HUA 1.7X 249 15
 2002 AUG 7 0344 3.88 19 19.25 155 6.25 6.79 27 7 .09 .7 .7 SF4 1.5X 224 8
 2002 AUG 8 1743 46.81 19 27.69 155 28.25 25.65 25 7 .12 .7 1.2 DML 1.9X 66 8

2002 AUG 8 2123 4.01 19 53.30 155 8.30 14.86 19 4 .16 2.3 1.6 KEA 1.5X 239 21
 2002 AUG 9 0028 24.08 19 19.12 155 11.55 4.11 26 7 .12 .7 2.6 SSF 1.4X 234 7
 2002 AUG 9 0100 1.52 19 12.19 155 28.32 0.03 23 5 .16 .4 .3 LSW # 1.4X 121 5
 2002 AUG 9 0124 29.87 19 19.28 155 8.44 6.53 3912 .10 .6 1.0 SF4 1.8X 186 8
 2002 AUG 9 0334 10.27 19 13.33 155 29.82 48.36 17 1 .10 1.1 2.6 DLST 2.3X 99 8

2002 AUG 9 0447 19.19 19 11.53 155 28.28 4.31 19 5 .13 1.2 3.1 LSW 1.3X 143 4
 2002 AUG 9 0629 51.04 19 27.53 155 28.47 10.96 3410 .11 .4 .9 KAO 1.6X 56 8
 2002 AUG 9 0750 45.13 19 15.57 155 27.29 9.61 4911 .14 .4 .5 LSW 2.6X 103 11
 2002 AUG 9 0855 22.80 19 31.84 155 55.20 8.86 21 5 .12 1.3 .7 KON 1.5X 307 12
 2002 AUG 9 1244 21.78 19 52.95 155 47.80 1.95 27 8 .14 3.0 1.3 DIS 2.4X 265103

2002 AUG 9 1323 51.62 19 58.03 155 28.64 1.84 17 6 .09 .5 .6 KEA 1.3X 181 16
 2002 AUG 9 1515 21.66 19 12.98 155 27.25 35.23 31 7 .08 .8 1.4 DLS 1.5X 118 7
 2002 AUG 9 1718 21.11 20 0.59 155 21.85 7.77 5010 .14 .5 .5 KEAF 3.3X 148 13
 2002 AUG 9 2135 6.21 19 21.67 155 2.59 8.32 31 9 .15 .8 .6 SF5 1.4X 213 9
 2002 AUG 9 2232 19.61 19 19.48 155 12.29 8.76 40 6 .11 .5 .4 SF3 1.8X 169 6

2002 AUG 9 2235 53.30 19 14.58 155 4.11 39.82 19 6 .12 2.3 1.8 DEP 1.6X 257 22
 2002 AUG 9 2301 23.91 19 21.61 155 25.42 11.32 29 6 .11 .6 .5 KAO 1.2X 113 4
 2002 AUG 10 0023 2.03 19 25.00 155 8.37 39.72 31 7 .09 .8 .9 DEP 1.6X 85 3
 2002 AUG 10 0037 17.48 19 26.30 154 55.55 5.65 21 4 .14 1.0 .9 LER 1.3X 175 6
 2002 AUG 10 0158 1.59 19 20.14 155 11.15 7.42 35 7 .14 .6 .7 SF3 1.6X 170 6

2002 AUG 10 0351 3.68 19 43.40 156 10.72 10.45 37 8 .16 1.1 2.0 HUA 2.0X 203 49
 2002 AUG 10 0529 9.36 19 52.73 155 35.80 21.10 23 5 .08 .6 1.2 KEA 1.5X 121 7
 2002 AUG 10 0529 46.00 19 12.55 155 29.13 38.93 29 8 .09 .7 1.2 DLS 1.7X 107 6
 2002 AUG 10 0545 2.16 19 49.78 155 47.15 36.90 23 7 .10 .8 1.2 HUA 1.4X 235 14
 2002 AUG 10 0547 54.54 19 13.29 155 29.21 37.87 4212 .07 .5 .9 DLS 2.1X 94 7

ORIGIN TIME (HST)												ORIGIN TIME (HST)																									
YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN	YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	RMKS	MAG	GAP	DS						DEG	MIN	KM	RD	S	SEC	KM	KM	RMKS	MAG	GAP	DS		

2002 AUG 10 1107 16.94 19 26.39 155 25.13 9.26 42 9 .11 .4 .8 KAO 2.2X 46 7
 2002 AUG 10 1448 41.91 19 49.45 155 34.18 24.97 26 8 .10 .7 1.1 KEA 1.6X 105 10
 2002 AUG 10 1524 34.70 19 26.20 154 57.23 1.12 19 6 .12 .9 .5 SLE 1.5X 156 3
 2002 AUG 10 1651 40.21 19 21.58 155 4.91 6.07 21 5 .14 .7 1.6 SF5 1.2X 157 6
 2002 AUG 10 2331 29.64 19 18.19 155 11.16 5.54 27 5 .13 .8 1.9 SF3 1.3X 245 9

2002 AUG 11 0421 20.39 20 21.65 156 28.79 0.47 24 5 .14 1.7 .4 DIS 2.0X 222 41
 2002 AUG 11 2157 5.04 19 19.82 154 59.33 38.25 36 9 .12 1.4 .9 LER 1.7X 226 10
 2002 AUG 11 2209 43.69 19 24.38 155 19.59 5.84 22 5 .09 .4 .8 KAO 1.1X 70 1
 2002 AUG 11 2333 25.46 20 2.20 155 20.75 6.56 28 7 .11 .7 .8 KEA 1.5X 215 31
 2002 AUG 12 0201 38.85 19 16.35 155 28.05 6.49 29 7 .12 .4 1.4 LSW 1.2X 117 11

2002 AUG 12 0558 52.45 19 41.14 156 11.31 11.38 3611 .13 .9 1.1 HUA 2.2X 206 37
 2002 AUG 12 1100 21.95 20 0.37 155 23.35 6.51 17 4 .21 1.3 1.8 KEA 1.2X 230 14
 2002 AUG 12 1529 3.38 19 25.32 155 15.02 14.56 19 5 .14 1.2 .4 DEPL 1.5X 246 5
 2002 AUG 12 1617 4.29 19 29.25 155 25.04 8.19 16 5 .11 .6 1.2 KAO 1.6X 99 3
 2002 AUG 12 2032 2.98 19 43.22 155 24.83 42.23 21 6 .07 .8 1.0 KEA 2.0X 152 15

2002 AUG 13 0138 16.61 20 1.09 155 23.07 5.67 20 5 .12 .7 .7 KEA 1.4U 236 15
 2002 AUG 13 0745 19.47 19 9.96 155 36.00 5.69 38 6 .14 .4 1.4 LSW 2.1X 106 14
 2002 AUG 13 0919 59.78 19 22.34 155 30.29 10.81 28 6 .07 .4 .9 KAO 2.0X 154 5
 2002 AUG 13 1718 48.17 19 20.56 155 13.29 5.94 3912 .11 .3 .7 SF2 1.3X 61 4
 2002 AUG 13 1824 19.17 19 31.08 155 53.21 10.20 20 3 .12 1.0 .6 KON 1.3X 213 13

2002 AUG 13 1838 38.22 19 24.08 155 15.25 13.97 19 5 .15 1.2 .4 DEPL 1.5X 221 2
 2002 AUG 13 1938 40.58 19 23.52 154 56.43 0.89 16 4 .17 .8 .6 SLE 1.5X 212 5
 2002 AUG 13 2032 51.48 19 29.94 155 26.76 9.41 28 7 .11 .4 .8 KAO 1.3X 79 4
 2002 AUG 13 2036 22.20 19 20.35 155 10.85 7.65 3913 .12 .8 .5 SF3 1.7X 203 6
 2002 AUG 13 2121 48.20 19 33.02 155 27.69 23.23 21 5 .07 .5 .8 DML 1.5X 98 2

2002 AUG 13 2137 27.71 20 32.72 155 16.51 12.66 5114 .15 1.1 2.2 DISF 3.5X 237 61
 2002 AUG 13 2303 54.31 19 25.71 155 15.38 15.33 20 6 .13 1.1 .4 DEPL 1.5X 217 4
 2002 AUG 14 0744 56.73 20 1.48 155 42.64 9.11 18 4 .11 .7 .9 KOM 1.3X 143 14
 2002 AUG 14 0916 35.76 19 10.74 155 27.95 32.80 23 5 .07 1.4 1.1 DLS 1.4X 264 19
 2002 AUG 14 1030 56.21 19 18.80 155 8.36 3.56 20 1 .09 1.0 1.5 SSF 1.3X 110 3

2002 AUG 14 1102 2.70 19 20.41 155 9.03 6.60 30 8 .12 .4 .9 SF4 1.3X 97 6
 2002 AUG 14 1124 20.68 18 58.68 155 11.73 30.86 6 1 .07 3.1 5.7 LOI 2.6X 280 35
 2002 AUG 14 1201 52.19 19 46.53 155 45.49 15.21 20 5 .15 .8 .6 HUA 1.4X 121 13
 2002 AUG 15 0029 12.75 19 24.84 155 15.51 14.50 21 6 .11 .8 .4 DEPL 1.3X 118 2
 2002 AUG 15 0224 57.45 19 23.03 155 14.20 3.48 17 6 .11 .5 .4 SEC 1.5X 138 2

2002 AUG 15 0613 14.49 19 56.16 155 23.10 9.11 17 5 .14 .9 .8 KEA .9X 201 7
 2002 AUG 15 0723 40.07 19 30.40 155 26.90 6.76 19 5 .08 .4 1.2 MLO 1.2X 100 3
 2002 AUG 15 0806 49.06 21 24.61 157 36.63 6.75 4913 .11 2.6 3.0 DISF 3.9X 221 42
 2002 AUG 15 1423 41.55 19 8.69 155 19.23 30.57 33 9 .09 .8 1.2 LOI 1.5X 211 13
 2002 AUG 15 1444 54.01 19 49.29 156 12.46 9.26 35 8 .12 .7 .9 HUA 2.3X 202 41

2002 AUG 15 1616 14.69 19 1.74 155 19.53 37.40 3611 .09 .9 1.2 LOI 1.7X 247 20
 2002 AUG 15 2302 56.55 19 29.14 155 35.34 2.37 14 4 .06 .4 .2 MLO 1.4X 82 1
 2002 AUG 16 0053 38.36 19 31.74 155 54.76 11.45 16 5 .09 1.1 .5 KON 1.0X 257 16
 2002 AUG 16 0056 56.44 19 21.28 155 23.99 9.20 4312 .10 .4 .5 SWR 1.5X 50 2
 2002 AUG 16 0223 32.14 20 1.53 155 22.07 5.14 25 8 .20 1.4 1.1 KEA 1.3X 245 15

YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN	GAP	DS		
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	RMKS	MAG					
2002	AUG	16	0801	39.79	19	23.05	155	32.78	7.75	16	4	.07	.5	.9	MLO	1.1X	150	3			
2002	AUG	16	0827	48.58	20	6.43	155	44.18	13.45	27	3	.12	1.2	.9	KOH	1.9X	182	5			
2002	AUG	17	0102	58.94	19	10.14	155	16.05	43.57	3712	.10	.9	1.0	DEP	2.0X	213	21				
2002	AUG	17	0105	1.04	19	10.65	155	16.37	44.07	4015	.09	.8	.9	DEP	2.1X	210	20				
2002	AUG	17	0106	12.27	19	10.44	155	16.44	45.99	24	7	.11	1.5	1.2	DEP	1.9X	297	22			
2002	AUG	17	0107	21.73	19	9.50	155	16.21	46.02	4014	.08	.6	.8	LOI	1.8X	199	20				
2002	AUG	17	0500	39.62	19	24.46	155	16.20	1.40	16	5	.14	.3	.4	SEC	1.0X	89	1			
2002	AUG	17	1226	29.41	19	59.25	155	21.23	9.14	30	7	.15	1.0	.5	KEA	1.6X	245	11			
2002	AUG	17	2027	5.40	19	16.44	155	15.64	8.07	35	8	.11	.6	.5	SF1	1.9X	209	6			
2002	AUG	18	0052	35.83	19	26.02	155	29.03	9.03	3110	.11	.3	.9	KAO	1.2X	65	7				
2002	AUG	18	0720	33.58	19	24.37	155	16.30	14.26	21	5	.11	.9	.4	DEP	1.5X	175	3			
2002	AUG	18	0855	10.92	19	3.74	155	22.82	50.22	22	4	.10	1.1	1.1	LOI	1.6X	252	14			
2002	AUG	18	0954	43.05	19	24.78	155	20.03	4.98	17	6	.08	.4	.8	KAO	1.0X	77	2			
2002	AUG	18	1603	55.01	19	5.59	155	29.78	29.16	27	7	.08	.7	1.5	DLS	1.6X	183	8			
2002	AUG	18	1740	40.15	19	17.71	155	16.84	28.96	26	9	.11	.8	1.1	DEP	1.4X	128	3			
2002	AUG	18	2042	58.39	19	8.43	155	25.88	40.58	19	6	.13	1.5	2.2	DLST	2.0X	281	22			
2002	AUG	18	2230	52.89	20	1.52	155	21.08	7.21	3411	.11	.6	.6	KEA	2.0X	211	29				
2002	AUG	19	0721	7.07	19	59.48	155	38.19	1.49	15	4	.11	.5	.6	KOH	1.5X	154	21			
2002	AUG	19	0843	19.32	19	22.11	154	54.48	7.41	29	6	.15	1.2	.7	LER	1.8X	225	9			
2002	AUG	19	0910	19.21	20	0.59	155	22.14	6.22	15	2	.10	.7	1.0	KEA	1.8X	168	13			
2002	AUG	19	1200	9.20	19	52.83	155	25.23	29.03	28	9	.10	.6	1.2	KEA	2.0X	135	8			
2002	AUG	19	1748	41.80	19	28.21	155	35.68	0.53	15	4	.14	.2	.2	MLO	2.0X	72	1			
2002	AUG	19	2343	34.19	19	13.18	155	28.03	33.57	21	6	.10	1.2	1.0	DLS	1.8X	225	15			
2002	AUG	20	0555	40.54	19	19.60	155	6.04	3.63	16	2	.10	1.2	3.8	SSF	1.5X	222	9			
2002	AUG	20	0840	30.06	19	14.33	155	35.56	2.53	3812	.18	.4	.9	LSW	1.7X	86	15				
2002	AUG	20	0901	19.99	19	19.21	155	10.03	7.21	36	8	.11	.5	.8	SF3	1.5X	176	7			
2002	AUG	20	0913	19.80	18	56.83	155	18.67	16.40	23	8	.14	2.5	16.3	LOI	-	1.5X	316	39		
2002	AUG	20	1308	25.22	19	23.58	155	28.69	9.59	43	9	.10	.3	.6	KAO	1.5X	53	3			
2002	AUG	20	1431	12.89	18	56.99	155	17.44	15.20	17	6	.14	1.5	1.8	LOI	1.8X	266	29			
2002	AUG	20	1924	21.92	19	25.33	155	13.08	31.74	25	8	.09	1.3	1.0	DEP	1.5X	165	2			
2002	AUG	20	2005	33.71	19	16.52	155	31.41	0.77	34	9	.14	.3	.4	LSW	1.5X	82	13			
2002	AUG	20	2015	28.93	19	17.72	155	30.33	11.81	3211	.10	.4	.6	LSW	1.6X	91	10				
2002	AUG	20	2217	12.28	18	57.42	155	19.17	11.55	20	6	.10	1.4	.8	LOI	1.4X	314	43			
2002	AUG	21	0054	36.91	19	28.50	155	25.49	6.16	22	7	.14	.4	1.4	KAO	1.1X	62	5			
2002	AUG	21	0331	54.38	20	1.71	155	45.35	11.12	22	5	.12	1.0	1.0	KOH	1.4X	155	11			
2002	AUG	21	0615	21.13	20	1.05	155	21.61	6.57	4112	.10	.4	.6	KEA	2.3X	174	12				
2002	AUG	21	0823	36.19	19	31.03	155	22.48	13.77	3110	.11	.6	.7	DML	1.4X	170	3				
2002	AUG	21	1141	31.62	19	20.29	155	5.65	7.85	4011	.10	.6	.7	SF4	1.8X	181	7				
2002	AUG	21	1555	44.87	19	17.66	155	13.21	9.94	46	8	.11	.5	.3	SF2F	3.6U	140	1			
2002	AUG	21	1603	19.32	19	19.21	155	13.32	8.92	44	8	.12	.4	.3	SF2F	3.0X	164	6			
2002	AUG	21	1616	25.09	19	18.47	155	13.09	7.47	4110	.12	.4	.7	SF2	1.9X	93	3				
2002	AUG	21	1619	12.75	19	18.47	155	13.14	5.60	3210	.12	.4	1.0	SF2	1.4X	91	3				
2002	AUG	21	1623	26.24	19	17.69	155	13.25	6.47	33	7	.11	.5	.9	SF2	1.5X	105	1			
2002	AUG	21	1855	47.67	19	24.14	155	14.19	13.42	19	5	.15	1.3	.5	DEP	1.4X	273	4			
2002	AUG	21	1933	39.80	19	25.09	154	58.30	4.04	29	6	.10	.8	.2	SLE	2.0X	189	1			

YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN	GAP	DS	
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	RMKS	MAG				
2002	AUG	21	1941	52.55	19	25.39	154	58.62	3.44	33	9	.11	.7	.3	SLE	1.8X	128	1		
2002	AUG	21	2000	35.22	19	15.99	155	11.97	3.72	31	8	.13	1.2	2.6	SSF	1.4X	253	12		
2002	AUG	21	2305	2.19	19	18.97	155	7.17	2.18	3710	.12	.4	.6	SSF	1.9X	186	8			
2002	AUG	22	0418	1.28	19	18.44	155	13.07	8.25	37	6	.12	.8	.5	SF2	1.7X	202	8		
2002	AUG	22	0436	17.24	19	16.62	155	11.72	7.19	27	4	.12	.9	1.5	SF3	1.2X	252	11		
2002	AUG	22	0556	2.79	19	26.22	155	28.97	9.55	3611	.13	.4	.8	KAO	1.5X	45	7			
2002	AUG	22	0927	14.87	19	24.00	155	16.06	15.15	22	6	.18	1.2	.5	DEPL	1.7X	182	3		
2002	AUG	22	1404	26.03	19	19.36	155	11.49	6.36	29	7	.08	.5	.9	SF3	1.8X	177	6		
2002	AUG	22	1415	51.89	19	51.80	155	55.55	22.28	18	6	.13	1.6	2.3	HUA	1.8X	291	22		
2002	AUG	22	1747	12.24	19	24.84	155	19.93	6.81	35	6	.11	.4	.8	KAO	1.7X	46	2		
2002	AUG	22	1918	51.37	19	30.79	155	27.11	5.89	17	5	.08	.3	.9	MLO	1.2X	124	2		
2002	AUG	23	0058	27.23	19	19.83	155	4.14	4.38	3912	.10	.8	1.3	SSF	1.9X	214	9			
2002	AUG	23	0236	59.03	19	13.12	155	27.08	35.43	4814	.08	.5	.8	DLS	2.1X	127	7			
2002	AUG	23	0524	49.79	19	11.82	155	25.31	34.51	5016	.10	.6	.9	DLS	2.2X	165	6			
2002	AUG	23	0817	28.69	19	28.36	155	34.91	3.64	10	.10	.7	.9	MLOT	1.1X	81	0			
2002	AUG	23	0908	53.24	19	24.20	155	37.52	2.67	18	6	.19	.5	.3	MLO	1.3X	115	1		
2002	AUG	23	1021	34.97	19	46.65	155	52.91	31.65	20	6	.12	1.3	2.2	HUA	1.6X	271	11		
2002	AUG	23	1207	49.82	19	10.46	155	28.98	28.20	27	9	.08	.5	1.1	DLS	1.6X	99	3		
2002	AUG	23	1233	0.39	19	17.76	155	13.02	6.00	3410	.10	.4	.9	SF2	1.5X	169	2			
2002	AUG	23	1313	15.69	19	26.09	155	28.78	10.33	27	8	.11	.4	1.1	KAO	1.2X	85	7		
2002	AUG	23	1708	2.75	19	22.86	155	26.51	9.79	34	9	.12	.4	.8	KAO	1.3X	55	2		
2002	AUG	23	1753	12.82	19	15.83	155	11.47	9.64	3510	.11	.6	.9	SF3	1.4X	198	7			
2002	AUG	23	1825	31.16	19	16.91	155	12.90	0.89	3710	.11	.7	.4	SSF	1.6X	181	10			
20																				

YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN	
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	RMKS	MAG	GAP	DS

2002 AUG 26 2334 12.92 18 47.11 155 12.49 10.90 28 6 .12 1.9 2.0 LOI 2.0X 277 49
 2002 AUG 27 0350 39.60 19 17.79 155 13.08 1.74 3110 .11 .7 .6 SSF 1.2X 207 9
 2002 AUG 27 0353 40.90 19 23.03 155 14.57 2.97 19 6 .10 .3 .4 SEC 1.1X 138 3
 2002 AUG 27 0354 5.04 19 22.80 155 14.53 2.58 30 8 .12 .4 .3 SEC 2.1X 122 3
 2002 AUG 27 0355 21.62 19 22.99 155 14.58 2.62 14 6 .10 .3 .4 SEC 1.4X 141 3

2002 AUG 27 0721 48.07 19 17.27 155 12.73 7.13 37 9 .13 .5 .7 SF2 1.5X 153 1
 2002 AUG 27 0753 17.18 19 16.67 155 12.13 7.91 4011 .11 .5 .7 SF3 1.8X 203 2
 2002 AUG 27 1427 19.32 19 15.51 155 10.39 9.54 36 9 .11 .6 .7 SF3 1.5X 195 6
 2002 AUG 27 2010 4.40 19 27.20 155 29.97 10.62 3710 .14 .4 .8 KAO 1.5X 67 7
 2002 AUG 27 2041 14.16 19 17.91 155 18.74 32.00 4615 .11 .6 .8 DEP 2.0X 157 0

2002 AUG 27 2054 59.08 19 24.90 155 15.82 12.17 20 7 .12 .8 .6 INTL 1.4X 229 3
 2002 AUG 27 2353 2.44 19 21.00 155 3.57 5.64 26 7 .11 1.1 1.3 SF5 1.6X 309 8
 2002 AUG 28 0338 48.54 19 15.24 155 32.92 6.47 31 9 .13 .3 1.1 LSW 1.5X 74 14
 2002 AUG 28 0406 4.71 19 19.05 155 11.76 6.30 3911 .10 .5 .8 SF3 1.4X 146 7
 2002 AUG 28 1136 39.06 19 23.82 155 29.51 12.60 23 6 .08 .4 .8 KAO 1.4X 76 4

2002 AUG 28 1202 23.76 19 18.43 155 12.93 8.87 42 9 .10 .4 .3 SF2 2.3X 167 8
 2002 AUG 28 1204 23.10 19 17.31 155 12.86 6.15 3911 .11 .4 .8 SF2 1.8X 183 1
 2002 AUG 28 1211 5.69 19 16.67 155 12.30 7.05 24 7 .10 .6 1.0 SF2 1.2X 226 2
 2002 AUG 28 1307 49.41 19 18.73 155 13.07 3.47 38 8 .13 .3 .9 SSF 1.5X 88 3
 2002 AUG 28 1309 11.69 19 25.65 155 19.36 6.71 3710 .09 .4 .6 KAO 1.8X 48 3

2002 AUG 28 1504 4.05 19 19.13 155 15.05 5.26 29 7 .12 .4 1.3 SF1 1.2X 117 4
 2002 AUG 28 1809 14.70 19 19.20 155 7.62 2.24 29 8 .10 .8 .9 SSF 1.3X 220 8
 2002 AUG 28 1902 17.13 19 18.40 155 8.10 6.33 29 8 .11 .8 1.3 SF4 1.5X 254 9
 2002 AUG 28 2149 45.26 19 18.63 155 13.13 9.20 42 9 .12 .6 .4 SF2 2.2X 170 7
 2002 AUG 29 0204 53.02 19 26.84 155 28.72 9.93 27 8 .10 .4 .9 KAO 1.0X 78 8

2002 AUG 29 0316 27.34 19 17.76 155 12.55 9.23 4112 .10 .5 .4 SF2 1.7X 202 9
 2002 AUG 29 0321 54.22 19 16.87 155 12.14 2.59 26 6 .11 1.3 1.5 SSF 1.3X 247 11
 2002 AUG 29 0723 14.21 19 20.49 155 51.28 8.11 23 7 .17 .8 1.6 KON 1.3X 207 20
 2002 AUG 29 0950 39.84 19 27.66 155 30.18 9.30 24 7 .15 .5 1.3 KAO 1.3X 70 7
 2002 AUG 29 1105 3.54 19 25.85 155 15.74 1.70 15 4 .07 .4 .4 SNC 1.3X 169 3

2002 AUG 29 1114 45.79 19 20.89 155 8.34 7.63 4611 .10 .5 .4 SF4 2.6X 164 5
 2002 AUG 29 1600 41.56 19 0.97 155 7.87 37.10 4915 .11 .7 1.4 LOIF 2.2X 237 31
 2002 AUG 29 1703 2.46 18 50.73 155 13.92 49.11 23 5 .10 1.5 2.0 LOI 2.0X 279 42
 2002 AUG 29 2030 31.93 19 28.50 155 36.17 0.47 12 1 .14 .3 .4 MLO 1.2X 89 1
 2002 AUG 29 2248 38.70 19 25.61 155 16.14 9.93 24 4 .09 .5 .6 INTL 1.5X 118 5

2002 AUG 30 0124 16.15 19 30.26 154 57.53 46.14 38 6 .10 1.2 .8 LER 2.0X 236 10
 2002 AUG 30 0415 56.40 19 20.12 155 6.24 51.26 34 2 .10 1.4 1.5 DEP 2.0X 183 6
 2002 AUG 30 0431 19.65 19 42.81 155 56.03 15.48 24 5 .12 1.5 .9 HUA 1.6X 235 10
 2002 AUG 30 0649 25.18 19 57.03 155 31.97 39.78 27 3 .12 .9 1.9 KEA 1.8X 160 20
 2002 AUG 30 1053 31.00 19 18.98 155 11.31 6.76 32 5 .10 .5 .7 SF3 1.7X 165 5

2002 AUG 30 1500 50.25 20 25.99 156 1.00 6.97 14 7 .09 1.6 2.8 DIS 2.0X 175 41
 2002 AUG 30 1542 35.52 19 18.44 154 58.65 40.88 38 7 .10 1.3 .8 LER 1.9X 253 12
 2002 AUG 30 1848 30.07 19 33.52 155 41.85 10.69 18 3 .10 .6 1.1 MLO 1.4X 122 9
 2002 AUG 30 2208 31.85 19 19.72 155 6.63 8.30 38 9 .11 .8 .5 SF4 2.0X 182 7
 2002 AUG 30 2301 39.78 19 52.50 155 20.57 31.52 3510 .11 .7 1.0 KEA 1.7X 120 2

YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN	
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	RMKS	MAG	GAP	DS

2002 AUG 31 0030 13.46 19 18.67 155 13.28 9.42 32 5 .12 .8 .5 SF2 1.8X 173 7
 2002 AUG 31 0048 24.53 19 18.22 155 13.11 7.51 22 2 .11 1.0 1.2 SF2 1.3X 215 8
 2002 AUG 31 0103 40.82 19 18.25 155 13.11 1.01 30 8 .14 .7 .5 SSF 1.3X 215 8
 2002 AUG 31 0400 22.88 18 54.66 155 20.29 39.58 28 8 .10 1.1 1.5 LOI 2.0X 250 30
 2002 AUG 31 0634 36.94 19 14.97 155 34.39 6.67 4412 .16 .3 1.0 LSW 2.1X 115 15

2002 AUG 31 0721 48.07 19 17.27 155 12.73 7.13 37 9 .13 .5 .7 SF2 1.5X 153 1
 2002 AUG 31 0753 17.18 19 16.67 155 12.13 7.91 4011 .11 .5 .7 SF3 1.8X 203 2
 2002 AUG 31 1427 19.32 19 15.51 155 10.39 9.54 36 9 .11 .6 .7 SF3 1.5X 195 6
 2002 AUG 31 2010 4.40 19 27.20 155 29.97 10.62 3710 .14 .4 .8 KAO 1.5X 67 7
 2002 AUG 31 2041 14.16 19 17.91 155 18.74 32.00 4615 .11 .6 .8 DEP 2.0X 157 0

2002 SEP 1 0615 55.06 19 30.05 155 30.29 7.73 17 4 .12 .5 1.7 MLO 1.4X 72 6
 2002 SEP 1 0838 13.69 19 26.72 155 30.17 11.34 18 3 .11 .5 1.0 KAO 1.2X 86 6
 2002 SEP 1 1614 53.31 19 21.11 155 17.35 47.62 5112 .13 .6 .9 DEP 2.4X 46 2
 2002 SEP 1 1636 45.60 19 22.01 155 9.41 4.50 16 3 .09 .7 .7 SER 1.4X 115 2
 2002 SEP 1 1902 9.47 19 10.79 155 39.60 1.23 18 3 .13 .6 .9 LSW 1.4X 160 11

2002 SEP 2 0158 8.35 19 14.49 155 2.28 44.10 33 9 .11 1.1 .8 DEP 1.5X 270 19
 2002 SEP 2 0245 9.88 19 22.65 155 29.85 9.72 26 6 .13 .5 .8 KAO 1.0X 118 4
 2002 SEP 2 0454 23.15 19 28.84 155 24.61 4.60 25 7 .11 .3 .9 KAO 1.1X 81 3
 2002 SEP 2 0734 54.88 19 26.19 154 57.37 0.76 22 7 .11 .6 .3 SLE 1.7X 153 3
 2002 SEP 2 0924 32.79 19 19.74 155 8.06 5.62 29 6 .11 .5 1.4 SF4 1.4X 184 7

2002 SEP 2 0938 20.53 19 43.22 156 10.35 15.38 20 5 .18 7.613.6 HUA - 1.8X 310 35
 2002 SEP 2 1021 7.87 19 19.49 155 11.06 5.33 30 9 .12 .6 1.5 SF3 1.2X 159 6
 2002 SEP 2 1438 42.42 19 33.49 155 26.76 25.19 15 3 .07 .9 1.4 DML 1.4X 158 3
 2002 SEP 2 1443 3.32 19 25.76 155 19.88 7.00 18 3 .13 .6 1.5 KAO 1.1X 94 4
 2002 SEP 2 1726 40.22 19 16.00 155 18.55 31.95 42 9 .11 .7 .9 DEP 1.9X 166 11

2002 SEP 2 2025 9.34 19 17.95 155 5.66 4.60 18 2 .09 1.2 5.3 SSF 1.4X 235 10
 2002 SEP 2 2155 44.11 19 25.68 155 19.01 14.35 14 2 .10 1.0 1.8 DEPL 1.7X 88 3
 2002 SEP 3 0210 13.34 19 19.83 155 5.99 6.61 34 7 .10 .8 .7 SF4 1.7X 220 7
 2002 SEP 3 1017 8.88 19 25.75 155 18.89 7.33 28 8 .10 .5 .7 INT 1.5X 145 2
 2002 SEP 3 1224 48.27 19 52.22 155 48.32 38.69 31 8 .09 .9 1.1 HUA 2.0X 175 15

2002 SEP 3 2121 37.07 19 18.03 155 7.59 3.96 27 7 .11 .9 2.7 SSF 1.3X 228 10
 2002 SEP 3 2206 10.91 20 0.95 155 22.77 6.52 17 4 .18 1.2 .8 KEA 1.1X 284 14
 2002 SEP 4 0031 19.83 19 15.93 155 26.13 8.60 27 7 .10 .4 .6 LSW 1.1X 139 9
 2002 SEP 4 0223 43.60 19 20.52 155 18.12 13.20 3611 .09 .6 .4 DEP 1.4X 173 5
 2002 SEP 4 0313 47.68 19 20.08 155 6.63 6.89 30 7 .11 .9 .6 SF4 1.3X 215 6

2002 SEP 4 0631 44.78 19 23.67 155 2.90 1.19 32 5 .14 .9 .7 SME 2.0X 147 8
 2002 SEP 4 1239 49.06 19 29.00 155 52.37 11.22 14 2 .15 1.1 .8 KON 1.3X 207 12
 2002 SEP 4 1459 53.89 19 48.57 155 46.93 14.35 27 8 .13 1.2 .6 HUA 1.7X 222 14
 2002 SEP 4 1514 45.97 19 50.43 155 44.22 34.91 33 8 .08 .7 1.1 HUA 1.9X 140 8
 2002 SEP 4 1716 3.35 19 39.68 156 27.51 2.36 26 7 .10 1.4 .7 DIS 2.0X 236 65

2002 SEP 4 1726 49.98 19 20.29 155 11.32 7.57 3913 .12 .4 .6 SF3 1.5X 80 5
 2002 SEP 5 0308 25.76 19 31.85 155 28.42 6.19 29 8 .12 .3 .9 MLO 1.2X 74 1
 2002 SEP 5 0416 2.10 19 24.77 155 1.04 7.11 27 7 .13 1.1 .6 SF5 1.1X 177 4
 2002 SEP 5 1241 55.78 19 45.48 155 50.87 29.82 22 7 .10 1.0 1.5 HUA 1.5X 248 8
 2002 SEP 5 1417 57.95 19 23.11 155 14.74 2.88 19 7 .08 .3 .4 SEC 1.7X 80 2

YEAR	MON	DA	HRMN	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN			
				SEC	DEG	MIN	DEG	KM	RD	S	SEC	KM	KM	RMKS	MAG	GAP	DS		
2002	SEP	5	1449	28.75	19	17.06	155	13.71	8.92	34	8	.10	.4	.4	SF2	1.5X	182	0	
2002	SEP	5	2213	29.13	19	19.67	155	5.94	3.25	28	8	.11	.6	1.0	SSF	1.2X	221	7	
2002	SEP	5	2343	24.17	19	37.31	156	24.18	15.69	26	6	.17	5.71	3.4	DIS	-	1.8X	299	60
2002	SEP	6	0409	34.24	19	19.90	155	10.89	8.31	35	9	.09	.7	.5	SF3	1.5X	207	5	
2002	SEP	6	0746	40.45	19	22.61	155	29.77	9.46	40	9	.09	.3	.6	KAO	1.4X	36	4	
2002	SEP	6	0915	39.16	19	50.79	155	31.85	19.60	4616	.10	.5	1.5	KEA	1.8X	115	11		
2002	SEP	6	1659	4.64	19	29.06	155	27.82	5.46	19	6	.11	.4	2.2	KAO	1.1X	78	5	
2002	SEP	6	2201	37.68	19	17.51	155	25.60	9.05	17	5	.09	.7	1.3	LSW	.8X	244	6	
2002	SEP	7	0154	53.01	19	30.38	155	21.56	13.18	3610	.10	.5	.6	DML	1.6X	116	3		
2002	SEP	7	0522	56.43	19	18.46	155	10.21	2.51	24	6	.10	.5	1.1	SSF	1.5X	219	8	
2002	SEP	7	0543	8.83	19	37.75	155	21.23	10.79	17	3	.12	.6	1.7	KEA	1.3X	154	14	
2002	SEP	7	1144	14.89	19	5.69	155	29.46	28.33	3710	.10	.7	1.4	DLS	1.9X	180	8		
2002	SEP	7	1305	31.19	19	22.80	154	45.85	39.43	4211	.13	1.1	1.0	LER	2.1X	283	13		
2002	SEP	7	1924	2.40	18	51.72	155	11.17	34.51	31	4	.11	1.8	2.5	LOI	2.3X	266	44	
2002	SEP	7	2139	57.72	19	29.58	155	24.05	22.59	17	5	.10	.8	1.1	DML	1.6X	65	1	
2002	SEP	8	0428	30.73	19	17.80	155	6.52	5.36	20	1	.10	1.6	2.2	SF4	1.2X	267	10	
2002	SEP	8	0501	29.19	19	8.73	155	38.32	11.95	13	1	.11	.7	1.0	LSW	1.3X	104	13	
2002	SEP	8	0746	22.67	19	19.73	155	6.77	7.63	4511	.09	.3	.4	SF4	2.3X	152	5		
2002	SEP	8	0958	24.87	19	22.33	155	54.74	14.00	26	7	.10	1.2	.5	KON	1.8X	258	22	
2002	SEP	8	1344	48.23	19	18.48	155	13.30	8.24	33	7	.10	.5	.6	SF2	1.4X	123	3	
2002	SEP	8	1822	5.70	19	50.30	155	49.28	39.34	34	9	.09	.8	1.0	HUA	2.1X	180	17	
2002	SEP	8	1839	26.45	19	16.05	155	14.11	0.73	23	5	.09	1.9	.8	SSF	1.3X	254	12	
2002	SEP	9	0006	23.19	19	23.55	155	15.12	3.09	19	7	.07	.3	.3	SEC	1.4X	98	3	
2002	SEP	9	0122	2.54	19	18.87	155	12.89	5.06	34	9	.13	.7	1.3	SF2	1.4X	228	7	
2002	SEP	9	0528	26.48	19	21.43	155	18.48	2.07	20	8	.09	.4	.5	SWR	1.2X	177	5	
2002	SEP	9	0730	50.69	19	22.94	155	14.69	2.81	18	6	.08	.3	.4	SEC	1.3X	121	2	
2002	SEP	9	0831	4.85	19	25.15	155	24.09	9.78	4410	.12	.4	.6	KAO	2.0X	43	8		
2002	SEP	9	1700	44.28	19	20.20	155	7.03	7.46	3710	.10	.4	.7	SF4	1.8X	140	5		
2002	SEP	9	1939	54.12	19	16.33	155	34.63	8.74	35	7	.15	.5	1.2	LSW	1.9X	101	13	
2002	SEP	9	2111	39.08	19	18.87	155	11.70	3.35	3411	.11	.6	1.2	SSF	1.3X	183	5		
2002	SEP	9	2318	8.56	19	13.03	155	27.22	35.05	3911	.09	.6	.9	DLS	1.6X	132	7		
2002	SEP	9	2336	14.90	19	16.27	155	12.13	5.81	30	9	.11	.7	1.6	SF3	1.2X	251	12	
2002	SEP	10	0624	11.16	19	18.76	155	6.44	4.94	24	4	.08	.9	2.1	SSF	1.4X	227	9	
2002	SEP	10	1016	56.17	19	13.63	155	34.47	35.70	19	5	.09	.7	1.4	DLS	1.6X	125	14	
2002	SEP	10	1416	50.76	19	21.57	155	14.29	12.56	3611	.09	.6	.3	SF2	1.7X	94	3		
2002	SEP	10	1807	22.17	20	4.88	155	36.63	32.68	30	9	.10	.8	1.2	KOH	2.0X	192	18	
2002	SEP	10	1958	23.14	19	13.08	155	27.44	33.65	29	8	.09	.9	1.2	DLS	1.3X	204	15	
2002	SEP	10	2201	29.42	19	28.48	154	54.84	0.02	20	6	.12	.7	.3	SLE	1.8X	147	7	
2002	SEP	10	2251	35.99	19	36.19	155	54.21	6.24	27	8	.16	.8	.9	KON	1.8X	259	12	
2002	SEP	10	2300	28.39	19	45.86	155	26.30	27.14	4914	.11	.4	1.0	KEAF	2.9X	76	3		
2002	SEP	10	2312	30.67	19	58.68	155	53.54	10.15	21	6	.11	1.2	.8	KOH	1.5X	225	20	
2002	SEP	11	0016	10.34	19	24.90	155	19.92	5.81	22	5	.12	.4	1.0	KAO	.9X	79	2	
2002	SEP	11	0137	36.99	19	56.99	155	25.93	35.71	3814	.11	.7	1.3	KEA	1.9X	183	11		
2002	SEP	11	0437	18.97	19	12.17	155	35.57	1.48	3510	.17	.7	.6	LSW	1.5X	134	14		
2002	SEP	11	0901	7.26	19	20.27	155	12.95	6.20	36	7	.11	.4	.7	SF2	1.5X	68	4	

YEAR	MON	DA	HRMN	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN		
				SEC	DEG	MIN	DEG	KM	RD	S	SEC	KM	KM	RMKS	MAG	GAP	DS	
2002	SEP	11	1012	5.97	19	20.90	155	7.92	9.32	4210	.08	.4	.3	SF4	2.1X	117	4	
2002	SEP	11	1058	15.42	19	33.89	155	36.30	12.33	20	6	.14	.8	1.0	MLO	1.3X	180	4
2002	SEP	11	1838	7.16	19	19.51	155	13.59	9.67	4111	.11	.6	.5	SF2	2.1X	165	6	
2002	SEP	11	2051	10.34	19	59.73	155	36.25	14.93	29	8	.12	1.8	2.3	KOH	# 2.0X	164	23
2002	SEP	11	2145	0.00	20	32.31	155	58.14	30.70	5014	.14	1.2	1.7	DISF	3.4X	185	36	
2002	SEP	11	2158	6.49	19	27.03	155	29.16	10.28	29	6	.11	.4	.9	KAO	1.4X	80	9
2002	SEP	12	0043	4.94	19	30.75	155	28.79	6.26	25	8	.09	.3	.8	MLO	1.2X	60	3
2002	SEP	12	0054	28.10	19	17.07	155	13.81	7.90	3511	.15	.6	.8	SF2	1.3X	198	10	
2002	SEP	12	0217	18.40	19	31.39	155	36.19	15.09	28	9	.11	.4	.3	DML	1.4X	64	3
2002	SEP	12	0451	32.20	19	20.03	155	12.67	6.47	31	9	.17	.7	1.1	SF2	1.2X	217	5
2002	SEP	12	0622	59.02	19	18.57	155	6.56	1.71	28	7	.09	.8	.5	SSF	1.4X	228	9
2002	SEP	12	1209	3.59	19	27.58	155	28.92	11.51	19	7	.12	.5	1.2	KAO	1.0X	70	8
2002	SEP	12	1215	15.55	19	16.92	155	7.00	5.62	32	9	.12	.6	1.3	SF4	1.4X	194	7
2002	SEP	12	2005	17.36	19	19.92	155	22.88	9.84	4212	.12	.5	.4	.4	SWR	1.7X	128	1
2002	SEP	12	2123	10.17	19	20.53	155	28.56	9.23	31	9	.12	.5	.7	KAO	1.2X	83	4
2002	SEP	12	2150	3.85	19	27.46	154	55.05	0.02	18	5	.13	.6	.3	SLE	# 1.3X	147	7
2002	SEP	12	2344	59.64	19	19.14	155	8.47	6.33	21	6	.09	.8	1.7	SF4	1.1X	265	7
2002	SEP	13	0101	46.34	19	12.00	155	27.77	6.44	4411	.13	.4	.9	LSW	2.1X	118	5	
2002	SEP	13	0104	10.02	19	12.82	155	26.87	0.03	23	6	.15	.6	.3	LSW	# 1.2X	163	6
2002	SEP	13	0757	53.05	19	28.42	155	36.09	1.11	19	4	.11	.3	.2	MLO	2.0X	83	2
2002	SEP	13	0918	1.75	19	22.79	155	50.95	12.64	21	6	.12	.9	.6	KON	2.0X	201	17
2002	SEP	13	1015	25.92	19	18.97	155	6.17	6.03	29	7	.14	.8	1.4	SF4	1.7X	207	8
2002	SEP	13	1200	30.05	19	24.75	155	16.81	0.91	12	3	.11	.4	.2	SNCL	1.4X	89	0
2002	SEP	13	1704	27.48	19	21.52	155	3.31	1.52	32	9	.14	.6	.5	SSF	1.4X	177	8
2002	SEP	13	1859	46.23	19	22.50	155	13.56	20.22	19	6	.10	1.0	.7	DEP	1.3X	275	4
2002	SEP	14	0239	2.50	19	18.99	155	13.14	7.89	4212	.11	.4	.6	SF2	1.5X	169	7	
2002	SEP	14	0304	17.13	19	30.35	155	15.15	9.85	3913	.11	.4	.6	GLN	1.5X	61	5	
2002	SEP	14																

YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN	
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	RMKS	MAG	GAP	DS	
2002	SEP	18	0137	17.22	19	28.24	154	54.00	2.66	4111	.13	.4	.8	SLEF	2.3X	134	5		
2002	SEP	18	0537	16.14	19	12.72	155	26.24	33.04	24	7	.09	.9	1.3	DLS	1.1X	228	15	
2002	SEP	18	1440	23.02	19	13.27	155	19.78	39.19	22	6	.10	1.5	.9	DEP	1.3X	237	13	
2002	SEP	18	1447	57.61	19	13.91	155	20.62	47.75	31	8	.11	1.5	1.0	DEP	2.1X	228	13	
2002	SEP	18	1610	44.36	19	16.60	155	13.36	6.76	3912	.11	.5	.8	SF2	1.4X	162	1		
2002	SEP	18	1816	50.11	18	50.95	155	11.21	35.14	22	7	.11	1.3	2.9	LOI	1.7X	268	53	
2002	SEP	18	1902	3.76	19	12.39	155	32.58	0.95	25	9	.14	.3	.3	LSW	1.4X	86	10	
2002	SEP	18	2059	30.90	19	16.72	155	15.41	44.28	20	5016	.13	.8	.7	DEP	2.4X	169	11	
2002	SEP	18	2153	26.10	19	13.10	155	25.52	35.84	25	8	.11	1.0	1.4	DLS	1.3X	215	14	
2002	SEP	19	0317	39.97	19	22.76	155	30.02	8.97	30	8	.12	.4	.7	KAO	1.2X	118	4	
2002	SEP	19	0324	38.60	19	22.22	155	30.34	10.27	20	6	.06	.4	.9	KAO	1.1X	160	5	
2002	SEP	19	0624	39.10	19	22.65	155	30.00	8.85	26	8	.07	.4	.8	KAO	1.1X	152	4	
2002	SEP	19	0643	57.40	19	17.14	155	29.28	5.35	4010	.11	.4	1.1	LSW	2.0X	123	10		
2002	SEP	19	0923	48.02	19	13.58	155	26.46	1.09	30	7	.13	.3	.4	LSW	1.5X	138	8	
2002	SEP	19	1221	6.28	19	23.87	155	26.85	9.87	3910	.11	.4	.7	KAO	1.4X	47	3		
2002	SEP	19	1439	15.69	19	21.95	155	0.94	8.69	3310	.15	.8	.5	SF5	1.4X	203	7		
2002	SEP	19	1520	37.63	19	23.37	155	17.17	1.94	20	8	.10	.3	.2	SSC	1.3X	82	0	
2002	SEP	19	1809	9.64	19	13.85	155	16.55	29.77	3912	.10	.8	1.0	DEP	1.8X	181	16		
2002	SEP	19	1847	35.86	19	12.56	155	24.88	36.78	4815	.10	.6	.9	DEP	2.2X	160	8		
2002	SEP	19	2224	54.47	19	25.34	155	29.69	10.82	4210	.10	.3	.5	KAO	2.2X	36	6		
2002	SEP	20	0258	20.67	19	25.89	155	18.64	7.79	22	7	.09	.5	.9	INT	1.1X	87	2	
2002	SEP	20	0347	39.05	19	23.66	155	17.11	6.25	23	6	.12	.5	.7	INTL	1.2X	103	1	
2002	SEP	20	0535	33.24	19	55.13	155	34.83	11.26	24	8	.11	.3	.4	KOH	1.2X	138	11	
2002	SEP	20	0543	36.65	19	42.27	156	6.11	14.30	16	5	.14	8.412	6	HUA	-	1.1X	312	41
2002	SEP	20	0834	22.82	19	25.74	155	28.12	9.45	37	9	.11	.3	.8	KAO	1.4X	47	6	
2002	SEP	20	0928	3.43	19	22.78	155	29.80	9.86	32	8	.09	.4	.8	KAO	1.1X	151	4	
2002	SEP	20	1316	7.51	19	19.54	155	11.49	0.01	32	7	.12	.4	.2	SSF	#	1.2X	94	6
2002	SEP	20	1436	23.18	19	27.98	155	5.66	43.60	24	5	.12	2.0	1.5	DEP	1.5X	244	12	
2002	SEP	20	2040	58.22	19	48.89	155	35.93	16.03	13	6	.10	.5	.8	KEA	1.7X	100	8	
2002	SEP	20	2208	8.94	19	21.88	155	30.07	8.41	27	7	.13	.4	.9	KAO	1.1X	126	4	
2002	SEP	21	0036	38.36	19	59.39	155	34.40	3.03	22	6	.12	.6	1.1	KOH	1.3X	168	17	
2002	SEP	21	0143	2.70	19	28.72	155	27.91	8.08	33	9	.10	.3	.9	KAO	1.4X	61	6	
2002	SEP	21	0214	19.99	19	26.54	155	29.30	10.34	3911	.10	.3	.7	KAO	1.6X	48	7		
2002	SEP	21	0617	50.12	19	16.87	155	29.77	12.14	21	6	.11	.4	1.0	LSW	1.2X	130	11	
2002	SEP	21	0715	13.09	19	22.27	155	2.04	8.08	35	9	.18	.8	.6	SF5	1.5X	182	8	
2002	SEP	21	1303	38.86	19	25.06	155	39.27	2.97	11	1	.08	.9	.5	MLO	.9X	204	3	
2002	SEP	21	1424	54.38	19	11.68	155	19.89	40.18	34	9	.12	.8	1.3	DEP	1.9X	181	15	
2002	SEP	21	1757	46.68	19	25.38	155	19.48	5.57	25	8	.14	.4	1.0	KAO	1.3X	86	3	
2002	SEP	21	1848	20.46	19	29.23	155	27.16	8.17	3512	.11	.3	.8	KAO	1.6X	70	5		
2002	SEP	21	2100	32.56	19	20.09	155	19.31	3.37	3210	.09	.5	.9	SWR	1.4X	199	7		
2002	SEP	21	2101	29.36	19	20.59	155	19.46	2.44	22	8	.11	.4	.6	SWR	1.1X	193	6	
2002	SEP	21	2332	50.16	19	17.76	155	14.39	5.56	28	7	.12	.8	1.5	SF2	1.0X	241	9	
2002	SEP	22	0057	20.12	19	26.58	154	55.24	0.10	19	6	.13	.7	.2	SLE	1.4X	170	7	
2002	SEP	22	0102	0.96	19	21.71	155	17.10	17.79	20	2	.10	1.4	1.1	DEPL	1.9X	176	2	
2002	SEP	22	0254	0.96	19	16.85	155	14.69	9.33	4010	.10	.5	.6	SFI	1.7X	176	10		

YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	RMKS	MAG	GAP	DS
2002	SEP	22	0434	5.62	19	32.92	155	37.59	12.75	25	7	.13	.5	.8	MLO	1.2X	101	5
2002	SEP	22	0553	36.74	20	29.71	155	48.18	24.59	21	3	.12	1.7	6.0	DIS	1.7X	210	41
2002	SEP	22	0821	9.90	19	31.75	155	36.35	15.02	25	8	.11	.7	.3	DML	1.4X	153	3
2002	SEP	22	0905	53.87	19	17.00	155	12.83	8.09	27	2	.13	.7	.6	SF2	1.7X	187	1
2002	SEP	22	0923	45.34	19	18.85	155	17.91	51.35	4110	.12	.9	.8	DEP	2.1X	113	2	
2002	SEP	23	0143	52.61	19	24.13	155	17.11	1.85	12	3	.07	.3	.2	SSC	1.1X	80	1
2002	SEP	23	0425	0.15	19	23.17	155	17.04	2.69	13	4	.05	.3	.2	SSC	.9X	119	0
2002	SEP	23	0430	23.13	19	23.28	155	16.85	2.88	24	6	.10	.3	.2	SSC	1.4X	110	0
2002	SEP	23	1405	13.40	19	20.84	155	6.44	6.67	20	2	.12	1.1	.9	SF4	1.3X	263	5
2002	SEP	23	1947	23.46	19	27.09	155	22.42	12.73	19	5	.06	.6	1.0	KAO	1.0X	124	5
2002	SEP	23	1953	5.62	19	26.85	155	22.50	11.18	24	6	.07	.5	1.0	KAO	1.3X	119	6
2002	SEP	23	2224	14.85	19	18.17	155	27.59	8.26	20	2	.14	1.1	.8	LSW	1.3U	180	8
2002	SEP	24	1107	26.66	19	20.85	155	5.68	8.03	22	5	.13	.6	.8	SF4	1.2X	155	6
2002	SEP	24	1420	57.00	19	19.89	155	8.15	6.78	32	9	.08	.4	.8	SF4	1.3X	116	5
2002	SEP	24	2237	30.95	19	28.97	155	36.28	14.23	22	5	.13	.5	.6	DML	1.9X	99	1
2002	SEP	25	0458	54.87	19	27.42	155	28.13	8.43	25	6	.09	.3	.9	KAO	1.2X	63	8
2002	SEP	25	1608	7.24	19	24.80	155	16.81	1.44	15	4	.13	.3	.2	SNC	1.1X	91	0
2002	SEP	25	1904	43.62	19	21.33	155	30.23	7.03	3710	.11	.3	.9	KAO	1.6X	70	5	
2002	SEP	26	0646	41.40	19	33.61	155	41.77	11.34	24	7	.12	.6	.8	MLO	1.5X	123	9
2002	SEP	26	0901	55.48	19	24.68	155	38.31	2.76	32	8	.12	.3	.3	MLO	2.0X	103	1
2002	SEP	26	1140	36.96	19	20.99	155	6.12	6.29	27	8	.10	.5	1.0	SF4	1.3X	147	5
2002	SEP	26	1342	47.13	19	20.06	155	10.85	7.94	3511	.10	.4	.6	.8	SF3	1.5X	86	5
2002	SEP	26	1545	40.01	19	1.58	155	26.72	41.09	29	9	.07	.9	1.4	DLS	1.6X	220	15
2002	SEP	26	1627	39.18	19	19.71	155	46.58	8.92	19	4	.10	.9	1.9	KON	1.2X	187	12
2002	SEP	26	1915	10.59	19	20.17	155	29.95	11.77	3710	.09	.4	.7	KAO	1.6X	80	6	
2002	SEP	27	0344	15.41	19	11.85	155	15.78	46.91	30	9	.08	.9	1.1	DEPT	1.9X	209	19
2002	SEP	27	0346	20.51	19	11.47	155	16.26	51.04	22	3	.13	1.3					

YEAR	MON	DA	HRMN	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN	
				DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	RMKS	MAG	GAP	DS
2002	SEP	29	1610	45.56	19	23.74	155	15.03	3.74	19	6	.09	.4	.5 SEC	1.5X	66	2
2002	SEP	29	1938	4.84	19	27.16	155	13.94	31.98	4713	.10	.5	.7	DEPF	2.7X	52	5
2002	SEP	29	2124	30.96	19	17.95	155	7.21	2.14	30	8	.10	1.3	1.2 SSF	1.3X	229	10
2002	SEP	30	0151	18.91	19	13.07	155	32.63	1.13	3610	.13	.3	.4	LSW	1.6X	79	11
2002	SEP	30	0421	26.60	19	21.38	155	30.32	10.53	34	8	.07	.4	.7 KAO	1.2X	68	5
2002	SEP	30	0603	12.53	19	23.77	155	27.33	9.41	4412	.11	.3	.6	KAO	1.8X	50	2
2002	SEP	30	1509	38.92	19	24.45	155	37.53	2.80	21	6	.22	.6	.5 MLO	1.4X	112	0
2002	SEP	30	2054	8.40	19	30.99	155	50.48	11.10	23	8	.15	.8	.6 KON	1.5X	192	8
2002	SEP	30	2138	44.28	19	19.27	155	7.82	7.49	4012	.11	.6	.6	SF4	1.9X	219	7
2002	SEP	30	2139	18.00	19	18.73	155	7.62	5.08	4012	.09	.5	1.2	SF4	2.3X	193	8
2002	SEP	30	2141	23.09	19	19.06	155	7.73	3.44	22	9	.09	.6	1.3 SSF	1.5X	221	8
2002	OCT	1	0115	6.92	19	21.42	155	10.06	2.68	3511	.09	.5	.3	SER	1.9X	195	2
2002	OCT	1	1513	39.21	19	26.38	155	30.11	12.10	27	8	.12	.5	1.1 KAO	1.4X	94	6
2002	OCT	2	0359	23.58	19	18.84	155	30.63	0.01	26	5	.21	.6	.4 LSW	# 1.5X	86	9
2002	OCT	2	0424	38.29	19	18.10	155	30.58	0.02	29	5	.19	.4	.4 LSW	# 1.4X	87	10
2002	OCT	2	1609	10.38	19	46.80	155	1.78	39.30	32	9	.12	1.0	1.2 HIL	1.8X	248	9
2002	OCT	2	1756	2.93	19	21.60	155	1.62	6.94	24	7	.10	.9	.7 SF5	1.2X	230	8
2002	OCT	2	1817	49.46	19	12.06	155	33.73	6.10	3910	.14	.4	1.2	LSW	1.6X	136	21
2002	OCT	2	1823	44.39	19	18.12	155	8.78	1.88	28	8	.12	1.3	1.1 SSF	1.4X	224	9
2002	OCT	3	0510	57.13	19	11.40	155	20.01	44.98	27	8	.10	1.3	.9 DEP	1.6X	276	17
2002	OCT	3	1220	55.86	19	23.99	155	15.77	3.04	22	6	.06	.3	.2 SEC	1.6X	113	1
2002	OCT	3	1833	14.40	19	19.99	155	0.91	36.30	3810	.11	1.1	.6	DEP	1.8X	250	10
2002	OCT	3	2229	6.98	19	33.41	155	44.87	0.01	18	5	.11	.4	.3 KON	# 1.5X	128	6
2002	OCT	4	0108	9.67	19	22.45	155	29.17	8.87	4313	.10	.3	.5 KAO	1.5X	62	3	
2002	OCT	4	0246	19.03	19	19.52	155	8.75	6.13	33	6	.11	.7	.8 SF4	1.5X	214	6
2002	OCT	4	0857	52.79	19	38.59	155	46.68	12.69	23	5	.10	.6	.4 KON	1.2X	130	8
2002	OCT	4	1545	44.91	19	53.75	155	9.30	38.64	3812	.11	.8	1.1	KEA	1.9X	216	20
2002	OCT	5	0615	29.93	19	46.99	154	59.67	44.30	4814	.12	.8	.9	KEA	2.3X	221	10
2002	OCT	5	0623	25.72	19	0.89	155	28.71	37.22	19	6	.08	1.4	1.2 DLS	1.6X	250	16
2002	OCT	5	0708	9.54	20	26.58	156	6.28	10.74	22	6	.10	1.7	1.5 DIS	1.8X	169	44
2002	OCT	5	1355	19.15	19	25.43	155	17.06	9.46	28	7	.11	.6	.4 INTL	1.8X	95	1
2002	OCT	5	2105	0.65	19	19.33	155	12.30	8.07	29	8	.11	.7	.9 SF3	1.5X	228	6
2002	OCT	5	2241	18.18	19	55.40	155	32.50	37.01	4913	.11	.6	1.1	KEAF	3.1X	119	14
2002	OCT	6	0304	3.41	19	18.74	155	6.37	6.87	3110	.11	.7	.8 SF4	1.7X	227	9	
2002	OCT	6	0341	37.62	19	21.34	155	1.39	7.83	38	9	.15	1.0	.6 SF5	1.8X	210	8
2002	OCT	6	0848	1.21	19	24.54	155	16.72	1.00	19	7	.11	.2	.2 SSC	1.5X	122	1
2002	OCT	6	2020	16.63	19	27.41	155	28.59	11.84	20	7	.12	.5	1.3 KAO	.9X	70	9
2002	OCT	6	2111	46.49	19	19.28	155	12.36	4.38	30	9	.12	.7	2.9 SSF	1.2X	228	6
2002	OCT	6	2210	19.71	19	30.64	155	27.08	7.35	20	5	.11	.4	.9 MLO	1.1X	104	3
2002	OCT	7	0237	19.66	19	45.74	155	19.92	12.65	3413	.11	.3	.5	KEA	1.4X	105	13
2002	OCT	7	0412	32.85	19	9.84	155	38.61	0.79	17	4	.08	.9	.4 LSW	1.1X	211	13
2002	OCT	7	1135	37.16	19	14.71	155	28.09	9.51	4615	.13	.3	1.1	LSW	1.7X	95	10
2002	OCT	7	1159	25.66	19	21.98	155	29.97	10.16	39	9	.09	.3	.7 KAO	1.6X	63	4
2002	OCT	7	1822	11.87	20	0.78	155	35.63	11.65	20	6	.14	.8	.6 KOH	1.5X	173	18
2002	OCT	7	1829	38.07	19	57.09	155	34.90	15.89	26	7	.11	.6	.8 KOH	1.6X	151	13

YEAR	MON	DA	HRMN	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN		
				DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	RMKS	MAG	GAP	DS	
2002	OCT	7	1903	6.10	19	29.34	155	25.70	4.86	20	6	.14	.4	1.5 KAO	1.3X	83	4	
2002	OCT	7	2143	15.80	19	28.25	155	36.89	11.84	25	5	.09	.5	.6 MLOT	2.2X	82	2	
2002	OCT	7	2152	8.92	19	20.18	155	19.48	1.75	24	7	.10	.7	.5 SWR	1.3X	215	7	
2002	OCT	7	2213	40.54	19	21.48	155	6.71	8.06	40	8	.09	.6	.4 SF4	2.1X	129	4	
2002	OCT	8	0248	4.28	19	24.91	155	16.75	15.27	23	7	.13	1.1	.5 DEPL	1.5X	107	0	
2002	OCT	8	0320	5.16	19	11.82	155	39.51	7.27	4614	.15	.3	.8	LSW	2.4X	89	12	
2002	OCT	8	0348	32.41	19	19.19	155	8.60	6.64	3813	.12	.5	.7	SF4	1.3X	218	7	
2002	OCT	8	0530	48.50	19	18.72	155	25.78	9.74	3811	.14	.5	.6	LSW	1.2X	119	5	
2002	OCT	8	0739	27.21	19	15.62	155	14.67	6.58	3210	.10	.6	.9	SF1	1.1X	244	3	
2002	OCT	8	0740	59.60	19	19.15	155	7.58	7.96	4111	.09	.4	.5	SF4	1.9X	138	3	
2002	OCT	8	0923	18.73	19	27.70	155	29.50	10.53	3510	.12	.3	.8	KAO	1.8X	50	8	
2002	OCT	8	1048	7.25	19	11.75	155	38.80	4.85	4210	.15	.4	1.6	LSW	2.5X	90	13	
2002	OCT	8	1613	49.94	18	56.20	155	28.20	35.27	5117	.10	.8	1.1	DLS	2.6X	236	21	
2002	OCT	8	1629	39.84	19	9.47	155	38.12	4.88	34	8	.14	.4	2.6	LSW	2.0X	101	14
2002	OCT	8	1821	43.91	19	30.35	155	27.39	5.82	28	8	.13	.3	1.0	MLO	1.5X	59	3
2002	OCT	8	2039	33.09	19	25.39	155	29.54	11.51	19	6	.08	.4	1.0	KAO	1.0X	102	6
2002	OCT	8	2254	3.71	19	28.39	155	37.67	13.12	11	2	.08	.8	1.1	DMLT	1.1X	194	3
2002	OCT	8	2259	6.75	19	58.34	155	35.77	9.65	18	5	.11	.6	.7	KOH	1.2X	156	14
2002	OCT	8	2331	14.62	19	20.28	155	13.06	8.98	4111	.09	.5	.4	.2	SF2	1.6X	163	4
2002	OCT	9	0100	16.42	19	14.77	155	27.39	7.55	40	8	.14	.4	.7	LSW	1.8X	116	10
2002	OCT	9	0500	7.77	19	32.66	155	38.09	12.51	16	3	.13	.8	1.2	MLO	.5X	171	5
2002	OCT	9	0500	41.75	19	32.19	155	38.14	12.57	16	4	.10	.7	1.1	MLO	.5X	166	5
2002	OCT	9	0509	21.59	19	14.04	155	36.68	6.52	21	3	.16	.6	2.0	LSW	1.7X	91	15
2002	OCT	9	0845	56.03	20	2.16	155	21.09	8.89	30	7	.13	.8	.7	KEA	2.1X	187	12
2002	OCT	9	1528	55.06	19	19.95	155	7.38	5.64	32	9	.10	.5	1.1	SF4	1.6X	179	5
2002	OCT	9	2159	59.04	19	19.43	155	7.55	7.05	3511	.13	.7	.7	SF4	1.5X	218	7	
2002	OCT	10	0100	21.22	19	20.93	155	4.37	4.53	26	7	.13	1.1	3.8	SSF	1.1X	217	7
2002	OCT	10	0112	31.84	19	5.12	155	23.73	35.07	5117	.09	.6	.9	LOI	2.4X	195	11	
2002	OCT	10	0219	34.79	19	17.34	155	29.35	10.35	4310	.12	.4	.6</td					

ORIGIN TIME (HST)	LAT	N	LONG W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN					
YEAR	MON	DA	HRMN	SEC	DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	RMKS	MAG	GAP	DS

2002 OCT 12 0239 18.94 19 25.02 155 17.99 5.65 18 2 .14 .7 1.3 INTL 1.4U 87 1
 2002 OCT 12 0241 4.16 19 19.68 155 13.21 10.23 35 5 .11 .7 .4 SF2 1.8X 166 5
 2002 OCT 12 0757 58.50 19 26.55 155 18.58 7.90 17 4 .10 .6 1.1 INT 1.4X 100 3
 2002 OCT 12 1519 49.24 19 20.39 155 9.48 6.62 24 4 .09 .5 .9 SF3 1.4X 124 5
 2002 OCT 13 0310 17.68 19 25.24 155 29.41 10.79 20 2 .08 .5 1.0 KAO 1.3X 102 6

2002 OCT 13 1133 33.80 19 20.15 155 7.34 7.72 27 4 .12 .6 .8 SF4 1.9X 134 5
 2002 OCT 13 1647 8.81 19 51.11 155 32.98 22.92 17 3 .11 1.2 2.3 KEA 1.2X 163 12
 2002 OCT 13 1650 10.97 19 13.15 155 27.18 35.14 5015 .08 .5 .8 DLS 2.3X 125 7
 2002 OCT 14 0318 51.01 20 10.37 155 37.83 30.94 22 4 .10 1.2 1.8 KOH 1.6X 236 16
 2002 OCT 14 0411 47.80 19 19.82 155 8.63 7.99 4312 .11 .6 .4 SF4 2.2X 181 6

2002 OCT 14 0738 7.64 19 18.94 154 59.22 39.22 4513 .10 .9 .7 LER 1.9X 247 11
 2002 OCT 14 0752 27.36 20 20.07 155 35.45 5.84 19 6 .09 1.4 .9 KOH 1.6X 291 30
 2002 OCT 14 0908 17.79 19 25.21 155 15.95 14.07 3811 .08 .5 .3 DEP 1.6X 98 2
 2002 OCT 14 1017 29.35 19 19.12 154 59.19 39.26 4914 .10 .8 .5 LER 2.3X 239 11
 2002 OCT 14 1213 5.16 19 14.91 155 29.42 2.59 3913 .11 .3 .7 LSW 1.4X 82 10

2002 OCT 14 1627 48.53 20 0.68 155 31.51 8.40 23 7 .12 .6 .6 KEA 1.6X 189 22
 2002 OCT 14 2302 18.60 19 19.58 155 10.31 7.45 31 5 .11 .9 .6 SF3 1.4X 210 6
 2002 OCT 14 2345 43.96 19 23.29 154 58.89 7.57 28 1 .16 2.3 .5 LER 1.4X 259 3
 2002 OCT 15 0000 17.37 19 13.56 155 29.08 39.20 4815 .09 .5 .9 DLS 2.5X 96 8
 2002 OCT 15 0105 43.36 19 18.90 154 36.37 42.31 38 7 .14 1.8 1.4 DIS 2.4X 297 41

2002 OCT 15 0928 7.45 19 20.51 155 5.73 6.37 24 6 .10 .6 1.2 SF4 1.3X 159 6
 2002 OCT 15 1441 14.73 19 18.57 155 8.35 5.40 29 8 .09 .7 1.2 SF4 1.5X 222 8
 2002 OCT 15 1900 34.46 19 23.34 155 17.67 11.90 24 4 .10 .6 .8 INTL 1.3X 121 1
 2002 OCT 16 0322 58.89 19 22.46 155 10.77 2.26 20 6 .14 1.1 .4 SER 1.5X 187 1
 2002 OCT 16 0533 15.82 19 19.65 155 8.64 5.94 34 8 .12 .6 .8 SF4 1.5X 214 6

2002 OCT 16 1106 45.99 19 12.81 155 30.61 0.55 4215 .12 .3 .2 LSW 1.8X 79 8
 2002 OCT 16 1849 38.05 19 18.80 155 8.25 6.65 3110 .12 .6 .9 SF4 1.5X 222 8
 2002 OCT 16 1948 30.44 19 15.82 155 27.56 7.16 4011 .14 .4 1.0 LSW 1.8X 113 11
 2002 OCT 17 0105 26.36 19 21.30 155 30.56 10.02 22 6 .11 .5 1.1 KAO 1.1X 172 6
 2002 OCT 17 0411 28.01 19 16.82 155 28.95 4.75 23 3 .07 .4 1.7 LSW 1.4X 115 11

2002 OCT 17 0813 34.49 19 18.35 155 13.22 5.75 32 9 .11 .4 1.0 SF2 1.4X 128 2
 2002 OCT 17 1230 31.65 19 24.70 154 46.58 40.40 29 5 .13 1.7 1.4 LER 1.6X 288 21
 2002 OCT 17 1852 41.58 19 19.44 155 6.79 6.86 4012 .11 .6 .5 SF4 2.0X 191 7
 2002 OCT 18 0415 49.79 19 18.74 155 5.75 6.93 24 7 .10 .8 1.0 SF4 1.3X 296 9
 2002 OCT 18 0437 36.35 19 12.85 155 27.21 34.94 3310 .08 .6 1.1 DLS 1.4X 143 6

2002 OCT 18 0545 27.12 19 18.87 155 6.89 5.32 3511 .11 .7 1.1 SF4 1.7X 264 8
 2002 OCT 18 1224 51.37 19 45.99 155 53.73 28.80 4310 .10 .8 1.3 HUA 2.4X 192 11
 2002 OCT 18 1236 6.59 19 8.83 155 33.28 0.02 33 9 .13 .4 .2 LSW # 1.6X 131 10
 2002 OCT 18 1827 25.63 19 20.14 155 7.52 9.14 37 9 .13 .8 .6 SF4F 2.9X 183 6
 2002 OCT 18 1858 36.02 19 20.21 155 7.41 9.52 37 6 .11 .8 .4 SF4F 2.6X 183 6

2002 OCT 18 1858 58.08 19 19.33 155 7.50 8.24 19 6 .12 .8 .8 SF4 2.4X 261 7
 2002 OCT 18 1923 52.94 19 20.49 155 7.13 7.49 38 9 .10 .6 .5 SF4 1.9X 182 5
 2002 OCT 19 0829 16.83 19 28.56 154 52.19 0.84 32 8 .17 2.1 .9 SLE 1.9X 275 13
 2002 OCT 19 1046 40.92 19 25.25 155 39.27 3.43 17 4 .10 .7 .6 MLO 1.3X 206 3
 2002 OCT 20 0359 51.48 19 28.62 155 27.12 4.75 29 8 .10 .3 2.5 KAO 1.4X 57 6

ORIGIN TIME (HST)	LAT	N	LONG W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN					
YEAR	MON	DA	HRMN	SEC	DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	RMKS	MAG	GAP	DS

2002 OCT 20 0422 55.20 19 37.95 156 27.42 25.92 21 6 .11 1.4 5.9 DIS 1.8X 296 74
 2002 OCT 20 1055 14.93 19 26.83 155 28.97 10.40 23 5 .11 .5 1.1 KAO 1.1X 80 8
 2002 OCT 20 1932 8.77 19 21.50 155 13.62 36.48 4411 .10 .6 .7 DEP 2.2X 153 2
 2002 OCT 21 0025 23.72 19 13.02 155 25.83 1.18 29 8 .12 .3 .4 LSW 1.2X 153 7
 2002 OCT 21 0424 5.57 19 30.00 155 28.47 5.05 21 5 .11 .3 1.6 MLO 1.3X 72 4

2002 OCT 21 0529 27.13 19 22.89 155 17.27 2.21 18 5 .04 .3 .2 SSC 1.4X 135 1
 2002 OCT 21 0724 21.02 19 18.91 155 25.85 10.36 21 7 .09 .5 .7 LSW 1.1X 219 5
 2002 OCT 21 0805 31.47 19 25.49 155 15.35 13.06 25 7 .13 1.0 .5 DEPL 1.6X 218 3
 2002 OCT 21 0838 26.41 19 21.35 155 10.05 3.10 24 9 .07 .6 .3 SER 1.9X 190 3
 2002 OCT 21 0905 34.42 19 55.87 155 32.59 19.08 22 5 .09 .8 1.3 KEA 1.4X 224 15

2002 OCT 21 1529 36.91 19 18.81 155 1.51 35.38 4314 .11 .9 .8 DEP 2.1X 228 13
 2002 OCT 21 1825 30.42 19 28.36 155 52.18 11.16 26 6 .15 1.0 .6 KON 1.5X 205 12
 2002 OCT 22 0429 53.62 19 17.99 155 12.33 7.69 26 6 .13 .7 1.0 SF2 1.2X 239 9
 2002 OCT 22 1319 50.04 19 34.49 155 41.54 7.22 29 7 .10 .4 1.9 MLO 1.7X 96 11
 2002 OCT 22 1829 18.17 19 24.01 155 47.90 10.44 18 5 .11 .9 1.3 KON 1.1X 244 13

2002 OCT 23 0116 9.32 19 32.35 155 35.48 12.20 24 7 .13 .4 .7 MLO .8X 101 1
 2002 OCT 23 0124 20.74 19 30.08 155 42.40 2.73 19 7 .15 .6 1.2 MLO 1.2X 114 6
 2002 OCT 23 0133 11.54 19 19.92 155 10.21 7.95 36 8 .13 1.0 .6 SF3 1.2X 208 5
 2002 OCT 23 0323 33.59 19 32.62 155 35.14 10.71 13 3 .14 .6 1.1 MLO .8X 115 1
 2002 OCT 23 1747 19.06 19 51.66 155 11.64 0.30 25 9 .16 .9 .3 KEA 1.4X 213 16

2002 OCT 24 0238 41.69 19 28.59 155 37.20 11.99 27 8 .12 .5 .5 MLO 1.8X 83 2
 2002 OCT 24 0418 18.32 19 55.42 155 25.12 12.46 8 3 .04 1.4 .5 KEA 1.5X 220 9
 2002 OCT 24 0707 49.36 19 55.41 155 22.49 19.61 3911 .09 .6 1.1 KEA 2.0X 226 5
 2002 OCT 24 0720 54.25 19 24.42 155 37.50 2.45 20 6 .22 .6 .4 MLO 1.4X 112 1
 2002 OCT 24 0951 41.82 19 18.88 155 7.00 6.85 3410 .10 .7 .7 SF4 1.8X 263 8

2002 OCT 24 1235 57.83 19 21.26 155 29.75 10.91 33 9 .12 .5 .9 KAO 1.5X 133 4
 2002 OCT 24 1645 34.09 19 19.38 155 11.93 5.99 3812 .11 .6 .9 SF3 1.6X 230 6
 2002 OCT 24 1820 26.21 19 24.12 155 37.56 0.93 15 4 .22 .6 .8 MLO 1.0X 123 6
 2002 OCT 25 0146 49.89 19 25.61 155 37.08 0.02 17 5 .11 .3 .3 MLO # .8X 97 3
 2002 OCT 25 0149 50.86 19 25.18 155 37.48 2.27 22 7 .10 .3 .3 MLO 1.8X 104 2

2002 OCT 25 0225 54.29 19 25.27 155 37.50 2.35 31 7 .11 .3 .3 MLO 2.0X 107 2
 2002 OCT 25 0332 44.64 19 27.55 155 24.51 10.74 3411 .12 .4 .8 KAO 1.4X 41 5
 2002 OCT 25 0400 37.26 19 22.09 155 26.51 10.75 4614 .12 .4 .5 KAO 2.4X 65 2
 2002 OCT 25 0731 53.71 19 13.29 155 37.24 1.93 24 7 .10 .4 .6 LSW 1.5X 91 16
 2002 OCT 25 0738 27.05 19 3.60 155 7.70 44.81 35 9 .08 1.1 1.3 LOI 1.9X 258 35

2002 OCT 25 1251 33.65 20 2.71 155 21.99 12.70 17 4 .08 .6 .4 KEA 1.7X 189 14
 2002 OCT 25 1820 34.62 19 26.98 155 36.13 5.25 12 3 .16 .7 1.1 MLO .8X 118 1
 2002 OCT 25 2007 21.07 19 25.06 155 15.54 11.50 20 5 .11 .9 .7 INTL 1.6X 209 4
 2002 OCT 25 2057 21.62 20 7.11 155 45.69 23.64 26 7 .12 1.0 1.4 KOH 1.9X 179 2
 2002 OCT 26 0138 15.83 19 32.57 155 44.05 9.86 29 8 .12 .5 .6 KON 1.7X 104 5

2002 OCT 26 0153 19.33 19 25.50 155 15.25 14.34 19 7 .11 1.0 .4 DEPL 1.4X 242 4
 2002 OCT 26 0209 37.12 19 24.22 155 29.82 9.32 36 9 .10 .3 .6 KAO 1.5X 43 5
 2002 OCT 26 0424 49.71 19 29.55 155 26.36 7.08 20 7 .10 .4 1.0 KAO 1.3X 106 5
 2002 OCT 26 0538 18.30 19 56.54 155 23.81 7.95 18 5 .13 .8 1.0 KEA .9X 243 8
 2002 OCT 26 0645 58.38 19 20.05 155 5.32 6.27 4311 .11 .5 .6 SF4 2.0X 194 7

YEAR	MON	DA	HRMN	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN			
				DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	RMKS	MAG	GAP	DS		
2002	OCT	26	1252	13.13	19	23.17	155	14.64	3.32	30	9	.10	.3	.3	SEC	2.0X	111	3	
2002	OCT	26	1855	10.54	19	18.44	155	7.72	4.24	3512	.10	.6	2.2	SSF	1.6X	225	9		
2002	OCT	26	2140	45.15	19	17.93	155	14.86	8.55	4111	.14	.5	.6	SF1	1.4X	172	8		
2002	OCT	27	0104	41.59	19	16.48	155	34.08	9.94	23	5	.11	.4	1.6	LSW	1.4X	99	14	
2002	OCT	27	0206	42.67	19	23.44	155	17.09	2.73	17	6	.07	.3	.2	SSC	1.3X	110	0	
2002	OCT	27	0231	2.36	19	20.48	155	10.73	8.60	3610	.09	.8	.4	SF3	1.5X	202	4		
2002	OCT	27	0644	27.77	19	20.67	155	10.75	7.87	23	7	.13	.9	1.0	SF3	1.4X	254	4	
2002	OCT	27	1403	39.35	19	12.68	155	11.41	29.63	27	7	.10	1.5	1.4	DEP	1.5X	270	17	
2002	OCT	27	1439	40.39	19	12.99	155	32.76	0.34	3912	.15	.4	.2	LSW	1.8X	140	20		
2002	OCT	27	2216	32.36	19	58.92	155	31.12	36.21	20	6	.09	.8	1.0	KEA	1.3X	251	20	
2002	OCT	27	2228	23.52	19	17.41	155	23.40	6.12	29	8	.12	.4	1.5	SWR	1.5X	141	5	
2002	OCT	28	0125	19.26	19	18.10	155	0.69	38.21	3511	.09	1.1	.8	DEP	1.7X	262	13		
2002	OCT	28	0200	55.71	19	29.46	155	27.35	7.76	28	9	.11	.3	.9	KAO	1.4X	70	5	
2002	OCT	28	0606	9.51	19	14.29	155	33.04	0.65	4614	.15	.4	.2	LSW	2.3X	133	18		
2002	OCT	28	0616	3.28	19	18.53	155	14.78	5.80	33	9	.11	.6	.9	SF1	1.5X	211	7	
2002	OCT	28	0752	12.43	19	6.90	155	9.21	16.45	4713	.12	.9	9.6	LOI	2.7X	227	28		
2002	OCT	28	1133	1.41	19	18.25	155	10.67	30.06	21	5	.09	1.4	1.0	DEP	1.5X	271	8	
2002	OCT	28	1239	35.96	19	11.04	155	31.49	7.26	4010	.13	.4	1.0	LSW	2.0X	100	7		
2002	OCT	28	1609	26.09	19	27.90	154	46.59	16.39	19	5	.10	2.314	2.2	LER	-	1.6X	301	37
2002	OCT	28	1721	29.04	19	20.90	155	13.01	7.40	4311	.14	.5	.4	SF2	1.6X	106	3		
2002	OCT	28	1827	36.22	19	18.53	155	30.47	3.87	38	9	.13	.4	1.7	LSW	1.6X	87	9	
2002	OCT	28	2020	58.92	19	20.03	155	15.90	4.95	3010	.12	.4	1.2	SSF	1.3X	156	4		
2002	OCT	28	2109	16.67	19	17.88	155	12.74	8.60	4011	.11	.5	.6	SF2	1.8X	179	9		
2002	OCT	28	2134	10.90	19	16.70	155	12.79	1.40	23	8	.08	1.4	.8	SSF	1.4X	245	11	
2002	OCT	29	0131	34.15	19	1.19	155	27.83	56.38	23	6	.11	1.3	1.2	DLST	2.6X	222	15	
2002	OCT	29	0346	45.25	19	24.57	155	16.54	1.69	18	6	.09	.2	.2	SNC	1.5X	89	1	
2002	OCT	29	0717	15.87	19	24.13	155	25.67	9.78	36	9	.12	.4	.7	KAO	1.3X	59	5	
2002	OCT	29	0839	21.64	19	23.68	155	30.10	8.96	4110	.11	.3	.7	KAO	1.8X	53	5		
2002	OCT	29	1135	34.75	19	27.28	155	26.13	3.87	27	8	.12	.3	1.6	KAO	1.2X	50	7	
2002	OCT	29	1216	22.58	20	24.45	156	3.01	28.32	24	7	.12	1.4	2.1	KOH	2.1X	166	41	
2002	OCT	29	1542	44.38	17	36.64	155	49.75	6.86	34	8	.12	9.111	1.1	DIS	-	2.9X	336153	
2002	OCT	29	1825	39.75	19	11.01	155	18.75	37.06	24	7	.13	1.3	1.8	DEP	1.8X	245	19	
2002	OCT	29	1832	40.75	19	14.59	155	19.68	54.42	17	6	.12	2.3	1.2	DEPT	2.3X	276	12	
2002	OCT	29	2214	52.39	19	15.75	155	31.01	3.78	15	3	.10	.5	3.3	LSW	1.3X	150	13	
2002	OCT	30	0023	32.96	19	47.50	155	35.59	14.06	19	5	.08	.5	.6	KEA	1.4X	109	10	
2002	OCT	30	0738	26.25	20	0.40	155	39.00	17.52	3810	.09	.5	2.0	KOHF	2.2X	156	16		
2002	OCT	30	0943	55.87	19	13.14	155	25.74	32.12	3211	.11	.6	1.0	DLS	1.6X	161	8		
2002	OCT	30	1001	28.96	19	29.79	155	28.15	6.49	4511	.11	.3	.9	KAO	2.7X	47	4		
2002	OCT	30	1349	13.10	19	18.06	155	8.12	3.61	3411	.12	1.4	2.5	SSF	1.3X	263	9		
2002	OCT	30	1351	42.90	19	18.18	155	8.04	6.16	3512	.09	.7	1.2	SF4	1.8X	263	9		
2002	OCT	30	1352	25.49	19	18.41	155	8.15	4.10	3011	.09	.9	3.1	SSF	1.6X	262	9		
2002	OCT	30	1455	56.19	19	18.41	155	8.24	4.57	4014	.10	.6	2.4	SSF	1.6X	223	9		
2002	OCT	30	1458	30.04	19	18.65	155	8.62	4.00	2910	.10	1.3	3.7	SSF	1.3X	266	8		
2002	OCT	30	1726	47.23	19	12.85	155	25.25	33.32	4615	.10	.6	.9	DLS	2.2X	154	8		
2002	OCT	30	1908	21.35	19	19.98	155	24.62	10.22	23	5	.10	.5	.6	SWR	1.2X	164	2	

YEAR	MON	DA	HRMN	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN		
				DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	RMKS	MAG	GAP	DS	
2002	OCT	30	2133	45.85	19	16.58	155	7.49	42.13	4111	.13	.9	.9	DEP	2.1X	206	12	
2002	OCT	31	0528	57.57	19	29.27	155	27.16	8.61	4411	.12	.3	.8	KAO	2.5X	47	5	
2002	OCT	31	0626	52.73	19	17.96	155	13.16	2.78	31	9	.11	.5	.9	SSF	1.2X	216	9
2002	OCT	31	0943	2.25	19	16.74	155	10.28	32.91	22	5	.10	1.6	1.4	DEP	1.4X	260	11
2002	OCT	31	1309	24.79	19	21.81	155	28.05	8.95	25	7	.11	.6	.9	KAO	1.2X	160	1
2002	OCT	31	1847	19.90	19	20.29	155	7.30	8.28	4311	.11	.6	.4	SF4	2.6X	177	6	
2002	OCT	31	1847	59.60	19	19.40	155	7.35	6.60	4011	.13	.6	.9	SF4	2.5X	190	7	
2002	OCT	31	1849	12.17	19	18.78	155	6.90	3.10	24	8	.12	.8	1.1	SSF	1.8X	226	8
2002	OCT	31	1901	47.19	19	19.14	155	7.05	5.24	4114	.10	.6	1.0	SF4	1.8X	222	8	
2002	OCT	31	1921	47.90	19	10.86	155	16.41	43.36	20	5	.11	1.3	1.8	DEP	1.6X	265	21
2002	OCT	31	2056	10.18	19	0.03	156	35.73	23.20	11	.12	9.5	12.1	DIS	-	299104		
2002	OCT	31	2056	29.61	19	28.20	155	14.29	24.86	20	8	.13	1.5	.8	DEP	1.3X	287	4
2002	OCT	31	2218	6.18	19	23.50	155	21.58	10.46	3611	.07	.4	.6	KAO	1.3X	106	3	
2002	OCT	31	2247	4.86	19	19.75	155	7.08	7.49	38	9	.11	.5	.6	SF4	2.2X	188	7
2002	OCT	31	2339	52.40	19	29.21	154	59.95	7.57	16	1	.12	3.3	1.0	LER	1.7X	250	24
2002	NOV	1	0432	10.89	19	1.23	155	7.25	42.19	4212	.10	.9	1.3	LOI	2.0X	248	39	
2002	NOV	1	0626	43.84	19	16.56	155	6.43	42.01	3510	.12	1.2	.8	DEP	1.7X	239	13	
2002	NOV	1	1019	47.17	19	19.86	155	6.92	6.36	28	8	.11	.5	.8	SF4	1.3X	147	5
2002	NOV	1	1317	14.78	19	29.36	155	5.62	43.42	29	9	.10	1.9	.8	DEP	2.0X	194	12
2002	NOV	1	1434	57.40	19	9.87	155	24.41	49.92	10	.09	.47	9.2	LOIT	-	247	6	
2002	NOV	1	2147	7.47	19	23.38	155	16.95	6.96	13	2	.08	.6	.9	INTL	1.5X	109	1
2002	NOV	2	0341	51.11	19	24.78	155	16.12	2.08	12	2	.09	.4	.5	SNCL	1.9X	102	2
2002	NOV	2	0700	33.75	19	18.18	155	3.62	6.37	31	7	.11	.7	1.0	SF5	1.8X	243	12
2002	NOV	2	0745	54.51	19	4.32	155	23.86	35.14	21	3	.07	1.1	1.6	LOI	1.6X	228	12
2002	NOV	2	0800	38.20	19	24.73	155	17.43	7.23	16	.11	.6	1.2	INTL	1.4X	78	1	
2002	NOV	2	1000	27.82	19	26.47	155	28.92	8.22	30	9	.10	.3	1.0	KAO	1.3X	48	8
2002	NOV	2	1150	34.18	19	23.65	155	16.82	16.28	26	7	.16	1.2	.6	DEPL	1.8X	47	1
2002	NOV	2	1152															

ORIGIN TIME (HST)		LAT	N	LONG	W	DEPTH	N	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN
YEAR	MON	DA	HRMN	SEC	DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	RMKS

2002	NOV	4	0411	51.06	19	19.15	155	7.86	3.13	22	3	.09	.8	1.3	SSF	1.4X	220	8
2002	NOV	4	0500	10.43	19	13.55	155	34.03	2.00	3610	.15	.4	.7	LSW	1.6X	134	18	
2002	NOV	4	0607	34.67	20	14.09	155	49.98	37.75	28	8	.12	1.2	1.0	KOH	1.9X	303	13
2002	NOV	4	0804	56.30	19	28.79	154	52.24	0.03	29	6	.14	2.0	.6	SLEF#	2.0X	273	13
2002	NOV	4	0905	47.75	19	16.12	155	9.10	35.58	3511	.11	.9	.9	DEP	1.5X	193	12	

2002	NOV	4	0938	55.00	19	57.95	155	31.13	41.58	3713	.11	.7	.9	KEA	1.8X	170	19	
2002	NOV	4	1108	41.24	19	41.43	155	16.41	30.65	4415	.11	.5	1.0	KEA	2.0X	105	23	
2002	NOV	4	1109	44.24	19	24.44	155	17.44	3.08	15	2	.09	.4	.6	SSCL	1.2X	101	2
2002	NOV	4	2223	35.65	19	25.65	155	19.05	6.88	19	4	.10	.5	1.1	KAO	1.3X	87	3
2002	NOV	4	2304	10.56	19	31.73	155	13.35	25.92	4512	.11	.5	.9	DEPF	2.9X	69	9	

2002	NOV	5	0003	57.67	19	34.37	155	12.04	22.82	4013	.12	.4	1.1	DEP	1.5X	75	15	
2002	NOV	5	0108	27.42	19	2.95	155	26.72	35.63	3813	.09	.7	.9	DLS	1.6X	203	12	
2002	NOV	5	0232	50.19	19	23.41	155	16.20	10.37	24	6	.12	.6	.5	INTL	1.5X	81	1
2002	NOV	5	0236	51.95	19	25.15	155	16.55	12.19	22	5	.11	.8	.7	INTL	2.0X	104	1
2002	NOV	5	1058	53.26	19	28.34	155	27.89	4.16	31	8	.12	.3	2.5	KAO	1.8X	61	7

2002	NOV	5	1104	57.25	19	29.00	155	27.83	8.40	22	7	.12	.4	1.0	KAO	1.3X	77	6
2002	NOV	5	1139	49.42	19	19.16	155	13.64	9.02	30	4	.11	.7	.6	SF2	1.5X	182	6
2002	NOV	5	1156	47.51	19	12.77	155	25.08	34.79	20	7	.12	1.6	1.2	DLS	1.5X	260	14
2002	NOV	5	1254	17.41	19	23.67	155	15.43	12.75	17	4	.14	1.1	.7	INTL	1.5X	155	2
2002	NOV	5	1930	34.85	19	52.67	155	49.05	37.86	19	4	.09	1.1	1.5	HUA	1.2X	261	17

2002	NOV	5	2100	42.88	19	1.07	155	26.40	36.65	4816	.09	.7	1.0	DLS	2.6X	214	16	
2002	NOV	5	2140	5.93	19	14.89	155	32.84	7.35	27	8	.14	.4	1.2	LSW	1.2X	79	13
2002	NOV	6	0053	0.26	18	56.34	155	11.54	11.64	23	7	.13	4.0	5.0	LOI	1.5X	287	49
2002	NOV	6	0124	13.05	19	16.85	155	33.89	2.59	3910	.13	.3	.8	LSW	1.7X	72	14	
2002	NOV	6	0622	9.27	19	17.54	155	12.48	9.47	36	8	.08	.6	.5	SF2	2.0X	183	9

2002	NOV	6	0757	15.13	19	18.88	155	8.16	41.18	2510	.07	2.7	1.0	DEP	2.3X	221	8	
2002	NOV	6	0922	43.84	19	17.14	155	12.14	8.94	29	5	.12	.9	.9	SF3	1.5X	186	10
2002	NOV	6	0937	13.02	19	18.32	155	15.18	8.70	29	4	.09	.9	.6	SFL	1.5X	223	5
2002	NOV	6	1230	37.94	19	31.17	155	52.28	7.84	33	9	.13	.7	.4	KON	2.0X	226	11
2002	NOV	6	1239	2.87	19	25.24	155	29.88	10.65	29	8	.08	.4	.8	KAO	1.5X	51	6

2002	NOV	6	1619	32.66	19	30.35	156	20.31	5.94	29	6	.13	1.1	1.4	DIS	1.9X	229	56
2002	NOV	6	1830	59.25	19	22.53	155	29.96	11.22	21	7	.12	.6	1.1	KAO	1.1X	154	4
2002	NOV	6	2051	48.36	19	26.32	155	18.64	8.05	19	7	.12	.6	1.1	INT	1.0X	95	2
2002	NOV	6	2107	37.78	19	45.99	155	26.70	23.84	25	5	.09	.6	1.1	KEA	1.2X	79	2
2002	NOV	6	2249	37.76	19	53.40	156	45.51	7.84	30	9	.13	2.5	3.2	DIS	2.2X	255	99

2002	NOV	7	0242	6.51	19	19.89	155	10.55	7.58	3611	.10	.7	.5	SF3	1.6X	208	5	
2002	NOV	7	0403	58.93	19	20.31	155	10.35	8.03	3810	.12	.6	.4	SF3	1.8X	172	5	
2002	NOV	7	0406	33.74	19	18.51	155	10.55	3.76	22	7	.11	1.2	2.9	SSF	1.3X	250	8
2002	NOV	7	0659	47.64	19	25.28	155	17.02	6.57	18	6	.12	.6	.8	INTL	1.6X	96	1
2002	NOV	7	1356	53.80	19	27.22	155	29.59	9.54	21	6	.08	.4	1.2	KAO	1.9X	82	9

2002	NOV	7	1846	1.64	19	24.60	155	15.57	1.68	18	6	.09	.3	.2	SNCL	1.1X	133	2
2002	NOV	8	0246	2.90	19	12.14	155	25.06	34.40	4214	.12	.7	1.0	DLS	1.8X	171	7	
2002	NOV	8	0910	45.69	19	26.86	154	40.95	30.55	3812	.13	1.1	1.8	LER	2.1X	312	31	
2002	NOV	8	1323	44.56	19	11.71	155	40.57	9.45	16	3	.16	1.0	4.0	LSW	1.4X	168	18
2002	NOV	8	1353	1.46	19	23.98	155	25.39	11.25	22	4	.10	.6	1.1	KAO	1.4X	84	5

ORIGIN TIME (HST)		LAT	N	LONG	W	DEPTH	N	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN
YEAR	MON	DA	HRMN	SEC	DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	RMKS

2002	NOV	8	1440	53.74	19	20.90	155	26.86	10.17	20	4	.11	.5	1.0	KAO	1.1X	88	3
2002	NOV	8	1501	11.80	19	26.11	155	30.21	10.13	4311	.10	.3	.5	KAO	2.7X	38	8	
2002	NOV	8	1527	53.48	19	12.43	155	25.26	34.91	4211	.10	.7	1.0	DLS	2.4X	158	7	
2002	NOV	8	2113	34.76	19	17.08	155	7.67	6.99	21	3	.11	1.5	1.0	SF4	1.7X	282	11
2002	NOV	8	2126	5.18	19	20.51	155	9.03	6.62	30	5	.13	.9	.8	SF4	1.9X	215	5

2002	NOV	8	2312	42.73	19	22.73	154	59.44	3.82	20	3	.11	1.3	1.9	SLE	1.3X	311	14	
2002	NOV	9	1344	52.91	19	26.72	155	19.47	6.13	18	4	.08	.6	1.1	KAO	1.4X	111	4	
2002	NOV	9	1845	48.02	19	21.92	155	4.94	6.34	25	4	.14	1.0	.8	SF5	1.7X	204	5	
2002	NOV	10	0243	27.68	19	16.89	155	1.45	44.84	19	3	.11	2.4	1.1	DEP	1.6X	261	16	
2002	NOV	10	0316	55.47	18	55.04	155	16.84	16.68	20	5	.13	1.9	1.6	LOI	-	1.7X	280	33

2002	NOV	10	1445	55.40	19	17.87	155	23.42	4.95	36	4	.15	.5	1.3	SWR	2.0X	135	4
2002	NOV	10	1750	27.09	19	14.46	155	6.84	42.12	25	5	.11	1.9	1.3	DEP	1.4X	288	16
2002	NOV	10	1907	9.70	19	18.62	155	27.17	50.58	21	5	.14	1.2	2.0	DLS	1.5X	115	7
2002	NOV	10	2010	25.89	19	13.20	155	30.03	40.90	17	2	.08	1.1	2.0	DLS	2.3X	107	8
2002	NOV	10	2141	47.98	19	28.44	155	52.53	9.06	19	3	.17	1.8	.9	KON	1.4X	249	12

2002	NOV	10	2247	30.39	19	12.75	155	24.99	36.93	30	7	.12	.9	1.2	DEP	1.6X	158	8	
2002	NOV	11	0435	3.99	19	24.24	155	26.88	9.25	25	5	.10	.4	.9	KAO	1.3X	63	3	
2002	NOV	11	0459	48.95	19	39.90	155	15.45	16.06	22	8	.08	.5	2.5	KEA	1.5X	103	22	
2002	NOV	11	0537	14.52	19	47.53	155	36.24	14.99	23	6	.11	.6	.7	KEA	1.9X	113	9	
2002	NOV	11	0926	52.51	18	55.29	155	16.87	16.65	21	4	.11	1.6	1.4	LOI	-	1.7X	267	33

2002	NOV	11	0939	58.37	18	54.97	155	16.54	19.41	19	4	.12	2.1	7.4	LOI	1.7X	275	33	
2002	NOV	11	0954	32.76	18	54.39	155	16.10	17.03	14	2	.09	2.3	3.6	LOI	-	1.7X	284	35
2002	NOV	11	0955	23.52	18	53.76	155	15.95	21.44	17	2	.10	2.3	5.7	LOI	1.7X	278	36	
2002																			

ORIGIN TIME (HST)				LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN			
YEAR	MON	DA	HRMN	SEC	DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	RMKS	MAG	GAP	DS	
2002	NOV	11	1355	50.59	19	18.72	155	13.95	8.80	23	3	.11	1.1	.7	SF2	1.5X	225	7	
2002	NOV	11	2127	49.81	19	15.05	155	6.47	44.39	25	4	.11	1.6	1.7	DEP	1.5X	246	18	
2002	NOV	11	2130	34.12	19	24.63	155	37.91	2.91	40	9	.14	.3	.4	MLO	2.8X	96	1	
2002	NOV	11	2333	46.27	19	21.42	155	18.31	13.03	11	3	.10	2.3	1.3	DEPL	2.2X	251	4	
2002	NOV	12	0000	55.24	19	23.76	155	14.77	3.24	33	7	.11	.3	.3	SEC	2.5X	94	2	
2002	NOV	12	0333	55.31	19	12.07	155	25.09	36.47	22	3	.11	1.0	1.6	DLS	1.2X	186	7	
2002	NOV	12	0637	22.98	19	23.54	155	15.00	0.72	4210	.11	.2	.3	.3	SCF	2.8X	101	2	
2002	NOV	12	1004	37.79	18	53.83	155	16.01	15.62	28	6	.12	1.8	4.8	LOI	1.8X	256	36	
2002	NOV	12	1013	43.11	18	54.68	155	16.32	17.55	30	7	.13	1.41	2.3	LOI	-	2.0X	253	34
2002	NOV	12	1136	9.48	19	29.23	155	26.13	9.74	27	8	.11	.4	.9	KAO	1.5X	66	5	
2002	NOV	12	1332	3.43	19	22.87	155	13.98	3.83	23	7	.10	.5	.5	SEC	1.8X	124	2	
2002	NOV	12	1354	56.25	18	55.87	155	17.11	17.32	24	7	.12	1.61	2.6	LOI	-	2.0X	274	31
2002	NOV	12	1545	35.28	19	16.30	155	6.99	43.24	38	8	.12	1.1	.8	DEP	1.9X	219	13	
2002	NOV	12	1709	45.69	19	33.69	155	37.24	9.57	21	4	.11	.7	1.2	MLO	1.5X	181	8	
2002	NOV	12	1710	11.42	19	33.88	155	37.33	8.23	32	8	.11	.4	.9	MLO	2.0X	106	9	
2002	NOV	12	2254	28.81	19	9.88	155	38.02	2.01	20	4	.10	.5	1.0	LSW	1.6X	98	14	
2002	NOV	13	0755	11.37	19	14.62	155	7.62	39.79	18	4	.11	2.4	1.4	DEP	1.4X	299	16	
2002	NOV	13	1157	15.85	19	7.88	155	35.41	0.82	17	3	.11	.5	.5	LSW	1.5X	131	14	
2002	NOV	13	1624	22.18	20	7.78	155	45.94	25.59	20	6	.11	1.1	1.3	KOH	2.1X	216	1	
2002	NOV	13	2028	30.99	19	21.03	155	18.37	1.32	16	5	.10	.5	.7	SWR	1.2X	188	5	
2002	NOV	13	2031	6.91	19	46.18	155	46.22	19.20	15	4	.15	1.3	2.7	HUA	1.3X	190	12	
2002	NOV	13	2208	19.43	19	23.84	155	30.05	9.71	29	6	.11	.4	.6	KAO	1.9X	106	5	
2002	NOV	13	2226	11.05	19	19.86	155	3.41	9.06	40	8	.11	.8	.4	SF5F	2.4X	199	10	
2002	NOV	13	2314	43.96	19	36.37	156	3.14	39.25	23	8	.11	1.2	1.8	KON	1.4X	280	24	
2002	NOV	13	2347	11.33	19	4.67	155	40.06	24.73	21	5	.09	1.0	2.1	DLS	1.6X	132	11	
2002	NOV	14	0102	57.89	19	19.87	155	12.43	8.49	35	8	.12	.9	.5	SF2	1.5X	205	5	
2002	NOV	14	0449	6.89	19	15.86	155	6.83	43.46	38	8	.12	.8	.9	DEP	1.9X	203	14	
2002	NOV	14	1118	25.55	19	19.53	154	55.69	0.51	21	4	.12	2.1	.9	SLE	1.8X	286	12	
2002	NOV	14	1159	24.55	19	22.31	155	2.33	6.39	27	5	.13	1.1	.8	SF5	1.8X	212	8	
2002	NOV	14	1210	54.59	19	13.26	155	32.30	2.29	21	3	.14	.5	1.4	LSW	1.6X	76	10	
2002	NOV	14	1552	12.53	19	12.28	155	39.84	3.31	18	4	.13	.6	2.2	LSW	1.7X	99	12	
2002	NOV	14	2118	9.74	19	18.58	155	8.41	2.60	24	3	.12	.8	1.4	SSF	1.6X	222	8	
2002	NOV	14	2123	36.51	19	19.44	155	8.57	7.39	29	6	.10	1.0	.6	SF4	1.7X	216	7	
2002	NOV	15	0155	24.33	19	19.71	155	8.69	8.00	29	4	.12	1.2	.6	SF4	1.7X	213	6	
2002	NOV	15	1102	47.47	19	20.40	155	10.80	8.49	26	7	.08	.9	.5	SF3	1.4X	223	5	
2002	NOV	15	1534	36.80	19	18.22	155	15.06	8.84	34	5	.12	.8	.5	SF1	1.9X	200	5	
2002	NOV	15	1833	50.23	19	51.07	155	22.97	27.47	3014	.12	.5	1.1	KEA	1.8X	132	6		
2002	NOV	15	1907	5.80	19	12.82	155	27.86	0.90	30	9	.13	.4	.3	LSW	1.8X	120	6	
2002	NOV	15	2324	26.97	19	23.20	155	30.62	11.48	27	8	.11	.4	.7	KAO	1.4X	146	5	
2002	NOV	16	0352	5.56	19	17.94	155	28.47	9.01	29	9	.11	.4	.8	LSW	1.4X	112	9	
2002	NOV	16	1738	59.35	19	20.88	155	4.31	6.65	3311	.12	.8	.9	SF5	1.9X	217	7		
2002	NOV	16	1816	19.67	19	24.11	155	29.40	9.74	31	9	.09	.4	.7	KAO	1.5X	123	4	
2002	NOV	17	0056	36.96	19	40.41	155	28.93	25.67	27	6	.10	.6	.9	KEA	1.6X	55	8	
2002	NOV	17	0153	40.30	19	12.99	155	19.74	45.09	4511	.12	.7	1.0	DEP	2.9X	176	15		
2002	NOV	17	0953	58.80	19	28.93	155	28.13	8.61	17	5	.11	.5	1.1	KAO	1.3X	63	6	

ORIGIN TIME (HST)				LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN		
YEAR	MON	DA	HRMN	SEC	DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	RMKS	MAG	GAP	DS
2002	NOV	17	1506	36.31	19	25.91	155	28.38	10.45	22	6	.12	.5	1.2	KAO	.9X	80	6
2002	NOV	17	1745	47.54	19	24.92	155	29.50	9.19	34	9	.11	.4	.8	KAO	1.5X	82	6
2002	NOV	17	1910	34.65	19	25.00	155	16.91	12.61	15	4	.08	1.2	.9	INTL	1.4X	204	1
2002	NOV	18	0046	14.80	19	58.33	155	23.39	32.06	3912	.11	.6	1.0	KEA	1.8X	194	10	
2002	NOV	18	0814	43.22	19	27.88	155	29.21	11.25	19	6	.13	.6	1.3	KAO	1.1X	67	8
2002	NOV	18	1811	43.93	19	25.02	155	17.00	12.28	18	4	.10	1.0	.8	INTL	1.5X	148	0
2002	NOV	18	2050	7.78	19	19.19	155	8.65	6.01	3312	.11	.6	1.1	SF4	1.3X	260	7	
2002	NOV	19	0110	32.09	19	22.85	155	7.52	43.50	4513	.10	.6	.7	DEP	2.8X	159	1	
2002	NOV	19	0145	54.77	19	40.32	155	28.83	24.58	18	4	.09	.8	1.3	KEA	1.5X	151	7
2002	NOV	19	0221	8.80	19	25.23	155	37.13	1.97	16	4	.13	.4	.5	MLO	1.3X	106	2
2002	NOV	19	0823	44.81	19	11.88	155	30.79	36.62	16	2	.06	.9	1.8	DLS	1.7X	130	7
2002	NOV	19	1202	47.18	19	24.66	155	16.79	13.52	20	6	.06	.9	.5	DEPL	1.6X	165	2
2002	NOV	19	1237	38.43	19	18.71	155	11.53	2.63	30	9	.11	.9	1.0	SSF	1.4X	238	8
2002	NOV	19	2039	20.83	19	25.56	155	15.69	13.62	22	6	.11	1.1	.4	DEPL	1.3X	173	3
2002	NOV	19	2219	9.52	19	18.70	155	12.59	27.81	26	7	.12	1.4	1.3	DEP	1.5X	232	7
2002	NOV	19	2343	14.83	19	25.97	155	30.64	11.54	18	7	.09	.5	.9	KAO	2.1X	104	4
2002	NOV	20	1241	0.30	19	19.73	155	13.68	8.44	37	9	.11	.4	.6	SF2	1.8X	120	5
2002	NOV	20	1414	1.74	19	14.06	155	19.85	8.48	18	6	.10	.9	2.0	SWR	1.1X	256	12
2002	NOV	20	2158	25.66	19	42.96	155	26.52	25.34	4814	.11	.4	1.0	KEAF	2.3X	63	7	
2002	NOV	20	2319	5.88	19	25.72	155	15.99	13.88	17	5	.09	1.0	.5	DEPL	1.1X	182	2
2002	NOV	21	0027	26.22	19	12.03	155	26.51	5.70	19	6	.13	.6	1.7	LSW	1.2X	188	5
2002	NOV	21	0312	8.64	19	21.32	156	2.27	43.68	20	5	.10	1.6	1.8	KON	1.3X	262	33
2002	NOV	21	0324	30.62	19	28.84	155	26.50	10.20	33	9	.13	.4	.8	KAO	1.4X	48	6
2002	NOV	21	0332	31.58	19	10.67	155	39.54	0.89	26	7	.14	.4	.4	LSW	1.5X	87	12
2002	NOV	21	0638	2.33	19	8.83	155	34.48	2.47	20	5	.07	.4	.9	LSW	1.8X	125	12
2002	NOV	21	0710	24.41	19	6.72	155	23.02	45.71	16	4	.10	1.5	2.2	LOI	1.8X	279	10
2002	NOV	21	0831	32.58	19	29.06	155	28.65	9.05	21	7	.12	.4	1.3	KAO	1.3X	64	6
2002	NOV	21	1234	1.81	19	26.83	155	23.40	8.74	31	8	.11	.4	.9	KAO	1.6X	48	5
2002	NOV	21	1604	8.85	19	18.34	155	6.94	3.70	3413	.11	.7	1.7	SSF	1.6X	228	9	
2002	NOV	21	1737	8.20	19	44.63	155	41.69	14.41	22	7	.12	.7	.5	KEA	1.4X	179	13
2002	NOV	22	0859	37.72	19	59.40	155	15.32	13.13	4215	.13	.6	.3	KEA	2.1X	132	2	
2002	NOV	22	0921	19.50	19	17.93	155	10.88	5.53	31	8	.12	.7	1.5	SF3	1.4X	249	9
2002	NOV	22	1010	59.91	19	24.34	155	16.87	14.16	20	6	.12	.8	.5	DEPL	1.3X	148	2
2002	NOV	22	1258	8.97	19	15.50	155	32.06	13.25	22	7	.12	.4	1.6	DLS	1.5X	75	13
2002	NOV	22	2056	26.62	19	22.96	155	2.49	7.61	3310	.14	.8	.5	SF5	1.5X	205	8	
2002	NOV	22	2059	12.50	19	56.17	155	40.37	6.79	18	5	.15	.7	1.2	KOH	1.2X	141	9
2002	NOV	23	0022	27.76	19	11.09	155	24.94	35.90	3010	.09	1.0	1.2	DEP	1.3X	262	17	
2002	NOV	23	0033	53.72	19	10.49	155	25.33	35.18	3912	.10	.8	1.0	DLS	1.6X	196	5	
2002	NOV	23	0106	5.36	19	32.29	155	45.46	6.03	17	4	.14	.9	1.4	KON	1.5X	139	3
2002	NOV	23	0226	22.01	20	6.35	155	45.43	20.58	19	4	.11	1.6	2.4	KOH	1.6X	161	3
2002	NOV	23	0811	5.97	20	0.09	155	31.39	7.46	26	9	.13	.6	.5	KEA	1.5X	185	21
2002	NOV	23	0854	13.57	19	17.06	155	6.24	13.98	4613	.13	.7	.3	DEP	2.5X	200	12	
2002	NOV	23	1207	19.49	19	37.00	155	5.49	12.85	4013	.11	.5	.6	HILF	2.5X	117	12	
2002	NOV	23	1443	29.67	19	17.88	155	29.12	2.41	30	9	.13	.5	.8	LSW	1.5X	164	9
2002	NOV	23	1832	13.23	19	25.04	155	15.22	12.82	20	6	.16	1.2	.4	INTL	1.3X	243	4

YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN	
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	RMKS	MAG	GAP	DS

2002 NOV 24 0106 14.86 19 10.70 155 40.13 10.27 24 5 .11 .5 1.0 LSW
 2002 NOV 24 0423 30.69 19 22.45 155 3.59 7.80 17 1 .13 2.0 .9 SF5
 2002 NOV 24 0545 5.63 20 8.20 155 45.98 25.86 13 3 .11 1.5 1.4 KOH
 2002 NOV 24 0812 44.79 19 25.62 155 18.61 6.15 16 5 .16 .7 1.1 INT
 2002 NOV 24 0925 15.57 19 29.04 155 26.28 9.57 23 7 .09 .4 .8 KAO

2002 NOV 24 1051 46.34 19 20.76 155 8.53 8.25 4110 .10 .6 .4 SF4
 2002 NOV 24 1653 2.92 19 23.28 155 17.15 2.04 18 6 .09 .3 .3 SSC
 2002 NOV 24 1726 21.35 19 11.83 155 27.50 6.19 3810 .12 .3 .9 LSW
 2002 NOV 24 1904 59.15 19 27.05 155 28.80 8.82 18 6 .14 .5 1.6 KAO
 2002 NOV 24 2020 49.29 19 22.13 155 31.54 25.45 3713 .09 .4 .9 DML

2002 NOV 24 2049 15.84 19 23.94 155 25.37 10.22 30 9 .12 .4 .9 KAO
 2002 NOV 24 2143 46.69 19 17.73 155 28.56 8.97 4613 .11 .3 .6 LSW
 2002 NOV 24 2307 1.10 19 24.01 155 29.30 8.97 38 9 .09 .3 .6 KAO
 2002 NOV 25 0139 59.78 19 12.87 155 27.25 0.14 4514 .14 .3 .2 LSW
 2002 NOV 25 0220 35.15 19 18.74 155 5.80 5.43 4012 .12 .6 1.3 SF4

2002 NOV 25 0242 3.94 19 34.95 155 10.02 19.06 4216 .11 .4 1.4 DEP
 2002 NOV 25 0313 18.78 19 25.03 155 16.63 13.07 23 6 .14 .8 .6 DEPL
 2002 NOV 25 0358 40.43 18 53.95 155 15.95 15.82 36 8 .10 1.4 4.4 LOI
 2002 NOV 25 1005 50.80 20 5.40 155 19.18 13.02 12 5 .08 1.8 .8 KEA
 2002 NOV 25 1414 16.72 19 19.23 155 30.00 10.08 26 3 .10 .5 1.2 KAO

2002 NOV 25 1822 36.38 19 6.07 155 22.06 39.23 12 .11 5.9 7.1 LOIT
 2002 NOV 25 2057 10.44 19 24.79 155 16.77 12.93 16 4 .09 1.0 .6 INTL
 2002 NOV 26 0046 12.16 19 26.08 155 19.12 7.79 20 7 .08 .6 .8 KAO
 2002 NOV 26 0101 4.80 19 49.69 155 24.25 21.22 24 7 .10 .6 1.1 KEA
 2002 NOV 26 0123 25.42 19 23.92 155 16.86 12.77 19 3 .11 1.2 .8 INTL

2002 NOV 26 1618 22.24 19 23.97 155 16.43 14.42 3810 .11 .7 .3 DEP
 2002 NOV 26 1702 26.67 19 18.87 155 12.51 2.18 22 6 .11 .6 .9 SSF
 2002 NOV 26 1814 20.44 19 25.33 155 17.07 13.02 17 5 .10 .7 .8 DEPL
 2002 NOV 27 0029 5.81 19 26.17 155 15.83 8.75 18 5 .14 1.0 .8 INTL
 2002 NOV 27 0727 38.08 19 21.08 155 8.13 8.71 31 7 .09 .9 .6 SF4

2002 NOV 27 0909 10.58 19 26.02 155 16.98 9.94 19 4 .12 .9 1.1 INTL
 2002 NOV 27 1341 56.36 19 25.19 155 17.33 10.66 26 6 .12 .7 .8 INTL
 2002 NOV 27 1355 59.34 19 14.20 155 26.58 2.60 34 9 .14 .4 .8 LSW
 2002 NOV 27 1553 4.78 19 17.04 155 18.78 28.09 22 7 .08 1.0 1.0 DEP
 2002 NOV 27 1952 37.24 19 23.94 155 14.74 15.56 22 7 .09 .9 .3 DEPL

2002 NOV 27 2114 37.23 19 23.25 155 16.93 2.96 18 6 .08 .4 .3 SSC
 2002 NOV 28 0009 57.65 19 15.95 155 28.61 7.29 31 6 .18 .5 1.3 LSW
 2002 NOV 28 0520 27.62 19 23.98 155 16.90 10.28 31 8 .13 .6 .5 INTL
 2002 NOV 28 0723 49.86 19 21.65 155 1.52 6.32 21 7 .13 1.6 2.5 SF5
 2002 NOV 28 0855 39.88 19 18.50 155 8.00 4.87 3410 .10 .7 2.1 SSF

2002 NOV 28 1015 41.79 19 23.87 155 16.38 11.77 21 6 .16 .8 1.1 INTL
 2002 NOV 28 1330 6.02 19 20.69 155 11.57 7.22 3811 .13 .7 .6 SF3
 2002 NOV 28 1509 50.30 19 20.55 155 13.02 6.40 30 9 .13 .7 .8 SF2
 2002 NOV 28 1834 27.26 19 30.91 155 26.92 6.03 17 5 .13 .4 1.1 MLO
 2002 NOV 28 1846 23.29 19 24.83 155 16.84 12.93 19 5 .09 .8 .8 INTL

YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN	
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	RMKS	MAG	GAP	DS

2002 NOV 28 2331 21.56 19 23.86 155 16.61 12.90 26 7 .13 .7 .8 INTL
 2002 NOV 29 0118 38.99 18 50.45 156 47.18 2.80 35 6 .12 5.0 3.5 DIS
 2002 NOV 29 0525 44.79 19 25.90 155 16.75 9.24 22 3 .14 .6 1.1 INT
 2002 NOV 29 0706 4.78 19 24.27 155 16.53 1.52 13 3 .05 .2 .2 SSC
 2002 NOV 29 0942 40.53 19 12.73 155 27.77 0.45 3310 .17 .4 .4 LSW

2002 NOV 29 1448 1.88 19 19.42 155 7.61 7.75 26 5 .11 .9 .7 SF4
 2002 NOV 29 2001 44.70 19 27.05 155 23.06 10.10 3411 .09 .4 .8 KAO
 2002 NOV 30 0345 49.84 19 25.72 155 16.19 8.85 22 7 .14 .7 .5 INTL
 2002 NOV 30 0524 38.82 19 32.74 155 15.09 24.25 22 6 .10 1.0 1.2 DEP
 2002 NOV 30 1017 43.76 19 6.67 155 28.07 29.62 3010 .10 .7 1.3 DLS

2002 NOV 30 1631 22.69 19 16.41 155 33.39 0.46 4011 .13 .3 .2 LSW
 2002 NOV 30 1736 48.69 19 50.54 155 25.13 23.93 34 9 .09 .5 1.1 KEA
 2002 DEC 1 0148 18.19 19 17.79 155 13.02 2.41 30 8 .10 .9 1.0 SSF
 2002 DEC 1 0456 58.33 19 24.06 155 15.66 16.82 22 7 .09 .9 .8 DEPL
 2002 DEC 1 1017 34.85 19 17.82 155 4.16 4.42 24 7 .11 .9 4.0 SSF

2002 DEC 1 1023 17.22 19 23.52 155 16.91 13.93 30 8 .19 .8 .7 DEPL
 2002 DEC 1 1050 32.34 19 6.15 155 28.10 31.70 20 6 .09 1.2 1.7 DLS
 2002 DEC 1 1508 7.22 20 39.52 156 32.90 1.05 21 6 .07 1.7 .7 DIS
 2002 DEC 1 1611 23.08 19 21.35 155 25.84 9.17 3910 .12 .4 .6 KAO
 2002 DEC 1 1616 34.74 19 18.68 155 7.24 6.61 4113 .12 .6 .9 SF4

2002 DEC 1 1641 19.83 19 26.31 155 15.73 1.44 22 6 .12 .3 .5 SNCL
 2002 DEC 1 1909 24.56 19 18.76 155 7.97 1.90 32 9 .10 .7 .6 SSF
 2002 DEC 2 0246 30.55 19 6.62 155 32.67 36.03 23 7 .08 .9 1.3 DLS
 2002 DEC 2 0304 19.43 19 22.52 155 17.25 11.55 25 7 .10 .6 .8 INTL
 2002 DEC 2 0717 56.04 19 25.64 155 16.73 14.24 21 7 .11 1.0 .6 DEPL

2002 DEC 2 0913 24.30 19 19.56 155 13.02 4.78 22 2 .10 1.2 2.4 SSF
 2002 DEC 2 1428 41.71 19 24.27 155 15.76 13.20 17 .11 1.6 1.8 DEP
 2002 DEC 2 1444 42.43 19 18.80 155 7.52 5.54 23 2 12 1.3 1.9 SF4
 2002 DEC 2 1445 29.97 19 18.91 155 7.44 4.04 19 1 .09 1.6 5.4 SSF
 2002 DEC 2 1626 16.89 19 16.02 155 27.64 7.79 26 2 .14 .5 1.0 LSW

2002 DEC 2 1759 24.42 19 15.65 155 27.59 4.71 21 6 .13 .6 3.1 LSW
 2002 DEC 2 1800 26.01 19 23.03 155 14.78 3.66 18 7 .08 .4 .5 SEC
 2002 DEC 2 1904 31.15 19 24.06 155 15.56 10.97 29 8 .12 .7 .6 INT
 2002 DEC 2 1941 5.08 19 11.64 155 37.42 4.83 25 3 .17 .6 1.9 LSW
 2002 DEC 2 2218 57.47 19 5.47 155 24.43 32.86 19 2 .10 1.7 1.7 LOI

2002 DEC 2 2359 16.76 19 35.06 155 11.65 12.97 25 7 .13 .4 .7 KEA
 2002 DEC 3 0018 5.82 19 23.23 155 17.86 11.21 27 7 .18 .8 .9 INT
 2002 DEC 3 0432 2.19 19 22.82 155 17.64 8.53 23 5 .12 .6 .8 INT
 2002 DEC 3 0538 53.10 19 58.41 155 33.19 14.99 24 7 .12 .7 .4 KEA
 2002 DEC 3 0738 56.93 19 24.58 155 19.19 5.19 26 8 .11 .4 .9 KAO

2002 DEC 3 0959 10.40 19 24.62 155 17.00 11.62 25 6 .10 .6 .6 INT
 2002 DEC 3 1318 39.40 19 19.62 155 12.76 6.04 34 9 .12 .7 1.0 SF2
 2002 DEC 3 1601 57.39 19 23.04 155 14.60 3.19 30 8 .09 .3 .3 SEC
 2002 DEC 3 1607 15.80 19 20.25 155 8.49 6.60 4212 .12 .5 .7 SF4
 2002 DEC 3 1959 19.39 19 22.67 155 16.37 14.33 21 6 .17 .9 .5 DEP

ORIGIN TIME (HST)												PREF	AZ	MIN			
YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	MAG	GAP	DS
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	RMKS		

2002 DEC 3 2140 48.68 19 20.98 155 12.45 8.43 4213 .12 .5 .4 SF2 1.9X 158 5
 2002 DEC 3 2221 34.74 19 19.88 155 7.79 9.40 7 2 .03 4.0 2.3 SF4 1.8X 288 6
 2002 DEC 4 0157 13.63 19 23.45 155 17.18 12.36 25 7 .10 .6 .6 INT 1.4X 111 0
 2002 DEC 4 1241 6.11 19 21.98 155 10.79 3.20 3811 .11 .6 .4 SER 2.0X 159 2
 2002 DEC 4 1652 9.99 19 51.40 155 23.24 31.45 16 4 .10 .8 1.4 KEA 1.4X 140 6

2002 DEC 4 1800 0.52 19 20.72 155 8.55 8.91 41 9 .12 .7 .5 SF4 2.7X 175 5
 2002 DEC 4 2326 58.45 19 23.76 155 16.88 2.66 16 4 .07 .4 .3 SSC 1.3X 59 1
 2002 DEC 5 0000 30.65 19 20.64 155 8.49 7.31 30 6 .11 .7 .7 SF4 2.1X 175 5
 2002 DEC 5 0100 59.67 19 24.71 155 16.38 13.20 21 1 .08 .7 .6 DEPL 1.3X 95 1
 2002 DEC 5 1012 3.96 19 33.10 155 45.24 2.64 12 2 .09 1.0 2.1 KON 1.5X 136 5

2002 DEC 5 1552 59.16 19 24.82 155 17.05 11.59 31 9 .15 .6 .5 INT 1.5X 65 0
 2002 DEC 5 1758 18.96 19 26.91 155 28.64 12.52 18 5 .09 .5 1.6 KAO 1.1X 102 8
 2002 DEC 5 1912 7.22 19 17.81 155 12.95 4.33 27 7 .11 .8 2.1 SSF 1.3X 218 10
 2002 DEC 5 2112 4.40 19 24.85 154 59.68 5.97 20 4 .13 1.3 .7 LER 1.1X 186 2
 2002 DEC 5 2330 45.79 19 21.10 155 4.51 6.32 27 7 .14 1.1 1.1 SF5 1.3X 215 7

2002 DEC 6 0103 5.03 19 26.90 155 28.81 9.90 22 7 .13 .4 1.4 KAO 1.1X 78 8
 2002 DEC 6 0106 8.62 19 25.25 155 16.73 13.03 33 9 .13 .6 .5 DEP 1.6X 62 1
 2002 DEC 6 0112 7.97 19 25.37 155 16.06 9.11 17 6 .10 .7 .8 INT 1.1X 125 2
 2002 DEC 6 0320 29.65 19 18.42 155 12.21 5.51 31 9 .12 .6 1.0 SF3 1.3X 253 8
 2002 DEC 6 0638 26.20 19 31.25 155 28.08 12.68 3310 .12 .5 .5 MLO 1.6X 53 2

2002 DEC 6 0832 50.72 19 24.38 155 15.79 13.61 25 8 .14 .8 .5 DEP 1.7X 119 3
 2002 DEC 6 0839 31.35 19 20.52 155 4.20 8.95 26 7 .14 1.2 .7 SF5 1.5X 221 8
 2002 DEC 6 1942 9.83 19 23.54 154 57.17 0.64 18 6 .17 2.2 .7 SLE 1.6X 299 4
 2002 DEC 6 2155 50.51 19 24.84 155 17.20 10.87 30 8 .14 .5 .6 INT 1.6X 84 1
 2002 DEC 6 2244 44.99 19 46.40 155 40.15 13.64 25 7 .10 .6 .3 KEA 1.5X 165 10

2002 DEC 7 0227 23.46 19 23.48 155 29.86 9.85 19 5 .07 .4 1.0 KAO 1.1X 141 4
 2002 DEC 7 0407 7.87 20 52.32 156 0.30 4.70 27 4 .11 8.9 9.8 DIS - 2.7X 269 32
 2002 DEC 7 0451 46.02 19 22.70 155 29.41 12.78 19 6 .13 .6 1.7 KAO 1.2X 117 7
 2002 DEC 7 1024 9.14 19 20.80 155 1.24 5.96 33 9 .16 .8 .9 SF5 1.6X 240 9
 2002 DEC 7 1029 13.13 19 24.23 155 15.57 12.91 3210 .14 .8 .5 INT 1.6X 123 2

2002 DEC 7 1109 29.03 19 21.21 155 15.54 24.72 4114 .11 .7 .7 DEP 2.2X 150 2
 2002 DEC 7 1224 6.58 19 19.96 155 12.76 5.88 30 7 .10 .6 .8 SF2 1.5X 217 5
 2002 DEC 7 1757 42.77 18 59.82 155 23.44 11.90 16 6 .08 5.9 7.9 LOI 1.5X 324 49
 2002 DEC 7 2109 14.30 19 22.08 155 31.47 25.73 4515 .10 .4 .7 DML 2.1X 61 6
 2002 DEC 7 2202 54.61 19 59.52 155 29.18 38.62 22 7 .08 .8 .9 KEA 1.4X 254 19

2002 DEC 7 2216 0.98 19 22.14 155 2.34 6.86 26 6 .10 1.2 .7 SF5 1.9X 217 8
 2002 DEC 8 0108 4.12 19 25.06 155 17.06 11.49 28 7 .19 .8 .9 INT 1.6X 91 1
 2002 DEC 8 1036 40.52 19 11.90 155 31.25 1.45 26 8 .12 .6 .6 LSW 1.4X 134 7
 2002 DEC 8 1219 49.98 19 21.90 155 5.08 9.63 22 7 .05 1.1 .9 SF5 2.5X 150 5
 2002 DEC 8 1605 25.04 19 17.40 155 14.69 4.77 24 7 .11 .8 3.3 SSF 1.4X 242 7

2002 DEC 8 1723 37.51 19 23.82 155 16.31 13.22 16 5 .11 1.1 .9 DEP 1.6X 96 1
 2002 DEC 8 2218 2.47 19 24.80 155 38.26 2.63 32 8 .15 .4 .3 MLO 2.3X 102 1
 2002 DEC 9 0625 50.51 19 24.28 155 3.23 4.21 31 8 .10 .9 2.6 SME 1.8X 179 8
 2002 DEC 9 1016 4.75 19 23.67 155 18.10 7.73 20 5 .15 .8 1.2 INT 1.3X 140 2
 2002 DEC 9 1754 32.62 19 22.77 155 14.49 1.76 18 7 .12 .4 .3 SEC 1.7X 159 2

ORIGIN TIME (HST)												PREF	AZ	MIN			
YEAR	MON	DA	HRMN	SEC	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	MAG	GAP	DS
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	RMKS		

2002 DEC 9 2328 36.40 19 22.79 155 14.67 2.87 31 9 .10 .4 .3 SEC 2.2X 156 2
 2002 DEC 9 2357 8.34 19 27.07 154 49.59 3.61 33 8 .20 1.3 1.4 SLE 2.2X 295 16
 2002 DEC 10 0002 22.00 19 11.77 155 31.44 7.49 29 8 .12 .5 .9 LSW 1.7X 197 8
 2002 DEC 10 0015 10.33 19 25.24 155 18.69 5.99 25 8 .11 .4 .8 INT 1.4X 77 2
 2002 DEC 10 0302 59.50 19 10.79 155 41.12 4.88 34 8 .13 .5 2.2 LSW 1.9X 156 9

2002 DEC 10 0444 57.95 19 22.79 155 14.36 1.49 17 6 .12 .3 .3 SEC 1.3X 156 2
 2002 DEC 10 0814 23.85 19 17.92 155 26.51 0.01 18 6 .12 .9 .3 LSW # 1.1X 251 7
 2002 DEC 10 0950 40.26 18 55.47 155 26.76 12.31 16 4 .09 5.1 7.1 LSW 1.5X 313 46
 2002 DEC 10 1059 25.95 19 22.79 155 14.47 1.54 17 5 .10 .3 .4 SEC 1.7X 129 2
 2002 DEC 10 1702 11.61 19 25.20 155 16.73 11.94 28 7 .11 .7 .6 INT 1.6X 109 1

2002 DEC 10 1928 29.02 19 36.30 155 59.45 9.87 18 5 .11 1.2 .8 KON 1.5X 282 26
 2002 DEC 10 1933 14.71 19 24.09 155 15.55 2.83 18 6 .09 .3 .3 SEC 1.5X 87 2
 2002 DEC 10 2255 18.56 19 25.70 155 23.54 9.85 22 7 .11 .5 1.2 KAO 1.2X 90 8
 2002 DEC 11 0007 16.10 19 44.94 156 3.52 33.64 23 6 .11 1.4 1.1 HUA 1.4X 302 24
 2002 DEC 11 0145 34.33 19 24.50 155 38.39 3.05 15 3 .14 .8 .5 MLO 1.1X 104 1

2002 DEC 11 0907 11.73 19 29.53 155 17.97 24.35 4212 .09 .6 .7 DEP 2.2X 108 4
 2002 DEC 11 0914 16.35 19 15.48 156 20.15 5.07 40 8 .13 2.8 3.8 DIS 2.8X 278 66
 2002 DEC 11 1203 28.37 18 51.51 155 13.82 11.02 21 4 .12 5.8 7.8 LOI 1.6X 290 48
 2002 DEC 11 1505 50.56 20 10.30 155 35.75 32.46 4213 .11 .9 2.0 KOH 2.3X 285 35
 2002 DEC 11 2012 30.66 19 25.05 155 16.16 11.89 31 9 .12 .6 .6 INT 1.3X 112 1

2002 DEC 11 2024 21.95 19 18.36 155 14.79 9.82 3710 .10 .4 .5 SF1 1.6X 169 8
 2002 DEC 11 2314 53.38 19 18.17 155 6.83 7.55 27 8 .10 .6 .8 SF4 1.5X 265 10
 2002 DEC 12 0009 29.38 20 0.36 155 2.47 36.02 3611 .11 1.0 1.4 KEA 2.0X 277 34
 2002 DEC 12 0126 39.30 19 11.50 155 30.76 37.43 4012 .07 .6 1.0 DLS 1.6X 89 6
 2002 DEC 12 0542 1.82 20 3.59 155 26.41 6.78 25 6 .15 1.1 .6 KEA 1.6X 265 21

2002 DEC 12 0549 40.18 19 18.55 155 13.49 0.49 30 9 .13 .5 .2 SSF 1.3X 213 8
 2002 DEC 12 0624 17.17 19 58.08 155 35.71 10.94 21 5 .13 1.3 .5 KOH 1.7X 258 14
 2002 DEC 12 0632 46.49 19 24.42 155 16.10 13.26 29 7 .12 .6 .4 DEP 1.6X 52 1
 2002 DEC 12 1330 58.57 19 14.91 155 20.49 12.29 3210 .12 .6 .5 SWR 1.5X 202 11
 2002 DEC 12 1550 56.07 19 20.38 155 7.62 8.20 3210 .10 .8 .7 SF4 1.5X 255 5

2002 DEC 12 1641 21.40 19 24.36 155 57.42 15.08 33 8 .13 .9 1.0 KONF 2.4X 235 23
 2002 DEC 12 1705 16.97 20 0.24 155 25.90 5.85 29 8 .15 .7 .6 KEA 1.8X 197 16
 2002 DEC 12 1716 54.86 19 38.18 155 50.93 24.66 5013 .10 .5 1.1 KONF 3.5X 108 6
 2002 DEC 12 1847 28.55 19 39.50 155 55.39 27.26 16 4 .08 1.4 1.1 HUA 1.4X 261 5
 2002 DEC 12 2102 50.35 19 12.23 155 25.03 5.00 18 4 .10 .7 2.2 LSW 1.1X 199 7

2002 DEC 13 0330 58.07 19 27.18 155 17.58 15.75 22 6 .13 1.2 .9 DEP 1.4X 118 2
 2002 DEC 13 0446 15.75 19 45.70 155 47.22 20.89 26 9 .13 1.0 1.9 HUA 1.8X 218 10
 2002 DEC 13 0516 57.90 19 19.29 155 13.94 9.01 3811 .13 .5 .4 SF2 1.6X 167 6
 2002 DEC 13 1249 32.33 19 24.19 155 16.47 15.24 20 5 .11 .9 .5 DEP 1.4X 79 1
 2002 DEC 13 1401 58.72 19 18.13 155 15.48 7.24 21 5 .07 .9 .8 SF1 1.2X 232 5

2002 DEC 13 1456 34.29 19 21.68 155 5.47 8.85 20 6 .11 1.3 .6 SF4 1.3X 202 5
 2002 DEC 13 1952 27.60 19 33.75 155 37.48 7.73 33 8 .12 .5 1.1 MLO 1.7X 105 9
 2002 DEC 13 2313 53.67 19 29.66 155 27.74 7.20 16 5 .08 .6 1.4 KAO 1.3X 103 4
 2002 DEC 13 2315 26.41 19 29.77 155 27.90 6.91 2810 .09 .3 .9 KAO 1.6X 77 4
 2002 DEC 14 0105 18.23 19 22.82 155 16.40 10.28 16 5 .11 .9 1.0 INT 1.3X 154 1

ORIGIN TIME (HST)											LAT	N	LON	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN
YEAR	MON	DA	HRMN	SEC	DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	RMKS	MAG	GAP	DS					

2002 DEC 14 0151 20.75 19 30.03 155 26.62 9.11 3611 .12 .4 .8 MLO 1.7X 62 4
 2002 DEC 14 0215 48.92 19 14.69 155 31.90 0.04 24 5 .17 .4 .3 LSW # 1.5X 80 12
 2002 DEC 14 0357 38.20 19 22.49 155 25.36 11.29 30 7 .12 .5 .7 KAO 1.3X 97 4
 2002 DEC 14 0732 2.64 19 22.29 154 57.07 3.68 29 8 .10 .9 .8 SLE 1.5X 276 6
 2002 DEC 14 1121 42.94 19 22.95 155 14.20 3.69 22 7 .09 .3 .4 SEC 1.7X 120 2

2002 DEC 14 1122 8.08 19 22.64 155 14.45 2.18 17 6 .10 .3 .3 SEC 1.5X 138 2
 2002 DEC 14 1555 3.04 19 17.18 155 7.49 41.77 4816 .11 .7 .6 DEP 2.2X 203 11
 2002 DEC 14 1631 36.62 19 12.28 155 21.02 49.93 31 9 .09 .9 1.0 DEP 1.4X 211 13
 2002 DEC 14 1734 40.35 19 20.06 155 11.76 9.92 3810 .11 .7 .3 SF3 3.2X 165 6
 2002 DEC 14 1759 47.47 19 21.38 155 11.65 8.60 22 8 .09 1.0 .6 SF3 1.6X 208 3

2002 DEC 14 1906 48.79 18 53.05 155 15.94 12.37 26 7 .11 1.1 .7 LOI 1.9X 271 37
 2002 DEC 14 1931 14.79 19 38.56 156 10.48 45.11 4713 .09 .9 1.3 KONF 3.8X 242 16
 2002 DEC 14 2039 44.74 19 24.47 155 15.01 14.53 18 5 .13 1.0 .4 DEP 1.6X 131 1
 2002 DEC 14 2148 37.39 19 20.88 155 9.99 2.45 3510 .09 .4 .4 SER 2.0X 199 3
 2002 DEC 14 2150 12.46 19 24.27 155 16.80 1.24 17 5 .12 .3 .2 SSC 1.0X 79 1

2002 DEC 15 0545 31.96 19 23.09 155 14.40 3.98 18 5 .08 .4 .5 SEC 1.7X 135 2
 2002 DEC 15 0556 7.53 19 19.33 155 5.55 2.43 24 4 .11 .8 1.1 SSF 1.7X 226 8
 2002 DEC 15 0843 3.27 19 23.18 155 14.71 3.24 19 5 .07 .4 .4 SEC 1.6X 110 3
 2002 DEC 15 1236 58.39 19 25.43 155 17.45 9.78 19 6 .08 .5 .8 INT 1.4X 107 0
 2002 DEC 15 1314 14.71 19 23.11 155 29.95 10.62 17 3 .06 .6 1.0 KAO 1.6X 147 4

2002 DEC 15 1754 46.39 19 24.28 155 29.57 9.19 33 8 .10 .3 .6 KAO 1.5X 53 5
 2002 DEC 15 1854 38.22 19 17.48 155 12.84 8.06 2711 .11 .6 1.1 SF2 1.4X 219 9
 2002 DEC 15 1946 12.01 19 17.42 155 7.12 4.24 26 8 .08 .6 2.5 SSF 1.4X 233 11
 2002 DEC 15 2115 4.38 19 46.71 155 35.95 16.35 15 7 .07 .7 1.5 KEA 1.5X 100 11
 2002 DEC 15 2213 54.23 19 18.19 155 8.75 7.14 27 8 .08 .6 .9 SF4 1.4X 262 9

2002 DEC 15 2218 11.15 19 13.60 155 12.27 9.37 26 6 .10 1.0 1.6 SF3 1.5X 231 17
 2002 DEC 15 2340 28.17 19 27.66 154 50.77 2.86 24 6 .16 1.7 1.5 SLEF 2.2X 287 15
 2002 DEC 16 0058 29.97 19 16.30 155 12.42 2.43 17 3 .08 1.7 1.7 SSF 1.4X 250 12
 2002 DEC 16 0445 48.38 19 16.84 155 12.03 9.77 21 5 .10 1.3 .7 SF3 1.9X 264 11
 2002 DEC 16 0900 58.79 19 19.72 155 11.55 6.76 23 3 .10 1.2 .9 SF3 1.4X 229 6

2002 DEC 16 0907 42.65 19 21.91 155 12.75 3.37 23 8 .07 .5 .3 SER 1.8X 175 1
 2002 DEC 16 1235 53.36 19 18.30 155 9.22 3.49 3110 .11 .7 1.5 SSF 1.5X 222 8
 2002 DEC 16 1500 59.10 19 21.40 155 12.72 2.57 29 7 .12 .5 .4 SER 1.8X 186 2
 2002 DEC 16 1519 9.49 19 18.16 155 12.70 5.50 30 7 .11 .8 1.4 SF2 1.1X 236 8
 2002 DEC 16 1805 19.37 19 26.54 155 44.36 0.96 15 3 .18 1.2 .8 KON 1.0X 198 8

2002 DEC 16 2018 58.58 19 26.49 155 20.72 7.62 37 8 .09 .3 .7 KAO 2.1X 48 5
 2002 DEC 16 2054 10.83 19 27.10 155 19.86 9.07 21 4 .08 .6 .9 KAO 1.4X 134 5
 2002 DEC 16 2059 51.04 19 26.09 155 19.23 6.49 18 5 .07 .5 .9 KAO 1.5X 97 3
 2002 DEC 17 0522 32.52 19 11.83 155 27.65 33.88 19 4 .07 1.7 1.2 DLS 1.6X 264 17
 2002 DEC 17 0638 28.13 19 19.08 155 7.60 9.15 4211 .11 .8 .4 SF4 2.7X 190 8

2002 DEC 17 0641 5.01 19 18.80 155 7.21 7.64 30 5 .10 .9 .7 SF4 1.7X 224 8
 2002 DEC 17 1515 30.76 19 23.67 155 25.94 10.46 22 8 .10 .4 .9 KAO 1.2X 90 4
 2002 DEC 17 1626 40.73 19 23.23 155 16.92 2.64 22 7 .07 .3 .2 SSC 1.5X 59 0
 2002 DEC 17 2123 38.80 19 13.93 155 31.37 32.71 22 7 .07 .8 1.2 DLS .9X 202 18
 2002 DEC 17 2254 9.95 19 20.95 155 9.12 7.83 40 9 .12 .7 .5 SF4 2.2X 172 4

ORIGIN TIME (HST)											LAT	N	LON	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN
YEAR	MON	DA	HRMN	SEC	DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	RMKS	MAG	GAP	DS					

2002 DEC 17 2304 28.62 19 18.63 155 8.78 5.96 3410 .11 .6 1.3 SF4 1.4X 264 8
 2002 DEC 18 0215 45.55 19 22.06 155 29.54 9.00 34 9 .10 .4 .7 KAO 1.4X 124 3
 2002 DEC 18 1645 2.22 19 34.29 155 41.59 13.42 17 4 .10 .7 .6 DML 1.1X 129 10
 2002 DEC 18 1648 54.20 19 16.58 155 14.49 6.78 3310 .13 .8 1.7 SF2 1.3X 239 8
 2002 DEC 18 2024 30.27 19 16.67 155 12.28 8.10 30 8 .12 .7 .8 SF3 1.2X 248 11

2002 DEC 18 2201 7.53 19 27.58 155 27.49 10.18 27 9 .11 .4 1.0 KAO 1.1X 61 8
 2002 DEC 19 0205 16.01 19 29.00 155 26.69 9.58 18 5 .14 .4 1.2 KAO 1.4X 77 6
 2002 DEC 19 1014 0.68 19 28.33 155 23.54 9.97 29 9 .10 .5 .9 KAO 1.3X 86 3
 2002 DEC 19 1221 12.39 19 15.89 155 18.92 11.52 28 9 .10 .7 .9 SWR 1.3X 231 8
 2002 DEC 19 1252 22.84 19 18.49 155 14.00 9.28 35 9 .12 .5 .8 SF2 1.5X 96 3

2002 DEC 19 1847 52.82 19 15.44 155 1.04 43.70 18 6 .10 2.4 1.2 DEP 1.2X 331 29
 2002 DEC 19 2029 1.31 19 24.66 155 14.64 3.62 3511 .12 .3 .4 SNCF 2.3X 64 1
 2002 DEC 19 2121 37.09 19 22.44 155 9.26 3.48 29 9 .11 .8 .4 SER 1.3X 201 2
 2002 DEC 19 2231 49.39 19 28.23 155 37.09 12.64 19 7 .10 .6 .9 MLO .9X 99 2
 2002 DEC 20 1159 54.11 19 22.35 155 30.52 9.54 4311 .10 .3 .6 KAO 1.8X 61 5

2002 DEC 20 2333 5.79 19 25.48 155 20.20 8.64 3210 .11 .4 .8 KAO 1.4X 46 3
 2002 DEC 21 0111 35.12 19 20.95 155 2.32 7.50 26 7 .15 1.1 .8 SF5 1.4X 232 10
 2002 DEC 21 0233 48.29 19 15.95 155 6.35 5.24 24 6 .12 1.0 2.7 SF4 1.1X 289 14
 2002 DEC 21 0259 56.62 19 17.52 155 0.75 39.74 4414 .10 1.0 .7 DEP 2.0X 239 14
 2002 DEC 21 0408 14.31 19 17.53 155 14.87 4.75 27 6 .13 .8 3.1 SSF 1.3X 231 9

2002 DEC 21 0413 36.33 20 23.04 155 45.85 36.69 18 6 .13 1.7 2.1 KOH 1.7X 315 28
 2002 DEC 21 0823 28.52 19 23.27 155 14.97 2.69 19 7 .09 .3 .4 SEC 1.3X 108 2
 2002 DEC 21 0914 4.42 19 28.28 155 23.67 11.41 3610 .11 .4 .8 KAO 1.7X 44 3
 2002 DEC 21 0931 26.34 19 28.03 154 55.50 0.58 3311 .13 1.7 .6 SLE # 1.5X 249 8
 2002 DEC 21 1459 28.99 18 55.97 155 13.20 9.81 32 5 .16 1.4 .9 LOI 2.7X 252 36

2002 DEC 21 1600 49.25 19 22.16 155 28.60 10.49 25 7 .10 .5 .8 KAO 1.1X 91 2
 2002 DEC 21 1810 24.61 19 25.23 155 13.69 32.00 4315 .13 .6 .6 DEP 1.7X 57 2
 2002 DEC 21 1954 34.16 19 25.13 155 18.95 7.05 3412 .10 .4 .6 INT 1.8X 74 2
 2002 DEC 22 0249 50.88 19 23.86 155 52.04 12.87 12 1 .08 2.4 .7 KON 1.7X 299 16
 2002 DEC 22 0312 3.16 19 26.05 155 30.05 9.61 15 3 .11 .5 1.5 KAO 1.0X 99 8

2002 DEC 22 0634 57.33 19 23.25 155 17.01 2.66 23 7 .09 .3 .2 SSC 1.6X 115 0
 2002 DEC 22 0730 43.52 19 32.75 155 42.26 7.50 16 3 .12 1.0 2.6 MLO 1.2X 196 8
 2002 DEC 22 1804 59.94 19 18.19 155 0.68 33.26 15 1 .08 3.6 3.5 DEP 1.3X 229 13
 2002 DEC 22 1829 33.02 19 22.24 155 16.94 2.95 2810 .09 .3 .3 SSC 1.6X 167 2
 2002 DEC 23 0247 3.99 19 15.53 155 27.33 8.03 19 1 .13 .6 1.0 LSW 1.4X 118 11

2002 DEC 23 0553 7.58 19 23.20 155 17.03 2.57 20 7 .09 .4 .2 SSC 1.6X 118 0
 2002 DEC 23 1355 42.33 19 26.16 155 20.50 3.58 24 9 .11 .4 .9 KAO 1.1X 101 5
 2002 DEC 23 2000 20.32 19 28.26 155 36.61 11.88 12 3 .09 .8 1.3 MLOT 174 2
 2002 DEC 23 2208 50.76 19 47.61 155 24.24 21.75 20 6 .10 .9 1.4 KEA 1.4X 134 6
 2002 DEC 24 0000 21.76 19 18.54 155 5.29 5.05 3310 .11 .8 2.2 SF4 1.4X 233 10

2002 DEC 24 0310 13.73 19 21.93 155 29.93 9.56 4513 .11 .3 .5 KAO 2.1X 66 4
 2002 DEC 24 0343 36.96 19 21.42 155 30.09 8.52 17 5 .09 .6 1.3 KAO 1.4X 171 5
 2002 DEC 24 0810 4.19 19 17.17 155 14.96 9.90 40 8 .10 .7 .4 SF1 2.4X 193 7
 2002 DEC 24 1358 51.54 19 3.95 155 23.82 28.22 22 8 .11 1.3 2.5 LOI 1.3X 291 30
 2002 DEC 24 1844 56.21 20 3.06 155 17.69 13.62 34 8 .12 1.0 .7 KEAF 2.1X 224 19

YEAR	MON	DA	HRS	MN	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN	
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	RMKS	MAG	GAP	DS

2002 DEC 24 1923 34.08 19 21.68 155 17.58 24.02 4013 .12 .6 .7 DEP 1.8X 138 3
 2002 DEC 24 2335 14.95 19 16.72 156 22.69 9.01 21 5 .11 6.2 8.7 DIS 1.8X 307 66
 2002 DEC 25 0322 32.87 19 28.42 155 37.18 15.47 11 1 .10 1.0 1.4 DML 1.3X 102 3
 2002 DEC 25 0604 6.81 19 25.65 155 31.40 16.35 16 3 .10 .8 1.1 DML 1.2X 118 3
 2002 DEC 25 0704 52.92 19 21.13 155 4.35 6.18 25 5 .11 .8 .9 SF5 1.7X 215 7

2002 DEC 25 1452 58.54 19 14.21 155 34.03 6.55 4712 .12 .3 .7 LSWF 3.5X 73 14
 2002 DEC 25 1503 30.87 19 14.28 155 34.49 2.14 24 4 .15 .5 1.1 LSW 2.1X 79 15
 2002 DEC 25 1549 6.87 19 24.42 154 56.72 3.62 16 1 .12 2.4 1.3 SLE 1.7X 272 4
 2002 DEC 25 1855 54.16 19 54.05 155 21.98 18.83 4313 .11 .6 1.3 KEAF 2.1X 175 3
 2002 DEC 25 1929 30.22 19 29.44 155 26.55 8.23 23 7 .09 .3 .8 KAO 1.2X 70 5

2002 DEC 25 2323 23.99 19 16.90 155 23.01 1.77 25 4 .12 .6 .6 SWR 1.7X 222 6
 2002 DEC 26 0026 7.53 19 16.67 155 23.33 2.23 25 4 .10 .6 .9 SWR 1.5X 149 7
 2002 DEC 26 0440 42.47 19 18.64 155 15.65 6.99 26 4 .10 1.2 .8 SF1 1.4X 226 7
 2002 DEC 26 0623 2.28 19 45.10 155 38.68 15.25 17 5 .13 .6 1.0 KEA 1.0X 102 12
 2002 DEC 26 0702 49.75 19 8.93 155 29.90 9.25 3813 .13 .5 1.3 LSW 1.7X 151 4

2002 DEC 26 2211 59.28 19 27.93 155 37.66 14.65 22 8 .12 .6 .6 DML 1.6X 100 3
 2002 DEC 26 2337 45.80 19 22.93 155 25.22 9.77 3510 .10 .4 .6 KAO 1.3X 90 4
 2002 DEC 27 0053 8.32 19 47.00 155 0.28 42.88 3212 .11 .9 1.1 KEA 2.0X 247 9
 2002 DEC 27 0136 11.07 19 51.36 155 24.82 27.84 28 8 .10 .6 .9 KEA 1.4X 152 8
 2002 DEC 27 0446 53.59 19 38.84 156 8.42 37.41 3410 .11 1.0 1.7 KON 2.2X 279 32

2002 DEC 27 0737 9.15 19 28.70 155 28.39 11.63 3212 .11 .4 .8 KAO 1.7X 56 6
 2002 DEC 27 1255 50.70 19 28.48 155 26.82 8.83 3913 .11 .3 .9 KAO 1.8X 55 7
 2002 DEC 27 1431 39.18 19 23.83 155 15.25 3.22 16 6 .06 .4 .5 SEC 1.5X 99 2
 2002 DEC 27 1616 49.98 19 50.14 155 34.82 25.01 8 1 .05 2.6 3.0 KEAT 252 14
 2002 DEC 27 1618 16.74 19 48.67 155 26.27 29.34 18 5 .11 .9 1.4 KEA 1.6X 124 4

2002 DEC 27 1619 38.08 19 47.36 155 27.75 28.25 15 6 .12 .8 1.5 KEA 1.7X 117 1
 2002 DEC 27 2059 30.41 19 21.39 155 26.83 9.87 23 6 .13 .5 .8 KAO 1.4U 128 2
 2002 DEC 28 0329 33.02 19 30.36 155 25.95 8.92 16 5 .10 .4 .9 MLO 1.3X 107 4
 2002 DEC 28 0430 49.88 19 25.09 155 18.93 7.27 3212 .10 .4 .6 INT 1.4X 75 2
 2002 DEC 28 1246 47.46 19 19.30 155 13.35 6.71 3211 .12 .4 .9 SF2 1.3X 130 4

2002 DEC 28 1426 59.11 19 25.11 155 17.05 11.52 24 6 .13 .6 .8 INTL 1.7X 92 1
 2002 DEC 28 1618 48.50 19 57.80 155 44.78 9.36 18 5 .15 .9 .7 KOH 1.6X 152 15
 2002 DEC 28 1906 14.21 19 26.66 155 29.22 10.24 4013 .12 .3 .8 KAO 1.7X 48 8
 2002 DEC 28 2047 53.21 19 26.00 154 50.58 6.20 19 6 .13 1.1 .9 LER 1.5X 293 14
 2002 DEC 28 2126 59.40 19 22.15 155 17.19 33.01 3312 .11 1.1 .8 DEP 1.7X 168 2

2002 DEC 28 2338 49.48 19 18.12 155 8.49 7.23 3410 .10 .6 1.0 SF4 1.6X 225 9
 2002 DEC 29 0117 56.84 19 17.46 155 14.82 7.68 25 2 .11 1.0 .7 SF1 1.8X 231 9
 2002 DEC 29 0200 8.38 19 20.79 155 11.52 8.16 4014 .11 .7 .5 SF3 1.6X 198 4
 2002 DEC 29 0640 38.82 19 37.47 154 59.61 34.56 4715 .11 .7 .9 HIL 2.4X 199 9
 2002 DEC 29 0751 19.96 19 33.04 155 44.57 12.65 22 6 .10 .6 .3 KON 1.6X 119 5

2002 DEC 29 1258 51.10 19 18.37 155 8.04 2.80 28 7 .10 .7 1.3 SSF 1.5X 226 9
 2002 DEC 29 1437 21.75 19 9.72 155 32.34 43.09 3712 .08 .6 1.0 DLS 2.1X 122 8
 2002 DEC 29 1556 15.42 19 18.18 155 12.56 1.39 26 6 .10 .6 .7 SSF 1.4X 216 8
 2002 DEC 29 1916 1.77 19 11.13 155 36.01 0.46 27 6 .18 .4 .3 LSW 2.1X 96 15
 2002 DEC 29 2246 39.06 19 28.30 155 23.33 10.38 30 7 .14 .4 .7 KAO 1.6X 57 3

YEAR	MON	DA	HRS	MN	LAT	N	LONG	W	DEPTH	N	RMS	ERH	ERZ	LOC	PREF	AZ	MIN	
					DEG	MIN	DEG	MIN	KM	RD	S	SEC	KM	KM	RMKS	MAG	GAP	DS

2002 DEC 29 2315 46.31 20 5.95 155 47.25 23.95 19 4 .10 1.5 1.9 KOH 1.6X 187 3
 2002 DEC 30 0511 3.04 19 18.26 155 3.74 43.28 29 4 .11 1.5 .8 DEP 1.8X 254 12
 2002 DEC 30 0639 35.11 19 17.21 155 13.28 5.10 24 3 .12 .9 2.8 SF2 1.6X 220 10
 2002 DEC 30 1823 34.71 19 11.47 155 20.22 45.24 23 7 .12 1.0 1.1 DEP 1.5X 243 17
 2002 DEC 30 1946 17.77 19 11.94 155 34.67 10.45 15 1 .13 .7 3.3 LSW 2.0X 91 13

2002 DEC 30 2153 2.39 19 13.01 155 27.12 6.03 34 5 .12 .4 .9 LSW 2.0X 127 7
 2002 DEC 31 0407 31.05 19 15.88 155 15.00 10.94 4510 .13 .6 .3 SF1 2.6X 176 7
 2002 DEC 31 0418 27.92 19 15.61 155 15.09 9.42 23 1 .11 1.3 .8 SF1 1.4X 226 13
 2002 DEC 31 0745 33.30 19 20.14 155 8.63 7.67 29 6 .12 1.1 .8 SF4 1.8X 208 6
 2002 DEC 31 0811 37.07 19 12.70 155 31.65 39.69 21 5 .10 1.2 1.5 DLS 1.4X 200 19

2002 DEC 31 1416 10.38 19 5.91 155 29.52 28.93 5016 .09 .6 1.1 DLS 2.6X 179 7
 2002 DEC 31 1454 37.11 19 23.90 155 29.86 8.66 16 3 .09 .5 .9 KAO 1.4X 133 5
 2002 DEC 31 1456 10.13 19 19.14 155 12.87 8.21 27 2 .11 1.1 .7 SF2 1.6X 227 6
 2002 DEC 31 1814 32.33 19 47.80 154 50.68 40.82 23 5 .13 1.6 1.4 KEA 1.9X 268 22
 2002 DEC 31 2208 19.30 19 23.82 155 3.33 3.06 27 6 .13 1.0 1.4 SME 1.7X 187 8

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

ORIGIN TIME (HST)	LAT N	LON W	DEPTH	N	N RMS	ERH	ERZ	LOC	PREF	AZ	MIN
YEAR MON DA HRMN	SEC	DEG MIN	DEG	MIN	KM	RD S	SEC	KM	KM RMKS	MAG	GAP DS
2002 JAN 8 1522	3.19	17 39.69	155	4.42	36.61	29	4	.09	2.5	3.5	DIS
2002 JAN 18 0118	14.50	19 21.57	155	4.98	9.08	4913	.13	.5	.4	SF5F	4.1U
2002 MAR 22 0409	21.80	19 22.11	155	28.75	10.70	5013	.12	.3	.4	KAOF	3.4X
2002 MAR 24 2308	57.41	20 12.26	154	46.44	2.44	4210	.10	1.7	1.1	KEA	3.3X
2002 APR 21 1425	17.29	19 13.39	155	26.72	10.73	46	9	.19	.5	.4	LSWF
										3.2X	130
											7
2002 MAY 6 2245	51.74	20 10.27	155	23.22	0.43	4511	.12	.8	.3	KEAF	3.2X
2002 JUN 25 0350	33.53	18 54.03	155	14.00	12.42	39	8	.12	1.2	1.1	LOI
2002 JUN 28 0936	26.40	19 19.75	155	6.88	9.67	5212	.12	.5	.4	SF4F	3.1X
2002 JUL 5 0431	41.93	18 33.45	154	16.76	11.14	4714	.14	7.5	10.4	DIS	-
2002 JUL 21 1445	35.59	19 19.96	155	8.03	8.56	46	9	.11	.4	.5	SF4
										3.0X	114
											5
2002 JUL 21 1731	24.56	19 18.58	155	13.69	9.40	5112	.12	.4	.3	SF2F	3.3X
2002 AUG 9 1718	21.11	20 0.59	155	21.85	7.77	5010	.14	.5	.5	KEAF	3.3X
2002 AUG 13 2137	27.71	20 32.72	155	16.51	12.66	5114	.15	1.1	2.2	DISF	3.5X
2002 AUG 15 0806	49.06	21 24.61	157	36.63	6.75	4913	.11	2.6	3.0	DISF	3.9X
2002 AUG 21 1555	44.87	19 17.66	155	13.21	9.94	46	8	.11	.5	.3	SF2F
										3.6U	140
											1
2002 AUG 21 1603	19.32	19 19.21	155	13.32	8.92	44	8	.12	.4	.3	SF2F
2002 SEP 11 2145	0.00	20 32.31	155	58.14	30.70	5014	.14	1.2	1.7	DISF	3.4X
2002 OCT 5 2241	18.18	19 55.40	155	32.50	37.01	4913	.11	.6	1.1	KEAF	3.1X
2002 DEC 12 1716	54.86	19 38.18	155	50.93	24.66	5013	.10	.5	1.1	KONF	3.5X
2002 DEC 14 1734	40.35	19 20.06	155	11.76	9.92	3810	.11	.7	.3	SF3	3.2X
										165	6
2002 DEC 14 1931	14.79	19 38.56	156	10.48	45.11	4713	.09	.9	1.3	KONF	3.8X
2002 DEC 25 1452	58.54	19 14.21	155	34.03	6.55	4712	.12	.3	.7	LSWF	3.5X
										73	14